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: P642956

Luminaire Tested: GWS-SA6D-830-U-T3R-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:	P642956
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA6D-830-U-T3R-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(96) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24948.6 lumens
Efficiency:	N/A
Efficacy:	101.5 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

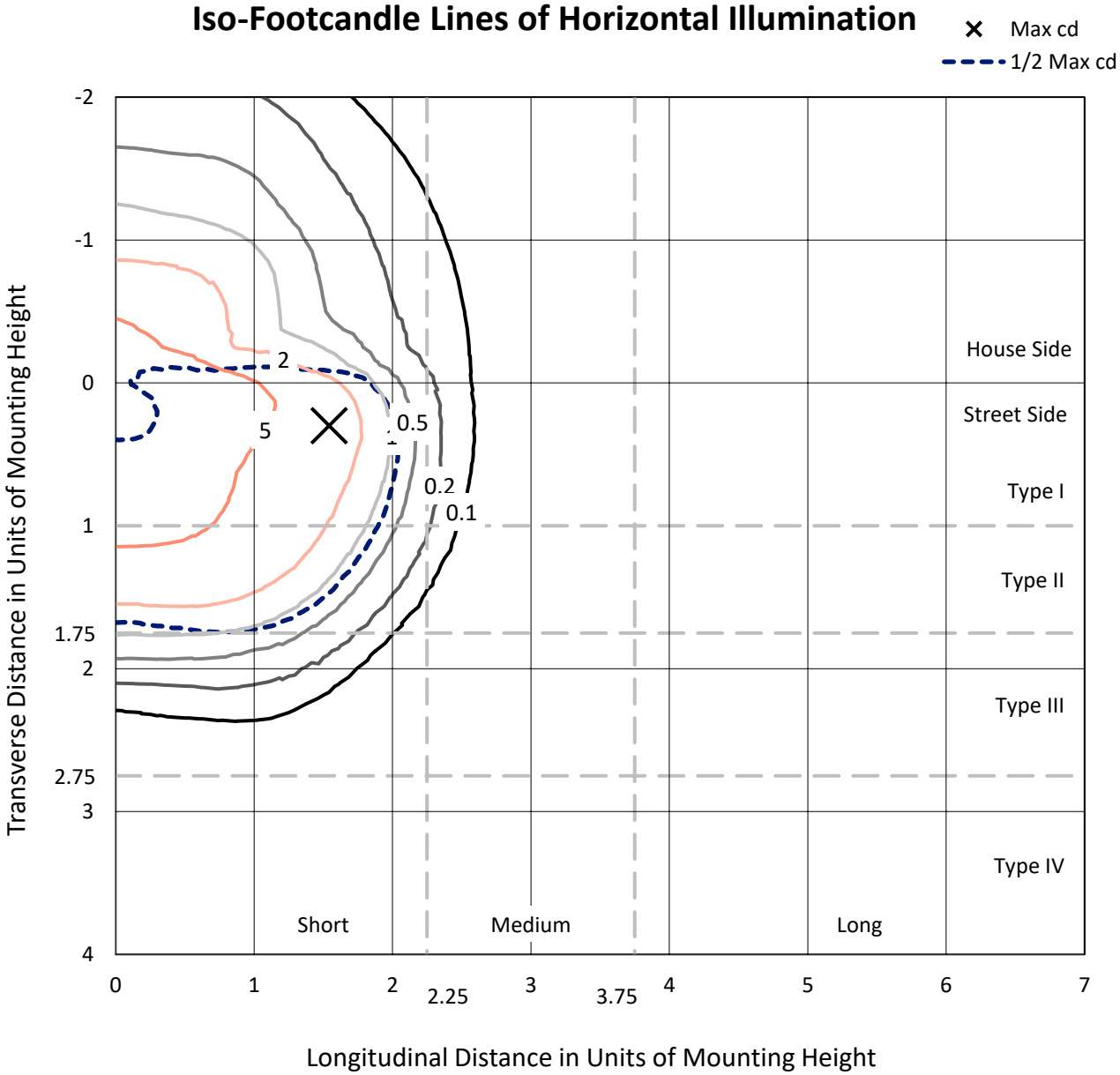
Input Watts (W):	245.7
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P642956
CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



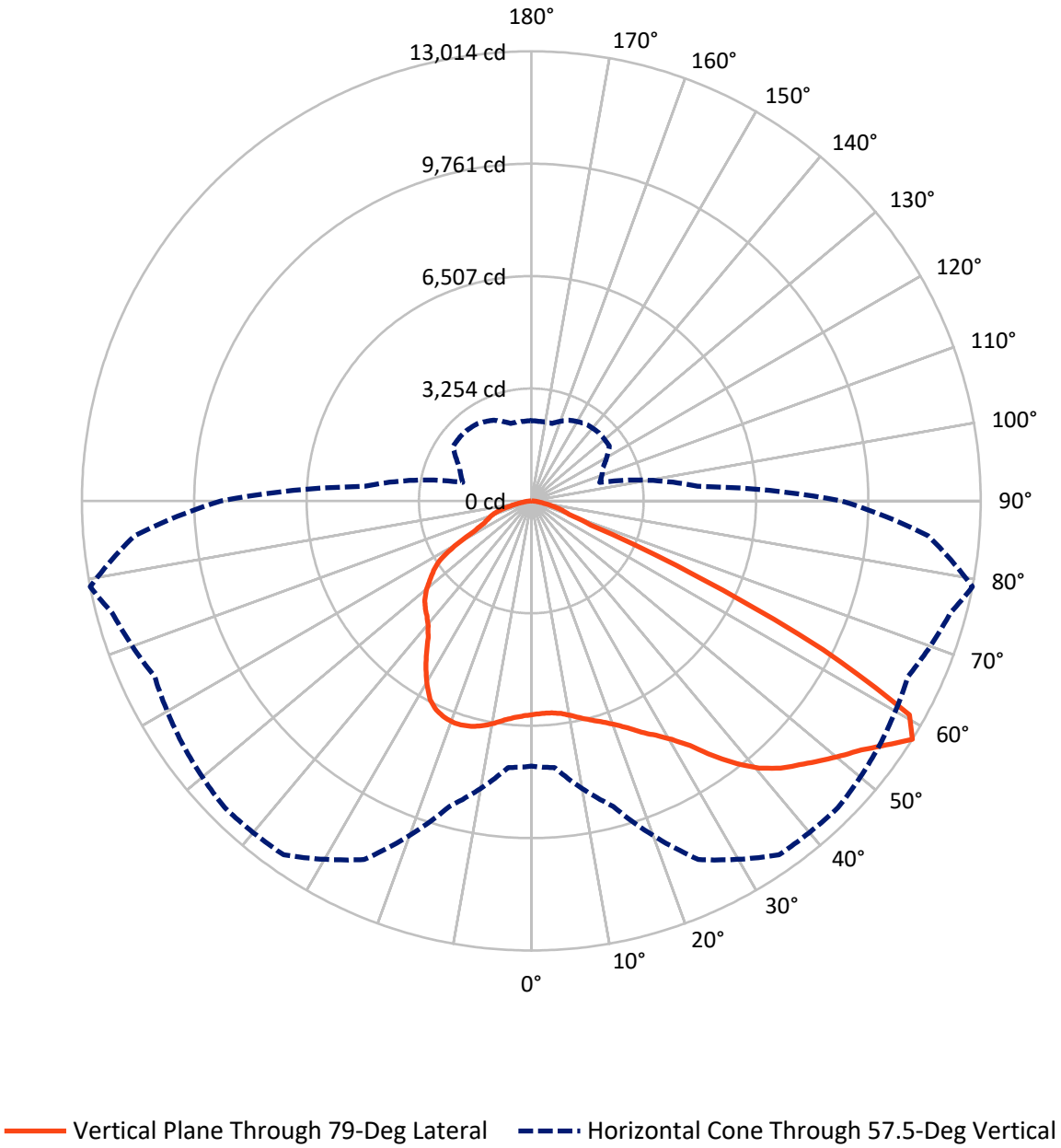
Based on 25 foot mounting height. Maximum calculated value = 10 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P642956
CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSWH

Luminous Intensity Polar Plot



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

Scaled Data Report

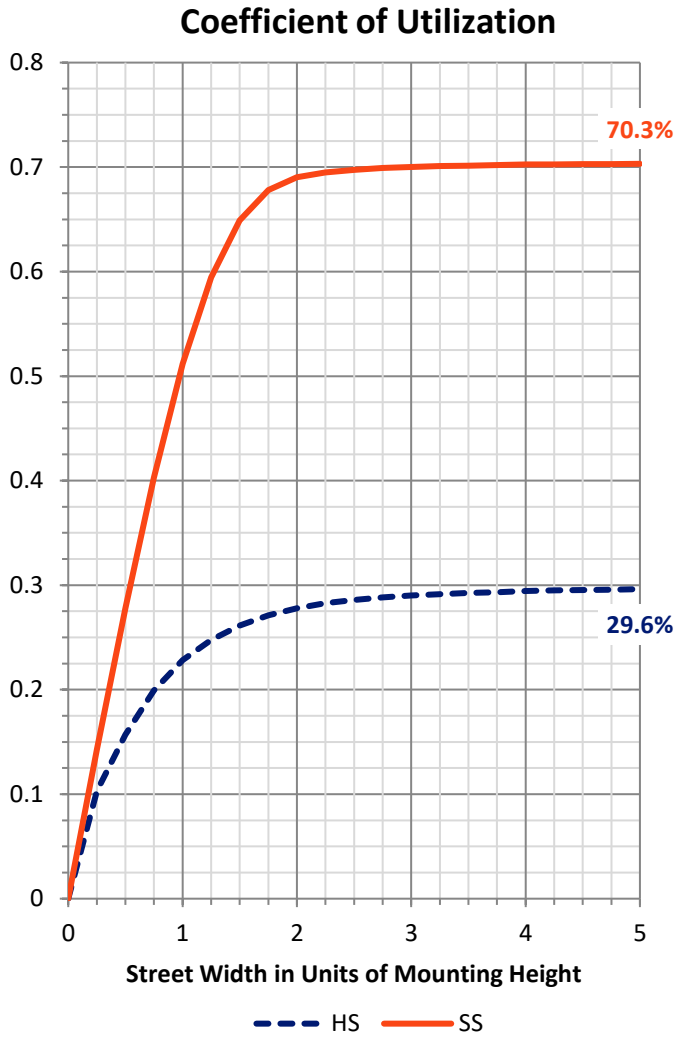
REPORT NUMBER: P642956
CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7416.1	0.0	7416.1
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	17532.5	0.0	17532.5
	% Fixture	70.3	0.0	70.3
Total	Lumens	24948.6	0.0	24948.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	572.6	2.3
10°-20°	1591.2	6.4
20°-30°	2697.2	10.8
30°-40°	4128.4	16.5
40°-50°	5504.8	22.1
50°-60°	6357.6	25.5
60°-70°	3303.6	13.2
70°-80°	702.3	2.8
80°-90°	91.0	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°	24948.6	100.0
0°-180°	24948.6	100.0



