

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: P1434490

Luminaire Tested: **GALN-SB9D-930-U-T2LG**

Issue Date: 03/24/202

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Report Generated By 670245763



Test Information

Test Method: LM-79-08
 Report Number: P1434490
 Test Lab: INNOVATION CENTER(G1)
 Issue Date: 03/24/202
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: McGRAW-EDISON
 Catalog Number: GALN-SB9D-930-U-T2LG
 Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 900mA 9xLight
 Square PACKAGE 90CRI 3000K FIXTURE w/ TYPE II LOW GLARE
 Light Source: (234) 3000K CCT, 90 CRI LEDS
 Ballast/Driver: ELECTRONIC DRIVER
 Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
a	good	reflector
b	good	lens
c	good	housing
d	good	cord

Summary

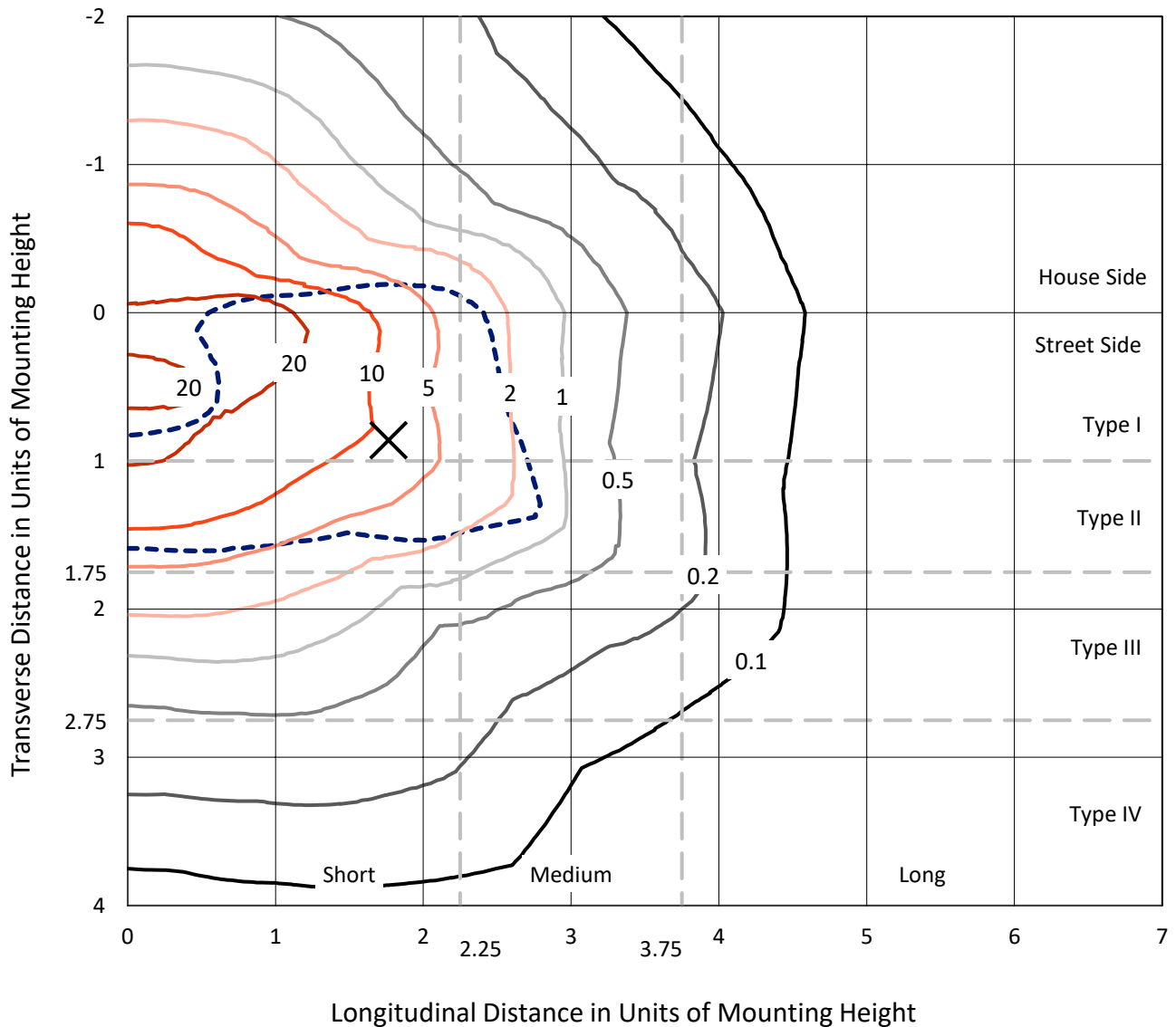
Lumens per Lamp: N/A
 Luminaire Lumens: 62421.8 lumens
 Efficiency: N/A
 Efficacy: 94.9 lumens/watt
 Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
 IES Classification: Type II - Short
 BUG Rating: B5 - U0 - G5

