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: P324651

Luminaire Tested: **GLEON-SA7C-830-U-SLR-HSS**

Issue Date: 3/3/2020

Report Generated By E0585644

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P324651
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-28)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA7C-830-U-SLR-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(7) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	29471 lumens
Efficiency:	N/A
Efficacy:	75.4 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type IV - Medium
BUG Rating:	B3 - U0 - G4

Input Watts (W):	391
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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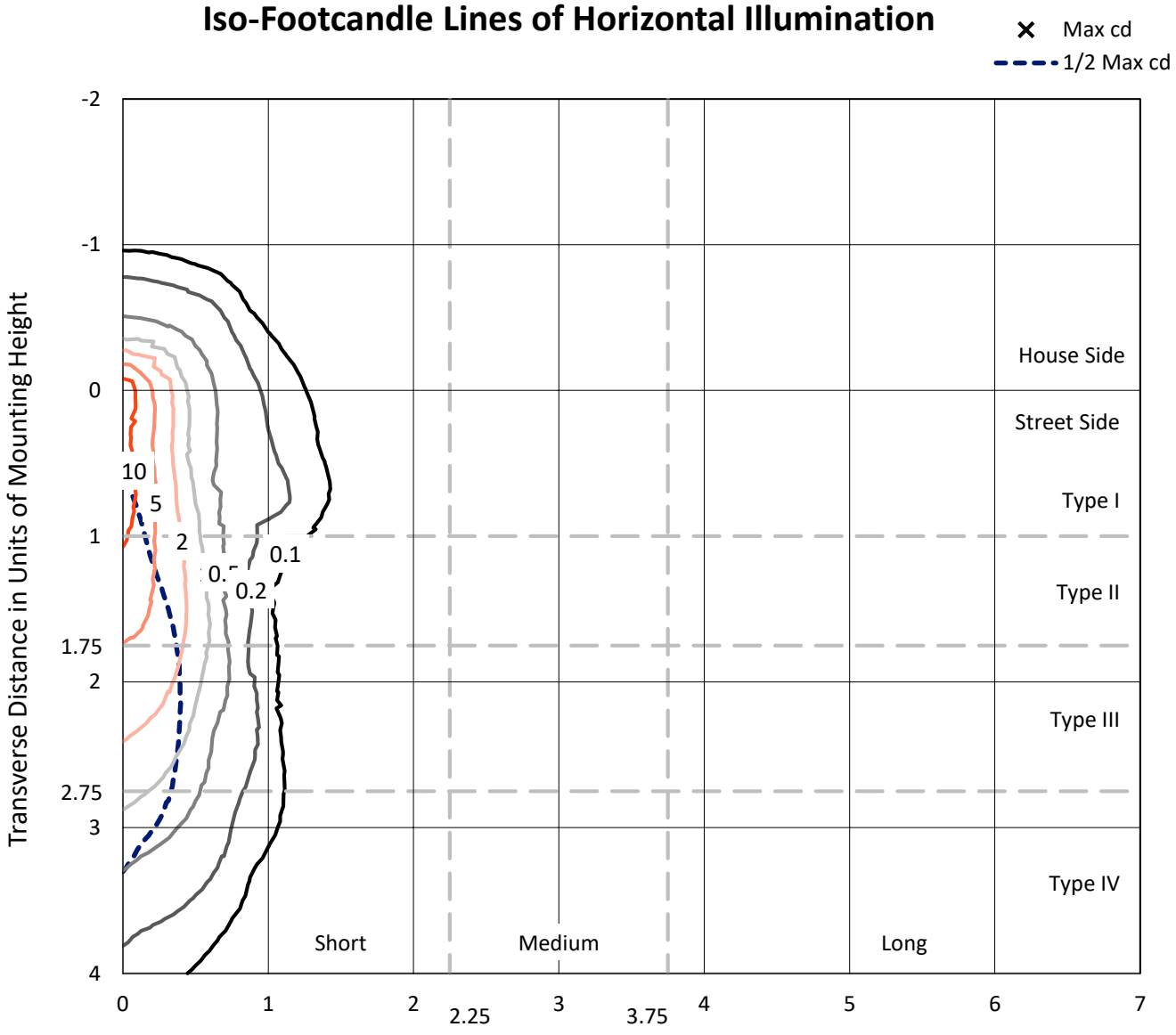
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 15.4 fc
Type IV - Medium - N/A

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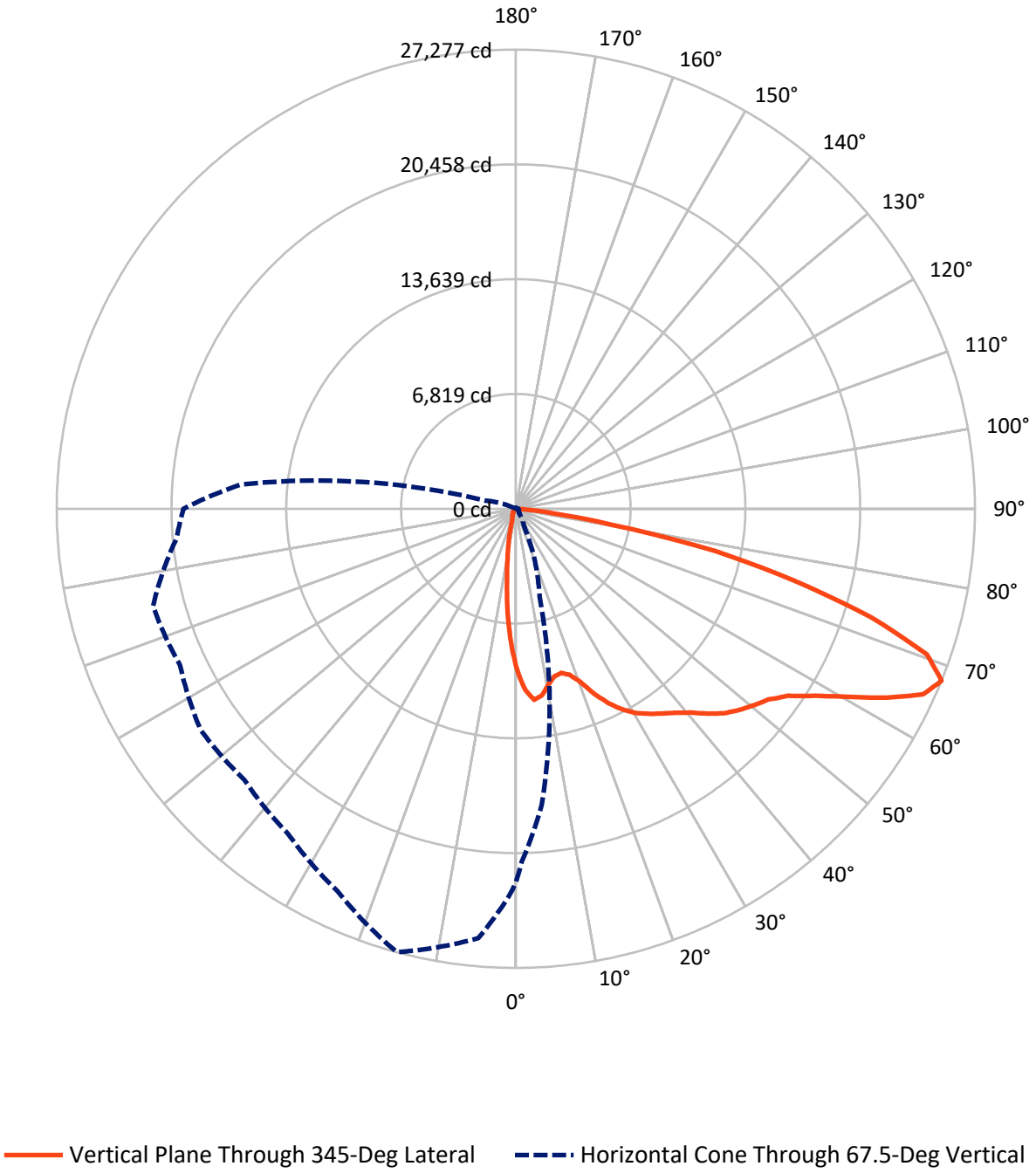
Luminous Intensity Polar Plot



