

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: P868541

Luminaire Tested: **EMM2-HTN-SA3A-740-U-T3**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868541  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA3A-740-U-T3  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 130W 70CRI 4000K  
FIXTURE w/ TYPE III DISTRIBUTION OPTIC  
Light Source: (30) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

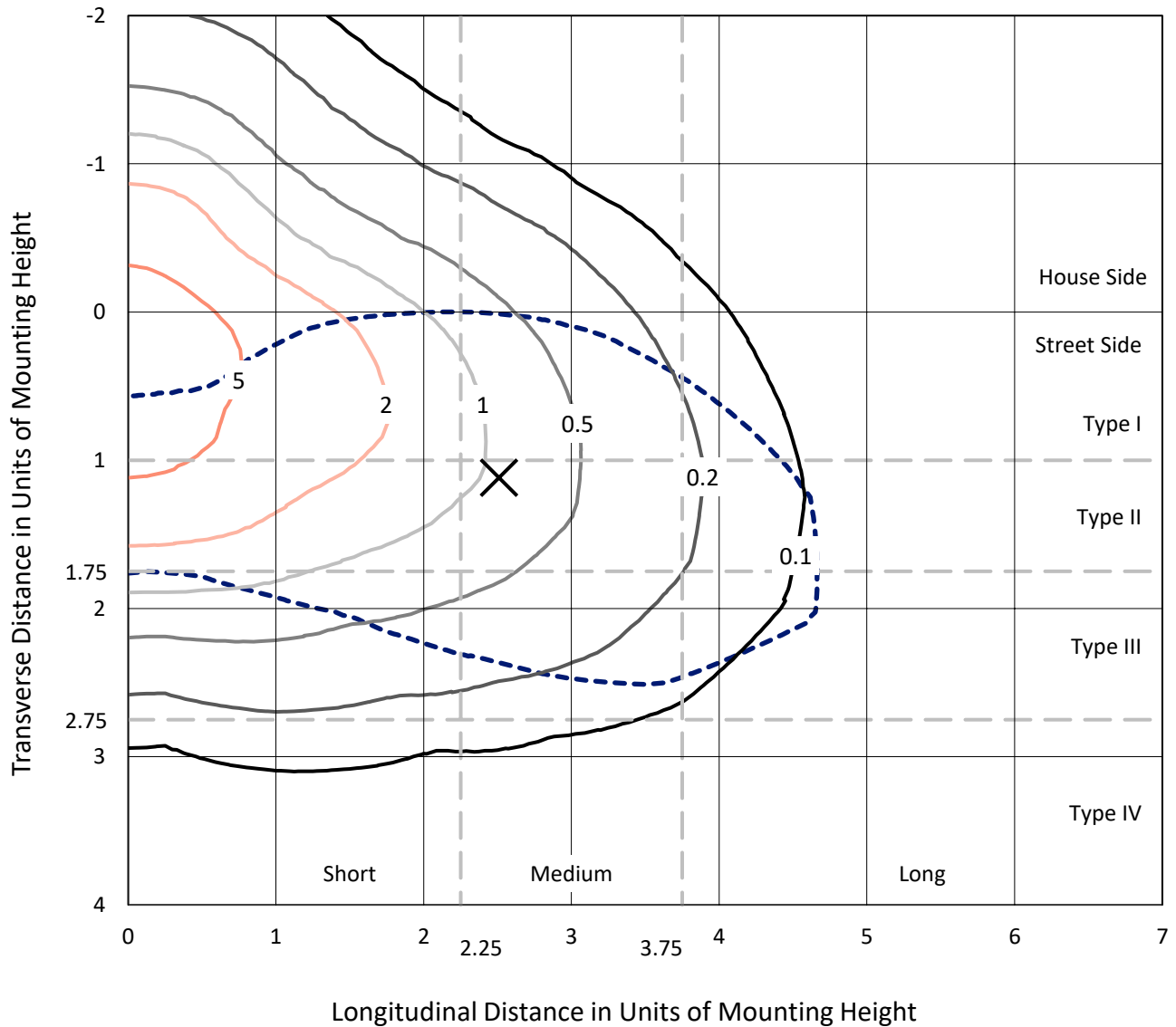
Lumens per Lamp: N/A  
Luminaire Lumens: 16937.3 lumens  
Efficiency: N/A  
Efficacy: 149.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 113  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 7.77%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P868541  
 CATALOG NUMBER: EMM2-HTN-SA3A-740-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

