

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: P258734

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258734  
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-LD5-20-S-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1673.0 lumens  
Efficiency: N/A  
Efficacy: 106.4 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

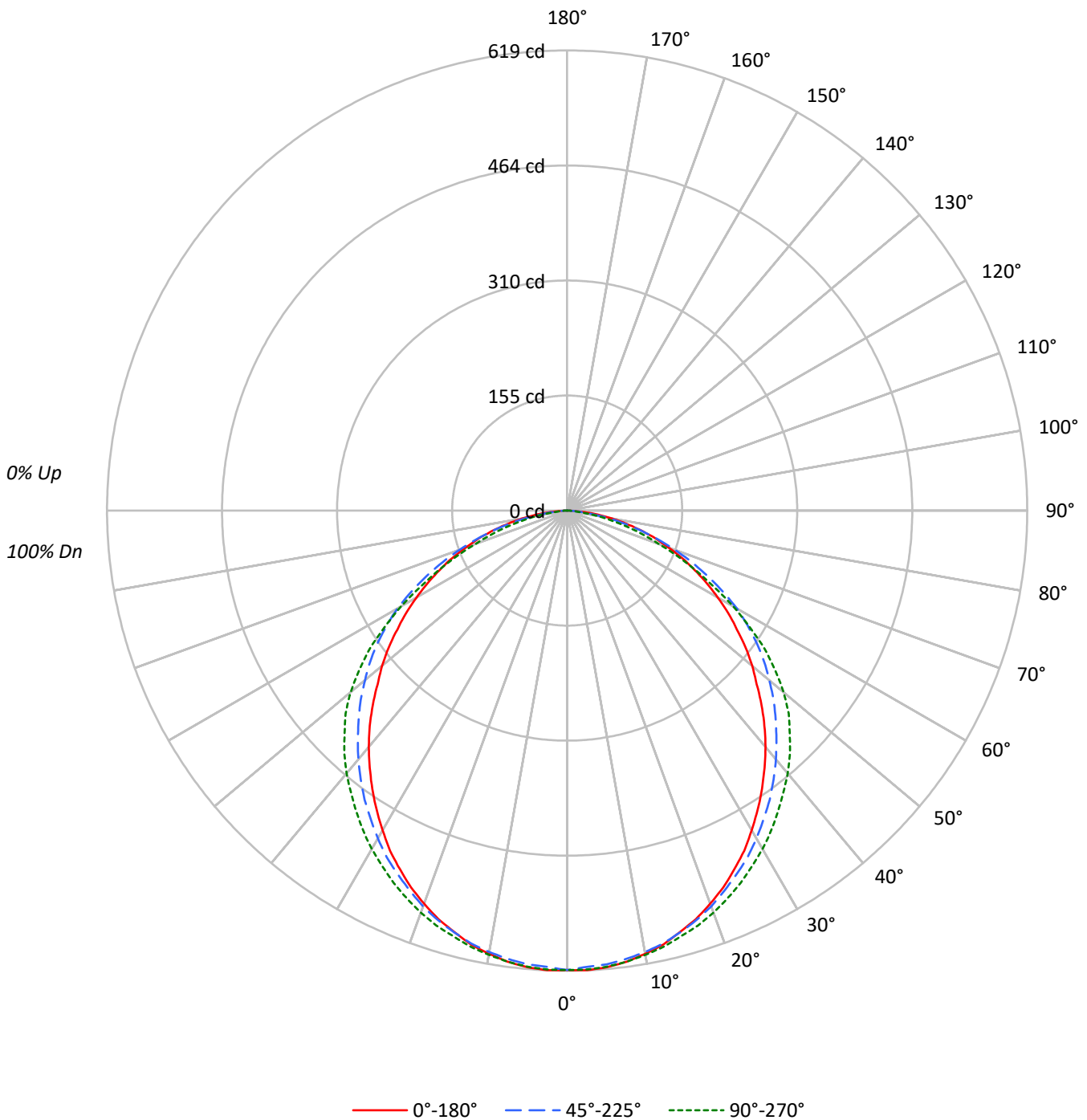
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1663	1663	1663
5°	1665	1655	1663
10°	1654	1648	1658
15°	1634	1636	1651
20°	1612	1623	1648
25°	1580	1602	1640
30°	1543	1582	1633
35°	1501	1560	1624
40°	1459	1535	1621
45°	1407	1509	1611
50°	1361	1486	1592
55°	1308	1462	1521
60°	1260	1420	1388
65°	1206	1329	1220
70°	1138	1209	1032
75°	1062	1046	853
80°	936	809	625
85°	738	392	346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.4	3.5
10°-20°	166.4	9.9
20°-30°	249.7	14.9
30°-40°	297.6	17.8
40°-50°	306.6	18.3
50°-60°	273.2	16.3
60°-70°	196.9	11.8
70°-80°	103.0	6.2
80°-90°	21.3	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
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0°-30°	474.4	28.4
0°-40°	772.1	46.1
0°-60°	1351.9	80.8
0°-90°	1673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1673.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	616	615	613	616	616	58
15°	587	587	587	593	593	166
25°	532	535	540	550	552	245
35°	457	463	475	490	494	286
45°	370	378	397	419	423	285
55°	279	288	312	326	324	250
65°	189	196	209	199	192	188
75°	102	107	101	87	82	108
85°	24	21	13	11	11	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	618.0	618.0	618.0	618.0	618.0
2.5°	618.8	617.3	614.3	618.0	618.0
5°	616.5	615.0	612.8	616.5	615.8
7.5°	612.0	610.6	608.3	612.8	612.0
10°	605.3	604.6	603.1	607.6	606.8
12.5°	597.9	597.1	596.4	600.9	600.9
15°	586.7	587.4	587.4	593.4	592.7
17.5°	576.3	577.0	577.8	585.2	585.2
20°	562.8	563.6	566.6	574.8	575.5
22.5°	548.7	549.4	553.1	562.8	564.3
25°	532.3	535.3	539.7	550.2	552.4
27.5°	515.9	518.1	525.6	537.5	539.0
30°	496.5	501.0	509.2	522.6	525.6
32.5°	477.1	482.3	492.0	506.9	510.7
35°	457.0	462.9	474.9	490.5	494.3
37.5°	436.1	441.3	456.2	472.6	477.9
40°	415.2	420.5	436.9	455.5	461.5
42.5°	392.9	400.3	416.7	437.6	443.6
45°	369.8	378.0	396.6	419.0	423.4
47.5°	345.9	354.9	376.5	398.8	404.1
50°	325.0	333.2	354.9	376.5	380.2
52.5°	302.7	310.1	334.0	351.9	352.6
55°	278.8	287.8	311.6	325.8	324.3
57.5°	257.2	264.6	287.8	295.2	290.7
60°	234.1	240.8	263.9	264.6	257.9
62.5°	211.7	218.4	236.3	231.1	222.9
65°	189.4	196.1	208.7	199.0	191.6
67.5°	167.7	173.7	181.2	168.5	161.0
70°	144.6	152.8	153.6	138.7	131.2
72.5°	124.5	129.0	127.5	113.3	106.6
75°	102.1	107.3	100.6	87.2	82.0
77.5°	81.3	85.0	76.0	63.4	59.6
80°	60.4	62.6	52.2	42.5	40.3
82.5°	41.0	41.0	29.8	23.1	20.9
85°	23.9	20.9	12.7	11.2	11.2
87.5°	8.2	5.2	5.2	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)