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: P321107

Luminaire Tested: **GLEON-SA3A-830-U-AFL**

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:	P321107
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA3A-830-U-AFL
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11599 lumens
Efficiency:	N/A
Efficacy:	120.8 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

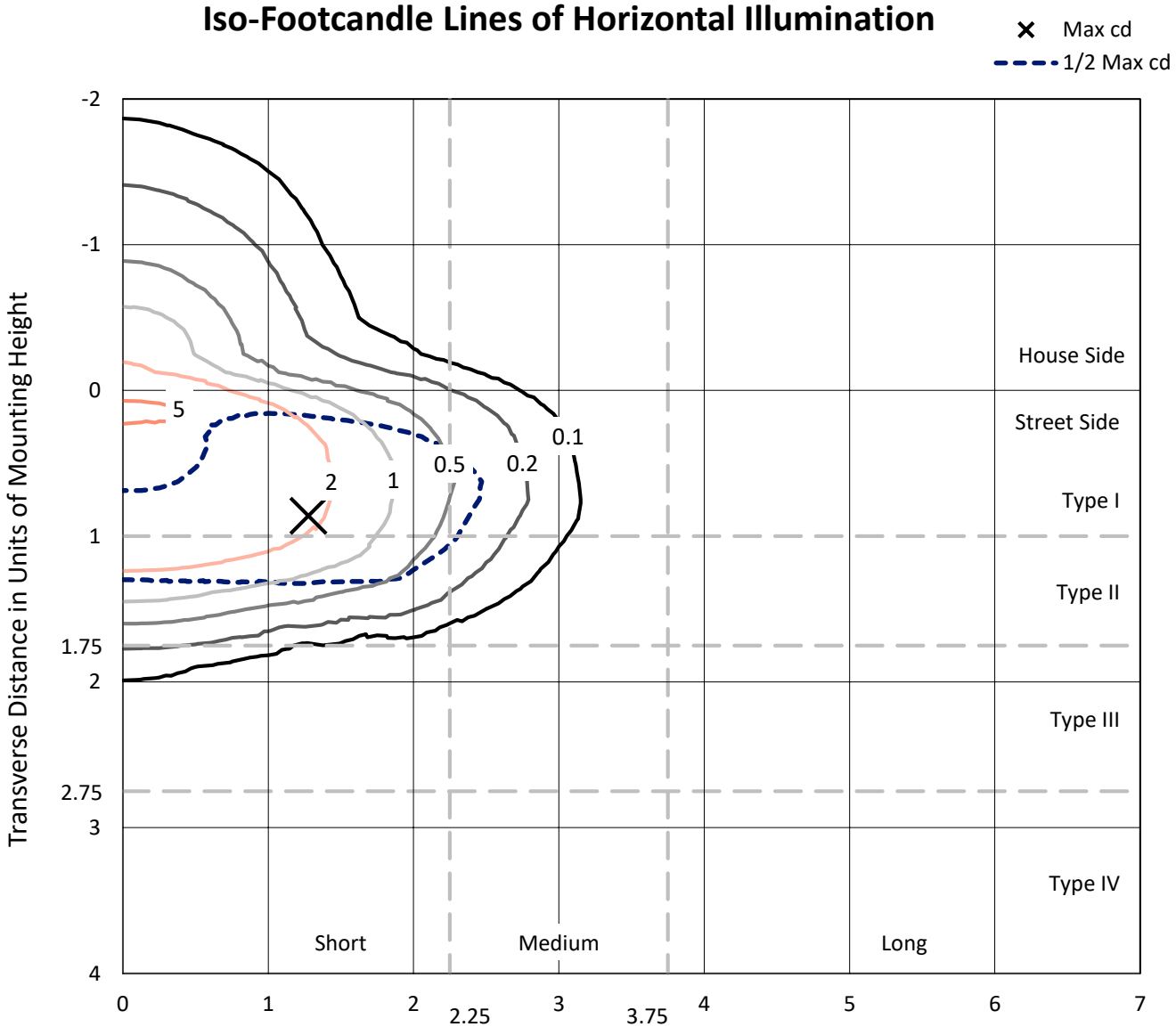
Input Watts (W):	96
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P321107
CATALOG NUMBER: GLEON-SA3A-830-U-AFL

Iso-Footcandle Lines of Horizontal Illumination



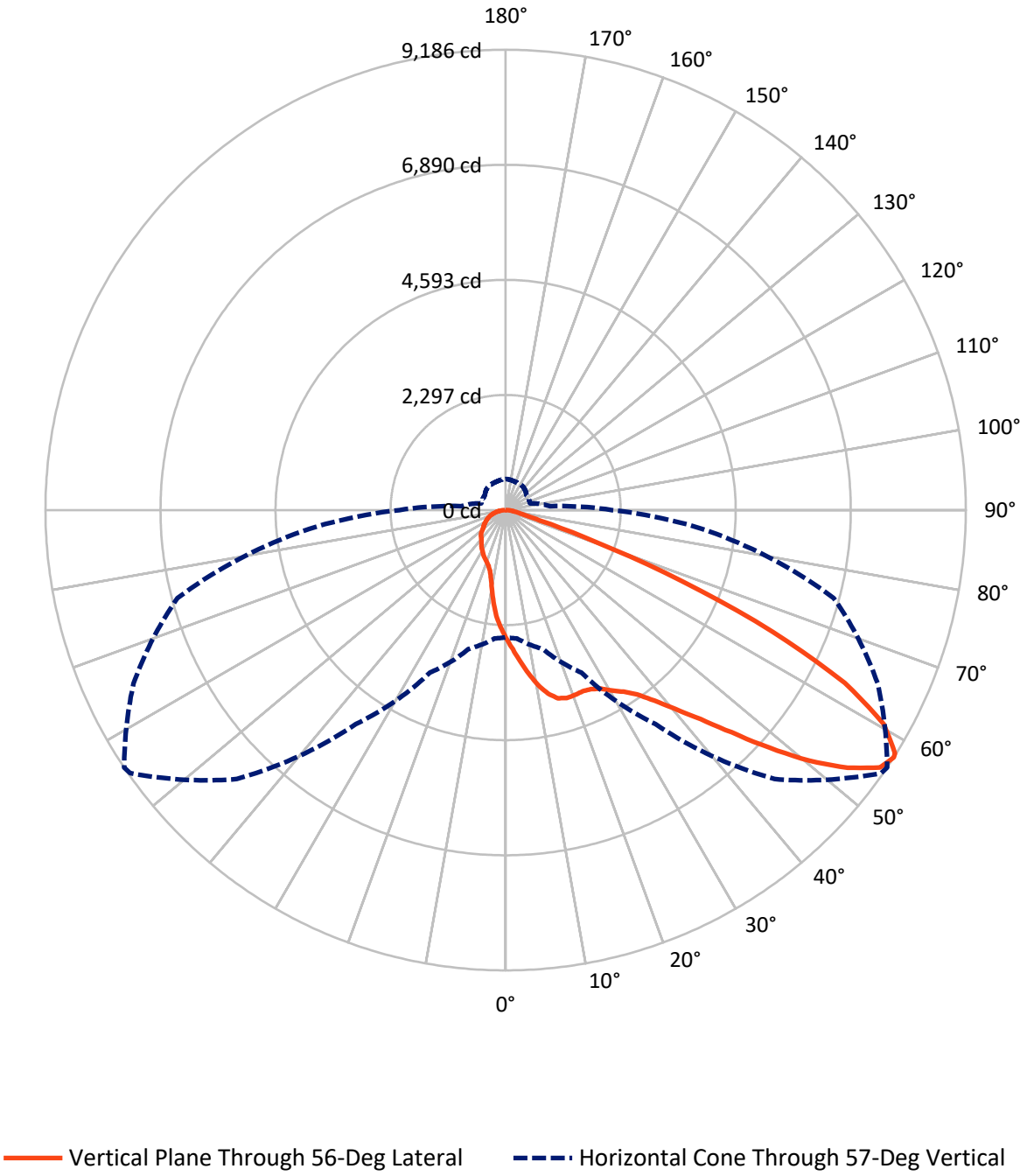
Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P321107
CATALOG NUMBER: GLEON-SA3A-830-U-AFL