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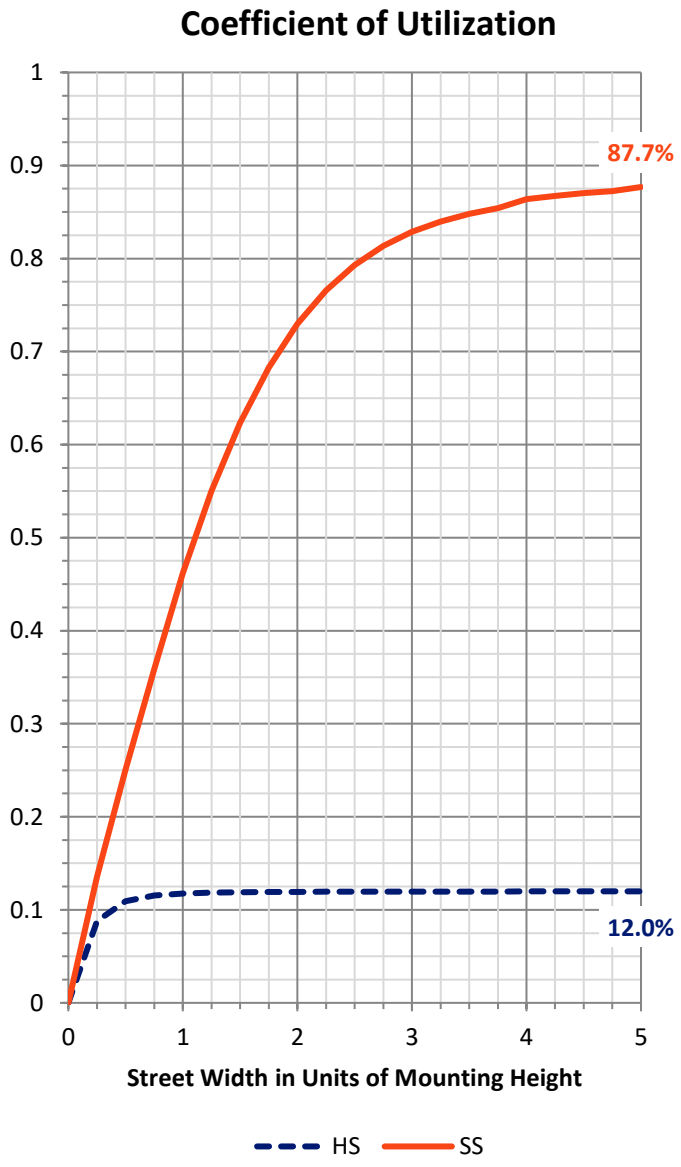
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3567.0	0.0	3567.0
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	25904.0	0.0	25904.0
	% Fixture	87.9	0.0	87.9
Total	Lumens	29471.0	0.0	29471.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	736.8	2.5
10°-20°	1466.6	5.0
20°-30°	2082.6	7.1
30°-40°	3076.1	10.4
40°-50°	4436.3	15.1
50°-60°	6227.7	21.1
60°-70°	7259.7	24.6
70°-80°	3711.3	12.6
80°-90°	474.0	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	29471.0	100.0
0°-180°	29471.0	100.0



