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: P636020

Luminaire Tested: GWS-SA3E-830-U-T2R-W

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:	P636020
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-11)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3E-830-U-T2R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	17813.6 lumens
Efficiency:	N/A
Efficacy:	111.9 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - 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

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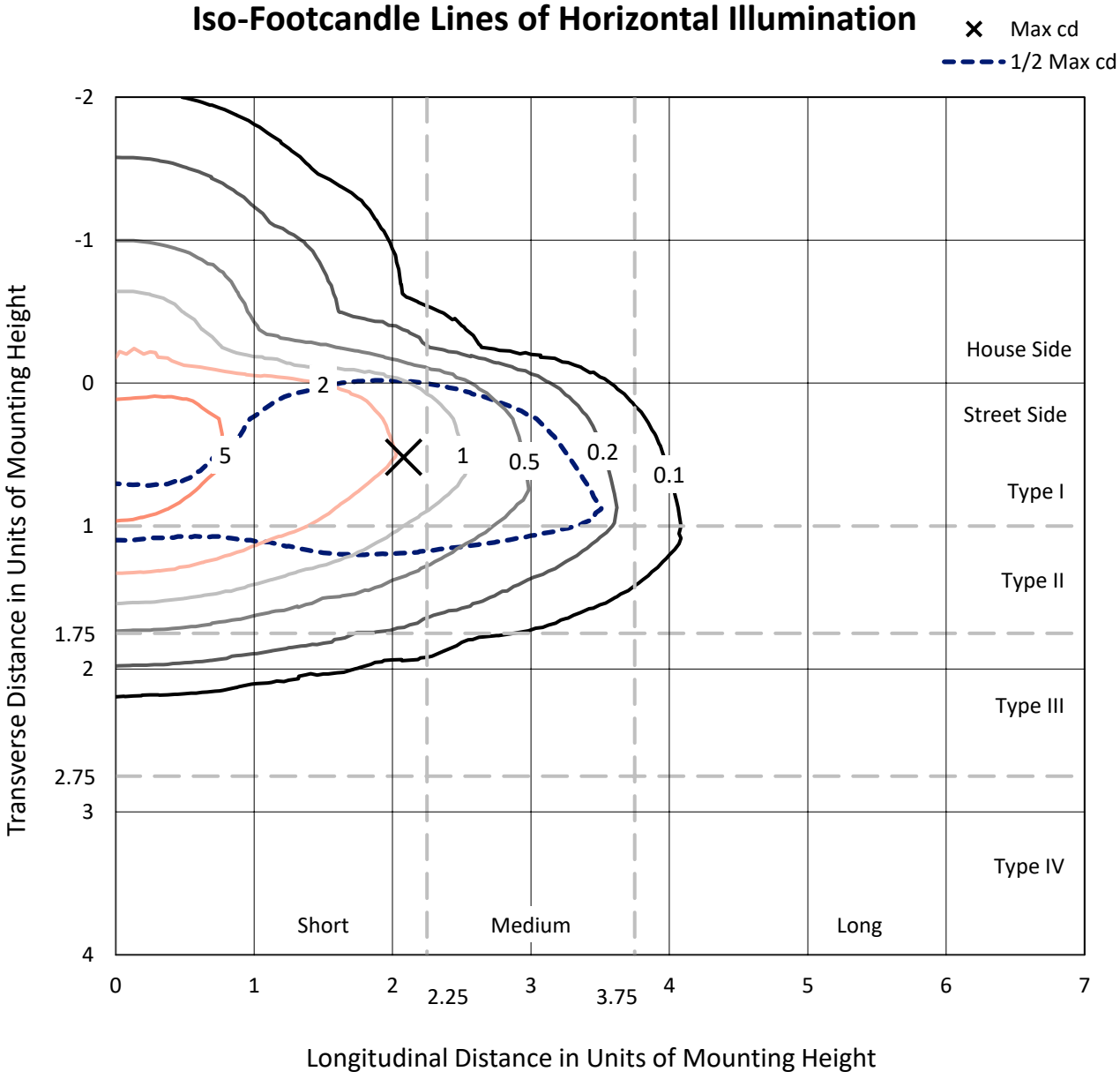
Scaled Data Report

REPORT NUMBER: P636020
CATALOG NUMBER: GWS-SA3E-830-U-T2R-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 7 fc
Type II - Short - N/A

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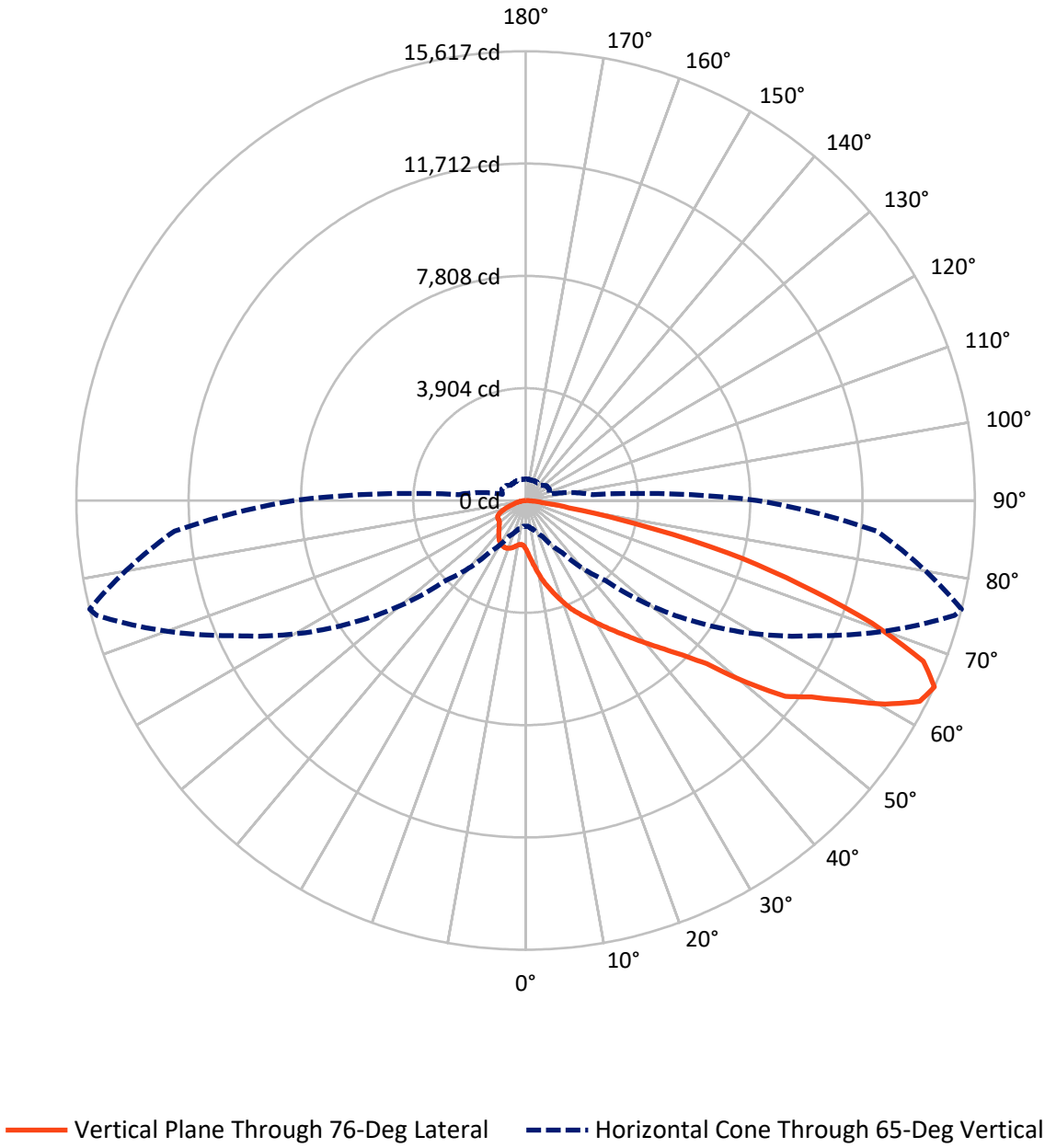
Luminous Intensity Polar Plot



