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: P635528

Luminaire Tested: GWS-SA3D-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:	P635528
	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-SA3D-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:	10263.2 lumens
Efficiency:	N/A
Efficacy:	85.0 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):	120.8
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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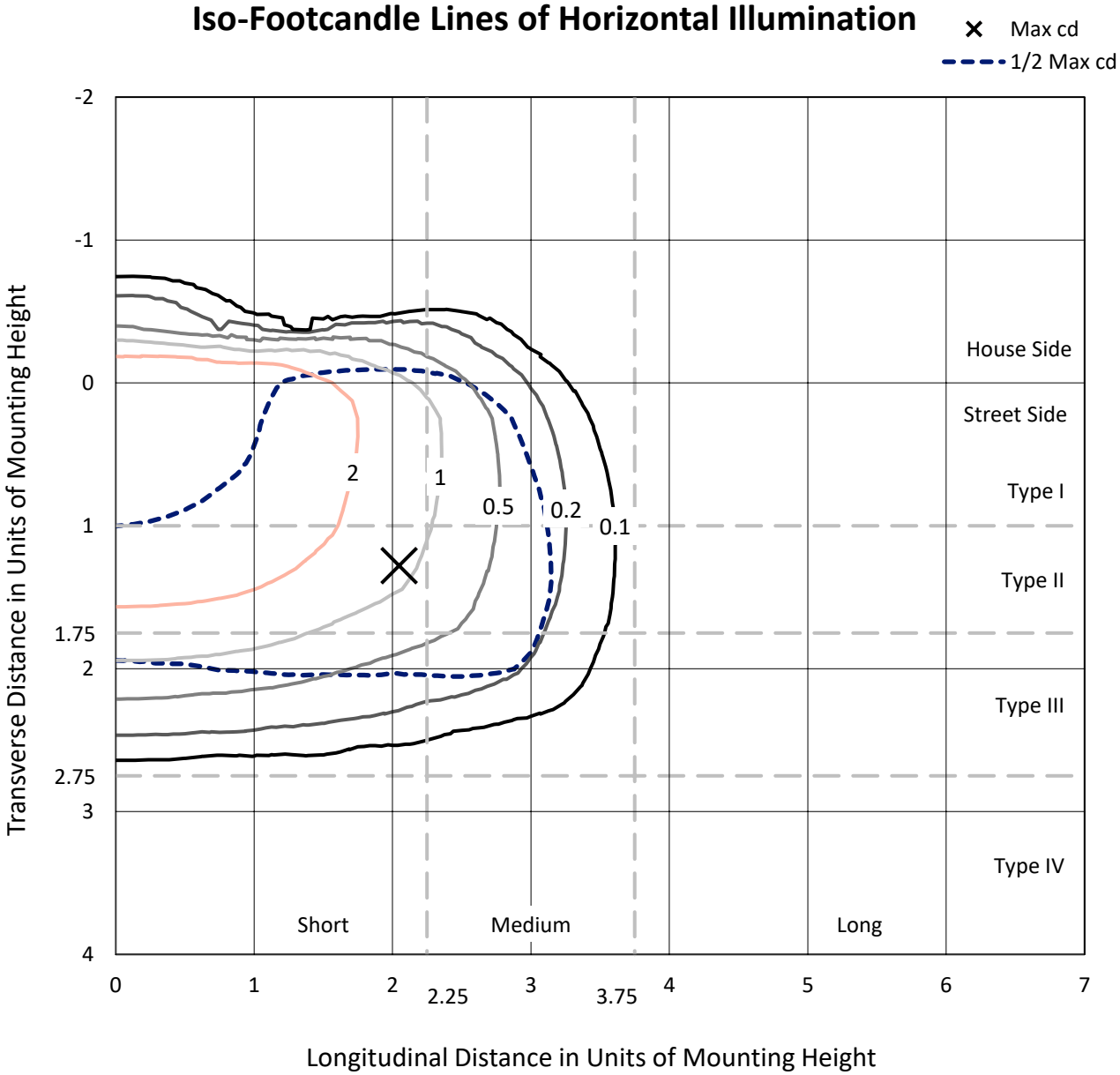
REPORT NUMBER: P635528
CATALOG NUMBER: GWS-SA3D-830-U-T3-W-HSS

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 3.9 fc
Type III - Short - N/A

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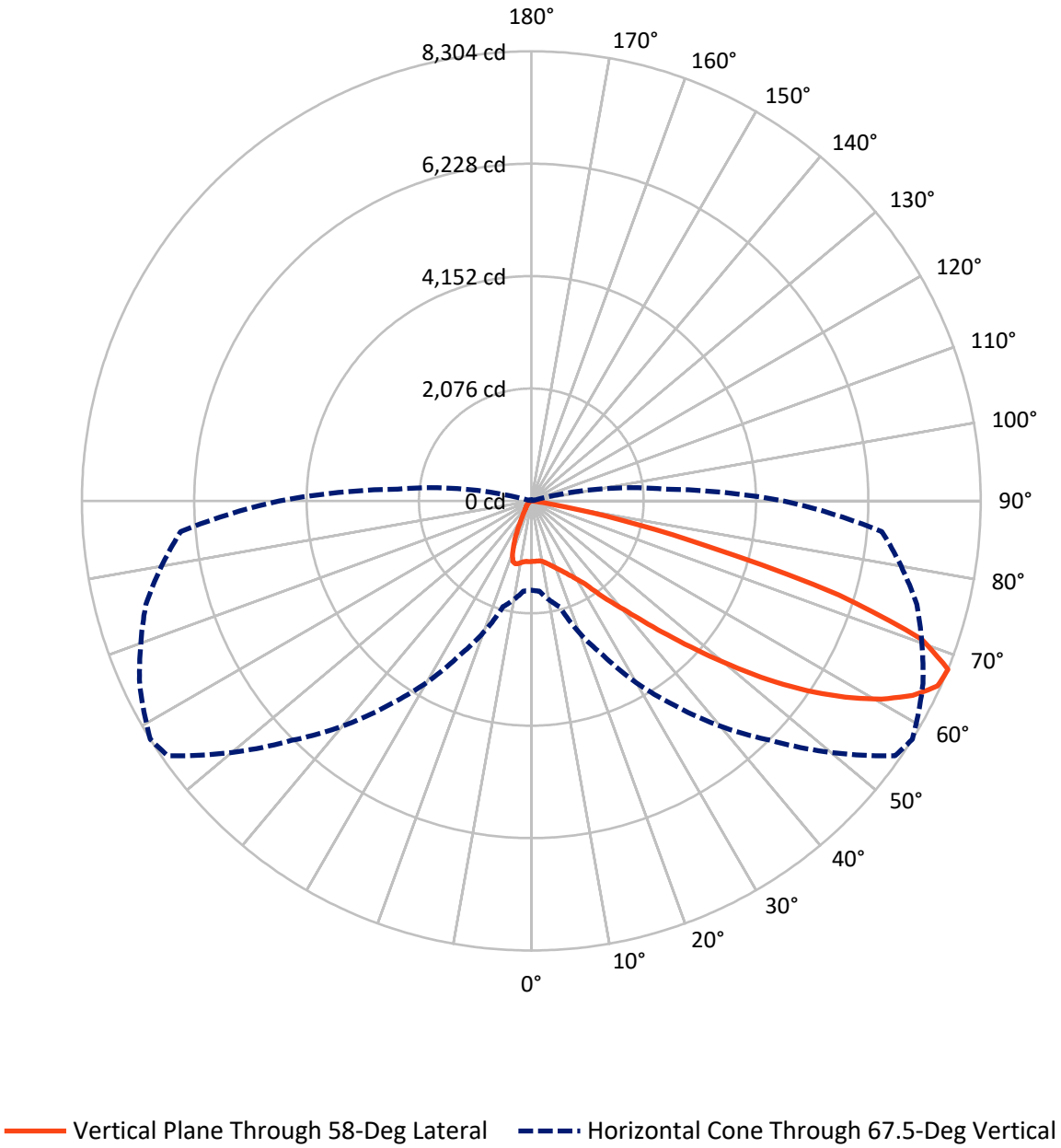
Luminous Intensity Polar Plot



