Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P324662

Luminaire Tested: **GLEON-SA8D-830-U-SLR-HSS**

Issue Date: 3/3/2020

Report Generated By E0585644

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P324662
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-28)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA8D-830-U-SLR-HSS
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(8) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	36630 lumens
Efficiency:	N/A
Efficacy:	71.7 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type IV - Medium
BUG Rating:	B3 - U0 - G5

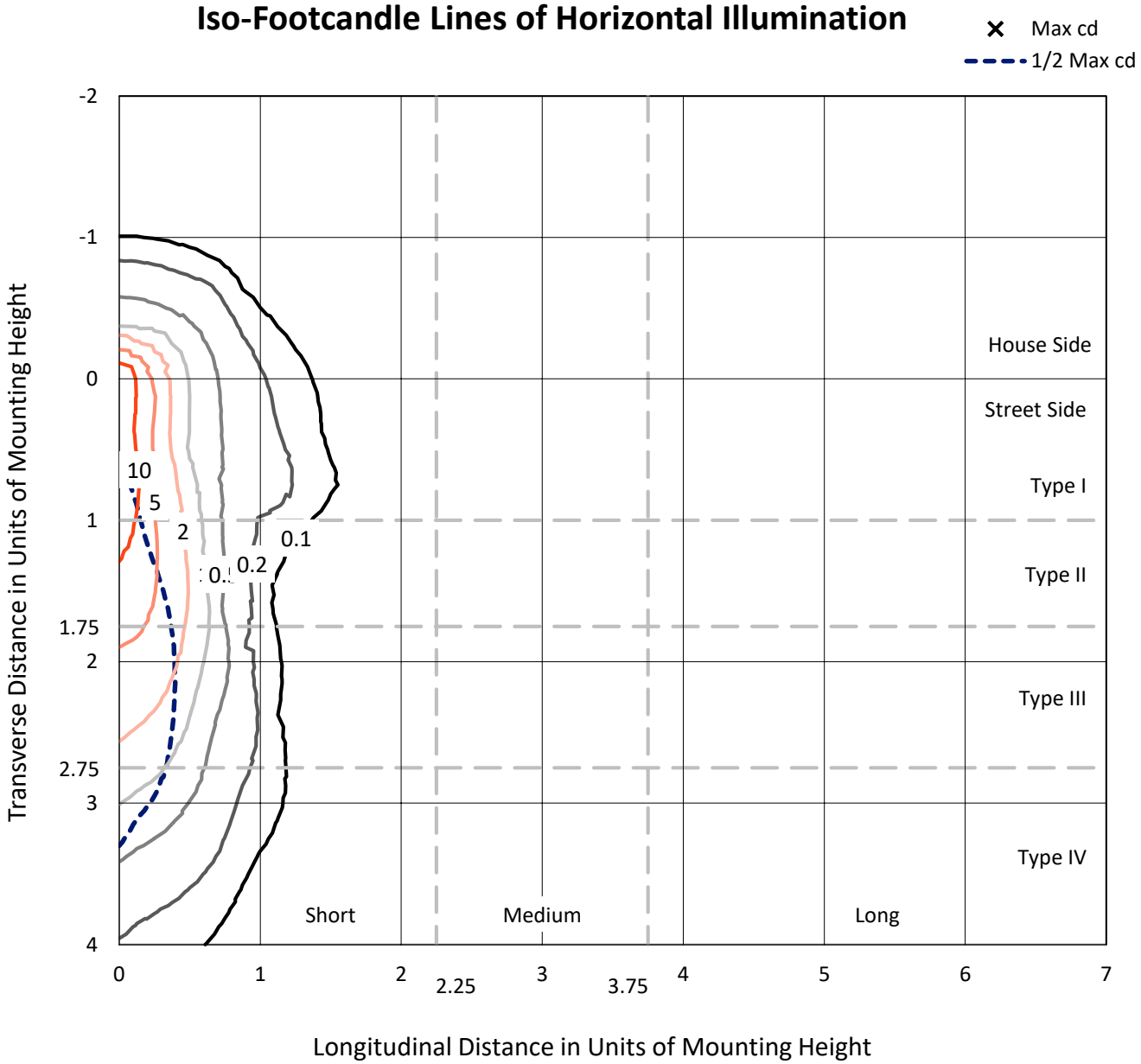
Input Watts (W):	511
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination



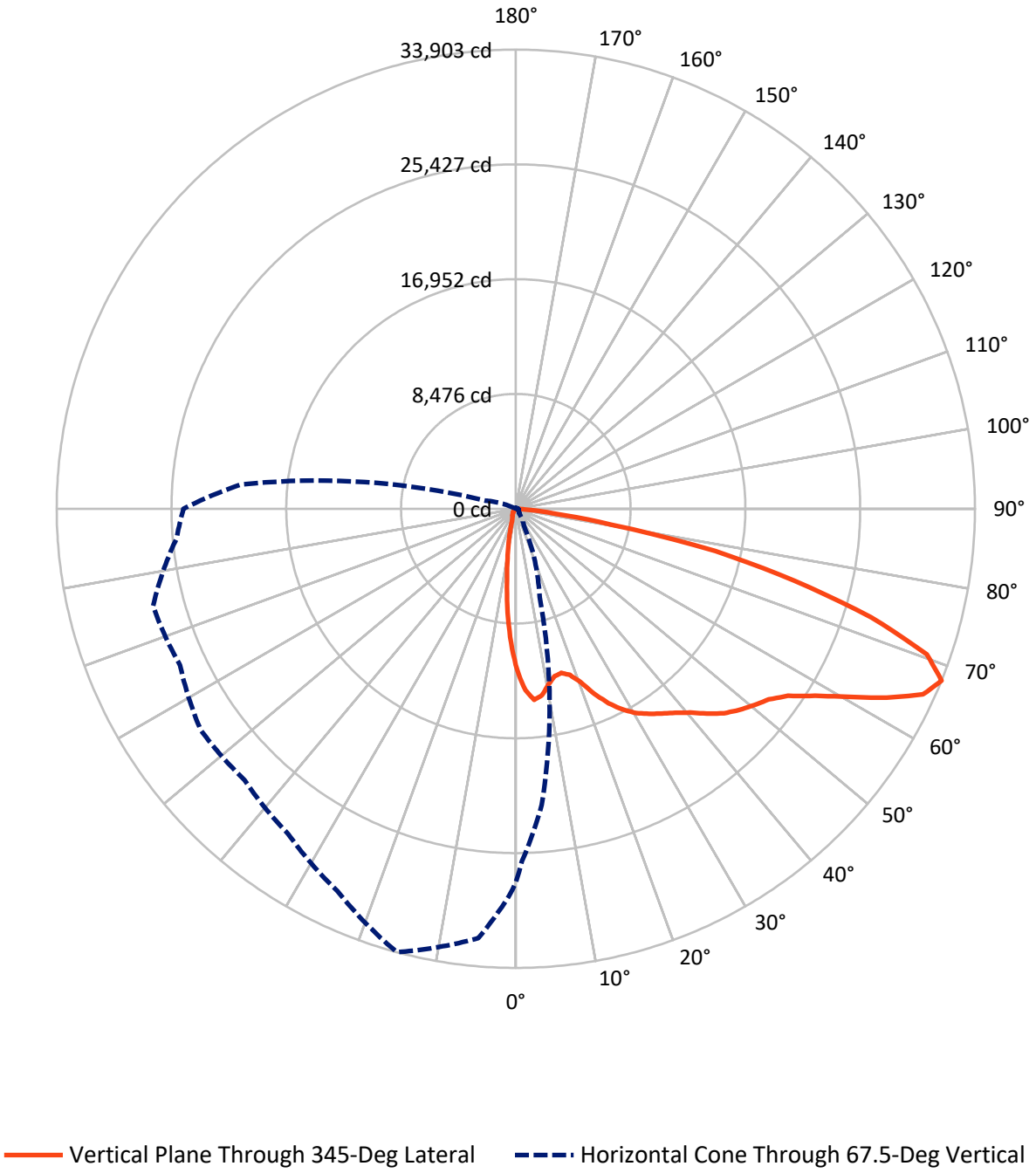
Based on 25 foot mounting height. Maximum calculated value = 19.1 fc
Type IV - Medium - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

