

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: P258730

Luminaire Tested: **14CZ-LD5-44-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258730  
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-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4448.2 lumens  
Efficiency: N/A  
Efficacy: 124.9 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

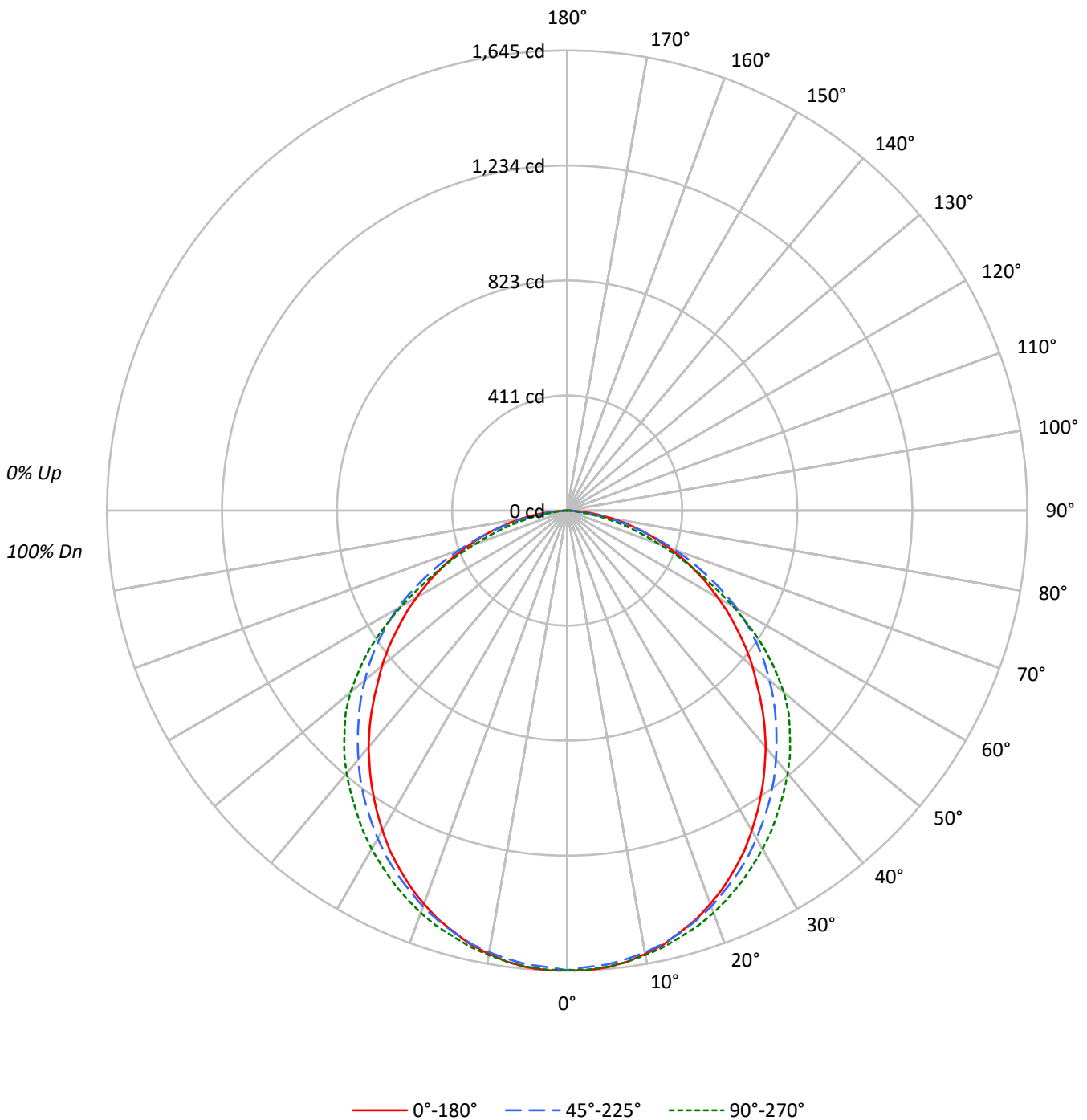
Input Watts (W): 35.619  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4422	4422	4422
5°	4428	4401	4422
10°	4398	4382	4409
15°	4346	4351	4390
20°	4285	4314	4382
25°	4202	4261	4361
30°	4102	4207	4342
35°	3991	4148	4317
40°	3878	4080	4310
45°	3741	4013	4284
50°	3618	3950	4232
55°	3478	3887	4045
60°	3350	3777	3691
65°	3206	3534	3244
70°	3025	3212	2745
75°	2823	2782	2267
80°	2489	2149	1658
85°	1958	1041	917



