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

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

Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1199868

Luminaire Tested: GPC-SB2B-830-U-SLR-HSS

Issue Date: 10/30/2025

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

Scaled Data Report

Test Information

Test Method:	LM-79-2024
Report Number:	P1199868
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab:	INNOVATION CENTER
Issue Date:	3/15/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GPC-SB2B-830-U-SLR-HSS
Description:	GALLEON PEDESTRIAN LUMINAIRE
	(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT ELIMINATOF
	RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7720 lumens
Efficiency:	N/A
Efficacy:	104.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	73.9
Input Voltage (V):	120.0
Input Current (Ain):	0.627
Voltage Rise (V):	NR
Power Factor:	0.988
Total Harmonic Distortion (THDi):	13.593
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

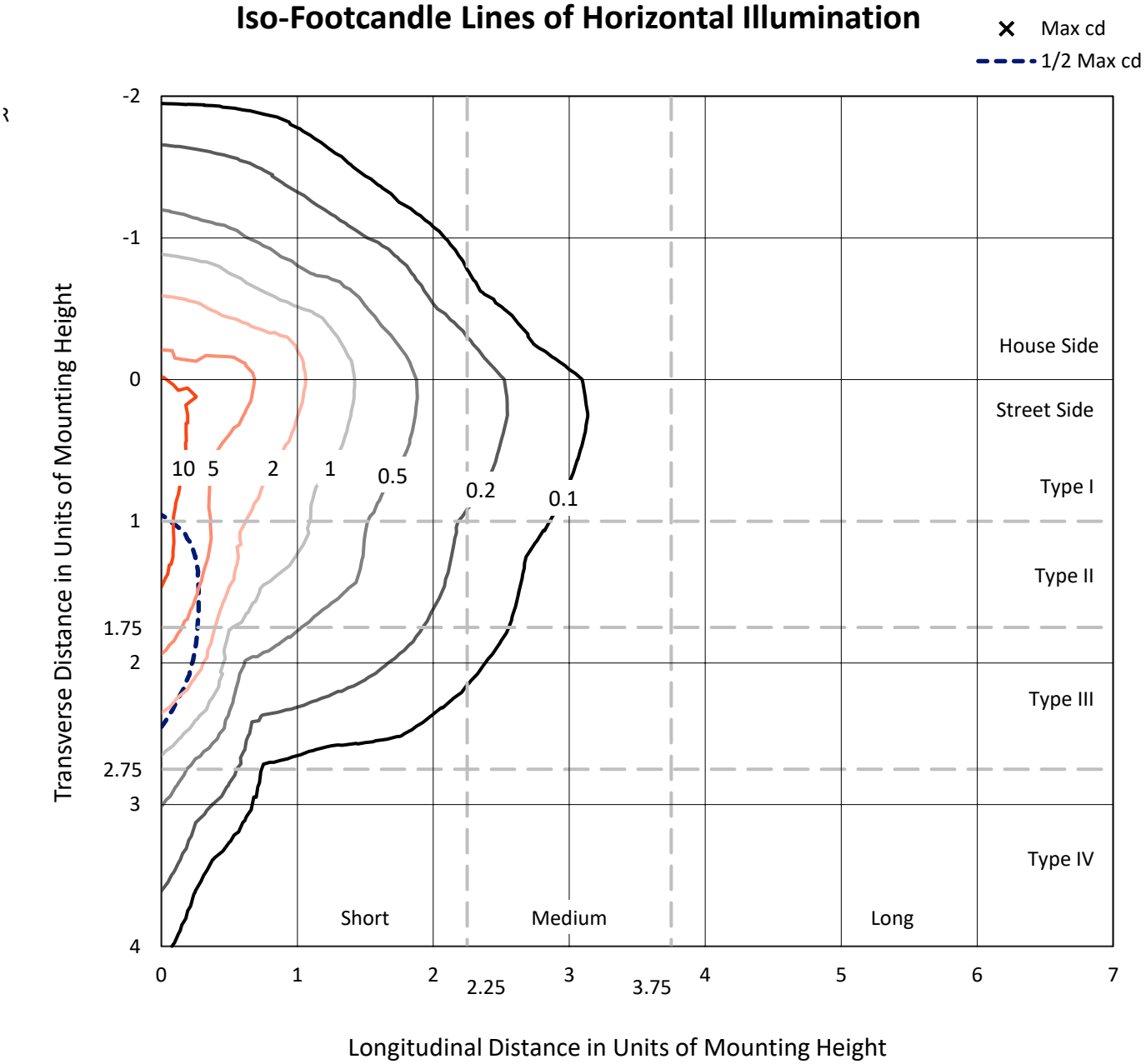


Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination



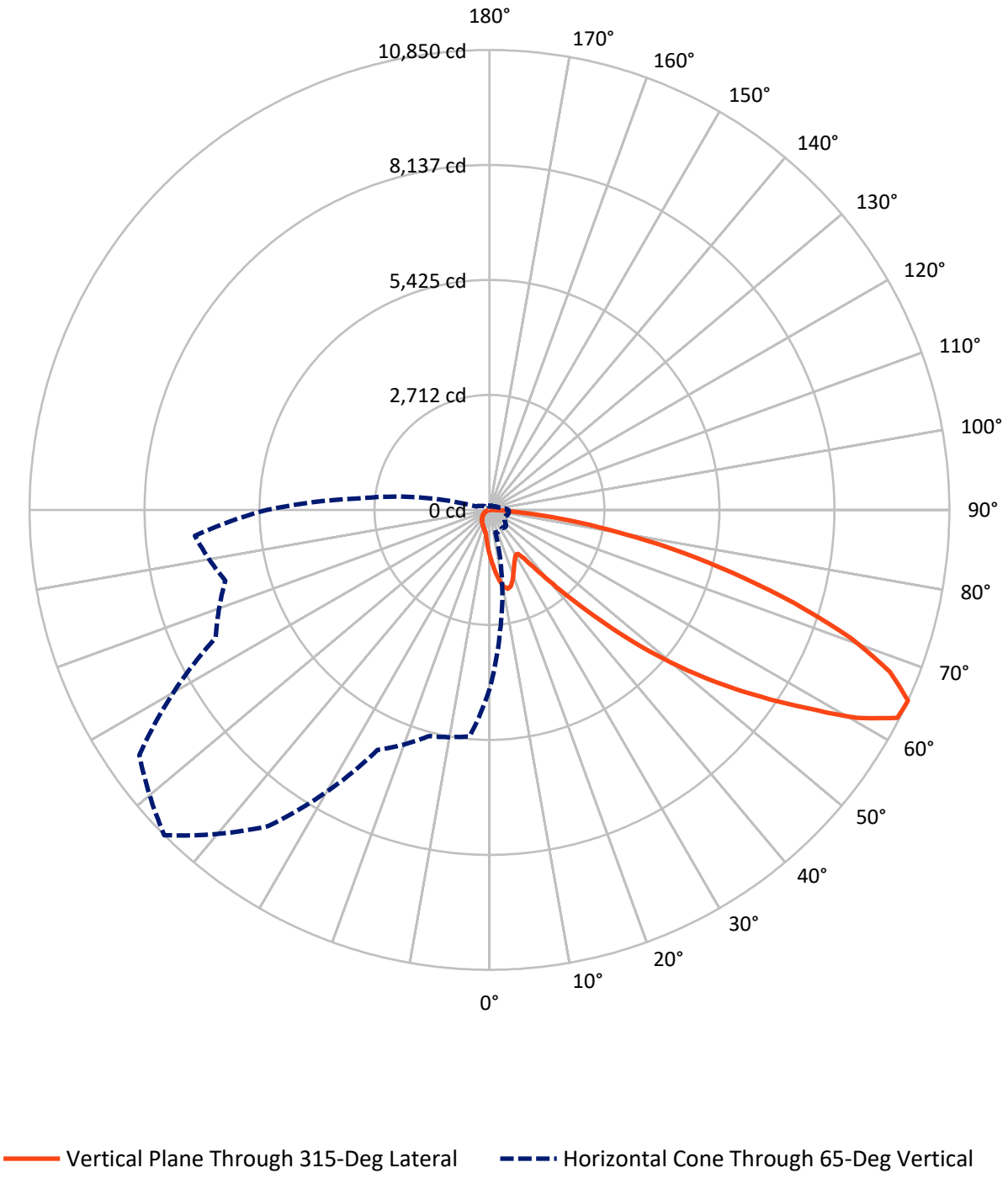
Based on 10 foot mounting height. Maximum calculated value = 14.9 fc
Type IV - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

