

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: P868976

Luminaire Tested: **EMM2-HSN-SA3B-722-U-T3-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868976  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HSN-SA3B-722-U-T3-HSS  
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 150W 70CRI 2200K  
FITXURE w/ TYPE III DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (30) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

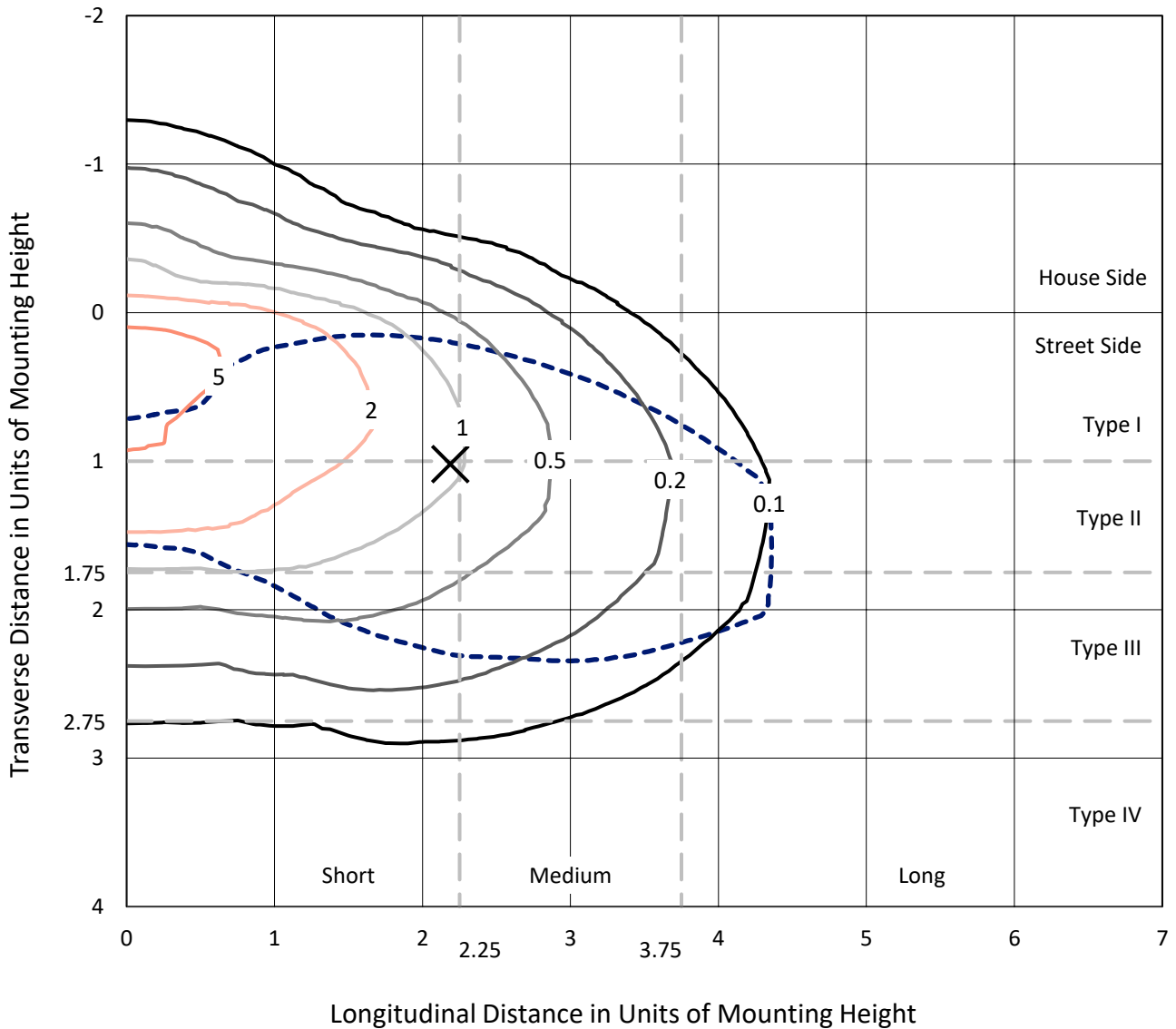
Lumens per Lamp: N/A  
Luminaire Lumens: 11464.1 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

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

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### Iso-Footcandle Lines of Horizontal Illumination

