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: P636010

Luminaire Tested: GWS-SA3E-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:	P636010
	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-SA3E-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:	10841.7 lumens
Efficiency:	N/A
Efficacy:	68.1 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B1 - U0 - G3

Input Watts (W):	159.2
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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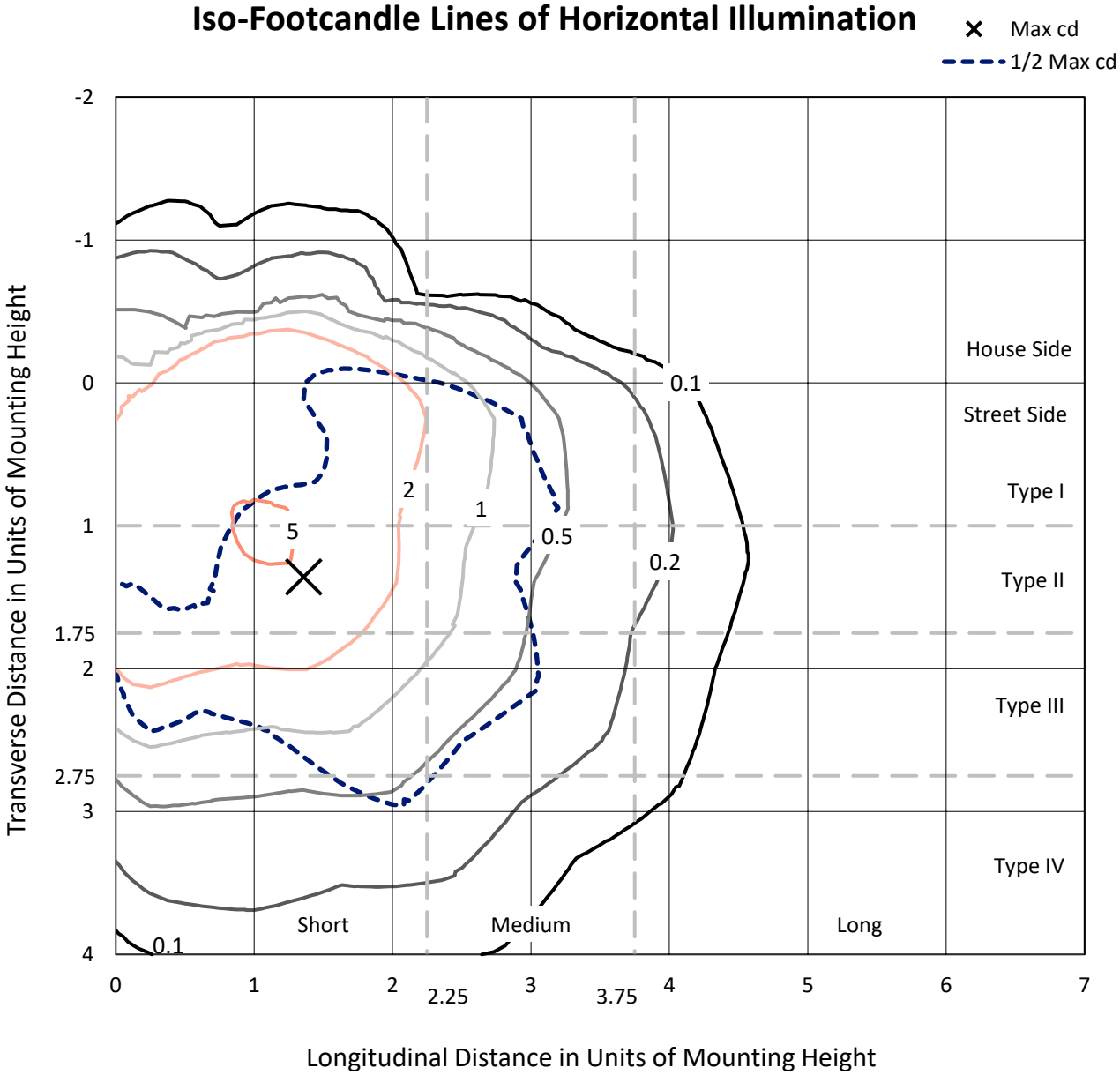
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 5.5 fc
Type IV - Short - N/A

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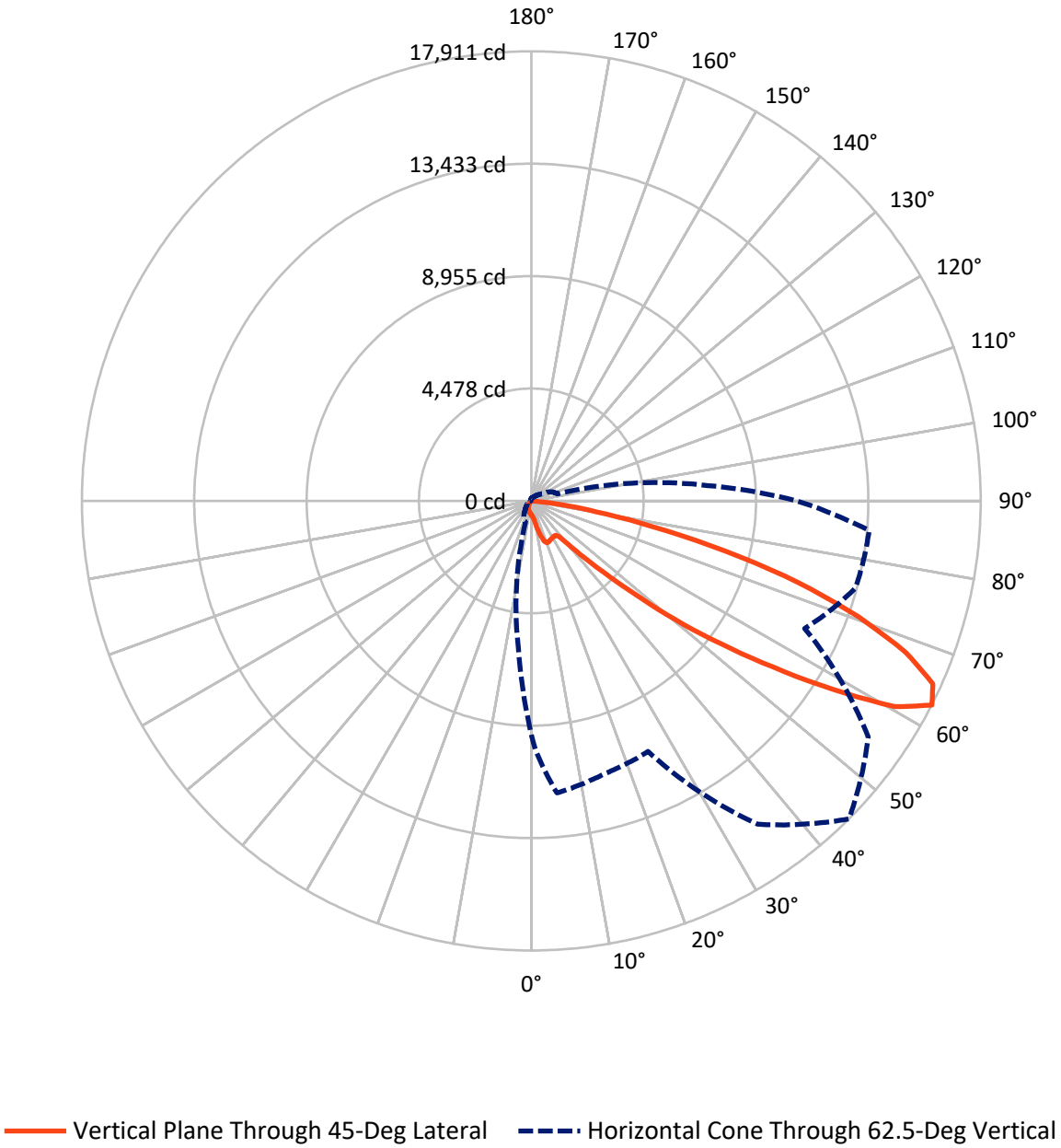
Luminous Intensity Polar Plot



