

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: P324644

Luminaire Tested: **GLEON-SA0B-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324644
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-SA0B-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 80 CRI, 3000K, 800mA 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: 33319 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

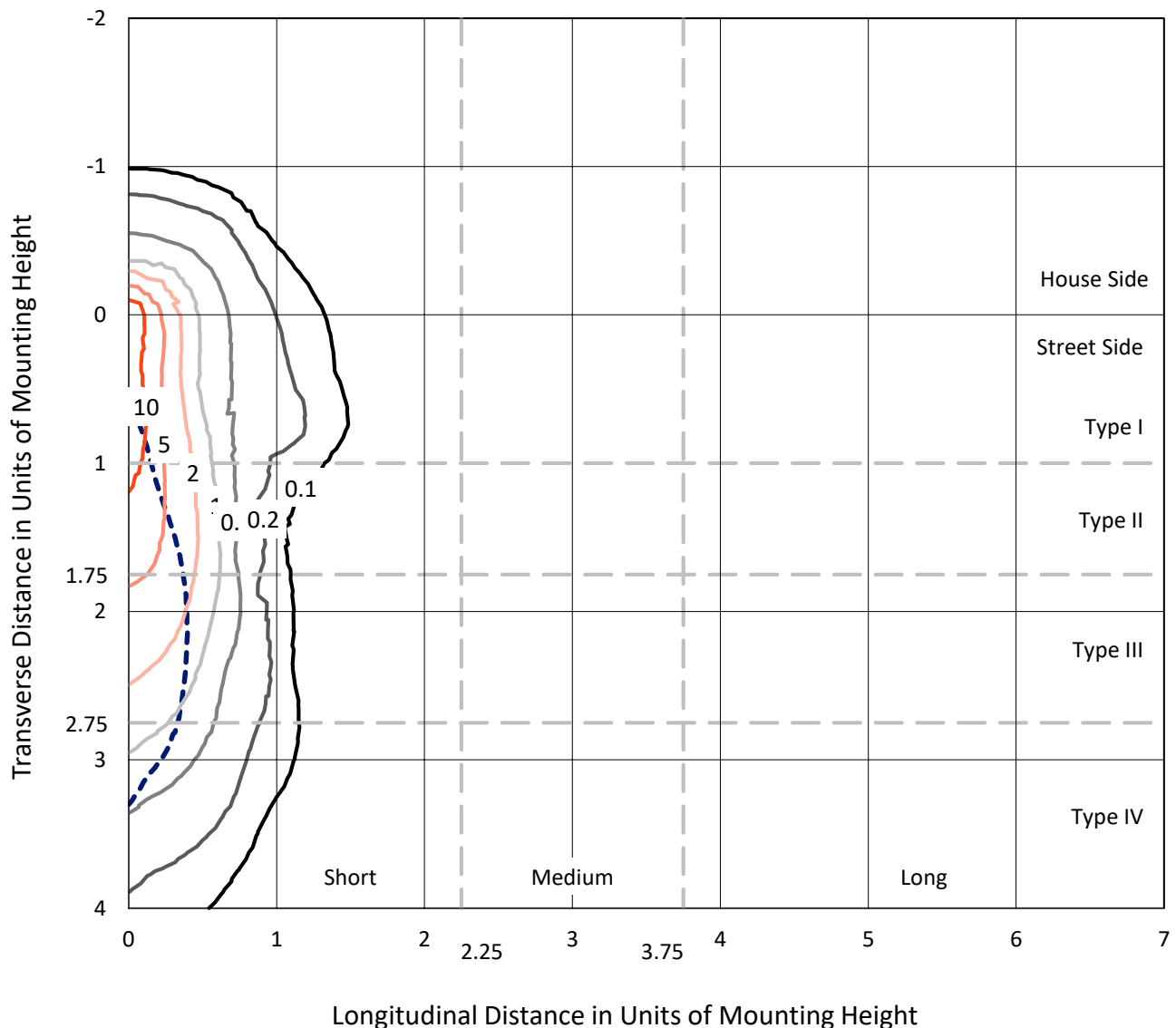
Input Watts (W): 419
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

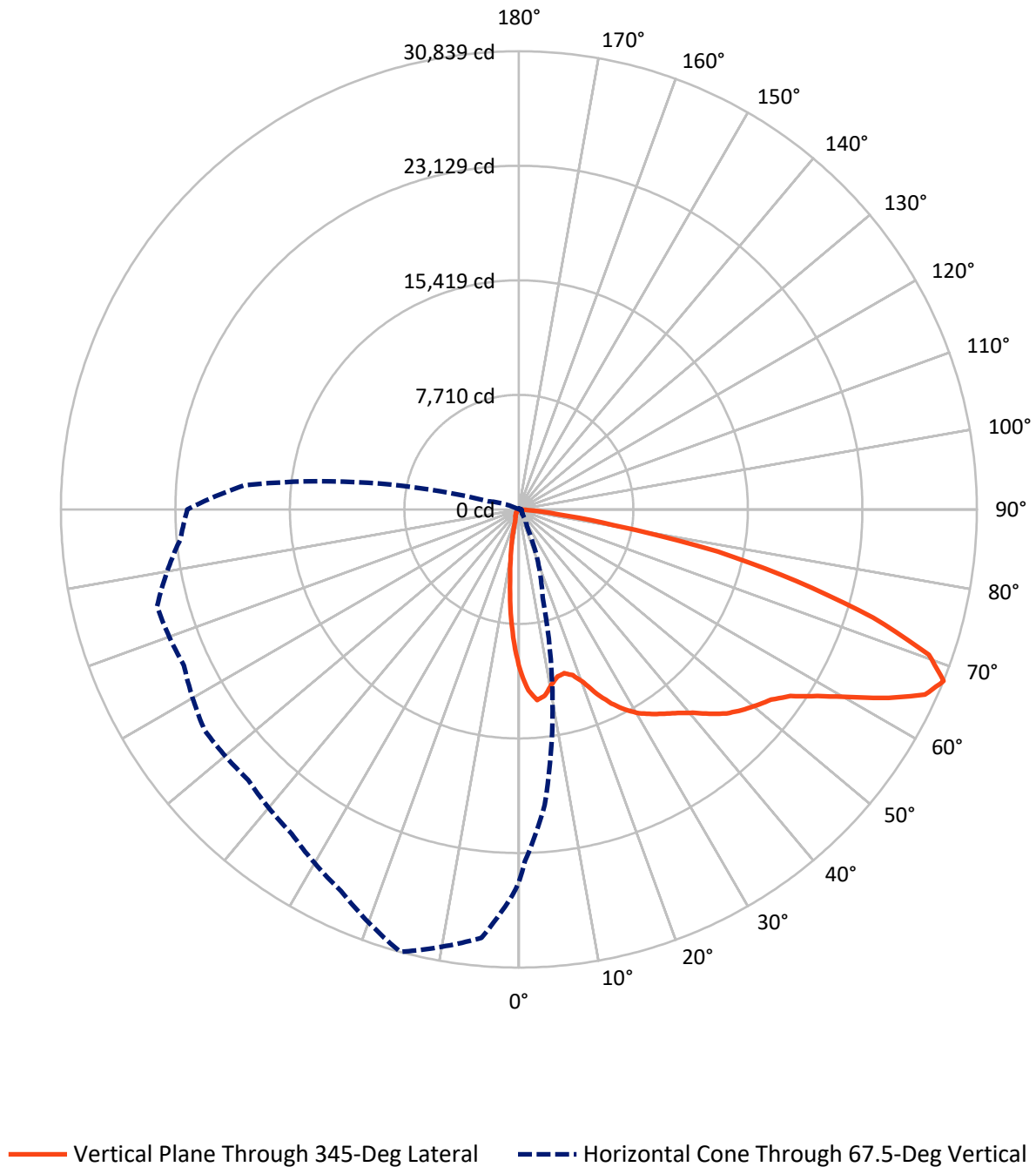
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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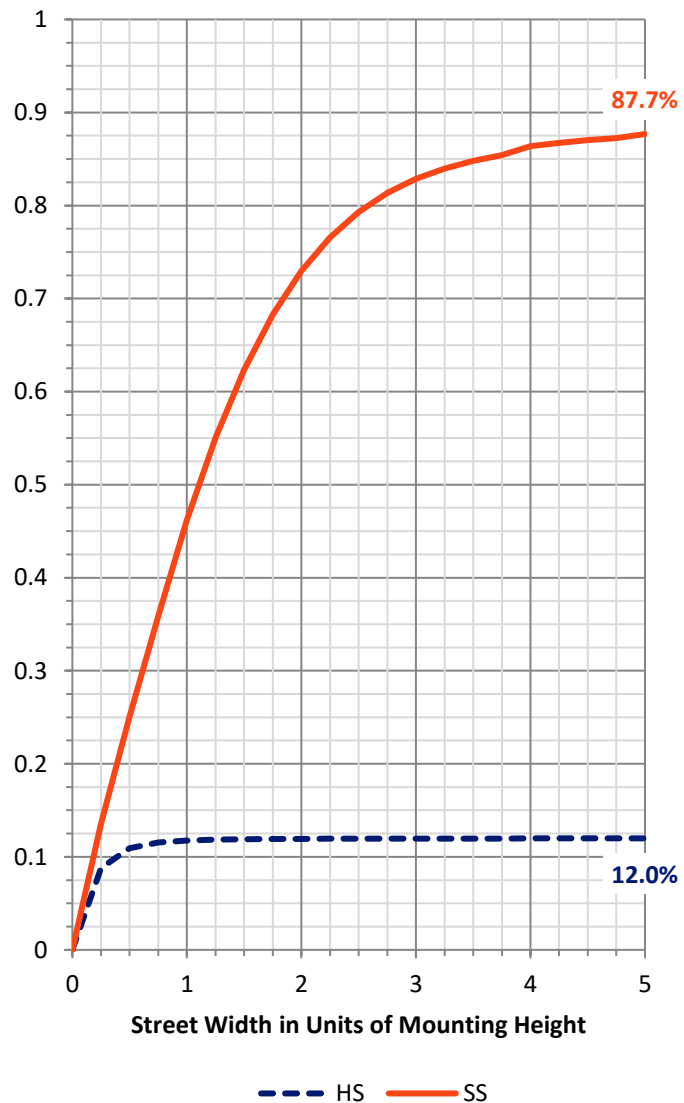
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4032.7	0.0	4032.7
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	29286.3	0.0	29286.3
	% Fixture	87.9	0.0	87.9
Total	Lumens	33319.0	0.0	33319.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	833.0	2.5
10°-20°	1658.1	5.0
20°-30°	2354.5	7.1
30°-40°	3477.7	10.4
40°-50°	5015.6	15.1
50°-60°	7040.8	21.1
60°-70°	8207.6	24.6
70°-80°	4195.9	12.6
80°-90°	535.9	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°	33319.0	100.0
0°-180°	33319.0	100.0

