

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P630561

Luminaire Tested: GWS-SA1D-830-U-SLL-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P630561
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-SA1D-830-U-SLL-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2916.5 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G1

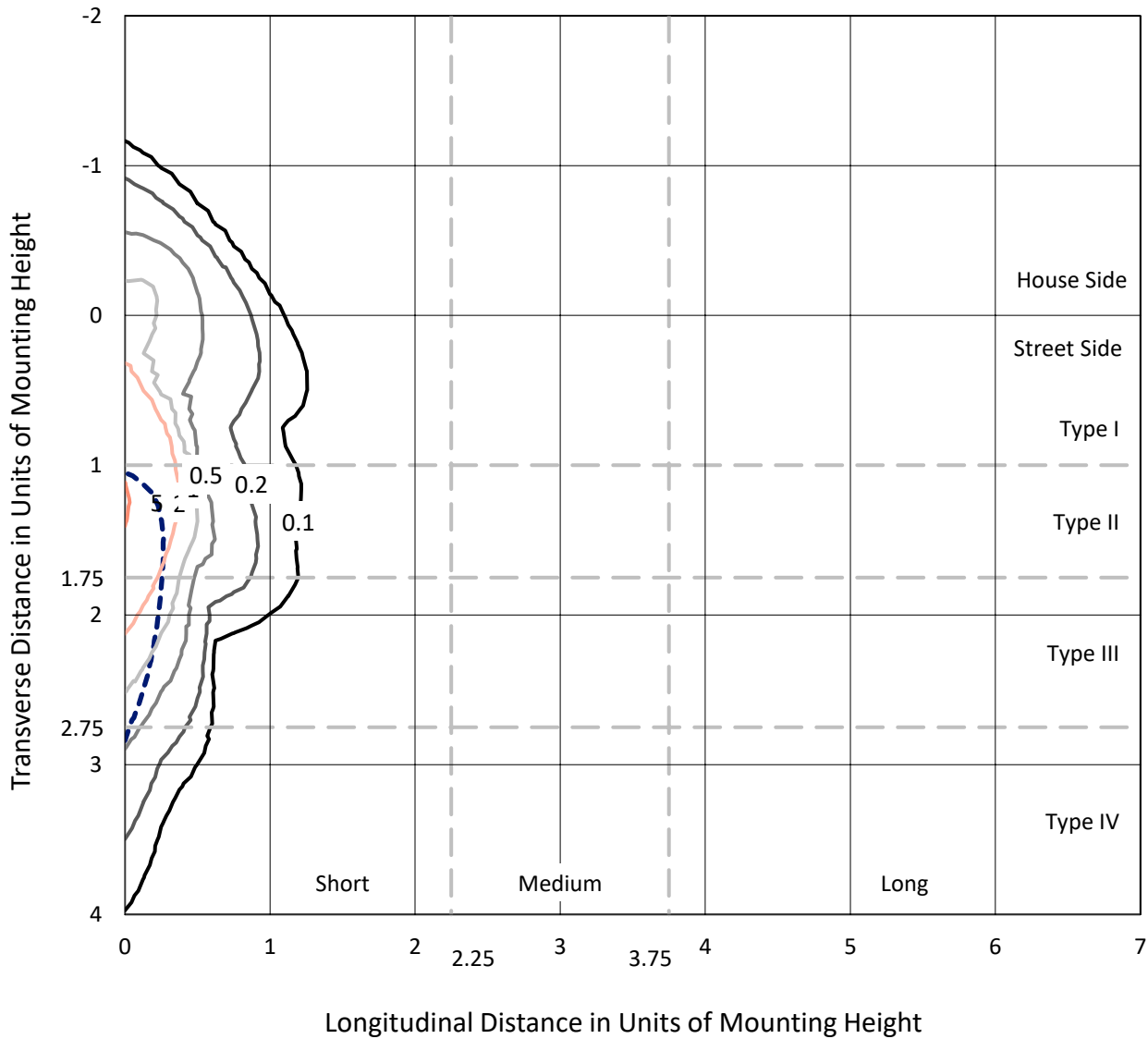
Input Watts (W): 44.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

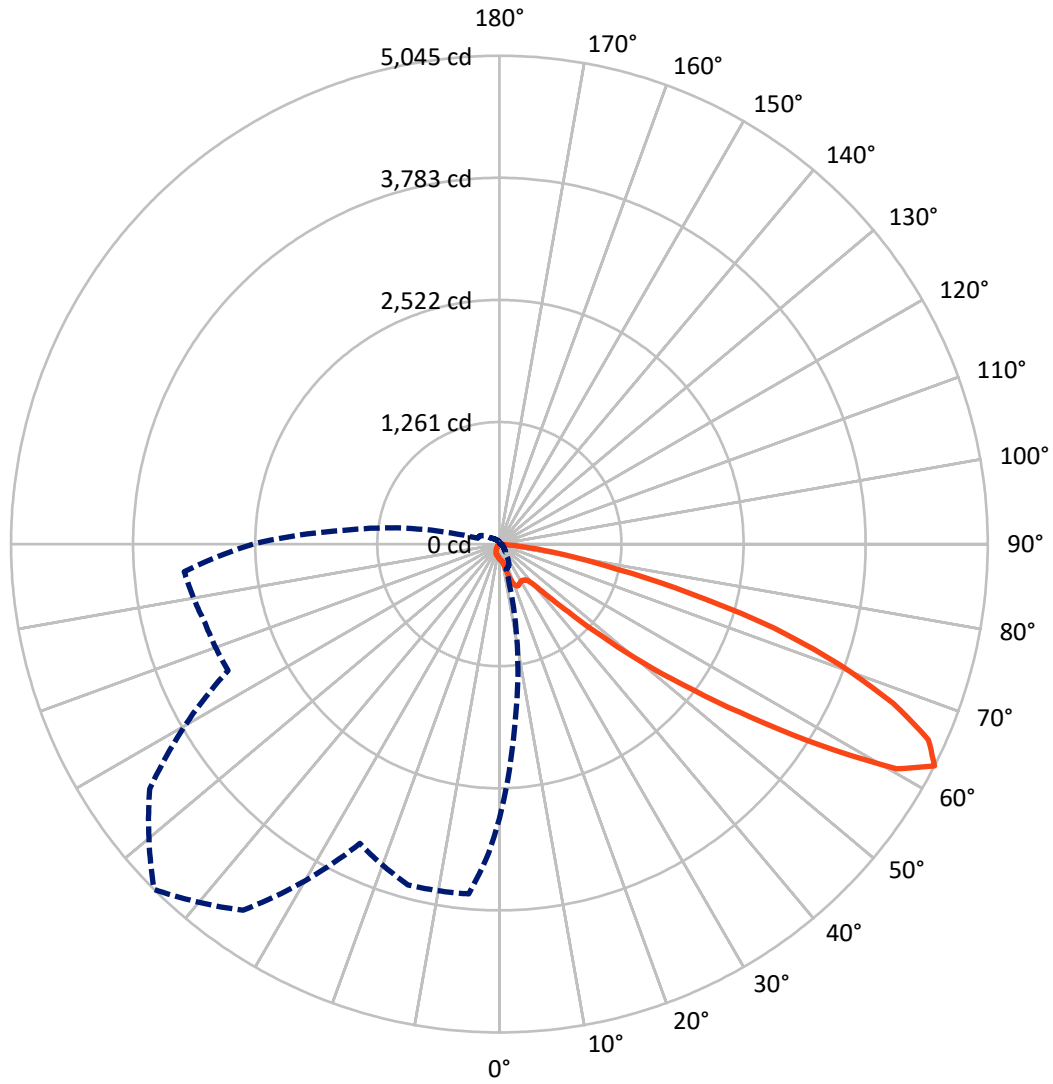
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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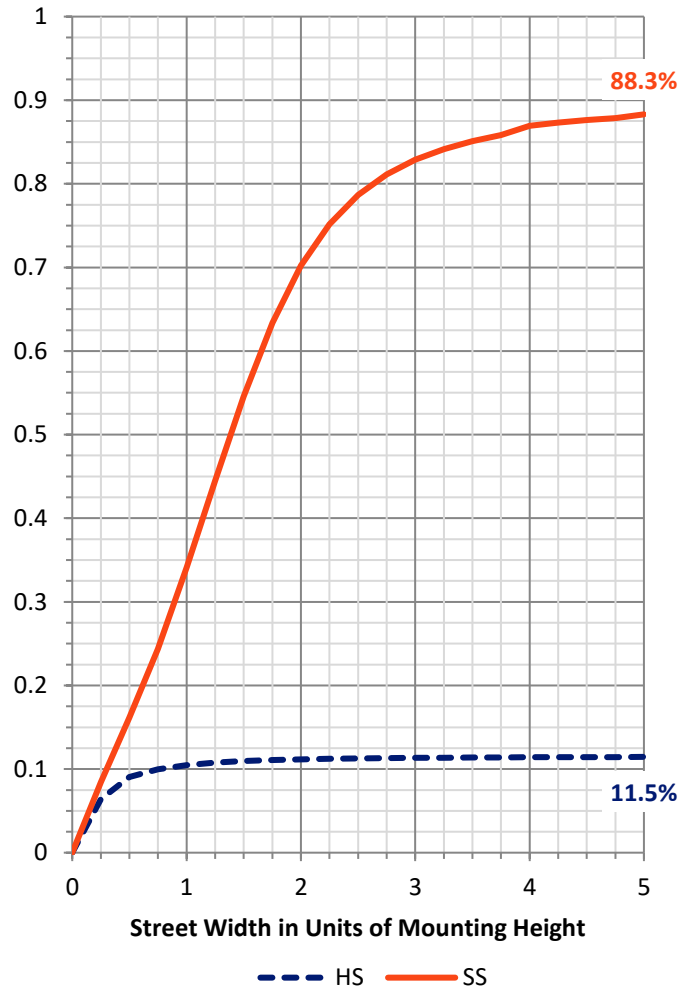
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	338.9	0.0	338.9
	% Fixture	11.6	0.0	11.6
Street Side	Lumens	2577.6	0.0	2577.6
	% Fixture	88.4	0.0	88.4
Total	Lumens	2916.5	0.0	2916.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.1	0.4
10°-20°	44.8	1.5
20°-30°	101.1	3.5
30°-40°	174.2	6.0
40°-50°	328.7	11.3
50°-60°	733.8	25.2
60°-70°	981.5	33.7
70°-80°	492.2	16.9
80°-90°	47.2	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°	2916.5	100.0
0°-180°	2916.5	100.0

Coefficient of Utilization

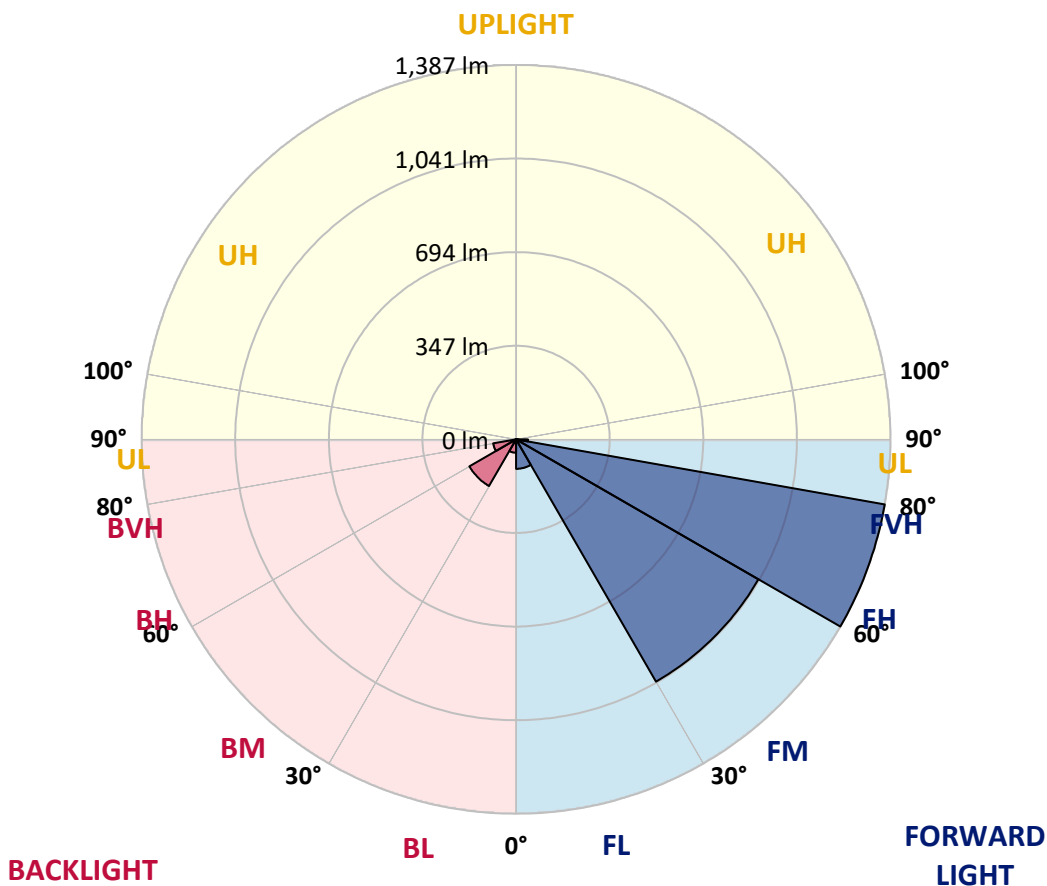


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	109.2	3.7			
FM (30°-60°)	1036.9	35.6			
FH (60°-80°)	1387.5	47.6			G1/1800
FVH (80°-90°)	44.0	1.5			G1/100
BL (0°-30°)	49.7	1.7	B0/110		
BM (30°-60°)	199.8	6.9	B0/220		
BH (60°-80°)	86.2	3.0	B0/110		G0/110
BVH (80°-90°)	3.1	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3
