

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: P868836

Luminaire Tested: **EMM2-HSN-SA3B-722-U-T2R-HSS**

Issue Date: 08/22/2024



Test Information

Test Method: LM-79-08
Report Number: P868836
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-T2R-HSS
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 150W 70CRI 2200K
FITXURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD
Light Source: (30) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

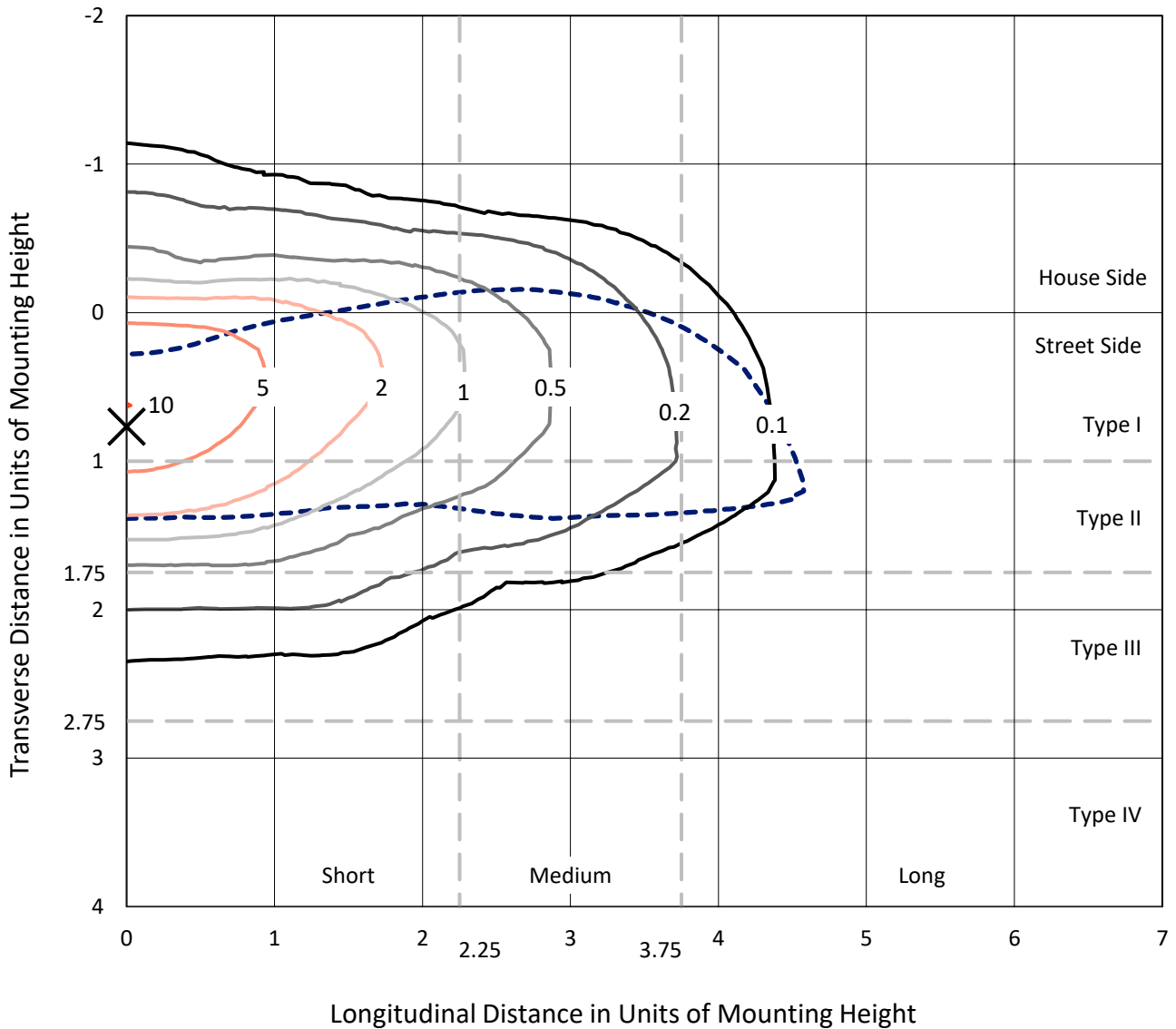
Lumens per Lamp: N/A
Luminaire Lumens: 11723.4 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 134
Input Voltage (V): 120
Input Current (A_{in}): 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: P868836
 CATALOG NUMBER: EMM2-HSN-SA3B-722-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