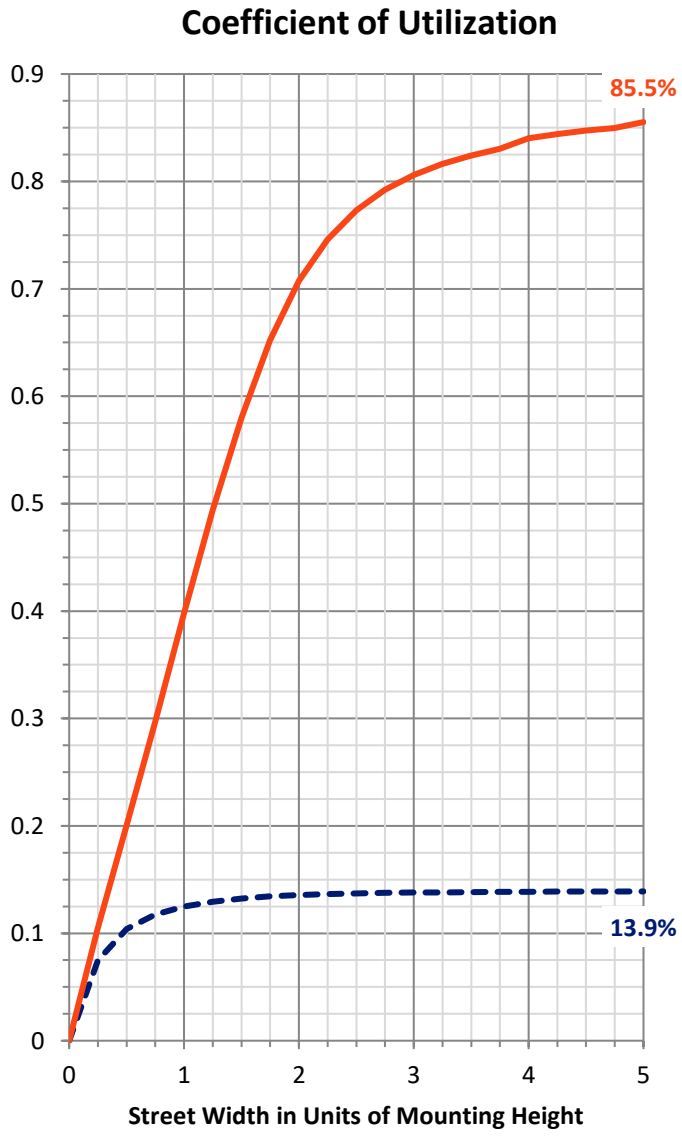
REPORT NUMBER: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1081.1	0.0	1081.1
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	6638.9	0.0	6638.9
	% Fixture	86.0	0.0	86.0
Total	Lumens	7720.0	0.0	7720.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	1.4
10°-20°	315.5	4.1
20°-30°	464.8	6.0
30°-40°	597.1	7.7
40°-50°	965.7	12.5
50°-60°	1693.5	21.9
60°-70°	2119.0	27.4
70°-80°	1238.2	16.0
80°-90°	220.9	2.9
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°	7720.0	100.0
0°-180°	7720.0	100.0



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

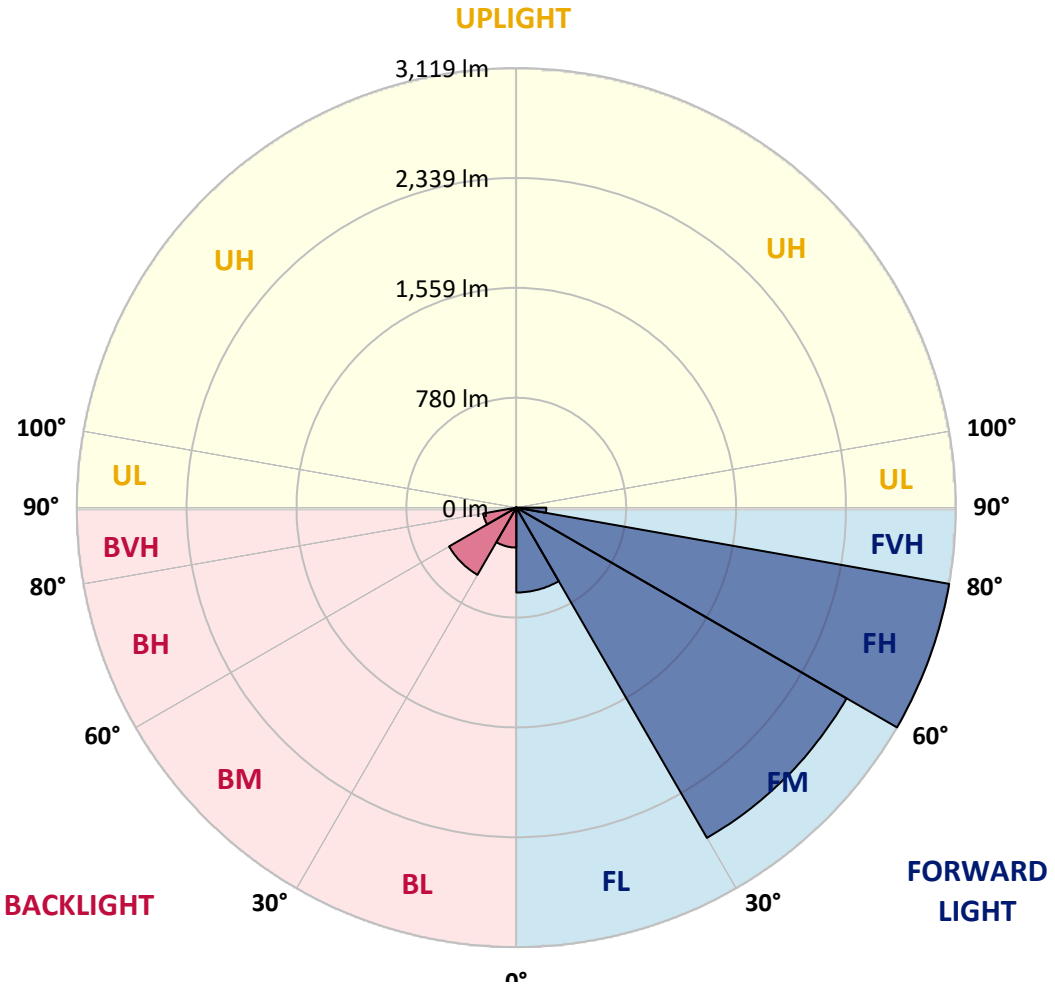
Scaled Data Report

REPORT NUMBER: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	602.1	7.8			
FM	(30°-60°)	2705.8	35.0			
FH	(60°-80°)	3118.5	40.4			G2/5000
FVH	(80°-90°)	212.4	2.8			G2/225
BL	(0°-30°)	283.4	3.7	B1/500		
BM	(30°-60°)	550.5	7.1	B1/1000		
BH	(60°-80°)	238.7	3.1	B1/500		G1/500
BVH	(80°-90°)	8.5	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
Type IV Short



