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: P634040

Luminaire Tested: GWS-SA2F-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:	P634040
	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-SA2F-830-U-T2R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	(32) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	13140.6 lumens
Efficiency:	N/A
Efficacy:	105.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G2

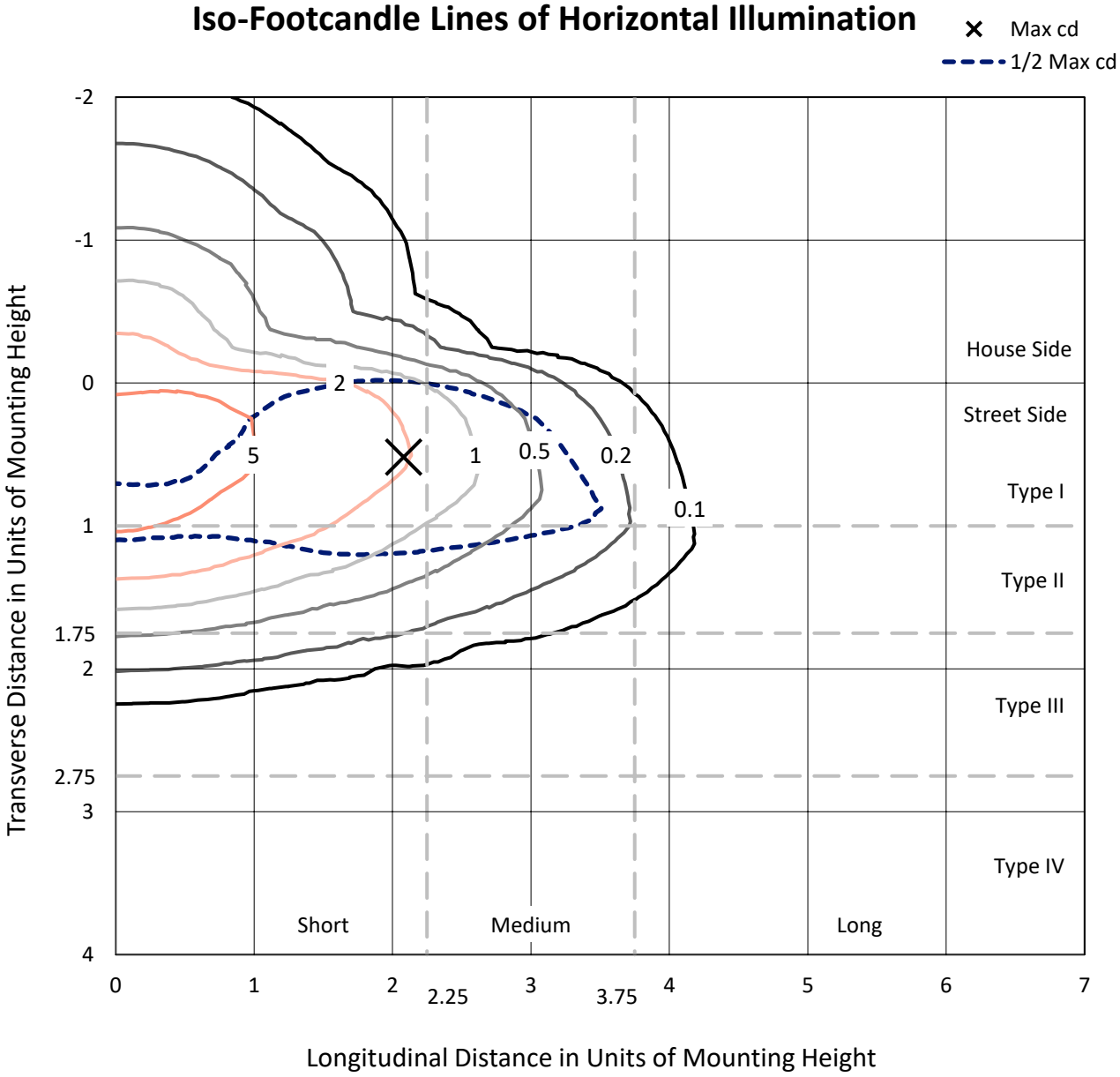
Input Watts (W):	124.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P634040
CATALOG NUMBER: GWS-SA2F-830-U-T2R-W

Iso-Footcandle Lines of Horizontal Illumination



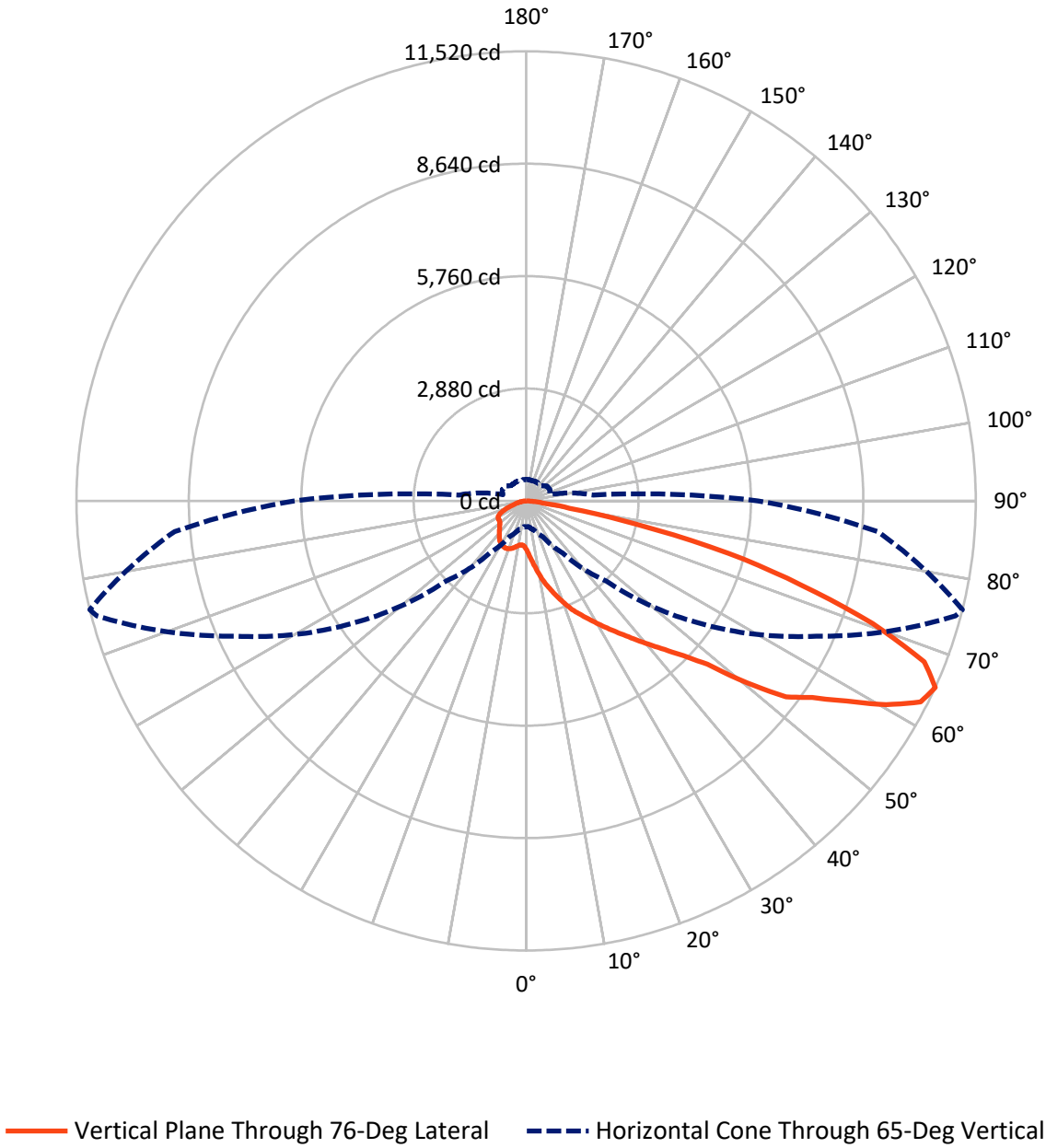
Based on 20 foot mounting height. Maximum calculated value = 8.1 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P634040
CATALOG NUMBER: GWS-SA2F-830-U-T2R-W

