Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P438619

Luminaire Tested: **ISW-SA1D-830-U-SL3**

Issue Date: 12/10/2020

Report Generated By 670245982

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P438619
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-16)
Test Lab:	INNOVATION CENTER
Issue Date:	12/10/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	ISW-SA1D-830-U-SL3
Description:	IMPACT ELITE LED WEDGE LUMINAIRE
	(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4452 lumens
Efficiency:	N/A
Efficacy:	98.5 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G1

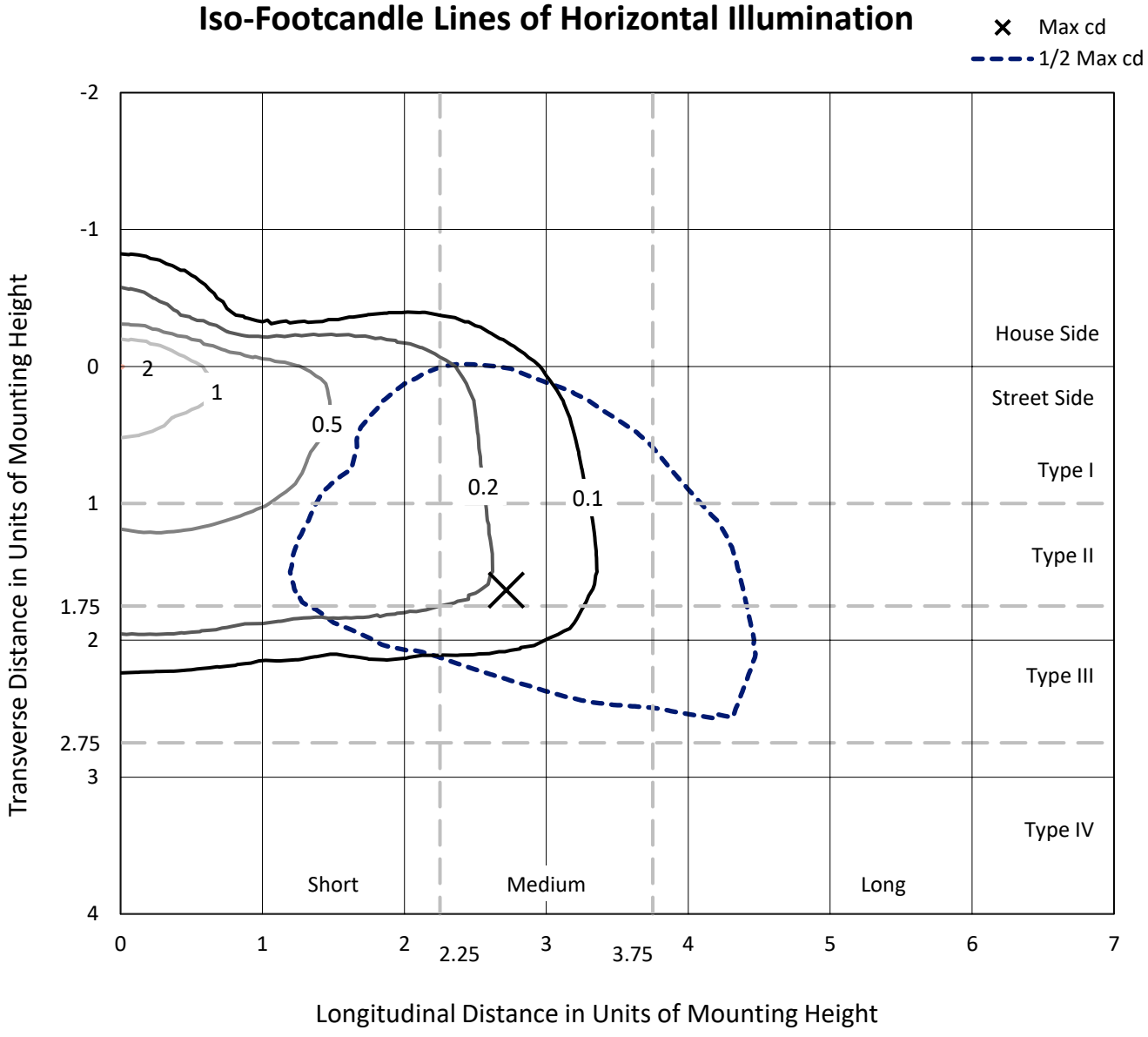
Input Watts (W):	45.2
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P438619
CATALOG NUMBER: ISW-SA1D-830-U-SL3

