

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: P869067

Luminaire Tested: **EMM2-HSN-SA3B-740-U-T4W-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P869067  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA3B-740-U-T4W-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 150W 70CRI 4000K  
FIXTURE w/ TYPE IV WIDE DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (30) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

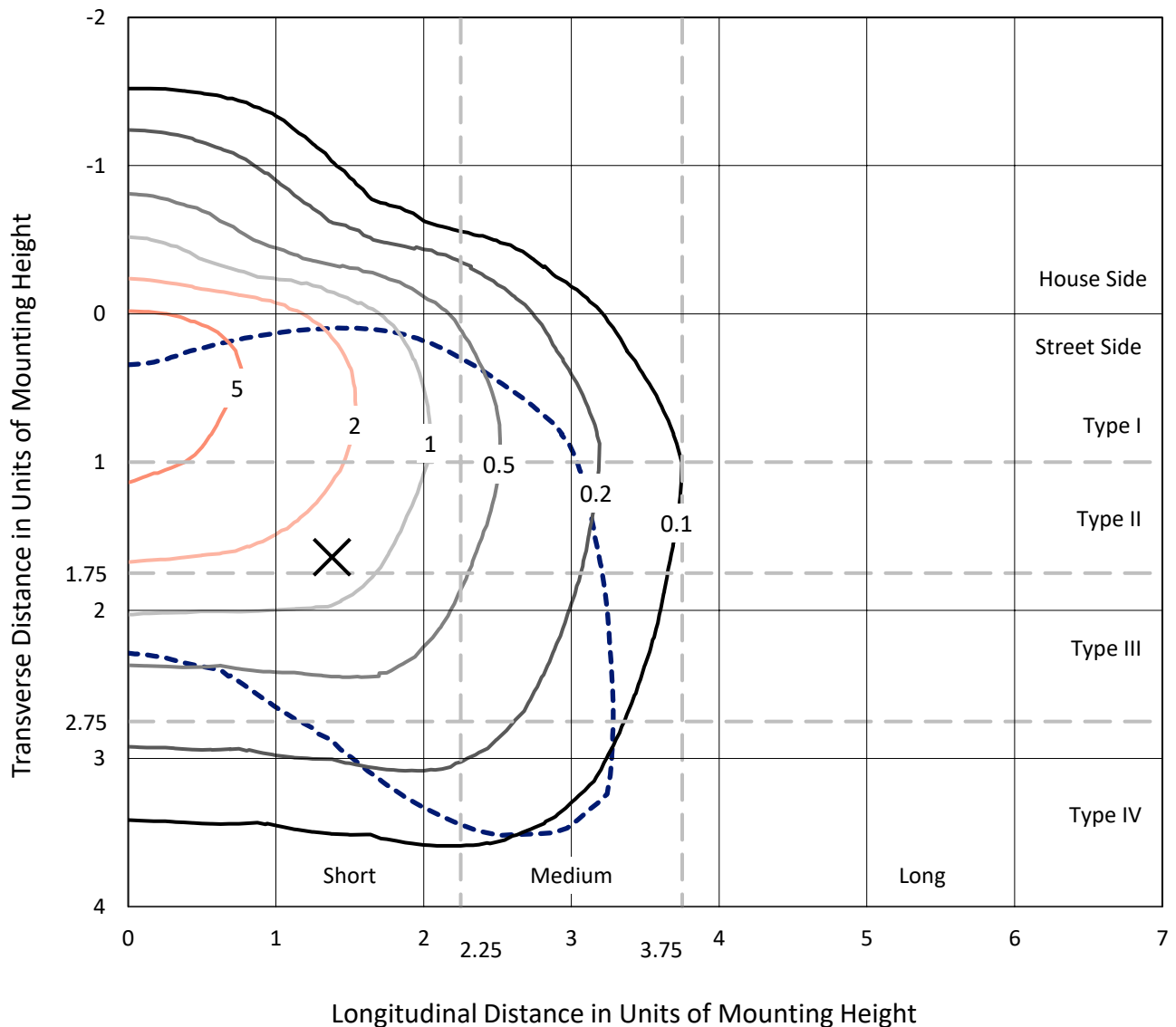
Lumens per Lamp: N/A  
Luminaire Lumens: 13493 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 134  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.70%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P869067  
 CATALOG NUMBER: EMM2-HSN-SA3B-740-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

