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: P637473

Luminaire Tested: GWS-SA4C-830-U-AFL-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:	P637473
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-47)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4C-830-U-AFL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE 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:	13989.4 lumens
Efficiency:	N/A
Efficacy:	108.9 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

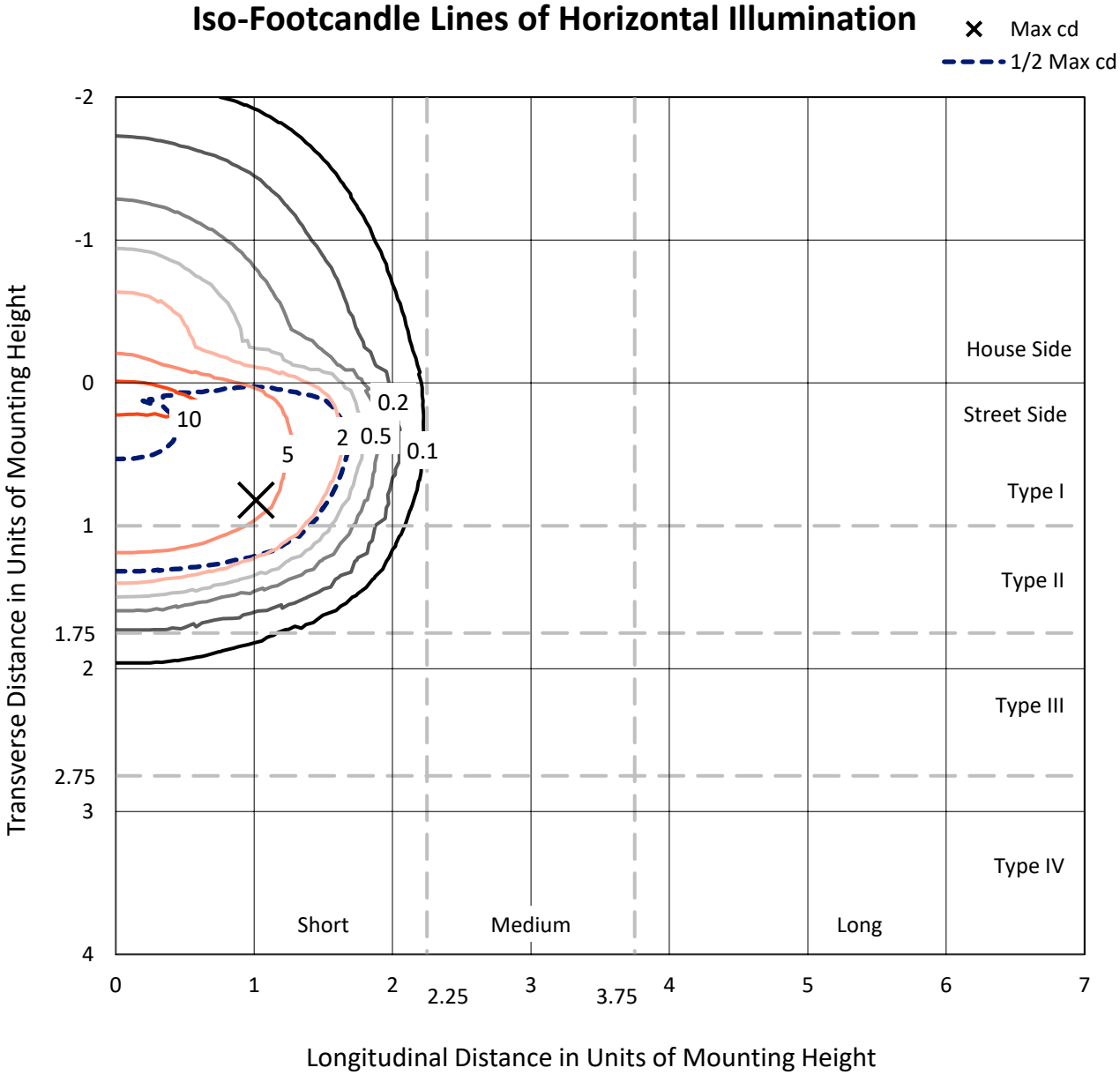
Input Watts (W):	128.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P637473
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



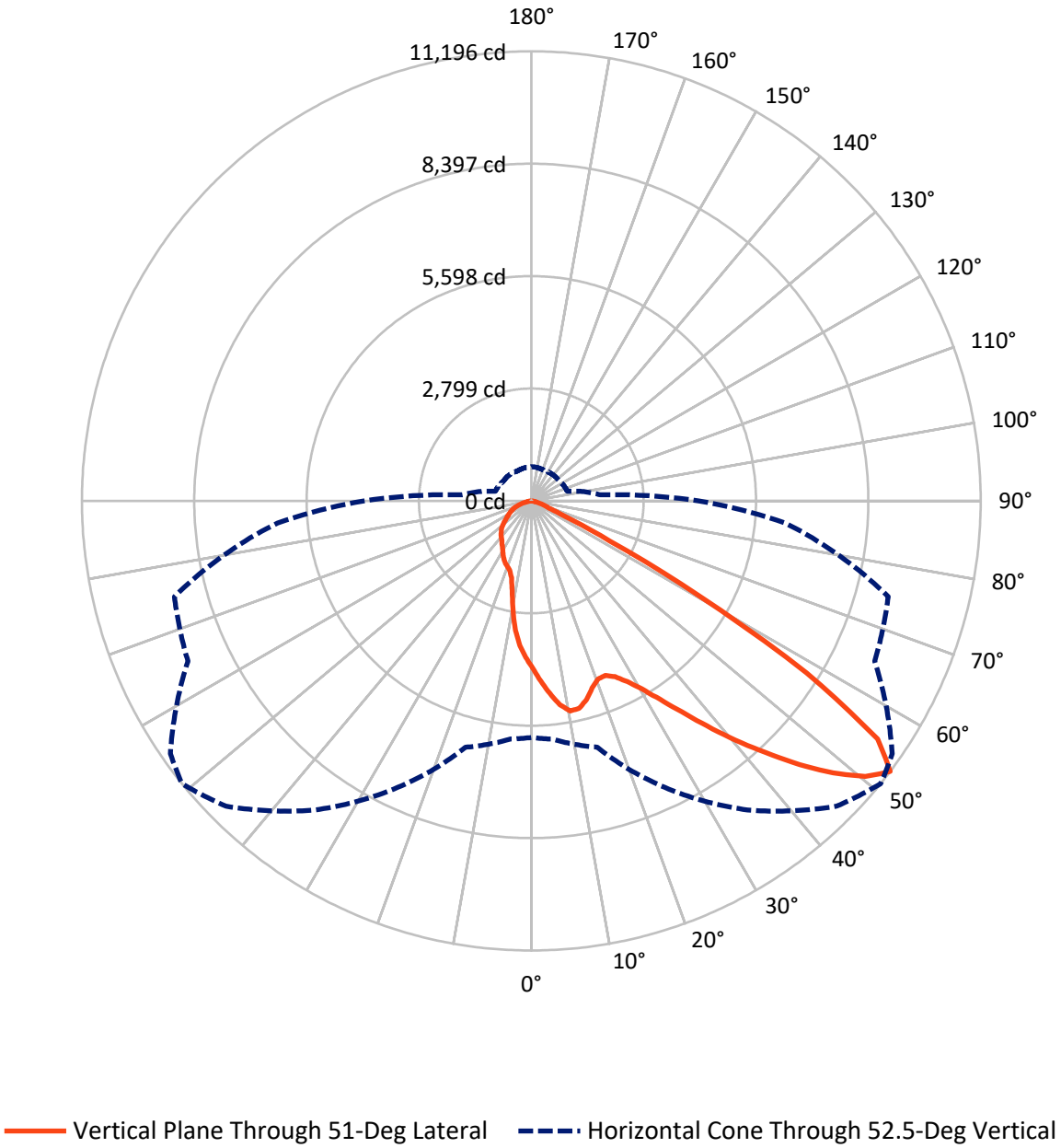
Based on 20 foot mounting height. Maximum calculated value = 12.7 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P637473
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSWH

