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: P324313

Luminaire Tested: **GLEON-SA9A-830-U-SLL-HSS**

Issue Date: 3/3/2020

Report Generated By E0585644

Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P324313
	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-SA9A-830-U-SLL-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(9) 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:	24544 lumens
Efficiency:	N/A
Efficacy:	84.6 lumens/watt
Luminous Opening:	Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B2 - U0 - G4

Input Watts (W):	290
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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REPORT NUMBER: P324313
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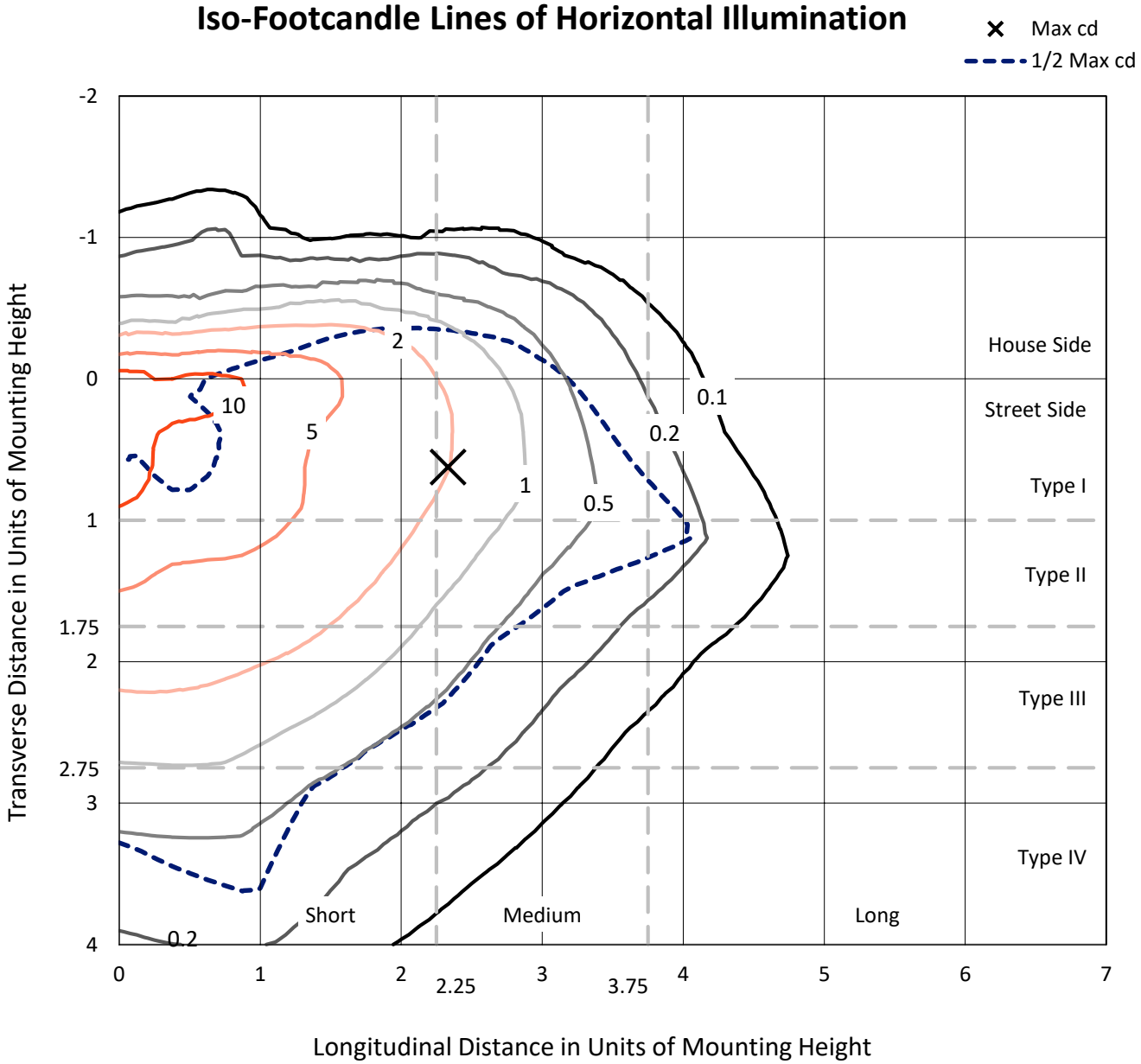
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 17.1 fc
Type III - Medium - N/A

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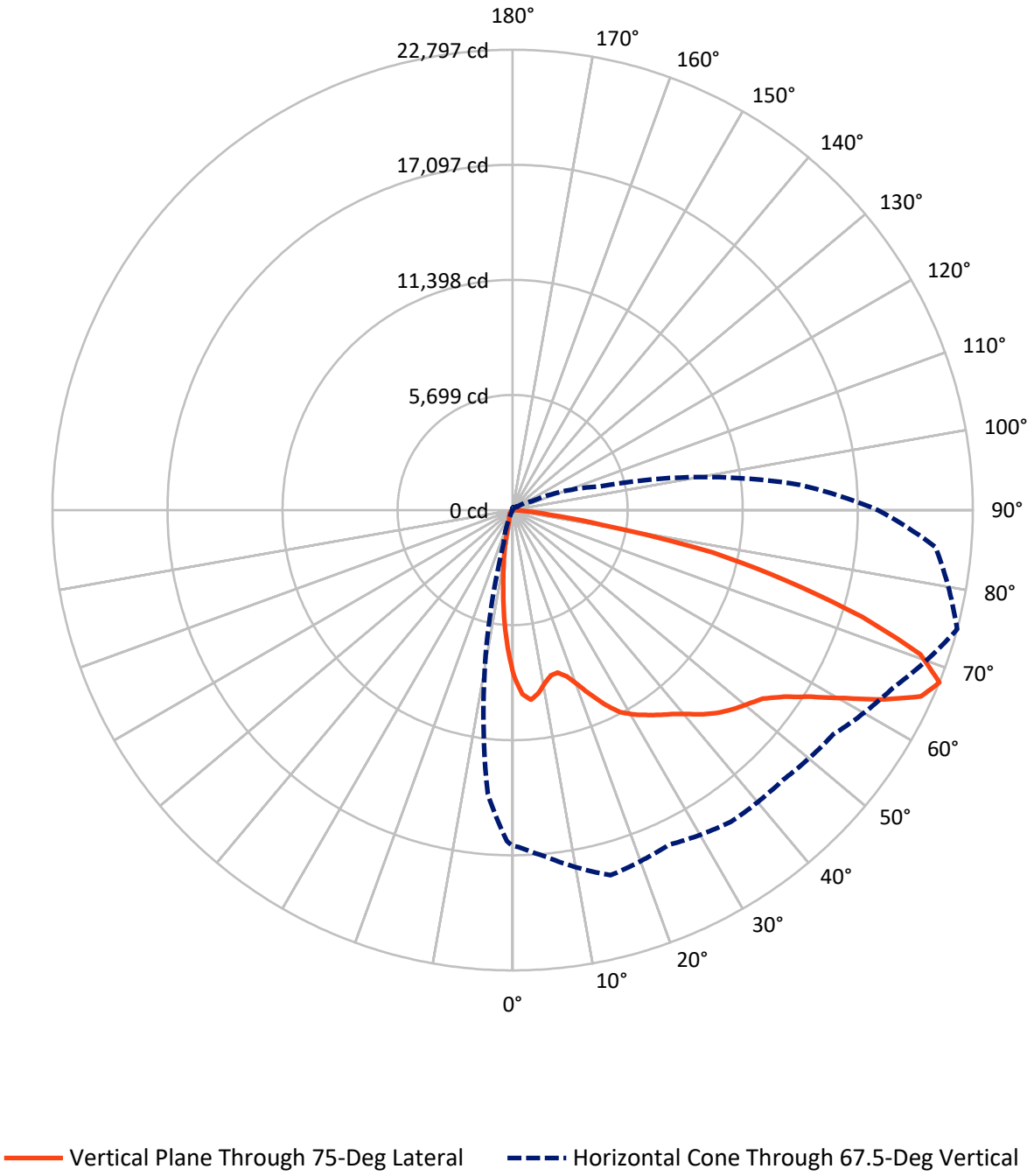
Luminous Intensity Polar Plot



