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: P637979

Luminaire Tested: GWS-SA4D-830-U-SL3-W-GRSWH

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:	P637979
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-33)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-SL3-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	16291.5 lumens
Efficiency:	N/A
Efficacy:	100.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G2

Input Watts (W):	162.1
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

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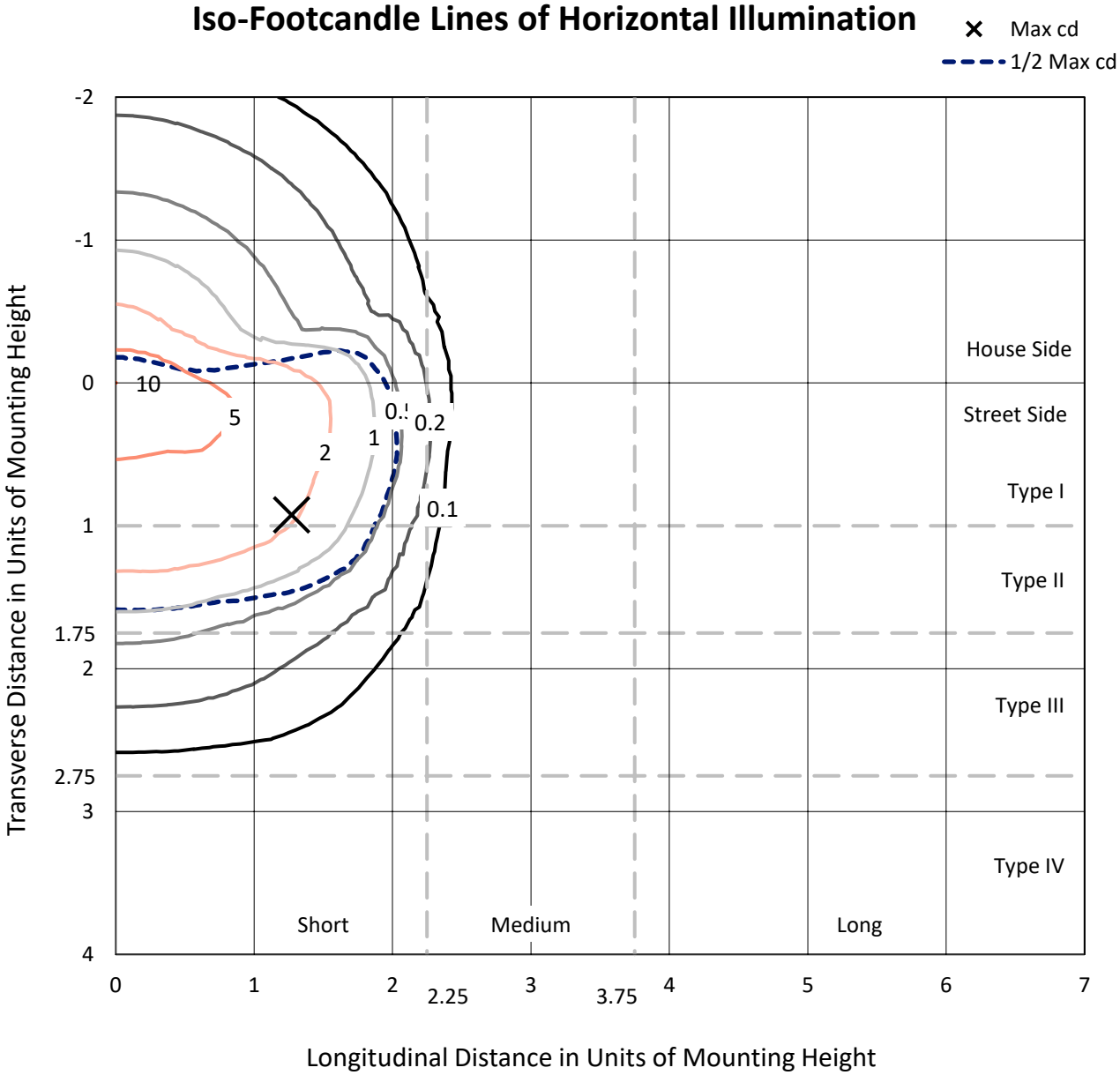
Scaled Data Report

REPORT NUMBER: P637979
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 10 fc
Type II - Short - N/A

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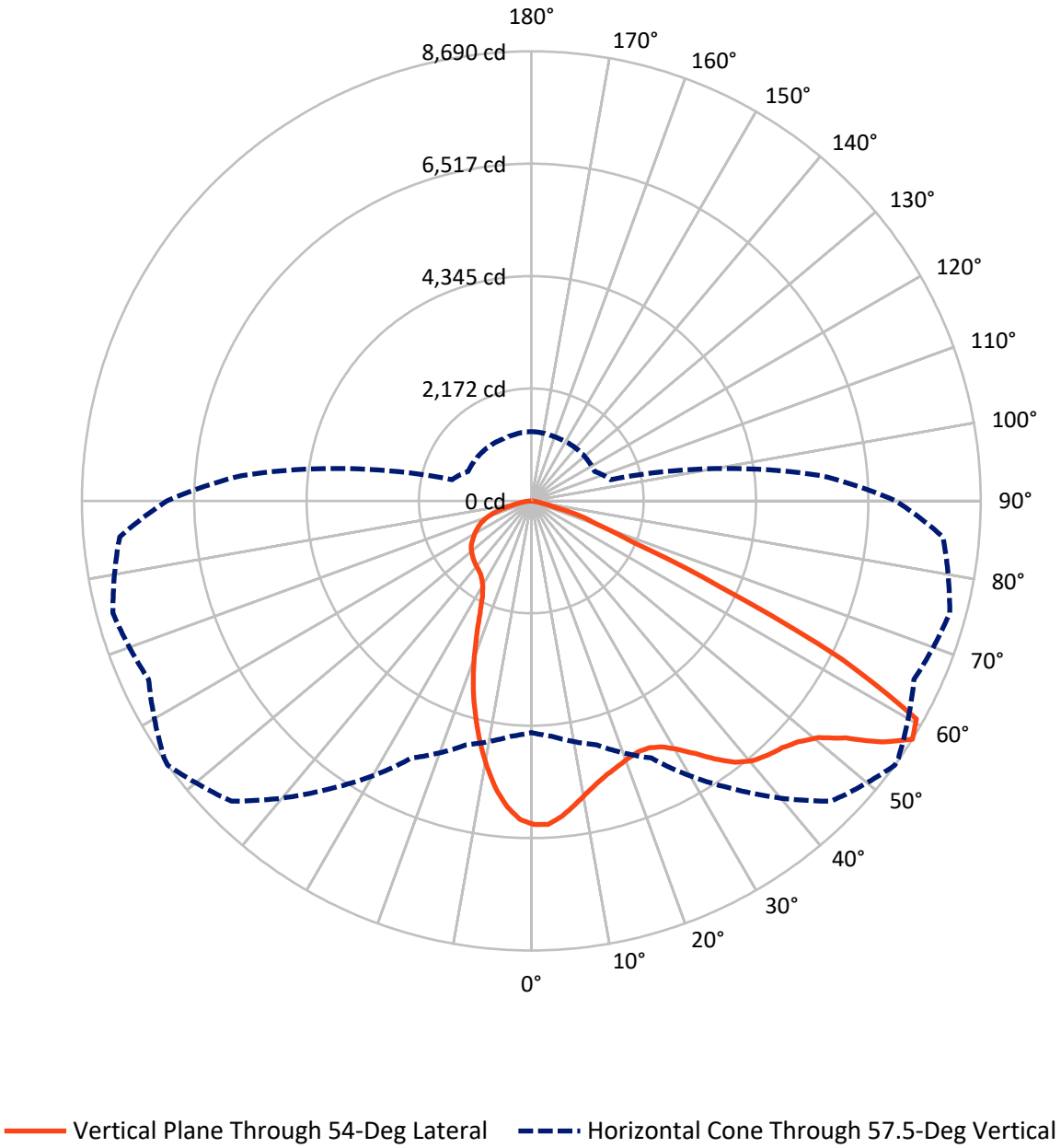
Luminous Intensity Polar Plot