Iso-Footcandle Lines of Horizontal Illumination



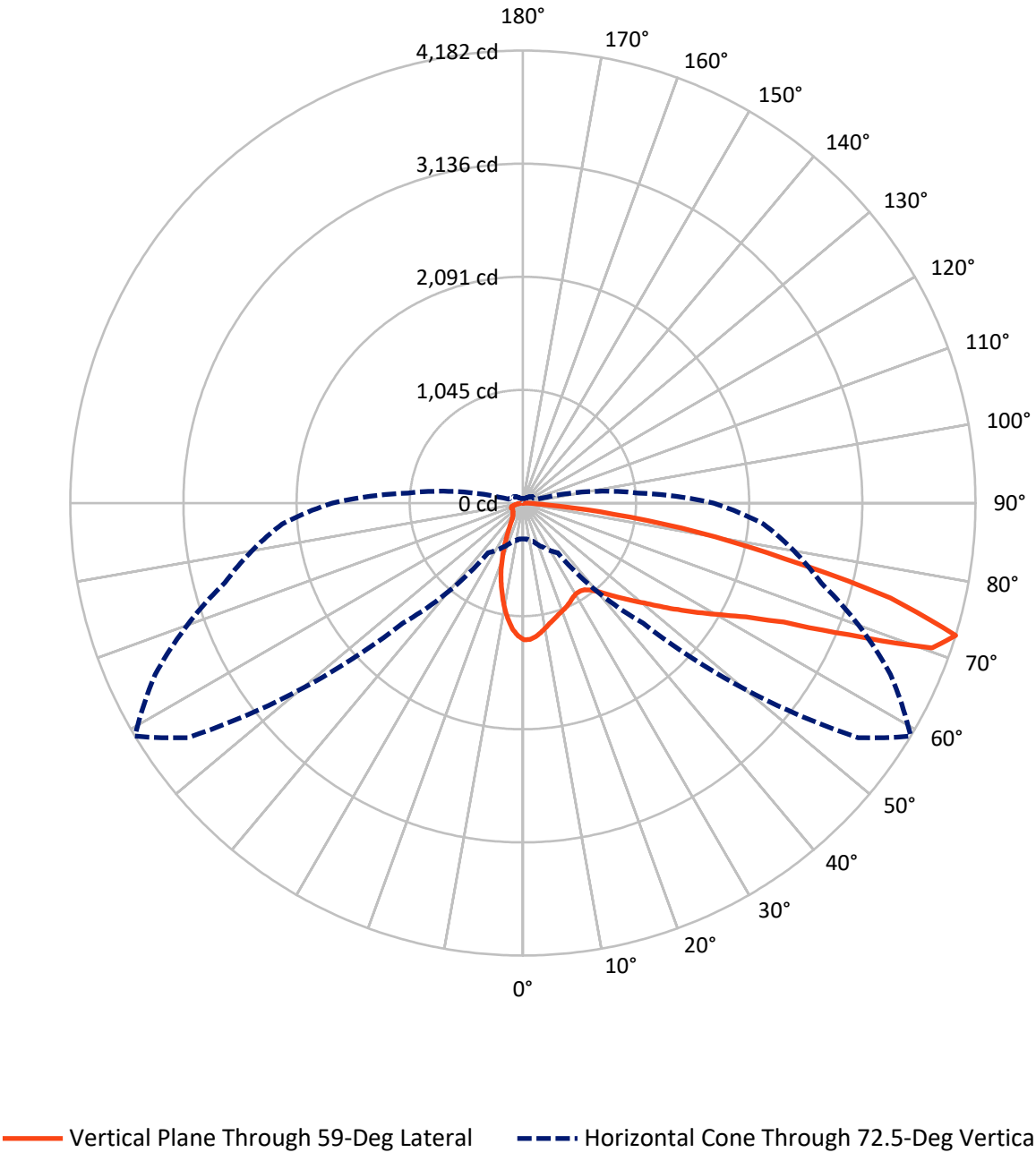
Based on 25 foot mounting height. Maximum calculated value = 2 fc
Type III - Medium - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P438619
CATALOG NUMBER: ISW-SA1D-830-U-SL3

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

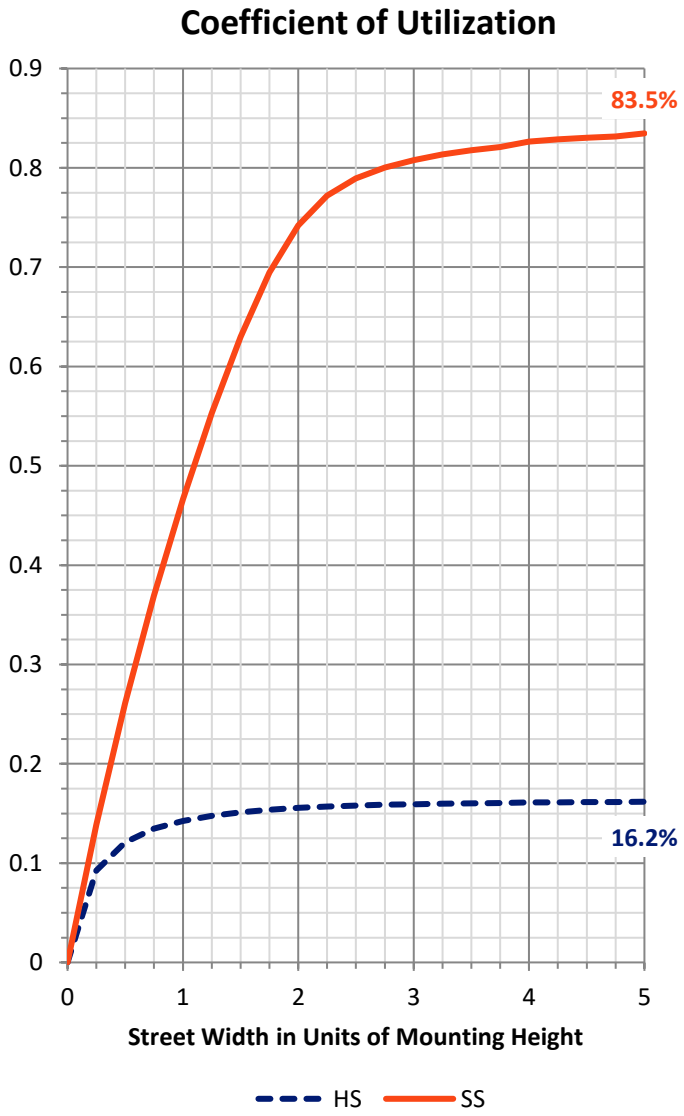
REPORT NUMBER: P438619
CATALOG NUMBER: ISW-SA1D-830-U-SL3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	726.7	0.0	726.7
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	3725.3	0.0	3725.3
	% Fixture	83.7	0.0	83.7
Total	Lumens	4452.0	0.0	4452.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	2.4
10°-20°	243.7	5.5
20°-30°	314.0	7.1
30°-40°	401.7	9.0
40°-50°	557.4	12.5
50°-60°	821.6	18.5
60°-70°	1105.5	24.8
70°-80°	804.2	18.1
80°-90°	95.6	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4452.0	100.0
0°-180°	4452.0	100.0