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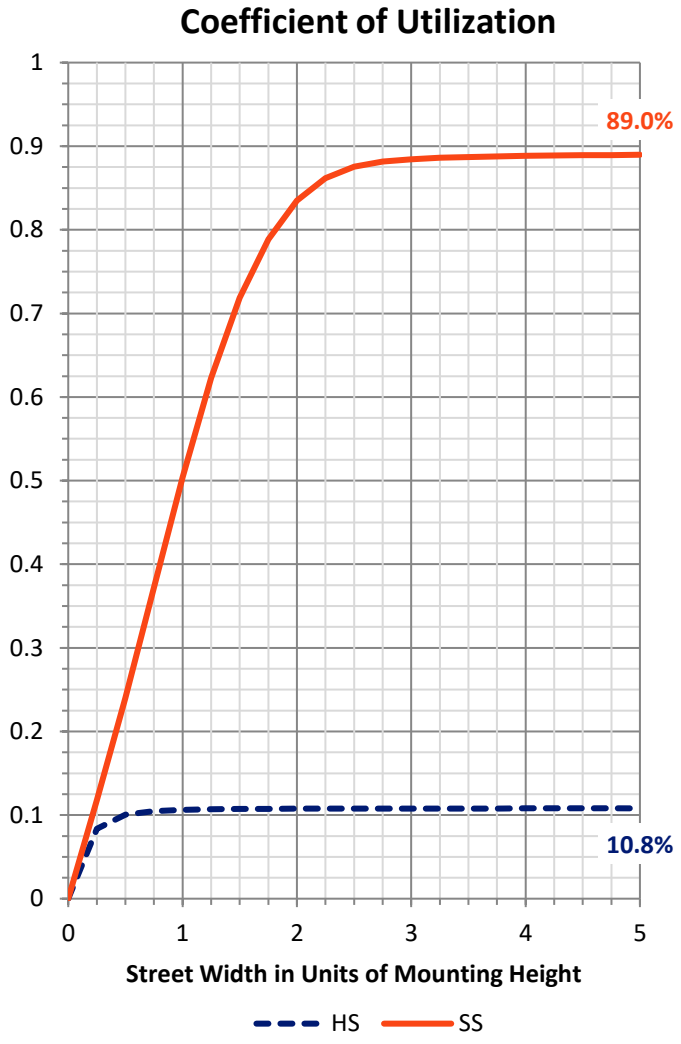
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1119.7	0.0	1119.7
	% Fixture	10.9	0.0	10.9
Street Side	Lumens	9143.5	0.0	9143.5
	% Fixture	89.1	0.0	89.1
Total	Lumens	10263.2	0.0	10263.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.1	1.0
10°-20°	295.0	2.9
20°-30°	514.9	5.0
30°-40°	919.5	9.0
40°-50°	1680.7	16.4
50°-60°	2795.2	27.2
60°-70°	3036.1	29.6
70°-80°	891.4	8.7
80°-90°	25.4	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°	10263.2	100.0
0°-180°	10263.2	100.0



