

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: P275758

Luminaire Tested: **14CZ2-20-RDP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275758  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-RDP-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1246.0 lumens  
Efficiency: N/A  
Efficacy: 77.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

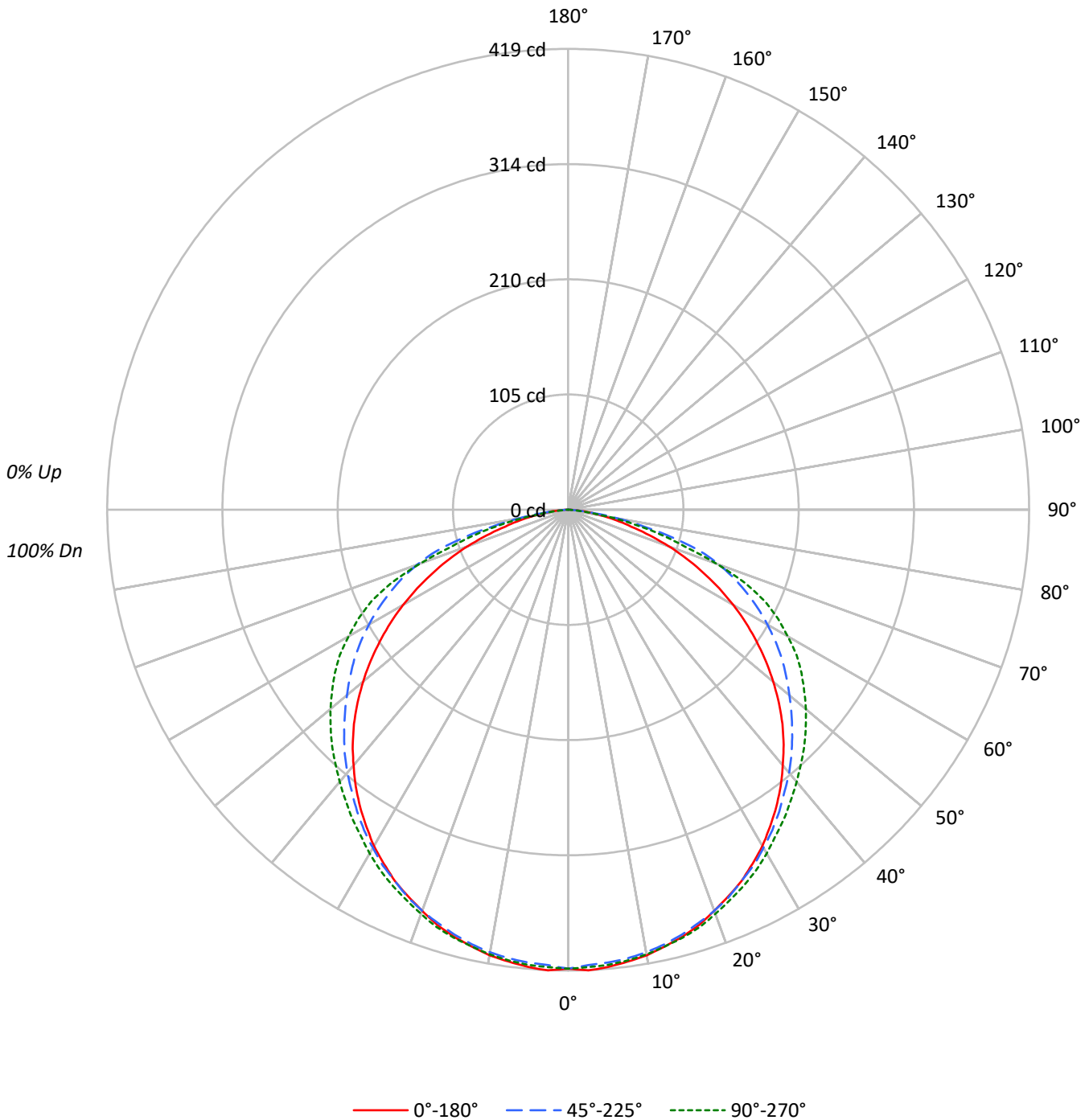
Input Watts (W): 15.996  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

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

	0°	45°	90°
0°	1123	1123	1123
5°	1127	1117	1122
10°	1124	1116	1122
15°	1119	1114	1122
20°	1111	1111	1120
25°	1106	1106	1121
30°	1097	1103	1121
35°	1083	1099	1125
40°	1066	1097	1135
45°	1048	1096	1155
50°	1018	1099	1181
55°	981	1114	1214
60°	932	1125	1241
65°	861	1140	1258
70°	766	1148	1125
75°	617	1031	900
80°	482	724	587
85°	330	210	151



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.5	3.2
10°-20°	113.3	9.1
20°-30°	172.6	13.8
30°-40°	210.2	16.9
40°-50°	223.0	17.9
50°-60°	210.4	16.9
60°-70°	169.9	13.6
70°-80°	92.2	7.4
80°-90°	14.9	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°	325.4	26.1
0°-40°	535.6	43.0
0°-60°	969.0	77.8
0°-90°	1246.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1246.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	417	416	413	416	415	40
15°	402	401	400	403	403	113
25°	373	372	373	376	377	172
35°	330	332	335	341	342	206
45°	275	279	288	299	304	212
55°	209	218	237	253	259	187
65°	135	152	179	194	198	134
75°	59	87	99	90	87	65
85°	11	12	7	6	5	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	417.3	417.3	417.3	417.3	417.3
2.5°	419.3	417.3	414.4	417.3	416.3
5°	417.3	416.3	413.4	416.3	415.4
7.5°	414.4	414.4	411.5	413.4	413.4
10°	411.5	410.5	408.6	411.5	410.5
12.5°	406.6	405.6	404.7	407.6	406.6
15°	401.8	400.8	399.8	402.7	402.7
17.5°	395.9	394.9	394.0	397.9	397.9
20°	388.1	388.1	388.1	392.0	391.1
22.5°	380.4	380.4	381.3	385.2	384.2
25°	372.6	371.6	372.6	376.5	377.4
27.5°	362.8	363.8	364.8	368.7	369.7
30°	353.1	354.1	355.1	359.9	360.9
32.5°	341.4	343.4	345.3	351.2	351.2
35°	329.8	331.7	334.6	341.4	342.4
37.5°	317.1	319.1	323.0	330.7	332.7
40°	303.5	306.4	312.3	320.0	323.0
42.5°	289.9	293.8	300.6	309.3	313.2
45°	275.3	279.2	287.9	298.6	303.5
47.5°	259.7	264.6	275.3	288.9	292.8
50°	243.2	250.0	262.6	277.2	282.1
52.5°	226.7	234.4	250.0	265.6	270.4
55°	209.1	217.9	237.4	252.9	258.8
57.5°	191.6	201.4	223.7	240.3	246.1
60°	173.2	184.8	209.1	225.7	230.5
62.5°	154.7	168.3	194.6	211.1	215.0
65°	135.2	151.8	179.0	193.6	197.5
67.5°	116.7	136.2	163.4	174.1	174.1
70°	97.3	118.7	145.9	148.8	143.0
72.5°	77.8	102.1	126.5	115.8	110.9
75°	59.3	86.6	99.2	89.5	86.6
77.5°	44.7	70.0	70.0	64.2	62.3
80°	31.1	53.5	46.7	40.9	37.9
82.5°	20.4	30.2	24.3	19.5	16.5
85°	10.7	11.7	6.8	5.8	4.9
87.5°	3.9	1.9	1.0	1.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)