

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: P868423

Luminaire Tested: **EMM2-HTN-SA3B-727-U-T2R-HSS**

Issue Date: 08/22/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P868423  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/22/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA3B-727-U-T2R-HSS  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 150W 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**

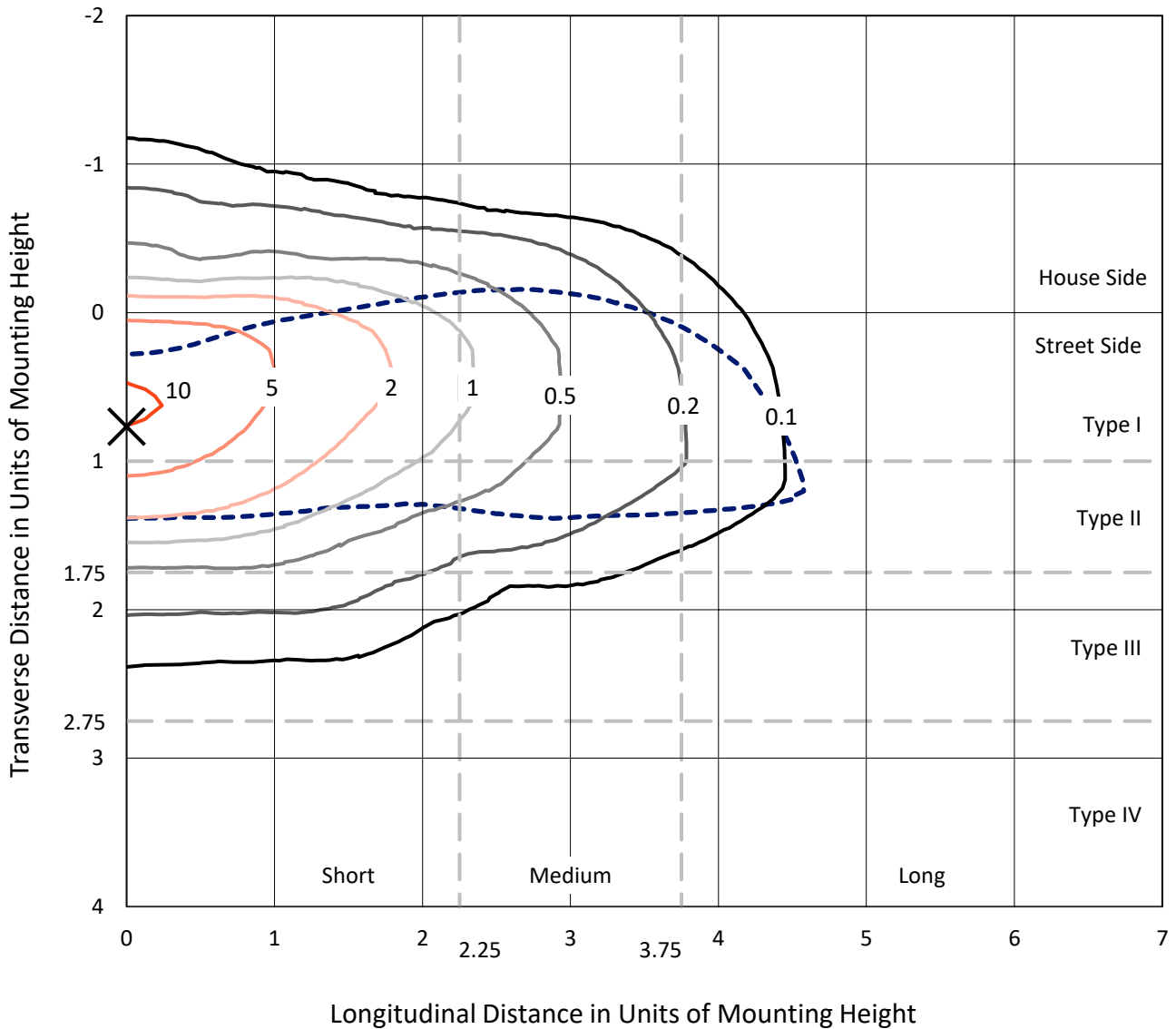
Lumens per Lamp: N/A  
Luminaire Lumens: 12579.2 lumens  
Efficiency: N/A  
Efficacy: 93.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

