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: P324661

Luminaire Tested: **GLEON-SA7D-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:	P324661
	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-SA7D-830-U-SLR-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(7) 80 CRI, 3000K, 1200mA 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:	32328 lumens
Efficiency:	N/A
Efficacy:	72.2 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):	448
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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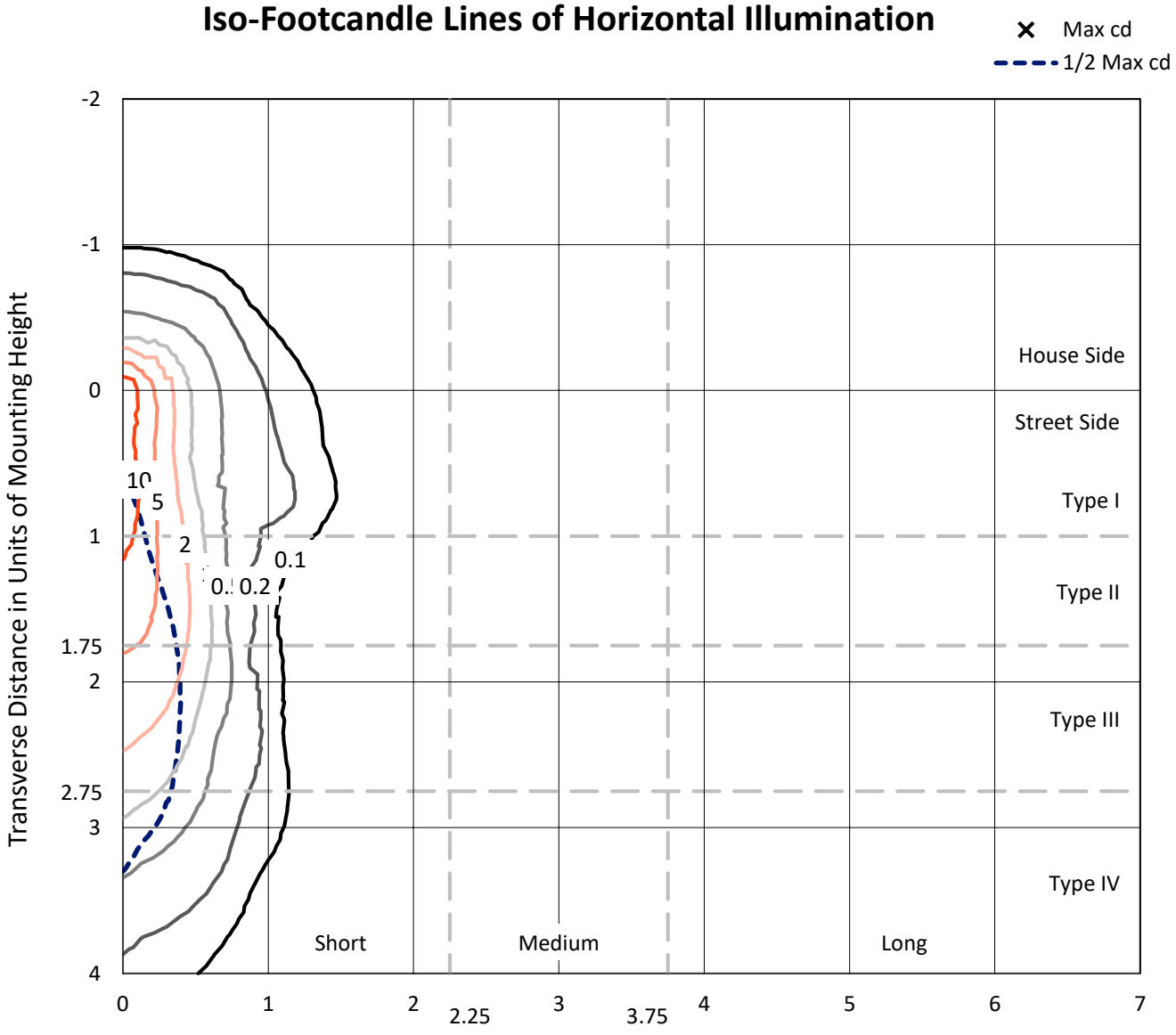
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 16.8 fc
Type IV - Medium - N/A

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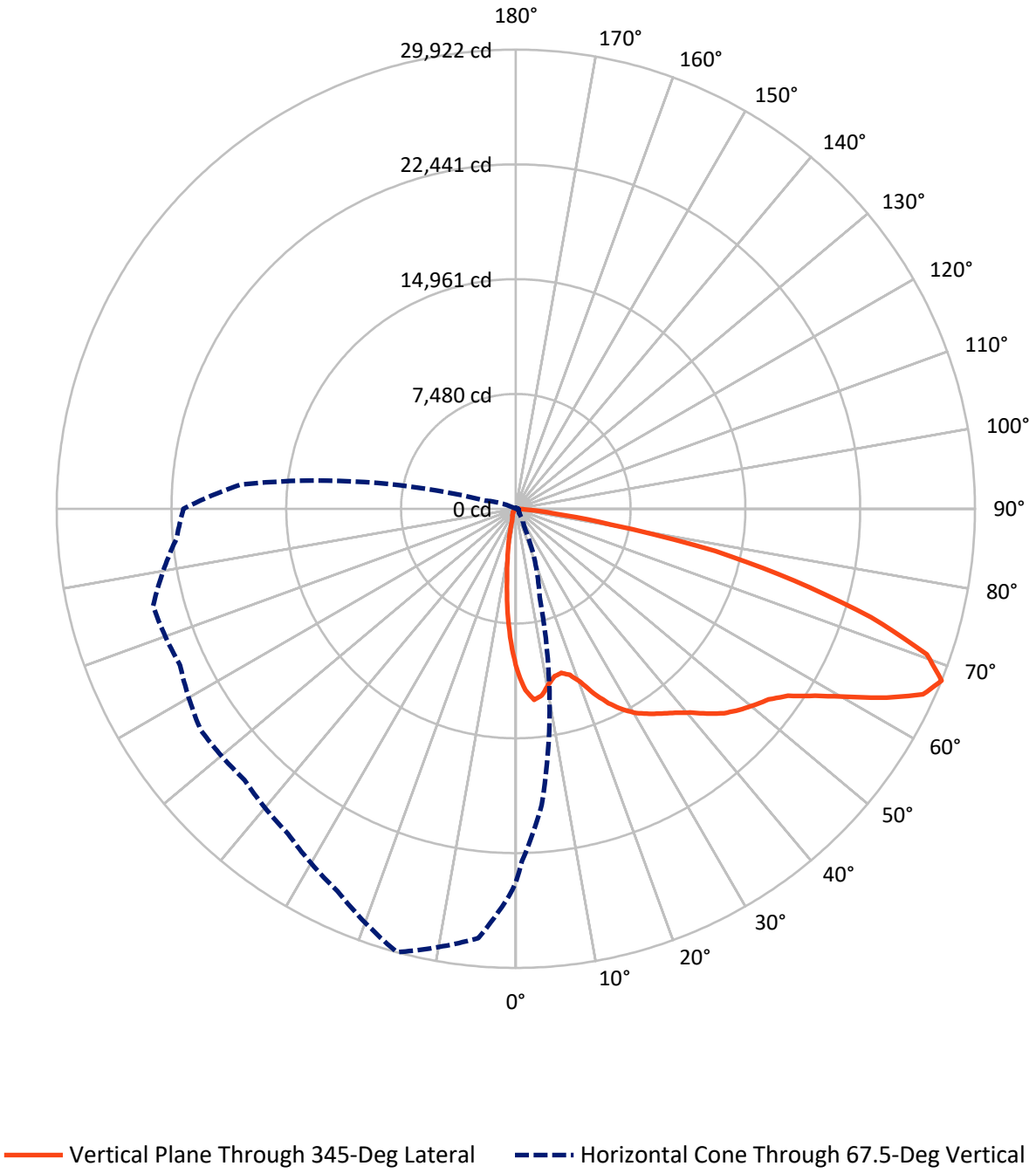
Luminous Intensity Polar Plot



