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: P641442

Luminaire Tested: GWS-SA5F-830-U-SL2-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:	P641442
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-27)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5F-830-U-SL2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	32582.5 lumens
Efficiency:	N/A
Efficacy:	105.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G4

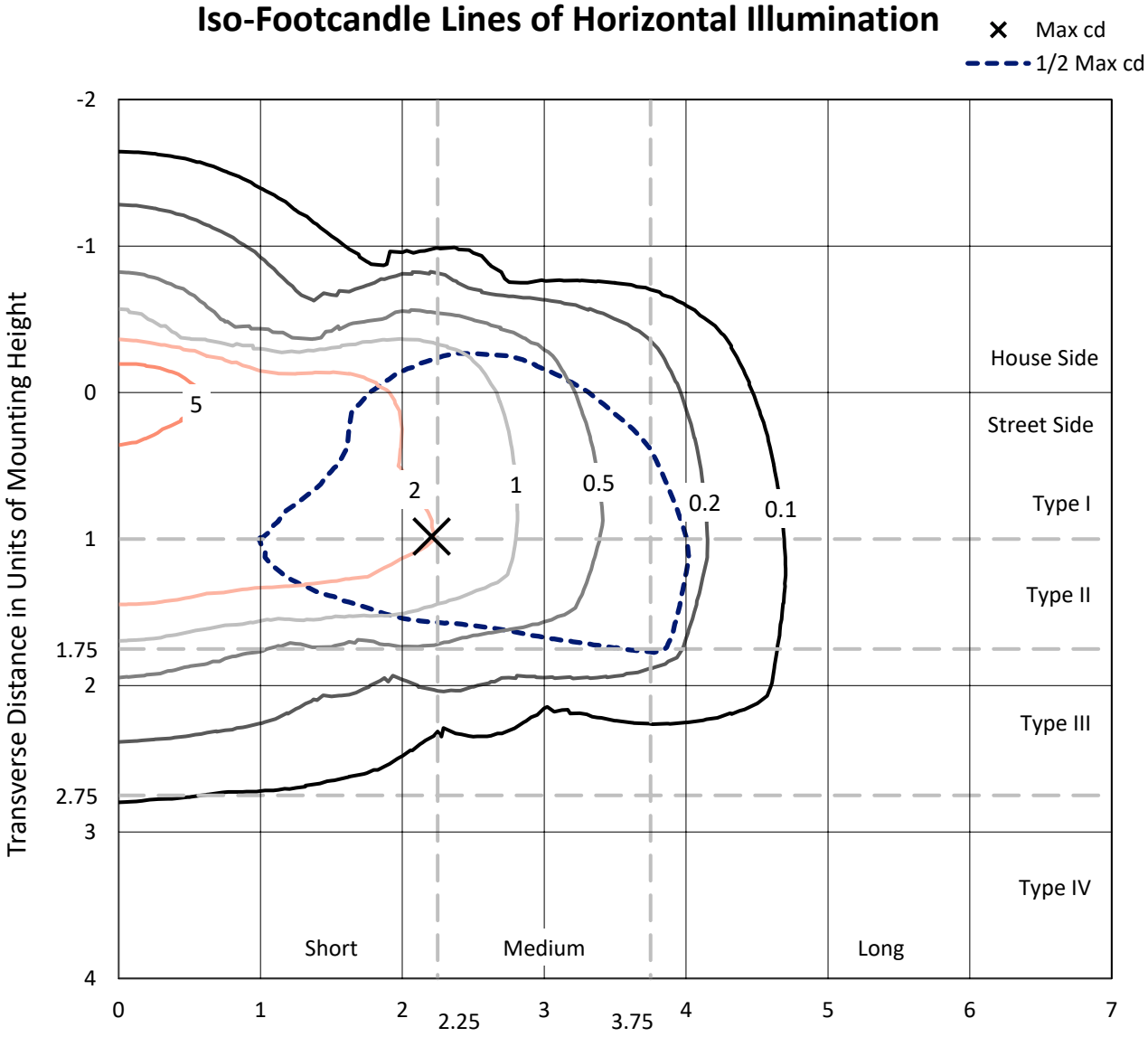
Input Watts (W):	310.3
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P641442
CATALOG NUMBER: GWS-SA5F-830-U-SL2-W

Iso-Footcandle Lines of Horizontal Illumination



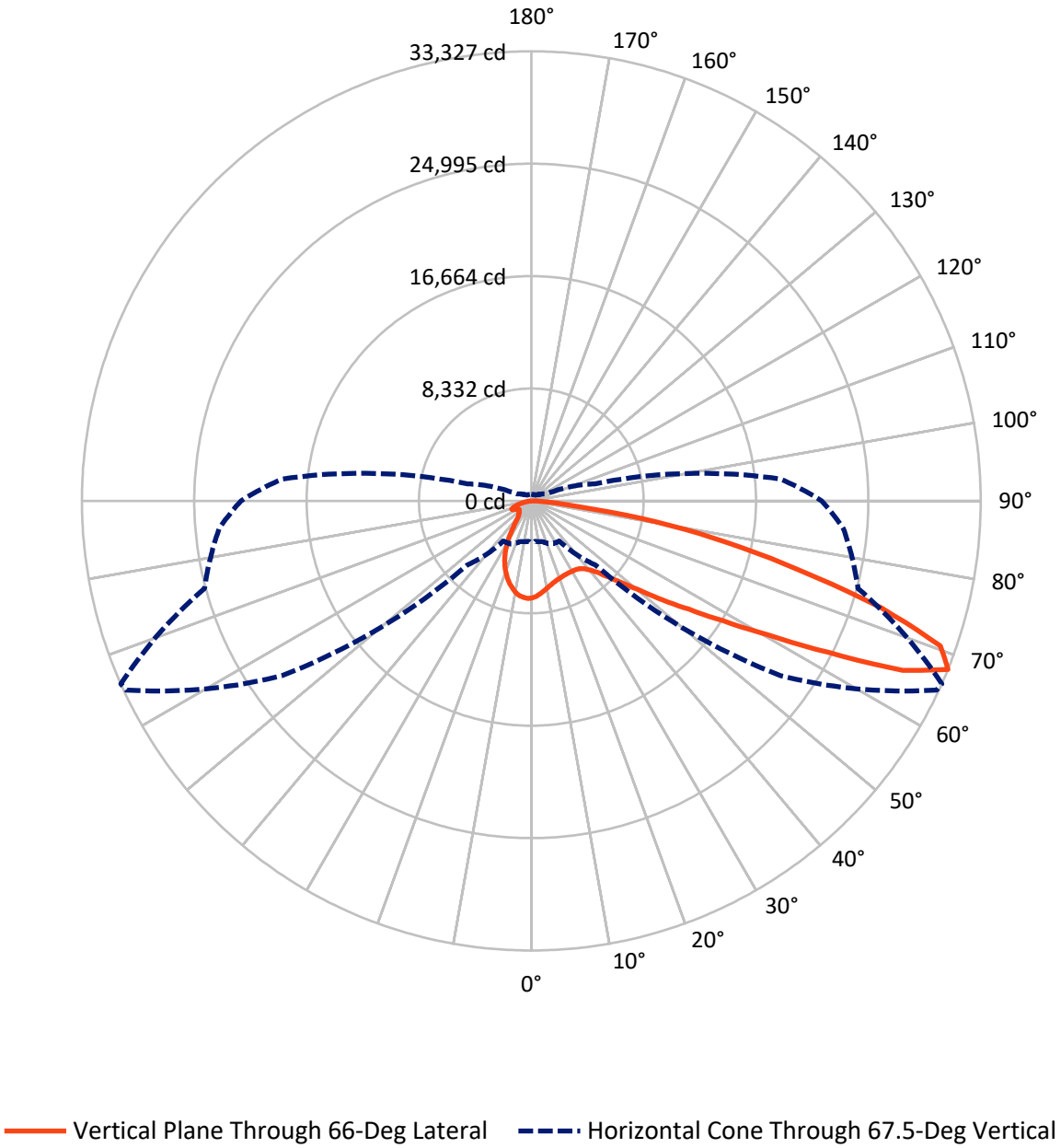
Based on 30 foot mounting height. Maximum calculated value = 8 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P641442
CATALOG NUMBER: GWS-SA5F-830-U-SL2-W

