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: P324649

Luminaire Tested: **GLEON-SA5C-830-U-SLR-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:	P324649
	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-SA5C-830-U-SLR-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(5) 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:	20824 lumens
Efficiency:	N/A
Efficacy:	74.6 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Medium
BUG Rating:	B2 - U0 - G3

Input Watts (W):	279
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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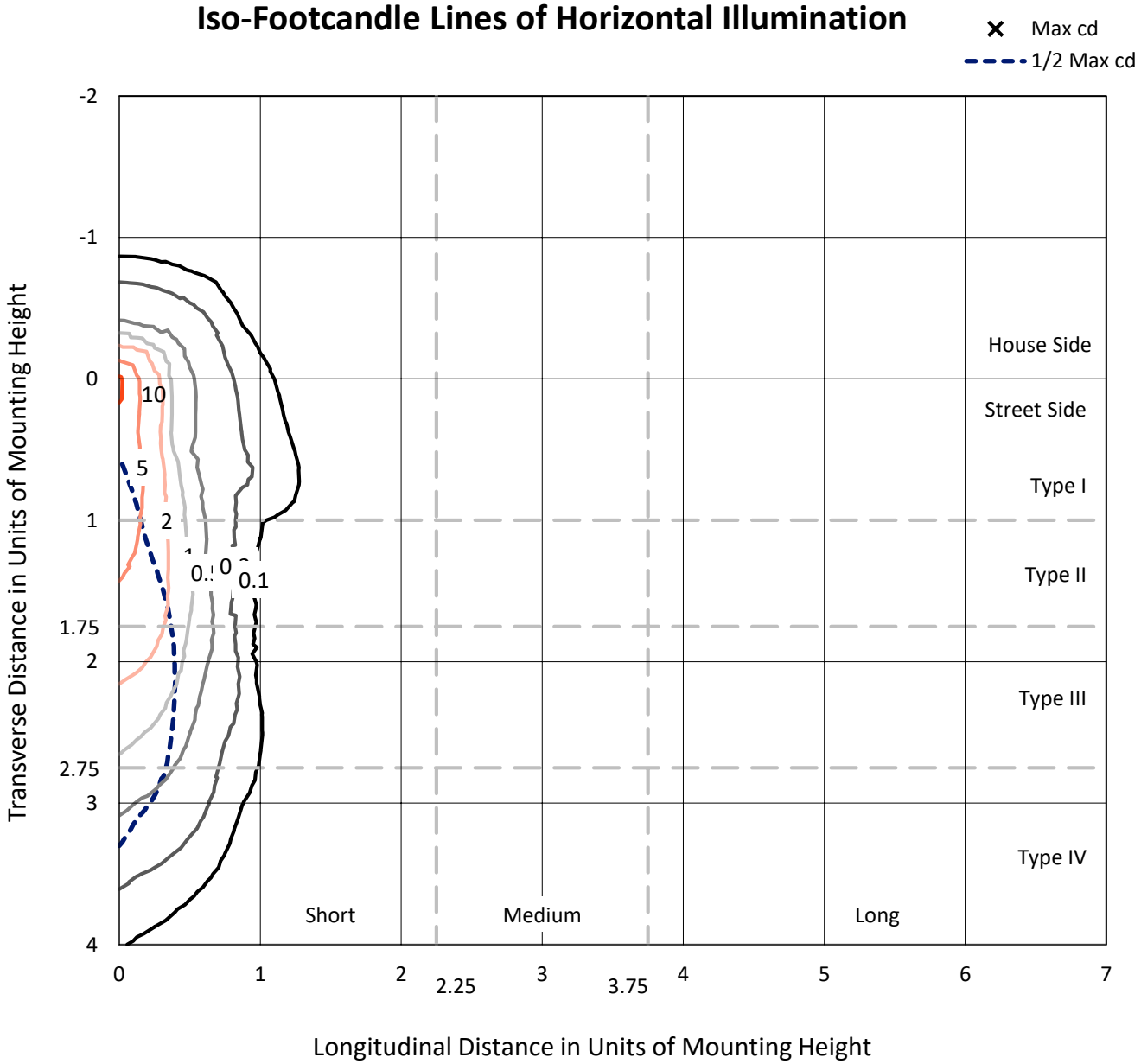
Iso-Footcandle Lines of Horizontal Illumination



Based on 25 foot mounting height. Maximum calculated value = 10.9 fc
Type IV - Medium - N/A

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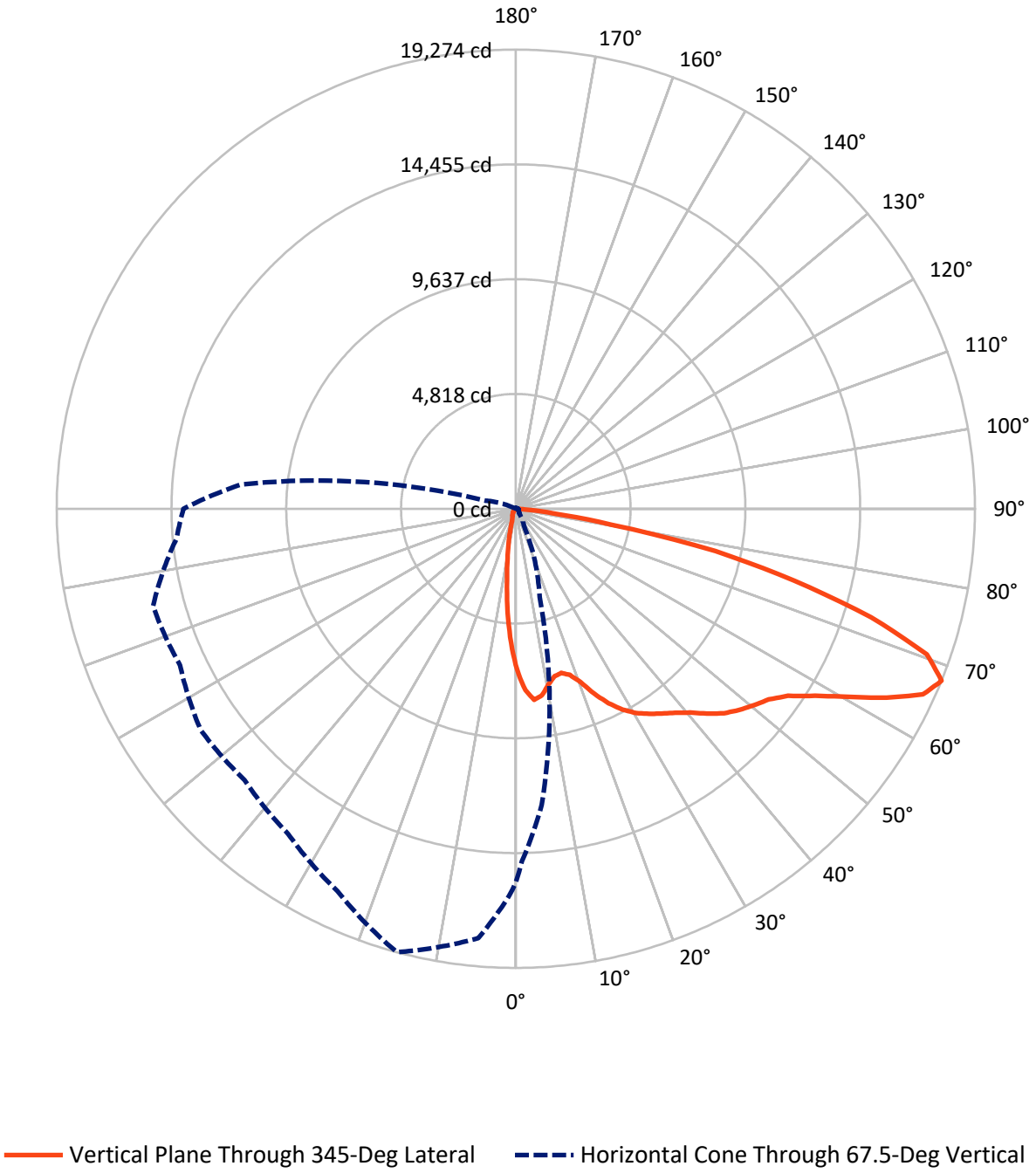
Luminous Intensity Polar Plot



