

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: P322705

Luminaire Tested: **GLEON-SA1A-830-U-T4FT-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322705
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA1A-830-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2753 lumens
Efficiency: N/A
Efficacy: 81.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

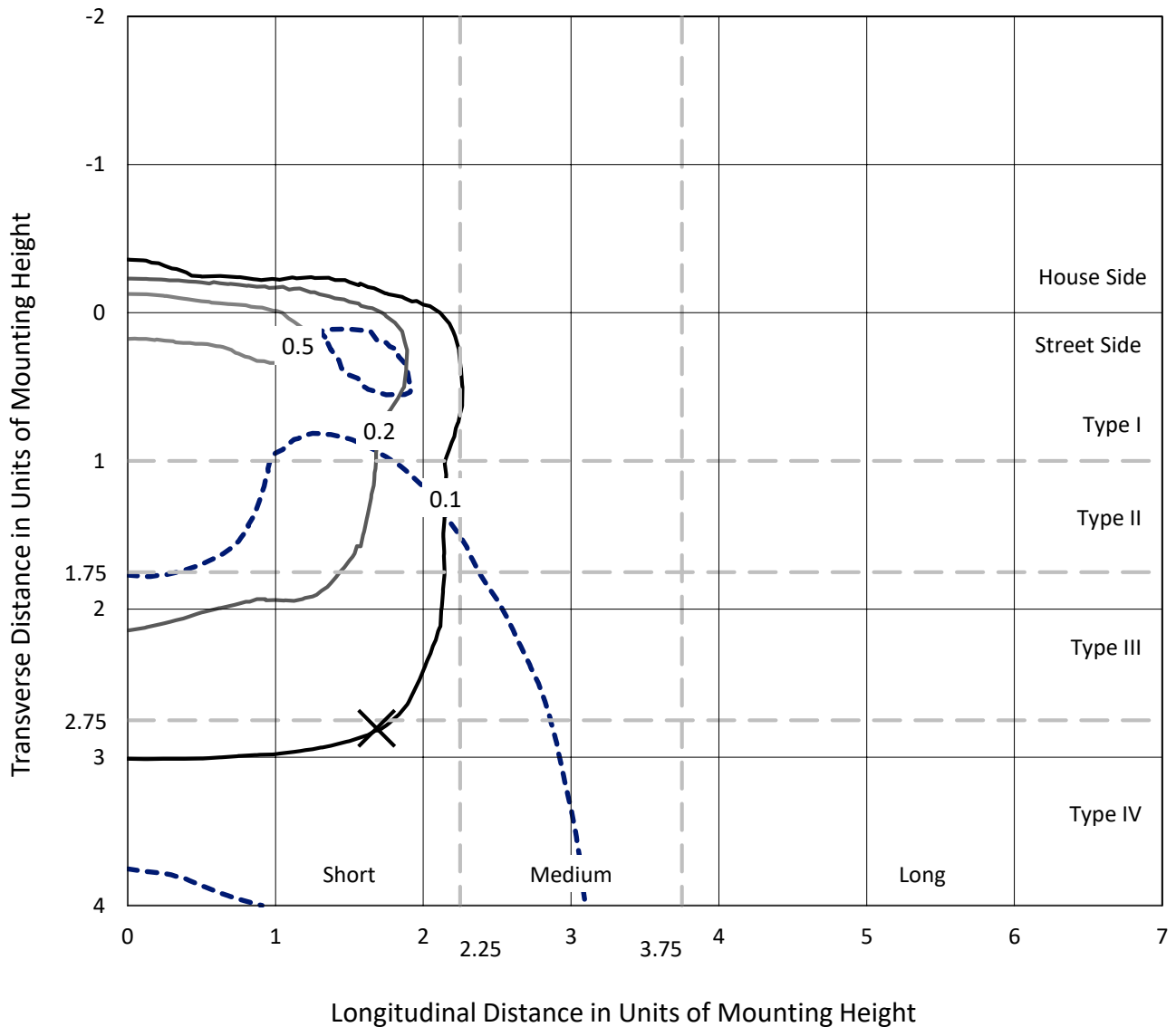
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P322705
 CATALOG NUMBER: GLEON-SA1A-830-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

