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: P636023

Luminaire Tested: GWS-SA3E-830-U-T3-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:	P636023
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-26)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3E-830-U-T3-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	12825.4 lumens
Efficiency:	N/A
Efficacy:	80.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B1 - U0 - G2

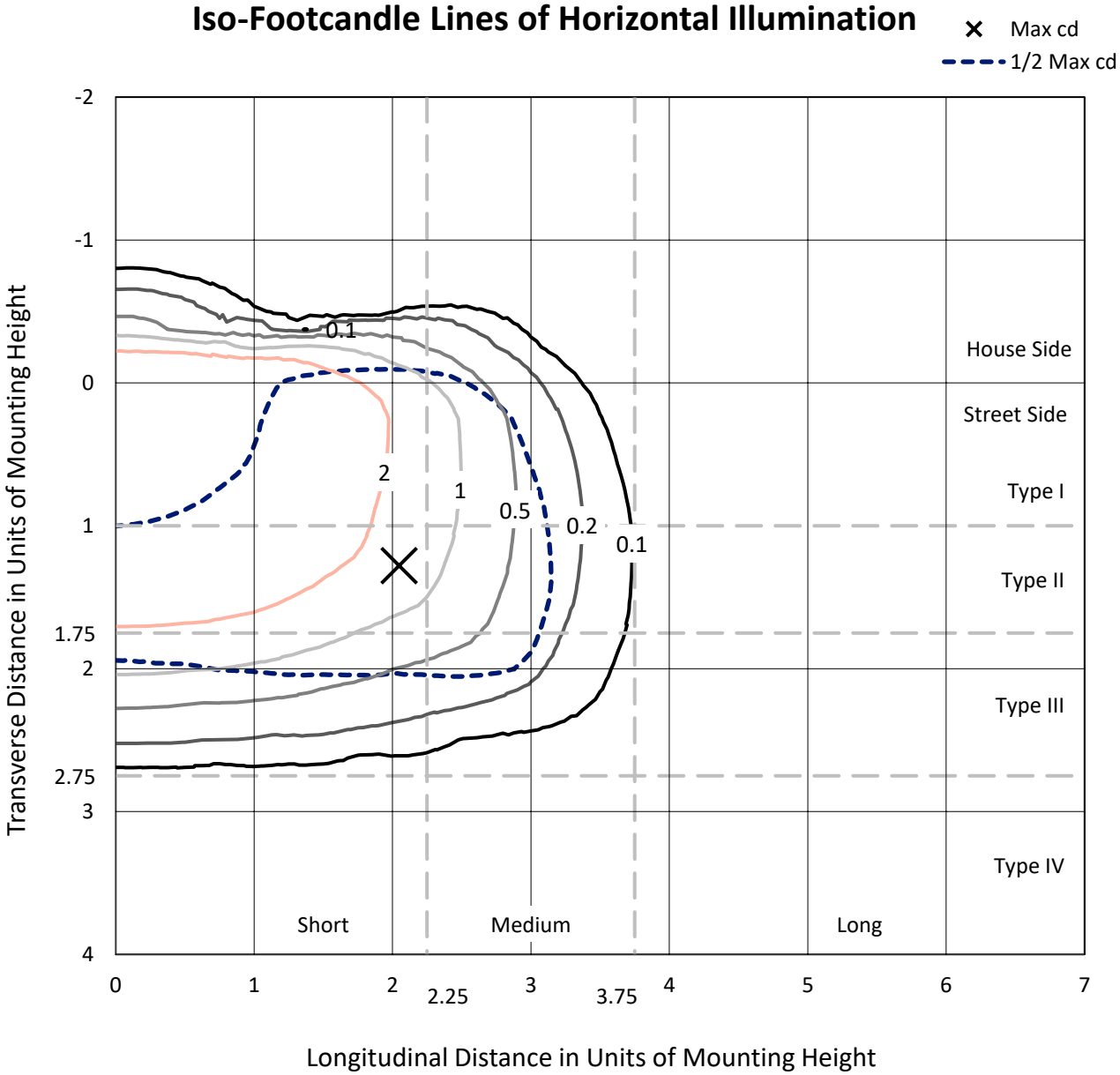
Input Watts (W):	159.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P636023
CATALOG NUMBER: GWS-SA3E-830-U-T3-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



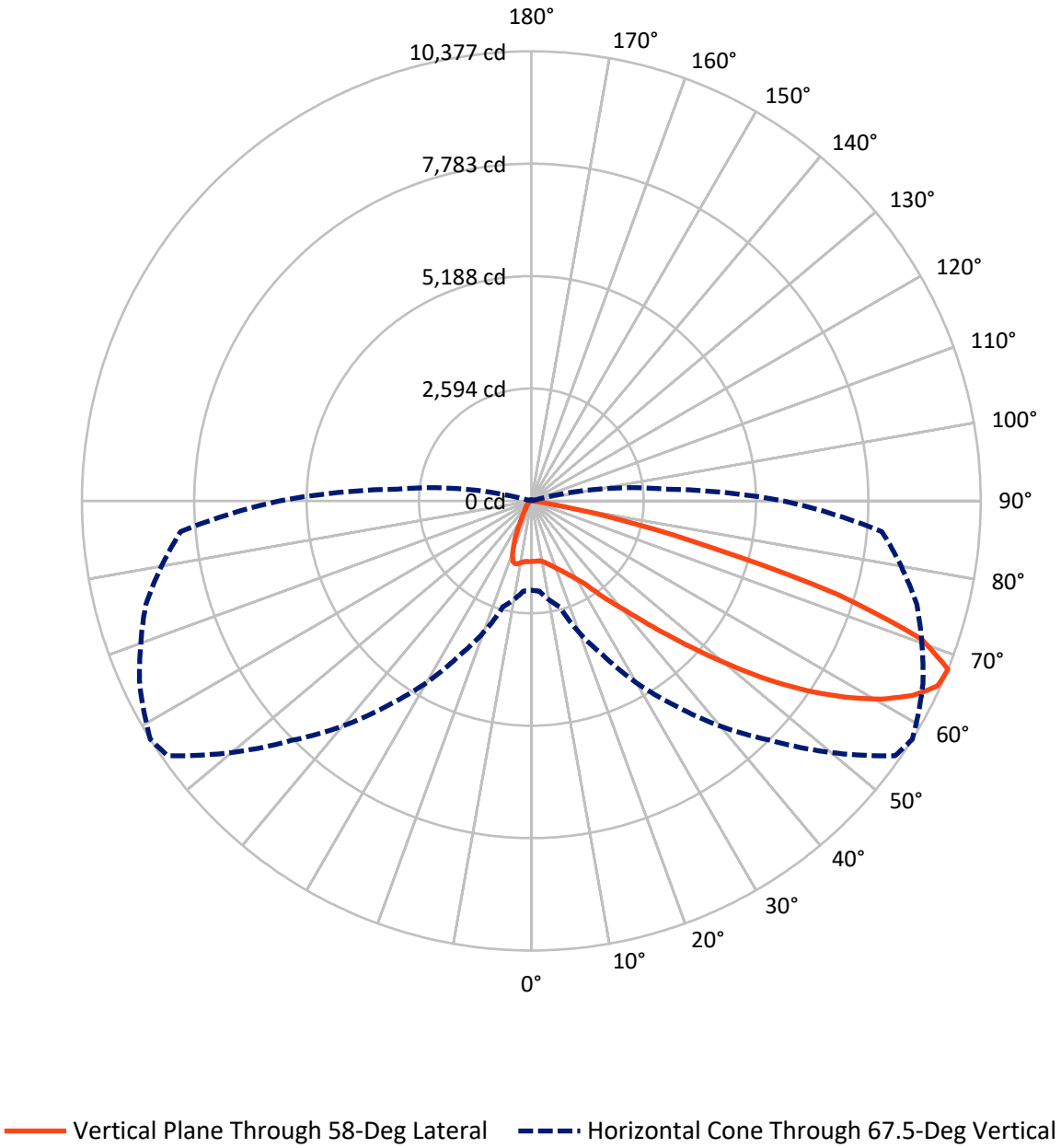
Based on 20 foot mounting height. Maximum calculated value = 4.9 fc
Type III - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P636023
CATALOG NUMBER: GWS-SA3E-830-U-T3-W-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