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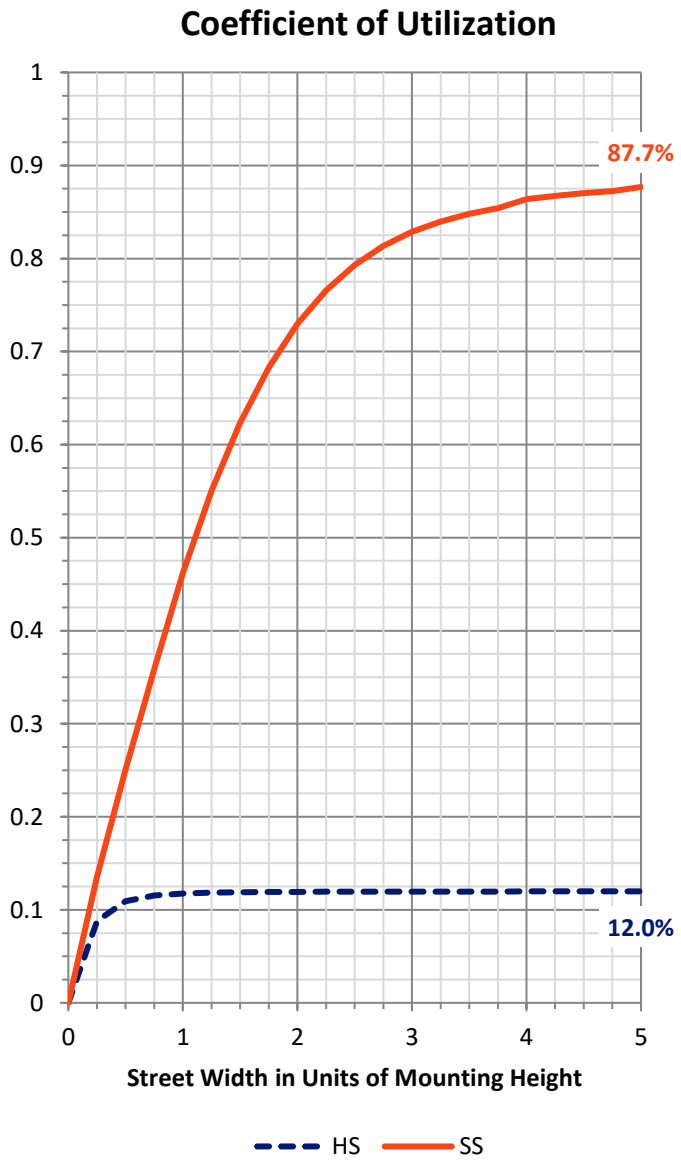
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3912.7	0.0	3912.7
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	28415.2	0.0	28415.2
	% Fixture	87.9	0.0	87.9
Total	Lumens	32328.0	0.0	32328.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	808.2	2.5
10°-20°	1608.8	5.0
20°-30°	2284.4	7.1
30°-40°	3374.3	10.4
40°-50°	4866.4	15.1
50°-60°	6831.4	21.1
60°-70°	7963.5	24.6
70°-80°	4071.1	12.6
80°-90°	519.9	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°	32328.0	100.0
0°-180°	32328.0	100.0



