

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: P388464

Luminaire Tested: **22CZ2-75VHE-UNV-L935-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: P388464  
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-L935-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6233.9 lumens  
Efficiency: N/A  
Efficacy: 114.0 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

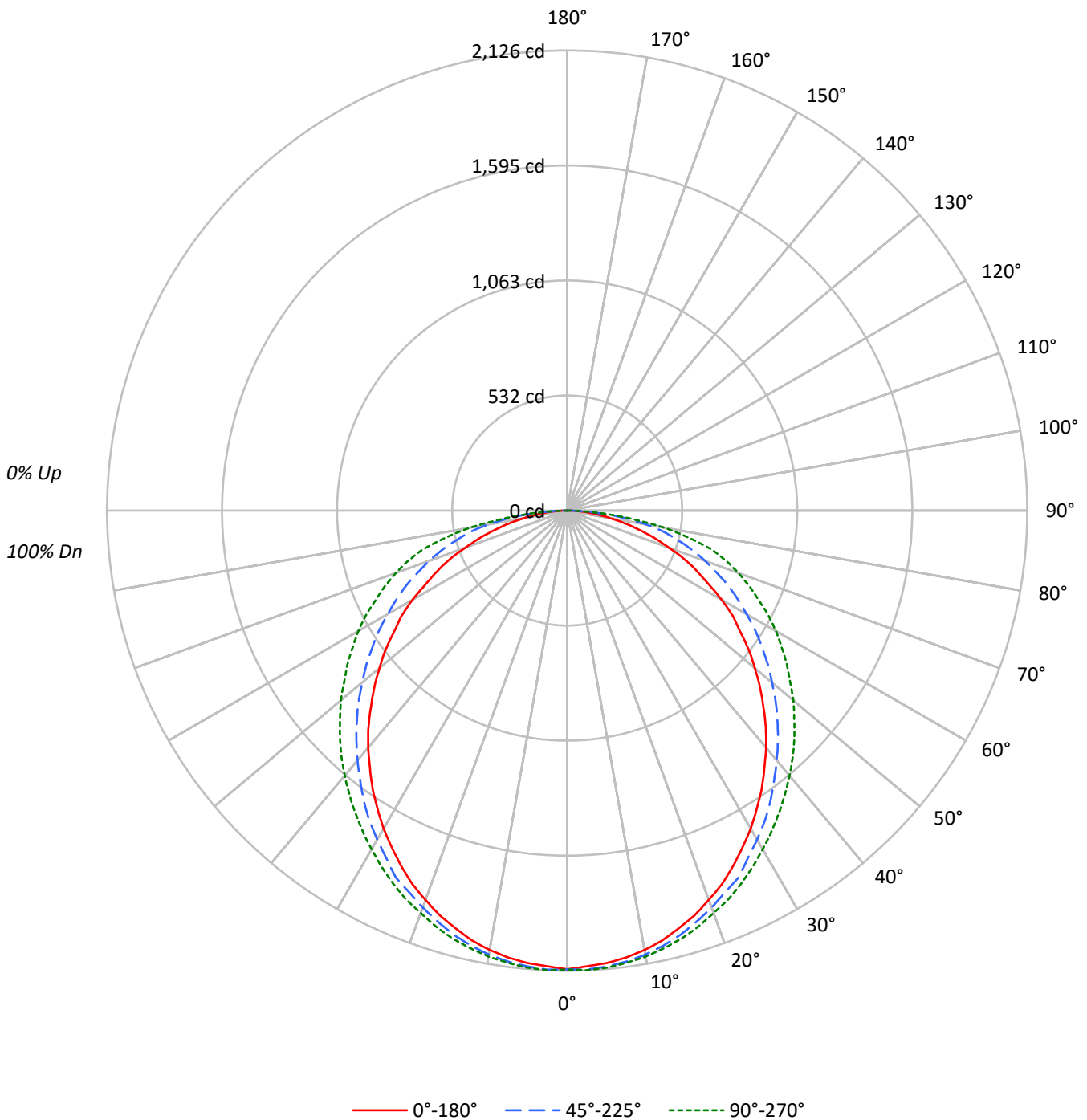
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5704	5704	5704
5°	5668	5709	5726
10°	5633	5691	5716
15°	5563	5649	5700
20°	5481	5587	5666
25°	5383	5556	5647
30°	5271	5452	5614
35°	5149	5381	5603
40°	5022	5291	5614
45°	4880	5230	5650
50°	4739	5175	5714
55°	4577	5152	5814
60°	4441	5151	5993
65°	4219	5235	6211
70°	3934	5334	6613
75°	3604	5518	7144
80°	3138	5752	7036
85°	2748	5113	5588



