

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: P438789

Luminaire Tested: **IST-SA1E-830-U-SL3-HSS**

Issue Date: 12/10/2020

Test Information

Test Method: LM-79-08
Report Number: P438789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-17)
Test Lab: INNOVATION CENTER
Issue Date: 12/10/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: IST-SA1E-830-U-SL3-HSS
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4665 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

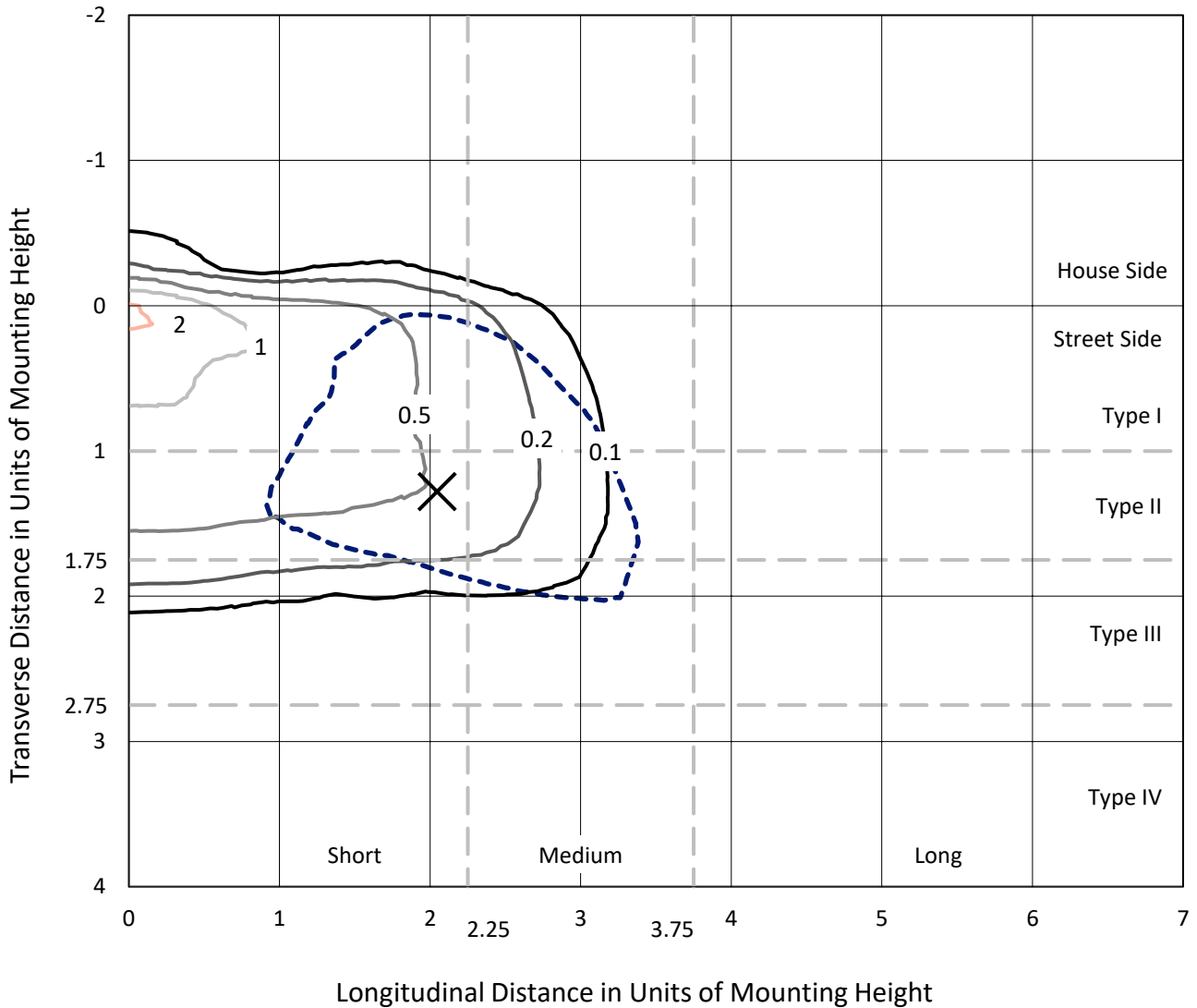
Input Watts (W): 58.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

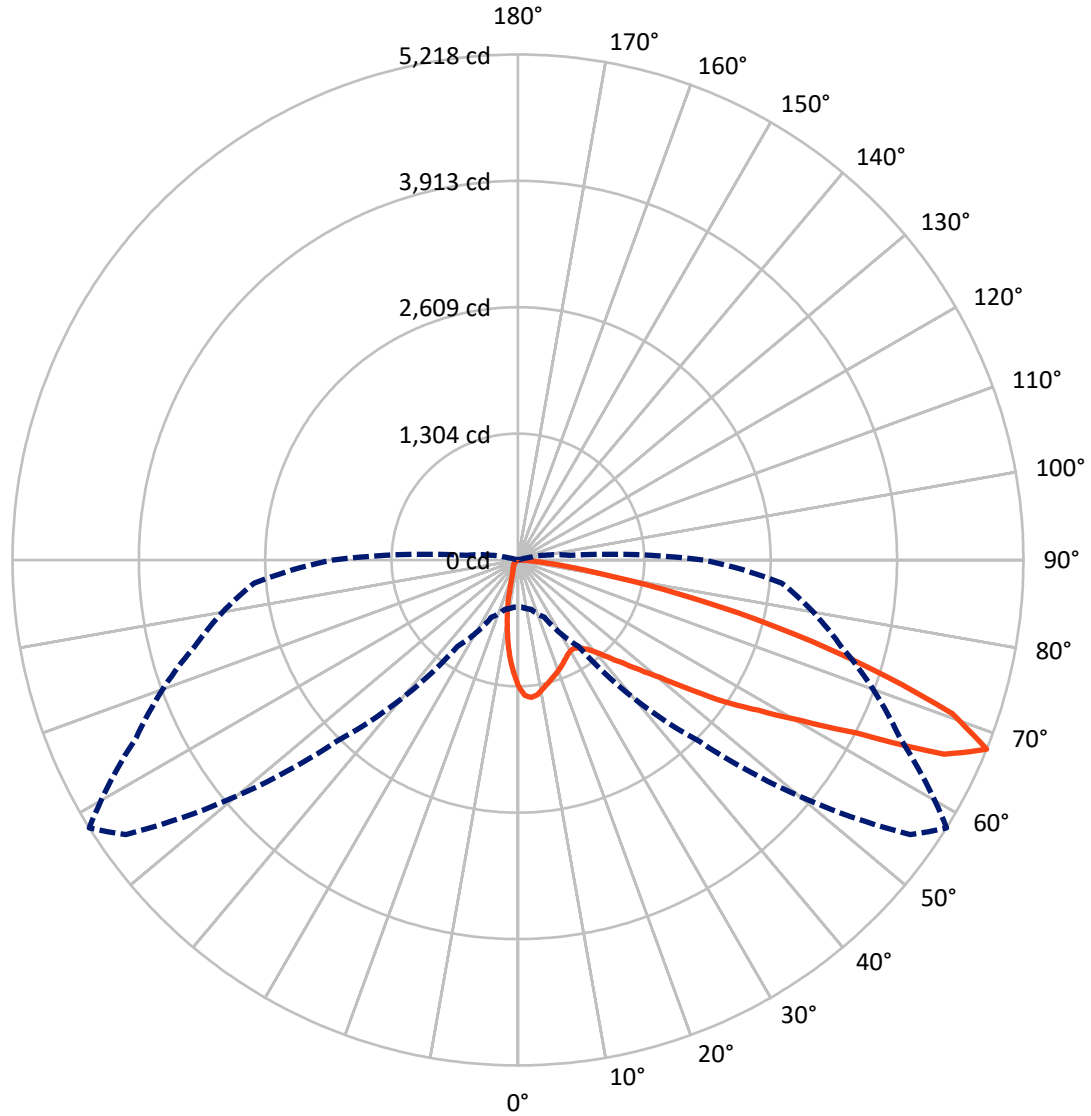
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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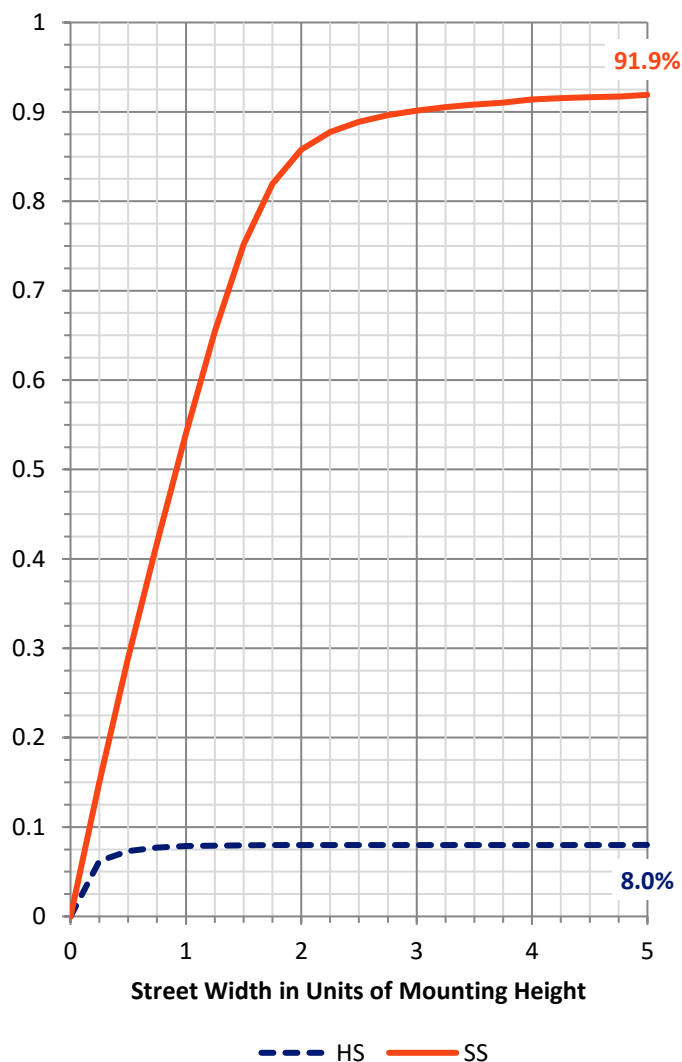
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	376.1	0.0	376.1
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	4288.9	0.0	4288.9
	% Fixture	91.9	0.0	91.9
Total	Lumens	4665.0	0.0	4665.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	2.3
10°-20°	221.6	4.8
20°-30°	299.9	6.4
30°-40°	412.4	8.8
40°-50°	645.7	13.8
50°-60°	1087.7	23.3
60°-70°	1290.8	27.7
70°-80°	560.6	12.0
