

PUREEDGE LIGHTING

TEST REPORT

SCOPE OF WORK

Electrical and Photometric tests as required to the IESNA test standard.

MODEL NUMBER

CCWG-7W-36-30K-SN

REPORT NUMBER

103597691CHI-030

ISSUE DATE

July 9, 2019

REVISION DATE

None

DOCUMENT CONTROL NUMBER

TBD

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TEST OF ONE LINEAR LED LIGHTING

MODEL NO. CCWG-7W-36-30K-SN
LED MODEL NO. LUMILEDS 2835C
DRIVER MODEL NO. HUARI/DR-24V-2000-60D

RENDERED TO:

PUREEDGE LIGHTING
1718 W. FULLERTON AVE,
CHICAGO, IL 60614

AUTHORIZATION

The testing performed was authorized by signed quote number Qu-00901421.

STANDARDS USED

IESNA LM-79 - 2008: Electrical and Photometric Measurements of Solid State Lighting
ANSI NEMA ANSLG C78.377: 2015: Specifications of the Chromaticity of Solid State Lighting Products

DESCRIPTION OF SAMPLE

The client submitted one production sample of model number CCWG-7W-36-30K-SN. The sample was received by Intertek on June 24, 2019 in undamaged condition and one sample was tested as received. The sample designation was AH06242019024015-030.

DATE OF TESTS

July 3, 2019 through July 8, 2019.

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SUMMARY

MODEL NO:	CCWG-7W-36-30K-SN
DESCRIPTION:	Linear LED lighting

CRITERIA	RESULTS	
	INTEGRATING SPHERE	GONIOPHOTOMETER
Lumen Output (lumens)	1762.2	1803.3
Input Power (W) @ 120 (VAC)	27.37	27.18
Lumen Efficacy (lm/W)	64.4	66.4
Input Power Factor @ 120 (VAC)	0.989	0.989

CRITERIA	RESULTS
Input Current ATHD (%) @ 120 (VAC)	13.06
Correlated Color Temperature (K)	2997
Color Rendering Index - Ra	93.8
Color Rendering - R9	68.2
DUV	0.0020
Chromaticity Coordinate (x)	0.434
Chromaticity Coordinate (y)	0.399
Chromaticity Coordinate (u')	0.251
Chromaticity Coordinate (v')	0.519

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EQUIPMENT LIST

EQUIPMENT USED	MODEL NO.	CONTROL NO.	LAST CAL DATE	CAL DUE DATE
Yokogawa Power Meter	WT210	146919	7/1/2019	7/1/2020
Omega Thermometer	DPI8-C24	146920	10/4/2018	10/4/2019
LSI High Speed Mirror Goniometer	6440T	146928	VBV	VBV
Newport Thermohygrometer	iServer	146957	12/11/2018	12/11/2019
Pacific, AC power supply	118-ACX	CHI0358	VBV	VBV
Labsphere 2M Sphere & Spectroradiometer	CDS1100	146137	VBV	VBV
Elgar AC Power Supply	CW1251M	146113	VBV	VBV
Sorenson DC Power Supply	XFR150-8	146847	VBV	VBV
Yokogawa Power Analyzer	WT1600	146767	4/3/2019	4/3/2020
Omega Temperature	MDSi8	146873	7/2/2019	7/2/2020
Newport Thermohygrometer	iTHX-M	146382	4/17/2019	4/17/2020

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TEST METHODS

SEASONING IN SAMPLE ORIENTATION - LED PRODUCTS

No seasoning was performed in accordance with IESNA LM-79.

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - INTEGRATING SPHERE METHOD

A Spectroradiometer and integrating sphere was used to measure correlated color temperature, chromaticity coordinates, and the color rendering index for each SSL unit.

Ambient temperature was measured at a position inside the sphere. Each SSL unit was operated on the client provided driver at the rated input voltage in its designated orientation. Each SSL unit was allowed to stabilize for at least thirty minutes before measurements were made. Stabilization procedures to LM-79 were followed. Electrical measurements including voltage, current, and power were measured using a power analyzer.

The calibration of the sphere photometer-spectroradiometer system is traceable to the National Institute of Standards and Technology.

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD

A Type C Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for the SSL sample.

Ambient temperature was measured equal to the height of the sample mounted on the goniometer equipment. The SSL sample was operated on the client provided driver at rated input volts in its designated orientation. The SSL sample was allowed to stabilize for at least thirty minutes before measurements were made. Stabilization procedures to LM-79 were followed. Electrical measurements including voltage, current, and power were measured using a power analyzer.