Luminous Intensity Polar Plot



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

Scaled Data Report

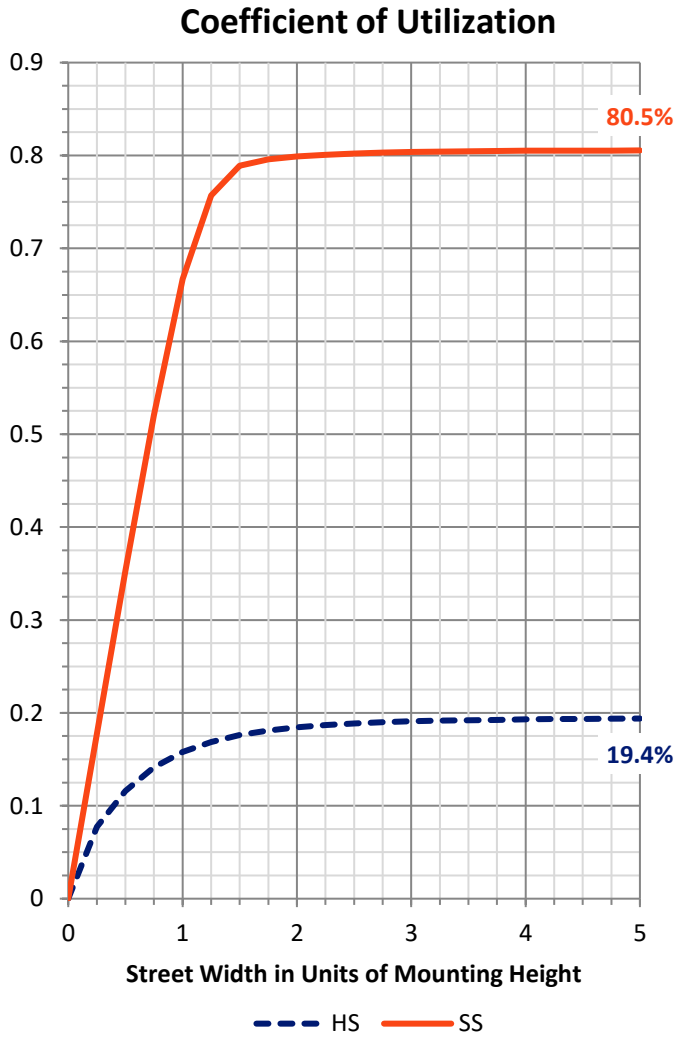
REPORT NUMBER: P637473
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2725.7	0.0	2725.7
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	11263.7	0.0	11263.7
	% Fixture	80.5	0.0	80.5
Total	Lumens	13989.4	0.0	13989.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.7	2.8
10°-20°	1010.0	7.2
20°-30°	1642.1	11.7
30°-40°	2602.4	18.6
40°-50°	3924.9	28.1
50°-60°	3395.4	24.3
60°-70°	769.8	5.5
70°-80°	227.0	1.6
80°-90°	29.2	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°	13989.4	100.0
0°-180°	13989.4	100.0



