

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: P868342

Luminaire Tested: **EMM2-HTN-SA2A-722-U-T1**

Issue Date: 08/22/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P868342  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA2A-722-U-T1  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 70W 70CRI 2200K  
FIXTURE w/ TYPE 1 DISTRIBUTION OPTIC  
Light Source: (20) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

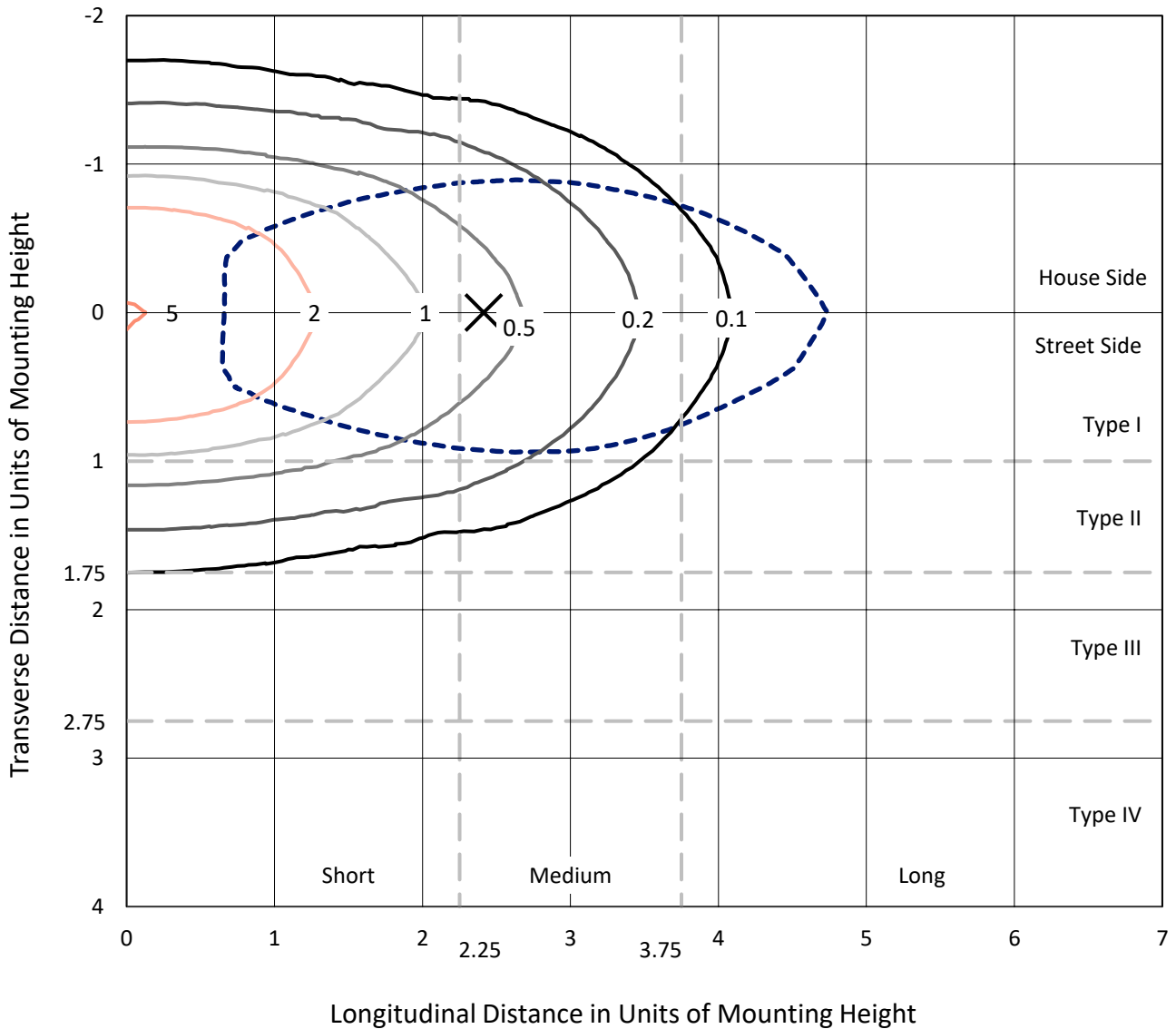
Lumens per Lamp: N/A  
Luminaire Lumens: 8344.7 lumens  
Efficiency: N/A  
Efficacy: 136.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B3 - U0 - G3

