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: P319535

Luminaire Tested: **GLEON-SA1D-830-U-SL2**

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:	P319535
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-20)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA1D-830-U-SL2
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT ELIMINATOR OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	6324 lumens
Efficiency:	N/A
Efficacy:	94.4 lumens/watt
Luminous Opening:	Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G2

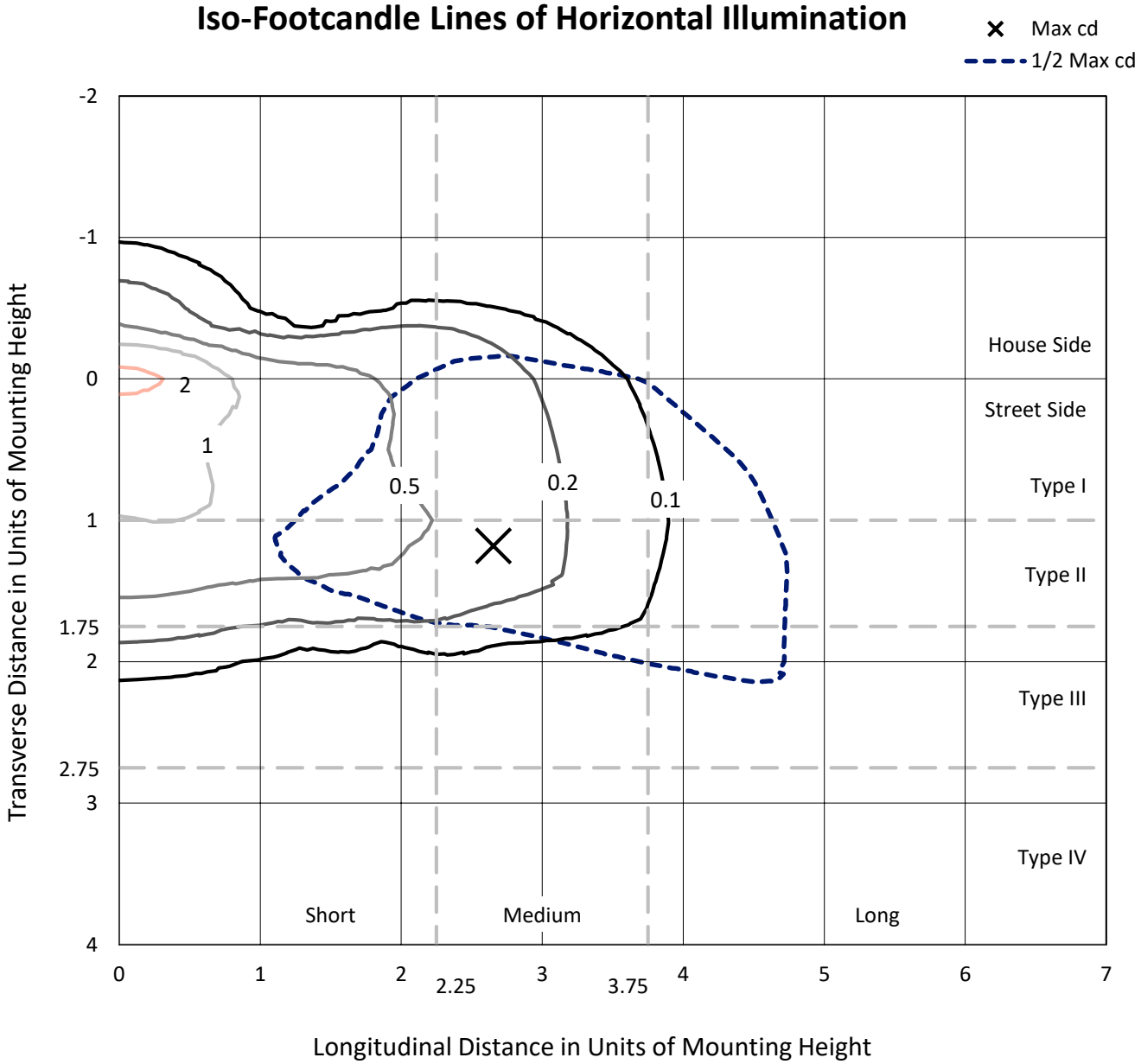
Input Watts (W):	67
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P319535
CATALOG NUMBER: GLEON-SA1D-830-U-SL2

Iso-Footcandle Lines of Horizontal Illumination



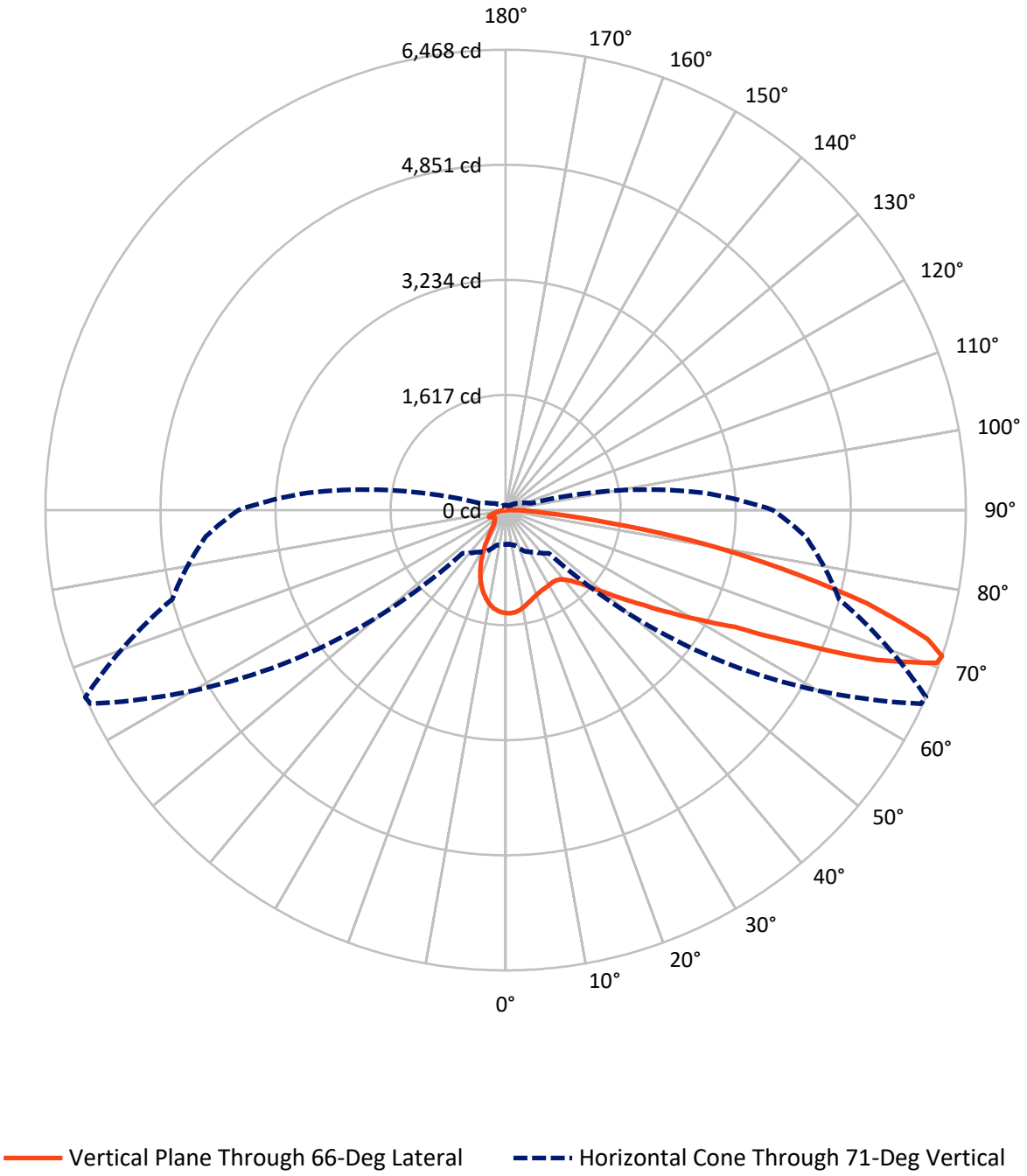
Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type III - Medium - N/A

