

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: P868422

Luminaire Tested: **EMM2-HTN-SA3A-727-U-T2R-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868422  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA3A-727-U-T2R-HSS  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 130W 70CRI 2700K  
FIXTURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD  
Light Source: (30) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

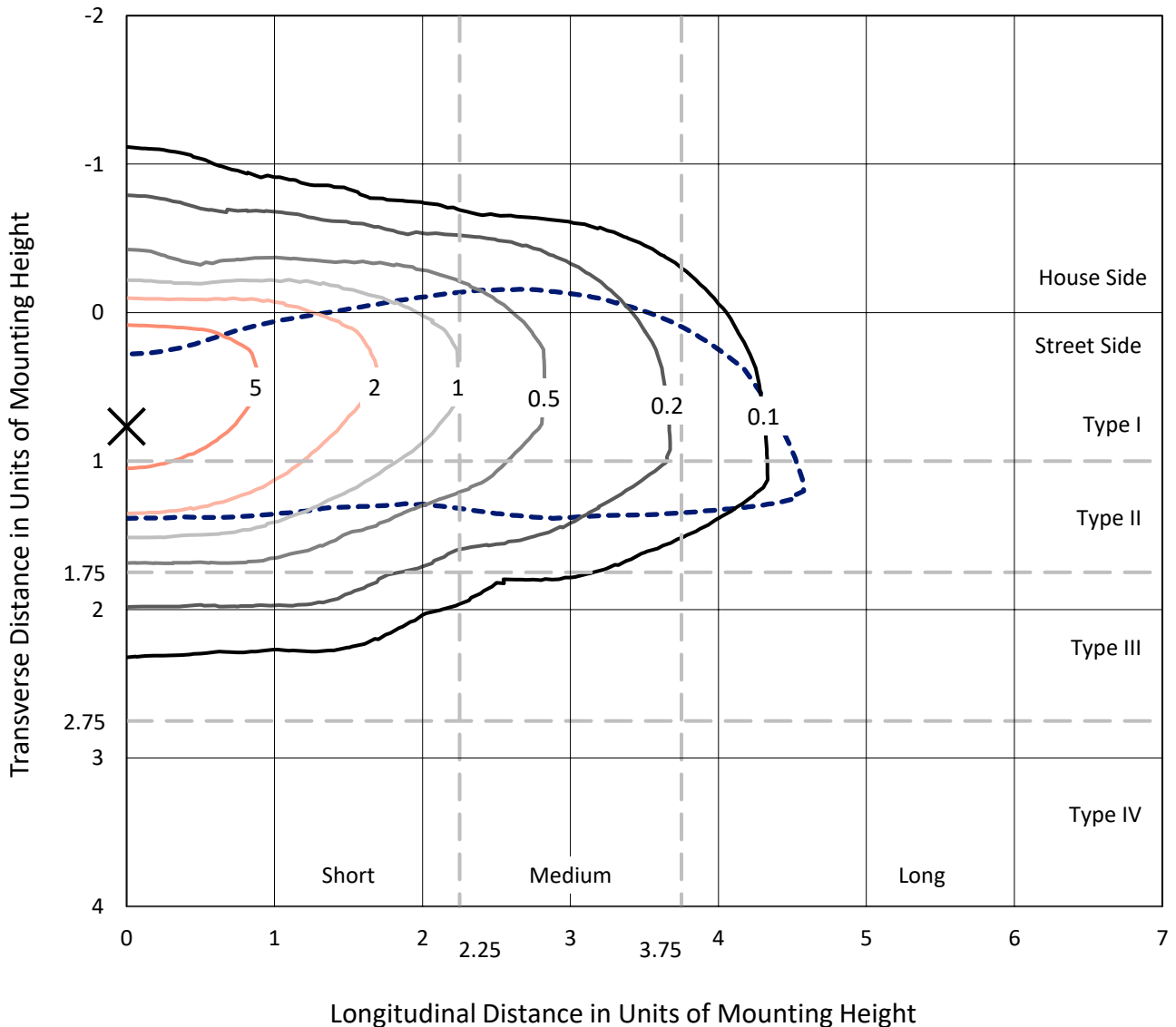
Lumens per Lamp: N/A  
Luminaire Lumens: 11131.2 lumens  
Efficiency: N/A  
Efficacy: 98.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 113  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P868422  
 CATALOG NUMBER: EMM2-HTN-SA3A-727-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

