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: P386502

Luminaire Tested: **GPC-SA2A-830-U-SLL-HSS**

Issue Date: 3/3/2020

Report Generated By 670245982

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:	P386502
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GPC-SA2A-830-U-SLL-HSS
Description:	GALLEON PEDESTRIAN LUMINAIRE
	(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5729 lumens
Efficiency:	N/A
Efficacy:	86.8 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B1 - U0 - G2

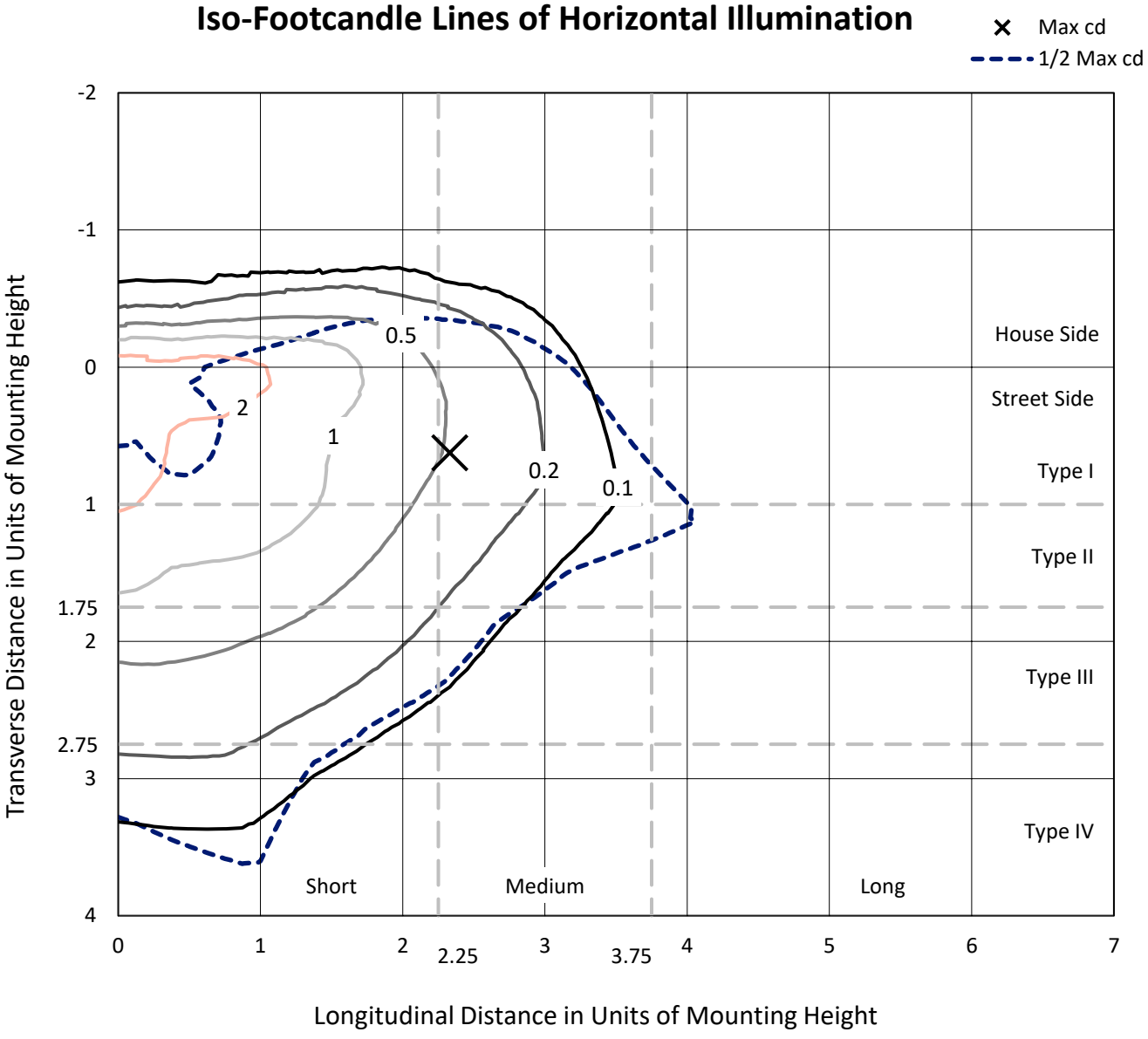
Input Watts (W):	66
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination



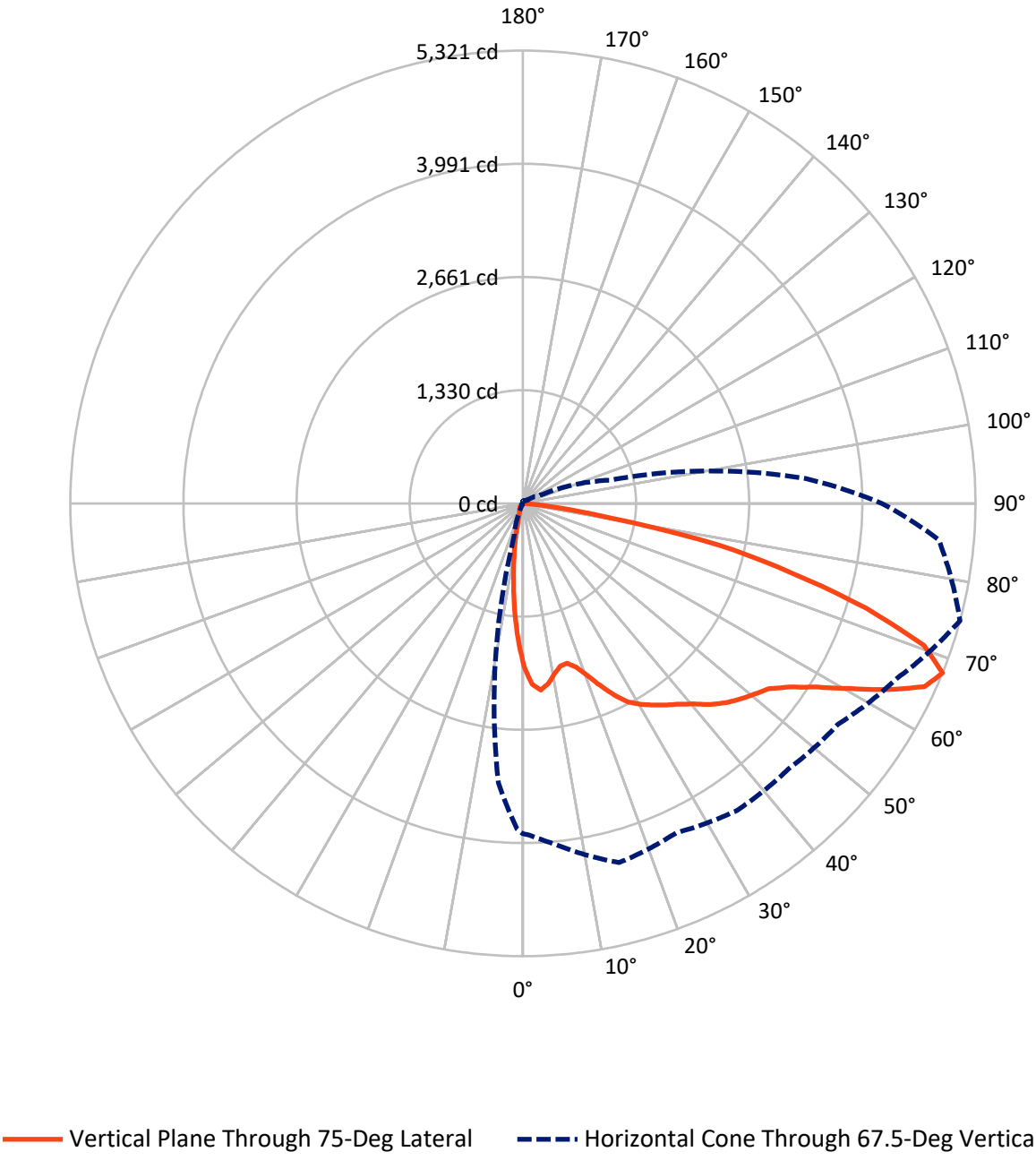
Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type III - Medium - N/A

