

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: P324332

Luminaire Tested: **GLEON-SA8C-830-U-SLL-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P324332
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA8C-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33396 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

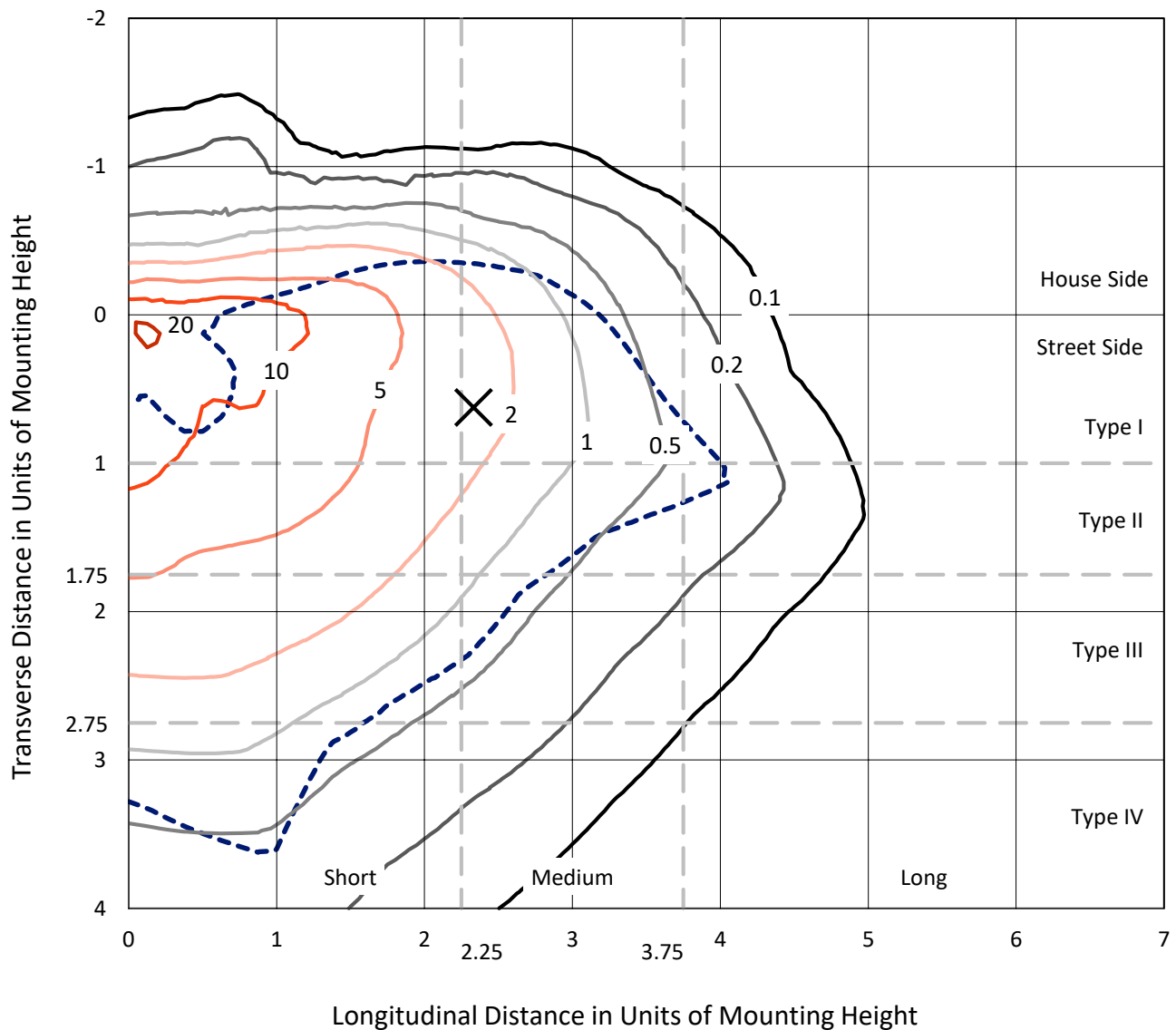
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P324332
 CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

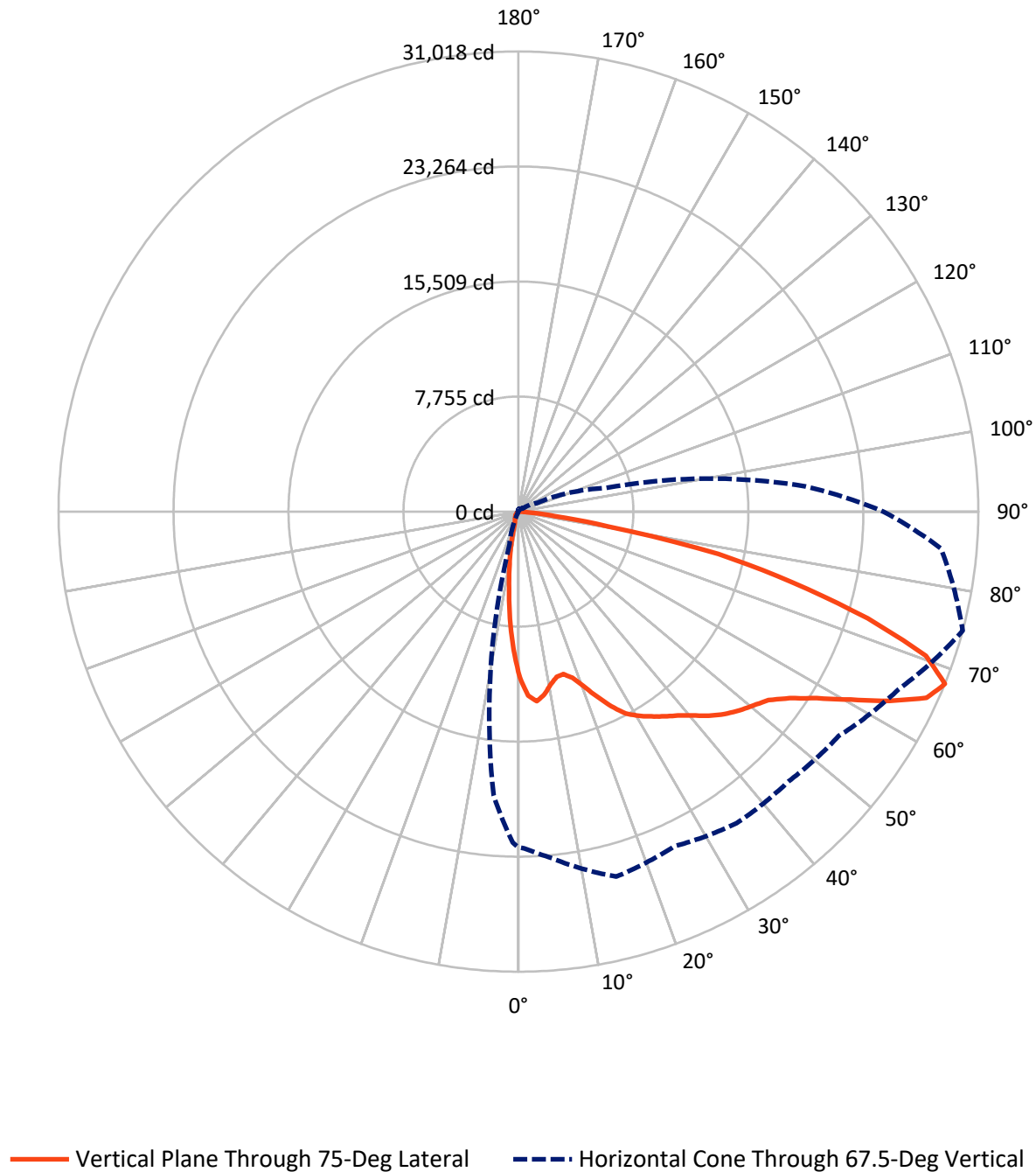
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.2 fc
 Type III - Medium - N/A

