

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: STREETWORKS

Report Number: P868042

Luminaire Tested: **MEM2-HSN-SA-110-730-U-T3**

Issue Date: 08/21/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P868042  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-110-730-U-T3  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 110W 70CRI 3000K  
FIXTURE w/ TYPE III DISTRIBUTION OPTIC  
Light Source: (30) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

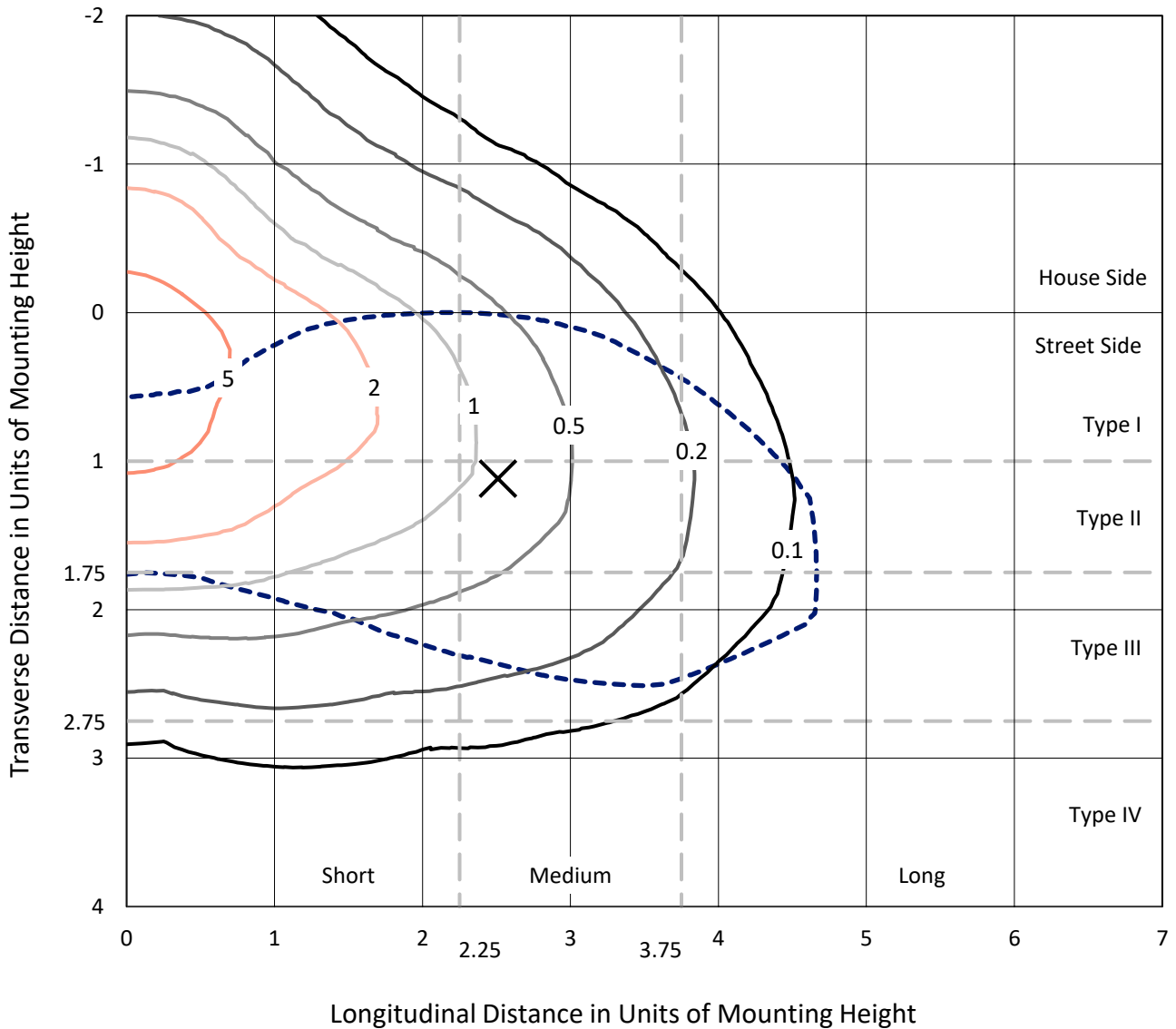
Lumens per Lamp: N/A  
Luminaire Lumens: 15973.5 lumens  
Efficiency: N/A  
Efficacy: 141.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 113  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 7.77%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P868042  
 CATALOG NUMBER: MEM2-HSN-SA-110-730-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