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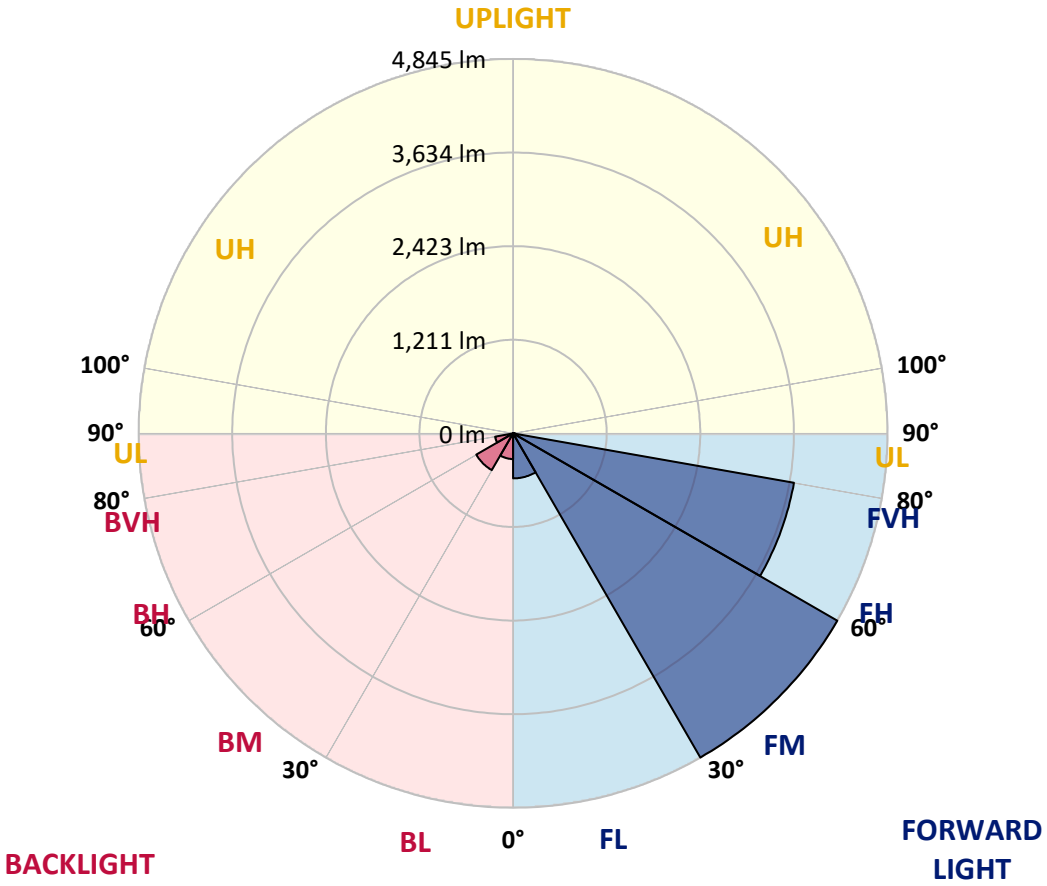
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	582.8	5.7			
FM	(30°-60°)	4845.5	47.2			
FH	(60°-80°)	3691.1	36.0			G2/5000
FVH	(80°-90°)	24.1	0.2			G1/100
BL	(0°-30°)	332.1	3.2	B1/500		
BM	(30°-60°)	550.0	5.4	B1/1000		
BH	(60°-80°)	236.3	2.3	B1/500		G1/500
BVH	(80°-90°)	1.2	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