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

Scaled Data Report

REPORT NUMBER: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

Luminous Intensity Polar Plot



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

Scaled Data Report

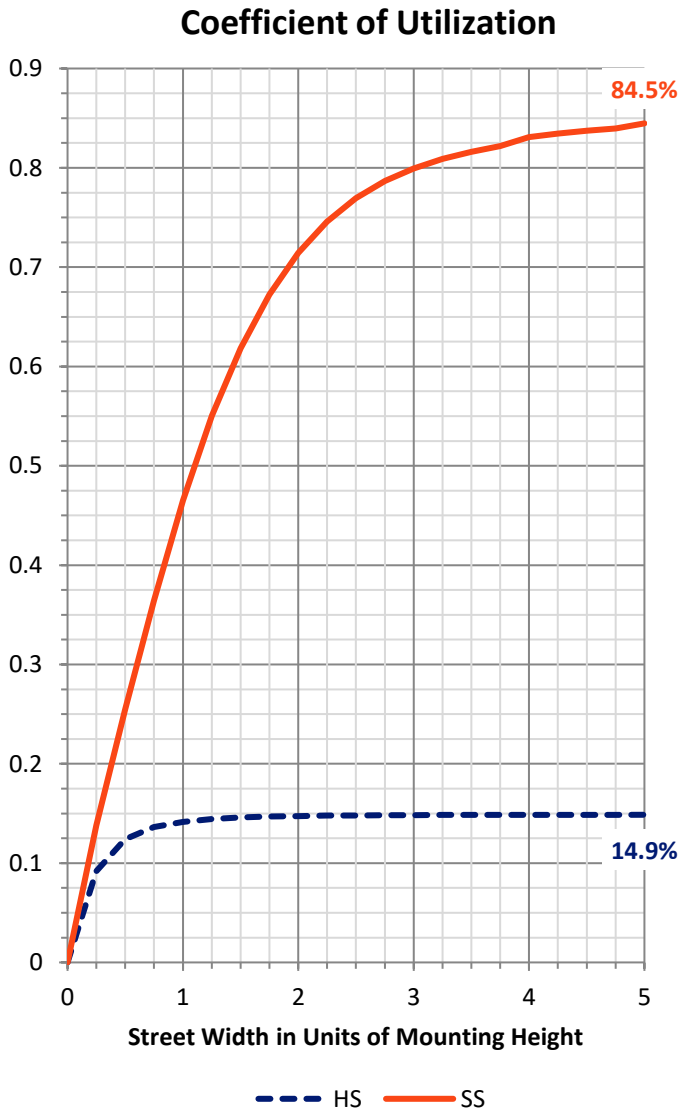
REPORT NUMBER: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	859.7	0.0	859.7
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	4869.3	0.0	4869.3
	% Fixture	85.0	0.0	85.0
Total	Lumens	5729.0	0.0	5729.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.8	2.5
10°-20°	287.1	5.0
20°-30°	406.1	7.1
30°-40°	597.1	10.4
40°-50°	858.2	15.0
50°-60°	1208.2	21.1
60°-70°	1411.0	24.6
70°-80°	719.9	12.6
80°-90°	95.6	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5729.0	100.0
0°-180°	5729.0	100.0



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

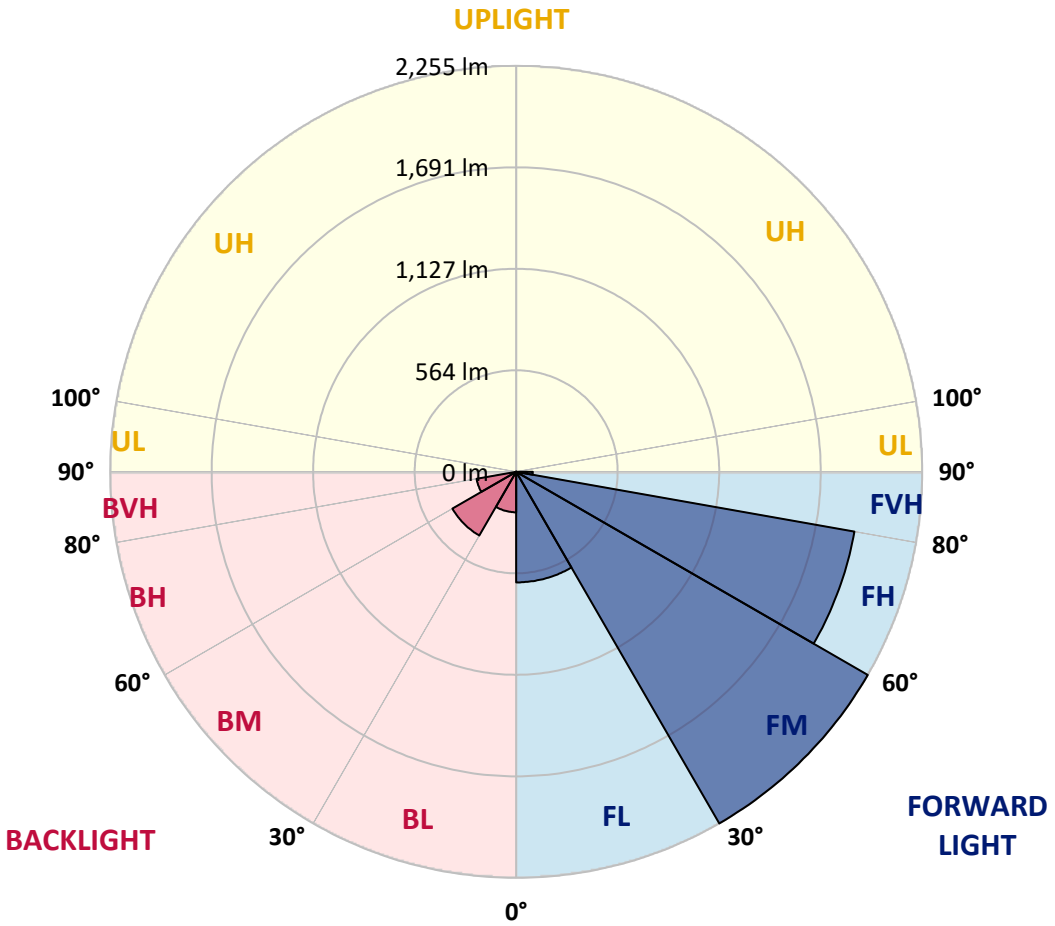
Scaled Data Report

REPORT NUMBER: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	614.2	10.7			
FM	(30°-60°)	2254.8	39.4			
FH	(60°-80°)	1907.6	33.3			G2/5000
FVH	(80°-90°)	92.7	1.6			G1/100
BL	(0°-30°)	224.8	3.9	B1/500		
BM	(30°-60°)	408.7	7.1	B1/1000		
BH	(60°-80°)	223.3	3.9	B1/500		G1/500
BVH	(80°-90°)	2.9	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 III Medium



