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: P638481

Luminaire Tested: GWS-SA4E-830-U-SLL-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:	P638481
	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-SA4E-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:	14719.2 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:	B2 - U0 - G3

Input Watts (W):	202.6
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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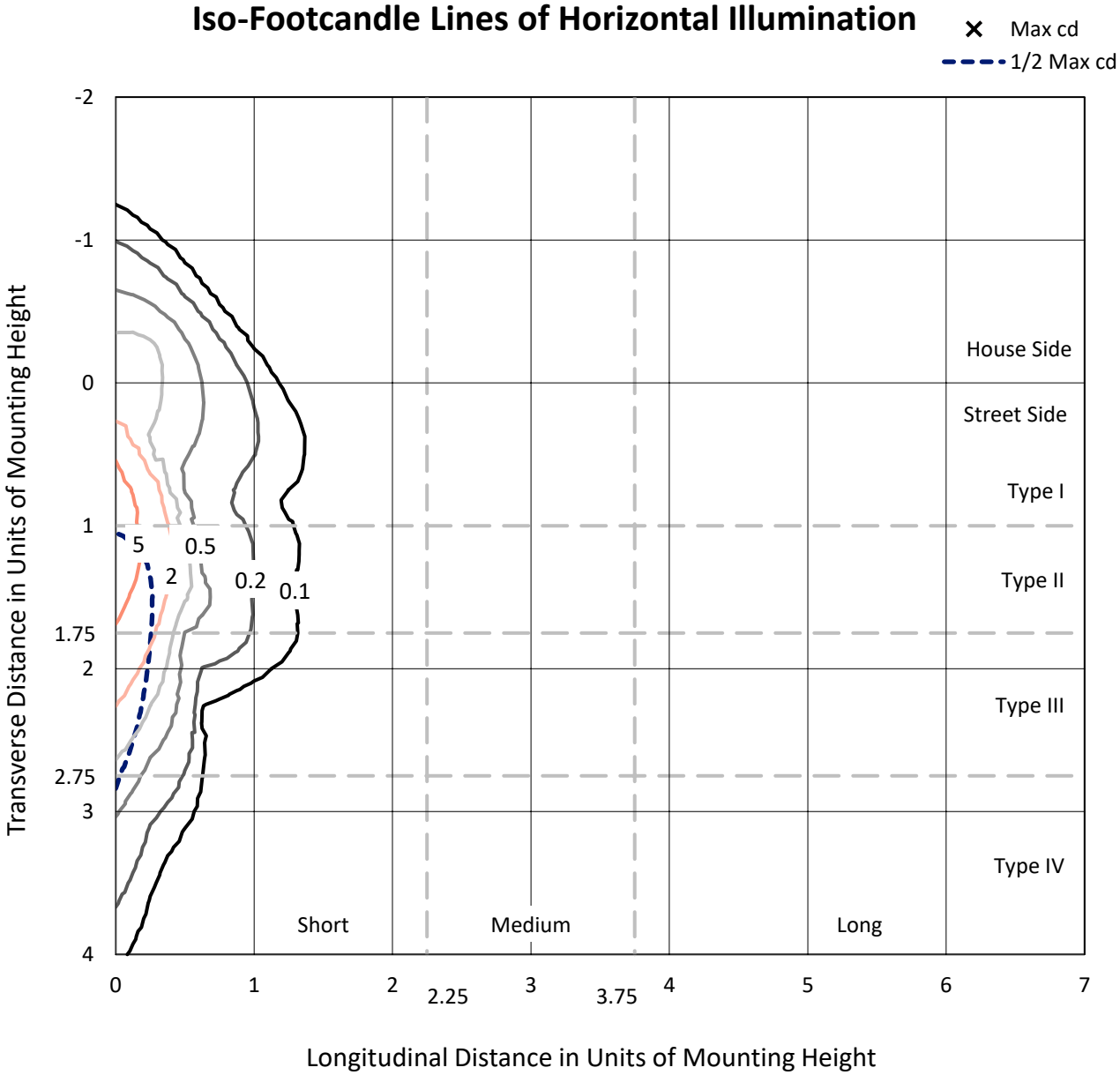
Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 6.6 fc
Type III - Short - N/A

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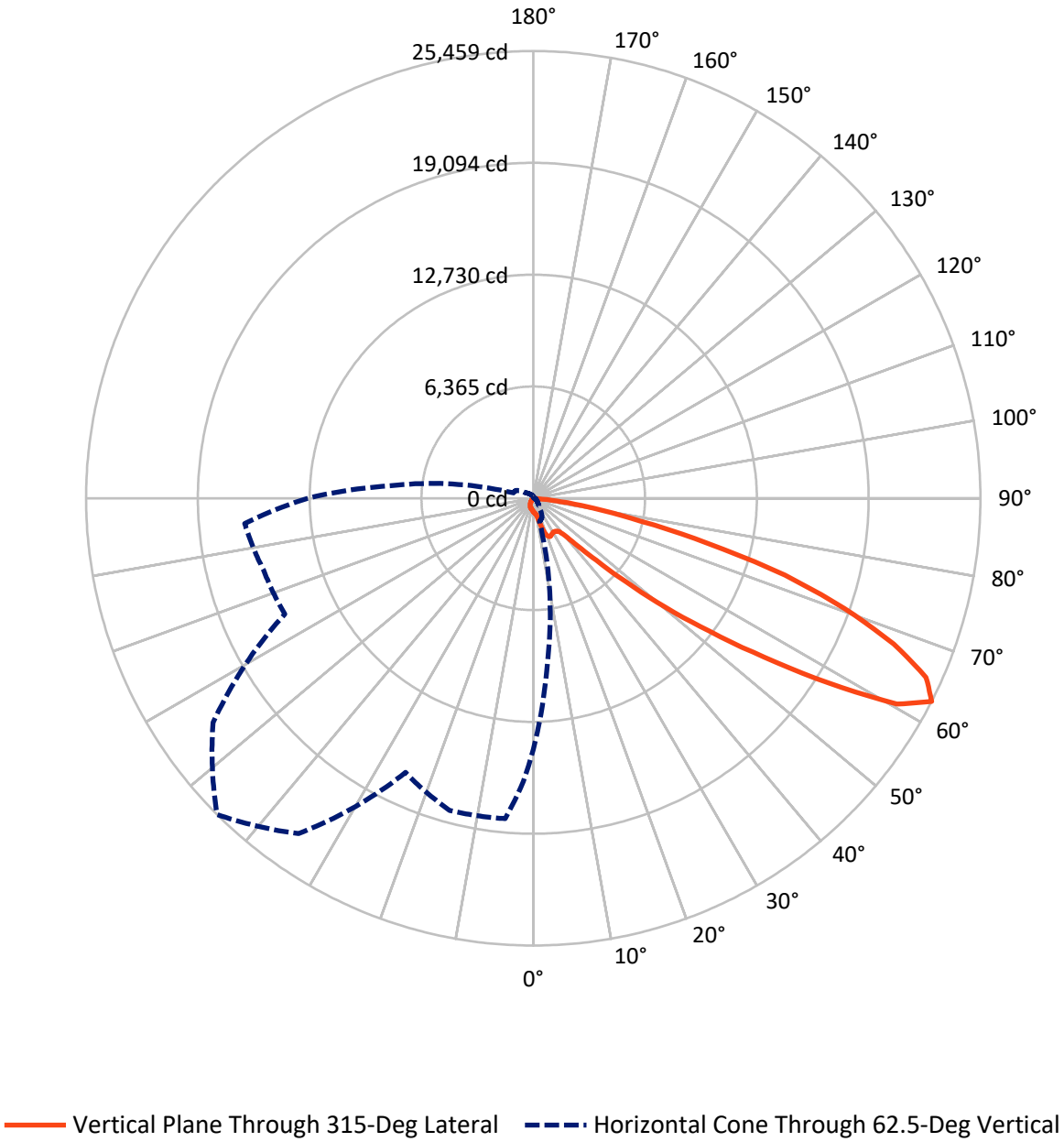
Luminous Intensity Polar Plot



