

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: P258731

Luminaire Tested: **14CZ-LD5-44-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258731
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-L83050-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4670.7 lumens
Efficiency: N/A
Efficacy: 128.1 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

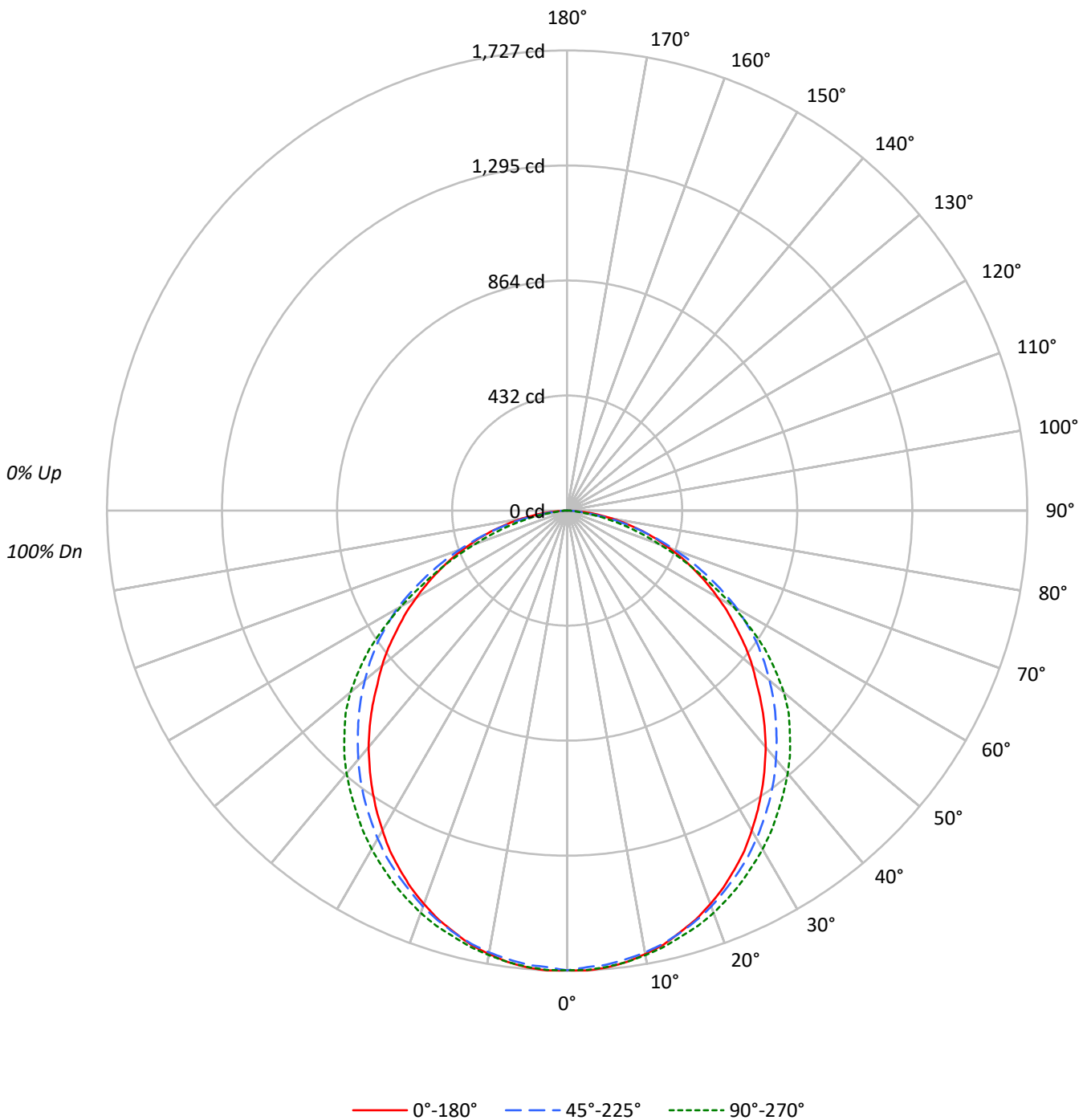
Input Watts (W): 36.456
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4643	4643	4643
5°	4649	4621	4644
10°	4618	4601	4629
15°	4563	4569	4610
20°	4500	4529	4601
25°	4412	4474	4579
30°	4307	4417	4559
35°	4191	4355	4533
40°	4072	4284	4526
45°	3929	4214	4499
50°	3799	4147	4443
55°	3652	4082	4247
60°	3517	3965	3876
65°	3366	3710	3406
70°	3177	3373	2882
75°	2964	2922	2380
80°	2613	2258	1742
85°	2056	1093	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.0	3.5
10°-20°	464.5	9.9
20°-30°	697.0	14.9
30°-40°	830.9	17.8
40°-50°	855.9	18.3
50°-60°	762.8	16.3
60°-70°	549.6	11.8
70°-80°	287.5	6.2
80°-90°	59.5	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°	1324.5	28.4
0°-40°	2155.4	46.1
0°-60°	3774.1	80.8
0°-90°	4670.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4670.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1725	1725	1725	1725	1725	
5°	1721	1717	1711	1721	1719	163
15°	1638	1640	1640	1657	1655	462
25°	1486	1494	1507	1536	1542	684
35°	1276	1292	1326	1369	1380	798
45°	1032	1055	1107	1170	1182	797
55°	778	803	870	910	905	698
65°	529	547	583	556	535	524