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

Scaled Data Report

REPORT NUMBER: P319535
CATALOG NUMBER: GLEON-SA1D-830-U-SL2

Luminous Intensity Polar Plot



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

Scaled Data Report

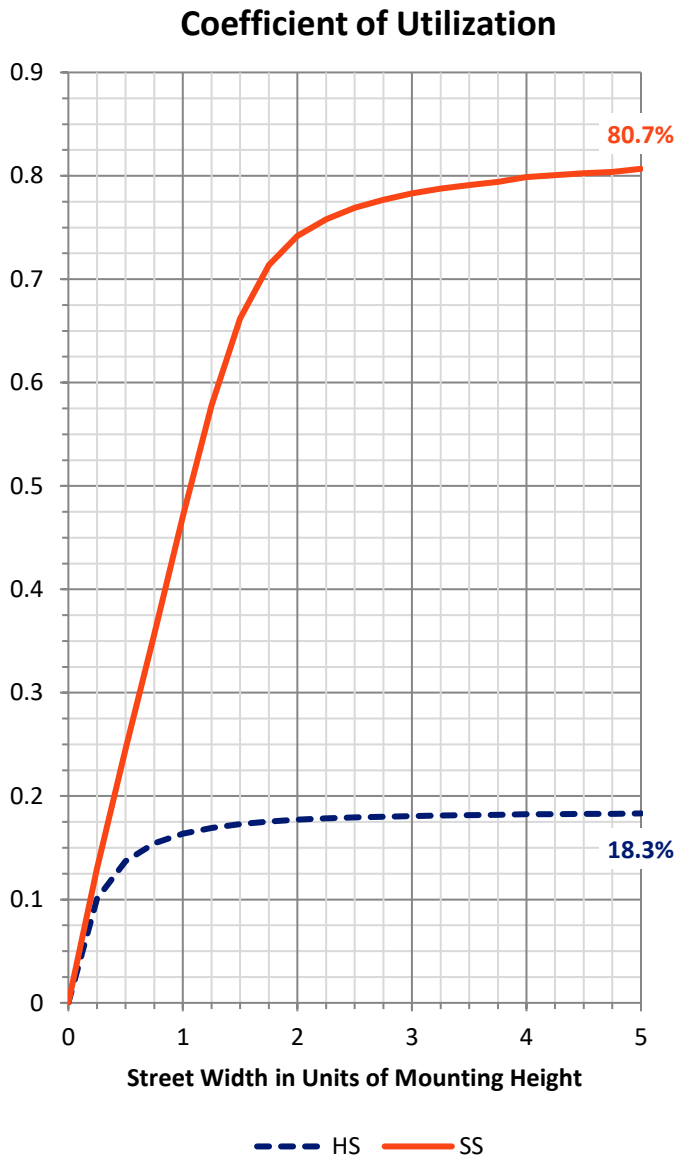
REPORT NUMBER: P319535
CATALOG NUMBER: GLEON-SA1D-830-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1172.0	0.0	1172.0
	% Fixture	18.5	0.0	18.5
Street Side	Lumens	5152.0	0.0	5152.0
	% Fixture	81.5	0.0	81.5
Total	Lumens	6324.0	0.0	6324.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	2.0
10°-20°	305.8	4.8
20°-30°	410.8	6.5
30°-40°	540.4	8.5
40°-50°	786.2	12.4
50°-60°	1228.1	19.4
60°-70°	1538.4	24.3
70°-80°	1173.5	18.6
80°-90°	213.1	3.4
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°	6324.0	100.0
0°-180°	6324.0	100.0



