

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: P870707

Luminaire Tested: **EMM2-HTN-SA2A-830-U-T2U**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870707  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA2A-830-U-T2U  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 70W 80CRI 3000K  
FIXTURE w/ TYPE II URBAN DISTRIBUTION OPTIC  
Light Source: (20) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

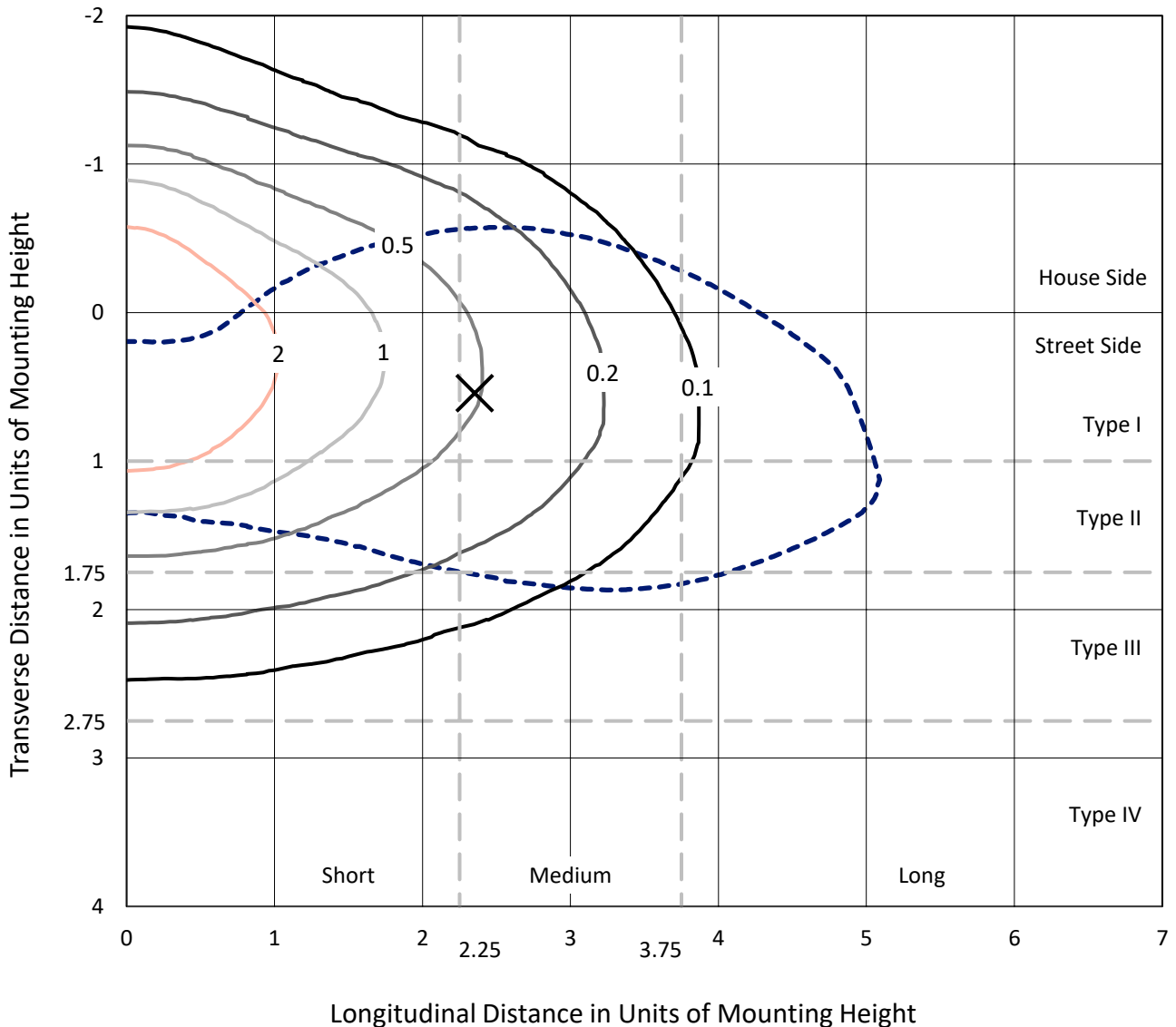
Lumens per Lamp: N/A  
Luminaire Lumens: 8223.8 lumens  
Efficiency: N/A  
Efficacy: 134.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2

Input Watts (W): 61  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.89%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P870707  
 CATALOG NUMBER: EMM2-HTN-SA2A-830-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

