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: P324333

Luminaire Tested: **GLEON-SA9C-830-U-SLL-HSS**

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:	P324333
	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:	GLEON-SA9C-830-U-SLL-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(9) 80 CRI, 3000K, 1050mA 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:	37250 lumens
Efficiency:	N/A
Efficacy:	74.4 lumens/watt
Luminous Opening:	Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B3 - U0 - G5

Input Watts (W):	501
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

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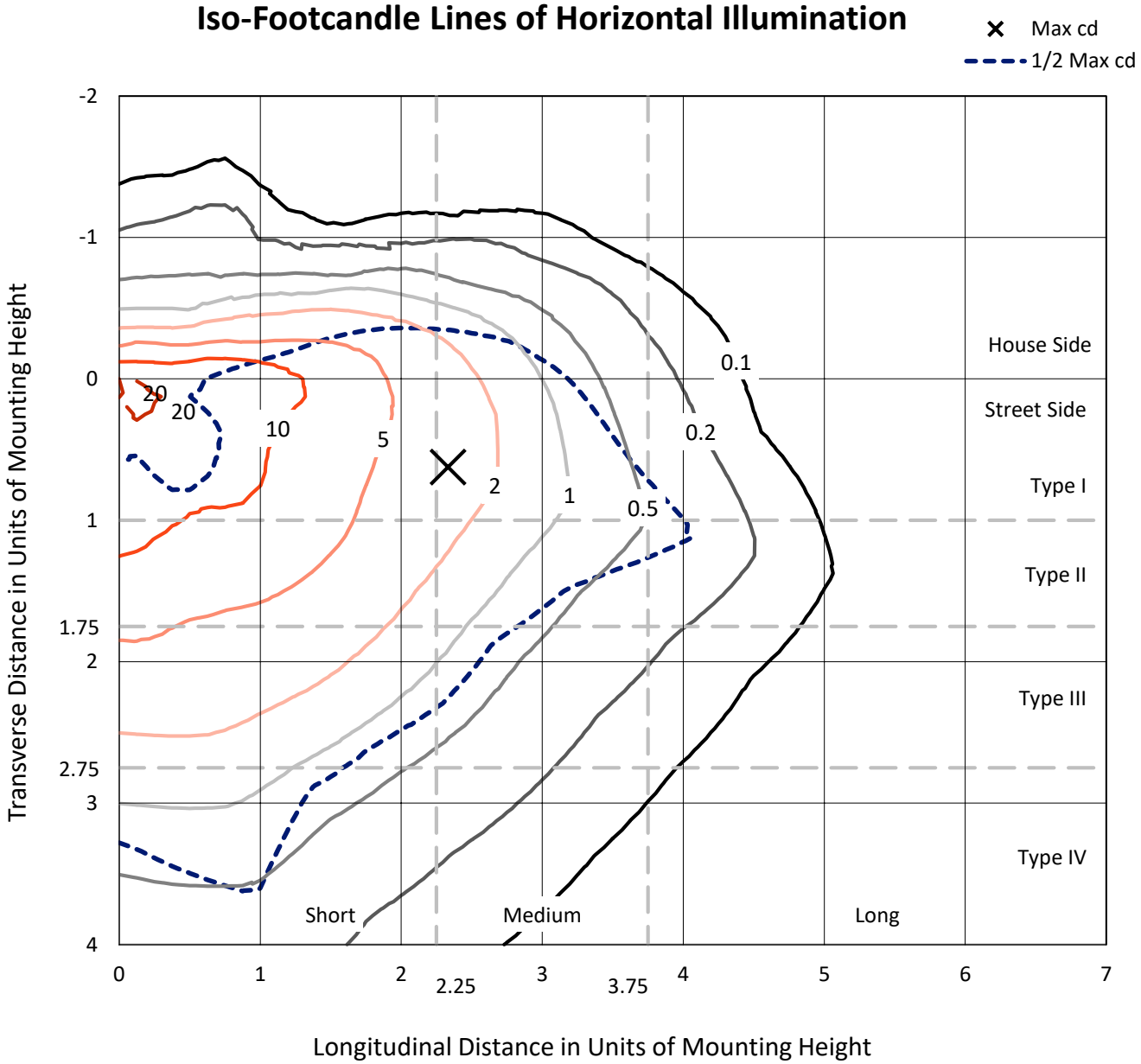
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 25.9 fc
Type III - Medium - N/A

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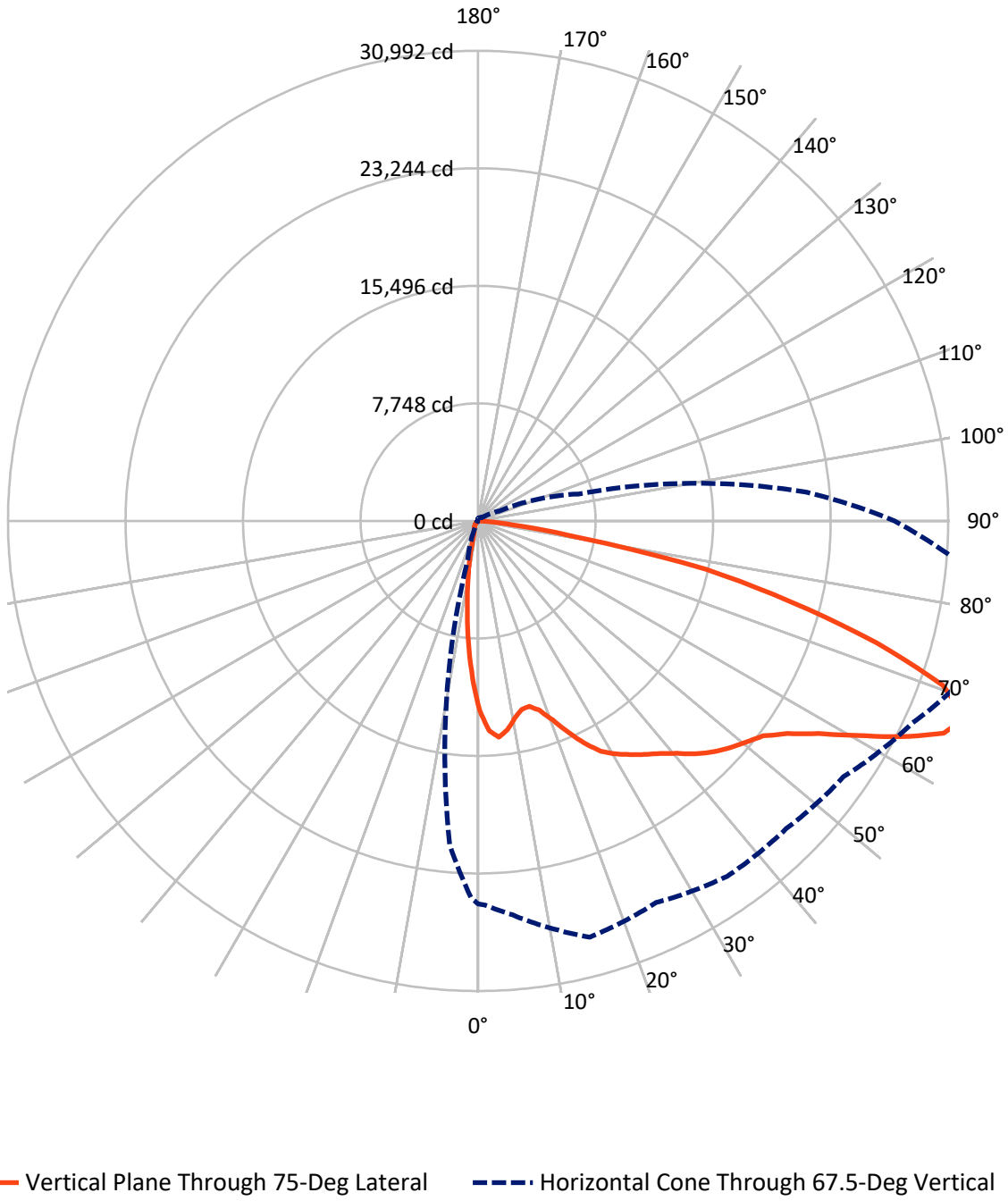
Luminous Intensity Polar Plot



