Signify Classified - Internal

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: P637986

Luminaire Tested: GWS-SA4D-830-U-SLL-W-HSS

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P637986
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-40)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4D-830-U-SLL-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11778.7 lumens
Efficiency:	N/A
Efficacy:	72.7 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B1 - U0 - G3

Input Watts (W):	162.1
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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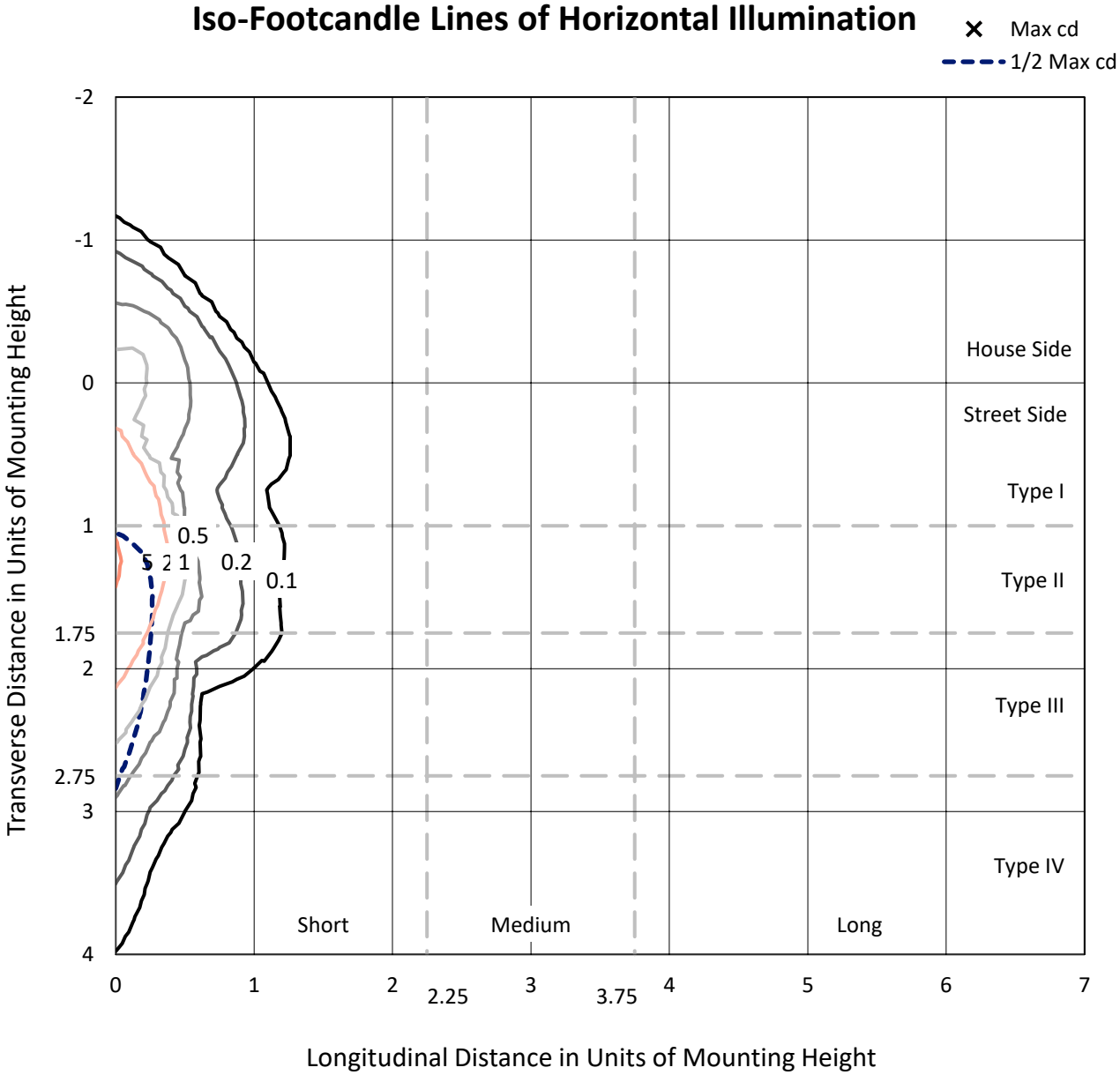
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 5.2 fc
Type III - Short - N/A

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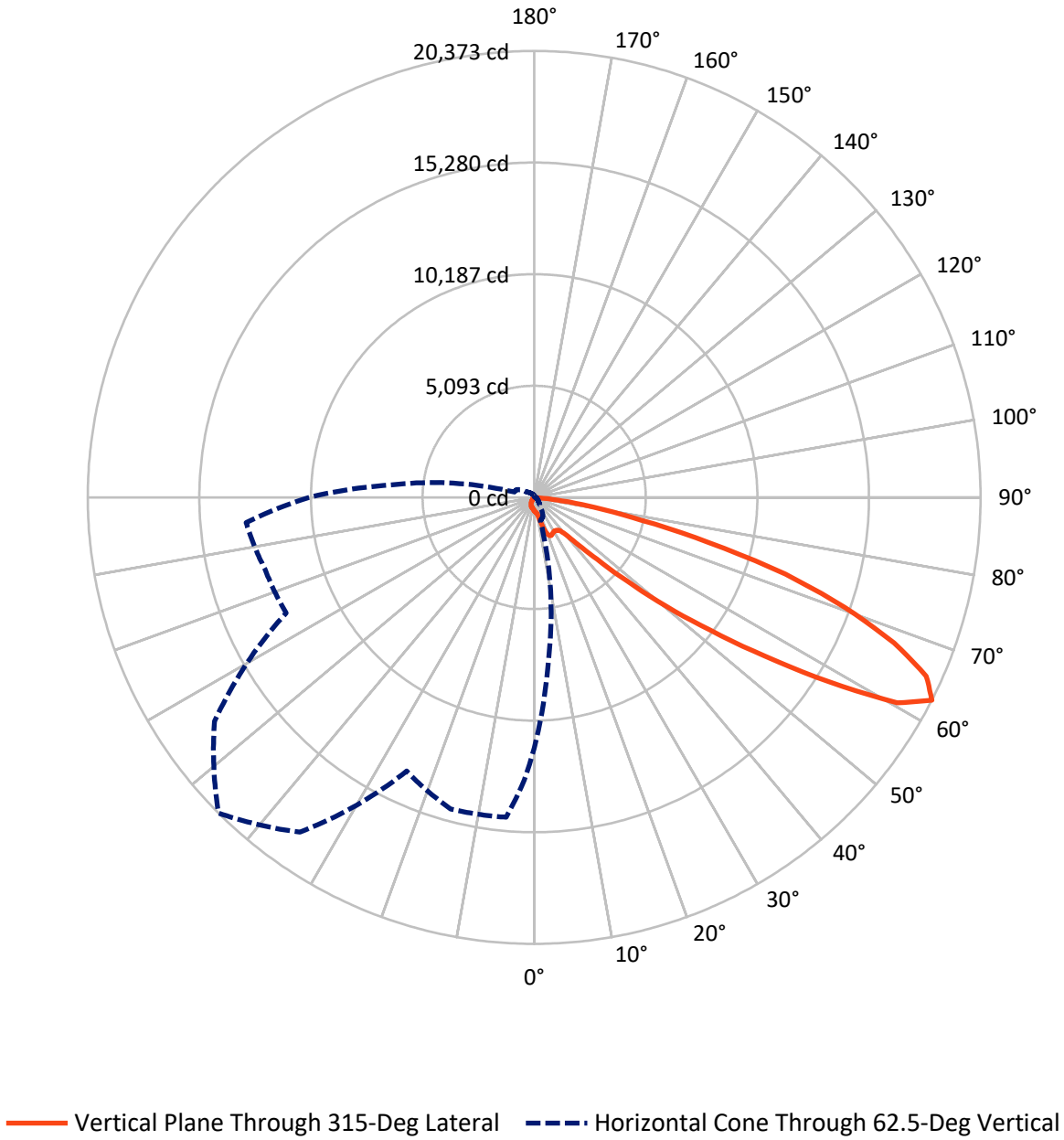
Luminous Intensity Polar Plot