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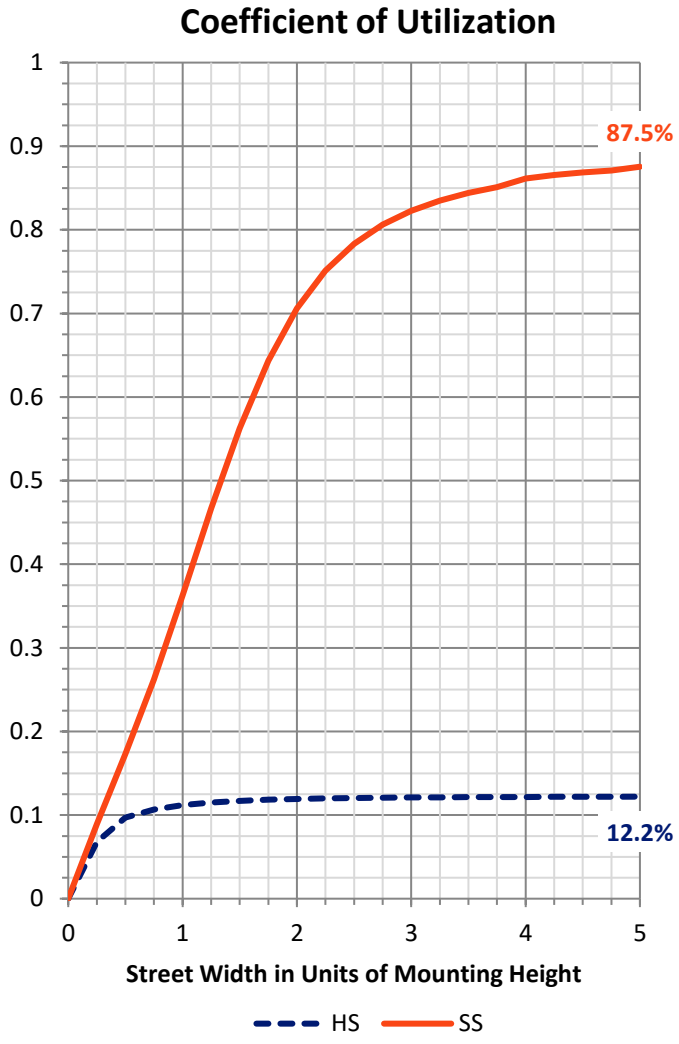
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1337.9	0.0	1337.9
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	9503.9	0.0	9503.9
	% Fixture	87.7	0.0	87.7
Total	Lumens	10841.7	0.0	10841.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	0.5
10°-20°	189.0	1.7
20°-30°	410.9	3.8
30°-40°	674.4	6.2
40°-50°	1239.8	11.4
50°-60°	2662.6	24.6
60°-70°	3576.2	33.0
70°-80°	1862.2	17.2
80°-90°	176.6	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°	10841.7	100.0
0°-180°	10841.7	100.0



