

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: P868103

Luminaire Tested: **MEM2-HSN-SA-90-727-U-T4W**

Issue Date: 08/21/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868103  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-90-727-U-T4W  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 90W 70CRI 2700K  
FITXURE w/ TYPE IV WIDE DISTRIBUTION OPTIC  
Light Source: (20) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

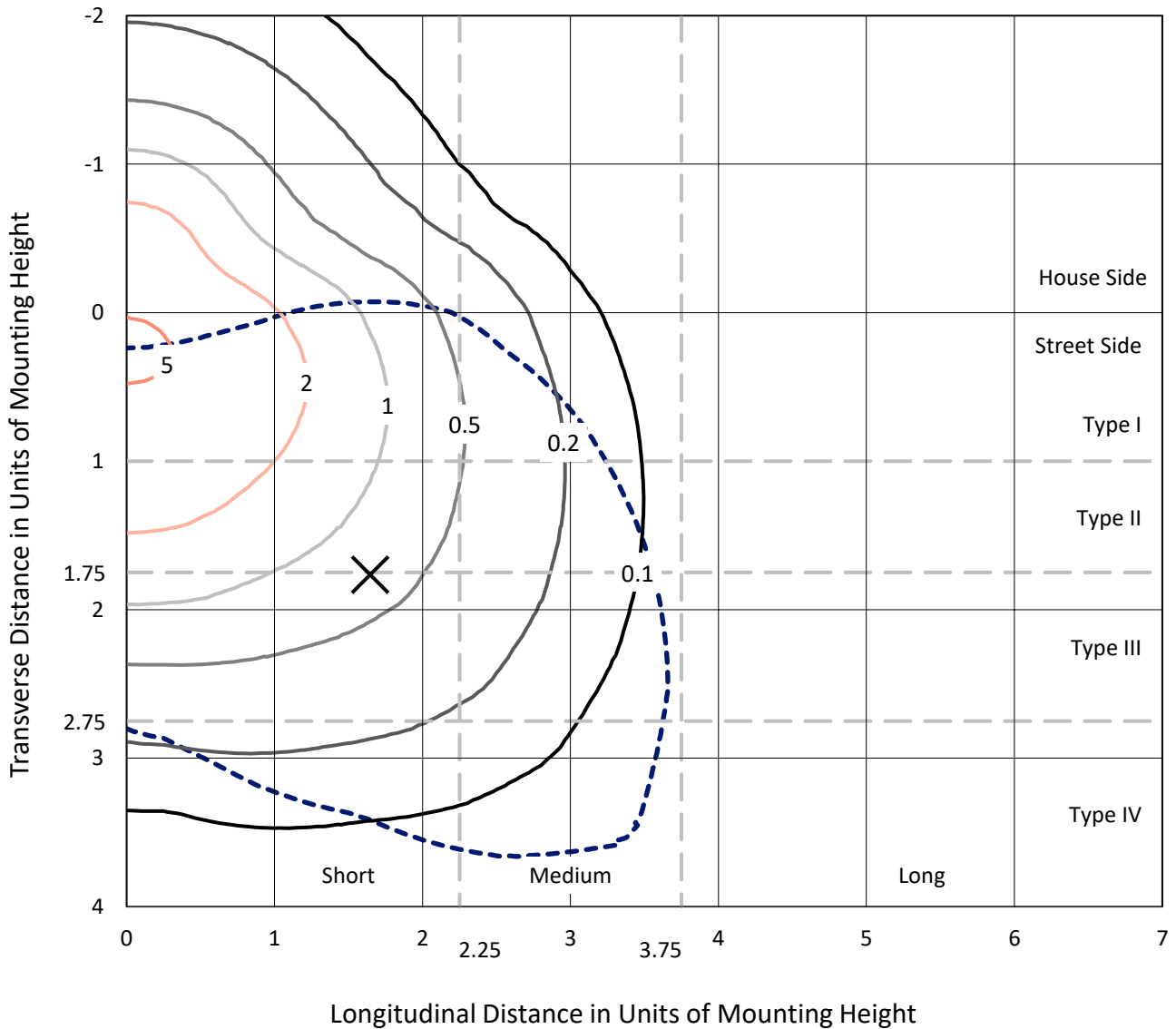
Lumens per Lamp: N/A  
Luminaire Lumens: 11679.1 lumens  
Efficiency: N/A  
Efficacy: 129.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 90  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.20%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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 CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

