

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: P388519

Luminaire Tested: **22CZ2-85VHE-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: P388519  
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: 22CZ2-85VHE-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**

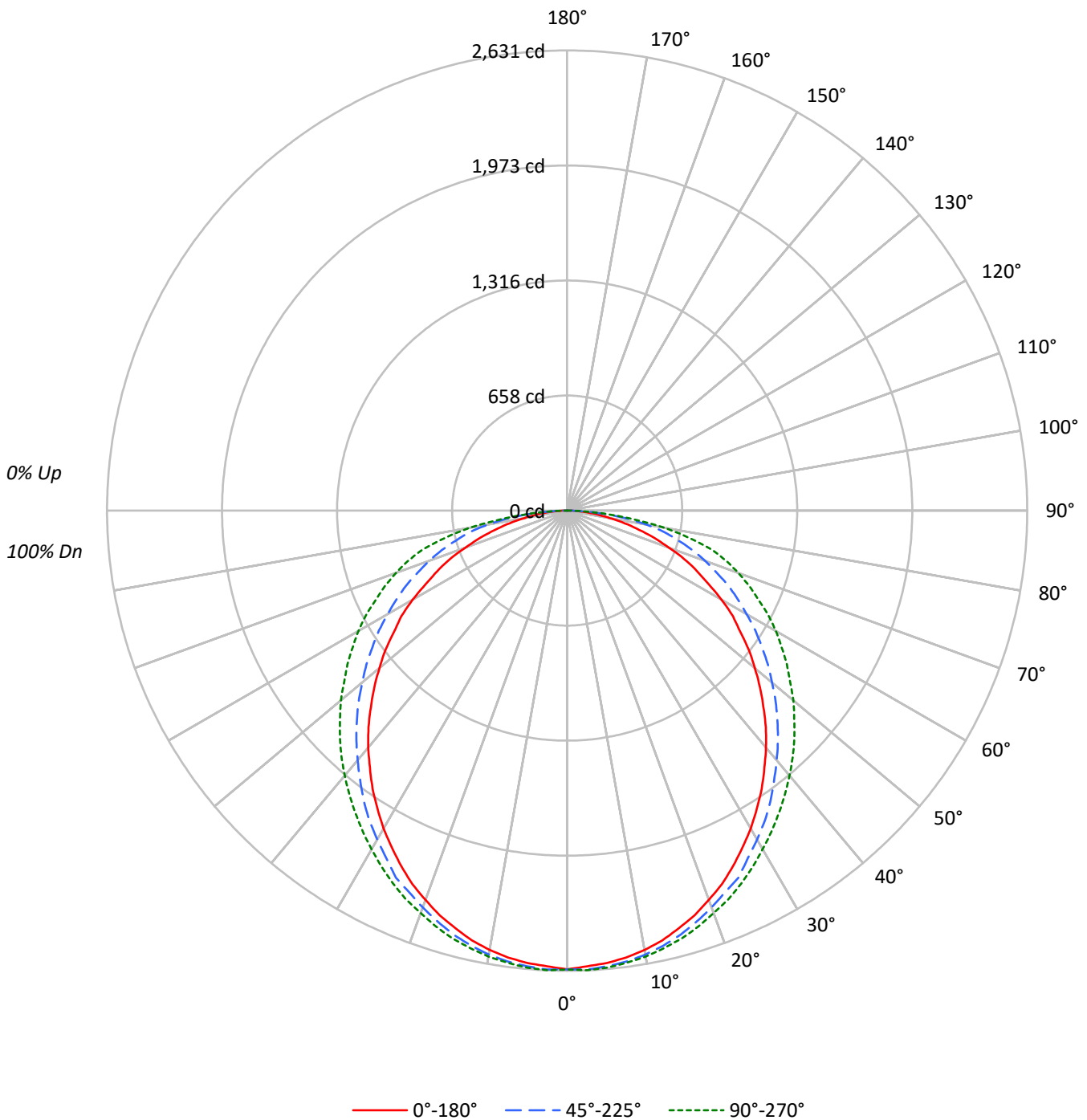
Lumens per Lamp: N/A  
Luminaire Lumens: 7714.4 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 63.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	7058	7058	7058
5°	7014	7065	7085
10°	6970	7043	7074
15°	6885	6990	7054
20°	6783	6914	7011
25°	6661	6875	6988
30°	6523	6747	6947
35°	6372	6659	6933
40°	6214	6547	6947
45°	6038	6472	6992
50°	5864	6404	7072
55°	5663	6376	7195
60°	5496	6374	7416
65°	5221	6478	7686
70°	4868	6600	8183
75°	4459	6828	8841
80°	3882	7118	8706
85°	3399	6329	6916



