

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: P258536

Luminaire Tested: **14CZ-LD5-20-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258536  
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-L83050-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1992.1 lumens  
Efficiency: N/A  
Efficacy: 129.8 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

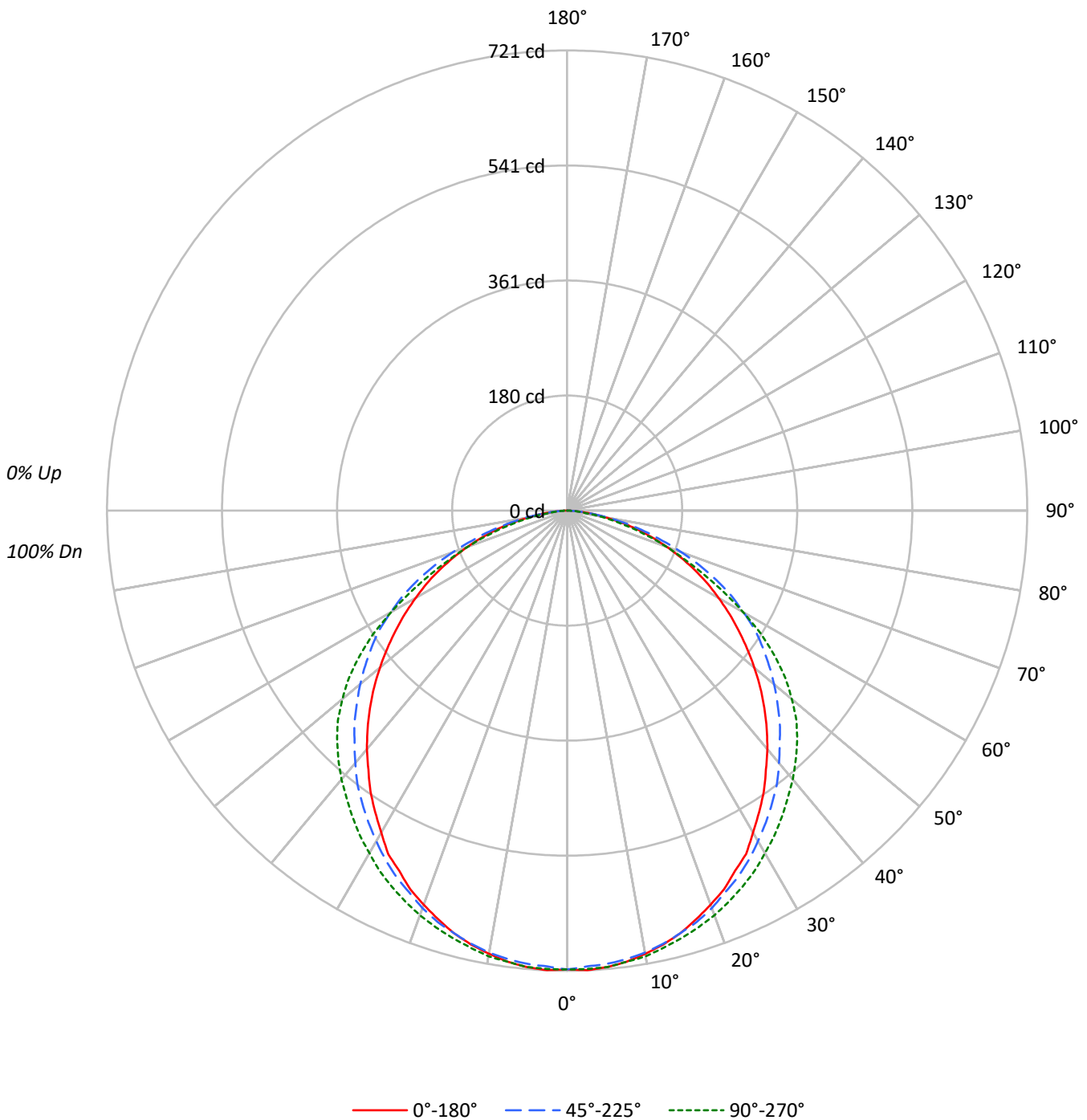
Input Watts (W): 15.345  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1935	1935	1935
5°	1939	1926	1939
10°	1927	1921	1938
15°	1910	1910	1931
20°	1881	1898	1932
25°	1849	1881	1930
30°	1810	1858	1926
35°	1765	1839	1926
40°	1715	1815	1932
45°	1663	1794	1940
50°	1603	1772	1924
55°	1539	1756	1862
60°	1475	1718	1713
65°	1407	1645	1501
70°	1306	1499	1298
75°	1184	1307	1072
80°	944	1035	792
85°	667	577	454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	3.4
10°-20°	194.3	9.8
20°-30°	293.0	14.7
30°-40°	351.2	17.6
40°-50°	364.4	18.3
50°-60°	328.7	16.5
60°-70°	239.8	12.0
70°-80°	125.8	6.3
80°-90°	26.8	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°	555.3	27.9
0°-40°	906.5	45.5
0°-60°	1599.7	80.3
0°-90°	1992.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1992.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	718	716	713	718	718	68
15°	686	686	686	693	693	193
25°	623	626	633	647	650	287
35°	537	543	560	580	586	336
45°	437	446	471	500	510	337
55°	328	340	374	399	397	294
65°	221	234	258	248	236	218
75°	114	130	126	109	103	119
85°	22	26	19	16	15	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	718.9	718.9	718.9	718.9	718.9
2.5°	720.8	718.9	714.9	718.9	718.9
5°	717.9	715.9	713.0	717.9	717.9
7.5°	713.0	711.0	709.1	714.0	713.0
10°	705.1	704.1	703.2	709.1	709.1
12.5°	696.3	696.3	695.3	702.2	701.2
15°	685.5	685.5	685.5	693.3	693.3
17.5°	671.7	673.7	675.7	684.5	684.5
20°	657.0	659.0	662.9	673.7	674.7
22.5°	642.3	643.3	647.2	660.0	662.9
25°	622.6	625.6	633.4	647.2	650.1
27.5°	606.9	607.9	616.7	632.5	636.4
30°	582.4	589.2	598.1	615.8	619.7
32.5°	559.8	565.7	579.4	598.1	604.0
35°	537.2	543.1	559.8	580.4	586.3
37.5°	511.7	520.5	540.1	560.8	567.6
40°	488.1	495.9	516.6	542.1	550.0
42.5°	462.6	470.4	493.0	521.5	530.3
45°	437.0	445.9	471.4	499.9	509.7
47.5°	410.5	420.3	446.8	478.3	487.1
50°	383.0	393.8	423.3	455.7	459.6
52.5°	355.5	367.3	398.7	427.2	431.1
55°	328.0	339.8	374.2	398.7	396.8
57.5°	301.5	314.3	349.6	362.4	360.4
60°	274.0	287.7	319.2	325.1	318.2
62.5°	248.5	261.2	290.7	285.8	276.9
65°	221.0	233.7	258.3	248.5	235.7
67.5°	193.5	209.2	224.9	208.2	198.4
70°	166.0	183.6	190.5	173.8	165.0
72.5°	139.5	158.1	156.1	139.5	133.6
75°	113.9	129.6	125.7	109.0	103.1
77.5°	86.4	104.1	95.3	81.5	76.6
80°	60.9	76.6	66.8	55.0	51.1
82.5°	40.3	51.1	41.2	32.4	29.5
85°	21.6	26.5	18.7	15.7	14.7
87.5°	8.8	7.9	6.9	6.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)