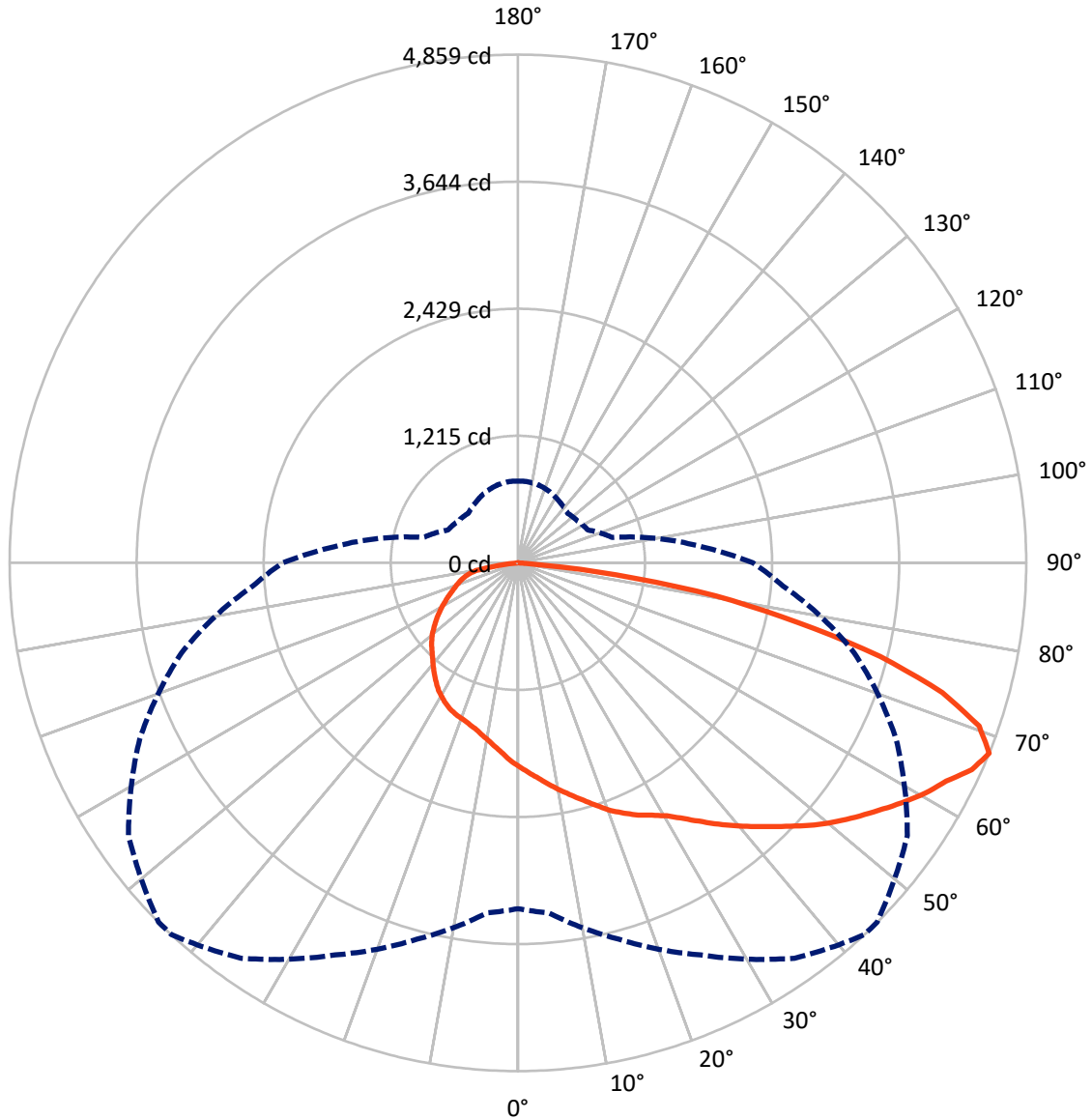
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 43-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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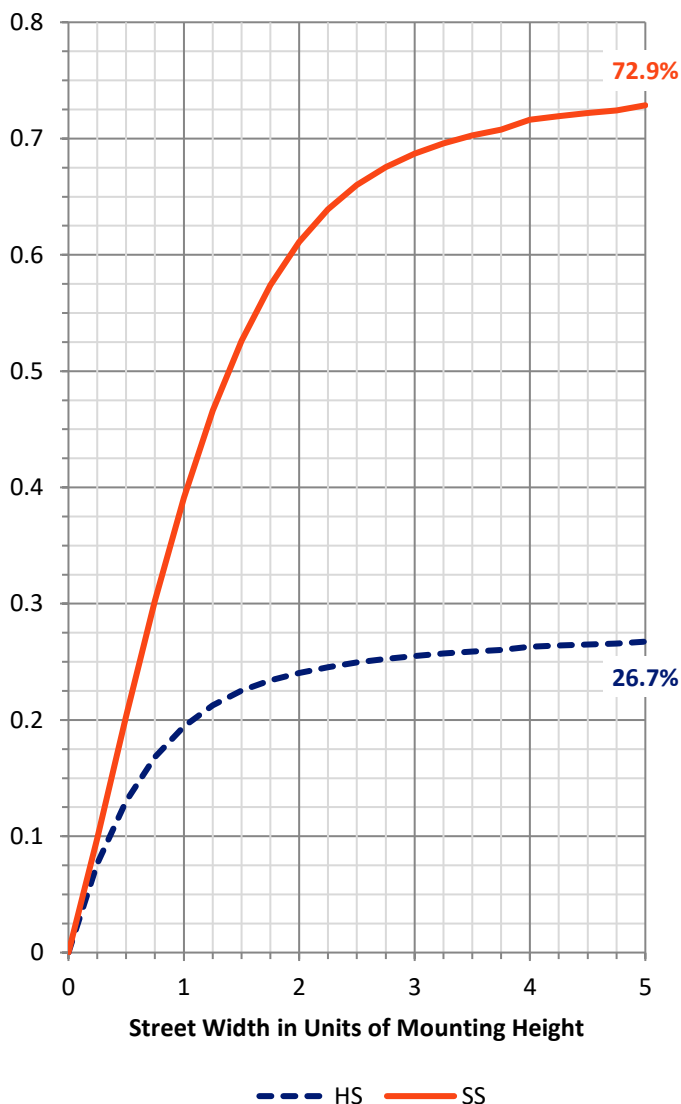
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3141.7	0.0	3141.7
	% Fixture	26.9	0.0	26.9
<b>Street Side</b>	Lumens	8537.4	0.0	8537.4
	% Fixture	73.1	0.0	73.1
<b>Total</b>	Lumens	11679.1	0.0	11679.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.6	1.6
10°-20°	569.8	4.9
20°-30°	972.2	8.3
30°-40°	1417.9	12.1
40°-50°	1904.7	16.3
50°-60°	2331.7	20.0
60°-70°	2453.9	21.0
70°-80°	1602.1	13.7
80°-90°	240.3	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°	11679.1	100.0
0°-180°	11679.1	100.0

