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: P640450

Luminaire Tested: GWS-SA5D-830-U-SL2-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:	P640450
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-29)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5D-830-U-SL2-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	20325.5 lumens
Efficiency:	N/A
Efficacy:	99.3 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

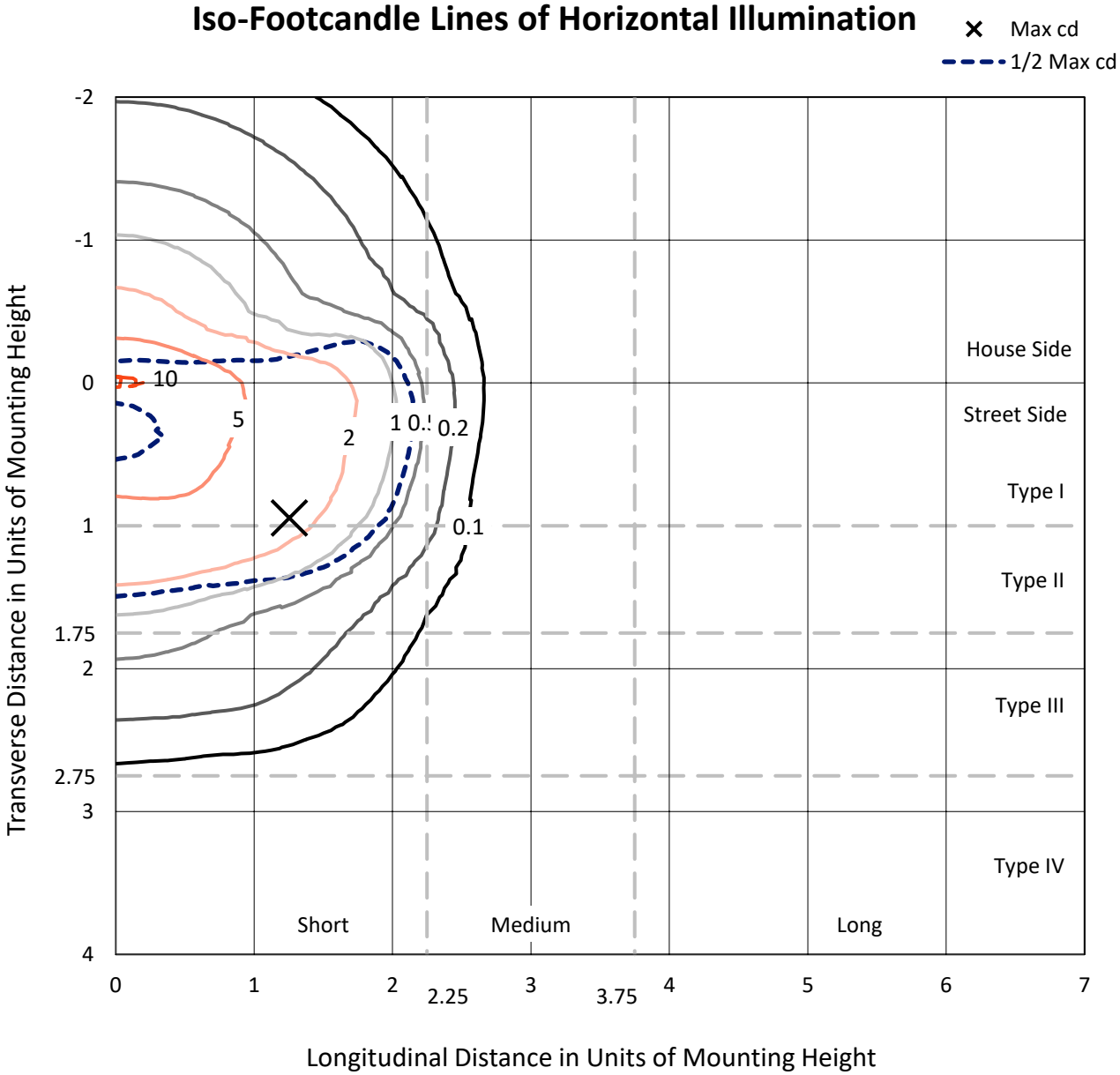
Input Watts (W):	204.6
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P640450
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



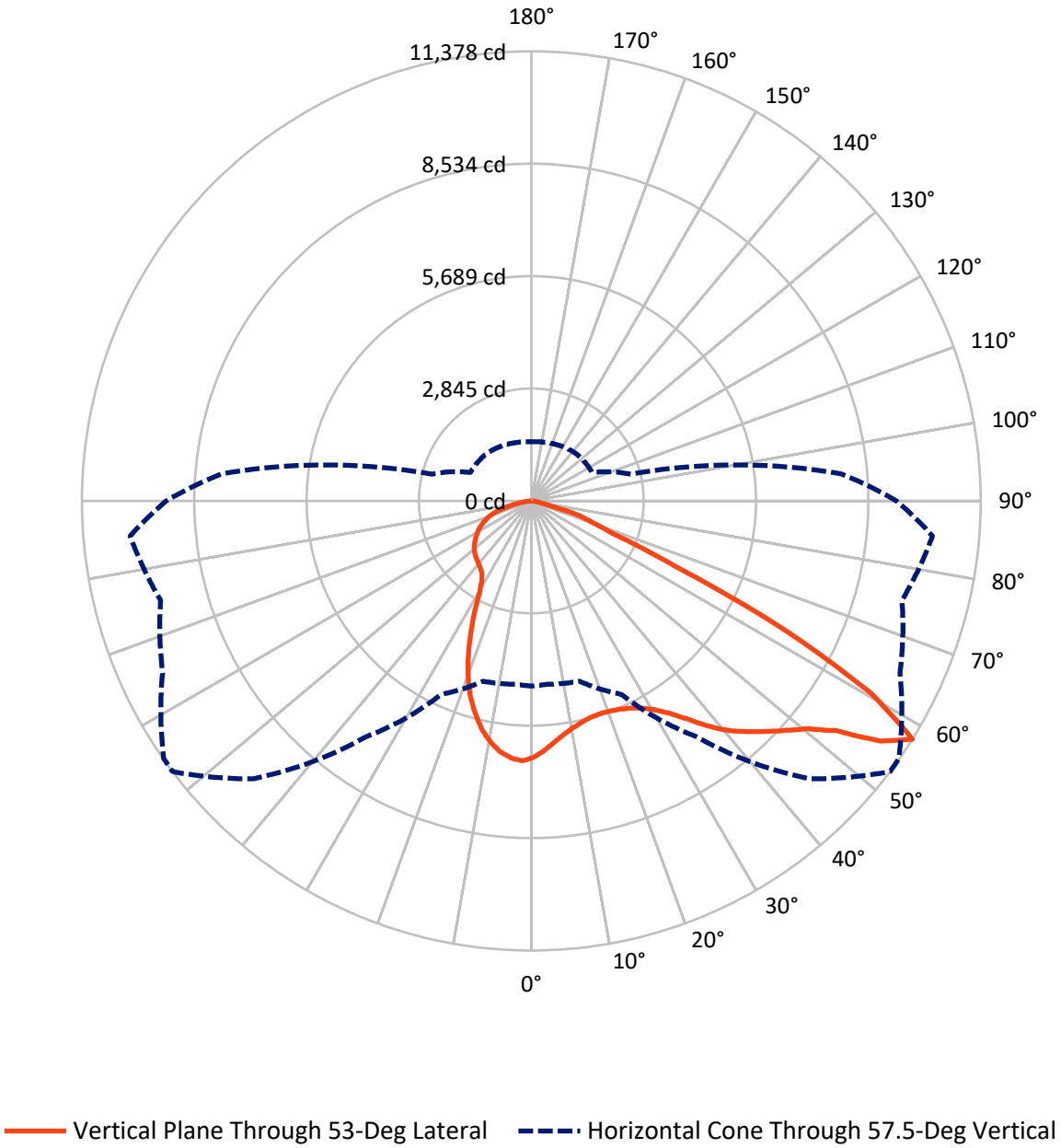
Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P640450
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-GRSWH

