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: P636492

Luminaire Tested: GWS-SA3F-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:	P636492
	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-SA3F-830-U-SL2-W
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	19087 lumens
Efficiency:	N/A
Efficacy:	104.2 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

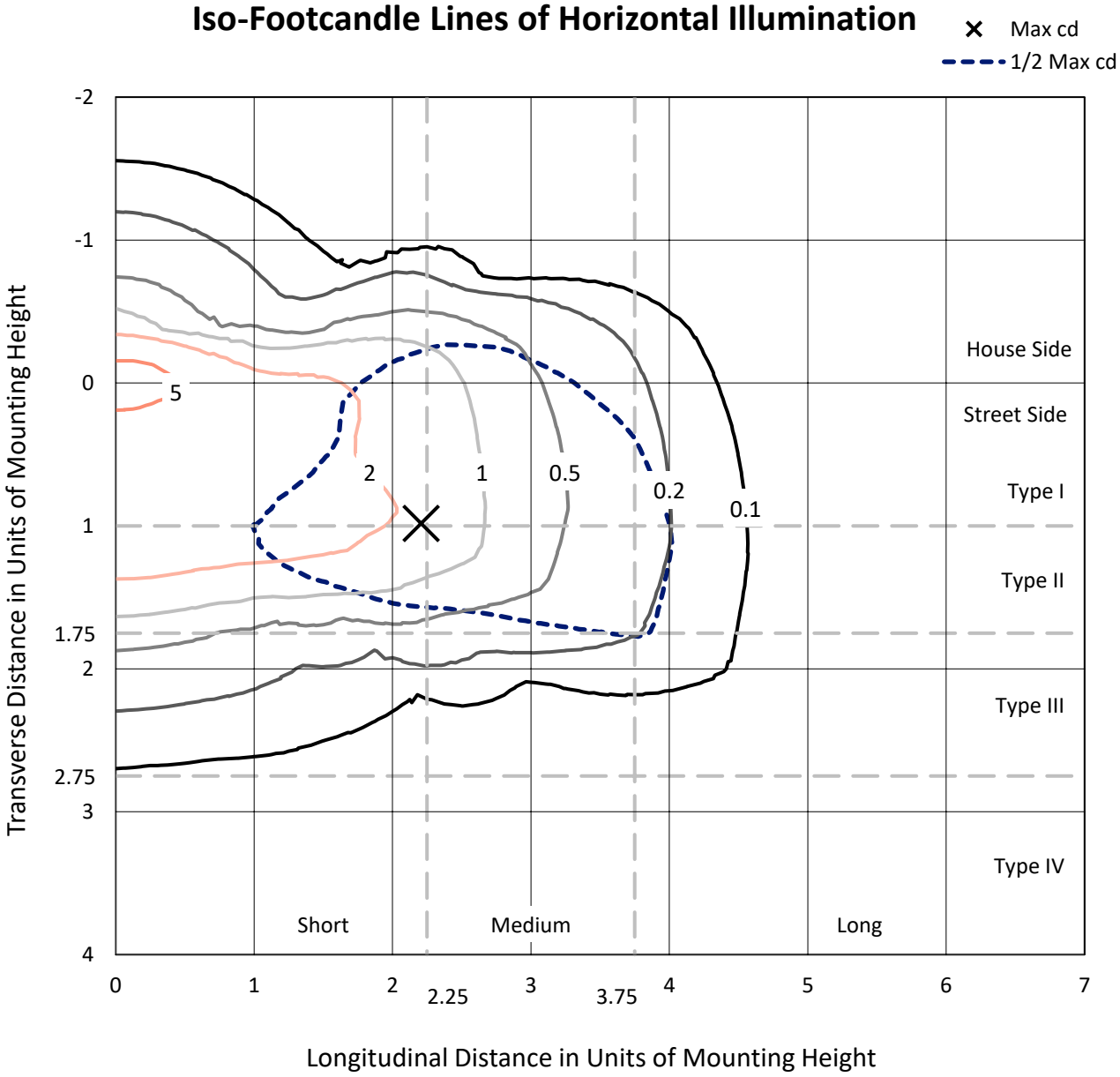
Input Watts (W):	183.2
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P636492
CATALOG NUMBER: GWS-SA3F-830-U-SL2-W

Iso-Footcandle Lines of Horizontal Illumination



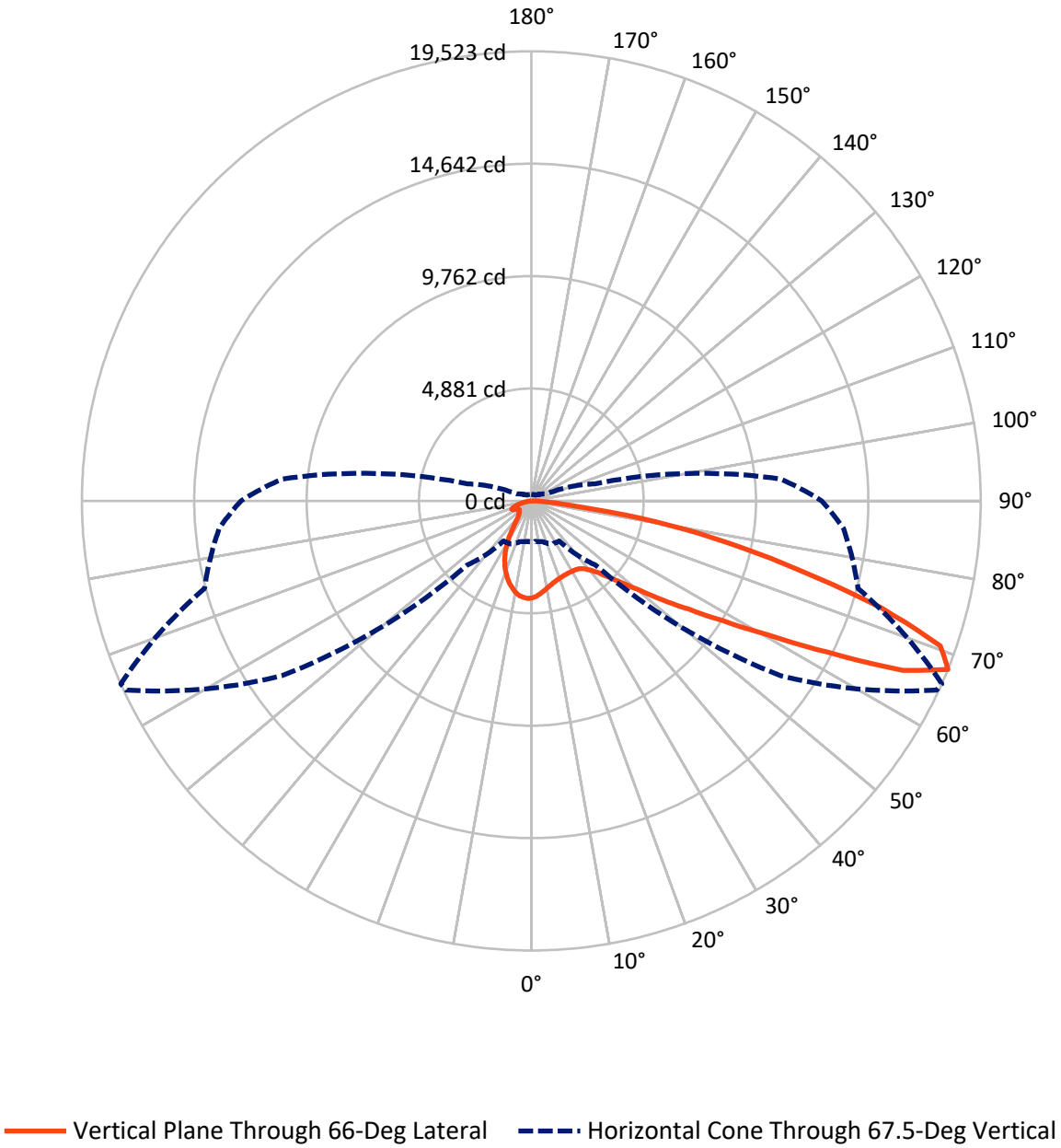
Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P636492
CATALOG NUMBER: GWS-SA3F-830-U-SL2-W