**Coefficient of Utilization**



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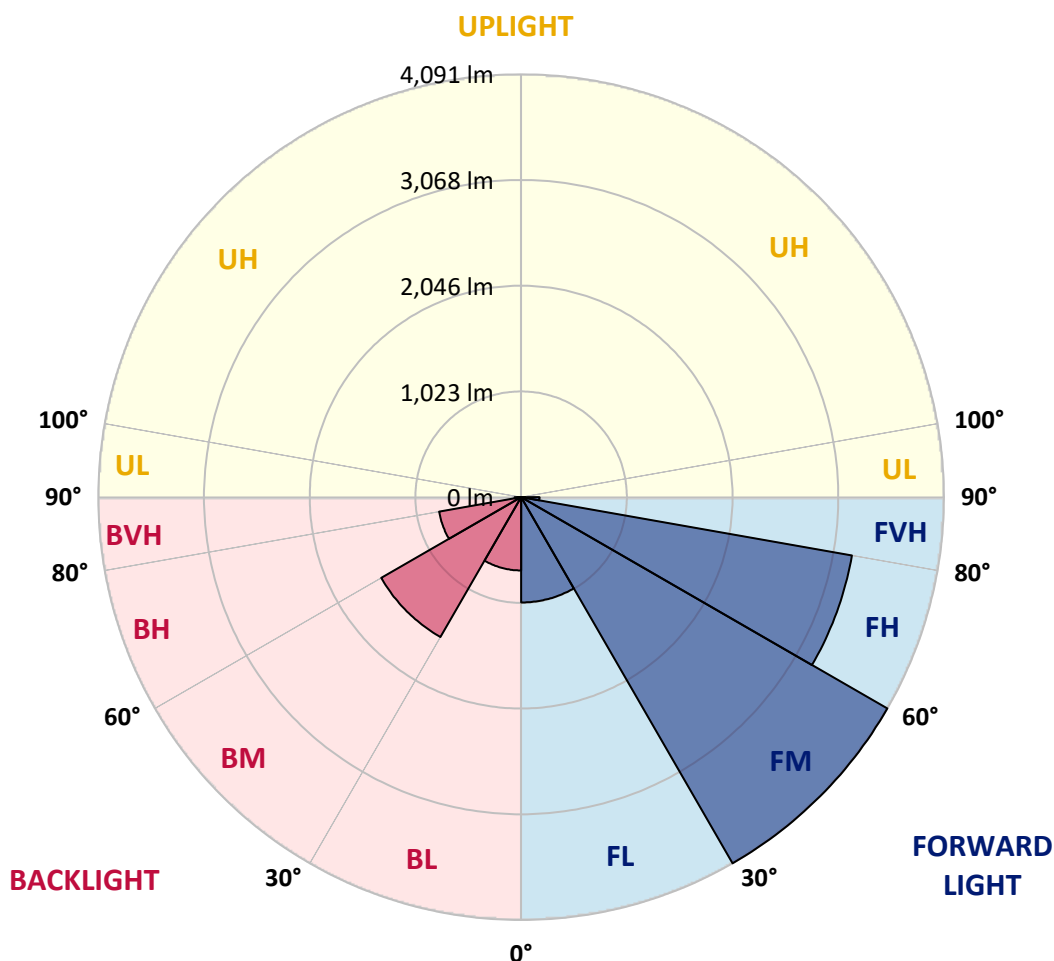
CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1019.2	8.7			
FM (30°-60°)	4091.1	35.0			
FH (60°-80°)	3249.8	27.8			G2/5000
FVH (80°-90°)	177.3	1.5			G2/225
BL (0°-30°)	709.3	6.1	B2/1000		
BM (30°-60°)	1563.2	13.4	B2/2500		
BH (60°-80°)	806.3	6.9	B2/1000		G2/1000
BVH (80°-90°)	63.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6
2.5°	2039.4	2037.0	2029.9	2025.2	2011.0	2008.7	2008.7	1994.5	1978.0	1968.5	1959.0
5°	2131.6	2119.7	2115.0	2105.6	2081.9	2067.8	2072.5	2046.5	2013.4	1989.8	1963.8
7.5°	2214.3	2209.5	2193.0	2181.2	2152.8	2138.6	2133.9	2093.7	2051.2	2015.8	1973.2
10°	2313.5	2301.7	2292.3	2268.6	2230.8	2209.5	2202.5	2150.5	2096.1	2048.8	1992.1
12.5°	2403.3	2389.1	2377.3	2353.7	2315.9	2280.4	2271.0	2211.9	2143.4	2079.6	2008.7
15°	2471.9	2474.2	2462.4	2441.1	2398.6	2356.1	2349.0	2271.0	2188.3	2110.3	2025.2
17.5°	2535.7	2545.1	2538.0	2523.8	2481.3	2438.8	2431.7	2344.2	2245.0	2145.7	2044.1
20°	2597.1	2597.1	2594.7	2585.3	2554.6	2526.2	2512.0	2424.6	2299.3	2183.5	2070.1
22.5°	2632.5	2642.0	2642.0	2642.0	2623.1	2599.5	2594.7	2509.7	2372.6	2230.8	2093.7
25°	2686.9	2698.7	2698.7	2694.0	2677.4	2670.4	2663.3	2582.9	2443.5	2285.2	2119.7
27.5°	2802.7	2800.3	2781.4	2757.8	2734.2	2731.8	2722.3	2665.6	2526.2	2344.2	2155.2
30°	2963.4	2968.1	2944.5	2871.2	2816.9	2805.1	2807.4	2757.8	2623.1	2412.8	2195.4
32.5°	3209.2	3209.2	3117.0	3022.5	2944.5	2913.8	2906.7	2864.1	2722.3	2488.4	2240.3
35°	3393.5	3386.4	3334.4	3223.3	3126.4	3039.0	3027.2	2970.5	2833.4	2573.5	2289.9
37.5°	3532.9	3547.1	3506.9	3421.8	3327.3	3176.1	3152.4	3072.1	2935.0	2656.2	2339.5
