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

Scaled data based on original data using

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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P633057

Luminaire Tested: GWS-SA2D-830-U-T3R-W-HSS

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P633057
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA2D-830-U-T3R-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7261 lumens
Efficiency:	N/A
Efficacy:	88.4 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G2

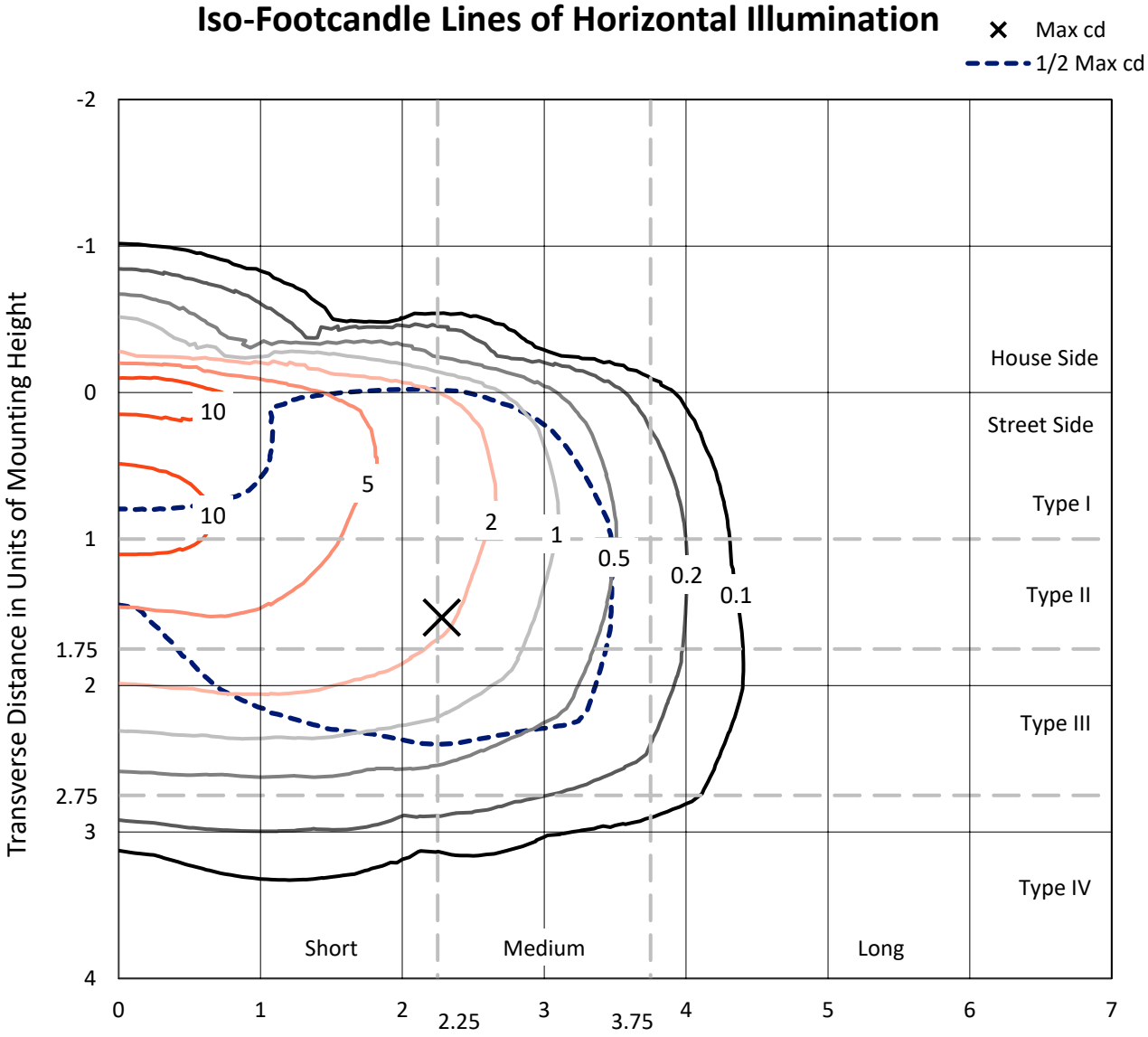
Input Watts (W):	82.1
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P633057
CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



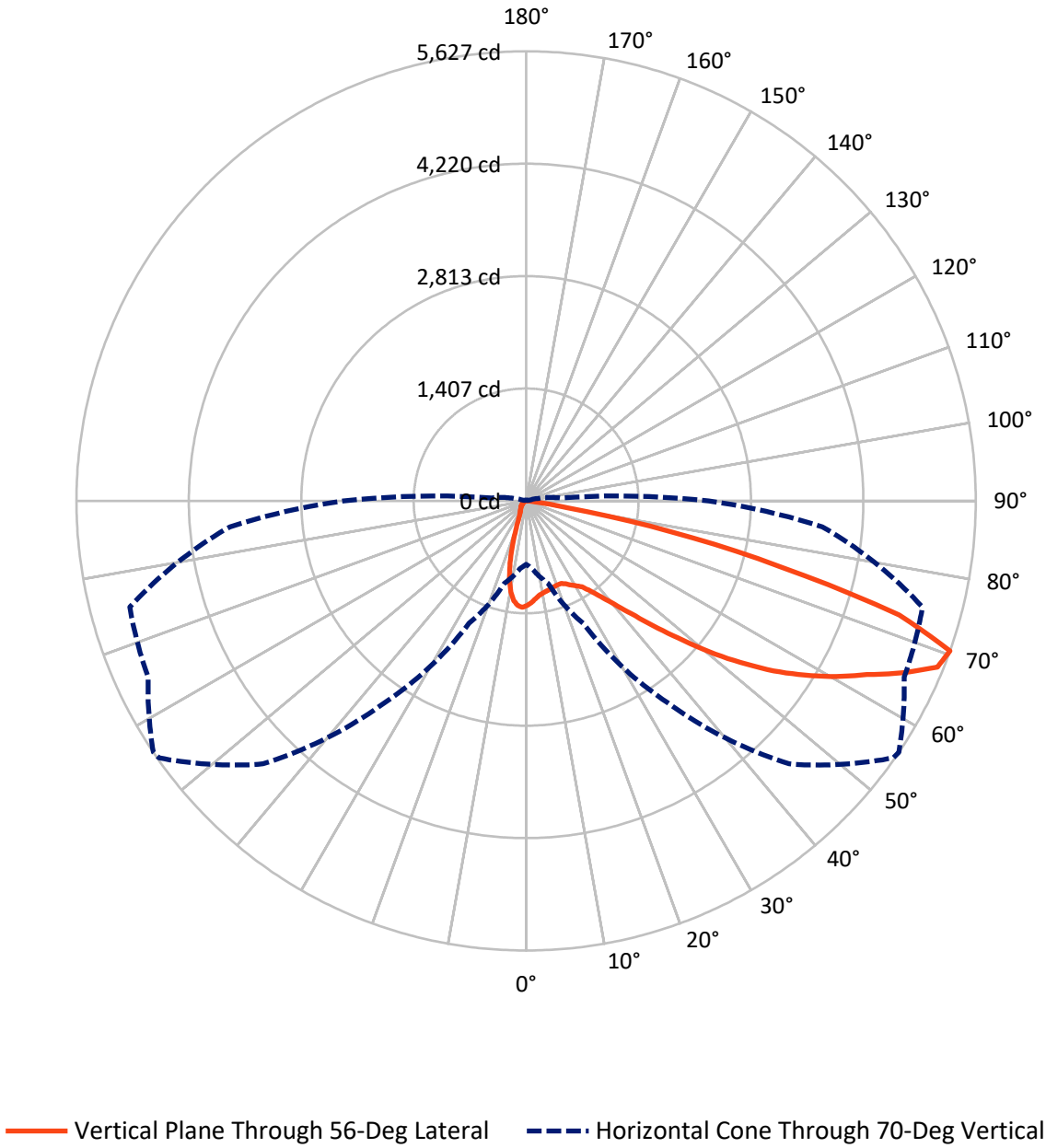
Based on 10 foot mounting height. Maximum calculated value = 13.8 fc
Type III - Medium - N/A

