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: P637000

Luminaire Tested: GWS-SA4B-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:	P637000
	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-SA4B-830-U-SLR-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7135.7 lumens
Efficiency:	N/A
Efficacy:	75.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	94.4
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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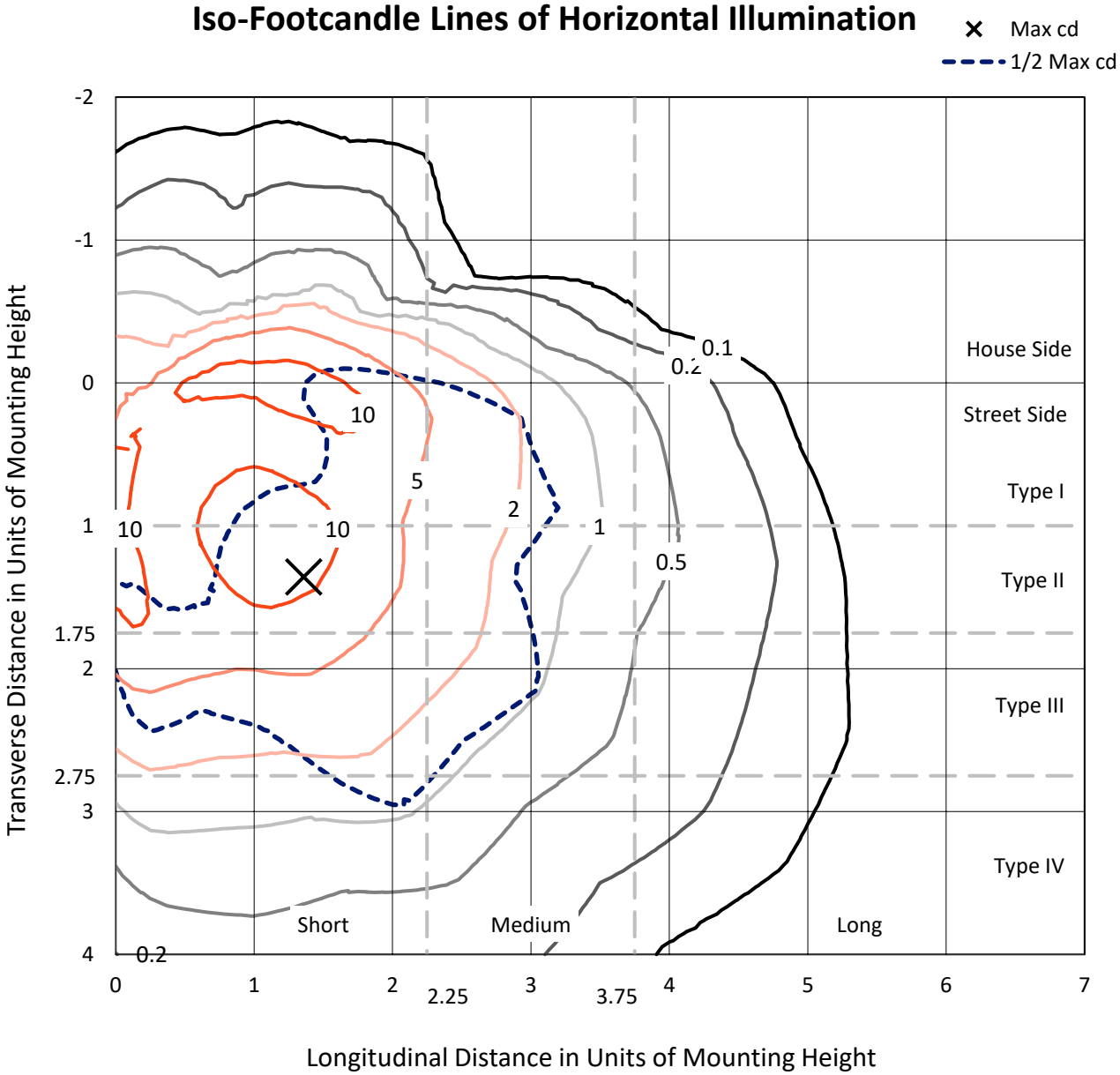
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 14.5 fc
Type IV - Short - N/A

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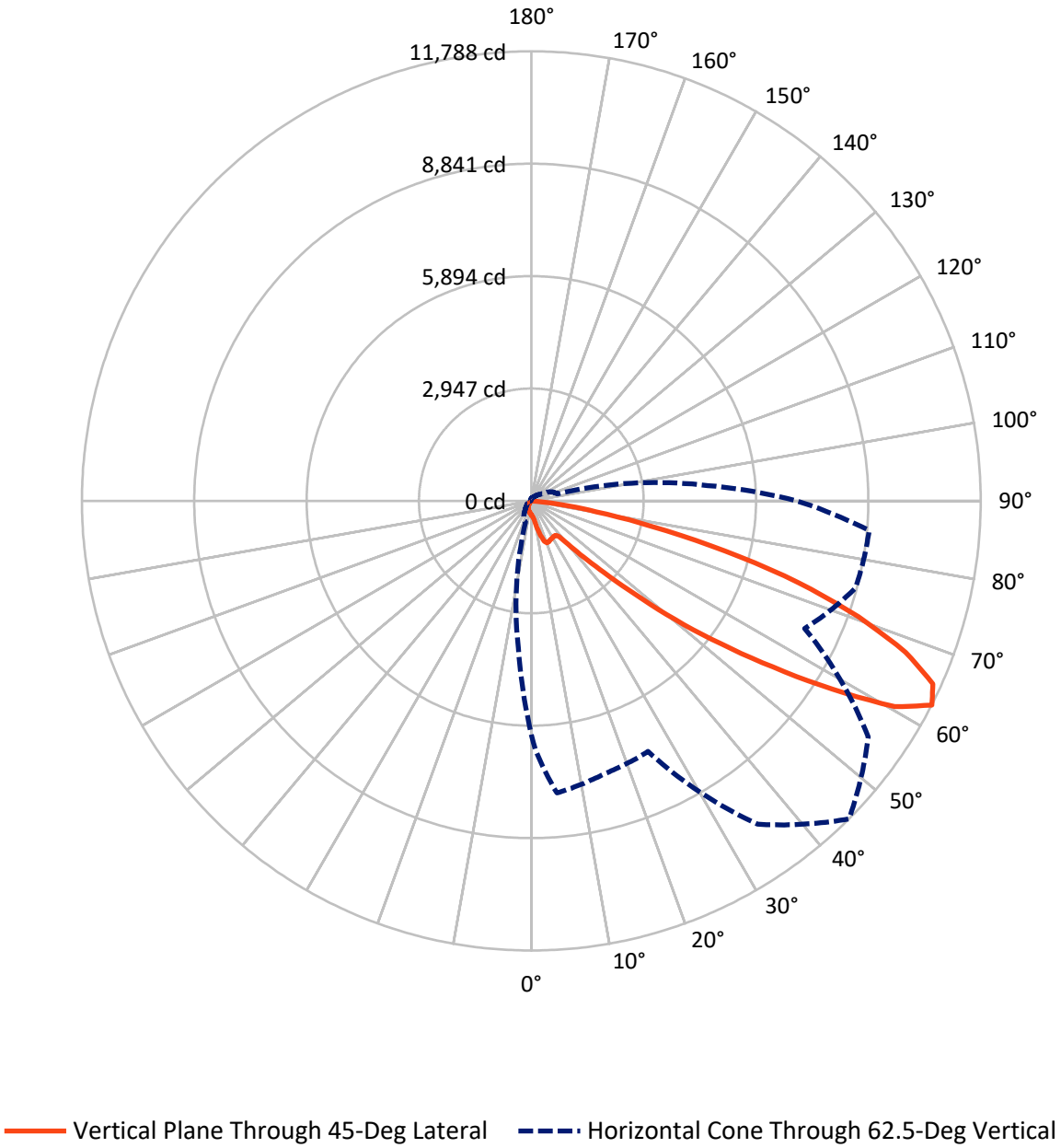
Luminous Intensity Polar Plot



