

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: P438116

Luminaire Tested: **IST-SA1A-830-U-T3**

Issue Date: 12/10/2020

Test Information

Test Method: LM-79-08
Report Number: P438116
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-8)
Test Lab: INNOVATION CENTER
Issue Date: 12/10/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: IST-SA1A-830-U-T3
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2170 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G1

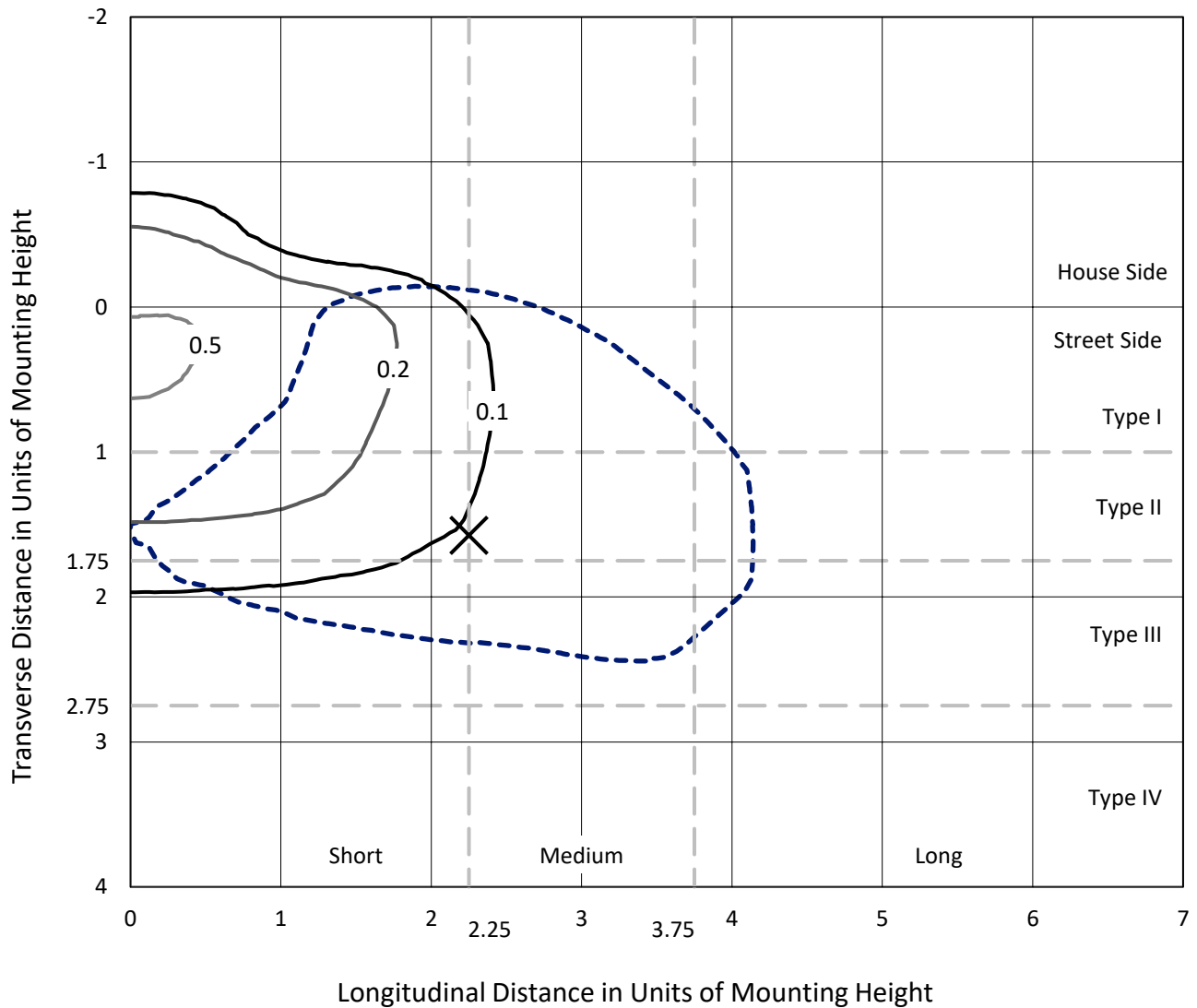
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P438116
 CATALOG NUMBER: IST-SA1A-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination

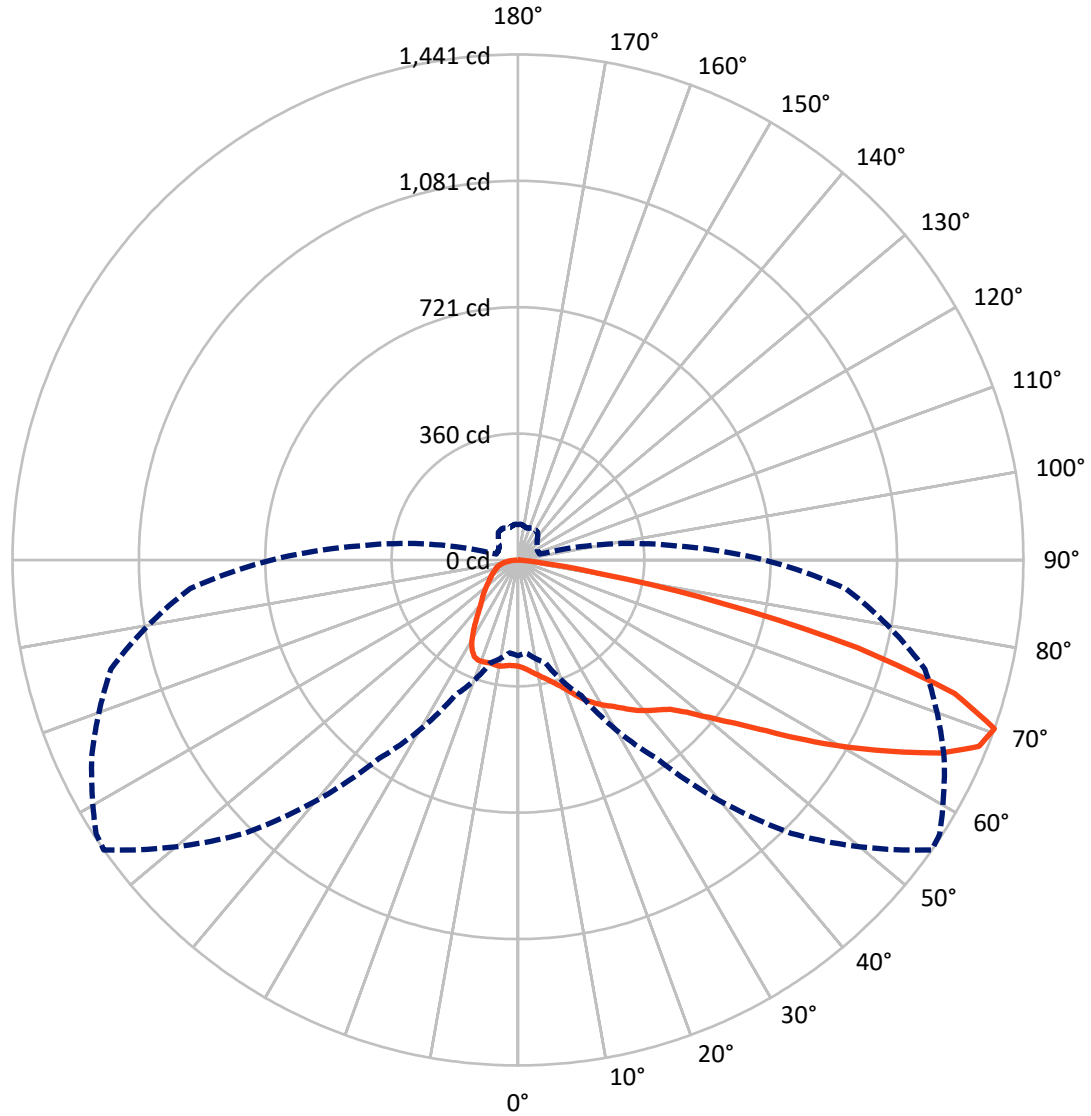
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P438116
CATALOG NUMBER: IST-SA1A-830-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P438116
 CATALOG NUMBER: IST-SA1A-830-U-T3