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

Scaled Data Report

REPORT NUMBER: P633057
CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

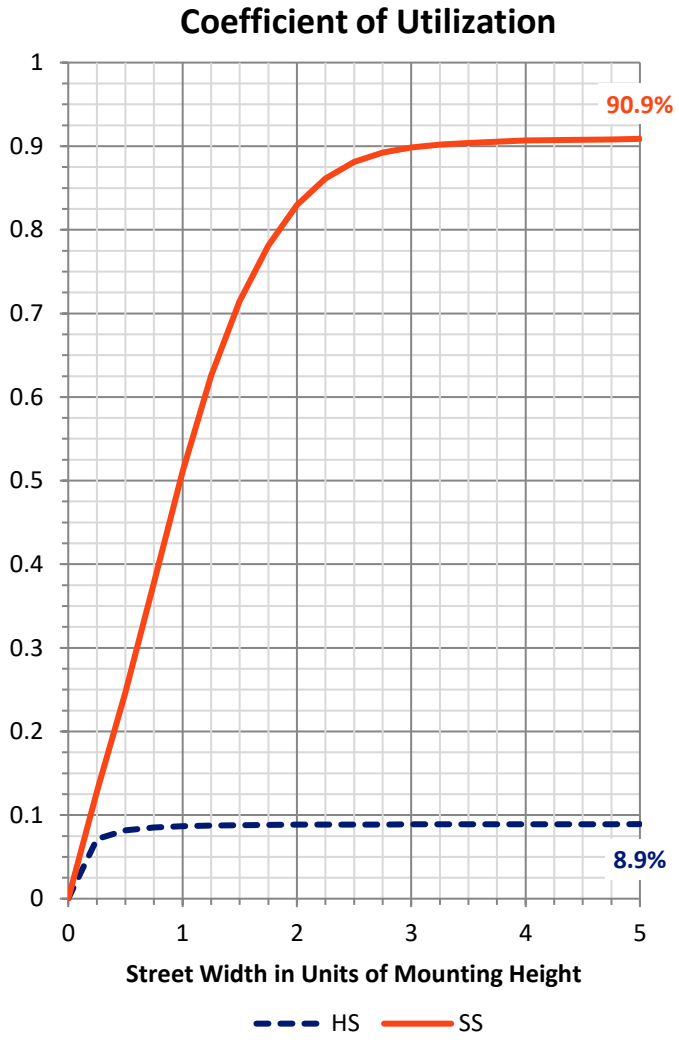
REPORT NUMBER: P633057
CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	652.2	0.0	652.2
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	6608.8	0.0	6608.8
	% Fixture	91.0	0.0	91.0
Total	Lumens	7261.0	0.0	7261.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	1.5
10°-20°	252.8	3.5
20°-30°	400.5	5.5
30°-40°	690.6	9.5
40°-50°	1166.2	16.1
50°-60°	1713.5	23.6
60°-70°	2031.5	28.0
70°-80°	866.3	11.9
80°-90°	27.2	0.4
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°	7261.0	100.0
0°-180°	7261.0	100.0



