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: P634521

Luminaire Tested: GWS-SA3B-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:	P634521
	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-SA3B-830-U-SLL-W-HSS
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5002.9 lumens
Efficiency:	N/A
Efficacy:	73.2 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B1 - U0 - G2

Input Watts (W):	68.3
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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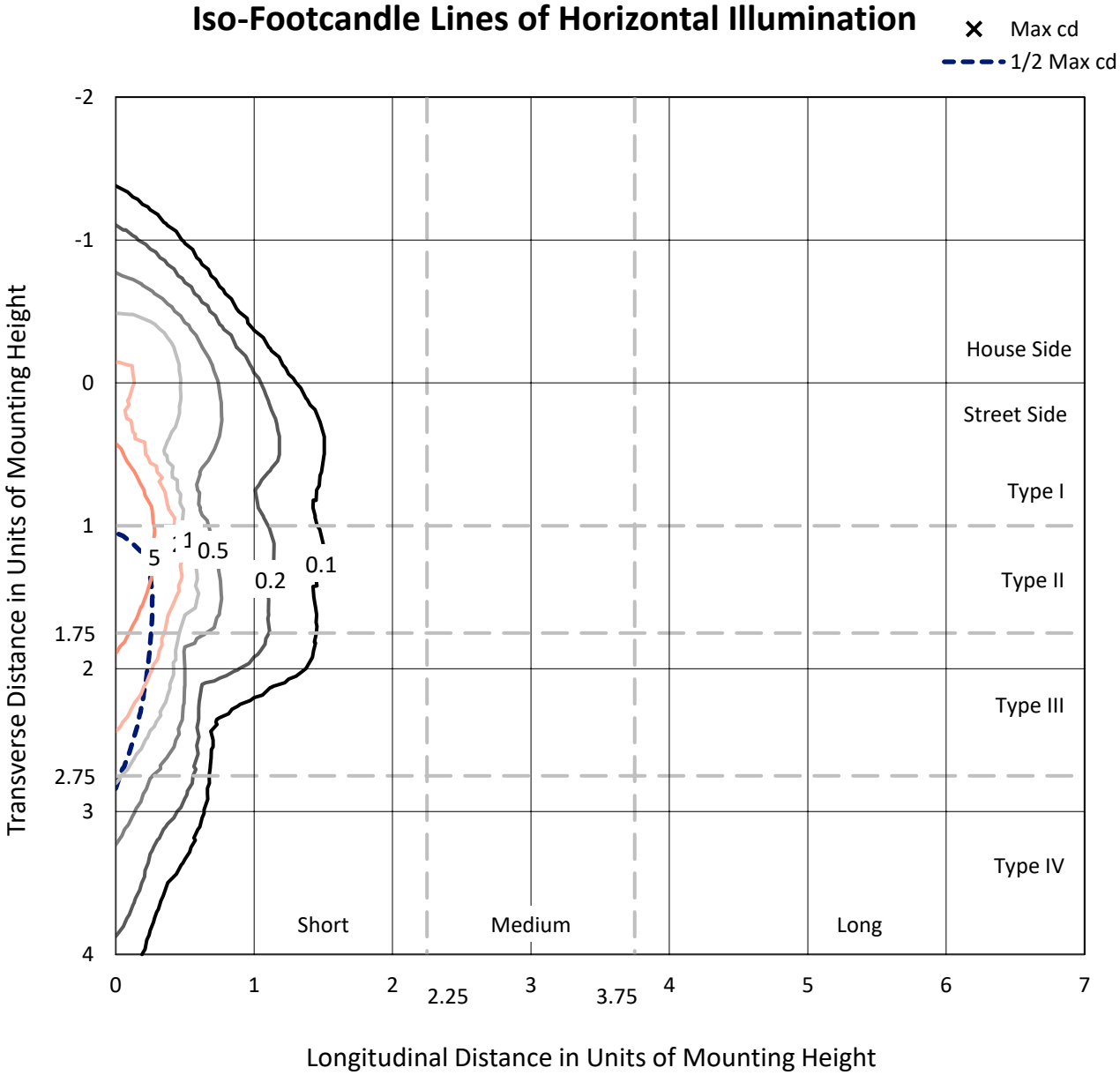
Iso-Footcandle Lines of Horizontal Illumination



Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
Type III - Short - N/A

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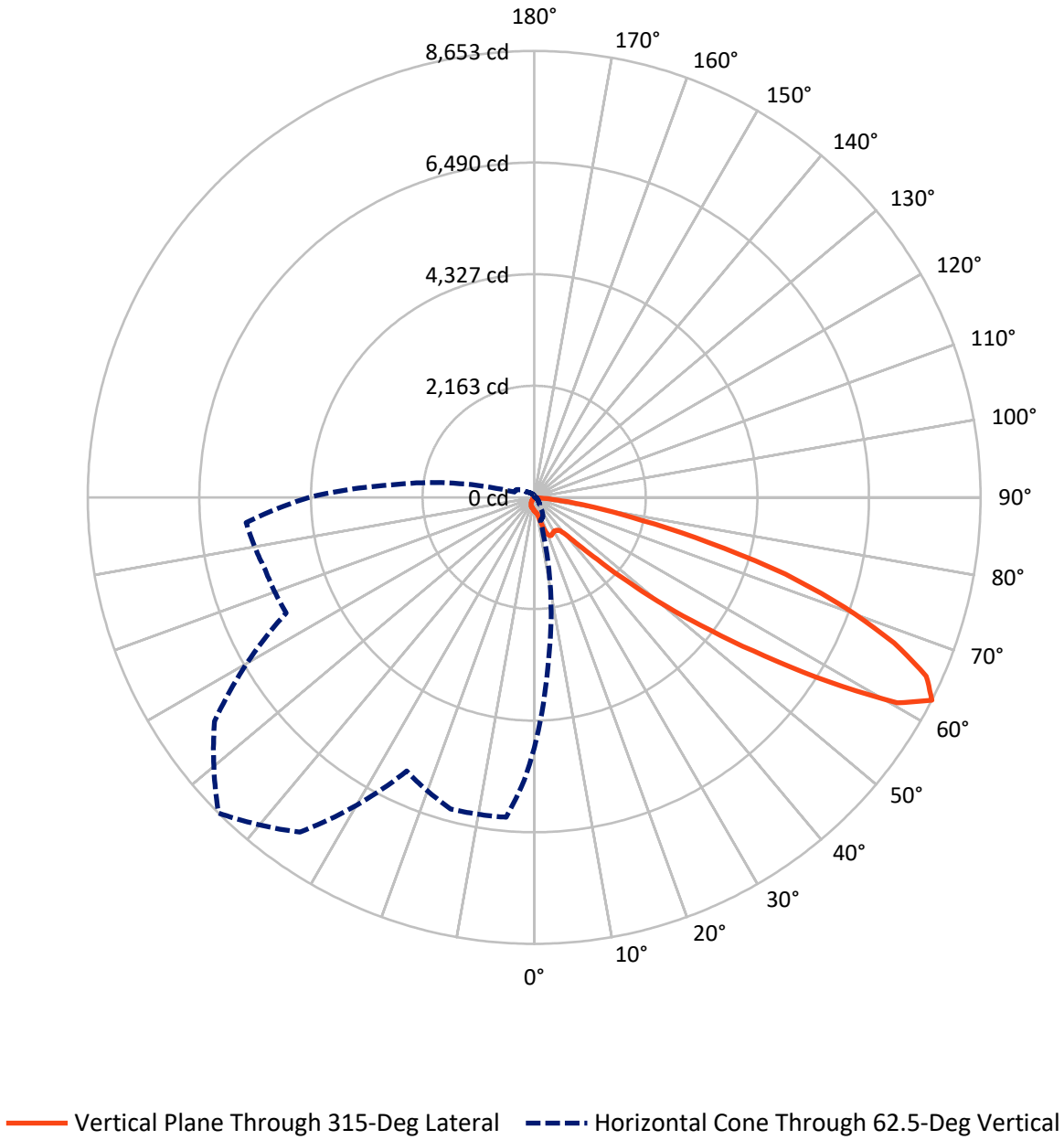
Luminous Intensity Polar Plot