Coefficient of Utilization



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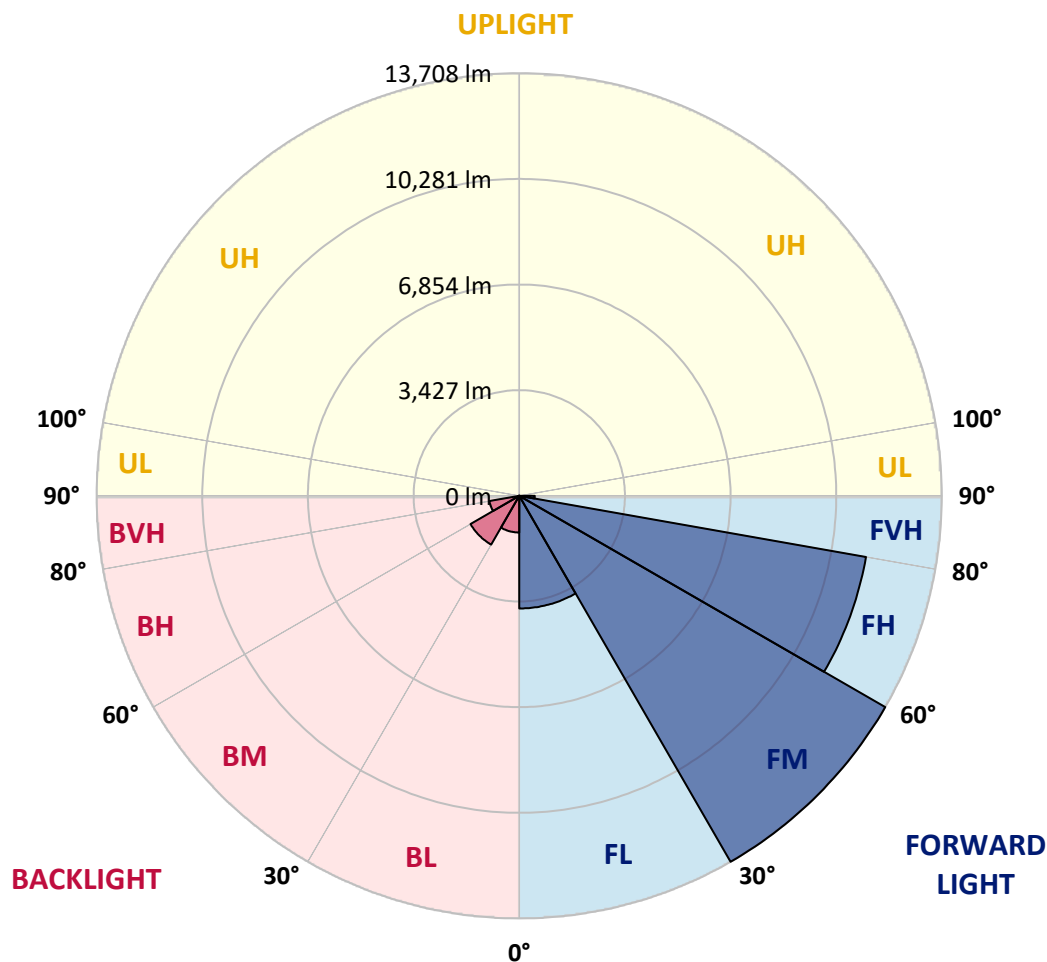
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3654.4	11.0			
FM	(30°-60°)	13708.0	41.1			
FH	(60°-80°)	11420.6	34.3			G4/12000
FVH	(80°-90°)	503.3	1.5			G4/750
BL	(0°-30°)	1191.1	3.6	B3/2500		
BM	(30°-60°)	1826.1	5.5	B2/2500		
BH	(60°-80°)	982.9	2.9	B2/1000		G2/1000
BVH	(80°-90°)	32.6	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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6
2.5°	11884.3	11792.8	11691.8	11361.9	11055.6	10705.2	10419.5	10220.6	9971.2	9647.6	9565.6
5°	11799.1	11701.2	11384.0	10650.0	10007.5	9382.5	8779.5	8425.9	7987.1	7542.0	7431.5
7.5°	10942.0	10839.4	10381.6	9376.1	8511.1	7608.3	6825.3	6340.7	5845.1	5437.9	5221.6
10°	10050.2	9938.1	9423.5	8203.3	7137.9	6321.8	5747.2	5284.7	4815.9	4380.3	4033.0
12.5°	9436.1	9289.3	8730.6	7347.8	6419.7	5865.6	5328.9	4774.9	4140.3	3673.1	3291.1
15°	9178.8	9011.5	8421.2	7017.9	6165.5	5515.2	4815.9	4135.6	3392.1	2857.0	2506.6
17.5°	9377.7	9159.9	8526.9	6995.8	5846.7	4961.2	4077.2	3278.5	2471.9	1930.5	1681.1
20°	10053.3	9767.6	8964.2	6989.5	5459.9	4302.9	3182.2	2279.3	1629.0	1310.1	1179.1
22.5°	11117.2	10740.0	9592.4	7040.0	5060.6	3611.6	2298.3	1548.5	1223.3	1057.6	980.2
25°	12402.1	11964.8	10496.9	7218.4	4710.2	2939.1	1670.0	1223.3	1032.3	910.8	846.1
27.5°	13623.8	13268.7	11639.7	7475.7	4438.7	2396.1	1355.9	1037.1	882.4	801.9	749.8
30°	14844.0	14397.3	12812.5	7781.9	4111.9	2028.3	1191.7	945.5	790.8	705.6	672.4
32.5°	15731.1	15360.2	13731.2	8002.9	3763.1	1788.4	1065.5	865.0	738.7	651.9	603.0
35°	16774.5	16354.6	14518.8	8051.8	3538.9	1636.9	958.1	778.2	640.9	563.5	511.4
37.5°	17901.5	17379.0	15428.0	7944.5	3363.7	1562.7	877.6	738.7	598.2	519.3	464.1
40°	19148.5	18558.1	16300.9	7789.8	3191.7	1537.4	816.1	708.7	565.1	484.6	427.8
42.5°	20461.8	19765.7	17057.0	7627.2	3082.8	1450.6	809.8	678.7	539.8	453.0	396.2
45°	21565.1	20859.6	17833.6	7573.5	3005.4	1355.9	836.6	658.2	522.5	427.8	372.5
47.5°	22444.4	21776.7	18629.2	7693.5	2961.2	1269.1	762.4	685.1	513.0	405.7	352.0
50°	23494.0	22737.9	19749.9	8051.8	2896.5	1182.3	689.8	784.5	513.0	391.5	334.6
52.5°	24810.5	24062.3	21000.0	8607.4	2767.1	1062.3	620.3	786.1	517.7	372.5	312.5
55°	26466.3	25923.3	22785.3	9216.7	2560.3	885.5	536.7	675.6	498.8	337.8	292.0
57.5°	28054.3	27610.7	24412.7	9633.4	2284.1	691.4	467.2	544.6	456.2	296.8	260.4
59°	28488.3	28003.7	25009.4	9652.4	2077.3	603.0	432.5	449.9	446.7	277.8	241.5
60°	28488.3	27973.8	25181.4	9551.4	1927.3	554.0	410.4	400.9	465.7	265.2	230.5
62.5°	27972.2	27249.2	24622.7	8867.9	1572.2	472.0	358.3	331.5	418.3	238.3	203.6
65°	26898.8	25846.0	22719.0	7631.9	1401.7	432.5	309.4	271.5	290.4	209.9	178.4
67.5°	25108.8	23681.9	19974.0	6165.5	1333.8	421.5	266.8	230.5	219.4	179.9	156.3
70°	21956.6	20373.4	16641.9	4847.5	1275.4	416.7	224.1	194.2	176.8	151.5	132.6