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

Scaled Data Report

REPORT NUMBER: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	*1922.0*	1922.0
2.5°	2083.5	2086.7	2103.5	2142.6	2185.2	2188.5	2217.3	2187.7	2177.6	*2129.9*	2080.5
5°	2099.2	2111.7	2169.5	2284.3	2383.9	2415.9	2438.7	2380.6	2319.6	*2202.9*	2078.3
7.5°	1972.5	1993.4	2084.3	2299.8	2477.8	2556.5	2571.4	2480.5	2331.0	*2138.8*	1951.6
10°	1810.2	1834.1	1943.7	2208.6	2453.1	2588.0	2608.6	2489.5	2274.5	*2035.2*	1814.5
12.5°	1678.8	1706.8	1818.9	2106.0	2368.1	2517.4	2558.1	2459.3	2225.7	*1961.6*	1720.9
15°	1618.3	1650.3	1768.1	2039.8	2274.0	2391.5	2425.1	2382.5	2198.5	*1949.9*	1699.2
17.5°	1653.0	1687.8	1809.4	2045.5	2185.5	2235.7	2262.8	2280.2	2198.5	*2020.2*	1762.7
20°	1795.5	1833.0	1961.6	2103.3	2112.2	2093.5	2122.5	2183.6	2224.0	*2153.7*	1915.2
22.5°	1992.5	2036.5	2181.7	2202.3	2076.4	2005.6	2009.4	2105.2	2270.4	*2323.1*	2126.9
25°	2232.7	2286.5	2434.1	2350.0	2091.3	1953.2	1951.8	2040.6	2315.8	*2492.7*	2362.7
27.5°	2471.3	2530.4	2660.2	2530.2	2152.9	1943.7	1941.0	2021.0	2360.0	*2643.6*	2620.3
30°	2671.3	2728.8	2840.6	2660.7	2219.4	1965.9	1952.9	2041.9	2386.3	*2741.6*	2808.1
32.5°	2834.1	2880.3	2970.6	2750.5	2290.5	2009.1	1980.9	2097.8	2431.1	*2824.4*	2980.7
35°	3013.2	3061.8	3097.9	2836.0	2370.3	2071.2	2030.8	2186.6	2500.0	*2908.5*	3169.8
37.5°	3217.6	3265.9	3261.6	2914.2	2471.5	2174.1	2148.3	2327.2	2607.2	*2991.8*	3381.0
40°	3417.6	3467.0	3431.7	2999.7	2590.4	2343.7	2324.7	2538.3	2750.8	*3098.5*	3628.5
42.5°	3604.9	3658.3	3582.9	3080.5	2732.1	2557.6	2590.1	2810.2	2930.5	*3229.8*	3841.8
45°	3755.8	3810.3	3709.6	3159.2	2881.3	2817.0	2915.0	3111.5	3146.5	*3340.8*	3985.9
47.5°	3865.4	3917.0	3797.6	3237.9	3072.4	3134.3	3305.0	3427.4	3341.6	*3437.1*	4088.2
50°	3935.4	3975.6	3823.3	3336.5	3323.2	3504.5	3711.3	3771.0	3525.4	*3524.0*	4212.5
52.5°	3979.9	3998.1	3842.3	3439.3	3584.8	3907.5	4109.1	4127.8	3714.5	*3619.5*	4380.0
55°	4133.3	4147.9	3976.9	3563.9	3801.1	4260.5	4469.0	4451.6	3928.6	*3806.5*	4577.5
57.5°	4394.9	4410.4	4255.1	3743.0	3976.1	4478.7	4729.8	4761.0	4179.7	*4069.2*	4789.2
60°	4526.2	4555.0	4499.6	3969.9	4145.7	4618.2	4907.5	5007.1	4493.4	*4415.5*	4994.4
62.5°	4407.1	4448.9	4529.2	4221.5	4314.3	4695.0	4962.9	5095.3	4814.7	*4819.1*	5120.9
65°	4169.4	4202.7	4339.0	4359.3	4412.0	4685.5	4826.1	4972.1	5011.5	*5189.8*	5114.1
67.5°	*3882.2*	*3894.7*	*4010.3*	*4370.2*	*4270.3*	*4400.0*	*4415.2*	*4523.3*	*4856.0*	*5321.1*	*4908.6*
70°	3468.9	3475.7	3576.6	4006.8	3669.7	3698.2	3675.7	3697.7	4174.8	*5001.2*	4390.0
72.5°	2791.8	2808.9	2952.4	3327.5	2673.5	2591.2	2768.2	2758.4	3215.2	*4225.3*	3260.5
75°	2055.5	2085.1	2301.9	2680.2	1876.4	1697.3	1826.5	1860.9	2285.6	*3268.3*	2039.0
77.5°	1439.2	1461.2	1671.2	1970.3	1358.0	1213.7	1167.0	1208.0	1508.7	*2364.3*	1027.2
80°	829.1	837.2	971.3	1137.7	915.1	1047.0	948.5	976.7	904.0	*1051.9*	441.8
82.5°	542.5	543.9	596.2	677.1	569.9	662.2	490.1	626.6	556.1	*422.6*	143.8
85°	293.1	294.7	345.8	480.6	322.7	182.4	107.2	220.1	343.9	*96.9*	39.4
87.5°	32.3	29.6	104.2	174.8	89.6	16.6	5.7	24.7	55.1	*6.2*	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: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0
2.5°	2055.2	2032.7	1976.5	1917.1	1869.3	1824.6	1779.5	1724.4	1681.8	1673.1	1659.0
5°	2011.3	1939.9	1822.1	1703.8	1608.5	1488.3	1412.0	1352.6	1294.5	1291.0	1279.3
7.5°	1857.7	1763.8	1597.9	1434.3	1300.2	1185.7	1070.1	992.7	932.0	910.5	897.8
10°	1710.0	1604.5	1397.4	1210.7	1091.0	989.8	908.3	827.5	754.2	703.7	680.9
12.5°	1606.9	1490.2	1262.0	1101.0	1015.3	919.2	819.9	718.9	634.5	573.7	536.5
15°	1567.0	1442.4	1216.6	1057.6	951.8	830.2	703.2	587.8	494.2	439.1	405.7
17.5°	1614.5	1469.6	1213.1	1004.7	856.8	705.6	565.3	429.1	340.9	299.1	277.6
20°	1735.0	1555.9	1211.8	939.8	743.9	558.0	382.9	282.2	228.8	205.4	195.4
22.5°	1905.4	1666.1	1222.6	875.8	626.4	398.7	264.3	207.3	179.9	167.4	161.7
25°	2124.7	1820.8	1253.3	817.7	515.9	297.4	206.0	173.7	154.4	144.7	140.6
27.5°	2358.4	1998.8	1301.0	767.2	426.1	237.2	176.4	148.7	134.9	128.1	124.3
30°	2551.1	2205.0	1349.3	711.0	360.9	206.8	161.5	135.7	119.7	115.3	111.8
32.5°	2719.6	2361.1	1383.5	660.3	318.3	183.7	146.0	121.3	110.5	102.0	98.2
35°	2894.1	2491.1	1382.5	624.7	289.0	166.4	133.0	108.6	95.5	85.8	82.8
37.5°	3083.0	2637.9	1358.8	594.3	276.3	152.5	125.7	101.8	88.7	79.0	75.2
40°	3304.2	2792.1	1334.7	565.8	272.7	141.4	120.5	96.3	82.5	73.0	69.2
42.5°	3519.7	2931.0	1313.5	544.7	257.5	141.1	115.9	92.3	77.6	68.4	64.0
45°	3692.0	3060.5	1309.5	531.9	241.5	146.0	113.4	89.6	73.8	64.6	60.5
47.5°	3835.3	3201.0	1335.5	523.0	226.3	133.3	119.4	87.7	70.3	61.3	56.7
50°	4005.7	3373.6	1396.8	508.3	210.3	120.0	136.8	88.2	67.3	58.1	53.2
52.5°	4243.4	3612.5	1486.9	483.6	188.3	107.7	134.6	88.7	64.0	54.5	49.7
55°	4510.0	3910.7	1583.8	442.6	157.7	91.7	115.3	84.9	57.8	50.7	46.1
57.5°	4790.0	4181.3	1641.4	393.8	125.4	79.2	92.3	77.3	51.0	45.6	42.6
60°	4834.0	4284.2	1615.0	333.8	99.6	68.9	68.4	78.7	45.6	40.2	38.0
62.5°	4724.6	4155.0	1487.8	280.3	83.3	60.5	56.2	68.7	41.3	35.8	33.7
65°	4514.3	3805.7	1281.5	252.7	77.3	51.8	46.7	48.3	36.1	31.2	29.3
67.5°	*4221.7*	*3339.4*	*1052.2*	*236.9*	*76.5*	*44.5*	*39.9*	*36.6*	*31.2*	*27.1*	*25.5*
70°	3623.6	2782.0	839.4	228.2	74.4	37.5	33.7	29.9	26.1	23.1	21.7
72.5°	2666.9	1971.4	653.0	218.7	74.9	29.9	29.3	24.7	20.9	17.9	17.4
75°	1541.0	1126.3	428.3	177.2	71.4	23.1	24.4	17.4	14.7	12.5	12.5
77.5°	821.2	686.9	163.1	73.8	26.1	14.7	13.8	10.3	9.2	7.6	7.3
80°	358.0	302.3	49.1	20.6	14.4	7.9	5.2	4.6	4.1	3.3	3.0
82.5°	126.7	109.4	16.0	10.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	28.8	20.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0
2.5°	1630.2	1624.3	1589.0	1590.3	1596.6	1605.5	1584.4	1594.1	1620.5	1645.7	1655.2
5°	1260.6	1262.0	1240.5	1253.8	1265.8	1273.9	1239.7	1240.3	1261.1	1289.6	1304.6
7.5°	888.3	886.1	887.2	918.9	941.5	925.2	937.9	893.7	896.4	916.8	901.6
10°	660.3	630.4	613.6	637.5	662.2	653.2	631.3	616.9	626.9	649.4	647.8
12.5°	518.9	476.0	450.8	433.7	454.0	437.2	436.7	424.2	410.6	413.1	449.1
15°	390.3	359.0	329.2	301.8	301.2	295.5	266.5	233.9	231.2	232.9	251.6
17.5°	268.4	257.8	245.6	222.0	215.8	191.9	163.6	150.6	144.1	147.1	153.3
20°	188.6	184.5	185.9	173.1	164.2	141.4	124.8	119.7	118.6	121.6	124.6
22.5°	156.3	149.0	148.2	142.5	133.5	117.0	108.0	105.0	103.7	106.4	108.6
25°	136.8	129.5	126.5	122.9	113.4	102.0	96.6	93.9	92.5	94.2	95.5
27.5°	120.5	113.7	111.0	108.6	99.3	91.2	86.8	84.4	83.3	83.9	85.2
30°	108.3	102.3	98.8	95.8	87.9	82.2	78.4	76.0	74.9	74.9	76.3
32.5°	95.5	92.3	89.0	85.2	77.9	74.1	70.3	67.6	66.5	66.8	67.8
35°	79.5	78.4	79.2	75.7	69.5	66.2	62.4	59.4	58.6	58.9	60.0
37.5°	70.6	65.7	68.7	66.8	63.2	58.9	54.0	51.3	49.9	50.7	51.3
40°	64.9	58.9	56.7	58.6	58.1	51.0	46.7	44.0	42.9	43.2	43.7
42.5°	60.0	52.9	48.0	47.8	51.0	44.5	39.9	37.5	36.1	36.1	36.6
45°	55.4	47.8	41.8	37.2	42.9	37.7	33.4	31.2	29.6	29.6	29.9
47.5°	51.8	43.4	36.4	30.4	32.3	30.9	27.4	25.2	23.6	23.6	23.9
50°	48.6	39.1	31.5	25.5	24.2	25.5	22.3	19.8	18.7	18.5	19.0
52.5°	45.1	34.7	26.9	21.7	19.0	19.3	17.4	15.7	14.4	14.4	14.9
55°	41.5	31.2	23.3	18.5	15.7	14.4	13.8	12.8	11.7	11.7	12.2
57.5°	38.0	27.4	19.8	15.2	12.5	11.4	11.4	10.6	9.8	9.8	10.3
60°	34.7	23.6	16.3	12.5	9.8	9.5	9.8	9.0	8.4	8.4	9.0
62.5°	30.9	20.1	13.3	10.3	7.9	7.6	8.4	7.9	7.3	7.3	7.9
65°	26.3	17.1	10.6	7.9	6.0	6.0	7.1	6.5	6.0	6.0	6.5
67.5°	*22.3*	*14.4*	*8.1*	*5.7*	*4.3*	*4.6*	*6.0*	*5.4*	*5.2*	*5.2*	*5.7*
70°	18.5	11.1	5.7	3.5	2.4	3.5	4.6	4.6	4.6	4.6	5.2
72.5°	13.8	7.6	3.3	1.4	1.1	2.4	3.8	4.3	4.1	4.1	4.9
75°	9.0	4.3	1.1	0.0	0.0	1.4	3.0	3.5	3.5	3.3	4.1
77.5°	5.2	1.4	0.0	0.0	0.0	0.0	1.9	1.6	1.4	1.1	1.9
80°	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report