2.5°	149.5	149.2	148.5	146.4	144.7	143.7	141.6	141.6	141.2	140.5	139.2
5°	144.7	143.3	141.9	138.1	134.0	131.6	128.8	128.5	128.5	127.8	127.4
7.5°	137.1	135.7	134.0	127.8	124.0	121.6	119.1	118.8	117.8	117.8	117.8
10°	133.0	130.9	128.1	121.2	117.4	115.3	113.6	112.6	111.9	110.9	110.5
12.5°	141.9	138.1	132.3	119.8	114.6	111.9	109.8	109.1	107.1	105.7	104.6
15°	169.9	160.6	148.8	122.9	113.6	109.5	106.7	105.3	103.6	101.2	99.5
17.5°	215.8	202.4	182.7	133.0	112.6	107.4	103.9	101.5	99.1	96.3	94.3
20°	279.4	259.3	235.9	151.3	112.6	105.0	100.8	97.7	94.3	91.2	88.7
22.5°	360.2	340.1	300.1	182.3	114.0	101.9	97.0	92.9	88.7	86.0	83.2
25°	450.7	422.3	385.0	220.0	117.8	97.7	92.5	88.4	84.6	81.2	78.0
27.5°	551.5	520.8	471.0	273.5	126.0	93.6	87.7	83.9	80.5	77.0	72.9
30°	644.4	626.1	575.3	337.7	139.5	90.8	83.9	80.5	77.0	72.5	68.7
32.5°	755.9	723.5	681.7	410.9	157.5	88.1	80.8	76.0	73.2	69.1	64.9
35°	868.2	840.5	785.6	501.1	177.5	85.3	77.0	72.5	70.1	65.3	60.8
37.5°	983.8	977.6	923.4	600.9	197.2	82.2	72.5	69.8	67.3	61.8	56.6
40°	1097.8	1086.4	1036.3	714.8	209.3	78.7	68.7	67.0	64.2	58.0	52.1
42.5°	1206.9	1198.3	1149.6	824.0	207.5	75.6	64.9	62.8	60.8	54.6	47.3
45°	1340.9	1326.8	1265.3	904.8	189.9	79.1	61.1	57.7	57.3	51.5	42.5
47.5°	1591.6	1545.0	1440.7	966.9	172.3	88.1	57.0	52.8	55.3	48.3	37.6
50°	1942.8	1887.9	1737.0	1015.3	172.0	99.8	56.3	48.3	53.5	45.9	33.5
52.5°	2295.7	2199.1	2015.7	1041.2	184.8	108.4	62.5	43.9	51.5	43.5	30.4
55°	2633.8	2433.2	2132.4	955.5	194.8	117.8	73.9	41.4	47.7	40.7	28.7
57.5°	2956.0	2621.4	2183.2	755.9	228.3	121.6	80.8	42.5	42.1	37.3	27.3