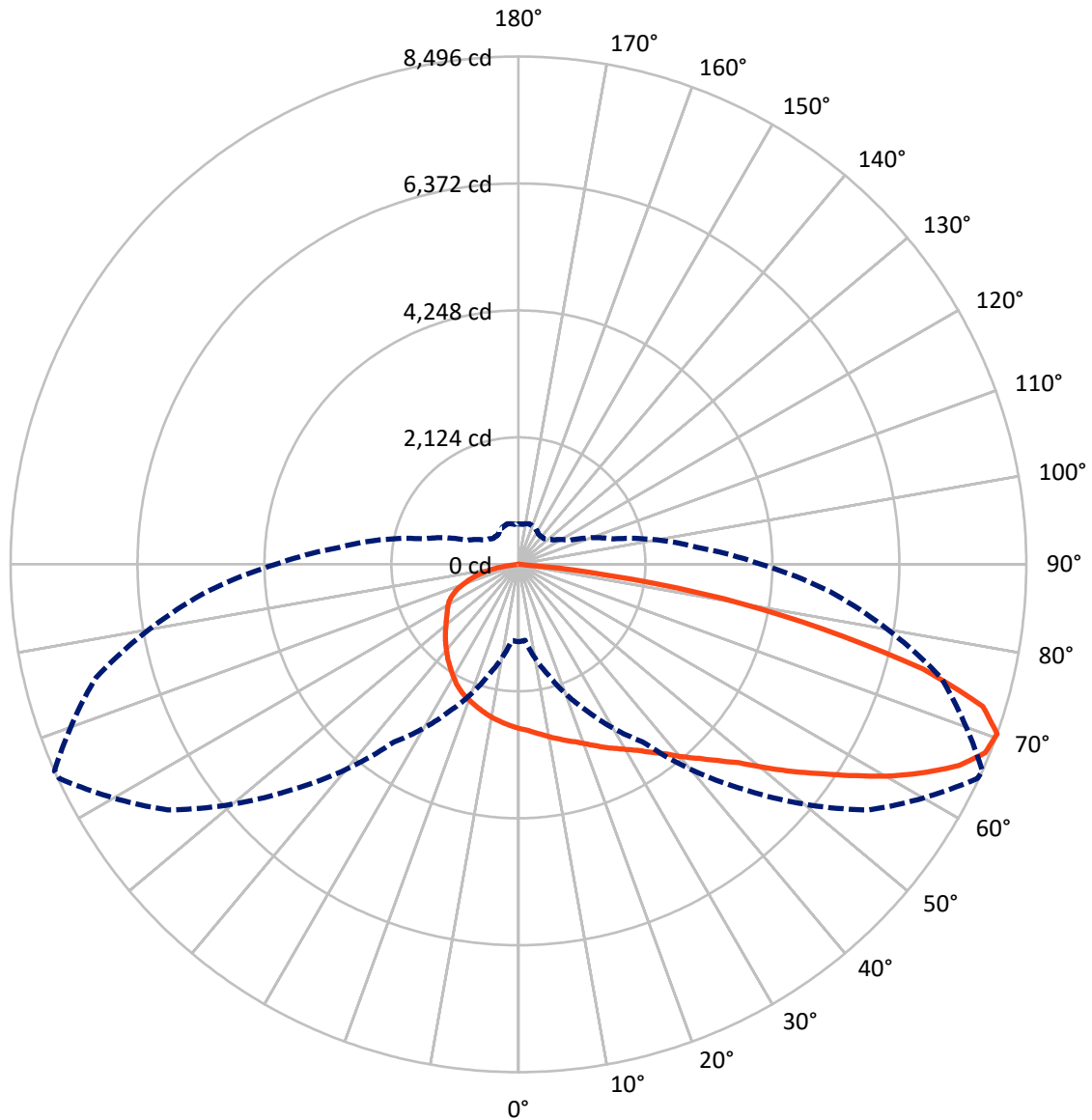
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.4 fc  
 Type III - Medium - N/A