Luminous Intensity Polar Plot



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

Scaled Data Report

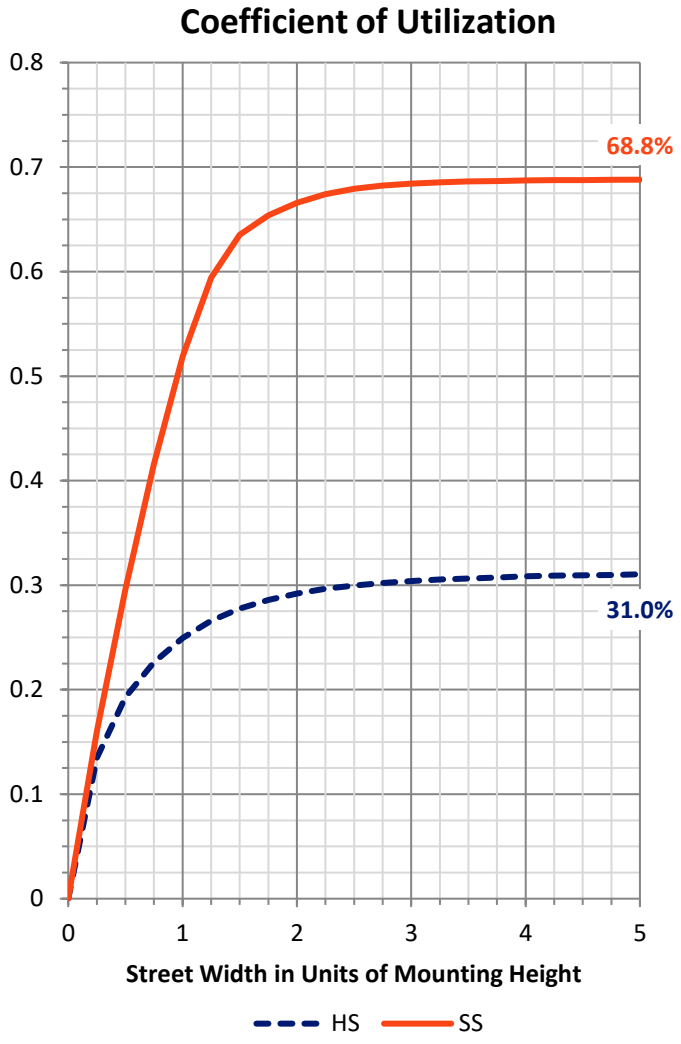
REPORT NUMBER: P640450
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6355.0	0.0	6355.0
	% Fixture	31.3	0.0	31.3
Street Side	Lumens	13970.5	0.0	13970.5
	% Fixture	68.7	0.0	68.7
Total	Lumens	20325.5	0.0	20325.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	586.9	2.9
10°-20°	1539.8	7.6
20°-30°	2268.7	11.2
30°-40°	3175.6	15.6
40°-50°	4174.6	20.5
50°-60°	4894.7	24.1
60°-70°	2883.5	14.2
70°-80°	717.3	3.5
80°-90°	84.2	0.4
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°	20325.5	100.0
0°-180°	20325.5	100.0



