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

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P321777

Luminaire Tested: **GLEON-SA3D-830-U-T3R-HSS**

Issue Date: 3/3/2020

Report Generated By E0585644

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

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P321777
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-11)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA3D-830-U-T3R-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(3) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14478 lumens
Efficiency:	N/A
Efficacy:	75.8 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B2 - U0 - G3

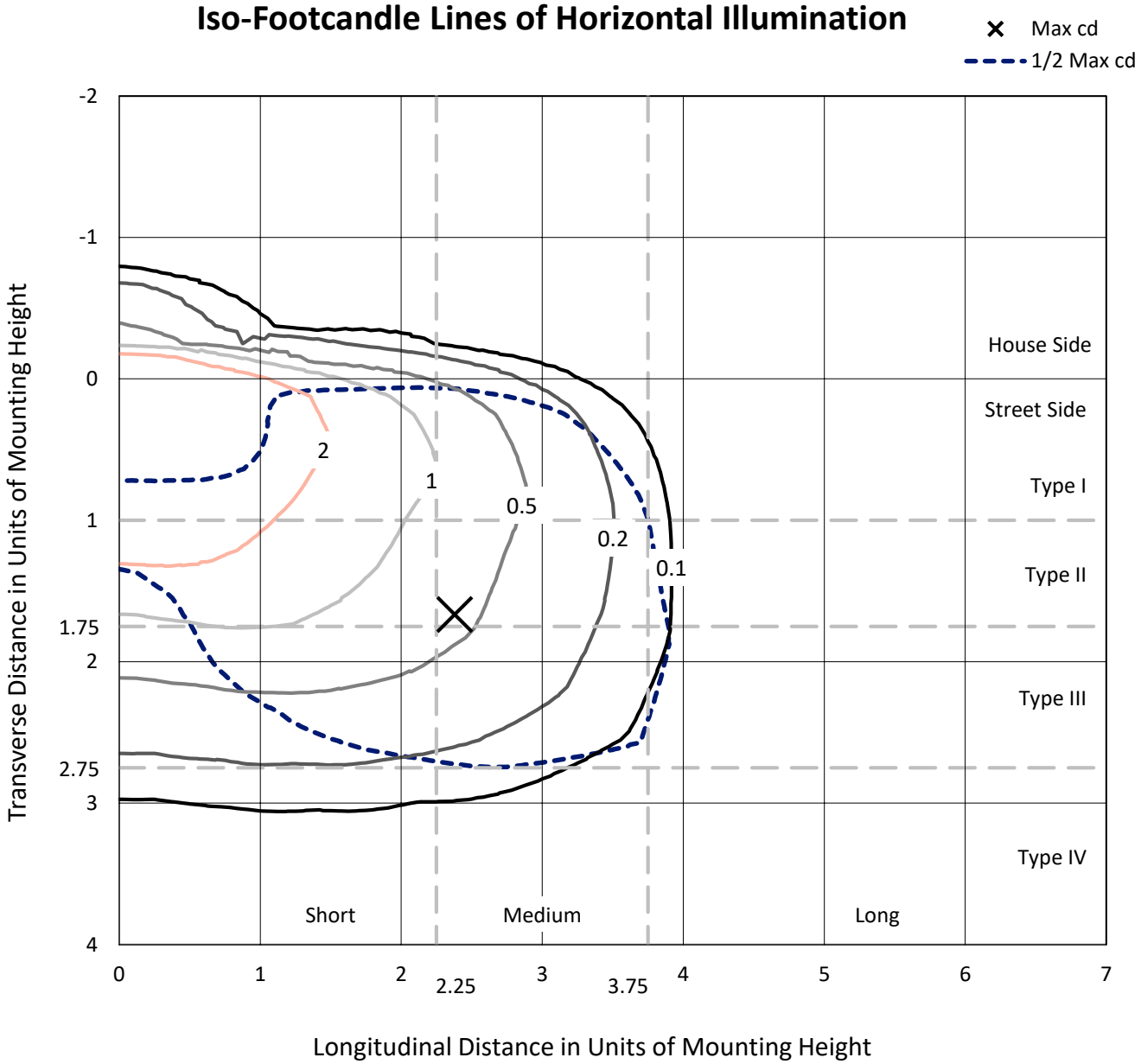
Input Watts (W):	191
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P321777
CATALOG NUMBER: GLEON-SA3D-830-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination



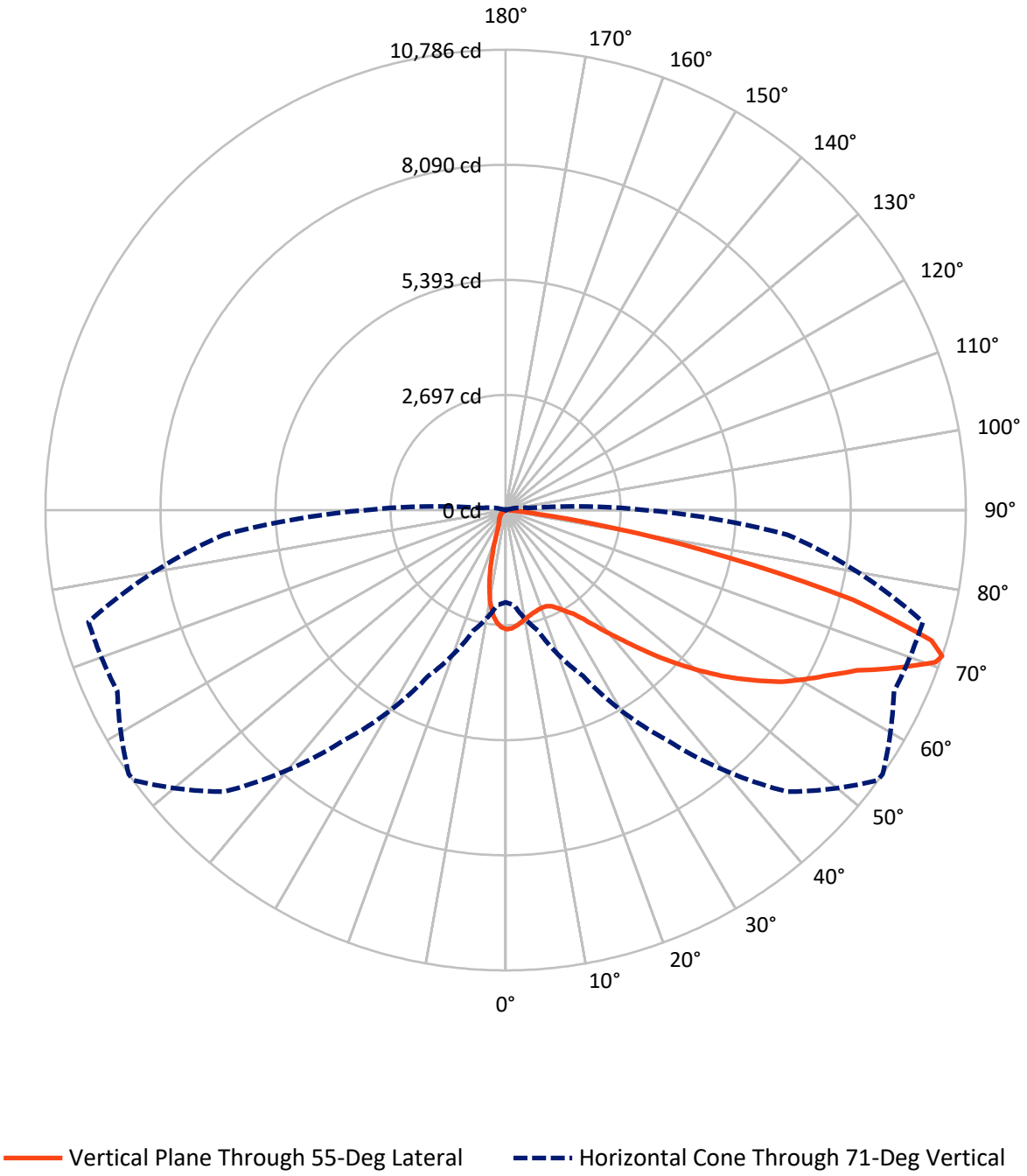
Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
Type III - Medium - N/A

