

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: P870706

Luminaire Tested: **EMM2-HTN-SA1B-830-U-T2U**

Issue Date: 09/05/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P870706  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 09/05/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: EMM2-HTN-SA1B-830-U-T2U  
Description: EPIC MODERN TALL HOUSING DISCRETE LED ARRAYS 60W 80CRI 3000K  
FIXTURE w/ TYPE II URBAN DISTRIBUTION OPTIC  
Light Source: (10) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

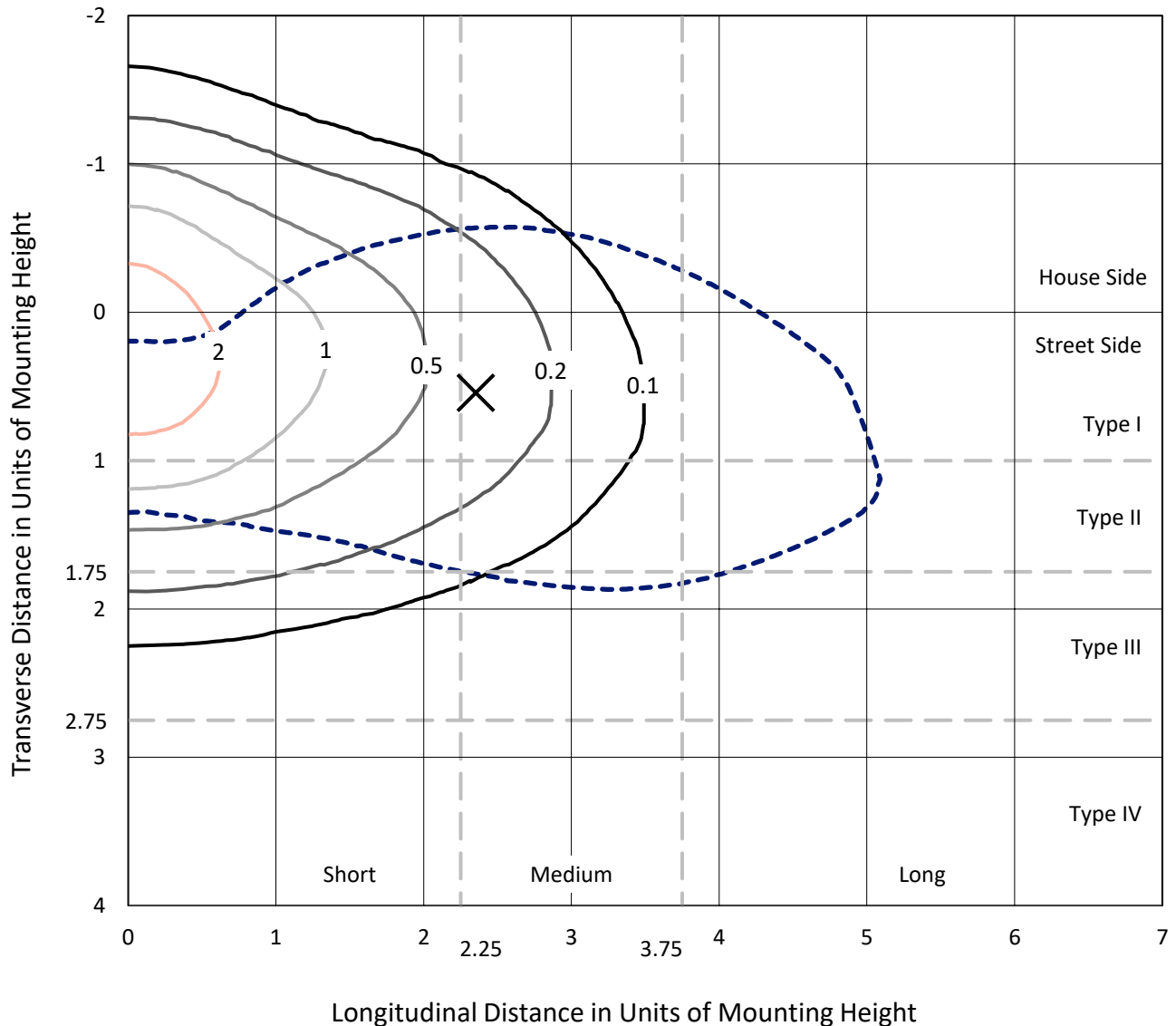
Lumens per Lamp: N/A  
Luminaire Lumens: 5506.7 lumens  
Efficiency: N/A  
Efficacy: 125.2 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2