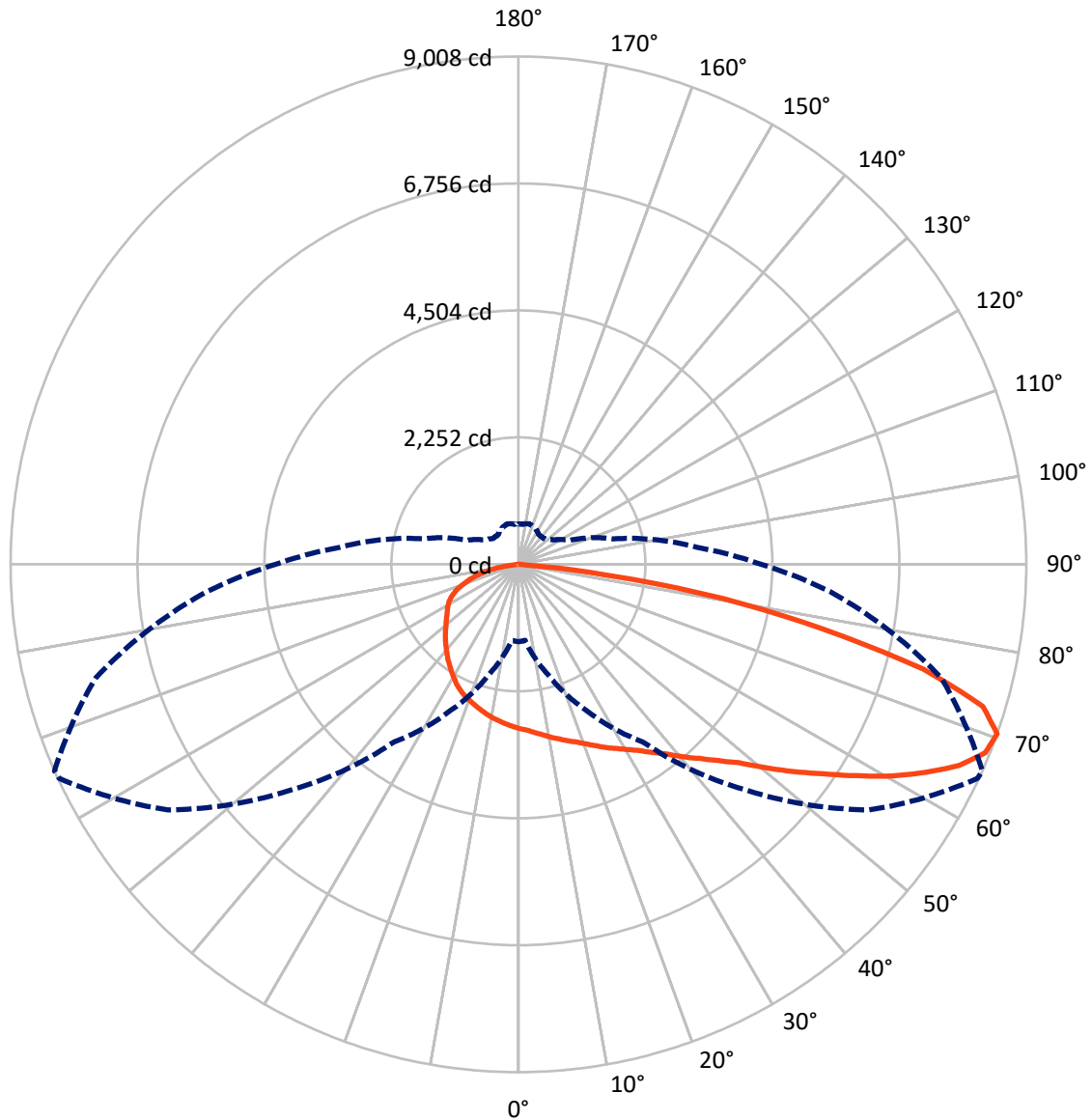
× Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P868541  
CATALOG NUMBER: EMM2-HTN-SA3A-740-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P868541