72.5°	15980.5	14329.4	11814.9	3789.9	1240.7	426.2	179.9	162.6	145.2	118.4	102.6
75°	9141.0	8059.7	6640.6	2503.5	1057.6	407.2	138.9	135.7	104.2	85.2	71.0
77.5°	4722.8	4579.2	3979.3	961.3	506.7	178.4	91.6	78.9	61.6	52.1	42.6
80°	2037.8	2015.7	1744.2	277.8	134.2	99.4	52.1	33.1	28.4	22.1	17.4
82.5°	704.0	704.0	620.3	93.1	60.0	48.9	6.3	0.0	0.0	0.0	0.0
85°	142.1	159.4	112.1	0.0	20.5	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°	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6
2.5°	9466.1	9275.1	9262.5	9142.5	8992.6	8924.7	8885.2	8954.7	9039.9	9049.4	9177.3
5°	7347.8	7147.3	7231.0	7017.9	7060.5	7017.9	6948.5	6961.1	6999.0	6880.6	7027.4
7.5°	5160.0	5008.5	5104.8	5048.0	5123.7	5153.7	5111.1	5048.0	4861.7	4839.6	4967.5
10°	3889.4	3717.3	3614.7	3507.4	3531.1	3580.0	3564.2	3518.4	3400.0	3406.4	3529.5
12.5°	3125.4	2932.8	2729.2	2465.6	2400.9	2437.2	2400.9	2374.0	2260.4	2269.8	2378.8
15°	2370.9	2213.0	1999.9	1788.4	1673.2	1684.2	1583.2	1512.2	1441.1	1355.9	1422.2
17.5°	1600.6	1504.3	1441.1	1378.0	1240.7	1209.1	1081.3	943.9	890.3	850.8	879.2
20°	1133.3	1081.3	1056.0	1052.8	973.9	934.5	809.8	724.5	697.7	689.8	707.2
22.5°	947.1	909.2	872.9	852.4	812.9	767.1	672.4	629.8	610.9	601.4	614.0
25°	824.0	795.6	757.7	722.9	707.2	658.2	590.4	558.8	546.2	536.7	543.0
27.5°	732.4	707.2	663.0	640.9	628.2	585.6	527.2	502.0	490.9	487.7	486.2
30°	659.8	636.1	595.1	569.8	547.7	509.8	475.1	449.9	438.8	435.7	432.5
32.5°	587.2	568.3	541.4	516.2	492.5	457.8	427.8	407.2	389.9	386.7	385.1
35°	495.6	476.7	462.5	460.9	438.8	405.7	383.6	356.7	342.5	337.8	339.4
37.5°	440.4	415.1	383.6	394.6	388.3	364.6	334.6	307.8	293.6	290.4	290.4
40°	405.7	378.8	342.5	323.6	342.5	337.8	290.4	263.6	249.4	247.8	244.7
42.5°	372.5	345.7	304.6	273.1	282.5	296.8	251.0	225.7	211.5	208.4	203.6
45°	348.8	320.4	274.7	238.3	219.4	249.4	214.7	183.1	175.2	168.9	165.7
47.5°	326.7	299.9	247.8	206.8	175.2	179.9	172.1	150.0	140.5	134.2	132.6
50°	307.8	279.4	224.1	176.8	145.2	132.6	138.9	118.4	110.5	104.2	101.0
52.5°	285.7	258.9	198.9	153.1	121.5	104.2	105.8	93.1	85.2	80.5	78.9
55°	268.3	241.5	178.4	134.2	107.3	85.2	75.8	72.6	67.9	64.7	63.1
57.5°	244.7	219.4	157.8	113.7	91.6	69.5	58.4	58.4	56.8	53.7	52.1
59°	230.5	208.4	145.2	102.6	83.7	60.0	52.1	53.7	52.1	48.9	47.4
60°	219.4	198.9	135.7	94.7	78.9	55.2	47.4	50.5	48.9	45.8	44.2
62.5°	194.2	179.9	116.8	78.9	69.5	44.2	39.5	42.6	42.6	41.0	39.5
65°	170.5	154.7	99.4	66.3	64.7	37.9	31.6	37.9	39.5	36.3	33.1
67.5°	148.4	132.6	86.8	53.7	60.0	30.0	23.7	31.6	42.6	33.1	30.0
70°	126.3	110.5	67.9	42.6	63.1	20.5	18.9	28.4	50.5	36.3	28.4
72.5°	97.9	85.2	47.4	31.6	67.9	14.2	14.2	23.7	56.8	39.5	26.8
75°	67.9	55.2	28.4	18.9	55.2	9.5	9.5	22.1	53.7	36.3	25.3
77.5°	39.5	30.0	9.5	1.6	28.4	0.0	1.6	15.8	37.9	22.1	11.0
80°	14.2	6.3	0.0	0.0	17.4	0.0	0.0	0.0	3.2	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