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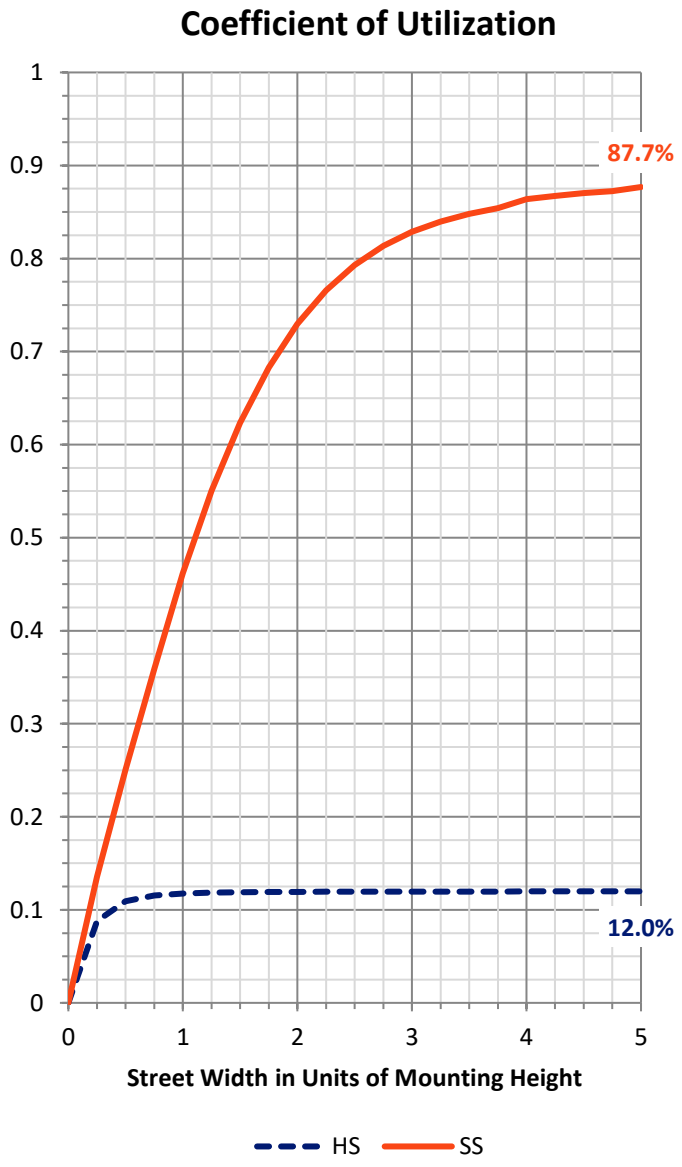
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2520.4	0.0	2520.4
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	18303.6	0.0	18303.6
	% Fixture	87.9	0.0	87.9
Total	Lumens	20824.0	0.0	20824.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	520.6	2.5
10°-20°	1036.3	5.0
20°-30°	1471.5	7.1
30°-40°	2173.5	10.4
40°-50°	3134.7	15.1
50°-60°	4400.4	21.1
60°-70°	5129.6	24.6
70°-80°	2622.4	12.6
80°-90°	334.9	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°	20824.0	100.0
0°-180°	20824.0	100.0