CATALOG NUMBER: EMM2-HTN-SA3A-740-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4364.9	0.0	4364.9
	% Fixture	25.8	0.0	25.8
<b>Street Side</b>	Lumens	12572.4	0.0	12572.4
	% Fixture	74.2	0.0	74.2
<b>Total</b>	Lumens	16937.3	0.0	16937.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.9	1.6
10°-20°	830.7	4.9
20°-30°	1395.3	8.2
30°-40°	2102.0	12.4
40°-50°	2853.8	16.8
50°-60°	3391.2	20.0
60°-70°	3460.9	20.4
70°-80°	2314.8	13.7
80°-90°	309.7	1.8
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°	16937.3	100.0
0°-180°	16937.3	100.0

**Coefficient of Utilization**



REPORT NUMBER: P868541

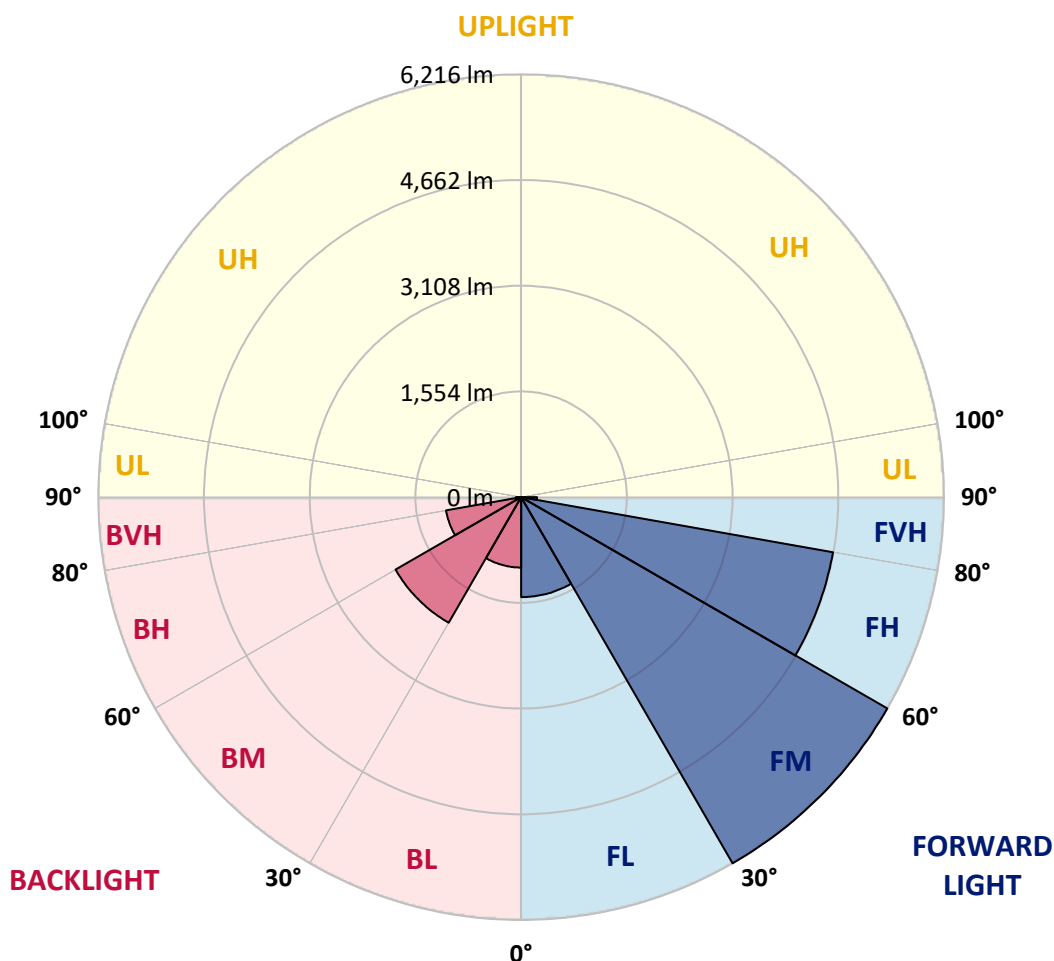
CATALOG NUMBER: EMM2-HTN-SA3A-740-U-T3

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1469.8	8.7			
FM	(30°-60°)	6215.7	36.7			
FH	(60°-80°)	4654.9	27.5			G2/5000
FVH	(80°-90°)	232.0	1.4			G3/500
BL	(0°-30°)	1035.0	6.1	B3/2500		
BM	(30°-60°)	2131.4	12.6	B2/2500		
BH	(60°-80°)	1120.8	6.6	B3/2500		G3/2500
BVH	(80°-90°)	77.7	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Medium





REPORT NUMBER: P868541

CATALOG NUMBER: EMM2-HTN-SA3A-740-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1
2.5°	3018.5	3005.0	2994.9	3001.6	2981.4	2988.2	2964.6	2947.8	2944.4	2937.7	2931.0
5°	3112.7	3112.7	3095.9	3095.9	3072.3	3068.9	3035.3	2998.3	2998.3	2974.7	2947.8
7.5°	3213.6	3206.9	3186.7	3183.3	3156.4	3149.7	3112.7	3055.5	3052.1	3008.4	2968.0
10°	3284.3	3287.7	3274.2	3274.2	3254.0	3237.2	3183.3	3122.8	3116.0	3058.8	2994.9
12.5°	3338.1	3344.9	3341.5	3341.5	3324.7	3324.7	3264.1	3183.3	3176.6	3102.6	3011.7
15°	3395.3	3392.0	3402.1	3405.4	3398.7	3388.6	3344.9	3250.7	3247.3	3149.7	3035.3
17.5°	3445.8	3442.5	3445.8	3462.6	3466.0	3466.0	3422.3	3324.7	3311.2	3206.9	3055.5
20°	3476.1	3482.8	3496.3	3516.5	3526.6	3553.5	3516.5	3412.2	3398.7	3267.5	3099.2
22.5°	3590.5	3570.3	3580.4	3593.9	3607.3	3644.4	3610.7	3503.0	3492.9	3358.3	3149.7
25°	3785.7	3785.7	3762.1	3738.6	3721.8	3738.6	3711.7	3607.3	3600.6	3439.1	3206.9
