

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: P871146

Luminaire Tested: **EMM2-HSN-SA1A-840-U-T2U-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P871146  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA1A-840-U-T2U-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 40W 80CRI 4000K  
FITXURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (10) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

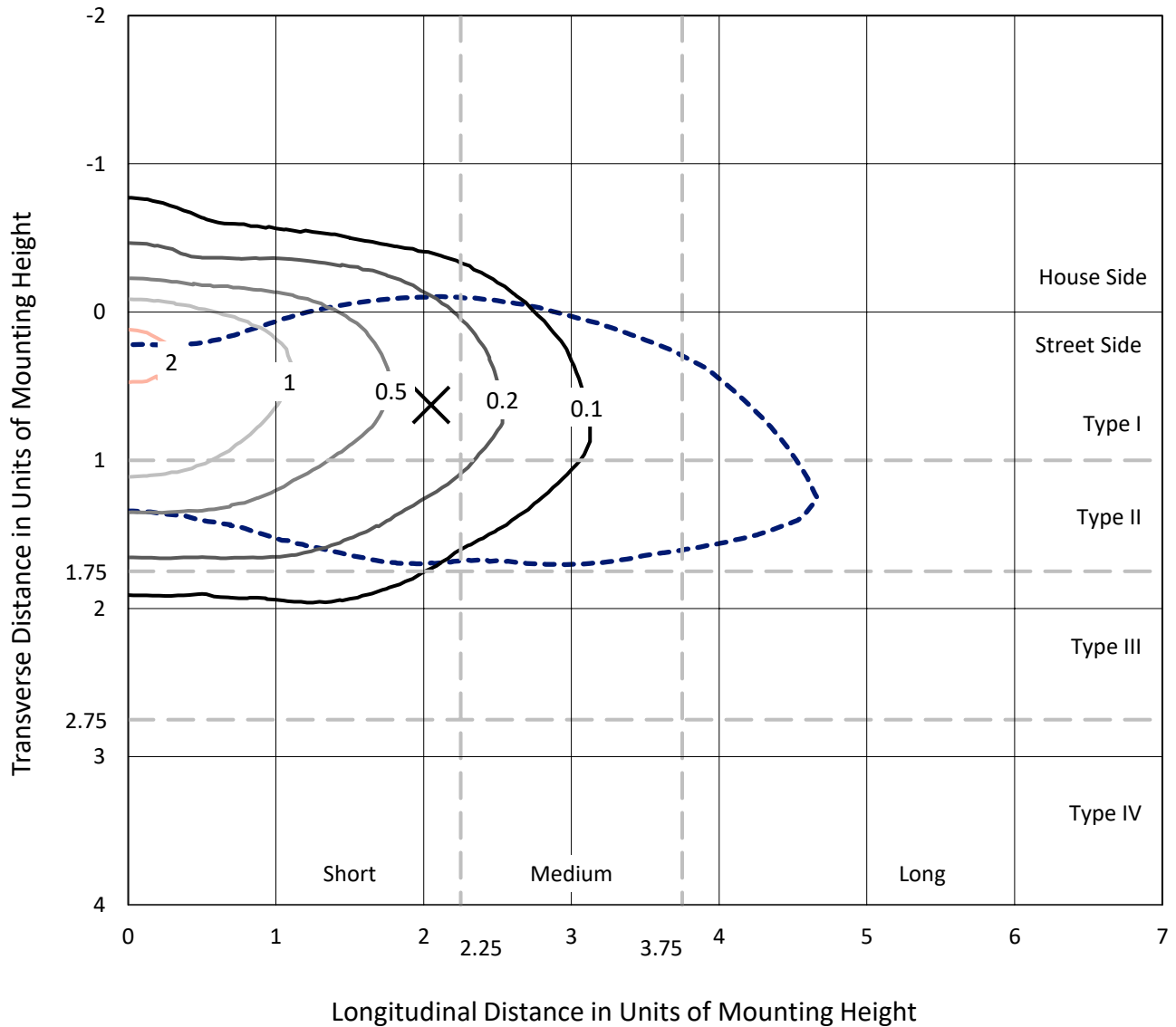
Lumens per Lamp: N/A  
Luminaire Lumens: 3188.7 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