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

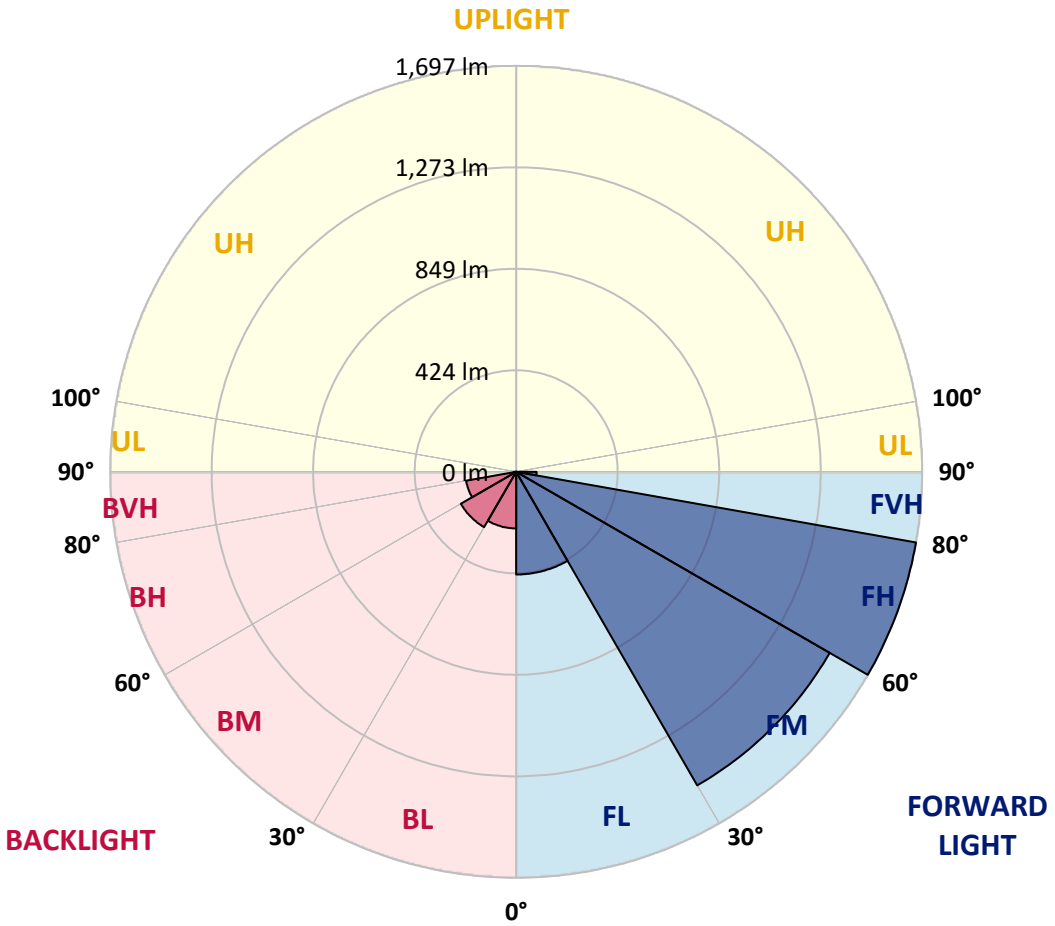
Scaled Data Report

REPORT NUMBER: P438619
CATALOG NUMBER: ISW-SA1D-830-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	429.4	9.6			
FM	(30°-60°)	1513.5	34.0			
FH	(60°-80°)	1697.1	38.1			G1/1800
FVH	(80°-90°)	85.3	1.9			G1/100
BL	(0°-30°)	236.7	5.3	B1/500		
BM	(30°-60°)	267.1	6.0	B1/1000		
BH	(60°-80°)	212.6	4.8	B1/500		G1/500
BVH	(80°-90°)	10.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
Type III Medium