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

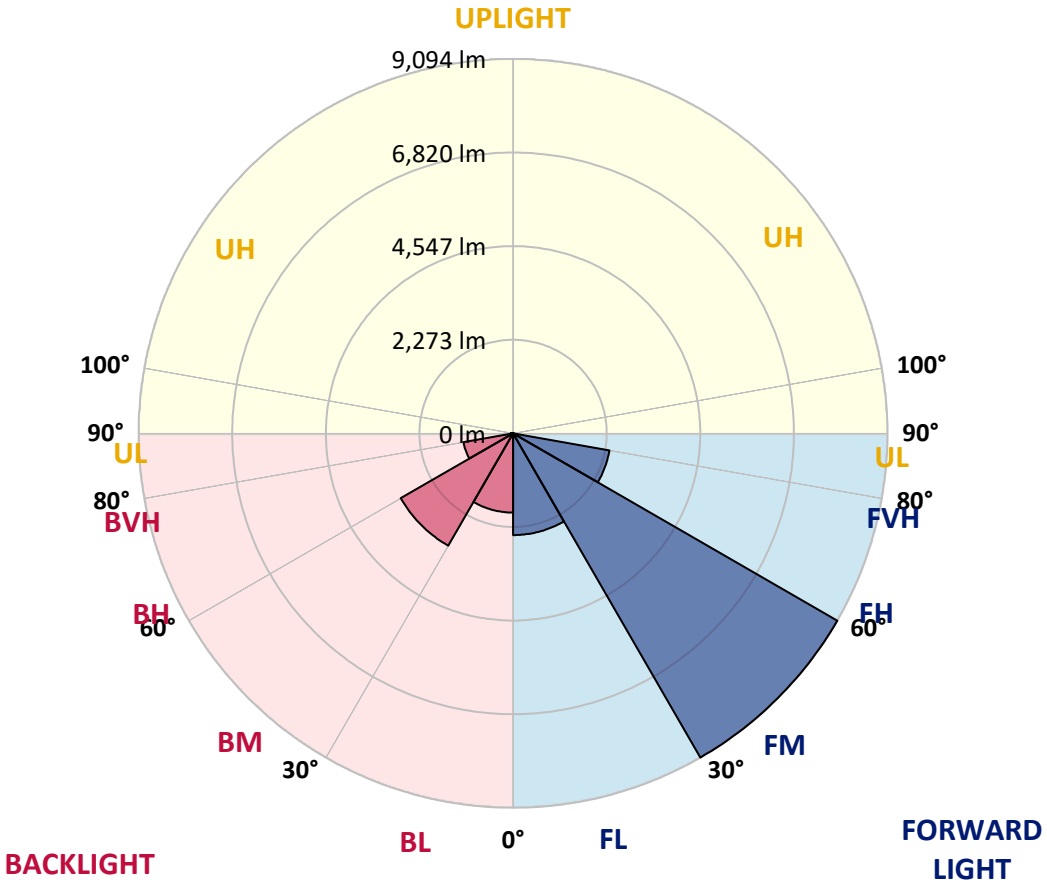
Scaled Data Report

REPORT NUMBER: P640450
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2471.2	12.2			
FM	(30°-60°)	9093.8	44.7			
FH	(60°-80°)	2377.3	11.7			G2/5000
FVH	(80°-90°)	28.2	0.1			G1/100
BL	(0°-30°)	1924.3	9.5	B3/2500		
BM	(30°-60°)	3151.2	15.5	B3/5000		
BH	(60°-80°)	1223.5	6.0	B3/2500		G3/2500
BVH	(80°-90°)	56.0	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-G3
Type II Short