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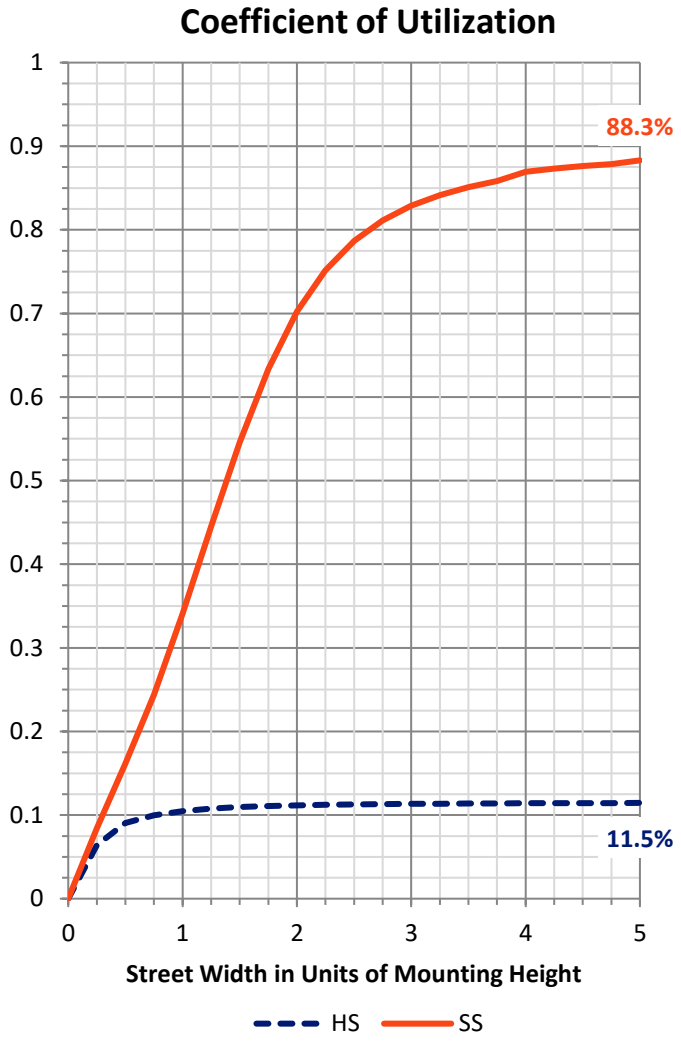
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	581.3	0.0	581.3
	% Fixture	11.6	0.0	11.6
Street Side	Lumens	4421.6	0.0	4421.6
	% Fixture	88.4	0.0	88.4
Total	Lumens	5002.9	0.0	5002.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	0.4
10°-20°	76.8	1.5
20°-30°	173.5	3.5
30°-40°	298.9	6.0
40°-50°	563.8	11.3
50°-60°	1258.8	25.2
60°-70°	1683.6	33.7
70°-80°	844.3	16.9
80°-90°	80.9	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°	5002.9	100.0
0°-180°	5002.9	100.0