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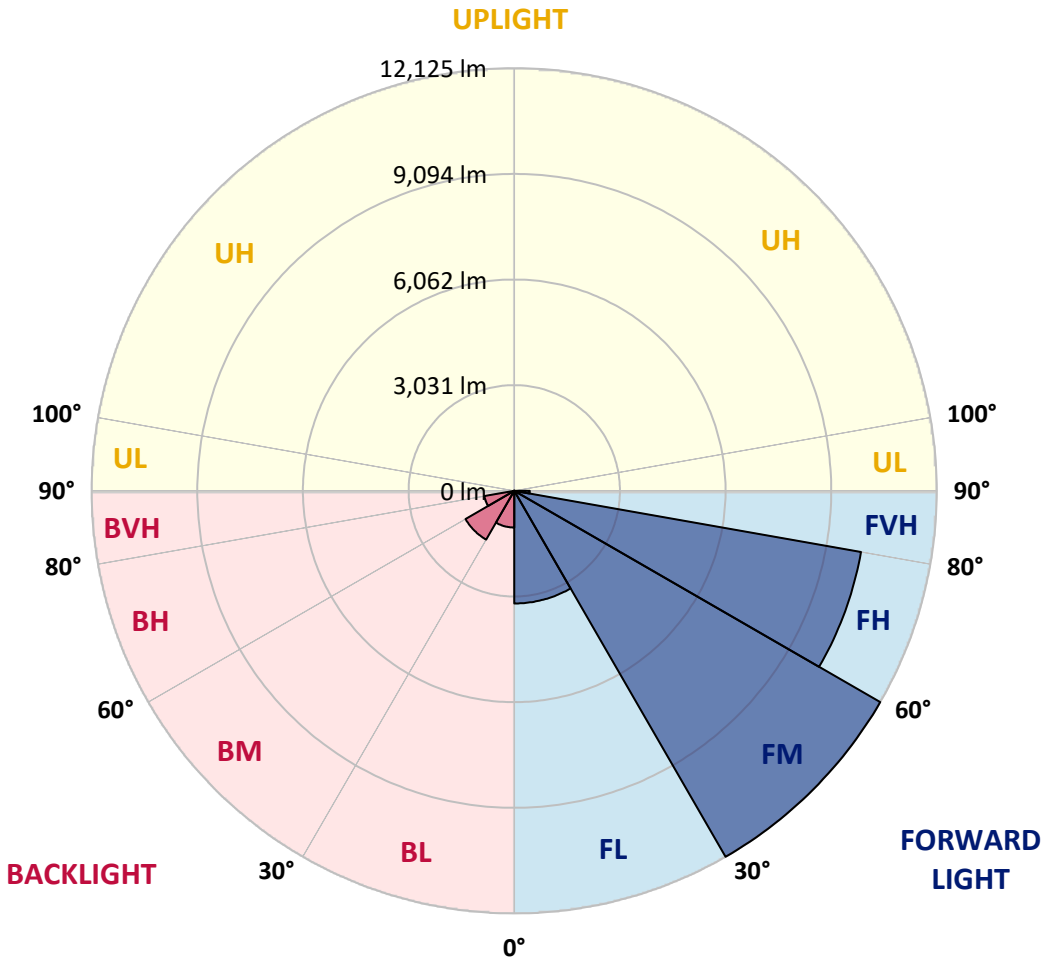
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3232.4	11.0			
FM	(30°-60°)	12124.9	41.1			
FH	(60°-80°)	10101.6	34.3			G4/12000
FVH	(80°-90°)	445.2	1.5			G3/500
BL	(0°-30°)	1053.5	3.6	B3/2500		
BM	(30°-60°)	1615.2	5.5	B2/2500		
BH	(60°-80°)	869.4	2.9	B2/1000		G2/1000
BVH	(80°-90°)	28.8	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-G4
Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1
2.5°	10511.8	10430.8	10341.5	10049.7	9778.8	9468.9	9216.2	9040.3	8819.7	8533.4	8460.8
5°	10436.4	10349.9	10069.2	9420.0	8851.8	8298.9	7765.5	7452.8	7064.7	6670.9	6573.2
7.5°	9678.3	9587.6	9182.7	8293.3	7528.2	6729.6	6037.1	5608.4	5170.0	4809.8	4618.6
10°	8889.5	8790.3	8335.2	7255.9	6313.5	5591.7	5083.5	4674.4	4259.7	3874.4	3567.2
12.5°	8346.4	8216.5	7722.3	6499.2	5678.3	5188.2	4713.5	4223.4	3662.2	3248.9	2911.0
15°	8118.8	7970.8	7448.6	6207.4	5453.5	4878.2	4259.7	3658.0	3000.4	2527.1	2217.1
17.5°	8294.7	8102.0	7542.2	6187.9	5171.4	4388.2	3606.3	2899.9	2186.4	1707.5	1486.9
20°	8892.3	8639.6	7928.9	6182.3	4829.4	3806.0	2814.7	2016.1	1440.9	1158.8	1042.9
22.5°	9833.3	9499.6	8484.6	6227.0	4476.1	3194.5	2032.8	1369.7	1082.0	935.4	867.0
25°	10969.8	10583.0	9284.6	6384.7	4166.2	2599.7	1477.2	1082.0	913.1	805.6	748.4
27.5°	12050.4	11736.3	10295.4	6612.3	3926.1	2119.4	1199.3	917.3	780.5	709.3	663.2
30°	13129.7	12734.5	11332.8	6883.2	3637.0	1794.1	1054.1	836.3	699.5	624.1	594.8
32.5°	13914.3	13586.2	12145.4	7078.6	3328.5	1581.9	942.4	765.1	653.4	576.6	533.3
35°	14837.2	14465.8	12842.1	7121.9	3130.2	1447.8	847.5	688.3	566.8	498.4	452.4
37.5°	15834.1	15371.9	13646.2	7027.0	2975.3	1382.2	776.3	653.4	529.2	459.3	410.5
40°	16937.0	16414.9	14418.3	6890.1	2823.1	1359.9	721.8	626.9	499.8	428.6	378.4
42.5°	18098.7	17482.9	15087.1	6746.3	2726.7	1283.1	716.2	600.4	477.5	400.7	350.4
45°	19074.6	18450.5	15774.0	6698.9	2658.3	1199.3	740.0	582.2	462.1	378.4	329.5
47.5°	19852.3	19261.7	16477.7	6805.0	2619.2	1122.5	674.4	605.9	453.8	358.8	311.3
50°	20780.7	20112.0	17469.0	7121.9	2562.0	1045.7	610.1	693.9	453.8	346.3	296.0
52.5°	21945.1	21283.3	18574.8	7613.4	2447.5	939.6	548.7	695.3	457.9	329.5	276.4
55°	23409.7	22929.4	20153.8	8152.3	2264.6	783.3	474.7	597.6	441.2	298.8	258.3
57.5°	24814.3	24422.0	21593.3	8520.9	2020.3	611.5	413.3	481.7	403.5	262.5	230.4
59°	25198.2	24769.6	22121.1	8537.6	1837.4	533.3	382.6	397.9	395.1	245.7	213.6
60°	25198.2	24743.1	22273.2	8448.3	1704.7	490.1	363.0	354.6	411.9	234.6	203.8
62.5°	24741.7	24102.2	21779.0	7843.7	1390.6	417.5	316.9	293.2	370.0	210.8	180.1
65°	23792.3	22861.0	20095.2	6750.5	1239.8	382.6	273.7	240.1	256.9	185.7	157.8
67.5°	*22209.0*	*20946.9*	*17667.2*	*5453.5*	*1179.8*	*372.8*	*236.0*	*203.8*	*194.1*	*159.2*	*138.2*
70°	19420.8	18020.5	14719.9	4287.7	1128.1	368.6	198.3	171.7	156.4	134.0	117.3
72.5°	14134.9	12674.5	10450.4	3352.2	1097.4	377.0	159.2	143.8	128.4	104.7	90.8
75°	8085.3	7128.9	5873.7	2214.3	935.4	360.2	122.9	120.1	92.1	75.4	62.8
77.5°	4177.4	4050.3	3519.8	850.3	448.2	157.8	81.0	69.8	54.5	46.1	37.7
80°	1802.5	1782.9	1542.8	245.7	118.7	88.0	46.1	29.3	25.1	19.5	15.4
82.5°	622.7	622.7	548.7	82.4	53.1	43.3	5.6	0.0	0.0	0.0	0.0
85°	125.7	141.0	99.1	0.0	18.2	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1
2.5°	8372.9	8203.9	8192.8	8086.7	7954.0	7894.0	7859.1	7920.5	7995.9	8004.3	8117.4
5°	6499.2	6321.9	6395.9	6207.4	6245.1	6207.4	6146.0	6157.1	6190.7	6085.9	6215.8
7.5°	4564.1	4430.1	4515.2	4465.0	4532.0	4558.5	4520.8	4465.0	4300.2	4280.7	4393.8
10°	3440.2	3288.0	3197.2	3102.3	3123.3	3166.5	3152.6	3112.1	3007.4	3013.0	3121.9
12.5°	2764.4	2594.1	2414.0	2180.8	2123.6	2155.7	2123.6	2099.9	1999.3	2007.7	2104.0
15°	2097.1	1957.4	1769.0	1581.9	1479.9	1489.7	1400.4	1337.5	1274.7	1199.3	1258.0
17.5°	1415.7	1330.6	1274.7	1218.9	1097.4	1069.5	956.4	834.9	787.4	752.5	777.7
20°	1002.5	956.4	934.0	931.3	861.4	826.5	716.2	640.8	617.1	610.1	625.5
22.5°	837.7	804.2	772.1	753.9	719.0	678.5	594.8	557.1	540.3	531.9	543.1
25°	728.8	703.7	670.2	639.4	625.5	582.2	522.2	494.2	483.1	474.7	480.3
27.5°	647.8	625.5	586.4	566.8	555.7	518.0	466.3	444.0	434.2	431.4	430.0
30°	583.6	562.7	526.4	504.0	484.5	451.0	420.2	397.9	388.1	385.3	382.6
32.5°	519.4	502.6	478.9	456.6	435.6	404.9	378.4	360.2	344.9	342.1	340.7
35°	438.4	421.6	409.1	407.7	388.1	358.8	339.3	315.5	303.0	298.8	300.2
37.5°	389.5	367.2	339.3	349.0	343.5	322.5	296.0	272.3	259.7	256.9	256.9
40°	358.8	335.1	303.0	286.2	303.0	298.8	256.9	233.2	220.6	219.2	216.4
42.5°	329.5	305.8	269.5	241.5	249.9	262.5	222.0	199.7	187.1	184.3	180.1
45°	308.6	283.4	242.9	210.8	194.1	220.6	189.9	162.0	155.0	149.4	146.6
47.5°	289.0	265.3	219.2	182.9	155.0	159.2	152.2	132.6	124.3	118.7	117.3
50°	272.3	247.1	198.3	156.4	128.4	117.3	122.9	104.7	97.7	92.1	89.4
52.5°	252.7	229.0	175.9	135.4	107.5	92.1	93.5	82.4	75.4	71.2	69.8
55°	237.4	213.6	157.8	118.7	94.9	75.4	67.0	64.2	60.0	57.2	55.8
57.5°	216.4	194.1	139.6	100.5	81.0	61.4	51.7	51.7	50.3	47.5	46.1
59°	203.8	184.3	128.4	90.8	74.0	53.1	46.1	47.5	46.1	43.3	41.9
60°	194.1	175.9	120.1	83.8	69.8	48.9	41.9	44.7	43.3	40.5	39.1
62.5°	171.7	159.2	103.3	69.8	61.4	39.1	34.9	37.7	37.7	36.3	34.9
65°	150.8	136.8	88.0	58.6	57.2	33.5	27.9	33.5	34.9	32.1	29.3
67.5°	*131.2*	*117.3*	*76.8*	*47.5*	*53.1*	*26.5*	*20.9*	*27.9*	*37.7*	*29.3*	*26.5*
70°	111.7	97.7	60.0	37.7	55.8	18.2	16.8	25.1	44.7	32.1	25.1
72.5°	86.6	75.4	41.9	27.9	60.0	12.6	12.6	20.9	50.3	34.9	23.7
75°	60.0	48.9	25.1	16.8	48.9	8.4	8.4	19.5	47.5	32.1	22.3
77.5°	34.9	26.5	8.4	1.4	25.1	0.0	1.4	14.0	33.5	19.5	9.8
80°	12.6	5.6	0.0	0.0	15.4	0.0	0.0	0.0	2.8	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