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

Scaled Data Report

REPORT NUMBER: P640450
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	53°	55°	65°	75°	85°
0°	6490.5	6490.5	6490.5	6490.5	6490.5	6490.5	*6490.5*	6490.5	6490.5	6490.5	6490.5
2.5°	6117.5	6134.7	6138.1	6191.1	6194.5	6271.5	*6322.8*	6312.6	6365.6	6430.6	6481.9
5°	5825.0	5826.7	5843.8	5907.1	5941.3	6042.3	*6127.8*	6127.8	6230.5	6363.9	6478.5
7.5°	5583.8	5582.1	5597.5	5667.6	5724.1	5845.5	*5961.9*	5975.6	6119.3	6314.3	6500.7
10°	5359.7	5371.7	5388.8	5474.3	5546.2	5696.7	*5835.3*	5857.5	6038.9	6280.1	6531.5
12.5°	5216.0	5217.7	5243.4	5339.2	5431.5	5592.4	*5737.8*	5765.1	5973.8	6247.6	6553.8
15°	5123.6	5125.3	5152.7	5258.8	5366.5	5529.1	*5677.9*	5708.7	5936.2	6242.4	6596.5
17.5°	5082.6	5080.8	5106.5	5212.6	5330.6	5500.0	*5659.1*	5696.7	5953.3	6281.8	6671.8
20°	5082.6	5084.3	5098.0	5193.8	5313.5	5493.1	*5677.9*	5724.1	6020.0	6370.7	6788.1
22.5°	5154.4	5161.2	5168.1	5233.1	5327.2	5503.4	*5727.5*	5789.1	6163.7	6519.6	6940.4
25°	5294.7	5296.4	5303.2	5356.3	5399.0	5532.5	*5809.6*	5902.0	6387.8	6736.8	7132.0
27.5°	5482.9	5506.8	5513.7	5547.9	5547.9	5604.3	*5937.9*	6071.4	6690.6	7049.9	7376.6
30°	5746.3	5754.9	5766.8	5804.5	5763.4	5739.5	*6126.1*	6297.2	7041.3	7428.0	7670.9
32.5°	5977.3	5996.1	6061.1	6122.7	6049.1	5973.8	*6403.2*	6605.1	7378.3	7821.4	7983.9
35°	6174.0	6220.2	6345.1	6481.9	6430.6	6355.3	*6771.0*	6981.5	7655.5	8103.7	8261.1
37.5°	6411.8	6447.7	6618.8	6841.2	6887.4	6851.4	*7219.2*	7369.8	7840.2	8175.5	8411.6
40°	6653.0	6707.7	6928.4	7236.4	7412.6	7438.2	*7633.2*	7734.2	7903.5	8035.3	8382.5
42.5°	6899.3	6993.4	7296.2	7655.5	7968.5	8026.7	*7982.2*	8025.0	7883.0	7842.0	8247.4
45°	7200.4	7311.6	7653.8	8112.2	8524.5	8615.2	*8324.4*	8285.0	7879.6	7768.4	8163.6
47.5°	7556.3	7667.5	7994.2	8528.0	9054.9	9121.6	*8675.1*	8603.2	7999.3	7881.3	8276.5
50°	7871.0	7948.0	8240.6	8837.6	9549.3	9588.6	*9061.7*	8974.5	8297.0	8194.4	8628.9
52.5°	7551.1	7542.6	7850.5	8586.1	9805.9	10279.7	*9657.0*	9573.2	8871.8	8714.4	9174.6
55°	6406.7	6309.1	6584.6	7308.2	9089.1	10893.9	*10724.5*	10556.9	9638.2	9237.9	9686.1
57.5°	*4684.0*	*4656.6*	*4723.3*	*5402.5*	*7280.8*	*9942.7*	*11378.0*	*11362.6*	*10300.3*	*9716.9*	*10195.9*
60°	3662.7	3621.6	3443.7	3462.5	4962.8	7766.7	*9874.3*	10327.6	10710.8	10004.3	10551.7
62.5°	3252.1	3221.3	3128.9	2874.0	2956.1	5207.4	*7238.1*	7653.8	9359.4	8835.9	9063.4
65°	2692.7	2684.1	2761.1	2750.8	2477.1	2875.7	*4085.2*	4504.3	5884.9	5958.4	5884.9
67.5°	1957.1	1941.7	2136.7	2521.6	2384.7	2170.9	*2277.0*	2422.4	3017.7	2709.8	2439.5
70°	1272.8	1250.5	1363.4	1821.9	2135.0	1892.1	*1640.6*	1616.6	1659.4	1031.6	1115.4
72.5°	853.7	828.0	826.3	1002.5	1289.9	1274.5	*1271.1*	1259.1	1123.9	814.3	903.3
75°	475.6	455.1	449.9	432.8	461.9	470.4	*501.2*	518.3	561.1	617.6	684.3
77.5°	80.4	78.7	99.2	126.6	174.5	224.1	*277.1*	292.5	361.0	427.7	470.4
80°	44.5	46.2	59.9	73.6	97.5	133.4	*171.1*	181.3	222.4	258.3	292.5
82.5°	24.0	24.0	30.8	39.3	53.0	70.1	*92.4*	100.9	128.3	150.5	174.5
85°	8.6	8.6	12.0	15.4	22.2	29.1	*35.9*	41.1	56.5	77.0	87.2
87.5°	0.0	0.0	0.0	0.0	1.7	3.4	*6.8*	6.8	8.6	15.4	22.2
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: P640450
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6490.5	6490.5	6490.5	6490.5	6490.5	6490.5	6490.5	6490.5	6490.5	6490.5	6490.5
2.5°	6524.7	6478.5	6541.8	6570.9	6581.1	6588.0	6543.5	6512.7	6502.5	6470.0	6451.1
5°	6548.6	6517.9	6577.7	6577.7	6535.0	6490.5	6399.8	6336.5	6292.0	6239.0	6230.5
7.5°	6589.7	6567.5	6600.0	6533.2	6425.5	6305.7	6148.3	6025.2	5925.9	5860.9	5862.6
10°	6644.4	6617.1	6591.4	6442.6	6245.8	6025.2	5784.0	5604.3	5440.1	5364.8	5323.8
12.5°	6680.4	6641.0	6533.2	6286.9	5997.8	5701.8	5361.4	5094.5	4856.7	4749.0	4740.4
15°	6724.9	6653.0	6437.4	6085.0	5683.0	5279.3	4841.3	4470.1	4148.5	3980.9	3972.3
17.5°	6783.0	6665.0	6322.8	5854.1	5351.1	4755.8	4205.0	3737.9	3395.8	3265.8	3288.0
20°	6865.1	6678.7	6192.8	5597.5	4938.9	4160.5	3474.5	3045.1	2913.4	2904.8	2887.7
22.5°	6957.5	6687.2	6049.1	5310.1	4439.3	3525.8	2870.6	2687.5	2685.8	2728.6	2738.9
25°	7061.9	6694.1	5886.6	4974.8	3898.7	2892.8	2538.7	2484.0	2526.7	2607.1	2617.4
27.5°	7195.3	6707.7	5689.9	4607.0	3323.9	2499.4	2355.7	2342.0	2393.3	2468.6	2465.2
30°	7392.0	6757.4	5481.2	4184.4	2733.7	2312.9	2244.5	2246.2	2266.7	2302.6	2307.8
32.5°	7592.2	6834.3	5277.6	3708.8	2395.0	2206.8	2176.0	2172.6	2172.6	2188.0	2191.4
35°	7782.1	6921.6	5056.9	3212.7	2230.8	2145.2	2124.7	2114.5	2109.3	2105.9	2100.8
37.5°	7888.1	6964.4	4841.3	2723.5	2143.5	2104.2	2083.7	2070.0	2051.2	2037.5	2034.0
40°	7842.0	6914.7	4591.6	2357.4	2090.5	2064.8	2040.9	2022.1	1996.4	1984.4	1977.6
42.5°	7688.0	6760.8	4319.6	2184.6	2047.7	2022.1	1993.0	1962.2	1945.1	1934.8	1933.1
45°	7525.5	6574.3	3991.1	2083.7	2006.7	1975.9	1941.7	1907.5	1888.6	1883.5	1881.8
47.5°	7520.3	6481.9	3642.1	2003.3	1957.1	1926.3	1883.5	1849.3	1828.8	1821.9	1815.1
50°	7746.2	6576.0	3248.7	1933.1	1905.7	1873.2	1825.3	1787.7	1762.0	1753.5	1751.8
52.5°	8214.9	6930.1	2896.3	1863.0	1837.3	1799.7	1760.3	1722.7	1691.9	1676.5	1674.8
55°	8721.3	7380.1	2677.3	1791.1	1756.9	1724.4	1688.5	1647.4	1613.2	1589.3	1585.8
57.5°	*9244.7*	*7871.0*	*2610.6*	*1700.5*	*1674.8*	*1652.6*	*1609.8*	*1565.3*	*1526.0*	*1503.7*	*1498.6*
60°	9675.8	8293.6	2735.4	1604.7	1591.0	1561.9	1522.5	1479.8	1452.4	1435.3	1431.9
62.5°	8100.3	6752.2	2208.5	1500.3	1500.3	1469.5	1425.0	1394.2	1375.4	1363.4	1360.0
65°	5140.7	4181.0	1507.1	1395.9	1394.2	1353.2	1315.5	1295.0	1286.5	1267.6	1264.2
67.5°	2239.3	1910.9	1288.2	1289.9	1283.0	1238.6	1200.9	1185.5	1168.4	1147.9	1146.2
70°	1161.6	1183.8	1153.0	1171.8	1159.9	1106.8	1070.9	1047.0	1011.0	990.5	992.2
72.5°	937.5	961.4	995.6	1024.7	999.1	956.3	899.8	870.8	824.6	802.3	804.0
75°	715.1	740.7	773.2	804.0	783.5	730.5	694.6	665.5	612.4	586.8	591.9
77.5°	492.7	506.4	545.7	544.0	537.2	521.8	468.7	434.5	379.8	349.0	352.4
80°	306.2	314.8	333.6	342.1	338.7	318.2	275.4	249.8	217.3	198.4	200.2
82.5°	184.8	189.9	207.0	208.7	207.0	191.6	159.1	140.3	119.8	109.5	109.5
85°	94.1	97.5	107.8	107.8	97.5	82.1	73.6	65.0	53.0	47.9	47.9
87.5°	25.7	25.7	32.5	27.4	22.2	20.5	10.3	8.6	3.4	1.7	1.7
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

