Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P639970

Luminaire Tested: GWS-SA5C-830-U-SLR-W-HSS

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P639970
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5C-830-U-SLR-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11739.4 lumens
Efficiency:	N/A
Efficacy:	74.5 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G3

Input Watts (W):	157.5
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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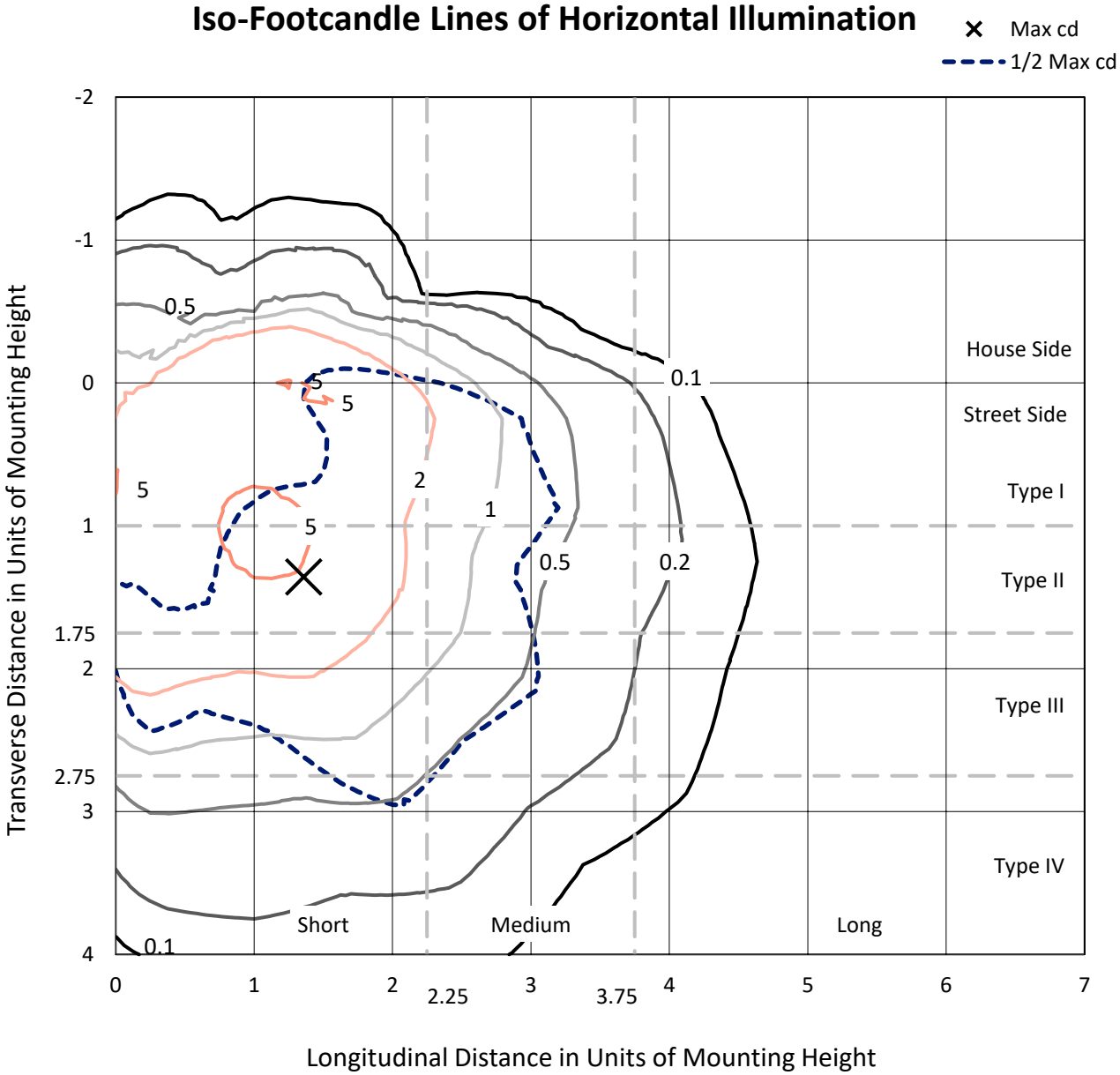
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 6 fc
Type IV - Short - N/A

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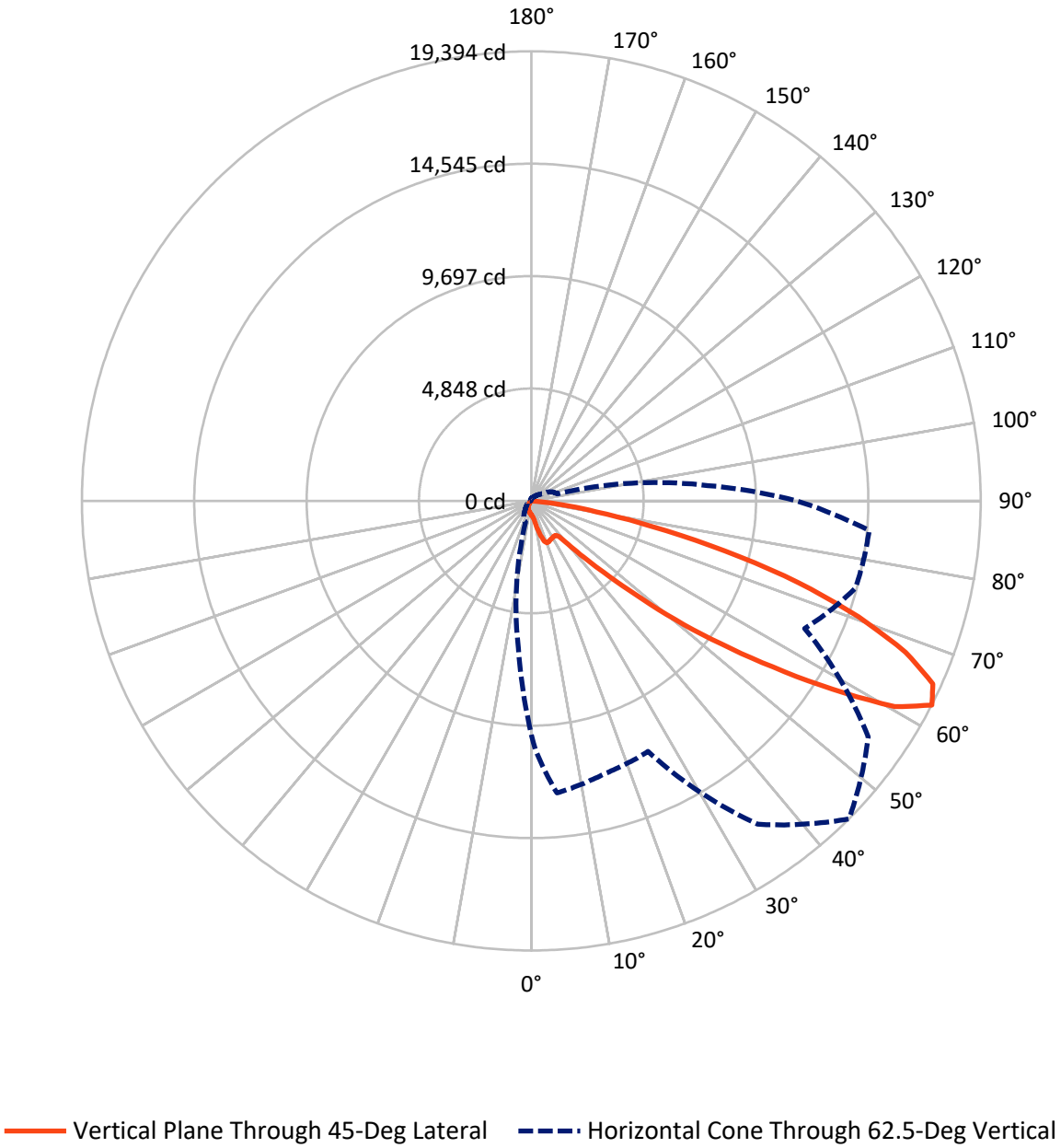
Luminous Intensity Polar Plot