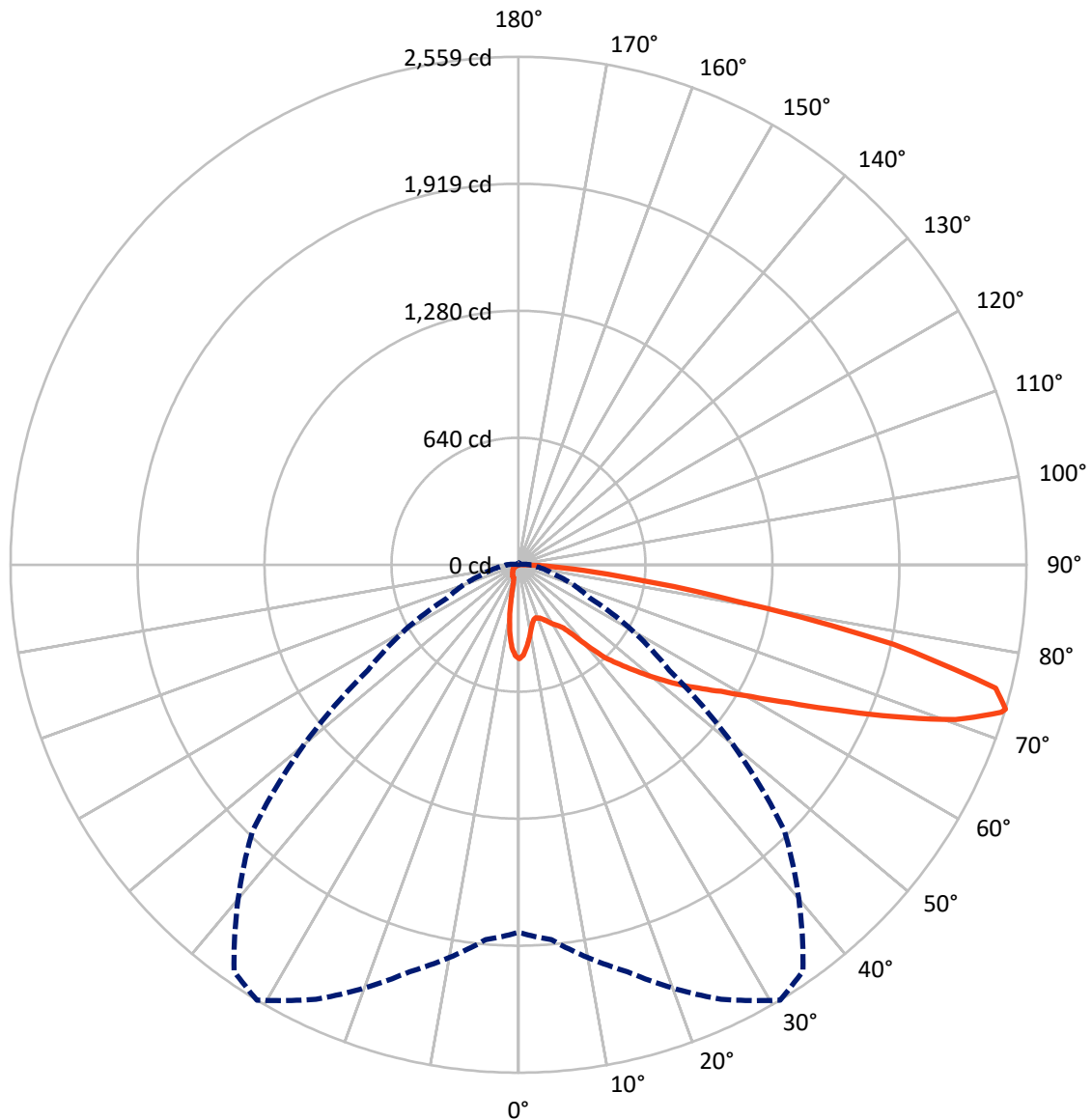
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Short - N/A

