

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: P868788

Luminaire Tested: **EMM2-HSN-SA1A-750-U-T1**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868788  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA1A-750-U-T1  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 40W 70CRI 5000K  
FIXTURE w/ TYPE 1 DISTRIBUTION OPTIC  
Light Source: (10) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

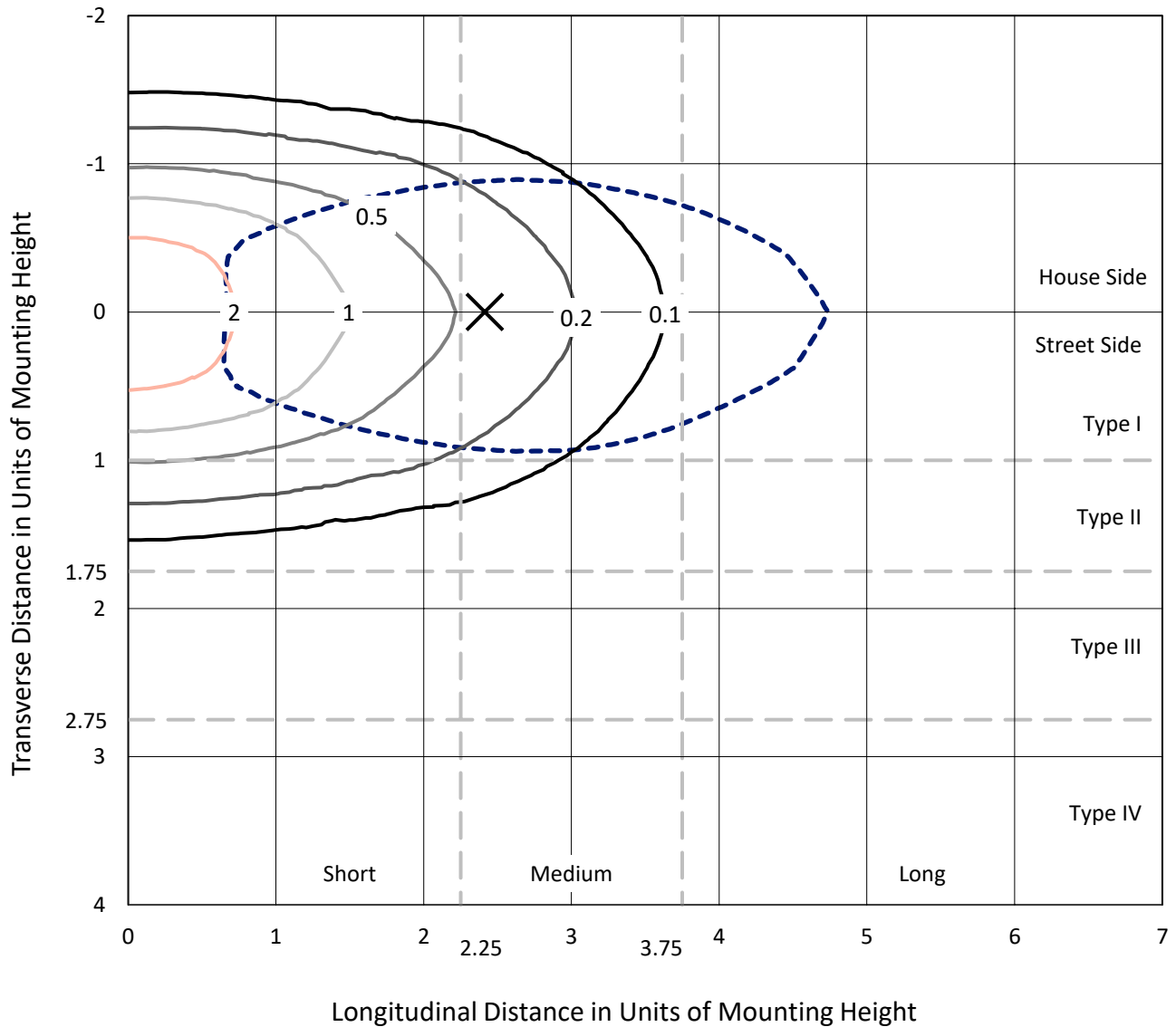
Lumens per Lamp: N/A  
Luminaire Lumens: 5078.6 lumens  
Efficiency: N/A  
Efficacy: 154.8 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 32.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 9.76%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P868788  
 CATALOG NUMBER: EMM2-HSN-SA1A-750-U-T1