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

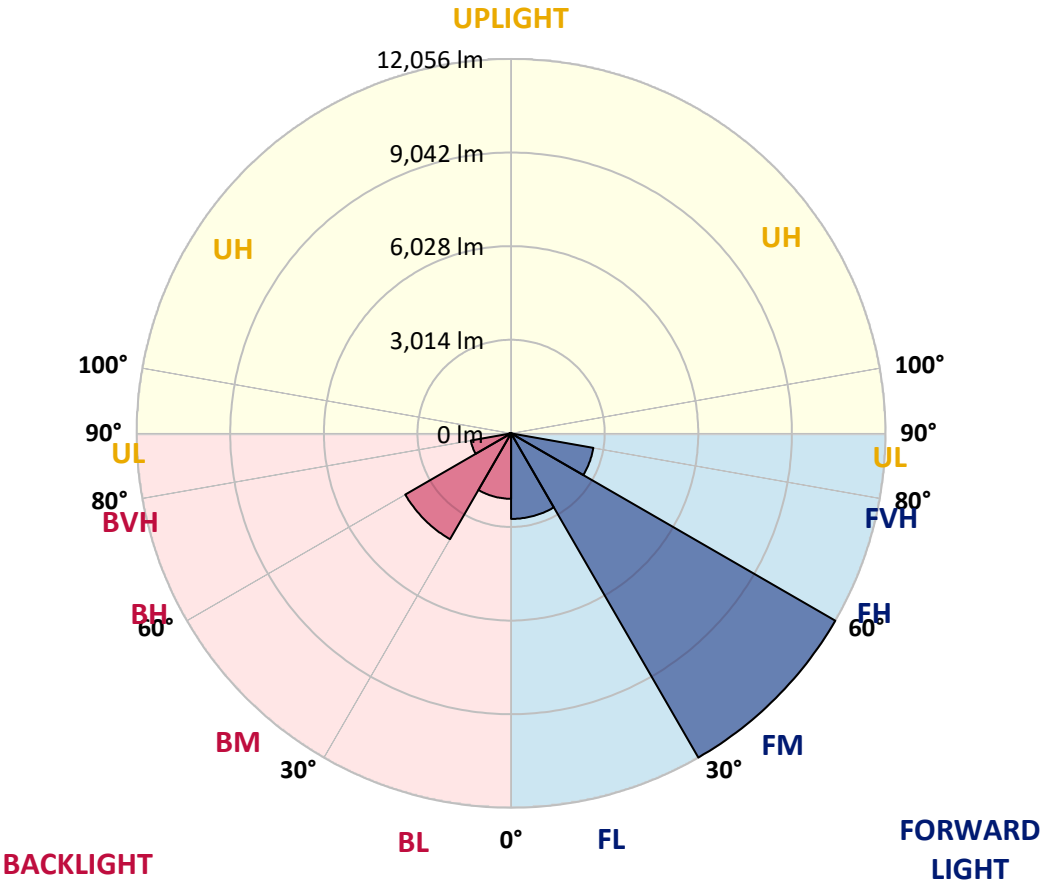
Scaled Data Report

REPORT NUMBER: P642956
CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2754.9	11.0			
FM	(30°-60°)	12055.9	48.3			
FH	(60°-80°)	2690.1	10.8			G2/5000
FVH	(80°-90°)	31.7	0.1			G1/100
BL	(0°-30°)	2106.1	8.4	B3/2500		
BM	(30°-60°)	3934.9	15.8	B3/5000		
BH	(60°-80°)	1315.8	5.3	B3/2500		G3/2500
BVH	(80°-90°)	59.2	0.2			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: P642956
CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	*6182.8*	6182.8
2.5°	5901.3	5889.1	5893.2	5909.5	5970.7	6015.6	6062.5	6105.3	6146.1	*6158.4*	6168.6
5°	5691.2	5668.8	5674.9	5701.4	5772.8	5848.3	5931.9	6033.9	6131.8	*6164.5*	6207.3
7.5°	5542.3	5538.2	5548.4	5589.2	5664.7	5736.1	5844.2	5989.1	6158.4	*6213.4*	6288.9
10°	5344.5	5336.3	5377.1	5460.7	5585.2	5699.4	5827.9	5999.3	6235.9	*6317.5*	6433.7
12.5°	5187.4	5183.3	5226.1	5342.4	5501.5	5683.1	5860.5	6052.3	6339.9	*6452.1*	6594.9
15°	5279.2	5260.8	5262.9	5344.5	5487.2	5701.4	5942.1	6148.2	6443.9	*6586.7*	6770.3
17.5°	5546.4	5513.8	5489.3	5503.6	5585.2	5807.5	6066.6	6276.7	6564.3	*6731.6*	6955.9
20°	5915.6	5897.3	5829.9	5785.1	5803.4	5999.3	6262.4	6458.2	6721.4	*6909.0*	7149.7
22.5°	6411.3	6366.4	6274.6	6203.2	6148.2	6301.2	6543.9	6713.2	6939.6	*7135.5*	7386.4
25°	7025.3	6960.0	6815.2	6703.0	6584.7	6741.8	6958.0	7086.5	7239.5	*7421.0*	7659.7
27.5°	7651.5	7596.5	7435.3	7284.4	7137.5	7235.4	7492.4	7565.9	7549.6	*7682.1*	7886.1
30°	8318.6	8249.2	8096.2	7933.0	7743.3	7806.6	8037.1	8073.8	7900.4	*8010.6*	8149.3
32.5°	9022.3	8955.0	8822.4	8632.7	8418.5	8443.0	8506.2	8540.9	8375.7	*8438.9*	8545.0
35°	9738.3	9675.1	9540.5	9352.8	9195.7	9046.8	8887.7	9026.4	8930.5	*9052.9*	9044.8
37.5°	10393.1	10329.9	10246.3	10101.4	9832.2	9538.4	9171.2	9342.6	9491.5	*9646.5*	9620.0
40°	10835.8	10792.9	10813.3	10790.9	10444.1	9862.8	9310.0	9497.6	9903.6	*10168.7*	10154.5
42.5°	11217.2	11174.4	11292.7	11378.4	10970.4	10162.6	9377.3	9556.8	10166.7	*10580.8*	10560.4
45°	11386.5	11374.3	11570.1	11841.4	11451.8	10480.8	9550.7	9679.2	10366.6	*10897.0*	10819.5
47.5°	11184.6	11227.4	11613.0	12071.9	11851.6	10858.2	9905.6	9938.2	10627.7	*11239.7*	11021.4
50°	10782.7	10876.6	11396.7	12078.1	12143.3	11284.5	10397.2	10315.6	10978.6	*11604.8*	11127.5
52.5°	10197.3	10295.2	11143.8	12031.1	12310.6	11778.2	11052.0	10935.7	11421.2	*11969.9*	11145.8
55°	8853.0	8985.6	10564.5	11925.1	12473.8	12227.0	11790.4	11553.8	11992.4	*12471.8*	11327.4
57.5°	*7680.1*	*7749.5*	*9152.9*	*11453.9*	*12506.4*	*12557.4*	*12316.7*	*12035.2*	*12559.5*	*13014.4*	*11531.4*
60°	5636.2	5652.5	6915.2	9477.2	11504.9	12365.7	12273.9	11855.7	12290.2	*12579.9*	10597.1
62.5°	3184.2	3186.3	4194.0	6325.6	8594.0	10079.0	10136.1	9766.9	9401.8	*9487.4*	7376.2
65°	1195.4	1307.6	1915.4	3108.8	4954.8	5950.3	6186.9	6272.6	5664.7	*5287.3*	3955.3
67.5°	799.6	826.1	1117.8	1599.3	2205.1	2545.8	2847.7	2855.8	2088.8	*1862.4*	1558.5
70°	609.9	636.4	879.2	1144.4	1117.8	1032.2	1115.8	1085.2	1121.9	*1152.5*	1185.2
72.5°	454.9	481.4	681.3	807.8	671.1	660.9	748.6	832.3	909.8	*942.4*	993.4
75°	301.9	322.3	459.0	432.5	371.3	438.6	546.7	630.3	675.2	*714.0*	752.7
77.5°	191.7	206.0	244.8	197.9	206.0	257.0	318.2	393.7	436.5	*475.3*	495.7