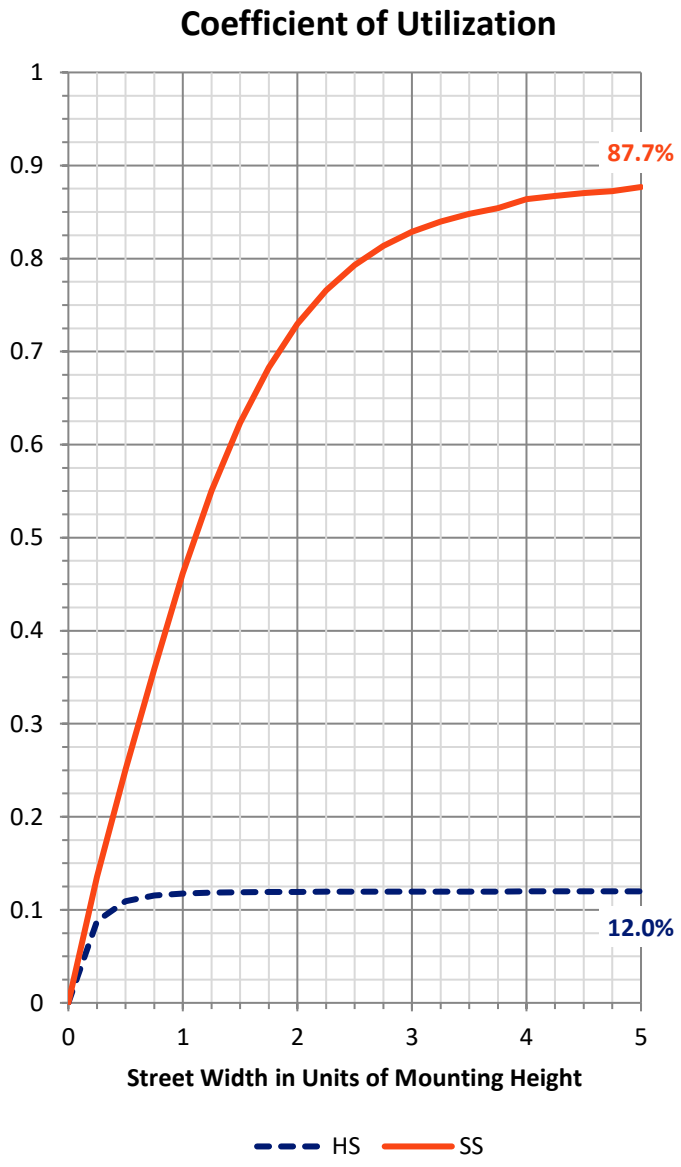
REPORT NUMBER: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4433.4	0.0	4433.4
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	32196.6	0.0	32196.6
	% Fixture	87.9	0.0	87.9
Total	Lumens	36630.0	0.0	36630.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	915.8	2.5
10°-20°	1822.8	5.0
20°-30°	2588.4	7.1
30°-40°	3823.3	10.4
40°-50°	5514.0	15.1
50°-60°	7740.5	21.1
60°-70°	9023.2	24.6
70°-80°	4612.8	12.6
80°-90°	589.1	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°	36630.0	100.0
0°-180°	36630.0	100.0



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

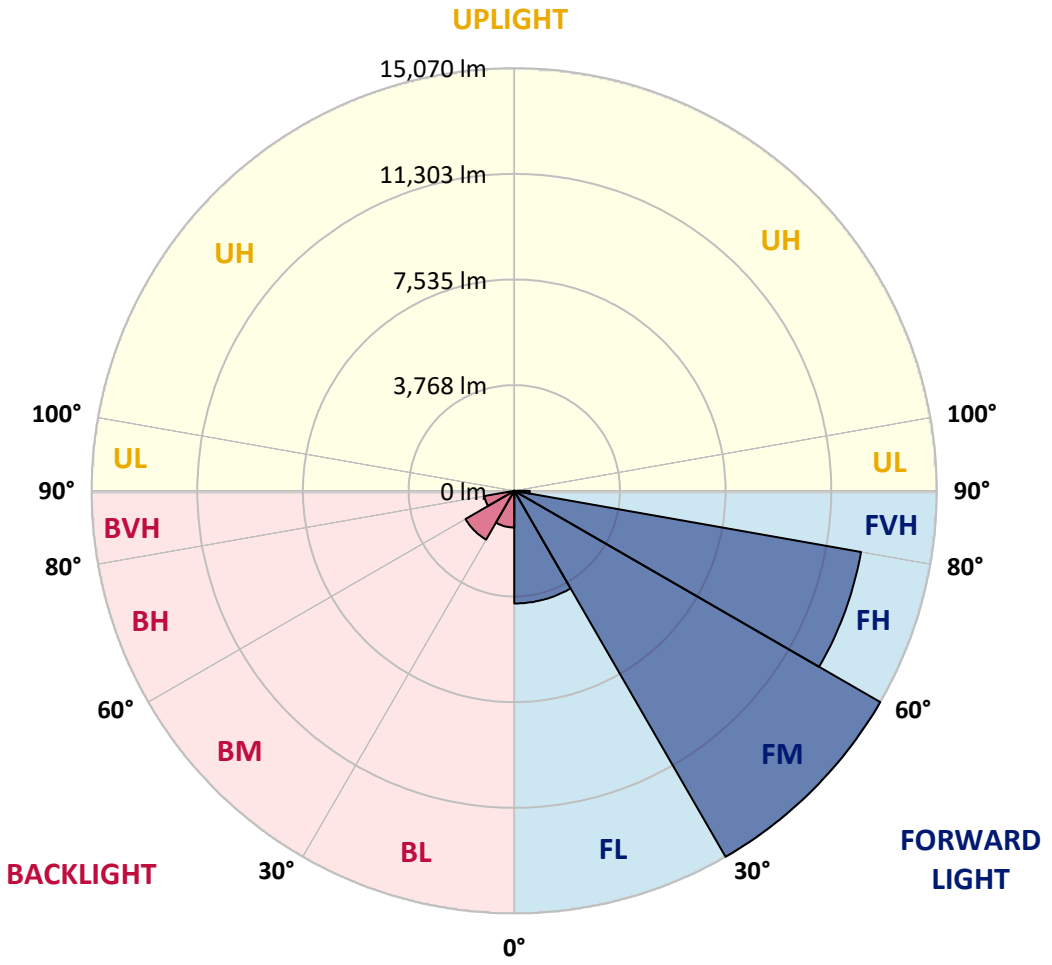
Scaled Data Report

REPORT NUMBER: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	4017.6	11.0			
FM	(30°-60°)	15070.2	41.1			
FH	(60°-80°)	12555.5	34.3			G5
FVH	(80°-90°)	553.3	1.5			G4/750
BL	(0°-30°)	1309.5	3.6	B3/2500		
BM	(30°-60°)	2007.6	5.5	B2/2500		
BH	(60°-80°)	1080.6	2.9	B3/2500		G3/2500
BVH	(80°-90°)	35.8	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
Type IV Medium