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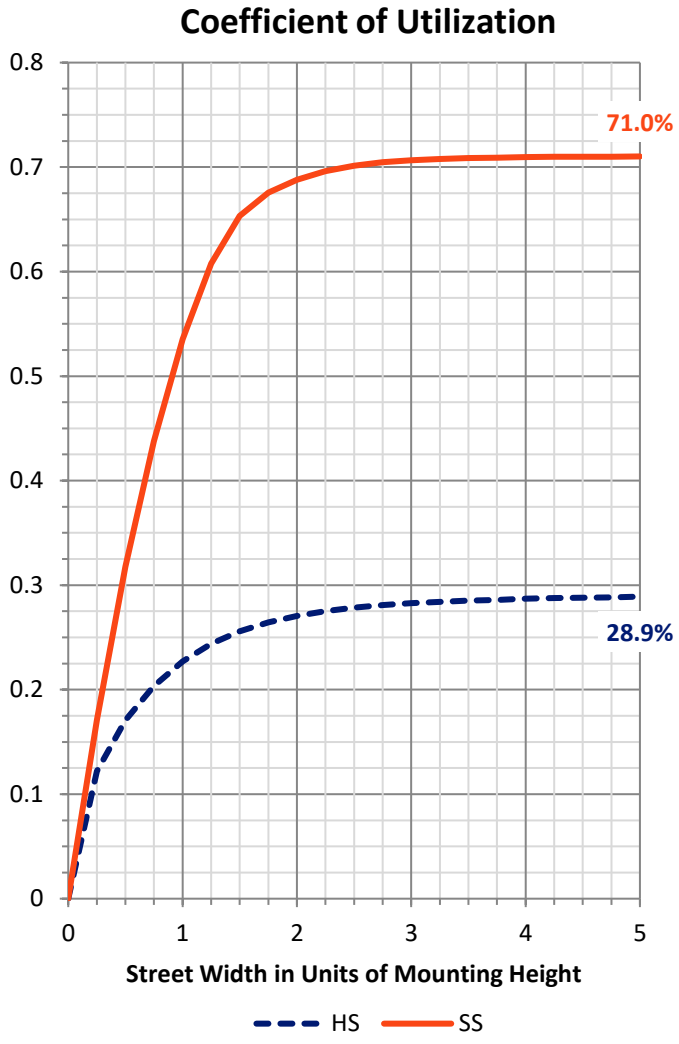
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4736.1	0.0	4736.1
	% Fixture	29.1	0.0	29.1
Street Side	Lumens	11555.4	0.0	11555.4
	% Fixture	70.9	0.0	70.9
Total	Lumens	16291.5	0.0	16291.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	549.8	3.4
10°-20°	1311.8	8.1
20°-30°	1815.4	11.1
30°-40°	2522.5	15.5
40°-50°	3331.4	20.4
50°-60°	3958.9	24.3
60°-70°	2193.3	13.5
70°-80°	546.2	3.4
80°-90°	62.1	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°	16291.5	100.0
0°-180°	16291.5	100.0



