

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: P869241

Luminaire Tested: **EMM2-HSN-SA2A-AMB-U-T4W-HSS**

Issue Date: 08/22/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P869241  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA2A-AMB-U-T4W-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 30W 0CRI 1540K  
FIXTURE w/ TYPE IV WIDE DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (20) 1540K CCT, 0 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

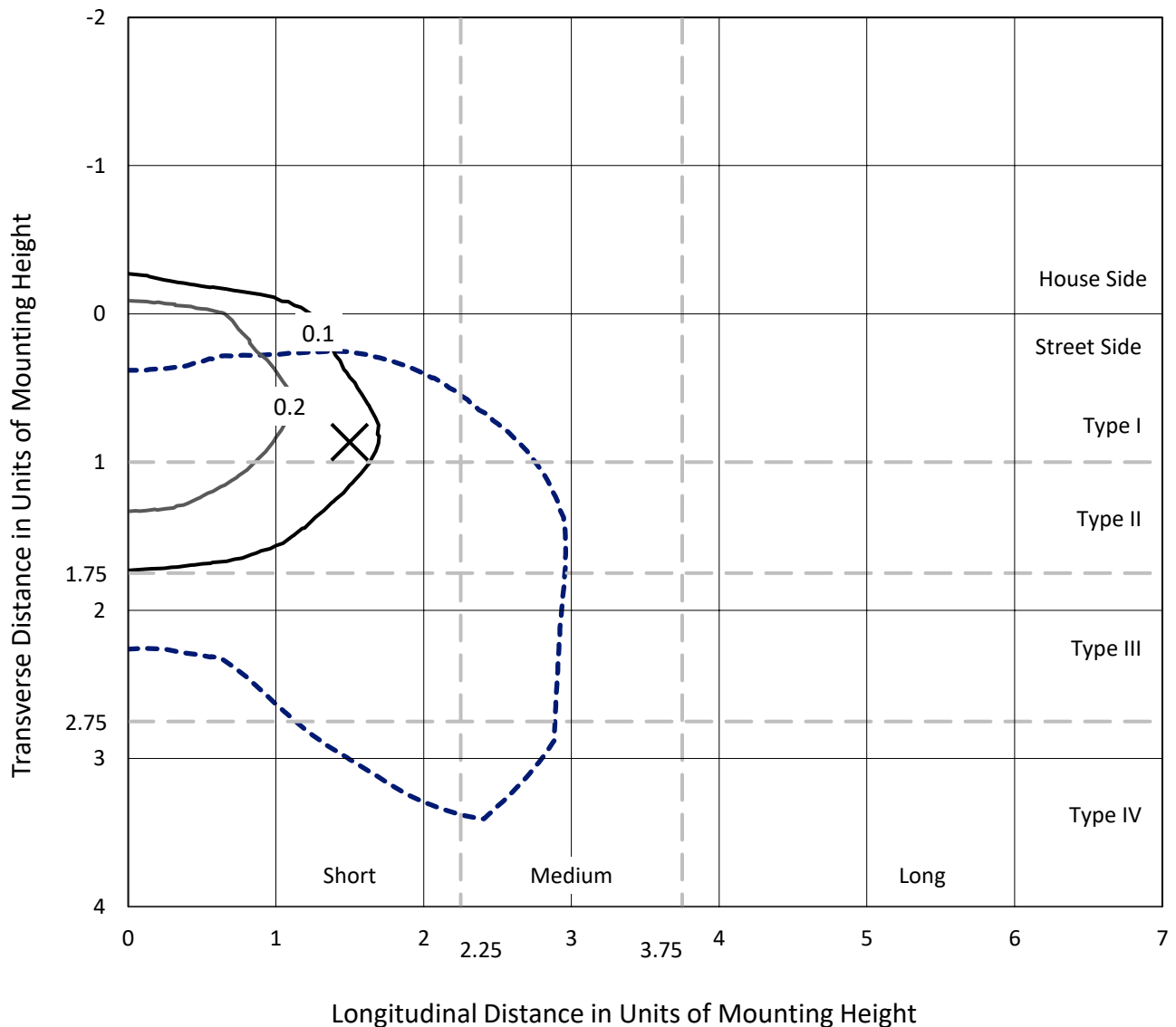
Lumens per Lamp: N/A  
Luminaire Lumens: 733.5 lumens  
Efficiency: N/A  
Efficacy: 24.4 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G1