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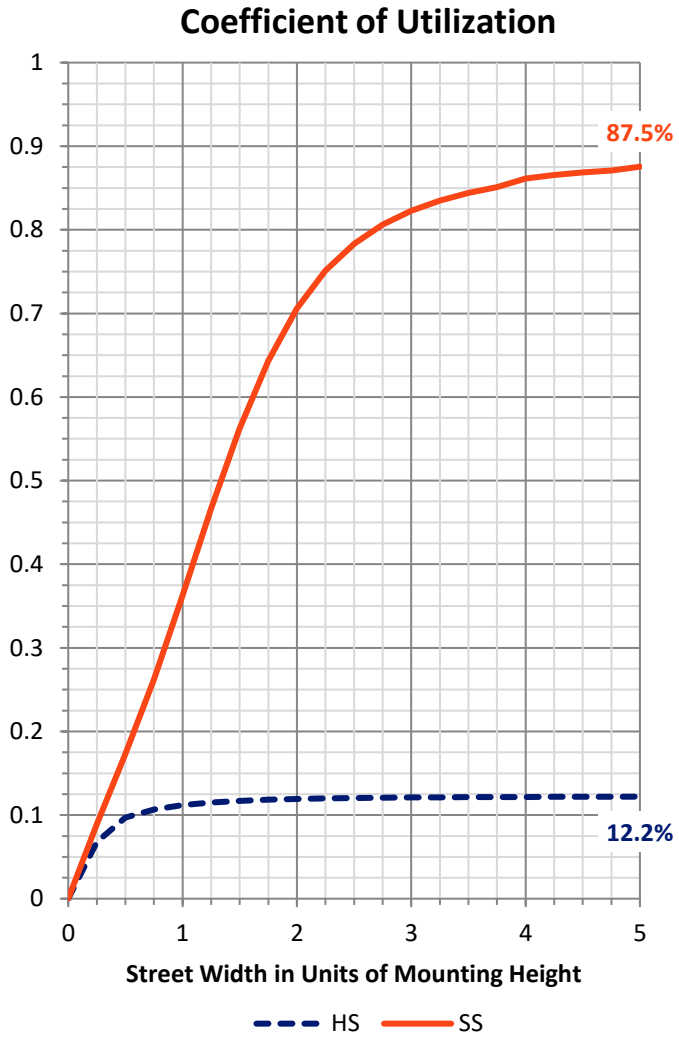
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1448.6	0.0	1448.6
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	10290.8	0.0	10290.8
	% Fixture	87.7	0.0	87.7
Total	Lumens	11739.4	0.0	11739.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.1	0.5
10°-20°	204.7	1.7
20°-30°	444.9	3.8
30°-40°	730.3	6.2
40°-50°	1342.5	11.4
50°-60°	2883.0	24.6
60°-70°	3872.3	33.0
70°-80°	2016.4	17.2
80°-90°	191.2	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°	11739.4	100.0
0°-180°	11739.4	100.0



