

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: P869027

Luminaire Tested: **EMM2-HSN-SA1B-740-U-T4W**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P869027  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA1B-740-U-T4W  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 60W 70CRI 4000K  
FIXTURE w/ TYPE IV WIDE DISTRIBUTION OPTIC  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

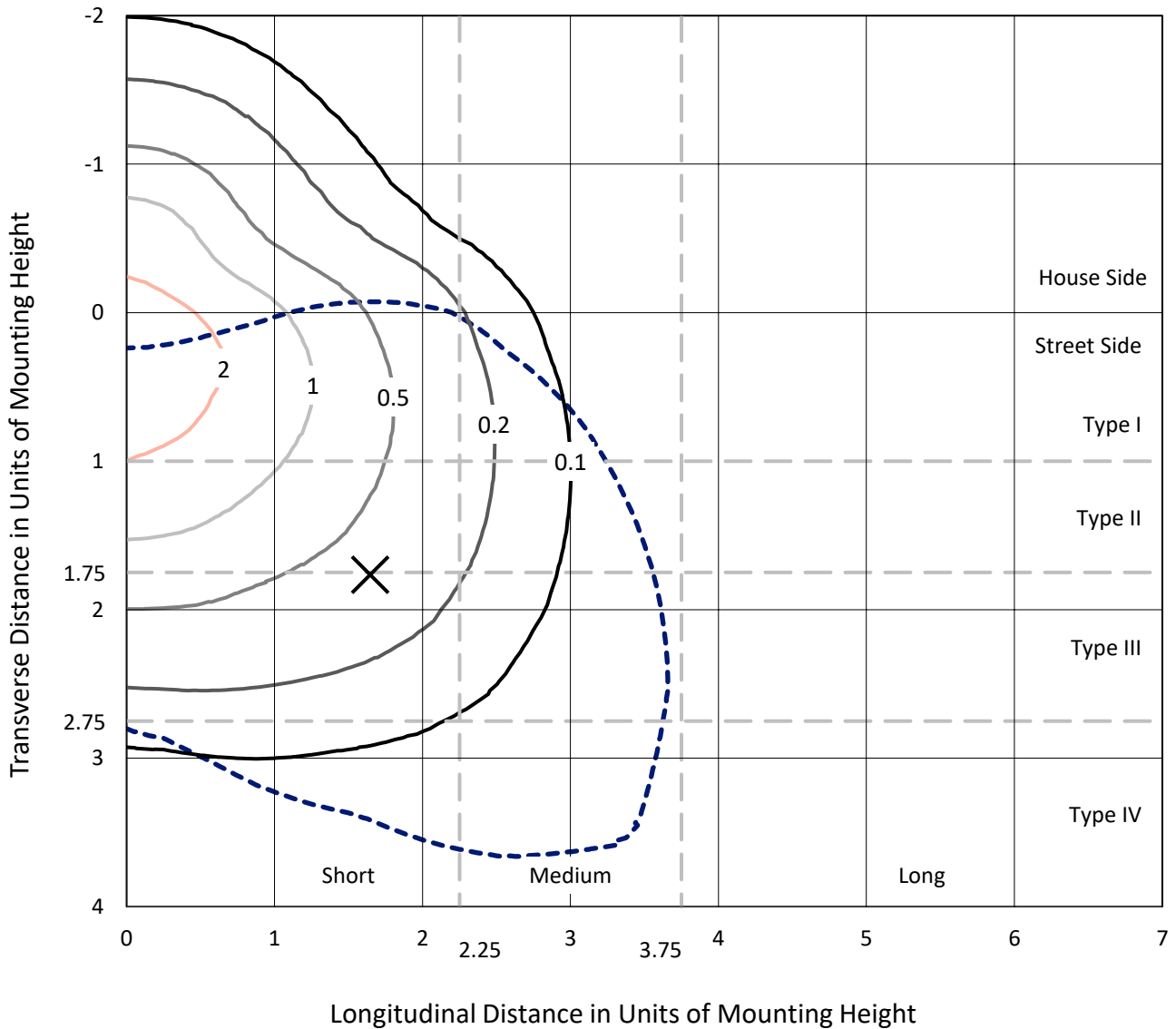
Lumens per Lamp: N/A  
Luminaire Lumens: 6163.4 lumens  
Efficiency: N/A  
Efficacy: 140.1 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

