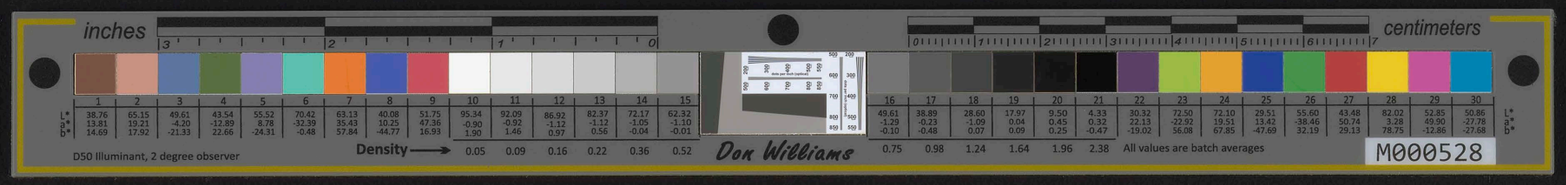

Kelsey, Theodore 1891-1987
PAPERS RELATING TO CHANTS
Chants with translations
typescripts
Queen Emma chants p. 1-51

Priv. Coll. M-86

3X17

F406

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Mele for Queen Emma

He inoa nou e Kaleleonalani,
Moopuna kapu oe a Keoua.
Nau i hehihehi o Pakaalana,
Paepae kapu ia a o Liloa
He ahi kapu oe no na alii,
He ahi kapu wela no Kamehameha,
Ua akaka ke'lii ike a ka po,
Ua ike o ka lani me ka honua
Ua na'i ke kupuna puni o Kahiki
A loaa ke kapu ou e ka lani.
Aole alii nana e a'e
Ko kapu ahi ku lokuloku.

This is your name chant, O Kaleleonalani,
Sacred descendant of Keoua.
It was you who trod on Pakaalana,
The sacred platform of Liloa.
You are of a fiery kapu to the chiefs,
A sacred, burning kapu offspring of Kamehameha
A chiefess recognized by the gods is known,
Known by the heavens and the earth.
Your ancestors conquered all of Kahiki,
And secured your kapus, O heavenly one,
There is no chief that can step over
Your multiple fiery kapus.

He inoa nou e Kaleleonalani,
Moopuna oe a Kaleiopuu,
Aloha nui ia ke kuini Emma,
I ka nahenahe mai o koleo.
I ka maikai o na olelo
Piha hauoli na makaainana
O ko lakou hoa a e like ai
Helu ekahi o ke aupuni lani.
He lani nui oe a he hiwahiwa,
Hiipoi ia nei e ka lahui.

This is your name chant, O Kaleleonalani
Descendant of Kaleiopuu.
Dearly loved are you, Queen Emma,
For the softness of your voice,
For the kindness of your words,
Thy people are filled with joy,
They like to compare you to
The greatest in the kingdom of heaven.
You are a great chiefess, dearly beloved
Much praised by your people.

He inoa nou e Kaleleonalani,
Moopuna kapu oe a Kamehameha,
He ohi oe na Keliimaikai,
Nana i hele ko kapu wela ahi.
Hui ae me Kaliko-o-ka-lani
O kaliko ia me ke kapu moe.
E ia' ke ano o Kahoalii
Ke akua kapu ia o Kamehameha
Moe na 'lii, na makaainana
A puni Hawaii nui o Keawe
Hoike mai o Kahoalii
I ke kapu moe o Kalikookalani.
Moe o Maui a puni i ke kapu
Moe Oahu a puni i ke kapu
Moe Kauai a puni i ke kapu
I kou ano a e Emalani
A he ahi, a he wela ahi, he akua,
Oia kapu mai ou kupuna mai.
E ia no ia la ia oe,
Aohe alii nana e ae
Ko kapu ahi wela ku lokuloku
Hea aku makou o mai oe.

This is your name chant O Kaleleonalani,
Sacred descendant of Kamehameha,
A young offspring of Keliimaikai's
Who gave your fiery kapu to you,
Combined with Kaliko-o-ka-lani's kapu,
Kaliko who had the prostrating kapu.
Here, too, is the revered kapu of Kahoalii,
The kapu god of Kamehameha
Before whom chiefs and commoners prostrated
All over great Hawaii land of Keawe.
Kahoalii has shown forth
The prostrating kapu of Kaliko-o-ka-lani,
All Maui is prostrated before the kapu,
All Oahu is prostrated before the kapu,
All Kauai is prostrated before the kapu,
Before your holy presence, O Emalani.
A fiery kapu, a heated kapu, a godly kapu,
Kapus inherited from your ancestors.
They are all yours.
No chief can step over
Your multiple fiery kapus.
We call to you, O answer us.

English Translation
By Mary Kawena Pukui

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

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0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

END

inches centimeters
D50 Illuminant, 2 degree observer
Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000528

He Inoa no Kaleleonalani

He inoa nou e Kaleleonalani,
Ke kuini kapu o Hawaii nei.
Aia i Maui ka manao paa,
I ka leo aloha o na komite.
Hoike ia a'e i ka lehulehu,
I na makaainana hoi a pau.
E ia ae o Kalani a hiki mai,
Maluna o ka moku ahi Beretane.
Na ka hae Hawaii la i hii mai,
Ike ia ko hae anuenue,
Ko hae kamaha'o pi'o i ka lewa,
O ka punohu ula ku i ke kai
Ua ike mai o Maui o Kama,
Me na hono hoi a o Piilani,
A he lani nui oe na ka lahui,
Hiipoi ia nei e ka lehulehu.
Hea aku makou o mai oe,
O Ku-kaili-moku kou inoa.

Name Chant for Queen Emma
(For hula dancing)

This is a name chant for Kaleleonalani,
The sacred queen of all Hawaii.
We set our minds on Maui,
On the beloved voices of the committee.
Reports have been given to the public,
To everyone of the people.
The heavenly one is on her way here
Upon an English steamship.
Borne hither under the Hawaiian flag,
There we see your rainbow banner.
Your wonderful banner arched in the sky,
And the red rainbow over the sea.
Maui, land of Kama has seen them,
As well as the other lands of Piilani.
You are heavenly to your people,
A person lauded by the public.
We call to you. O answer us,
Ku-kaili-moku is your name.

He Inoa no Kaleleonalani

He inoa nou e Kaleleonalani
Ke kuini ku kapu ku hanohano,
Hanohano wale oe a e Emalani,
I ka ulu wehiwehi o na pua
Ku ka pi'oloke au i ke kai,
Kahiko i ka lehua me ka maile,
Ko lei hoohiwahiwa e ka lani,
Huli a'e oe mauka maikai.
E haawi i ko leo me ka aloha,
Ko leo kapu o Koha-i-ka-lani.
A he lani nui oe a he hiwahiwa,
Hiipoi ia nei e ka lehulehu,
Hea aku makou hoola'i oe,
O Kaleleonalani kou inoa.

Name Chant for Queen Emma

This is a name chant for Kaleleonalani,
The sacred and honored queen.
We honor you, O Emalani,
The most beautiful of all flowers.
There is excitement there at sea
As she is decked with lehua and maile.
They are leis to bedeck you, heavenly one,
As you turn shoreward and seaward
To give your affectionate greeting,
With your sacred voice, Koha-i-ka-lani.
You are a great chiefess, a beloved one
A person lauded by the public.
We call to you, you pause to hear,
Kaleleonalani is your name.

He Inoa no Kaleleonalani

Hanohano wale oe e Emalani,
I ke kahiko mau ia e ka ua.
La'i ko huaka'i maka'ika'i,
Ua ike ia e luna me lalo,
Ua hoike mai ka pae opua,
Me na wahine o Wahinekapu.
E kapu oe la he mea laha ole,
O makou la e hiipoi nei
Hea aku makou hoola'i oe,
O Kaleleonalani kou inoa.

A Name Song for Kaleleonalani

Honored art thou, O Emalani,
Your decorations are the showers
That tell the success of your journey
Recognized by high and low.
The horizon clouds have revealed it
And the women of Wahinekapu, too.
You are kapu, a choice person,
Whom we all laud.
We call to you, you pause to hear.
Kaleleonalani is your name.

START

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D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

END

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

He Inoa no Kaleleonalani

He ui a he ninau keia,
Na Hopoe wahine i Haena.
Mahea mai nei oe e Kalani,
Ma ka hikina mai au o ka la.
Hookahi mea nani a'u i ike,
O ka milo holu o Waiakaea.
I ka holu nape i ka ili o ka wai
O ka waiwai nui no ke aloha.
A Kukii a e hea mai nei,
Lulu lima i Wai-welawela,
Huli hoi o Kalani no Kalehua,
Piha hauoli na makaainana.
Hea aku makou hoola'i oe
O Kaleleonalani kou inoa.

A Name Song for Queen Emma

An appeal, a question is this
By Hopoe, womanof Haena.
Where did you come from, heavenly one?"
From the east where the sun rises.
I have seen something beautiful,
The swaying milo tree of Waiakea,
That go up and down over the water.
The most valuable treasure is love,
Kukii is calling now,
To shake hands with Wai-welawela".
The heavenly one goes back to Kalehua,
Her people are filled with joy
We call to you, and pause to hear,
Kaleleonalani is your name.

