

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: P258565

Luminaire Tested: **14CZ-LD5-44-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258565  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-44-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4622.7 lumens  
Efficiency: N/A  
Efficacy: 123.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

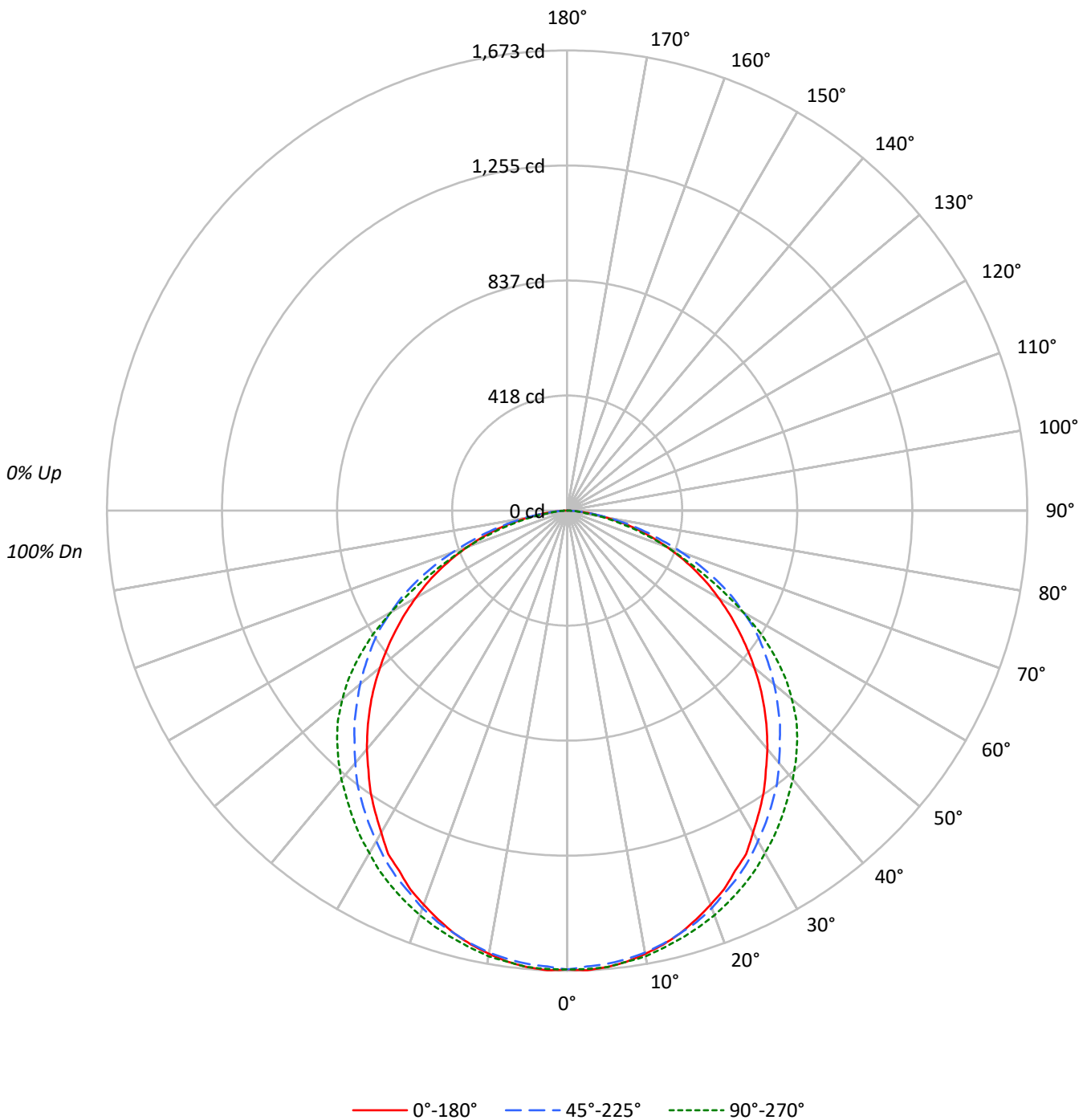
Input Watts (W): 37.386  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

