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: P318238

Luminaire Tested: **GLEON-SA4B-830-U-T2**

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:	P318238
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-12)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA4B-830-U-T2
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(4) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	17976 lumens
Efficiency:	N/A
Efficacy:	105.1 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B2 - U0 - G3

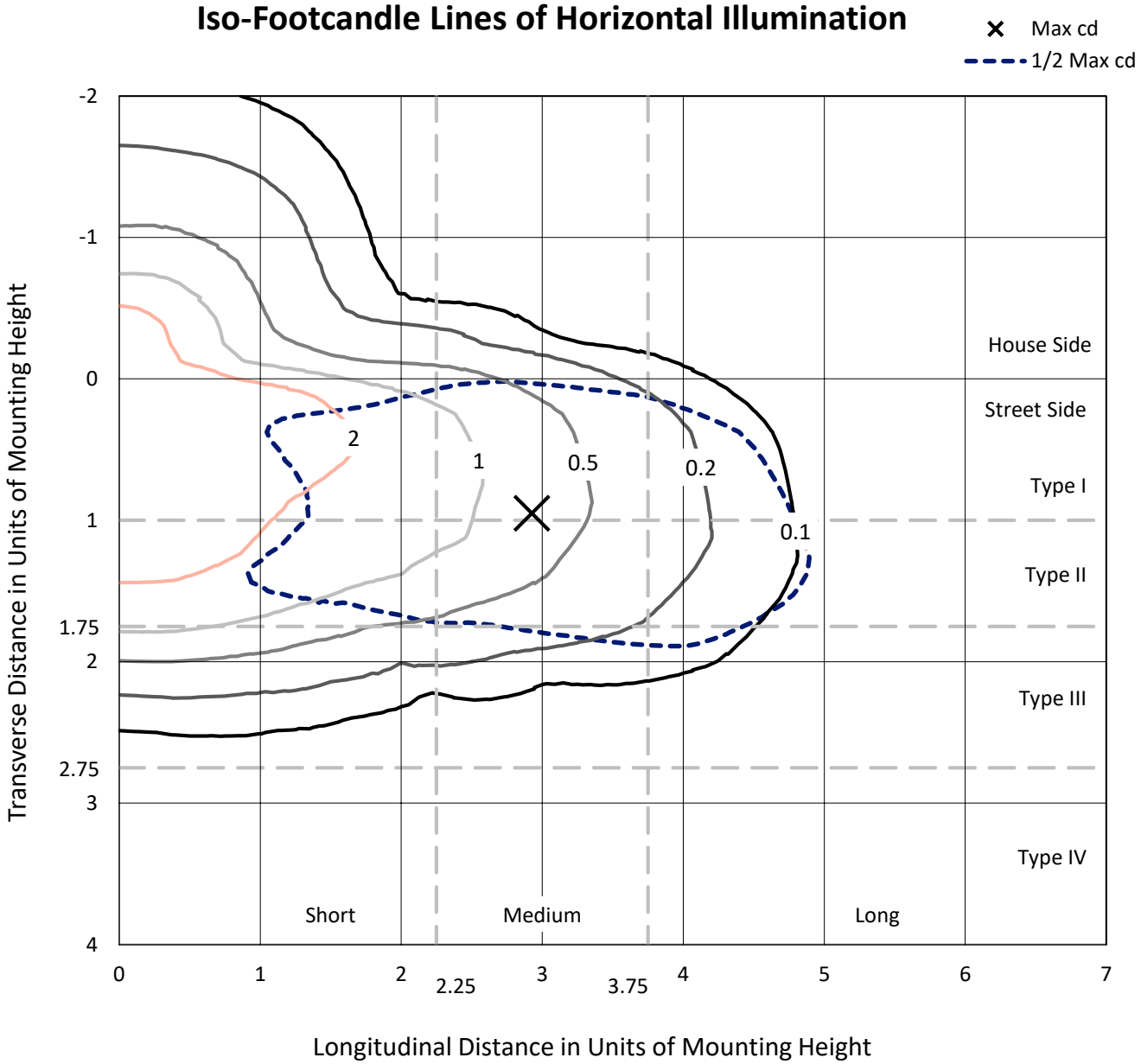
Input Watts (W):	171
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P318238
CATALOG NUMBER: GLEON-SA4B-830-U-T2

Iso-Footcandle Lines of Horizontal Illumination



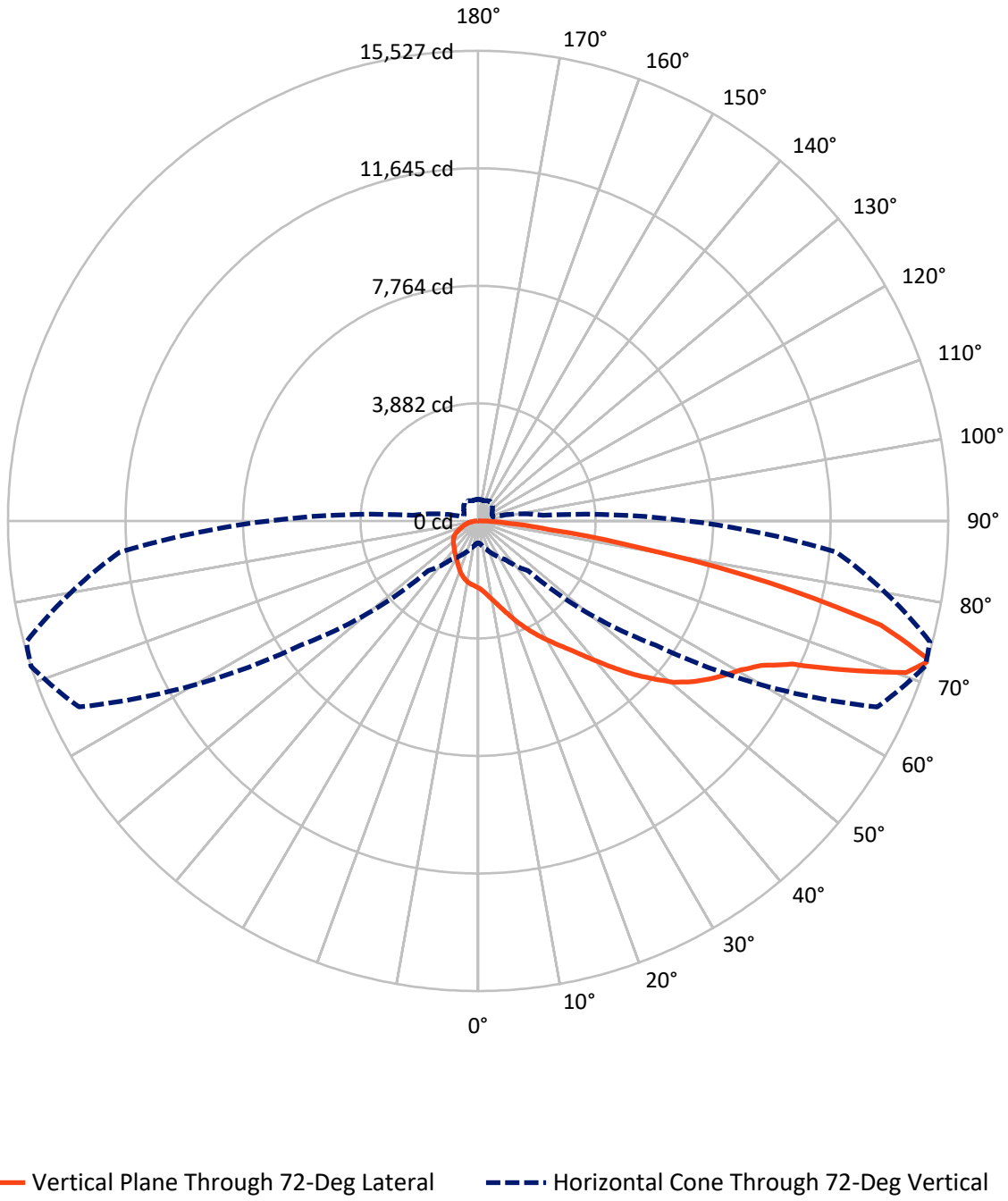
Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
Type III - Medium - N/A