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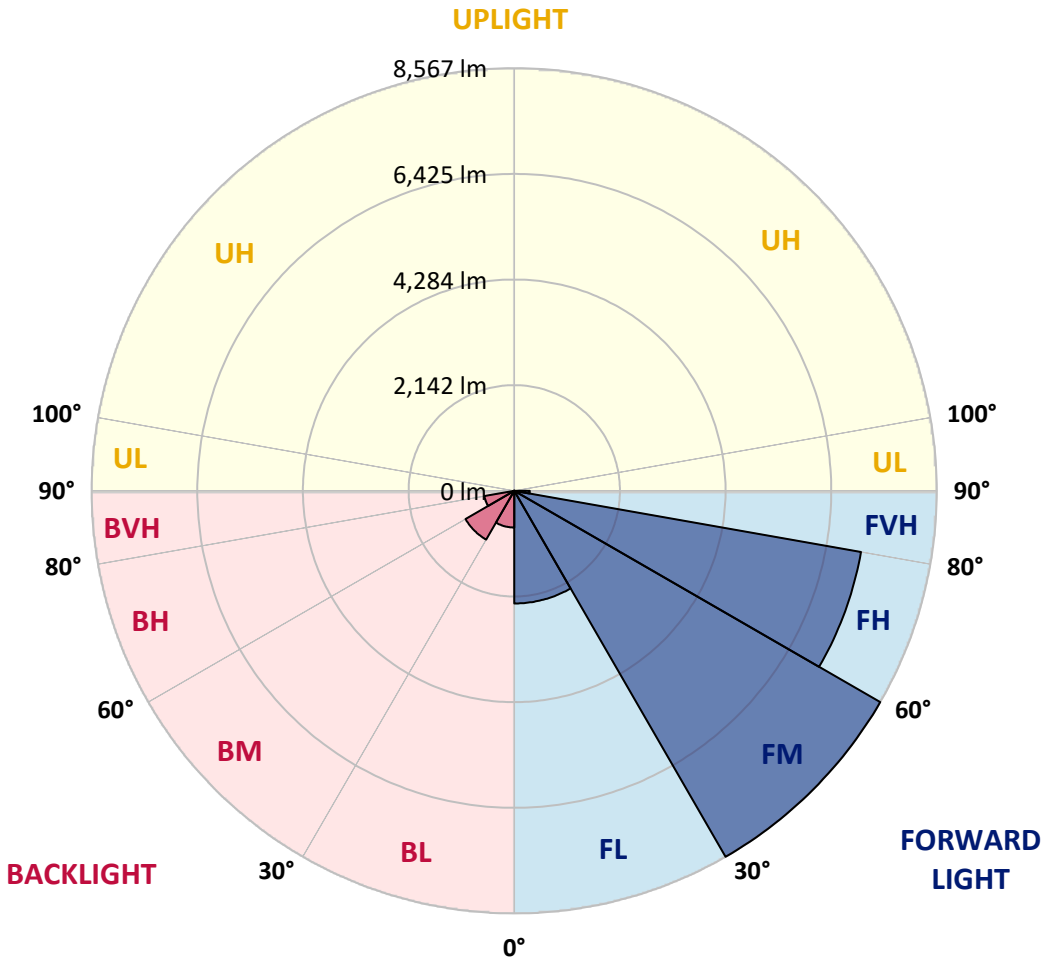
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2284.0	11.0			
FM	(30°-60°)	8567.3	41.1			
FH	(60°-80°)	7137.7	34.3			G3/7500
FVH	(80°-90°)	314.6	1.5			G3/500
BL	(0°-30°)	744.4	3.6	B2/1000		
BM	(30°-60°)	1141.3	5.5	B2/2500		
BH	(60°-80°)	614.3	2.9	B2/1000		G2/1000
BVH	(80°-90°)	20.4	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-G3
Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4
2.5°	7427.6	7370.4	7307.2	7101.0	6909.7	6690.6	6512.1	6387.8	6231.9	6029.7	5978.4
5°	7374.3	7313.1	7114.9	6656.1	6254.6	5863.9	5487.1	5266.1	4991.8	4713.6	4644.6
7.5°	6838.6	6774.5	6488.4	5860.0	5319.4	4755.1	4265.8	3962.9	3653.1	3398.6	3263.4
10°	6281.2	6211.2	5889.6	5127.0	4461.1	3951.1	3592.0	3302.9	3009.9	2737.6	2520.6
12.5°	5897.5	5805.7	5456.5	4592.3	4012.2	3665.9	3330.5	2984.3	2587.7	2295.7	2056.9
15°	5736.7	5632.1	5263.1	4386.1	3853.4	3446.9	3009.9	2584.7	2120.1	1785.6	1566.6
17.5°	5861.0	5724.8	5329.2	4372.3	3654.1	3100.7	2548.2	2049.0	1544.9	1206.5	1050.7
20°	6283.2	6104.6	5602.5	4368.4	3412.4	2689.3	1988.8	1424.5	1018.1	818.8	736.9
22.5°	6948.1	6712.3	5995.1	4399.9	3162.8	2257.2	1436.4	967.8	764.6	661.0	612.6
25°	7751.2	7477.9	6560.4	4511.4	2943.8	1836.9	1043.7	764.6	645.2	569.2	528.8
27.5°	8514.7	8292.8	7274.7	4672.2	2774.1	1497.6	847.4	648.2	551.5	501.2	468.6
30°	9277.3	8998.1	8007.7	4863.6	2569.9	1267.7	744.8	590.9	494.3	441.0	420.3
32.5°	9831.8	9599.9	8581.8	5001.7	2351.9	1117.7	665.9	540.6	461.7	407.4	376.9
35°	10483.9	10221.4	9074.1	5032.3	2211.8	1023.0	598.8	486.4	400.5	352.2	319.6
37.5°	11188.2	10861.7	9642.3	4965.2	2102.3	976.7	548.5	461.7	373.9	324.6	290.0
40°	11967.6	11598.6	10187.9	4868.5	1994.8	960.9	510.0	443.0	353.2	302.9	267.3
42.5°	12788.4	12353.3	10660.4	4766.9	1926.7	906.6	506.1	424.2	337.4	283.1	247.6
45°	13478.0	13037.0	11145.8	4733.4	1878.4	847.4	522.9	411.4	326.5	267.3	232.8
47.5°	14027.5	13610.2	11643.0	4808.3	1850.7	793.2	476.5	428.2	320.6	253.5	220.0
50°	14683.5	14211.0	12343.5	5032.3	1810.3	738.9	431.1	490.3	320.6	244.7	209.1
52.5°	15506.3	15038.7	13124.8	5379.5	1729.4	663.9	387.7	491.3	323.6	232.8	195.3
55°	16541.1	16201.8	14240.6	5760.3	1600.2	553.4	335.4	422.2	311.7	211.1	182.5
57.5°	17533.6	17256.4	15257.7	6020.8	1427.5	432.1	292.0	340.4	285.1	185.5	162.8
59°	17804.9	17502.0	15630.6	6032.6	1298.3	376.9	270.3	281.2	279.2	173.6	150.9
60°	17804.9	17483.3	15738.1	5969.5	1204.6	346.3	256.5	250.6	291.0	165.7	144.0
62.5°	17482.3	17030.5	15388.9	5542.3	982.6	295.0	223.9	207.2	261.4	149.0	127.3
65°	16811.5	16153.4	14199.1	4769.9	876.0	270.3	193.4	169.7	181.5	131.2	111.5
67.5°	*15692.7*	*14800.9*	*12483.5*	*3853.4*	*833.6*	*263.4*	*166.7*	*144.0*	*137.1*	*112.5*	*97.7*
70°	13722.6	12733.1	10401.0	3029.6	797.1	260.4	140.1	121.3	110.5	94.7	82.9
72.5°	9987.6	8955.7	7384.2	2368.7	775.4	266.4	112.5	101.6	90.8	74.0	64.1
75°	5713.0	5037.2	4150.3	1564.6	661.0	254.5	86.8	84.8	65.1	53.3	44.4
77.5°	2951.7	2861.9	2487.0	600.8	316.7	111.5	57.2	49.3	38.5	32.6	26.6
80°	1273.6	1259.8	1090.1	173.6	83.9	62.2	32.6	20.7	17.8	13.8	10.9
82.5°	440.0	440.0	387.7	58.2	37.5	30.6	3.9	0.0	0.0	0.0	0.0
85°	88.8	99.6	70.0	0.0	12.8	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°	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4
2.5°	5916.2	5796.8	5789.0	5714.0	5620.3	5577.8	5553.2	5596.6	5649.9	5655.8	5735.7
5°	4592.3	4467.0	4519.3	4386.1	4412.7	4386.1	4342.7	4350.6	4374.3	4300.3	4392.0
7.5°	3225.0	3130.3	3190.4	3154.9	3202.3	3221.0	3194.4	3154.9	3038.5	3024.7	3104.6
10°	2430.8	2323.3	2259.2	2192.1	2206.9	2237.4	2227.6	2199.0	2125.0	2128.9	2205.9
12.5°	1953.3	1833.0	1705.7	1541.0	1500.5	1523.2	1500.5	1483.7	1412.7	1418.6	1486.7
15°	1481.8	1383.1	1249.9	1117.7	1045.7	1052.6	989.5	945.1	900.7	847.4	888.9
17.5°	1000.3	940.2	900.7	861.2	775.4	755.7	675.8	589.9	556.4	531.7	549.5
20°	708.3	675.8	660.0	658.0	608.7	584.0	506.1	452.8	436.0	431.1	442.0
22.5°	591.9	568.2	545.6	532.7	508.1	479.5	420.3	393.6	381.8	375.9	383.8
25°	515.0	497.2	473.5	451.8	442.0	411.4	369.0	349.2	341.3	335.4	339.4
27.5°	457.7	442.0	414.3	400.5	392.6	366.0	329.5	313.7	306.8	304.8	303.9
30°	412.4	397.6	371.9	356.1	342.3	318.6	296.9	281.2	274.3	272.3	270.3
32.5°	367.0	355.2	338.4	322.6	307.8	286.1	267.3	254.5	243.7	241.7	240.7
35°	309.8	297.9	289.1	288.1	274.3	253.5	239.7	223.0	214.1	211.1	212.1
37.5°	275.2	259.5	239.7	246.6	242.7	227.9	209.1	192.4	183.5	181.5	181.5
40°	253.5	236.8	214.1	202.2	214.1	211.1	181.5	164.8	155.9	154.9	152.9
42.5°	232.8	216.1	190.4	170.7	176.6	185.5	156.9	141.1	132.2	130.2	127.3
45°	218.0	200.3	171.7	149.0	137.1	155.9	134.2	114.4	109.5	105.6	103.6
47.5°	204.2	187.4	154.9	129.2	109.5	112.5	107.5	93.7	87.8	83.9	82.9
50°	192.4	174.6	140.1	110.5	90.8	82.9	86.8	74.0	69.1	65.1	63.1
52.5°	178.6	161.8	124.3	95.7	76.0	65.1	66.1	58.2	53.3	50.3	49.3
55°	167.7	150.9	111.5	83.9	67.1	53.3	47.4	45.4	42.4	40.4	39.5
57.5°	152.9	137.1	98.7	71.0	57.2	43.4	36.5	36.5	35.5	33.5	32.6
59°	144.0	130.2	90.8	64.1	52.3	37.5	32.6	33.5	32.6	30.6	29.6
60°	137.1	124.3	84.8	59.2	49.3	34.5	29.6	31.6	30.6	28.6	27.6
62.5°	121.3	112.5	73.0	49.3	43.4	27.6	24.7	26.6	26.6	25.6	24.7
65°	106.5	96.7	62.2	41.4	40.4	23.7	19.7	23.7	24.7	22.7	20.7
67.5°	*92.7*	*82.9*	*54.3*	*33.5*	*37.5*	*18.7*	*14.8*	*19.7*	*26.6*	*20.7*	*18.7*
70°	78.9	69.1	42.4	26.6	39.5	12.8	11.8	17.8	31.6	22.7	17.8
72.5°	61.2	53.3	29.6	19.7	42.4	8.9	8.9	14.8	35.5	24.7	16.8
75°	42.4	34.5	17.8	11.8	34.5	5.9	5.9	13.8	33.5	22.7	15.8
77.5°	24.7	18.7	5.9	1.0	17.8	0.0	1.0	9.9	23.7	13.8	6.9
80°	8.9	3.9	0.0	0.0	10.9	0.0	0.0	0.0	2.0	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