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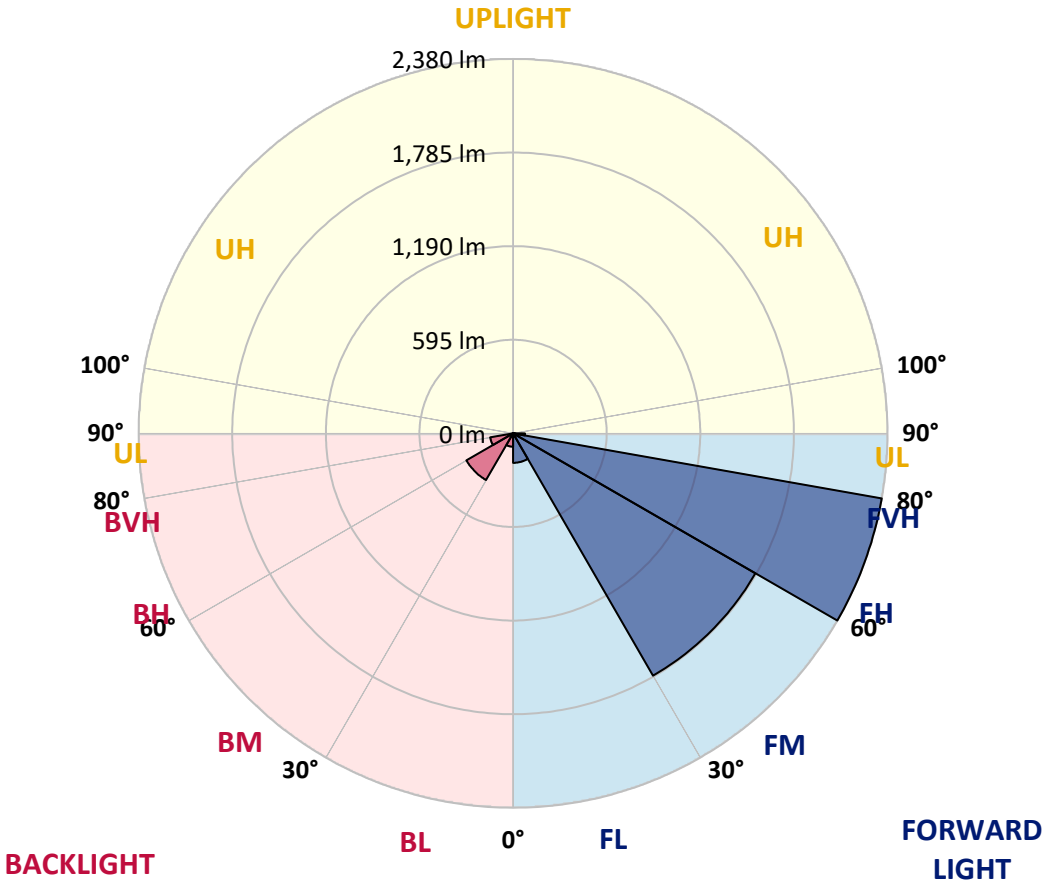
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	187.4	3.7			
FM	(30°-60°)	1778.7	35.6			
FH	(60°-80°)	2380.0	47.6			G2/5000
FVH	(80°-90°)	75.5	1.5			G1/100
BL	(0°-30°)	85.3	1.7	B0/110		
BM	(30°-60°)	342.8	6.9	B1/1000		
BH	(60°-80°)	147.8	3.0	B1/500		G1/500
BVH	(80°-90°)	5.4	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5
2.5°	256.5	255.9	254.7	251.2	248.2	246.4	242.9	242.9	242.3	241.1	238.7
5°	248.2	245.8	243.5	236.9	229.8	225.7	221.0	220.4	220.4	219.2	218.6
7.5°	235.2	232.8	229.8	219.2	212.7	208.5	204.4	203.8	202.0	202.0	202.0
10°	228.1	224.5	219.8	207.9	201.4	197.9	194.9	193.1	191.9	190.2	189.6
12.5°	243.5	236.9	226.9	205.6	196.7	191.9	188.4	187.2	183.6	181.3	179.5
15°	291.4	275.5	255.3	210.9	194.9	187.8	183.0	180.7	177.7	173.6	170.6
17.5°	370.2	347.1	313.4	228.1	193.1	184.2	178.3	174.2	170.0	165.3	161.7
20°	479.2	444.9	404.6	259.5	193.1	180.1	173.0	167.6	161.7	156.4	152.2
22.5°	617.8	583.5	514.8	312.8	195.5	174.7	166.5	159.3	152.2	147.5	142.8
25°	773.0	724.5	660.5	377.3	202.0	167.6	158.8	151.6	145.1	139.2	133.9
27.5°	946.0	893.3	808.0	469.2	216.2	160.5	150.5	143.9	138.0	132.1	125.0
30°	1105.4	1074.0	986.9	579.3	239.3	155.8	143.9	138.0	132.1	124.4	117.9
32.5°	1296.7	1241.0	1169.3	704.9	270.1	151.1	138.6	130.3	125.6	118.5	111.4
35°	1489.2	1441.8	1347.6	859.5	304.5	146.3	132.1	124.4	120.3	112.0	104.3
37.5°	1687.7	1677.0	1584.0	1030.7	338.2	141.0	124.4	119.7	115.5	106.0	97.1
40°	1883.1	1863.6	1777.7	1226.2	359.0	135.1	117.9	114.9	110.2	99.5	89.4
42.5°	2070.3	2055.5	1972.0	1413.4	356.0	129.7	111.4	107.8	104.3	93.6	81.2
45°	2300.2	2275.9	2170.4	1552.0	325.8	135.7	104.8	98.9	98.3	88.3	72.9
47.5°	2730.2	2650.3	2471.4	1658.6	295.6	151.1	97.7	90.6	94.8	82.9	64.6
50°	3332.7	3238.5	2979.6	1741.6	295.0	171.2	96.6	82.9	91.8	78.8	57.5
52.5°	3938.1	3772.2	3457.7	1786.0	316.9	186.0	107.2	75.2	88.3	74.6	52.1
55°	4518.0	4173.8	3657.9	1639.1	334.1	202.0	126.8	71.1	81.7	69.9	49.2
57.5°	5070.7	4496.7	3745.0	1296.7	391.6	208.5	138.6	72.9	72.3	64.0	46.8
60°	5146.5	4481.3	3569.0	754.1	431.8	197.3	133.9	81.2	63.4	56.9	42.7
62.5°	*4859.8*	*4183.3*	*3168.0*	*470.3*	*401.0*	*193.1*	*119.1*	*92.4*	*57.5*	*50.4*	*37.3*
65°	4424.4	3715.9	2641.4	303.3	303.9	214.4	104.3	90.6	53.9	44.4	32.0
67.5°	3743.8	3109.9	2081.0	203.2	171.8	183.0	91.2	62.2	52.7	37.9	24.9
70°	2732.6	2213.7	1354.7	135.7	102.5	146.3	76.4	44.4	49.8	31.4	17.8
72.5°	1997.5	1487.4	756.5	88.9	58.1	85.3	56.3	32.0	38.5	23.1	12.4
75°	1437.7	1023.6	431.8	56.9	38.5	46.8	36.7	21.9	24.9	18.4	11.3
77.5°	691.9	498.8	196.1	31.4	26.1	23.7	19.5	13.6	15.4	16.6	10.1
80°	26.1	19.5	14.8	15.4	16.6	10.7	8.9	7.1	8.9	11.3	5.3
82.5°	0.0	0.0	0.0	1.8	2.4	3.0	3.6	3.0	3.6	4.1	0.6
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°	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5
2.5°	240.5	239.3	240.5	241.7	242.9	244.1	242.3	243.5	244.6	241.7	242.9
5°	221.5	221.0	224.5	226.3	228.7	229.8	228.7	228.7	228.1	224.5	224.5
7.5°	205.0	205.6	208.5	212.7	215.6	217.4	216.2	215.6	213.8	208.5	208.5
10°	192.5	192.5	197.3	200.8	205.0	206.7	205.6	203.8	202.0	196.7	196.1
12.5°	182.4	182.4	186.0	191.9	196.7	199.0	198.4	196.1	193.1	187.8	187.2
15°	173.0	172.4	177.7	183.0	189.6	192.5	191.3	189.6	184.2	179.5	178.3
17.5°	163.5	162.9	167.6	174.7	181.9	186.0	185.4	181.3	176.5	170.6	169.4
20°	154.0	152.8	158.8	165.9	173.0	177.1	175.9	172.4	166.5	160.5	159.3
22.5°	144.5	143.9	148.1	154.0	160.5	164.1	163.5	160.5	154.6	149.3	149.3
25°	133.9	133.9	136.8	141.0	145.7	147.5	148.1	146.9	143.4	140.4	140.4
27.5°	125.0	123.2	124.4	125.6	128.0	130.9	130.9	132.1	132.7	131.5	132.1
30°	117.9	114.9	113.1	110.8	109.6	110.8	112.0	116.1	120.3	122.6	123.8
32.5°	109.6	106.0	101.3	94.8	90.6	89.4	93.0	100.7	108.4	113.7	116.7
35°	101.3	96.6	87.7	78.2	72.9	71.1	75.2	84.1	95.4	104.8	109.0
37.5°	93.0	86.5	74.0	62.8	56.9	55.7	59.8	69.3	82.3	95.4	100.7
40°	83.5	75.8	61.0	49.2	44.4	43.2	46.8	56.3	69.9	84.7	93.0
42.5°	74.0	64.6	49.2	39.1	34.4	34.4	39.1	46.2	58.6	74.6	84.7
45°	64.6	54.5	40.3	31.4	28.4	29.0	32.0	39.1	49.2	65.8	75.2
47.5°	55.7	46.8	33.2	26.1	23.7	24.3	27.8	33.8	42.1	56.9	66.9
50°	48.0	39.7	29.0	21.9	20.1	21.3	24.9	30.2	37.3	50.4	58.6
52.5°	43.2	35.5	26.7	19.0	17.8	19.0	22.5	27.2	33.8	44.4	52.7
55°	40.9	34.9	26.7	17.2	15.4	16.6	20.1	24.9	30.2	40.3	47.4
57.5°	40.3	36.1	28.4	15.4	13.0	14.2	17.8	22.5	27.8	36.7	42.7
60°	37.9	34.4	27.8	12.4	10.1	11.8	14.8	19.5	25.5	34.4	39.7
62.5°	*33.2*	*30.2*	*24.3*	*10.1*	*7.7*	*8.9*	*12.4*	*17.2*	*23.1*	*31.4*	*37.3*
65°	27.2	24.3	19.0	6.5	4.7	5.9	9.5	14.8	20.1	28.4	33.8
67.5°	20.1	17.2	13.0	4.1	2.4	4.1	7.7	12.4	18.4	25.5	30.8
70°	12.4	10.1	7.1	2.4	1.8	3.6	7.1	11.8	16.6	23.7	29.0
72.5°	7.1	4.7	3.0	1.2	1.8	3.6	7.1	11.8	16.0	22.5	27.2
75°	5.3	3.0	1.2	0.6	1.2	3.0	6.5	10.7	15.4	21.3	26.1
77.5°	3.6	1.8	0.6	0.0	0.6	2.4	5.9	10.1	14.2	20.1	24.9
80°	0.6	0.0	0.0	0.0	0.0	1.8	5.3	8.9	13.0	17.8	21.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.6	4.1	7.7	11.3	14.8	17.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	5.9	8.9	11.3	12.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	5.9	7.1	8.3