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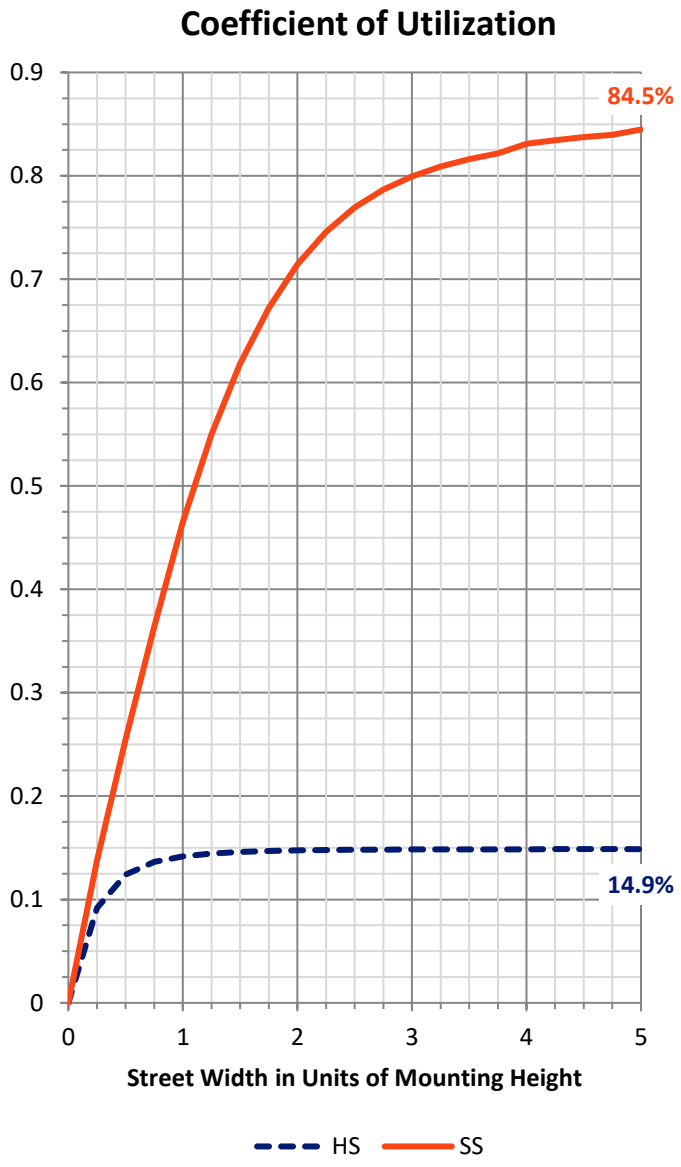
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3683.1	0.0	3683.1
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	20860.9	0.0	20860.9
	% Fixture	85.0	0.0	85.0
Total	Lumens	24544.0	0.0	24544.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	624.6	2.5
10°-20°	1229.8	5.0
20°-30°	1739.9	7.1
30°-40°	2558.1	10.4
40°-50°	3676.8	15.0
50°-60°	5176.0	21.1
60°-70°	6045.1	24.6
70°-80°	3084.0	12.6
80°-90°	409.7	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°	24544.0	100.0
0°-180°	24544.0	100.0