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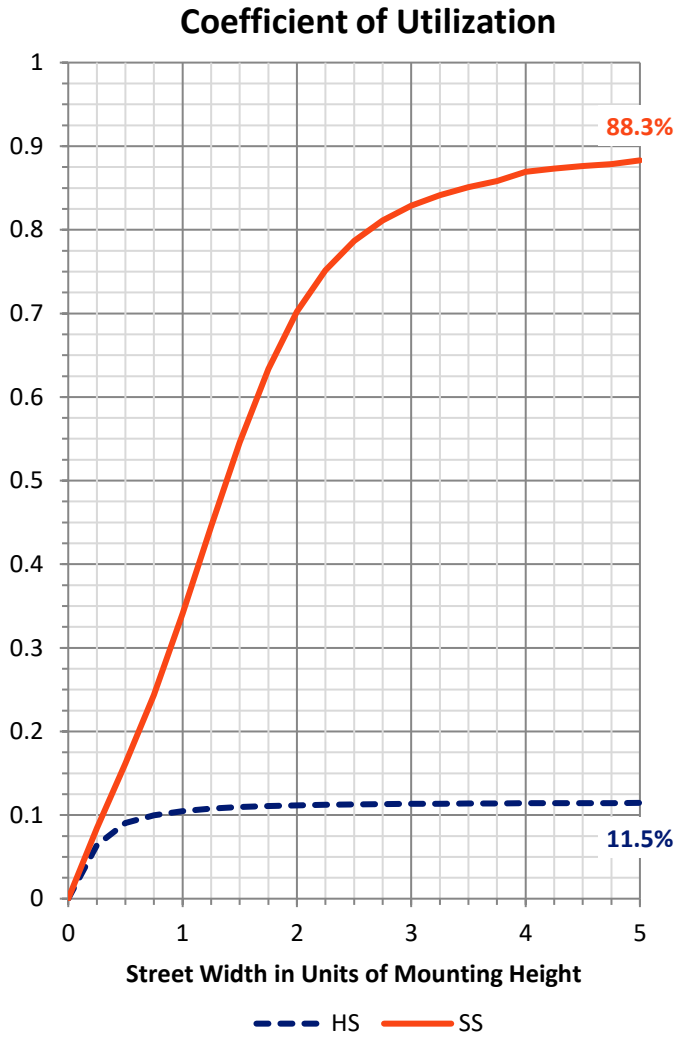
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1368.5	0.0	1368.5
	% Fixture	11.6	0.0	11.6
Street Side	Lumens	10410.2	0.0	10410.2
	% Fixture	88.4	0.0	88.4
Total	Lumens	11778.7	0.0	11778.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.7	0.4
10°-20°	180.8	1.5
20°-30°	408.5	3.5
30°-40°	703.7	6.0
40°-50°	1327.4	11.3
50°-60°	2963.6	25.2
60°-70°	3963.8	33.7
70°-80°	1987.7	16.9
80°-90°	190.5	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°	11778.7	100.0
0°-180°	11778.7	100.0



