

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: P258753

Luminaire Tested: **14CZ-LD5-35-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258753  
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-L93050-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3368.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 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

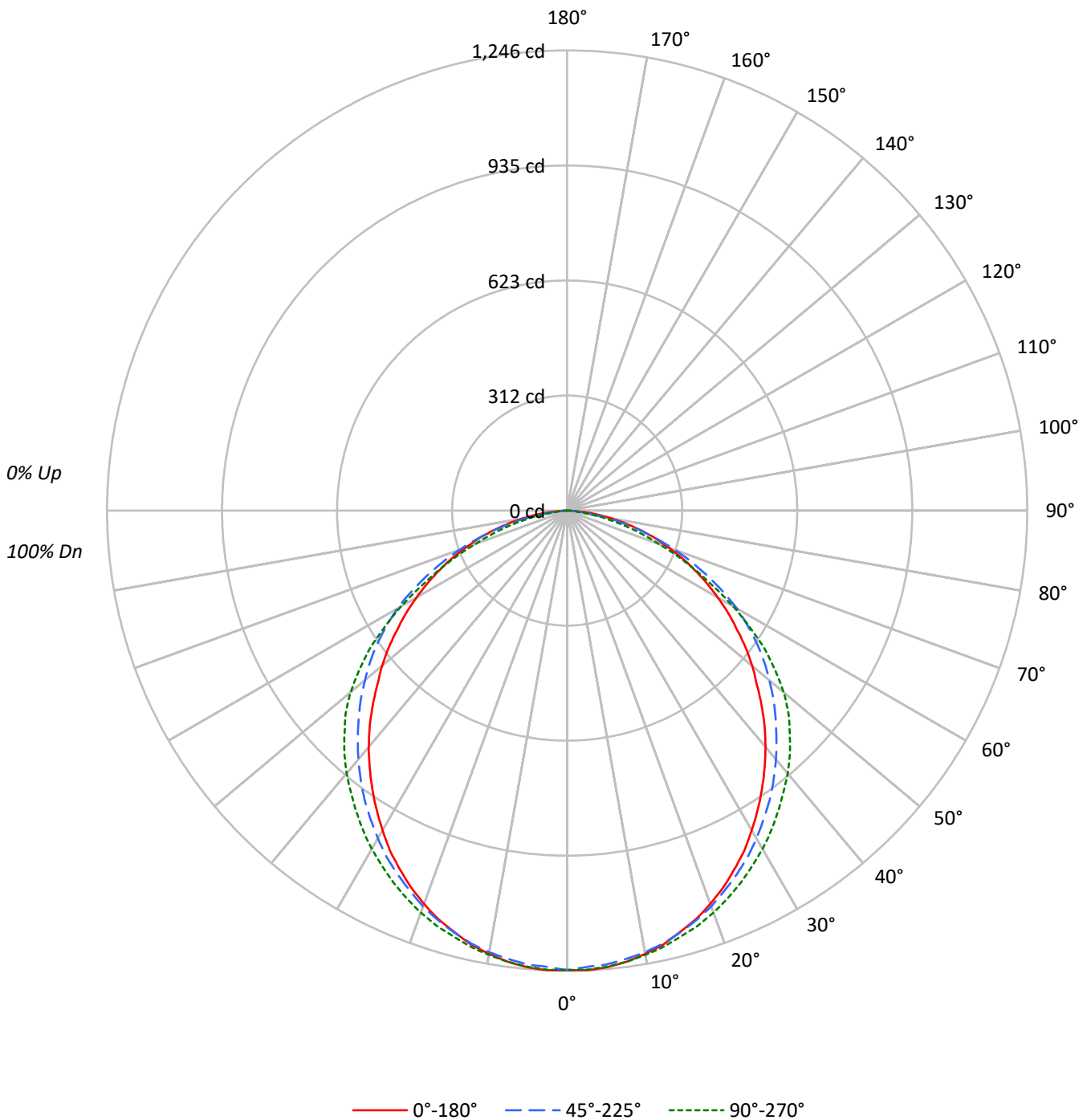
Input Watts (W): 28.551  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3348	3348	3348
5°	3353	3332	3348
10°	3330	3318	3338
15°	3290	3295	3324
20°	3245	3266	3318
25°	3182	3226	3302
30°	3106	3185	3287
35°	3022	3141	3269
40°	2936	3090	3263
45°	2833	3038	3244
50°	2739	2991	3204
55°	2633	2943	3063
60°	2536	2859	2795
65°	2427	2676	2456
70°	2290	2433	2078
75°	2138	2106	1717
80°	1884	1629	1255
85°	1482	787	695



