

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: P870753

Luminaire Tested: **EMM2-HTN-SA3B-840-U-T2U-HSS**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870753  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA3B-840-U-T2U-HSS  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 150W 80CRI 4000K  
FITXURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (30) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

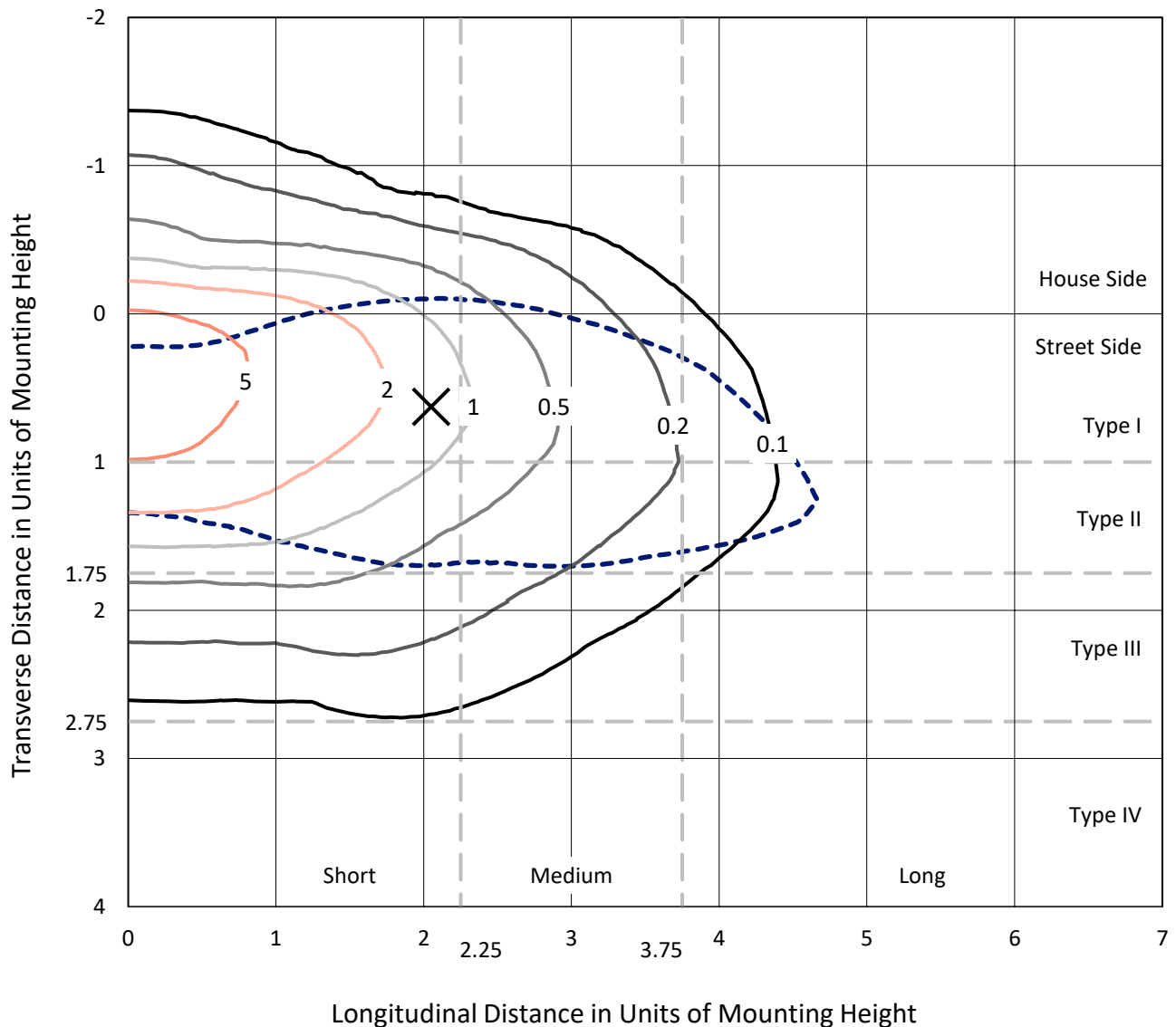
Lumens per Lamp: N/A  
Luminaire Lumens: 12273.2 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

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

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### Iso-Footcandle Lines of Horizontal Illumination

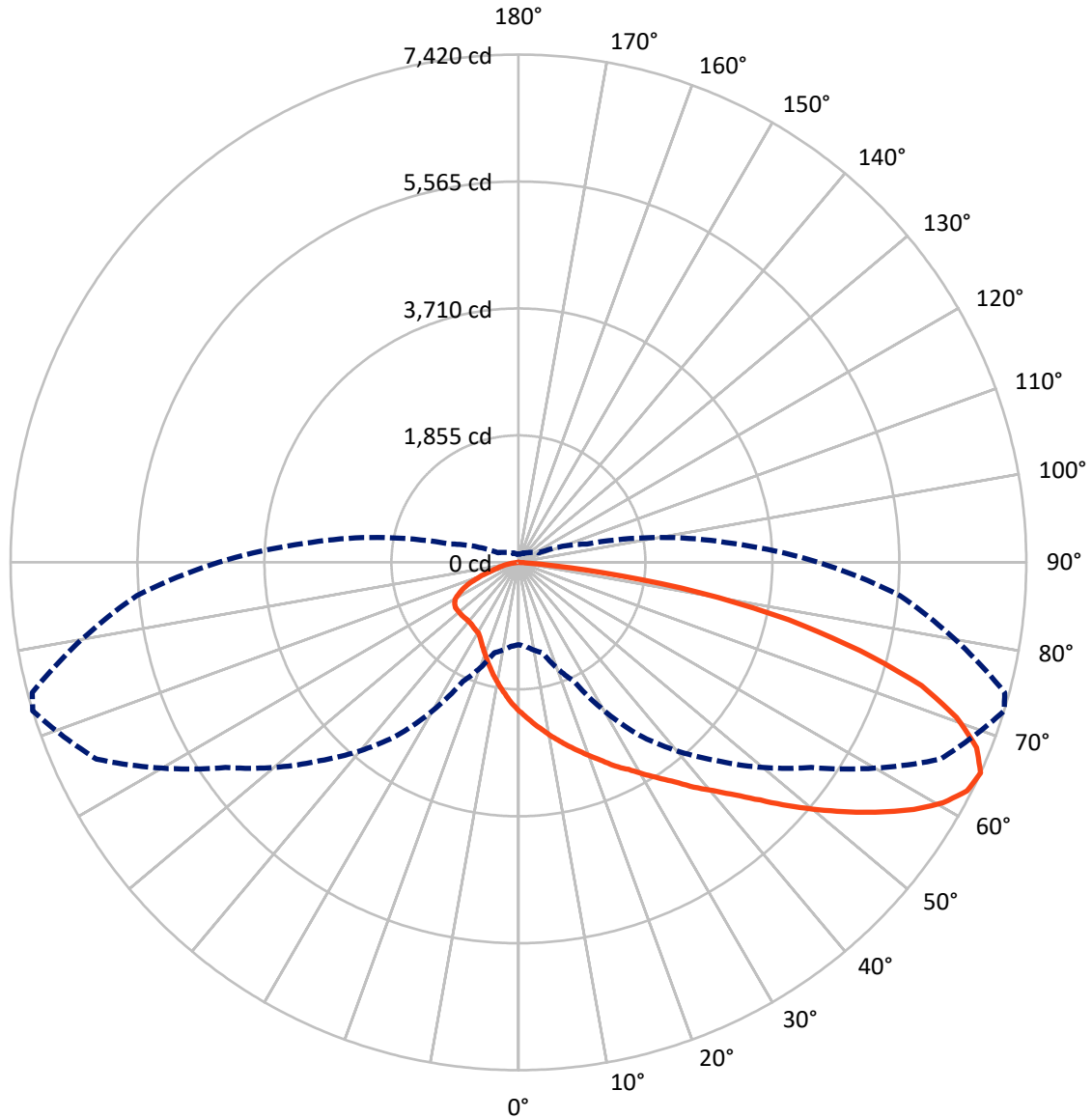
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.8 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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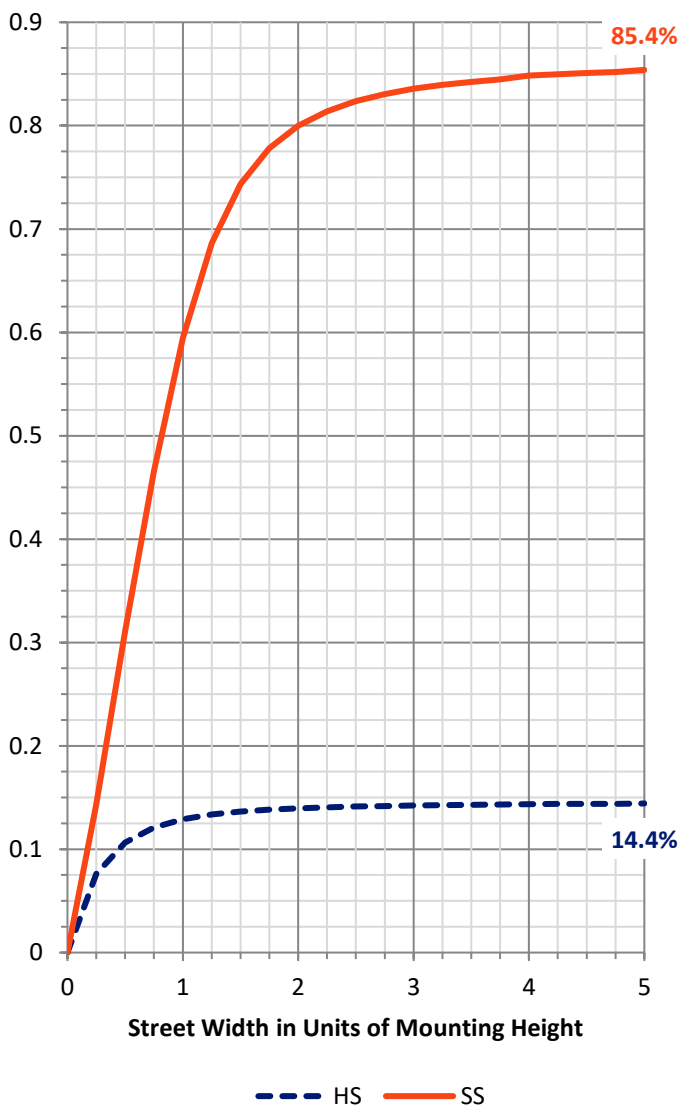
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1784.7	0.0	1784.7
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	10488.5	0.0	10488.5
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	12273.2	0.0	12273.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.2	1.7