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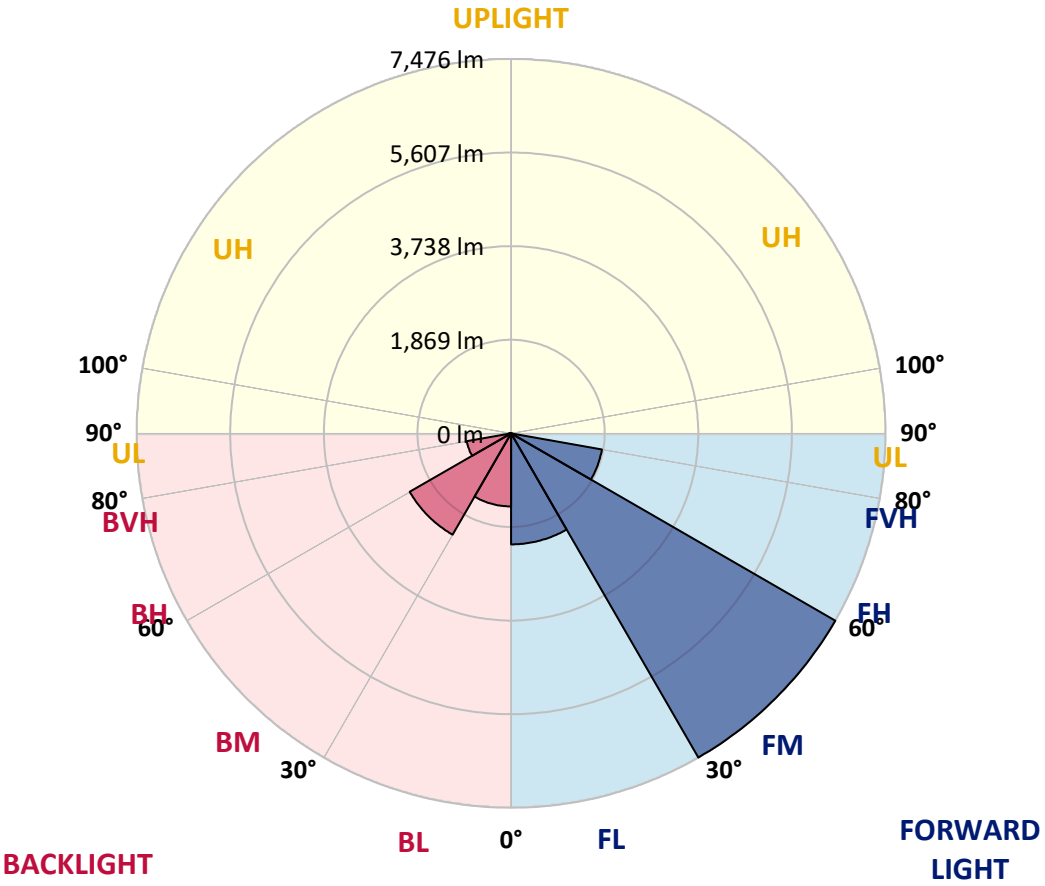
REPORT NUMBER: P637979
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2217.5	13.6			
FM	(30°-60°)	7476.4	45.9			
FH	(60°-80°)	1842.0	11.3			G2/5000
FVH	(80°-90°)	19.4	0.1			G1/100
BL	(0°-30°)	1459.5	9.0	B3/2500		
BM	(30°-60°)	2336.4	14.3	B2/2500		
BH	(60°-80°)	897.5	5.5	B2/1000		G2/1000
BVH	(80°-90°)	42.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P637979
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7
2.5°	6137.5	6150.1	6158.5	6187.7	6212.8	6235.2	6258.9	6258.9	6257.5	6253.3	6244.9
5°	5894.9	5908.8	5928.3	5968.8	6023.2	6062.2	6126.4	6132.0	6159.8	6171.0	6165.4
7.5°	5613.2	5617.4	5642.5	5695.5	5781.9	5851.6	5943.7	5954.8	6021.8	6060.8	6053.9
10°	5305.0	5291.0	5335.7	5413.7	5526.7	5643.9	5762.4	5772.2	5879.5	5953.4	5947.9
12.5°	5023.3	5024.7	5069.3	5164.1	5305.0	5450.0	5609.0	5631.3	5763.8	5858.6	5848.9
15°	4787.6	4793.2	4847.5	4954.9	5115.3	5288.2	5486.3	5507.2	5674.5	5800.0	5772.2
17.5°	4599.3	4604.9	4652.3	4775.0	4946.6	5155.8	5397.0	5417.9	5625.7	5774.9	5717.8
20°	4469.6	4466.8	4512.9	4630.0	4807.1	5034.4	5318.9	5349.6	5610.4	5784.7	5681.5
22.5°	4416.6	4415.2	4448.7	4544.9	4710.9	4941.0	5271.5	5313.3	5627.1	5827.9	5659.2
25°	4443.1	4437.5	4466.8	4538.0	4670.4	4904.7	5285.4	5330.1	5698.2	5917.2	5663.4
27.5°	4525.4	4518.4	4543.5	4607.7	4708.1	4942.4	5383.1	5434.7	5848.9	6080.4	5719.2
30°	4650.9	4646.7	4671.8	4733.2	4821.1	5067.9	5569.9	5628.5	6081.7	6334.2	5840.5
32.5°	4797.3	4790.4	4835.0	4906.1	5007.9	5296.6	5821.0	5897.7	6357.9	6660.5	6044.1
35°	4961.9	4956.3	5017.7	5120.9	5267.3	5614.6	6125.0	6208.7	6639.6	7030.1	6314.6
37.5°	5122.3	5122.3	5240.8	5394.2	5578.3	5960.4	6410.9	6463.9	6834.8	7357.8	6604.7
40°	5264.5	5272.9	5451.4	5681.5	5915.8	6272.8	6599.1	6643.8	6921.3	7583.7	6857.1
42.5°	5422.1	5429.1	5636.9	5938.1	6217.0	6525.2	6713.5	6735.8	6938.0	7696.7	7035.6
45°	5547.6	5557.4	5815.4	6137.5	6479.2	6714.9	6804.1	6823.7	6961.7	7758.0	7165.3
47.5°	5613.2	5627.1	5922.8	6297.9	6656.3	6885.0	6953.4	6961.7	7059.3	7865.4	7321.5
50°	5602.0	5629.9	5963.2	6377.4	6787.4	7056.6	7193.2	7207.2	7258.8	8023.0	7504.2
52.5°	5701.0	5713.6	6049.7	6472.2	6974.3	7373.1	7610.2	7629.7	7606.0	8141.5	7613.0
55°	5536.5	5596.4	5942.3	6458.3	7258.8	7862.6	8228.0	8218.2	7921.2	8274.0	7794.3
57.5°	4478.0	4565.8	4882.4	5482.1	6790.2	8205.7	8689.6	8665.9	8165.2	8375.8	7990.9
60°	3100.1	3114.1	3400.0	3825.3	5240.8	7249.0	8554.3	8605.9	8209.9	8247.5	7626.9
62.5°	2479.6	2475.4	2501.9	2513.0	3333.0	5095.8	6752.5	6940.8	6820.9	6426.2	5405.4
65°	2117.0	2132.3	2210.4	2170.0	2175.5	2870.0	4034.5	4061.0	3977.3	3835.1	2858.9
67.5°	1656.8	1683.3	1821.3	1978.9	1928.7	1847.8	2093.3	2080.7	1640.0	1269.1	1048.7
70°	1037.6	1054.3	1202.1	1553.6	1679.1	1517.3	1345.8	1340.2	878.6	722.4	792.1
72.5°	605.2	608.0	649.9	866.0	1114.3	1037.6	990.1	953.9	564.8	576.0	631.7
75°	333.3	333.3	331.9	373.7	439.3	389.1	376.5	366.8	377.9	428.1	470.0
77.5°	69.7	71.1	75.3	99.0	128.3	156.2	196.6	198.0	246.8	285.9	319.4
80°	32.1	33.5	41.8	53.0	68.3	90.6	119.9	121.3	149.2	179.9	202.2
82.5°	16.7	18.1	22.3	27.9	36.3	47.4	66.9	66.9	89.3	106.0	119.9
85°	5.6	5.6	8.4	11.2	15.3	19.5	26.5	26.5	39.0	51.6	60.0
87.5°	0.0	0.0	0.0	0.0	1.4	2.8	5.6	5.6	7.0	8.4	13.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report