REPORT NUMBER: P868042  
CATALOG NUMBER: MEM2-HSN-SA-110-730-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P868042  
 CATALOG NUMBER: MEM2-HSN-SA-110-730-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4116.5	0.0	4116.5
	% Fixture	25.8	0.0	25.8
<b>Street Side</b>	Lumens	11857.0	0.0	11857.0
	% Fixture	74.2	0.0	74.2
<b>Total</b>	Lumens	15973.5	0.0	15973.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	263.0	1.6
10°-20°	783.4	4.9
20°-30°	1315.9	8.2
30°-40°	1982.4	12.4
40°-50°	2691.4	16.8
50°-60°	3198.2	20.0
60°-70°	3264.0	20.4
70°-80°	2183.1	13.7
80°-90°	292.1	1.8
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°	15973.5	100.0
0°-180°	15973.5	100.0

**Coefficient of Utilization**



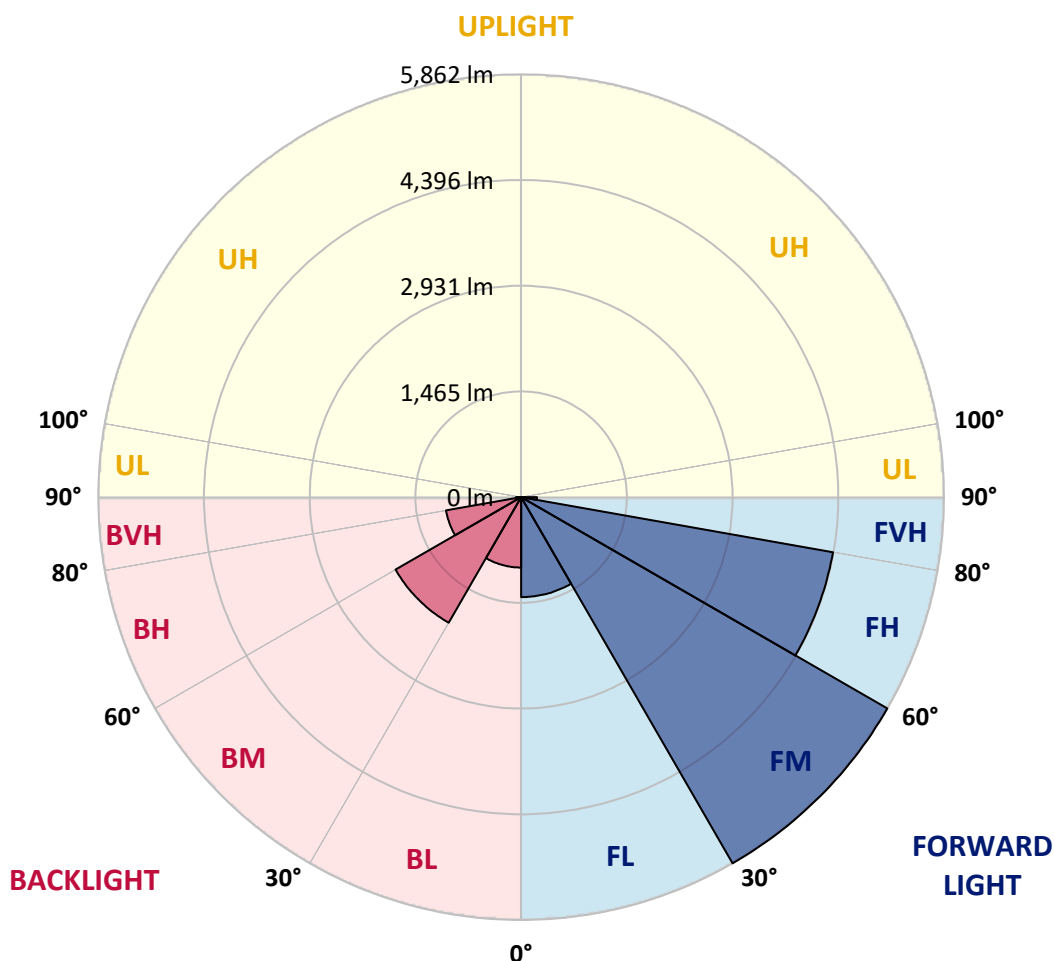
REPORT NUMBER: P868042  
 CATALOG NUMBER: MEM2-HSN-SA-110-730-U-T3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1386.2	8.7			
FM (30°-60°)	5862.0	36.7			
FH (60°-80°)	4390.1	27.5			G2/5000
FVH (80°-90°)	218.8	1.4			G2/225
BL (0°-30°)	976.1	6.1	B2/1000		
BM (30°-60°)	2010.1	12.6	B2/2500		
BH (60°-80°)	1057.0	6.6	B3/2500		G3/2500
BVH (80°-90°)	73.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Medium