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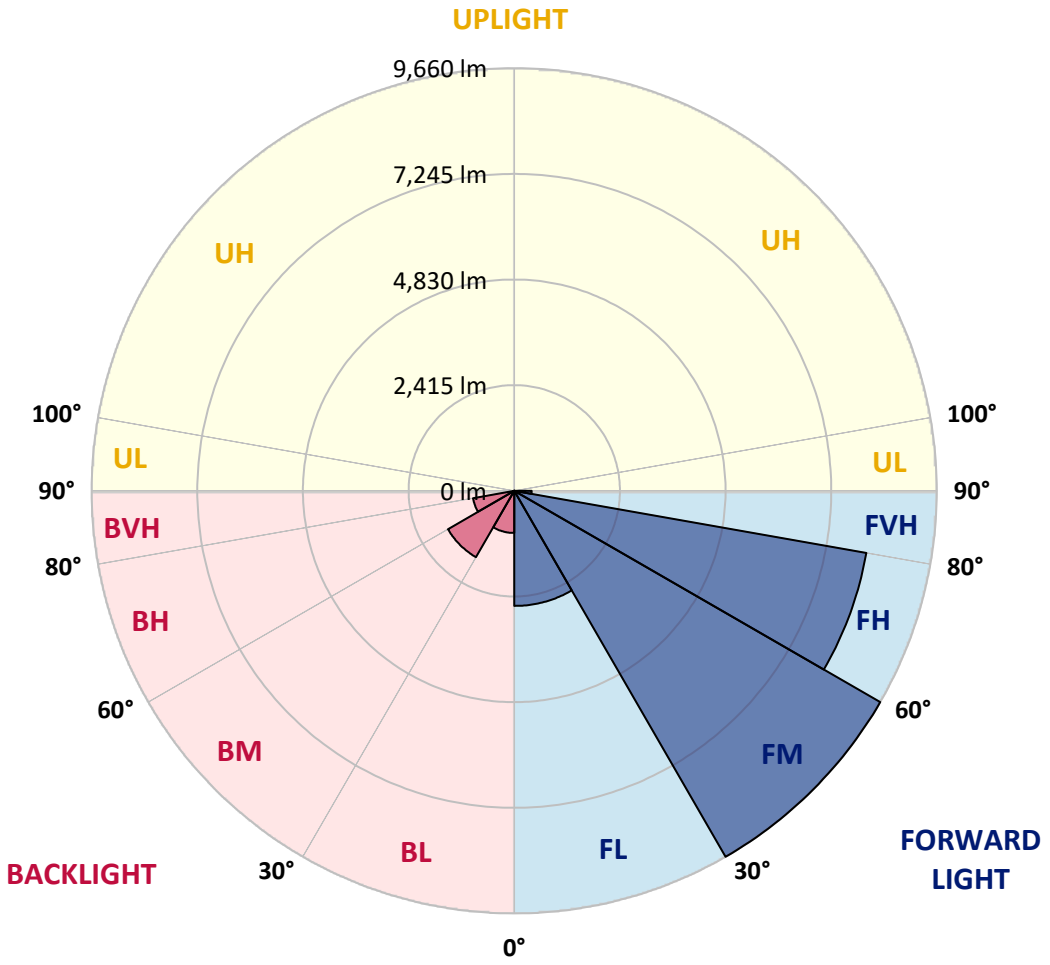
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2631.1	10.7			
FM	(30°-60°)	9660.1	39.4			
FH	(60°-80°)	8172.4	33.3			G4/12000
FVH	(80°-90°)	397.3	1.6			G3/500
BL	(0°-30°)	963.2	3.9	B2/1000		
BM	(30°-60°)	1750.8	7.1	B2/2500		
BH	(60°-80°)	956.7	3.9	B2/1000		G2/1000
BVH	(80°-90°)	12.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	*8234.1*	8234.1
2.5°	8925.9	8939.8	9011.9	9179.4	9361.9	9375.8	9499.1	9372.4	9329.3	*9124.7*	8913.1
5°	8993.3	9046.8	9294.5	9786.3	10213.0	10350.2	10447.8	10199.0	9937.4	*9437.5*	8903.8
7.5°	8450.4	8539.9	8929.4	9852.5	10615.3	10952.4	11016.4	10626.9	9986.2	*9163.1*	8360.8
10°	7755.1	7857.4	8327.1	9461.9	10509.5	11087.3	11175.7	10665.3	9744.4	*8718.9*	7773.7
12.5°	7192.3	7312.1	7792.3	9022.4	10145.5	10785.0	10959.4	10536.2	9535.1	*8403.8*	7372.5
15°	6933.1	7070.3	7574.9	8738.7	9742.1	10245.5	10389.7	10207.2	9418.9	*8353.8*	7279.5
17.5°	7081.9	7230.7	7751.6	8763.1	9363.1	9578.1	9694.4	9768.8	9418.9	*8655.0*	7551.6
20°	7692.3	7852.7	8403.8	9010.8	9049.1	8968.9	9093.3	9354.9	9528.2	*9227.0*	8205.0
22.5°	8536.4	8724.7	9346.8	9435.1	8895.7	8592.2	8608.5	9018.9	9727.0	*9952.5*	9111.9
25°	9565.4	9795.6	10428.1	10067.6	8959.6	8367.8	8362.0	8742.2	9921.1	*10679.2*	10122.3
27.5°	10587.4	10840.8	11396.6	10839.7	9223.5	8327.1	8315.5	8658.5	10110.7	*11325.7*	11225.7
30°	11444.2	11690.7	12169.8	11398.9	9508.4	8422.4	8366.6	8748.0	10223.4	*11745.4*	12030.2
32.5°	12141.9	12339.5	12726.7	11783.8	9813.0	8607.3	8486.4	8987.5	10415.3	*12100.0*	12769.7
35°	12909.2	13117.3	13272.0	12150.0	10154.8	8873.6	8700.3	9367.7	10710.6	*12460.4*	13580.1
37.5°	13784.7	13991.7	13973.1	12484.8	10588.5	9314.2	9203.8	9970.0	11169.9	*12817.4*	14484.7
40°	14641.6	14853.2	14702.1	12851.1	11097.8	10040.9	9959.5	10874.5	11784.9	*13274.3*	15545.0
42.5°	15443.9	15672.9	15349.7	13197.6	11704.7	10957.1	11096.6	12039.5	12554.6	*13837.0*	16458.9
45°	16090.3	16324.0	15892.7	13534.7	12344.2	12068.6	12488.3	13330.1	13480.1	*14312.6*	17076.3
47.5°	16560.0	16780.9	16269.4	13871.9	13162.7	13427.8	14159.1	14683.5	14316.1	*14725.3*	17514.6
50°	16860.0	17032.1	16379.8	14294.0	14237.0	15013.7	15899.6	16155.4	15103.2	*15097.4*	18047.1
52.5°	17050.7	17128.6	16461.2	14734.6	15357.8	16740.3	17604.1	17684.3	15913.6	*15506.6*	18764.5
55°	17707.6	17770.4	17037.9	15268.3	16284.5	18252.9	19145.8	19071.4	16830.9	*16307.7*	19610.9
57.5°	18828.4	18894.7	18229.6	16035.7	17034.4	19187.7	20263.2	20396.9	17906.4	*17433.2*	20517.8
60°	19391.2	19514.4	19277.2	17007.7	17761.1	19785.3	21024.7	21451.4	19250.5	*18916.8*	21396.8
62.5°	18880.7	19059.8	19403.9	18085.5	18483.1	20114.3	21261.9	21829.3	20627.1	*20645.7*	21938.6
65°	17862.2	18005.2	18588.9	18676.1	18901.7	20073.7	20675.9	21301.4	21470.0	*22233.9*	21909.5
67.5°	*16632.1*	*16685.6*	*17180.9*	*18722.6*	*18294.8*	*18850.5*	*18915.6*	*19378.4*	*20803.8*	*22796.6*	*21029.4*
70°	14861.4	14890.4	15322.9	17165.8	15721.7	15843.8	15747.3	15841.5	17885.5	*21425.8*	18807.5
72.5°	11960.5	12033.7	12648.8	14255.6	11453.6	11101.3	11859.3	11817.5	13774.3	*18101.7*	13968.4
75°	8806.1	8932.9	9861.8	11482.6	8038.8	7271.4	7824.8	7972.5	9792.1	*14002.1*	8735.2
77.5°	6165.7	6259.9	7159.8	8441.0	5818.0	5199.5	4999.5	5175.1	6463.3	*10129.3*	4400.7
80°	3552.0	3586.9	4161.2	4874.0	3920.6	4485.6	4063.6	4184.5	3872.9	*4506.5*	1892.8
82.5°	2324.2	2330.0	2554.4	2900.9	2441.6	2836.9	2099.8	2684.6	2382.3	*1810.3*	616.2
85°	1255.7	1262.7	1481.3	2059.1	1382.4	781.3	459.3	942.9	1473.1	*415.1*	168.6
87.5°	138.4	126.7	446.5	748.8	383.7	70.9	24.4	105.8	236.0	*26.7*	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°	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1
