

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: P322708

Luminaire Tested: **GLEON-SA4A-830-U-T4FT-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322708
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-SA4A-830-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10608 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

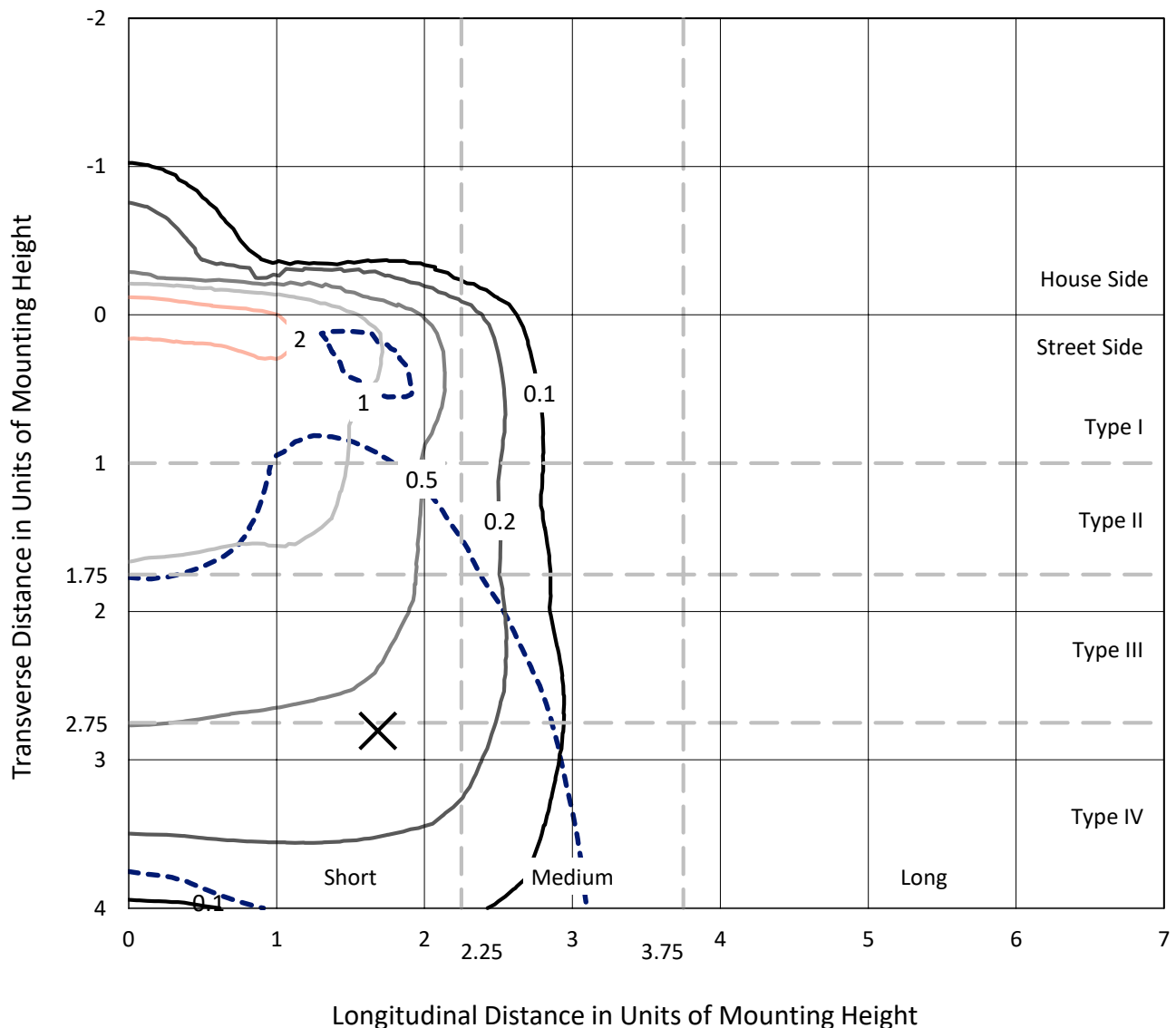
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