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REPORT NUMBER: P635528
CATALOG NUMBER: GWS-SA3D-830-U-T3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4
2.5°	1097.3	1095.3	1095.3	1103.4	1104.4	1108.4	1117.4	1118.4	1123.4	1121.4	1114.4
5°	1040.2	1041.2	1047.2	1061.3	1073.3	1088.3	1110.4	1115.4	1126.4	1132.4	1128.4
7.5°	987.1	988.1	997.1	1019.2	1042.2	1072.3	1108.4	1118.4	1140.4	1156.5	1157.5
10°	967.1	966.1	975.1	1000.1	1030.2	1072.3	1124.4	1137.4	1170.5	1198.6	1203.6
12.5°	973.1	972.1	981.1	1004.1	1037.2	1090.3	1152.5	1170.5	1212.6	1255.7	1264.7
15°	997.1	996.1	1002.1	1021.2	1057.3	1112.4	1188.5	1215.6	1268.7	1320.8	1334.8
17.5°	1069.3	1064.3	1058.3	1060.3	1081.3	1138.4	1234.6	1267.7	1333.8	1396.0	1408.0
20°	1197.6	1184.5	1168.5	1147.4	1137.4	1176.5	1287.7	1325.8	1406.0	1477.1	1479.2
22.5°	1391.0	1386.0	1348.9	1287.7	1244.7	1245.7	1349.9	1394.0	1492.2	1570.3	1559.3
25°	1660.5	1657.5	1600.4	1500.2	1388.0	1349.9	1429.0	1474.1	1594.4	1677.6	1642.5
27.5°	1995.2	1974.2	1907.1	1771.8	1604.4	1485.2	1529.3	1569.3	1702.6	1780.8	1714.7
30°	2286.9	2287.9	2224.7	2083.4	1895.0	1688.6	1651.5	1686.6	1801.8	1884.0	1803.8
32.5°	2567.5	2576.5	2507.3	2380.1	2173.6	1954.2	1826.9	1832.9	1929.1	2018.3	1921.1
35°	2828.0	2835.0	2786.9	2678.7	2486.3	2231.8	2071.4	2068.4	2120.5	2211.7	2084.4
37.5°	3119.6	3126.7	3079.6	2982.4	2802.0	2549.4	2349.0	2345.0	2366.0	2440.2	2294.9
40°	3430.3	3443.3	3391.2	3309.0	3136.7	2923.2	2671.7	2635.6	2614.6	2701.8	2567.5
42.5°	3745.0	3765.0	3747.0	3664.8	3517.5	3341.1	3090.6	3034.5	2989.4	3098.6	2956.3
45°	4135.8	4159.9	4151.8	4088.7	3974.5	3831.2	3594.7	3529.5	3508.5	3609.7	3440.3
47.5°	4511.6	4537.7	4566.7	4552.7	4471.5	4405.4	4142.8	4105.7	4099.7	4208.0	3945.4
50°	4791.2	4815.3	4926.5	5006.7	5061.8	5047.8	4820.3	4765.1	4756.1	4825.3	4478.5
52.5°	4991.6	5014.7	5168.0	5418.5	5621.0	5731.2	5501.7	5489.7	5440.6	5416.5	4977.6
55°	5147.0	5179.0	5340.4	5719.2	6127.1	6371.6	6228.3	6185.2	6058.9	5920.6	5440.6
57.5°	5178.0	5191.1	5418.5	5929.6	6519.9	6915.7	6915.7	6840.6	6597.1	6405.6	5975.7
60°	4899.4	4939.5	5247.2	5912.6	6688.2	7271.5	7485.9	7433.8	7105.1	6869.6	6490.8
62.5°	4281.1	4326.2	4701.0	5504.7	6519.9	7344.6	7917.9	7909.8	7539.1	7253.4	6917.7
65°	3283.0	3316.1	3642.8	4604.8	5808.4	7063.0	8226.5	8248.6	7881.8	7507.0	7065.0
67.5°	1649.5	1672.6	2025.3	3145.7	4603.8	6252.3	8205.5	8303.7	7986.0	7372.7	6502.9
70°	576.2	599.3	765.6	1349.9	2802.0	4774.2	7496.0	7656.3	7373.7	6293.4	4797.2
72.5°	197.4	208.4	317.7	501.1	1090.3	2830.0	5700.1	5941.7	5435.6	4225.0	2756.9
75°	112.2	119.3	170.4	271.6	457.0	931.0	3233.9	3382.2	3168.7	2302.9	1134.4
77.5°	76.2	82.2	106.2	154.3	252.5	299.6	1318.8	1660.5	1448.1	751.6	289.6
80°	45.1	49.1	65.1	91.2	129.3	116.2	282.6	375.8	484.0	224.5	87.2
82.5°	21.0	24.1	42.1	60.1	65.1	49.1	83.2	101.2	136.3	110.2	36.1
85°	0.0	0.0	14.0	25.1	24.1	14.0	23.0	25.1	37.1	55.1	14.0
87.5°	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0	6.0	11.0	6.0
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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REPORT NUMBER: P635528
CATALOG NUMBER: GWS-SA3D-830-U-T3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4	1118.4
2.5°	1122.4	1115.4	1123.4	1119.4	1123.4	1122.4	1114.4	1109.4	1109.4	1100.3	1097.3
5°	1136.4	1129.4	1131.4	1122.4	1120.4	1115.4	1105.4	1101.3	1101.3	1092.3	1089.3
7.5°	1167.5	1156.5	1154.5	1136.4	1128.4	1114.4	1096.3	1089.3	1088.3	1079.3	1076.3
10°	1216.6	1203.6	1194.5	1171.5	1148.4	1120.4	1082.3	1050.2	1032.2	1008.1	1006.1
12.5°	1276.7	1260.7	1246.7	1211.6	1173.5	1110.4	998.1	880.9	808.7	751.6	755.6
15°	1343.9	1328.8	1306.8	1253.7	1175.5	1011.2	776.7	596.3	508.1	461.0	459.0
17.5°	1417.0	1395.0	1358.9	1286.7	1112.4	772.6	505.1	356.8	310.7	294.6	290.6
20°	1485.2	1458.1	1413.0	1293.8	930.0	523.1	315.7	276.6	268.6	263.6	263.6
22.5°	1557.3	1523.2	1456.1	1239.6	691.5	334.7	268.6	259.6	253.5	246.5	245.5
25°	1630.5	1586.4	1495.2	1098.3	453.0	263.6	251.5	241.5	230.5	219.5	216.5
27.5°	1692.6	1635.5	1525.2	887.9	290.6	237.5	229.5	212.5	197.4	185.4	183.4
30°	1766.8	1693.6	1538.3	649.4	228.5	209.4	197.4	179.4	161.3	149.3	145.3
32.5°	1866.0	1785.8	1518.2	422.9	202.4	184.4	165.4	144.3	126.3	113.2	111.2
35°	2020.3	1925.1	1426.0	269.6	183.4	159.3	136.3	114.2	99.2	89.2	87.2
37.5°	2208.7	2120.5	1274.7	202.4	164.4	138.3	111.2	90.2	79.2	72.2	70.1
40°	2488.3	2365.0	1087.3	177.4	145.3	117.2	91.2	74.2	66.1	60.1	58.1
42.5°	2851.1	2653.7	871.9	161.3	127.3	98.2	74.2	61.1	54.1	50.1	49.1
45°	3275.0	2935.3	644.4	145.3	110.2	81.2	61.1	50.1	45.1	42.1	41.1
47.5°	3708.9	3181.8	444.9	128.3	94.2	67.1	51.1	43.1	39.1	35.1	34.1
50°	4171.9	3390.2	303.6	111.2	80.2	55.1	44.1	39.1	34.1	31.1	30.1
52.5°	4511.6	3467.4	211.5	96.2	68.1	47.1	39.1	35.1	31.1	27.1	26.1
55°	4825.3	3465.4	160.3	81.2	58.1	41.1	35.1	31.1	27.1	24.1	23.0
57.5°	5137.9	3438.3	126.3	69.1	50.1	37.1	31.1	27.1	25.1	21.0	20.0
60°	5340.4	3336.1	98.2	58.1	43.1	32.1	27.1	24.1	21.0	18.0	17.0
62.5°	5447.6	3193.8	75.2	46.1	35.1	28.1	24.1	21.0	18.0	15.0	14.0
65°	5302.3	2941.3	59.1	36.1	27.1	24.1	20.0	17.0	14.0	11.0	10.0
67.5°	*4657.9*	*2480.3*	*46.1*	*29.1*	*21.0*	*18.0*	*17.0*	*14.0*	*10.0*	*8.0*	*7.0*
70°	3292.0	1698.6	36.1	22.0	16.0	14.0	13.0	11.0	8.0	6.0	5.0
72.5°	1806.8	856.8	26.1	16.0	12.0	11.0	10.0	9.0	7.0	5.0	5.0
75°	695.5	235.5	19.0	11.0	8.0	8.0	7.0	7.0	6.0	4.0	4.0
77.5°	181.4	70.1	12.0	7.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0
80°	58.1	23.0	7.0	5.0	4.0	3.0	3.0	2.0	3.0	2.0	2.0
82.5°	19.0	8.0	4.0	4.0	3.0	2.0	2.0	1.0	1.0	0.0	0.0
85°	7.0	4.0	3.0	2.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0
87.5°	4.0	2.0	2.0	2.0	2.0	1.0	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