80°	87.7	85.7	83.6	93.8	116.3	151.0	191.7	236.6	269.3	*285.6*	297.8
82.5°	34.7	38.8	42.8	51.0	63.2	81.6	108.1	138.7	165.2	*169.3*	179.5
85°	14.3	16.3	18.4	22.4	28.6	36.7	44.9	63.2	79.6	*85.7*	91.8
87.5°	0.0	0.0	0.0	0.0	2.0	4.1	6.1	10.2	18.4	*20.4*	22.4
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: P642956
CATALOG NUMBER: GWS-SA6D-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8	6182.8
2.5°	6223.6	6197.1	6242.0	6272.6	6301.2	6270.6	6260.4	6233.8	6229.8	6229.8	6244.0
5°	6280.8	6262.4	6309.3	6327.7	6325.6	6258.3	6217.5	6164.5	6138.0	6138.0	6142.0
7.5°	6382.7	6372.5	6399.1	6370.5	6305.2	6168.6	6033.9	5921.7	5846.3	5807.5	5819.7
10°	6552.1	6539.8	6517.4	6411.3	6223.6	5940.1	5664.7	5460.7	5338.3	5269.0	5273.1
12.5°	6717.3	6696.9	6617.3	6382.7	5997.2	5546.4	5185.3	4956.9	4822.2	4740.7	4722.3
15°	6898.8	6845.8	6674.4	6235.9	5628.0	5065.0	4687.6	4440.8	4296.0	4247.0	4245.0
17.5°	7072.2	6978.4	6668.3	5974.8	5185.3	4561.1	4181.7	4028.7	4004.3	4026.7	4032.8
20°	7247.7	7096.7	6601.0	5613.7	4659.1	4059.3	3863.5	3926.7	4018.5	4079.7	4094.0
22.5°	7429.2	7194.6	6448.0	5148.6	4104.2	3720.7	3802.3	3941.0	4055.3	4136.9	4145.0
25°	7633.2	7286.4	6219.6	4579.5	3659.5	3626.9	3788.0	3934.9	4057.3	4151.1	4167.5
27.5°	7749.5	7288.4	5899.3	3994.1	3455.5	3590.2	3753.4	3892.1	4014.5	4116.5	4134.8
30°	7863.7	7233.4	5391.4	3518.8	3396.4	3547.3	3694.2	3822.7	3939.0	4038.9	4061.4
32.5°	8024.8	7182.4	4805.9	3245.4	3361.7	3506.5	3626.9	3741.1	3830.9	3875.7	3888.0
35°	8224.7	7117.1	4183.8	3127.1	3339.3	3473.9	3580.0	3641.2	3524.9	3500.4	3526.9
37.5°	8504.2	7055.9	3563.6	3076.1	3325.0	3461.7	3555.5	3398.4	3255.6	3198.5	3218.9
40°	8806.1	7021.2	3143.4	3035.3	3331.1	3473.9	3453.5	3221.0	3014.9	2894.6	2890.5
42.5°	9063.1	6968.2	2874.2	3008.8	3347.4	3520.8	3314.8	3063.9	2757.9	2686.5	2688.5
45°	9236.5	6833.6	2731.4	2980.2	3361.7	3531.0	3249.5	2847.7	2629.4	2584.5	2582.5
47.5°	9307.9	6588.8	2639.6	2935.4	3359.7	3447.4	3116.9	2757.9	2539.6	2527.4	2535.6
50°	9261.0	6186.9	2545.8	2847.7	3310.7	3359.7	2963.9	2678.3	2478.4	2545.8	2594.7
52.5°	9087.6	5666.8	2433.6	2727.3	3223.0	3259.7	2886.4	2629.4	2433.6	2523.3	2562.1
55°	9042.7	5244.5	2290.8	2570.2	3092.4	3082.2	2804.8	2604.9	2403.0	2368.3	2374.4
57.5°	*8983.6*	*4832.4*	*2054.1*	*2288.7*	*2762.0*	*2778.3*	*2727.3*	*2576.4*	*2323.4*	*2313.2*	*2323.4*
60°	7804.5	3704.4	1831.8	1974.6	2268.3	2356.0	2639.6	2523.3	2194.9	2152.1	2150.0
62.5°	5097.6	2243.9	1629.9	1721.6	1848.1	1950.1	2407.0	2370.3	2054.1	2027.6	2046.0
65°	2741.6	1599.3	1483.0	1538.1	1607.4	1684.9	1995.0	2111.3	1856.3	1762.4	1764.5
67.5°	1401.4	1360.6	1372.8	1411.6	1464.6	1503.4	1609.5	1711.4	1582.9	1503.4	1501.3
70°	1199.4	1232.1	1250.4	1272.9	1307.6	1301.4	1311.6	1330.0	1319.8	1281.0	1279.0
72.5°	1022.0	1073.0	1077.1	1081.1	1093.4	1064.8	1046.5	1015.9	1017.9	1024.0	1026.1
75°	777.2	826.1	838.4	832.3	844.5	807.8	783.3	752.7	716.0	709.9	714.0
77.5°	505.9	544.6	563.0	558.9	565.0	536.5	524.2	491.6	448.8	432.5	432.5
80°	306.0	328.4	342.7	346.8	352.9	332.5	312.1	283.5	265.2	246.8	246.8
82.5°	185.6	199.9	210.1	210.1	216.2	193.8	177.5	157.1	148.9	132.6	132.6
85°	93.8	104.0	108.1	106.1	102.0	83.6	77.5	67.3	63.2	55.1	55.1
87.5°	22.4	28.6	28.6	20.4	20.4	10.2	6.1	2.0	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