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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6
2.5°	9210.4	9423.5	9614.5	9903.4	10245.9	10640.5	10979.9	11344.5	11687.0	11829.1	11927.0
5°	7057.4	7321.0	7628.8	8053.4	8618.5	9314.6	9966.5	10703.6	11496.0	11892.2	12264.8
7.5°	4989.6	5257.9	5639.9	6091.3	6774.8	7603.5	8455.9	9474.0	10547.4	11174.0	11791.2
10°	3587.9	3917.8	4274.5	4891.7	5586.2	6372.3	7249.9	8386.4	9582.9	10277.5	11020.9
12.5°	2441.9	2817.6	3357.4	4048.8	4864.9	5635.2	6397.6	7482.0	8871.0	9559.3	10356.4
15°	1464.8	1673.2	2244.6	3044.9	4045.6	5005.3	5840.4	6927.9	8408.5	9251.4	10080.1
17.5°	902.9	999.2	1310.1	1966.8	3018.0	4231.9	5376.3	6740.1	8474.8	9500.8	10388.0
20°	719.8	757.7	857.1	1161.8	1999.9	3379.5	4853.8	6702.2	9016.3	10279.0	11230.9
22.5°	625.1	661.4	727.7	844.5	1258.0	2530.3	4358.2	6736.9	9792.9	11445.5	12556.8
25°	550.9	582.5	645.6	741.9	921.8	1782.1	3827.8	6891.6	10804.7	12893.0	14073.7
27.5°	492.5	519.3	577.7	666.1	790.8	1243.8	3226.4	7079.5	12004.3	14373.6	15538.5
30°	438.8	462.5	514.6	596.7	686.6	956.6	2566.6	7207.3	13205.5	15538.5	16585.0
32.5°	393.0	410.4	457.8	527.2	596.7	762.4	1951.0	7186.8	14097.4	16507.7	17338.0
35°	345.7	363.0	404.1	464.1	519.3	629.8	1534.3	6803.2	14874.0	17513.2	18199.8
37.5°	293.6	315.7	355.2	408.8	446.7	554.0	1240.7	6340.7	15661.6	18662.3	19161.1
40°	249.4	271.5	306.2	364.6	388.3	525.6	953.4	5777.2	16547.2	19947.2	20215.5
42.5°	206.8	227.3	263.6	314.1	366.2	453.0	705.6	5133.2	17398.0	21045.8	21176.8
45°	167.3	187.8	225.7	276.2	391.5	375.7	546.2	4443.4	18084.6	21959.8	22002.4
47.5°	132.6	151.5	191.0	260.4	364.6	299.9	389.9	3902.0	18660.7	22673.2	22561.2
50°	102.6	118.4	159.4	298.3	318.9	247.8	295.2	3722.0	19176.9	23115.2	22824.8
52.5°	80.5	94.7	131.0	279.4	247.8	205.2	247.8	3890.9	19884.1	23481.4	22973.1
55°	64.7	78.9	102.6	159.4	168.9	173.6	211.5	4048.8	21104.2	24340.1	23849.2
57.5°	53.7	67.9	83.7	112.1	127.9	146.8	187.8	4066.2	22542.2	25767.0	25303.0
59°	48.9	61.6	75.8	99.4	112.1	134.2	176.8	3971.4	23048.9	26286.4	26054.3
60°	45.8	58.4	71.0	91.6	104.2	126.3	170.5	3881.5	23071.0	26267.4	26374.8
62.5°	39.5	52.1	63.1	77.3	88.4	107.3	153.1	3548.4	22136.6	25407.2	26182.2
65°	34.7	45.8	56.8	66.3	75.8	96.3	138.9	2940.7	20540.7	24019.7	24864.2
67.5°	31.6	39.5	52.1	58.4	67.9	85.2	123.1	2096.2	18547.1	22322.8	22870.5
70°	28.4	37.9	47.4	53.7	61.6	74.2	105.8	1204.4	15661.6	19838.3	20228.2
72.5°	26.8	36.3	42.6	50.5	55.2	66.3	96.3	566.7	11467.6	15892.1	16910.2
75°	23.7	33.1	39.5	47.4	52.1	60.0	82.1	271.5	7627.2	11500.8	12657.8
77.5°	14.2	26.8	36.3	42.6	45.8	52.1	67.9	156.3	4868.0	7960.3	9376.1
80°	0.0	9.5	26.8	36.3	39.5	44.2	52.1	123.1	2604.5	4547.6	5458.4
82.5°	0.0	0.0	18.9	28.4	26.8	30.0	39.5	77.3	1174.4	2972.3	3349.5
85°	0.0	0.0	6.3	22.1	18.9	14.2	26.8	26.8	257.3	1504.3	1876.8
87.5°	0.0	0.0	0.0	1.6	9.5	6.3	11.0	3.2	1.6	112.1	454.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P324644