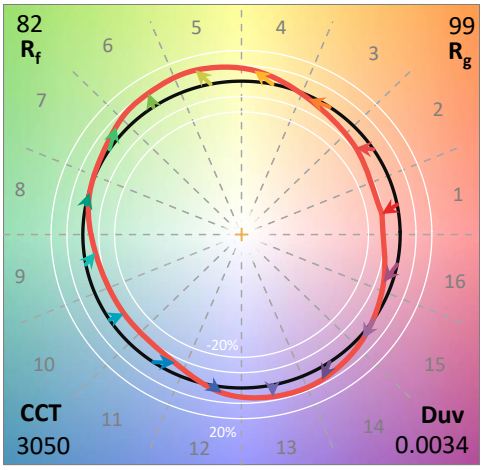
Test Information

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

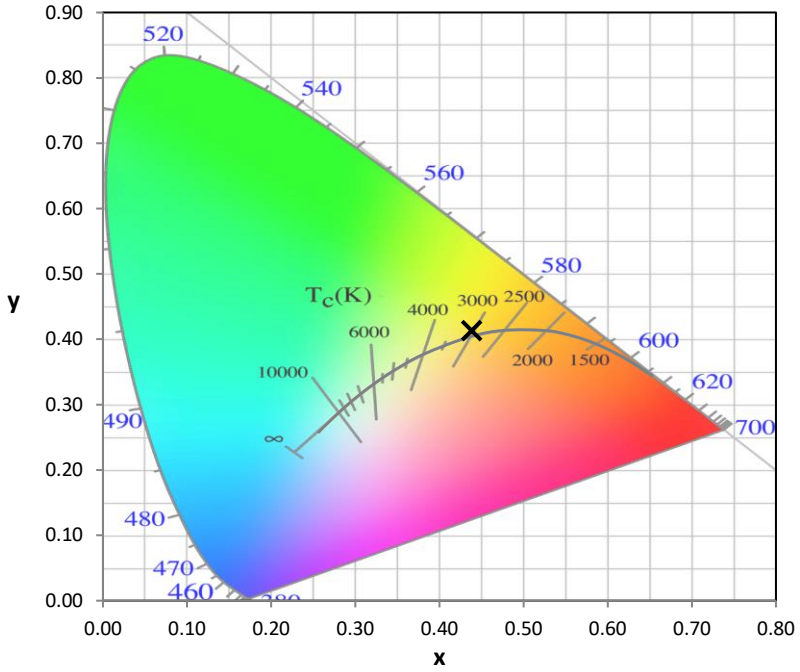
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

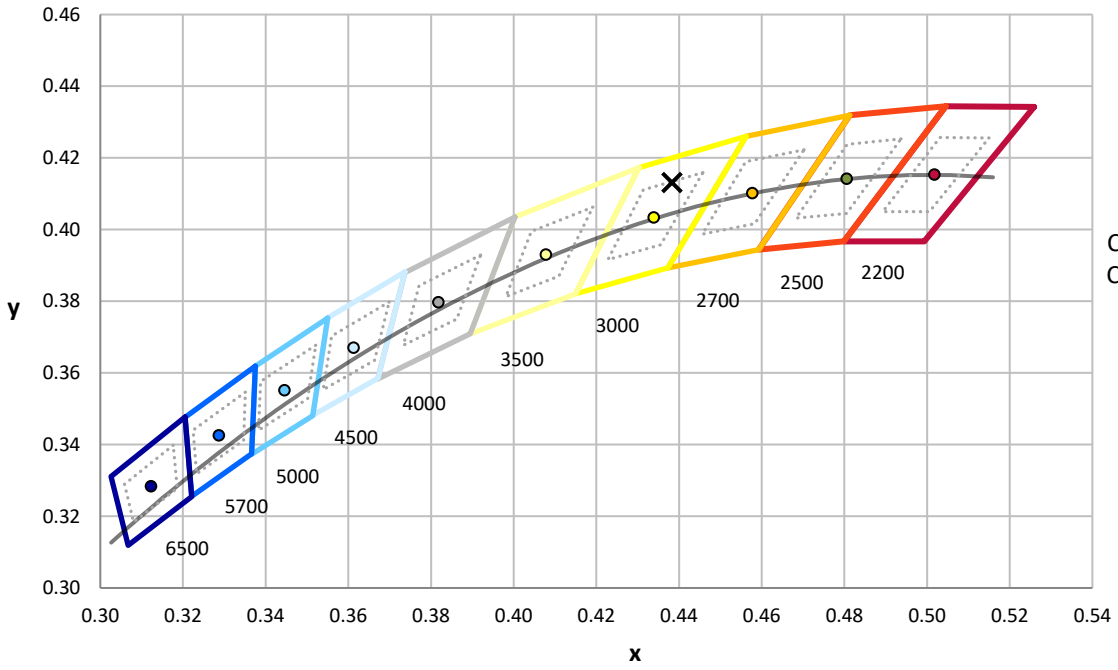
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