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

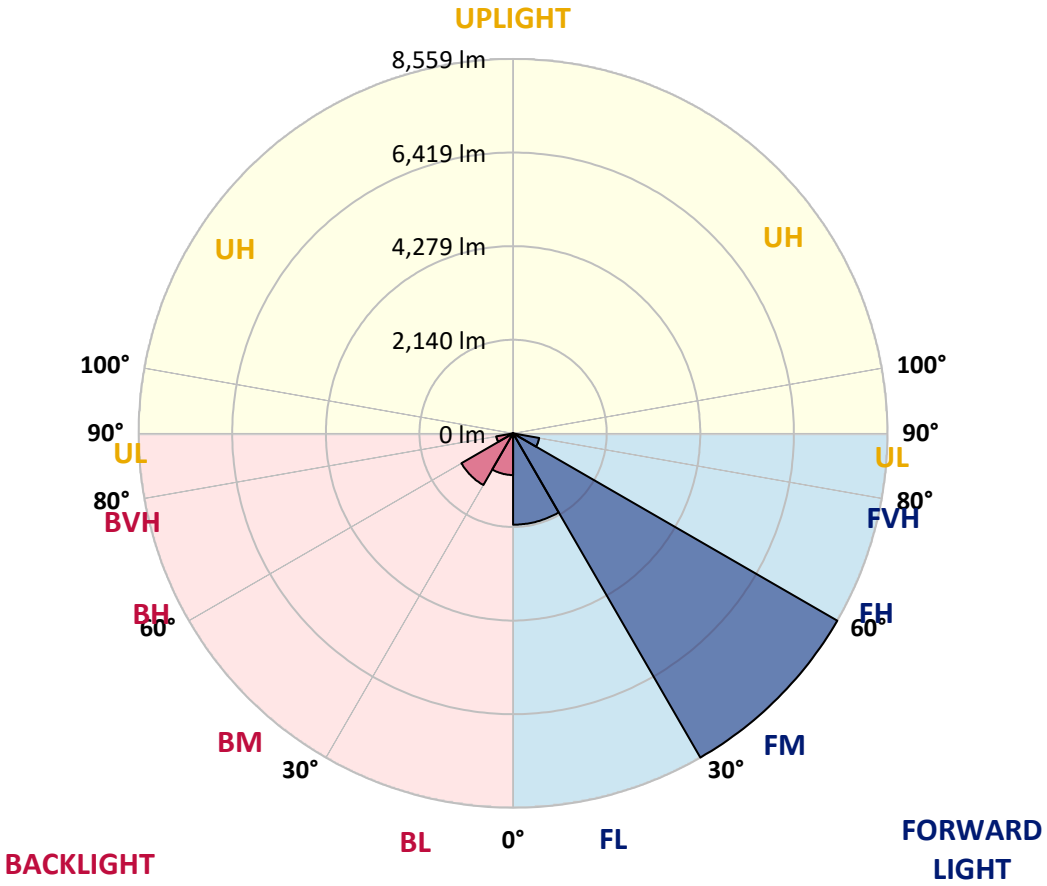
Scaled Data Report

REPORT NUMBER: P637473
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2088.0	14.9			
FM	(30°-60°)	8558.9	61.2			
FH	(60°-80°)	605.8	4.3			G0/660
FVH	(80°-90°)	11.0	0.1			G1/100
BL	(0°-30°)	952.8	6.8	B2/1000		
BM	(30°-60°)	1363.8	9.7	B2/2500		
BH	(60°-80°)	390.9	2.8	B1/500		G1/500
BVH	(80°-90°)	18.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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

