

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: P868376

Luminaire Tested: **EMM2-HTN-SA1B-722-U-T2R**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868376  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA1B-722-U-T2R  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 60W 70CRI 2200K  
FITXURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

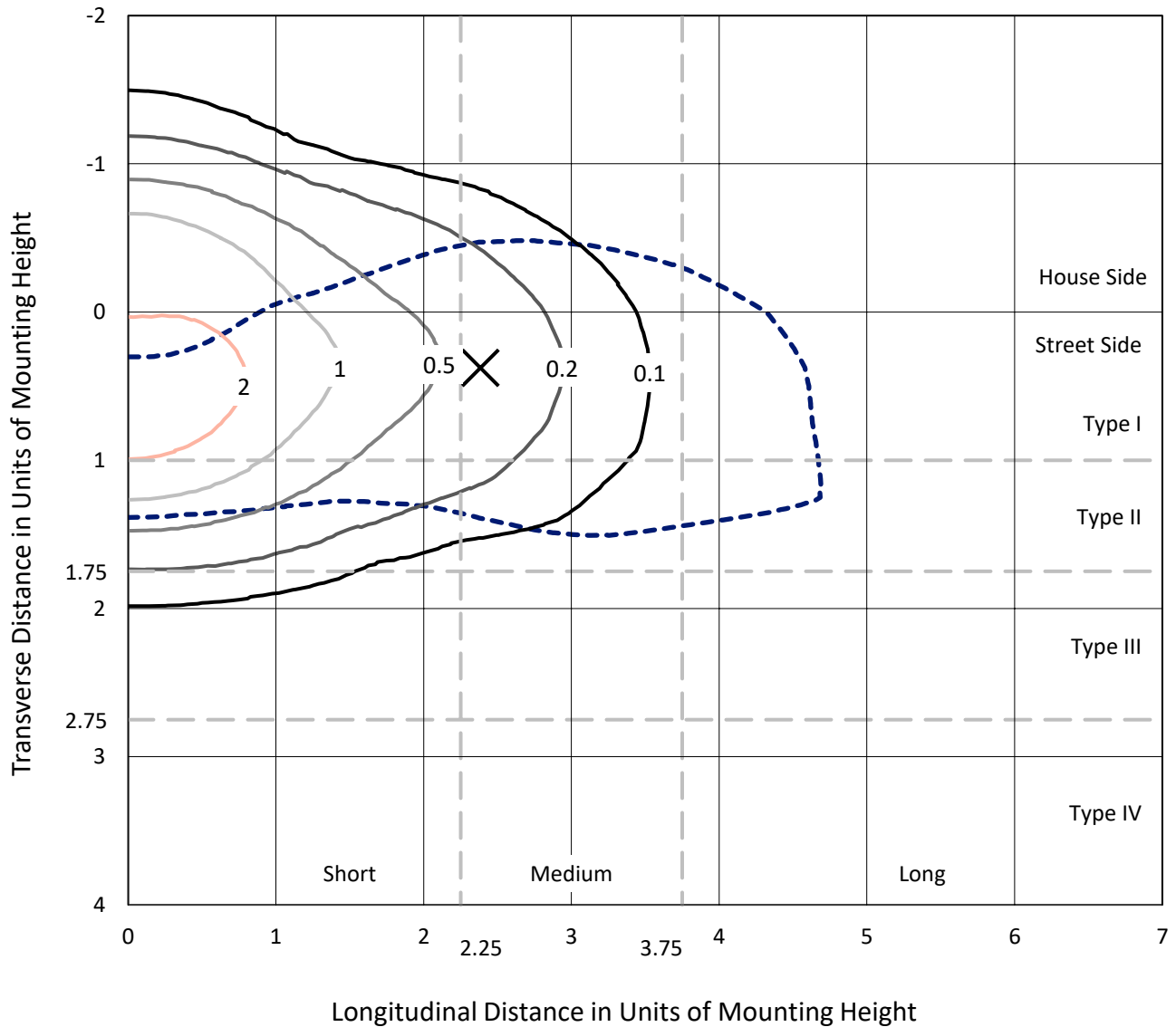
Lumens per Lamp: N/A  
Luminaire Lumens: 5410.7 lumens  
Efficiency: N/A  
Efficacy: 123.0 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1

Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.91%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P868376  
 CATALOG NUMBER: EMM2-HTN-SA1B-722-U-T2R

### Iso-Footcandle Lines of Horizontal Illumination

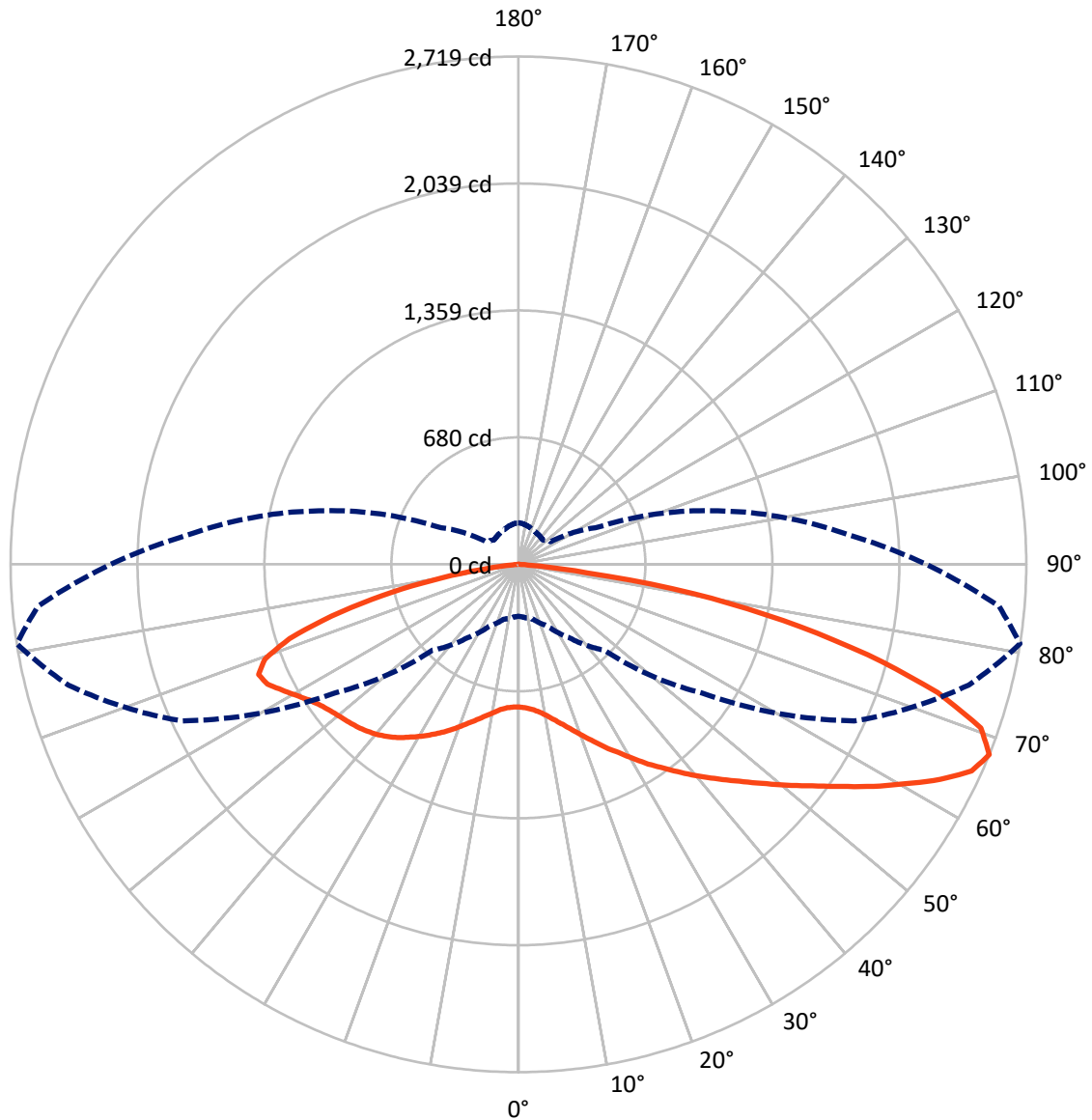
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Medium - N/A

REPORT NUMBER: P868376  
CATALOG NUMBER: EMM2-HTN-SA1B-722-U-T2R

### Luminous Intensity Polar Plot



— Vertical Plane Through 81-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical



REPORT NUMBER: P868376  
 CATALOG NUMBER: EMM2-HTN-SA1B-722-U-T2R

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1658.0	0.0	1658.0
	% Fixture	30.6	0.0	30.6
<b>Street Side</b>	Lumens	3752.7	0.0	3752.7
	% Fixture	69.4	0.0	69.4
<b>Total</b>	Lumens	5410.7	0.0	5410.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.9	1.4
10°-20°	276.5	5.1
20°-30°	550.7	10.2
30°-40°	865.2	16.0
40°-50°	1073.0	19.8
50°-60°	1049.0	19.4
60°-70°	882.1	16.3
70°-80°	560.5	10.4
80°-90°	75.7	1.4
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°	5410.7	100.0
0°-180°	5410.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P868376

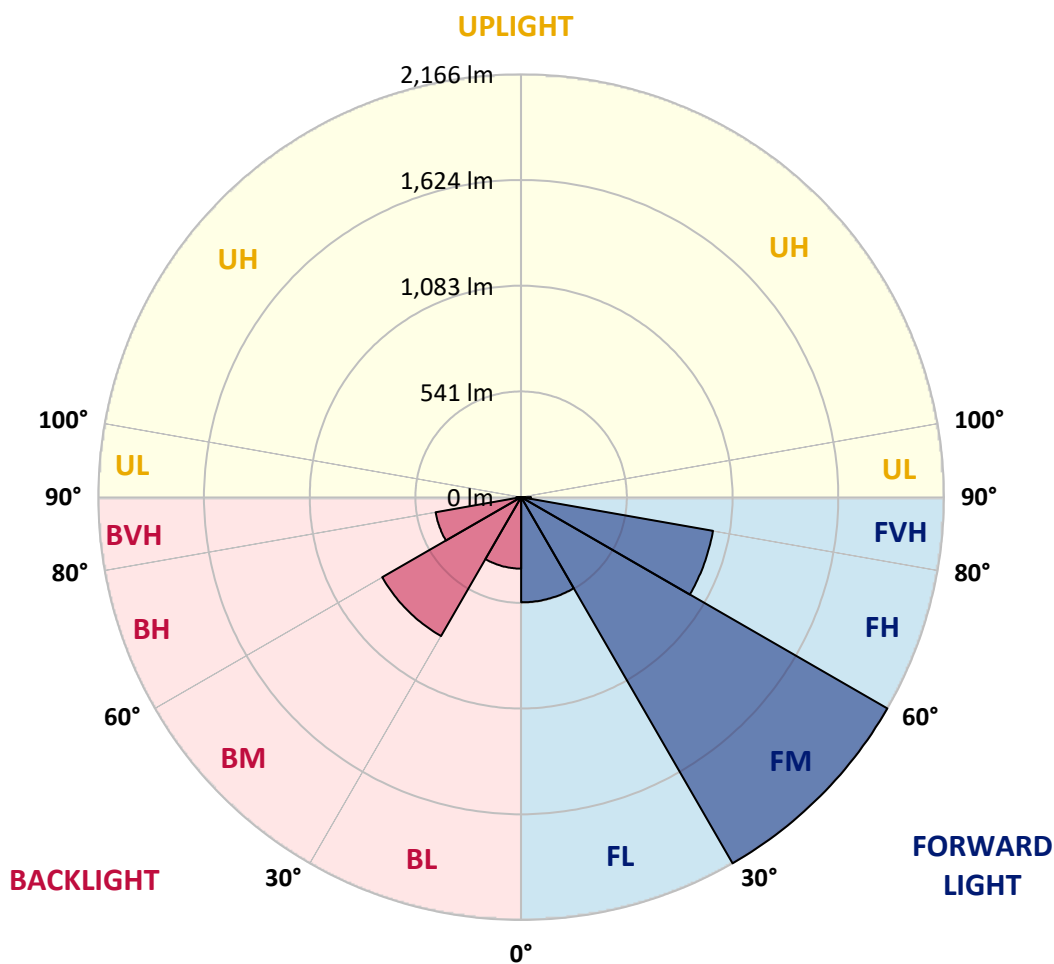
CATALOG NUMBER: EMM2-HTN-SA1B-722-U-T2R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	538.9	10.0			
FM (30°-60°)	2165.5	40.0			
FH (60°-80°)	997.6	18.4			G1/1800
FVH (80°-90°)	50.7	0.9			G1/100
BL (0°-30°)	366.2	6.8	B1/500		
BM (30°-60°)	821.7	15.2	B1/1000		
BH (60°-80°)	445.1	8.2	B1/500		G1/500
BVH (80°-90°)	25.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Medium