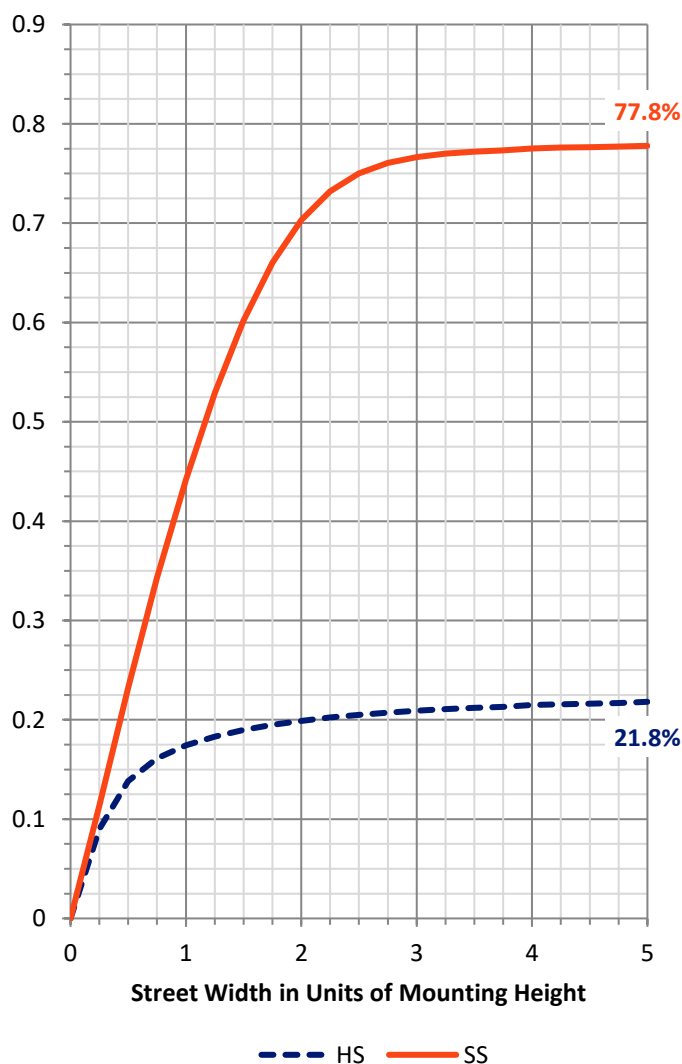
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	480.0	0.0	480.0
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	1690.0	0.0	1690.0
	% Fixture	77.9	0.0	77.9
Total	Lumens	2170.0	0.0	2170.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.8	1.4
10°-20°	95.0	4.4
20°-30°	165.2	7.6
30°-40°	232.9	10.7
40°-50°	308.6	14.2
50°-60°	449.6	20.7
60°-70°	561.1	25.9
70°-80°	298.8	13.8
80°-90°	28.8	1.3
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°	2170.0	100.0
0°-180°	2170.0	100.0