27.5°	4125.6	4125.6	4075.1	3987.6	3876.6	3846.3	3826.1	3718.4	3698.2	3526.6	3243.9
30°	4556.3	4569.8	4478.9	4330.8	4125.6	3991.0	3940.5	3822.7	3812.6	3614.1	3301.1
32.5°	5017.3	5044.2	4976.9	4761.6	4425.1	4162.6	4081.8	3960.7	3937.1	3718.4	3375.2
35°	5431.2	5458.1	5367.3	5165.4	4734.6	4411.6	4250.1	4112.1	4098.6	3853.0	3486.2
37.5°	5767.7	5774.4	5717.2	5471.6	4993.8	4620.2	4458.7	4293.8	4266.9	4014.5	3604.0
40°	6124.4	6151.3	6094.1	5791.3	5229.3	4845.7	4667.3	4512.5	4489.0	4182.8	3715.0
42.5°	6497.9	6494.6	6494.6	6067.2	5464.9	5034.1	4892.8	4721.2	4707.7	4354.4	3836.2
45°	6726.8	6740.2	6703.2	6232.1	5811.5	5229.3	5111.5	4987.0	4963.5	4593.3	3994.3
47.5°	6784.0	6753.7	6585.4	6360.0	6201.8	5431.2	5387.5	5313.4	5259.6	4855.8	4189.5
50°	6706.6	6659.5	6561.9	6417.2	6346.5	5673.5	5666.8	5703.8	5666.8	5175.5	4415.0
52.5°	6417.2	6410.4	6393.6	6427.3	6312.9	5865.3	5983.1	6111.0	6104.2	5501.9	4650.5
55°	5808.1	5851.8	6053.7	6265.7	6185.0	5996.5	6336.4	6582.1	6555.1	5885.5	4892.8
57.5°	5185.6	5229.3	5488.4	5993.2	6060.5	6137.9	6733.5	7117.1	7073.4	6302.8	5114.9
60°	4643.8	4596.7	4855.8	5582.6	5885.5	6265.7	7127.2	7658.9	7621.9	6720.0	5343.7
62.5°	3785.7	3832.8	4246.7	4983.7	5639.8	6346.5	7450.2	8150.2	8126.6	7103.6	5528.8
65°	2994.9	2931.0	3553.5	4354.4	5215.8	6319.6	7729.5	8611.2	8594.4	7480.5	5670.1
67.5°	2035.9	1992.1	2813.2	3728.5	4640.4	6104.2	7793.5	8920.8	8927.5	7702.6	5707.1
70°	1372.9	1352.8	2022.4	2867.0	3842.9	5639.8	7594.9	8984.7	9008.3	7759.8	5542.3
72.5°	1012.9	1009.5	1480.6	2046.0	2860.3	4761.6	7053.2	8567.4	8611.2	7356.0	5057.7
75°	797.5	807.6	1056.6	1453.7	1908.0	3523.2	5932.6	7345.9	7413.2	6353.2	4199.6
77.5°	652.8	652.8	740.3	1043.2	1275.4	2187.3	4266.9	5377.4	5512.0	4902.9	3233.8
80°	528.3	538.4	548.5	726.9	844.6	1248.4	2483.4	3587.2	3684.7	3415.5	2335.4
82.5°	289.4	309.6	299.5	376.9	424.0	578.8	986.0	1450.3	1598.4	1423.4	1060.0
85°	20.2	13.5	23.6	30.3	37.0	57.2	77.4	107.7	101.0	144.7	74.0
87.5°	3.4	3.4	3.4	6.7	6.7	10.1	13.5	13.5	13.5	13.5	13.5
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: P868541