START

inches 3 2 1 0

centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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M000528

END

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
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M000528

Mele (Queen Emma's)

O Ainaike kai haale i ka li'u la,
I hapai ia e ka aina
Kaawale aku la ke kaha o Kalamaihiki,
Ua hele ka pua o ke aeae,
I luhe wale iho no i Waiolono la,
Kuu mea aloha, maanei mai a.
Malama ka liko i o Kaukaopua,
I na pona wai o Namolokama,
E hoa ana ia Mamalahoa,
I paa ke kanaka pahee i Manuakepa,
I na kikepa lehua o Kupakoili la,
Kuu mea aloha e, maanei mai a.
(Composed by Fanny Young, Queen
Emma's Mother.)

O ke kai o Kaula ka'u aloha,
O ke kai uahi nui o Kamalua,
E ne ana ia Kaneenee,
Piha kai aku la ka luna Makaikiolea,
Ke poloai la i ke Koolau-wahine,
E kuu mea aloha, maanei mai a.
Malama Lehua i ka Wai-a-ka-paao,
He wai makaikai na ko laila kupa
Ke alai ia la e ke koa pua ia,
Maalo ana Kawaikui i kuu maka,
Hanuna ka ihu o Haena i ka ino,
E kuu mea aloha e, maanei mai,
E kuu mea aloha e, maanei no a.
(By John Young, Queen Emma's Uncle)

O Haupu kai oni pii iluna
Pipii no ke keha i ka makani
Ke kehakeha hanohano i Olokui,
A oia ku'i ku'iku'i i Kaunuohua
Kela ka pali o Ahumauna
Kelakela no. I kela i ka Makani
Kukuohi ka pali o Malelewaa,
A oi'a waa; he waawaa
Ke kanaka nihi kipapali ma Kahiwa,
Hoolewalewa a ke aho a ka lawaia,
I ka puwalu makawalu a ke anuenue,
E pipi'o ana i ke kai o Mokapu.
A oia kapu.
Kapu na pali okalakala i ka Hoolua,
O kalakala no haoeoe na kuahiwi,
Ke kuahiwi kahela o Waialua i luna,
A oia luna.
E komo kapa au a holo kaa kaua.
(By Hikoni (Aunt of Queen Emma by marriage).

O Kaala ka i ulu kapaaha i luna,
O haoha no e oha i Kamaoha,
Ka haliliu pali o Maunalahilahi,
Ka nu hekili o ke kai o Waialua.
A oia luna.
Aohe lua o ka mauna o Koholaapeape
E kakakau pu ana me Mahiki,

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

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0.75 0.98 1.24 1.64 1.96 2.38

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M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
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M000528

5.

Mele (Queen Emma's)

Ke kau ahe me he iwa la i ka malie,
Ke nepunepu e a ke kila,
Oia kila,
Kila kui i ka ua Apuakea i Mololani,
E hehi ana i ka onohi o ke koa,
Pua ka maka o ke koa uli i ka la,
E kilohi ana i ka pae hala o Moelana
Oia lana,
Lana Nuuanu i ka ua lei maohui
E haaheo ana i luna o ka ahihi,
Lea ka hilinai ku i luna o ke kaa,
Me he auwaalalua la i ke kai o Polihale,
A oia hale.
(By, Kamaikui Young, Queen Emma's Aunt, her mother's sister and wife of Dr. Rooke)

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

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Don Williams

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Mele (Translated)

Queen Emma's

Anaike has been covered by a mirage
It was lifted up by the land
Separatating the land of Kalamaikiki
The blossom of the aeae
Droops over the water-of-Lono,
My beloved, come to me.
Cherished is the bud by Kaukaopua
By the pools of Namolokama,
Held fast by Mamalahoua,
The man is held lest he slip at Manuakepa.
Among the lehua garbed trees of Kupakolii,
My beloved, come to me.
(Composed by Fanny Young; Queen Emma's mother).

I love the sea of Kaula
The thick sprayed sea of Kamalua,
That teases Kaneenea.
The sea has risen up to Makaikiolea,
It sends an invitation to the Koolau-wahine breeze,
My beloved, come to me.
Lehua takes care of the Water-of-the-paoo-fish,
A pool much visited by the natives there,
Hidden from view by a blossoming koa tree
Kawaiku'i passes before my eyes,
Haena's nose snorts at the storm.
My beloved, come to me,
My beloved, come here to me.
(Composed by John Young, Queen Emma's uncle)

Haupu raised itself upward,
Rising proudly in the wind,
Proudly and majestically toward Olokui,
Reaching, ever reaching to Kaunuohua;
High is the cliff o Ahumauna,
High indeed. It was the wind that made it look high
As it sweeps up the cliff of Malelewaa,
Like a canoe, it is hollowed inward.
A man walks gingerly on the cliff at Kahiwa,
Letting his line down as he fishes.
Many are the rainbows arching,
Over the sea at Mokapu.
There is a kapu there.
Kapu are the cliffs, roughened by the Hoolua breeze,
Rough and tall are the mountains.
A mountain is Waialua reaching up high,
Up to the heights.
Let me be dressed, then we shall go for a ride.
(Composed by Hikoni, Aunt of Queen Emma by marriage)

It was Kaala who grew straight upward,
Well developed, a delight to Kamaoha.
The over hanging cliff side of Maunalahilahi,
The thunderous sea of Waialua,
Belong to that height.
There is none to compare to the mountain, Koloapeape,
Standing above together with Mahiki,

START

inches 3 2 1 0

centimeters 0 1 2 3 4 5 6 7

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b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Poised on high like an iwa bird in the calm,
Plump and majestic.
Majestically,
Majestically the Apuakea rain reaches up to Mololani,
Treading on the leaf buds of the koa trees,
The buds of the koa unfolds green in the sun
And seem to glance at the hala trees of Moelana.
Buoyant,
Buoyant is Nuuanu, wreathed about with cold rains,
Proudly the ahihi blossoms cover the top
She enjoys herself as she leans back on her carriage
Shaped like a nautilus at the sea of Polihale,
A house it is.
(Composed by Kamaikui Young, Queen Emma's Aunt; her mother's sister and wife of Dr. Rooke)

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

centimeters 0 1 2 3 4 5 6 7

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

END

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000490

Hula Song for Queen Emma

A kai o Hale Kauila
Ike ia na kumu o ka hana
Ehuehu na makaainana
Paa ole i ke kau mai
E ake aku ana ha manao
E kau aku i ka lei alii
E noho Kaleleonalani
I ke kalaunu o Hawaii
Pehea makou e ka lani
Ua kuikahi like ka manao
Ua ike o luna me lalo
Ua lohe Hawaii o Keawe
Ua Puni Kauai-o-Mano
Ua kui ka lono i Pelekane
He lawe ke aloha i ke kino
E kuili nei i ka poli
Pono ole ka hale o Keweiki
Aohe heahea leo aku
A he kunou Haole ke aloha
Ka maalo ana ae mawaho
A he lohe olelo wale mai
I ka hale hoolulu i ke kai
Kumaka ka i ike i na pipi
Mena apo hao i ka nuku
E ola Kaleleonalani
A kau i ka pua aneane

We were down at Halekauila
To see what was being done.
The people were so excited,
They could not be restrained.
All were so eager to have
The crown placed ~~co~~ on thee.
To have Kaleleonalani
Sit on the throne of Hawaii.
What of us, O heavenly one,
We are all of one mind.
All those above and below know
Hawaii island of Keawe has heard,
It has gone around Kauai of Mano,
The news have reach Britannia.
Love dwells fast in your body
It is wound tight in the bosom.
It is not well to have the house of David
He never calls us to him.
His greeting is a nod like the Haole's,
When he passes by, outside,
We have heard some rumors
Of the "houses" that are stationed on the sea.
Mine eyes have seen the cattle
With rings of iron in their noses.
Long may Kaleleonalani live
Till old and very feeble.

START

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

centimeters 0 1 2 3 4 5 6 7

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

END

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Chant for the Hair. (Queen Emma's)

O ke oho anu ia o ke Kaieulu,
I ho a'e i ke oho lau pua hinano,
Aeae ke oho luheluhe o ke uki,
Holu maka ke oho, liha ole o Kanana,
Ea mai ke oho malumalu kaupoku.
O Kana, o Niheu na hoa e like ai,
He oho i mahalo ia e Kauai,
I nana ia e Oahu-a-Lua,
Haehae oho o Kakaalaneo
I loaa i loko o Lumilumi-ahulani,
Loa ke kai o Kaaki.
He luheluhe oho wahine ia,
Kuene ka ehu o Kalani.
O ka ehu o Luaehu, ka ena wai hohonu,
Piha alii ai ka makaha,
I hoi ai ka haua a kau i ke keha,
Ike ia ke koouli hiehie,
He mea wale no i ka maikai,
Neenee ka aha makemake i ke aki
Holo a ke oho i ke kahi a Makalii
Me he pua ko la ke oho
He paka ua aku la i hukia i kou lauoho,
Nani ka ulu o ke oho pohina luna
Ulu ke oho eleele me ko oho a'ea'e
He oho hawane loulu no ka Lua,
Ulu ke oho pua koolau o Malama,
I ha'i malule ka lau awapuhi,
Kulu na'e ho'i ka piipii o Maa-iki
He oho piipii hunahuna no ke kai

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

He oho anuunuu, he oho hiehie
I aui newa i ka lawe a ka makani,
Mohalu ke oho i ka pali o Ke-e,
Me he oho no ka uau, ke wai la no,
Noho mai ka moa me kona aki,
Haaheo ke au poo papalo
I haaheo no i ka luhe o ke uki
Kau ana no i ke kau o ke aloha
E hea e, e hoi e.

