

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: INVUE

Report Number: P871177

Luminaire Tested: **EMM2-HSN-SA2B-830-U-T3**

Issue Date: 09/05/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P871177  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA2B-830-U-T3  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 100W 80CRI 3000K  
FITXURE w/ TYPE III DISTRIBUTION OPTIC  
Light Source: (20) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

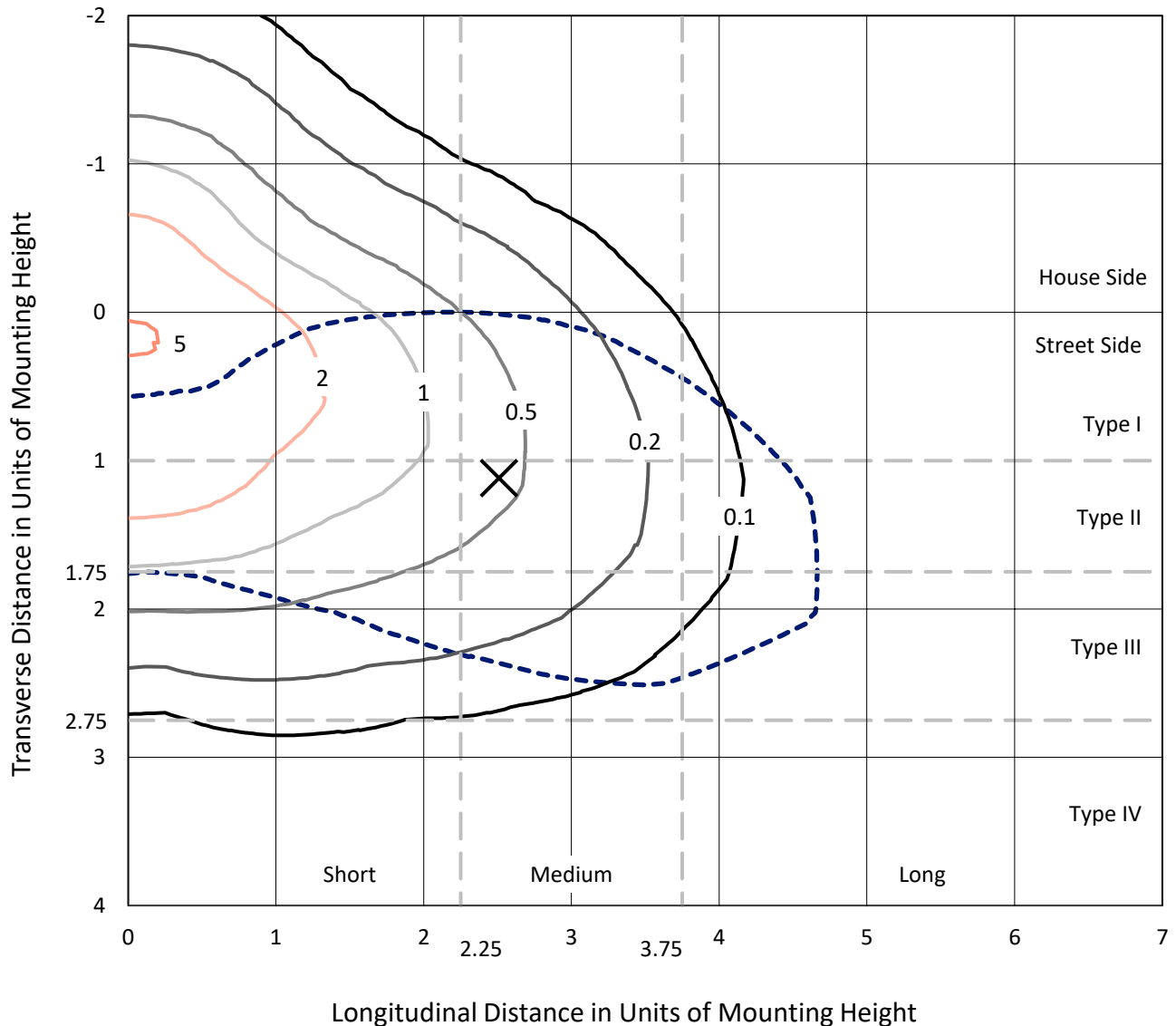
Lumens per Lamp: N/A  
Luminaire Lumens: 11253.2 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2

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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### Iso-Footcandle Lines of Horizontal Illumination