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

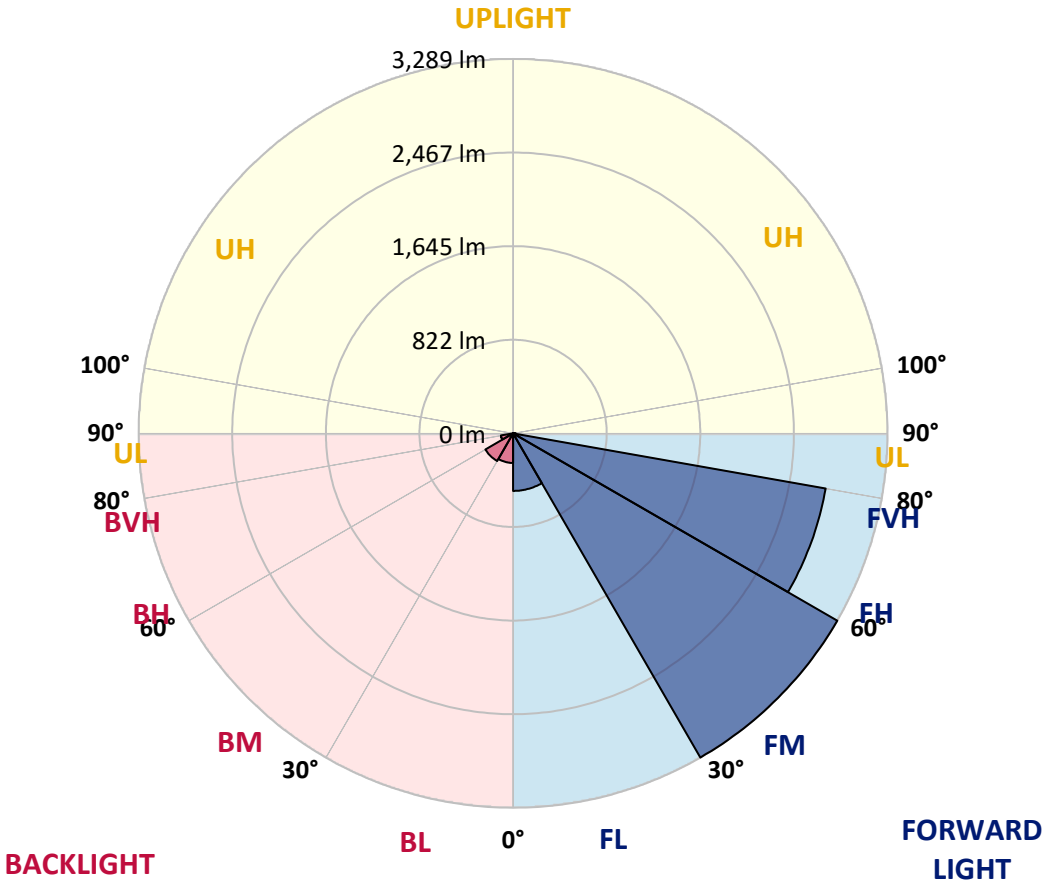
Scaled Data Report

REPORT NUMBER: P633057
CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	506.0	7.0			
FM	(30°-60°)	3289.4	45.3			
FH	(60°-80°)	2789.0	38.4			G2/5000
FVH	(80°-90°)	24.4	0.3			G1/100
BL	(0°-30°)	259.7	3.6	B1/500		
BM	(30°-60°)	280.9	3.9	B1/1000		
BH	(60°-80°)	108.8	1.5	B0/110		G0/110
BVH	(80°-90°)	2.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type III Medium



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

Scaled Data Report

REPORT NUMBER: P633057
CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2	*1309.2*	1309.2	1309.2	1309.2
2.5°	1218.8	1216.8	1218.1	1228.1	1246.7	1255.4	1270.0	*1272.7*	1284.6	1299.9	1305.9
5°	1139.7	1133.0	1136.4	1150.3	1171.6	1195.5	1222.8	*1230.1*	1260.0	1293.9	1319.2
7.5°	1067.2	1059.9	1067.9	1089.8	1119.7	1145.7	1186.2	*1190.9*	1238.7	1298.6	1344.5
10°	953.5	955.5	971.5	1010.0	1055.9	1109.8	1164.3	*1170.9*	1230.1	1313.9	1385.0
12.5°	866.4	861.7	879.0	922.9	987.4	1065.9	1147.7	*1156.3*	1230.8	1337.2	1436.9
15°	825.8	824.5	831.8	863.7	926.2	1018.7	1132.4	*1143.7*	1239.4	1358.4	1486.1
17.5°	827.2	825.2	824.5	843.1	889.7	983.4	1115.7	*1130.4*	1246.7	1381.7	1538.0
20°	885.0	875.7	859.1	850.4	878.4	960.8	1104.4	*1121.1*	1257.4	1406.3	1593.2
22.5°	1006.0	1009.4	964.8	918.3	905.0	963.5	1103.1	*1122.4*	1280.6	1444.9	1661.0
25°	1248.1	1242.7	1160.3	1055.9	983.4	994.1	1126.4	*1149.7*	1326.5	1500.1	1724.8
27.5°	1551.3	1555.9	1442.9	1276.7	1125.0	1057.2	1168.9	*1192.2*	1379.7	1534.6	1767.4
30°	1881.7	1877.1	1756.1	1571.9	1325.9	1162.3	1211.5	*1232.1*	1406.3	1553.3	1811.2
32.5°	2194.2	2183.6	2063.9	1871.1	1581.8	1327.8	1270.0	*1282.0*	1441.6	1593.8	1870.4
35°	2460.9	2460.2	2355.8	2150.4	1845.2	1535.3	1370.4	*1380.4*	1507.4	1658.3	1957.5
37.5°	2736.2	2726.8	2609.8	2422.3	2115.8	1762.7	1524.0	*1520.0*	1611.1	1753.4	2064.6
40°	2962.2	2956.2	2866.5	2686.3	2397.0	2014.0	1710.2	*1698.2*	1734.1	1885.1	2213.5
42.5°	3129.8	3130.5	3102.5	2992.8	2694.9	2304.6	1944.2	*1925.6*	1924.9	2083.9	2410.3
45°	3256.8	3265.4	3307.3	3290.7	3046.7	2643.1	2244.1	*2224.8*	2192.2	2341.9	2635.8
47.5°	3316.0	3327.3	3453.6	3520.1	3354.5	2978.9	2601.2	*2560.6*	2496.8	2685.0	2887.8
50°	3310.0	3329.9	3506.1	3708.3	3633.8	3319.3	2990.2	*2970.9*	2866.5	3048.0	3137.1
52.5°	3174.3	3216.9	3509.5	3822.6	3848.6	3633.1	3392.4	*3356.5*	3306.0	3427.0	3371.2
55°	2806.0	2857.8	3369.2	3859.2	4016.1	3907.1	3786.1	*3756.8*	3673.0	3784.7	3575.3
57.5°	2605.8	2650.4	3073.9	3841.3	4158.4	4160.4	4136.5	*4112.5*	4043.4	4138.5	3814.7
60°	2485.5	2530.0	2916.3	3775.4	4287.4	4427.7	4465.6	*4463.0*	4363.2	4540.8	4095.3
62.5°	2309.3	2370.4	2752.1	3604.5	4379.2	4691.0	4805.4	*4787.4*	4676.4	4959.7	4373.2
65°	1953.5	2006.7	2415.7	3322.6	4325.3	4909.1	5173.8	*5183.1*	5054.7	5354.0	4592.6
67.5°	1369.7	1409.0	1815.2	2730.8	3959.6	4980.9	5550.8	*5550.1*	5331.3	5556.1	4495.5
70°	*793.9*	*847.8*	*1072.5*	*1688.2*	*3080.6*	*4654.5*	*5607.3*	*5626.6*	*5219.0*	*5133.9*	*3720.2*
72.5°	307.2	351.7	607.7	897.0	1606.5	3565.3	4823.3	*4879.9*	4367.9	3960.3	2589.2
75°	91.8	102.4	285.9	477.4	645.0	1722.1	3265.4	*3281.4*	2996.1	2470.2	1327.2
77.5°	68.5	75.8	125.0	241.4	226.1	522.0	1689.6	*1845.2*	1590.5	882.4	365.7
80°	46.5	55.2	89.1	117.7	83.8	139.0	474.8	*521.3*	485.4	198.1	91.8
82.5°	20.6	26.6	63.2	59.2	30.6	39.9	146.3	*155.6*	100.4	59.8	31.9
85°	2.0	2.7	23.9	25.9	11.3	9.3	30.6	*30.6*	21.9	20.6	13.3
87.5°	0.0	0.0	0.7	1.3	1.3	2.0	2.7	*3.3*	4.0	5.3	6.6
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