Input Watts (W): 30  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.98  
Total Harmonic Distortion (THDi): 9.04%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P869241  
 CATALOG NUMBER: EMM2-HSN-SA2A-AMB-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

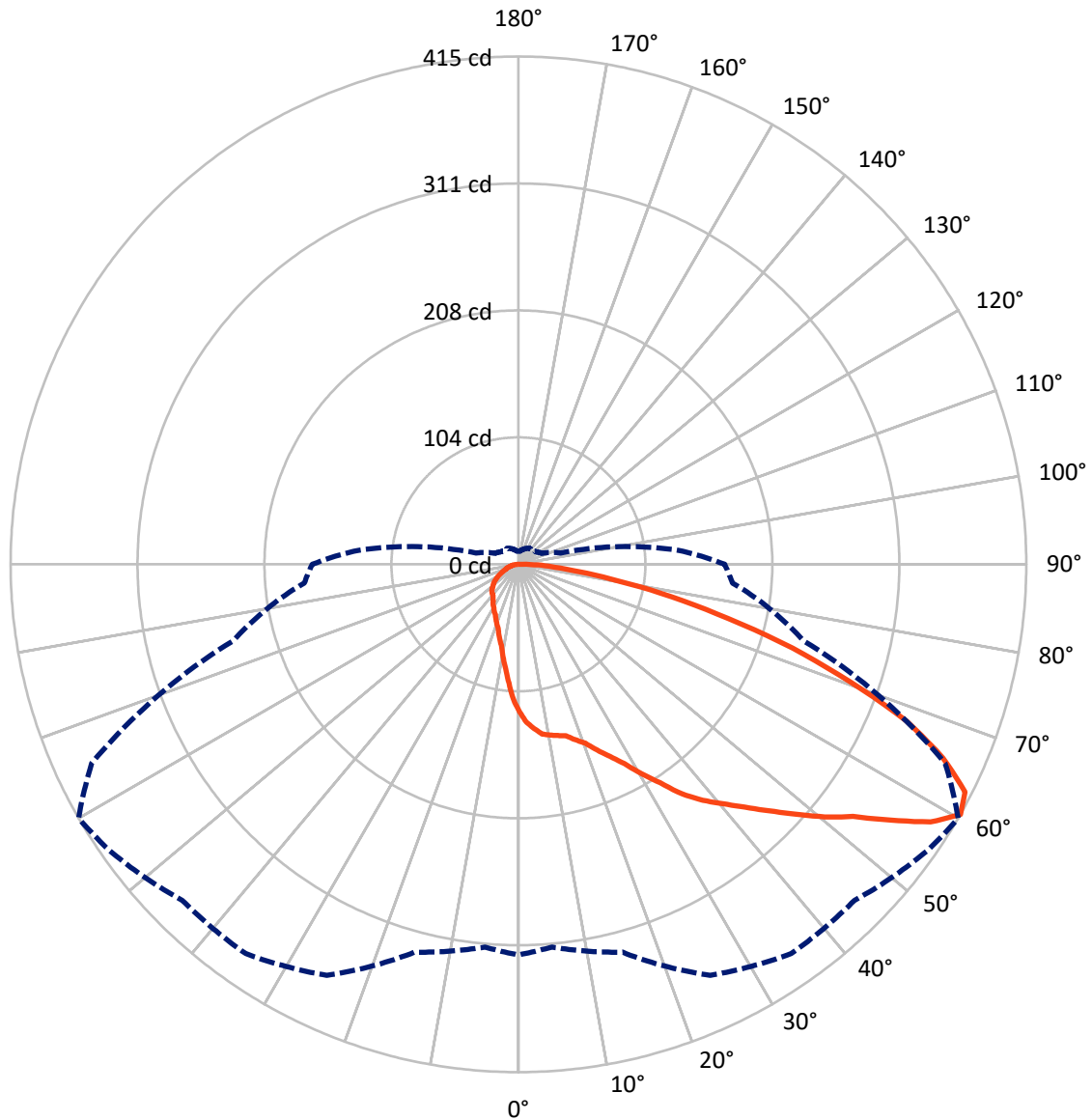
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 0.4 fc  
 Type IV - Short - N/A