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

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### Iso-Footcandle Lines of Horizontal Illumination

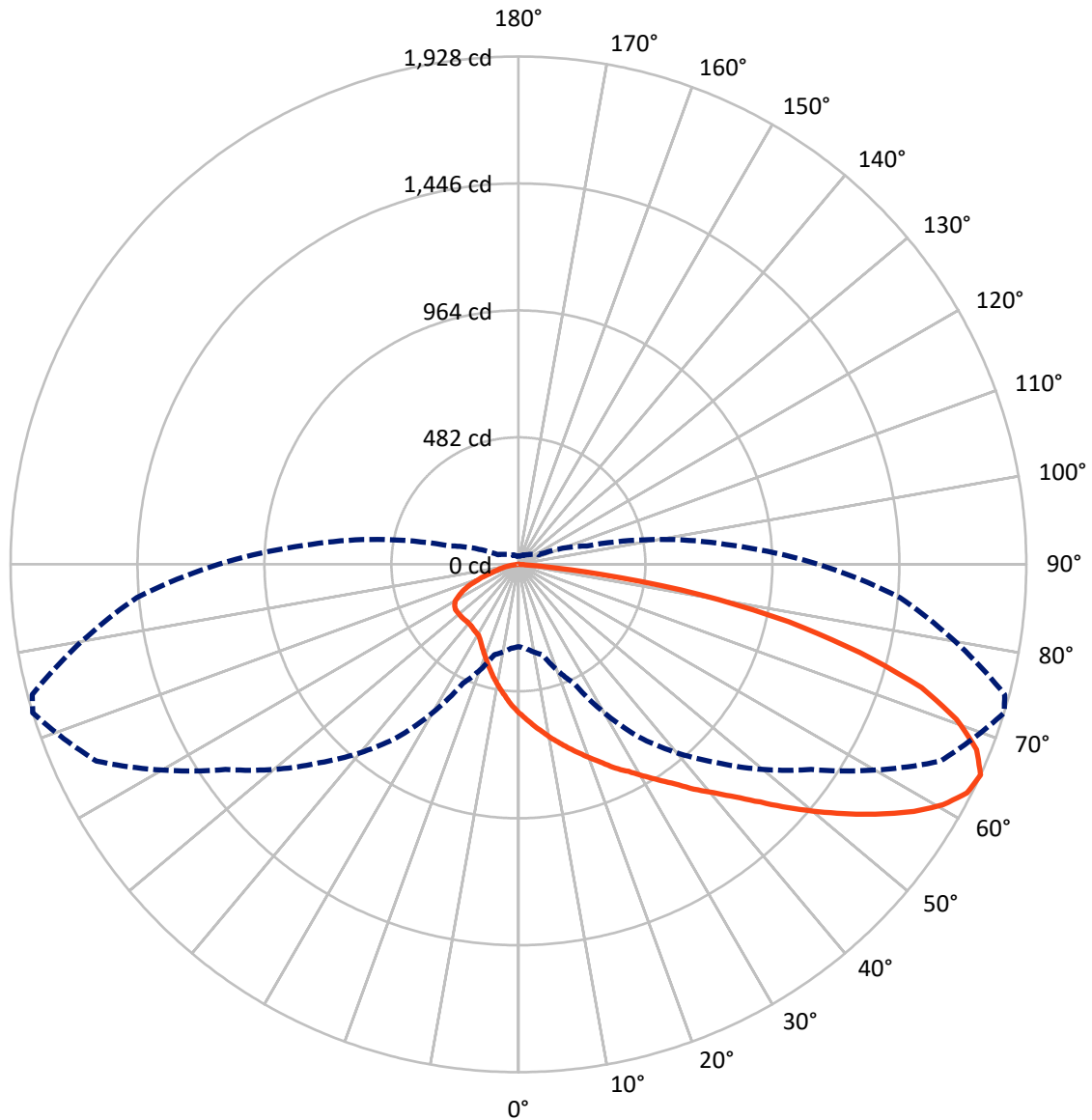
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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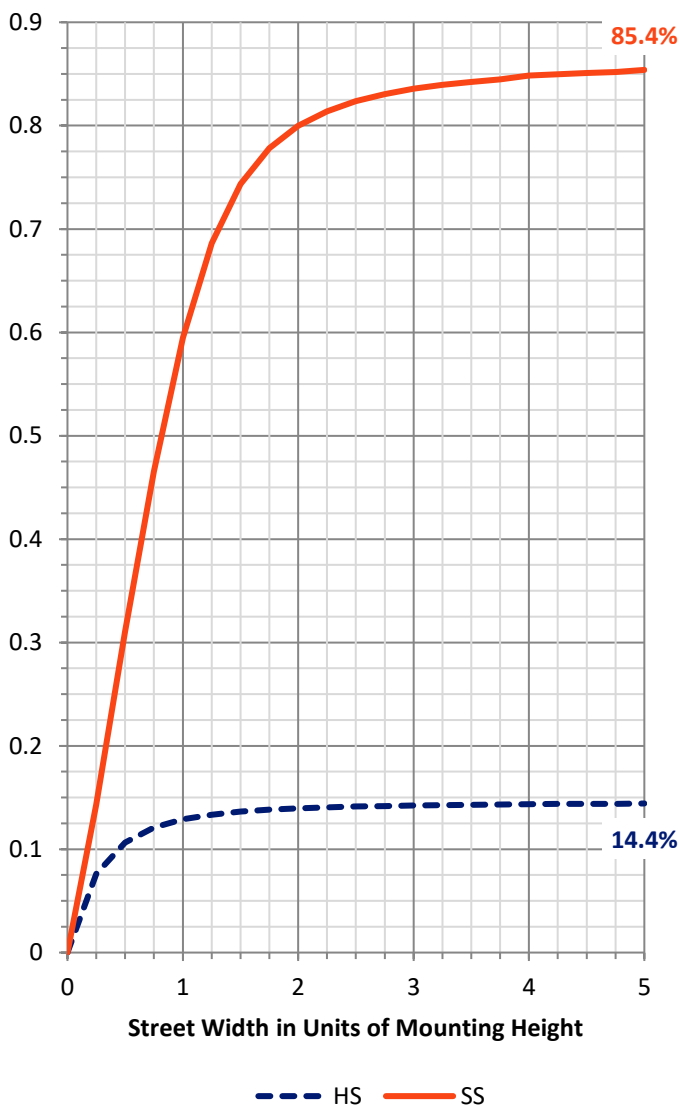
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	463.7	0.0	463.7
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	2725.0	0.0	2725.0
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	3188.7	0.0	3188.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.6	1.7
10°-20°	165.9	5.2
20°-30°	277.9	8.7
30°-40°	419.2	13.1
40°-50°	592.4	18.6
50°-60°	666.5	20.9
60°-70°	597.7	18.7
70°-80°	363.5	11.4
80°-90°	50.9	1.6
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°	3188.7	100.0
0°-180°	3188.7	100.0

