

Signify Classified - Internal
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: P324634

Luminaire Tested: **GLEON-SA0A-830-U-SLR-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324634
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-SA0A-830-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(10) 80 CRI, 3000K, 615mA 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: 27171 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

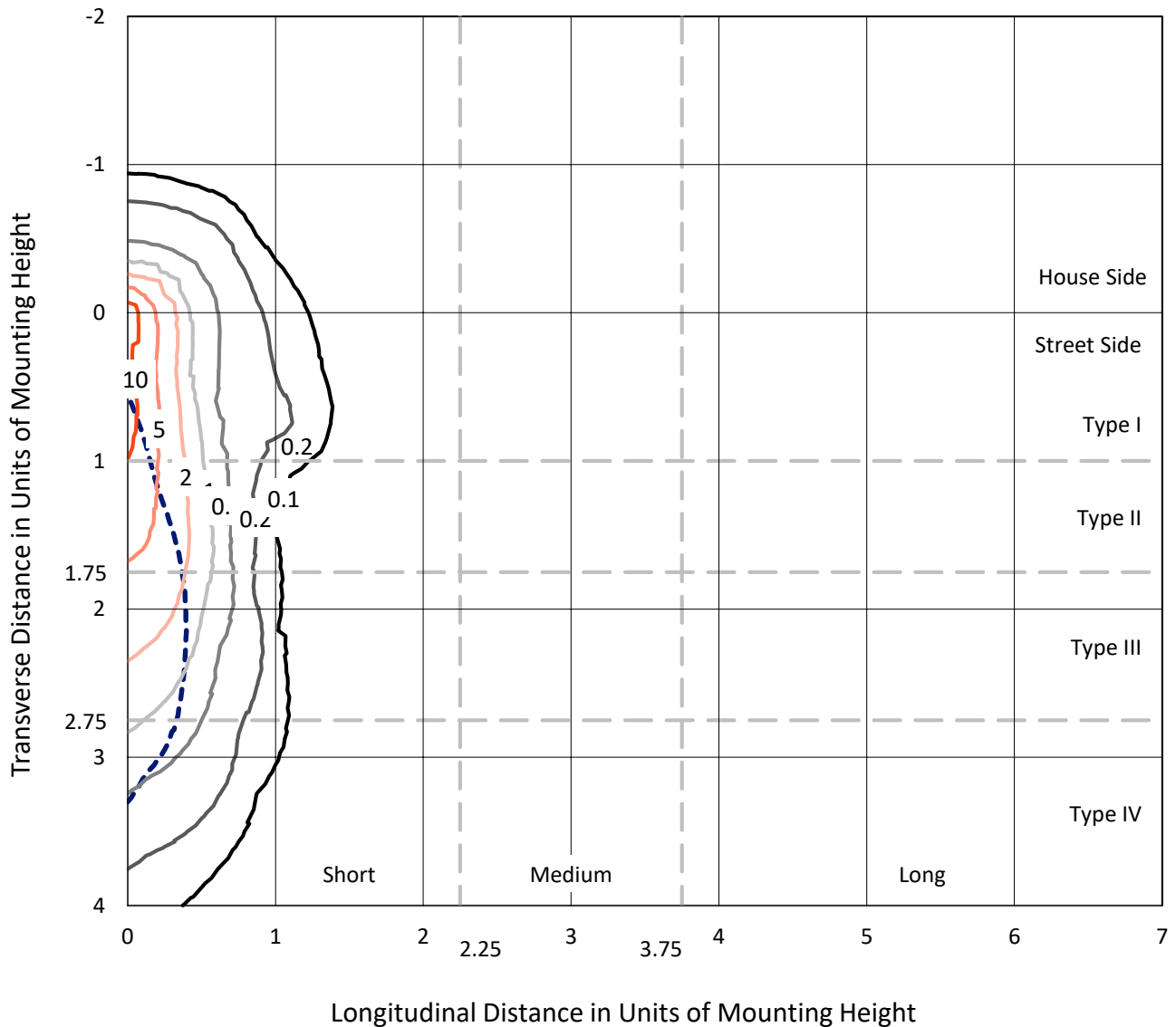
Input Watts (W): 323
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