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

Scaled Data Report

REPORT NUMBER: P321777
CATALOG NUMBER: GLEON-SA3D-830-U-T3R-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

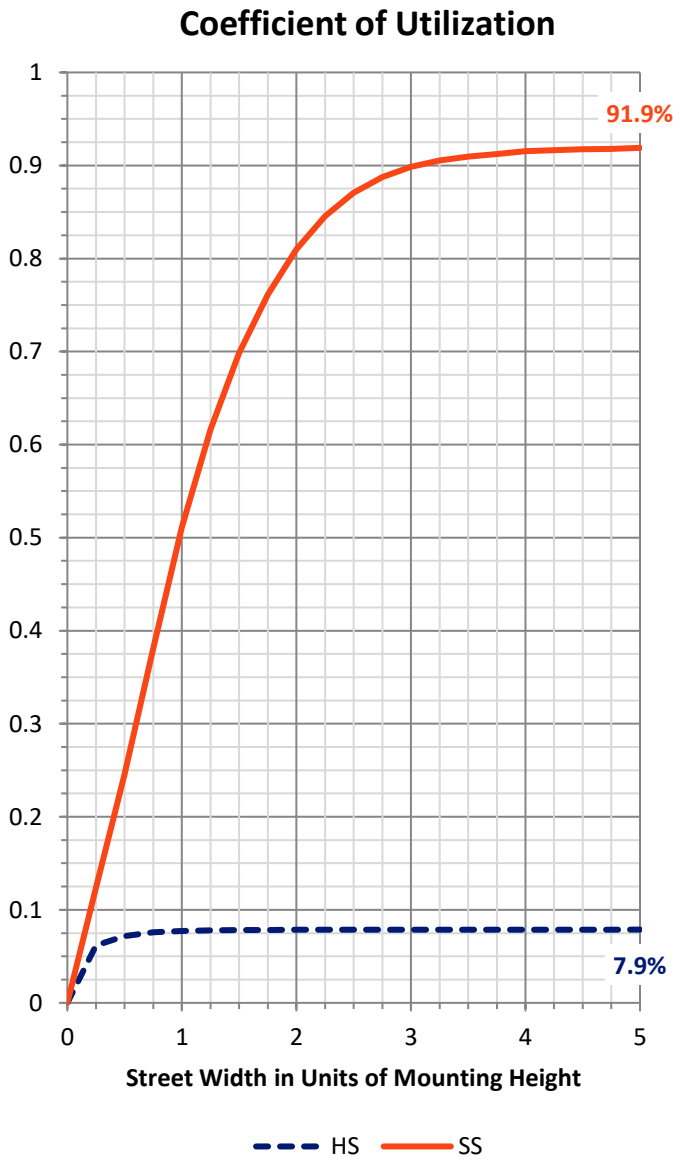
REPORT NUMBER: P321777
CATALOG NUMBER: GLEON-SA3D-830-U-T3R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1146.3	0.0	1146.3
	% Fixture	7.9	0.0	7.9
Street Side	Lumens	13331.7	0.0	13331.7
	% Fixture	92.1	0.0	92.1
Total	Lumens	14478.0	0.0	14478.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.1	1.6
10°-20°	537.5	3.7
20°-30°	863.7	6.0
30°-40°	1467.5	10.1
40°-50°	2277.7	15.7
50°-60°	3062.3	21.2
60°-70°	3746.2	25.9
70°-80°	2190.4	15.1
80°-90°	94.7	0.7
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°	14478.0	100.0
0°-180°	14478.0	100.0



