

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: P870449

Luminaire Tested: **MEM2-HSN-SA-100-830-U-T4W**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870449  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-100-830-U-T4W  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 100W 80CRI 3000K  
FITXURE w/ TYPE IV WIDE DISTRIBUTION OPTIC  
Light Source: (20) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

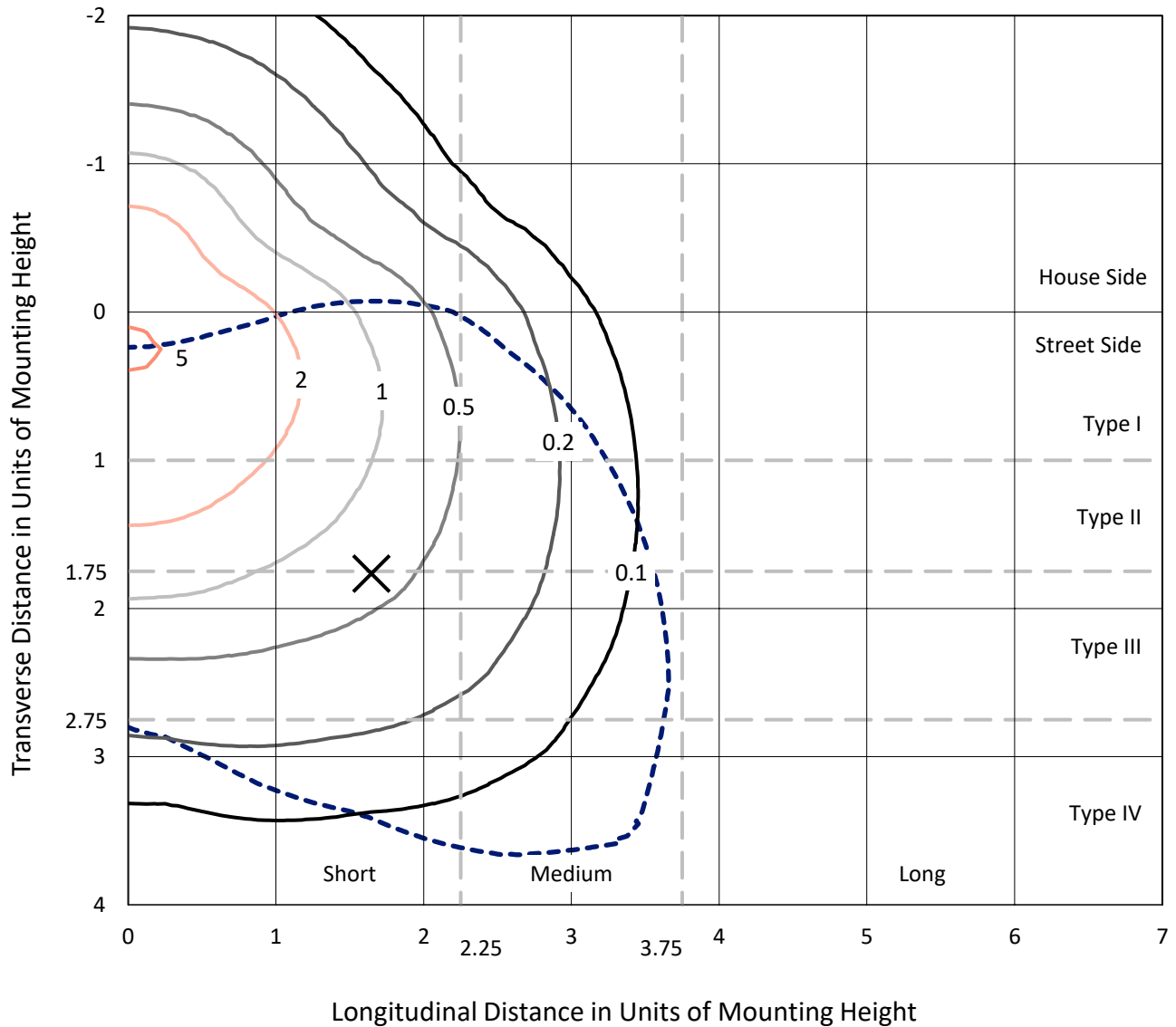
Lumens per Lamp: N/A  
Luminaire Lumens: 11050.3 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