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

Scaled Data Report

REPORT NUMBER: P318238
CATALOG NUMBER: GLEON-SA4B-830-U-T2

Luminous Intensity Polar Plot



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

Scaled Data Report

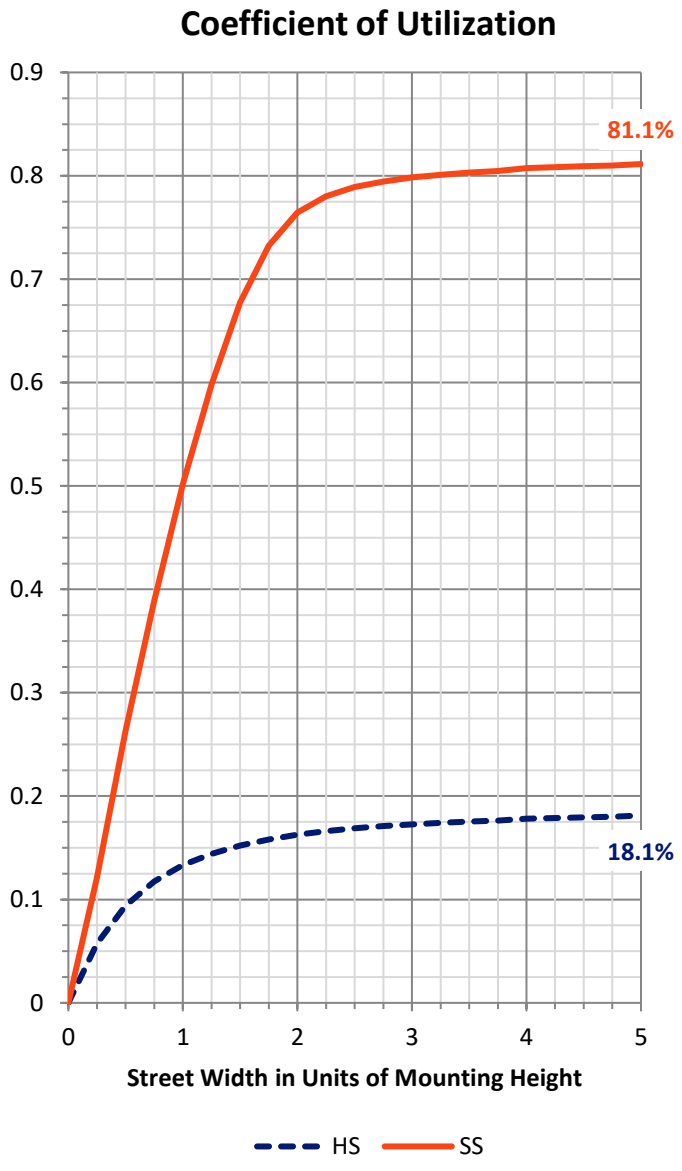
REPORT NUMBER: P318238
CATALOG NUMBER: GLEON-SA4B-830-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3334.7	0.0	3334.7
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	14641.3	0.0	14641.3
	% Fixture	81.4	0.0	81.4
Total	Lumens	17976.0	0.0	17976.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.6	1.2
10°-20°	716.1	4.0
20°-30°	1254.8	7.0
30°-40°	1860.5	10.4
40°-50°	2721.2	15.1
50°-60°	3744.3	20.8
60°-70°	4168.6	23.2
70°-80°	2824.6	15.7
80°-90°	464.2	2.6
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°	17976.0	100.0
0°-180°	17976.0	100.0



