

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: P258744

Luminaire Tested: **14CZ-LD5-29-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258744  
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-LD5-29-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: 2333.0 lumens  
Efficiency: N/A  
Efficacy: 103.2 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

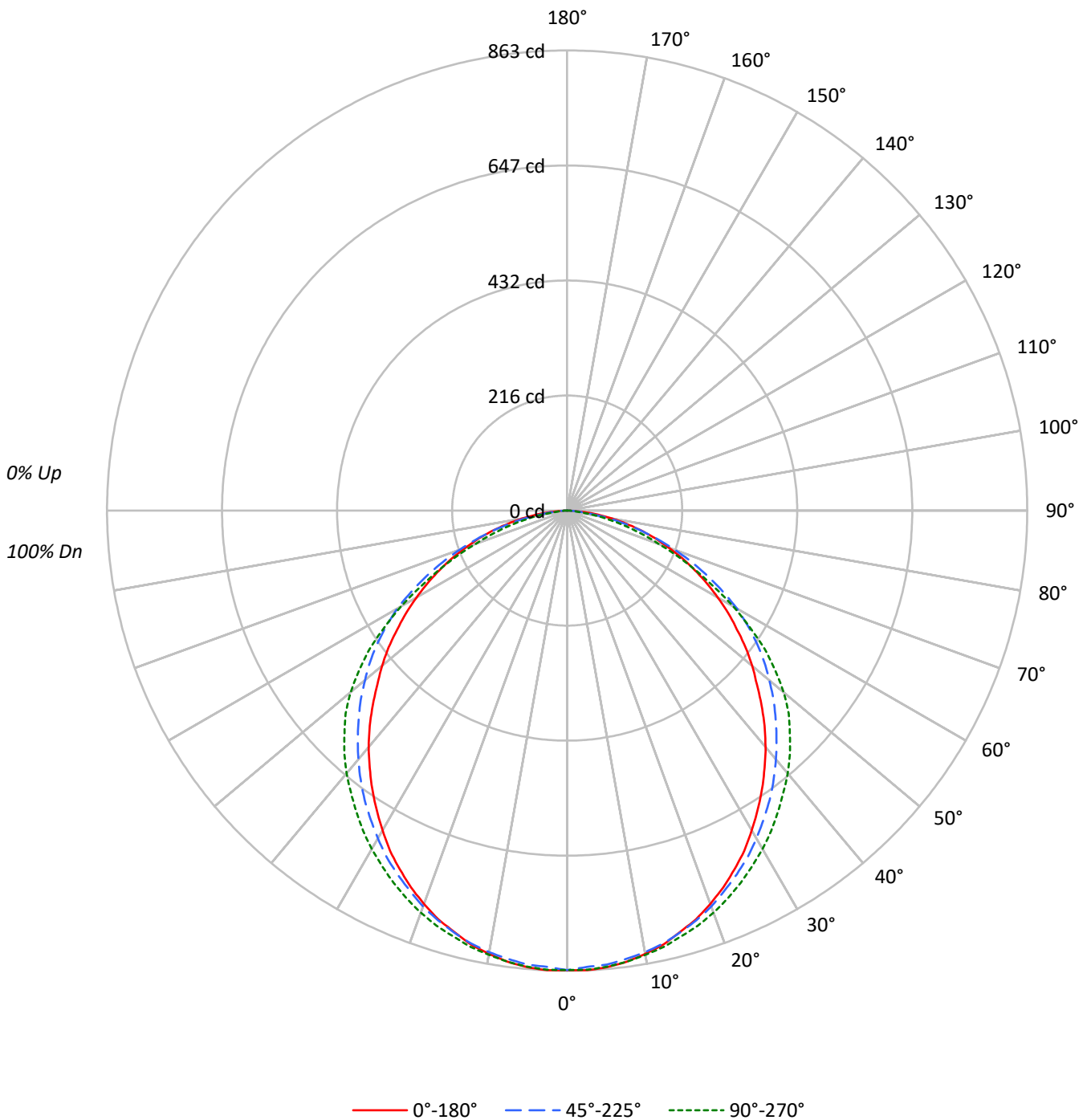
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2319	2319	2319
5°	2322	2308	2320
10°	2306	2298	2312
15°	2279	2282	2303
20°	2248	2263	2298
25°	2204	2235	2287
30°	2151	2206	2277
35°	2094	2175	2264
40°	2034	2140	2261
45°	1962	2105	2247
50°	1898	2071	2220
55°	1824	2038	2122
60°	1757	1981	1936
65°	1682	1854	1701
70°	1587	1685	1440
75°	1481	1459	1189
80°	1305	1128	869
85°	1028	546	482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.4	3.5
10°-20°	232.0	9.9
20°-30°	348.2	14.9
30°-40°	415.1	17.8
40°-50°	427.5	18.3
50°-60°	381.0	16.3
60°-70°	274.5	11.8
70°-80°	143.6	6.2
80°-90°	29.7	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°	661.6	28.4
0°-40°	1076.6	46.1
0°-60°	1885.2	80.8
0°-90°	2333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2333.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	860	858	854	860	859	82
15°	818	819	819	828	826	231
25°	742	746	753	767	770	342
35°	637	646	662	684	689	399
45°	516	527	553	584	590	398
55°	389	401	434	454	452	349
65°	264	273	291	278	267	262
75°	142	150	140	122	114	151
85°	33	29	18	16	16	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	861.8	861.8	861.8	861.8	861.8
2.5°	862.9	860.8	856.6	861.8	861.8
5°	859.7	857.7	854.5	859.7	858.7
7.5°	853.5	851.4	848.3	854.5	853.5
10°	844.1	843.1	841.0	847.3	846.2
12.5°	833.7	832.7	831.7	837.9	837.9
15°	818.1	819.2	819.2	827.5	826.5
17.5°	803.6	804.6	805.7	816.1	816.1
20°	784.9	785.9	790.1	801.5	802.6
22.5°	765.1	766.2	771.4	784.9	787.0
25°	742.3	746.4	752.7	767.2	770.3
27.5°	719.4	722.5	732.9	749.5	751.6
30°	692.4	698.6	710.0	728.7	732.9
32.5°	665.3	672.6	686.1	706.9	712.1
35°	637.3	645.6	662.2	684.0	689.2
37.5°	608.2	615.4	636.2	659.1	666.4
40°	579.0	586.3	609.2	635.2	643.5
42.5°	547.9	558.3	581.1	610.2	618.5
45°	515.6	527.1	553.1	584.2	590.5
47.5°	482.4	494.8	525.0	556.2	563.5
50°	453.3	464.7	494.8	525.0	530.2
52.5°	422.1	432.5	465.7	490.7	491.7
55°	388.8	401.3	434.5	454.3	452.2
57.5°	358.7	369.1	401.3	411.7	405.4
60°	326.4	335.8	368.0	369.1	359.7
62.5°	295.2	304.6	329.5	322.3	310.8
65°	264.1	273.4	291.1	277.6	267.2
67.5°	233.9	242.2	252.6	234.9	224.5
70°	201.7	213.1	214.2	193.4	183.0
72.5°	173.6	179.8	177.8	158.0	148.7
75°	142.4	149.7	140.3	121.6	114.4
77.5°	113.3	118.5	106.0	88.4	83.2
80°	84.2	87.3	72.8	59.3	56.1
82.5°	57.2	57.2	41.6	32.2	29.1
85°	33.3	29.1	17.7	15.6	15.6
87.5°	11.4	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)