

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: P388567

Luminaire Tested: **22CZ2-95VHE-UNV-L950-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: P388567  
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: 22CZ2-95VHE-UNV-L950-CD1-SWPD1-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: 8605.3 lumens  
Efficiency: N/A  
Efficacy: 118.4 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

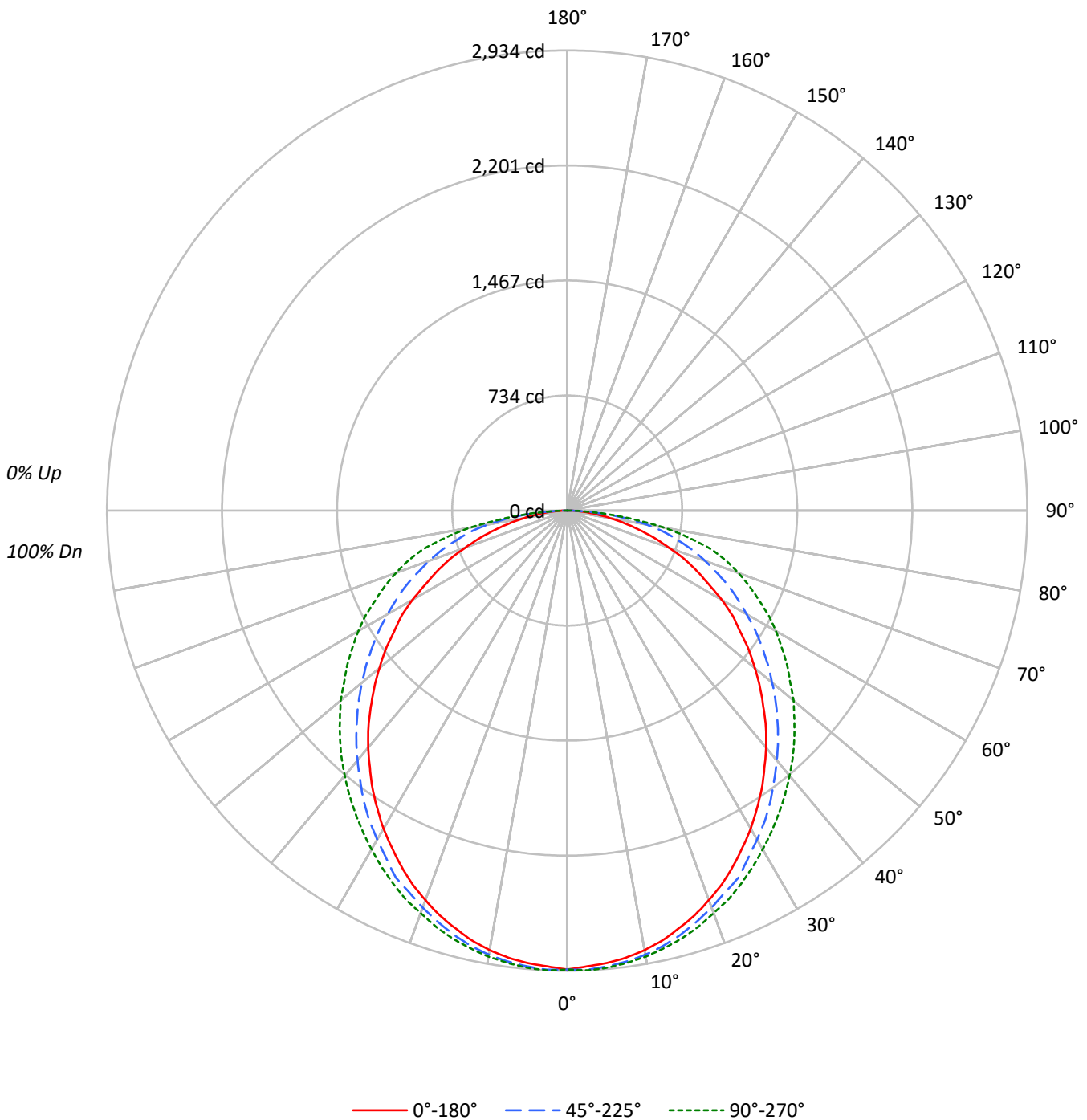
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7874	7874	7874
5°	7824	7881	7904
10°	7775	7856	7891
15°	7680	7797	7868
20°	7567	7712	7821
25°	7430	7669	7795
30°	7276	7526	7750
35°	7108	7428	7734
40°	6932	7304	7750
45°	6736	7219	7799
50°	6541	7144	7888
55°	6317	7112	8026
60°	6130	7110	8273
65°	5824	7226	8574
70°	5430	7363	9128
75°	4975	7616	9862
80°	4331	7941	9712
85°	3792	7061	7713