Luminous Intensity Polar Plot



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

Scaled Data Report

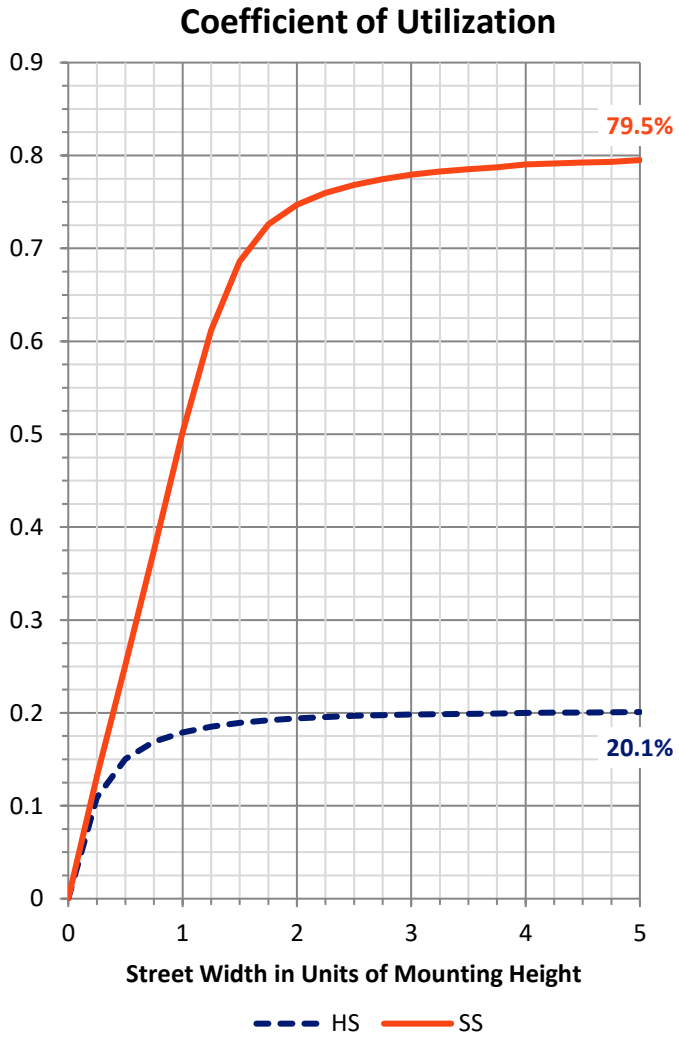
REPORT NUMBER: P636492
CATALOG NUMBER: GWS-SA3F-830-U-SL2-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3873.2	0.0	3873.2
	% Fixture	20.3	0.0	20.3
Street Side	Lumens	15213.8	0.0	15213.8
	% Fixture	79.7	0.0	79.7
Total	Lumens	19087.0	0.0	19087.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.2	1.9
10°-20°	909.7	4.8
20°-30°	1250.4	6.6
30°-40°	1709.5	9.0
40°-50°	2590.4	13.6
50°-60°	4026.8	21.1
60°-70°	4902.5	25.7
70°-80°	2986.4	15.6
80°-90°	341.1	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°	19087.0	100.0
0°-180°	19087.0	100.0