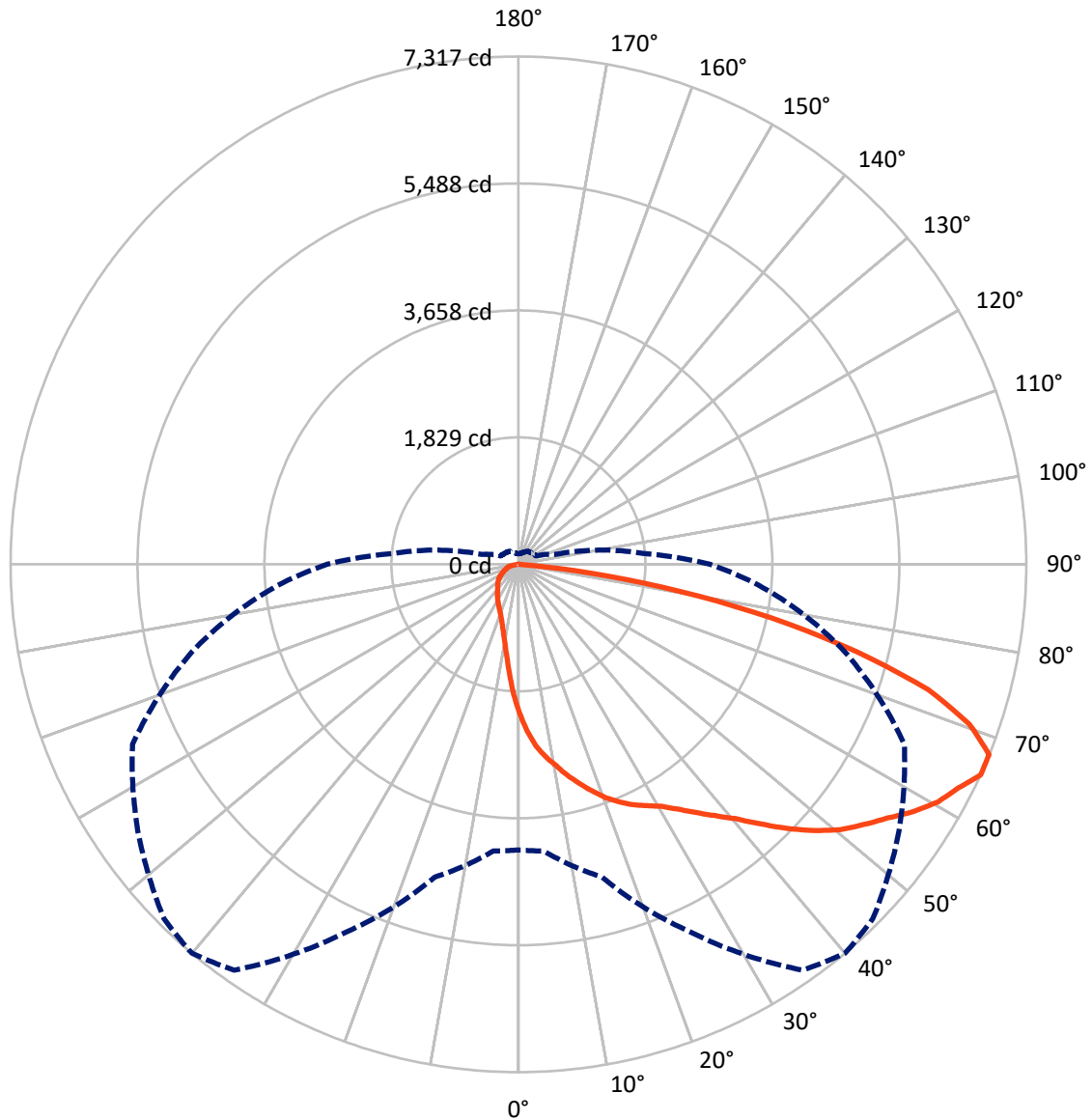
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P869067  
CATALOG NUMBER: EMM2-HSN-SA3B-740-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P869067  
 CATALOG NUMBER: EMM2-HSN-SA3B-740-U-T4W-HSS