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

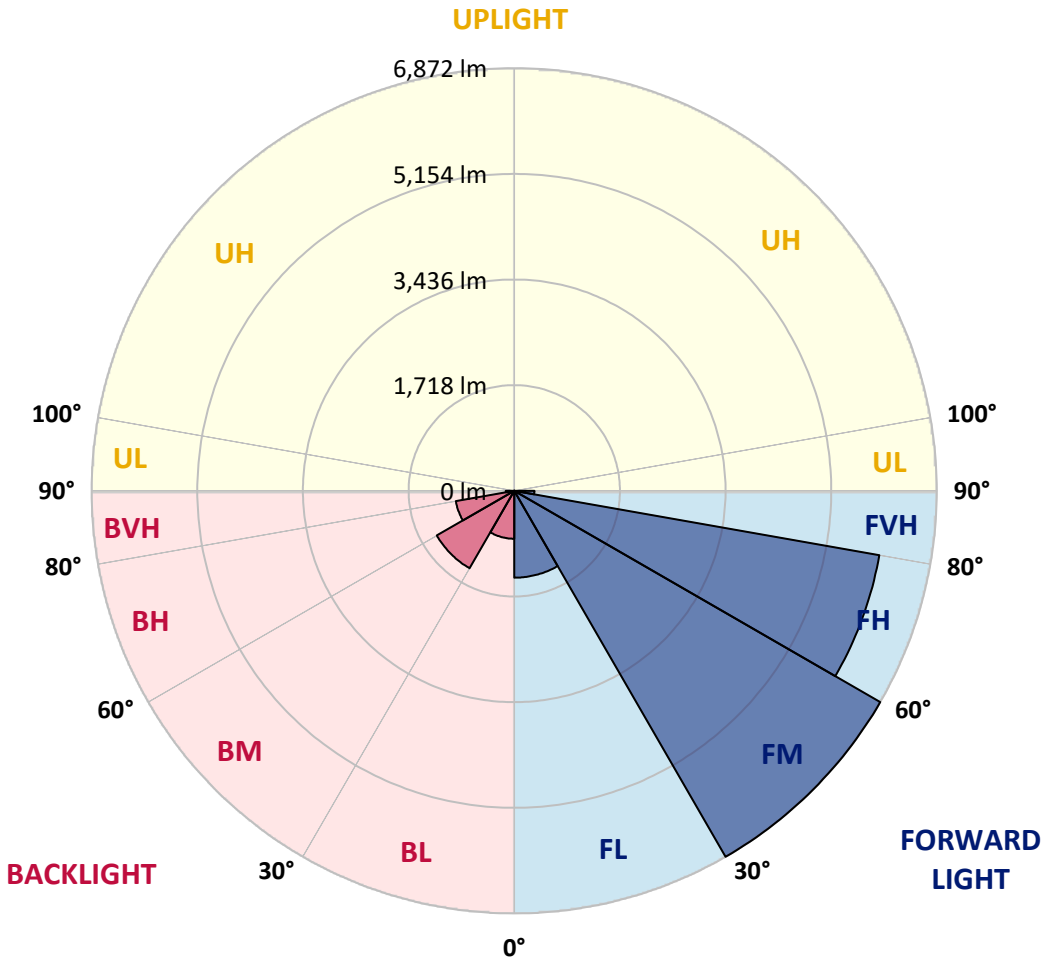
Scaled Data Report

REPORT NUMBER: P318238
CATALOG NUMBER: GLEON-SA4B-830-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1413.0	7.9			
FM	(30°-60°)	6872.4	38.2			
FH	(60°-80°)	6028.4	33.5			G3/7500
FVH	(80°-90°)	327.5	1.8			G3/500
BL	(0°-30°)	779.5	4.3	B2/1000		
BM	(30°-60°)	1453.6	8.1	B2/2500		
BH	(60°-80°)	964.8	5.4	B2/1000		G2/1000
BVH	(80°-90°)	136.8	0.8			G2/225
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: P318238
CATALOG NUMBER: GLEON-SA4B-830-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	*2211.5*	2211.5	2211.5
2.5°	2443.0	2439.3	2426.3	2426.3	2401.5	2380.5	2340.9	2314.3	*2282.7*	2271.6	2234.4
5°	2679.4	2680.7	2664.6	2653.4	2616.9	2572.4	2504.9	2443.6	*2382.3*	2357.6	2281.5
7.5°	2878.1	2875.7	2871.3	2862.0	2828.0	2782.2	2691.2	2600.2	*2509.9*	2472.7	2341.5
10°	3005.6	3011.2	3014.9	3019.2	3005.0	2972.2	2886.2	2775.4	*2657.2*	2606.4	2413.3
12.5°	3070.0	3079.9	3097.2	3126.9	3150.5	3146.8	3084.2	2966.6	*2826.1*	2762.4	2503.0
15°	3107.8	3120.8	3148.0	3201.2	3267.4	3305.2	3288.5	3182.0	*3025.4*	2946.8	2612.6
17.5°	3131.3	3141.8	3183.9	3255.1	3353.5	3453.8	3497.7	3408.6	*3250.7*	3161.0	2738.2
20°	3147.4	3155.4	3208.0	3291.6	3419.1	3578.8	3701.3	3679.1	*3498.9*	3382.6	2869.5
22.5°	3183.3	3190.1	3240.2	3324.4	3465.5	3671.6	3897.5	3931.0	*3760.8*	3628.9	3010.0
25°	3283.5	3283.5	3325.6	3384.4	3516.9	3752.1	4063.4	4211.4	*4028.1*	3874.6	3139.9
27.5°	3474.8	3472.9	3488.4	3508.8	3609.1	3833.8	4211.4	4458.9	*4305.4*	4137.7	3266.2
30°	3701.3	3713.7	3715.6	3705.7	3752.7	3935.9	4348.1	4720.1	*4584.6*	4403.8	3395.6
32.5°	3992.9	4000.9	3991.6	3958.8	3952.0	4080.8	4482.5	4993.7	*4886.6*	4681.8	3513.8
35°	4363.0	4347.5	4318.4	4251.6	4187.8	4274.5	4636.0	5267.3	*5225.8*	5017.8	3676.6
37.5°	4759.7	4760.4	4724.5	4572.8	4484.9	4522.1	4847.6	5577.4	*5636.2*	5417.7	3885.2
40°	5077.9	5094.6	5116.9	4917.6	4803.7	4855.1	5116.9	5937.0	*6121.4*	5891.8	4156.9
42.5°	5300.1	5319.3	5382.4	5257.4	5139.2	5234.5	5433.8	6320.7	*6666.1*	6439.0	4475.0
45°	5535.3	5545.8	5590.4	5536.5	5461.0	5675.8	5790.9	6718.1	*7242.4*	7022.0	4830.9
47.5°	5782.9	5794.0	5839.8	5803.9	5764.3	6088.0	6163.5	7092.6	*7794.5*	7662.6	5211.0
50°	6088.6	6096.1	6139.4	6074.4	6086.8	6398.7	6496.5	7436.1	*8373.2*	8238.3	5592.2
52.5°	6505.8	6507.7	6567.7	6508.9	6450.7	6626.5	6783.1	7759.8	*8826.9*	8763.1	5973.5
55°	6832.6	6852.4	7049.2	7036.9	7003.4	6833.2	7022.6	8068.0	*9231.7*	9262.0	6378.3
57.5°	6624.0	6701.4	7100.0	7381.0	7654.6	7347.6	7346.3	8415.3	*9608.0*	9751.6	6823.3
60°	5801.4	5906.7	6494.0	7117.3	7973.3	8242.6	8018.5	8839.3	*9988.0*	10236.9	7381.0
62.5°	4143.3	4316.6	5112.5	6107.8	7536.4	8835.5	9386.4	9512.1	*10504.9*	10798.9	8105.8
65°	2094.5	2225.8	2893.0	4091.9	6021.2	8448.1	10873.1	10985.2	*11403.0*	11664.2	9221.8
67.5°	1272.6	1322.1	1647.7	2275.9	3691.4	6580.7	11358.4	13440.6	*13141.0*	13279.6	10813.1
70°	937.7	974.2	1177.2	1511.5	2123.0	3861.6	9869.2	15192.8	*14996.0*	14980.5	11989.1
72°	*730.4*	*757.0*	*936.5*	*1221.2*	*1552.3*	*2316.7*	*7153.2*	*14546.0*	*15527.0*	*15449.1*	*11881.4*
72.5°	692.6	716.1	879.5	1149.4	1466.9	2100.1	6431.5	14109.6	*15488.7*	15453.4	11742.1
75°	545.3	562.0	651.1	888.8	1148.2	1191.5	3524.3	10934.4	*13740.1*	14311.4	10561.2
77.5°	451.2	453.7	500.7	646.8	895.0	842.4	1731.2	7586.5	*9838.9*	10467.1	7481.3