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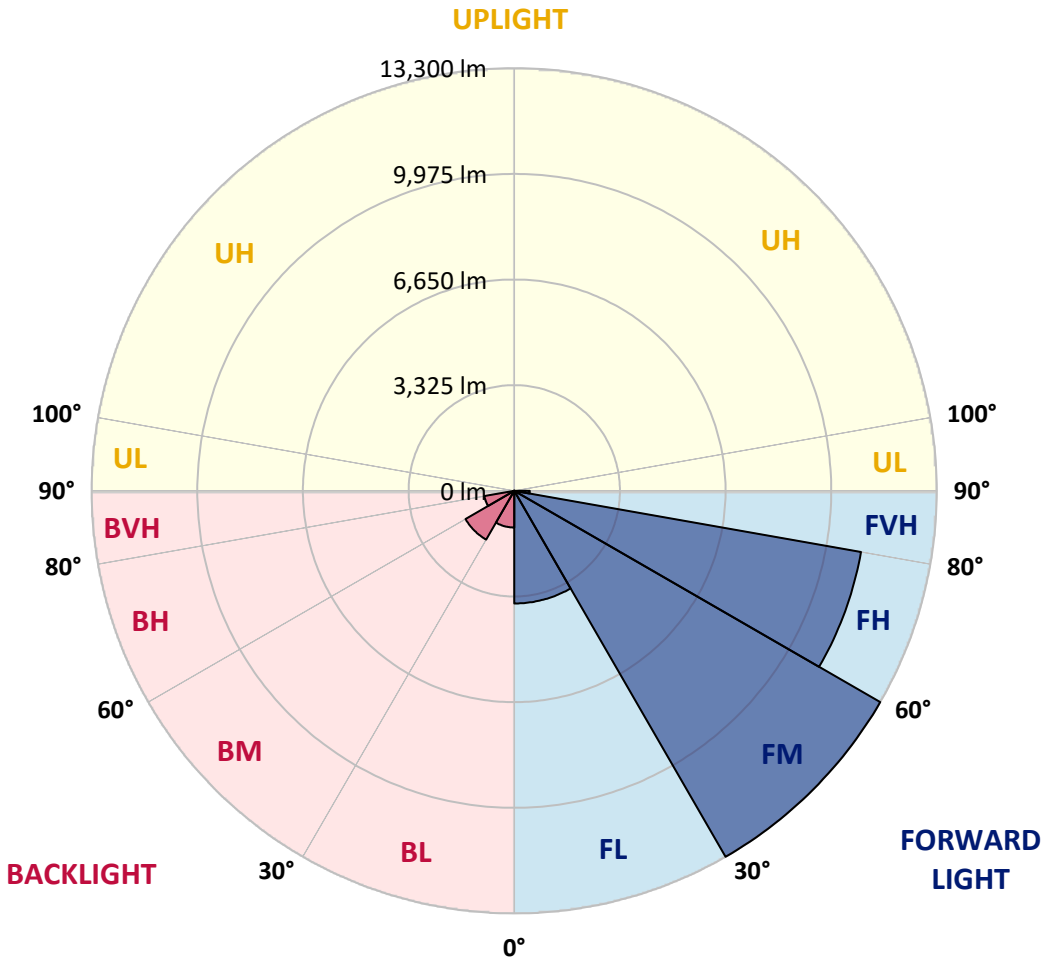
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3545.8	11.0			
FM	(30°-60°)	13300.3	41.1			
FH	(60°-80°)	11080.9	34.3			G4/12000
FVH	(80°-90°)	488.3	1.5			G3/500
BL	(0°-30°)	1155.7	3.6	B3/2500		
BM	(30°-60°)	1771.8	5.5	B2/2500		
BH	(60°-80°)	953.7	2.9	B2/1000		G2/1000
BVH	(80°-90°)	31.6	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°	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8
2.5°	11530.9	11442.0	11344.0	11023.9	10726.8	10386.8	10109.6	9916.6	9674.7	9360.7	9281.1
5°	11448.2	11353.2	11045.4	10333.2	9709.9	9103.4	8518.4	8175.3	7749.5	7317.6	7210.4
7.5°	10616.6	10517.0	10072.9	9097.3	8258.0	7382.0	6622.3	6152.1	5671.2	5276.1	5066.3
10°	9751.2	9642.5	9143.2	7959.4	6925.6	6133.8	5576.3	5127.6	4672.7	4250.0	3913.1
12.5°	9155.5	9013.0	8470.9	7129.3	6228.7	5691.2	5170.4	4632.9	4017.2	3563.9	3193.2
15°	8905.8	8743.5	8170.7	6809.2	5982.1	5351.2	4672.7	4012.6	3291.3	2772.1	2432.1
17.5°	9098.8	8887.5	8273.3	6787.7	5672.8	4813.6	3955.9	3181.0	2398.4	1873.1	1631.1
20°	9754.3	9477.1	8697.5	6781.6	5297.6	4174.9	3087.6	2211.5	1580.5	1271.2	1144.1
22.5°	10786.6	10420.5	9307.1	6830.6	4910.1	3504.1	2229.9	1502.4	1186.9	1026.1	951.1
25°	12033.2	11609.0	10184.7	7003.7	4570.1	2851.7	1620.4	1186.9	1001.6	883.7	820.9
27.5°	13218.6	12874.0	11293.5	7253.3	4306.7	2324.9	1315.6	1006.2	856.1	778.0	727.5
30°	14402.5	13969.1	12431.4	7550.4	3989.6	1968.0	1156.3	917.4	767.3	684.6	652.4
32.5°	15263.2	14903.3	13322.8	7764.8	3651.2	1735.2	1033.8	839.3	716.8	632.5	585.0
35°	16275.5	15868.2	14087.0	7812.3	3433.7	1588.2	929.6	755.0	621.8	546.8	496.2
37.5°	17369.1	16862.1	14969.2	7708.2	3263.7	1516.2	851.5	716.8	580.4	503.9	450.3
40°	18579.0	18006.2	15816.1	7558.1	3096.7	1491.7	791.8	687.7	548.3	470.2	415.0
42.5°	19853.2	19177.8	16549.7	7400.3	2991.1	1407.5	785.7	658.6	523.8	439.5	384.4
45°	20923.7	20239.1	17303.2	7348.3	2916.0	1315.6	811.7	638.6	506.9	415.0	361.4
47.5°	21776.8	21129.0	18075.1	7464.7	2873.1	1231.3	739.7	664.7	497.7	393.6	341.5
50°	22795.3	22061.7	19162.5	7812.3	2810.4	1147.1	669.3	761.2	497.7	379.8	324.7
52.5°	24072.6	23346.6	20375.4	8351.4	2684.8	1030.7	601.9	762.7	502.3	361.4	303.2
55°	25679.1	25152.3	22107.6	8942.6	2484.1	859.2	520.7	655.5	484.0	327.7	283.3
57.5°	27219.8	26789.5	23686.6	9346.9	2216.1	670.8	453.3	528.4	442.6	287.9	252.7
59°	27641.0	27170.8	24265.5	9365.3	2015.5	585.0	419.6	436.5	433.4	269.5	234.3
60°	27641.0	27141.7	24432.5	9267.3	1870.0	537.6	398.2	389.0	451.8	257.3	223.6
62.5°	27140.2	26438.8	23890.3	8604.1	1525.4	457.9	347.7	321.6	405.9	231.3	197.6
65°	26098.8	25077.2	22043.3	7404.9	1360.0	419.6	300.2	263.4	281.8	203.7	173.1
67.5°	*24362.0*	*22977.5*	*19380.0*	*5982.1*	*1294.1*	*408.9*	*258.8*	*223.6*	*212.9*	*174.6*	*151.6*
70°	21303.6	19767.4	16146.9	4703.3	1237.5	404.3	217.5	188.4	171.5	147.0	128.6
72.5°	15505.2	13903.2	11463.5	3677.2	1203.8	413.5	174.6	157.7	140.9	114.9	99.5
75°	8869.1	7820.0	6443.1	2429.0	1026.1	395.1	134.8	131.7	101.1	82.7	68.9
77.5°	4582.3	4443.0	3861.0	932.7	491.6	173.1	88.8	76.6	59.7	50.5	41.4
80°	1977.2	1955.8	1692.3	269.5	130.2	96.5	50.5	32.2	27.6	21.4	16.8
82.5°	683.1	683.1	601.9	90.4	58.2	47.5	6.1	0.0	0.0	0.0	0.0
85°	137.8	154.7	108.7	0.0	19.9	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°	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8
2.5°	9184.6	8999.3	8987.0	8870.6	8725.1	8659.3	8621.0	8688.4	8771.1	8780.2	8904.3
5°	7129.3	6934.8	7015.9	6809.2	6850.5	6809.2	6741.8	6754.0	6790.8	6675.9	6818.4
7.5°	5006.6	4859.5	4953.0	4897.8	4971.3	5000.4	4959.1	4897.8	4717.1	4695.7	4819.7
10°	3773.7	3606.7	3507.2	3403.1	3426.0	3473.5	3458.2	3413.8	3298.9	3305.0	3424.5
12.5°	3032.4	2845.6	2648.0	2392.2	2329.5	2364.7	2329.5	2303.4	2193.1	2202.3	2308.0
15°	2300.4	2147.2	1940.4	1735.2	1623.4	1634.1	1536.1	1467.2	1398.3	1315.6	1379.9
17.5°	1553.0	1459.5	1398.3	1337.0	1203.8	1173.2	1049.1	915.9	863.8	825.5	853.1