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

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### Iso-Footcandle Lines of Horizontal Illumination

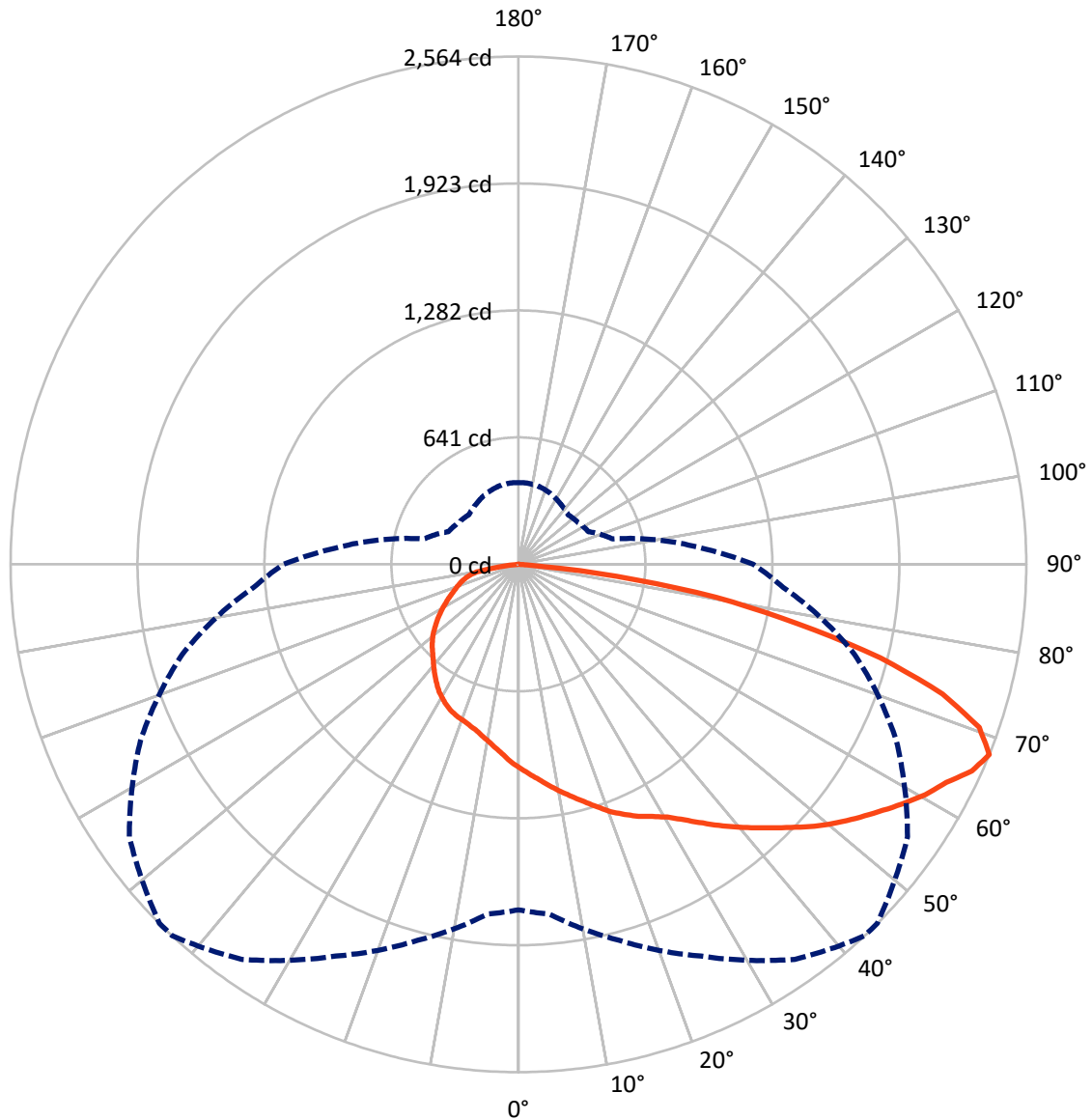
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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