 Input Watts (W): 658
 Input Voltage (V): 120
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: 0.97
 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: P1434490
 CATALOG NUMBER: GALN-SB9D-930-U-T2LG

Iso-Footcandle Lines of Horizontal Illumination

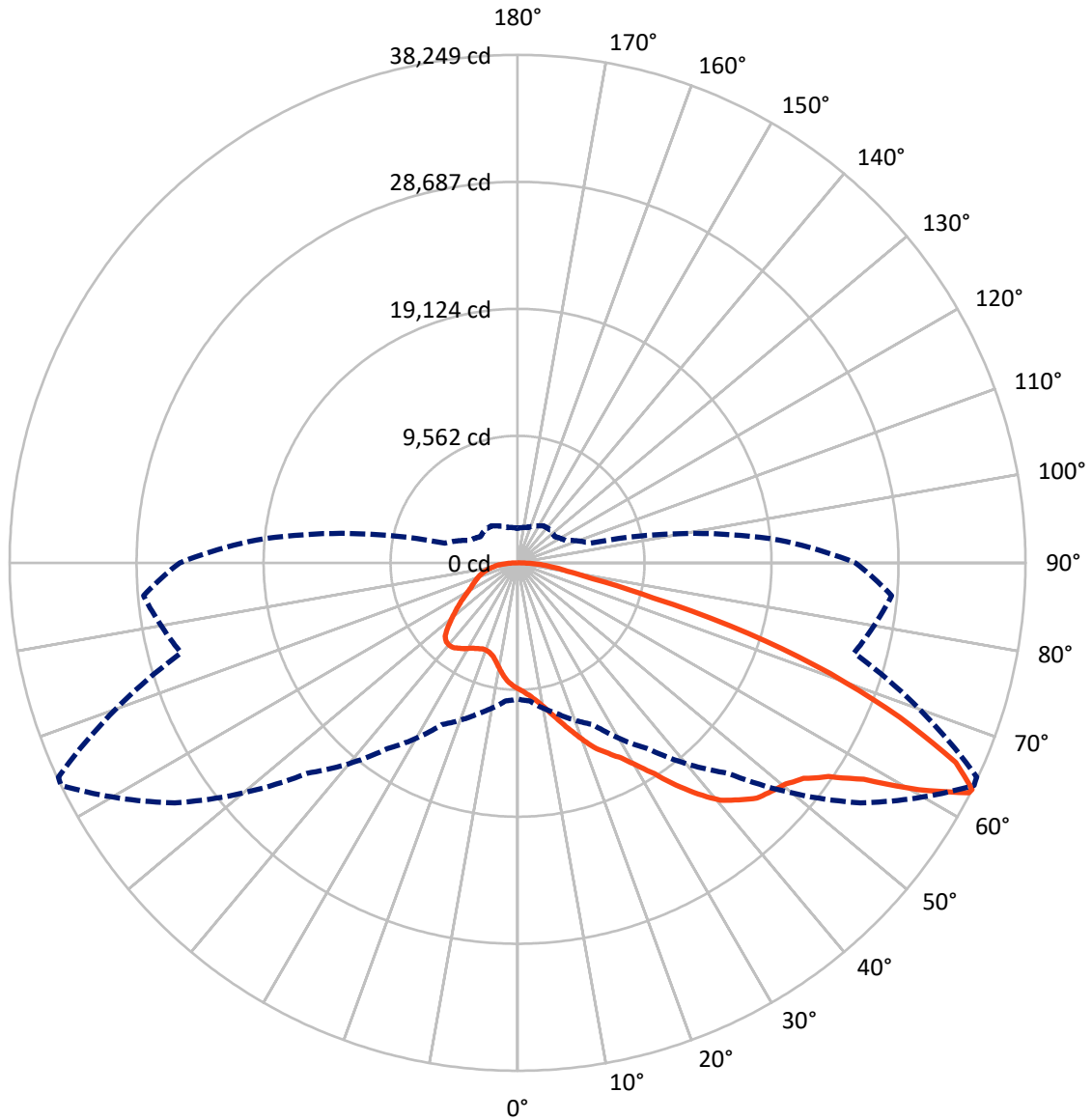
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 36.6 fc
 Type II - Short - N/A