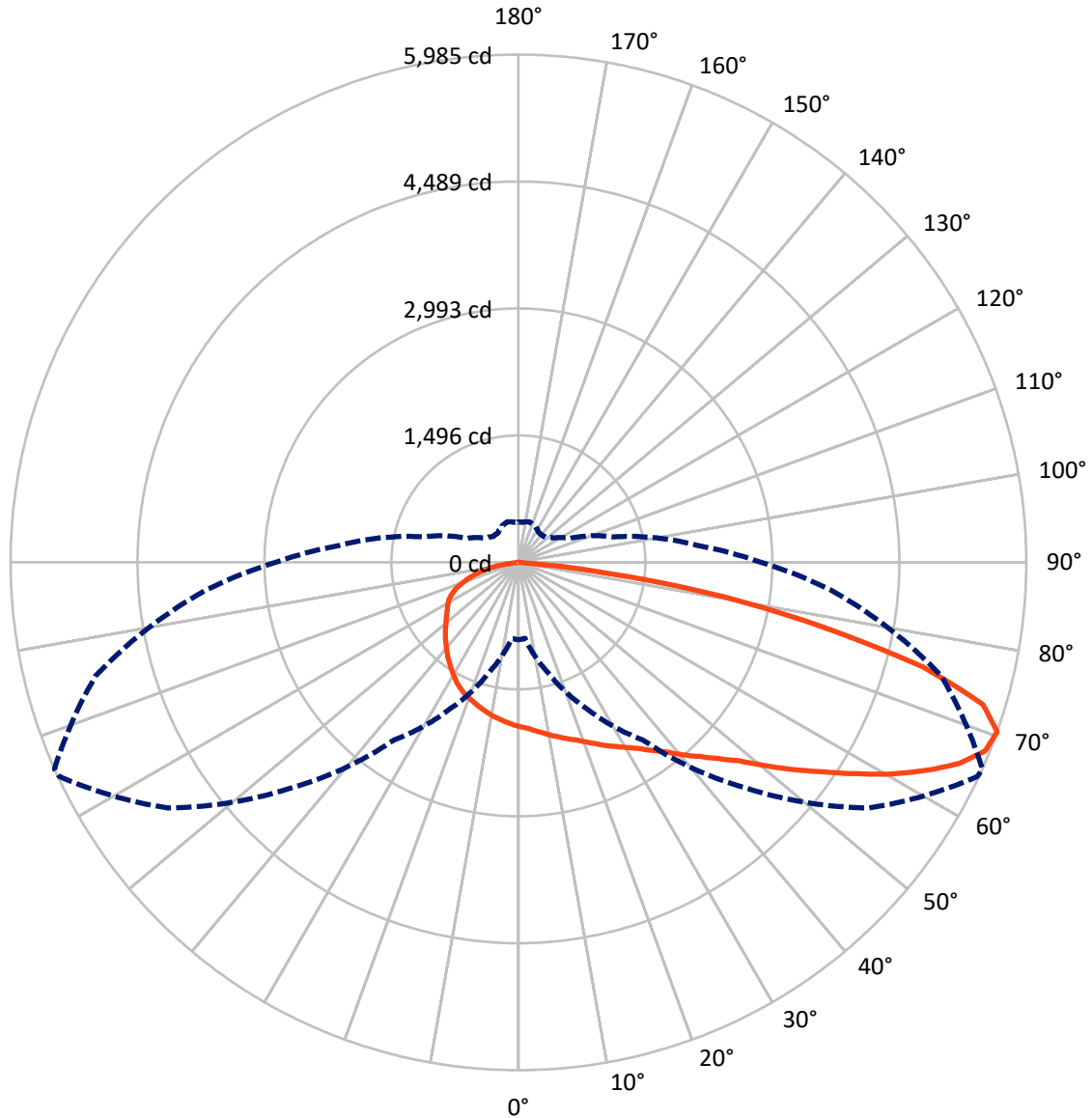
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.2 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2900.0	0.0	2900.0
	% Fixture	25.8	0.0	25.8
<b>Street Side</b>	Lumens	8353.2	0.0	8353.2
	% Fixture	74.2	0.0	74.2
<b>Total</b>	Lumens	11253.2	0.0	11253.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.3	1.6
10°-20°	551.9	4.9
20°-30°	927.0	8.2
30°-40°	1396.6	12.4
40°-50°	1896.1	16.8
50°-60°	2253.1	20.0
60°-70°	2299.4	20.4
70°-80°	1538.0	13.7
80°-90°	205.8	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°	11253.2	100.0
0°-180°	11253.2	100.0