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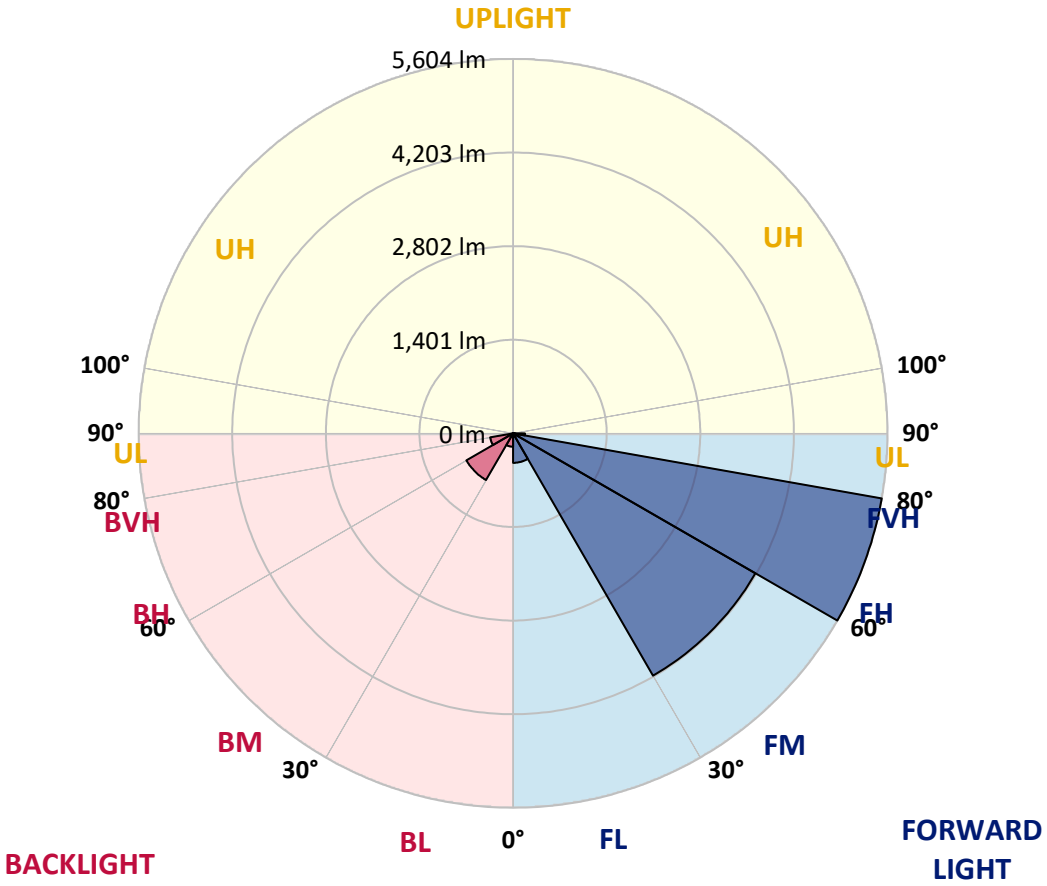
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	441.1	3.7			
FM	(30°-60°)	4187.7	35.6			
FH	(60°-80°)	5603.5	47.6			G3/7500
FVH	(80°-90°)	177.8	1.5			G2/225
BL	(0°-30°)	200.9	1.7	B1/500		
BM	(30°-60°)	807.0	6.9	B1/1000		
BH	(60°-80°)	348.0	3.0	B1/500		G1/500
BVH	(80°-90°)	12.7	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9
2.5°	603.9	602.5	599.7	591.3	584.4	580.2	571.8	571.8	570.4	567.6	562.0
5°	584.4	578.8	573.2	557.9	541.1	531.4	520.2	518.8	518.8	516.0	514.6
7.5°	553.7	548.1	541.1	516.0	500.7	490.9	481.2	479.8	475.6	475.6	475.6
10°	536.9	528.6	517.4	489.5	474.2	465.8	458.8	454.7	451.9	447.7	446.3
12.5°	573.2	557.9	534.2	483.9	463.0	451.9	443.5	440.7	432.3	426.8	422.6
15°	686.2	648.5	601.1	496.5	458.8	442.1	430.9	425.4	418.4	408.6	401.7
17.5°	871.7	817.3	737.8	536.9	454.7	433.7	419.8	410.0	400.3	389.1	380.7
20°	1128.3	1047.4	952.6	610.9	454.7	424.0	407.2	394.7	380.7	368.2	358.4
22.5°	1454.6	1373.7	1212.0	736.4	460.2	411.4	391.9	375.2	358.4	347.3	336.1
25°	1820.0	1705.7	1555.0	888.4	475.6	394.7	373.8	357.0	341.7	327.7	315.2
27.5°	2227.3	2103.1	1902.3	1104.6	509.1	378.0	354.2	338.9	325.0	311.0	294.3
30°	2602.4	2528.5	2323.5	1364.0	563.4	366.8	338.9	325.0	311.0	292.9	277.5
32.5°	3052.9	2921.8	2753.1	1659.6	636.0	355.6	326.4	306.8	295.7	278.9	262.2
35°	3506.2	3394.6	3172.8	2023.6	716.9	344.5	311.0	292.9	283.1	263.6	245.5
37.5°	3973.4	3948.3	3729.3	2426.7	796.3	331.9	292.9	281.7	272.0	249.6	228.7
40°	4433.6	4387.6	4185.4	2886.9	845.2	318.0	277.5	270.6	259.4	234.3	210.6
42.5°	4874.3	4839.5	4642.8	3327.7	838.2	305.4	262.2	253.8	245.5	220.4	191.1
45°	5415.5	5358.3	5110.0	3654.0	767.1	319.4	246.9	232.9	231.5	207.8	171.5
47.5°	6428.0	6239.7	5818.5	3905.0	695.9	355.6	230.1	213.4	223.1	195.3	152.0
50°	7846.3	7624.6	7015.1	4100.3	694.5	403.1	227.3	195.3	216.2	185.5	135.3
52.5°	9271.7	8881.2	8140.6	4204.9	746.1	437.9	252.4	177.1	207.8	175.7	122.7
55°	10637.1	9826.8	8612.0	3859.0	786.6	475.6	298.5	167.4	192.5	164.6	115.8
57.5°	11938.3	10586.9	8817.0	3052.9	921.9	490.9	326.4	171.5	170.1	150.6	110.2
60°	12116.8	10550.6	8402.8	1775.4	1016.7	464.4	315.2	191.1	149.2	133.9	100.4
62.5°	*11441.8*	*9849.1*	*7458.6*	*1107.4*	*944.2*	*454.7*	*280.3*	*217.6*	*135.3*	*118.5*	*87.9*
65°	10416.7	8748.7	6218.8	714.1	715.5	504.9	245.5	213.4	126.9	104.6	75.3
67.5°	8814.2	7322.0	4899.4	478.4	404.5	430.9	214.8	146.4	124.1	89.3	58.6
70°	6433.6	5211.8	3189.6	319.4	241.3	344.5	179.9	104.6	117.2	73.9	41.8
72.5°	4702.8	3502.0	1781.0	209.2	136.7	200.8	132.5	75.3	90.7	54.4	29.3
75°	3384.8	2410.0	1016.7	133.9	90.7	110.2	86.5	51.6	58.6	43.2	26.5
77.5°	1629.0	1174.3	461.6	73.9	61.4	55.8	46.0	32.1	36.3	39.1	23.7
80°	61.4	46.0	34.9	36.3	39.1	25.1	20.9	16.7	20.9	26.5	12.6
82.5°	0.0	0.0	0.0	4.2	5.6	7.0	8.4	7.0	8.4	9.8	1.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9
2.5°	566.2	563.4	566.2	569.0	571.8	574.6	570.4	573.2	576.0	569.0	571.8
5°	521.6	520.2	528.6	532.8	538.3	541.1	538.3	538.3	536.9	528.6	528.6
7.5°	482.6	483.9	490.9	500.7	507.7	511.8	509.1	507.7	503.5	490.9	490.9
10°	453.3	453.3	464.4	472.8	482.6	486.7	483.9	479.8	475.6	463.0	461.6
12.5°	429.6	429.6	437.9	451.9	463.0	468.6	467.2	461.6	454.7	442.1	440.7
15°	407.2	405.8	418.4	430.9	446.3	453.3	450.5	446.3	433.7	422.6	419.8
17.5°	384.9	383.5	394.7	411.4	428.2	437.9	436.5	426.8	415.6	401.7	398.9
20°	362.6	359.8	373.8	390.5	407.2	417.0	414.2	405.8	391.9	378.0	375.2
22.5°	340.3	338.9	348.7	362.6	378.0	386.3	384.9	378.0	364.0	351.5	351.5
25°	315.2	315.2	322.2	331.9	343.1	347.3	348.7	345.9	337.5	330.5	330.5