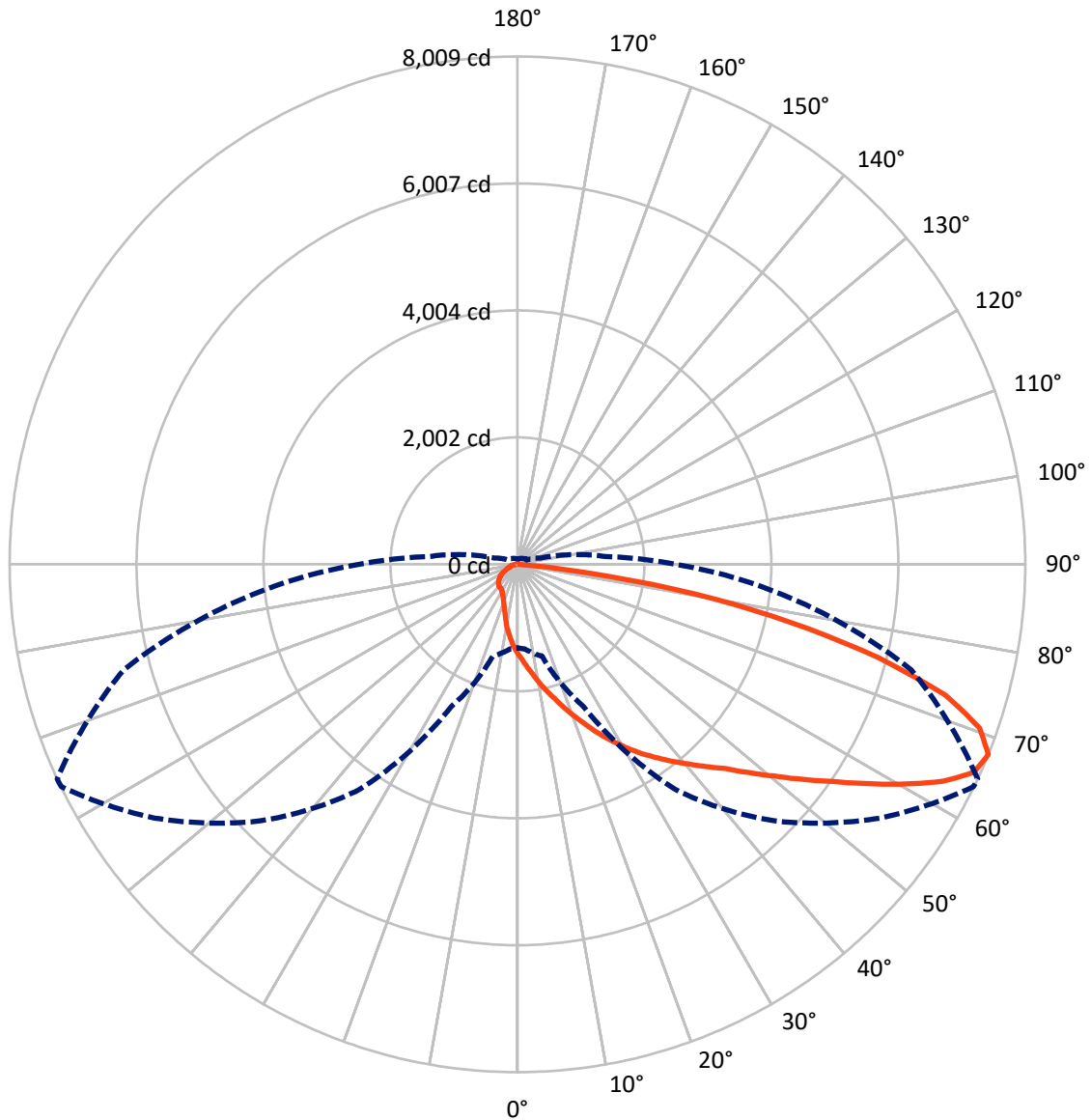
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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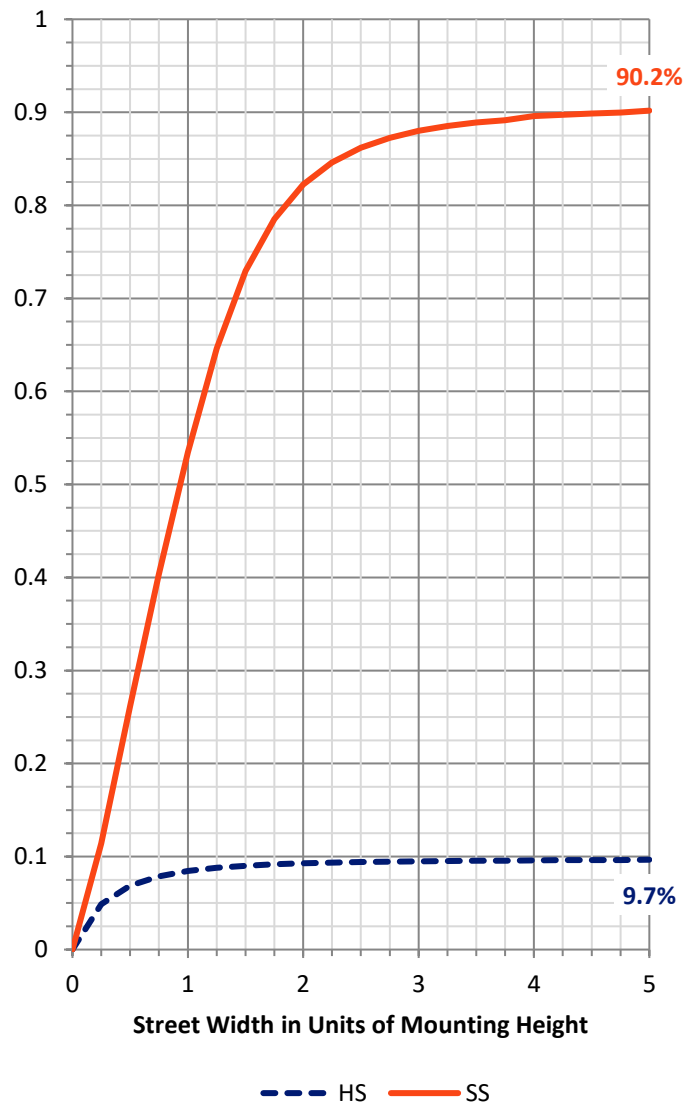
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1115.8	0.0	1115.8
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	10348.3	0.0	10348.3
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	11464.1	0.0	11464.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.6	1.2
10°-20°	460.0	4.0
20°-30°	837.2	7.3
30°-40°	1295.7	11.3
40°-50°	1958.7	17.1
50°-60°	2548.1	22.2
60°-70°	2513.7	21.9
70°-80°	1530.1	13.3
80°-90°	181.9	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°	11464.1	100.0
0°-180°	11464.1	100.0



