

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: P475244

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475244
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-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5966.4 lumens
Efficiency: N/A
Efficacy: 130.6 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

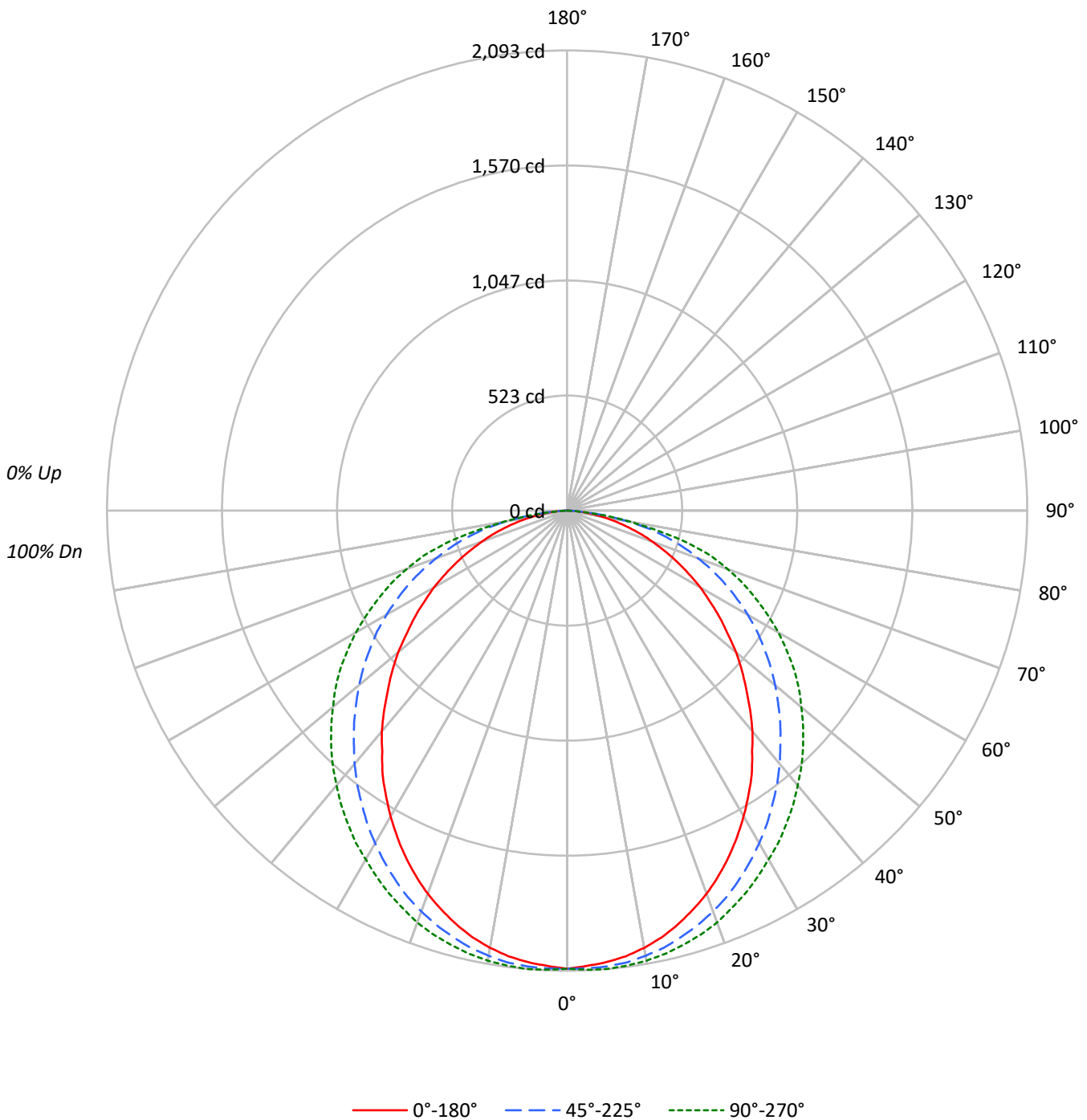
Input Watts (W): 45.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5608	5608	5608
5°	5569	5622	5653
10°	5517	5618	5679
15°	5428	5593	5696
20°	5311	5556	5709
25°	5163	5499	5701
30°	4989	5429	5693
35°	4809	5349	5712
40°	4606	5283	5730
45°	4386	5216	5777
50°	4196	5169	5820
55°	3972	5128	5913
60°	3764	5106	5975
65°	3515	5066	6022
70°	3230	4990	6105
75°	2915	4858	5887
80°	2501	4302	4434
85°	2013	2535	2013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.6	3.3
10°-20°	564.9	9.5
20°-30°	848.5	14.2
30°-40°	1011.9	17.0
40°-50°	1046.3	17.5
50°-60°	961.9	16.1
60°-70°	765.8	12.8
70°-80°	467.9	7.8
80°-90°	101.7	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°	1611.0	27.0
0°-40°	2623.0	44.0
0°-60°	4631.1	77.6
0°-90°	5966.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5966.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2084	2084	2084	2084	2084	
5°	2062	2067	2081	2090	2093	195
15°	1948	1971	2008	2036	2045	549
25°	1739	1781	1852	1903	1920	800
35°	1464	1526	1628	1713	1739	913
45°	1152	1235	1371	1481	1518	891
55°	847	940	1093	1218	1260	757
65°	552	646	796	906	946	547
75°	280	362	467	549	566	299
