

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: METALUX

Report Number: P475273

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475273  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-65VHE-SQR-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6182.8 lumens  
Efficiency: N/A  
Efficacy: 135.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

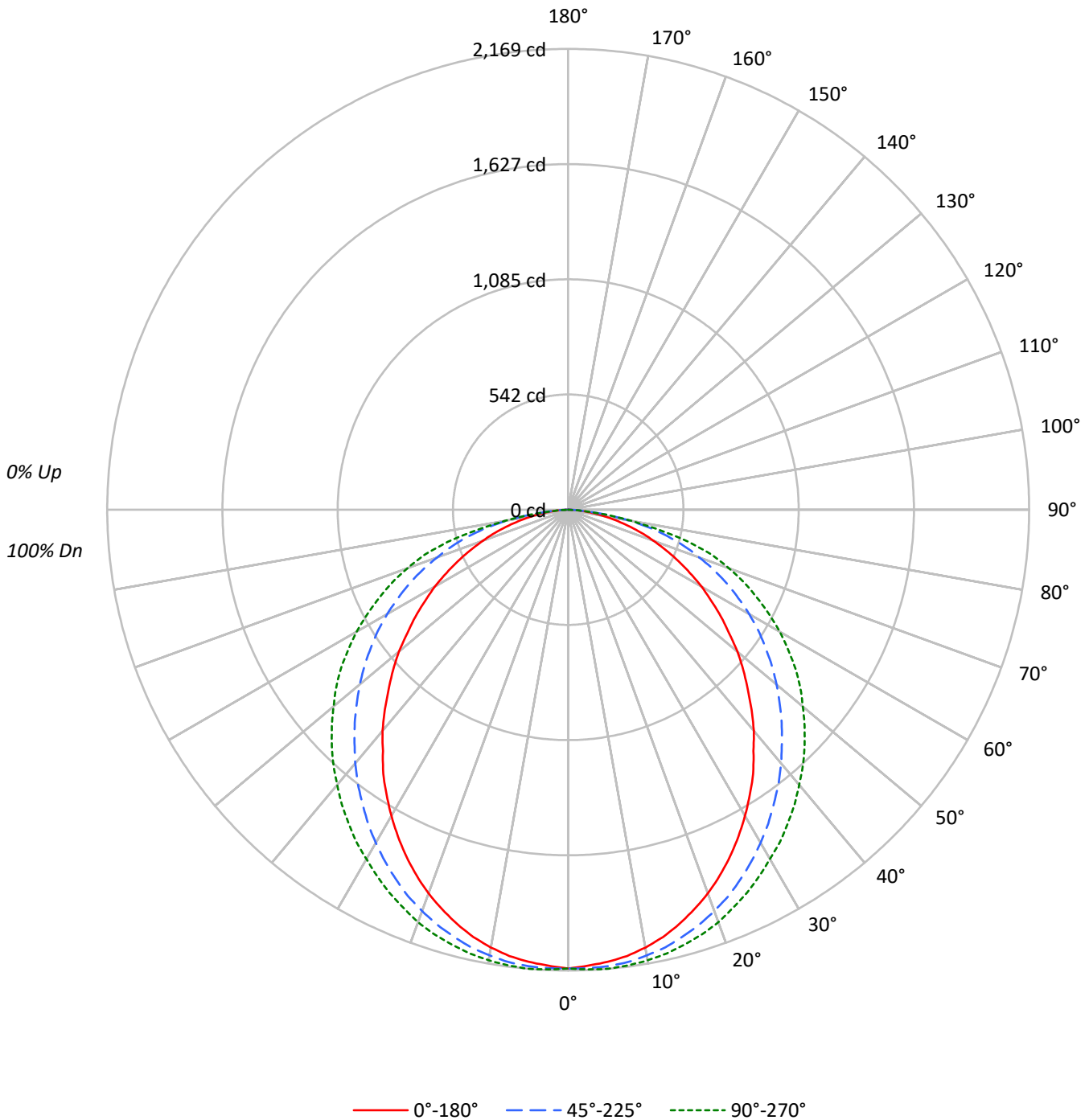
Input Watts (W): 45.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5812	5812	5812
5°	5771	5826	5858
10°	5718	5822	5885
15°	5625	5796	5903
20°	5504	5757	5916
25°	5350	5698	5907
30°	5170	5626	5899
35°	4984	5543	5919
40°	4773	5474	5938
45°	4545	5405	5986
50°	4349	5356	6032
55°	4116	5314	6127
60°	3901	5292	6192
65°	3643	5250	6240
70°	3347	5171	6326
75°	3021	5034	6101
80°	2591	4458	4595
85°	2084	2628	2084