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1
2.5°	8146.7	8335.2	8504.1	8759.6	9062.6	9411.6	9711.8	10034.3	10337.3	10463.0	10549.5
5°	6242.3	6475.5	6747.7	7123.3	7623.1	8238.8	8815.5	9467.5	10168.4	10518.8	10848.3
7.5°	4413.3	4650.7	4988.5	5387.9	5992.4	6725.4	7479.3	8379.9	9329.3	9883.5	10429.5
10°	3173.5	3465.3	3780.9	4326.8	4941.1	5636.4	6412.6	7417.9	8476.2	9090.5	9748.1
12.5°	2159.9	2492.2	2969.7	3581.2	4303.0	4984.4	5658.7	6617.9	7846.5	8455.3	9160.3
15°	1295.7	1479.9	1985.4	2693.2	3578.4	4427.3	5165.9	6127.8	7437.4	8183.0	8916.0
17.5°	798.6	883.8	1158.8	1739.6	2669.5	3743.2	4755.4	5961.7	7496.1	8403.6	9188.3
20°	636.7	670.2	758.1	1027.6	1769.0	2989.2	4293.2	5928.2	7975.0	9091.9	9933.8
22.5°	552.9	585.0	643.6	747.0	1112.8	2238.1	3854.8	5958.9	8661.9	10123.7	11106.6
25°	487.3	515.2	571.0	656.2	815.4	1576.3	3385.7	6095.7	9556.8	11404.0	12448.3
27.5°	435.6	459.3	511.0	589.2	699.5	1100.2	2853.8	6261.9	10617.9	12713.6	13744.0
30°	388.1	409.1	455.2	527.8	607.3	846.1	2270.2	6375.0	11680.4	13744.0	14669.6
32.5°	347.6	363.0	404.9	466.3	527.8	674.4	1725.7	6356.8	12469.3	14601.2	15335.6
35°	305.8	321.1	357.4	410.5	459.3	557.1	1357.1	6017.5	13156.2	15490.6	16097.9
37.5°	259.7	279.2	314.1	361.6	395.1	490.1	1097.4	5608.4	13852.9	16507.0	16948.2
40°	220.6	240.1	270.9	322.5	343.5	464.9	843.3	5110.0	14636.1	17643.5	17880.9
42.5°	182.9	201.0	233.2	277.8	323.9	400.7	624.1	4540.4	15388.7	18615.2	18731.1
45°	148.0	166.1	199.7	244.3	346.3	332.3	483.1	3930.2	15996.0	19423.6	19461.3
47.5°	117.3	134.0	168.9	230.4	322.5	265.3	344.9	3451.4	16505.6	20054.7	19955.6
50°	90.8	104.7	141.0	263.9	282.0	219.2	261.1	3292.2	16962.2	20445.6	20188.7
52.5°	71.2	83.8	115.9	247.1	219.2	181.5	219.2	3441.6	17587.7	20769.6	20320.0
55°	57.2	69.8	90.8	141.0	149.4	153.6	187.1	3581.2	18666.9	21529.1	21094.9
57.5°	47.5	60.0	74.0	99.1	113.1	129.8	166.1	3596.6	19938.8	22791.2	22380.7
59°	43.3	54.5	67.0	88.0	99.1	118.7	156.4	3512.8	20387.0	23250.6	23045.3
60°	40.5	51.7	62.8	81.0	92.1	111.7	150.8	3433.2	20406.5	23233.8	23328.7
62.5°	34.9	46.1	55.8	68.4	78.2	94.9	135.4	3138.6	19580.0	22472.9	23158.4
65°	30.7	40.5	50.3	58.6	67.0	85.2	122.9	2601.1	18168.5	21245.6	21992.6
67.5°	*27.9*	*34.9*	*46.1*	*51.7*	*60.0*	*75.4*	*108.9*	*1854.1*	*16405.1*	*19744.8*	*20229.2*
70°	25.1	33.5	41.9	47.5	54.5	65.6	93.5	1065.3	13852.9	17547.2	17892.0
72.5°	23.7	32.1	37.7	44.7	48.9	58.6	85.2	501.2	10143.2	14056.7	14957.3
75°	20.9	29.3	34.9	41.9	46.1	53.1	72.6	240.1	6746.3	10172.6	11196.0
77.5°	12.6	23.7	32.1	37.7	40.5	46.1	60.0	138.2	4305.8	7040.9	8293.3
80°	0.0	8.4	23.7	32.1	34.9	39.1	46.1	108.9	2303.7	4022.4	4828.0
82.5°	0.0	0.0	16.8	25.1	23.7	26.5	34.9	68.4	1038.8	2629.0	2962.7
85°	0.0	0.0	5.6	19.5	16.8	12.6	23.7	23.7	227.6	1330.6	1660.1
87.5°	0.0	0.0	0.0	1.4	8.4	5.6	9.8	2.8	1.4	99.1	402.1
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: P324651
CATALOG NUMBER: GLEON-SA7C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	9600.1	9600.1	9600.1	9600.1	9600.1	9600.1	*9600.1*	9600.1	9600.1	9600.1
2.5°	10852.5	10955.8	11130.3	11212.7	11172.2	11000.5	*10795.3*	10585.8	10463.0	10511.8
5°	11519.9	12051.8	12359.0	12460.9	12290.6	11905.2	*11401.2*	10736.6	10500.7	10436.4
7.5°	11519.9	12520.9	13154.8	13266.5	12886.7	12131.4	*11186.2*	10148.8	9804.0	9678.3
10°	11115.0	12477.6	13361.4	13538.7	13008.2	11878.7	*10612.4*	9428.4	9019.3	8889.5
12.5°	10658.4	12125.8	13057.1	13301.4	12865.8	11627.4	*10214.4*	8941.1	8459.4	8346.4
15°	10377.8	11693.0	12463.7	12641.0	12456.7	11480.8	*10119.5*	8794.5	8227.7	8118.8
17.5°	10478.3	11357.9	11635.8	11739.1	11863.3	11429.1	*10377.8*	9115.6	8398.0	8294.7
20°	10856.7	11004.7	10860.9	10990.7	11325.8	11479.4	*10993.5*	9891.9	9030.5	8892.3
22.5°	11498.9	10821.8	10418.3	10469.9	10877.6	11645.5	*11934.5*	11000.5	10006.4	9833.3
25°	12247.3	10969.8	10172.6	10126.5	10545.3	11864.7	*12794.6*	12206.8	11161.1	10969.8
27.5°	13188.3	11302.1	10122.3	10076.2	10429.5	12070.0	*13509.4*	13399.1	12377.1	12050.4
30°	13914.3	11628.8	10271.7	10165.6	10545.3	12212.4	*14083.3*	14411.4	13346.1	13129.7
32.5°	14435.1	12014.1	10514.6	10361.0	10872.0	12458.1	*14525.8*	15338.4	14242.4	13914.3
35°	14831.6	12433.0	10906.9	10654.2	11321.6	12830.9	*14940.5*	16325.5	15196.0	14837.2
37.5°	15203.0	13020.8	11519.9	11218.3	12026.7	13431.2	*15378.9*	17445.3	16262.7	15834.1
40°	15721.0	13686.7	12465.1	12197.0	13212.0	14249.4	*15926.2*	18612.5	17476.0	16937.0
42.5°	16239.0	14401.6	13432.6	13505.2	14690.6	15243.5	*16632.7*	19846.7	18673.9	18098.7
45°	16712.3	15138.8	14810.7	15145.7	16063.0	16333.9	*17335.0*	20560.1	19630.3	19074.6
47.5°	17133.9	16060.2	16180.3	17072.5	17624.0	17321.0	*17859.9*	21175.8	20342.3	19852.3
50°	17624.0	17252.6	17985.6	19247.7	19420.8	18214.5	*18337.4*	21904.6	21174.4	20780.7
52.5°	18160.1	18509.1	19984.9	21097.7	21041.8	19184.9	*18817.7*	22721.4	22315.1	21945.1
55°	18768.8	19524.2	21745.5	22828.9	22781.4	20268.3	*19613.5*	23730.8	23744.8	23409.7
57.5°	19672.2	20398.2	22940.6	24229.3	24308.9	21519.3	*20962.2*	24861.8	25037.7	24814.3
59°	20320.0	20965.0	23413.9	24814.3	25138.2	22486.9	*21947.9*	25518.0	25402.1	25198.2
60°	20800.3	21325.2	23648.5	25120.0	25619.9	23143.1	*22675.3*	25903.3	25445.4	25198.2
62.5°	21988.4	22109.9	24071.5	25466.3	26174.2	24600.7	*24722.1*	26559.5	25145.2	24741.7
65°	22542.7	22605.5	24065.9	24846.4	25638.0	25735.8	*26579.1*	26579.1	24412.2	23792.3
67.5°	*22310.9*	*22008.0*	*22872.2*	*22791.2*	*23581.5*	*25061.4*	*27277.1*	*25604.5*	*23010.4*	*22209.0*
70°	20426.1	19260.3	18876.3	18911.2	19515.8	21798.5	*25894.9*	22736.8	20357.7	19420.8
72.5°	16995.7	14199.1	13251.1	14333.2	14490.9	16752.7	*22068.0*	17122.7	15013.1	14134.9
75°	13670.0	10009.2	8467.8	9609.9	9878.0	12259.8	*17071.1*	10664.0	8769.4	8085.3
77.5°	9820.7	7184.7	6076.2	5996.6	6342.8	7775.3	*12113.2*	5366.9	4476.1	4177.4
80°	5579.1	4728.9	5091.9	4804.3	4978.8	4861.5	*5755.0*	2354.0	1928.1	1802.5
82.5°	3367.6	2795.1	3026.9	2520.1	3188.9	2777.0	*2217.1*	753.9	654.8	622.7
85°	2190.6	1527.4	795.8	533.3	1098.8	1774.5	*495.6*	205.2	157.8	125.7
87.5°	755.3	389.5	39.1	16.8	117.3	330.9	*18.2*	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