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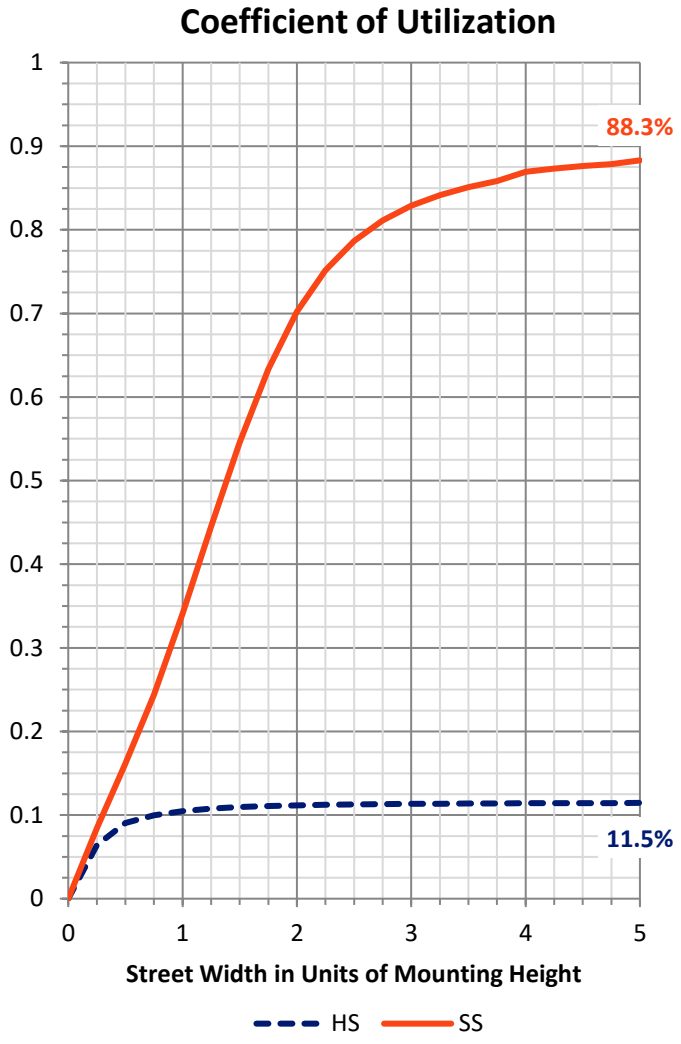
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1710.2	0.0	1710.2
	% Fixture	11.6	0.0	11.6
Street Side	Lumens	13009.0	0.0	13009.0
	% Fixture	88.4	0.0	88.4
Total	Lumens	14719.2	0.0	14719.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	0.4
10°-20°	225.9	1.5
20°-30°	510.4	3.5
30°-40°	879.3	6.0
40°-50°	1658.7	11.3
50°-60°	3703.5	25.2
60°-70°	4953.3	33.7
70°-80°	2484.0	16.9
80°-90°	238.1	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°	14719.2	100.0
0°-180°	14719.2	100.0