REPORT NUMBER: P386502
CATALOG NUMBER: GPC-SA2A-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0	1922.0
2.5°	1693.5	1725.5	1770.5	1818.3	1891.9	1950.2	2007.5	2056.6	2075.6	2083.5
5°	1340.4	1387.3	1453.3	1538.0	1670.7	1790.1	1911.1	2033.0	2085.9	2099.2
7.5°	961.8	1021.8	1105.6	1211.8	1367.3	1522.0	1691.0	1869.9	1951.8	1972.5
10°	711.9	785.1	881.2	993.0	1141.5	1300.5	1484.8	1689.1	1782.8	1810.2
12.5°	505.1	604.1	732.8	868.7	997.4	1139.3	1325.7	1551.0	1649.2	1678.8
15°	296.6	392.4	544.7	726.8	891.5	1035.4	1224.8	1480.2	1588.4	1618.3
17.5°	170.2	217.9	333.0	536.0	759.6	958.8	1193.0	1497.8	1625.4	1653.0
20°	130.0	145.2	191.9	345.2	605.5	883.6	1193.0	1597.7	1754.8	1795.5
22.5°	113.7	124.8	143.8	206.0	445.6	803.0	1206.9	1742.1	1947.5	1992.5
25°	101.0	111.0	127.3	155.0	304.0	707.2	1239.7	1919.3	2174.4	2232.7
27.5°	90.4	99.9	114.5	135.7	207.9	591.6	1283.9	2127.2	2424.6	2471.3
30°	80.9	89.8	103.1	118.1	160.4	460.5	1321.7	2323.1	2621.1	2671.3
32.5°	71.9	80.1	92.0	103.1	131.4	340.6	1325.7	2478.3	2784.2	2834.1
35°	63.5	70.8	81.7	90.4	108.8	268.9	1262.5	2612.9	2947.3	3013.2
37.5°	55.4	62.4	71.9	78.4	95.8	219.3	1165.9	2763.0	3156.5	3217.6
40°	47.8	54.0	63.8	68.1	90.6	168.5	1060.9	2920.4	3361.7	3417.6
42.5°	40.7	46.7	56.2	64.6	79.5	125.9	947.4	3068.1	3546.2	3604.9
45°	33.9	40.2	49.7	68.4	65.9	94.2	826.1	3166.0	3692.0	3755.8
47.5°	27.4	34.5	47.5	65.1	52.6	69.2	730.0	3258.8	3802.4	3865.4
50°	22.0	29.0	53.5	58.1	43.2	52.9	689.9	3341.9	3874.9	3935.4
52.5°	17.9	24.4	50.5	44.5	36.1	43.7	711.6	3476.5	3941.9	3979.9
55°	14.9	19.3	30.4	30.9	30.7	37.2	738.5	3669.7	4115.4	4133.3
57.5°	13.0	15.5	21.2	23.9	25.8	33.1	739.0	3947.1	4383.8	4394.9
60°	11.1	13.6	17.6	19.3	22.3	29.6	712.1	4044.0	4489.3	4526.2
62.5°	9.8	11.9	14.7	16.0	18.7	26.6	649.2	3903.7	4344.4	4407.1
65°	8.7	10.9	12.2	13.6	16.6	23.9	545.5	3623.1	4104.0	4169.4
67.5°	*7.6*	*9.5*	*10.9*	*12.2*	*14.9*	*21.2*	*401.7*	*3297.1*	*3828.0*	*3882.2*
70°	6.8	8.4	9.8	10.9	13.0	17.9	243.7	2797.8	3446.4	3468.9
72.5°	6.5	7.6	9.0	9.8	11.4	15.7	123.5	2056.0	2755.1	2791.8
75°	5.7	6.8	8.1	8.7	10.0	13.6	50.2	1350.4	1996.6	2055.5
77.5°	4.6	6.2	7.3	7.9	8.7	11.1	25.5	863.0	1401.2	1439.2
80°	1.6	4.6	6.2	6.5	7.3	8.1	16.8	472.5	812.8	829.1
82.5°	0.0	3.0	4.9	4.6	5.2	6.2	10.9	224.7	536.5	542.5
85°	0.0	1.4	3.8	3.0	2.2	4.3	3.8	49.1	281.4	293.1
87.5°	0.0	0.0	0.3	1.4	1.1	1.6	0.5	0.3	25.5	32.3
90°	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