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P438619
CATALOG NUMBER: ISW-SA1D-830-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6	*1263.6*	1263.6	1263.6	1263.6
2.5°	1257.1	1257.1	1261.9	1265.2	1260.3	1265.2	1263.6	*1261.9*	1263.6	1263.6	1260.3
5°	1205.2	1211.6	1211.6	1213.3	1224.6	1232.7	1236.0	*1239.2*	1240.8	1242.5	1239.2
7.5°	1141.9	1145.1	1148.4	1163.0	1169.5	1187.3	1198.7	*1205.2*	1211.6	1214.9	1205.2
10°	1072.2	1077.0	1086.8	1098.1	1114.3	1138.7	1158.1	*1169.5*	1179.2	1184.1	1172.7
12.5°	1013.8	1015.4	1025.1	1043.0	1062.4	1096.5	1120.8	*1133.8*	1146.8	1156.5	1143.5
15°	960.2	961.9	970.0	991.1	1013.8	1051.1	1086.8	*1106.2*	1124.1	1140.3	1122.4
17.5°	918.1	922.9	926.2	944.0	971.6	1012.1	1059.2	*1078.6*	1106.2	1130.5	1107.8
20°	893.7	892.1	893.7	905.1	934.3	974.8	1030.0	*1057.6*	1090.0	1124.1	1093.2
22.5°	879.1	882.4	880.8	885.6	903.5	944.0	999.2	*1038.1*	1075.4	1119.2	1080.3
25°	879.1	884.0	882.4	880.8	887.2	914.8	973.2	*1012.1*	1059.2	1119.2	1065.7
27.5°	895.4	897.0	893.7	888.9	888.9	898.6	950.5	*986.2*	1051.1	1117.6	1057.6
30°	910.0	913.2	913.2	910.0	905.1	900.2	934.3	*971.6*	1043.0	1127.3	1051.1
32.5°	929.4	932.7	939.1	942.4	935.9	921.3	939.1	*970.0*	1044.6	1148.4	1052.7
35°	953.7	957.0	966.7	982.9	978.1	953.7	957.0	*984.6*	1057.6	1171.1	1059.2
37.5°	973.2	978.1	999.2	1026.7	1028.4	1002.4	1000.8	*1020.3*	1081.9	1206.8	1081.9
40°	992.7	999.2	1030.0	1075.4	1085.1	1070.5	1060.8	*1075.4*	1125.7	1258.7	1119.2
42.5°	1018.6	1025.1	1065.7	1122.4	1146.8	1140.3	1133.8	*1154.9*	1192.2	1328.4	1177.6
45°	1046.2	1059.2	1111.1	1174.3	1218.1	1223.0	1229.5	*1242.5*	1271.7	1425.8	1260.3
47.5°	1096.5	1107.8	1167.9	1232.7	1289.5	1315.5	1326.8	*1343.0*	1360.9	1515.0	1360.9
50°	1164.6	1187.3	1240.8	1304.1	1370.6	1420.9	1450.1	*1450.1*	1469.6	1622.0	1471.2
52.5°	1266.8	1287.9	1320.3	1380.3	1459.8	1539.3	1579.8	*1586.3*	1579.8	1724.2	1583.1
55°	1352.8	1373.9	1404.7	1448.5	1549.0	1672.3	1742.0	*1737.2*	1714.5	1832.9	1693.4
57.5°	1448.5	1464.7	1492.3	1527.9	1639.9	1810.2	1912.4	*1907.5*	1865.3	1943.2	1813.4
60°	1489.0	1511.7	1562.0	1635.0	1781.0	1987.0	2107.0	*2092.4*	1998.3	2061.6	1920.5
62.5°	1367.4	1409.5	1511.7	1659.3	1944.8	2282.2	2361.7	*2314.6*	2186.5	2191.3	2064.8
65°	1093.2	1070.5	1226.2	1471.2	1957.8	2647.1	2750.9	*2648.8*	2421.7	2356.8	2228.7
67.5°	624.5	634.2	708.8	973.2	1612.3	2796.4	3425.7	*3245.7*	2789.9	2614.7	2426.5
70°	423.3	433.1	465.5	577.4	926.2	2499.5	3975.6	*4011.3*	3359.2	2843.4	2433.0
72.5°	*330.9*	*332.5*	*366.6*	*454.2*	*561.2*	*1570.1*	*3779.3*	*4181.6*	*3748.5*	*2851.5*	*2231.9*
75°	253.0	254.7	285.5	387.7	504.4	760.7	2877.5	*3506.8*	3516.5	2622.8	1823.2
77.5°	160.6	168.7	204.4	309.8	473.6	504.4	1832.9	*2470.3*	2535.2	1943.2	953.7
80°	77.9	81.1	102.2	197.9	416.9	446.1	1091.6	*1643.1*	1424.1	757.5	290.3
82.5°	32.4	34.1	48.7	86.0	266.0	377.9	546.6	*845.1*	549.9	206.0	94.1
85°	6.5	8.1	11.4	21.1	86.0	184.9	223.8	*219.0*	133.0	63.3	35.7
87.5°	0.0	0.0	0.0	1.6	1.6	3.2	3.2	*3.2*	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P438619
CATALOG NUMBER: ISW-SA1D-830-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6	1263.6
2.5°	1258.7	1258.7	1245.7	1236.0	1224.6	1216.5	1208.4	1198.7	1197.1	1201.9	1206.8
5°	1232.7	1226.2	1205.2	1185.7	1163.0	1137.0	1120.8	1099.7	1088.4	1093.2	1090.0
7.5°	1198.7	1188.9	1150.0	1117.6	1072.2	1031.6	1004.0	973.2	952.1	944.0	939.1
10°	1163.0	1143.5	1091.6	1033.2	973.2	913.2	862.9	814.3	789.9	788.3	762.3
12.5°	1128.9	1103.0	1030.0	945.6	862.9	781.8	707.2	653.7	587.2	567.7	574.2
15°	1101.4	1065.7	963.5	856.4	749.4	647.2	549.9	470.4	412.0	390.9	382.8
17.5°	1075.4	1025.1	901.8	773.7	639.1	510.9	392.5	332.5	296.8	283.9	283.9
20°	1046.2	987.8	835.3	681.2	517.4	379.6	290.3	261.1	249.8	248.2	246.5
22.5°	1023.5	950.5	767.2	583.9	403.9	288.7	240.1	227.1	227.1	228.7	228.7
25°	995.9	908.3	694.2	480.1	311.4	231.9	212.5	207.6	212.5	217.4	217.4
27.5°	976.5	871.0	627.7	382.8	241.7	201.1	191.4	193.0	199.5	206.0	206.0
30°	960.2	835.3	558.0	301.7	201.1	178.4	176.8	180.0	186.5	193.0	191.4
32.5°	944.0	807.8	481.7	238.4	173.6	163.8	162.2	167.1	171.9	173.6	176.8
35°	937.5	785.1	405.5	196.3	157.3	152.5	152.5	154.1	155.7	157.3	157.3
37.5°	942.4	767.2	337.4	167.1	147.6	146.0	144.4	142.7	142.7	142.7	144.4
40°	961.9	760.7	279.0	150.8	139.5	139.5	136.2	131.4	129.8	131.4	129.8
42.5°	1000.8	773.7	230.3	141.1	133.0	131.4	126.5	123.3	121.7	121.7	120.0
45°	1062.4	796.4	197.9	134.6	128.1	123.3	118.4	115.2	113.5	115.2	115.2
47.5°	1143.5	838.6	175.2	128.1	123.3	115.2	108.7	107.1	107.1	110.3	110.3
50°	1240.8	895.4	162.2	124.9	118.4	108.7	102.2	100.6	102.2	105.4	107.1
52.5°	1344.7	966.7	159.0	123.3	113.5	102.2	97.3	95.7	97.3	100.6	102.2
55°	1448.5	1044.6	167.1	123.3	108.7	97.3	94.1	89.2	90.8	94.1	95.7
57.5°	1558.8	1128.9	191.4	120.0	105.4	94.1	89.2	84.3	84.3	87.6	87.6
60°	1677.2	1224.6	236.8	120.0	102.2	90.8	82.7	77.9	77.9	77.9	79.5
62.5°	1808.6	1339.8	290.3	121.7	103.8	87.6	76.2	69.7	69.7	71.4	69.7
65°	2003.2	1511.7	304.9	123.3	107.1	84.3	71.4	64.9	63.3	63.3	63.3
67.5°	2123.2	1531.2	236.8	120.0	111.9	84.3	66.5	58.4	56.8	55.1	55.1
70°	2035.6	1344.7	168.7	115.2	111.9	84.3	63.3	53.5	50.3	47.0	47.0
72.5°	*1761.5*	*1067.3*	*137.9*	*108.7*	*103.8*	*79.5*	*58.4*	*48.7*	*43.8*	*40.6*	*40.6*
75°	1411.2	757.5	116.8	100.6	87.6	63.3	48.7	40.6	37.3	35.7	35.7
77.5°	687.7	373.1	90.8	87.6	69.7	47.0	38.9	34.1	32.4	29.2	29.2
80°	201.1	137.9	68.1	69.7	43.8	32.4	29.2	27.6	26.0	22.7	24.3
82.5°	92.5	77.9	48.7	43.8	27.6	19.5	19.5	17.8	16.2	14.6	14.6
85°	37.3	38.9	26.0	21.1	13.0	9.7	8.1	8.1	6.5	6.5	6.5
87.5°	3.2	4.9	4.9	3.2	3.2	1.6	0.0	0.0	0.0	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

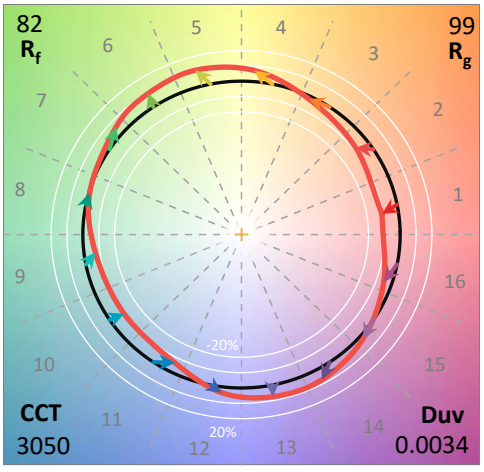
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