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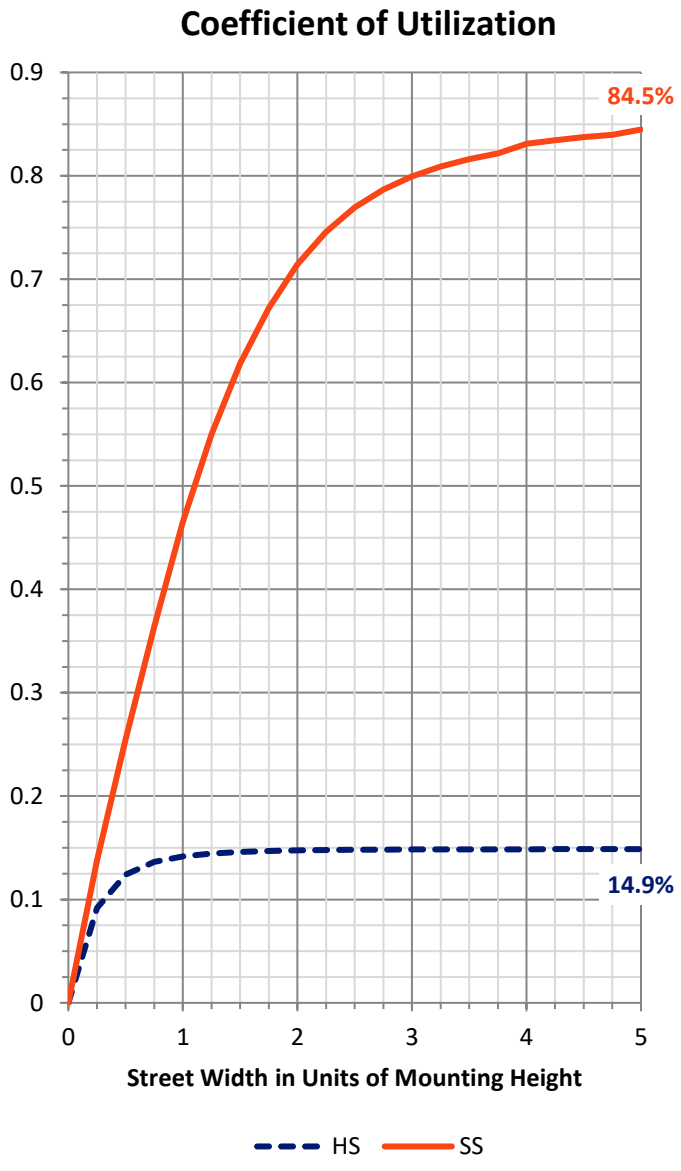
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5589.7	0.0	5589.7
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	31660.3	0.0	31660.3
	% Fixture	85.0	0.0	85.0
Total	Lumens	37250.0	0.0	37250.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	947.9	2.5
10°-20°	1866.5	5.0
20°-30°	2640.6	7.1
30°-40°	3882.4	10.4
40°-50°	5580.2	15.0
50°-60°	7855.5	21.1
60°-70°	9174.5	24.6
70°-80°	4680.5	12.6
80°-90°	621.8	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°	37250.0	100.0
0°-180°	37250.0	100.0



