

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: P871145

Luminaire Tested: **EMM2-HSN-SA3B-830-U-T2U-HSS**

Issue Date: 09/05/2024



Test Information

Test Method: LM-79-08
Report Number: P871145
Test Lab: INNOVATION CENTER(G3)
Issue Date: 09/05/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM2-HSN-SA3B-830-U-T2U-HSS
Description: EPIC MODERN SHORT HOUSING DISCRETE LED ARRAYS 150W 80CRI 3000K
FITXURE w/ TYPE II URBAN DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD
Light Source: (30) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

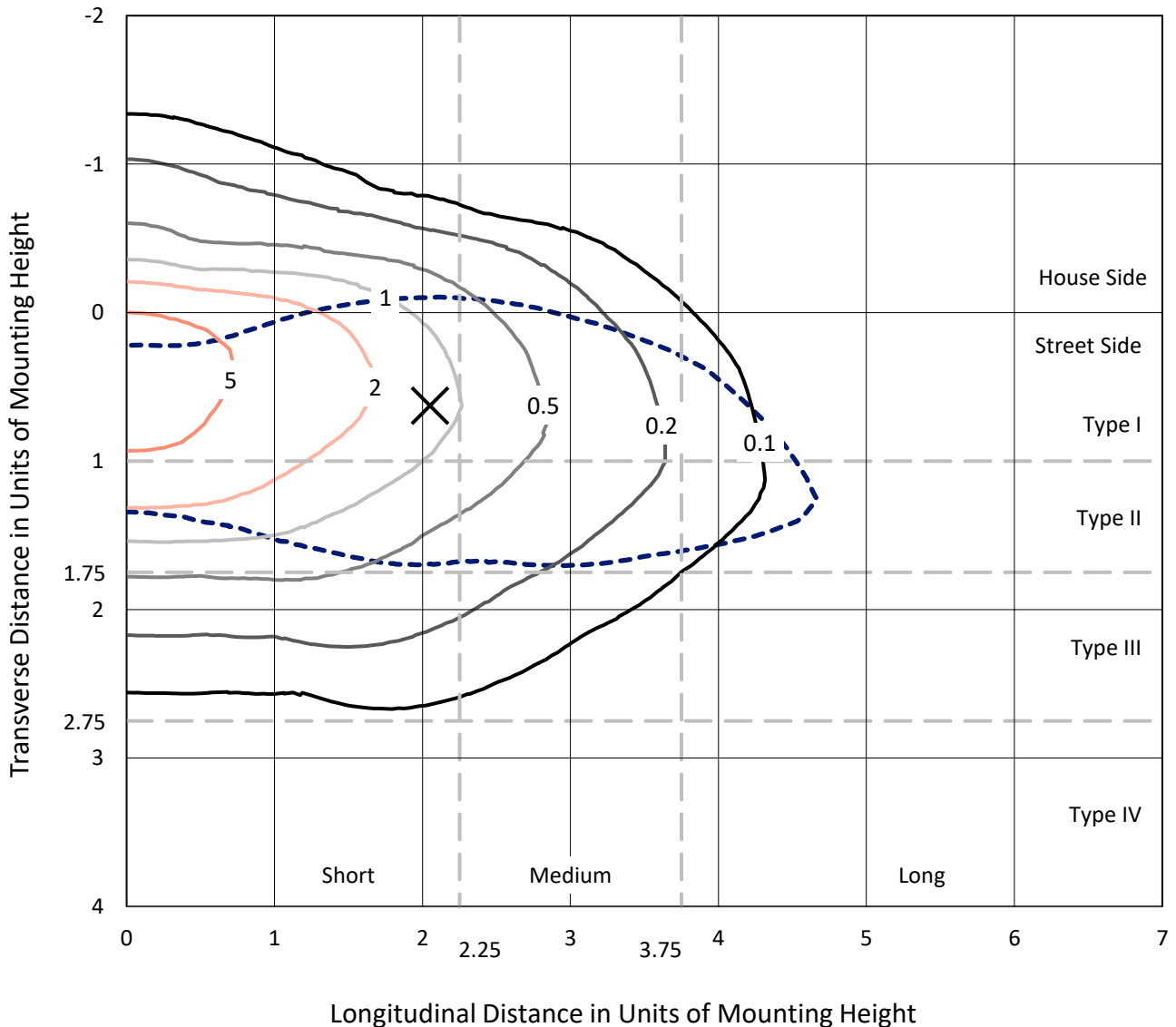
Lumens per Lamp: N/A
Luminaire Lumens: 11290.8 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

