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: P635515

Luminaire Tested: GWS-SA3D-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:	P635515
	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-SA3D-830-U-SLR-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8675.8 lumens
Efficiency:	N/A
Efficacy:	71.8 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	120.8
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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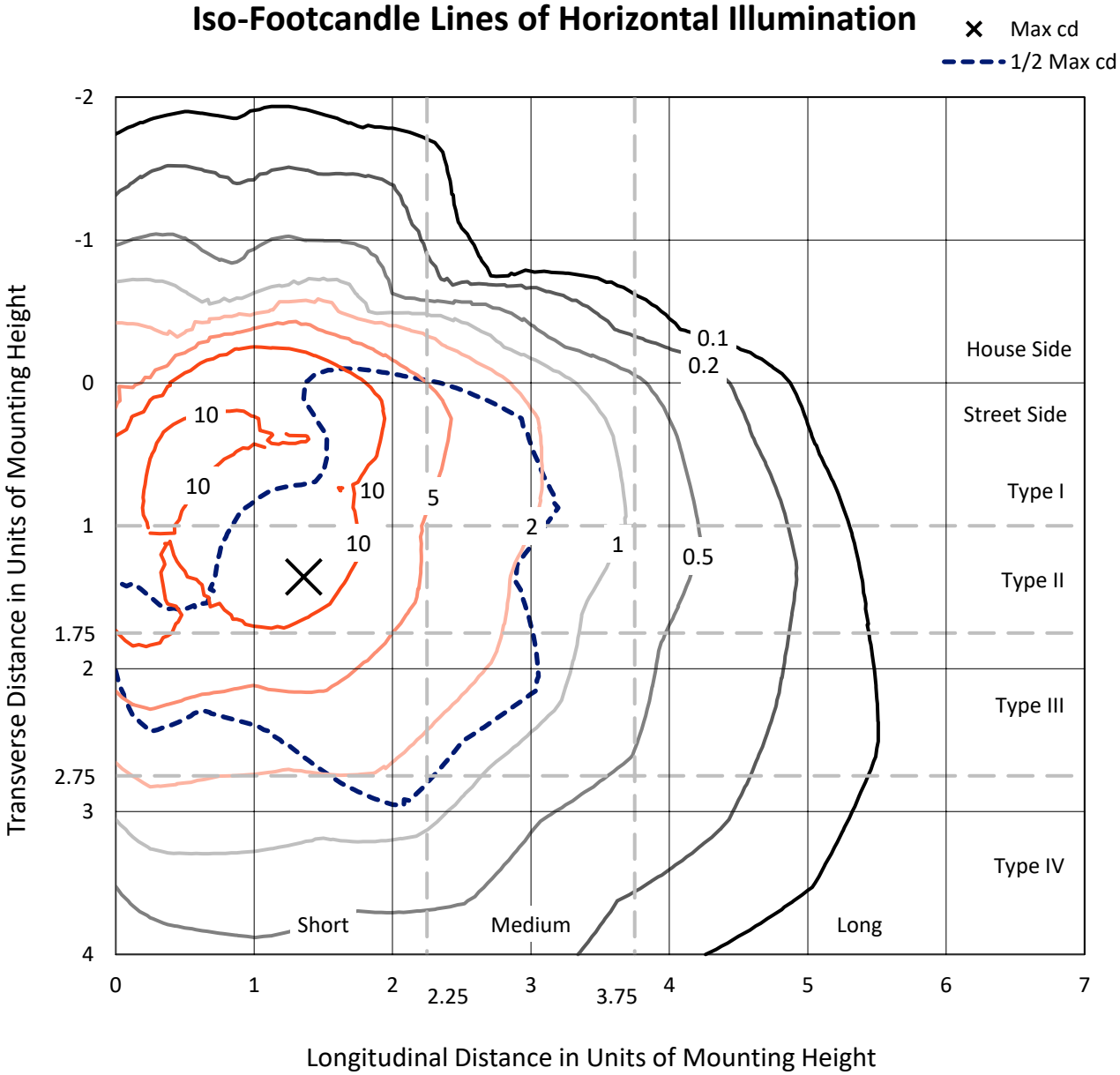
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 17.6 fc
Type IV - Short - N/A

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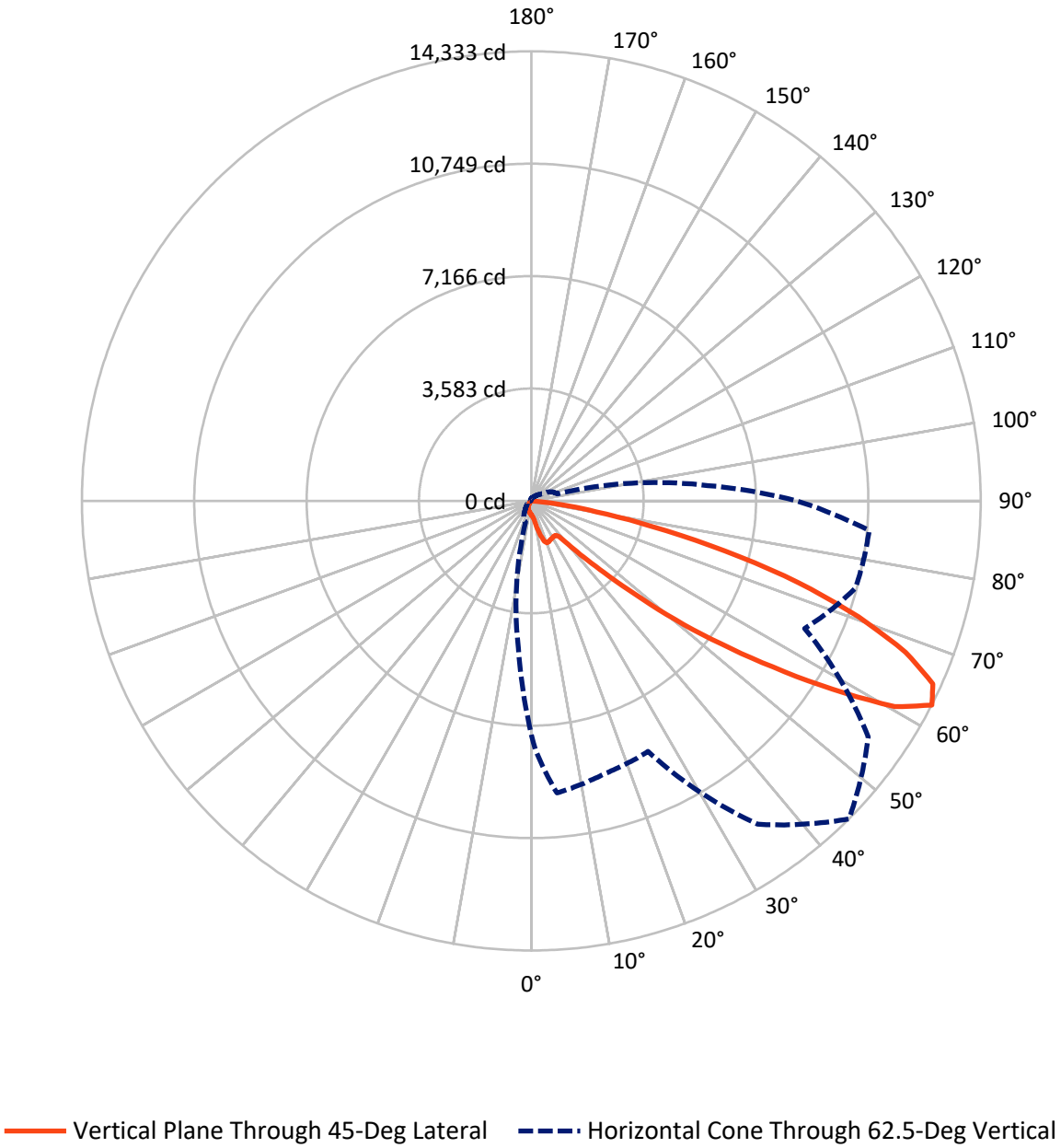
Luminous Intensity Polar Plot