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

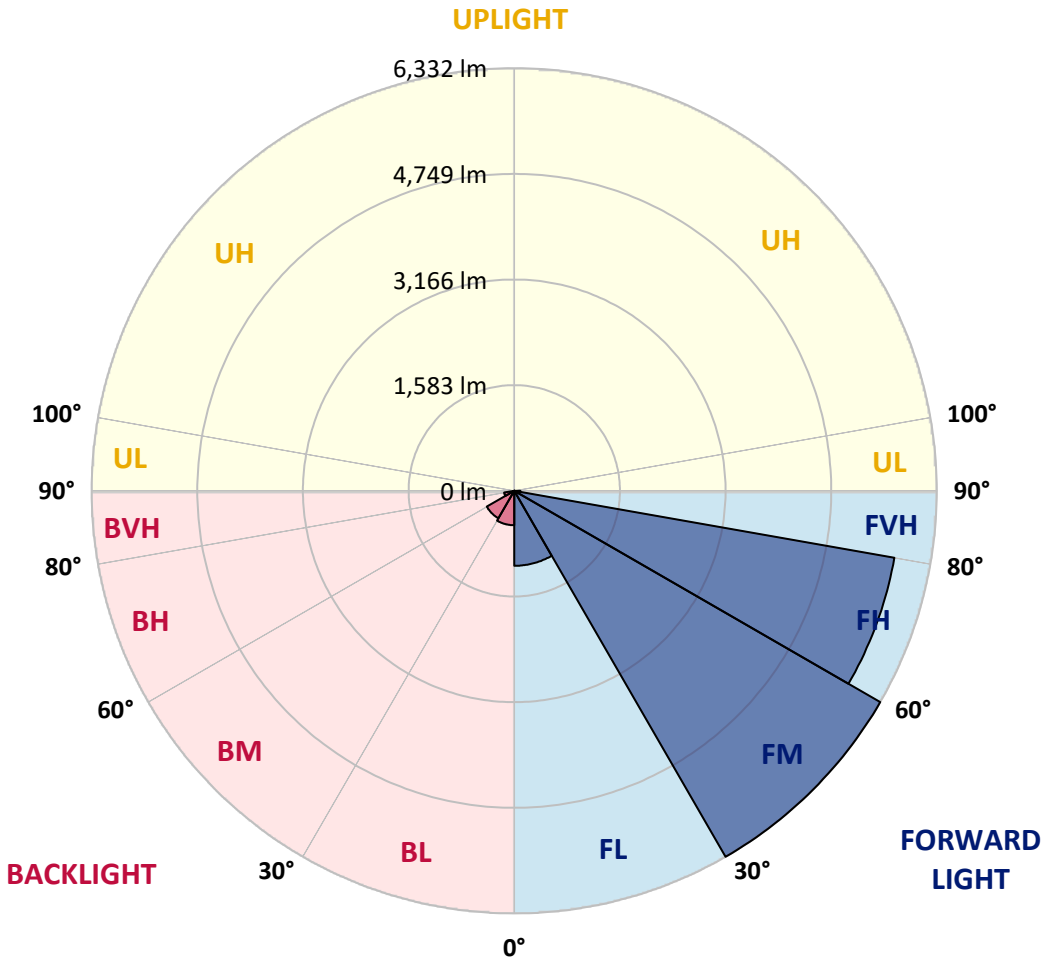
Scaled Data Report

REPORT NUMBER: P321777
CATALOG NUMBER: GLEON-SA3D-830-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1123.3	7.8			
FM	(30°-60°)	6332.3	43.7			
FH	(60°-80°)	5783.0	39.9			G3/7500
FVH	(80°-90°)	93.2	0.6			G1/100
BL	(0°-30°)	515.9	3.6	B2/1000		
BM	(30°-60°)	475.3	3.3	B1/1000		
BH	(60°-80°)	153.6	1.1	B1/500		G1/500
BVH	(80°-90°)	1.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type III Medium



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

Scaled Data Report

REPORT NUMBER: P321777
CATALOG NUMBER: GLEON-SA3D-830-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1
2.5°	2710.2	2713.5	2725.2	2730.4	2742.7	2763.5	2773.9	2774.6	2791.5	2798.0	2803.2
5°	2518.4	2537.9	2557.5	2578.3	2616.0	2666.0	2715.4	2720.0	2774.6	2814.9	2836.3
7.5°	2353.3	2370.9	2394.3	2427.4	2480.7	2559.4	2642.0	2651.7	2755.1	2846.7	2894.8
10°	2183.7	2198.0	2231.8	2280.5	2354.0	2459.3	2570.5	2586.7	2737.5	2889.6	2974.2
12.5°	2002.3	2010.7	2051.7	2121.9	2229.8	2363.7	2510.0	2531.4	2726.5	2939.1	3067.8
15°	1864.5	1868.4	1907.4	1980.2	2103.7	2277.9	2463.2	2489.2	2729.1	2998.2	3169.8
17.5°	1829.4	1831.3	1852.1	1902.2	2011.4	2201.2	2426.1	2458.0	2736.9	3056.1	3272.6
20°	1971.7	1958.1	1936.6	1928.8	1975.6	2155.0	2404.0	2439.8	2747.3	3107.4	3364.9
22.5°	2362.4	2322.1	2233.1	2114.1	2041.9	2158.3	2409.9	2445.6	2780.4	3170.5	3471.5
25°	2942.3	2886.4	2734.9	2500.9	2276.0	2251.9	2458.6	2495.0	2844.8	3245.9	3573.5
27.5°	3602.1	3546.9	3361.6	3027.5	2643.9	2437.2	2570.5	2604.3	2940.4	3312.9	3651.6
30°	4234.0	4218.4	4000.0	3620.3	3106.8	2737.5	2714.8	2743.4	3011.2	3353.2	3713.3
32.5°	4769.7	4745.0	4569.5	4200.2	3636.6	3098.3	2884.4	2892.9	3064.5	3405.2	3793.9
35°	5266.4	5235.8	5081.7	4732.7	4180.1	3539.1	3145.8	3133.4	3180.9	3509.8	3910.9
37.5°	5700.0	5727.9	5557.0	5224.8	4667.6	3997.4	3498.1	3461.1	3362.9	3680.2	4080.6
40°	6062.7	6062.7	5973.7	5696.7	5194.2	4471.3	3896.6	3847.9	3636.6	3942.8	4295.8
42.5°	6193.4	6221.4	6254.5	6097.8	5665.5	4964.1	4340.6	4289.9	4022.1	4315.3	4567.5
45°	6201.2	6245.4	6415.1	6414.4	6091.3	5453.6	4841.2	4817.2	4516.2	4793.8	4904.3
47.5°	6091.3	6146.6	6426.1	6584.8	6428.7	5909.3	5388.6	5358.7	5096.7	5380.1	5256.6
50°	5921.7	5982.8	6307.8	6651.7	6658.2	6305.9	5965.2	5920.4	5735.7	6050.4	5620.7
52.5°	5618.1	5736.4	6201.9	6667.3	6809.0	6648.5	6513.9	6494.4	6450.8	6695.9	5910.6
55°	4968.6	5100.0	5936.0	6672.5	6948.8	6952.1	7028.1	7033.3	7121.1	7299.2	6126.4
57.5°	4661.8	4735.9	5471.8	6697.2	7156.2	7296.6	7552.1	7592.4	7728.3	7871.9	6372.8
60°	4468.7	4556.5	5243.0	6663.4	7481.9	7748.4	8037.7	8051.4	8197.0	8462.9	6706.3
62.5°	4314.6	4401.1	5098.7	6533.4	7847.9	8291.9	8512.3	8513.6	8622.8	9166.9	7085.3
65°	3934.3	4007.2	4806.8	6387.1	8089.7	8829.5	9063.5	9055.1	9144.2	9909.3	7525.4
67.5°	3384.4	3440.3	4210.6	5832.6	7998.7	9318.4	9895.7	9867.7	9759.8	10551.0	7698.4
70°	2616.6	2636.8	3318.7	4860.7	7145.8	9506.3	10699.8	10685.5	10137.5	10435.9	7064.5
71°	2162.8	2229.2	2924.8	4289.9	6574.4	9332.7	10777.8	10786.3	10042.6	10122.5	6628.3
72.5°	1256.0	1312.5	2119.9	3294.7	5581.7	8608.5	10373.5	10434.6	9599.2	9207.2	5661.6
75°	269.1	288.0	786.0	1594.7	3070.4	6033.5	8187.9	8405.7	7823.8	6263.6	3412.3
77.5°	187.2	202.2	336.7	723.5	1014.8	2981.3	5086.3	5332.0	4674.1	2354.0	1092.2
80°	148.2	165.1	262.6	357.5	274.3	961.5	2382.6	2532.7	1558.9	525.3	184.0
82.5°	82.6	98.2	204.8	193.1	105.3	182.7	667.0	754.1	312.0	106.0	43.6
85°	24.1	29.3	132.0	140.4	44.9	35.1	113.8	141.1	59.2	28.0	19.5
87.5°	0.0	0.0	63.7	54.0	13.0	5.2	10.4	11.7	11.7	11.7	13.0
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