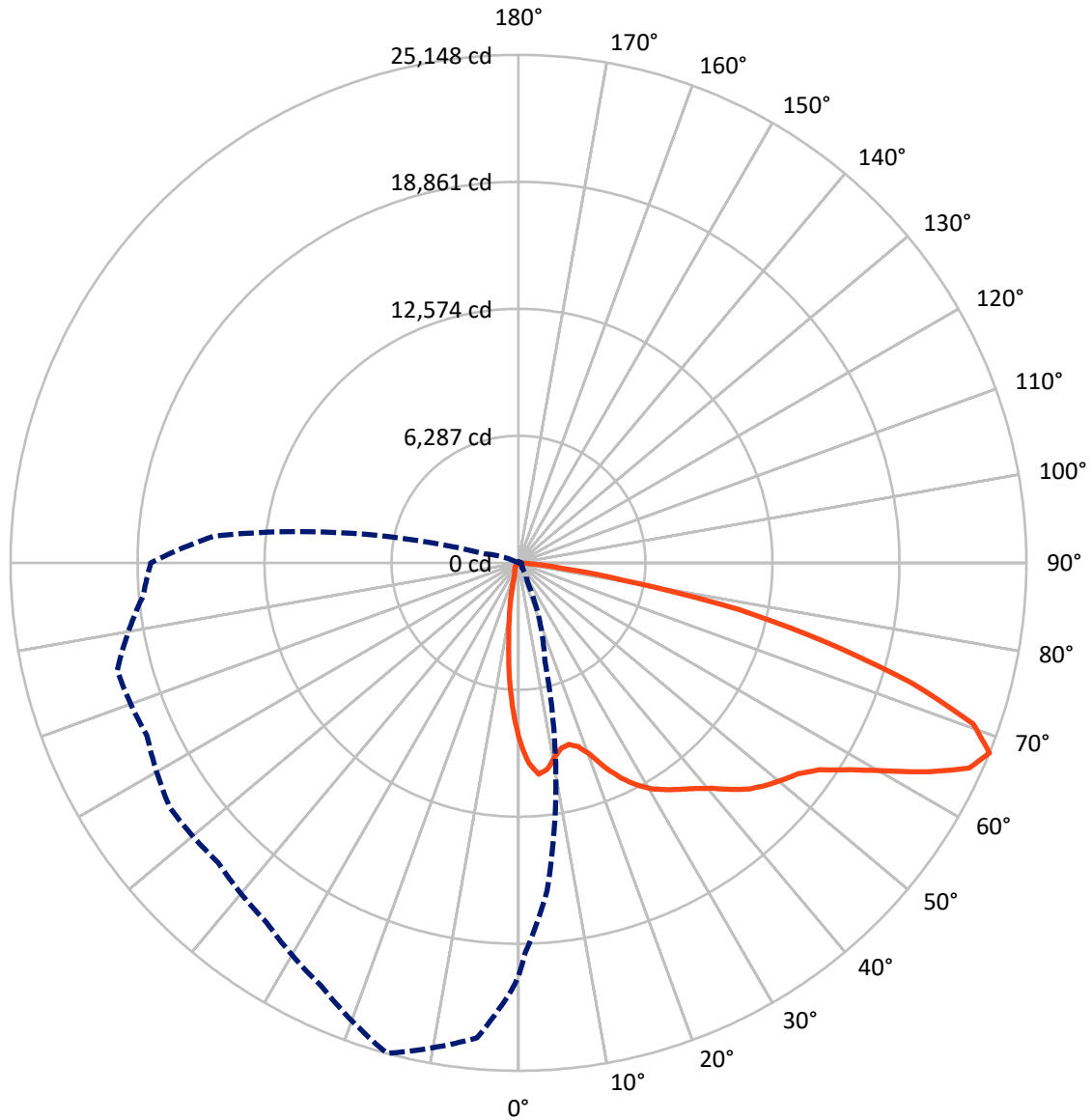
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 345-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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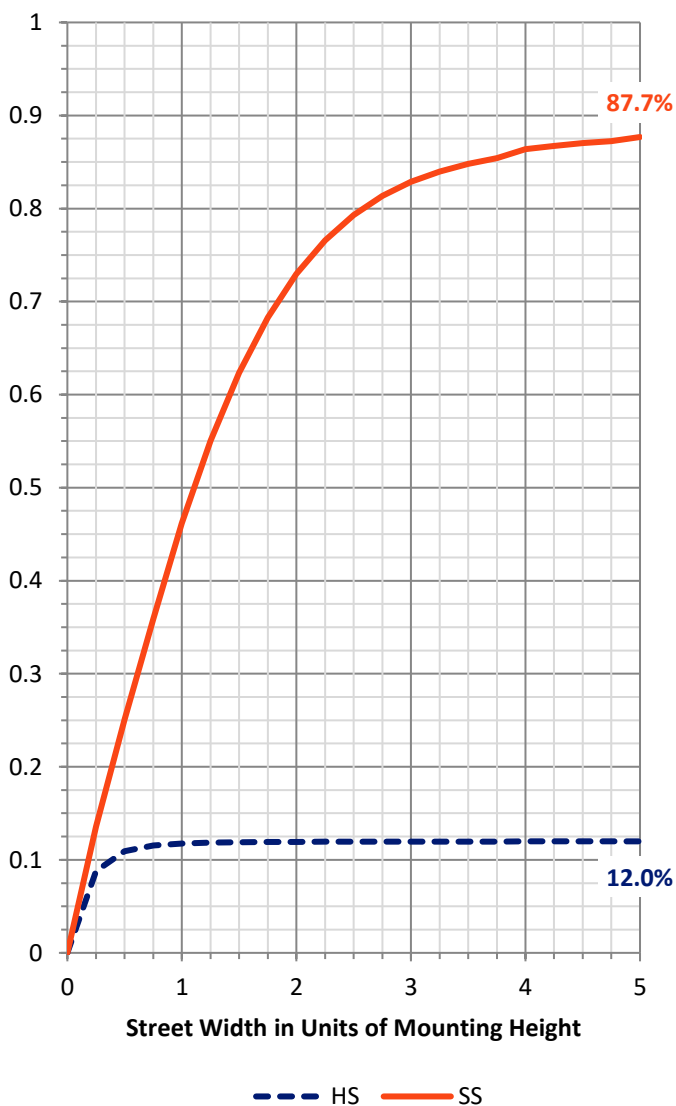
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3288.6	0.0	3288.6
	% Fixture	12.1	0.0	12.1
Street Side	Lumens	23882.4	0.0	23882.4
	% Fixture	87.9	0.0	87.9
Total	Lumens	27171.0	0.0	27171.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	679.3	2.5
10°-20°	1352.1	5.0
20°-30°	1920.0	7.1
30°-40°	2836.0	10.4
40°-50°	4090.1	15.1
50°-60°	5741.7	21.1
60°-70°	6693.1	24.6
70°-80°	3421.7	12.6
80°-90°	437.0	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°	27171.0	100.0
0°-180°	27171.0	100.0