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2
2.5°	13065.3	12964.7	12853.6	12490.9	12154.3	11769.0	11454.9	11236.3	10962.1	10606.4	10516.1
5°	12971.6	12864.0	12515.2	11708.3	11002.0	10314.8	9651.9	9263.2	8780.8	8291.4	8170.0
7.5°	12029.3	11916.5	11413.3	10307.9	9356.9	8364.3	7503.6	6970.8	6425.9	5978.2	5740.5
10°	11048.9	10925.7	10359.9	9018.5	7847.2	6950.0	6318.4	5809.9	5294.5	4815.6	4433.8
12.5°	10373.8	10212.4	9598.1	8078.0	7057.6	6448.5	5858.5	5249.4	4551.8	4038.1	3618.2
15°	10091.0	9907.0	9258.0	7715.3	6778.2	6063.3	5294.5	4546.6	3729.2	3141.0	2755.7
17.5°	10309.6	10070.1	9374.3	7691.0	6427.7	5454.2	4482.4	3604.3	2717.5	2122.3	1848.1
20°	11052.3	10738.2	9855.0	7684.1	6002.5	4730.5	3498.4	2505.8	1790.9	1440.3	1296.3
22.5°	12222.0	11807.2	10545.6	7739.6	5563.5	3970.4	2526.6	1702.4	1344.9	1162.7	1077.6
25°	13634.5	13153.8	11540.0	7935.7	5178.2	3231.2	1836.0	1344.9	1134.9	1001.3	930.1
27.5°	14977.7	14587.2	12796.4	8218.5	4879.8	2634.2	1490.7	1140.1	970.1	881.5	824.3
30°	16319.1	15828.0	14085.7	8555.2	4520.5	2229.9	1310.2	1039.5	869.4	775.7	739.3
32.5°	17294.3	16886.5	15095.7	8798.1	4137.0	1966.1	1171.4	951.0	812.1	716.7	662.9
35°	18441.4	17979.8	15961.6	8851.9	3890.6	1799.5	1053.3	855.5	704.5	619.5	562.2
37.5°	19680.4	19106.0	16961.2	8733.9	3698.0	1718.0	964.8	812.1	657.7	570.9	510.2
40°	21051.3	20402.3	17920.8	8563.9	3508.8	1690.2	897.2	779.2	621.2	532.7	470.3
42.5°	22495.1	21729.8	18752.0	8385.1	3389.1	1594.8	890.2	746.2	593.5	498.0	435.6
45°	23708.1	22932.4	19605.8	8326.1	3304.1	1490.7	919.7	723.6	574.4	470.3	409.5
47.5°	24674.7	23940.7	20480.4	8458.0	3255.5	1395.2	838.2	753.1	564.0	446.0	387.0
50°	25828.7	24997.5	21712.5	8851.9	3184.3	1299.8	758.3	862.5	564.0	430.4	367.9
52.5°	27276.0	26453.4	23086.9	9462.8	3042.0	1167.9	682.0	864.2	569.2	409.5	343.6
55°	29096.3	28499.4	25049.5	10132.6	2814.7	973.5	590.0	742.7	548.4	371.4	321.0
57.5°	30842.1	30354.5	26838.7	10590.7	2511.0	760.1	513.7	598.7	501.5	326.2	286.3
59°	31319.3	30786.6	27494.6	10611.6	2283.7	662.9	475.5	494.6	491.1	305.4	265.5
60°	31319.3	30753.6	27683.8	10500.5	2118.8	609.1	451.2	440.8	511.9	291.5	253.4
62.5°	30751.8	29957.1	27069.5	9749.1	1728.4	518.9	393.9	364.4	459.9	262.0	223.9
65°	29571.8	28414.4	24976.7	8390.3	1541.0	475.5	340.1	298.5	319.3	230.8	196.1
67.5°	*27604.0*	*26035.2*	*21958.9*	*6778.2*	*1466.4*	*463.3*	*293.3*	*253.4*	*241.2*	*197.8*	*171.8*
70°	24138.5	22398.0	18295.6	5329.2	1402.1	458.1	246.4	213.4	194.4	166.6	145.8
72.5°	17568.5	15753.4	12989.0	4166.5	1364.0	468.5	197.8	178.7	159.7	130.2	112.8
75°	10049.3	8860.6	7300.5	2752.2	1162.7	447.7	152.7	149.2	114.5	93.7	78.1
77.5°	5192.1	5034.2	4374.8	1056.8	557.0	196.1	100.6	86.8	67.7	57.3	46.9
80°	2240.3	2216.0	1917.5	305.4	147.5	109.3	57.3	36.4	31.2	24.3	19.1
82.5°	774.0	774.0	682.0	102.4	65.9	53.8	6.9	0.0	0.0	0.0	0.0
85°	156.2	175.3	123.2	0.0	22.6	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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2
2.5°	10406.8	10196.8	10182.9	10051.1	9886.2	9811.6	9768.2	9844.5	9938.3	9948.7	10089.2
5°	8078.0	7857.6	7949.6	7715.3	7762.1	7715.3	7638.9	7652.8	7694.5	7564.3	7725.7
7.5°	5672.8	5506.2	5612.1	5549.6	5632.9	5665.9	5619.0	5549.6	5344.8	5320.5	5461.1
10°	4275.9	4086.7	3973.9	3855.9	3881.9	3935.7	3918.4	3868.1	3737.9	3744.9	3880.2
12.5°	3436.0	3224.3	3000.4	2710.6	2639.4	2679.4	2639.4	2609.9	2485.0	2495.4	2615.1
15°	2606.5	2432.9	2198.7	1966.1	1839.5	1851.6	1740.5	1662.4	1584.4	1490.7	1563.5
17.5°	1759.6	1653.8	1584.4	1514.9	1364.0	1329.3	1188.7	1037.7	978.7	935.3	966.6
20°	1246.0	1188.7	1160.9	1157.5	1070.7	1027.3	890.2	796.5	767.0	758.3	777.4
22.5°	1041.2	999.6	959.6	937.1	893.7	843.4	739.3	692.4	671.6	661.2	675.0
25°	905.8	874.6	833.0	794.8	777.4	723.6	649.0	614.3	600.4	590.0	597.0
27.5°	805.2	777.4	728.8	704.5	690.7	643.8	579.6	551.8	539.7	536.2	534.5
30°	725.4	699.3	654.2	626.5	602.2	560.5	522.3	494.6	482.4	479.0	475.5
32.5°	645.5	624.7	595.2	567.5	541.4	503.2	470.3	447.7	428.6	425.2	423.4
35°	544.9	524.1	508.5	506.7	482.4	446.0	421.7	392.2	376.6	371.4	373.1
37.5°	484.2	456.4	421.7	433.8	426.9	400.9	367.9	338.4	322.8	319.3	319.3
40°	446.0	416.5	376.6	355.7	376.6	371.4	319.3	289.8	274.2	272.4	269.0
42.5°	409.5	380.0	334.9	300.2	310.6	326.2	275.9	248.2	232.5	229.1	223.9
45°	383.5	352.3	301.9	262.0	241.2	274.2	236.0	201.3	192.6	185.7	182.2
47.5°	359.2	329.7	272.4	227.3	192.6	197.8	189.2	164.9	154.4	147.5	145.8
50°	338.4	307.2	246.4	194.4	159.7	145.8	152.7	130.2	121.5	114.5	111.1
52.5°	314.1	284.6	218.7	168.3	133.6	114.5	116.3	102.4	93.7	88.5	86.8
55°	295.0	265.5	196.1	147.5	118.0	93.7	83.3	79.8	74.6	71.1	69.4
57.5°	269.0	241.2	173.5	124.9	100.6	76.4	64.2	64.2	62.5	59.0	57.3
59°	253.4	229.1	159.7	112.8	92.0	65.9	57.3	59.0	57.3	53.8	52.1
60°	241.2	218.7	149.2	104.1	86.8	60.7	52.1	55.5	53.8	50.3	48.6
62.5°	213.4	197.8	128.4	86.8	76.4	48.6	43.4	46.9	46.9	45.1	43.4
65°	187.4	170.1	109.3	72.9	71.1	41.6	34.7	41.6	43.4	39.9	36.4
67.5°	*163.1*	*145.8*	*95.4*	*59.0*	*65.9*	*33.0*	*26.0*	*34.7*	*46.9*	*36.4*	*33.0*
70°	138.8	121.5	74.6	46.9	69.4	22.6	20.8	31.2	55.5	39.9	31.2
72.5°	107.6	93.7	52.1	34.7	74.6	15.6	15.6	26.0	62.5	43.4	29.5
75°	74.6	60.7	31.2	20.8	60.7	10.4	10.4	24.3	59.0	39.9	27.8
77.5°	43.4	33.0	10.4	1.7	31.2	0.0	1.7	17.4	41.6	24.3	12.1
80°	15.6	6.9	0.0	0.0	19.1	0.0	0.0	0.0	3.5	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2
2.5°	10125.7	10359.9	10569.9	10887.5	11264.1	11697.9	12071.0	12471.8	12848.4	13004.6	13112.2
5°	7758.7	8048.5	8386.9	8853.7	9474.9	10240.2	10956.9	11767.3	12638.4	13074.0	13483.5
7.5°	5485.4	5780.4	6200.3	6696.7	7448.1	8359.1	9296.2	10415.5	11595.5	12284.4	12962.9
10°	3944.4	4307.1	4699.3	5377.8	6141.3	7005.5	7970.4	9219.8	10535.2	11298.8	12116.1
12.5°	2684.6	3097.6	3691.1	4451.1	5348.3	6195.1	7033.3	8225.5	9752.6	10509.2	11385.5