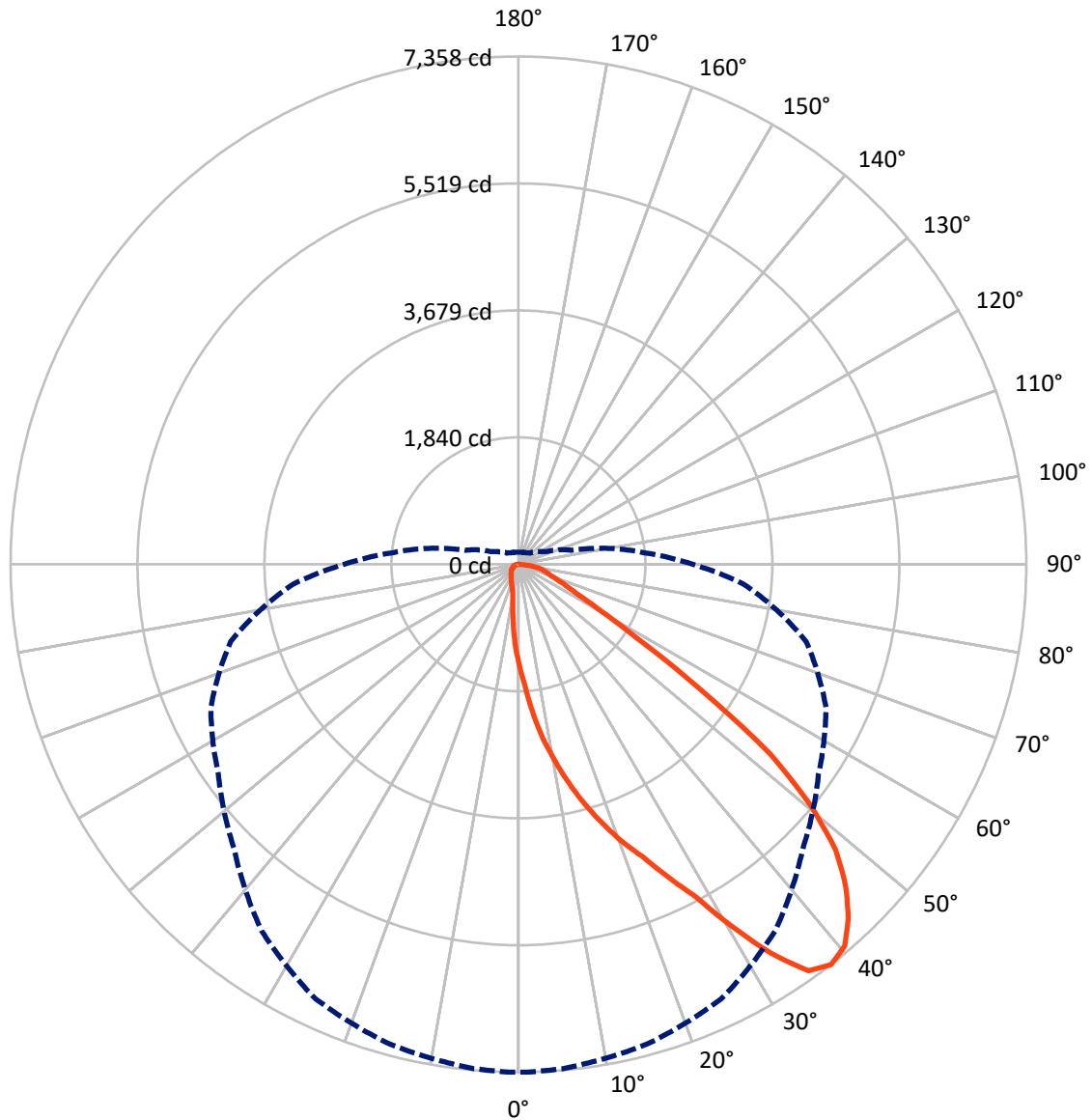
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Short - N/A