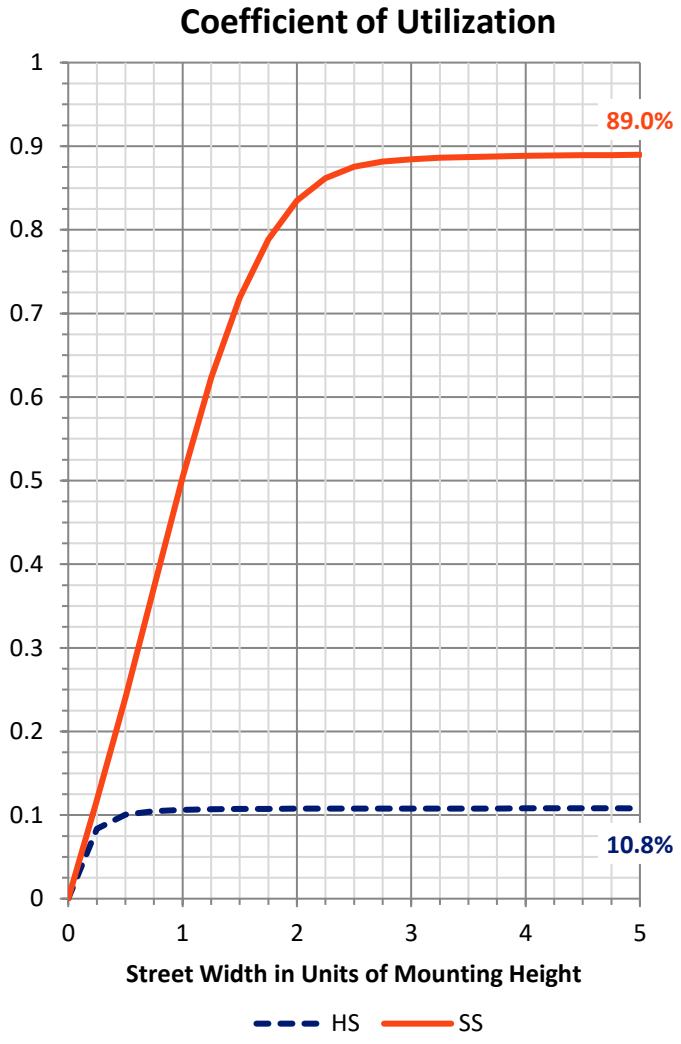
REPORT NUMBER: P636023
CATALOG NUMBER: GWS-SA3E-830-U-T3-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1399.2	0.0	1399.2
	% Fixture	10.9	0.0	10.9
Street Side	Lumens	11426.2	0.0	11426.2
	% Fixture	89.1	0.0	89.1
Total	Lumens	12825.4	0.0	12825.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	1.0
10°-20°	368.6	2.9
20°-30°	643.4	5.0
30°-40°	1149.1	9.0
40°-50°	2100.3	16.4
50°-60°	3493.0	27.2
60°-70°	3794.0	29.6
70°-80°	1114.0	8.7
80°-90°	31.7	0.2
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°	12825.4	100.0
0°-180°	12825.4	100.0