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

0 1 2 3 4 5 6 7 centimeters

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
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0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

END

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Chant for the Hair. (Queen Emma's).

The cold leaves blown by the Kaieulu,
That blew on the petals of the hinano,
Slender are the drooping leaves of the uki,
The swaying, careless leaves of Kanana,
The leaves that rise up, shades the house tops,
Kana and Niheu are to be compared to them.
This is hair admired by Kauai,
Watched over by Oahu island of Lua,
The strands of hair of Kakaalaneo,
That descended from Lumilumi-ahulani,
From the distant sea Kaaki.
It is the loosened hair of a woman,
The reddish hair of the heavenly one well arranged,
The reddish hair of Luaehu; the reddish hue of deep waters,
Filled with chiefs pressed against the sluice gate,
Turning from the pressure and rising to the top.
Her majestic appearance can be seen
And there are expressions of admiration,
The crowd move up eager to look up to her.
The hair is smooth with the comb of Makalii,
It looks like the tassel of the sugar cane,
Little rain drops is drawn out of the hair.
Beautifully grows the graying locks above,
Mixed are the black hair with the white,
Like the loulu palm leaves at the Pit.
The hair grows like the koolau blossoms of Malama.
The leaves of the ginger hangs limp,
The tiny leaved ferns of Maa-iki also bends over.
It is curly hair fine as fine sea spray,

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
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	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Waving hair, beautiful hair,

Moving gently with the playing of the breezes.

The leaves hang down over the cliff of Ke-e,

Like the feathers of the uwa'u bird they are moist,

The cock sits high on its perch,

Holding proudly his helmet-like comb.

Proud is he of the drooping of the uki grass,

As he perches on his perch of love.

I call to you, return thou to me.

(The word <u>cho</u> means both leaf and hair. M.P.).

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
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D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

END

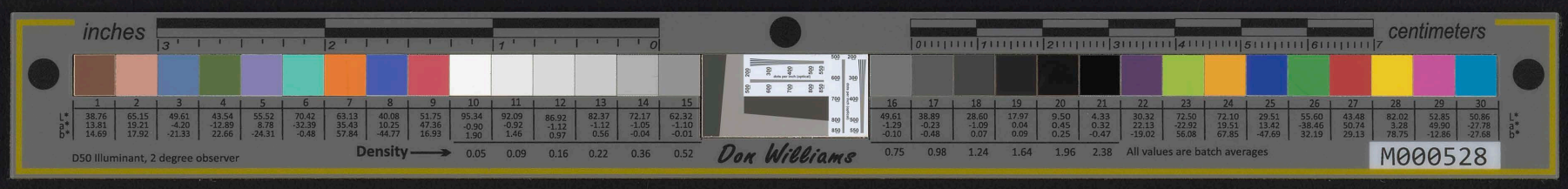
inches centimeters
D50 Illuminant, 2 degree observer
Density 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000528

Mele for Queen Emma's Hair.

O ulu maiewa ulu oho ke alii
I kukupu i ke panepoo o ka lani,
No ka lani i ku pono i ka moku ke oho,
No ke kaulike o ke oho o ka'e ka nui,
I kaeo ia aku ai ke kapu i luna,
    Oia ia nei, o Kaeo-ku-lani.

He alii pulupulu lauoho kanaka,
I puka ai nei mai loko o laua,
Eia la ke loku a wai nei
Puloku i ka ua ke oho o ka laau,
Mohalahala, malamalama ka nahelehele
Ka lepo ole i ka holoi a ka wai,
O ka wai liko lehua
Ke lawe la, ke hana la a kau ka ohu i luna,
Ano hoolaka i luna ke akua hula,
Na ona pale kai o Kahuoi
E oi, e ue ana ke oho o Ka-puu-ukiuki,
Ke alo lahilahi o ka malanai,
Me ia makani he Aimaunu
He Halula ka inoa i ke awakea,
Hocho ia ai ka hana i Lani-haahaa,
I ka manawa i haahaa mai ai ka lani,
He ane kiekie wale mai no koe,
He ha'i ai ka a-i, eia no e.

START



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
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L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
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D50 Illuminant, 2 degree observer

Density →	0.05	0.09	0.16	0.22	0.36	0.52	0.75	0.98	1.24	1.64	1.96	2.38

All values are batch averages

END

Mele for Queen Emma's Hair.

Long and freely grows the hair of the chiefess,
That sprouted from the top of the heavenly one's head,
The hair belongs to the heavenly one who rules the islands.
The hair grows out evenly and O so thickly,
Well covered with kapus above.
That is who she is, Kaeo-ku-lani's (descendant).
A chief who kindled fires with the hair of men,
From them was she descended.
Here the rain is falling in streams,
Drenched by the rain are the leaves of the trees,
Unfolding and brightening the forest,
Washed free of soil are they by the water,
Water dripping from the leaf buds of the lehua.
Moving and busy, the mists rise to the top.
As though calling to the gods of the hula for inspiration.
The owners of the break water of Kahuoi,
Moves and shakes the leaves of Kapuu-ukiuki,
Before the soft Malanai breeze,
And the other breeze, the Aimaunu.
Halula is the name given to the noontide,
When the shouting was done at Lani-haahaa
At the time when the sky became low,
Rapidly it rose to a great height
That one had to throw the head back to see. There it is.

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
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D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
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0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

END

inches centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

He Papa Ahaaina

no

Kalelaonalani.

1.- E ai ana ka oe e Pua-i-Lahaina o ka ua Paupili,
Pili iho ka la'i pili i ka pohu,
Ke kohi a la i ka hono o Hauola
Paa mai na halo hina o Kanaloa e,
A Kanaloa, ike i ka lau o ke kaao,
He apo gula ia na ka malie
He hoa kuwili mai ke oho o ka ula,
E ulu ana i ka la'i o Hauola e,
Aloha oukou, o ka ho'i no ia la,
He ai, a he ahaaina.
He ahaaina kohea, koano, komeha, koiu,
Ko molia ola e Kalani,
Ko mauli ola i luna o ka aina
E ola Emalani i ke ao malama.
E malama i ka hauli ola e Kalani,
E noho i ka moku a kuapapanui,
A hilihili honua kapakapa a ka'eka'e
A kamanomano manomano ka aina.
O ka moku o Kalani e.
O Kalani ka i oho i ka uka ha'ea
A kupu i ke ao nonohi ula,
O na papa o Kalani, omela ula i ka lihilihi o ka la,
Ke alii hoi nona ka ahaaina.
E ai ana ka iwa o ka moku
I Oahu-a-Lua o ka makanalau e,
Ko hoi ka ahaaina moku la, e Kalani.

2.- O kuu hiwa la, kai ku hiwa,

START

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

centimeters 0 1 2 3 4 5 6 7

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000528

O ka pali kai Koolau,

O kuu wai i Waiohua

O ke alanui kai o ka pili kaunoa

O ka lipo nahele i Oopuola,

O a'u lehua i Hanehoi e,

Ke oho o ka hala i ke kai,

Ke hooluhe ia la e ka makani

Ke oho o ka hala o Honomaele,

O kuu pua hala i paoa i ke ala.

O aka ka nahele o Akiohala,

Lei aku la i ke alo o Kamehaikana,

Ka makana ka ia o ka leo

Ka mohai aku i ke alo o Liawahine

Anoai wale.

3.- I Oahu ke kumu o ka ahaaina,

E ai ana i ke kahua o Holani,

I ka momona o na moku e waiho nei,

Mai Kaula no a Hawaii,

Mai Kahiki mai no ka ai, e Kalani

Aohe kumu, aohe lau,

Ka ulu ana mai o Aahoaka ia ne'i,

Lako ae la ka wahine o Holani-ku,

I ke kanaka, i ka wai o Loiloa,

Iaia no ka liuliu, ka makaukau.

Ka hoouka o ke pa, ka pahi, ke o,

Ke puna a me ke kiaha,

Ka uwai, ka hooneenee, ka hooponopono,

O kela aoao, o keia aoao.

Ua lako na mea a pau i luna o ka papaaina,

I ke kihi o ka honua,

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

He honua kahiko no, mai a Kahiko mai,

E eu, e ku, e akahai ke kuu,

E hoomalu ka noho.

E hoali pono aku i mua o ke Akua,

E ai, e Kalani, me ka hoomanao,

] I ku kapu o ka ahaaina moku, e Kalani e,

Mohala aku la ka lau i na Hono-a-Piilani,

O kuu wai i ka pali o Kahiwa

O Kikipua e alo nei i ke kai.

[This mele seems to be incomplete]

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

END

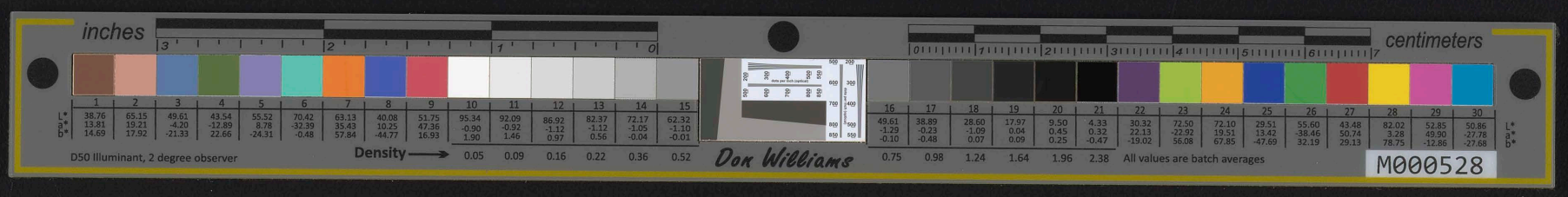
inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Feasting Chant for Queen Emma.

