

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: P474893

Luminaire Tested: **22CZ2-50VHE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474893
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5007.4 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

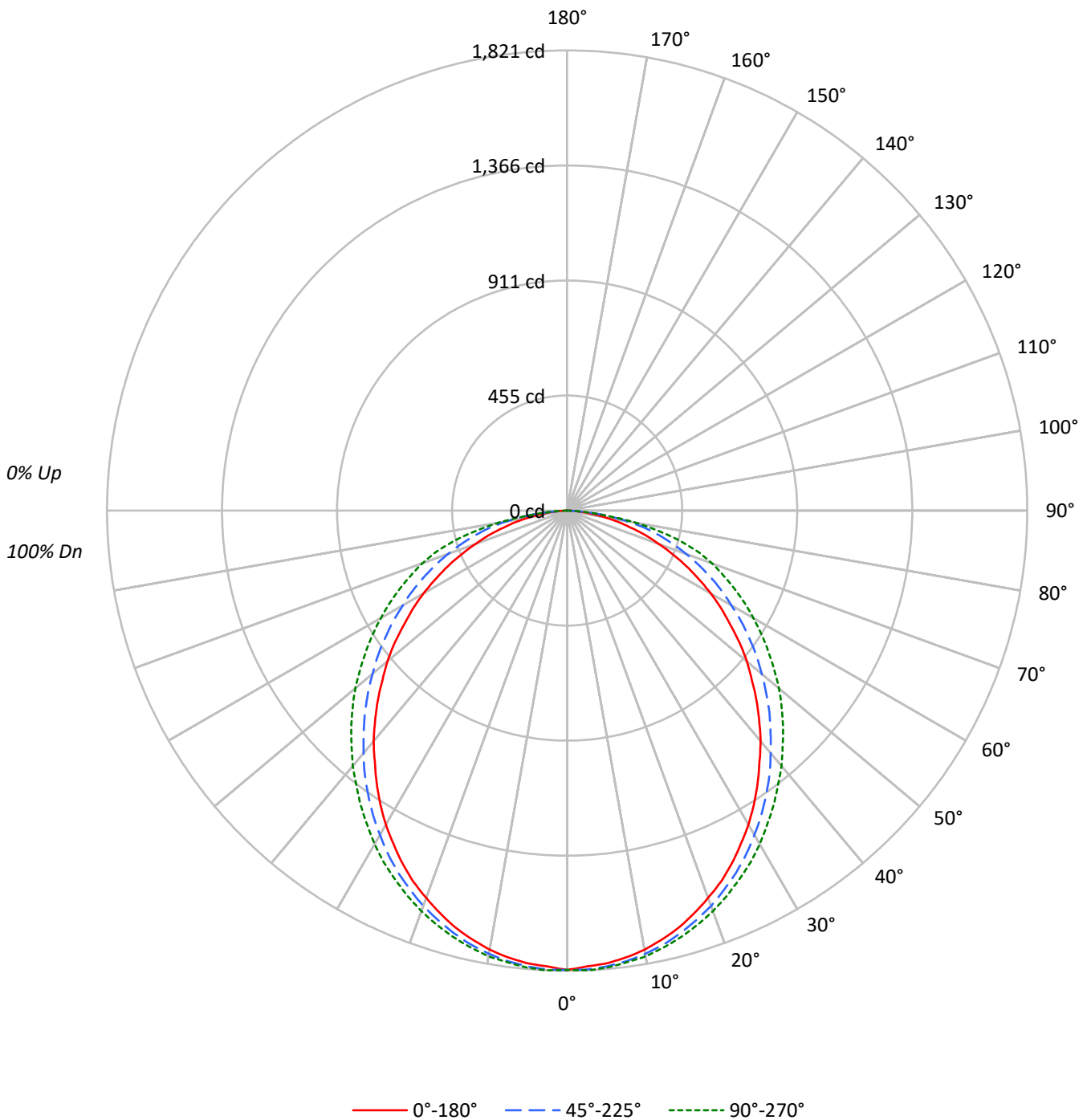
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	86	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4891	4891	4891
5°	4858	4890	4904
10°	4821	4867	4894
15°	4760	4824	4865
20°	4671	4768	4830
25°	4577	4695	4782
30°	4458	4605	4737
35°	4319	4510	4678
40°	4184	4402	4636
45°	4031	4307	4598
50°	3886	4211	4581
55°	3701	4128	4560
60°	3535	4043	4578
65°	3318	3997	4645
70°	3032	3947	4795
75°	2721	3919	4800
80°	2290	3699	4263
85°	1720	2507	2319