CATALOG NUMBER: GLEON-SA0B-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6	10853.6
2.5°	12269.5	12386.3	12583.6	12676.7	12631.0	12436.8	12204.8	11968.0	11829.1	11884.3
5°	13024.0	13625.4	13972.7	14087.9	13895.3	13459.7	12889.8	12138.5	11871.7	11799.1
7.5°	13024.0	14155.8	14872.4	14998.7	14569.3	13715.4	12646.8	11473.9	11084.1	10942.0
10°	12566.2	14106.8	15106.0	15306.5	14706.7	13429.7	11998.0	10659.4	10197.0	10050.2
12.5°	12050.1	13709.1	14761.9	15038.1	14545.7	13145.5	11548.1	10108.6	9564.0	9436.1
15°	11732.8	13219.7	14091.1	14291.5	14083.2	12979.8	11440.8	9942.8	9302.0	9178.8
17.5°	11846.5	12840.9	13155.0	13271.8	13412.3	12921.4	11732.8	10305.9	9494.5	9377.7
20°	12274.2	12441.5	12279.0	12425.8	12804.6	12978.2	12428.9	11183.5	10209.6	10053.3
22.5°	13000.3	12234.8	11778.6	11837.0	12297.9	13166.1	13492.8	12436.8	11312.9	11117.2
25°	13846.4	12402.1	11500.8	11448.7	11922.2	13413.9	14465.2	13800.6	12618.3	12402.1
27.5°	14910.3	12777.8	11444.0	11391.9	11791.2	13645.9	15273.3	15148.6	13993.2	13623.8
30°	15731.1	13147.1	11612.8	11492.9	11922.2	13806.9	15922.1	16293.0	15088.7	14844.0
32.5°	16319.9	13582.8	11887.5	11713.9	12291.6	14084.7	16422.5	17341.1	16102.0	15731.1
35°	16768.2	14056.3	12331.1	12045.4	12799.9	14506.2	16891.3	18457.1	17180.1	16774.5
37.5°	17188.0	14720.9	13024.0	12683.1	13597.0	15184.9	17386.9	19723.1	18386.1	17901.5
40°	17773.6	15473.8	14092.6	13789.6	14937.1	16109.9	18005.7	21042.7	19757.8	19148.5
42.5°	18359.3	16282.0	15186.5	15268.6	16608.7	17233.8	18804.4	22438.0	21112.1	20461.8
45°	18894.4	17115.4	16744.5	17123.3	18160.4	18466.6	19598.4	23244.6	22193.4	21565.1
47.5°	19371.1	18157.2	18293.0	19301.6	19925.1	19582.6	20191.9	23940.7	22998.4	22444.4
50°	19925.1	19505.2	20333.9	21760.9	21956.6	20592.8	20731.7	24764.7	23939.2	23494.0
52.5°	20531.2	20925.9	22594.3	23852.4	23789.2	21689.8	21274.7	25688.1	25228.8	24810.5
55°	21219.5	22073.4	24584.8	25809.7	25756.0	22914.7	22174.4	26829.4	26845.1	26466.3
57.5°	22240.7	23061.5	25935.9	27392.9	27482.8	24329.1	23699.2	28107.9	28306.8	28054.3
59°	22973.1	23702.4	26471.0	28054.3	28420.5	25422.9	24813.6	28849.8	28718.8	28488.3
60°	23516.1	24109.6	26736.2	28399.9	28965.0	26164.8	25636.0	29285.5	28767.7	28488.3
62.5°	24859.4	24996.7	27214.5	28791.4	29591.7	27812.8	27950.1	30027.4	28428.4	27972.2
65°	25486.1	25557.1	27208.2	28090.6	28985.6	29096.1	30049.5	30049.5	27599.7	26898.8
67.5°	25224.0	24881.5	25858.6	25767.0	26660.5	28333.6	30838.7	28947.7	26014.9	25108.8
70°	23093.1	21775.1	21341.0	21380.5	22063.9	24644.7	29276.0	25705.5	23015.8	21956.6
72.5°	19214.8	16053.1	14981.3	16204.6	16383.0	18940.1	24949.4	19358.4	16973.4	15980.5
75°	15454.9	11316.1	9573.5	10864.7	11167.7	13860.6	19300.0	12056.4	9914.4	9141.0
77.5°	11103.0	8122.8	6869.5	6779.6	7171.0	8790.5	13694.9	6067.7	5060.6	4722.8
80°	6307.6	5346.3	5756.7	5431.5	5628.8	5496.3	6506.5	2661.3	2179.9	2037.8
82.5°	3807.3	3160.1	3422.1	2849.1	3605.2	3139.6	2506.6	852.4	740.3	704.0
85°	2476.6	1726.9	899.7	603.0	1242.3	2006.2	560.4	232.0	178.4	142.1
87.5°	854.0	440.4	44.2	18.9	132.6	374.1	20.5	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

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.

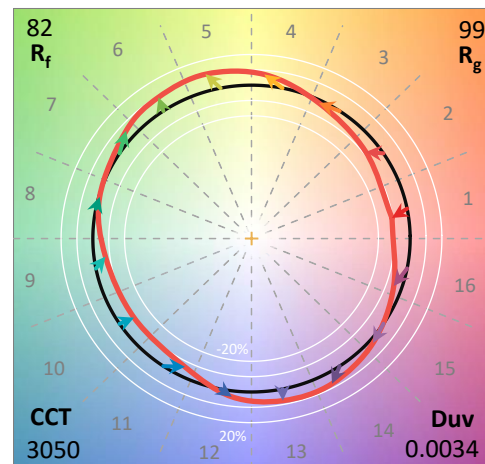
Test Information

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
 CIE u' : 0.2476
 CIE v' : 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 81.0
 R1: 79.6
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



Test Conditions

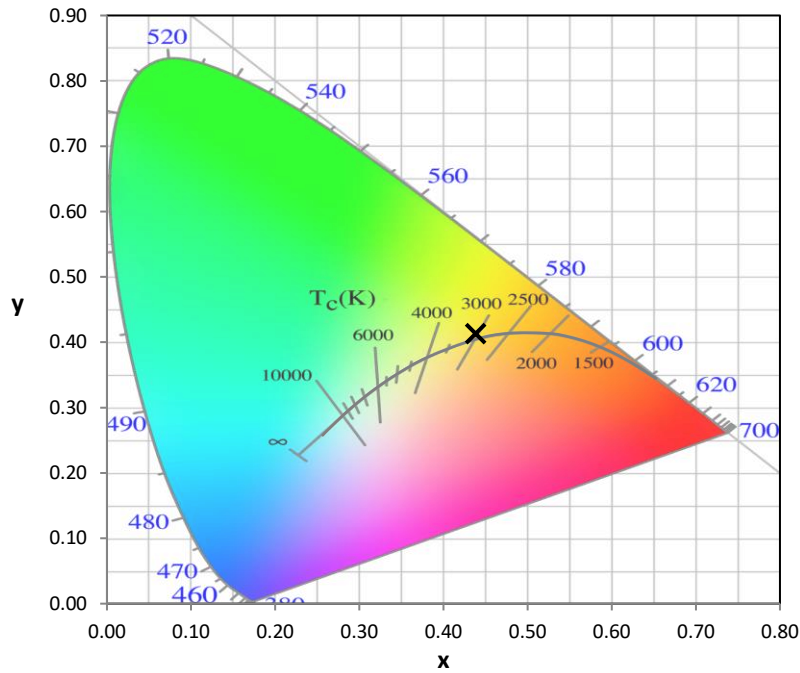
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

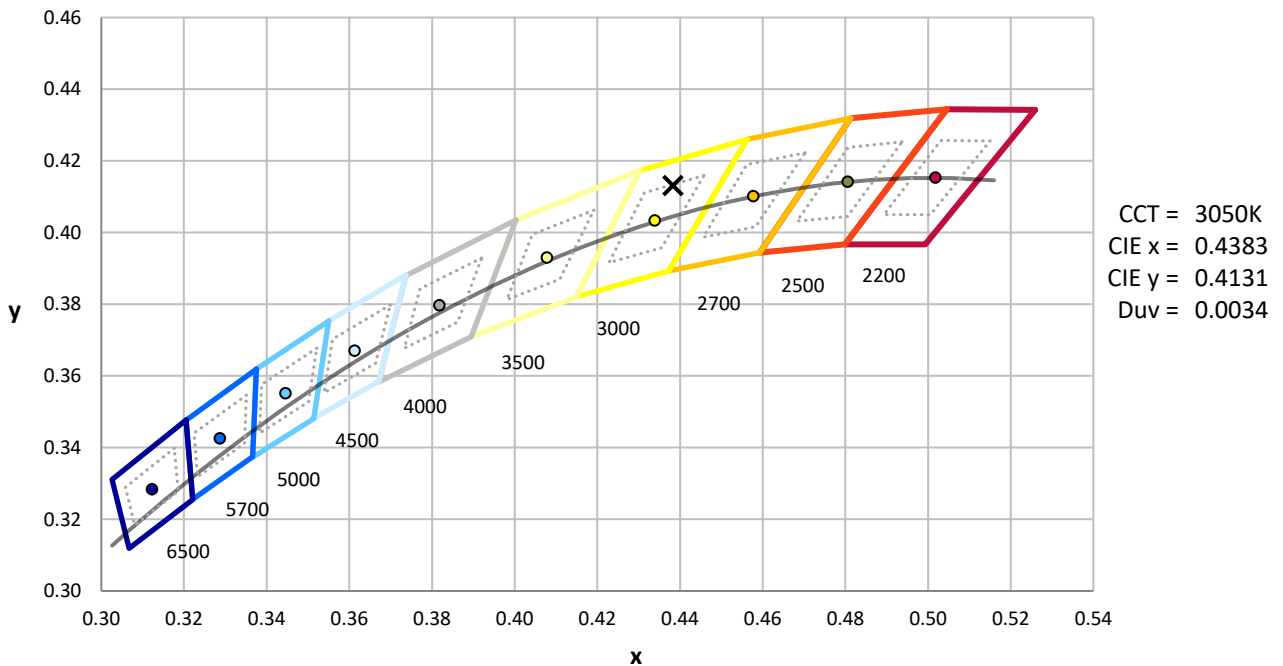
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