Scaled Data Report

REPORT NUMBER: P633057
CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2	1309.2
2.5°	1321.2	1313.2	1323.2	1331.2	1333.2	1318.5	1309.9	1297.3	1294.6	1295.3	1291.9
5°	1339.2	1335.2	1342.5	1333.8	1311.2	1268.7	1232.1	1191.5	1169.6	1157.0	1155.6
7.5°	1372.4	1370.4	1362.4	1323.2	1252.7	1158.3	1067.2	978.1	922.9	903.0	899.6
10°	1421.6	1417.6	1385.0	1291.9	1141.7	960.1	807.2	679.6	601.8	579.1	551.2
12.5°	1478.1	1470.1	1399.0	1224.8	974.1	722.8	531.9	389.0	321.8	301.9	301.9
15°	1532.6	1515.4	1391.0	1113.7	768.0	470.1	297.2	224.7	204.1	198.8	198.8
17.5°	1588.5	1555.3	1359.8	962.1	530.6	277.9	198.1	184.2	181.5	182.2	182.9
20°	1641.0	1589.2	1304.6	780.0	338.4	194.2	177.5	174.2	172.9	174.2	173.5
22.5°	1698.2	1620.4	1220.8	581.1	220.1	174.9	168.9	166.2	164.9	166.9	166.9
25°	1754.7	1643.0	1109.8	391.0	174.9	162.9	159.6	156.9	155.6	156.3	156.3
27.5°	1784.0	1634.4	964.1	249.3	156.9	150.9	147.6	144.3	142.3	141.6	142.3
30°	1803.9	1607.8	785.9	177.5	142.3	135.0	131.7	129.0	123.7	120.4	121.7
32.5°	1835.2	1581.2	592.4	148.9	130.3	119.0	113.7	107.1	99.7	96.4	96.4
35°	1872.4	1544.6	415.6	134.3	117.7	105.7	95.7	84.4	75.8	73.1	73.1
37.5°	1921.6	1510.0	276.6	124.3	107.1	94.4	80.5	67.2	57.8	56.5	55.9
40°	1995.4	1480.8	194.8	117.0	97.7	82.5	65.8	51.9	45.2	43.2	43.2
42.5°	2091.2	1450.9	154.3	109.7	89.8	71.1	52.5	41.2	35.9	34.6	33.9
45°	2209.5	1415.6	134.3	103.1	81.8	59.2	41.9	34.6	30.6	29.3	29.3
47.5°	2337.9	1367.7	125.0	94.4	72.5	47.9	35.2	29.9	27.9	27.3	26.6
50°	2464.2	1303.2	117.0	86.4	61.8	39.2	30.6	27.3	25.9	25.3	25.3
52.5°	2574.6	1228.1	107.1	77.1	50.5	33.9	27.3	25.3	23.9	22.6	21.9
55°	2669.0	1146.3	94.4	66.5	41.2	29.9	25.3	23.3	21.9	20.6	19.9
57.5°	2790.7	1099.8	75.8	53.9	33.9	26.6	23.3	21.3	19.9	18.0	18.0
60°	2925.7	1065.9	56.5	42.6	29.3	24.6	21.3	19.3	18.0	16.0	16.0
62.5°	3034.0	1015.3	44.5	34.6	25.3	21.9	19.3	17.3	16.0	14.0	14.0
65°	3075.3	910.9	36.6	27.3	20.6	19.3	17.3	16.0	14.0	12.0	12.0
67.5°	2889.1	702.2	30.6	21.9	17.3	16.6	15.3	14.6	12.0	10.6	10.0
70°	*2288.0*	*428.2*	*25.3*	*18.0*	*14.6*	*14.0*	*14.0*	*12.6*	*10.6*	*10.0*	*9.3*
72.5°	1567.9	220.8	20.6	14.6	12.6	12.6	12.0	11.3	10.0	9.3	9.3
75°	814.5	73.8	16.0	11.3	10.0	10.6	10.6	10.0	9.3	9.3	8.6
77.5°	233.4	33.2	12.0	8.6	8.0	8.0	8.6	8.6	8.6	8.0	8.0
80°	60.5	19.3	8.6	6.6	6.6	6.6	6.6	7.3	8.0	7.3	7.3
82.5°	24.6	10.6	6.0	5.3	5.3	5.3	5.3	6.0	6.6	6.6	6.6
85°	15.3	5.3	4.7	4.7	4.7	4.0	4.0	4.7	4.7	5.3	5.3
87.5°	9.3	4.0	4.0	4.0	4.0	3.3	3.3	3.3	3.3	3.3	3.3
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

