

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: P870450

Luminaire Tested: **MEM2-HSN-SA-120-830-U-T4W**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870450  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: MEM2-HSN-SA-120-830-U-T4W  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 120W 80CRI 3000K  
FITXURE w/ TYPE IV WIDE DISTRIBUTION OPTIC  
Light Source: (20) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

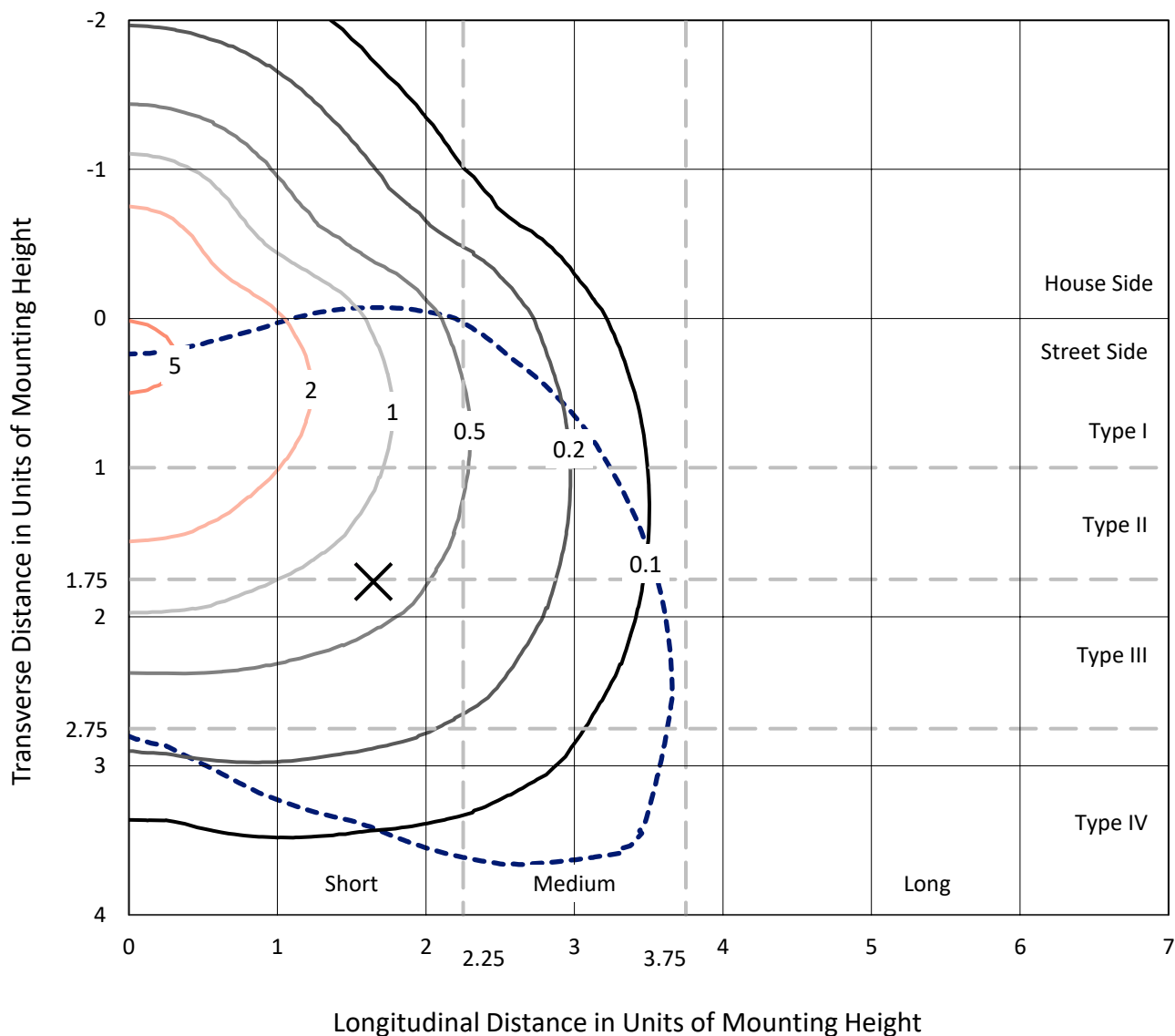
Lumens per Lamp: N/A  
Luminaire Lumens: 11837.7 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 101  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.45%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P870450  
 CATALOG NUMBER: MEM2-HSN-SA-120-830-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