Coefficient of Utilization

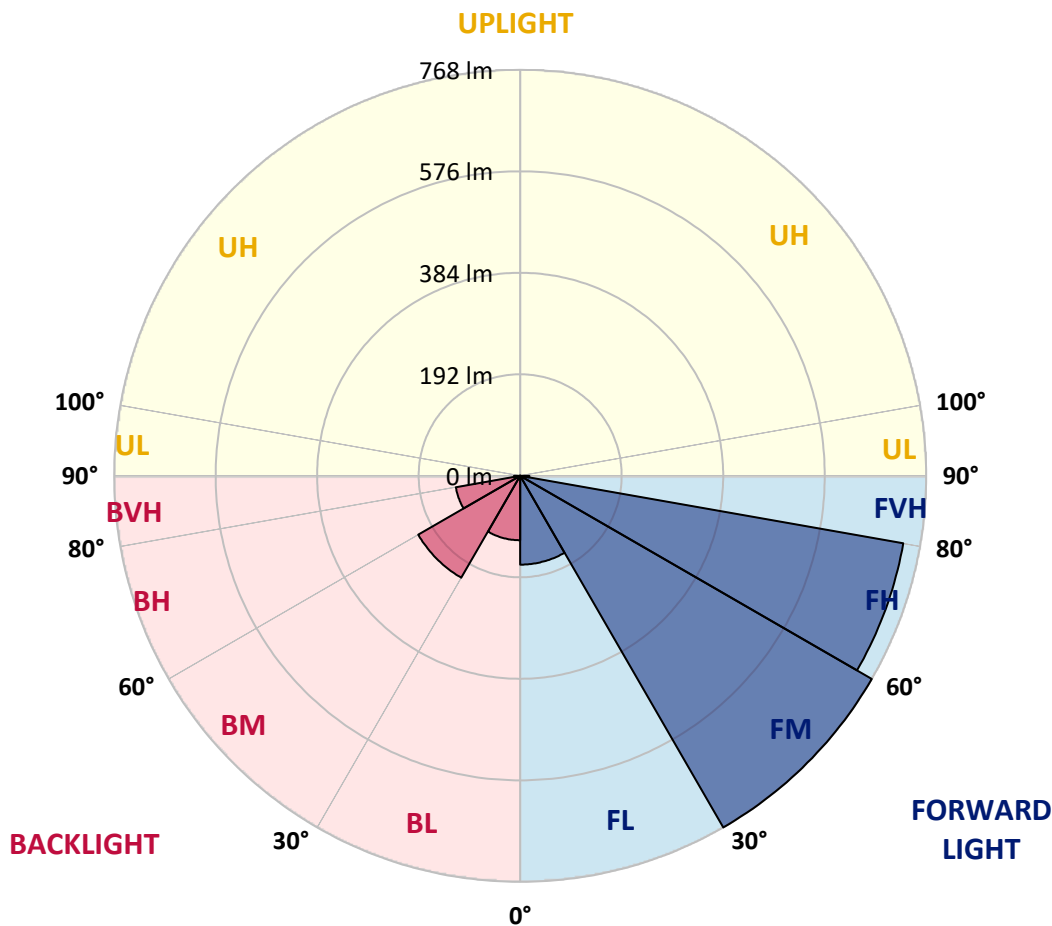


REPORT NUMBER: P438116
 CATALOG NUMBER: IST-SA1A-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	168.1	7.7			
FM (30°-60°)	768.5	35.4			
FH (60°-80°)	736.3	33.9			G1/1800
FVH (80°-90°)	17.2	0.8			G1/100
BL (0°-30°)	122.0	5.6	B1/500		
BM (30°-60°)	222.7	10.3	B1/1000		
BH (60°-80°)	123.7	5.7	B1/500		G1/500
BVH (80°-90°)	11.6	0.5			G1/100
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 Medium





