

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: P258603

Luminaire Tested: **14CZ-LD5-20-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258603  
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-L82765-W2A1-U-5700K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2198.0 lumens  
Efficiency: N/A  
Efficacy: 139.0 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

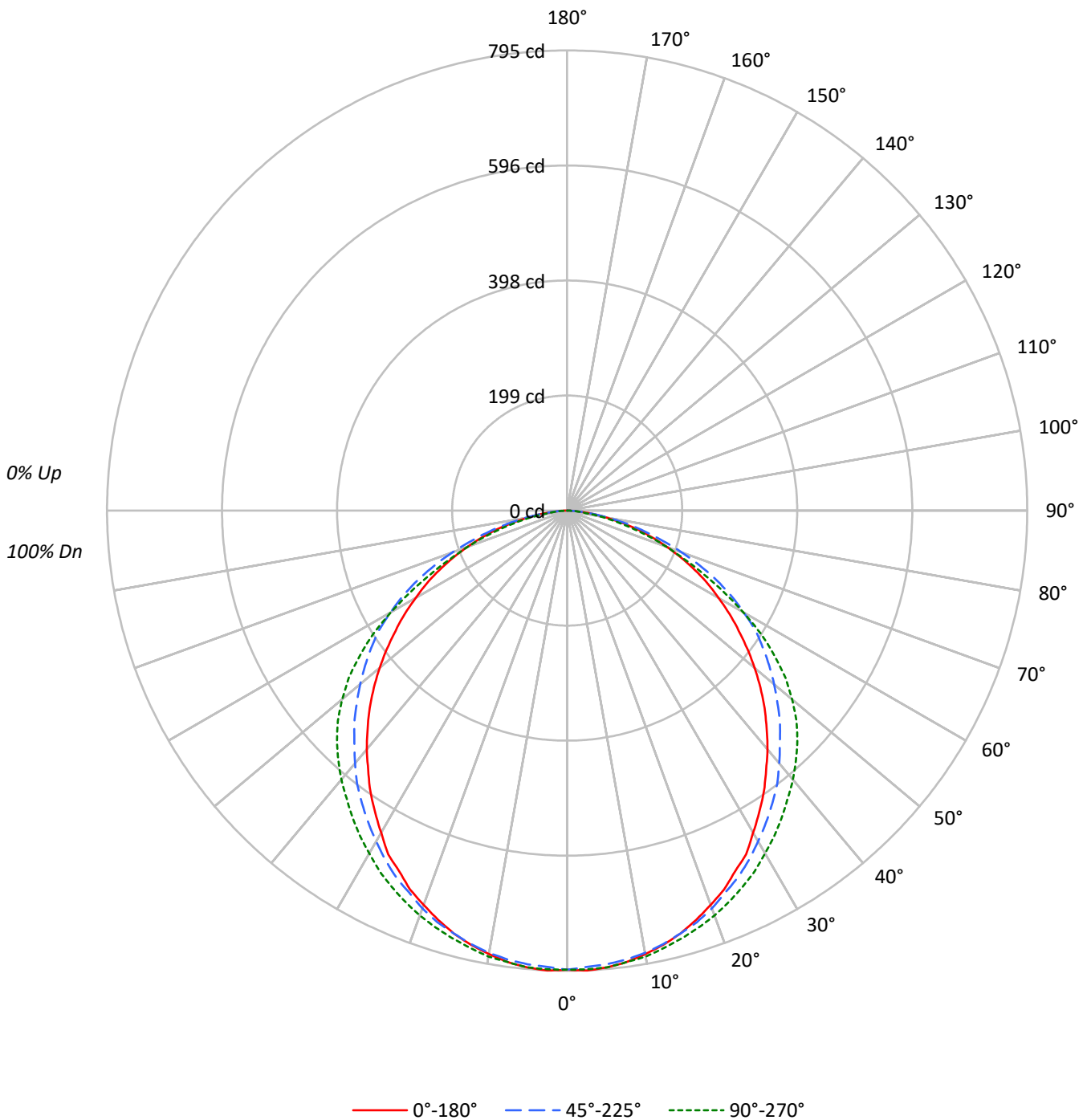
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2134	2134	2134
5°	2140	2125	2140
10°	2126	2120	2138
15°	2107	2107	2131
20°	2076	2094	2132
25°	2040	2075	2130
30°	1997	2050	2125
35°	1947	2029	2125
40°	1892	2002	2132
45°	1835	1979	2140
50°	1769	1955	2123
55°	1698	1937	2054
60°	1627	1896	1890
65°	1552	1815	1656
70°	1441	1654	1432
75°	1307	1442	1183
80°	1041	1142	872
85°	735	636	503



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.1	3.4
10°-20°	214.4	9.8
20°-30°	323.3	14.7
30°-40°	387.5	17.6
40°-50°	402.1	18.3
50°-60°	362.7	16.5
60°-70°	264.6	12.0
70°-80°	138.8	6.3
80°-90°	29.6	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°	612.7	27.9
0°-40°	1000.2	45.5
0°-60°	1765.0	80.3
0°-90°	2198.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2198.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	792	790	787	792	792	75
15°	756	756	756	765	765	213
25°	687	690	699	714	717	317
35°	593	599	618	640	647	370
45°	482	492	520	552	562	372
55°	362	375	413	440	438	324
65°	244	258	285	274	260	241
75°	126	143	139	120	114	132
85°	24	29	21	17	16	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	793.2	793.2	793.2	793.2	793.2
2.5°	795.4	793.2	788.9	793.2	793.2
5°	792.1	789.9	786.7	792.1	792.1
7.5°	786.7	784.5	782.4	787.8	786.7
10°	778.0	776.9	775.9	782.4	782.4
12.5°	768.3	768.3	767.2	774.8	773.7
15°	756.4	756.4	756.4	765.0	765.0
17.5°	741.2	743.4	745.5	755.3	755.3
20°	724.9	727.1	731.4	743.4	744.4
22.5°	708.7	709.8	714.1	728.2	731.4
25°	687.0	690.3	698.9	714.1	717.3
27.5°	669.7	670.7	680.5	697.8	702.2
30°	642.6	650.2	659.9	679.4	683.8
32.5°	617.7	624.2	639.3	659.9	666.4
35°	592.7	599.2	617.7	640.4	646.9
37.5°	564.6	574.3	596.0	618.7	626.3
40°	538.5	547.2	570.0	598.1	606.8
42.5°	510.4	519.0	544.0	575.4	585.1
45°	482.2	492.0	520.1	551.6	562.4
47.5°	452.9	463.8	493.0	527.7	537.5
50°	422.6	434.5	467.0	502.8	507.1
52.5°	392.3	405.3	439.9	471.4	475.7
55°	361.9	374.9	412.9	439.9	437.8
57.5°	332.7	346.8	385.8	399.8	397.7
60°	302.3	317.5	352.2	358.7	351.1
62.5°	274.2	288.2	320.7	315.3	305.6
65°	243.8	257.9	285.0	274.2	260.1
67.5°	213.5	230.8	248.1	229.7	218.9
70°	183.1	202.6	210.2	191.8	182.0
72.5°	153.9	174.5	172.3	153.9	147.4
75°	125.7	143.0	138.7	120.3	113.8
77.5°	95.4	114.9	105.1	89.9	84.5
80°	67.2	84.5	73.7	60.7	56.3
82.5°	44.4	56.3	45.5	35.8	32.5
85°	23.8	29.3	20.6	17.3	16.3
87.5°	9.8	8.7	7.6	7.6	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)