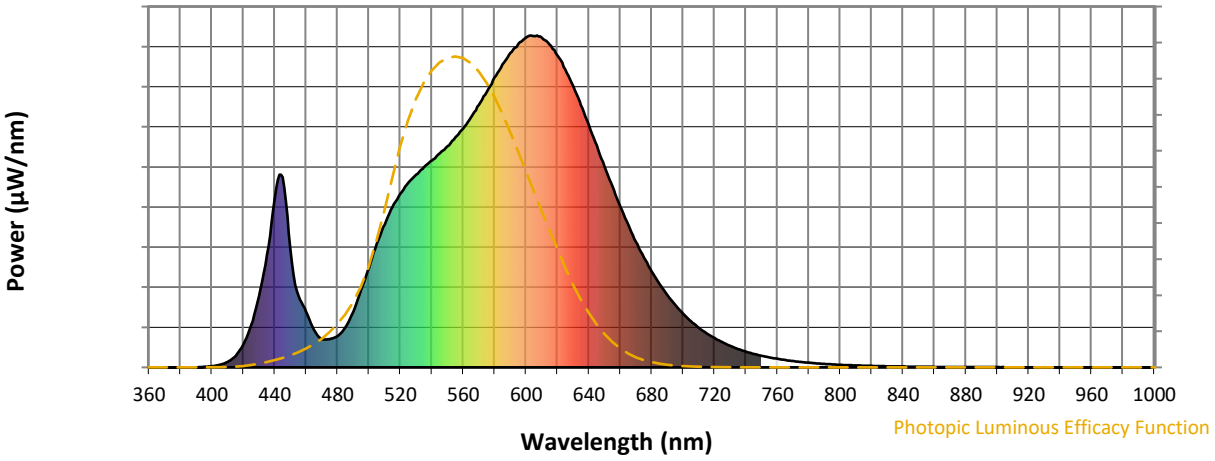


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

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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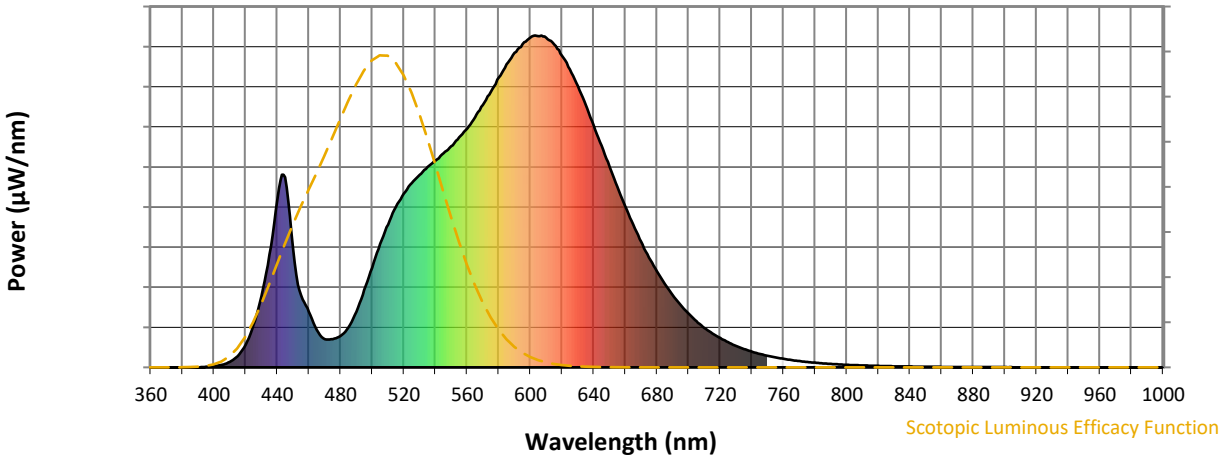
Scotopic Flux vs. Wavelength



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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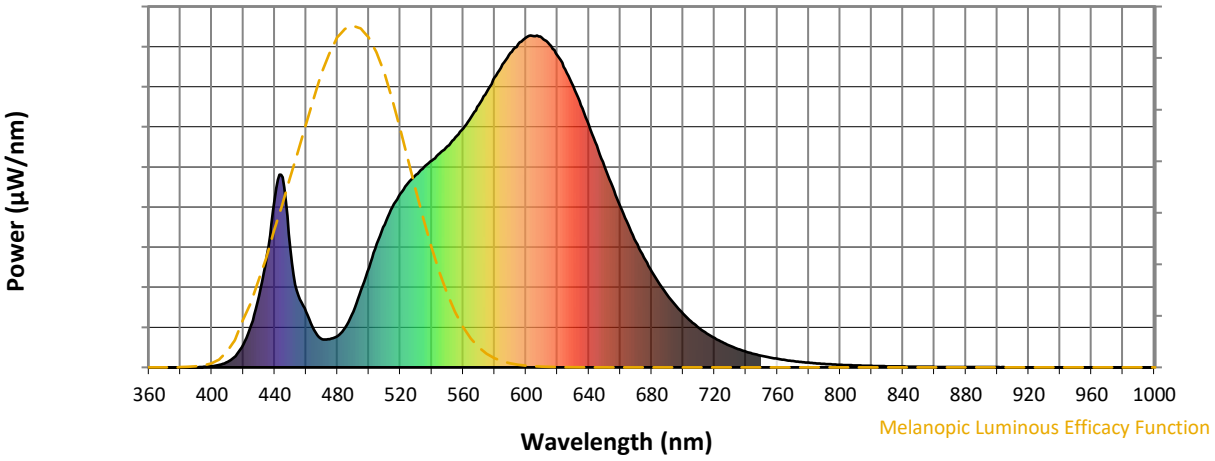
Melanopic Flux vs. Wavelength



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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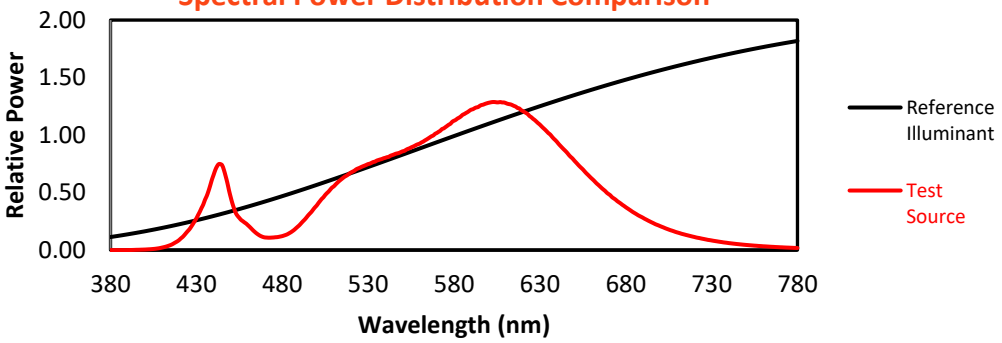
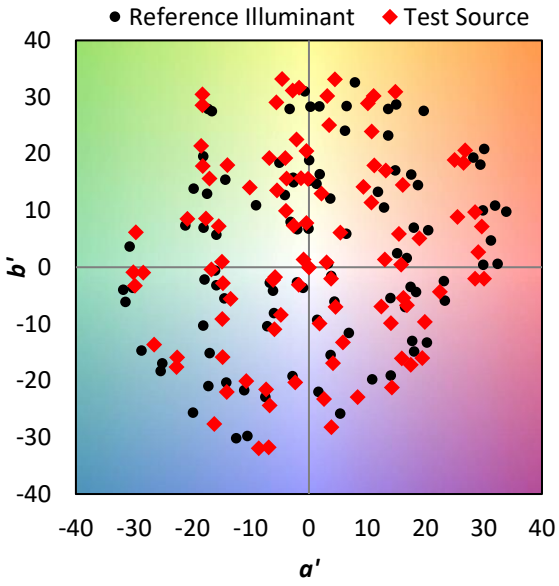
Summary

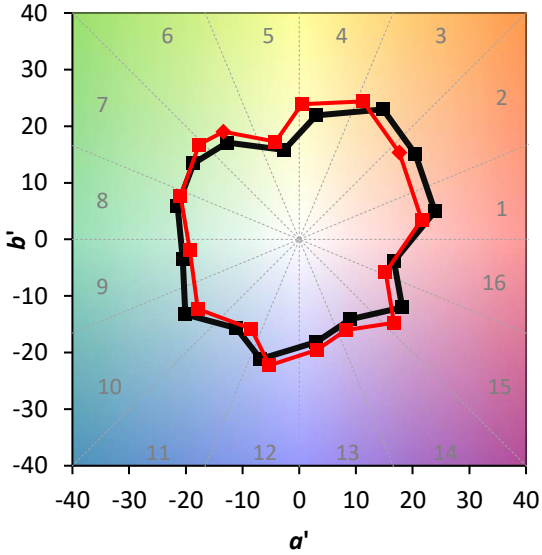
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