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

Scaled Data Report

REPORT NUMBER: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0
2.5°	1207.8	1187.0	1174.8	1144.5	1114.2	1089.7	1056.7	1034.9	1008.9	983.9	961.5
5°	1346.1	1312.5	1272.1	1216.8	1166.3	1114.7	1064.7	1015.3	963.1	915.3	886.0
7.5°	1463.1	1414.7	1343.4	1270.0	1205.7	1143.4	1084.9	1019.5	956.2	881.2	841.4
10°	1552.4	1490.7	1397.1	1300.8	1226.9	1164.2	1107.3	1052.0	988.1	897.7	847.7
12.5°	1606.7	1540.7	1429.6	1316.8	1232.2	1162.0	1117.9	1093.4	1068.4	978.6	920.1
15°	1646.5	1575.3	1452.4	1328.0	1220.0	1133.9	1101.4	1125.9	1154.6	1097.2	1029.6
17.5°	1688.0	1613.0	1482.2	1332.8	1187.0	1079.1	1065.3	1128.5	1195.0	1192.4	1125.3
20°	1727.4	1652.9	1508.3	1329.6	1133.9	1012.6	1024.8	1105.7	1182.8	1215.2	1179.1
22.5°	1772.6	1693.9	1533.3	1317.3	1064.7	950.4	988.7	1069.5	1137.0	1175.3	1164.2
25°	1827.9	1745.5	1568.4	1299.3	990.3	898.8	952.0	1027.5	1082.3	1108.9	1108.3
27.5°	1887.5	1807.1	1615.2	1289.7	930.2	862.1	910.5	977.5	1026.4	1045.0	1045.0
30°	1961.4	1878.9	1670.5	1279.0	890.8	840.8	867.4	919.5	967.4	986.0	986.0
32.5°	2042.2	1958.7	1723.7	1253.5	866.9	824.9	825.4	858.4	902.0	924.3	927.5
35°	2143.3	2054.4	1780.6	1197.7	847.7	806.3	784.4	800.4	836.6	863.2	870.1
37.5°	2287.4	2180.0	1850.2	1117.9	819.5	777.5	741.4	745.1	772.7	802.0	812.6
40°	2486.3	2348.5	1932.1	1034.9	779.1	737.1	694.0	692.4	712.6	741.4	753.1
42.5°	2755.4	2571.4	2030.5	955.7	740.3	688.2	644.0	641.4	657.3	682.3	694.6
45°	3110.7	2856.4	2151.2	887.6	710.0	640.3	596.7	595.6	608.9	630.7	643.5
47.5°	3565.4	3252.7	2272.0	841.4	694.0	602.6	557.9	560.0	571.7	591.4	600.4
50°	4154.1	3769.1	2308.7	818.0	694.0	582.4	523.3	534.0	543.5	558.4	563.7
52.5°	4859.8	4264.7	2187.4	796.7	698.3	585.0	494.1	516.9	523.8	536.6	538.7
55°	5514.0	4507.8	1880.5	767.4	699.4	601.5	469.1	503.1	515.9	520.7	520.1
57.5°	5893.7	4424.3	1520.5	718.0	695.1	612.7	453.1	486.1	510.6	513.7	509.0
60°	5821.4	4131.2	1119.5	680.2	663.7	608.4	448.3	460.0	498.9	503.6	497.3
62.5°	5264.0	3639.8	777.0	651.0	594.6	589.8	446.7	419.1	473.3	485.0	476.0
65°	*4231.2*	*2865.5*	*548.8*	*560.5*	*521.2*	*549.4*	*438.2*	*376.5*	*442.5*	*458.4*	*444.6*
67.5°	3069.7	1939.0	396.2	454.2	472.3	484.0	419.1	345.7	407.4	428.7	410.6
70°	1969.9	1047.2	278.1	300.0	397.8	411.1	386.1	318.0	371.7	396.2	376.5
72.5°	1400.3	618.5	200.0	210.1	319.6	342.5	339.8	287.2	330.3	360.0	336.6
75°	966.3	340.9	135.1	150.0	231.9	278.1	262.2	246.8	279.7	310.1	287.2
77.5°	605.8	152.6	80.8	104.2	152.1	218.6	179.8	190.9	218.0	246.2	222.3
80°	337.2	59.0	45.2	69.1	83.0	159.0	99.5	122.9	160.6	180.8	161.7
82.5°	73.4	7.4	20.2	29.8	32.4	92.5	52.7	71.3	101.0	99.5	86.2
85°	0.0	0.0	3.7	4.3	2.1	39.9	19.1	23.4	33.0	30.8	23.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	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