80°-90°	41.2	0.9
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°	4665.0	100.0
0°-180°	4665.0	100.0

Coefficient of Utilization



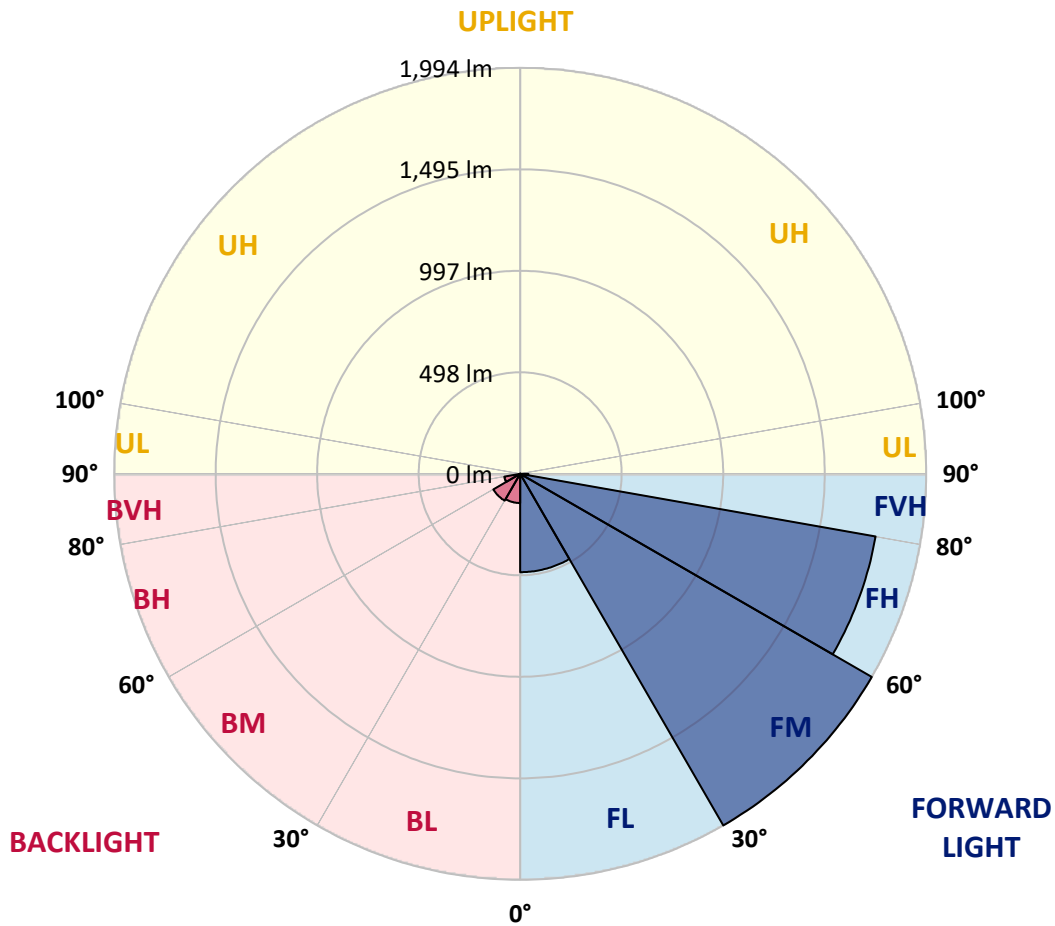
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	483.1	10.4			
FM (30°-60°)	1993.6	42.7			
FH (60°-80°)	1772.2	38.0			G1/1800
FVH (80°-90°)	39.9	0.9			G1/100
BL (0°-30°)	143.6	3.1	B1/500		
BM (30°-60°)	152.1	3.3	B0/220		
BH (60°-80°)	79.1	1.7	B0/110		G0/110
BVH (80°-90°)	1.3	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4
2.5°	1466.1	1458.0	1454.0	1452.0	1437.9	1425.9	1401.8	1399.8	1383.7	1353.6	1323.5
5°	1433.9	1439.9	1442.0	1448.0	1446.0	1446.0	1429.9	1425.9	1403.8	1361.6	1303.4
7.5°	1363.6	1361.6	1365.6	1381.7	1389.7	1405.8	1403.8	1407.8	1397.8	1351.6	1269.2
10°	1261.2	1265.2	1277.3	1291.3	1313.4	1341.5	1359.6	1363.6	1371.7	1333.5	1237.1
12.5°	1166.8	1172.8	1180.9	1209.0	1233.1	1277.3	1311.4	1319.5	1335.5	1315.4	1209.0
15°	1088.5	1090.5	1096.5	1122.6	1162.8	1219.0	1269.2	1281.3	1307.4	1299.4	1186.9
17.5°	1026.2	1028.2	1036.3	1058.4	1090.5	1156.8	1225.1	1245.1	1283.3	1289.3	1162.8
20°	992.1	992.1	992.1	1006.2	1038.3	1100.5	1180.9	1209.0	1263.2	1273.3	1142.7