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.7	3.4
10°-20°	487.6	9.7
20°-30°	726.9	14.5
30°-40°	857.8	17.1
40°-50°	873.9	17.5
50°-60°	788.2	15.7
60°-70°	619.0	12.4
70°-80°	387.0	7.7
80°-90°	95.4	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°-30°	1386.2	27.7
0°-40°	2244.0	44.8
0°-60°	3906.1	78.0
0°-90°	5007.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5007.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1798	1802	1810	1814	1815	171
15°	1709	1715	1732	1744	1746	481
25°	1541	1550	1581	1604	1610	709
35°	1315	1333	1373	1410	1424	822
45°	1059	1077	1132	1186	1208	817
55°	789	814	880	948	972	708
65°	521	549	628	698	730	515
75°	262	298	377	441	462	280
85°	56	72	81	80	75	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1817.7	1817.7	1817.7	1817.7	1817.7
2.5°	1805.6	1809.2	1817.7	1821.3	1821.3
5°	1798.3	1801.9	1810.4	1814.1	1815.3
7.5°	1783.8	1788.6	1798.3	1803.1	1803.1
10°	1764.4	1770.4	1781.3	1788.6	1791.0
12.5°	1737.7	1745.0	1759.5	1768.0	1770.4
15°	1708.6	1714.7	1731.7	1743.8	1746.2
17.5°	1671.1	1680.8	1698.9	1714.7	1718.3
20°	1631.1	1642.0	1665.0	1683.2	1686.8
22.5°	1589.9	1598.4	1623.8	1645.6	1650.5
25°	1541.4	1549.9	1581.4	1604.4	1610.5
27.5°	1488.1	1502.6	1534.1	1560.8	1570.5
30°	1434.8	1449.3	1482.0	1513.5	1524.4
32.5°	1376.6	1392.4	1429.9	1462.6	1473.5
35°	1314.8	1333.0	1373.0	1410.5	1423.9
37.5°	1250.6	1271.2	1316.0	1356.0	1370.5
40°	1191.2	1205.7	1253.0	1299.0	1319.6
42.5°	1124.5	1143.9	1191.2	1243.3	1262.7
45°	1059.1	1077.3	1131.8	1186.3	1208.2
47.5°	991.2	1014.3	1068.8	1129.4	1151.2
50°	928.2	947.6	1005.8	1070.0	1094.3
52.5°	860.4	881.0	944.0	1010.6	1032.4
55°	788.9	814.3	879.8	947.6	971.9
57.5°	723.4	747.7	816.7	887.0	912.5
60°	656.8	681.0	751.3	822.8	850.7
62.5°	586.5	614.4	690.7	759.8	791.3
65°	521.1	548.9	627.7	698.0	729.5
67.5°	452.0	484.7	563.5	637.4	668.9
70°	385.4	424.1	501.7	574.4	609.5
72.5°	326.0	357.5	438.7	515.0	544.1
75°	261.7	298.1	376.9	441.1	461.7
77.5°	207.2	238.7	313.9	356.3	369.6
80°	147.8	183.0	238.7	264.2	275.1
82.5°	98.2	127.2	162.4	167.2	164.8
85°	55.7	71.5	81.2	80.0	75.1
87.5°	21.8	24.2	18.2	10.9	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)