REPORT NUMBER: P868376

CATALOG NUMBER: EMM2-HTN-SA1B-722-U-T2R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	81°	85°
0°	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9
2.5°	790.7	789.6	789.6	781.1	781.1	778.9	780.0	773.5	770.3	769.3	768.2
5°	847.6	847.6	841.1	835.8	825.0	815.4	806.8	793.9	784.3	780.0	776.8
7.5°	933.4	927.0	924.8	908.7	886.2	866.9	849.7	821.8	803.6	797.2	792.9
10°	1038.5	1030.0	1013.9	995.6	966.7	937.7	903.4	865.8	835.8	822.9	817.5
12.5°	1146.9	1135.1	1112.6	1095.4	1057.9	1013.9	965.6	914.1	872.3	854.0	844.4
15°	1266.0	1259.6	1232.7	1198.4	1154.4	1092.2	1032.1	968.8	915.2	889.4	873.3
17.5°	1394.7	1385.1	1356.1	1314.3	1252.1	1178.0	1108.3	1026.7	964.5	931.3	913.0
20°	1521.3	1519.2	1476.3	1436.6	1363.6	1271.4	1181.2	1095.4	1017.1	978.5	954.9
22.5°	1663.0	1649.0	1611.5	1555.7	1468.8	1384.0	1277.8	1166.2	1074.0	1028.9	1002.1
25°	1810.0	1808.9	1762.7	1694.1	1592.2	1484.9	1370.1	1246.7	1141.5	1086.8	1051.4
27.5°	1992.3	1978.4	1919.4	1841.1	1723.0	1599.7	1466.6	1330.4	1205.9	1140.5	1097.6
30°	2152.2	2147.9	2081.4	1993.4	1861.5	1714.5	1570.7	1424.8	1282.1	1204.8	1157.6
32.5°	2282.0	2276.7	2219.8	2131.8	1990.2	1837.8	1672.6	1513.8	1358.3	1274.6	1212.4
35°	2390.4	2381.8	2322.8	2234.8	2112.5	1958.0	1782.1	1607.2	1442.0	1340.0	1281.0
37.5°	2433.3	2425.8	2377.5	2304.6	2191.9	2050.3	1880.8	1710.2	1525.6	1414.1	1347.5
40°	2417.2	2412.9	2378.6	2328.2	2242.3	2124.3	1975.2	1817.5	1620.1	1492.4	1413.0
42.5°	2341.0	2341.0	2319.6	2293.8	2250.9	2166.1	2058.9	1920.5	1711.2	1570.7	1475.2
45°	2233.7	2229.4	2221.9	2212.3	2205.8	2173.7	2113.6	2009.5	1812.1	1656.5	1550.3
47.5°	2091.0	2094.3	2088.9	2093.2	2120.0	2140.4	2137.2	2092.1	1915.1	1750.9	1624.3
50°	1866.8	1881.8	1899.0	1949.4	2004.1	2061.0	2113.6	2151.1	2036.3	1858.2	1710.2
52.5°	1588.9	1595.4	1641.5	1760.6	1877.5	1952.6	2052.4	2178.0	2143.6	1969.8	1811.0
55°	1246.7	1258.5	1328.2	1496.7	1704.8	1848.6	1965.5	2166.1	2253.1	2097.5	1929.0
57.5°	893.7	901.2	1012.8	1186.6	1458.0	1699.4	1866.8	2118.9	2341.0	2242.3	2050.3
60°	635.1	649.1	721.0	890.5	1151.2	1493.5	1776.7	2050.3	2422.6	2383.9	2209.1
62.5°	468.8	476.4	526.8	650.2	864.7	1212.4	1659.7	1999.9	2476.2	2536.3	2367.9
65°	353.0	356.2	390.5	475.3	646.9	893.7	1475.2	1990.2	2506.3	2666.1	2508.4
67.5°	277.9	283.2	304.7	362.6	481.7	650.2	1201.6	1983.8	2495.5	2718.7	2582.4
70°	233.9	235.0	251.1	283.2	360.5	467.8	898.0	1887.2	2435.4	2626.4	2513.8
72.5°	202.8	202.8	210.3	236.0	289.7	354.1	611.5	1656.5	2283.1	2346.4	2275.6
75°	164.2	163.1	176.0	200.6	232.8	272.5	410.9	1254.2	1963.4	1931.2	1873.3
77.5°	142.7	141.6	152.3	173.8	192.0	217.8	281.1	814.3	1545.0	1448.4	1411.9
80°	122.3	119.1	127.7	148.1	157.7	169.5	194.2	474.2	1009.6	949.5	905.5
82.5°	92.3	84.8	82.6	99.8	106.2	98.7	98.7	166.3	366.9	370.1	342.2
85°	7.5	8.6	10.7	12.9	18.2	20.4	21.5	35.4	54.7	52.6	53.6
87.5°	1.1	1.1	1.1	2.1	2.1	3.2	3.2	3.2	4.3	4.3	4.3
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: P868376