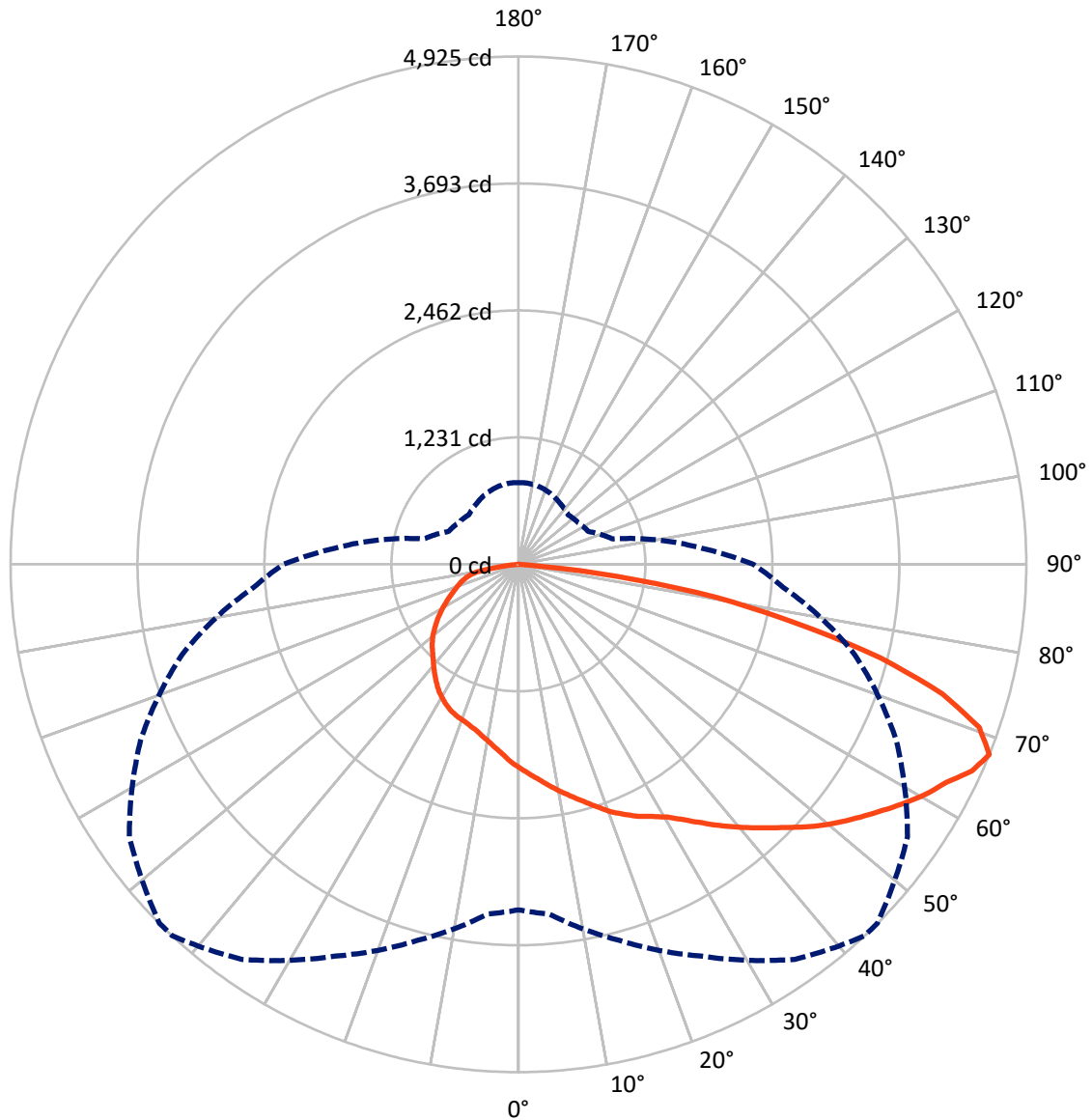
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P870450  
CATALOG NUMBER: MEM2-HSN-SA-120-830-U-T4W