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

REPORT NUMBER: P870449  
 CATALOG NUMBER: MEM2-HSN-SA-100-830-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

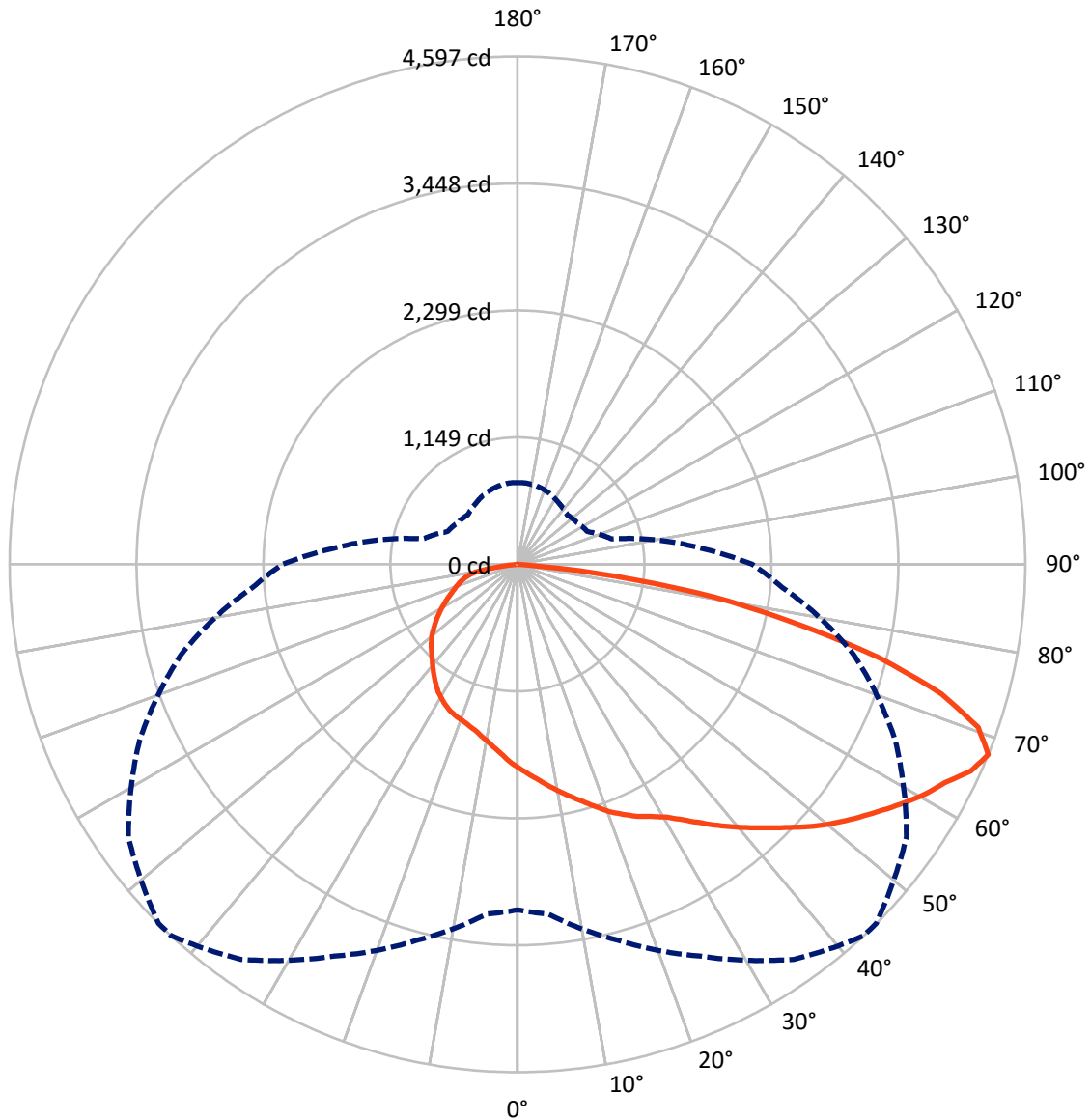
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.3 fc  
 Type IV - Short - N/A