15°	1610.4	1839.5	2467.6	3347.5	4447.7	5502.7	6420.7	7616.4	9244.1	10170.8	11081.8
17.5°	992.6	1098.5	1440.3	2162.2	3318.0	4652.4	5910.5	7409.9	9317.0	10445.0	11420.2
20°	791.3	833.0	942.3	1277.2	2198.7	3715.3	5336.2	7368.2	9912.2	11300.5	12346.9
22.5°	687.2	727.1	800.0	928.4	1383.1	2781.7	4791.3	7406.4	10766.0	12582.9	13804.6
25°	605.6	640.3	709.8	815.6	1013.4	1959.2	4208.2	7576.5	11878.4	14174.2	15472.2
27.5°	541.4	570.9	635.1	732.3	869.4	1367.4	3547.0	7783.0	13197.2	15801.9	17082.6
30°	482.4	508.5	565.7	656.0	754.9	1051.6	2821.7	7923.5	14517.8	17082.6	18233.2
32.5°	432.1	451.2	503.2	579.6	656.0	838.2	2144.9	7901.0	15498.3	18148.1	19060.9
35°	380.0	399.1	444.2	510.2	570.9	692.4	1686.7	7479.3	16352.0	19253.5	20008.4
37.5°	322.8	347.1	390.5	449.5	491.1	609.1	1364.0	6970.8	17218.0	20516.9	21065.2
40°	274.2	298.5	336.7	400.9	426.9	577.9	1048.1	6351.3	18191.5	21929.4	22224.4
42.5°	227.3	249.9	289.8	345.3	402.6	498.0	775.7	5643.3	19126.8	23137.2	23281.2
45°	183.9	206.5	248.2	303.7	430.4	413.0	600.4	4885.0	19881.7	24142.0	24188.8
47.5°	145.8	166.6	210.0	286.3	400.9	329.7	428.6	4289.7	20515.1	24926.3	24803.1
50°	112.8	130.2	175.3	328.0	350.5	272.4	324.5	4091.9	21082.6	25412.2	25092.9
52.5°	88.5	104.1	144.0	307.2	272.4	225.6	272.4	4277.6	21860.0	25814.8	25256.0
55°	71.1	86.8	112.8	175.3	185.7	190.9	232.5	4451.1	23201.4	26758.8	26219.2
57.5°	59.0	74.6	92.0	123.2	140.6	161.4	206.5	4470.2	24782.3	28327.6	27817.4
59°	53.8	67.7	83.3	109.3	123.2	147.5	194.4	4366.1	25339.3	28898.5	28643.4
60°	50.3	64.2	78.1	100.6	114.5	138.8	187.4	4267.2	25363.6	28877.7	28995.7
62.5°	43.4	57.3	69.4	85.0	97.2	118.0	168.3	3901.0	24336.3	27931.9	28784.0
65°	38.2	50.3	62.5	72.9	83.3	105.9	152.7	3232.9	22581.9	26406.6	27335.0
67.5°	*34.7*	*43.4*	*57.3*	*64.2*	*74.6*	*93.7*	*135.4*	*2304.5*	*20390.2*	*24541.1*	*25143.3*
70°	31.2	41.6	52.1	59.0	67.7	81.6	116.3	1324.1	17218.0	21809.7	22238.3
72.5°	29.5	39.9	46.9	55.5	60.7	72.9	105.9	623.0	12607.2	17471.3	18590.6
75°	26.0	36.4	43.4	52.1	57.3	65.9	90.2	298.5	8385.1	12643.6	13915.6
77.5°	15.6	29.5	39.9	46.9	50.3	57.3	74.6	171.8	5351.8	8751.3	10307.9
80°	0.0	10.4	29.5	39.9	43.4	48.6	57.3	135.4	2863.3	4999.5	6000.8
82.5°	0.0	0.0	20.8	31.2	29.5	33.0	43.4	85.0	1291.1	3267.6	3682.4
85°	0.0	0.0	6.9	24.3	20.8	15.6	29.5	29.5	282.9	1653.8	2063.3
87.5°	0.0	0.0	0.0	1.7	10.4	6.9	12.1	3.5	1.7	123.2	499.8
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: P324662
CATALOG NUMBER: GLEON-SA8D-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	11932.2	11932.2	11932.2	11932.2	11932.2	11932.2	*11932.2*	11932.2	11932.2	11932.2
2.5°	13488.7	13617.2	13834.1	13936.5	13886.1	13672.7	*13417.6*	13157.3	13004.6	13065.3
5°	14318.2	14979.4	15361.2	15487.9	15276.1	14797.2	*14170.7*	13344.7	13051.4	12971.6
7.5°	14318.2	15562.5	16350.3	16489.1	16017.1	15078.3	*13903.5*	12614.1	12185.5	12029.3
10°	13815.0	15508.7	16607.1	16827.5	16168.1	14764.2	*13190.3*	11718.7	11210.3	11048.9
12.5°	13247.5	15071.4	16228.8	16532.5	15991.1	14451.9	*12695.7*	11113.1	10514.4	10373.8
15°	12898.7	14533.4	15491.3	15711.7	15482.6	14269.6	*12577.7*	10930.9	10226.3	10091.0
17.5°	13023.7	14116.9	14462.3	14590.7	14745.1	14205.4	*12898.7*	11330.0	10438.0	10309.6
20°	13494.0	13677.9	13499.2	13660.5	14077.0	14267.9	*13664.0*	12294.8	11224.1	11052.3
22.5°	14292.2	13450.6	12949.1	13013.3	13520.0	14474.4	*14833.6*	13672.7	12437.1	12222.0
25°	15222.3	13634.5	12643.6	12586.4	13107.0	14746.9	*15902.6*	15172.0	13872.3	13634.5
27.5°	16392.0	14047.5	12581.2	12523.9	12962.9	15002.0	*16791.1*	16654.0	15383.7	14977.7
30°	17294.3	14453.6	12766.9	12635.0	13107.0	15179.0	*17504.3*	17912.1	16588.1	16319.1
32.5°	17941.6	14932.5	13068.8	12877.9	13513.0	15484.4	*18054.4*	19064.4	17702.1	17294.3
35°	18434.4	15453.1	13556.4	13242.3	14071.8	15947.7	*18569.8*	20291.3	18887.4	18441.4
37.5°	18896.0	16183.7	14318.2	13943.4	14948.2	16693.9	*19114.7*	21683.0	20213.2	19680.4
40°	19539.9	17011.5	15493.1	15159.9	16421.5	17710.8	*19795.0*	23133.7	21721.2	21051.3
42.5°	20183.7	17900.0	16695.6	16785.9	18259.2	18946.4	*20673.0*	24667.8	23210.1	22495.1
45°	20771.9	18816.2	18408.4	18824.9	19965.0	20301.7	*21545.9*	25554.5	24398.8	23708.1
47.5°	21296.0	19961.5	20110.8	21219.7	21905.1	21528.5	*22198.4*	26319.8	25283.8	24674.7
50°	21905.1	21443.5	22354.6	23923.3	24138.5	22639.2	*22791.9*	27225.7	26318.1	25828.7
52.5°	22571.5	23005.3	24839.6	26222.6	26153.2	23845.2	*23388.8*	28240.8	27735.8	27276.0
55°	23328.1	24266.9	27027.8	28374.4	28315.4	25191.8	*24378.0*	29495.5	29512.8	29096.3
57.5°	24450.9	25353.2	28513.3	30115.0	30213.9	26746.7	*26054.3*	30901.1	31119.7	30842.1
59°	25256.0	26057.8	29101.5	30842.1	31244.7	27949.3	*27279.4*	31716.7	31572.7	31319.3
60°	25853.0	26505.5	29393.1	31222.1	31843.4	28764.9	*28183.6*	32195.6	31626.5	31319.3
62.5°	27329.8	27480.7	29918.9	31652.5	32532.3	30576.6	*30727.6*	33011.3	31253.4	30751.8
65°	28018.7	28096.8	29911.9	30882.0	31865.9	31987.4	*33035.5*	33035.5	30342.3	29571.8
67.5°	*27730.6*	*27354.1*	*28428.2*	*28327.6*	*29309.8*	*31149.2*	*33903.2*	*31824.3*	*28600.0*	*27604.0*
70°	25387.9	23938.9	23461.7	23505.1	24256.5	27093.8	*32185.2*	28259.9	25302.9	24138.5
72.5°	21124.2	17648.3	16470.1	17814.9	18011.0	20822.3	*27428.7*	21282.1	18660.0	17568.5
75°	16990.7	12440.6	10524.8	11944.3	12277.5	15238.0	*21217.9*	13254.5	10899.6	10049.3
77.5°	12206.3	8930.0	7552.2	7453.3	7883.6	9664.1	*15055.8*	6670.6	5563.5	5192.1
80°	6934.4	5877.6	6328.8	5971.3	6188.2	6042.4	*7153.0*	2925.8	2396.5	2240.3
82.5°	4185.6	3474.1	3762.2	3132.3	3963.5	3451.6	*2755.7*	937.1	813.9	774.0
85°	2722.7	1898.5	989.1	662.9	1365.7	2205.6	*616.0*	255.1	196.1	156.2
87.5°	938.8	484.2	48.6	20.8	145.8	411.3	*22.6*	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.