40°	3802.3	3766.9	3670.0	3592.0	3478.6	3310.8	3289.5	3190.2	3039.0	2748.3	2401.0
42.5°	3998.4	3948.8	3837.7	3733.8	3592.0	3445.5	3426.6	3317.9	3159.5	2852.3	2464.8
45°	4279.7	4168.6	4015.0	3922.8	3722.0	3592.0	3568.4	3450.2	3284.8	2963.4	2545.1
47.5°	4551.4	4357.6	4194.6	4152.0	3863.7	3750.3	3731.4	3594.3	3419.5	3083.9	2623.1
50°	4516.0	4388.4	4334.0	4293.8	3986.6	3899.2	3880.3	3740.9	3556.5	3211.5	2701.1
52.5°	4426.2	4438.0	4440.4	4343.5	4102.4	4038.6	4019.7	3899.2	3698.3	3322.6	2776.7
55°	4520.7	4534.9	4532.5	4386.0	4237.1	4178.0	4166.2	4059.9	3835.4	3426.6	2831.0
57.5°	4664.9	4617.6	4610.5	4492.3	4381.3	4326.9	4312.7	4220.6	3951.2	3502.2	2873.6
60°	4690.8	4596.3	4627.0	4516.0	4490.0	4473.4	4468.7	4360.0	4059.9	3563.6	2890.1
62.5°	4400.2	4383.6	4504.2	4459.3	4546.7	4594.0	4596.3	4459.3	4119.0	3587.3	2873.6
65°	3903.9	3970.1	4230.0	4360.0	4631.8	4766.5	4761.7	4518.3	4111.9	3518.7	2772.0
67.5°	3306.0	3358.0	3724.3	4135.5	4612.9	4858.6	4856.3	4544.3	3989.0	3329.7	2542.7
70°	2507.3	2670.4	3190.2	3731.4	4357.6	4676.7	4716.8	4397.8	3707.8	2984.7	2195.4
72.5°	1907.1	1933.1	2561.7	3128.8	3901.6	4244.2	4237.1	3929.9	3237.5	2514.4	1829.1
75°	1354.1	1410.8	1928.3	2424.6	3197.3	3577.8	3561.3	3223.3	2582.9	1956.7	1399.0
77.5°	1009.1	1030.3	1410.8	1798.4	2391.5	2734.2	2727.1	2382.1	1900.0	1436.8	1042.1
80°	737.3	772.7	1016.2	1254.8	1621.1	1916.5	1907.1	1580.9	1219.4	1004.3	760.9
82.5°	413.6	439.5	590.8	758.6	855.5	947.6	907.4	758.6	555.3	432.5	373.4
85°	11.8	14.2	21.3	26.0	44.9	75.6	82.7	73.3	87.4	54.4	59.1
87.5°	4.7	4.7	4.7	4.7	4.7	7.1	7.1	7.1	7.1	7.1	7.1
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: P868103