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CATALOG NUMBER: GLEON-SA1A-830-U-T4FT-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 31-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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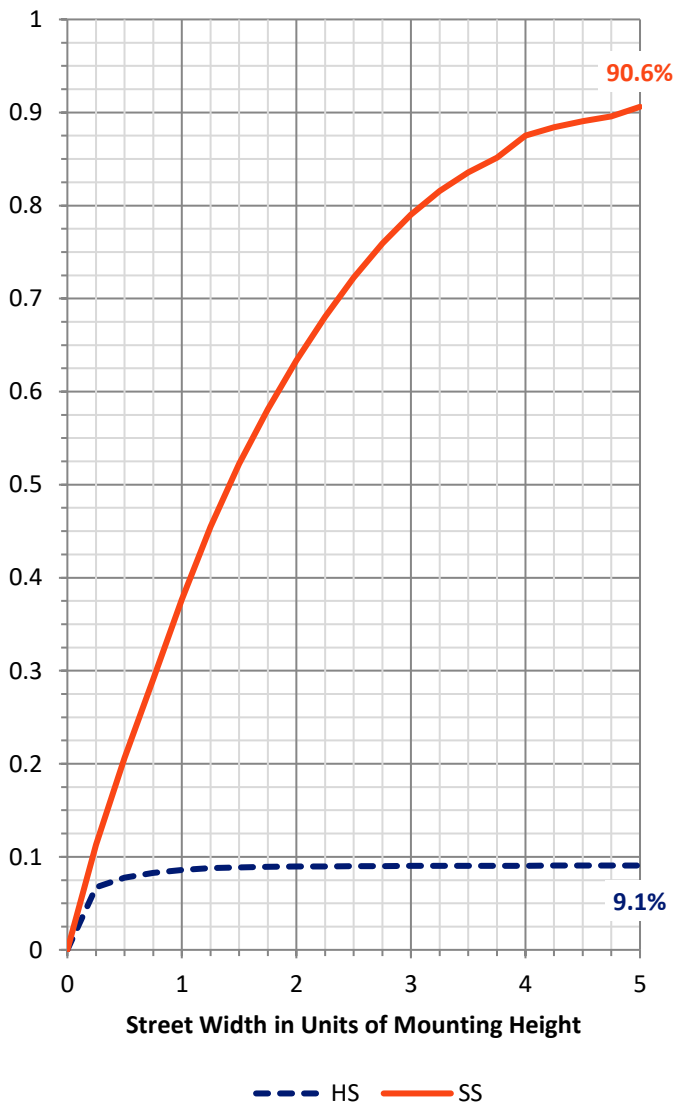
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	250.9	0.0	250.9
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2502.1	0.0	2502.1
	% Fixture	90.9	0.0	90.9
Total	Lumens	2753.0	0.0	2753.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.3	1.4
10°-20°	85.3	3.1
20°-30°	127.8	4.6
30°-40°	203.3	7.4
40°-50°	363.0	13.2
50°-60°	563.3	20.5
60°-70°	748.8	27.2
70°-80°	563.2	20.5
80°-90°	59.2	2.1
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°	2753.0	100.0
0°-180°	2753.0	100.0