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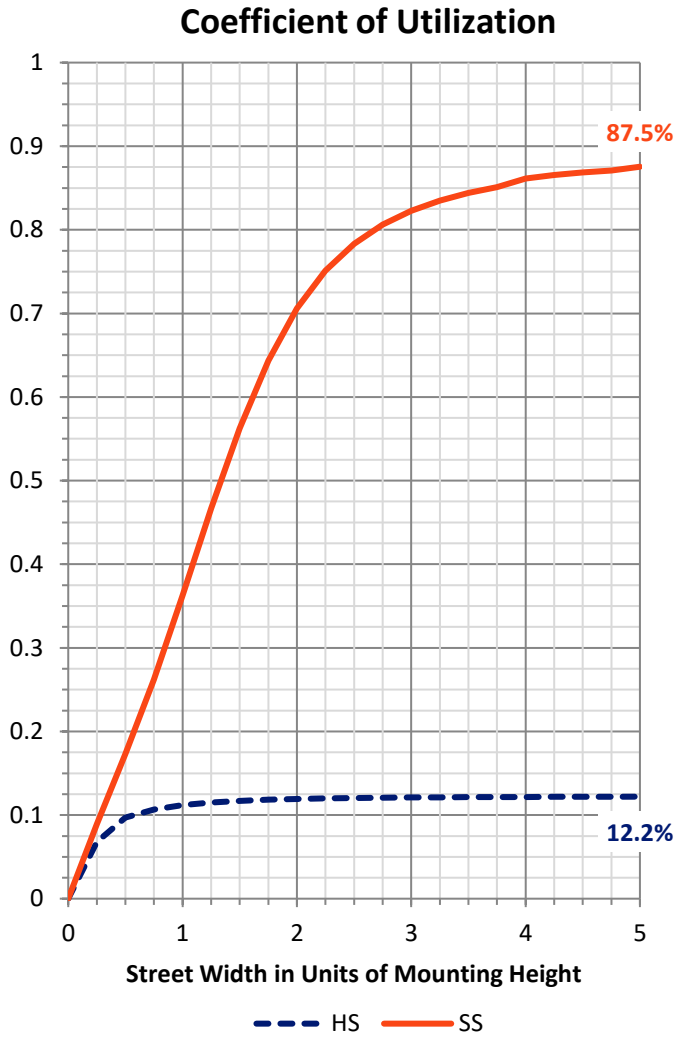
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1070.6	0.0	1070.6
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	7605.2	0.0	7605.2
	% Fixture	87.7	0.0	87.7
Total	Lumens	8675.8	0.0	8675.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.0	0.5
10°-20°	151.3	1.7
20°-30°	328.8	3.8
30°-40°	539.7	6.2
40°-50°	992.1	11.4
50°-60°	2130.7	24.6
60°-70°	2861.8	33.0
70°-80°	1490.2	17.2
80°-90°	141.3	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°	8675.8	100.0
0°-180°	8675.8	100.0



