

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: P258813

Luminaire Tested: **14CZ-LD5-44-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258813  
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-L82765-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: 4519.0 lumens  
Efficiency: N/A  
Efficacy: 124.6 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

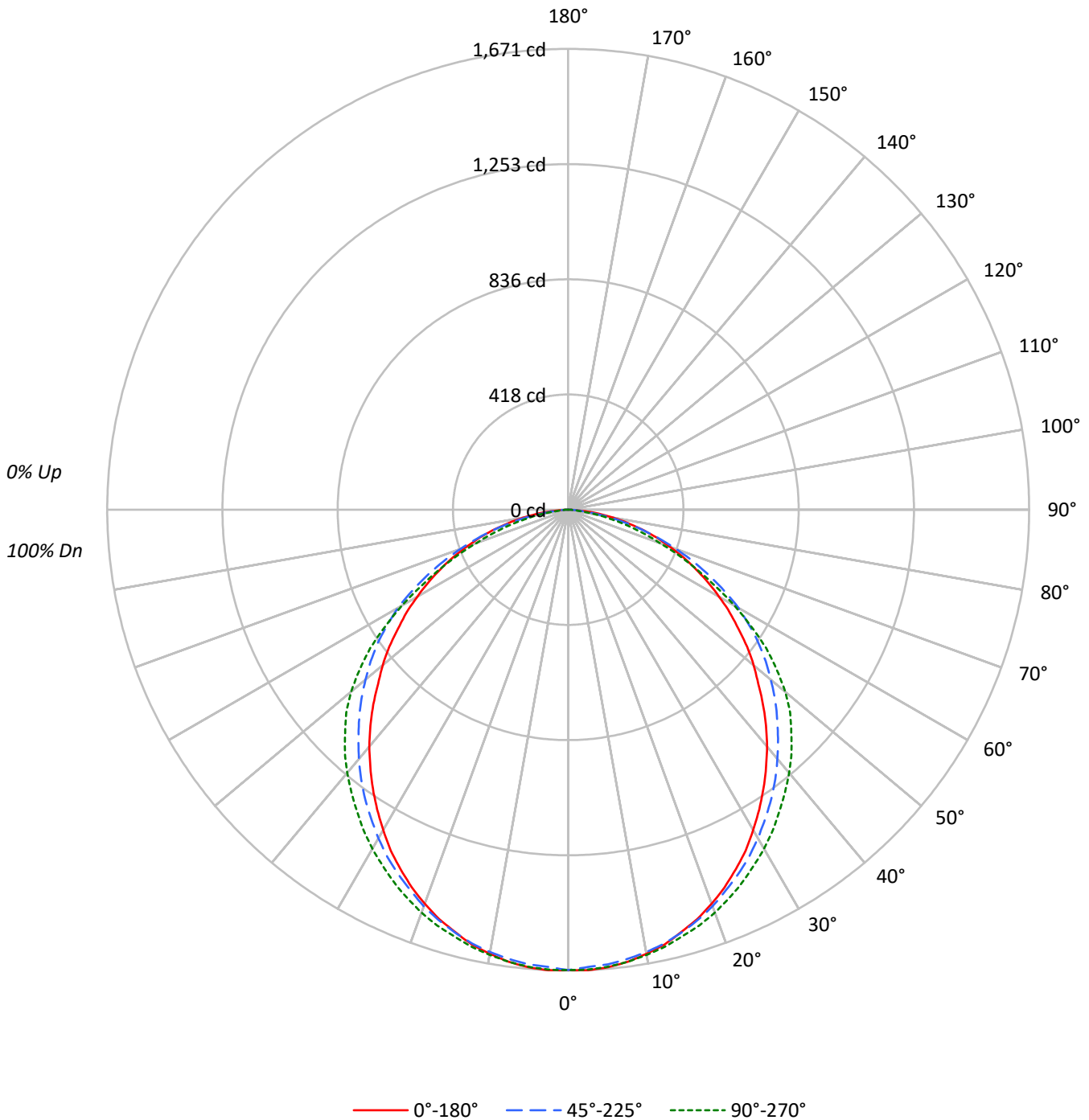
Input Watts (W): 36.27  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4492	4492	4492
5°	4498	4471	4493
10°	4468	4451	4479
15°	4415	4421	4460
20°	4354	4383	4452
25°	4269	4329	4430
30°	4167	4273	4411
35°	4055	4214	4386
40°	3940	4145	4379
45°	3801	4077	4353
50°	3676	4013	4299
55°	3533	3949	4109
60°	3403	3836	3750
65°	3257	3590	3295
70°	3073	3264	2788
75°	2869	2826	2303
80°	2528	2185	1684
85°	1988	1056	932



