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: P640458

Luminaire Tested: GWS-SA5D-830-U-SL4-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:	P640458
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5D-830-U-SL4-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	22919 lumens
Efficiency:	N/A
Efficacy:	112.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U0 - G4

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

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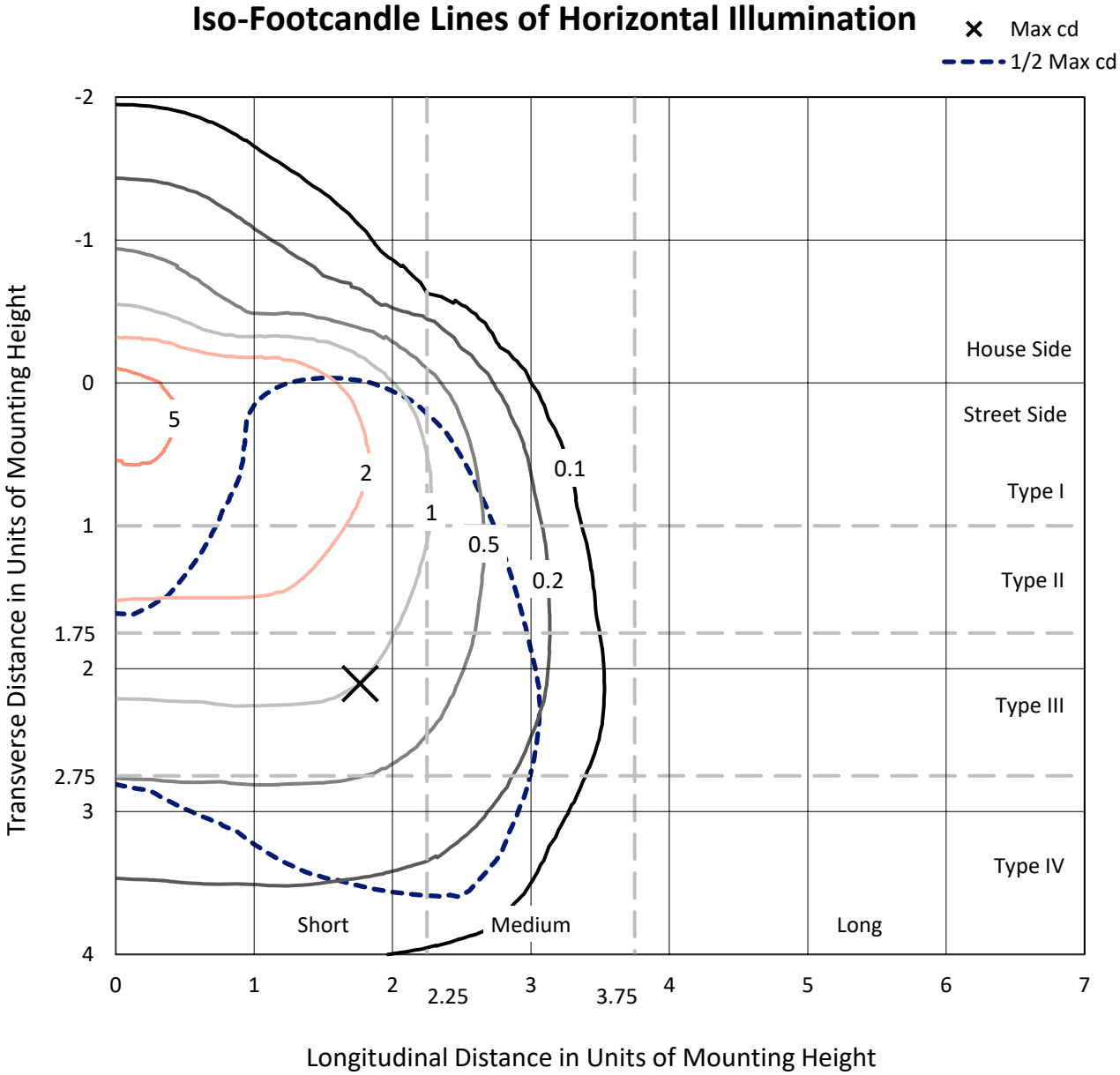
Scaled Data Report

REPORT NUMBER: P640458
CATALOG NUMBER: GWS-SA5D-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
Type IV - Short - N/A

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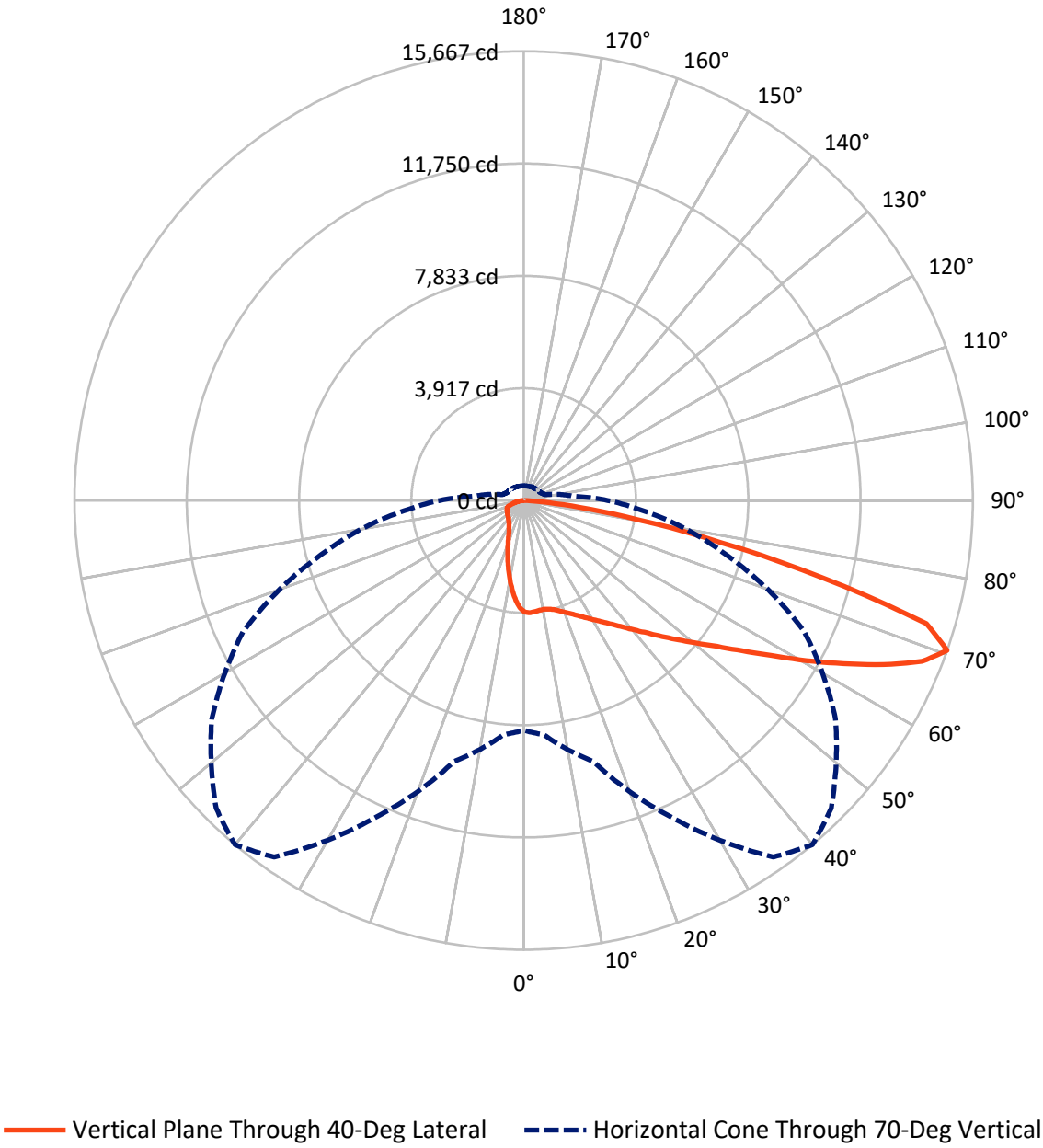
Luminous Intensity Polar Plot