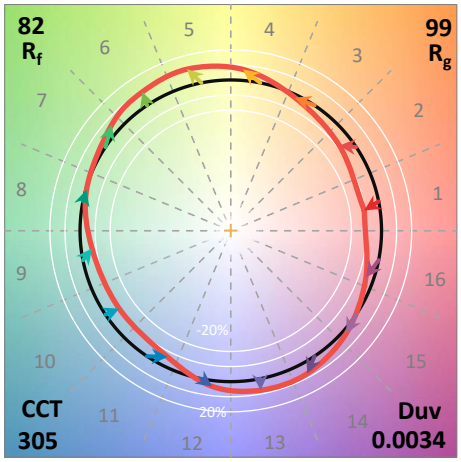
Spectral Power Distribution Comparison

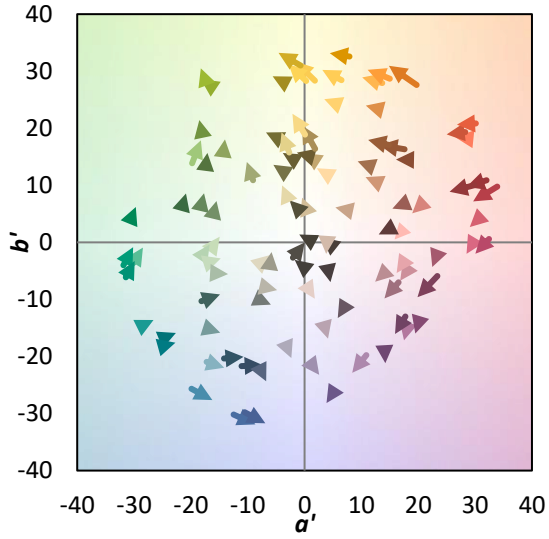


Color Vector Graphics









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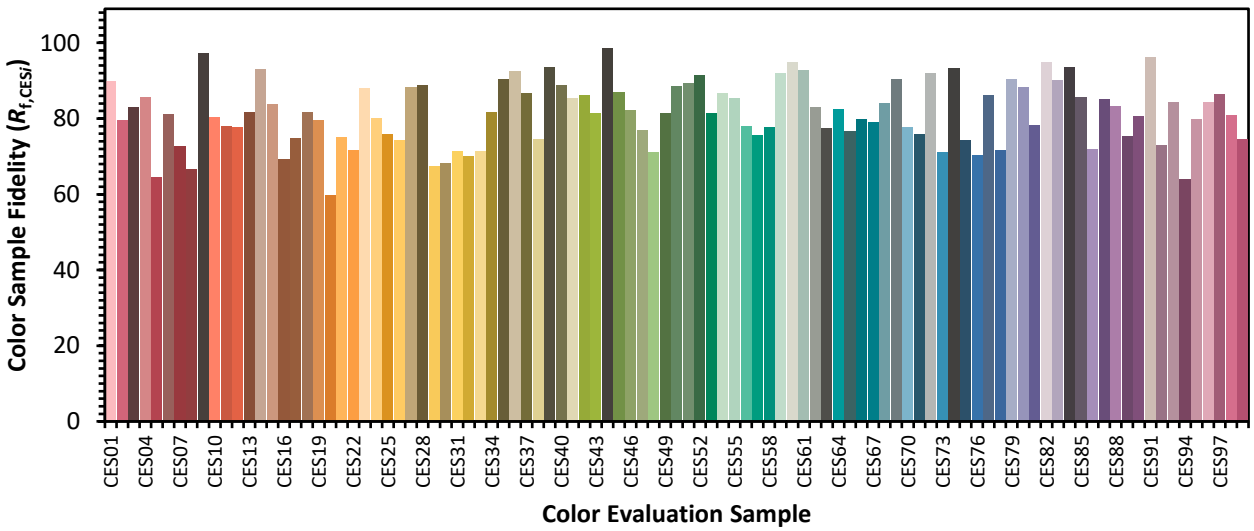
Individual Sample Fidelity Index ($R_{f,i}$)

