

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: P258762

Luminaire Tested: **14CZ-LD5-44-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258762  
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-L93050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4155.0 lumens  
Efficiency: N/A  
Efficacy: 112.0 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

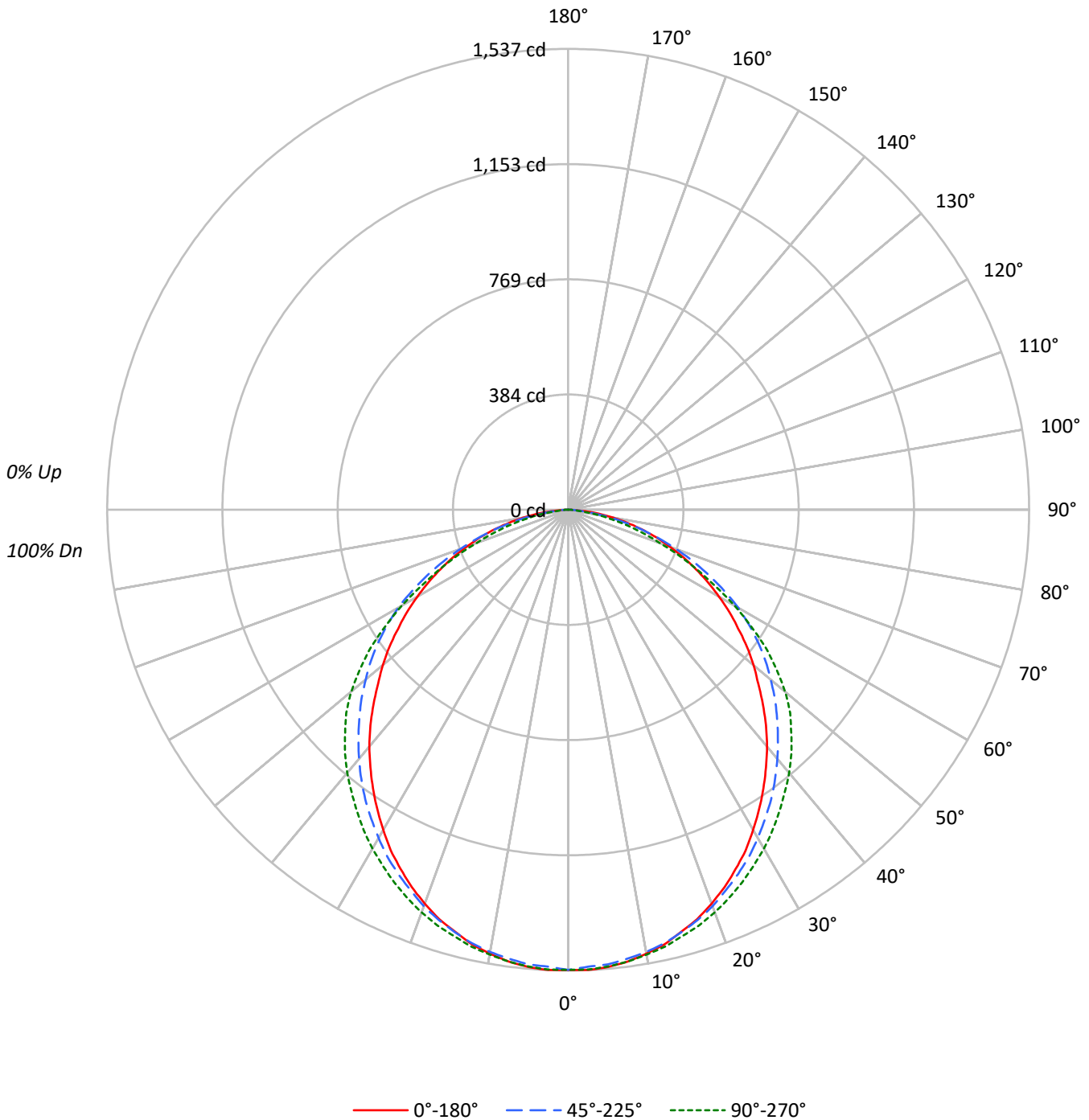
Input Watts (W): 37.107  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4130	4130	4130
5°	4136	4111	4131
10°	4108	4093	4118
15°	4059	4064	4101
20°	4003	4029	4093
25°	3925	3980	4073
30°	3832	3929	4056
35°	3728	3874	4032
40°	3623	3811	4026
45°	3495	3749	4002
50°	3379	3689	3953
55°	3248	3631	3779
60°	3129	3527	3448
65°	2995	3301	3030
70°	2826	3001	2564
75°	2637	2598	2118
80°	2325	2008	1550
85°	1828	973	858