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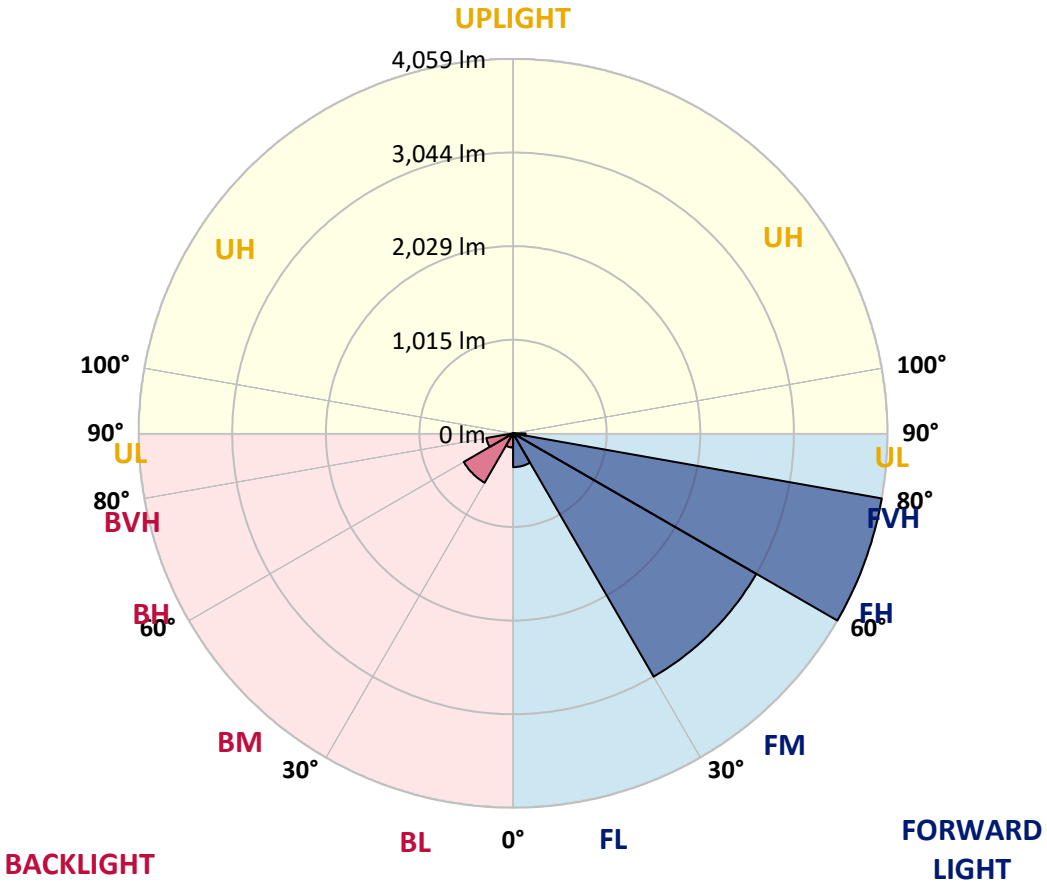
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	366.5	4.2			
FM	(30°-60°)	3045.1	35.1			
FH	(60°-80°)	4058.6	46.8			G2/5000
FVH	(80°-90°)	135.0	1.6			G2/225
BL	(0°-30°)	153.6	1.8	B1/500		
BM	(30°-60°)	617.4	7.1	B1/1000		
BH	(60°-80°)	293.3	3.4	B1/500		G1/500
BVH	(80°-90°)	6.3	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-G2
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0
2.5°	460.0	462.0	464.0	471.0	476.0	480.0	481.0	478.0	471.0	464.0	454.0
5°	445.9	448.0	455.0	474.0	493.0	508.1	513.1	510.1	493.0	471.0	448.0
7.5°	444.9	449.0	466.0	506.1	547.2	578.2	586.2	579.2	547.2	503.1	456.0
10°	481.0	488.0	513.1	585.2	660.4	715.5	737.6	707.5	656.4	576.2	499.1
12.5°	575.2	587.3	635.4	740.6	856.8	930.0	960.0	923.0	842.8	726.5	604.3
15°	723.5	741.6	813.7	971.1	1108.4	1173.5	1183.5	1162.5	1069.3	941.0	776.7
17.5°	933.0	959.0	1071.3	1231.6	1330.8	1353.9	1350.9	1328.8	1260.7	1172.5	1017.2
20°	1183.5	1214.6	1324.8	1457.1	1467.1	1440.1	1425.0	1412.0	1389.0	1373.9	1252.7
22.5°	1436.1	1474.1	1589.4	1622.5	1532.3	1454.1	1417.0	1427.0	1461.1	1535.3	1486.2
25°	1687.6	1723.7	1831.9	1742.7	1562.3	1432.0	1384.9	1409.0	1490.2	1650.5	1713.6
27.5°	1981.2	2008.3	2072.4	1824.9	1567.3	1414.0	1367.9	1405.0	1504.2	1722.7	1963.2
30°	2286.9	2302.9	2271.8	1846.9	1550.3	1387.0	1350.9	1405.0	1528.3	1770.8	2150.6
32.5°	2511.3	2514.4	2413.1	1848.9	1541.3	1364.9	1334.8	1399.0	1551.3	1810.9	2332.0
35°	2742.8	2727.8	2548.4	1879.0	1565.3	1372.9	1346.9	1416.0	1587.4	1858.0	2491.3
37.5°	2977.3	2950.3	2699.7	1928.1	1627.5	1460.1	1444.1	1503.2	1645.5	1923.1	2666.7
40°	3217.9	3180.8	2857.1	2002.3	1765.8	1756.7	1811.9	1804.8	1804.8	2006.3	2847.1
42.5°	3511.5	3468.4	3089.6	2211.7	2088.4	2289.9	2440.2	2347.0	2174.6	2197.7	3081.6
45°	3899.3	3862.2	3492.4	2612.6	2594.5	3057.5	3259.9	3075.5	2646.6	2639.6	3473.4
47.5°	4519.6	4512.6	4134.8	3077.6	3213.8	4034.6	4425.4	4070.7	3184.8	3107.6	4215.0
50°	5391.5	5370.4	4935.5	3622.7	3950.4	5245.2	5942.7	5351.4	3835.2	3653.8	5208.1
52.5°	6373.6	6395.6	6056.9	4218.0	4733.1	6592.0	7563.1	6818.5	4541.7	4348.3	6457.7
55°	7298.5	7424.8	7335.6	4914.5	5497.7	8079.2	9342.9	8427.9	5416.5	5257.2	7858.7
57.5°	8022.1	8377.8	9003.2	5926.6	6396.6	9818.9	11330.1	10172.7	6437.7	6733.3	9765.8
60°	8062.2	8533.2	9985.3	8044.1	7553.1	11311.1	13314.3	11877.3	8043.1	9239.7	11260.0
62.5°	7457.9	7963.0	9345.9	9006.2	8812.8	12580.8	14332.5	13119.9	9622.5	10707.8	10817.0
65°	6766.4	7276.5	8632.4	7914.8	8666.4	12526.7	14074.0	13149.0	9765.8	9709.7	10024.3
67.5°	5721.2	6179.2	7406.8	7005.9	7988.0	11922.4	12879.4	12320.2	8997.2	9081.3	9221.6
70°	4175.9	4616.8	5756.3	5776.3	6975.9	10833.1	11066.6	10989.4	8285.6	8374.8	7974.0
72.5°	3016.4	3388.2	4371.3	4737.1	5568.9	9084.3	8923.0	9220.6	7109.1	7458.9	6404.6
75°	2168.6	2447.2	3206.8	4120.8	4414.4	6746.4	6387.6	7141.2	5704.1	6422.7	4815.3
77.5°	879.9	978.1	1261.7	2775.9	2901.2	4538.7	3910.3	5187.0	4066.7	4220.0	2334.0
80°	36.1	40.1	52.1	1433.1	1989.2	2553.4	2092.5	2772.9	2685.7	1699.6	551.2
82.5°	4.0	4.0	9.0	412.9	870.9	1409.0	986.1	1597.4	1359.9	720.5	250.5
85°	1.0	1.0	2.0	47.1	204.4	225.5	133.3	490.0	632.3	294.6	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	9.0	10.0	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°	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0
2.5°	454.0	449.0	442.9	436.9	433.9	425.9	422.9	420.9	418.9	419.9	419.9
5°	438.9	427.9	414.9	401.9	394.8	386.8	382.8	380.8	381.8	385.8	385.8
7.5°	436.9	415.9	387.8	370.8	362.8	356.8	352.8	350.7	351.7	356.8	358.8