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P870450  
 CATALOG NUMBER: MEM2-HSN-SA-120-830-U-T4W

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3184.4	0.0	3184.4
	% Fixture	26.9	0.0	26.9
<b>Street Side</b>	Lumens	8653.3	0.0	8653.3
	% Fixture	73.1	0.0	73.1
<b>Total</b>	Lumens	11837.7	0.0	11837.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.1	1.6
10°-20°	577.5	4.9
20°-30°	985.4	8.3
30°-40°	1437.1	12.1
40°-50°	1930.6	16.3
50°-60°	2363.3	20.0
60°-70°	2487.3	21.0
70°-80°	1623.8	13.7
80°-90°	243.6	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°	11837.7	100.0
0°-180°	11837.7	100.0

**Coefficient of Utilization**



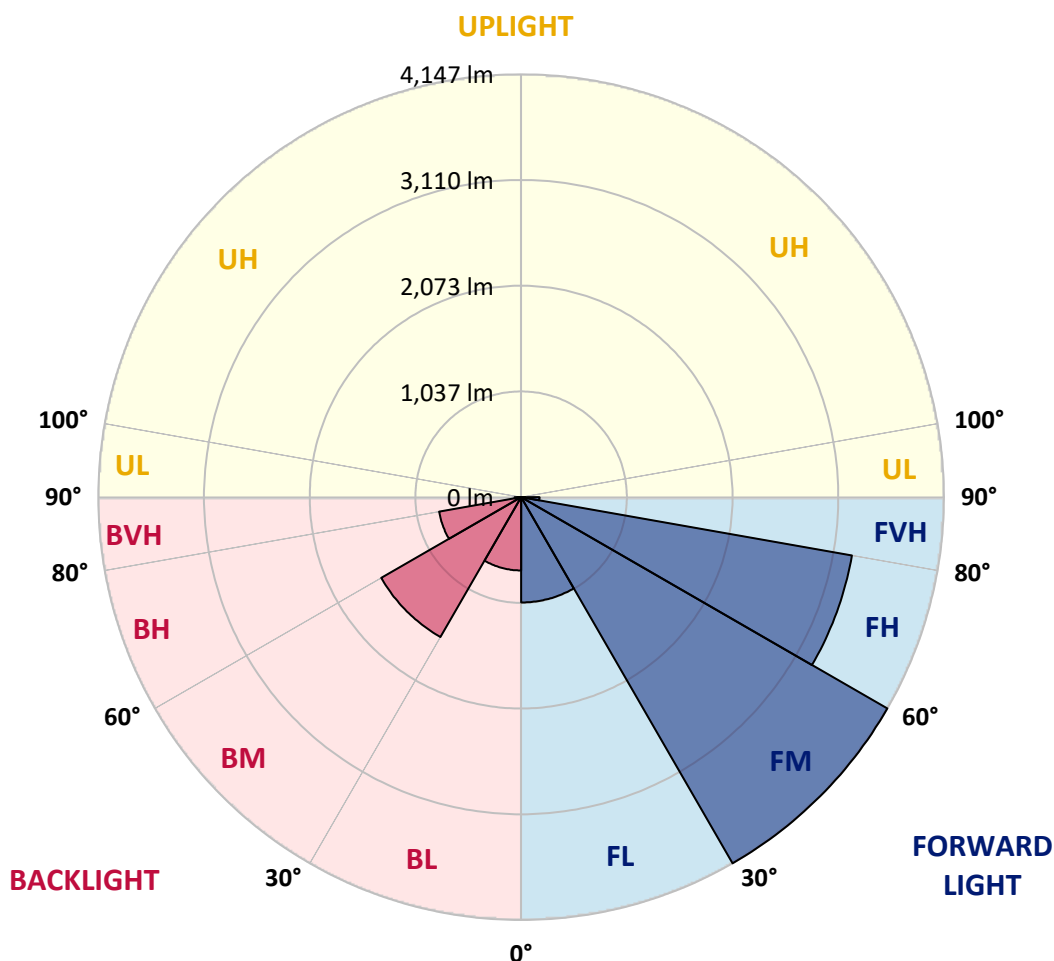
REPORT NUMBER: P870450  
 CATALOG NUMBER: MEM2-HSN-SA-120-830-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1033.1	8.7			
FM (30°-60°)	4146.6	35.0			
FH (60°-80°)	3293.9	27.8			G2/5000
FVH (80°-90°)	179.7	1.5			G2/225
BL (0°-30°)	718.9	6.1	B2/1000		
BM (30°-60°)	1584.4	13.4	B2/2500		
BH (60°-80°)	817.2	6.9	B2/1000		G2/1000
BVH (80°-90°)	63.9	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