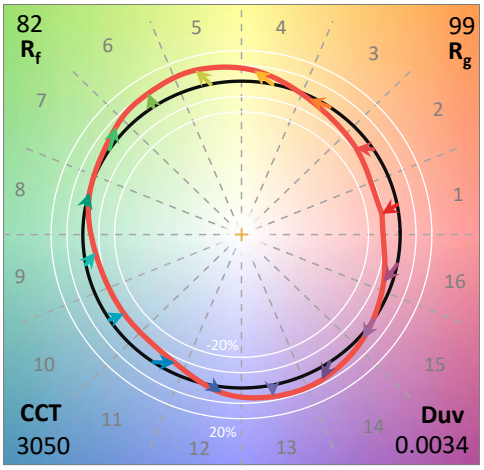
Test Information

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

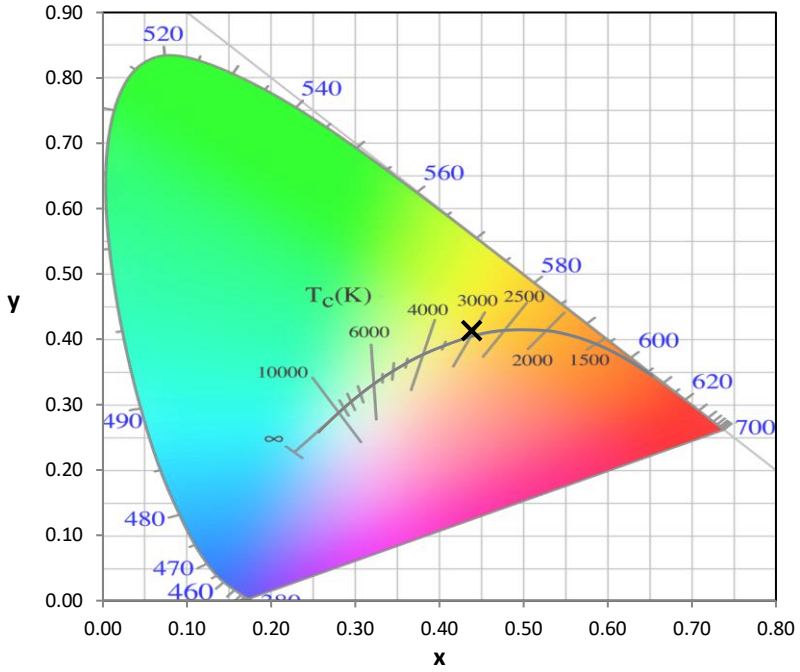
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

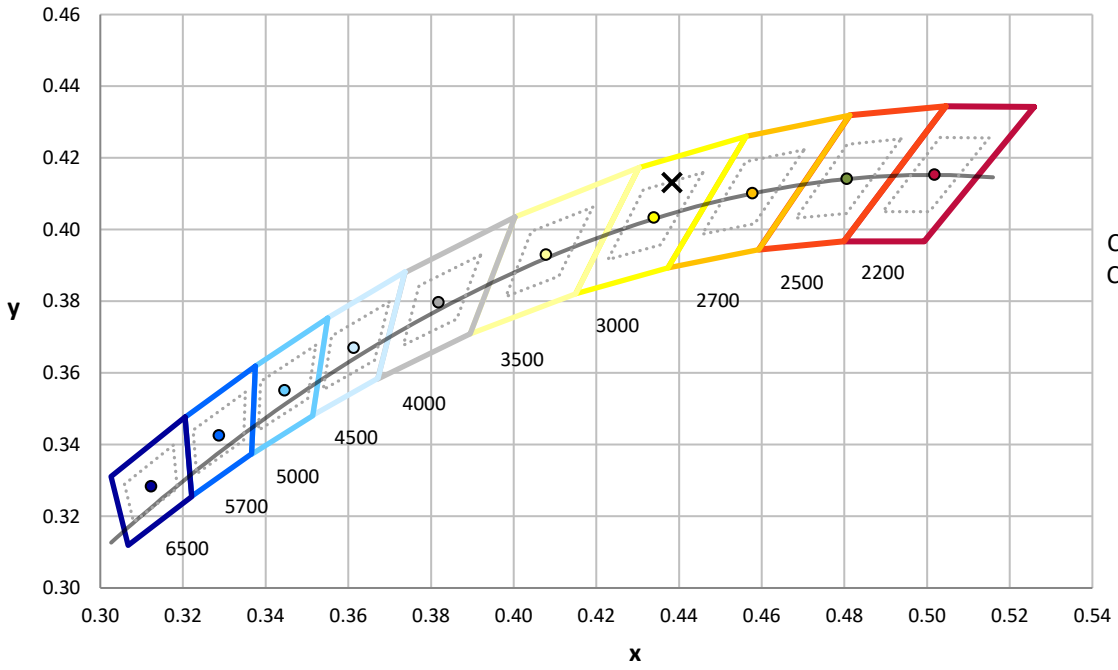
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