80°	367.7	370.8	393.0	453.7	677.1	623.3	822.0	4362.4	*5508.7*	5515.5	3557.7
82.5°	292.8	293.4	318.1	331.8	486.5	445.6	471.0	2048.1	*2407.1*	2315.5	1278.8
85°	206.1	201.8	310.7	272.3	318.1	286.0	260.0	810.8	*995.3*	951.9	400.5
87.5°	68.7	71.2	138.0	176.4	185.7	162.2	115.7	310.7	*375.7*	372.6	126.9
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: P318238
CATALOG NUMBER: GLEON-SA4B-830-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5
2.5°	2222.7	2202.9	2173.8	2141.6	2116.2	2090.2	2071.0	2061.1	2050.0	2040.7	2051.8
5°	2246.2	2209.0	2147.1	2086.5	2041.9	2002.3	1973.8	1959.0	1945.4	1936.1	1937.3
7.5°	2284.6	2224.5	2120.5	2032.0	1970.1	1927.4	1898.3	1888.4	1879.8	1877.3	1880.4
10°	2325.4	2236.9	2085.3	1967.6	1897.1	1861.8	1848.8	1855.6	1861.8	1867.4	1873.6
12.5°	2371.8	2248.0	2033.9	1892.1	1832.1	1818.5	1831.5	1861.2	1882.9	1895.9	1903.9
15°	2432.5	2257.9	1974.5	1816.6	1776.4	1791.9	1835.8	1887.2	1924.9	1949.1	1952.8
17.5°	2488.2	2257.3	1898.3	1740.5	1731.2	1776.4	1842.6	1915.0	1965.8	1999.8	2006.6
20°	2545.8	2240.6	1809.8	1666.2	1685.4	1759.7	1845.7	1933.0	1994.3	2033.9	2043.2
22.5°	2599.6	2211.5	1712.6	1598.8	1647.0	1737.4	1834.0	1922.5	1983.7	2015.9	2025.8
25°	2636.1	2160.8	1614.2	1541.8	1613.0	1710.2	1795.6	1866.8	1912.6	1928.7	1931.1
27.5°	2654.7	2094.5	1521.4	1492.3	1577.7	1665.6	1724.4	1759.7	1772.7	1771.4	1769.0
30°	2657.2	2007.3	1441.5	1452.1	1536.9	1600.0	1627.8	1621.0	1604.3	1575.9	1578.3
32.5°	2649.1	1908.8	1374.7	1413.7	1484.9	1520.1	1521.4	1488.6	1444.0	1398.8	1386.5
35°	2651.6	1812.3	1315.9	1370.4	1421.7	1437.2	1423.0	1374.7	1314.0	1255.9	1243.5
37.5°	2678.8	1728.1	1265.1	1320.2	1351.8	1355.5	1335.1	1284.3	1239.8	1182.8	1177.9
40°	2743.8	1668.1	1216.9	1263.9	1281.9	1283.7	1254.6	1218.7	1222.4	1192.1	1191.5
42.5°	2860.8	1642.1	1174.2	1205.1	1216.2	1220.0	1197.7	1174.8	1207.0	1187.2	1180.3
45°	3011.8	1648.3	1138.3	1147.5	1168.0	1185.3	1171.7	1143.8	1156.2	1070.2	1041.7
47.5°	3186.4	1687.9	1109.8	1098.0	1133.3	1166.1	1145.1	1103.0	1059.0	973.6	957.5
50°	3390.6	1749.2	1083.8	1049.1	1095.5	1140.1	1119.1	1059.0	992.8	951.3	945.8
52.5°	3603.5	1824.1	1057.8	995.3	1047.9	1120.3	1109.8	1049.1	967.4	926.6	919.1
55°	3844.9	1899.6	1025.0	932.8	996.5	1111.0	1105.4	1013.2	948.2	925.3	919.8
57.5°	4145.1	1985.6	981.7	867.8	948.2	1077.6	1060.3	991.6	928.4	911.1	909.2
60°	4536.3	2112.5	919.1	798.4	889.4	1026.2	1022.5	960.0	896.9	884.5	882.0
62.5°	5123.1	2322.3	833.1	729.1	823.8	939.0	973.0	917.3	863.4	862.8	864.1
65°	6032.9	2638.0	739.6	668.5	757.6	865.3	915.4	873.3	829.4	841.8	843.6
67.5°	7087.6	2899.8	648.0	609.0	690.1	795.4	863.4	829.4	784.2	816.4	817.0
70°	7438.6	2665.8	567.6	550.2	620.2	727.9	807.1	781.1	735.3	767.5	764.4
72°	*6922.4*	*2152.1*	*515.6*	*505.7*	*567.6*	*672.2*	*757.0*	*735.9*	*690.8*	*712.4*	*704.4*
72.5°	6759.6	2051.8	502.6	494.5	553.3	657.9	744.0	724.8	679.6	698.2	690.8
75°	6029.8	1782.0	432.0	433.9	482.8	588.6	670.9	664.8	618.3	620.2	617.7
77.5°	4373.5	1306.6	363.9	376.3	411.0	517.4	597.3	593.6	542.8	533.5	531.7
80°	2029.5	666.6	296.5	302.0	337.9	432.6	509.4	504.4	463.6	451.8	445.0
82.5°	695.1	316.9	222.8	226.5	261.8	348.5	441.9	438.8	404.8	381.9	367.7
85°	248.2	157.8	156.0	152.3	186.9	274.2	385.0	368.3	318.1	271.1	269.9
87.5°	80.5	67.5	80.5	79.8	108.9	185.7	279.8	238.3	230.9	191.9	188.2
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