Scaled Data Report

REPORT NUMBER: P321777
CATALOG NUMBER: GLEON-SA3D-830-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1	2792.1
2.5°	2803.2	2807.7	2791.5	2770.0	2747.3	2719.3	2690.1	2667.3	2666.7	2655.6	2644.6
5°	2837.6	2835.0	2790.2	2721.9	2641.3	2557.5	2477.5	2387.1	2357.2	2320.2	2307.8
7.5°	2901.3	2883.1	2788.2	2638.7	2461.9	2286.4	2105.0	1922.3	1844.3	1774.1	1761.7
10°	2981.3	2946.9	2775.9	2513.9	2189.5	1865.8	1592.1	1343.7	1234.5	1150.7	1146.8
12.5°	3064.5	3011.9	2741.4	2325.4	1832.6	1377.5	1062.2	817.8	726.8	668.3	673.5
15°	3151.6	3073.0	2667.3	2071.2	1426.3	934.8	652.7	509.0	472.6	457.7	461.6
17.5°	3240.7	3115.2	2564.0	1765.0	1025.2	603.3	451.8	411.5	411.5	414.8	416.1
20°	3318.1	3138.0	2411.8	1421.7	694.9	439.5	395.3	389.4	392.7	397.9	398.5
22.5°	3394.8	3139.3	2213.6	1073.9	486.3	384.9	376.4	373.8	375.8	381.6	382.3
25°	3457.2	3123.7	1965.2	763.9	388.1	362.7	358.8	357.5	358.8	366.0	366.0
27.5°	3482.5	3067.1	1662.3	537.0	347.8	338.0	336.7	338.0	340.0	345.2	345.8
30°	3485.1	2968.3	1332.0	388.8	315.3	304.9	307.5	312.0	310.1	308.8	310.1
32.5°	3491.6	2853.9	1010.2	319.8	288.0	271.7	268.5	268.5	260.7	256.1	253.5
35°	3513.1	2719.3	732.7	287.3	260.0	241.2	228.8	214.5	199.6	191.8	189.8
37.5°	3546.9	2578.3	524.6	265.9	235.3	213.9	190.5	165.1	143.7	137.8	137.8
40°	3608.6	2432.6	388.1	249.0	215.8	189.2	154.1	120.9	101.4	98.2	98.2
42.5°	3706.2	2279.2	309.4	234.0	198.9	163.8	117.7	87.8	73.5	71.5	70.9
45°	3807.6	2110.2	270.4	219.7	180.7	134.6	87.1	65.0	56.6	54.6	54.6
47.5°	3909.0	1930.1	251.6	206.1	163.2	104.7	65.0	51.4	47.5	47.5	48.1
50°	3994.8	1742.2	237.9	191.1	140.4	79.3	51.4	43.6	42.3	44.9	45.5
52.5°	4016.3	1557.6	221.0	172.3	112.5	60.5	42.3	38.4	38.4	38.4	38.4
55°	4003.3	1414.6	198.9	148.9	83.2	48.1	36.4	33.8	33.2	33.2	33.2
57.5°	4047.5	1330.1	159.3	115.7	59.8	39.0	31.9	29.9	28.6	28.0	28.0
60°	4136.5	1274.8	113.8	83.2	44.9	32.5	27.3	25.4	23.4	22.1	22.1
62.5°	4254.8	1226.7	84.5	61.8	34.5	26.0	22.8	20.8	18.2	16.9	16.9
65°	4345.8	1140.9	64.4	46.2	26.0	20.8	17.6	16.9	13.0	11.7	11.1
67.5°	4206.7	952.4	52.0	33.8	19.5	16.3	13.7	13.0	7.8	6.5	6.5
70°	3608.0	663.1	41.6	24.7	14.3	13.0	11.1	8.5	5.9	5.2	5.2
71°	*3271.9*	*553.9*	*37.7*	*20.8*	*12.4*	*12.4*	*10.4*	*7.2*	*5.2*	*4.6*	*4.6*
72.5°	2718.0	393.3	31.9	16.3	11.1	13.0	11.1	6.5	5.2	4.6	3.9
75°	1577.8	164.5	22.1	11.1	8.5	15.6	14.3	5.9	3.9	3.3	3.3
77.5°	474.6	60.5	12.4	7.2	6.5	13.7	16.3	5.2	2.0	0.7	0.7
80°	86.5	26.0	7.8	4.6	4.6	8.5	12.4	2.6	0.0	0.0	0.0
82.5°	30.6	13.0	4.6	2.6	2.0	3.9	5.9	0.0	0.0	0.0	0.0
85°	17.6	9.1	2.6	1.3	0.0	0.7	1.3	0.0	0.0	0.0	0.0
87.5°	11.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	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