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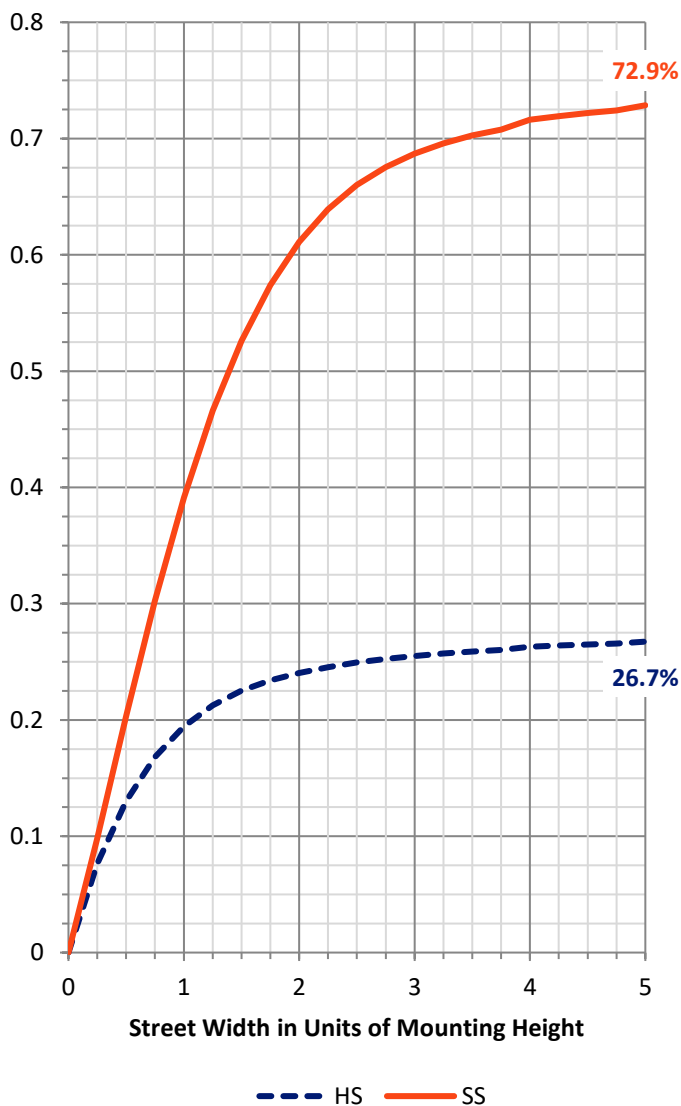
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1658.0	0.0	1658.0
	% Fixture	26.9	0.0	26.9
<b>Street Side</b>	Lumens	4505.4	0.0	4505.4
	% Fixture	73.1	0.0	73.1
<b>Total</b>	Lumens	6163.4	0.0	6163.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	1.6
10°-20°	300.7	4.9
20°-30°	513.0	8.3
30°-40°	748.2	12.1
40°-50°	1005.2	16.3
50°-60°	1230.5	20.0
60°-70°	1295.0	21.0
70°-80°	845.5	13.7
80°-90°	126.8	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°	6163.4	100.0
0°-180°	6163.4	100.0



