

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: P230919

Luminaire Tested: **14CZ-LD5-29-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230919  
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-L950-CD1-U  
Description: CRUZE 1x4 LED TROFFER  
WITH SMOOTH LENS  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2857.0 lumens  
Efficiency: N/A  
Efficacy: 116.6 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

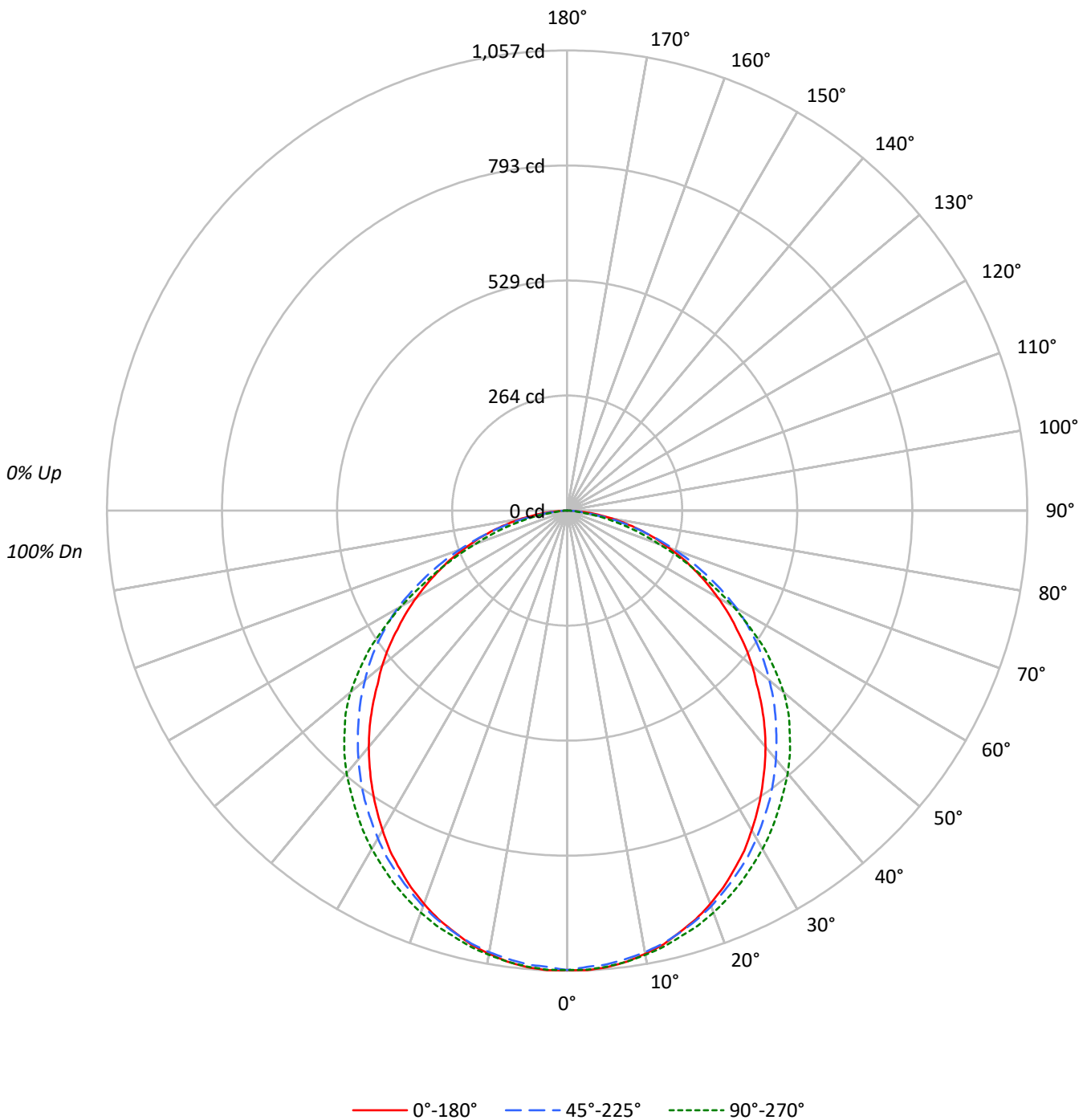
Input Watts (W): 24.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2840	2840	2840
5°	2844	2827	2841
10°	2825	2814	2832
15°	2791	2795	2820
20°	2753	2771	2814
25°	2699	2737	2801
30°	2635	2702	2789
35°	2564	2664	2773
40°	2491	2621	2768
45°	2403	2578	2752
50°	2324	2537	2718
55°	2234	2496	2598
60°	2151	2426	2371
65°	2059	2270	2083
70°	1943	2064	1763
75°	1813	1787	1456
80°	1598	1381	1065
85°	1257	667	590