Scaled Data Report

REPORT NUMBER: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0
2.5°	957.3	931.2	912.1	902.5	894.5	902.0	906.2	906.2	924.3	935.0	939.2
5°	867.4	820.6	785.0	761.0	746.7	751.5	756.8	762.6	785.5	800.9	811.0
7.5°	805.2	733.4	679.1	645.6	628.1	630.7	634.5	639.3	661.6	677.0	690.3
10°	793.5	690.3	613.7	569.6	548.3	544.6	542.5	540.9	554.2	565.9	576.5
12.5°	841.4	692.4	585.5	531.8	505.8	494.6	481.8	471.7	473.9	481.3	494.6
15°	927.0	719.6	576.5	512.1	479.7	461.1	446.2	434.0	431.3	434.0	436.1
17.5°	1024.8	756.3	575.4	495.1	454.7	435.6	423.3	412.2	408.4	409.0	411.6
20°	1089.7	785.5	572.2	476.0	430.8	413.8	403.1	392.0	388.2	389.3	389.8
22.5°	1096.1	800.9	567.5	454.7	406.8	392.5	381.9	371.7	371.2	371.2	374.4
25°	1061.5	800.9	557.4	435.6	384.0	371.2	361.6	349.4	351.5	352.6	356.9
27.5°	1007.8	781.8	538.2	420.1	364.3	351.0	341.4	330.3	332.9	334.5	339.3
30°	954.6	757.3	515.3	402.6	345.7	330.3	323.4	313.8	314.8	317.0	322.3
32.5°	905.2	731.3	488.2	388.2	327.1	311.7	306.3	295.7	297.3	299.4	305.3
35°	856.2	702.5	456.3	371.2	310.1	294.6	290.4	278.1	279.2	282.4	288.8
37.5°	803.6	672.2	430.2	354.2	293.6	277.6	273.4	260.6	261.7	265.4	272.8
40°	748.3	642.4	404.7	336.1	276.0	260.1	256.3	242.5	243.6	247.8	255.8
42.5°	692.4	610.0	385.0	312.7	257.9	240.9	237.2	224.4	226.0	230.8	238.8
45°	640.9	571.2	372.3	286.7	240.9	221.8	218.0	206.3	209.5	214.9	222.8
47.5°	596.7	531.3	367.0	264.9	222.8	202.1	198.9	189.3	194.6	200.5	206.9
50°	559.0	493.0	360.0	242.5	205.8	185.1	181.9	175.5	182.4	188.3	194.1
52.5°	531.8	449.4	345.2	222.3	190.9	170.7	169.7	166.5	172.8	178.2	183.5
55°	508.4	404.2	321.2	204.8	177.6	158.5	159.5	158.0	163.3	167.5	172.3
57.5°	487.2	364.8	290.9	190.9	163.3	147.8	151.0	148.9	151.6	154.2	160.1
60°	461.6	324.9	254.7	175.5	146.3	137.2	140.9	135.1	134.6	135.6	137.2
62.5°	423.9	271.2	217.0	156.4	131.4	125.5	127.1	115.9	107.4	107.4	109.0
65°	*371.2*	*218.0*	*181.9*	*135.1*	*114.3*	*109.6*	*108.5*	*92.5*	*80.8*	*79.8*	*84.6*
67.5°	310.1	179.2	151.0	113.8	95.2	92.0	93.1	81.4	69.7	68.6	73.9
70°	252.6	148.4	121.8	90.9	73.4	76.6	81.4	69.7	58.5	56.9	61.7
72.5°	205.3	118.1	95.2	69.7	54.2	63.3	69.1	56.9	46.3	45.2	49.5
75°	158.5	86.7	68.1	47.3	39.4	48.9	54.2	41.5	33.0	31.4	35.1
77.5°	105.8	53.7	38.3	29.8	23.4	33.5	36.2	21.8	19.1	18.6	21.3
80°	64.4	25.0	16.5	14.4	8.0	12.2	14.4	9.0	10.1	10.6	12.8
82.5°	32.4	6.9	2.7	0.5	0.0	0.0	4.3	2.1	4.3	5.3	8.0
85°	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.7	4.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
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: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0	1069.0
2.5°	969.0	991.3	1012.6	1046.6	1081.7	1116.3	1151.4	1185.4	1197.7	1206.7	1226.9
5°	857.3	899.3	948.2	1015.8	1088.1	1162.6	1238.1	1307.2	1338.6	1359.9	1407.7
7.5°	741.9	796.7	866.9	968.5	1081.7	1200.3	1318.9	1428.0	1478.5	1519.4	1592.3
10°	627.6	687.1	775.9	891.9	1045.0	1215.2	1379.0	1529.0	1594.4	1646.0	1744.9
12.5°	527.0	582.9	676.0	804.1	987.6	1203.5	1413.6	1593.9	1671.0	1729.0	1837.5
15°	456.3	495.7	578.1	716.4	919.5	1165.8	1415.7	1624.7	1709.3	1769.9	1864.1
17.5°	417.0	430.2	484.0	627.0	844.0	1116.3	1396.0	1635.4	1725.8	1782.2	1847.6
20°	395.7	397.8	412.7	511.1	747.2	1070.0	1377.4	1646.0	1741.2	1788.5	1808.2
22.5°	378.7	378.7	382.4	418.0	622.2	1014.7	1371.6	1664.6	1762.5	1791.7	1751.3
25°	363.2	363.2	364.3	373.9	493.0	930.2	1367.9	1693.3	1791.7	1799.7	1688.6
27.5°	347.3	347.8	347.8	353.1	397.3	815.3	1351.9	1730.6	1826.8	1810.3	1628.5
30°	331.3	332.4	332.4	336.1	351.5	680.7	1320.5	1775.2	1872.6	1824.2	1568.9
32.5°	315.4	316.4	316.4	319.6	330.8	543.5	1281.2	1816.2	1918.8	1830.0	1513.6
35°	298.9	300.5	299.4	303.7	315.4	432.4	1231.2	1857.1	1968.8	1848.6	1486.5
37.5°	282.4	283.5	282.9	287.2	300.5	373.3	1173.2	1888.0	2036.9	1890.1	1518.9
40°	265.9	265.4	265.4	270.2	284.5	356.3	1100.4	1936.9	2134.8	1963.0	1660.4
42.5°	248.9	248.9	247.8	253.1	270.7	343.6	1030.7	2024.7	2277.3	2078.9	1911.4
45°	233.5	232.9	230.8	235.6	257.4	321.2	1006.2	2188.5	2487.9	2266.6	2215.1
47.5°	218.6	218.0	212.7	217.0	241.4	301.0	1097.7	2456.5	2779.9	2542.7	2499.6
50°	205.3	205.8	195.7	199.4	225.5	285.6	1296.1	2804.3	3167.6	2914.4	2769.2
52.5°	193.1	193.1	179.8	181.9	205.8	271.8	1484.9	3181.4	3679.2	3432.9	3083.5
55°	180.8	179.8	164.9	165.9	186.1	252.1	1513.0	3549.4	4376.9	4213.1	3513.3
57.5°	167.0	164.9	151.0	151.0	168.1	237.7	1311.5	3832.3	5242.8	5359.8	4132.8
60°	150.0	148.4	139.3	136.7	153.7	250.5	925.4	3865.3	5801.2	6884.5	5319.3
62.5°	128.2	130.3	125.5	121.8	139.9	260.1	548.3	3599.9	5666.1	7369.5	6740.4
65°	*101.0*	*109.6*	*108.5*	*105.8*	*153.7*	*219.1*	*323.9*	*3090.4*	*5251.8*	*6978.1*	*6450.5*
67.5°	86.2	92.0	90.4	90.4	161.1	166.5	203.7	2414.5	4681.7	6513.8	5761.8
70°	73.4	79.2	73.4	73.4	121.8	101.0	140.9	1685.9	4066.4	6000.1	5309.8
72.5°	60.6	66.5	60.1	55.8	97.3	75.5	103.2	1053.5	3482.4	5465.1	5000.2
75°	46.3	53.2	48.4	43.1	64.4	56.4	78.2	612.1	2885.2	4675.8	4559.4
77.5°	29.3	38.3	36.2	30.3	47.3	41.0	56.4	364.3	2226.2	3653.7	3921.7
80°	18.1	19.7	20.2	19.1	27.1	27.7	38.3	207.4	1523.7	2546.4	3063.9
82.5°	11.7	11.7	9.0	10.1	13.3	16.0	21.8	78.2	895.6	1550.3	2132.6
85°	8.5	7.4	4.8	4.8	6.4	8.0	8.5	23.9	363.2	612.1	833.9
87.5°	4.3	3.7	1.6	2.1	3.2	2.7	2.1	1.1	91.5	195.7	137.2
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