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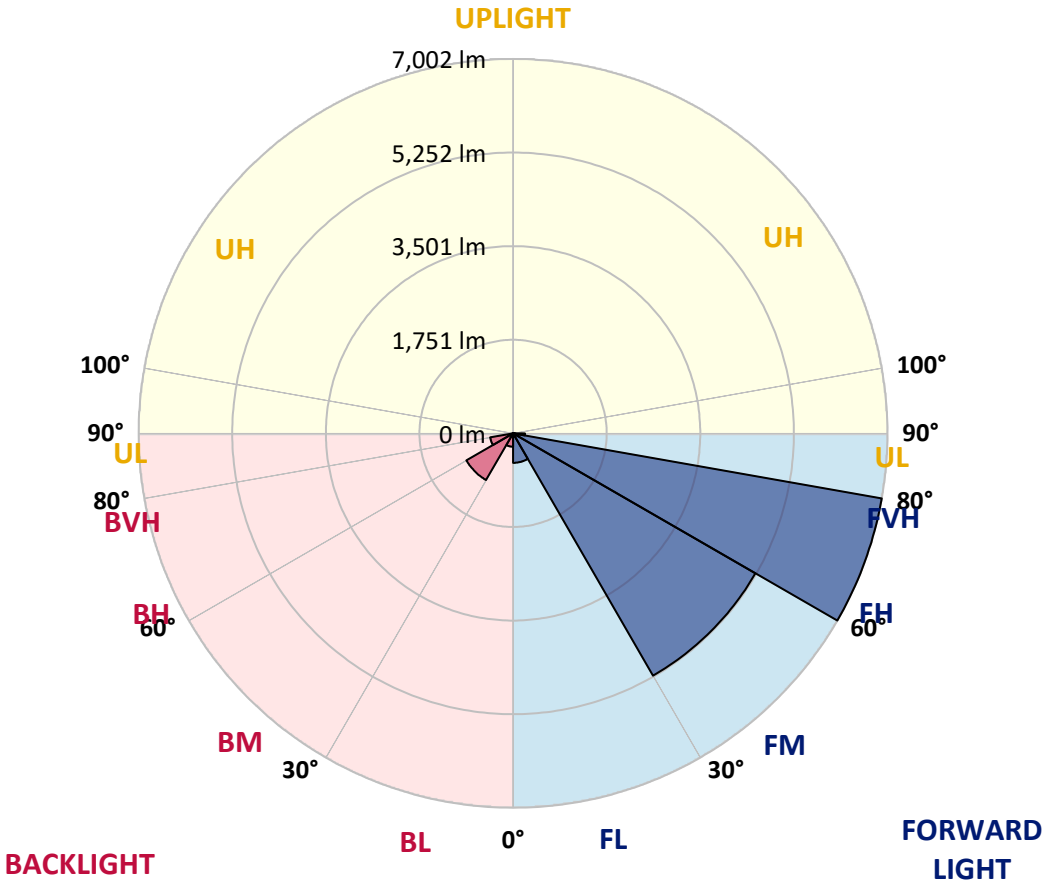
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	551.3	3.7			
FM	(30°-60°)	5233.1	35.6			
FH	(60°-80°)	7002.4	47.6			G3/7500
FVH	(80°-90°)	222.2	1.5			G2/225
BL	(0°-30°)	251.0	1.7	B1/500		
BM	(30°-60°)	1008.4	6.9	B2/2500		
BH	(60°-80°)	434.9	3.0	B1/500		G1/500
BVH	(80°-90°)	15.8	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	754.6	752.9	749.4	739.0	730.2	725.0	714.6	714.6	712.8	709.3	702.4
5°	730.2	723.3	716.3	697.1	676.2	664.0	650.1	648.3	648.3	644.8	643.1
7.5°	691.9	684.9	676.2	644.8	625.7	613.5	601.3	599.5	594.3	594.3	594.3
10°	671.0	660.5	646.6	611.7	592.6	582.1	573.4	568.2	564.7	559.4	557.7
12.5°	716.3	697.1	667.5	604.8	578.6	564.7	554.2	550.7	540.3	533.3	528.1
15°	857.5	810.4	751.2	620.4	573.4	552.5	538.5	531.6	522.8	510.6	501.9
17.5°	1089.3	1021.3	922.0	671.0	568.2	542.0	524.6	512.4	500.2	486.2	475.8
20°	1409.9	1308.9	1190.4	763.4	568.2	529.8	508.9	493.2	475.8	460.1	447.9
22.5°	1817.8	1716.7	1514.5	920.2	575.1	514.1	489.7	468.8	447.9	434.0	420.0
25°	2274.4	2131.5	1943.3	1110.2	594.3	493.2	467.1	446.2	427.0	409.6	393.9
27.5°	2783.3	2628.2	2377.2	1380.3	636.1	472.3	442.7	423.5	406.1	388.7	367.7
30°	3252.1	3159.7	2903.6	1704.5	704.1	458.4	423.5	406.1	388.7	366.0	346.8
32.5°	3815.1	3651.2	3440.3	2074.0	794.7	444.4	407.8	383.4	369.5	348.6	327.7
35°	4381.5	4242.0	3964.9	2528.8	895.8	430.5	388.7	366.0	353.8	329.4	306.7
37.5°	4965.3	4933.9	4660.3	3032.5	995.2	414.8	366.0	352.1	339.9	312.0	285.8
40°	5540.5	5482.9	5230.2	3607.7	1056.2	397.4	346.8	338.1	324.2	292.8	263.2
42.5°	6091.2	6047.6	5801.9	4158.4	1047.4	381.7	327.7	317.2	306.7	275.4	238.8
45°	6767.4	6695.9	6385.7	4566.2	958.6	399.1	308.5	291.1	289.3	259.7	214.4
47.5°	8032.7	7797.4	7271.1	4879.9	869.7	444.4	287.6	266.7	278.9	244.0	190.0
50°	9805.2	9528.0	8766.4	5123.9	867.9	503.7	284.1	244.0	270.1	231.8	169.1
52.5°	11586.3	11098.3	10172.9	5254.6	932.4	547.2	315.5	221.3	259.7	219.6	153.4
55°	13292.6	12280.0	10762.0	4822.4	983.0	594.3	373.0	209.1	240.5	205.7	144.7
57.5°	14918.6	13229.8	11018.2	3815.1	1152.0	613.5	407.8	214.4	212.6	188.2	137.7
60°	15141.7	13184.5	10500.5	2218.6	1270.5	580.4	393.9	238.8	186.5	167.3	125.5
62.5°	*14298.2*	*12307.9*	*9320.6*	*1383.8*	*1179.9*	*568.2*	*350.3*	*271.9*	*169.1*	*148.1*	*109.8*
65°	13017.2	10932.8	7771.3	892.3	894.1	630.9	306.7	266.7	158.6	130.7	94.1
67.5°	11014.7	9149.8	6122.6	597.8	505.4	538.5	268.4	183.0	155.1	111.5	73.2
70°	8039.7	6512.9	3985.8	399.1	301.5	430.5	224.8	130.7	146.4	92.4	52.3
72.5°	5876.8	4376.2	2225.6	261.4	170.8	251.0	165.6	94.1	113.3	68.0	36.6
75°	4229.8	3011.6	1270.5	167.3	113.3	137.7	108.1	64.5	73.2	54.0	33.1
77.5°	2035.6	1467.5	576.9	92.4	76.7	69.7	57.5	40.1	45.3	48.8	29.6
80°	76.7	57.5	43.6	45.3	48.8	31.4	26.1	20.9	26.1	33.1	15.7
82.5°	0.0	0.0	0.0	5.2	7.0	8.7	10.5	8.7	10.5	12.2	1.7
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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REPORT NUMBER: P638481
CATALOG NUMBER: GWS-SA4E-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	707.6	704.1	707.6	711.1	714.6	718.0	712.8	716.3	719.8	711.1	714.6
5°	651.8	650.1	660.5	665.8	672.7	676.2	672.7	672.7	671.0	660.5	660.5
7.5°	603.0	604.8	613.5	625.7	634.4	639.6	636.1	634.4	629.2	613.5	613.5
10°	566.4	566.4	580.4	590.8	603.0	608.2	604.8	599.5	594.3	578.6	576.9
12.5°	536.8	536.8	547.2	564.7	578.6	585.6	583.8	576.9	568.2	552.5	550.7
15°	508.9	507.2	522.8	538.5	557.7	566.4	562.9	557.7	542.0	528.1	524.6
17.5°	481.0	479.3	493.2	514.1	535.0	547.2	545.5	533.3	519.4	501.9	498.4
20°	453.1	449.6	467.1	488.0	508.9	521.1	517.6	507.2	489.7	472.3	468.8