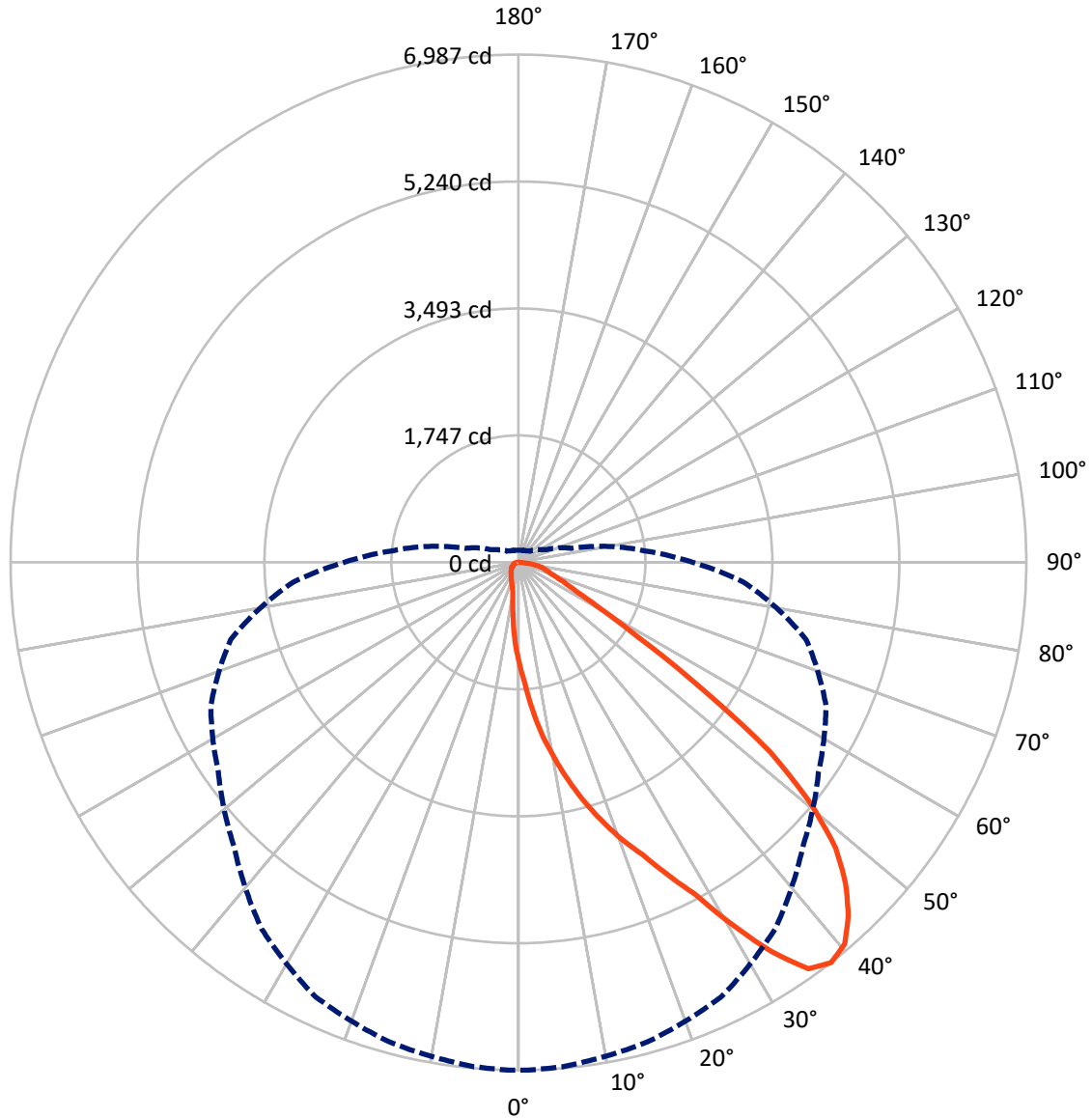
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.5 fc  
 Type II - Short - N/A