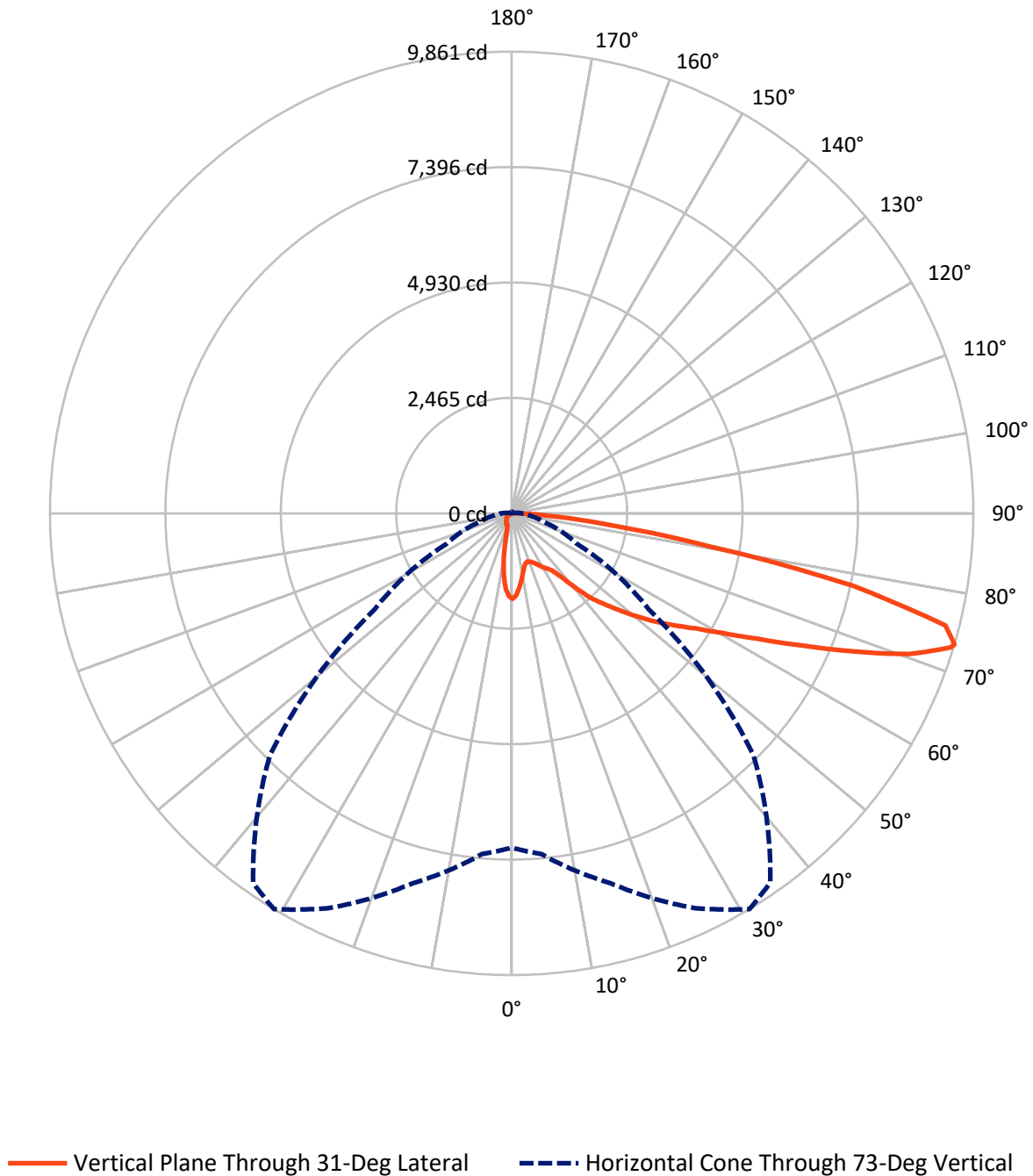
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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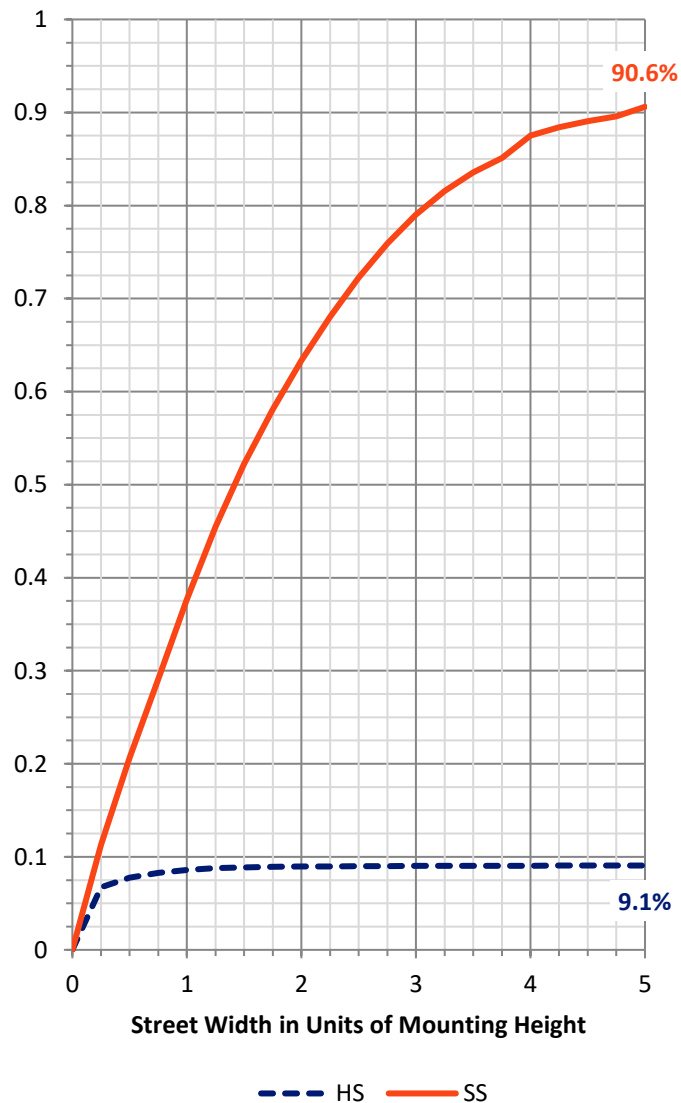
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	967.0	0.0	967.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	9641.0	0.0	9641.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	10608.0	0.0	10608.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.3	1.4
10°-20°	328.6	3.1
20°-30°	492.3	4.6
30°-40°	783.3	7.4
40°-50°	1398.7	13.2
50°-60°	2170.4	20.5
60°-70°	2885.2	27.2
70°-80°	2170.3	20.5
80°-90°	228.1	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°	10608.0	100.0
0°-180°	10608.0	100.0