Luminous Intensity Polar Plot



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

Scaled Data Report

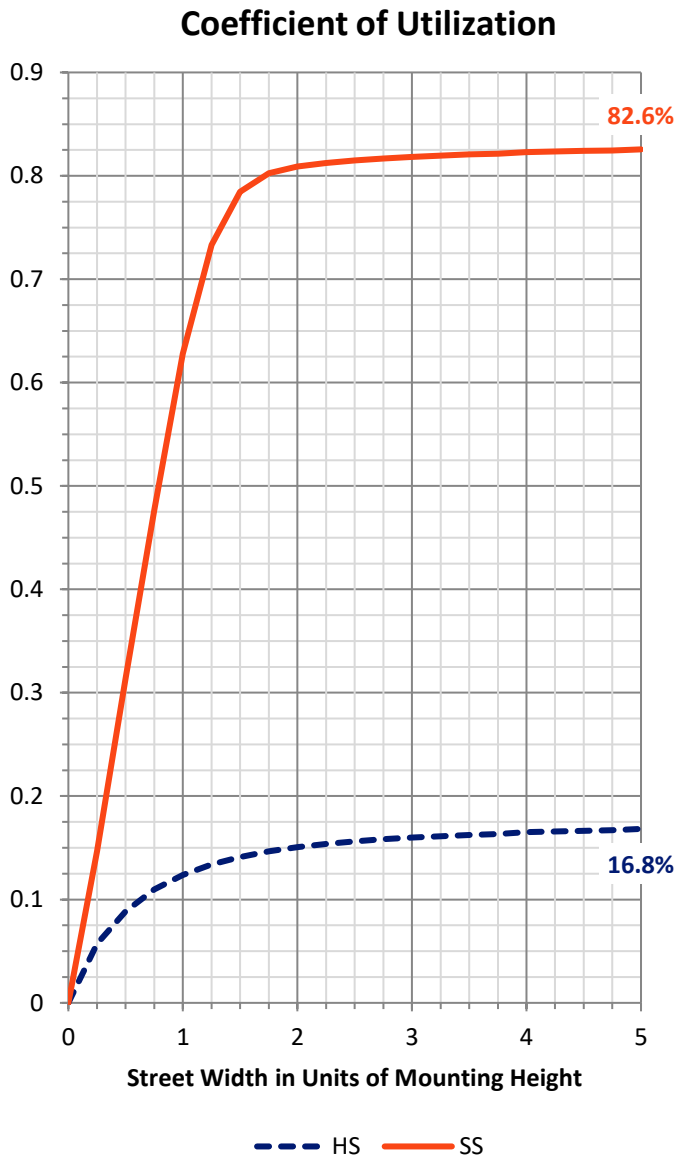
REPORT NUMBER: P321107
CATALOG NUMBER: GLEON-SA3A-830-U-AFL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1999.4	0.0	1999.4
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	9599.6	0.0	9599.6
	% Fixture	82.8	0.0	82.8
Total	Lumens	11599.0	0.0	11599.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.8	2.1
10°-20°	694.8	6.0
20°-30°	1131.7	9.8
30°-40°	1691.8	14.6
40°-50°	2566.1	22.1
50°-60°	2876.1	24.8
60°-70°	1698.7	14.6
70°-80°	556.6	4.8
80°-90°	137.5	1.2
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°	11599.0	100.0
0°-180°	11599.0	100.0