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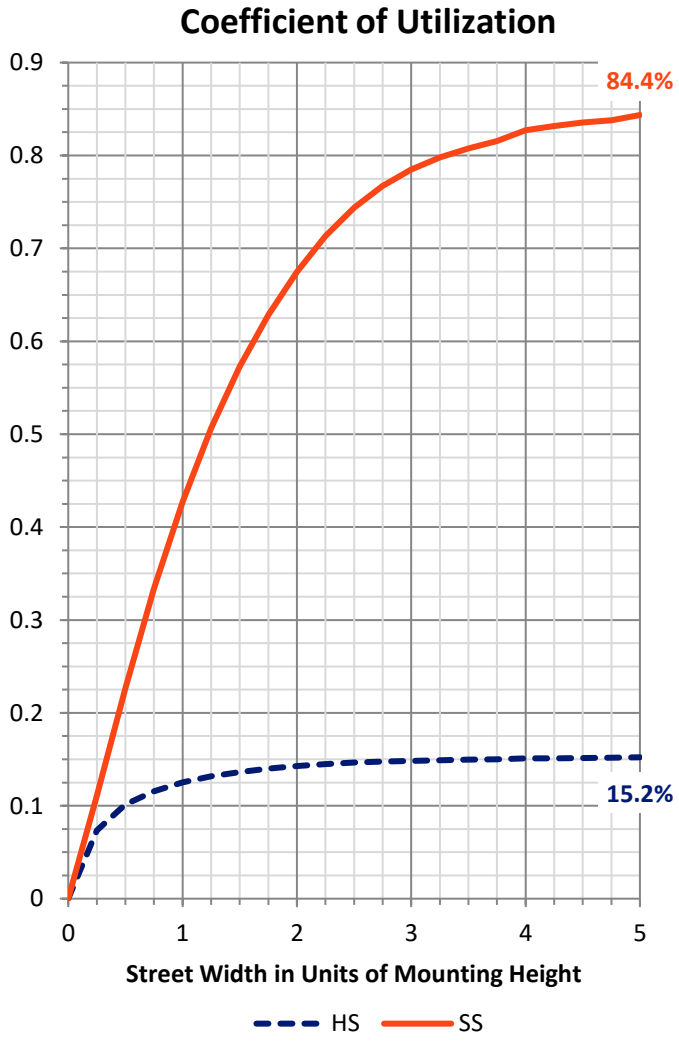
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3530.1	0.0	3530.1
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	19388.9	0.0	19388.9
	% Fixture	84.6	0.0	84.6
Total	Lumens	22919.0	0.0	22919.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.8	1.5
10°-20°	896.2	3.9
20°-30°	1407.2	6.1
30°-40°	2115.7	9.2
40°-50°	3265.7	14.2
50°-60°	4849.8	21.2
60°-70°	6113.1	26.7
70°-80°	3535.2	15.4
80°-90°	392.3	1.7
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°	22919.0	100.0
0°-180°	22919.0	100.0



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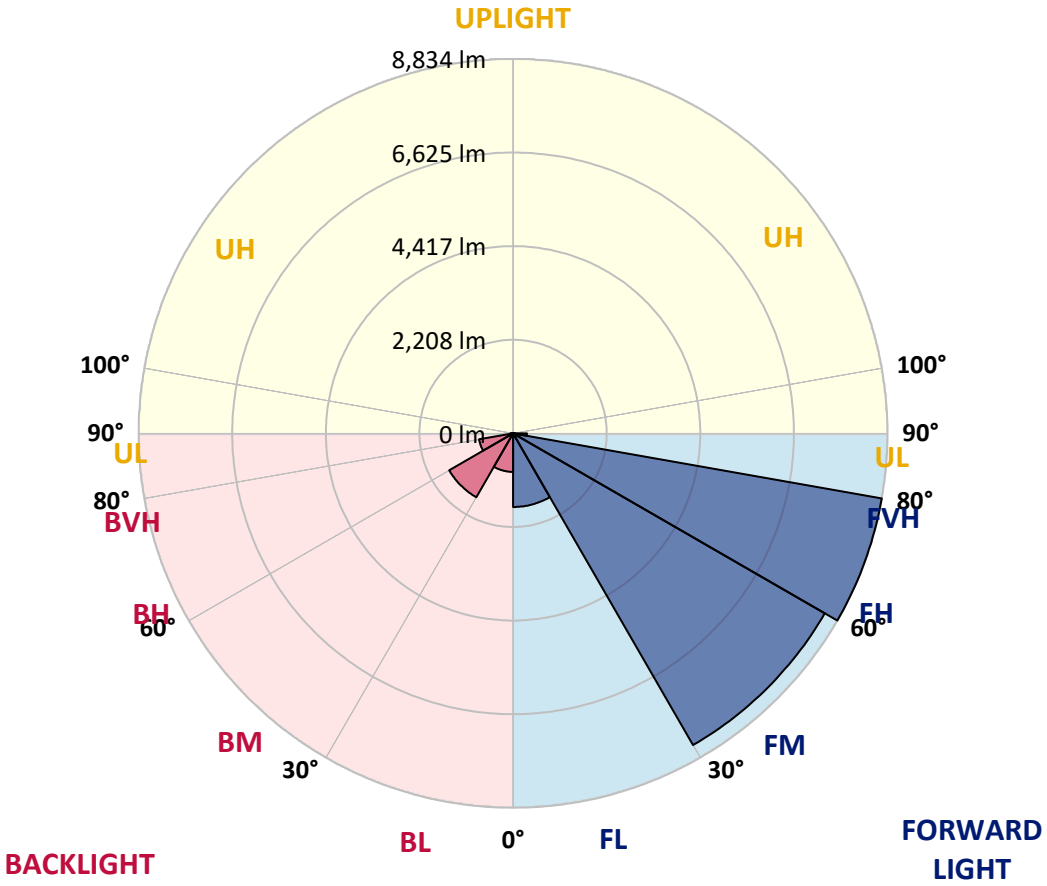
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1737.4	7.6			
FM	(30°-60°)	8491.2	37.0			
FH	(60°-80°)	8833.5	38.5			G4/12000
FVH	(80°-90°)	326.8	1.4			G3/500
BL	(0°-30°)	909.8	4.0	B2/1000		
BM	(30°-60°)	1740.0	7.6	B2/2500		
BH	(60°-80°)	814.8	3.6	B2/1000		G2/1000
BVH	(80°-90°)	65.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
Type IV Short