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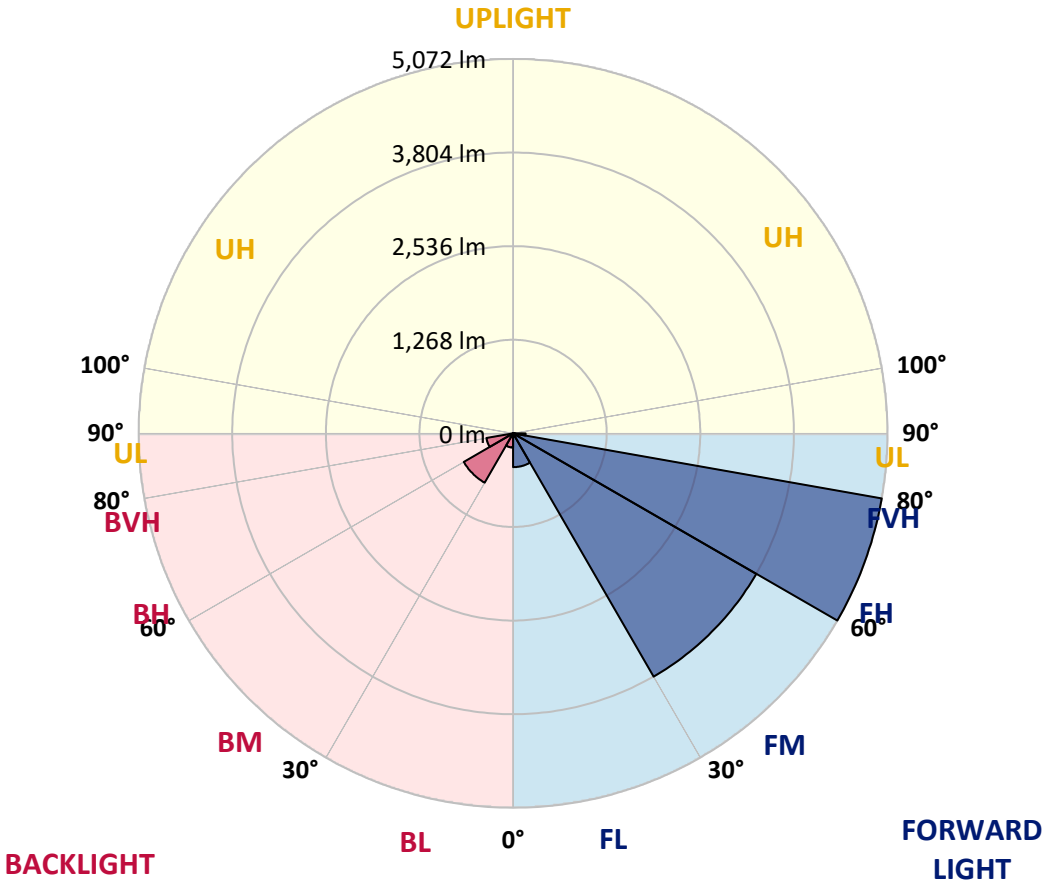
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	458.0	4.2			
FM	(30°-60°)	3805.3	35.1			
FH	(60°-80°)	5071.8	46.8			G3/7500
FVH	(80°-90°)	168.7	1.6			G2/225
BL	(0°-30°)	191.9	1.8	B1/500		
BM	(30°-60°)	771.5	7.1	B1/1000		
BH	(60°-80°)	366.6	3.4	B1/500		G1/500
BVH	(80°-90°)	7.9	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°	563.5	563.5	563.5	563.5	563.5	563.5	*563.5*	563.5	563.5	563.5	563.5
2.5°	574.8	577.3	579.8	588.6	594.8	599.9	*601.1*	597.4	588.6	579.8	567.3
5°	557.3	559.8	568.6	592.3	616.1	634.9	*641.2*	637.4	616.1	588.6	559.8
7.5°	556.0	561.0	582.3	632.4	683.8	722.6	*732.6*	723.8	683.8	628.7	569.8
10°	601.1	609.9	641.2	731.4	825.3	894.2	*921.7*	884.1	820.3	720.1	623.7
12.5°	718.8	733.9	794.0	925.5	1070.7	1162.1	*1199.7*	1153.4	1053.2	907.9	755.1
15°	904.2	926.7	1016.9	1213.5	1385.1	1466.5	*1479.0*	1452.7	1336.2	1175.9	970.5
17.5°	1165.9	1198.5	1338.7	1539.1	1663.1	1691.9	*1688.1*	1660.6	1575.4	1465.2	1271.1
20°	1479.0	1517.8	1655.6	1820.9	1833.4	1799.6	*1780.8*	1764.5	1735.7	1716.9	1565.4
22.5°	1794.6	1842.2	1986.2	2027.5	1914.8	1817.1	*1770.8*	1783.3	1825.9	1918.5	1857.2
25°	2108.9	2154.0	2289.2	2177.8	1952.4	1789.6	*1730.7*	1760.8	1862.2	2062.6	2141.5
27.5°	2475.8	2509.6	2589.8	2280.5	1958.6	1767.0	*1709.4*	1755.7	1879.7	2152.7	2453.3
30°	2857.8	2877.8	2839.0	2308.0	1937.3	1733.2	*1688.1*	1755.7	1909.8	2212.8	2687.5
32.5°	3138.3	3142.1	3015.6	2310.5	1926.1	1705.7	*1668.1*	1748.2	1938.6	2262.9	2914.1
35°	3427.6	3408.8	3184.6	2348.1	1956.1	1715.7	*1683.1*	1769.5	1983.7	2321.8	3113.3
37.5°	3720.6	3686.8	3373.7	2409.5	2033.8	1824.6	*1804.6*	1878.5	2056.3	2403.2	3332.4
40°	4021.2	3974.8	3570.3	2502.1	2206.6	2195.3	*2264.2*	2255.4	2255.4	2507.1	3557.8
42.5°	4388.1	4334.3	3860.9	2763.9	2609.8	2861.5	*3049.4*	2932.9	2717.5	2746.3	3850.9
45°	4872.8	4826.4	4364.3	3264.8	3242.2	3820.8	*4073.8*	3843.4	3307.4	3298.6	4340.5
47.5°	5647.9	5639.2	5167.0	3845.9	4016.2	5041.8	*5530.2*	5086.9	3979.9	3883.4	5267.2
50°	6737.5	6711.2	6167.6	4527.1	4936.6	6554.6	*7426.2*	6687.4	4792.6	4565.9	6508.3
52.5°	7964.7	7992.3	7569.0	5271.0	5914.7	8237.7	*9451.2*	8520.7	5675.5	5433.8	8069.9
55°	9120.6	9278.4	9166.9	6141.3	6870.2	10096.2	*11675.3*	10532.0	6768.8	6569.6	9820.6
57.5°	10024.8	10469.3	11250.8	7406.2	7993.5	12270.2	*14158.7*	12712.2	8044.9	8414.3	12203.8
60°	10074.9	10663.5	12478.1	10052.3	9438.7	14134.9	*16638.2*	14842.4	10051.1	11546.3	14071.0
62.5°	*9319.7*	*9950.9*	*11679.1*	*11254.5*	*11012.9*	*15721.6*	*17910.6*	*16395.3*	*12024.7*	*13381.0*	*13517.5*
65°	8455.6	9093.1	10787.4	9890.8	10830.0	15653.9	*17587.5*	16431.6	12203.8	12133.7	12526.9
67.5°	7149.5	7721.8	9255.9	8754.9	9982.2	14898.8	*16094.7*	15396.0	11243.3	11348.5	11523.8
70°	5218.4	5769.4	7193.3	7218.3	8717.4	13537.5	*13829.3*	13732.9	10354.1	10465.6	9964.7
72.5°	3769.5	4234.1	5462.6	5919.7	6959.1	11352.2	*11150.6*	11522.5	8883.9	9321.0	8003.5
75°	2710.0	3058.2	4007.4	5149.5	5516.4	8430.6	*7982.3*	8924.0	7128.2	8026.1	6017.4
77.5°	1099.5	1222.3	1576.7	3468.9	3625.5	5671.7	*4886.5*	6482.0	5081.9	5273.5	2916.6
80°	45.1	50.1	65.1	1790.8	2485.8	3190.9	*2614.8*	3465.2	3356.2	2123.9	688.8
82.5°	5.0	5.0	11.3	516.0	1088.3	1760.8	*1232.3*	1996.2	1699.4	900.4	313.1
85°	1.3	1.3	2.5	58.9	255.5	281.8	*166.6*	612.4	790.2	368.2	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	6.3	11.3	12.5	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°	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5
2.5°	567.3	561.0	553.5	546.0	542.3	532.2	528.5	526.0	523.5	524.7	524.7
5°	548.5	534.7	518.5	502.2	493.4	483.4	478.4	475.9	477.1	482.1	482.1