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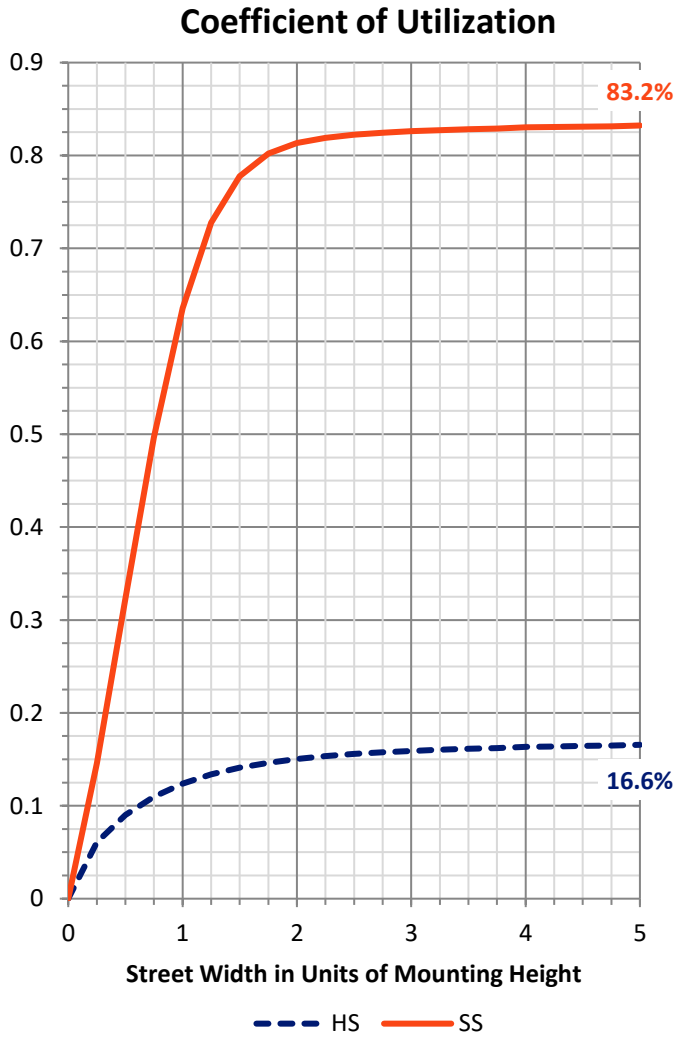
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2977.6	0.0	2977.6
	% Fixture	16.7	0.0	16.7
Street Side	Lumens	14836.0	0.0	14836.0
	% Fixture	83.3	0.0	83.3
Total	Lumens	17813.6	0.0	17813.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.4	1.1
10°-20°	763.3	4.3
20°-30°	1487.6	8.4
30°-40°	2488.0	14.0
40°-50°	3562.3	20.0
50°-60°	4217.3	23.7
60°-70°	3506.7	19.7
70°-80°	1435.0	8.1
80°-90°	152.8	0.9
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°	17813.6	100.0
0°-180°	17813.6	100.0