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

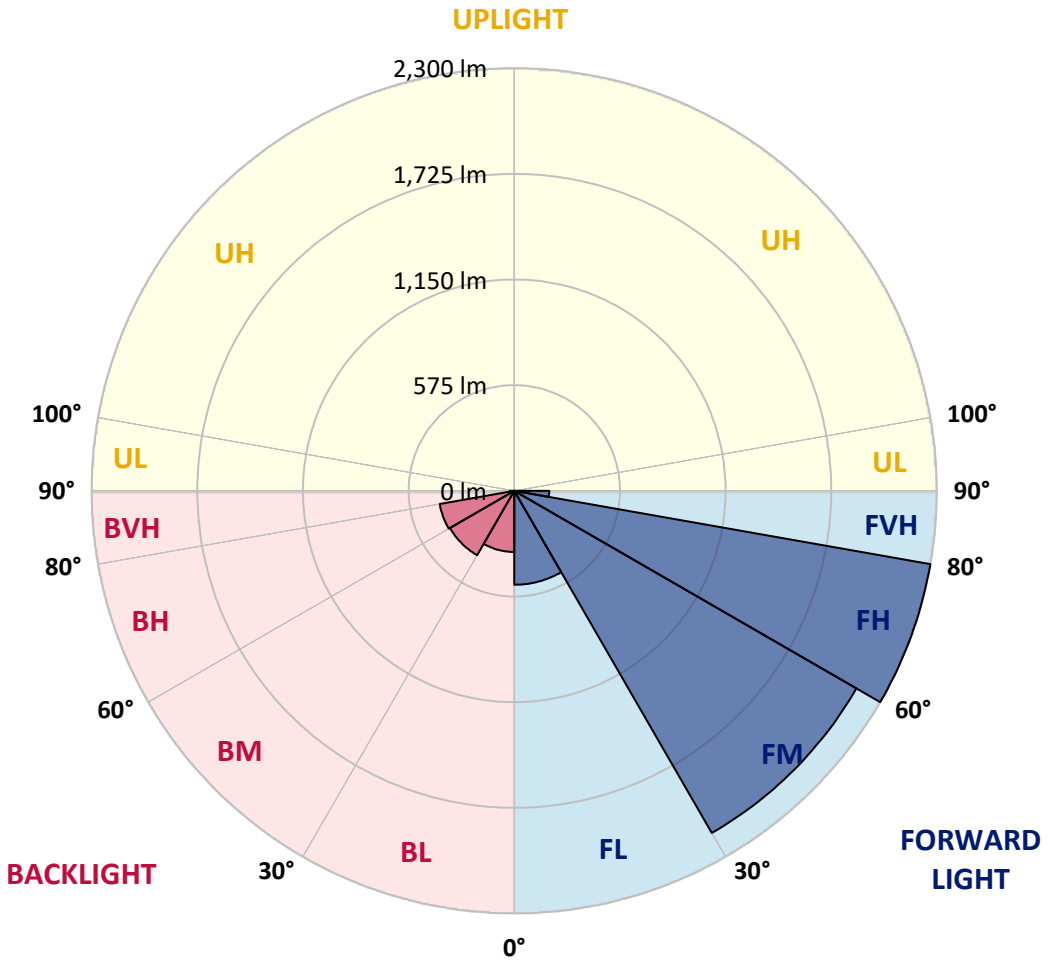
Scaled Data Report

REPORT NUMBER: P319535
CATALOG NUMBER: GLEON-SA1D-830-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	511.4	8.1			
FM	(30°-60°)	2150.5	34.0			
FH	(60°-80°)	2300.1	36.4			G2/5000
FVH	(80°-90°)	190.0	3.0			G2/225
BL	(0°-30°)	332.8	5.3	B1/500		
BM	(30°-60°)	404.3	6.4	B1/1000		
BH	(60°-80°)	411.8	6.5	B1/500		G1/500
BVH	(80°-90°)	23.1	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type III Medium