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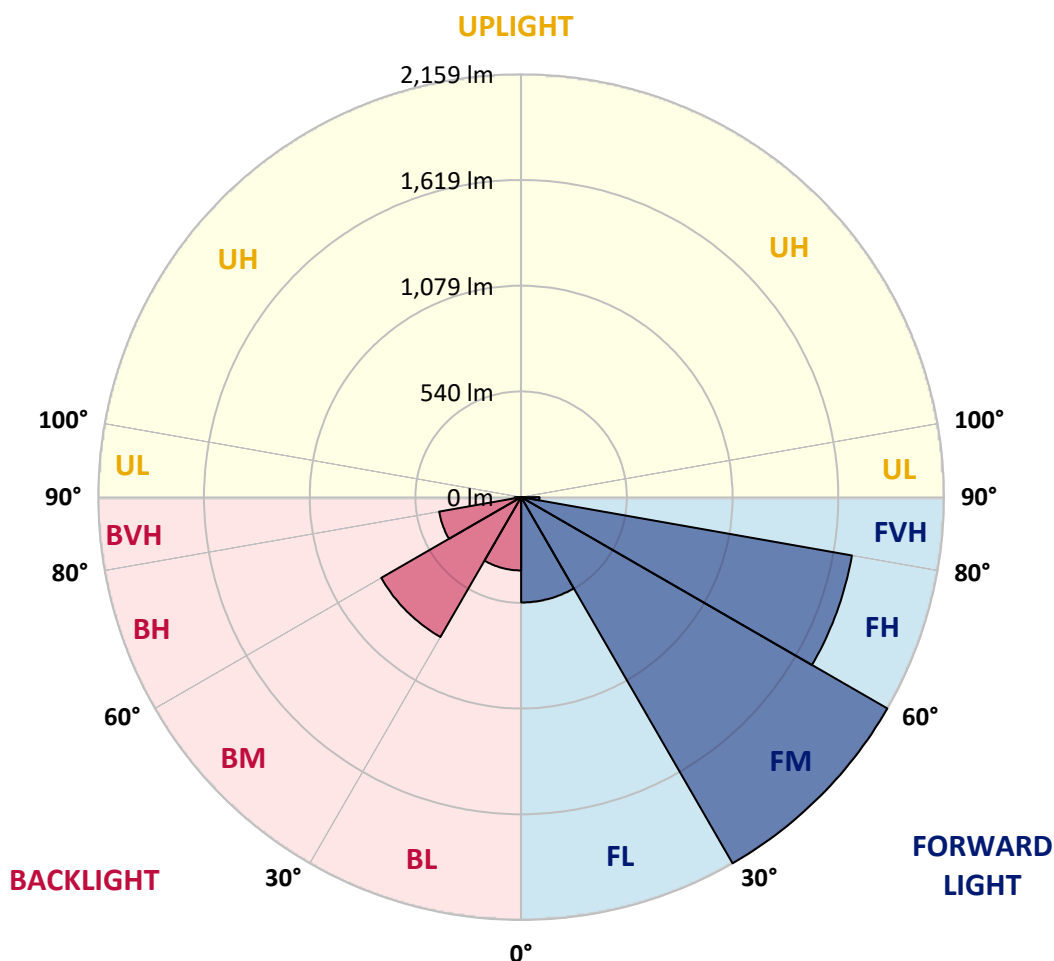
CATALOG NUMBER: EMM2-HSN-SA1B-740-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	537.9	8.7			
FM (30°-60°)	2159.0	35.0			
FH (60°-80°)	1715.0	27.8			G1/1800
FVH (80°-90°)	93.6	1.5			G1/100
BL (0°-30°)	374.3	6.1	B1/500		
BM (30°-60°)	824.9	13.4	B1/1000		
BH (60°-80°)	425.5	6.9	B1/500		G1/500
BVH (80°-90°)	33.3	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9
2.5°	1076.2	1075.0	1071.3	1068.8	1061.3	1060.0	1060.0	1052.5	1043.8	1038.8	1033.8
5°	1124.9	1118.6	1116.2	1111.2	1098.7	1091.2	1093.7	1080.0	1062.5	1050.1	1036.3
7.5°	1168.5	1166.0	1157.3	1151.1	1136.1	1128.6	1126.1	1104.9	1082.5	1063.8	1041.3
10°	1220.9	1214.7	1209.7	1197.2	1177.3	1166.0	1162.3	1134.9	1106.2	1081.2	1051.3
12.5°	1268.3	1260.8	1254.6	1242.1	1222.2	1203.4	1198.5	1167.3	1131.1	1097.4	1060.0
15°	1304.5	1305.7	1299.5	1288.3	1265.8	1243.4	1239.6	1198.5	1154.8	1113.7	1068.8
17.5°	1338.1	1343.1	1339.4	1331.9	1309.5	1287.0	1283.3	1237.1	1184.7	1132.4	1078.7
20°	1370.6	1370.6	1369.3	1364.3	1348.1	1333.1	1325.7	1279.5	1213.4	1152.3	1092.5
22.5°	1389.3	1394.3	1394.3	1394.3	1384.3	1371.8	1369.3	1324.4	1252.1	1177.3	1104.9
25°	1417.9	1424.2	1424.2	1421.7	1413.0	1409.2	1405.5	1363.1	1289.5	1205.9	1118.6
27.5°	1479.1	1477.8	1467.8	1455.4	1442.9	1441.6	1436.7	1406.7	1333.1	1237.1	1137.4
30°	1563.9	1566.4	1553.9	1515.2	1486.5	1480.3	1481.5	1455.4	1384.3	1273.3	1158.6
32.5°	1693.6	1693.6	1644.9	1595.0	1553.9	1537.7	1533.9	1511.5	1436.7	1313.2	1182.2
35°	1790.8	1787.1	1759.7	1701.0	1649.9	1603.8	1597.5	1567.6	1495.3	1358.1	1208.4
37.5°	1864.4	1871.9	1850.7	1805.8	1755.9	1676.1	1663.6	1621.2	1548.9	1401.7	1234.6
40°	2006.6	1987.9	1936.7	1895.6	1835.7	1747.2	1736.0	1683.6	1603.8	1450.4	1267.0
42.5°	2110.1	2083.9	2025.3	1970.4	1895.6	1818.3	1808.3	1750.9	1667.4	1505.2	1300.7
45°	2258.5	2199.9	2118.8	2070.2	1964.2	1895.6	1883.1	1820.8	1733.5	1563.9	1343.1
