

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: P258716

Luminaire Tested: **14CZ-LD5-29-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258716  
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-LD5-29-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3148.7 lumens  
Efficiency: N/A  
Efficacy: 139.3 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

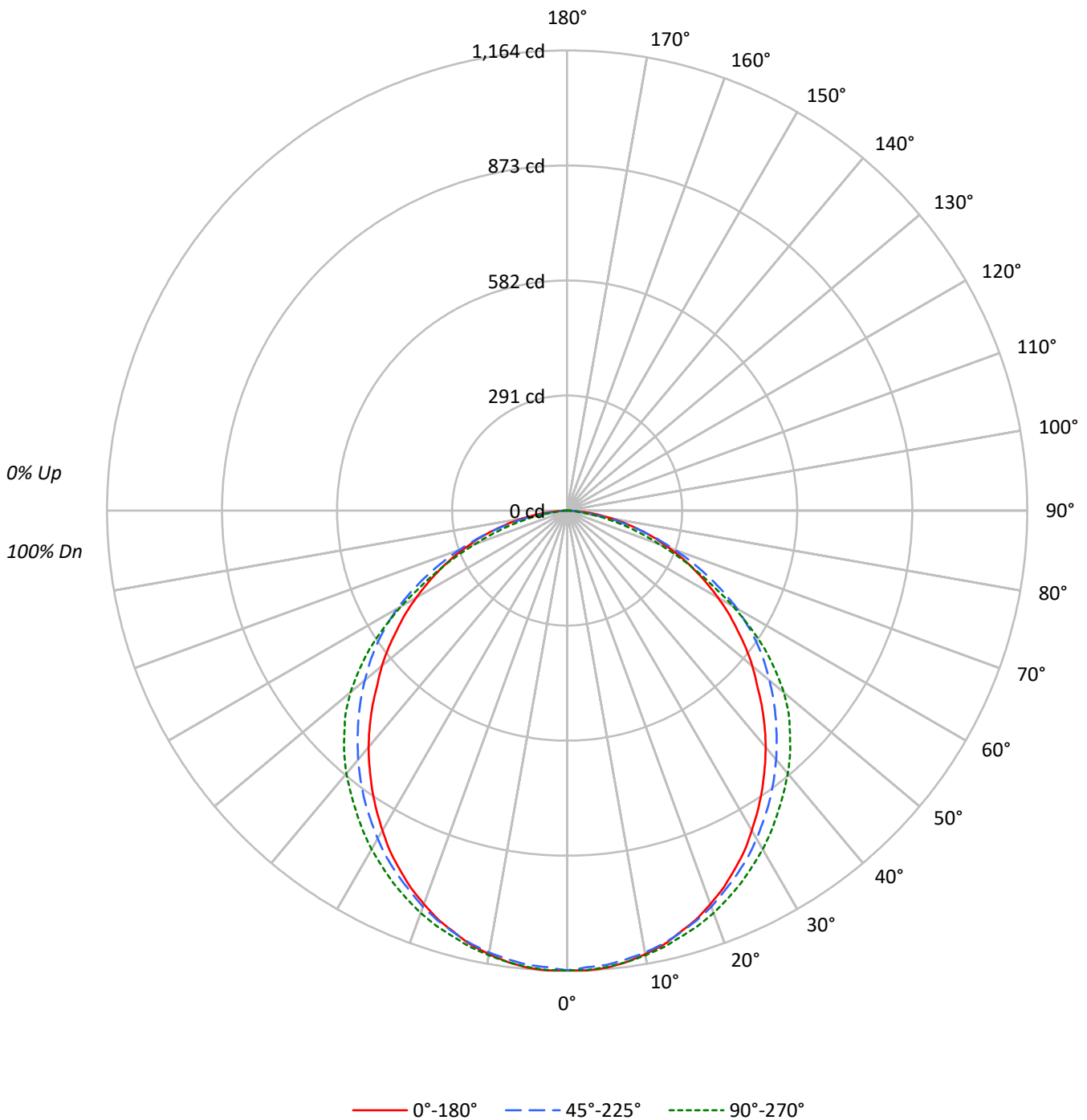
Input Watts (W): 22.599  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3130	3130	3130
5°	3134	3115	3130
10°	3113	3102	3121
15°	3076	3080	3107
20°	3033	3054	3102
25°	2975	3016	3087
30°	2903	2978	3074
35°	2825	2936	3056
40°	2745	2888	3051
45°	2648	2841	3033
50°	2561	2796	2996
55°	2462	2752	2863
60°	2371	2673	2613
65°	2269	2502	2296
70°	2142	2274	1943
75°	1998	1969	1604
80°	1760	1522	1175
85°	1386	738	648