60°	3000.2	2612.4	2080.6	439.6	251.7	115.0	78.0	47.3	37.0	33.2	24.9
62.5°	2833.1	2438.7	1846.8	274.2	233.8	112.6	69.4	53.9	33.5	29.4	21.8
65°	2579.3	2166.2	1539.8	176.8	177.2	125.0	60.8	52.8	31.4	25.9	18.6
67.5°	2182.5	1813.0	1213.1	118.4	100.1	106.7	53.2	36.3	30.7	22.1	14.5
70°	1593.0	1290.5	789.8	79.1	59.7	85.3	44.5	25.9	29.0	18.3	10.4
72.5°	1164.4	867.1	441.0	51.8	33.8	49.7	32.8	18.6	22.4	13.5	7.3
75°	838.1	596.7	251.7	33.2	22.4	27.3	21.4	12.8	14.5	10.7	6.6
77.5°	403.3	290.8	114.3	18.3	15.2	13.8	11.4	7.9	9.0	9.7	5.9
80°	15.2	11.4	8.6	9.0	9.7	6.2	5.2	4.1	5.2	6.6	3.1
82.5°	0.0	0.0	0.0	1.0	1.4	1.7	2.1	1.7	2.1	2.4	0.3
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°	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3
2.5°	140.2	139.5	140.2	140.9	141.6	142.3	141.2	141.9	142.6	140.9	141.6
5°	129.2	128.8	130.9	131.9	133.3	134.0	133.3	133.3	133.0	130.9	130.9
7.5°	119.5	119.8	121.6	124.0	125.7	126.7	126.0	125.7	124.7	121.6	121.6
10°	112.2	112.2	115.0	117.1	119.5	120.5	119.8	118.8	117.8	114.6	114.3
12.5°	106.4	106.4	108.4	111.9	114.6	116.0	115.7	114.3	112.6	109.5	109.1
15°	100.8	100.5	103.6	106.7	110.5	112.2	111.5	110.5	107.4	104.6	103.9
17.5°	95.3	95.0	97.7	101.9	106.0	108.4	108.1	105.7	102.9	99.5	98.8
20°	89.8	89.1	92.5	96.7	100.8	103.3	102.6	100.5	97.0	93.6	92.9
22.5°	84.3	83.9	86.3	89.8	93.6	95.7	95.3	93.6	90.1	87.0	87.0
25°	78.0	78.0	79.8	82.2	85.0	86.0	86.3	85.6	83.6	81.8	81.8
27.5°	72.9	71.8	72.5	73.2	74.6	76.3	76.3	77.0	77.4	76.7	77.0
30°	68.7	67.0	66.0	64.6	63.9	64.6	65.3	67.7	70.1	71.5	72.2
32.5°	63.9	61.8	59.1	55.3	52.8	52.1	54.2	58.7	63.2	66.3	68.0