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

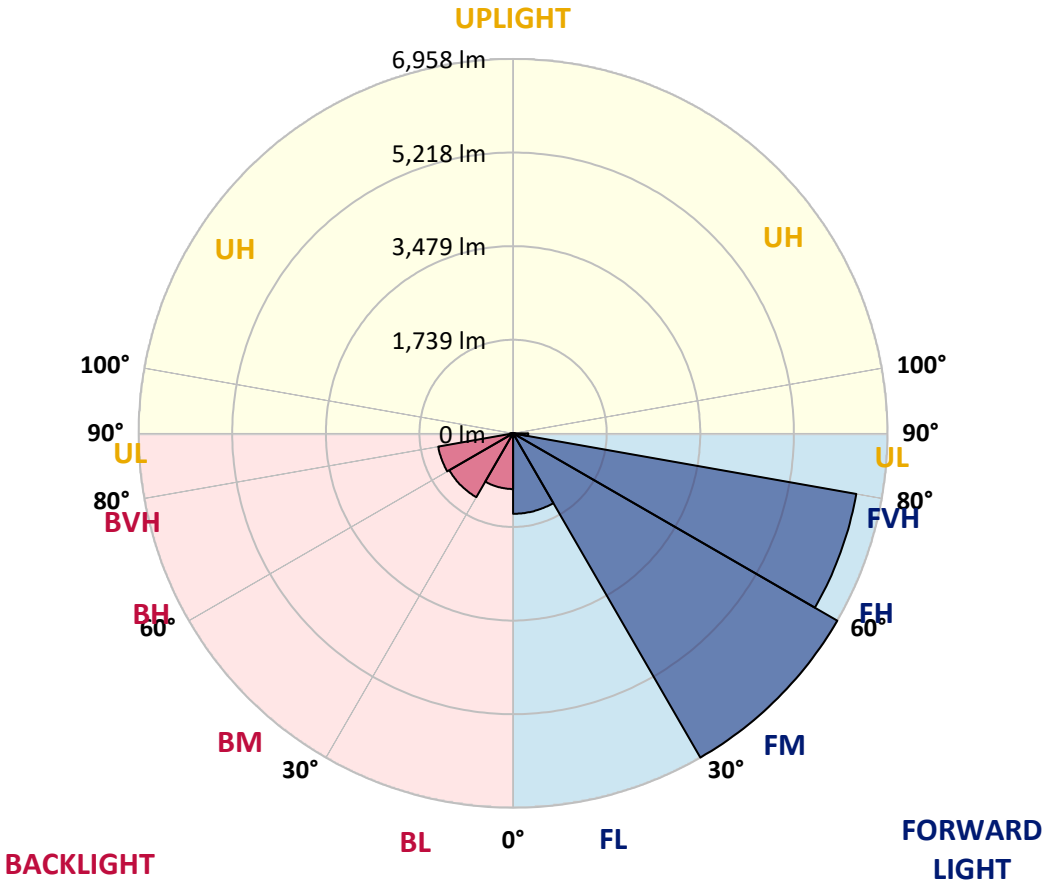
Scaled Data Report

REPORT NUMBER: P636492
CATALOG NUMBER: GWS-SA3F-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°)	1495.6	7.8			
FM	(30°-60°)	6957.9	36.5			
FH	(60°-80°)	6476.7	33.9			G3/7500
FVH	(80°-90°)	283.6	1.5			G3/500
BL	(0°-30°)	1034.7	5.4	B3/2500		
BM	(30°-60°)	1368.7	7.2	B2/2500		
BH	(60°-80°)	1412.2	7.4	B3/2500		G3/2500
BVH	(80°-90°)	57.5	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: P636492
CATALOG NUMBER: GWS-SA3F-830-U-SL2-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	*4217.7*	4217.7	4217.7
2.5°	3950.3	3964.3	3955.9	4008.8	4011.6	4078.4	4116.0	4148.1	*4150.8*	4192.6	4220.5
5°	3680.2	3688.6	3688.6	3738.7	3772.1	3861.2	3947.6	4039.5	*4046.4*	4146.7	4223.3
7.5°	3461.6	3469.9	3464.4	3531.2	3574.4	3673.2	3783.2	3923.9	*3937.8*	4099.3	4233.0
10°	3290.3	3287.5	3301.5	3362.7	3418.4	3536.8	3659.3	3819.4	*3840.3*	4045.0	4244.1
12.5°	3173.4	3176.1	3184.5	3248.6	3308.4	3425.4	3552.1	3726.2	*3748.4*	3982.4	4238.6
15°	3117.7	3112.1	3119.1	3177.5	3234.6	3337.7	3468.6	3648.2	*3670.5*	3926.7	4240.0
17.5°	3105.1	3101.0	3099.6	3141.3	3184.5	3280.6	3405.9	3588.3	*3612.0*	3890.5	4248.3
20°	3144.1	3138.5	3123.2	3141.3	3159.4	3240.2	3361.3	3545.1	*3571.6*	3866.8	4265.0
22.5°	3251.3	3241.6	3217.9	3195.6	3172.0	3220.7	3333.5	3513.1	*3539.6*	3851.5	4281.7
25°	3414.3	3405.9	3380.8	3330.7	3244.4	3236.0	3327.9	3499.2	*3525.6*	3840.3	4288.7
27.5°	3638.4	3625.9	3600.8	3528.4	3387.8	3293.1	3348.8	3497.8	*3522.9*	3827.8	4281.7
30°	3904.4	3896.0	3882.1	3794.4	3606.4	3414.3	3396.1	3508.9	*3528.4*	3820.8	4267.8
32.5°	4174.5	4166.2	4177.3	4135.5	3904.4	3614.8	3499.2	3539.6	*3553.5*	3819.4	4255.3
35°	4412.6	4422.4	4503.1	4510.1	4283.1	3886.3	3662.1	3610.6	*3613.4*	3847.3	4260.9
37.5°	4661.9	4699.5	4805.3	4895.8	4706.4	4245.5	3904.4	3744.3	*3741.5*	3918.3	4295.7
40°	4991.9	5008.6	5143.7	5313.5	5195.2	4738.5	4248.3	3962.9	*3943.4*	4063.1	4389.0
42.5°	5313.5	5353.9	5569.7	5764.7	5725.7	5294.0	4681.4	4290.1	*4255.3*	4319.3	4581.1
45°	5722.9	5761.9	6004.2	6254.8	6325.8	5922.0	5235.6	4755.2	*4720.4*	4705.0	4933.4
47.5°	6132.3	6172.7	6389.9	6751.9	7001.2	6707.4	5956.8	5369.2	*5312.1*	5252.3	5465.3
50°	6408.0	6455.3	6662.8	7097.2	7682.1	7687.6	6811.8	6174.1	*6101.6*	6007.0	6214.4
52.5°	6398.2	6428.9	6626.6	7127.9	8172.2	8814.1	7956.4	7198.9	*7140.4*	6934.3	7115.3
55°	5895.6	5941.5	6140.6	6767.2	8225.1	9882.1	9638.4	8407.5	*8303.1*	7934.1	8133.2
57.5°	4886.1	4925.0	5125.6	5898.4	7755.9	10429.3	11774.4	9947.6	*9804.1*	9023.0	9252.7
60°	3688.6	3641.2	3735.9	4412.6	6633.6	10443.3	13659.8	12036.2	*11796.7*	10187.1	10379.2
62.5°	2768.2	2720.8	2741.7	2932.5	4497.6	9599.4	14734.7	14893.5	*14498.0*	11501.5	11463.9
65°	2187.5	2161.1	2220.9	2351.8	2622.0	7310.3	14743.1	17983.3	*17734.1*	13024.8	12576.5
67.5°	*1782.3*	*1765.6*	*1826.9*	*2069.2*	*2126.2*	*3928.1*	*13219.8*	*19425.9*	*19523.3*	*14693.0*	*13608.3*
70°	1435.6	1410.5	1506.6	1825.5	1977.3	2376.9	9469.9	18690.7	*18848.0*	15687.2	13317.2
72.5°	991.4	992.8	1041.5	1478.8	1909.0	2052.4	5356.7	15563.2	*15904.4*	14786.3	11707.6
75°	668.4	673.9	687.9	976.1	1758.6	1991.2	2854.5	11782.8	*12023.7*	12221.4	9677.4
77.5°	403.8	406.6	438.6	590.4	1212.8	1858.9	1934.1	8541.2	*8730.6*	8056.6	5998.6
80°	233.9	243.7	272.9	395.5	818.8	1396.6	1496.9	5236.9	*5451.4*	3581.3	1906.2
82.5°	103.0	110.0	149.0	229.8	477.6	1187.7	1168.3	2069.2	*2038.5*	998.4	661.4
85°	18.1	22.3	32.0	72.4	175.4	626.6	906.5	913.4	*859.1*	378.7	274.3
87.5°	0.0	0.0	0.0	0.0	0.0	4.2	136.5	245.1	*243.7*	107.2	94.7
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