You are eating, O Blossom-of-Lahaina, in the Paupili rain,
All is calm, all is still,
The hush goes on to the back of Hauola,
Where the gray fins of Kanaloa were hold fast.
At Kanaloa one sees great peacefulness,
Like a golden girdle is the calm,
A beloved companion of the red blossoms
That grow on the peaceful shore of Hauola.
Greetings to you all, turns to go,
To the eating place, to a feast.
A feast that is agreeable, holy, peaceful, majestic,
An offering to you, O heavenly one,
A life giving feast upon the land.
May Emalani live till she reaches the world of light.
Take care of those with the breath of life, heavenly one,
Rule your land with peace and plenty
Till the earth produces abundantly for the skilled,
The land yield abundantly, plentifully,
The land of the heavenly one.
The heavenly one causes growth, high in the inlands
Till they grow up to the rainbow tinted clouds,
And on the level lands of the heavenly one where they lie yellow speckled in the sunshine,
This is the chiefess whose feast this is.
The supreme one of the island eats
Of the abundant yield of Oahu island of Lua,
Come to the feast of the island, O heavenly one.

My favorite one, there is my favorite

START



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01
Density										0.05	0.09	0.16	0.22	0.36	0.52

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68
Density	0.75	0.98	1.24	1.64	1.96	2.38									

D50 Illuminant, 2 degree observer

All values are batch averages

inches
centimeters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
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0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

Of the sea cliffs of Koolau,
Of my water spring at Waiohua
Of the sea trail where the dodder vines cling,
Of the green forest of Oopuloa,
Of my lehua trees at Hanehoi,
The leaves of the hala by the sea,
With leaves blown downward by the wind,
The leaves of the hala of Honomaele,
My hala blossoms full of fragrance,
The divided forest of Akiohala,
As a wreath before the face of Kamehaikana,
These are the gifts given by the voice,
An offering given in the presence of Lia'wahine,
Greetings.

At Oahu is the foundation of the feast,
A feast held on the site of Helani,
Here before you is the fatness of the islands
From Kaula to Hawaii.
From Kahiki, too, came food, O heavenly one,
Without root, without leaves,
Growing here like Aahoaka.
Well supplied is the woman of Holani-ku
With men and with the water of Loiloa.
She commands when to get ready, to set forth,
Then the dishes are brought, the knives, the forks,
The spoons and the glasses,
The things are moved, set, arranged
On that side and on this side,
Everything is on the table,
There on the corner of the earth.

inches

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
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D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

centimeters

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

It is an old earth, old since Kahiki.

Get up, stand and sit carefully,

Keep silence after sitting

As a fitting grace is said before God.

Eat, O heavenly one, remembering,

That the kapu must be observed for the feast, O heavenly one.

The leaves of the lands of Piilani are unfolding,

Over my waters of the cliff of Kahiwa,

Of Kikipua standing before the sea.

(This mele seems incomplete).

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

centimeters 0 1 2 3 4 5 6 7

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

END

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

He Koihonua no Kaleleonalani.

O mai ke alii Kaleleonalani, ke alii nona ia inoa,
Kapu ka lani kapu ka honua.
Hoii, hoanoano ihi ka leo,
Hamau ka leo e, kapu e, kapu ke alii,
He alii pono na ka maka i ike aku,
He alii a ka maka a ka ihi kapu,
O Ka-ihi-kapu-a-Manuia
O Kane-a-hoa-lani ke alii
Hookahi wale no o Kaleleonalani i kona kapu,
Hookahi no, aole lua aku la
Elua mai wahine i ike i ke kapu hoano moe,
O Kalola-pupuka-o-Honokawailani,
O Kalani-nui-kiikii-ao,
He maka no Ka-ihi-kapu-a-Manuia,
Ihi ka lani, hamau ka leo,
Malu ka moku i ke alii,
O Kakuhihewa nui makua,
O Kawelo-nui-a-Ululani,
Hanau pono o Kekelaokalani,
A kau o Kawelo ka maka,
Ko maka, ko lani, ko alii, ko haku la,
Akahi no a hea ia e ka lani o Kawelo Kauloaiwi,
O ka maka o ka lani nui ke alii, eo,
E o aku ana i ka inoa o Kaleleonalani,
Ua loaa maloko o Kekelaokalani, ka makua,
Nana ke keiki, e o la,
O mai o Kaleleonalani ke alii nona ia inoa,
Lolilohi ka lani, wa'ewa'e ka moku,
Punahelu ka honua, ua i-i,

START

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
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D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

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0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

centimeters 0 1 2 3 4 5 6 7

M000528

inches centimeters
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
D50 Illuminant, 2 degree observer
Don Williams
All values are batch averages
M000528

Ke ae kunahihi no ke ao,

He mao pani no ka ino o Ikuwa,

He hailepo makani no na huihui,

He kawa-u no ka honua i lalo,

He au pala no ka i'a o Lumilani

I na la i ka poli o Anu a

Mai laila mai ke Kiu o Kemelia,

He koa ia e kawau ái ka moku,

O ka moku ka Kaleleonalani i noho,

O ke kiekie, o ka hanohanô ka i Koalaka mai

Aia la, aloha no.

O mai Kaleleonalani ke alii nona ia inoa

E aha ana oe e Kaleleonalani

Hoa noho o ka la i luna,

E walea a'e ana makou i ka hau hana lani,

I ke i lani ana a ka lani na,

He lani mai no mai ka po mai,

Na ka uhi a ka po kapu,

Ouwai a ka po kapu, o uwai a ka po i ka lani,

O hanee i ka honua ka po,

E ka po lani e, auhea ka kaua lani?

Aia i Kupina'i, i ka ula hooleilei lani,

Kulia i ka nuu o ka lani Kalanikaumakaamano,

Lolo poo ka la i luna, ka lolo o Ku ma laua o Lono,

Ka hau kea muhea o Lehua,

Kapu malahia ahaaha o Wakea,

O Wakea ka maka, o Haloa ke ewe,

Ka mahele alii a ka pae opua,

Ka pae opua o ka newanewa,

Aala mai ana ka makani

inches 3 2 1 0

centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

He hanu no luna o Kanaka-mea,
I ke alo o Kameha'ikana, he hiapo,
He ua mai ka lani, mai luna e,
E ua, e ua i lalo o ka honua i ka moku o ka lani,
Aia la, aloha ino.

Akaka i Kilauea i Puna ka uahi,
He uahi lehua no Ai-lehua
O ke kupu lau e koele ana ia Moeawakea,
Lau ohia na ke akua,
I ka nahelehele i Ieielewa e
Ua lewa ia Kaumaka i ka nana e,
Ua apo wale ka onohi i ka holoholo,
I limalima aku ko manao e lalau,
E lolo aku i ke kaha i mana oe
Aia la, aloha ino!

O mai o Kaleleonalani ke alii nona ka inoa
O Hopoe lehua haahaa, O Keaau ohia hao'e,
Au iho la o Panaewa, i ka maka au o Hanalei
Uliuli mai ana ia'u, ka wohi pulama i ka ino,
Aia au a ike aku i ka hapa o Honokawailani,
Alawa a'e au o Paliuli
Aniania mai ka makani,
Puhe'u mai ana i kuu alo,
Oloolo kani a ka manu, kani mai ana kuamauna,
Oa'u lehua e ke aloha, ua pau mai la i ke akua,
O ka holo mai a hihi i ka luna o Puupaialau
O Haili nui kula manu, e Haili e hooluea,
Hooluea ka hale kipa wale,

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

centimeters 0 1 2 3 4 5 6 7

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

E kii e ka lani i ka amoo la,

O kaua ihi lani oe e ka poino

He ino la au ia oe, he palai au la i ka lili.

Aia la, aloha ino.

O ke kino aloha a ka i'a moe a au,

E holo ana i kua Kahiki,

I ke poo o ke au o Hanalo'i a,

Hana ke aloha he ukana e noho nei,

Ua opeope a ua waiho malie,

Aia aku no ua aloha hou a,

O ka makani noe aloha o ka Lupua wai opua,

I lu i ka pua hau lana i Wailua,

Aiai kai o Kalehua --- u -- e,

Manao au aia i ane'i oia la,

He kanaka haawe, kukala i ka pono,

E ha'i no i ka la nui ike ola

Ola o Kaleleonalani i ke ao malama nei.

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

END

Genealogical Chant for Queen Emma.