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°	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5
2.5°	242.3	245.8	245.8	248.2	251.2	256.5	259.5	263.6	266.6	269.5	270.7
5°	223.9	224.5	225.1	226.3	229.8	235.8	241.1	247.6	255.3	261.2	264.8
7.5°	208.5	208.5	208.5	210.3	213.8	218.0	223.3	232.2	241.1	248.2	254.1
10°	195.5	197.3	197.9	200.8	205.0	210.3	216.2	223.9	234.0	243.5	254.1
12.5°	187.2	189.0	191.9	194.9	199.0	205.0	211.5	221.5	242.3	261.8	284.3
15°	179.5	181.9	185.4	189.6	194.3	200.8	207.9	228.7	277.2	314.0	349.5
17.5°	171.2	174.7	179.5	183.6	189.6	196.7	205.6	245.8	341.2	402.2	462.6
20°	160.5	165.3	170.6	177.1	184.2	192.5	205.6	281.4	433.6	521.3	601.3
22.5°	150.5	155.2	161.7	170.0	178.3	186.6	208.5	335.3	552.7	663.5	764.7
25°	142.2	148.1	154.6	161.7	171.2	180.7	215.6	411.1	696.0	838.8	910.5
27.5°	134.5	141.6	148.1	154.0	162.3	173.0	231.6	512.4	865.5	1010.6	1066.9
30°	126.8	135.1	141.6	147.5	155.8	167.0	255.9	641.5	1053.8	1194.8	1200.7
32.5°	120.3	128.0	135.7	141.6	149.3	162.3	289.7	792.6	1246.9	1383.2	1327.5
35°	113.1	122.0	129.1	135.7	143.9	158.2	328.8	955.5	1441.8	1556.2	1453.7
37.5°	106.0	116.1	125.0	129.7	138.0	154.0	357.2	1125.5	1640.9	1725.0	1564.4
40°	99.5	110.8	120.8	125.6	129.7	148.7	361.3	1299.7	1842.9	1891.4	1668.7
42.5°	92.4	104.8	113.7	120.3	123.8	145.1	336.5	1446.6	2012.3	2057.3	1804.9
45°	84.7	99.5	106.6	111.4	118.5	147.5	304.5	1560.3	2206.0	2283.6	2029.5
47.5°	77.0	93.6	99.5	103.1	112.6	161.7	292.6	1636.1	2525.3	2686.4	2408.0
50°	69.9	88.3	94.8	94.2	111.4	180.1	305.7	1693.6	3005.1	3194.6	2926.9
52.5°	62.2	82.3	90.0	87.7	120.3	194.3	331.7	1739.2	3374.1	3790.6	3624.1
55°	55.7	75.8	82.9	82.3	136.8	205.0	351.9	1498.7	3527.0	4344.4	4409.6
57.5°	50.9	68.7	74.6	84.7	147.5	205.0	407.0	1063.9	3529.9	4752.0	5452.2
60°	46.8	62.2	66.3	93.0	143.4	194.3	402.8	651.6	3253.3	4724.1	6006.6
62.5°	*43.2*	*56.3*	*61.6*	*95.4*	*126.8*	*192.5*	*363.7*	*404.0*	*2774.7*	*4364.6*	*5604.4*
65°	40.3	51.5	59.2	87.7	114.9	206.1	245.2	290.3	2250.4	3954.7	5142.9
67.5°	37.3	47.4	62.8	71.7	104.3	184.2	177.1	206.1	1766.4	3505.0	4719.4
70°	34.9	45.0	66.3	58.6	91.2	143.9	125.6	156.4	1352.4	2924.5	4122.9
72.5°	33.2	42.1	55.7	46.2	74.0	111.4	87.7	113.7	883.8	2283.0	3361.1
75°	31.4	38.5	40.9	37.3	55.1	72.9	66.3	76.4	526.6	1668.7	2550.1
77.5°	30.8	36.1	33.2	30.2	37.3	43.2	50.4	51.5	257.1	834.6	1336.4
80°	27.2	32.6	28.4	24.9	25.5	28.4	37.3	34.4	58.6	212.1	356.6
82.5°	21.3	25.5	23.7	20.7	20.7	20.7	24.9	23.1	19.0	95.4	161.1
85°	14.8	17.8	17.8	16.6	16.0	16.0	15.4	14.8	5.3	5.9	8.9
87.5°	10.1	12.4	13.0	12.4	10.7	9.5	8.3	7.1	2.4	0.0	1.2
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: P634521
CATALOG NUMBER: GWS-SA3B-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5	259.5
2.5°	274.9	276.6	276.6	274.3	272.5	267.8	263.0	258.3	257.1	256.5
5°	274.9	282.0	285.5	284.9	280.8	273.1	263.0	252.3	249.4	248.2
7.5°	270.7	284.3	295.0	296.8	289.1	275.5	257.1	241.1	236.9	235.2
10°	280.2	306.8	328.2	331.1	322.2	295.6	266.0	238.7	232.2	228.1
12.5°	331.1	375.0	401.0	413.5	396.3	362.5	313.4	264.8	250.0	243.5
15°	434.2	496.4	546.2	546.2	530.2	470.3	408.1	329.4	309.2	291.4
17.5°	566.3	644.5	688.3	683.6	659.3	617.2	542.6	429.5	388.6	370.2
20°	716.8	763.6	773.6	770.7	760.0	735.7	684.2	562.8	507.7	479.2
22.5°	847.1	834.6	819.8	808.0	805.0	812.1	805.0	711.4	668.2	617.8
25°	935.4	864.9	820.4	799.1	809.2	850.0	894.5	859.5	825.2	773.0
27.5°	983.3	861.3	797.3	775.4	792.6	850.6	947.2	1006.4	970.9	946.0
30°	1009.4	858.3	782.5	761.2	787.3	860.1	983.9	1143.9	1145.0	1105.4
32.5°	1046.7	877.3	785.5	765.9	800.9	888.6	1030.1	1283.7	1318.0	1296.7
35°	1088.8	906.3	799.1	781.3	824.6	926.5	1081.7	1424.6	1496.3	1489.2
37.5°	1128.5	938.9	831.1	813.9	860.7	959.0	1131.4	1563.3	1662.8	1687.7
40°	1169.9	984.5	929.4	946.0	972.1	1010.6	1175.9	1683.5	1845.8	1883.1
42.5°	1267.7	1142.7	1226.8	1258.2	1261.7	1182.4	1273.0	1837.5	2025.9	2070.3
45°	1485.7	1424.1	1665.1	1709.6	1686.5	1446.0	1507.0	2059.7	2277.7	2300.2
47.5°	1761.1	1789.5	2265.2	2418.6	2280.0	1757.0	1790.7	2527.0	2738.5	2730.2
50°	2082.2	2216.6	2946.4	3308.4	2976.7	2161.0	2117.7	3101.6	3358.1	3332.7
52.5°	2461.9	2713.0	3765.1	4279.3	3965.3	2615.3	2597.5	3862.8	4019.2	3938.1
55°	2939.9	3192.3	4707.0	5425.5	4978.9	3169.8	3230.8	4745.5	4775.7	4518.0
57.5°	3653.1	3817.2	5817.1	6740.0	6036.8	3923.3	4365.8	5920.1	5558.8	5070.7
60°	4948.1	4621.1	6889.8	8084.7	7162.3	4983.0	5862.7	6616.2	5819.4	5146.5
62.5°	5398.9	5303.5	7561.6	8653.3	7919.4	5853.2	6251.9	6221.7	5481.8	4859.8
65°	4715.8	5133.5	7441.3	8353.0	7822.2	5709.8	5610.3	5786.3	5101.5	4424.4
67.5°	4356.3	4734.2	6985.8	7524.3	7283.8	5223.5	5000.8	4952.8	4282.8	3743.8
70°	3993.8	4368.1	6325.3	6392.3	6280.3	4430.9	4138.3	3816.6	3201.2	2732.6
72.5°	3557.8	3763.9	5408.9	5091.4	4964.6	3480.2	3418.6	2874.2	2399.7	1997.5
75°	3102.8	3043.0	4217.1	3494.4	3589.2	2707.7	2887.2	2110.6	1758.2	1437.7
77.5°	2256.9	2212.5	2824.4	2122.5	2350.5	1773.6	1593.5	842.3	802.1	691.9
80°	1259.4	1518.2	1525.3	1189.5	1483.9	1156.3	398.7	27.8	17.8	26.1
82.5°	585.3	652.8	826.9	551.5	846.5	572.8	82.3	0.0	0.0	0.0
85°	189.6	277.2	232.2	81.2	205.0	193.7	13.6	0.0	0.0	0.0
87.5°	11.3	23.1	5.9	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.