**Coefficient of Utilization**



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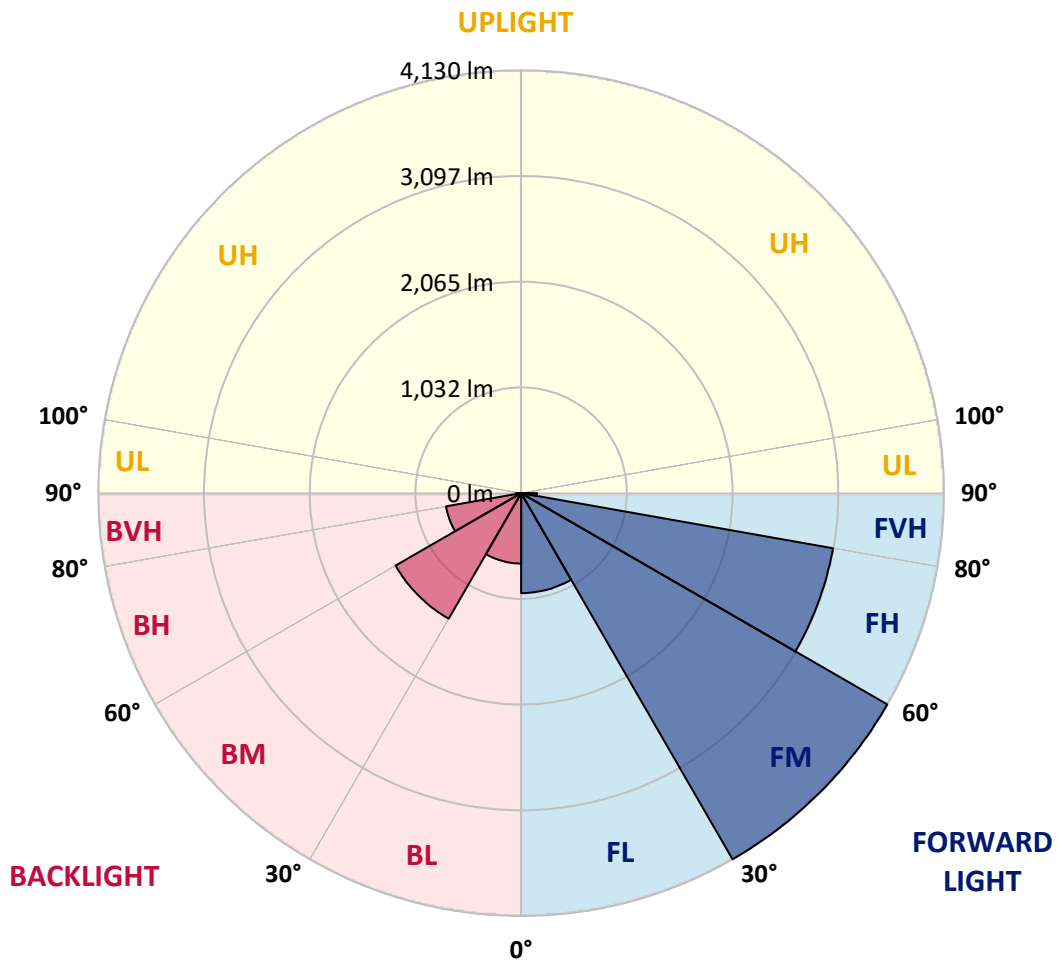
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	976.6	8.7			
FM (30°-60°)	4129.7	36.7			
FH (60°-80°)	3092.8	27.5			G2/5000
FVH (80°-90°)	154.1	1.4			G2/225
BL (0°-30°)	687.6	6.1	B2/1000		
BM (30°-60°)	1416.1	12.6	B2/2500		
BH (60°-80°)	744.7	6.6	B2/1000		G2/1000
BVH (80°-90°)	51.6	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2
2.5°	2005.5	1996.5	1989.8	1994.3	1980.9	1985.4	1969.7	1958.5	1956.3	1951.8	1947.4
5°	2068.1	2068.1	2056.9	2056.9	2041.3	2039.0	2016.7	1992.1	1992.1	1976.4	1958.5
7.5°	2135.2	2130.7	2117.3	2115.0	2097.1	2092.7	2068.1	2030.1	2027.8	1998.8	1971.9
10°	2182.1	2184.3	2175.4	2175.4	2162.0	2150.8	2115.0	2074.8	2070.3	2032.3	1989.8
12.5°	2217.9	2222.4	2220.1	2220.1	2208.9	2208.9	2168.7	2115.0	2110.6	2061.4	2001.0
15°	2255.9	2253.7	2260.4	2262.6	2258.1	2251.4	2222.4	2159.7	2157.5	2092.7	2016.7
17.5°	2289.4	2287.2	2289.4	2300.6	2302.8	2302.8	2273.8	2208.9	2200.0	2130.7	2030.1
20°	2309.5	2314.0	2323.0	2336.4	2343.1	2361.0	2336.4	2267.1	2258.1	2170.9	2059.1
22.5°	2385.6	2372.1	2378.9	2387.8	2396.7	2421.3	2399.0	2327.4	2320.7	2231.3	2092.7
25°	2515.2	2515.2	2499.6	2483.9	2472.8	2483.9	2466.0	2396.7	2392.3	2285.0	2130.7
27.5°	2741.0	2741.0	2707.5	2649.4	2575.6	2555.5	2542.1	2470.5	2457.1	2343.1	2155.3
30°	3027.2	3036.2	2975.8	2877.4	2741.0	2651.6	2618.1	2539.8	2533.1	2401.2	2193.3
32.5°	3333.5	3351.4	3306.7	3163.6	2940.0	2765.6	2712.0	2631.5	2615.8	2470.5	2242.5
35°	3608.5	3626.4	3566.0	3431.9	3145.7	2931.1	2823.8	2732.1	2723.2	2560.0	2316.3
37.5°	3832.1	3836.6	3798.6	3635.4	3317.9	3069.7	2962.4	2852.8	2834.9	2667.3	2394.5
40°	4069.1	4087.0	4049.0	3847.8	3474.4	3219.5	3101.0	2998.2	2982.5	2779.1	2468.3
42.5°	4317.3	4315.0	4315.0	4031.1	3630.9	3344.7	3250.8	3136.8	3127.8	2893.1	2548.8
45°	4469.3	4478.2	4453.6	4140.6	3861.2	3474.4	3396.1	3313.4	3297.8	3051.8	2653.9
47.5°	4507.3	4487.2	4375.4	4225.6	4120.5	3608.5	3579.5	3530.3	3494.5	3226.2	2783.5
50°	4455.9	4424.6	4359.7	4263.6	4216.7	3769.5	3765.0	3789.6	3765.0	3438.6	2933.3