REPORT NUMBER: P868422  
CATALOG NUMBER: EMM2-HTN-SA3A-727-U-T2R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 37.5-Deg Vertical

REPORT NUMBER: P868422

CATALOG NUMBER: EMM2-HTN-SA3A-727-U-T2R-HSS

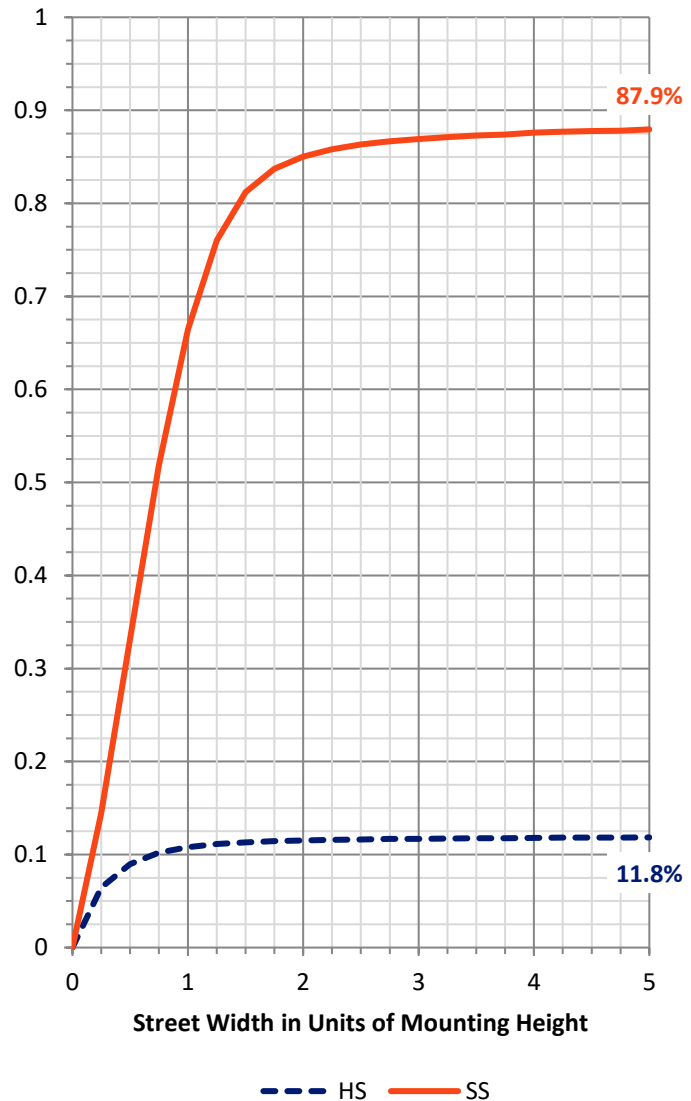
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1327.6	0.0	1327.6
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	9803.6	0.0	9803.6
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	11131.2	0.0	11131.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.4	1.2
10°-20°	483.7	4.3
20°-30°	998.0	9.0
30°-40°	1756.0	15.8
40°-50°	2384.3	21.4
50°-60°	2362.3	21.2
60°-70°	1818.6	16.3
70°-80°	1055.5	9.5
80°-90°	134.2	1.2
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°	11131.2	100.0
0°-180°	11131.2	100.0



