

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: P258743

Luminaire Tested: **14CZ-LD5-25-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258743  
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-LD5-25-S-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2344.0 lumens  
Efficiency: N/A  
Efficacy: 123.6 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

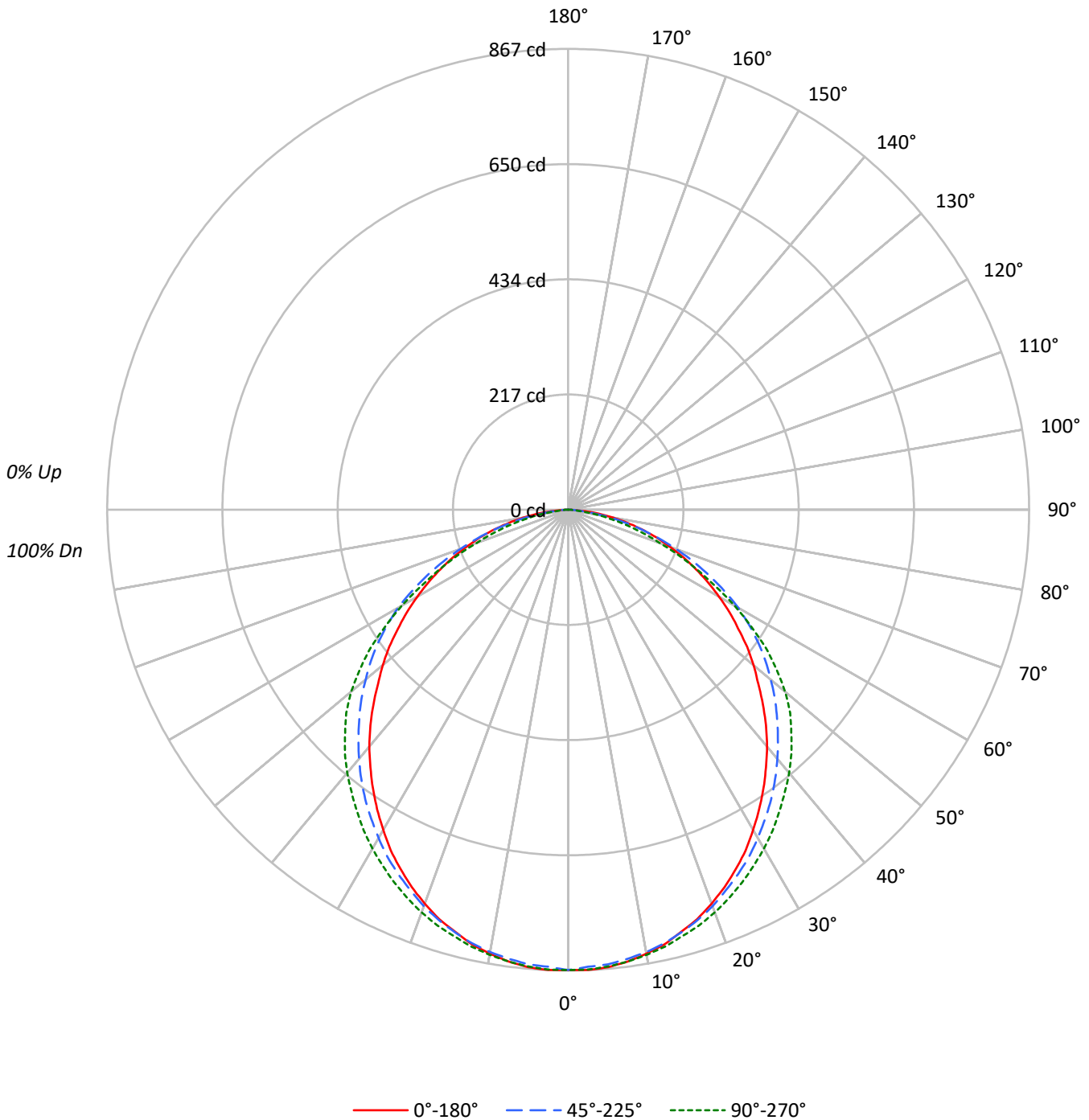
Input Watts (W): 18.972  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2330	2330	2330
5°	2333	2319	2330
10°	2317	2309	2323
15°	2290	2293	2313
20°	2258	2273	2309
25°	2214	2245	2298
30°	2161	2217	2288
35°	2103	2186	2275
40°	2044	2150	2271
45°	1972	2115	2258
50°	1906	2081	2230
55°	1833	2048	2131
60°	1765	1990	1945
65°	1689	1862	1709
70°	1594	1693	1446
75°	1488	1466	1195
80°	1311	1133	874
85°	1031	550	485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.8	3.5
10°-20°	233.1	9.9
20°-30°	349.8	14.9
30°-40°	417.0	17.8
40°-50°	429.6	18.3
50°-60°	382.8	16.3
60°-70°	275.8	11.8
70°-80°	144.3	6.2
80°-90°	29.8	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°	664.7	28.4
0°-40°	1081.7	46.1
0°-60°	1894.1	80.8
0°-90°	2344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2344.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	864	862	859	864	863	82
15°	822	823	823	831	830	232
25°	746	750	756	771	774	344
35°	640	649	665	687	692	400
45°	518	530	556	587	593	400
55°	391	403	437	456	454	350
65°	265	275	292	279	268	263
75°	143	150	141	122	115	152
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°	865.9	865.9	865.9	865.9	865.9
2.5°	866.9	864.8	860.7	865.9	865.9
5°	863.8	861.7	858.6	863.8	862.7
7.5°	857.5	855.4	852.3	858.6	857.5
10°	848.1	847.1	845.0	851.3	850.2
12.5°	837.7	836.6	835.6	841.9	841.9
15°	822.0	823.1	823.1	831.4	830.4
17.5°	807.4	808.4	809.5	819.9	819.9
20°	788.6	789.6	793.8	805.3	806.3
22.5°	768.7	769.8	775.0	788.6	790.7
25°	745.8	749.9	756.2	770.8	774.0
27.5°	722.8	725.9	736.4	753.1	755.2
30°	695.6	701.9	713.4	732.2	736.4
32.5°	668.5	675.8	689.4	710.2	715.5
35°	640.3	648.6	665.3	687.3	692.5
37.5°	611.0	618.3	639.2	662.2	669.5
40°	581.8	589.1	612.1	638.2	646.5
42.5°	550.4	560.9	583.9	613.1	621.5
45°	518.1	529.6	555.7	587.0	593.3
47.5°	484.6	497.2	527.5	558.8	566.1
50°	455.4	466.9	497.2	527.5	532.7
52.5°	424.1	434.5	467.9	493.0	494.0
55°	390.6	403.2	436.6	456.4	454.3
57.5°	360.3	370.8	403.2	413.6	407.3
60°	328.0	337.4	369.7	370.8	361.4
62.5°	296.6	306.0	331.1	323.8	312.3
65°	265.3	274.7	292.5	278.9	268.4
67.5°	235.0	243.4	253.8	236.1	225.6
70°	202.6	214.1	215.2	194.3	183.8
72.5°	174.4	180.7	178.6	158.8	149.4
75°	143.1	150.4	141.0	122.2	114.9
77.5°	113.8	119.1	106.5	88.8	83.6
80°	84.6	87.7	73.1	59.5	56.4
82.5°	57.4	57.4	41.8	32.4	29.2
85°	33.4	29.2	17.8	15.7	15.7
87.5°	11.5	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)