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.

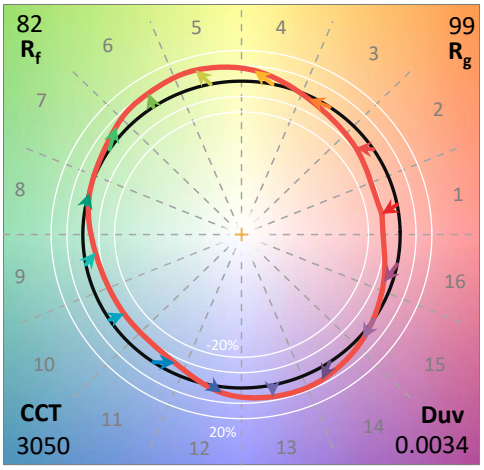
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

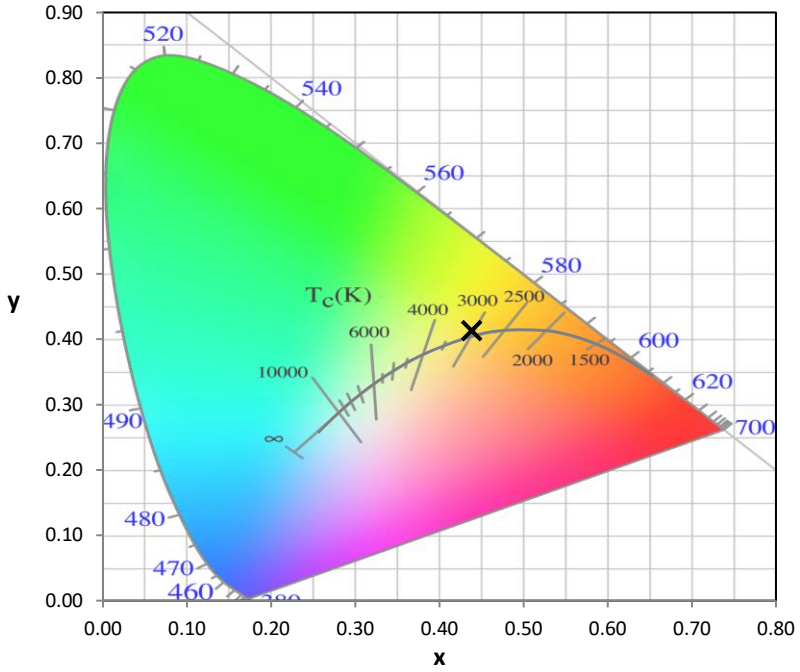
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

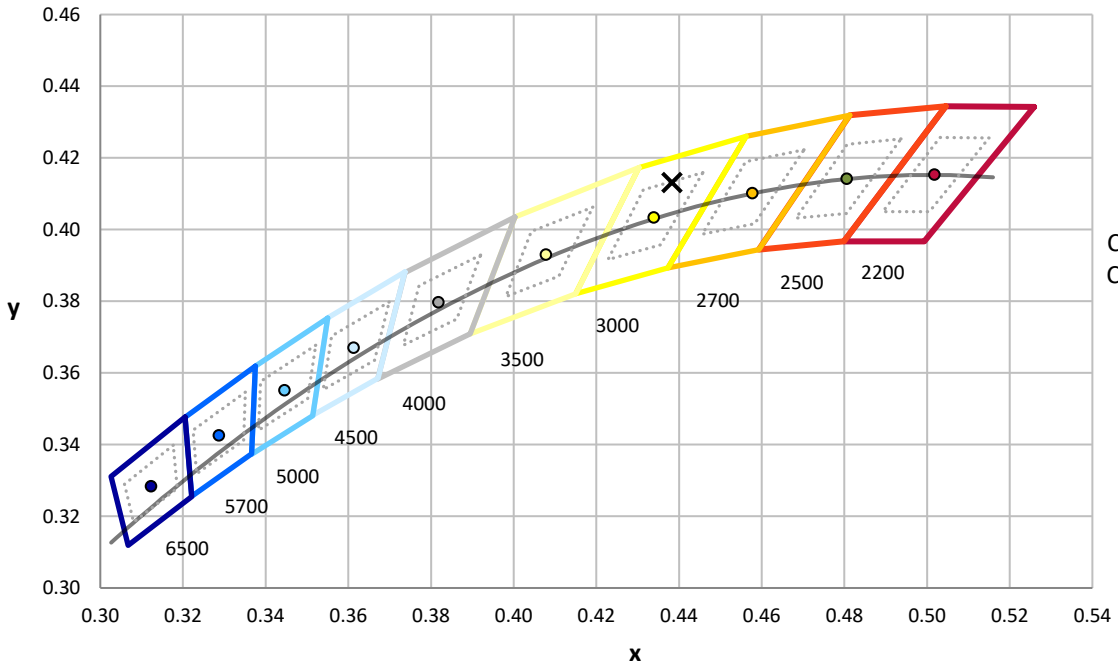
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