Coefficient of Utilization

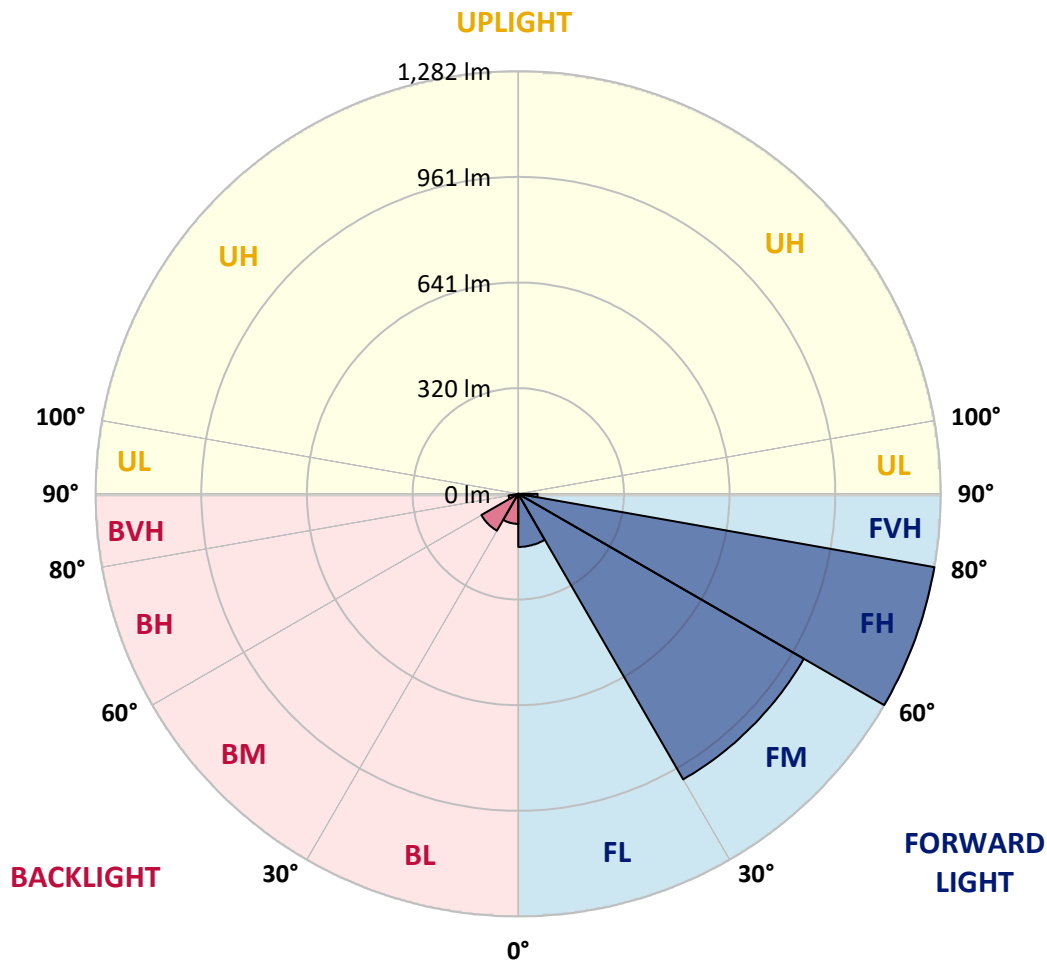


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	161.1	5.9			
FM (30°-60°)	1000.3	36.3			
FH (60°-80°)	1282.0	46.6			G1/1800
FVH (80°-90°)	58.7	2.1			G1/100
BL (0°-30°)	91.3	3.3	B0/110		
BM (30°-60°)	129.2	4.7	B0/220		
BH (60°-80°)	30.0	1.1	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			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 IV Short