Luminous Intensity Polar Plot



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

Scaled Data Report

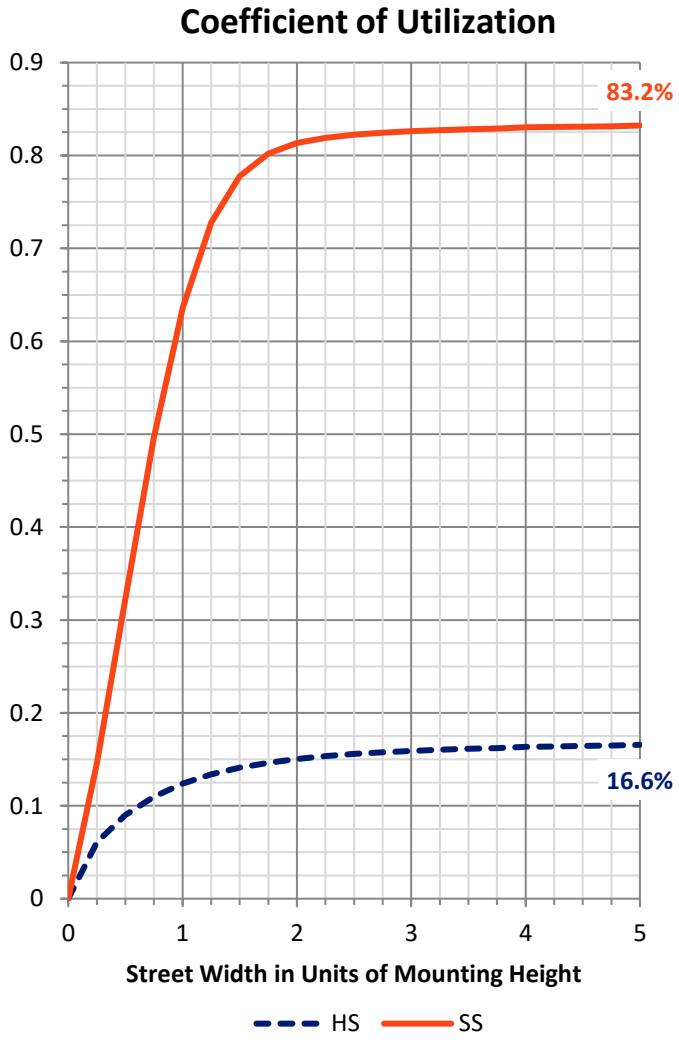
REPORT NUMBER: P634040
CATALOG NUMBER: GWS-SA2F-830-U-T2R-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2196.5	0.0	2196.5
	% Fixture	16.7	0.0	16.7
Street Side	Lumens	10944.1	0.0	10944.1
	% Fixture	83.3	0.0	83.3
Total	Lumens	13140.6	0.0	13140.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.8	1.1
10°-20°	563.1	4.3
20°-30°	1097.4	8.4
30°-40°	1835.3	14.0
40°-50°	2627.8	20.0
50°-60°	3111.0	23.7
60°-70°	2586.8	19.7
70°-80°	1058.6	8.1
80°-90°	112.7	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°	13140.6	100.0
0°-180°	13140.6	100.0