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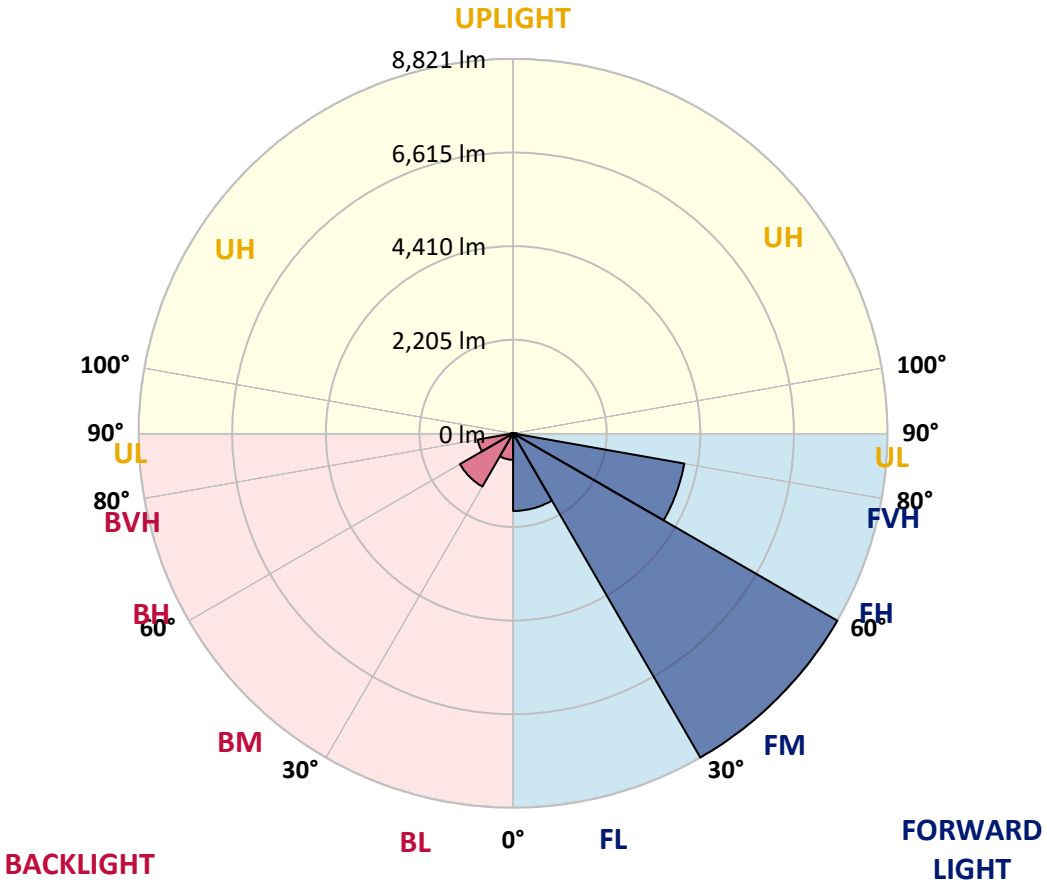
REPORT NUMBER: P636020
CATALOG NUMBER: GWS-SA3E-830-U-T2R-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1828.5	10.3			
FM	(30°-60°)	8820.6	49.5			
FH	(60°-80°)	4095.8	23.0			G2/5000
FVH	(80°-90°)	91.1	0.5			G1/100
BL	(0°-30°)	622.9	3.5	B2/1000		
BM	(30°-60°)	1447.0	8.1	B2/2500		
BH	(60°-80°)	846.0	4.7	B2/1000		G2/1000
BVH	(80°-90°)	61.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
Type II Short