REPORT NUMBER: P322705

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	31°	35°	45°	55°	65°	75°	85°
0°	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7
2.5°	448.9	450.8	452.8	453.2	456.6	456.7	461.5	465.2	468.8	472.3	473.5
5°	402.8	405.9	409.5	413.2	420.3	423.1	435.0	447.1	458.7	469.8	475.1
7.5°	353.6	357.1	362.2	371.3	379.2	384.7	403.5	425.0	446.6	466.9	478.6
10°	308.8	312.0	317.4	327.0	339.2	346.8	371.9	401.9	433.5	464.4	483.9
12.5°	280.2	282.0	284.9	295.2	306.2	314.7	344.3	381.4	422.7	464.2	492.4
15°	275.0	275.5	273.1	277.6	286.3	294.5	324.5	364.8	414.5	466.4	503.4
17.5°	283.3	283.0	275.0	274.4	281.3	288.0	314.8	353.4	408.7	471.4	517.7
20°	296.0	295.0	281.0	278.5	285.7	292.1	314.2	349.0	406.6	479.7	535.1
22.5°	312.8	311.2	289.2	286.5	294.4	301.0	322.5	353.2	408.5	490.9	555.3
25°	333.7	331.3	303.4	300.4	308.4	315.0	337.5	365.2	414.1	504.5	580.9
27.5°	357.3	353.8	326.0	318.3	327.4	334.2	357.4	383.5	423.0	518.9	612.3
30°	379.5	374.9	349.9	337.2	348.2	355.9	379.0	405.4	437.3	541.2	655.3
32.5°	401.9	396.7	371.1	356.1	366.0	374.4	401.2	435.4	464.1	575.1	712.4
35°	453.3	447.9	416.5	391.6	391.5	396.2	432.3	476.5	499.5	622.4	780.5
37.5°	539.9	536.8	506.9	459.6	447.0	441.7	474.7	525.5	550.4	687.5	857.5
40°	634.8	632.1	598.5	555.7	536.4	523.5	535.6	593.8	622.4	766.9	936.0
42.5°	741.9	729.1	669.3	656.5	639.2	629.4	618.5	678.0	710.8	853.4	1013.9
45°	839.1	817.6	740.0	720.6	716.7	719.1	725.2	791.2	810.2	956.2	1091.5
47.5°	897.1	880.1	820.6	802.0	800.9	816.9	862.7	919.0	909.2	1045.8	1159.8
50°	952.2	936.8	887.4	892.0	896.9	918.8	1018.9	1050.5	999.6	1127.0	1222.4
52.5°	996.8	973.3	947.5	973.2	997.7	1032.9	1180.0	1168.5	1063.7	1191.7	1276.0
55°	1022.5	1011.8	1024.4	1050.2	1096.3	1153.4	1332.1	1266.7	1110.6	1250.7	1311.7
57.5°	1116.8	1095.9	1120.8	1143.2	1203.3	1283.2	1462.3	1339.9	1144.4	1287.2	1319.9
60°	1230.9	1214.1	1228.7	1265.9	1347.0	1440.9	1584.1	1399.6	1162.1	1310.6	1298.7
62.5°	1412.5	1390.3	1381.1	1422.7	1530.2	1632.8	1676.5	1440.9	1158.1	1300.3	1225.6
65°	1655.8	1632.8	1591.8	1629.5	1766.3	1838.6	1779.9	1449.7	1131.2	1216.3	1041.1
67.5°	1905.0	1888.3	1853.3	1916.9	2040.3	2063.6	1889.1	1428.4	1044.4	986.3	735.5
70°	2069.6	2062.5	2085.3	2225.9	2336.0	2329.2	1989.3	1314.0	814.1	606.5	363.9
72.5°	1950.9	1985.2	2153.3	2408.3	2542.8	2487.8	1937.9	1009.0	465.3	233.3	105.2
73°	1852.6	1896.4	2122.7	2415.2	2559.1	2498.8	1894.6	926.2	396.6	184.2	79.8
75°	1288.8	1342.6	1757.4	2249.3	2482.8	2380.8	1579.3	566.9	183.8	81.6	32.2
77.5°	625.8	665.5	967.7	1625.2	1930.9	1860.2	983.2	211.2	83.0	51.1	14.8
80°	233.6	259.7	420.0	827.2	1115.8	1145.1	432.4	79.9	55.2	41.1	7.5
82.5°	61.2	68.2	154.9	368.9	571.9	598.5	136.3	40.3	40.4	33.8	4.6
85°	19.5	22.4	48.4	165.6	269.4	236.6	35.6	19.5	29.4	25.2	2.6
87.5°	2.4	3.1	15.4	38.9	59.4	33.0	5.5	5.8	12.5	14.0	1.5
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: P322705
 CATALOG NUMBER: GLEON-SA1A-830-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7
2.5°	474.7	474.1	474.2	470.7	468.4	463.8	459.1	457.0	454.7	453.7	454.7
5°	477.2	475.9	472.4	461.7	450.2	435.4	421.5	411.0	397.8	394.2	397.9
7.5°	480.9	478.5	468.3	446.3	420.9	392.6	360.8	337.6	318.6	306.3	310.8
10°	486.5	481.9	461.3	423.9	378.4	328.3	283.2	248.0	223.1	212.9	212.4
12.5°	495.8	487.1	452.6	394.9	326.6	259.7	200.6	162.5	142.3	129.2	128.9
15°	506.0	493.3	441.7	360.0	266.2	186.0	129.2	100.2	87.2	83.0	82.4
17.5°	518.5	500.5	427.6	317.0	203.0	123.3	84.3	76.0	75.4	75.0	75.0
20°	534.3	509.0	409.4	267.8	144.0	82.3	71.7	72.2	72.5	71.9	72.1
22.5°	552.6	517.6	387.7	215.0	97.4	68.8	68.6	69.2	69.5	69.2	69.4
25°	573.9	527.5	361.3	159.6	70.3	65.3	66.0	67.0	67.6	67.6	67.6
27.5°	600.3	539.7	329.5	111.4	60.8	61.7	63.6	65.3	66.3	66.5	66.5
30°	634.6	554.8	291.4	76.4	55.2	56.8	60.4	63.7	65.5	65.7	65.9
32.5°	678.0	571.7	247.2	56.4	50.5	51.7	55.5	61.2	64.5	65.1	65.1
35°	727.7	591.4	199.6	49.2	47.2	47.6	50.5	57.0	62.9	64.4	64.5
37.5°	782.2	610.8	151.8	45.9	44.3	44.3	46.5	52.0	59.0	63.6	64.1
40°	832.9	622.5	106.4	43.4	41.8	41.8	43.6	47.7	54.3	61.2	62.6
42.5°	879.8	626.6	74.1	41.0	39.3	39.7	41.4	44.6	49.6	56.4	57.8
45°	928.1	625.9	54.0	38.1	36.9	38.1	39.3	41.8	45.4	49.3	49.6
47.5°	964.4	620.2	42.8	35.4	34.6	36.2	37.3	38.9	41.0	40.7	40.7
50°	998.5	606.5	34.5	31.8	32.3	34.2	34.8	35.3	35.4	32.9	32.6
52.5°	1024.4	585.1	27.6	27.9	30.0	31.9	31.4	30.6	29.2	26.1	25.6
55°	1033.0	543.8	21.7	23.0	26.7	29.1	27.1	25.3	22.8	20.2	19.7
57.5°	1017.4	490.6	17.6	17.9	22.5	24.5	22.2	20.2	17.4	15.2	14.8
60°	984.2	431.5	14.5	13.5	17.4	19.1	17.6	15.6	13.1	11.5	11.3
62.5°	918.5	368.4	12.0	10.5	13.2	14.7	13.7	12.3	10.1	9.0	8.9
65°	780.3	294.8	9.7	8.5	10.2	11.5	10.6	9.6	7.9	7.1	7.0
67.5°	544.7	199.2	7.9	7.0	8.1	9.0	8.4	7.8	6.3	6.2	6.3
70°	262.7	96.1	6.6	5.7	6.3	7.0	6.7	6.3	6.1	7.0	8.1
72.5°	75.3	32.2	5.3	4.7	5.1	5.5	5.8	5.7	6.6	8.5	9.8
73°	57.9	26.0	5.0	4.4	4.8	5.4	5.7	5.5	6.7	8.6	9.8
75°	24.8	12.5	3.8	3.6	4.0	4.7	5.0	5.0	6.7	8.8	9.4
77.5°	11.2	6.7	2.4	2.8	3.5	3.8	4.2	4.2	5.4	6.7	6.7
80°	6.3	3.6	1.9	2.2	2.6	2.6	2.6	2.3	2.4	2.7	3.0
82.5°	4.0	2.4	1.5	1.8	1.6	1.3	1.1	1.1	0.9	1.1	1.3
85°	2.3	1.3	1.3	1.1	0.7	0.5	0.7	0.5	0.1	0.0	0.1
87.5°	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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