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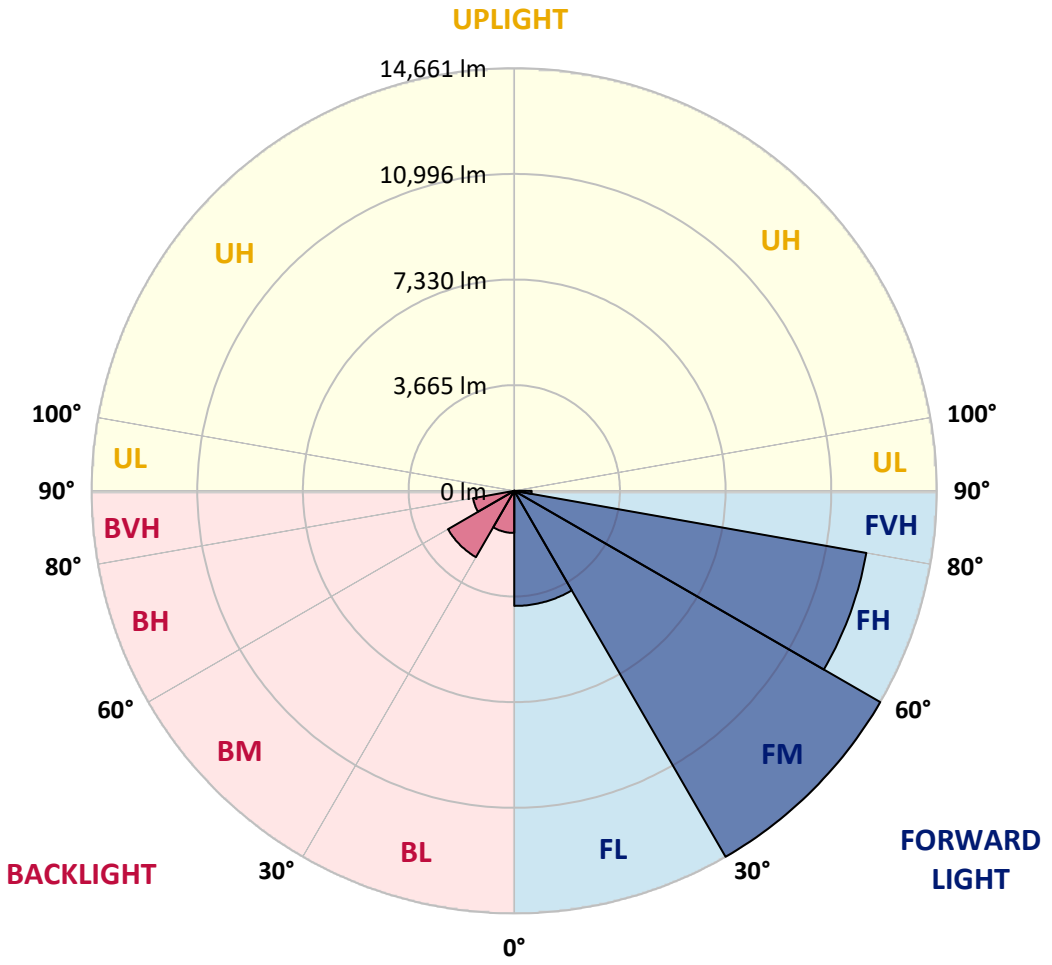
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3993.2	10.7			
FM	(30°-60°)	14660.9	39.4			
FH	(60°-80°)	12403.2	33.3			G5
FVH	(80°-90°)	602.9	1.6			G4/750
BL	(0°-30°)	1461.8	3.9	B3/2500		
BM	(30°-60°)	2657.2	7.1	B3/5000		
BH	(60°-80°)	1451.9	3.9	B3/2500		G3/2500
BVH	(80°-90°)	18.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	*12496.7*	12496.7
2.5°	13546.7	13567.8	13677.2	13931.3	14208.4	14229.6	14416.6	14224.3	14159.0	*13848.4*	13527.3
5°	13649.0	13730.2	14106.0	14852.4	15500.0	15708.3	15856.5	15478.9	15081.8	*14323.1*	13513.1
7.5°	12824.9	12960.8	13552.0	14953.0	16110.6	16622.3	16719.4	16128.2	15156.0	*13906.6*	12689.1
10°	11769.7	11925.0	12637.9	14360.1	15950.0	16827.0	16961.1	16186.5	14788.9	*13232.6*	11798.0
12.5°	10915.7	11097.4	11826.2	13693.1	15397.7	16368.2	16632.9	15990.6	14471.3	*12754.4*	11189.2
15°	10522.2	10730.4	11496.2	13262.6	14785.4	15549.5	15768.3	15491.2	14294.8	*12678.5*	11048.0
17.5°	10748.0	10973.9	11764.4	13299.6	14210.1	14536.6	14713.0	14826.0	14294.8	*13135.5*	11460.9
20°	11674.4	11918.0	12754.4	13675.5	13733.7	13612.0	13800.8	14197.8	14460.7	*14003.7*	12452.6
22.5°	12955.5	13241.4	14185.4	14319.5	13500.8	13040.2	13064.9	13687.8	14762.5	*15104.8*	13829.0
25°	14517.2	14866.6	15826.5	15279.5	13597.8	12699.7	12690.8	13267.9	15057.1	*16207.6*	15362.4
27.5°	16068.2	16452.9	17296.4	16451.2	13998.4	12637.9	12620.3	13140.8	15344.8	*17188.7*	17037.0
30°	17368.7	17742.8	18469.8	17299.9	14430.7	12782.6	12697.9	13276.7	15515.9	*17825.8*	18258.1
32.5°	18427.5	18727.5	19315.1	17884.0	14893.0	13063.2	12879.7	13640.2	15807.1	*18364.0*	19380.4
35°	19592.1	19908.0	20142.7	18439.8	15411.8	13467.3	13204.3	14217.2	16255.3	*18911.0*	20610.3
37.5°	20920.8	21234.9	21206.7	18948.0	16070.0	14136.0	13968.4	15131.3	16952.3	*19452.7*	21983.1
40°	22221.3	22542.5	22313.1	19503.9	16842.9	15238.9	15115.4	16504.1	17885.8	*20146.2*	23592.4
42.5°	23438.9	23786.5	23296.0	20029.7	17764.0	16629.4	16841.1	18272.2	19053.9	*21000.2*	24979.4
45°	24420.0	24774.7	24120.0	20541.4	18734.5	18316.3	18953.3	20230.9	20458.5	*21721.9*	25916.3
47.5°	25132.9	25468.1	24691.7	21053.2	19976.8	20379.1	21489.0	22284.8	21727.2	*22348.4*	26581.6
50°	25588.1	25849.3	24859.4	21693.7	21607.3	22786.0	24130.6	24518.8	22921.9	*22913.0*	27389.8
52.5°	25877.5	25995.8	24982.9	22362.5	23308.3	25406.4	26717.5	26839.2	24151.8	*23534.2*	28478.5
55°	26874.5	26969.8	25858.1	23172.4	24714.7	27702.1	29057.3	28944.4	25544.0	*24750.0*	29763.1
57.5°	28575.6	28676.1	27666.8	24337.1	25852.8	29120.8	30753.1	30956.0	27176.3	*26458.1*	31139.5
60°	29429.6	29616.7	29256.7	25812.2	26955.7	30027.8	31908.9	32556.5	29216.1	*28709.7*	32473.5
62.5°	28655.0	28926.7	29449.0	27448.0	28051.5	30527.2	32268.8	33129.9	31305.4	*31333.6*	33295.8
65°	27109.2	27326.2	28212.1	28344.4	28686.7	30465.4	31379.5	32328.8	32584.7	*33744.0*	33251.7
67.5°	*25242.3*	*25323.5*	*26075.2*	*28415.0*	*27765.6*	*28609.1*	*28707.9*	*29410.2*	*31573.6*	*34598.1*	*31915.9*
70°	22554.8	22598.9	23255.4	26052.2	23860.6	24045.9	23899.4	24042.4	27144.5	*32517.6*	28543.8
72.5°	18152.2	18263.4	19196.8	21635.5	17382.9	16848.2	17998.7	17935.2	20904.9	*27472.7*	21199.6