REPORT NUMBER: P868422

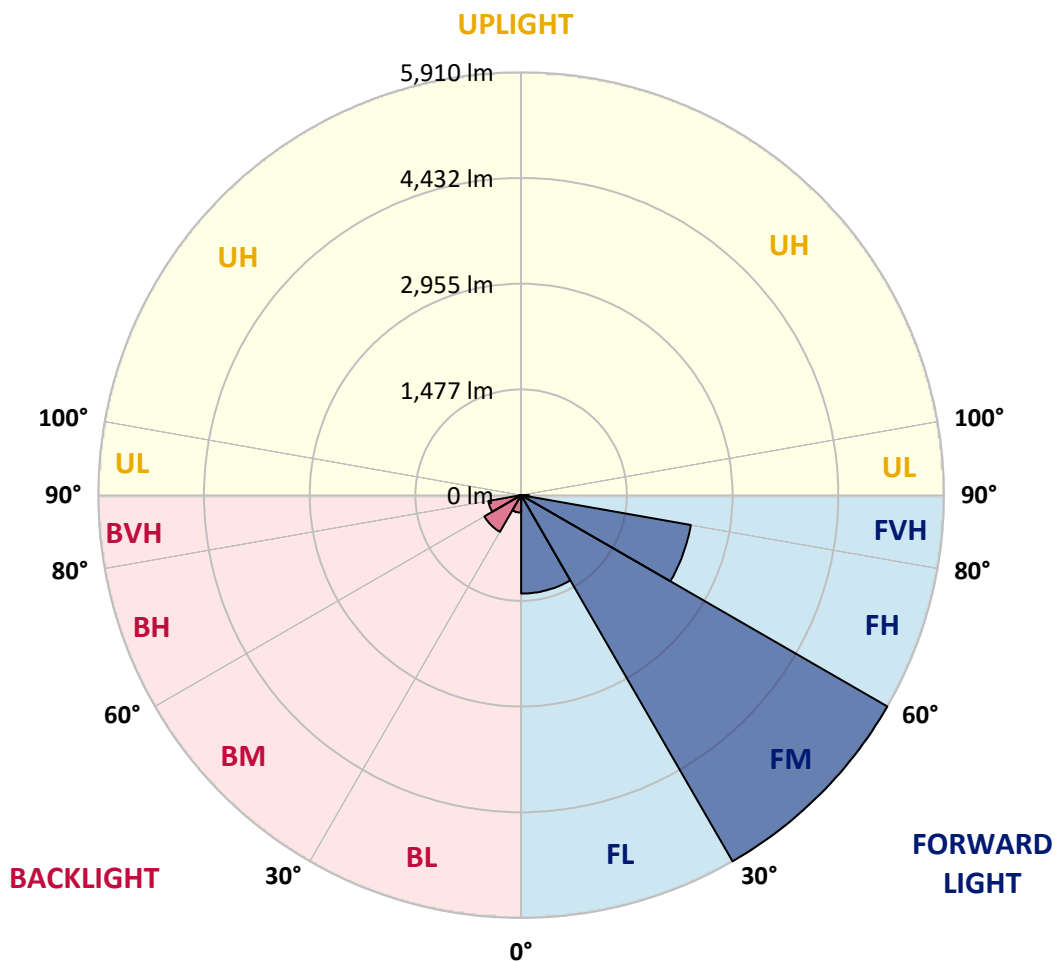
CATALOG NUMBER: EMM2-HTN-SA3A-727-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1376.0	12.4			
FM (30°-60°)	5909.7	53.1			
FH (60°-80°)	2408.4	21.6			G2/5000
FVH (80°-90°)	109.5	1.0			G2/225
BL (0°-30°)	244.1	2.2	B1/500		
BM (30°-60°)	593.0	5.3	B1/1000		
BH (60°-80°)	465.8	4.2	B1/500		G1/500
BVH (80°-90°)	24.8	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 II Short