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: P871145
 CATALOG NUMBER: EMM2-HSN-SA3B-830-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

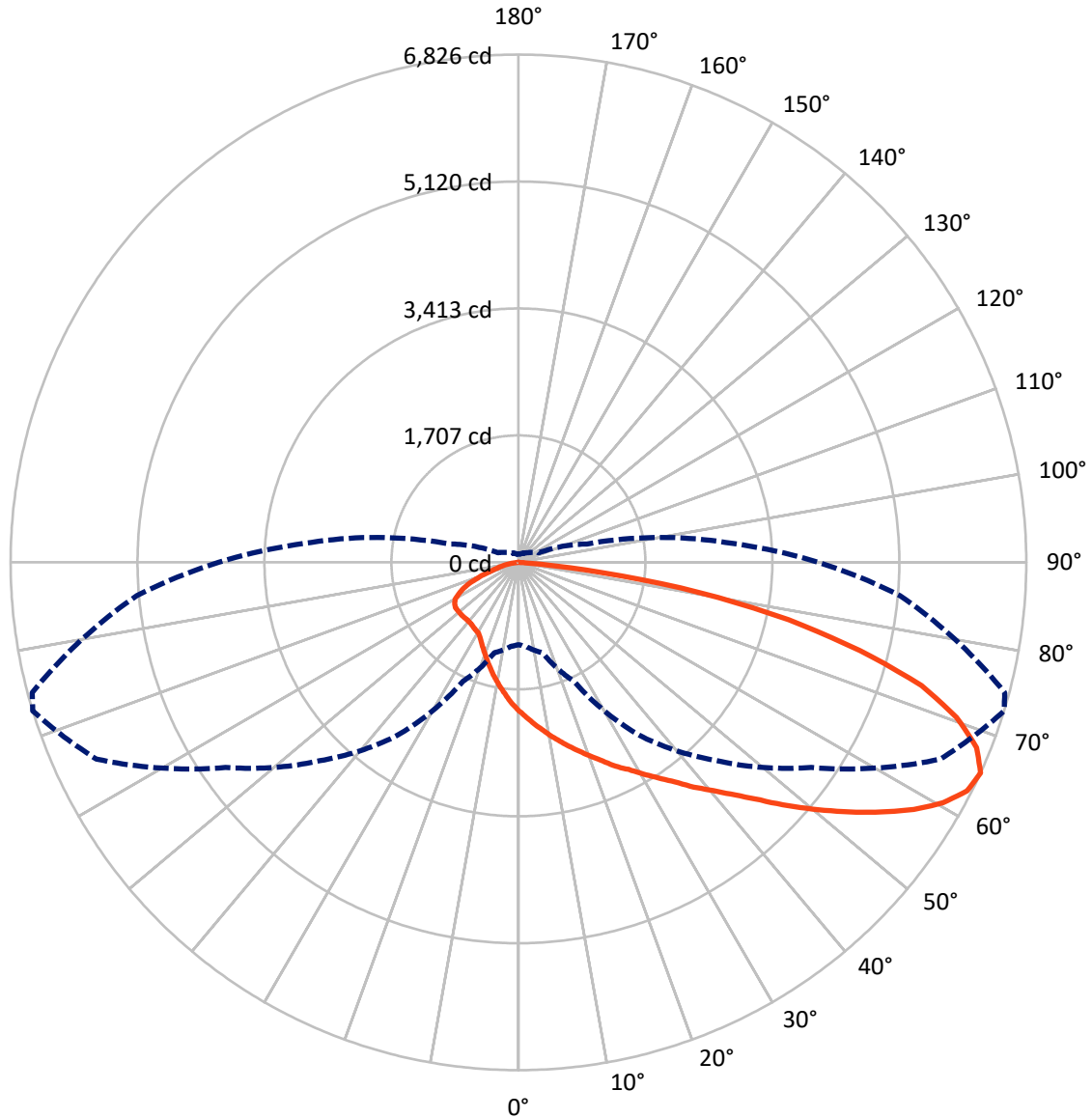
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.1 fc
 Type II - Short - N/A

REPORT NUMBER: P871145
CATALOG NUMBER: EMM2-HSN-SA3B-830-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P871145
 CATALOG NUMBER: EMM2-HSN-SA3B-830-U-T2U-HSS