7.5°	546.0	519.7	484.6	463.4	453.3	445.8	440.8	438.3	439.6	445.8	448.3
10°	587.3	541.0	478.4	442.1	430.8	423.3	418.3	414.5	412.0	417.0	418.3
12.5°	676.2	612.4	508.4	439.6	419.5	409.5	405.7	398.2	394.5	397.0	398.2
15°	860.3	750.1	568.6	449.6	409.5	398.2	392.0	385.7	379.5	378.2	379.5
17.5°	1100.8	943.0	660.0	473.4	402.0	388.2	379.5	370.7	361.9	360.7	359.4
20°	1398.8	1179.7	787.7	510.9	395.7	379.5	366.9	354.4	343.1	339.4	339.4
22.5°	1670.6	1465.2	951.8	557.3	387.0	366.9	351.9	336.9	324.3	318.1	316.8
25°	2002.5	1768.3	1148.4	611.1	374.4	350.6	334.4	319.3	306.8	299.3	296.8
27.5°	2336.8	2087.6	1371.3	681.3	359.4	334.4	319.3	305.6	291.8	283.0	280.5
30°	2661.2	2432.0	1621.7	768.9	348.1	318.1	305.6	291.8	279.3	265.5	261.7
32.5°	3009.3	2783.9	1902.3	866.6	339.4	306.8	293.0	280.5	264.2	251.7	245.5
35°	3344.9	3147.1	2211.6	961.8	330.6	296.8	281.8	269.2	251.7	237.9	229.2
37.5°	3683.1	3516.5	2534.7	1019.4	318.1	283.0	269.2	259.2	239.2	222.9	212.9
40°	4041.2	3898.5	2884.1	995.6	306.8	268.0	260.5	249.2	226.7	207.9	195.4
42.5°	4434.4	4262.9	3239.7	904.2	296.8	255.5	248.0	236.7	215.4	192.9	176.6
45°	4929.1	4662.4	3531.5	766.4	301.8	242.9	227.9	225.4	205.4	176.6	156.5
47.5°	5779.4	5276.0	3758.2	677.5	335.6	229.2	211.6	217.9	196.6	160.3	137.8
50°	7080.6	6292.9	3969.8	671.2	387.0	222.9	196.6	212.9	187.8	144.0	121.5
52.5°	8320.4	7326.0	4105.1	726.3	432.0	239.2	181.6	206.6	181.6	132.7	110.2
55°	9506.3	7922.1	3863.4	766.4	474.6	288.0	170.3	196.6	174.1	126.5	106.4
57.5°	10784.9	8187.6	3041.9	847.8	504.7	329.4	172.8	181.6	164.1	122.7	105.2
60°	11166.9	7848.3	1835.9	954.3	488.4	341.9	191.6	161.5	150.3	115.2	101.4
62.5°	*10573.3*	*7043.0*	*1083.3*	*869.1*	*474.6*	*323.1*	*219.2*	*149.0*	*136.5*	*105.2*	*93.9*
65°	9685.4	5949.7	706.3	733.9	503.4	288.0	232.9	142.8	124.0	95.2	82.7
67.5°	8671.0	4792.6	494.7	433.3	464.6	259.2	196.6	141.5	111.5	80.1	67.6
70°	7303.5	3589.1	348.1	286.8	387.0	230.4	152.8	137.8	97.7	65.1	52.6
72.5°	5642.9	2246.7	259.2	185.3	275.5	187.8	121.5	116.5	78.9	53.8	40.1
75°	4161.4	1281.1	182.8	134.0	181.6	142.8	90.2	82.7	67.6	51.3	36.3
77.5°	2172.8	641.2	114.0	102.7	103.9	88.9	65.1	60.1	62.6	51.3	33.8
80°	417.0	127.7	68.9	75.1	56.4	56.4	47.6	50.1	55.1	41.3	28.8
82.5°	174.1	27.6	37.6	42.6	35.1	38.8	38.8	40.1	38.8	30.1	21.3
85°	0.0	0.0	16.3	17.5	23.8	23.8	20.0	20.0	20.0	17.5	12.5
87.5°	0.0	0.0	0.0	0.0	1.3	3.8	7.5	8.8	10.0	7.5	5.0
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°	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5
2.5°	523.5	521.0	524.7	527.2	529.7	529.7	527.2	524.7	521.0	524.7	521.0
5°	483.4	487.2	493.4	495.9	498.4	493.4	490.9	483.4	477.1	478.4	475.9
7.5°	452.1	455.8	463.4	468.4	468.4	465.9	458.3	450.8	440.8	440.8	439.6
10°	423.3	428.3	437.1	443.3	445.8	443.3	435.8	425.8	417.0	417.0	413.3
12.5°	399.5	405.7	415.8	424.5	427.0	424.5	417.0	407.0	397.0	397.0	394.5
15°	379.5	387.0	398.2	408.3	412.0	408.3	399.5	387.0	376.9	378.2	374.4
17.5°	360.7	366.9	382.0	393.2	397.0	393.2	382.0	365.7	355.7	358.2	355.7
20°	339.4	346.9	361.9	374.4	378.2	374.4	361.9	344.4	334.4	334.4	335.6
22.5°	316.8	324.3	339.4	348.1	353.2	349.4	336.9	320.6	310.6	310.6	311.8
25°	296.8	300.6	311.8	320.6	321.8	318.1	308.1	295.5	288.0	291.8	293.0
27.5°	278.0	278.0	283.0	288.0	286.8	283.0	279.3	269.2	268.0	271.8	275.5
30°	258.0	251.7	249.2	245.5	244.2	242.9	246.7	246.7	249.2	254.2	258.0
32.5°	240.4	227.9	216.7	205.4	199.1	204.1	214.1	222.9	231.7	239.2	242.9
35°	220.4	200.4	181.6	166.6	156.5	164.1	180.3	196.6	211.6	221.7	227.9
37.5°	200.4	171.6	149.0	130.2	122.7	129.0	146.5	169.1	191.6	204.1	212.9
40°	179.1	142.8	116.5	101.4	93.9	100.2	117.7	140.3	170.3	186.6	197.9