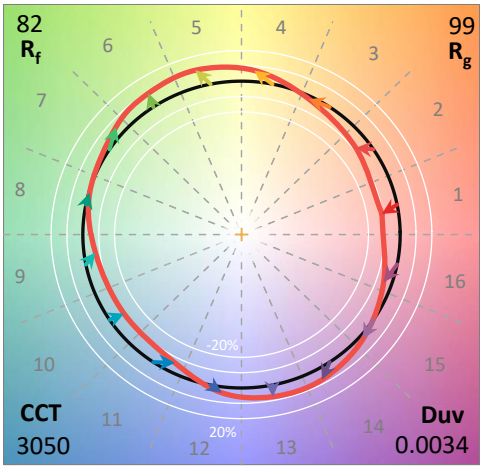
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

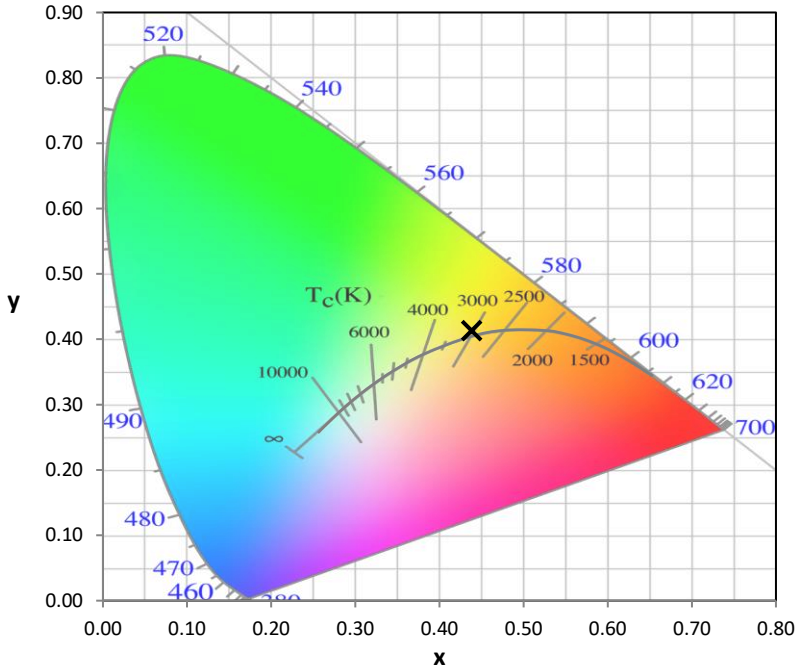
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

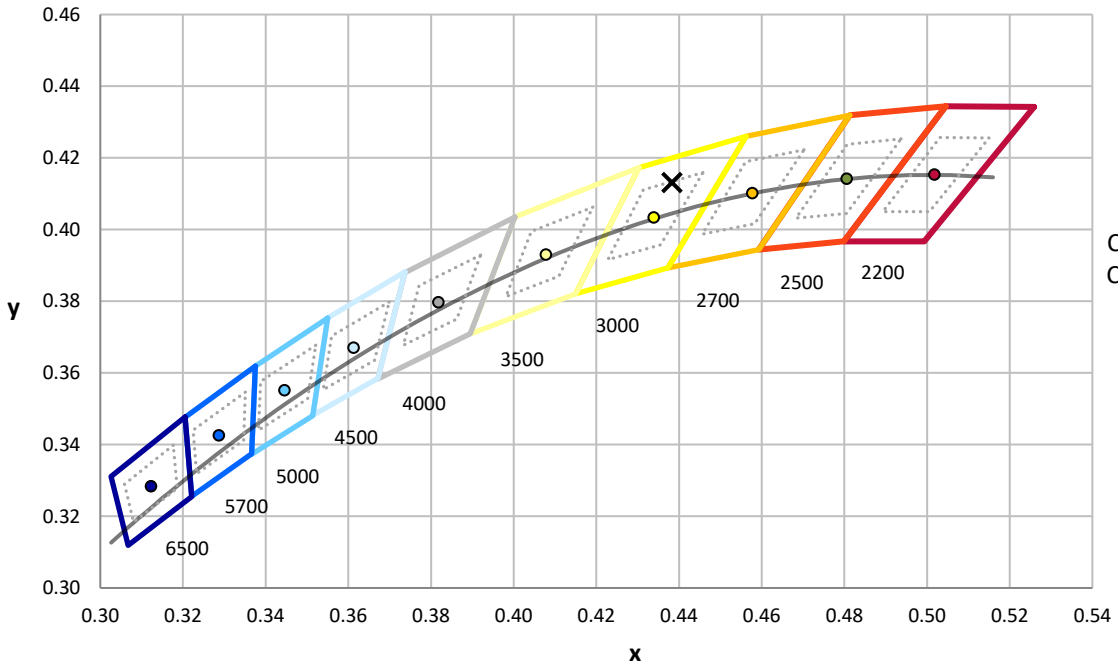
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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