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Scaled Data Report

REPORT NUMBER: P636020
CATALOG NUMBER: GWS-SA3E-830-U-T2R-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	*1686.9*	1686.9
2.5°	2364.4	2373.2	2344.4	2334.3	2266.7	2175.3	2098.9	1983.7	1877.2	*1861.0*	1765.8
5°	3003.1	2965.5	2932.9	2911.7	2817.7	2713.8	2552.2	2335.6	2108.9	*2081.4*	1876.0
7.5°	3382.5	3376.3	3336.2	3323.7	3251.0	3147.1	2980.5	2711.3	2381.9	*2336.8*	2025.0
10°	3686.8	3683.1	3663.1	3674.3	3607.9	3506.5	3345.0	3066.9	2681.2	*2636.1*	2191.6
12.5°	3952.3	3958.6	3954.8	3996.2	3962.4	3883.5	3715.6	3410.1	2980.5	*2931.7*	2394.4
15°	4146.4	4151.5	4170.2	4260.4	4279.2	4262.9	4092.6	3747.0	3276.1	*3206.0*	2603.6
17.5°	4201.6	4211.6	4256.7	4401.9	4503.4	4571.0	4444.5	4090.1	3566.6	*3490.2*	2816.5
20°	4275.4	4286.7	4331.8	4483.3	4632.4	4786.4	4763.8	4438.2	3859.7	*3797.1*	3031.9
22.5°	4617.3	4608.6	4588.5	4661.2	4767.6	4959.2	5015.6	4772.6	4162.7	*4102.6*	3269.8
25°	5276.0	5259.8	5132.0	5065.7	5030.6	5147.1	5247.2	5076.9	4458.3	*4368.1*	3491.5
27.5°	6002.4	5993.6	5830.8	5673.0	5457.6	5407.5	5466.4	5342.4	4745.1	*4653.6*	3684.3
30°	6689.9	6663.6	6493.3	6295.4	6007.4	5792.0	5705.6	5602.9	5059.4	*4964.2*	3909.8
32.5°	7304.8	7271.0	7070.6	6851.5	6549.7	6295.4	6037.5	5879.7	5415.1	*5304.8*	4140.2
35°	7809.5	7775.7	7570.3	7337.4	7005.5	6817.7	6464.5	6180.2	5777.0	*5665.5*	4411.9
37.5°	8200.2	8168.9	7954.8	7725.6	7436.3	7287.3	6980.5	6518.4	6194.0	*6077.5*	4700.0
40°	8419.4	8396.8	8225.3	8043.7	7800.7	7671.7	7534.0	6945.4	6661.1	*6544.7*	5039.4
42.5°	8485.8	8470.7	8350.5	8256.6	8092.5	7994.8	8073.7	7447.6	7159.5	*7058.1*	5421.3
45°	8319.2	8319.2	8284.1	8331.7	8339.2	8338.0	8614.7	8014.9	7771.9	*7660.5*	5959.8
47.5°	7893.4	7921.0	7972.3	8206.5	8453.2	8659.8	9247.2	8771.3	8559.6	*8468.2*	6722.5
50°	7114.5	7189.6	7364.9	7822.0	8346.7	8872.7	9845.8	9889.6	10091.2	*9929.7*	7844.6
52.5°	5973.6	5962.3	6409.4	7060.6	7860.8	8881.5	10175.1	10876.4	11418.7	*11307.2*	8678.6
55°	4747.6	4728.8	5145.8	6043.7	7115.7	8545.9	10373.0	11328.5	12155.1	*12054.9*	9428.8
57.5°	3635.5	3611.7	3982.4	4792.6	6063.8	7833.3	10335.4	11867.0	13168.2	*13116.9*	10448.1
60°	2502.1	2473.3	2820.2	3529.1	4818.9	6743.8	9919.7	12143.8	14354.2	*14371.7*	11538.9
62.5°	1502.8	1486.5	1738.2	2288.0	3466.4	5393.8	8946.6	11976.0	15298.4	*15377.3*	12240.2
65°	*906.7*	*895.4*	*1043.2*	*1365.0*	*2199.1*	*3936.1*	*7446.3*	*11118.1*	*15434.9*	*15616.5*	*12256.5*
67.5°	660.0	661.2	703.8	831.5	1282.4	2542.2	5587.9	9580.3	14723.6	*14911.4*	11483.8
70°	573.6	576.1	598.6	627.4	775.2	1455.2	3633.0	7562.8	12620.9	*12766.2*	9631.6
72.5°	509.7	509.7	524.7	539.8	606.1	886.6	1946.1	5286.1	9961.0	*9999.8*	7351.1
75°	448.3	444.6	452.1	459.6	526.0	619.9	946.8	3683.1	7357.4	*7267.2*	4751.3
77.5°	356.9	353.2	354.4	361.9	422.0	443.3	479.6	2300.5	4146.4	*3913.5*	2098.9
80°	254.2	251.7	265.5	284.3	311.8	271.8	300.6	1113.3	1644.3	*1530.3*	814.0
82.5°	151.5	156.5	177.8	192.9	215.4	170.3	194.1	371.9	582.3	*567.3*	330.6
85°	21.3	22.5	63.9	73.9	92.7	66.4	102.7	167.8	232.9	*249.2*	116.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	8.8	30.1	66.4	*67.6*	28.8
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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CATALOG NUMBER: GWS-SA3E-830-U-T2R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9	1686.9
2.5°	1716.9	1658.1	1574.2	1504.0	1445.2	1397.6	1357.5	1327.5	1318.7	1306.2	1306.2
5°	1779.6	1673.1	1522.8	1416.4	1355.0	1318.7	1293.7	1281.1	1274.9	1267.4	1263.6
7.5°	1866.0	1716.9	1514.1	1406.4	1358.8	1336.2	1320.0	1312.4	1307.4	1299.9	1299.9
10°	1984.9	1782.1	1541.6	1441.4	1403.9	1381.3	1362.5	1350.0	1338.7	1327.5	1325.0
12.5°	2113.9	1867.2	1591.7	1489.0	1448.9	1421.4	1395.1	1376.3	1362.5	1348.8	1345.0
15°	2256.7	1954.9	1645.6	1535.4	1485.3	1447.7	1416.4	1387.6	1368.8	1348.8	1346.2
17.5°	2397.0	2043.8	1690.6	1566.7	1502.8	1456.5	1411.4	1373.8	1350.0	1327.5	1321.2
20°	2564.8	2132.7	1721.9	1575.4	1499.0	1437.7	1383.8	1336.2	1309.9	1283.6	1279.9
22.5°	2718.8	2215.4	1737.0	1562.9	1470.2	1397.6	1335.0	1283.6	1254.8	1228.5	1223.5
25°	2867.8	2288.0	1730.7	1532.8	1426.4	1342.5	1277.4	1226.0	1198.5	1170.9	1163.4
27.5°	3011.8	2336.8	1705.7	1486.5	1371.3	1281.1	1218.5	1172.2	1148.4	1124.6	1114.6
30°	3153.4	2381.9	1666.8	1426.4	1301.2	1217.3	1165.9	1133.4	1109.6	1084.5	1077.0
32.5°	3296.1	2414.5	1608.0	1356.3	1229.8	1160.9	1129.6	1105.8	1080.8	1055.7	1048.2
35°	3440.1	2428.3	1536.6	1276.1	1169.7	1124.6	1113.3	1085.8	1052.0	1021.9	1011.9
37.5°	3611.7	2440.8	1447.7	1197.2	1117.1	1107.1	1104.6	1063.2	1023.1	981.8	970.6
40°	3818.3	2457.1	1356.3	1125.8	1074.5	1100.8	1090.8	1034.4	954.3	914.2	901.7
42.5°	4071.3	2487.1	1261.1	1060.7	1043.2	1077.0	1065.7	964.3	910.4	887.9	881.6
45°	4443.2	2597.3	1165.9	1009.4	1019.4	1043.2	1025.7	923.0	901.7	886.6	879.1
47.5°	5105.7	2766.4	1083.3	970.6	1000.6	1013.1	945.5	911.7	895.4	875.4	866.6
50°	5794.5	2840.3	1016.9	946.8	979.3	985.6	901.7	896.7	885.4	864.1	855.3
52.5°	6260.4	2830.3	976.8	938.0	961.8	938.0	881.6	880.4	872.9	847.8	837.8
55°	6786.4	2847.8	959.3	940.5	954.3	857.8	856.6	860.3	856.6	829.0	824.0
57.5°	7496.4	2901.6	950.5	949.3	949.3	819.0	832.8	837.8	830.3	817.8	814.0
60°	8178.9	2905.4	934.2	959.3	945.5	795.2	805.2	810.3	801.5	799.0	797.7
62.5°	8435.7	2725.1	897.9	951.8	930.5	768.9	776.4	778.9	770.2	776.4	775.2
65°	*8053.7*	*2341.8*	*837.8*	*915.4*	*884.1*	*745.1*	*740.1*	*746.4*	*731.4*	*747.6*	*748.9*
67.5°	7150.8	1861.0	746.4	846.6	819.0	718.8	708.8	708.8	683.8	708.8	707.6
70°	5765.7	1314.9	612.4	736.4	747.6	687.5	682.5	653.7	613.6	651.2	647.5
72.5°	4370.6	944.3	482.1	582.3	643.7	643.7	644.9	596.1	549.8	567.3	552.3
75°	2768.9	665.0	385.7	445.8	504.7	564.8	593.6	503.4	462.1	454.6	447.1
77.5°	1247.3	437.1	300.6	341.9	358.2	445.8	542.3	433.3	376.9	360.7	355.7
80°	522.2	271.8	214.1	241.7	220.4	374.4	478.4	336.9	276.8	254.2	237.9
82.5°	229.2	161.5	136.5	130.2	137.8	278.0	356.9	224.2	172.8	234.2	236.7
85°	96.4	85.2	70.1	63.9	56.4	106.4	167.8	87.7	107.7	61.4	50.1
87.5°	22.5	25.0	18.8	12.5	7.5	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

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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

