

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: P258940

Luminaire Tested: **14CZ-LD5-20-RDP-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258940  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35909)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-20-RDP-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1477.0 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

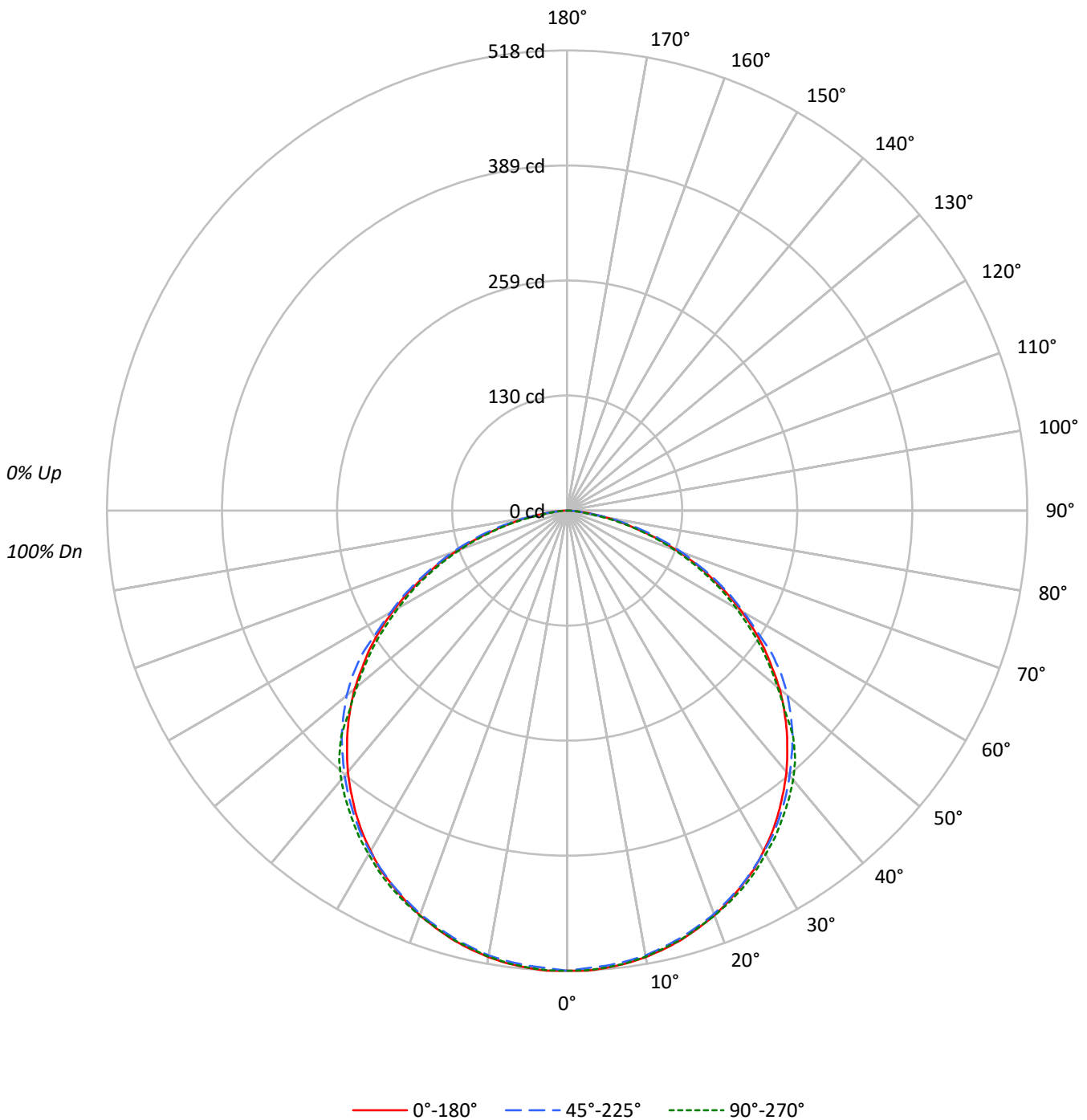
Input Watts (W): 15.996  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	47	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34
8	61	47	38	33	59	46	38	33	45	38	32	44	37	32	43	36	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1394	1394	1394
5°	1395	1389	1394
10°	1394	1389	1393
15°	1392	1385	1391
20°	1388	1384	1390
25°	1382	1381	1391
30°	1375	1378	1388
35°	1363	1374	1389
40°	1350	1368	1390
45°	1330	1367	1369
50°	1308	1356	1294
55°	1271	1321	1247
60°	1218	1236	1181
65°	1140	1171	1110
70°	1038	1079	1004
75°	866	946	850
80°	687	724	589
85°	445	386	343