10°-20°	638.7	5.2
20°-30°	1069.7	8.7
30°-40°	1613.6	13.1
40°-50°	2280.0	18.6
50°-60°	2565.5	20.9
60°-70°	2300.5	18.7
70°-80°	1399.2	11.4
80°-90°	195.8	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°	12273.2	100.0
0°-180°	12273.2	100.0

**Coefficient of Utilization**



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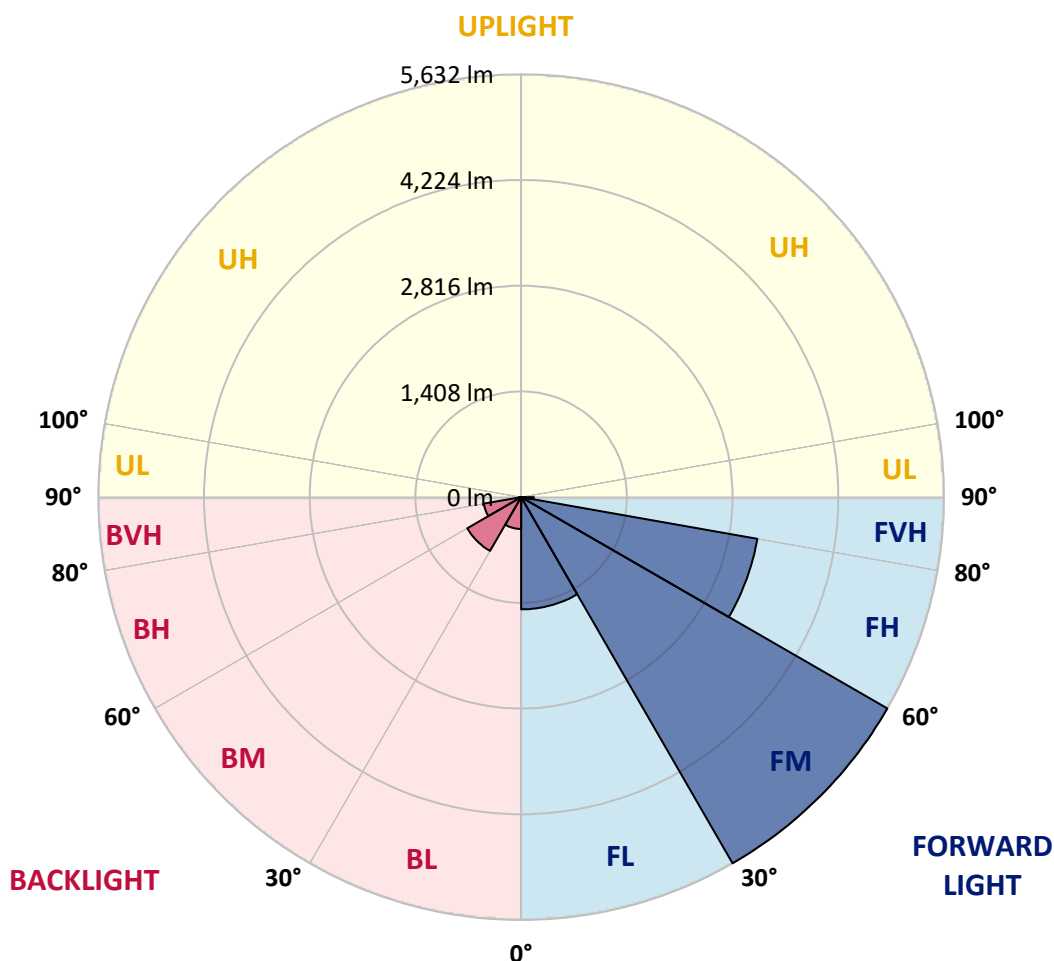
CATALOG NUMBER: EMM2-HTN-SA3B-840-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1494.6	12.2			
FM (30°-60°)	5631.5	45.9			
FH (60°-80°)	3194.2	26.0			G2/5000
FVH (80°-90°)	168.2	1.4			G2/225
BL (0°-30°)	424.0	3.5	B1/500		
BM (30°-60°)	827.6	6.7	B1/1000		
BH (60°-80°)	505.5	4.1	B2/1000		G2/1000
BVH (80°-90°)	27.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3
2.5°	2513.1	2498.7	2477.0	2458.9	2426.4	2383.1	2347.0	2300.1	2267.6	2256.7	2209.8
5°	2877.8	2859.7	2834.5	2791.1	2704.5	2653.9	2560.0	2451.7	2365.1	2347.0	2238.7
7.5°	3253.3	3246.1	3188.3	3123.3	3018.6	2906.7	2762.2	2592.5	2466.2	2437.3	2271.2
10°	3571.1	3538.6	3506.1	3444.7	3332.7	3173.9	2986.1	2751.4	2574.5	2527.5	2303.7
12.5°	3762.4	3751.6	3722.7	3650.5	3542.2	3405.0	3181.1	2906.7	2679.2	2614.2	2336.2
15°	3903.2	3914.1	3885.2	3838.3	3726.3	3596.3	3379.7	3069.2	2791.1	2715.3	2372.3
17.5°	4036.8	4029.6	4026.0	3971.9	3870.8	3740.8	3520.5	3202.8	2903.1	2820.0	2408.4