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

Scaled Data Report

REPORT NUMBER: P319535
CATALOG NUMBER: GLEON-SA1D-830-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	*1448.7*	1448.7	1448.7
2.5°	1421.8	1419.7	1426.2	1433.0	1435.6	1440.0	1446.5	1450.2	*1450.0*	1450.7	1448.5
5°	1327.5	1324.7	1337.8	1348.5	1369.0	1392.2	1420.3	1440.4	*1440.8*	1452.2	1455.3
7.5°	1238.2	1236.3	1251.3	1268.6	1292.4	1327.7	1373.4	1416.6	*1419.2*	1450.0	1460.7
10°	1166.6	1166.2	1180.8	1199.6	1227.3	1266.8	1319.2	1382.5	*1386.5*	1439.5	1461.6
12.5°	1110.7	1111.6	1124.2	1145.6	1174.9	1216.2	1272.9	1344.3	*1350.7*	1422.9	1456.6
15°	1069.4	1072.9	1083.2	1104.8	1133.6	1175.6	1233.9	1309.0	*1318.6*	1404.4	1453.7
17.5°	1045.9	1049.8	1057.0	1074.9	1102.0	1142.4	1197.6	1279.9	*1288.7*	1390.2	1453.9
20°	1038.9	1042.2	1046.3	1057.2	1080.1	1116.8	1169.0	1253.7	*1263.1*	1378.8	1456.1
22.5°	1052.6	1055.0	1055.5	1054.6	1068.6	1098.5	1148.3	1234.5	*1244.6*	1371.4	1457.7
25°	1082.1	1085.4	1083.0	1074.9	1070.3	1088.7	1137.6	1221.8	*1231.9*	1366.0	1454.6
27.5°	1126.4	1126.9	1124.9	1114.4	1092.8	1089.8	1134.3	1214.4	*1224.0*	1359.6	1448.3
30°	1186.7	1189.5	1186.0	1171.8	1136.5	1107.2	1138.2	1207.2	*1216.0*	1351.5	1438.0
32.5°	1257.2	1264.2	1264.0	1249.1	1198.5	1146.3	1154.4	1202.9	*1209.6*	1343.0	1425.6
35°	1330.4	1340.0	1357.9	1351.5	1288.9	1208.1	1185.4	1209.8	*1214.4*	1341.9	1416.8
37.5°	1406.3	1416.0	1452.9	1469.9	1396.5	1296.5	1234.3	1234.5	*1236.7*	1355.3	1416.2
40°	1485.8	1496.1	1551.5	1595.9	1536.0	1408.5	1313.1	1286.0	*1283.6*	1388.0	1429.1
42.5°	1597.2	1606.3	1672.9	1729.5	1690.8	1552.0	1422.1	1365.5	*1360.5*	1452.2	1470.3
45°	1738.0	1745.9	1816.6	1877.1	1857.2	1715.7	1559.0	1474.9	*1474.0*	1559.2	1553.9
47.5°	1905.5	1911.6	1975.1	2033.6	2040.9	1904.2	1731.0	1643.7	*1629.5*	1705.9	1683.4
50°	2079.9	2086.7	2129.9	2192.8	2246.3	2156.4	1952.4	1850.5	*1831.5*	1899.6	1866.8
52.5°	2195.4	2204.4	2241.9	2321.6	2477.3	2432.8	2214.2	2101.1	*2072.3*	2134.3	2109.2
55°	2143.9	2164.0	2221.4	2349.2	2662.0	2855.1	2537.1	2393.5	*2360.9*	2412.5	2397.6
57.5°	1909.6	1937.1	2015.5	2212.7	2688.0	3227.1	3025.4	2737.8	*2714.9*	2700.0	2706.8
60°	1481.5	1507.9	1605.0	1862.0	2507.0	3498.7	3760.1	3162.3	*3129.1*	2988.7	2994.8
62.5°	1048.5	1035.2	1101.8	1289.8	2037.1	3530.6	4596.1	3730.0	*3620.8*	3293.5	3266.6
65°	799.6	796.5	826.4	886.3	1233.9	3149.2	5094.2	4684.1	*4513.6*	3652.0	3588.7
67.5°	657.0	651.5	681.0	768.1	794.6	2031.7	5105.1	5791.1	*5623.6*	4098.3	3961.2
70°	540.2	534.1	561.6	674.0	734.3	1030.4	4296.6	6439.4	*6430.4*	4663.4	4242.4
71°	*484.3*	*479.9*	*512.9*	*637.8*	*721.4*	*858.7*	*3709.6*	*6441.1*	*6468.0*	*4854.6*	*4225.8*
72.5°	394.3	395.9	430.8	567.7	711.8	758.3	2726.4	6140.9	*6197.7*	5037.0	4074.9
75°	262.0	263.3	309.2	436.7	690.2	741.9	1498.5	5152.9	*5257.3*	4927.8	3718.4
77.5°	176.0	175.5	206.8	299.6	601.3	741.9	878.6	3854.0	*3968.6*	3921.0	2866.6
80°	121.2	120.3	142.4	206.8	455.2	750.9	679.3	2700.9	*2735.6*	2117.5	1165.1
82.5°	74.2	74.9	93.0	146.1	309.8	675.8	641.3	1472.7	*1435.0*	593.9	291.1
85°	42.6	42.4	59.4	98.9	198.9	570.3	625.3	633.8	*581.4*	178.8	105.2
87.5°	15.3	16.4	31.9	54.8	114.0	397.2	530.6	329.7	*297.2*	80.8	47.6
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: P319535
CATALOG NUMBER: GLEON-SA1D-830-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7	1448.7
2.5°	1447.0	1448.3	1446.7	1438.0	1430.6	1418.6	1411.8	1402.4	1399.6	1398.3	1401.8
5°	1452.4	1452.9	1440.0	1417.0	1391.3	1360.9	1339.1	1312.2	1299.6	1294.1	1297.6
7.5°	1457.4	1455.5	1427.3	1383.4	1335.8	1283.0	1236.0	1193.0	1167.9	1157.7	1158.5
10°	1458.1	1449.8	1404.6	1336.7	1262.9	1185.4	1113.3	1047.0	1005.0	977.7	986.0
12.5°	1451.3	1437.4	1371.2	1276.2	1173.8	1068.1	970.8	871.2	811.4	783.6	784.5
15°	1446.1	1420.8	1330.1	1205.0	1067.5	927.5	794.6	677.5	613.8	585.4	572.1
17.5°	1441.7	1402.9	1282.5	1124.9	941.9	764.4	604.6	500.2	465.3	457.0	453.5
20°	1435.6	1383.9	1229.5	1032.1	798.9	581.9	441.5	390.0	390.2	399.8	401.1
22.5°	1427.1	1362.2	1172.9	928.0	645.4	423.8	346.1	331.2	346.3	364.6	367.9
25°	1414.4	1336.7	1110.1	812.9	492.1	325.8	295.6	295.0	313.3	332.5	335.4
27.5°	1396.5	1303.3	1040.2	689.3	362.7	276.9	264.9	269.4	283.0	296.9	298.0
30°	1372.5	1264.4	963.1	559.0	284.3	246.5	245.2	249.3	257.6	267.5	268.3
32.5°	1346.1	1224.9	880.8	432.8	243.5	230.1	231.4	233.4	237.3	241.3	242.1
35°	1322.1	1184.5	796.5	328.8	224.0	219.4	218.6	218.1	218.6	217.3	217.5
37.5°	1306.6	1151.1	708.7	261.8	212.9	210.0	207.4	204.2	200.4	198.3	198.7
40°	1300.9	1126.2	619.9	226.2	203.7	201.7	196.7	189.7	185.4	184.1	184.1
42.5°	1316.2	1113.3	534.1	208.3	196.1	192.8	184.5	176.4	173.1	172.9	172.7
45°	1362.9	1118.6	452.4	198.5	189.1	182.8	171.8	165.1	162.9	163.3	163.1
47.5°	1446.7	1151.5	382.5	191.9	182.1	173.8	161.6	156.1	153.5	153.5	153.7
50°	1589.3	1228.6	326.9	186.5	176.2	165.5	154.2	147.4	143.9	143.7	143.7
52.5°	1797.0	1366.6	292.1	181.9	169.7	158.1	146.7	138.2	134.1	133.2	132.8
55°	2057.2	1564.4	282.5	178.8	160.9	150.0	137.8	129.3	124.7	122.7	122.5
57.5°	2348.3	1805.0	301.5	175.1	152.0	140.4	127.9	119.9	115.1	112.7	112.4
60°	2642.8	2067.7	379.0	169.9	144.5	129.9	117.9	110.5	105.7	103.1	102.6
62.5°	2937.8	2344.6	537.3	169.4	139.3	119.9	107.6	101.3	96.7	93.9	93.2
65°	3270.6	2647.6	717.3	181.0	137.6	110.7	97.2	92.1	88.2	85.6	85.4
67.5°	3652.7	2989.8	700.0	204.8	143.5	102.4	87.3	83.4	80.6	78.4	78.2
70°	3831.9	2936.3	435.2	221.6	151.7	94.3	77.9	75.1	72.9	71.4	70.7
71°	*3756.8*	*2788.0*	*364.9*	*219.7*	*150.9*	*90.8*	*74.2*	*72.1*	*69.9*	*68.6*	*67.9*
72.5°	3552.0	2542.6	304.4	204.4	141.0	84.5	69.4	67.2	65.3	63.8	63.3
75°	3187.4	2270.8	243.7	163.3	112.4	71.4	60.9	58.5	57.0	56.1	55.2
77.5°	2343.0	1620.5	188.4	129.0	82.8	58.3	52.0	50.2	48.7	47.4	46.7
80°	897.6	627.7	126.9	96.3	60.7	46.1	41.9	41.0	39.5	38.6	38.6
82.5°	241.7	187.6	67.7	58.3	40.6	33.6	32.1	31.7	30.3	28.6	28.8
85°	97.8	82.8	38.0	32.1	24.9	19.9	21.6	21.8	20.3	18.1	18.3
87.5°	43.0	35.2	21.2	14.2	10.9	7.6	9.8	9.8	9.0	7.4	6.8
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

