

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: P388471

Luminaire Tested: **22CZ2-75VHE-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: P388471  
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: 22CZ2-75VHE-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: 6767.0 lumens  
Efficiency: N/A  
Efficacy: 123.7 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

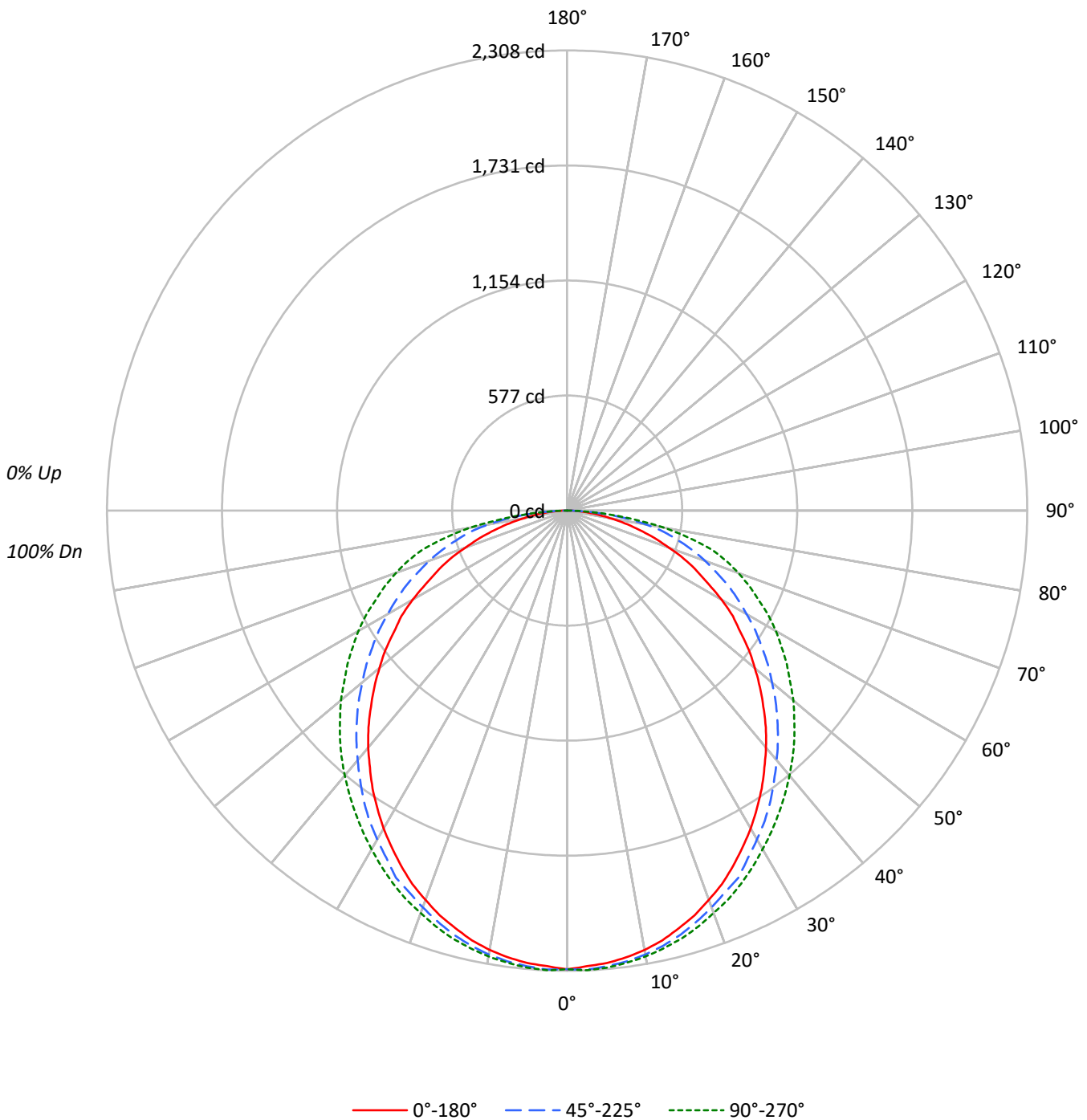
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	6192	6192	6192
5°	6152	6197	6215
10°	6114	6178	6205
15°	6039	6132	6187
20°	5950	6065	6150
25°	5843	6031	6130
30°	5722	5918	6094
35°	5590	5841	6082
40°	5451	5743	6094
45°	5297	5677	6133
50°	5144	5618	6203
55°	4968	5593	6311
60°	4821	5591	6505
65°	4579	5682	6742
70°	4271	5790	7179
75°	3912	5990	7755
80°	3406	6244	7637
85°	2983	5551	6067