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4
2.5°	5756.4	5889.6	6009.0	6189.5	6403.6	6650.2	6862.3	7090.2	7304.3	7393.1	7454.2
5°	4410.8	4575.5	4767.9	5033.3	5386.5	5821.5	6228.9	6689.7	7184.9	7432.5	7665.3
7.5°	3118.4	3286.1	3524.9	3807.0	4234.2	4752.1	5284.8	5921.2	6592.0	6983.6	7369.4
10°	2242.4	2448.6	2671.5	3057.3	3491.3	3982.6	4531.1	5241.4	5989.2	6423.3	6888.0
12.5°	1526.2	1761.0	2098.3	2530.4	3040.5	3521.9	3998.4	4676.2	5544.3	5974.4	6472.6
15°	915.5	1045.7	1402.8	1903.0	2528.5	3128.3	3650.2	4329.9	5255.2	5782.1	6300.0
17.5°	564.3	624.5	818.8	1229.2	1886.2	2644.9	3360.1	4212.5	5296.7	5937.9	6492.4
20°	449.9	473.5	535.7	726.1	1249.9	2112.2	3033.6	4188.8	5635.1	6424.3	7019.2
22.5°	390.7	413.4	454.8	527.8	786.3	1581.4	2723.8	4210.5	6120.4	7153.3	7847.8
25°	344.3	364.0	403.5	463.7	576.1	1113.8	2392.3	4307.2	6752.8	8058.0	8795.9
27.5°	307.8	324.6	361.1	416.3	494.3	777.4	2016.5	4424.6	7502.6	8983.3	9711.4
30°	274.3	289.1	321.6	372.9	429.1	597.8	1604.1	4504.5	8253.3	9711.4	10365.5
32.5°	245.6	256.5	286.1	329.5	372.9	476.5	1219.4	4491.7	8810.7	10317.1	10836.0
35°	216.1	226.9	252.6	290.0	324.6	393.6	958.9	4251.9	9296.1	10945.5	11374.7
37.5°	183.5	197.3	222.0	255.5	279.2	346.3	775.4	3962.9	9788.3	11663.7	11975.5
40°	155.9	169.7	191.4	227.9	242.7	328.5	595.9	3610.7	10341.8	12466.8	12634.5
42.5°	129.2	142.1	164.8	196.3	228.9	283.1	441.0	3208.2	10873.5	13153.4	13235.3
45°	104.6	117.4	141.1	172.6	244.7	234.8	341.3	2777.1	11302.7	13724.6	13751.2
47.5°	82.9	94.7	119.4	162.8	227.9	187.4	243.7	2438.7	11662.8	14170.5	14100.5
50°	64.1	74.0	99.6	186.5	199.3	154.9	184.5	2326.2	11985.4	14446.7	14265.2
52.5°	50.3	59.2	81.9	174.6	154.9	128.2	154.9	2431.8	12427.3	14675.6	14358.0
55°	40.4	49.3	64.1	99.6	105.6	108.5	132.2	2530.4	13189.9	15212.3	14905.5
57.5°	33.5	42.4	52.3	70.0	79.9	91.7	117.4	2541.3	14088.6	16104.1	15814.1
59°	30.6	38.5	47.4	62.2	70.0	83.9	110.5	2482.1	14405.3	16428.7	16283.7
60°	28.6	36.5	44.4	57.2	65.1	78.9	106.5	2425.9	14419.1	16416.8	16483.9
62.5°	24.7	32.6	39.5	48.3	55.2	67.1	95.7	2217.7	13835.1	15879.2	16363.6
65°	21.7	28.6	35.5	41.4	47.4	60.2	86.8	1837.9	12837.7	15012.0	15539.8
67.5°	*19.7*	*24.7*	*32.6*	*36.5*	*42.4*	*53.3*	*76.9*	*1310.1*	*11591.7*	*13951.5*	*14293.8*
70°	17.8	23.7	29.6	33.5	38.5	46.4	66.1	752.7	9788.3	12398.7	12642.4
72.5°	16.8	22.7	26.6	31.6	34.5	41.4	60.2	354.2	7167.1	9932.4	10568.7
75°	14.8	20.7	24.7	29.6	32.6	37.5	51.3	169.7	4766.9	7187.9	7911.0
77.5°	8.9	16.8	22.7	26.6	28.6	32.6	42.4	97.7	3042.5	4975.1	5860.0
80°	0.0	5.9	16.8	22.7	24.7	27.6	32.6	76.9	1627.8	2842.2	3411.4
82.5°	0.0	0.0	11.8	17.8	16.8	18.7	24.7	48.3	734.0	1857.6	2093.4
85°	0.0	0.0	3.9	13.8	11.8	8.9	16.8	16.8	160.8	940.2	1173.0
87.5°	0.0	0.0	0.0	1.0	5.9	3.9	6.9	2.0	1.0	70.0	284.1
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: P324649
CATALOG NUMBER: GLEON-SA5C-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6783.4	6783.4	6783.4	6783.4	6783.4	6783.4	*6783.4*	6783.4	6783.4	6783.4
2.5°	7668.3	7741.3	7864.6	7922.8	7894.2	7772.9	*7627.8*	7479.9	7393.1	7427.6
5°	8139.9	8515.7	8732.8	8804.8	8684.4	8412.1	*8056.0*	7586.4	7419.7	7374.3
7.5°	8139.9	8847.2	9295.1	9374.0	9105.7	8572.0	*7904.1*	7171.1	6927.4	6838.6
10°	7853.8	8816.6	9441.1	9566.4	9191.5	8393.4	*7498.6*	6662.0	6373.0	6281.2
12.5°	7531.2	8568.0	9226.0	9398.7	9090.9	8215.8	*7217.5*	6317.7	5977.4	5897.5
15°	7332.9	8262.2	8806.8	8932.0	8801.8	8112.2	*7150.4*	6214.2	5813.6	5736.7
17.5°	7403.9	8025.4	8221.7	8294.7	8382.5	8075.7	*7332.9*	6441.1	5934.0	5861.0
20°	7671.3	7775.8	7674.2	7766.0	8002.7	8111.2	*7767.9*	6989.6	6380.9	6283.2
22.5°	8125.1	7646.6	7361.5	7398.0	7686.1	8228.6	*8432.9*	7772.9	7070.5	6948.1
25°	8653.8	7751.2	7187.9	7155.3	7451.3	8383.5	*9040.6*	8625.2	7886.3	7751.2
27.5°	9318.8	7986.0	7152.3	7119.8	7369.4	8528.6	*9545.7*	9467.7	8745.6	8514.7
30°	9831.8	8216.8	7257.9	7182.9	7451.3	8629.2	*9951.1*	10183.0	9430.2	9277.3
32.5°	10199.7	8489.1	7429.6	7321.0	7682.1	8802.8	*10263.9*	10838.0	10063.6	9831.8
35°	10479.9	8785.0	7706.8	7528.2	7999.8	9066.2	*10556.9*	11535.5	10737.4	10483.9
37.5°	10742.3	9200.4	8139.9	7926.8	8498.0	9490.4	*10866.6*	12326.7	11491.1	11188.2
40°	11108.3	9671.0	8807.7	8618.3	9335.5	10068.5	*11253.3*	13151.4	12348.4	11967.6
42.5°	11474.3	10176.1	9491.4	9542.7	10380.3	10770.9	*11752.5*	14023.5	13194.8	12788.4
45°	11808.8	10696.9	10465.1	10701.9	11350.0	11541.4	*12248.8*	14527.6	13870.6	13478.0
47.5°	12106.7	11348.1	11432.9	12063.3	12453.0	12238.9	*12619.7*	14962.7	14373.7	14027.5
50°	12453.0	12190.5	12708.5	13600.3	13722.6	12870.3	*12957.1*	15477.7	14961.7	14683.5
52.5°	12831.8	13078.4	14121.2	14907.5	14868.0	13555.9	*13296.4*	16054.8	15767.7	15506.3
55°	13261.9	13795.6	15365.2	16130.7	16097.2	14321.5	*13858.8*	16768.0	16777.9	16541.1
57.5°	13900.2	14413.2	16209.7	17120.2	17176.5	15205.4	*14811.8*	17567.1	17691.4	17533.6
59°	14358.0	14813.7	16544.1	17533.6	17762.5	15889.1	*15508.2*	18030.8	17948.9	17804.9
60°	14697.3	15068.3	16709.8	17749.6	18102.8	16352.7	*16022.2*	18303.1	17979.5	17804.9
62.5°	15536.9	15622.7	17008.8	17994.3	18494.5	17382.7	*17468.5*	18766.8	17767.4	17482.3
65°	15928.5	15972.9	17004.8	17556.3	18115.6	18184.7	*18780.6*	18780.6	17249.5	16811.5
67.5°	*15764.7*	*15550.7*	*16161.3*	*16104.1*	*16662.5*	*17708.2*	*19273.8*	*18092.0*	*16259.0*	*15692.7*
70°	14432.9	13609.2	13337.9	13362.5	13789.7	15402.7	*18297.2*	16065.6	14384.6	13722.6
72.5°	12009.0	10033.0	9363.2	10127.7	10239.2	11837.4	*15593.1*	12098.8	10608.2	9987.6
75°	9659.1	7072.4	5983.3	6790.3	6979.7	8662.7	*12062.3*	7535.1	6196.4	5713.0
77.5°	6939.3	5076.7	4293.4	4237.1	4481.8	5494.0	*8559.1*	3792.2	3162.8	2951.7
80°	3942.2	3341.4	3597.9	3394.6	3518.0	3435.1	*4066.5*	1663.3	1362.4	1273.6
82.5°	2379.5	1975.0	2138.8	1780.7	2253.2	1962.2	*1566.6*	532.7	462.7	440.0
85°	1547.9	1079.3	562.3	376.9	776.4	1253.9	*350.2*	145.0	111.5	88.8
87.5°	533.7	275.2	27.6	11.8	82.9	233.8	*12.8*	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.