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REPORT NUMBER: P640458
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3891.9	3891.9	3891.9	3891.9	3891.9	*3891.9*	3891.9	3891.9	3891.9	3891.9	3891.9
2.5°	3915.9	3922.7	3927.8	3934.7	3931.3	*3921.0*	3929.5	3929.5	3910.7	3890.2	3871.4
5°	3921.0	3929.5	3927.8	3926.1	3912.4	*3895.3*	3895.3	3885.1	3852.6	3820.1	3789.3
7.5°	3910.7	3909.0	3907.3	3902.2	3886.8	*3868.0*	3864.5	3844.0	3801.2	3756.8	3712.3
10°	3864.5	3862.8	3868.0	3879.9	3876.5	*3859.4*	3859.4	3840.6	3791.0	3736.2	3678.1
12.5°	3826.9	3826.9	3847.4	3879.9	3891.9	*3885.1*	3886.8	3873.1	3816.6	3751.6	3683.2
15°	3832.0	3833.7	3878.2	3931.3	3953.5	*3948.4*	3950.1	3934.7	3871.4	3806.4	3714.0
17.5°	3866.2	3874.8	3951.8	4025.3	4054.4	*4047.6*	4035.6	4009.9	3938.1	3864.5	3751.6
20°	3938.1	3951.8	4051.0	4143.4	4177.6	*4162.2*	4141.7	4090.4	4011.7	3931.3	3792.7
22.5°	4080.1	4088.6	4198.1	4288.8	4316.2	*4297.4*	4256.3	4182.7	4092.1	4008.2	3842.3
25°	4280.2	4290.5	4394.9	4478.7	4471.8	*4449.6*	4393.2	4302.5	4194.7	4105.8	3914.1
27.5°	4518.0	4535.1	4637.8	4704.5	4660.0	*4627.5*	4564.2	4454.7	4333.3	4252.9	4023.6
30°	4778.1	4784.9	4872.2	4938.9	4870.4	*4826.0*	4749.0	4630.9	4521.5	4461.6	4187.9
32.5°	5029.5	5036.4	5111.7	5149.3	5077.4	*5044.9*	4978.2	4853.3	4776.4	4743.9	4432.5
35°	5294.7	5293.0	5354.6	5387.1	5313.5	*5299.8*	5231.4	5135.6	5121.9	5164.7	4790.0
37.5°	5559.9	5544.5	5577.0	5619.7	5578.7	*5592.4*	5547.9	5515.4	5568.4	5679.6	5265.6
40°	5772.0	5772.0	5806.2	5859.2	5872.9	*5932.8*	5907.1	5949.9	6121.0	6386.2	5854.1
42.5°	5960.2	5961.9	6033.7	6115.9	6215.1	*6307.5*	6328.0	6439.2	6793.3	7209.0	6593.2
45°	6156.9	6158.6	6256.1	6375.9	6586.3	*6762.5*	6803.6	7053.3	7559.7	8066.1	7395.5
47.5°	6384.4	6365.6	6500.8	6700.9	7000.3	*7253.5*	7359.6	7713.7	8353.5	8976.2	8151.6
50°	6641.1	6601.7	6752.2	7097.8	7467.3	*7814.6*	7992.5	8398.0	9205.4	9816.2	8863.3
52.5°	6930.2	6907.9	7065.3	7486.2	8050.7	*8451.0*	8692.2	9224.3	10033.4	10652.7	9427.8
55°	7289.4	7236.4	7463.9	7999.4	8735.0	*9244.8*	9530.5	10042.0	10938.4	11412.3	9858.9
57.5°	7682.9	7624.7	7929.2	8640.9	9624.6	*10184.0*	10541.5	10962.4	11790.3	11993.9	10112.1
60°	8107.1	8088.3	8449.3	9393.6	10685.2	*11335.3*	11593.6	11975.1	12531.1	12330.9	10048.8
62.5°	8495.5	8488.6	9013.8	10209.6	11809.2	*12524.2*	12729.5	12830.5	13064.8	12308.7	9545.9
65°	8904.3	8962.5	9672.5	11155.7	13097.3	*13798.7*	13884.3	13627.7	13244.5	11725.3	8516.0
67.5°	8955.7	9068.6	10086.5	12041.8	14318.8	*14980.9*	14912.4	13930.5	12714.1	10101.9	6675.3
70°	*8009.6*	*8206.4*	*9426.1*	*12177.0*	*15179.3*	*15666.9*	*15172.5*	*13278.7*	*10789.6*	*7318.5*	*4198.1*
72.5°	6692.4	6861.7	7939.5	10384.1	14069.0	*14690.0*	14021.1	11239.5	7624.7	4198.1	2138.4
75°	5209.2	5405.9	6399.8	8254.3	10533.0	*10781.0*	10445.7	7838.6	4191.3	1731.3	971.7
77.5°	3178.5	3320.5	4093.8	5592.4	7369.8	*6998.6*	5931.1	4394.9	1839.0	829.7	600.5
80°	1406.2	1493.5	2016.9	3004.0	4258.0	*4025.3*	3173.4	1876.7	1005.9	526.9	419.1
82.5°	754.4	810.9	993.9	1189.0	1869.8	*1955.4*	1585.8	1081.2	540.6	301.1	239.5
85°	331.9	364.4	451.6	431.1	614.2	*603.9*	609.0	742.5	258.3	138.6	155.7
87.5°	0.0	0.0	0.0	0.0	1.7	*1.7*	18.8	99.2	25.7	41.1	35.9
90°	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0