REPORT NUMBER: P637979
CATALOG NUMBER: GWS-SA4D-830-U-SL3-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7	6254.7
2.5°	6226.8	6183.6	6184.9	6193.3	6166.8	6126.4	6099.9	6066.4	6045.5	6041.3	6056.6
5°	6137.5	6087.3	6052.5	6016.2	5940.9	5851.6	5781.9	5724.7	5687.1	5673.1	5656.4
7.5°	6014.8	5949.3	5861.4	5759.6	5622.9	5464.0	5352.4	5247.8	5175.3	5154.4	5144.6
10°	5892.1	5797.3	5641.1	5451.4	5224.1	5009.3	4807.1	4652.3	4529.6	4459.9	4482.2
12.5°	5765.2	5648.0	5404.0	5112.5	4795.9	4472.4	4207.4	3950.8	3752.8	3653.8	3624.5
15°	5653.6	5494.6	5154.4	4759.7	4338.5	3931.3	3547.8	3162.9	2911.9	2775.2	2737.6
17.5°	5558.8	5352.4	4890.8	4399.9	3896.4	3316.3	2844.9	2487.9	2316.4	2241.1	2235.5
20°	5465.3	5212.9	4630.0	4012.2	3386.0	2736.2	2315.0	2147.6	2086.3	2059.8	2058.4
22.5°	5381.7	5066.5	4355.3	3624.5	2878.4	2299.7	2068.2	1995.6	1978.9	1978.9	1976.1
25°	5310.5	4920.1	4073.6	3213.1	2419.6	2047.2	1939.9	1909.2	1916.1	1928.7	1930.1
27.5°	5281.3	4805.7	3801.6	2790.5	2103.0	1900.8	1852.0	1847.8	1867.3	1886.9	1889.7
30°	5311.9	4727.6	3522.7	2386.1	1913.4	1811.6	1789.2	1797.6	1821.3	1840.8	1840.8
32.5°	5406.8	4688.6	3238.2	2090.5	1803.2	1748.8	1741.8	1750.2	1768.3	1779.5	1780.9
35°	5567.2	4703.9	2944.0	1891.0	1732.1	1702.8	1701.4	1707.0	1713.9	1720.9	1722.3
37.5°	5769.4	4772.2	2628.8	1775.3	1686.0	1669.3	1666.5	1665.1	1666.5	1666.5	1667.9
40°	5967.4	4875.4	2347.1	1707.0	1654.0	1640.0	1633.0	1623.3	1621.9	1619.1	1617.7
42.5°	6113.8	4954.9	2122.5	1658.2	1624.7	1607.9	1599.6	1584.2	1582.8	1581.5	1580.1
45°	6224.0	5021.9	1935.7	1610.7	1594.0	1578.7	1560.5	1546.6	1549.4	1552.2	1552.2
47.5°	6348.1	5080.4	1799.0	1566.1	1556.3	1541.0	1518.7	1508.9	1518.7	1528.5	1528.5
50°	6498.7	5162.7	1687.4	1521.5	1517.3	1499.2	1479.6	1475.5	1486.6	1500.6	1500.6
52.5°	6608.9	5233.8	1607.9	1476.9	1476.9	1453.1	1436.4	1435.0	1447.6	1461.5	1462.9
55°	6815.3	5399.8	1580.1	1425.3	1419.7	1401.5	1389.0	1379.2	1394.6	1407.1	1407.1
57.5°	*7048.2*	*5620.1*	*1587.0*	*1351.3*	*1344.4*	*1338.8*	*1329.0*	*1317.9*	*1322.1*	*1336.0*	*1337.4*
60°	6554.5	5193.4	1510.3	1277.4	1273.2	1270.5	1257.9	1238.4	1244.0	1255.1	1256.5
62.5°	4578.4	3451.6	1221.6	1185.4	1199.3	1197.9	1181.2	1158.9	1160.3	1175.6	1175.6
65°	2376.4	1867.3	1072.4	1101.7	1122.6	1114.3	1086.4	1066.9	1064.1	1083.6	1079.4
67.5°	1025.0	1019.4	976.2	1013.9	1036.2	1018.0	988.8	956.7	959.5	966.4	960.9
70°	825.6	850.7	868.8	909.3	927.4	893.9	861.8	843.7	828.4	827.0	817.2
72.5°	659.6	694.5	734.9	776.8	782.4	748.9	708.4	691.7	668.0	666.6	656.8
75°	496.5	525.8	557.8	591.3	591.3	559.2	532.7	524.4	496.5	488.1	479.7
77.5°	338.9	357.0	382.1	390.5	398.8	386.3	359.8	345.9	313.8	305.4	294.3
80°	213.4	225.9	241.3	246.8	255.2	239.9	218.9	203.6	181.3	174.3	168.7
82.5°	128.3	136.7	146.4	149.2	156.2	145.0	125.5	114.4	101.8	96.2	92.0
85°	65.5	69.7	75.3	76.7	75.3	64.2	57.2	51.6	43.2	41.8	39.0
87.5°	16.7	19.5	20.9	19.5	18.1	13.9	9.8	7.0	2.8	2.8	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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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