REPORT NUMBER: P324332
CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P324332

CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5011.4	0.0	5011.4
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	28384.6	0.0	28384.6
	% Fixture	85.0	0.0	85.0
Total	Lumens	33396.0	0.0	33396.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	849.9	2.5
10°-20°	1673.4	5.0
20°-30°	2367.4	7.1
30°-40°	3480.7	10.4
40°-50°	5002.9	15.0
50°-60°	7042.8	21.1
60°-70°	8225.3	24.6
70°-80°	4196.3	12.6
80°-90°	557.4	1.7
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°	33396.0	100.0
0°-180°	33396.0	100.0

Coefficient of Utilization



REPORT NUMBER: P324332

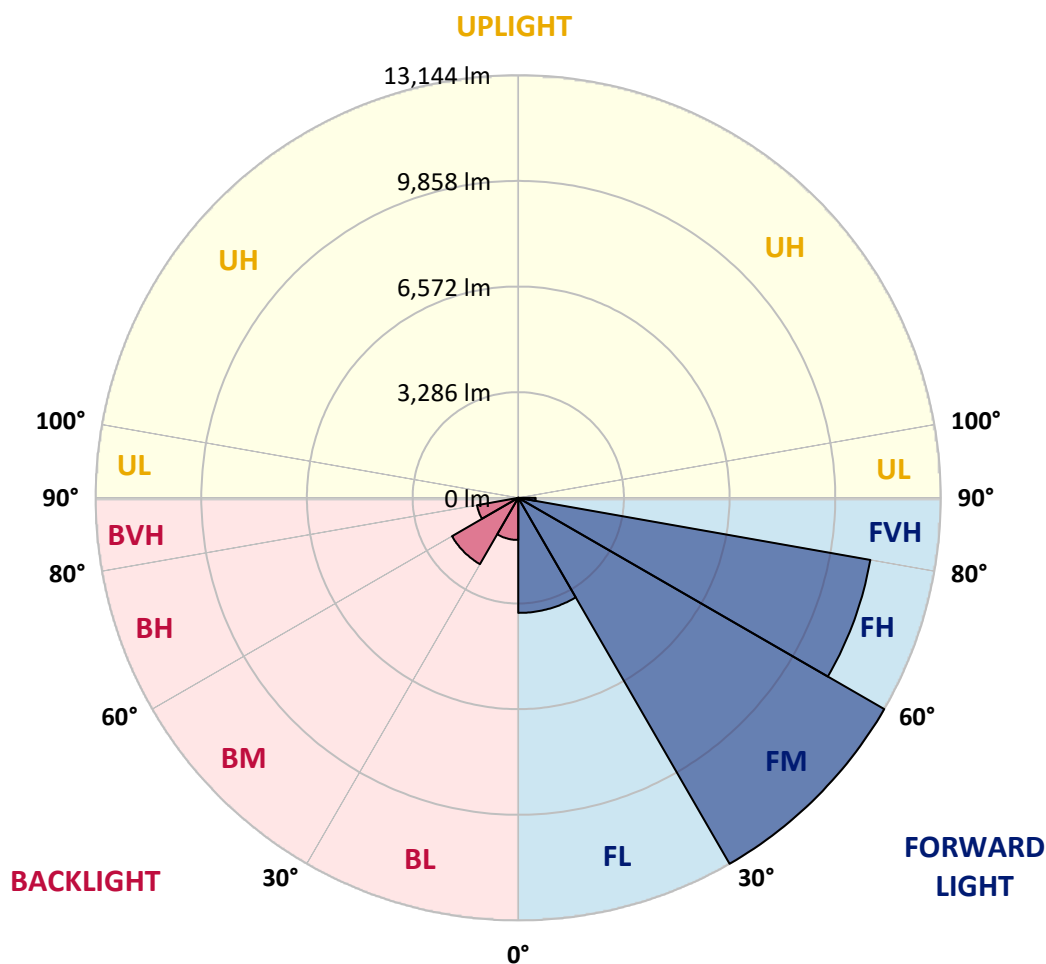
CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3580.1	10.7			
FM	(30°-60°)	13144.1	39.4			
FH	(60°-80°)	11119.9	33.3			G4/12000
FVH	(80°-90°)	540.5	1.6			G4/750
BL	(0°-30°)	1310.5	3.9	B3/2500		
BM	(30°-60°)	2382.3	7.1	B2/2500		
BH	(60°-80°)	1301.7	3.9	B3/2500		G3/2500
BVH	(80°-90°)	16.9	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 III Medium