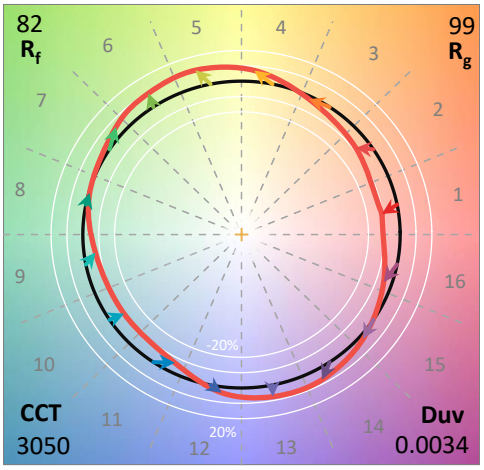
Test Information

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

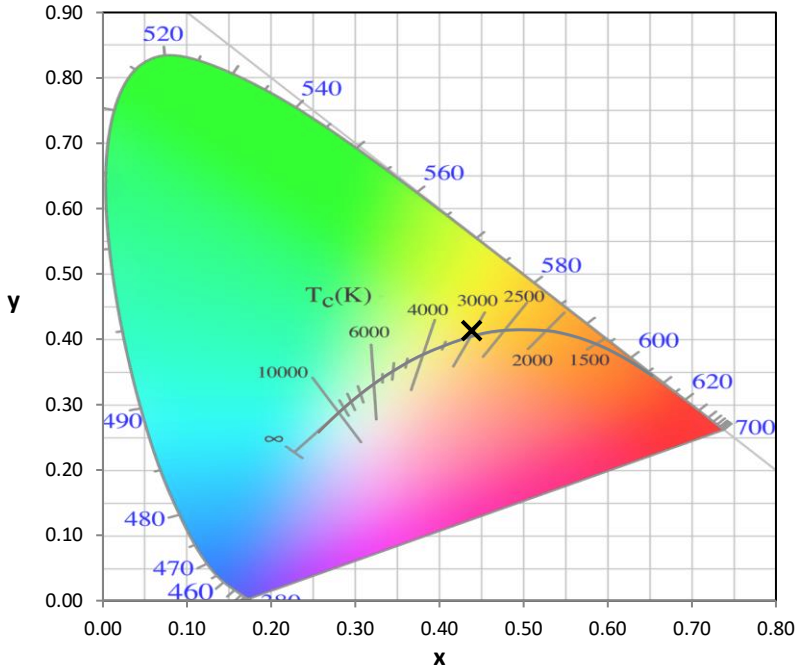
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

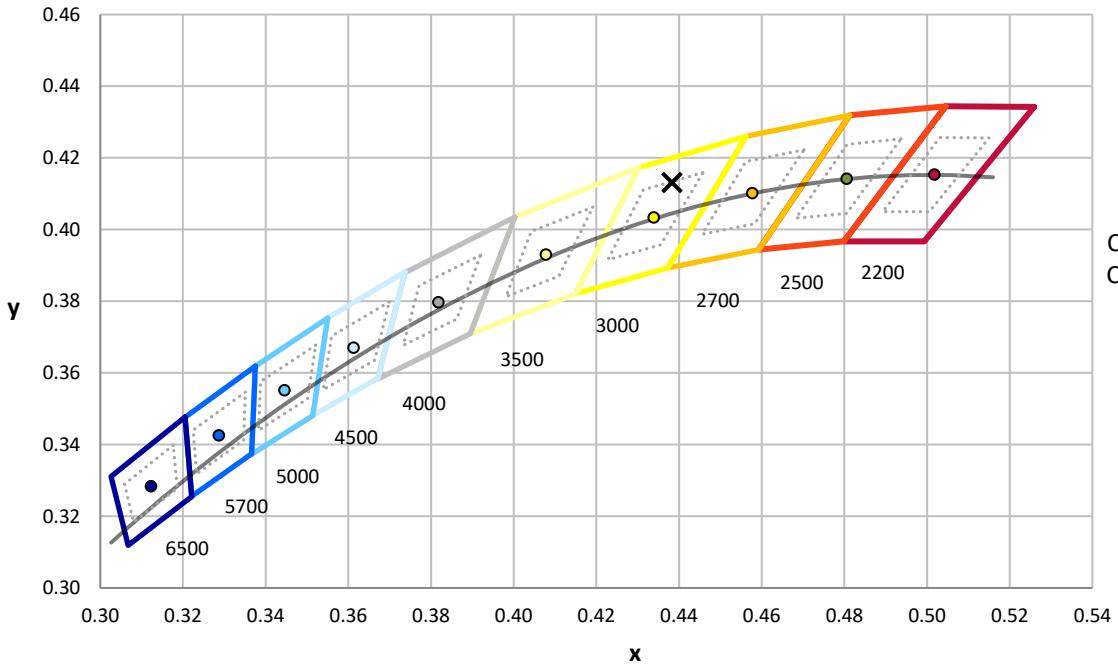
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