75°	13364.9	13557.2	14967.1	17427.0	12200.3	11035.7	11875.6	12099.7	14861.3	*21250.8*	13257.3
77.5°	9357.6	9500.5	10866.3	12810.8	8829.9	7891.2	7587.7	7854.1	9809.3	*15373.0*	6678.9
80°	5390.8	5443.7	6315.4	7397.1	5950.2	6807.7	6167.2	6350.7	5877.8	*6839.5*	2872.7
82.5°	3527.4	3536.2	3876.8	4402.6	3705.6	4305.6	3186.8	4074.4	3615.6	*2747.4*	935.2
85°	1905.7	1916.3	2248.1	3125.1	2098.1	1185.8	697.0	1431.1	2235.7	*630.0*	255.9
87.5°	210.0	192.3	677.6	1136.4	582.3	107.6	37.1	160.6	358.2	*40.6*	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7
2.5°	13363.1	13216.7	12851.4	12465.0	12154.4	11863.3	11570.3	11212.1	10935.1	10878.6	10786.9
5°	13077.3	12613.2	11847.4	11078.0	10458.7	9676.9	9181.1	8794.7	8417.0	8394.1	8318.2
7.5°	12078.5	11468.0	10389.8	9325.8	8454.1	7709.4	6957.7	6454.8	6059.6	5920.2	5837.2
10°	11118.6	10432.2	9085.8	7871.8	7093.6	6435.4	5906.0	5380.2	4903.8	4575.5	4427.3
12.5°	10448.1	9689.3	8205.3	7158.9	6601.3	5976.6	5330.8	4674.4	4125.6	3730.3	3488.6
15°	10188.7	9378.7	7910.6	6876.6	6188.4	5397.8	4572.0	3822.1	3213.3	2855.1	2638.0
17.5°	10497.5	9555.2	7887.7	6532.5	5570.8	4587.9	3675.6	2789.8	2216.3	1944.6	1805.2
20°	11280.9	10116.3	7878.8	6110.7	4836.7	3628.0	2489.8	1835.2	1487.5	1335.8	1270.5
22.5°	12389.1	10832.7	7949.4	5694.3	4072.6	2592.2	1718.7	1348.1	1169.9	1088.7	1051.7
25°	13814.9	11838.6	8148.8	5316.7	3354.5	1934.0	1339.3	1129.3	1004.0	940.5	914.1
27.5°	15334.2	12996.1	8459.4	4988.5	2770.4	1542.2	1147.0	967.0	877.0	832.9	808.2
30°	16587.0	14337.2	8773.5	4623.2	2346.9	1344.6	1049.9	882.3	778.2	749.9	727.0
32.5°	17682.8	15351.8	8995.8	4293.2	2069.8	1194.6	949.3	788.8	718.2	663.5	638.8
35°	18817.5	16197.1	8988.8	4062.1	1879.3	1081.7	864.6	705.8	621.1	557.6	538.2
37.5°	20045.6	17151.7	8835.2	3864.4	1796.3	991.7	817.0	661.7	577.0	513.5	488.8
40°	21483.7	18154.0	8678.2	3679.1	1773.4	919.3	783.5	626.4	536.4	474.7	450.0
42.5°	22884.8	19057.4	8540.6	3541.5	1674.6	917.6	753.5	600.0	504.7	444.7	416.4
45°	24005.3	19899.1	8514.1	3458.6	1570.5	949.3	737.6	582.3	480.0	420.0	393.5
47.5°	24937.0	20813.2	8683.5	3400.3	1471.7	866.4	776.4	570.0	457.0	398.8	368.8
50°	26045.2	21935.5	9082.3	3305.1	1367.5	779.9	889.3	573.5	437.6	377.6	345.9
52.5°	27590.9	23488.3	9668.1	3144.5	1224.6	700.5	875.2	577.0	416.4	354.7	322.9
55°	29323.7	25427.6	10298.1	2878.0	1025.2	596.4	749.9	552.3	375.9	330.0	300.0
57.5°	31144.8	27186.8	10672.2	2560.4	815.2	515.3	600.0	502.9	331.7	296.4	277.0
60°	31430.7	27855.6	10501.0	2170.4	647.6	448.2	444.7	511.7	296.4	261.2	247.0
62.5°	30719.5	27015.7	9673.4	1822.8	541.7	393.5	365.3	446.4	268.2	232.9	218.8
65°	29352.0	24744.7	8332.3	1642.8	502.9	337.0	303.5	314.1	234.7	202.9	190.6
67.5°	*27449.8*	*21713.1*	*6841.3*	*1540.5*	*497.6*	*289.4*	*259.4*	*238.2*	*202.9*	*176.5*	*165.9*
70°	23560.6	18088.7	5457.8	1484.0	483.5	243.5	218.8	194.1	169.4	150.0	141.2
72.5°	17340.5	12817.9	4245.6	1422.2	487.0	194.1	190.6	160.6	135.9	116.5	112.9
75°	10019.3	7323.0	2784.5	1152.3	464.1	150.0	158.8	112.9	95.3	81.2	81.2
77.5°	5339.6	4466.1	1060.5	480.0	169.4	95.3	90.0	67.1	60.0	49.4	47.6
80°	2327.5	1965.7	319.4	134.1	93.5	51.2	33.5	30.0	26.5	21.2	19.4
82.5°	824.1	711.1	104.1	65.3	40.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	187.0	134.1	0.0	15.9	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