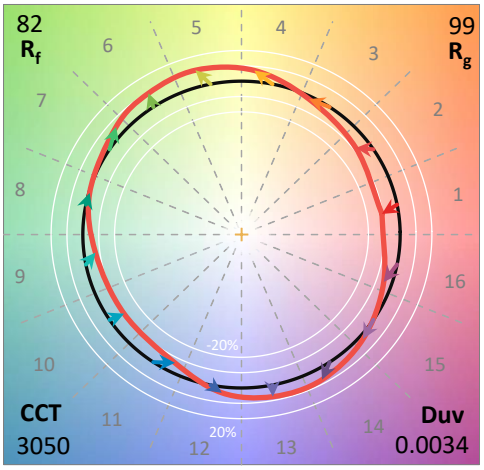
Test Information

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

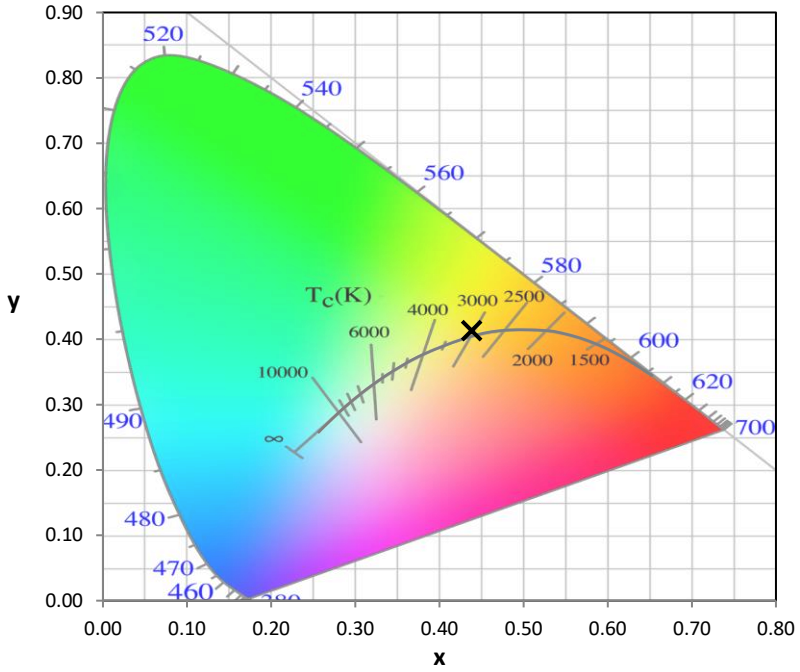
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

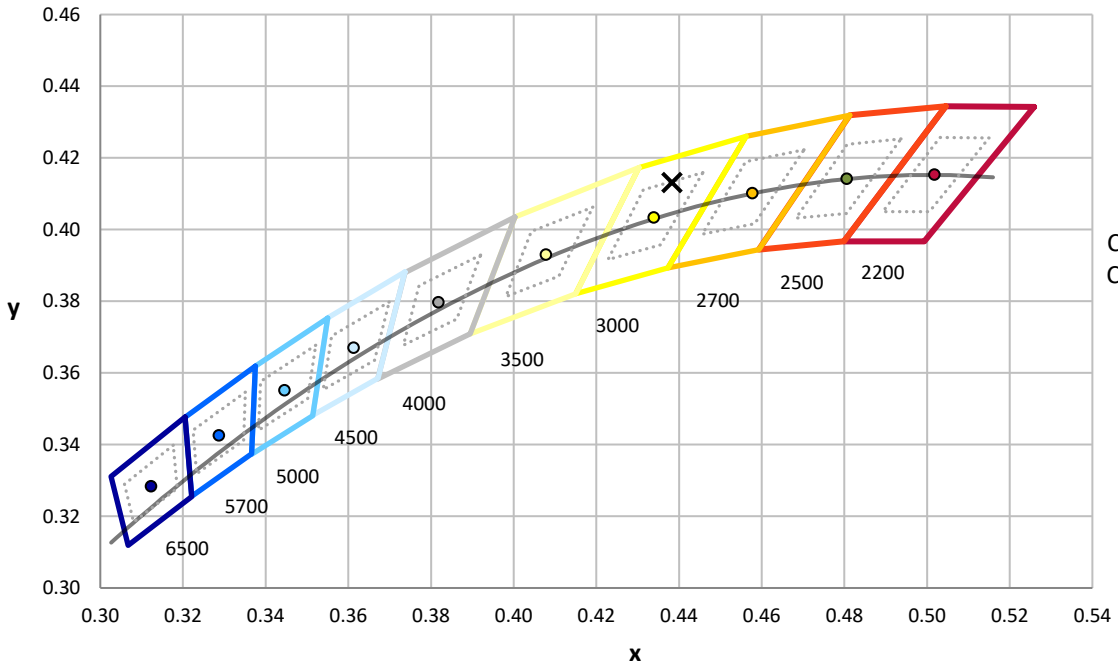
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