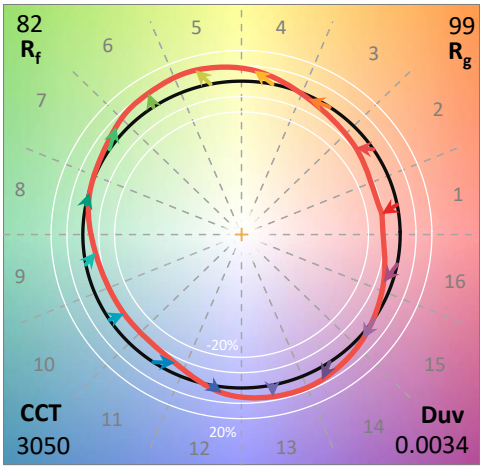
Test Information

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

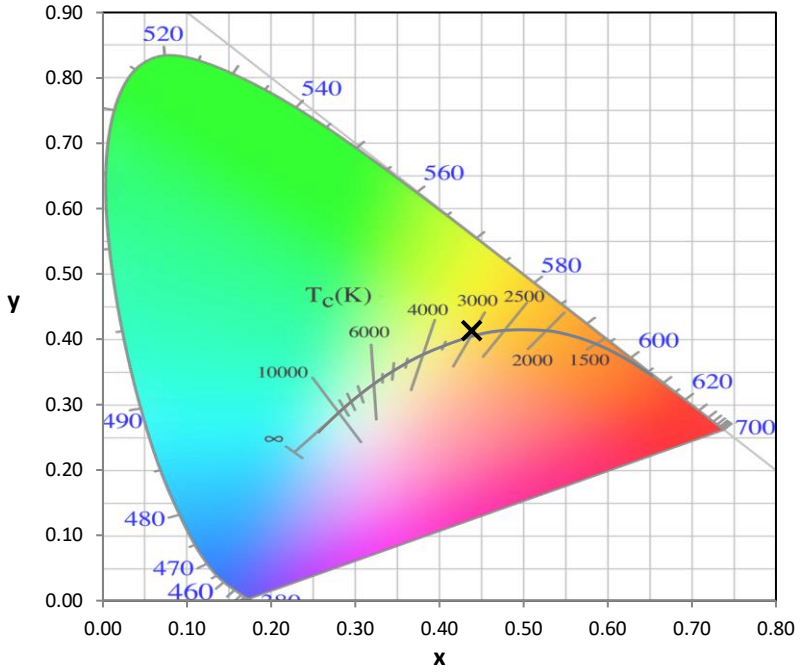
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

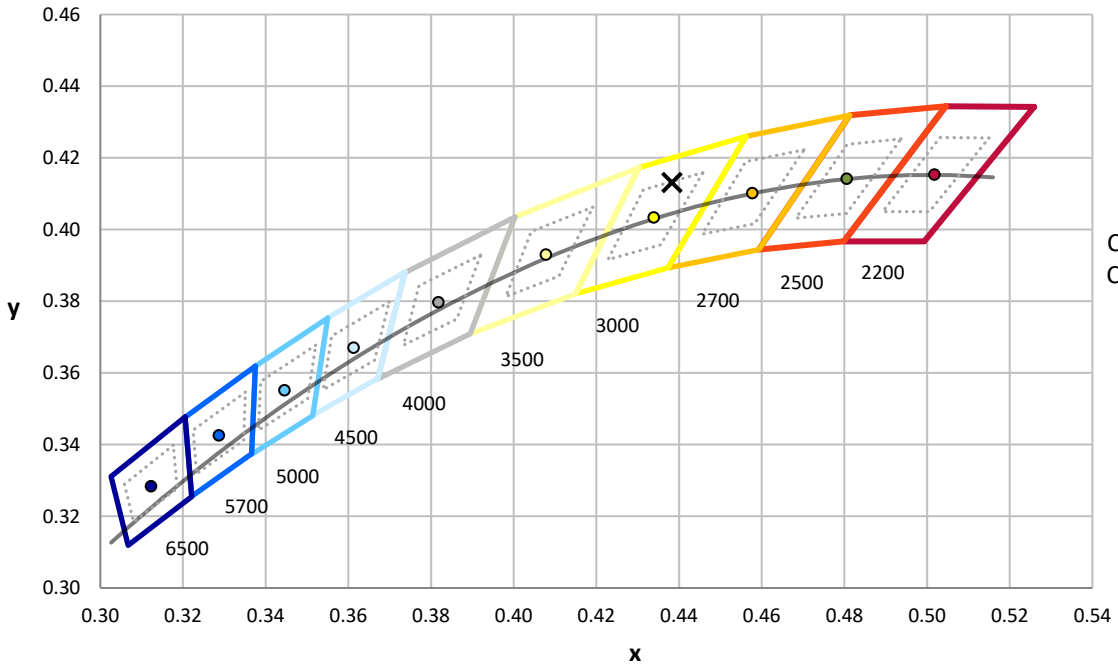
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

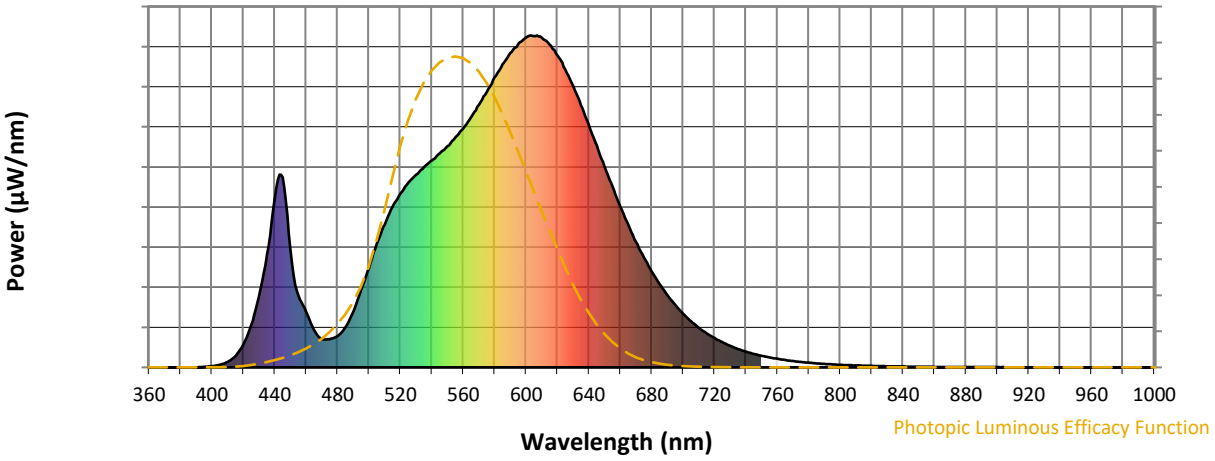


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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			