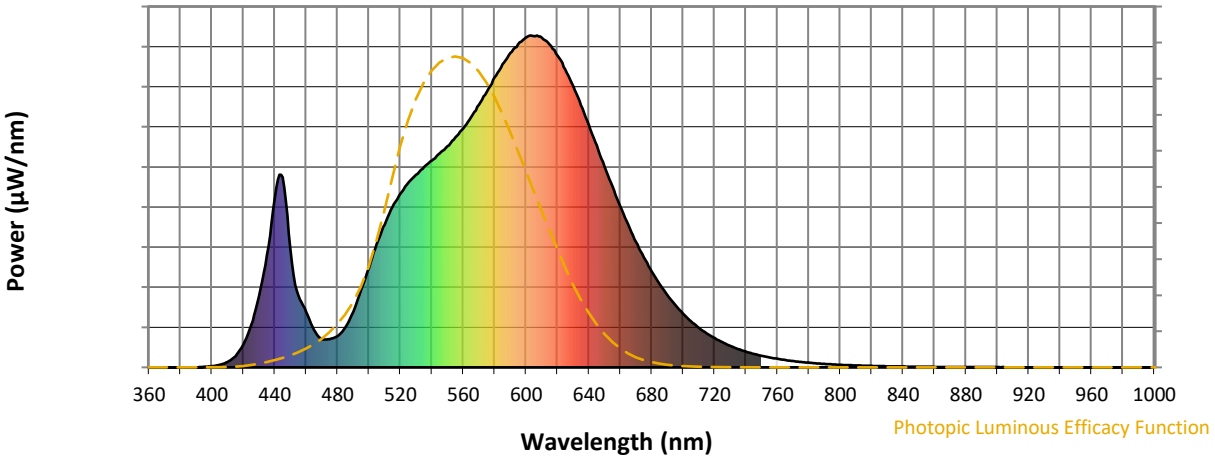


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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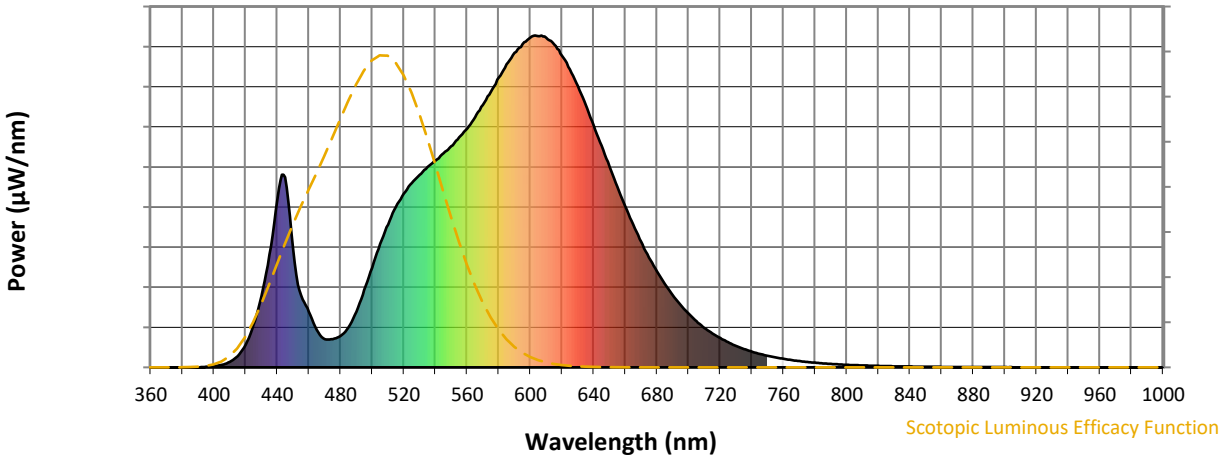
Scotopic Flux vs. Wavelength



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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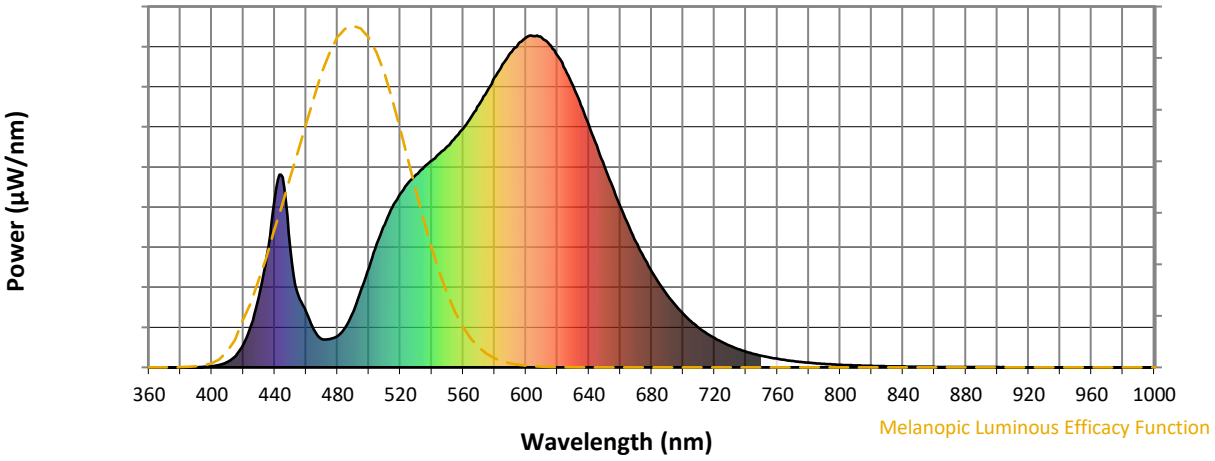
Melanopic Flux vs. Wavelength



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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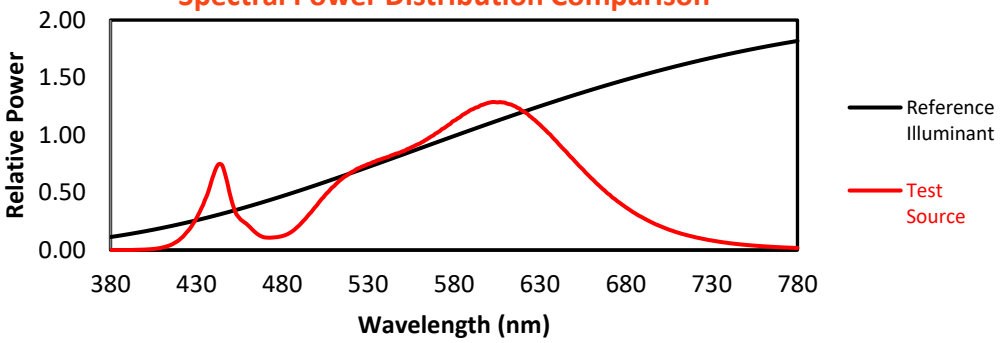
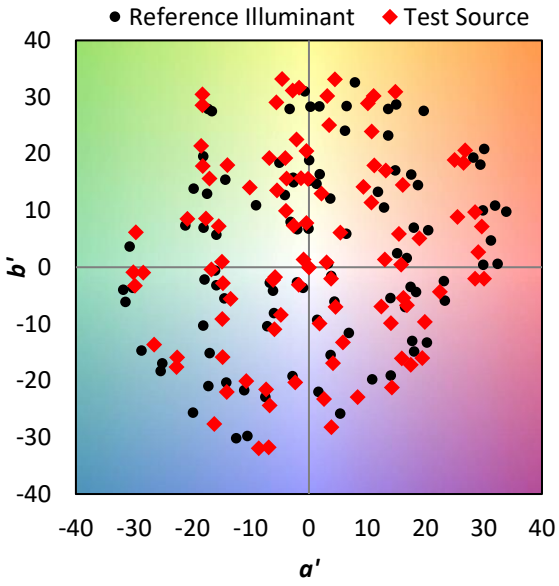
Summary

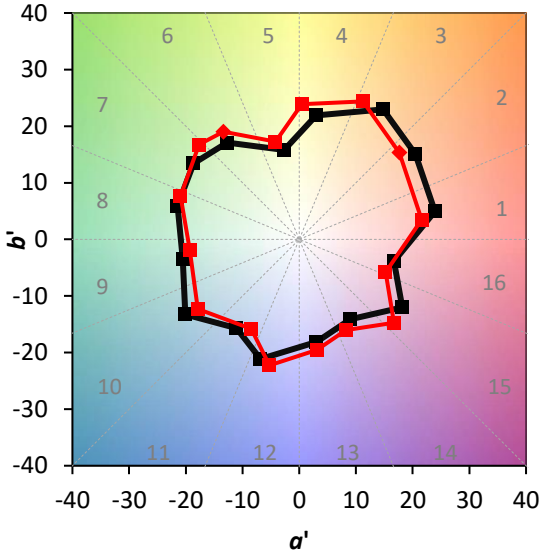
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