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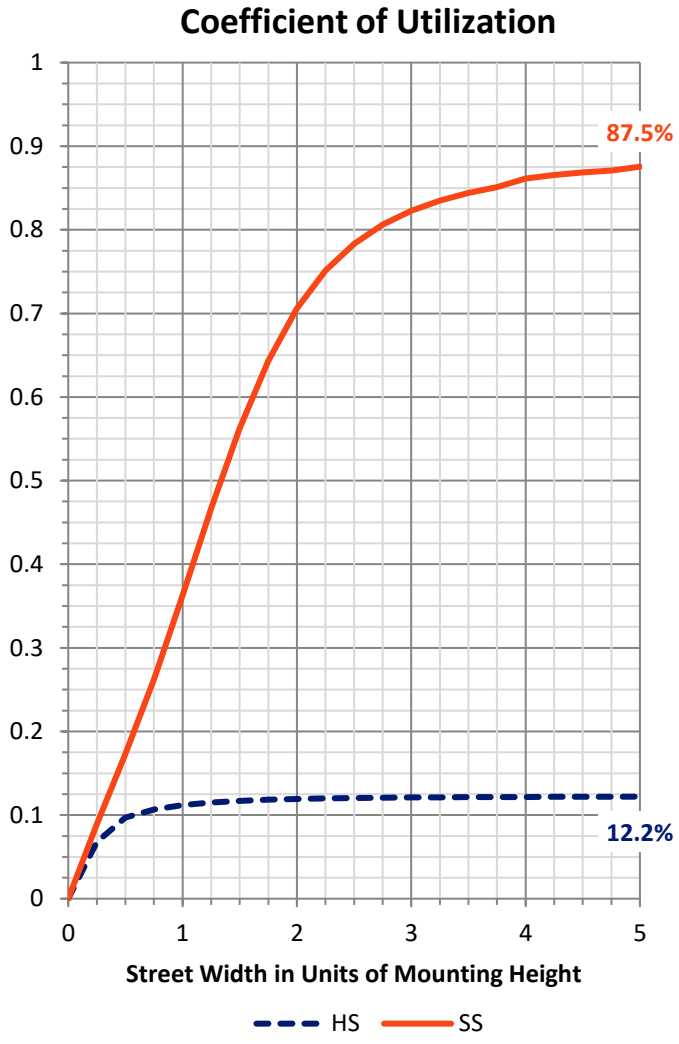
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	880.5	0.0	880.5
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	6255.2	0.0	6255.2
	% Fixture	87.7	0.0	87.7
Total	Lumens	7135.7	0.0	7135.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.9	0.5
10°-20°	124.4	1.7
20°-30°	270.4	3.8
30°-40°	443.9	6.2
40°-50°	816.0	11.4
50°-60°	1752.4	24.6
60°-70°	2353.8	33.0
70°-80°	1225.6	17.2
80°-90°	116.2	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°	7135.7	100.0
0°-180°	7135.7	100.0