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

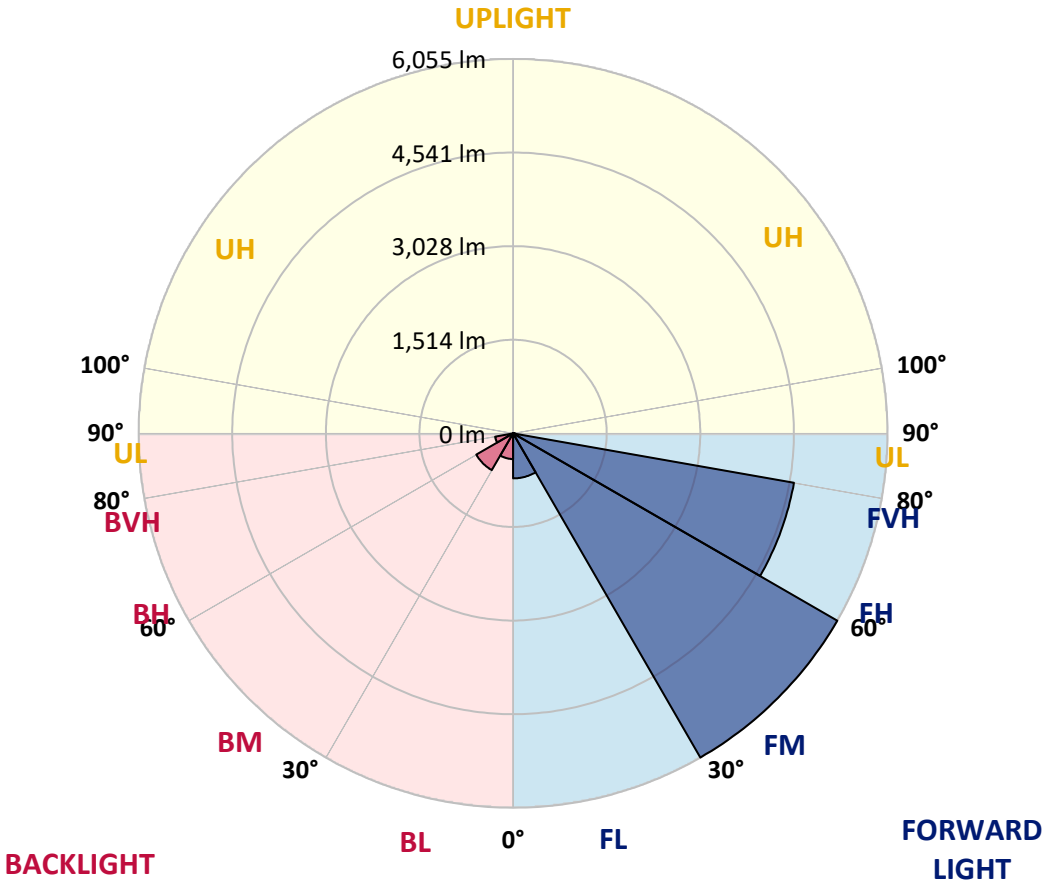
Scaled Data Report

REPORT NUMBER: P636023
CATALOG NUMBER: GWS-SA3E-830-U-T3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	728.3	5.7			
FM	(30°-60°)	6055.1	47.2			
FH	(60°-80°)	4612.6	36.0			G2/5000
FVH	(80°-90°)	30.2	0.2			G1/100
BL	(0°-30°)	415.0	3.2	B1/500		
BM	(30°-60°)	687.2	5.4	B1/1000		
BH	(60°-80°)	295.4	2.3	B1/500		G1/500
BVH	(80°-90°)	1.6	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 Short