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.3	3.5
10°-20°	442.3	9.9
20°-30°	663.8	14.9
30°-40°	791.4	17.8
40°-50°	815.2	18.3
50°-60°	726.5	16.3
60°-70°	523.5	11.8
70°-80°	273.8	6.2
80°-90°	56.6	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°	1261.4	28.4
0°-40°	2052.8	46.1
0°-60°	3594.4	80.8
0°-90°	4448.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4448.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1643	1643	1643	1643	1643	
5°	1639	1635	1629	1639	1637	156
15°	1560	1562	1562	1578	1576	440
25°	1415	1423	1435	1463	1469	652
35°	1215	1231	1263	1304	1314	760
45°	983	1005	1054	1114	1126	759
55°	741	765	828	866	862	665
65°	504	521	555	529	509	499
75°	272	285	268	232	218	288
85°	63	56	34	30	30	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1643.2	1643.2	1643.2	1643.2	1643.2
2.5°	1645.2	1641.2	1633.3	1643.2	1643.2
5°	1639.2	1635.2	1629.3	1639.2	1637.2
7.5°	1627.3	1623.4	1617.4	1629.3	1627.3
10°	1609.5	1607.5	1603.5	1615.4	1613.4
12.5°	1589.7	1587.7	1585.7	1597.6	1597.6
15°	1559.9	1561.9	1561.9	1577.8	1575.8
17.5°	1532.2	1534.2	1536.1	1556.0	1556.0
20°	1496.5	1498.5	1506.4	1528.2	1530.2
22.5°	1458.8	1460.8	1470.7	1496.5	1500.5
25°	1415.2	1423.2	1435.1	1462.8	1468.7
27.5°	1371.6	1377.6	1397.4	1429.1	1433.1
30°	1320.1	1332.0	1353.8	1389.5	1397.4
32.5°	1268.6	1282.4	1308.2	1347.8	1357.7
35°	1215.0	1230.9	1262.6	1304.2	1314.1
37.5°	1159.5	1173.4	1213.1	1256.7	1270.5
40°	1104.0	1117.9	1161.5	1211.1	1226.9
42.5°	1044.6	1064.4	1108.0	1163.5	1179.4
45°	983.1	1004.9	1054.5	1113.9	1125.8
47.5°	919.7	943.5	1001.0	1060.4	1074.3
50°	864.2	886.0	943.5	1001.0	1010.9
52.5°	804.7	824.6	888.0	935.6	937.5
55°	741.3	765.1	828.5	866.2	862.2
57.5°	683.8	703.7	765.1	784.9	773.0
60°	622.4	640.2	701.7	703.7	685.8
62.5°	562.9	580.8	628.3	614.5	592.7
65°	503.5	521.3	555.0	529.2	509.4
67.5°	446.0	461.8	481.7	448.0	428.1
70°	384.5	406.3	408.3	368.7	348.9
72.5°	331.0	342.9	338.9	301.3	283.4
75°	271.5	285.4	267.6	231.9	218.0
77.5°	216.1	226.0	202.2	168.5	158.6
80°	160.6	166.5	138.7	113.0	107.0
82.5°	109.0	109.0	79.3	61.4	55.5
85°	63.4	55.5	33.7	29.7	29.7
87.5°	21.8	13.9	13.9	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)