REPORT NUMBER: P324332

CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8
2.5°	12145.1	12164.1	12262.2	12490.0	12738.3	12757.3	12925.0	12752.6	12694.0	12415.6	12127.7
5°	12236.8	12309.6	12646.6	13315.8	13896.4	14083.0	14215.9	13877.4	13521.4	12841.2	12115.0
7.5°	11498.0	11619.9	12149.8	13405.9	14443.7	14902.5	14989.5	14459.6	13587.9	12467.8	11376.2
10°	10552.0	10691.2	11330.3	12874.4	14299.8	15086.0	15206.3	14511.8	13258.8	11863.5	10577.3
12.5°	9786.3	9949.3	10602.6	12276.4	13804.6	14674.7	14912.0	14336.2	12974.1	11434.8	10031.5
15°	9433.5	9620.2	10306.8	11890.4	13255.7	13940.7	14136.8	13888.5	12815.9	11366.7	9905.0
17.5°	9636.0	9838.5	10547.3	11923.6	12739.9	13032.6	13190.8	13292.0	12815.9	11776.5	10275.1
20°	10466.6	10684.9	11434.8	12260.6	12312.8	12203.6	12372.9	12728.8	12964.6	12554.8	11164.2
22.5°	11615.1	11871.4	12717.8	12838.0	12103.9	11691.0	11713.2	12271.6	13235.1	13542.0	12398.2
25°	13015.2	13328.4	14189.0	13698.6	12191.0	11385.7	11377.8	11895.1	13499.3	14530.8	13773.0
27.5°	14405.8	14750.7	15506.9	14749.1	12550.1	11330.3	11314.5	11781.2	13757.1	15410.3	15274.3
30°	15571.7	15907.1	16558.9	15510.0	12937.7	11460.1	11384.1	11903.0	13910.6	15981.5	16369.0
32.5°	16520.9	16789.9	17316.7	16033.7	13352.2	11711.6	11547.1	12228.9	14171.6	16464.0	17375.2
35°	17565.0	17848.2	18058.6	16532.0	13817.3	12073.9	11838.2	12746.2	14573.5	16954.4	18477.9
37.5°	18756.3	19037.9	19012.6	16987.6	14407.4	12673.5	12523.2	13565.7	15198.4	17440.1	19708.7
40°	19922.2	20210.2	20004.5	17485.9	15100.3	13662.2	13551.5	14796.5	16035.2	18061.8	21151.5
42.5°	21013.8	21325.5	20885.7	17957.4	15926.1	14908.9	15098.7	16381.7	17082.5	18827.5	22394.9
45°	21893.4	22211.4	21624.5	18416.2	16796.2	16421.3	16992.4	18137.7	18341.8	19474.5	23235.0
47.5°	22532.6	22833.1	22137.1	18874.9	17909.9	18270.6	19265.7	19979.2	19479.3	20036.1	23831.4
50°	22940.7	23174.8	22287.3	19449.2	19371.7	20428.5	21634.0	21982.0	20550.3	20542.4	24555.9
52.5°	23200.2	23306.2	22398.1	20048.8	20896.8	22777.8	23953.2	24062.4	21653.0	21099.3	25532.0
55°	24094.0	24179.4	23182.8	20774.9	22157.6	24836.0	26050.9	25949.7	22901.2	22189.3	26683.7
57.5°	25619.1	25709.2	24804.3	21819.1	23178.0	26107.9	27571.3	27753.2	24364.5	23720.6	27917.7
60°	26384.7	26552.4	26229.7	23141.6	24166.8	26921.0	28607.5	29188.1	26193.3	25739.3	29113.7
62.5°	25690.2	25933.9	26402.1	24608.1	25149.2	27368.8	28930.2	29702.2	28066.4	28091.7	29850.9
65°	24304.4	24499.0	25293.2	25411.8	25718.7	27313.4	28132.9	28984.0	29213.4	30252.8	29811.4
67.5°	22630.6	22703.4	23377.3	25475.1	24892.9	25649.1	25737.7	26367.3	28306.9	31018.4	28613.8
70°	20221.2	20260.8	20849.3	23356.8	21391.9	21558.0	21426.7	21554.9	24336.0	29153.3	25590.6
72.5°	16274.1	16373.8	17210.7	19397.0	15584.4	15105.0	16136.5	16079.5	18742.1	24630.3	19006.3
75°	11982.1	12154.6	13418.6	15623.9	10938.0	9893.9	10646.9	10847.8	13323.7	19052.1	11885.6
77.5°	8389.4	8517.5	9742.0	11485.4	7916.4	7074.7	6802.6	7041.5	8794.4	13782.5	5987.9
80°	4833.0	4880.5	5662.0	6631.8	5334.5	6103.4	5529.1	5693.6	5269.7	6131.9	2575.5
82.5°	3162.4	3170.3	3475.7	3947.1	3322.2	3860.1	2857.1	3652.9	3241.5	2463.2	838.5
85°	1708.6	1718.1	2015.5	2801.7	1881.0	1063.1	624.9	1283.0	2004.4	564.8	229.4
87.5°	188.3	172.4	607.5	1018.8	522.1	96.5	33.2	144.0	321.1	36.4	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



REPORT NUMBER: P324332

CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8
2.5°	11980.6	11849.2	11521.8	11175.3	10896.9	10635.8	10373.2	10052.1	9803.7	9753.1	9670.8
5°	11724.3	11308.2	10621.6	9931.9	9376.6	8675.7	8231.2	7884.7	7546.2	7525.6	7457.6
7.5°	10828.9	10281.5	9314.9	8360.9	7579.4	6911.8	6237.9	5787.0	5432.6	5307.6	5233.3
10°	9968.2	9352.8	8145.8	7057.3	6359.7	5769.6	5295.0	4823.5	4396.4	4102.1	3969.3
12.5°	9367.1	8686.8	7356.3	6418.2	5918.3	5358.3	4779.2	4190.7	3698.7	3344.4	3127.6
15°	9134.5	8408.4	7092.1	6165.1	5548.1	4839.4	4099.0	3426.6	2880.8	2559.7	2365.1
17.5°	9411.4	8566.6	7071.6	5856.6	4994.4	4113.2	3295.3	2501.2	1987.0	1743.4	1618.4
20°	10113.8	9069.7	7063.7	5478.5	4336.3	3252.6	2232.2	1645.3	1333.6	1197.6	1139.0
22.5°	11107.3	9712.0	7126.9	5105.1	3651.3	2324.0	1540.9	1208.7	1048.9	976.1	942.9
25°	12385.5	10613.7	7305.7	4766.6	3007.4	1733.9	1200.7	1012.5	900.2	843.2	819.5
27.5°	13747.7	11651.5	7584.2	4472.3	2483.8	1382.7	1028.3	866.9	786.3	746.7	724.6
30°	14870.9	12853.8	7865.7	4144.9	2104.1	1205.5	941.3	791.0	697.7	672.4	651.8
32.5°	15853.3	13763.5	8065.1	3849.0	1855.7	1071.0	851.1	707.2	643.9	594.8	572.7
35°	16870.5	14521.3	8058.8	3641.8	1684.8	969.8	775.2	632.8	556.9	499.9	482.5
37.5°	17971.6	15377.1	7921.1	3464.6	1610.5	889.1	732.5	593.3	517.3	460.4	438.2
40°	19261.0	16275.7	7780.3	3298.5	1589.9	824.2	702.4	561.6	480.9	425.6	403.4
42.5°	20517.1	17085.7	7656.9	3175.1	1501.3	822.6	675.5	537.9	452.5	398.7	373.4
45°	21521.6	17840.3	7633.2	3100.7	1408.0	851.1	661.3	522.1	430.3	376.5	352.8
47.5°	22356.9	18659.8	7785.1	3048.5	1319.4	776.8	696.1	511.0	409.7	357.5	330.6
50°	23350.5	19666.0	8142.6	2963.1	1226.1	699.2	797.3	514.2	392.3	338.5	310.1
52.5°	24736.3	21058.1	8667.8	2819.1	1097.9	628.1	784.7	517.3	373.4	318.0	289.5
55°	26289.8	22796.7	9232.6	2580.3	919.1	534.7	672.4	495.2	337.0	295.8	268.9
57.5°	27922.5	24374.0	9568.0	2295.5	730.9	461.9	537.9	450.9	297.4	265.8	248.4
60°	28178.7	24973.6	9414.5	1945.9	580.6	401.8	398.7	458.8	265.8	234.1	221.5
62.5°	27541.2	24220.6	8672.6	1634.2	485.7	352.8	327.5	400.2	240.5	208.8	196.2
65°	26315.1	22184.5	7470.2	1472.9	450.9	302.2	272.1	281.6	210.4	181.9	170.9
67.5°	24609.7	19466.6	6133.4	1381.1	446.1	259.4	232.6	213.6	181.9	158.2	148.7
70°	21123.0	16217.2	4893.2	1330.5	433.5	218.3	196.2	174.0	151.9	134.5	126.6
72.5°	15546.4	11491.7	3806.3	1275.1	436.6	174.0	170.9	144.0	121.8	104.4	101.2
75°	8982.6	6565.3	2496.4	1033.1	416.1	134.5	142.4	101.2	85.4	72.8	72.8
77.5°	4787.2	4004.1	950.8	430.3	151.9	85.4	80.7	60.1	53.8	44.3	42.7
80°	2086.7	1762.4	286.3	120.2	83.8	45.9	30.1	26.9	23.7	19.0	17.4
82.5°	738.8	637.5	93.3	58.5	36.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	167.7	120.2	0.0	14.2	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