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

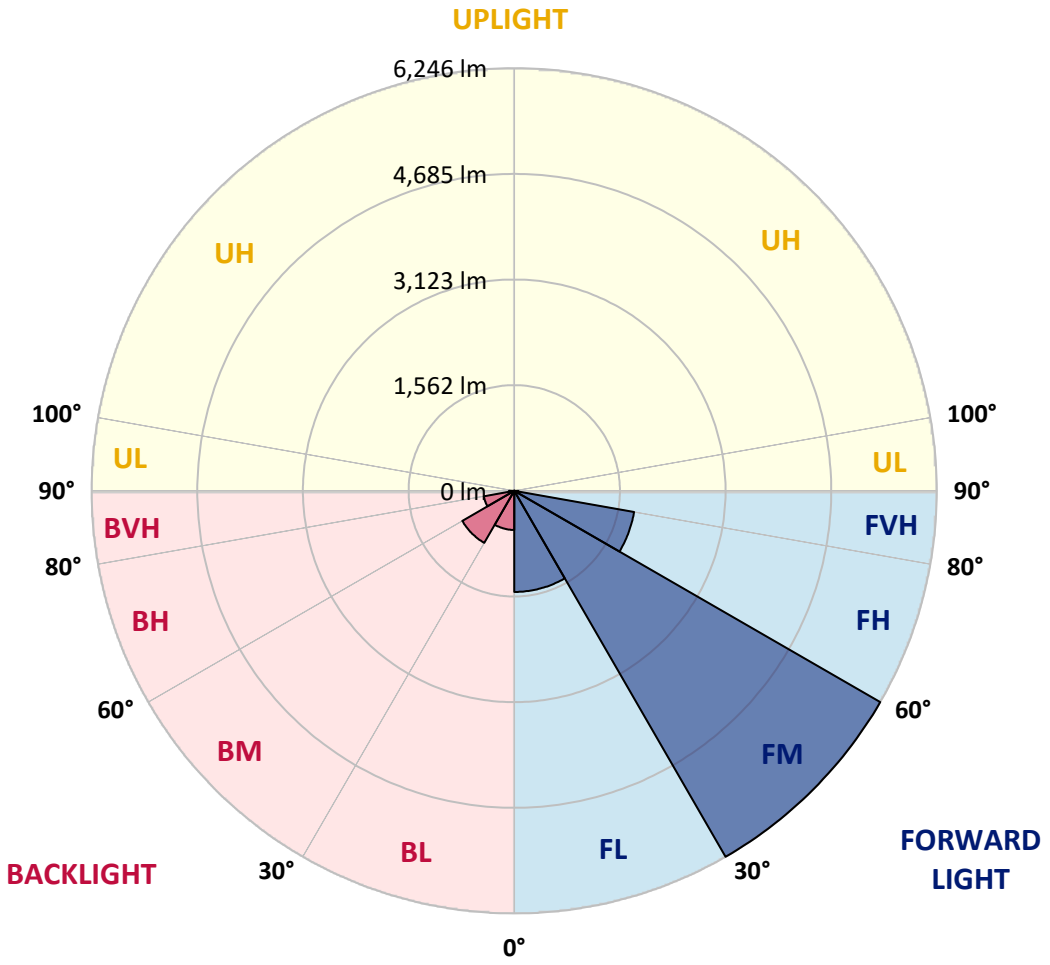
Scaled Data Report

REPORT NUMBER: P321107
CATALOG NUMBER: GLEON-SA3A-830-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1494.1	12.9			
FM	(30°-60°)	6246.4	53.9			
FH	(60°-80°)	1798.5	15.5			G1/1800
FVH	(80°-90°)	60.5	0.5			G1/100
BL	(0°-30°)	578.1	5.0	B2/1000		
BM	(30°-60°)	887.5	7.7	B1/1000		
BH	(60°-80°)	456.8	3.9	B1/500		G1/500
BVH	(80°-90°)	77.0	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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