2.5°	8805.0	8708.5	8467.8	8213.2	8008.5	7816.7	7623.7	7387.7	7205.1	7167.9	7107.5
5°	8616.6	8310.8	7806.2	7299.3	6891.2	6376.1	6049.4	5794.8	5546.0	5530.9	5480.9
7.5°	7958.5	7556.3	6845.9	6144.8	5570.4	5079.7	4584.4	4253.1	3992.6	3900.8	3846.1
10°	7326.0	6873.8	5986.6	5186.7	4674.0	4240.3	3891.5	3545.0	3231.1	3014.8	2917.2
12.5°	6884.2	6384.3	5406.5	4717.0	4349.6	3938.0	3512.5	3079.9	2718.3	2457.9	2298.6
15°	6713.3	6179.6	5212.3	4531.0	4077.5	3556.6	3012.5	2518.4	2117.2	1881.2	1738.2
17.5°	6916.8	6295.9	5197.2	4304.2	3670.6	3023.0	2421.9	1838.2	1460.3	1281.3	1189.4
20°	7433.0	6665.6	5191.4	4026.4	3186.9	2390.5	1640.5	1209.2	980.1	880.1	837.1
22.5°	8163.2	7137.7	5237.9	3752.0	2683.5	1708.0	1132.4	888.3	770.9	717.4	693.0
25°	9102.6	7800.4	5369.3	3503.2	2210.3	1274.3	882.5	744.1	661.6	619.7	602.3
27.5°	10103.7	8563.1	5573.9	3286.9	1825.4	1016.2	755.7	637.1	577.9	548.8	532.5
30°	10929.2	9446.8	5780.8	3046.2	1546.4	886.0	691.8	581.3	512.7	494.1	479.0
32.5°	11651.2	10115.3	5927.3	2828.8	1363.8	787.1	625.5	519.7	473.2	437.2	420.9
35°	12398.8	10672.2	5922.7	2676.5	1238.3	712.7	569.7	465.1	409.3	367.4	354.6
37.5°	13208.0	11301.2	5821.5	2546.3	1183.6	653.4	538.3	436.0	380.2	338.3	322.1
40°	14155.6	11961.6	5718.1	2424.2	1168.5	605.8	516.2	412.8	353.5	312.8	296.5
42.5°	15078.8	12556.9	5627.4	2333.5	1103.4	604.6	496.5	395.3	332.5	293.0	274.4
45°	15817.1	13111.5	5609.9	2278.9	1034.8	625.5	486.0	383.7	316.2	276.7	259.3
47.5°	16431.0	13713.8	5721.5	2240.5	969.7	570.9	511.6	375.5	301.1	262.8	243.0
50°	17161.1	14453.3	5984.3	2177.7	901.1	513.9	586.0	377.9	288.3	248.8	227.9
52.5°	18179.6	15476.4	6370.3	2071.9	806.9	461.6	576.7	380.2	274.4	233.7	212.8
55°	19321.4	16754.2	6785.4	1896.3	675.5	393.0	494.1	363.9	247.7	217.4	197.7
57.5°	20521.3	17913.4	7031.9	1687.0	537.2	339.5	395.3	331.4	218.6	195.3	182.5
60°	20709.6	18354.0	6919.1	1430.1	426.7	295.3	293.0	337.2	195.3	172.1	162.8
62.5°	20241.1	17800.6	6373.8	1201.0	356.9	259.3	240.7	294.2	176.7	153.5	144.2
65°	19340.0	16304.2	5490.2	1082.5	331.4	222.1	200.0	207.0	154.6	133.7	125.6
67.5°	*18086.6*	*14306.8*	*4507.7*	*1015.0*	*327.9*	*190.7*	*170.9*	*157.0*	*133.7*	*116.3*	*109.3*
70°	15524.1	11918.6	3596.2	977.8	318.6	160.4	144.2	127.9	111.6	98.8	93.0
72.5°	11425.6	8445.7	2797.4	937.1	320.9	127.9	125.6	105.8	89.5	76.7	74.4
75°	6601.7	4825.1	1834.7	759.2	305.8	98.8	104.6	74.4	62.8	53.5	53.5
77.5°	3518.3	2942.7	698.8	316.2	111.6	62.8	59.3	44.2	39.5	32.6	31.4
80°	1533.6	1295.2	210.4	88.4	61.6	33.7	22.1	19.8	17.4	14.0	12.8
82.5°	543.0	468.6	68.6	43.0	26.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	123.2	88.4	0.0	10.5	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°	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1
2.5°	6984.2	6958.6	6807.5	6813.3	6840.0	6878.4	6787.7	6829.6	6942.4	7050.5	7091.2
5°	5400.6	5406.5	5314.6	5371.6	5422.7	5457.6	5311.1	5313.4	5403.0	5525.1	5589.0
7.5°	3805.4	3796.1	3800.8	3936.8	4033.3	3963.6	4018.2	3828.7	3840.3	3927.5	3862.4
10°	2828.8	2700.9	2628.8	2731.1	2836.9	2798.6	2704.4	2642.8	2685.8	2782.3	2775.3
12.5°	2223.0	2039.3	1931.2	1858.0	1945.2	1873.1	1870.8	1817.3	1759.1	1769.6	1924.2
15°	1671.9	1538.2	1410.3	1292.9	1290.6	1266.2	1141.8	1002.2	990.6	997.6	1077.8
17.5°	1149.9	1104.5	1052.2	951.1	924.3	822.0	701.1	645.3	617.4	630.2	656.9
20°	808.1	790.6	796.4	741.8	703.4	605.8	534.8	512.7	508.1	520.9	533.7
22.5°	669.7	638.3	634.8	610.4	572.0	501.1	462.7	450.0	444.1	455.8	465.1
25°	586.0	554.6	541.8	526.7	486.0	437.2	413.9	402.3	396.5	403.4	409.3
27.5°	516.2	487.2	475.5	465.1	425.5	390.7	372.1	361.6	356.9	359.3	365.1
30°	463.9	438.3	423.2	410.4	376.7	352.3	336.0	325.6	320.9	320.9	326.7
32.5°	409.3	395.3	381.4	365.1	333.7	317.4	301.1	289.5	284.9	286.0	290.7
35°	340.7	336.0	339.5	324.4	297.6	283.7	267.4	254.6	251.1	252.3	257.0