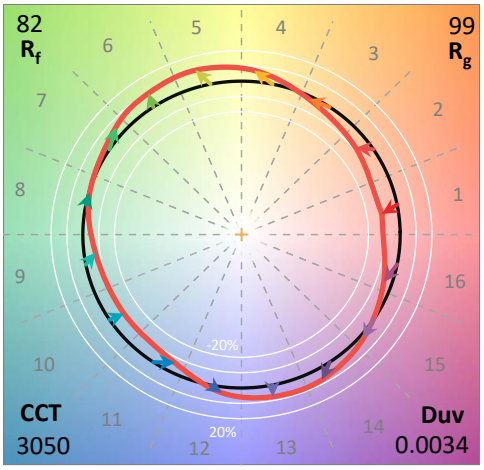
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

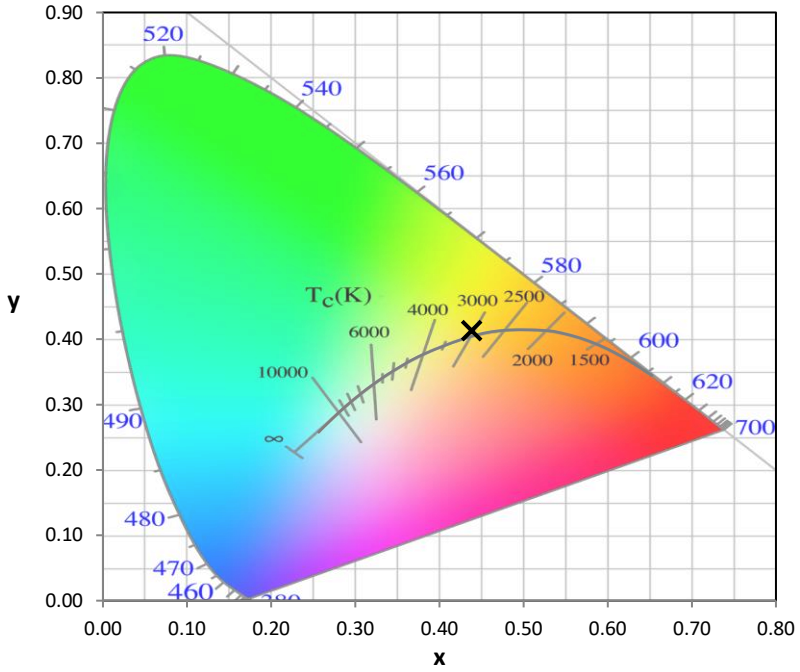
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

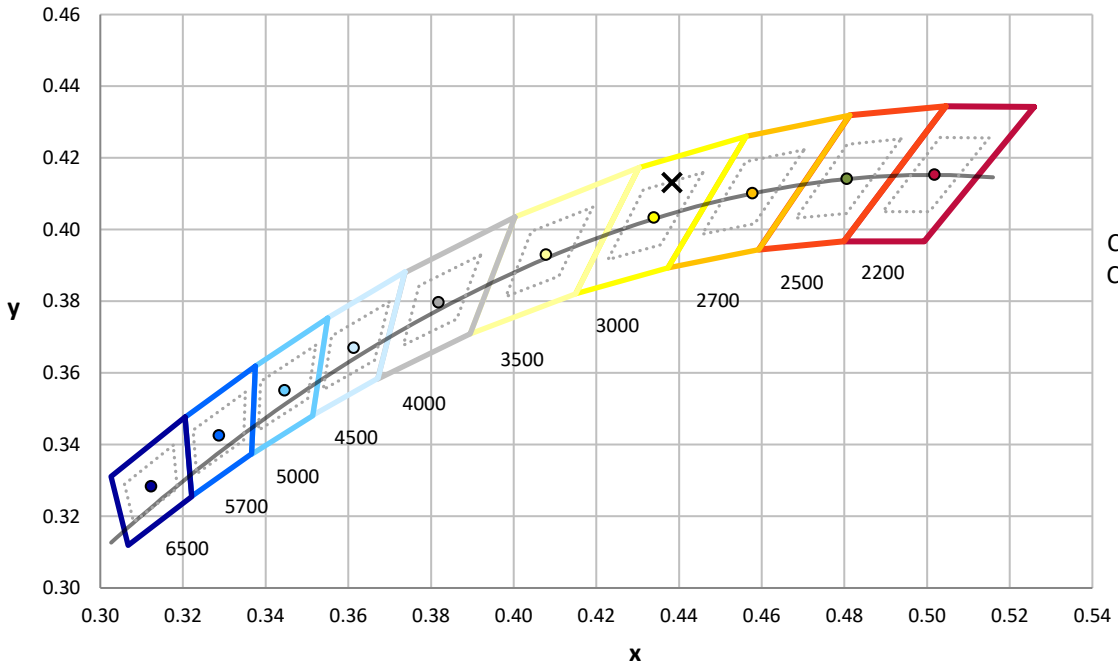
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