Scaled Data Report

REPORT NUMBER: P321107
CATALOG NUMBER: GLEON-SA3A-830-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7	*2572.7*	2572.7	2572.7	2572.7
2.5°	2954.1	2981.3	2969.3	2927.8	2895.9	2850.9	2800.7	*2785.5*	2732.5	2673.1	2601.8
5°	3421.7	3408.2	3388.6	3324.1	3255.9	3176.6	3050.6	*3030.7*	2912.7	2778.4	2636.4
7.5°	3688.0	3686.8	3675.2	3637.4	3575.2	3471.5	3319.7	*3296.2*	3118.0	2901.9	2681.9
10°	3649.3	3646.5	3665.7	3705.1	3723.9	3702.3	3574.4	*3550.9*	3332.0	3038.7	2734.5
12.5°	3429.7	3431.3	3462.0	3544.9	3657.7	3793.2	3772.5	*3760.9*	3554.1	3193.3	2798.3
15°	3258.7	3262.3	3286.6	3358.7	3491.9	3737.8	3892.9	*3896.9*	3768.9	3363.9	2872.8
17.5°	3183.7	3191.3	3202.5	3253.1	3375.1	3627.4	3921.6	*3943.1*	3957.1	3540.9	2944.6
20°	3207.7	3214.8	3218.0	3250.3	3350.4	3560.4	3901.7	*3940.3*	4101.4	3707.5	3016.3
22.5°	3314.9	3319.3	3321.3	3329.6	3407.4	3579.6	3888.5	*3929.2*	4205.8	3857.0	3070.5
25°	3492.7	3489.5	3476.7	3466.0	3518.2	3655.3	3918.8	*3957.5*	4290.7	3992.5	3106.0
27.5°	3705.5	3701.5	3676.8	3647.3	3677.2	3773.3	4006.1	*4036.8*	4366.8	4119.3	3124.0
30°	3961.0	3950.7	3904.0	3869.0	3880.5	3950.3	4150.0	*4177.9*	4484.4	4263.2	3141.5
32.5°	4256.4	4245.3	4177.9	4119.7	4119.7	4177.9	4298.3	*4321.4*	4584.1	4425.8	3169.8
35°	4626.3	4612.4	4524.7	4427.0	4399.5	4429.0	4500.4	*4516.7*	4763.5	4630.7	3221.2
37.5°	5062.4	5043.7	4930.1	4799.3	4739.1	4737.6	4789.0	*4822.5*	5050.1	4899.8	3308.5
40°	5499.7	5486.6	5387.3	5284.5	5166.5	5128.6	5207.9	*5218.3*	5424.8	5233.8	3420.1
42.5°	5837.7	5835.3	5817.0	5830.6	5709.8	5633.2	5695.4	*5703.8*	5882.4	5595.4	3538.9
45°	6016.3	6020.3	6109.2	6306.1	6350.8	6294.9	6325.6	*6328.0*	6405.4	5960.1	3647.7
47.5°	5873.2	5893.9	6118.8	6559.2	6924.8	7110.1	7059.1	*7088.6*	6912.4	6273.4	3733.0
50°	5315.5	5341.1	5723.7	6446.4	7192.6	7899.0	7872.3	*7865.5*	7321.4	6503.0	3779.3
52.5°	4624.7	4644.7	4960.4	5860.1	6996.1	8335.1	8580.2	*8545.1*	7684.9	6674.8	3788.0
55°	3572.8	3603.9	3906.4	4689.7	6201.3	8168.4	9100.8	*9069.3*	8016.2	6764.9	3777.7
57°	*2540.0*	*2572.7*	*2873.2*	*3579.2*	*5216.7*	*7591.6*	*9152.6*	*9186.1*	*8195.1*	*6780.1*	*3789.2*
57.5°	2266.5	2300.0	2597.8	3283.4	4909.8	7383.2	9108.0	*9163.8*	8227.4	6777.7	3795.6
60°	1141.2	1154.0	1343.7	1832.8	3103.6	5968.9	8525.6	*8669.5*	8256.5	6660.5	3823.1
62.5°	709.5	700.4	694.4	844.3	1510.0	3958.3	7323.8	*7600.8*	7699.7	6376.7	3756.6
65°	623.8	606.7	540.9	529.0	666.9	1922.5	5515.3	*5860.1*	6509.8	5929.4	3597.9
67.5°	586.0	569.2	495.1	450.4	450.8	762.2	3424.1	*3812.4*	5071.2	5173.2	3223.6
70°	546.9	531.8	462.4	409.8	383.9	422.1	1575.3	*1869.9*	3305.7	4066.3	2694.2
72.5°	496.7	486.3	420.5	366.3	338.8	316.1	603.1	*712.3*	1913.8	2730.9	1871.1
75°	444.1	434.5	378.3	326.5	293.0	248.7	339.6	*365.9*	972.2	1397.1	921.2
77.5°	386.3	380.7	336.4	288.6	261.9	206.1	240.4	*253.1*	417.0	599.1	462.0
80°	307.3	318.1	294.2	257.1	232.4	165.0	170.2	*178.6*	242.8	292.6	262.3
82.5°	200.1	218.8	230.4	208.9	191.3	129.9	122.4	*126.0*	158.3	178.6	114.0
85°	83.3	93.7	151.5	136.7	127.2	94.9	82.1	*83.7*	98.1	101.6	46.6
87.5°	37.1	39.5	66.6	62.6	53.8	32.7	35.1	*38.3*	52.2	49.4	17.9
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: P321107
CATALOG NUMBER: GLEON-SA3A-830-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7	2572.7
2.5°	2575.1	2541.6	2484.2	2420.8	2369.0	2327.5	2285.7	2257.0	2223.5	2205.5	2196.4
5°	2577.1	2511.3	2390.5	2266.5	2155.7	2054.5	1958.0	1883.9	1814.5	1777.0	1766.7
7.5°	2585.4	2486.6	2291.2	2087.2	1890.2	1710.5	1571.7	1484.8	1422.3	1394.4	1386.4
10°	2592.2	2457.5	2168.5	1866.3	1598.5	1416.3	1308.7	1260.0	1238.5	1234.9	1231.3
12.5°	2608.1	2427.6	2039.3	1635.9	1371.6	1245.7	1208.2	1205.0	1211.0	1219.8	1219.8
15°	2633.3	2398.1	1891.8	1438.2	1227.3	1183.1	1190.7	1208.2	1224.5	1238.1	1240.1
17.5°	2651.6	2361.8	1733.2	1280.0	1150.4	1162.4	1189.5	1214.2	1230.9	1244.1	1245.3
20°	2664.7	2305.6	1563.8	1159.2	1106.2	1143.2	1177.1	1199.0	1210.6	1223.8	1225.7
22.5°	2658.0	2230.3	1413.5	1072.7	1070.3	1115.3	1147.6	1173.9	1165.2	1152.4	1160.8
25°	2625.3	2126.6	1258.8	1008.1	1032.4	1077.9	1117.7	1100.2	1070.7	1065.1	1068.3
27.5°	2567.1	1994.3	1115.7	948.3	988.6	1043.2	1040.8	1023.2	1012.9	1005.7	1010.1
30°	2504.5	1850.8	990.6	896.1	939.9	985.0	975.8	975.4	965.0	953.5	959.1
32.5°	2442.7	1706.5	891.3	853.0	903.3	909.2	929.2	935.2	914.8	890.5	888.9
35°	2388.9	1570.1	816.0	814.0	859.0	859.8	888.9	880.5	829.9	804.8	804.8
37.5°	2348.6	1434.2	758.6	778.9	800.8	821.5	836.3	801.6	793.2	779.3	778.9
40°	2331.1	1314.6	722.7	752.2	759.8	786.1	748.2	761.8	765.7	758.6	758.6
42.5°	2312.8	1210.6	691.6	731.9	730.7	727.1	707.9	725.5	741.4	741.8	740.6
45°	2294.4	1120.9	664.1	688.4	705.2	666.5	670.1	688.8	711.1	719.1	719.1
47.5°	2274.1	1050.0	639.0	642.6	668.5	642.6	639.8	654.1	680.4	693.2	696.0
50°	2229.5	986.2	610.3	602.3	609.5	618.3	620.6	627.4	656.5	676.9	681.6
52.5°	2167.7	929.2	573.6	565.2	565.2	598.3	609.5	611.5	636.2	660.5	665.3
55°	2116.3	892.9	535.7	534.1	532.6	577.2	596.3	599.5	616.7	635.8	638.2
57°	*2119.8*	*890.1*	*506.6*	*508.2*	*507.8*	*555.7*	*584.0*	*590.7*	*599.5*	*615.9*	*618.7*
57.5°	2121.8	892.1	500.3	501.1	500.7	549.7	580.4	588.0	594.7	611.9	614.7
60°	2151.7	897.3	474.4	465.6	467.6	517.8	560.1	569.6	574.0	596.7	600.3
62.5°	2107.5	874.2	453.6	432.5	432.5	484.3	531.8	546.9	553.7	584.4	590.4
65°	1979.1	809.2	429.3	395.0	399.0	450.8	497.9	522.6	532.9	571.2	577.6
67.5°	1781.0	733.9	403.4	361.5	365.5	415.8	462.8	489.5	505.8	556.9	562.0
70°	1523.1	641.8	368.3	326.1	330.9	377.5	421.3	451.6	475.9	543.3	544.9
72.5°	1122.9	526.2	319.3	287.0	292.2	332.8	379.5	414.6	447.2	509.4	508.6
75°	667.7	411.4	265.1	247.5	251.1	289.0	341.6	384.3	433.3	496.3	503.9
77.5°	405.0	309.7	216.0	207.3	211.7	250.3	314.5	360.0	427.3	468.0	465.6
80°	244.8	221.2	172.6	167.0	171.4	214.1	291.0	341.6	373.5	399.8	399.8
82.5°	128.0	135.1	126.8	122.4	128.4	173.8	264.7	298.2	330.1	283.4	264.7
85°	52.2	70.6	76.9	76.5	80.1	120.4	228.4	255.1	212.9	202.1	206.9
87.5°	17.5	29.9	37.5	32.3	33.9	75.7	158.3	123.2	146.3	102.0	96.9
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