37.5°	302.3	281.4	294.2	286.0	270.9	252.3	231.4	219.7	213.9	217.4	219.7
40°	277.9	252.3	243.0	251.1	248.8	218.6	200.0	188.4	183.7	184.9	187.2
42.5°	257.0	226.7	205.8	204.6	218.6	190.7	170.9	160.4	154.6	154.6	157.0
45°	237.2	204.6	179.1	159.3	183.7	161.6	143.0	133.7	126.7	126.7	127.9
47.5°	222.1	186.0	155.8	130.2	138.4	132.5	117.4	108.1	101.2	101.2	102.3
50°	208.1	167.4	134.9	109.3	103.5	109.3	95.3	84.9	80.2	79.1	81.4
52.5°	193.0	148.8	115.1	93.0	81.4	82.6	74.4	67.4	61.6	61.6	63.9
55°	177.9	133.7	100.0	79.1	67.4	61.6	59.3	54.6	50.0	50.0	52.3
57.5°	162.8	117.4	84.9	65.1	53.5	48.8	48.8	45.3	41.9	41.9	44.2
60°	148.8	101.2	69.8	53.5	41.9	40.7	41.9	38.4	36.0	36.0	38.4
62.5°	132.5	86.0	57.0	44.2	33.7	32.6	36.0	33.7	31.4	31.4	33.7
65°	112.8	73.2	45.3	33.7	25.6	25.6	30.2	27.9	25.6	25.6	27.9
67.5°	*95.3*	*61.6*	*34.9*	*24.4*	*18.6*	*19.8*	*25.6*	*23.3*	*22.1*	*22.1*	*24.4*
70°	79.1	47.7	24.4	15.1	10.5	15.1	19.8	19.8	19.8	19.8	22.1
72.5°	59.3	32.6	14.0	5.8	4.7	10.5	16.3	18.6	17.4	17.4	20.9
75°	38.4	18.6	4.7	0.0	0.0	5.8	12.8	15.1	15.1	14.0	17.4
77.5°	22.1	5.8	0.0	0.0	0.0	0.0	8.1	7.0	5.8	4.7	8.1
80°	5.8	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: P324313
CATALOG NUMBER: GLEON-SA9A-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1	8234.1
2.5°	7255.1	7392.3	7585.3	7789.9	8105.0	8355.0	8600.3	8810.8	8892.2	8925.9
5°	5742.5	5943.6	6226.1	6588.9	7157.5	7669.0	8187.6	8709.6	8936.4	8993.3
7.5°	4120.5	4377.5	4736.8	5191.4	5857.6	6520.3	7244.7	8010.9	8362.0	8450.4
10°	3049.7	3363.6	3775.2	4254.2	4890.2	5571.6	6361.0	7236.5	7637.6	7755.1
12.5°	2163.7	2588.1	3139.2	3721.7	4272.8	4880.9	5679.7	6644.7	7065.6	7192.3
15°	1270.8	1681.2	2333.5	3113.7	3819.4	4435.6	5247.2	6341.3	6805.2	6933.1
17.5°	729.0	933.6	1426.6	2296.3	3254.3	4107.7	5111.1	6416.8	6963.3	7081.9
20°	556.9	622.0	822.0	1478.9	2593.9	3785.7	5111.1	6844.7	7517.9	7692.3
22.5°	487.2	534.8	616.2	882.5	1909.1	3440.4	5170.4	7463.2	8343.4	8536.4
25°	432.5	475.5	545.3	663.9	1302.2	3029.9	5311.1	8222.5	9315.4	9565.4
27.5°	387.2	427.9	490.7	581.3	890.6	2534.6	5500.6	9113.1	10387.4	10587.4
30°	346.5	384.8	441.8	505.8	687.1	1973.1	5662.2	9952.5	11229.2	11444.2
32.5°	308.1	343.0	394.1	441.8	562.7	1459.2	5679.7	10617.6	11927.9	12141.9
35°	272.1	303.5	350.0	387.2	466.2	1152.2	5408.8	11194.3	12626.7	12909.2
37.5°	237.2	267.4	308.1	336.0	410.4	939.4	4994.9	11837.2	13523.1	13784.7
40°	204.6	231.4	273.2	291.8	388.3	722.0	4544.9	12511.6	14402.1	14641.6
42.5°	174.4	200.0	240.7	276.7	340.7	539.5	4058.9	13144.1	15192.7	15443.9
45°	145.3	172.1	212.8	293.0	282.5	403.4	3539.2	13563.8	15817.1	16090.3
47.5°	117.4	147.7	203.5	279.0	225.6	296.5	3127.6	13961.4	16290.3	16560.0
50°	94.2	124.4	229.0	248.8	184.9	226.7	2955.5	14317.2	16600.7	16860.0
52.5°	76.7	104.6	216.3	190.7	154.6	187.2	3048.5	14893.9	16887.9	17050.7
55°	63.9	82.6	130.2	132.5	131.4	159.3	3163.6	15721.7	17630.9	17707.6
57.5°	55.8	66.3	90.7	102.3	110.5	141.8	3166.0	16910.0	18780.8	18828.4
60°	47.7	58.1	75.6	82.6	95.3	126.7	3050.9	17325.1	19233.0	19391.2
62.5°	41.9	51.2	62.8	68.6	80.2	113.9	2781.1	16724.0	18612.2	18880.7
65°	37.2	46.5	52.3	58.1	70.9	102.3	2337.0	15521.8	17582.0	17862.2
67.5°	*32.6*	*40.7*	*46.5*	*52.3*	*63.9*	*90.7*	*1720.8*	*14125.4*	*16399.6*	*16632.1*
70°	29.1	36.0	41.9	46.5	55.8	76.7	1044.1	11986.1	14764.9	14861.4
72.5°	27.9	32.6	38.4	41.9	48.8	67.4	529.0	8808.5	11803.5	11960.5
75°	24.4	29.1	34.9	37.2	43.0	58.1	215.1	5785.5	8553.8	8806.1
77.5°	19.8	26.7	31.4	33.7	37.2	47.7	109.3	3697.3	6002.9	6165.7
80°	7.0	19.8	26.7	27.9	31.4	34.9	72.1	2024.2	3482.2	3552.0
82.5°	0.0	12.8	20.9	19.8	22.1	26.7	46.5	962.7	2298.6	2324.2
85°	0.0	5.8	16.3	12.8	9.3	18.6	16.3	210.4	1205.7	1255.7
87.5°	0.0	0.0	1.2	5.8	4.7	7.0	2.3	1.2	109.3	138.4
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.