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

Scaled Data Report

REPORT NUMBER: P636023
CATALOG NUMBER: GWS-SA3E-830-U-T3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6	*1397.6*	1397.6	1397.6	1397.6
2.5°	1371.3	1368.8	1368.8	1378.8	1380.1	1385.1	1396.3	*1397.6*	1403.8	1401.3	1392.6
5°	1299.9	1301.2	1308.7	1326.2	1341.2	1360.0	1387.6	*1393.8*	1407.6	1415.1	1410.1
7.5°	1233.5	1234.8	1246.1	1273.6	1302.4	1340.0	1385.1	*1397.6*	1425.1	1445.2	1446.4
10°	1208.5	1207.2	1218.5	1249.8	1287.4	1340.0	1405.1	*1421.4*	1462.7	1497.8	1504.0
12.5°	1216.0	1214.7	1226.0	1254.8	1296.1	1362.5	1440.2	*1462.7*	1515.3	1569.2	1580.4
15°	1246.1	1244.8	1252.3	1276.1	1321.2	1390.1	1485.2	*1519.1*	1585.4	1650.6	1668.1
17.5°	1336.2	1330.0	1322.4	1325.0	1351.2	1422.6	1542.9	*1584.2*	1666.8	1744.5	1759.5
20°	1496.5	1480.2	1460.2	1433.9	1421.4	1470.2	1609.2	*1656.8*	1757.0	1845.9	1848.4
22.5°	1738.2	1732.0	1685.6	1609.2	1555.4	1556.6	1686.9	*1742.0*	1864.7	1962.4	1948.6
25°	2075.1	2071.3	1999.9	1874.7	1734.5	1686.9	1785.8	*1842.2*	1992.4	2096.4	2052.5
27.5°	2493.4	2467.1	2383.2	2214.1	2005.0	1855.9	1911.0	*1961.1*	2127.7	2225.4	2142.7
30°	2857.8	2859.0	2780.1	2603.6	2368.1	2110.2	2063.8	*2107.6*	2251.7	2354.4	2254.2
32.5°	3208.4	3219.7	3133.3	2974.3	2716.3	2442.0	2283.0	*2290.5*	2410.7	2522.2	2400.7
35°	3534.0	3542.8	3482.7	3347.4	3107.0	2788.9	2588.5	*2584.8*	2649.9	2763.9	2604.8
37.5°	3898.5	3907.2	3848.4	3726.9	3501.5	3185.9	2935.4	*2930.4*	2956.7	3049.4	2867.8
40°	4286.7	4303.0	4237.8	4135.1	3919.8	3653.0	3338.7	*3293.6*	3267.3	3376.2	3208.4
42.5°	4679.9	4705.0	4682.4	4579.7	4395.6	4175.2	3862.1	*3792.0*	3735.7	3872.2	3694.3
45°	5168.3	5198.4	5188.3	5109.5	4966.7	4787.6	4492.1	*4410.7*	4384.4	4510.8	4299.2
47.5°	5637.9	5670.5	5706.8	5689.3	5587.8	5505.2	5177.1	*5130.7*	5123.2	5258.5	4930.4
50°	5987.3	6017.4	6156.4	6256.6	6325.5	6307.9	6023.6	*5954.8*	5943.5	6029.9	5596.6
52.5°	6237.8	6266.6	6458.2	6771.3	7024.2	7162.0	6875.2	*6860.2*	6798.8	6768.8	6220.3
55°	6431.9	6472.0	6673.6	7147.0	7656.7	7962.2	7783.1	*7729.3*	7571.5	7398.7	6798.8
57.5°	6470.7	6487.0	6771.3	7410.0	8147.6	8642.2	8642.2	*8548.3*	8244.0	8004.8	7467.6
60°	6122.6	6172.7	6557.1	7388.7	8358.0	9086.8	9354.8	*9289.7*	8878.9	8584.6	8111.3
62.5°	5349.9	5406.3	5874.6	6879.0	8147.6	9178.2	9894.6	*9884.5*	9421.2	9064.3	8644.7
65°	4102.6	4143.9	4552.2	5754.4	7258.4	8826.3	10280.3	*10307.8*	9849.5	9381.1	8828.8
67.5°	*2061.3*	*2090.1*	*2530.9*	*3931.0*	*5753.1*	*7813.2*	*10254.0*	*10376.7*	*9979.7*	*9213.3*	*8126.3*
70°	720.1	748.9	956.8	1686.9	3501.5	5966.0	9367.3	*9567.7*	9214.5	7864.5	5994.8
72.5°	246.7	260.5	397.0	626.2	1362.5	3536.5	7123.2	*7425.0*	6792.6	5279.8	3445.1
75°	140.3	149.0	212.9	339.4	571.1	1163.4	4041.2	*4226.6*	3959.8	2877.8	1417.6
77.5°	95.2	102.7	132.7	192.9	315.6	374.4	1648.0	*2075.1*	1809.6	939.2	361.9
80°	56.4	61.4	81.4	114.0	161.5	145.3	353.2	*469.6*	604.9	280.5	109.0
82.5°	26.3	30.1	52.6	75.1	81.4	61.4	103.9	*126.5*	170.3	137.8	45.1
85°	0.0	0.0	17.5	31.3	30.1	17.5	28.8	*31.3*	46.3	68.9	17.5
87.5°	0.0	0.0	0.0	0.0	0.0	1.3	2.5	*3.8*	7.5	13.8	7.5
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: P636023
CATALOG NUMBER: GWS-SA3E-830-U-T3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6	1397.6
2.5°	1402.6	1393.8	1403.8	1398.8	1403.8	1402.6	1392.6	1386.3	1386.3	1375.0	1371.3
5°	1420.1	1411.4	1413.9	1402.6	1400.1	1393.8	1381.3	1376.3	1376.3	1365.0	1361.3
7.5°	1458.9	1445.2	1442.7	1420.1	1410.1	1392.6	1370.0	1361.3	1360.0	1348.7	1345.0
10°	1520.3	1504.0	1492.8	1464.0	1435.2	1400.1	1352.5	1312.4	1289.9	1259.8	1257.3
12.5°	1595.5	1575.4	1557.9	1514.1	1466.5	1387.6	1247.3	1100.8	1010.6	939.2	944.2
15°	1679.4	1660.6	1633.0	1566.6	1469.0	1263.6	970.5	745.1	634.9	576.1	573.6
17.5°	1770.8	1743.2	1698.1	1608.0	1390.1	965.5	631.2	445.8	388.2	368.2	363.2
20°	1855.9	1822.1	1765.8	1616.7	1162.1	653.7	394.5	345.6	335.6	329.4	329.4
22.5°	1946.1	1903.5	1819.6	1549.1	864.1	418.3	335.6	324.4	316.8	308.1	306.8
25°	2037.5	1982.4	1868.5	1372.5	566.0	329.4	314.3	301.8	288.0	274.3	270.5
27.5°	2115.2	2043.8	1906.0	1109.6	363.2	296.8	286.8	265.5	246.7	231.7	229.2
30°	2207.8	2116.4	1922.3	811.5	285.5	261.7	246.7	224.2	201.6	186.6	181.6
32.5°	2331.8	2231.6	1897.3	528.5	253.0	230.4	206.6	180.3	157.8	141.5	139.0
35°	2524.7	2405.7	1782.0	336.9	229.2	199.1	170.3	142.8	124.0	111.5	109.0
37.5°	2760.1	2649.9	1592.9	253.0	205.4	172.8	139.0	112.7	98.9	90.2	87.7
40°	3109.5	2955.5	1358.8	221.7	181.6	146.5	114.0	92.7	82.7	75.1	72.6
42.5°	3562.8	3316.1	1089.5	201.6	159.0	122.7	92.7	76.4	67.6	62.6	61.4
45°	4092.6	3668.0	805.2	181.6	137.8	101.4	76.4	62.6	56.4	52.6	51.3
47.5°	4634.8	3976.1	556.0	160.3	117.7	83.9	63.9	53.8	48.8	43.8	42.6
50°	5213.4	4236.6	379.5	139.0	100.2	68.9	55.1	48.8	42.6	38.8	37.6
52.5°	5637.9	4333.0	264.2	120.2	85.2	58.9	48.8	43.8	38.8	33.8	32.6
55°	6029.9	4330.5	200.4	101.4	72.6	51.3	43.8	38.8	33.8	30.1	28.8
57.5°	6420.6	4296.7	157.8	86.4	62.6	46.3	38.8	33.8	31.3	26.3	25.0
60°	6673.6	4169.0	122.7	72.6	53.8	40.1	33.8	30.1	26.3	22.5	21.3
62.5°	6807.6	3991.1	93.9	57.6	43.8	35.1	30.1	26.3	22.5	18.8	17.5
65°	6626.0	3675.5	73.9	45.1	33.8	30.1	25.0	21.3	17.5	13.8	12.5
67.5°	*5820.8*	*3099.5*	*57.6*	*36.3*	*26.3*	*22.5*	*21.3*	*17.5*	*12.5*	*10.0*	*8.8*
70°	4113.9	2122.7	45.1	27.6	20.0	17.5	16.3	13.8	10.0	7.5	6.3
72.5°	2257.9	1070.7	32.6	20.0	15.0	13.8	12.5	11.3	8.8	6.3	6.3
75°	869.1	294.3	23.8	13.8	10.0	10.0	8.8	8.8	7.5	5.0	5.0
77.5°	226.7	87.7	15.0	8.8	6.3	6.3	6.3	5.0	5.0	3.8	3.8
80°	72.6	28.8	8.8	6.3	5.0	3.8	3.8	2.5	3.8	2.5	2.5
82.5°	23.8	10.0	5.0	5.0	3.8	2.5	2.5	1.3	1.3	0.0	0.0
85°	8.8	5.0	3.8	2.5	2.5	2.5	1.3	0.0	0.0	0.0	0.0
87.5°	5.0	2.5	2.5	2.5	2.5	1.3	0.0	0.0	0.0	0.0	0.0
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