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REPORT NUMBER: P640458
CATALOG NUMBER: GWS-SA5D-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3891.9	3891.9	3891.9	3891.9	3891.9	3891.9	3891.9	3891.9	3891.9	3891.9	3891.9
2.5°	3850.9	3820.1	3811.5	3801.2	3782.4	3749.9	3726.0	3698.6	3686.6	3672.9	3674.6
5°	3755.1	3717.4	3681.5	3635.3	3577.1	3512.1	3467.6	3416.3	3389.0	3363.3	3370.1
7.5°	3672.9	3614.8	3541.2	3443.7	3339.3	3223.0	3128.9	3055.4	3005.8	2971.5	2988.6
10°	3621.6	3553.2	3424.9	3265.8	3089.6	2911.7	2776.5	2649.9	2571.2	2509.6	2506.2
12.5°	3611.3	3522.4	3335.9	3105.0	2850.1	2612.3	2413.8	2242.8	2138.4	2061.4	2090.5
15°	3621.6	3508.7	3258.9	2956.1	2634.5	2312.9	2066.6	1869.8	1744.9	1674.8	1669.7
17.5°	3633.6	3495.0	3171.7	2795.3	2408.7	2040.9	1755.2	1546.5	1418.2	1348.1	1349.8
20°	3643.9	3474.5	3069.0	2619.1	2179.5	1787.7	1491.8	1293.3	1178.7	1127.4	1135.9
22.5°	3661.0	3454.0	2959.6	2430.9	1945.1	1543.1	1283.0	1122.2	1053.8	1019.6	1021.3
25°	3693.5	3442.0	2846.7	2225.7	1714.2	1348.1	1139.3	1031.6	988.8	968.3	966.6
27.5°	3760.2	3452.3	2728.6	2027.2	1505.4	1199.2	1047.0	976.8	947.7	934.1	932.3
30°	3871.4	3493.3	2626.0	1825.3	1325.8	1082.9	983.7	940.9	923.8	911.8	910.1
32.5°	4040.7	3570.3	2514.8	1637.2	1180.4	997.4	934.1	911.8	899.8	893.0	893.0
35°	4297.4	3710.6	2405.3	1472.9	1067.5	930.6	894.7	886.2	875.9	872.5	875.9
37.5°	4666.9	3934.7	2306.1	1329.2	987.1	879.3	851.9	855.4	846.8	851.9	857.1
40°	5135.6	4234.1	2222.2	1211.2	927.2	841.7	814.3	826.3	821.2	826.3	834.8
42.5°	5729.2	4605.3	2158.9	1118.8	884.4	810.9	785.2	797.2	793.8	800.6	809.2
45°	6391.3	5094.6	2129.9	1053.8	853.7	788.6	761.3	769.8	766.4	771.5	780.1
47.5°	7026.0	5539.3	2155.5	1016.2	828.0	769.8	740.7	744.2	742.5	740.7	745.9
50°	7573.4	5893.5	2229.1	1004.2	810.9	751.0	723.6	725.3	720.2	710.0	713.4
52.5°	8019.9	6177.4	2273.6	1004.2	802.3	730.5	704.8	706.5	696.3	682.6	684.3
55°	8314.1	6292.1	2237.6	1002.5	798.9	713.4	686.0	687.7	677.4	660.3	662.1
57.5°	8398.0	6180.9	2087.1	983.7	795.5	699.7	667.2	670.6	663.8	644.9	644.9
60°	8163.6	5773.7	1811.7	940.9	786.9	691.1	653.5	658.6	655.2	636.4	636.4
62.5°	7549.4	5050.1	1483.2	875.9	763.0	680.9	641.5	651.8	660.3	650.1	648.4
65°	6399.8	4045.9	1206.1	804.0	732.2	663.8	624.4	650.1	668.9	682.6	682.6
67.5°	4802.0	2896.3	983.7	728.8	686.0	629.5	602.2	626.1	639.8	648.4	653.5
70°	*2927.1*	*1703.9*	*775.0*	*641.5*	*619.3*	*578.2*	*557.7*	*533.7*	*514.9*	*511.5*	*513.2*
72.5°	1431.9	975.1	629.5	545.7	528.6	491.0	444.8	434.5	426.0	420.8	419.1
75°	788.6	679.2	520.1	453.3	422.6	376.4	366.1	349.0	345.6	338.7	340.4
77.5°	557.7	535.5	429.4	367.8	321.6	297.7	302.8	290.8	290.8	285.7	284.0
80°	419.1	420.8	330.2	268.6	237.8	229.2	234.4	234.4	230.9	229.2	227.5
82.5°	265.2	299.4	222.4	172.8	169.4	171.1	169.4	167.7	171.1	165.9	164.2
85°	183.0	215.6	135.1	102.6	102.6	100.9	104.4	102.6	106.1	100.9	100.9
87.5°	41.1	95.8	49.6	30.8	32.5	30.8	32.5	34.2	37.6	39.3	39.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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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