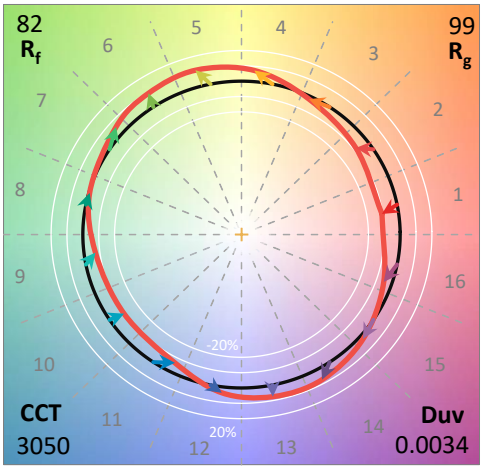
Test Information

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

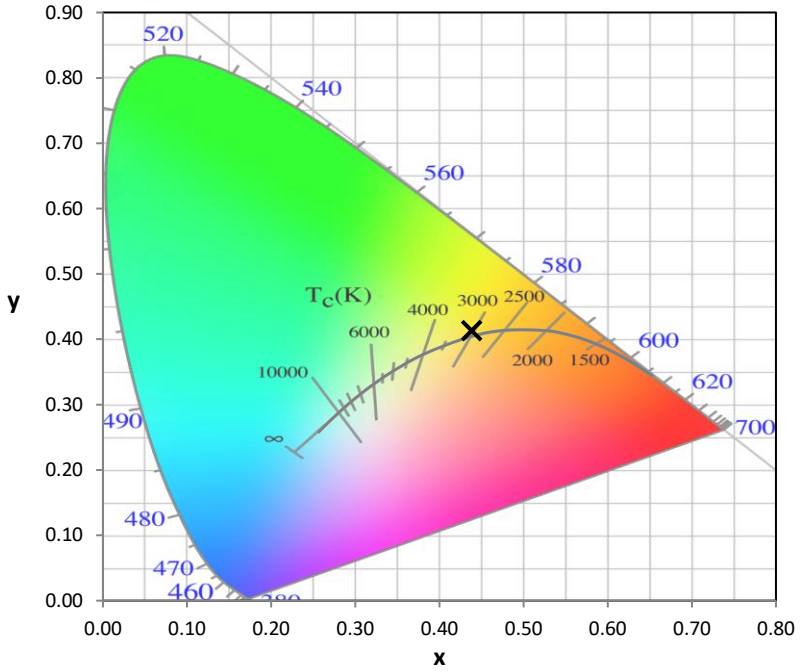
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

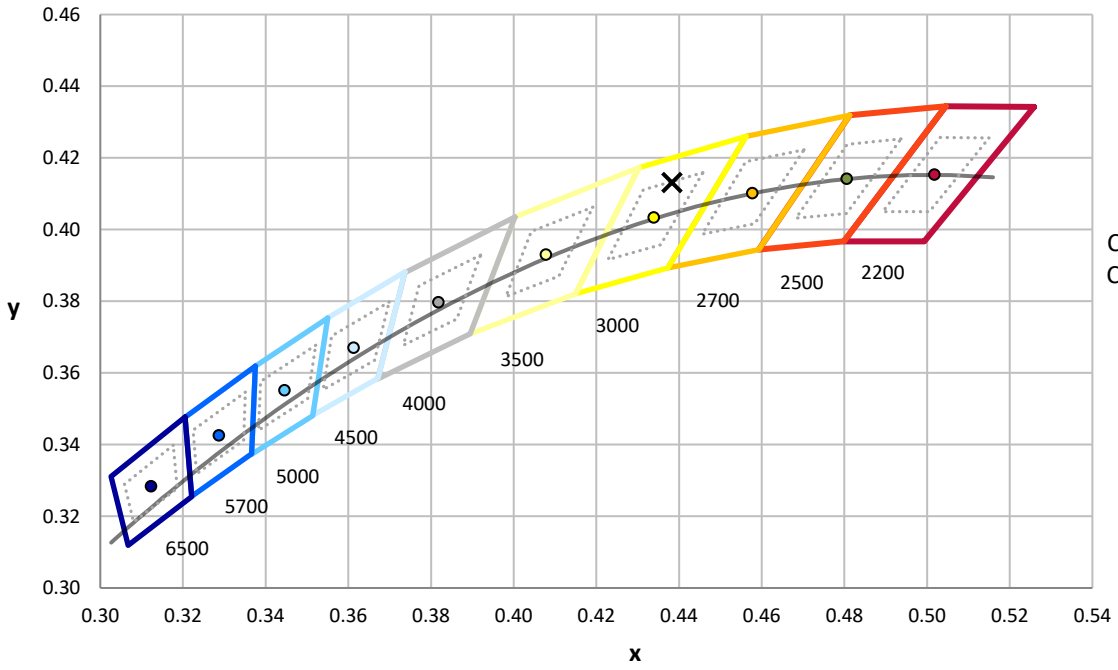
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