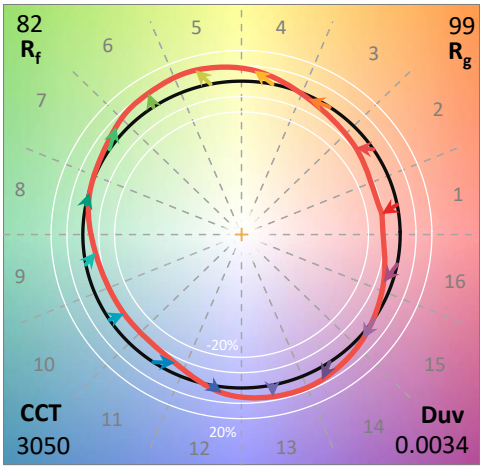
Test Information

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

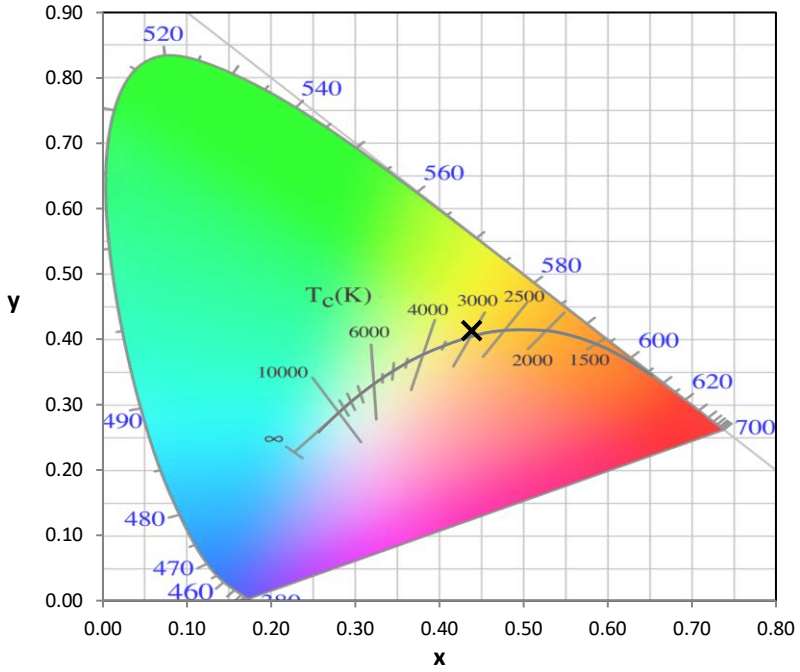
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

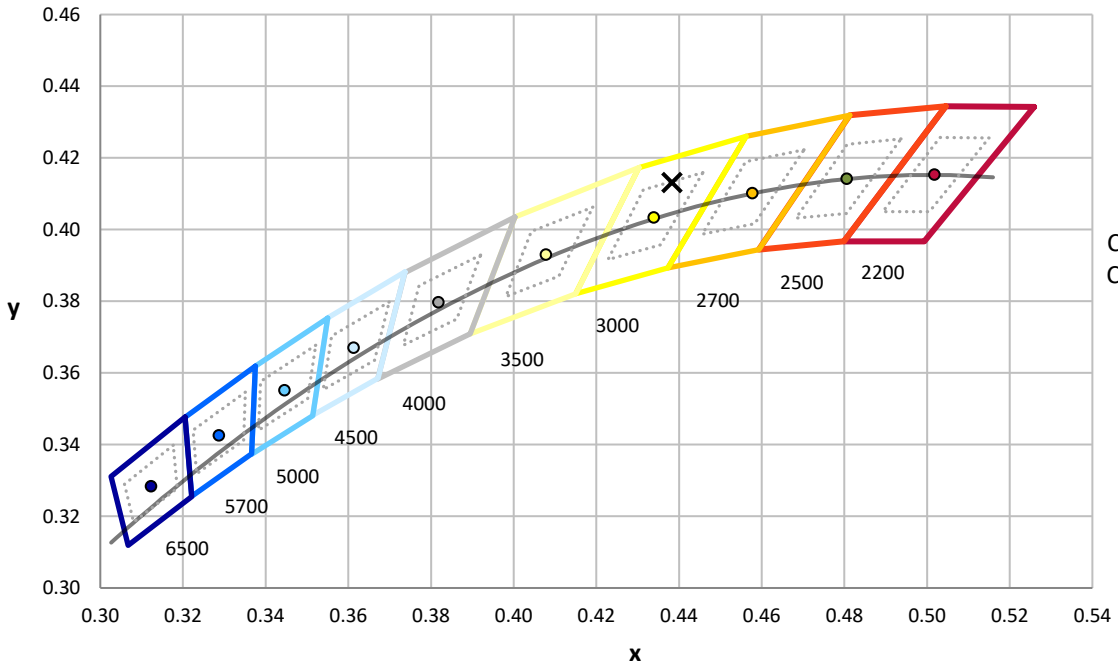
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