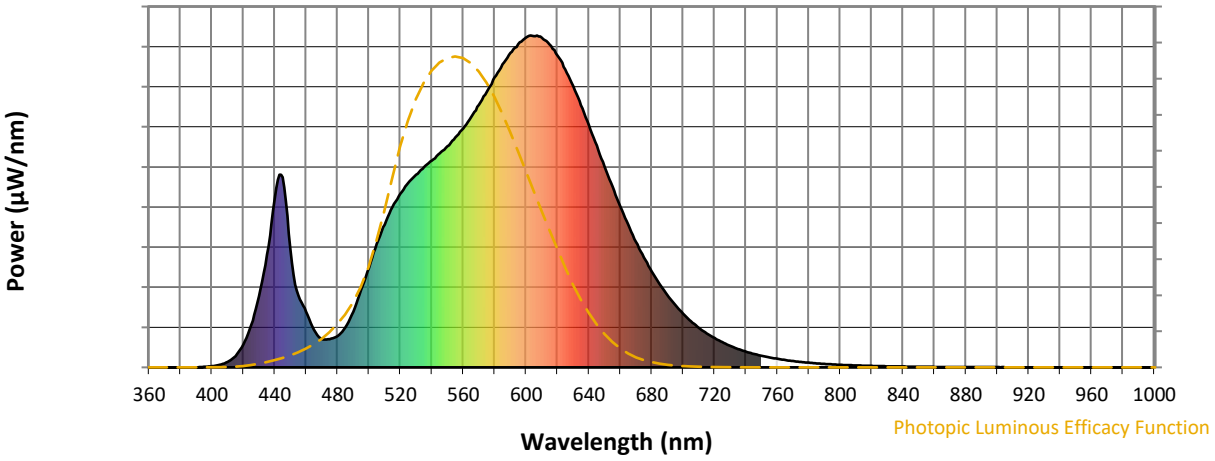


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

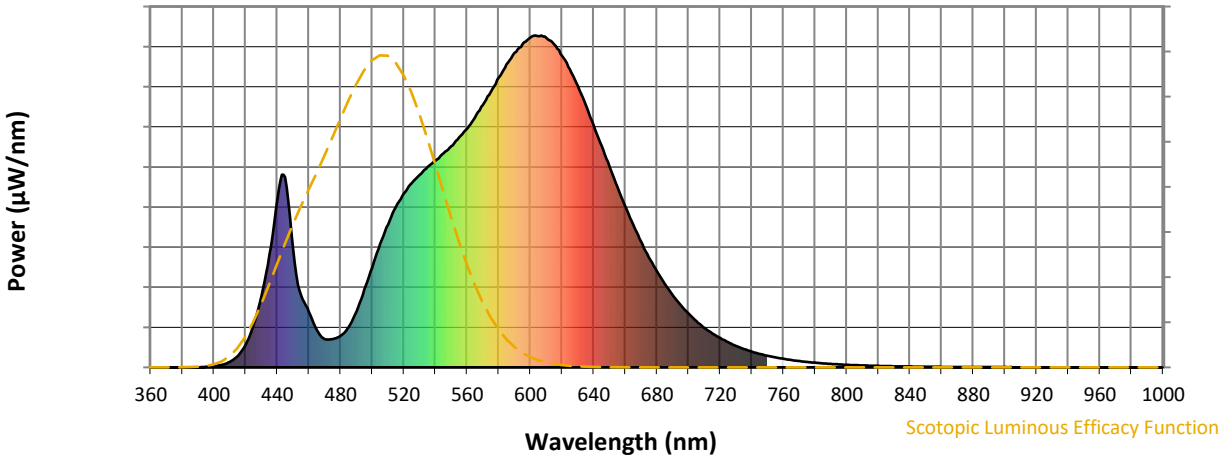


Photopic Lumens: NR

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

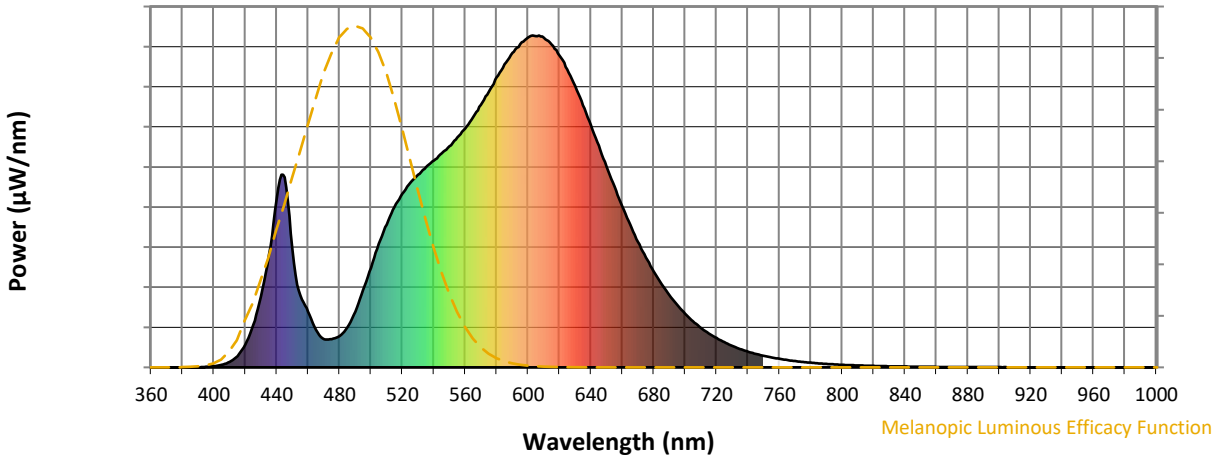


Scotopic Lumens: NR **S/P: 1.27**

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			

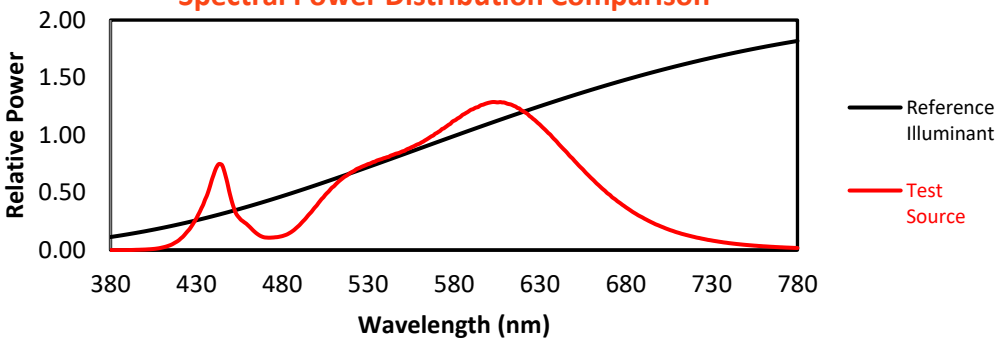
REPORT NUMBER: SP1-2408-195-9

TM-30-18

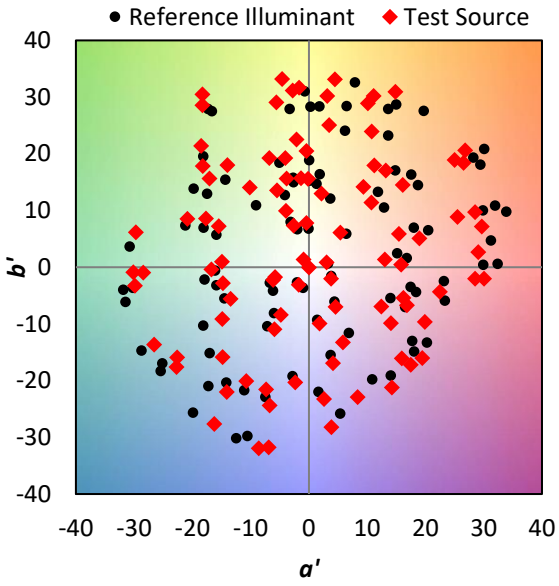