REPORT NUMBER: P868042

CATALOG NUMBER: MEM2-HSN-SA-110-730-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3
2.5°	2846.7	2834.0	2824.5	2830.8	2811.8	2818.1	2795.9	2780.1	2776.9	2770.5	2764.2
5°	2935.6	2935.6	2919.7	2919.7	2897.5	2894.3	2862.6	2827.7	2827.7	2805.5	2780.1
7.5°	3030.8	3024.4	3005.4	3002.2	2976.8	2970.5	2935.6	2881.6	2878.4	2837.2	2799.1
10°	3097.4	3100.6	3087.9	3087.9	3068.9	3053.0	3002.2	2945.1	2938.7	2884.8	2824.5
12.5°	3148.2	3154.5	3151.4	3151.4	3135.5	3135.5	3078.4	3002.2	2995.9	2926.1	2840.4
15°	3202.2	3199.0	3208.5	3211.7	3205.3	3195.8	3154.5	3065.7	3062.5	2970.5	2862.6
17.5°	3249.8	3246.6	3249.8	3265.6	3268.8	3268.8	3227.5	3135.5	3122.8	3024.4	2881.6
20°	3278.3	3284.7	3297.4	3316.4	3325.9	3351.3	3316.4	3218.0	3205.3	3081.6	2922.9
22.5°	3386.2	3367.2	3376.7	3389.4	3402.1	3437.0	3405.3	3303.7	3294.2	3167.2	2970.5
25°	3570.3	3570.3	3548.1	3525.9	3510.0	3525.9	3500.5	3402.1	3395.7	3243.4	3024.4
27.5°	3890.8	3890.8	3843.2	3760.7	3656.0	3627.4	3608.4	3506.8	3487.8	3325.9	3059.3
30°	4297.0	4309.7	4224.0	4084.4	3890.8	3763.9	3716.3	3605.2	3595.7	3408.4	3113.3
32.5°	4731.8	4757.2	4693.7	4490.6	4173.3	3925.7	3849.6	3735.3	3713.1	3506.8	3183.1
35°	5122.2	5147.6	5061.9	4871.5	4465.2	4160.6	4008.2	3878.1	3865.4	3633.8	3287.8
37.5°	5439.5	5445.9	5391.9	5160.3	4709.6	4357.3	4205.0	4049.5	4024.1	3786.1	3398.9
40°	5775.9	5801.3	5747.4	5461.7	4931.8	4570.0	4401.8	4255.8	4233.6	3944.8	3503.6
42.5°	6128.2	6125.0	6125.0	5722.0	5153.9	4747.7	4614.4	4452.5	4439.9	4106.6	3617.9
45°	6344.0	6356.7	6321.8	5877.5	5480.8	4931.8	4820.7	4703.3	4681.0	4332.0	3767.1
47.5°	6398.0	6369.4	6210.7	5998.1	5848.9	5122.2	5080.9	5011.1	4960.3	4579.5	3951.1
50°	6325.0	6280.5	6188.5	6052.0	5985.4	5350.7	5344.3	5379.2	5344.3	4881.0	4163.8
52.5°	6052.0	6045.7	6029.8	6061.6	5953.7	5531.6	5642.6	5763.2	5756.9	5188.8	4385.9
55°	5477.6	5518.9	5709.3	5909.2	5833.1	5655.3	5975.9	6207.5	6182.2	5550.6	4614.4
57.5°	4890.5	4931.8	5176.1	5652.2	5715.6	5788.6	6350.4	6712.1	6670.9	5944.1	4823.9
60°	4379.6	4335.1	4579.5	5265.0	5550.6	5909.2	6721.7	7223.1	7188.2	6337.7	5039.7
62.5°	3570.3	3614.7	4005.1	4700.1	5318.9	5985.4	7026.3	7686.4	7664.2	6699.4	5214.2
65°	2824.5	2764.2	3351.3	4106.6	4919.1	5960.0	7289.7	8121.2	8105.3	7054.9	5347.5
67.5°	1920.0	1878.8	2653.1	3516.3	4376.4	5756.9	7350.0	8413.2	8419.5	7264.3	5382.4
70°	1294.8	1275.8	1907.3	2703.9	3624.2	5318.9	7162.8	8473.5	8495.7	7318.3	5226.9
72.5°	955.3	952.1	1396.4	1929.5	2697.6	4490.6	6651.8	8080.0	8121.2	6937.5	4769.9
75°	752.1	761.7	996.5	1371.0	1799.4	3322.7	5595.0	6927.9	6991.4	5991.7	3960.6
77.5°	615.7	615.7	698.2	983.8	1202.8	2062.8	4024.1	5071.4	5198.3	4623.9	3049.8
80°	498.3	507.8	517.3	685.5	796.6	1177.4	2342.1	3383.0	3475.1	3221.2	2202.5
82.5°	272.9	292.0	282.4	355.4	399.9	545.9	929.9	1367.8	1507.5	1342.4	999.7
85°	19.0	12.7	22.2	28.6	34.9	54.0	73.0	101.6	95.2	136.5	69.8
87.5°	3.2	3.2	3.2	6.3	6.3	9.5	12.7	12.7	12.7	12.7	12.7