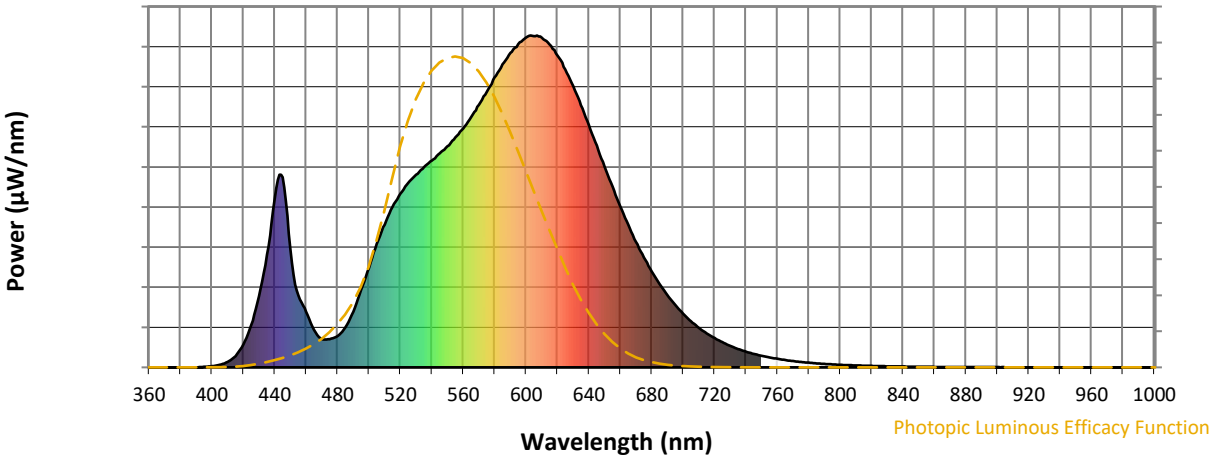


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

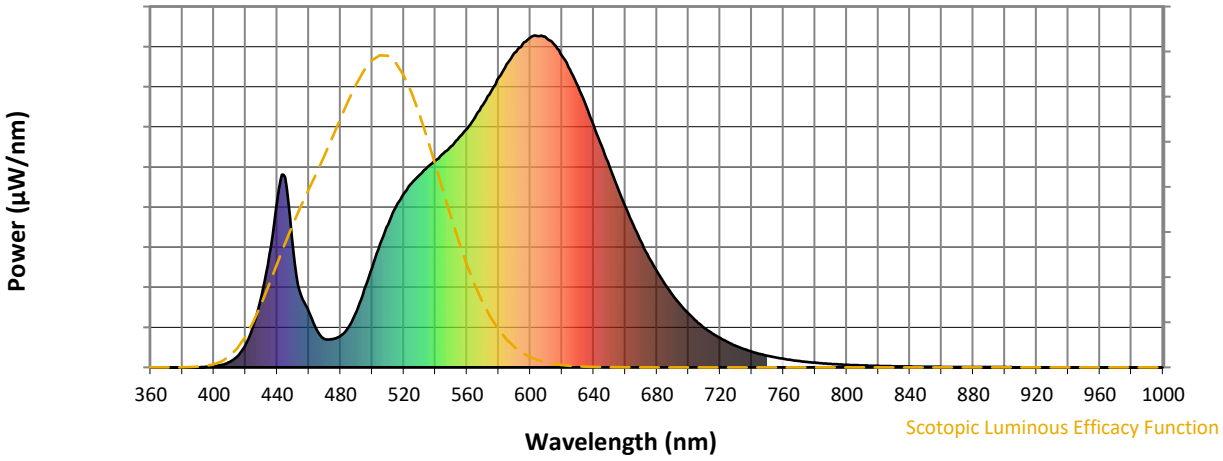


Photopic Lumens: NR

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

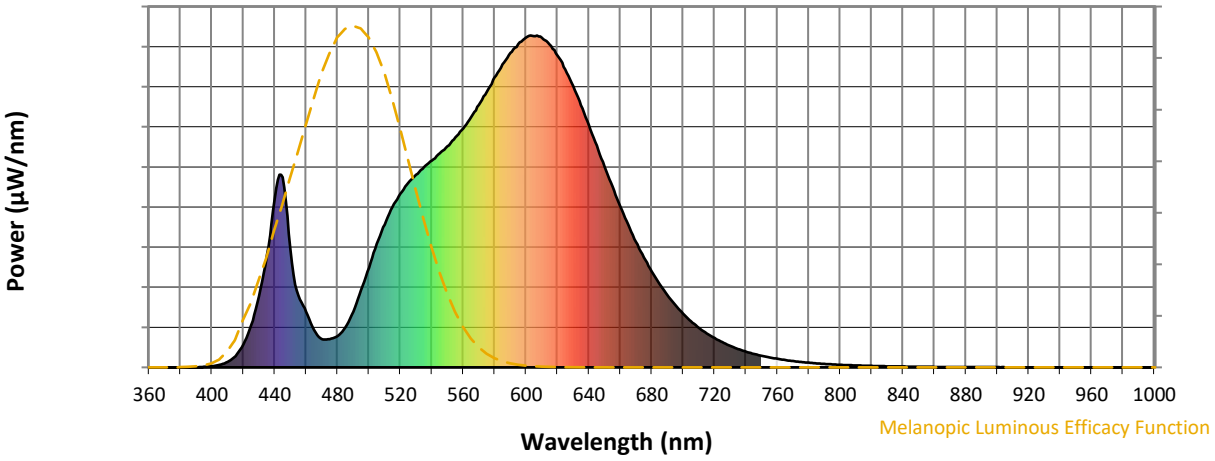


Scotopic Lumens: NR **S/P: 1.27**

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			

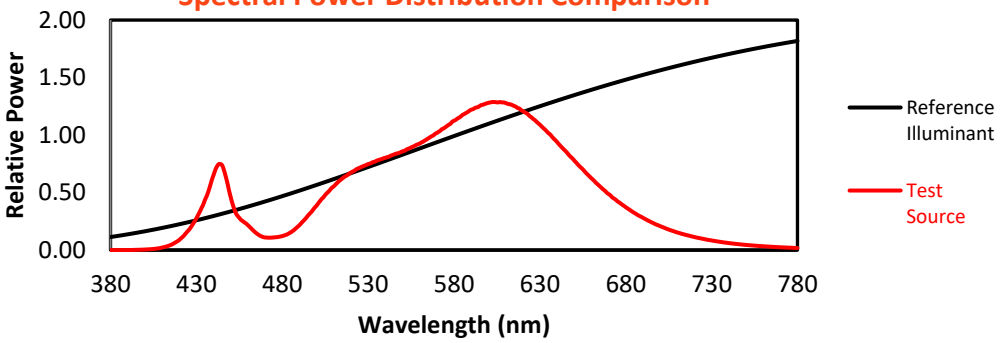
REPORT NUMBER: SP1-2408-195-9

TM-30-18

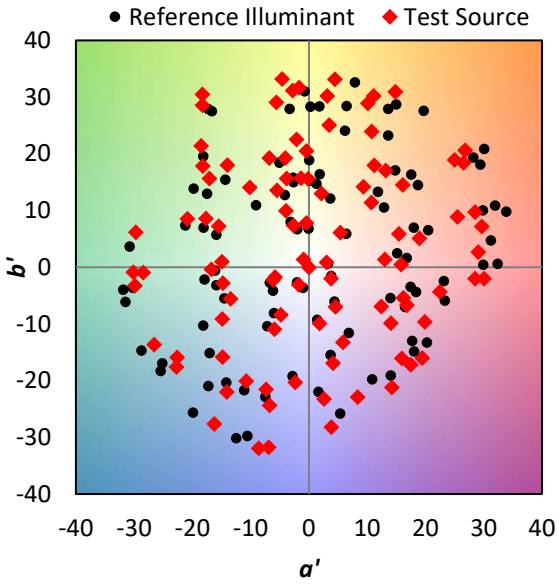
Summary

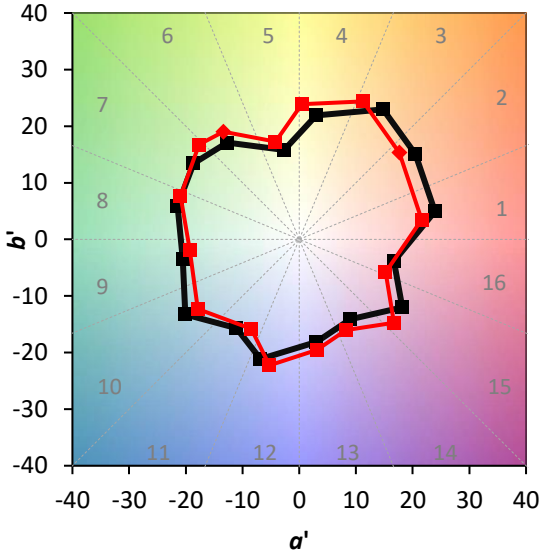
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