42.5°	157.8	117.7	93.9	78.9	75.1	78.9	92.7	115.2	147.8	167.8	182.8
45°	136.5	97.7	75.1	63.9	60.1	63.9	75.1	93.9	126.5	149.0	166.6
47.5°	117.7	82.7	62.6	52.6	50.1	53.8	62.6	78.9	106.4	129.0	149.0
50°	102.7	72.6	53.8	45.1	42.6	46.3	53.8	66.4	90.2	110.2	131.5
52.5°	92.7	67.6	47.6	38.8	37.6	40.1	46.3	56.4	76.4	93.9	114.0
55°	90.2	67.6	43.8	35.1	33.8	36.3	41.3	48.8	66.4	81.4	98.9
57.5°	92.7	72.6	41.3	30.1	28.8	31.3	36.3	42.6	57.6	70.1	86.4
60°	92.7	73.9	36.3	23.8	22.5	25.0	30.1	37.6	51.3	61.4	75.1
62.5°	*83.9*	*67.6*	*30.1*	*18.8*	*16.3*	*18.8*	*25.0*	*31.3*	*45.1*	*55.1*	*66.4*
65°	72.6	57.6	25.0	13.8	11.3	13.8	20.0	26.3	38.8	47.6	60.1
67.5°	58.9	43.8	18.8	10.0	7.5	10.0	15.0	21.3	32.6	41.3	53.8
70°	43.8	31.3	15.0	8.8	7.5	8.8	13.8	20.0	28.8	37.6	50.1
72.5°	32.6	21.3	12.5	8.8	6.3	8.8	12.5	18.8	27.6	36.3	47.6
75°	27.6	17.5	11.3	7.5	6.3	7.5	11.3	17.5	25.0	33.8	45.1
77.5°	26.3	16.3	10.0	6.3	5.0	6.3	10.0	15.0	22.5	31.3	43.8
80°	22.5	13.8	8.8	5.0	3.8	5.0	8.8	12.5	17.5	23.8	33.8
82.5°	17.5	11.3	6.3	2.5	1.3	2.5	6.3	7.5	11.3	13.8	20.0
85°	11.3	6.3	2.5	0.0	0.0	0.0	2.5	5.0	5.0	6.3	10.0
87.5°	5.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	3.8
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: P636010
CATALOG NUMBER: GWS-SA3E-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5
2.5°	528.5	529.7	532.2	536.0	544.8	552.3	559.8	569.8	574.8	574.8
5°	478.4	479.6	480.9	485.9	498.4	508.4	524.7	544.8	554.8	557.3
7.5°	439.6	442.1	444.6	448.3	460.9	474.6	495.9	533.5	552.3	556.0
10°	417.0	420.8	425.8	433.3	444.6	459.6	495.9	563.5	594.8	601.1
12.5°	399.5	405.7	410.8	419.5	433.3	457.1	529.7	648.7	703.8	718.8
15°	382.0	389.5	397.0	405.7	420.8	465.9	594.8	801.5	892.9	904.2
17.5°	364.4	373.2	383.2	393.2	412.0	487.2	697.5	1013.1	1140.9	1165.9
20°	344.4	355.7	369.4	382.0	403.2	521.0	840.3	1264.8	1425.1	1479.0
22.5°	323.1	336.9	353.2	369.4	393.2	562.3	1013.1	1535.3	1759.5	1794.6
25°	305.6	319.3	334.4	350.6	376.9	612.4	1222.3	1871.0	2075.1	2108.9
27.5°	289.3	303.1	316.8	331.9	360.7	677.5	1474.0	2227.9	2440.8	2475.8
30°	271.8	288.0	301.8	316.8	345.6	757.7	1764.5	2623.6	2825.2	2857.8
32.5°	256.7	273.0	286.8	301.8	334.4	845.3	2070.1	2974.2	3138.3	3138.3
35°	244.2	261.7	271.8	291.8	325.6	901.7	2359.4	3308.6	3432.6	3427.6
37.5°	230.4	251.7	259.2	273.0	314.3	907.9	2631.1	3661.8	3753.2	3720.6
40°	216.7	239.2	250.5	258.0	301.8	856.6	2929.2	3986.1	4063.8	4021.2
42.5°	204.1	221.7	237.9	246.7	294.3	766.4	3168.4	4333.0	4425.7	4388.1
45°	191.6	206.6	216.7	232.9	299.3	703.8	3373.7	4737.5	4900.3	4872.8
47.5°	179.1	191.6	197.9	222.9	333.1	675.0	3499.0	5363.7	5670.5	5647.9
50°	165.3	180.3	180.3	220.4	383.2	685.0	3607.9	6270.3	6745.0	6737.5
52.5°	151.5	167.8	165.3	239.2	422.0	731.4	3731.9	7070.6	7895.8	7964.7
55°	137.8	152.8	155.3	276.8	444.6	771.4	3252.3	7407.4	8878.9	9120.6
57.5°	122.7	131.5	161.5	305.6	437.1	887.9	2227.9	7468.8	9506.3	10024.8
60°	106.4	114.0	182.8	299.3	413.3	820.3	1402.6	6917.8	9417.4	10074.9
62.5°	*92.7*	*105.2*	*192.9*	*264.2*	*420.8*	*711.3*	*894.2*	*5895.9*	*8569.6*	*9319.7*
65°	81.4	101.4	175.3	239.2	425.8	482.1	603.6	4796.4	7741.8	8455.6
67.5°	72.6	112.7	144.0	212.9	365.7	339.4	414.5	3726.9	6509.5	7149.5
70°	66.4	115.2	117.7	182.8	283.0	217.9	273.0	2508.4	4487.0	5218.4
72.5°	60.1	85.2	88.9	146.5	182.8	132.7	176.6	1435.2	3271.0	3769.5
75°	57.6	57.6	61.4	95.2	101.4	96.4	114.0	856.6	2345.6	2710.0
77.5°	53.8	43.8	38.8	61.4	55.1	68.9	67.6	380.7	1016.9	1099.5
80°	42.6	31.3	26.3	38.8	37.6	46.3	40.1	31.3	46.3	45.1
82.5°	26.3	20.0	18.8	23.8	21.3	23.8	18.8	5.0	5.0	5.0
85°	12.5	11.3	10.0	10.0	11.3	10.0	7.5	2.5	1.3	1.3
87.5°	6.3	6.3	5.0	3.8	5.0	5.0	3.8	1.3	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