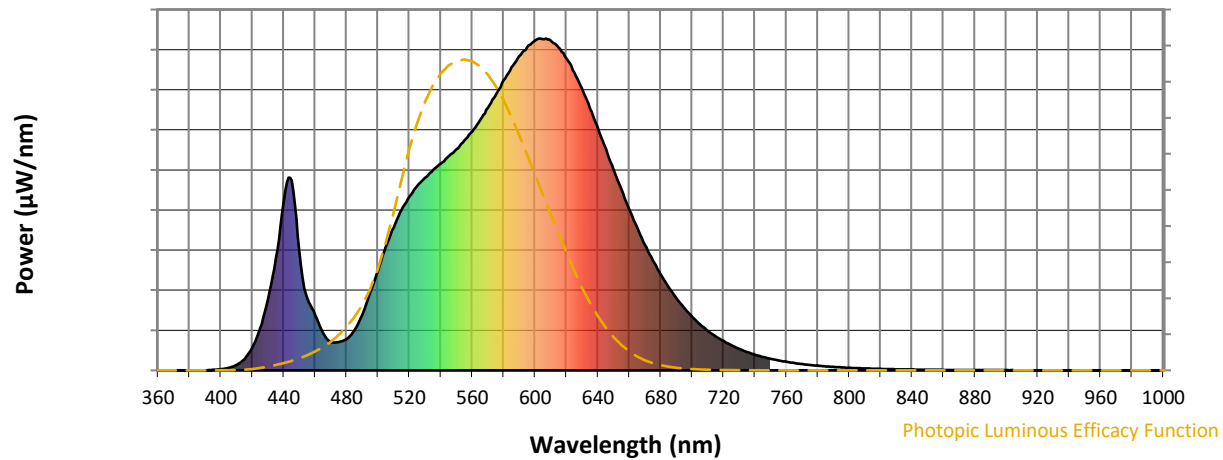
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

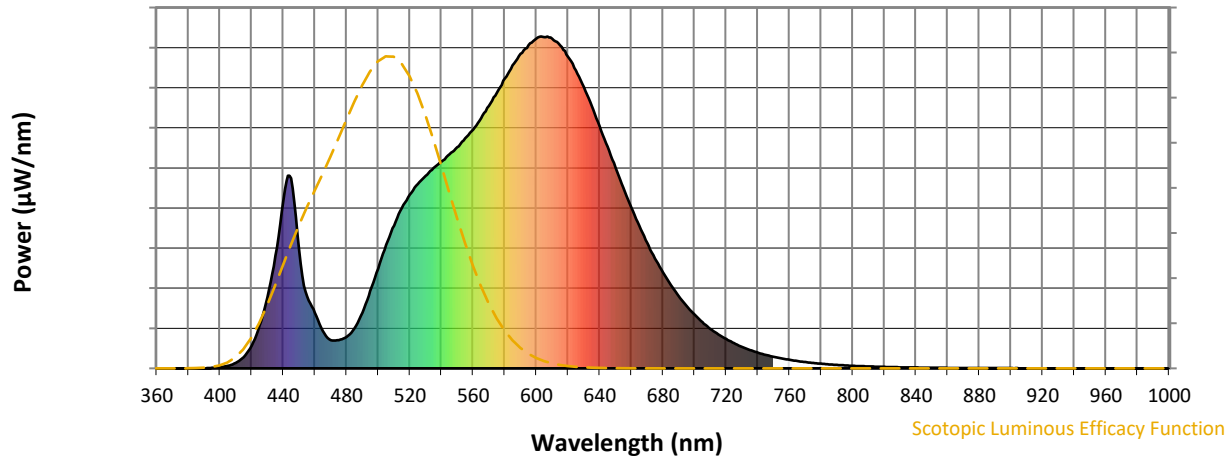


Photopic Lumens: NR

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	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



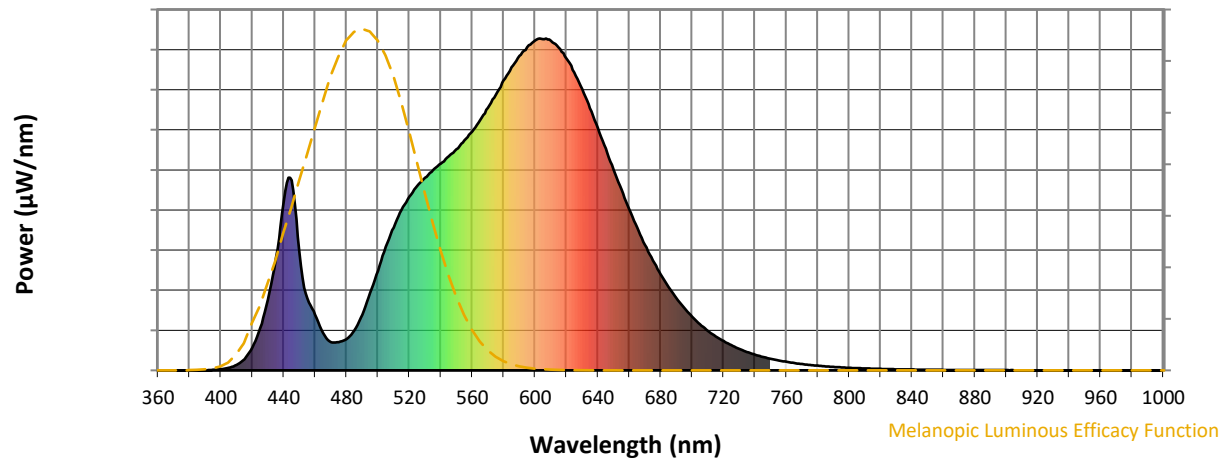
Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.32

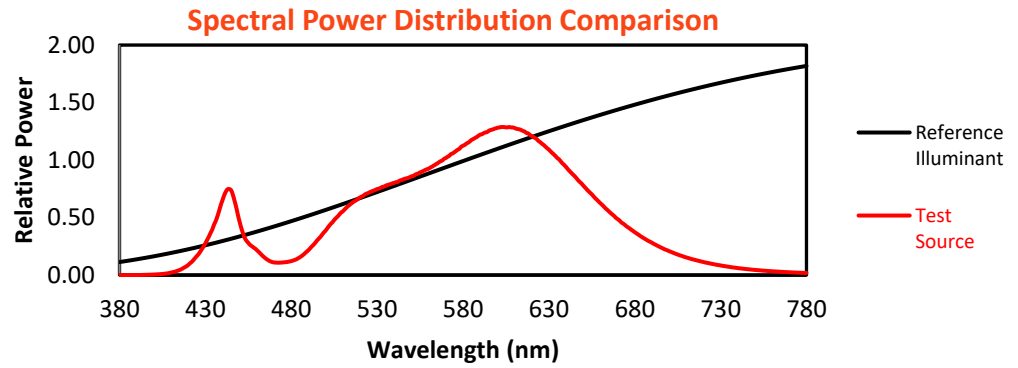
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	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