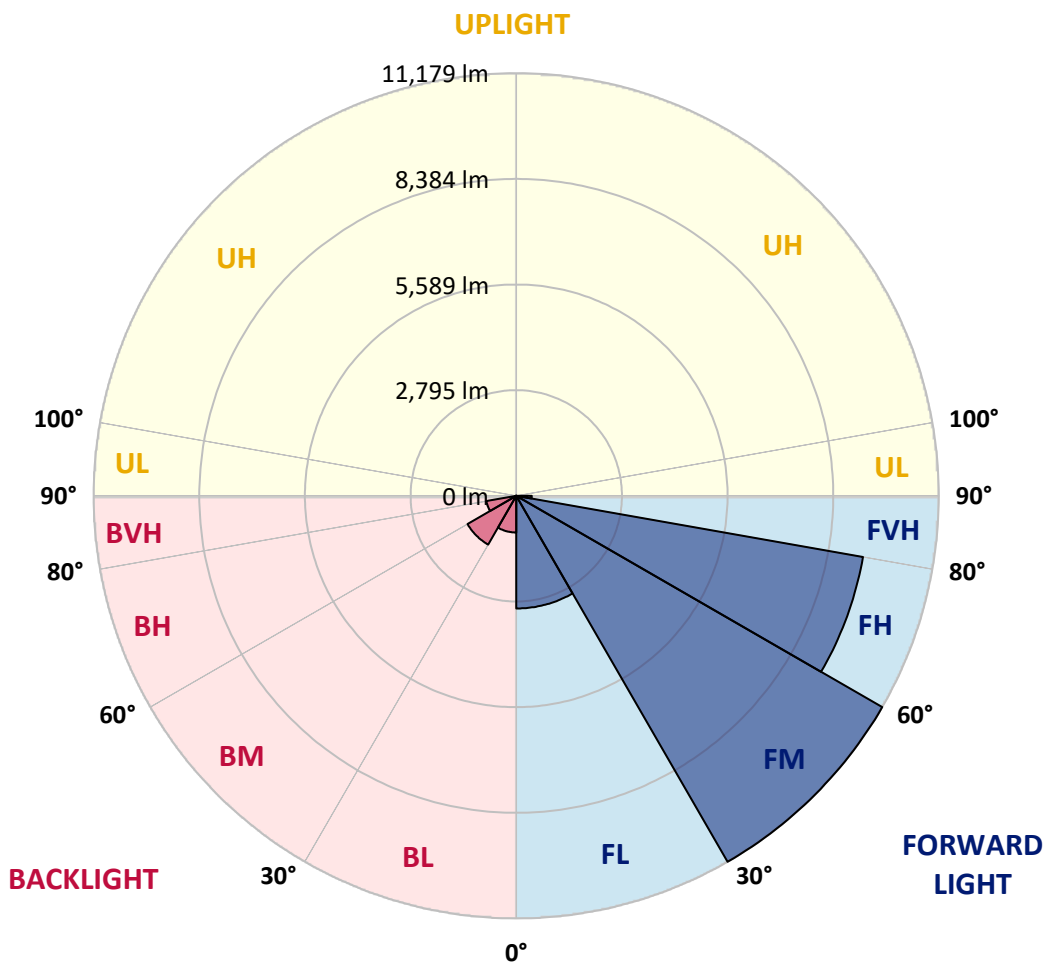


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2980.1	11.0			
FM (30°-60°)	11178.6	41.1			
FH (60°-80°)	9313.3	34.3			G4/12000
FVH (80°-90°)	410.4	1.5			G3/500
BL (0°-30°)	971.3	3.6	B2/1000		
BM (30°-60°)	1489.2	5.5	B2/2500		
BH (60°-80°)	801.5	2.9	B2/1000		G2/1000
BVH (80°-90°)	26.6	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9
2.5°	9691.5	9616.8	9534.4	9265.4	9015.7	8729.9	8496.9	8334.7	8131.3	7867.5	7800.5
5°	9621.9	9542.1	9283.4	8684.9	8161.0	7651.2	7159.5	6871.2	6513.3	6150.3	6060.2
7.5°	8923.0	8839.3	8466.0	7646.1	6940.7	6204.4	5565.9	5170.7	4766.6	4434.5	4258.1
10°	8195.7	8104.3	7684.7	6689.7	5820.8	5155.3	4686.8	4309.6	3927.3	3572.0	3288.8
12.5°	7695.0	7575.3	7119.6	5992.0	5235.1	4783.3	4345.6	3893.8	3376.4	2995.4	2683.8
15°	7485.2	7348.7	6867.3	5723.0	5027.9	4497.5	3927.3	3372.5	2766.2	2329.9	2044.1
17.5°	7647.4	7469.7	6953.5	5704.9	4767.9	4045.7	3324.9	2673.5	2015.8	1574.3	1370.9
20°	8198.3	7965.3	7310.1	5699.8	4452.5	3509.0	2595.0	1858.7	1328.4	1068.4	961.6
22.5°	9065.9	8758.2	7822.4	5741.0	4126.8	2945.2	1874.2	1262.8	997.6	862.4	799.4
25°	10113.7	9757.1	8560.0	5886.4	3841.1	2396.8	1361.9	997.6	841.8	742.7	689.9
27.5°	11110.0	10820.3	9491.9	6096.3	3619.7	1954.0	1105.7	845.7	719.6	653.9	611.4
30°	12105.0	11740.7	10448.3	6346.0	3353.2	1654.1	971.8	771.0	644.9	575.4	548.4
32.5°	12828.4	12525.9	11197.5	6526.2	3068.7	1458.4	868.9	705.4	602.4	531.6	491.7
35°	13679.3	13336.9	11839.8	6566.1	2885.9	1334.8	781.3	634.6	522.6	459.5	417.1
37.5°	14598.3	14172.3	12581.3	6478.6	2743.1	1274.3	715.7	602.4	487.9	423.5	378.4
40°	15615.2	15133.8	13293.1	6352.4	2602.8	1253.7	665.5	578.0	460.8	395.2	348.8
42.5°	16686.2	16118.5	13909.7	6219.8	2513.9	1183.0	660.3	553.5	440.2	369.4	323.1
45°	17586.0	17010.6	14543.0	6176.1	2450.9	1105.7	682.2	536.8	426.1	348.8	303.8
47.5°	18302.9	17758.4	15191.7	6273.9	2414.8	1034.9	621.7	558.7	418.3	330.8	287.0
50°	19158.9	18542.4	16105.7	6566.1	2362.0	964.1	562.5	639.7	418.3	319.2	272.9
52.5°	20232.5	19622.3	17125.1	7019.2	2256.5	866.3	505.9	641.0	422.2	303.8	254.9
55°	21582.8	21140.0	18581.0	7516.1	2087.9	722.1	437.7	550.9	406.8	275.5	238.1
57.5°	22877.7	22516.0	19908.1	7855.9	1862.6	563.8	381.0	444.1	372.0	242.0	212.4
59°	23231.7	22836.5	20394.7	7871.3	1694.0	491.7	352.7	366.9	364.3	226.6	196.9
60°	23231.7	22812.1	20535.0	7788.9	1571.7	451.8	334.7	327.0	379.7	216.3	187.9
62.5°	22810.8	22221.2	20079.3	7231.6	1282.1	384.9	292.2	270.3	341.1	194.4	166.1
65°	21935.5	21076.9	18526.9	6223.7	1143.0	352.7	252.3	221.4	236.8	171.2	145.5
67.5°	20475.8	19312.1	16288.4	5027.9	1087.7	343.7	217.5	187.9	178.9	146.7	127.4
70°	17905.2	16614.1	13571.1	3953.0	1040.1	339.8	182.8	158.3	144.2	123.6	108.1
72.5°	13031.8	11685.4	9634.8	3090.6	1011.8	347.5	146.7	132.6	118.4	96.5	83.7
75°	7454.3	6572.5	5415.3	2041.5	862.4	332.1	113.3	110.7	85.0	69.5	57.9
77.5°	3851.4	3734.2	3245.1	783.9	413.2	145.5	74.7	64.4	50.2	42.5	34.8
80°	1661.8	1643.8	1422.4	226.6	109.4	81.1	42.5	27.0	23.2	18.0	14.2
82.5°	574.1	574.1	505.9	75.9	48.9	39.9	5.1	0.0	0.0	0.0	0.0
85°	115.8	130.0	91.4	0.0	16.7	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°	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9
2.5°	7719.4	7563.7	7553.4	7455.6	7333.3	7277.9	7245.7	7302.4	7371.9	7379.6	7483.9
5°	5992.0	5828.5	5896.7	5723.0	5757.7	5723.0	5666.3	5676.6	5707.5	5611.0	5730.7
7.5°	4207.9	4084.3	4162.9	4116.5	4178.3	4202.8	4168.0	4116.5	3964.6	3946.6	4050.9
10°	3171.7	3031.4	2947.7	2860.2	2879.5	2919.4	2906.5	2869.2	2772.7	2777.8	2878.2
12.5°	2548.7	2391.6	2225.6	2010.6	1957.9	1987.5	1957.9	1936.0	1843.3	1851.0	1939.8
15°	1933.4	1804.7	1630.9	1458.4	1364.4	1373.5	1291.1	1233.2	1175.2	1105.7	1159.8
17.5°	1305.2	1226.7	1175.2	1123.7	1011.8	986.0	881.7	769.8	726.0	693.8	717.0
20°	924.2	881.7	861.1	858.6	794.2	762.0	660.3	590.8	568.9	562.5	576.7
22.5°	772.3	741.4	711.8	695.1	662.9	625.6	548.4	513.6	498.2	490.4	500.7
25°	671.9	648.8	617.9	589.5	576.7	536.8	481.4	455.7	445.4	437.7	442.8
27.5°	597.3	576.7	540.6	522.6	512.3	477.6	429.9	409.3	400.3	397.7	396.5
30°	538.1	518.7	485.3	464.7	446.7	415.8	387.5	366.9	357.8	355.3	352.7
32.5°	478.8	463.4	441.5	420.9	401.6	373.3	348.8	332.1	317.9	315.4	314.1