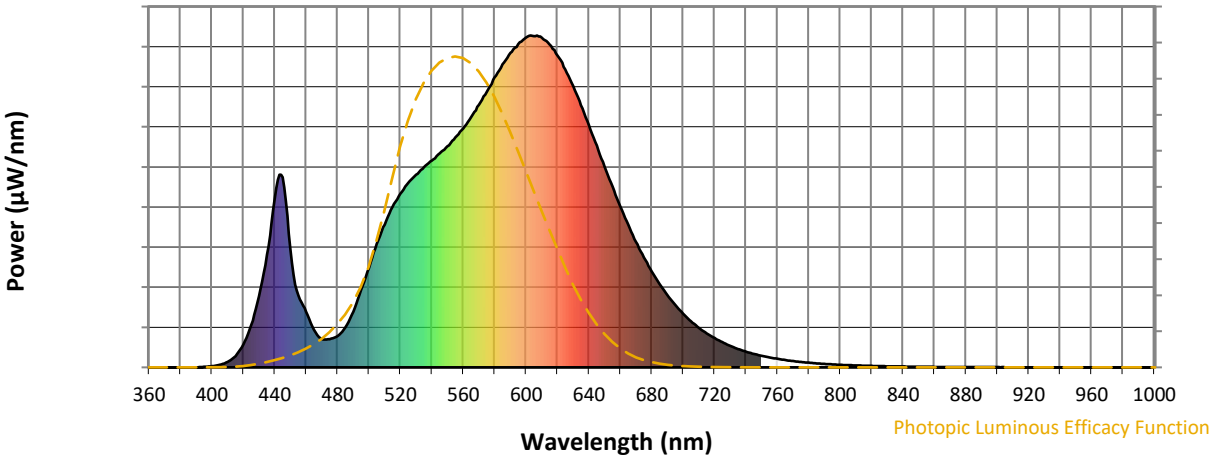


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

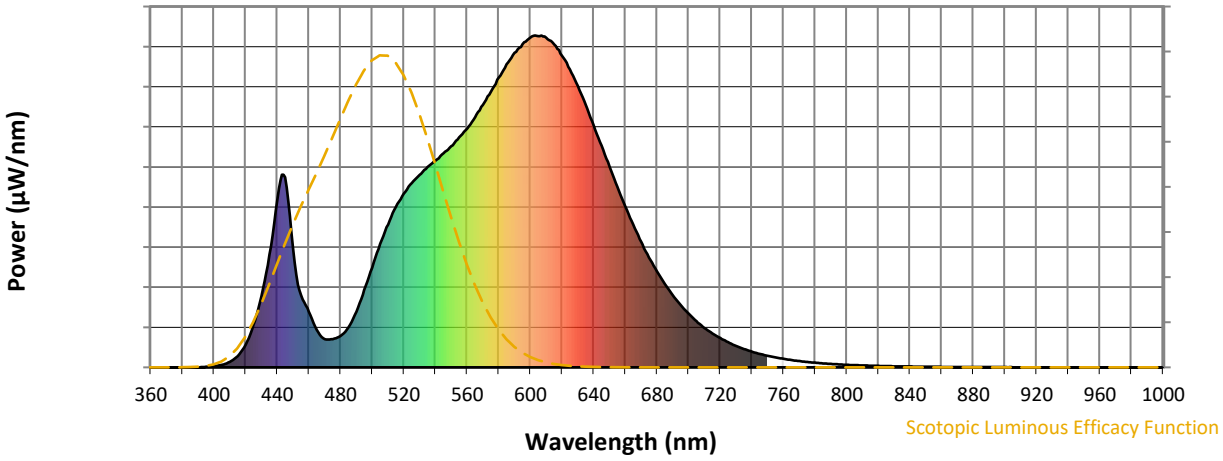


Photopic Lumens: NR

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

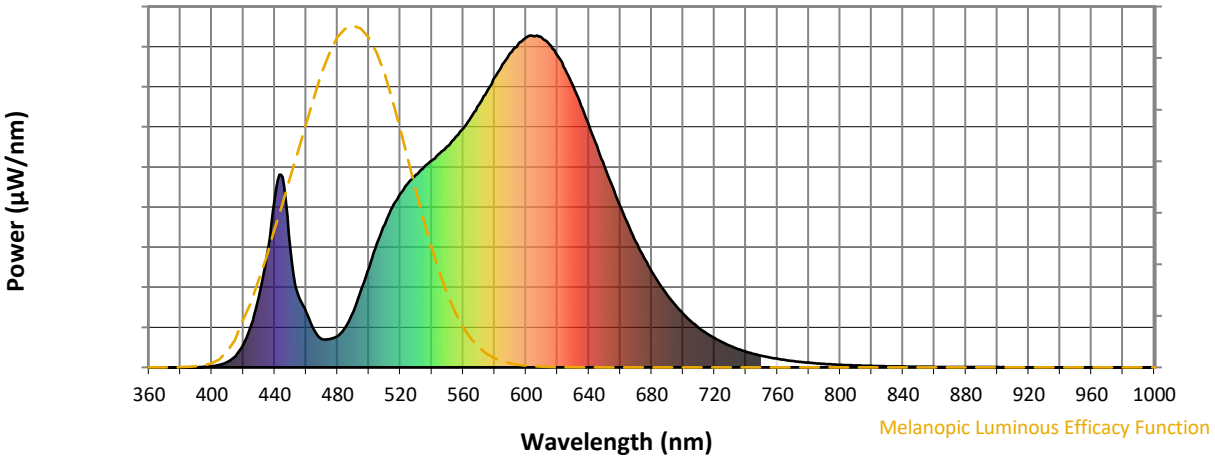


Scotopic Lumens: NR **S/P: 1.27**

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			

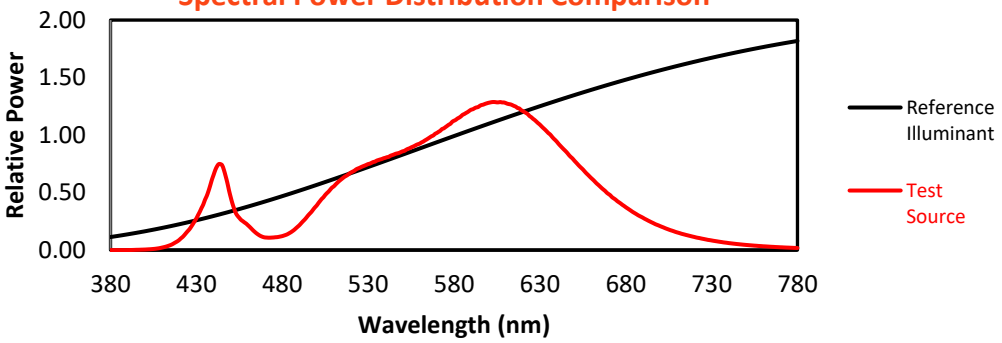
REPORT NUMBER: SP1-2408-195-9

TM-30-18

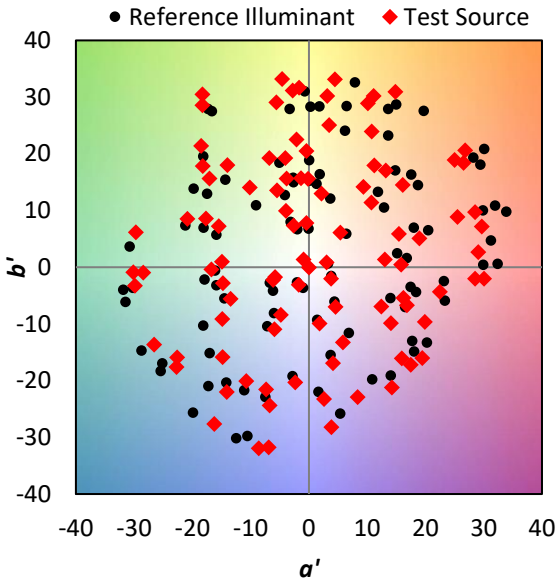
Summary

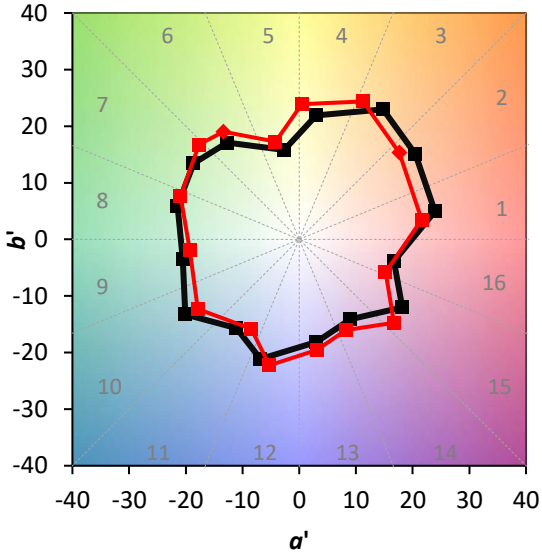
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