REPORT NUMBER: P870450

CATALOG NUMBER: MEM2-HSN-SA-120-830-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1
2.5°	2067.1	2064.7	2057.5	2052.7	2038.3	2035.9	2035.9	2021.6	2004.8	1995.2	1985.6
5°	2160.5	2148.5	2143.7	2134.1	2110.2	2095.8	2100.6	2074.3	2040.7	2016.8	1990.4
7.5°	2244.3	2239.5	2222.8	2210.8	2182.0	2167.7	2162.9	2122.2	2079.1	2043.1	2000.0
10°	2344.9	2332.9	2323.4	2299.4	2261.1	2239.5	2232.3	2179.7	2124.6	2076.7	2019.2
12.5°	2435.9	2421.6	2409.6	2385.6	2347.3	2311.4	2301.8	2241.9	2172.5	2107.8	2035.9
15°	2505.4	2507.8	2495.8	2474.3	2431.2	2388.0	2380.9	2301.8	2218.0	2138.9	2052.7
17.5°	2570.1	2579.7	2572.5	2558.1	2515.0	2471.9	2464.7	2376.1	2275.5	2174.9	2071.9
20°	2632.4	2632.4	2630.0	2620.4	2589.2	2560.5	2546.1	2457.5	2330.6	2213.2	2098.2
22.5°	2668.3	2677.9	2677.9	2677.9	2658.7	2634.7	2630.0	2543.7	2404.8	2261.1	2122.2
25°	2723.4	2735.3	2735.3	2730.6	2713.8	2706.6	2699.4	2618.0	2476.7	2316.2	2148.5
27.5°	2840.7	2838.3	2819.2	2795.2	2771.3	2768.9	2759.3	2701.8	2560.5	2376.1	2184.4
30°	3003.6	3008.4	2984.4	2910.2	2855.1	2843.1	2845.5	2795.2	2658.7	2445.5	2225.2
32.5°	3252.7	3252.7	3159.3	3063.5	2984.4	2953.3	2946.1	2903.0	2759.3	2522.2	2270.7
35°	3439.5	3432.4	3379.7	3267.1	3168.9	3080.3	3068.3	3010.8	2871.9	2608.4	2321.0
37.5°	3580.9	3595.2	3554.5	3468.3	3372.5	3219.2	3195.2	3113.8	2974.9	2692.2	2371.3
40°	3853.9	3818.0	3719.8	3640.7	3525.8	3355.7	3334.2	3233.6	3080.3	2785.6	2433.5
42.5°	4052.7	4002.4	3889.8	3784.5	3640.7	3492.2	3473.1	3362.9	3202.4	2891.0	2498.2
45°	4337.8	4225.2	4069.5	3976.1	3772.5	3640.7	3616.8	3497.0	3329.4	3003.6	2579.7
47.5°	4613.2	4416.8	4251.5	4208.4	3916.2	3801.2	3782.1	3643.1	3465.9	3125.8	2658.7
50°	4577.3	4447.9	4392.8	4352.1	4040.7	3952.1	3933.0	3791.6	3604.8	3255.1	2737.7
52.5°	4486.3	4498.2	4500.6	4402.4	4158.1	4093.4	4074.3	3952.1	3748.5	3367.7	2814.4
55°	4582.1	4596.4	4594.0	4445.5	4294.6	4234.8	4222.8	4115.0	3887.4	3473.1	2869.5
57.5°	4728.2	4680.3	4673.1	4553.3	4440.7	4385.7	4371.3	4277.9	4004.8	3549.7	2912.6
60°	4754.5	4658.7	4689.8	4577.3	4550.9	4534.2	4529.4	4419.2	4115.0	3612.0	2929.4
62.5°	4459.9	4443.1	4565.3	4519.8	4608.4	4656.3	4658.7	4519.8	4174.9	3636.0	2912.6
65°	3956.9	4024.0	4287.5	4419.2	4694.6	4831.2	4826.4	4579.7	4167.7	3566.5	2809.6
67.5°	3350.9	3403.6	3774.9	4191.6	4675.5	4924.6	4922.2	4606.0	4043.1	3374.9	2577.3
70°	2541.3	2706.6	3233.6	3782.1	4416.8	4740.1	4780.9	4457.5	3758.1	3025.2	2225.2
72.5°	1932.9	1959.3	2596.4	3171.3	3954.5	4301.8	4294.6	3983.3	3281.5	2548.5	1853.9
75°	1372.5	1429.9	1954.5	2457.5	3240.7	3626.4	3609.6	3267.1	2618.0	1983.2	1418.0
77.5°	1022.8	1044.3	1429.9	1822.8	2424.0	2771.3	2764.1	2414.4	1925.8	1456.3	1056.3
80°	747.3	783.2	1029.9	1271.9	1643.1	1942.5	1932.9	1602.4	1235.9	1018.0	771.3
82.5°	419.2	445.5	598.8	768.9	867.1	960.5	919.8	768.9	562.9	438.3	378.4
85°	12.0	14.4	21.6	26.3	45.5	76.6	83.8	74.3	88.6	55.1	59.9
87.5°	4.8	4.8	4.8	4.8	4.8	7.2	7.2	7.2	7.2	7.2	7.2
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: P870450