Coefficient of Utilization



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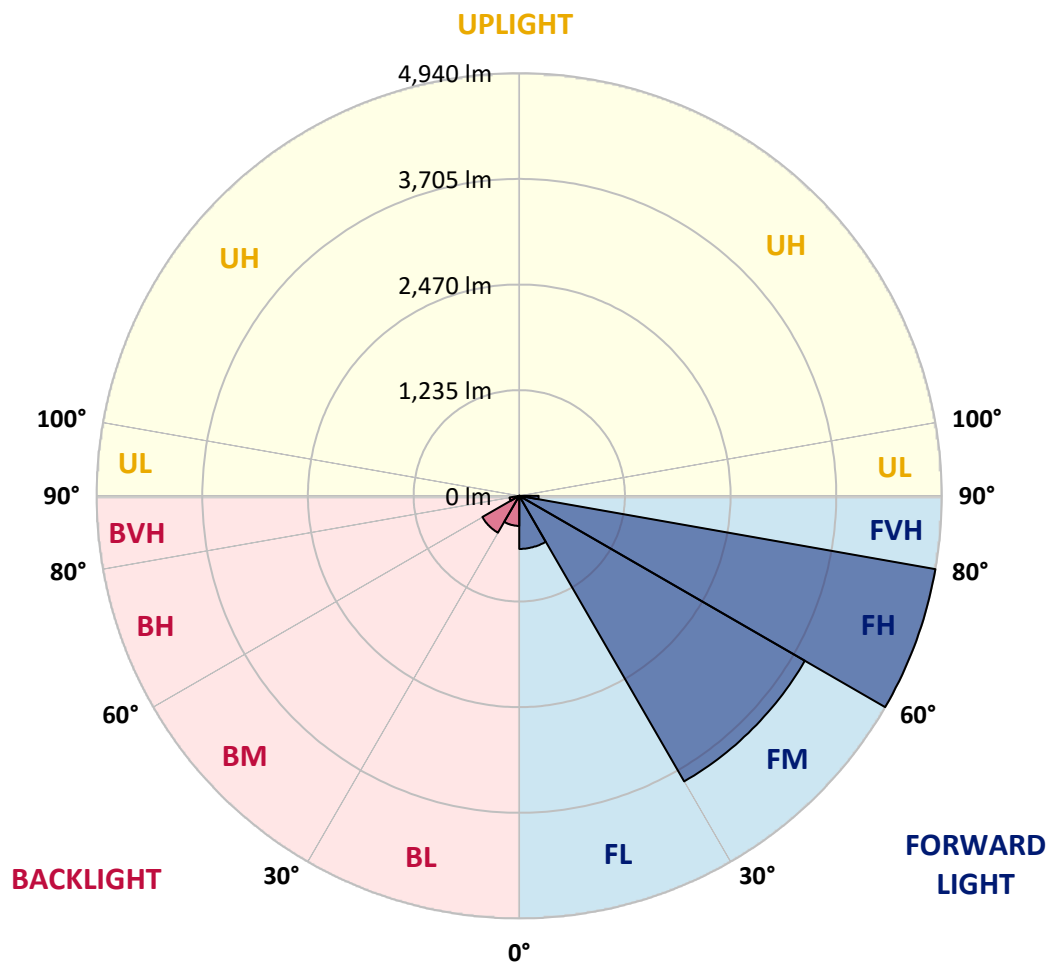
CATALOG NUMBER: GLEON-SA4A-830-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	620.6	5.9			
FM	(30°-60°)	3854.6	36.3			
FH	(60°-80°)	4939.7	46.6			G2/5000
FVH	(80°-90°)	226.1	2.1			G3/500
BL	(0°-30°)	351.6	3.3	B1/500		
BM	(30°-60°)	497.7	4.7	B1/1000		
BH	(60°-80°)	115.7	1.1	B1/500		G1/500
BVH	(80°-90°)	1.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	31°	35°	45°	55°	65°	75°	85°
0°	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1
2.5°	1729.6	1736.9	1744.7	1746.2	1759.2	1759.7	1778.4	1792.4	1806.4	1819.9	1824.6
5°	1552.1	1564.0	1578.0	1592.1	1619.6	1630.5	1676.1	1722.9	1767.5	1810.1	1830.8
7.5°	1362.6	1376.1	1395.8	1430.6	1461.2	1482.5	1554.7	1637.7	1720.8	1799.2	1844.3
10°	1189.8	1202.2	1223.0	1259.8	1307.1	1336.1	1433.2	1548.5	1670.4	1789.3	1864.6
12.5°	1079.7	1086.5	1097.9	1137.3	1179.9	1212.6	1326.8	1469.5	1628.9	1788.8	1897.3
15°	1059.5	1061.5	1052.2	1069.8	1103.1	1134.7	1250.5	1405.7	1597.2	1797.1	1939.8
17.5°	1091.7	1090.6	1059.5	1057.4	1083.9	1109.8	1213.1	1361.6	1574.9	1816.3	1994.9
20°	1140.4	1136.8	1082.8	1073.0	1101.0	1125.4	1210.5	1345.0	1566.6	1848.5	2061.8
22.5°	1205.3	1199.1	1114.5	1104.1	1134.2	1159.7	1242.7	1361.1	1573.9	1891.6	2139.7
25°	1285.8	1276.4	1169.0	1157.6	1188.2	1213.6	1300.3	1407.3	1595.7	1944.0	2238.3
27.5°	1376.6	1363.1	1256.2	1226.6	1261.4	1287.9	1377.2	1477.9	1629.9	1999.5	2359.3
30°	1462.3	1444.6	1348.1	1299.3	1341.9	1371.4	1460.2	1561.9	1685.0	2085.2	2524.9
32.5°	1548.5	1528.7	1430.1	1372.0	1410.4	1442.6	1545.9	1677.7	1788.3	2216.0	2745.0
35°	1746.7	1726.0	1605.0	1509.0	1508.5	1526.7	1665.8	1836.0	1924.8	2398.2	3007.6
37.5°	2080.5	2068.6	1953.3	1771.1	1722.3	1702.1	1829.3	2025.0	2121.0	2648.9	3304.0
40°	2446.0	2435.6	2306.3	2141.3	2067.0	2017.2	2063.9	2288.2	2398.2	2955.2	3606.7
42.5°	2858.6	2809.3	2578.8	2529.5	2463.1	2425.2	2383.2	2612.6	2738.7	3288.4	3906.7