REPORT NUMBER: P324332

CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8
2.5°	9503.1	9468.3	9262.7	9270.6	9307.0	9359.2	9235.8	9292.7	9446.2	9593.3	9648.7
5°	7348.4	7356.3	7231.4	7308.9	7378.5	7425.9	7226.6	7229.8	7351.6	7517.7	7604.7
7.5°	5177.9	5165.3	5171.6	5356.7	5488.0	5393.1	5467.4	5209.6	5225.4	5344.0	5255.4
10°	3849.0	3675.0	3576.9	3716.1	3860.1	3807.9	3679.8	3595.9	3654.4	3785.7	3776.3
12.5°	3024.8	2774.8	2627.7	2528.1	2646.7	2548.6	2545.5	2472.7	2393.6	2407.8	2618.2
15°	2274.9	2093.0	1919.0	1759.2	1756.0	1722.8	1553.5	1363.7	1347.9	1357.4	1466.5
17.5°	1564.6	1502.9	1431.7	1294.1	1257.7	1118.5	954.0	878.0	840.0	857.4	893.8
20°	1099.5	1075.8	1083.7	1009.3	957.1	824.2	727.7	697.7	691.3	708.7	726.1
22.5°	911.2	868.5	863.8	830.6	778.3	681.8	629.6	612.2	604.3	620.1	632.8
25°	797.3	754.6	737.2	716.7	661.3	594.8	563.2	547.4	539.5	549.0	556.9
27.5°	702.4	662.9	647.0	632.8	579.0	531.6	506.2	492.0	485.7	488.8	496.8
30°	631.2	596.4	575.9	558.4	512.6	479.3	457.2	443.0	436.6	436.6	444.5
32.5°	556.9	537.9	518.9	496.8	454.0	431.9	409.7	393.9	387.6	389.2	395.5
35°	463.5	457.2	461.9	441.4	405.0	386.0	363.9	346.5	341.7	343.3	349.6
37.5°	411.3	382.8	400.2	389.2	368.6	343.3	314.8	299.0	291.1	295.8	299.0
40°	378.1	343.3	330.6	341.7	338.5	297.4	272.1	256.3	250.0	251.5	254.7
42.5°	349.6	308.5	280.0	278.4	297.4	259.4	232.6	218.3	210.4	210.4	213.6
45°	322.7	278.4	243.6	216.7	250.0	219.9	194.6	181.9	172.4	172.4	174.0
47.5°	302.2	253.1	212.0	177.2	188.3	180.3	159.8	147.1	137.6	137.6	139.2
50°	283.2	227.8	183.5	148.7	140.8	148.7	129.7	115.5	109.2	107.6	110.7
52.5°	262.6	202.5	156.6	126.6	110.7	112.3	101.2	91.8	83.8	83.8	87.0
55°	242.0	181.9	136.1	107.6	91.8	83.8	80.7	74.4	68.0	68.0	71.2
57.5°	221.5	159.8	115.5	88.6	72.8	66.4	66.4	61.7	57.0	57.0	60.1
60°	202.5	137.6	94.9	72.8	57.0	55.4	57.0	52.2	49.0	49.0	52.2
62.5°	180.3	117.1	77.5	60.1	45.9	44.3	49.0	45.9	42.7	42.7	45.9
65°	153.5	99.7	61.7	45.9	34.8	34.8	41.1	38.0	34.8	34.8	38.0
67.5°	129.7	83.8	47.5	33.2	25.3	26.9	34.8	31.6	30.1	30.1	33.2
70°	107.6	64.9	33.2	20.6	14.2	20.6	26.9	26.9	26.9	26.9	30.1
72.5°	80.7	44.3	19.0	7.9	6.3	14.2	22.1	25.3	23.7	23.7	28.5
75°	52.2	25.3	6.3	0.0	0.0	7.9	17.4	20.6	20.6	19.0	23.7
77.5°	30.1	7.9	0.0	0.0	0.0	0.0	11.1	9.5	7.9	6.3	11.1
80°	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

REPORT NUMBER: P324332

CATALOG NUMBER: GLEON-SA8C-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8	11203.8
2.5°	9871.7	10058.4	10321.0	10599.5	11028.2	11368.3	11702.1	11988.5	12099.2	12145.1
5°	7813.5	8087.2	8471.7	8965.2	9738.8	10434.9	11140.5	11850.8	12159.3	12236.8
7.5°	5606.6	5956.3	6445.1	7063.7	7970.2	8871.9	9857.5	10900.0	11377.8	11498.0
10°	4149.6	4576.8	5136.8	5788.6	6653.9	7581.0	8655.2	9846.4	10392.2	10552.0
12.5°	2944.1	3521.6	4271.4	5064.0	5813.9	6641.3	7728.1	9041.2	9613.9	9786.3
15°	1729.1	2287.6	3175.1	4236.6	5196.9	6035.4	7139.6	8628.3	9259.5	9433.5
17.5°	991.9	1270.4	1941.1	3124.5	4428.0	5589.2	6954.5	8731.1	9474.7	9636.0
20°	757.8	846.4	1118.5	2012.3	3529.5	5151.0	6954.5	9313.3	10229.3	10466.6
22.5°	662.9	727.7	838.5	1200.7	2597.7	4681.2	7035.2	10154.9	11352.5	11615.1
25°	588.5	647.0	742.0	903.3	1771.8	4122.7	7226.6	11188.0	12675.1	13015.2
27.5°	526.8	582.2	667.6	791.0	1211.8	3448.8	7484.5	12399.8	14133.7	14405.8
30°	471.4	523.6	601.2	688.2	935.0	2684.7	7704.4	13542.0	15279.0	15571.7
32.5°	419.2	466.7	536.3	601.2	765.7	1985.4	7728.1	14446.9	16229.8	16520.9
35°	370.2	412.9	476.2	526.8	634.4	1567.8	7359.5	15231.6	17180.6	17565.0
37.5°	322.7	363.9	419.2	457.2	558.4	1278.3	6796.3	16106.4	18400.3	18756.3
40°	278.4	314.8	371.8	397.1	528.4	982.4	6184.1	17024.0	19596.3	19922.2
42.5°	237.3	272.1	327.5	376.5	463.5	734.1	5522.8	17884.6	20672.1	21013.8
45°	197.8	234.1	289.5	398.7	384.4	549.0	4815.6	18455.7	21521.6	21893.4
47.5°	159.8	200.9	276.9	379.7	306.9	403.4	4255.6	18996.8	22165.5	22532.6
50°	128.1	169.3	311.7	338.5	251.5	308.5	4021.5	19480.9	22587.9	22940.7
52.5°	104.4	142.4	294.3	259.4	210.4	254.7	4148.0	20265.5	22978.7	23200.2
55°	87.0	112.3	177.2	180.3	178.8	216.7	4304.6	21391.9	23989.6	24094.0
57.5°	75.9	90.2	123.4	139.2	150.3	193.0	4307.8	23008.7	25554.2	25619.1
60°	64.9	79.1	102.8	112.3	129.7	172.4	4151.2	23573.5	26169.6	26384.7
62.5°	57.0	69.6	85.4	93.3	109.2	155.0	3784.2	22755.6	25324.8	25690.2
65°	50.6	63.3	71.2	79.1	96.5	139.2	3179.8	21119.8	23923.1	24304.4
67.5°	44.3	55.4	63.3	71.2	87.0	123.4	2341.4	19219.8	22314.2	22630.6
70°	39.6	49.0	57.0	63.3	75.9	104.4	1420.6	16308.9	20089.9	20221.2
72.5°	38.0	44.3	52.2	57.0	66.4	91.8	719.8	11985.3	16060.6	16274.1
75°	33.2	39.6	47.5	50.6	58.5	79.1	292.7	7872.1	11638.8	11982.1
77.5°	26.9	36.4	42.7	45.9	50.6	64.9	148.7	5030.8	8167.9	8389.4
80°	9.5	26.9	36.4	38.0	42.7	47.5	98.1	2754.3	4738.1	4833.0
82.5°	0.0	17.4	28.5	26.9	30.1	36.4	63.3	1309.9	3127.6	3162.4
85°	0.0	7.9	22.1	17.4	12.7	25.3	22.1	286.3	1640.5	1708.6
87.5°	0.0	0.0	1.6	7.9	6.3	9.5	3.2	1.6	148.7	188.3
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.