22.5°	982.1	982.1	978.0	982.1	1002.1	1054.4	1136.7	1170.8	1239.1	1267.2	1118.6
25°	996.1	990.1	990.1	980.0	982.1	1016.2	1096.5	1134.7	1225.1	1263.2	1106.6
27.5°	1022.2	1020.2	1012.2	1004.1	992.1	1000.1	1062.4	1100.5	1211.0	1269.2	1096.5
30°	1052.3	1052.3	1048.3	1044.3	1024.2	1008.2	1046.3	1080.5	1205.0	1279.3	1090.5
32.5°	1086.5	1084.5	1094.5	1098.5	1074.4	1044.3	1050.3	1082.5	1209.0	1309.4	1094.5
35°	1126.7	1126.7	1144.7	1168.8	1148.7	1102.6	1088.5	1116.6	1229.1	1341.5	1110.6
37.5°	1170.8	1172.8	1205.0	1239.1	1225.1	1184.9	1160.8	1170.8	1271.3	1401.8	1146.7
40°	1223.1	1223.1	1271.3	1327.5	1327.5	1281.3	1249.2	1257.2	1331.5	1488.1	1211.0
42.5°	1279.3	1285.3	1353.6	1421.9	1442.0	1399.8	1365.6	1375.7	1427.9	1600.6	1305.4
45°	1359.6	1377.7	1466.1	1532.3	1572.5	1552.4	1508.2	1516.3	1554.4	1763.3	1448.0
47.5°	1502.2	1518.3	1594.6	1660.9	1711.1	1721.1	1701.0	1697.0	1713.1	1954.1	1628.7
50°	1672.9	1687.0	1739.2	1795.4	1865.7	1926.0	1913.9	1907.9	1913.9	2162.9	1849.6
52.5°	1841.6	1835.6	1897.8	1928.0	2026.4	2158.9	2211.1	2211.1	2179.0	2381.8	2066.5
55°	1992.2	2018.3	2084.6	2138.8	2221.2	2379.8	2556.6	2578.7	2468.2	2598.7	2247.3