### Iso-Footcandle Lines of Horizontal Illumination

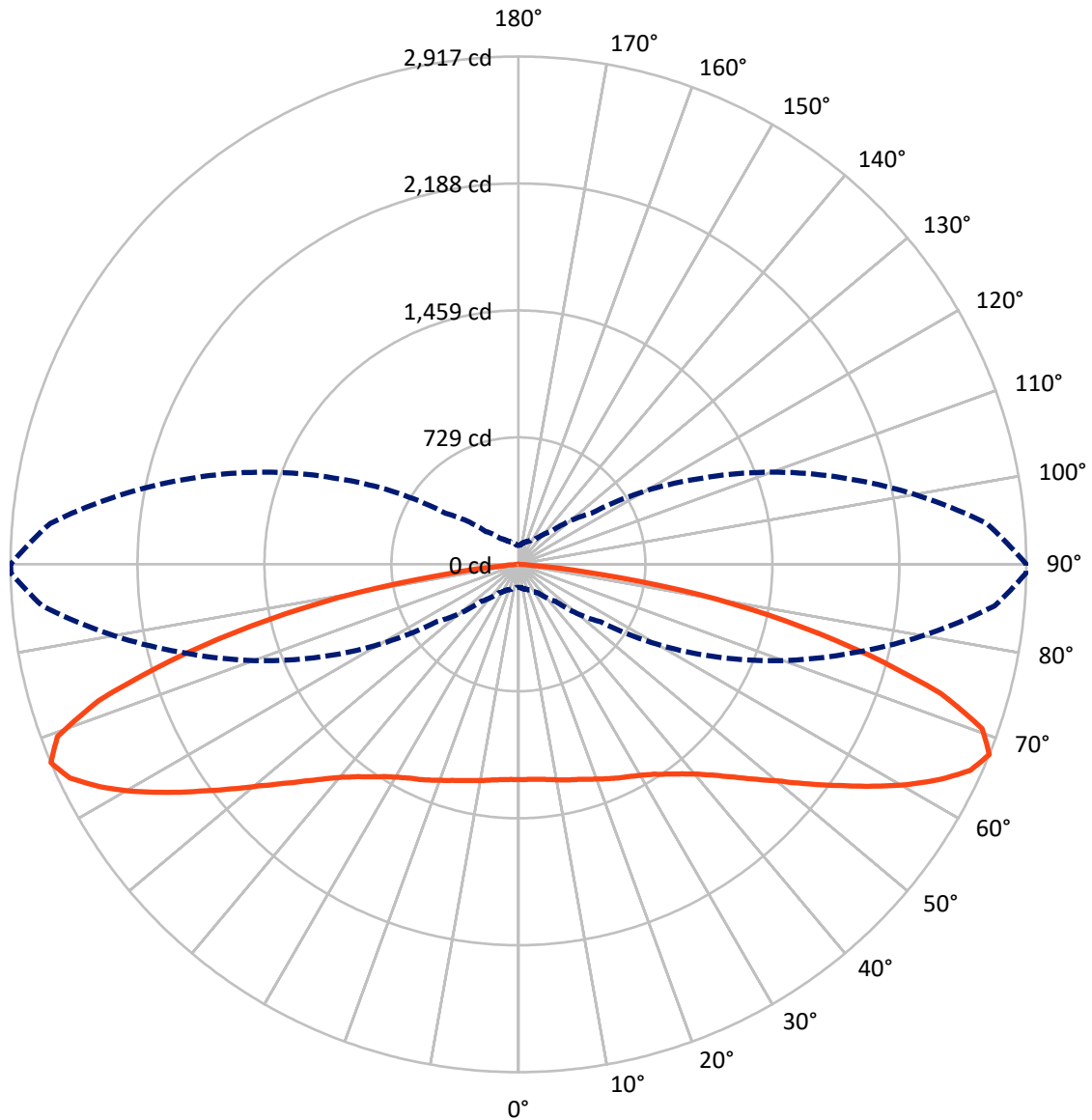
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.1 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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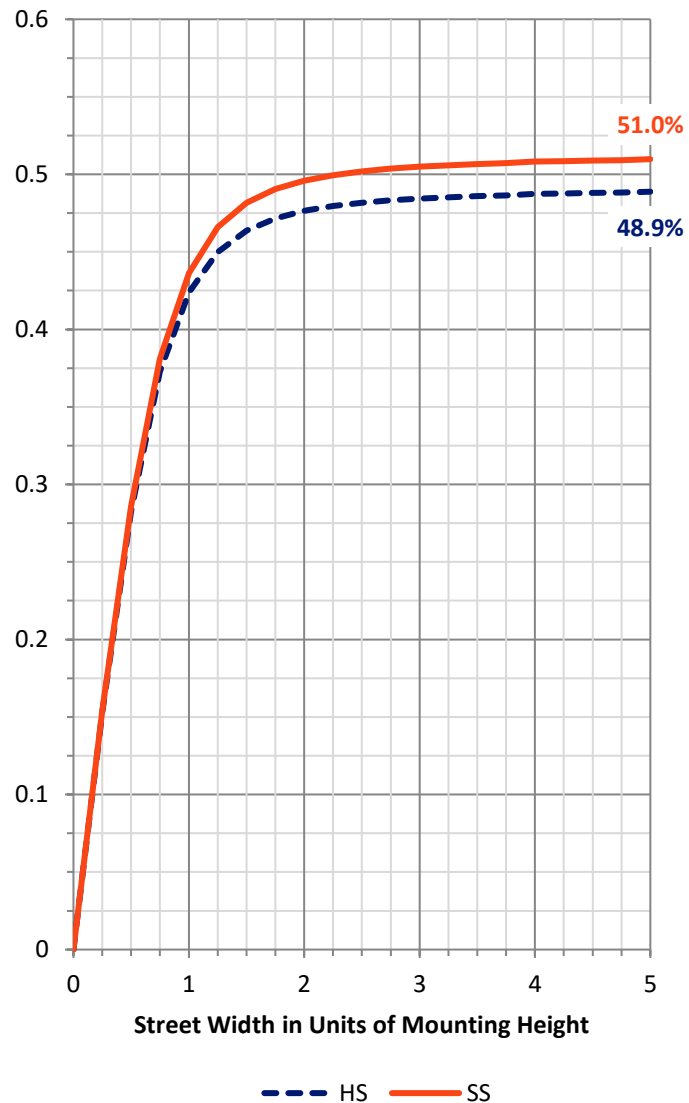
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2494.2	0.0	2494.2
	% Fixture	49.1	0.0	49.1
<b>Street Side</b>	Lumens	2584.4	0.0	2584.4
	% Fixture	50.9	0.0	50.9
<b>Total</b>	Lumens	5078.6	0.0	5078.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.6	2.3
10°-20°	356.4	7.0
20°-30°	589.8	11.6
30°-40°	782.0	15.4
40°-50°	881.7	17.4
50°-60°	903.9	17.8
60°-70°	853.7	16.8
70°-80°	523.9	10.3
80°-90°	68.6	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°	5078.6	100.0
0°-180°	5078.6	100.0

