

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: P275470

Luminaire Tested: **14CZ2-29-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275470  
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-L82765-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: 2945.0 lumens  
Efficiency: N/A  
Efficacy: 130.9 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

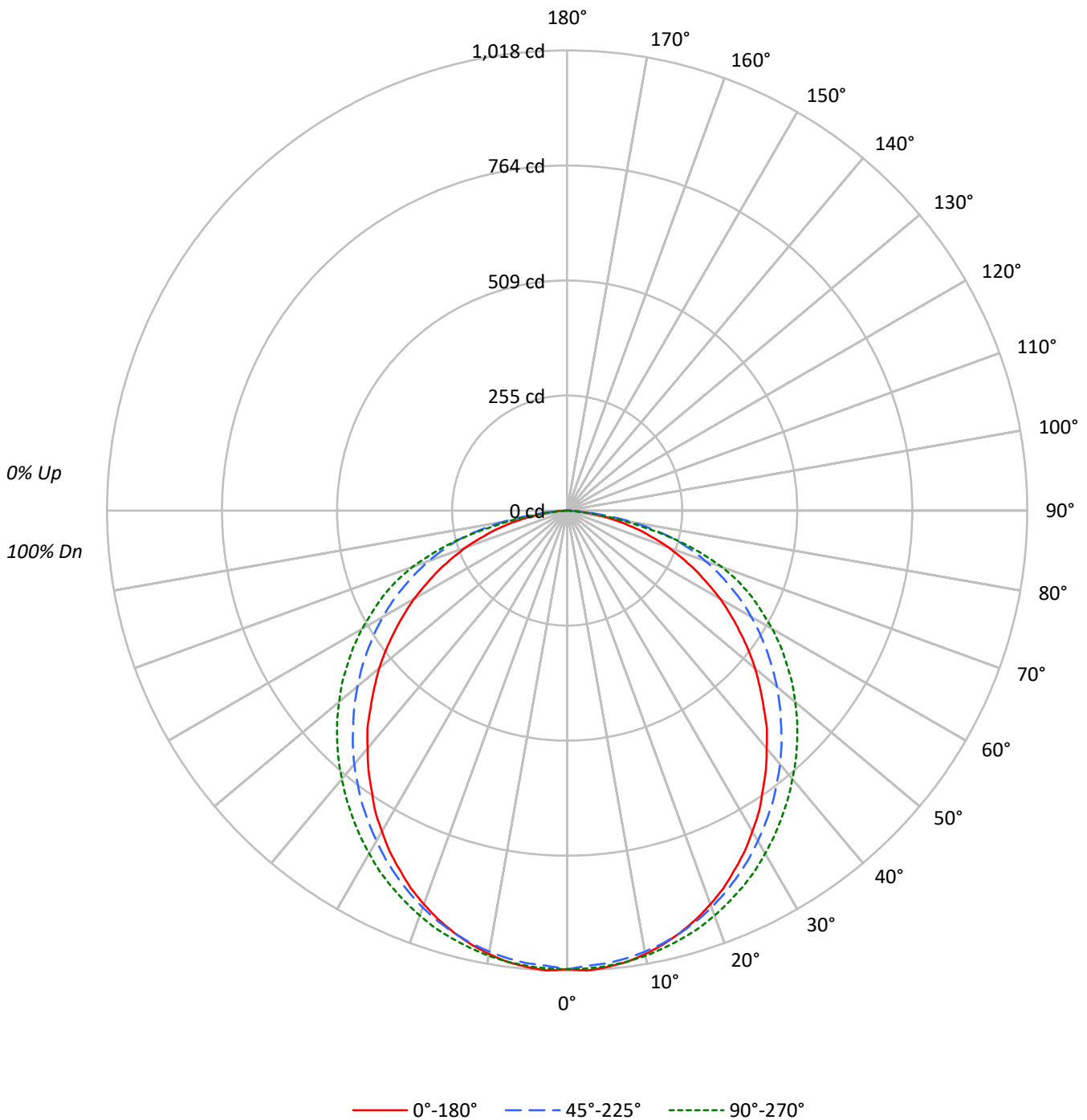
Input Watts (W): 22.506  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2730	2730	2730
5°	2739	2716	2732
10°	2722	2708	2733
15°	2693	2695	2731
20°	2653	2676	2731
25°	2603	2650	2728
30°	2546	2622	2722
35°	2479	2599	2720
40°	2413	2574	2724
45°	2339	2547	2739
50°	2271	2535	2757
55°	2184	2526	2782
60°	2106	2531	2820
65°	1999	2538	2864
70°	1876	2558	2862
75°	1700	2581	2588
80°	1395	2228	1843
85°	1034	1053	426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.0	3.3
10°-20°	274.2	9.3
20°-30°	413.1	14.0
30°-40°	495.8	16.8
40°-50°	516.7	17.5
50°-60°	478.4	16.2
60°-70°	386.5	13.1
70°-80°	235.7	8.0
80°-90°	48.7	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°	783.4	26.6
0°-40°	1279.1	43.4
0°-60°	2274.2	77.2
0°-90°	2945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2945.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1015	1015	1015	1015	1015	
5°	1014	1011	1005	1013	1011	96
15°	967	967	967	980	980	272
25°	877	882	892	915	919	404
35°	754	766	791	820	828	473
45°	615	633	669	707	720	475
55°	466	490	538	580	593	417
65°	314	345	399	439	450	310
75°	164	200	248	252	249	172
85°	34	50	34	19	14	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1014.6	1014.6	1014.6	1014.6	1014.6
2.5°	1018.5	1015.2	1008.0	1015.2	1013.9
5°	1013.9	1011.3	1005.4	1012.6	1011.3
7.5°	1007.3	1004.7	999.5	1008.0	1006.7
10°	996.2	994.9	990.9	1000.8	1000.1
12.5°	983.0	982.4	980.4	991.6	990.9
15°	966.6	967.3	967.3	980.4	980.4
17.5°	948.2	949.6	952.2	966.6	968.6
20°	926.6	929.2	934.4	950.9	953.5
22.5°	904.2	906.2	914.1	933.8	936.4
25°	876.7	881.9	892.4	914.7	918.7
27.5°	850.4	855.0	869.4	892.4	899.0
30°	819.5	826.8	843.8	868.8	876.0
32.5°	790.0	797.9	817.6	846.5	853.0
35°	754.5	766.3	791.3	820.2	828.1
37.5°	722.3	733.5	761.7	793.3	802.5
40°	686.9	700.7	732.8	766.3	775.5
42.5°	654.0	667.2	702.0	736.1	748.6
45°	614.6	633.0	669.2	706.6	719.7
47.5°	578.5	596.9	638.3	678.3	690.2
50°	542.4	562.1	605.5	646.8	658.6
52.5°	505.0	526.0	572.6	614.0	627.8
55°	465.6	489.9	538.5	580.5	593.0
57.5°	428.2	453.1	505.0	547.7	560.1
60°	391.4	417.0	470.2	510.9	524.0
62.5°	350.7	380.9	436.0	476.1	485.9
65°	313.9	344.8	398.6	438.7	449.8
67.5°	275.1	308.6	362.5	399.3	409.8
70°	238.4	273.2	325.1	359.2	363.8
72.5°	199.0	234.4	287.0	308.6	308.6
75°	163.5	199.6	248.2	252.2	248.9
77.5°	124.8	164.8	196.3	188.5	180.6
80°	90.0	129.4	143.8	129.4	118.9
82.5°	60.4	93.9	86.7	69.0	61.1
85°	33.5	49.9	34.1	19.0	13.8
87.5°	12.5	11.2	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)