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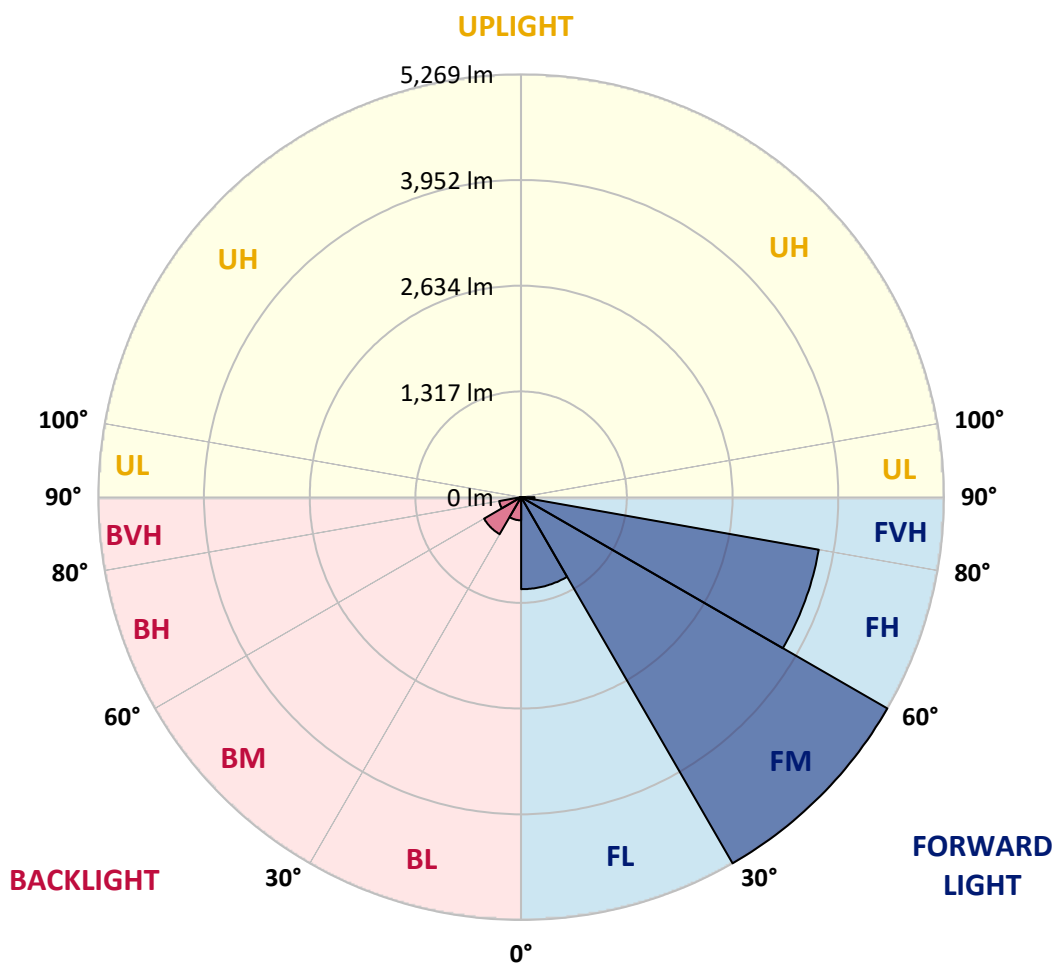
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1147.1	10.0			
FM	(30°-60°)	5268.9	46.0			
FH	(60°-80°)	3766.0	32.9			G2/5000
FVH	(80°-90°)	166.3	1.5			G2/225
BL	(0°-30°)	288.7	2.5	B1/500		
BM	(30°-60°)	533.6	4.7	B1/1000		
BH	(60°-80°)	277.8	2.4	B1/500		G1/500
BVH	(80°-90°)	15.6	0.1			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6
2.5°	1655.4	1642.3	1652.1	1629.2	1603.1	1583.4	1544.2	1511.5	1508.2	1475.5	1439.5
5°	1972.8	1930.2	1933.5	1887.7	1832.1	1773.2	1711.0	1629.2	1629.2	1550.7	1468.9
7.5°	2257.4	2250.8	2221.4	2149.4	2084.0	1992.4	1877.9	1773.2	1750.3	1629.2	1501.7
10°	2532.2	2522.4	2496.2	2440.6	2329.4	2227.9	2084.0	1927.0	1897.5	1724.1	1540.9
12.5°	2751.4	2754.7	2725.2	2679.4	2581.3	2460.2	2270.5	2074.2	2048.0	1815.7	1580.2
15°	2944.4	2941.2	2934.6	2895.3	2800.5	2689.2	2466.8	2237.8	2195.2	1913.9	1619.4
17.5°	3091.6	3085.1	3072.0	3039.3	2993.5	2885.5	2672.9	2411.2	2375.2	2028.4	1665.2
20°	3134.2	3130.9	3130.9	3153.8	3134.2	3068.7	2879.0	2591.1	2551.8	2149.4	1727.4
22.5°	3212.7	3209.4	3206.1	3229.0	3242.1	3235.6	3072.0	2774.3	2738.3	2290.1	1805.9
25°	3314.1	3307.6	3297.8	3320.7	3337.0	3376.3	3265.0	2990.2	2947.7	2453.7	1884.4
27.5°	3448.2	3454.8	3441.7	3438.4	3438.4	3461.3	3435.2	3183.2	3144.0	2610.7	1976.0
30°	3624.9	3634.7	3611.8	3595.5	3566.0	3562.8	3569.3	3399.2	3343.6	2780.8	2070.9
32.5°	3798.3	3808.1	3795.0	3772.1	3696.9	3667.4	3693.6	3582.4	3546.4	2967.3	2192.0
35°	3939.0	3961.9	3961.9	3916.1	3811.4	3795.0	3837.6	3762.3	3736.1	3186.5	2335.9
37.5°	4128.7	4141.8	4128.7	4043.7	3912.8	3932.4	3997.9	3952.1	3935.7	3422.1	2506.0
40°	4534.4	4550.8	4465.7	4262.9	4053.5	4076.4	4190.9	4164.7	4138.5	3654.4	2663.1
42.5°	5100.4	5061.1	5044.8	4593.3	4269.4	4256.3	4400.3	4364.3	4361.0	3889.9	2807.0
45°	5473.4	5486.4	5404.7	4976.1	4724.2	4478.8	4632.6	4619.5	4593.3	4128.7	2980.4
47.5°	5731.8	5702.4	5499.5	5293.4	5342.5	4770.0	4891.0	4923.7	4907.4	4400.3	3193.1