Scaled Data Report

REPORT NUMBER: P637473
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	51°	55°	65°	75°	85°
0°	4165.3	4165.3	4165.3	4165.3	4165.3	4165.3	*4165.3*	4165.3	4165.3	4165.3	4165.3
2.5°	4641.8	4668.3	4627.4	4611.9	4586.5	4542.3	*4491.5*	4477.1	4367.6	4295.8	4215.1
5°	5108.3	5122.7	5089.5	5056.3	4993.3	4914.8	*4816.5*	4795.4	4596.5	4431.8	4260.4
7.5°	5212.2	5206.7	5235.4	5254.2	5246.5	5215.5	*5128.2*	5087.3	4849.6	4588.7	4335.6
10°	4801.0	4770.0	4876.1	5002.2	5153.6	5328.3	*5318.3*	5315.0	5108.3	4799.9	4431.8
12.5°	4256.0	4240.5	4326.7	4484.8	4771.1	5158.0	*5302.9*	5415.6	5341.5	5001.1	4539.0
15°	3944.3	3938.7	3997.3	4111.2	4338.9	4827.5	*5137.0*	5360.3	5541.6	5216.6	4652.8
17.5°	3887.9	3891.2	3911.1	3976.3	4139.9	4542.3	*4900.5*	5212.2	5697.5	5453.2	4795.4
20°	4052.6	4074.7	4040.4	4050.4	4138.8	4439.5	*4739.1*	5063.0	5797.0	5690.9	4949.1
22.5°	4418.5	4410.8	4335.6	4291.4	4292.5	4502.5	*4721.4*	4993.3	5862.2	5921.9	5088.4
25°	4833.0	4824.2	4734.7	4636.3	4574.4	4673.9	*4848.5*	5067.4	5920.8	6133.0	5200.0
27.5°	5322.8	5295.1	5195.6	5069.6	4932.5	4975.6	*5093.9*	5267.5	6011.4	6340.9	5274.1
30°	5797.0	5829.0	5686.4	5537.2	5392.4	5365.9	*5434.4*	5591.4	6196.1	6584.1	5362.5
32.5°	6426.0	6414.9	6256.9	6062.3	5855.6	5835.7	*5889.8*	6033.6	6527.7	6920.1	5497.4
35°	7187.6	7189.9	6965.5	6702.4	6408.3	6355.2	*6445.9*	6585.2	7021.8	7375.6	5710.8
37.5°	7979.2	7975.8	7780.2	7481.7	7080.4	7005.2	*7109.2*	7213.1	7639.8	7995.7	6042.4
40°	8534.1	8556.2	8464.4	8307.5	7927.2	7743.7	*7835.4*	7907.3	8311.9	8725.3	6479.1
42.5°	8849.1	8882.3	8902.2	8996.2	8796.1	8600.4	*8567.3*	8604.8	8912.2	9403.0	6889.2
45°	8916.6	8960.8	9105.6	9453.8	9531.2	9475.9	*9367.6*	9277.0	9359.9	9883.8	7157.8
47.5°	8619.2	8696.6	9006.1	9615.2	10067.3	10240.9	*10120.4*	9982.2	9618.5	10007.7	7130.2
50°	7440.8	7531.4	8229.0	9285.8	10143.6	10775.9	*10787.0*	10582.5	9587.6	9650.6	6783.1
52.5°	*5891.0*	*5952.9*	*6351.9*	*7871.9*	*9395.2*	*10753.8*	*11196.0*	*10977.1*	*9438.3*	*9204.0*	*6348.6*
55°	3520.9	3620.4	3992.9	5193.4	7319.2	9531.2	*10473.1*	10579.2	9365.4	8829.2	6052.3
57.5°	1188.4	1237.0	1593.0	2293.8	4313.5	6978.7	*8091.9*	8523.0	8502.0	8256.6	5474.2
60°	566.0	577.0	648.9	870.0	1726.7	3646.9	*4789.9*	5287.4	5740.6	5785.9	3405.9
62.5°	431.1	437.8	474.2	521.8	694.2	1536.6	*2195.4*	2575.7	2751.5	2361.2	1240.3
65°	360.4	365.9	393.5	423.4	472.0	665.5	*842.4*	971.7	875.5	682.1	591.4
67.5°	300.7	305.1	326.1	358.2	391.3	445.5	*467.6*	480.9	504.1	566.0	543.9
70°	235.5	239.9	262.0	289.6	321.7	335.0	*356.0*	369.2	415.6	495.2	493.0
72.5°	181.3	186.8	199.0	216.7	243.2	256.5	*279.7*	295.2	321.7	385.8	412.3
75°	132.7	136.0	147.0	152.6	155.9	152.6	*175.8*	193.5	228.8	253.1	259.8
77.5°	54.2	60.8	58.6	58.6	69.6	84.0	*96.2*	107.2	131.5	145.9	147.0
80°	22.1	24.3	28.7	32.1	38.7	49.7	*57.5*	61.9	73.0	81.8	88.4
82.5°	13.3	14.4	16.6	17.7	22.1	28.7	*33.2*	36.5	45.3	54.2	57.5
85°	6.6	6.6	7.7	8.8	11.1	13.3	*15.5*	17.7	23.2	28.7	32.1
87.5°	1.1	1.1	1.1	2.2	3.3	4.4	*5.5*	6.6	7.7	8.8	11.1
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: P637473
CATALOG NUMBER: GWS-SA4C-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4165.3	4165.3	4165.3	4165.3	4165.3	4165.3	4165.3	4165.3	4165.3	4165.3	4165.3
2.5°	4167.6	4107.9	4038.2	3982.9	3918.8	3871.3	3803.9	3761.9	3722.1	3688.9	3664.6
5°	4172.0	4071.4	3926.6	3798.3	3665.7	3539.7	3410.3	3305.3	3211.3	3132.9	3126.2
7.5°	4197.4	4052.6	3826.0	3601.6	3342.9	3093.1	2843.2	2639.8	2485.1	2404.4	2387.8
10°	4240.5	4050.4	3723.2	3365.0	2923.9	2521.5	2225.3	2070.5	1981.0	1948.9	1937.9
12.5°	4285.8	4044.8	3591.6	3031.1	2418.7	2066.1	1903.6	1884.8	1901.4	1903.6	1902.5
15°	4341.1	4041.5	3425.8	2639.8	2049.5	1854.9	1866.0	1905.8	1944.5	1953.3	1953.3
17.5°	4408.5	4033.8	3200.3	2257.3	1818.5	1814.0	1872.6	1925.7	1962.2	1968.8	1968.8
20°	4479.3	4013.9	2922.8	1945.6	1724.5	1788.6	1851.6	1892.5	1918.0	1926.8	1927.9
22.5°	4527.9	3960.8	2603.3	1714.6	1665.9	1740.0	1785.3	1827.3	1827.3	1805.2	1798.6
25°	4537.9	3847.0	2257.3	1556.5	1596.3	1664.8	1711.2	1686.9	1641.6	1623.9	1622.8
27.5°	4501.4	3681.2	1915.7	1443.7	1512.3	1580.8	1573.1	1537.7	1517.8	1500.1	1506.7
30°	4457.2	3482.2	1619.5	1350.9	1415.0	1482.4	1455.9	1443.7	1429.3	1409.5	1413.9
32.5°	4427.3	3260.0	1391.8	1279.0	1349.8	1360.8	1379.6	1378.5	1365.2	1327.6	1325.4
35°	4436.2	3035.6	1239.2	1220.4	1295.6	1291.2	1326.5	1319.9	1228.2	1176.2	1172.9
37.5°	4506.9	2820.0	1149.7	1174.0	1209.4	1237.0	1268.0	1188.4	1156.3	1123.1	1125.3
40°	4641.8	2619.9	1101.0	1148.6	1157.4	1198.3	1126.5	1125.3	1111.0	1081.1	1080.0
42.5°	4794.3	2450.8	1067.9	1136.4	1124.2	1132.0	1055.7	1064.6	1063.4	1044.7	1039.1
45°	4887.2	2294.9	1041.3	1091.1	1094.4	1017.0	993.8	1003.8	1009.3	999.3	998.2
47.5°	4791.0	2115.8	1013.7	1021.4	1050.2	965.1	936.3	937.4	947.4	948.5	944.1
50°	4521.3	1915.7	980.5	961.7	943.0	910.9	884.4	878.8	888.8	898.7	902.0
52.5°	*4173.1*	*1724.5*	*925.3*	*896.5*	*852.3*	*852.3*	*840.1*	*822.5*	*835.7*	*849.0*	*853.4*
55°	3917.7	1583.0	846.8	814.7	766.1	782.7	780.4	765.0	782.7	792.6	795.9
57.5°	3394.8	1272.4	745.1	735.1	694.2	714.1	718.5	698.6	689.8	692.0	695.3
60°	2015.2	821.4	672.1	671.0	634.5	657.7	671.0	651.1	624.6	627.9	632.3
62.5°	904.3	627.9	580.4	575.9	574.8	604.7	619.1	600.3	562.7	566.0	570.4
65°	569.3	542.8	504.1	504.1	521.8	547.2	558.3	542.8	499.7	494.1	498.6
67.5°	528.4	505.2	465.4	457.7	466.5	487.5	488.6	458.8	433.3	428.9	428.9
70°	474.2	456.6	417.9	402.4	399.1	398.0	394.6	386.9	370.3	365.9	368.1
72.5°	392.4	380.3	356.0	339.4	330.5	329.4	316.2	309.5	295.2	292.9	291.8
75°	259.8	263.1	263.1	260.9	253.1	249.8	235.5	228.8	212.2	205.6	204.5
77.5°	153.7	157.0	161.4	162.5	161.4	161.4	148.1	140.4	123.8	115.0	112.8
80°	94.0	96.2	98.4	101.7	97.3	94.0	81.8	74.1	66.3	60.8	59.7
82.5°	60.8	63.0	64.1	66.3	64.1	59.7	49.7	45.3	39.8	35.4	34.3
85°	34.3	35.4	37.6	37.6	34.3	31.0	25.4	22.1	18.8	16.6	16.6
87.5°	12.2	12.2	12.2	13.3	11.1	9.9	6.6	4.4	3.3	3.3	3.3
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

