

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: P387481

Luminaire Tested: **14CZ2-39-SQR-UNV-L930-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P387481  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-SQR-UNV-L930-CD1-SWPD1-U  
Description: 1x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3076.2 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

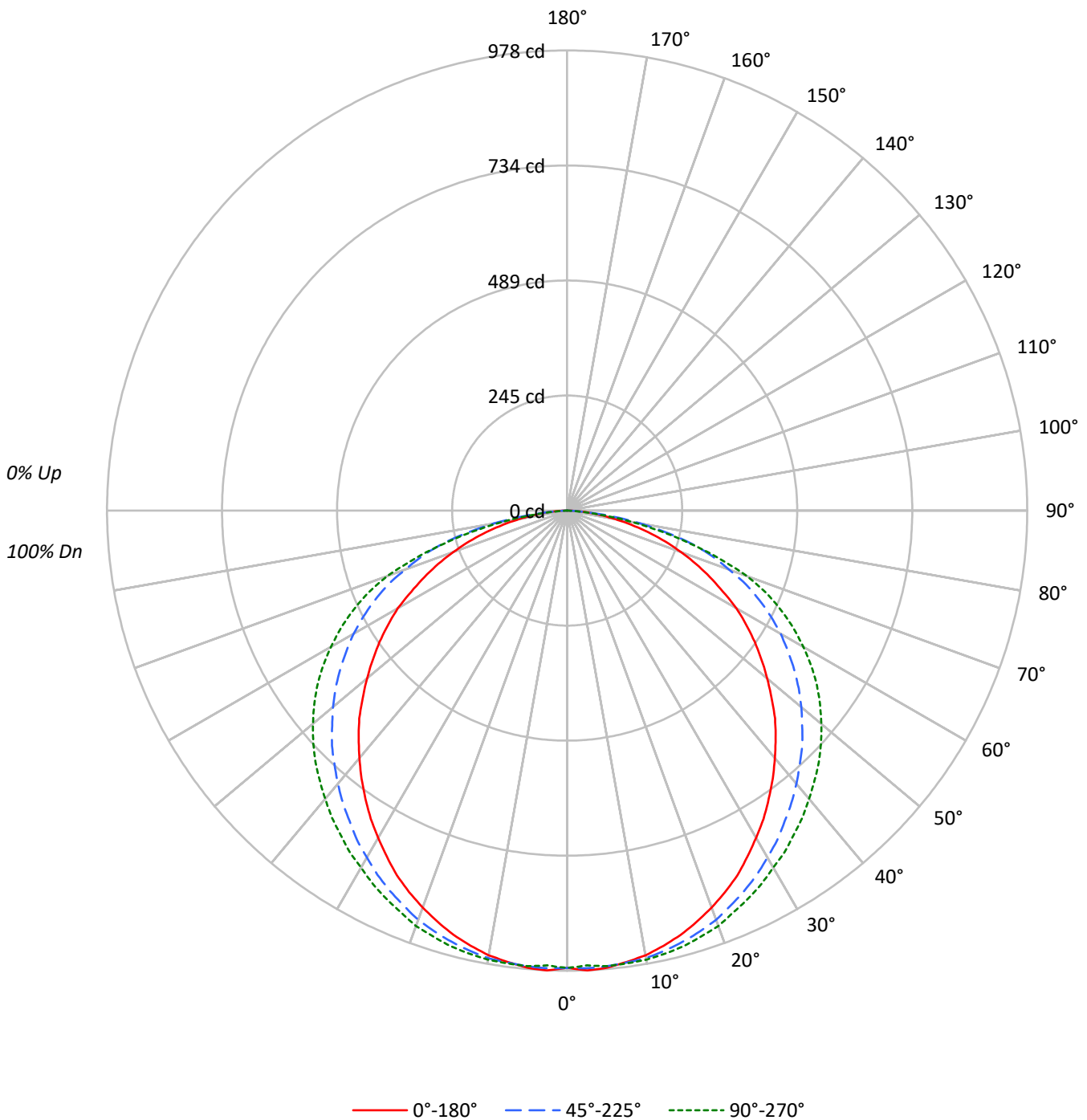
Input Watts (W): 32.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

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

	0°	45°	90°
0°	2616	2616	2616
5°	2634	2626	2626
10°	2622	2639	2648
15°	2600	2643	2669
20°	2571	2651	2690
25°	2541	2647	2702
30°	2495	2645	2722
35°	2455	2648	2760
40°	2413	2663	2810
45°	2378	2691	2879
50°	2323	2719	2953
55°	2284	2764	3041
60°	2236	2820	3121
65°	2132	2873	3198
70°	2025	2879	3196
75°	1854	2870	2821
80°	1585	2450	2187
85°	1244	1389	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.4	3.0
10°-20°	266.9	8.7
20°-30°	408.1	13.3
30°-40°	500.3	16.3
40°-50°	538.0	17.5
50°-60°	517.0	16.8
60°-70°	430.5	14.0
70°-80°	264.2	8.6
80°-90°	58.9	1.9
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°	767.4	24.9
0°-40°	1267.6	41.2
0°-60°	2322.6	75.5
0°-90°	3076.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	972	972	972	972	972	
5°	975	966	972	972	972	93
15°	933	930	949	955	958	263
25°	856	864	892	902	910	394
35°	747	766	806	828	840	468
45°	625	653	707	740	757	481
55°	487	529	589	630	648	435
65°	335	386	451	488	502	332
75°	178	233	276	274	271	189
85°	40	60	45	31	26	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	972.1	972.1	972.1	972.1	972.1
2.5°	978.3	969.0	973.7	972.1	967.5
5°	975.2	965.9	972.1	972.1	972.1
7.5°	967.5	959.7	969.0	970.6	970.6
10°	959.7	953.5	965.9	967.5	969.0
12.5°	947.3	942.6	958.2	961.3	964.4
15°	933.3	930.2	948.8	955.1	958.2
17.5°	916.3	917.8	938.0	945.7	948.8
20°	897.7	902.3	925.6	933.3	939.5
22.5°	877.5	883.7	908.5	917.8	924.0
25°	855.8	863.6	891.5	902.3	910.1
27.5°	829.5	841.9	872.9	886.8	894.6
30°	803.1	817.1	851.2	868.2	876.0
32.5°	776.8	792.3	831.0	848.1	860.5
35°	747.3	765.9	806.2	827.9	840.3
37.5°	717.8	739.5	783.0	807.8	821.7
40°	686.8	710.1	758.1	786.1	800.0
42.5°	655.8	682.2	731.8	762.8	778.3
45°	624.8	652.7	707.0	739.5	756.6
47.5°	589.2	623.3	677.5	714.7	731.8
50°	555.0	592.3	649.6	688.4	705.4
52.5°	520.9	559.7	620.2	660.5	677.5
55°	486.8	528.7	589.2	629.5	648.1
57.5°	451.2	494.6	556.6	598.5	615.5
60°	415.5	460.5	524.0	562.8	579.9
62.5°	373.6	426.4	488.4	527.1	542.6
65°	334.9	386.1	451.2	488.4	502.3
67.5°	296.1	348.8	412.4	446.5	458.9
70°	257.4	310.1	365.9	398.5	406.2
72.5°	218.6	271.3	324.0	342.6	339.5
75°	178.3	232.6	276.0	274.4	271.3
77.5°	139.5	192.3	218.6	207.8	203.1
80°	102.3	153.5	158.1	147.3	141.1
82.5°	69.8	110.1	99.2	86.8	80.6
85°	40.3	60.5	45.0	31.0	26.4
87.5°	17.1	15.5	4.7	4.7	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)