10°	470.0	432.9	382.8	353.8	344.7	338.7	334.7	331.7	329.7	333.7	334.7
12.5°	541.2	490.0	406.9	351.7	335.7	327.7	324.7	318.7	315.7	317.7	318.7
15°	688.5	600.3	455.0	359.8	327.7	318.7	313.7	308.7	303.6	302.6	303.6
17.5°	880.9	754.6	528.1	378.8	321.7	310.7	303.6	296.6	289.6	288.6	287.6
20°	1119.4	944.0	630.3	408.9	316.7	303.6	293.6	283.6	274.6	271.6	271.6
22.5°	1336.8	1172.5	761.6	445.9	309.7	293.6	281.6	269.6	259.6	254.5	253.5
25°	1602.4	1415.0	919.0	489.0	299.6	280.6	267.6	255.5	245.5	239.5	237.5
27.5°	1870.0	1670.6	1097.3	545.2	287.6	267.6	255.5	244.5	233.5	226.5	224.5
30°	2129.5	1946.1	1297.8	615.3	278.6	254.5	244.5	233.5	223.5	212.5	209.4
32.5°	2408.1	2227.7	1522.2	693.5	271.6	245.5	234.5	224.5	211.5	201.4	196.4
35°	2676.7	2518.4	1769.8	769.6	264.6	237.5	225.5	215.5	201.4	190.4	183.4
37.5°	2947.3	2814.0	2028.3	815.7	254.5	226.5	215.5	207.4	191.4	178.4	170.4
40°	3233.9	3119.6	2307.9	796.7	245.5	214.5	208.4	199.4	181.4	166.4	156.3
42.5°	3548.6	3411.3	2592.5	723.5	237.5	204.4	198.4	189.4	172.4	154.3	141.3
45°	3944.4	3730.9	2826.0	613.3	241.5	194.4	182.4	180.4	164.3	141.3	125.3
47.5°	4624.8	4222.0	3007.4	542.2	268.6	183.4	169.4	174.4	157.3	128.3	110.2
50°	5666.1	5035.7	3176.8	537.1	309.7	178.4	157.3	170.4	150.3	115.2	97.2
52.5°	6658.2	5862.5	3285.0	581.2	345.7	191.4	145.3	165.4	145.3	106.2	88.2
55°	7607.2	6339.5	3091.6	613.3	379.8	230.5	136.3	157.3	139.3	101.2	85.2
57.5°	8630.4	6551.9	2434.2	678.4	403.9	263.6	138.3	145.3	131.3	98.2	84.2
60°	8936.0	6280.4	1469.1	763.6	390.8	273.6	153.3	129.3	120.3	92.2	81.2
62.5°	*8461.0*	*5636.0*	*866.8*	*695.5*	*379.8*	*258.6*	*175.4*	*119.3*	*109.2*	*84.2*	*75.2*
65°	7750.5	4761.1	565.2	587.3	402.9	230.5	186.4	114.2	99.2	76.2	66.1
67.5°	6938.8	3835.2	395.8	346.7	371.8	207.4	157.3	113.2	89.2	64.1	54.1
70°	5844.4	2872.1	278.6	229.5	309.7	184.4	122.3	110.2	78.2	52.1	42.1
72.5°	4515.6	1797.8	207.4	148.3	220.5	150.3	97.2	93.2	63.1	43.1	32.1
75°	3330.1	1025.2	146.3	107.2	145.3	114.2	72.2	66.1	54.1	41.1	29.1
77.5°	1738.7	513.1	91.2	82.2	83.2	71.2	52.1	48.1	50.1	41.1	27.1
80°	333.7	102.2	55.1	60.1	45.1	45.1	38.1	40.1	44.1	33.1	23.0
82.5°	139.3	22.0	30.1	34.1	28.1	31.1	31.1	32.1	31.1	24.1	17.0
85°	0.0	0.0	13.0	14.0	19.0	19.0	16.0	16.0	16.0	14.0	10.0
87.5°	0.0	0.0	0.0	0.0	1.0	3.0	6.0	7.0	8.0	6.0	4.0
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°	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0
2.5°	418.9	416.9	419.9	421.9	423.9	423.9	421.9	419.9	416.9	419.9	416.9
5°	386.8	389.8	394.8	396.8	398.8	394.8	392.8	386.8	381.8	382.8	380.8
7.5°	361.8	364.8	370.8	374.8	374.8	372.8	366.8	360.8	352.8	352.8	351.7
10°	338.7	342.7	349.7	354.8	356.8	354.8	348.7	340.7	333.7	333.7	330.7
12.5°	319.7	324.7	332.7	339.7	341.7	339.7	333.7	325.7	317.7	317.7	315.7
15°	303.6	309.7	318.7	326.7	329.7	326.7	319.7	309.7	301.6	302.6	299.6
17.5°	288.6	293.6	305.7	314.7	317.7	314.7	305.7	292.6	284.6	286.6	284.6
20°	271.6	277.6	289.6	299.6	302.6	299.6	289.6	275.6	267.6	267.6	268.6
22.5°	253.5	259.6	271.6	278.6	282.6	279.6	269.6	256.5	248.5	248.5	249.5
25°	237.5	240.5	249.5	256.5	257.5	254.5	246.5	236.5	230.5	233.5	234.5
27.5°	222.5	222.5	226.5	230.5	229.5	226.5	223.5	215.5	214.5	217.5	220.5
30°	206.4	201.4	199.4	196.4	195.4	194.4	197.4	197.4	199.4	203.4	206.4
32.5°	192.4	182.4	173.4	164.3	159.3	163.3	171.4	178.4	185.4	191.4	194.4
35°	176.4	160.3	145.3	133.3	125.3	131.3	144.3	157.3	169.4	177.4	182.4
37.5°	160.3	137.3	119.3	104.2	98.2	103.2	117.2	135.3	153.3	163.3	170.4
40°	143.3	114.2	93.2	81.2	75.2	80.2	94.2	112.2	136.3	149.3	158.3
42.5°	126.3	94.2	75.2	63.1	60.1	63.1	74.2	92.2	118.3	134.3	146.3