**Coefficient of Utilization**



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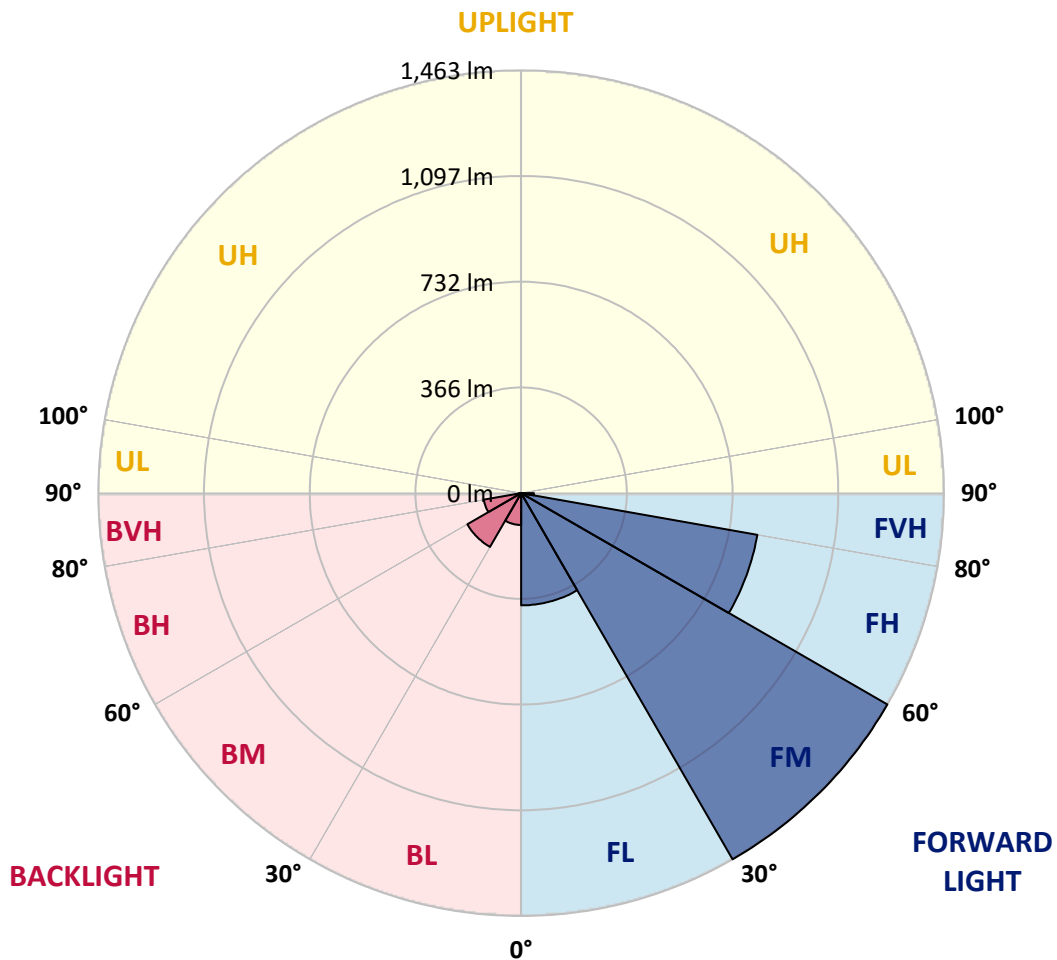
CATALOG NUMBER: EMM2-HSN-SA1A-840-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	388.3	12.2			
FM (30°-60°)	1463.1	45.9			
FH (60°-80°)	829.9	26.0			G1/1800
FVH (80°-90°)	43.7	1.4			G1/100
BL (0°-30°)	110.2	3.5	B1/500		
BM (30°-60°)	215.0	6.7	B0/220		
BH (60°-80°)	131.3	4.1	B1/500		G1/500
BVH (80°-90°)	7.2	0.2			G0/10
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 Short