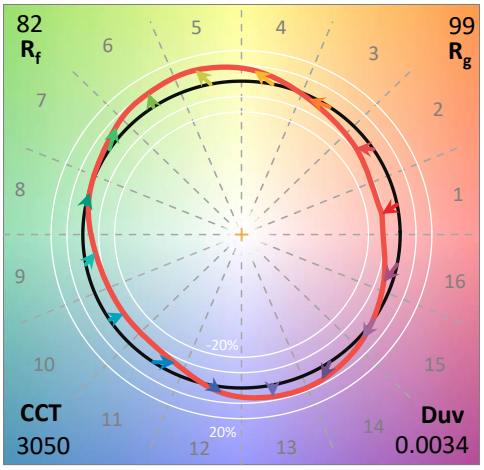
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

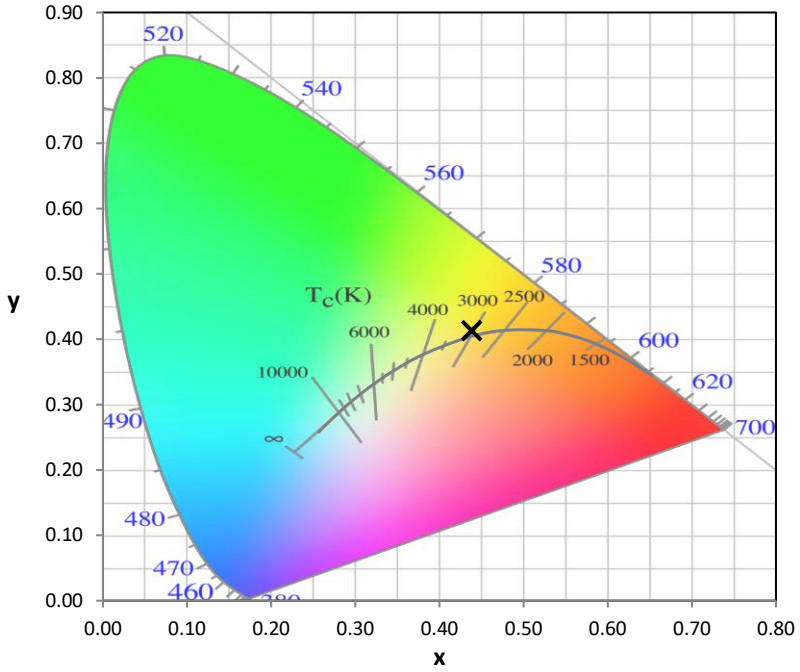
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

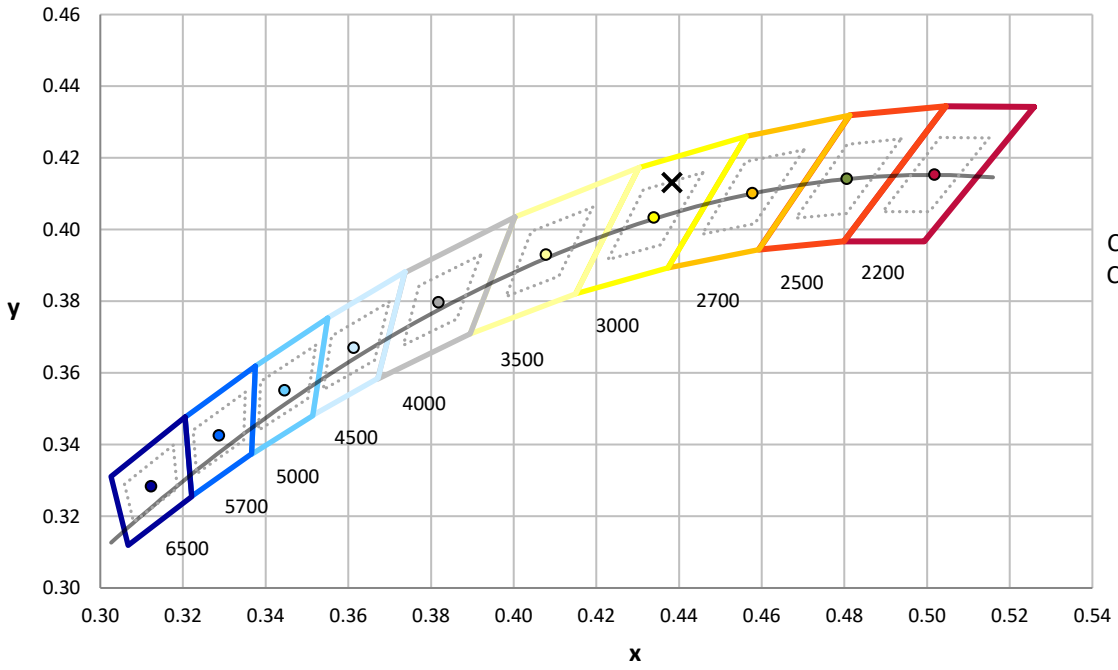
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