REPORT NUMBER: P869241  
CATALOG NUMBER: EMM2-HSN-SA2A-AMB-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P869241

CATALOG NUMBER: EMM2-HSN-SA2A-AMB-U-T4W-HSS

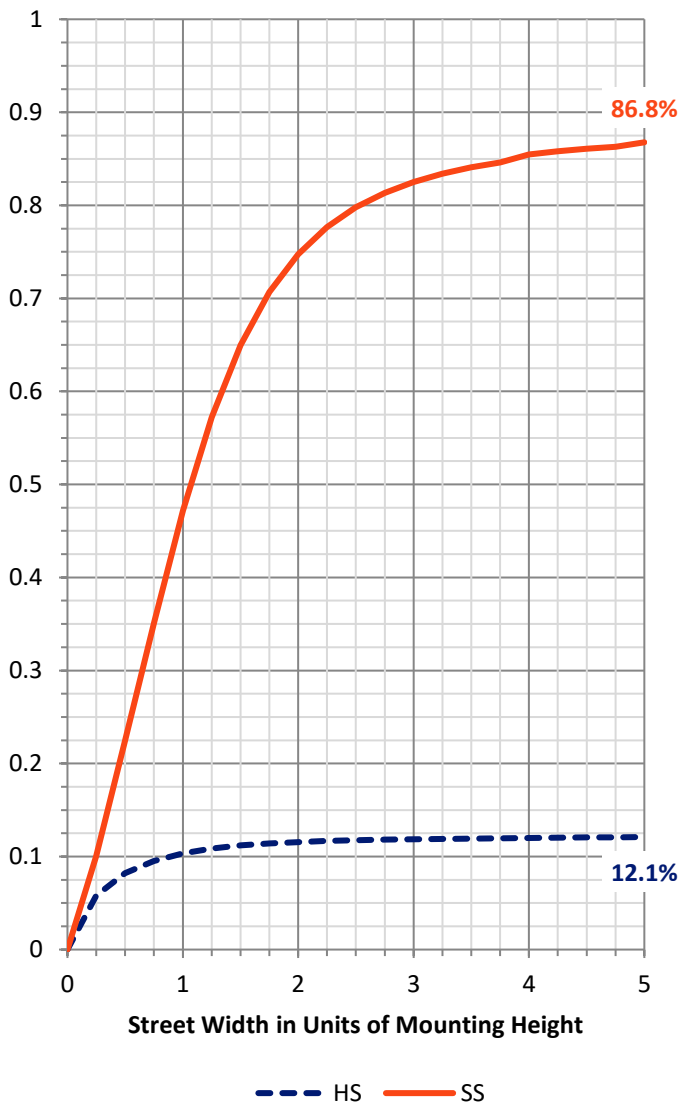
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	89.9	0.0	89.9
	% Fixture	12.3	0.0	12.3
<b>Street Side</b>	Lumens	643.6	0.0	643.6
	% Fixture	87.7	0.0	87.7
<b>Total</b>	Lumens	733.5	0.0	733.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.7	1.5
10°-20°	31.2	4.3
20°-30°	55.1	7.5
30°-40°	84.9	11.6
40°-50°	126.2	17.2
50°-60°	163.6	22.3
60°-70°	156.2	21.3
70°-80°	86.0	11.7
80°-90°	19.5	2.7
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°	733.5	100.0
0°-180°	733.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P869241