20°	4112.7	4116.3	4109.1	4087.4	3989.9	3863.5	3657.7	3361.6	3025.8	2931.9	2455.3
22.5°	4152.4	4166.8	4181.3	4177.7	4098.2	4000.7	3787.7	3488.0	3152.2	3054.7	2513.1
25°	4177.7	4188.5	4221.0	4264.3	4192.1	4112.7	3932.1	3639.7	3300.2	3188.3	2581.7
27.5°	4199.3	4213.8	4253.5	4318.5	4260.7	4213.8	4058.5	3769.6	3426.6	3325.5	2661.1
30°	4340.2	4358.2	4358.2	4390.7	4325.7	4314.9	4199.3	3924.9	3585.5	3477.2	2762.2
32.5°	4712.1	4676.0	4611.0	4578.5	4423.2	4426.8	4336.5	4080.2	3755.2	3646.9	2888.6
35°	5033.4	5033.4	4954.0	4849.3	4600.1	4549.6	4495.4	4286.0	3939.4	3834.6	3054.7
37.5°	5343.9	5347.6	5264.5	5174.2	4889.0	4708.5	4679.6	4484.6	4166.8	4044.1	3228.0
40°	5538.9	5560.6	5538.9	5470.3	5195.9	4986.5	4860.1	4708.5	4383.5	4289.6	3426.6
42.5°	5571.4	5614.8	5694.2	5715.9	5419.8	5235.6	5091.2	4939.5	4643.5	4538.7	3654.1
45°	5488.4	5502.8	5679.7	5705.0	5585.9	5434.2	5336.7	5210.3	4954.0	4863.7	3906.9
47.5°	5260.9	5232.0	5293.4	5513.7	5560.6	5553.4	5578.6	5517.3	5315.1	5199.5	4184.9
50°	4773.4	4784.3	4982.9	5250.1	5412.6	5596.7	5759.2	5827.8	5679.7	5564.2	4484.6
52.5°	3885.2	3935.7	4314.9	4946.8	5228.4	5567.8	5889.2	6120.3	6058.9	5946.9	4780.7
55°	3191.9	3267.8	3646.9	4459.3	4975.6	5427.0	5965.0	6427.2	6438.0	6351.4	5051.5