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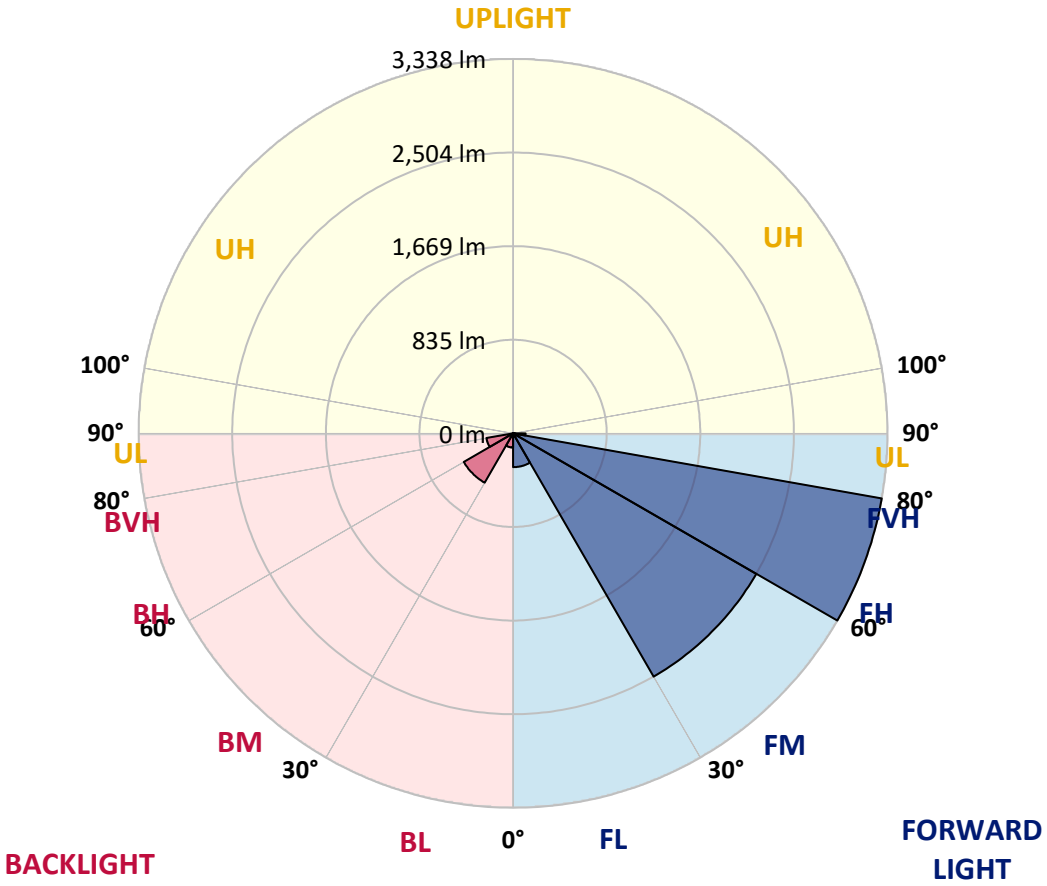
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	301.4	4.2			
FM	(30°-60°)	2504.5	35.1			
FH	(60°-80°)	3338.1	46.8			G2/5000
FVH	(80°-90°)	111.0	1.6			G2/225
BL	(0°-30°)	126.3	1.8	B1/500		
BM	(30°-60°)	507.8	7.1	B1/1000		
BH	(60°-80°)	241.3	3.4	B1/500		G1/500
BVH	(80°-90°)	5.2	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°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9
2.5°	378.3	380.0	381.6	387.4	391.5	394.8	395.6	393.2	387.4	381.6	373.4
5°	366.8	368.4	374.2	389.9	405.5	417.9	422.0	419.5	405.5	387.4	368.4
7.5°	366.0	369.3	383.3	416.2	450.0	475.6	482.2	476.4	450.0	413.8	375.0
10°	395.6	401.4	422.0	481.4	543.2	588.5	606.6	581.9	539.9	473.9	410.5
12.5°	473.1	483.0	522.6	609.1	704.7	764.9	789.6	759.1	693.2	597.6	497.0
15°	595.1	609.9	669.3	798.7	911.6	965.2	973.4	956.1	879.5	774.0	638.8
17.5°	767.4	788.8	881.1	1013.0	1094.6	1113.5	1111.1	1092.9	1036.9	964.4	836.6
20°	973.4	999.0	1089.6	1198.4	1206.7	1184.4	1172.1	1161.4	1142.4	1130.0	1030.3
22.5°	1181.1	1212.5	1307.2	1334.4	1260.3	1196.0	1165.5	1173.7	1201.7	1262.7	1222.3
25°	1388.0	1417.7	1506.7	1433.3	1285.0	1177.8	1139.1	1158.9	1225.6	1357.5	1409.4
27.5°	1629.5	1651.8	1704.5	1500.9	1289.1	1163.0	1125.1	1155.6	1237.2	1416.9	1614.7
30°	1880.9	1894.1	1868.5	1519.1	1275.1	1140.7	1111.1	1155.6	1257.0	1456.4	1768.8
32.5°	2065.5	2068.0	1984.8	1520.7	1267.7	1122.6	1097.9	1150.6	1275.9	1489.4	1918.0
35°	2255.9	2243.6	2096.0	1545.4	1287.5	1129.2	1107.8	1164.6	1305.6	1528.1	2049.1
37.5°	2448.8	2426.6	2220.5	1585.8	1338.6	1200.9	1187.7	1236.4	1353.4	1581.7	2193.3
40°	2646.6	2616.1	2349.9	1646.8	1452.3	1444.9	1490.2	1484.5	1484.5	1650.1	2341.7
42.5°	2888.1	2852.7	2541.1	1819.1	1717.7	1883.4	2007.0	1930.4	1788.6	1807.6	2534.5
45°	3207.1	3176.6	2872.5	2148.8	2134.0	2514.7	2681.2	2529.6	2176.8	2171.0	2856.8
47.5°	3717.3	3711.5	3400.8	2531.2	2643.3	3318.4	3639.8	3348.1	2619.4	2556.0	3466.7
50°	4434.4	4417.1	4059.4	2979.6	3249.1	4314.1	4887.7	4401.4	3154.4	3005.2	4283.6
52.5°	5242.2	5260.3	4981.7	3469.2	3892.9	5421.8	6220.5	5608.1	3735.4	3576.4	5311.4
55°	6002.9	6106.8	6033.4	4042.1	4521.8	6645.0	7684.4	6931.8	4455.0	4324.0	6463.7
57.5°	6598.0	6890.6	7405.0	4874.5	5261.1	8075.9	9318.8	8366.8	5294.9	5538.1	8032.2
60°	6631.0	7018.4	8212.7	6616.2	6212.3	9303.2	10950.8	9768.9	6615.3	7599.5	9261.1
62.5°	6134.0	6549.4	7686.8	7407.4	7248.3	10347.5	11788.2	10790.9	7914.3	8807.0	8896.8
65°	5565.3	5984.8	7100.0	6509.8	7128.0	10303.0	11575.6	10814.8	8032.2	7986.0	8244.9
67.5°	4705.6	5082.3	6091.9	5762.2	6570.0	9806.0	10593.1	10133.2	7400.0	7469.2	7584.6
70°	3434.6	3797.3	4734.4	4750.9	5737.5	8910.0	9102.1	9038.6	6814.8	6888.2	6558.5
72.5°	2481.0	2786.7	3595.3	3896.2	4580.3	7471.7	7339.0	7583.8	5847.1	6134.8	5267.7
75°	1783.7	2012.8	2637.6	3389.3	3630.8	5548.8	5253.7	5873.5	4691.6	5282.5	3960.5
77.5°	723.7	804.5	1037.7	2283.1	2386.2	3733.0	3216.2	4266.3	3344.8	3470.9	1919.6
80°	29.7	33.0	42.9	1178.7	1636.1	2100.2	1721.0	2280.7	2209.0	1397.9	453.3
82.5°	3.3	3.3	7.4	339.6	716.3	1158.9	811.1	1313.8	1118.5	592.6	206.1
85°	0.8	0.8	1.6	38.7	168.1	185.5	109.6	403.1	520.1	242.3	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	7.4	8.2	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°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9
2.5°	373.4	369.3	364.3	359.4	356.9	350.3	347.8	346.2	344.5	345.4	345.4
5°	361.0	351.9	341.2	330.5	324.7	318.2	314.9	313.2	314.0	317.3	317.3
7.5°	359.4	342.1	319.0	305.0	298.4	293.4	290.1	288.5	289.3	293.4	295.1
10°	386.6	356.1	314.9	291.0	283.5	278.6	275.3	272.8	271.2	274.5	275.3
12.5°	445.1	403.1	334.6	289.3	276.1	269.5	267.1	262.1	259.6	261.3	262.1
15°	566.3	493.7	374.2	295.9	269.5	262.1	258.0	253.9	249.7	248.9	249.7
17.5°	724.5	620.7	434.4	311.6	264.6	255.5	249.7	244.0	238.2	237.4	236.6
20°	920.7	776.4	518.4	336.3	260.5	249.7	241.5	233.3	225.8	223.4	223.4
22.5°	1099.5	964.4	626.4	366.8	254.7	241.5	231.6	221.7	213.5	209.4	208.5
25°	1318.0	1163.8	755.8	402.2	246.4	230.8	220.1	210.2	201.9	197.0	195.3
27.5°	1538.0	1374.0	902.5	448.4	236.6	220.1	210.2	201.1	192.0	186.3	184.6
30°	1751.5	1600.7	1067.4	506.1	229.1	209.4	201.1	192.0	183.8	174.7	172.3
32.5°	1980.6	1832.3	1252.0	570.4	223.4	201.9	192.9	184.6	173.9	165.7	161.6
35°	2201.5	2071.3	1455.6	633.0	217.6	195.3	185.5	177.2	165.7	156.6	150.8
37.5°	2424.1	2314.5	1668.3	670.9	209.4	186.3	177.2	170.6	157.4	146.7	140.1
40°	2659.8	2565.9	1898.2	655.3	201.9	176.4	171.4	164.0	149.2	136.8	128.6
42.5°	2918.6	2805.7	2132.3	595.1	195.3	168.1	163.2	155.8	141.8	126.9	116.2
45°	3244.2	3068.6	2324.4	504.4	198.6	159.9	150.0	148.4	135.2	116.2	103.0
47.5°	3803.9	3472.5	2473.5	445.9	220.9	150.8	139.3	143.4	129.4	105.5	90.7
50°	4660.2	4141.8	2612.8	441.8	254.7	146.7	129.4	140.1	123.6	94.8	80.0
52.5°	5476.2	4821.8	2701.9	478.1	284.4	157.4	119.5	136.0	119.5	87.4	72.5
55°	6256.8	5214.1	2542.8	504.4	312.4	189.6	112.1	129.4	114.6	83.2	70.1
57.5°	7098.3	5388.9	2002.1	558.0	332.2	216.8	113.7	119.5	108.0	80.8	69.2
60°	7349.7	5165.5	1208.3	628.1	321.5	225.0	126.1	106.3	98.9	75.8	66.8
62.5°	*6959.0*	*4635.5*	*713.0*	*572.0*	*312.4*	*212.7*	*144.2*	*98.1*	*89.8*	*69.2*	*61.8*
65°	6374.7	3916.0	464.9	483.0	331.3	189.6	153.3	94.0	81.6	62.6	54.4
67.5°	5707.0	3154.4	325.6	285.2	305.8	170.6	129.4	93.1	73.4	52.8	44.5
