

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: P871139

Luminaire Tested: **EMM2-HSN-SA1A-830-U-T2U-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P871139  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA1A-830-U-T2U-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 40W 80CRI 3000K  
FITXURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (10) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

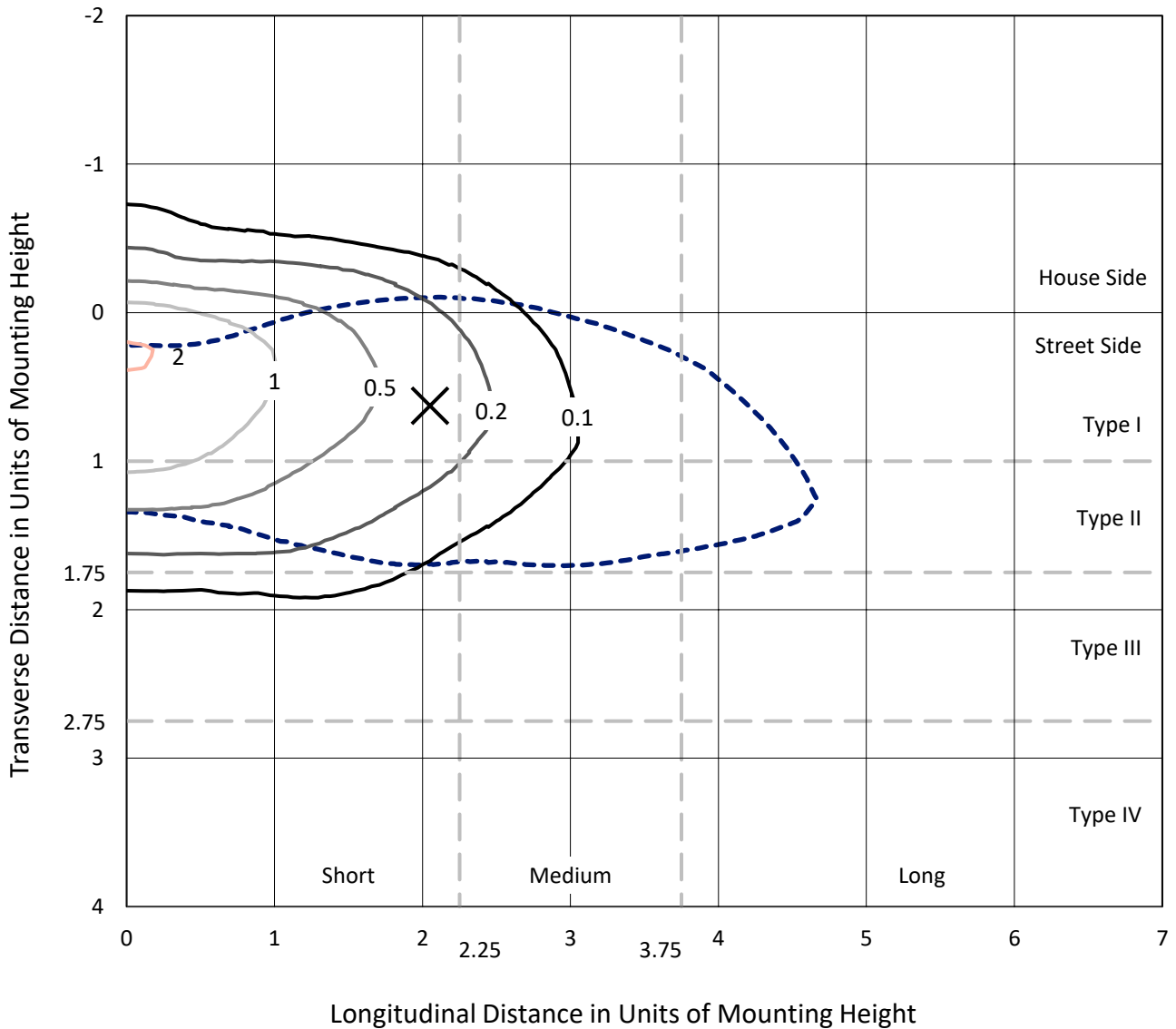
Lumens per Lamp: N/A  
Luminaire Lumens: 2933.4 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