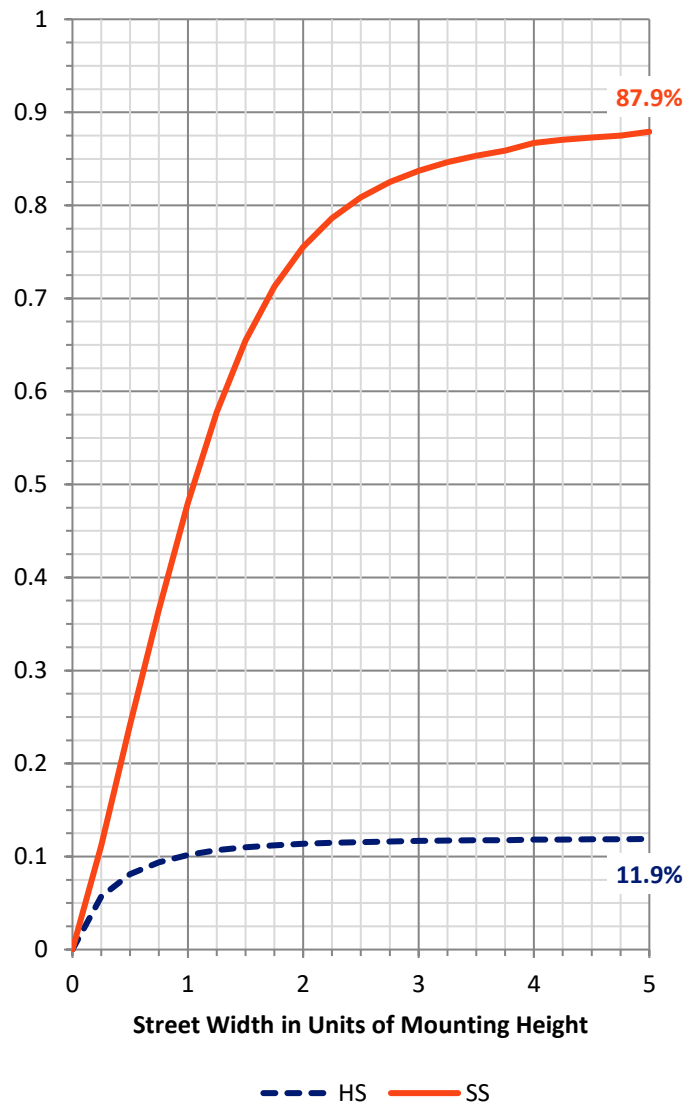
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1615.4	0.0	1615.4
	% Fixture	12.0	0.0	12.0
<b>Street Side</b>	Lumens	11877.6	0.0	11877.6
	% Fixture	88.0	0.0	88.0
<b>Total</b>	Lumens	13493.0	0.0	13493.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.8	1.5
10°-20°	603.7	4.5
20°-30°	1038.5	7.7
30°-40°	1569.8	11.6
40°-50°	2295.4	17.0
50°-60°	2931.8	21.7
60°-70°	2925.9	21.7
70°-80°	1715.8	12.7
80°-90°	211.4	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°	13493.0	100.0
0°-180°	13493.0	100.0