57.5°	1974.2	2000.3	2122.8	2293.5	2536.5	2751.4	2924.1	2928.1	2767.4	2765.4	2470.2
60°	1763.3	1765.3	1930.0	2189.0	2675.1	3287.6	3388.0	3367.9	3028.5	2998.4	2777.5
62.5°	1241.1	1233.1	1446.0	1775.3	2468.2	3580.8	4090.9	3938.3	3462.3	3363.9	3064.7
65°	723.0	719.0	801.3	1060.4	1869.7	3373.9	4809.9	4834.0	4032.7	3550.7	3004.4
67.5°	486.0	490.0	528.2	654.7	1090.5	2646.9	4942.4	5217.6	4350.0	3454.3	2733.3
70°	357.5	357.5	387.6	482.0	646.7	1658.9	4317.8	4757.7	4412.2	3213.3	2287.5
72.5°	255.1	255.1	297.2	389.6	528.2	855.5	3209.3	3771.6	3725.4	2667.0	1582.5
75°	162.7	166.7	212.9	319.3	482.0	548.3	2177.0	2733.3	2598.7	1492.2	674.8
77.5°	62.3	70.3	114.5	235.0	421.7	455.9	1241.1	1723.1	1371.7	522.2	180.7
80°	22.1	22.1	38.2	120.5	297.2	375.6	648.7	855.5	445.8	126.5	68.3
82.5°	4.0	4.0	14.1	50.2	146.6	261.1	377.6	421.7	174.7	42.2	40.2
85°	0.0	0.0	2.0	10.0	34.1	26.1	150.6	142.6	54.2	18.1	26.1
87.5°	0.0	0.0	0.0	0.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
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°	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4	1313.4
2.5°	1299.4	1283.3	1237.1	1205.0	1160.8	1116.6	1088.5	1066.4	1056.4	1042.3	1048.3
5°	1267.2	1231.1	1146.7	1070.4	998.1	921.8	865.6	815.4	799.3	771.2	767.2
