

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: P258552

Luminaire Tested: **14CZ-LD5-35-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258552  
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-LD5-35-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3535.0 lumens  
Efficiency: N/A  
Efficacy: 128.9 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

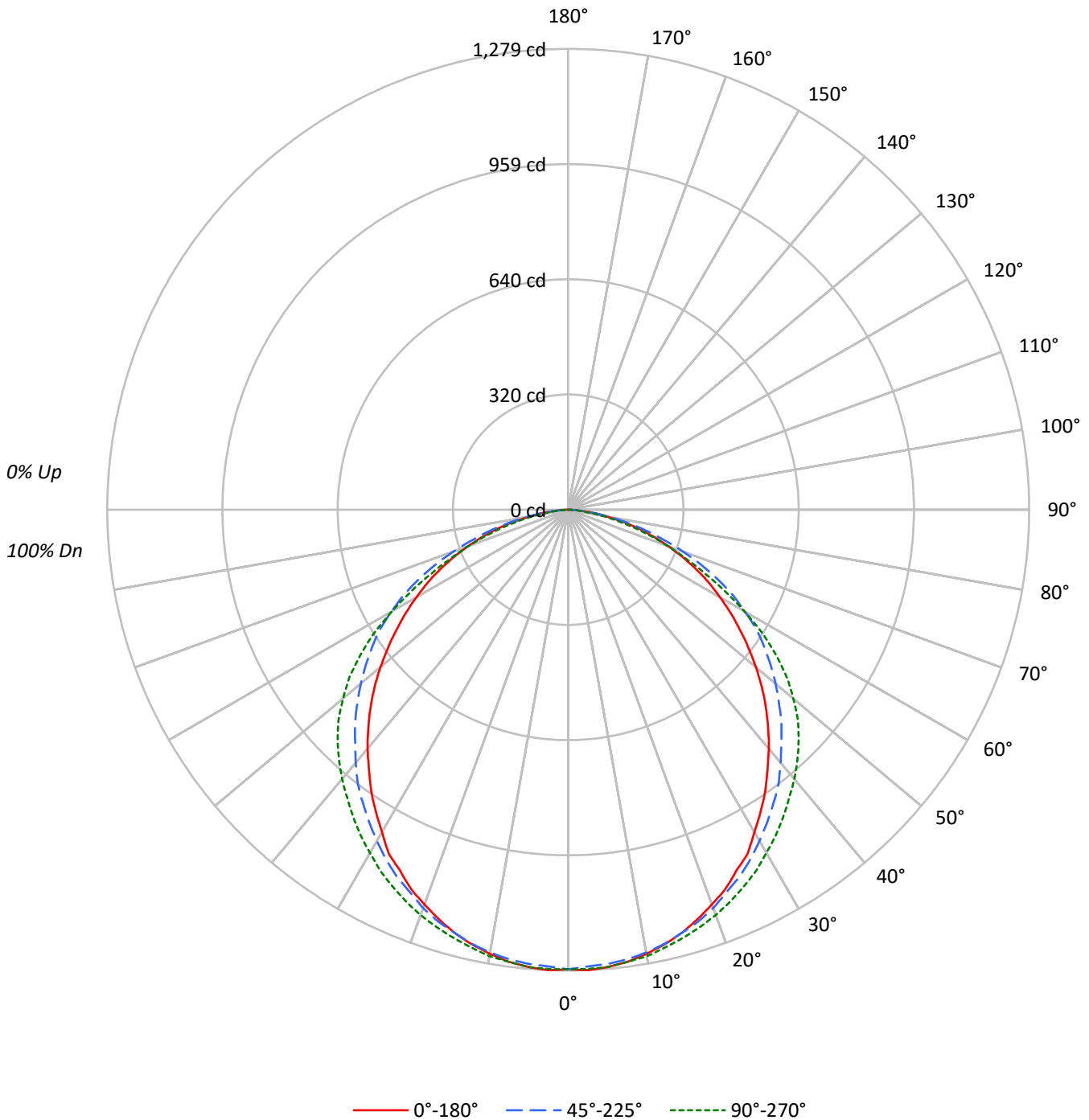
Input Watts (W): 27.435  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3433	3433	3433
5°	3441	3418	3441
10°	3419	3410	3438
15°	3389	3389	3428
20°	3339	3369	3429
25°	3281	3338	3426
30°	3211	3298	3417
35°	3132	3263	3418
40°	3042	3220	3428
45°	2951	3183	3442
50°	2846	3144	3414
55°	2731	3115	3303
60°	2617	3048	3039
65°	2497	2918	2663
70°	2317	2660	2304
75°	2102	2320	1903
80°	1674	1836	1404
85°	1183	1022	806