45°	109.2	78.2	60.1	51.1	48.1	51.1	60.1	75.2	101.2	119.3	133.3
47.5°	94.2	66.1	50.1	42.1	40.1	43.1	50.1	63.1	85.2	103.2	119.3
50°	82.2	58.1	43.1	36.1	34.1	37.1	43.1	53.1	72.2	88.2	105.2
52.5°	74.2	54.1	38.1	31.1	30.1	32.1	37.1	45.1	61.1	75.2	91.2
55°	72.2	54.1	35.1	28.1	27.1	29.1	33.1	39.1	53.1	65.1	79.2
57.5°	74.2	58.1	33.1	24.1	23.0	25.1	29.1	34.1	46.1	56.1	69.1
60°	74.2	59.1	29.1	19.0	18.0	20.0	24.1	30.1	41.1	49.1	60.1
62.5°	*67.1*	*54.1*	*24.1*	*15.0*	*13.0*	*15.0*	*20.0*	*25.1*	*36.1*	*44.1*	*53.1*
65°	58.1	46.1	20.0	11.0	9.0	11.0	16.0	21.0	31.1	38.1	48.1
67.5°	47.1	35.1	15.0	8.0	6.0	8.0	12.0	17.0	26.1	33.1	43.1
70°	35.1	25.1	12.0	7.0	6.0	7.0	11.0	16.0	23.0	30.1	40.1
72.5°	26.1	17.0	10.0	7.0	5.0	7.0	10.0	15.0	22.0	29.1	38.1
75°	22.0	14.0	9.0	6.0	5.0	6.0	9.0	14.0	20.0	27.1	36.1
77.5°	21.0	13.0	8.0	5.0	4.0	5.0	8.0	12.0	18.0	25.1	35.1
80°	18.0	11.0	7.0	4.0	3.0	4.0	7.0	10.0	14.0	19.0	27.1
82.5°	14.0	9.0	5.0	2.0	1.0	2.0	5.0	6.0	9.0	11.0	16.0
85°	9.0	5.0	2.0	0.0	0.0	0.0	2.0	4.0	4.0	5.0	8.0
87.5°	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	3.0
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: P635515
CATALOG NUMBER: GWS-SA3D-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0	451.0
2.5°	422.9	423.9	425.9	428.9	435.9	441.9	448.0	456.0	460.0	460.0
5°	382.8	383.8	384.8	388.8	398.8	406.9	419.9	435.9	443.9	445.9
7.5°	351.7	353.8	355.8	358.8	368.8	379.8	396.8	426.9	441.9	444.9
10°	333.7	336.7	340.7	346.7	355.8	367.8	396.8	451.0	476.0	481.0
12.5°	319.7	324.7	328.7	335.7	346.7	365.8	423.9	519.1	563.2	575.2
15°	305.7	311.7	317.7	324.7	336.7	372.8	476.0	641.4	714.5	723.5
17.5°	291.6	298.6	306.7	314.7	329.7	389.8	558.2	810.7	912.9	933.0
20°	275.6	284.6	295.6	305.7	322.7	416.9	672.4	1012.2	1140.4	1183.5
22.5°	258.6	269.6	282.6	295.6	314.7	450.0	810.7	1228.6	1408.0	1436.1
25°	244.5	255.5	267.6	280.6	301.6	490.0	978.1	1497.2	1660.5	1687.6
27.5°	231.5	242.5	253.5	265.6	288.6	542.2	1179.5	1782.8	1953.2	1981.2
30°	217.5	230.5	241.5	253.5	276.6	606.3	1412.0	2099.5	2260.8	2286.9
32.5°	205.4	218.5	229.5	241.5	267.6	676.4	1656.5	2380.1	2511.3	2511.3
35°	195.4	209.4	217.5	233.5	260.6	721.5	1888.0	2647.6	2746.8	2742.8
37.5°	184.4	201.4	207.4	218.5	251.5	726.5	2105.5	2930.2	3003.4	2977.3
40°	173.4	191.4	200.4	206.4	241.5	685.5	2344.0	3189.8	3251.9	3217.9
42.5°	163.3	177.4	190.4	197.4	235.5	613.3	2535.4	3467.4	3541.5	3511.5
45°	153.3	165.4	173.4	186.4	239.5	563.2	2699.7	3791.1	3921.3	3899.3
47.5°	143.3	153.3	158.3	178.4	266.6	540.1	2800.0	4292.1	4537.7	4519.6
50°	132.3	144.3	144.3	176.4	306.7	548.2	2887.1	5017.7	5397.5	5391.5
52.5°	121.3	134.3	132.3	191.4	337.7	585.2	2986.4	5658.0	6318.5	6373.6
55°	110.2	122.3	124.3	221.5	355.8	617.3	2602.5	5927.6	7105.1	7298.5
57.5°	98.2	105.2	129.3	244.5	349.7	710.5	1782.8	5976.7	7607.2	8022.1
60°	85.2	91.2	146.3	239.5	330.7	656.4	1122.4	5535.8	7536.0	8062.2
62.5°	*74.2*	*84.2*	*154.3*	*211.5*	*336.7*	*569.2*	*715.5*	*4718.0*	*6857.6*	*7457.9*
65°	65.1	81.2	140.3	191.4	340.7	385.8	483.0	3838.2	6195.2	6766.4
67.5°	58.1	90.2	115.2	170.4	292.6	271.6	331.7	2982.3	5209.1	5721.2
70°	53.1	92.2	94.2	146.3	226.5	174.4	218.5	2007.3	3590.6	4175.9
72.5°	48.1	68.1	71.2	117.2	146.3	106.2	141.3	1148.4	2617.6	3016.4
75°	46.1	46.1	49.1	76.2	81.2	77.2	91.2	685.5	1877.0	2168.6
77.5°	43.1	35.1	31.1	49.1	44.1	55.1	54.1	304.6	813.7	879.9
80°	34.1	25.1	21.0	31.1	30.1	37.1	32.1	25.1	37.1	36.1
82.5°	21.0	16.0	15.0	19.0	17.0	19.0	15.0	4.0	4.0	4.0
85°	10.0	9.0	8.0	8.0	9.0	8.0	6.0	2.0	1.0	1.0
87.5°	5.0	5.0	4.0	3.0	4.0	4.0	3.0	1.0	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.