Answer, O Kaleleonalani, thou chiefess whose name chant this is,
Heaven is kapu, earth is kapu,
Hushed, silenced in reverence the voices,
Keep thy voices still, for kapu, kapu is the chiefess,
A good chiefess upon whom we look,
A chiefess whose face shows the strict kapus,
Of Ka-ihi-kapu-a-Manuia,
Of Kane-hoa-lani the chief.
Only Kaleleonalani has his kapu,
Only she and none else.
Two other women have had the sacred prostrating kapu,
Kalola-pupuka-o-Honokawailani
And Kalani-kii-kii-ao.
Hers is the face of Ka-ihi-kapu-a-Manuia,
Heaven is sacred, the voices are hushed,
The islands are made peaceful by the chiefess.
Kakuhihewa the great, the older one
And Kawelo-nui-a-Ululani,
The fitting progenitors of Kekelaokalani
Whose face is that of Kawelo.
There is your favorite, your heavenly one, your chiefess and mistress.
It is the first time that the chiefess is called Kawelo Kauloaiwi,
Thou favorite of the mighty heavenly one, the chief, answer,
Answer to the name of Kaleleonalani.
Born was she from Kekelaokalani, her mother.
Hers is the child who lives today
Answer, O Kaleleonalani, thou chiefess whose name chant this is.
Changing is the heavens, rotting the earth,
The earth is mildewed; it is sour smelling,

START

inches 3 2 1 0

centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000528

The clouds are without color,

A storm is brewing for the month of Ikuwa,

The dust laden wind rises toward the Pleides,

There is dampness on the earth below,

A feeble current for the fish of Lumilani,

In the days when held against the bosom of the cold.

From thence came the spy of Kemelia

A warrior that brings chilliness to the land,

The land upon which Kaleleonalani lives,

Whose majesty and regalness came from Koalaka.

There she is, O how we love her.

Answer, O Kaleleonalani, thou chiefess whose name chant this is,

What art thou doing, O Kaleleonalani.

Companion of the sun on high,

We are enjoying the refreshing dew of heaven

The supreme one, the heavenly one is she,

A heavenly one descended from the gods,

From the spreading of the kapu night,

The moving of the kapu night, the moving to the night to heaven,

Falling upon earth is the night.

O heavenly night, where is our heavenly one?

Gone to Kupina'i where the heavens glow red,

Elevated on high is the heavenly one, Kaumakaamano,

Directly overhead is the sun, directly above with Ku and Lono.

Like the acrid white dew on Lehua

Is the bitter kapu of Wakea that causes one to pant.

Wakea is the source, Haloa the branch,

The division of chiefs among the rows of rain clouds,

The rows of rain clouds in space.

The wind brings such fragrance

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

The breath of perfume from the heights of Kanaka-mea
Before the face of Kameha'ikana, the first born,
Is rain from heaven, from above,
Pour, pour down upon the earth, on the land of the heavenly one.
There she is, O how we love her.

Plainly from Puna, Kilauea's smoke can be seen,
Smoke from among the lehua trees of Ai-lehua,
Rising in a thick column, darkening Moeawakea,
The many ohia trees of the gods
In the forest of Ieielewa.
Kaumaka has seen them all,
Her eyes have taken in all as they moved about,
With her thoughts so eager to grasp them,
An offering from the land that power may be hers.
There she is; O how we love her.

Answer, O Kaleleonalani, thou chiefess whose name chant this is,
At Hopoe the lehua trees are stunted; at Keaau they are tall and straight,
Panaewa passes before the glances of Hanalei,
It whistles to me, this chieftain who embraces the storm.
Later I shall see a part of Honokawailani,
I glance over at Paliuli
Where the zephyrs play,
Quickly they go puffing before me.
The birds sing aloud, the land shells trill,
My lehua blossoms, O loved one, are destroyed by the gods,
Destruction hurried and spreaded out on Puupaialau.
There is Haili land of birds, Haili the productive,
Producing a house freely visited by all.

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Go fetch, O heavenly one, the remainder that is left,

Lest you find them all destroyed

I am not despised by thee, I have not been in disfavor,

There she is; O how we love her.

The beloved form of the shark who lies in the current,

Goes sailing toward the back of Kahiki,

At the head of the current of Hanalo'i,

Love made the package, that is here,

Has wrapped it and left it alone,

There are still other lovers,

The misty love wind, Lupua, blows the rain clouds,

And scatters the hau blossoms to float on the water at Wailua.

Clean is the sea of Kalehua.

I think that he is here,

A man who carries and announces the truth,

Telling of the great life-giving sun,

Long may Kaleleonalani live in this world of light.

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

centimeters 0 1 2 3 4 5 6 7

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

END

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Geneological Chant for Queen Emma.

O Kumuhili ka lani o Kalaaumoku,

O ke alii o Hanalea o ke kahiko maka o Palena,

Na Haho o Waia ke alii, ke alii o Kehaukapu,

Na Kehaukapu o Kuaiwa,

Na Manu-a-kela-i-ka-po-loa,

Na Ka-ehu-a-ka-po-hoi,

Na Kulu-a-ka-po i hanau mai,

O Makulu ka lani, o Haloa ke alii,

O Hana-ke-o-kihi kama ola a Ka-maka-Holani,

Kini alii i noho i ka wai o Makana,

He alii kau na lauae o Kalalau,

Pua mokihana, hanu pue'a ke hei,

Ako ala i ka na'ena'e o Kawaikini,

Kihae ae la o Kamaile

Ha'iha'i ala o Makua i Kalalau,

Pikoi ia, penu kai o Hana,

Kaakoli ia ana o Honopu waiakua,

He ino no ia alii, kahe kai huna ole

Na Kama kapu ia nei,

O ka lau mano alii na o Haka,

Na Kawelo na ka moo-kiha i ka wai,

I manawa i ka wai, i nonolo ka puu,

Ka puu i luu i ka wai a Kuhe a,

Ua kuhe ka ili, ua paka ka ili,

Ua hooulu ka ili i ke kino, ua hoopala a kiha,

Ua unahi pakalua i ka hi'u weloka,

Ua holo hi'u Kawelo, ua holo poo

Ka mala unahi, unahi i paa i ka wale,

START

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

centimeters 0 1 2 3 4 5 6 7

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000528

Ka wale ia o Kawelo, o na hale kino ia o Kawelo,

Kai pili i ka wai o Hakookoo,

He koowai, koowai o Konalele----,

Kai koo i ka wai o Hakookoo,

Kai koo i ka wai o Uulua,

Ke hoholo pu nei me ka moo-kiha,

Ua kahuli oni'o eleele ka ili o Kawelo,

O ka lena, o ka lenalena o ke alii nui,

Ua hapa i'a, ua hapa kanaka,

Ula ka lalo, hoomeha, aia o Kawelo e holo nei,

Holo kanaka hooho ia Kawelo e holo nei,

I na la he kanaka kino lehulehu,

He manomano, he imi a naha lani kapu a Kawelo-ai-kanaka,

He hanau ia na ka maka o Kualii ke alii,

Ke alii hoi na Kawelo i Oahu, o ke Oahu a Kakuhihewa,

Aina o ka lani, mano ia alii,

I ke oho moe nolu pe i ke kapu,

Oi hele, hele mai o kalani

Na Ewa ula a Laakona ke alii,

Na Ewa, na kikee nui a Ewa,

Na Ewa hoi i Kukaniloko,

Na Kalamakua i Oahu,

He oki no ka pu ahuawa,

He hau no ka uka o Lihue,

O Kou a Kanehoalani,

Na hoahoa o Kupihea,

No lalo o Waialua,

No ka maka'u pali,

He alii o Kakuhihewa nui maka'u pali,

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages
Don Williams
M000528

He alina no ia alii,

Ke oki ku pee ke kaona la,

He hale 'welu no Waianae,

He lihilihi ea no Pahua,

O Kaumaka ka hoku a Mano e,

O Kaumaka ka hoku, ka hoku no,

O kalo lena o Kaihukea,

O ka puukaa mai Halaia,

Nolaila ke ala i anuanu ai,

I hu'ihu'i ai, he aala alii nui, kawekiu lani nui,

He ewe no na alii, he kumu laha ole,

Ke kumu o na alii i laha mai ai lakou,

Awaawa awahia o ke kapu,

Ka awahia okala nui, o ka awa i ke ka lolo alii;

I 'hee ai i ke kanoa kapu o Kalanikauleleiaiwi

Ku i ke amo i ka apu alii o Umi-kalakaua-a-Kama,

Kauakahi-a-Kakuhihewa,

O Kawelo ke alii o Waiolani, o ka neeui i Hanalei,

O Kaina he alii no Humanu,

Kini alii i noho i ka wai o Makaukiu ku kona,

O ka moho kuanea, kuanea kalani

O ka lani kau pale, pane poo i luna o Ke-kapu-oho-lani,

I kapu ha-ku ia na Lono,

O ka lani kona mea e hu'ena

O na ao i ka liko o Laa e.

No Laa ia mau ao lani

I puoko memele i ka hikina,

I luna i Ka-unu-hoa-lani,

Ka unu kapu o Kamahano e,

inches 3 2 1 0

centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	-22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000528

Na Kama-hano ia lani kapu,

Ka-lani-ku'i-hono-i-ka-moku

Kane a Kamakea-wahine,

Wahine a Kamakea-kane,

Loaa ka palena o na lani

Lani hakilua i ka wa,

Ko laua makuakane o Ku, Kauakahi-a-Ku,

O ka maka pa a Haumea,

O ka pua naha a iuiu e,

No Uilani kela maka,

No Ka-lani-poko-o-Hoolewa,

Na Ka wahine alo i ka la,

Kau keha ka la i Lehua,

Hele wale i waho ia lani,

Puhia Lawakua na alii,

Aohe wahi hemahema,

He makaukau wale no,

Kau ai ka lako wale i na alii e,

I alii i kanaka, i kapu i ke aloha,

I kau i ka laahia iaia,

Ka unuunu me he unuunu kahakai la,

Hele wale ma na hakuma lani,

Aia naku a lolohua ka manao,

Ka 'liha kau poopua a ke kanaka,

Poo a'e la i ke aloha kau umauma,

Aiwaiwa nui ia la i ka hele,

A hele a'e ka mea i eha ai o loko,

He mahalo wale no kana olelo

He leo keia e uwalo nei e,

Ke hea mai nei ma luna o Makaunu kapu a Hanae,

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Hoolono ia aku ana o ka noio hele la ma ka maii wahi alii,

O ke kamu ai maia o ka uka wao kanaka ole o Laauhaele,

Hele mai o Kaleleonalani, iuiu, anoano, mehameha ia lani ke puka,

Me he ano no ka Makahiki la,

Ke ko-ko mai o ka weli, he weliweli Kauhi, he maka'u,

Me he maka'u no ke akua la,

Ea mai Aikanaka-a-Lono, o Lono nui a Piilani

Ke alii o ke kapu o-------e,

Puoho Kama a Maui, holo kaakua i ka manono

Hana ka oulu lau makawalu,

Kapu mai nei Pihanakalani,

Na ka lani na Kalakaua-ehu,

Hanau o Kaleleonalani

Ke noho kiihelei mai la i ike ia ai e na moku,

Ma ka moku aui ole ka noho.