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7
2.5°	10599.8	10561.0	10331.6	10340.4	10381.0	10439.2	10301.6	10365.1	10536.3	10700.4	10762.2
5°	8196.5	8205.3	8065.9	8152.3	8230.0	8282.9	8060.6	8064.1	8200.0	8385.3	8482.3
7.5°	5775.5	5761.3	5768.4	5974.9	6121.3	6015.4	6098.4	5810.8	5828.4	5960.7	5861.9
10°	4293.2	4099.1	3989.7	4145.0	4305.6	4247.3	4104.4	4010.9	4076.2	4222.6	4212.0
12.5°	3373.9	3095.1	2931.0	2819.8	2952.1	2842.7	2839.2	2758.0	2669.8	2685.7	2920.4
15°	2537.5	2334.5	2140.4	1962.2	1958.7	1921.6	1732.8	1521.1	1503.4	1514.0	1635.8
17.5°	1745.2	1676.3	1596.9	1443.4	1402.8	1247.6	1064.0	979.3	937.0	956.4	997.0
20°	1226.4	1199.9	1208.7	1125.8	1067.6	919.3	811.7	778.2	771.1	790.5	809.9
22.5°	1016.4	968.8	963.5	926.4	868.2	760.5	702.3	682.9	674.1	691.7	705.8
25°	889.3	841.7	822.3	799.4	737.6	663.5	628.2	610.5	601.7	612.3	621.1
27.5°	783.5	739.4	721.7	705.8	645.8	592.9	564.7	548.8	541.7	545.3	554.1
30°	704.1	665.2	642.3	622.9	571.7	534.7	510.0	494.1	487.0	487.0	495.8
32.5°	621.1	600.0	578.8	554.1	506.4	481.7	457.0	439.4	432.3	434.1	441.1
35°	517.0	510.0	515.3	492.3	451.7	430.6	405.9	386.4	381.1	382.9	390.0
37.5°	458.8	427.0	446.4	434.1	411.1	382.9	351.2	333.5	324.7	330.0	333.5
40°	421.7	382.9	368.8	381.1	377.6	331.7	303.5	285.9	278.8	280.6	284.1
42.5°	390.0	344.1	312.3	310.6	331.7	289.4	259.4	243.5	234.7	234.7	238.2
45°	360.0	310.6	271.7	241.7	278.8	245.3	217.0	202.9	192.3	192.3	194.1
47.5°	337.0	282.3	236.5	197.6	210.0	201.2	178.2	164.1	153.5	153.5	155.3
50°	315.9	254.1	204.7	165.9	157.0	165.9	144.7	128.8	121.8	120.0	123.5
52.5°	292.9	225.9	174.7	141.2	123.5	125.3	112.9	102.3	93.5	93.5	97.1
55°	270.0	202.9	151.8	120.0	102.3	93.5	90.0	82.9	75.9	75.9	79.4
57.5°	247.0	178.2	128.8	98.8	81.2	74.1	74.1	68.8	63.5	63.5	67.1
60°	225.9	153.5	105.9	81.2	63.5	61.8	63.5	58.2	54.7	54.7	58.2
62.5°	201.2	130.6	86.5	67.1	51.2	49.4	54.7	51.2	47.6	47.6	51.2
65°	171.2	111.2	68.8	51.2	38.8	38.8	45.9	42.3	38.8	38.8	42.3
67.5°	*144.7*	*93.5*	*52.9*	*37.1*	*28.2*	*30.0*	*38.8*	*35.3*	*33.5*	*33.5*	*37.1*
70°	120.0	72.3	37.1	22.9	15.9	22.9	30.0	30.0	30.0	30.0	33.5
72.5°	90.0	49.4	21.2	8.8	7.1	15.9	24.7	28.2	26.5	26.5	31.8
75°	58.2	28.2	7.1	0.0	0.0	8.8	19.4	22.9	22.9	21.2	26.5
77.5°	33.5	8.8	0.0	0.0	0.0	0.0	12.4	10.6	8.8	7.1	12.4
80°	8.8	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: P324333
CATALOG NUMBER: GLEON-SA9C-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7	12496.7
2.5°	11011.0	11219.2	11512.1	11822.7	12300.9	12680.3	13052.6	13372.0	13495.5	13546.7
5°	8715.2	9020.5	9449.3	9999.9	10862.7	11639.2	12426.2	13218.5	13562.5	13649.0
7.5°	6253.7	6643.6	7188.9	7878.8	8889.9	9895.8	10995.1	12157.9	12690.8	12824.9
10°	4628.5	5104.9	5729.6	6456.6	7421.8	8455.9	9654.0	10982.7	11591.5	11769.7
12.5°	3283.9	3927.9	4764.4	5648.4	6484.8	7407.7	8620.0	10084.6	10723.3	10915.7
15°	1928.7	2551.6	3541.5	4725.5	5796.6	6731.9	7963.5	9624.0	10328.1	10522.2
17.5°	1106.4	1417.0	2165.1	3485.0	4939.1	6234.3	7757.1	9738.7	10568.1	10748.0
20°	845.2	944.0	1247.6	2244.5	3936.8	5745.5	7757.1	10388.1	11409.8	11674.4
22.5°	739.4	811.7	935.2	1339.3	2897.4	5221.4	7847.1	11326.8	12662.6	12955.5
25°	656.4	721.7	827.6	1007.6	1976.3	4598.5	8060.6	12479.1	14137.8	14517.2
27.5°	587.6	649.4	744.7	882.3	1351.7	3846.8	8348.2	13830.8	15764.7	16068.2
30°	525.8	584.1	670.5	767.6	1042.9	2994.5	8593.5	15104.8	17042.3	17368.7
32.5°	467.6	520.6	598.2	670.5	854.1	2214.5	8620.0	16114.1	18102.8	18427.5
35°	412.9	460.6	531.1	587.6	707.6	1748.7	8208.8	16989.4	19163.3	19592.1
37.5°	360.0	405.9	467.6	510.0	622.9	1425.8	7580.6	17965.2	20523.8	20920.8
40°	310.6	351.2	414.7	442.9	589.4	1095.8	6897.7	18988.6	21857.8	22221.3
42.5°	264.7	303.5	365.3	420.0	517.0	818.8	6160.1	19948.5	23057.7	23438.9
45°	220.6	261.2	322.9	444.7	428.8	612.3	5371.4	20585.6	24005.3	24420.0
47.5°	178.2	224.1	308.8	423.5	342.3	450.0	4746.7	21189.0	24723.5	25132.9
50°	142.9	188.8	347.6	377.6	280.6	344.1	4485.6	21729.0	25194.6	25588.1
52.5°	116.5	158.8	328.2	289.4	234.7	284.1	4626.7	22604.2	25630.5	25877.5
55°	97.1	125.3	197.6	201.2	199.4	241.7	4801.4	23860.6	26758.1	26874.5
57.5°	84.7	100.6	137.6	155.3	167.6	215.3	4804.9	25664.0	28503.2	28575.6
60°	72.3	88.2	114.7	125.3	144.7	192.3	4630.3	26294.0	29189.6	29429.6
62.5°	63.5	77.6	95.3	104.1	121.8	172.9	4220.9	25381.7	28247.4	28655.0
65°	56.5	70.6	79.4	88.2	107.6	155.3	3546.8	23557.1	26683.9	27109.2
67.5°	*49.4*	*61.8*	*70.6*	*79.4*	*97.1*	*137.6*	*2611.6*	*21437.9*	*24889.4*	*25242.3*
70°	44.1	54.7	63.5	70.6	84.7	116.5	1584.6	18191.0	22408.4	22554.8
72.5°	42.3	49.4	58.2	63.5	74.1	102.3	802.9	13368.4	17914.0	18152.2
75°	37.1	44.1	52.9	56.5	65.3	88.2	326.4	8780.5	12982.0	13364.9
77.5°	30.0	40.6	47.6	51.2	56.5	72.3	165.9	5611.4	9110.5	9357.6
80°	10.6	30.0	40.6	42.3	47.6	52.9	109.4	3072.1	5284.9	5390.8
82.5°	0.0	19.4	31.8	30.0	33.5	40.6	70.6	1461.1	3488.6	3527.4
85°	0.0	8.8	24.7	19.4	14.1	28.2	24.7	319.4	1829.9	1905.7
87.5°	0.0	0.0	1.8	8.8	7.1	10.6	3.5	1.8	165.9	210.0
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