Luminous Intensity Polar Plot



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

Scaled Data Report

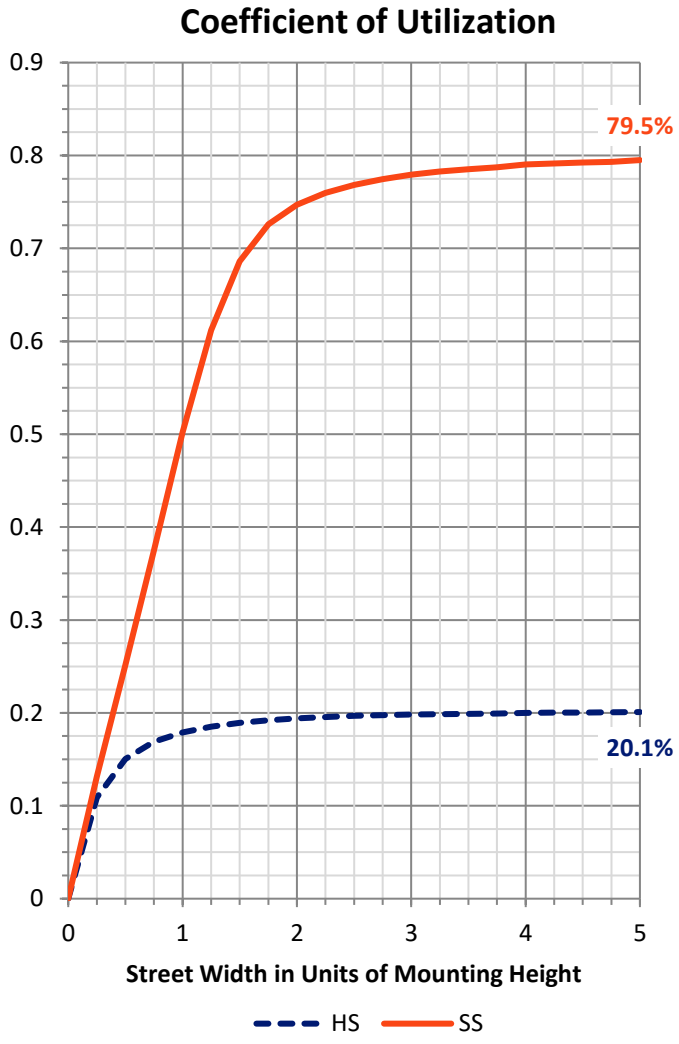
REPORT NUMBER: P641442
CATALOG NUMBER: GWS-SA5F-830-U-SL2-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6611.7	0.0	6611.7
	% Fixture	20.3	0.0	20.3
Street Side	Lumens	25970.8	0.0	25970.8
	% Fixture	79.7	0.0	79.7
Total	Lumens	32582.5	0.0	32582.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	631.9	1.9
10°-20°	1552.9	4.8
20°-30°	2134.5	6.6
30°-40°	2918.2	9.0
40°-50°	4421.9	13.6
50°-60°	6874.0	21.1
60°-70°	8368.9	25.7
70°-80°	5097.9	15.6
80°-90°	582.3	1.8
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°	32582.5	100.0
0°-180°	32582.5	100.0