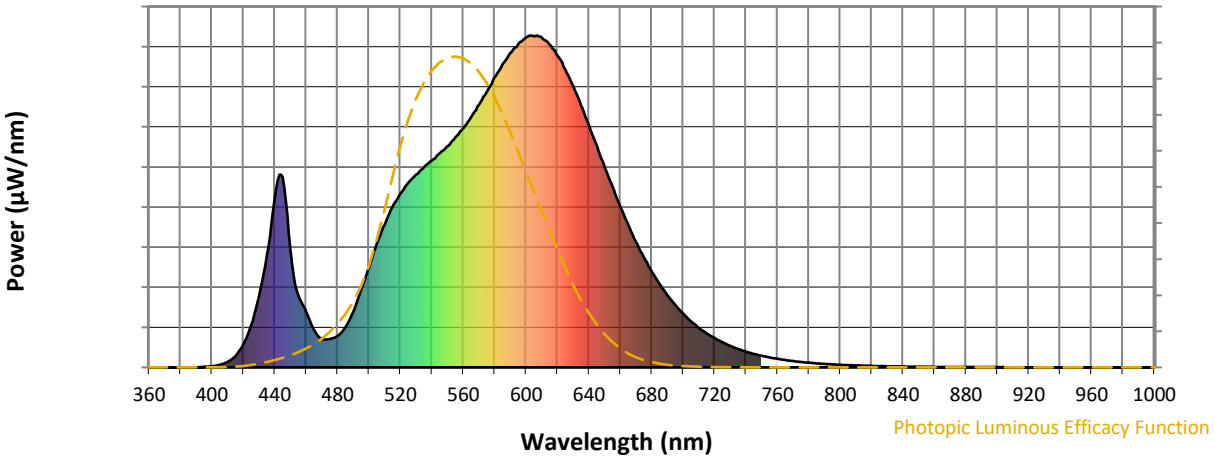


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

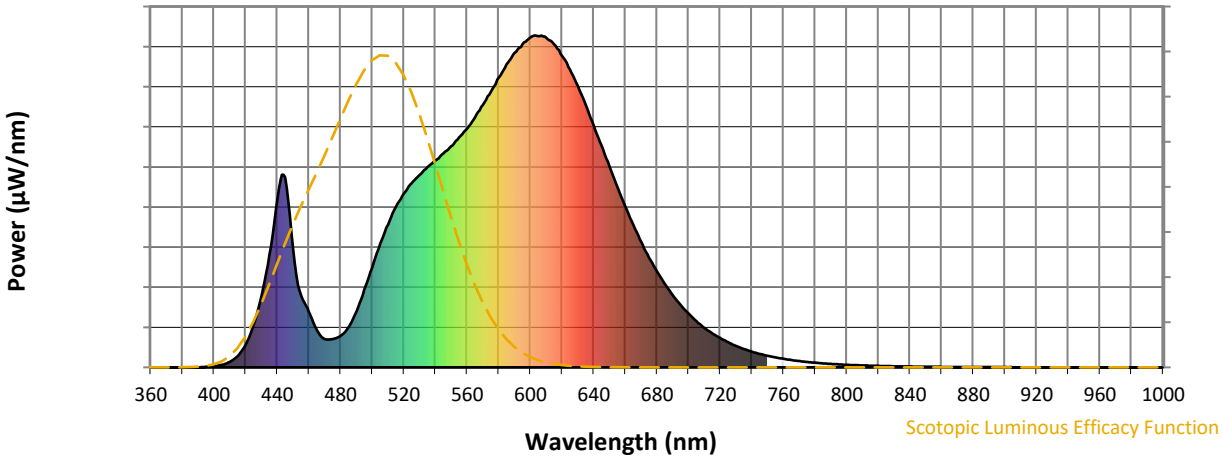


Photopic Lumens: NR

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

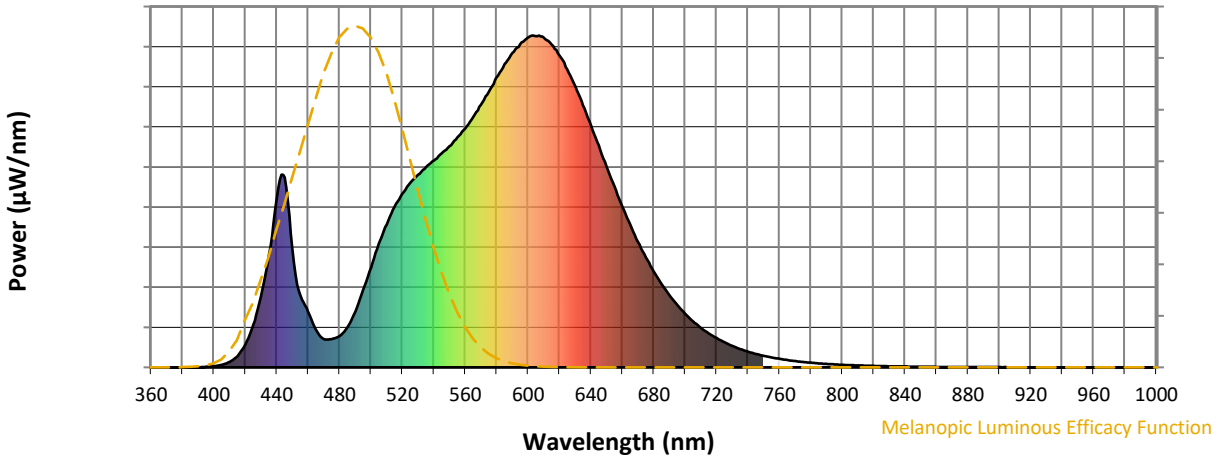


Scotopic Lumens: NR **S/P: 1.27**

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			

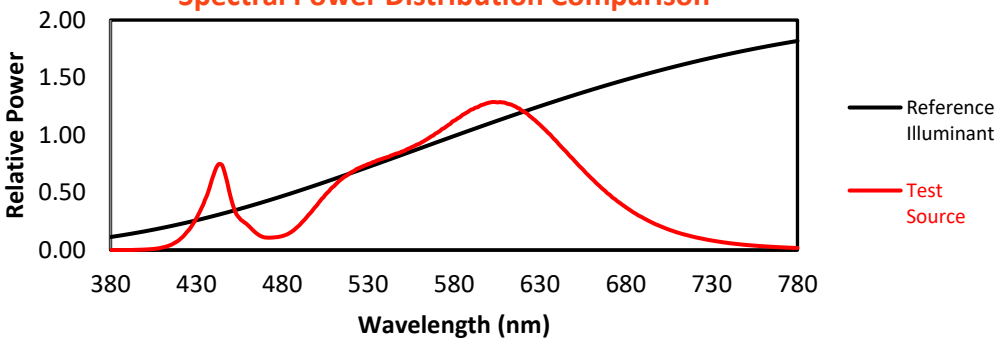
REPORT NUMBER: SP1-2408-195-9

TM-30-18