Summary

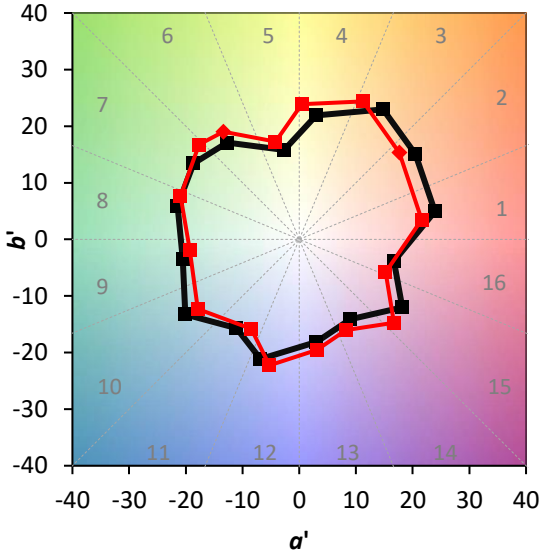
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

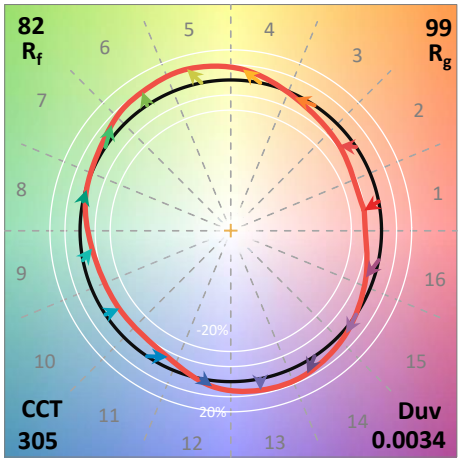
Spectral Power Distribution Comparison

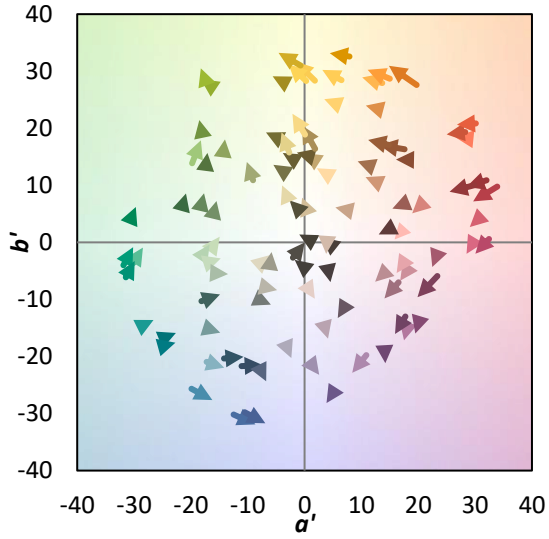


Color Vector Graphics







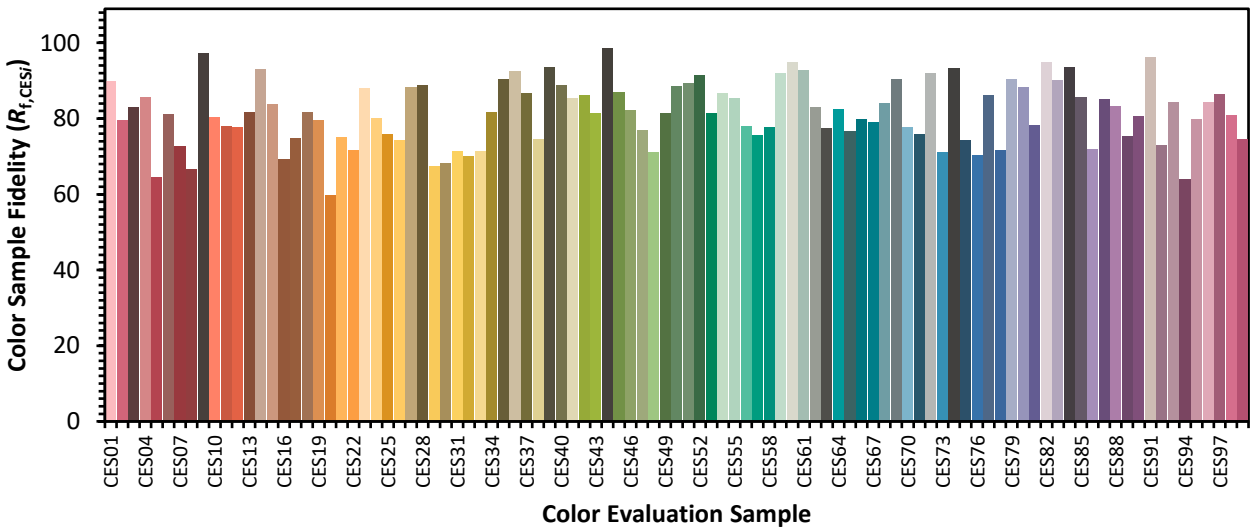


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

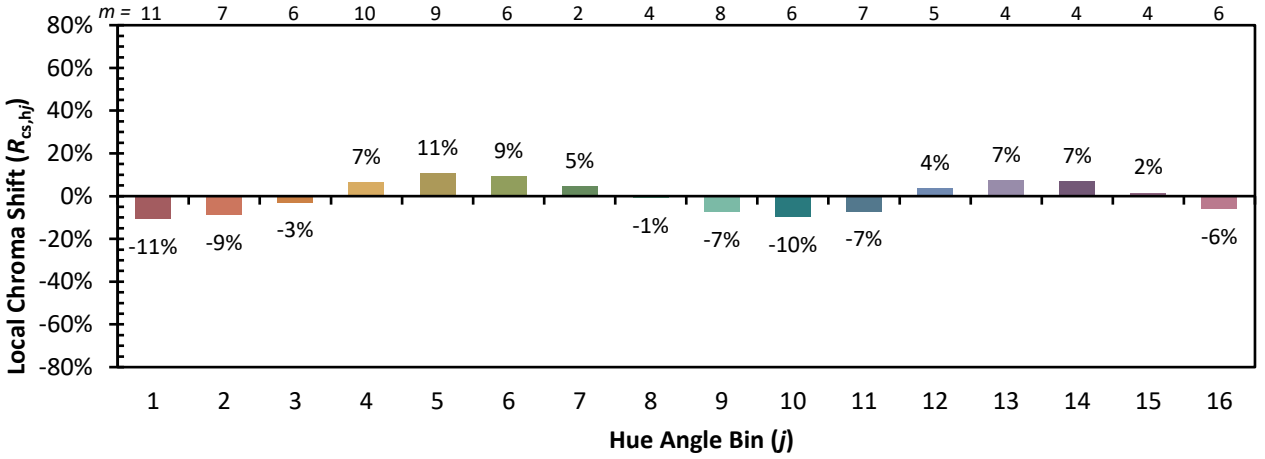
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