REPORT NUMBER: P868422

CATALOG NUMBER: EMM2-HTN-SA3A-727-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3
2.5°	1662.0	1686.9	1668.2	1652.7	1630.9	1609.2	1578.1	1544.0	1500.5	1447.7	1401.1
5°	2037.9	2050.3	2044.1	2034.8	1966.4	1901.2	1836.0	1755.2	1643.4	1544.0	1438.3
7.5°	2413.8	2407.6	2392.0	2364.1	2302.0	2227.4	2109.4	1975.8	1817.3	1643.4	1478.7
10°	2743.1	2752.4	2740.0	2696.5	2618.8	2516.3	2373.4	2221.2	2006.8	1764.5	1534.6
12.5°	3087.9	3094.1	3094.1	3000.9	2948.1	2789.7	2637.5	2432.4	2193.2	1913.6	1599.9
15°	3426.5	3414.1	3414.1	3352.0	3258.8	3081.7	2910.8	2662.3	2392.0	2053.4	1674.4
17.5°	3749.6	3755.8	3727.9	3659.5	3569.4	3398.6	3187.3	2913.9	2587.8	2221.2	1752.1
20°	4069.6	4050.9	4038.5	3970.2	3873.9	3671.9	3470.0	3159.4	2817.6	2410.7	1860.8
22.5°	4367.8	4377.1	4346.1	4237.3	4147.2	3964.0	3734.1	3448.3	3060.0	2600.2	1978.9
25°	4753.0	4722.0	4749.9	4619.4	4479.7	4262.2	4001.2	3718.5	3324.0	2833.2	2124.9
27.5°	5163.1	5181.7	5166.2	5023.3	4833.8	4541.8	4268.4	3967.1	3591.2	3053.7	2289.5
30°	5775.1	5765.8	5768.9	5554.5	5240.8	4892.8	4557.3	4228.0	3858.3	3324.0	2482.1
32.5°	6380.9	6415.0	6331.2	6141.7	5781.3	5256.3	4846.2	4479.7	4116.2	3557.0	2677.8
35°	6868.6	6859.3	6825.1	6613.9	6256.6	5747.1	5175.5	4759.2	4389.6	3842.8	2895.3
37.5°	6986.6	6986.6	6964.9	6834.4	6598.3	6157.2	5532.8	5038.8	4669.2	4097.5	3106.6
40°	6909.0	6893.4	6881.0	6794.0	6666.7	6405.7	5908.7	5327.7	4967.4	4426.8	3339.5
42.5°	6654.2	6657.3	6641.8	6592.1	6523.8	6424.4	6141.7	5635.3	5259.4	4737.5	3569.4
45°	6312.5	6318.7	6300.1	6293.9	6259.7	6259.7	6194.5	5877.6	5535.9	5054.4	3821.1
47.5°	5874.5	5871.4	5862.1	5846.5	5914.9	5989.4	6048.5	6014.3	5781.3	5396.1	4047.8
50°	5206.6	5200.4	5228.3	5306.0	5473.7	5638.4	5812.4	5973.9	5958.4	5713.0	4321.2
52.5°	4339.9	4299.5	4330.5	4569.7	4914.6	5281.1	5526.6	5781.3	6048.5	6048.5	4591.5
55°	3035.1	3069.3	3087.9	3439.0	4119.3	4749.9	5181.7	5511.0	6014.3	6315.6	4889.7
57.5°	1932.3	1944.7	2000.6	2379.6	3178.0	3967.1	4731.3	5271.8	5886.9	6539.3	5187.9
60°	1301.6	1258.2	1301.6	1519.1	2286.4	3112.8	4069.6	4970.5	5703.6	6700.8	5517.2
62.5°	919.5	916.4	928.9	1056.2	1630.9	2339.2	3240.1	4563.5	5557.6	6710.2	5762.7
65°	742.5	720.7	730.0	801.5	1093.5	1714.8	2376.5	3827.3	5427.1	6545.5	5883.8
67.5°	596.5	587.1	593.4	640.0	820.1	1289.2	1674.4	2910.8	5150.7	6265.9	5815.5
70°	487.7	490.8	493.9	540.5	652.4	975.5	1196.0	1997.5	4560.4	5949.1	5507.9
72.5°	422.5	422.5	425.6	456.7	546.8	773.5	904.0	1298.5	3690.6	5607.3	4942.5
75°	372.8	372.8	372.8	400.7	466.0	621.3	702.1	888.5	2649.9	4973.6	4088.2
77.5°	323.1	326.2	326.2	351.0	400.7	484.6	540.5	615.1	1690.0	3842.8	3094.1
80°	248.5	248.5	251.6	279.6	341.7	379.0	397.6	434.9	888.5	2413.8	1963.3
82.5°	174.0	177.1	177.1	180.2	229.9	233.0	214.4	217.5	323.1	801.5	745.6
85°	18.6	21.7	24.9	24.9	40.4	49.7	52.8	49.7	52.8	93.2	93.2
87.5°	0.0	0.0	0.0	0.0	3.1	6.2	6.2	9.3	9.3	9.3	9.3
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: P868422