REPORT NUMBER: P869067

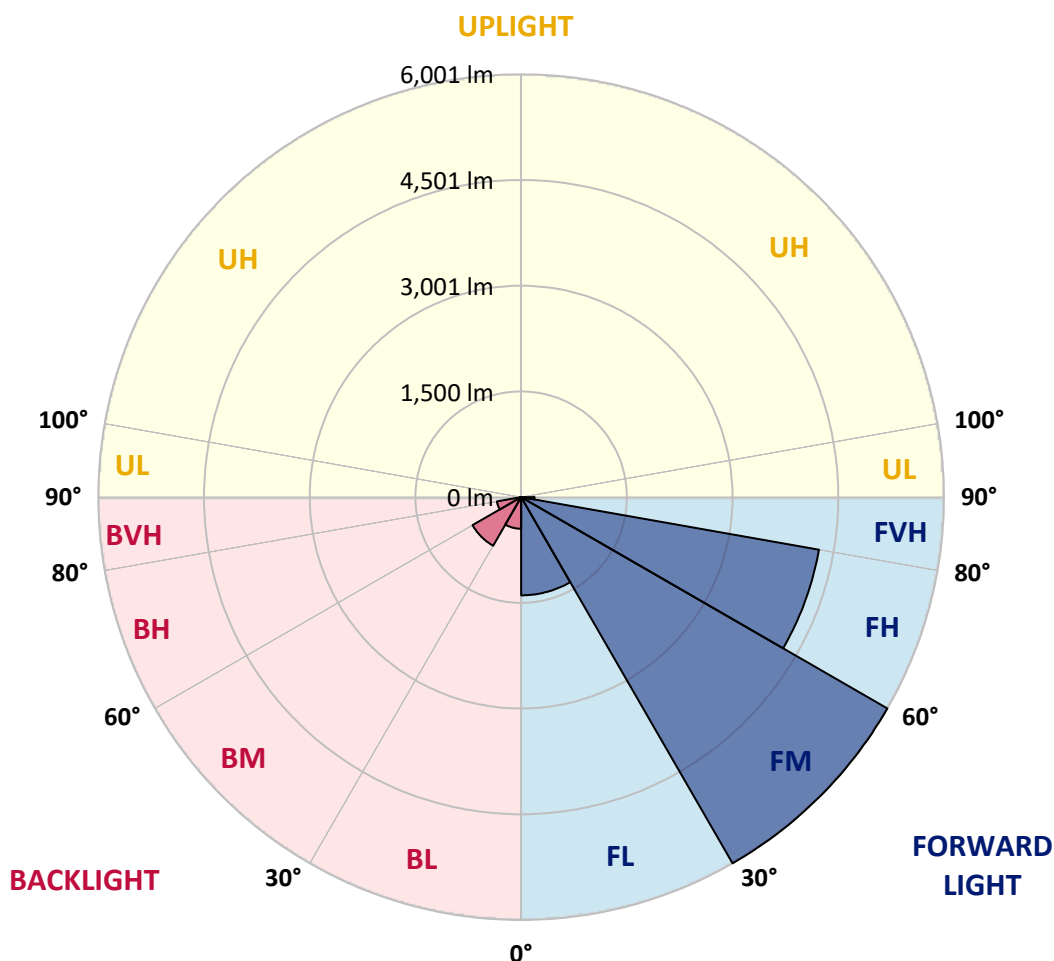
CATALOG NUMBER: EMM2-HSN-SA3B-740-U-T4W-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1393.6	10.3			
FM	(30°-60°)	6001.1	44.5			
FH	(60°-80°)	4291.9	31.8			G2/5000
FVH	(80°-90°)	191.0	1.4			G2/225
BL	(0°-30°)	449.3	3.3	B1/500		
BM	(30°-60°)	796.0	5.9	B1/1000		
BH	(60°-80°)	349.7	2.6	B1/500		G1/500
BVH	(80°-90°)	20.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P869067