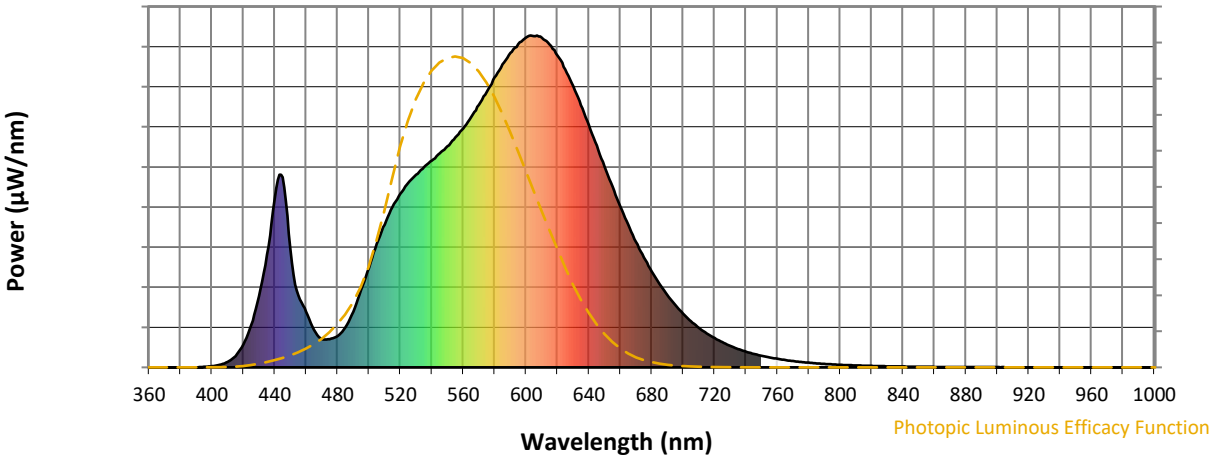


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

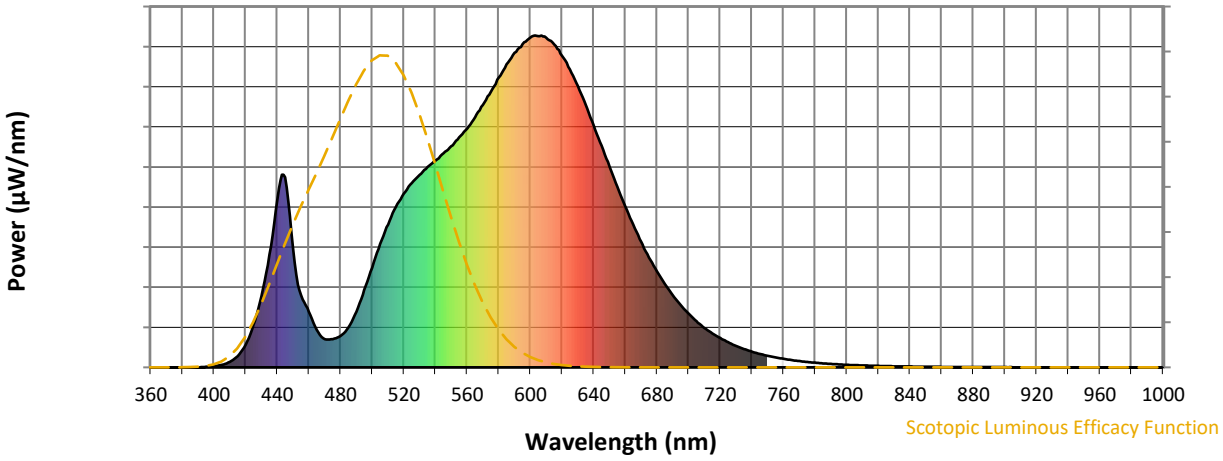


Photopic Lumens: NR

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

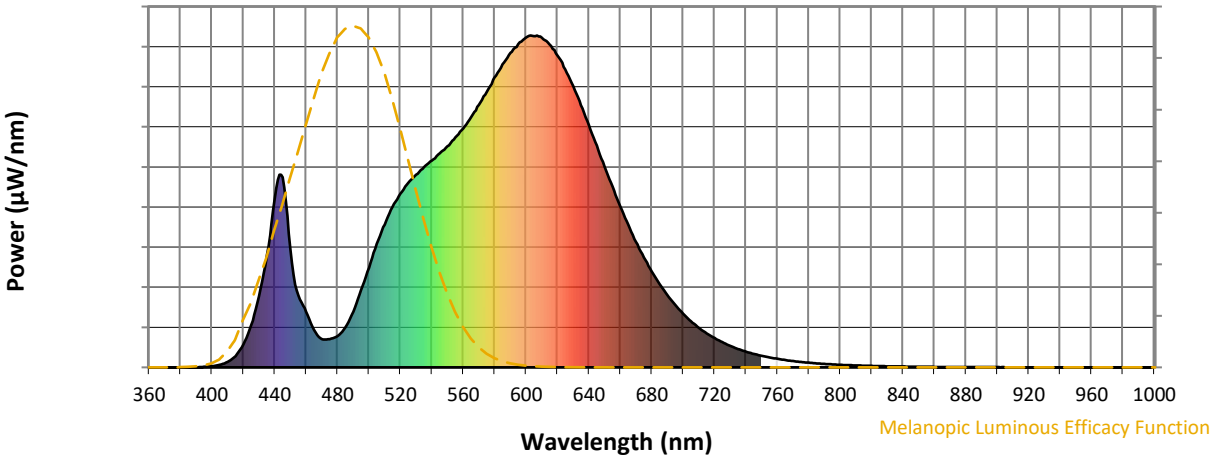


Scotopic Lumens: NR **S/P: 1.27**

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			

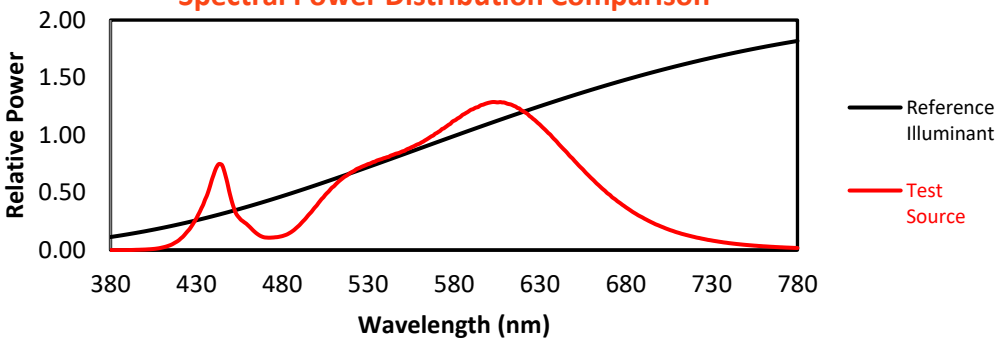
REPORT NUMBER: SP1-2408-195-9

TM-30-18

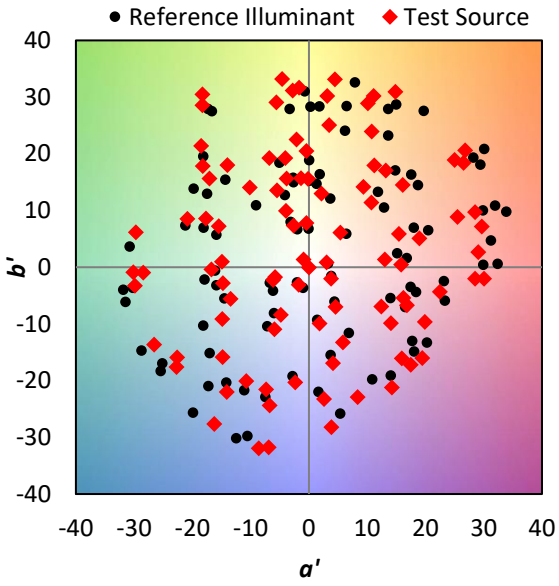
Summary

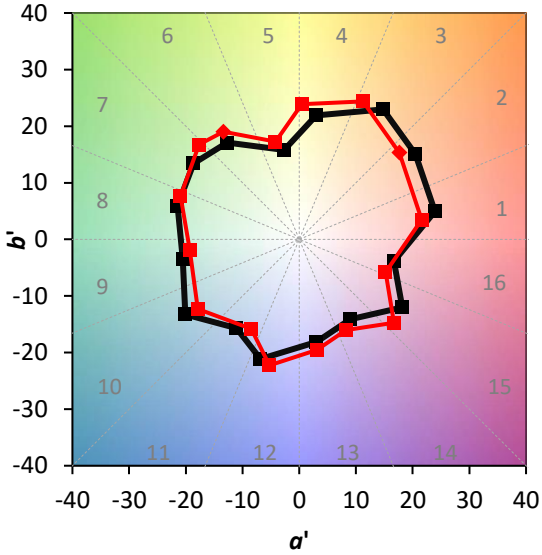
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