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

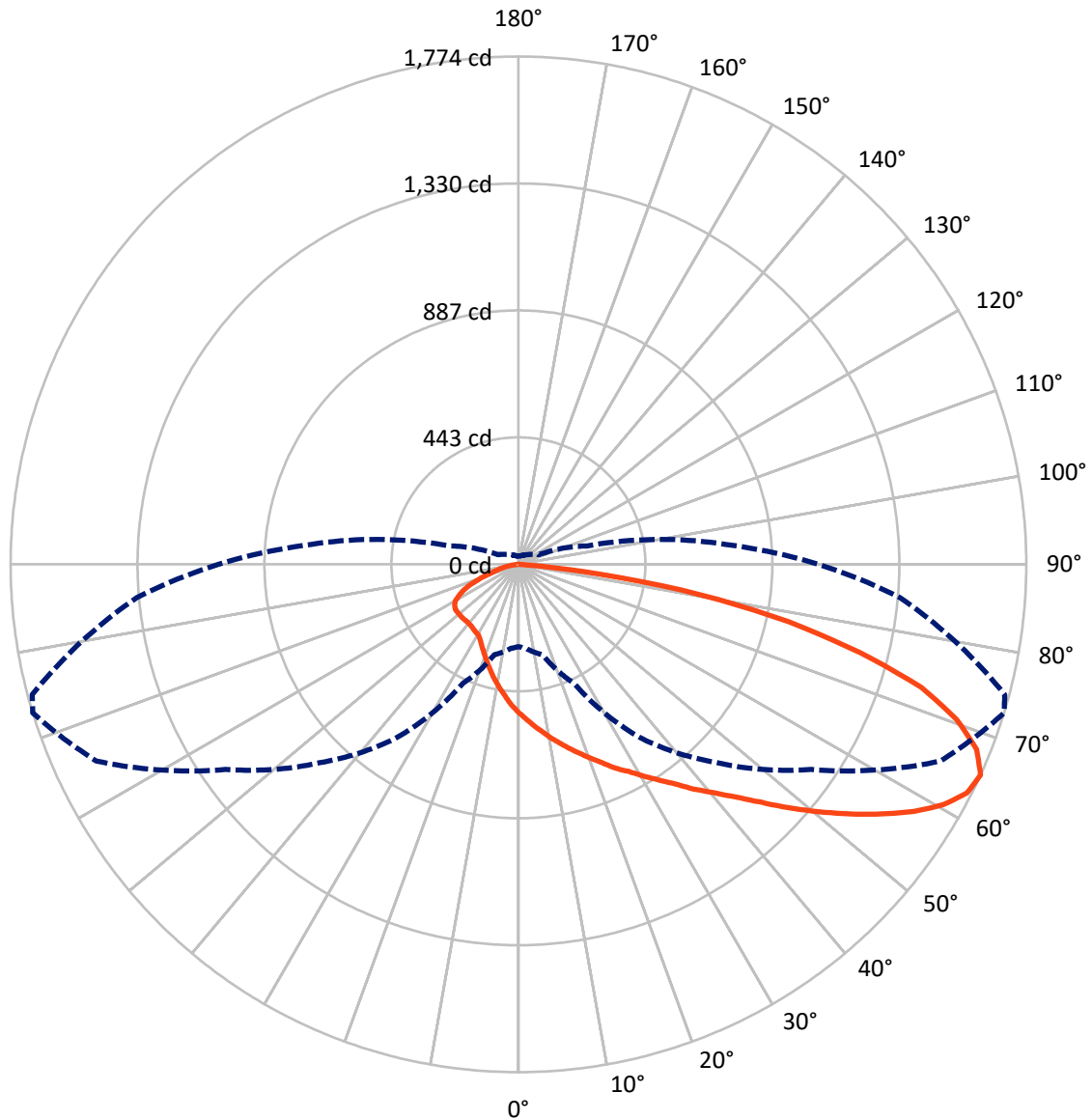
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.1 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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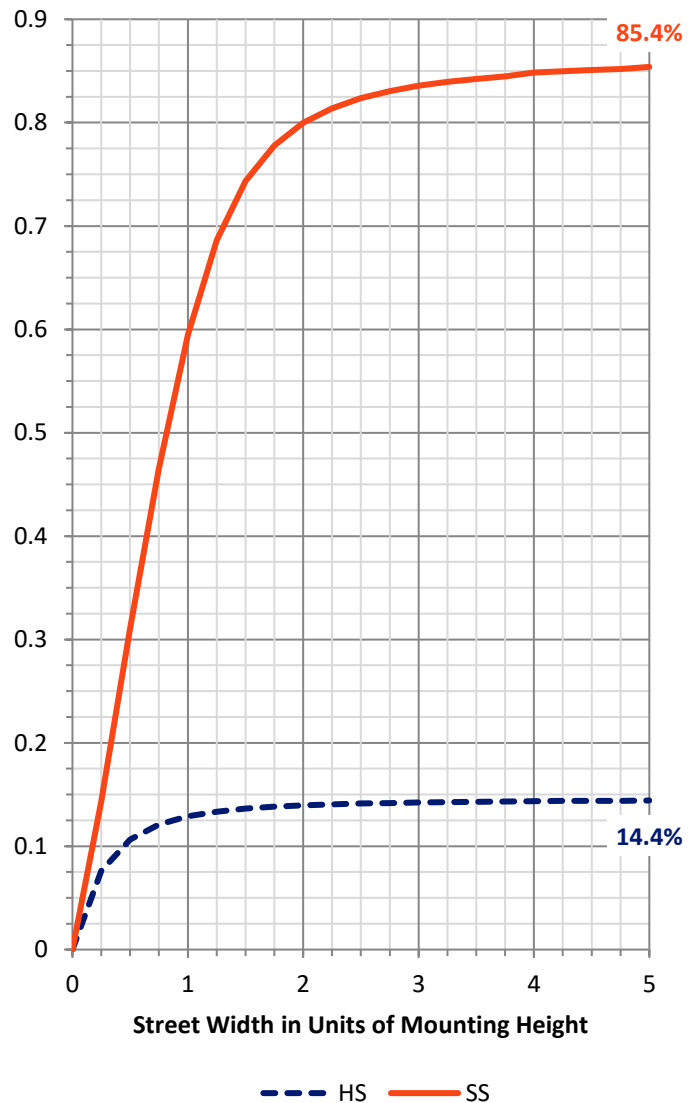
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	426.6	0.0	426.6
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	2506.9	0.0	2506.9
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	2933.4	0.0	2933.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.2	1.7
10°-20°	152.7	5.2
20°-30°	255.7	8.7
30°-40°	385.7	13.1
40°-50°	544.9	18.6
50°-60°	613.2	20.9
60°-70°	549.9	18.7
70°-80°	334.4	11.4
80°-90°	46.8	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°	2933.4	100.0
0°-180°	2933.4	100.0