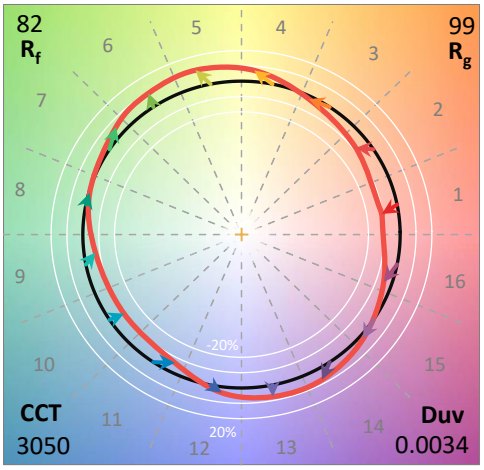
Test Information

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

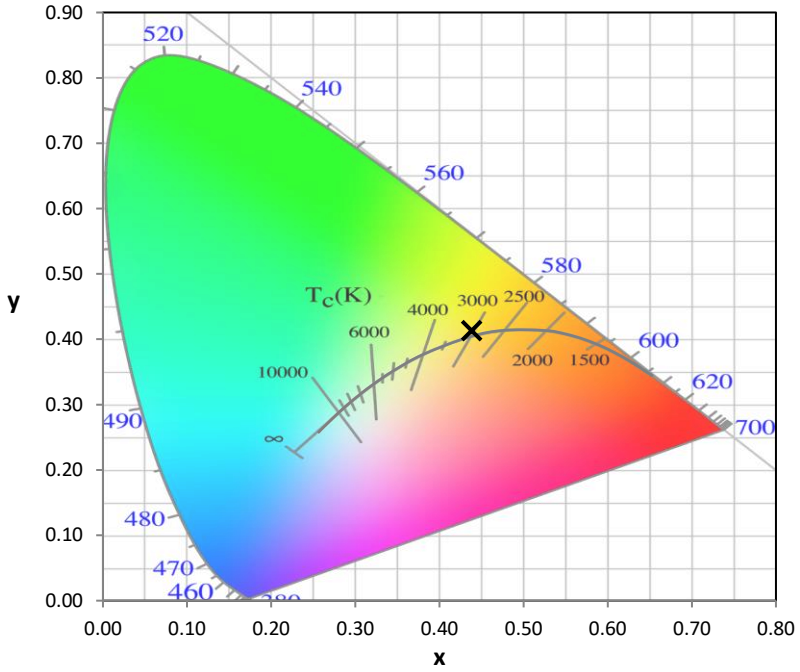
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

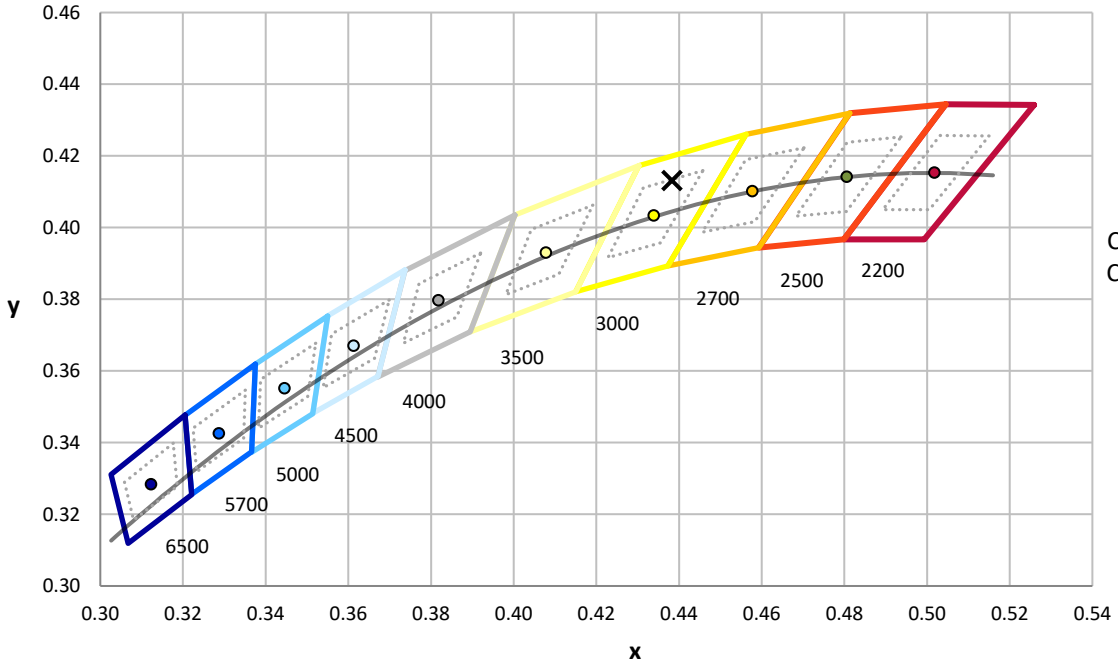
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

