

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: P258817

Luminaire Tested: **14CZ-LD5-44-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258817  
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-6500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4649.0 lumens  
Efficiency: N/A  
Efficacy: 125.0 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

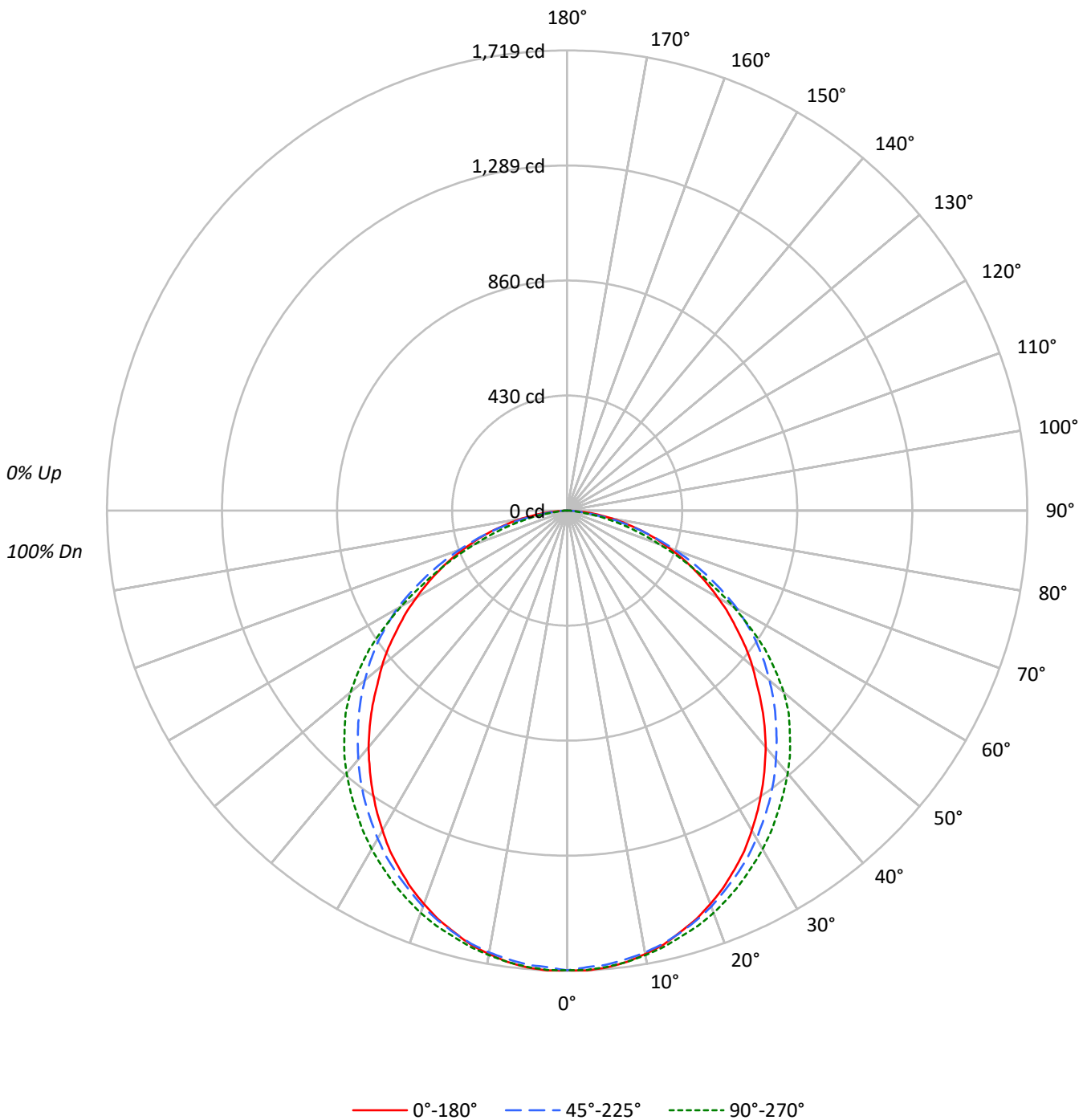
Input Watts (W): 37.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258817