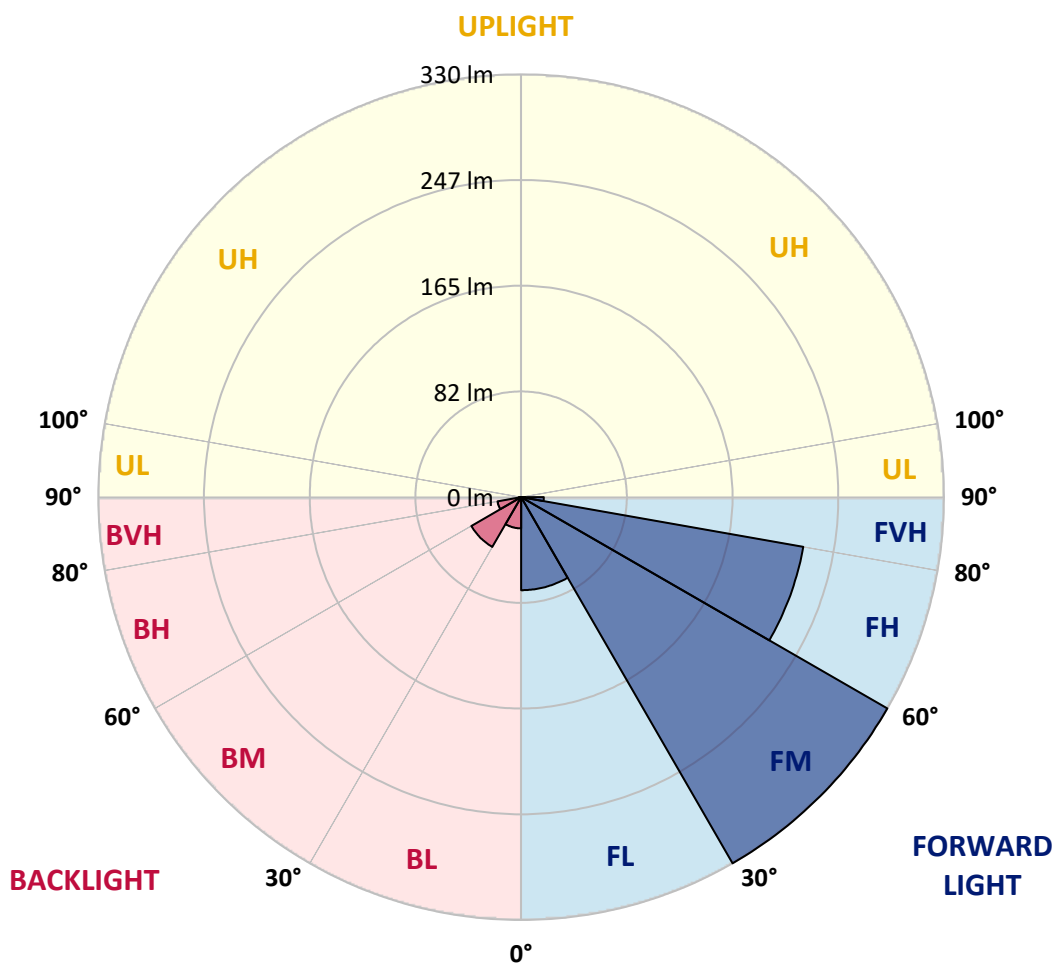
CATALOG NUMBER: EMM2-HSN-SA2A-AMB-U-T4W-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	72.6	9.9			
FM (30°-60°)	329.9	45.0			
FH (60°-80°)	223.5	30.5			G0/660
FVH (80°-90°)	17.7	2.4			G1/100
BL (0°-30°)	24.4	3.3	B0/110		
BM (30°-60°)	44.9	6.1	B0/220		
BH (60°-80°)	18.8	2.6	B0/110		G0/110
BVH (80°-90°)	1.9	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type IV Short