CATALOG NUMBER: MEM2-HSN-SA-90-727-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6
2.5°	1954.3	1944.9	1926.0	1914.1	1907.1	1897.6	1883.4	1874.0	1866.9	1876.3	1874.0
5°	1952.0	1933.1	1900.0	1876.3	1852.7	1833.8	1812.5	1796.0	1786.5	1791.3	1788.9
7.5°	1952.0	1928.3	1876.3	1838.5	1803.1	1774.7	1751.1	1729.8	1720.4	1722.7	1720.4
10°	1961.4	1928.3	1859.8	1805.4	1758.2	1725.1	1699.1	1680.2	1673.1	1680.2	1682.6
12.5°	1970.9	1928.3	1845.6	1777.1	1715.6	1680.2	1656.6	1644.7	1649.5	1651.8	1654.2
15°	1975.6	1926.0	1831.4	1744.0	1675.5	1637.7	1623.5	1621.1	1632.9	1644.7	1647.1
17.5°	1987.4	1923.6	1810.2	1710.9	1640.0	1609.3	1602.2	1611.7	1635.3	1651.8	1656.6
20°	2001.6	1928.3	1786.5	1670.7	1604.6	1580.9	1592.8	1614.0	1642.4	1666.0	1670.7
22.5°	2015.8	1930.7	1765.3	1635.3	1566.8	1562.0	1588.0	1618.8	1651.8	1675.5	1680.2
25°	2032.3	1930.7	1736.9	1590.4	1529.0	1536.0	1576.2	1616.4	1647.1	1677.8	1682.6
27.5°	2048.8	1935.4	1706.2	1540.8	1481.7	1503.0	1552.6	1602.2	1635.3	1666.0	1673.1
30°	2077.2	1944.9	1680.2	1498.2	1434.4	1462.8	1521.9	1578.6	1614.0	1647.1	1654.2
32.5°	2105.6	1959.0	1658.9	1453.3	1387.2	1420.3	1486.4	1550.2	1588.0	1618.8	1623.5
35°	2143.4	1978.0	1642.4	1408.4	1339.9	1365.9	1436.8	1507.7	1550.2	1573.9	1585.7
37.5°	2183.5	2003.9	1628.2	1368.3	1287.9	1311.5	1387.2	1462.8	1507.7	1531.3	1536.0
40°	2233.2	2039.4	1618.8	1330.5	1238.3	1257.2	1332.8	1415.5	1458.1	1474.6	1484.1
42.5°	2287.5	2077.2	1611.7	1292.6	1183.9	1202.8	1283.2	1363.5	1406.1	1420.3	1427.3
45°	2356.1	2126.8	1606.9	1252.5	1139.0	1155.6	1235.9	1316.3	1351.7	1370.6	1377.7
47.5°	2419.9	2176.5	1592.8	1205.2	1089.4	1113.0	1186.3	1257.2	1297.4	1309.2	1316.3
50°	2483.7	2219.0	1564.4	1153.2	1044.5	1065.8	1131.9	1183.9	1214.7	1228.8	1233.6
52.5°	2545.1	2249.7	1519.5	1098.9	997.2	1011.4	1065.8	1115.4	1136.7	1141.4	1155.6
55°	2585.3	2266.3	1455.7	1035.1	950.0	954.7	994.9	1039.8	1051.6	1054.0	1054.0
57.5°	2613.6	2256.8	1380.1	971.3	902.7	902.7	926.4	961.8	966.5	968.9	973.6
60°	2618.4	2223.7	1283.2	912.2	850.7	843.6	867.3	888.5	890.9	895.6	900.4
62.5°	2582.9	2150.5	1179.2	855.5	801.1	784.6	805.8	827.1	838.9	846.0	850.7
65°	2474.2	2001.6	1061.1	798.7	753.8	725.5	751.5	786.9	810.6	812.9	812.9
67.5°	2247.4	1760.5	935.8	739.7	697.1	671.1	704.2	742.0	770.4	782.2	779.8
70°	1904.7	1493.5	820.0	678.2	640.4	623.9	659.3	701.9	725.5	734.9	739.7
72.5°	1533.7	1195.8	718.4	616.8	590.8	581.3	616.8	659.3	692.4	706.6	708.9
75°	1193.4	940.5	633.3	553.0	531.7	534.1	571.9	614.4	649.9	657.0	635.7
77.5°	926.4	749.1	553.0	477.4	465.5	482.1	519.9	564.8	586.1	593.1	579.0
80°	668.8	574.2	446.6	375.7	375.7	401.7	434.8	486.8	493.9	484.4	489.2
82.5°	316.7	278.9	219.8	182.0	170.1	189.1	200.9	217.4	236.3	241.0	229.2
85°	42.5	28.4	21.3	23.6	21.3	14.2	9.5	9.5	9.5	7.1	7.1
87.5°	7.1	7.1	4.7	4.7	4.7	4.7	4.7	4.7	2.4	2.4	2.4
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: SP1-2407-157-3