20°	1099.6	1049.1	1024.6	1021.5	945.0	906.7	785.7	703.0	676.9	669.3	686.1
22.5°	918.9	882.2	846.9	827.0	788.7	744.3	652.4	611.1	592.7	583.5	595.8
25°	799.5	771.9	735.1	701.4	686.1	638.6	572.8	542.2	529.9	520.7	526.8
27.5°	710.6	686.1	643.2	621.8	609.5	568.2	511.5	487.0	476.3	473.2	471.7
30°	640.2	617.2	577.4	552.9	531.4	494.7	461.0	436.5	425.8	422.7	419.6
32.5°	569.7	551.4	525.3	500.8	477.8	444.1	415.0	395.1	378.3	375.2	373.7
35°	480.9	462.5	448.7	447.2	425.8	393.6	372.2	346.1	332.3	327.7	329.3
37.5°	427.3	402.8	372.2	382.9	376.8	353.8	324.7	298.6	284.9	281.8	281.8
40°	393.6	367.6	332.3	314.0	332.3	327.7	281.8	255.8	242.0	240.4	237.4
42.5°	361.4	335.4	295.6	265.0	274.1	287.9	243.5	219.0	205.2	202.2	197.6
45°	338.5	310.9	266.5	231.3	212.9	242.0	208.3	177.7	170.0	163.9	160.8
47.5°	317.0	291.0	240.4	200.6	170.0	174.6	166.9	145.5	136.3	130.2	128.6
50°	298.6	271.1	217.5	171.5	140.9	128.6	134.8	114.9	107.2	101.1	98.0
52.5°	277.2	251.2	193.0	148.6	117.9	101.1	102.6	90.4	82.7	78.1	76.6
55°	260.4	234.3	173.1	130.2	104.1	82.7	73.5	70.5	65.9	62.8	61.3
57.5°	237.4	212.9	153.2	110.3	88.8	67.4	56.7	56.7	55.1	52.1	50.5
59°	223.6	202.2	140.9	99.5	81.2	58.2	50.5	52.1	50.5	47.5	45.9
60°	212.9	193.0	131.7	91.9	76.6	53.6	45.9	49.0	47.5	44.4	42.9
62.5°	188.4	174.6	113.3	76.6	67.4	42.9	38.3	41.4	41.4	39.8	38.3
65°	165.4	150.1	96.5	64.3	62.8	36.8	30.6	36.8	38.3	35.2	32.2
67.5°	*144.0*	*128.6*	*84.2*	*52.1*	*58.2*	*29.1*	*23.0*	*30.6*	*41.4*	*32.2*	*29.1*
70°	122.5	107.2	65.9	41.4	61.3	19.9	18.4	27.6	49.0	35.2	27.6
72.5°	95.0	82.7	45.9	30.6	65.9	13.8	13.8	23.0	55.1	38.3	26.0
75°	65.9	53.6	27.6	18.4	53.6	9.2	9.2	21.4	52.1	35.2	24.5
77.5°	38.3	29.1	9.2	1.5	27.6	0.0	1.5	15.3	36.8	21.4	10.7
80°	13.8	6.1	0.0	0.0	16.8	0.0	0.0	0.0	3.1	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°	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8
2.5°	8936.5	9143.2	9328.5	9608.8	9941.1	10324.0	10653.3	11007.1	11339.4	11477.3	11572.2
5°	6847.5	7103.2	7401.9	7813.9	8362.1	9037.5	9670.1	10385.3	11154.1	11538.5	11900.0
7.5°	4841.2	5101.5	5472.1	5910.2	6573.3	7377.4	8204.4	9192.2	10233.7	10841.7	11440.5
10°	3481.2	3801.3	4147.4	4746.2	5420.1	6182.8	7034.3	8137.0	9297.9	9971.8	10693.1
12.5°	2369.3	2733.8	3257.6	3928.4	4720.2	5467.6	6207.3	7259.4	8607.2	9274.9	10048.4
15°	1421.3	1623.4	2177.8	2954.3	3925.3	4856.5	5666.7	6721.9	8158.4	8976.3	9780.3
17.5°	876.0	969.5	1271.2	1908.3	2928.3	4106.0	5216.4	6539.6	8222.8	9218.3	10079.0
20°	698.4	735.1	831.6	1127.2	1940.4	3279.0	4709.4	6502.9	8748.1	9973.3	10896.8
22.5°	606.5	641.7	706.0	819.4	1220.6	2455.0	4228.5	6536.6	9501.6	11105.1	12183.3
25°	534.5	565.1	626.4	719.8	894.4	1729.1	3714.0	6686.7	10483.3	12509.5	13655.1
27.5°	477.8	503.9	560.5	646.3	767.3	1206.8	3130.4	6868.9	11647.3	13946.1	15076.4
30°	425.8	448.7	499.3	578.9	666.2	928.1	2490.3	6993.0	12812.8	15076.4	16091.8
32.5°	381.4	398.2	444.1	511.5	578.9	739.7	1893.0	6973.0	13678.1	16016.7	16822.3
35°	335.4	352.3	392.1	450.3	503.9	611.1	1488.6	6600.9	14431.6	16992.3	17658.5
37.5°	284.9	306.3	344.6	396.7	433.4	537.6	1203.8	6152.1	15195.8	18107.3	18591.2
40°	242.0	263.4	297.1	353.8	376.8	510.0	925.0	5605.4	16055.0	19353.9	19614.3
42.5°	200.6	220.5	255.8	304.8	355.3	439.5	684.6	4980.5	16880.5	20419.9	20547.0
45°	162.3	182.3	219.0	268.0	379.8	364.5	529.9	4311.3	17546.7	21306.6	21348.0
47.5°	128.6	147.0	185.3	252.7	353.8	291.0	378.3	3785.9	18105.7	21998.9	21890.1
50°	99.5	114.9	154.7	289.5	309.4	240.4	286.4	3611.3	18606.5	22427.7	22145.9
52.5°	78.1	91.9	127.1	271.1	240.4	199.1	240.4	3775.2	19292.7	22783.0	22289.9
55°	62.8	76.6	99.5	154.7	163.9	168.5	205.2	3928.4	20476.5	23616.2	23139.9
57.5°	52.1	65.9	81.2	108.7	124.1	142.4	182.3	3945.2	21871.8	25000.7	24550.4
59°	47.5	59.7	73.5	96.5	108.7	130.2	171.5	3853.3	22363.4	25504.5	25279.4
60°	44.4	56.7	68.9	88.8	101.1	122.5	165.4	3766.0	22384.8	25486.2	25590.3
62.5°	38.3	50.5	61.3	75.0	85.8	104.1	148.6	3442.9	21478.1	24651.5	25403.5
65°	33.7	44.4	55.1	64.3	73.5	93.4	134.8	2853.2	19929.8	23305.3	24124.6