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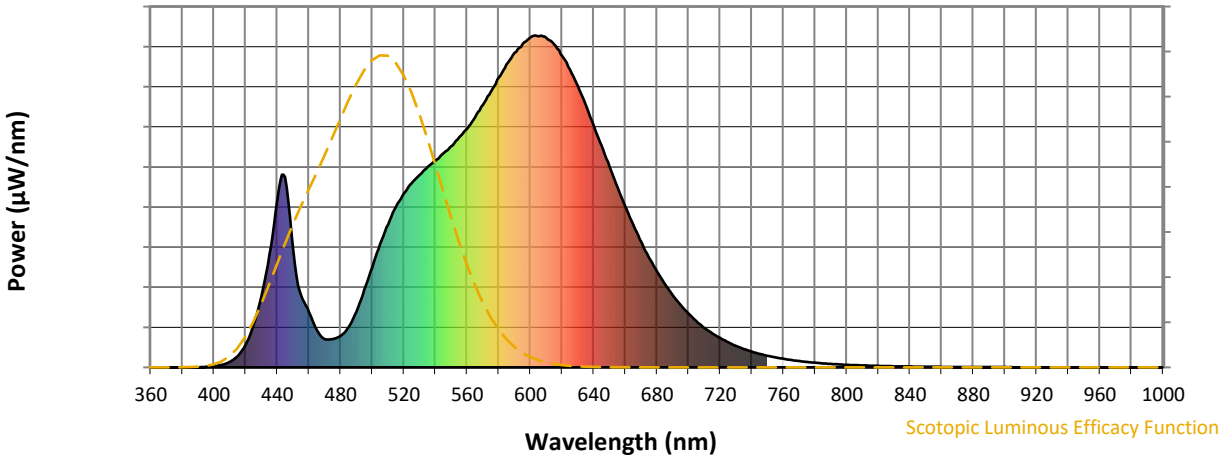
Scotopic Flux vs. Wavelength



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			

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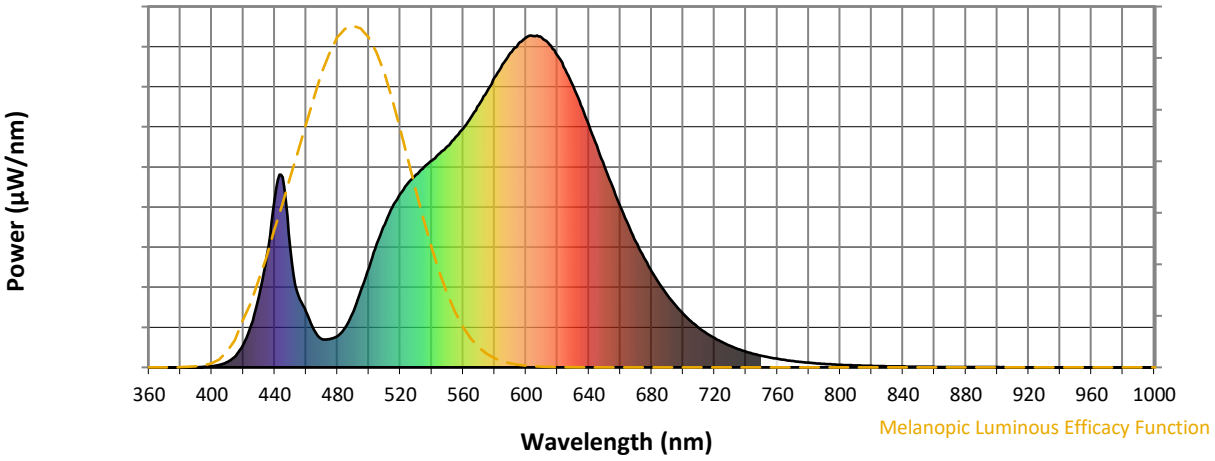
Melanopic Flux vs. Wavelength



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			

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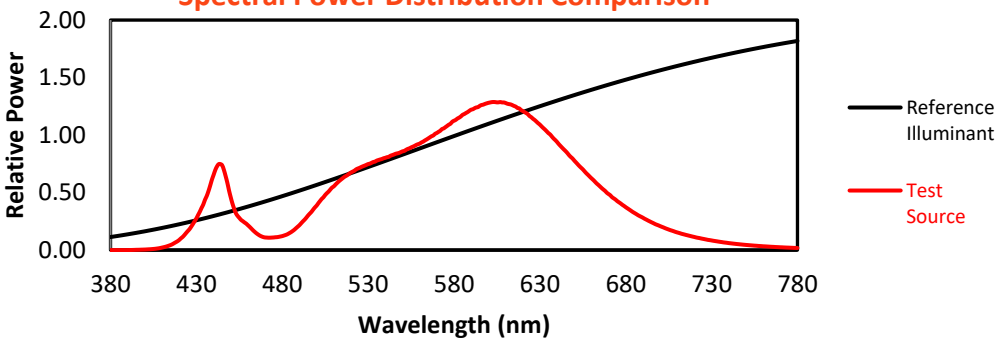
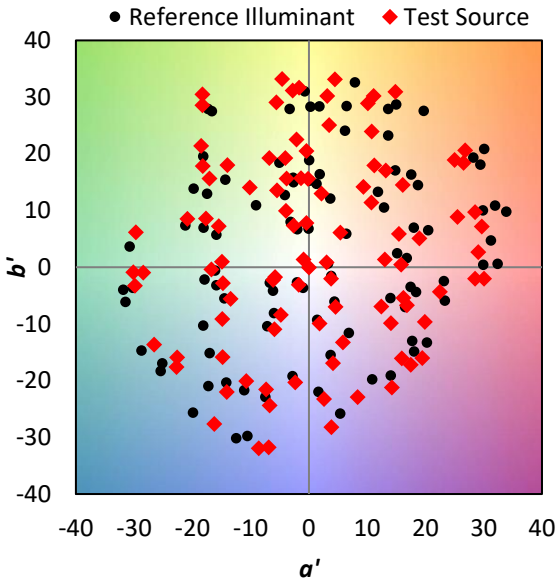
Summary

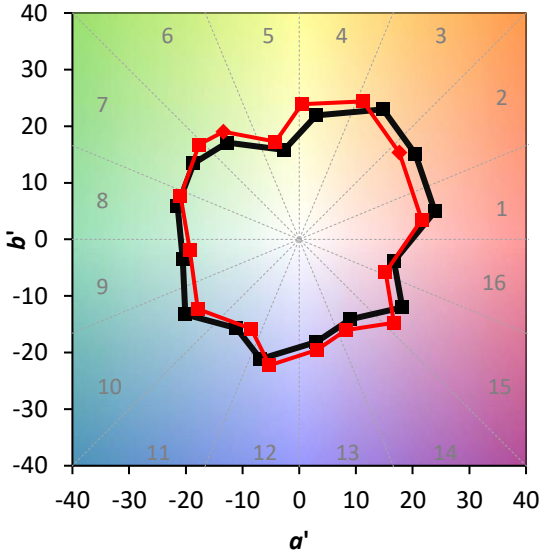
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