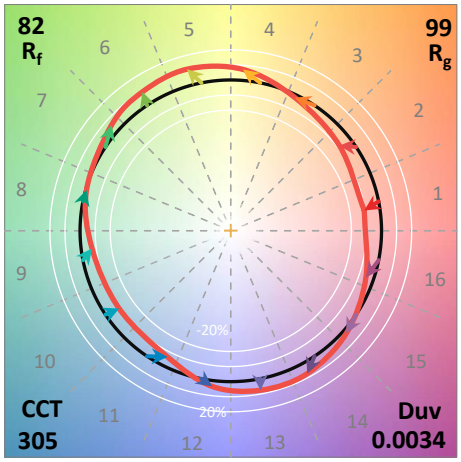
Spectral Power Distribution Comparison

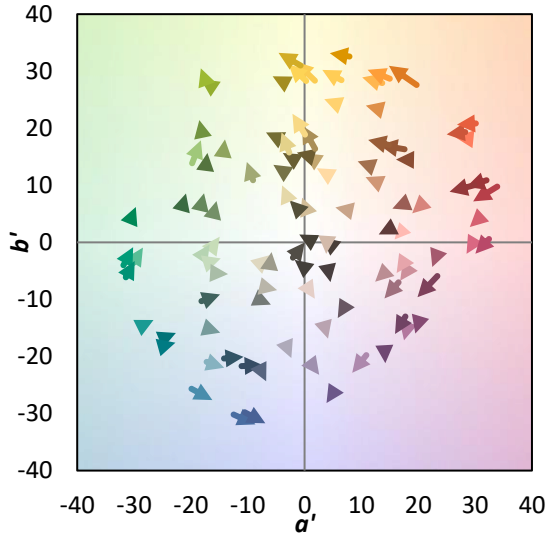


Color Vector Graphics









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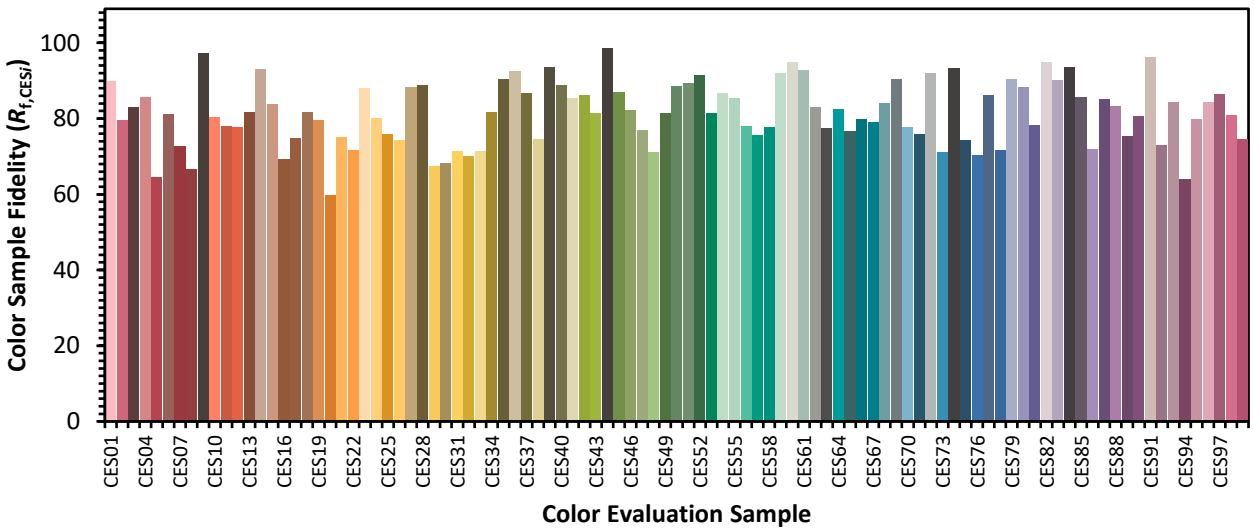
Individual Sample Fidelity Index ($R_{f,i}$)