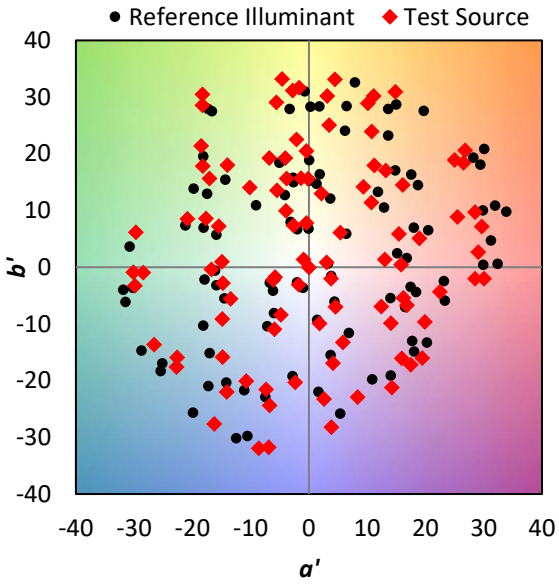
Summary

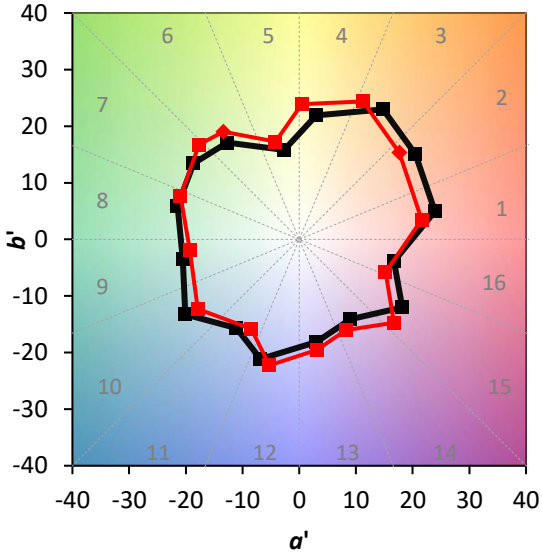
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

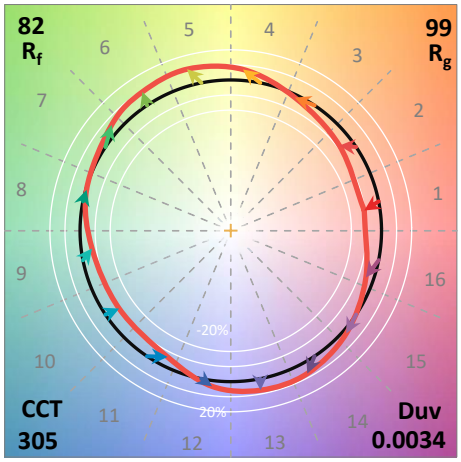
Spectral Power Distribution Comparison

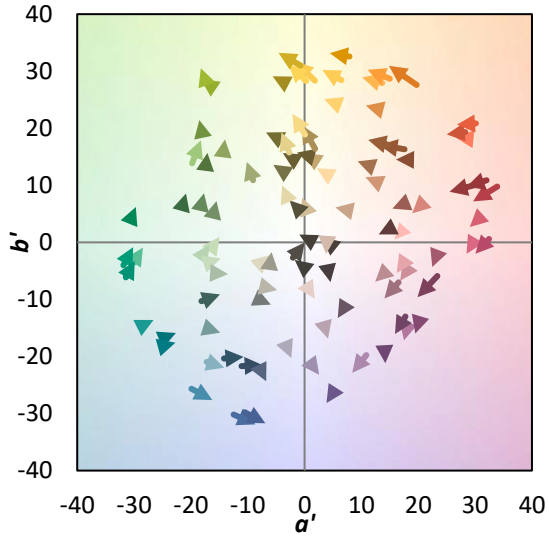


Color Vector Graphics









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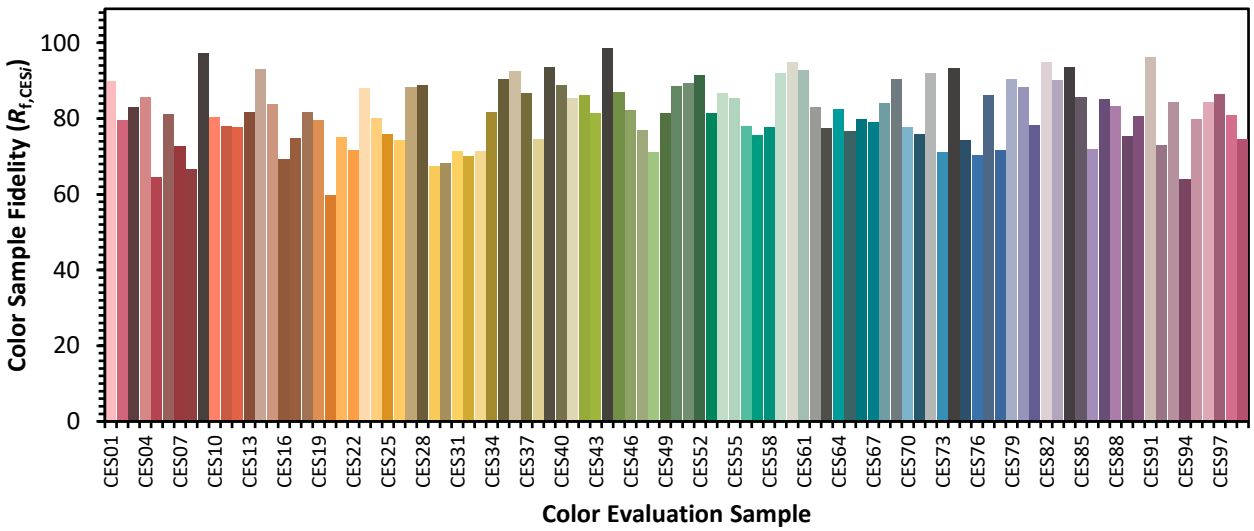
Individual Sample Fidelity Index ($R_{f,i}$)