50°	5839.8	5810.3	5676.2	5538.8	5597.7	5103.7	5156.0	5264.0	5247.6	4675.1	3373.0
52.5°	5705.6	5669.6	5679.5	5715.5	5686.0	5365.4	5483.2	5653.3	5633.7	4995.7	3582.4
55°	4851.8	4946.6	5313.0	5679.5	5669.6	5565.0	5833.2	6081.9	6042.6	5329.4	3762.3
57.5°	3912.8	3965.2	4429.7	5421.0	5617.3	5731.8	6232.4	6539.9	6526.8	5663.1	3925.9
60°	3111.3	3166.9	3520.2	4884.5	5496.3	5905.2	6641.3	7047.0	7033.9	6000.1	4043.7
62.5°	2473.3	2473.3	2787.4	4112.4	5264.0	6006.6	6965.2	7557.4	7534.4	6271.6	4073.1
65°	1779.7	1802.6	2038.2	3307.6	4887.7	5980.4	7122.2	7920.5	7907.4	6425.4	4011.0
67.5°	1315.2	1341.3	1498.4	2479.9	4331.6	5718.7	6978.3	8002.3	8008.8	6428.7	3808.1
70°	1027.3	1033.8	1151.6	1724.1	3549.7	5136.4	6438.5	7730.7	7730.7	6268.3	3507.1
72.5°	781.9	788.5	889.9	1174.5	2614.0	4246.5	5630.4	7011.0	7060.1	5843.0	3062.2
75°	605.2	618.3	687.0	844.1	1639.1	3019.7	4626.0	5741.6	5875.8	5018.6	2522.4
77.5°	467.8	480.9	536.5	618.3	955.3	1861.5	3252.0	4292.3	4413.4	3952.1	1946.6
80°	376.2	382.8	418.8	464.6	579.1	958.6	1985.8	2820.1	2856.1	2686.0	1289.0
82.5°	173.4	186.5	225.7	255.2	287.9	444.9	847.3	1043.6	1089.4	1066.5	530.0
85°	19.6	19.6	22.9	26.2	29.4	45.8	58.9	52.3	52.3	62.2	55.6
87.5°	0.0	0.0	0.0	3.3	6.5	6.5	9.8	9.8	9.8	9.8	9.8
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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CATALOG NUMBER: EMM2-HSN-SA3B-722-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6	1416.6
2.5°	1419.9	1397.0	1354.4	1318.4	1285.7	1253.0	1236.7	1197.4	1187.6	1194.1	1171.2
5°	1426.4	1380.6	1292.3	1210.5	1141.8	1076.3	1020.7	961.8	948.8	929.1	919.3
7.5°	1436.2	1367.5	1230.1	1102.5	997.8	903.0	834.3	788.5	752.5	742.6	739.4
10°	1449.3	1351.2	1161.4	1001.1	857.2	759.0	696.8	664.1	651.0	641.2	644.5
12.5°	1459.1	1334.8	1096.0	886.6	745.9	657.6	628.1	602.0	595.4	592.2	592.2
15°	1472.2	1318.4	1017.5	785.2	651.0	598.7	569.3	559.4	559.4	556.2	556.2
17.5°	1488.6	1305.4	952.0	706.7	595.4	546.4	533.3	520.2	520.2	520.2	516.9