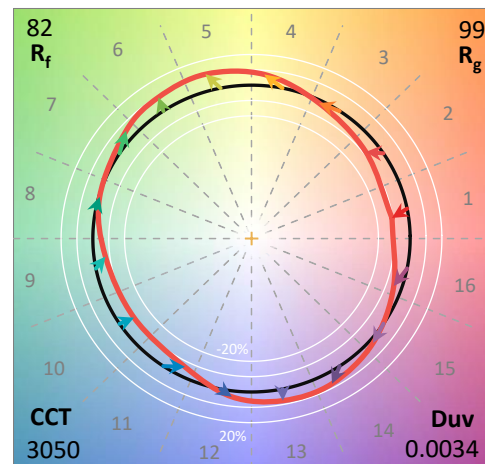
Test Information

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
 Rf: 81.5
 Rg: 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

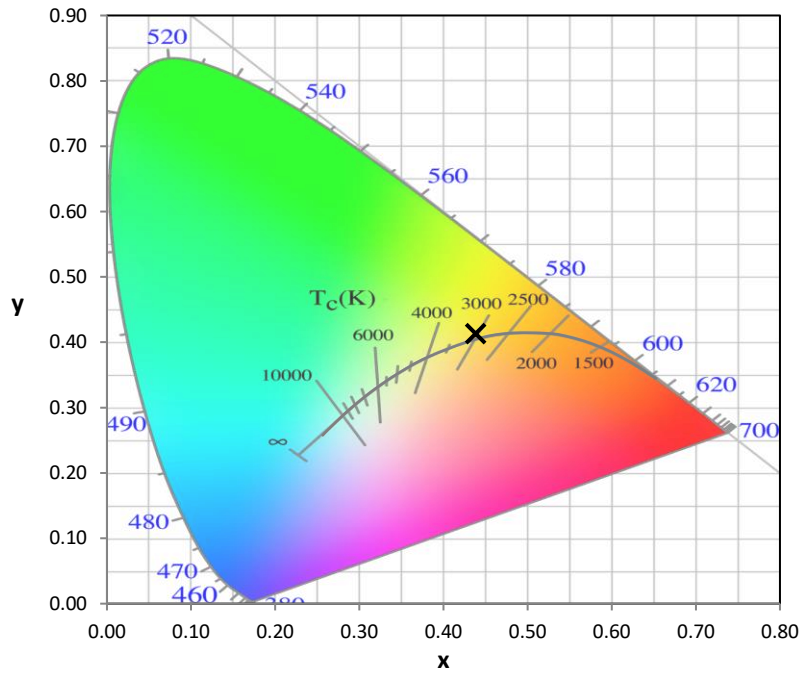
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

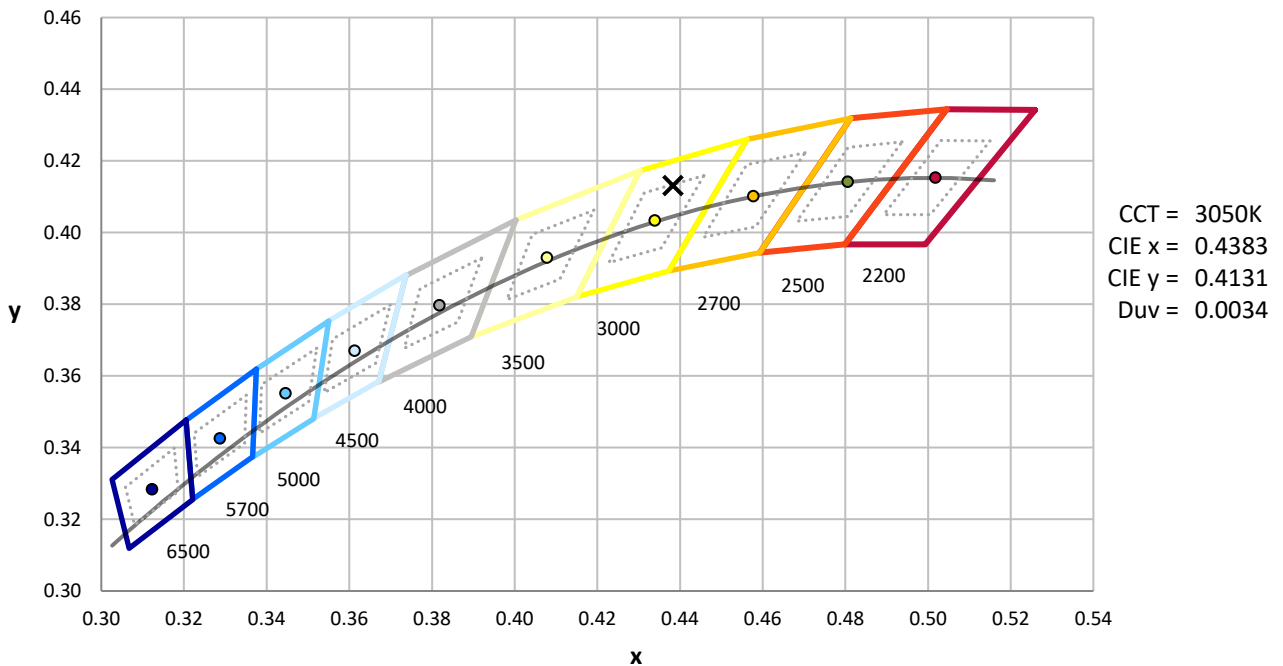
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