Ilio ii kalawela, maka'u ka manu lele oloio,

Lele mio, pakii, kolo i ka nahele,

Ka weliweli ia Kalani, kau lani hoohiwahiwa ho'i,

No Hiwauli ka hala o Kalahena,

Kukupu maka hao'eo'e ka ohia,

Hoole'ole'o i luna a i lalo

I hapai'na e ka ua a ki'eki'e kawelu, amau o ka Hilo-pali-ku,

Nana aku oe me he manu maka noenoe la,

Ka noenoe hiwa uli o ka laau, ke oho ohia o Waiakea,

Hoakea iaia i kaawale

I pau ke kilohi, ka nana i ka moe,

Eia e.

inches

centimeters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

END

inches centimeters
D50 Illuminant, 2 degree observer
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000528

Genealogical Chant for Queen Emma

Kumuhili was chief of Kalaaumoku,

A chief of Hanalea, an ancient progenitor was Palena;

Haho son of Waia was a chief; a chief was Kehaukapu,

Kehaukapu was an ancestor to Kuaiwa,

It was Manuia-the-great-one-in-the-long-night

It was Kaehu-of-the-night, also

It was Kulu-of-the-night who bore him.

Makulu was a heavenly one; Haloa, a chief,

Hana-ke-o-kihi was a human offspring of Ka-maka-Holani's

Multitudes were the chiefs who dwelt by the waters of Makana,

A chief of the lauae ferns of Kalalau,

The mokihana berries and the fragrantly perfumed hei,

Plucked is the na'ena'e blossom of Kawaikini,

Torn into strips by Kamaile,

Broken into pieces by Makua at Kalalau.

Beaten and tossed into the sea of Hana,

Despised is Honopu the desolate.

He was a wicked chief; a flowing, lifeless sea.

She [our chiefess] is a descendant of the sacred Kama,

Of the multitude of chiefs descended from Haka.

From Kawelo, the moo that dwells in the water,

Who lived in the water; made a gurgling with his throat,

The throat that dived into the water of Kuhe

The skin coarsened, it thickened,

The skin enlarged the nody, yellowing it like a lizard's,

The scales grew down to the moving tail,

Kawelo traveled by means of his tail, he went head first,

Scales cropped up, scales that were covered with slime,

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

That was Kawelo's slime; the shelter of Kawelo's body,

The sea lies close to the water of Hakookoo

A dam, a dam for water was Konalelo ---,

Rough was the sea to the water of Hakookoo,

Rough was the sea to the water of Uulua,

Together he swam there with other lizards,

Changed and streaked with black was Kawelo's skin,

Yellowed, yellowed became the great chief,

Partly fish and partly human

The [water] below looked red, there was a hush, Kawèlo swam by,

The people ran shouting as Kawelo passed by

There was a man of many forms,

Of multiple forms, an ancestor a sacred progenitor was Kawelo-ai-kanaka

Born of his family was Kualii the chief,

A chief from Kawelo on Oahu, Oahu land of Kakuhihewa,

Land of the heavenly one, a sacred chief he,

His hair was made smooth with kapus

He came, the heavenly one came

To red Ewa of the chief Laakona,

To Ewa, the great winding paths of Ewa,

To Ewa, at Kukaniloko,

To Kalamakua, chief of Oahu,

A division of a clump of ahuawa grass,

Dew from the upland of Lihue,

At Kou of Kanehoalani

Were the mallets of Kupihea,

From down at Waialua,

From the fearsome cliffs.

A chief was Kakuhihewa the elder who feared cliffs,

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

36.

A shameful thing to that chief,

A cutting shame to be concealed

A poorly made house for Waianae,

A bit of air for Pahu'a

Kaumaka is the star of Mano,

Kaumaka is a star, a star indeed,

A yellow taro from Kaihukea,

A clump of puukaa grass from Halaia,

That is the source of the cold,

A cool fragrance, a fragrance of high chiefs, the highest of high chiefs,

A descendant of chiefs, an uncommon source,

A source of chiefs from whence came they,

Sour, bitter with kapus,

A bitterness that chills the skin; the awa for the presence of chiefs,

To pour into the sacred container Kalanikauleleiaiwi,

To make it worth holding the royal cups of Umi-kalakaua-a-Kama,

And Kanakahi-a-Kakuhihewa.

Kawelo was chief of Waolani, the handsome hero of Hanalei,

Kaina was chief of Humanu,

The multitude of chiefs who dwelt by the waters of friendless Makaukiu

A lonely person, lonely is the heavenly one

The heavenly one who stands apart on the summit of Ke-kapu-oho-lani

A sacred lord unto Lono.

The heavens reveal her grace,

The clouds at the top of Laa.

To Laa belong these heavenly clouds

That billow, yellow, in the east,

Up at the top of Ka-unu-hoa-lani,

The sacred rock of Kamahano.

inches 3 2 1 0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

centimeters 0 1 2 3 4 5 6 7

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

To Kamahano belonged the sacred heavenly one,

Ka-lani-kui-hono-i-ka-moku,

The husband of Kamakea-wahine

From whence descended the boundaries of heaven

Heavens that doubled upon themselves.

Their father was Ku, Kanakahi-a-Ku,

Their progenitress was Haumea,

The blossom of naha rank, out of reach

To Uilani belonged those favorite ones,

To Ka-lani-poko-o-Hoolewa,

To the women that travelled in the sunlight,

The sun that shone partly on Lahua

The heavenly ones went out unprotected

The Lawakua breeze blew upon them,

There was nothing that they needed,

They were well supplied.

They were supplied for they were chiefs,

Chiefs served by the people and made kapu by love,

Sacred were they made to be.

A stick to denote the kapu, as those placed on the shore,

Where others went under the lowering brow of heaven.

Man goes pushing on until he becomes ill tempered

Unsociable and unfriendly does he become,

Then when he turns to place love upon his chest,

His journey becomes a wonderful experience.

He goes to the one who had hurt his feelings,

His words are one words of praise,

He calls from the top of Makaunu, sacred hill of Hanae,

The noio birds pause to listen as they soar to the place of chiefs.

inches

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
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b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

centimeters

M000528

inches centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

The banana eating birds also of the uninhabited forest of Laauhaele

Kaleleonalani comes, majestic, holy; silently comes the heavenly one,

Like the sacred silence of the Makahiki

Bringing with her the dread, the dread of Kauhi's kapu fearful,

A fear as of a god,

Aikanaka-a-Lono rises, great Lono son of Piilani,

The chief of the prostrating kapu,

Kama ruler of Maui arises at once, before whose kapu none stands,

Many times over are they.

Kapu is Pihanakalani

For the heavenly one, for Kalakaua-ehu,

Bord is Kaleleonalani,

She sits astride over the islands,

Sitting upon an immovable land,

Like a brown brindle dog that frightens the birds which fly screaming,

Flying silently, crouching low and creeping away into the forest,

They fear the heavehly one, the beloved heavenly one,

To Hiwauli belongs the hala trees of Kalahena,

Tall and straight grows the ohia trees,

Straight and smooth from top to bottom,

The rains lift up on high the kawelu grasses and tree ferns of Hilo-pali-ku,

Till they look to you like sleepy birds,

The restful green of the trees, the ohia leaves of Waiakea,

Sweep them aside that they may be separated,

So we gaze no more upon this dream,

Lo, here she is.