REPORT NUMBER: P868836
CATALOG NUMBER: EMM2-HSN-SA3B-722-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P868836

CATALOG NUMBER: EMM2-HSN-SA3B-722-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1398.2	0.0	1398.2
	% Fixture	11.9	0.0	11.9
Street Side	Lumens	10325.2	0.0	10325.2
	% Fixture	88.1	0.0	88.1
Total	Lumens	11723.4	0.0	11723.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	1.2
10°-20°	509.4	4.3
20°-30°	1051.1	9.0
30°-40°	1849.5	15.8
40°-50°	2511.2	21.4
50°-60°	2488.0	21.2
60°-70°	1915.4	16.3
70°-80°	1111.7	9.5
80°-90°	141.4	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°	11723.4	100.0
0°-180°	11723.4	100.0



REPORT NUMBER: P868836

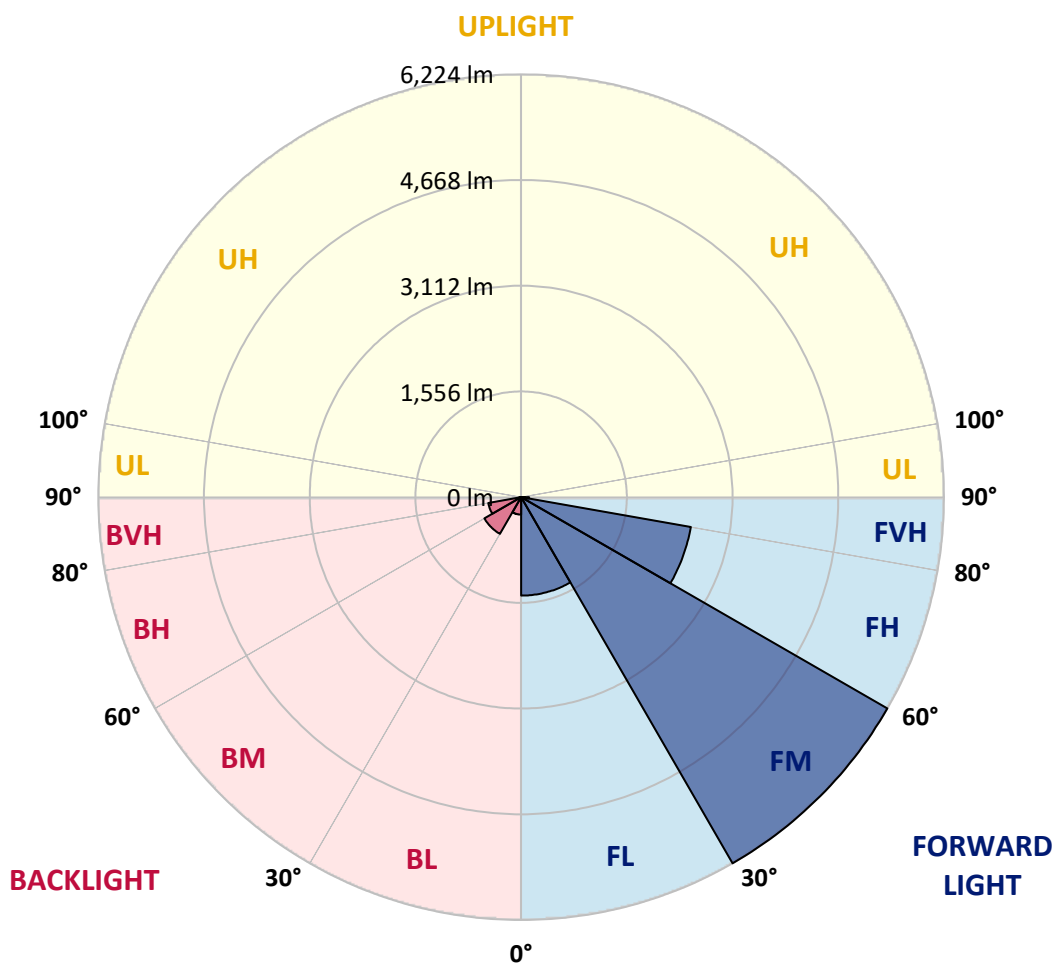
CATALOG NUMBER: EMM2-HSN-SA3B-722-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1449.2	12.4			
FM (30°-60°)	6224.1	53.1			
FH (60°-80°)	2536.5	21.6			G2/5000
FVH (80°-90°)	115.3	1.0			G2/225
BL (0°-30°)	257.1	2.2	B1/500		
BM (30°-60°)	624.5	5.3	B1/1000		
BH (60°-80°)	490.6	4.2	B1/500		G1/500
BVH (80°-90°)	26.1	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: P868836