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

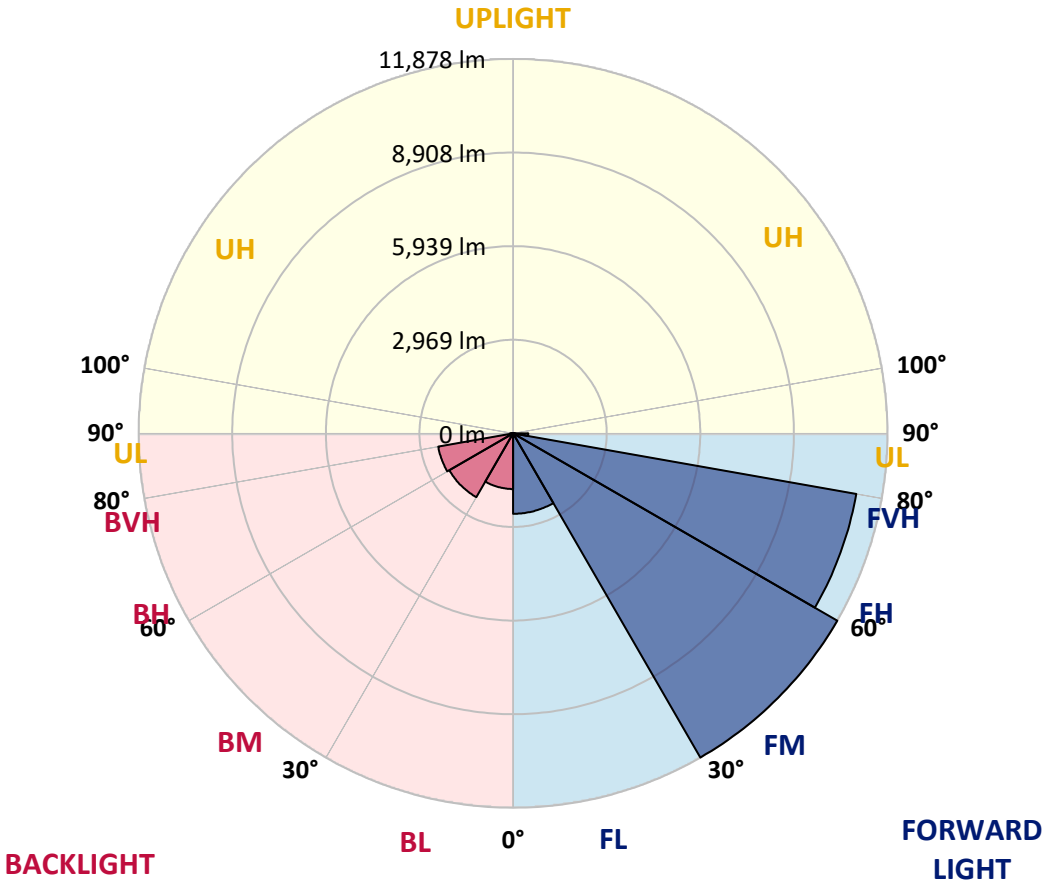
Scaled Data Report

REPORT NUMBER: P641442
CATALOG NUMBER: GWS-SA5F-830-U-SL2-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2553.0	7.8			
FM	(30°-60°)	11877.6	36.5			
FH	(60°-80°)	11056.1	33.9			G4/12000
FVH	(80°-90°)	484.1	1.5			G3/500
BL	(0°-30°)	1766.3	5.4	B3/2500		
BM	(30°-60°)	2336.5	7.2	B2/2500		
BH	(60°-80°)	2410.8	7.4	B3/2500		G3/2500
BVH	(80°-90°)	98.2	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-G4
Type II Short