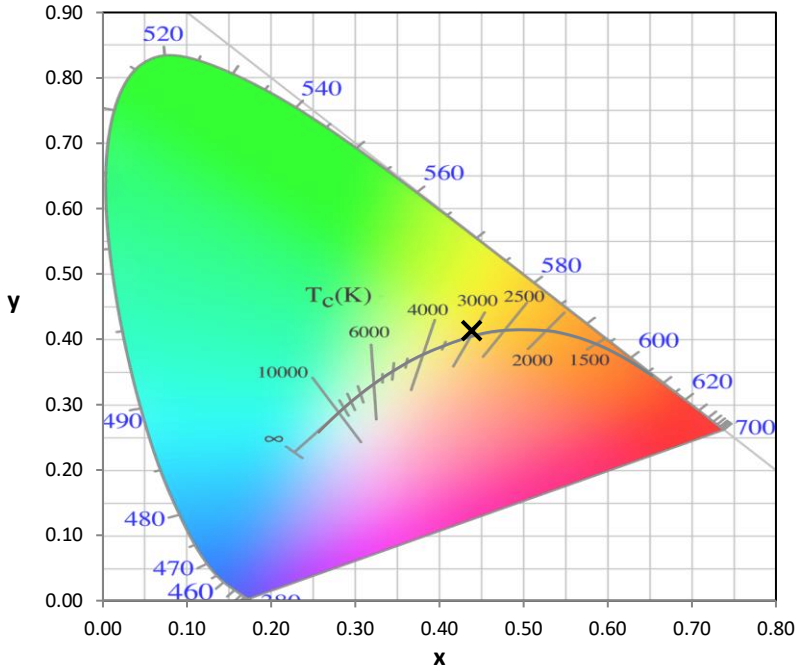
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

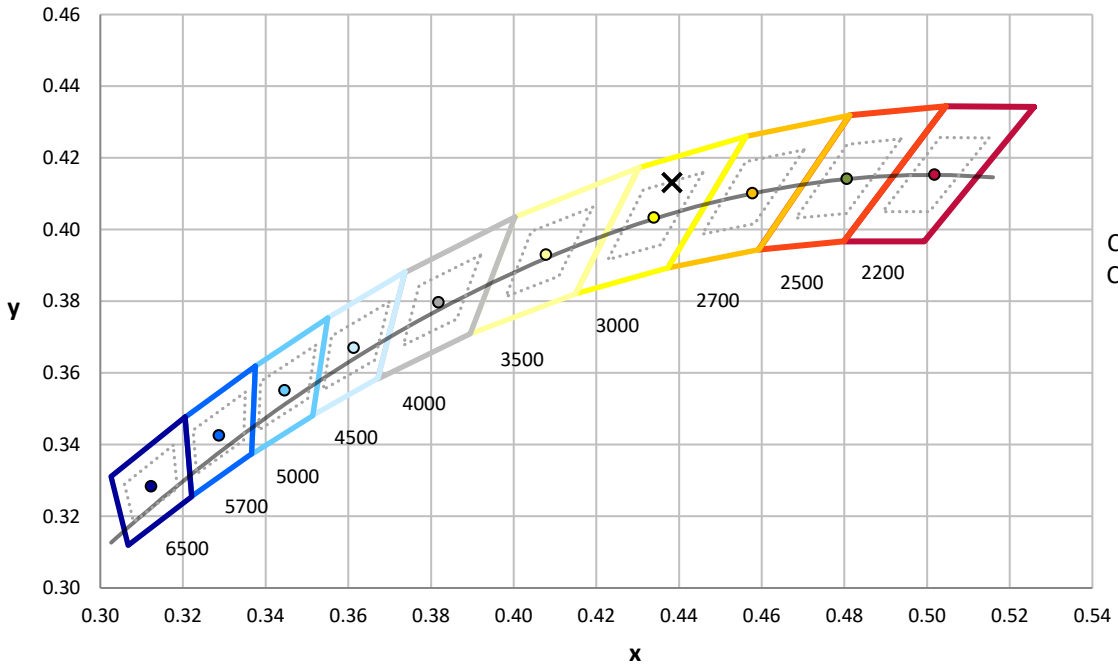
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

