

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: P258722

Luminaire Tested: **14CZ-LD5-35-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258722  
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-LD5-35-S-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3822.0 lumens  
Efficiency: N/A  
Efficacy: 133.0 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

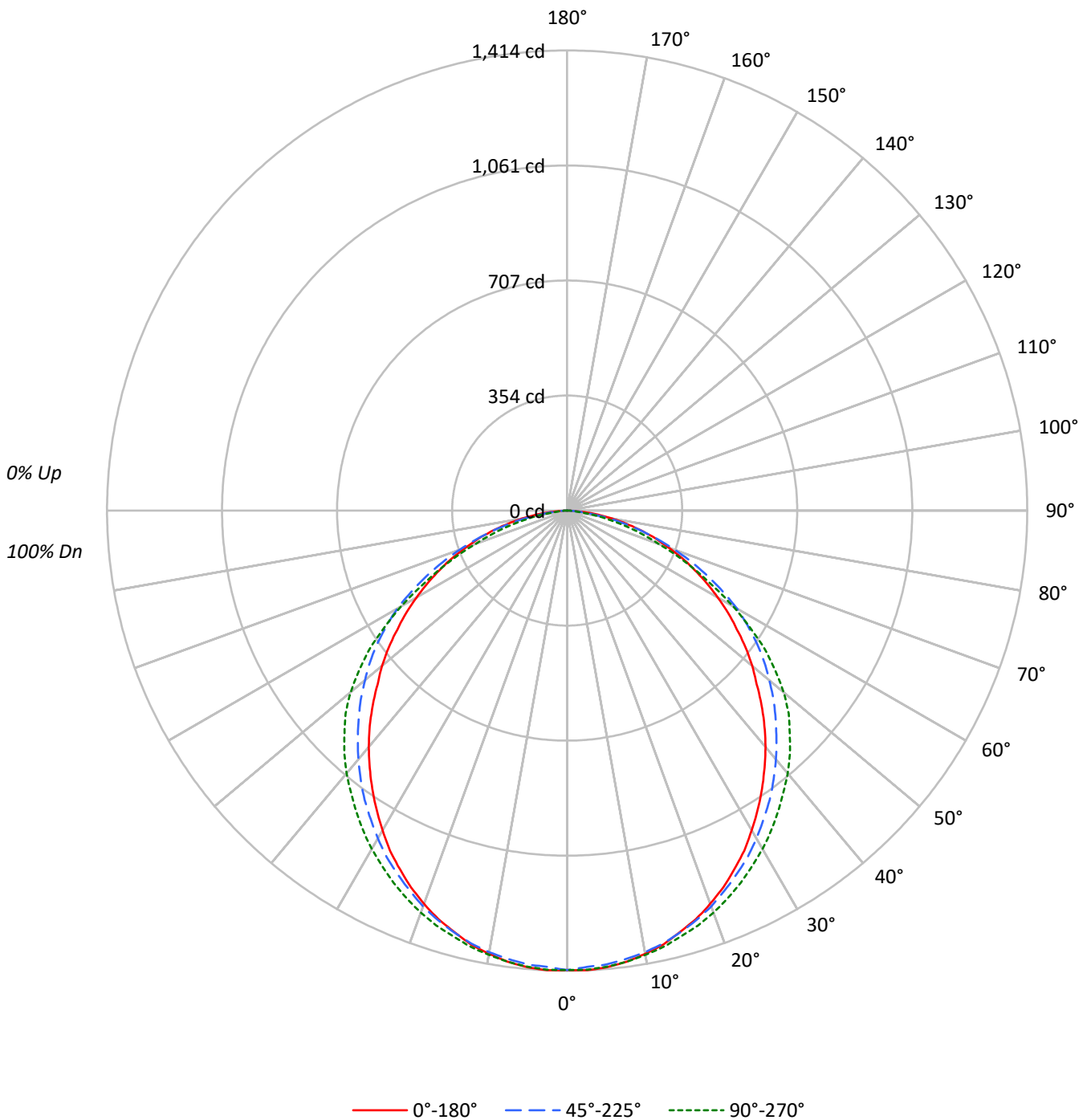
Input Watts (W): 28.737  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3799	3799	3799
5°	3805	3781	3800
10°	3779	3765	3788
15°	3734	3739	3772
20°	3682	3707	3765
25°	3611	3661	3747
30°	3525	3614	3731
35°	3430	3564	3710
40°	3332	3506	3703
45°	3215	3448	3682
50°	3108	3394	3636
55°	2989	3340	3476
60°	2878	3245	3172
65°	2755	3037	2787
70°	2600	2760	2358
75°	2426	2390	1947
80°	2139	1847	1426
85°	1683	895	787