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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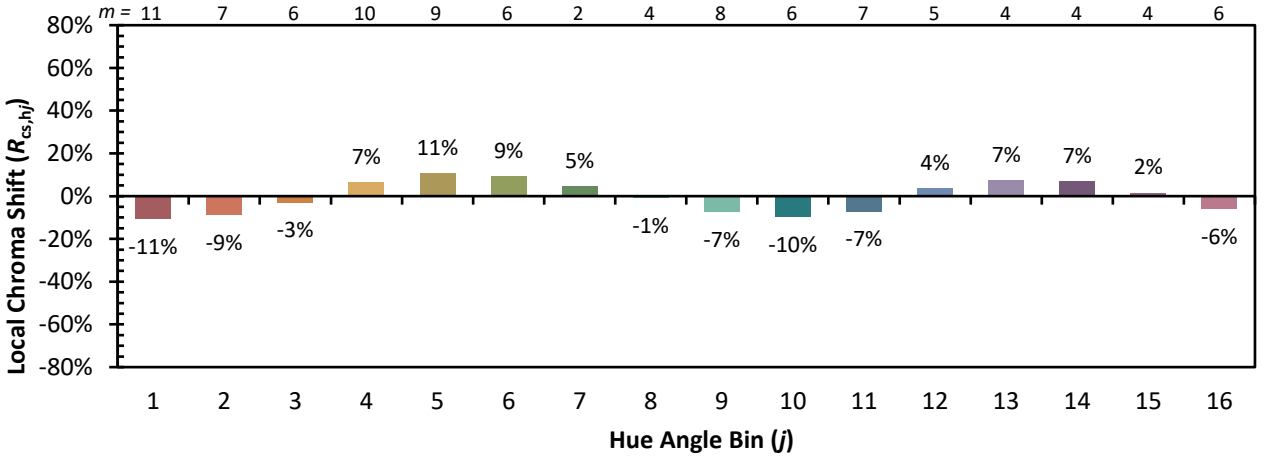
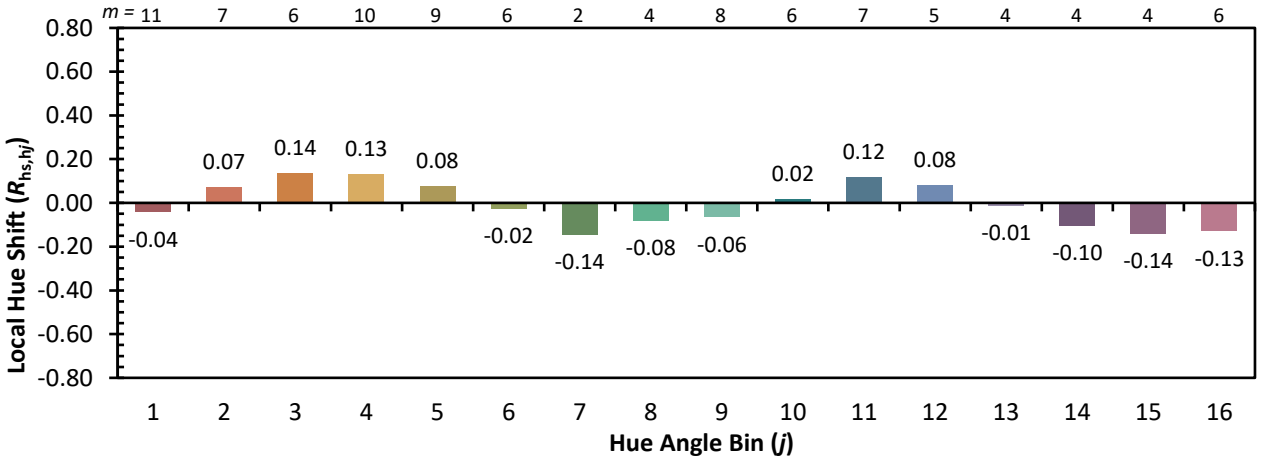
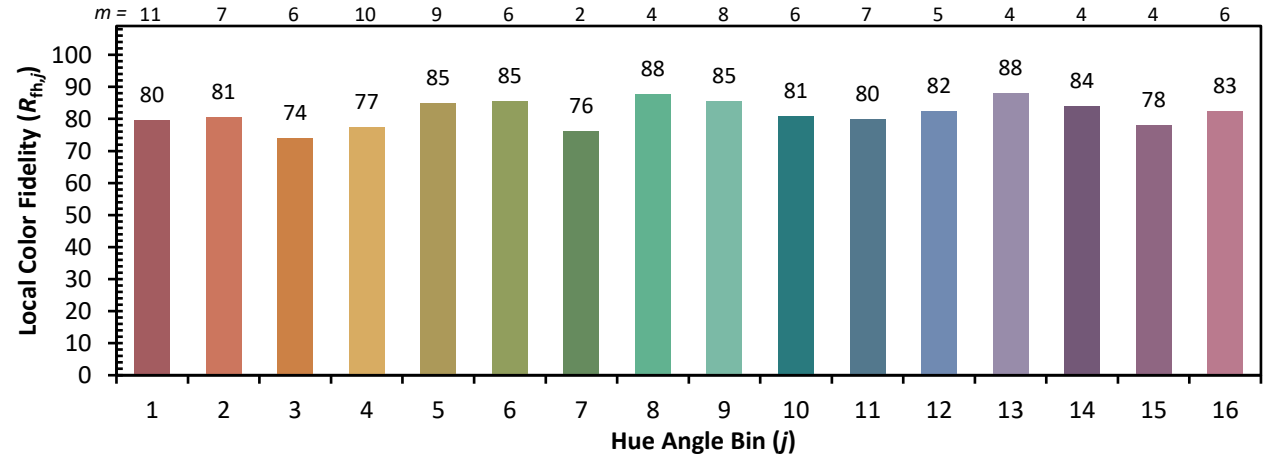
Color Rendition by Hue-Angle Bin







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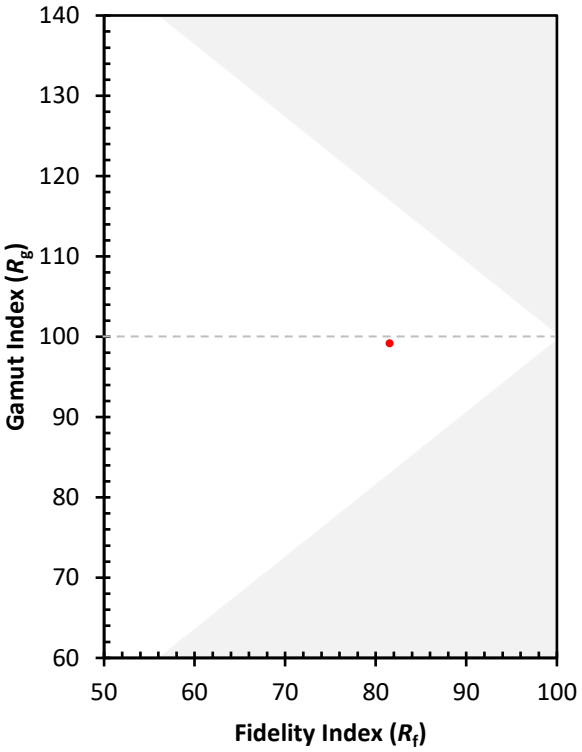
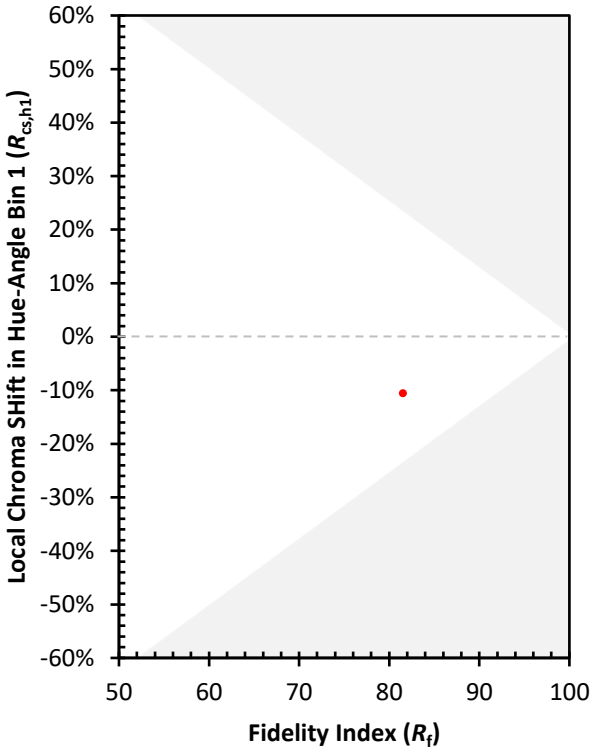
Measure Comparisons





(END OF REPORT)