Scaled Data Report

REPORT NUMBER: P1199868
CATALOG NUMBER: GPC-SB2B-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1069.0	1069.0	*1069.0*	1069.0	1069.0	1069.0	1069.0	1069.0
2.5°	1237.6	1254.0	*1255.1*	1255.1	1240.8	1240.2	1211.0	1207.8
5°	1457.2	1467.8	*1470.5*	1465.2	1436.5	1415.2	1358.3	1346.1
7.5°	1658.2	1679.5	*1679.5*	1666.7	1619.9	1576.3	1493.9	1463.1
10°	1818.8	1843.3	*1838.0*	1811.9	1752.9	1692.8	1592.8	1552.4
12.5°	1897.0	1922.0	*1908.2*	1878.4	1821.0	1757.7	1652.4	1606.7
15°	1895.4	1888.5	*1874.2*	1870.4	1842.8	1794.9	1696.5	1646.5
17.5°	1827.9	1769.4	*1758.2*	1795.4	1830.5	1818.8	1734.8	1688.0
20°	1721.0	1618.9	*1608.8*	1680.0	1780.0	1831.1	1770.5	1727.4
22.5°	1608.2	1498.2	*1474.8*	1553.5	1704.0	1834.8	1815.7	1772.6
25°	1501.3	1390.7	*1367.3*	1440.7	1619.4	1828.4	1864.6	1827.9
27.5°	1412.0	1305.1	*1283.3*	1356.7	1538.0	1810.3	1913.5	1887.5
30°	1342.9	1243.9	*1228.0*	1298.7	1467.8	1788.0	1975.7	1961.4
32.5°	1302.4	1230.1	*1236.0*	1293.9	1430.1	1763.5	2035.3	2042.2
35°	1342.3	1345.5	*1396.6*	1420.5	1465.2	1759.8	2116.1	2143.3
37.5°	1540.7	1651.3	*1757.2*	1737.5	1637.0	1802.9	2236.9	2287.4
40°	1878.4	2105.5	*2277.3*	2202.3	1949.1	1934.8	2410.8	2486.3
42.5°	2291.1	2676.2	*2959.1*	2758.1	2351.7	2165.6	2659.1	2755.4
45°	2726.7	3379.8	*3825.4*	3407.4	2780.9	2489.0	3035.1	3110.7
47.5°	3185.6	4234.9	*4811.4*	4127.5	3178.7	2857.0	3547.8	3565.4
50°	3687.7	5172.6	*5816.6*	4847.1	3562.7	3278.7	4174.3	4154.1
52.5°	4165.8	6136.8	*6800.5*	5569.8	3899.9	3802.0	4901.3	4859.8
55°	4622.1	7100.4	*7790.2*	6264.4	4217.9	4493.4	5765.0	5514.0
57.5°	5151.3	7966.8	*8810.3*	6962.2	4662.5	5391.1	6730.8	5893.7
60°	5933.6	8951.2	*9963.8*	7918.4	5508.1	6334.6	7077.0	5821.4
62.5°	6932.4	9856.4	*10802.5*	8855.5	6357.5	6512.2	6567.0	5264.0
65°	*7126.5*	*10085.6*	*10849.8*	*9105.9*	*6247.9*	*5524.1*	*5361.4*	*4231.2*
67.5°	6611.7	9671.3	*10188.2*	8639.5	5526.7	4269.0	4023.3	3069.7
70°	6034.1	8881.5	*9035.2*	7846.6	4860.9	3139.9	2717.1	1969.9
72.5°	5442.2	7828.0	*7509.9*	6814.3	4272.2	2286.3	1959.8	1400.3
75°	4739.1	6442.6	*5915.5*	5661.8	3537.2	1794.4	1417.9	966.3
77.5°	3795.1	4534.9	*4394.0*	4388.6	2658.1	1311.0	946.1	605.8
80°	2677.2	2943.1	*2871.3*	3305.3	1783.2	950.9	569.6	337.2
82.5°	1296.1	1627.4	*1670.5*	1968.3	867.4	559.5	131.4	73.4
85°	507.4	785.0	*662.1*	747.2	243.6	155.8	3.2	0.0
87.5°	56.9	90.9	*83.5*	65.9	29.8	6.4	0.0	0.0
90°	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0	0.0


HS
SS

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

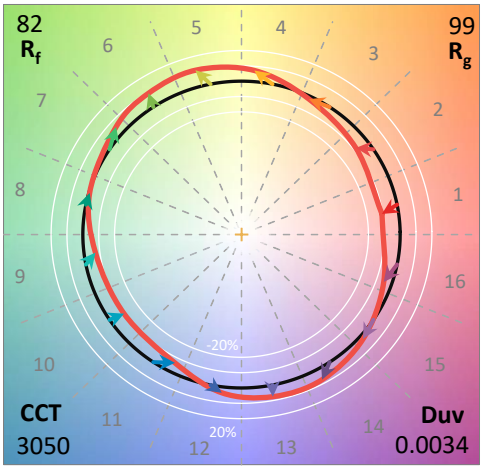
Test Information

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
CIE u':	0.2476
CIE v':	0.5251
Duv:	0.0034
CIE x:	0.4383
CIE y:	0.4131
CIE z:	0.1487
Peak Wavelength (nm):	603
Dominant Wavelength (nm):	581
Purity:	55.55201
Rf:	81.5
Rg:	99.2

CRI (Ra):	81.0
R1:	79.6
R2:	85.6
R3:	92.0
R4:	82.6
R5:	78.9
R6:	81.7
R7:	85.2
R8:	62.0
R9:	7.1
R10:	67.0
R11:	82.7
R12:	63.2
R13:	80.3
R14:	95.0
R15:	71.7



Test Conditions

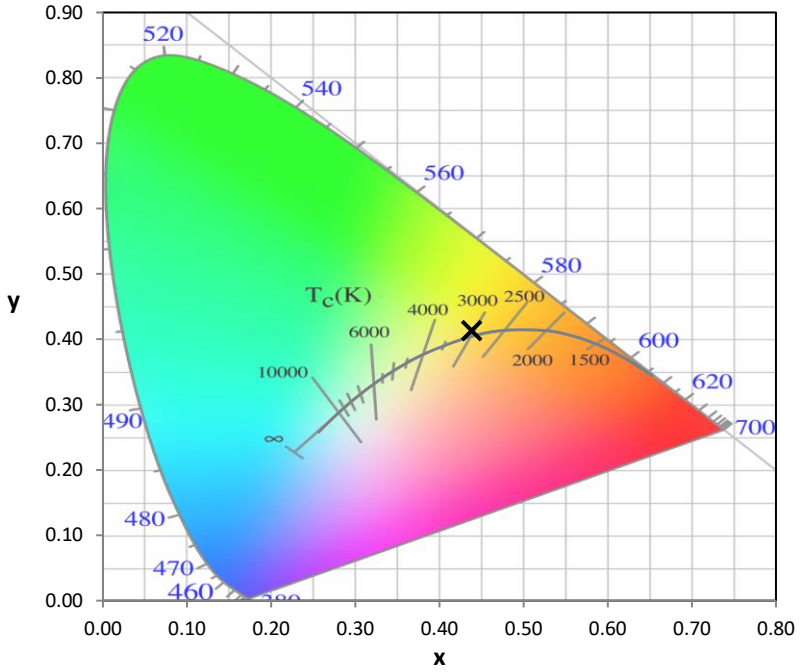
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

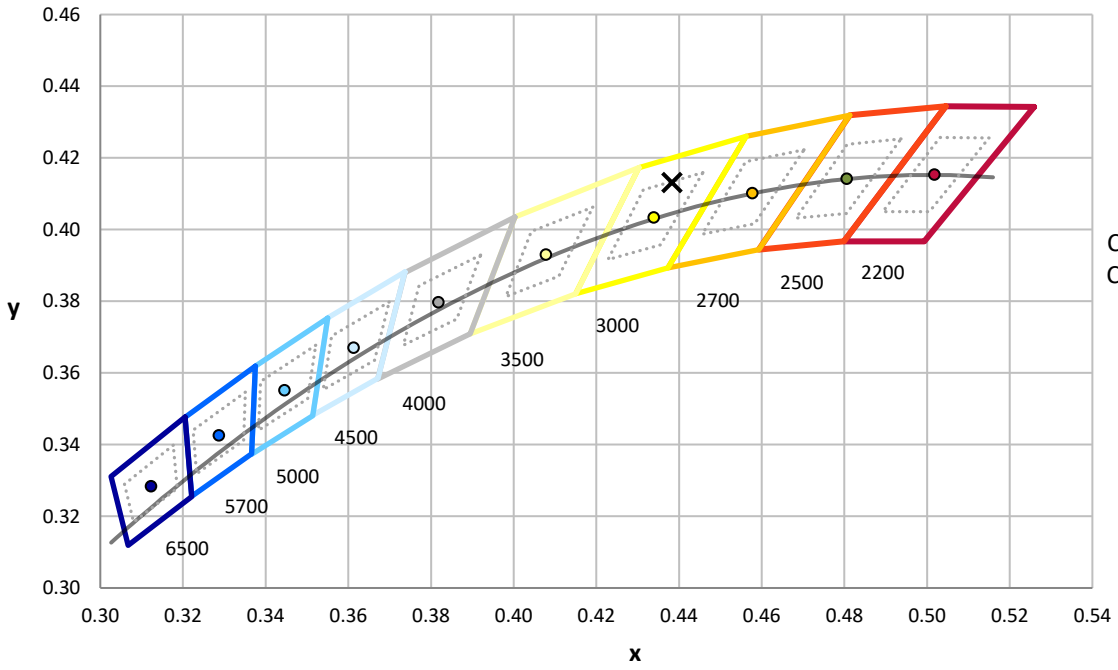
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

