

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: P258905

Luminaire Tested: **14CZ-LD5-20-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258905  
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-L93050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1320.0 lumens  
Efficiency: N/A  
Efficacy: 82.5 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

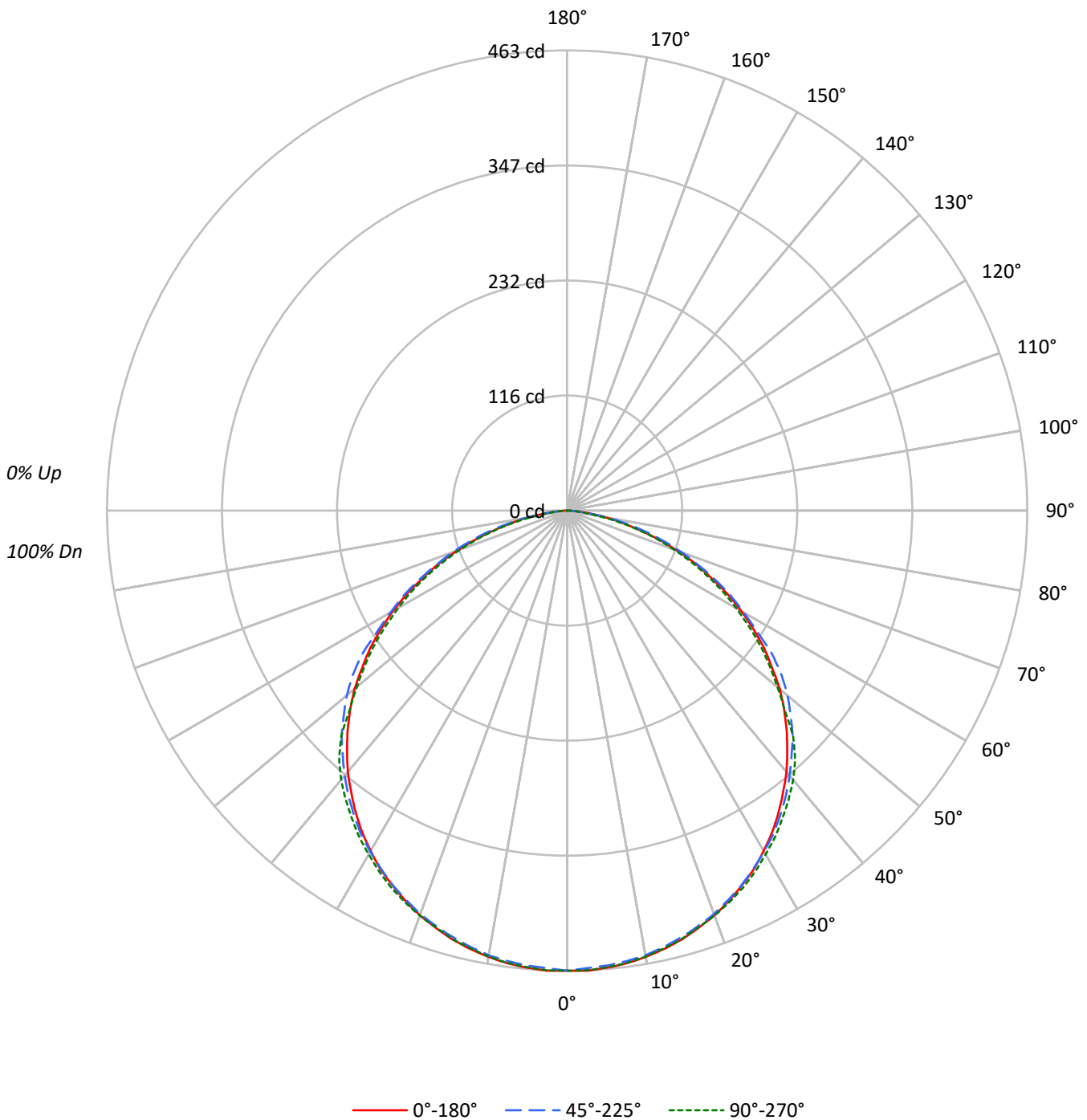
Input Watts (W): 15.996  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1246	1246	1246
5°	1247	1241	1246
10°	1246	1241	1245
15°	1244	1238	1243
20°	1241	1237	1242
25°	1235	1234	1243
30°	1229	1231	1241
35°	1218	1228	1241
40°	1206	1223	1242
45°	1188	1222	1223
50°	1169	1212	1156
55°	1136	1181	1114
60°	1088	1104	1056
65°	1019	1046	991
70°	928	965	897
75°	774	845	760
80°	614	646	527
85°	398	346	306



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.8	3.3
10°-20°	125.9	9.5
20°-30°	192.1	14.6
30°-40°	234.3	17.7
40°-50°	245.3	18.6
50°-60°	218.2	16.5
60°-70°	161.0	12.2
70°-80°	83.2	6.3
80°-90°	16.2	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°	361.8	27.4
0°-40°	596.1	45.2
0°-60°	1059.6	80.3
0°-90°	1320.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1320.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	462	461	460	461	461	44
15°	447	446	444	446	446	126
25°	416	416	416	419	419	192
35°	371	371	374	378	378	232
45°	312	314	321	324	321	241
55°	242	247	252	241	238	216
65°	160	171	164	159	156	159
75°	74	82	81	75	73	80
85°	13	14	11	10	10	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	462.9	462.9	462.9	462.9	462.9
2.5°	463.4	462.9	460.8	462.9	462.9
5°	461.6	461.2	459.5	461.2	461.2
7.5°	459.5	459.1	457.3	459.1	459.1
10°	456.0	455.6	454.3	456.0	455.6
12.5°	451.7	451.7	449.6	451.7	450.9
15°	446.6	446.2	444.4	446.2	446.2
17.5°	440.1	439.7	438.4	440.6	439.7
20°	433.2	432.8	432.0	434.1	433.7
22.5°	425.1	425.1	423.8	426.4	426.4
25°	416.0	416.0	415.6	418.6	418.6
27.5°	407.0	406.1	406.1	409.2	409.6
30°	395.4	395.4	396.2	399.7	399.3
32.5°	383.8	384.2	385.9	388.9	389.4
35°	370.9	371.3	373.9	378.2	377.7
37.5°	357.1	358.4	361.4	366.1	366.1
40°	343.3	344.2	348.1	353.2	353.7
42.5°	327.8	330.0	334.3	340.3	339.5
45°	312.3	314.5	321.0	324.0	321.4
47.5°	296.0	298.6	305.0	305.5	296.9
50°	279.2	282.2	289.5	280.9	276.2
52.5°	259.9	265.5	271.9	259.9	256.8
55°	242.2	247.4	251.7	240.9	237.5
57.5°	222.4	229.3	226.3	221.1	216.8
60°	202.2	209.5	205.2	200.1	196.2
62.5°	181.6	189.7	185.4	180.3	176.8
65°	160.0	171.2	164.3	158.8	155.7
67.5°	139.8	150.6	142.4	138.1	135.1
70°	117.9	126.9	122.6	117.0	114.0
72.5°	96.4	103.3	102.0	95.9	93.8
75°	74.4	82.2	81.3	74.9	73.1
77.5°	55.9	63.2	60.7	55.5	53.3
80°	39.6	44.3	41.7	35.7	34.0
82.5°	24.1	28.0	23.7	20.2	18.5
85°	12.9	14.2	11.2	10.3	9.9
87.5°	4.7	4.7	4.7	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)