CATALOG NUMBER: EMM2-HSN-SA3B-722-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7
2.5°	1750.4	1776.6	1757.0	1740.6	1717.7	1694.8	1662.1	1626.1	1580.3	1524.7	1475.6
5°	2146.3	2159.4	2152.9	2143.0	2071.1	2002.4	1933.7	1848.6	1730.8	1626.1	1514.9
7.5°	2542.2	2535.7	2519.3	2489.9	2424.4	2345.9	2221.6	2080.9	1914.0	1730.8	1557.4
10°	2889.0	2898.8	2885.8	2839.9	2758.2	2650.2	2499.7	2339.4	2113.6	1858.4	1616.3
12.5°	3252.2	3258.7	3258.7	3160.6	3105.0	2938.1	2777.8	2561.8	2309.9	2015.4	1685.0
15°	3608.8	3595.7	3595.7	3530.3	3432.1	3245.7	3065.7	2804.0	2519.3	2162.7	1763.5
17.5°	3949.1	3955.6	3926.2	3854.2	3759.3	3579.4	3356.9	3069.0	2725.4	2339.4	1845.3
20°	4286.1	4266.5	4253.4	4181.4	4080.0	3867.3	3654.6	3327.4	2967.5	2538.9	1959.8
22.5°	4600.2	4610.0	4577.3	4462.8	4367.9	4174.9	3932.7	3631.7	3222.8	2738.5	2084.2
25°	5005.9	4973.2	5002.6	4865.2	4718.0	4488.9	4214.1	3916.4	3500.9	2983.9	2237.9
27.5°	5437.8	5457.4	5441.0	5290.5	5091.0	4783.4	4495.5	4178.1	3782.2	3216.2	2411.3
30°	6082.3	6072.5	6075.8	5850.0	5519.6	5153.1	4799.8	4453.0	4063.6	3500.9	2614.2
32.5°	6720.3	6756.3	6668.0	6468.4	6088.9	5535.9	5104.1	4718.0	4335.2	3746.2	2820.3
35°	7234.0	7224.2	7188.2	6965.7	6589.5	6052.9	5450.9	5012.4	4623.1	4047.3	3049.3
37.5°	7358.3	7358.3	7335.4	7198.0	6949.4	6484.8	5827.1	5306.9	4917.6	4315.5	3271.8
40°	7276.5	7260.2	7247.1	7155.5	7021.3	6746.5	6223.0	5611.2	5231.7	4662.4	3517.2
42.5°	7008.3	7011.5	6995.2	6942.8	6870.8	6766.1	6468.4	5935.1	5539.2	4989.5	3759.3
45°	6648.4	6654.9	6635.3	6628.7	6592.7	6592.7	6524.0	6190.3	5830.4	5323.3	4024.3
47.5°	6187.0	6183.8	6173.9	6157.6	6229.6	6308.1	6370.2	6334.3	6088.9	5683.2	4263.2
50°	5483.6	5477.0	5506.5	5588.3	5765.0	5938.4	6121.6	6291.7	6275.4	6016.9	4551.1
52.5°	4570.7	4528.2	4560.9	4812.9	5176.0	5562.1	5820.6	6088.9	6370.2	6370.2	4835.8
55°	3196.6	3232.6	3252.2	3621.9	4338.4	5002.6	5457.4	5804.2	6334.3	6651.6	5149.9
57.5°	2035.1	2048.2	2107.1	2506.2	3347.1	4178.1	4983.0	5552.3	6200.1	6887.2	5464.0
60°	1370.9	1325.1	1370.9	1599.9	2408.1	3278.4	4286.1	5234.9	6007.1	7057.3	5810.8
62.5°	968.5	965.2	978.3	1112.4	1717.7	2463.7	3412.5	4806.3	5853.3	7067.1	6069.2
65°	782.0	759.1	768.9	844.1	1151.7	1806.0	2502.9	4030.9	5715.9	6893.7	6196.8
67.5°	628.2	618.4	624.9	674.0	863.8	1357.8	1763.5	3065.7	5424.7	6599.3	6124.9
70°	513.7	516.9	520.2	569.3	687.1	1027.4	1259.7	2103.8	4803.0	6265.6	5801.0
72.5°	445.0	445.0	448.2	481.0	575.8	814.7	952.1	1367.6	3886.9	5905.6	5205.5
75°	392.6	392.6	392.6	422.1	490.8	654.4	739.4	935.7	2790.9	5238.2	4305.7
77.5°	340.3	343.5	343.5	369.7	422.1	510.4	569.3	647.8	1779.9	4047.3	3258.7
80°	261.7	261.7	265.0	294.5	359.9	399.2	418.8	458.1	935.7	2542.2	2067.8
82.5°	183.2	186.5	186.5	189.8	242.1	245.4	225.8	229.0	340.3	844.1	785.2
85°	19.6	22.9	26.2	26.2	42.5	52.3	55.6	52.3	55.6	98.2	98.2
87.5°	0.0	0.0	0.0	0.0	3.3	6.5	6.5	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