35°	404.2	388.7	377.2	375.9	357.8	330.8	312.8	290.9	279.3	275.5	276.8
37.5°	359.1	338.5	312.8	321.8	316.7	297.3	272.9	251.0	239.4	236.8	236.8
40°	330.8	308.9	279.3	263.9	279.3	275.5	236.8	215.0	203.4	202.1	199.5
42.5°	303.8	281.9	248.4	222.7	230.4	242.0	204.7	184.1	172.5	169.9	166.1
45°	284.5	261.3	224.0	194.4	178.9	203.4	175.1	149.3	142.9	137.7	135.2
47.5°	266.5	244.6	202.1	168.6	142.9	146.7	140.3	122.3	114.6	109.4	108.1
50°	251.0	227.8	182.8	144.2	118.4	108.1	113.3	96.5	90.1	85.0	82.4
52.5°	233.0	211.1	162.2	124.9	99.1	85.0	86.2	75.9	69.5	65.6	64.4
55°	218.8	196.9	145.5	109.4	87.5	69.5	61.8	59.2	55.4	52.8	51.5
57.5°	199.5	178.9	128.7	92.7	74.7	56.6	47.6	47.6	46.3	43.8	42.5
59°	187.9	169.9	118.4	83.7	68.2	48.9	42.5	43.8	42.5	39.9	38.6
60°	178.9	162.2	110.7	77.2	64.4	45.1	38.6	41.2	39.9	37.3	36.0
62.5°	158.3	146.7	95.3	64.4	56.6	36.0	32.2	34.8	34.8	33.5	32.2
65°	139.0	126.1	81.1	54.1	52.8	30.9	25.7	30.9	32.2	29.6	27.0
67.5°	121.0	108.1	70.8	43.8	48.9	24.5	19.3	25.7	34.8	27.0	24.5
70°	103.0	90.1	55.4	34.8	51.5	16.7	15.4	23.2	41.2	29.6	23.2
72.5°	79.8	69.5	38.6	25.7	55.4	11.6	11.6	19.3	46.3	32.2	21.9
75°	55.4	45.1	23.2	15.4	45.1	7.7	7.7	18.0	43.8	29.6	20.6
77.5°	32.2	24.5	7.7	1.3	23.2	0.0	1.3	12.9	30.9	18.0	9.0
80°	11.6	5.1	0.0	0.0	14.2	0.0	0.0	0.0	2.6	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°	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9
2.5°	7510.9	7684.7	7840.4	8076.0	8355.3	8677.1	8953.9	9251.2	9530.6	9646.4	9726.2
5°	5755.1	5970.1	6221.1	6567.4	7028.2	7595.9	8127.5	8728.6	9374.8	9697.9	10001.7
7.5°	4068.9	4287.7	4599.2	4967.4	5524.7	6200.5	6895.6	7725.9	8601.2	9112.2	9615.5
10°	2925.8	3194.9	3485.8	3989.1	4555.5	5196.5	5912.2	6839.0	7814.7	8381.1	8987.3
12.5°	1991.3	2297.7	2737.9	3301.7	3967.2	4595.4	5217.1	6101.4	7234.2	7795.4	8445.4
15°	1194.5	1364.4	1830.4	2483.0	3299.1	4081.8	4762.7	5649.6	6857.0	7544.4	8220.2
17.5°	736.3	814.8	1068.4	1603.9	2461.2	3451.0	4384.3	5496.4	6911.1	7747.8	8471.2
20°	587.0	617.9	699.0	947.4	1630.9	2755.9	3958.2	5465.5	7352.6	8382.4	9158.5
22.5°	509.7	539.3	593.4	688.7	1025.9	2063.4	3554.0	5493.8	7985.9	9333.6	10239.8
25°	449.2	475.0	526.5	605.0	751.7	1453.3	3121.5	5620.0	8811.0	10514.0	11476.8
27.5°	401.6	423.5	471.1	543.2	644.9	1014.3	2631.1	5773.2	9789.3	11721.4	12671.4
30°	357.8	377.2	419.6	486.6	559.9	780.1	2093.0	5877.4	10768.9	12671.4	13524.8
32.5°	320.5	334.7	373.3	429.9	486.6	621.7	1591.0	5860.7	11496.1	13461.7	14138.8
35°	281.9	296.1	329.5	378.4	423.5	513.6	1251.2	5547.9	12129.4	14281.7	14841.6
37.5°	239.4	257.4	289.6	333.4	364.3	451.8	1011.8	5170.7	12771.8	15218.8	15625.5
40°	203.4	221.4	249.7	297.3	316.7	428.6	777.5	4711.2	13493.9	16266.6	16485.4
42.5°	168.6	185.4	215.0	256.2	298.6	369.4	575.4	4186.0	14187.7	17162.5	17269.3
45°	136.4	153.2	184.1	225.3	319.2	306.4	445.4	3623.5	14747.6	17907.8	17942.5
47.5°	108.1	123.6	155.8	212.4	297.3	244.6	317.9	3182.0	15217.5	18489.6	18398.2
50°	83.7	96.5	130.0	243.3	260.0	202.1	240.7	3035.3	15638.4	18850.0	18613.2
52.5°	65.6	77.2	106.8	227.8	202.1	167.3	202.1	3173.0	16215.1	19148.6	18734.2
55°	52.8	64.4	83.7	130.0	137.7	141.6	172.5	3301.7	17210.1	19848.9	19448.6
57.5°	43.8	55.4	68.2	91.4	104.3	119.7	153.2	3315.9	18382.7	21012.5	20634.1
59°	39.9	50.2	61.8	81.1	91.4	109.4	144.2	3238.6	18795.9	21436.0	21246.8
60°	37.3	47.6	57.9	74.7	85.0	103.0	139.0	3165.3	18814.0	21420.6	21508.1
62.5°	32.2	42.5	51.5	63.1	72.1	87.5	124.9	2893.7	18051.9	20719.0	21351.1
65°	28.3	37.3	46.3	54.1	61.8	78.5	113.3	2398.1	16750.6	19587.6	20276.2
67.5°	25.7	32.2	42.5	47.6	55.4	69.5	100.4	1709.4	15124.8	18203.8	18650.5
70°	23.2	30.9	38.6	43.8	50.2	60.5	86.2	982.1	12771.8	16177.7	16495.7
72.5°	21.9	29.6	34.8	41.2	45.1	54.1	78.5	462.1	9351.6	12959.7	13790.0
75°	19.3	27.0	32.2	38.6	42.5	48.9	66.9	221.4	6219.8	9378.7	10322.2
77.5°	11.6	21.9	29.6	34.8	37.3	42.5	55.4	127.4	3969.8	6491.4	7646.1
80°	0.0	7.7	21.9	29.6	32.2	36.0	42.5	100.4	2123.9	3708.5	4451.2
82.5°	0.0	0.0	15.4	23.2	21.9	24.5	32.2	63.1	957.7	2423.8	2731.5
85°	0.0	0.0	5.1	18.0	15.4	11.6	21.9	21.9	209.8	1226.7	1530.5
87.5°	0.0	0.0	0.0	1.3	7.7	5.1	9.0	2.6	1.3	91.4	370.7
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: P324634