CATALOG NUMBER: EMM2-HTN-SA1B-722-U-T2R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9	763.9
2.5°	767.1	765.0	762.8	762.8	762.8	760.7	759.6	759.6	758.5	755.3	754.2
5°	774.6	771.4	768.2	768.2	768.2	767.1	766.0	767.1	766.0	762.8	761.7
7.5°	789.6	785.3	781.1	781.1	783.2	782.1	782.1	783.2	782.1	778.9	777.8
10°	811.1	804.7	802.5	802.5	804.7	803.6	802.5	802.5	801.4	796.1	798.2
12.5°	834.7	828.3	826.1	827.2	826.1	824.0	825.0	821.8	820.8	812.2	811.1
15°	864.7	857.2	852.9	854.0	850.8	846.5	842.2	840.1	835.8	828.3	826.1
17.5°	899.1	887.3	881.9	881.9	875.5	866.9	860.5	854.0	847.6	839.0	836.8
20°	932.3	921.6	913.0	910.9	898.0	884.1	872.3	861.5	854.0	844.4	842.2
22.5°	974.2	959.2	947.4	937.7	918.4	895.9	877.6	862.6	851.9	841.1	837.9
25°	1018.2	996.7	977.4	959.2	932.3	900.1	874.4	852.9	839.0	827.2	825.0
27.5°	1062.2	1034.3	1006.4	977.4	936.6	894.8	858.3	832.6	814.3	799.3	797.2
30°	1109.4	1075.0	1031.0	989.2	935.6	880.8	834.7	798.2	776.8	759.6	757.5
32.5°	1157.6	1114.7	1054.6	997.8	930.2	860.5	800.4	761.7	734.9	715.6	710.2
35°	1211.3	1158.7	1076.1	1001.0	915.2	830.4	763.9	715.6	684.5	665.2	660.9
37.5°	1266.0	1199.5	1090.0	998.9	893.7	795.0	716.7	667.3	630.9	604.0	599.7
40°	1321.8	1237.0	1098.6	988.1	863.7	751.0	672.7	612.6	560.0	535.4	523.6
42.5°	1373.3	1271.4	1102.9	973.1	830.4	704.9	614.8	536.4	487.1	460.3	465.6
45°	1426.9	1303.6	1104.0	954.9	786.4	645.9	541.8	468.8	419.5	399.1	397.0
47.5°	1473.1	1330.4	1101.9	929.1	737.1	578.3	465.6	395.9	359.4	340.1	338.0
50°	1534.2	1360.4	1098.6	899.1	672.7	501.0	394.8	338.0	304.7	289.7	288.6
52.5°	1595.4	1393.7	1096.5	857.2	605.1	428.1	330.4	285.4	262.9	255.3	253.2
55°	1675.8	1434.4	1097.6	809.0	527.9	353.0	280.0	248.9	237.1	233.9	233.9
57.5°	1768.1	1487.0	1104.0	755.3	447.4	291.8	243.5	229.6	228.5	230.7	231.7
60°	1879.7	1556.8	1116.9	699.5	373.4	246.8	222.1	221.0	224.2	231.7	233.9
62.5°	2005.2	1632.9	1133.0	626.6	302.6	216.7	210.3	214.6	218.9	227.5	228.5
65°	2115.7	1718.8	1142.6	556.8	253.2	199.6	202.8	204.9	215.6	227.5	227.5
67.5°	2182.2	1781.0	1106.1	468.8	211.4	184.5	191.0	197.4	209.2	219.9	222.1
70°	2159.7	1760.6	981.7	363.7	179.2	170.6	178.1	187.8	199.6	212.4	218.9
72.5°	2003.1	1615.8	797.2	265.0	155.6	157.7	167.4	180.2	191.0	204.9	213.5
75°	1674.8	1348.6	575.1	191.0	136.3	144.8	159.9	170.6	178.1	181.3	182.4
77.5°	1271.4	991.3	391.6	142.7	118.0	129.8	145.9	157.7	159.9	162.0	164.2
80°	830.4	630.9	221.0	99.8	90.1	106.2	119.1	132.0	127.7	134.1	136.3
82.5°	350.8	275.7	100.9	49.4	41.8	45.1	48.3	42.9	39.7	39.7	34.3
85°	46.1	35.4	15.0	6.4	5.4	3.2	3.2	3.2	2.1	2.1	2.1
87.5°	4.3	4.3	3.2	3.2	2.1	2.1	1.1	2.1	1.1	1.1	1.1
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: 4π  
 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