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L82765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P258817

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L82765-W2A1-U-6500K

**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°	4621	4621	4621
5°	4628	4600	4622
10°	4596	4579	4608
15°	4542	4548	4588
20°	4479	4509	4580
25°	4392	4453	4558
30°	4287	4396	4538
35°	4172	4335	4512
40°	4053	4264	4504
45°	3910	4194	4478
50°	3781	4128	4423
55°	3635	4062	4228
60°	3501	3947	3858
65°	3351	3693	3390
70°	3162	3357	2869
75°	2951	2908	2370
80°	2600	2247	1734
85°	2047	1087	960



TEST NUMBER: P258817

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L82765-W2A1-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.3	3.5
10°-20°	462.3	9.9
20°-30°	693.8	14.9
30°-40°	827.1	17.8
40°-50°	851.9	18.3
50°-60°	759.3	16.3
60°-70°	547.1	11.8
70°-80°	286.1	6.2
80°-90°	59.2	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°	1318.3	28.4
0°-40°	2145.4	46.1
0°-60°	3756.6	80.8
0°-90°	4649.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4649.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1717	1717	1717	1717	1717	
5°	1713	1709	1703	1713	1711	163
15°	1630	1632	1632	1649	1647	460
25°	1479	1487	1500	1529	1535	681
35°	1270	1286	1320	1363	1374	794
45°	1028	1050	1102	1164	1177	793
55°	775	800	866	905	901	695
65°	526	545	580	553	532	521
75°	284	298	280	242	228	301
85°	66	58	35	31	31	78
90°	0	0	0	0	0	



TEST NUMBER: P258817

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L82765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1717.3	1717.3	1717.3	1717.3	1717.3
2.5°	1719.4	1715.3	1707.0	1717.3	1717.3
5°	1713.2	1709.1	1702.8	1713.2	1711.1
7.5°	1700.8	1696.6	1690.4	1702.8	1700.8
10°	1682.1	1680.1	1675.9	1688.3	1686.3
12.5°	1661.4	1659.3	1657.3	1669.7	1669.7
15°	1630.3	1632.4	1632.4	1649.0	1646.9
17.5°	1601.3	1603.4	1605.5	1626.2	1626.2
20°	1564.0	1566.1	1574.4	1597.2	1599.3
22.5°	1524.7	1526.8	1537.1	1564.0	1568.2
25°	1479.1	1487.4	1499.8	1528.8	1535.0
27.5°	1433.5	1439.8	1460.5	1493.6	1497.8
30°	1379.7	1392.1	1414.9	1452.2	1460.5
32.5°	1325.8	1340.3	1367.2	1408.7	1419.0
35°	1269.9	1286.5	1319.6	1363.1	1373.5
37.5°	1211.9	1226.4	1267.8	1313.4	1327.9
40°	1153.9	1168.4	1213.9	1265.7	1282.3
42.5°	1091.7	1112.4	1158.0	1216.0	1232.6
45°	1027.5	1050.3	1102.1	1164.2	1176.7
47.5°	961.2	986.1	1046.1	1108.3	1122.8
50°	903.2	926.0	986.1	1046.1	1056.5
52.5°	841.1	861.8	928.1	977.8	979.9
55°	774.8	799.6	865.9	905.3	901.1
57.5°	714.7	735.4	799.6	820.3	807.9
60°	650.5	669.1	733.3	735.4	716.8
62.5°	588.3	607.0	656.7	642.2	619.4
65°	526.2	544.8	580.0	553.1	532.4
67.5°	466.1	482.7	503.4	468.2	447.5
70°	401.9	424.7	426.7	385.3	364.6
72.5°	346.0	358.4	354.2	314.9	296.2
75°	283.8	298.3	279.7	242.4	227.9
77.5°	225.8	236.2	211.3	176.1	165.7
80°	167.8	174.0	145.0	118.1	111.9
82.5°	113.9	113.9	82.9	64.2	58.0
85°	66.3	58.0	35.2	31.1	31.1
87.5°	22.8	14.5	14.5	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)