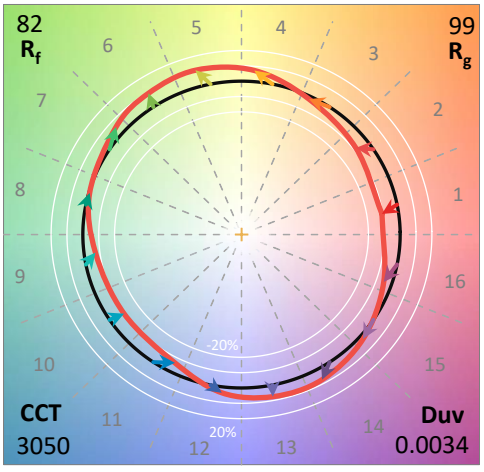
Test Information

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

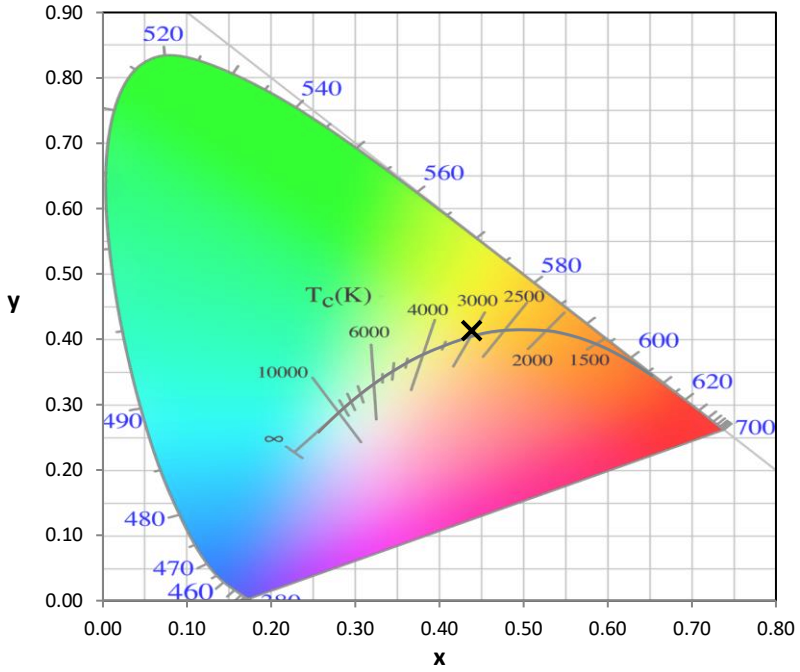
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

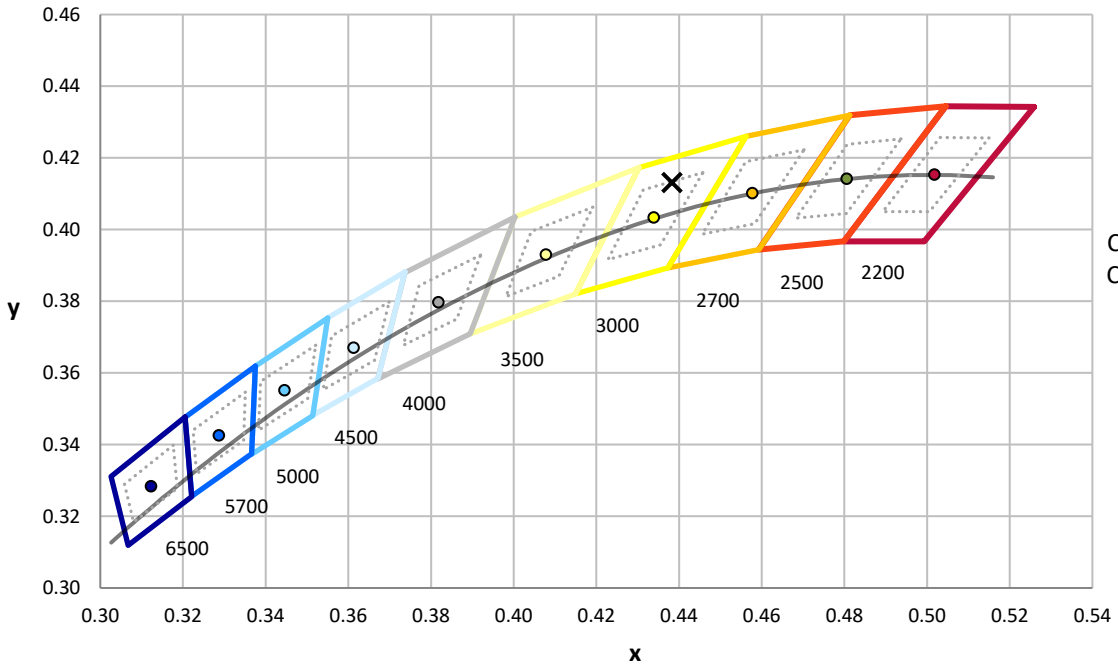
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