CATALOG NUMBER: GLEON-SA0A-830-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9	8850.9
2.5°	10005.5	10100.8	10261.7	10337.6	10300.3	10142.0	9952.8	9759.7	9646.4	9691.5
5°	10620.8	11111.3	11394.4	11488.4	11331.4	10976.1	10511.4	9898.7	9681.2	9621.9
7.5°	10620.8	11543.8	12128.2	12231.1	11881.0	11184.6	10313.2	9356.8	9038.8	8923.0
10°	10247.5	11503.9	12318.7	12482.1	11993.0	10951.6	9784.1	8692.6	8315.4	8195.7
12.5°	9826.6	11179.5	12038.1	12263.3	11861.7	10719.9	9417.3	8243.3	7799.2	7695.0
15°	9567.9	10780.4	11491.0	11654.5	11484.5	10584.8	9329.7	8108.2	7585.6	7485.2
17.5°	9660.6	10471.5	10727.7	10822.9	10937.5	10537.2	9567.9	8404.2	7742.6	7647.4
20°	10009.4	10145.8	10013.3	10133.0	10441.9	10583.5	10135.5	9119.9	8325.7	8198.3
22.5°	10601.5	9977.2	9605.2	9652.8	10028.7	10736.7	11003.1	10142.0	9225.5	9065.9
25°	11291.5	10113.7	9378.7	9336.2	9722.3	10938.8	11796.1	11254.1	10290.0	10113.7
27.5°	12159.1	10420.0	9332.3	9289.8	9615.5	11128.0	12455.1	12353.4	11411.2	11110.0
30°	12828.4	10721.2	9470.1	9372.2	9722.3	11259.3	12984.2	13286.7	12304.5	12105.0
32.5°	13308.5	11076.5	9694.0	9552.4	10023.6	11485.8	13392.2	14141.4	13130.9	12828.4
35°	13674.1	11462.7	10055.7	9822.8	10438.0	11829.5	13774.5	15051.4	14010.1	13679.3
37.5°	14016.5	12004.6	10620.8	10342.8	11088.1	12383.0	14178.7	16083.8	14993.5	14598.3
40°	14494.1	12618.6	11492.3	11245.1	12180.9	13137.3	14683.3	17159.9	16112.1	15615.2
42.5°	14971.6	13277.6	12384.3	12451.2	13544.1	14053.8	15334.6	18297.8	17216.5	16686.2
45°	15408.0	13957.3	13654.8	13963.7	14809.4	15059.1	15982.1	18955.6	18098.3	17586.0
47.5°	15796.7	14806.9	14917.6	15740.1	16248.5	15969.2	16466.1	19523.2	18754.7	18302.9
50°	16248.5	15906.1	16581.9	17745.6	17905.2	16793.0	16906.3	20195.1	19521.9	19158.9
52.5°	16742.8	17064.6	18425.2	19451.1	19399.6	17687.6	17349.1	20948.2	20573.6	20232.5
55°	17304.1	18000.4	20048.4	21047.3	21003.5	18686.5	18082.8	21878.8	21891.7	21582.8
57.5°	18136.9	18806.2	21150.3	22338.4	22411.7	19839.9	19326.3	22921.5	23083.7	22877.7
59°	18734.2	19328.8	21586.6	22877.7	23176.3	20731.9	20235.0	23526.5	23419.6	23231.7
60°	19177.0	19660.9	21802.9	23159.6	23620.4	21336.9	20905.7	23881.7	23459.5	23231.7
62.5°	20272.4	20384.4	22192.9	23478.8	24131.5	22680.8	22792.7	24486.7	23182.8	22810.8
65°	20783.4	20841.3	22187.8	22907.3	23637.2	23727.3	24504.7	24504.7	22507.0	21935.5
67.5°	20569.7	20290.4	21087.2	21012.5	21741.1	23105.5	25148.4	23606.3	21214.6	20475.8
70°	18832.0	17757.2	17403.2	17435.4	17992.7	20097.3	23874.0	20962.3	18768.9	17905.2
72.5°	15669.3	13091.0	12217.0	13214.6	13360.0	15445.3	20345.7	15786.4	13841.4	13031.8
75°	12603.1	9228.1	7807.0	8859.9	9107.1	11303.1	15738.8	9831.8	8085.0	7454.3
77.5°	9054.3	6624.0	5602.0	5528.6	5847.8	7168.5	11167.9	4948.1	4126.8	3851.4
80°	5143.7	4359.8	4694.5	4429.3	4590.2	4482.1	5305.9	2170.2	1777.6	1661.8
82.5°	3104.8	2577.0	2790.7	2323.4	2940.0	2560.3	2044.1	695.1	603.7	574.1
85°	2019.6	1408.2	733.7	491.7	1013.0	1636.1	457.0	189.2	145.5	115.8
87.5°	696.4	359.1	36.0	15.4	108.1	305.1	16.7	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.