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

REPORT NUMBER: P868423  
 CATALOG NUMBER: EMM2-HTN-SA3B-727-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

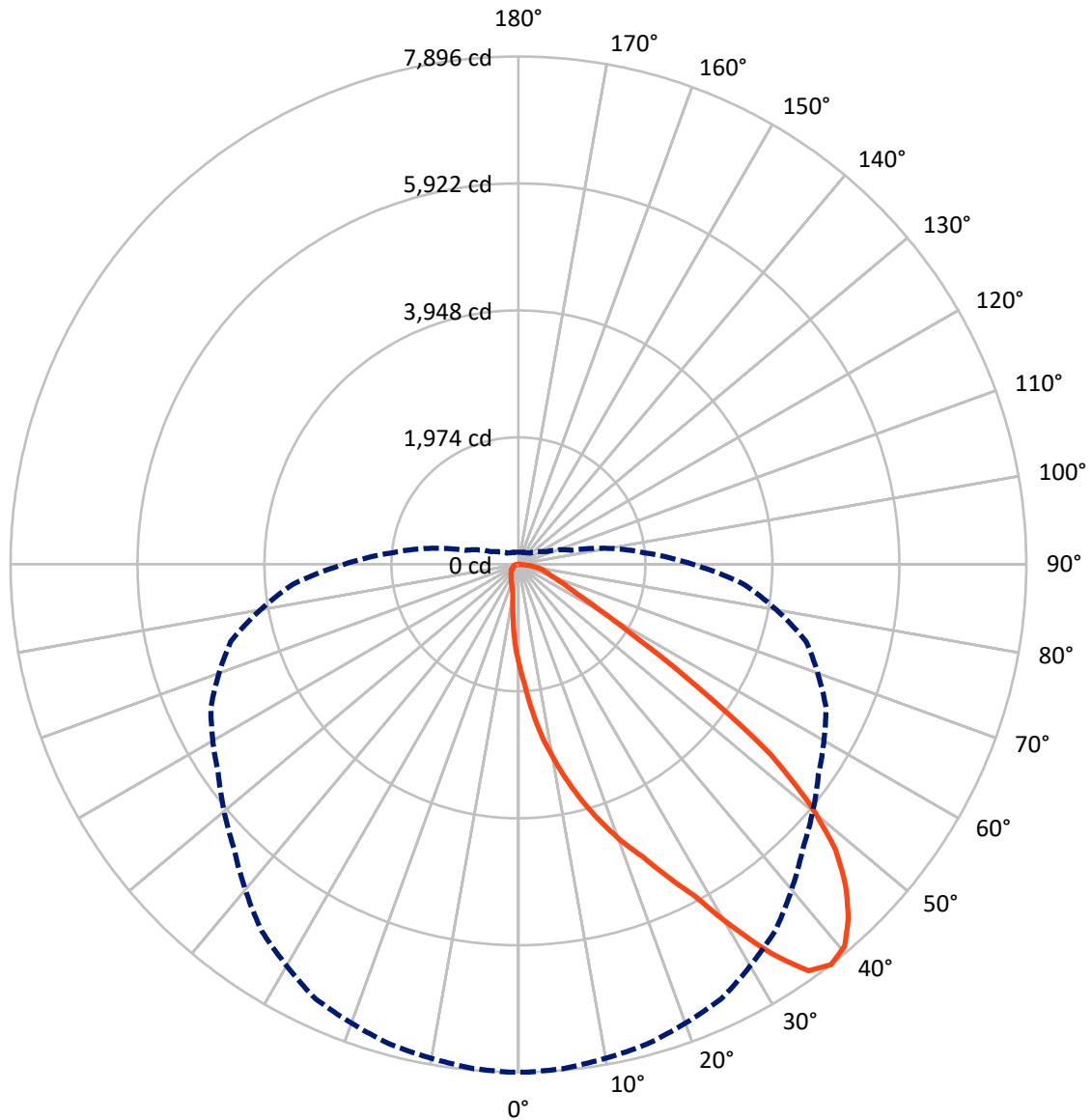
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.8 fc  
 Type II - Short - N/A

REPORT NUMBER: P868423  
CATALOG NUMBER: EMM2-HTN-SA3B-727-U-T2R-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P868423