52.5°	4263.6	4259.1	4248.0	4270.3	4194.3	3896.9	3975.2	4060.1	4055.7	3655.5	3089.8
55°	3858.9	3888.0	4022.1	4163.0	4109.3	3984.1	4209.9	4373.2	4355.3	3910.4	3250.8
57.5°	3445.3	3474.4	3646.5	3981.9	4026.6	4078.0	4473.8	4728.6	4699.6	4187.6	3398.4
60°	3085.4	3054.1	3226.2	3709.1	3910.4	4163.0	4735.3	5088.6	5064.0	4464.8	3550.4
62.5°	2515.2	2546.5	2821.5	3311.2	3747.1	4216.7	4950.0	5415.0	5399.4	4719.7	3673.4
65°	1989.8	1947.4	2361.0	2893.1	3465.4	4198.8	5135.6	5721.3	5710.1	4970.1	3767.3
67.5°	1352.6	1323.6	1869.1	2477.2	3083.1	4055.7	5178.0	5927.0	5931.5	5117.7	3791.9
70°	912.2	898.8	1343.7	1904.9	2553.2	3747.1	5046.1	5969.5	5985.1	5155.7	3682.3
72.5°	673.0	670.7	983.7	1359.3	1900.4	3163.6	4686.2	5692.3	5721.3	4887.4	3360.4
75°	529.9	536.6	702.0	965.9	1267.7	2340.8	3941.7	4880.7	4925.4	4221.1	2790.2
77.5°	433.7	433.7	491.9	693.1	847.4	1453.2	2834.9	3572.8	3662.2	3257.5	2148.6
80°	351.0	357.7	364.4	482.9	561.2	829.5	1650.0	2383.3	2448.2	2269.3	1551.6
82.5°	192.3	205.7	199.0	250.4	281.7	384.6	655.1	963.6	1062.0	945.7	704.3
85°	13.4	8.9	15.7	20.1	24.6	38.0	51.4	71.5	67.1	96.1	49.2
87.5°	2.2	2.2	2.2	4.5	4.5	6.7	8.9	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2	1936.2
2.5°	1945.1	1933.9	1916.1	1911.6	1904.9	1895.9	1887.0	1873.6	1869.1	1873.6	1878.0
5°	1947.4	1931.7	1902.6	1884.7	1866.9	1851.2	1833.3	1815.4	1804.3	1806.5	1815.4
7.5°	1954.1	1931.7	1887.0	1857.9	1828.9	1804.3	1775.2	1755.1	1741.7	1743.9	1750.6
10°	1963.0	1931.7	1878.0	1828.9	1788.6	1752.8	1723.8	1699.2	1685.8	1683.5	1685.8
12.5°	1965.2	1929.5	1857.9	1797.6	1748.4	1701.4	1670.1	1647.8	1634.3	1627.6	1632.1
15°	1971.9	1922.8	1837.8	1764.0	1703.7	1654.5	1616.5	1589.6	1580.7	1576.2	1574.0
17.5°	1980.9	1920.5	1819.9	1730.5	1658.9	1603.0	1569.5	1542.7	1531.5	1527.0	1531.5
20°	1994.3	1922.8	1799.8	1696.9	1618.7	1562.8	1524.8	1498.0	1489.0	1486.8	1484.5
22.5°	2012.2	1927.2	1784.1	1665.6	1574.0	1518.1	1480.1	1462.2	1455.5	1457.7	1457.7
25°	2030.1	1931.7	1761.8	1623.2	1527.0	1468.9	1442.1	1428.7	1433.1	1442.1	1442.1
27.5°	2045.7	1929.5	1730.5	1578.4	1471.1	1417.5	1397.4	1399.6	1410.8	1426.4	1428.7
30°	2065.8	1929.5	1696.9	1522.6	1408.5	1357.1	1352.6	1370.5	1388.4	1404.1	1404.1