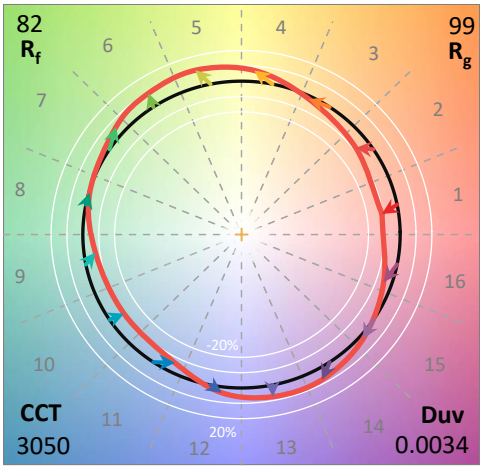
Test Information

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

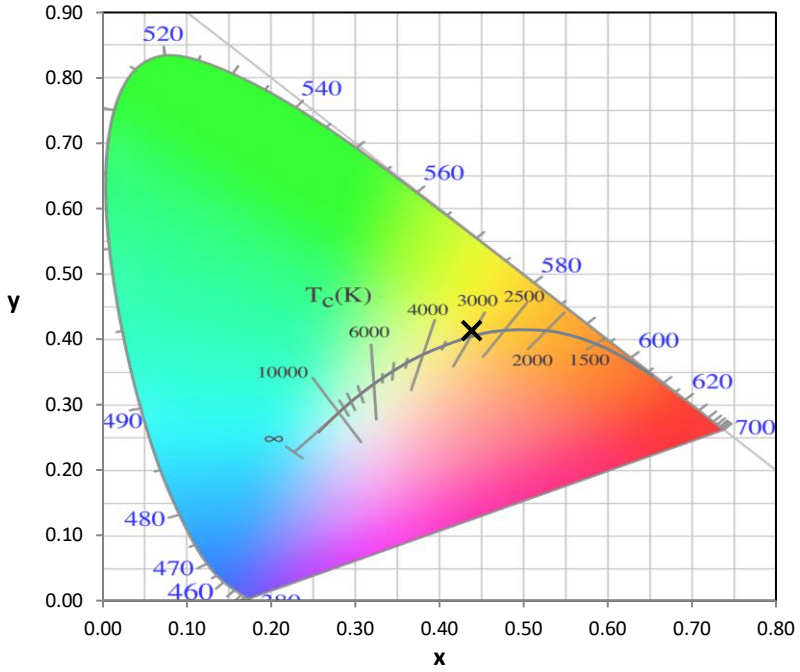
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

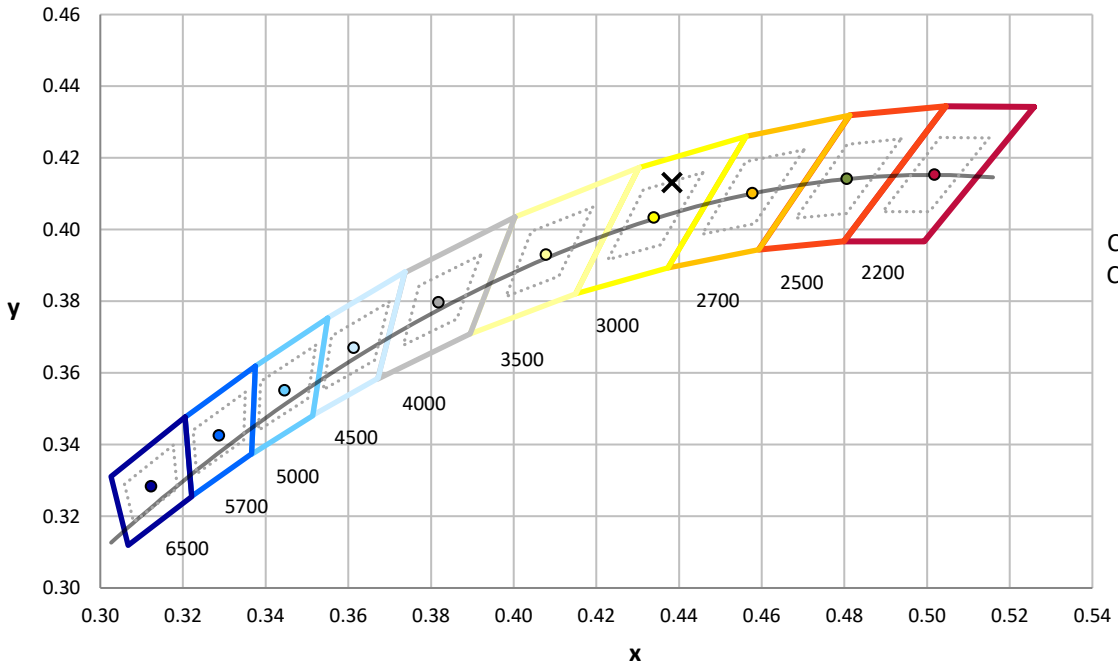
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