Input Watts (W): 44  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 6.91%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

REPORT NUMBER: P870706  
 CATALOG NUMBER: EMM2-HTN-SA1B-830-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

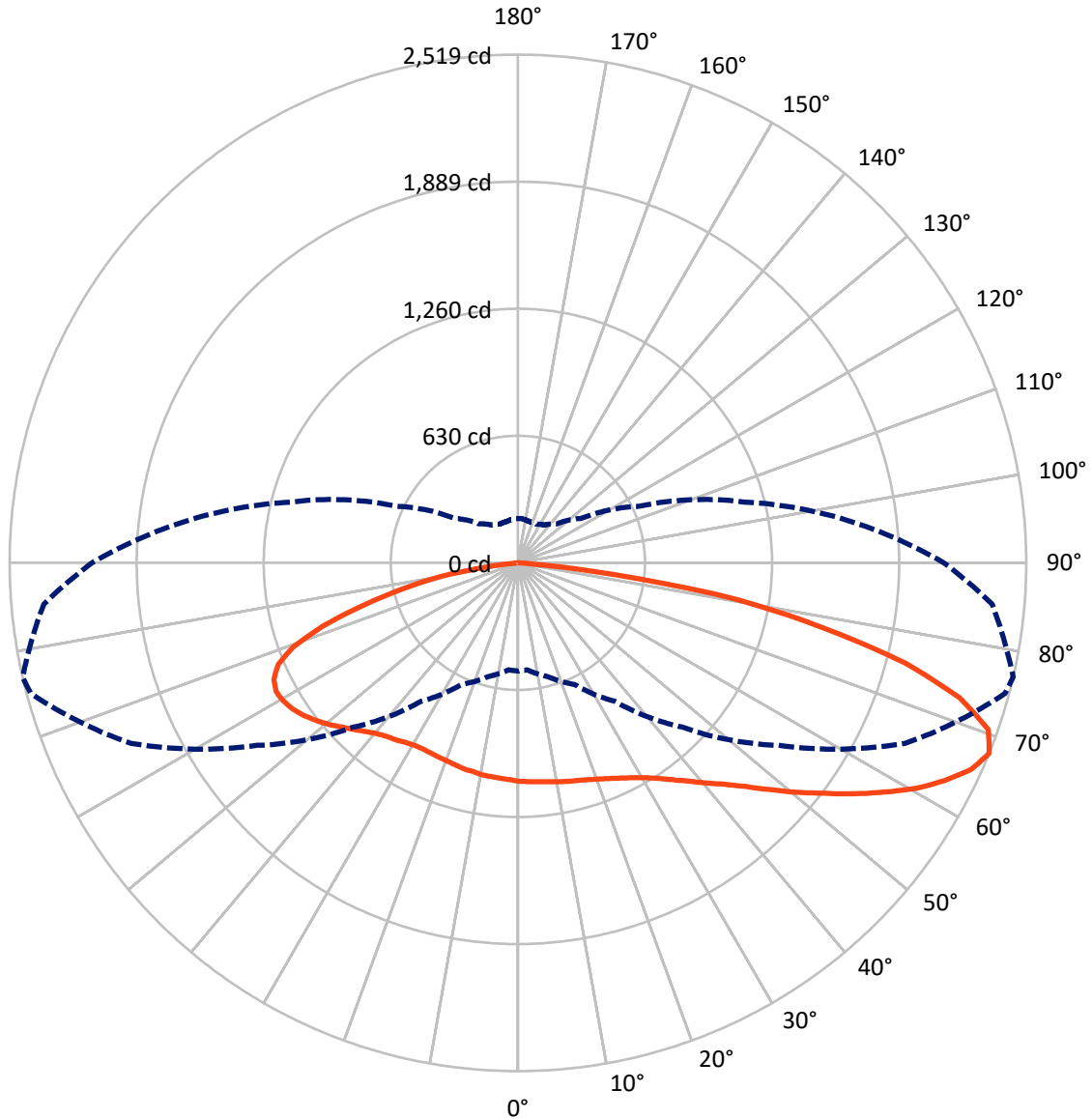
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3 fc  
 Type III - Medium - N/A