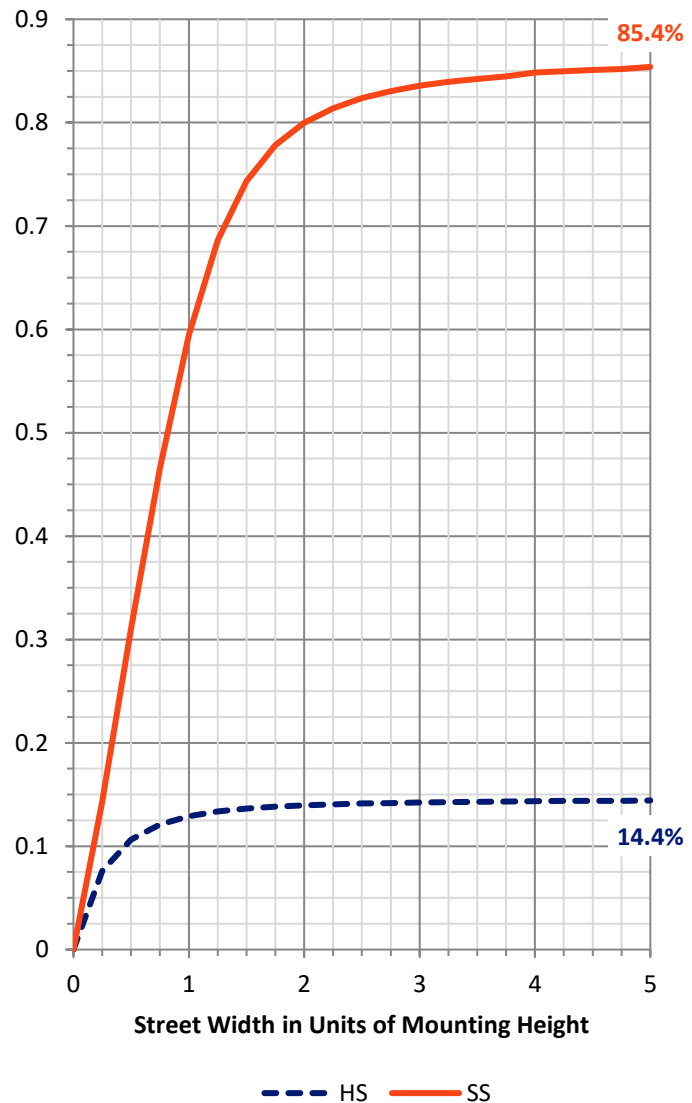
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1641.8	0.0	1641.8
	% Fixture	14.5	0.0	14.5
Street Side	Lumens	9648.9	0.0	9648.9
	% Fixture	85.5	0.0	85.5
Total	Lumens	11290.8	0.0	11290.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.3	1.7
10°-20°	587.6	5.2
20°-30°	984.1	8.7
30°-40°	1484.4	13.1
40°-50°	2097.5	18.6
50°-60°	2360.1	20.9
60°-70°	2116.4	18.7
70°-80°	1287.2	11.4
80°-90°	180.1	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°	11290.8	100.0
0°-180°	11290.8	100.0