Scaled Data Report

REPORT NUMBER: P636492
CATALOG NUMBER: GWS-SA3F-830-U-SL2-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7	4217.7
2.5°	4238.6	4201.0	4234.4	4238.6	4231.6	4226.0	4184.3	4148.1	4143.9	4104.9	4104.9
5°	4253.9	4219.1	4235.8	4203.8	4153.6	4102.1	4013.0	3951.7	3923.9	3873.8	3873.8
7.5°	4274.8	4238.6	4219.1	4139.7	4022.7	3910.0	3766.5	3646.8	3598.1	3527.0	3524.3
10°	4294.3	4248.3	4181.5	4026.9	3840.3	3660.7	3451.8	3282.0	3166.4	3081.5	3081.5
12.5°	4292.9	4233.0	4100.7	3872.4	3614.8	3354.4	3075.9	2819.7	2666.5	2534.2	2525.9
15°	4290.1	4207.9	3997.7	3692.7	3351.6	2991.0	2612.2	2278.0	2051.1	1921.6	1910.4
17.5°	4287.3	4175.9	3882.1	3488.0	3031.3	2539.8	2039.9	1677.9	1488.5	1409.1	1411.9
20°	4287.3	4139.7	3758.2	3252.7	2662.3	1999.5	1496.9	1233.7	1186.4	1190.5	1194.7
22.5°	4274.8	4095.2	3620.3	2996.5	2251.6	1470.4	1104.2	1015.1	1040.1	1079.1	1084.7
25°	4245.5	4021.4	3460.2	2712.5	1762.8	1070.8	900.9	884.2	930.1	978.9	992.8
27.5°	4199.6	3936.4	3280.6	2379.7	1297.7	860.5	792.3	790.9	827.1	863.3	875.8
30°	4150.8	3841.7	3091.2	2009.3	939.9	749.1	722.7	722.7	740.8	763.1	760.3
32.5°	4093.8	3745.6	2887.9	1623.6	765.8	686.5	678.1	673.9	676.7	685.1	685.1
35°	4045.0	3660.7	2679.0	1215.6	686.5	651.7	643.3	633.6	629.4	623.8	626.6
37.5°	4026.9	3593.9	2463.2	916.2	647.5	626.6	612.7	598.7	589.0	586.2	584.8
40°	4056.2	3566.0	2247.4	754.7	619.6	600.1	584.8	566.7	558.4	558.4	558.4
42.5°	4170.3	3586.9	2027.4	682.3	600.1	577.9	555.6	538.9	536.1	538.9	540.3
45°	4379.2	3667.7	1799.0	646.1	583.4	555.6	529.1	516.6	516.6	519.4	519.4
47.5°	4752.4	3879.3	1573.5	623.8	566.7	537.5	509.6	497.1	495.7	498.5	498.5
50°	5398.5	4260.9	1370.2	608.5	554.2	523.6	495.7	479.0	474.8	473.4	473.4
52.5°	6213.0	4922.3	1240.7	597.4	538.9	508.2	480.4	458.1	449.8	445.6	445.6
55°	7197.5	5803.7	1240.7	589.0	519.4	490.1	458.1	435.8	423.3	417.7	417.7
57.5°	8312.8	6829.9	1455.1	582.0	504.1	469.3	434.4	412.2	398.2	389.9	389.9
60°	9447.7	7914.6	1985.6	572.3	490.1	442.8	408.0	387.1	369.0	359.2	357.9
62.5°	10624.3	9109.3	2684.6	577.9	480.4	417.7	380.1	356.5	341.1	331.4	330.0
65°	11702.0	10246.9	3295.9	621.0	481.8	395.5	348.1	327.2	314.7	302.2	300.8
67.5°	*12616.9*	*10874.9*	*2867.0*	*708.7*	*511.0*	*369.0*	*316.1*	*295.2*	*284.1*	*275.7*	*274.3*
70°	11976.3	9916.9	1626.4	763.1	551.4	341.1	279.9	266.0	254.8	249.2	247.9
72.5°	10241.4	8396.4	1087.5	673.9	502.7	304.9	246.5	235.3	227.0	220.0	218.6
75°	8296.1	6658.6	831.3	552.8	391.3	247.9	211.7	203.3	194.9	188.0	186.6
77.5°	4908.3	3847.3	612.7	437.2	275.7	193.5	175.4	168.5	160.1	154.6	153.2
80°	1566.5	1336.7	388.5	300.8	182.4	149.0	135.1	129.5	121.1	114.2	112.8
82.5°	597.4	516.6	206.1	153.2	121.1	101.6	90.5	84.9	79.4	72.4	71.0
85°	264.6	247.9	114.2	82.2	65.4	50.1	44.6	41.8	34.8	29.2	27.8
87.5°	93.3	93.3	48.7	23.7	13.9	7.0	4.2	1.4	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

