

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: P388369

Luminaire Tested: **22CZ2-55VHE-UNV-L935-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P388369  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-UNV-L935-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4617.5 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

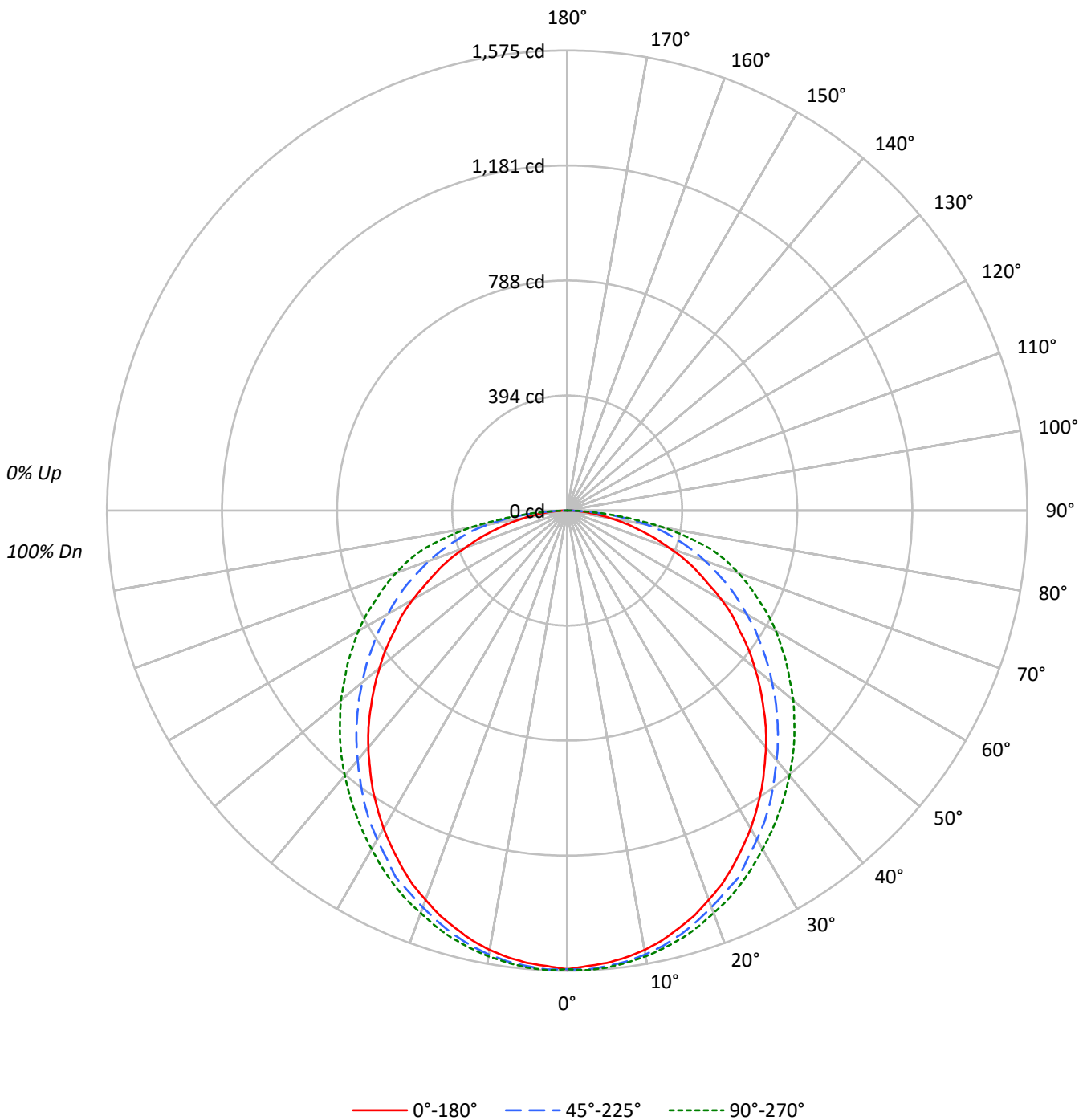
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	4225	4225	4225
5°	4198	4229	4241
10°	4172	4216	4234
15°	4121	4184	4222
20°	4060	4138	4197
25°	3987	4115	4183
30°	3904	4039	4158
35°	3814	3986	4150
40°	3719	3919	4158
45°	3614	3874	4185
50°	3510	3834	4233
55°	3390	3816	4306
60°	3289	3815	4439
65°	3125	3877	4600
70°	2914	3950	4899
75°	2669	4087	5292
80°	2325	4260	5212
85°	2035	3788	4140