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.8	3.3
10°-20°	585.4	9.5
20°-30°	879.3	14.2
30°-40°	1048.6	17.0
40°-50°	1084.2	17.5
50°-60°	996.8	16.1
60°-70°	793.5	12.8
70°-80°	484.8	7.8
80°-90°	105.4	1.7
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°-30°	1669.5	27.0
0°-40°	2718.1	44.0
0°-60°	4799.1	77.6
0°-90°	6182.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6182.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2160	2160	2160	2160	2160	
5°	2136	2142	2157	2166	2169	203
15°	2019	2042	2080	2110	2119	569
25°	1802	1846	1919	1972	1990	829
35°	1517	1582	1687	1776	1802	946
45°	1194	1279	1420	1535	1573	924
55°	877	974	1133	1262	1306	785
65°	572	669	824	939	980	567
75°	291	376	484	569	587	309
85°	68	82	85	73	68	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2159.7	2159.7	2159.7	2159.7	2159.7
2.5°	2148.0	2150.9	2159.7	2165.9	2165.9
5°	2136.3	2142.2	2156.8	2165.9	2168.8
7.5°	2118.8	2127.5	2148.0	2159.7	2162.9
10°	2092.5	2104.2	2130.5	2148.0	2153.8
12.5°	2060.0	2077.5	2110.0	2133.4	2139.2
15°	2019.1	2042.5	2080.5	2110.0	2118.8
17.5°	1972.0	2001.2	2048.3	2083.7	2095.4
20°	1922.0	1951.5	2010.3	2051.2	2065.8
22.5°	1863.5	1901.5	1969.1	2016.2	2027.9
25°	1801.9	1845.7	1919.1	1972.0	1989.5
27.5°	1734.3	1787.2	1866.5	1931.1	1945.7
30°	1663.8	1719.7	1810.6	1881.1	1898.6
32.5°	1590.5	1655.1	1751.8	1831.1	1854.8
35°	1517.1	1581.7	1687.2	1775.5	1801.9
37.5°	1432.0	1508.3	1625.9	1716.8	1748.9
40°	1358.6	1432.0	1558.3	1658.0	1690.5
42.5°	1276.5	1355.7	1487.9	1596.3	1634.6
45°	1194.3	1279.4	1420.3	1534.9	1572.9
47.5°	1118.0	1203.1	1349.8	1470.3	1508.3
50°	1038.8	1126.8	1279.4	1402.8	1440.8
52.5°	953.7	1050.5	1208.9	1332.3	1376.5
55°	877.4	974.1	1132.6	1261.8	1306.0
57.5°	798.2	897.8	1062.5	1185.5	1226.8
60°	724.8	821.5	983.2	1103.4	1150.5
62.5°	645.5	745.2	903.7	1021.2	1065.4
65°	572.2	669.2	824.5	939.1	980.0
67.5°	498.8	595.9	742.3	851.1	897.8
70°	425.4	522.5	657.2	763.1	804.0
72.5°	361.1	446.2	575.1	672.2	710.2
75°	290.6	375.7	484.2	569.2	586.8
77.5°	226.0	302.3	393.2	431.2	437.4
80°	167.2	226.0	287.7	296.5	296.5
82.5°	111.4	155.5	178.9	181.8	178.9
85°	67.5	82.2	85.1	73.4	67.5
87.5°	23.4	23.4	14.6	8.8	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)