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

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### Iso-Footcandle Lines of Horizontal Illumination

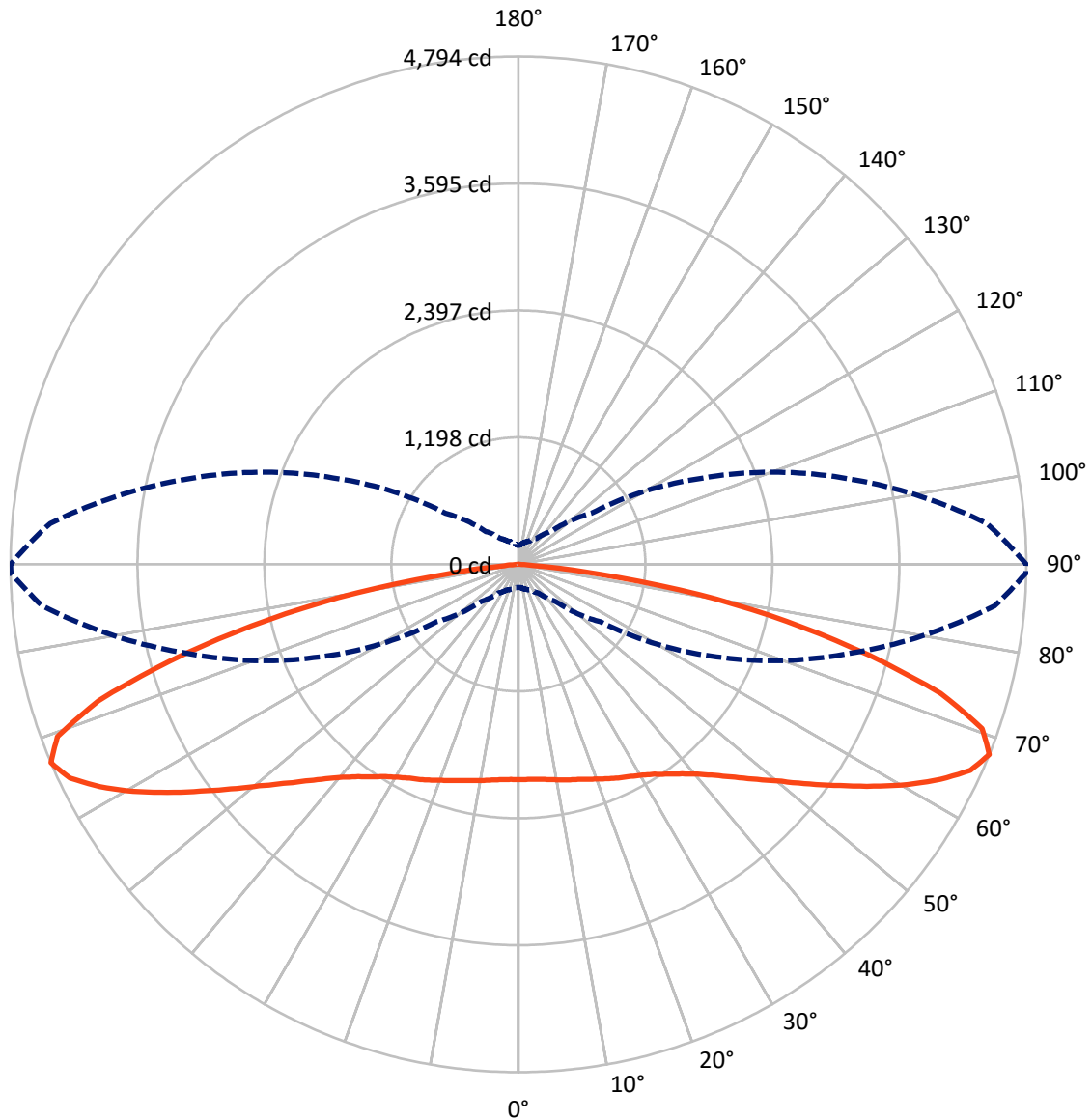
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.1 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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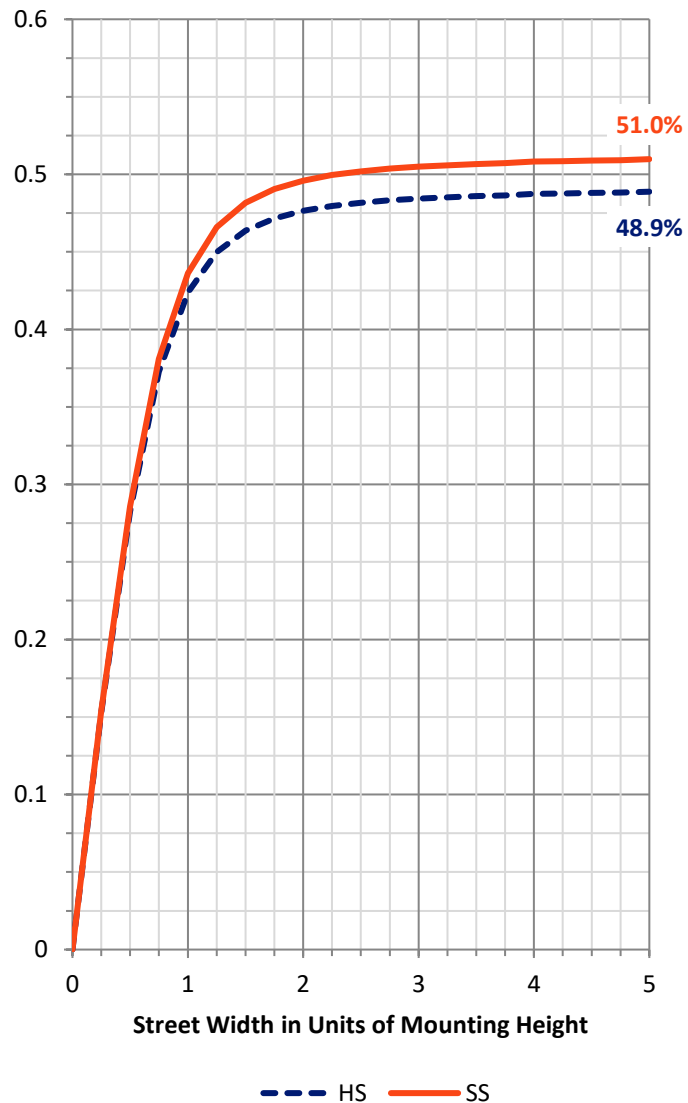
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4098.3	0.0	4098.3
	% Fixture	49.1	0.0	49.1
<b>Street Side</b>	Lumens	4246.5	0.0	4246.5
	% Fixture	50.9	0.0	50.9
<b>Total</b>	Lumens	8344.7	0.0	8344.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.9	2.3
10°-20°	585.6	7.0
20°-30°	969.1	11.6
30°-40°	1285.0	15.4
40°-50°	1448.8	17.4
50°-60°	1485.2	17.8
60°-70°	1402.8	16.8
70°-80°	860.8	10.3
80°-90°	112.6	1.3
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°	8344.7	100.0
0°-180°	8344.7	100.0