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

Scaled Data Report

REPORT NUMBER: P641442
CATALOG NUMBER: GWS-SA5F-830-U-SL2-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	*7199.8*	7199.8	7199.8
2.5°	6743.4	6767.2	6752.9	6843.3	6848.0	6962.1	7026.3	7081.0	*7085.7*	7157.0	7204.6
5°	6282.3	6296.6	6296.6	6382.1	6439.2	6591.3	6738.7	6895.6	*6907.4*	7078.6	7209.3
7.5°	5909.1	5923.4	5913.9	6028.0	6101.7	6270.4	6458.2	6698.3	*6722.0*	6997.8	7226.0
10°	5616.8	5612.0	5635.8	5740.4	5835.4	6037.5	6246.6	6520.0	*6555.7*	6905.1	7245.0
12.5°	5417.1	5421.8	5436.1	5545.4	5647.7	5847.3	6063.6	6360.7	*6398.8*	6798.1	7235.5
15°	5322.0	5312.5	5324.4	5424.2	5521.7	5697.6	5921.0	6227.6	*6265.7*	6703.0	7237.8
17.5°	5300.6	5293.5	5291.1	5362.4	5436.1	5600.1	5814.0	6125.4	*6165.8*	6641.2	7252.1
20°	5367.2	5357.7	5331.5	5362.4	5393.3	5531.2	5738.0	6051.7	*6096.9*	6600.8	7280.6
22.5°	5550.2	5533.6	5493.2	5455.1	5414.7	5497.9	5690.4	5997.1	*6042.2*	6574.7	7309.1
25°	5828.3	5814.0	5771.3	5685.7	5538.3	5524.1	5680.9	5973.3	*6018.5*	6555.7	7321.0
27.5°	6211.0	6189.6	6146.8	6023.2	5783.1	5621.5	5716.6	5970.9	*6013.7*	6534.3	7309.1
30°	6665.0	6650.7	6627.0	6477.2	6156.3	5828.3	5797.4	5989.9	*6023.2*	6522.4	7285.4
32.5°	7126.1	7111.9	7130.9	7059.6	6665.0	6170.6	5973.3	6042.2	*6066.0*	6520.0	7264.0
35°	7532.6	7549.2	7687.1	7699.0	7311.5	6634.1	6251.4	6163.5	*6168.2*	6567.5	7273.5
37.5°	7958.1	8022.2	8202.9	8357.4	8034.1	7247.3	6665.0	6391.6	*6386.9*	6688.8	7332.9
40°	8521.4	8549.9	8780.5	9070.5	8868.4	8088.8	7252.1	6764.8	*6731.5*	6936.0	7492.2
42.5°	9070.5	9139.4	9507.8	9840.6	9774.1	9037.2	7991.3	7323.4	*7264.0*	7373.3	7820.2
45°	9769.3	9835.9	10249.4	10677.3	10798.5	10109.2	8937.4	8117.3	*8057.9*	8031.7	8421.6
47.5°	10468.1	10537.1	10907.9	11525.9	11951.3	11449.8	10168.6	9165.6	*9068.1*	8965.9	9329.6
50°	10938.8	11019.6	11373.7	12115.4	13113.7	13123.2	11628.1	10539.4	*10415.8*	10254.2	10608.4
52.5°	10922.1	10974.4	11311.9	12167.7	13950.4	15046.1	13581.9	12288.9	*12189.0*	11837.3	12146.3
55°	10064.0	10142.5	10482.4	11552.0	14040.7	16869.3	16453.3	14352.1	*14173.8*	13543.9	13883.8
57.5°	8340.7	8407.3	8749.6	10068.8	13239.7	17803.4	20099.6	16981.0	*16736.2*	15402.7	15794.9
60°	6296.6	6215.7	6377.4	7532.6	11323.8	17827.2	23318.0	20546.4	*20137.6*	17389.8	17717.8
62.5°	4725.4	4644.6	4680.2	5005.9	7677.6	16386.8	25153.0	25423.9	*24748.9*	19633.7	19569.5
65°	3734.2	3689.0	3791.2	4014.7	4475.8	12479.0	25167.2	30698.4	*30272.9*	22234.1	21468.7
67.5°	*3042.5*	*3014.0*	*3118.6*	*3532.2*	*3629.6*	*6705.4*	*22566.8*	*33160.9*	*33327.3*	*25081.7*	*23230.0*
70°	2450.6	2407.9	2571.9	3116.2	3375.3	4057.5	16165.7	31905.9	*32174.5*	26778.8	22733.2
72.5°	1692.4	1694.8	1778.0	2524.3	3258.8	3503.6	9144.2	26567.3	*27149.6*	25240.9	19985.5
75°	1140.9	1150.4	1174.2	1666.2	3002.1	3399.1	4872.8	20113.8	*20525.0*	20862.6	16519.9
77.5°	689.3	694.1	748.7	1007.8	2070.3	3173.2	3301.6	14580.3	*14903.5*	13753.1	10239.9
80°	399.3	416.0	465.9	675.1	1397.7	2384.1	2555.2	8939.7	*9305.8*	6113.5	3254.1
82.5°	175.9	187.8	254.3	392.2	815.3	2027.5	1994.3	3532.2	*3479.9*	1704.3	1129.1
85°	30.9	38.0	54.7	123.6	299.5	1069.6	1547.4	1559.3	*1466.6*	646.5	468.3
87.5°	0.0	0.0	0.0	0.0	0.0	7.1	232.9	418.3	*416.0*	183.0	161.6
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: P641442
CATALOG NUMBER: GWS-SA5F-830-U-SL2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8	7199.8
2.5°	7235.5	7171.3	7228.3	7235.5	7223.6	7214.1	7142.8	7081.0	7073.8	7007.3	7007.3
5°	7261.6	7202.2	7230.7	7176.0	7090.5	7002.5	6850.4	6745.8	6698.3	6612.7	6612.7
7.5°	7297.3	7235.5	7202.2	7066.7	6867.0	6674.5	6429.7	6225.3	6142.1	6020.8	6016.1
10°	7330.5	7252.1	7138.0	6874.2	6555.7	6249.0	5892.5	5602.5	5405.2	5260.2	5260.2
12.5°	7328.2	7226.0	7000.1	6610.3	6170.6	5726.1	5250.7	4813.3	4551.9	4326.1	4311.8
15°	7323.4	7183.2	6824.2	6303.7	5721.3	5105.7	4459.2	3888.7	3501.3	3280.2	3261.2
17.5°	7318.7	7128.5	6627.0	5954.3	5174.6	4335.6	3482.2	2864.2	2541.0	2405.5	2410.2
20°	7318.7	7066.7	6415.4	5552.6	4544.7	3413.3	2555.2	2106.0	2025.2	2032.3	2039.4
22.5°	7297.3	6990.6	6180.1	5115.2	3843.5	2510.1	1884.9	1732.8	1775.6	1842.1	1851.7
25°	7247.3	6864.7	5906.7	4630.3	3009.2	1827.9	1537.9	1509.4	1587.8	1671.0	1694.8
27.5°	7168.9	6719.7	5600.1	4062.2	2215.3	1469.0	1352.5	1350.1	1411.9	1473.7	1495.1
30°	7085.7	6558.0	5276.8	3430.0	1604.4	1278.8	1233.6	1233.6	1264.5	1302.6	1297.8
32.5°	6988.3	6394.0	4929.8	2771.5	1307.3	1171.8	1157.6	1150.4	1155.2	1169.5	1169.5
35°	6905.1	6249.0	4573.3	2075.1	1171.8	1112.4	1098.2	1081.5	1074.4	1064.9	1069.6
37.5°	6874.2	6134.9	4204.8	1564.0	1105.3	1069.6	1045.9	1022.1	1005.5	1000.7	998.3
40°	6924.1	6087.4	3836.4	1288.3	1057.7	1024.5	998.3	967.4	953.2	953.2	953.2
42.5°	7119.0	6123.0	3460.9	1164.7	1024.5	986.4	948.4	919.9	915.1	919.9	922.3
45°	7475.5	6260.9	3071.0	1102.9	995.9	948.4	903.2	881.9	881.9	886.6	886.6
47.5°	8112.6	6622.2	2686.0	1064.9	967.4	917.5	870.0	848.6	846.2	851.0	851.0
50°	9215.5	7273.5	2338.9	1038.7	946.0	893.7	846.2	817.7	810.5	808.2	808.2
52.5°	10606.0	8402.5	2117.9	1019.7	919.9	867.6	820.1	782.0	767.8	760.6	760.6
55°	12286.5	9907.2	2117.9	1005.5	886.6	836.7	782.0	744.0	722.6	713.1	713.1
57.5°	14190.4	11659.0	2483.9	993.6	860.5	801.0	741.6	703.6	679.8	665.5	665.5
60°	16127.7	13510.6	3389.5	976.9	836.7	755.9	696.4	660.8	629.9	613.3	610.9
62.5°	18136.2	15550.1	4582.8	986.4	820.1	713.1	648.9	608.5	582.4	565.7	563.3
65°	19976.0	17492.0	5626.3	1060.1	822.4	675.1	594.2	558.6	537.2	515.8	513.4
67.5°	*21537.6*	*18564.0*	*4894.2*	*1209.9*	*872.3*	*629.9*	*539.6*	*503.9*	*484.9*	*470.6*	*468.3*
70°	20444.2	16928.7	2776.3	1302.6	941.3	582.4	477.8	454.0	435.0	425.5	423.1
72.5°	17482.5	14333.1	1856.4	1150.4	858.1	520.6	420.7	401.7	387.4	375.6	373.2
75°	14161.9	11366.6	1419.0	943.7	667.9	423.1	361.3	347.0	332.8	320.9	318.5
77.5°	8378.8	6567.5	1045.9	746.4	470.6	330.4	299.5	287.6	273.4	263.8	261.5
80°	2674.1	2281.9	663.2	513.4	311.4	254.3	230.6	221.1	206.8	194.9	192.5
82.5°	1019.7	881.9	351.8	261.5	206.8	173.5	154.5	145.0	135.5	123.6	121.2
85°	451.6	423.1	194.9	140.2	111.7	85.6	76.1	71.3	59.4	49.9	47.5
87.5°	159.3	159.3	83.2	40.4	23.8	11.9	7.1	2.4	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