70°	4807.0	2362.3	229.1	188.8	254.7	151.7	100.6	90.7	64.3	42.9	34.6
72.5°	3714.0	1478.7	170.6	122.0	181.3	123.6	80.0	76.7	51.9	35.4	26.4
75°	2738.9	843.2	120.3	88.2	119.5	94.0	59.3	54.4	44.5	33.8	23.9
77.5°	1430.1	422.0	75.0	67.6	68.4	58.5	42.9	39.6	41.2	33.8	22.3
80°	274.5	84.1	45.3	49.5	37.1	37.1	31.3	33.0	36.3	27.2	19.0
82.5°	114.6	18.1	24.7	28.0	23.1	25.6	25.6	26.4	25.6	19.8	14.0
85°	0.0	0.0	10.7	11.5	15.7	15.7	13.2	13.2	13.2	11.5	8.2
87.5°	0.0	0.0	0.0	0.0	0.8	2.5	4.9	5.8	6.6	4.9	3.3
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°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9
2.5°	344.5	342.9	345.4	347.0	348.7	348.7	347.0	345.4	342.9	345.4	342.9
5°	318.2	320.6	324.7	326.4	328.0	324.7	323.1	318.2	314.0	314.9	313.2
7.5°	297.5	300.0	305.0	308.3	308.3	306.6	301.7	296.7	290.1	290.1	289.3
10°	278.6	281.9	287.7	291.8	293.4	291.8	286.8	280.2	274.5	274.5	272.0
12.5°	262.9	267.1	273.6	279.4	281.1	279.4	274.5	267.9	261.3	261.3	259.6
15°	249.7	254.7	262.1	268.7	271.2	268.7	262.9	254.7	248.1	248.9	246.4
17.5°	237.4	241.5	251.4	258.8	261.3	258.8	251.4	240.7	234.1	235.7	234.1
20°	223.4	228.3	238.2	246.4	248.9	246.4	238.2	226.7	220.1	220.1	220.9
22.5°	208.5	213.5	223.4	229.1	232.4	230.0	221.7	211.0	204.4	204.4	205.2
25°	195.3	197.8	205.2	211.0	211.8	209.4	202.8	194.5	189.6	192.0	192.9
27.5°	183.0	183.0	186.3	189.6	188.8	186.3	183.8	177.2	176.4	178.9	181.3
30°	169.8	165.7	164.0	161.6	160.7	159.9	162.4	162.4	164.0	167.3	169.8
32.5°	158.3	150.0	142.6	135.2	131.1	134.4	140.9	146.7	152.5	157.4	159.9
35°	145.1	131.9	119.5	109.6	103.0	108.0	118.7	129.4	139.3	145.9	150.0
37.5°	131.9	112.9	98.1	85.7	80.8	84.9	96.4	111.3	126.1	134.4	140.1
40°	117.9	94.0	76.7	66.8	61.8	65.9	77.5	92.3	112.1	122.8	130.2
42.5°	103.9	77.5	61.8	51.9	49.5	51.9	61.0	75.8	97.3	110.4	120.3
45°	89.8	64.3	49.5	42.0	39.6	42.0	49.5	61.8	83.2	98.1	109.6
47.5°	77.5	54.4	41.2	34.6	33.0	35.4	41.2	51.9	70.1	84.9	98.1
50°	67.6	47.8	35.4	29.7	28.0	30.5	35.4	43.7	59.3	72.5	86.5
52.5°	61.0	44.5	31.3	25.6	24.7	26.4	30.5	37.1	50.3	61.8	75.0
55°	59.3	44.5	28.8	23.1	22.3	23.9	27.2	32.1	43.7	53.6	65.1
57.5°	61.0	47.8	27.2	19.8	19.0	20.6	23.9	28.0	37.9	46.2	56.9
60°	61.0	48.6	23.9	15.7	14.8	16.5	19.8	24.7	33.8	40.4	49.5
62.5°	*55.2*	*44.5*	*19.8*	*12.4*	*10.7*	*12.4*	*16.5*	*20.6*	*29.7*	*36.3*	*43.7*
65°	47.8	37.9	16.5	9.1	7.4	9.1	13.2	17.3	25.6	31.3	39.6
67.5°	38.7	28.8	12.4	6.6	4.9	6.6	9.9	14.0	21.4	27.2	35.4
70°	28.8	20.6	9.9	5.8	4.9	5.8	9.1	13.2	19.0	24.7	33.0
72.5°	21.4	14.0	8.2	5.8	4.1	5.8	8.2	12.4	18.1	23.9	31.3
75°	18.1	11.5	7.4	4.9	4.1	4.9	7.4	11.5	16.5	22.3	29.7
77.5°	17.3	10.7	6.6	4.1	3.3	4.1	6.6	9.9	14.8	20.6	28.8
80°	14.8	9.1	5.8	3.3	2.5	3.3	5.8	8.2	11.5	15.7	22.3
82.5°	11.5	7.4	4.1	1.6	0.8	1.6	4.1	4.9	7.4	9.1	13.2
85°	7.4	4.1	1.6	0.0	0.0	0.0	1.6	3.3	3.3	4.1	6.6
87.5°	3.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	2.5
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: P637000
CATALOG NUMBER: GWS-SA4B-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9
2.5°	347.8	348.7	350.3	352.8	358.5	363.5	368.4	375.0	378.3	378.3
5°	314.9	315.7	316.5	319.8	328.0	334.6	345.4	358.5	365.1	366.8
7.5°	289.3	291.0	292.6	295.1	303.3	312.4	326.4	351.1	363.5	366.0
10°	274.5	276.9	280.2	285.2	292.6	302.5	326.4	370.9	391.5	395.6
12.5°	262.9	267.1	270.4	276.1	285.2	300.8	348.7	427.0	463.2	473.1
15°	251.4	256.3	261.3	267.1	276.9	306.6	391.5	527.5	587.7	595.1
17.5°	239.9	245.6	252.2	258.8	271.2	320.6	459.1	666.8	750.9	767.4
20°	226.7	234.1	243.2	251.4	265.4	342.9	553.1	832.5	938.0	973.4
22.5°	212.7	221.7	232.4	243.2	258.8	370.1	666.8	1010.5	1158.1	1181.1
25°	201.1	210.2	220.1	230.8	248.1	403.1	804.5	1231.4	1365.8	1388.0
27.5°	190.4	199.5	208.5	218.4	237.4	445.9	970.1	1466.3	1606.4	1629.5
30°	178.9	189.6	198.6	208.5	227.5	498.7	1161.4	1726.8	1859.5	1880.9
32.5°	169.0	179.7	188.8	198.6	220.1	556.4	1362.5	1957.6	2065.5	2065.5
35°	160.7	172.3	178.9	192.0	214.3	593.5	1552.9	2177.6	2259.2	2255.9
37.5°	151.7	165.7	170.6	179.7	206.9	597.6	1731.7	2410.1	2470.2	2448.8
40°	142.6	157.4	164.8	169.8	198.6	563.8	1927.9	2623.5	2674.7	2646.6
42.5°	134.4	145.9	156.6	162.4	193.7	504.4	2085.3	2851.9	2912.9	2888.1
45°	126.1	136.0	142.6	153.3	197.0	463.2	2220.5	3118.1	3225.2	3207.1
47.5°	117.9	126.1	130.2	146.7	219.2	444.3	2302.9	3530.2	3732.1	3717.3
50°	108.8	118.7	118.7	145.1	252.2	450.9	2374.6	4127.0	4439.3	4434.4
52.5°	99.7	110.4	108.8	157.4	277.8	481.4	2456.2	4653.6	5196.8	5242.2
55°	90.7	100.6	102.2	182.2	292.6	507.7	2140.5	4875.4	5843.8	6002.9
57.5°	80.8	86.5	106.3	201.1	287.7	584.4	1466.3	4915.8	6256.8	6598.0
60°	70.1	75.0	120.3	197.0	272.0	539.9	923.1	4553.1	6198.3	6631.0
62.5°	*61.0*	*69.2*	*126.9*	*173.9*	*276.9*	*468.2*	*588.5*	*3880.5*	*5640.3*	*6134.0*
65°	53.6	66.8	115.4	157.4	280.2	317.3	397.3	3156.8	5095.4	5565.3
67.5°	47.8	74.2	94.8	140.1	240.7	223.4	272.8	2452.9	4284.4	4705.6
70°	43.7	75.8	77.5	120.3	186.3	143.4	179.7	1650.9	2953.2	3434.6
72.5°	39.6	56.0	58.5	96.4	120.3	87.4	116.2	944.6	2152.9	2481.0
75°	37.9	37.9	40.4	62.6	66.8	63.5	75.0	563.8	1543.8	1783.7
77.5°	35.4	28.8	25.6	40.4	36.3	45.3	44.5	250.6	669.3	723.7
80°	28.0	20.6	17.3	25.6	24.7	30.5	26.4	20.6	30.5	29.7
82.5°	17.3	13.2	12.4	15.7	14.0	15.7	12.4	3.3	3.3	3.3
85°	8.2	7.4	6.6	6.6	7.4	6.6	4.9	1.6	0.8	0.8
87.5°	4.1	4.1	3.3	2.5	3.3	3.3	2.5	0.8	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.