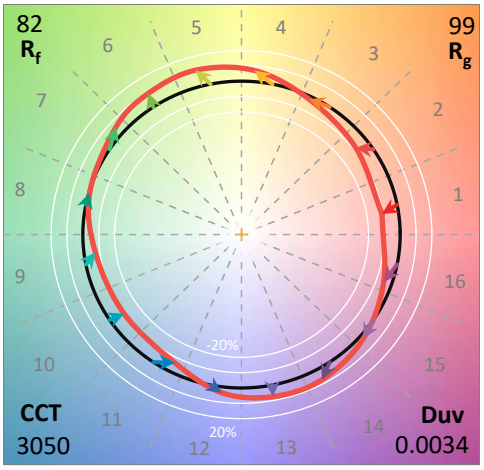
Test Information

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

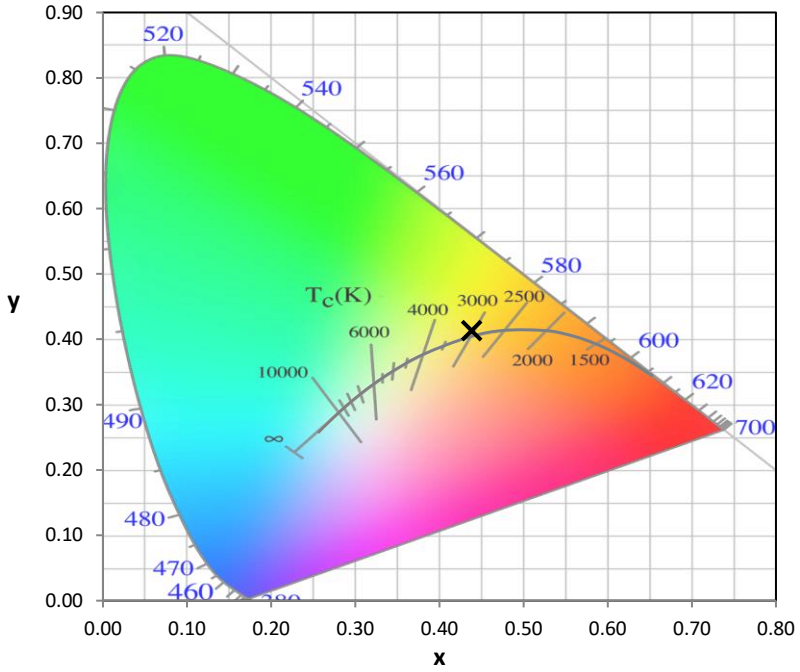
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

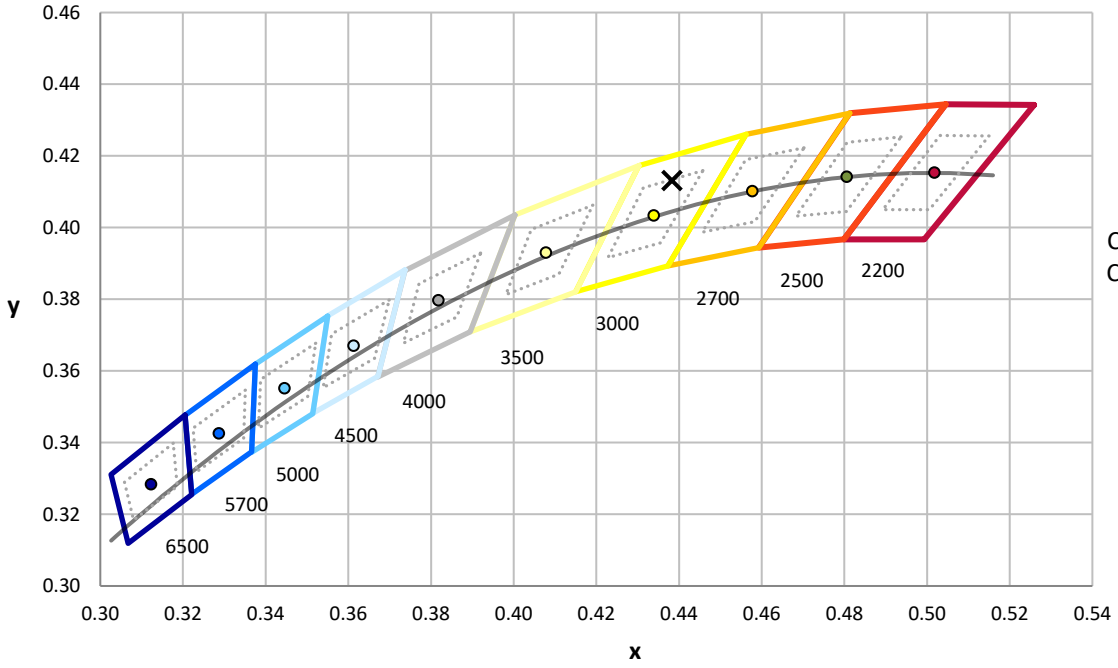
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