32.5°	2097.1	1942.9	1670.1	1466.7	1343.7	1303.5	1323.6	1348.2	1368.3	1383.9	1388.4
35°	2150.8	1971.9	1652.2	1410.8	1281.1	1252.0	1290.0	1330.3	1343.7	1354.9	1357.1
37.5°	2202.2	1998.8	1629.9	1357.1	1216.3	1205.1	1256.5	1299.0	1301.2	1307.9	1307.9
40°	2251.4	2018.9	1600.8	1299.0	1153.7	1153.7	1214.0	1249.8	1245.3	1238.6	1240.8
42.5°	2305.1	2030.1	1567.3	1245.3	1102.2	1102.2	1151.4	1182.7	1180.5	1189.4	1196.1
45°	2369.9	2052.4	1522.6	1196.1	1048.6	1039.6	1079.9	1106.7	1140.2	1180.5	1191.7
47.5°	2459.3	2083.7	1486.8	1142.5	1003.9	972.6	988.2	1044.1	1082.1	1115.6	1120.1
50°	2553.2	2128.4	1455.5	1086.6	950.2	894.3	907.7	970.3	992.7	1006.1	1012.8
52.5°	2653.9	2164.2	1428.7	1039.6	894.3	813.8	831.7	892.1	907.7	918.9	921.1
55°	2741.0	2193.3	1395.1	994.9	833.9	737.8	760.2	818.3	833.9	847.4	847.4
57.5°	2832.7	2220.1	1372.8	956.9	769.1	675.2	690.9	749.0	771.3	775.8	782.5
60°	2908.7	2244.7	1352.6	921.1	708.7	619.3	630.5	681.9	708.7	711.0	715.4
62.5°	2962.4	2260.4	1341.5	876.4	648.4	563.4	572.4	623.8	655.1	661.8	664.0
65°	2995.9	2269.3	1321.3	818.3	596.9	516.5	516.5	567.9	599.2	614.8	619.3
67.5°	2980.3	2253.7	1267.7	751.2	550.0	469.5	467.3	518.7	545.5	554.5	556.7
70°	2859.5	2162.0	1158.1	668.5	500.8	427.0	422.6	469.5	494.1	474.0	476.2
72.5°	2613.6	1954.1	1008.3	585.8	449.4	386.8	382.3	422.6	424.8	424.8	422.6
75°	2202.2	1596.3	804.9	498.6	395.7	344.3	346.5	377.8	380.1	391.3	384.6
77.5°	1688.0	1182.7	628.2	398.0	335.4	306.3	317.5	328.7	344.3	360.0	344.3
80°	1227.4	816.1	436.0	297.4	259.3	259.3	263.8	275.0	297.4	313.0	297.4
82.5°	525.4	360.0	201.2	147.6	127.4	125.2	127.4	127.4	156.5	161.0	140.9
85°	40.2	33.5	24.6	24.6	20.1	11.2	11.2	8.9	6.7	6.7	6.7
87.5°	8.9	6.7	6.7	6.7	4.5	4.5	4.5	4.5	4.5	4.5	4.5
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

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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 3000K 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	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			

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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)