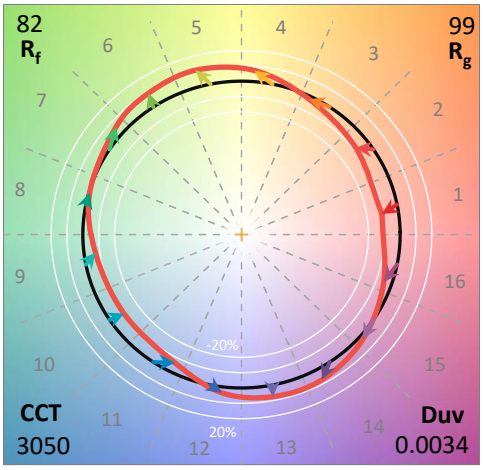
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

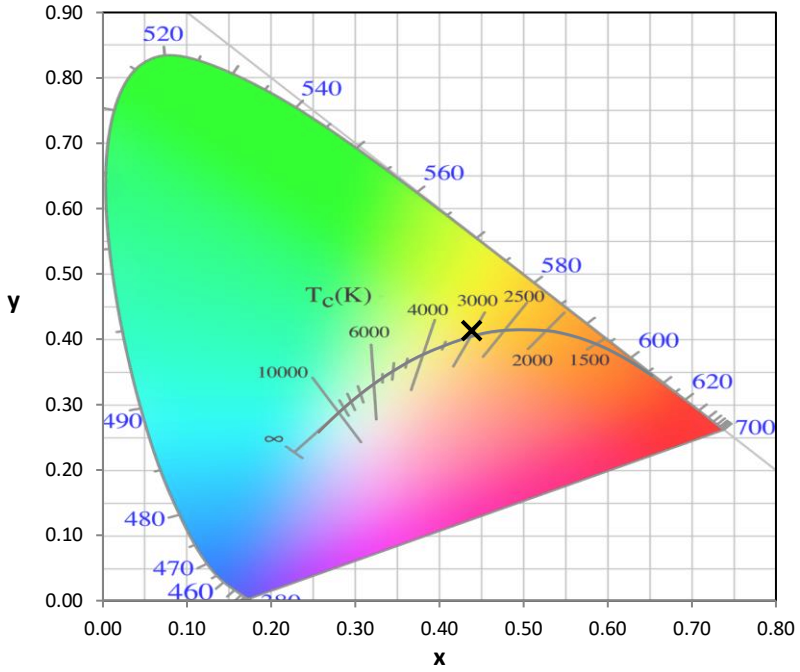
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

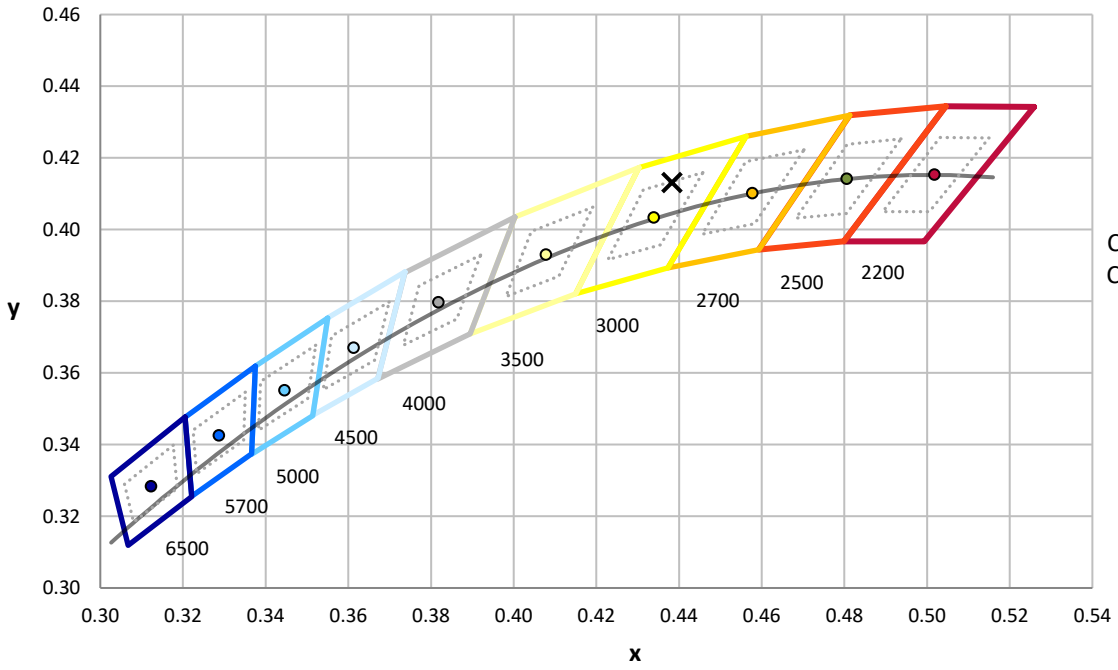
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

