

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: P258866

Luminaire Tested: **14CZ-LD5-44-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258866  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-44-S-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3929.0 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

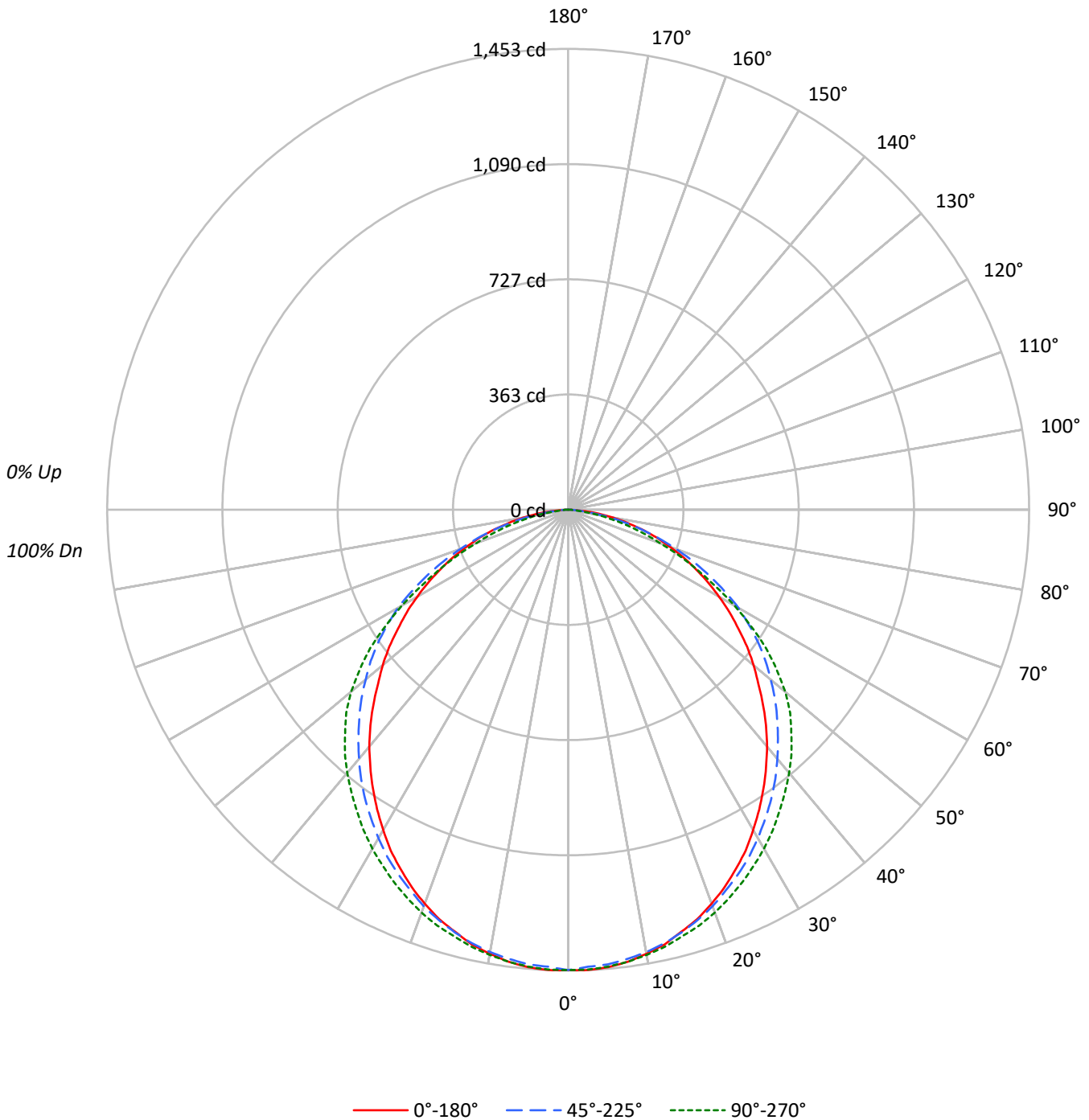
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3906	3906	3906
5°	3911	3887	3906
10°	3885	3870	3894
15°	3838	3843	3877
20°	3785	3810	3871
25°	3711	3763	3852
30°	3623	3716	3835
35°	3526	3664	3813
40°	3426	3604	3807
45°	3305	3545	3784
50°	3195	3489	3738
55°	3072	3433	3573
60°	2958	3336	3260
65°	2832	3121	2865
70°	2672	2838	2424
75°	2494	2458	2002
80°	2197	1900	1464
85°	1729	920	812