35°	59.1	56.3	51.1	45.6	42.5	41.4	43.9	49.0	55.6	61.1	63.5
37.5°	54.2	50.4	43.2	36.6	33.2	32.5	34.9	40.4	48.0	55.6	58.7
40°	48.7	44.2	35.6	28.7	25.9	25.2	27.3	32.8	40.7	49.4	54.2
42.5°	43.2	37.6	28.7	22.8	20.0	20.0	22.8	26.9	34.2	43.5	49.4
45°	37.6	31.8	23.5	18.3	16.6	16.9	18.6	22.8	28.7	38.3	43.9
47.5°	32.5	27.3	19.3	15.2	13.8	14.2	16.2	19.7	24.5	33.2	39.0
50°	28.0	23.1	16.9	12.8	11.7	12.4	14.5	17.6	21.8	29.4	34.2
52.5°	25.2	20.7	15.5	11.1	10.4	11.1	13.1	15.9	19.7	25.9	30.7
55°	23.8	20.4	15.5	10.0	9.0	9.7	11.7	14.5	17.6	23.5	27.6
57.5°	23.5	21.1	16.6	9.0	7.6	8.3	10.4	13.1	16.2	21.4	24.9
60°	22.1	20.0	16.2	7.3	5.9	6.9	8.6	11.4	14.8	20.0	23.1
62.5°	19.3	17.6	14.2	5.9	4.5	5.2	7.3	10.0	13.5	18.3	21.8
65°	15.9	14.2	11.1	3.8	2.8	3.5	5.5	8.6	11.7	16.6	19.7
67.5°	11.7	10.0	7.6	2.4	1.4	2.4	4.5	7.3	10.7	14.8	18.0
70°	7.3	5.9	4.1	1.4	1.0	2.1	4.1	6.9	9.7	13.8	16.9
72.5°	4.1	2.8	1.7	0.7	1.0	2.1	4.1	6.9	9.3	13.1	15.9
75°	3.1	1.7	0.7	0.3	0.7	1.7	3.8	6.2	9.0	12.4	15.2
77.5°	2.1	1.0	0.3	0.0	0.3	1.4	3.5	5.9	8.3	11.7	14.5
80°	0.3	0.0	0.0	0.0	0.0	1.0	3.1	5.2	7.6	10.4	12.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.3	2.4	4.5	6.6	8.6	10.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	3.5	5.2	6.6	7.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	3.5	4.1	4.8
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°	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3
2.5°	141.2	143.3	143.3	144.7	146.4	149.5	151.3	153.7	155.4	157.1	157.8
5°	130.5	130.9	131.2	131.9	134.0	137.4	140.5	144.3	148.8	152.3	154.4