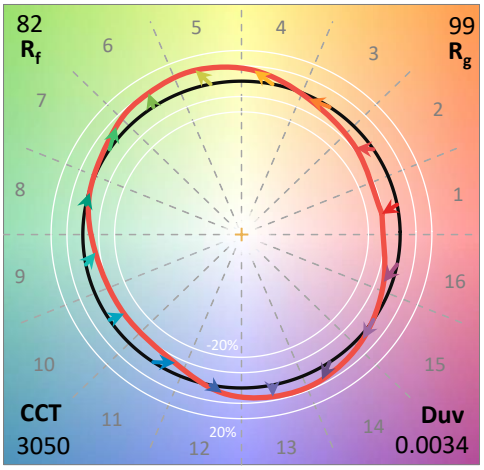
Test Information

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

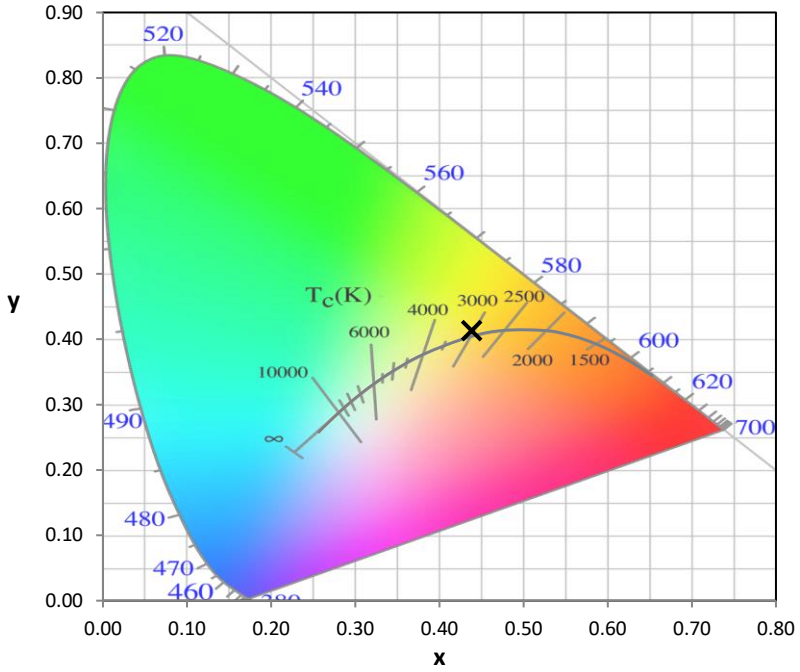
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

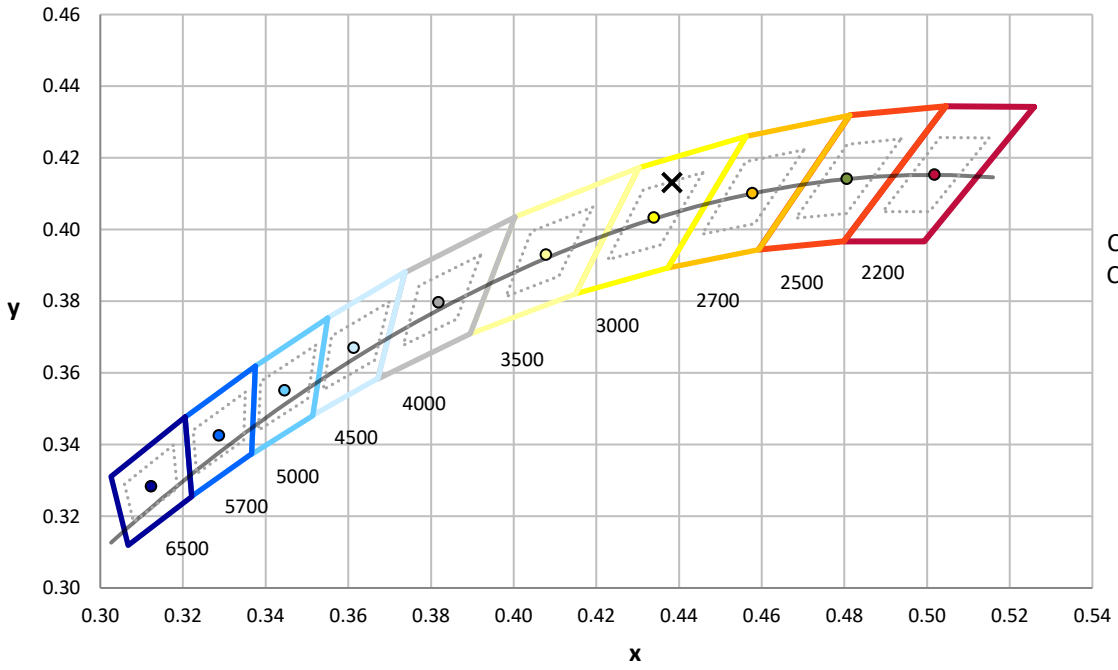
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