67.5°	*30.6*	*38.3*	*50.5*	*56.7*	*65.9*	*82.7*	*119.5*	*2033.9*	*17995.5*	*21658.9*	*22190.3*
70°	27.6	36.8	45.9	52.1	59.7	72.0	102.6	1168.6	15195.8	19248.2	19626.5
72.5°	26.0	35.2	41.4	49.0	53.6	64.3	93.4	549.8	11126.6	15419.4	16407.3
75°	23.0	32.2	38.3	45.9	50.5	58.2	79.6	263.4	7400.3	11158.7	12281.3
77.5°	13.8	26.0	35.2	41.4	44.4	50.5	65.9	151.6	4723.2	7723.5	9097.3
80°	0.0	9.2	26.0	35.2	38.3	42.9	50.5	119.5	2527.0	4412.3	5296.0
82.5°	0.0	0.0	18.4	27.6	26.0	29.1	38.3	75.0	1139.5	2883.9	3249.9
85°	0.0	0.0	6.1	21.4	18.4	13.8	26.0	26.0	249.6	1459.5	1821.0
87.5°	0.0	0.0	0.0	1.5	9.2	6.1	10.7	3.1	1.5	108.7	441.1
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: P324661
CATALOG NUMBER: GLEON-SA7D-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	10530.8	10530.8	10530.8	10530.8	10530.8	10530.8	*10530.8*	10530.8	10530.8	10530.8
2.5°	11904.6	12017.9	12209.3	12299.7	12255.3	12066.9	*11841.8*	11612.0	11477.3	11530.9
5°	12636.6	13220.1	13557.1	13668.9	13482.0	13059.3	*12506.5*	11777.4	11518.6	11448.2
7.5°	12636.6	13734.7	14430.1	14552.6	14136.0	13307.4	*12270.6*	11132.7	10754.4	10616.6
10°	12192.5	13687.3	14656.7	14851.2	14269.2	13030.2	*11641.1*	10342.4	9893.7	9751.2
12.5°	11691.7	13301.3	14322.8	14590.9	14113.0	12754.6	*11204.7*	9807.9	9279.5	9155.5
15°	11383.8	12826.5	13671.9	13866.5	13664.3	12593.8	*11100.5*	9647.1	9025.3	8905.8
17.5°	11494.1	12459.0	12763.8	12877.1	13013.4	12537.1	*11383.8*	9999.3	9212.1	9098.8
20°	11909.2	12071.5	11913.8	12056.2	12423.8	12592.2	*12059.3*	10850.9	9905.9	9754.3
22.5°	12613.7	11870.9	11428.3	11484.9	11932.1	12774.5	*13091.5*	12066.9	10976.5	10786.6
25°	13434.6	12033.2	11158.7	11108.2	11567.6	13014.9	*14034.9*	13390.1	12243.0	12033.2
27.5°	14466.8	12397.7	11103.6	11053.0	11440.5	13240.1	*14819.1*	14698.1	13577.0	13218.6
30°	15263.2	12756.1	11267.5	11151.1	11567.6	13396.3	*15448.5*	15808.4	14639.9	14402.5
32.5°	15834.5	13178.8	11533.9	11365.5	11926.0	13665.8	*15934.0*	16825.4	15623.1	15263.2
35°	16269.4	13638.3	11964.3	11687.1	12419.2	14074.7	*16388.9*	17908.2	16669.2	16275.5
37.5°	16676.8	14283.0	12636.6	12305.8	13192.6	14733.3	*16869.8*	19136.4	17839.2	17369.1
40°	17245.0	15013.6	13673.5	13379.4	14492.8	15630.8	*17470.1*	20416.8	19170.1	18579.0
42.5°	17813.2	15797.7	14734.8	14814.5	16114.7	16721.2	*18245.1*	21770.7	20484.2	19853.2
45°	18332.4	16606.4	16246.4	16614.0	17620.2	17917.3	*19015.5*	22553.3	21533.3	20923.7
47.5°	18794.9	17617.2	17748.9	18727.5	19332.5	19000.1	*19591.3*	23228.7	22314.4	21776.8
50°	19332.5	18925.1	19729.1	21113.6	21303.6	19980.3	*20115.1*	24028.1	23227.2	22795.3
52.5°	19920.6	20303.5	21922.3	23142.9	23081.7	21044.7	*20641.9*	24924.1	24478.4	24072.6
55°	20588.3	21416.9	23853.5	25042.0	24989.9	22233.2	*21514.9*	26031.4	26046.7	25679.1
57.5°	21579.2	22375.6	25164.5	26578.1	26665.4	23605.4	*22994.4*	27271.9	27464.9	27219.8
59°	22289.9	22997.4	25683.7	27219.8	27575.2	24666.8	*24075.6*	27991.7	27864.6	27641.0
60°	22816.7	23392.6	25941.0	27555.3	28103.5	25386.6	*24873.5*	28414.4	27912.1	27641.0
62.5°	24120.0	24253.3	26405.1	27935.1	28711.6	26985.5	*27118.8*	29134.3	27582.8	27140.2
65°	24728.0	24797.0	26398.9	27255.1	28123.4	28230.7	*29155.7*	29155.7	26778.8	26098.8
67.5°	*24473.8*	*24141.5*	*25089.5*	*25000.7*	*25867.5*	*27490.9*	*29921.5*	*28086.7*	*25241.1*	*24362.0*
70°	22406.3	21127.4	20706.3	20744.5	21407.7	23911.7	*28405.2*	24940.9	22331.2	21303.6
72.5°	18643.3	15575.6	14535.7	15722.7	15895.7	18376.8	*24207.3*	18782.7	16468.5	15505.2
75°	14995.2	10979.5	9288.7	10541.5	10835.6	13448.3	*18726.0*	11697.8	9619.5	8869.1
77.5°	10772.8	7881.2	6665.2	6577.9	6957.7	8529.1	*13287.5*	5887.2	4910.1	4582.3
80°	6120.0	5187.3	5585.5	5270.0	5461.4	5332.8	*6313.0*	2582.2	2115.0	1977.2
82.5°	3694.0	3066.1	3320.4	2764.4	3498.0	3046.2	*2432.1*	827.0	718.3	683.1
85°	2403.0	1675.5	873.0	585.0	1205.3	1946.6	*543.7*	225.1	173.1	137.8
87.5°	828.6	427.3	42.9	18.4	128.6	363.0	*19.9*	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.