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.5	3.2
10°-20°	571.0	9.2
20°-30°	857.1	13.7
30°-40°	1024.2	16.4
40°-50°	1065.0	17.1
50°-60°	987.1	15.8
60°-70°	809.7	13.0
70°-80°	547.3	8.8
80°-90°	172.0	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°	1628.6	26.1
0°-40°	2652.8	42.6
0°-60°	4704.9	75.5
0°-90°	6233.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6233.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2098	2101	2114	2117	2120	199
15°	1997	2006	2028	2040	2046	563
25°	1813	1828	1871	1893	1902	835
35°	1568	1589	1638	1687	1706	980
45°	1282	1307	1374	1454	1485	990
55°	976	1006	1098	1196	1239	877
65°	663	699	822	930	976	655
75°	347	405	531	638	687	368
85°	89	123	166	184	181	101
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2119.6	2119.6	2119.6	2119.6	2119.6
2.5°	2107.4	2113.5	2122.7	2125.8	2125.8
5°	2098.2	2101.2	2113.5	2116.6	2119.6
7.5°	2082.8	2089.0	2101.2	2104.3	2107.4
10°	2061.4	2067.5	2082.8	2089.0	2092.0
12.5°	2033.8	2039.9	2058.3	2067.5	2070.6
15°	1996.9	2006.1	2027.6	2039.9	2046.0
17.5°	1960.1	1969.3	1990.8	2009.2	2015.3
20°	1914.1	1935.6	1950.9	1975.5	1978.5
22.5°	1868.1	1880.4	1908.0	1932.5	1944.8
25°	1812.9	1828.2	1871.2	1892.6	1901.8
27.5°	1754.6	1776.1	1809.8	1843.6	1855.8
30°	1696.3	1711.7	1754.6	1794.5	1806.8
32.5°	1631.9	1653.4	1699.4	1739.3	1757.7
35°	1567.5	1589.0	1638.0	1687.1	1705.5
37.5°	1496.9	1521.5	1570.6	1628.8	1653.4
40°	1429.5	1447.9	1506.1	1576.7	1598.2
42.5°	1358.9	1380.4	1441.7	1518.4	1543.0
45°	1282.2	1306.8	1374.2	1454.0	1484.7
47.5°	1208.6	1233.1	1306.8	1386.5	1423.3
50°	1131.9	1162.6	1236.2	1328.2	1365.0
52.5°	1058.3	1085.9	1168.7	1263.8	1297.6
55°	975.5	1006.1	1098.2	1196.3	1239.3
57.5°	908.0	929.5	1030.7	1131.9	1174.9
60°	825.2	852.8	957.1	1064.4	1113.5
62.5°	736.2	782.2	889.6	1000.0	1049.1
65°	662.6	699.4	822.1	929.5	975.5
67.5°	585.9	625.8	745.4	858.9	911.0
70°	500.0	552.1	677.9	791.4	840.5
72.5°	423.3	478.5	607.4	717.8	769.9
75°	346.6	404.9	530.7	638.0	687.1
77.5°	273.0	337.4	460.1	542.9	573.6
80°	202.5	263.8	371.2	429.4	454.0
82.5°	141.1	193.3	273.0	303.7	309.8
85°	89.0	122.7	165.6	184.0	181.0
87.5°	39.9	49.1	61.3	67.5	64.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)