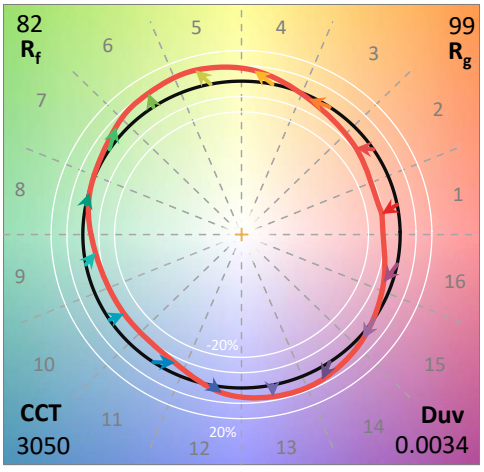
Test Information

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

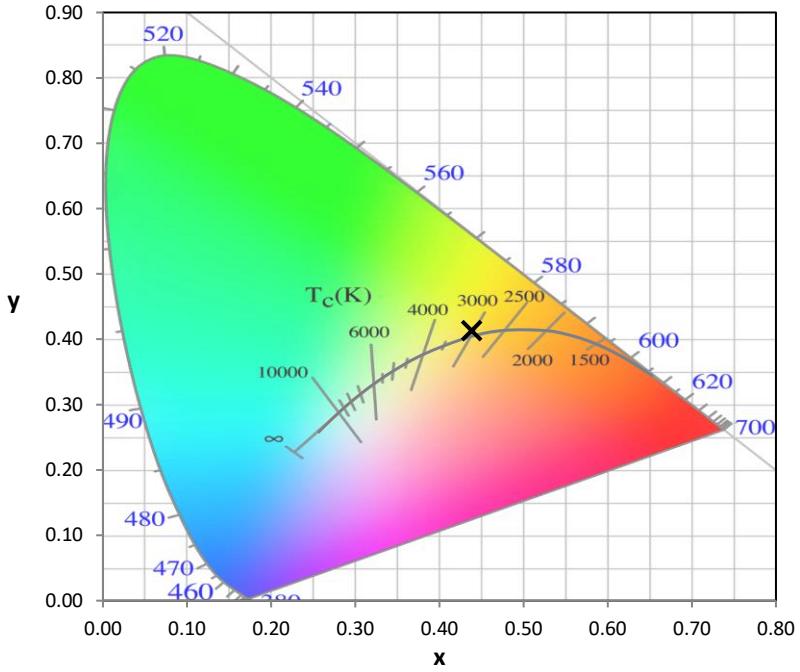
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

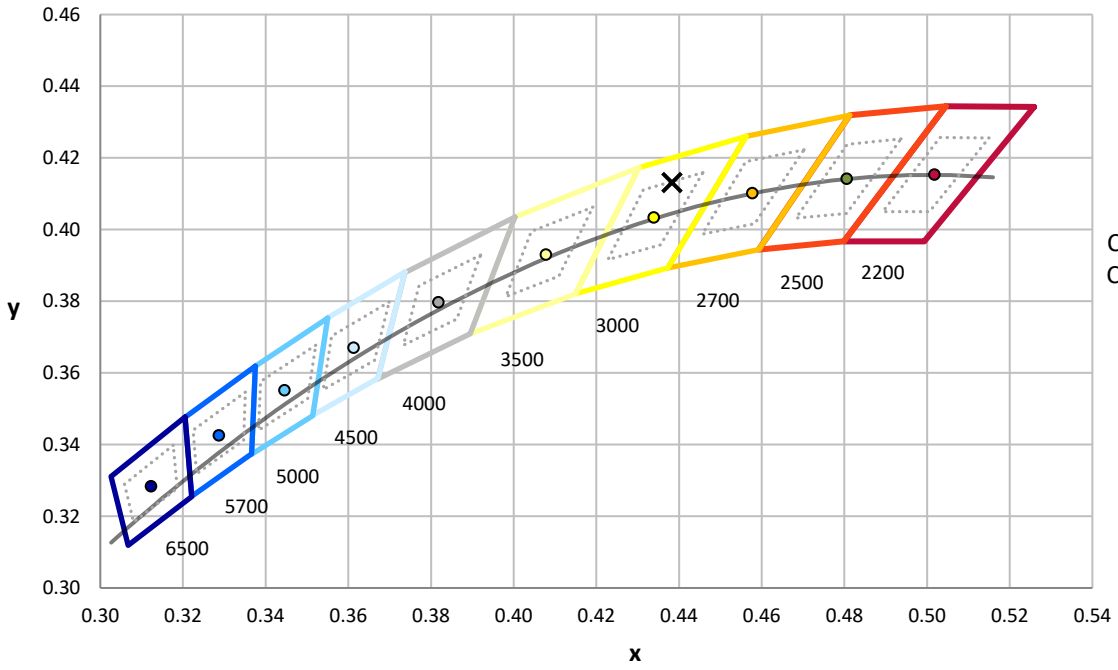
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