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

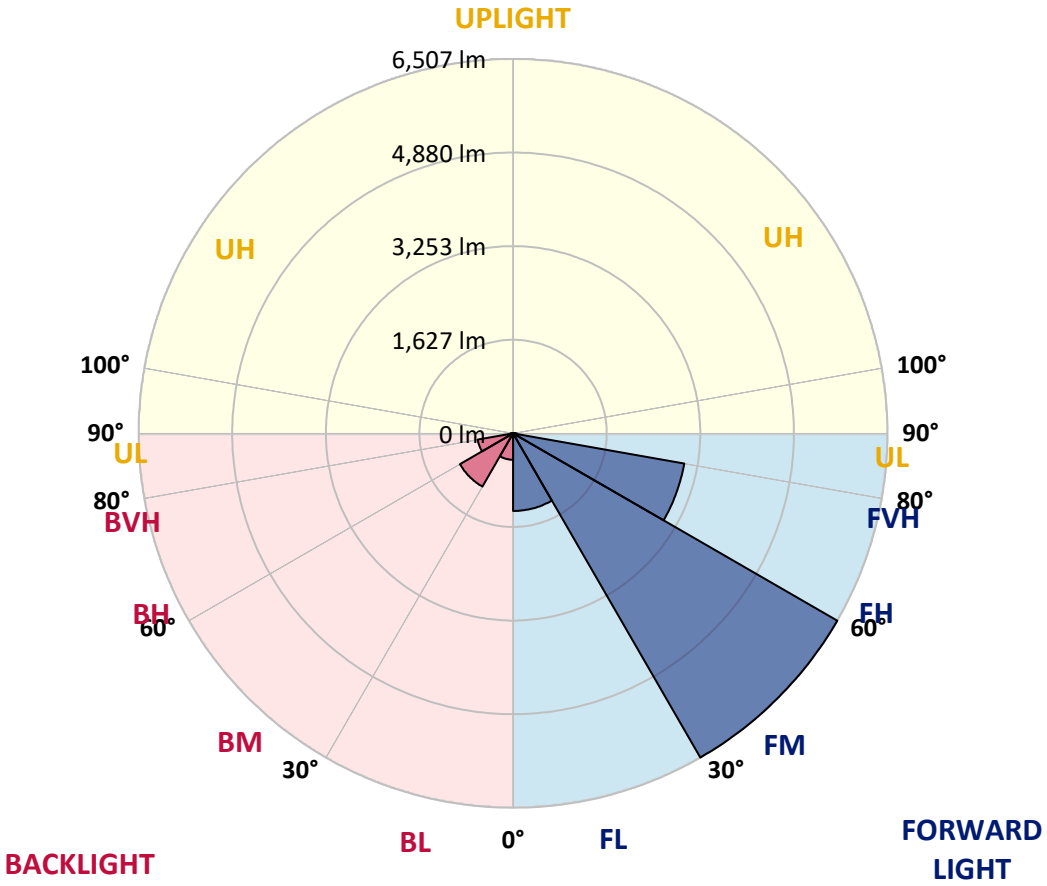
Scaled Data Report

REPORT NUMBER: P634040
CATALOG NUMBER: GWS-SA2F-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°)	1348.8	10.3			
FM	(30°-60°)	6506.7	49.5			
FH	(60°-80°)	3021.4	23.0			G2/5000
FVH	(80°-90°)	67.2	0.5			G1/100
BL	(0°-30°)	459.5	3.5	B1/500		
BM	(30°-60°)	1067.4	8.1	B2/2500		
BH	(60°-80°)	624.0	4.7	B2/1000		G2/1000
BVH	(80°-90°)	45.5	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