20°	1521.3	1298.8	893.1	641.2	546.4	513.6	494.0	484.2	480.9	477.7	477.7
22.5°	1554.0	1298.8	827.7	592.2	513.6	477.7	458.0	448.2	444.9	444.9	444.9
25°	1599.8	1295.5	775.4	549.6	484.2	441.7	422.0	412.2	405.7	405.7	402.4
27.5°	1652.1	1295.5	729.6	516.9	451.5	408.9	386.0	376.2	366.4	366.4	363.1
30°	1704.5	1302.1	690.3	490.7	418.8	379.5	350.1	337.0	330.4	327.2	327.2
32.5°	1773.2	1321.7	664.1	471.1	389.3	350.1	320.6	307.5	301.0	297.7	297.7
35°	1877.9	1370.8	667.4	461.3	369.7	323.9	294.4	278.1	274.8	274.8	271.5
37.5°	1989.1	1416.6	677.2	454.7	350.1	304.3	274.8	258.5	255.2	255.2	255.2
40°	2084.0	1455.9	690.3	451.5	333.7	284.6	258.5	245.4	238.8	238.8	238.8
42.5°	2178.9	1478.8	693.6	441.7	323.9	268.3	245.4	232.3	225.7	229.0	229.0
45°	2273.7	1495.1	683.8	428.6	314.1	255.2	232.3	219.2	212.7	212.7	212.7
47.5°	2388.3	1531.1	667.4	408.9	307.5	245.4	219.2	206.1	202.8	202.8	202.8
50°	2502.8	1560.5	654.3	386.0	291.2	232.3	209.4	193.0	189.8	189.8	189.8
52.5°	2597.6	1573.6	638.0	356.6	274.8	219.2	196.3	179.9	173.4	173.4	173.4
55°	2669.6	1576.9	615.1	333.7	251.9	206.1	183.2	166.9	160.3	157.0	157.0
57.5°	2728.5	1573.6	592.2	310.8	232.3	189.8	166.9	153.8	143.9	140.7	140.7
60°	2761.2	1563.8	559.4	281.4	206.1	173.4	153.8	137.4	130.9	127.6	127.6
62.5°	2741.6	1537.6	513.6	235.6	186.5	157.0	140.7	127.6	117.8	114.5	114.5
65°	2650.0	1485.3	454.7	193.0	166.9	140.7	127.6	114.5	101.4	98.1	98.1
67.5°	2489.7	1397.0	376.2	163.6	153.8	127.6	114.5	101.4	91.6	85.1	85.1
70°	2267.2	1279.2	294.4	140.7	137.4	117.8	104.7	91.6	81.8	75.2	75.2
72.5°	1949.9	1086.2	219.2	121.0	121.0	108.0	94.9	85.1	75.2	68.7	68.7
75°	1576.9	821.2	166.9	111.2	108.0	98.1	85.1	75.2	68.7	62.2	62.2
77.5°	1151.6	546.4	137.4	101.4	101.4	88.3	78.5	68.7	62.2	58.9	58.9
80°	700.1	314.1	98.1	78.5	78.5	75.2	65.4	58.9	55.6	49.1	45.8
82.5°	284.6	121.0	52.3	39.3	39.3	36.0	22.9	19.6	19.6	19.6	16.4
85°	29.4	19.6	13.1	9.8	9.8	9.8	6.5	6.5	6.5	6.5	6.5
87.5°	9.8	9.8	6.5	6.5	6.5	6.5	3.3	3.3	3.3	3.3	3.3
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: SP1-2407-157-2

