

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: P388557

Luminaire Tested: **22CZ2-95VHE-UNV-L930-CD1-SDWPD1-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: P388557  
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-SDWPD1-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: 7736.1 lumens  
Efficiency: N/A  
Efficacy: 106.4 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

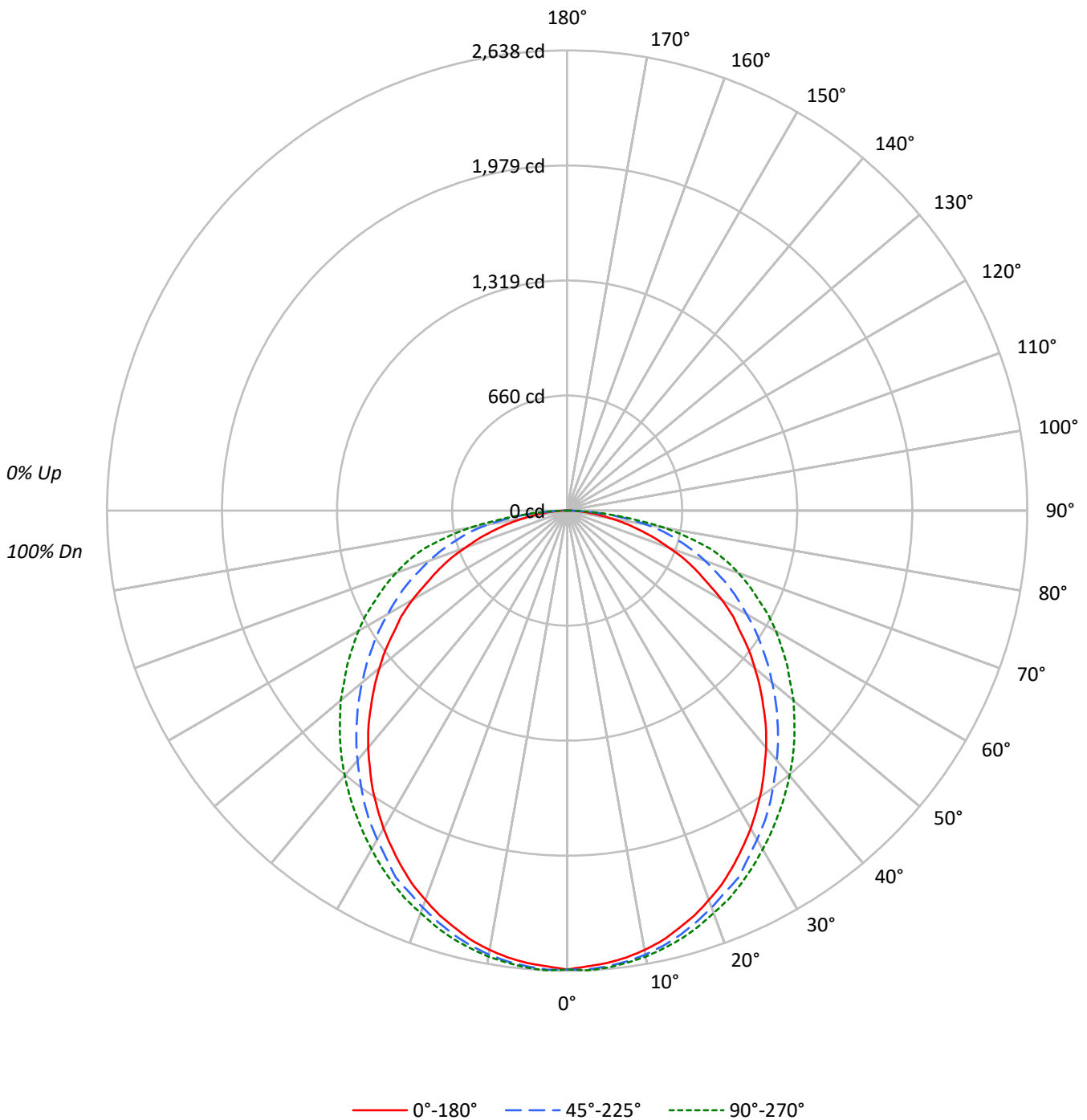
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7078	7078	7078
5°	7034	7085	7105
10°	6990	7063	7094
15°	6904	7010	7074
20°	6802	6933	7031
25°	6680	6895	7008
30°	6541	6766	6967
35°	6390	6678	6953
40°	6231	6566	6967
45°	6056	6490	7011
50°	5881	6422	7092
55°	5679	6394	7215
60°	5511	6392	7437
65°	5235	6496	7708
70°	4882	6619	8206
75°	4473	6848	8866
80°	3893	7138	8731
85°	3409	6348	6935