85°	65	79	82	71	65	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2084.1	2084.1	2084.1	2084.1	2084.1
2.5°	2072.8	2075.6	2084.1	2090.1	2090.1
5°	2061.5	2067.2	2081.3	2090.1	2092.9
7.5°	2044.6	2053.1	2072.8	2084.1	2087.2
10°	2019.2	2030.5	2055.9	2072.8	2078.5
12.5°	1987.9	2004.8	2036.2	2058.7	2064.4
15°	1948.4	1971.0	2007.6	2036.2	2044.6
17.5°	1903.0	1931.2	1976.6	2010.8	2022.1
20°	1854.7	1883.2	1940.0	1979.4	1993.5
22.5°	1798.3	1835.0	1900.2	1945.6	1956.9
25°	1738.8	1781.1	1851.9	1903.0	1919.9
27.5°	1673.6	1724.7	1801.1	1863.5	1877.6
30°	1605.6	1659.5	1747.2	1815.2	1832.2
32.5°	1534.8	1597.2	1690.5	1767.0	1789.9
35°	1464.0	1526.3	1628.2	1713.4	1738.8
37.5°	1381.9	1455.5	1569.0	1656.7	1687.7
40°	1311.1	1381.9	1503.8	1600.0	1631.3
42.5°	1231.8	1308.2	1435.8	1540.4	1577.4
45°	1152.5	1234.6	1370.6	1481.2	1517.9
47.5°	1078.9	1161.0	1302.6	1418.9	1455.5
50°	1002.4	1087.3	1234.6	1353.7	1390.3
52.5°	920.3	1013.7	1166.6	1285.7	1328.3
55°	846.7	940.1	1093.0	1217.7	1260.3
57.5°	770.2	866.4	1025.3	1144.0	1183.8
60°	699.4	792.8	948.8	1064.8	1110.2
62.5°	622.9	719.1	872.1	985.5	1028.1
65°	552.1	645.8	795.6	906.2	945.7
67.5°	481.3	575.0	716.3	821.3	866.4
70°	410.5	504.2	634.2	736.4	775.9
72.5°	348.4	430.5	554.9	648.6	685.3
75°	280.4	362.5	467.2	549.3	566.2
77.5°	218.1	291.7	379.5	416.1	422.1
80°	161.4	218.1	277.6	286.1	286.1
82.5°	107.5	150.1	172.7	175.5	172.7
85°	65.2	79.3	82.1	70.8	65.2
87.5°	22.6	22.6	14.1	8.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)