CATALOG NUMBER: EMM2-HTN-SA3A-740-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1	2914.1
2.5°	2927.6	2910.8	2883.9	2877.1	2867.0	2853.6	2840.1	2819.9	2813.2	2819.9	2826.7
5°	2931.0	2907.4	2863.7	2836.7	2809.8	2786.3	2759.4	2732.4	2715.6	2719.0	2732.4
7.5°	2941.1	2907.4	2840.1	2796.4	2752.6	2715.6	2671.9	2641.6	2621.4	2624.7	2634.8
10°	2954.5	2907.4	2826.7	2752.6	2692.0	2638.2	2594.5	2557.4	2537.3	2533.9	2537.3
12.5°	2957.9	2904.0	2796.4	2705.5	2631.5	2560.8	2513.7	2480.1	2459.9	2449.8	2456.5
15°	2968.0	2894.0	2766.1	2655.0	2564.2	2490.1	2432.9	2392.6	2379.1	2372.4	2369.0
17.5°	2981.4	2890.6	2739.2	2604.6	2496.9	2412.7	2362.3	2321.9	2305.1	2298.3	2305.1
20°	3001.6	2894.0	2708.9	2554.1	2436.3	2352.2	2295.0	2254.6	2241.1	2237.8	2234.4
22.5°	3028.6	2900.7	2685.3	2507.0	2369.0	2284.9	2227.7	2200.8	2190.7	2194.0	2194.0
25°	3055.5	2907.4	2651.7	2443.0	2298.3	2210.8	2170.5	2150.3	2157.0	2170.5	2170.5
27.5°	3079.0	2904.0	2604.6	2375.7	2214.2	2133.4	2103.2	2106.5	2123.4	2146.9	2150.3
30°	3109.3	2904.0	2554.1	2291.6	2120.0	2042.6	2035.9	2062.8	2089.7	2113.3	2113.3
32.5°	3156.4	2924.2	2513.7	2207.5	2022.4	1961.8	1992.1	2029.1	2059.4	2083.0	2089.7
35°	3237.2	2968.0	2486.8	2123.4	1928.2	1884.4	1941.6	2002.2	2022.4	2039.2	2042.6
37.5°	3314.6	3008.4	2453.1	2042.6	1830.6	1813.8	1891.2	1955.1	1958.5	1968.6	1968.6
40°	3388.6	3038.7	2409.4	1955.1	1736.4	1736.4	1827.2	1881.1	1874.3	1864.2	1867.6
42.5°	3469.4	3055.5	2358.9	1874.3	1659.0	1659.0	1733.0	1780.1	1776.8	1790.2	1800.3
45°	3567.0	3089.1	2291.6	1800.3	1578.2	1564.8	1625.3	1665.7	1716.2	1776.8	1793.6
47.5°	3701.6	3136.2	2237.8	1719.5	1510.9	1463.8	1487.4	1571.5	1628.7	1679.2	1685.9
50°	3842.9	3203.5	2190.7	1635.4	1430.2	1346.0	1366.2	1460.4	1494.1	1514.3	1524.4
52.5°	3994.3	3257.4	2150.3	1564.8	1346.0	1224.9	1251.8	1342.7	1366.2	1383.0	1386.4
55°	4125.6	3301.1	2099.8	1497.5	1255.2	1110.5	1144.1	1231.6	1255.2	1275.4	1275.4
57.5°	4263.5	3341.5	2066.1	1440.2	1157.6	1016.2	1039.8	1127.3	1160.9	1167.7	1177.8
60°	4377.9	3378.5	2035.9	1386.4	1066.7	932.1	948.9	1026.3	1066.7	1070.1	1076.8
62.5°	4458.7	3402.1	2019.0	1319.1	975.9	848.0	861.5	938.9	986.0	996.1	999.4
65°	4509.2	3415.5	1988.8	1231.6	898.5	777.3	777.3	854.7	901.8	925.4	932.1
67.5°	4485.6	3392.0	1908.0	1130.7	827.8	706.7	703.3	780.7	821.1	834.5	837.9
70°	4303.9	3254.0	1743.1	1006.2	753.8	642.7	636.0	706.7	743.7	713.4	716.8
72.5°	3933.8	2941.1	1517.6	881.6	676.4	582.2	575.4	636.0	639.4	639.4	636.0
75°	3314.6	2402.7	1211.4	750.4	595.6	518.2	521.6	568.7	572.1	588.9	578.8
77.5°	2540.6	1780.1	945.6	599.0	504.8	461.0	477.8	494.7	518.2	541.8	518.2
80°	1847.4	1228.2	656.2	447.6	390.3	390.3	397.1	413.9	447.6	471.1	447.6
82.5°	790.8	541.8	302.9	222.1	191.8	188.4	191.8	191.8	235.6	242.3	212.0
85°	60.6	50.5	37.0	37.0	30.3	16.8	16.8	13.5	10.1	10.1	10.1
87.5°	13.5	10.1	10.1	10.1	6.7	6.7	6.7	6.7	6.7	6.7	6.7
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:  $4\pi$   
 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  
 R<sub>f</sub>: 73.2  
 R<sub>g</sub>: 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**