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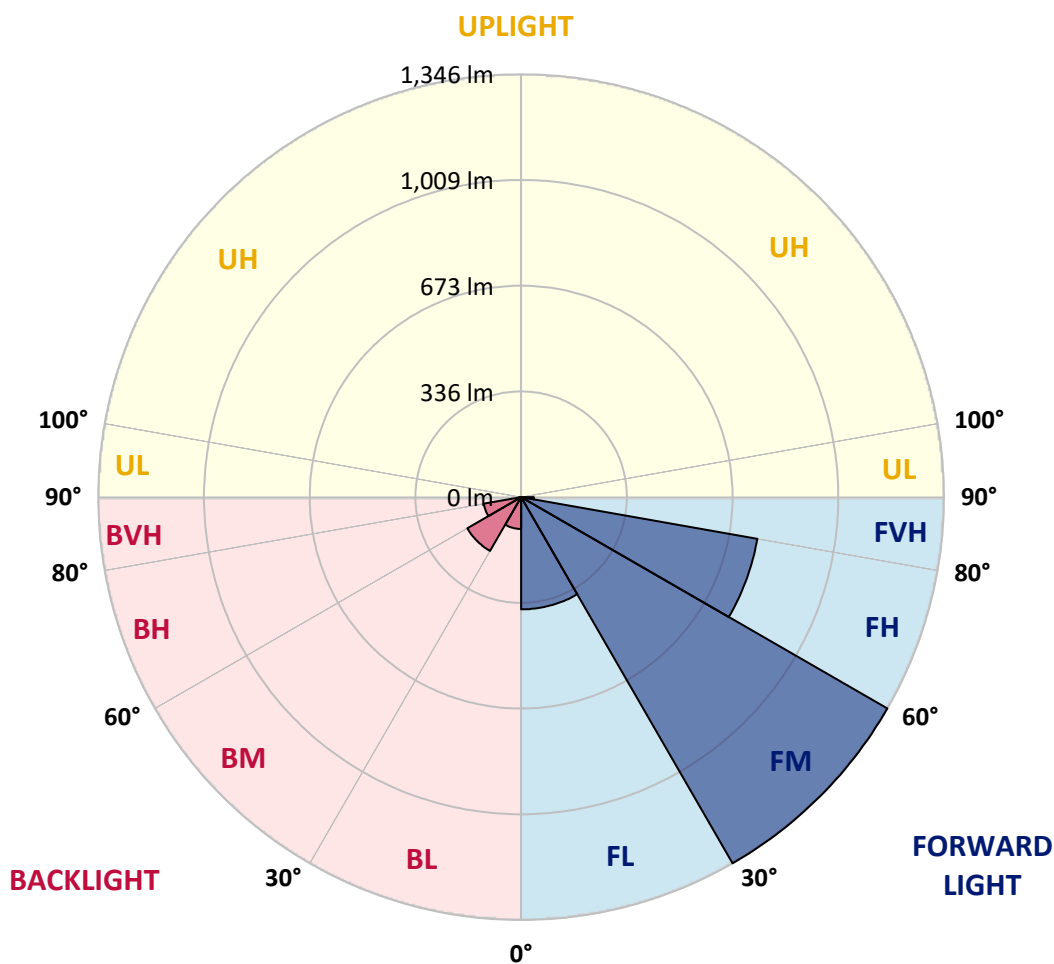
CATALOG NUMBER: EMM2-HSN-SA1A-830-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	357.2	12.2			
FM (30°-60°)	1346.0	45.9			
FH (60°-80°)	763.5	26.0			G1/1800
FVH (80°-90°)	40.2	1.4			G1/100
BL (0°-30°)	101.3	3.5	B0/110		
BM (30°-60°)	197.8	6.7	B0/220		
BH (60°-80°)	120.8	4.1	B1/500		G1/500
BVH (80°-90°)	6.6	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: P871139