CATALOG NUMBER: EMM2-HTN-SA3B-727-U-T2R-HSS

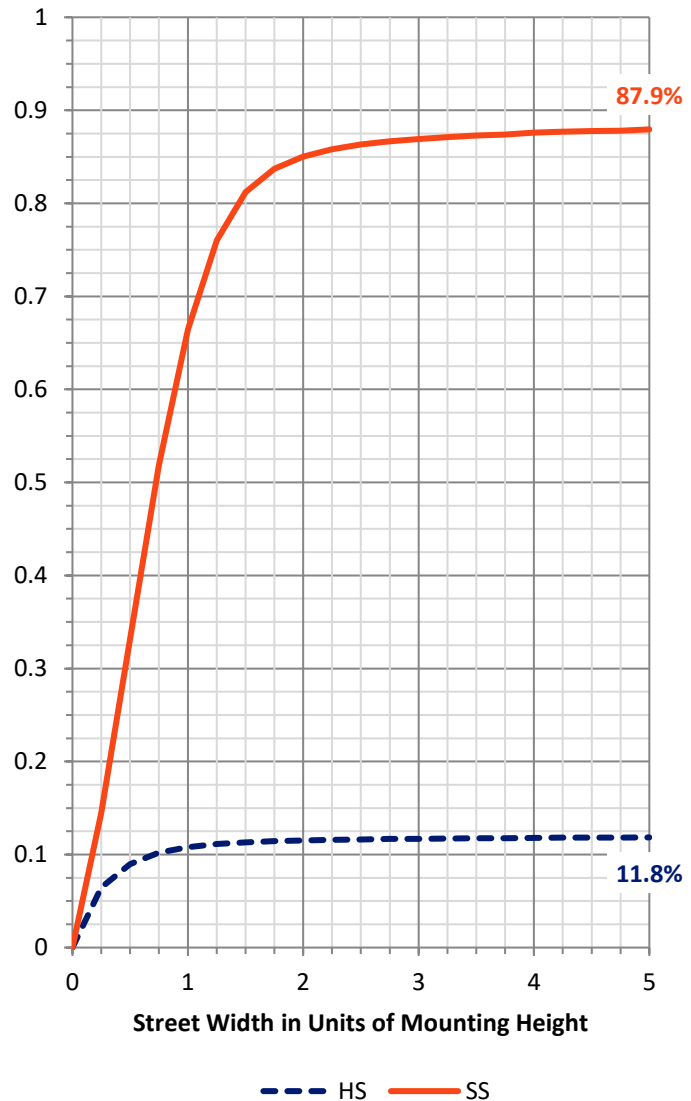
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1500.3	0.0	1500.3
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	11078.9	0.0	11078.9
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	12579.2	0.0	12579.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.4	1.2
10°-20°	546.6	4.3
20°-30°	1127.9	9.0
30°-40°	1984.5	15.8
40°-50°	2694.5	21.4
50°-60°	2669.6	21.2
60°-70°	2055.2	16.3
70°-80°	1192.8	9.5
80°-90°	151.7	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°	12579.2	100.0
0°-180°	12579.2	100.0