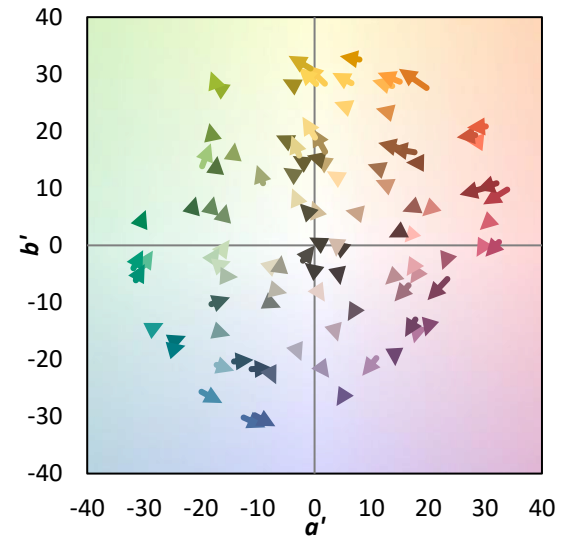
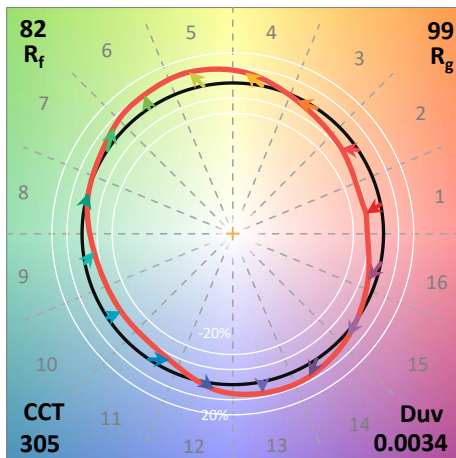
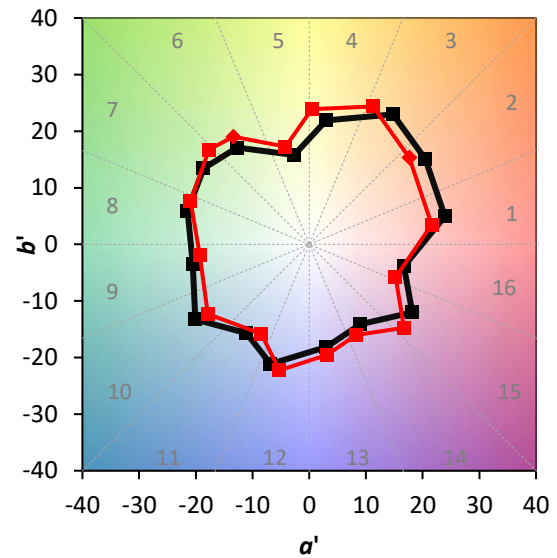
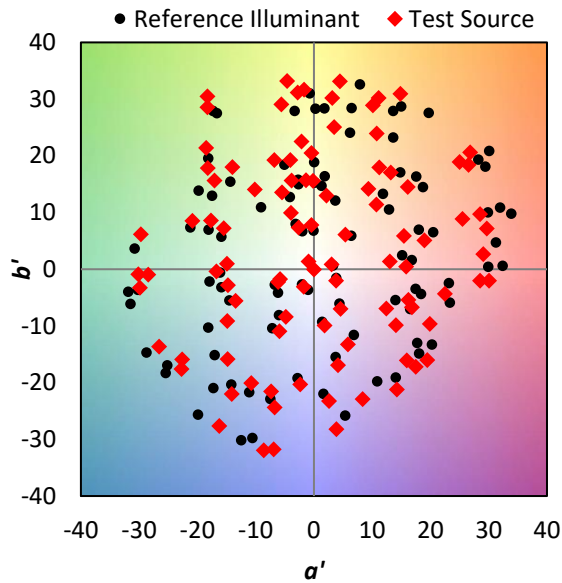
TM-30-18