REPORT NUMBER: P869241

CATALOG NUMBER: EMM2-HSN-SA2A-AMB-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6
2.5°	136.5	136.5	136.5	134.8	134.8	133.0	131.2	129.5	127.7	125.9	122.4
5°	141.9	143.6	143.6	141.9	141.9	140.1	138.3	134.8	133.0	129.5	124.1
7.5°	147.2	147.2	147.2	145.4	145.4	143.6	141.9	140.1	138.3	133.0	124.1
10°	154.3	154.3	152.5	150.7	149.0	147.2	143.6	141.9	140.1	134.8	124.1
12.5°	164.9	164.9	163.1	161.4	156.1	150.7	145.4	143.6	141.9	134.8	125.9
15°	180.9	179.1	179.1	173.8	166.7	157.8	149.0	145.4	143.6	138.3	127.7
17.5°	195.1	193.3	193.3	186.2	177.3	166.7	154.3	150.7	145.4	140.1	129.5
20°	205.7	205.7	203.9	198.6	189.7	179.1	163.1	156.1	150.7	141.9	131.2
22.5°	211.0	211.0	211.0	207.5	202.2	189.7	173.8	164.9	156.1	145.4	134.8
25°	212.8	214.6	214.6	212.8	211.0	202.2	184.4	173.8	163.1	149.0	138.3
27.5°	216.3	216.3	216.3	216.3	216.3	211.0	195.1	184.4	173.8	152.5	141.9
30°	221.7	221.7	221.7	221.7	221.7	221.7	209.3	198.6	184.4	157.8	145.4
32.5°	234.1	234.1	232.3	228.8	232.3	234.1	225.2	212.8	198.6	164.9	149.0
35°	258.9	257.1	251.8	241.2	242.9	244.7	242.9	230.5	212.8	172.0	150.7
37.5°	294.4	294.4	283.7	264.2	257.1	255.4	253.6	244.7	221.7	175.6	150.7
40°	319.2	319.2	313.9	289.1	274.9	264.2	266.0	257.1	237.6	182.7	154.3
42.5°	338.7	336.9	335.2	310.3	297.9	278.4	280.2	271.3	251.8	189.7	157.8
45°	363.5	354.7	345.8	328.1	319.2	301.5	294.4	287.3	269.5	198.6	161.4
47.5°	372.4	363.5	356.4	349.3	336.9	324.5	310.3	305.0	285.5	207.5	164.9
50°	374.2	367.1	367.1	356.4	351.1	344.0	329.8	324.5	303.2	218.1	166.7
52.5°	367.1	368.9	374.2	363.5	363.5	358.2	351.1	342.3	322.7	227.0	172.0
55°	367.1	367.1	379.5	370.6	376.0	370.6	376.0	368.9	342.3	235.9	177.3
57.5°	351.1	349.3	363.5	379.5	388.4	383.0	397.2	397.2	365.3	241.2	179.1
60°	319.2	313.9	328.1	370.6	388.4	388.4	407.9	415.0	384.8	241.2	175.6
62.5°	283.7	280.2	292.6	340.5	377.7	377.7	397.2	409.6	390.1	237.6	168.5
65°	232.3	230.5	255.4	308.6	365.3	365.3	368.9	381.3	372.4	228.8	157.8
67.5°	177.3	179.1	203.9	283.7	354.7	349.3	335.2	342.3	338.7	207.5	138.3
70°	134.8	140.1	157.8	255.4	331.6	321.0	294.4	287.3	278.4	179.1	111.7
72.5°	104.6	108.2	124.1	212.8	299.7	274.9	248.3	234.1	216.3	150.7	88.7
75°	83.3	83.3	95.8	161.4	253.6	230.5	193.3	177.3	163.1	120.6	69.2
77.5°	58.5	62.1	70.9	111.7	177.3	182.7	138.3	127.7	115.3	90.4	51.4
80°	39.0	40.8	47.9	72.7	108.2	127.7	97.5	83.3	72.7	56.7	35.5
82.5°	30.1	30.1	35.5	51.4	67.4	81.6	60.3	49.7	40.8	35.5	23.1
85°	21.3	21.3	26.6	35.5	42.6	47.9	37.2	30.1	24.8	23.1	14.2
87.5°	10.6	10.6	16.0	21.3	23.1	26.6	19.5	16.0	12.4	10.6	5.3
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: P869241