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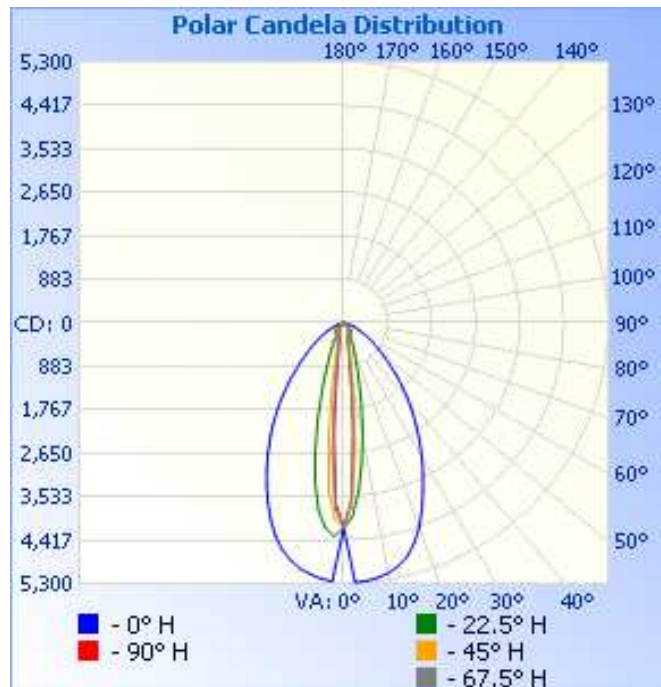
RESULTS OF TESTS

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

INTERTEK CONTROL NO.	BASE POSITION	INPUT VOLTAGE (VAC)	INPUT CURRENT (mA)	INPUT POWER (W)	INPUT POWER FACTOR	LIGHT OUTPUT (lm)	LUMEN EFFICACY (lm/W)
AH06242019024015-030	Base Up	120.0	229.2	27.18	0.989	1803.3	66.4

INTENSITY SUMMARY - CANDELAS

Angle	0	22.5	45	67.5	90
0	4164	4164	4164	4164	4164
5	5261	3444	2586	2160	2231
10	5164	2181	896	608	586
15	4913	1164	411	310	300
20	4428	630	266	245	258
25	3759	353	234	380	346
30	3131	235	345	183	179
35	2527	210	167	163	127
40	1978	254	155	89	87
45	1480	140	86	76	80
50	1054	121	69	71	87
55	749	110	60	78	91
60	512	132	46	84	109
65	318	144	44	86	88
70	194	90	39	58	51
75	100	48	34	30	20
80	41	33	22	12	8
85	14	23	10	4	8
90	1	12	3	4	12
95	0	3	2	8	27
100	1	1	1	16	12
105	1	0	1	6	4



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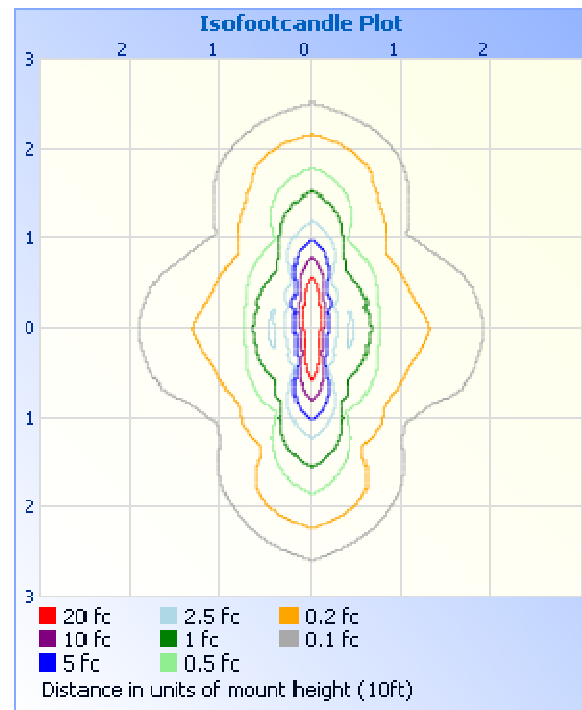
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RESULTS OF TESTS

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - DISTRIBUTION METHOD (25°C +/- 1°C)