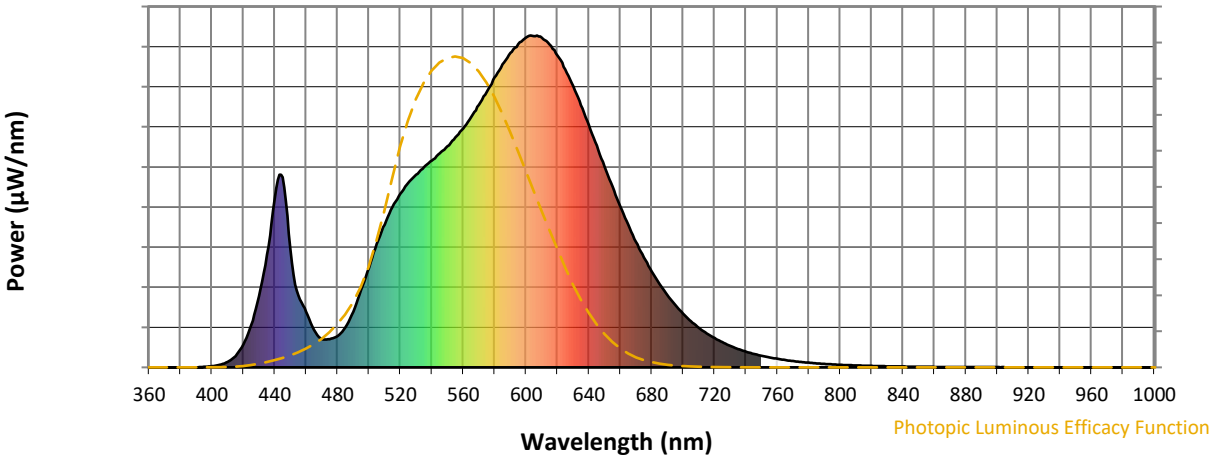


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

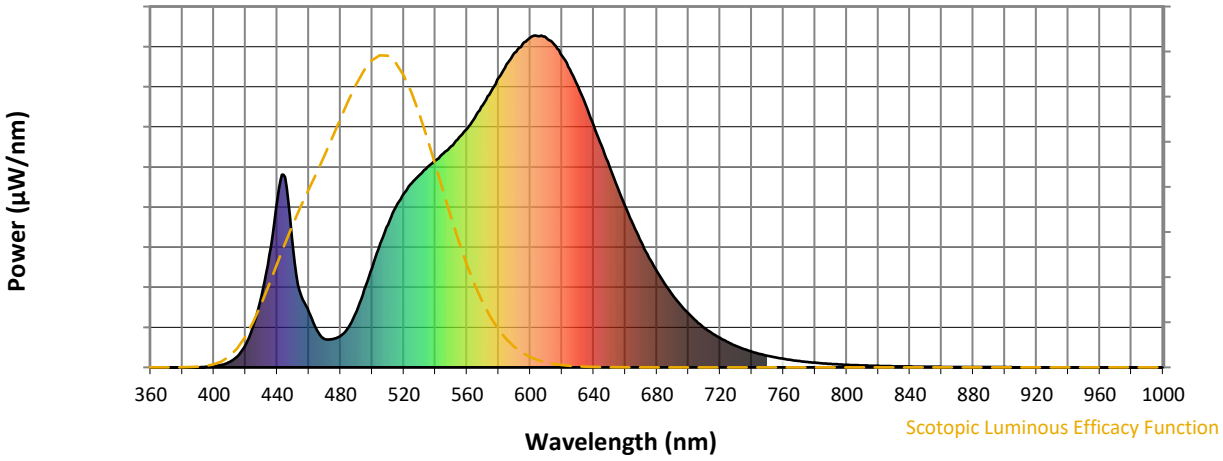


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

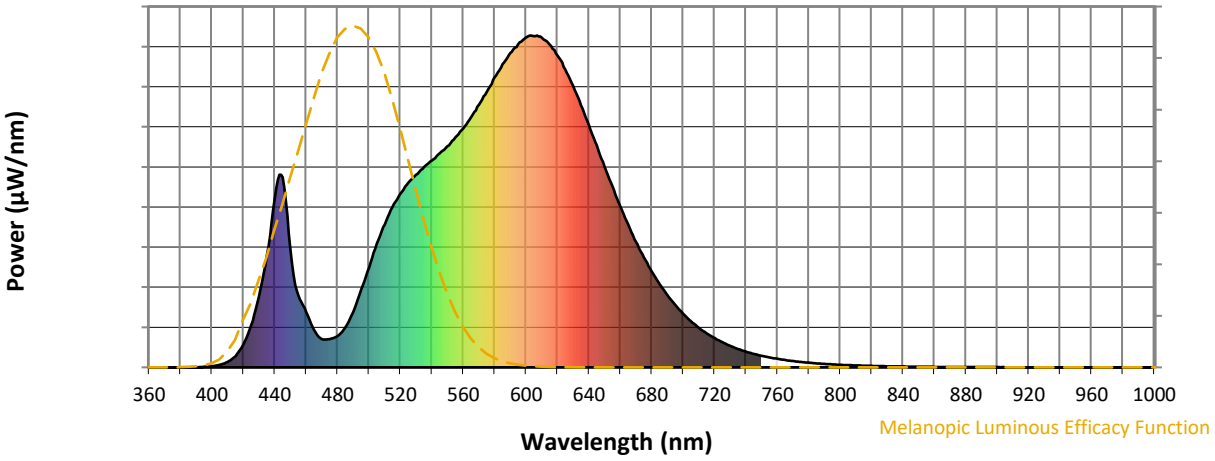


Scotopic Lumens: NR **S/P: 1.27**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

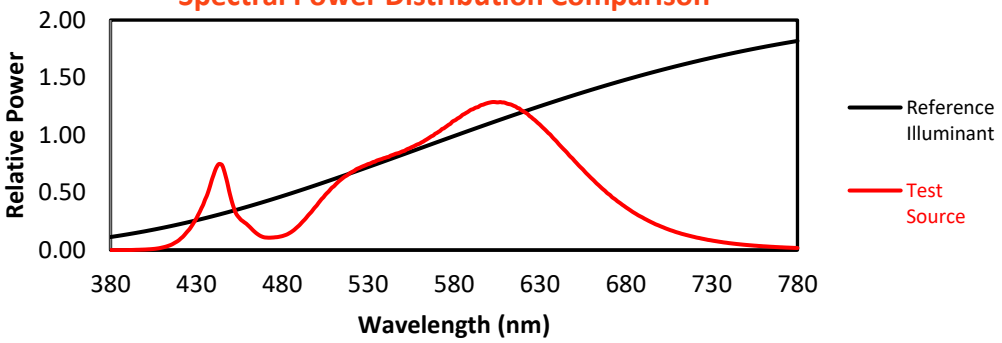
REPORT NUMBER: SP1-2408-195-9

TM-30-18

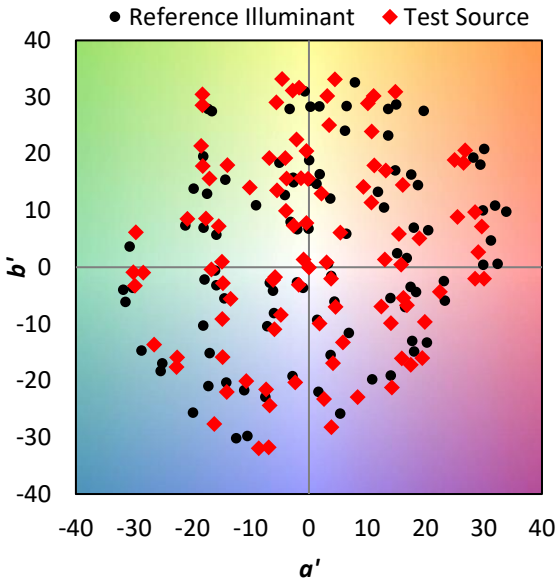
Summary

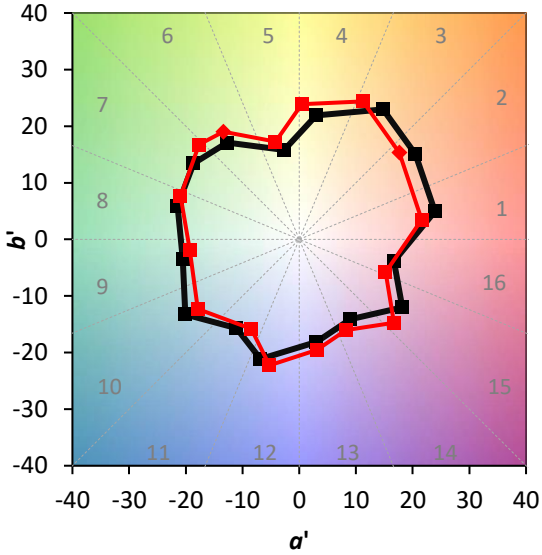
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