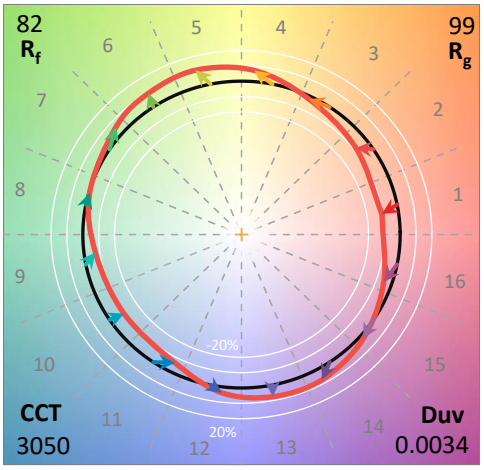
Test Information

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

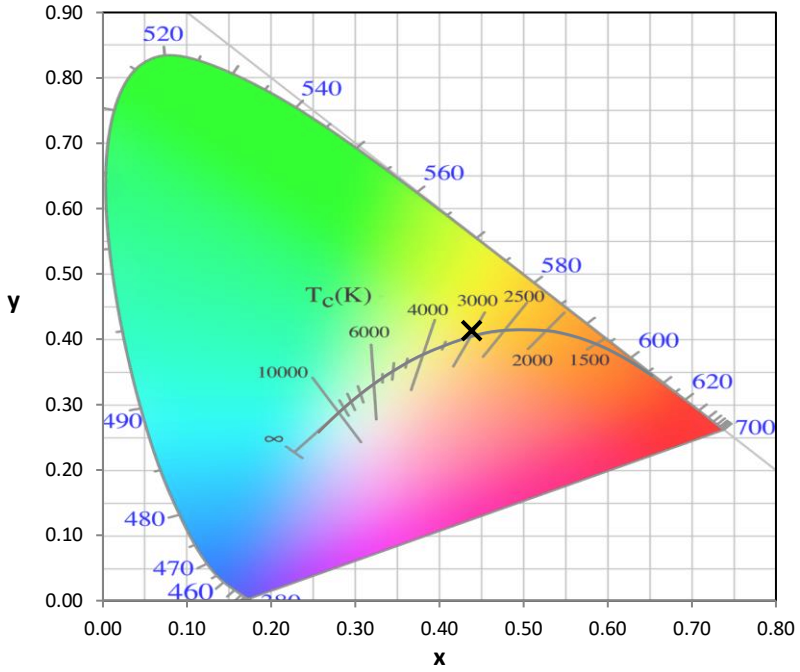
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

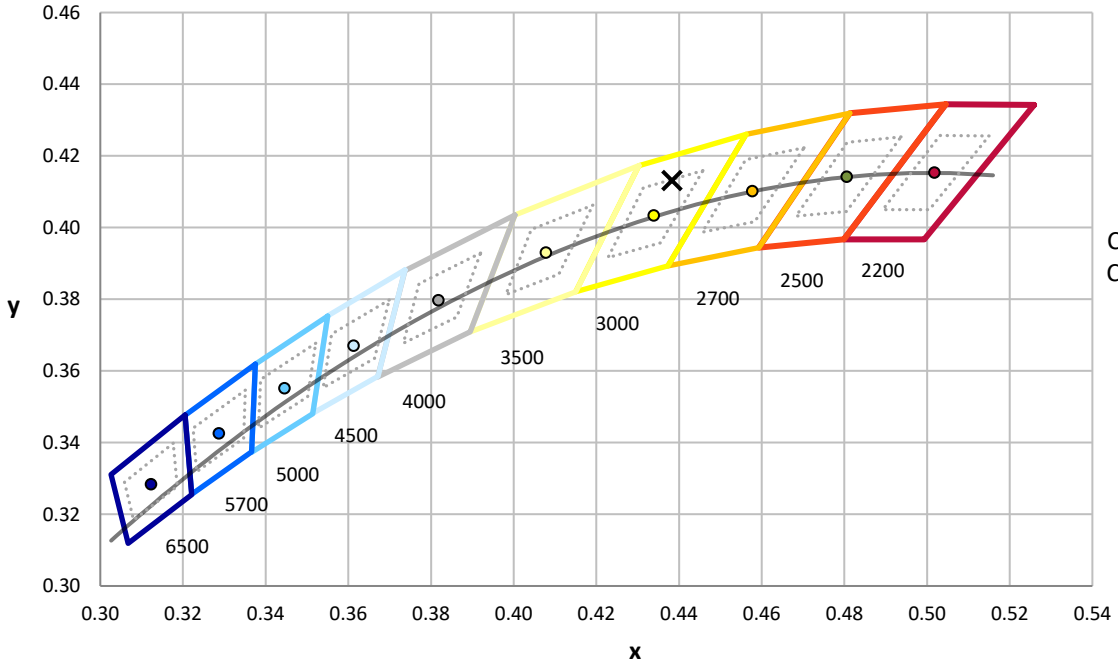
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