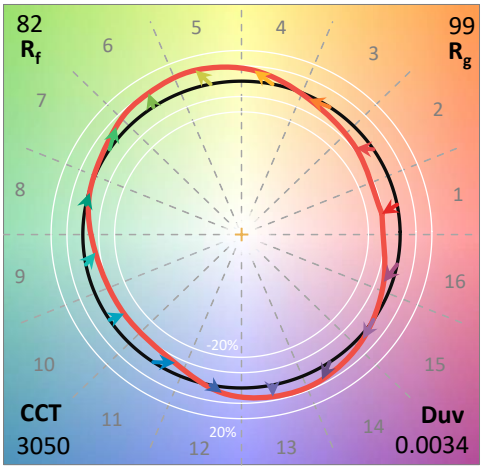
Test Information

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

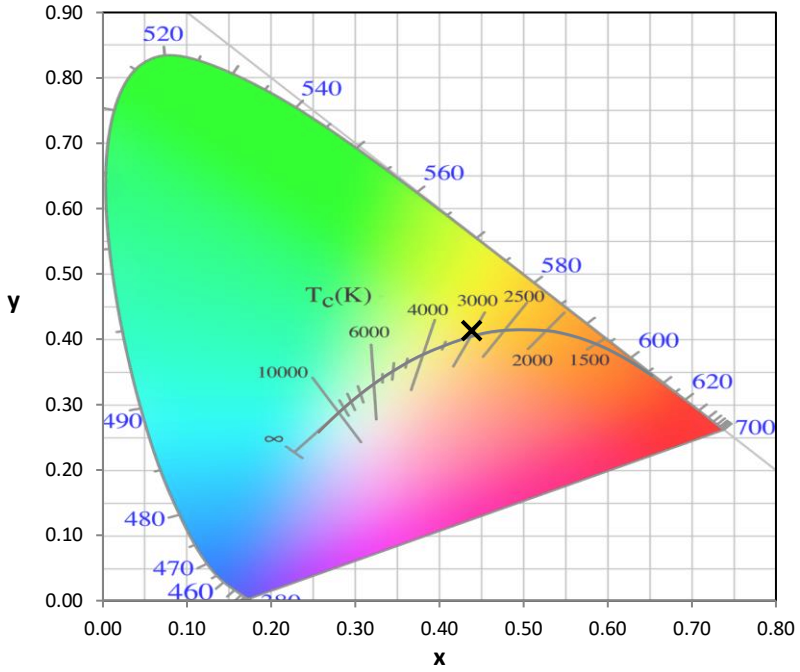
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

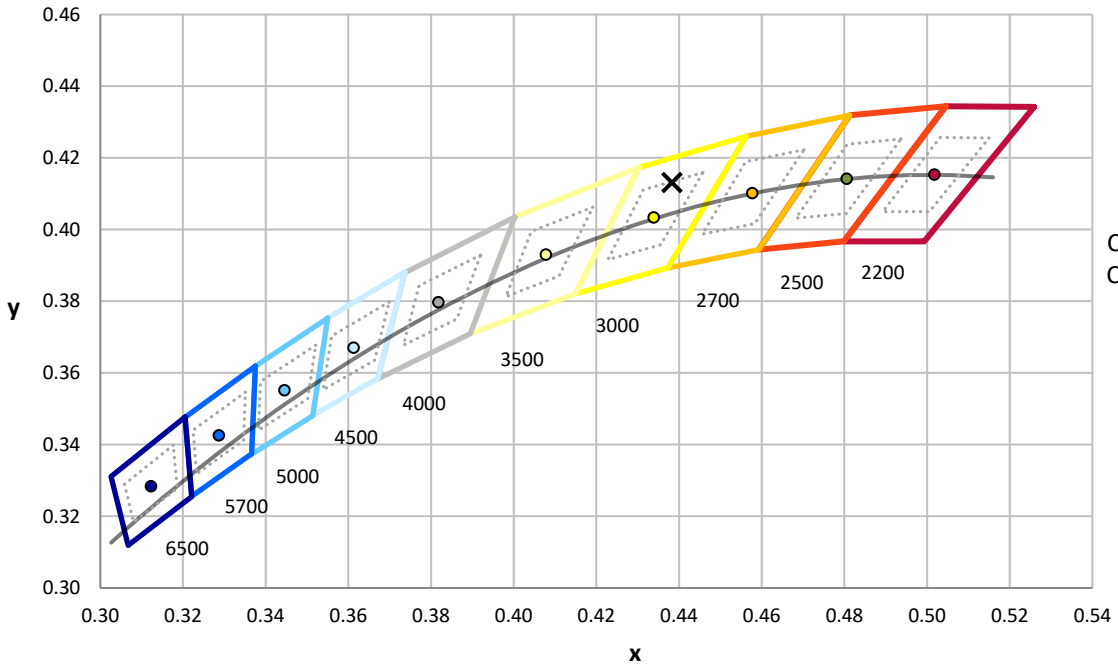
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