REPORT NUMBER: P871145

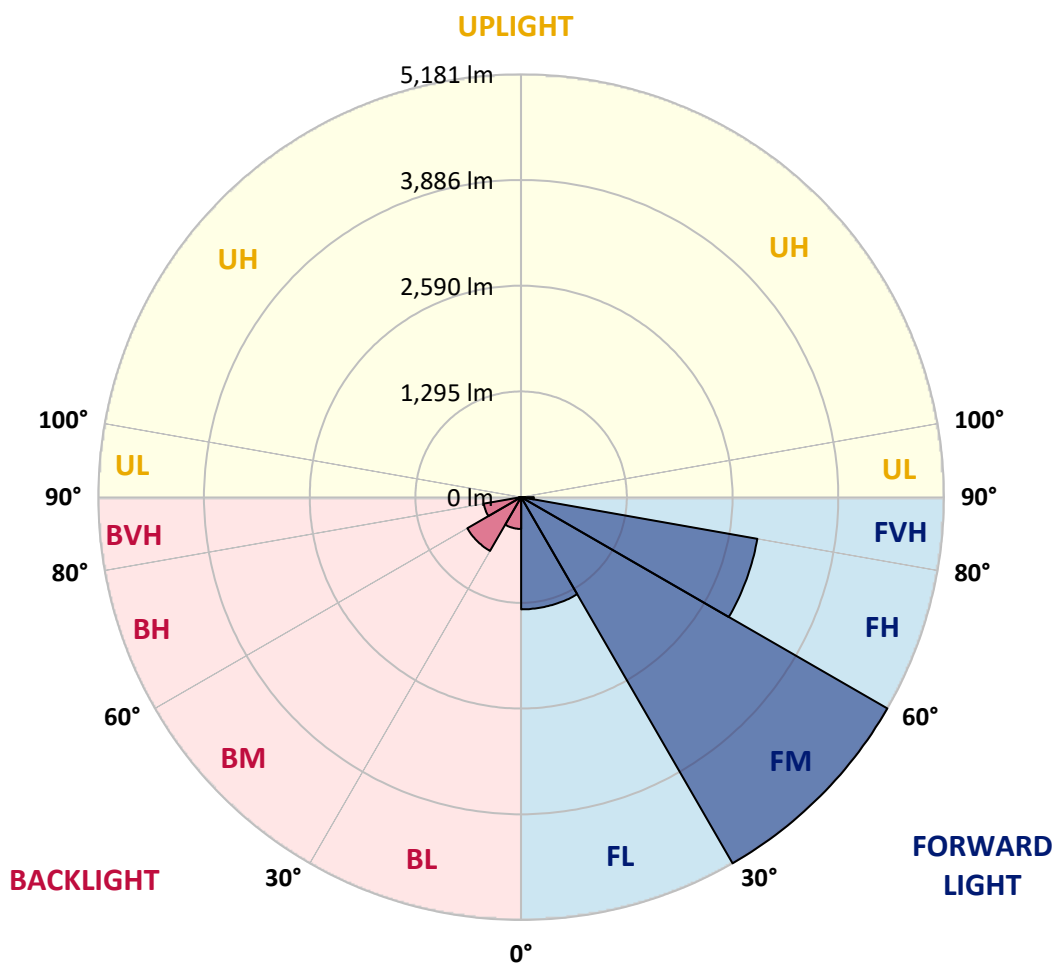
CATALOG NUMBER: EMM2-HSN-SA3B-830-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1375.0	12.2			
FM (30°-60°)	5180.7	45.9			
FH (60°-80°)	2938.5	26.0			G2/5000
FVH (80°-90°)	154.7	1.4			G2/225
BL (0°-30°)	390.0	3.5	B1/500		
BM (30°-60°)	761.3	6.7	B1/1000		
BH (60°-80°)	465.1	4.1	B1/500		G1/500
BVH (80°-90°)	25.4	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: P871145