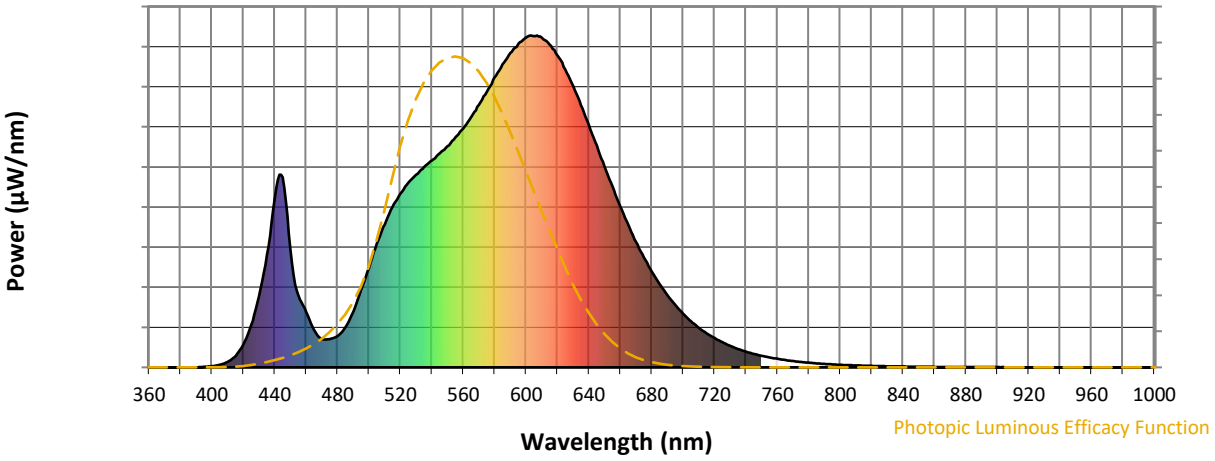


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

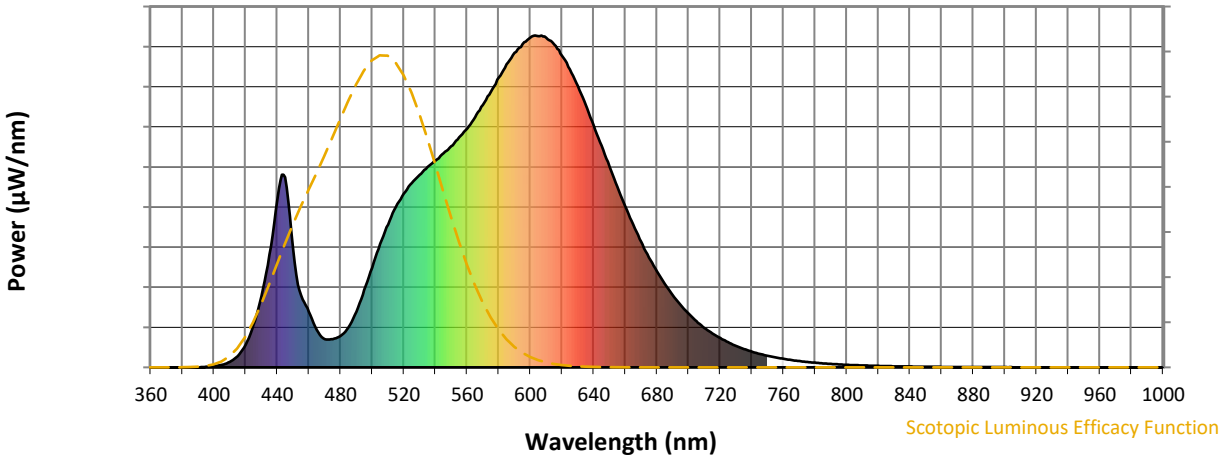


Photopic Lumens: NR

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

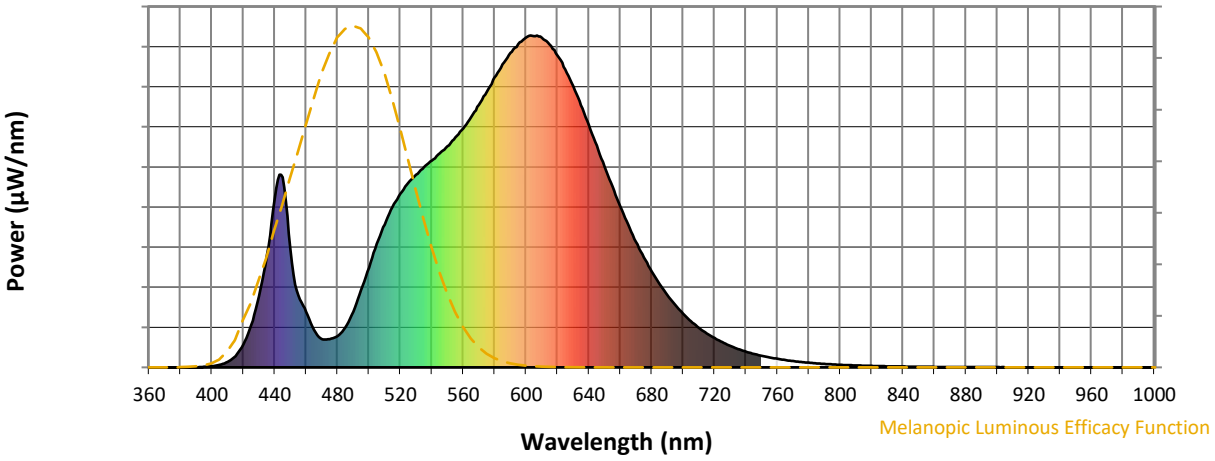


Scotopic Lumens: NR **S/P: 1.27**

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			

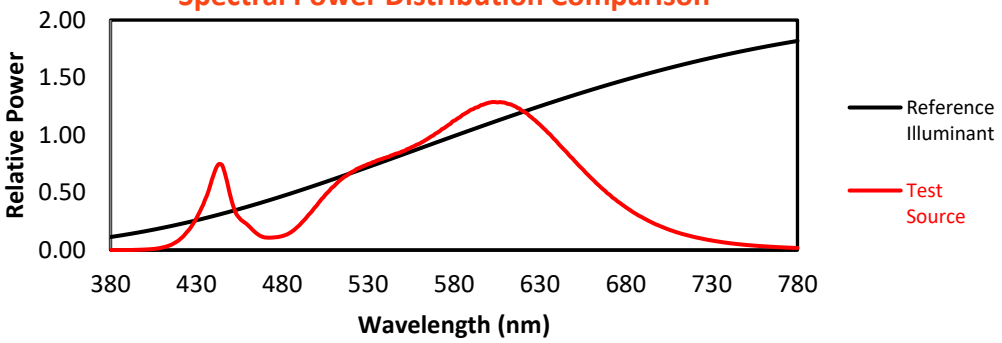
REPORT NUMBER: SP1-2408-195-9

TM-30-18

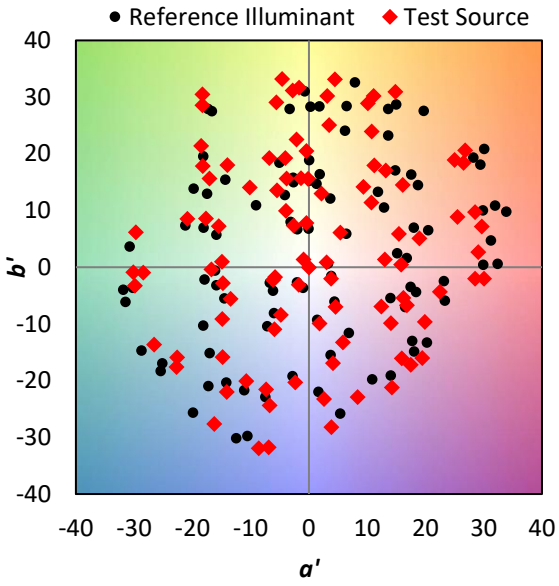
Summary

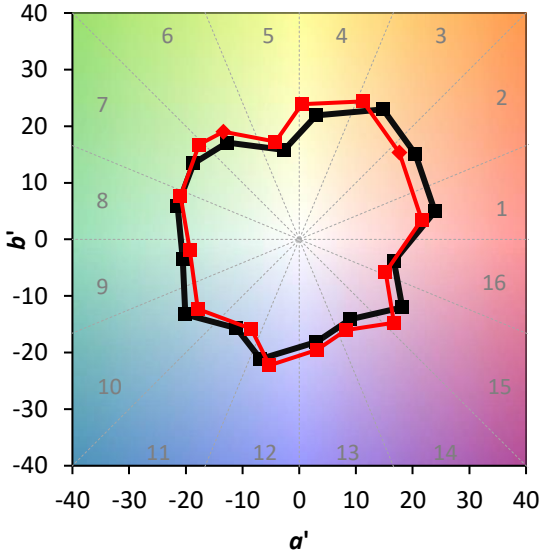
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