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.6	3.2
10°-20°	619.8	9.2
20°-30°	930.4	13.7
30°-40°	1111.8	16.4
40°-50°	1156.1	17.1
50°-60°	1071.5	15.8
60°-70°	878.9	13.0
70°-80°	594.2	8.8
80°-90°	186.7	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°	1767.8	26.1
0°-40°	2879.6	42.6
0°-60°	5107.2	75.5
0°-90°	6767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6767.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2301	2301	2301	2301	2301	
5°	2278	2281	2294	2298	2301	216
15°	2168	2178	2201	2214	2221	611
25°	1968	1985	2031	2054	2064	906
35°	1702	1725	1778	1831	1851	1064
45°	1392	1418	1492	1578	1612	1075
55°	1059	1092	1192	1299	1345	952
65°	719	759	892	1009	1059	711
75°	376	440	576	693	746	399
85°	97	133	180	200	196	110
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2300.9	2300.9	2300.9	2300.9	2300.9
2.5°	2287.6	2294.2	2304.2	2307.6	2307.6
5°	2277.6	2280.9	2294.2	2297.6	2300.9
7.5°	2260.9	2267.6	2280.9	2284.3	2287.6
10°	2237.6	2244.3	2260.9	2267.6	2270.9
12.5°	2207.7	2214.3	2234.3	2244.3	2247.6
15°	2167.7	2177.7	2201.0	2214.3	2221.0
17.5°	2127.8	2137.7	2161.1	2181.0	2187.7
20°	2077.8	2101.1	2117.8	2144.4	2147.7
22.5°	2027.9	2041.2	2071.1	2097.8	2111.1
25°	1967.9	1984.6	2031.2	2054.5	2064.5
27.5°	1904.7	1928.0	1964.6	2001.2	2014.5
30°	1841.4	1858.0	1904.7	1947.9	1961.3
32.5°	1771.5	1794.8	1844.7	1888.0	1908.0
35°	1701.5	1724.8	1778.1	1831.4	1851.4
37.5°	1625.0	1651.6	1704.9	1768.1	1794.8
40°	1551.7	1571.7	1634.9	1711.5	1734.8
42.5°	1475.1	1498.4	1565.0	1648.3	1674.9
45°	1391.9	1418.5	1491.8	1578.3	1611.6
47.5°	1311.9	1338.6	1418.5	1505.1	1545.0
50°	1228.7	1262.0	1341.9	1441.8	1481.8
52.5°	1148.8	1178.8	1268.7	1371.9	1408.5
55°	1058.9	1092.2	1192.1	1298.6	1345.2
57.5°	985.6	1008.9	1118.8	1228.7	1275.3
60°	895.7	925.7	1038.9	1155.4	1208.7
62.5°	799.2	849.1	965.6	1085.5	1138.8
65°	719.2	759.2	892.4	1008.9	1058.9
67.5°	636.0	679.3	809.1	932.3	989.0
70°	542.8	599.4	735.9	859.1	912.4
72.5°	459.5	519.5	659.3	779.2	835.8
75°	376.3	439.5	576.1	692.6	745.9
77.5°	296.4	366.3	499.5	589.4	622.7
80°	219.8	286.4	402.9	466.2	492.8
82.5°	153.2	209.8	296.4	329.7	336.3
85°	96.6	133.2	179.8	199.8	196.5
87.5°	43.3	53.3	66.6	73.3	69.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)