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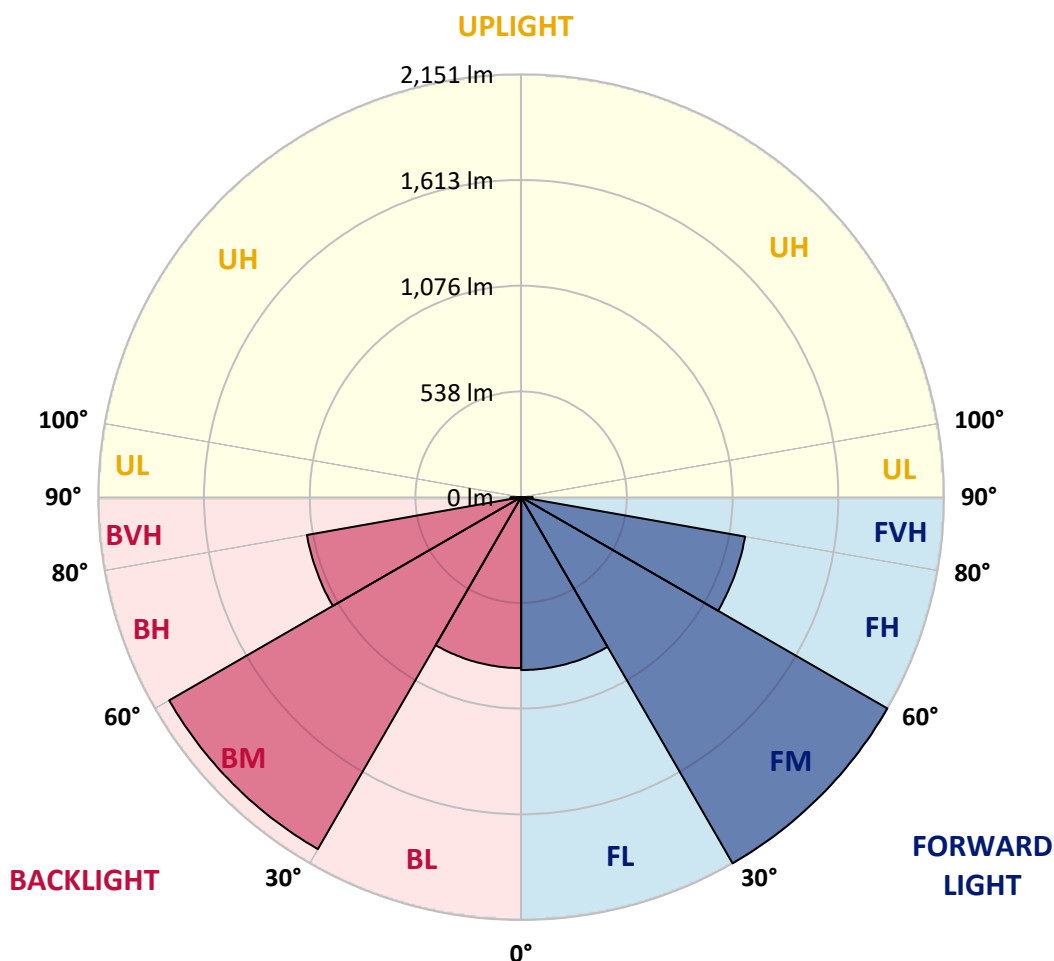
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	879.8	10.5			
FM (30°-60°)	2151.2	25.8			
FH (60°-80°)	1156.9	13.9			G1/1800
FVH (80°-90°)	58.7	0.7			G1/100
BL (0°-30°)	869.7	10.4	B2/1000		
BM (30°-60°)	2067.9	24.8	B2/2500		
BH (60°-80°)	1106.7	13.3	B3/2500		G3/2500
BVH (80°-90°)	54.0	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
0°	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2
2.5°	2041.2	2041.2	2036.4	2028.4	2026.8	2028.4	2038.0	2033.2	2033.2	2034.8	2033.2
5°	2041.2	2041.2	2038.0	2030.0	2030.0	2030.0	2041.2	2036.4	2038.0	2039.6	2039.6
7.5°	2044.4	2044.4	2041.2	2034.8	2034.8	2034.8	2050.8	2047.6	2047.6	2052.4	2049.2
10°	2052.4	2049.2	2046.0	2047.6	2042.8	2050.8	2058.8	2060.4	2066.8	2070.0	2068.4
12.5°	2052.4	2049.2	2041.2	2050.8	2050.8	2062.0	2073.2	2079.6	2087.7	2087.7	2087.7
15°	2042.8	2039.6	2033.2	2049.2	2055.6	2070.0	2086.1	2095.7	2110.1	2110.1	2108.5
17.5°	2031.6	2026.8	2023.6	2047.6	2062.0	2081.2	2105.3	2118.1	2134.1	2135.7	2132.5
20°	2010.7	2009.1	2010.7	2042.8	2068.4	2095.7	2124.5	2142.1	2163.0	2169.4	2164.6
22.5°	1988.3	1988.3	1994.7	2038.0	2078.0	2114.9	2153.3	2175.8	2196.6	2203.0	2196.6
25°	1957.9	1957.9	1970.7	2022.0	2081.2	2135.7	2180.6	2211.0	2230.2	2236.7	2233.5
27.5°	1911.4	1911.4	1925.8	1989.9	2071.6	2151.7	2209.4	2244.7	2265.5	2271.9	2268.7
30°	1845.7	1842.5	1861.7	1941.9	2054.0	2169.4	2243.1	2279.9	2307.2	2312.0	2307.2
32.5°	1741.6	1746.4	1775.2	1876.2	2025.2	2180.6	2283.1	2326.4	2356.8	2366.4	2363.2
35°	1615.0	1623.0	1663.1	1792.8	1970.7	2179.0	2324.8	2377.6	2417.7	2430.5	2428.9
37.5°	1464.4	1475.6	1525.3	1677.5	1889.0	2154.9	2363.2	2435.3	2488.2	2504.2	2507.4
40°	1299.4	1310.6	1374.7	1542.9	1778.4	2098.9	2385.7	2501.0	2571.5	2603.6	2608.4
42.5°	1124.7	1144.0	1220.9	1384.3	1645.4	2009.1	2385.7	2565.1	2651.6	2710.9	2715.7
45°	956.5	972.5	1065.5	1225.7	1502.9	1893.8	2358.4	2629.2	2760.6	2863.1	2859.9
47.5°	810.7	815.5	900.4	1062.3	1344.2	1762.4	2302.3	2686.9	2875.9	3012.1	3041.0