22.5°	425.3	423.5	435.7	453.1	472.3	482.8	481.0	472.3	454.9	439.2	439.2
25°	393.9	393.9	402.6	414.8	428.7	434.0	435.7	432.2	421.8	413.1	413.1
27.5°	367.7	362.5	366.0	369.5	376.5	385.2	385.2	388.7	390.4	386.9	388.7
30°	346.8	338.1	332.9	325.9	322.4	325.9	329.4	341.6	353.8	360.8	364.3
32.5°	322.4	312.0	298.0	278.9	266.7	263.2	273.6	296.3	318.9	334.6	343.3
35°	298.0	284.1	257.9	230.1	214.4	209.1	221.3	247.5	280.6	308.5	320.7
37.5°	273.6	254.5	217.9	184.7	167.3	163.8	176.0	203.9	242.3	280.6	296.3
40°	245.7	223.1	179.5	144.7	130.7	127.2	137.7	165.6	205.7	249.2	273.6
42.5°	217.9	190.0	144.7	115.0	101.1	101.1	115.0	135.9	172.5	219.6	249.2
45°	190.0	160.3	118.5	92.4	83.7	85.4	94.1	115.0	144.7	193.5	221.3
47.5°	163.8	137.7	97.6	76.7	69.7	71.5	81.9	99.3	123.7	167.3	196.9
50°	141.2	116.8	85.4	64.5	59.3	62.7	73.2	88.9	109.8	148.1	172.5
52.5°	127.2	104.6	78.4	55.8	52.3	55.8	66.2	80.2	99.3	130.7	155.1
55°	120.3	102.8	78.4	50.5	45.3	48.8	59.3	73.2	88.9	118.5	139.4
57.5°	118.5	106.3	83.7	45.3	38.3	41.8	52.3	66.2	81.9	108.1	125.5
60°	111.5	101.1	81.9	36.6	29.6	34.9	43.6	57.5	74.9	101.1	116.8
62.5°	*97.6*	*88.9*	*71.5*	*29.6*	*22.7*	*26.1*	*36.6*	*50.5*	*68.0*	*92.4*	*109.8*
65°	80.2	71.5	55.8	19.2	13.9	17.4	27.9	43.6	59.3	83.7	99.3
67.5°	59.3	50.5	38.3	12.2	7.0	12.2	22.7	36.6	54.0	74.9	90.6
70°	36.6	29.6	20.9	7.0	5.2	10.5	20.9	34.9	48.8	69.7	85.4
72.5°	20.9	13.9	8.7	3.5	5.2	10.5	20.9	34.9	47.1	66.2	80.2
75°	15.7	8.7	3.5	1.7	3.5	8.7	19.2	31.4	45.3	62.7	76.7
77.5°	10.5	5.2	1.7	0.0	1.7	7.0	17.4	29.6	41.8	59.3	73.2
80°	1.7	0.0	0.0	0.0	0.0	5.2	15.7	26.1	38.3	52.3	64.5
82.5°	0.0	0.0	0.0	0.0	0.0	1.7	12.2	22.7	33.1	43.6	52.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	7.0	17.4	26.1	33.1	36.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7	17.4	20.9	24.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	712.8	723.3	723.3	730.2	739.0	754.6	763.4	775.6	784.3	793.0	796.5
5°	658.8	660.5	662.3	665.8	676.2	693.6	709.3	728.5	751.2	768.6	779.0
7.5°	613.5	613.5	613.5	618.7	629.2	641.4	657.0	683.2	709.3	730.2	747.7
10°	575.1	580.4	582.1	590.8	603.0	618.7	636.1	658.8	688.4	716.3	747.7
12.5°	550.7	556.0	564.7	573.4	585.6	603.0	622.2	651.8	712.8	770.3	836.6
15°	528.1	535.0	545.5	557.7	571.6	590.8	611.7	672.7	815.6	923.7	1028.3
17.5°	503.7	514.1	528.1	540.3	557.7	578.6	604.8	723.3	1003.9	1183.4	1361.1
20°	472.3	486.2	501.9	521.1	542.0	566.4	604.8	827.8	1275.8	1533.7	1769.0
22.5°	442.7	456.6	475.8	500.2	524.6	549.0	613.5	986.4	1626.1	1952.0	2250.0
25°	418.3	435.7	454.9	475.8	503.7	531.6	634.4	1209.5	2047.8	2467.8	2678.7
27.5°	395.6	416.5	435.7	453.1	477.5	508.9	681.4	1507.5	2546.3	2973.3	3138.8
30°	373.0	397.4	416.5	434.0	458.4	491.5	752.9	1887.5	3100.5	3515.3	3532.7
32.5°	353.8	376.5	399.1	416.5	439.2	477.5	852.2	2331.9	3668.7	4069.5	3905.7
35°	332.9	359.0	379.9	399.1	423.5	465.3	967.3	2811.2	4242.0	4578.4	4276.9
37.5°	312.0	341.6	367.7	381.7	406.1	453.1	1050.9	3311.4	4827.6	5075.1	4602.8
40°	292.8	325.9	355.5	369.5	381.7	437.4	1063.1	3823.8	5421.9	5564.9	4909.5
42.5°	271.9	308.5	334.6	353.8	364.3	427.0	989.9	4256.0	5920.4	6052.8	5310.4
45°	249.2	292.8	313.7	327.7	348.6	434.0	895.8	4590.6	6490.3	6718.6	5970.9
47.5°	226.6	275.4	292.8	303.3	331.1	475.8	861.0	4813.7	7429.7	7903.7	7084.6
50°	205.7	259.7	278.9	277.1	327.7	529.8	899.3	4982.7	8841.4	9399.1	8611.3
52.5°	183.0	242.3	264.9	257.9	353.8	571.6	976.0	5116.9	9927.2	11152.4	10662.6
55°	163.8	223.1	244.0	242.3	402.6	603.0	1035.2	4409.4	10376.8	12781.9	12973.6
57.5°	149.9	202.2	219.6	249.2	434.0	603.0	1197.3	3130.1	10385.5	13981.0	16041.0
60°	137.7	183.0	195.2	273.6	421.8	571.6	1185.1	1917.1	9571.6	13899.1	17672.3