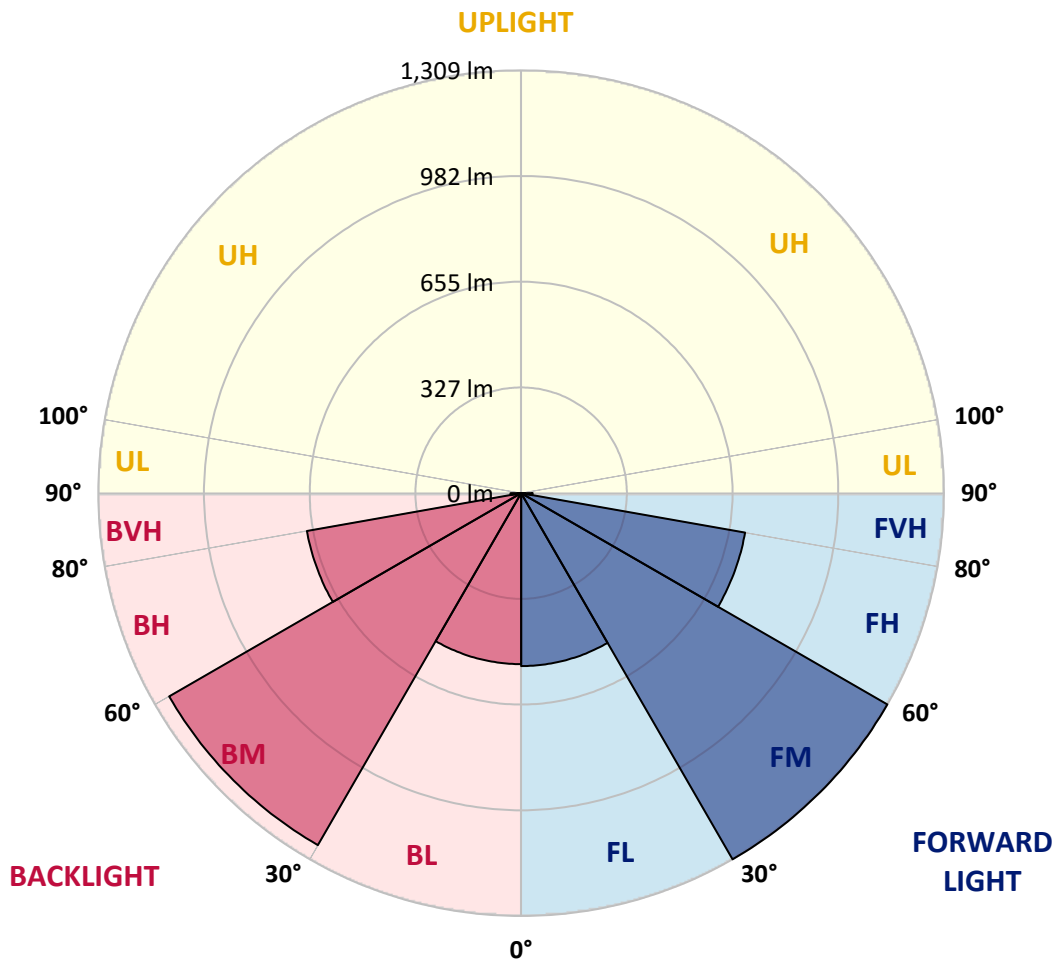


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	535.4	10.5			
FM (30°-60°)	1309.2	25.8			
FH (60°-80°)	704.1	13.9			G1/1800
FVH (80°-90°)	35.7	0.7			G1/100
BL (0°-30°)	529.3	10.4	B2/1000		
BM (30°-60°)	1258.5	24.8	B2/2500		
BH (60°-80°)	673.5	13.3	B2/1000		G2/1000
BVH (80°-90°)	32.8	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 I Short





REPORT NUMBER: P868788

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
0°	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4
2.5°	1242.3	1242.3	1239.3	1234.4	1233.5	1234.4	1240.3	1237.4	1237.4	1238.4	1237.4
5°	1242.3	1242.3	1240.3	1235.4	1235.4	1235.4	1242.3	1239.3	1240.3	1241.3	1241.3
7.5°	1244.2	1244.2	1242.3	1238.4	1238.4	1238.4	1248.1	1246.2	1246.2	1249.1	1247.1
10°	1249.1	1247.1	1245.2	1246.2	1243.2	1248.1	1253.0	1254.0	1257.9	1259.8	1258.8
12.5°	1249.1	1247.1	1242.3	1248.1	1248.1	1254.9	1261.8	1265.7	1270.5	1270.5	1270.5
15°	1243.2	1241.3	1237.4	1247.1	1251.0	1259.8	1269.6	1275.4	1284.2	1284.2	1283.2
17.5°	1236.4	1233.5	1231.5	1246.2	1254.9	1266.6	1281.3	1289.1	1298.8	1299.8	1297.8
20°	1223.7	1222.7	1223.7	1243.2	1258.8	1275.4	1293.0	1303.7	1316.4	1320.3	1317.3
22.5°	1210.1	1210.1	1214.0	1240.3	1264.7	1287.1	1310.5	1324.2	1336.8	1340.7	1336.8
25°	1191.5	1191.5	1199.3	1230.5	1266.6	1299.8	1327.1	1345.6	1357.3	1361.2	1359.3
27.5°	1163.3	1163.3	1172.0	1211.0	1260.8	1309.5	1344.6	1366.1	1378.8	1382.7	1380.7
30°	1123.3	1121.3	1133.0	1181.8	1250.1	1320.3	1365.1	1387.5	1404.1	1407.0	1404.1
32.5°	1059.9	1062.8	1080.4	1141.8	1232.5	1327.1	1389.5	1415.8	1434.3	1440.2	1438.2