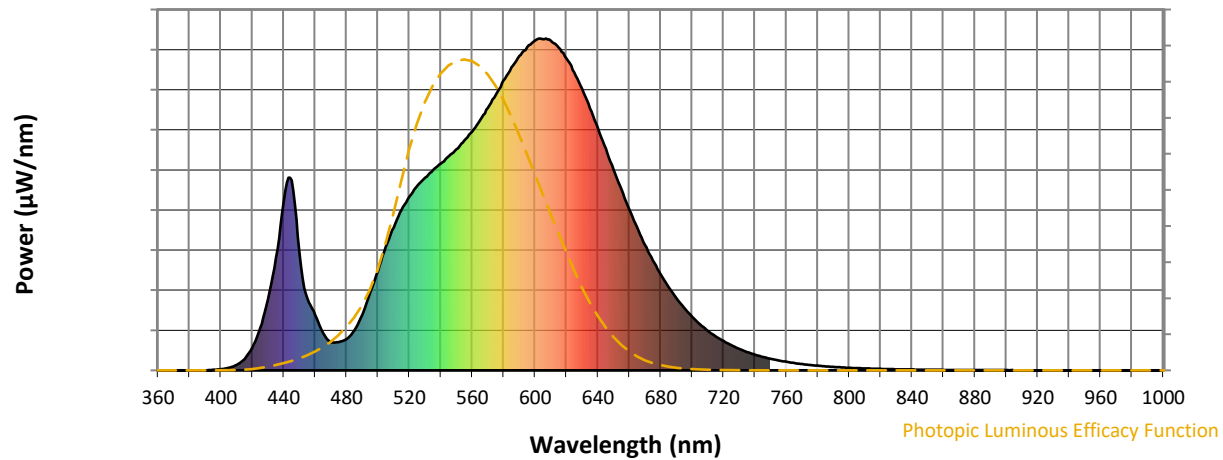
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

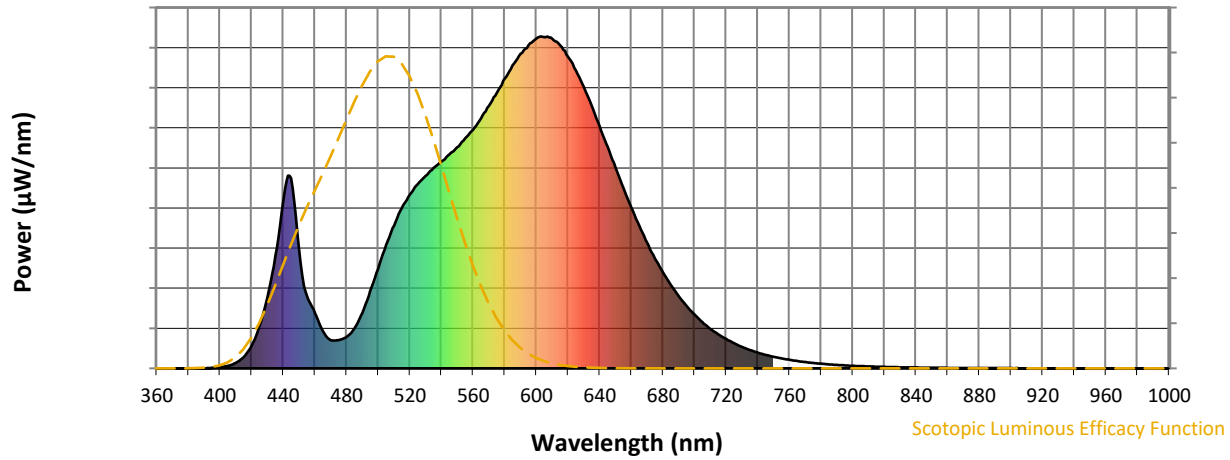


Photopic Lumens: NR

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



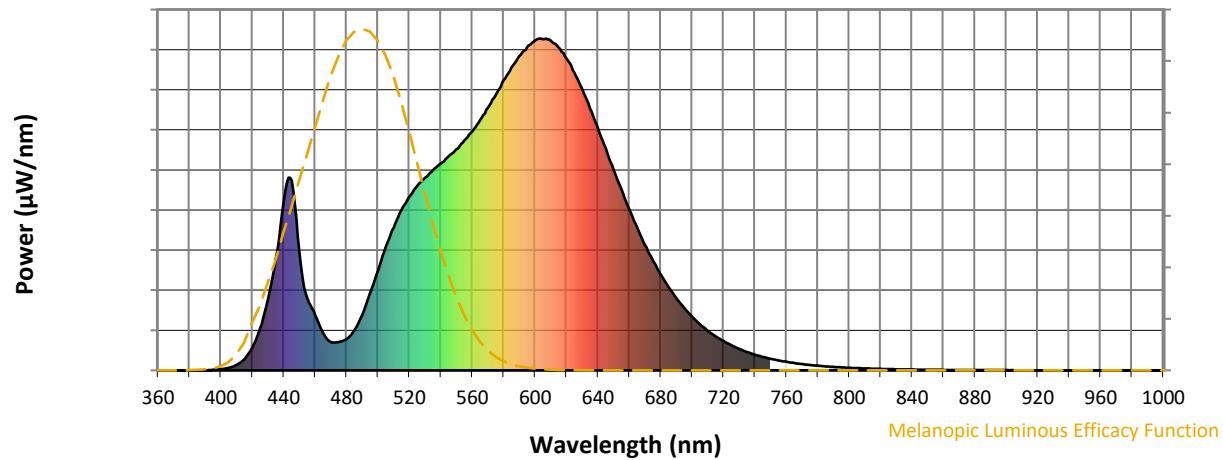
Scotopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.32

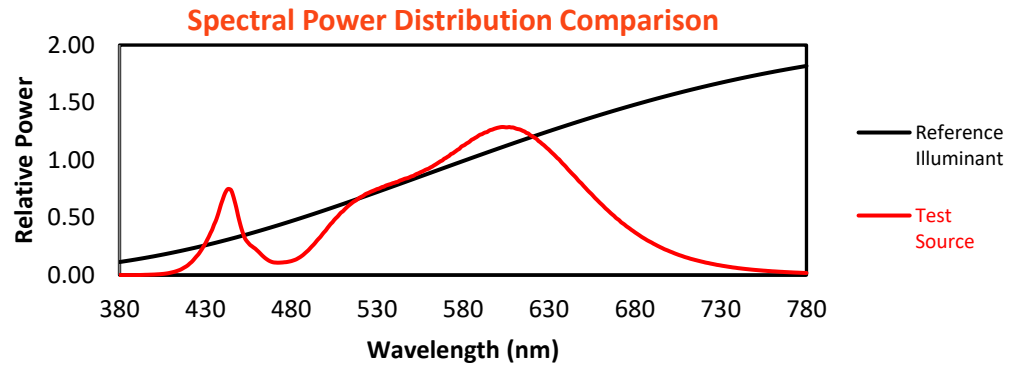
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940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