50°	660.1	671.3	743.4	903.6	1182.4	1618.2	2207.8	2723.7	2994.5	3201.2	3238.0
52.5°	554.4	556.0	610.4	757.8	1014.2	1443.6	2094.1	2733.3	3108.2	3406.3	3451.1
55°	451.8	459.8	506.3	616.8	852.4	1272.1	1946.7	2718.9	3212.4	3604.9	3688.2
57.5°	387.7	389.3	423.0	511.1	719.4	1089.5	1783.2	2670.8	3298.9	3824.4	3930.2
60°	333.3	333.3	358.9	426.2	581.6	911.6	1591.0	2585.9	3347.0	4059.9	4213.8
62.5°	290.0	291.6	314.0	363.7	483.9	753.0	1379.5	2453.0	3364.6	4287.5	4463.7
65°	262.8	264.4	277.2	310.8	398.9	612.0	1163.2	2291.1	3340.6	4457.3	4686.4
67.5°	217.9	219.5	241.9	267.6	331.7	491.9	945.3	2066.8	3242.8	4510.2	4790.5
70°	166.6	171.4	201.9	229.1	275.6	392.5	725.8	1770.4	3008.9	4330.7	4619.1
72.5°	139.4	141.0	163.4	193.9	230.7	307.6	551.2	1393.9	2653.2	3867.7	4188.1
75°	121.8	123.4	136.2	163.4	192.3	246.7	382.9	962.9	2116.5	3127.5	3420.7
77.5°	110.6	112.2	115.4	137.8	161.8	190.7	270.8	572.0	1493.2	2390.5	2544.3
80°	105.7	105.7	97.7	113.8	133.0	149.0	181.0	328.4	958.1	1611.8	1735.2
82.5°	75.3	73.7	67.3	70.5	81.7	81.7	92.9	136.2	366.9	680.9	738.6
85°	4.8	4.8	8.0	9.6	14.4	19.2	24.0	32.0	92.9	126.6	131.4
87.5°	1.6	1.6	1.6	1.6	1.6	3.2	3.2	3.2	4.8	6.4	6.4
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°	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2	2033.2
2.5°	2031.6	2033.2	2033.2	2036.4	2039.6	2038.0	2036.4	2039.6	2034.8	2025.2	2023.6
5°	2038.0	2038.0	2036.4	2039.6	2042.8	2039.6	2036.4	2036.4	2033.2	2023.6	2022.0
7.5°	2050.8	2049.2	2049.2	2049.2	2049.2	2044.4	2039.6	2036.4	2031.6	2022.0	2017.2
10°	2068.4	2066.8	2065.2	2063.6	2055.6	2050.8	2042.8	2038.0	2031.6	2020.4	2017.2
12.5°	2087.7	2084.4	2081.2	2082.8	2066.8	2052.4	2044.4	2033.2	2028.4	2002.7	1997.9
15°	2106.9	2102.1	2100.5	2094.1	2078.0	2057.2	2041.2	2025.2	2009.1	1985.1	1977.1
17.5°	2132.5	2129.3	2119.7	2113.3	2090.9	2062.0	2038.0	2015.6	1994.7	1965.9	1961.1
20°	2163.0	2159.8	2150.1	2137.3	2108.5	2073.2	2039.6	2004.3	1978.7	1945.1	1937.0
22.5°	2196.6	2191.8	2183.8	2169.4	2132.5	2090.9	2044.4	1997.9	1959.5	1921.0	1916.2