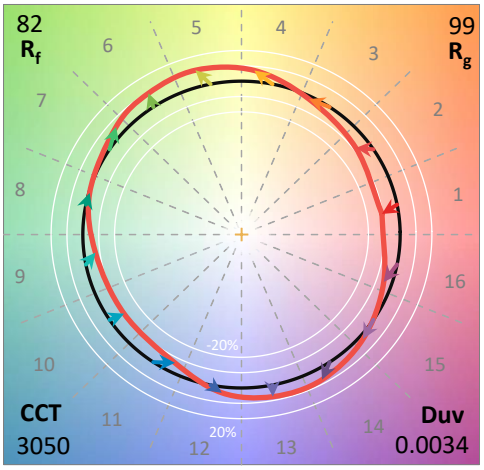
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

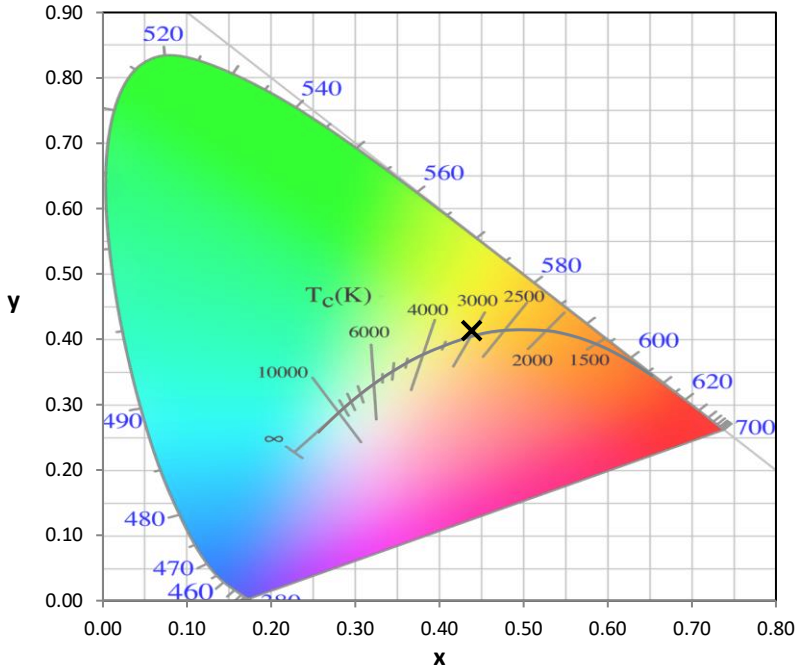
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

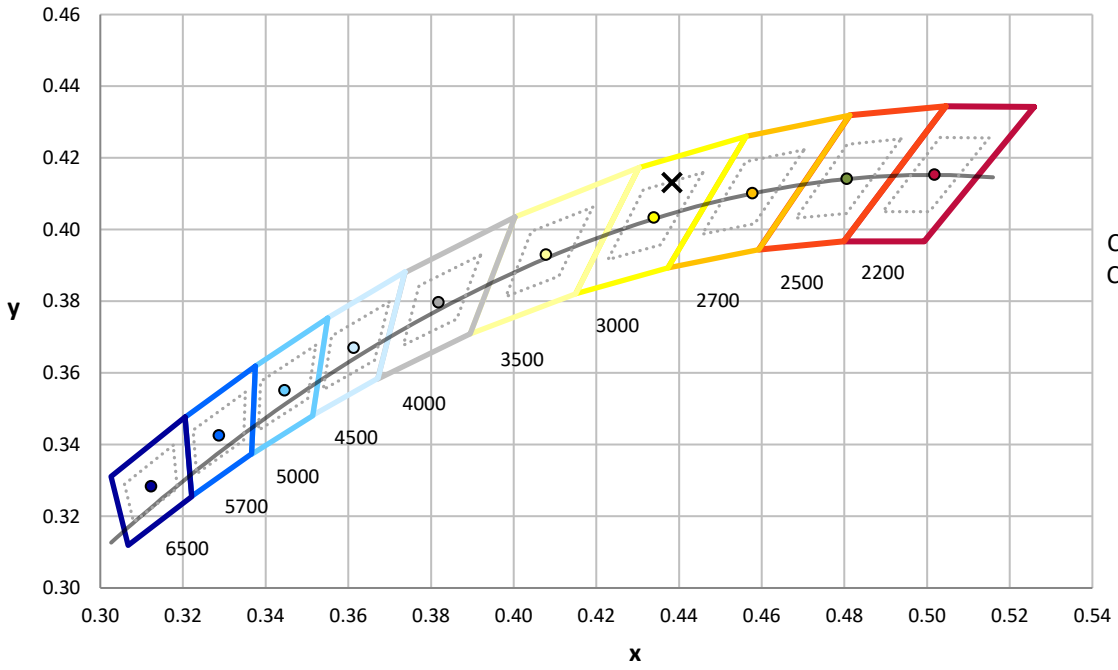
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