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.7	3.5
10°-20°	284.1	9.9
20°-30°	426.4	14.9
30°-40°	508.3	17.8
40°-50°	523.6	18.3
50°-60°	466.6	16.3
60°-70°	336.2	11.8
70°-80°	175.8	6.2
80°-90°	36.3	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°	810.2	28.4
0°-40°	1318.5	46.1
0°-60°	2308.6	80.8
0°-90°	2857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2857.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1055	1055	1055	1055	1055	
5°	1053	1050	1046	1053	1052	100
15°	1002	1003	1003	1013	1012	283
25°	909	914	922	940	943	419
35°	780	791	811	838	844	488
45°	631	645	677	716	723	487
55°	476	491	532	556	554	427
65°	323	335	356	340	327	320
75°	174	183	172	149	140	185
85°	41	36	22	19	19	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1055.4	1055.4	1055.4	1055.4	1055.4
2.5°	1056.6	1054.1	1049.0	1055.4	1055.4
5°	1052.8	1050.3	1046.5	1052.8	1051.6
7.5°	1045.2	1042.6	1038.8	1046.5	1045.2
10°	1033.7	1032.5	1029.9	1037.6	1036.3
12.5°	1021.0	1019.7	1018.5	1026.1	1026.1
15°	1001.9	1003.2	1003.2	1013.4	1012.1
17.5°	984.1	985.4	986.6	999.4	999.4
20°	961.2	962.4	967.5	981.5	982.8
22.5°	937.0	938.3	944.6	961.2	963.7
25°	909.0	914.1	921.7	939.5	943.3
27.5°	881.0	884.8	897.5	917.9	920.4
30°	847.9	855.5	869.5	892.4	897.5
32.5°	814.8	823.7	840.2	865.7	872.1
35°	780.4	790.6	810.9	837.7	844.0
37.5°	744.7	753.7	779.1	807.1	816.0
40°	709.1	718.0	746.0	777.8	788.0
42.5°	670.9	683.6	711.6	747.3	757.5
45°	631.4	645.4	677.3	715.5	723.1
47.5°	590.7	606.0	642.9	681.1	690.0
50°	555.1	569.1	606.0	642.9	649.3
52.5°	516.9	529.6	570.3	600.9	602.2
55°	476.1	491.4	532.1	556.3	553.8
57.5°	439.2	451.9	491.4	504.1	496.5
60°	399.7	411.2	450.7	451.9	440.5
62.5°	361.6	373.0	403.6	394.7	380.6
65°	323.4	334.8	356.5	339.9	327.2
67.5°	286.4	296.6	309.4	287.7	275.0
70°	247.0	261.0	262.3	236.8	224.1
72.5°	212.6	220.2	217.7	193.5	182.0
75°	174.4	183.3	171.9	148.9	140.0
77.5°	138.8	145.1	129.9	108.2	101.8
80°	103.1	106.9	89.1	72.6	68.7
82.5°	70.0	70.0	50.9	39.5	35.6
85°	40.7	35.6	21.6	19.1	19.1
87.5°	14.0	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)