REPORT NUMBER: P1434490
CATALOG NUMBER: GALN-SB9D-930-U-T2LG

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P1434490
 CATALOG NUMBER: GALN-SB9D-930-U-T2LG

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16771.0	0.0	16771.0
	% Fixture	26.9	0.0	26.9
Street Side	Lumens	45650.8	0.0	45650.8
	% Fixture	73.1	0.0	73.1
Total	Lumens	62421.8	0.0	62421.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	872.8	1.4
10°-20°	2686.9	4.3
20°-30°	4913.5	7.9
30°-40°	8451.9	13.5
40°-50°	12464.4	20.0
50°-60°	14939.3	23.9
60°-70°	11990.2	19.2
70°-80°	4818.0	7.7
80°-90°	1284.7	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°	62421.8	100.0
0°-180°	62421.8	100.0

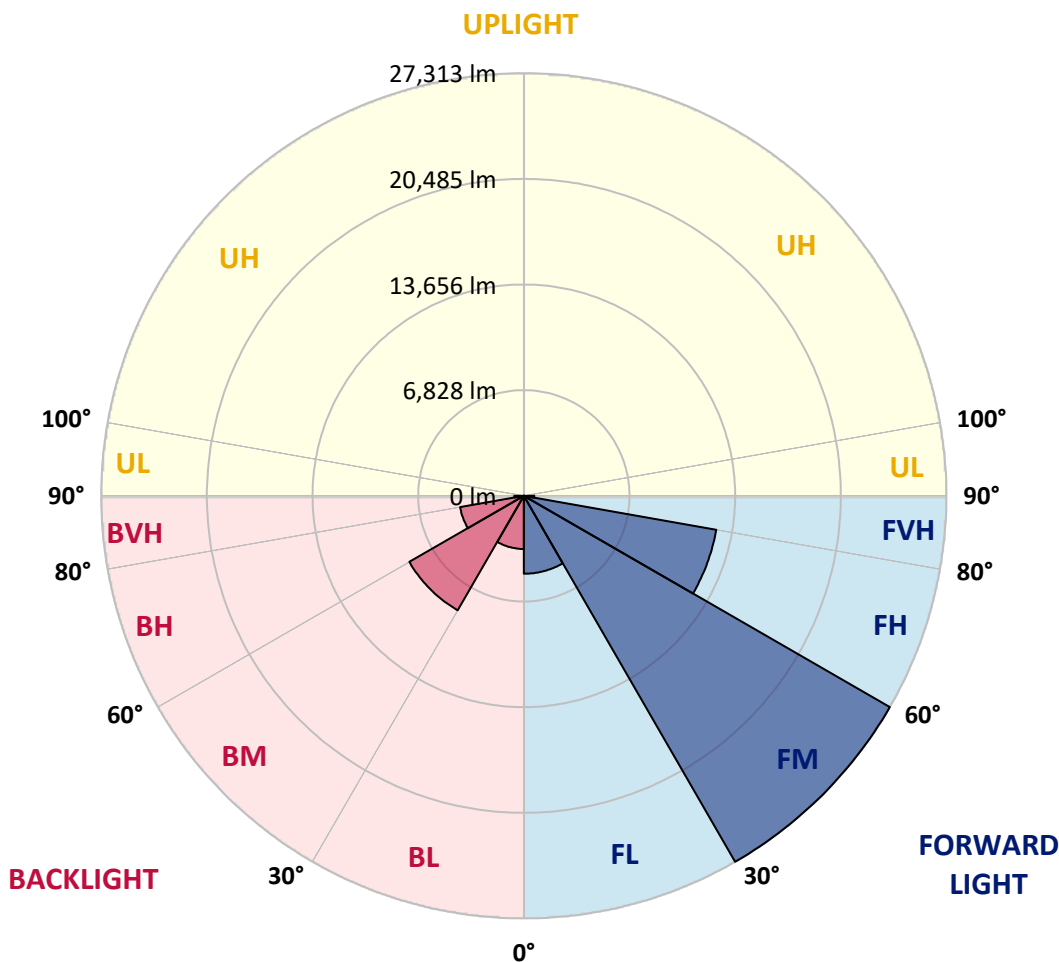


REPORT NUMBER: P1434490
 CATALOG NUMBER: GALN-SB9D-930-U-T2LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5036.2	8.1			
FM (30°-60°)	27312.8	43.8			
FH (60°-80°)	12626.7	20.2			G5
FVH (80°-90°)	675.0	1.1			G4/750
BL (0°-30°)	3437.0	5.5	B4/5000		
BM (30°-60°)	8542.8	13.7	B5		
BH (60°-80°)	4181.5	6.7	B4/5000		G4/5000
BVH (80°-90°)	609.7	1.0			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type II Short