REPORT NUMBER: P868836

CATALOG NUMBER: EMM2-HSN-SA3B-722-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7	1452.7
2.5°	1449.4	1426.5	1377.4	1334.9	1295.6	1262.9	1240.0	1210.6	1187.7	1187.7	1200.8
5°	1459.2	1406.9	1305.5	1210.6	1135.3	1063.3	997.9	955.4	922.7	903.0	903.0
7.5°	1472.3	1393.8	1240.0	1096.1	978.3	863.8	762.3	713.3	664.2	647.8	651.1
10°	1498.5	1387.3	1181.1	994.6	818.0	674.0	575.8	523.5	497.3	484.2	484.2
12.5°	1527.9	1387.3	1119.0	880.1	674.0	526.8	467.9	428.6	415.5	409.0	402.4
15°	1567.2	1393.8	1066.6	759.1	549.7	445.0	402.4	379.5	366.4	359.9	359.9
17.5°	1613.0	1400.3	1011.0	660.9	467.9	392.6	359.9	343.5	330.5	323.9	323.9
20°	1671.9	1416.7	955.4	572.6	409.0	359.9	330.5	314.1	301.0	297.7	294.5
22.5°	1743.9	1442.9	899.8	500.6	369.7	327.2	301.0	287.9	278.1	271.6	271.6
25°	1829.0	1475.6	857.2	448.2	340.3	304.3	281.4	265.0	255.2	251.9	251.9
27.5°	1946.7	1531.2	814.7	409.0	317.4	281.4	258.5	245.4	235.6	232.3	229.0
30°	2058.0	1599.9	795.1	399.2	301.0	261.7	245.4	229.0	219.2	215.9	212.7
32.5°	2201.9	1678.4	782.0	399.2	294.5	248.7	229.0	215.9	206.1	202.9	199.6
35°	2355.7	1770.1	782.0	412.3	297.7	238.8	215.9	202.9	193.0	186.5	186.5
37.5°	2522.6	1861.7	788.5	431.9	307.6	232.3	202.9	189.8	180.0	176.7	176.7
40°	2699.3	1986.0	801.6	448.2	317.4	229.0	189.8	180.0	170.1	163.6	163.6
42.5°	2862.8	2084.2	824.5	467.9	323.9	225.8	180.0	170.1	160.3	157.0	157.0
45°	3052.6	2192.1	844.1	481.0	323.9	215.9	170.1	160.3	153.8	150.5	147.2
47.5°	3203.1	2280.5	853.9	487.5	317.4	206.1	160.3	153.8	147.2	140.7	144.0
50°	3386.3	2375.3	870.3	490.8	304.3	193.0	153.8	144.0	137.4	134.1	134.1
52.5°	3563.0	2470.2	883.4	484.2	287.9	176.7	144.0	137.4	130.9	124.3	124.3
55°	3772.4	2574.9	903.0	474.4	261.7	160.3	134.1	127.6	117.8	114.5	111.2
57.5°	4011.3	2712.3	919.4	454.8	229.0	144.0	127.6	117.8	104.7	98.2	98.2
60°	4230.5	2869.4	932.5	405.7	199.6	134.1	117.8	108.0	94.9	91.6	91.6
