

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: P258857

Luminaire Tested: **14CZ-LD5-39-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258857  
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-LD5-39-S-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3514.0 lumens  
Efficiency: N/A  
Efficacy: 112.1 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

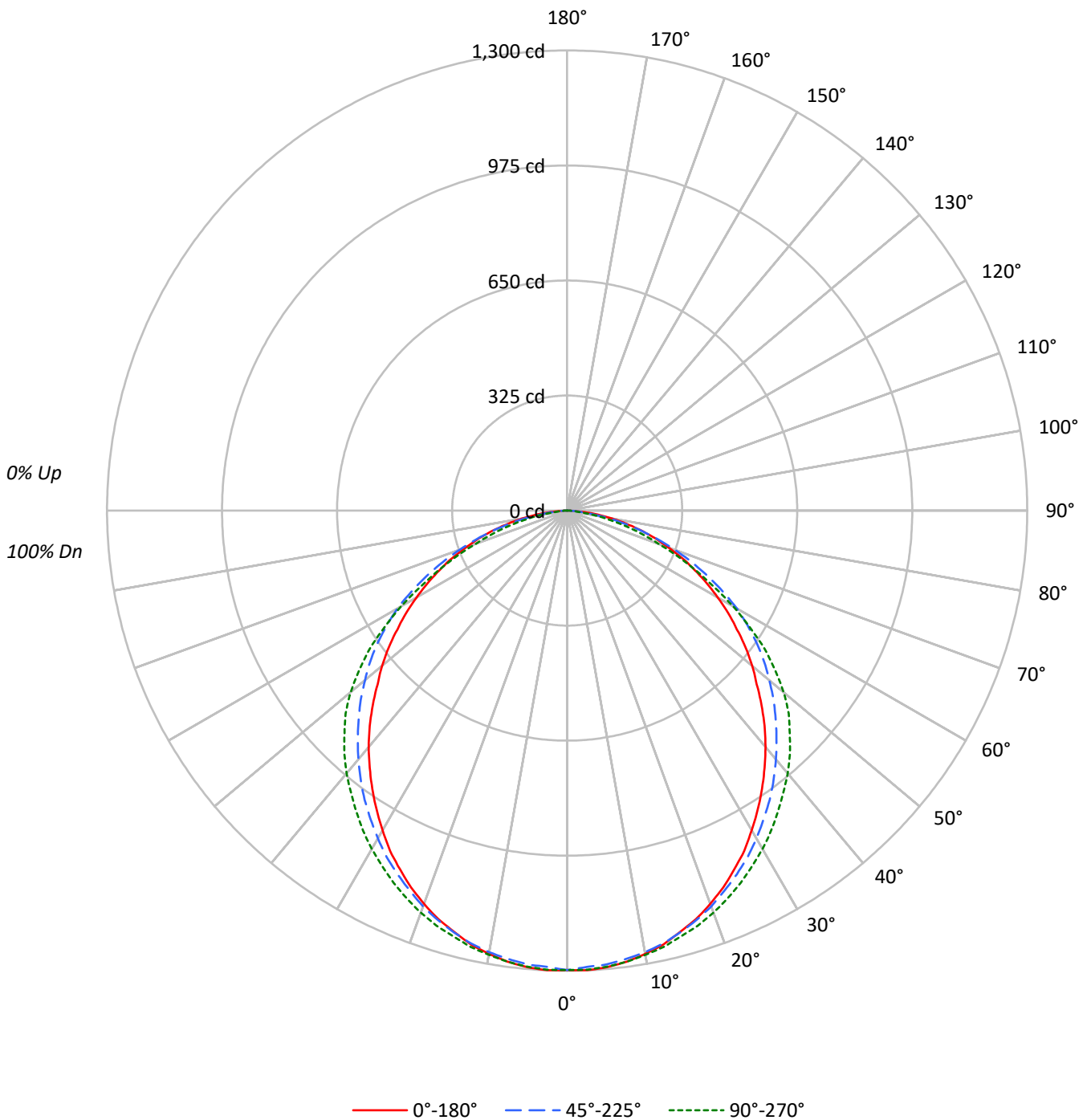
Input Watts (W): 31.341  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3493	3493	3493
5°	3498	3477	3494
10°	3474	3462	3483
15°	3433	3438	3468
20°	3385	3408	3462
25°	3320	3366	3445
30°	3240	3323	3430
35°	3153	3277	3410
40°	3064	3223	3405
45°	2956	3170	3385
50°	2858	3120	3343
55°	2747	3071	3195
60°	2646	2983	2916
65°	2532	2791	2562
70°	2390	2538	2168
75°	2230	2198	1790
80°	1965	1698	1311
85°	1547	821	726