MOUNTING HEIGHT: 10ft	
ILLUMINANCE - CONE OF LIGHT	ISOILLUMINATION PLOT



ZONAL LUMEN SUMMARY AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	955.5	53.0
0-40	1250.6	69.4
0-60	1618.8	89.8
60-90	174.8	9.7
70-100	67.8	3.8
90-120	9.6	0.5
0-90	1793.6	99.5
90-180	9.6	0.5
0-180	1803.3	100.0

ZONE	LUMENS	% LUMINAIRE
0-10	259.1	14.4
10-20	349.7	19.4
20-30	346.7	19.2
30-40	295.0	16.4
40-50	215.3	11.9
50-60	153.0	8.5
60-70	113.8	6.3
70-80	47.2	2.6
80-90	13.8	0.8
90-100	6.8	0.4
100-110	2.9	0.2

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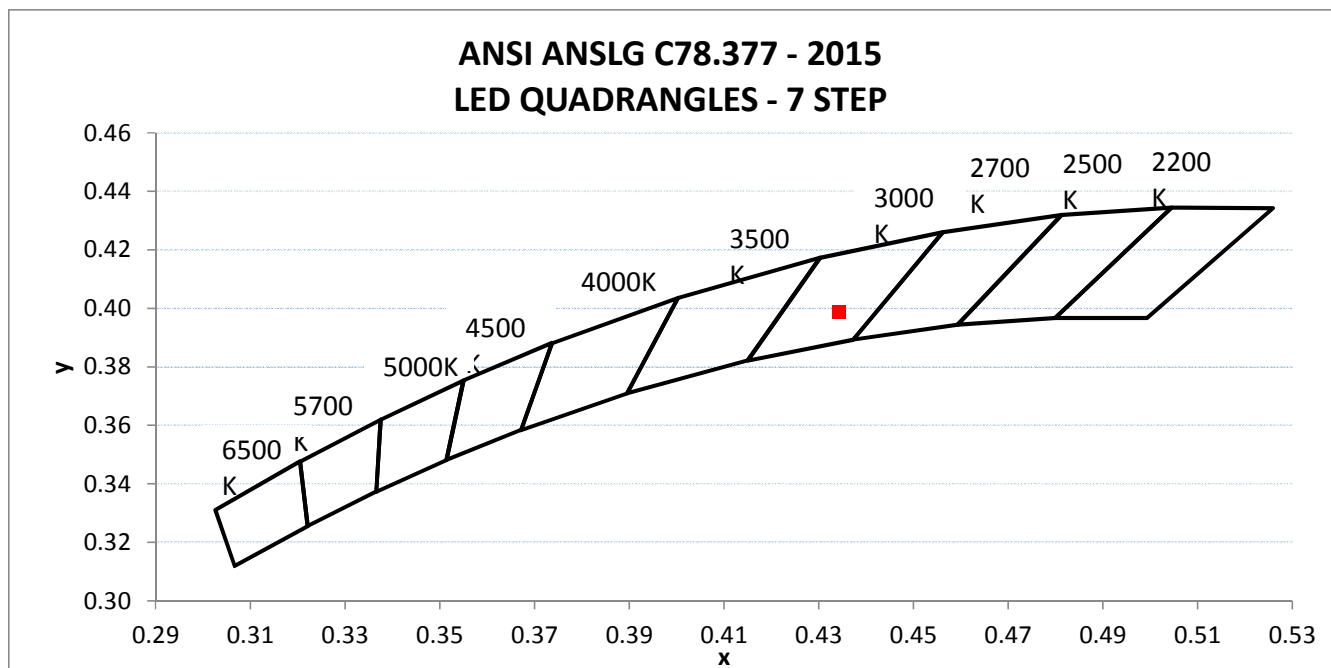
RESULTS OF TESTS

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - INTEGRATING SPHERE METHOD (25°C +/- 1°C)

INTERTEK CONTROL NO.	BASE POSITION	INPUT VOLTAGE (VAC)	INPUT CURRENT (mA)	INPUT POWER (W)	INPUT POWER FACTOR	INPUT CURRENT ATHD (%)
AH06242019024015-030	Base Up	119.99	230.74	27.37	0.989	13.06

LIGHT OUTPUT (lm)	LUMEN EFFICACY (lm/W)	CORRELATED COLOR TEMPERATURE - CCT (K)	CRI - Ra	CRI - R9	DUV
1762.2	64.4	2997	93.8	68.2	0.0020