CATALOG NUMBER: MEM2-HSN-SA-120-830-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1	1976.1
2.5°	1980.9	1971.3	1952.1	1940.1	1932.9	1923.4	1909.0	1899.4	1892.2	1901.8	1899.4
5°	1978.5	1959.3	1925.8	1901.8	1877.9	1858.7	1837.1	1820.4	1810.8	1815.6	1813.2
7.5°	1978.5	1954.5	1901.8	1863.5	1827.6	1798.8	1774.9	1753.3	1743.7	1746.1	1743.7
10°	1988.0	1954.5	1885.0	1830.0	1782.0	1748.5	1722.2	1703.0	1695.8	1703.0	1705.4
12.5°	1997.6	1954.5	1870.7	1801.2	1738.9	1703.0	1679.1	1667.1	1671.9	1674.3	1676.7
15°	2002.4	1952.1	1856.3	1767.7	1698.2	1659.9	1645.5	1643.1	1655.1	1667.1	1669.5
17.5°	2014.4	1949.7	1834.7	1734.1	1662.3	1631.1	1624.0	1633.5	1657.5	1674.3	1679.1
20°	2028.8	1954.5	1810.8	1693.4	1626.4	1602.4	1614.4	1635.9	1664.7	1688.6	1693.4
22.5°	2043.1	1956.9	1789.2	1657.5	1588.0	1583.2	1609.6	1640.7	1674.3	1698.2	1703.0
25°	2059.9	1956.9	1760.5	1612.0	1549.7	1556.9	1597.6	1638.3	1669.5	1700.6	1705.4
27.5°	2076.7	1961.7	1729.4	1561.7	1501.8	1523.4	1573.7	1624.0	1657.5	1688.6	1695.8
30°	2105.4	1971.3	1703.0	1518.6	1453.9	1482.6	1542.5	1600.0	1635.9	1669.5	1676.7
32.5°	2134.1	1985.6	1681.4	1473.1	1406.0	1439.5	1506.6	1571.3	1609.6	1640.7	1645.5
35°	2172.5	2004.8	1664.7	1427.6	1358.1	1384.4	1456.3	1528.2	1571.3	1595.2	1607.2
37.5°	2213.2	2031.2	1650.3	1386.8	1305.4	1329.3	1406.0	1482.6	1528.2	1552.1	1556.9
40°	2263.5	2067.1	1640.7	1348.5	1255.1	1274.3	1350.9	1434.7	1477.9	1494.6	1504.2
42.5°	2318.6	2105.4	1633.5	1310.2	1200.0	1219.2	1300.6	1382.0	1425.2	1439.5	1446.7
45°	2388.0	2155.7	1628.8	1269.5	1154.5	1171.3	1252.7	1334.1	1370.1	1389.2	1396.4
47.5°	2452.7	2206.0	1614.4	1221.6	1104.2	1128.2	1202.4	1274.3	1315.0	1327.0	1334.1
50°	2517.4	2249.1	1585.6	1168.9	1058.7	1080.2	1147.3	1200.0	1231.1	1245.5	1250.3
52.5°	2579.7	2280.3	1540.1	1113.8	1010.8	1025.2	1080.2	1130.5	1152.1	1156.9	1171.3
55°	2620.4	2297.0	1475.5	1049.1	962.9	967.7	1008.4	1053.9	1065.9	1068.3	1068.3
57.5°	2649.1	2287.4	1398.8	984.4	915.0	915.0	938.9	974.9	979.6	982.0	986.8
60°	2653.9	2253.9	1300.6	924.6	862.3	855.1	879.0	900.6	903.0	907.8	912.6
62.5°	2618.0	2179.7	1195.2	867.1	812.0	795.2	816.8	838.3	850.3	857.5	862.3
65°	2507.8	2028.8	1075.5	809.6	764.1	735.3	761.7	797.6	821.6	824.0	824.0
67.5°	2277.9	1784.4	948.5	749.7	706.6	680.2	713.8	752.1	780.8	792.8	790.4
70°	1930.6	1513.8	831.1	687.4	649.1	632.3	668.3	711.4	735.3	744.9	749.7
72.5°	1554.5	1212.0	728.1	625.2	598.8	589.2	625.2	668.3	701.8	716.2	718.6
75°	1209.6	953.3	641.9	560.5	538.9	541.3	579.6	622.8	658.7	665.9	644.3
77.5°	938.9	759.3	560.5	483.8	471.9	488.6	526.9	572.5	594.0	601.2	586.8
80°	677.8	582.0	452.7	380.8	380.8	407.2	440.7	493.4	500.6	491.0	495.8
82.5°	321.0	282.6	222.8	184.4	172.5	191.6	203.6	220.4	239.5	244.3	232.3
85°	43.1	28.7	21.6	24.0	21.6	14.4	9.6	9.6	9.6	7.2	7.2
87.5°	7.2	7.2	4.8	4.8	4.8	4.8	4.8	4.8	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