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.7	3.5
10°-20°	349.4	9.9
20°-30°	524.4	14.9
30°-40°	625.2	17.8
40°-50°	644.0	18.3
50°-60°	573.9	16.3
60°-70°	413.5	11.8
70°-80°	216.3	6.2
80°-90°	44.7	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°	996.5	28.4
0°-40°	1621.7	46.1
0°-60°	2839.5	80.8
0°-90°	3514.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3514.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1295	1292	1287	1295	1293	123
15°	1232	1234	1234	1246	1245	348
25°	1118	1124	1134	1156	1160	515
35°	960	972	997	1030	1038	600
45°	777	794	833	880	889	599
55°	586	604	654	684	681	525
65°	398	412	438	418	402	394
75°	214	226	211	183	172	227
85°	50	44	27	24	24	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1298.1	1298.1	1298.1	1298.1	1298.1
2.5°	1299.6	1296.5	1290.2	1298.1	1298.1
5°	1294.9	1291.8	1287.1	1294.9	1293.4
7.5°	1285.5	1282.4	1277.7	1287.1	1285.5
10°	1271.5	1269.9	1266.8	1276.2	1274.6
12.5°	1255.8	1254.2	1252.7	1262.1	1262.1
15°	1232.3	1233.9	1233.9	1246.4	1244.8
17.5°	1210.4	1212.0	1213.5	1229.2	1229.2
20°	1182.2	1183.8	1190.0	1207.3	1208.8
22.5°	1152.5	1154.0	1161.8	1182.2	1185.3
25°	1118.0	1124.3	1133.7	1155.6	1160.3
27.5°	1083.6	1088.3	1103.9	1129.0	1132.1
30°	1042.8	1052.2	1069.5	1097.6	1103.9
32.5°	1002.1	1013.1	1033.4	1064.8	1072.6
35°	959.9	972.4	997.4	1030.3	1038.1
37.5°	916.0	927.0	958.3	992.7	1003.7
40°	872.2	883.1	917.6	956.7	969.2
42.5°	825.2	840.9	875.3	919.1	931.7
45°	776.7	793.9	833.0	880.0	889.4
47.5°	726.5	745.3	790.7	837.7	848.7
50°	682.7	699.9	745.3	790.7	798.6
52.5°	635.7	651.4	701.5	739.1	740.6
55°	585.6	604.4	654.5	684.3	681.1
57.5°	540.2	555.9	604.4	620.1	610.7
60°	491.7	505.8	554.3	555.9	541.8
62.5°	444.7	458.8	496.4	485.4	468.2
65°	397.7	411.8	438.4	418.1	402.4
67.5°	352.3	364.8	380.5	353.9	338.2
70°	303.8	321.0	322.6	291.2	275.6
72.5°	261.5	270.9	267.8	238.0	223.9
75°	214.5	225.5	211.4	183.2	172.2
77.5°	170.7	178.5	159.7	133.1	125.3
80°	126.8	131.5	109.6	89.3	84.6
82.5°	86.1	86.1	62.6	48.5	43.8
85°	50.1	43.8	26.6	23.5	23.5
87.5°	17.2	11.0	11.0	11.0	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)