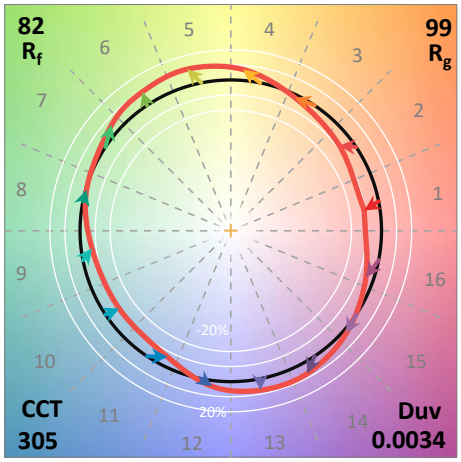
Spectral Power Distribution Comparison

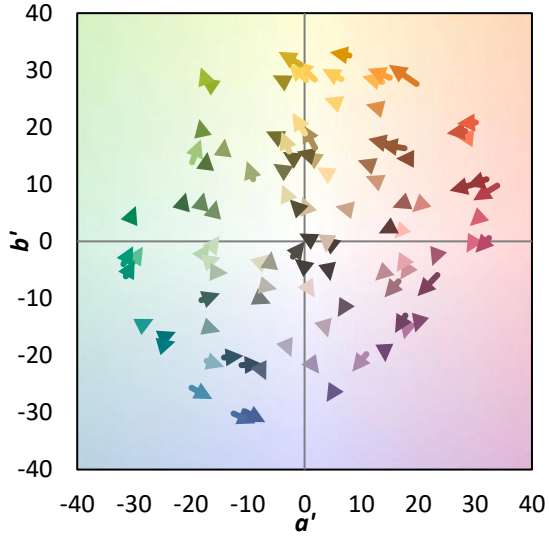


Color Vector Graphics







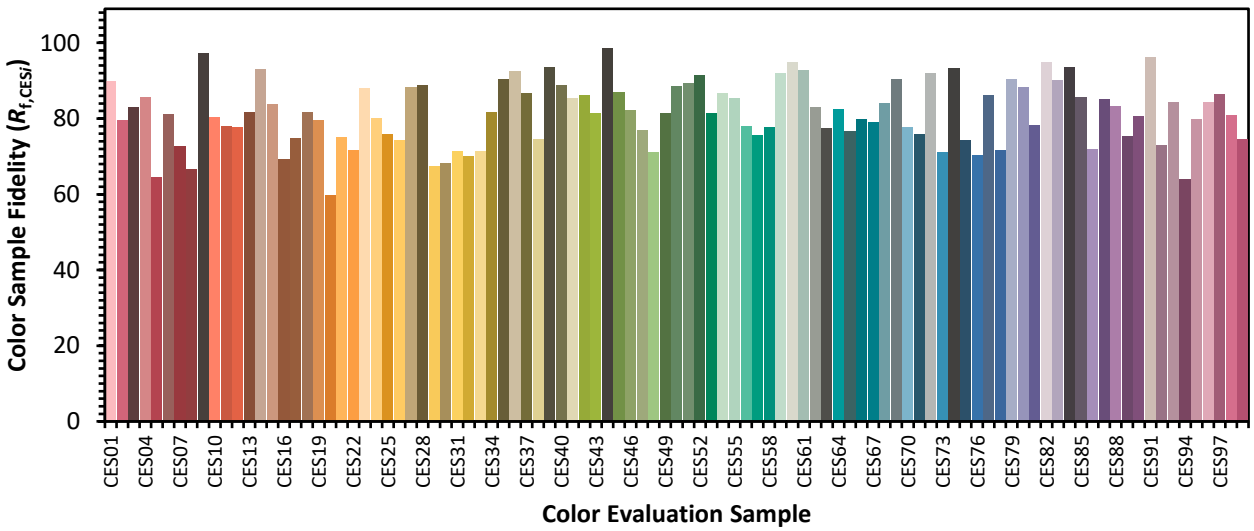


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

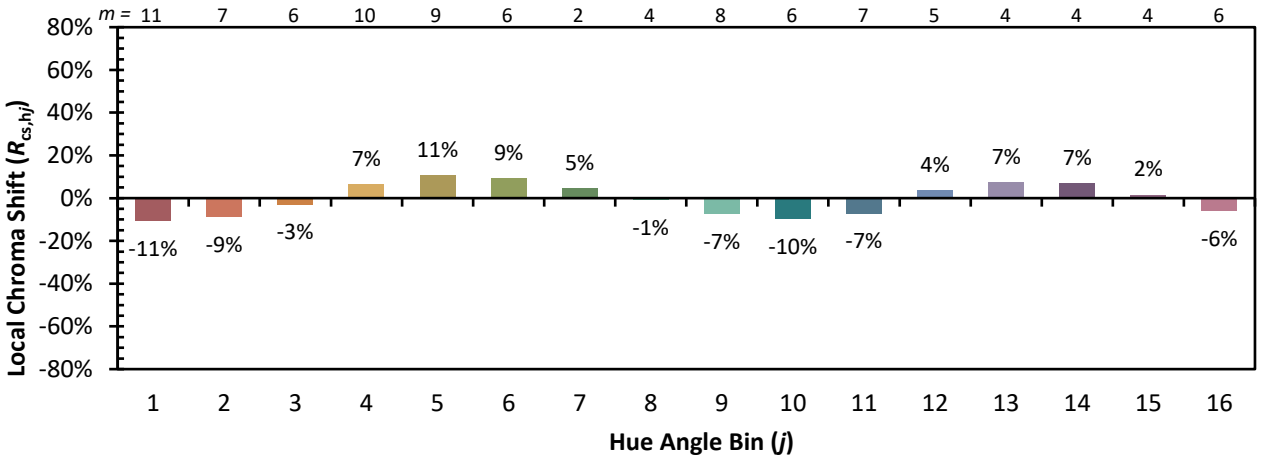
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

