

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: P258566

Luminaire Tested: **14CZ-LD5-20-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258566  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-20-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1640.0 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

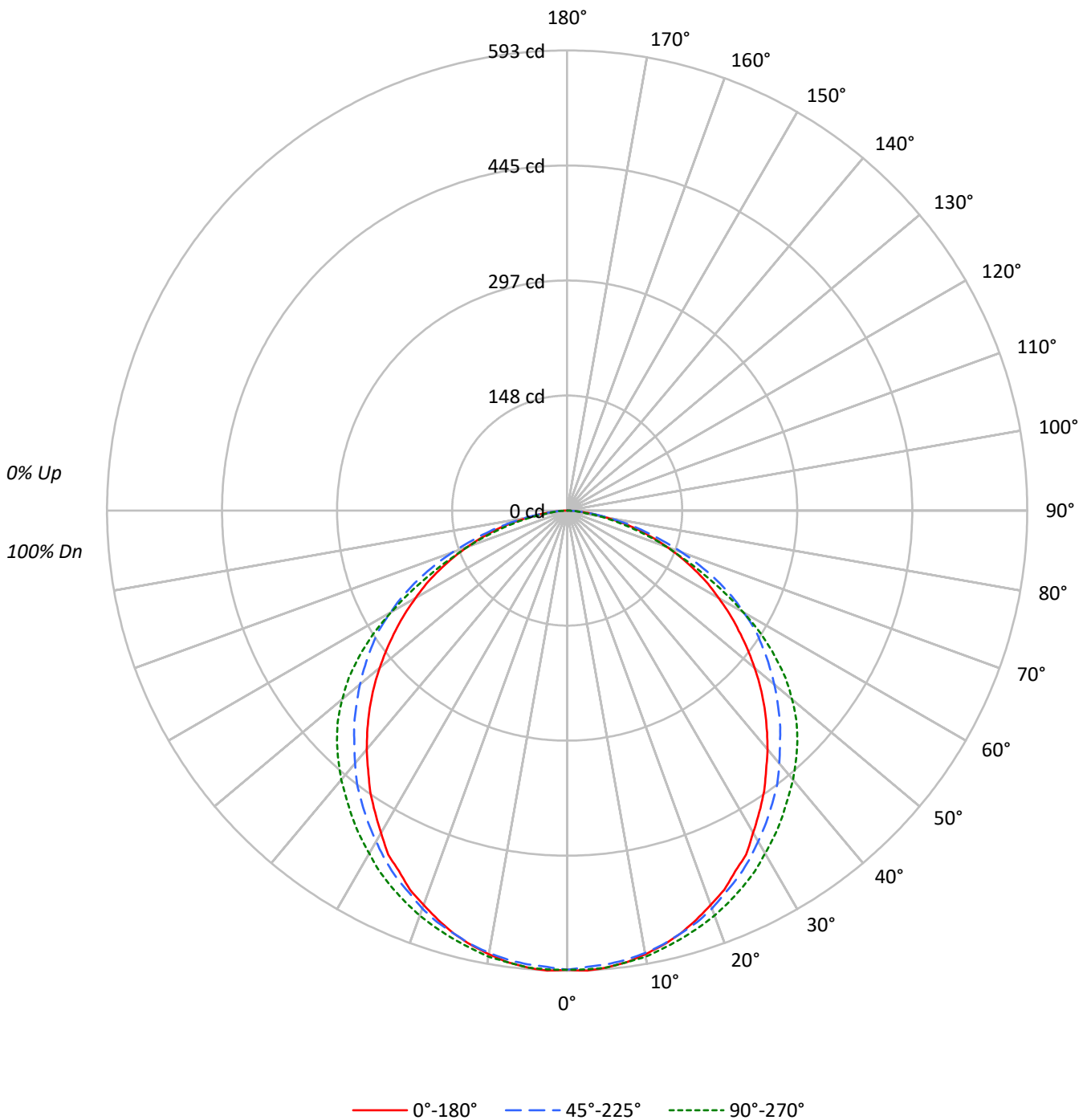
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1593	1593	1593
5°	1596	1586	1596
10°	1586	1582	1595
15°	1572	1572	1590
20°	1549	1563	1590
25°	1522	1548	1589
30°	1490	1530	1585
35°	1453	1514	1586
40°	1411	1494	1591
45°	1369	1477	1597
50°	1320	1459	1584
55°	1267	1445	1532
60°	1214	1414	1410
65°	1158	1354	1235
70°	1075	1234	1068
75°	975	1076	883
80°	776	852	651
85°	550	475	374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.0	3.4
10°-20°	160.0	9.8
20°-30°	241.2	14.7
30°-40°	289.1	17.6
40°-50°	300.0	18.3
50°-60°	270.6	16.5
60°-70°	197.4	12.0
70°-80°	103.6	6.3
80°-90°	22.1	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°	457.2	27.9
0°-40°	746.3	45.5
0°-60°	1316.9	80.3
0°-90°	1640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1640.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	591	589	587	591	591	56
15°	564	564	564	571	571	159
25°	513	515	522	533	535	237
35°	442	447	461	478	483	276
45°	360	367	388	412	420	277
55°	270	280	308	328	327	242
65°	182	192	213	205	194	180
75°	94	107	104	90	85	98
85°	18	22	15	13	12	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	591.8	591.8	591.8	591.8	591.8
2.5°	593.4	591.8	588.6	591.8	591.8
5°	591.0	589.4	587.0	591.0	591.0
7.5°	587.0	585.4	583.7	587.8	587.0
10°	580.5	579.7	578.9	583.7	583.7
12.5°	573.2	573.2	572.4	578.1	577.3
15°	564.3	564.3	564.3	570.8	570.8
17.5°	553.0	554.6	556.3	563.5	563.5
20°	540.9	542.5	545.7	554.6	555.4
22.5°	528.8	529.6	532.8	543.3	545.7
25°	512.6	515.0	521.5	532.8	535.2
27.5°	499.7	500.5	507.7	520.7	523.9
30°	479.4	485.1	492.4	506.9	510.2
32.5°	460.9	465.7	477.0	492.4	497.2
35°	442.3	447.1	460.9	477.8	482.7
37.5°	421.2	428.5	444.7	461.7	467.3
40°	401.8	408.3	425.3	446.3	452.8
42.5°	380.8	387.3	405.9	429.3	436.6
45°	359.8	367.1	388.1	411.5	419.6
47.5°	338.0	346.0	367.9	393.7	401.0
50°	315.3	324.2	348.5	375.1	378.4
52.5°	292.7	302.4	328.3	351.7	354.9
55°	270.0	279.7	308.0	328.3	326.6
57.5°	248.2	258.7	287.8	298.3	296.7
60°	225.6	236.9	262.8	267.6	262.0
62.5°	204.6	215.1	239.3	235.3	228.0
65°	181.9	192.4	212.6	204.6	194.0
67.5°	159.3	172.2	185.1	171.4	163.3
70°	136.6	151.2	156.9	143.1	135.8
72.5°	114.8	130.2	128.6	114.8	110.0
75°	93.8	106.7	103.5	89.7	84.9
77.5°	71.1	85.7	78.4	67.1	63.1
80°	50.1	63.1	55.0	45.3	42.0
82.5°	33.1	42.0	34.0	26.7	24.3
85°	17.8	21.8	15.4	12.9	12.1
87.5°	7.3	6.5	5.7	5.7	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)