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CATALOG NUMBER: MEM2-HSN-SA-100-830-U-T4W

### 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	2972.6	0.0	2972.6
	% Fixture	26.9	0.0	26.9
<b>Street Side</b>	Lumens	8077.7	0.0	8077.7
	% Fixture	73.1	0.0	73.1
<b>Total</b>	Lumens	11050.3	0.0	11050.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.5	1.6
10°-20°	539.1	4.9
20°-30°	919.8	8.3
30°-40°	1341.5	12.1
40°-50°	1802.2	16.3
50°-60°	2206.2	20.0
60°-70°	2321.8	21.0
70°-80°	1515.8	13.7
80°-90°	227.4	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°	11050.3	100.0
0°-180°	11050.3	100.0

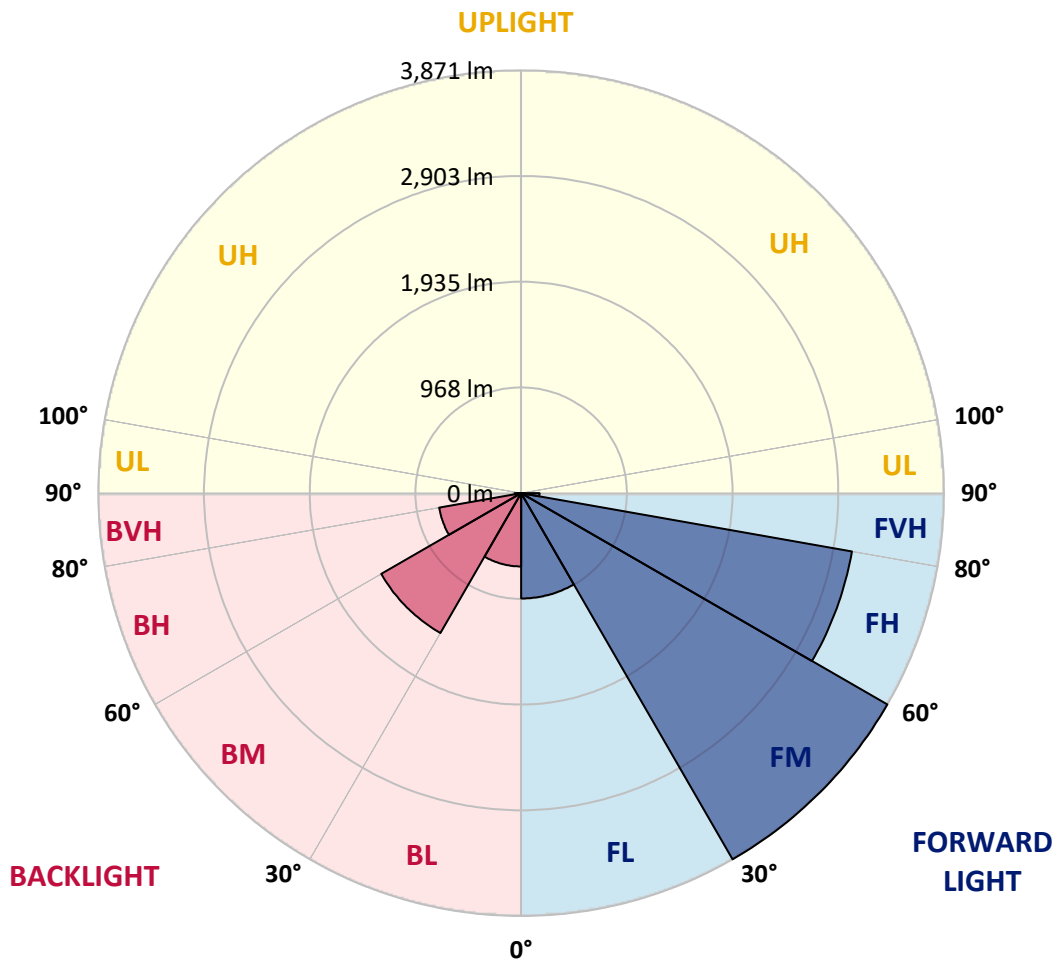


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 CATALOG NUMBER: MEM2-HSN-SA-100-830-U-T4W