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.0	3.3
10°-20°	140.8	9.5
20°-30°	215.0	14.6
30°-40°	262.1	17.7
40°-50°	274.5	18.6
50°-60°	244.2	16.5
60°-70°	180.2	12.2
70°-80°	93.1	6.3
80°-90°	18.1	1.2
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°	404.9	27.4
0°-40°	667.0	45.2
0°-60°	1185.7	80.3
0°-90°	1477.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1477.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	518	518	518	518	518	
5°	516	516	514	516	516	49
15°	500	499	497	499	499	141
25°	466	466	465	468	468	215
35°	415	416	418	423	423	260
45°	350	352	359	362	360	269
55°	271	277	282	270	266	242
65°	179	192	184	178	174	178
75°	83	92	91	84	82	90
85°	14	16	12	12	11	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	<i>518.0</i>	518.0	518.0	518.0	518.0
2.5°	<i>518.5</i>	<i>518.0</i>	<i>515.6</i>	<i>518.0</i>	<i>518.0</i>
5°	<i>516.5</i>	516.1	514.1	516.1	516.1
7.5°	<i>514.1</i>	513.7	511.7	513.7	513.7
10°	<i>510.3</i>	509.8	508.4	510.3	509.8
12.5°	<i>505.5</i>	505.5	503.1	505.5	504.5
15°	<i>499.7</i>	499.2	497.3	499.2	499.2
17.5°	<i>492.5</i>	492.0	490.5	493.0	492.0
20°	<i>484.8</i>	484.3	483.3	485.7	485.3
22.5°	<i>475.6</i>	475.6	474.2	477.1	477.1
25°	<i>465.5</i>	465.5	465.0	468.4	468.4
27.5°	<i>455.4</i>	454.4	454.4	457.8	458.3
30°	<i>442.4</i>	442.4	443.4	447.2	446.7
32.5°	<i>429.4</i>	429.9	431.8	435.2	435.7
35°	<i>415.0</i>	415.5	418.3	423.2	422.7
37.5°	<i>399.6</i>	401.0	404.4	409.7	409.7
40°	<i>384.2</i>	385.1	389.5	395.2	395.7
42.5°	<i>366.8</i>	369.2	374.1	380.8	379.8
45°	<i>349.5</i>	351.9	359.1	362.5	359.6
47.5°	<i>331.2</i>	334.1	341.3	341.8	332.2
50°	<i>312.4</i>	315.8	324.0	314.4	309.1
52.5°	<i>290.8</i>	297.0	304.2	290.8	287.4
55°	<i>271.0</i>	276.8	281.6	269.6	265.7
57.5°	<i>248.9</i>	256.6	253.2	247.4	242.6
60°	<i>226.3</i>	234.4	229.6	223.9	219.5
62.5°	<i>203.2</i>	212.3	207.5	201.7	197.9
65°	<i>179.1</i>	191.6	183.9	177.6	174.3
67.5°	<i>156.5</i>	168.5	159.3	154.5	151.2
70°	<i>131.9</i>	142.0	137.2	130.9	127.6
72.5°	<i>107.8</i>	115.5	114.1	107.4	104.9
75°	<i>83.3</i>	91.9	91.0	83.8	81.8
77.5°	<i>62.6</i>	70.8	67.9	62.1	59.7
80°	<i>44.3</i>	49.6	46.7	40.0	38.0
82.5°	<i>27.0</i>	31.3	26.5	22.6	20.7
85°	<i>14.4</i>	15.9	12.5	11.6	11.1
87.5°	<i>5.3</i>	5.3	5.3	4.8	4.8
90°	<i>0.0</i>	0.0	0.0	0.0	0.0

(END OF REPORT)