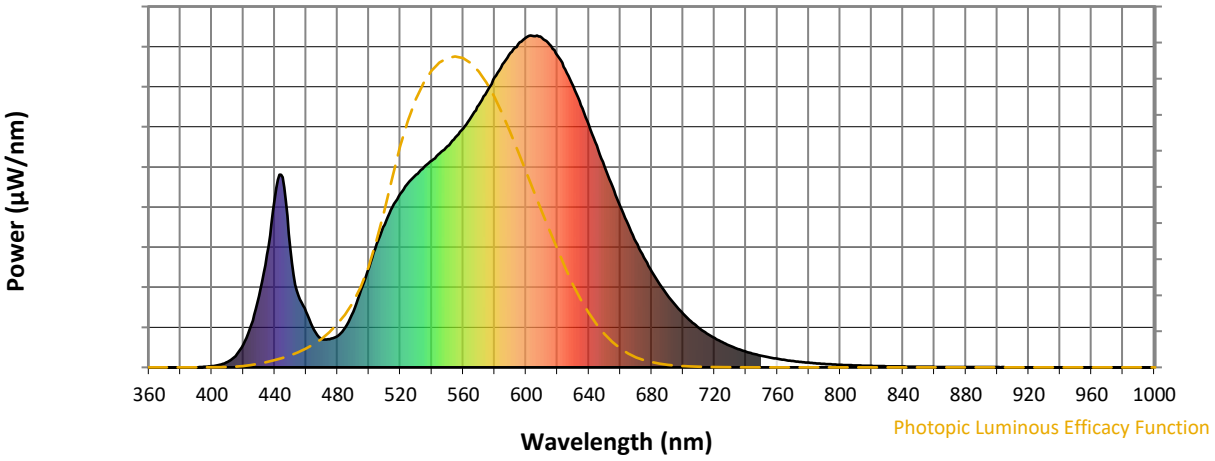


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

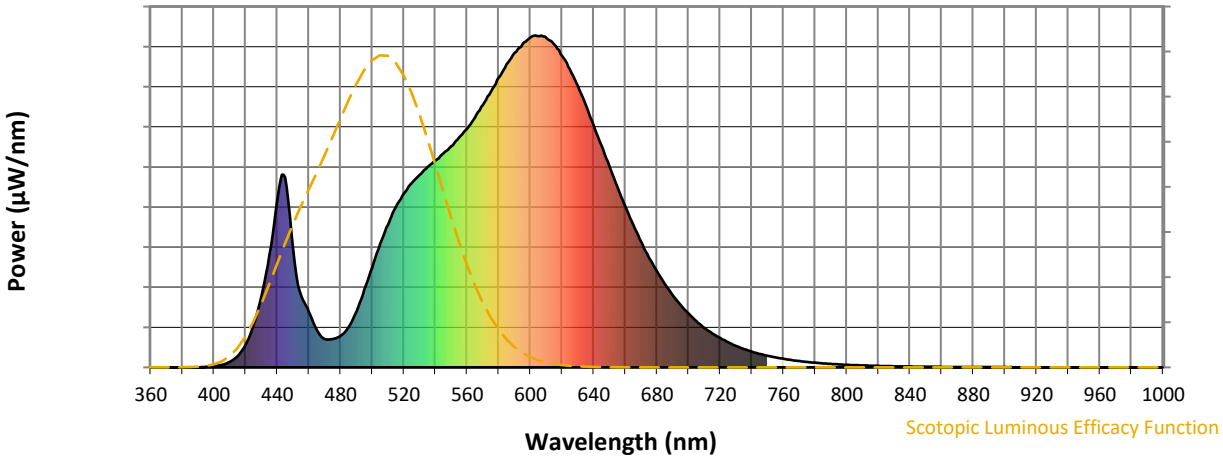


Photopic Lumens: NR

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

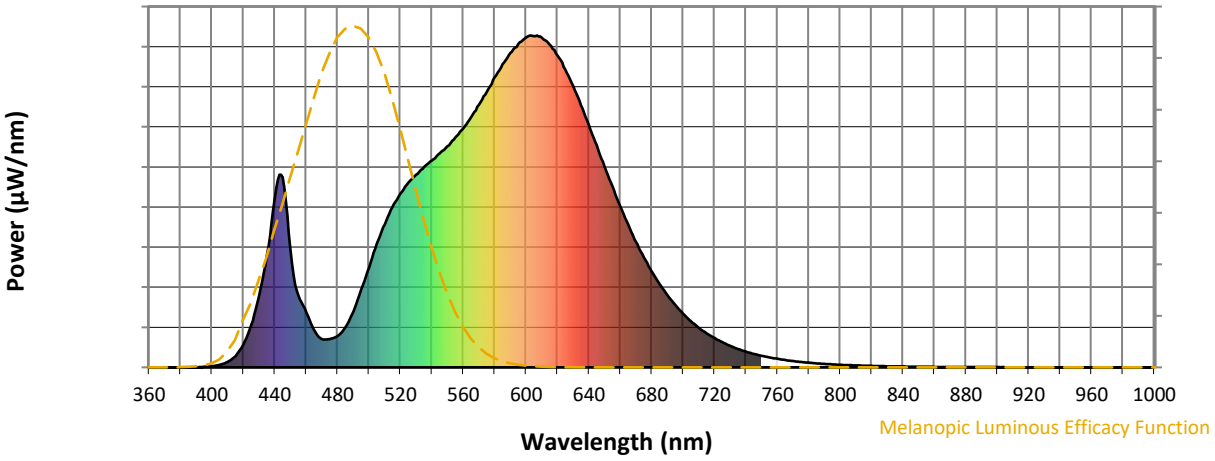


Scotopic Lumens: NR **S/P: 1.27**

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			

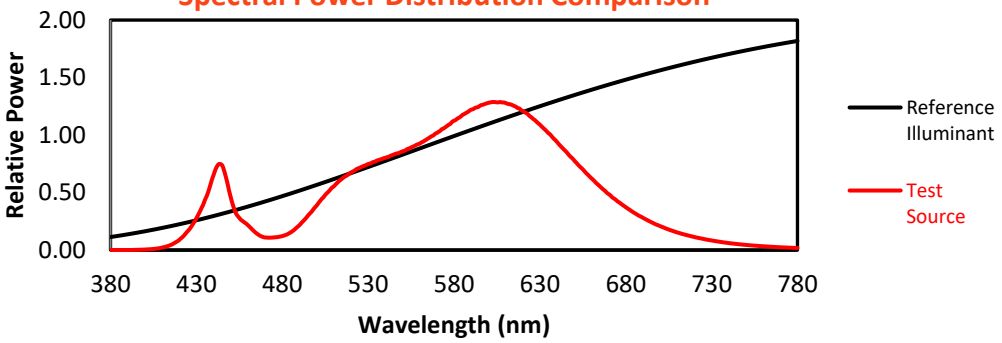
REPORT NUMBER: SP1-2408-195-9

TM-30-18

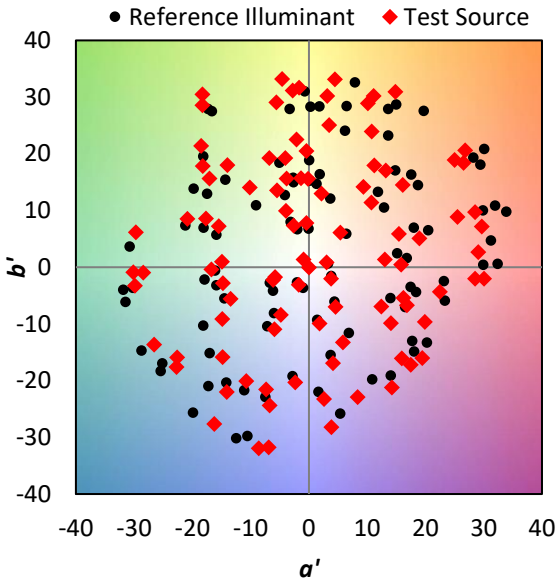
Summary

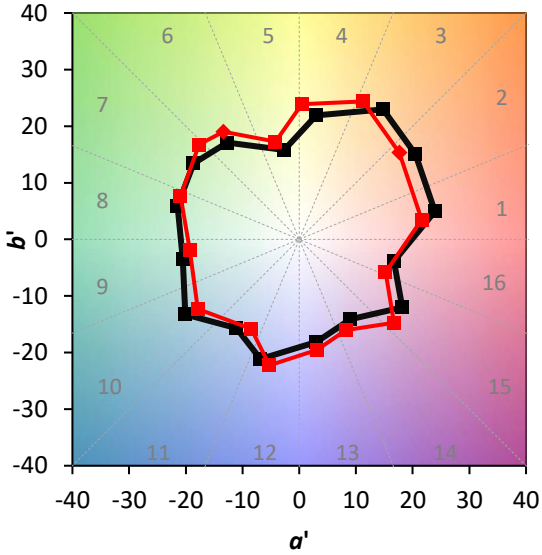
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