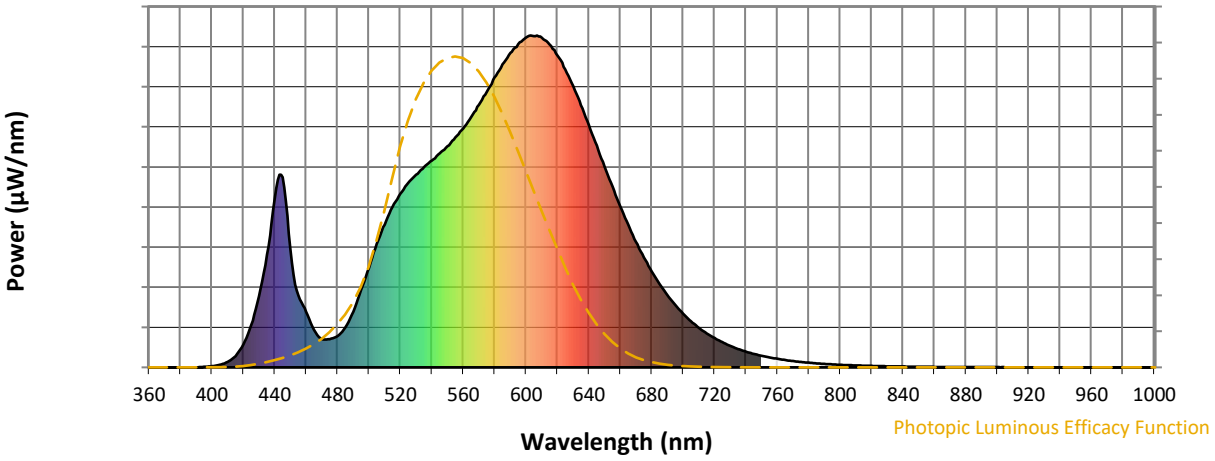


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

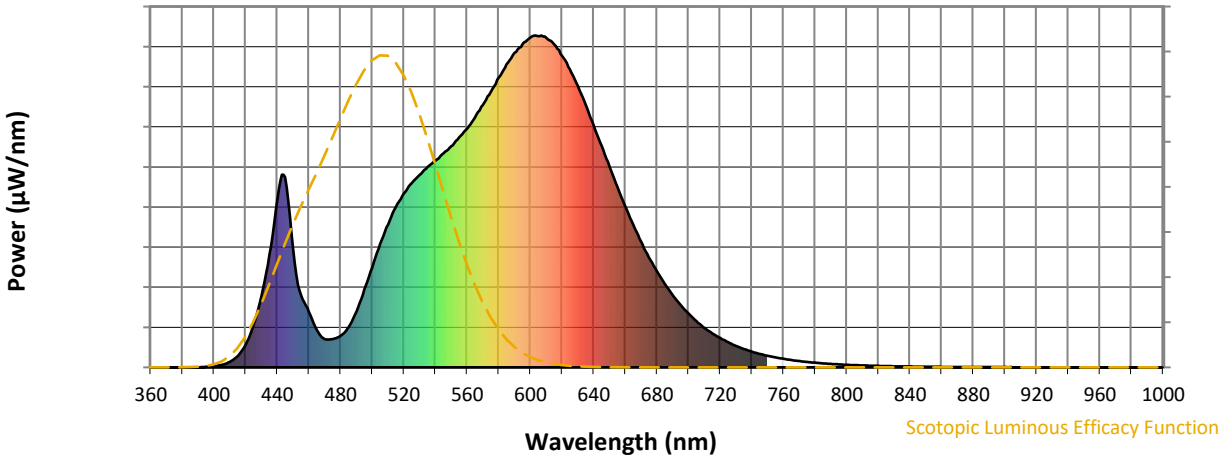


Photopic Lumens: NR

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

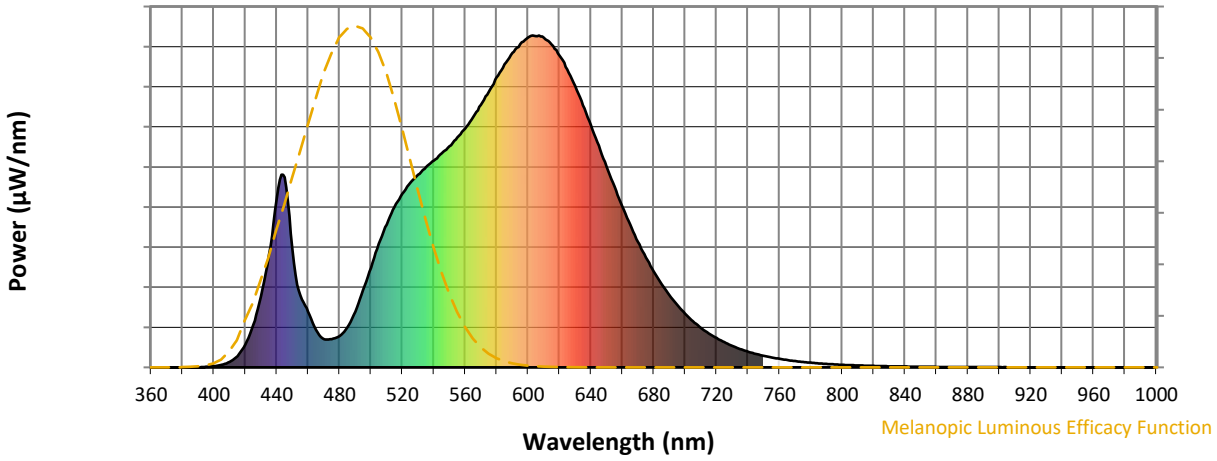


Scotopic Lumens: NR **S/P: 1.27**

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			

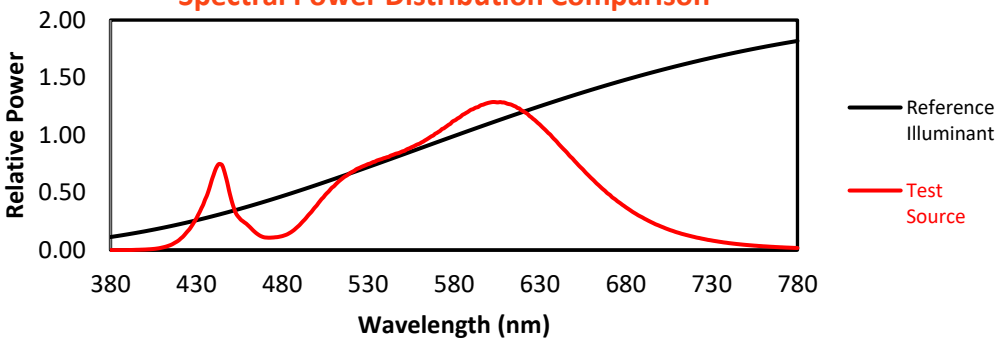
REPORT NUMBER: SP1-2408-195-9

TM-30-18

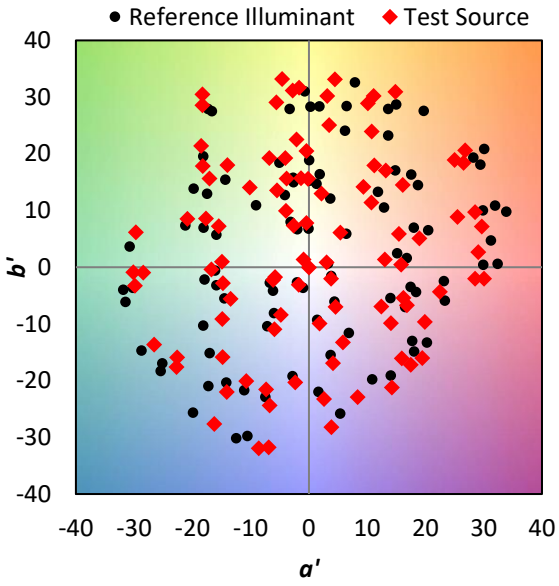
Summary

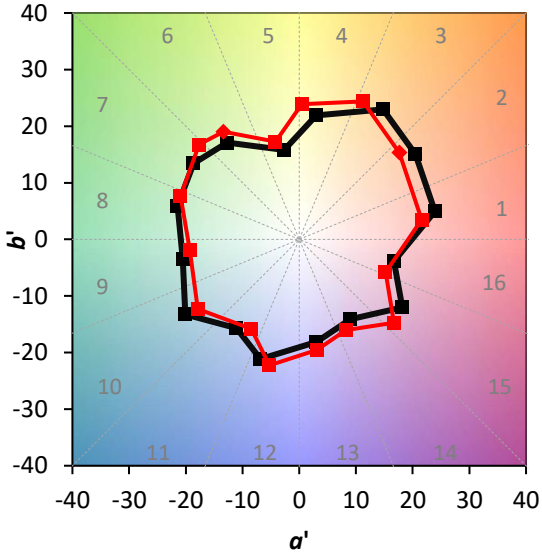
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