CATALOG NUMBER: EMM2-HSN-SA3B-830-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0
2.5°	2311.9	2298.6	2278.7	2262.1	2232.2	2192.3	2159.1	2115.9	2086.0	2076.1	2032.9
5°	2647.4	2630.8	2607.6	2567.7	2488.0	2441.5	2355.1	2255.5	2175.7	2159.1	2059.5
7.5°	2992.9	2986.2	2933.1	2873.3	2777.0	2674.0	2541.1	2385.0	2268.7	2242.2	2089.4
10°	3285.2	3255.3	3225.4	3168.9	3066.0	2919.8	2747.1	2531.2	2368.4	2325.2	2119.3
12.5°	3461.2	3451.3	3424.7	3358.3	3258.6	3132.4	2926.4	2674.0	2464.7	2404.9	2149.2
15°	3590.8	3600.8	3574.2	3531.0	3428.0	3308.4	3109.1	2823.5	2567.7	2497.9	2182.4
17.5°	3713.7	3707.1	3703.7	3653.9	3560.9	3441.3	3238.7	2946.4	2670.7	2594.3	2215.6
20°	3783.5	3786.8	3780.1	3760.2	3670.5	3554.3	3364.9	3092.5	2783.6	2697.2	2258.8
22.5°	3820.0	3833.3	3846.6	3843.2	3770.2	3680.5	3484.5	3208.8	2899.9	2810.2	2311.9
25°	3843.2	3853.2	3883.1	3923.0	3856.5	3783.5	3617.4	3348.3	3036.1	2933.1	2375.0
27.5°	3863.2	3876.5	3913.0	3972.8	3919.6	3876.5	3733.6	3467.9	3152.3	3059.3	2448.1
30°	3992.7	4009.3	4009.3	4039.2	3979.4	3969.5	3863.2	3610.7	3298.5	3198.8	2541.1
32.5°	4334.9	4301.6	4241.9	4212.0	4069.1	4072.4	3989.4	3753.6	3454.6	3354.9	2657.4
35°	4630.5	4630.5	4557.4	4461.1	4231.9	4185.4	4135.6	3942.9	3624.0	3527.7	2810.2
37.5°	4916.2	4919.5	4843.1	4760.0	4497.6	4331.5	4305.0	4125.6	3833.3	3720.3	2969.6
40°	5095.5	5115.5	5095.5	5032.4	4780.0	4587.3	4471.0	4331.5	4032.6	3946.2	3152.3
42.5°	5125.4	5165.3	5238.4	5258.3	4985.9	4816.5	4683.6	4544.1	4271.7	4175.4	3361.6
45°	5049.0	5062.3	5225.1	5248.3	5138.7	4999.2	4909.5	4793.3	4557.4	4474.4	3594.1
47.5°	4839.8	4813.2	4869.7	5072.3	5115.5	5108.8	5132.1	5075.6	4889.6	4783.3	3849.9
50°	4391.3	4401.3	4584.0	4829.8	4979.3	5148.7	5298.2	5361.3	5225.1	5118.8	4125.6
52.5°	3574.2	3620.7	3969.5	4550.8	4809.9	5122.1	5417.7	5630.3	5573.9	5470.9	4398.0
55°	2936.4	3006.2	3354.9	4102.3	4577.3	4992.6	5487.5	5912.7	5922.6	5842.9	4647.1
57.5°	2298.6	2355.1	2723.8	3408.1	4245.2	4789.9	5497.5	6155.2	6268.1	6175.1	4866.3
60°	1800.4	1840.2	2056.2	2840.1	3836.6	4500.9	5424.4	6347.8	6560.4	6490.7	5055.7
62.5°	1365.2	1395.1	1587.8	2245.5	3335.0	4162.1	5178.6	6417.6	6766.4	6699.9	5162.0
65°	1106.1	1132.7	1258.9	1763.8	2840.1	3770.2	4806.5	6258.1	6826.2	6766.4	5148.7
67.5°	903.5	913.5	1016.4	1375.2	2401.6	3328.4	4261.8	5842.9	6643.5	6640.1	4995.9
70°	730.8	757.4	843.7	1096.2	1996.4	2820.1	3627.3	5191.9	6248.2	6281.4	4690.3
72.5°	621.2	627.8	704.2	906.8	1627.6	2288.7	3002.8	4441.2	5666.9	5693.4	4212.0
75°	524.8	534.8	591.3	734.1	1322.0	1817.0	2414.9	3587.5	4743.4	4856.4	3547.6
77.5°	451.8	455.1	494.9	604.6	940.0	1365.2	1770.5	2690.6	3713.7	3793.4	2786.9
80°	355.4	362.1	405.3	478.3	654.4	886.9	1222.4	1840.2	2481.3	2571.0	1929.9
82.5°	166.1	186.0	196.0	262.4	342.1	438.5	578.0	767.3	1122.7	1119.4	900.2
85°	16.6	13.3	13.3	19.9	29.9	29.9	36.5	43.2	86.4	103.0	79.7
87.5°	0.0	0.0	0.0	3.3	6.6	6.6	6.6	10.0	10.0	10.0	10.0
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: P871145