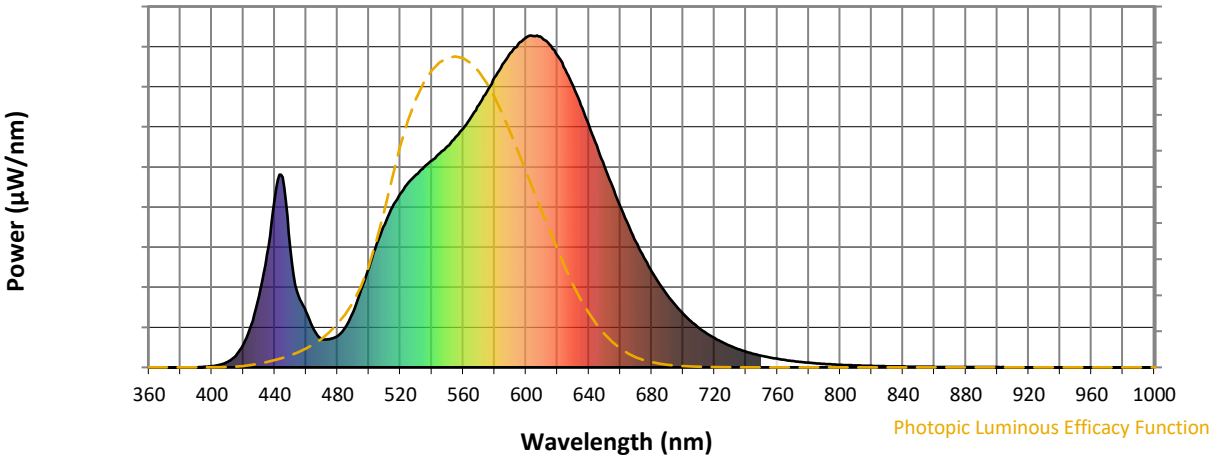


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

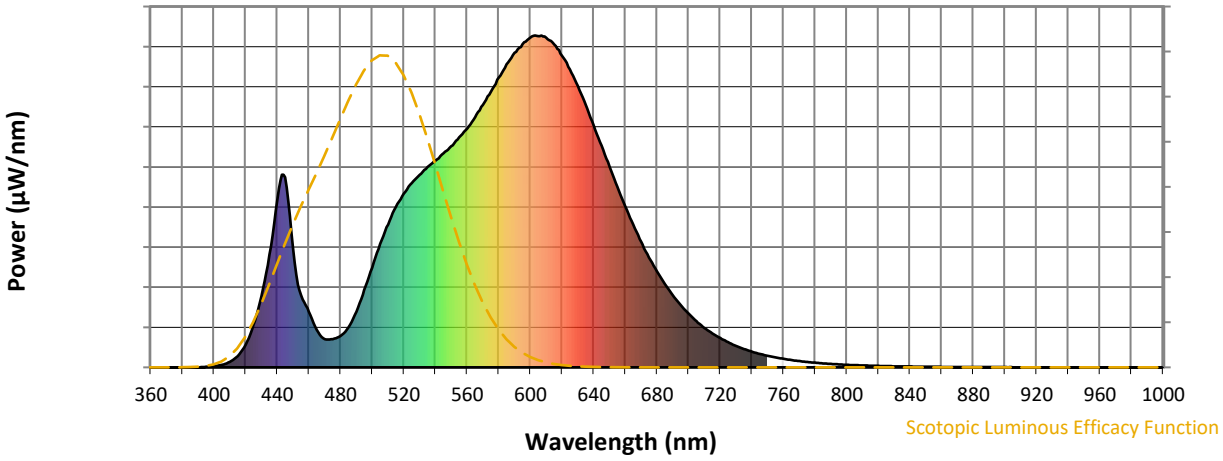


Photopic Lumens: NR

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

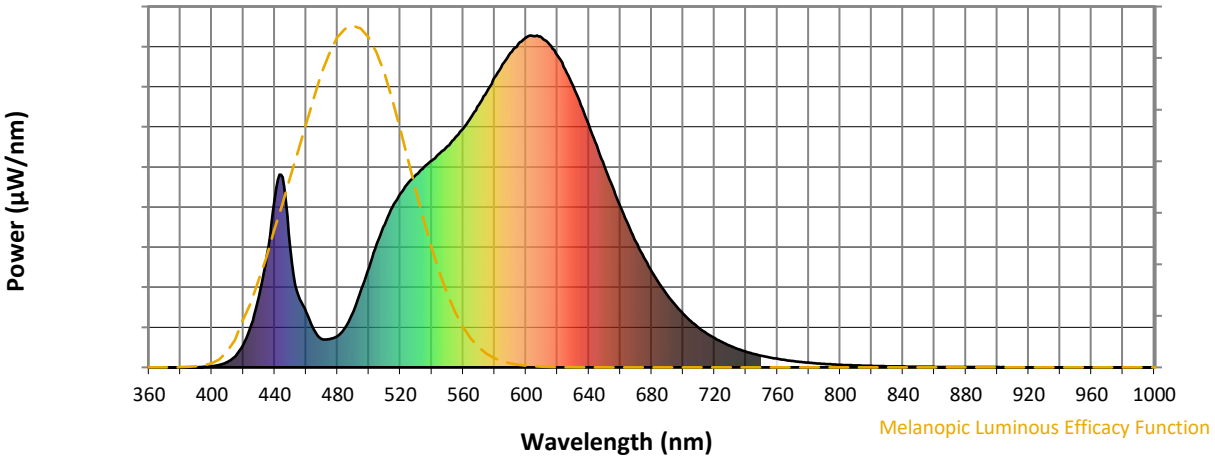


Scotopic Lumens: NR **S/P: 1.27**

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			

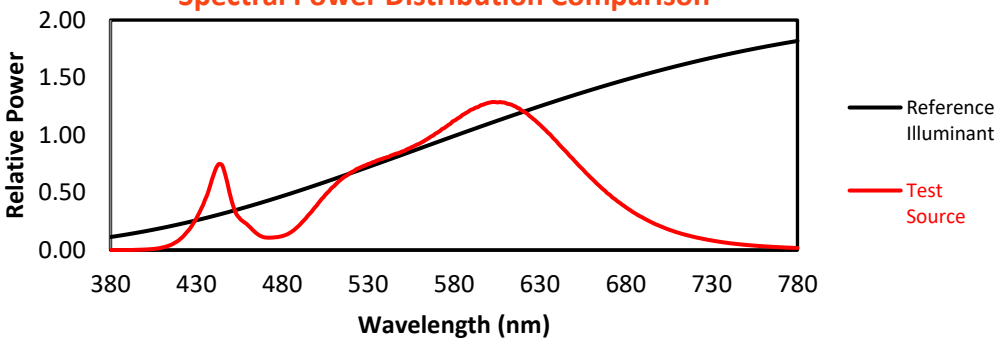
REPORT NUMBER: SP1-2408-195-9

TM-30-18

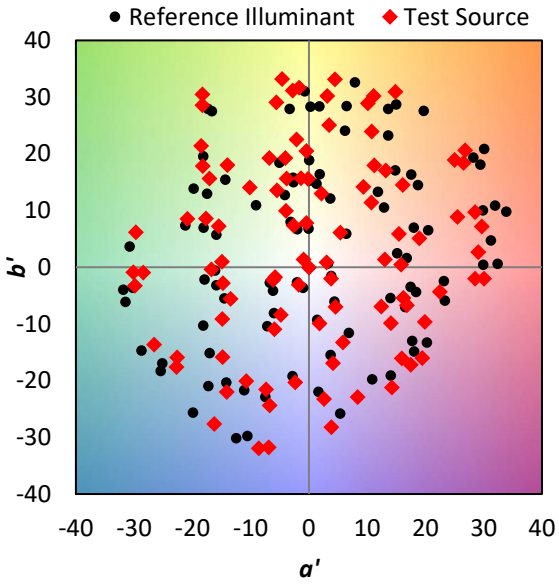
Summary

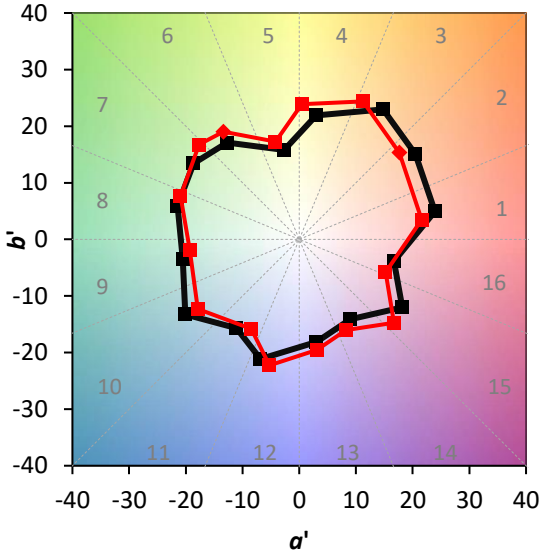
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