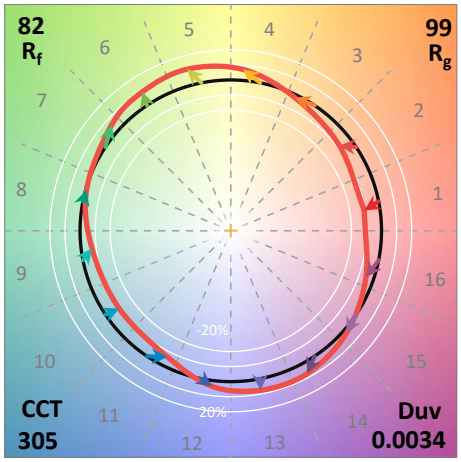
Spectral Power Distribution Comparison

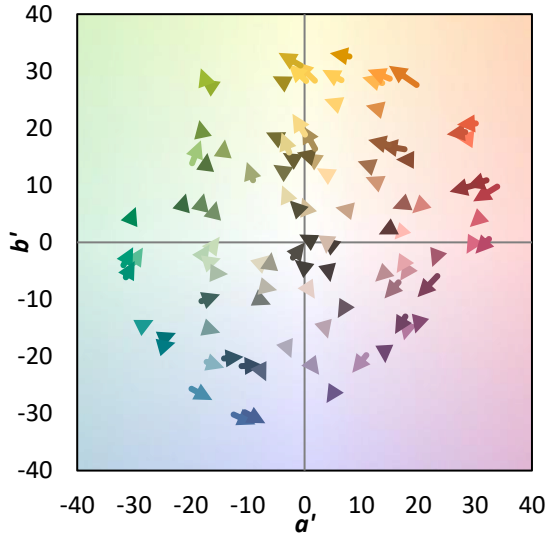


Color Vector Graphics







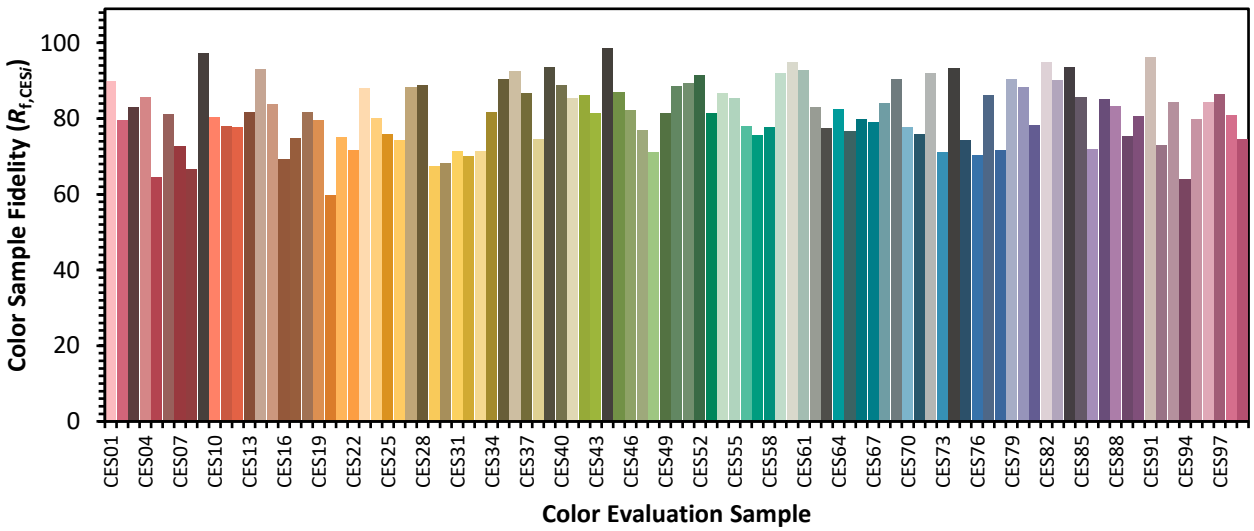


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

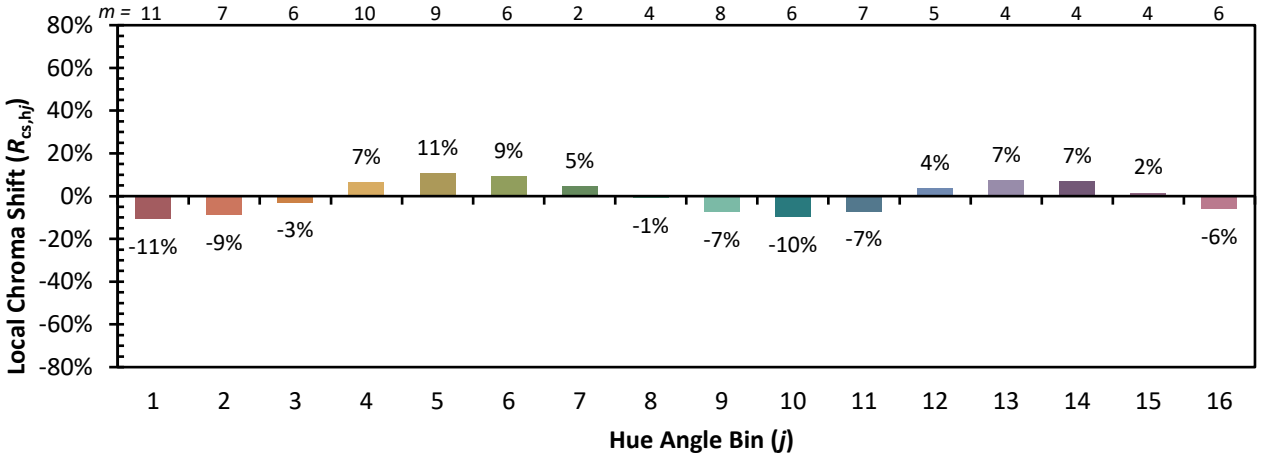
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