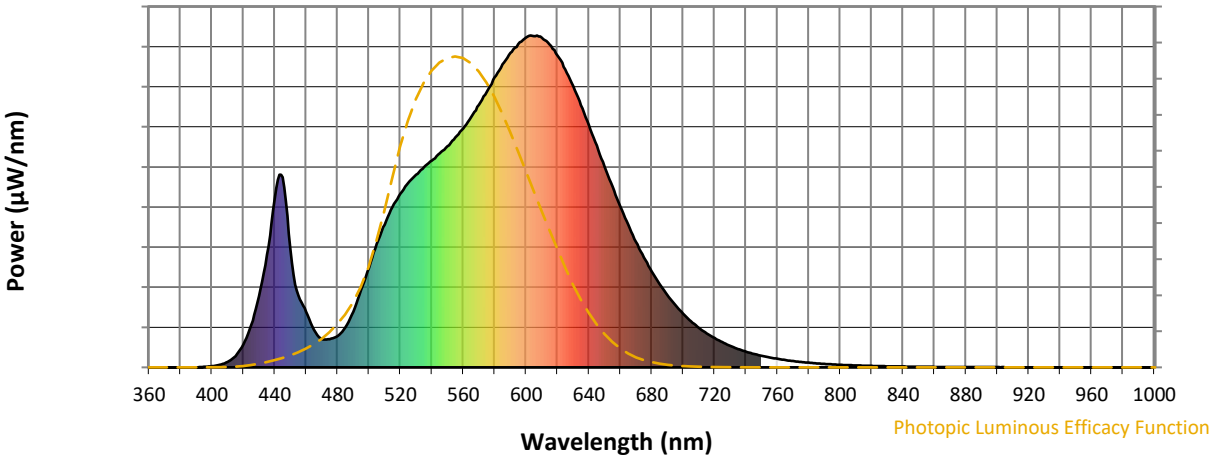


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

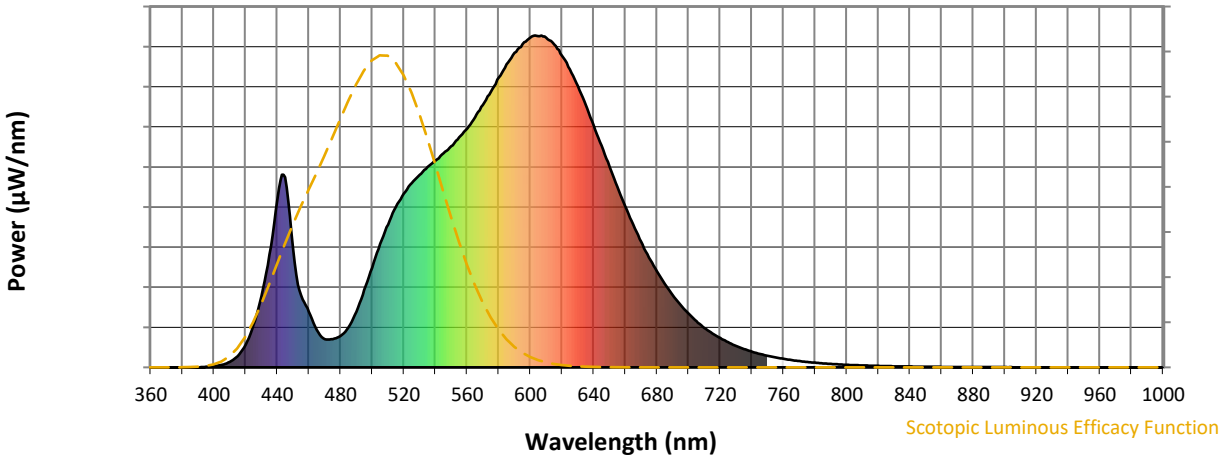


Photopic Lumens: NR

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

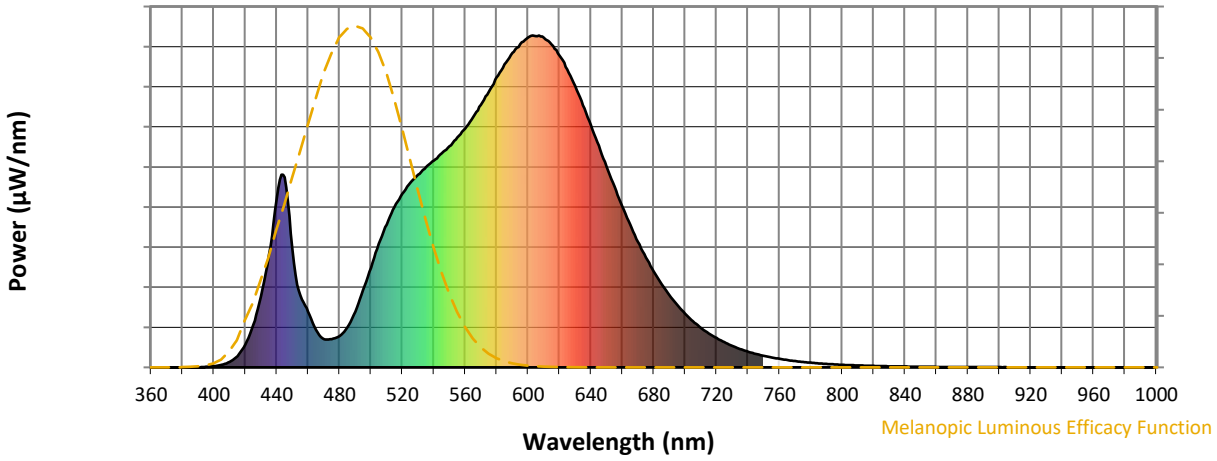


Scotopic Lumens: NR **S/P: 1.27**

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			

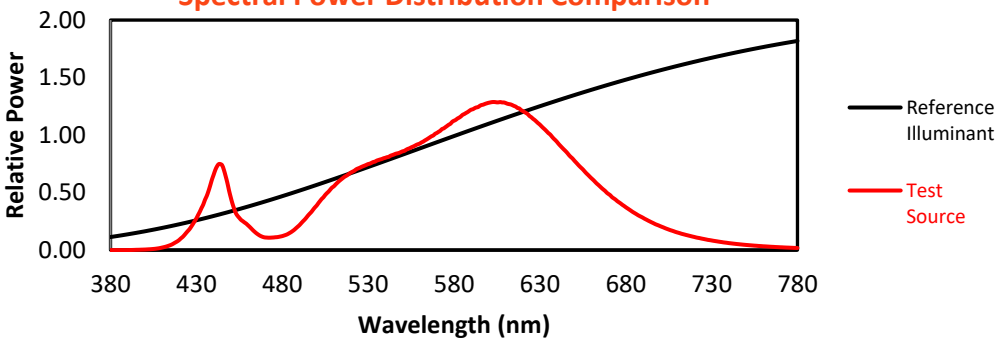
REPORT NUMBER: SP1-2408-195-9

TM-30-18

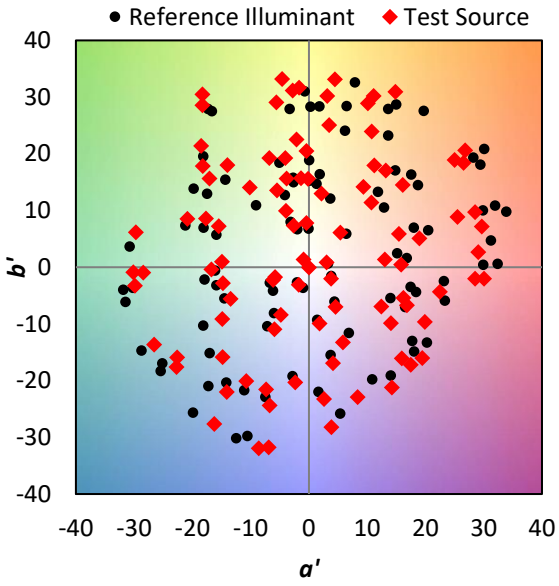
Summary

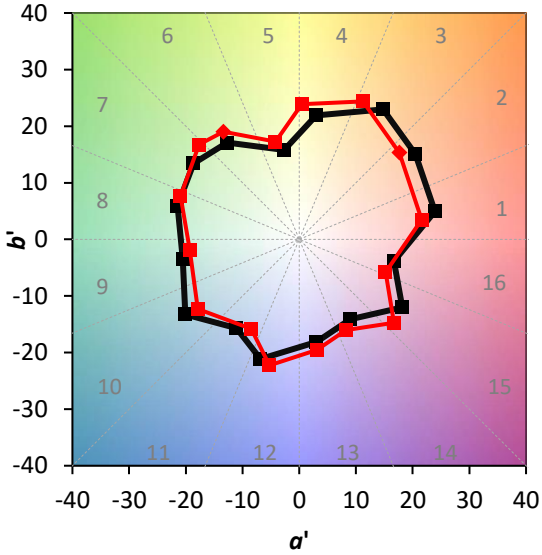
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

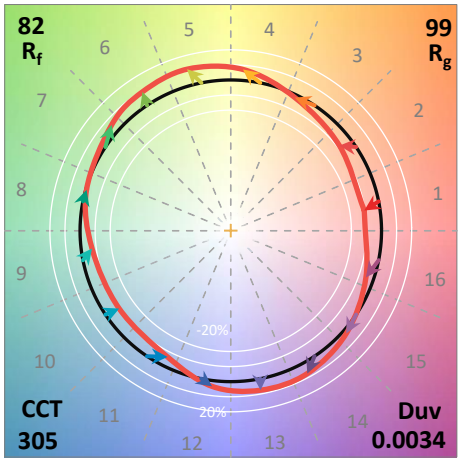
Spectral Power Distribution Comparison

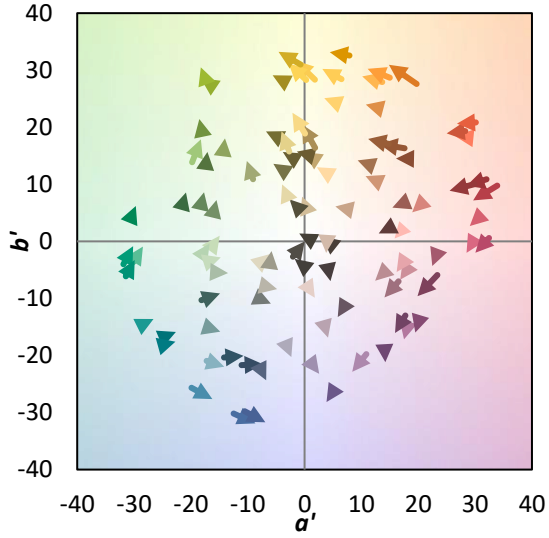


Color Vector Graphics









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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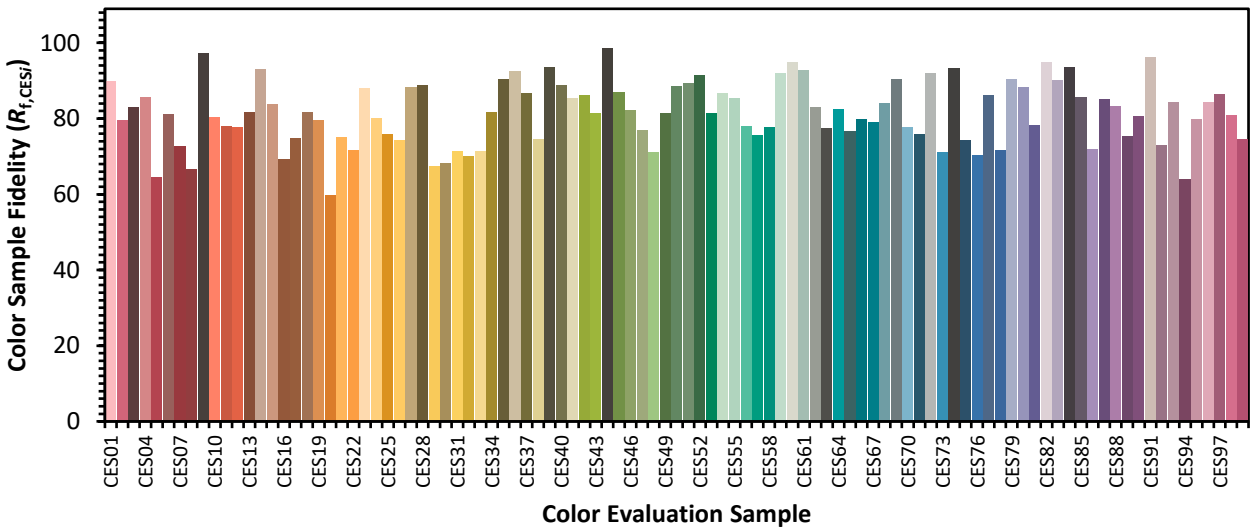