CATALOG NUMBER: EMM2-HSN-SA3B-830-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0	2003.0
2.5°	2013.0	1983.1	1929.9	1880.1	1846.9	1820.3	1777.1	1750.6	1730.6	1704.0	1700.7
5°	2006.3	1953.2	1846.9	1757.2	1670.8	1597.8	1521.4	1474.8	1425.0	1401.8	1421.7
7.5°	2013.0	1926.6	1760.5	1624.3	1494.8	1378.5	1278.9	1215.8	1169.2	1146.0	1149.3
10°	2016.3	1903.4	1687.4	1498.1	1332.0	1195.8	1082.9	996.5	940.0	926.8	910.2
12.5°	2009.6	1873.5	1614.4	1375.2	1175.9	1026.4	893.5	827.1	770.6	744.1	744.1
15°	2016.3	1850.2	1538.0	1262.3	1036.4	863.6	750.7	677.6	644.4	621.2	624.5
17.5°	2016.3	1830.3	1464.9	1152.6	900.2	740.7	637.8	578.0	544.8	531.5	528.2
20°	2039.5	1813.7	1395.1	1049.7	780.6	631.1	548.1	501.6	475.0	461.7	455.1
22.5°	2056.2	1800.4	1332.0	950.0	681.0	551.4	481.7	438.5	418.5	411.9	411.9
25°	2086.0	1797.1	1275.5	853.7	601.2	491.6	428.5	395.3	378.7	372.0	372.0
27.5°	2129.2	1803.7	1222.4	770.6	541.4	431.8	385.3	358.7	348.8	345.5	342.1
30°	2192.3	1833.6	1189.2	707.5	485.0	395.3	352.1	335.5	328.9	325.5	325.5
32.5°	2275.4	1886.7	1175.9	674.3	451.8	365.4	328.9	315.6	308.9	308.9	305.6
35°	2378.4	1946.5	1165.9	644.4	428.5	345.5	312.2	299.0	295.6	295.6	295.6
37.5°	2501.3	2009.6	1149.3	624.5	415.2	328.9	299.0	285.7	285.7	285.7	285.7
40°	2637.5	2102.7	1146.0	611.2	405.3	318.9	285.7	272.4	272.4	272.4	272.4
42.5°	2790.3	2202.3	1142.7	601.2	398.6	312.2	272.4	259.1	259.1	259.1	259.1
45°	2976.3	2328.5	1149.3	594.6	398.6	305.6	262.4	245.8	242.5	242.5	242.5
47.5°	3159.0	2448.1	1156.0	587.9	392.0	295.6	249.1	232.5	229.2	225.9	225.9
50°	3354.9	2571.0	1156.0	581.3	385.3	285.7	239.2	215.9	212.6	209.3	209.3
52.5°	3547.6	2674.0	1159.3	571.3	368.7	269.1	222.6	202.6	196.0	192.7	189.3
55°	3733.6	2783.6	1162.6	554.7	348.8	252.5	212.6	189.3	179.4	172.7	172.7
57.5°	3873.1	2873.3	1146.0	521.5	322.2	235.8	196.0	172.7	159.4	152.8	152.8
60°	4006.0	2929.8	1116.1	471.7	295.6	219.2	182.7	156.1	142.8	136.2	136.2
62.5°	4059.2	2939.7	1046.3	385.3	262.4	202.6	166.1	142.8	132.9	129.5	129.5
65°	4029.3	2896.5	953.3	305.6	232.5	182.7	152.8	132.9	119.6	109.6	109.6
67.5°	3866.5	2747.1	827.1	242.5	202.6	166.1	139.5	119.6	106.3	96.3	96.3
70°	3557.6	2507.9	644.4	192.7	176.1	146.2	126.2	109.6	96.3	86.4	86.4
72.5°	3102.5	2175.7	468.4	162.8	152.8	129.5	112.9	99.7	86.4	79.7	79.7
75°	2557.7	1677.5	332.2	139.5	136.2	116.3	103.0	89.7	79.7	73.1	73.1
77.5°	1920.0	1169.2	259.1	122.9	119.6	106.3	93.0	83.0	73.1	69.8	66.4
80°	1278.9	724.1	196.0	93.0	89.7	83.0	76.4	69.8	59.8	53.1	53.1
82.5°	571.3	305.6	99.7	53.1	46.5	39.9	33.2	23.3	23.3	19.9	19.9
85°	59.8	39.9	19.9	13.3	13.3	10.0	10.0	10.0	6.6	6.6	6.6
87.5°	10.0	10.0	6.6	6.6	6.6	3.3	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

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: SP1-2407-157-7

Test Date: 09/05/2024

Luminaire Tested: MEM2-HTN-SA-40-830-U-5WQ

Data in this report applies to families of products including MEM2-HTN-SA-40-830-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-157-7
 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-40-830-U-5WQ**
 Description: Epic Modern Light Square 40W 5WQ Optic

Spectral Parameters

CCT (K): 3126
 CIE u': 0.2465
 CIE v': 0.5182
 Duv: -0.0004
 CIE x: 0.4277
 CIE y: 0.3997
 CIE z: 0.1727
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 582
 Purity: 48.31913
 Rf: 84.4
 Rg: 94.7