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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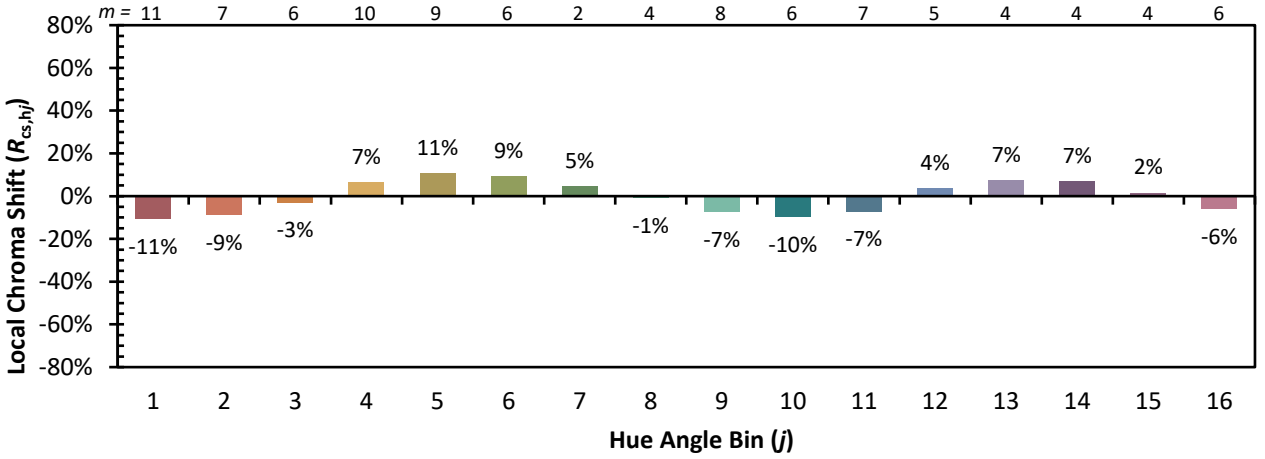
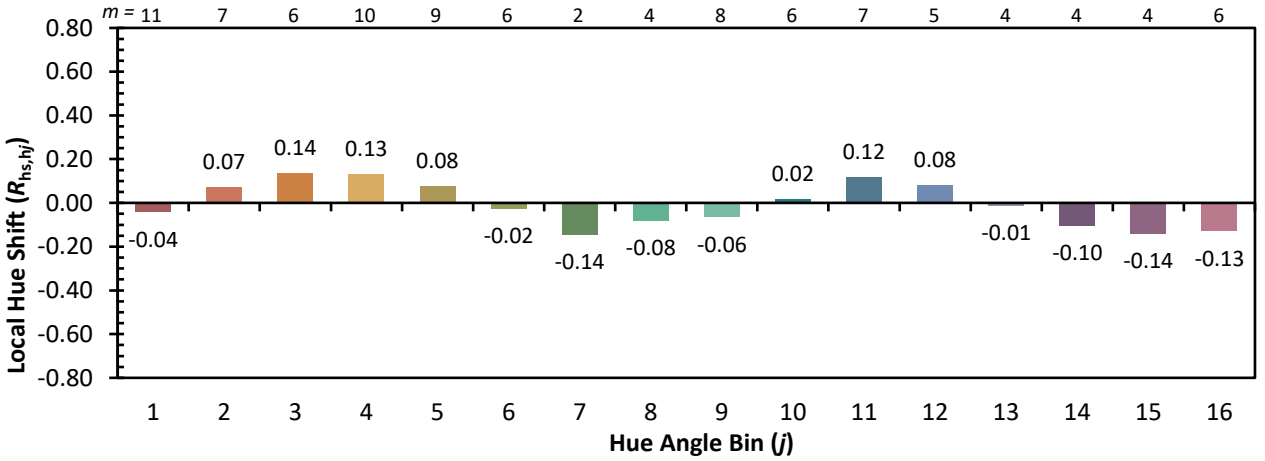
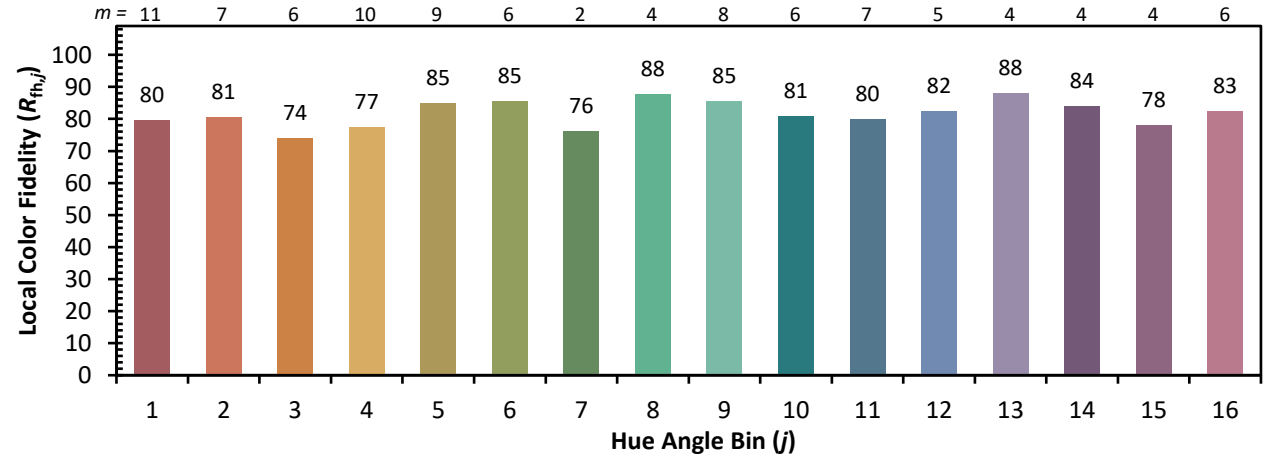
Color Rendition by Hue-Angle Bin







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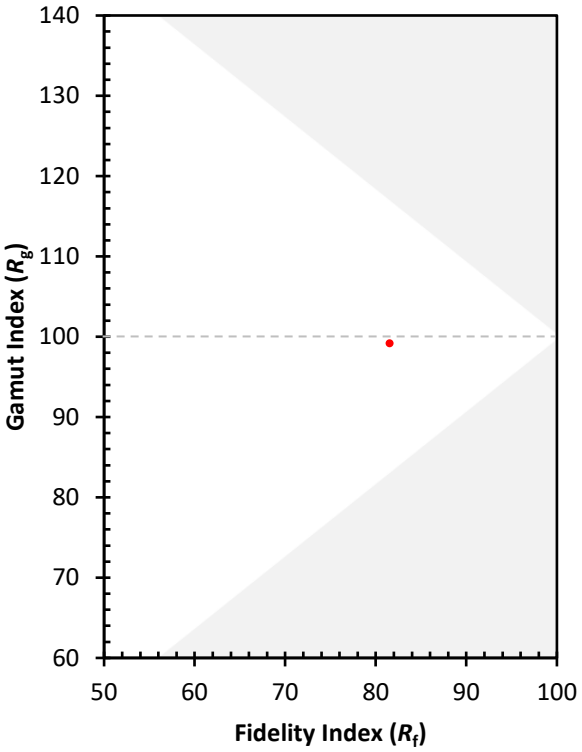
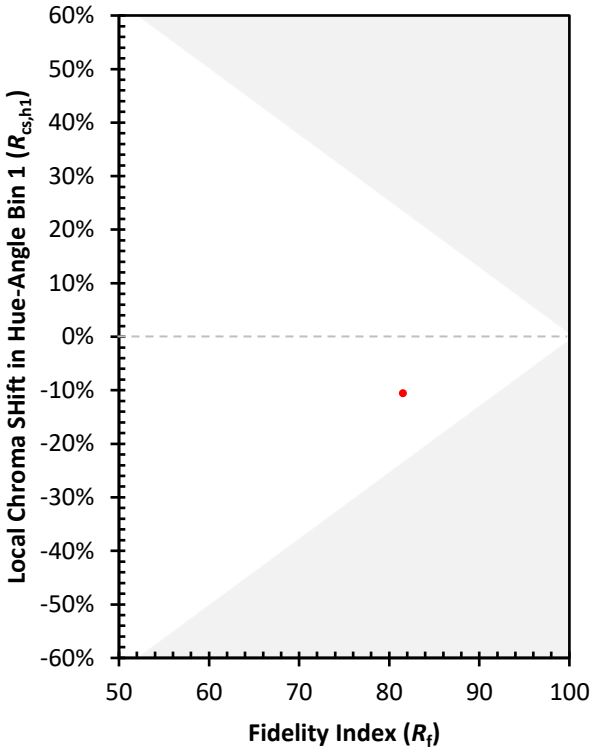
Measure Comparisons





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