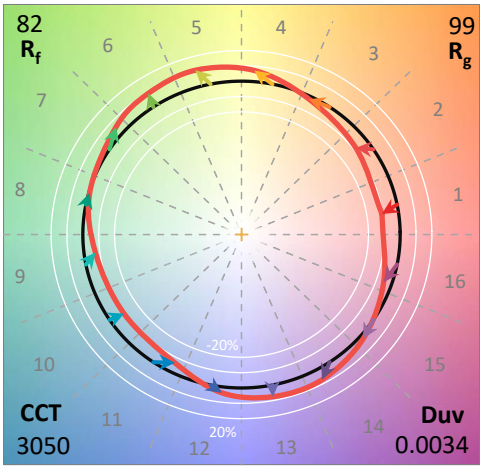
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

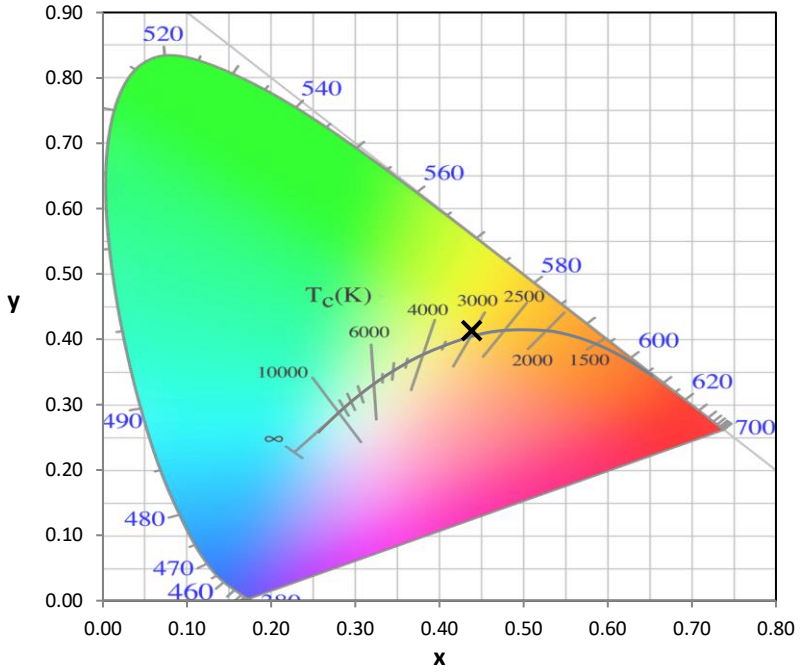
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

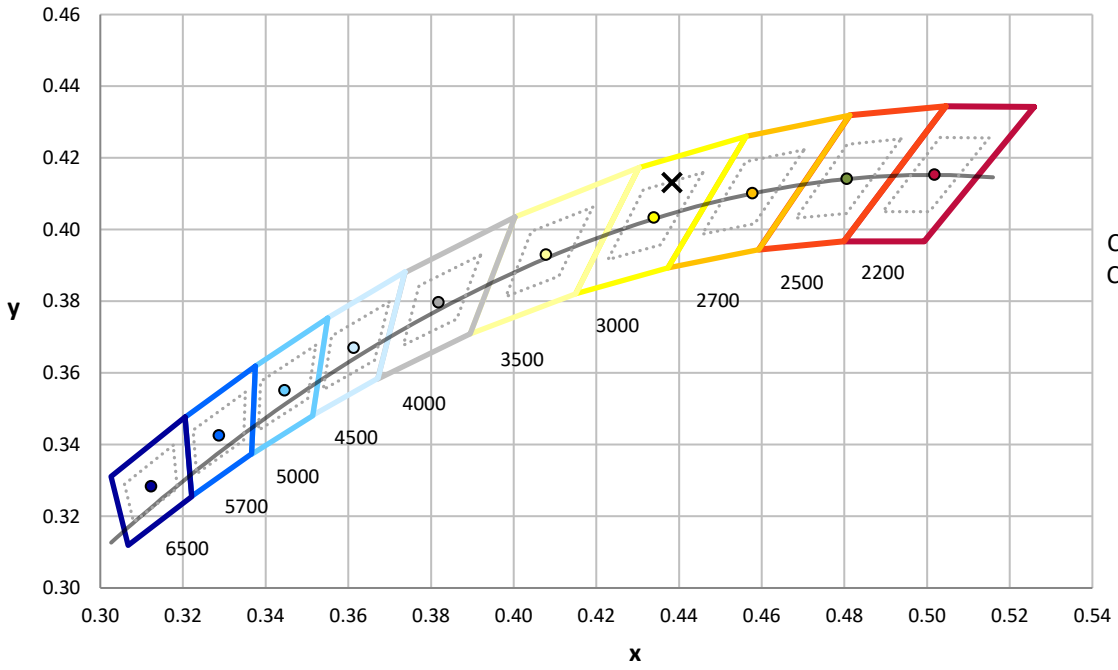
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