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	964.4	8.7			
FM	(30°-60°)	3870.8	35.0			
FH	(60°-80°)	3074.8	27.8			G2/5000
FVH	(80°-90°)	167.8	1.5			G2/225
BL	(0°-30°)	671.1	6.1	B2/1000		
BM	(30°-60°)	1479.0	13.4	B2/2500		
BH	(60°-80°)	762.9	6.9	B2/1000		G2/1000
BVH	(80°-90°)	59.6	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type IV Short





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CATALOG NUMBER: MEM2-HSN-SA-100-830-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6
2.5°	1929.6	1927.4	1920.6	1916.2	1902.8	1900.5	1900.5	1887.1	1871.5	1862.5	1853.6
5°	2016.8	2005.6	2001.1	1992.2	1969.8	1956.4	1960.9	1936.3	1905.0	1882.6	1858.0
7.5°	2095.1	2090.6	2074.9	2063.7	2036.9	2023.5	2019.0	1981.0	1940.8	1907.2	1867.0
10°	2189.0	2177.8	2168.8	2146.5	2110.7	2090.6	2083.9	2034.7	1983.3	1938.5	1884.9
12.5°	2273.9	2260.5	2249.3	2227.0	2191.2	2157.7	2148.7	2092.8	2028.0	1967.6	1900.5
15°	2338.8	2341.0	2329.8	2309.7	2269.5	2229.2	2222.5	2148.7	2070.5	1996.7	1916.2
17.5°	2399.1	2408.1	2401.4	2388.0	2347.7	2307.5	2300.8	2218.0	2124.1	2030.2	1934.1
20°	2457.3	2457.3	2455.0	2446.1	2417.0	2390.2	2376.8	2294.0	2175.5	2066.0	1958.7
22.5°	2490.8	2499.8	2499.8	2499.8	2481.9	2459.5	2455.0	2374.5	2244.9	2110.7	1981.0
25°	2542.2	2553.4	2553.4	2548.9	2533.3	2526.6	2519.9	2443.9	2311.9	2162.1	2005.6
27.5°	2651.8	2649.6	2631.7	2609.3	2587.0	2584.7	2575.8	2522.1	2390.2	2218.0	2039.2
30°	2803.8	2808.3	2785.9	2716.6	2665.2	2654.0	2656.3	2609.3	2481.9	2282.9	2077.2
32.5°	3036.4	3036.4	2949.2	2859.7	2785.9	2756.9	2750.2	2709.9	2575.8	2354.4	2119.6
35°	3210.8	3204.1	3154.9	3049.8	2958.1	2875.4	2864.2	2810.5	2680.9	2434.9	2166.6
37.5°	3342.7	3356.1	3318.1	3237.6	3148.2	3005.1	2982.7	2906.7	2777.0	2513.2	2213.6
40°	3597.6	3564.0	3472.4	3398.6	3291.3	3132.5	3112.4	3018.5	2875.4	2600.4	2271.7
42.5°	3783.2	3736.2	3631.1	3532.7	3398.6	3260.0	3242.1	3139.2	2989.4	2698.7	2332.1
45°	4049.2	3944.2	3798.8	3711.6	3521.6	3398.6	3376.2	3264.4	3107.9	2803.8	2408.1
47.5°	4306.4	4123.0	3968.7	3928.5	3655.7	3548.4	3530.5	3400.8	3235.4	2917.9	2481.9
50°	4272.8	4152.1	4100.7	4062.7	3772.0	3689.3	3671.4	3539.5	3365.1	3038.6	2555.6
52.5°	4187.9	4199.0	4201.3	4109.6	3881.5	3821.2	3803.3	3689.3	3499.2	3143.7	2627.2
55°	4277.3	4290.7	4288.5	4149.9	4009.0	3953.1	3941.9	3841.3	3628.9	3242.1	2678.6
57.5°	4413.7	4369.0	4362.3	4250.5	4145.4	4094.0	4080.5	3993.3	3738.4	3313.6	2718.9
60°	4438.3	4348.9	4377.9	4272.8	4248.2	4232.6	4228.1	4125.3	3841.3	3371.8	2734.5
62.5°	4163.3	4147.6	4261.7	4219.2	4301.9	4346.6	4348.9	4219.2	3897.2	3394.1	2718.9
65°	3693.7	3756.3	4002.3	4125.3	4382.4	4509.8	4505.4	4275.1	3890.5	3329.3	2622.7
67.5°	3128.0	3177.2	3523.8	3912.8	4364.5	4597.0	4594.8	4299.7	3774.2	3150.4	2405.8
70°	2372.3	2526.6	3018.5	3530.5	4123.0	4424.9	4462.9	4161.0	3508.1	2824.0	2077.2
72.5°	1804.4	1829.0	2423.7	2960.3	3691.5	4015.7	4009.0	3718.3	3063.2	2379.0	1730.6
75°	1281.2	1334.8	1824.5	2294.0	3025.2	3385.2	3369.5	3049.8	2443.9	1851.3	1323.7
77.5°	954.7	974.9	1334.8	1701.5	2262.7	2587.0	2580.2	2253.8	1797.7	1359.4	986.0
80°	697.6	731.1	961.4	1187.3	1533.8	1813.3	1804.4	1495.8	1153.7	950.3	720.0
82.5°	391.3	415.9	559.0	717.7	809.4	896.6	858.6	717.7	525.4	409.2	353.3
85°	11.2	13.4	20.1	24.6	42.5	71.5	78.3	69.3	82.7	51.4	55.9
87.5°	4.5	4.5	4.5	4.5	4.5	6.7	6.7	6.7	6.7	6.7	6.7
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: P870449