CATALOG NUMBER: EMM2-HSN-SA2A-AMB-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6
2.5°	120.6	118.8	115.3	111.7	109.9	106.4	104.6	101.1	101.1	99.3	99.3
5°	120.6	117.0	108.2	101.1	94.0	88.7	83.3	79.8	76.3	76.3	76.3
7.5°	120.6	115.3	102.9	90.4	81.6	74.5	69.2	65.6	62.1	62.1	62.1
10°	118.8	111.7	95.8	81.6	70.9	63.8	58.5	56.7	55.0	53.2	53.2
12.5°	118.8	109.9	90.4	72.7	62.1	56.7	51.4	49.7	47.9	47.9	47.9
15°	118.8	108.2	85.1	67.4	56.7	49.7	47.9	46.1	44.3	44.3	44.3
17.5°	118.8	106.4	79.8	60.3	51.4	46.1	44.3	42.6	40.8	40.8	40.8
20°	120.6	106.4	76.3	56.7	47.9	42.6	40.8	39.0	39.0	39.0	39.0
22.5°	124.1	108.2	72.7	53.2	44.3	40.8	39.0	37.2	37.2	35.5	35.5
25°	125.9	108.2	69.2	49.7	40.8	37.2	35.5	35.5	35.5	33.7	33.7
27.5°	127.7	109.9	67.4	47.9	39.0	37.2	33.7	33.7	31.9	31.9	31.9
30°	131.2	109.9	63.8	44.3	37.2	35.5	31.9	31.9	30.1	30.1	30.1
32.5°	136.5	111.7	62.1	42.6	35.5	33.7	30.1	30.1	28.4	28.4	28.4
35°	136.5	111.7	58.5	39.0	33.7	31.9	28.4	28.4	26.6	26.6	26.6
37.5°	140.1	113.5	56.7	37.2	31.9	30.1	28.4	26.6	24.8	24.8	24.8
40°	143.6	117.0	56.7	35.5	30.1	28.4	26.6	24.8	24.8	24.8	24.8
42.5°	147.2	118.8	55.0	35.5	28.4	26.6	24.8	23.1	23.1	23.1	23.1
45°	150.7	120.6	55.0	33.7	28.4	24.8	23.1	23.1	21.3	21.3	21.3
47.5°	154.3	124.1	53.2	31.9	26.6	24.8	23.1	21.3	21.3	21.3	21.3
50°	157.8	125.9	49.7	30.1	24.8	23.1	21.3	19.5	19.5	19.5	19.5
52.5°	163.1	129.5	46.1	28.4	23.1	21.3	19.5	19.5	17.7	17.7	17.7
55°	166.7	131.2	42.6	26.6	21.3	19.5	17.7	17.7	16.0	16.0	16.0
57.5°	170.2	131.2	39.0	23.1	19.5	17.7	17.7	16.0	14.2	12.4	12.4
60°	168.5	131.2	35.5	21.3	17.7	16.0	16.0	14.2	12.4	10.6	10.6
62.5°	161.4	125.9	31.9	17.7	16.0	14.2	14.2	12.4	10.6	10.6	8.9
65°	147.2	109.9	26.6	14.2	14.2	14.2	12.4	10.6	8.9	8.9	8.9
67.5°	125.9	88.7	23.1	12.4	12.4	12.4	12.4	8.9	8.9	7.1	7.1
70°	102.9	65.6	19.5	10.6	10.6	10.6	10.6	8.9	7.1	7.1	7.1
72.5°	76.3	47.9	16.0	8.9	10.6	8.9	8.9	7.1	7.1	7.1	5.3
75°	56.7	35.5	14.2	7.1	8.9	7.1	7.1	7.1	5.3	5.3	5.3
77.5°	40.8	26.6	12.4	5.3	7.1	7.1	7.1	5.3	5.3	5.3	5.3
80°	26.6	17.7	7.1	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
82.5°	17.7	10.6	5.3	3.5	5.3	5.3	5.3	5.3	5.3	5.3	5.3
85°	8.9	5.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
87.5°	3.5	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	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: SP1-2407-157-1

Test Date: 08/06/2024

Luminaire Tested: MEM2-HTN-SA-45-AMB-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-45-AMB-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-1  
 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-45-AMB-U-5WQ-2**  
 Description: Epic Modern Light Square 45W 5WQ Optic and Flare Trim AMBER LED

**Spectral Parameters**

CCT (K): 1538  
 CIE u': 0.3530  
 CIE v': 0.5469  
 Duv: 0.0116  
 CIE x: 0.5918  
 CIE y: 0.4076  
 CIE z: 0.0006  
 Peak Wavelength (nm): 597  
 Dominant Wavelength (nm): 592  
 Purity: 99.98881  
 R<sub>f</sub>: 1.1  
 R<sub>g</sub>: 0