47.5°	2401.9	2299.6	2213.6	2191.1	2039.0	1979.1	1969.2	1896.8	1804.5	1627.5	1384.3
50°	2383.2	2315.9	2287.2	2266.0	2103.9	2057.7	2047.7	1974.2	1876.9	1694.8	1425.4
52.5°	2335.8	2342.0	2343.3	2292.2	2165.0	2131.3	2121.3	2057.7	1951.7	1753.4	1465.3
55°	2385.7	2393.2	2391.9	2314.6	2236.0	2204.9	2198.6	2142.5	2024.0	1808.3	1494.0
57.5°	2461.8	2436.8	2433.1	2370.7	2312.1	2283.4	2276.0	2227.3	2085.1	1848.2	1516.5
60°	2475.5	2425.6	2441.8	2383.2	2369.5	2360.8	2358.3	2300.9	2142.5	1880.6	1525.2
62.5°	2322.1	2313.4	2377.0	2353.3	2399.4	2424.4	2425.6	2353.3	2173.7	1893.1	1516.5
65°	2060.2	2095.1	2232.3	2300.9	2444.3	2515.4	2512.9	2384.4	2169.9	1856.9	1462.8
67.5°	1744.7	1772.1	1965.4	2182.4	2434.3	2564.0	2562.8	2398.2	2105.1	1757.2	1341.9
70°	1323.2	1409.2	1683.6	1969.2	2299.6	2468.0	2489.2	2320.8	1956.7	1575.1	1158.6
72.5°	1006.4	1020.1	1351.9	1651.2	2059.0	2239.8	2236.0	2073.9	1708.5	1326.9	965.3
75°	714.6	744.5	1017.6	1279.5	1687.3	1888.1	1879.4	1701.0	1363.1	1032.6	738.3
77.5°	532.5	543.7	744.5	949.0	1262.1	1442.9	1439.1	1257.1	1002.7	758.2	550.0
80°	389.1	407.8	536.3	662.2	855.5	1011.4	1006.4	834.3	643.5	530.0	401.6
82.5°	218.2	232.0	311.8	400.3	451.4	500.1	478.9	400.3	293.1	228.2	197.0
85°	6.2	7.5	11.2	13.7	23.7	39.9	43.6	38.7	46.1	28.7	31.2
87.5°	2.5	2.5	2.5	2.5	2.5	3.7	3.7	3.7	3.7	3.7	3.7
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°	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9	1028.9
2.5°	1031.3	1026.4	1016.4	1010.1	1006.4	1001.4	993.9	988.9	985.2	990.2	988.9
5°	1030.1	1020.1	1002.7	990.2	977.7	967.7	956.5	947.8	942.8	945.3	944.1
7.5°	1030.1	1017.6	990.2	970.2	951.5	936.6	924.1	912.9	907.9	909.1	907.9
10°	1035.1	1017.6	981.5	952.8	927.8	910.4	896.7	886.7	882.9	886.7	887.9
12.5°	1040.1	1017.6	974.0	937.8	905.4	886.7	874.2	868.0	870.5	871.7	873.0
15°	1042.6	1016.4	966.5	920.4	884.2	864.2	856.8	855.5	861.7	868.0	869.2
17.5°	1048.8	1015.1	955.3	902.9	865.5	849.3	845.5	850.5	863.0	871.7	874.2
20°	1056.3	1017.6	942.8	881.7	846.8	834.3	840.5	851.8	866.7	879.2	881.7