REPORT NUMBER: P870706  
CATALOG NUMBER: EMM2-HTN-SA1B-830-U-T2U

### Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P870706  
 CATALOG NUMBER: EMM2-HTN-SA1B-830-U-T2U

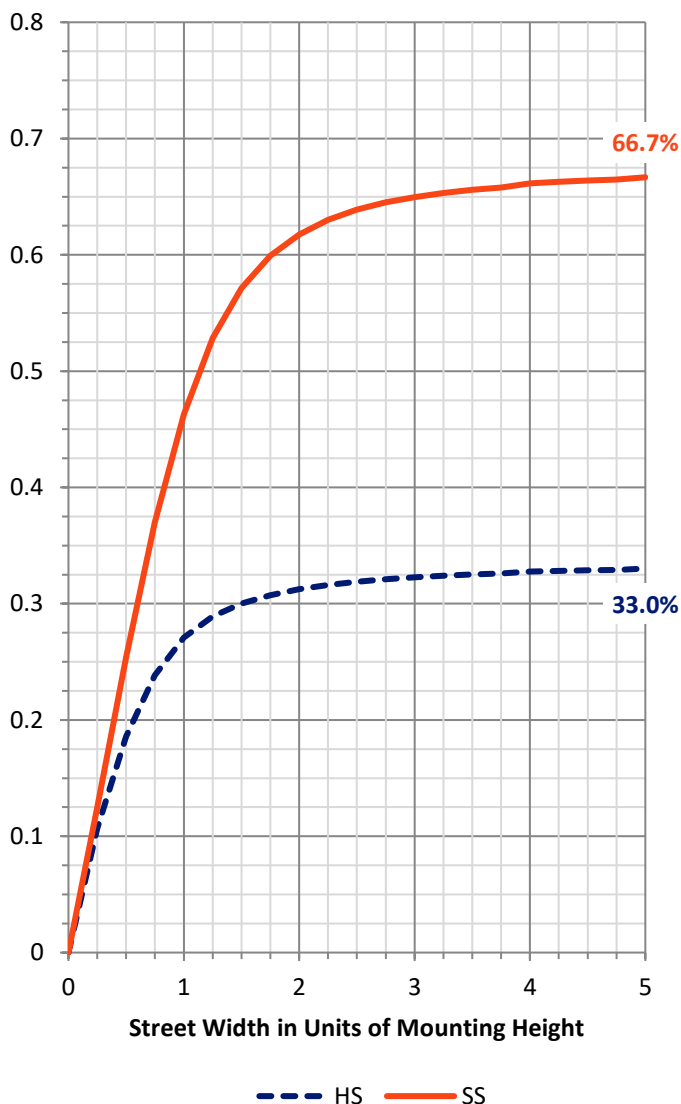
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1831.2	0.0	1831.2
	% Fixture	33.3	0.0	33.3
<b>Street Side</b>	Lumens	3675.5	0.0	3675.5
	% Fixture	66.7	0.0	66.7
<b>Total</b>	Lumens	5506.7	0.0	5506.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.1	1.9
10°-20°	315.6	5.7
20°-30°	532.1	9.7
30°-40°	755.0	13.7
40°-50°	955.3	17.3
50°-60°	1046.5	19.0
60°-70°	1011.6	18.4
70°-80°	680.3	12.4
80°-90°	106.3	1.9
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°	5506.7	100.0
0°-180°	5506.7	100.0