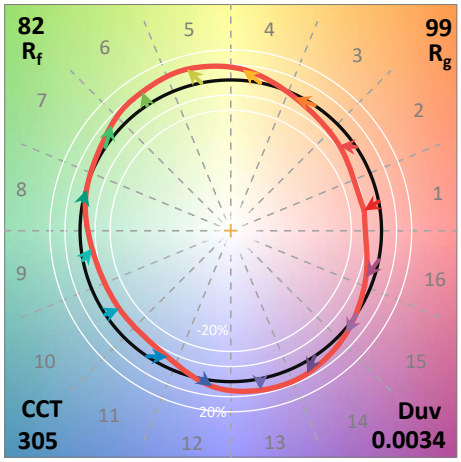
Spectral Power Distribution Comparison

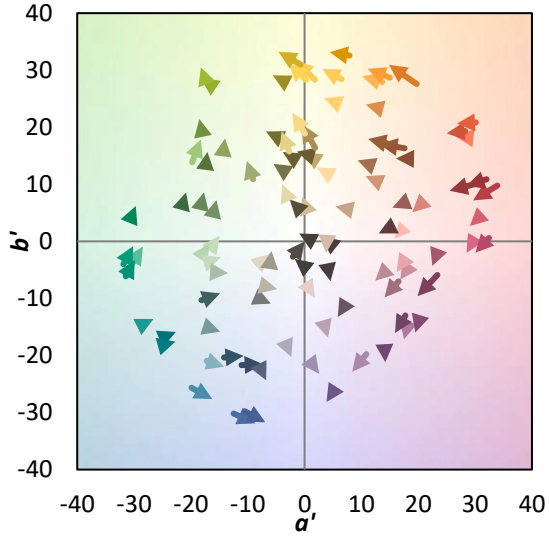


Color Vector Graphics







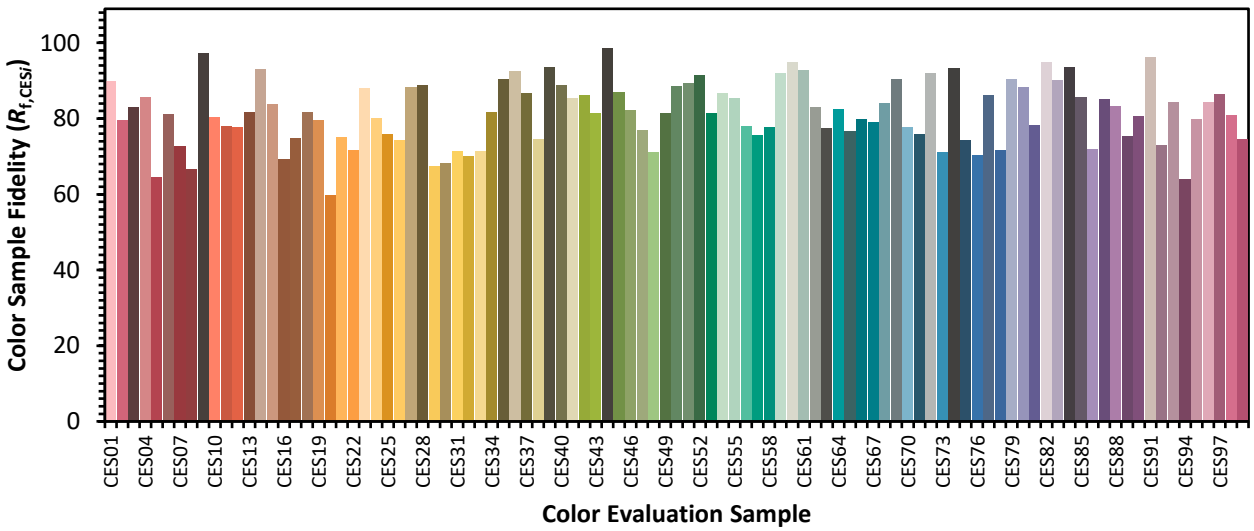


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

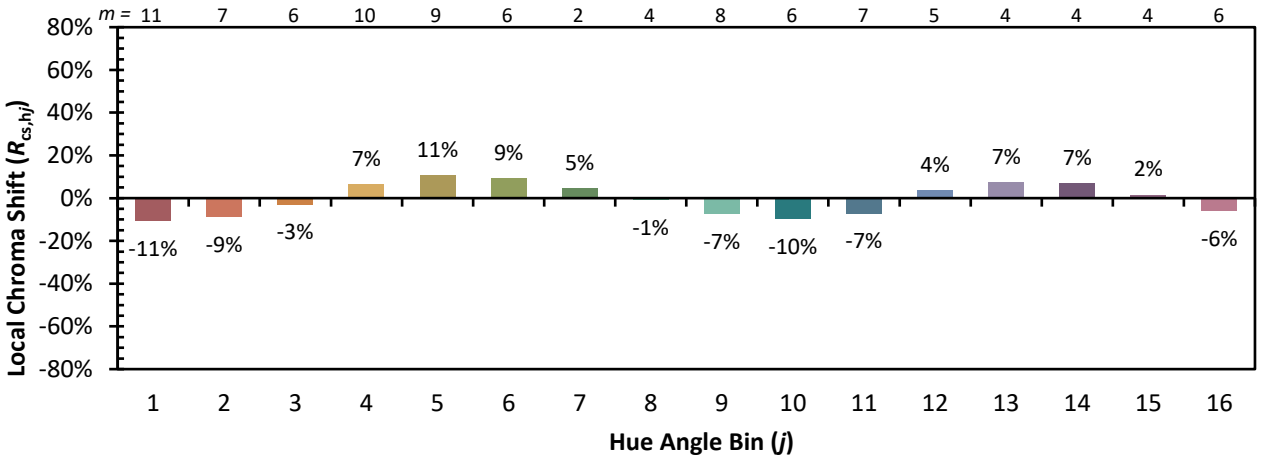
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