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

Scaled Data Report

REPORT NUMBER: P634040
CATALOG NUMBER: GWS-SA2F-830-U-T2R-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	*1244.4*	1244.4
2.5°	1744.1	1750.6	1729.4	1722.0	1672.1	1604.7	1548.3	1463.3	1384.8	*1372.8*	1302.6
5°	2215.3	2187.6	2163.6	2147.8	2078.6	2001.9	1882.7	1722.9	1555.7	*1535.4*	1383.9
7.5°	2495.2	2490.6	2461.0	2451.8	2398.2	2321.5	2198.7	2000.0	1757.1	*1723.8*	1493.8
10°	2719.7	2716.9	2702.1	2710.4	2661.5	2586.7	2467.5	2262.4	1977.9	*1944.6*	1616.7
12.5°	2915.5	2920.1	2917.4	2947.9	2922.9	2864.7	2740.9	2515.5	2198.7	*2162.6*	1766.3
15°	3058.7	3062.4	3076.3	3142.8	3156.6	3144.6	3019.0	2764.0	2416.7	*2364.9*	1920.6
17.5°	3099.4	3106.8	3140.0	3247.2	3322.0	3371.9	3278.6	3017.1	2631.0	*2574.6*	2077.6
20°	3153.9	3162.2	3195.4	3307.2	3417.2	3530.8	3514.2	3274.0	2847.2	*2801.0*	2236.5
22.5°	3406.1	3399.6	3384.8	3438.4	3516.9	3658.3	3699.8	3520.6	3070.7	*3026.4*	2412.1
25°	3892.0	3880.0	3785.8	3736.8	3710.9	3796.8	3870.7	3745.1	3288.7	*3222.2*	2575.6
27.5°	4427.8	4421.3	4301.2	4184.8	4025.9	3989.0	4032.4	3941.0	3500.3	*3432.9*	2717.8
30°	4935.0	4915.6	4789.9	4644.0	4431.5	4272.6	4208.9	4133.1	3732.2	*3662.0*	2884.1
32.5°	5388.6	5363.6	5215.8	5054.1	4831.5	4644.0	4453.7	4337.3	3994.5	*3913.2*	3054.1
35°	5760.9	5735.9	5584.4	5412.6	5167.8	5029.2	4768.7	4559.0	4261.5	*4179.3*	3254.6
37.5°	6049.1	6026.0	5868.0	5699.0	5485.6	5375.6	5149.3	4808.4	4569.1	*4483.2*	3467.0
40°	6210.7	6194.1	6067.6	5933.6	5754.4	5659.2	5557.6	5123.4	4913.7	*4827.8*	3717.4
42.5°	6259.7	6248.6	6159.9	6090.7	5969.6	5897.6	5955.8	5493.9	5281.4	*5206.6*	3999.2
45°	6136.8	6136.8	6111.0	6146.1	6151.6	6150.7	6354.9	5912.4	5733.1	*5650.9*	4396.4
47.5°	5822.7	5843.1	5880.9	6053.7	6235.7	6388.1	6821.4	6470.3	6314.2	*6246.8*	4959.0
50°	5248.1	5303.6	5432.9	5770.1	6157.2	6545.2	7263.0	7295.3	7444.0	*7324.9*	5786.7
52.5°	4406.6	4398.2	4728.0	5208.4	5798.7	6551.6	7505.9	8023.3	8423.3	*8341.0*	6402.0
55°	3502.1	3488.3	3795.9	4458.3	5249.1	6304.0	7651.9	8356.7	8966.5	*8892.6*	6955.3
57.5°	2681.8	2664.3	2937.7	3535.4	4473.1	5778.4	7624.2	8754.0	9713.8	*9675.9*	7707.3
60°	1845.8	1824.5	2080.4	2603.3	3554.8	4974.7	7317.5	8958.1	10588.7	*10601.6*	8511.9
62.5°	1108.6	1096.6	1282.2	1687.8	2557.1	3978.8	6599.7	8834.4	11285.2	*11343.4*	9029.3
65°	*668.8*	*660.5*	*769.5*	*1006.9*	*1622.2*	*2903.5*	*5492.9*	*8201.5*	*11385.9*	*11519.9*	*9041.3*
67.5°	486.8	487.8	519.2	613.4	946.0	1875.3	4122.0	7067.1	10861.2	*10999.8*	8471.3
70°	423.1	425.0	441.6	462.8	571.8	1073.5	2680.0	5578.9	9310.1	*9417.3*	7105.0
72.5°	376.0	376.0	387.1	398.2	447.1	654.1	1435.6	3899.4	7348.0	*7376.6*	5422.7
75°	330.7	328.0	333.5	339.0	388.0	457.3	698.4	2716.9	5427.4	*5360.8*	3504.9
77.5°	263.3	260.5	261.4	267.0	311.3	327.0	353.8	1697.0	3058.7	*2886.9*	1548.3
80°	187.5	185.7	195.8	209.7	230.0	200.5	221.7	821.3	1213.0	*1128.9*	600.5
82.5°	111.8	115.5	131.2	142.3	158.9	125.6	143.2	274.4	429.6	*418.5*	243.9
85°	15.7	16.6	47.1	54.5	68.4	49.0	75.8	123.8	171.8	*183.8*	85.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	6.5	22.2	49.0	*49.9*	21.2
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: P634040
CATALOG NUMBER: GWS-SA2F-830-U-T2R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4	1244.4
2.5°	1266.5	1223.1	1161.2	1109.5	1066.1	1031.0	1001.4	979.2	972.8	963.5	963.5
5°	1312.7	1234.2	1123.3	1044.8	999.6	972.8	954.3	945.1	940.4	934.9	932.1
7.5°	1376.5	1266.5	1116.9	1037.4	1002.3	985.7	973.7	968.1	964.5	958.9	958.9
10°	1464.2	1314.6	1137.2	1063.3	1035.6	1019.0	1005.1	995.9	987.5	979.2	977.4
12.5°	1559.4	1377.4	1174.2	1098.4	1068.8	1048.5	1029.1	1015.3	1005.1	994.9	992.2
15°	1664.7	1442.1	1213.9	1132.6	1095.6	1067.9	1044.8	1023.6	1009.7	994.9	993.1
17.5°	1768.2	1507.7	1247.1	1155.7	1108.6	1074.4	1041.1	1013.4	995.9	979.2	974.6
20°	1892.0	1573.2	1270.2	1162.1	1105.8	1060.5	1020.8	985.7	966.3	946.9	944.1
22.5°	2005.6	1634.2	1281.3	1152.9	1084.5	1031.0	984.8	946.9	925.7	906.3	902.6
25°	2115.5	1687.8	1276.7	1130.7	1052.2	990.3	942.3	904.4	884.1	863.8	858.2
27.5°	2221.8	1723.8	1258.2	1096.6	1011.6	945.1	898.9	864.7	847.1	829.6	822.2
30°	2326.1	1757.1	1229.6	1052.2	959.8	897.9	860.1	836.0	818.5	800.0	794.5
32.5°	2431.5	1781.1	1186.2	1000.5	907.2	856.4	833.3	815.7	797.2	778.8	773.2
35°	2537.7	1791.3	1133.5	941.4	862.8	829.6	821.3	800.9	776.0	753.8	746.4
37.5°	2664.3	1800.5	1067.9	883.2	824.0	816.6	814.8	784.3	754.7	724.3	715.9
40°	2816.7	1812.5	1000.5	830.5	792.6	812.0	804.6	763.1	703.9	674.4	665.1
42.5°	3003.3	1834.7	930.3	782.5	769.5	794.5	786.2	711.3	671.6	655.0	650.4
45°	3277.7	1916.0	860.1	744.6	752.0	769.5	756.6	680.8	665.1	654.1	648.5
47.5°	3766.4	2040.7	799.1	715.9	738.1	747.4	697.5	672.5	660.5	645.7	639.3
50°	4274.4	2095.2	750.1	698.4	722.4	727.0	665.1	661.4	653.1	637.4	631.0
52.5°	4618.1	2087.8	720.6	691.9	709.5	691.9	650.4	649.4	643.9	625.4	618.0
55°	5006.1	2100.7	707.6	693.8	703.9	632.8	631.9	634.7	631.9	611.6	607.9
57.5°	5529.9	2140.5	701.2	700.2	700.2	604.2	614.3	618.0	612.5	603.2	600.5
60°	6033.4	2143.2	689.2	707.6	697.5	586.6	594.0	597.7	591.2	589.4	588.5
62.5°	6222.8	2010.2	662.4	702.1	686.4	567.2	572.8	574.6	568.1	572.8	571.8
65°	*5941.0*	*1727.5*	*618.0*	*675.3*	*652.2*	*549.7*	*546.0*	*550.6*	*539.5*	*551.5*	*552.4*
67.5°	5274.9	1372.8	550.6	624.5	604.2	530.3	522.9	522.9	504.4	522.9	522.0
70°	4253.2	970.0	451.7	543.2	551.5	507.2	503.5	482.2	452.7	480.4	477.6
72.5°	3224.1	696.5	355.7	429.6	474.8	474.8	475.8	439.7	405.6	418.5	407.4
75°	2042.5	490.5	284.5	328.9	372.3	416.6	437.9	371.4	340.9	335.3	329.8
77.5°	920.1	322.4	221.7	252.2	264.2	328.9	400.0	319.6	278.1	266.1	262.4
80°	385.2	200.5	158.0	178.3	162.6	276.2	352.9	248.5	204.2	187.5	175.5
82.5°	169.1	119.2	100.7	96.1	101.6	205.1	263.3	165.4	127.5	172.8	174.6
85°	71.1	62.8	51.7	47.1	41.6	78.5	123.8	64.7	79.4	45.3	37.0
87.5°	16.6	18.5	13.9	9.2	5.5	0.9	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