45°	3233.4	3150.4	2851.4	2776.6	2761.6	2770.9	2794.3	3048.6	3121.8	3684.5	4205.7
47.5°	3456.6	3391.2	3161.8	3090.2	3086.0	3147.8	3324.3	3541.2	3503.4	4029.7	4468.9
50°	3668.9	3609.8	3419.3	3436.9	3456.1	3540.2	3925.9	4047.9	3851.7	4342.7	4710.2
52.5°	3840.8	3750.4	3650.8	3749.9	3844.4	3979.9	4546.7	4502.6	4098.8	4591.9	4916.8
55°	3939.9	3898.9	3947.2	4046.8	4224.4	4444.5	5132.8	4881.0	4279.4	4819.3	5054.4
57.5°	4303.3	4222.8	4318.8	4405.0	4636.5	4944.4	5634.7	5162.9	4409.7	4959.9	5086.1
60°	4742.9	4678.1	4734.6	4877.9	5190.4	5552.2	6104.0	5392.8	4477.7	5050.2	5004.0
62.5°	5442.7	5357.0	5321.7	5482.1	5896.4	6291.4	6460.1	5552.2	4462.6	5010.3	4722.7
65°	6380.2	6291.4	6133.6	6278.9	6805.8	7084.6	6858.2	5586.0	4358.8	4686.9	4011.5
67.5°	7340.5	7276.1	7141.2	7386.2	7861.7	7951.5	7279.2	5503.9	4024.5	3800.3	2834.2
70°	7974.8	7947.3	8035.0	8577.0	9001.1	8975.1	7665.4	5063.2	3136.9	2337.0	1402.1
72.5°	7517.5	7649.3	8297.2	9279.8	9797.9	9586.1	7467.1	3888.0	1792.9	899.1	405.4
73°	7138.6	7307.3	8179.3	9306.3	9860.7	9628.6	7300.5	3568.8	1528.2	709.6	307.3
75°	4966.2	5173.3	6771.6	8667.3	9566.9	9173.9	6085.3	2184.3	708.0	314.6	124.1
77.5°	2411.2	2564.3	3728.6	6262.3	7440.1	7167.6	3788.3	813.9	319.8	196.7	57.1
80°	900.1	1000.8	1618.5	3187.2	4299.6	4412.3	1666.3	307.8	212.8	158.3	29.1
82.5°	235.7	262.7	597.0	1421.3	2203.5	2306.3	525.3	155.2	155.7	130.3	17.6
85°	75.3	86.2	186.4	638.0	1038.2	911.5	137.0	75.3	113.2	97.1	9.9
87.5°	9.3	11.9	59.2	150.0	228.9	127.2	21.3	22.3	48.3	54.0	5.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1	1825.1
2.5°	1829.3	1826.7	1827.2	1813.7	1804.9	1787.2	1769.1	1760.8	1751.9	1748.3	1751.9
5°	1838.6	1834.0	1820.5	1778.9	1734.8	1677.7	1624.2	1583.8	1532.9	1518.9	1533.4
7.5°	1853.2	1843.8	1804.4	1719.8	1621.6	1512.6	1390.1	1300.8	1227.7	1180.4	1197.5
10°	1874.4	1856.8	1777.4	1633.6	1458.1	1265.0	1091.1	955.6	859.6	820.2	818.6
12.5°	1910.3	1877.0	1744.1	1521.5	1258.3	1000.8	772.9	626.0	548.2	497.8	496.8
15°	1949.7	1900.9	1702.1	1387.0	1025.7	716.9	497.8	386.2	335.9	319.8	317.7