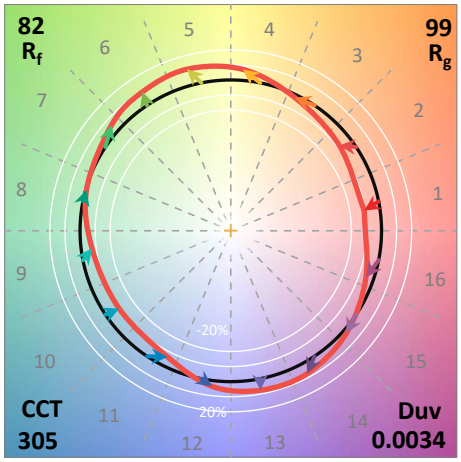
Spectral Power Distribution Comparison

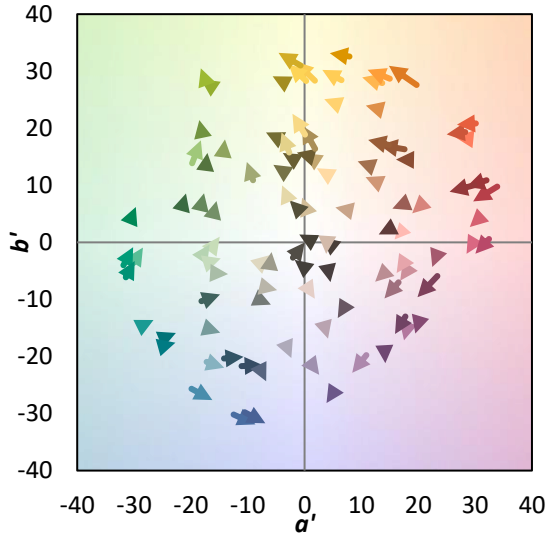


Color Vector Graphics







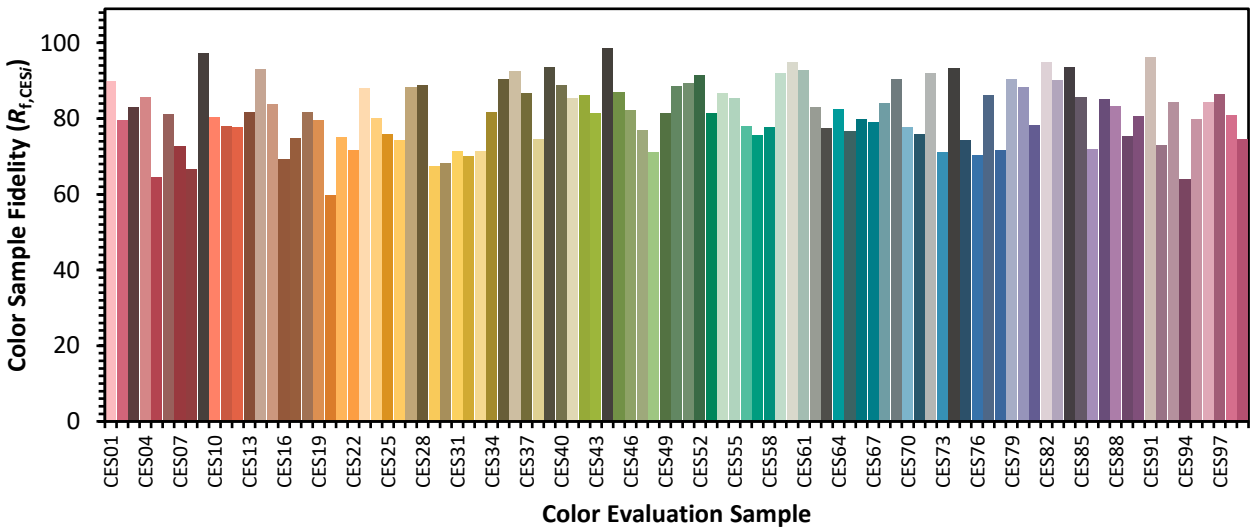


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

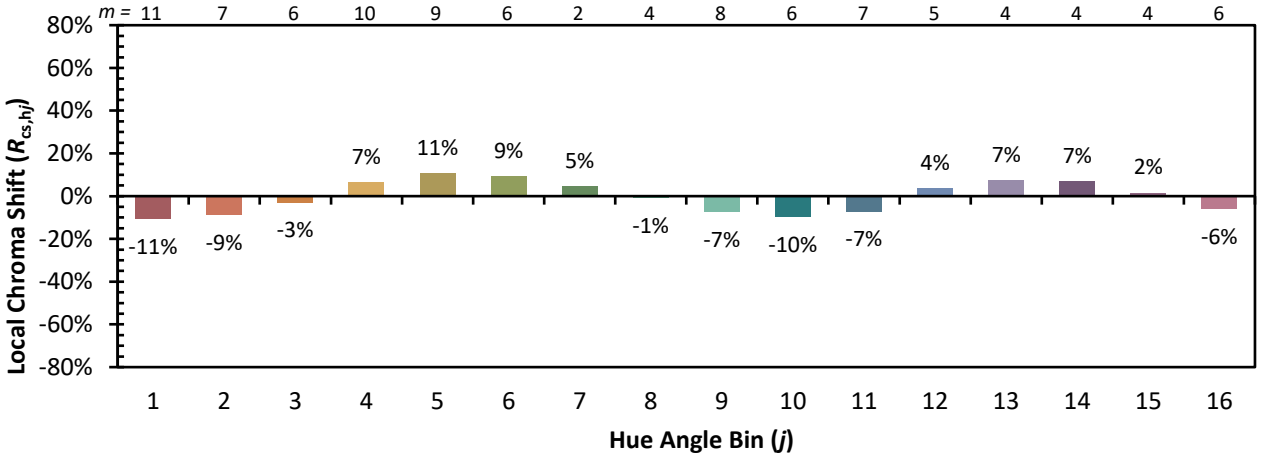
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