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-722-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-722-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-2  
 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-40-722-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2253  
 CIE u': 0.2868  
 CIE v': 0.5332  
 Duv: -0.0014  
 CIE x: 0.4974  
 CIE y: 0.4110  
 CIE z: 0.0915  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 587  
 Purity: 72.69432  
 Rf: 76.9  
 Rg: 92.7

CRI (Ra): 70.6  
 R1: 68.4  
 R2: 88.7  
 R3: 85.4  
 R4: 63.5  
 R5: 69.0  
 R6: 88.9  
 R7: 68.5  
 R8: 32.0  
 R9: -36.0  
 R10: 78.2  
 R11: 61.0  
 R12: 74.2  
 R13: 72.8  
 R14: 92.2  
 R15: 58.0



**Test Conditions**

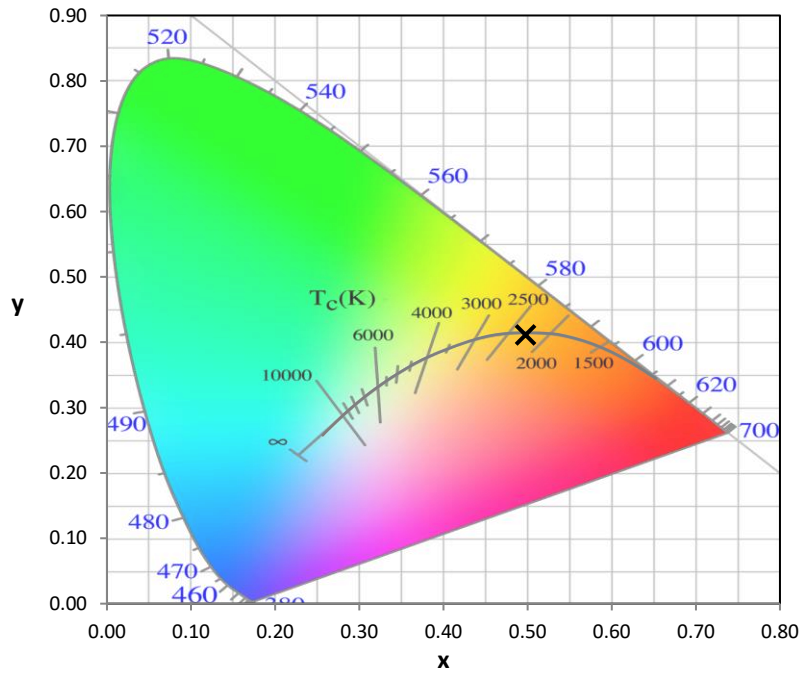
Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 24.1