35°	982.9	987.8	1012.1	1091.1	1199.3	1326.1	1414.8	1447.0	1471.4	1479.2	1478.2
37.5°	891.2	898.0	928.3	1020.9	1149.6	1311.5	1438.2	1482.1	1514.3	1524.0	1526.0
40°	790.8	797.6	836.6	939.0	1082.3	1277.4	1451.9	1522.1	1565.0	1584.5	1587.4
42.5°	684.5	696.2	743.0	842.5	1001.4	1222.7	1451.9	1561.1	1613.8	1649.8	1652.8
45°	582.1	591.9	648.4	745.9	914.6	1152.5	1435.3	1600.1	1680.1	1742.5	1740.5
47.5°	493.4	496.3	548.0	646.5	818.1	1072.6	1401.2	1635.2	1750.3	1833.1	1850.7
50°	401.7	408.6	452.4	549.9	719.6	984.8	1343.7	1657.6	1822.4	1948.2	1970.6
52.5°	337.4	338.4	371.5	461.2	617.2	878.5	1274.4	1663.5	1891.7	2073.0	2100.3
55°	275.0	279.8	308.1	375.4	518.7	774.2	1184.7	1654.7	1955.0	2193.9	2244.6
57.5°	236.0	236.9	257.4	311.1	437.8	663.1	1085.3	1625.5	2007.7	2327.5	2391.9
60°	202.8	202.8	218.4	259.4	354.0	554.8	968.3	1573.8	2036.9	2470.9	2564.5
62.5°	176.5	177.5	191.1	221.3	294.5	458.3	839.5	1492.8	2047.7	2609.3	2716.6
65°	159.9	160.9	168.7	189.2	242.8	372.5	707.9	1394.4	2033.0	2712.7	2852.1
67.5°	132.6	133.6	147.2	162.8	201.8	299.3	575.3	1257.9	1973.6	2744.8	2915.5
70°	101.4	104.3	122.9	139.4	167.7	238.9	441.7	1077.5	1831.2	2635.6	2811.2
72.5°	84.8	85.8	99.5	118.0	140.4	187.2	335.4	848.3	1614.7	2353.8	2548.9
75°	74.1	75.1	82.9	99.5	117.0	150.2	233.0	586.0	1288.1	1903.4	2081.8
77.5°	67.3	68.3	70.2	83.9	98.5	116.0	164.8	348.1	908.8	1454.8	1548.4
80°	64.4	64.4	59.5	69.2	80.9	90.7	110.2	199.9	583.1	980.9	1056.0
82.5°	45.8	44.9	41.0	42.9	49.7	49.7	56.6	82.9	223.3	414.4	449.5
85°	2.9	2.9	4.9	5.9	8.8	11.7	14.6	19.5	56.6	77.0	80.0
87.5°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.9	3.9	3.9
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: P868788