REPORT NUMBER: P438116
 CATALOG NUMBER: IST-SA1A-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0
2.5°	313.2	312.4	312.4	311.6	310.9	310.1	308.5	307.0	307.0	305.4	305.4
5°	321.0	319.5	320.2	319.5	319.5	317.9	315.5	315.5	314.8	310.9	307.7
7.5°	328.8	328.0	328.0	328.8	328.0	326.5	325.7	324.9	321.8	317.1	312.4
10°	339.8	339.8	339.8	339.0	339.0	337.4	335.1	335.1	331.2	325.7	320.2
12.5°	356.2	355.4	354.6	354.6	352.3	349.1	346.8	346.8	344.4	335.9	328.8
15°	374.9	372.6	371.0	371.0	367.9	362.4	360.1	360.8	358.5	348.4	338.2
17.5°	393.7	393.7	392.1	388.2	384.3	380.4	374.9	376.5	374.1	364.0	350.7
20°	410.8	409.3	409.3	406.9	401.5	396.8	393.7	392.9	391.3	380.4	364.8
22.5°	429.6	428.8	426.5	424.9	421.0	418.6	417.1	417.1	410.8	396.0	375.7
25°	452.2	451.4	451.4	445.2	442.1	438.2	440.5	438.2	435.0	413.2	387.4
27.5°	474.9	474.9	474.1	471.0	462.4	460.0	461.6	460.0	459.3	429.6	398.3
30°	499.1	498.3	496.0	495.2	486.6	480.3	479.6	476.4	476.4	444.4	406.1
32.5°	519.4	518.6	520.2	517.1	511.6	503.0	497.5	497.5	492.1	459.3	415.5
35°	538.1	539.7	539.7	538.1	533.5	524.9	519.4	521.0	513.2	472.5	427.2
37.5°	559.2	557.7	555.3	553.8	547.5	543.6	543.6	545.2	533.5	486.6	442.9
40°	563.9	567.8	573.3	567.0	563.9	563.1	564.7	560.8	549.1	508.5	469.4
42.5°	573.3	576.4	586.6	584.2	581.9	584.2	584.2	578.8	573.3	538.1	505.3
45°	596.7	602.2	610.0	610.8	610.0	613.9	606.9	606.1	605.3	581.1	553.8
47.5°	622.5	628.7	646.7	644.4	653.0	660.8	648.3	647.5	649.8	638.1	615.5
50°	653.0	659.2	681.9	690.5	713.9	727.9	705.3	695.1	711.5	710.8	693.6
52.5°	688.1	695.9	711.5	741.2	781.1	795.9	771.7	763.1	782.6	792.0	776.4
55°	712.3	718.6	742.8	788.9	853.7	873.2	859.2	851.3	872.4	880.2	863.8
57.5°	720.9	722.5	758.4	831.0	920.9	970.9	968.5	963.0	954.4	974.0	969.3
60°	706.1	714.7	760.7	849.8	981.0	1075.5	1084.1	1071.6	1060.7	1065.4	1049.7
62.5°	686.5	693.6	742.0	852.1	1021.6	1170.0	1202.0	1188.0	1160.6	1148.1	1111.4
65°	617.8	617.8	665.5	804.5	1014.6	1247.3	1326.2	1302.0	1252.0	1207.5	1109.1
67.5°	472.5	470.2	516.3	660.8	915.4	1255.2	1417.6	1405.1	1324.7	1230.2	1065.4
70°	272.6	265.6	303.8	426.5	691.2	1102.1	1441.0	1434.0	1341.1	1201.3	938.0
72.5°	94.5	100.8	125.7	181.2	380.4	793.6	1302.0	1316.9	1263.0	1091.1	753.7
75°	49.2	49.2	57.8	78.9	160.9	409.3	1000.5	1046.6	1058.3	913.1	538.1
77.5°	35.9	36.7	41.4	50.8	76.5	157.0	600.6	644.4	732.6	628.7	310.9
80°	24.2	25.0	29.7	33.6	46.9	60.9	239.8	263.2	363.2	281.2	120.3
82.5°	18.0	18.7	18.7	19.5	25.8	28.1	63.3	78.1	125.0	83.6	43.0
85°	3.9	3.9	7.8	7.8	7.8	7.8	14.1	15.6	23.4	25.0	14.1
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6	1.6	2.3	2.3
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: P438116