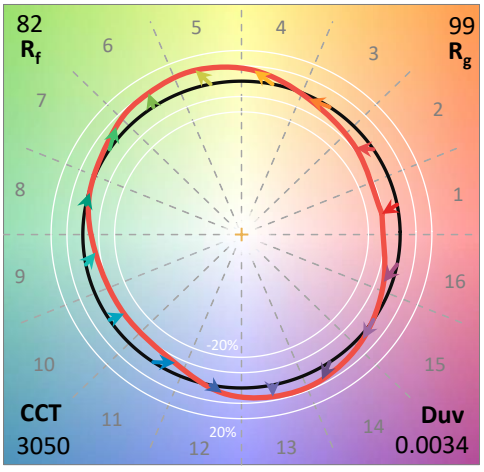
Test Information

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

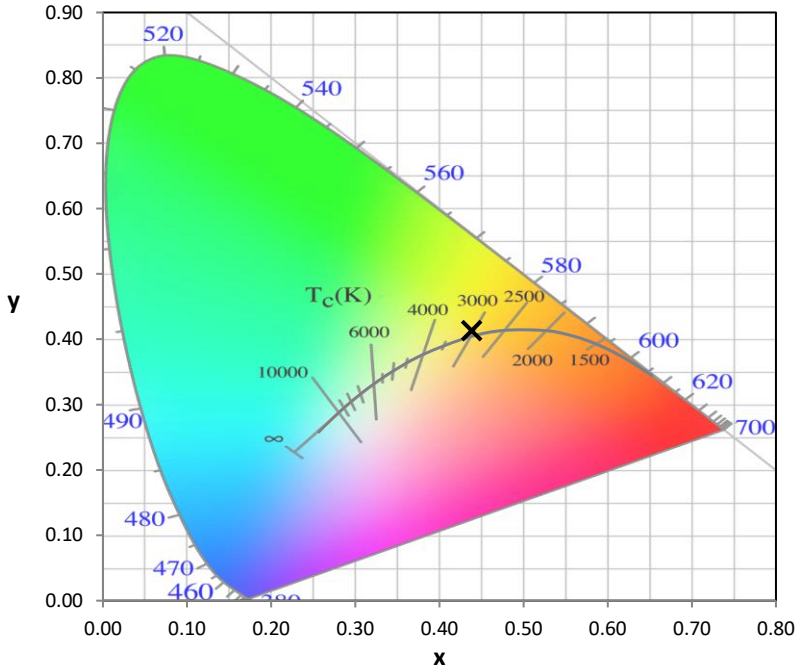
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

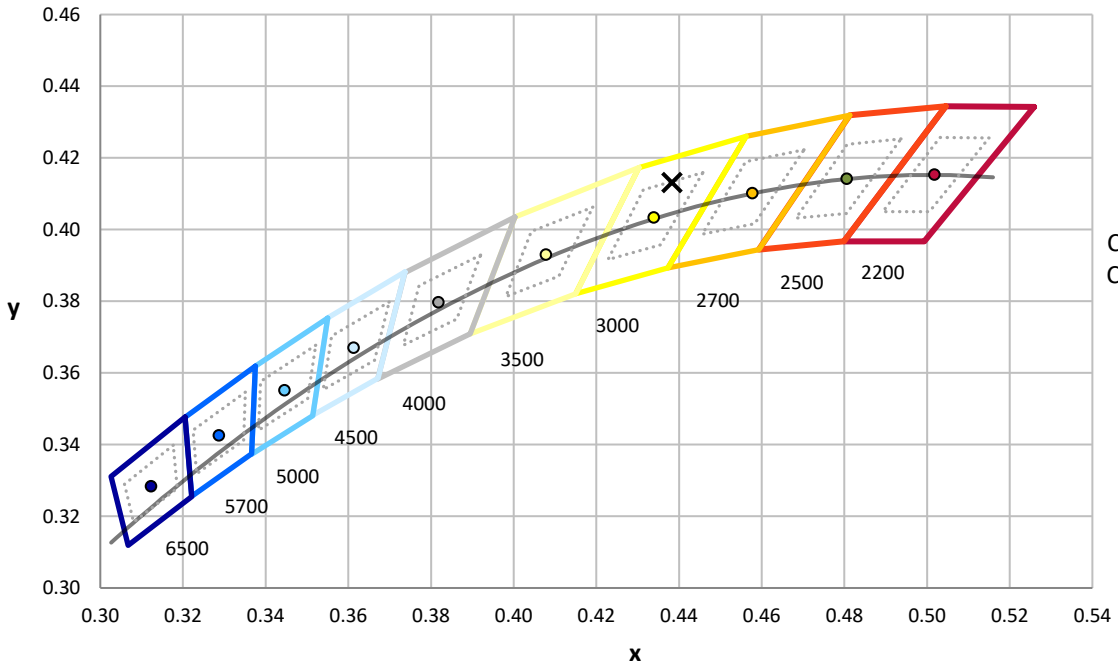
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