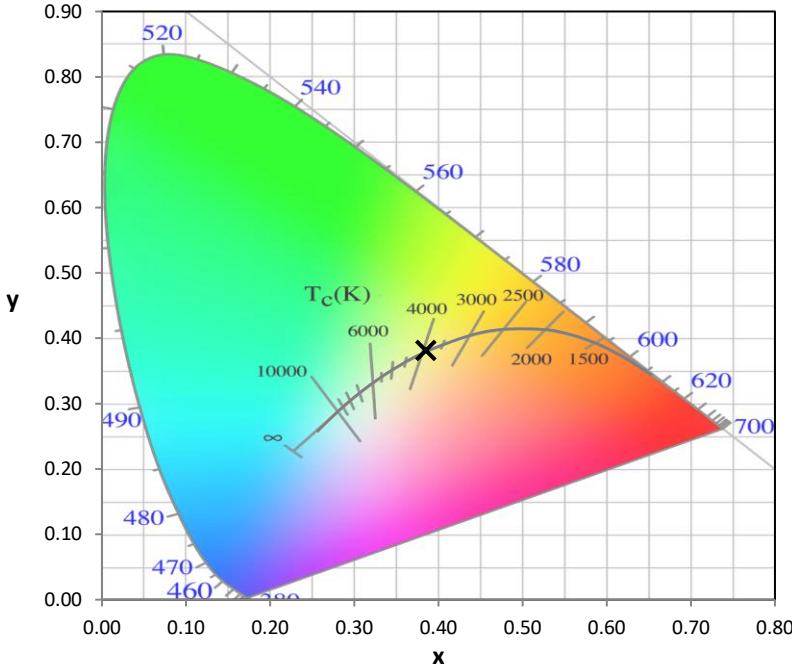
Stabilization Time: 21M  
 Operation Time: 1H 21M  
 Sphere Temperature (°C): 24.2