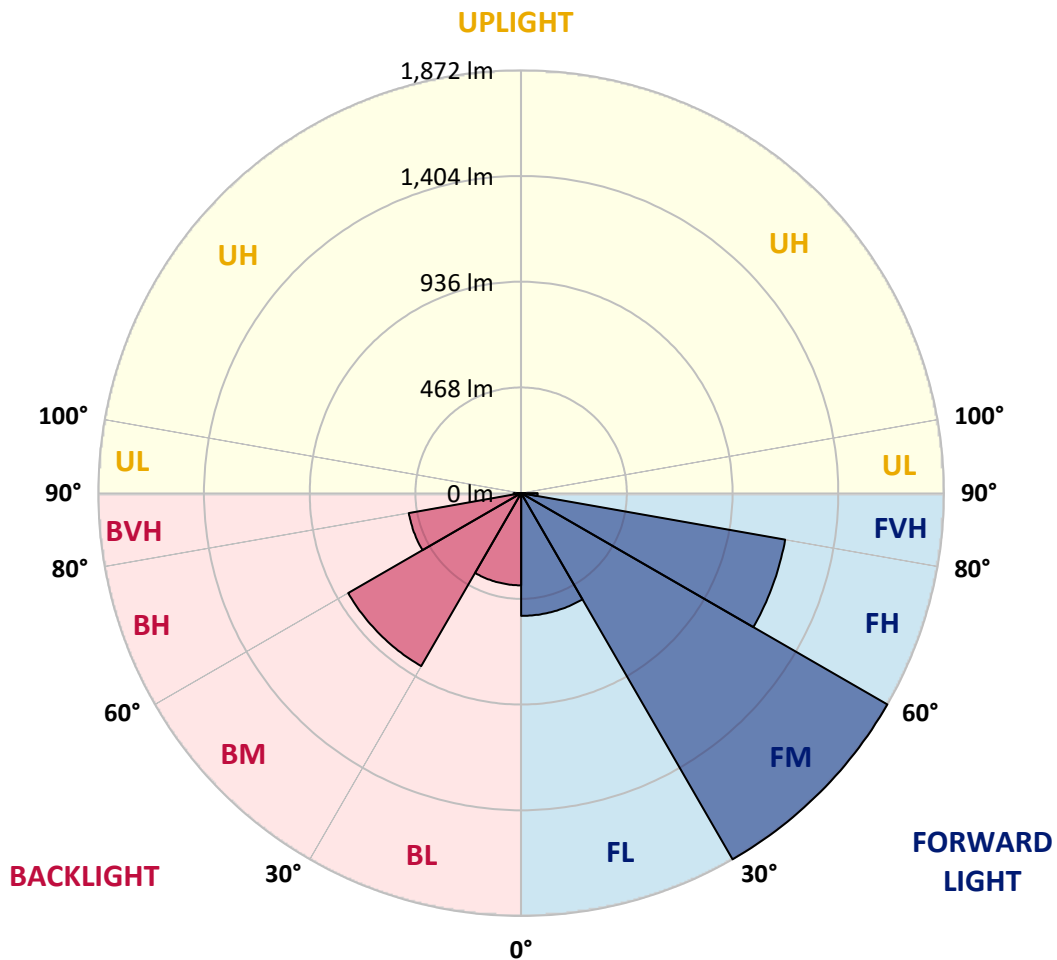


REPORT NUMBER: P870706  
 CATALOG NUMBER: EMM2-HTN-SA1B-830-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	543.5	9.9			
FM	(30°-60°)	1872.3	34.0			
FH	(60°-80°)	1186.9	21.6			G1/1800
FVH	(80°-90°)	72.8	1.3			G1/100
BL	(0°-30°)	408.2	7.4	B1/500		
BM	(30°-60°)	884.4	16.1	B1/1000		
BH	(60°-80°)	505.0	9.2	B2/1000		G2/1000
BVH	(80°-90°)	33.5	0.6			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 III Medium