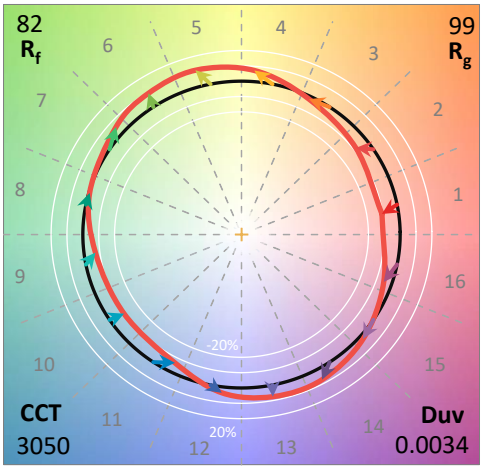
Test Information

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

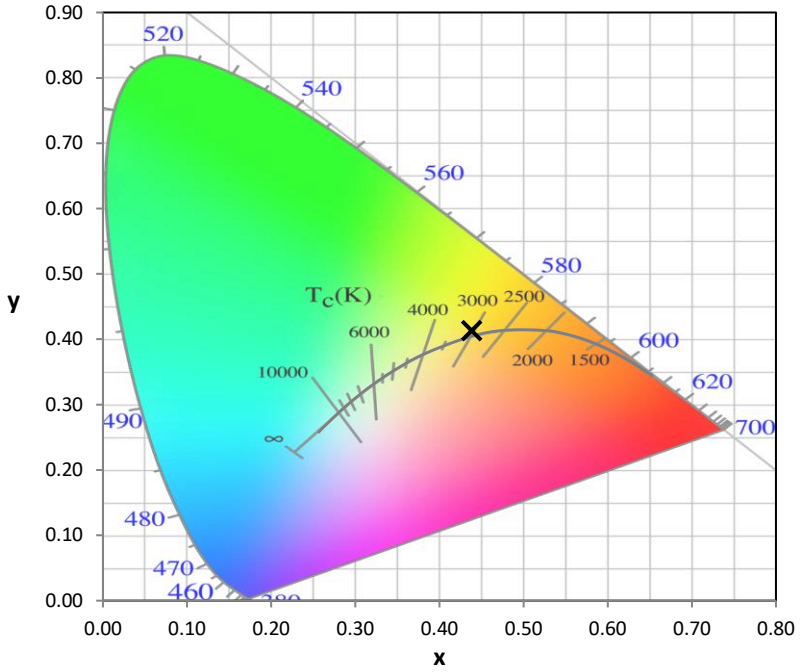
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

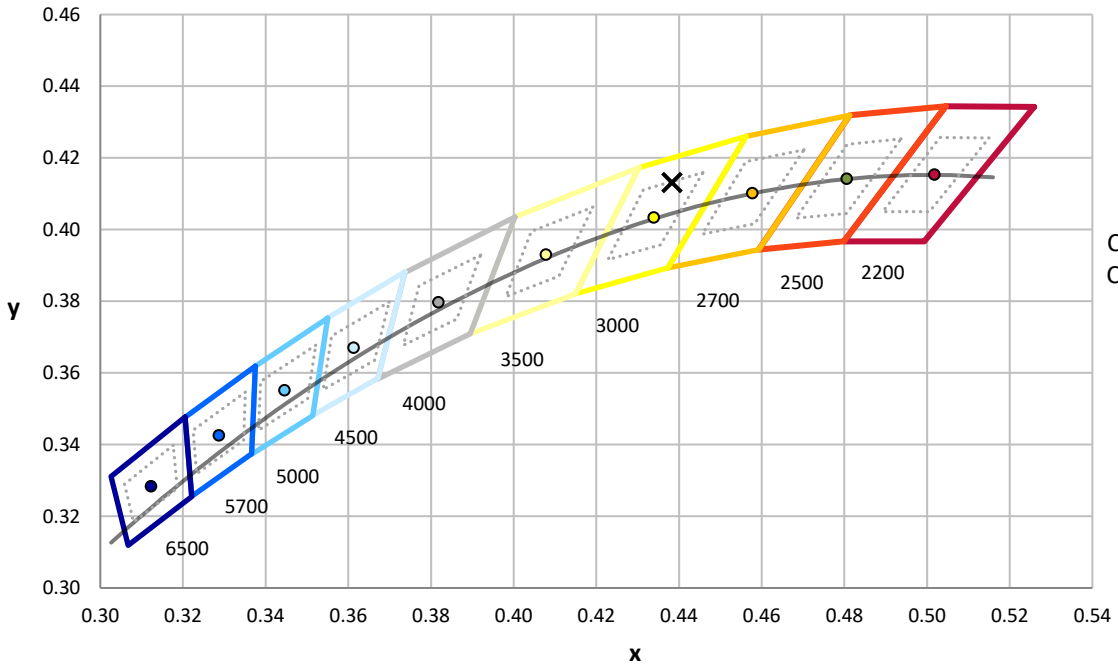
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