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	-19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000528

END

inches centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

Mele Inoa (Queen Emmas' perhaps)

O Kaeo-ku-lani, Kalalawalu,

O ke kahe a ka wai kapu alii a Loe,

O ke pani hanono wai a ka uka,

O ka halo lani kapu alii o Liloa,

O ka paepae kapu o lakou,

O ka lala i kau mai i ka wekiu,

I mohala ka lau, ka liko kapu o,

O Haloa ka lani o Umi ke alii,

O ka makolu lani na o ke kapu,

O ka pali pilikia o ka pela,

He lohelohe kuna moe wai no ka pela la,

He mau lohe laua na Kalohelani,

O ka lau hiwa a Makakaualii,

O ka maka e ohi ka mapuna-wai

I ulu ka ele ka hooholo i ka lalani,

O ka haku'i alii, kawowo lani,

I holo pono i kuamoo o Haloa,

Na Kuihewa, na Kama ka ka lani,

Loaa ka lau, ka ao, kahi o ke awe,

O ka pia manalo ole keia o ka lani,

O ka uhu jumulea ia o Kamakea,

O ka huli i owaka i mamaka mai ke kapu,

I ulu mai kapa, Ulu o Hakalau,

O ka lau kahiko, o Piilani na alii,

O ka ouli o ka lani, na kolu lani,

O ka awai alii o Kaulahea,

Na Kiha ka maka, ka makalappua,

O ka hiu i ala mai ke kua la,

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

0.75 0.98 1.24 1.64 1.96 2.38

All values are batch averages

M000528

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000528

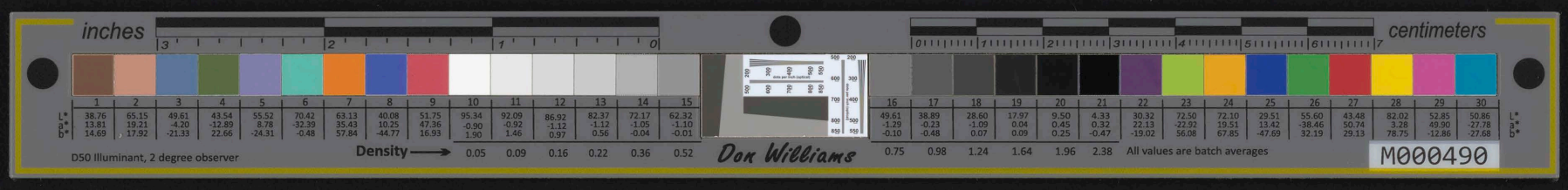
I nahae mai ka mana kapu oi,

O ka mana kapu aku ia he akea lani,

O ke ki'o wai hohonu o kama a Umi,

O na maka i pua o Kama he ewalu,

A walu ka lai ai kapu, ke hana la.


inches
centimeters
Density
Don Williams
D50 Illuminant, 2 degree observer
All values are batch averages
M000490

END

inches centimeters
D50 Illuminant, 2 degree observer
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

Chants in Praise of Chief (or perhaps the Chiefess, Queen Emma).

Kaeo-ku-lani and Kalalawalu,
Flowed from the sacred, royal waters of Loe,
The strong dam that held the water in the upland.
Offsprings of the sacred, royal bosom of Liloa,
To them belong the sacrdd platform.
Of the topmost branch of the tree are they,
Their leaves unfolded, the buds of the postrating kapu.
Haloa was the heavenly person; Umi was the chief,
To them belong the multiple kapus,
A sheer and dangerous cliff where the bodies are hidden away,
Like the young dragon flies, hidden in water, so are the bodies.
Descendants are they of Kalohelani,
The many favorites from Makakaualii,
Faces that can withhold the springs of water.
Growing profusely, coming down in a line
Of the powerful chiefs, offshoots of chiefs,
Coming directly from the lineage of Haloa,
From Kuihewa, from Kama came the chiefs,
The leaves, the buds, the tendrils were founded.
The heavenly one is an arrowroot that does not lose its bitterness,
A fearless uhu fish of Kamakea,
A taro stalk that unfolded with newly-budded kapus,
That grew along the borders. Hakalau grew from
The old leaf stalk of Piilani, the chief,
Whose omens are in the skies, the triple skies,
From the most sacred chief, Kaulahea.
To Kiha belongs this face, this unfolded flower,
A tail that grew from the fin down the back,

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
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D50 Illuminant, 2 degree observer

Density ⟶ 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

That divided itself into a branch of piercing kapus,

A kapu division of a powerful chief,

Of the deep pool of the children of Umi,

Of the flowers of Kama that unfolded, eight of them,

Eight held in the peaceful bond of the kapus; they live on.

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52

Don Williams

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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0.75 0.98 1.24 1.64 1.96 2.38 All values are batch averages

M000490

END

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7
D50 Illuminant, 2 degree observer
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

No Ke Luahine (Geneological Chant for Queen Emma)

O ka mauli o Ku i hele i ka lani,

Mauli o Ku, o Ku-ka-lani-hoonee-nuu,

Akua Luanuu no Kamakai'a,

Keiki Luanuu a Laka ha'i manawa lani

O Ha'i, o Kumalae e.

O Ha'i ku, o ka onohi ula o Ku,

Kalai ia Ku, ke koa i Kawaluna,

O meo Ku e kau i ke ao,

Me he ka uhi ala i ka lani,

Lele Ku i luna hoano ia na moku,

Wahi ke keiki o ka lani,

Haluku aku la i ke [redacted] o ka moku,

Mololani ka ula i Melemele,

Haua e kona nui aloha

Meha ke kua, ko, nahae ke [redacted]

Oilo kupu hou ka moku,

O ka hihi lau a Lupe---e---,

Na Lupe na kaei a-i-----o,

Na ke kama ka mahiole kapu,

Na ke kama ka ai olani,

Na O e ka nunu kapu

Na ka wahine hua i ka lolo,

He lani hua i lolo na,

Loaa ai ka lolo o na alii,

I ke aki manawa hooku'i,

Ka hono ku o ke kulu i Laumaha,

Ka mahu o ka umu kinana iho ae

Ke poo o ka mahu lani, mahu kapu

He wahine kapu lani i hoa i ka hau o Kauakahi,

START

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

inches centimeters
D50 Illuminant, 2 degree observer
Density 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

Aa aku i ka laua makahiapo

Nihinihi ai e na alii, nihihi kohina, e Kalani,

Lalahi wale kalani, hoike a ka mea

Ke aho o Ku o kona makua kapu.

Me he lau ki la ka lahilahi, e kau pinao ia lani,

Ka pili iho pana'i ole, pili awaina ole ia lani,

Awaina ole i ke kapu, he kapu la kana olelo,

Ua awaia aku ka maha o Lono,

Kuhia aku ka maha i like,

Nana ia aku a ike,

He okoa ko ke alii mea o ke kapu,

He kapu ke alii [redacted]

O Emalani ke alii.

He alii ulu kapu i kanaka i na maka

He hoailona kapu ka pahu [redacted]

He hoike maka no ka noa, he ha'i maka no ke ino,

He ho'iho'i no ke kane ia ne'i,

Kaa mawaho ke ola, maloko ka wela,

E pii ai ka wela a hala wale i luna,

Loaa mai luna ke alii

Ono ka ai a ka muli lani, ha lani hoalina aina,

E ha'i iho ana i lono

E kauoha iho ana Ku i ke kanaka,

Moe malie i ke kai o ko Haku e,

Mai oni a'e i ke kai o ke alii,

He akua Ku, ma ke kua kona au,

Ma ke kua ke au awaawa,

Aia ma ke kua kekahi maka'u,

He maka ko ke kua e nana a'e ana,

inches 3 2 1 0 | 0 1 2 3 4 5 6 7 centimeters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
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	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

inches centimeters
D50 Illuminant, 2 degree observer
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

O ka paa kapu o ke kahili

Alua mea o ke alii malaila,

O ka imi lani kuhau lua kela,

A kuhau lua na alii, a mana ke akua kaa malani,

I weli lua ia o Ku la, a ho'i kolu ia Kalani,

Ho'i kolu, ho'i ha ke kapu ia Lono,

Na Lono ka lau, na Lono-nui-Akea,

Keakealani a Kanehoalani ua mau alii nei.

He mau alii na Kanehoalani

O oukou ia, e Kanehoalani, mai loko mai o Kanehoalani,

Na ipu wai a Hoalani o Kalani,

O ka haku [redacted] lani ka ia

O ke kani a ka uwe i ka lani o Kama,

O ke Kama, ka lau o kela Kama,

[redacted] lani i o,

I o Kauhi la no, i o Kauhi-a-Kamalalawalu,

Pehea la ka uhi, pehea ke aka,

He molohai, mololeha ka uhi,

He pule wale no Kona ano, he paa koiikoi, he koi,

He koi wale ia Piilani ------ e,

He makoi i ke kapu o Piilani wahine

Ia lani papa'i, papa eka, papa eka i ke kapu,

Pepeeki manoanoa, makolukolu, ili lua,

Ili paka o ka ni'o alii i Leleahana,

He mau mahana e noho nei,

Noho mai o Kauhiakalani, paa,

Pili paa mai ka uhi kaamola ke aka,

A hula ke aka mawaho o ka uhi,

Wehe mai o Kalani maloko o Kainehu

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
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D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

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M000490

inches centimeters
D50 Illuminant, 2 degree observer
Density 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

Hu'ehu'e ia mau lani nui,

O Kauhi ma no laua o Keaka,

O ka Keaka lau kua i lani mamao,

Kua i lani mamao lau a Keaka,

Ka Keaka poo mai he lani lau,

O ka Kaikilani, o Kaikilani alii lau akea,

O ko Kea-ka-ai-nehu o Maka,

O ko Kukona lau o Ka-lani-kukuma,

O ka Kahiwa-a-Lono o Kaleleonalani ke alii e,

O ke alii o Kahi-o-lana-i-maalo

O ka Maalohiolani Kauhi keia,

Oua Keaka la keia, [redacted] ke kapu,

Liolio i Wawau na alii,

[redacted] he mau mana i like kike ana,

I pakela ka heluna a pa'i, [redacted]

He mau kaopua na alii, ka papale lau aka ole i ke kapu,

O na alii maoli na, o ke kumu olu mai ka po mai,

O kona panalaau, o ka aina,

He opala ke kapu no ke alii moku,

Na ke alii nui i luakini i kanaka,

I holo ka papa o kona makahiki e,

Makahiki ku ka mauli i Oahu,

Makia i ka ulu pale o ka honua,

Kuini ua keiki no Akua, ke kino laau o Laumalahea,

He laau, he maha ulu koa, he koa ula, he koa lei,

O ke koa ku i ke aki nuu,

Lealea ia Ku makua akua e,

O kuu makuakane ia o Kalani,

O Kalani kupuna kane kualua oe,

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
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b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

inches centimeters
D50 Illuminant, 2 degree observer
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

I noopuna kuakolu ia oe e-----.