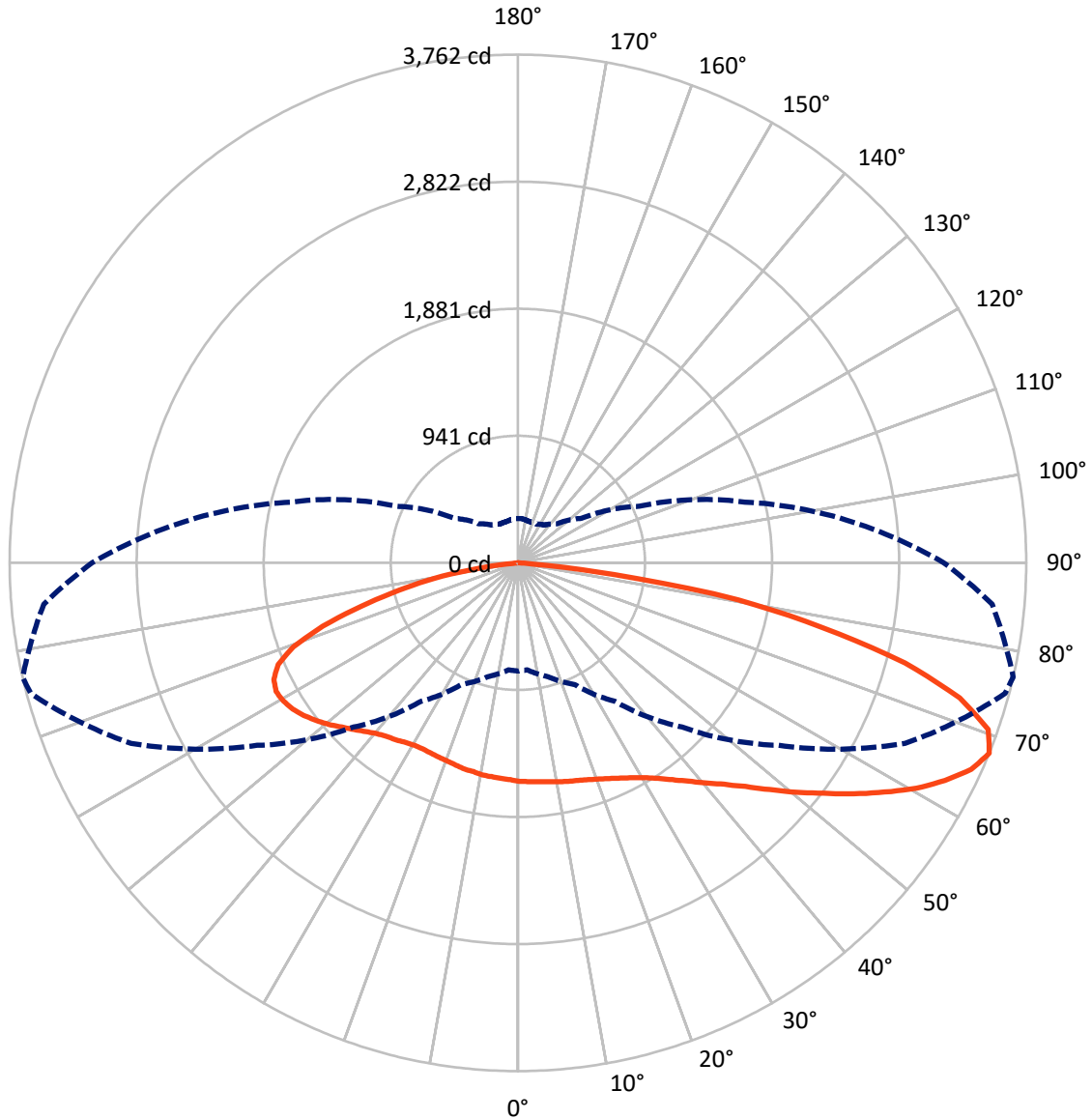
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.4 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2734.7	0.0	2734.7
	% Fixture	33.3	0.0	33.3
<b>Street Side</b>	Lumens	5489.1	0.0	5489.1
	% Fixture	66.7	0.0	66.7
<b>Total</b>	Lumens	8223.8	0.0	8223.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.4	1.9
10°-20°	471.3	5.7
20°-30°	794.6	9.7
30°-40°	1127.6	13.7
40°-50°	1426.6	17.3
50°-60°	1562.8	19.0
60°-70°	1510.7	18.4
70°-80°	1016.0	12.4
80°-90°	158.8	1.9
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°	8223.8	100.0
0°-180°	8223.8	100.0