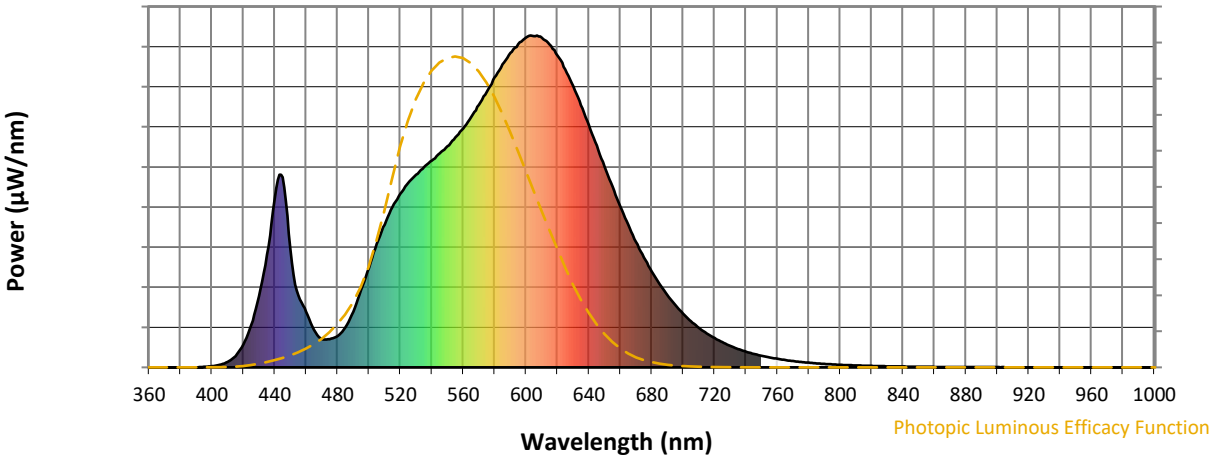


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

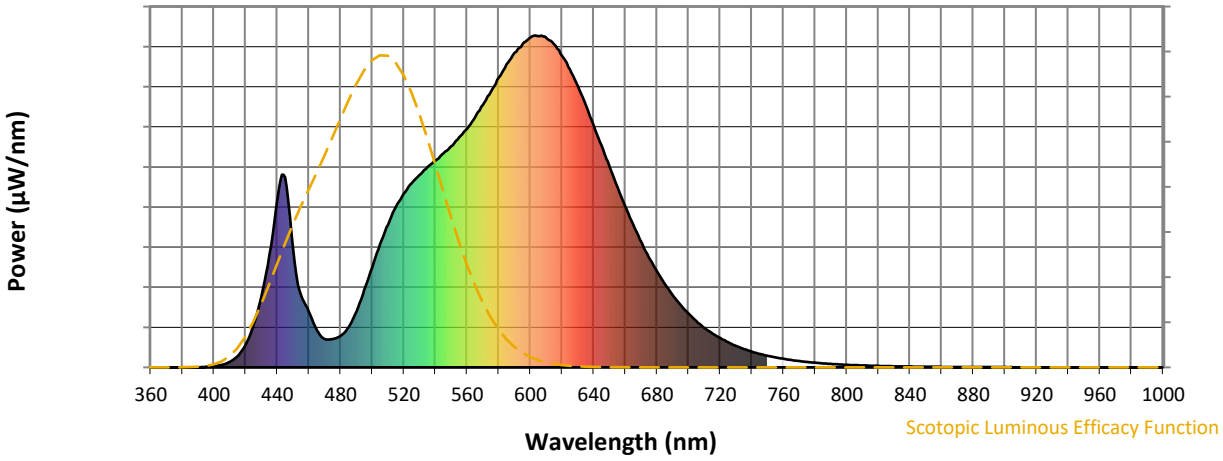


Photopic Lumens: NR

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

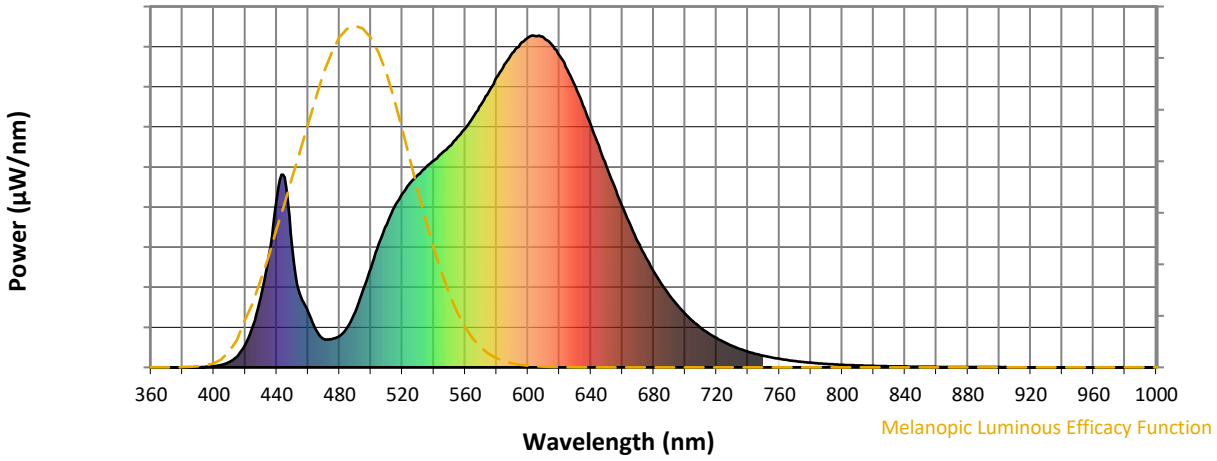


Scotopic Lumens: NR **S/P: 1.27**

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			

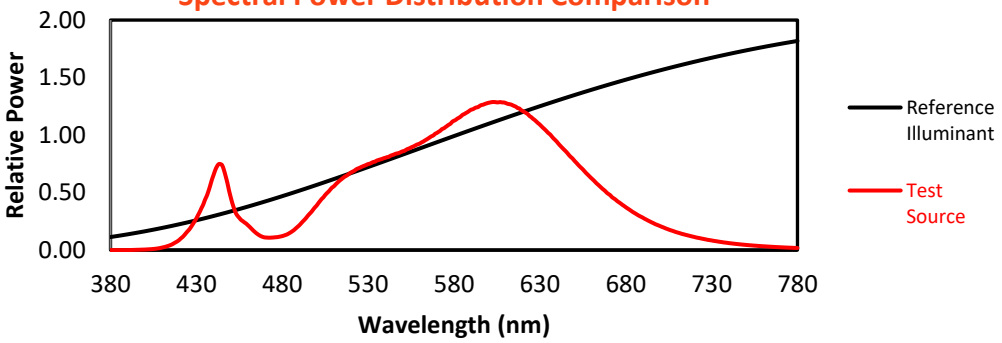
REPORT NUMBER: SP1-2408-195-9

TM-30-18

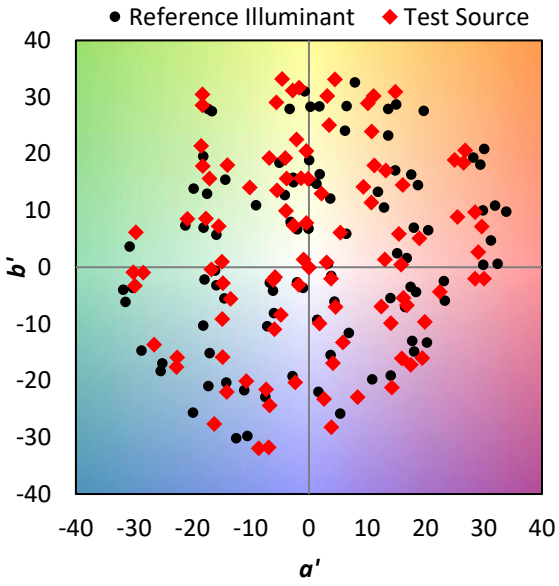
Summary

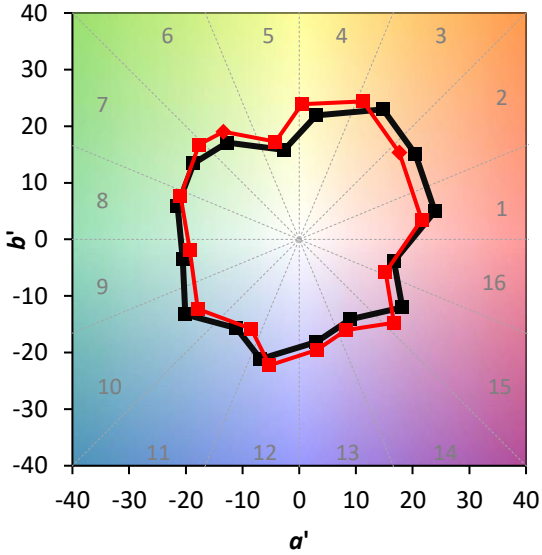
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

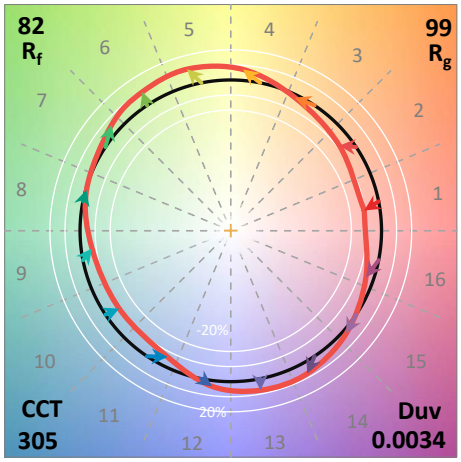
Spectral Power Distribution Comparison

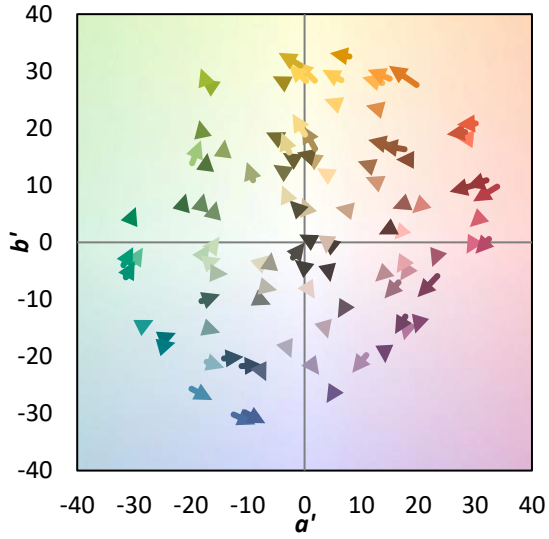


Color Vector Graphics







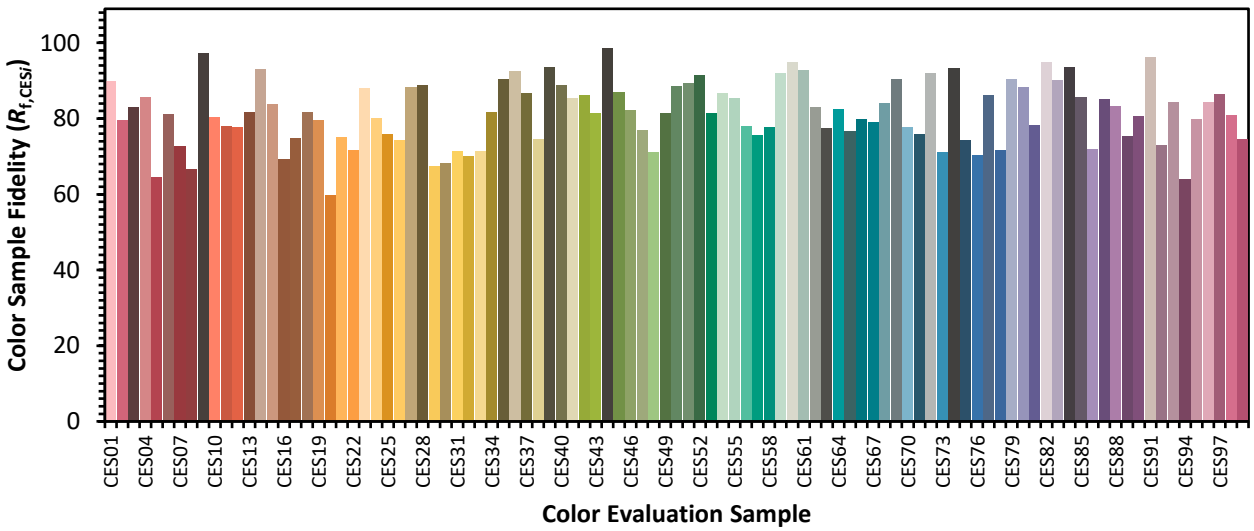


REPORT NUMBER: SP1-2408-195-9

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
CES25 = 72	CES50 = 89	CES75 = 74	