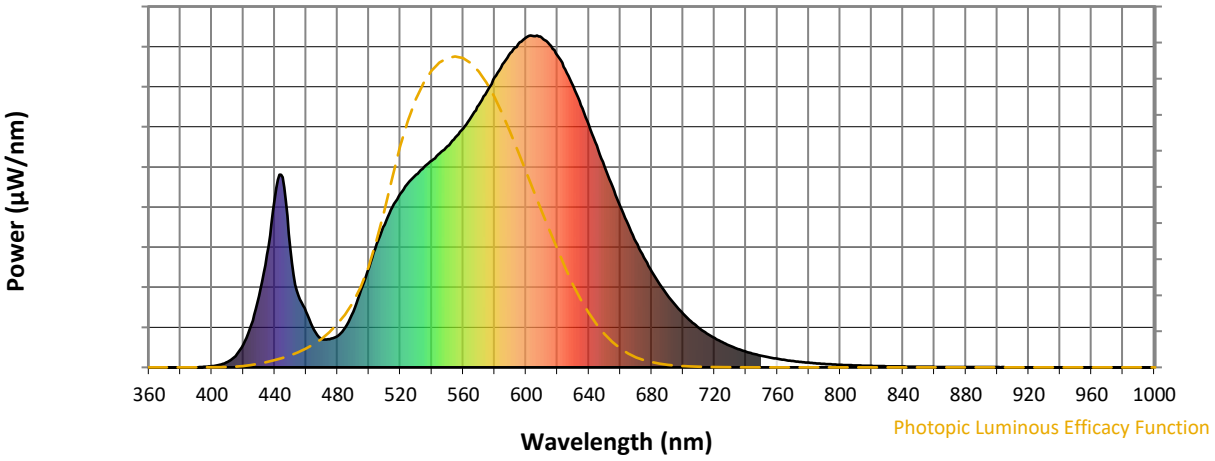


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

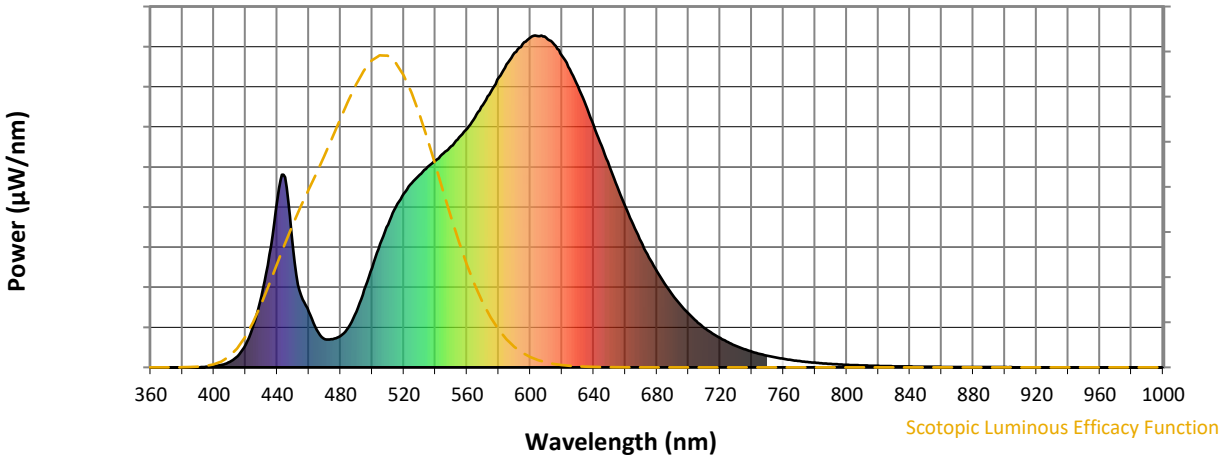


Photopic Lumens: NR

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

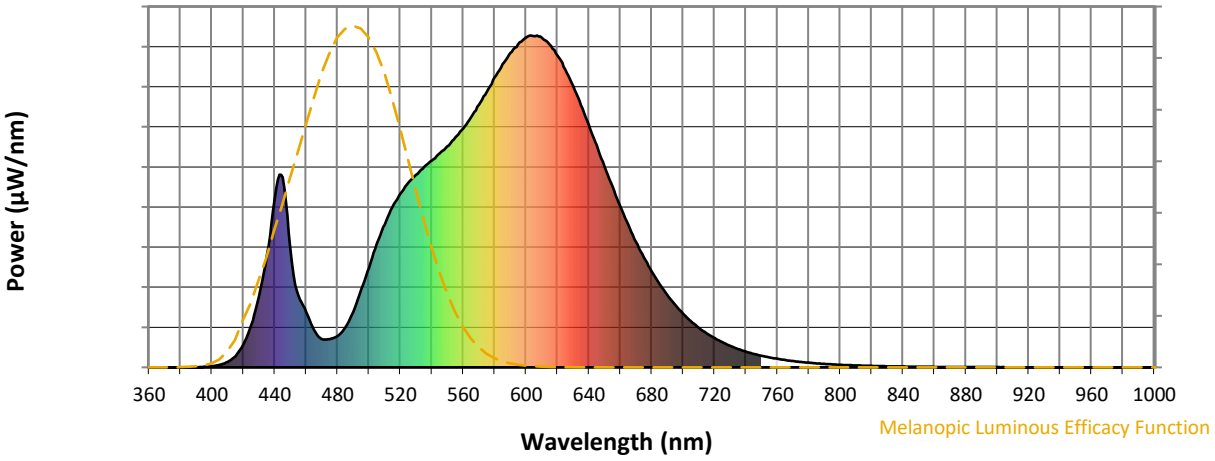


Scotopic Lumens: NR **S/P: 1.27**

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			

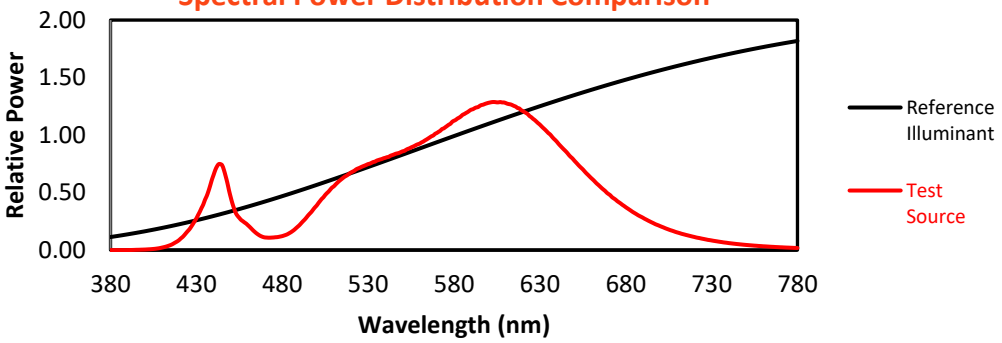
REPORT NUMBER: SP1-2408-195-9

TM-30-18

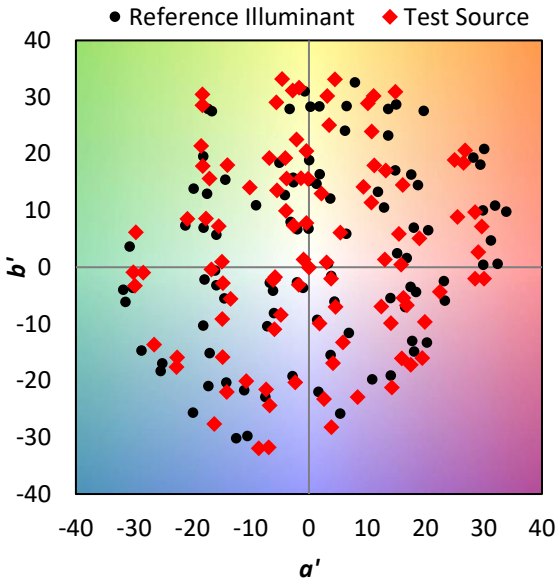
Summary

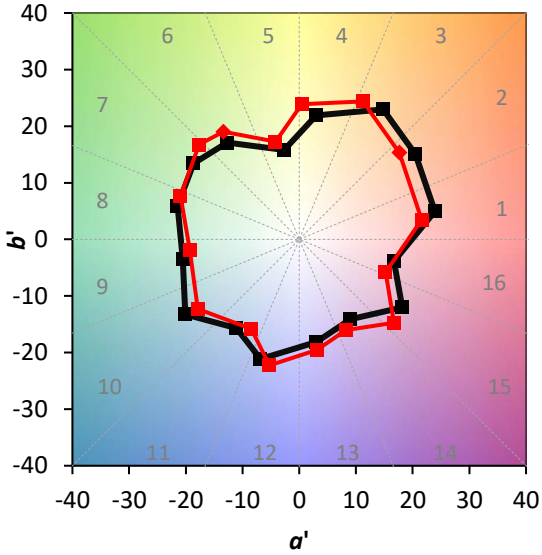
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