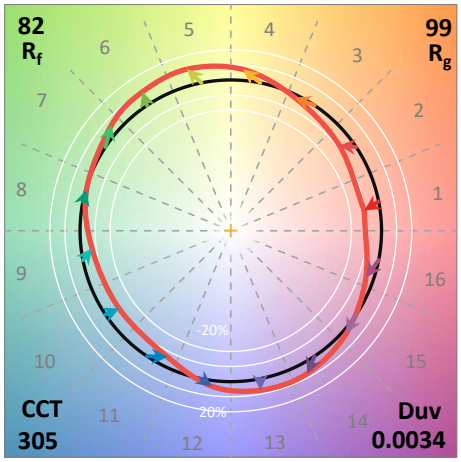
Spectral Power Distribution Comparison

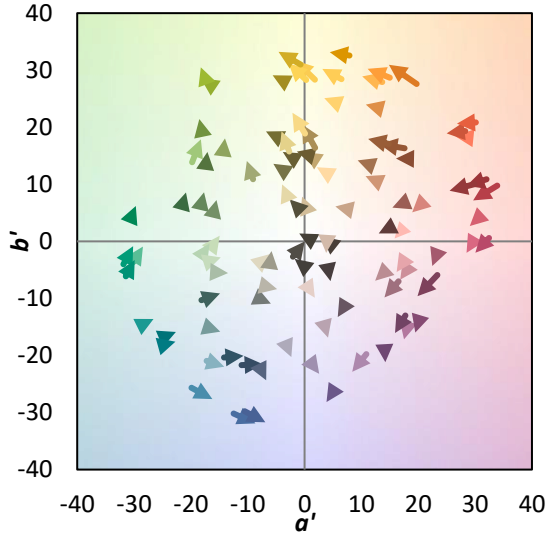


Color Vector Graphics







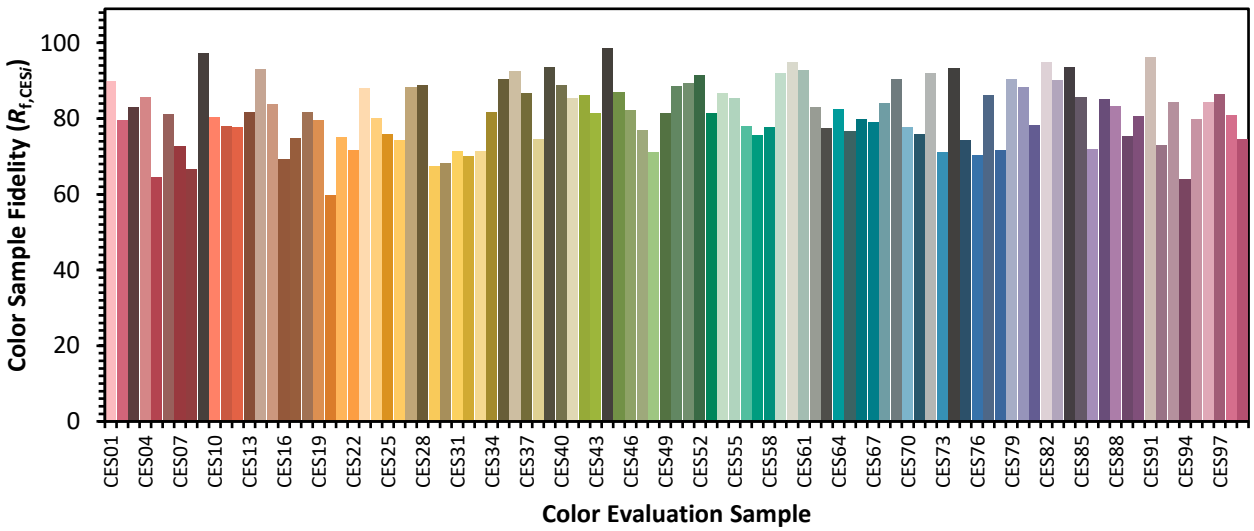


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Individual Sample Fidelity Index ($R_{f,i}$)

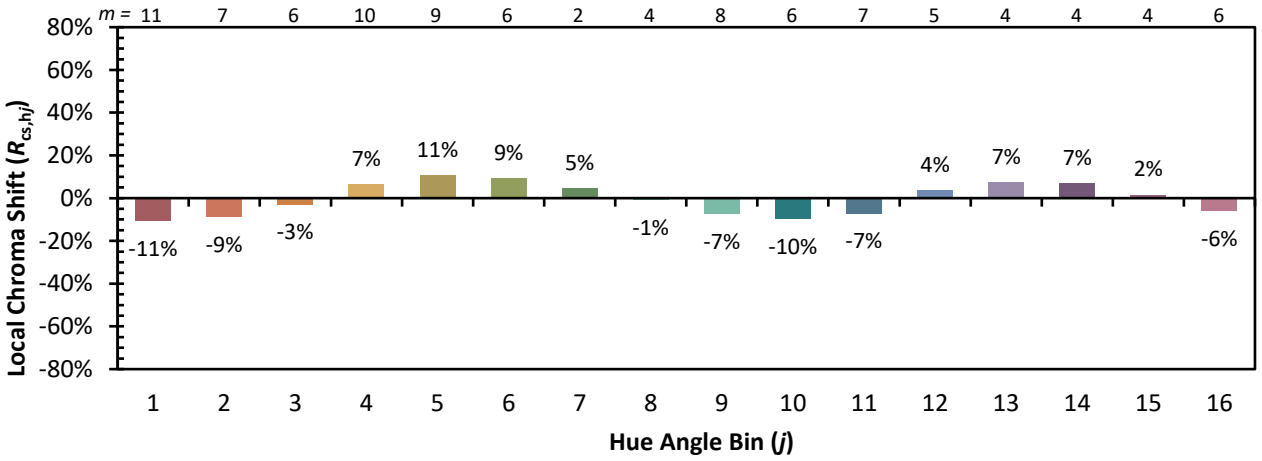
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	