57.5°	2498.7	2560.0	2960.8	3704.7	4614.6	5206.7	5975.8	6690.8	6813.5	6712.4	5289.8
60°	1957.0	2000.4	2235.1	3087.2	4170.4	4892.6	5896.4	6900.2	7131.3	7055.5	5495.6
62.5°	1484.0	1516.5	1726.0	2440.9	3625.2	4524.3	5629.2	6976.0	7355.1	7282.9	5611.1
65°	1202.4	1231.3	1368.5	1917.3	3087.2	4098.2	5224.8	6802.7	7420.1	7355.1	5596.7
67.5°	982.1	993.0	1104.9	1494.9	2610.6	3618.0	4632.6	6351.4	7221.6	7217.9	5430.6
70°	794.4	823.3	917.1	1191.6	2170.1	3065.5	3943.0	5643.6	6791.9	6828.0	5098.4
72.5°	675.2	682.4	765.5	985.7	1769.3	2487.8	3264.1	4827.6	6160.0	6188.9	4578.5
75°	570.5	581.3	642.7	798.0	1437.1	1975.1	2625.0	3899.6	5156.2	5279.0	3856.3
77.5°	491.1	494.7	538.0	657.2	1021.8	1484.0	1924.5	2924.7	4036.8	4123.5	3029.4
80°	386.4	393.6	440.5	520.0	711.3	964.1	1328.8	2000.4	2697.2	2794.7	2097.9
82.5°	180.5	202.2	213.0	285.3	371.9	476.6	628.3	834.1	1220.4	1216.8	978.5
85°	18.1	14.4	14.4	21.7	32.5	32.5	39.7	46.9	93.9	111.9	86.7
87.5°	0.0	0.0	0.0	3.6	7.2	7.2	7.2	10.8	10.8	10.8	10.8
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3	2177.3
2.5°	2188.1	2155.6	2097.9	2043.7	2007.6	1978.7	1931.8	1902.9	1881.2	1852.3	1848.7
5°	2180.9	2123.1	2007.6	1910.1	1816.2	1736.8	1653.7	1603.2	1549.0	1523.7	1545.4
7.5°	2188.1	2094.2	1913.7	1765.7	1624.8	1498.5	1390.1	1321.5	1271.0	1245.7	1249.3