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



CCT = 3915K  
 CIE x = 0.3850  
 CIE y = 0.3816  
 Duv = 0.0010

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

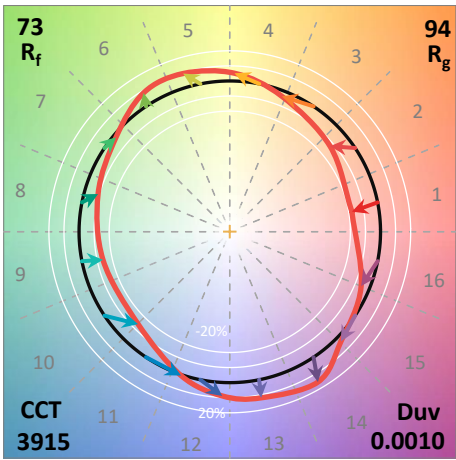
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	112	NR	620	618	NR	750	15	NR	880	0	NR
365	0	NR	495	153	NR	625	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**



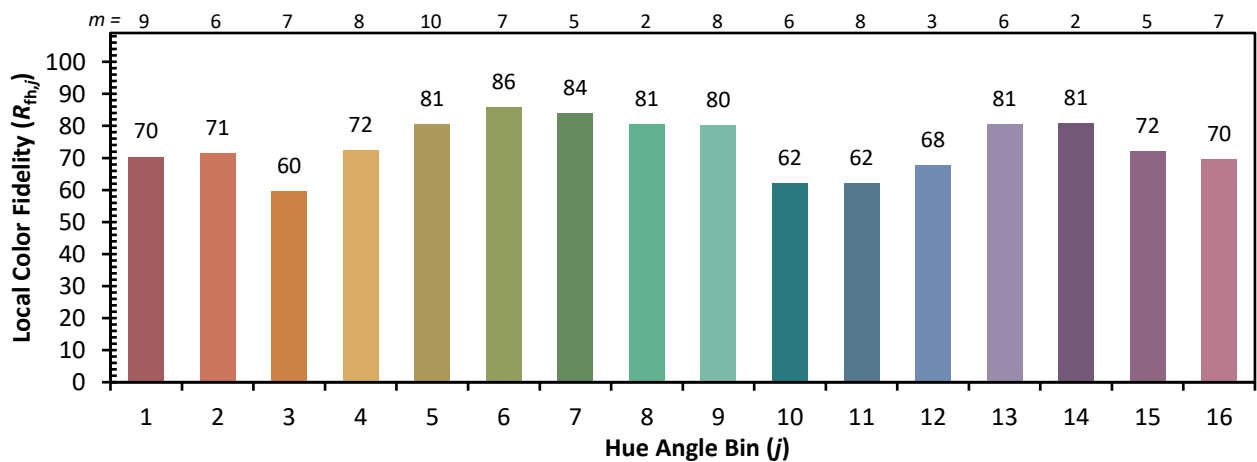


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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)