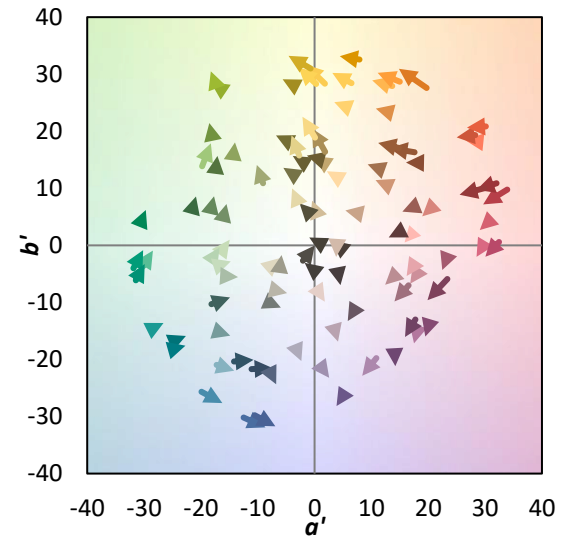
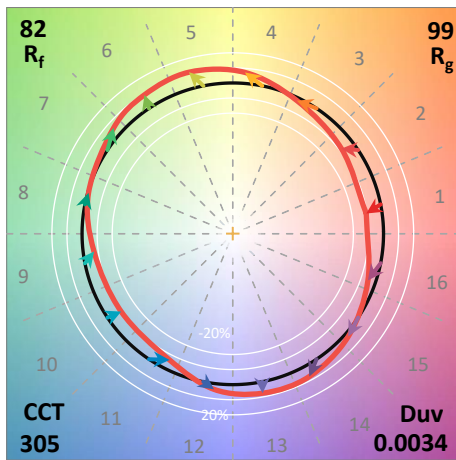
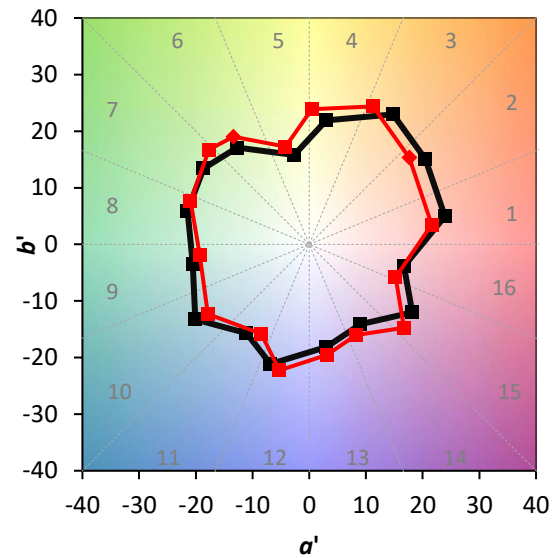
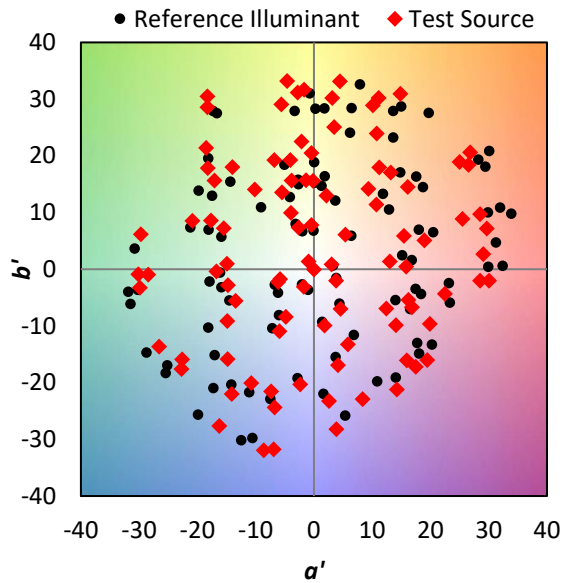
TM-30-18