62.5°	4466.0	3033.0	932.5	320.6	170.1	121.1	111.2	101.4	88.3	85.1	85.1
65°	4629.6	3180.2	903.0	238.8	144.0	114.5	108.0	94.9	81.8	78.5	78.5
67.5°	4675.4	3271.8	821.2	170.1	124.3	108.0	101.4	88.3	78.5	72.0	72.0
70°	4528.2	3199.8	670.7	130.9	108.0	98.2	91.6	81.8	72.0	68.7	68.7
72.5°	4106.1	2925.0	500.6	111.2	94.9	91.6	85.1	75.3	68.7	65.4	65.4
75°	3438.7	2431.0	353.4	98.2	88.3	81.8	75.3	68.7	62.2	62.2	62.2
77.5°	2604.4	1757.0	219.2	88.3	75.3	75.3	68.7	62.2	58.9	55.6	55.6
80°	1681.7	1109.1	124.3	62.2	52.3	55.6	49.1	42.5	42.5	39.3	39.3
82.5°	713.3	438.4	65.4	36.0	26.2	22.9	16.4	16.4	13.1	13.1	13.1
85°	72.0	26.2	13.1	9.8	9.8	6.5	6.5	6.5	6.5	3.3	3.3
87.5°	9.8	9.8	9.8	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: 4π
 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	R9:	-36.0
R2:	88.7	R10:	78.2
R3:	85.4	R11:	61.0
R4:	63.5	R12:	74.2
R5:	69.0	R13:	72.8
R6:	88.9	R14:	92.2
R7:	68.5	R15:	58.0
R8:	32.0		



Test Conditions

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

REPORT NUMBER: SP1-2407-157-2

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: SP1-2407-157-2

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

REPORT NUMBER: SP1-2407-157-2

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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			

REPORT NUMBER: SP1-2407-157-2

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 0.96

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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			

REPORT NUMBER: SP1-2407-157-2

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.71

λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /nm	Lumens (φ/nm)	λ (nm)	Power W ² /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

$R_f = 76.9$
 $R_g = 92.7$
 $CIE R_a = 70.6$
 $R_9 = -36.0$



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)