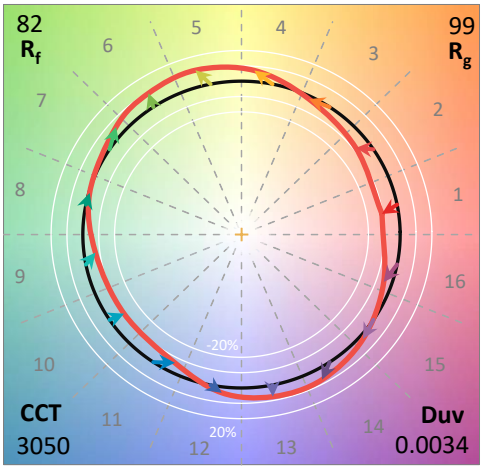
Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

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

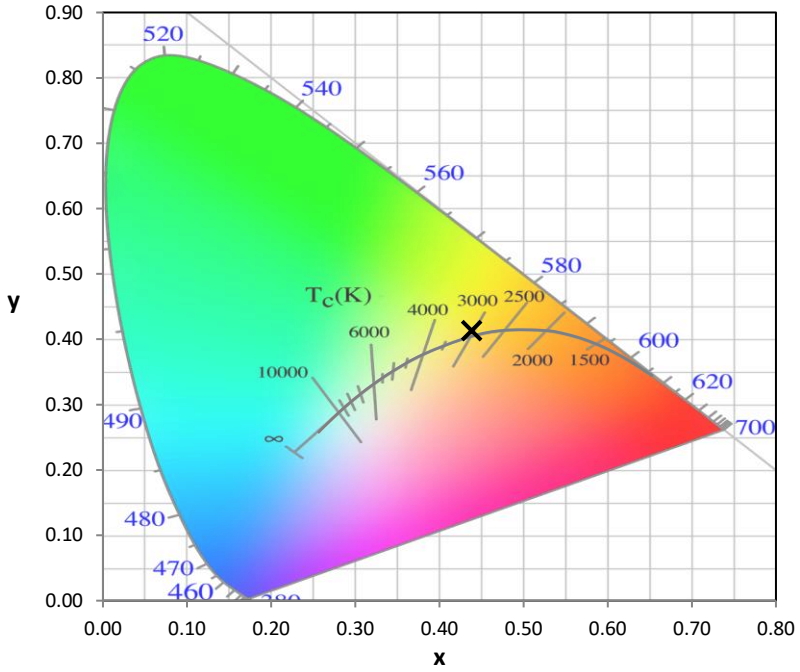
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

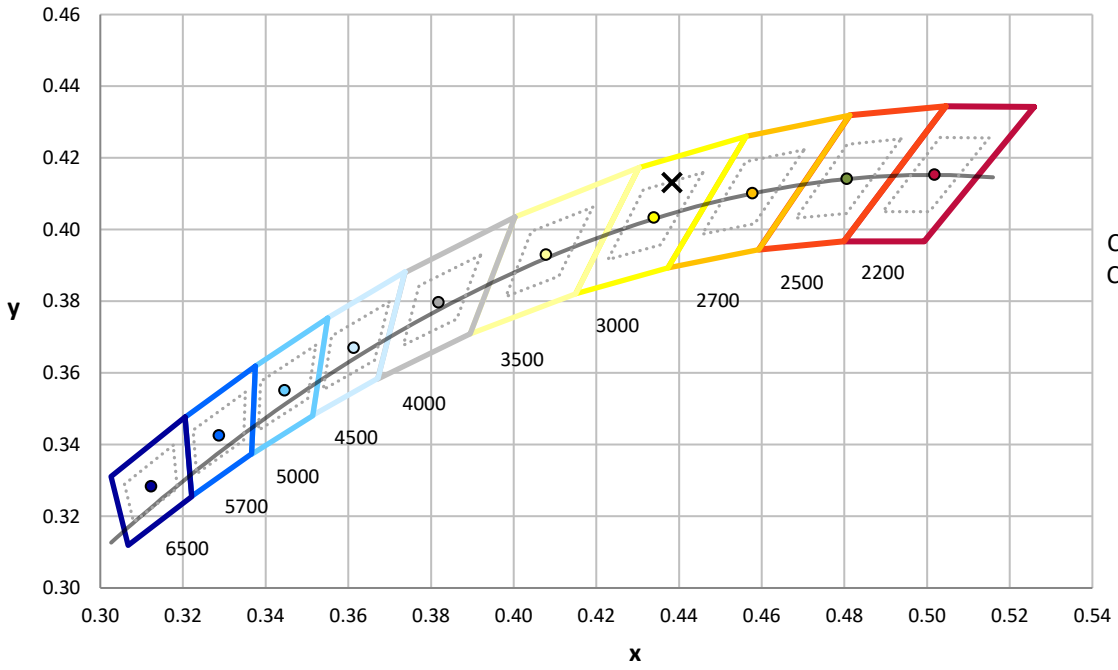
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