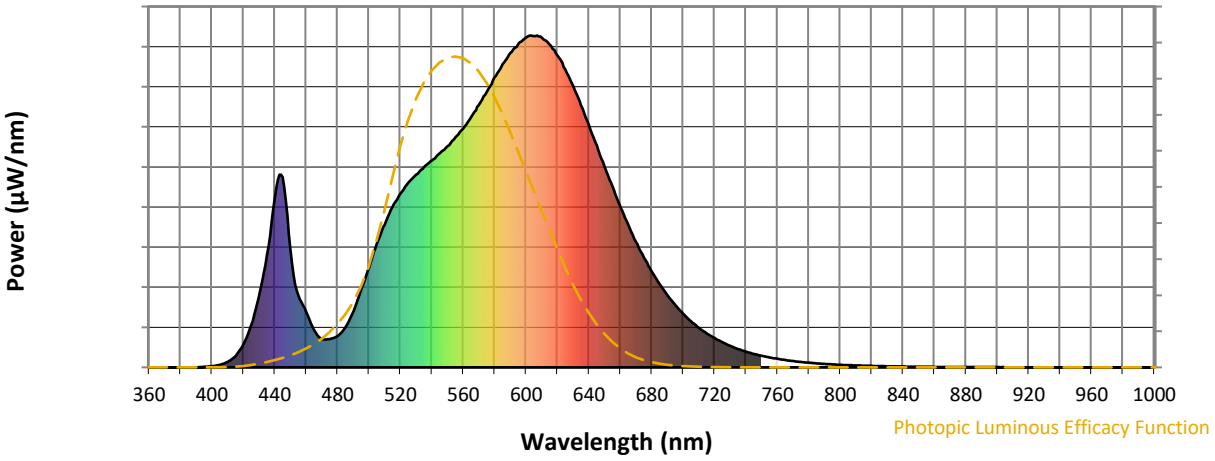


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

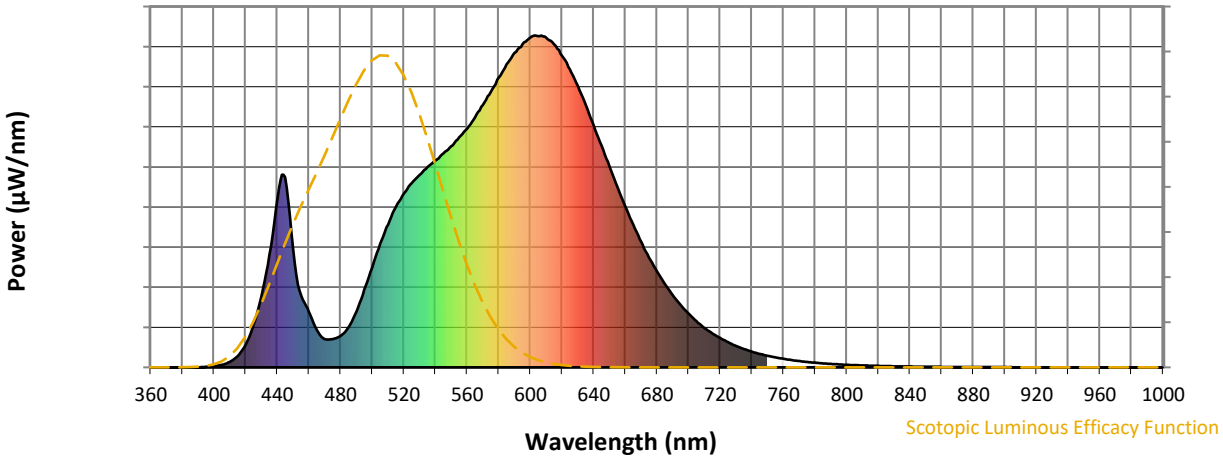


Photopic Lumens: NR

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

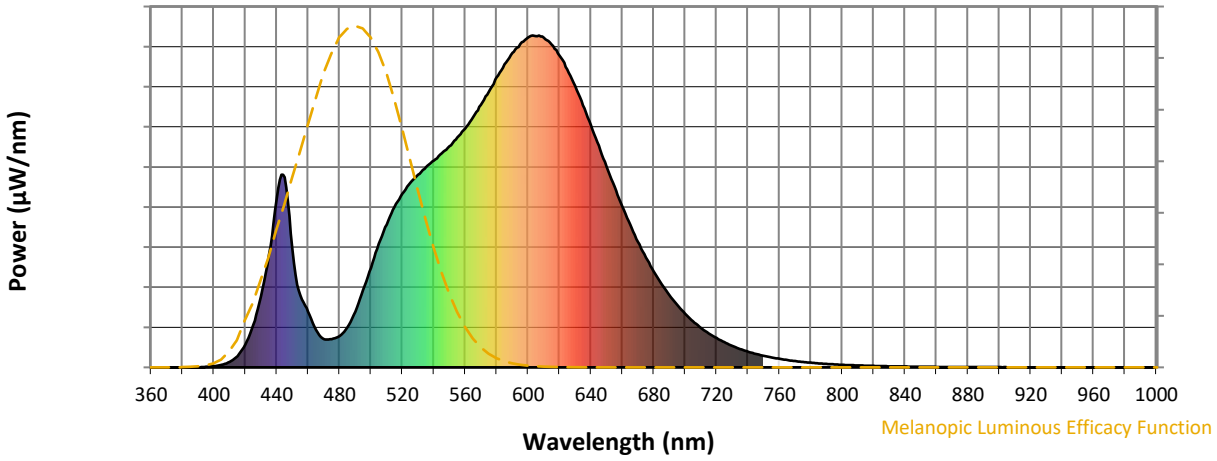


Scotopic Lumens: NR **S/P: 1.27**

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			

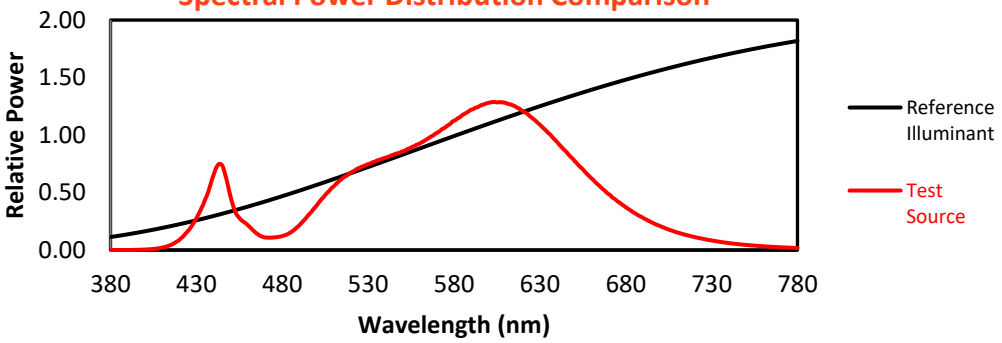
REPORT NUMBER: SP1-2408-195-9

TM-30-18

