

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: P258563

Luminaire Tested: **14CZ-LD5-44-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258563  
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-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4579.1 lumens  
Efficiency: N/A  
Efficacy: 125.6 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

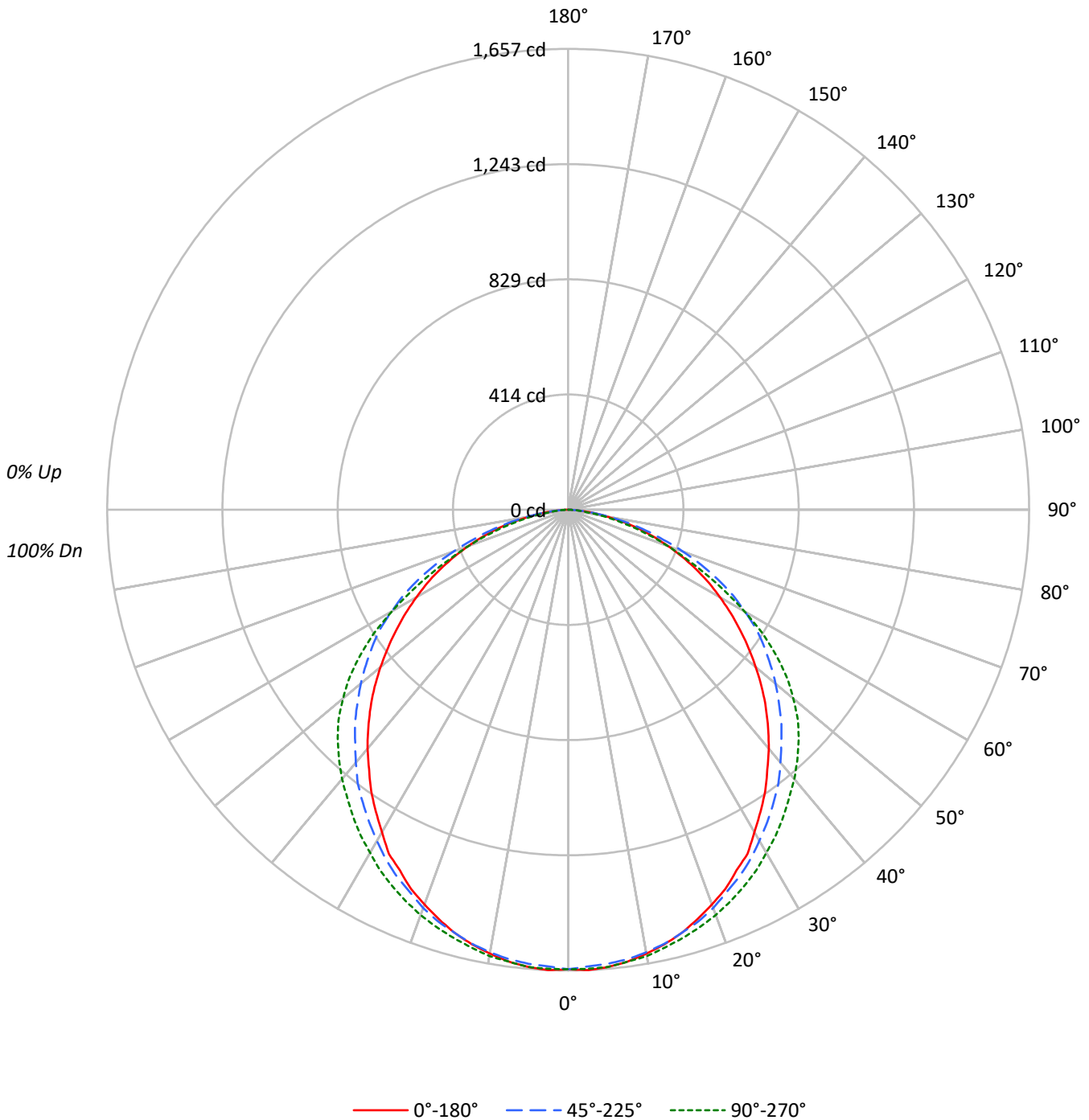
Input Watts (W): 36.456  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4447	4447	4447
5°	4458	4427	4458
10°	4429	4417	4454
15°	4390	4390	4440
20°	4325	4364	4441
25°	4249	4323	4437
30°	4160	4272	4426
35°	4056	4227	4427
40°	3941	4171	4441
45°	3823	4124	4459
50°	3686	4073	4423
55°	3537	4035	4279
60°	3390	3949	3936
65°	3234	3780	3450
70°	3002	3445	2984
75°	2723	3005	2464
80°	2170	2379	1819
85°	1535	1325	1047