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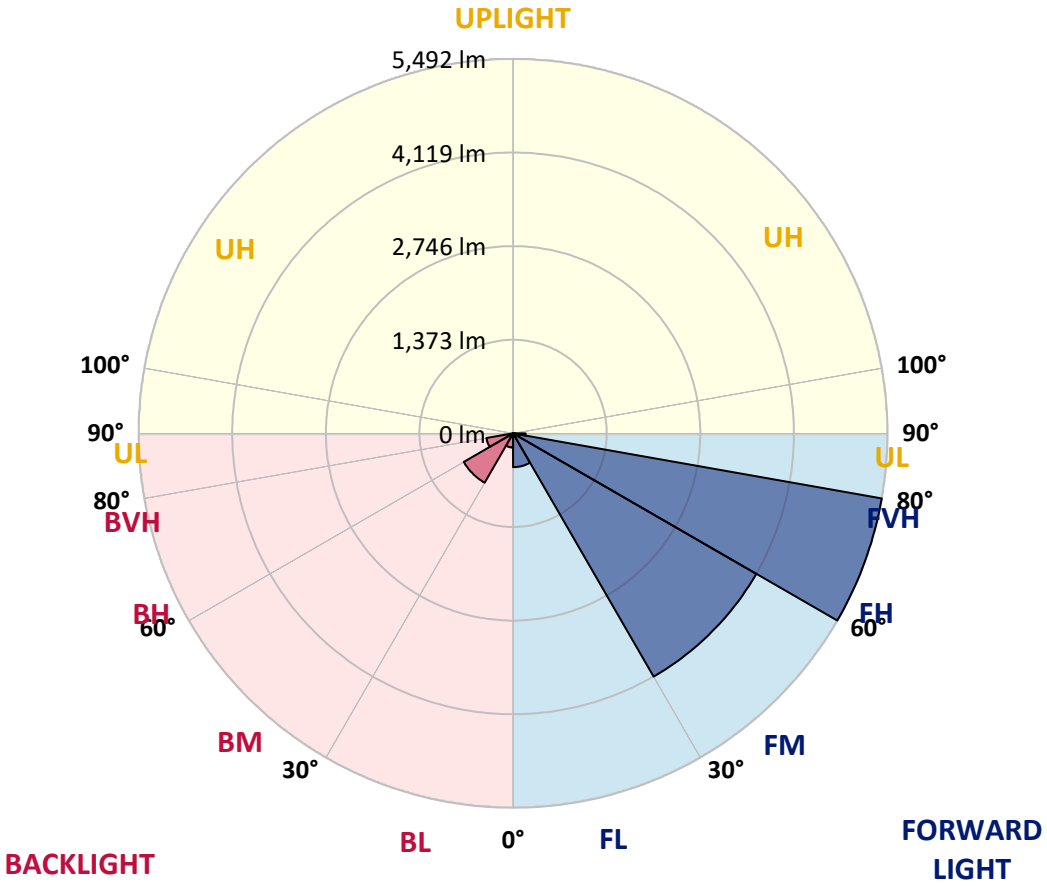
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	495.9	4.2			
FM	(30°-60°)	4120.4	35.1			
FH	(60°-80°)	5491.8	46.8			G3/7500
FVH	(80°-90°)	182.7	1.6			G2/225
BL	(0°-30°)	207.8	1.8	B1/500		
BM	(30°-60°)	835.4	7.1	B1/1000		
BH	(60°-80°)	396.9	3.4	B1/500		G1/500
BVH	(80°-90°)	8.5	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	610.2	610.2	610.2	610.2	610.2	610.2	*610.2*	610.2	610.2	610.2	610.2
2.5°	622.4	625.1	627.8	637.3	644.1	649.5	*650.9*	646.8	637.3	627.8	614.3
5°	603.4	606.1	615.6	641.4	667.2	687.5	*694.3*	690.2	667.2	637.3	606.1
7.5°	602.1	607.5	630.5	684.8	740.4	782.4	*793.3*	783.8	740.4	680.7	617.0
10°	650.9	660.4	694.3	791.9	893.6	968.2	*998.0*	957.3	888.2	779.7	675.3
12.5°	778.3	794.6	859.7	1002.1	1159.4	1258.4	*1299.1*	1248.9	1140.4	983.1	817.7
15°	979.0	1003.4	1101.1	1314.0	1499.7	1587.9	*1601.4*	1573.0	1446.9	1273.3	1050.9
17.5°	1262.4	1297.7	1449.6	1666.5	1800.8	1832.0	*1827.9*	1798.1	1705.9	1586.5	1376.3
20°	1601.4	1643.5	1792.6	1971.6	1985.2	1948.6	*1928.2*	1910.6	1879.4	1859.1	1695.0
22.5°	1943.2	1994.7	2150.6	2195.4	2073.3	1967.6	*1917.4*	1931.0	1977.1	2077.4	2011.0
25°	2283.5	2332.3	2478.8	2358.1	2114.0	1937.7	*1874.0*	1906.5	2016.4	2233.3	2318.8
27.5°	2680.8	2717.4	2804.2	2469.3	2120.8	1913.3	*1850.9*	1901.1	2035.4	2331.0	2656.4
30°	3094.4	3116.1	3074.1	2499.1	2097.7	1876.7	*1827.9*	1901.1	2067.9	2396.1	2910.0
32.5°	3398.2	3402.2	3265.3	2501.8	2085.5	1846.9	*1806.2*	1893.0	2099.1	2450.3	3155.4
35°	3711.4	3691.1	3448.3	2542.5	2118.1	1857.7	*1822.5*	1916.0	2147.9	2514.0	3371.0
37.5°	4028.7	3992.1	3653.1	2609.0	2202.2	1975.7	*1954.0*	2034.0	2226.6	2602.2	3608.3
40°	4354.1	4304.0	3866.0	2709.3	2389.3	2377.1	*2451.7*	2442.2	2442.2	2714.7	3852.4
42.5°	4751.4	4693.1	4180.6	2992.7	2825.9	3098.5	*3301.9*	3175.8	2942.5	2973.7	4169.7
45°	5276.2	5226.1	4725.7	3535.1	3510.7	4137.2	*4411.1*	4161.6	3581.2	3571.7	4699.9
47.5°	6115.6	6106.1	5594.9	4164.3	4348.7	5459.3	*5988.1*	5508.1	4309.4	4205.0	5703.4
50°	7295.3	7266.8	6678.3	4902.0	5345.4	7097.3	*8041.1*	7241.1	5189.4	4944.0	7047.2
52.5°	8624.2	8654.0	8195.7	5707.4	6404.4	8919.8	*10233.8*	9226.3	6145.4	5883.7	8738.1
55°	9875.8	10046.7	9926.0	6649.9	7439.1	10932.1	*12642.1*	11404.0	7329.2	7113.6	10633.8
57.5°	10854.8	11336.2	12182.4	8019.4	8655.4	13286.2	*15331.0*	13764.8	8711.0	9111.0	13214.3
60°	10909.1	11546.4	13511.3	10884.7	10220.2	15305.2	*18015.9*	16071.4	10883.3	12502.4	15236.1
62.5°	*10091.4*	*10774.8*	*12646.1*	*12186.4*	*11924.7*	*17023.3*	*19393.6*	*17752.8*	*13020.4*	*14488.9*	*14636.7*
65°	9155.8	9846.0	11680.6	10709.7	11726.7	16950.1	*19043.8*	17792.2	13214.3	13138.4	13564.1
67.5°	7741.4	8361.1	10022.2	9479.8	10808.7	16132.4	*17427.4*	16670.7	12174.2	12288.1	12478.0
70°	5650.5	6247.1	7788.9	7816.0	9439.2	14658.4	*14974.4*	14870.0	11211.5	11332.1	10789.7
72.5°	4081.6	4584.7	5914.9	6409.8	7535.3	12292.2	*12073.9*	12476.6	9619.5	10092.8	8666.2
75°	2934.4	3311.4	4339.2	5575.9	5973.2	9128.6	*8643.2*	9662.9	7718.4	8690.6	6515.6
77.5°	1190.6	1323.5	1707.2	3756.1	3925.6	6141.4	*5291.1*	7018.7	5502.7	5710.1	3158.1
80°	48.8	54.2	70.5	1939.1	2691.7	3455.1	*2831.3*	3752.1	3634.1	2299.8	745.8
82.5°	5.4	5.4	12.2	558.7	1178.4	1906.5	*1334.3*	2161.5	1840.1	975.0	339.0
85°	1.4	1.4	2.7	63.7	276.6	305.1	*180.3*	663.1	855.6	398.7	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	6.8	12.2	13.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2
2.5°	614.3	607.5	599.4	591.2	587.2	576.3	572.2	569.5	566.8	568.2	568.2
5°	593.9	579.0	561.4	543.8	534.3	523.4	518.0	515.3	516.6	522.1	522.1