REPORT NUMBER: P870706

CATALOG NUMBER: EMM2-HTN-SA1B-830-U-T2U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1106.6	1105.5	1100.1	1102.3	1095.7	1100.1	1093.6	1088.1	1087.0	1085.9	1087.0
5°	1141.5	1136.0	1130.6	1127.3	1121.9	1119.7	1108.8	1097.9	1091.4	1090.3	1088.1
7.5°	1181.8	1179.6	1172.0	1167.6	1152.4	1144.8	1129.5	1109.9	1100.1	1095.7	1090.3
10°	1223.2	1228.6	1218.8	1210.1	1192.7	1176.3	1150.2	1125.2	1105.5	1103.4	1091.4
12.5°	1274.4	1273.3	1266.7	1251.5	1230.8	1207.9	1176.3	1141.5	1115.3	1111.0	1093.6
15°	1320.1	1319.0	1310.3	1296.2	1268.9	1240.6	1198.1	1157.8	1125.2	1118.6	1097.9
17.5°	1362.6	1360.4	1355.0	1339.7	1306.0	1271.1	1229.7	1176.3	1137.1	1129.5	1101.2
20°	1399.6	1401.8	1395.3	1380.0	1348.4	1311.4	1259.1	1200.3	1152.4	1143.7	1111.0
22.5°	1439.9	1441.0	1437.8	1432.3	1392.0	1352.8	1296.2	1227.5	1169.8	1161.1	1121.9
25°	1482.4	1483.5	1485.7	1482.4	1436.7	1394.2	1334.3	1261.3	1193.8	1181.8	1137.1
27.5°	1531.4	1532.5	1536.9	1530.3	1481.3	1436.7	1376.8	1297.2	1218.8	1205.8	1150.2
30°	1587.0	1591.3	1588.1	1585.9	1529.2	1485.7	1419.2	1334.3	1251.5	1235.2	1173.1
32.5°	1653.4	1652.3	1645.8	1639.3	1581.5	1535.8	1467.2	1382.2	1291.8	1273.3	1210.1
35°	1701.3	1701.3	1691.5	1688.3	1634.9	1587.0	1519.4	1435.6	1337.5	1320.1	1249.3
37.5°	1730.8	1735.1	1727.5	1729.7	1678.5	1633.8	1571.7	1490.0	1387.7	1372.4	1297.2
40°	1741.6	1752.5	1759.1	1767.8	1716.6	1678.5	1627.3	1548.9	1451.9	1434.5	1355.0
42.5°	1743.8	1760.2	1783.0	1801.6	1743.8	1712.2	1680.6	1608.8	1515.1	1499.8	1418.1
45°	1732.9	1725.3	1780.9	1783.0	1759.1	1739.5	1727.5	1680.6	1606.6	1581.5	1496.6
47.5°	1650.2	1641.4	1656.7	1726.4	1740.6	1751.4	1775.4	1764.5	1698.1	1678.5	1587.0
50°	1516.2	1511.8	1572.8	1648.0	1694.8	1750.4	1814.6	1845.1	1799.4	1787.4	1701.3
52.5°	1295.1	1283.1	1407.3	1553.2	1634.9	1739.5	1841.9	1927.9	1913.7	1896.3	1799.4
55°	1154.6	1154.6	1238.4	1420.3	1558.7	1700.3	1859.3	2015.0	2040.1	2020.5	1911.6
57.5°	1004.3	1016.2	1103.4	1228.6	1448.6	1628.4	1857.1	2088.0	2162.1	2143.6	2030.3
60°	875.7	885.5	935.6	1062.0	1319.0	1533.6	1833.1	2147.9	2275.4	2268.8	2134.8
62.5°	745.0	757.0	797.3	916.0	1148.0	1424.7	1783.0	2180.6	2382.1	2375.6	2240.5
65°	640.5	641.5	681.8	781.0	977.0	1292.9	1694.8	2174.1	2464.9	2469.2	2329.8
67.5°	535.9	532.6	584.9	665.5	837.6	1151.3	1577.2	2116.3	2499.7	2519.3	2359.2
70°	394.3	398.7	471.6	560.9	708.0	987.9	1412.7	2004.1	2443.1	2473.6	2291.7
72.5°	296.3	305.0	375.8	468.4	591.4	824.5	1233.0	1809.2	2285.2	2289.5	2085.8
75°	240.7	242.9	306.1	388.8	484.7	661.1	990.1	1510.7	1932.3	1982.4	1772.1
77.5°	204.8	202.6	233.1	313.7	391.0	528.3	746.1	1149.1	1517.3	1540.1	1387.7
80°	174.3	173.2	184.1	253.8	306.1	376.9	510.8	800.6	1082.7	1107.7	985.7
82.5°	91.5	98.0	95.9	156.8	173.2	198.2	245.1	363.8	472.7	479.3	453.1
85°	4.4	4.4	4.4	6.5	10.9	17.4	33.8	33.8	37.0	70.8	80.6
87.5°	1.1	1.1	2.2	2.2	2.2	3.3	3.3	4.4	4.4	4.4	4.4
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: P870706