10°	2191.7	2069.0	1834.3	1628.5	1447.9	1299.9	1177.1	1083.2	1021.8	1007.4	989.4
12.5°	2184.5	2036.5	1754.8	1494.9	1278.2	1115.7	971.3	899.1	837.7	808.8	808.8
15°	2191.7	2011.2	1671.8	1372.1	1126.6	938.8	816.0	736.6	700.5	675.2	678.8
17.5°	2191.7	1989.5	1592.4	1252.9	978.5	805.2	693.3	628.3	592.2	577.7	574.1
20°	2217.0	1971.5	1516.5	1141.0	848.5	686.0	595.8	545.2	516.3	501.9	494.7
22.5°	2235.1	1957.0	1447.9	1032.7	740.2	599.4	523.6	476.6	455.0	447.7	447.7
25°	2267.6	1953.4	1386.5	928.0	653.6	534.4	465.8	429.7	411.6	404.4	404.4
27.5°	2314.5	1960.7	1328.8	837.7	588.6	469.4	418.8	390.0	379.1	375.5	371.9
30°	2383.1	1993.1	1292.7	769.1	527.2	429.7	382.7	364.7	357.5	353.9	353.9
32.5°	2473.4	2050.9	1278.2	733.0	491.1	397.2	357.5	343.0	335.8	335.8	332.2
35°	2585.3	2115.9	1267.4	700.5	465.8	375.5	339.4	325.0	321.4	321.4	321.4
37.5°	2718.9	2184.5	1249.3	678.8	451.3	357.5	325.0	310.5	310.5	310.5	310.5
40°	2867.0	2285.6	1245.7	664.4	440.5	346.6	310.5	296.1	296.1	296.1	296.1
42.5°	3033.1	2393.9	1242.1	653.6	433.3	339.4	296.1	281.6	281.6	281.6	281.6
45°	3235.3	2531.2	1249.3	646.3	433.3	332.2	285.3	267.2	263.6	263.6	263.6
47.5°	3433.8	2661.1	1256.5	639.1	426.1	321.4	270.8	252.8	249.1	245.5	245.5
50°	3646.9	2794.7	1256.5	631.9	418.8	310.5	260.0	234.7	231.1	227.5	227.5