O oe ia e Kaleleonalani a Kauahoa,

Ka hiwahiwa o Hoohila la o Kihi,

O Kiha alii o Kahalahala,

O kuu maha lani o Kaioe la,

O oe kekahi alii, e ho'iho'i paha,

E ho'iho'i i luna a i lalo i kuu waimaka,

Halana e kahe, e kulu, e hanini,

Aohe wahi i koe o ka hanini,

Ili i luna ia oe oia kahi,

Aole au he huli wale iho no.

O ka huli, ka [redacted] ia i o Akea, [redacted]

He aho ia no'u la e hanu a

E hanu a'e ha au i maha ai

[redacted]

O ke aha lani o Kalahu,

O ke Kalahu lani poo ula o Wainiha,

O ke oho ku'i, oho hou o ka lani,

O ka huini oho ekaeka o ke akua,

O ke kaa i kupu o ke kaa i lani,

O ka wahi o ka hulu e paa ai,

O ka hulu e lele i ka ehu lani,

I ka ulu o ke ahiahi.

O ke kino hulu manu o Ku

Akua aimoku a Kiha-a-Piilani,

Noho o Kiha i ka moku a hoohuelo

Kauoha ia ka maka o Laaina,

Ia Kamakau ka lolo o ke kapu

Papani kua'i ole i luna.

O Kauhi-lono-honua-a-Kama,

inches 3 2 1 0 | 0 1 2 3 4 5 6 7 centimeters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

inches centimeters
D50 Illuminant, 2 degree observer
Density 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

Ike ia o Kauhi he peelua ka hoa,

Weweli wale Kauhi-lono-honua,

Akua wale o Kalani-ku'i-hono-o-ka-moku.

He akua ko Kalani hoa e like ai.

Hamau i pee iho oe i ke alii,

O ka ike ia ke hoano mai nei,

E kolo ka puu iki i ko maka,

E kikoo a'e na haku i ka luna,

O napa i napa ka pua o ka lihilihi

O hualake ka lau o ka onohi,

O kunihi loko malamalama he ike hapa,

He mau alii ha'oha [illegible],

Aohe laau nana e hihi a'e,

Aohe ulu laau, nahelehele,

Aole malu nana e alai o Kalani-o-na-lani,

Aohe upena nana e kuu o Kawelo,

E loaa ai oia ka hanau manō,

Hanau kanaka mai o Kawelo, hanau alii oia keia,

Oia nei, oia la, elua kualā o Kawelo,

Alua i'o o Kawelo i ka haku alo,

O ko Kawelo hanauna aku no he kapu,

O ko Mano imi naku no i ke alii ----, e ---,

E imi aku ana no ia Mano a oolea wale ke kapu,

O Emalani ia o ka hulali o ke kapu,

Ku mai Emalani, haunaele na moku,

Hele o Emalani a ka hae o na lani,

O ka ho'i ka hele au e Emalani,

Loaa ka hikina ka loa o ke kapu,

Nana i o Kauhola-nui-a-Mahu,

Loaa Liloa ka makua o ke kapu,

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

inches
centimeters
D50 Illuminant, 2 degree observer
Density
Don Williams
All values are batch averages
M000490

Ma-ku, hahau, hanee,

Hanee mai Liloa me he ulu au nui la,

Me he kuaua naulu nui i pano Hilo-pali-ku;

Pela no ke kapu o na lani, pela Mano, pela Kakuhihewa,

Mai hoohewahewa i na Kuhihewa ehiku,

Kakuhihewa i maka i ka lani, me he aka i ka wai akahi,

Oia maka o Kakuhihewa Kaumeheiwa, alua,

Iloko wale no o Kakuhihewa o Ka-lani-nui-maka-hakuma-i-ka-lani,

Makolu Kalani Maka-hakuma-i-ka-lani,

O ke kaha ia o ka una ea,

O ke kukulu o ka ea kua wawaka,

O ka wawaka o ka ea [illegible] i awa

A ua kamalani ka ea i ka awaawa,

Na lani awaawa e mu'e ai ka nuku,

Hoao iho, maneo wawalu moku ka lau o ko alelo,

He mau lani ka ami kileo,

E koii ai ka leo ha i ka puu, hoopana iki i ka dlelo,

Hoopono ia iho ka nau a ka niho,

E kuka'i ke a luna i loaa ke a lalo,

O ke a paa o ke kapu a Kaulahea,

O ka liliko, ka liliko, ka likoliko i ke kapu,

O ka weweke, weweke, weweke ia Wahine,

Na na kikini ka lani, nana i kikeke, kikonikoni,

O ke kaikamahine o ke koni lani a--- p Kaleleonalani.

Loa ke aa ula ke aa o Kalani i kupu ai,

O Iwikauikaua kane, o Kauakuaana au,

Poe alii a Kaiwi a ekolu,

Kiina ia aku ua mau kolu la, loaa ka weli i ke kua, a---,

Ke kua a ke kama a Kaulahea, o Kaleleonalani,

inches 3 2 1 0 | 0 1 2 3 4 5 6 7 centimeters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

inches centimeters
D50 Illuminant, 2 degree observer
Density 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

O Kanaka-nui, o Haku-mea-lani, o Ka-nakulu-ka-maka-o-Luanuu,

Iaia wae mai o ka lani,

Wae o ka lani hoao e kiloi i ke kapu

Unuhi o ka lani, onou a kaawale,

Waiho iho i ka hua na ka Haao,

Holo luna mai ko ia nei hoa,

O Ka-iwikuikahi-a-kama-pialu,

Unuhi o Kama-pialu ia Kaaka,

Hookaawale ia a'e i akea

Ke kumu o ka lani i makua lua ai,

He wahine ke kahua malama lani,

Nana i hoomoe ka pu[illegible],

Ka pulale, lalelale o Ku, o ke kuhili ku i o Lono la,

Hihia i o Lono la a ke kulu i luna,

Ke kawowo i hua maka wili e,

Kowiliwili me he laau hua nui la,

Ka pupu o ia laau nui o Emalani,

Ke loha la ka lau, ka malu i Hawaii,

O Hawaii nui a Keawe-nui-a-Umi,

Aina a Kauhola-a-Mahu, o ka mahu alii a Kauhola,

O Kau ke aa, ka mole o ke alii

O Neula wahine ke kumu o ke kapu,

O Liloa ke one wai e inu ai,

Moe ia Akahi, alii kapu a Kuleana,

Ku mai o Umi, koi me he pukoi la,

Kokoi aku Kapukini loaa na alii,

O Kanaloakuaana ka i Halawa,

O nahae ia mana o Kapukini i Maui,

He aa no Kapukini o Ka-lani-kau-maka-owakea,

inches 3 2 1 0 centimeters 0 1 2 3 4 5 6 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

inches centimeters
D50 Illuminant, 2 degree observer
Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38
Don Williams
All values are batch averages
M000490

Loaa pomaikai ka laulau lani

Ka laulau puuhaku i loko alii

Ka loko malahia, awahia o na alii,

O na alii piko hookahi, o Kawau ma lau o Kiha,

Ia Kiha moe kakaele o ke kapu,

Mai holo lihaliha na alii nui,

Nonopa, nonopa ka lani hoolei loa,

He mau lani keha, ku haku ole mai,

He hoio ku wale ma ka loa o Piilani

He loa Piilani, he loa ke kanaka

O na pua luhi a ka imi lani,

Aohe a'u lani liha i [illegible],

He liha ole, o Kauhi-kea-lani-o-Kama na,

Olioli o ka lau pua lani na,

I waiho iho ai i ke ao, e mana, e ola.

E ola ia Emalani.

inches 3 2 1 0 | 0 1 2 3 4 5 6 7 centimeters

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L*	38.76	65.15	49.61	43.54	55.52	70.42	63.13	40.08	51.75	95.34	92.09	86.92	82.37	72.17	62.32
a*	13.81	19.21	-4.20	-12.89	8.78	-32.39	35.43	10.25	47.36	-0.90	-0.92	-1.12	-1.12	-1.05	-1.10
b*	14.69	17.92	-21.33	22.66	-24.31	-0.48	57.84	-44.77	16.93	1.90	1.46	0.97	0.56	-0.04	-0.01

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
L*	49.61	38.89	28.60	17.97	9.50	4.33	30.32	72.50	72.10	29.51	55.60	43.48	82.02	52.85	50.86
a*	-1.29	-0.23	-1.09	0.04	0.45	0.32	22.13	-22.92	19.51	13.42	-38.46	50.74	3.28	49.90	-27.78
b*	-0.10	-0.48	0.07	0.09	0.25	-0.47	-19.02	56.08	67.85	-47.69	32.19	29.13	78.75	-12.86	-27.68

D50 Illuminant, 2 degree observer

Density → 0.05 0.09 0.16 0.22 0.36 0.52 0.75 0.98 1.24 1.64 1.96 2.38

Don Williams

All values are batch averages

M000490

END