CATALOG NUMBER: EMM2-HTN-SA1B-830-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1084.9	1080.5	1074.0	1075.0	1074.0	1074.0	1068.5	1064.2	1063.1	1065.2	1069.6
5°	1085.9	1079.4	1069.6	1066.3	1063.1	1060.9	1052.2	1045.6	1042.4	1044.6	1045.6
7.5°	1085.9	1076.1	1065.2	1058.7	1050.0	1043.5	1033.7	1024.9	1020.6	1021.7	1023.9
10°	1083.8	1072.9	1064.2	1051.1	1036.9	1029.3	1014.1	1003.2	997.7	998.8	993.4
12.5°	1083.8	1071.8	1054.4	1042.4	1022.8	1006.4	994.4	982.5	978.1	973.8	971.6
15°	1084.9	1069.6	1052.2	1027.1	1004.3	986.8	971.6	963.9	957.4	955.2	956.3
17.5°	1084.9	1069.6	1043.5	1014.1	987.9	966.1	953.1	944.3	942.2	940.0	940.0
20°	1090.3	1070.7	1035.8	1001.0	968.3	945.4	933.5	928.0	928.0	924.7	924.7
22.5°	1099.0	1072.9	1031.5	990.1	952.0	926.9	913.8	907.3	910.6	908.4	907.3
25°	1108.8	1080.5	1026.0	974.8	930.2	904.0	891.0	886.6	885.5	880.1	887.7
27.5°	1116.4	1085.9	1022.8	959.6	910.6	880.1	863.7	856.1	850.7	852.9	850.7
30°	1137.1	1101.2	1023.9	946.5	888.8	851.8	832.2	823.4	821.3	821.3	821.3
32.5°	1165.5	1120.8	1031.5	941.1	868.1	824.5	800.6	791.9	789.7	785.3	787.5
35°	1201.4	1150.2	1043.5	932.4	851.8	792.9	766.8	754.8	751.6	747.2	747.2
37.5°	1241.7	1179.6	1052.2	928.0	830.0	760.3	730.9	715.6	713.4	709.1	711.3
40°	1292.9	1219.9	1066.3	919.3	804.9	730.9	691.6	666.6	672.0	674.2	678.6
42.5°	1350.6	1271.1	1088.1	910.6	785.3	700.4	642.6	617.6	624.1	621.9	626.3
45°	1429.0	1331.0	1115.3	907.3	761.4	663.3	592.5	564.2	562.0	558.8	560.9
47.5°	1510.7	1402.9	1141.5	900.8	735.2	617.6	535.9	499.9	491.2	486.9	482.5
50°	1595.7	1474.8	1172.0	896.4	700.4	566.4	479.3	437.9	421.5	416.1	410.6
52.5°	1691.5	1552.1	1198.1	885.5	662.2	513.0	428.1	381.2	362.7	351.8	352.9
55°	1792.8	1622.9	1222.1	872.5	618.7	462.9	376.9	337.7	319.1	315.9	315.9
57.5°	1886.5	1695.9	1239.5	849.6	575.1	413.9	334.4	300.6	291.9	296.3	296.3
60°	1982.4	1754.7	1248.2	824.5	530.4	372.5	305.0	277.7	273.4	282.1	283.2
62.5°	2059.7	1801.6	1246.1	789.7	481.4	336.6	276.7	254.9	257.1	272.3	275.6
65°	2115.2	1824.4	1218.8	737.4	434.6	305.0	251.6	230.9	230.9	241.8	245.1
67.5°	2110.9	1795.0	1164.4	664.4	384.5	273.4	228.7	212.4	212.4	220.0	218.9
70°	2021.6	1693.7	1060.9	576.2	335.5	246.2	209.1	197.1	196.1	199.3	198.2
72.5°	1807.0	1487.9	899.7	476.0	289.7	218.9	189.5	178.6	176.5	172.1	168.8
75°	1491.1	1222.1	702.5	379.0	245.1	192.8	171.0	161.2	152.5	157.9	154.7
77.5°	1156.7	937.8	522.8	294.1	199.3	167.7	152.5	141.6	139.4	159.0	152.5
80°	844.1	648.1	369.2	210.2	154.7	136.2	127.4	118.7	150.3	201.5	200.4
82.5°	374.7	312.6	168.8	100.2	71.9	59.9	50.1	56.6	94.8	92.6	95.9
85°	33.8	34.9	18.5	12.0	7.6	6.5	4.4	4.4	3.3	3.3	3.3
87.5°	4.4	4.4	3.3	3.3	2.2	2.2	2.2	2.2	1.1	1.1	1.1
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  
 R<sub>f</sub>: 84.4  
 R<sub>g</sub>: 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 <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	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 <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	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 <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	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**