**Coefficient of Utilization**



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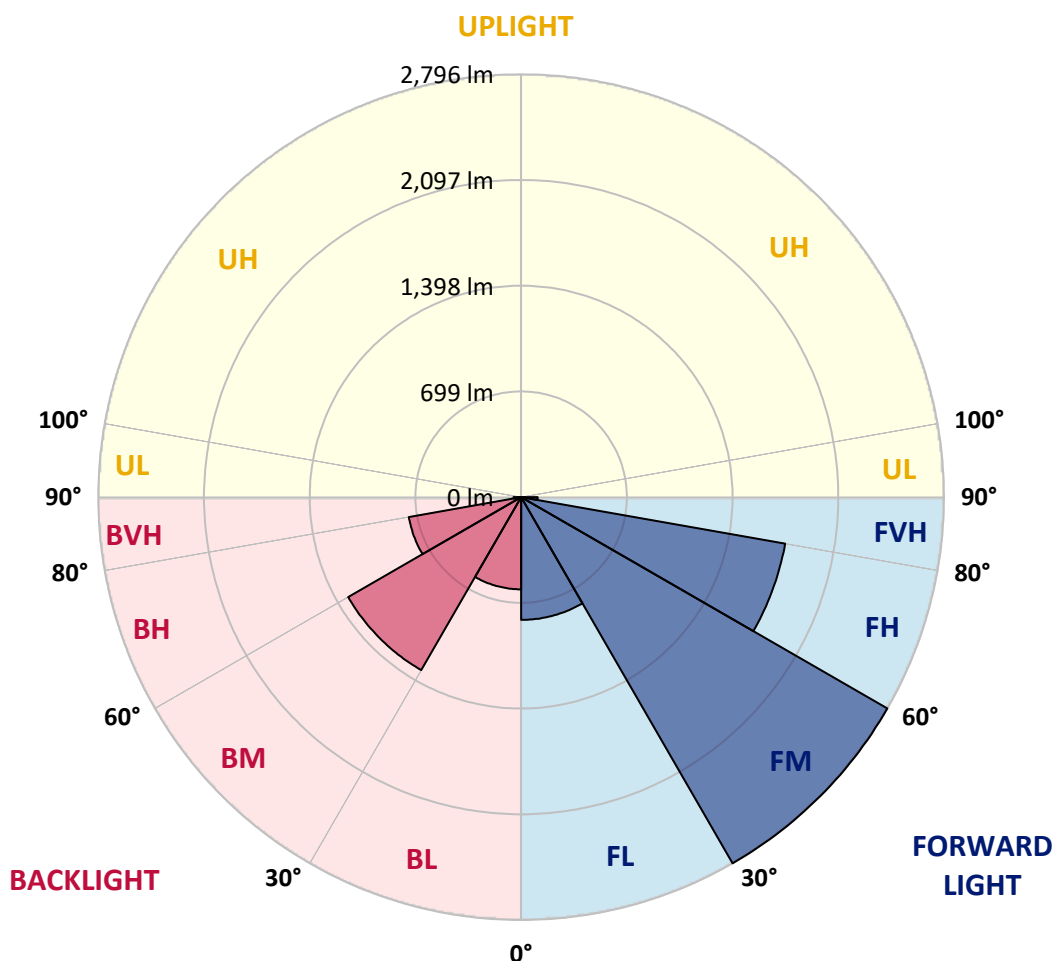
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	811.7	9.9			
FM	(30°-60°)	2796.2	34.0			
FH	(60°-80°)	1772.5	21.6			G1/1800
FVH	(80°-90°)	108.7	1.3			G2/225
BL	(0°-30°)	609.6	7.4	B2/1000		
BM	(30°-60°)	1320.8	16.1	B2/2500		
BH	(60°-80°)	754.2	9.2	B2/1000		G2/1000
BVH	(80°-90°)	50.1	0.6			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°	75°	77°	85°
0°	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9
2.5°	1652.7	1651.0	1642.9	1646.2	1636.4	1642.9	1633.2	1625.0	1623.4	1621.8	1623.4
5°	1704.7	1696.6	1688.5	1683.6	1675.4	1672.2	1655.9	1639.7	1629.9	1628.3	1625.0
7.5°	1764.9	1761.7	1750.3	1743.8	1721.0	1709.6	1686.8	1657.6	1642.9	1636.4	1628.3
10°	1826.7	1834.9	1820.2	1807.2	1781.2	1756.8	1717.7	1680.3	1651.0	1647.8	1629.9
12.5°	1903.2	1901.6	1891.8	1869.0	1838.1	1804.0	1756.8	1704.7	1665.7	1659.2	1633.2
15°	1971.5	1969.9	1956.9	1935.7	1895.0	1852.8	1789.3	1729.1	1680.3	1670.6	1639.7
17.5°	2034.9	2031.7	2023.6	2000.8	1950.4	1898.3	1836.5	1756.8	1698.2	1686.8	1644.5
20°	2090.2	2093.5	2083.7	2061.0	2013.8	1958.5	1880.4	1792.6	1721.0	1708.0	1659.2
22.5°	2150.4	2152.1	2147.2	2139.0	2078.9	2020.3	1935.7	1833.2	1747.0	1734.0	1675.4
25°	2213.9	2215.5	2218.7	2213.9	2145.5	2082.1	1992.6	1883.7	1782.8	1764.9	1698.2
27.5°	2287.1	2288.7	2295.2	2285.4	2212.2	2145.5	2056.1	1937.3	1820.2	1800.7	1717.7
30°	2370.0	2376.5	2371.7	2368.4	2283.8	2218.7	2119.5	1992.6	1869.0	1844.6	1751.9
32.5°	2469.3	2467.6	2457.9	2448.1	2361.9	2293.6	2191.1	2064.2	1929.2	1901.6	1807.2
35°	2540.8	2540.8	2526.2	2521.3	2441.6	2370.0	2269.2	2143.9	1997.5	1971.5	1865.8
37.5°	2584.7	2591.3	2579.9	2583.1	2506.7	2440.0	2347.3	2225.3	2072.4	2049.6	1937.3
40°	2601.0	2617.3	2627.0	2640.1	2563.6	2506.7	2430.2	2313.1	2168.3	2142.3	2023.6
42.5°	2604.3	2628.7	2662.8	2690.5	2604.3	2557.1	2509.9	2402.6	2262.7	2239.9	2117.9
45°	2588.0	2576.6	2659.6	2662.8	2627.0	2597.8	2579.9	2509.9	2399.3	2361.9	2235.0
47.5°	2464.4	2451.4	2474.1	2578.2	2599.4	2615.7	2651.4	2635.2	2535.9	2506.7	2370.0
50°	2264.3	2257.8	2348.9	2461.1	2531.1	2614.0	2710.0	2755.5	2687.2	2669.3	2540.8