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.8	3.2
10°-20°	708.6	9.2
20°-30°	1063.7	13.7
30°-40°	1271.0	16.4
40°-50°	1321.7	17.1
50°-60°	1225.0	15.8
60°-70°	1004.8	13.0
70°-80°	679.2	8.8
80°-90°	213.4	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°	2021.0	26.1
0°-40°	3292.0	42.6
0°-60°	5838.6	75.5
0°-90°	7736.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7736.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2630	2630	2630	2630	2630	
5°	2604	2608	2623	2627	2630	247
15°	2478	2490	2516	2531	2539	699
25°	2250	2269	2322	2349	2360	1036
35°	1945	1972	2033	2094	2116	1216
45°	1591	1622	1705	1804	1842	1229
55°	1210	1249	1363	1485	1538	1088
65°	822	868	1020	1153	1210	813
75°	430	502	659	792	853	456
85°	110	152	206	228	225	125
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2630.4	2630.4	2630.4	2630.4	2630.4
2.5°	2615.2	2622.8	2634.2	2638.0	2638.0
5°	2603.8	2607.6	2622.8	2626.6	2630.4
7.5°	2584.7	2592.3	2607.6	2611.4	2615.2
10°	2558.1	2565.7	2584.7	2592.3	2596.2
12.5°	2523.8	2531.4	2554.3	2565.7	2569.5
15°	2478.1	2489.6	2516.2	2531.4	2539.1
17.5°	2432.5	2443.9	2470.5	2493.4	2501.0
20°	2375.4	2402.0	2421.0	2451.5	2455.3
22.5°	2318.3	2333.5	2367.8	2398.2	2413.4
25°	2249.7	2268.8	2322.1	2348.7	2360.1
27.5°	2177.4	2204.1	2245.9	2287.8	2303.0
30°	2105.1	2124.1	2177.4	2226.9	2242.1
32.5°	2025.2	2051.8	2108.9	2158.4	2181.2
35°	1945.2	1971.9	2032.8	2093.7	2116.5
37.5°	1857.7	1888.1	1949.0	2021.3	2051.8
40°	1773.9	1796.8	1869.1	1956.6	1983.3
42.5°	1686.4	1713.0	1789.1	1884.3	1914.8
45°	1591.2	1621.6	1705.4	1804.4	1842.4
47.5°	1499.8	1530.3	1621.6	1720.6	1766.3
50°	1404.7	1442.7	1534.1	1648.3	1694.0
52.5°	1313.3	1347.6	1450.3	1568.4	1610.2
55°	1210.5	1248.6	1362.8	1484.6	1537.9
57.5°	1126.8	1153.4	1279.0	1404.7	1458.0
60°	1024.0	1058.3	1187.7	1320.9	1381.8
62.5°	913.6	970.7	1103.9	1241.0	1301.9
65°	822.2	867.9	1020.2	1153.4	1210.5
67.5°	727.1	776.6	925.0	1065.9	1130.6
70°	620.5	685.2	841.3	982.1	1043.0
72.5°	525.3	593.8	753.7	890.8	955.5
75°	430.2	502.5	658.6	791.8	852.7
77.5°	338.8	418.7	571.0	673.8	711.8
80°	251.2	327.4	460.6	532.9	563.4
82.5°	175.1	239.8	338.8	376.9	384.5
85°	110.4	152.3	205.6	228.4	224.6
87.5°	49.5	60.9	76.1	83.7	79.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)