CATALOG NUMBER: EMM2-HSN-SA1A-830-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4
2.5°	600.7	597.2	592.0	587.7	579.9	569.6	561.0	549.7	542.0	539.4	528.2
5°	687.8	683.5	677.5	667.1	646.4	634.3	611.9	586.0	565.3	561.0	535.1
7.5°	777.6	775.8	762.0	746.5	721.5	694.7	660.2	619.6	589.4	582.5	542.8
10°	853.5	845.8	838.0	823.3	796.6	758.6	713.7	657.6	615.3	604.1	550.6
12.5°	899.3	896.7	889.8	872.5	846.6	813.8	760.3	694.7	640.4	624.8	558.4
15°	932.9	935.5	928.6	917.4	890.6	859.6	807.8	733.6	667.1	649.0	567.0
17.5°	964.8	963.1	962.3	949.3	925.1	894.1	841.4	765.5	693.9	674.0	575.6
20°	983.0	983.8	982.1	976.9	953.6	923.4	874.2	803.5	723.2	700.8	586.8
22.5°	992.5	995.9	999.4	998.5	979.5	956.2	905.3	833.7	753.4	730.1	600.7
25°	998.5	1001.1	1008.9	1019.2	1002.0	983.0	939.8	869.9	788.8	762.0	617.1
27.5°	1003.7	1007.1	1016.6	1032.2	1018.4	1007.1	970.0	901.0	819.0	794.8	636.0
30°	1037.3	1041.7	1041.7	1049.4	1033.9	1031.3	1003.7	938.1	857.0	831.1	660.2
32.5°	1126.2	1117.6	1102.1	1094.3	1057.2	1058.1	1036.5	975.2	897.5	871.6	690.4
35°	1203.0	1203.0	1184.1	1159.0	1099.5	1087.4	1074.5	1024.4	941.5	916.5	730.1
37.5°	1277.3	1278.1	1258.3	1236.7	1168.5	1125.4	1118.5	1071.9	995.9	966.6	771.5
40°	1323.9	1329.0	1323.9	1307.5	1241.9	1191.8	1161.6	1125.4	1047.7	1025.3	819.0
42.5°	1331.6	1342.0	1361.0	1366.1	1295.4	1251.4	1216.8	1180.6	1109.8	1084.8	873.4
45°	1311.8	1315.2	1357.5	1363.6	1335.1	1298.8	1275.5	1245.3	1184.1	1162.5	933.8
47.5°	1257.4	1250.5	1265.2	1317.8	1329.0	1327.3	1333.4	1318.7	1270.4	1242.7	1000.2
50°	1140.9	1143.5	1191.0	1254.8	1293.7	1337.7	1376.5	1392.9	1357.5	1329.9	1071.9
52.5°	928.6	940.7	1031.3	1182.3	1249.6	1330.8	1407.6	1462.8	1448.1	1421.4	1142.6
55°	762.9	781.0	871.6	1065.8	1189.2	1297.1	1425.7	1536.2	1538.8	1518.0	1207.4
57.5°	597.2	611.9	707.7	885.5	1102.9	1244.5	1428.3	1599.2	1628.5	1604.3	1264.3
60°	467.8	478.1	534.2	737.9	996.8	1169.4	1409.3	1649.2	1704.5	1686.3	1313.5
62.5°	354.7	362.5	412.5	583.4	866.5	1081.4	1345.4	1667.3	1758.0	1740.7	1341.1
65°	287.4	294.3	327.1	458.3	737.9	979.5	1248.8	1625.9	1773.5	1758.0	1337.7
67.5°	234.7	237.3	264.1	357.3	624.0	864.7	1107.2	1518.0	1726.0	1725.2	1298.0
70°	189.9	196.8	219.2	284.8	518.7	732.7	942.4	1348.9	1623.3	1632.0	1218.6
72.5°	161.4	163.1	183.0	235.6	422.9	594.6	780.2	1153.8	1472.3	1479.2	1094.3
75°	136.4	138.9	153.6	190.7	343.5	472.1	627.4	932.1	1232.4	1261.7	921.7
77.5°	117.4	118.2	128.6	157.1	244.2	354.7	460.0	699.0	964.8	985.6	724.1
80°	92.3	94.1	105.3	124.3	170.0	230.4	317.6	478.1	644.7	668.0	501.4
82.5°	43.2	48.3	50.9	68.2	88.9	113.9	150.2	199.4	291.7	290.8	233.9