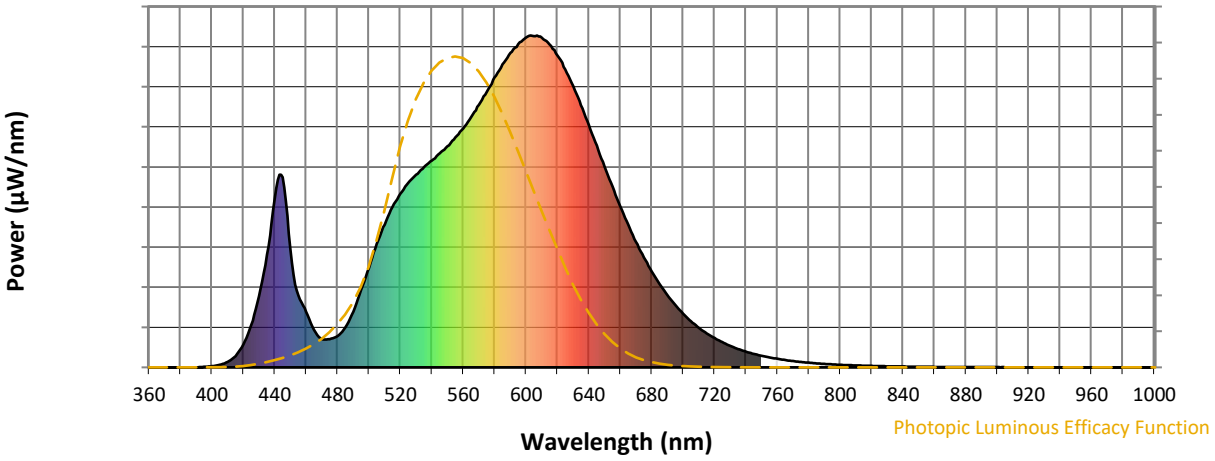


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

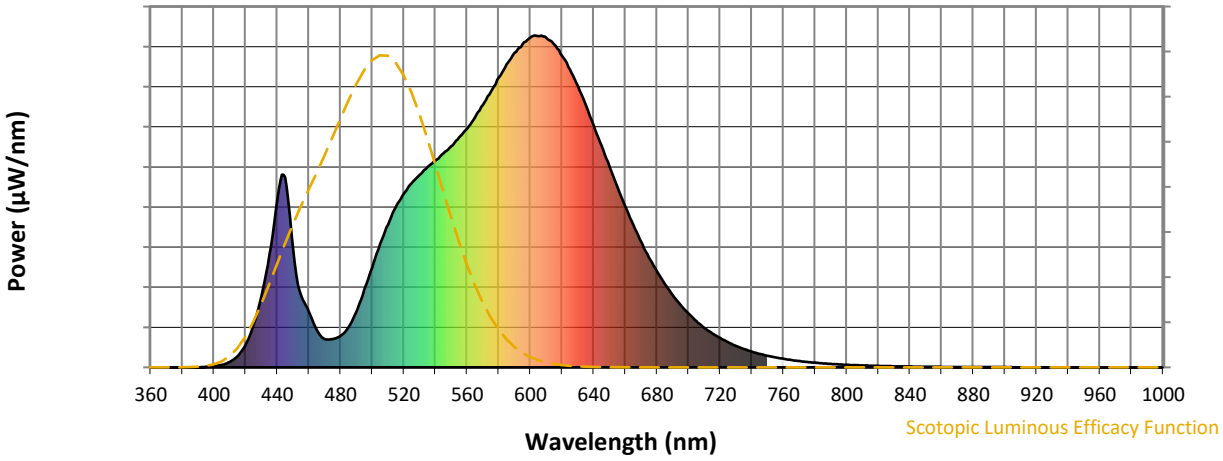


Photopic Lumens: NR

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

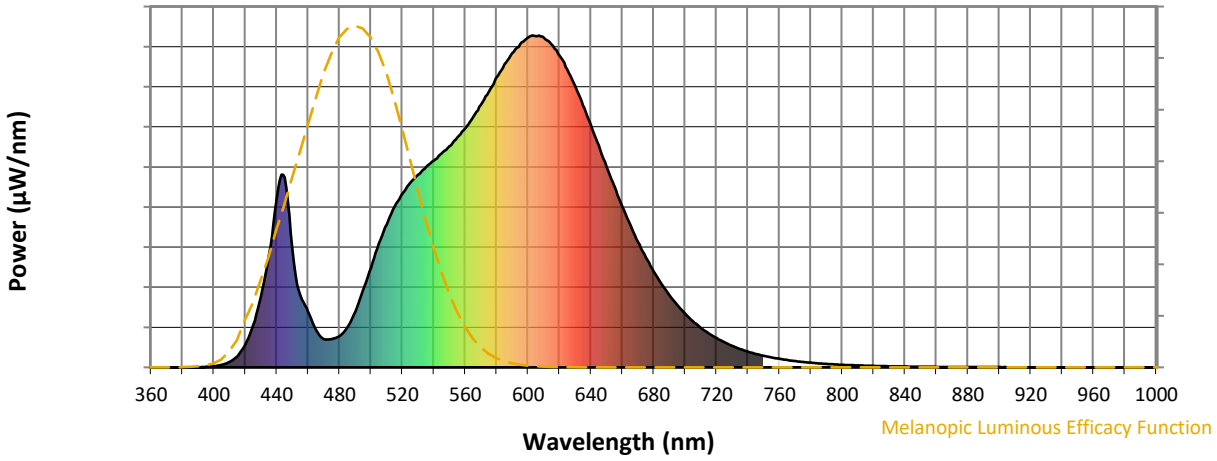


Scotopic Lumens: NR **S/P: 1.27**

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			

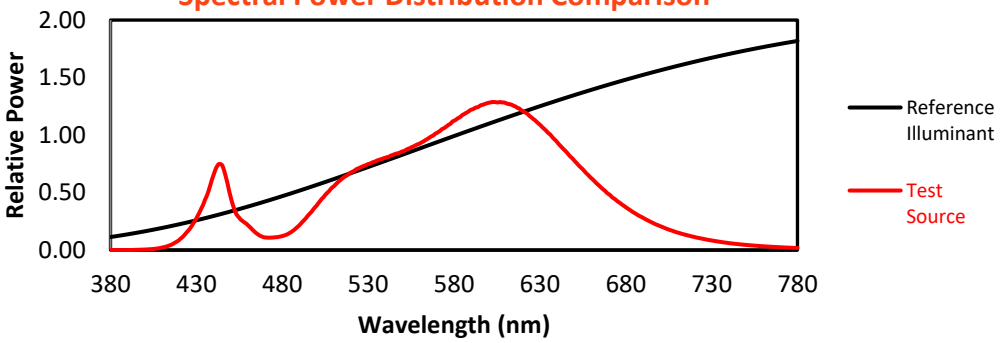
REPORT NUMBER: SP1-2408-195-9

TM-30-18

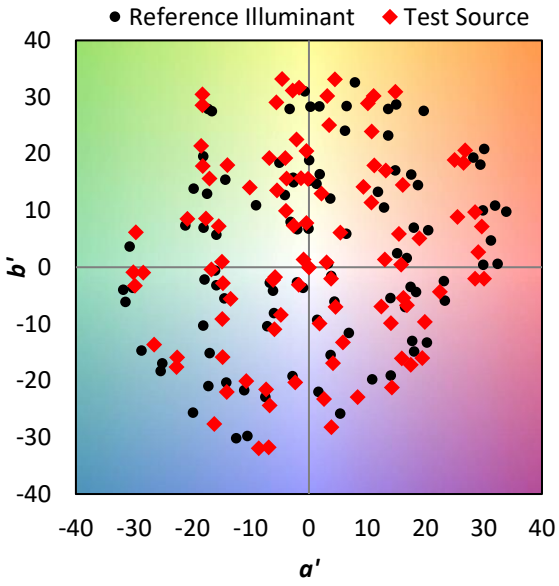