7.5°	591.2	562.7	524.8	501.7	490.9	482.7	477.3	474.6	476.0	482.7	485.5
10°	636.0	585.8	518.0	478.7	466.5	458.3	452.9	448.8	446.1	451.6	452.9
12.5°	732.2	663.1	550.5	476.0	454.3	443.4	439.3	431.2	427.1	429.9	431.2
15°	931.6	812.2	615.6	486.8	443.4	431.2	424.4	417.7	410.9	409.5	410.9
17.5°	1191.9	1021.1	714.6	512.6	435.3	420.4	410.9	401.4	391.9	390.5	389.2
20°	1514.7	1277.4	852.9	553.3	428.5	410.9	397.3	383.7	371.5	367.5	367.5
22.5°	1808.9	1586.5	1030.6	603.4	419.0	397.3	381.0	364.8	351.2	344.4	343.1
25°	2168.3	1914.7	1243.5	661.7	405.4	379.7	362.1	345.8	332.2	324.1	321.4
27.5°	2530.3	2260.5	1484.8	737.7	389.2	362.1	345.8	330.9	315.9	306.5	303.7
30°	2881.5	2633.4	1756.0	832.6	377.0	344.4	330.9	315.9	302.4	287.5	283.4
32.5°	3258.5	3014.4	2059.8	938.4	367.5	332.2	317.3	303.7	286.1	272.6	265.8
35°	3621.9	3407.6	2394.7	1041.4	358.0	321.4	305.1	291.5	272.6	257.6	248.1
37.5°	3988.0	3807.7	2744.6	1103.8	344.4	306.5	291.5	280.7	259.0	241.4	230.5
40°	4375.8	4221.2	3122.9	1078.0	332.2	290.2	282.0	269.8	245.4	225.1	211.5
42.5°	4801.6	4615.8	3508.0	979.0	321.4	276.6	268.5	256.3	233.2	208.8	191.2
45°	5337.2	5048.4	3823.9	829.9	326.8	263.1	246.8	244.1	222.4	191.2	169.5
47.5°	6258.0	5712.9	4069.4	733.6	363.4	248.1	229.2	235.9	212.9	173.6	149.2
50°	7666.9	6813.9	4298.5	726.8	419.0	241.4	212.9	230.5	203.4	155.9	131.5
52.5°	9009.3	7932.6	4445.0	786.5	467.8	259.0	196.6	223.7	196.6	143.7	119.3
55°	10293.4	8578.1	4183.3	829.9	513.9	311.9	184.4	212.9	188.5	137.0	115.3
57.5°	11677.9	8865.6	3293.7	918.0	546.5	356.6	187.1	196.6	177.6	132.9	113.9
60°	12091.5	8498.1	1987.9	1033.3	528.8	370.2	207.5	174.9	162.7	124.8	109.8
62.5°	*11448.8*	*7626.2*	*1172.9*	*941.1*	*513.9*	*349.8*	*237.3*	*161.4*	*147.8*	*113.9*	*101.7*
65°	10487.4	6442.4	764.8	794.6	545.1	311.9	252.2	154.6	134.2	103.1	89.5
67.5°	9389.0	5189.4	535.6	469.2	503.1	280.7	212.9	153.2	120.7	86.8	73.2
70°	7908.2	3886.3	377.0	310.5	419.0	249.5	165.4	149.2	105.8	70.5	57.0
72.5°	6110.2	2432.7	280.7	200.7	298.3	203.4	131.5	126.1	85.4	58.3	43.4
75°	4506.0	1387.2	198.0	145.1	196.6	154.6	97.6	89.5	73.2	55.6	39.3
77.5°	2352.7	694.3	123.4	111.2	112.5	96.3	70.5	65.1	67.8	55.6	36.6
80°	451.6	138.3	74.6	81.4	61.0	61.0	51.5	54.2	59.7	44.7	31.2
82.5°	188.5	29.8	40.7	46.1	38.0	42.0	42.0	43.4	42.0	32.5	23.1
85°	0.0	0.0	17.6	19.0	25.8	25.8	21.7	21.7	21.7	19.0	13.6
87.5°	0.0	0.0	0.0	0.0	1.4	4.1	8.1	9.5	10.8	8.1	5.4
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°	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2
2.5°	566.8	564.1	568.2	570.9	573.6	573.6	570.9	568.2	564.1	568.2	564.1
5°	523.4	527.5	534.3	537.0	539.7	534.3	531.6	523.4	516.6	518.0	515.3
7.5°	489.5	493.6	501.7	507.1	507.1	504.4	496.3	488.2	477.3	477.3	476.0
10°	458.3	463.8	473.2	480.0	482.7	480.0	471.9	461.0	451.6	451.6	447.5
12.5°	432.6	439.3	450.2	459.7	462.4	459.7	451.6	440.7	429.9	429.9	427.1
15°	410.9	419.0	431.2	442.1	446.1	442.1	432.6	419.0	408.2	409.5	405.4
17.5°	390.5	397.3	413.6	425.8	429.9	425.8	413.6	396.0	385.1	387.8	385.1
20°	367.5	375.6	391.9	405.4	409.5	405.4	391.9	372.9	362.1	362.1	363.4
22.5°	343.1	351.2	367.5	377.0	382.4	378.3	364.8	347.1	336.3	336.3	337.6
25°	321.4	325.4	337.6	347.1	348.5	344.4	333.6	320.0	311.9	315.9	317.3
27.5°	301.0	301.0	306.5	311.9	310.5	306.5	302.4	291.5	290.2	294.3	298.3
30°	279.3	272.6	269.8	265.8	264.4	263.1	267.1	267.1	269.8	275.3	279.3
32.5°	260.4	246.8	234.6	222.4	215.6	221.0	231.9	241.4	250.9	259.0	263.1
35°	238.7	217.0	196.6	180.3	169.5	177.6	195.3	212.9	229.2	240.0	246.8
37.5°	217.0	185.8	161.4	141.0	132.9	139.7	158.7	183.1	207.5	221.0	230.5
40°	193.9	154.6	126.1	109.8	101.7	108.5	127.5	151.9	184.4	202.0	214.2