7.5°	121.6	121.6	121.6	122.6	124.7	127.1	130.2	135.4	140.5	144.7	148.1
10°	114.0	115.0	115.3	117.1	119.5	122.6	126.0	130.5	136.4	141.9	148.1
12.5°	109.1	110.2	111.9	113.6	116.0	119.5	123.3	129.2	141.2	152.6	165.8
15°	104.6	106.0	108.1	110.5	113.3	117.1	121.2	133.3	161.6	183.0	203.7
17.5°	99.8	101.9	104.6	107.1	110.5	114.6	119.8	143.3	198.9	234.5	269.7
20°	93.6	96.3	99.5	103.3	107.4	112.2	119.8	164.0	252.8	303.9	350.5
22.5°	87.7	90.5	94.3	99.1	103.9	108.8	121.6	195.5	322.2	386.8	445.8
25°	82.9	86.3	90.1	94.3	99.8	105.3	125.7	239.7	405.8	489.0	530.8
27.5°	78.4	82.5	86.3	89.8	94.6	100.8	135.0	298.7	504.5	589.1	621.9
30°	73.9	78.7	82.5	86.0	90.8	97.4	149.2	374.0	614.3	696.5	700.0
32.5°	70.1	74.6	79.1	82.5	87.0	94.6	168.9	462.0	726.9	806.3	773.9
35°	66.0	71.1	75.3	79.1	83.9	92.2	191.7	557.0	840.5	907.2	847.4
37.5°	61.8	67.7	72.9	75.6	80.5	89.8	208.2	656.1	956.6	1005.6	912.0
40°	58.0	64.6	70.4	73.2	75.6	86.7	210.7	757.7	1074.3	1102.6	972.8
42.5°	53.9	61.1	66.3	70.1	72.2	84.6	196.1	843.3	1173.1	1199.3	1052.2
45°	49.4	58.0	62.2	64.9	69.1	86.0	177.5	909.6	1286.0	1331.2	1183.1
47.5°	44.9	54.6	58.0	60.1	65.6	94.3	170.6	953.8	1472.1	1566.1	1403.8
50°	40.7	51.5	55.3	54.9	64.9	105.0	178.2	987.3	1751.9	1862.4	1706.3
52.5°	36.3	48.0	52.5	51.1	70.1	113.3	193.4	1013.9	1967.0	2209.8	2112.7
55°	32.5	44.2	48.3	48.0	79.8	119.5	205.1	873.7	2056.1	2532.6	2570.6
57.5°	29.7	40.1	43.5	49.4	86.0	119.5	237.2	620.2	2057.8	2770.2	3178.4
60°	27.3	36.3	38.7	54.2	83.6	113.3	234.8	379.9	1896.5	2754.0	3501.6
62.5°	25.2	32.8	35.9	55.6	73.9	112.2	212.0	235.5	1617.5	2544.4	3267.2
