

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: P275401

Luminaire Tested: **14CZ2-29-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275401  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-29-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3073.0 lumens  
Efficiency: N/A  
Efficacy: 132.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

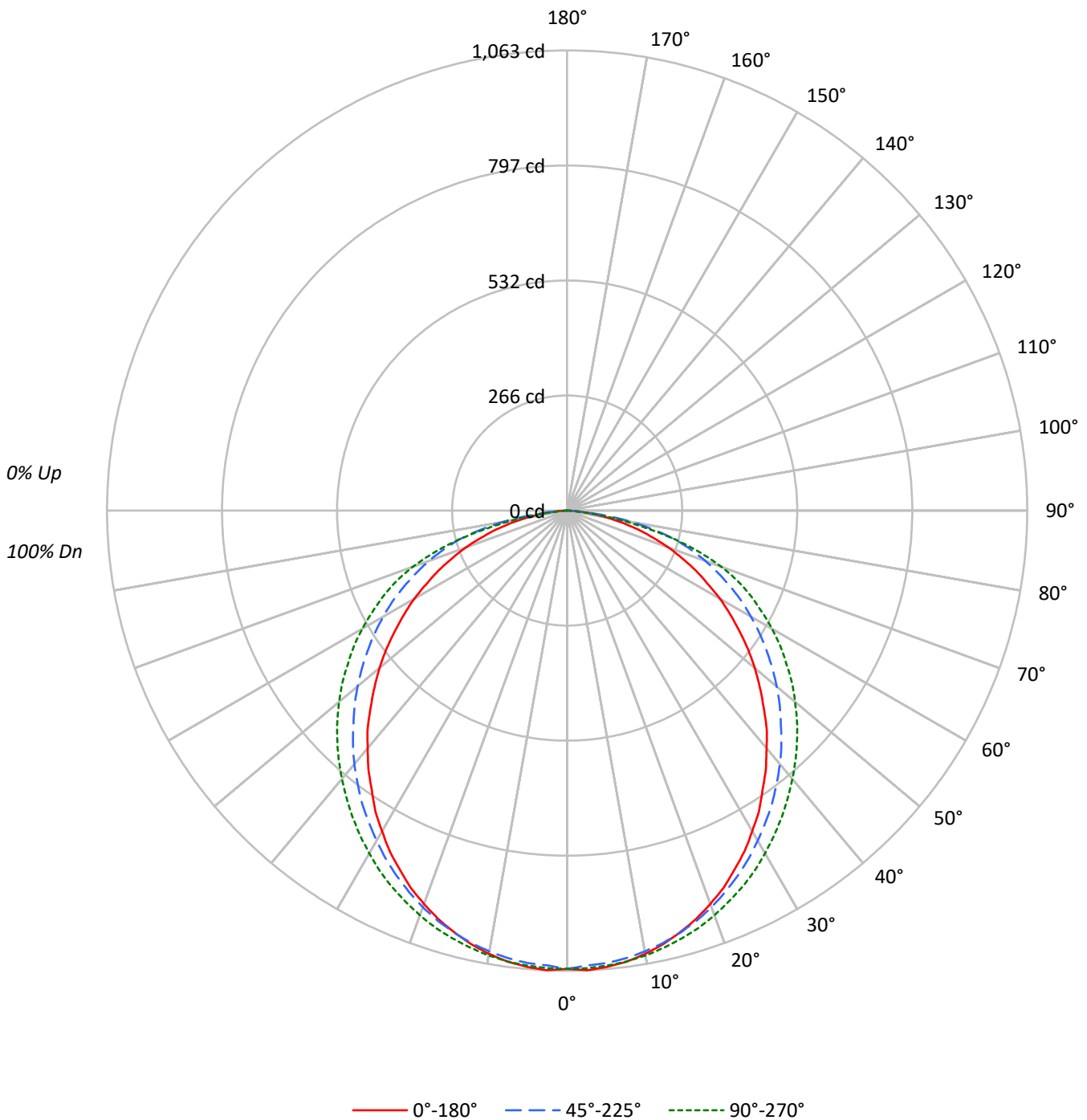
Input Watts (W): 23.25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2849	2849	2849
5°	2858	2834	2850
10°	2840	2825	2852
15°	2810	2812	2850
20°	2769	2792	2849
25°	2716	2765	2846
30°	2657	2736	2840
35°	2586	2712	2839
40°	2518	2686	2843
45°	2441	2657	2858
50°	2370	2645	2877
55°	2279	2636	2903
60°	2198	2640	2943
65°	2085	2648	2989
70°	1957	2669	2987
75°	1774	2693	2700
80°	1455	2326	1922
85°	1078	1099	445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.2	3.3
10°-20°	286.2	9.3
20°-30°	431.1	14.0
30°-40°	517.3	16.8
40°-50°	539.2	17.5
50°-60°	499.1	16.2
60°-70°	403.3	13.1
70°-80°	245.9	8.0
80°-90°	50.8	1.7
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°	817.4	26.6
0°-40°	1334.7	43.4
0°-60°	2373.0	77.2
0°-90°	3073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3073.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1058	1055	1049	1057	1055	100
15°	1009	1009	1009	1023	1023	284
25°	915	920	931	954	959	422
35°	787	800	826	856	864	493
45°	641	660	698	737	751	496
55°	486	511	562	606	619	435
65°	328	360	416	458	469	324
75°	171	208	259	263	260	179
85°	35	52	36	20	14	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1058.7	1058.7	1058.7	1058.7	1058.7
2.5°	1062.8	1059.3	1051.8	1059.3	1058.0
5°	1058.0	1055.2	1049.1	1056.6	1055.2
7.5°	1051.1	1048.4	1042.9	1051.8	1050.4
10°	1039.5	1038.1	1034.0	1044.3	1043.6
12.5°	1025.8	1025.1	1023.0	1034.7	1034.0
15°	1008.6	1009.3	1009.3	1023.0	1023.0
17.5°	989.5	990.8	993.6	1008.6	1010.7
20°	966.8	969.6	975.1	992.2	994.9
22.5°	943.5	945.6	953.8	974.4	977.1
25°	914.8	920.2	931.2	954.5	958.6
27.5°	887.4	892.2	907.2	931.2	938.1
30°	855.1	862.7	880.5	906.5	914.1
32.5°	824.3	832.5	853.1	883.2	890.1
35°	787.3	799.6	825.7	855.8	864.1
37.5°	753.7	765.4	794.9	827.7	837.3
40°	716.7	731.1	764.7	799.6	809.2
42.5°	682.5	696.2	732.5	768.1	781.1
45°	641.4	660.5	698.2	737.3	751.0
47.5°	603.7	622.9	666.0	707.8	720.2
50°	566.0	586.5	631.8	674.9	687.3
52.5°	526.9	548.9	597.5	640.7	655.1
55°	485.8	511.2	561.9	605.7	618.7
57.5°	446.8	472.8	526.9	571.5	584.5
60°	408.4	435.1	490.6	533.1	546.8
62.5°	365.9	397.4	455.0	496.8	507.1
65°	327.5	359.7	415.9	457.7	469.4
67.5°	287.1	322.1	378.2	416.6	427.6
70°	248.7	285.0	339.2	374.8	379.6
72.5°	207.6	244.6	299.4	322.1	322.1
75°	170.6	208.3	259.0	263.1	259.7
77.5°	130.2	172.0	204.9	196.7	188.4
80°	93.9	135.0	150.1	135.0	124.0
82.5°	63.0	98.0	90.4	71.9	63.7
85°	34.9	52.1	35.6	19.9	14.4
87.5°	13.0	11.6	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)