75°	285	300	281	244	229	302
85°	67	58	35	31	31	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1725.3	1725.3	1725.3	1725.3	1725.3
2.5°	1727.4	1723.3	1714.9	1725.3	1725.3
5°	1721.2	1717.0	1710.8	1721.2	1719.1
7.5°	1708.7	1704.5	1698.3	1710.8	1708.7
10°	1690.0	1687.9	1683.7	1696.2	1694.1
12.5°	1669.1	1667.1	1665.0	1677.5	1677.5
15°	1637.9	1640.0	1640.0	1656.7	1654.6
17.5°	1608.8	1610.9	1612.9	1633.8	1633.8
20°	1571.3	1573.4	1581.7	1604.6	1606.7
22.5°	1531.8	1533.9	1544.3	1571.3	1575.5
25°	1486.0	1494.3	1506.8	1535.9	1542.2
27.5°	1440.2	1446.4	1467.3	1500.6	1504.7
30°	1386.1	1398.6	1421.5	1458.9	1467.3
32.5°	1332.0	1346.6	1373.6	1415.2	1425.6
35°	1275.8	1292.4	1325.7	1369.4	1379.8
37.5°	1217.5	1232.1	1273.7	1319.5	1334.1
40°	1159.2	1173.8	1219.6	1271.6	1288.3
42.5°	1096.8	1117.6	1163.4	1221.7	1238.3
45°	1032.3	1055.2	1107.2	1169.6	1182.1
47.5°	965.7	990.7	1051.0	1113.5	1128.0
50°	907.4	930.3	990.7	1051.0	1061.4
52.5°	845.0	865.8	932.4	982.3	984.4
55°	778.4	803.4	870.0	909.5	905.3
57.5°	718.0	738.8	803.4	824.2	811.7
60°	653.5	672.2	736.8	738.8	720.1
62.5°	591.1	609.8	659.7	645.2	622.3
65°	528.6	547.4	582.7	555.7	534.9
67.5°	468.3	484.9	505.7	470.4	449.5
70°	403.8	426.7	428.7	387.1	366.3
72.5°	347.6	360.1	355.9	316.3	297.6
75°	285.1	299.7	281.0	243.5	228.9
77.5°	226.9	237.3	212.3	176.9	166.5
80°	168.6	174.8	145.7	118.6	112.4
82.5°	114.5	114.5	83.2	64.5	58.3
85°	66.6	58.3	35.4	31.2	31.2
87.5°	22.9	14.6	14.6	14.6	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)