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



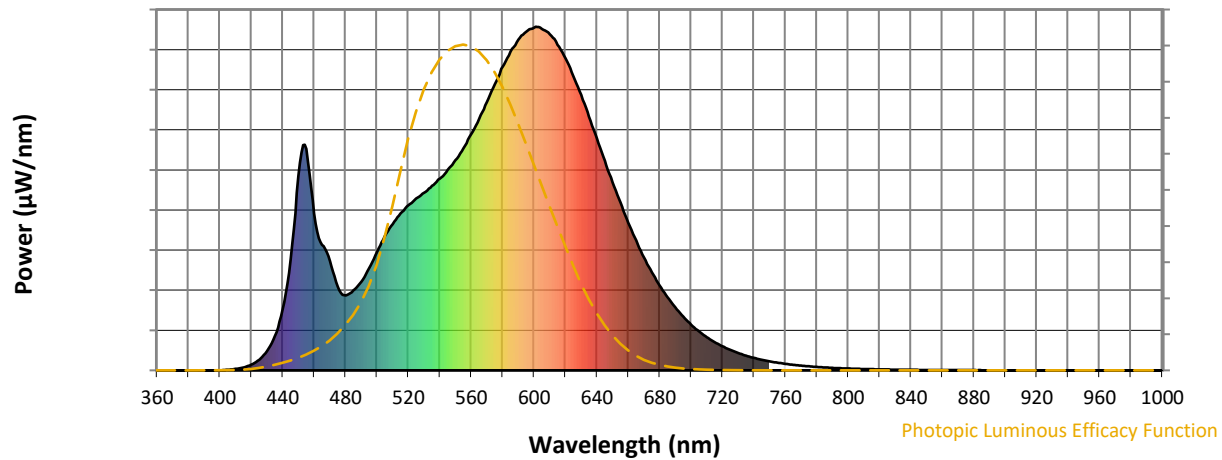
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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

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			

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)