65°	23.5	30.0	34.5	51.1	67.0	120.2	143.0	169.2	1311.9	2305.4	2998.1
67.5°	21.8	27.6	36.6	41.8	60.8	107.4	103.3	120.2	1029.8	2043.3	2751.2
70°	20.4	26.2	38.7	34.2	53.2	83.9	73.2	91.2	788.4	1704.9	2403.5
72.5°	19.3	24.5	32.5	26.9	43.2	64.9	51.1	66.3	515.2	1330.9	1959.4
75°	18.3	22.4	23.8	21.8	32.1	42.5	38.7	44.5	307.0	972.8	1486.6
77.5°	18.0	21.1	19.3	17.6	21.8	25.2	29.4	30.0	149.9	486.6	779.1
80°	15.9	19.0	16.6	14.5	14.8	16.6	21.8	20.0	34.2	123.6	207.9
82.5°	12.4	14.8	13.8	12.1	12.1	12.1	14.5	13.5	11.1	55.6	93.9
85°	8.6	10.4	10.4	9.7	9.3	9.3	9.0	8.6	3.1	3.5	5.2
87.5°	5.9	7.3	7.6	7.3	6.2	5.5	4.8	4.1	1.4	0.0	0.7
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):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3	151.3
2.5°	160.2	161.3	161.3	159.9	158.9	156.1	153.3	150.6	149.9	149.5
5°	160.2	164.4	166.4	166.1	163.7	159.2	153.3	147.1	145.4	144.7
7.5°	157.8	165.8	172.0	173.0	168.5	160.6	149.9	140.5	138.1	137.1
10°	163.3	178.9	191.3	193.0	187.9	172.3	155.1	139.2	135.4	133.0
12.5°	193.0	218.6	233.8	241.0	231.0	211.3	182.7	154.4	145.7	141.9
15°	253.1	289.4	318.4	318.4	309.1	274.2	237.9	192.0	180.3	169.9
17.5°	330.1	375.7	401.3	398.5	384.4	359.8	316.3	250.4	226.5	215.8
20°	417.8	445.1	451.0	449.3	443.1	428.9	398.9	328.1	295.9	279.4
22.5°	493.8	486.6	477.9	471.0	469.3	473.4	469.3	414.7	389.5	360.2
25°	545.3	504.2	478.3	465.8	471.7	495.5	521.4	501.1	481.0	450.7
27.5°	573.2	502.1	464.8	452.0	462.0	495.9	552.2	586.7	566.0	551.5
30°	588.4	500.4	456.2	443.7	458.9	501.4	573.6	666.8	667.5	644.4
32.5°	610.2	511.4	457.9	446.5	466.9	518.0	600.5	748.3	768.4	755.9