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

	0°	45°	90°
0°	4489	4489	4489
5°	4500	4469	4500
10°	4471	4459	4496
15°	4432	4432	4482
20°	4366	4405	4483
25°	4290	4364	4480
30°	4199	4313	4468
35°	4095	4267	4469
40°	3979	4211	4483
45°	3859	4163	4501
50°	3721	4112	4465
55°	3571	4074	4320
60°	3422	3986	3974
65°	3265	3817	3482
70°	3030	3478	3013
75°	2749	3033	2488
80°	2190	2402	1836
85°	1547	1337	1056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.8	3.4
10°-20°	450.9	9.8
20°-30°	679.9	14.7
30°-40°	814.9	17.6
40°-50°	845.7	18.3
50°-60°	762.8	16.5
60°-70°	556.4	12.0
70°-80°	292.0	6.3
80°-90°	62.3	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°	1288.6	27.9
0°-40°	2103.6	45.5
0°-60°	3712.0	80.3
0°-90°	4622.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4622.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1668	1668	1668	1668	1668	
5°	1666	1661	1654	1666	1666	158
15°	1591	1591	1591	1609	1609	448
25°	1445	1452	1470	1502	1509	667
35°	1247	1260	1299	1347	1360	779
45°	1014	1035	1094	1160	1183	782
55°	761	788	868	925	921	681
65°	513	542	599	577	547	507
75°	264	301	292	253	239	277
85°	50	62	43	36	34	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1668.2	1668.2	1668.2	1668.2	1668.2
2.5°	1672.7	1668.2	1659.1	1668.2	1668.2
5°	1665.9	1661.4	1654.5	1665.9	1665.9
7.5°	1654.5	1650.0	1645.4	1656.8	1654.5
10°	1636.3	1634.0	1631.7	1645.4	1645.4
12.5°	1615.8	1615.8	1613.5	1629.4	1627.2
15°	1590.7	1590.7	1590.7	1608.9	1608.9
17.5°	1558.8	1563.4	1567.9	1588.4	1588.4
20°	1524.6	1529.2	1538.3	1563.4	1565.6
22.5°	1490.4	1492.7	1501.8	1531.5	1538.3
25°	1444.9	1451.7	1469.9	1501.8	1508.7
27.5°	1408.4	1410.7	1431.2	1467.6	1476.8
30°	1351.4	1367.4	1387.9	1428.9	1438.0
32.5°	1299.0	1312.7	1344.6	1387.9	1401.6
35°	1246.6	1260.3	1299.0	1346.9	1360.5
37.5°	1187.3	1207.8	1253.4	1301.3	1317.2
40°	1132.6	1150.9	1198.7	1258.0	1276.2
42.5°	1073.4	1091.6	1144.0	1210.1	1230.6
45°	1014.1	1034.6	1093.9	1160.0	1182.8
47.5°	952.6	975.4	1036.9	1109.8	1130.4
50°	888.8	913.9	982.2	1057.4	1066.5
52.5°	825.0	852.3	925.3	991.3	1000.5
55°	761.2	788.5	868.3	925.3	920.7
57.5°	699.6	729.3	811.3	840.9	836.4
60°	635.8	667.7	740.7	754.3	738.4
62.5°	576.6	606.2	674.6	663.2	642.7
65°	512.8	542.4	599.4	576.6	546.9
67.5°	449.0	485.4	521.9	483.1	460.3
70°	385.1	426.2	442.1	403.4	382.9
72.5°	323.6	366.9	362.4	323.6	309.9
75°	264.4	300.8	291.7	253.0	239.3
77.5°	200.5	241.6	221.1	189.2	177.8
80°	141.3	177.8	155.0	127.6	118.5
82.5°	93.4	118.5	95.7	75.2	68.4
85°	50.1	61.5	43.3	36.5	34.2
87.5°	20.5	18.2	16.0	16.0	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)