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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



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



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

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



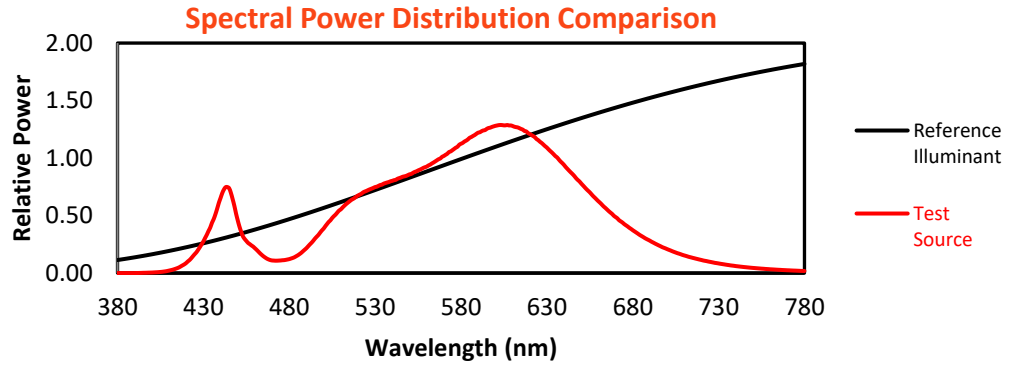
Melanopic Lumens: NR