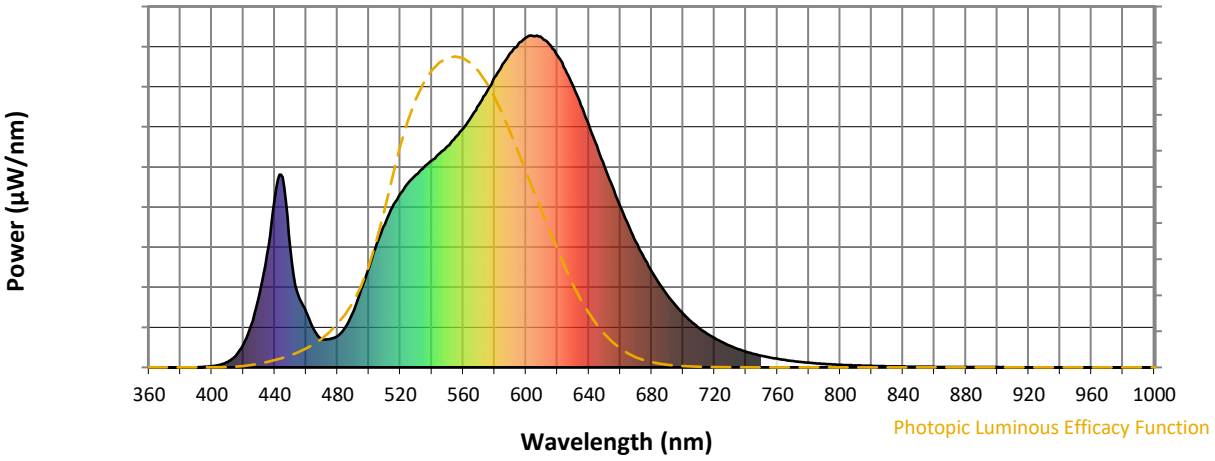


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

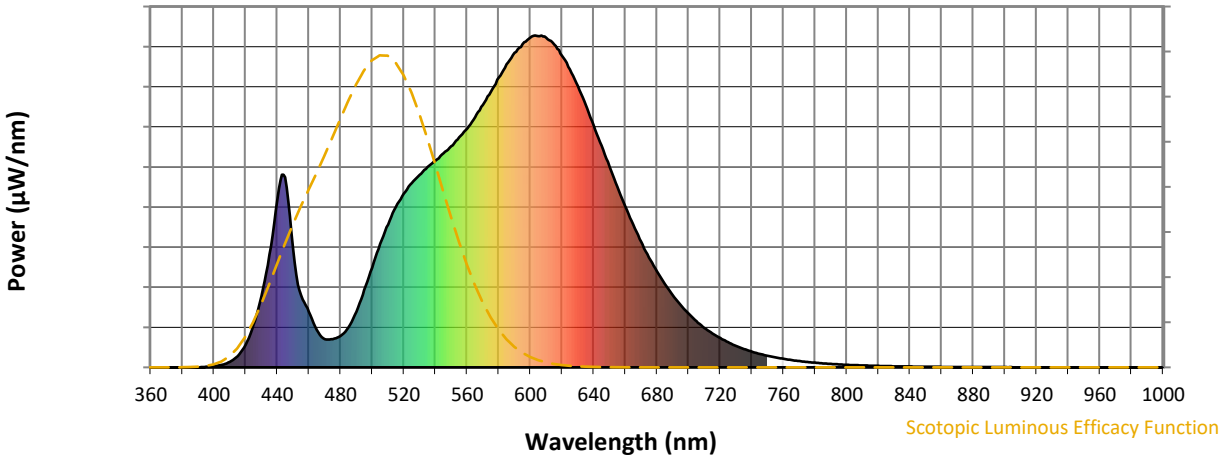


Photopic Lumens: NR

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

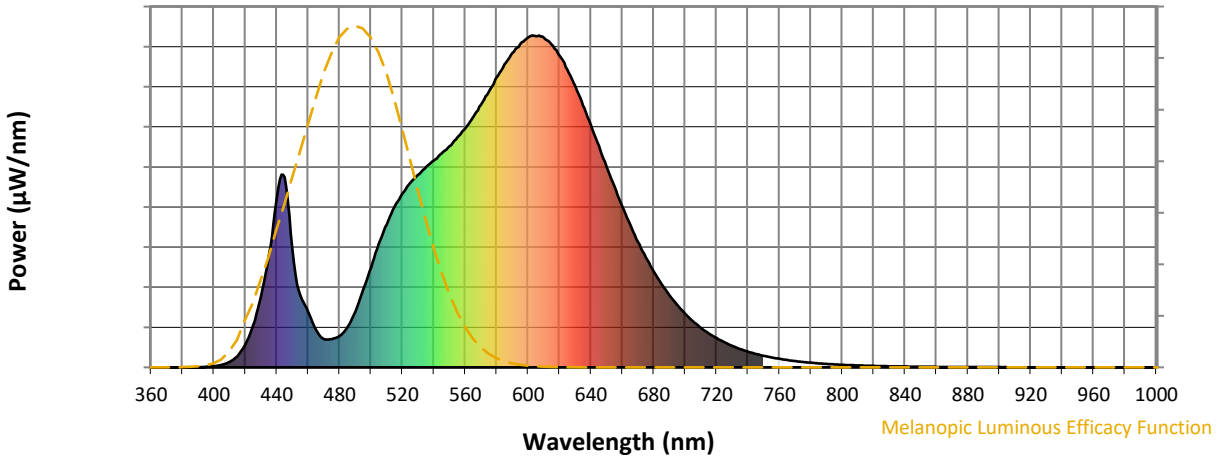


Scotopic Lumens: NR **S/P: 1.27**

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			

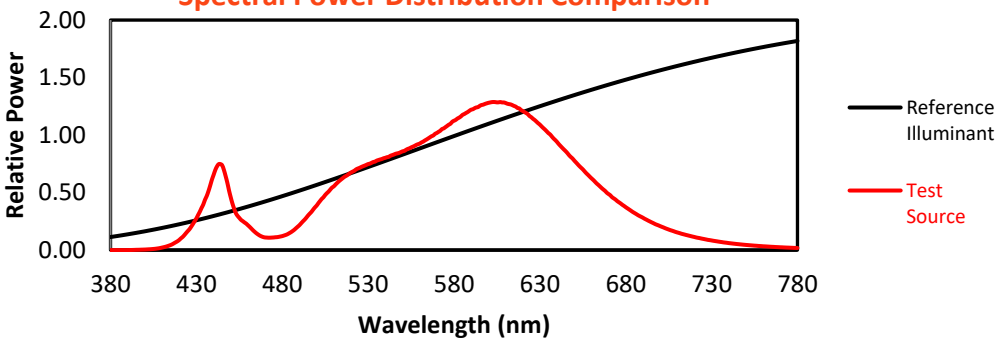
REPORT NUMBER: SP1-2408-195-9

TM-30-18

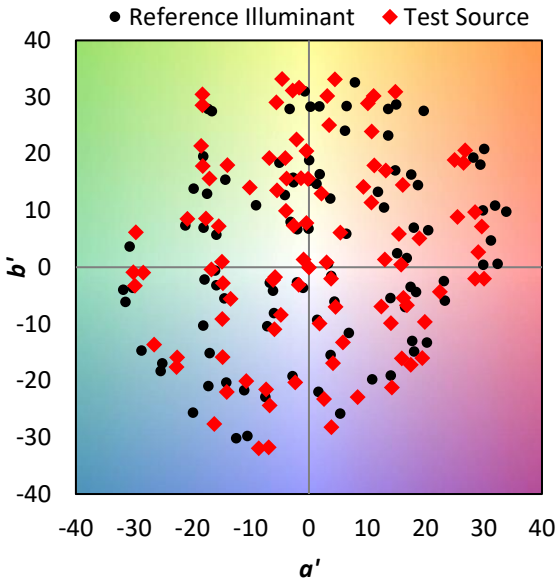