CATALOG NUMBER: EMM2-HTN-SA3A-727-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3	1379.3
2.5°	1376.2	1354.5	1307.9	1267.5	1230.2	1199.1	1177.4	1149.4	1127.7	1127.7	1140.1
5°	1385.5	1335.8	1239.5	1149.4	1078.0	1009.6	947.5	907.1	876.0	857.4	857.4
7.5°	1397.9	1323.4	1177.4	1040.7	928.9	820.1	723.8	677.2	630.6	615.1	618.2
10°	1422.8	1317.2	1121.5	944.4	776.6	640.0	546.8	497.0	472.2	459.8	459.8
12.5°	1450.8	1317.2	1062.4	835.7	640.0	500.2	444.2	407.0	394.5	388.3	382.1
15°	1488.0	1323.4	1012.7	720.7	521.9	422.5	382.1	360.4	347.9	341.7	341.7
17.5°	1531.5	1329.6	959.9	627.5	444.2	372.8	341.7	326.2	313.8	307.5	307.5
20°	1587.4	1345.1	907.1	543.6	388.3	341.7	313.8	298.2	285.8	282.7	279.6
22.5°	1655.8	1370.0	854.3	475.3	351.0	310.7	285.8	273.4	264.1	257.8	257.8
25°	1736.6	1401.1	813.9	425.6	323.1	288.9	267.2	251.6	242.3	239.2	239.2
27.5°	1848.4	1453.9	773.5	388.3	301.3	267.2	245.4	233.0	223.7	220.6	217.5
30°	1954.0	1519.1	754.9	379.0	285.8	248.5	233.0	217.5	208.1	205.0	201.9
32.5°	2090.7	1593.7	742.5	379.0	279.6	236.1	217.5	205.0	195.7	192.6	189.5
35°	2236.7	1680.6	742.5	391.4	282.7	226.8	205.0	192.6	183.3	177.1	177.1
37.5°	2395.2	1767.6	748.7	410.1	292.0	220.6	192.6	180.2	170.9	167.8	167.8
40°	2562.9	1885.7	761.1	425.6	301.3	217.5	180.2	170.9	161.5	155.3	155.3
42.5°	2718.2	1978.9	782.9	444.2	307.5	214.4	170.9	161.5	152.2	149.1	149.1
45°	2898.4	2081.4	801.5	456.7	307.5	205.0	161.5	152.2	146.0	142.9	139.8
47.5°	3041.3	2165.3	810.8	462.9	301.3	195.7	152.2	146.0	139.8	133.6	136.7
50°	3215.3	2255.4	826.3	466.0	288.9	183.3	146.0	136.7	130.5	127.4	127.4
52.5°	3383.0	2345.4	838.8	459.8	273.4	167.8	136.7	130.5	124.3	118.0	118.0
55°	3581.9	2444.9	857.4	450.5	248.5	152.2	127.4	121.2	111.8	108.7	105.6
57.5°	3808.6	2575.3	872.9	431.8	217.5	136.7	121.2	111.8	99.4	93.2	93.2
60°	4016.8	2724.4	885.4	385.2	189.5	127.4	111.8	102.5	90.1	87.0	87.0
62.5°	4240.4	2879.8	885.4	304.4	161.5	114.9	105.6	96.3	83.9	80.8	80.8
65°	4395.8	3019.6	857.4	226.8	136.7	108.7	102.5	90.1	77.7	74.6	74.6
67.5°	4439.3	3106.6	779.7	161.5	118.0	102.5	96.3	83.9	74.6	68.3	68.3
70°	4299.5	3038.2	636.8	124.3	102.5	93.2	87.0	77.7	68.3	65.2	65.2
72.5°	3898.7	2777.3	475.3	105.6	90.1	87.0	80.8	71.5	65.2	62.1	62.1
75°	3265.0	2308.2	335.5	93.2	83.9	77.7	71.5	65.2	59.0	59.0	59.0
77.5°	2472.8	1668.2	208.1	83.9	71.5	71.5	65.2	59.0	55.9	52.8	52.8
80°	1596.8	1053.1	118.0	59.0	49.7	52.8	46.6	40.4	40.4	37.3	37.3
82.5°	677.2	416.3	62.1	34.2	24.9	21.7	15.5	15.5	12.4	12.4	12.4
85°	68.3	24.9	12.4	9.3	9.3	6.2	6.2	6.2	6.2	3.1	3.1
87.5°	9.3	9.3	9.3	6.2	6.2	6.2	3.1	3.1	3.1	3.1	3.1
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: SP1-2407-157-3