Summary

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

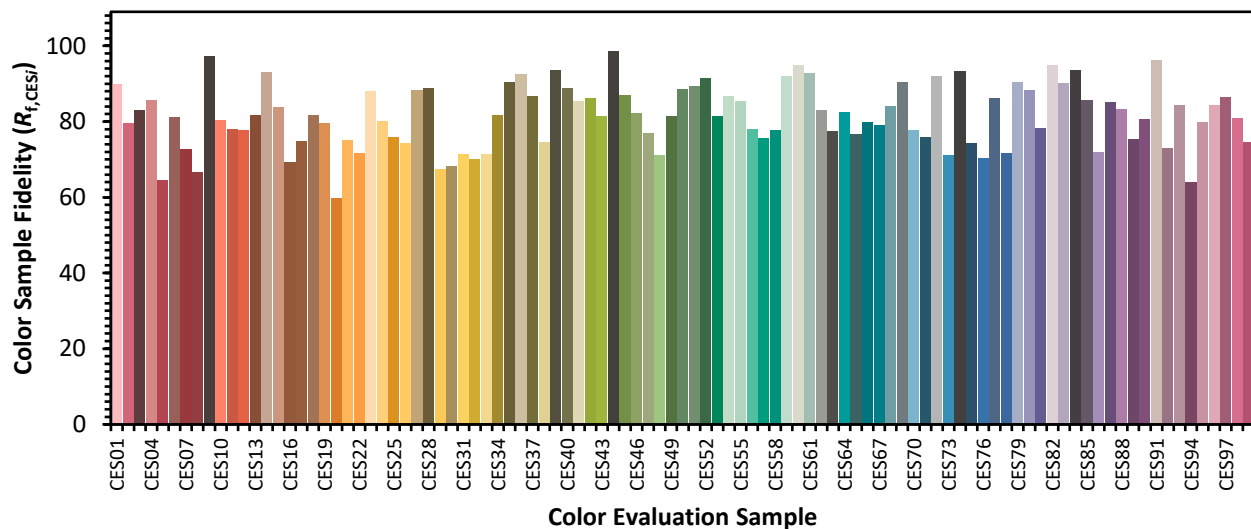


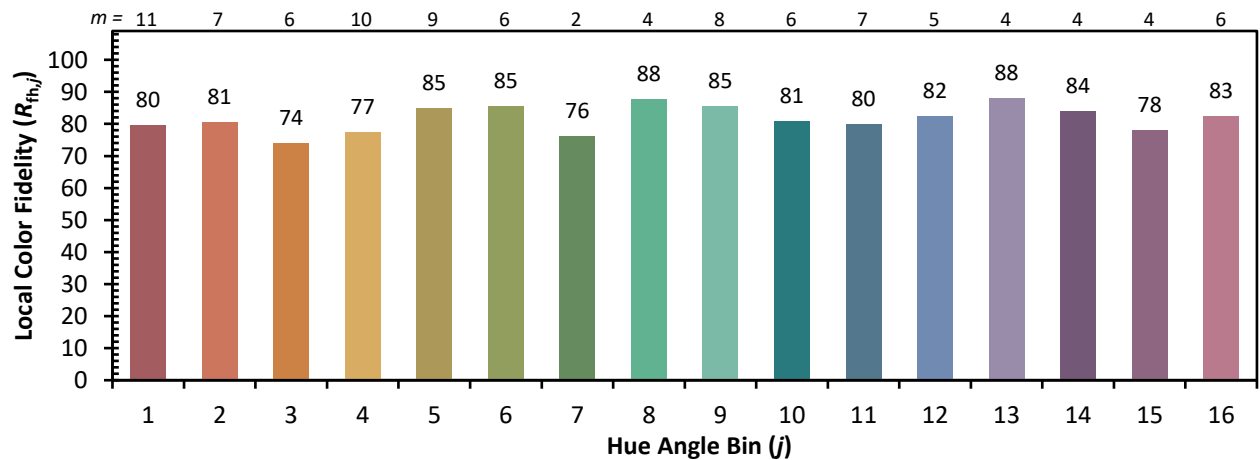
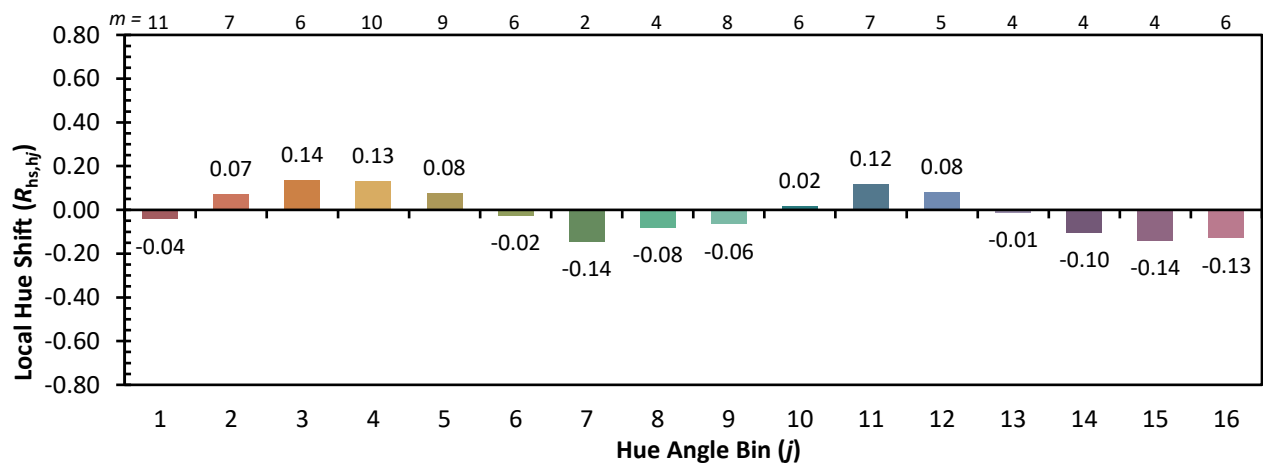
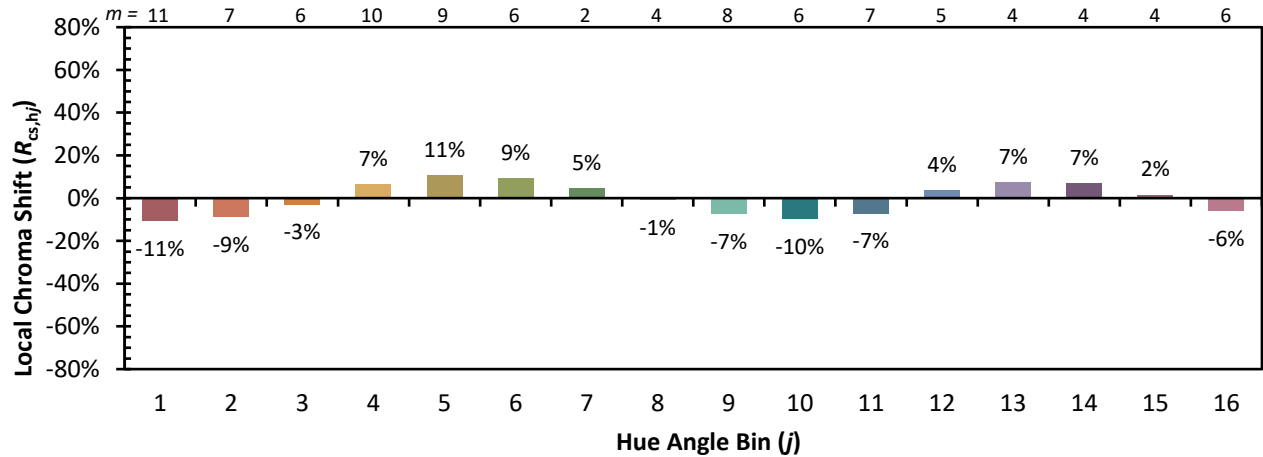
Color Vector Graphics



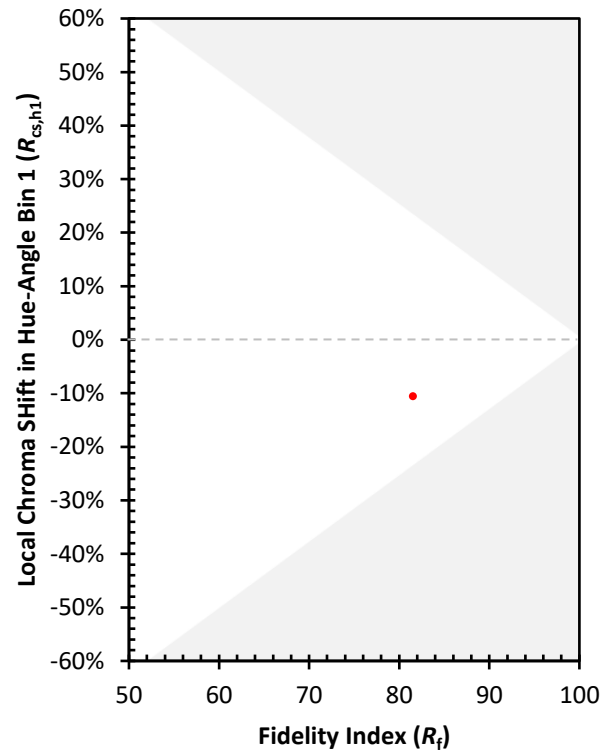
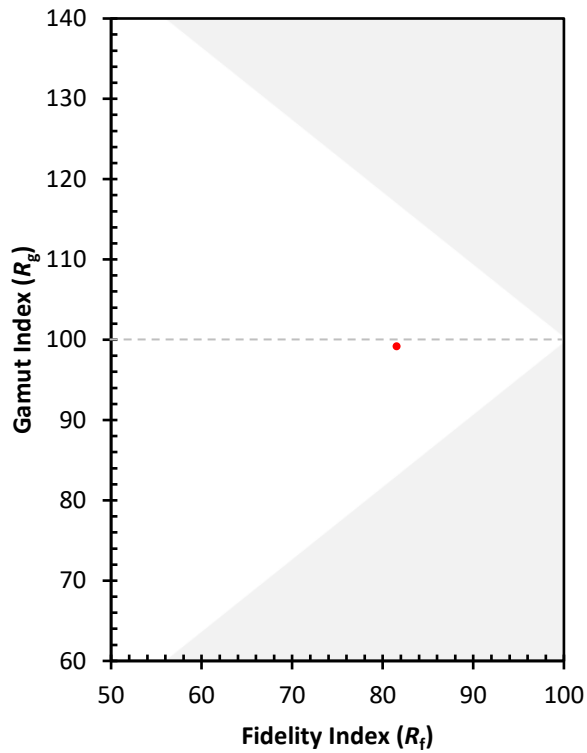
Individual Sample Fidelity Index ($R_{f,i}$)

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)