 CATALOG NUMBER: IST-SA1A-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0
2.5°	304.6	303.8	303.0	302.3	301.5	300.7	299.9	300.7	300.7	302.3	303.0
5°	307.0	304.6	303.8	302.3	301.5	301.5	301.5	302.3	303.0	303.8	304.6
7.5°	310.9	310.1	307.7	304.6	303.8	303.8	302.3	302.3	302.3	303.8	303.8
10°	317.9	315.5	312.4	309.3	307.0	302.3	298.4	295.2	296.8	299.1	299.1
12.5°	325.7	321.8	317.9	312.4	306.2	298.4	294.5	295.2	295.2	297.6	298.4
15°	335.9	332.7	324.1	314.8	303.8	297.6	296.0	294.5	294.5	296.0	297.6
17.5°	346.8	341.3	330.4	316.3	305.4	298.4	295.2	289.0	285.9	285.1	286.6
20°	356.9	350.7	335.9	317.9	307.0	297.6	286.6	276.5	268.7	267.1	265.6
22.5°	365.5	357.7	339.8	321.0	307.0	289.8	271.0	256.2	245.3	242.1	243.7
25°	374.9	363.2	344.4	324.1	301.5	274.2	248.4	230.4	219.5	214.8	214.8
27.5°	382.7	371.0	349.1	321.8	287.4	253.1	223.4	205.4	196.8	192.1	191.4
30°	389.7	377.2	358.5	314.8	267.1	224.2	198.4	185.9	180.4	175.0	175.7
32.5°	399.1	388.2	365.5	299.9	239.8	197.6	178.1	171.8	166.4	162.5	164.0
35°	412.4	406.1	367.9	281.2	211.7	178.9	165.6	158.6	153.9	148.4	148.4
37.5°	431.1	425.7	360.1	253.1	186.7	164.8	155.4	146.1	138.2	132.0	130.4
40°	453.8	446.0	346.8	221.8	167.1	155.4	146.8	135.1	124.2	115.6	114.0
42.5°	489.7	467.1	327.3	189.8	153.1	147.6	135.9	121.1	110.1	103.9	102.3
45°	528.0	491.3	299.1	162.5	142.2	138.2	125.0	110.1	102.3	97.6	96.9
47.5°	576.4	517.8	272.6	142.2	129.7	128.9	113.3	103.9	97.6	94.5	93.7
50°	640.5	551.4	246.0	126.5	118.7	116.4	107.8	100.0	95.3	92.9	92.2
52.5°	714.7	590.5	224.9	114.8	108.6	107.0	104.7	98.4	95.3	92.9	92.2
55°	785.0	631.1	202.3	103.9	100.0	101.5	103.1	98.4	96.1	94.5	92.9
57.5°	862.3	665.5	176.5	95.3	92.9	96.9	101.5	99.2	97.6	95.3	94.5
60°	909.9	689.7	142.2	87.5	87.5	92.9	99.2	97.6	94.5	94.5	94.5
62.5°	931.0	685.8	112.5	79.7	81.2	88.3	95.3	93.7	91.4	95.3	95.3
65°	903.7	641.2	91.4	72.6	75.0	82.0	91.4	91.4	91.4	97.6	97.6
67.5°	832.6	574.1	75.0	66.4	68.7	77.3	91.4	96.9	96.1	103.1	103.1
70°	702.9	455.4	64.8	61.7	64.8	77.3	96.9	100.0	94.5	102.3	100.8
72.5°	535.8	317.9	57.8	57.0	60.9	75.0	97.6	96.1	89.0	91.4	89.0
75°	352.3	192.9	50.8	52.3	53.9	66.4	92.9	89.8	81.2	79.7	78.1
77.5°	193.7	96.9	44.5	46.9	46.9	56.2	84.4	77.3	70.3	66.4	64.8
80°	77.3	49.2	39.1	41.4	38.3	45.3	63.3	60.1	53.9	50.8	49.2
82.5°	35.1	27.3	32.8	34.4	28.9	33.6	46.9	45.3	40.6	35.1	33.6
85°	13.3	15.6	25.0	23.4	20.3	19.5	26.6	24.2	19.5	15.6	15.6
87.5°	1.6	3.1	6.2	8.6	4.7	3.1	1.6	0.8	0.8	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



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

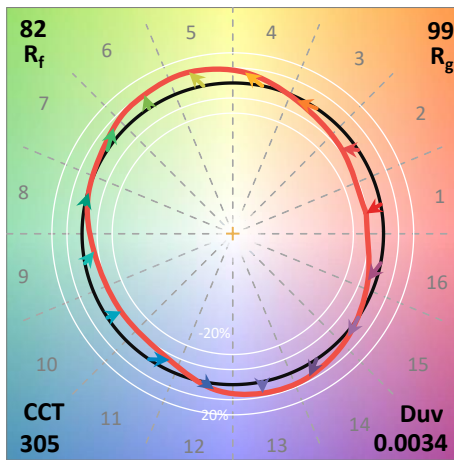
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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