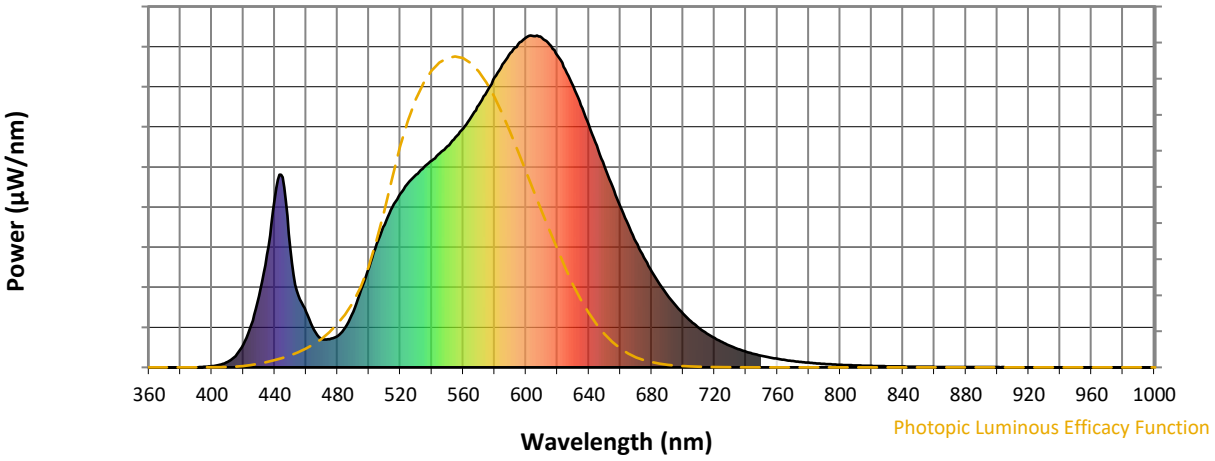


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

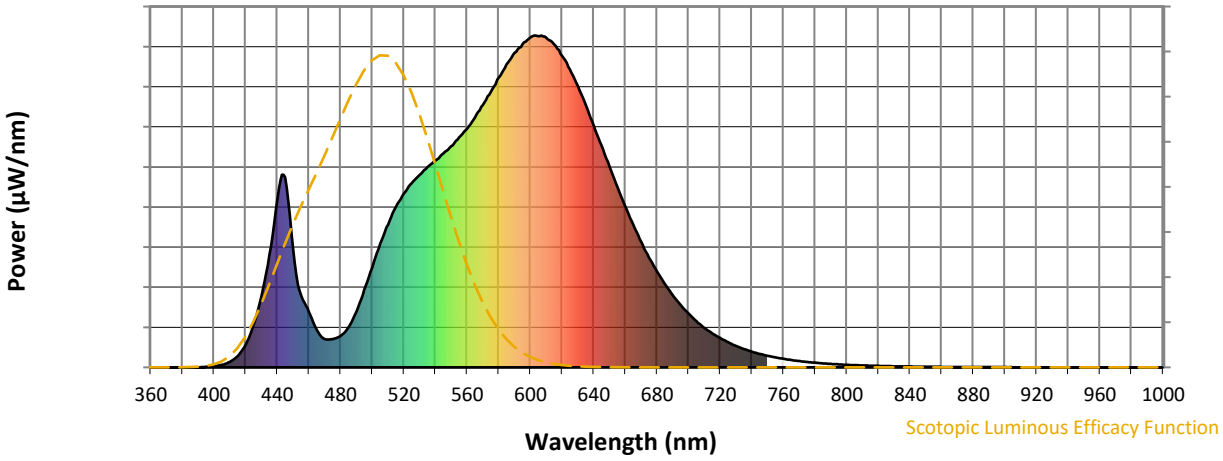


Photopic Lumens: NR

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

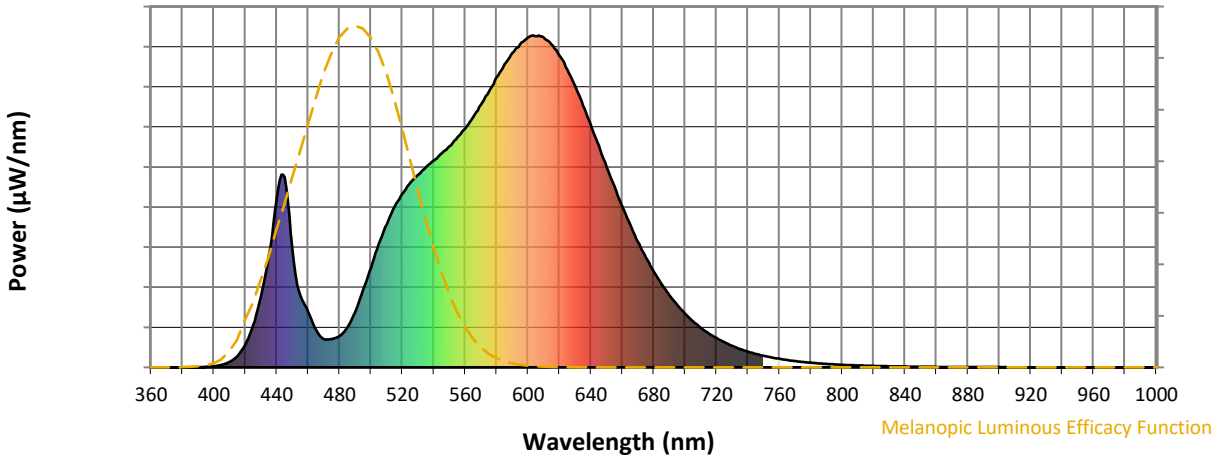


Scotopic Lumens: NR **S/P: 1.27**

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			

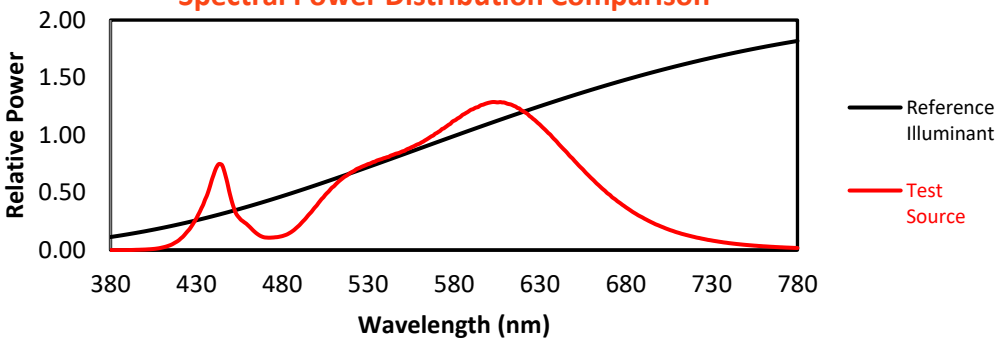
REPORT NUMBER: SP1-2408-195-9

TM-30-18

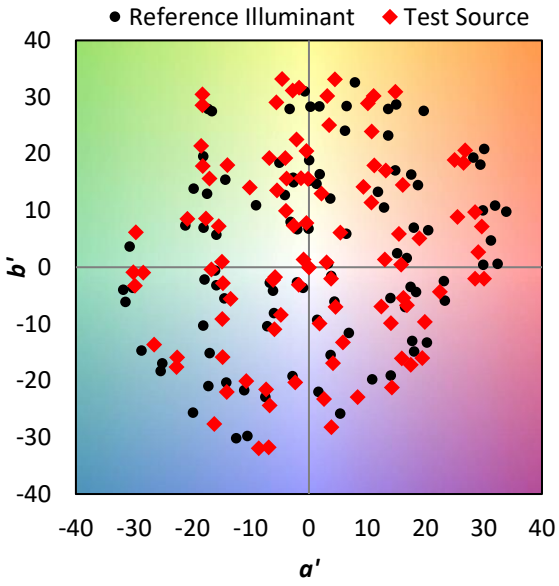
Summary

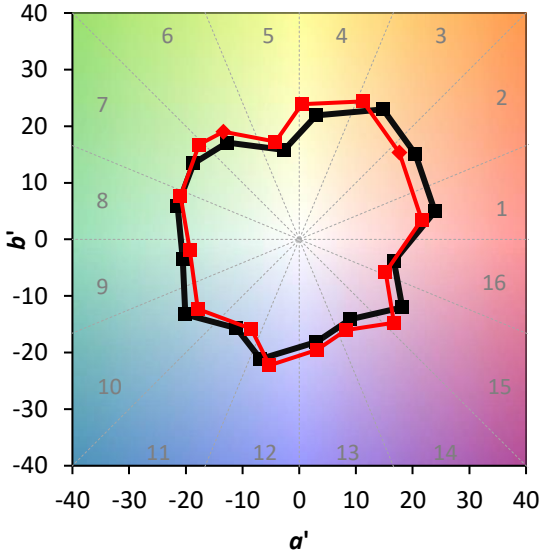
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

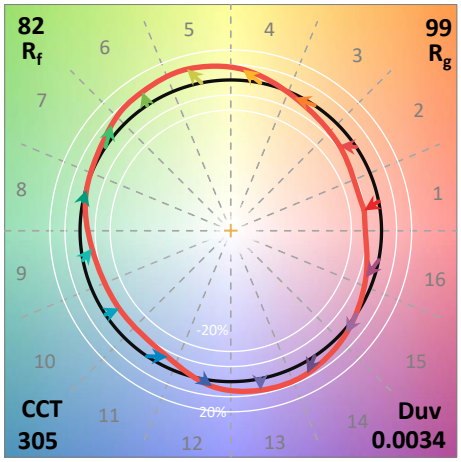
Spectral Power Distribution Comparison

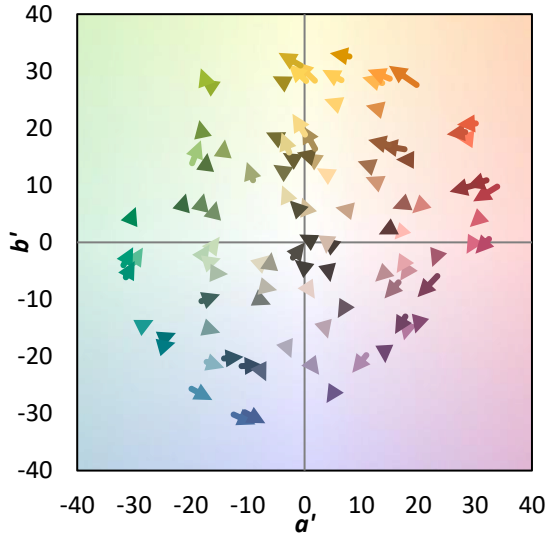


Color Vector Graphics









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
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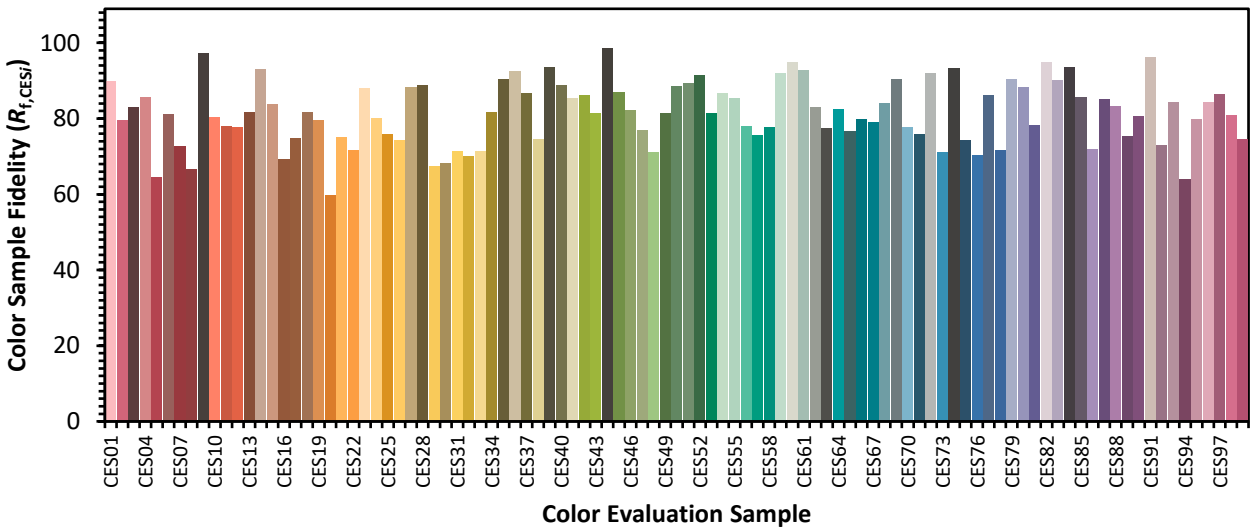

