

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: P258653

Luminaire Tested: **14CZ-LD5-20-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258653  
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-L92765-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1862.0 lumens  
Efficiency: N/A  
Efficacy: 119.9 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

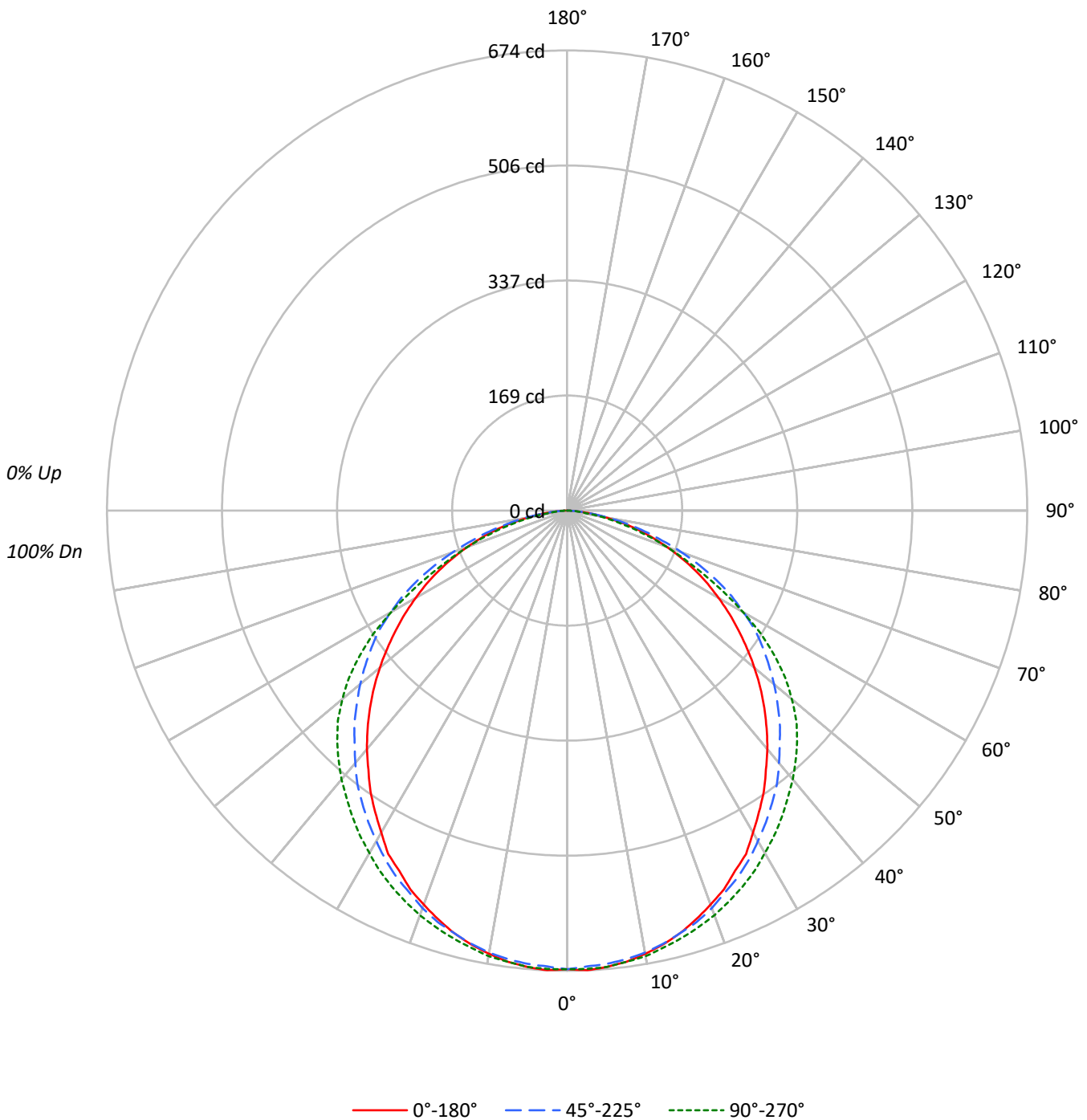
Input Watts (W): 15.531  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1808	1808	1808
5°	1813	1800	1813
10°	1801	1796	1811
15°	1785	1785	1806
20°	1759	1774	1806
25°	1728	1758	1804
30°	1691	1737	1800
35°	1649	1719	1800
40°	1603	1696	1806
45°	1555	1677	1813
50°	1499	1656	1798
55°	1438	1641	1740
60°	1378	1605	1601
65°	1315	1537	1403
70°	1220	1401	1213
75°	1107	1222	1002
80°	882	967	739
85°	624	537	426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.6	3.4
10°-20°	181.6	9.8
20°-30°	273.8	14.7
30°-40°	328.2	17.6
40°-50°	340.6	18.3
50°-60°	307.2	16.5
60°-70°	224.1	12.0
70°-80°	117.6	6.3
80°-90°	25.1	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°	519.1	27.9
0°-40°	847.3	45.5
0°-60°	1495.2	80.3
0°-90°	1862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1862.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	671	669	666	671	671	64
15°	641	641	641	648	648	180
25°	582	585	592	605	608	269
35°	502	508	523	542	548	314
45°	408	417	441	467	476	315
55°	307	318	350	373	371	275
65°	206	218	241	232	220	204
75°	106	121	118	102	96	112
85°	20	25	17	15	14	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	671.9	671.9	671.9	671.9	671.9
2.5°	673.8	671.9	668.3	671.9	671.9
5°	671.0	669.2	666.4	671.0	671.0
7.5°	666.4	664.6	662.8	667.4	666.4
10°	659.1	658.2	657.3	662.8	662.8
12.5°	650.8	650.8	649.9	656.3	655.4
15°	640.7	640.7	640.7	648.1	648.1
17.5°	627.9	629.7	631.6	639.8	639.8
20°	614.1	615.9	619.6	629.7	630.6
22.5°	600.3	601.3	604.9	616.9	619.6
25°	582.0	584.7	592.1	604.9	607.7
27.5°	567.3	568.2	576.5	591.2	594.8
30°	544.3	550.8	559.0	575.6	579.2
32.5°	523.2	528.7	541.6	559.0	564.5
35°	502.1	507.6	523.2	542.5	548.0
37.5°	478.3	486.5	504.9	524.2	530.6
40°	456.2	463.6	482.8	506.7	514.1
42.5°	432.4	439.7	460.8	487.4	495.7
45°	408.5	416.8	440.6	467.2	476.4
47.5°	383.7	392.9	417.7	447.0	455.3
50°	358.0	368.1	395.6	425.9	429.6
52.5°	332.3	343.3	372.7	399.3	403.0
55°	306.6	317.6	349.7	372.7	370.9
57.5°	281.8	293.7	326.8	338.7	336.9
60°	256.1	269.0	298.3	303.8	297.4
62.5°	232.2	244.2	271.7	267.1	258.9
65°	206.5	218.5	241.4	232.2	220.3
67.5°	180.8	195.5	210.2	194.6	185.4
70°	155.1	171.7	178.1	162.5	154.2
72.5°	130.3	147.8	146.0	130.3	124.8
75°	106.5	121.2	117.5	101.9	96.4
77.5°	80.8	97.3	89.0	76.2	71.6
80°	56.9	71.6	62.4	51.4	47.7
82.5°	37.6	47.7	38.6	30.3	27.5
85°	20.2	24.8	17.4	14.7	13.8
87.5°	8.3	7.3	6.4	6.4	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)