CATALOG NUMBER: EMM2-HSN-SA1A-750-U-T1

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4	1237.4
2.5°	1236.4	1237.4	1237.4	1239.3	1241.3	1240.3	1239.3	1241.3	1238.4	1232.5	1231.5
5°	1240.3	1240.3	1239.3	1241.3	1243.2	1241.3	1239.3	1239.3	1237.4	1231.5	1230.5
7.5°	1248.1	1247.1	1247.1	1247.1	1247.1	1244.2	1241.3	1239.3	1236.4	1230.5	1227.6
10°	1258.8	1257.9	1256.9	1255.9	1251.0	1248.1	1243.2	1240.3	1236.4	1229.6	1227.6
12.5°	1270.5	1268.6	1266.6	1267.6	1257.9	1249.1	1244.2	1237.4	1234.4	1218.8	1215.9
15°	1282.2	1279.3	1278.3	1274.4	1264.7	1252.0	1242.3	1232.5	1222.7	1208.1	1203.2
17.5°	1297.8	1295.9	1290.0	1286.1	1272.5	1254.9	1240.3	1226.6	1214.0	1196.4	1193.5
20°	1316.4	1314.4	1308.6	1300.8	1283.2	1261.8	1241.3	1219.8	1204.2	1183.7	1178.9
22.5°	1336.8	1333.9	1329.0	1320.3	1297.8	1272.5	1244.2	1215.9	1192.5	1169.1	1166.2
25°	1358.3	1356.3	1351.5	1338.8	1314.4	1283.2	1244.2	1202.3	1173.0	1152.5	1143.8
27.5°	1378.8	1377.8	1371.9	1357.3	1332.0	1291.0	1235.4	1179.8	1140.8	1113.5	1107.7
30°	1405.1	1403.1	1396.3	1379.7	1351.5	1295.9	1217.9	1141.8	1093.1	1062.8	1054.1
32.5°	1437.3	1435.3	1425.6	1405.1	1374.9	1296.9	1192.5	1093.1	1028.7	996.5	985.8
35°	1480.2	1476.3	1463.6	1439.2	1397.3	1287.1	1147.7	1030.7	951.7	909.7	895.1
37.5°	1527.0	1522.1	1505.5	1475.3	1412.9	1260.8	1084.3	946.8	857.1	807.4	796.6
40°	1584.5	1577.7	1552.3	1510.4	1418.7	1214.9	1013.1	861.0	765.4	710.8	698.2
42.5°	1656.7	1645.0	1604.0	1549.4	1407.0	1152.5	928.3	772.3	663.1	612.3	609.4
45°	1743.4	1724.9	1663.5	1587.4	1381.7	1074.5	838.6	672.8	568.5	518.7	506.1
47.5°	1845.8	1823.4	1732.7	1616.7	1332.0	994.6	742.0	576.3	480.7	430.0	420.3
50°	1958.9	1937.5	1805.8	1633.3	1278.3	901.0	647.5	490.5	394.9	353.0	353.0
52.5°	2096.4	2047.7	1876.1	1635.2	1196.4	797.6	556.8	406.6	331.5	294.5	286.7
55°	2242.7	2185.2	1939.4	1617.7	1111.6	703.0	459.3	338.4	272.0	245.7	238.9
57.5°	2405.5	2317.8	1985.3	1582.6	1004.3	599.7	383.2	278.9	229.1	207.7	204.8
60°	2569.3	2456.2	2012.6	1523.1	890.2	504.1	318.9	233.0	197.0	181.4	178.4
62.5°	2721.4	2569.3	2014.5	1436.3	779.1	420.3	261.3	200.9	174.5	162.8	162.8
65°	2853.1	2663.9	1981.4	1325.1	637.7	337.4	215.5	169.7	152.1	139.4	136.5
67.5°	2917.4	2700.0	1922.9	1173.0	510.9	267.2	181.4	147.2	130.7	111.2	109.2
70°	2826.8	2595.7	1772.7	978.0	394.9	212.6	151.1	125.8	109.2	92.6	90.7
72.5°	2537.2	2317.8	1529.9	757.6	297.4	171.6	125.8	107.3	89.7	80.9	79.0
75°	2075.9	1927.7	1209.1	521.7	207.7	134.6	105.3	90.7	76.1	72.2	71.2
77.5°	1575.7	1433.4	883.4	326.7	142.4	105.3	89.7	77.0	66.3	69.2	67.3
80°	1052.1	986.8	587.0	185.3	95.6	77.0	68.3	56.6	50.7	58.5	56.6
82.5°	477.8	452.4	275.9	80.9	42.9	33.2	23.4	17.6	13.7	12.7	14.6
85°	80.0	70.2	19.5	8.8	4.9	2.9	2.0	2.0	1.0	1.0	1.0
87.5°	3.9	2.9	2.9	2.0	1.0	1.0	1.0	1.0	1.0	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: SP1-2407-157-6