REPORT NUMBER: P871146

CATALOG NUMBER: EMM2-HSN-SA1A-840-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7
2.5°	652.9	649.2	643.5	638.9	630.4	619.2	609.8	597.6	589.1	586.3	574.1
5°	747.7	743.0	736.4	725.2	702.6	689.5	665.1	637.0	614.5	609.8	581.6
7.5°	845.2	843.4	828.4	811.5	784.3	755.2	717.7	673.6	640.7	633.2	590.1
10°	927.8	919.3	910.9	895.0	865.9	824.6	775.8	714.8	668.9	656.7	598.5
12.5°	977.5	974.7	967.2	948.4	920.3	884.6	826.5	755.2	696.1	679.2	607.0
15°	1014.1	1016.9	1009.4	997.2	968.1	934.4	878.1	797.4	725.2	705.5	616.3
17.5°	1048.8	1046.9	1046.0	1031.9	1005.7	971.9	914.7	832.1	754.2	732.7	625.7
20°	1068.5	1069.4	1067.6	1061.9	1036.6	1003.8	950.3	873.4	786.1	761.7	637.9
22.5°	1078.8	1082.6	1086.3	1085.4	1064.8	1039.4	984.1	906.2	819.0	793.6	652.9
25°	1085.4	1088.2	1096.6	1107.9	1089.1	1068.5	1021.6	945.6	857.4	828.4	670.7
27.5°	1091.0	1094.8	1105.1	1122.0	1107.0	1094.8	1054.4	979.4	890.3	864.0	691.4
30°	1127.6	1132.3	1132.3	1140.7	1123.9	1121.0	1091.0	1019.7	931.5	903.4	717.7
32.5°	1224.2	1214.9	1198.0	1189.5	1149.2	1150.1	1126.7	1060.1	975.6	947.5	750.5
35°	1307.7	1307.7	1287.1	1259.9	1195.2	1182.0	1167.9	1113.5	1023.5	996.3	793.6
37.5°	1388.4	1389.3	1367.8	1344.3	1270.2	1223.3	1215.8	1165.1	1082.6	1050.7	838.7
40°	1439.1	1444.7	1439.1	1421.2	1349.9	1295.5	1262.7	1223.3	1138.9	1114.5	890.3
42.5°	1447.5	1458.8	1479.4	1485.0	1408.1	1360.3	1322.7	1283.3	1206.4	1179.2	949.4
45°	1425.9	1429.7	1475.6	1482.2	1451.3	1411.9	1386.5	1353.7	1287.1	1263.6	1015.0
47.5°	1366.8	1359.3	1375.3	1432.5	1444.7	1442.8	1449.4	1433.4	1380.9	1350.9	1087.3
50°	1240.2	1243.0	1294.6	1364.0	1406.2	1454.1	1496.3	1514.1	1475.6	1445.6	1165.1
52.5°	1009.4	1022.5	1121.0	1285.2	1358.4	1446.6	1530.1	1590.1	1574.1	1545.1	1242.1
55°	829.3	849.0	947.5	1158.6	1292.7	1410.0	1549.8	1669.8	1672.6	1650.1	1312.4
57.5°	649.2	665.1	769.2	962.5	1198.9	1352.8	1552.6	1738.3	1770.2	1743.9	1374.3
60°	508.5	519.7	580.7	802.1	1083.5	1271.1	1531.9	1792.7	1852.8	1833.1	1427.8
62.5°	385.6	394.0	448.4	634.2	941.9	1175.5	1462.5	1812.4	1910.9	1892.2	1457.8
65°	312.4	319.9	355.5	498.1	802.1	1064.8	1357.4	1767.4	1927.8	1910.9	1454.1
67.5°	255.2	258.0	287.1	388.4	678.3	940.0	1203.6	1650.1	1876.2	1875.3	1410.9
70°	206.4	213.9	238.3	309.6	563.8	796.5	1024.4	1466.3	1764.6	1774.0	1324.6
72.5°	175.4	177.3	198.9	256.1	459.7	646.4	848.1	1254.3	1600.4	1607.9	1189.5
75°	148.2	151.0	167.0	207.3	373.4	513.1	682.0	1013.2	1339.6	1371.5	1001.9
77.5°	127.6	128.5	139.8	170.7	265.5	385.6	500.0	759.9	1048.8	1071.3	787.1
80°	100.4	102.3	114.4	135.1	184.8	250.5	345.2	519.7	700.8	726.1	545.0
82.5°	46.9	52.5	55.3	74.1	96.6	123.8	163.2	216.7	317.1	316.1	254.2