CRI (Ra):	-21.8		
R1:	-34.3	R9:	-386.6
R2:	52.3	R10:	28.9
R3:	17.0	R11:	-95.5
R4:	-68.4	R12:	-10.5
R5:	-40.8	R13:	-15.5
R6:	41.5	R14:	45.9
R7:	-7.2	R15:	-67.7
R8:	-134.5		



**Test Conditions**

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

REPORT NUMBER: SP1-2407-157-1

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: SP1-2407-157-1

CIE 1931 Chromaticity Diagram



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



Point lies outside the range

REPORT NUMBER: SP1-2407-157-1

**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	0	NR	620	30	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	13	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	6	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	3	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	2	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	1	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	0	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	0	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	0	NR	795	0	NR	925	0	NR
410	0	NR	540	1	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	3	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	5	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	10	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	19	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	34	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	63	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	113	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	199	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	352	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	614	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	954	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	837	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	417	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	179	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	69	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-1

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 0.22**

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	0	NR	620	30	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	13	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	6	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	3	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	2	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	1	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	0	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	0	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	0	NR	795	0	NR	925	0	NR
410	0	NR	540	1	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	3	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	5	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	10	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	19	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	34	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	63	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	113	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	199	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	352	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	614	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	954	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	837	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	417	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	179	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	69	NR	745	0	NR	875	0	NR			

REPORT NUMBER: SP1-2407-157-1

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 0.12**

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	0	NR	620	30	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	13	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	6	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	3	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	2	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	1	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	1	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	0	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	0	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	0	NR	795	0	NR	925	0	NR
410	0	NR	540	1	NR	670	0	NR	800	0	NR	930	0	NR
415	0	NR	545	3	NR	675	0	NR	805	0	NR	935	0	NR
420	0	NR	550	5	NR	680	0	NR	810	0	NR	940	0	NR
425	0	NR	555	10	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	19	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	34	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	63	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	113	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	199	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	352	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	614	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	954	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	837	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	417	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	179	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	69	NR	745	0	NR	875	0	NR			

**Summary**

$R_f = 1.1$   
 $R_g = 0$   
 $CIE R_a = -21.8$   
 $R_g = -386.6$



**Color Vector Graphics**





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

CES01 = 90	CES26 = 0	CES51 = 17	CES76 = 0
CES02 = 70	CES27 = 32	CES52 = 2	CES77 = 0
CES03 = 31	CES28 = 24	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 1	CES54 = 12	CES79 = 2
CES05 = 52	CES30 = 31	CES55 = 6	CES80 = 1
CES06 = 56	CES31 = 1	CES56 = 0	CES81 = 0
CES07 = 41	CES32 = 0	CES57 = 0	CES82 = 50
CES08 = 38	CES33 = 21	CES58 = 0	CES83 = 21
CES09 = 29	CES34 = 0	CES59 = 9	CES84 = 54
CES10 = 87	CES35 = 23	CES60 = 60	CES85 = 9
CES11 = 70	CES36 = 77	CES61 = 13	CES86 = 0
CES12 = 76	CES37 = 5	CES62 = 53	CES87 = 2
CES13 = 47	CES38 = 41	CES63 = 68	CES88 = 1
CES14 = 77	CES39 = 75	CES64 = 0	CES89 = 0
CES15 = 74	CES40 = 49	CES65 = 0	CES90 = 2
CES16 = 49	CES41 = 75	CES66 = 0	CES91 = 57
CES17 = 56	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 60	CES43 = 0	CES68 = 0	CES93 = 2
CES19 = 80	CES44 = 95	CES69 = 27	CES94 = 0
CES20 = 71	CES45 = 1	CES70 = 0	CES95 = 0
CES21 = 94	CES46 = 5	CES71 = 0	CES96 = 2
CES22 = 87	CES47 = 70	CES72 = 42	CES97 = 1
CES23 = 94	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 95	CES49 = 5	CES74 = 62	CES99 = 0
CES25 = 79	CES50 = 9	CES75 = 0	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)