22.5°	1063.8	1018.9	931.6	863.0	826.8	824.3	838.0	854.3	871.7	884.2	886.7
25°	1072.5	1018.9	916.6	839.3	806.9	810.6	831.8	853.0	869.2	885.4	887.9
27.5°	1081.2	1021.4	900.4	813.1	781.9	793.2	819.3	845.5	863.0	879.2	882.9
30°	1096.2	1026.4	886.7	790.7	757.0	772.0	803.1	833.1	851.8	869.2	873.0
32.5°	1111.2	1033.8	875.5	767.0	732.0	749.5	784.4	818.1	838.0	854.3	856.8
35°	1131.1	1043.8	866.7	743.3	707.1	720.8	758.2	795.6	818.1	830.6	836.8
37.5°	1152.3	1057.5	859.2	722.1	679.7	692.1	732.0	772.0	795.6	808.1	810.6
40°	1178.5	1076.2	854.3	702.1	653.5	663.5	703.4	747.0	769.5	778.2	783.2
42.5°	1207.2	1096.2	850.5	682.2	624.8	634.8	677.2	719.6	742.0	749.5	753.2
45°	1243.4	1122.4	848.0	661.0	601.1	609.8	652.2	694.6	713.3	723.3	727.1
47.5°	1277.0	1148.6	840.5	636.0	574.9	587.4	626.0	663.5	684.7	690.9	694.6
50°	1310.7	1171.0	825.6	608.6	551.2	562.4	597.4	624.8	641.0	648.5	651.0
52.5°	1343.1	1187.2	801.9	579.9	526.3	533.8	562.4	588.6	599.9	602.3	609.8
55°	1364.3	1196.0	768.2	546.2	501.3	503.8	525.0	548.7	555.0	556.2	556.2
57.5°	1379.3	1191.0	728.3	512.6	476.4	476.4	488.9	507.6	510.1	511.3	513.8
60°	1381.8	1173.5	677.2	481.4	449.0	445.2	457.7	468.9	470.2	472.6	475.1
62.5°	1363.1	1134.9	622.3	451.4	422.8	414.0	425.3	436.5	442.7	446.5	449.0
65°	1305.7	1056.3	559.9	421.5	397.8	382.9	396.6	415.3	427.8	429.0	429.0
67.5°	1186.0	929.1	493.8	390.3	367.9	354.2	371.6	391.6	406.6	412.8	411.5
70°	1005.2	788.2	432.7	357.9	338.0	329.2	347.9	370.4	382.9	387.8	390.3
72.5°	809.4	631.0	379.1	325.5	311.8	306.8	325.5	347.9	365.4	372.9	374.1
75°	629.8	496.3	334.2	291.8	280.6	281.8	301.8	324.2	343.0	346.7	335.5
77.5°	488.9	395.3	291.8	251.9	245.7	254.4	274.4	298.1	309.3	313.0	305.5
80°	352.9	303.0	235.7	198.3	198.3	212.0	229.5	256.9	260.6	255.7	258.1
82.5°	167.1	147.2	116.0	96.0	89.8	99.8	106.0	114.7	124.7	127.2	121.0
85°	22.4	15.0	11.2	12.5	11.2	7.5	5.0	5.0	5.0	3.7	3.7
87.5°	3.7	3.7	2.5	2.5	2.5	2.5	2.5	2.5	1.2	1.2	1.2
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: SP1-2407-157-5