27.5°	294.3	290.1	292.9	295.7	301.2	308.2	308.2	311.0	312.4	309.6	311.0
30°	277.5	270.6	266.4	260.8	258.0	260.8	263.6	273.4	283.1	288.7	291.5
32.5°	258.0	249.6	238.5	223.1	213.4	210.6	219.0	237.1	255.2	267.8	274.7
35°	238.5	227.3	206.4	184.1	171.5	167.4	177.1	198.0	224.5	246.9	256.6
37.5°	219.0	203.6	174.3	147.8	133.9	131.1	140.9	163.2	193.9	224.5	237.1
40°	196.6	178.5	143.6	115.8	104.6	101.8	110.2	132.5	164.6	199.4	219.0
42.5°	174.3	152.0	115.8	92.0	80.9	80.9	92.0	108.8	138.1	175.7	199.4
45°	152.0	128.3	94.8	73.9	66.9	68.3	75.3	92.0	115.8	154.8	177.1
47.5°	131.1	110.2	78.1	61.4	55.8	57.2	65.5	79.5	99.0	133.9	157.6
50°	113.0	93.4	68.3	51.6	47.4	50.2	58.6	71.1	87.9	118.5	138.1
52.5°	101.8	83.7	62.8	44.6	41.8	44.6	53.0	64.2	79.5	104.6	124.1
55°	96.2	82.3	62.8	40.4	36.3	39.1	47.4	58.6	71.1	94.8	111.6
57.5°	94.8	85.1	66.9	36.3	30.7	33.5	41.8	53.0	65.5	86.5	100.4
60°	89.3	80.9	65.5	29.3	23.7	27.9	34.9	46.0	60.0	80.9	93.4
62.5°	*78.1*	*71.1*	*57.2*	*23.7*	*18.1*	*20.9*	*29.3*	*40.4*	*54.4*	*73.9*	*87.9*
65°	64.2	57.2	44.6	15.3	11.2	13.9	22.3	34.9	47.4	66.9	79.5
67.5°	47.4	40.4	30.7	9.8	5.6	9.8	18.1	29.3	43.2	60.0	72.5
70°	29.3	23.7	16.7	5.6	4.2	8.4	16.7	27.9	39.1	55.8	68.3
72.5°	16.7	11.2	7.0	2.8	4.2	8.4	16.7	27.9	37.7	53.0	64.2
75°	12.6	7.0	2.8	1.4	2.8	7.0	15.3	25.1	36.3	50.2	61.4
77.5°	8.4	4.2	1.4	0.0	1.4	5.6	13.9	23.7	33.5	47.4	58.6
80°	1.4	0.0	0.0	0.0	0.0	4.2	12.6	20.9	30.7	41.8	51.6
82.5°	0.0	0.0	0.0	0.0	0.0	1.4	9.8	18.1	26.5	34.9	41.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	5.6	13.9	20.9	26.5	29.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	13.9	16.7	19.5
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°	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9	610.9
2.5°	570.4	578.8	578.8	584.4	591.3	603.9	610.9	620.6	627.6	634.6	637.4
5°	527.2	528.6	530.0	532.8	541.1	555.1	567.6	583.0	601.1	615.0	623.4
7.5°	490.9	490.9	490.9	495.1	503.5	513.2	525.8	546.7	567.6	584.4	598.3
10°	460.2	464.4	465.8	472.8	482.6	495.1	509.1	527.2	550.9	573.2	598.3
12.5°	440.7	444.9	451.9	458.8	468.6	482.6	497.9	521.6	570.4	616.4	669.4
15°	422.6	428.2	436.5	446.3	457.4	472.8	489.5	538.3	652.7	739.2	822.8
17.5°	403.1	411.4	422.6	432.3	446.3	463.0	483.9	578.8	803.3	947.0	1089.2
20°	378.0	389.1	401.7	417.0	433.7	453.3	483.9	662.5	1020.9	1227.3	1415.6
22.5°	354.2	365.4	380.7	400.3	419.8	439.3	490.9	789.4	1301.2	1562.0	1800.5
25°	334.7	348.7	364.0	380.7	403.1	425.4	507.7	967.9	1638.7	1974.8	2143.6
27.5°	316.6	333.3	348.7	362.6	382.1	407.2	545.3	1206.4	2037.6	2379.3	2511.8
30°	298.5	318.0	333.3	347.3	366.8	393.3	602.5	1510.4	2481.1	2813.0	2827.0
32.5°	283.1	301.2	319.4	333.3	351.5	382.1	682.0	1866.1	2935.8	3256.5	3125.4
35°	266.4	287.3	304.0	319.4	338.9	372.4	774.0	2249.6	3394.6	3663.8	3422.5
37.5°	249.6	273.4	294.3	305.4	325.0	362.6	841.0	2649.9	3863.2	4061.2	3683.3
40°	234.3	260.8	284.5	295.7	305.4	350.1	850.7	3059.9	4338.8	4453.1	3928.8
42.5°	217.6	246.9	267.8	283.1	291.5	341.7	792.2	3405.8	4737.7	4843.6	4249.5
45°	199.4	234.3	251.0	262.2	278.9	347.3	716.9	3673.5	5193.7	5376.4	4778.1
47.5°	181.3	220.4	234.3	242.7	265.0	380.7	689.0	3852.0	5945.4	6324.8	5669.3
50°	164.6	207.8	223.1	221.8	262.2	424.0	719.6	3987.3	7075.1	7521.4	6891.0
52.5°	146.4	193.9	212.0	206.4	283.1	457.4	781.0	4094.7	7944.0	8924.4	8532.5
55°	131.1	178.5	195.3	193.9	322.2	482.6	828.4	3528.5	8303.8	10228.4	10381.8
57.5°	119.9	161.8	175.7	199.4	347.3	482.6	958.1	2504.8	8310.8	11187.9	12836.4
60°	110.2	146.4	156.2	219.0	337.5	457.4	948.4	1534.1	7659.5	11122.4	14141.8
62.5°	*101.8*	*132.5*	*145.0*	*224.5*	*298.5*	*453.3*	*856.3*	*951.2*	*6532.6*	*10275.8*	*13194.9*