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	3.5
10°-20°	390.7	9.9
20°-30°	586.3	14.9
30°-40°	699.0	17.8
40°-50°	720.0	18.3
50°-60°	641.7	16.3
60°-70°	462.3	11.8
70°-80°	241.8	6.2
80°-90°	50.0	1.3
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°	1114.2	28.4
0°-40°	1813.2	46.1
0°-60°	3174.8	80.8
0°-90°	3929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3929.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1448	1444	1439	1448	1446	137
15°	1378	1380	1380	1394	1392	389
25°	1250	1257	1268	1292	1297	576
35°	1073	1087	1115	1152	1161	671
45°	868	888	931	984	994	670
55°	655	676	732	765	762	587
65°	445	460	490	468	450	441
75°	240	252	236	205	193	254
85°	56	49	30	26	26	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1451.4	1451.4	1451.4	1451.4	1451.4
2.5°	1453.1	1449.6	1442.6	1451.4	1451.4
5°	1447.9	1444.4	1439.1	1447.9	1446.1
7.5°	1437.4	1433.9	1428.6	1439.1	1437.4
10°	1421.6	1419.9	1416.4	1426.9	1425.1
12.5°	1404.1	1402.4	1400.6	1411.1	1411.1
15°	1377.8	1379.6	1379.6	1393.6	1391.8
17.5°	1353.3	1355.1	1356.8	1374.3	1374.3
20°	1321.8	1323.6	1330.6	1349.8	1351.6
22.5°	1288.6	1290.3	1299.1	1321.8	1325.3
25°	1250.0	1257.0	1267.5	1292.1	1297.3
27.5°	1211.5	1216.8	1234.3	1262.3	1265.8
30°	1166.0	1176.5	1195.8	1227.3	1234.3
32.5°	1120.5	1132.7	1155.5	1190.5	1199.3
35°	1073.2	1087.2	1115.2	1152.0	1160.7
37.5°	1024.2	1036.4	1071.5	1110.0	1122.2
40°	975.2	987.4	1025.9	1069.7	1083.7
42.5°	922.6	940.2	978.7	1027.7	1041.7
45°	868.4	887.6	931.4	983.9	994.4
47.5°	812.3	833.4	884.1	936.7	948.9
50°	763.3	782.6	833.4	884.1	892.9
52.5°	710.8	728.3	784.3	826.4	828.1
55°	654.8	675.8	731.8	765.1	761.6
57.5°	604.0	621.5	675.8	693.3	682.8
60°	549.7	565.5	619.8	621.5	605.8
62.5°	497.2	513.0	555.0	542.7	523.5
65°	444.7	460.4	490.2	467.5	449.9
67.5°	393.9	407.9	425.4	395.7	378.2
70°	339.6	358.9	360.7	325.6	308.1
72.5°	292.4	302.9	299.4	266.1	250.4
75°	239.9	252.1	236.4	204.8	192.6
77.5°	190.8	199.6	178.6	148.8	140.1
80°	141.8	147.1	122.6	99.8	94.5
82.5°	96.3	96.3	70.0	54.3	49.0
85°	56.0	49.0	29.8	26.3	26.3
87.5°	19.3	12.3	12.3	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)