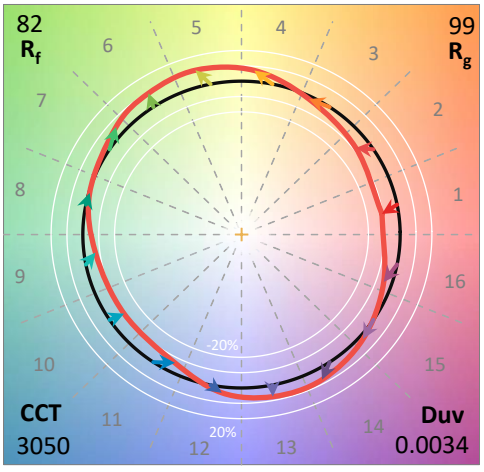
Test Information

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

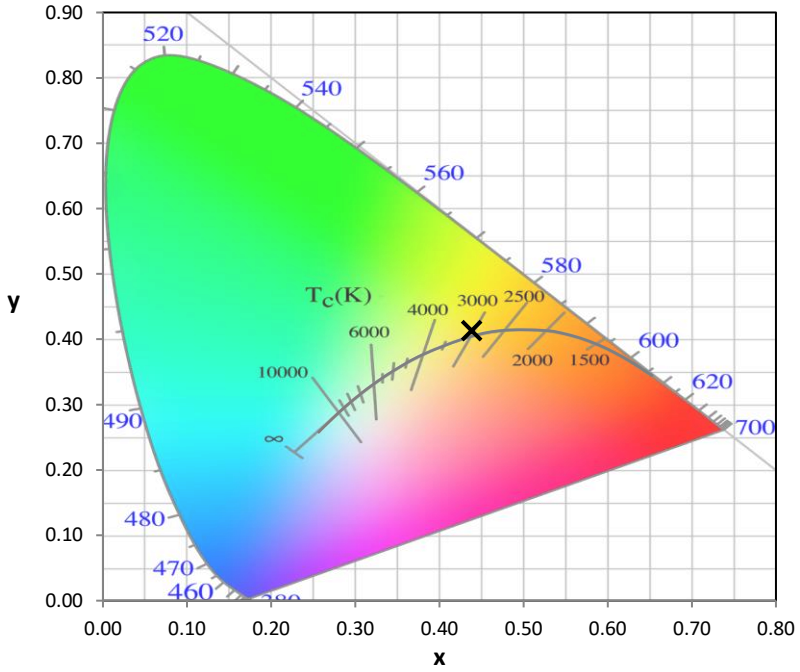
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

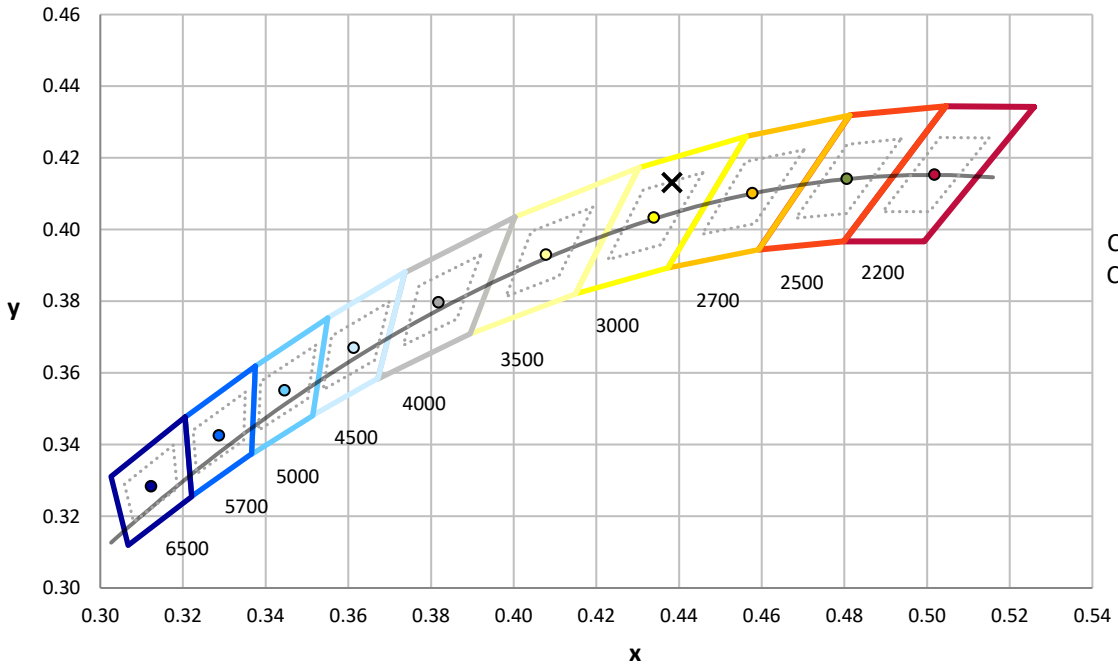
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