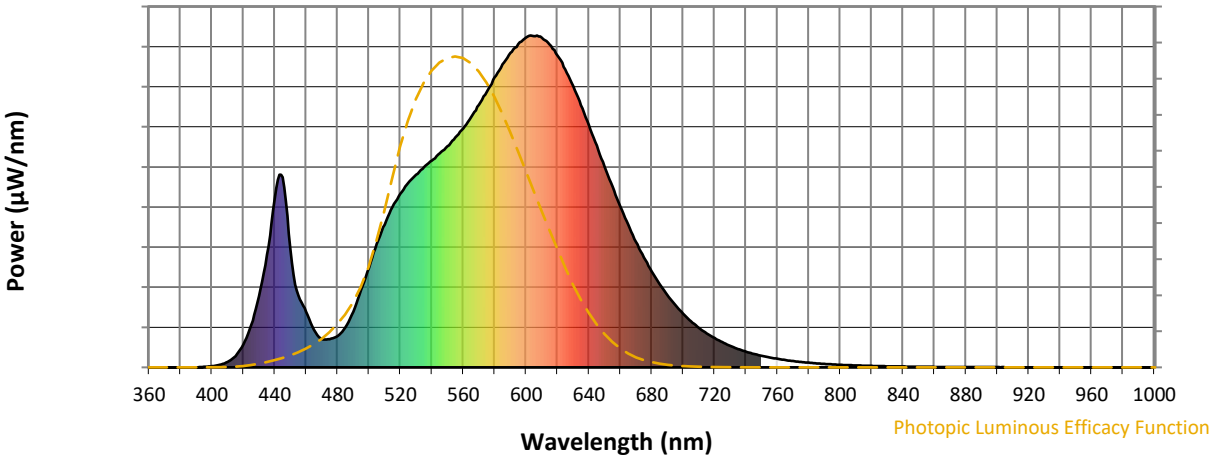


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

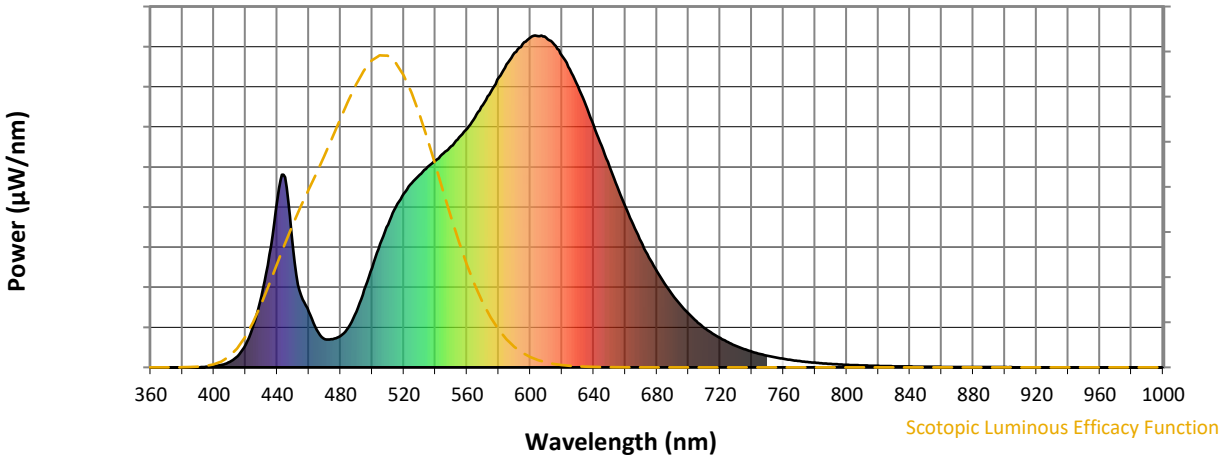


Photopic Lumens: NR

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

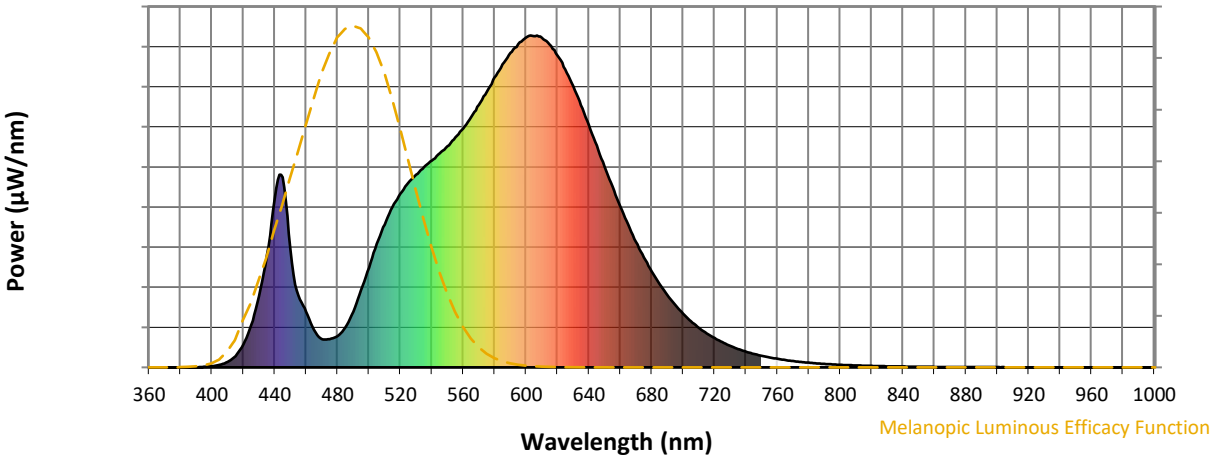


Scotopic Lumens: NR **S/P: 1.27**

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			

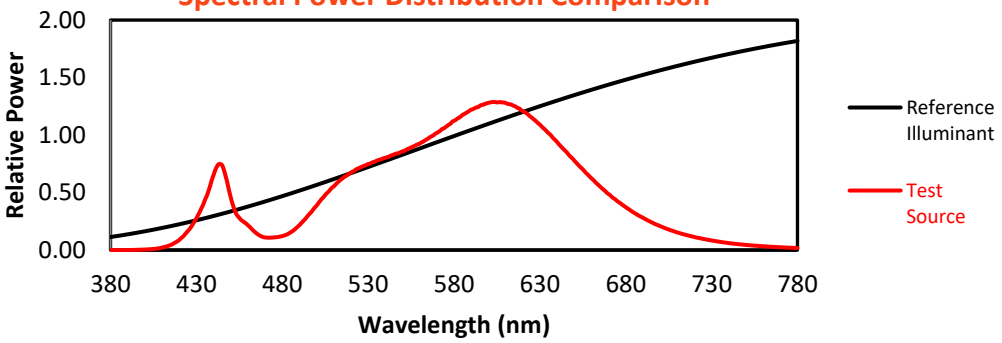
REPORT NUMBER: SP1-2408-195-9

TM-30-18

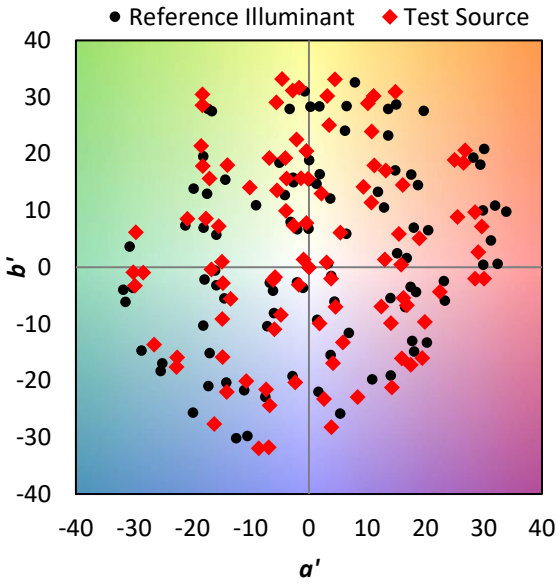
Summary

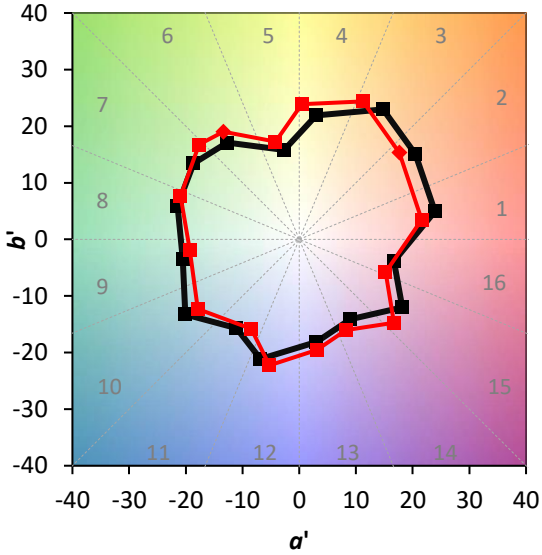
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