85°	4.7	3.8	3.8	5.6	8.4	8.4	10.3	12.2	24.4	29.1	22.5
87.5°	0.0	0.0	0.0	0.9	1.9	1.9	1.9	2.8	2.8	2.8	2.8
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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CATALOG NUMBER: EMM2-HSN-SA1A-840-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7	565.7
2.5°	568.5	560.1	545.0	531.0	521.6	514.1	501.9	494.4	488.8	481.2	480.3
5°	566.6	551.6	521.6	496.3	471.9	451.2	429.7	416.5	402.4	395.9	401.5
7.5°	568.5	544.1	497.2	458.7	422.1	389.3	361.2	343.3	330.2	323.6	324.6
10°	569.4	537.5	476.6	423.1	376.2	337.7	305.8	281.4	265.5	261.7	257.0
12.5°	567.6	529.1	455.9	388.4	332.1	289.9	252.4	233.6	217.6	210.1	210.1
15°	569.4	522.5	434.3	356.5	292.7	243.9	212.0	191.4	182.0	175.4	176.4
17.5°	569.4	516.9	413.7	325.5	254.2	209.2	180.1	163.2	153.8	150.1	149.2
20°	576.0	512.2	394.0	296.4	220.5	178.2	154.8	141.7	134.1	130.4	128.5
22.5°	580.7	508.5	376.2	268.3	192.3	155.7	136.0	123.8	118.2	116.3	116.3
25°	589.1	507.5	360.2	241.1	169.8	138.8	121.0	111.6	106.9	105.1	105.1
27.5°	601.3	509.4	345.2	217.6	152.9	122.0	108.8	101.3	98.5	97.6	96.6
30°	619.2	517.8	335.8	199.8	137.0	111.6	99.4	94.7	92.9	91.9	91.9
32.5°	642.6	532.8	332.1	190.4	127.6	103.2	92.9	89.1	87.2	87.2	86.3
35°	671.7	549.7	329.3	182.0	121.0	97.6	88.2	84.4	83.5	83.5	83.5
37.5°	706.4	567.6	324.6	176.4	117.3	92.9	84.4	80.7	80.7	80.7	80.7
40°	744.9	593.8	323.6	172.6	114.4	90.1	80.7	76.9	76.9	76.9	76.9
42.5°	788.0	622.0	322.7	169.8	112.6	88.2	76.9	73.2	73.2	73.2	73.2
45°	840.5	657.6	324.6	167.9	112.6	86.3	74.1	69.4	68.5	68.5	68.5
47.5°	892.1	691.4	326.5	166.0	110.7	83.5	70.4	65.7	64.7	63.8	63.8
50°	947.5	726.1	326.5	164.2	108.8	80.7	67.5	61.0	60.0	59.1	59.1
52.5°	1001.9	755.2	327.4	161.4	104.1	76.0	62.9	57.2	55.3	54.4	53.5
55°	1054.4	786.1	328.3	156.7	98.5	71.3	60.0	53.5	50.7	48.8	48.8
57.5°	1093.8	811.5	323.6	147.3	91.0	66.6	55.3	48.8	45.0	43.2	43.2
60°	1131.4	827.4	315.2	133.2	83.5	61.9	51.6	44.1	40.3	38.5	38.5
62.5°	1146.4	830.2	295.5	108.8	74.1	57.2	46.9	40.3	37.5	36.6	36.6
65°	1137.9	818.0	269.2	86.3	65.7	51.6	43.2	37.5	33.8	31.0	31.0
67.5°	1092.0	775.8	233.6	68.5	57.2	46.9	39.4	33.8	30.0	27.2	27.2
70°	1004.7	708.3	182.0	54.4	49.7	41.3	35.6	31.0	27.2	24.4	24.4
72.5°	876.2	614.5	132.3	46.0	43.2	36.6	31.9	28.1	24.4	22.5	22.5
75°	722.3	473.7	93.8	39.4	38.5	32.8	29.1	25.3	22.5	20.6	20.6
77.5°	542.2	330.2	73.2	34.7	33.8	30.0	26.3	23.5	20.6	19.7	18.8
80°	361.2	204.5	55.3	26.3	25.3	23.5	21.6	19.7	16.9	15.0	15.0
82.5°	161.4	86.3	28.1	15.0	13.1	11.3	9.4	6.6	6.6	5.6	5.6
85°	16.9	11.3	5.6	3.8	3.8	2.8	2.8	2.8	1.9	1.9	1.9
87.5°	2.8	2.8	1.9	1.9	1.9	0.9	0.9	0.9	0.9	0.9	0.9
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: SP1-2407-157-8