REPORT NUMBER: P868423

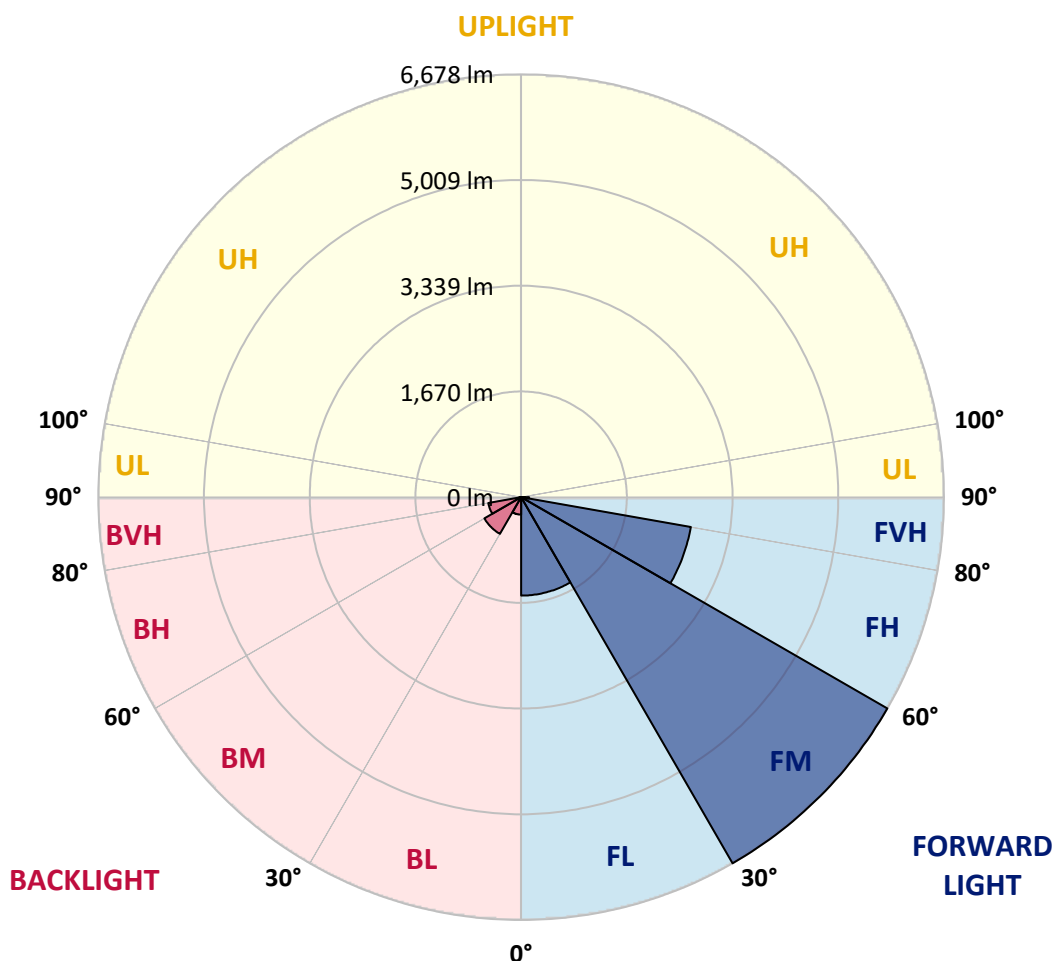
CATALOG NUMBER: EMM2-HTN-SA3B-727-U-T2R-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1555.0	12.4			
FM	(30°-60°)	6678.5	53.1			
FH	(60°-80°)	2721.7	21.6			G2/5000
FVH	(80°-90°)	123.7	1.0			G2/225
BL	(0°-30°)	275.8	2.2	B1/500		
BM	(30°-60°)	670.1	5.3	B1/1000		
BH	(60°-80°)	526.4	4.2	B2/1000		G2/1000
BVH	(80°-90°)	28.0	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