42.5°	170.9	127.5	101.7	85.4	81.4	85.4	100.3	124.8	160.0	181.7	198.0
45°	147.8	105.8	81.4	69.2	65.1	69.2	81.4	101.7	137.0	161.4	180.3
47.5°	127.5	89.5	67.8	57.0	54.2	58.3	67.8	85.4	115.3	139.7	161.4
50°	111.2	78.6	58.3	48.8	46.1	50.2	58.3	71.9	97.6	119.3	142.4
52.5°	100.3	73.2	51.5	42.0	40.7	43.4	50.2	61.0	82.7	101.7	123.4
55°	97.6	73.2	47.5	38.0	36.6	39.3	44.7	52.9	71.9	88.1	107.1
57.5°	100.3	78.6	44.7	32.5	31.2	33.9	39.3	46.1	62.4	75.9	93.6
60°	100.3	80.0	39.3	25.8	24.4	27.1	32.5	40.7	55.6	66.4	81.4
62.5°	*90.9*	*73.2*	*32.5*	*20.3*	*17.6*	*20.3*	*27.1*	*33.9*	*48.8*	*59.7*	*71.9*
65°	78.6	62.4	27.1	14.9	12.2	14.9	21.7	28.5	42.0	51.5	65.1
67.5°	63.7	47.5	20.3	10.8	8.1	10.8	16.3	23.1	35.3	44.7	58.3
70°	47.5	33.9	16.3	9.5	8.1	9.5	14.9	21.7	31.2	40.7	54.2
72.5°	35.3	23.1	13.6	9.5	6.8	9.5	13.6	20.3	29.8	39.3	51.5
75°	29.8	19.0	12.2	8.1	6.8	8.1	12.2	19.0	27.1	36.6	48.8
77.5°	28.5	17.6	10.8	6.8	5.4	6.8	10.8	16.3	24.4	33.9	47.5
80°	24.4	14.9	9.5	5.4	4.1	5.4	9.5	13.6	19.0	25.8	36.6
82.5°	19.0	12.2	6.8	2.7	1.4	2.7	6.8	8.1	12.2	14.9	21.7
85°	12.2	6.8	2.7	0.0	0.0	0.0	2.7	5.4	5.4	6.8	10.8
87.5°	5.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.7	4.1
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: P639970
CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2	610.2
2.5°	572.2	573.6	576.3	580.4	589.9	598.0	606.1	617.0	622.4	622.4
5°	518.0	519.4	520.7	526.1	539.7	550.5	568.2	589.9	600.7	603.4
7.5°	476.0	478.7	481.4	485.5	499.0	513.9	537.0	577.7	598.0	602.1
10°	451.6	455.6	461.0	469.2	481.4	497.7	537.0	610.2	644.1	650.9
12.5°	432.6	439.3	444.8	454.3	469.2	494.9	573.6	702.4	762.1	778.3
15°	413.6	421.7	429.9	439.3	455.6	504.4	644.1	867.8	966.8	979.0
17.5°	394.6	404.1	414.9	425.8	446.1	527.5	755.3	1097.0	1235.3	1262.4
20°	372.9	385.1	400.0	413.6	436.6	564.1	909.9	1369.6	1543.1	1601.4
22.5°	349.8	364.8	382.4	400.0	425.8	608.8	1097.0	1662.5	1905.2	1943.2
25°	330.9	345.8	362.1	379.7	408.2	663.1	1323.5	2025.9	2246.9	2283.5
27.5°	313.2	328.2	343.1	359.3	390.5	733.6	1596.0	2412.3	2642.9	2680.8
30°	294.3	311.9	326.8	343.1	374.3	820.4	1910.6	2840.8	3059.2	3094.4
32.5°	278.0	295.6	310.5	326.8	362.1	915.3	2241.5	3220.5	3398.2	3398.2
35°	264.4	283.4	294.3	315.9	352.6	976.3	2554.7	3582.6	3716.8	3711.4
37.5°	249.5	272.6	280.7	295.6	340.4	983.1	2849.0	3965.0	4064.0	4028.7
40°	234.6	259.0	271.2	279.3	326.8	927.5	3171.7	4316.2	4400.2	4354.1
42.5°	221.0	240.0	257.6	267.1	318.7	829.9	3430.7	4691.8	4792.1	4751.4
45°	207.5	223.7	234.6	252.2	324.1	762.1	3653.1	5129.8	5306.1	5276.2
47.5°	193.9	207.5	214.2	241.4	360.7	730.9	3788.7	5807.8	6140.0	6115.6
50°	179.0	195.3	195.3	238.7	414.9	741.7	3906.7	6789.5	7303.5	7295.3
52.5°	164.1	181.7	179.0	259.0	457.0	791.9	4040.9	7656.0	8549.6	8624.2
55°	149.2	165.4	168.1	299.7	481.4	835.3	3521.5	8020.8	9614.1	9875.8
57.5°	132.9	142.4	174.9	330.9	473.2	961.4	2412.3	8087.2	10293.4	10854.8
60°	115.3	123.4	198.0	324.1	447.5	888.2	1518.7	7490.6	10197.2	10909.1
62.5°	*100.3*	*113.9*	*208.8*	*286.1*	*455.6*	*770.2*	*968.2*	*6384.1*	*9279.2*	*10091.4*
65°	88.1	109.8	189.8	259.0	461.0	522.1	653.6	5193.5	8382.8	9155.8
67.5°	78.6	122.0	155.9	230.5	396.0	367.5	448.8	4035.5	7048.5	7741.4
70°	71.9	124.8	127.5	198.0	306.5	235.9	295.6	2716.1	4858.6	5650.5
72.5°	65.1	92.2	96.3	158.7	198.0	143.7	191.2	1554.0	3541.9	4081.6
75°	62.4	62.4	66.4	103.1	109.8	104.4	123.4	927.5	2539.8	2934.4
77.5°	58.3	47.5	42.0	66.4	59.7	74.6	73.2	412.2	1101.1	1190.6
80°	46.1	33.9	28.5	42.0	40.7	50.2	43.4	33.9	50.2	48.8
82.5°	28.5	21.7	20.3	25.8	23.1	25.8	20.3	5.4	5.4	5.4
85°	13.6	12.2	10.8	10.8	12.2	10.8	8.1	2.7	1.4	1.4
87.5°	6.8	6.8	5.4	4.1	5.4	5.4	4.1	1.4	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.