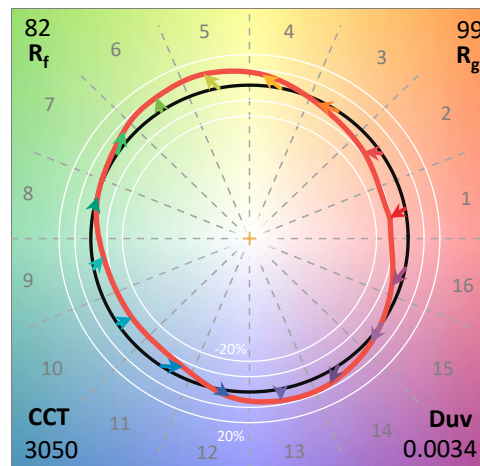
Test Information

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
 Rf: 81.5
 Rg: 99.2

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



Test Conditions

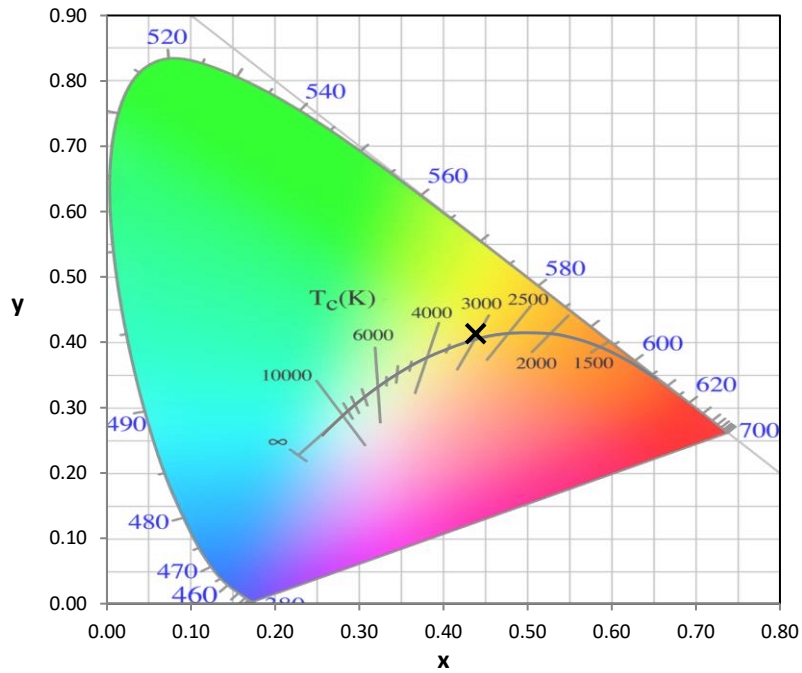
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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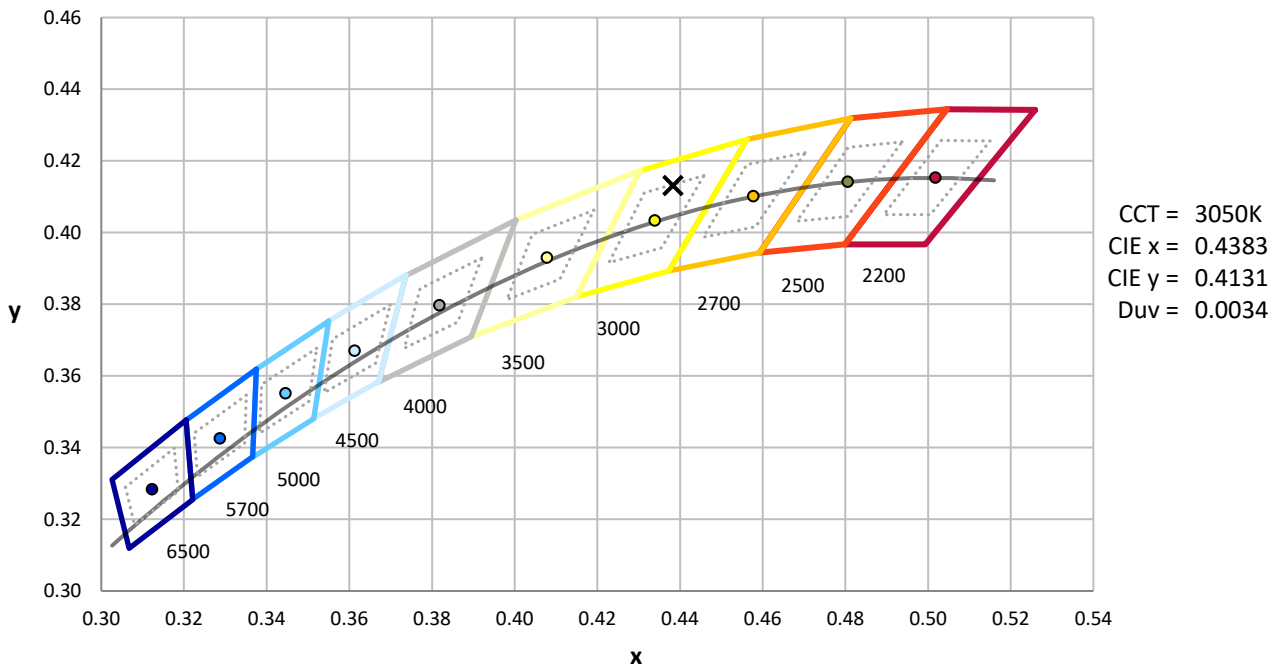
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