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-750-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-750-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-6  
 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-40-750-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 5094  
 CIE u': 0.2082  
 CIE v': 0.4867  
 Duv: 0.0032  
 CIE x: 0.3430  
 CIE y: 0.3564  
 CIE z: 0.3006  
 Peak Wavelength (nm): 451  
 Dominant Wavelength (nm): 568  
 Purity: 9.86439  
 Rf: 73.7  
 Rg: 93

CRI (Ra):	72.0		
R1:	68.6	R9:	-39.6
R2:	78.1	R10:	47.6
R3:	84.6	R11:	68.2
R4:	71.6	R12:	41.4
R5:	69.6	R13:	70.4
R6:	69.4	R14:	91.4
R7:	80.9	R15:	61.4
R8:	53.1		



**Test Conditions**

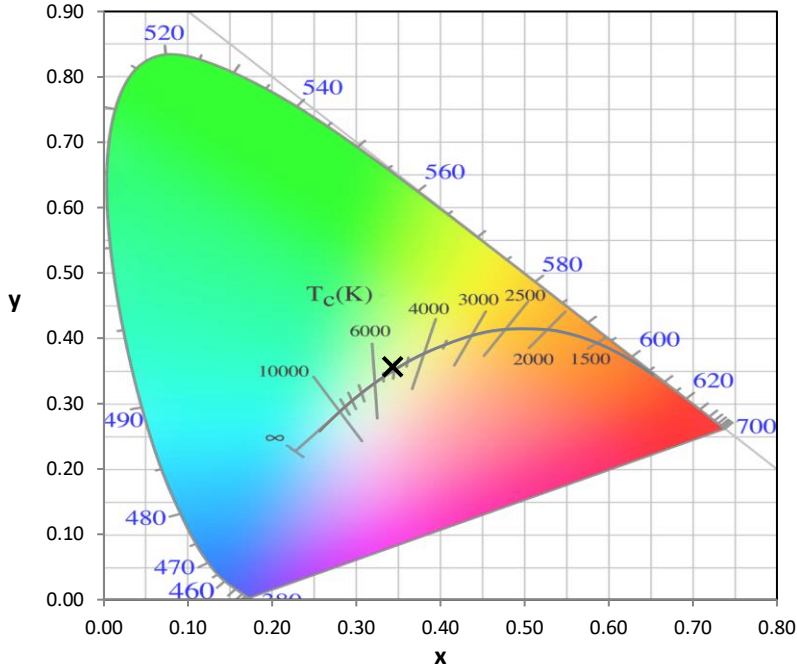
Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.2

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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 5000K 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	114	NR	620	361	NR	750	9	NR	880	0	NR
365	0	NR	495	145	NR	625	326	NR	755	8	NR	885	0	NR
370	0	NR	500	197	NR	630	294	NR	760	7	NR	890	0	NR
375	0	NR	505	259	NR	635	261	NR	765	6	NR	895	0	NR
380	0	NR	510	319	NR	640	232	NR	770	5	NR	900	0	NR
385	0	NR	515	373	NR	645	204	NR	775	4	NR	905	0	NR
390	0	NR	520	414	NR	650	179	NR	780	4	NR	910	0	NR
395	1	NR	525	445	NR	655	157	NR	785	3	NR	915	0	NR
400	3	NR	530	465	NR	660	136	NR	790	3	NR	920	0	NR
405	5	NR	535	482	NR	665	118	NR	795	2	NR	925	0	NR
410	9	NR	540	493	NR	670	102	NR	800	2	NR	930	0	NR
415	18	NR	545	505	NR	675	87	NR	805	2	NR	935	0	NR
420	36	NR	550	515	NR	680	75	NR	810	2	NR	940	0	NR
425	72	NR	555	527	NR	685	65	NR	815	1	NR	945	0	NR
430	134	NR	560	540	NR	690	56	NR	820	1	NR	950	0	NR
435	242	NR	565	550	NR	695	48	NR	825	1	NR	955	0	NR
440	407	NR	570	557	NR	700	41	NR	830	1	NR	960	0	NR
445	684	NR	575	561	NR	705	35	NR	835	1	NR	965	0	NR
450	988	NR	580	559	NR	710	30	NR	840	1	NR	970	0	NR
455	828	NR	585	551	NR	715	26	NR	845	1	NR	975	0	NR
460	473	NR	590	537	NR	720	22	NR	850	1	NR	980	0	NR
465	333	NR	595	516	NR	725	19	NR	855	0	NR	985	0	NR
470	232	NR	600	491	NR	730	16	NR	860	0	NR	990	0	NR
475	146	NR	605	461	NR	735	14	NR	865	0	NR	995	0	NR
480	113	NR	610	429	NR	740	12	NR	870	0	NR	1000	0	NR
485	106	NR	615	395	NR	745	10	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.81**