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: P868042  
 CATALOG NUMBER: MEM2-HSN-SA-110-730-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3	2748.3
2.5°	2761.0	2745.2	2719.8	2713.4	2703.9	2691.2	2678.5	2659.5	2653.1	2659.5	2665.8
5°	2764.2	2742.0	2700.7	2675.3	2649.9	2627.7	2602.3	2577.0	2561.1	2564.3	2577.0
7.5°	2773.7	2742.0	2678.5	2637.3	2596.0	2561.1	2519.8	2491.3	2472.2	2475.4	2484.9
10°	2786.4	2742.0	2665.8	2596.0	2538.9	2488.1	2446.8	2411.9	2392.9	2389.7	2392.9
12.5°	2789.6	2738.8	2637.3	2551.6	2481.7	2415.1	2370.7	2338.9	2319.9	2310.4	2316.7
15°	2799.1	2729.3	2608.7	2504.0	2418.3	2348.5	2294.5	2256.4	2243.7	2237.4	2234.2
17.5°	2811.8	2726.1	2583.3	2456.4	2354.8	2275.5	2227.9	2189.8	2173.9	2167.6	2173.9
20°	2830.8	2729.3	2554.7	2408.8	2297.7	2218.3	2164.4	2126.3	2113.6	2110.4	2107.3
22.5°	2856.2	2735.6	2532.5	2364.3	2234.2	2154.9	2100.9	2075.5	2066.0	2069.2	2069.2
25°	2881.6	2742.0	2500.8	2304.0	2167.6	2085.0	2047.0	2027.9	2034.3	2047.0	2047.0
27.5°	2903.8	2738.8	2456.4	2240.6	2088.2	2012.1	1983.5	1986.7	2002.5	2024.8	2027.9
30°	2932.4	2738.8	2408.8	2161.2	1999.4	1926.4	1920.0	1945.4	1970.8	1993.0	1993.0
32.5°	2976.8	2757.9	2370.7	2081.9	1907.3	1850.2	1878.8	1913.7	1942.2	1964.5	1970.8
35°	3053.0	2799.1	2345.3	2002.5	1818.5	1777.2	1831.2	1888.3	1907.3	1923.2	1926.4
37.5°	3126.0	2837.2	2313.5	1926.4	1726.4	1710.6	1783.6	1843.9	1847.0	1856.6	1856.6
40°	3195.8	2865.8	2272.3	1843.9	1637.6	1637.6	1723.3	1774.0	1767.7	1758.2	1761.3
42.5°	3272.0	2881.6	2224.7	1767.7	1564.6	1564.6	1634.4	1678.8	1675.7	1688.4	1697.9
45°	3364.0	2913.4	2161.2	1697.9	1488.4	1475.7	1532.8	1570.9	1618.5	1675.7	1691.5
47.5°	3490.9	2957.8	2110.4	1621.7	1424.9	1380.5	1402.7	1482.1	1536.0	1583.6	1590.0
50°	3624.2	3021.3	2066.0	1542.4	1348.8	1269.4	1288.5	1377.3	1409.1	1428.1	1437.6
52.5°	3767.1	3072.0	2027.9	1475.7	1269.4	1155.2	1180.6	1266.3	1288.5	1304.3	1307.5
55°	3890.8	3113.3	1980.3	1412.2	1183.7	1047.3	1079.0	1161.5	1183.7	1202.8	1202.8
57.5°	4020.9	3151.4	1948.6	1358.3	1091.7	958.4	980.6	1063.2	1094.9	1101.2	1110.8
60°	4128.8	3186.3	1920.0	1307.5	1006.0	879.1	895.0	967.9	1006.0	1009.2	1015.5
62.5°	4205.0	3208.5	1904.2	1244.0	920.3	799.7	812.4	885.4	929.9	939.4	942.6
65°	4252.6	3221.2	1875.6	1161.5	847.3	733.1	733.1	806.1	850.5	872.7	879.1
67.5°	4230.4	3199.0	1799.4	1066.3	780.7	666.5	663.3	736.3	774.4	787.1	790.2
70°	4059.0	3068.9	1643.9	948.9	710.9	606.2	599.8	666.5	701.4	672.8	676.0
72.5°	3709.9	2773.7	1431.3	831.5	637.9	549.0	542.7	599.8	603.0	603.0	599.8
75°	3126.0	2265.9	1142.5	707.7	561.7	488.7	491.9	536.3	539.5	555.4	545.9
77.5°	2396.1	1678.8	891.8	564.9	476.0	434.8	450.6	466.5	488.7	510.9	488.7
80°	1742.3	1158.4	618.9	422.1	368.1	368.1	374.5	390.4	422.1	444.3	422.1
82.5°	745.8	510.9	285.6	209.5	180.9	177.7	180.9	180.9	222.2	228.5	199.9
85°	57.1	47.6	34.9	34.9	28.6	15.9	15.9	12.7	9.5	9.5	9.5
87.5°	12.7	9.5	9.5	9.5	6.3	6.3	6.3	6.3	6.3	6.3	6.3
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