REPORT NUMBER: SP1-2407-157-2

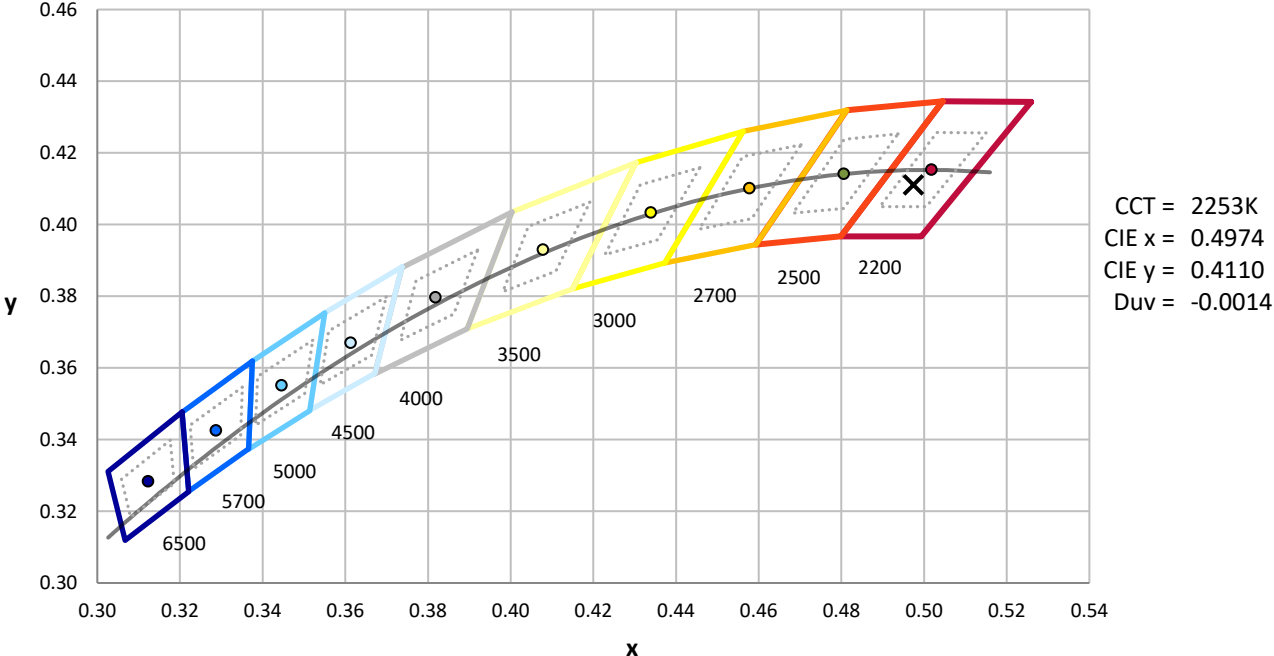
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2407-157-2

**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

REPORT NUMBER: SP1-2407-157-2

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

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			

REPORT NUMBER: SP1-2407-157-2

**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			

REPORT NUMBER: SP1-2407-157-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.71

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			

**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)