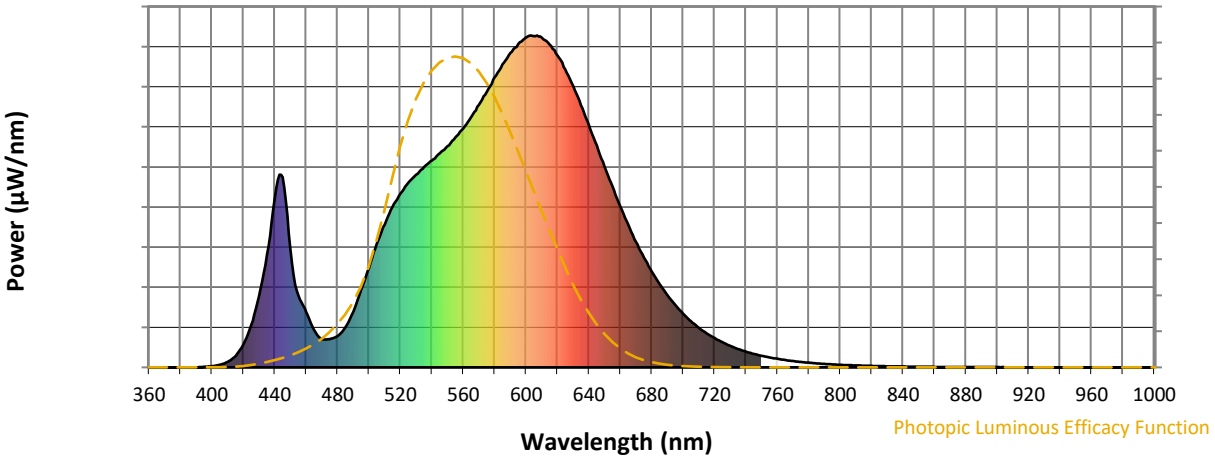


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

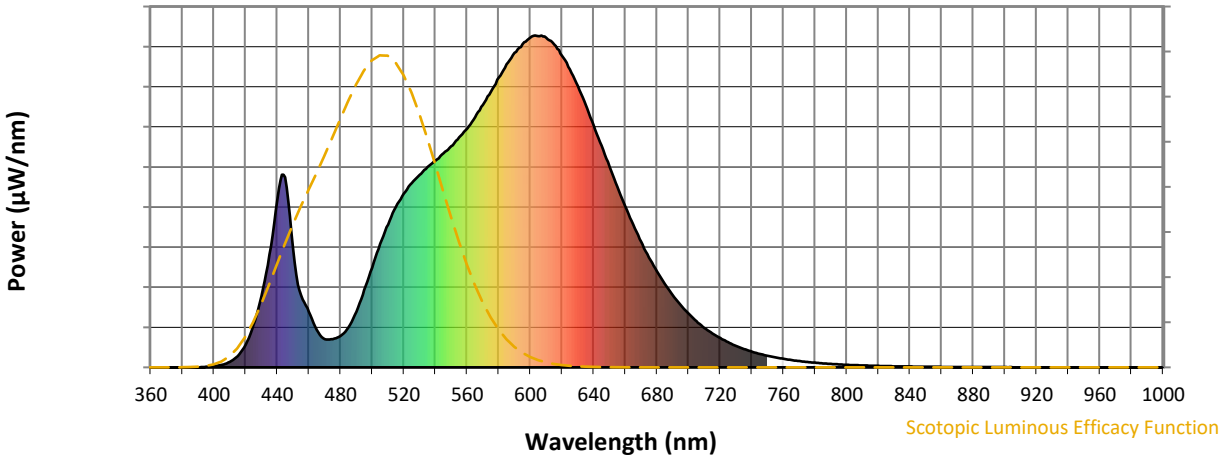


Photopic Lumens: NR

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

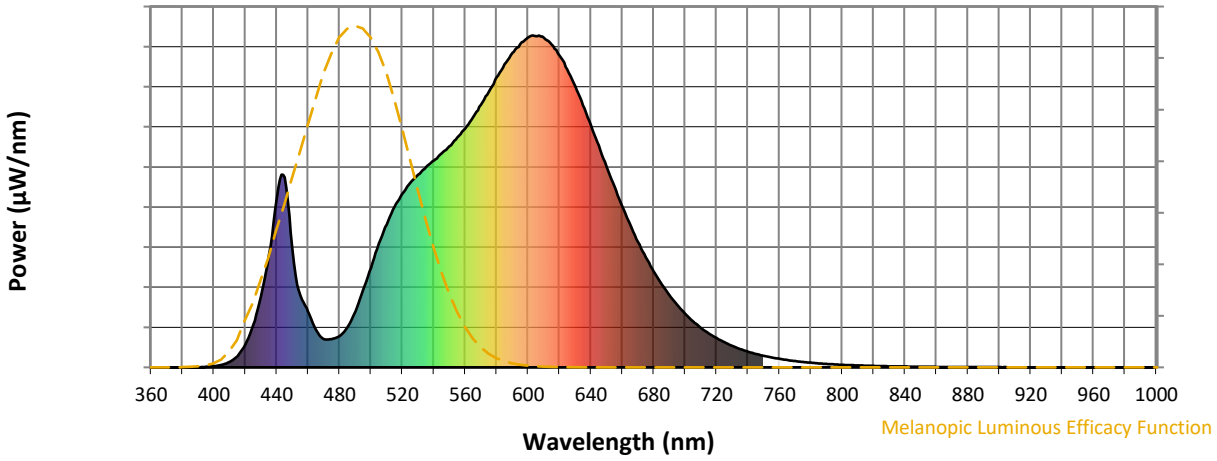


Scotopic Lumens: NR **S/P: 1.27**

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			

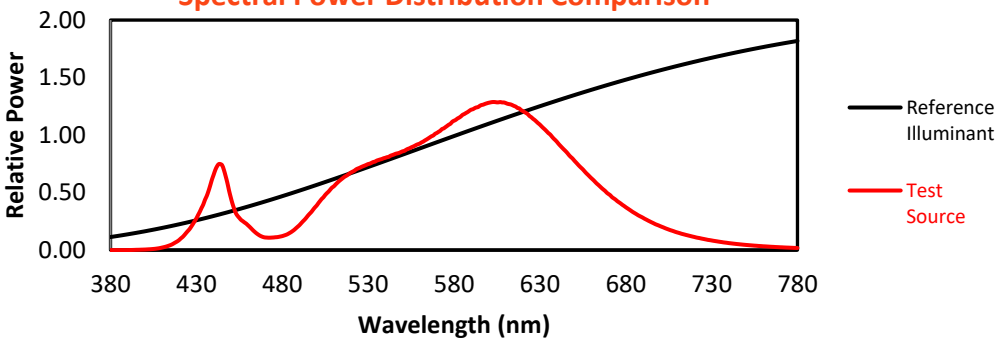
REPORT NUMBER: SP1-2408-195-9

TM-30-18

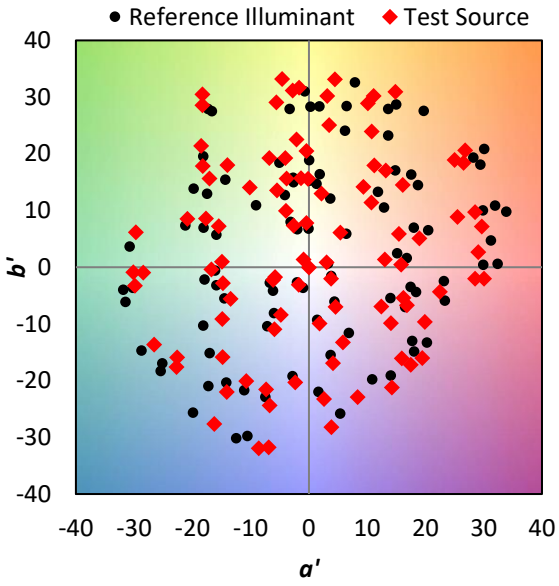