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.6	3.5
10°-20°	334.9	9.9
20°-30°	502.6	14.9
30°-40°	599.2	17.8
40°-50°	617.2	18.3
50°-60°	550.0	16.3
60°-70°	396.3	11.8
70°-80°	207.3	6.2
80°-90°	42.9	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°	955.1	28.4
0°-40°	1554.3	46.1
0°-60°	2721.5	80.8
0°-90°	3368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3368.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1244	1244	1244	1244	1244	
5°	1241	1238	1234	1241	1240	118
15°	1181	1183	1183	1195	1193	333
25°	1072	1078	1087	1108	1112	494
35°	920	932	956	988	995	575
45°	744	761	798	843	852	574
55°	561	579	627	656	653	503
65°	381	395	420	401	386	378
75°	206	216	203	176	165	218
85°	48	42	26	22	22	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1244.1	1244.1	1244.1	1244.1	1244.1
2.5°	1245.6	1242.6	1236.6	1244.1	1244.1
5°	1241.1	1238.1	1233.6	1241.1	1239.6
7.5°	1232.1	1229.1	1224.6	1233.6	1232.1
10°	1218.6	1217.1	1214.1	1223.1	1221.6
12.5°	1203.6	1202.1	1200.6	1209.6	1209.6
15°	1181.1	1182.6	1182.6	1194.6	1193.1
17.5°	1160.1	1161.6	1163.1	1178.1	1178.1
20°	1133.1	1134.6	1140.6	1157.1	1158.6
22.5°	1104.6	1106.1	1113.6	1133.1	1136.1
25°	1071.6	1077.6	1086.6	1107.6	1112.1
27.5°	1038.5	1043.0	1058.0	1082.1	1085.1
30°	999.5	1008.5	1025.0	1052.0	1058.0
32.5°	960.5	971.0	990.5	1020.5	1028.0
35°	920.0	932.0	956.0	987.5	995.0
37.5°	878.0	888.5	918.5	951.5	962.0
40°	835.9	846.4	879.5	917.0	929.0
42.5°	790.9	805.9	838.9	881.0	893.0
45°	744.4	760.9	798.4	843.4	852.4
47.5°	696.4	714.4	757.9	802.9	813.4
50°	654.3	670.8	714.4	757.9	765.4
52.5°	609.3	624.3	672.3	708.4	709.9
55°	561.3	579.3	627.3	655.8	652.8
57.5°	517.8	532.8	579.3	594.3	585.3
60°	471.2	484.7	531.3	532.8	519.3
62.5°	426.2	439.7	475.7	465.2	448.7
65°	381.2	394.7	420.2	400.7	385.7
67.5°	337.7	349.7	364.7	339.2	324.2
70°	291.1	307.7	309.2	279.1	264.1
72.5°	250.6	259.6	256.6	228.1	214.6
75°	205.6	216.1	202.6	175.6	165.1
77.5°	163.6	171.1	153.1	127.6	120.1
80°	121.6	126.1	105.1	85.5	81.0
82.5°	82.5	82.5	60.0	46.5	42.0
85°	48.0	42.0	25.5	22.5	22.5
87.5°	16.5	10.5	10.5	10.5	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)