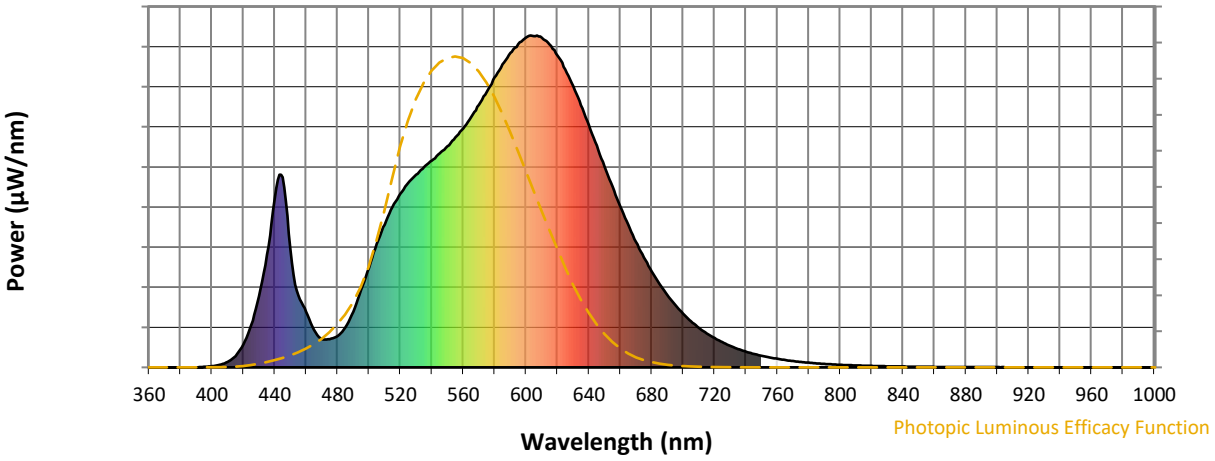


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

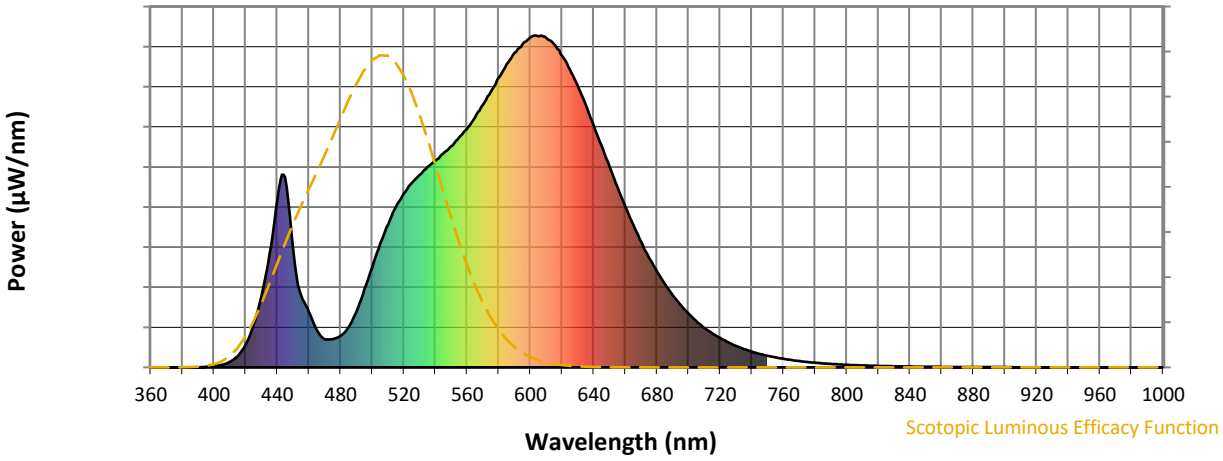


Photopic Lumens: NR

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

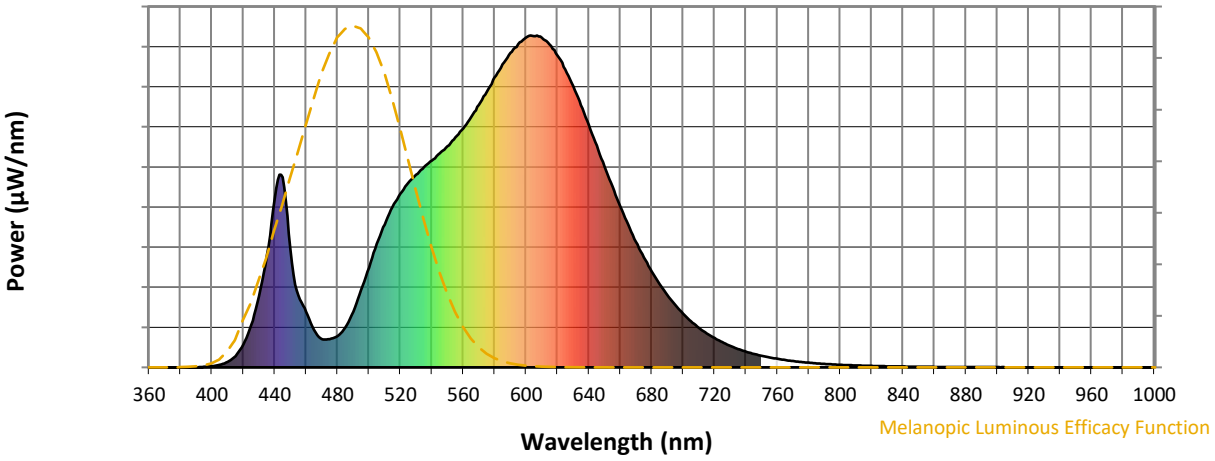


Scotopic Lumens: NR **S/P: 1.27**

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			

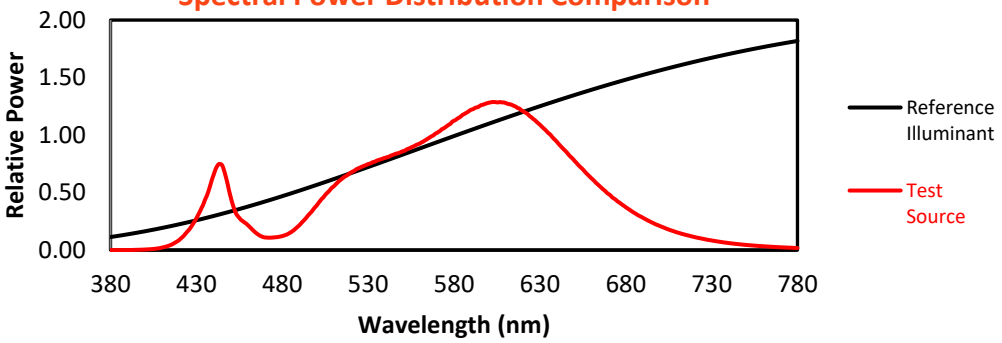
REPORT NUMBER: SP1-2408-195-9

TM-30-18

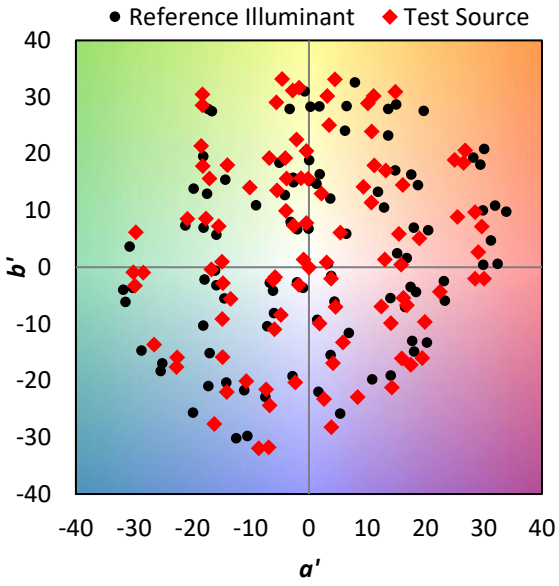