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-30-727-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-30-727-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-3  
 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-30-727-U-5WQ-2**  
 Description: Epic Modern Light Square 30W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2747  
 CIE u': 0.2606  
 CIE v': 0.5257  
 Duv: -0.0005  
 CIE x: 0.4552  
 CIE y: 0.4082  
 CIE z: 0.1366  
 Peak Wavelength (nm): 597  
 Dominant Wavelength (nm): 584  
 Purity: 59.16856  
 Rf: 75.5  
 Rg: 93.6

CRI (Ra):	71.7		
R1:	68.1	R9:	-35.3
R2:	83.9	R10:	64.2
R3:	94.7	R11:	61.7
R4:	66.3	R12:	53.9
R5:	67.4	R13:	71.2
R6:	78.7	R14:	97.6
R7:	75.0	R15:	59.3
R8:	39.4		



**Test Conditions**

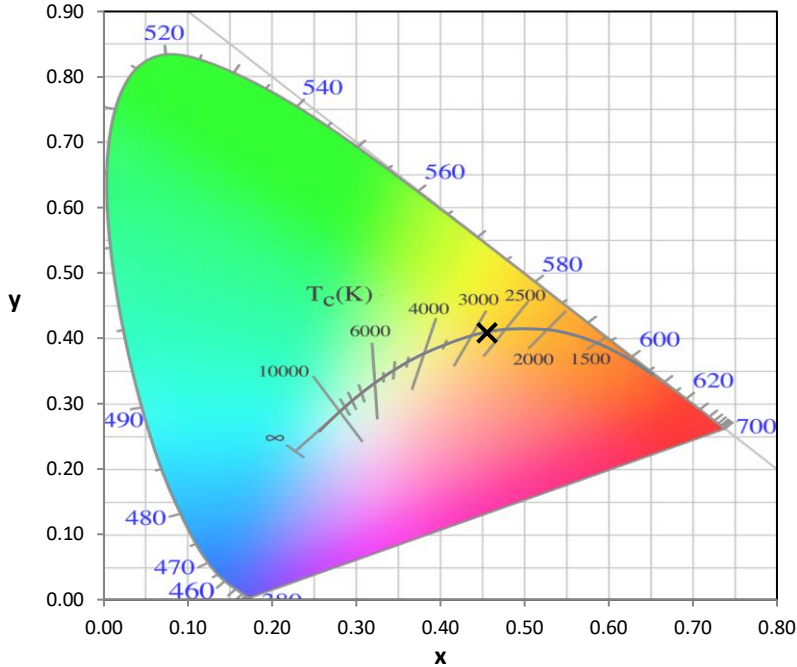
Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-157-3

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 2700K 4-step quadrangle

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**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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.13**

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.04

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

**Summary**

$R_f = 75.5$   
 $R_g = 93.6$   
 $CIE R_a = 71.7$   
 $R_g = -35.3$



**Color Vector Graphics**





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

CES01 = 86	CES26 = 68	CES51 = 87	CES76 = 63
CES02 = 63	CES27 = 90	CES52 = 85	CES77 = 79
CES03 = 31	CES28 = 87	CES53 = 78	CES78 = 66
CES04 = 71	CES29 = 71	CES54 = 86	CES79 = 87
CES05 = 50	CES30 = 85	CES55 = 84	CES80 = 85
CES06 = 52	CES31 = 74	CES56 = 75	CES81 = 67
CES07 = 42	CES32 = 66	CES57 = 75	CES82 = 93
CES08 = 41	CES33 = 80	CES58 = 76	CES83 = 91
CES09 = 29	CES34 = 79	CES59 = 85	CES84 = 89
CES10 = 77	CES35 = 89	CES60 = 90	CES85 = 72
CES11 = 60	CES36 = 93	CES61 = 81	CES86 = 59
CES12 = 66	CES37 = 88	CES62 = 91	CES87 = 77
CES13 = 43	CES38 = 93	CES63 = 77	CES88 = 79
CES14 = 74	CES39 = 97	CES64 = 67	CES89 = 65
CES15 = 72	CES40 = 93	CES65 = 66	CES90 = 80
CES16 = 48	CES41 = 93	CES66 = 63	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 61	CES92 = 55
CES18 = 57	CES43 = 78	CES68 = 68	CES93 = 72
CES19 = 73	CES44 = 99	CES69 = 78	CES94 = 48
CES20 = 67	CES45 = 85	CES70 = 63	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 61	CES96 = 76
CES22 = 80	CES47 = 86	CES72 = 86	CES97 = 81
CES23 = 92	CES48 = 74	CES73 = 56	CES98 = 76
CES24 = 91	CES49 = 79	CES74 = 93	CES99 = 64
CES25 = 73	CES50 = 86	CES75 = 66	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)