

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: P258729

Luminaire Tested: **14CZ-LD5-44-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258729  
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-L83050-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: 4203.6 lumens  
Efficiency: N/A  
Efficacy: 118.3 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

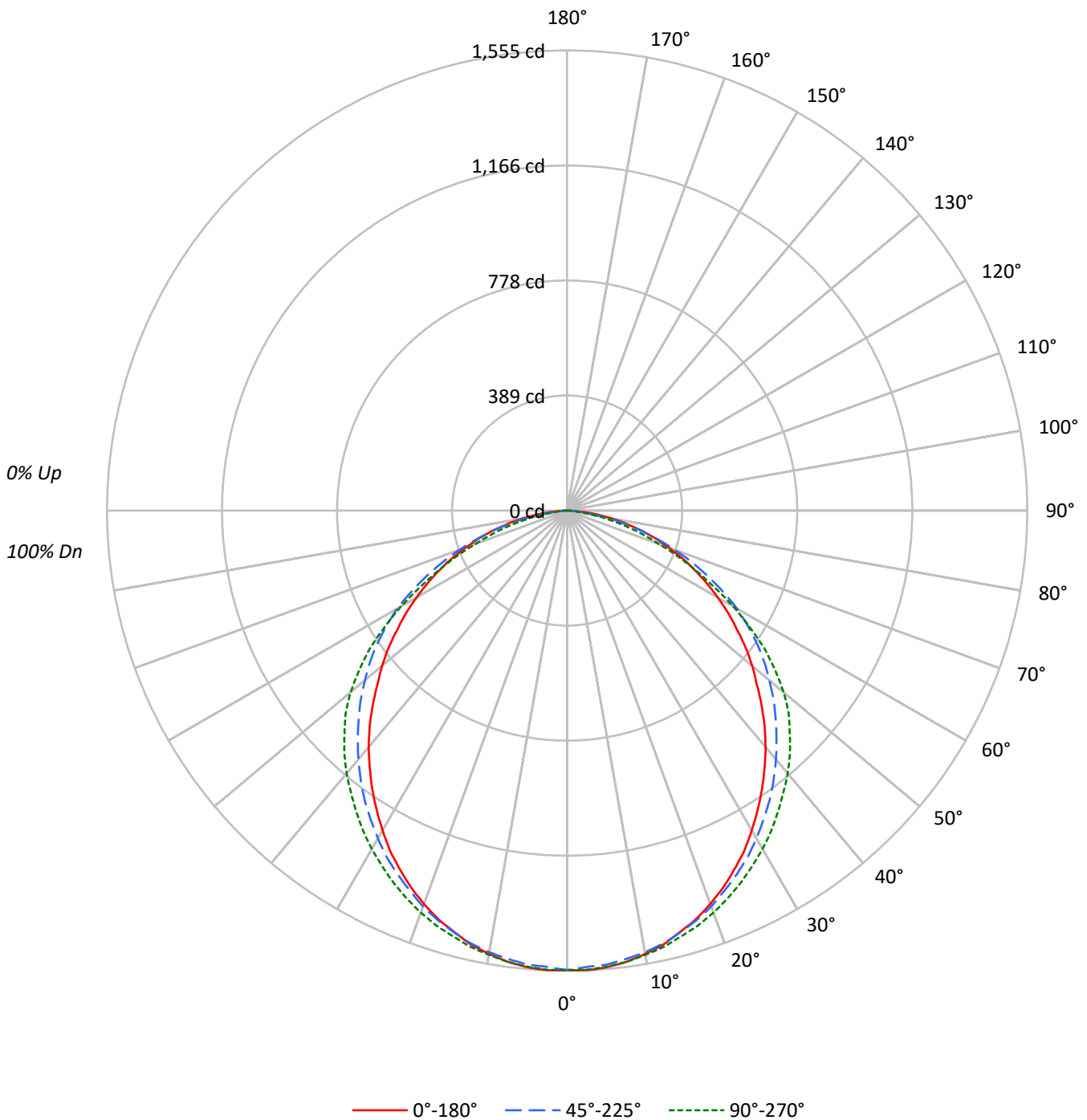
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4179	4179	4179
5°	4185	4159	4179
10°	4156	4141	4166
15°	4107	4112	4148
20°	4050	4077	4141
25°	3971	4026	4121
30°	3876	3975	4103
35°	3772	3920	4080
40°	3665	3856	4073
45°	3536	3792	4049
50°	3419	3733	3999
55°	3286	3674	3823
60°	3166	3569	3488
65°	3030	3340	3065
70°	2859	3036	2594
75°	2668	2629	2142
80°	2351	2032	1567
85°	1849	982	868