M/P: 2.32

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

Summary

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

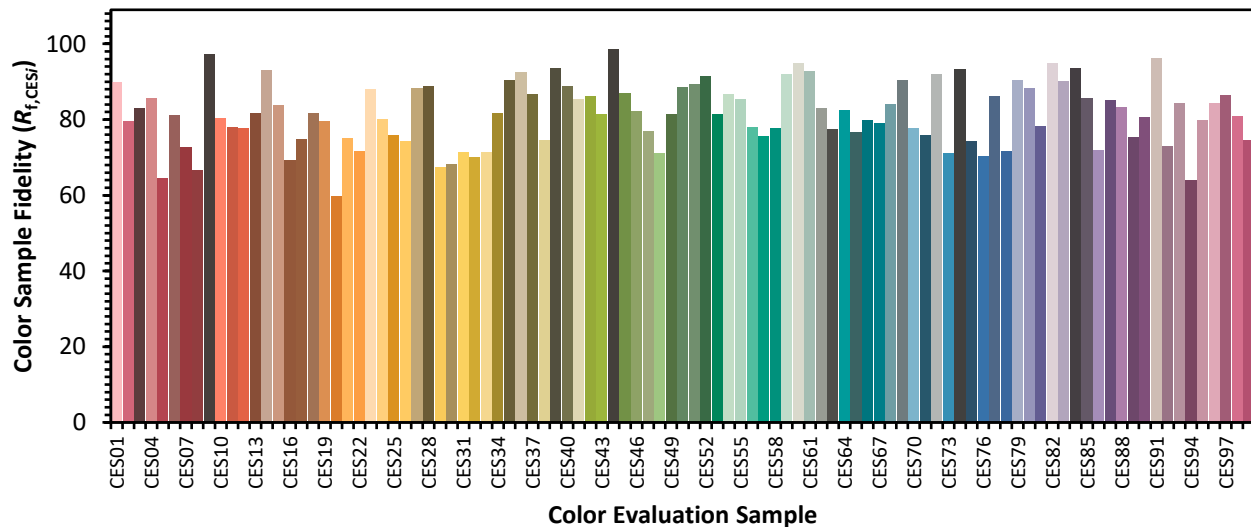


Color Vector Graphics

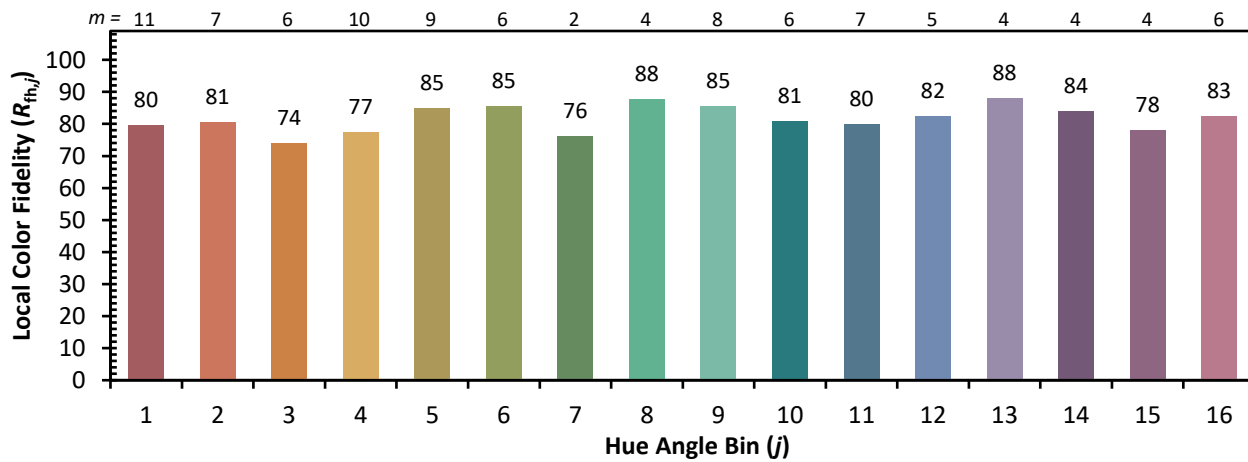
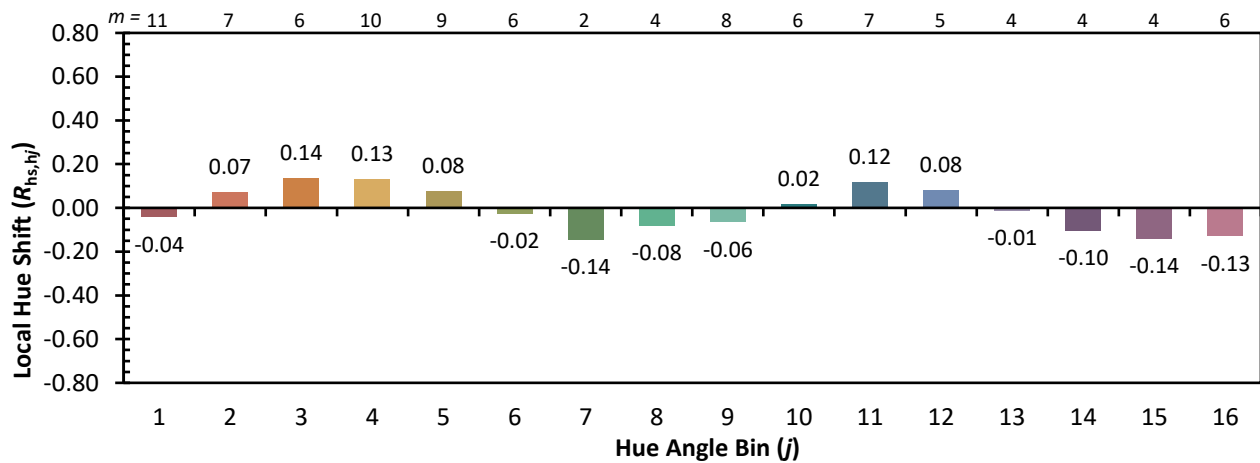
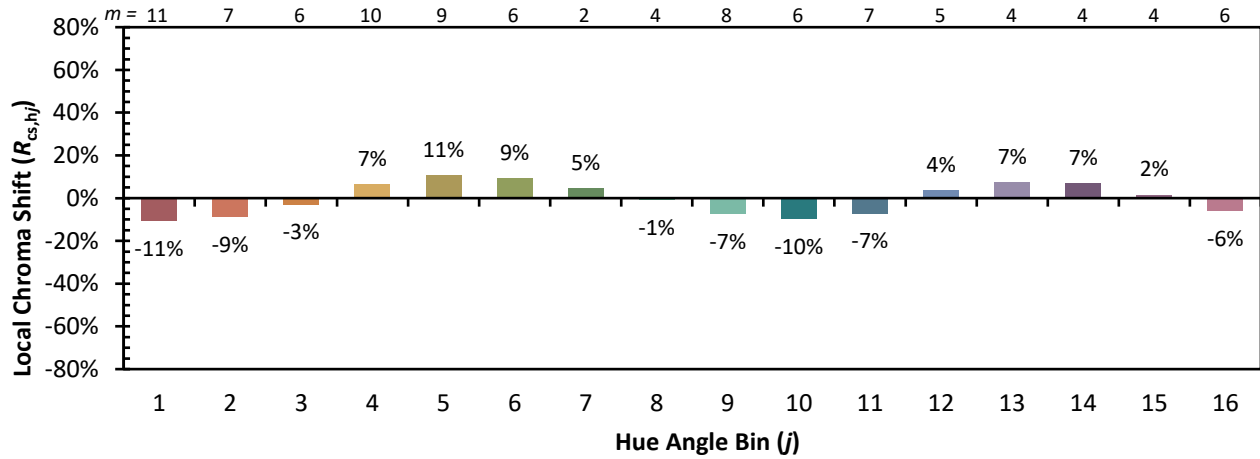