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	114	NR	620	361	NR	750	9	NR	880	0	NR
365	0	NR	495	145	NR	625	326	NR	755	8	NR	885	0	NR
370	0	NR	500	197	NR	630	294	NR	760	7	NR	890	0	NR
375	0	NR	505	259	NR	635	261	NR	765	6	NR	895	0	NR
380	0	NR	510	319	NR	640	232	NR	770	5	NR	900	0	NR
385	0	NR	515	373	NR	645	204	NR	775	4	NR	905	0	NR
390	0	NR	520	414	NR	650	179	NR	780	4	NR	910	0	NR
395	1	NR	525	445	NR	655	157	NR	785	3	NR	915	0	NR
400	3	NR	530	465	NR	660	136	NR	790	3	NR	920	0	NR
405	5	NR	535	482	NR	665	118	NR	795	2	NR	925	0	NR
410	9	NR	540	493	NR	670	102	NR	800	2	NR	930	0	NR
415	18	NR	545	505	NR	675	87	NR	805	2	NR	935	0	NR
420	36	NR	550	515	NR	680	75	NR	810	2	NR	940	0	NR
425	72	NR	555	527	NR	685	65	NR	815	1	NR	945	0	NR
430	134	NR	560	540	NR	690	56	NR	820	1	NR	950	0	NR
435	242	NR	565	550	NR	695	48	NR	825	1	NR	955	0	NR
440	407	NR	570	557	NR	700	41	NR	830	1	NR	960	0	NR
445	684	NR	575	561	NR	705	35	NR	835	1	NR	965	0	NR
450	988	NR	580	559	NR	710	30	NR	840	1	NR	970	0	NR
455	828	NR	585	551	NR	715	26	NR	845	1	NR	975	0	NR
460	473	NR	590	537	NR	720	22	NR	850	1	NR	980	0	NR
465	333	NR	595	516	NR	725	19	NR	855	0	NR	985	0	NR
470	232	NR	600	491	NR	730	16	NR	860	0	NR	990	0	NR
475	146	NR	605	461	NR	735	14	NR	865	0	NR	995	0	NR
480	113	NR	610	429	NR	740	12	NR	870	0	NR	1000	0	NR
485	106	NR	615	395	NR	745	10	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.73

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	114	NR	620	361	NR	750	9	NR	880	0	NR
365	0	NR	495	145	NR	625	326	NR	755	8	NR	885	0	NR
370	0	NR	500	197	NR	630	294	NR	760	7	NR	890	0	NR
375	0	NR	505	259	NR	635	261	NR	765	6	NR	895	0	NR
380	0	NR	510	319	NR	640	232	NR	770	5	NR	900	0	NR
385	0	NR	515	373	NR	645	204	NR	775	4	NR	905	0	NR
390	0	NR	520	414	NR	650	179	NR	780	4	NR	910	0	NR
395	1	NR	525	445	NR	655	157	NR	785	3	NR	915	0	NR
400	3	NR	530	465	NR	660	136	NR	790	3	NR	920	0	NR
405	5	NR	535	482	NR	665	118	NR	795	2	NR	925	0	NR
410	9	NR	540	493	NR	670	102	NR	800	2	NR	930	0	NR
415	18	NR	545	505	NR	675	87	NR	805	2	NR	935	0	NR
420	36	NR	550	515	NR	680	75	NR	810	2	NR	940	0	NR
425	72	NR	555	527	NR	685	65	NR	815	1	NR	945	0	NR
430	134	NR	560	540	NR	690	56	NR	820	1	NR	950	0	NR
435	242	NR	565	550	NR	695	48	NR	825	1	NR	955	0	NR
440	407	NR	570	557	NR	700	41	NR	830	1	NR	960	0	NR
445	684	NR	575	561	NR	705	35	NR	835	1	NR	965	0	NR
450	988	NR	580	559	NR	710	30	NR	840	1	NR	970	0	NR
455	828	NR	585	551	NR	715	26	NR	845	1	NR	975	0	NR
460	473	NR	590	537	NR	720	22	NR	850	1	NR	980	0	NR
465	333	NR	595	516	NR	725	19	NR	855	0	NR	985	0	NR
470	232	NR	600	491	NR	730	16	NR	860	0	NR	990	0	NR
475	146	NR	605	461	NR	735	14	NR	865	0	NR	995	0	NR
480	113	NR	610	429	NR	740	12	NR	870	0	NR	1000	0	NR
485	106	NR	615	395	NR	745	10	NR	875	0	NR			