7.5°	1219.0	1168.8	1044.3	923.8	807.3	710.9	624.6	558.3	498.1	471.9	488.0
10°	1172.8	1104.6	941.9	781.2	626.6	492.0	389.6	309.3	263.1	243.0	247.0
12.5°	1128.7	1042.3	835.5	644.7	455.9	303.3	220.9	178.7	164.7	162.7	158.7
15°	1090.5	984.1	741.1	500.1	303.3	190.8	156.6	146.6	144.6	144.6	144.6
17.5°	1048.3	923.8	638.6	367.5	198.8	148.6	138.6	136.6	134.6	134.6	134.6
20°	1016.2	871.6	544.2	257.1	152.6	132.5	128.5	128.5	126.5	126.5	126.5
22.5°	982.1	817.4	451.9	188.8	130.5	122.5	118.5	116.5	116.5	114.5	114.5
25°	949.9	767.2	363.5	144.6	116.5	110.5	106.4	104.4	104.4	102.4	100.4
27.5°	929.8	727.0	285.2	122.5	104.4	100.4	96.4	92.4	88.4	86.4	86.4
30°	915.8	678.8	216.9	106.4	96.4	90.4	84.3	78.3	72.3	70.3	70.3
32.5°	895.7	640.6	166.7	96.4	86.4	80.3	72.3	66.3	60.2	56.2	56.2
35°	895.7	608.5	128.5	86.4	78.3	70.3	64.3	54.2	48.2	46.2	44.2
37.5°	909.8	572.4	106.4	80.3	72.3	64.3	56.2	46.2	40.2	38.2	38.2
40°	941.9	560.3	90.4	72.3	64.3	56.2	48.2	38.2	34.1	30.1	30.1
42.5°	1008.2	564.3	80.3	68.3	58.2	50.2	40.2	32.1	28.1	26.1	26.1
45°	1104.6	576.4	74.3	62.3	52.2	42.2	34.1	28.1	22.1	20.1	20.1
47.5°	1239.1	614.5	66.3	56.2	46.2	36.1	28.1	22.1	18.1	16.1	16.1