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.7	3.4
10°-20°	344.8	9.8
20°-30°	519.9	14.7
30°-40°	623.2	17.6
40°-50°	646.7	18.3
50°-60°	583.3	16.5
60°-70°	425.5	12.0
70°-80°	223.2	6.3
80°-90°	47.6	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°	985.4	27.9
0°-40°	1608.6	45.5
0°-60°	2838.6	80.3
0°-90°	3535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3535.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1274	1270	1265	1274	1274	121
15°	1216	1216	1216	1230	1230	343
25°	1105	1110	1124	1148	1154	510
35°	953	964	993	1030	1040	595
45°	776	791	836	887	904	598
55°	582	603	664	708	704	521
65°	392	415	458	441	418	388
75°	202	230	223	193	183	212
85°	38	47	33	28	26	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1275.7	1275.7	1275.7	1275.7	1275.7
2.5°	1279.2	1275.7	1268.7	1275.7	1275.7
5°	1273.9	1270.5	1265.2	1273.9	1273.9
7.5°	1265.2	1261.7	1258.3	1267.0	1265.2
10°	1251.3	1249.5	1247.8	1258.3	1258.3
12.5°	1235.6	1235.6	1233.9	1246.1	1244.3
15°	1216.4	1216.4	1216.4	1230.4	1230.4
17.5°	1192.0	1195.5	1199.0	1214.7	1214.7
20°	1165.9	1169.4	1176.3	1195.5	1197.3
22.5°	1139.7	1141.5	1148.5	1171.1	1176.3
25°	1104.9	1110.1	1124.1	1148.5	1153.7
27.5°	1077.0	1078.8	1094.4	1122.3	1129.3
30°	1033.4	1045.6	1061.3	1092.7	1099.7
32.5°	993.4	1003.8	1028.2	1061.3	1071.8
35°	953.3	963.7	993.4	1030.0	1040.4
37.5°	908.0	923.6	958.5	995.1	1007.3
40°	866.1	880.1	916.7	962.0	975.9
42.5°	820.8	834.8	874.9	925.4	941.1
45°	775.5	791.2	836.5	887.1	904.5
47.5°	728.5	745.9	792.9	848.7	864.4
50°	679.7	698.8	751.1	808.6	815.6
52.5°	630.9	651.8	707.6	758.1	765.1
55°	582.1	603.0	664.0	707.6	704.1
57.5°	535.0	557.7	620.4	643.1	639.6
60°	486.2	510.6	566.4	576.8	564.6
62.5°	440.9	463.6	515.8	507.1	491.5
65°	392.1	414.8	458.3	440.9	418.3
67.5°	343.3	371.2	399.1	369.5	352.0
70°	294.5	325.9	338.1	308.5	292.8
72.5°	247.5	280.6	277.1	247.5	237.0
75°	202.2	230.0	223.1	193.4	183.0
77.5°	153.4	184.7	169.0	144.6	135.9
80°	108.0	135.9	118.5	97.6	90.6
82.5°	71.5	90.6	73.2	57.5	52.3
85°	38.3	47.1	33.1	27.9	26.1
87.5°	15.7	13.9	12.2	12.2	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)