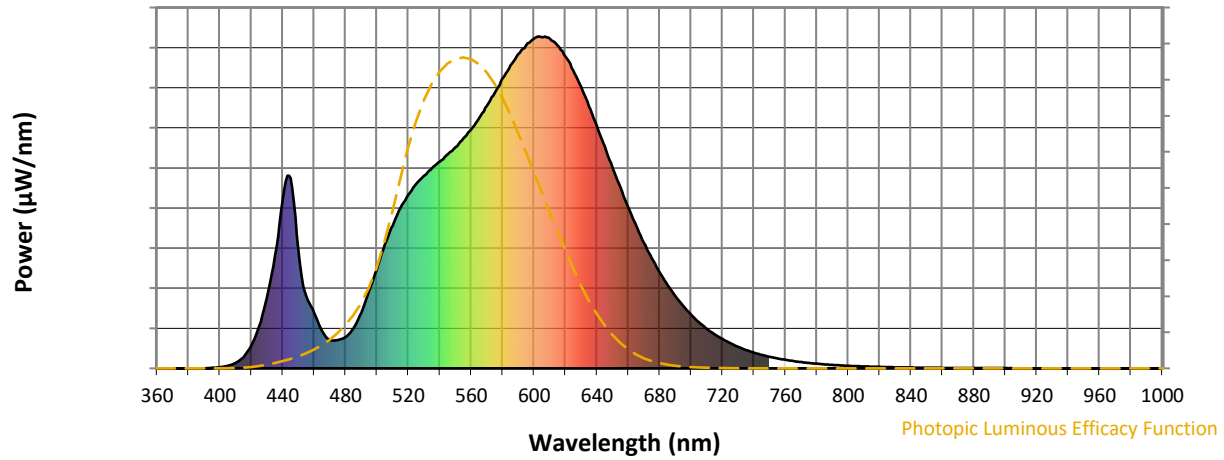


CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

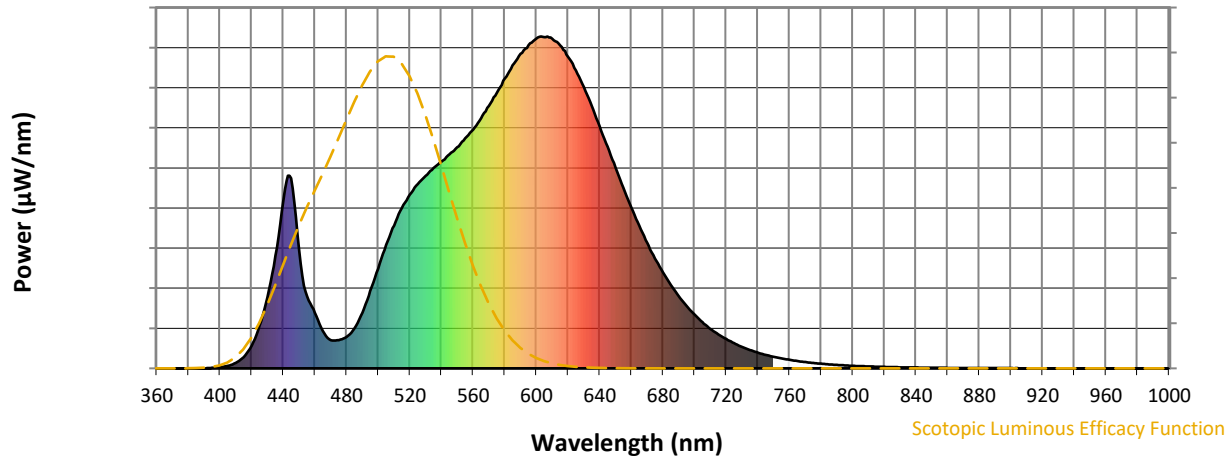


Photopic Lumens: NR

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



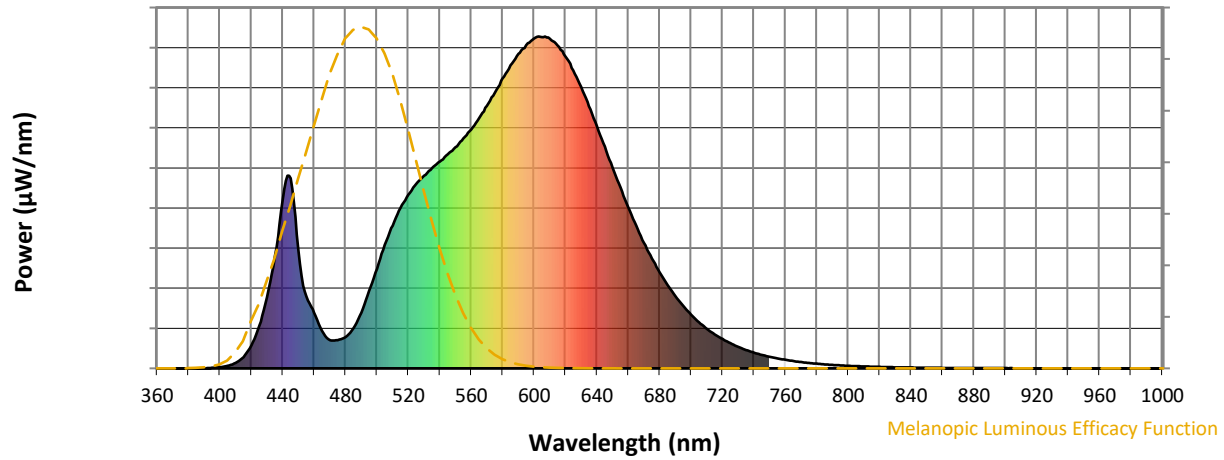
Scotopic Lumens: NR

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



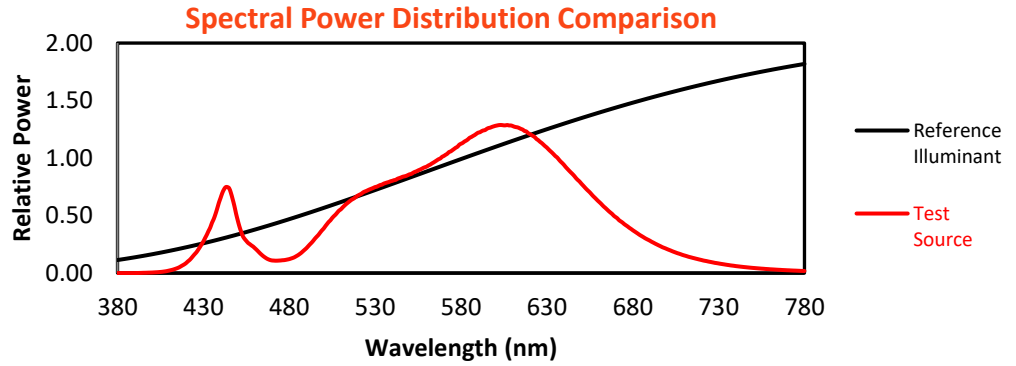
Melanopic Lumens: NR

M/P: 2.32

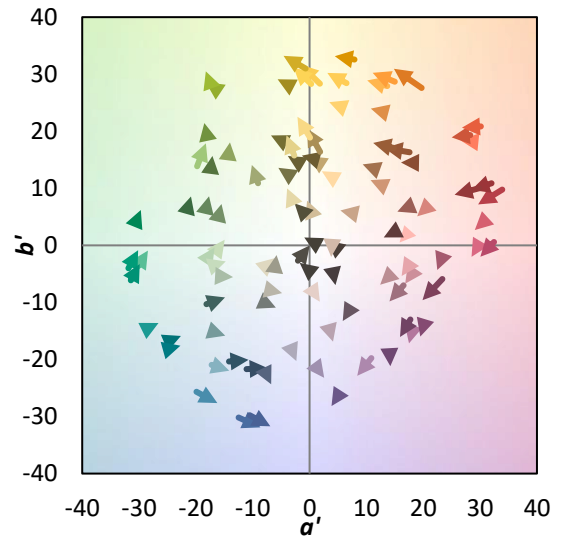
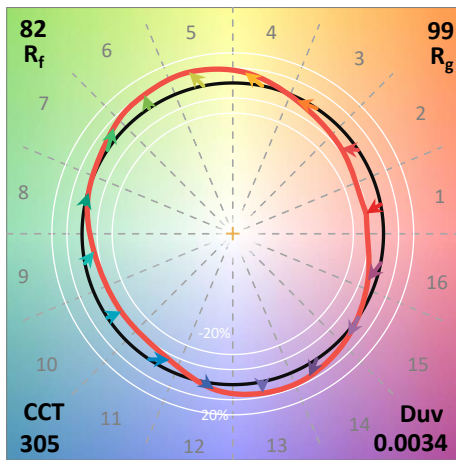
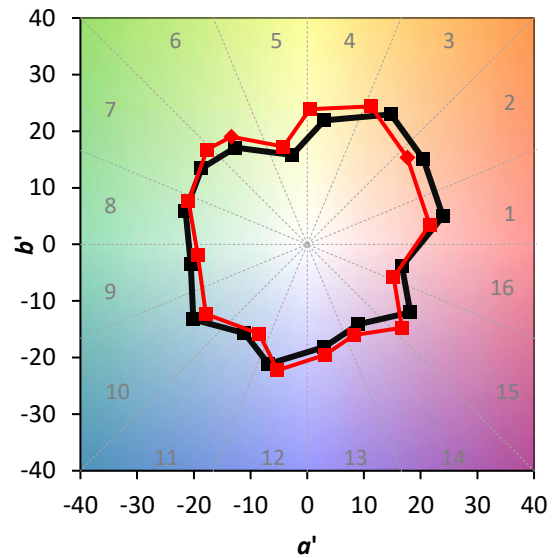
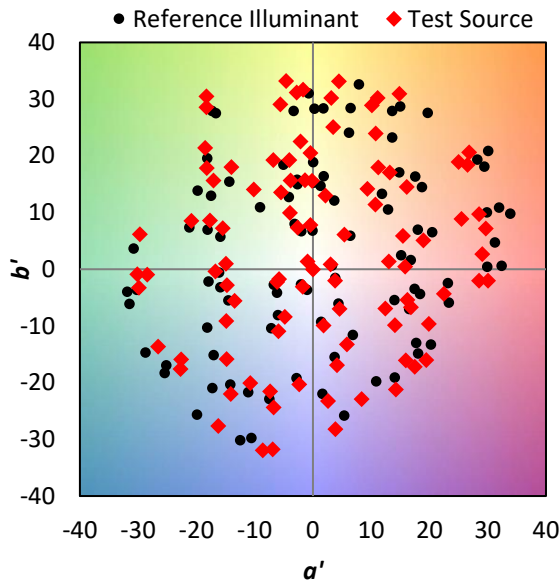
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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			