Test Date: 08/07/2024

Luminaire Tested: MEM2-HTN-SA-40-727-U-5WQ-2

Data in this report applies to families of products including MEM2-HTN-SA-40-727-U-5WQ-2

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-157-3  
 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-40-727-U-5WQ-2**  
 Description: Epic Modern Light Square 40W 5WQ Optic and Flare Trim

**Spectral Parameters**

CCT (K): 2747  
 CIE u': 0.2606  
 CIE v': 0.5257  
 Duv: -0.0005  
 CIE x: 0.4552  
 CIE y: 0.4082  
 CIE z: 0.1366  
 Peak Wavelength (nm): 597  
 Dominant Wavelength (nm): 584  
 Purity: 59.16856  
 R<sub>f</sub>: 75.5  
 R<sub>g</sub>: 93.6

CRI (Ra):	71.7		
R1:	68.1	R9:	-35.3
R2:	83.9	R10:	64.2
R3:	94.7	R11:	61.7
R4:	66.3	R12:	53.9
R5:	67.4	R13:	71.2
R6:	78.7	R14:	97.6
R7:	75.0	R15:	59.3
R8:	39.4		



**Test Conditions**

Stabilization Time: 22M  
 Operation Time: 1H 22M  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2407-157-3

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: SP1-2407-157-3

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-3

**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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-3

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.13**

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.04

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	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	784	NR	755	17	NR	885	1	NR
370	0	NR	500	171	NR	630	720	NR	760	15	NR	890	0	NR
375	0	NR	505	221	NR	635	652	NR	765	13	NR	895	0	NR
380	0	NR	510	268	NR	640	587	NR	770	11	NR	900	0	NR
385	0	NR	515	313	NR	645	521	NR	775	9	NR	905	0	NR
390	0	NR	520	350	NR	650	461	NR	780	8	NR	910	0	NR
395	0	NR	525	381	NR	655	406	NR	785	7	NR	915	0	NR
400	0	NR	530	407	NR	660	353	NR	790	6	NR	920	0	NR
405	2	NR	535	435	NR	665	307	NR	795	5	NR	925	0	NR
410	4	NR	540	462	NR	670	264	NR	800	4	NR	930	0	NR
415	9	NR	545	496	NR	675	227	NR	805	4	NR	935	0	NR
420	20	NR	550	534	NR	680	196	NR	810	3	NR	940	0	NR
425	38	NR	555	582	NR	685	167	NR	815	3	NR	945	0	NR
430	69	NR	560	638	NR	690	144	NR	820	2	NR	950	0	NR
435	120	NR	565	700	NR	695	122	NR	825	2	NR	955	0	NR
440	193	NR	570	767	NR	700	103	NR	830	2	NR	960	0	NR
445	316	NR	575	836	NR	705	88	NR	835	2	NR	965	0	NR
450	469	NR	580	898	NR	710	74	NR	840	1	NR	970	0	NR
455	431	NR	585	947	NR	715	63	NR	845	1	NR	975	0	NR
460	264	NR	590	982	NR	720	54	NR	850	1	NR	980	0	NR
465	197	NR	595	997	NR	725	46	NR	855	1	NR	985	0	NR
470	155	NR	600	997	NR	730	39	NR	860	1	NR	990	0	NR
475	108	NR	605	978	NR	735	33	NR	865	1	NR	995	0	NR
480	90	NR	610	947	NR	740	28	NR	870	1	NR	1000	0	NR
485	92	NR	615	900	NR	745	24	NR	875	1	NR			