17.5°	1998.0	1928.4	1647.6	1221.4	782.3	475.0	325.0	292.8	290.7	289.1	289.1
20°	2058.7	1961.1	1577.5	1032.0	554.9	317.2	276.2	278.2	279.3	277.2	277.7
22.5°	2129.3	1994.4	1493.9	828.5	375.3	265.3	264.2	266.8	267.9	266.8	267.3
25°	2211.3	2032.8	1392.2	615.1	271.0	251.8	254.4	258.0	260.6	260.6	260.6
27.5°	2313.1	2079.5	1269.7	429.3	234.1	237.7	245.0	251.8	255.4	256.4	256.4
30°	2445.4	2137.6	1122.8	294.3	212.8	219.1	232.6	245.5	252.3	253.3	253.8
32.5°	2612.6	2203.0	952.5	217.5	194.7	199.3	213.9	235.7	248.6	250.7	250.7
35°	2804.1	2278.8	769.3	189.5	181.7	183.2	194.7	219.6	242.4	248.1	248.6
37.5°	3013.8	2353.6	585.0	177.0	170.8	170.8	179.1	200.4	227.4	245.0	247.1
40°	3209.5	2398.7	410.1	167.1	160.9	160.9	168.2	183.8	209.2	235.7	241.4
42.5°	3390.2	2414.3	285.5	157.8	151.6	153.1	159.4	171.8	191.0	217.5	222.7
45°	3576.0	2411.7	208.2	146.9	142.2	146.9	151.6	160.9	174.9	190.0	191.0
47.5°	3716.2	2389.9	165.1	136.5	133.4	139.6	143.8	150.0	157.8	156.8	156.8
50°	3847.5	2337.0	132.9	122.5	124.6	131.8	133.9	136.0	136.5	126.7	125.6
52.5°	3947.2	2254.4	106.4	107.5	115.8	123.0	120.9	117.8	112.6	100.7	98.6
55°	3980.4	2095.6	83.6	88.8	102.8	112.1	104.3	97.6	87.7	77.9	75.8
57.5°	3920.2	1890.5	68.0	69.0	86.7	94.5	85.7	77.9	67.0	58.7	57.1
60°	3792.5	1662.7	56.1	51.9	67.0	73.7	68.0	60.2	50.4	44.1	43.6
62.5°	3539.2	1419.7	46.2	40.5	50.9	56.6	52.9	47.2	38.9	34.8	34.3
65°	3006.6	1135.8	37.4	32.7	39.5	44.1	41.0	36.9	30.6	27.5	27.0
67.5°	2098.7	767.7	30.6	27.0	31.1	34.8	32.2	30.1	24.4	23.9	24.4
70°	1012.2	370.1	25.4	21.8	24.4	27.0	26.0	24.4	23.4	27.0	31.1
72.5°	290.2	124.1	20.2	18.2	19.7	21.3	22.3	21.8	25.4	32.7	37.9
73°	223.2	100.2	19.2	17.1	18.7	20.8	21.8	21.3	26.0	33.2	37.9
75°	95.5	48.3	14.5	14.0	15.6	18.2	19.2	19.2	26.0	33.7	36.3
77.5°	43.1	26.0	9.3	10.9	13.5	14.5	16.1	16.1	20.8	26.0	26.0
80°	24.4	14.0	7.3	8.3	9.9	9.9	9.9	8.8	9.3	10.4	11.4
82.5°	15.6	9.3	5.7	6.7	6.2	5.2	4.2	4.2	3.6	4.2	5.2
85°	8.8	5.2	5.2	4.2	2.6	2.1	2.6	2.1	0.5	0.0	0.5
87.5°	5.2	3.1	1.6	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