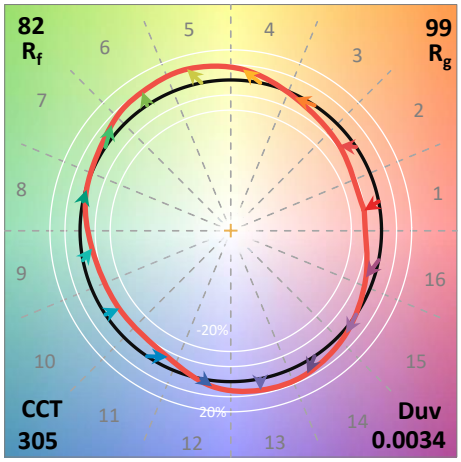
Spectral Power Distribution Comparison

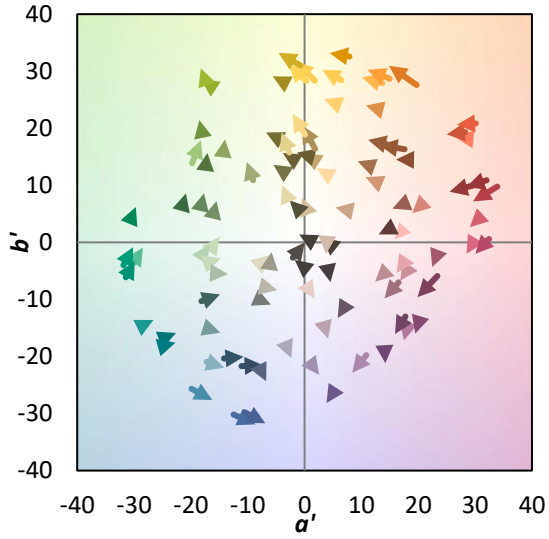


Color Vector Graphics







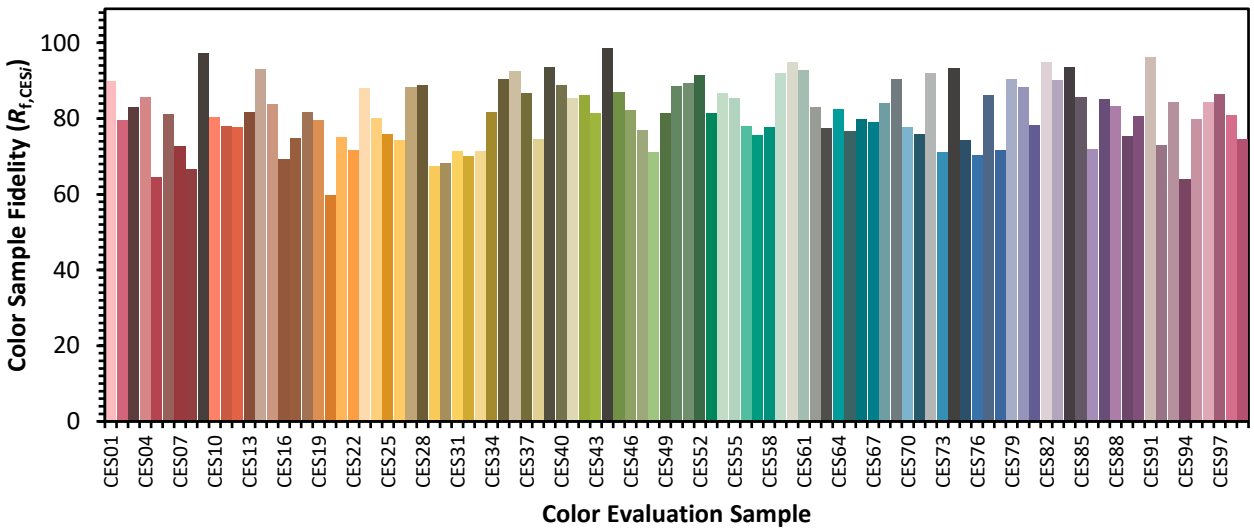


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

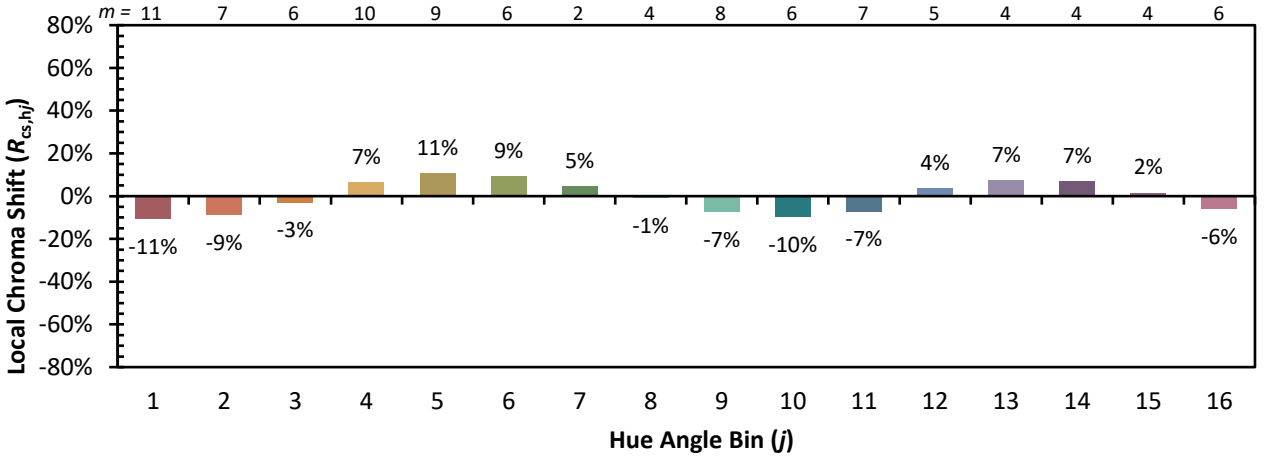
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