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.7	3.5
10°-20°	418.0	9.9
20°-30°	627.3	14.9
30°-40°	747.9	17.8
40°-50°	770.3	18.3
50°-60°	686.5	16.3
60°-70°	494.7	11.8
70°-80°	258.7	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°	1192.0	28.4
0°-40°	1939.9	46.1
0°-60°	3396.7	80.8
0°-90°	4203.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1553	1553	1553	1553	1553	
5°	1549	1545	1540	1549	1547	147
15°	1474	1476	1476	1491	1489	416
25°	1337	1345	1356	1382	1388	616
35°	1148	1163	1193	1232	1242	718
45°	929	950	996	1053	1064	717
55°	700	723	783	818	815	628
65°	476	493	524	500	481	471
75°	257	270	253	219	206	272
85°	60	52	32	28	28	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1552.8	1552.8	1552.8	1552.8	1552.8
2.5°	1554.7	1550.9	1543.4	1552.8	1552.8
5°	1549.1	1545.3	1539.7	1549.1	1547.2
7.5°	1537.8	1534.1	1528.4	1539.7	1537.8
10°	1521.0	1519.1	1515.3	1526.6	1524.7
12.5°	1502.2	1500.4	1498.5	1509.7	1509.7
15°	1474.1	1476.0	1476.0	1491.0	1489.1
17.5°	1447.9	1449.8	1451.7	1470.4	1470.4
20°	1414.2	1416.1	1423.6	1444.2	1446.0
22.5°	1378.6	1380.5	1389.8	1414.2	1417.9
25°	1337.4	1344.9	1356.1	1382.3	1388.0
27.5°	1296.2	1301.8	1320.5	1350.5	1354.3
30°	1247.5	1258.7	1279.3	1313.0	1320.5
32.5°	1198.8	1211.9	1236.2	1273.7	1283.1
35°	1148.2	1163.2	1193.2	1232.5	1241.9
37.5°	1095.8	1108.9	1146.3	1187.5	1200.7
40°	1043.3	1056.4	1097.6	1144.5	1159.4
42.5°	987.1	1005.9	1047.1	1099.5	1114.5
45°	929.1	949.7	996.5	1052.7	1063.9
47.5°	869.1	891.6	945.9	1002.1	1015.2
50°	816.7	837.3	891.6	945.9	955.3
52.5°	760.5	779.2	839.1	884.1	886.0
55°	700.5	723.0	783.0	818.5	814.8
57.5°	646.2	665.0	723.0	741.7	730.5
60°	588.2	605.0	663.1	665.0	648.1
62.5°	532.0	548.8	593.8	580.7	560.1
65°	475.8	492.6	524.5	500.1	481.4
67.5°	421.4	436.4	455.2	423.3	404.6
70°	363.4	384.0	385.9	348.4	329.7
72.5°	312.8	324.0	320.3	284.7	267.9
75°	256.6	269.7	252.9	219.2	206.0
77.5°	204.2	213.5	191.1	159.2	149.8
80°	151.7	157.3	131.1	106.8	101.1
82.5°	103.0	103.0	74.9	58.1	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)