Summary

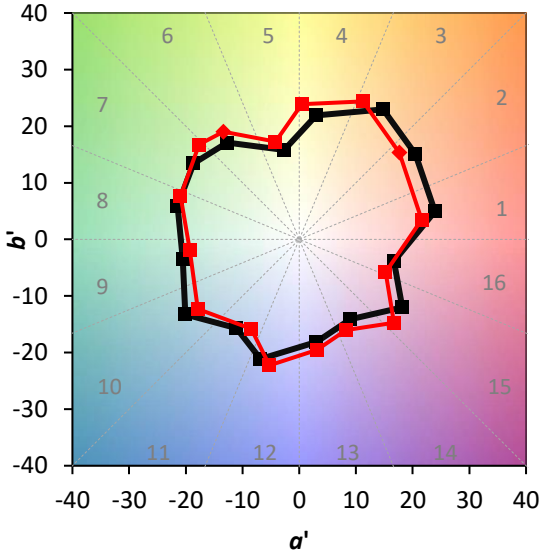
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

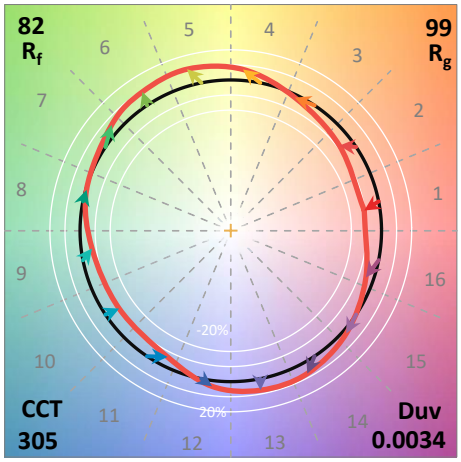
Spectral Power Distribution Comparison

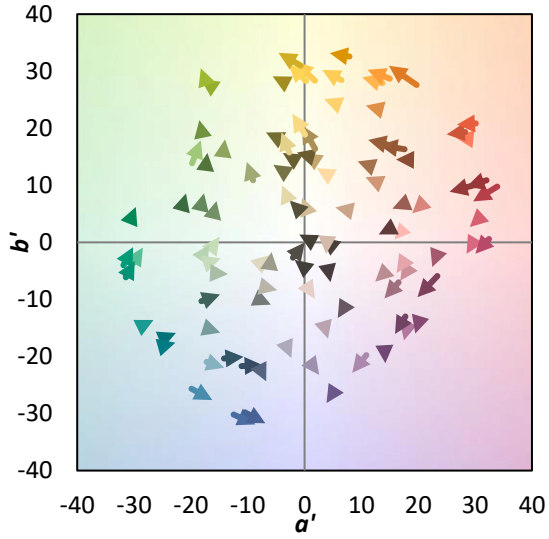


Color Vector Graphics







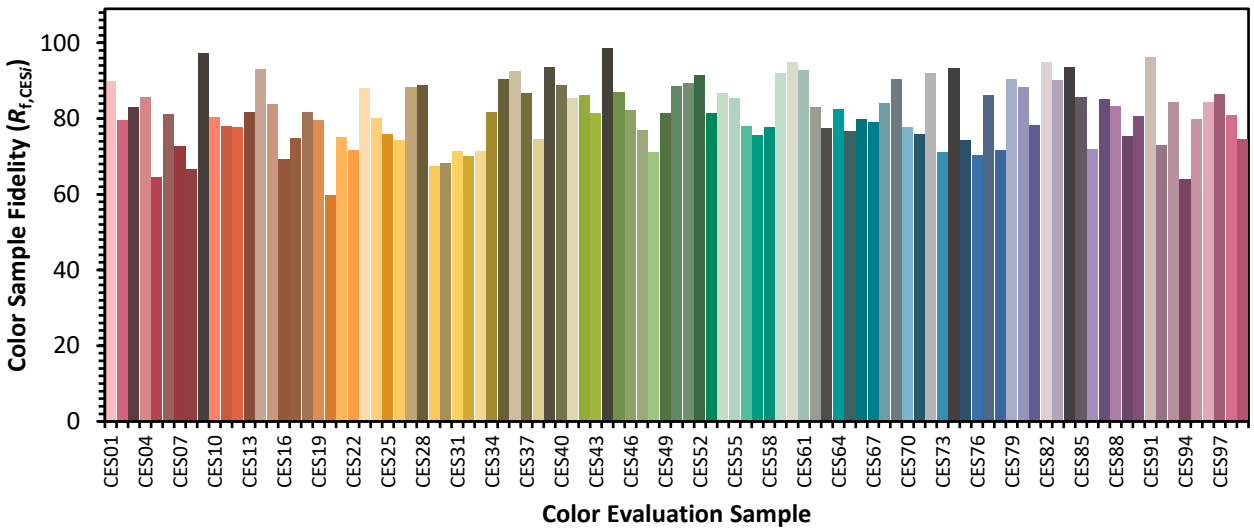


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

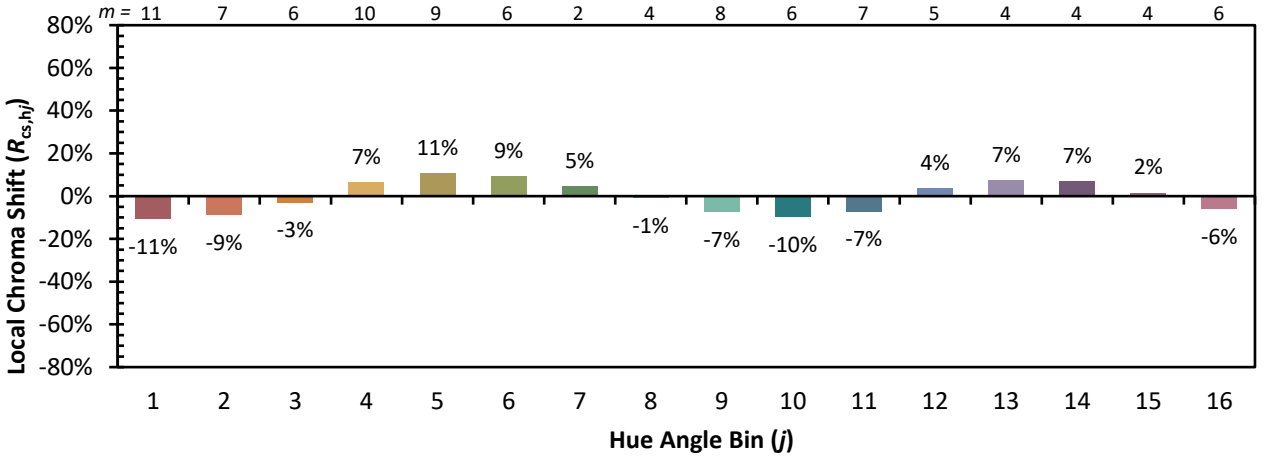
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