Streetworks

Report Number: SP1-2407-157-4

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-30-730-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-30-730-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-4  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/20/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-30-730-U-5WQ-2**  
 Description: Epic Modern Light Square 30W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 3057  
 CIE u': 0.2487  
 CIE v': 0.5199  
 Duv: -0.0002  
 CIE x: 0.4326  
 CIE y: 0.4020  
 CIE z: 0.1654  
 Peak Wavelength (nm): 593  
 Dominant Wavelength (nm): 582  
 Purity: 50.50735  
 Rf: 74.6  
 Rg: 94

CRI (Ra):	71.7		
R1:	68.1	R9:	-34.8
R2:	82.0	R10:	58.5
R3:	93.5	R11:	62.5
R4:	67.5	R12:	47.5
R5:	67.2	R13:	70.7
R6:	74.9	R14:	96.4
R7:	77.4	R15:	60.0
R8:	43.1		



**Test Conditions**

Stabilization Time: 21M  
 Operation Time: 1H 21M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-157-4

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: SP1-2407-157-4

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: SP1-2407-157-4

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	104	NR	620	818	NR	750	20	NR	880	1	NR
365	0	NR	495	135	NR	625	755	NR	755	17	NR	885	0	NR
370	0	NR	500	184	NR	630	691	NR	760	15	NR	890	0	NR
375	0	NR	505	247	NR	635	625	NR	765	13	NR	895	0	NR
380	0	NR	510	309	NR	640	561	NR	770	11	NR	900	0	NR
385	0	NR	515	369	NR	645	499	NR	775	9	NR	905	0	NR
390	0	NR	520	419	NR	650	441	NR	780	8	NR	910	0	NR
395	0	NR	525	460	NR	655	388	NR	785	7	NR	915	0	NR
400	1	NR	530	492	NR	660	338	NR	790	6	NR	920	0	NR
405	3	NR	535	524	NR	665	294	NR	795	5	NR	925	0	NR
410	7	NR	540	553	NR	670	253	NR	800	4	NR	930	0	NR
415	15	NR	545	588	NR	675	218	NR	805	4	NR	935	0	NR
420	31	NR	550	625	NR	680	188	NR	810	3	NR	940	0	NR
425	60	NR	555	670	NR	685	161	NR	815	3	NR	945	0	NR
430	107	NR	560	723	NR	690	139	NR	820	3	NR	950	0	NR
435	183	NR	565	780	NR	695	118	NR	825	2	NR	955	0	NR
440	289	NR	570	837	NR	700	100	NR	830	2	NR	960	0	NR
445	460	NR	575	894	NR	705	85	NR	835	2	NR	965	0	NR
450	646	NR	580	942	NR	710	73	NR	840	1	NR	970	0	NR
455	561	NR	585	976	NR	715	62	NR	845	1	NR	975	0	NR
460	331	NR	590	998	NR	720	53	NR	850	1	NR	980	0	NR
465	238	NR	595	1000	NR	725	45	NR	855	1	NR	985	0	NR
470	178	NR	600	990	NR	730	39	NR	860	1	NR	990	0	NR
475	120	NR	605	962	NR	735	33	NR	865	1	NR	995	0	NR
480	96	NR	610	925	NR	740	28	NR	870	1	NR	1000	0	NR
485	95	NR	615	873	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-4