REPORT NUMBER: P1434490

CATALOG NUMBER: GALN-SB9D-930-U-T2LG

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1
2.5°	9898.7	9912.7	9870.7	9856.6	9884.7	9828.6	9814.6	9758.5	9730.5	9674.4	9604.3
5°	10179.1	10193.1	10165.1	10165.1	10193.1	10151.1	10137.1	10081.0	10052.9	9996.9	9856.6
7.5°	10165.1	10179.1	10207.2	10319.3	10459.5	10515.6	10557.7	10515.6	10501.6	10417.5	10277.3
10°	9940.8	9954.8	10024.9	10193.1	10543.7	10796.0	11062.4	11062.4	11090.5	11020.4	10768.0
12.5°	9632.3	9646.3	9814.6	10081.0	10543.7	10978.3	11525.1	11749.5	11735.4	11693.4	11398.9
15°	8889.2	8889.2	9141.6	9646.3	10389.4	11104.5	11917.7	12520.6	12534.6	12576.7	12226.2
17.5°	8258.3	8272.3	8482.6	8931.3	9898.7	11034.4	12338.3	13375.9	13417.9	13656.3	13151.5
20°	8314.4	8314.4	8384.5	8580.7	9365.9	10754.0	12576.7	14287.2	14427.4	14988.3	14357.3
22.5°	8749.0	8749.0	8805.1	8791.1	9267.8	10571.7	12730.9	15198.6	15451.0	16614.7	15801.5
25°	9548.2	9534.2	9478.1	9394.0	9674.4	10768.0	13081.4	15899.6	16390.4	18409.4	17470.0
27.5°	10529.6	10501.6	10417.5	10277.3	10473.6	11356.9	13684.3	16642.7	17175.5	20372.3	19236.6
30°	11749.5	11665.3	11581.2	11398.9	11609.2	12324.3	14581.7	17694.3	18199.0	22601.6	21367.7
32.5°	13193.6	13291.7	13011.3	12759.0	12983.3	13642.3	15913.6	18942.1	19489.0	24929.0	23583.0
35°	15352.8	15647.2	15563.1	14287.2	14497.5	15226.6	17470.0	20554.5	21045.3	27046.2	25854.4
37.5°	17484.0	17413.9	17484.0	16418.4	16081.9	16965.2	19138.4	22096.8	22573.5	28770.7	27859.4
40°	19194.5	19404.8	19404.8	18535.5	18100.9	18689.8	20652.7	23512.9	23975.6	29724.2	29303.5
42.5°	21059.3	21087.3	21031.2	20274.1	20105.9	20260.1	21984.7	24410.3	24788.8	30214.9	30285.0
45°	23162.4	23148.4	22910.0	22279.1	22026.7	21886.5	22811.9	25279.6	25658.1	30439.2	30817.8
47.5°	24901.0	24971.1	24985.1	24312.1	23891.5	23288.6	23527.0	25714.2	26148.9	30186.9	30930.0
50°	24999.1	25111.3	25644.1	25840.4	25756.3	24788.8	24185.9	26176.9	26611.5	30242.9	31336.6
52.5°	24382.2	24494.4	25181.4	25994.6	26976.1	26513.4	25223.5	26976.1	27424.7	30789.7	32261.9
55°	22727.8	22910.0	23933.6	25069.2	26821.9	27480.8	27060.2	28420.2	28840.9	31224.4	33341.5
57.5°	19783.4	20007.7	21423.8	23232.5	25630.1	27256.5	29724.2	30733.7	31084.2	31532.9	33355.6
60°	14792.0	14974.2	17189.5	19629.2	23232.5	25854.4	31308.5	34701.6	34897.9	29864.4	31462.7
62.5°	10894.2	11076.5	12562.7	14315.3	18255.1	23274.6	31617.0	38136.7	38164.7	26849.9	28854.9
63°	10263.2	10445.5	11791.5	13432.0	17077.4	22405.3	31518.8	38248.8	38150.7	26233.0	28280.0
65°	7991.9	8314.4	9716.4	10964.3	12801.0	17834.5	30257.0	36257.9	36398.1	24410.3	25391.7
67.5°	5440.1	5678.4	7459.1	8903.2	9674.4	11356.9	24816.9	31028.1	31252.4	22517.5	20260.1
70°	4206.2	4318.4	5356.0	7052.5	7823.6	7220.7	16180.0	24985.1	24985.1	17582.1	14357.3
72.5°	3294.9	3337.0	4038.0	5510.2	6295.4	5552.2	9015.4	18171.0	17498.0	10431.5	9576.2
75°	2355.5	2411.6	3042.5	4108.1	5019.5	4374.5	5762.6	10585.7	10179.1	6000.9	6393.5
77.5°	1864.8	1892.8	2271.4	3028.5	4066.0	3337.0	4388.5	5776.6	5720.5	4220.3	4108.1
80°	1472.2	1528.3	1780.6	2173.2	3140.7	2607.9	3266.9	3813.7	3701.5	2902.3	2635.9
82.5°	1051.6	1149.7	1374.0	1654.5	2327.5	1864.8	2145.2	2692.0	2692.0	2187.2	1738.6
85°	645.0	729.1	813.2	1023.5	1654.5	1205.8	1135.7	1738.6	1780.6	1640.4	1121.7
87.5°	308.5	336.5	392.6	434.6	602.9	546.8	448.7	659.0	673.0	729.1	462.7
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: P1434490
 CATALOG NUMBER: GALN-SB9D-930-U-T2LG