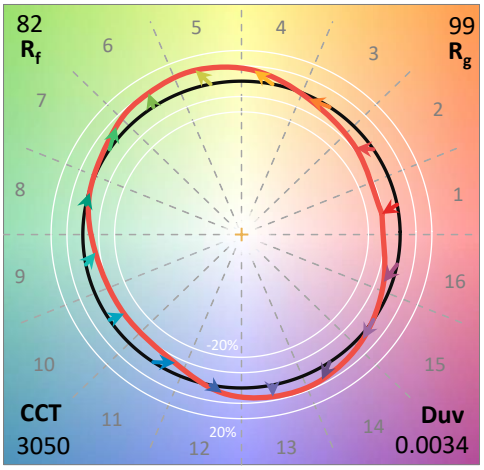
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

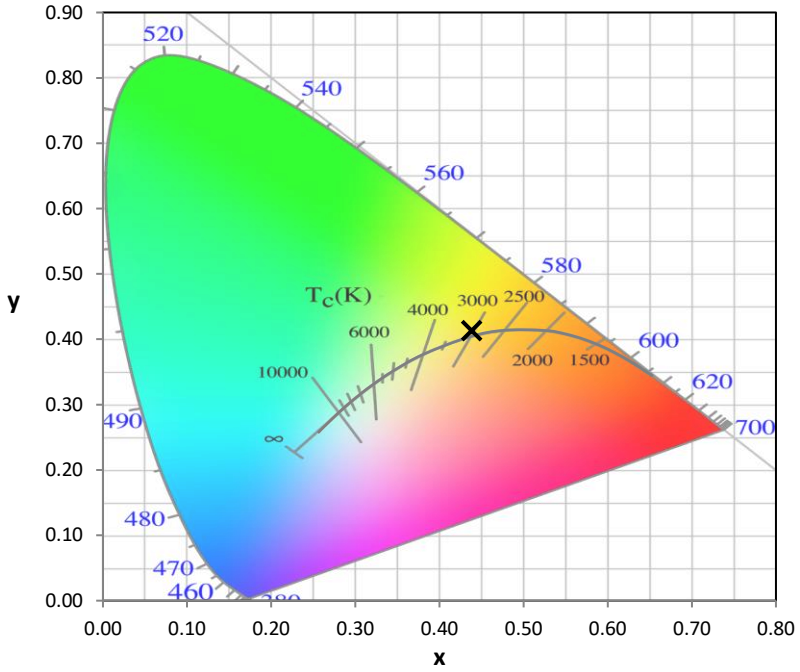
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

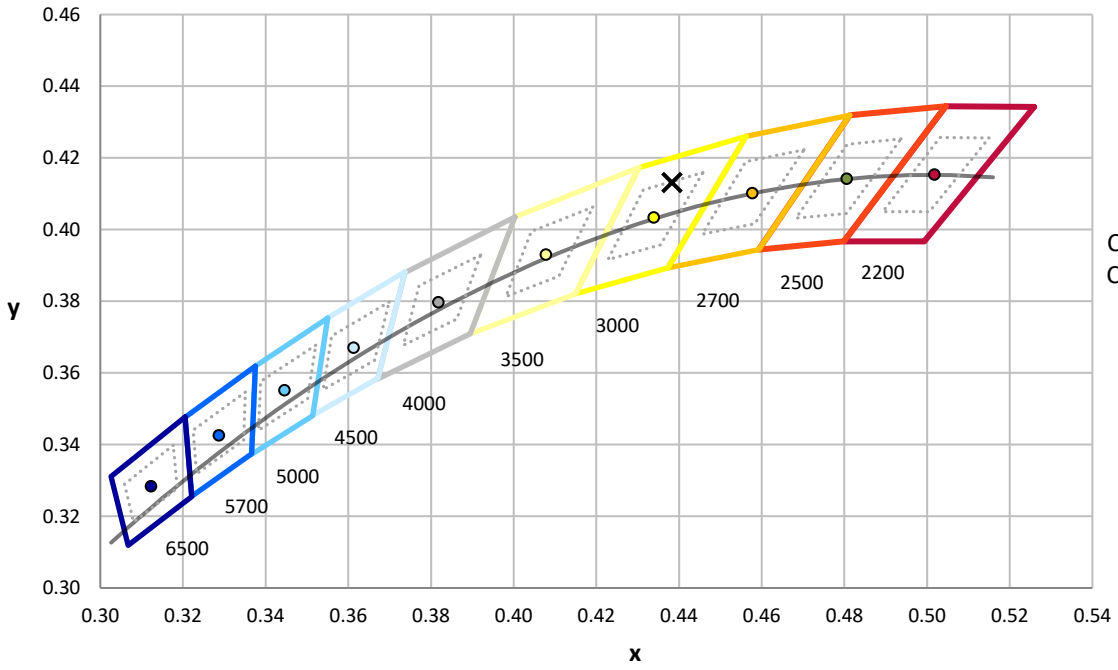
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