CATALOG NUMBER: EMM2-HSN-SA3B-740-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8
2.5°	2502.3	2490.9	2468.1	2449.1	2422.4	2399.6	2376.8	2335.0	2281.7	2236.1	2179.0
5°	2749.5	2730.5	2715.3	2692.4	2646.8	2627.8	2612.6	2525.1	2433.8	2338.8	2213.3
7.5°	2924.4	2939.6	2909.2	2875.0	2817.9	2795.1	2772.3	2684.8	2570.7	2433.8	2255.1
10°	3126.0	3129.8	3091.7	3049.9	2989.1	2943.4	2913.0	2806.5	2681.0	2528.9	2300.7
12.5°	3319.9	3319.9	3297.1	3236.2	3156.4	3114.6	3061.3	2939.6	2787.5	2608.8	2354.0
15°	3475.8	3483.4	3464.4	3418.8	3331.3	3274.3	3221.0	3080.3	2886.4	2700.0	2395.8
17.5°	3616.5	3612.7	3601.3	3559.5	3475.8	3430.2	3377.0	3221.0	3000.5	2772.3	2460.5
20°	3711.6	3711.6	3707.8	3685.0	3624.1	3589.9	3525.3	3361.7	3126.0	2878.8	2528.9
22.5°	3783.9	3780.1	3780.1	3783.9	3749.6	3715.4	3688.8	3525.3	3255.3	2970.0	2597.4
25°	3844.7	3840.9	3852.3	3859.9	3844.7	3837.1	3806.7	3681.2	3415.0	3076.5	2665.8
27.5°	3924.6	3936.0	3932.2	3932.2	3928.4	3936.0	3932.2	3825.7	3570.9	3190.6	2738.1
30°	4050.1	4069.1	4057.7	4042.5	4042.5	4046.3	4065.3	3996.8	3753.4	3331.3	2817.9
32.5°	4342.9	4323.9	4244.0	4190.8	4198.4	4202.2	4221.2	4183.2	3936.0	3491.0	2901.6
35°	4677.5	4654.7	4567.3	4445.6	4403.7	4388.5	4384.7	4361.9	4133.7	3662.2	3000.5
37.5°	5111.1	5118.7	4989.4	4814.4	4688.9	4593.9	4574.9	4525.4	4304.9	3818.1	3103.1
40°	5552.2	5521.8	5411.5	5240.4	4993.2	4818.2	4761.2	4692.8	4498.8	3981.6	3202.0
42.5°	5978.1	5921.1	5776.6	5590.2	5301.2	5111.1	4981.8	4894.3	4677.5	4160.3	3297.1
45°	6533.3	6369.8	6111.2	5943.9	5582.6	5426.7	5308.8	5114.9	4890.5	4339.1	3411.2
47.5°	6970.7	6655.0	6419.3	6347.0	5875.4	5730.9	5624.5	5354.5	5107.3	4540.6	3529.1
50°	6890.8	6696.9	6639.8	6575.2	6096.0	6008.5	5909.7	5628.3	5327.8	4753.6	3643.2
52.5°	6685.5	6708.3	6780.5	6670.2	6290.0	6229.1	6164.5	5921.1	5548.4	4928.5	3745.8
55°	6521.9	6567.6	6761.5	6727.3	6521.9	6453.5	6407.9	6210.1	5761.4	5088.3	3833.3
57.5°	6225.3	6187.3	6430.7	6826.2	6769.1	6715.9	6670.2	6514.3	5978.1	5202.3	3890.3
60°	5757.6	5616.9	5943.9	6704.5	6940.3	6947.9	6921.2	6742.5	6153.1	5202.3	3859.9
62.5°	5099.7	4966.6	5369.7	6297.6	7031.5	7103.8	7088.6	6822.4	6229.1	5088.3	3742.0
65°	4114.7	4145.1	4666.1	5837.4	7138.0	7316.7	7221.7	6693.1	6134.0	4867.7	3475.8
67.5°	3285.7	3377.0	3844.7	5240.4	7088.6	7312.9	7179.8	6328.0	5727.1	4559.7	3068.9
70°	2593.6	2654.4	3042.3	4434.2	6655.0	6890.8	6723.5	5769.0	5038.8	4084.3	2551.7
72.5°	2026.9	2084.0	2414.8	3548.1	5902.1	6175.9	5966.7	5016.0	4179.4	3464.4	2026.9
75°	1540.2	1582.0	1829.2	2734.3	4700.4	5042.6	4890.5	4015.8	3262.9	2741.9	1551.6
77.5°	992.6	1049.6	1327.2	1916.7	3319.9	3730.6	3749.6	3000.5	2346.4	1981.3	1140.9
80°	657.9	680.7	851.8	1247.3	2042.1	2361.6	2471.9	2026.9	1498.3	1262.6	821.4
82.5°	273.8	304.2	406.9	627.5	1023.0	1026.8	1175.1	855.6	608.5	536.2	346.1
85°	7.6	15.2	11.4	30.4	26.6	41.8	49.4	68.5	49.4	53.2	53.2
87.5°	0.0	0.0	3.8	3.8	7.6	7.6	7.6	7.6	7.6	11.4	7.6
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: P869067