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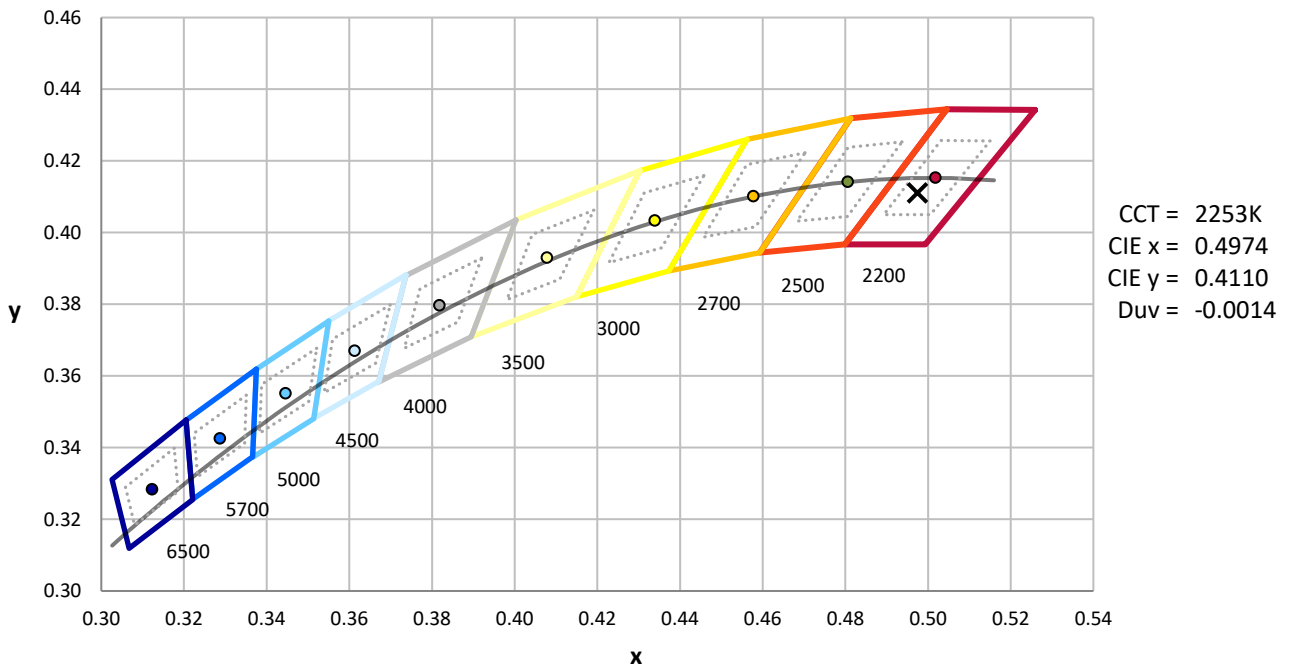
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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**CIE 1931 Chromaticity Diagram**



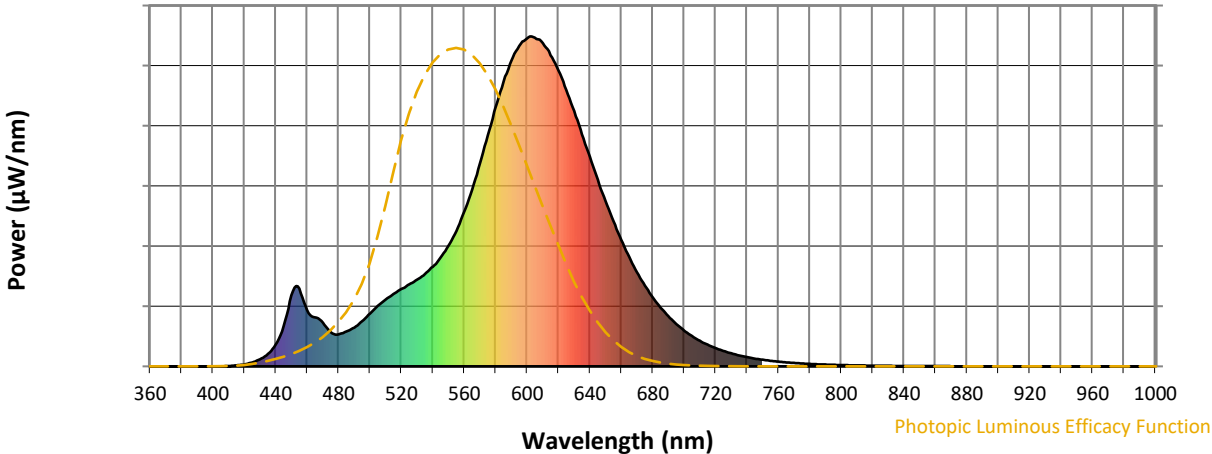
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 2200K 4-step quadrangle