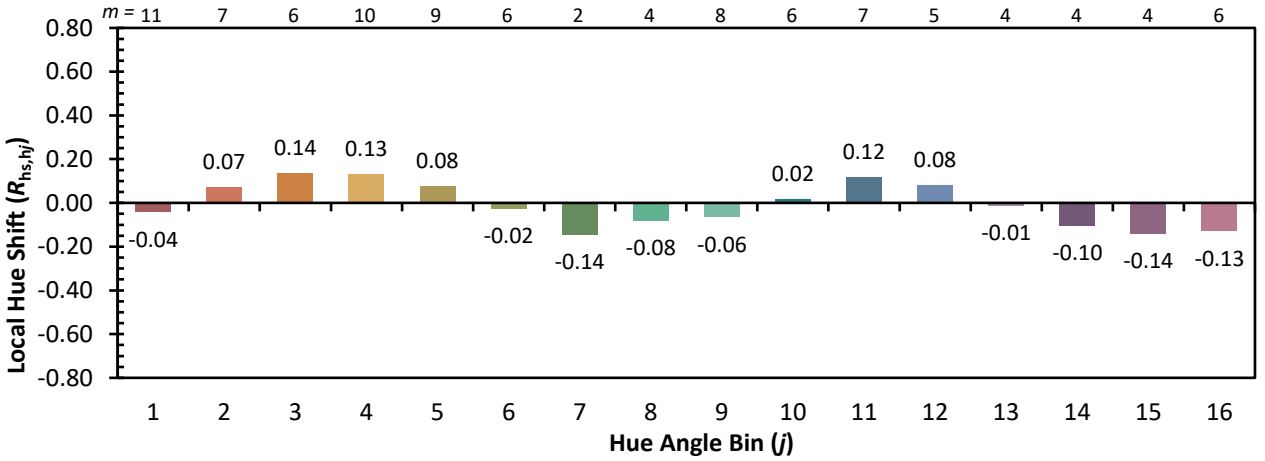


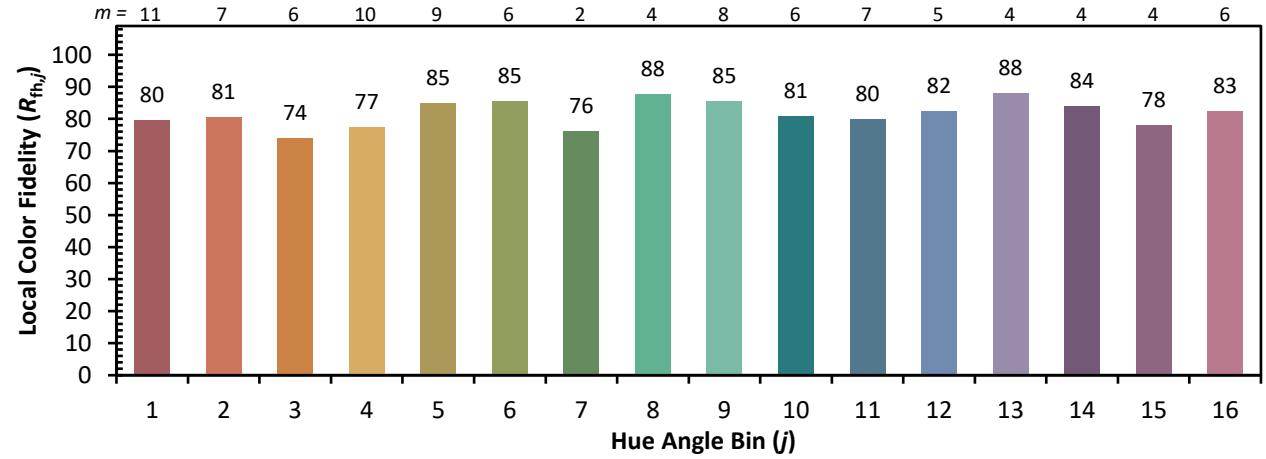
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



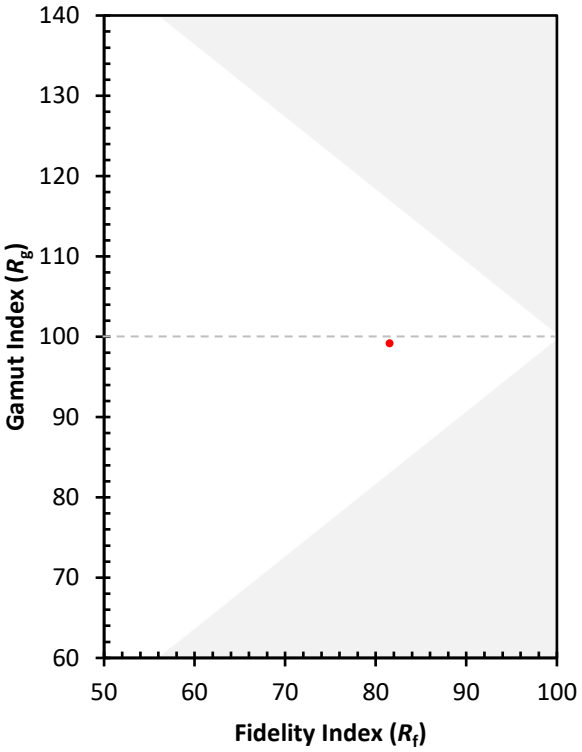


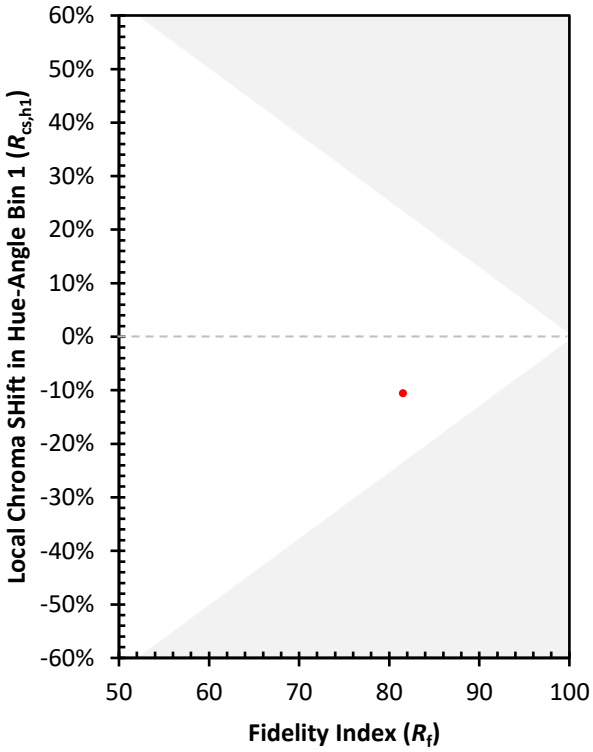


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)