65°	94.8	121.3	139.5	206.4	270.6	485.3	577.4	683.4	5298.3	9310.7	12108.4
67.5°	87.9	111.6	147.8	168.8	245.5	433.7	417.0	485.3	4158.9	8252.2	11111.2
70°	82.3	106.0	156.2	138.1	214.8	338.9	295.7	368.2	3184.0	6885.4	9706.8
72.5°	78.1	99.0	131.1	108.8	174.3	262.2	206.4	267.8	2080.8	5375.0	7913.3
75°	73.9	90.7	96.2	87.9	129.7	171.5	156.2	179.9	1239.9	3928.8	6004.0
77.5°	72.5	85.1	78.1	71.1	87.9	101.8	118.5	121.3	605.3	1965.1	3146.3
80°	64.2	76.7	66.9	58.6	60.0	66.9	87.9	80.9	138.1	499.3	839.6
82.5°	50.2	60.0	55.8	48.8	48.8	48.8	58.6	54.4	44.6	224.5	379.3
85°	34.9	41.8	41.8	39.1	37.7	37.7	36.3	34.9	12.6	13.9	20.9
87.5°	23.7	29.3	30.7	29.3	25.1	22.3	19.5	16.7	5.6	0.0	2.8
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: P637986
CATALOG NUMBER: GWS-SA4D-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	610.9	610.9	610.9	*610.9*	610.9	610.9	610.9	610.9	610.9	610.9
2.5°	647.1	651.3	651.3	*645.7*	641.5	630.4	619.2	608.1	605.3	603.9
5°	647.1	663.9	672.2	*670.8*	661.1	642.9	619.2	594.1	587.2	584.4
7.5°	637.4	669.4	694.5	*698.7*	680.6	648.5	605.3	567.6	557.9	553.7
10°	659.7	722.4	772.6	*779.6*	758.7	695.9	626.2	562.0	546.7	536.9
12.5°	779.6	882.8	944.2	*973.5*	933.0	853.5	737.8	623.4	588.5	573.2
15°	1022.3	1168.7	1285.9	*1285.9*	1248.2	1107.4	960.9	775.4	728.0	686.2
17.5°	1333.3	1517.4	1620.6	*1609.4*	1552.3	1453.2	1277.5	1011.1	914.9	871.7
20°	1687.5	1797.7	1821.4	*1814.5*	1789.3	1732.2	1610.8	1324.9	1195.2	1128.3
22.5°	1994.4	1965.1	1930.2	*1902.3*	1895.3	1912.1	1895.3	1675.0	1573.2	1454.6
25°	2202.2	2036.2	1931.6	*1881.4*	1905.1	2001.3	2105.9	2023.6	1942.8	1820.0
27.5°	2315.1	2027.8	1877.2	*1825.6*	1866.1	2002.7	2230.1	2369.5	2285.8	2227.3
30°	2376.5	2020.9	1842.3	*1792.1*	1853.5	2025.0	2316.5	2693.1	2695.9	2602.4
32.5°	2464.4	2065.5	1849.3	*1803.3*	1885.6	2092.0	2425.3	3022.2	3103.1	3052.9
35°	2563.4	2133.8	1881.4	*1839.6*	1941.4	2181.2	2546.6	3354.2	3522.9	3506.2
37.5°	2656.8	2210.5	1956.7	*1916.3*	2026.4	2258.0	2663.8	3680.5	3914.8	3973.4
40°	2754.5	2317.9	2188.2	*2227.3*	2288.6	2379.3	2768.4	3963.6	4345.8	4433.6
42.5°	2984.6	2690.3	2888.3	*2962.3*	2970.6	2783.7	2997.1	4326.2	4769.7	4874.3
45°	3497.8	3352.8	3920.4	*4025.0*	3970.6	3404.4	3548.0	4849.2	5362.5	5415.5
47.5°	4146.3	4213.3	5333.2	*5694.4*	5368.0	4136.6	4216.1	5949.6	6447.5	6428.0
50°	4902.2	5218.8	6937.0	*7789.2*	7008.2	5087.7	4985.9	7302.4	7906.3	7846.3
52.5°	5796.2	6387.5	8864.4	*10075.0*	9335.8	6157.4	6115.6	9094.6	9462.8	9271.7
55°	6921.7	7515.8	11082.0	*12773.7*	11722.1	7462.8	7606.5	11172.6	11243.7	10637.1
57.5°	8600.9	8987.2	13695.5	*15868.4*	14213.0	9236.8	10278.6	13938.2	13087.5	11938.3
60°	11649.6	10879.7	16221.3	*19034.3*	16862.8	11731.9	13802.9	15576.9	13701.1	12116.8
62.5°	*12710.9*	*12486.4*	*17802.8*	*20373.2*	*18645.2*	*13780.6*	*14719.2*	*14648.1*	*12906.2*	*11441.8*
65°	11102.9	12086.1	17519.7	*19666.1*	18416.5	13443.1	13208.8	13623.0	12010.8	10416.7
67.5°	10256.3	11146.1	16447.2	*17714.9*	17148.7	12298.1	11773.7	11660.7	10083.4	8814.2
70°	9402.8	10284.2	14892.2	*15049.8*	14786.2	10432.0	9743.1	8985.8	7536.7	6433.6
72.5°	8376.3	8861.7	12734.6	*11987.1*	11688.6	8193.6	8048.6	6766.9	5649.8	4702.8
75°	7305.2	7164.4	9928.6	*8227.1*	8450.2	6375.0	6797.6	4969.2	4139.3	3384.8
77.5°	5313.6	5209.0	6649.7	*4997.1*	5534.0	4175.6	3751.6	1983.2	1888.4	1629.0
80°	2965.0	3574.5	3591.2	*2800.5*	3493.6	2722.4	938.6	65.5	41.8	61.4
82.5°	1377.9	1536.9	1946.9	*1298.4*	1993.0	1348.6	193.9	0.0	0.0	0.0
85°	446.3	652.7	546.7	*191.1*	482.6	456.1	32.1	0.0	0.0	0.0
87.5°	26.5	54.4	13.9	*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