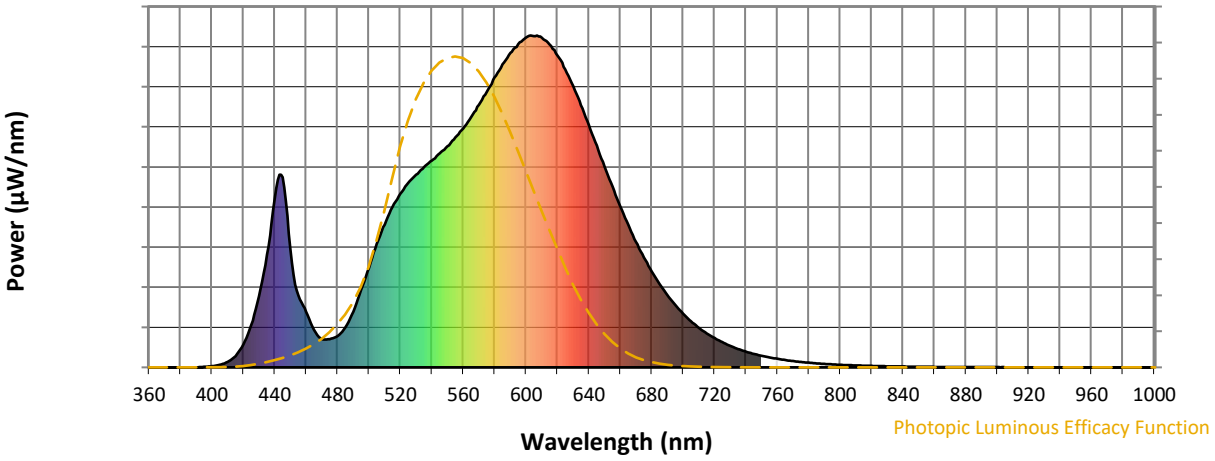


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

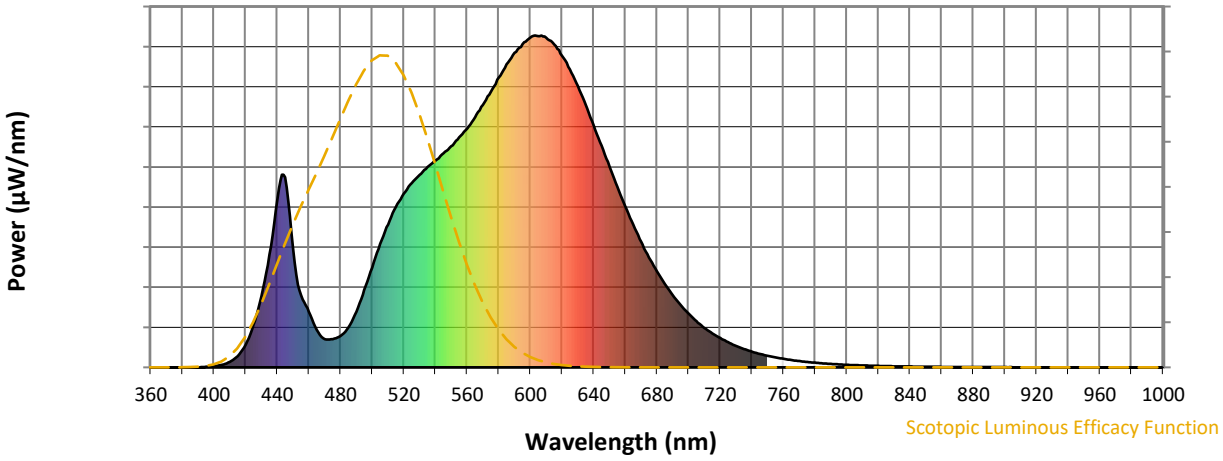


Photopic Lumens: NR

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

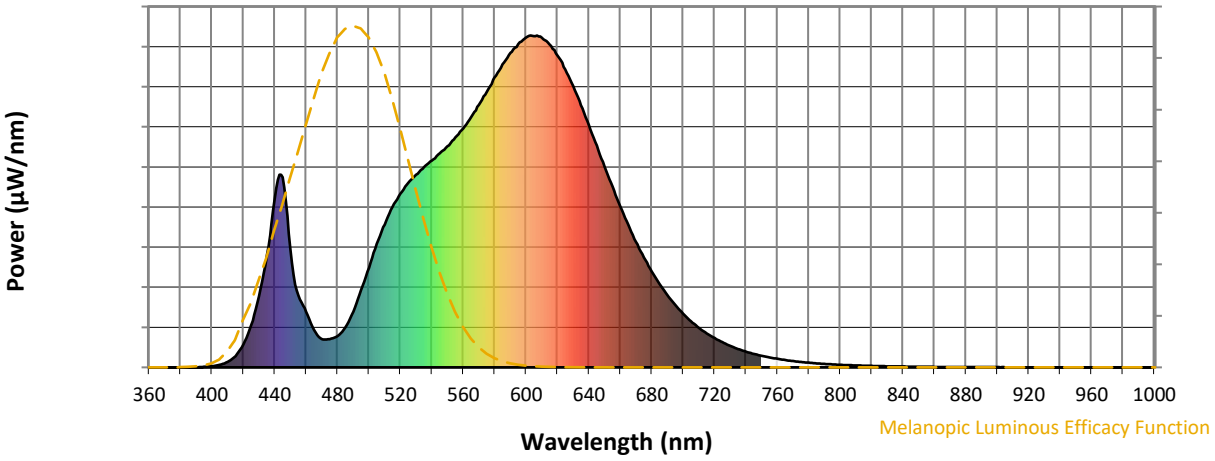


Scotopic Lumens: NR **S/P: 1.27**

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			

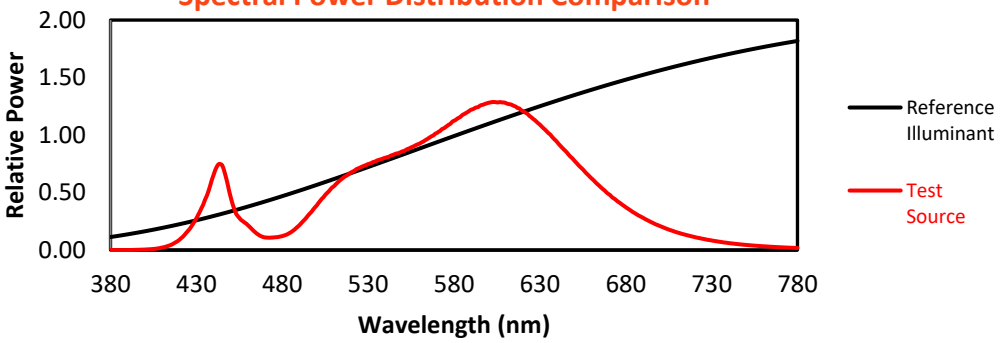
REPORT NUMBER: SP1-2408-195-9

TM-30-18

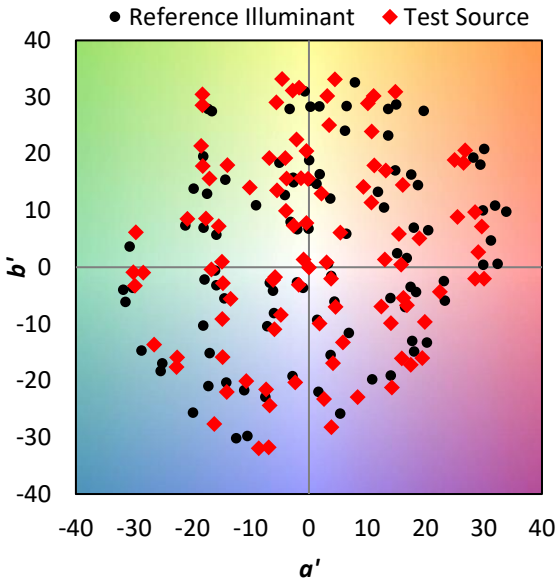
Summary

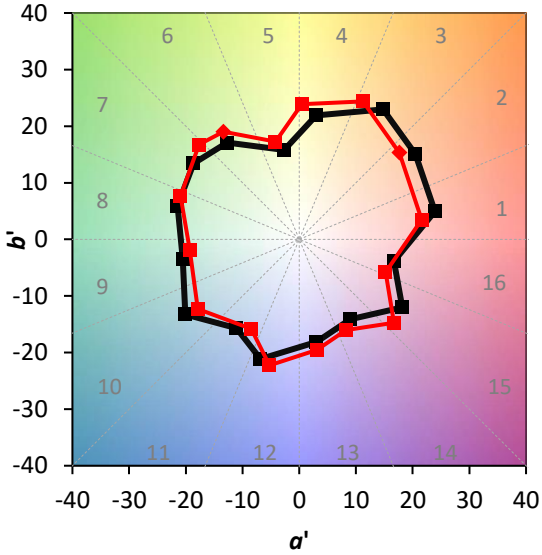
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