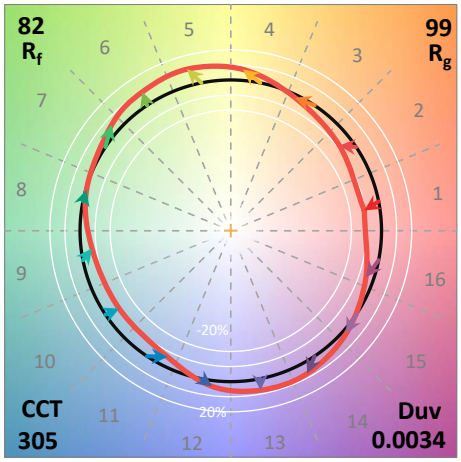
Spectral Power Distribution Comparison

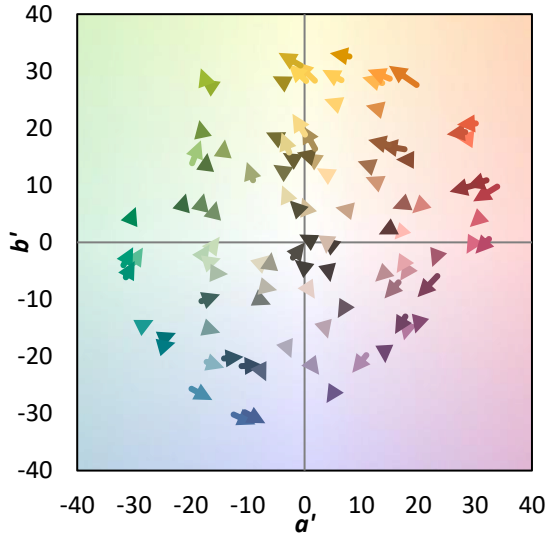


Color Vector Graphics







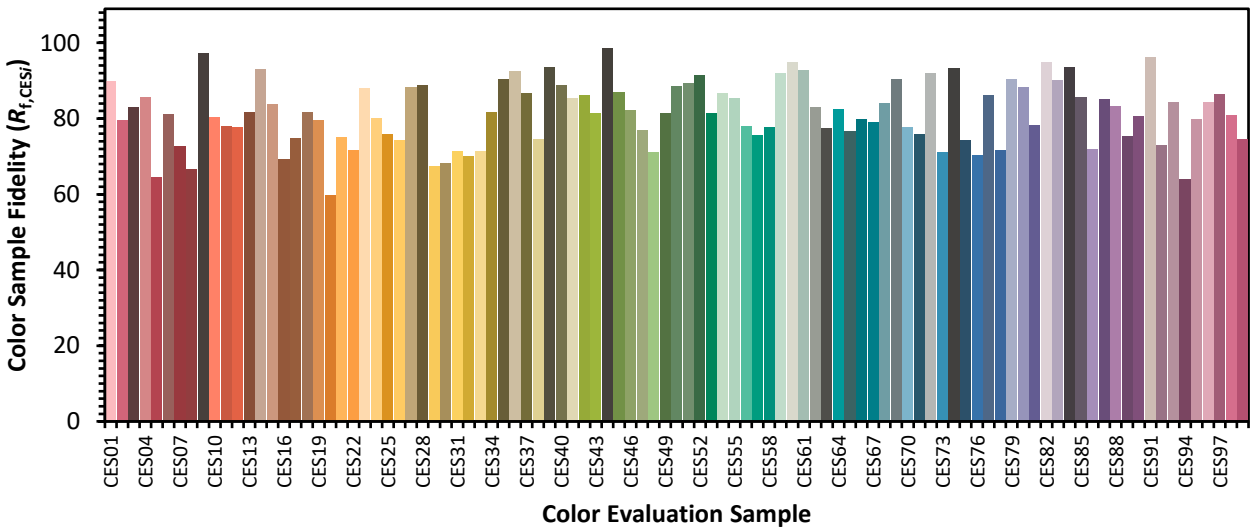


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

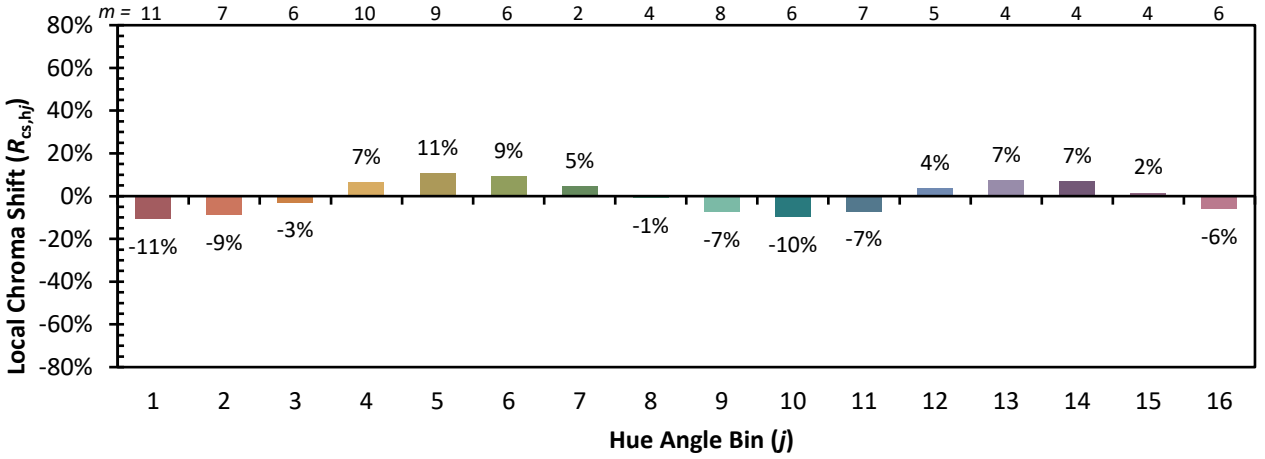
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