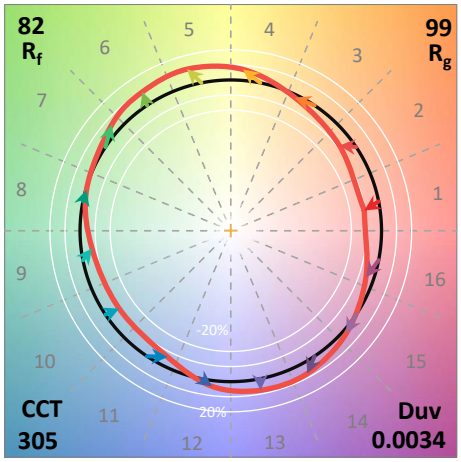
Spectral Power Distribution Comparison

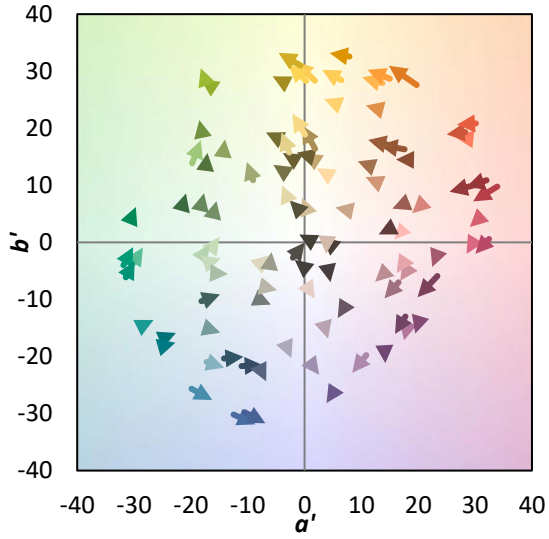


Color Vector Graphics







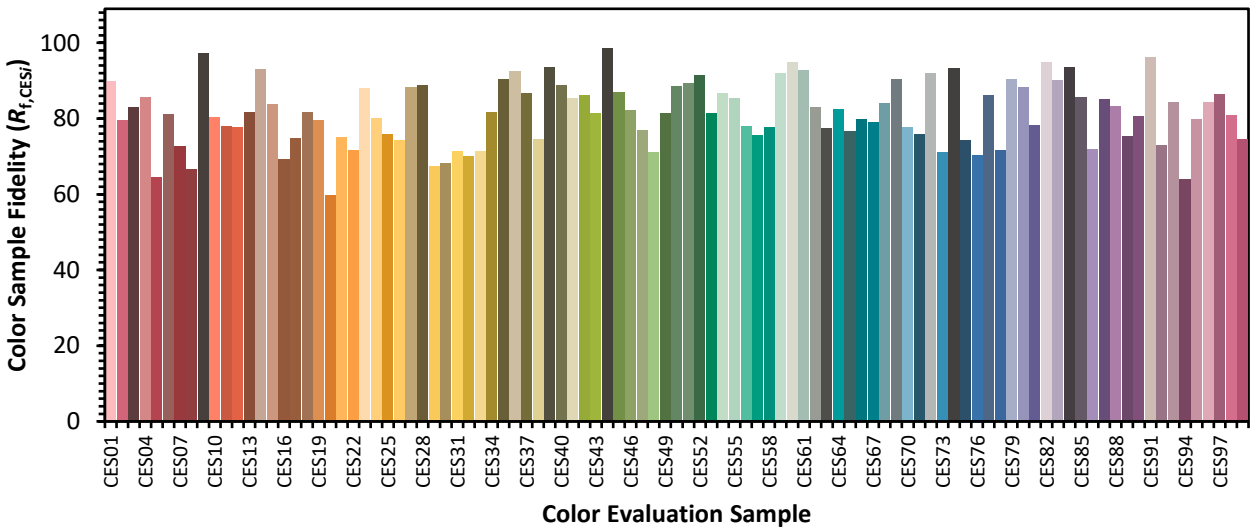


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

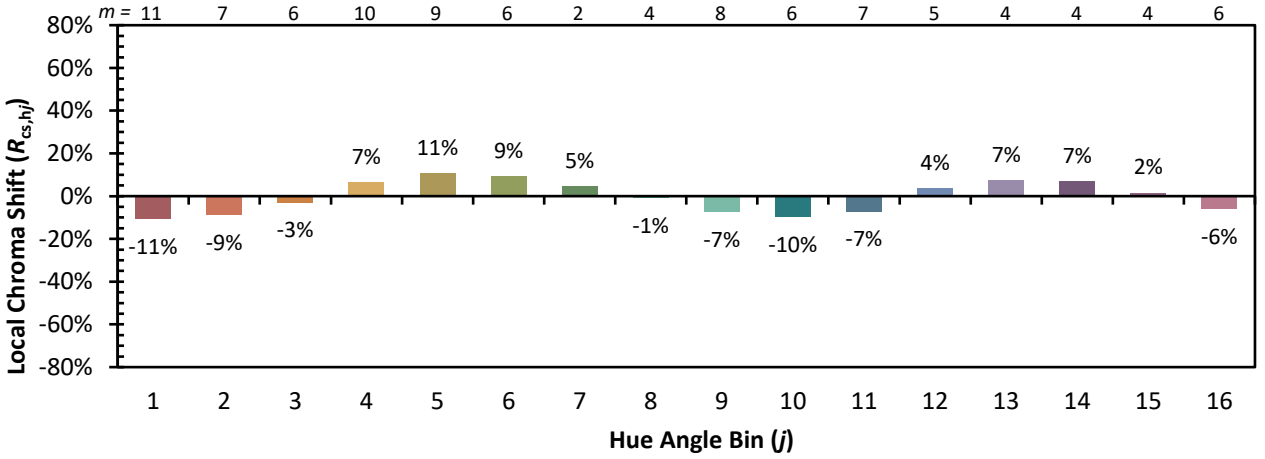
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