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**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 0.96**

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	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 1.71**

λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>2</sup> /nm	Lumens (φ/nm)
360	0	NR	490	117	NR	620	896	NR	750	20	NR	880	0	NR
365	0	NR	495	137	NR	625	838	NR	755	17	NR	885	0	NR
370	0	NR	500	160	NR	630	774	NR	760	14	NR	890	0	NR
375	0	NR	505	183	NR	635	704	NR	765	12	NR	895	0	NR
380	0	NR	510	202	NR	640	635	NR	770	10	NR	900	0	NR
385	0	NR	515	219	NR	645	565	NR	775	9	NR	905	0	NR
390	0	NR	520	235	NR	650	501	NR	780	7	NR	910	0	NR
395	0	NR	525	249	NR	655	440	NR	785	6	NR	915	0	NR
400	0	NR	530	263	NR	660	383	NR	790	5	NR	920	0	NR
405	0	NR	535	281	NR	665	332	NR	795	5	NR	925	0	NR
410	1	NR	540	302	NR	670	286	NR	800	4	NR	930	0	NR
415	3	NR	545	331	NR	675	245	NR	805	3	NR	935	0	NR
420	6	NR	550	366	NR	680	210	NR	810	3	NR	940	0	NR
425	12	NR	555	411	NR	685	178	NR	815	3	NR	945	0	NR
430	21	NR	560	469	NR	690	152	NR	820	2	NR	950	0	NR
435	38	NR	565	536	NR	695	129	NR	825	2	NR	955	0	NR
440	66	NR	570	614	NR	700	109	NR	830	2	NR	960	0	NR
445	122	NR	575	701	NR	705	92	NR	835	1	NR	965	0	NR
450	215	NR	580	785	NR	710	77	NR	840	1	NR	970	0	NR
455	236	NR	585	863	NR	715	66	NR	845	1	NR	975	0	NR
460	170	NR	590	928	NR	720	55	NR	850	1	NR	980	0	NR
465	148	NR	595	971	NR	725	47	NR	855	1	NR	985	0	NR
470	132	NR	600	994	NR	730	40	NR	860	1	NR	990	0	NR
475	104	NR	605	996	NR	735	33	NR	865	1	NR	995	0	NR
480	97	NR	610	979	NR	740	28	NR	870	1	NR	1000	0	NR
485	105	NR	615	943	NR	745	24	NR	875	0	NR			

**Summary**

$R_f = 76.9$   
 $R_g = 92.7$   
 $CIE R_a = 70.6$   
 $R_g = -36.0$



**Color Vector Graphics**





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

CES01 = 87	CES26 = 76	CES51 = 88	CES76 = 78
CES02 = 65	CES27 = 94	CES52 = 85	CES77 = 75
CES03 = 32	CES28 = 93	CES53 = 80	CES78 = 79
CES04 = 72	CES29 = 81	CES54 = 86	CES79 = 82
CES05 = 51	CES30 = 91	CES55 = 83	CES80 = 81
CES06 = 52	CES31 = 83	CES56 = 77	CES81 = 51
CES07 = 44	CES32 = 75	CES57 = 75	CES82 = 92
CES08 = 42	CES33 = 88	CES58 = 76	CES83 = 88
CES09 = 29	CES34 = 88	CES59 = 84	CES84 = 90
CES10 = 79	CES35 = 94	CES60 = 91	CES85 = 65
CES11 = 62	CES36 = 90	CES61 = 82	CES86 = 48
CES12 = 68	CES37 = 97	CES62 = 91	CES87 = 76
CES13 = 45	CES38 = 98	CES63 = 86	CES88 = 78
CES14 = 75	CES39 = 97	CES64 = 70	CES89 = 61
CES15 = 72	CES40 = 94	CES65 = 71	CES90 = 80
CES16 = 48	CES41 = 95	CES66 = 71	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 70	CES92 = 51
CES18 = 57	CES43 = 80	CES68 = 74	CES93 = 68
CES19 = 74	CES44 = 99	CES69 = 84	CES94 = 44
CES20 = 68	CES45 = 83	CES70 = 72	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 75	CES96 = 75
CES22 = 81	CES47 = 88	CES72 = 89	CES97 = 76
CES23 = 92	CES48 = 73	CES73 = 68	CES98 = 72
CES24 = 92	CES49 = 82	CES74 = 85	CES99 = 63
CES25 = 73	CES50 = 87	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)