52.5°	3856.3	2906.7	1260.2	621.1	400.8	292.5	241.9	220.3	213.0	209.4	205.8
55°	4058.5	3025.8	1263.8	603.0	379.1	274.4	231.1	205.8	195.0	187.8	187.8
57.5°	4210.2	3123.3	1245.7	566.9	350.2	256.4	213.0	187.8	173.3	166.1	166.1
60°	4354.6	3184.7	1213.2	512.7	321.4	238.3	198.6	169.7	155.3	148.0	148.0
62.5°	4412.4	3195.5	1137.4	418.8	285.3	220.3	180.5	155.3	144.4	140.8	140.8
65°	4379.9	3148.6	1036.3	332.2	252.8	198.6	166.1	144.4	130.0	119.2	119.2
67.5°	4202.9	2986.1	899.1	263.6	220.3	180.5	151.7	130.0	115.5	104.7	104.7
70°	3867.1	2726.1	700.5	209.4	191.4	158.9	137.2	119.2	104.7	93.9	93.9
72.5°	3372.5	2365.1	509.1	176.9	166.1	140.8	122.8	108.3	93.9	86.7	86.7
75°	2780.3	1823.4	361.1	151.7	148.0	126.4	111.9	97.5	86.7	79.4	79.4
77.5°	2087.0	1271.0	281.6	133.6	130.0	115.5	101.1	90.3	79.4	75.8	72.2
80°	1390.1	787.1	213.0	101.1	97.5	90.3	83.0	75.8	65.0	57.8	57.8
82.5°	621.1	332.2	108.3	57.8	50.6	43.3	36.1	25.3	25.3	21.7	21.7
85°	65.0	43.3	21.7	14.4	14.4	10.8	10.8	10.8	7.2	7.2	7.2
87.5°	10.8	10.8	7.2	7.2	7.2	3.6	3.6	3.6	3.6	3.6	3.6
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**

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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**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)