Individual Sample Fidelity Index ($R_{f,i}$)

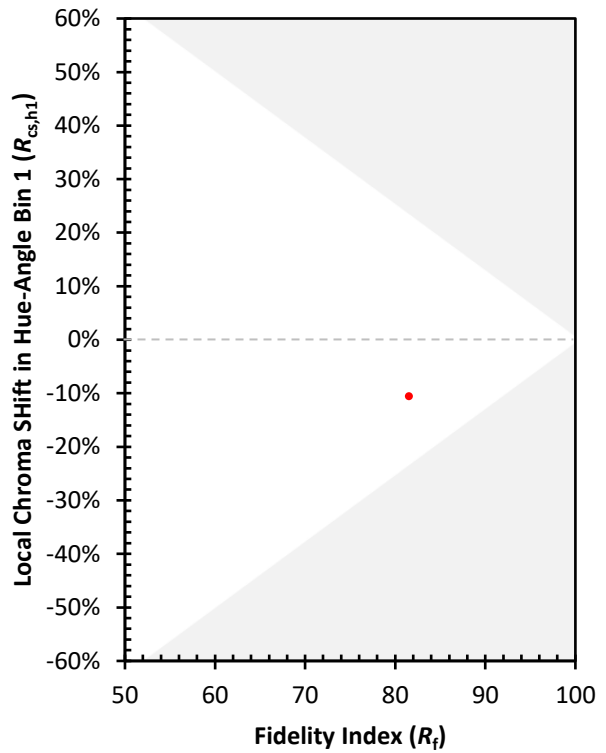
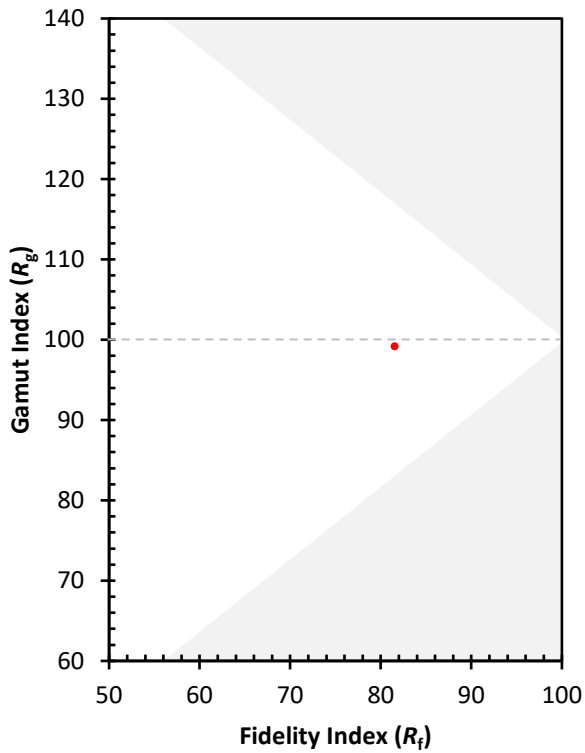
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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