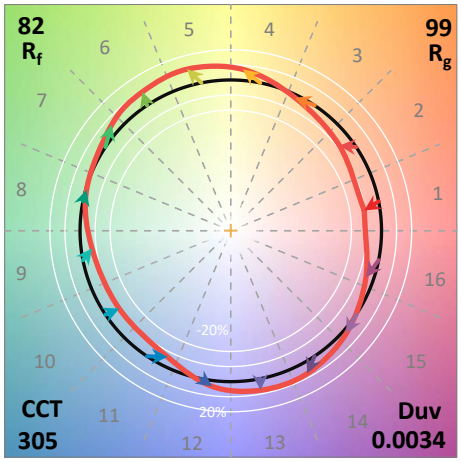
Spectral Power Distribution Comparison

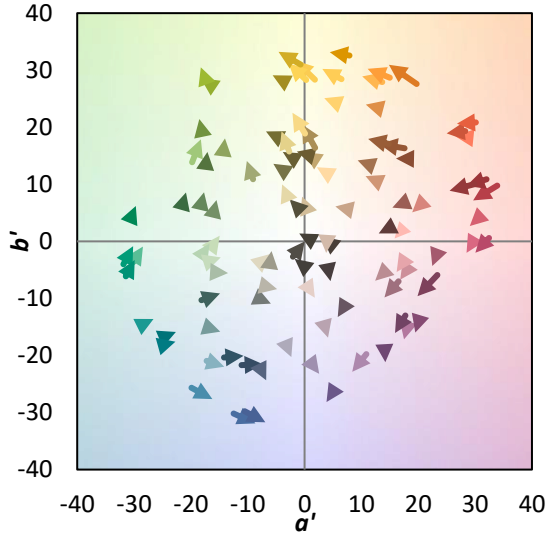


Color Vector Graphics







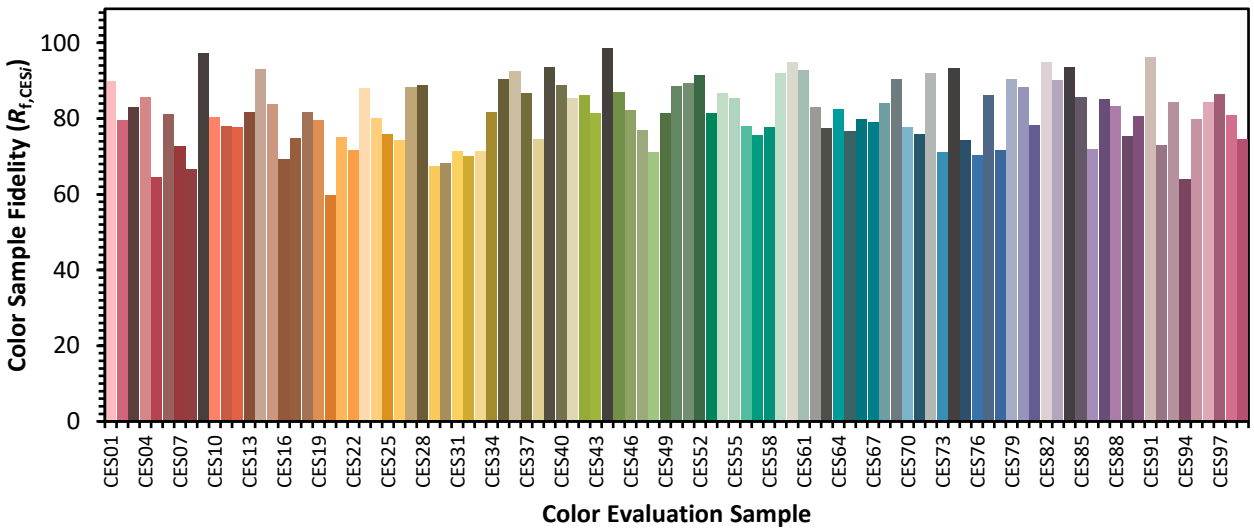


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

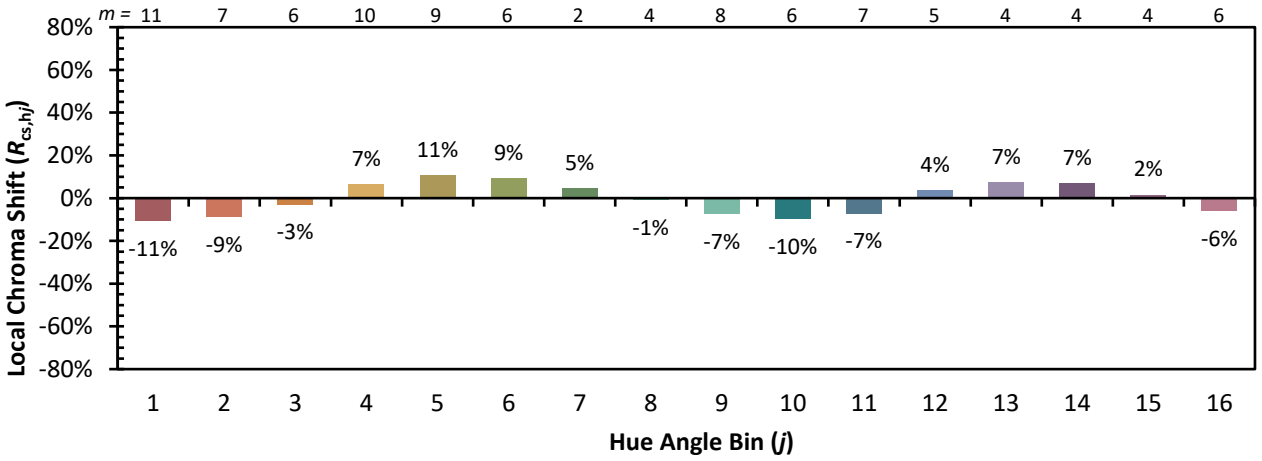
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

