

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: P258767

Luminaire Tested: **14CZ-LD5-20-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258767  
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-L82765-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2146.0 lumens  
Efficiency: N/A  
Efficacy: 138.2 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

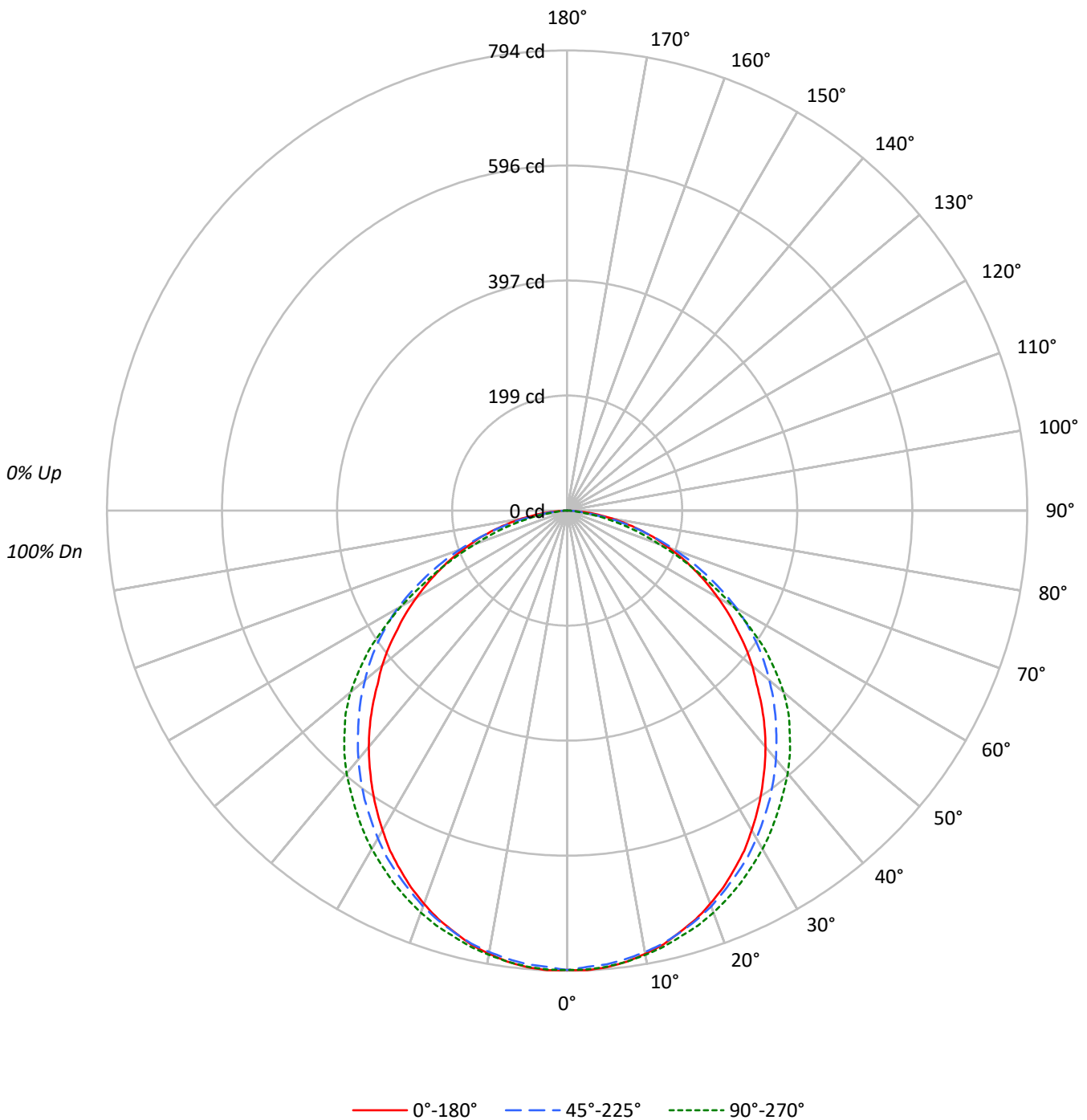
Input Watts (W): 15.531  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2133	2133	2133
5°	2136	2123	2134
10°	2122	2114	2127
15°	2097	2099	2118
20°	2068	2081	2114
25°	2027	2056	2104
30°	1979	2029	2095
35°	1926	2001	2083
40°	1871	1969	2079
45°	1805	1936	2067
50°	1745	1906	2042
55°	1678	1875	1952
60°	1616	1822	1781
65°	1547	1705	1565
70°	1459	1550	1324
75°	1362	1342	1094
80°	1201	1037	800
85°	945	503	442



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.9	3.5
10°-20°	213.4	9.9
20°-30°	320.3	14.9
30°-40°	381.8	17.8
40°-50°	393.3	18.3
50°-60°	350.5	16.3
60°-70°	252.5	11.8
70°-80°	132.1	6.2
80°-90°	27.3	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
0°-30°	608.6	28.4
0°-40°	990.3	46.1
0°-60°	1734.1	80.8
0°-90°	2146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2146.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	791	789	786	791	790	75
15°	753	754	754	761	760	212
25°	683	687	692	706	709	314
35°	586	594	609	629	634	367
45°	474	485	509	537	543	366
55°	358	369	400	418	416	321
65°	243	252	268	255	246	241
75°	131	138	129	112	105	139
85°	31	27	16	14	14	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	792.7	792.7	792.7	792.7	792.7
2.5°	793.7	791.8	788.0	792.7	792.7
5°	790.8	788.9	786.0	790.8	789.9
7.5°	785.1	783.2	780.3	786.0	785.1
10°	776.5	775.5	773.6	779.3	778.4
12.5°	766.9	766.0	765.0	770.7	770.7
15°	752.6	753.5	753.5	761.2	760.2
17.5°	739.2	740.1	741.1	750.7	750.7
20°	722.0	722.9	726.8	737.3	738.2
22.5°	703.8	704.8	709.5	722.0	723.9
25°	682.8	686.6	692.3	705.7	708.6
27.5°	661.7	664.6	674.2	689.5	691.4
30°	636.9	642.6	653.1	670.3	674.2
32.5°	612.0	618.7	631.1	650.3	655.0
35°	586.2	593.8	609.1	629.2	634.0
37.5°	559.4	566.1	585.2	606.3	613.0
40°	532.6	539.3	560.4	584.3	591.9
42.5°	503.9	513.5	534.5	561.3	569.0
45°	474.3	484.8	508.7	537.4	543.2
47.5°	443.7	455.2	482.9	511.6	518.3
50°	416.9	427.4	455.2	482.9	487.7
52.5°	388.2	397.8	428.4	451.4	452.3
55°	357.6	369.1	399.7	417.9	416.0
57.5°	329.9	339.5	369.1	378.7	372.9
60°	300.3	308.9	338.5	339.5	330.9
62.5°	271.6	280.2	303.1	296.4	285.9
65°	242.9	251.5	267.8	255.3	245.8
67.5°	215.2	222.8	232.4	216.1	206.6
70°	185.5	196.0	197.0	177.9	168.3
72.5°	159.7	165.4	163.5	145.4	136.7
75°	131.0	137.7	129.1	111.9	105.2
77.5°	104.2	109.0	97.5	81.3	76.5
80°	77.5	80.3	66.9	54.5	51.6
82.5°	52.6	52.6	38.3	29.6	26.8
85°	30.6	26.8	16.3	14.3	14.3
87.5°	10.5	6.7	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)