

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: P388352

Luminaire Tested: **22CZ2-50VHE-UNV-L950-CD1-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: P388352  
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: 22CZ2-50VHE-UNV-L950-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

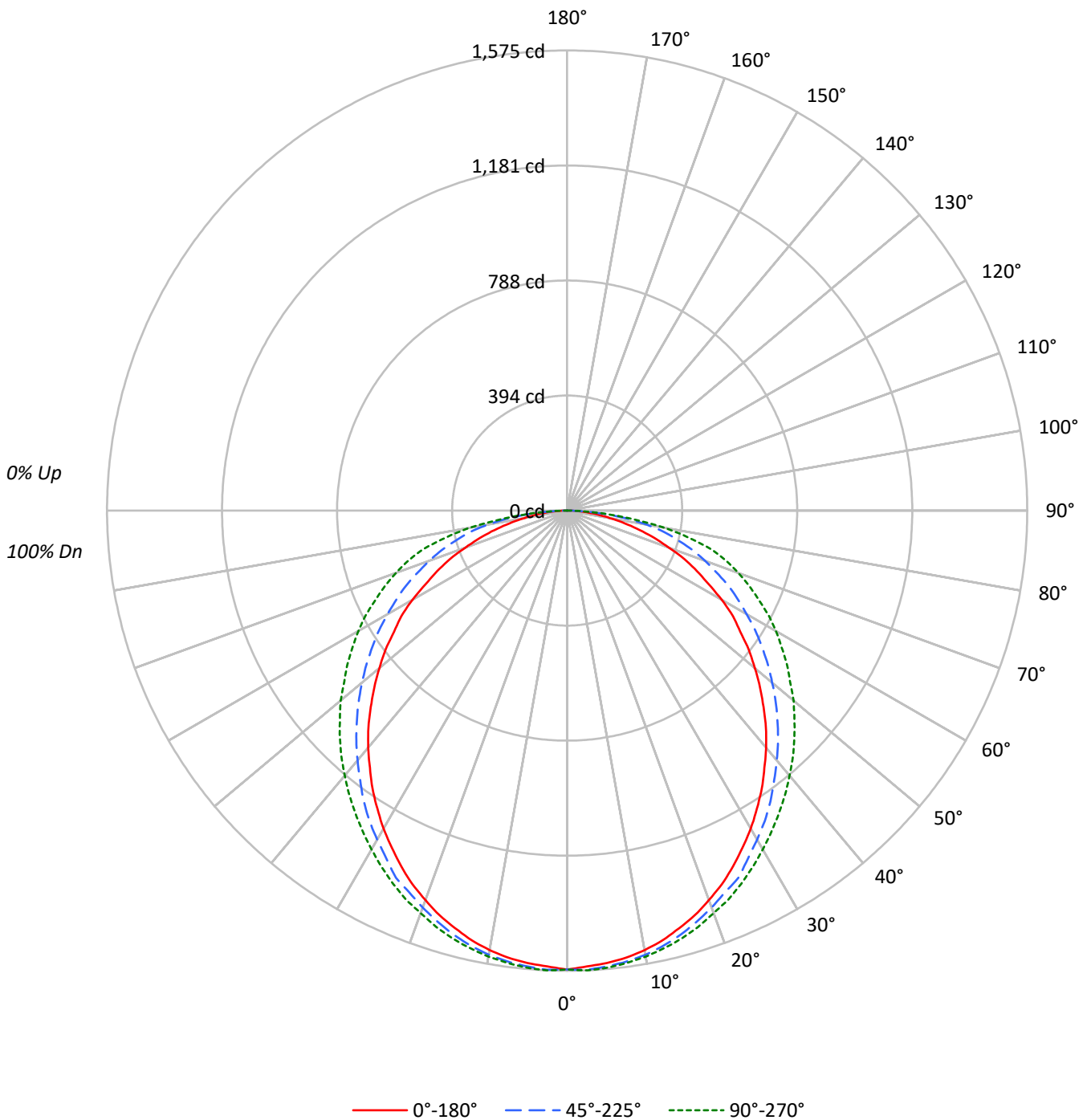
Lumens per Lamp: N/A  
Luminaire Lumens: 4619.7 lumens  
Efficiency: N/A  
Efficacy: 127.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 36.2  
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°	4227	4227	4227
5°	4200	4231	4243
10°	4174	4218	4236
15°	4123	4186	4224
20°	4062	4140	4199
25°	3989	4117	4185
30°	3906	4040	4160
35°	3816	3988	4152
40°	3721	3921	4160
45°	3616	3876	4187
50°	3512	3835	4235
55°	3392	3818	4309
60°	3291	3817	4441
65°	3126	3879	4603
70°	2915	3953	4901
75°	2671	4089	5294
80°	2325	4263	5213
85°	2035	3792	4140