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-740-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-740-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-5  
 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-40-740-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 3915  
 CIE u': 0.2262  
 CIE v': 0.5044  
 Duv: 0.0010  
 CIE x: 0.3850  
 CIE y: 0.3816  
 CIE z: 0.2334  
 Peak Wavelength (nm): 449  
 Dominant Wavelength (nm): 578  
 Purity: 30.05482  
 R<sub>f</sub>: 73.2  
 R<sub>g</sub>: 93.9

CRI (Ra):	71.0		
R1:	67.6	R9:	-38.4
R2:	78.3	R10:	48.9
R3:	87.1	R11:	65.3
R4:	69.7	R12:	40.4
R5:	67.4	R13:	69.3
R6:	69.3	R14:	92.6
R7:	79.7	R15:	59.9
R8:	48.7		



**Test Conditions**

Stabilization Time: 21M  
 Operation Time: 1H 21M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-157-5

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 4000K 4-step quadrangle

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**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	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.49**

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	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



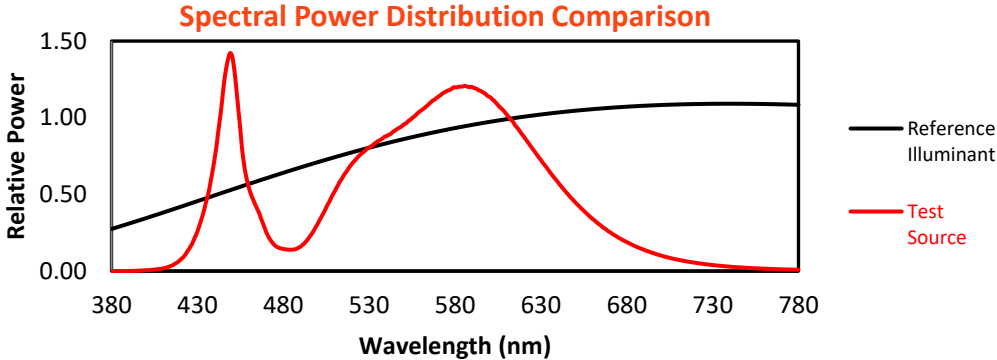
**Melanopic Lumens: NR**

**M/P: 2.88**

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	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	563	NR	755	13	NR	885	0	NR
370	0	NR	500	216	NR	630	510	NR	760	11	NR	890	0	NR
375	0	NR	505	291	NR	635	456	NR	765	9	NR	895	0	NR
380	0	NR	510	366	NR	640	407	NR	770	8	NR	900	0	NR
385	0	NR	515	436	NR	645	359	NR	775	7	NR	905	0	NR
390	0	NR	520	492	NR	650	316	NR	780	6	NR	910	0	NR
395	2	NR	525	536	NR	655	277	NR	785	5	NR	915	0	NR
400	4	NR	530	567	NR	660	240	NR	790	4	NR	920	0	NR
405	7	NR	535	596	NR	665	208	NR	795	4	NR	925	0	NR
410	12	NR	540	619	NR	670	179	NR	800	3	NR	930	0	NR
415	25	NR	545	644	NR	675	154	NR	805	3	NR	935	0	NR
420	51	NR	550	671	NR	680	133	NR	810	3	NR	940	0	NR
425	100	NR	555	701	NR	685	114	NR	815	2	NR	945	0	NR
430	180	NR	560	735	NR	690	98	NR	820	2	NR	950	0	NR
435	315	NR	565	768	NR	695	83	NR	825	2	NR	955	0	NR
440	514	NR	570	798	NR	700	71	NR	830	1	NR	960	0	NR
445	828	NR	575	825	NR	705	61	NR	835	1	NR	965	0	NR
450	992	NR	580	843	NR	710	52	NR	840	1	NR	970	0	NR
455	652	NR	585	848	NR	715	44	NR	845	1	NR	975	0	NR
460	382	NR	590	844	NR	720	38	NR	850	1	NR	980	0	NR
465	282	NR	595	826	NR	725	32	NR	855	1	NR	985	0	NR
470	180	NR	600	800	NR	730	28	NR	860	1	NR	990	0	NR
475	119	NR	605	762	NR	735	24	NR	865	1	NR	995	0	NR
480	101	NR	610	719	NR	740	20	NR	870	1	NR	1000	0	NR
485	98	NR	615	669	NR	745	17	NR	875	0	NR			