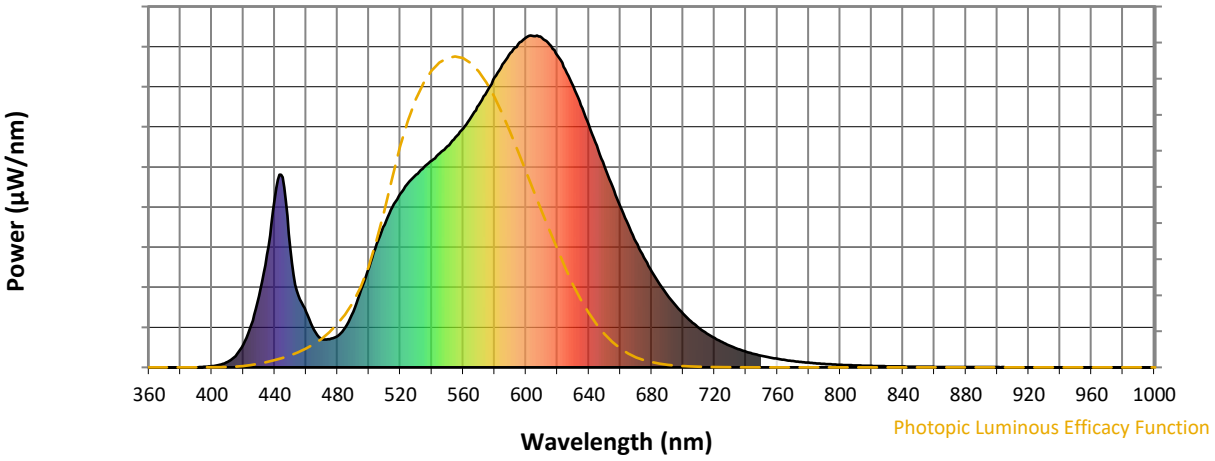


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

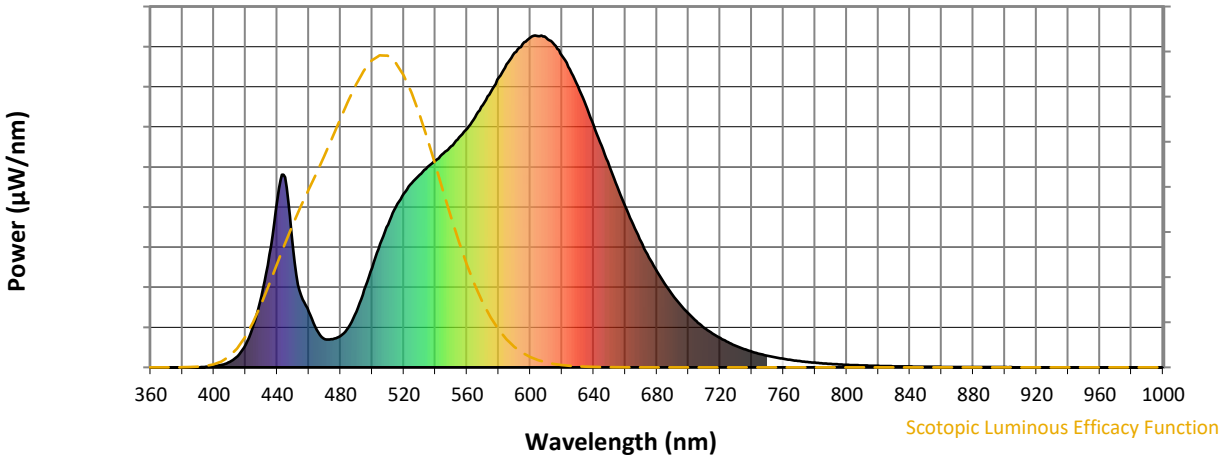


Photopic Lumens: NR

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

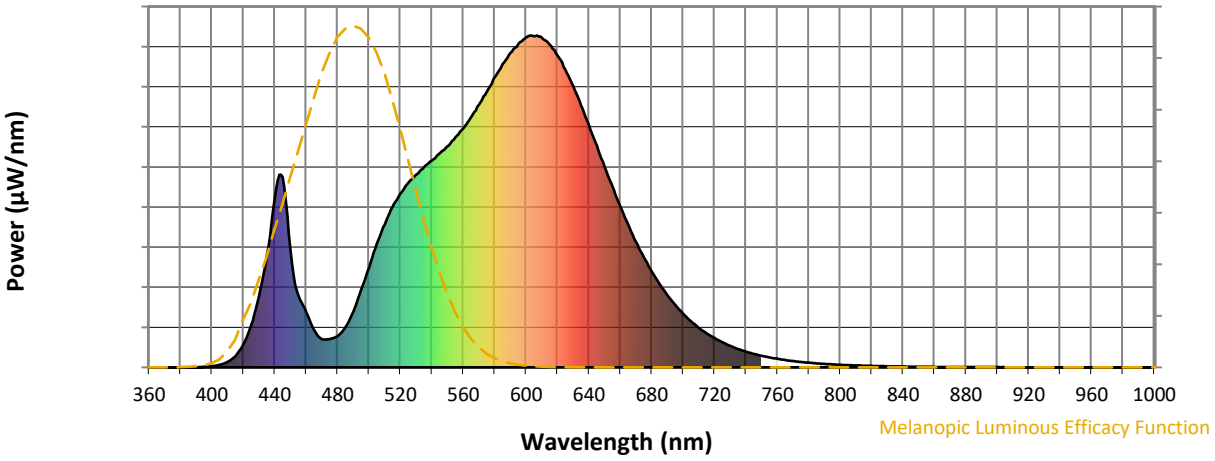


Scotopic Lumens: NR **S/P: 1.27**

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			

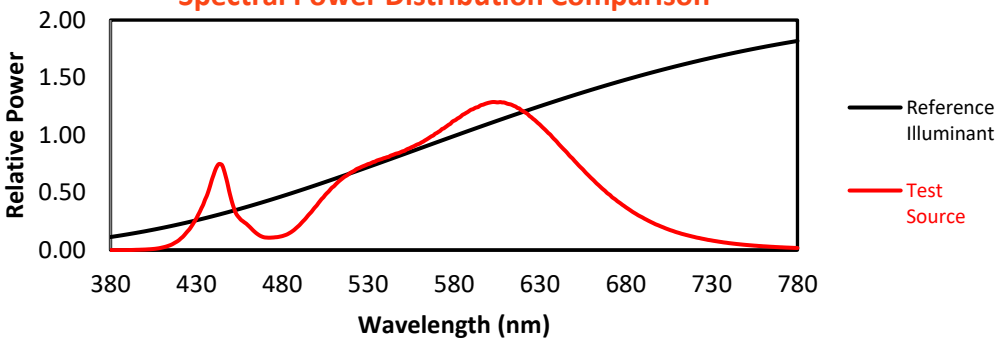
REPORT NUMBER: SP1-2408-195-9

TM-30-18

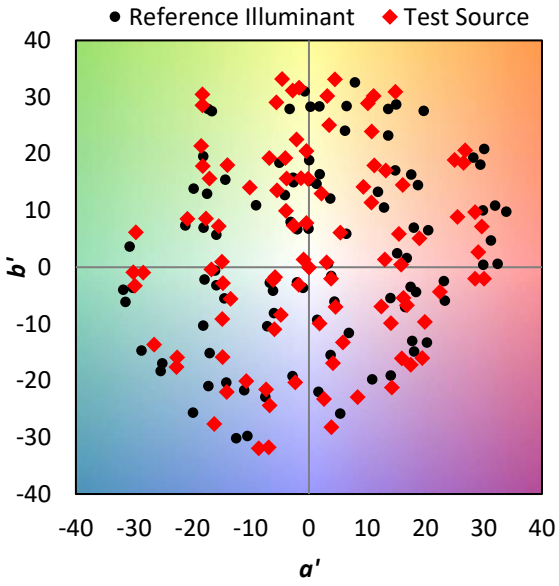
Summary

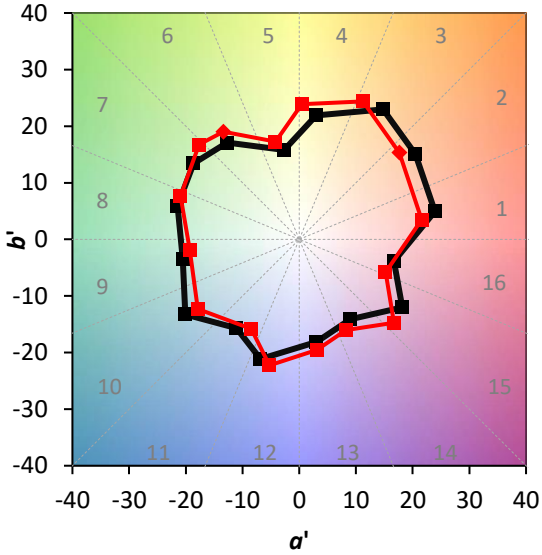
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