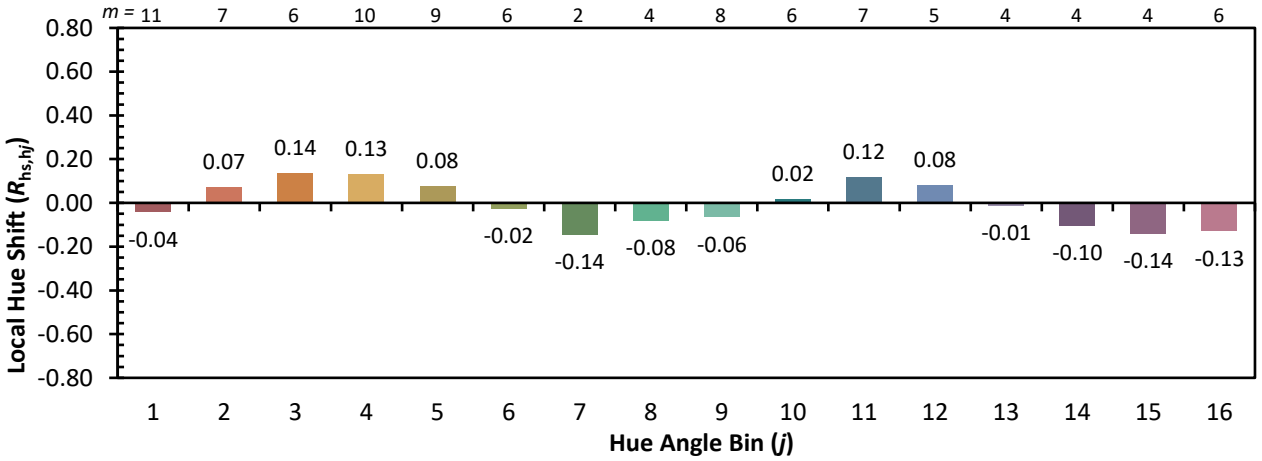


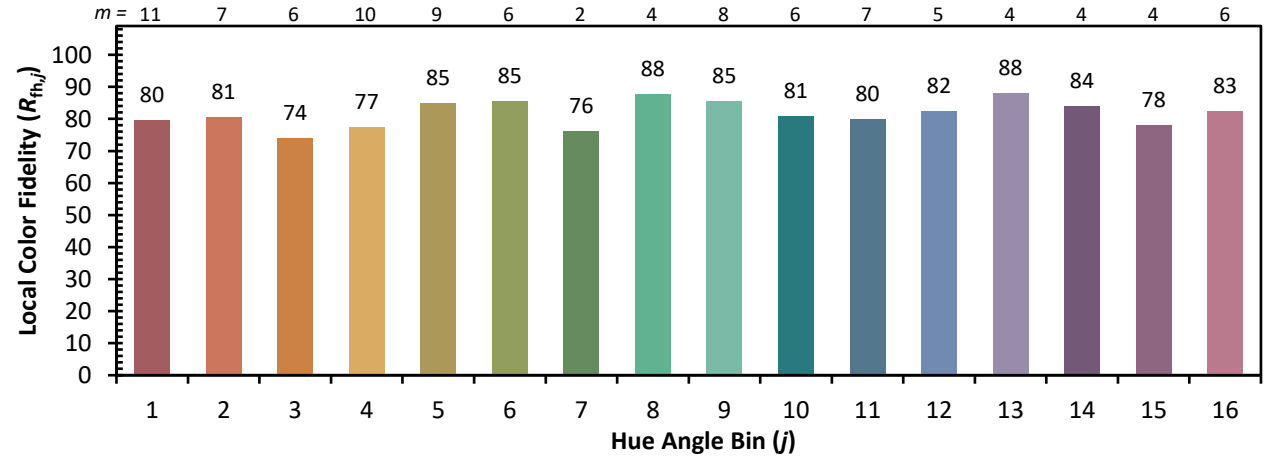
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



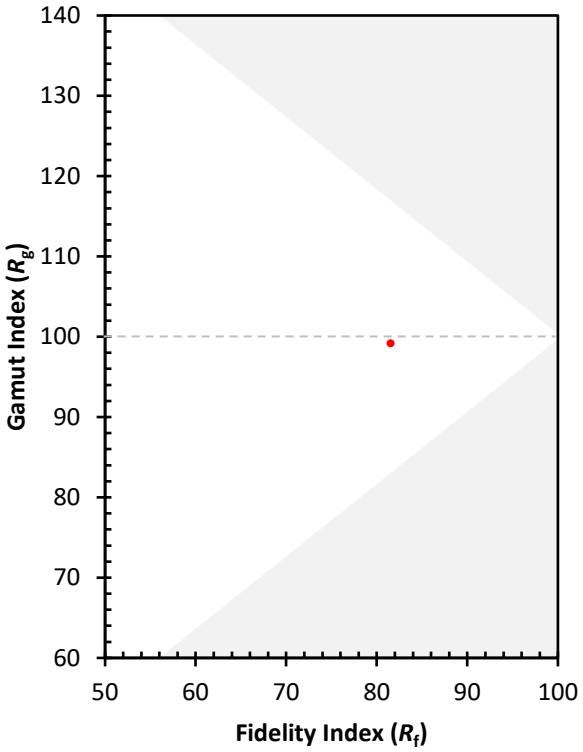


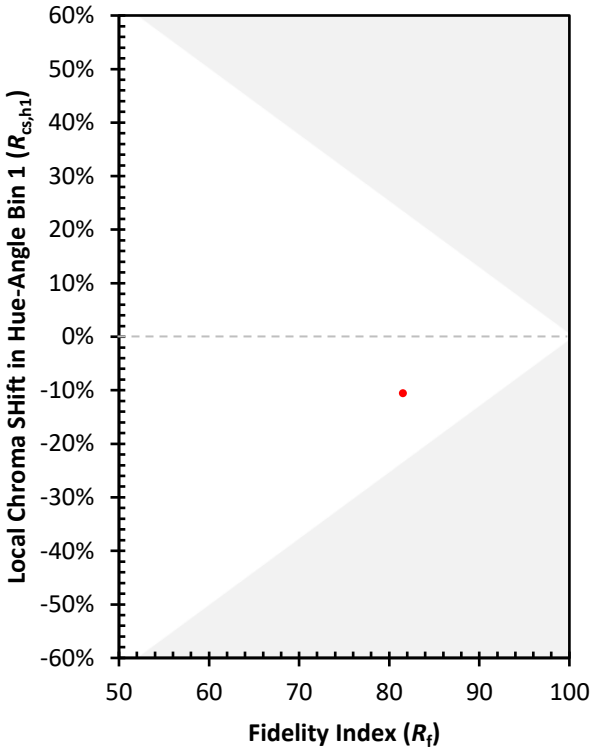


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)