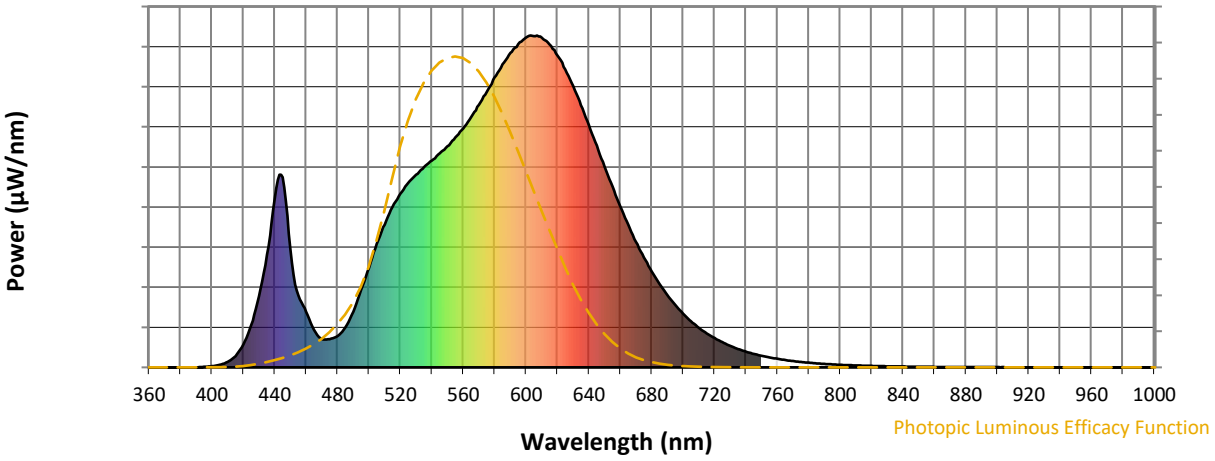


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

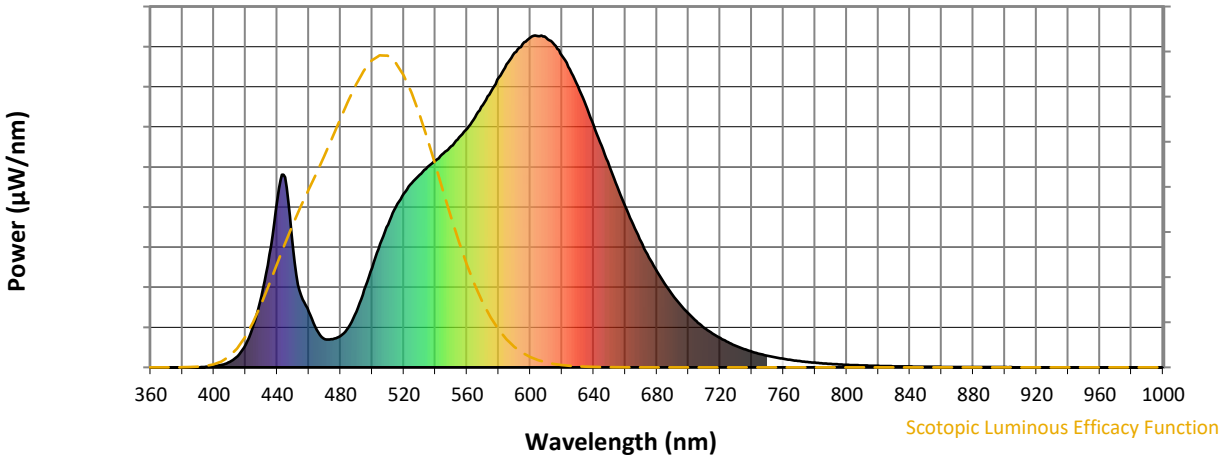


Photopic Lumens: NR

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

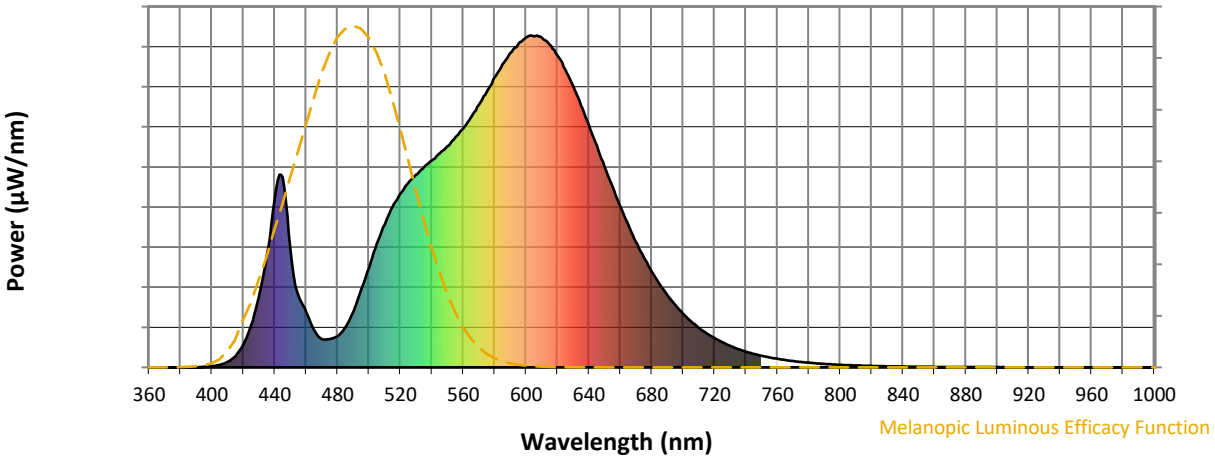


Scotopic Lumens: NR **S/P: 1.27**

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			

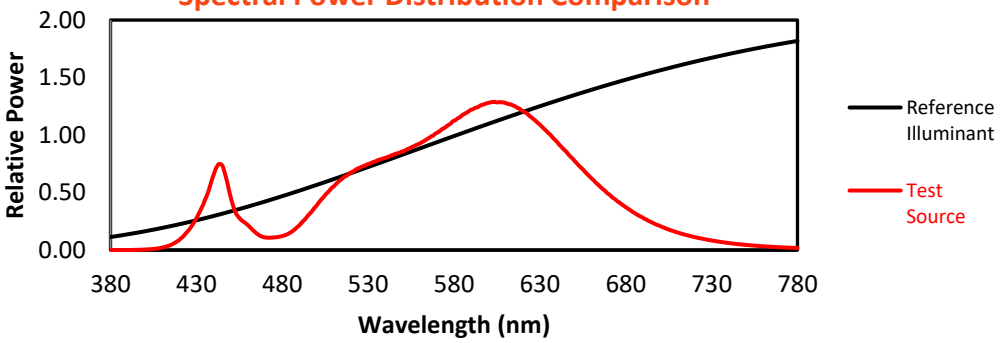
REPORT NUMBER: SP1-2408-195-9

TM-30-18

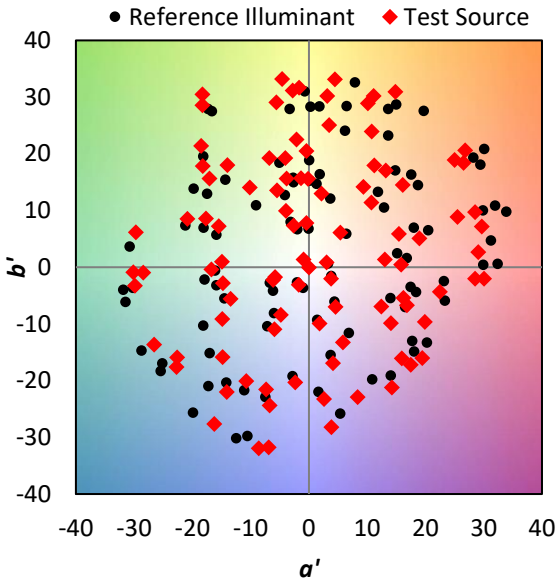
Summary

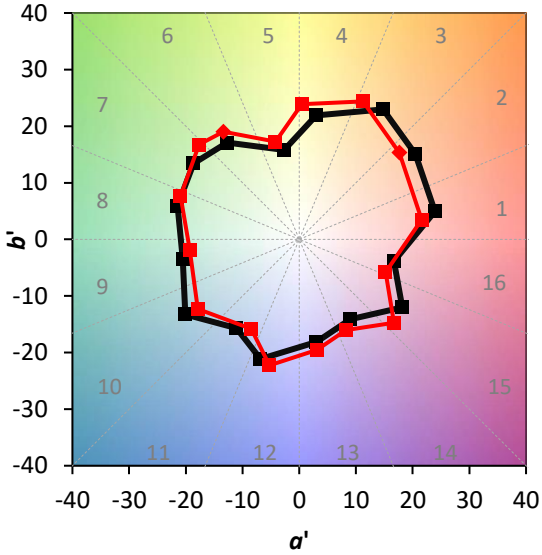
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