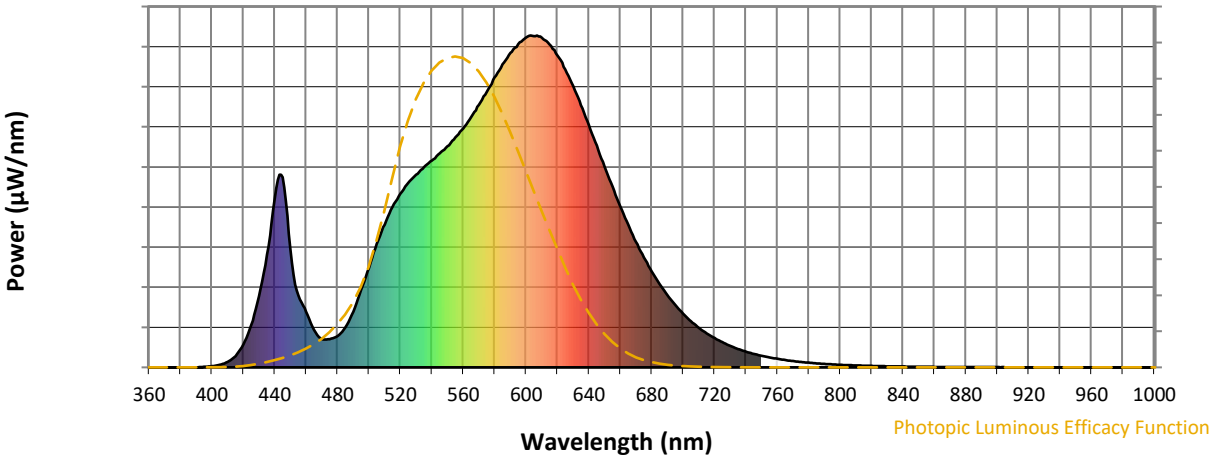


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

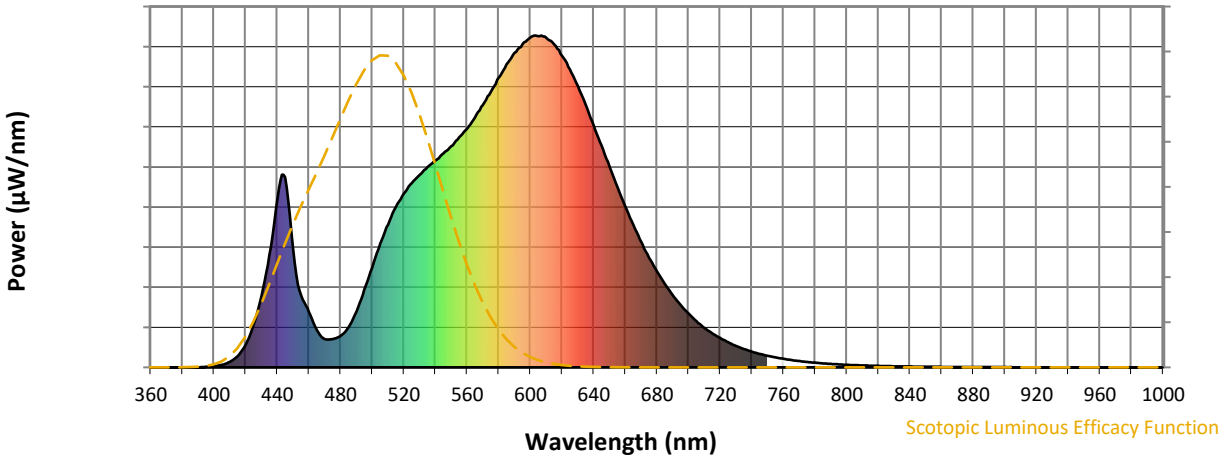


Photopic Lumens: NR

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

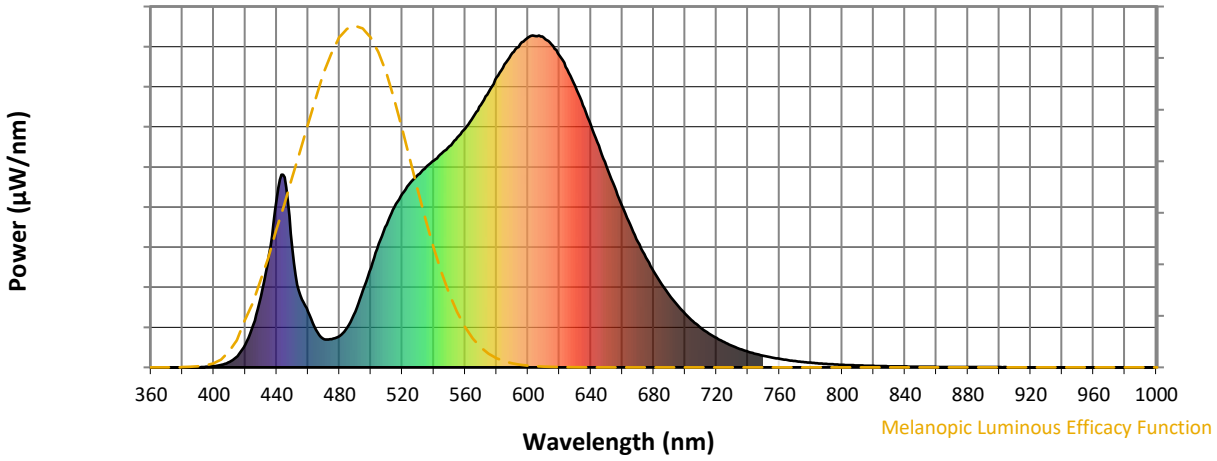


Scotopic Lumens: NR **S/P: 1.27**

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			

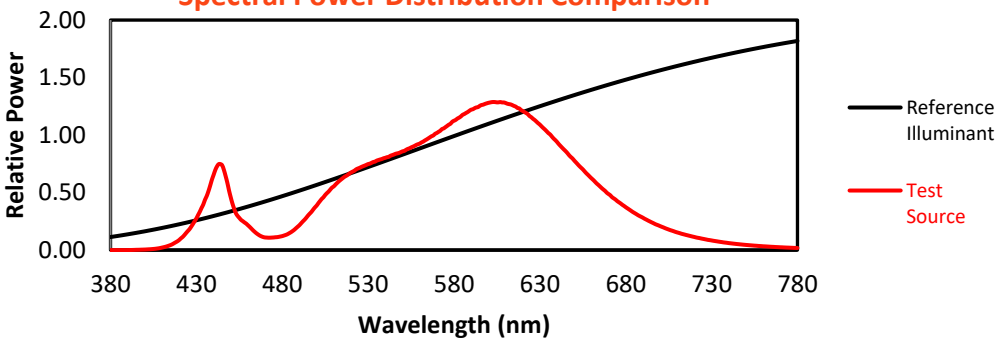
REPORT NUMBER: SP1-2408-195-9

TM-30-18

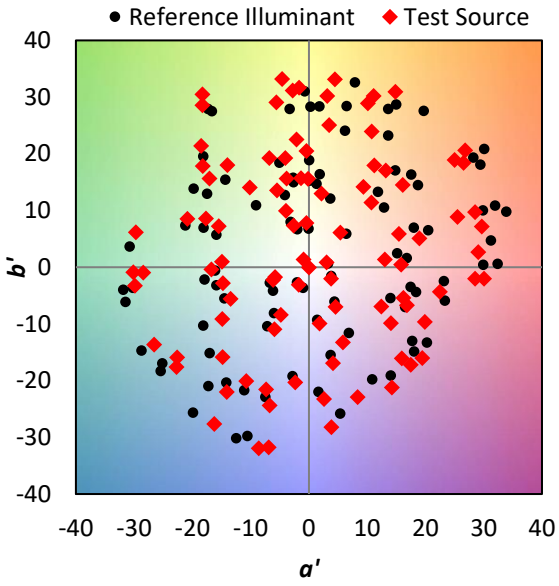
Summary

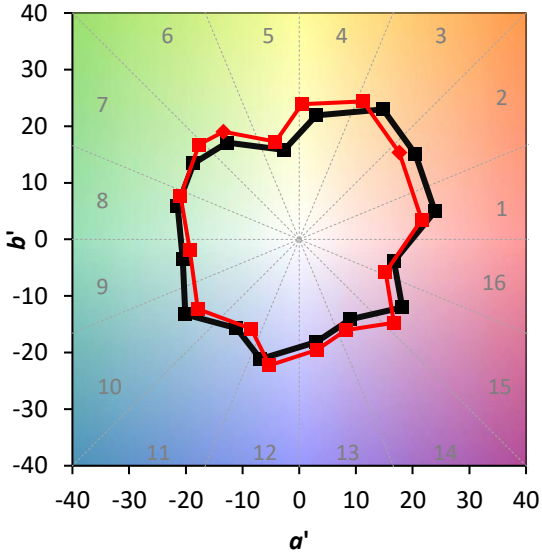
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

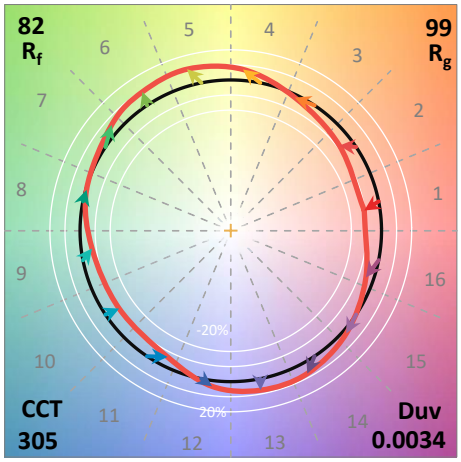
Spectral Power Distribution Comparison

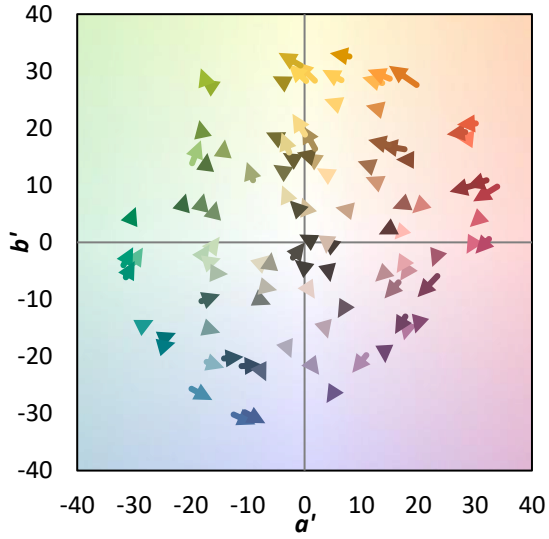


Color Vector Graphics









REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
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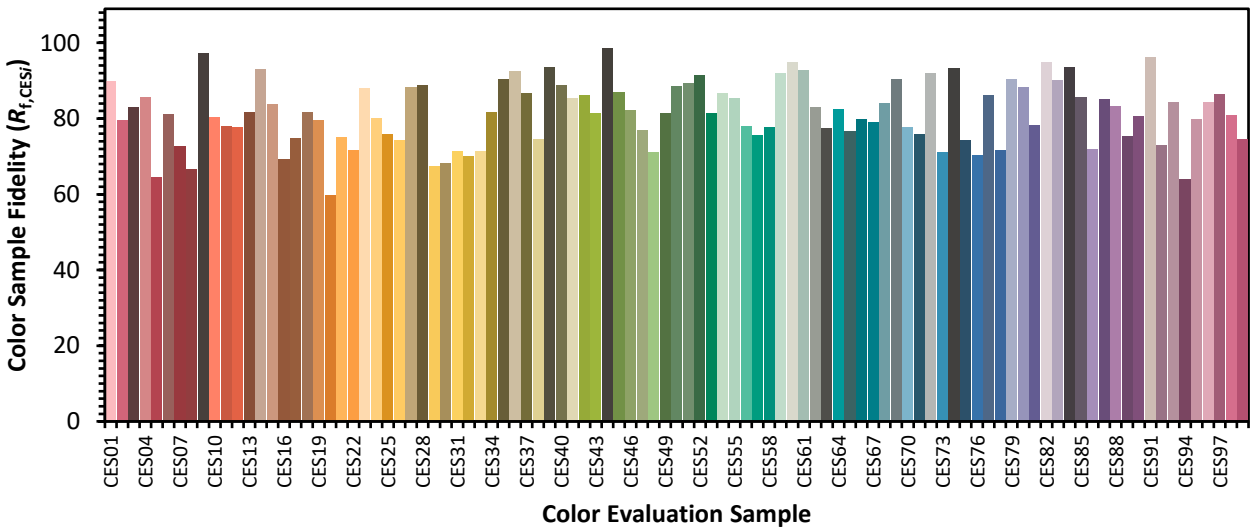