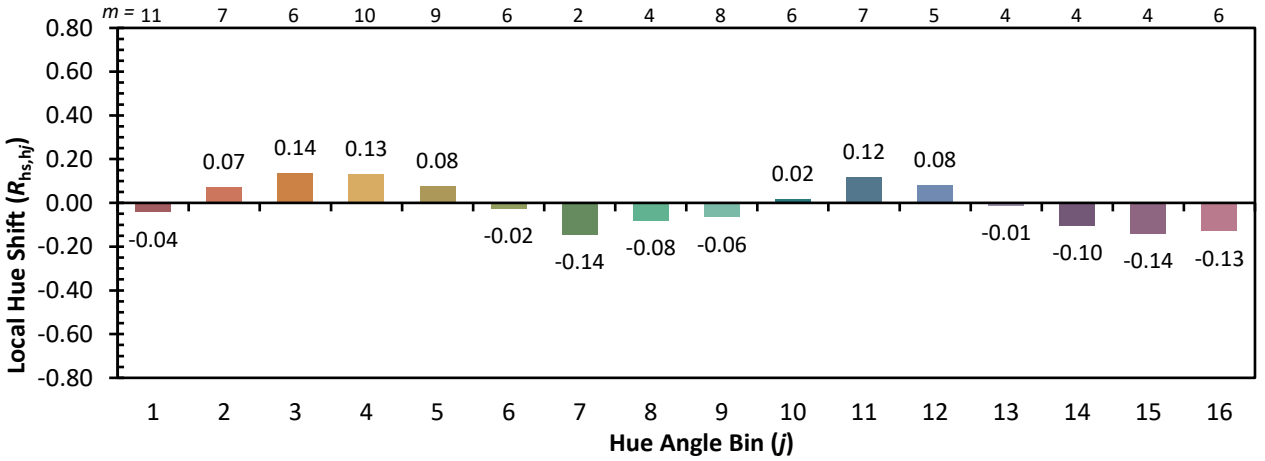


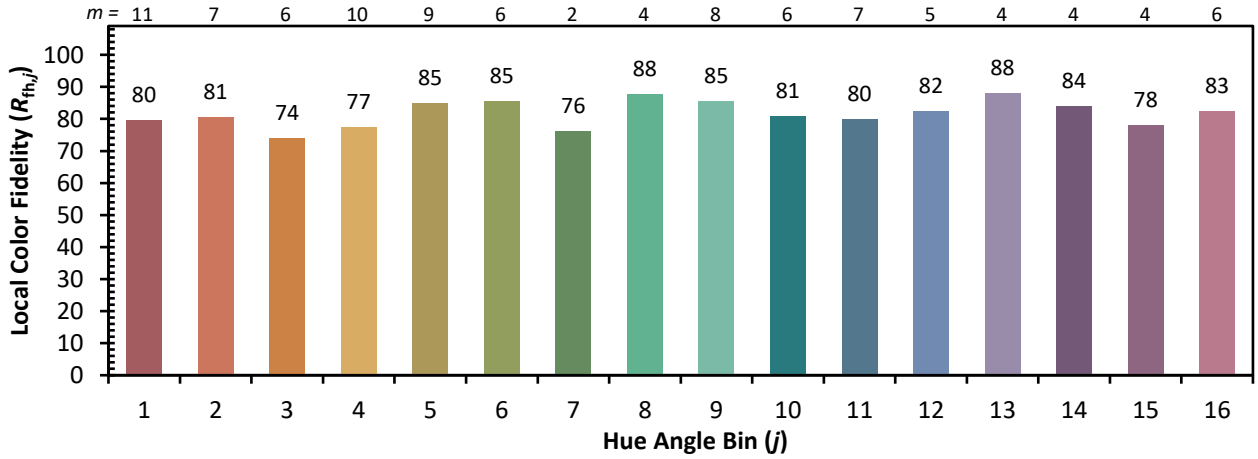
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



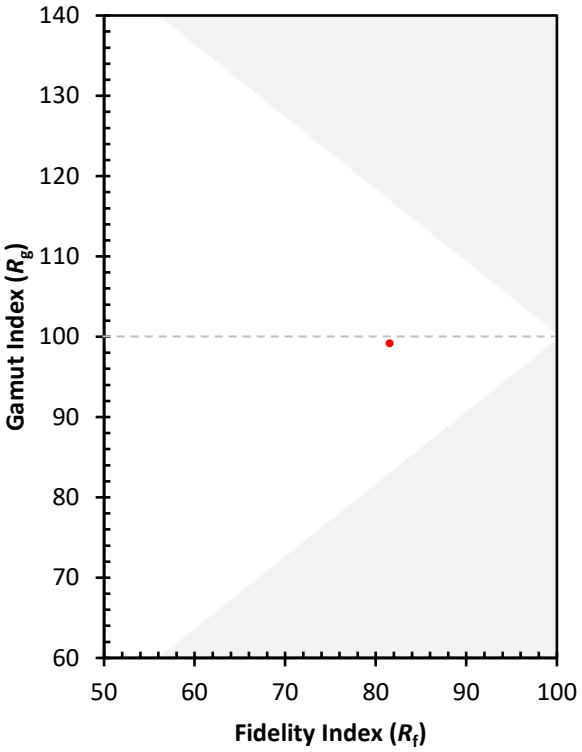


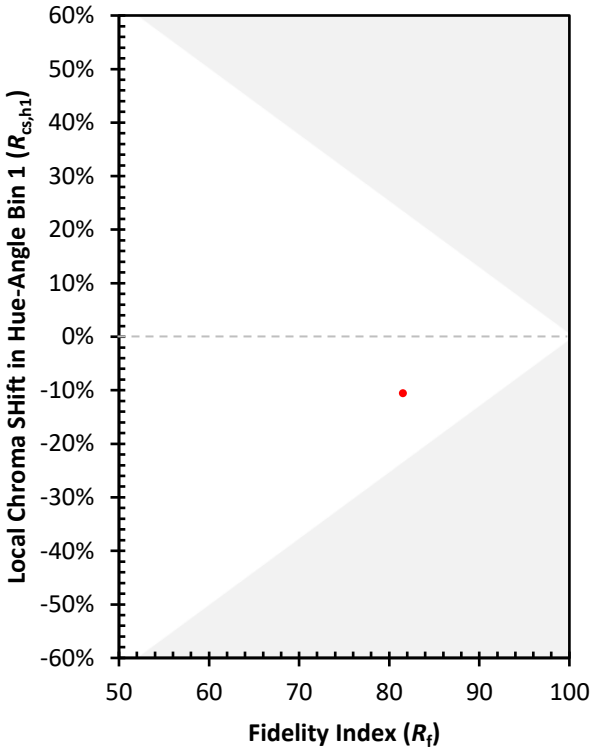


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)