62.5°	*127.2*	*165.6*	*181.3*	*280.6*	*373.0*	*566.4*	*1070.1*	*1188.6*	*8163.4*	*12841.2*	*16488.9*
65°	118.5	151.6	174.3	257.9	338.1	606.5	721.5	854.0	6621.0	11635.1	15131.2
67.5°	109.8	139.4	184.7	210.9	306.7	542.0	521.1	606.5	5197.1	10312.3	13885.1
70°	102.8	132.5	195.2	172.5	268.4	423.5	369.5	460.1	3978.9	8604.3	12130.1
72.5°	97.6	123.7	163.8	135.9	217.9	327.7	257.9	334.6	2600.3	6716.9	9888.8
75°	92.4	113.3	120.3	109.8	162.1	214.4	195.2	224.8	1549.4	4909.5	7502.9
77.5°	90.6	106.3	97.6	88.9	109.8	127.2	148.1	151.6	756.4	2455.6	3931.8
80°	80.2	95.9	83.7	73.2	74.9	83.7	109.8	101.1	172.5	623.9	1049.2
82.5°	62.7	74.9	69.7	61.0	61.0	61.0	73.2	68.0	55.8	280.6	474.0
85°	43.6	52.3	52.3	48.8	47.1	47.1	45.3	43.6	15.7	17.4	26.1
87.5°	29.6	36.6	38.3	36.6	31.4	27.9	24.4	20.9	7.0	0.0	3.5
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: P638481
CATALOG NUMBER: GWS-SA4E-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4	763.4
2.5°	808.7	813.9	813.9	806.9	801.7	787.8	773.8	759.9	756.4	754.6
5°	808.7	829.6	840.0	838.3	826.1	803.4	773.8	742.4	733.7	730.2
7.5°	796.5	836.6	867.9	873.2	850.5	810.4	756.4	709.3	697.1	691.9
10°	824.4	902.8	965.5	974.2	948.1	869.7	782.5	702.4	683.2	671.0
12.5°	974.2	1103.2	1179.9	1216.5	1166.0	1066.6	922.0	779.0	735.5	716.3
15°	1277.5	1460.5	1606.9	1606.9	1559.8	1383.8	1200.8	969.0	909.8	857.5
17.5°	1666.1	1896.2	2025.2	2011.2	1939.8	1816.0	1596.4	1263.6	1143.3	1089.3
20°	2108.8	2246.5	2276.1	2267.4	2236.0	2164.6	2013.0	1655.7	1493.6	1409.9
22.5°	2492.2	2455.6	2412.1	2377.2	2368.5	2389.4	2368.5	2093.1	1965.9	1817.8
25°	2751.9	2544.5	2413.8	2351.1	2380.7	2501.0	2631.7	2528.8	2427.8	2274.4
27.5°	2893.1	2534.1	2345.8	2281.4	2331.9	2502.7	2786.8	2961.1	2856.5	2783.3
30°	2969.8	2525.4	2302.3	2239.5	2316.2	2530.6	2894.8	3365.4	3368.9	3252.1
32.5°	3079.6	2581.1	2311.0	2253.5	2356.3	2614.2	3030.8	3776.7	3877.8	3815.1
35°	3203.3	2666.5	2351.1	2298.8	2426.0	2725.8	3182.4	4191.5	4402.4	4381.5
37.5°	3320.1	2762.4	2445.2	2394.6	2532.3	2821.6	3328.8	4599.3	4892.1	4965.3
40°	3442.1	2896.6	2734.5	2783.3	2860.0	2973.3	3459.5	4953.1	5430.7	5540.5
42.5°	3729.7	3361.9	3609.4	3701.8	3712.2	3478.7	3745.3	5406.3	5960.5	6091.2
45°	4371.0	4189.8	4899.1	5029.8	4961.8	4254.2	4433.8	6059.8	6701.2	6767.4
47.5°	5181.4	5265.1	6664.6	7116.0	6708.1	5169.2	5268.6	7434.9	8057.1	8032.7
50°	6126.0	6521.7	8668.8	9733.7	8757.7	6357.8	6230.6	9125.4	9880.1	9805.2
52.5°	7243.2	7982.2	11077.4	12590.2	11666.5	7694.6	7642.3	11365.0	11825.1	11586.3
55°	8649.7	9392.1	13848.5	15962.6	14648.5	9325.9	9505.4	13961.8	14050.7	13292.6
57.5°	10748.0	11230.8	17114.6	19829.9	17761.2	11542.8	12844.6	17417.8	16354.7	14918.6
60°	14557.8	13595.8	20270.8	23786.1	21072.5	14660.7	17248.8	19465.7	17121.5	15141.7
62.5°	15884.1	15603.5	22247.2	25459.2	23299.9	17220.9	18393.8	18304.9	16128.1	14298.2
65°	13874.7	15103.4	21893.4	24575.6	23014.0	16799.1	16506.3	17023.9	15009.2	13017.2
67.5°	12816.8	13928.7	20553.2	22137.4	21429.8	15368.3	14713.0	14571.8	12600.6	11014.7
70°	11750.1	12851.6	18609.9	18806.9	18477.5	13036.4	12175.4	11229.0	9418.2	8039.7
72.5°	10467.4	11073.9	15913.8	14979.6	14606.6	10239.1	10057.9	8456.2	7060.2	5876.8
75°	9128.9	8952.9	12407.2	10280.9	10559.8	7966.5	8494.5	6209.7	5172.7	4229.8
77.5°	6640.2	6509.5	8309.8	6244.6	6915.5	5218.0	4688.2	2478.3	2359.8	2035.6
80°	3705.3	4466.9	4487.8	3499.6	4365.8	3402.0	1172.9	81.9	52.3	76.7
82.5°	1721.9	1920.6	2433.0	1622.6	2490.5	1685.3	242.3	0.0	0.0	0.0
85°	557.7	815.6	683.2	238.8	603.0	569.9	40.1	0.0	0.0	0.0
87.5°	33.1	68.0	17.4	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.