Summary

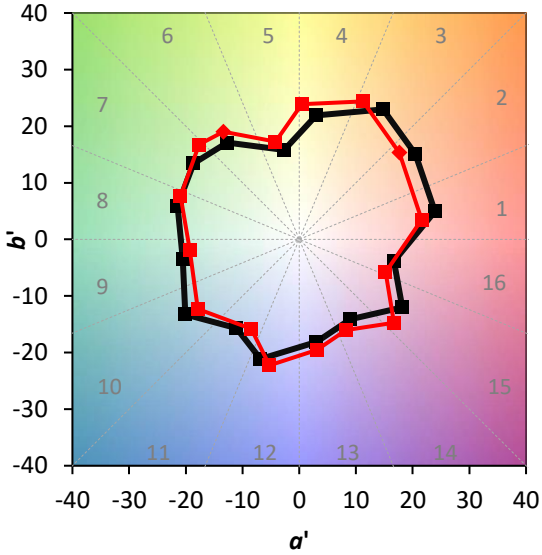
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

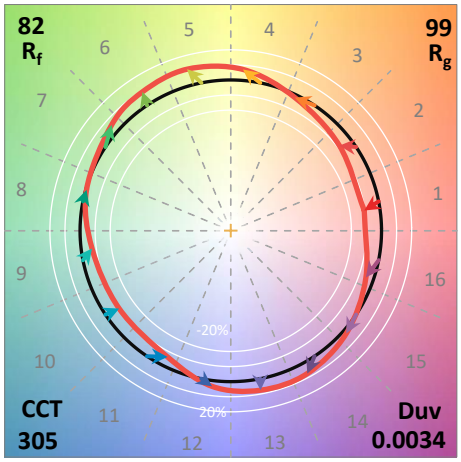
Spectral Power Distribution Comparison

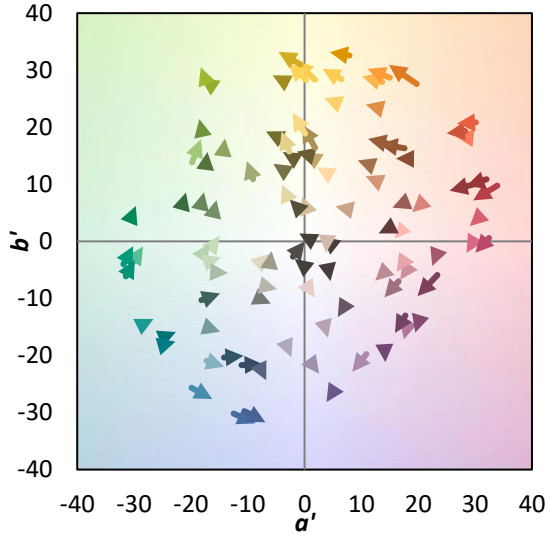


Color Vector Graphics







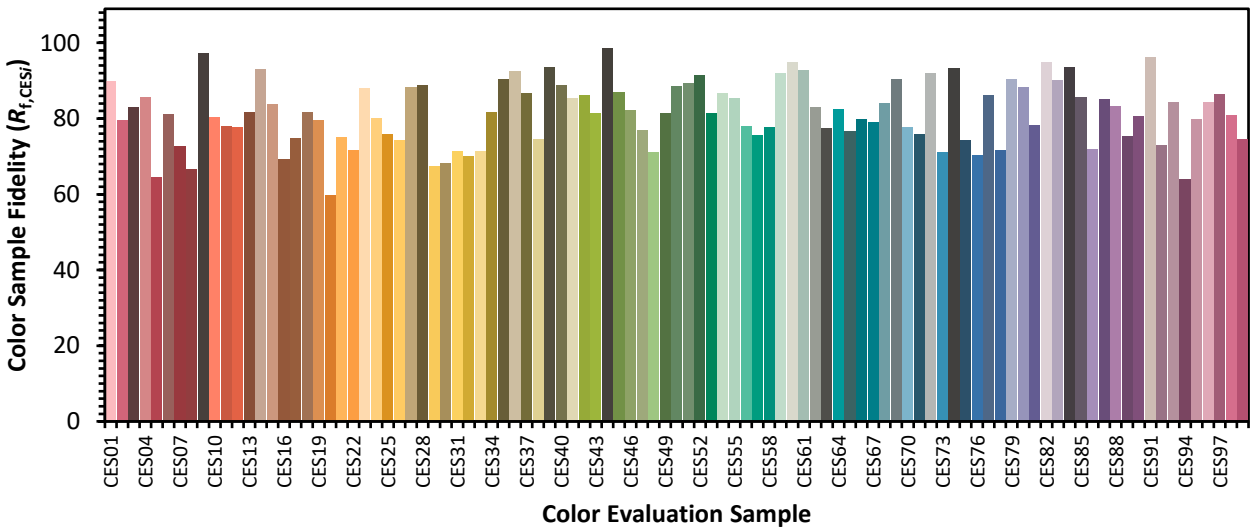


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

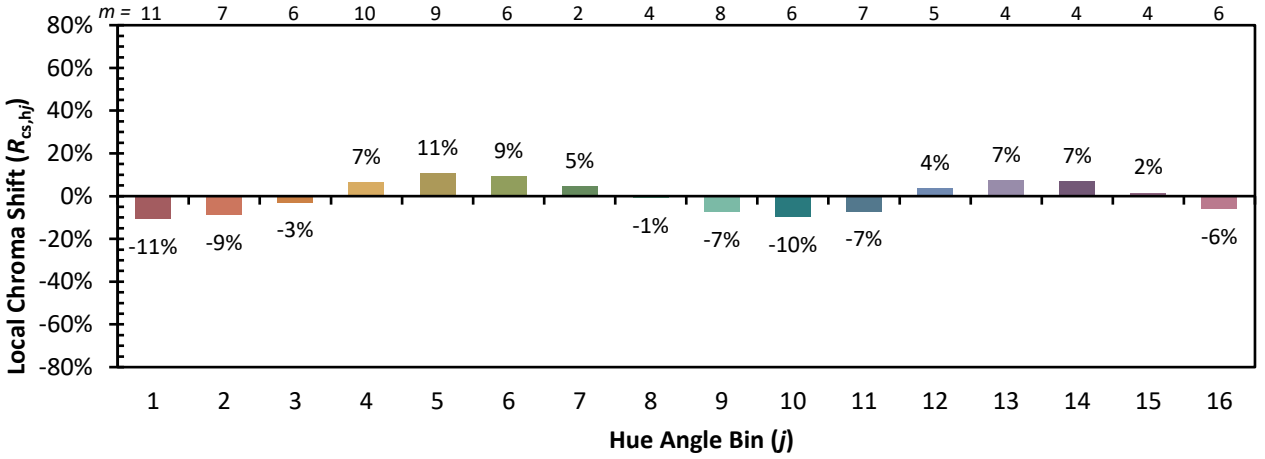
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

