

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: P388559

Luminaire Tested: **22CZ2-95VHE-UNV-L930-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: P388559  
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-L930-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

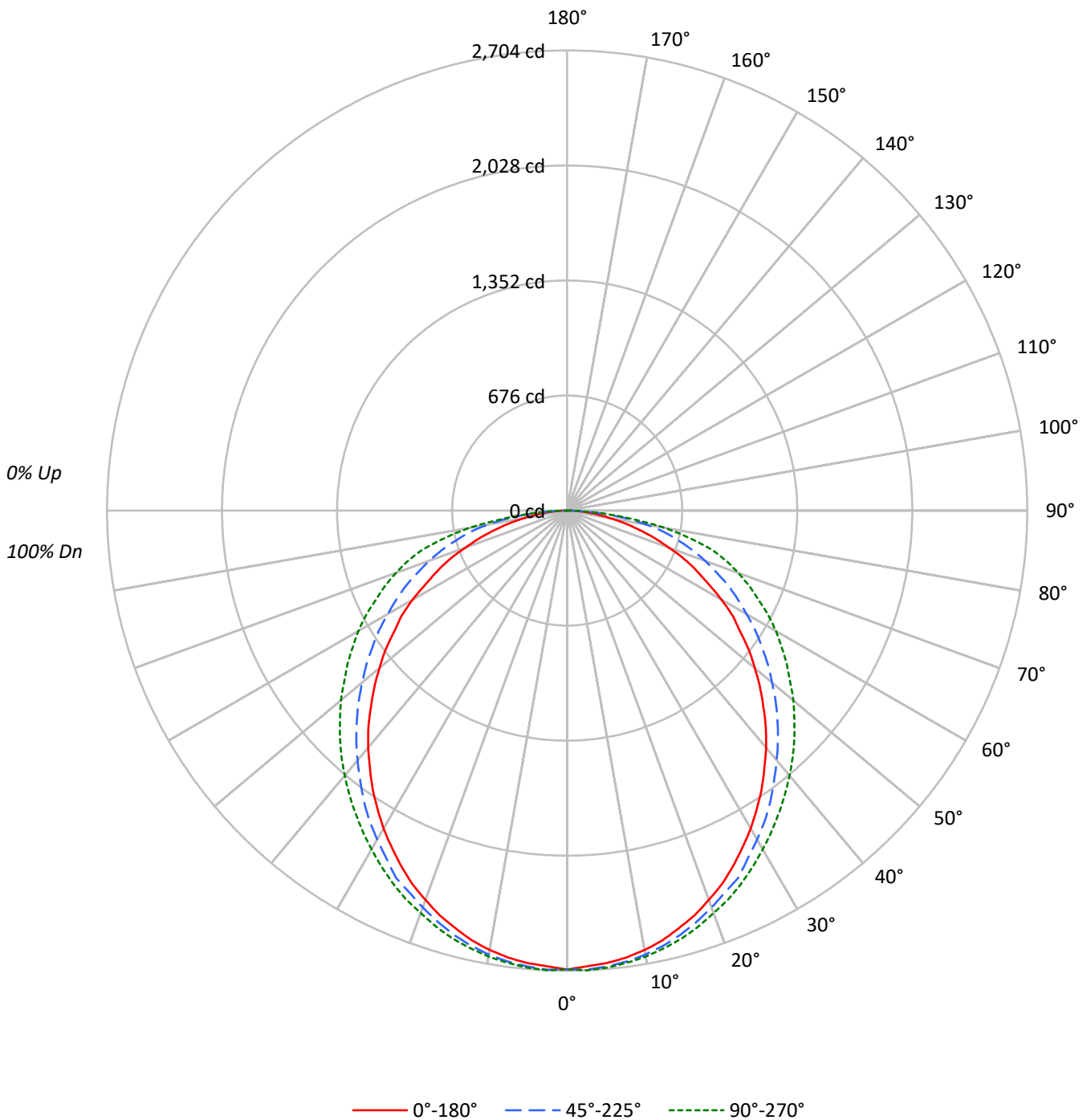
Lumens per Lamp: N/A  
Luminaire Lumens: 7929.0 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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°	7255	7255	7255
5°	7209	7262	7283
10°	7164	7239	7271
15°	7076	7185	7250
20°	6972	7106	7206
25°	6846	7067	7182
30°	6704	6935	7141
35°	6549	6844	7126
40°	6387	6730	7141
45°	6207	6652	7187
50°	6027	6582	7268
55°	5821	6553	7395
60°	5648	6551	7622
65°	5366	6658	7900
70°	5004	6784	8411
75°	4584	7018	9087
80°	3990	7316	8948
85°	3492	6505	7108