85°	4.3	3.5	3.5	5.2	7.8	7.8	9.5	11.2	22.4	26.8	20.7
87.5°	0.0	0.0	0.0	0.9	1.7	1.7	1.7	2.6	2.6	2.6	2.6
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-830-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4
2.5°	523.0	515.2	501.4	488.5	479.8	472.9	461.7	454.8	449.6	442.7	441.9
5°	521.3	507.5	479.8	456.5	434.1	415.1	395.3	383.2	370.2	364.2	369.4
7.5°	523.0	500.5	457.4	422.0	388.4	358.2	332.3	315.9	303.8	297.7	298.6
10°	523.8	494.5	438.4	389.2	346.1	310.7	281.3	258.9	244.2	240.8	236.5
12.5°	522.1	486.7	419.4	357.3	305.5	266.7	232.2	214.9	200.2	193.3	193.3
15°	523.8	480.7	399.6	327.9	269.3	224.4	195.0	176.1	167.4	161.4	162.2
17.5°	523.8	475.5	380.6	299.5	233.9	192.5	165.7	150.2	141.5	138.1	137.2
20°	529.9	471.2	362.5	272.7	202.8	164.0	142.4	130.3	123.4	120.0	118.2
22.5°	534.2	467.8	346.1	246.8	176.9	143.3	125.1	113.9	108.7	107.0	107.0
25°	542.0	466.9	331.4	221.8	156.2	127.7	111.3	102.7	98.4	96.7	96.7
27.5°	553.2	468.6	317.6	200.2	140.7	112.2	100.1	93.2	90.6	89.8	88.9
30°	569.6	476.4	309.0	183.8	126.0	102.7	91.5	87.2	85.4	84.6	84.6
32.5°	591.2	490.2	305.5	175.2	117.4	94.9	85.4	82.0	80.3	80.3	79.4
35°	617.9	505.7	302.9	167.4	111.3	89.8	81.1	77.7	76.8	76.8	76.8
37.5°	649.8	522.1	298.6	162.2	107.9	85.4	77.7	74.2	74.2	74.2	74.2
40°	685.2	546.3	297.7	158.8	105.3	82.8	74.2	70.8	70.8	70.8	70.8
42.5°	724.9	572.2	296.9	156.2	103.6	81.1	70.8	67.3	67.3	67.3	67.3
45°	773.3	605.0	298.6	154.5	103.6	79.4	68.2	63.9	63.0	63.0	63.0
47.5°	820.7	636.0	300.3	152.8	101.8	76.8	64.7	60.4	59.5	58.7	58.7
50°	871.6	668.0	300.3	151.0	100.1	74.2	62.1	56.1	55.2	54.4	54.4
52.5°	921.7	694.7	301.2	148.4	95.8	69.9	57.8	52.6	50.9	50.1	49.2
55°	970.0	723.2	302.1	144.1	90.6	65.6	55.2	49.2	46.6	44.9	44.9
57.5°	1006.3	746.5	297.7	135.5	83.7	61.3	50.9	44.9	41.4	39.7	39.7
60°	1040.8	761.2	290.0	122.5	76.8	57.0	47.5	40.6	37.1	35.4	35.4
62.5°	1054.6	763.8	271.8	100.1	68.2	52.6	43.2	37.1	34.5	33.7	33.7
65°	1046.8	752.5	247.7	79.4	60.4	47.5	39.7	34.5	31.1	28.5	28.5
67.5°	1004.5	713.7	214.9	63.0	52.6	43.2	36.2	31.1	27.6	25.0	25.0
70°	924.3	651.6	167.4	50.1	45.7	38.0	32.8	28.5	25.0	22.4	22.4
72.5°	806.1	565.3	121.7	42.3	39.7	33.7	29.3	25.9	22.4	20.7	20.7
75°	664.5	435.8	86.3	36.2	35.4	30.2	26.8	23.3	20.7	19.0	19.0
77.5°	498.8	303.8	67.3	31.9	31.1	27.6	24.2	21.6	19.0	18.1	17.3
80°	332.3	188.1	50.9	24.2	23.3	21.6	19.8	18.1	15.5	13.8	13.8
82.5°	148.4	79.4	25.9	13.8	12.1	10.4	8.6	6.0	6.0	5.2	5.2
85°	15.5	10.4	5.2	3.5	3.5	2.6	2.6	2.6	1.7	1.7	1.7
87.5°	2.6	2.6	1.7	1.7	1.7	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: SP1-2407-157-7