CATALOG NUMBER: EMM2-HSN-SA3B-740-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8	2144.8
2.5°	2152.4	2118.2	2049.8	1996.5	1939.5	1897.6	1859.6	1817.8	1791.2	1795.0	1768.3
5°	2152.4	2087.8	1950.9	1829.2	1718.9	1639.0	1551.6	1483.1	1433.7	1426.1	1448.9
7.5°	2163.8	2057.4	1852.0	1669.5	1517.3	1391.9	1300.6	1232.1	1197.9	1175.1	1171.3
10°	2175.2	2034.5	1760.7	1528.8	1338.6	1201.7	1121.8	1045.8	1007.8	1004.0	992.6
12.5°	2182.9	2007.9	1677.1	1388.1	1190.3	1061.0	981.1	920.3	889.9	889.9	886.1
15°	2209.5	2000.3	1589.6	1281.6	1076.2	950.7	882.3	832.8	813.8	802.4	798.6
17.5°	2232.3	1985.1	1513.5	1175.1	973.5	863.3	798.6	764.4	745.4	737.8	734.0
20°	2266.5	1977.5	1441.3	1087.6	897.5	791.0	741.6	711.1	699.7	692.1	692.1
22.5°	2300.7	1969.9	1369.0	1011.6	832.8	737.8	692.1	665.5	654.1	650.3	646.5
25°	2342.6	1966.1	1308.2	946.9	775.8	695.9	654.1	631.3	616.1	608.5	608.5
27.5°	2384.4	1969.9	1247.3	882.3	726.3	657.9	616.1	589.4	578.0	562.8	566.6
30°	2441.4	1973.7	1197.9	829.0	684.5	619.9	581.8	547.6	532.4	524.8	524.8
32.5°	2498.5	1988.9	1148.5	779.6	642.7	589.4	543.8	513.4	494.4	490.6	486.8
35°	2559.3	2000.3	1102.8	737.8	608.5	555.2	509.6	479.2	464.0	460.1	460.1
37.5°	2627.8	2019.3	1068.6	699.7	574.2	521.0	479.2	448.7	437.3	433.5	433.5
40°	2700.0	2049.8	1042.0	665.5	547.6	490.6	452.5	425.9	418.3	414.5	414.5
42.5°	2772.3	2076.4	1019.2	638.9	521.0	464.0	433.5	406.9	395.5	395.5	395.5
45°	2840.8	2095.4	996.4	612.3	494.4	444.9	410.7	387.9	376.5	376.5	376.5
47.5°	2901.6	2114.4	962.1	585.6	467.8	418.3	391.7	368.9	357.5	357.5	357.5
50°	2966.2	2125.8	924.1	551.4	441.1	399.3	372.7	346.1	338.5	334.7	334.7
52.5°	3019.5	2125.8	874.7	517.2	410.7	372.7	349.9	327.0	315.6	308.0	308.0
55°	3057.5	2125.8	821.4	475.4	380.3	349.9	327.0	304.2	289.0	277.6	277.6
57.5°	3080.3	2114.4	760.6	425.9	349.9	319.4	304.2	277.6	247.2	224.4	216.8
60°	3061.3	2080.2	695.9	372.7	315.6	292.8	281.4	247.2	205.4	193.9	193.9
62.5°	2981.5	2000.3	631.3	327.0	289.0	266.2	254.8	216.8	186.3	174.9	174.9
65°	2757.1	1806.4	551.4	285.2	258.6	243.4	228.2	193.9	167.3	152.1	152.1
67.5°	2430.0	1559.2	460.1	251.0	232.0	220.6	209.2	174.9	148.3	133.1	133.1
70°	1969.9	1258.8	391.7	220.6	205.4	197.7	186.3	159.7	129.3	117.9	117.9
72.5°	1547.8	988.7	327.0	197.7	190.1	174.9	167.3	140.7	117.9	106.5	106.5
75°	1152.3	737.8	289.0	174.9	174.9	155.9	152.1	125.5	102.7	95.1	95.1
77.5°	848.0	547.6	251.0	152.1	152.1	136.9	129.3	110.3	95.1	87.5	87.5
80°	574.2	372.7	186.3	114.1	114.1	110.3	102.7	95.1	79.9	72.3	68.5
82.5°	243.4	155.9	91.3	57.0	53.2	41.8	34.2	26.6	26.6	22.8	22.8
85°	41.8	19.0	19.0	15.2	11.4	11.4	11.4	7.6	7.6	7.6	7.6
87.5°	7.6	7.6	7.6	7.6	7.6	7.6	3.8	3.8	3.8	3.8	3.8
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: 4π  
 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  
 Rf: 73.2  
 Rg: 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

REPORT NUMBER: SP1-2407-157-5

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

REPORT NUMBER: SP1-2407-157-5

**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			

REPORT NUMBER: SP1-2407-157-5

**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			

REPORT NUMBER: SP1-2407-157-5

**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)