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u' : 0.2476
 CIE v' : 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 R_f: 81.5
 R_g: 99.2

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



Test Conditions

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

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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

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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			

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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			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

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

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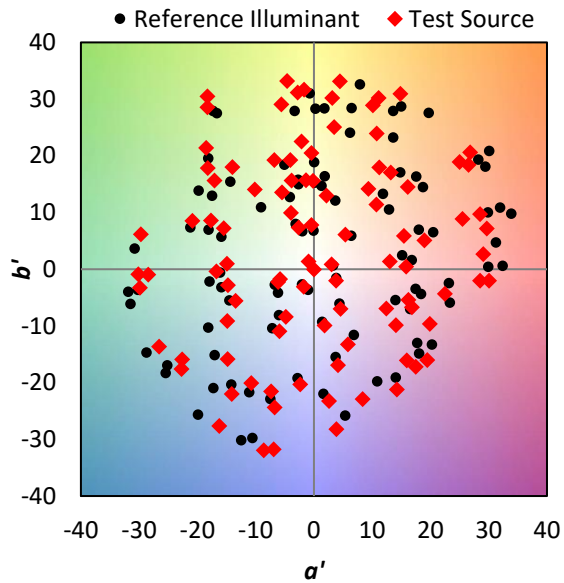
TM-30-18