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.

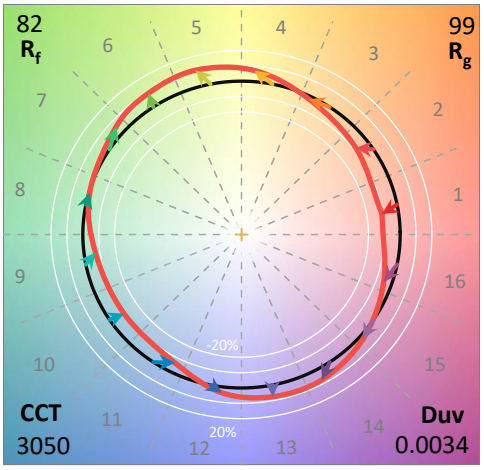
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

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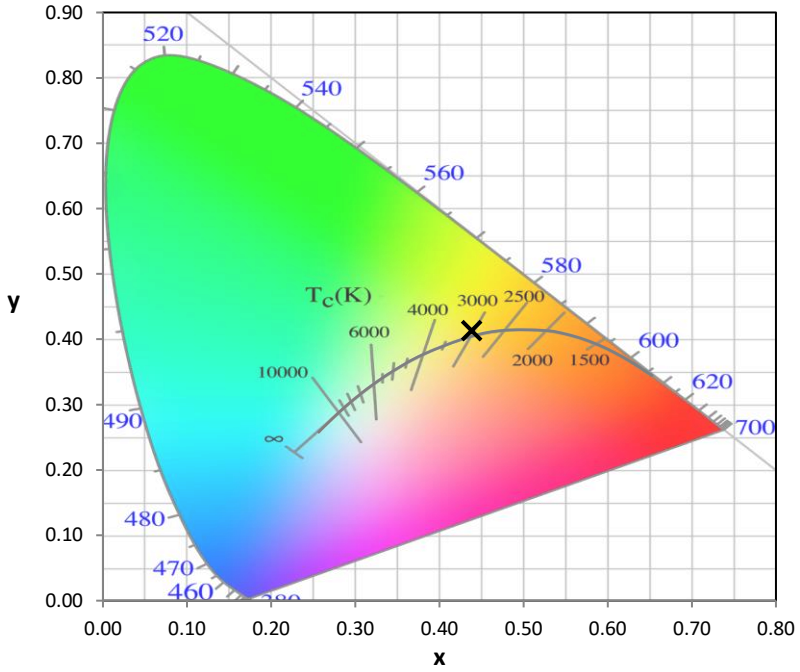
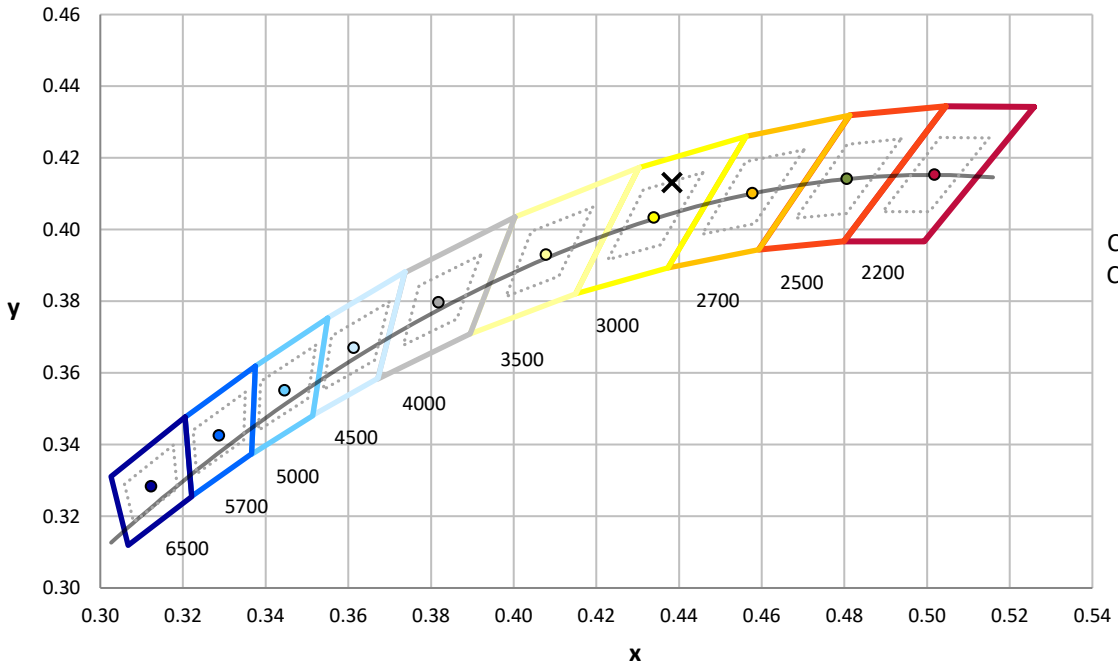
CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