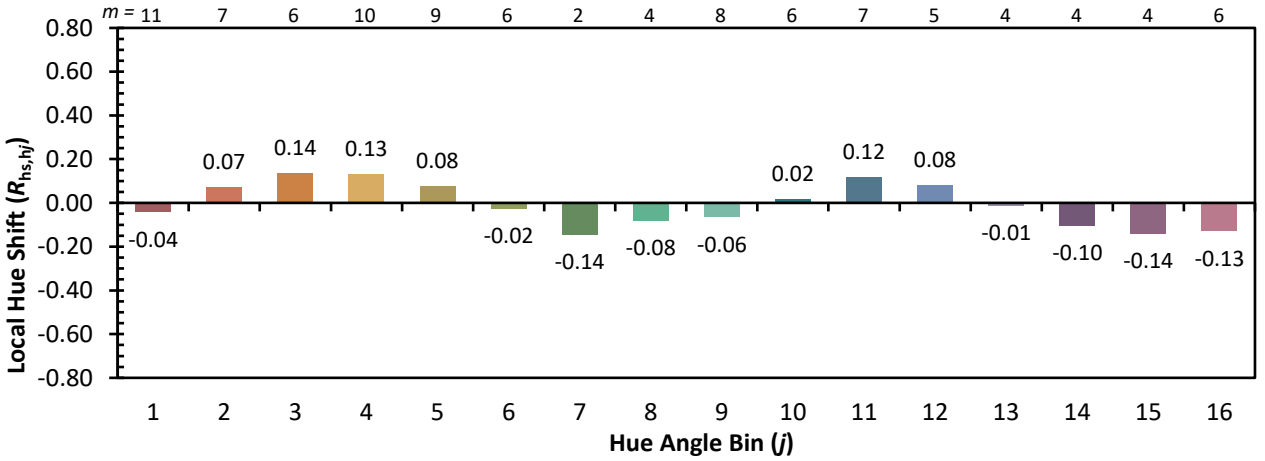


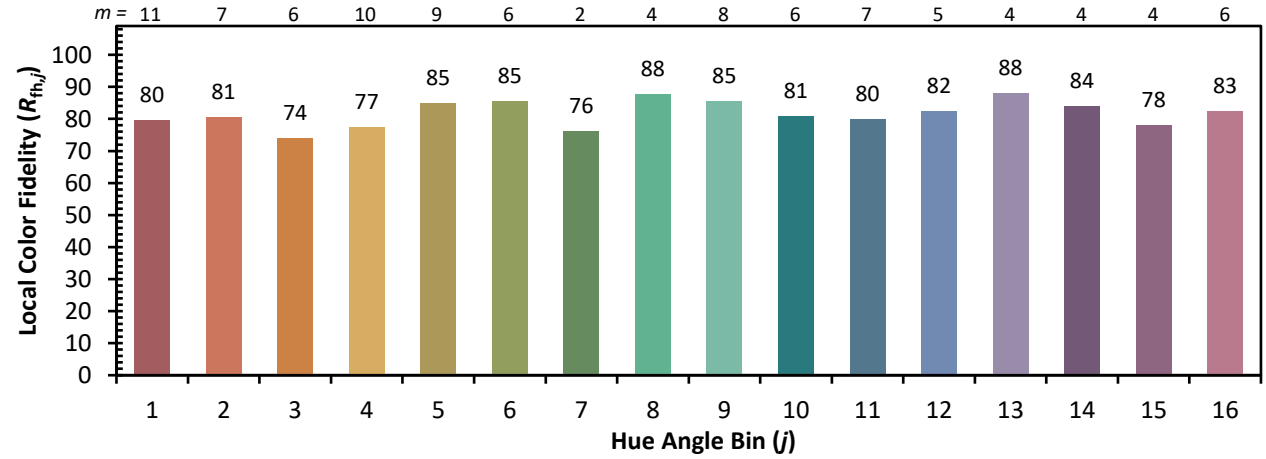
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



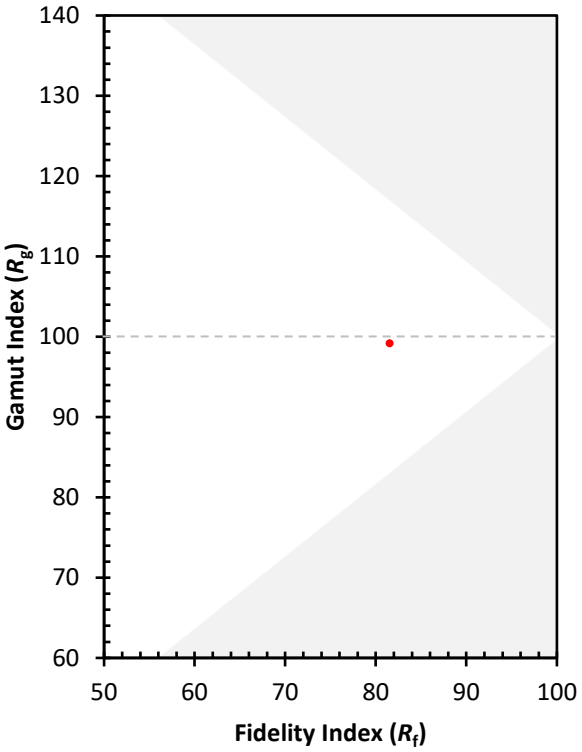


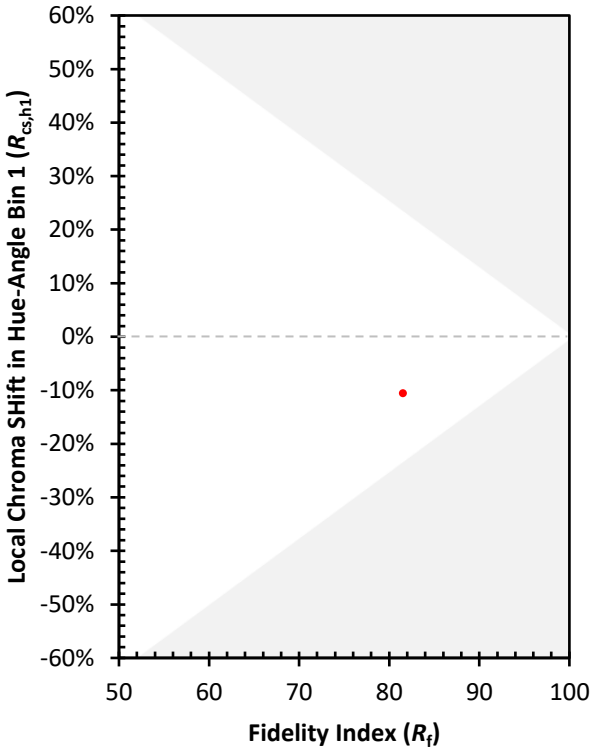


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)