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.7	3.5
10°-20°	449.4	9.9
20°-30°	674.4	14.9
30°-40°	804.0	17.8
40°-50°	828.1	18.3
50°-60°	738.0	16.3
60°-70°	531.8	11.8
70°-80°	278.1	6.2
80°-90°	57.5	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°	1281.5	28.4
0°-40°	2085.5	46.1
0°-60°	3651.6	80.8
0°-90°	4519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4519.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1669	1669	1669	1669	1669	
5°	1665	1661	1655	1665	1663	158
15°	1585	1587	1587	1603	1601	447
25°	1438	1446	1458	1486	1492	662
35°	1234	1250	1283	1325	1335	772
45°	999	1021	1071	1132	1144	771
55°	753	777	842	880	876	675
65°	512	530	564	538	518	507
75°	276	290	272	236	222	292
85°	64	56	34	30	30	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1669.3	1669.3	1669.3	1669.3	1669.3
2.5°	1671.3	1667.3	1659.3	1669.3	1669.3
5°	1665.3	1661.3	1655.2	1665.3	1663.3
7.5°	1653.2	1649.2	1643.1	1655.2	1653.2
10°	1635.1	1633.1	1629.0	1641.1	1639.1
12.5°	1615.0	1612.9	1610.9	1623.0	1623.0
15°	1584.7	1586.8	1586.8	1602.9	1600.9
17.5°	1556.6	1558.6	1560.6	1580.7	1580.7
20°	1520.3	1522.3	1530.4	1552.5	1554.5
22.5°	1482.1	1484.1	1494.1	1520.3	1524.3
25°	1437.7	1445.8	1457.9	1486.1	1492.1
27.5°	1393.4	1399.5	1419.6	1451.8	1455.9
30°	1341.1	1353.2	1375.3	1411.6	1419.6
32.5°	1288.7	1302.8	1329.0	1369.3	1379.4
35°	1234.4	1250.5	1282.7	1325.0	1335.1
37.5°	1178.0	1192.1	1232.4	1276.7	1290.8
40°	1121.6	1135.7	1180.0	1230.3	1246.5
42.5°	1061.2	1081.3	1125.6	1182.0	1198.1
45°	998.8	1020.9	1071.3	1131.7	1143.8
47.5°	934.3	958.5	1016.9	1077.3	1091.4
50°	878.0	900.1	958.5	1016.9	1027.0
52.5°	817.5	837.7	902.1	950.4	952.5
55°	753.1	777.3	841.7	880.0	875.9
57.5°	694.7	714.8	777.3	797.4	785.3
60°	632.3	650.4	712.8	714.8	696.7
62.5°	571.9	590.0	638.3	624.2	602.1
65°	511.5	529.6	563.8	537.6	517.5
67.5°	453.1	469.2	489.3	455.1	434.9
70°	390.6	412.8	414.8	374.5	354.4
72.5°	336.3	348.4	344.3	306.1	288.0
75°	275.9	290.0	271.8	235.6	221.5
77.5°	219.5	229.6	205.4	171.2	161.1
80°	163.1	169.1	141.0	114.8	108.7
82.5°	110.8	110.8	80.5	62.4	56.4
85°	64.4	56.4	34.2	30.2	30.2
87.5°	22.2	14.1	14.1	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)