Summary

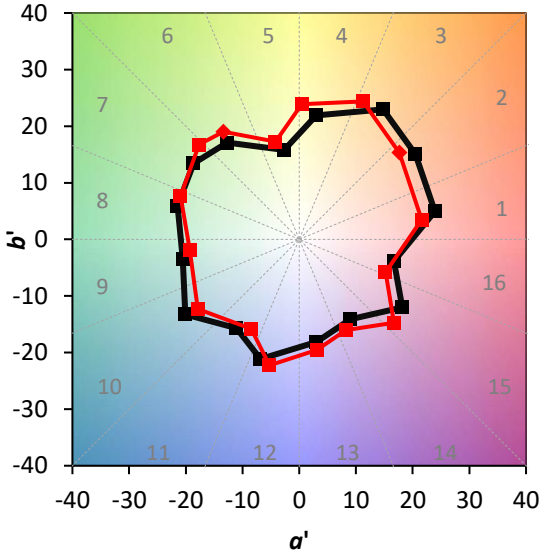
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

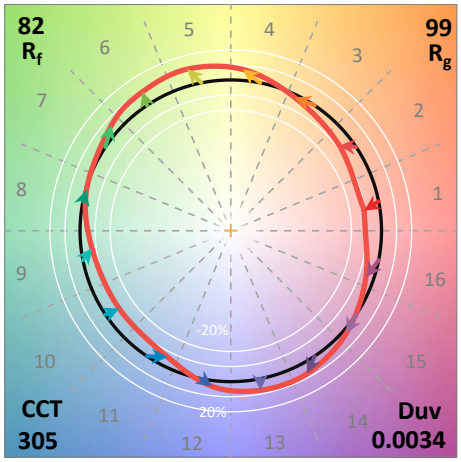
Spectral Power Distribution Comparison

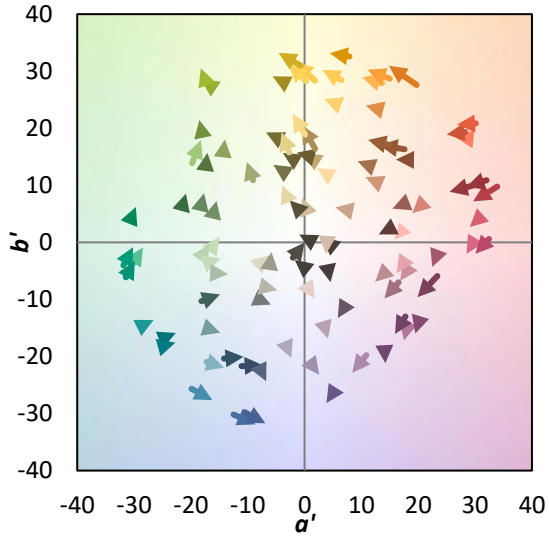


Color Vector Graphics







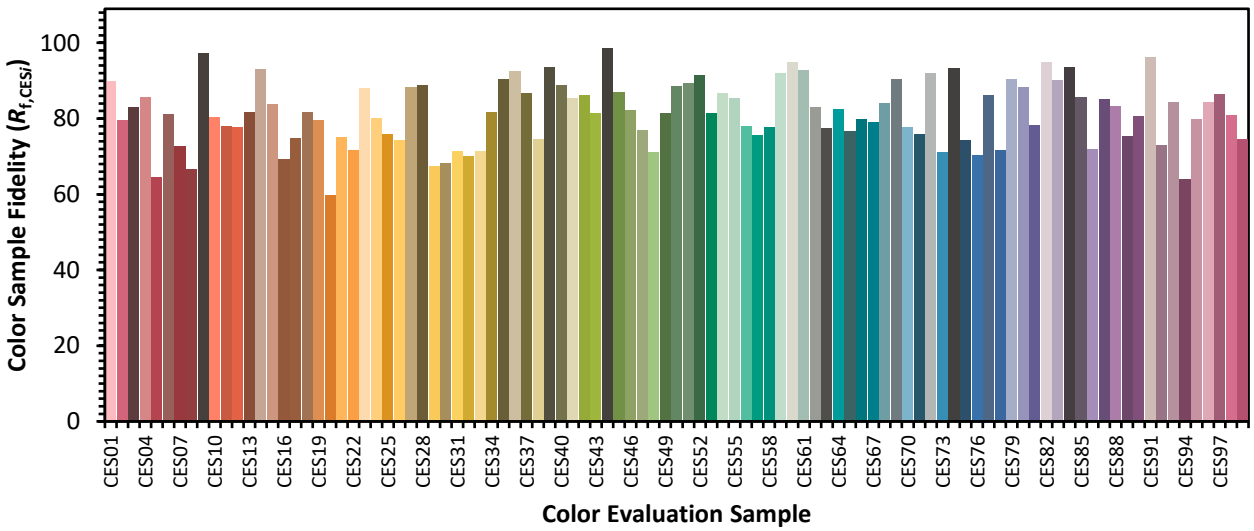


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

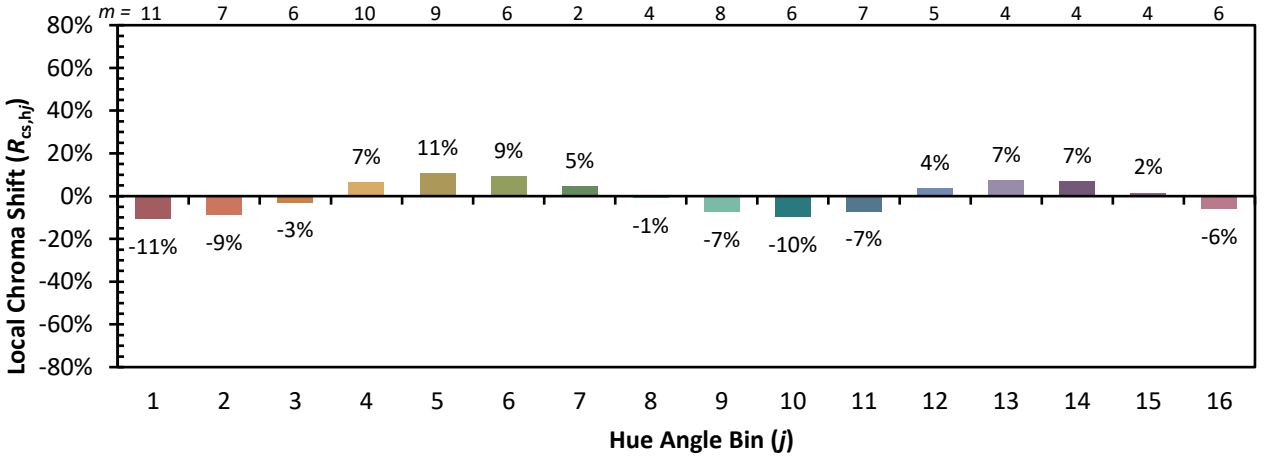
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