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1	9506.1
2.5°	9590.2	9562.2	9422.0	9281.8	9127.6	8987.4	8847.1	8735.0	8608.8	8636.8	8650.9
5°	9772.5	9702.4	9394.0	9029.4	8552.7	8104.0	7669.4	7360.9	7164.6	7108.6	6996.4
7.5°	10165.1	9996.9	9436.0	8664.9	7781.6	7080.5	6673.9	6491.6	6435.6	6449.6	6421.5
10°	10613.8	10361.4	9492.1	8230.2	7108.6	6631.9	6575.8	6687.9	6744.0	6800.1	6814.1
12.5°	11202.6	10796.0	9464.1	7753.5	6786.1	6702.0	6912.3	7122.6	7248.8	7332.9	7318.9
15°	11889.7	11342.9	9379.9	7360.9	6744.0	6968.4	7234.7	7473.1	7627.3	7711.5	7669.4
17.5°	12716.9	11987.8	9281.8	7108.6	6870.2	7136.6	7417.0	7655.4	7823.6	7879.7	7837.6
20°	13740.4	12716.9	9113.5	6996.4	6968.4	7206.7	7459.1	7683.4	7823.6	7879.7	7823.6
22.5°	14946.2	13586.2	8973.3	6996.4	7010.4	7206.7	7389.0	7557.2	7683.4	7725.5	7655.4
25°	16488.5	14595.7	8917.2	7108.6	7024.4	7136.6	7234.7	7332.9	7403.0	7431.0	7403.0
27.5°	18058.8	15759.4	8945.3	7248.8	7010.4	7038.5	7038.5	7052.5	7066.5	7080.5	7066.5
30°	19867.5	16937.2	9057.5	7431.0	7038.5	6898.2	6856.2	6772.1	6702.0	6645.9	6589.8
32.5°	21620.1	18058.8	9253.7	7697.4	7010.4	6744.0	6659.9	6449.6	6253.3	6085.0	6085.0
35°	23512.9	19222.6	9604.3	7893.7	6982.4	6603.8	6365.5	6127.1	5916.8	5678.4	5678.4
37.5°	25139.4	20218.0	9884.7	8118.1	6954.3	6435.6	6057.0	5790.6	5566.3	5327.9	5299.9
40°	26275.0	20792.9	10052.9	8202.2	6856.2	6211.2	5762.6	5426.1	5103.6	4781.1	4767.1
42.5°	26821.9	20764.9	9954.8	8174.1	6673.9	5930.8	5510.2	5061.5	4626.9	4332.4	4304.4
45°	27116.3	20582.6	9576.2	7935.8	6379.5	5636.4	5187.7	4711.0	4276.4	4010.0	3953.9
47.5°	27060.2	20133.9	9057.5	7346.9	5986.9	5313.9	4865.2	4374.5	4024.0	3869.7	3869.7
50°	27214.4	19783.4	8468.6	6673.9	5454.1	4935.3	4570.8	4122.1	3911.8	3715.5	3645.4
52.5°	27901.5	20077.8	7963.8	6043.0	4949.4	4570.8	4318.4	3939.9	3673.5	3547.3	3505.2
55°	28812.8	20708.8	7487.1	5482.1	4458.6	4248.3	4122.1	3771.6	3463.1	3337.0	3266.9
57.5°	28981.1	21143.4	7024.4	4935.3	4052.0	3995.9	3953.9	3477.2	3224.8	3126.6	3070.6
60°	27817.3	20820.9	6421.5	4444.6	3729.5	3757.6	3645.4	3294.9	3000.5	2902.3	2846.2
62.5°	25840.4	19979.7	5818.6	4024.0	3477.2	3533.2	3421.1	3070.6	2776.1	2678.0	2649.9
63°	25447.8	19755.4	5678.4	3981.9	3421.1	3491.2	3393.0	3042.5	2748.1	2649.9	2607.9
65°	23106.3	18409.4	5187.7	3757.6	3238.8	3238.8	3252.8	2902.3	2649.9	2607.9	2579.8
67.5°	18844.0	15366.8	4654.9	3491.2	3042.5	3084.6	3154.7	2958.4	2860.2	2832.2	2804.2
70°	14245.2	11567.2	4192.2	3238.8	2832.2	2972.4	3449.1	3365.0	3000.5	2748.1	2692.0
72.5°	10095.0	7879.7	3785.6	2986.4	2579.8	2930.4	3575.3	3210.8	2706.0	2411.6	2355.5
75°	6758.0	5075.5	3379.0	2720.0	2299.4	2706.0	3379.0	2930.4	2355.5	2285.4	2201.3
77.5°	4248.3	3617.4	2972.4	2411.6	1991.0	2411.6	3070.6	2607.9	2033.0	2061.1	1934.9
80°	2593.9	2579.8	2495.7	2047.0	1598.4	1920.9	2579.8	2201.3	1626.4	1626.4	1444.1
82.5°	1542.3	1864.8	2117.1	1696.5	1163.7	1374.0	1864.8	1654.5	1360.0	1318.0	1233.8
85°	1037.5	1261.9	1682.5	1303.9	743.1	841.2	1289.9	1388.1	1247.9	1093.6	1023.5
87.5°	378.6	504.7	771.1	532.8	322.5	504.7	967.4	1009.5	757.1	588.9	532.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