Summary

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

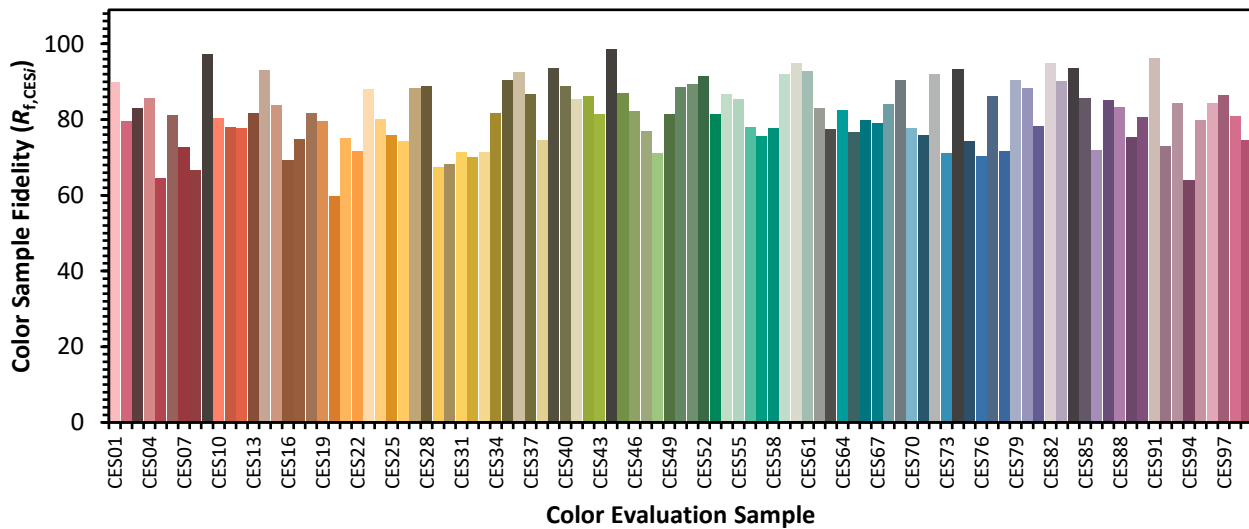


Color Vector Graphics

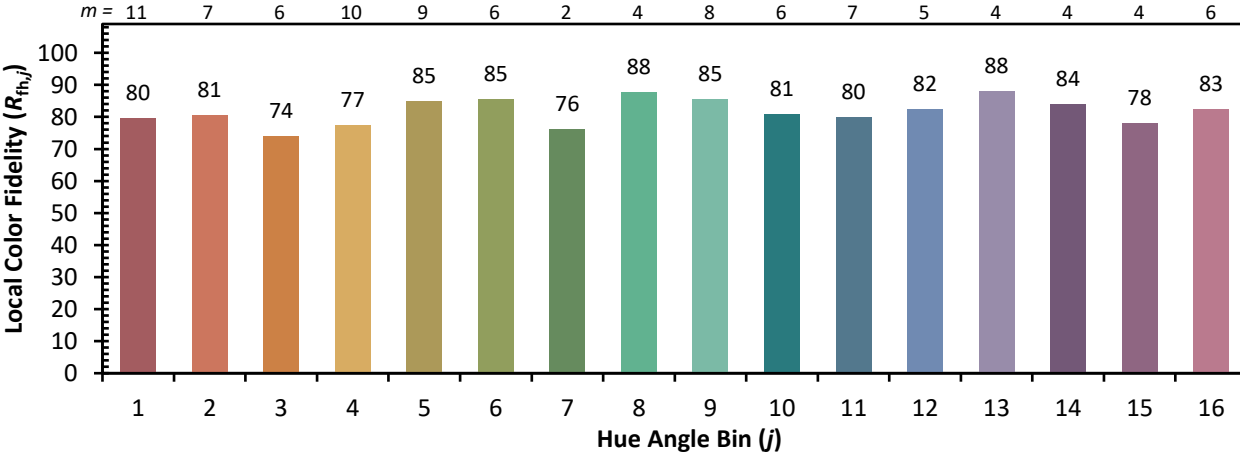
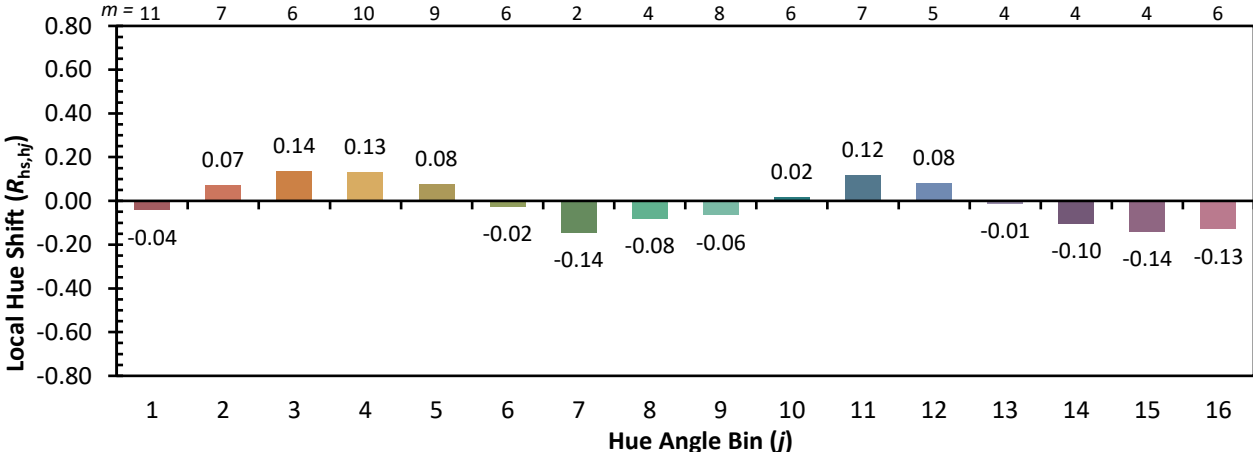
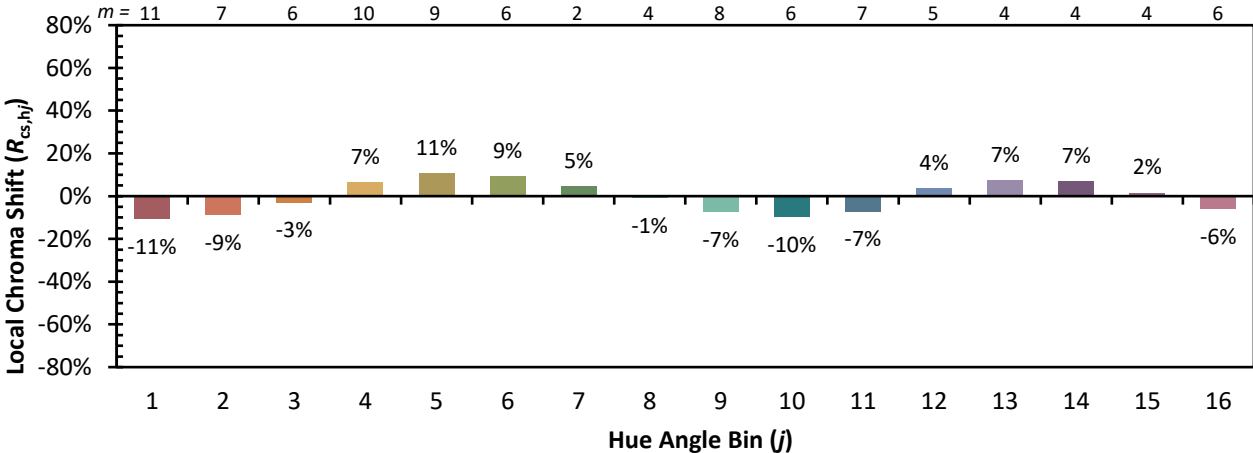


Individual Sample Fidelity Index ($R_{f,i}$)

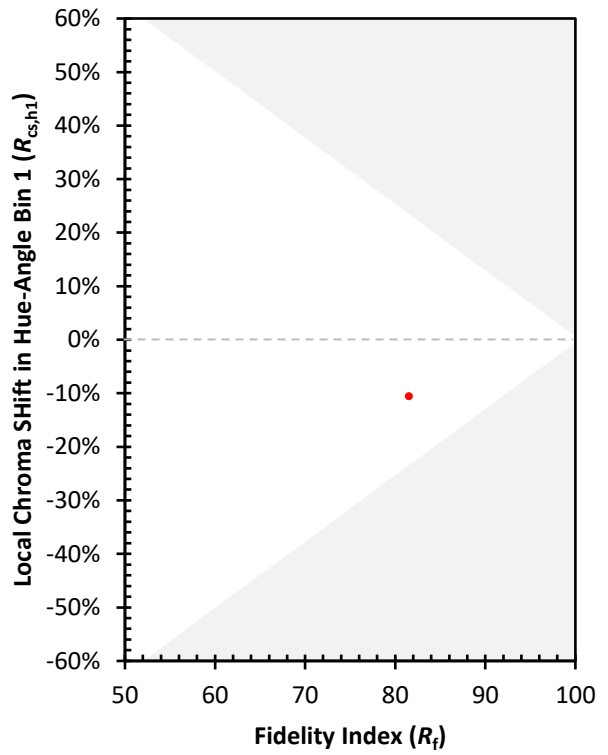
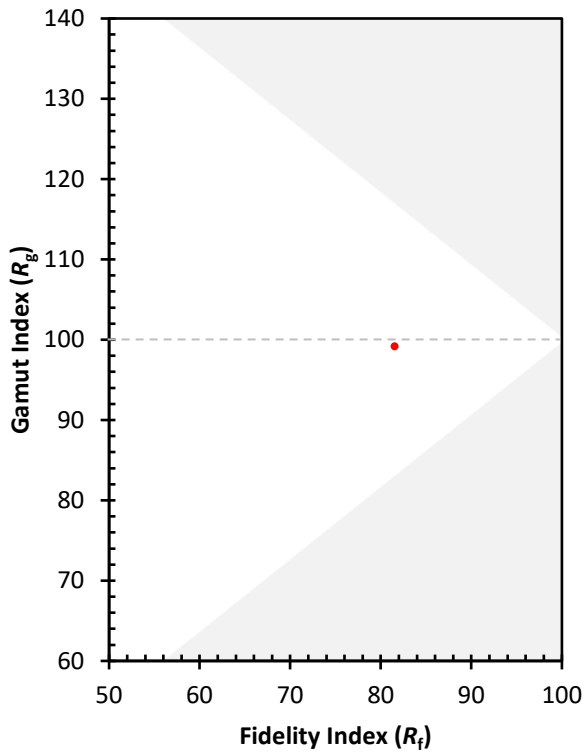
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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