35°	634.7	528.4	465.8	455.5	480.7	540.1	630.6	830.5	872.3	868.2
37.5°	657.9	547.3	484.5	474.5	501.8	559.1	659.6	911.3	969.3	983.8
40°	682.0	573.9	541.8	551.5	566.7	589.1	685.5	981.4	1076.0	1097.8
42.5°	739.0	666.1	715.2	733.5	735.5	689.3	742.1	1071.2	1181.0	1206.9
45°	866.1	830.2	970.7	996.6	983.2	842.9	878.5	1200.7	1327.8	1340.9
47.5°	1026.7	1043.2	1320.5	1410.0	1329.2	1024.2	1043.9	1473.2	1596.5	1591.6
50°	1213.8	1292.2	1717.7	1928.7	1735.3	1259.8	1234.5	1808.1	1957.7	1942.8
52.5°	1435.2	1581.6	2194.9	2494.7	2311.6	1524.6	1514.3	2251.9	2343.1	2295.7
55°	1713.9	1861.0	2744.0	3162.9	2902.5	1847.9	1883.4	2766.4	2784.0	2633.8
57.5°	2129.6	2225.3	3391.1	3929.1	3519.2	2287.1	2545.1	3451.2	3240.6	2956.0
60°	2884.5	2693.9	4016.5	4713.0	4175.4	2904.9	3417.7	3857.0	3392.5	3000.2
62.5°	3147.3	3091.7	4408.1	5044.6	4616.7	3412.2	3644.6	3627.0	3195.7	2833.1
65°	2749.2	2992.6	4338.0	4869.5	4560.1	3328.6	3270.6	3373.2	2974.0	2579.3
67.5°	2539.5	2759.9	4072.5	4386.4	4246.2	3045.1	2915.3	2887.3	2496.7	2182.5
70°	2328.2	2546.5	3687.4	3726.4	3661.2	2583.1	2412.5	2225.0	1866.2	1593.0
72.5°	2074.0	2194.2	3153.2	2968.1	2894.2	2028.8	1992.9	1675.5	1398.9	1164.4
75°	1808.8	1774.0	2458.4	2037.1	2092.3	1578.5	1683.1	1230.4	1024.9	838.1
77.5°	1315.7	1289.8	1646.5	1237.3	1370.3	1033.9	928.9	491.1	467.6	403.3
80°	734.2	885.1	889.2	693.4	865.0	674.1	232.4	16.2	10.4	15.2
82.5°	341.2	380.6	482.1	321.5	493.5	333.9	48.0	0.0	0.0	0.0
85°	110.5	161.6	135.4	47.3	119.5	112.9	7.9	0.0	0.0	0.0
87.5°	6.6	13.5	3.5	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.