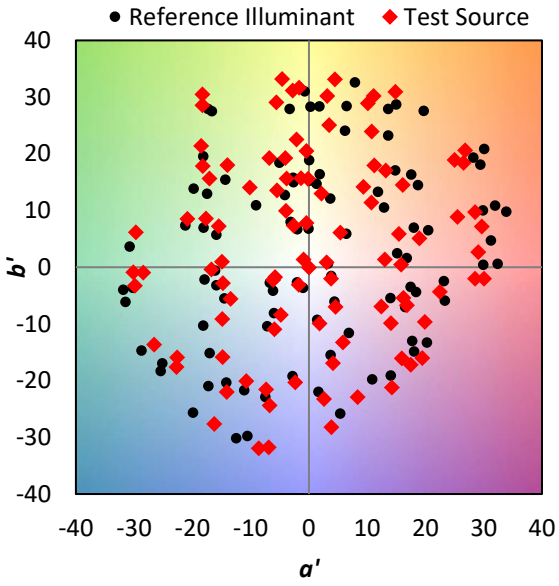
Summary

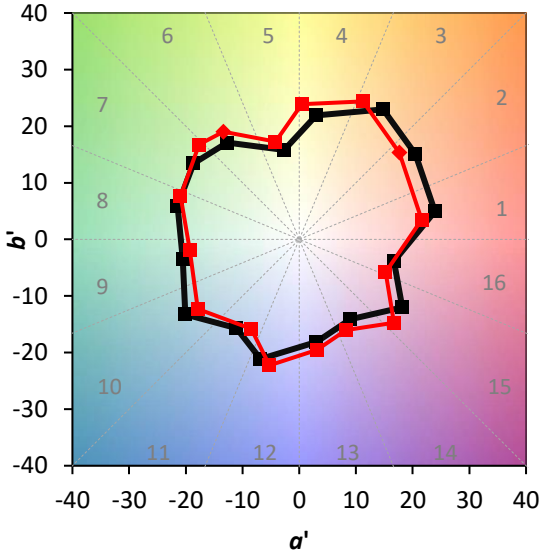
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

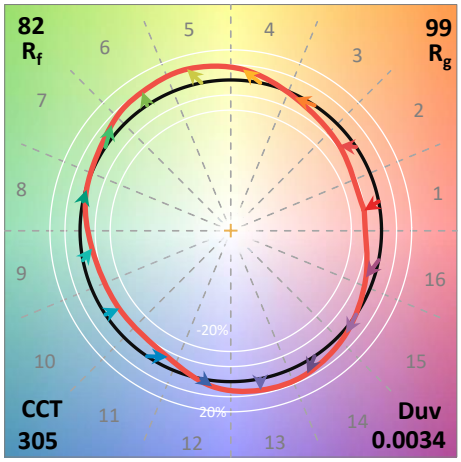
Spectral Power Distribution Comparison

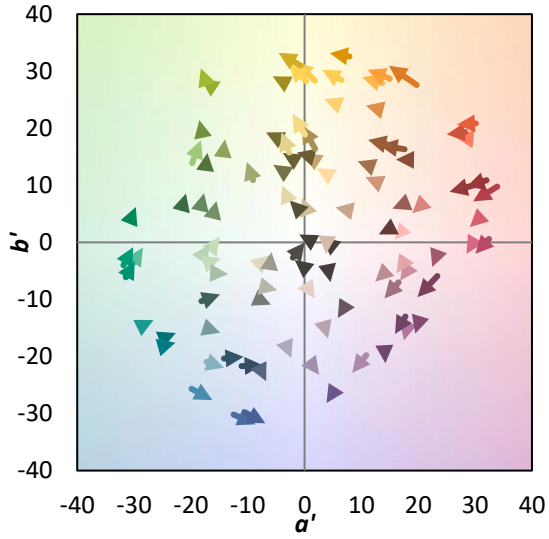


Color Vector Graphics









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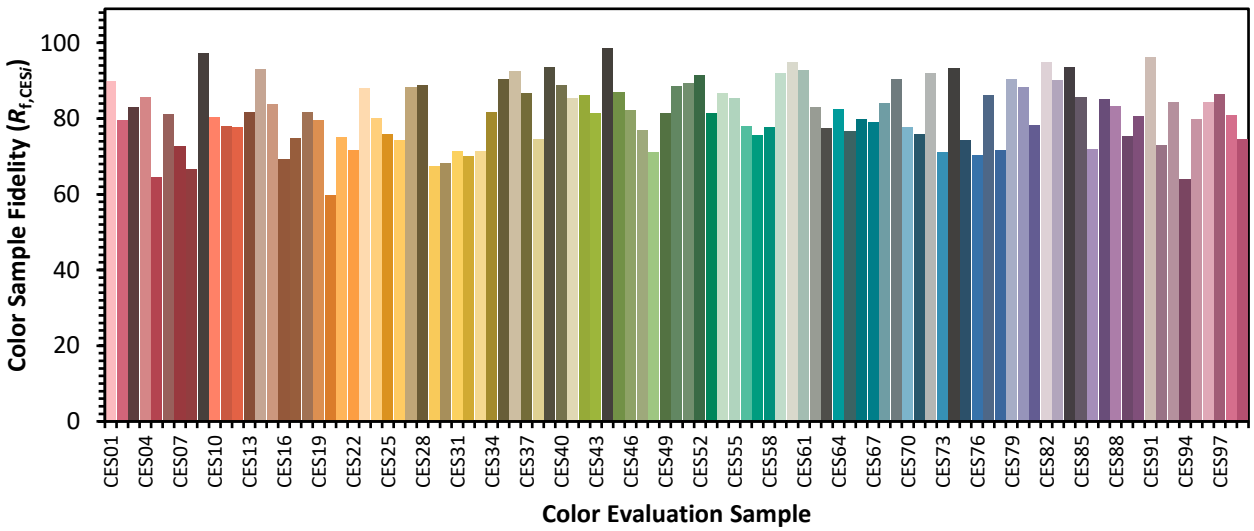
Individual Sample Fidelity Index ($R_{f,i}$)