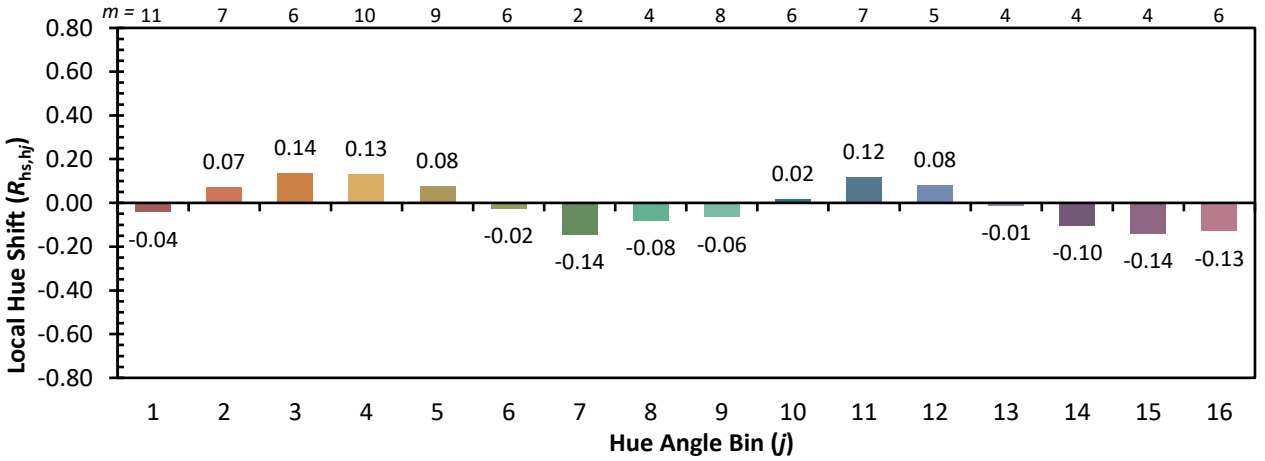


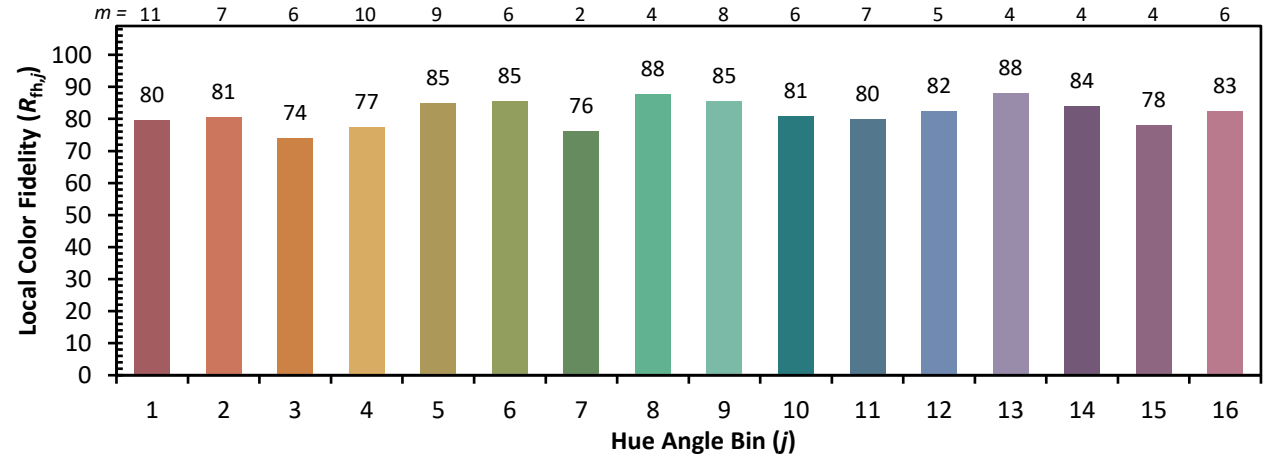
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



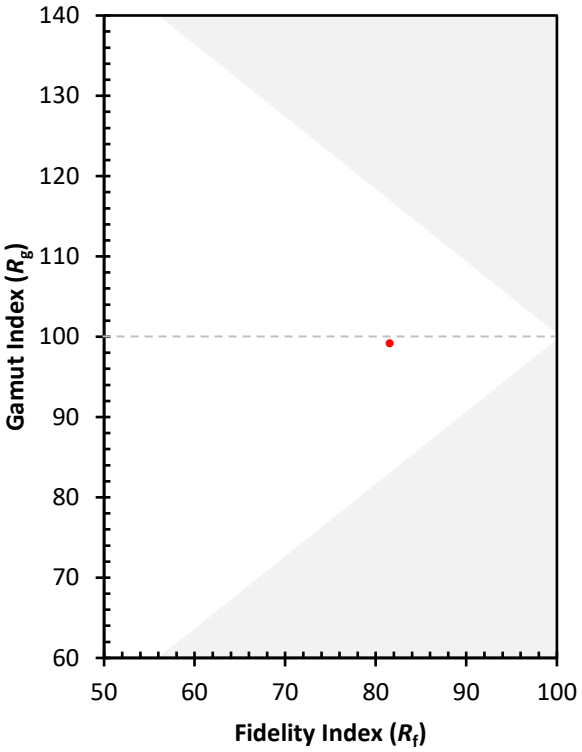


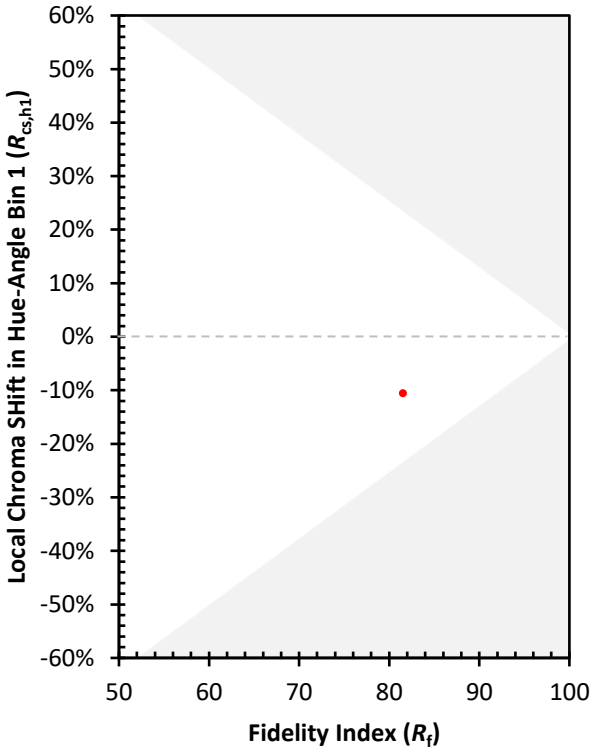


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)