**Summary**

$R_f = 73.7$   
 $R_g = 93$   
 $CIE R_a = 72.0$   
 $R_g = -39.6$



**Color Vector Graphics**



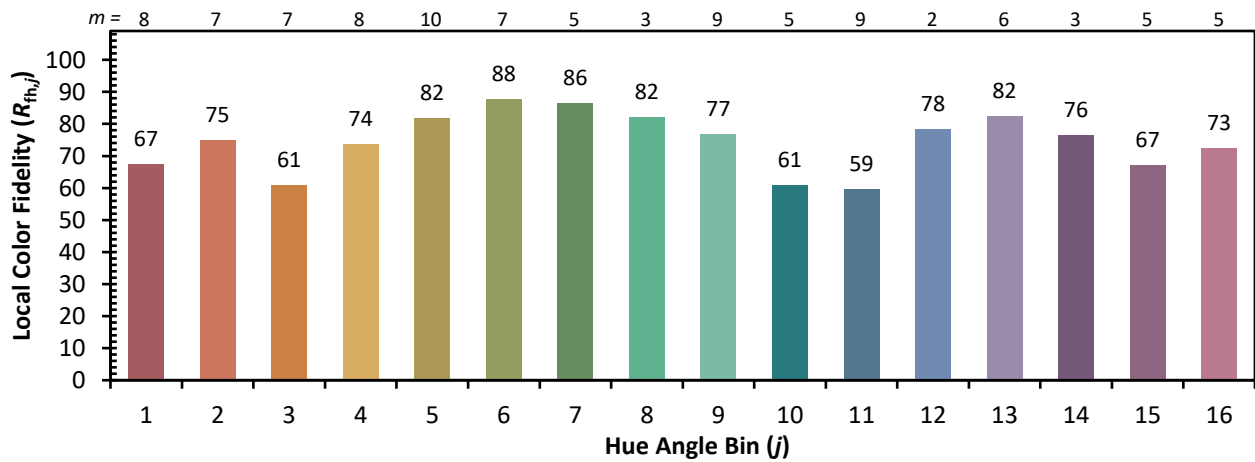


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 85	CES26 = 62	CES51 = 90	CES76 = 50
CES02 = 59	CES27 = 88	CES52 = 89	CES77 = 67
CES03 = 30	CES28 = 80	CES53 = 79	CES78 = 53
CES04 = 69	CES29 = 69	CES54 = 84	CES79 = 80
CES05 = 46	CES30 = 88	CES55 = 83	CES80 = 77
CES06 = 50	CES31 = 72	CES56 = 74	CES81 = 78
CES07 = 38	CES32 = 62	CES57 = 73	CES82 = 90
CES08 = 38	CES33 = 82	CES58 = 73	CES83 = 90
CES09 = 29	CES34 = 69	CES59 = 86	CES84 = 85
CES10 = 72	CES35 = 83	CES60 = 88	CES85 = 77
CES11 = 56	CES36 = 87	CES61 = 82	CES86 = 75
CES12 = 61	CES37 = 78	CES62 = 81	CES87 = 76
CES13 = 41	CES38 = 98	CES63 = 73	CES88 = 81
CES14 = 74	CES39 = 96	CES64 = 63	CES89 = 72
CES15 = 70	CES40 = 91	CES65 = 60	CES90 = 80
CES16 = 46	CES41 = 96	CES66 = 56	CES91 = 71
CES17 = 49	CES42 = 79	CES67 = 53	CES92 = 58
CES18 = 55	CES43 = 78	CES68 = 63	CES93 = 74
CES19 = 71	CES44 = 99	CES69 = 72	CES94 = 52
CES20 = 63	CES45 = 86	CES70 = 55	CES95 = 64
CES21 = 85	CES46 = 85	CES71 = 46	CES96 = 76
CES22 = 77	CES47 = 89	CES72 = 82	CES97 = 86
CES23 = 91	CES48 = 80	CES73 = 45	CES98 = 76
CES24 = 90	CES49 = 83	CES74 = 90	CES99 = 62
CES25 = 71	CES50 = 89	CES75 = 48	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)