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.9	3.5
10°-20°	313.1	9.9
20°-30°	469.9	14.9
30°-40°	560.2	17.8
40°-50°	577.0	18.3
50°-60°	514.2	16.3
60°-70°	370.5	11.8
70°-80°	193.8	6.2
80°-90°	40.1	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°	892.9	28.4
0°-40°	1453.1	46.1
0°-60°	2544.4	80.8
0°-90°	3148.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3148.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1163	1163	1163	1163	1163	
5°	1160	1158	1153	1160	1159	110
15°	1104	1106	1106	1117	1115	312
25°	1002	1007	1016	1036	1040	461
35°	860	871	894	923	930	538
45°	696	711	746	788	797	537
55°	525	542	586	613	610	471
65°	356	369	393	375	361	353
75°	192	202	189	164	154	204
85°	45	39	24	21	21	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1163.1	1163.1	1163.1	1163.1	1163.1
2.5°	1164.5	1161.7	1156.1	1163.1	1163.1
5°	1160.3	1157.5	1153.3	1160.3	1158.9
7.5°	1151.9	1149.1	1144.9	1153.3	1151.9
10°	1139.3	1137.9	1135.1	1143.5	1142.1
12.5°	1125.3	1123.9	1122.5	1130.9	1130.9
15°	1104.2	1105.6	1105.6	1116.8	1115.4
17.5°	1084.6	1086.0	1087.4	1101.4	1101.4
20°	1059.3	1060.7	1066.3	1081.8	1083.2
22.5°	1032.7	1034.1	1041.1	1059.3	1062.1
25°	1001.8	1007.4	1015.8	1035.5	1039.7
27.5°	970.9	975.1	989.2	1011.6	1014.4
30°	934.4	942.9	958.3	983.6	989.2
32.5°	898.0	907.8	926.0	954.1	961.1
35°	860.1	871.3	893.8	923.2	930.2
37.5°	820.8	830.6	858.7	889.5	899.4
40°	781.5	791.3	822.2	857.3	868.5
42.5°	739.4	753.4	784.3	823.6	834.8
45°	695.9	711.4	746.4	788.5	796.9
47.5°	651.0	667.9	708.6	750.6	760.5
50°	611.7	627.2	667.9	708.6	715.6
52.5°	569.6	583.7	628.6	662.2	663.7
55°	524.7	541.6	586.5	613.1	610.3
57.5°	484.1	498.1	541.6	555.6	547.2
60°	440.6	453.2	496.7	498.1	485.5
62.5°	398.5	411.1	444.8	435.0	419.5
65°	356.4	369.0	392.9	374.6	360.6
67.5°	315.7	326.9	340.9	317.1	303.1
70°	272.2	287.6	289.0	261.0	246.9
72.5°	234.3	242.7	239.9	213.3	200.6
75°	192.2	202.0	189.4	164.2	154.3
77.5°	152.9	160.0	143.1	119.3	112.2
80°	113.6	117.9	98.2	80.0	75.8
82.5°	77.2	77.2	56.1	43.5	39.3
85°	44.9	39.3	23.9	21.0	21.0
87.5°	15.4	9.8	9.8	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)