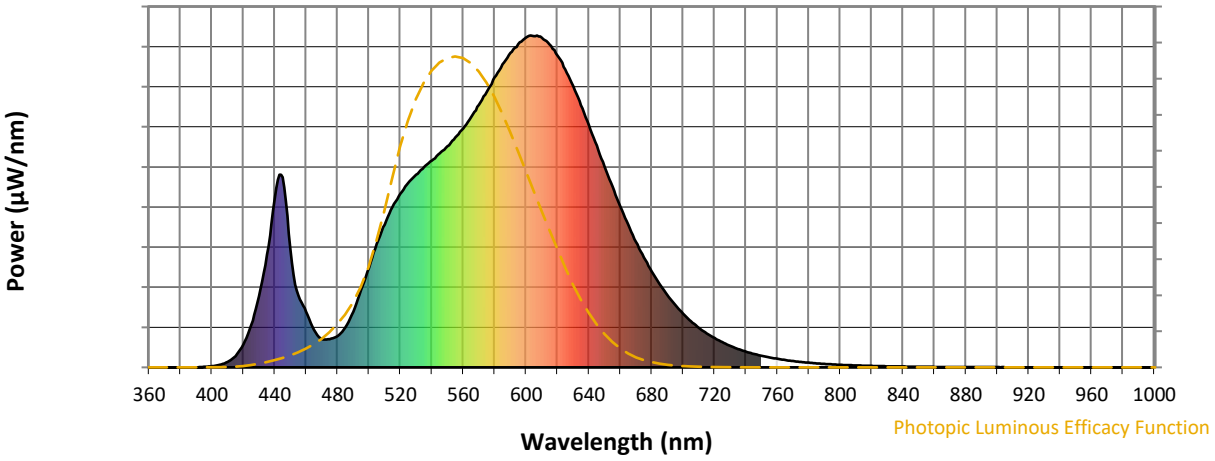


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

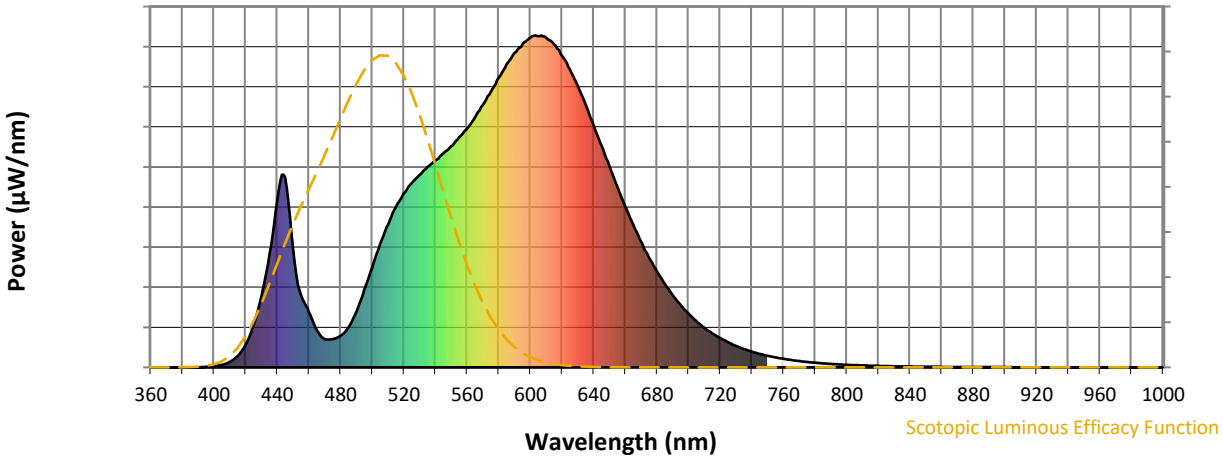


Photopic Lumens: NR

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

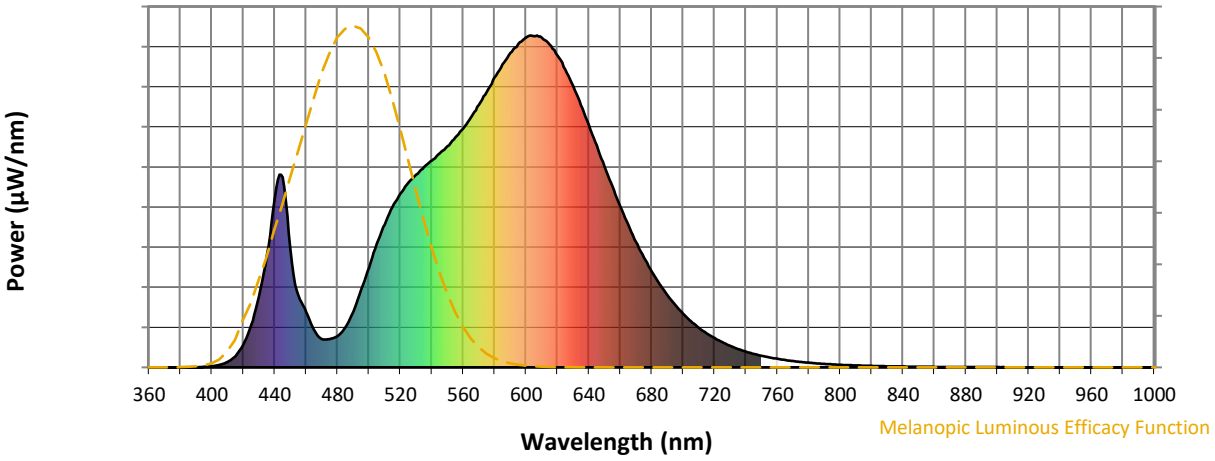


Scotopic Lumens: NR **S/P: 1.27**

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			

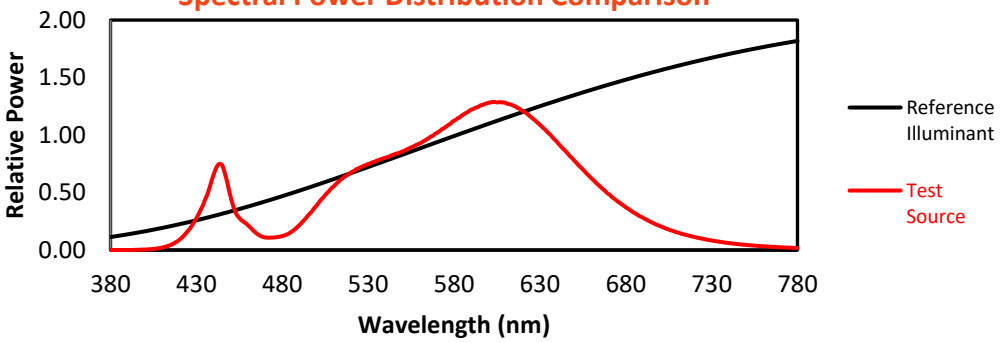
REPORT NUMBER: SP1-2408-195-9

TM-30-18

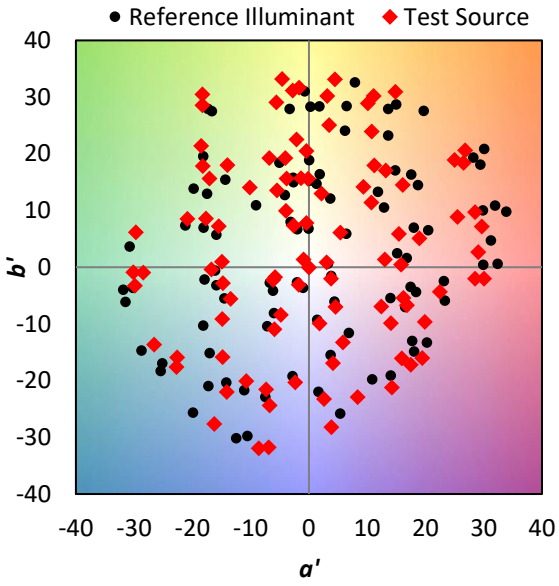
Summary

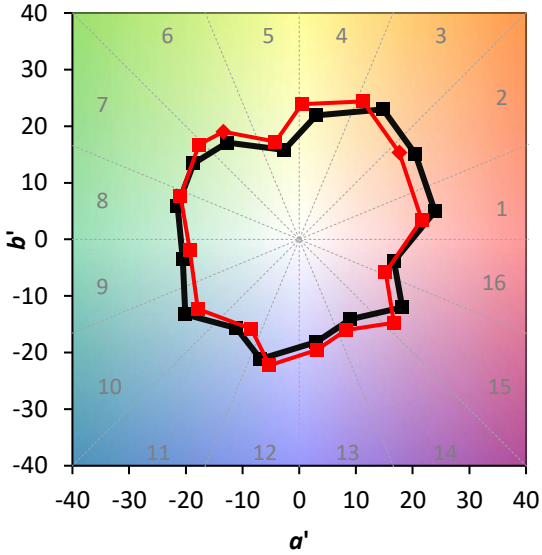
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