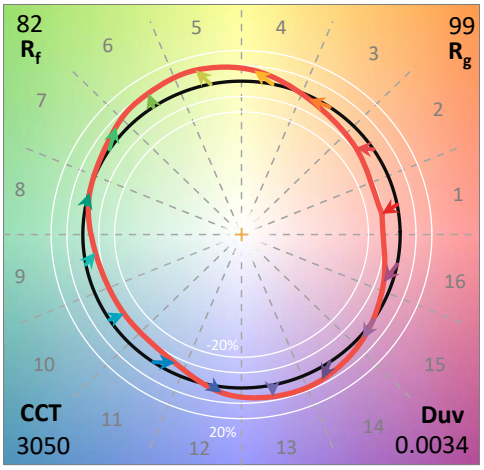
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

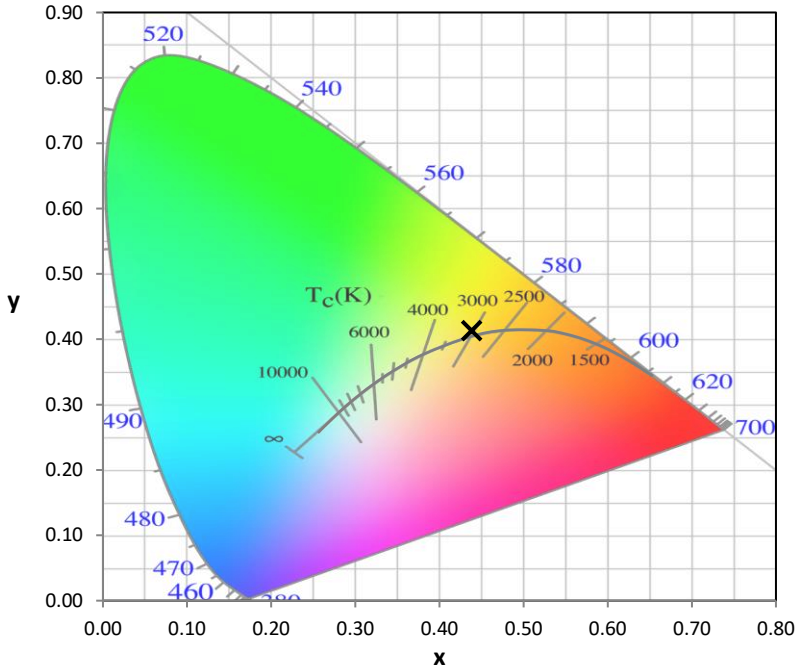
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

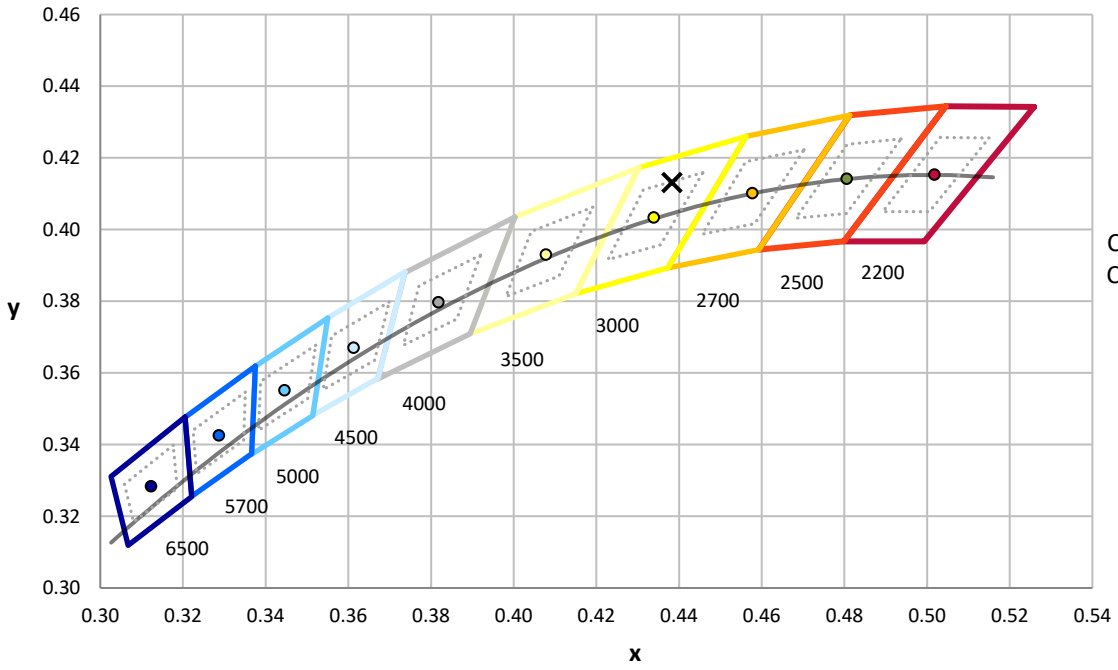
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