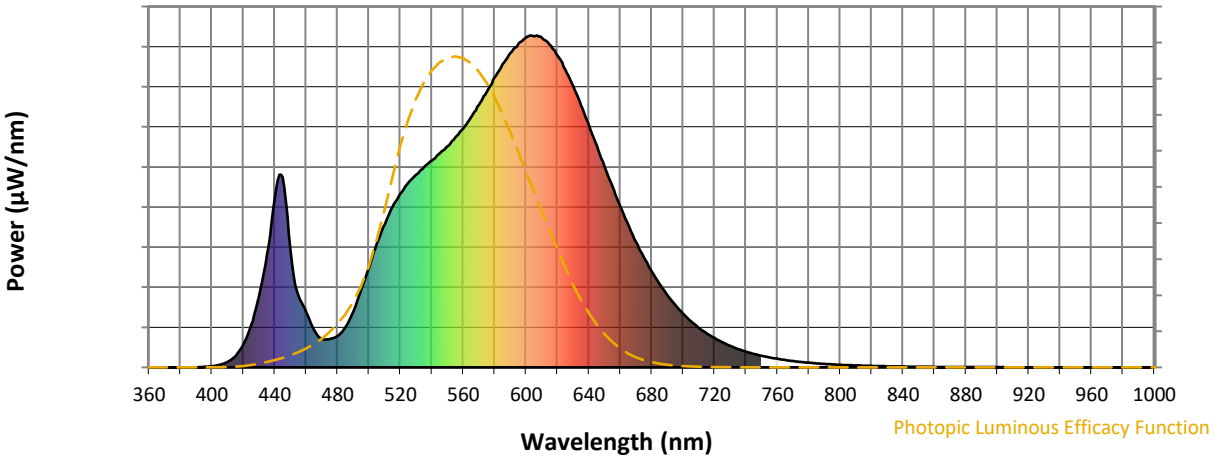


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

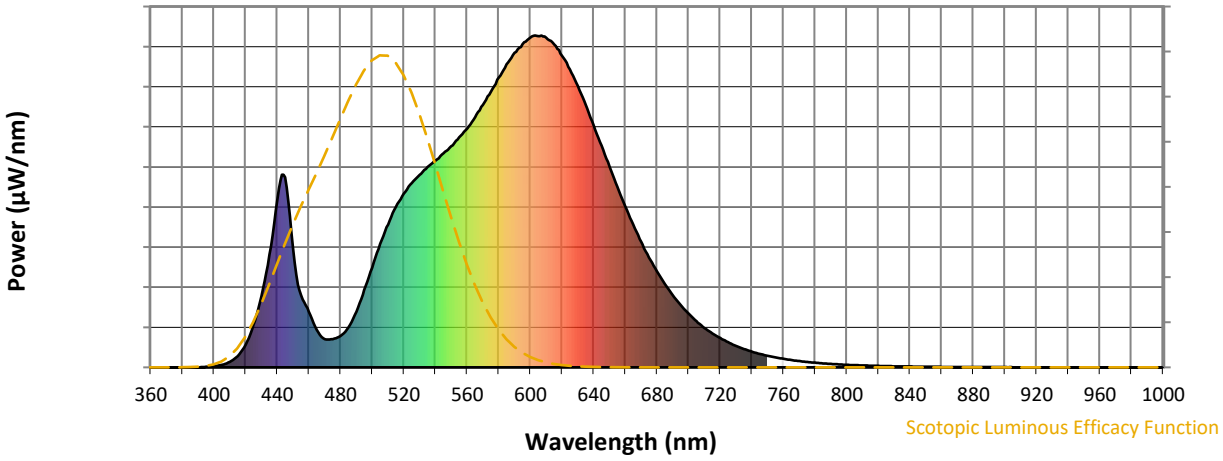


Photopic Lumens: NR

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

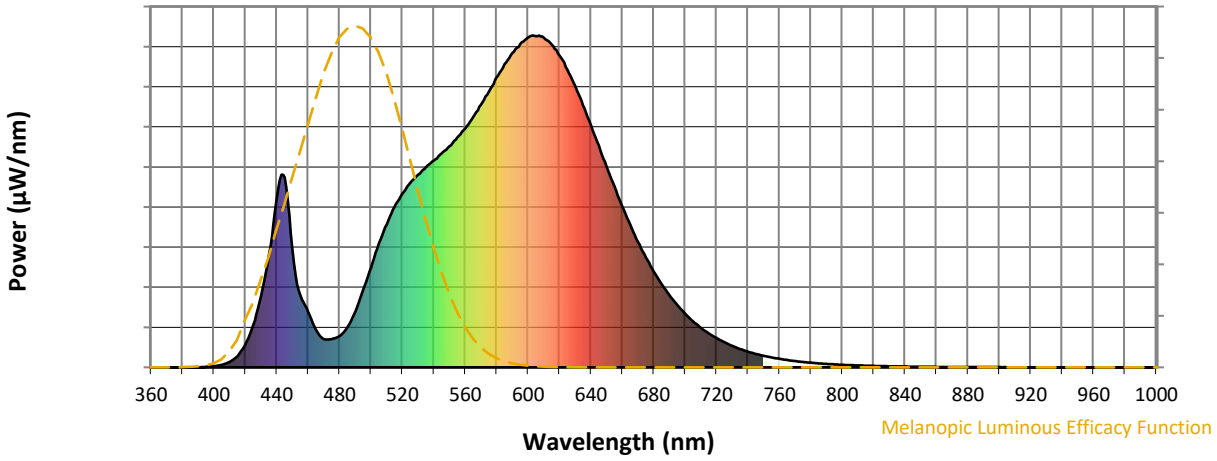


Scotopic Lumens: NR **S/P: 1.27**

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			

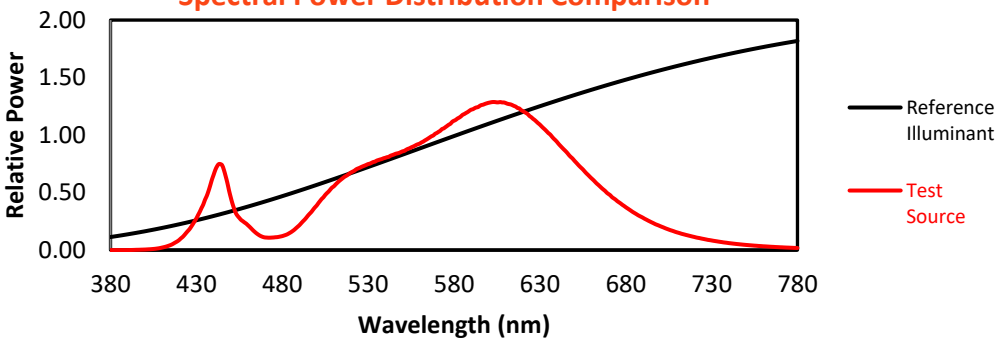
REPORT NUMBER: SP1-2408-195-9

TM-30-18

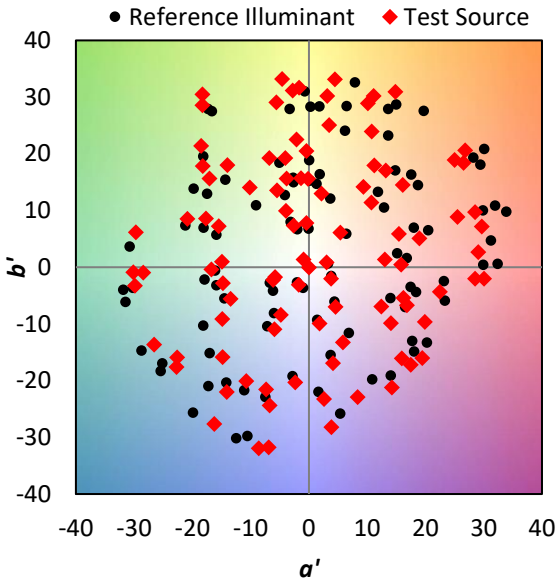
Summary

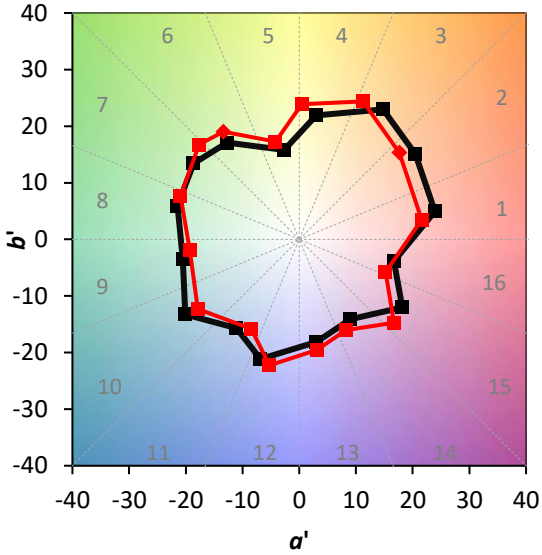
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

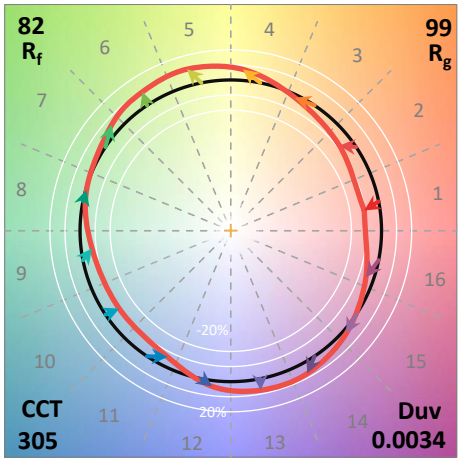
Spectral Power Distribution Comparison

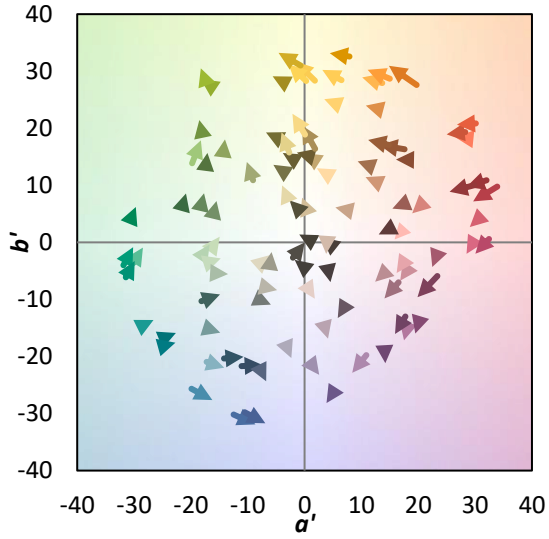


Color Vector Graphics









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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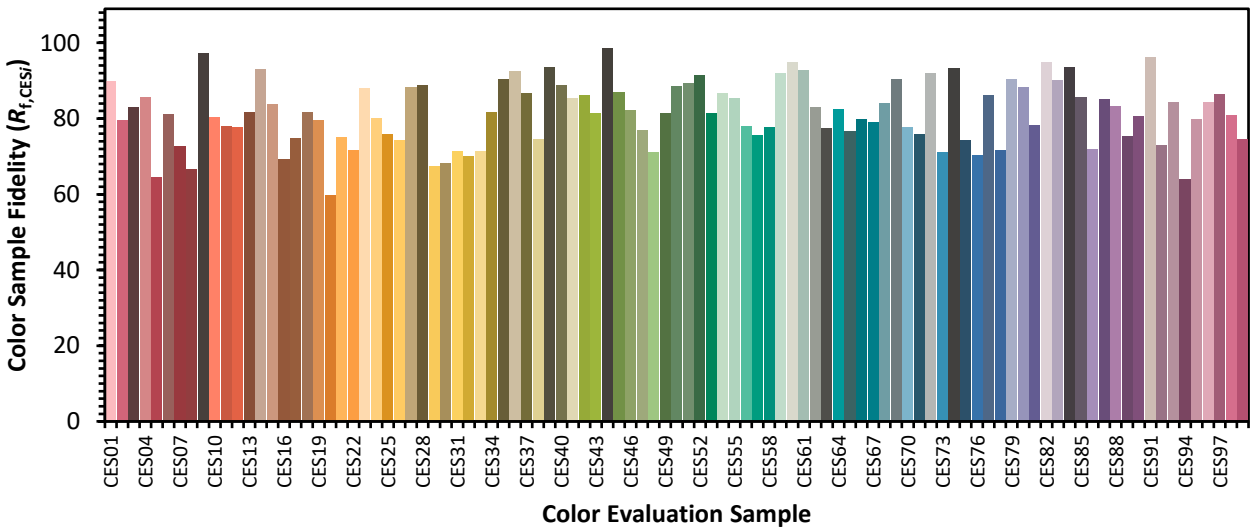