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

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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

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

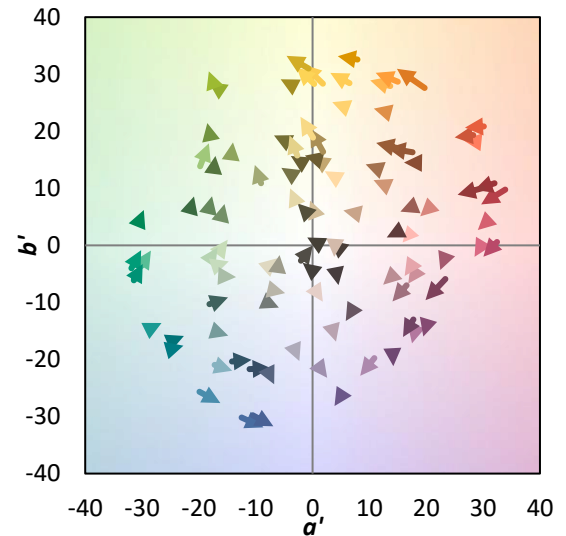
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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

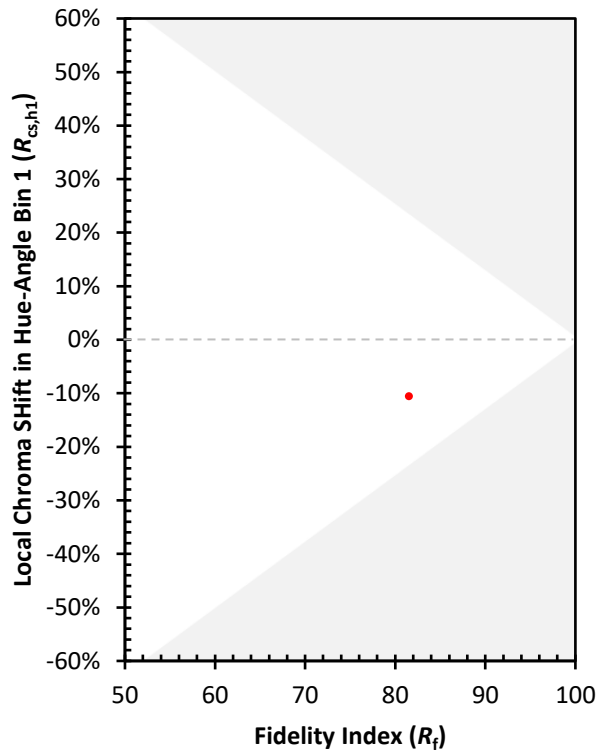
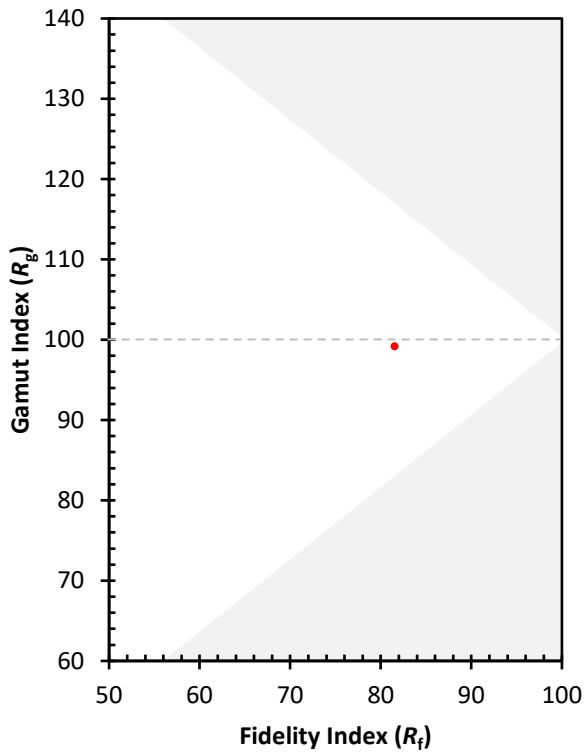
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
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CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
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CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
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CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
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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)