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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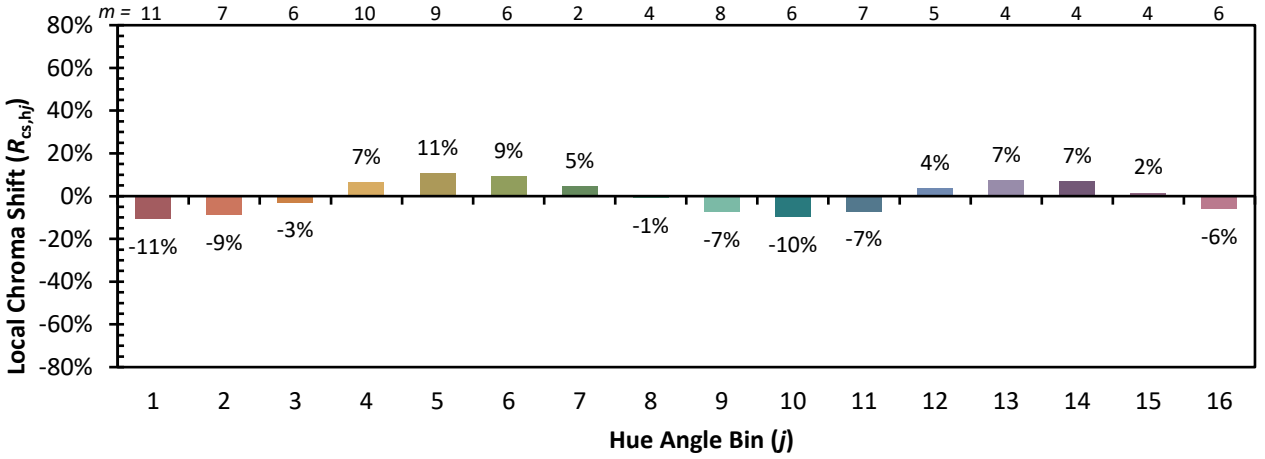
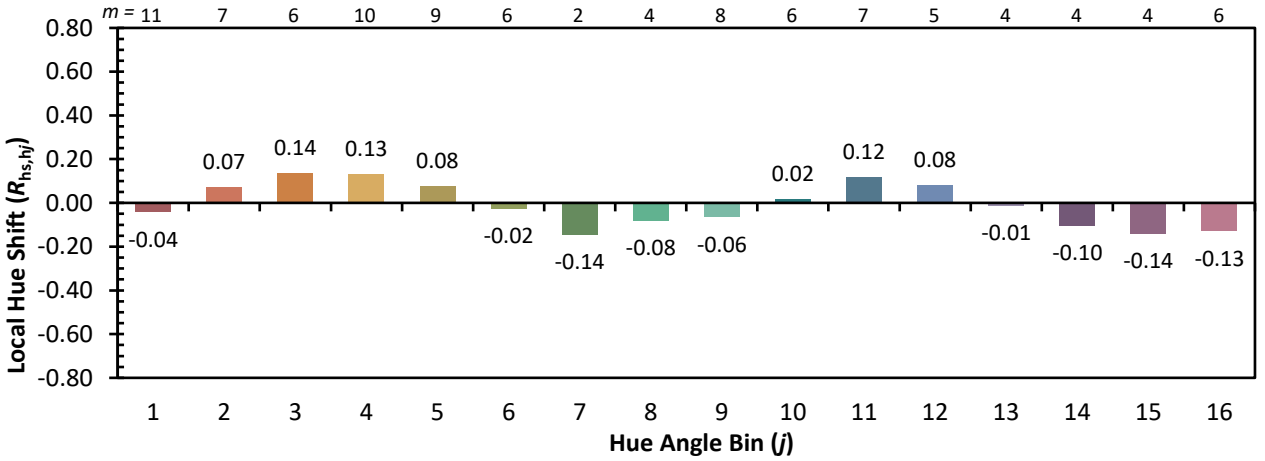
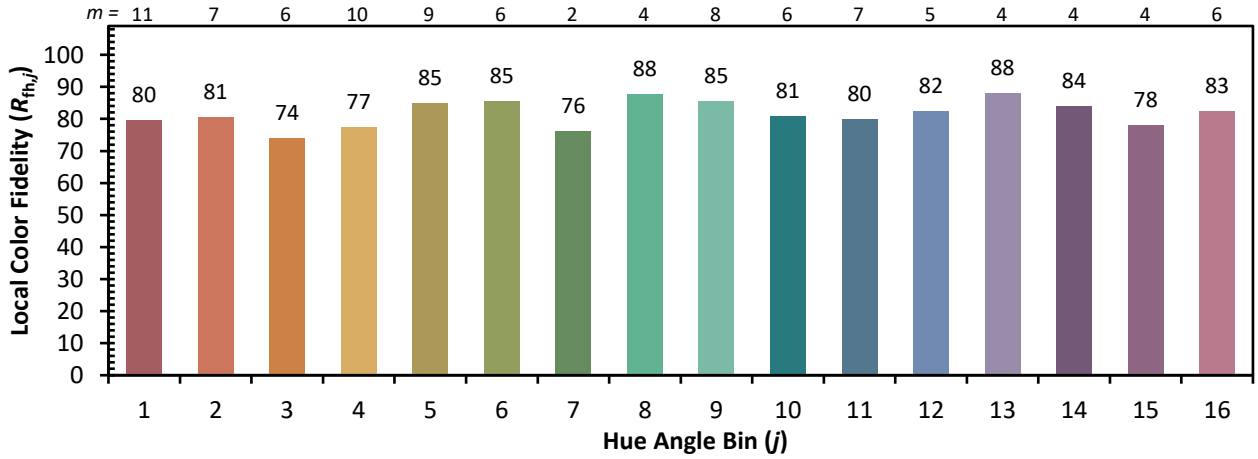
Color Rendition by Hue-Angle Bin







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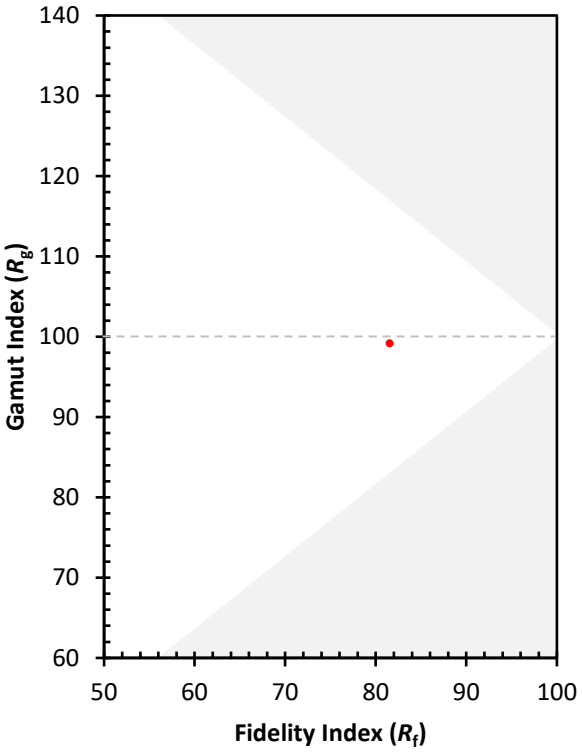
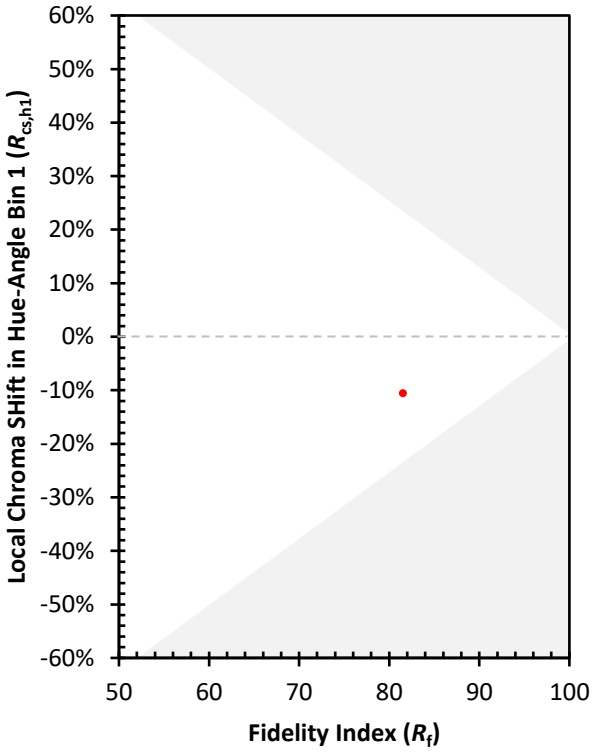
Measure Comparisons





(END OF REPORT)