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.0	3.2
10°-20°	726.2	9.2
20°-30°	1090.2	13.7
30°-40°	1302.7	16.4
40°-50°	1354.6	17.1
50°-60°	1255.5	15.8
60°-70°	1029.8	13.0
70°-80°	696.2	8.8
80°-90°	218.7	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°	2071.4	26.1
0°-40°	3374.1	42.6
0°-60°	5984.2	75.5
0°-90°	7929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7929.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2696	2696	2696	2696	2696	
5°	2669	2673	2688	2692	2696	253
15°	2540	2552	2579	2595	2602	716
25°	2306	2325	2380	2407	2419	1062
35°	1994	2021	2084	2146	2169	1246
45°	1631	1662	1748	1849	1888	1259
55°	1241	1280	1397	1522	1576	1115
65°	843	890	1046	1182	1241	833
75°	441	515	675	812	874	468
85°	113	156	211	234	230	128
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2696.0	2696.0	2696.0	2696.0	2696.0
2.5°	2680.4	2688.2	2699.9	2703.8	2703.8
5°	2668.7	2672.6	2688.2	2692.1	2696.0
7.5°	2649.2	2657.0	2672.6	2676.5	2680.4
10°	2621.9	2629.7	2649.2	2657.0	2660.9
12.5°	2586.8	2594.6	2618.0	2629.7	2633.6
15°	2539.9	2551.6	2579.0	2594.6	2602.4
17.5°	2493.1	2504.8	2532.1	2555.5	2563.4
20°	2434.6	2461.9	2481.4	2512.6	2516.5
22.5°	2376.1	2391.7	2426.8	2458.0	2473.6
25°	2305.8	2325.4	2380.0	2407.3	2419.0
27.5°	2231.7	2259.0	2301.9	2344.9	2360.5
30°	2157.6	2177.1	2231.7	2282.4	2298.0
32.5°	2075.7	2103.0	2161.5	2212.2	2235.6
35°	1993.7	2021.0	2083.5	2145.9	2169.3
37.5°	1904.0	1935.2	1997.6	2071.7	2103.0
40°	1818.1	1841.6	1915.7	2005.4	2032.7
42.5°	1728.4	1755.7	1833.8	1931.3	1962.5
45°	1630.9	1662.1	1747.9	1849.4	1888.4
47.5°	1537.2	1568.4	1662.1	1763.5	1810.3
50°	1439.7	1478.7	1572.3	1689.4	1736.2
52.5°	1346.1	1381.2	1486.5	1607.5	1650.4
55°	1240.7	1279.7	1396.8	1521.6	1576.2
57.5°	1154.9	1182.2	1310.9	1439.7	1494.3
60°	1049.5	1084.6	1217.3	1353.9	1416.3
62.5°	936.4	994.9	1131.5	1271.9	1334.3
65°	842.7	889.6	1045.6	1182.2	1240.7
67.5°	745.2	795.9	948.1	1092.4	1158.8
70°	636.0	702.3	862.3	1006.6	1069.0
72.5°	538.4	608.6	772.5	913.0	979.3
75°	440.9	515.0	675.0	811.5	874.0
77.5°	347.2	429.2	585.2	690.6	729.6
80°	257.5	335.5	472.1	546.2	577.4
82.5°	179.5	245.8	347.2	386.3	394.1
85°	113.1	156.1	210.7	234.1	230.2
87.5°	50.7	62.4	78.0	85.8	81.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)