

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: P258810

Luminaire Tested: **14CZ-LD5-44-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258810  
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-L82765-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4199.0 lumens  
Efficiency: N/A  
Efficacy: 118.8 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

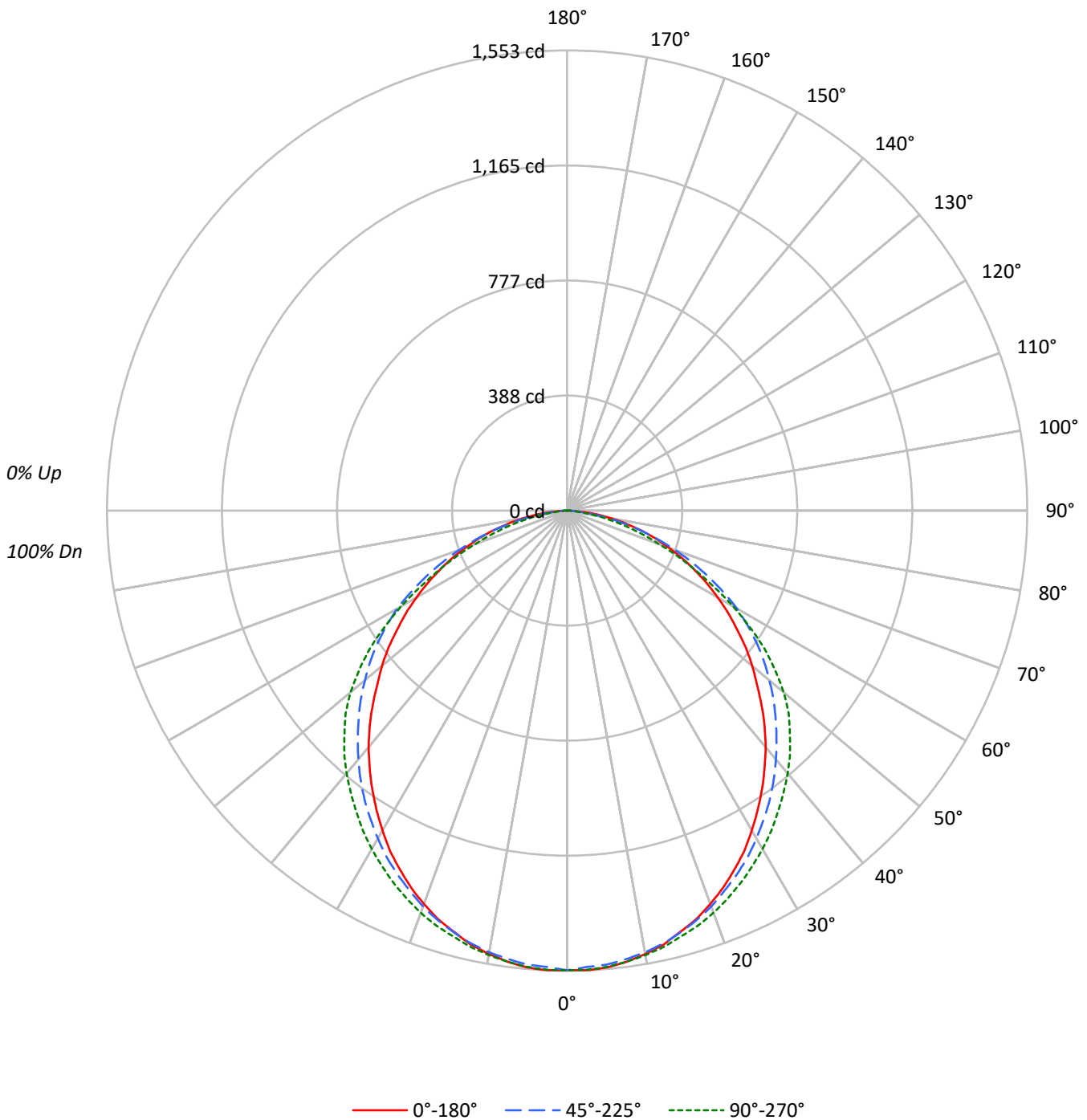
Input Watts (W): 35.34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4174	4174	4174
5°	4180	4155	4175
10°	4151	4136	4162
15°	4102	4108	4144
20°	4046	4072	4137
25°	3967	4022	4117
30°	3872	3971	4099
35°	3768	3915	4075
40°	3661	3851	4069
45°	3532	3788	4045
50°	3415	3728	3995
55°	3283	3669	3818
60°	3162	3565	3484
65°	3026	3336	3062
70°	2856	3032	2591
75°	2665	2626	2140
80°	2349	2030	1565
85°	1849	982	868