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 1.23

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	104	NR	620	818	NR	750	20	NR	880	1	NR
365	0	NR	495	135	NR	625	755	NR	755	17	NR	885	0	NR
370	0	NR	500	184	NR	630	691	NR	760	15	NR	890	0	NR
375	0	NR	505	247	NR	635	625	NR	765	13	NR	895	0	NR
380	0	NR	510	309	NR	640	561	NR	770	11	NR	900	0	NR
385	0	NR	515	369	NR	645	499	NR	775	9	NR	905	0	NR
390	0	NR	520	419	NR	650	441	NR	780	8	NR	910	0	NR
395	0	NR	525	460	NR	655	388	NR	785	7	NR	915	0	NR
400	1	NR	530	492	NR	660	338	NR	790	6	NR	920	0	NR
405	3	NR	535	524	NR	665	294	NR	795	5	NR	925	0	NR
410	7	NR	540	553	NR	670	253	NR	800	4	NR	930	0	NR
415	15	NR	545	588	NR	675	218	NR	805	4	NR	935	0	NR
420	31	NR	550	625	NR	680	188	NR	810	3	NR	940	0	NR
425	60	NR	555	670	NR	685	161	NR	815	3	NR	945	0	NR
430	107	NR	560	723	NR	690	139	NR	820	3	NR	950	0	NR
435	183	NR	565	780	NR	695	118	NR	825	2	NR	955	0	NR
440	289	NR	570	837	NR	700	100	NR	830	2	NR	960	0	NR
445	460	NR	575	894	NR	705	85	NR	835	2	NR	965	0	NR
450	646	NR	580	942	NR	710	73	NR	840	1	NR	970	0	NR
455	561	NR	585	976	NR	715	62	NR	845	1	NR	975	0	NR
460	331	NR	590	998	NR	720	53	NR	850	1	NR	980	0	NR
465	238	NR	595	1000	NR	725	45	NR	855	1	NR	985	0	NR
470	178	NR	600	990	NR	730	39	NR	860	1	NR	990	0	NR
475	120	NR	605	962	NR	735	33	NR	865	1	NR	995	0	NR
480	96	NR	610	925	NR	740	28	NR	870	1	NR	1000	0	NR
485	95	NR	615	873	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-4

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.27**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	104	NR	620	818	NR	750	20	NR	880	1	NR
365	0	NR	495	135	NR	625	755	NR	755	17	NR	885	0	NR
370	0	NR	500	184	NR	630	691	NR	760	15	NR	890	0	NR
375	0	NR	505	247	NR	635	625	NR	765	13	NR	895	0	NR
380	0	NR	510	309	NR	640	561	NR	770	11	NR	900	0	NR
385	0	NR	515	369	NR	645	499	NR	775	9	NR	905	0	NR
390	0	NR	520	419	NR	650	441	NR	780	8	NR	910	0	NR
395	0	NR	525	460	NR	655	388	NR	785	7	NR	915	0	NR
400	1	NR	530	492	NR	660	338	NR	790	6	NR	920	0	NR
405	3	NR	535	524	NR	665	294	NR	795	5	NR	925	0	NR
410	7	NR	540	553	NR	670	253	NR	800	4	NR	930	0	NR
415	15	NR	545	588	NR	675	218	NR	805	4	NR	935	0	NR
420	31	NR	550	625	NR	680	188	NR	810	3	NR	940	0	NR
425	60	NR	555	670	NR	685	161	NR	815	3	NR	945	0	NR
430	107	NR	560	723	NR	690	139	NR	820	3	NR	950	0	NR
435	183	NR	565	780	NR	695	118	NR	825	2	NR	955	0	NR
440	289	NR	570	837	NR	700	100	NR	830	2	NR	960	0	NR
445	460	NR	575	894	NR	705	85	NR	835	2	NR	965	0	NR
450	646	NR	580	942	NR	710	73	NR	840	1	NR	970	0	NR
455	561	NR	585	976	NR	715	62	NR	845	1	NR	975	0	NR
460	331	NR	590	998	NR	720	53	NR	850	1	NR	980	0	NR
465	238	NR	595	1000	NR	725	45	NR	855	1	NR	985	0	NR
470	178	NR	600	990	NR	730	39	NR	860	1	NR	990	0	NR
475	120	NR	605	962	NR	735	33	NR	865	1	NR	995	0	NR
480	96	NR	610	925	NR	740	28	NR	870	1	NR	1000	0	NR
485	95	NR	615	873	NR	745	24	NR	875	1	NR			