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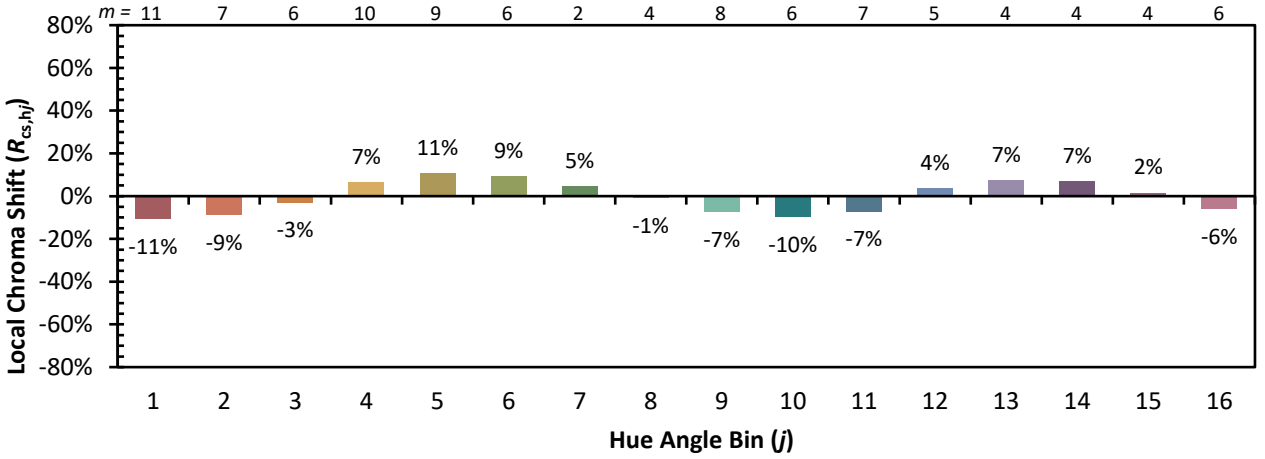
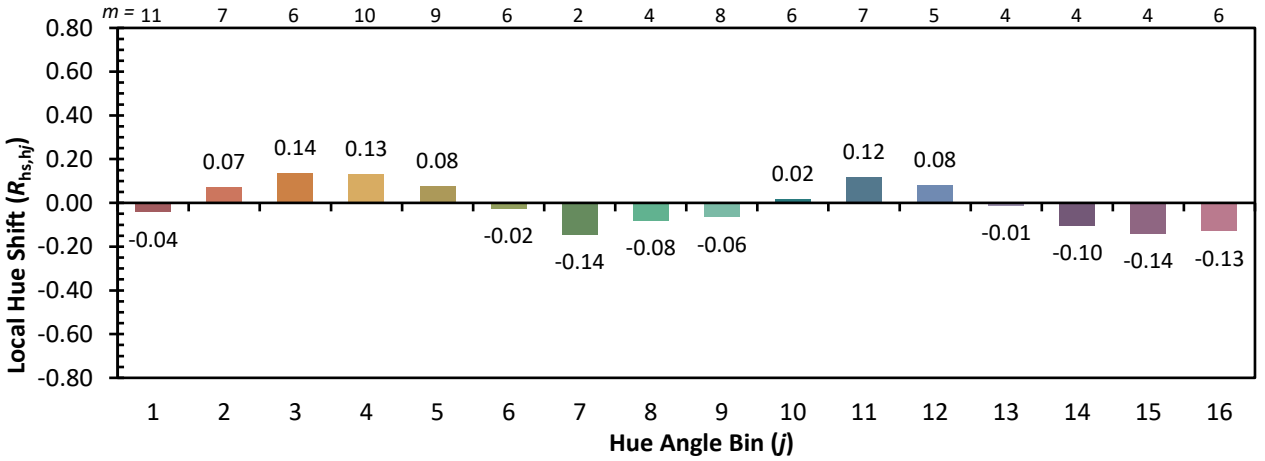
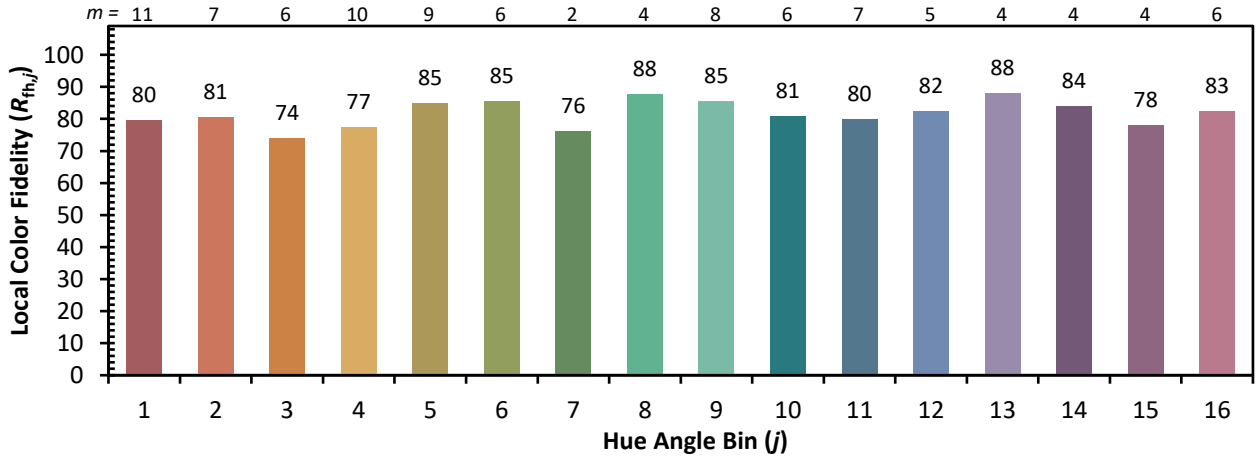
Color Rendition by Hue-Angle Bin







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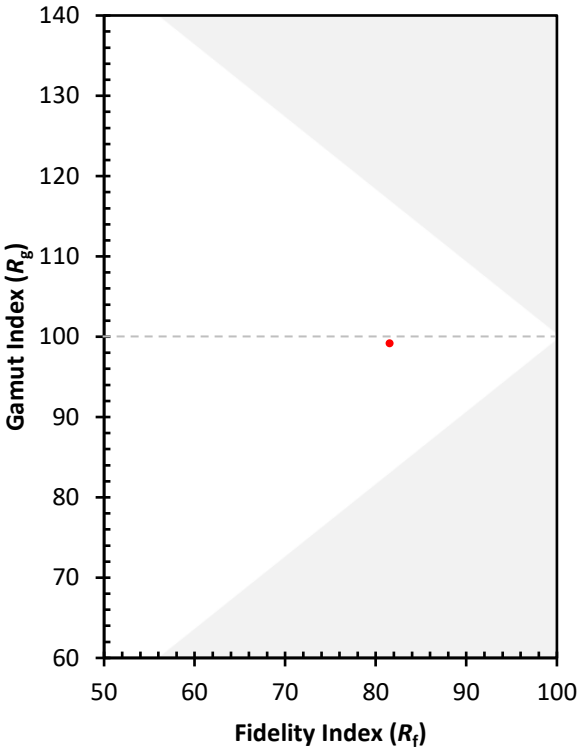
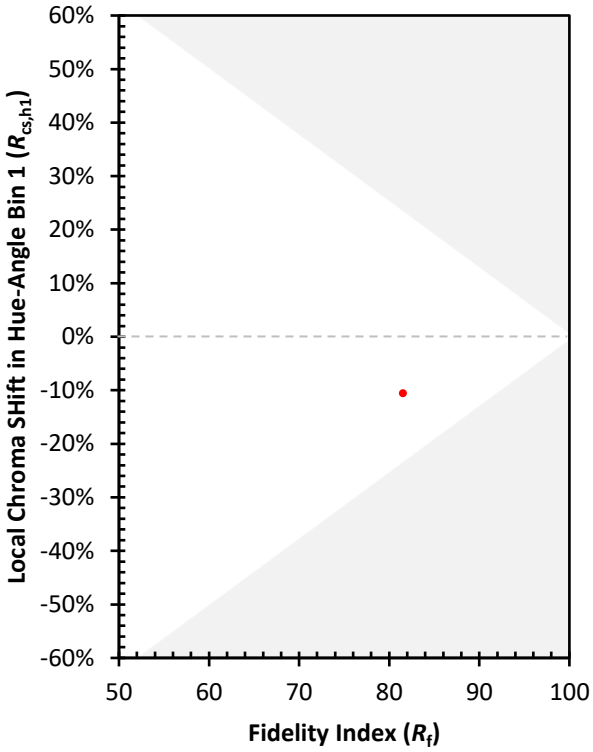
Measure Comparisons





(END OF REPORT)