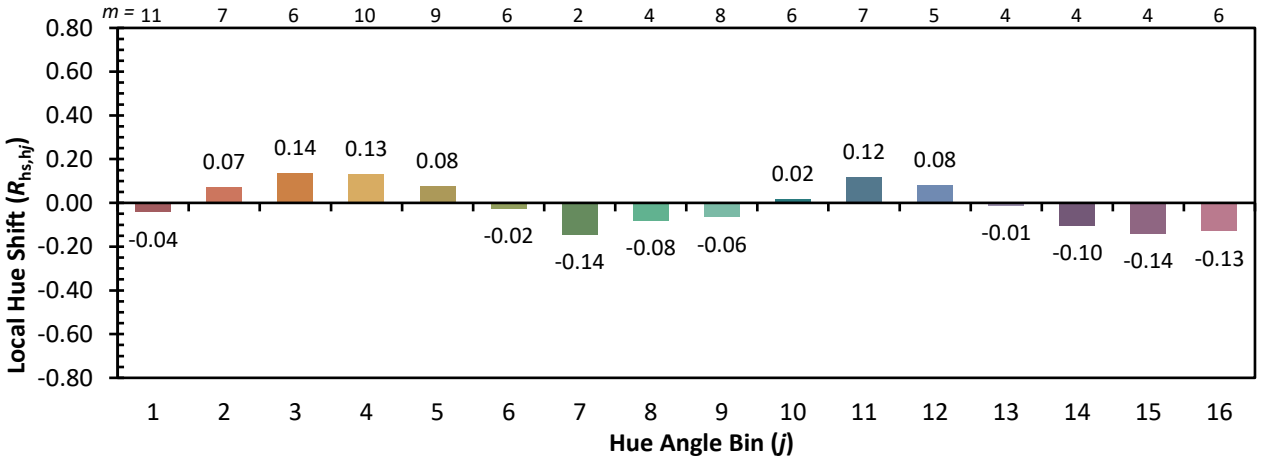


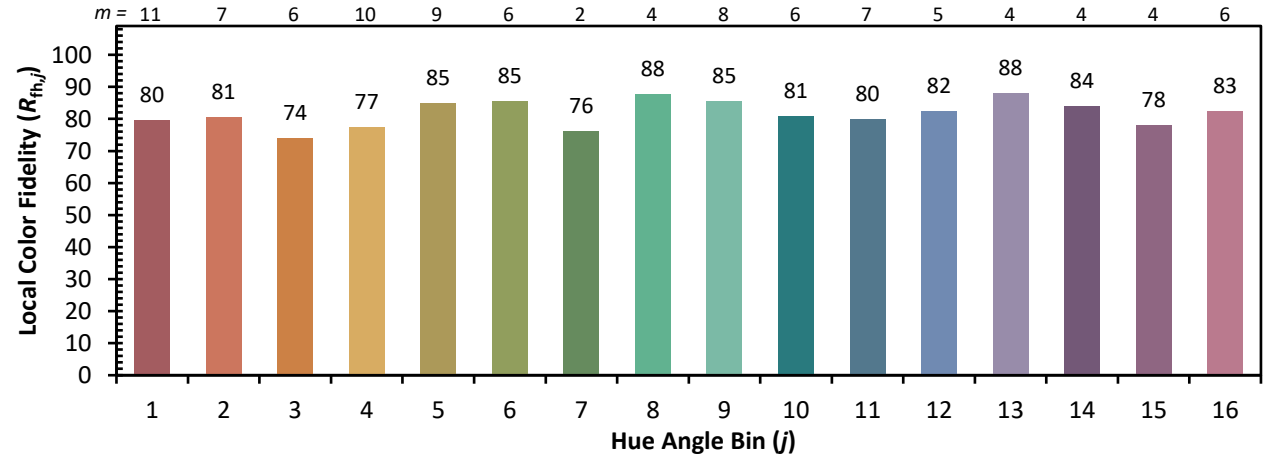
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



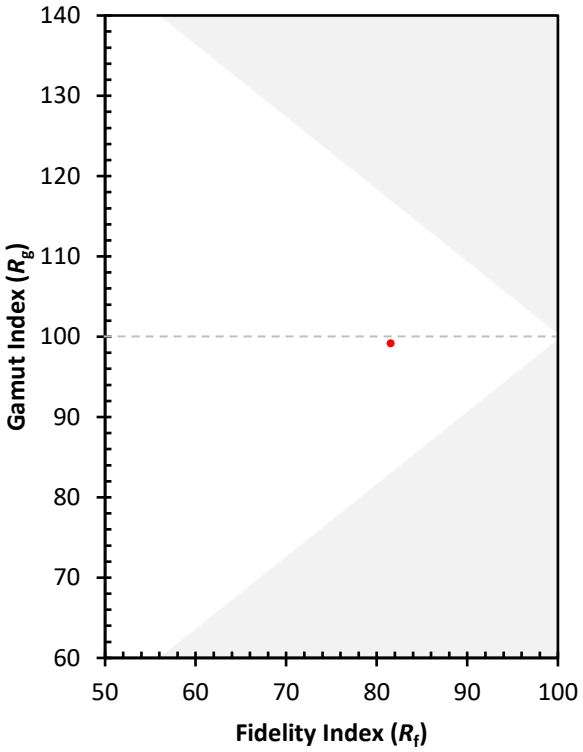


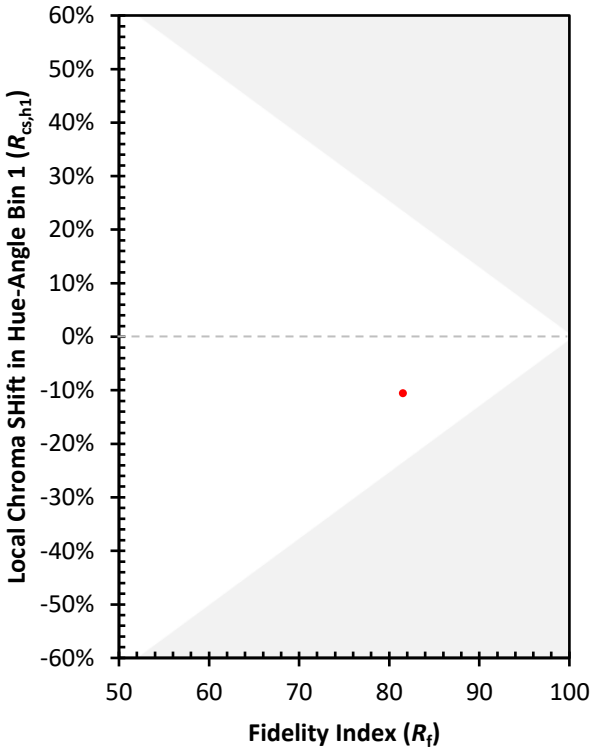


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)