CRI (Ra):	82.6		
R1:	81.4	R9:	5.1
R2:	92.2	R10:	82.2
R3:	94.9	R11:	79.8
R4:	80.1	R12:	70.4
R5:	81.8	R13:	84.2
R6:	90.5	R14:	97.9
R7:	81.8	R15:	73.6
R8:	58.0		



Test Conditions

Stabilization Time: 22M
 Operation Time: 1H 22M
 Sphere Temperature (°C): 24.3

REPORT NUMBER: SP1-2407-157-7

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: SP1-2407-157-7

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-157-7

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.42

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-157-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.79

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	258	NR	620	908	NR	750	26	NR	880	1	NR
365	0	NR	495	297	NR	625	857	NR	755	22	NR	885	0	NR
370	0	NR	500	345	NR	630	801	NR	760	19	NR	890	0	NR
375	0	NR	505	391	NR	635	738	NR	765	16	NR	895	0	NR
380	0	NR	510	426	NR	640	675	NR	770	14	NR	900	0	NR
385	0	NR	515	456	NR	645	610	NR	775	12	NR	905	0	NR
390	0	NR	520	480	NR	650	547	NR	780	10	NR	910	0	NR
395	0	NR	525	500	NR	655	488	NR	785	9	NR	915	0	NR
400	0	NR	530	517	NR	660	429	NR	790	7	NR	920	0	NR
405	2	NR	535	538	NR	665	378	NR	795	6	NR	925	0	NR
410	4	NR	540	558	NR	670	328	NR	800	5	NR	930	0	NR
415	9	NR	545	584	NR	675	285	NR	805	5	NR	935	0	NR
420	16	NR	550	611	NR	680	247	NR	810	4	NR	940	0	NR
425	31	NR	555	646	NR	685	212	NR	815	3	NR	945	0	NR
430	56	NR	560	687	NR	690	183	NR	820	3	NR	950	0	NR
435	101	NR	565	731	NR	695	156	NR	825	3	NR	955	0	NR
440	178	NR	570	780	NR	700	133	NR	830	2	NR	960	0	NR
445	323	NR	575	832	NR	705	114	NR	835	2	NR	965	0	NR
450	566	NR	580	883	NR	710	96	NR	840	2	NR	970	0	NR
455	645	NR	585	927	NR	715	82	NR	845	1	NR	975	0	NR
460	457	NR	590	963	NR	720	70	NR	850	1	NR	980	0	NR
465	365	NR	595	985	NR	725	59	NR	855	1	NR	985	0	NR
470	317	NR	600	998	NR	730	50	NR	860	1	NR	990	0	NR
475	244	NR	605	994	NR	735	43	NR	865	1	NR	995	0	NR
480	218	NR	610	978	NR	740	36	NR	870	1	NR	1000	0	NR
485	233	NR	615	947	NR	745	31	NR	875	1	NR			

Summary

$R_f = 84.4$
 $R_g = 94.7$
 $CIE R_a = 82.6$
 $R_9 = 5.1$



Color Vector Graphics



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

CES01 = 86	CES26 = 86	CES51 = 93	CES76 = 82
CES02 = 63	CES27 = 92	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 94	CES53 = 89	CES78 = 81
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 90
CES05 = 49	CES30 = 91	CES55 = 86	CES80 = 89
CES06 = 51	CES31 = 93	CES56 = 85	CES81 = 72
CES07 = 42	CES32 = 85	CES57 = 83	CES82 = 95
CES08 = 41	CES33 = 97	CES58 = 84	CES83 = 94
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 91
CES10 = 76	CES35 = 96	CES60 = 90	CES85 = 74
CES11 = 59	CES36 = 81	CES61 = 87	CES86 = 68
CES12 = 65	CES37 = 96	CES62 = 83	CES87 = 84
CES13 = 43	CES38 = 86	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 75
CES15 = 71	CES40 = 96	CES65 = 78	CES90 = 89
CES16 = 47	CES41 = 96	CES66 = 77	CES91 = 73
CES17 = 50	CES42 = 97	CES67 = 76	CES92 = 63
CES18 = 56	CES43 = 91	CES68 = 80	CES93 = 77
CES19 = 72	CES44 = 99	CES69 = 85	CES94 = 61
CES20 = 66	CES45 = 93	CES70 = 78	CES95 = 73
CES21 = 87	CES46 = 90	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 88
CES23 = 92	CES48 = 83	CES73 = 74	CES98 = 85
CES24 = 91	CES49 = 91	CES74 = 90	CES99 = 76
CES25 = 72	CES50 = 93	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)