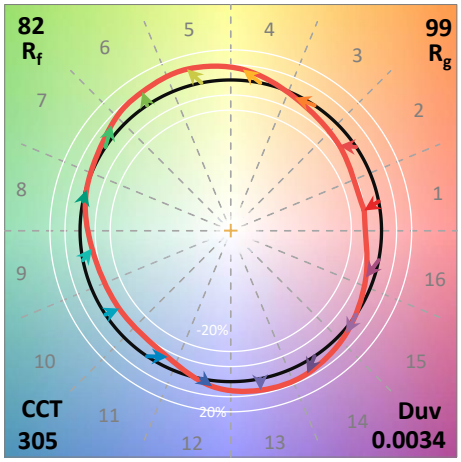
Spectral Power Distribution Comparison

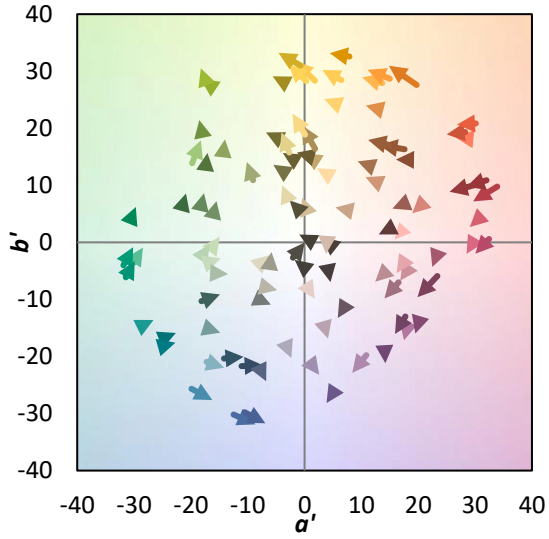


Color Vector Graphics









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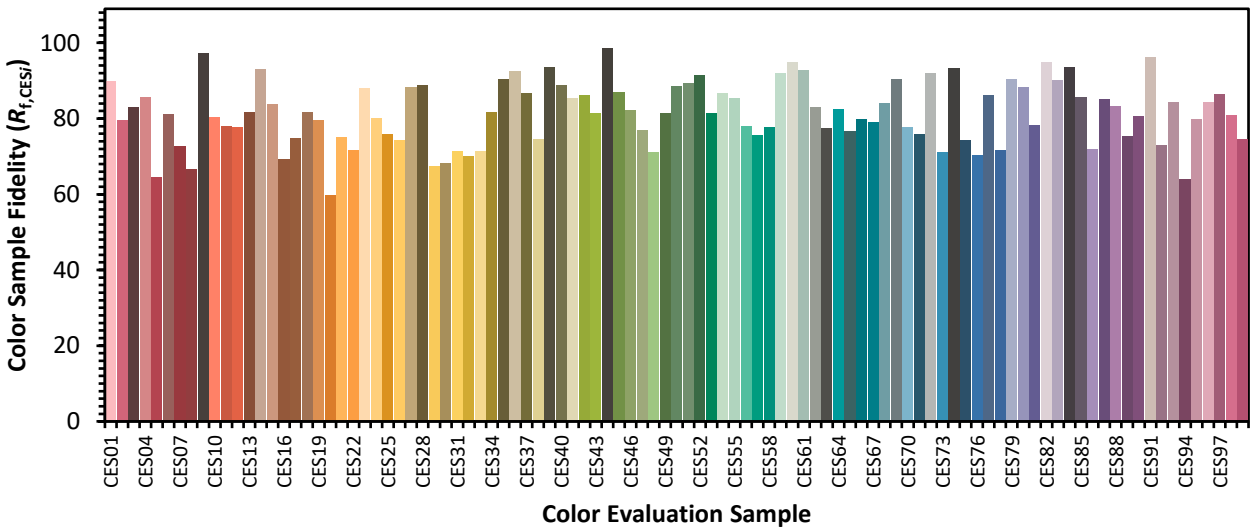
Individual Sample Fidelity Index ($R_{f,i}$)