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.5	3.2
10°-20°	422.9	9.2
20°-30°	634.9	13.7
30°-40°	758.6	16.4
40°-50°	788.9	17.1
50°-60°	731.2	15.8
60°-70°	599.7	13.0
70°-80°	405.4	8.8
80°-90°	127.4	2.8
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°	1206.3	26.1
0°-40°	1964.9	42.6
0°-60°	3485.0	75.5
0°-90°	4617.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4617.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1570	1570	1570	1570	1570	
5°	1554	1556	1566	1568	1570	148
15°	1479	1486	1502	1511	1516	417
25°	1343	1354	1386	1402	1409	618
35°	1161	1177	1213	1250	1263	726
45°	950	968	1018	1077	1100	733
55°	722	745	813	886	918	649
65°	491	518	609	688	722	485
75°	257	300	393	473	509	272
85°	66	91	123	136	134	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1570.0	1570.0	1570.0	1570.0	1570.0
2.5°	1560.9	1565.5	1572.3	1574.6	1574.6
5°	1554.1	1556.4	1565.5	1567.8	1570.0
7.5°	1542.8	1547.3	1556.4	1558.7	1560.9
10°	1526.9	1531.4	1542.8	1547.3	1549.6
12.5°	1506.4	1511.0	1524.6	1531.4	1533.7
15°	1479.2	1486.0	1501.9	1511.0	1515.5
17.5°	1451.9	1458.7	1474.6	1488.2	1492.8
20°	1417.8	1433.7	1445.1	1463.2	1465.5
22.5°	1383.7	1392.8	1413.3	1431.4	1440.5
25°	1342.8	1354.2	1386.0	1401.9	1408.7
27.5°	1299.7	1315.6	1340.6	1365.5	1374.6
30°	1256.5	1267.8	1299.7	1329.2	1338.3
32.5°	1208.8	1224.7	1258.8	1288.3	1301.9
35°	1161.1	1177.0	1213.3	1249.7	1263.3
37.5°	1108.8	1127.0	1163.3	1206.5	1224.7
40°	1058.8	1072.4	1115.6	1167.9	1183.8
42.5°	1006.5	1022.5	1067.9	1124.7	1142.9
45°	949.7	967.9	1017.9	1077.0	1099.7
47.5°	895.2	913.4	967.9	1027.0	1054.3
50°	838.4	861.1	915.7	983.8	1011.1
52.5°	783.9	804.3	865.7	936.1	961.1
55°	722.5	745.3	813.4	886.1	917.9
57.5°	672.5	688.5	763.4	838.4	870.2
60°	611.2	631.6	708.9	788.4	824.8
62.5°	545.3	579.4	658.9	740.7	777.1
65°	490.8	518.0	608.9	688.5	722.5
67.5°	434.0	463.5	552.1	636.2	674.8
70°	370.4	409.0	502.1	586.2	622.6
72.5°	313.6	354.5	449.9	531.7	570.3
75°	256.7	299.9	393.1	472.6	509.0
77.5°	202.2	249.9	340.8	402.2	424.9
80°	150.0	195.4	274.9	318.1	336.3
82.5°	104.5	143.1	202.2	224.9	229.5
85°	65.9	90.9	122.7	136.3	134.1
87.5°	29.5	36.4	45.4	50.0	47.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)