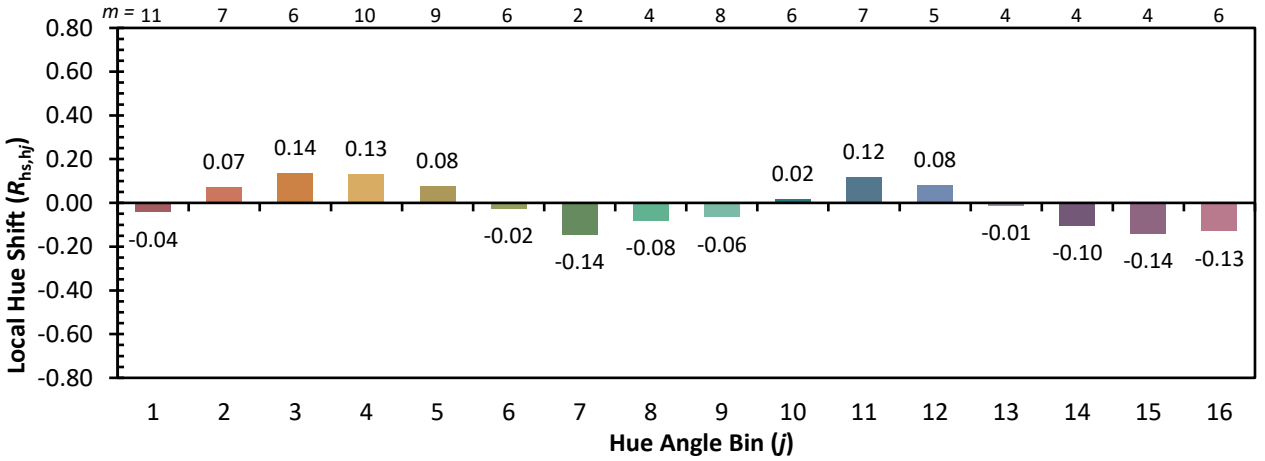


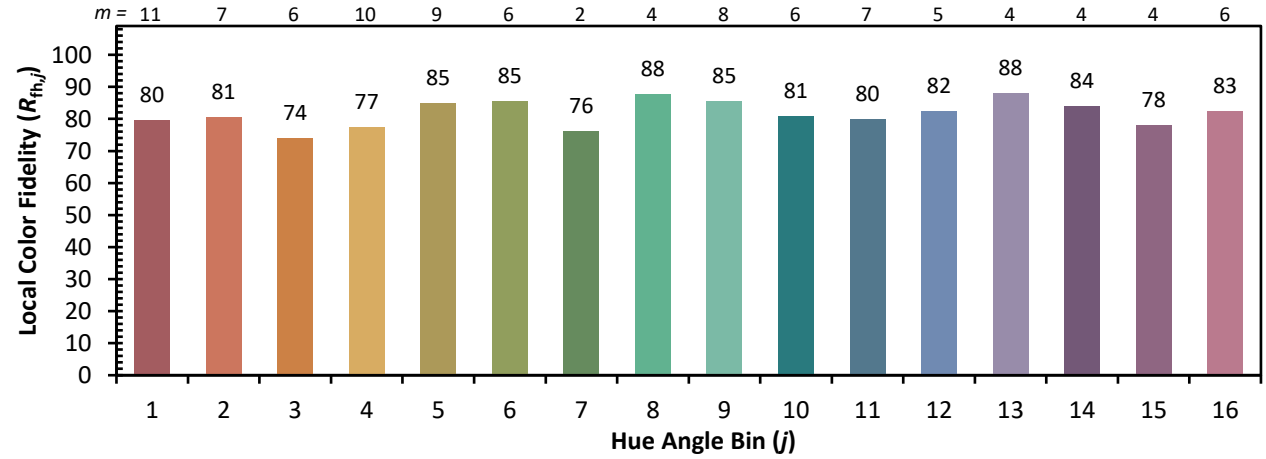
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



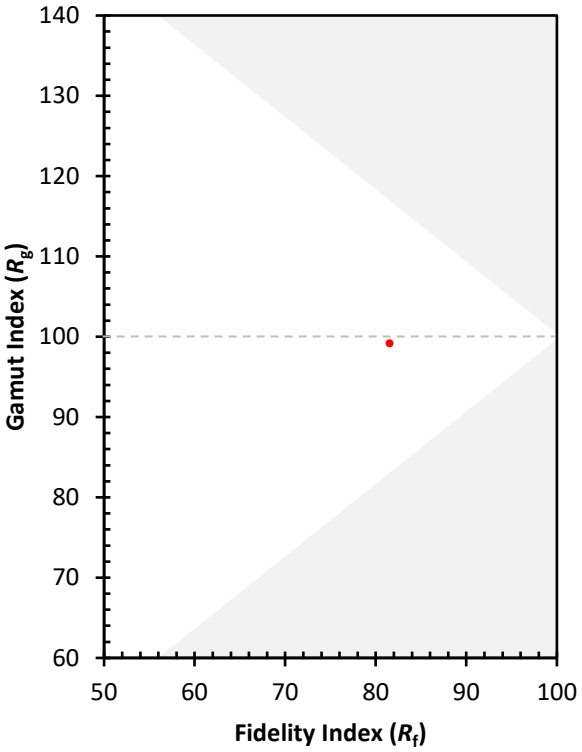


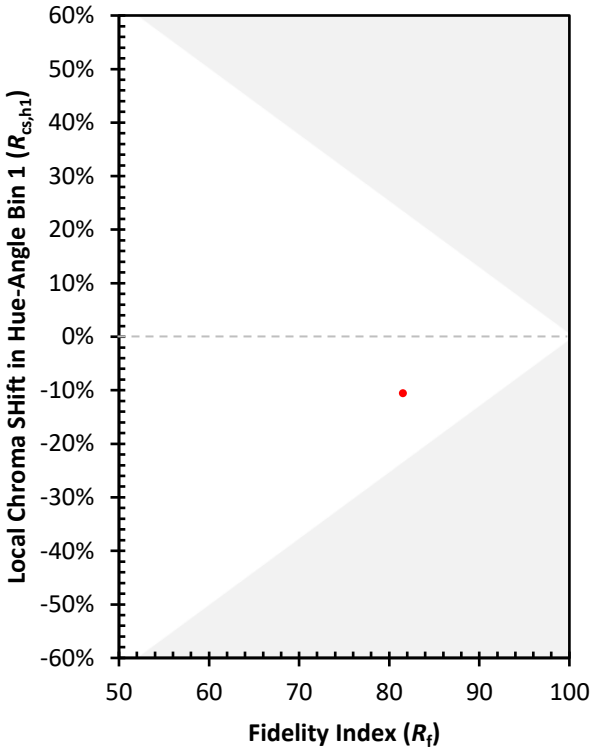


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)