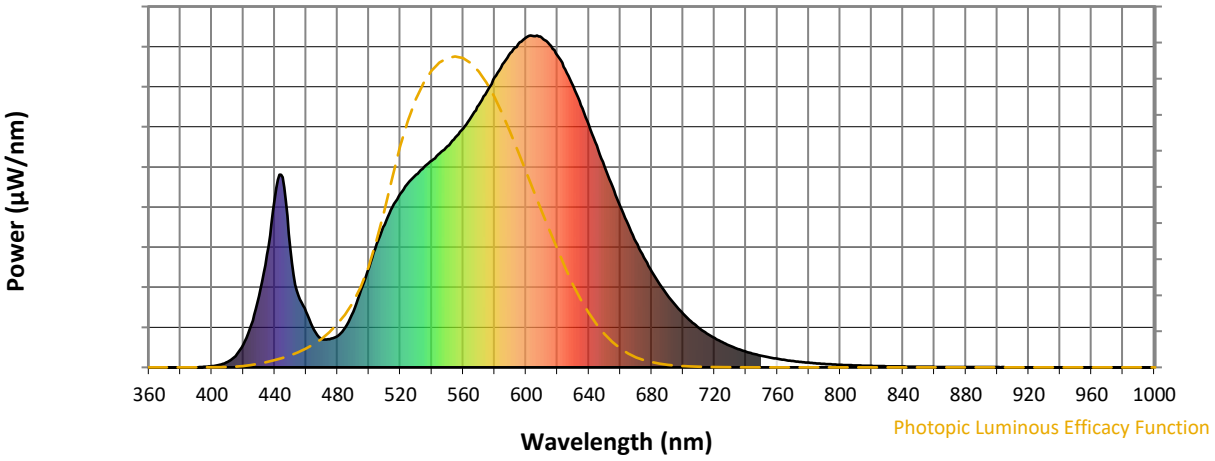


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

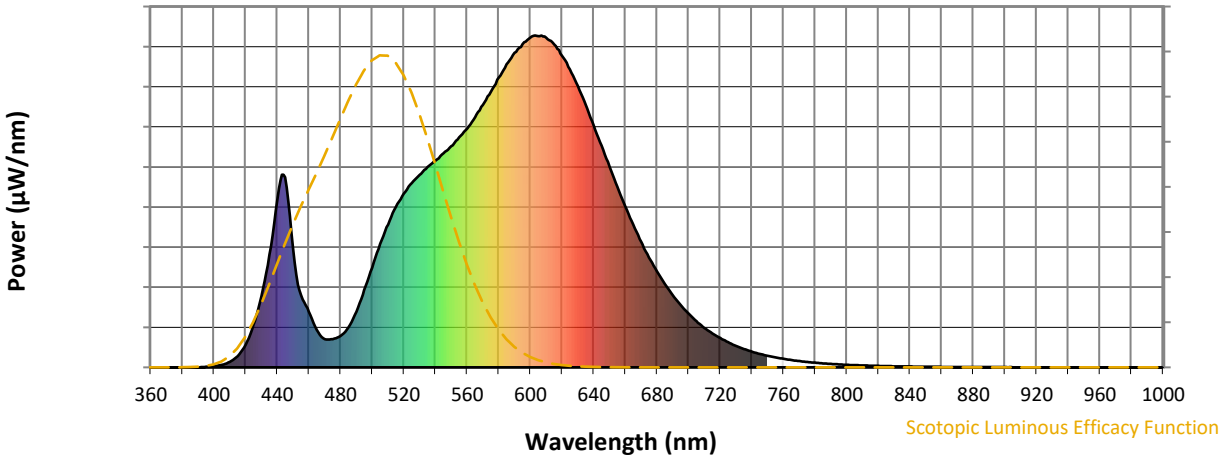


Photopic Lumens: NR

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

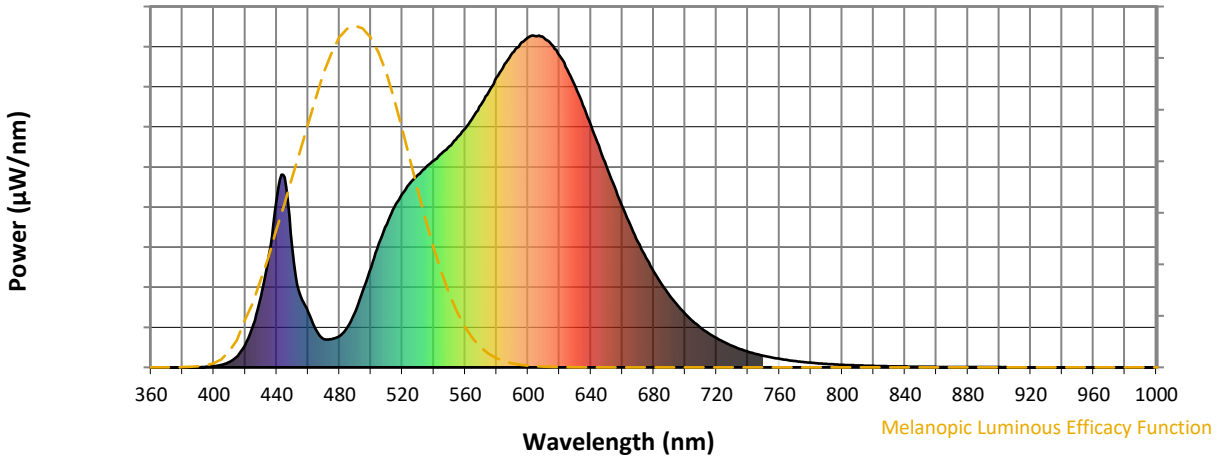


Scotopic Lumens: NR **S/P: 1.27**

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			

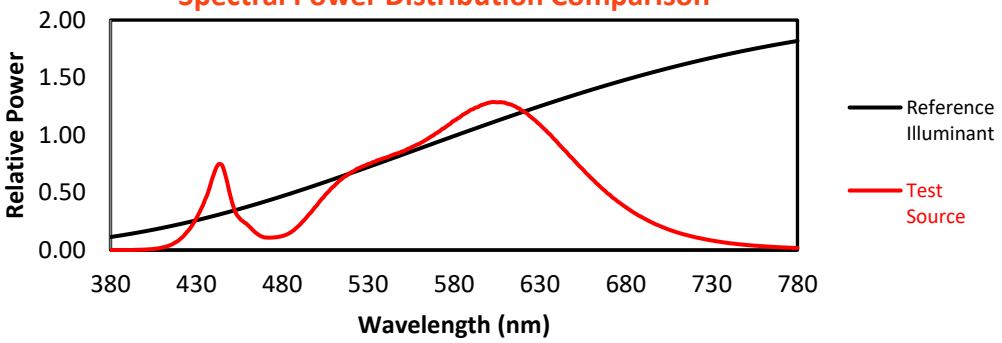
REPORT NUMBER: SP1-2408-195-9

TM-30-18

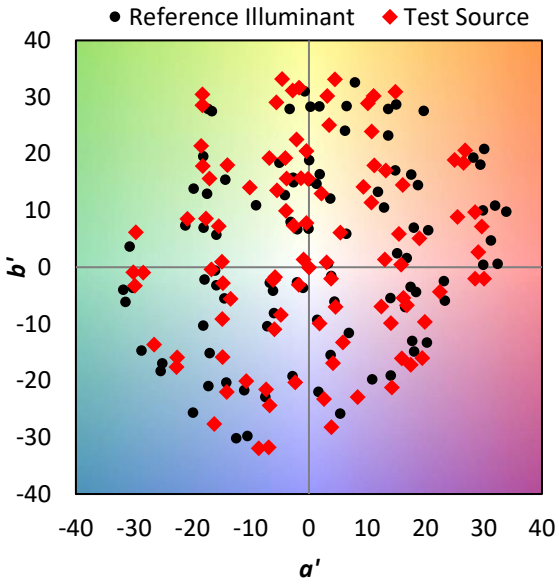
Summary

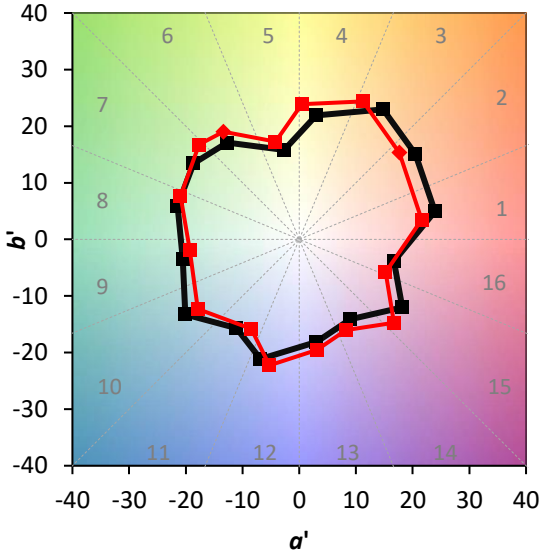
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