50°	1399.8	680.8	62.3	50.2	42.2	30.1	22.1	16.1	12.0	12.0	12.0
52.5°	1588.6	747.1	56.2	46.2	36.1	26.1	18.1	12.0	10.0	8.0	8.0
55°	1747.2	805.3	50.2	42.2	30.1	20.1	14.1	10.0	8.0	6.0	6.0
57.5°	1954.1	889.7	42.2	36.1	24.1	16.1	10.0	8.0	4.0	4.0	4.0
60°	2231.2	990.1	36.1	30.1	18.1	12.0	8.0	4.0	4.0	2.0	2.0
62.5°	2349.7	909.8	32.1	24.1	14.1	8.0	6.0	4.0	2.0	2.0	2.0
65°	2219.2	743.1	26.1	18.1	10.0	6.0	4.0	2.0	2.0	0.0	0.0
67.5°	1913.9	548.3	22.1	12.0	8.0	4.0	2.0	0.0	0.0	0.0	0.0
70°	1560.4	405.7	16.1	8.0	4.0	4.0	2.0	0.0	0.0	0.0	0.0
72.5°	1080.5	245.0	12.0	6.0	4.0	2.0	2.0	0.0	0.0	0.0	0.0
75°	419.7	96.4	10.0	6.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0
77.5°	118.5	34.1	8.0	4.0	4.0	2.0	2.0	2.0	0.0	0.0	0.0
80°	48.2	18.1	6.0	4.0	4.0	4.0	2.0	2.0	0.0	0.0	0.0
82.5°	30.1	10.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
85°	20.1	6.0	4.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0
87.5°	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0
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

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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 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)