CATALOG NUMBER: MEM2-HSN-SA-100-830-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6	1844.6
2.5°	1849.1	1840.2	1822.3	1811.1	1804.4	1795.4	1782.0	1773.1	1766.4	1775.3	1773.1
5°	1846.9	1829.0	1797.7	1775.3	1753.0	1735.1	1714.9	1699.3	1690.4	1694.8	1692.6
7.5°	1846.9	1824.5	1775.3	1739.5	1706.0	1679.2	1656.8	1636.7	1627.7	1630.0	1627.7
10°	1855.8	1824.5	1759.7	1708.2	1663.5	1632.2	1607.6	1589.7	1583.0	1589.7	1592.0
12.5°	1864.8	1824.5	1746.2	1681.4	1623.3	1589.7	1567.4	1556.2	1560.7	1562.9	1565.1
15°	1869.2	1822.3	1732.8	1650.1	1585.3	1549.5	1536.1	1533.8	1545.0	1556.2	1558.4
17.5°	1880.4	1820.0	1712.7	1618.8	1551.7	1522.7	1515.9	1524.9	1547.3	1562.9	1567.4
20°	1893.8	1824.5	1690.4	1580.8	1518.2	1495.8	1507.0	1527.1	1554.0	1576.3	1580.8
22.5°	1907.2	1826.7	1670.2	1547.3	1482.4	1477.9	1502.5	1531.6	1562.9	1585.3	1589.7
25°	1922.9	1826.7	1643.4	1504.8	1446.6	1453.3	1491.4	1529.4	1558.4	1587.5	1592.0
27.5°	1938.5	1831.2	1614.3	1457.8	1401.9	1422.0	1469.0	1515.9	1547.3	1576.3	1583.0
30°	1965.4	1840.2	1589.7	1417.6	1357.2	1384.0	1439.9	1493.6	1527.1	1558.4	1565.1
32.5°	1992.2	1853.6	1569.6	1375.1	1312.5	1343.8	1406.4	1466.8	1502.5	1531.6	1536.1
35°	2028.0	1871.5	1554.0	1332.6	1267.8	1292.4	1359.4	1426.5	1466.8	1489.1	1500.3
37.5°	2066.0	1896.1	1540.5	1294.6	1218.6	1240.9	1312.5	1384.0	1426.5	1448.9	1453.3
40°	2112.9	1929.6	1531.6	1258.8	1171.6	1189.5	1261.1	1339.3	1379.6	1395.2	1404.2
42.5°	2164.4	1965.4	1524.9	1223.0	1120.2	1138.1	1214.1	1290.1	1330.4	1343.8	1350.5
45°	2229.2	2012.3	1520.4	1185.0	1077.7	1093.4	1169.4	1245.4	1278.9	1296.8	1303.5
47.5°	2289.6	2059.3	1507.0	1140.3	1030.8	1053.1	1122.4	1189.5	1227.5	1238.7	1245.4
50°	2349.9	2099.5	1480.2	1091.1	988.3	1008.4	1071.0	1120.2	1149.3	1162.7	1167.1
52.5°	2408.1	2128.6	1437.7	1039.7	943.6	957.0	1008.4	1055.4	1075.5	1079.9	1093.4
55°	2446.1	2144.2	1377.3	979.3	898.8	903.3	941.3	983.8	995.0	997.2	997.2
57.5°	2472.9	2135.3	1305.8	919.0	854.1	854.1	876.5	910.0	914.5	916.7	921.2
60°	2477.4	2104.0	1214.1	863.1	804.9	798.2	820.6	840.7	842.9	847.4	851.9
62.5°	2443.9	2034.7	1115.7	809.4	758.0	742.3	762.4	782.6	793.7	800.5	804.9
65°	2341.0	1893.8	1003.9	755.7	713.3	686.4	711.0	744.6	766.9	769.2	769.2
67.5°	2126.4	1665.8	885.4	699.8	659.6	635.0	666.3	702.1	728.9	740.1	737.9
70°	1802.1	1413.1	775.9	641.7	605.9	590.3	623.8	664.1	686.4	695.4	699.8
72.5°	1451.1	1131.4	679.7	583.6	559.0	550.0	583.6	623.8	655.1	668.5	670.8
75°	1129.1	889.9	599.2	523.2	503.1	505.3	541.1	581.3	614.9	621.6	601.5
77.5°	876.5	708.8	523.2	451.7	440.5	456.1	491.9	534.4	554.5	561.2	547.8
80°	632.8	543.3	422.6	355.5	355.5	380.1	411.4	460.6	467.3	458.4	462.8
82.5°	299.6	263.8	207.9	172.2	161.0	178.9	190.1	205.7	223.6	228.1	216.9
85°	40.2	26.8	20.1	22.4	20.1	13.4	8.9	8.9	8.9	6.7	6.7
87.5°	6.7	6.7	4.5	4.5	4.5	4.5	4.5	4.5	2.2	2.2	2.2
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