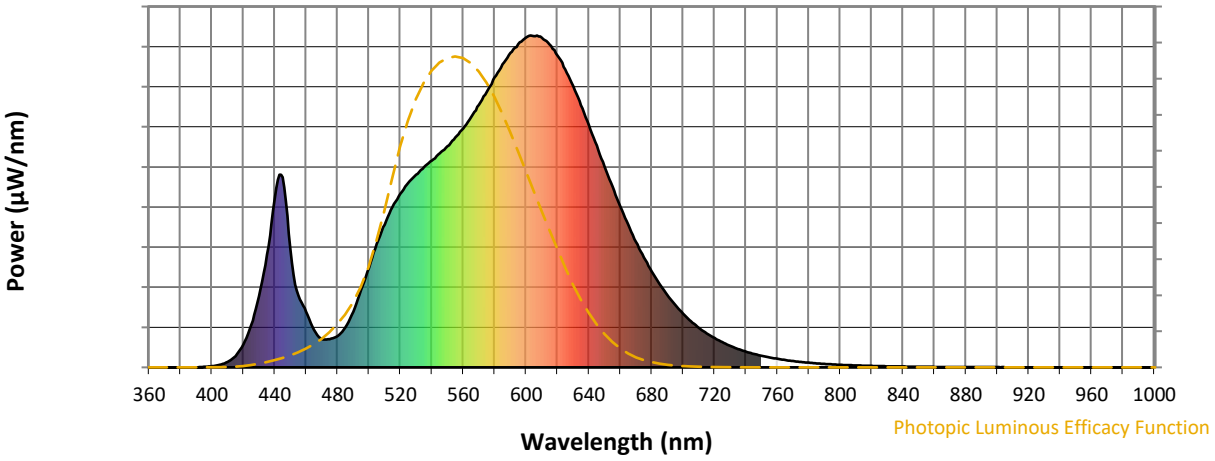


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

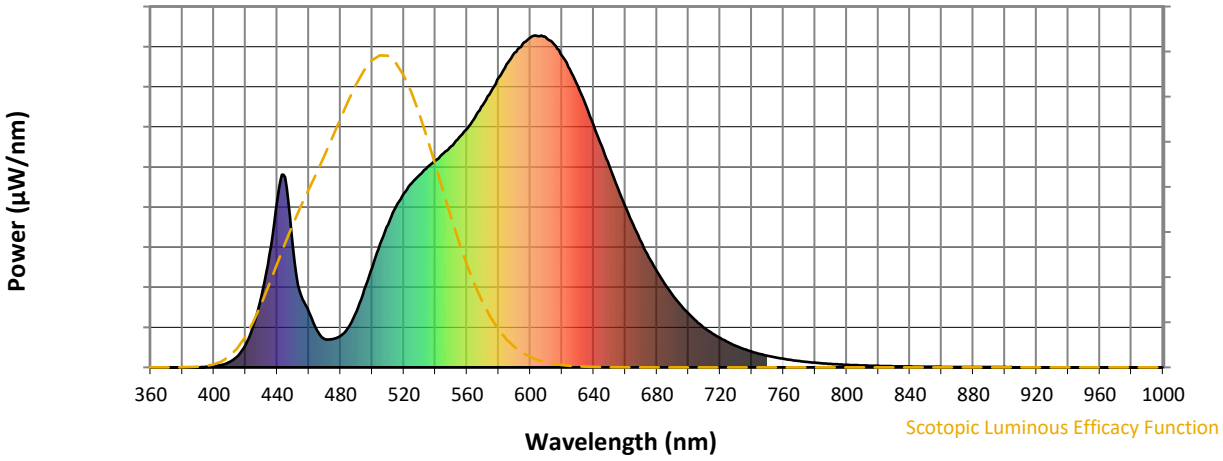


Photopic Lumens: NR

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

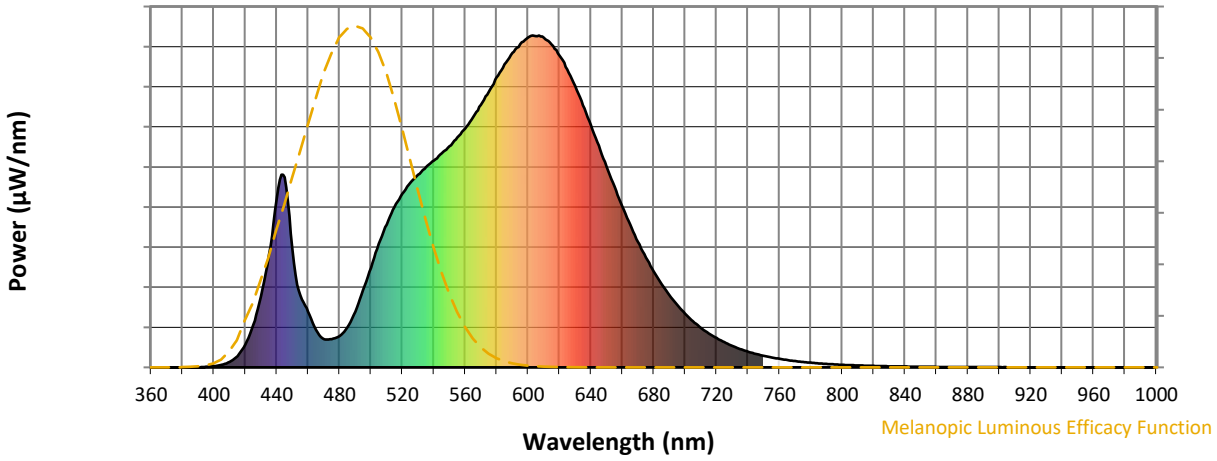


Scotopic Lumens: NR **S/P: 1.27**

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			

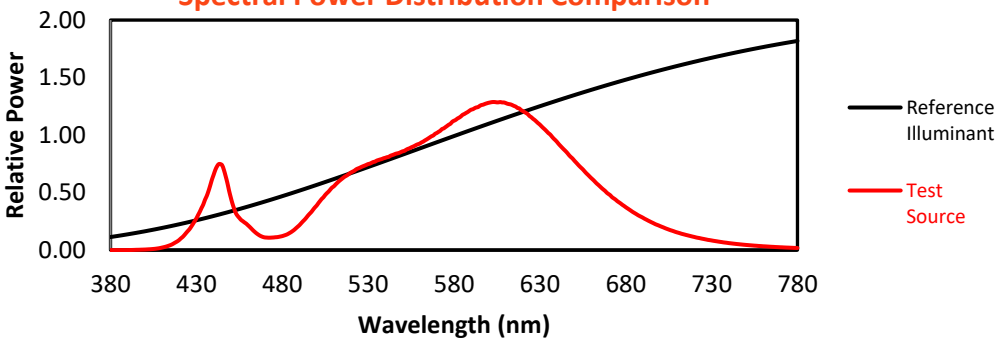
REPORT NUMBER: SP1-2408-195-9

TM-30-18

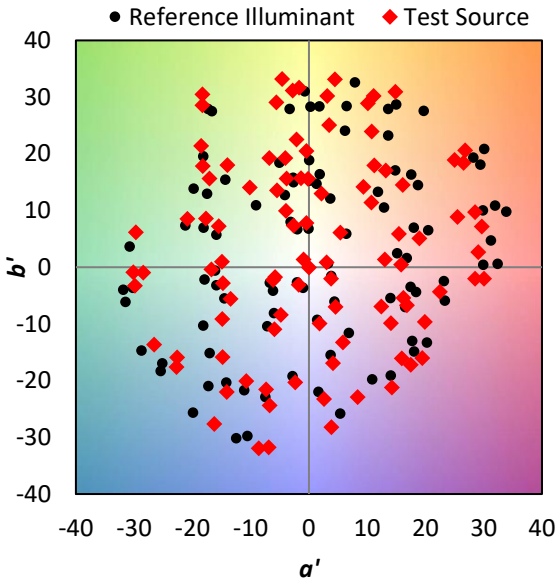
Summary

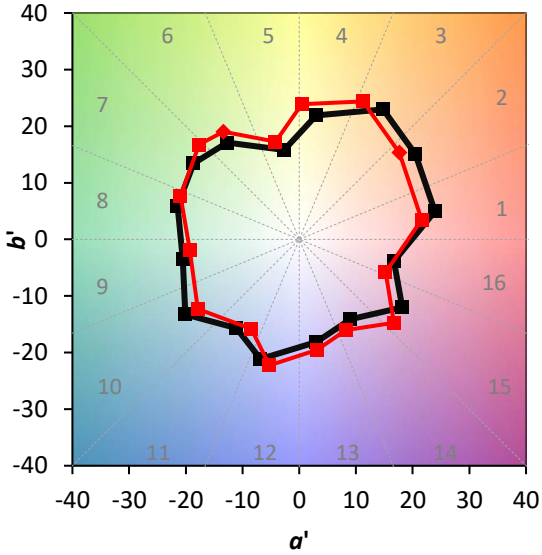
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

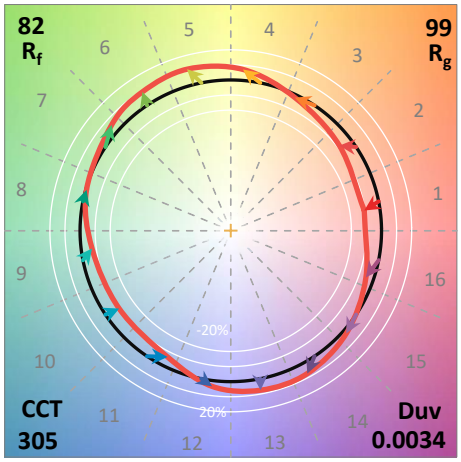
Spectral Power Distribution Comparison

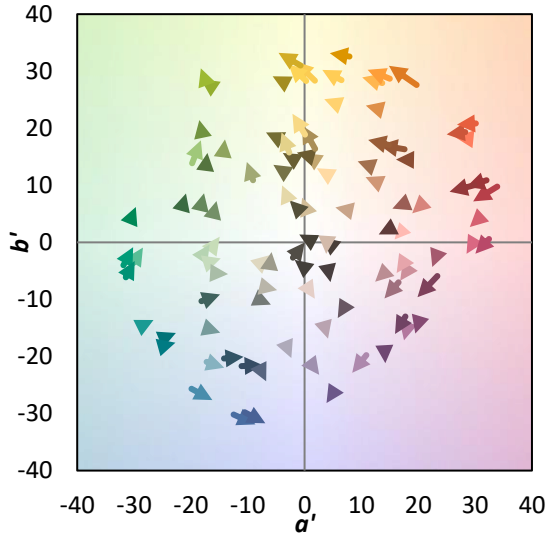


Color Vector Graphics









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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
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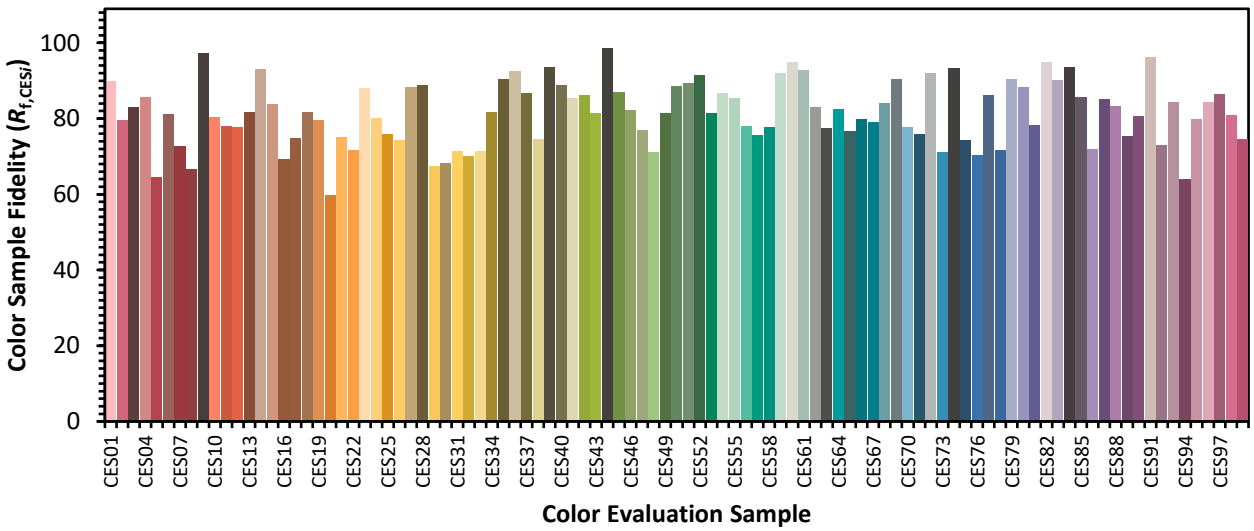