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.6	3.5
10°-20°	417.6	9.9
20°-30°	626.6	14.9
30°-40°	747.0	17.8
40°-50°	769.5	18.3
50°-60°	685.8	16.3
60°-70°	494.1	11.8
70°-80°	258.4	6.2
80°-90°	53.5	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°	1190.7	28.4
0°-40°	1937.8	46.1
0°-60°	3393.0	80.8
0°-90°	4199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4199.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1547	1544	1538	1547	1546	147
15°	1472	1474	1474	1489	1488	416
25°	1336	1343	1355	1381	1386	615
35°	1147	1162	1192	1231	1240	717
45°	928	949	995	1052	1063	716
55°	700	722	782	818	814	628
65°	475	492	524	500	481	471
75°	256	269	253	219	206	272
85°	60	52	32	28	28	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1551.1	1551.1	1551.1	1551.1	1551.1
2.5°	1553.0	1549.2	1541.8	1551.1	1551.1
5°	1547.4	1543.6	1538.0	1547.4	1545.5
7.5°	1536.1	1532.4	1526.8	1538.0	1536.1
10°	1519.3	1517.4	1513.7	1524.9	1523.0
12.5°	1500.6	1498.7	1496.9	1508.1	1508.1
15°	1472.5	1474.4	1474.4	1489.4	1487.5
17.5°	1446.3	1448.2	1450.1	1468.8	1468.8
20°	1412.7	1414.5	1422.0	1442.6	1444.5
22.5°	1377.1	1379.0	1388.3	1412.7	1416.4
25°	1335.9	1343.4	1354.7	1380.8	1386.5
27.5°	1294.8	1300.4	1319.1	1349.0	1352.8
30°	1246.1	1257.4	1277.9	1311.6	1319.1
32.5°	1197.5	1210.6	1234.9	1272.3	1281.7
35°	1147.0	1161.9	1191.9	1231.2	1240.5
37.5°	1094.6	1107.7	1145.1	1186.3	1199.4
40°	1042.2	1055.3	1096.4	1143.2	1158.2
42.5°	986.1	1004.8	1045.9	1098.3	1113.3
45°	928.0	948.6	995.4	1051.5	1062.8
47.5°	868.2	890.6	944.9	1001.0	1014.1
50°	815.8	836.4	890.6	944.9	954.2
52.5°	759.7	778.4	838.2	883.1	885.0
55°	699.8	722.2	782.1	817.7	813.9
57.5°	645.5	664.2	722.2	740.9	729.7
60°	587.5	604.4	662.4	664.2	647.4
62.5°	531.4	548.2	593.1	580.0	559.4
65°	475.3	492.1	523.9	499.6	480.9
67.5°	421.0	436.0	454.7	422.9	404.1
70°	363.0	383.6	385.4	348.0	329.3
72.5°	312.5	323.7	320.0	284.4	267.6
75°	256.3	269.4	252.6	218.9	205.8
77.5°	203.9	213.3	190.8	159.0	149.7
80°	151.6	157.2	131.0	106.7	101.0
82.5°	102.9	102.9	74.8	58.0	52.4
85°	59.9	52.4	31.8	28.1	28.1
87.5°	20.6	13.1	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)