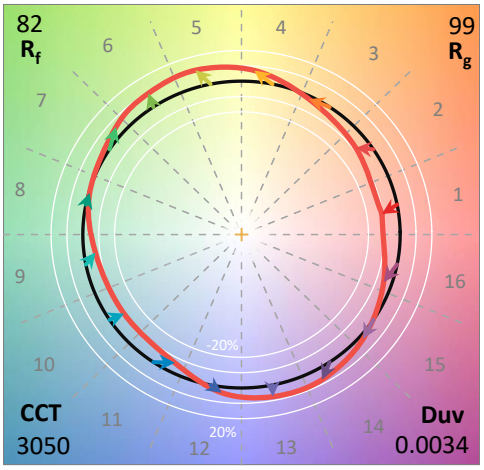
Test Information

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

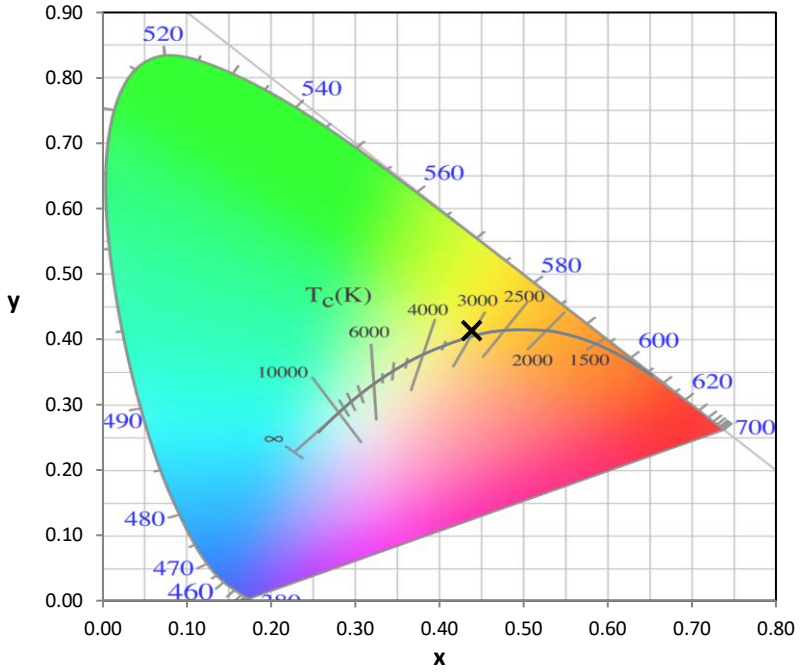
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

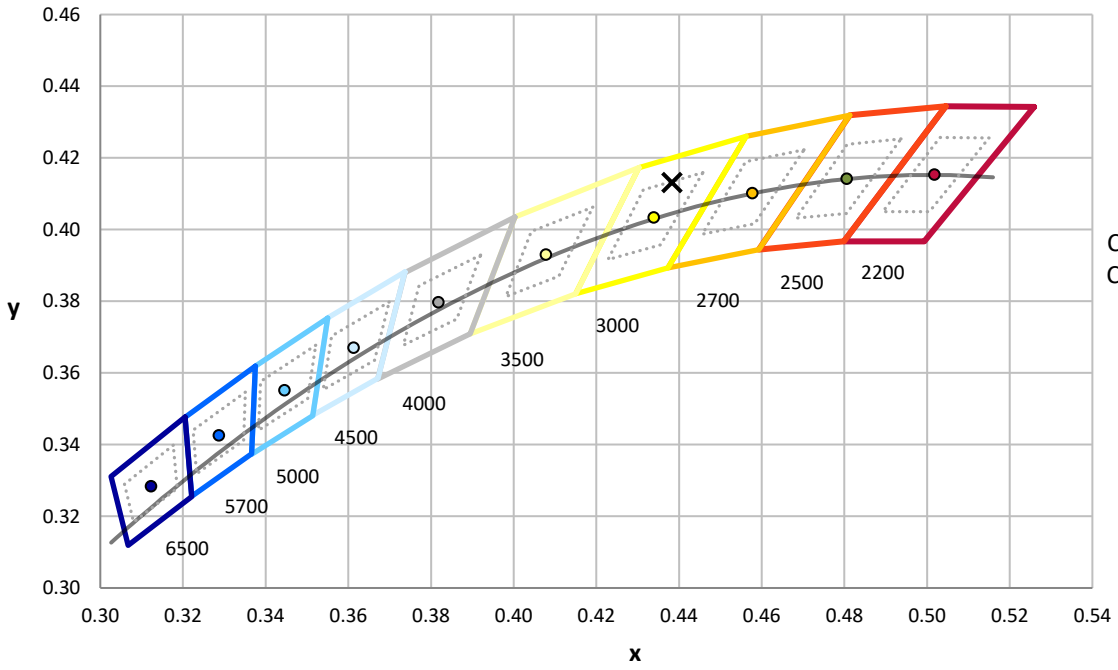
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