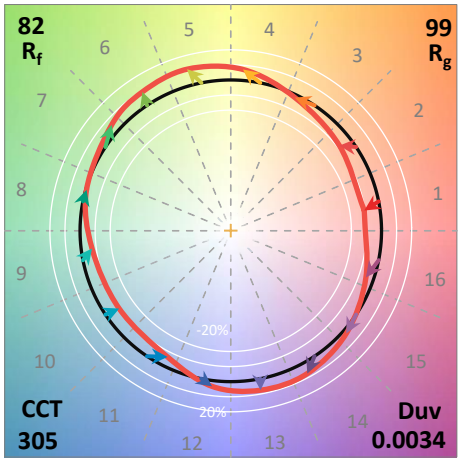
Spectral Power Distribution Comparison

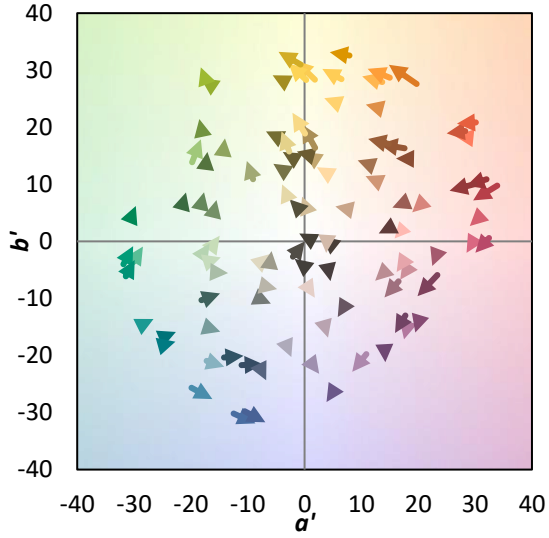


Color Vector Graphics







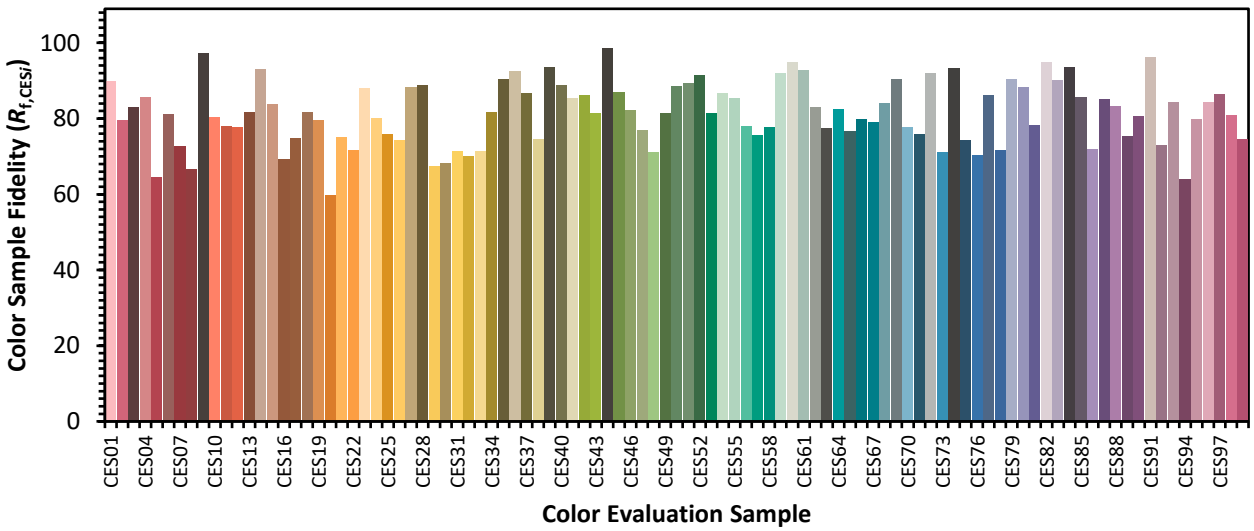


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

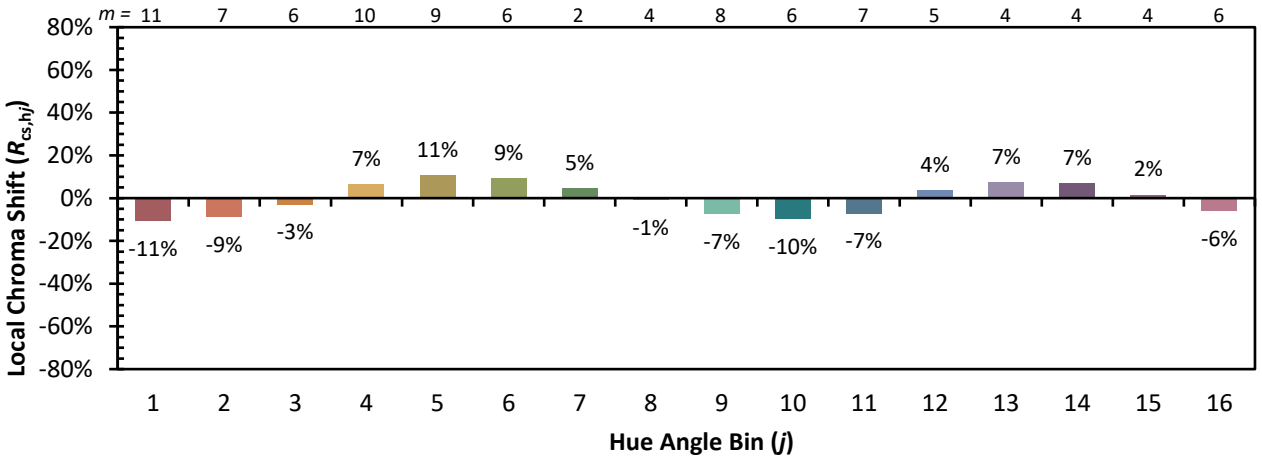
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