CIE 1931 CHROMATICITY COORDINATE (x)	CIE 1931 CHROMATICITY COORDINATE (y)	CIE 1976 CHROMATICITY COORDINATE (u')	CIE 1976 CHROMATICITY COORDINATE (v')
0.434	0.399	0.251	0.519



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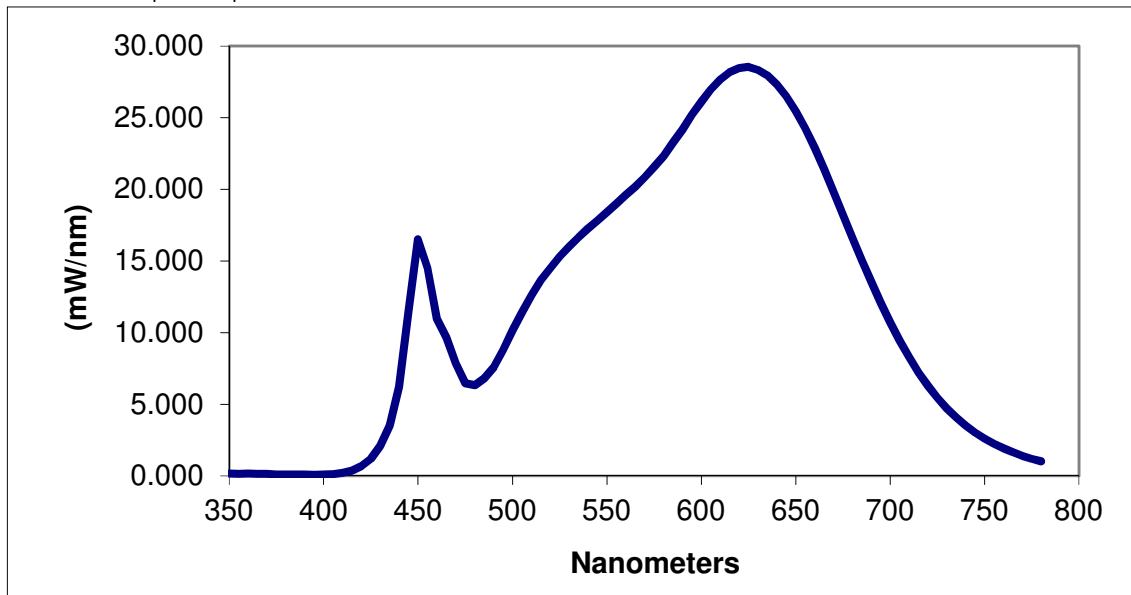
TEST REPORT

RESULTS OF TESTS

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS - INTEGRATING SPHERE METHOD (25°C +/- 1°C)

SPECTRAL DISTRIBUTION OVER VISIBLE WAVELENGTHS*							
nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
350	0.172	460	10.988	570	20.841	680	16.618
355	0.158	465	9.655	575	21.560	685	15.066
360	0.168	470	7.870	580	22.328	690	13.543
365	0.149	475	6.464	585	23.256	695	12.099
370	0.153	480	6.344	590	24.179	700	10.713
375	0.120	485	6.808	595	25.208	705	9.454
380	0.112	490	7.597	600	26.116	710	8.304
385	0.104	495	8.766	605	26.958	715	7.236
390	0.098	500	10.167	610	27.662	720	6.304
395	0.095	505	11.408	615	28.170	725	5.462
400	0.098	510	12.618	620	28.453	730	4.718
405	0.131	515	13.659	625	28.545	735	4.078
410	0.212	520	14.512	630	28.317	740	3.524
415	0.385	525	15.307	635	27.954	745	3.036
420	0.687	530	16.009	640	27.299	750	2.617
425	1.206	535	16.660	645	26.494	755	2.252
430	2.086	540	17.286	650	25.448	760	1.944
435	3.525	545	17.812	655	24.261	765	1.662
440	6.227	550	18.418	660	22.913	770	1.412
445	11.572	555	19.004	665	21.426	775	1.209
450	16.525	560	19.617	670	19.817	780	1.035
455	14.510	565	20.173	675	18.241		

*Without correction of sample absorption.



End Of Test Results

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PICTURES



CONCLUSION

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

Tess Gallagher

Tess Gallagher
Engineer
Lighting Division

Report Reviewed By:

Tim Quigley

Timothy Quigley
Project Engineer
Lighting Division

Attachments: IES File

REVISION HISTORY

JOB NUMBER	DATE OF REVISION	PROJECT HANDLER	REVIEWED BY	REVISION NOTE
None				