

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: P258824

Luminaire Tested: **14CZ-LD5-20-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258824  
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-L92765-W2A1-U-5500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2019.0 lumens  
Efficiency: N/A  
Efficacy: 127.7 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

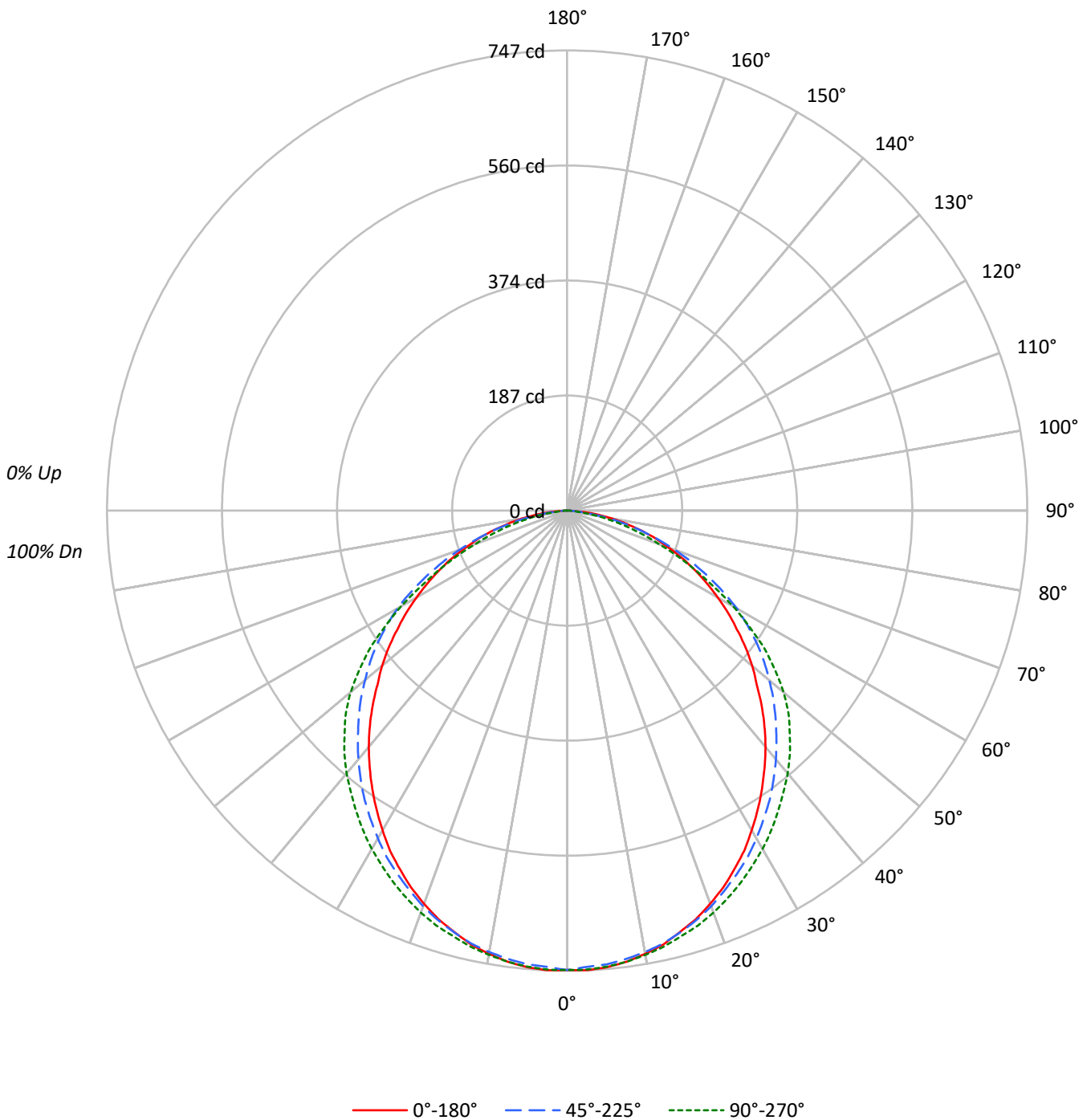
Input Watts (W): 15.81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2007	2007	2007
5°	2010	1998	2007
10°	1996	1989	2001
15°	1972	1975	1992
20°	1945	1958	1989
25°	1907	1934	1979
30°	1862	1909	1971
35°	1812	1883	1960
40°	1760	1852	1956
45°	1698	1821	1945
50°	1642	1793	1921
55°	1579	1765	1836
60°	1520	1714	1675
65°	1455	1604	1472
70°	1373	1458	1245
75°	1282	1263	1029
80°	1130	976	753
85°	889	472	417



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.5	3.5
10°-20°	200.8	9.9
20°-30°	301.3	14.9
30°-40°	359.2	17.8
40°-50°	370.0	18.3
50°-60°	329.7	16.3
60°-70°	237.6	11.8
70°-80°	124.3	6.2
80°-90°	25.7	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°	572.5	28.4
0°-40°	931.7	46.1
0°-60°	1631.5	80.8
0°-90°	2019.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2019.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	744	742	740	744	743	71
15°	708	709	709	716	715	200
25°	642	646	651	664	667	296
35°	552	559	573	592	596	345
45°	446	456	479	506	511	344
55°	336	347	376	393	391	302
65°	228	237	252	240	231	226
75°	123	130	122	105	99	131
85°	29	25	15	14	14	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	745.8	745.8	745.8	745.8	745.8
2.5°	746.7	744.9	741.3	745.8	745.8
5°	744.0	742.2	739.5	744.0	743.1
7.5°	738.6	736.8	734.1	739.5	738.6
10°	730.5	729.6	727.8	733.2	732.3
12.5°	721.5	720.6	719.7	725.1	725.1
15°	708.0	708.9	708.9	716.1	715.2
17.5°	695.4	696.3	697.2	706.2	706.2
20°	679.2	680.1	683.7	693.6	694.5
22.5°	662.2	663.1	667.5	679.2	681.0
25°	642.4	646.0	651.4	664.0	666.6
27.5°	622.6	625.3	634.3	648.7	650.5
30°	599.2	604.6	614.5	630.7	634.3
32.5°	575.8	582.1	593.8	611.8	616.3
35°	551.5	558.7	573.1	592.0	596.5
37.5°	526.3	532.6	550.6	570.4	576.7
40°	501.1	507.4	527.2	549.7	556.9
42.5°	474.1	483.1	502.9	528.1	535.3
45°	446.2	456.1	478.6	505.6	511.0
47.5°	417.4	428.2	454.3	481.3	487.6
50°	392.3	402.1	428.2	454.3	458.8
52.5°	365.3	374.3	403.0	424.6	425.5
55°	336.5	347.3	376.1	393.2	391.4
57.5°	310.4	319.4	347.3	356.3	350.9
60°	282.5	290.6	318.5	319.4	311.3
62.5°	255.5	263.6	285.2	278.9	269.0
65°	228.5	236.6	251.9	240.2	231.2
67.5°	202.4	209.6	218.6	203.3	194.3
70°	174.5	184.4	185.3	167.3	158.3
72.5°	150.2	155.6	153.8	136.7	128.7
75°	123.3	129.6	121.5	105.3	99.0
77.5°	98.1	102.6	91.8	76.5	72.0
80°	72.9	75.6	63.0	51.3	48.6
82.5°	49.5	49.5	36.0	27.9	25.2
85°	28.8	25.2	15.3	13.5	13.5
87.5°	9.9	6.3	6.3	6.3	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)