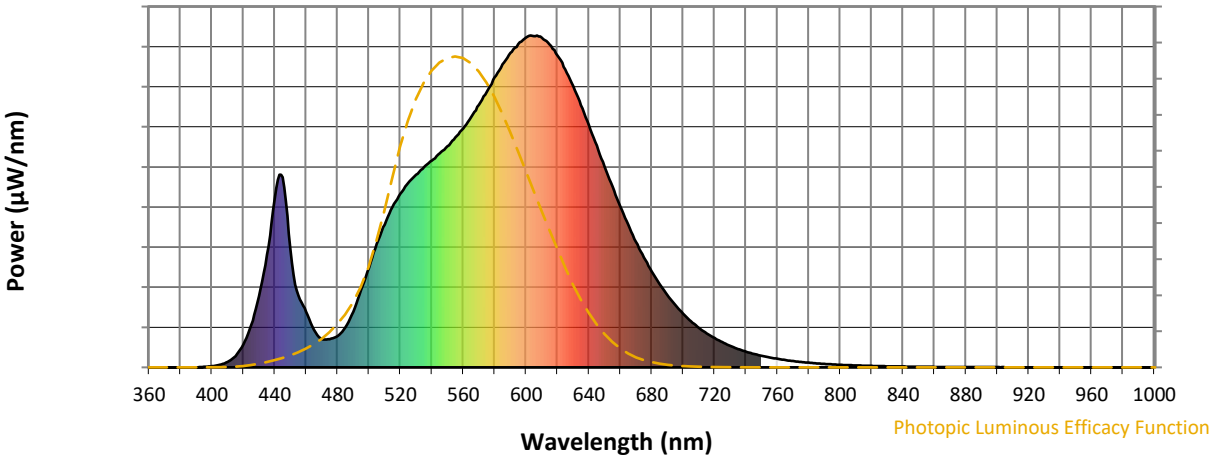


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

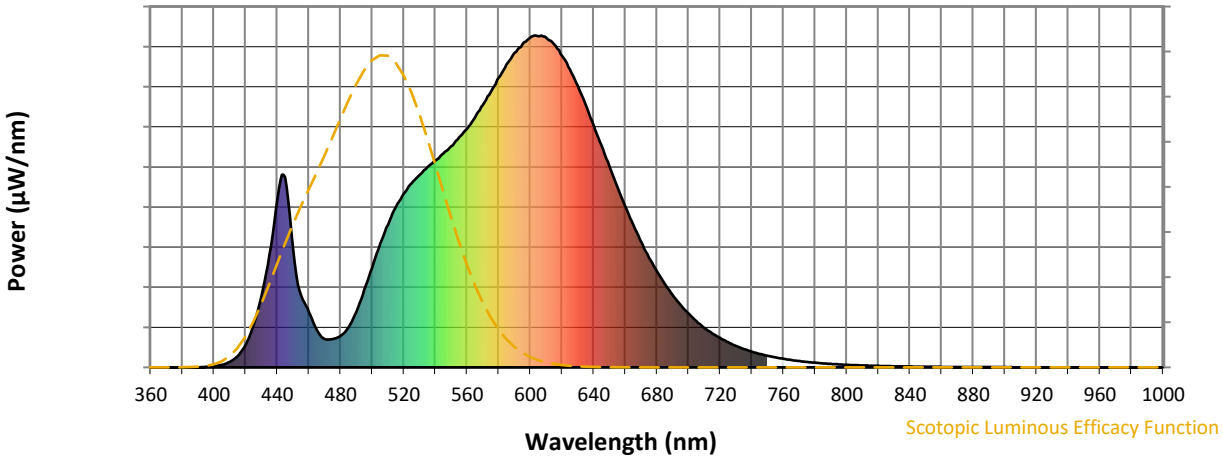


Photopic Lumens: NR

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

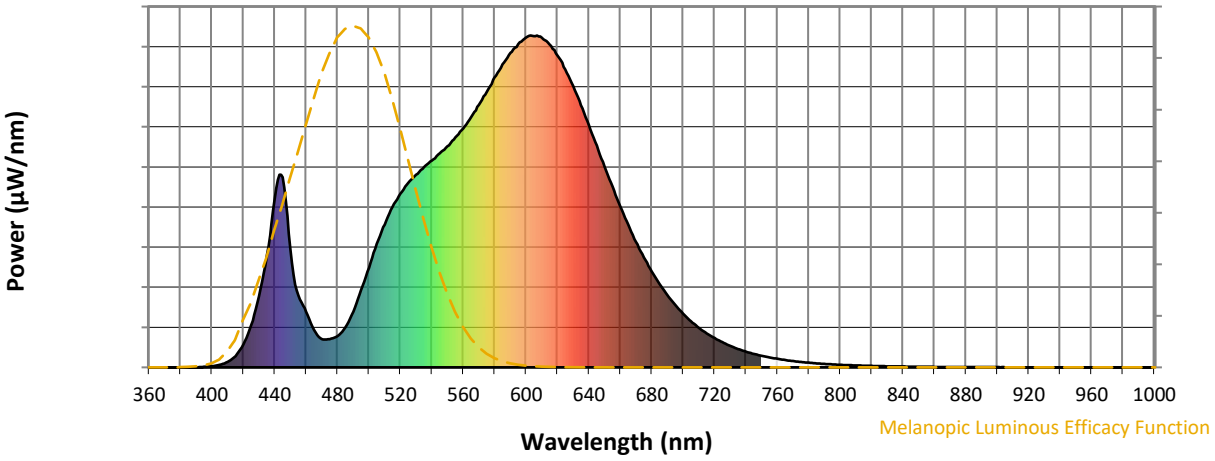


Scotopic Lumens: NR **S/P: 1.27**

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			

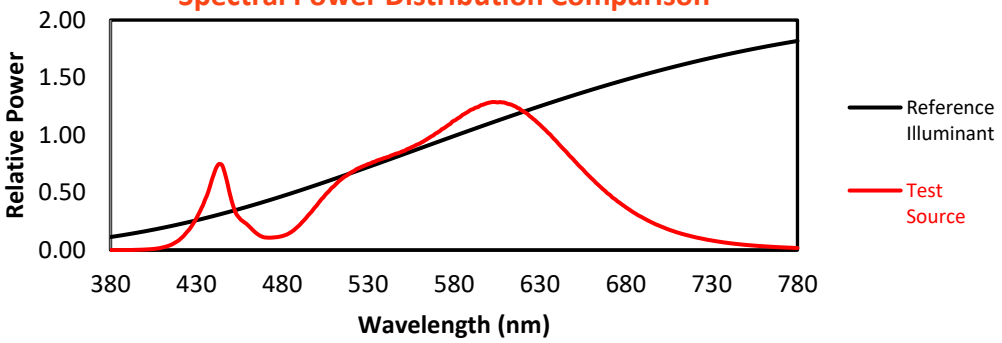
REPORT NUMBER: SP1-2408-195-9

TM-30-18

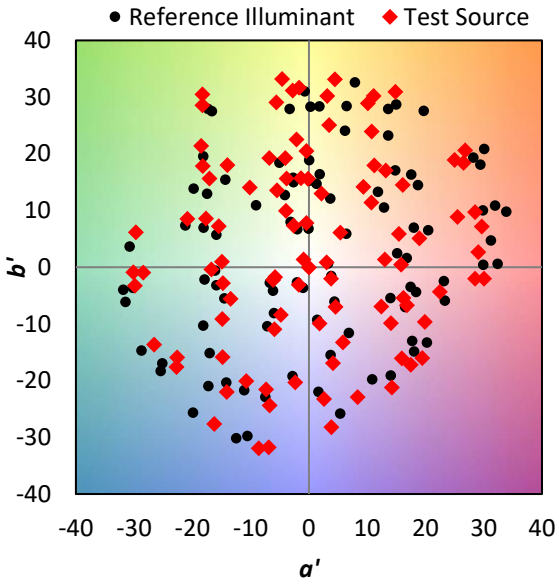
Summary

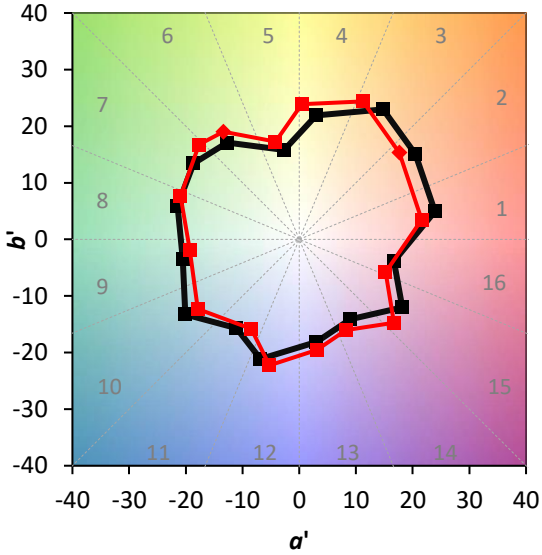
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