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.4	3.4
10°-20°	446.7	9.8
20°-30°	673.5	14.7
30°-40°	807.2	17.6
40°-50°	837.7	18.3
50°-60°	755.6	16.5
60°-70°	551.2	12.0
70°-80°	289.2	6.3
80°-90°	61.7	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°	1276.5	27.9
0°-40°	2083.7	45.5
0°-60°	3677.0	80.3
0°-90°	4579.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4579.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1652	1652	1652	1652	1652	
5°	1650	1646	1639	1650	1650	157
15°	1576	1576	1576	1594	1594	444
25°	1431	1438	1456	1488	1494	660
35°	1235	1248	1287	1334	1348	771
45°	1005	1025	1084	1149	1172	774
55°	754	781	860	916	912	675
65°	508	537	594	571	542	502
75°	262	298	289	251	237	275
85°	50	61	43	36	34	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1652.4	1652.4	1652.4	1652.4	1652.4
2.5°	1657.0	1652.4	1643.4	1652.4	1652.4
5°	1650.2	1645.7	1638.9	1650.2	1650.2
7.5°	1638.9	1634.4	1629.9	1641.2	1638.9
10°	1620.8	1618.6	1616.3	1629.9	1629.9
12.5°	1600.5	1600.5	1598.3	1614.1	1611.8
15°	1575.7	1575.7	1575.7	1593.8	1593.8
17.5°	1544.1	1548.6	1553.1	1573.4	1573.4
20°	1510.2	1514.7	1523.8	1548.6	1550.9
22.5°	1476.4	1478.6	1487.7	1517.0	1523.8
25°	1431.2	1438.0	1456.1	1487.7	1494.4
27.5°	1395.1	1397.4	1417.7	1453.8	1462.8
30°	1338.7	1354.5	1374.8	1415.4	1424.4
32.5°	1286.7	1300.3	1331.9	1374.8	1388.3
35°	1234.8	1248.4	1286.7	1334.1	1347.7
37.5°	1176.1	1196.4	1241.6	1289.0	1304.8
40°	1122.0	1140.0	1187.4	1246.1	1264.2
42.5°	1063.3	1081.3	1133.2	1198.7	1219.0
45°	1004.6	1024.9	1083.6	1149.0	1171.6
47.5°	943.6	966.2	1027.1	1099.4	1119.7
50°	880.4	905.2	973.0	1047.5	1056.5
52.5°	817.2	844.3	916.5	982.0	991.0
55°	754.0	781.1	860.1	916.5	912.0
57.5°	693.0	722.4	803.7	833.0	828.5
60°	629.8	661.4	733.7	747.2	731.4
62.5°	571.1	600.5	668.2	656.9	636.6
65°	507.9	537.3	593.7	571.1	541.8
67.5°	444.7	480.8	517.0	478.6	456.0
70°	381.5	422.1	437.9	399.6	379.3
72.5°	320.6	363.4	358.9	320.6	307.0
75°	261.9	298.0	289.0	250.6	237.0
77.5°	198.7	239.3	219.0	187.4	176.1
80°	140.0	176.1	153.5	126.4	117.4
82.5°	92.6	117.4	94.8	74.5	67.7
85°	49.7	61.0	42.9	36.1	33.9
87.5°	20.3	18.1	15.8	15.8	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)