LM-79-08: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

McGRAW-EDISON

Report Number: SP1-2106-271-2

Luminaire Tested: GFLD-SA1-A-930-U-WR-X-BK

Test Date: 06/16/2021

Test Information

Test Method: LM-79-08
 Report Number: SP1-2106-271-2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1
 Measurement Geometry: 4π
 Issue Date: 06/16/2021
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: MCGRAW-EDISON
 Catalog Number: **GFLD-SA1-A-930-U-WR-X-BK**
 Description: MCGRAW EDISON

N6, BLACK

Spectral Parameters

CCT (K): 3038
 CIE u': 0.2481
 CIE v': 0.5247
 Duv: 0.0030
 CIE x: 0.4384
 CIE y: 0.4121
 CIE z: 0.1495
 Peak Wavelength (nm): 624
 Dominant Wavelength (nm): 581
 Purity: 55.6
 Rf: 92.8
 Rg: 98

CRI (Ra): 92.3

R1: 92.0	R9: 58.9
R2: 94.8	R10: 87.0
R3: 96.7	R11: 93.2
R4: 93.0	R12: 81.1
R5: 91.4	R13: 92.5
R6: 93.7	R14: 97.4
R7: 93.9	
R8: 82.9	

Test Conditions
 Stabilization Time: 82M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.3/43%
 Sphere Temperature (°C): 24.2



REPORT NUMBER: SP1-2106-271-2

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	1/31/2021	7/31/2021
Power Meter	XITRON 2801 IN0071	12/1/2020	12/1/2021
AC Power Source	CHROMA 61603 IN0063	12/1/2020	12/1/2021
DC Power Source	AGILENT E3634A IN0208	12/1/2020	12/1/2021
Sphere Thermometer	ONSET IN0085	12/1/2020	12/1/2021
Room Thermometer	ONSET IN0046	12/1/2020	12/1/2021