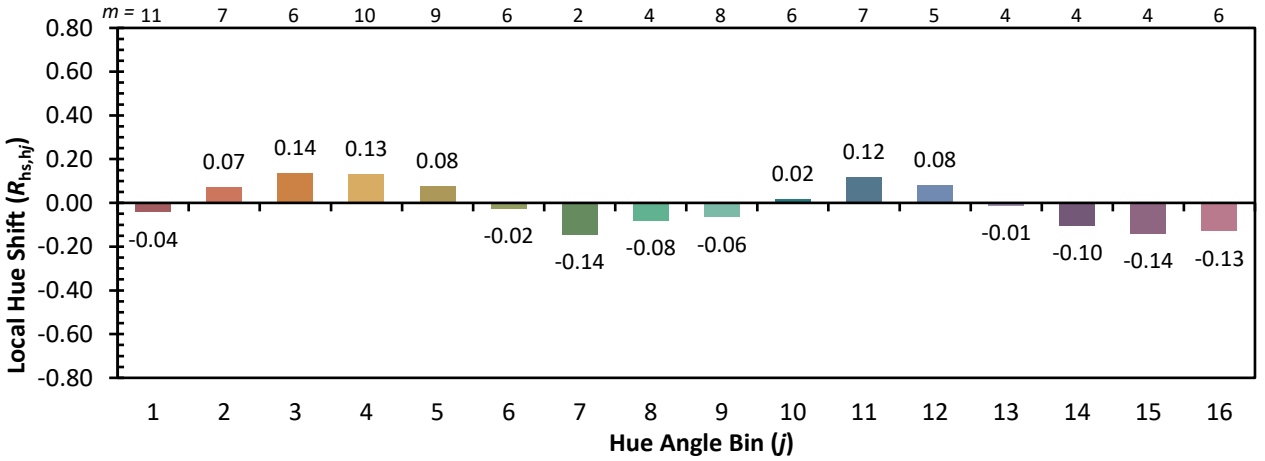


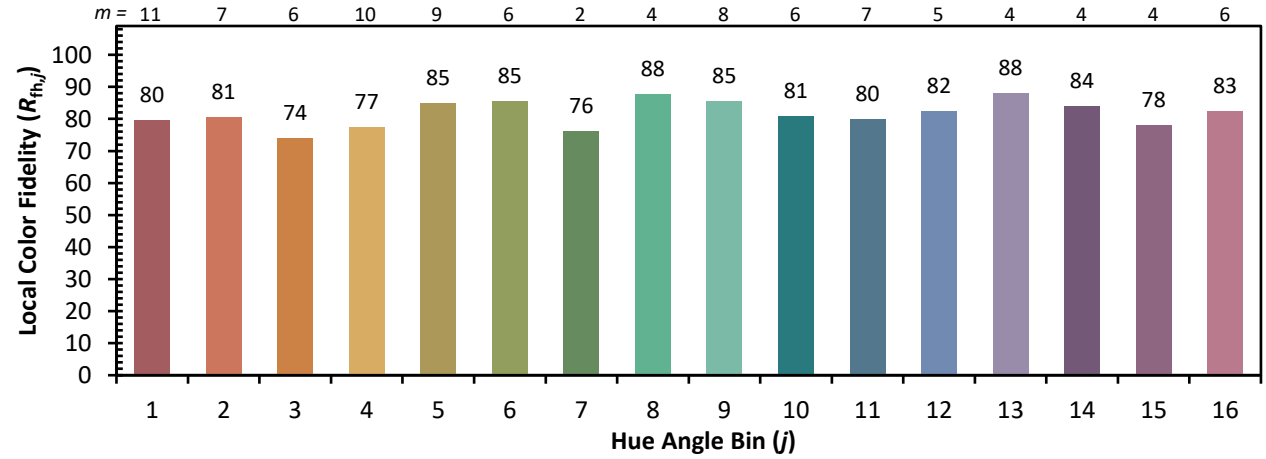
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



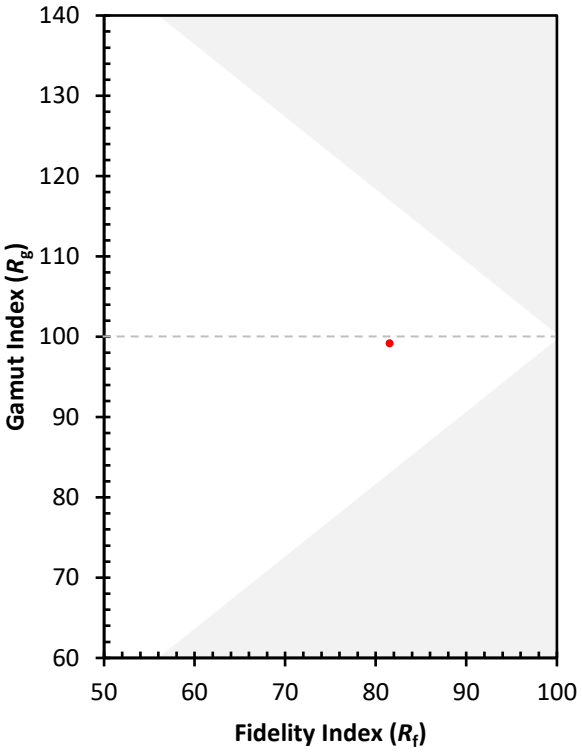


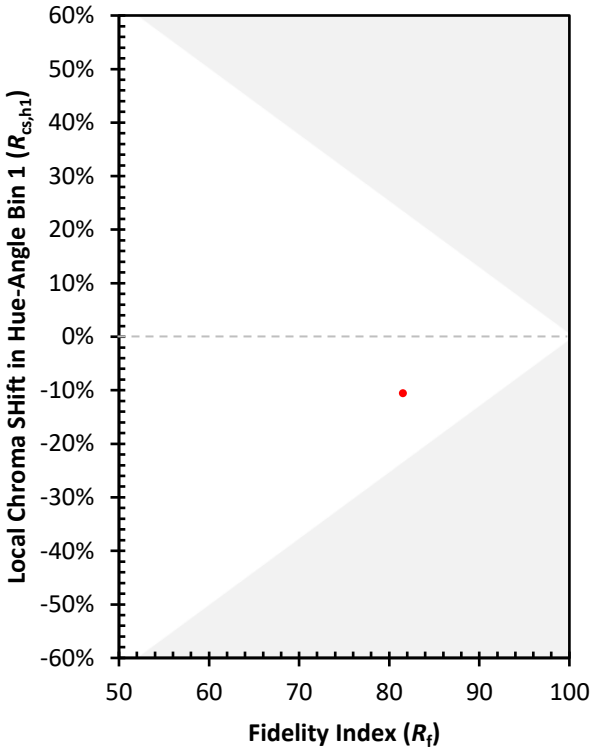


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)