**Summary**

$R_f = 74.6$   
 $R_g = 94$   
 $CIE R_a = 71.7$   
 $R_9 = -34.8$



**Color Vector Graphics**



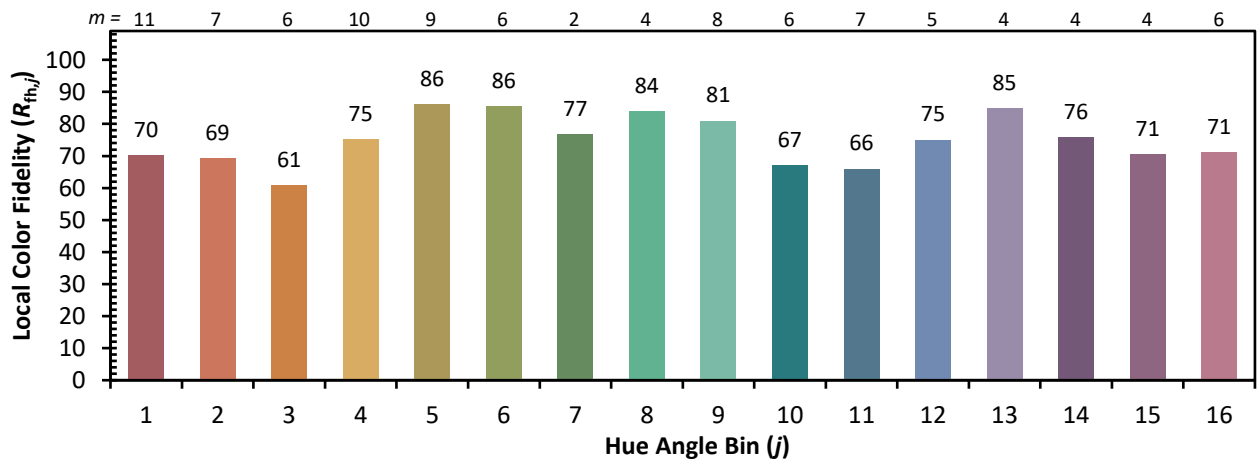


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 65	CES51 = 87	CES76 = 58
CES02 = 62	CES27 = 89	CES52 = 85	CES77 = 76
CES03 = 31	CES28 = 84	CES53 = 77	CES78 = 61
CES04 = 71	CES29 = 68	CES54 = 85	CES79 = 86
CES05 = 49	CES30 = 83	CES55 = 84	CES80 = 83
CES06 = 51	CES31 = 71	CES56 = 74	CES81 = 73
CES07 = 41	CES32 = 64	CES57 = 74	CES82 = 93
CES08 = 40	CES33 = 78	CES58 = 75	CES83 = 91
CES09 = 29	CES34 = 75	CES59 = 85	CES84 = 88
CES10 = 76	CES35 = 87	CES60 = 90	CES85 = 75
CES11 = 59	CES36 = 92	CES61 = 81	CES86 = 64
CES12 = 65	CES37 = 84	CES62 = 89	CES87 = 77
CES13 = 43	CES38 = 92	CES63 = 75	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 65	CES89 = 67
CES15 = 71	CES40 = 92	CES65 = 64	CES90 = 80
CES16 = 47	CES41 = 93	CES66 = 60	CES91 = 78
CES17 = 50	CES42 = 86	CES67 = 58	CES92 = 56
CES18 = 56	CES43 = 77	CES68 = 66	CES93 = 73
CES19 = 73	CES44 = 99	CES69 = 75	CES94 = 49
CES20 = 66	CES45 = 85	CES70 = 60	CES95 = 66
CES21 = 87	CES46 = 81	CES71 = 56	CES96 = 76
CES22 = 79	CES47 = 86	CES72 = 85	CES97 = 82
CES23 = 92	CES48 = 75	CES73 = 52	CES98 = 76
CES24 = 91	CES49 = 79	CES74 = 95	CES99 = 64
CES25 = 73	CES50 = 86	CES75 = 60	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)