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.0	3.5
10°-20°	413.2	9.9
20°-30°	620.1	14.9
30°-40°	739.2	17.8
40°-50°	761.4	18.3
50°-60°	678.6	16.3
60°-70°	488.9	11.8
70°-80°	255.7	6.2
80°-90°	52.9	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°	1178.3	28.4
0°-40°	1917.5	46.1
0°-60°	3357.5	80.8
0°-90°	4155.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4155.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1535	1535	1535	1535	1535	
5°	1531	1528	1522	1531	1529	145
15°	1457	1459	1459	1474	1472	411
25°	1322	1329	1340	1366	1372	609
35°	1135	1150	1179	1218	1228	710
45°	918	939	985	1040	1052	709
55°	692	715	774	809	805	621
65°	470	487	518	494	476	466
75°	254	267	250	217	204	269
85°	59	52	32	28	28	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1534.9	1534.9	1534.9	1534.9	1534.9
2.5°	1536.7	1533.0	1525.6	1534.9	1534.9
5°	1531.2	1527.5	1521.9	1531.2	1529.3
7.5°	1520.0	1516.3	1510.8	1521.9	1520.0
10°	1503.4	1501.5	1497.8	1508.9	1507.1
12.5°	1484.9	1483.0	1481.2	1492.3	1492.3
15°	1457.1	1458.9	1458.9	1473.8	1471.9
17.5°	1431.2	1433.0	1434.9	1453.4	1453.4
20°	1397.9	1399.7	1407.1	1427.5	1429.3
22.5°	1362.7	1364.5	1373.8	1397.9	1401.6
25°	1321.9	1329.3	1340.5	1366.4	1371.9
27.5°	1281.2	1286.8	1305.3	1334.9	1338.6
30°	1233.1	1244.2	1264.5	1297.9	1305.3
32.5°	1184.9	1197.9	1222.0	1259.0	1268.2
35°	1134.9	1149.8	1179.4	1218.3	1227.5
37.5°	1083.1	1096.1	1133.1	1173.8	1186.8
40°	1031.3	1044.2	1085.0	1131.2	1146.1
42.5°	975.7	994.2	1035.0	1086.8	1101.6
45°	918.3	938.7	985.0	1040.5	1051.6
47.5°	859.1	881.3	935.0	990.5	1003.5
50°	807.2	827.6	881.3	935.0	944.2
52.5°	751.7	770.2	829.5	873.9	875.7
55°	692.4	714.7	773.9	809.1	805.4
57.5°	638.8	657.3	714.7	733.2	722.1
60°	581.4	598.0	655.4	657.3	640.6
62.5°	525.8	542.5	586.9	574.0	553.6
65°	470.3	486.9	518.4	494.3	475.8
67.5°	416.6	431.4	449.9	418.4	399.9
70°	359.2	379.5	381.4	344.4	325.9
72.5°	309.2	320.3	316.6	281.4	264.8
75°	253.6	266.6	249.9	216.6	203.7
77.5°	201.8	211.1	188.8	157.4	148.1
80°	150.0	155.5	129.6	105.5	100.0
82.5°	101.8	101.8	74.1	57.4	51.8
85°	59.2	51.8	31.5	27.8	27.8
87.5°	20.4	13.0	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)