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.6	3.2
10°-20°	423.1	9.2
20°-30°	635.2	13.7
30°-40°	759.0	16.4
40°-50°	789.2	17.1
50°-60°	731.5	15.8
60°-70°	600.0	13.0
70°-80°	405.6	8.8
80°-90°	127.5	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°	1206.9	26.1
0°-40°	1965.9	42.6
0°-60°	3486.6	75.5
0°-90°	4619.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4619.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1555	1557	1566	1568	1571	148
15°	1480	1487	1503	1512	1516	417
25°	1344	1355	1387	1403	1409	619
35°	1162	1178	1214	1250	1264	726
45°	950	968	1018	1078	1100	734
55°	723	746	814	886	918	650
65°	491	518	609	689	723	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°	1570.8	1570.8	1570.8	1570.8	1570.8
2.5°	1561.7	1566.2	1573.1	1575.3	1575.3
5°	1554.9	1557.1	1566.2	1568.5	1570.8
7.5°	1543.5	1548.1	1557.1	1559.4	1561.7
10°	1527.6	1532.1	1543.5	1548.1	1550.3
12.5°	1507.1	1511.7	1525.3	1532.1	1534.4
15°	1479.9	1486.7	1502.6	1511.7	1516.2
17.5°	1452.6	1459.4	1475.3	1488.9	1493.5
20°	1418.5	1434.4	1445.8	1463.9	1466.2
22.5°	1384.4	1393.5	1413.9	1432.1	1441.2
25°	1343.5	1354.8	1386.7	1402.6	1409.4
27.5°	1300.3	1316.2	1341.2	1366.2	1375.3
30°	1257.1	1268.4	1300.3	1329.8	1338.9
32.5°	1209.3	1225.3	1259.4	1288.9	1302.5
35°	1161.6	1177.5	1213.9	1250.3	1263.9
37.5°	1109.3	1127.5	1163.9	1207.1	1225.3
40°	1059.3	1073.0	1116.1	1168.4	1184.3
42.5°	1007.0	1022.9	1068.4	1125.2	1143.4
45°	950.2	968.4	1018.4	1077.5	1100.2
47.5°	895.6	913.8	968.4	1027.5	1054.8
50°	838.8	861.5	916.1	984.3	1011.6
52.5°	784.3	804.7	866.1	936.6	961.6
55°	722.9	745.6	813.8	886.5	918.4
57.5°	672.9	688.8	763.8	838.8	870.6
60°	611.5	632.0	709.2	788.8	825.2
62.5°	545.6	579.7	659.2	741.1	777.4
65°	491.0	518.3	609.2	688.8	722.9
67.5°	434.2	463.7	552.4	636.5	675.1
70°	370.5	409.2	502.4	586.5	622.9
72.5°	313.7	354.6	450.1	531.9	570.6
75°	256.9	300.1	393.3	472.8	509.2
77.5°	202.3	250.1	341.0	402.4	425.1
80°	150.0	195.5	275.1	318.2	336.4
82.5°	104.6	143.2	202.3	225.0	229.6
85°	65.9	90.9	122.8	136.4	134.1
87.5°	29.6	36.4	45.5	50.0	47.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)