Streetworks

Report Number: SP1-2407-157-7

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-830-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-7  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 09/05/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-40-830-U-5WQ**  
 Description: Epic Modern Light Square 40W 5WQ Optic

**Spectral Parameters**

CCT (K): 3126  
 CIE u': 0.2465  
 CIE v': 0.5182  
 Duv: -0.0004  
 CIE x: 0.4277  
 CIE y: 0.3997  
 CIE z: 0.1727  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 582  
 Purity: 48.31913  
 Rf: 84.4  
 Rg: 94.7

CRI (Ra):	82.6		
R1:	81.4	R9:	5.1
R2:	92.2	R10:	82.2
R3:	94.9	R11:	79.8
R4:	80.1	R12:	70.4
R5:	81.8	R13:	84.2
R6:	90.5	R14:	97.9
R7:	81.8	R15:	73.6
R8:	58.0		



**Test Conditions**

Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.3

REPORT NUMBER: SP1-2407-157-7

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: SP1-2407-157-7

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: SP1-2407-157-7

**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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.42**

$\lambda$ (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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.79

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

**Summary**

$R_f = 84.4$   
 $R_g = 94.7$   
 $CIE R_a = 82.6$   
 $R_9 = 5.1$



**Color Vector Graphics**





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

CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 95
CES08 = 41	CES33 = 97	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 91
CES10 = 76	CES35 = 96	CES60 = 90	CES85 = 74
CES11 = 59	CES36 = 81	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 96	CES62 = 83	CES87 = 84
CES13 = 43	CES38 = 86	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 75
CES15 = 71	CES40 = 96	CES65 = 78	CES90 = 89
CES16 = 47	CES41 = 96	CES66 = 77	CES91 = 73
CES17 = 50	CES42 = 97	CES67 = 76	CES92 = 63
CES18 = 56	CES43 = 91	CES68 = 80	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 85	CES94 = 61
CES20 = 66	CES45 = 93	CES70 = 78	CES95 = 73
CES21 = 87	CES46 = 90	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 74	CES98 = 85
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 76
CES25 = 72	CES50 = 93	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)