REPORT NUMBER: P868423

CATALOG NUMBER: EMM2-HTN-SA3B-727-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7
2.5°	1878.2	1906.3	1885.2	1867.7	1843.1	1818.5	1783.4	1744.8	1695.7	1636.0	1583.3
5°	2303.0	2317.0	2310.0	2299.5	2222.3	2148.5	2074.8	1983.5	1857.1	1744.8	1625.4
7.5°	2727.8	2720.8	2703.2	2671.6	2601.4	2517.1	2383.7	2232.8	2053.7	1857.1	1671.1
10°	3099.9	3110.4	3096.4	3047.3	2959.5	2843.6	2682.1	2510.1	2267.9	1994.1	1734.3
12.5°	3489.6	3496.6	3496.6	3391.3	3331.6	3152.6	2980.6	2748.9	2478.5	2162.6	1808.0
15°	3872.3	3858.2	3858.2	3788.0	3682.7	3482.6	3289.5	3008.6	2703.2	2320.5	1892.2
17.5°	4237.4	4244.4	4212.8	4135.6	4033.8	3840.7	3601.9	3293.0	2924.4	2510.1	1980.0
20°	4599.0	4577.9	4563.9	4486.6	4377.8	4149.6	3921.4	3570.3	3184.2	2724.3	2102.9
22.5°	4936.0	4946.5	4911.4	4788.5	4686.7	4479.6	4219.8	3896.8	3458.0	2938.4	2236.3
25°	5371.3	5336.2	5367.8	5220.4	5062.4	4816.6	4521.7	4202.3	3756.4	3201.7	2401.3
27.5°	5834.7	5855.8	5838.2	5676.7	5462.6	5132.6	4823.7	4483.1	4058.3	3451.0	2587.4
30°	6526.3	6515.8	6519.3	6277.1	5922.5	5529.3	5150.1	4778.0	4360.2	3756.4	2805.0
32.5°	7210.9	7249.5	7154.7	6940.6	6533.3	5940.0	5476.6	5062.4	4651.6	4019.7	3026.2
35°	7762.1	7751.5	7712.9	7474.2	7070.5	6494.7	5848.8	5378.3	4960.6	4342.7	3271.9
37.5°	7895.5	7895.5	7870.9	7723.5	7456.7	6958.1	6252.5	5694.3	5276.5	4630.6	3510.7
40°	7807.7	7790.2	7776.1	7677.8	7533.9	7239.0	6677.3	6020.8	5613.6	5002.7	3774.0
42.5°	7519.8	7523.4	7505.8	7449.6	7372.4	7260.1	6940.6	6368.3	5943.6	5353.8	4033.8
45°	7133.7	7140.7	7119.6	7112.6	7074.0	7074.0	7000.3	6642.2	6256.0	5711.9	4318.1
47.5°	6638.7	6635.2	6624.6	6607.1	6684.3	6768.6	6835.3	6796.6	6533.3	6098.0	4574.4
50°	5883.9	5876.9	5908.4	5996.2	6185.8	6371.9	6568.5	6751.0	6733.5	6456.1	4883.3
52.5°	4904.4	4858.8	4893.9	5164.2	5553.9	5968.1	6245.5	6533.3	6835.3	6835.3	5188.8
55°	3429.9	3468.5	3489.6	3886.3	4655.1	5367.8	5855.8	6227.9	6796.6	7137.2	5525.8
57.5°	2183.6	2197.7	2260.9	2689.2	3591.4	4483.1	5346.7	5957.6	6652.7	7389.9	5862.8
60°	1471.0	1421.8	1471.0	1716.7	2583.8	3517.7	4599.0	5617.1	6445.6	7572.5	6234.9
62.5°	1039.2	1035.6	1049.7	1193.6	1843.1	2643.5	3661.6	5157.2	6280.6	7583.0	6512.3
65°	839.0	814.5	825.0	905.8	1235.8	1937.9	2685.7	4325.1	6133.1	7397.0	6649.2
67.5°	674.0	663.5	670.5	723.2	926.8	1456.9	1892.2	3289.5	5820.7	7081.0	6572.0
70°	551.2	554.7	558.2	610.9	737.2	1102.3	1351.6	2257.4	5153.7	6722.9	6224.4
72.5°	477.5	477.5	481.0	516.1	617.9	874.2	1021.6	1467.5	4170.7	6336.7	5585.5
75°	421.3	421.3	421.3	452.9	526.6	702.1	793.4	1004.0	2994.6	5620.6	4620.0
77.5°	365.1	368.6	368.6	396.7	452.9	547.7	610.9	695.1	1909.8	4342.7	3496.6
80°	280.9	280.9	284.4	316.0	386.2	428.3	449.4	491.5	1004.0	2727.8	2218.7
82.5°	196.6	200.1	200.1	203.6	259.8	263.3	242.2	245.7	365.1	905.8	842.6
85°	21.1	24.6	28.1	28.1	45.6	56.2	59.7	56.2	59.7	105.3	105.3
87.5°	0.0	0.0	0.0	0.0	3.5	7.0	7.0	10.5	10.5	10.5	10.5
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: P868423