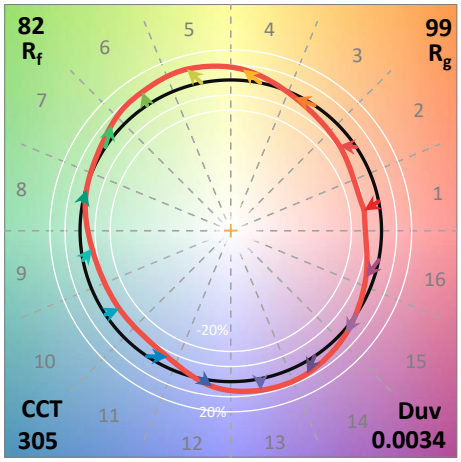
Spectral Power Distribution Comparison

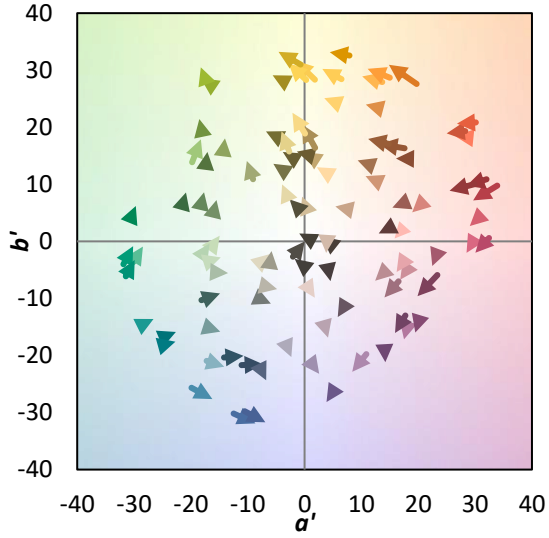


Color Vector Graphics







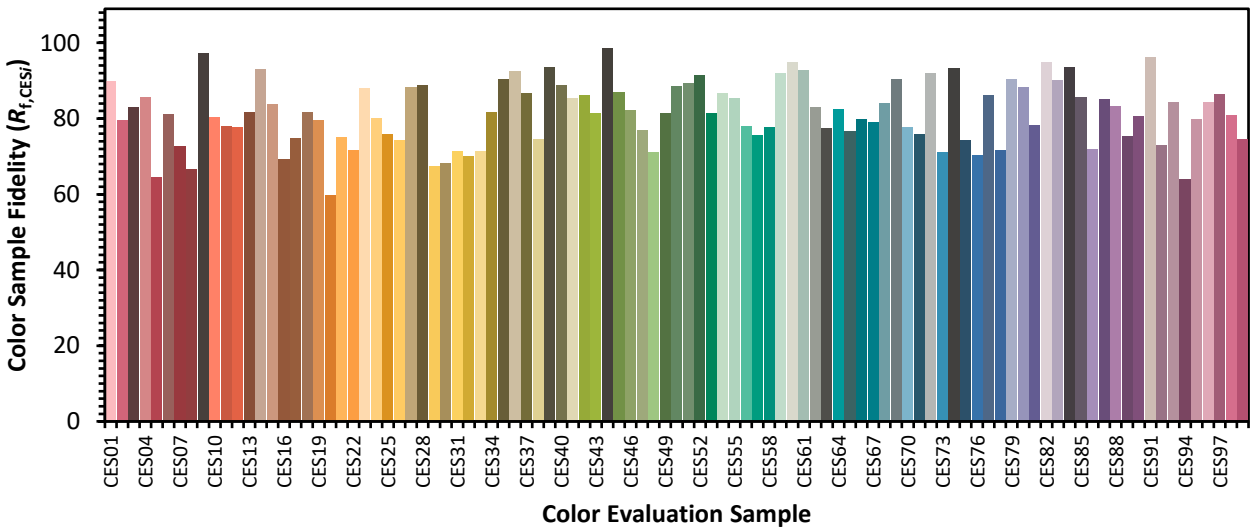


REPORT NUMBER: SP1-2408-195-9

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	



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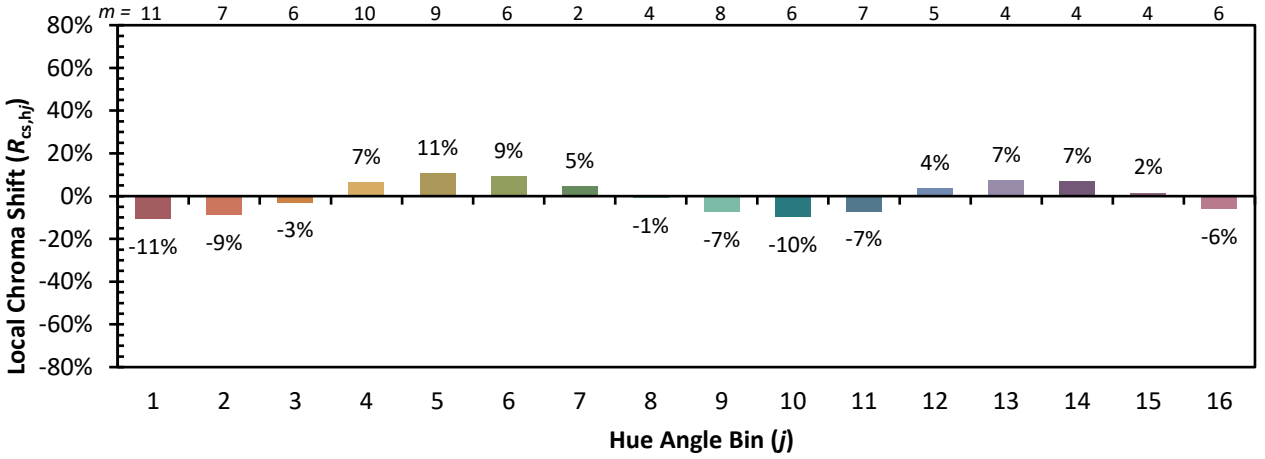
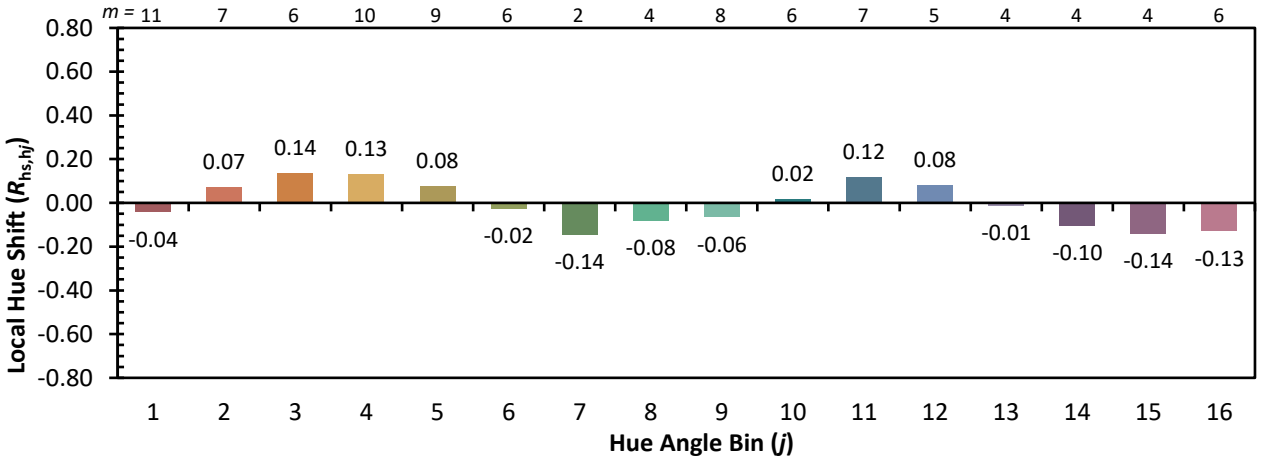
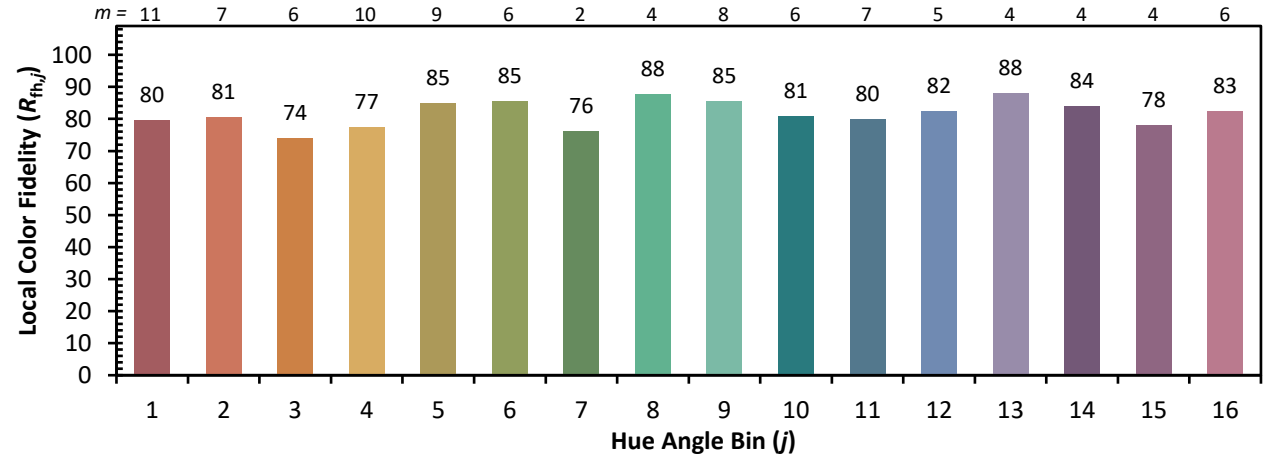
Color Rendition by Hue-Angle Bin







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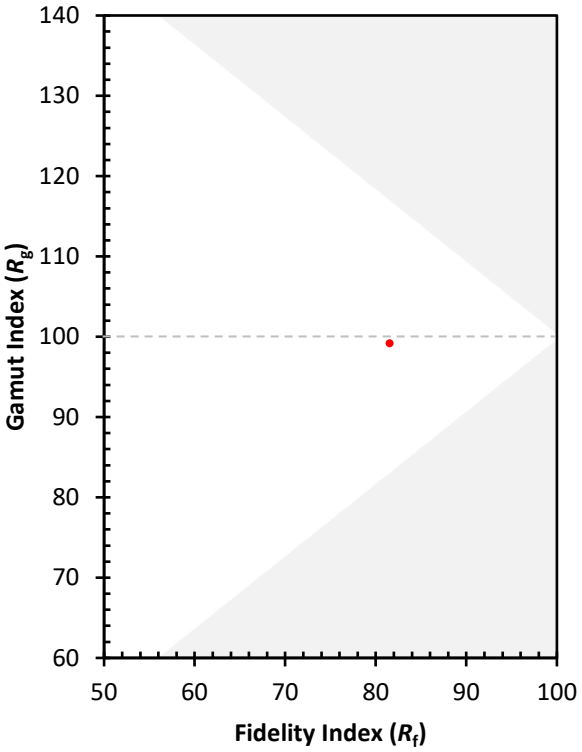
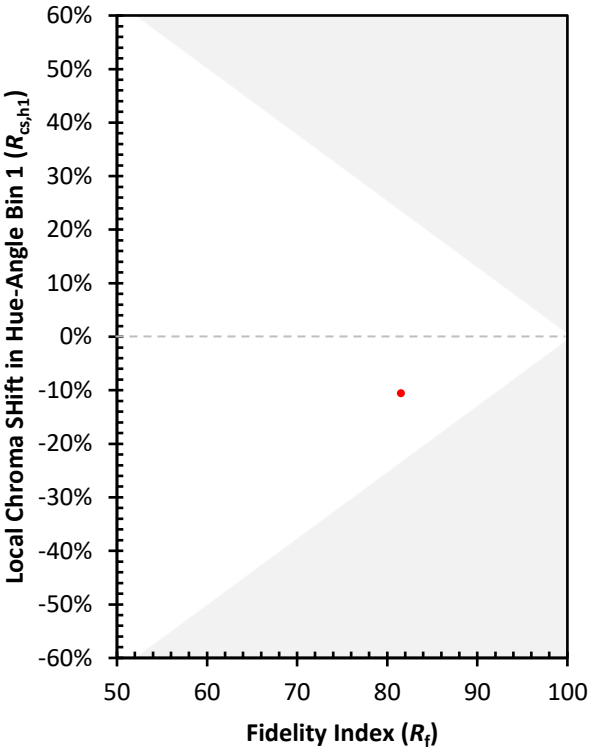
Measure Comparisons





(END OF REPORT)