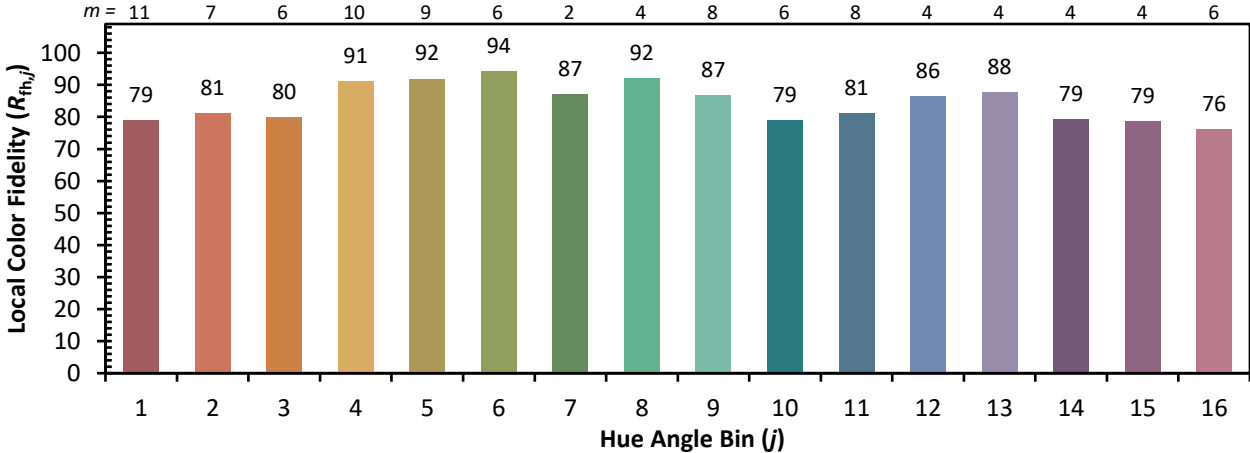


Individual Sample Fidelity Index ( $R_{f,i}$ )

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)