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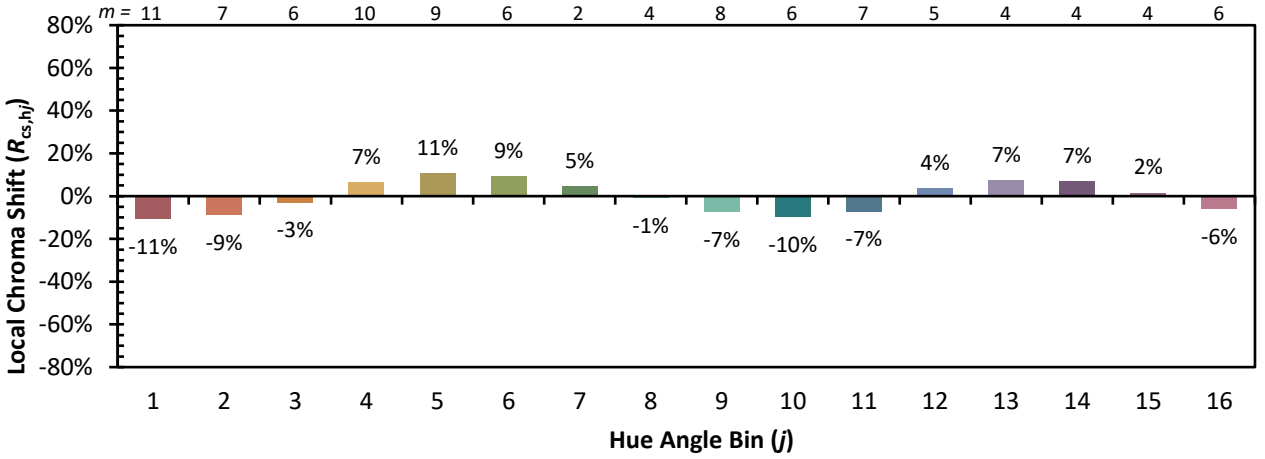
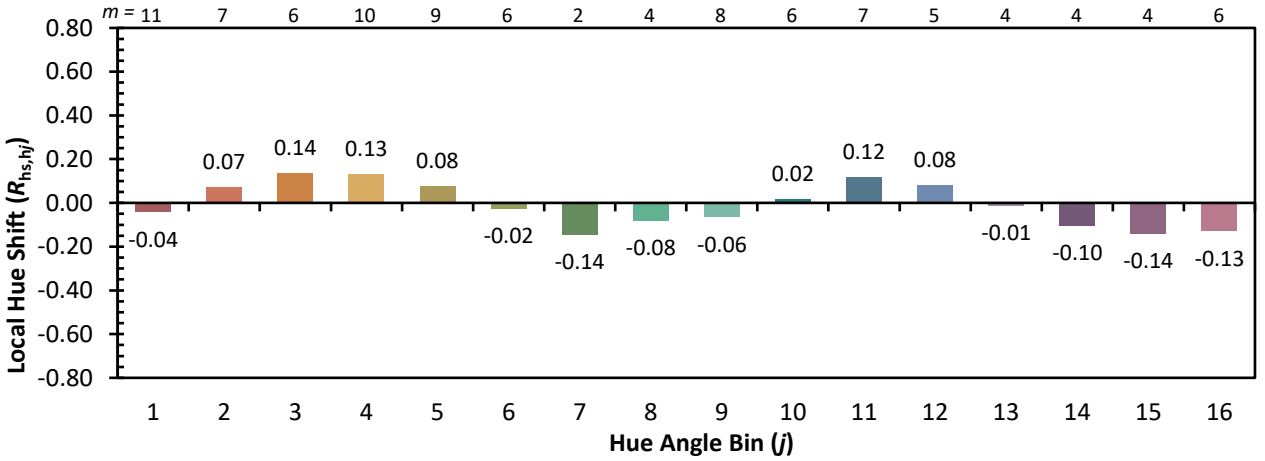
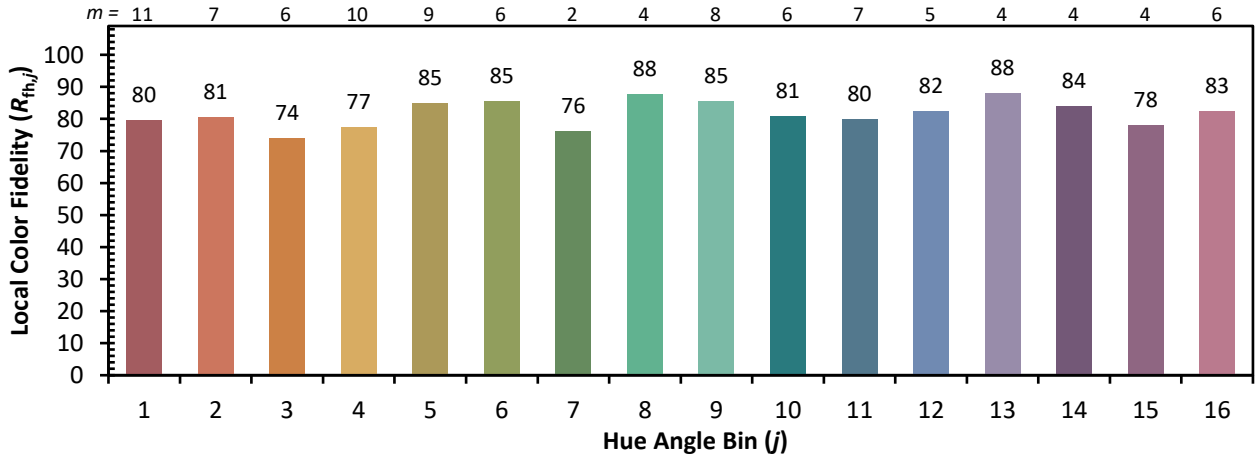
Color Rendition by Hue-Angle Bin







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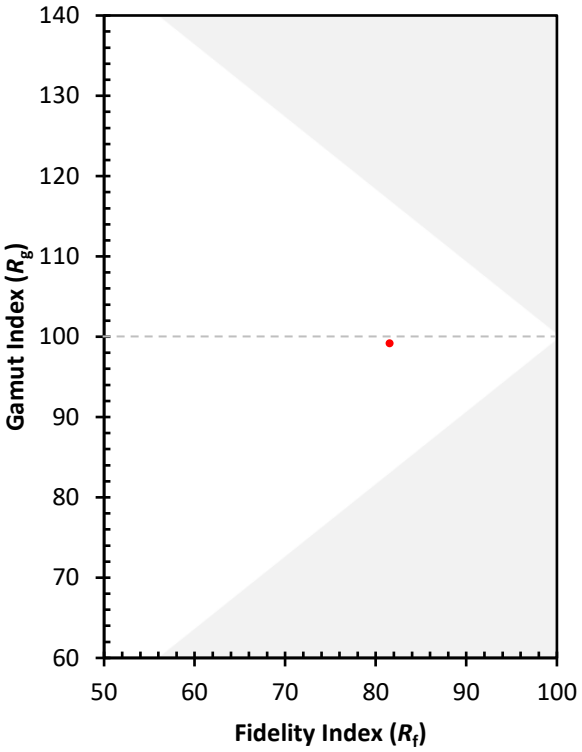
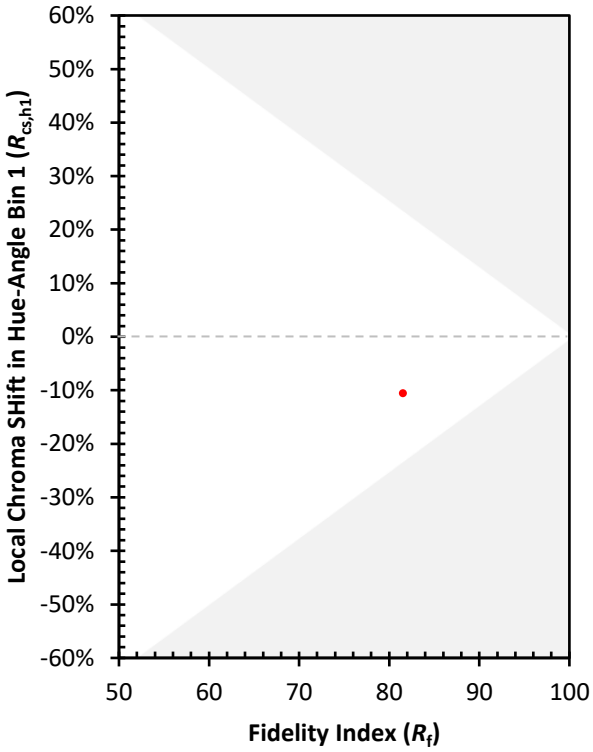
Measure Comparisons





(END OF REPORT)