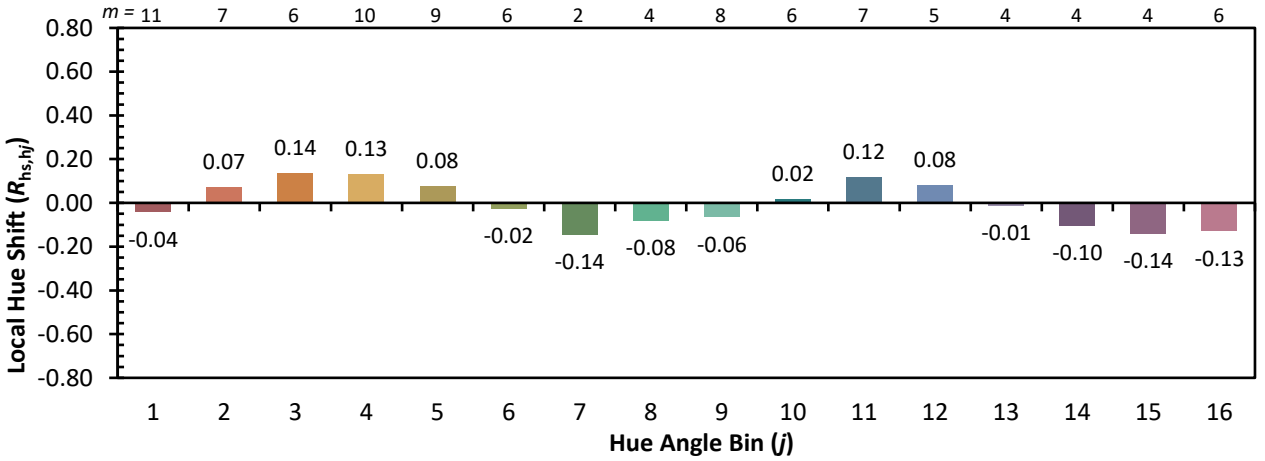


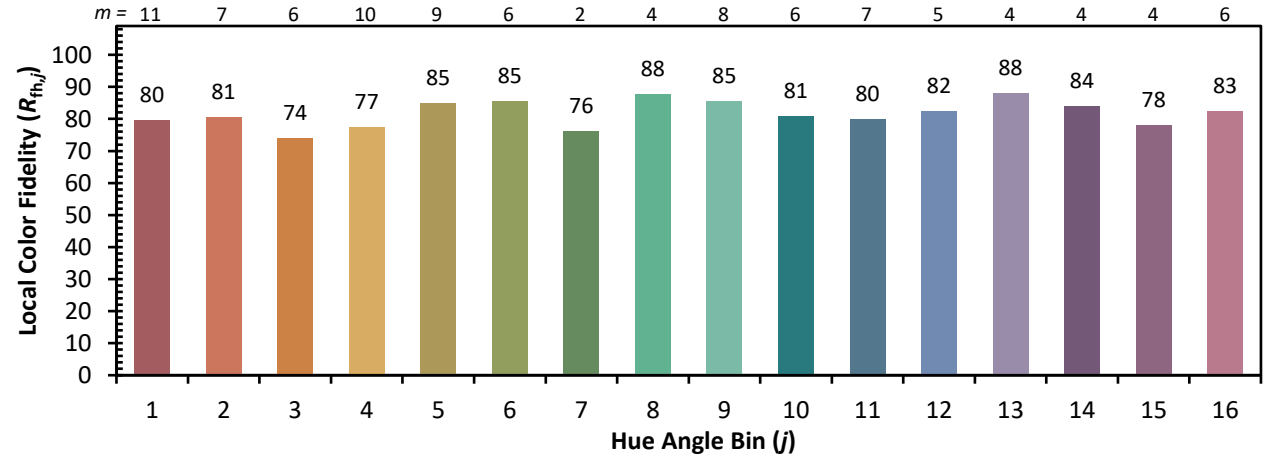
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



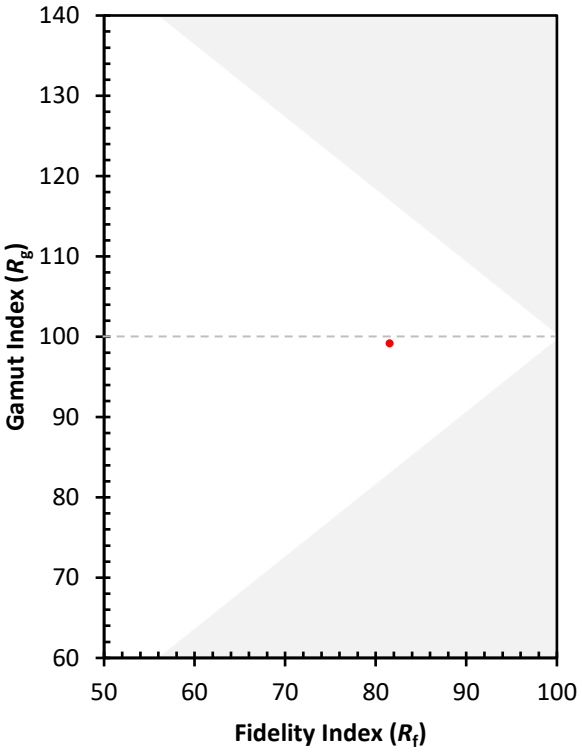


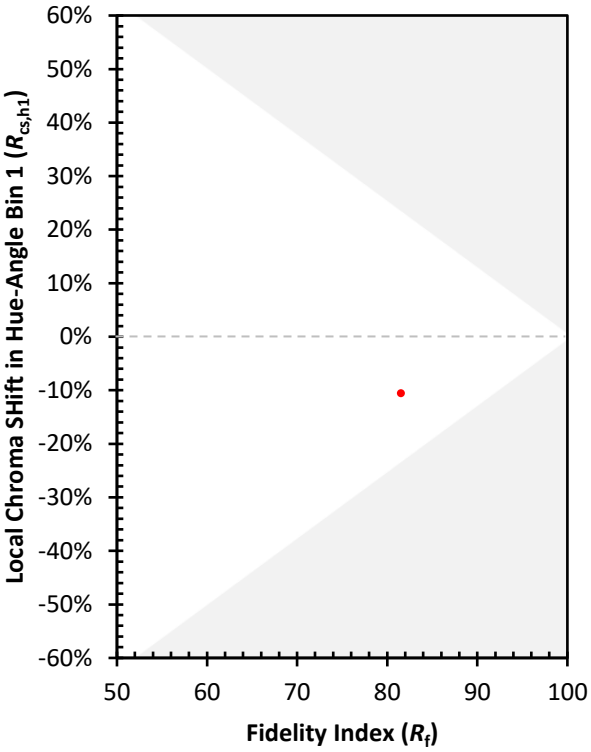


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)