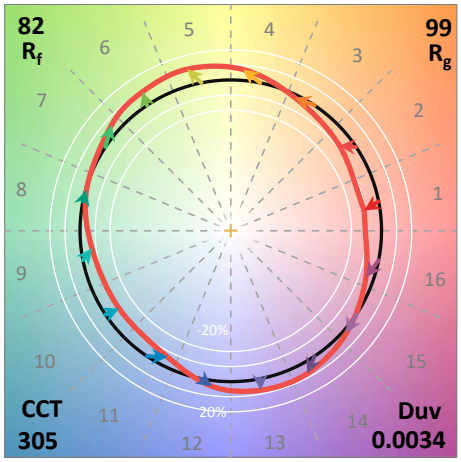
Spectral Power Distribution Comparison

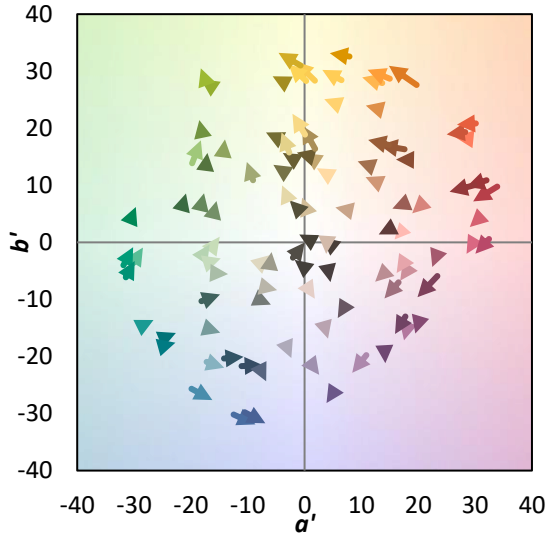


Color Vector Graphics







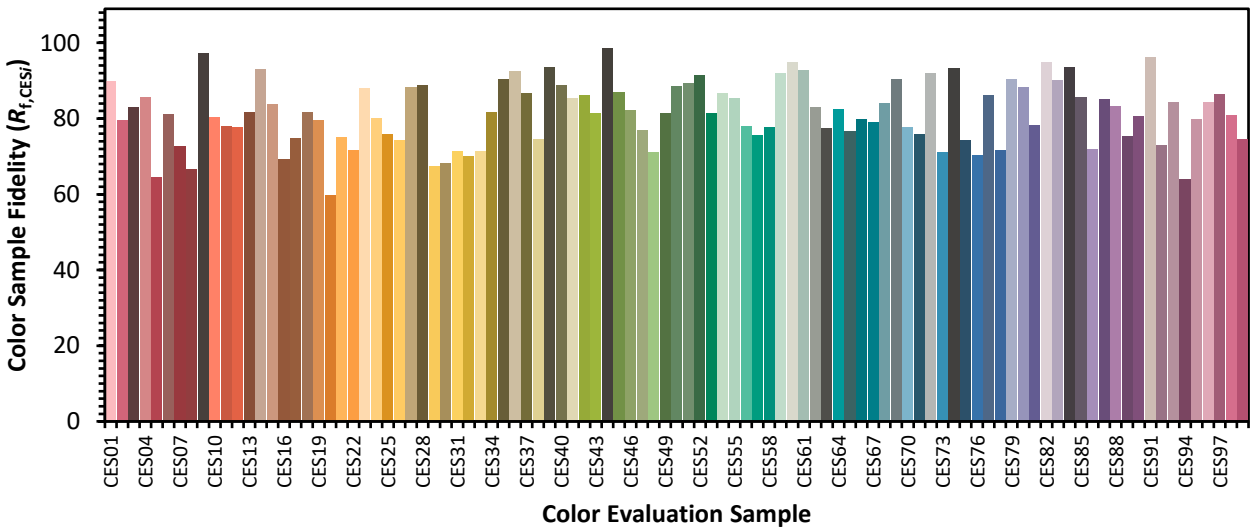


REPORT NUMBER: SP1-2408-195-9

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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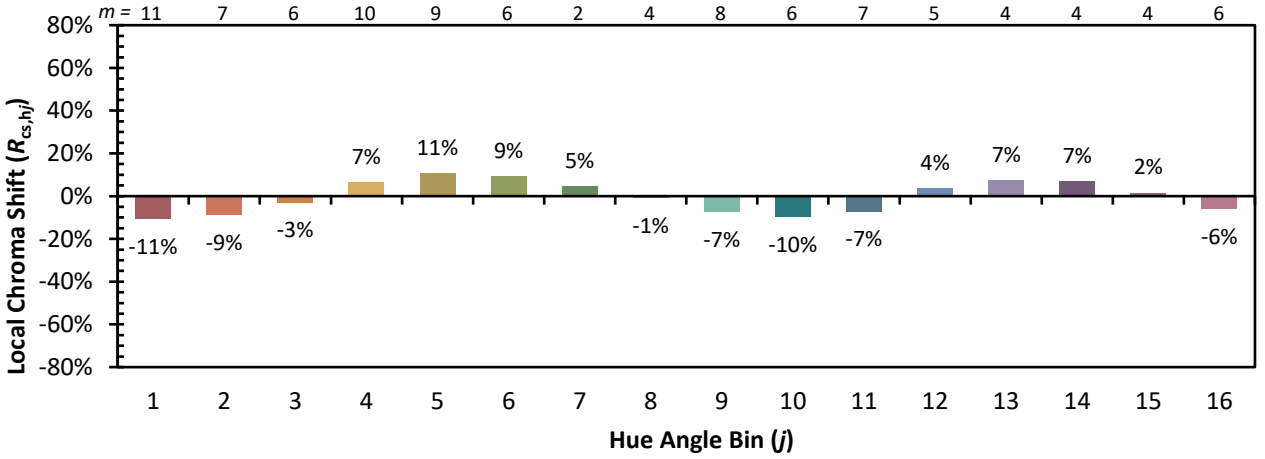
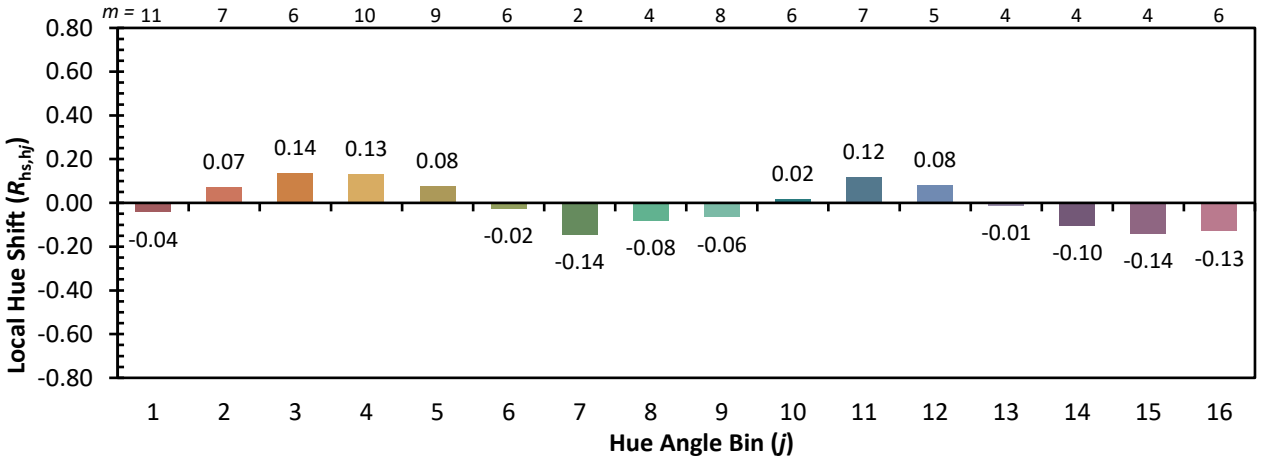
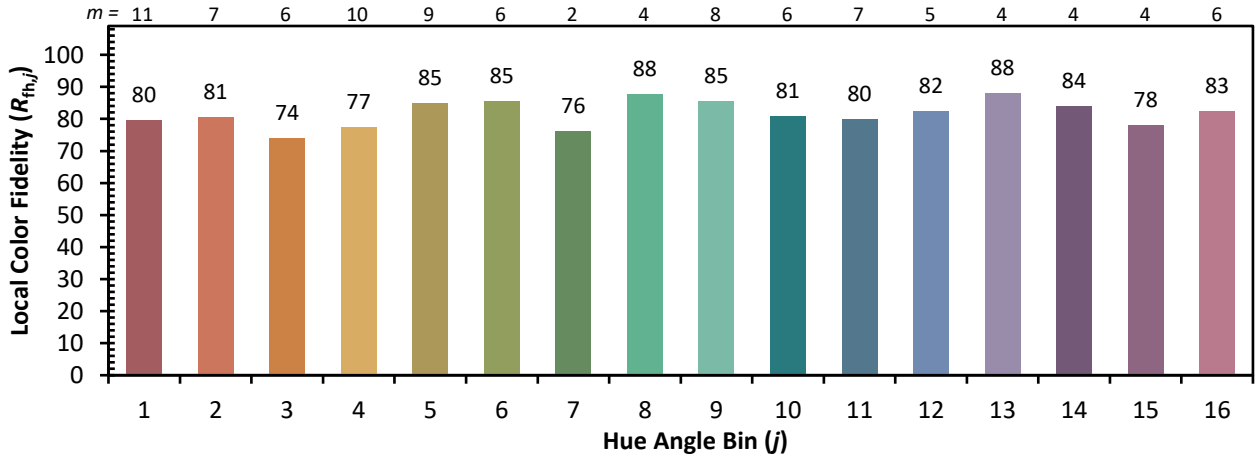
Color Rendition by Hue-Angle Bin







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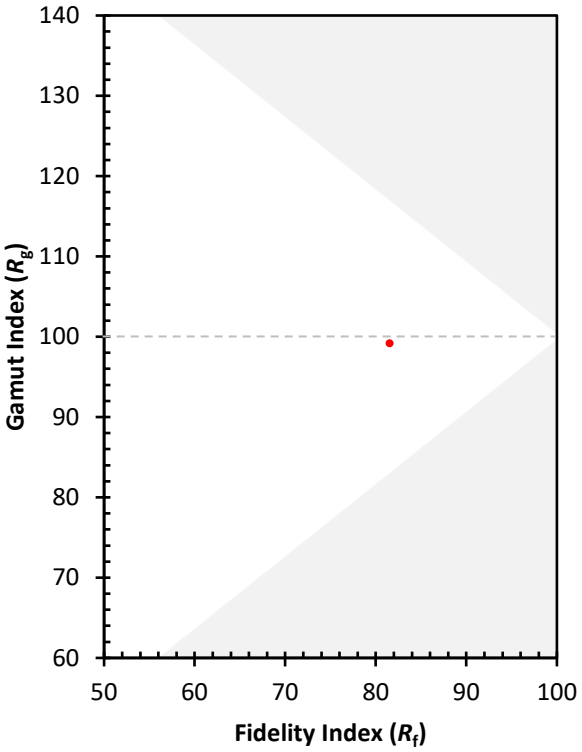
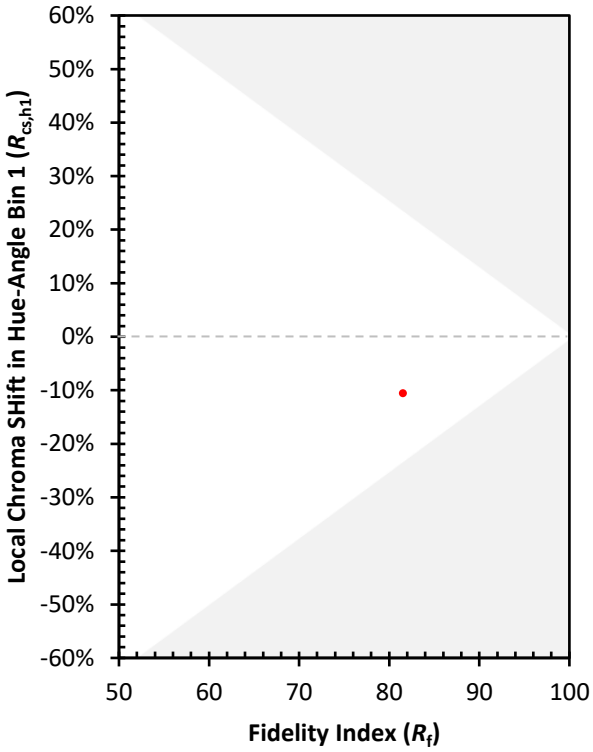
Measure Comparisons





(END OF REPORT)