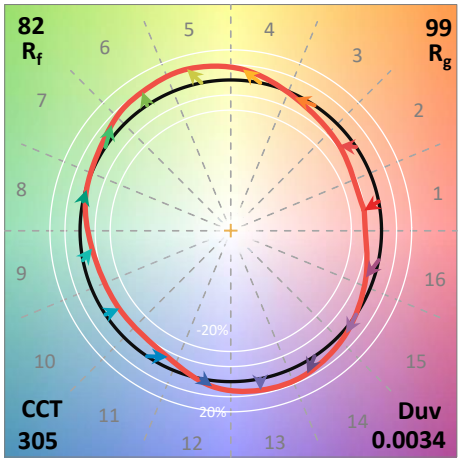
Spectral Power Distribution Comparison

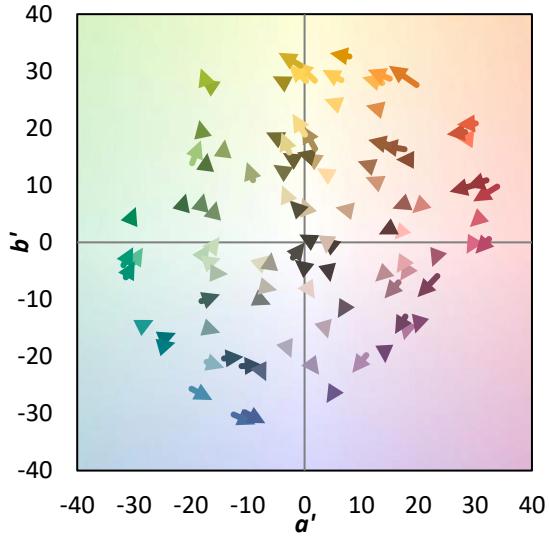


Color Vector Graphics







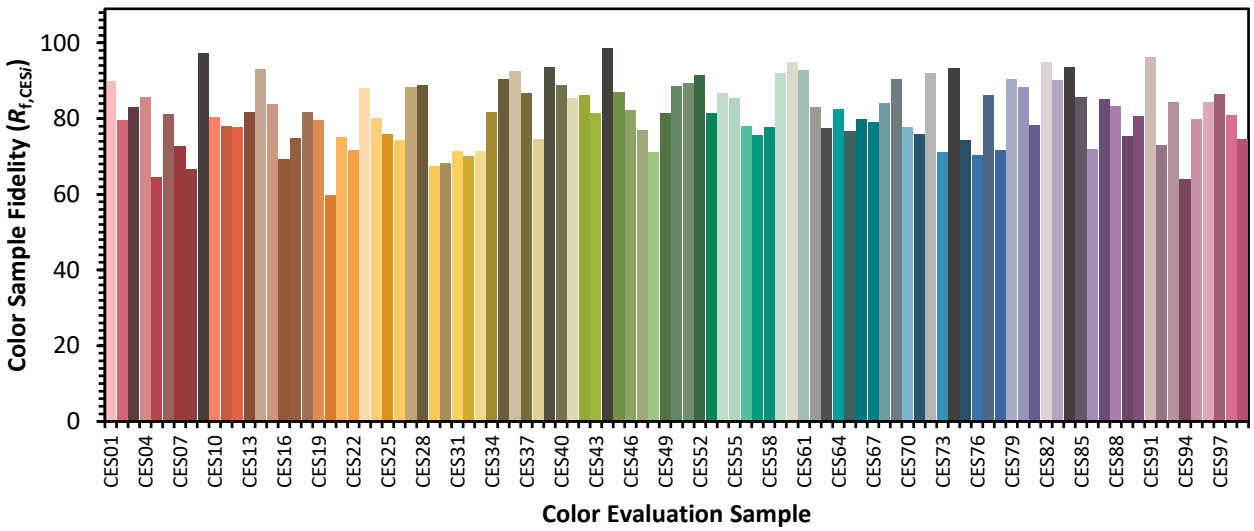


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

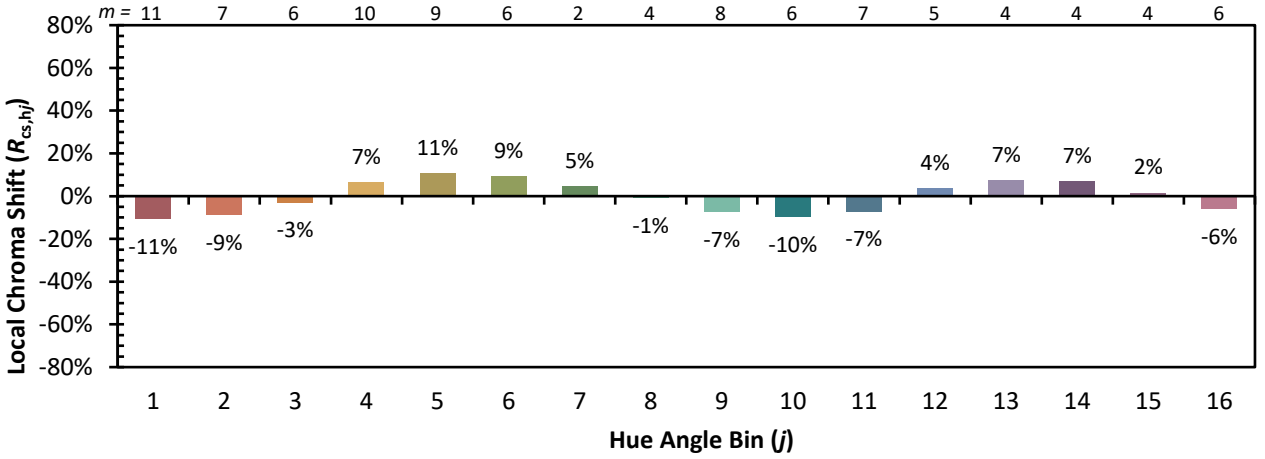
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