**Summary**

$R_f = 75.5$   
 $R_g = 93.6$   
 $CIE R_a = 71.7$   
 $R_g = -35.3$



**Color Vector Graphics**





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

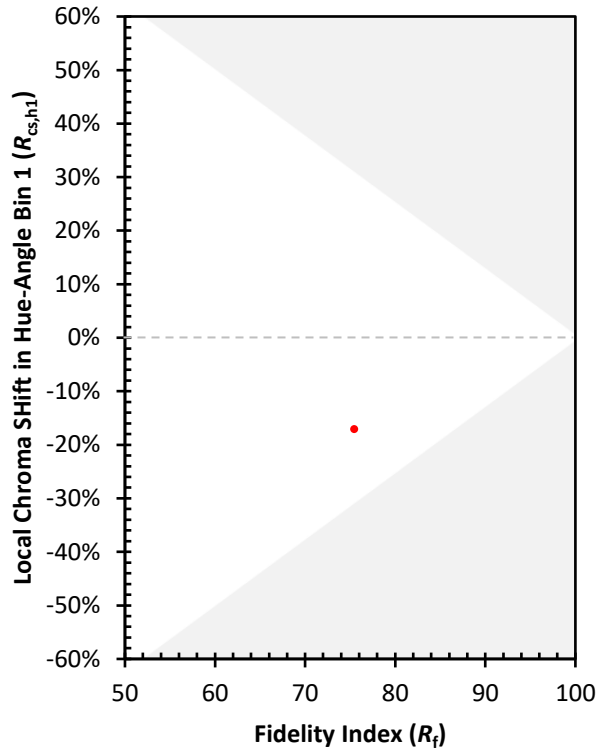
CES01 = 86	CES26 = 68	CES51 = 87	CES76 = 63
CES02 = 63	CES27 = 90	CES52 = 85	CES77 = 79
CES03 = 31	CES28 = 87	CES53 = 78	CES78 = 66
CES04 = 71	CES29 = 71	CES54 = 86	CES79 = 87
CES05 = 50	CES30 = 85	CES55 = 84	CES80 = 85
CES06 = 52	CES31 = 74	CES56 = 75	CES81 = 67
CES07 = 42	CES32 = 66	CES57 = 75	CES82 = 93
CES08 = 41	CES33 = 80	CES58 = 76	CES83 = 91
CES09 = 29	CES34 = 79	CES59 = 85	CES84 = 89
CES10 = 77	CES35 = 89	CES60 = 90	CES85 = 72
CES11 = 60	CES36 = 93	CES61 = 81	CES86 = 59
CES12 = 66	CES37 = 88	CES62 = 91	CES87 = 77
CES13 = 43	CES38 = 93	CES63 = 77	CES88 = 79
CES14 = 74	CES39 = 97	CES64 = 67	CES89 = 65
CES15 = 72	CES40 = 93	CES65 = 66	CES90 = 80
CES16 = 48	CES41 = 93	CES66 = 63	CES91 = 80
CES17 = 51	CES42 = 89	CES67 = 61	CES92 = 55
CES18 = 57	CES43 = 78	CES68 = 68	CES93 = 72
CES19 = 73	CES44 = 99	CES69 = 78	CES94 = 48
CES20 = 67	CES45 = 85	CES70 = 63	CES95 = 66
CES21 = 88	CES46 = 81	CES71 = 61	CES96 = 76
CES22 = 80	CES47 = 86	CES72 = 86	CES97 = 81
CES23 = 92	CES48 = 74	CES73 = 56	CES98 = 76
CES24 = 91	CES49 = 79	CES74 = 93	CES99 = 64
CES25 = 73	CES50 = 86	CES75 = 66	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)