52.5°	1934.1	1916.2	2101.6	2319.6	2441.6	2597.8	2750.7	2879.2	2858.0	2832.0	2687.2
55°	1724.2	1724.2	1849.5	2121.1	2327.7	2539.2	2776.7	3009.3	3046.7	3017.4	2854.8
57.5°	1499.8	1517.7	1647.8	1834.9	2163.4	2431.8	2773.4	3118.3	3228.9	3201.2	3032.1
60°	1307.8	1322.5	1397.3	1586.0	1969.9	2290.3	2737.6	3207.8	3398.1	3388.3	3188.2
62.5°	1112.6	1130.5	1190.7	1368.0	1714.5	2127.7	2662.8	3256.6	3557.5	3547.7	3346.0
65°	956.5	958.1	1018.3	1166.3	1459.1	1930.8	2531.1	3246.8	3681.1	3687.6	3479.4
67.5°	800.3	795.4	873.5	993.9	1250.9	1719.4	2355.4	3160.6	3733.2	3762.4	3523.3
70°	588.8	595.4	704.3	837.7	1057.3	1475.4	2109.8	2993.0	3648.6	3694.1	3422.5
72.5°	442.4	455.5	561.2	699.5	883.3	1231.4	1841.4	2701.9	3412.7	3419.2	3115.0
75°	359.5	362.7	457.1	580.7	723.9	987.4	1478.6	2256.2	2885.7	2960.5	2646.6
77.5°	305.8	302.6	348.1	468.5	584.0	788.9	1114.3	1716.1	2265.9	2300.1	2072.4
80°	260.3	258.6	274.9	379.0	457.1	562.8	762.9	1195.6	1616.9	1654.3	1472.1
82.5°	136.6	146.4	143.1	234.2	258.6	296.1	366.0	543.3	706.0	715.7	676.7
85°	6.5	6.5	6.5	9.8	16.3	26.0	50.4	50.4	55.3	105.7	120.4
87.5°	1.6	1.6	3.3	3.3	3.3	4.9	4.9	6.5	6.5	6.5	6.5
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°	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9	1616.9
2.5°	1620.1	1613.6	1603.9	1605.5	1603.9	1603.9	1595.7	1589.2	1587.6	1590.9	1597.4
5°	1621.8	1612.0	1597.4	1592.5	1587.6	1584.4	1571.3	1561.6	1556.7	1560.0	1561.6
7.5°	1621.8	1607.1	1590.9	1581.1	1568.1	1558.3	1543.7	1530.7	1524.2	1525.8	1529.0
10°	1618.5	1602.2	1589.2	1569.7	1548.6	1537.2	1514.4	1498.1	1490.0	1491.6	1483.5
12.5°	1618.5	1600.6	1574.6	1556.7	1527.4	1503.0	1485.1	1467.2	1460.7	1454.2	1451.0
15°	1620.1	1597.4	1571.3	1533.9	1499.8	1473.7	1451.0	1439.6	1429.8	1426.6	1428.2
17.5°	1620.1	1597.4	1558.3	1514.4	1475.4	1442.8	1423.3	1410.3	1407.1	1403.8	1403.8
20°	1628.3	1599.0	1546.9	1494.9	1446.1	1411.9	1394.0	1385.9	1385.9	1381.0	1381.0
22.5°	1641.3	1602.2	1540.4	1478.6	1421.7	1384.3	1364.8	1355.0	1359.9	1356.6	1355.0
25°	1655.9	1613.6	1532.3	1455.9	1389.2	1350.1	1330.6	1324.1	1322.5	1314.3	1325.7
27.5°	1667.3	1621.8	1527.4	1433.1	1359.9	1314.3	1289.9	1278.5	1270.4	1273.7	1270.4