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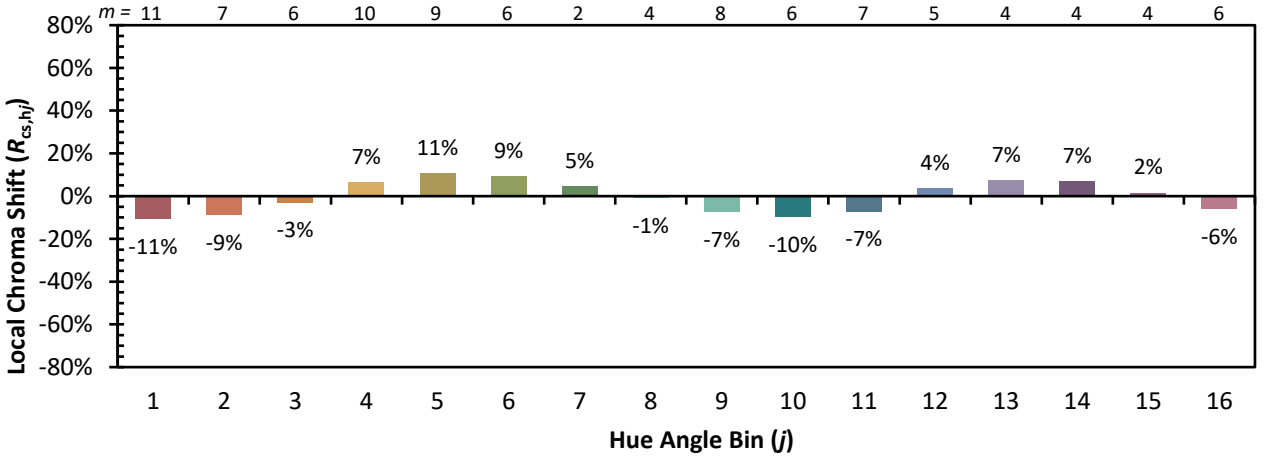
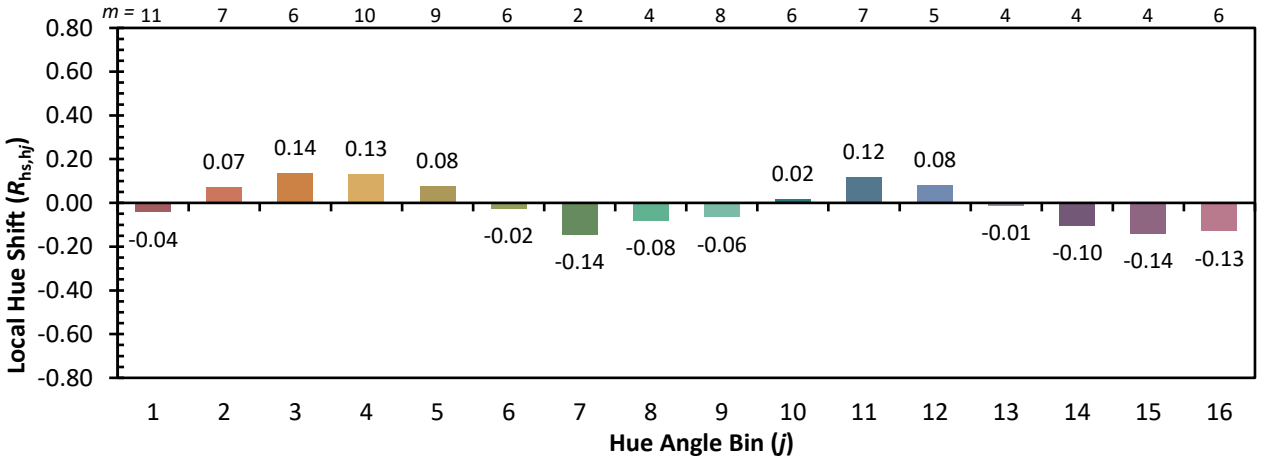
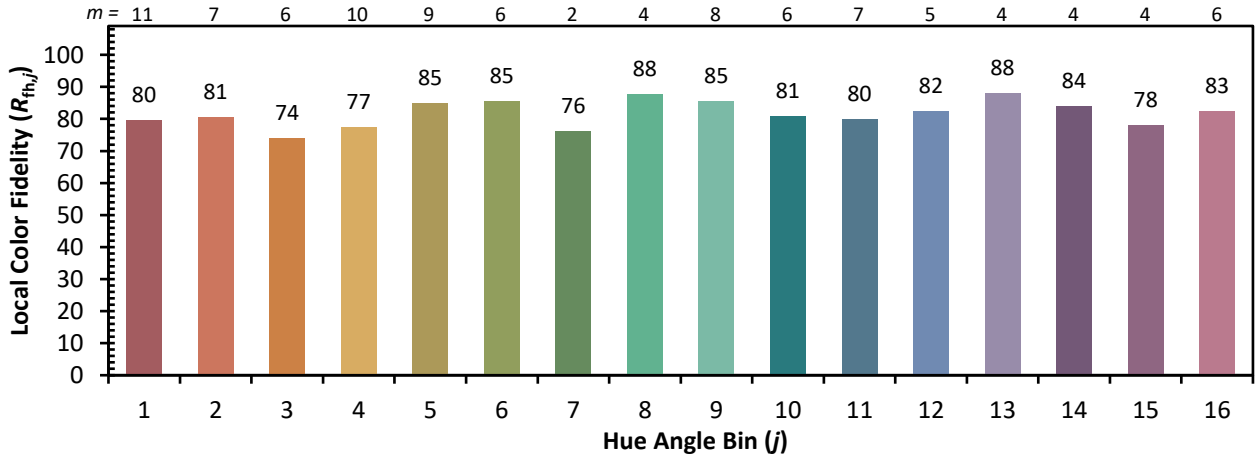
Color Rendition by Hue-Angle Bin







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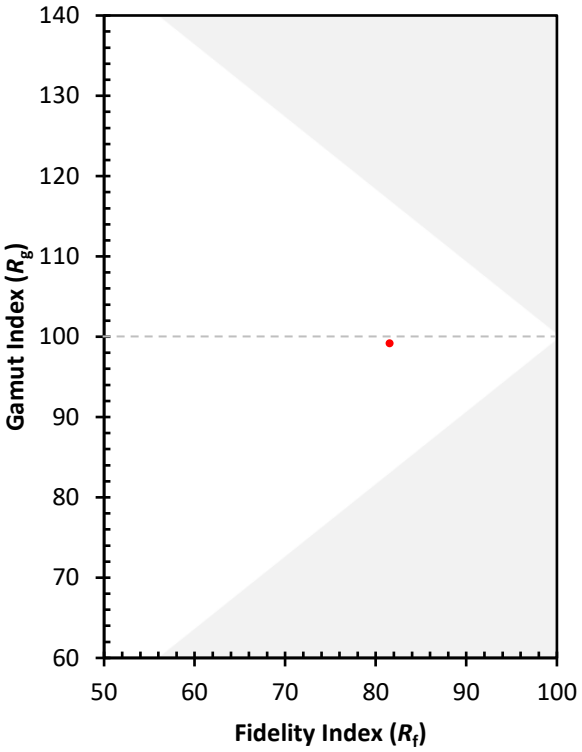
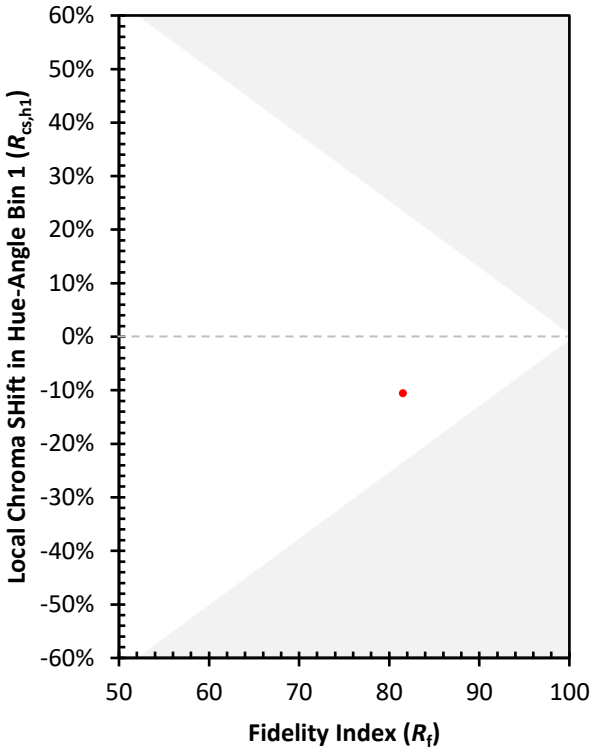
Measure Comparisons





(END OF REPORT)