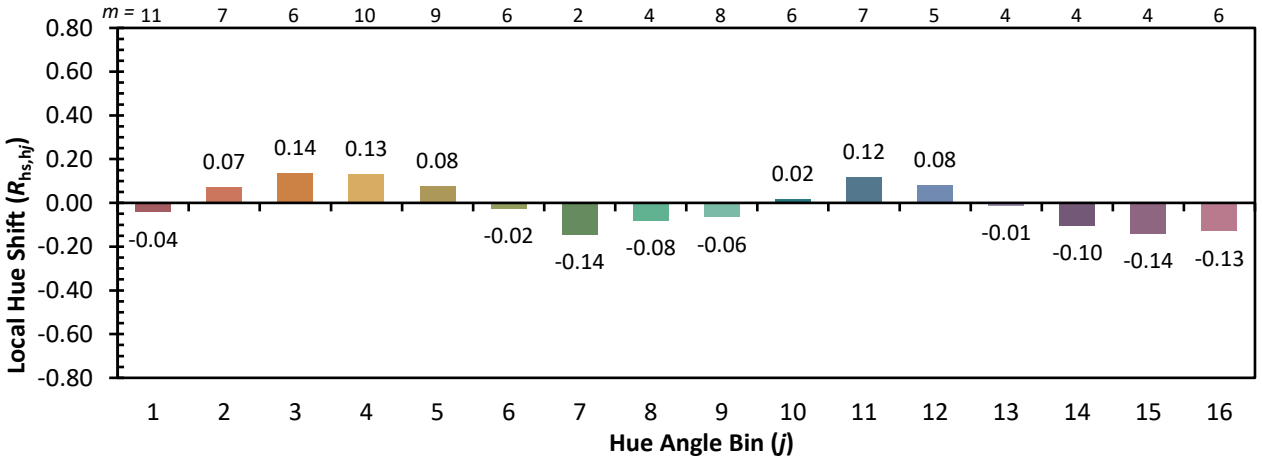


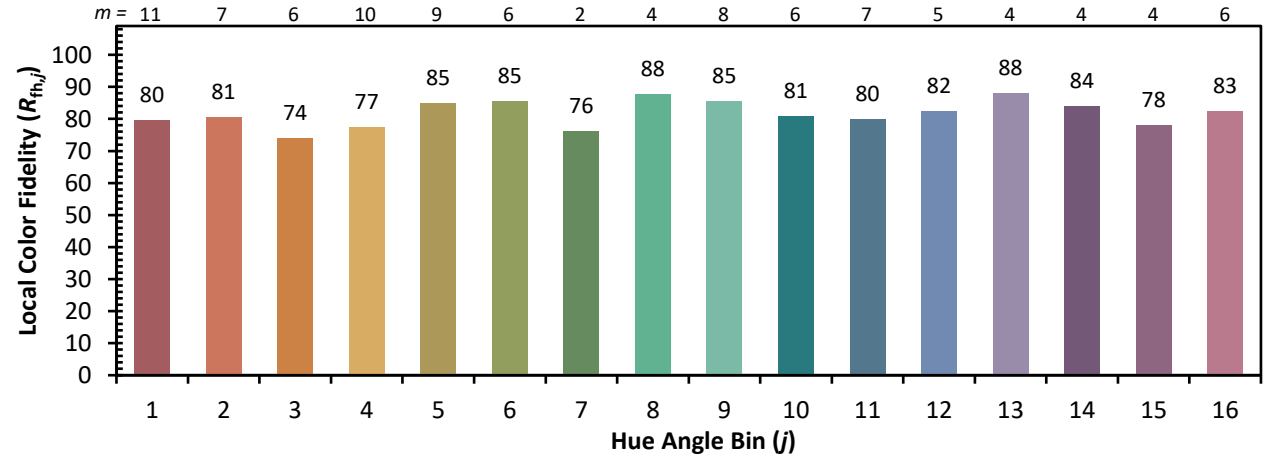
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



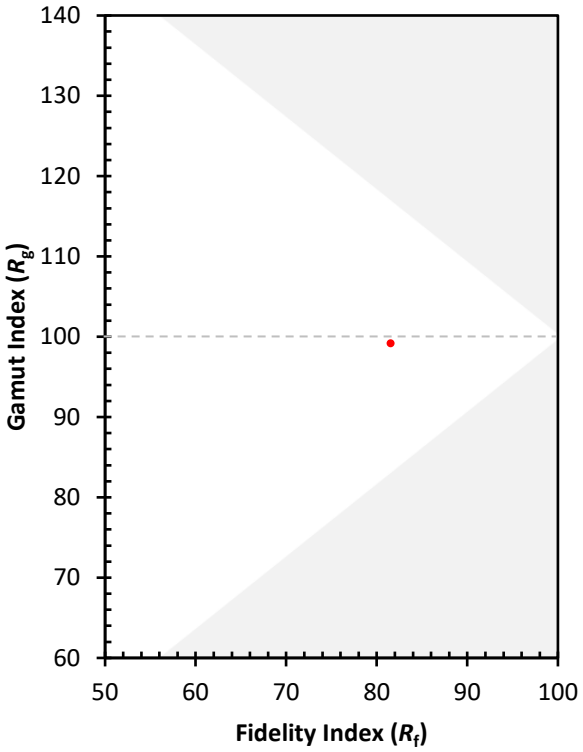


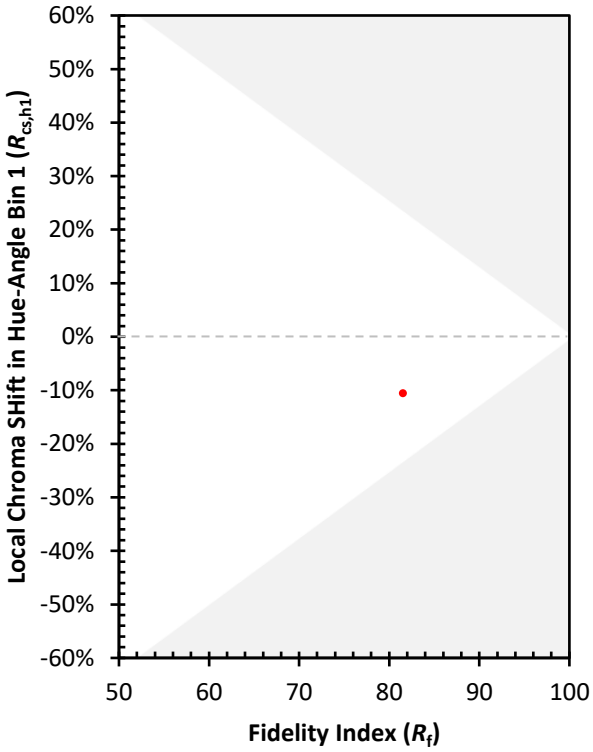


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)