30°	1698.2	1644.5	1529.0	1413.6	1327.3	1272.0	1242.8	1229.7	1226.5	1226.5	1226.5
32.5°	1740.5	1673.8	1540.4	1405.4	1296.4	1231.4	1195.6	1182.6	1179.3	1172.8	1176.1
35°	1794.2	1717.7	1558.3	1392.4	1272.0	1184.2	1145.2	1127.3	1122.4	1115.9	1115.9
37.5°	1854.4	1761.7	1571.3	1385.9	1239.5	1135.4	1091.5	1068.7	1065.5	1058.9	1062.2
40°	1930.8	1821.8	1592.5	1372.9	1202.1	1091.5	1032.9	995.5	1003.6	1006.9	1013.4
42.5°	2017.0	1898.3	1625.0	1359.9	1172.8	1045.9	959.7	922.3	932.1	928.8	935.3
45°	2134.2	1987.8	1665.7	1355.0	1137.0	990.6	884.9	842.6	839.4	834.5	837.7
47.5°	2256.2	2095.1	1704.7	1345.2	1098.0	922.3	800.3	746.6	733.6	727.1	720.6
50°	2383.0	2202.5	1750.3	1338.7	1045.9	845.9	715.7	653.9	629.5	621.4	613.2
52.5°	2526.2	2318.0	1789.3	1322.5	989.0	766.2	639.3	569.3	541.7	525.4	527.0
55°	2677.5	2423.7	1825.1	1302.9	923.9	691.3	562.8	504.3	476.6	471.7	471.7
57.5°	2817.4	2532.7	1851.1	1268.8	858.9	618.1	499.4	449.0	435.9	442.4	442.4
60°	2960.5	2620.5	1864.1	1231.4	792.2	556.3	455.5	414.8	408.3	421.3	422.9
62.5°	3076.0	2690.5	1860.9	1179.3	719.0	502.6	413.2	380.6	383.9	406.7	411.5
65°	3159.0	2724.6	1820.2	1101.2	649.0	455.5	375.8	344.8	344.8	361.1	366.0
67.5°	3152.4	2680.7	1738.9	992.3	574.2	408.3	341.6	317.2	317.2	328.6	327.0
70°	3019.1	2529.4	1584.4	860.5	501.0	367.6	312.3	294.4	292.8	297.7	296.1
72.5°	2698.6	2222.0	1343.6	710.8	432.7	327.0	283.0	266.8	263.5	257.0	252.1
75°	2226.9	1825.1	1049.2	566.1	366.0	287.9	255.4	240.7	227.7	235.9	231.0
77.5°	1727.5	1400.5	780.8	439.2	297.7	250.5	227.7	211.5	208.2	237.5	227.7
80°	1260.7	967.9	551.4	313.9	231.0	203.3	190.3	177.3	224.5	300.9	299.3
82.5°	559.6	466.8	252.1	149.7	107.4	89.5	74.8	84.6	141.5	138.3	143.1
85°	50.4	52.1	27.7	17.9	11.4	9.8	6.5	6.5	4.9	4.9	4.9
87.5°	6.5	6.5	4.9	4.9	3.3	3.3	3.3	3.3	1.6	1.6	1.6
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



CCT = 3126K  
 CIE x = 0.4277  
 CIE y = 0.3997  
 Duv = -0.0004

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**

$\lambda$ (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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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)