25°	2231.8	2228.6	2220.6	2199.8	2159.8	2108.5	2044.4	1975.5	1927.4	1893.8	1879.4
27.5°	2265.5	2263.9	2254.3	2230.2	2188.6	2121.3	2030.0	1938.6	1874.6	1829.7	1820.1
30°	2308.8	2305.5	2294.3	2267.1	2220.6	2129.3	2001.1	1876.2	1796.1	1746.4	1732.0
32.5°	2361.6	2358.4	2342.4	2308.8	2259.1	2130.9	1959.5	1796.1	1690.3	1637.4	1619.8
35°	2432.1	2425.7	2404.9	2364.8	2295.9	2114.9	1885.8	1693.5	1563.7	1494.8	1470.8
37.5°	2509.0	2501.0	2473.8	2424.1	2321.6	2071.6	1781.6	1555.7	1408.3	1326.6	1309.0
40°	2603.6	2592.3	2550.7	2481.8	2331.2	1996.3	1664.7	1414.7	1257.7	1168.0	1147.2
42.5°	2722.1	2702.9	2635.6	2545.9	2312.0	1893.8	1525.3	1268.9	1089.5	1006.2	1001.4
45°	2864.7	2834.3	2733.3	2608.4	2270.3	1765.6	1377.9	1105.5	934.1	852.4	831.5
47.5°	3032.9	2996.1	2847.1	2656.4	2188.6	1634.2	1219.3	946.9	789.9	706.6	690.5
50°	3218.8	3183.5	2967.3	2683.7	2100.5	1480.4	1063.9	805.9	648.9	580.0	580.0
52.5°	3444.7	3364.6	3082.6	2686.9	1965.9	1310.6	914.8	668.1	544.7	483.9	471.0
55°	3685.0	3590.5	3186.8	2658.0	1826.5	1155.2	754.6	556.0	447.0	403.8	392.5
57.5°	3952.6	3808.4	3262.1	2600.4	1650.3	985.3	629.7	458.2	376.5	341.3	336.5
60°	4221.8	4035.9	3306.9	2502.6	1462.8	828.3	523.9	382.9	323.6	298.0	293.2
62.5°	4471.7	4221.8	3310.1	2360.0	1280.1	690.5	429.4	330.1	286.8	267.6	267.6
65°	4688.0	4377.2	3255.6	2177.4	1047.8	554.4	354.1	278.8	249.9	229.1	224.3
67.5°	4793.7	4436.5	3159.5	1927.4	839.5	439.0	298.0	241.9	214.7	182.6	179.4
70°	4644.7	4265.0	2912.8	1607.0	648.9	349.3	248.3	206.7	179.4	152.2	149.0
72.5°	4168.9	3808.4	2513.8	1244.9	488.7	282.0	206.7	176.2	147.4	133.0	129.8
75°	3411.1	3167.5	1986.7	857.2	341.3	221.1	173.0	149.0	125.0	118.6	117.0
77.5°	2589.1	2355.2	1451.6	536.7	233.9	173.0	147.4	126.6	108.9	113.8	110.6
80°	1728.8	1621.4	964.5	304.4	157.0	126.6	112.2	92.9	83.3	96.1	92.9
82.5°	785.1	743.4	453.4	133.0	70.5	54.5	38.5	28.8	22.4	20.8	24.0
85°	131.4	115.4	32.0	14.4	8.0	4.8	3.2	3.2	1.6	1.6	1.6
87.5°	6.4	4.8	4.8	3.2	1.6	1.6	1.6	1.6	1.6	0.0	0.0
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: SP1-2407-157-2