Summary

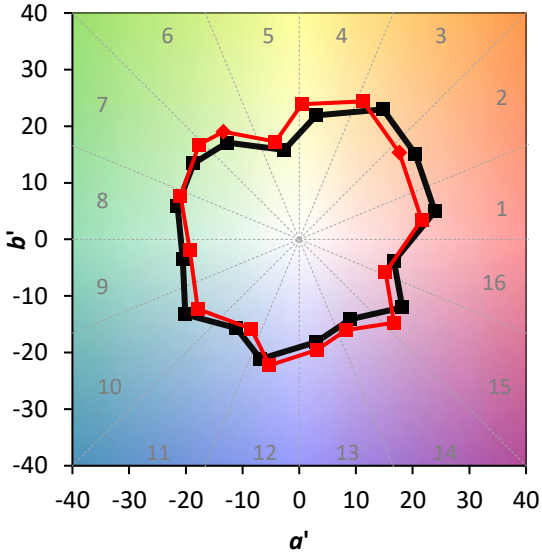
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

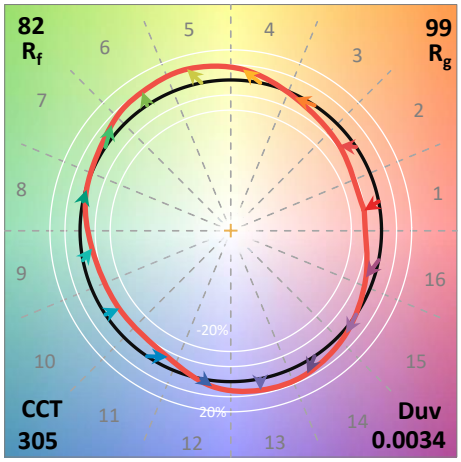
Spectral Power Distribution Comparison

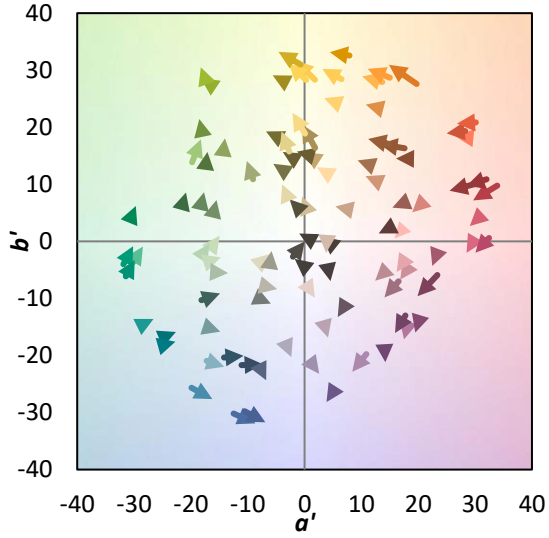


Color Vector Graphics







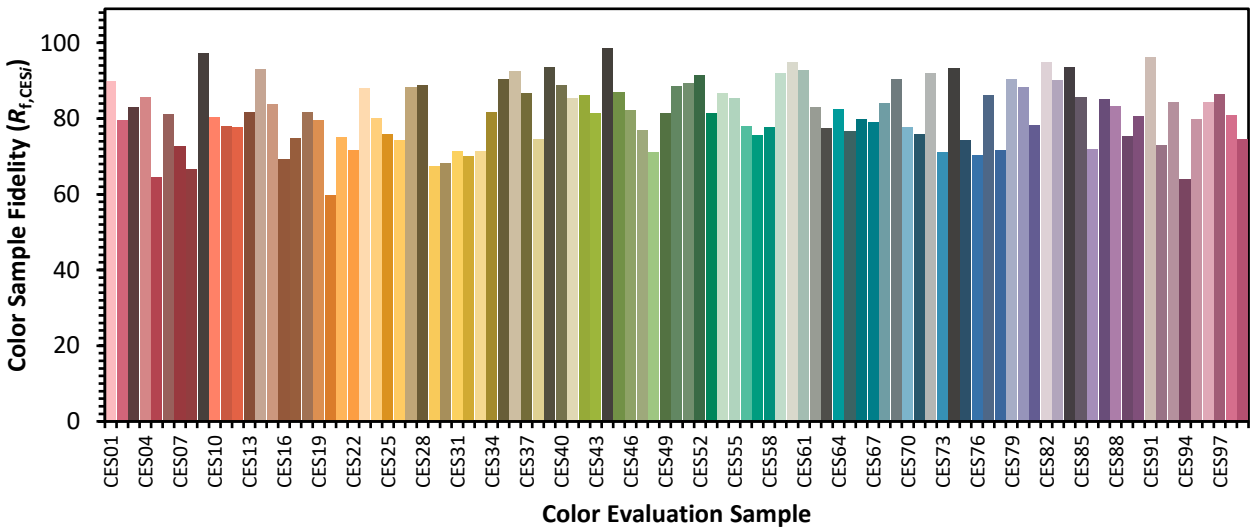


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

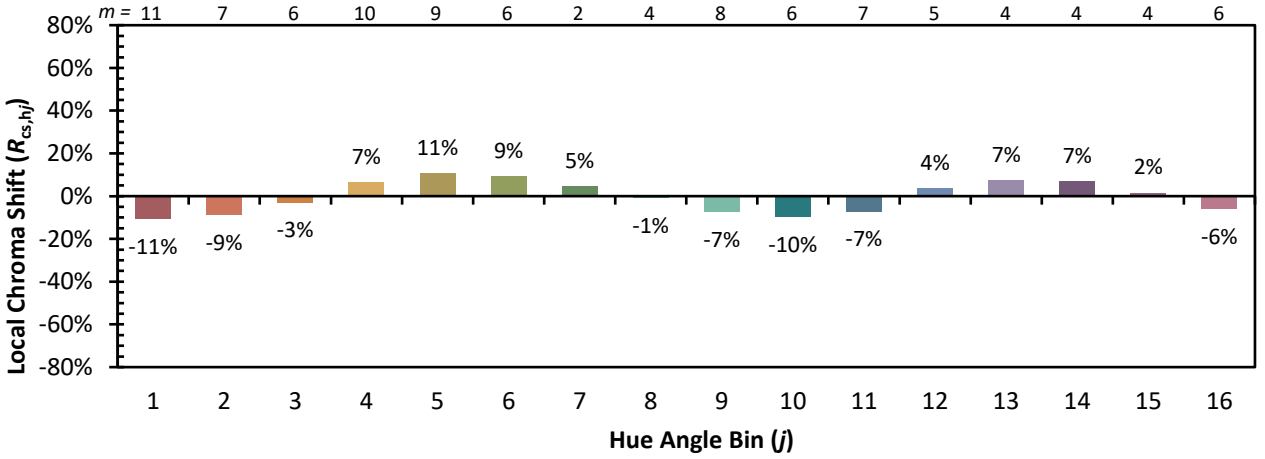
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