CATALOG NUMBER: EMM2-HTN-SA3B-727-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7	1558.7
2.5°	1555.2	1530.6	1478.0	1432.4	1390.2	1355.1	1330.5	1298.9	1274.4	1274.4	1288.4
5°	1565.8	1509.6	1400.8	1298.9	1218.2	1141.0	1070.8	1025.1	990.0	968.9	968.9
7.5°	1579.8	1495.5	1330.5	1176.1	1049.7	926.8	818.0	765.3	712.7	695.1	698.6
10°	1607.9	1488.5	1267.3	1067.2	877.7	723.2	617.9	561.7	533.6	519.6	519.6
12.5°	1639.5	1488.5	1200.6	944.4	723.2	565.2	502.0	459.9	445.9	438.8	431.8
15°	1681.6	1495.5	1144.5	814.5	589.8	477.5	431.8	407.2	393.2	386.2	386.2
17.5°	1730.8	1502.6	1084.8	709.2	502.0	421.3	386.2	368.6	354.6	347.6	347.6
20°	1793.9	1520.1	1025.1	614.4	438.8	386.2	354.6	337.0	323.0	319.5	316.0
22.5°	1871.2	1548.2	965.4	537.1	396.7	351.1	323.0	308.9	298.4	291.4	291.4
25°	1962.5	1583.3	919.8	481.0	365.1	326.5	301.9	284.4	273.8	270.3	270.3
27.5°	2088.8	1643.0	874.2	438.8	340.5	301.9	277.3	263.3	252.8	249.3	245.7
30°	2208.2	1716.7	853.1	428.3	323.0	280.9	263.3	245.7	235.2	231.7	228.2
32.5°	2362.7	1801.0	839.0	428.3	316.0	266.8	245.7	231.7	221.2	217.7	214.2
35°	2527.7	1899.3	839.0	442.3	319.5	256.3	231.7	217.7	207.1	200.1	200.1
37.5°	2706.7	1997.6	846.1	463.4	330.0	249.3	217.7	203.6	193.1	189.6	189.6
40°	2896.3	2131.0	860.1	481.0	340.5	245.7	203.6	193.1	182.6	175.5	175.5
42.5°	3071.8	2236.3	884.7	502.0	347.6	242.2	193.1	182.6	172.0	168.5	168.5
45°	3275.4	2352.1	905.8	516.1	347.6	231.7	182.6	172.0	165.0	161.5	158.0
47.5°	3436.9	2446.9	916.3	523.1	340.5	221.2	172.0	165.0	158.0	151.0	154.5
50°	3633.5	2548.7	933.8	526.6	326.5	207.1	165.0	154.5	147.4	143.9	143.9
52.5°	3823.1	2650.6	947.9	519.6	308.9	189.6	154.5	147.4	140.4	133.4	133.4
55°	4047.8	2762.9	968.9	509.0	280.9	172.0	143.9	136.9	126.4	122.9	119.4
57.5°	4304.1	2910.3	986.5	488.0	245.7	154.5	136.9	126.4	112.3	105.3	105.3
60°	4539.3	3078.9	1000.5	435.3	214.2	143.9	126.4	115.9	101.8	98.3	98.3
62.5°	4792.1	3254.4	1000.5	344.0	182.6	129.9	119.4	108.8	94.8	91.3	91.3
65°	4967.6	3412.4	968.9	256.3	154.5	122.9	115.9	101.8	87.8	84.3	84.3
67.5°	5016.7	3510.7	881.2	182.6	133.4	115.9	108.8	94.8	84.3	77.2	77.2
70°	4858.8	3433.4	719.7	140.4	115.9	105.3	98.3	87.8	77.2	73.7	73.7
72.5°	4405.9	3138.5	537.1	119.4	101.8	98.3	91.3	80.7	73.7	70.2	70.2
75°	3689.7	2608.4	379.2	105.3	94.8	87.8	80.7	73.7	66.7	66.7	66.7
77.5°	2794.5	1885.2	235.2	94.8	80.7	80.7	73.7	66.7	63.2	59.7	59.7
80°	1804.5	1190.1	133.4	66.7	56.2	59.7	52.7	45.6	45.6	42.1	42.1
82.5°	765.3	470.4	70.2	38.6	28.1	24.6	17.6	17.6	14.0	14.0	14.0
85°	77.2	28.1	14.0	10.5	10.5	7.0	7.0	7.0	7.0	3.5	3.5
87.5°	10.5	10.5	10.5	7.0	7.0	7.0	3.5	3.5	3.5	3.5	3.5
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  
 Rf: 75.5  
 Rg: 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