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-722-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-722-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-2  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry:  $4\pi$   
 Issue Date: 08/20/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: Streetworks  
 Catalog Number: **MEM2-HTN-SA-40-722-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2253  
 CIE u': 0.2868  
 CIE v': 0.5332  
 Duv: -0.0014  
 CIE x: 0.4974  
 CIE y: 0.4110  
 CIE z: 0.0915  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 587  
 Purity: 72.69432  
 Rf: 76.9  
 Rg: 92.7

CRI (Ra):	70.6		
R1:	68.4	R9:	-36.0
R2:	88.7	R10:	78.2
R3:	85.4	R11:	61.0
R4:	63.5	R12:	74.2
R5:	69.0	R13:	72.8
R6:	88.9	R14:	92.2
R7:	68.5	R15:	58.0
R8:	32.0		



**Test Conditions**

Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 24.1

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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 2200K 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	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 0.96**

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	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.71

λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

**Summary**

$R_f = 76.9$   
 $R_g = 92.7$   
 CIE  $R_a = 70.6$   
 $R_9 = -36.0$



**Color Vector Graphics**





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

CES01 = 87	CES26 = 76	CES51 = 88	CES76 = 78
CES02 = 65	CES27 = 94	CES52 = 85	CES77 = 75
CES03 = 32	CES28 = 93	CES53 = 80	CES78 = 79
CES04 = 72	CES29 = 81	CES54 = 86	CES79 = 82
CES05 = 51	CES30 = 91	CES55 = 83	CES80 = 81
CES06 = 52	CES31 = 83	CES56 = 77	CES81 = 51
CES07 = 44	CES32 = 75	CES57 = 75	CES82 = 92
CES08 = 42	CES33 = 88	CES58 = 76	CES83 = 88
CES09 = 29	CES34 = 88	CES59 = 84	CES84 = 90
CES10 = 79	CES35 = 94	CES60 = 91	CES85 = 65
CES11 = 62	CES36 = 90	CES61 = 82	CES86 = 48
CES12 = 68	CES37 = 97	CES62 = 91	CES87 = 76
CES13 = 45	CES38 = 98	CES63 = 86	CES88 = 78
CES14 = 75	CES39 = 97	CES64 = 70	CES89 = 61
CES15 = 72	CES40 = 94	CES65 = 71	CES90 = 80
CES16 = 48	CES41 = 95	CES66 = 71	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 70	CES92 = 51
CES18 = 57	CES43 = 80	CES68 = 74	CES93 = 68
CES19 = 74	CES44 = 99	CES69 = 84	CES94 = 44
CES20 = 68	CES45 = 83	CES70 = 72	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 75	CES96 = 75
CES22 = 81	CES47 = 88	CES72 = 89	CES97 = 76
CES23 = 92	CES48 = 73	CES73 = 68	CES98 = 72
CES24 = 92	CES49 = 82	CES74 = 85	CES99 = 63
CES25 = 73	CES50 = 87	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)