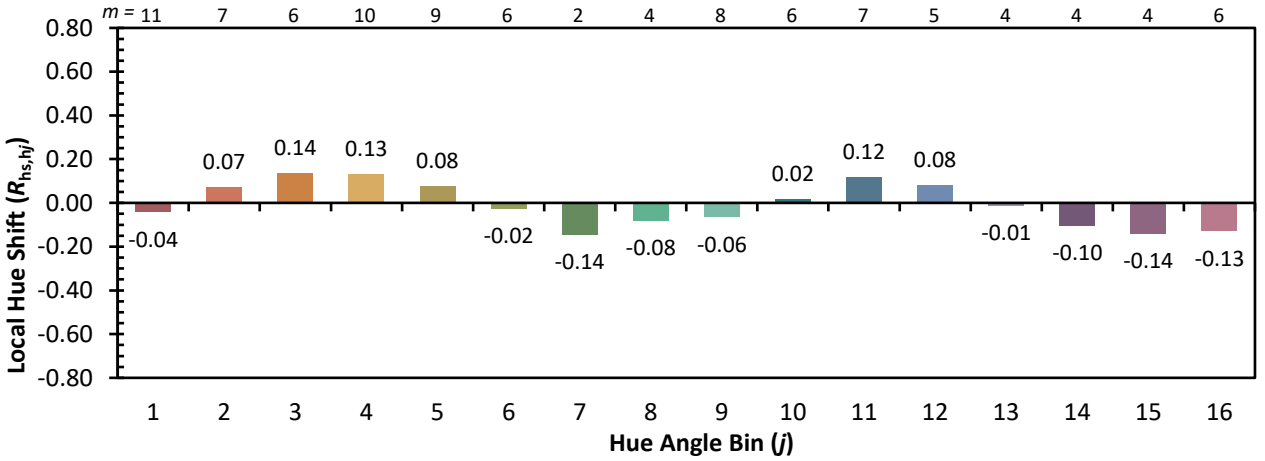


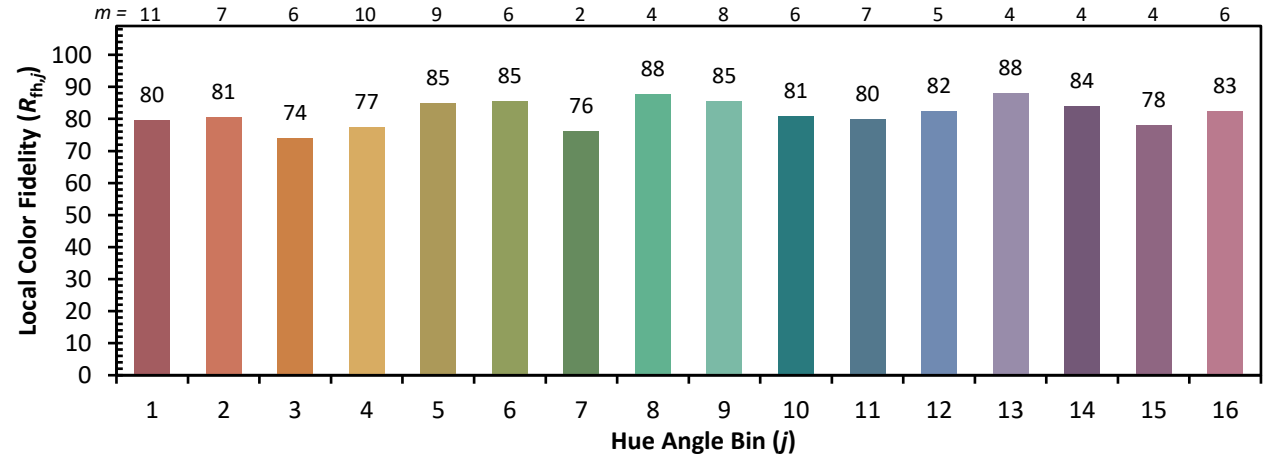
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



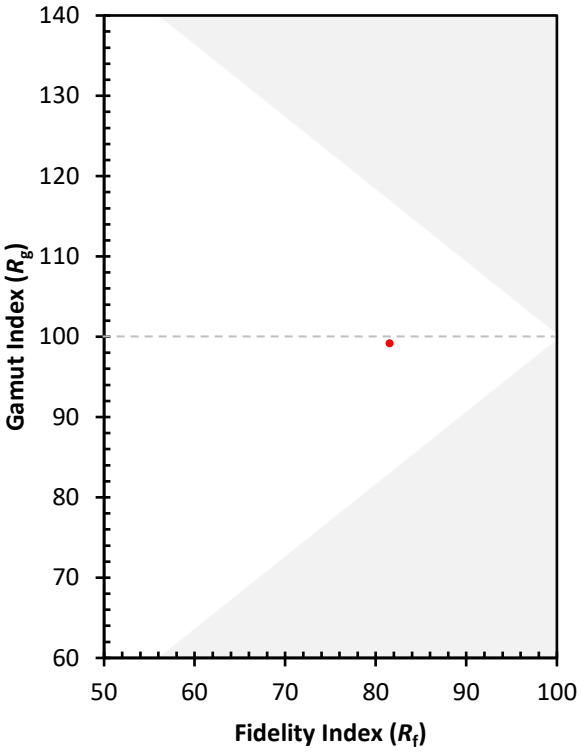


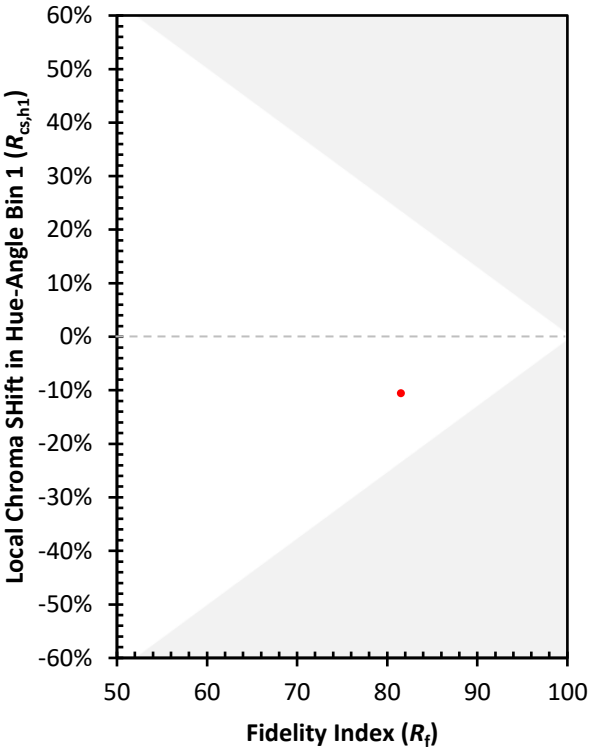


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)