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.4	3.5
10°-20°	380.1	9.9
20°-30°	570.4	14.9
30°-40°	680.0	17.8
40°-50°	700.4	18.3
50°-60°	624.2	16.3
60°-70°	449.8	11.8
70°-80°	235.2	6.2
80°-90°	48.6	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°	1083.8	28.4
0°-40°	1763.8	46.1
0°-60°	3088.4	80.8
0°-90°	3822.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3822.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1412	1412	1412	1412	1412	
5°	1408	1405	1400	1408	1407	134
15°	1340	1342	1342	1356	1354	378
25°	1216	1223	1233	1257	1262	560
35°	1044	1058	1085	1121	1129	653
45°	845	864	906	957	967	652
55°	637	657	712	744	741	571
65°	433	448	477	455	438	429
75°	233	245	230	199	187	247
85°	54	48	29	26	26	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1411.9	1411.9	1411.9	1411.9	1411.9
2.5°	1413.6	1410.2	1403.3	1411.9	1411.9
5°	1408.5	1405.1	1399.9	1408.5	1406.8
7.5°	1398.2	1394.8	1389.7	1399.9	1398.2
10°	1382.9	1381.2	1377.8	1388.0	1386.3
12.5°	1365.9	1364.2	1362.5	1372.7	1372.7
15°	1340.3	1342.0	1342.0	1355.7	1354.0
17.5°	1316.5	1318.2	1319.9	1336.9	1336.9
20°	1285.8	1287.5	1294.4	1313.1	1314.8
22.5°	1253.5	1255.2	1263.7	1285.8	1289.2
25°	1216.0	1222.8	1233.0	1256.9	1262.0
27.5°	1178.5	1183.6	1200.7	1227.9	1231.3
30°	1134.3	1144.5	1163.2	1193.9	1200.7
32.5°	1090.0	1101.9	1124.0	1158.1	1166.6
35°	1044.0	1057.6	1084.9	1120.6	1129.2
37.5°	996.3	1008.2	1042.3	1079.8	1091.7
40°	948.6	960.5	998.0	1040.6	1054.2
42.5°	897.5	914.6	952.0	999.7	1013.3
45°	844.7	863.5	906.0	957.1	967.4
47.5°	790.2	810.7	860.1	911.2	923.1
50°	742.5	761.3	810.7	860.1	868.6
52.5°	691.5	708.5	763.0	803.9	805.6
55°	637.0	657.4	711.9	744.3	740.8
57.5°	587.6	604.6	657.4	674.4	664.2
60°	534.8	550.1	602.9	604.6	589.3
62.5°	483.7	499.0	539.9	528.0	509.2
65°	432.6	447.9	476.9	454.7	437.7
67.5°	383.2	396.8	413.9	384.9	367.9
70°	330.4	349.1	350.8	316.8	299.7
72.5°	284.4	294.6	291.2	258.9	243.5
75°	233.3	245.2	229.9	199.3	187.3
77.5°	185.6	194.2	173.7	144.8	136.2
80°	138.0	143.1	119.2	97.1	92.0
82.5°	93.7	93.7	68.1	52.8	47.7
85°	54.5	47.7	29.0	25.5	25.5
87.5°	18.7	11.9	11.9	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)