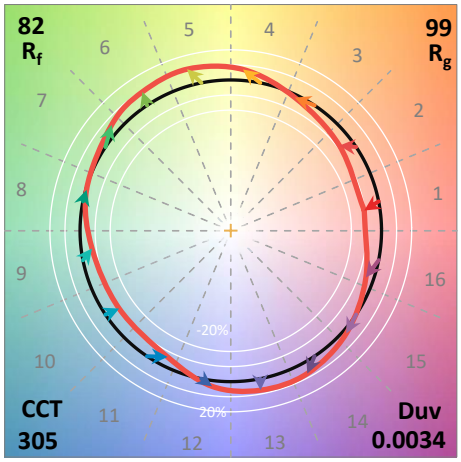
Spectral Power Distribution Comparison

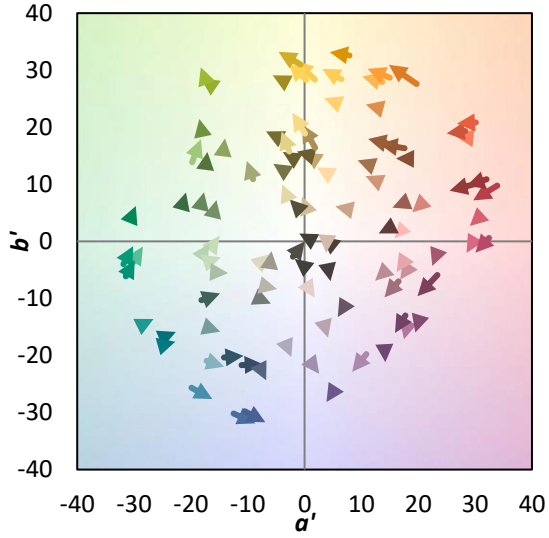


Color Vector Graphics







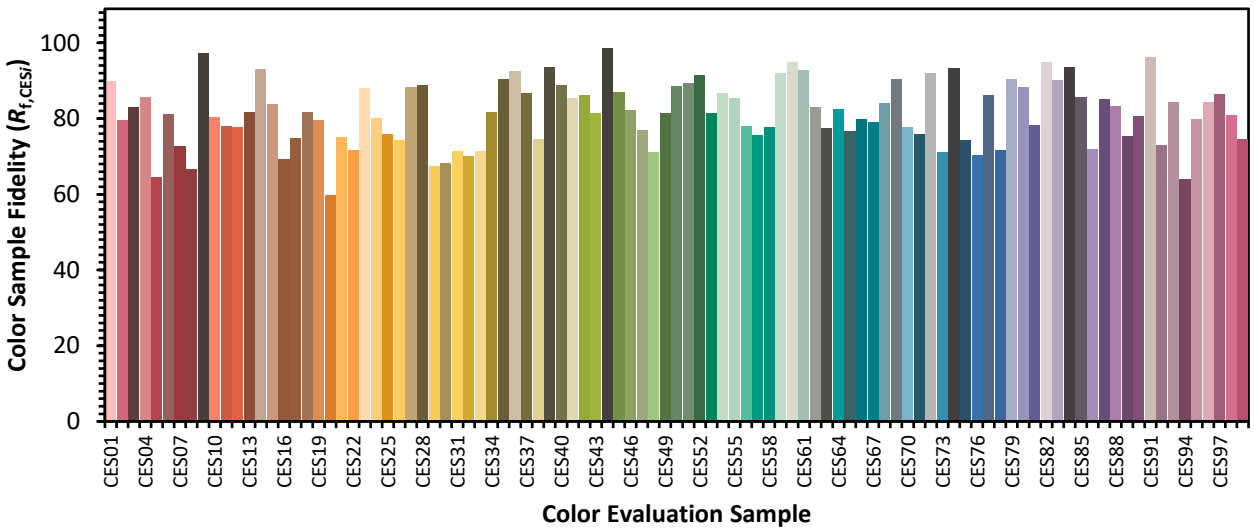


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

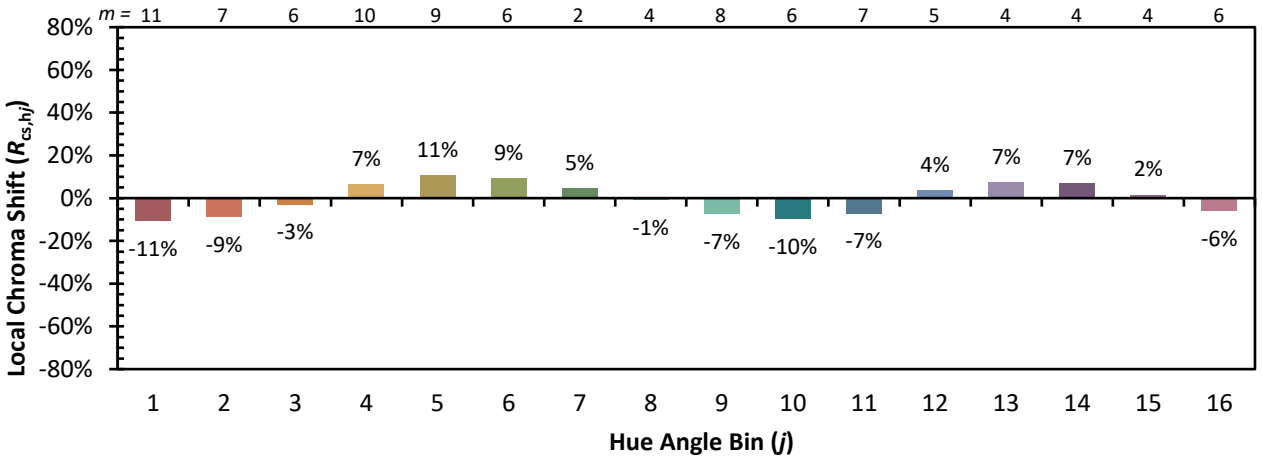
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