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-830-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-7  
 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-40-830-U-5WQ**  
 Description: Epic Modern Light Square 40W 5WQ Optic

**Spectral Parameters**

CCT (K): 3126  
 CIE u': 0.2465  
 CIE v': 0.5182  
 Duv: -0.0004  
 CIE x: 0.4277  
 CIE y: 0.3997  
 CIE z: 0.1727  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 582  
 Purity: 48.31913  
 Rf: 84.4  
 Rg: 94.7

CRI (Ra):	82.6		
R1:	81.4	R9:	5.1
R2:	92.2	R10:	82.2
R3:	94.9	R11:	79.8
R4:	80.1	R12:	70.4
R5:	81.8	R13:	84.2
R6:	90.5	R14:	97.9
R7:	81.8	R15:	73.6
R8:	58.0		



**Test Conditions**

Stabilization Time: 22M  
 Operation Time: 1H 22M  
 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



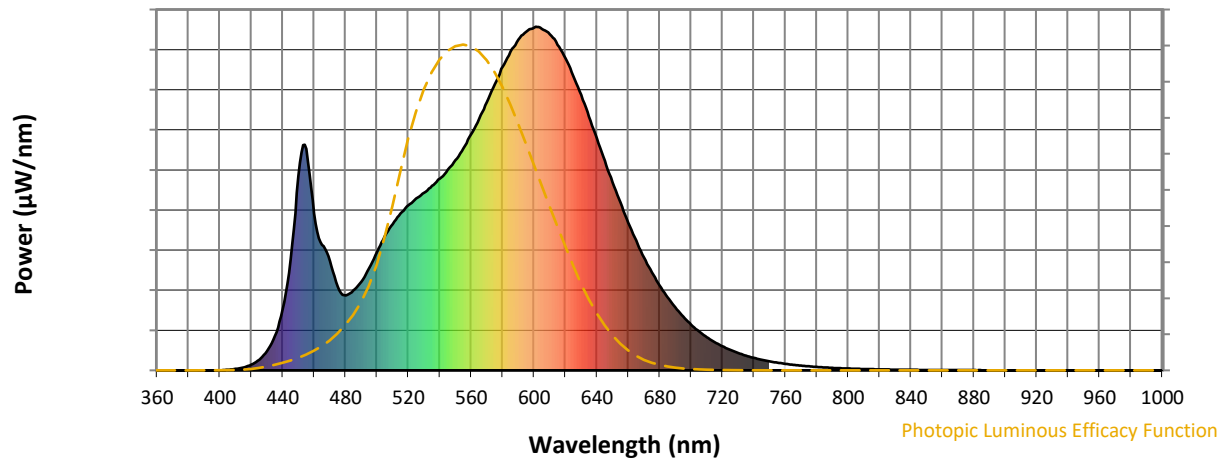
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR S/P: 1.42

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.79

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

**Summary**

$R_f = 84.4$   
 $R_g = 94.7$   
 $CIE R_a = 82.6$   
 $R_9 = 5.1$



**Color Vector Graphics**





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

CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 95
CES08 = 41	CES33 = 97	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 91
CES10 = 76	CES35 = 96	CES60 = 90	CES85 = 74
CES11 = 59	CES36 = 81	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 96	CES62 = 83	CES87 = 84
CES13 = 43	CES38 = 86	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 75
CES15 = 71	CES40 = 96	CES65 = 78	CES90 = 89
CES16 = 47	CES41 = 96	CES66 = 77	CES91 = 73
CES17 = 50	CES42 = 97	CES67 = 76	CES92 = 63
CES18 = 56	CES43 = 91	CES68 = 80	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 85	CES94 = 61
CES20 = 66	CES45 = 93	CES70 = 78	CES95 = 73
CES21 = 87	CES46 = 90	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 74	CES98 = 85
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 76
CES25 = 72	CES50 = 93	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)