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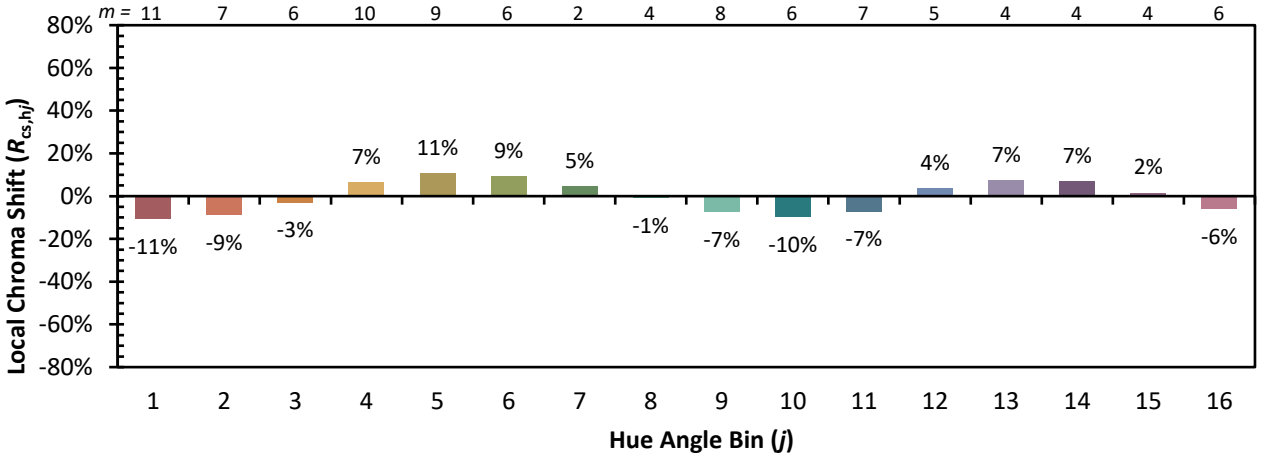
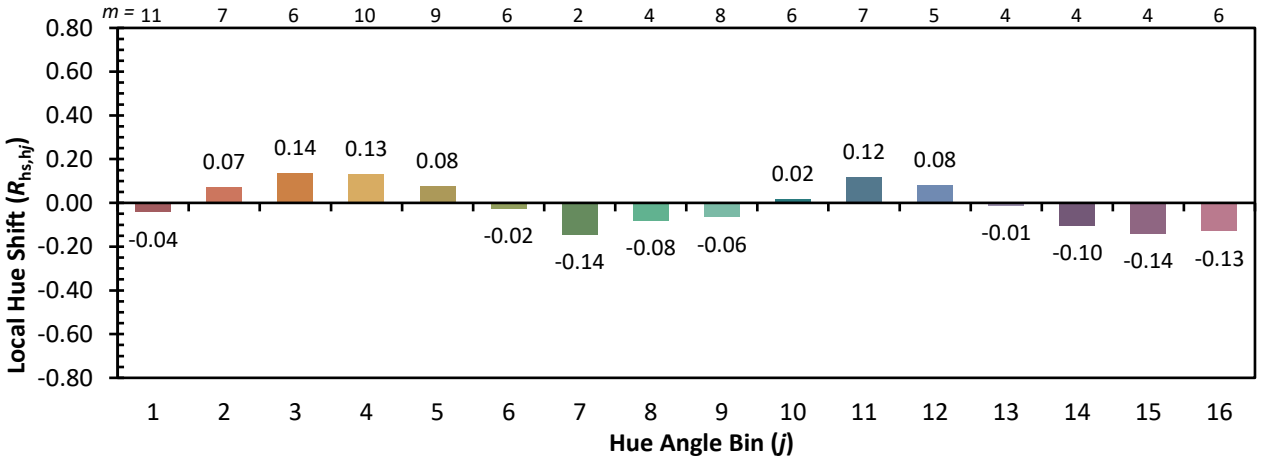
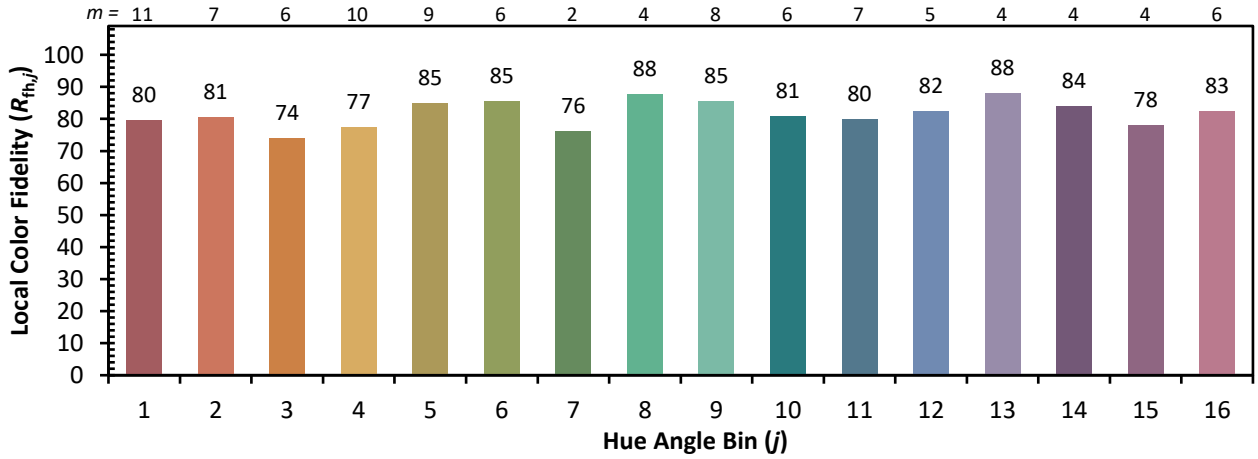
Color Rendition by Hue-Angle Bin







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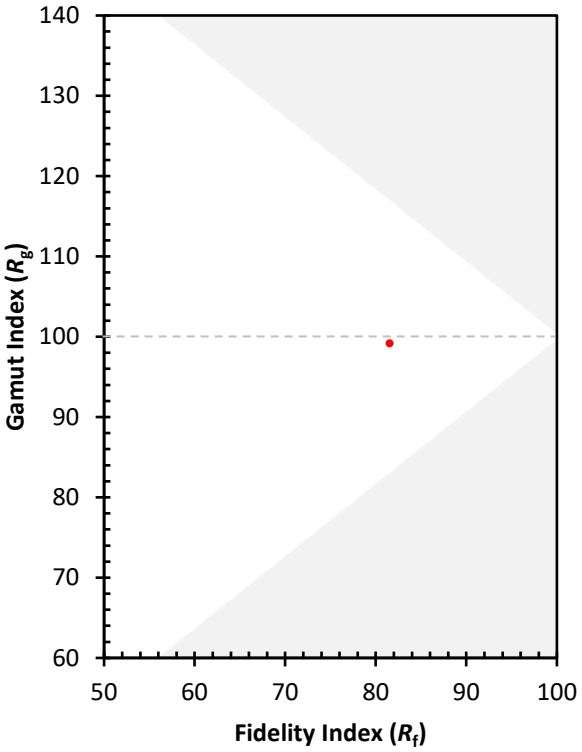
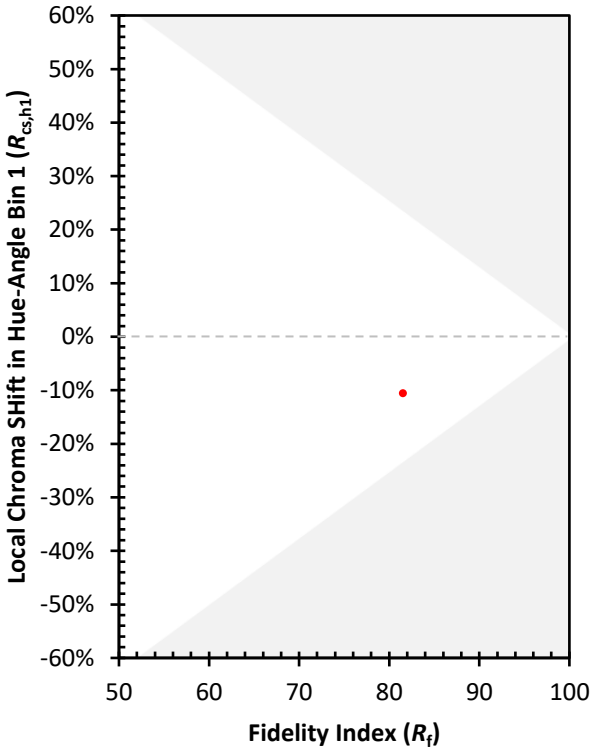
Measure Comparisons





(END OF REPORT)