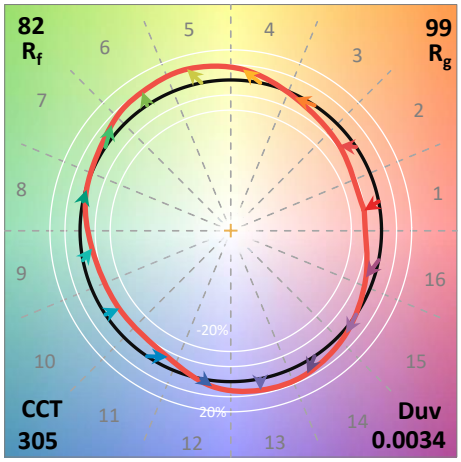
Spectral Power Distribution Comparison

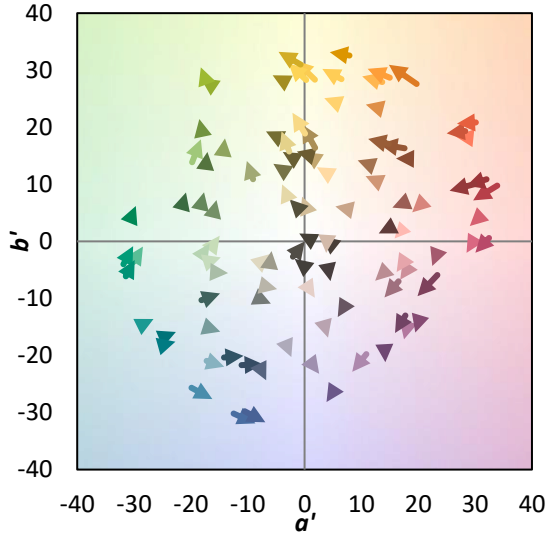


Color Vector Graphics







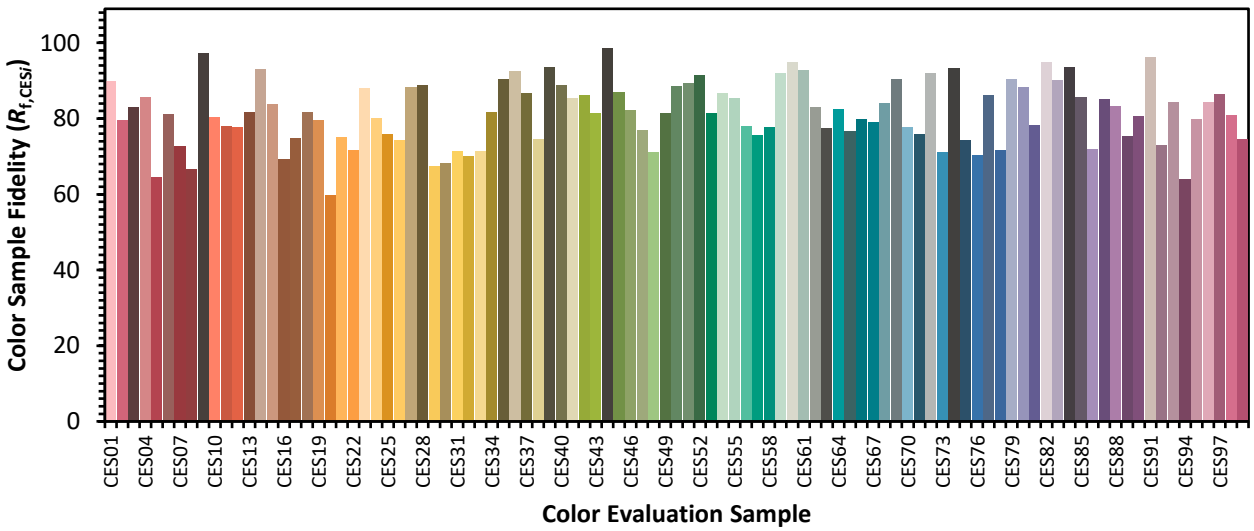


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

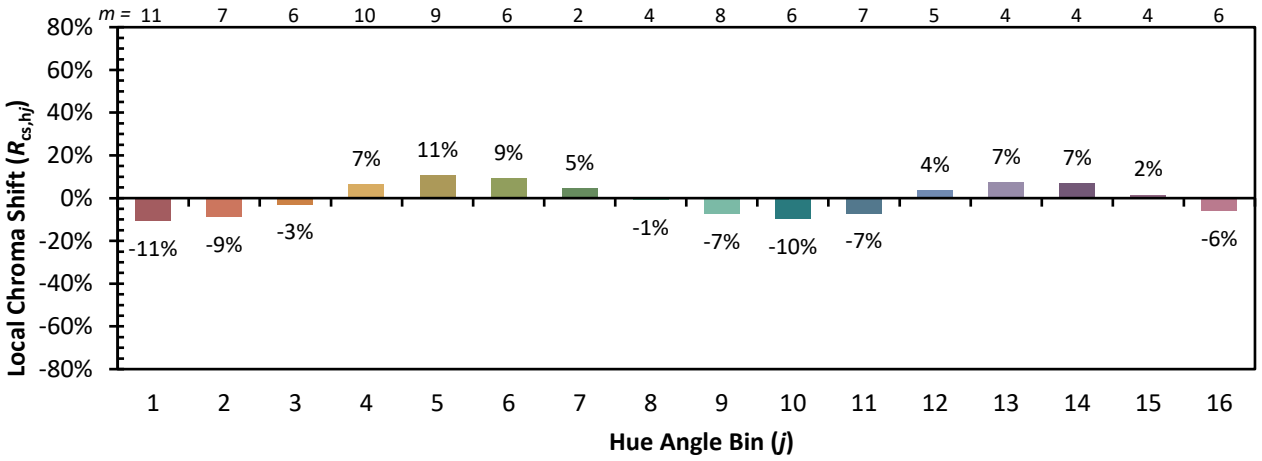
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