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-840-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-840-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-8  
 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-40-840-U-5WQ**  
 Description: Epic Modern Light Square 40W 5WQ Optic

**Spectral Parameters**

CCT (K): 3996  
 CIE u': 0.2245  
 CIE v': 0.5031  
 Duv: 0.0012  
 CIE x: 0.3815  
 CIE y: 0.3799  
 CIE z: 0.2386  
 Peak Wavelength (nm): 449  
 Dominant Wavelength (nm): 578  
 Purity: 28.49233  
 Rf: 82.6  
 Rg: 95.1

CRI (Ra):	80.6		
R1:	78.1	R9:	-5.8
R2:	87.1	R10:	70.3
R3:	94.5	R11:	78.7
R4:	79.7	R12:	60.5
R5:	78.7	R13:	80.2
R6:	82.7	R14:	97.2
R7:	84.3	R15:	70.6
R8:	59.5		



**Test Conditions**

Stabilization Time: 29M  
 Operation Time: 1H 29M  
 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**



Point lies inside the ANSI 4000K 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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.66**

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.37

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	289	NR	620	725	NR	750	17	NR	880	0	NR
365	0	NR	495	351	NR	625	673	NR	755	15	NR	885	0	NR
370	0	NR	500	414	NR	630	619	NR	760	13	NR	890	0	NR
375	0	NR	505	470	NR	635	562	NR	765	11	NR	895	0	NR
380	0	NR	510	513	NR	640	506	NR	770	9	NR	900	0	NR
385	0	NR	515	546	NR	645	452	NR	775	8	NR	905	0	NR
390	0	NR	520	571	NR	650	400	NR	780	7	NR	910	0	NR
395	1	NR	525	592	NR	655	352	NR	785	6	NR	915	0	NR
400	3	NR	530	606	NR	660	307	NR	790	5	NR	920	0	NR
405	6	NR	535	624	NR	665	267	NR	795	4	NR	925	0	NR
410	12	NR	540	642	NR	670	231	NR	800	4	NR	930	0	NR
415	22	NR	545	663	NR	675	199	NR	805	3	NR	935	0	NR
420	44	NR	550	686	NR	680	171	NR	810	3	NR	940	0	NR
425	83	NR	555	713	NR	685	146	NR	815	2	NR	945	0	NR
430	150	NR	560	745	NR	690	125	NR	820	2	NR	950	0	NR
435	267	NR	565	774	NR	695	106	NR	825	2	NR	955	0	NR
440	466	NR	570	806	NR	700	90	NR	830	1	NR	960	0	NR
445	804	NR	575	835	NR	705	76	NR	835	1	NR	965	0	NR
450	1000	NR	580	858	NR	710	65	NR	840	1	NR	970	0	NR
455	715	NR	585	875	NR	715	55	NR	845	1	NR	975	0	NR
460	492	NR	590	884	NR	720	47	NR	850	1	NR	980	0	NR
465	402	NR	595	880	NR	725	40	NR	855	1	NR	985	0	NR
470	288	NR	600	868	NR	730	34	NR	860	1	NR	990	0	NR
475	226	NR	605	844	NR	735	28	NR	865	1	NR	995	0	NR
480	227	NR	610	814	NR	740	24	NR	870	0	NR	1000	0	NR
485	248	NR	615	771	NR	745	20	NR	875	0	NR			