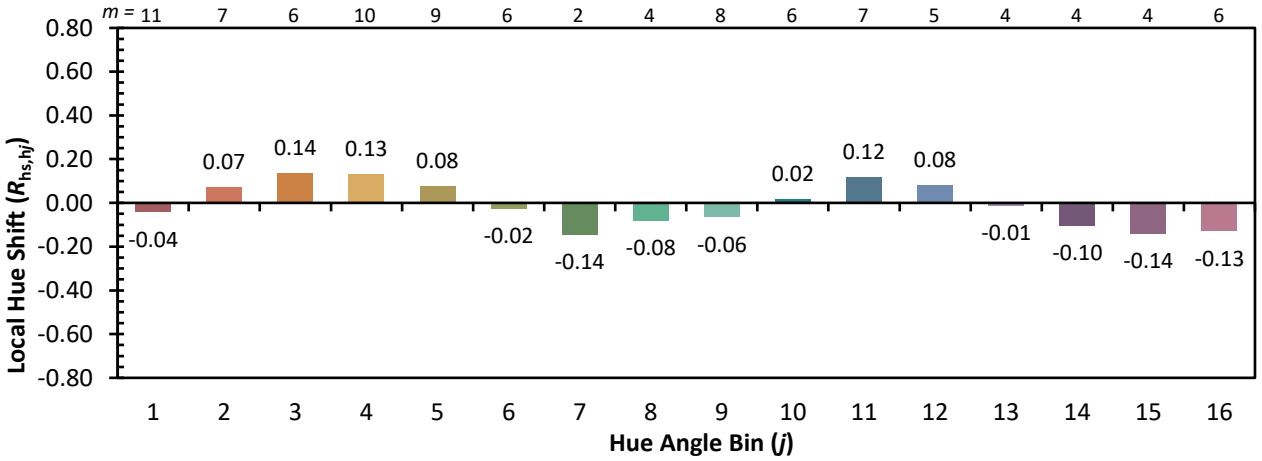


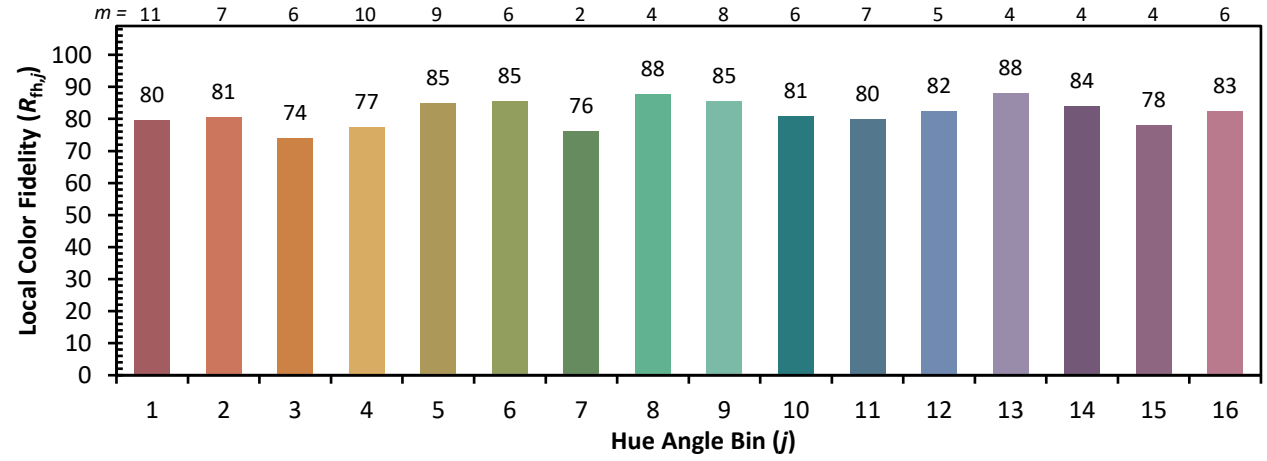
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



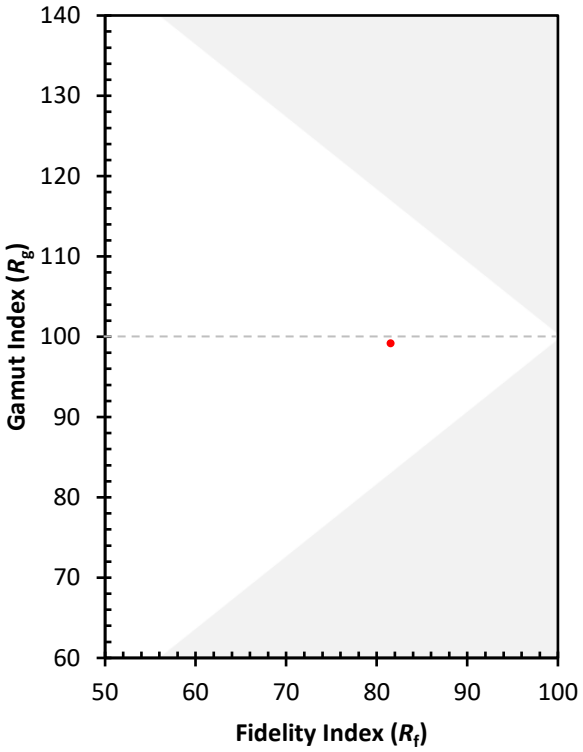


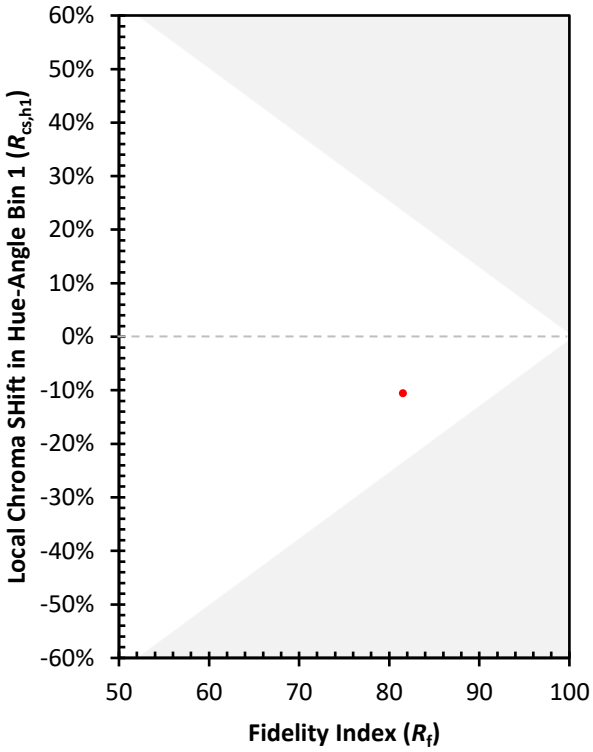


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)