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.1	3.2
10°-20°	706.6	9.2
20°-30°	1060.7	13.7
30°-40°	1267.4	16.4
40°-50°	1317.9	17.1
50°-60°	1221.5	15.8
60°-70°	1002.0	13.0
70°-80°	677.3	8.8
80°-90°	212.8	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°	2015.3	26.1
0°-40°	3282.8	42.6
0°-60°	5822.3	75.5
0°-90°	7714.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7714.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2623	2623	2623	2623	2623	
5°	2596	2600	2615	2619	2623	246
15°	2471	2483	2509	2524	2532	697
25°	2243	2262	2316	2342	2354	1033
35°	1940	1966	2027	2088	2111	1212
45°	1587	1617	1701	1799	1837	1225
55°	1207	1245	1359	1480	1534	1085
65°	820	866	1017	1150	1207	810
75°	429	501	657	790	850	455
85°	110	152	205	228	224	125
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2623.0	2623.0	2623.0	2623.0	2623.0
2.5°	2607.9	2615.4	2626.8	2630.6	2630.6
5°	2596.5	2600.3	2615.4	2619.2	2623.0
7.5°	2577.5	2585.1	2600.3	2604.1	2607.9
10°	2550.9	2558.5	2577.5	2585.1	2588.9
12.5°	2516.8	2524.3	2547.1	2558.5	2562.3
15°	2471.2	2482.6	2509.2	2524.3	2531.9
17.5°	2425.6	2437.0	2463.6	2486.4	2494.0
20°	2368.7	2395.3	2414.3	2444.6	2448.4
22.5°	2311.8	2326.9	2361.1	2391.5	2406.7
25°	2243.4	2262.4	2315.6	2342.1	2353.5
27.5°	2171.3	2197.9	2239.6	2281.4	2296.6
30°	2099.2	2118.2	2171.3	2220.7	2235.8
32.5°	2019.5	2046.0	2103.0	2152.3	2175.1
35°	1939.8	1966.3	2027.1	2087.8	2110.6
37.5°	1852.4	1882.8	1943.6	2015.7	2046.0
40°	1768.9	1791.7	1863.8	1951.1	1977.7
42.5°	1681.6	1708.2	1784.1	1879.0	1909.4
45°	1586.7	1617.1	1700.6	1799.3	1837.3
47.5°	1495.6	1526.0	1617.1	1715.8	1761.3
50°	1400.7	1438.7	1529.8	1643.7	1689.2
52.5°	1309.6	1343.8	1446.3	1564.0	1605.7
55°	1207.1	1245.1	1359.0	1480.4	1533.6
57.5°	1123.6	1150.2	1275.5	1400.7	1453.9
60°	1021.1	1055.3	1184.4	1317.2	1377.9
62.5°	911.0	968.0	1100.8	1237.5	1298.2
65°	819.9	865.5	1017.3	1150.2	1207.1
67.5°	725.0	774.4	922.4	1062.9	1127.4
70°	618.7	683.3	838.9	979.4	1040.1
72.5°	523.8	592.2	751.6	888.3	952.8
75°	428.9	501.1	656.7	789.6	850.3
77.5°	337.8	417.6	569.4	671.9	709.9
80°	250.5	326.5	459.3	531.4	561.8
82.5°	174.6	239.1	337.8	375.8	383.4
85°	110.1	151.8	205.0	227.8	224.0
87.5°	49.3	60.7	75.9	83.5	79.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)