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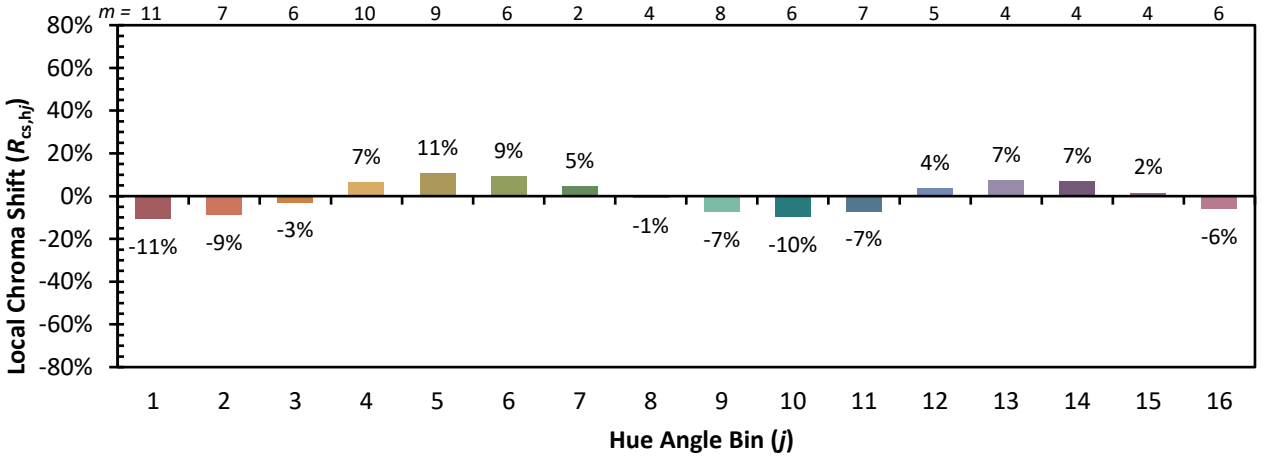
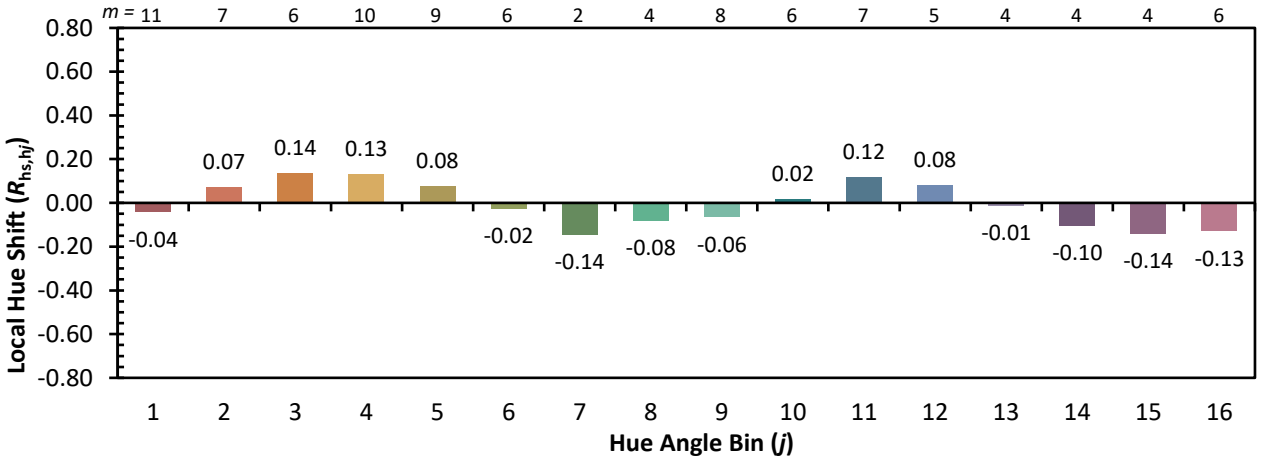
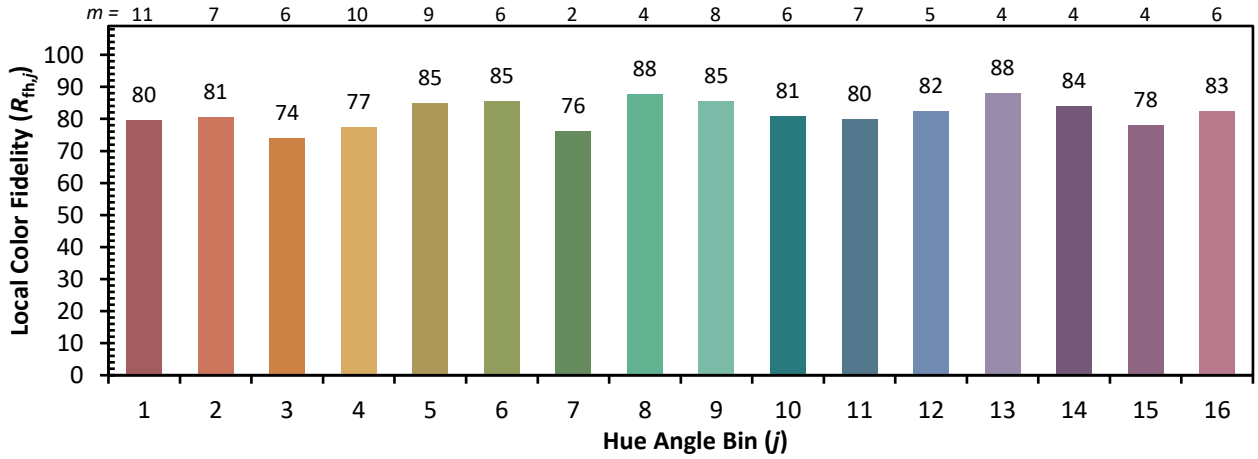
Color Rendition by Hue-Angle Bin







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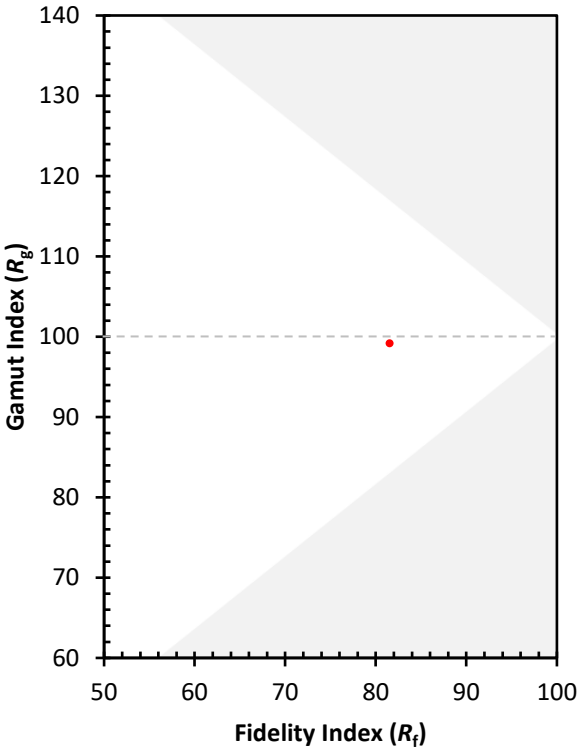
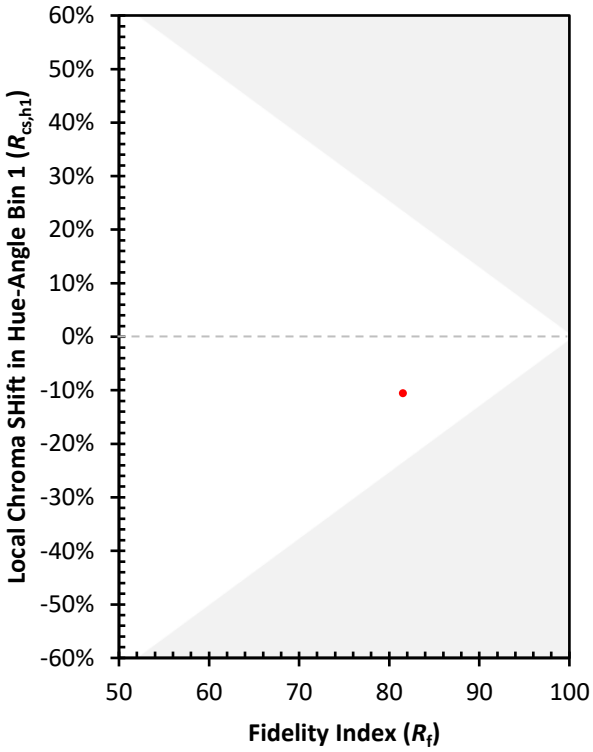
Measure Comparisons





(END OF REPORT)