Summary

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

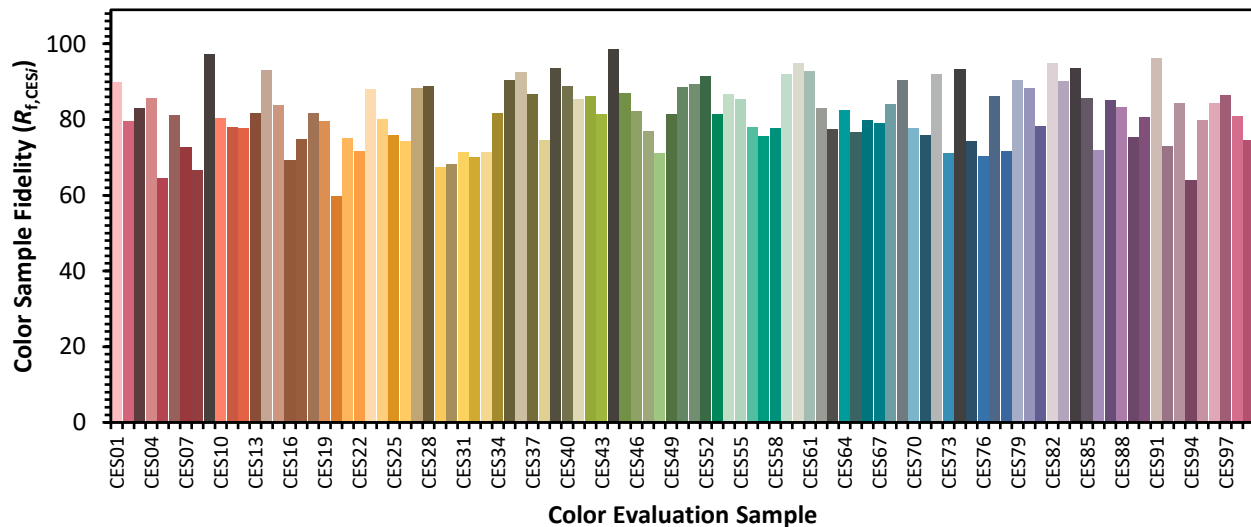


Color Vector Graphics

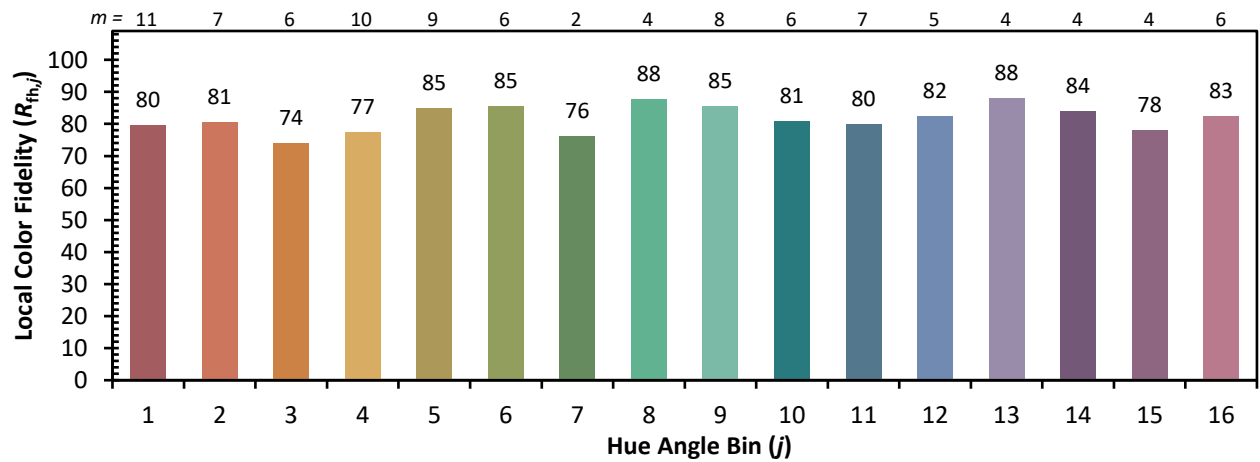
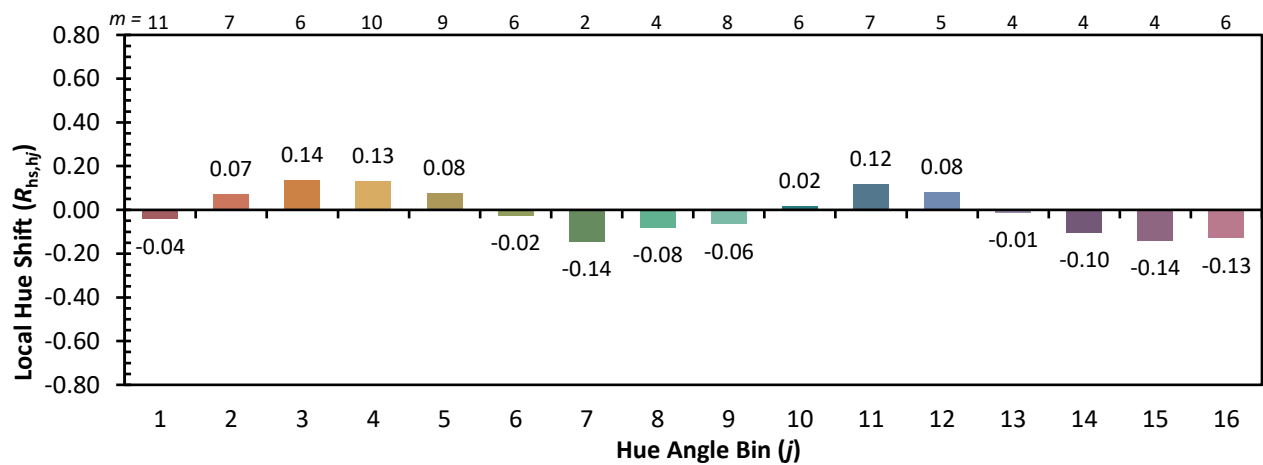
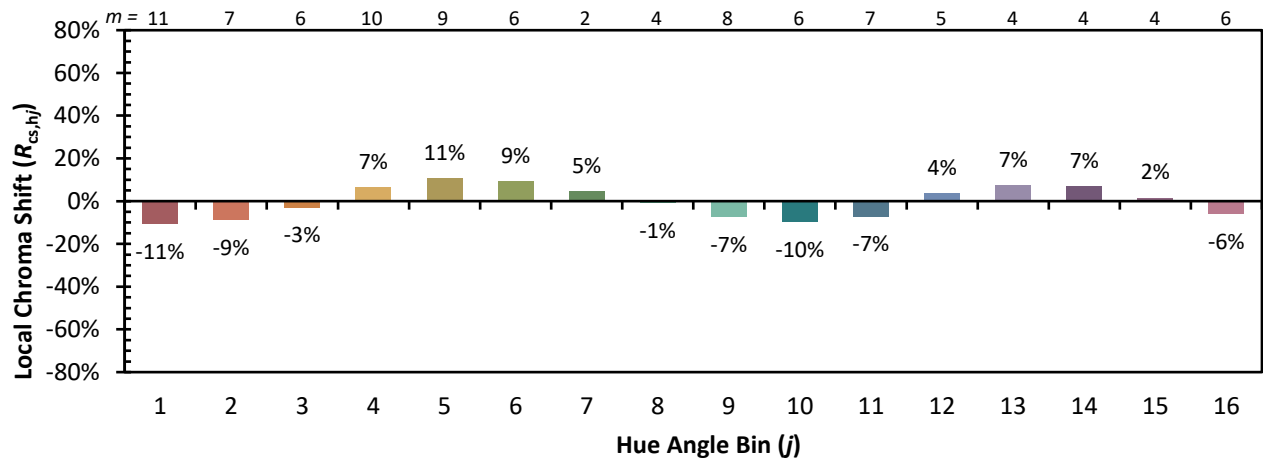


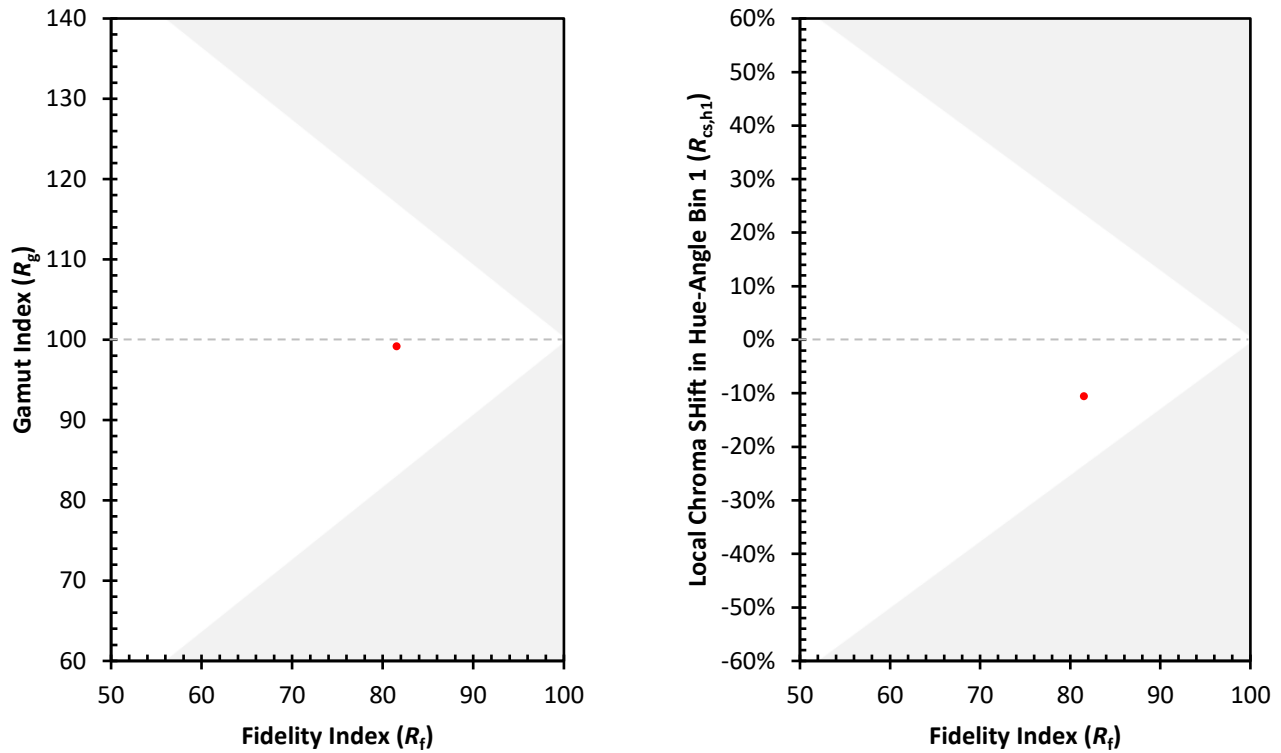
Individual Sample Fidelity Index ($R_{f,i}$)

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	



Color Rendition by Hue-Angle Bin



Measure Comparisons


(END OF REPORT)