**Summary**

$R_f = 73.2$   
 $R_g = 93.9$   
 $CIE R_a = 71.0$   
 $R_g = -38.4$



**Color Vector Graphics**



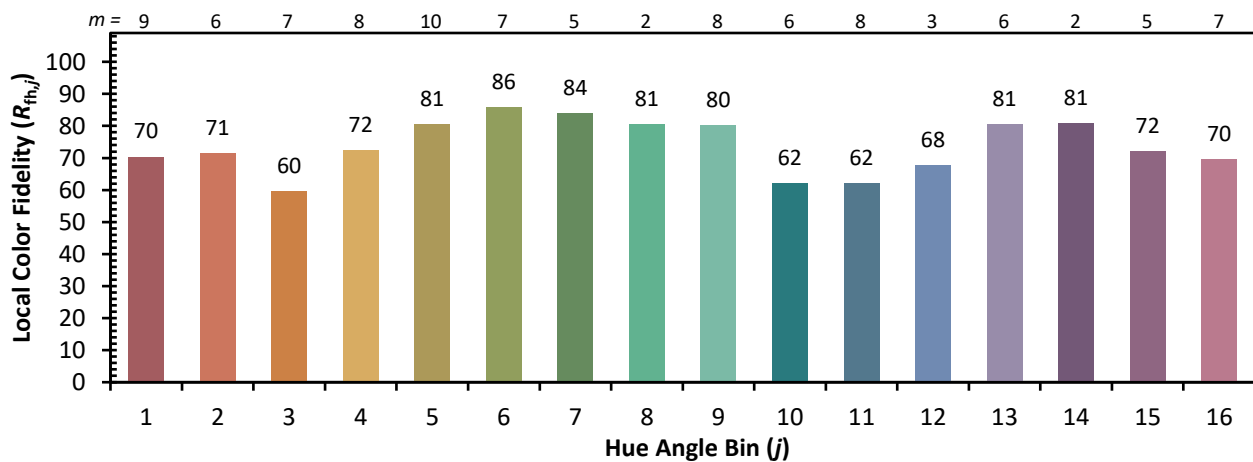


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 85	CES26 = 61	CES51 = 88	CES76 = 50
CES02 = 61	CES27 = 88	CES52 = 87	CES77 = 69
CES03 = 30	CES28 = 81	CES53 = 77	CES78 = 53
CES04 = 70	CES29 = 65	CES54 = 84	CES79 = 81
CES05 = 47	CES30 = 81	CES55 = 83	CES80 = 78
CES06 = 50	CES31 = 69	CES56 = 73	CES81 = 77
CES07 = 40	CES32 = 60	CES57 = 72	CES82 = 91
CES08 = 39	CES33 = 76	CES58 = 73	CES83 = 89
CES09 = 29	CES34 = 70	CES59 = 85	CES84 = 86
CES10 = 74	CES35 = 83	CES60 = 89	CES85 = 77
CES11 = 57	CES36 = 91	CES61 = 81	CES86 = 71
CES12 = 63	CES37 = 79	CES62 = 85	CES87 = 76
CES13 = 42	CES38 = 92	CES63 = 72	CES88 = 80
CES14 = 74	CES39 = 96	CES64 = 64	CES89 = 70
CES15 = 71	CES40 = 91	CES65 = 61	CES90 = 79
CES16 = 46	CES41 = 93	CES66 = 57	CES91 = 74
CES17 = 49	CES42 = 80	CES67 = 54	CES92 = 57
CES18 = 56	CES43 = 76	CES68 = 63	CES93 = 74
CES19 = 72	CES44 = 99	CES69 = 73	CES94 = 51
CES20 = 65	CES45 = 85	CES70 = 55	CES95 = 65
CES21 = 86	CES46 = 82	CES71 = 48	CES96 = 76
CES22 = 78	CES47 = 86	CES72 = 83	CES97 = 84
CES23 = 92	CES48 = 77	CES73 = 45	CES98 = 75
CES24 = 91	CES49 = 80	CES74 = 93	CES99 = 62
CES25 = 72	CES50 = 88	CES75 = 51	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)