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	



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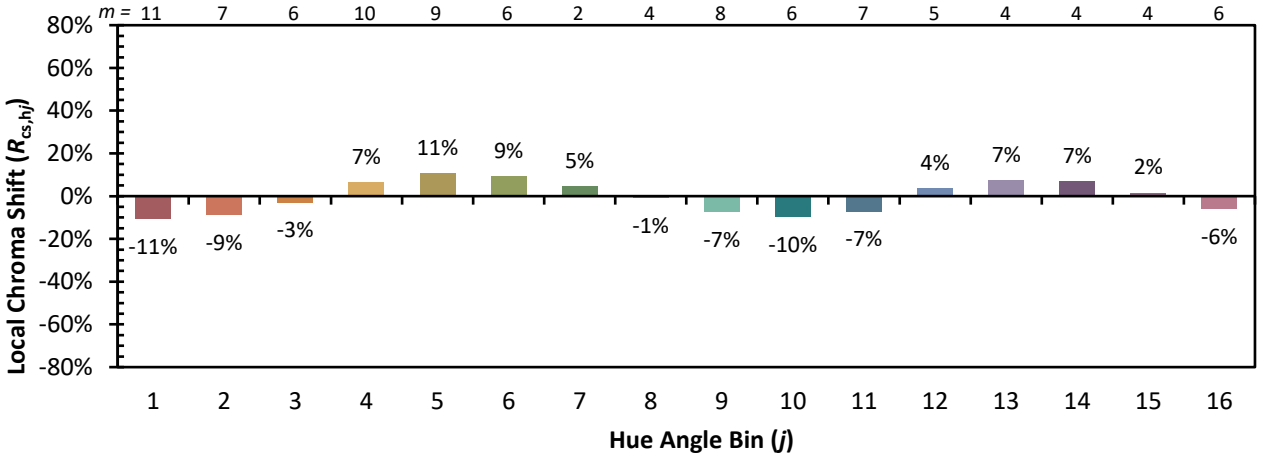
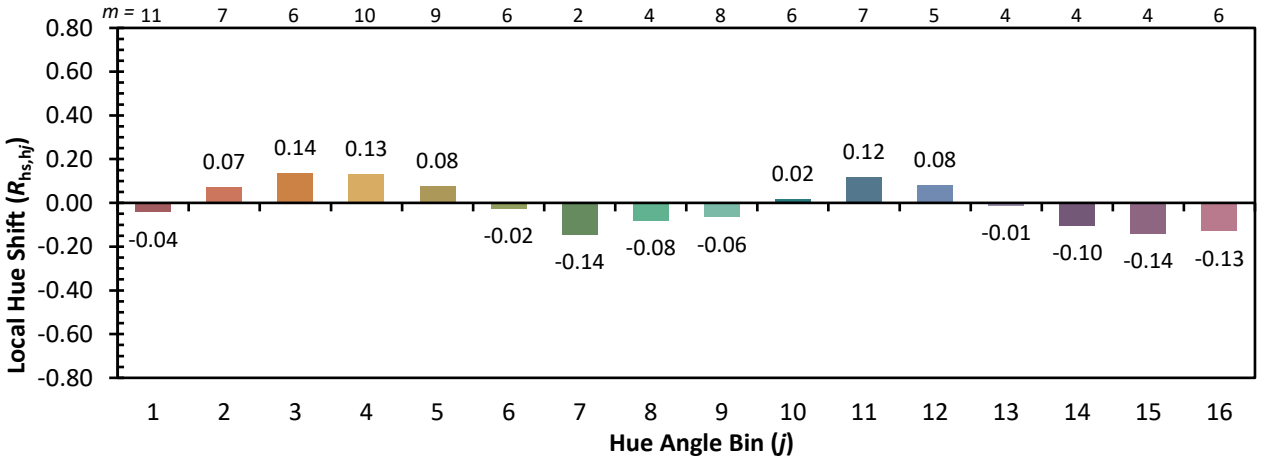
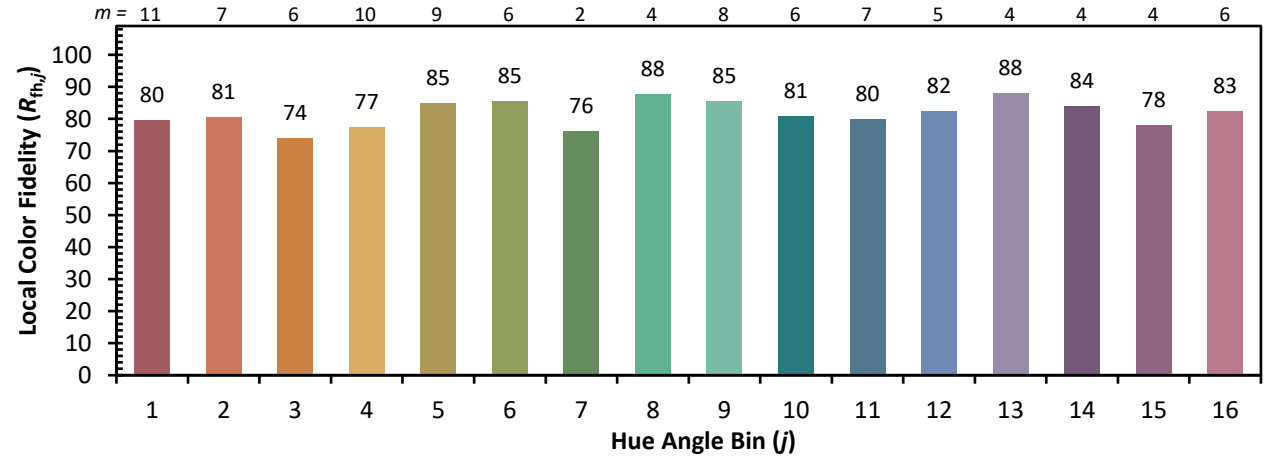
Color Rendition by Hue-Angle Bin







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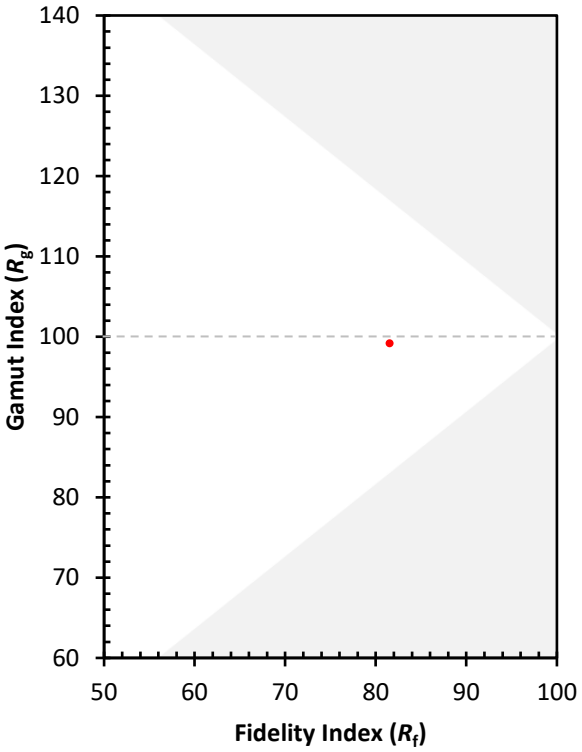
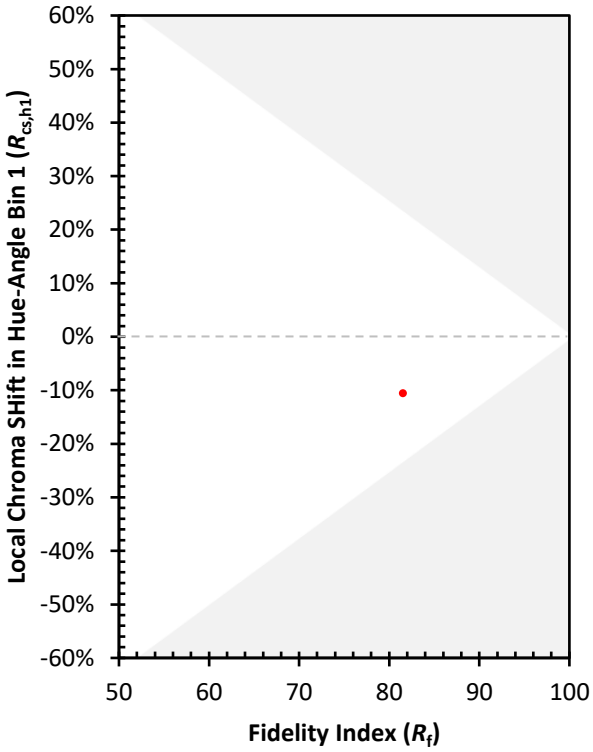
Measure Comparisons





(END OF REPORT)