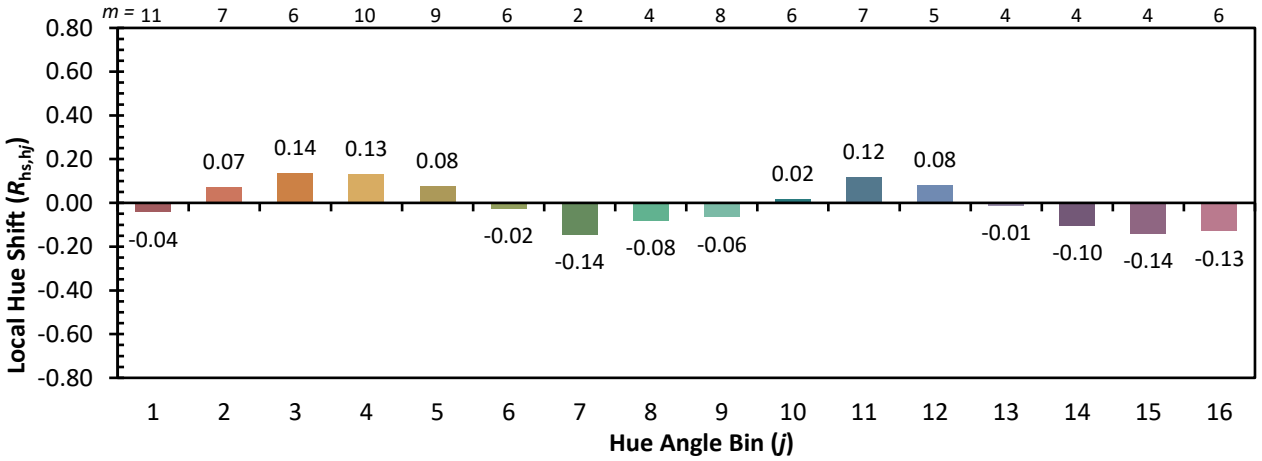


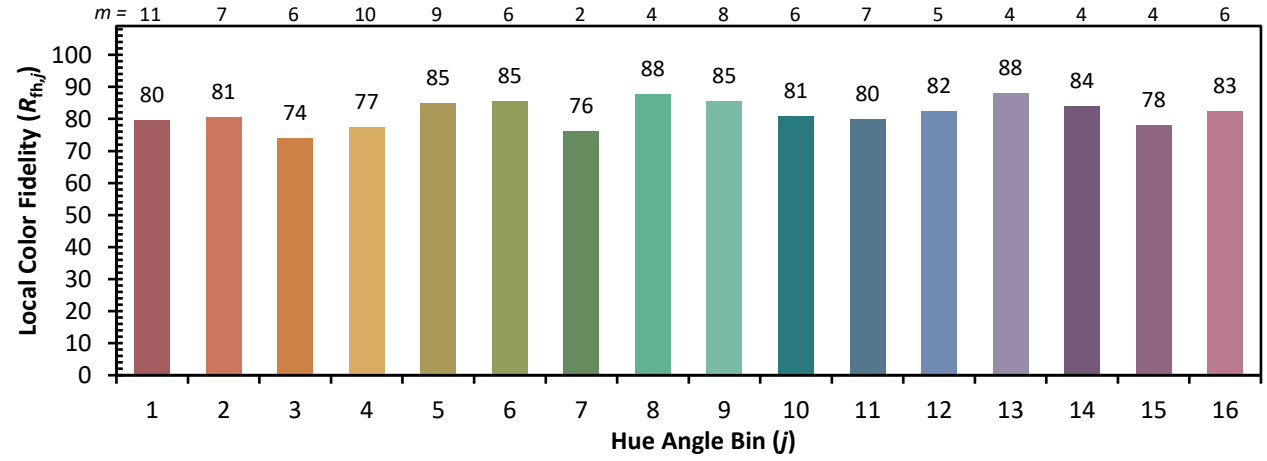
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



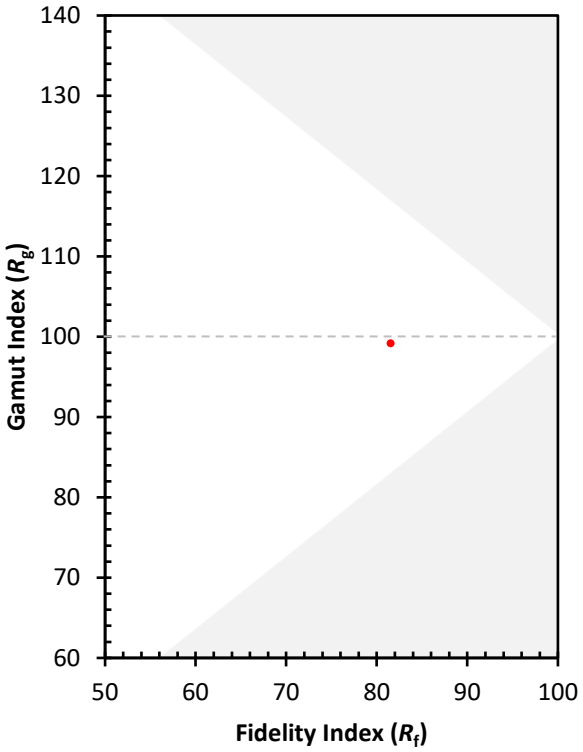


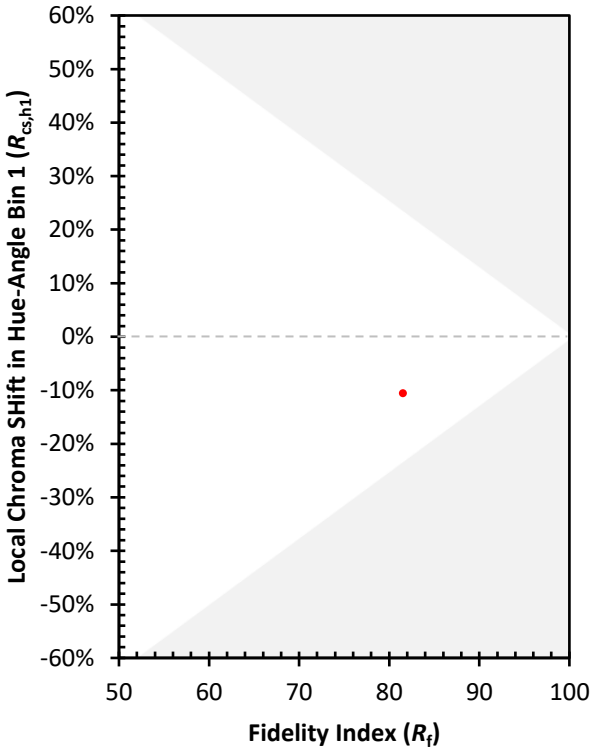


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)