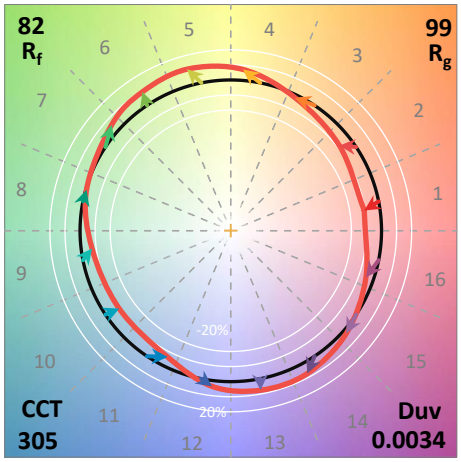
Spectral Power Distribution Comparison

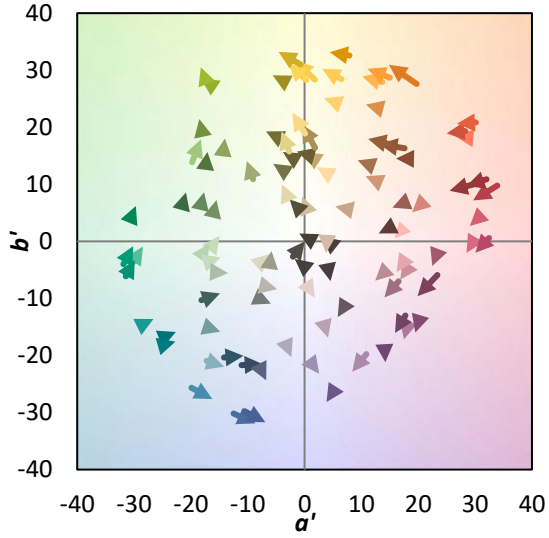


Color Vector Graphics







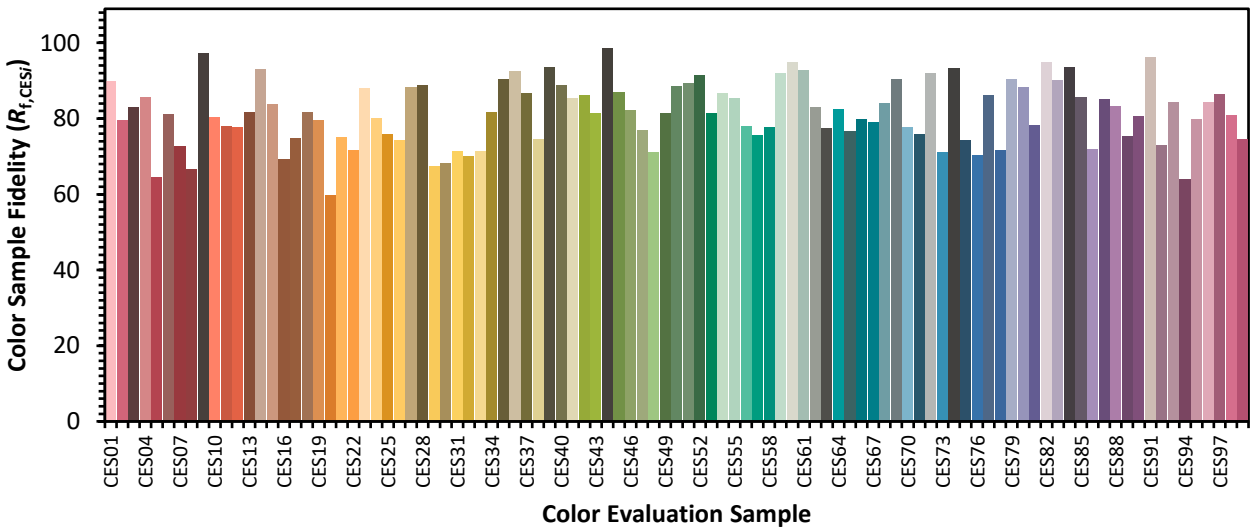


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

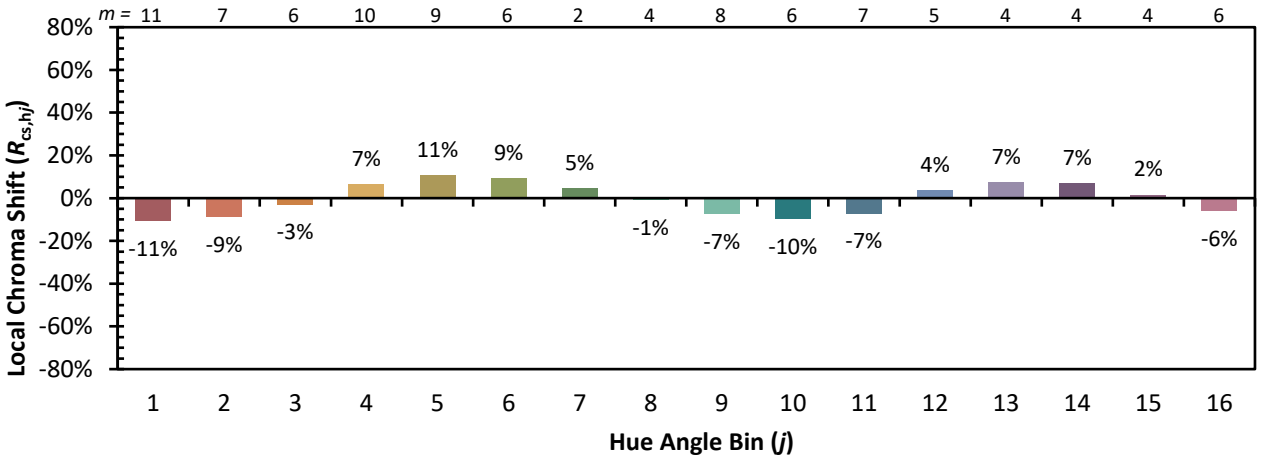
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