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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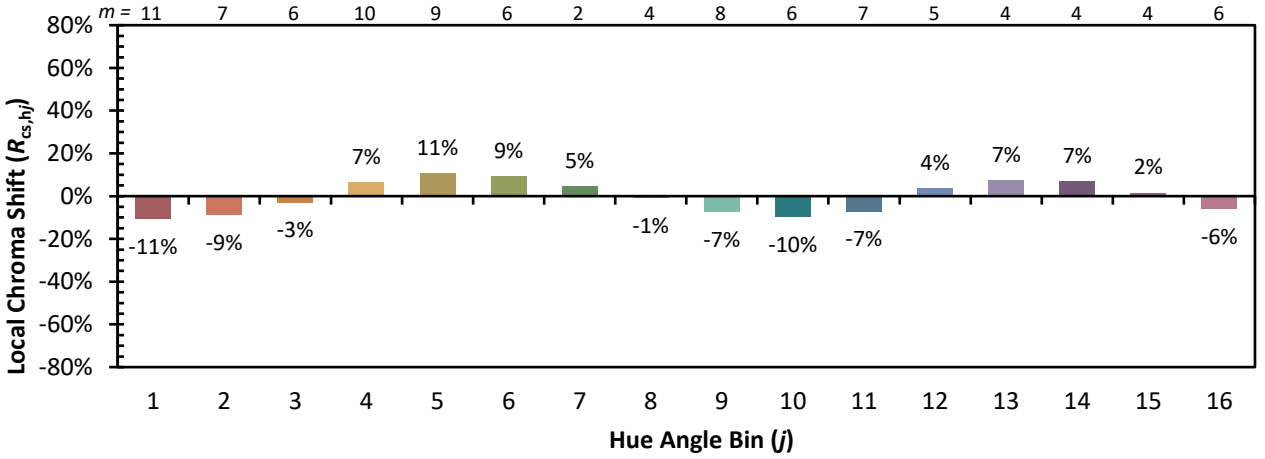
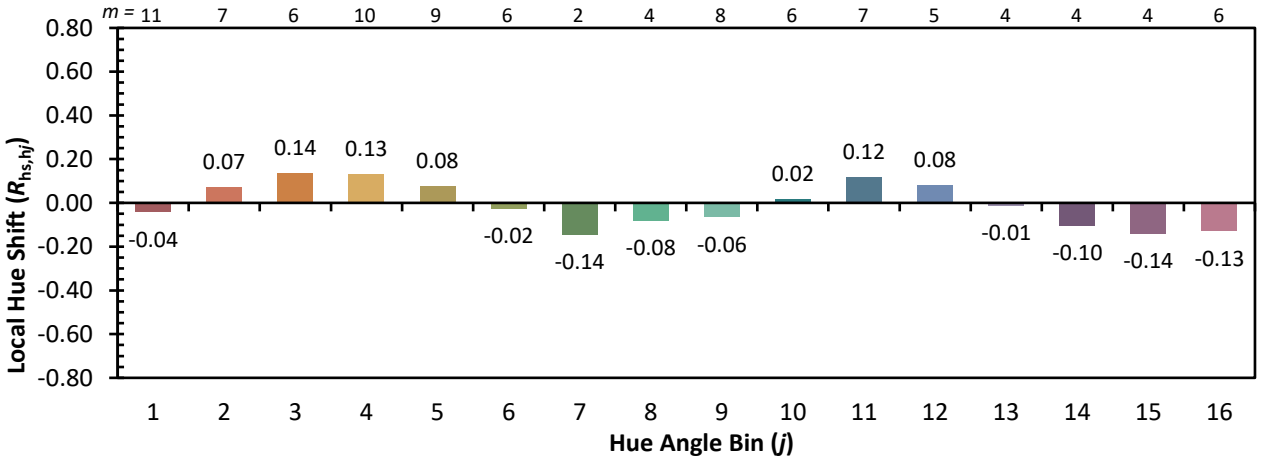
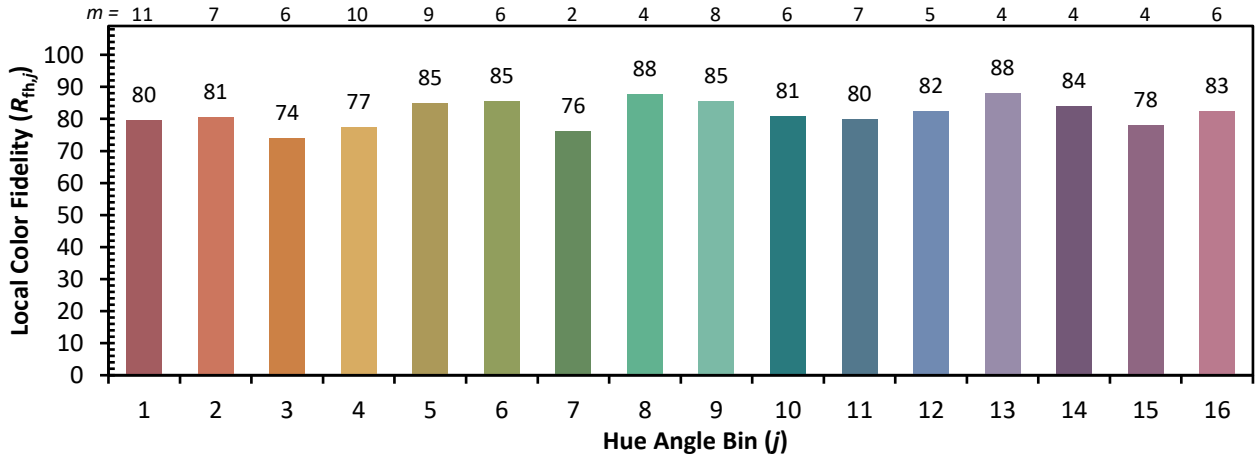
Color Rendition by Hue-Angle Bin







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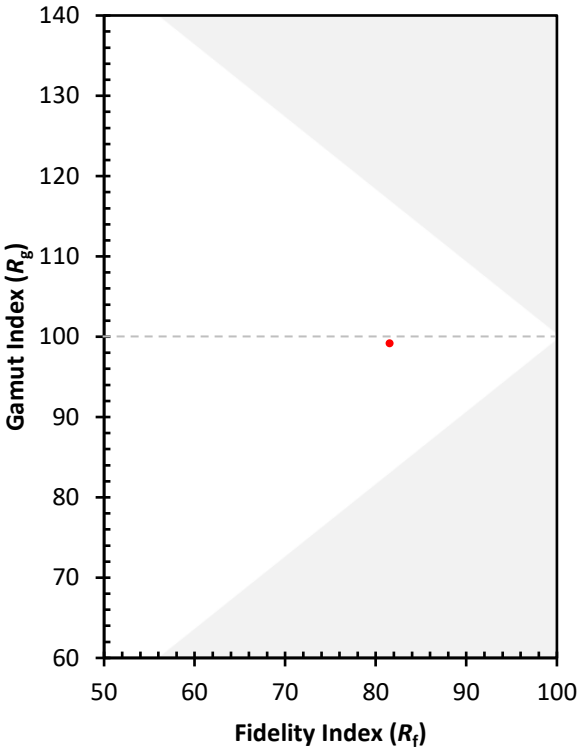
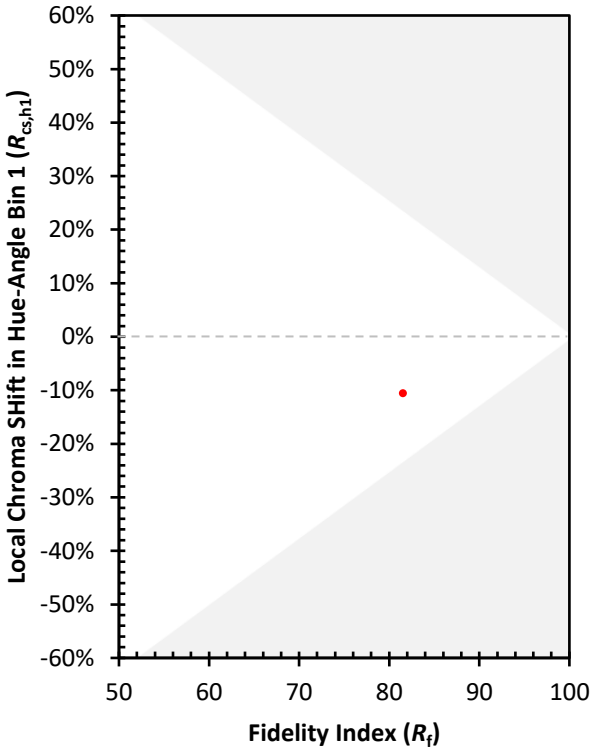
Measure Comparisons





(END OF REPORT)