CCT = 2747K  
 CIE x = 0.4552  
 CIE y = 0.4082  
 Duv = -0.0005

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

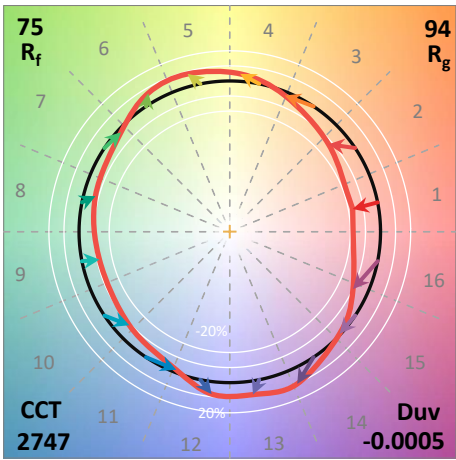
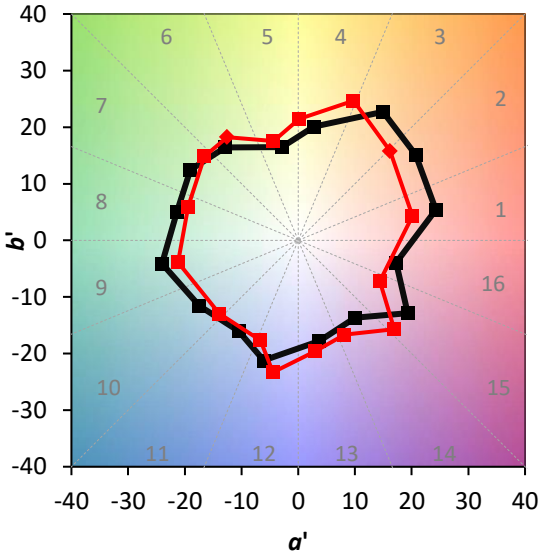
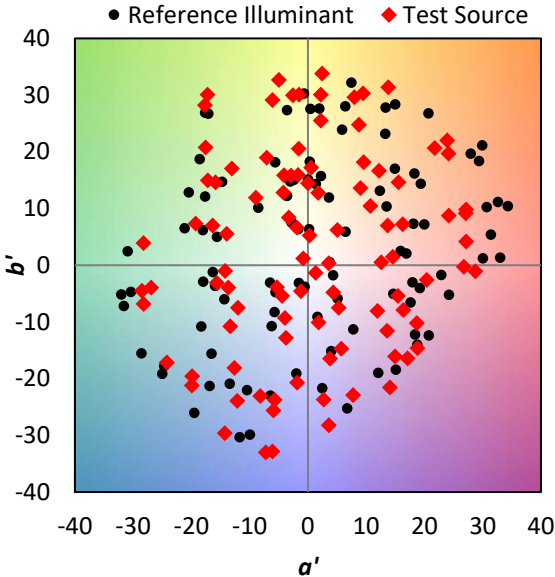
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	103	NR	620	846	NR	750	20	NR	880	0	NR
365	0	NR	495	130	NR	625	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**



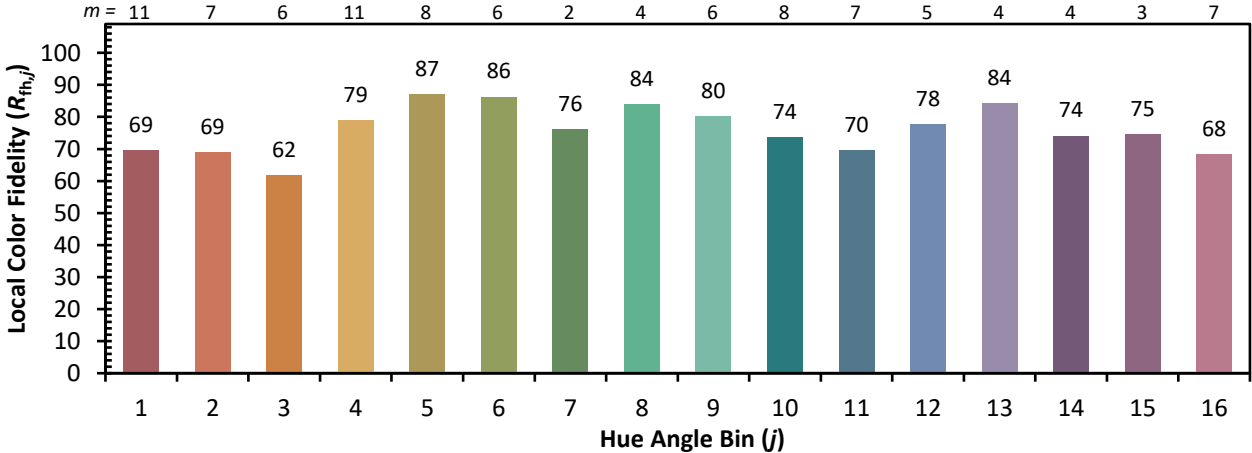


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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)