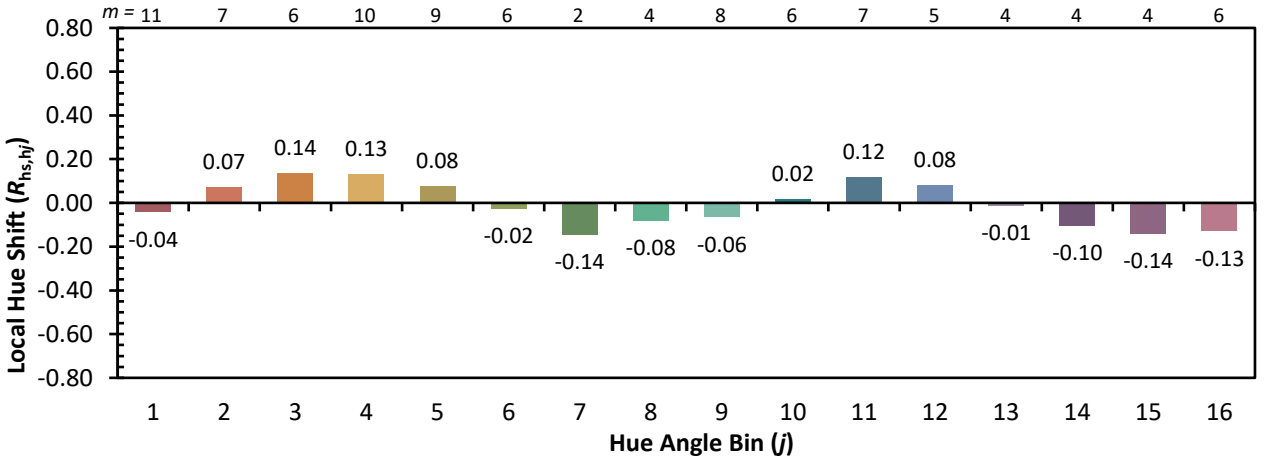


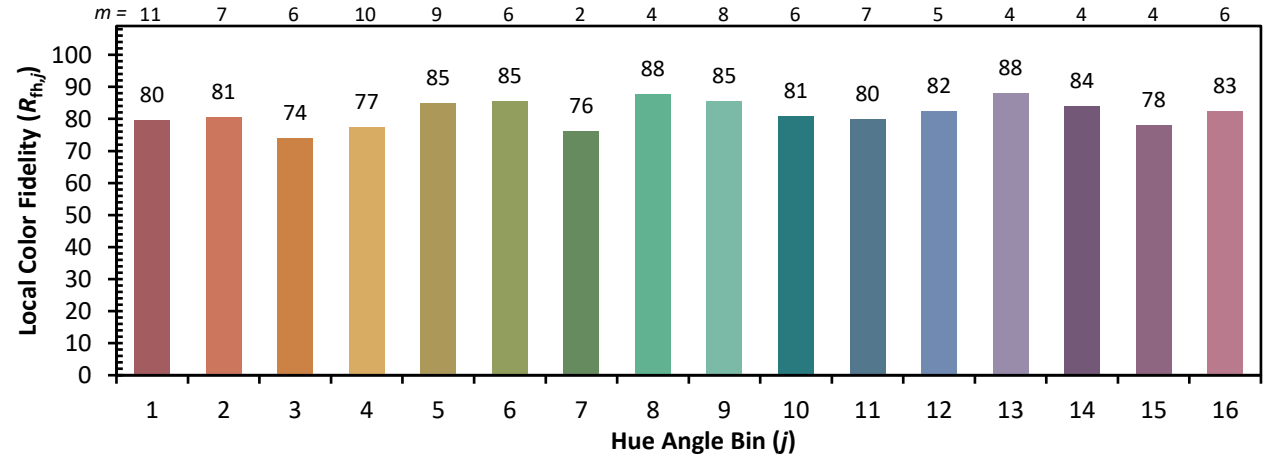
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



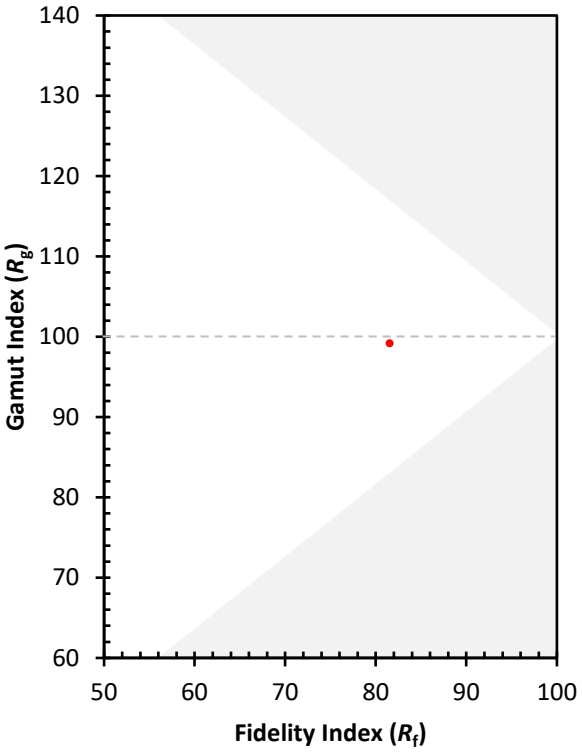


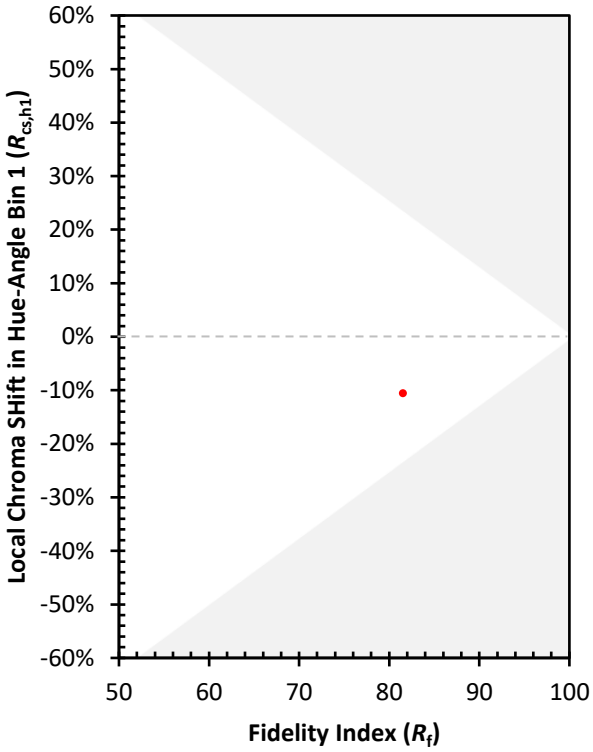


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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