**Summary**

$R_f = 82.6$   
 $R_g = 95.1$   
 CIE  $R_a = 80.6$   
 $R_9 = -5.8$



**Color Vector Graphics**



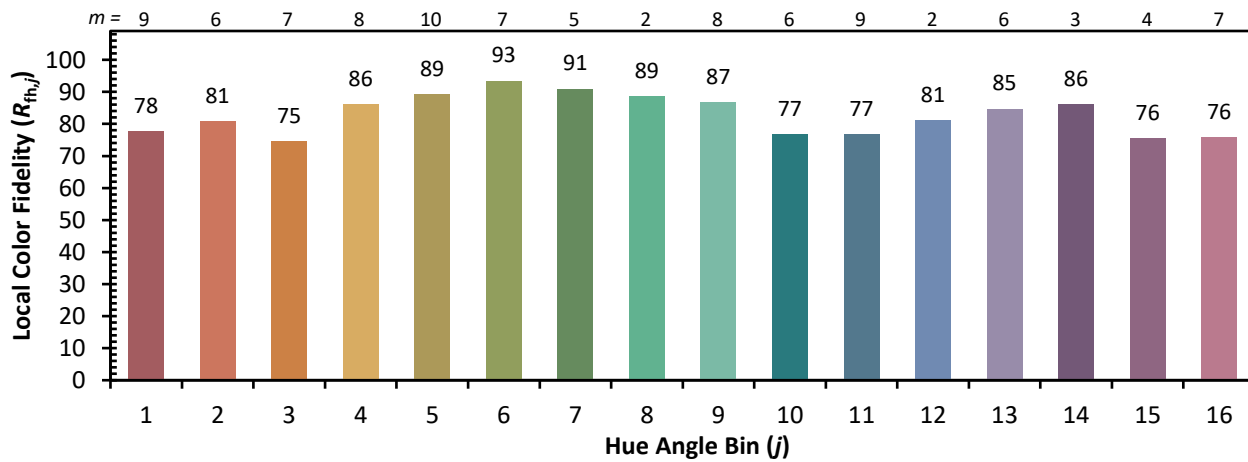


Individual Sample Fidelity Index ( $R_{f,i}$ )

CES01 = 85	CES26 = 79	CES51 = 94	CES76 = 72
CES02 = 61	CES27 = 93	CES52 = 94	CES77 = 82
CES03 = 31	CES28 = 90	CES53 = 88	CES78 = 71
CES04 = 69	CES29 = 83	CES54 = 89	CES79 = 91
CES05 = 48	CES30 = 95	CES55 = 88	CES80 = 88
CES06 = 50	CES31 = 86	CES56 = 84	CES81 = 80
CES07 = 40	CES32 = 78	CES57 = 84	CES82 = 95
CES08 = 39	CES33 = 90	CES58 = 84	CES83 = 95
CES09 = 29	CES34 = 85	CES59 = 90	CES84 = 90
CES10 = 74	CES35 = 92	CES60 = 91	CES85 = 78
CES11 = 57	CES36 = 85	CES61 = 87	CES86 = 73
CES12 = 63	CES37 = 91	CES62 = 87	CES87 = 83
CES13 = 42	CES38 = 95	CES63 = 84	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 78	CES89 = 76
CES15 = 71	CES40 = 94	CES65 = 75	CES90 = 87
CES16 = 46	CES41 = 98	CES66 = 75	CES91 = 72
CES17 = 49	CES42 = 92	CES67 = 73	CES92 = 62
CES18 = 56	CES43 = 88	CES68 = 77	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 82	CES94 = 60
CES20 = 65	CES45 = 93	CES70 = 72	CES95 = 70
CES21 = 86	CES46 = 90	CES71 = 67	CES96 = 82
CES22 = 78	CES47 = 95	CES72 = 89	CES97 = 90
CES23 = 91	CES48 = 84	CES73 = 65	CES98 = 84
CES24 = 90	CES49 = 89	CES74 = 93	CES99 = 73
CES25 = 71	CES50 = 94	CES75 = 69	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)