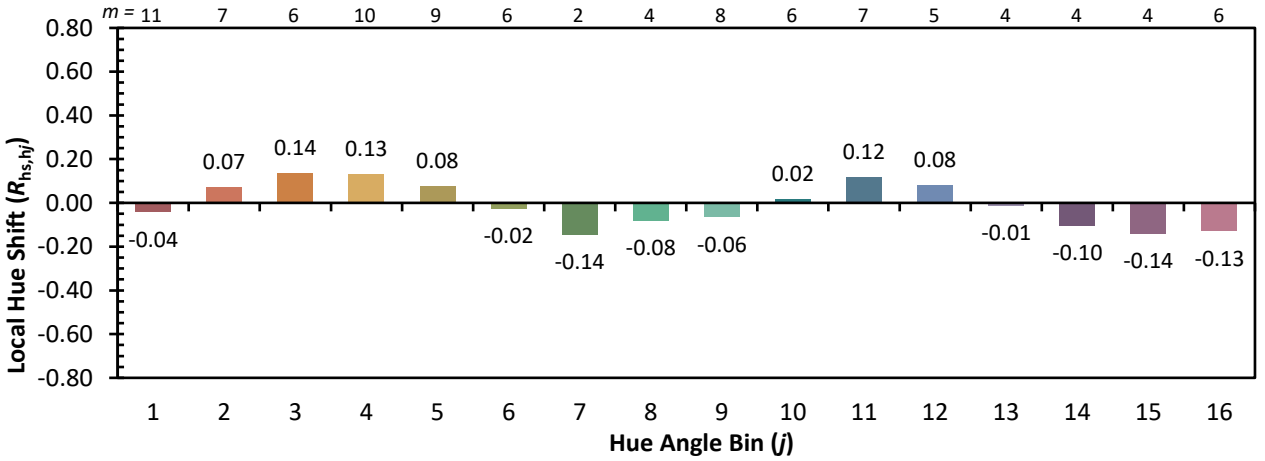


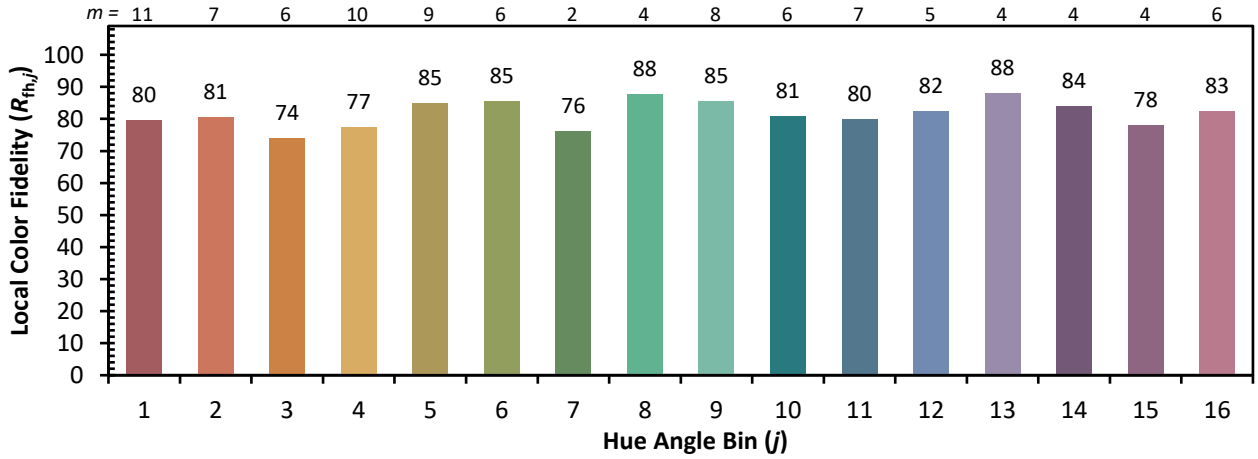
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



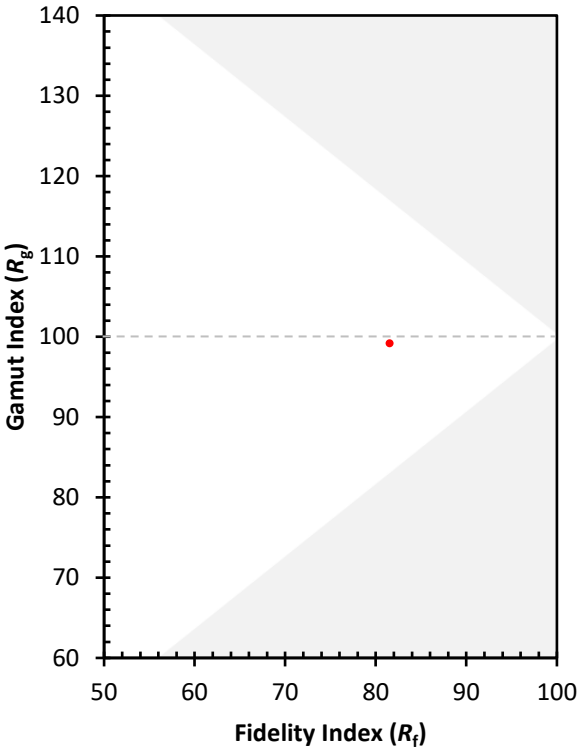


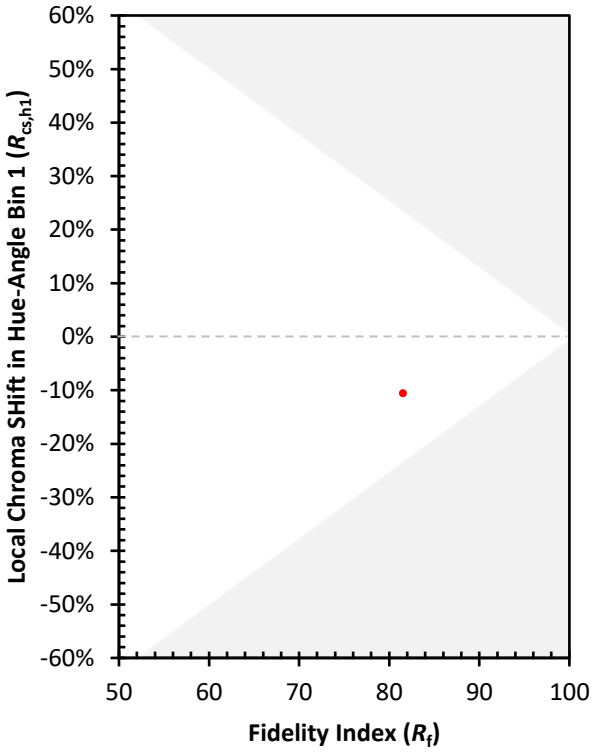


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)