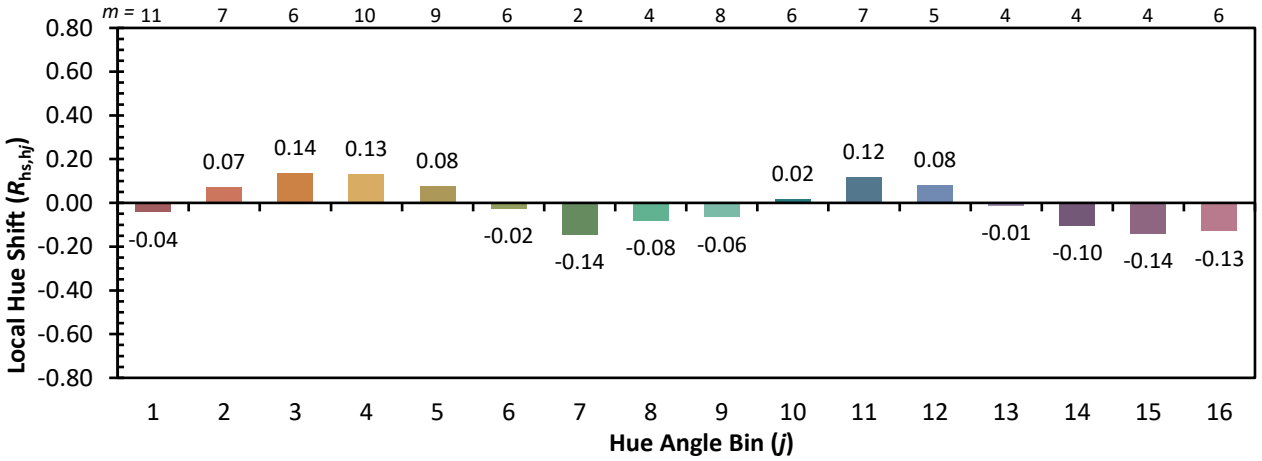


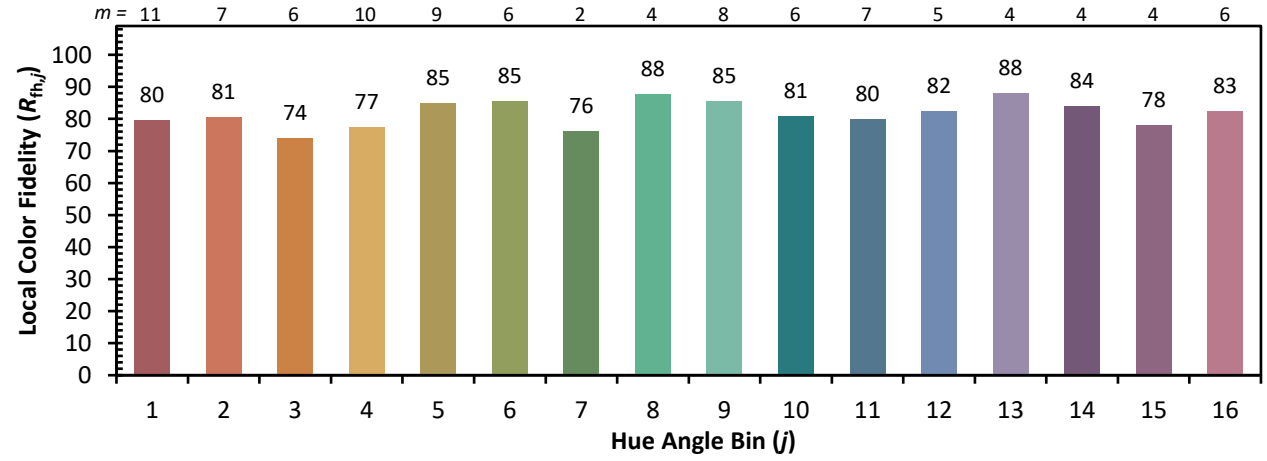
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



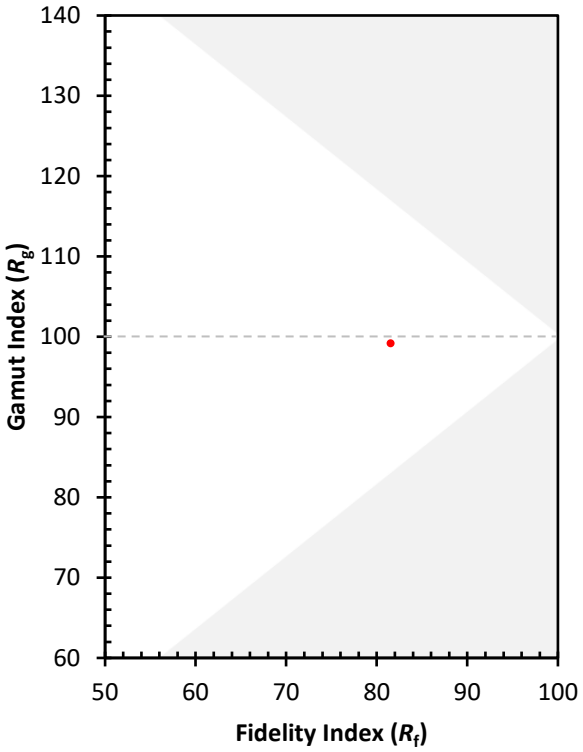


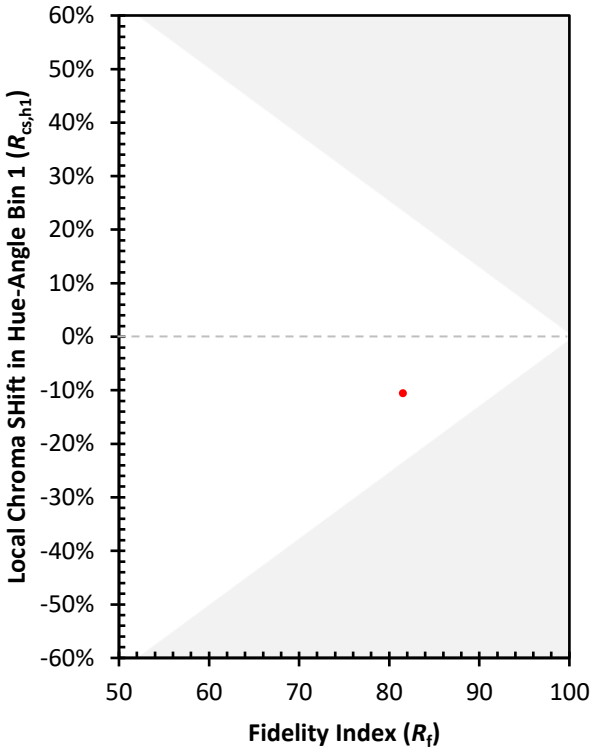


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)