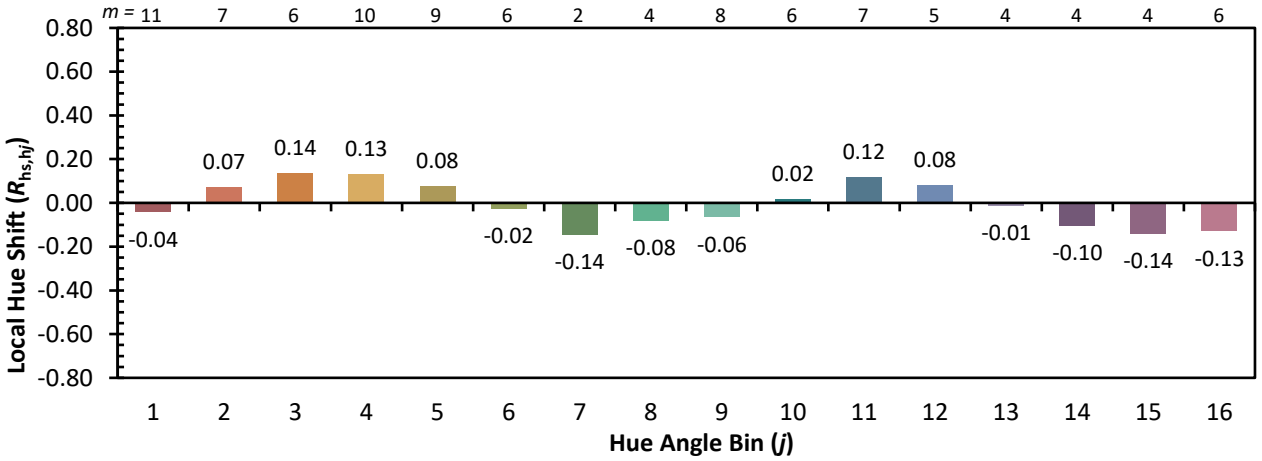


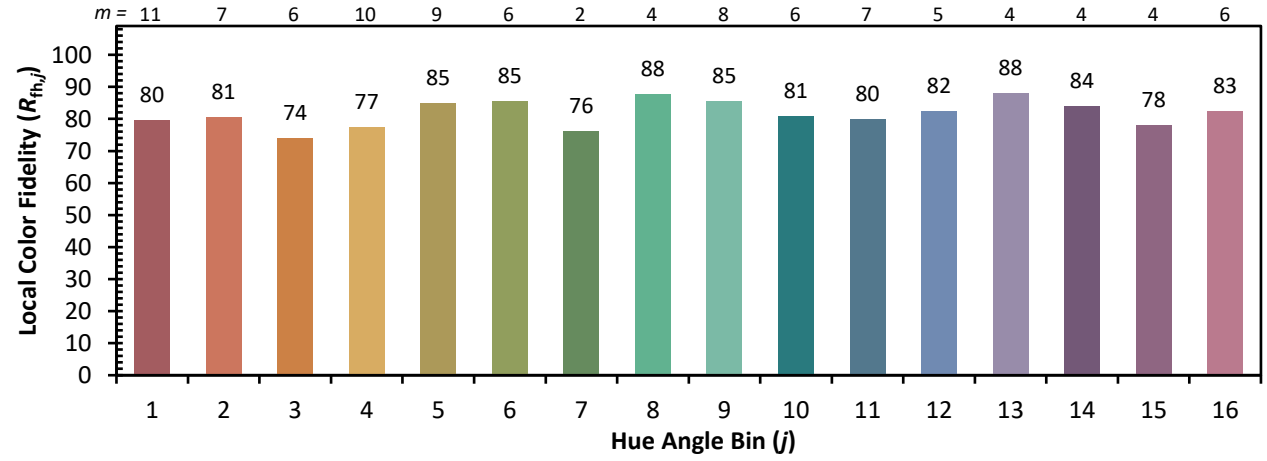
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



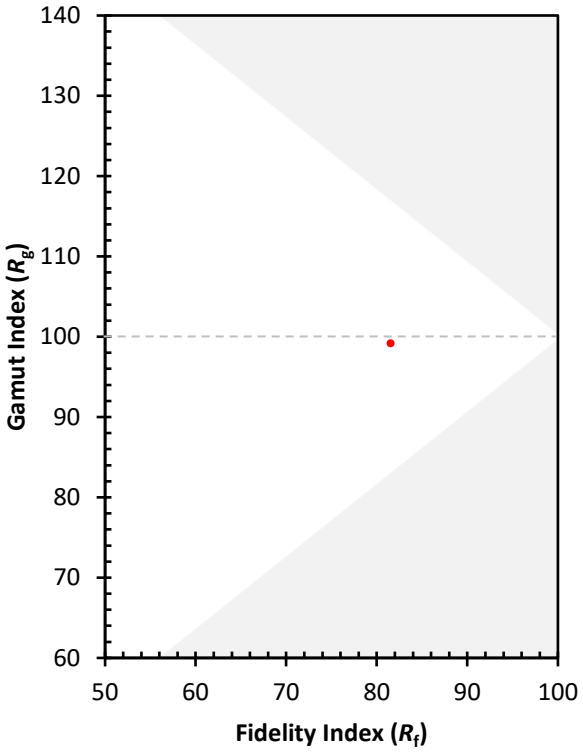


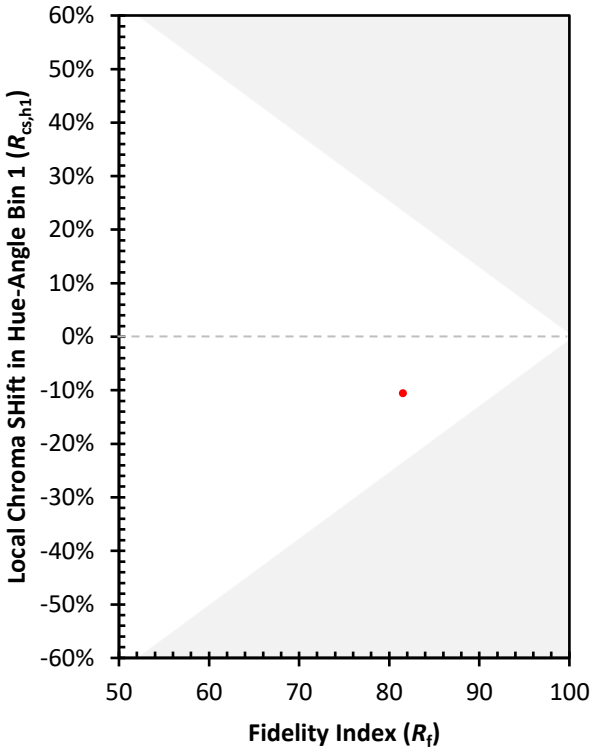


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)