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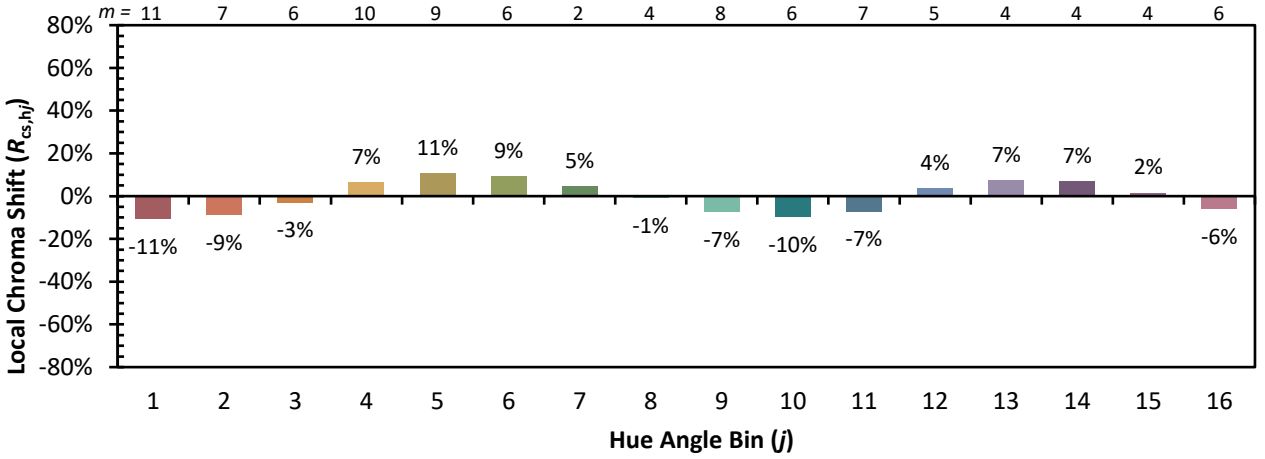
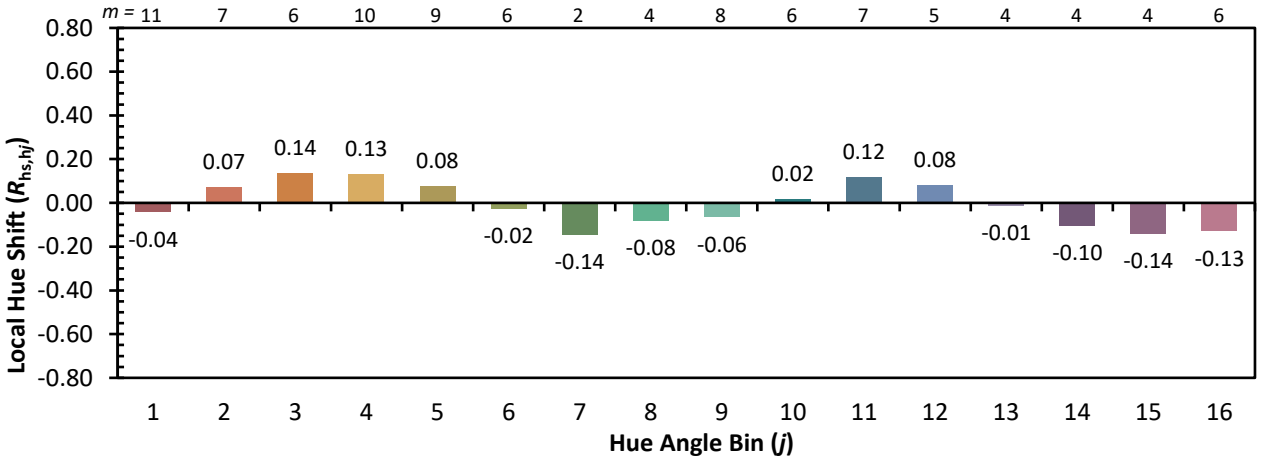
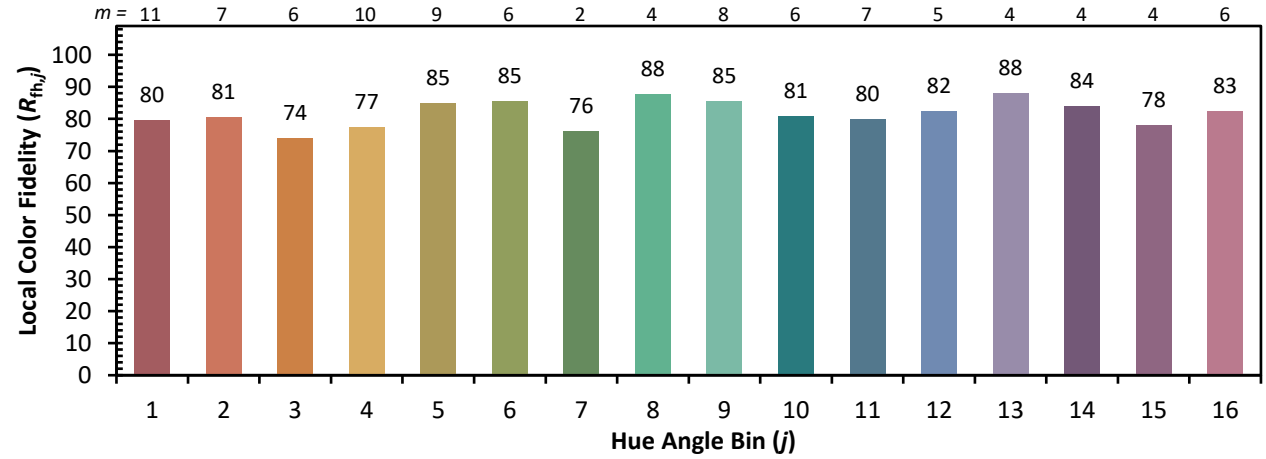
Color Rendition by Hue-Angle Bin







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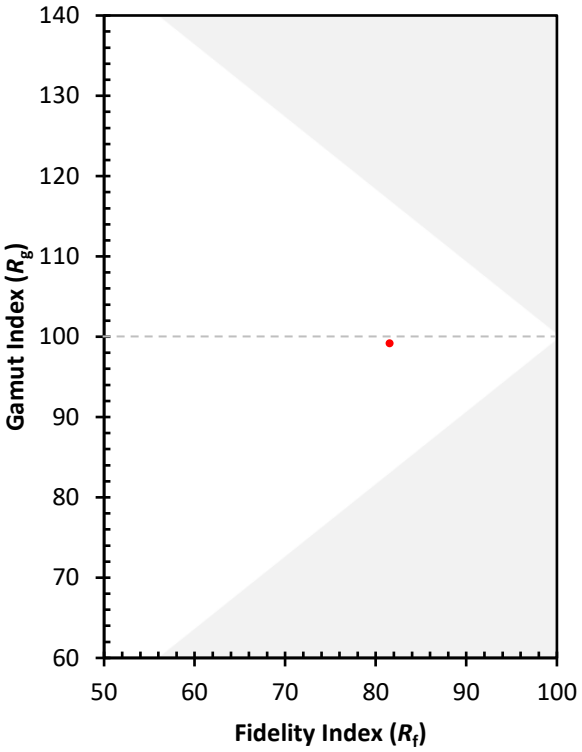
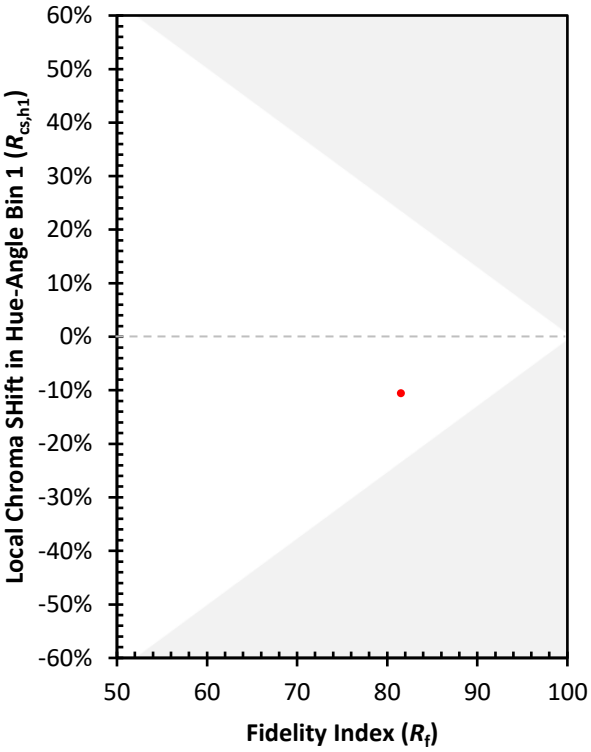
Measure Comparisons





(END OF REPORT)