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.7	3.2
10°-20°	788.2	9.2
20°-30°	1183.2	13.7
30°-40°	1413.8	16.4
40°-50°	1470.2	17.1
50°-60°	1362.6	15.8
60°-70°	1117.7	13.0
70°-80°	755.6	8.8
80°-90°	237.4	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°	2248.1	26.1
0°-40°	3661.9	42.6
0°-60°	6494.7	75.5
0°-90°	8605.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8605.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2926	2926	2926	2926	2926	
5°	2896	2901	2918	2922	2926	275
15°	2757	2769	2799	2816	2824	778
25°	2502	2524	2583	2613	2625	1152
35°	2164	2193	2261	2329	2354	1352
45°	1770	1804	1897	2007	2049	1367
55°	1346	1389	1516	1651	1711	1210
65°	915	965	1135	1283	1346	904
75°	478	559	732	881	948	507
85°	123	169	229	254	250	139
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2926.0	2926.0	2926.0	2926.0	2926.0
2.5°	2909.0	2917.5	2930.2	2934.4	2934.4
5°	2896.3	2900.6	2917.5	2921.7	2926.0
7.5°	2875.1	2883.6	2900.6	2904.8	2909.0
10°	2845.5	2854.0	2875.1	2883.6	2887.9
12.5°	2807.4	2815.9	2841.3	2854.0	2858.2
15°	2756.6	2769.3	2798.9	2815.9	2824.3
17.5°	2705.8	2718.5	2748.1	2773.5	2782.0
20°	2642.3	2671.9	2693.1	2726.9	2731.2
22.5°	2578.7	2595.7	2633.8	2667.7	2684.6
25°	2502.5	2523.7	2583.0	2612.6	2625.3
27.5°	2422.1	2451.7	2498.3	2544.9	2561.8
30°	2341.6	2362.8	2422.1	2477.1	2494.1
32.5°	2252.7	2282.3	2345.8	2400.9	2426.3
35°	2163.8	2193.4	2261.2	2328.9	2354.3
37.5°	2066.4	2100.3	2168.0	2248.5	2282.3
40°	1973.2	1998.6	2079.1	2176.5	2206.1
42.5°	1875.8	1905.5	1990.2	2096.0	2129.9
45°	1770.0	1803.8	1897.0	2007.1	2049.4
47.5°	1668.3	1702.2	1803.8	1913.9	1964.8
50°	1562.5	1604.8	1706.5	1833.5	1884.3
52.5°	1460.9	1499.0	1613.3	1744.6	1791.1
55°	1346.5	1388.9	1515.9	1651.4	1710.7
57.5°	1253.4	1283.0	1422.8	1562.5	1621.8
60°	1139.0	1177.2	1321.1	1469.3	1537.1
62.5°	1016.3	1079.8	1228.0	1380.4	1448.2
65°	914.6	965.4	1134.8	1283.0	1346.5
67.5°	808.8	863.8	1029.0	1185.6	1257.6
70°	690.2	762.2	935.8	1092.5	1160.2
72.5°	584.3	660.6	838.4	990.8	1062.8
75°	478.5	558.9	732.5	880.8	948.5
77.5°	376.9	465.8	635.2	749.5	791.8
80°	279.5	364.2	512.4	592.8	626.7
82.5°	194.8	266.8	376.9	419.2	427.7
85°	122.8	169.4	228.7	254.1	249.8
87.5°	55.0	67.8	84.7	93.2	88.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)