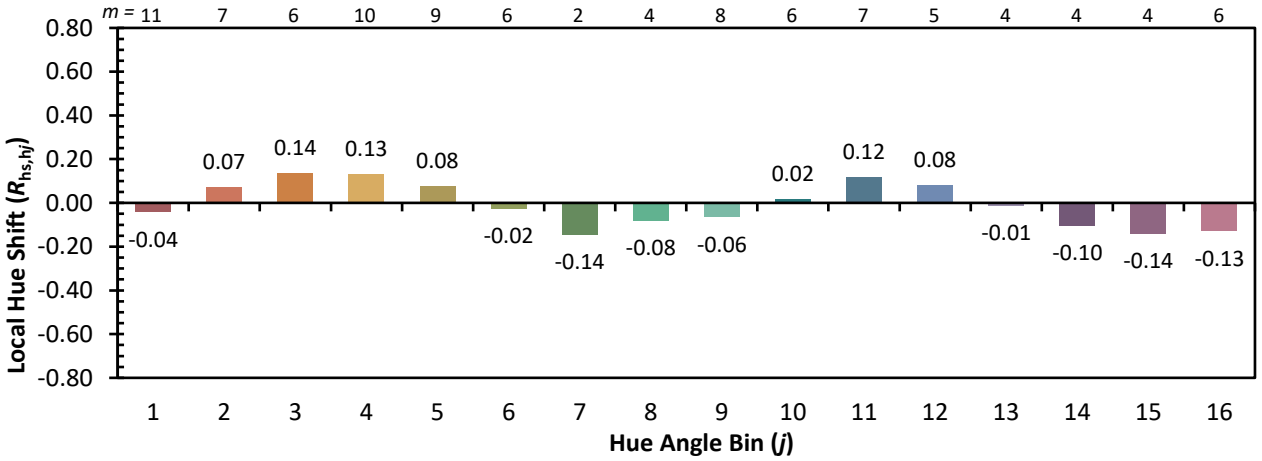


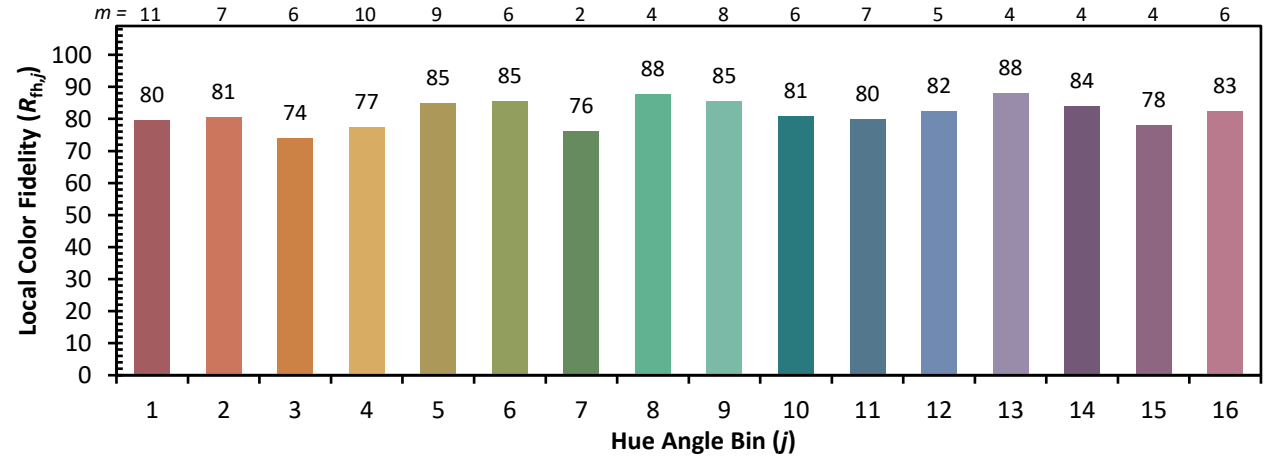
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



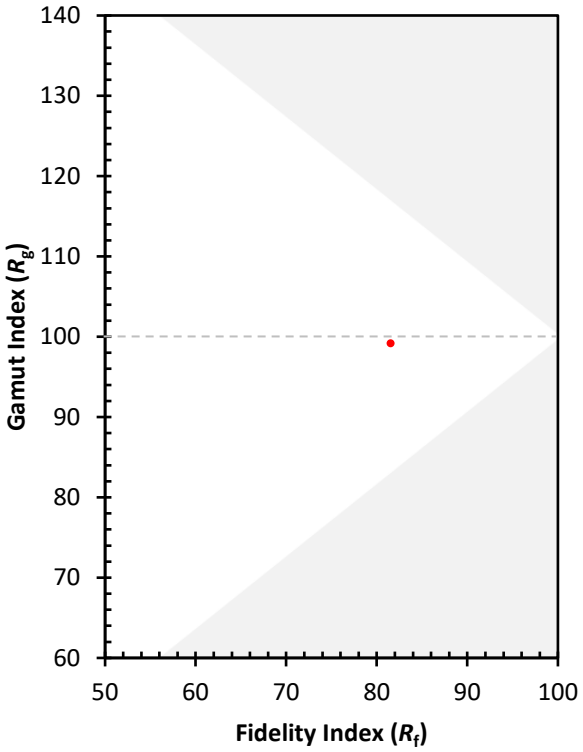


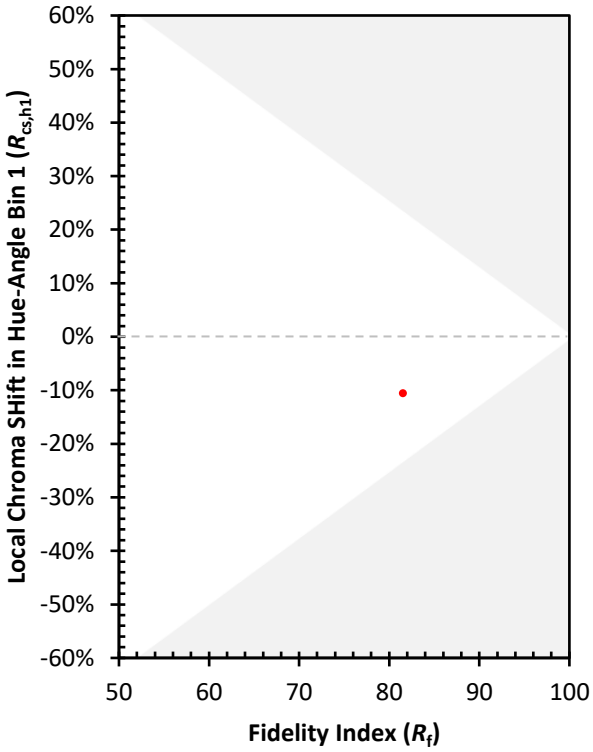


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)