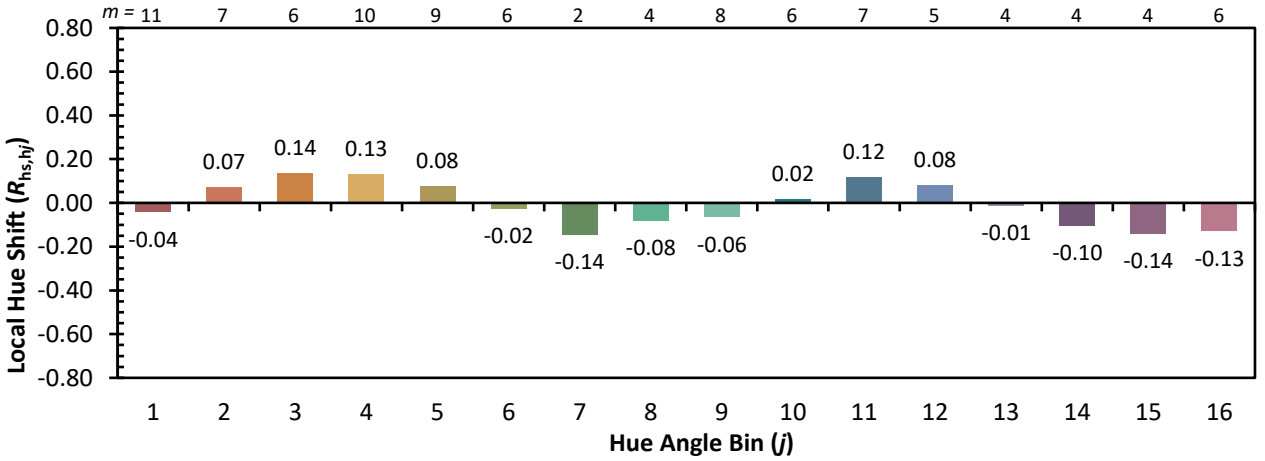


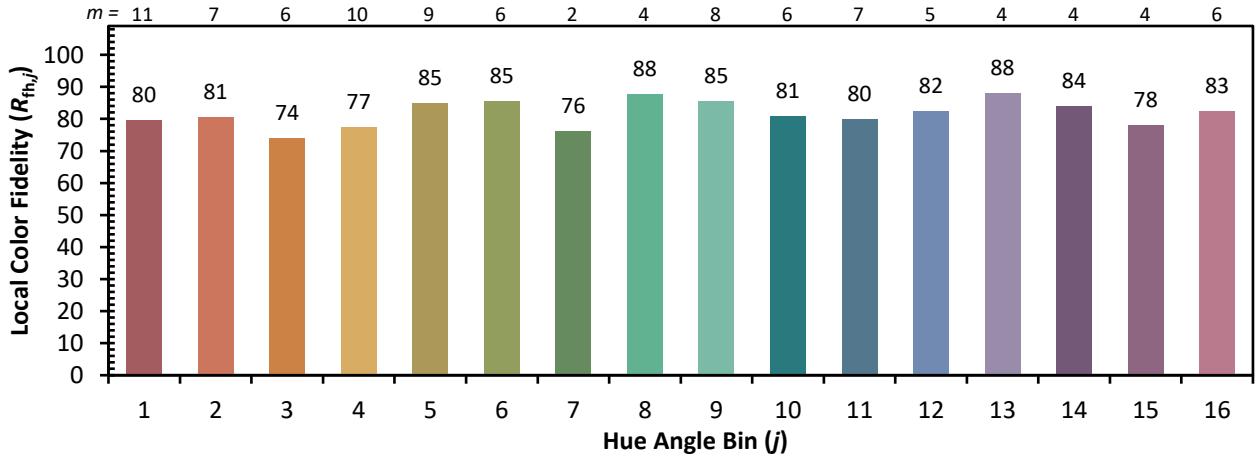
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



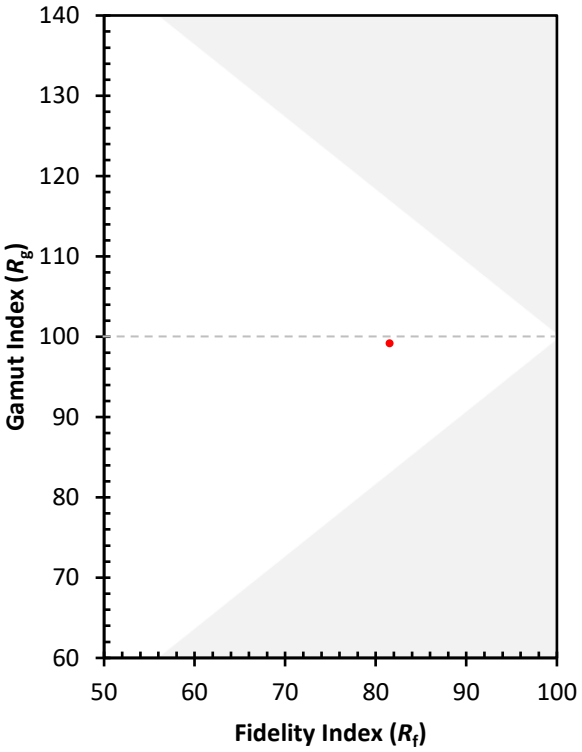


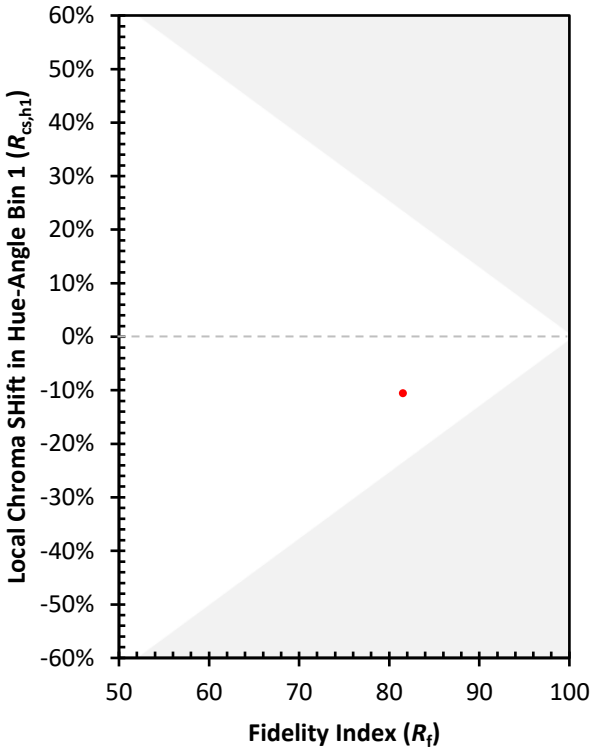


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)