Summary

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



Color Vector Graphics

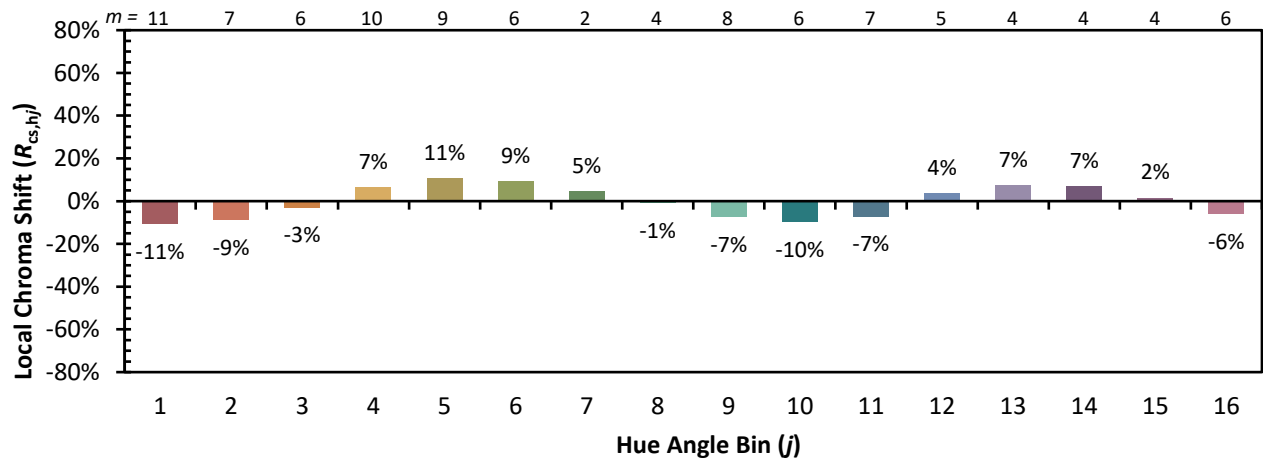


Individual Sample Fidelity Index ($R_{f,i}$)

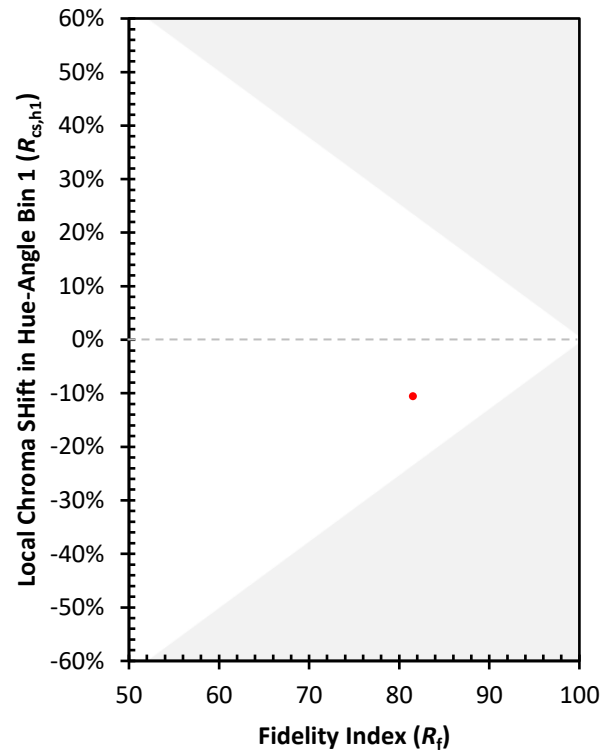
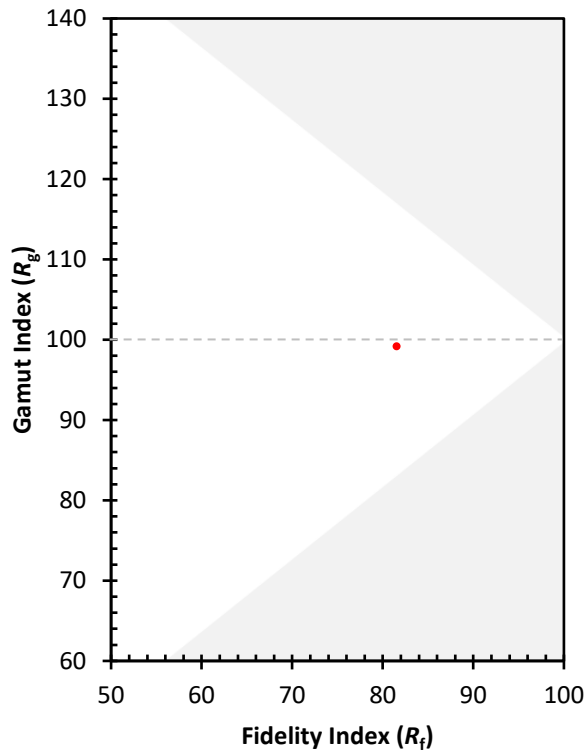
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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