REPORT NUMBER: SP1-2106-271-2

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: SP1-2106-271-2

Photopic Flux vs. Wavelength



#####

λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)
360	718	NR	490	11837	NR	620	36553	NR	750	3581	NR	880	702	NR
365	573	NR	495	13045	NR	625	36706	NR	755	3240	NR	885	837	NR
370	566	NR	500	14286	NR	630	35946	NR	760	2875	NR	890	938	NR
375	689	NR	505	15591	NR	635	35109	NR	765	2561	NR	895	722	NR
380	659	NR	510	16757	NR	640	33848	NR	770	2263	NR	900	712	NR
385	616	NR	515	17969	NR	645	32907	NR	775	1981	NR	905	660	NR
390	575	NR	520	19153	NR	650	31426	NR	780	1758	NR	910	722	NR
395	507	NR	525	20279	NR	655	29538	NR	785	1656	NR	915	683	NR
400	452	NR	530	21424	NR	660	27902	NR	790	1510	NR	920	536	NR
405	442	NR	535	22450	NR	665	25950	NR	795	1317	NR	925	653	NR
410	492	NR	540	23201	NR	670	23596	NR	800	1296	NR	930	693	NR
415	658	NR	545	23916	NR	675	21412	NR	805	1239	NR	935	1009	NR
420	1015	NR	550	24774	NR	680	19353	NR	810	1094	NR	940	1041	NR
425	1715	NR	555	25531	NR	685	17528	NR	815	1156	NR	945	716	NR
430	3048	NR	560	26160	NR	690	15706	NR	820	966	NR	950	700	NR
435	5481	NR	565	26923	NR	695	13845	NR	825	931	NR	955	812	NR
440	9614	NR	570	27732	NR	700	12373	NR	830	938	NR	960	505	NR
445	14315	NR	575	28529	NR	705	10898	NR	835	822	NR	965	551	NR
450	14893	NR	580	29552	NR	710	9649	NR	840	838	NR	970	824	NR
455	11988	NR	585	30530	NR	715	8554	NR	845	759	NR	975	814	NR
460	10638	NR	590	31835	NR	720	7611	NR	850	712	NR	980	926	NR
465	9480	NR	595	32776	NR	725	6679	NR	855	651	NR	985	954	NR
470	8416	NR	600	33912	NR	730	5833	NR	860	789	NR	990	814	NR
475	8624	NR	605	35057	NR	735	5111	NR	865	715	NR	995	765	NR
480	9529	NR	610	35715	NR	740	4579	NR	870	935	NR	1000	954	NR
485	10656	NR	615	36371	NR	745	4054	NR	875	919	NR			

REPORT NUMBER: SP1-2106-271-2

Scotopic Flux vs. Wavelength



Scotopic Lumens: 2650.8

S/P: 1.41

λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)
360	718	NR	490	11837	NR	620	36553	NR	750	3581	NR	880	702	NR
365	573	NR	495	13045	NR	625	36706	NR	755	3240	NR	885	837	NR
370	566	NR	500	14286	NR	630	35946	NR	760	2875	NR	890	938	NR
375	689	NR	505	15591	NR	635	35109	NR	765	2561	NR	895	722	NR
380	659	NR	510	16757	NR	640	33848	NR	770	2263	NR	900	712	NR
385	616	NR	515	17969	NR	645	32907	NR	775	1981	NR	905	660	NR
390	575	NR	520	19153	NR	650	31426	NR	780	1758	NR	910	722	NR
395	507	NR	525	20279	NR	655	29538	NR	785	1656	NR	915	683	NR
400	452	NR	530	21424	NR	660	27902	NR	790	1510	NR	920	536	NR
405	442	NR	535	22450	NR	665	25950	NR	795	1317	NR	925	653	NR
410	492	NR	540	23201	NR	670	23596	NR	800	1296	NR	930	693	NR
415	658	NR	545	23916	NR	675	21412	NR	805	1239	NR	935	1009	NR
420	1015	NR	550	24774	NR	680	19353	NR	810	1094	NR	940	1041	NR
425	1715	NR	555	25531	NR	685	17528	NR	815	1156	NR	945	716	NR
430	3048	NR	560	26160	NR	690	15706	NR	820	966	NR	950	700	NR
435	5481	NR	565	26923	NR	695	13845	NR	825	931	NR	955	812	NR
440	9614	NR	570	27732	NR	700	12373	NR	830	938	NR	960	505	NR
445	14315	NR	575	28529	NR	705	10898	NR	835	822	NR	965	551	NR
450	14893	NR	580	29552	NR	710	9649	NR	840	838	NR	970	824	NR
455	11988	NR	585	30530	NR	715	8554	NR	845	759	NR	975	814	NR
460	10638	NR	590	31835	NR	720	7611	NR	850	712	NR	980	926	NR
465	9480	NR	595	32776	NR	725	6679	NR	855	651	NR	985	954	NR
470	8416	NR	600	33912	NR	730	5833	NR	860	789	NR	990	814	NR
475	8624	NR	605	35057	NR	735	5111	NR	865	715	NR	995	765	NR
480	9529	NR	610	35715	NR	740	4579	NR	870	935	NR	1000	954	NR
485	10656	NR	615	36371	NR	745	4054	NR	875	919	NR			

REPORT NUMBER: SP1-2106-271-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: 1008.8 S/P: 0.54

λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)	λ (nm)	Power (µW/nm)	Lumens (φ/nm)
360	718	NR	490	11837	NR	620	36553	NR	750	3581	NR	880	702	NR
365	573	NR	495	13045	NR	625	36706	NR	755	3240	NR	885	837	NR
370	566	NR	500	14286	NR	630	35946	NR	760	2875	NR	890	938	NR
375	689	NR	505	15591	NR	635	35109	NR	765	2561	NR	895	722	NR
380	659	NR	510	16757	NR	640	33848	NR	770	2263	NR	900	712	NR
385	616	NR	515	17969	NR	645	32907	NR	775	1981	NR	905	660	NR
390	575	NR	520	19153	NR	650	31426	NR	780	1758	NR	910	722	NR
395	507	NR	525	20279	NR	655	29538	NR	785	1656	NR	915	683	NR
400	452	NR	530	21424	NR	660	27902	NR	790	1510	NR	920	536	NR
405	442	NR	535	22450	NR	665	25950	NR	795	1317	NR	925	653	NR
410	492	NR	540	23201	NR	670	23596	NR	800	1296	NR	930	693	NR
415	658	NR	545	23916	NR	675	21412	NR	805	1239	NR	935	1009	NR
420	1015	NR	550	24774	NR	680	19353	NR	810	1094	NR	940	1041	NR
425	1715	NR	555	25531	NR	685	17528	NR	815	1156	NR	945	716	NR
430	3048	NR	560	26160	NR	690	15706	NR	820	966	NR	950	700	NR
435	5481	NR	565	26923	NR	695	13845	NR	825	931	NR	955	812	NR
440	9614	NR	570	27732	NR	700	12373	NR	830	938	NR	960	505	NR
445	14315	NR	575	28529	NR	705	10898	NR	835	822	NR	965	551	NR
450	14893	NR	580	29552	NR	710	9649	NR	840	838	NR	970	824	NR
455	11988	NR	585	30530	NR	715	8554	NR	845	759	NR	975	814	NR
460	10638	NR	590	31835	NR	720	7611	NR	850	712	NR	980	926	NR
465	9480	NR	595	32776	NR	725	6679	NR	855	651	NR	985	954	NR
470	8416	NR	600	33912	NR	730	5833	NR	860	789	NR	990	814	NR
475	8624	NR	605	35057	NR	735	5111	NR	865	715	NR	995	765	NR
480	9529	NR	610	35715	NR	740	4579	NR	870	935	NR	1000	954	NR
485	10656	NR	615	36371	NR	745	4054	NR	875	919	NR			

REPORT NUMBER: SP1-2106-271-2

TM-30-18

Summary

$R_f = 92.8$
 $R_g = 98$
 CIE $R_a = 92.3$
 $R_9 = 58.9$



Color Vector Graphics



REPORT NUMBER: SP1-2106-271-2

TM-30-18

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

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 94	CES52 = 98	CES77 = 92
CES03 = 32	CES28 = 97	CES53 = 96	CES78 = 88
CES04 = 70	CES29 = 96	CES54 = 95	CES79 = 95
CES05 = 50	CES30 = 97	CES55 = 94	CES80 = 95
CES06 = 51	CES31 = 97	CES56 = 94	CES81 = 85
CES07 = 43	CES32 = 92	CES57 = 93	CES82 = 98
CES08 = 42	CES33 = 99	CES58 = 94	CES83 = 97
CES09 = 29	CES34 = 96	CES59 = 96	CES84 = 95
CES10 = 76	CES35 = 98	CES60 = 95	CES85 = 86
CES11 = 58	CES36 = 88	CES61 = 94	CES86 = 85
CES12 = 65	CES37 = 95	CES62 = 92	CES87 = 93
CES13 = 44	CES38 = 93	CES63 = 93	CES88 = 96
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 87
CES15 = 72	CES40 = 98	CES65 = 89	CES90 = 96
CES16 = 48	CES41 = 98	CES66 = 90	CES91 = 82
CES17 = 50	CES42 = 97	CES67 = 89	CES92 = 82
CES18 = 57	CES43 = 98	CES68 = 91	CES93 = 89
CES19 = 72	CES44 = 99	CES69 = 92	CES94 = 81
CES20 = 67	CES45 = 99	CES70 = 89	CES95 = 86
CES21 = 86	CES46 = 97	CES71 = 87	CES96 = 93
CES22 = 79	CES47 = 96	CES72 = 95	CES97 = 96
CES23 = 92	CES48 = 93	CES73 = 86	CES98 = 94
CES24 = 90	CES49 = 97	CES74 = 93	CES99 = 91
CES25 = 72	CES50 = 98	CES75 = 88	



REPORT NUMBER: SP1-2106-271-2

TM-30-18

Color Rendition by Hue-Angle Bin



REPORT NUMBER: SP1-2106-271-2

TM-30-18

Measure Comparisons



(END OF REPORT)