

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: P387467

Luminaire Tested: **14CZ2-35-SQR-UNV-L950-CD1-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: P387467  
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: 14CZ2-35-SQR-UNV-L950-CD1-U  
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

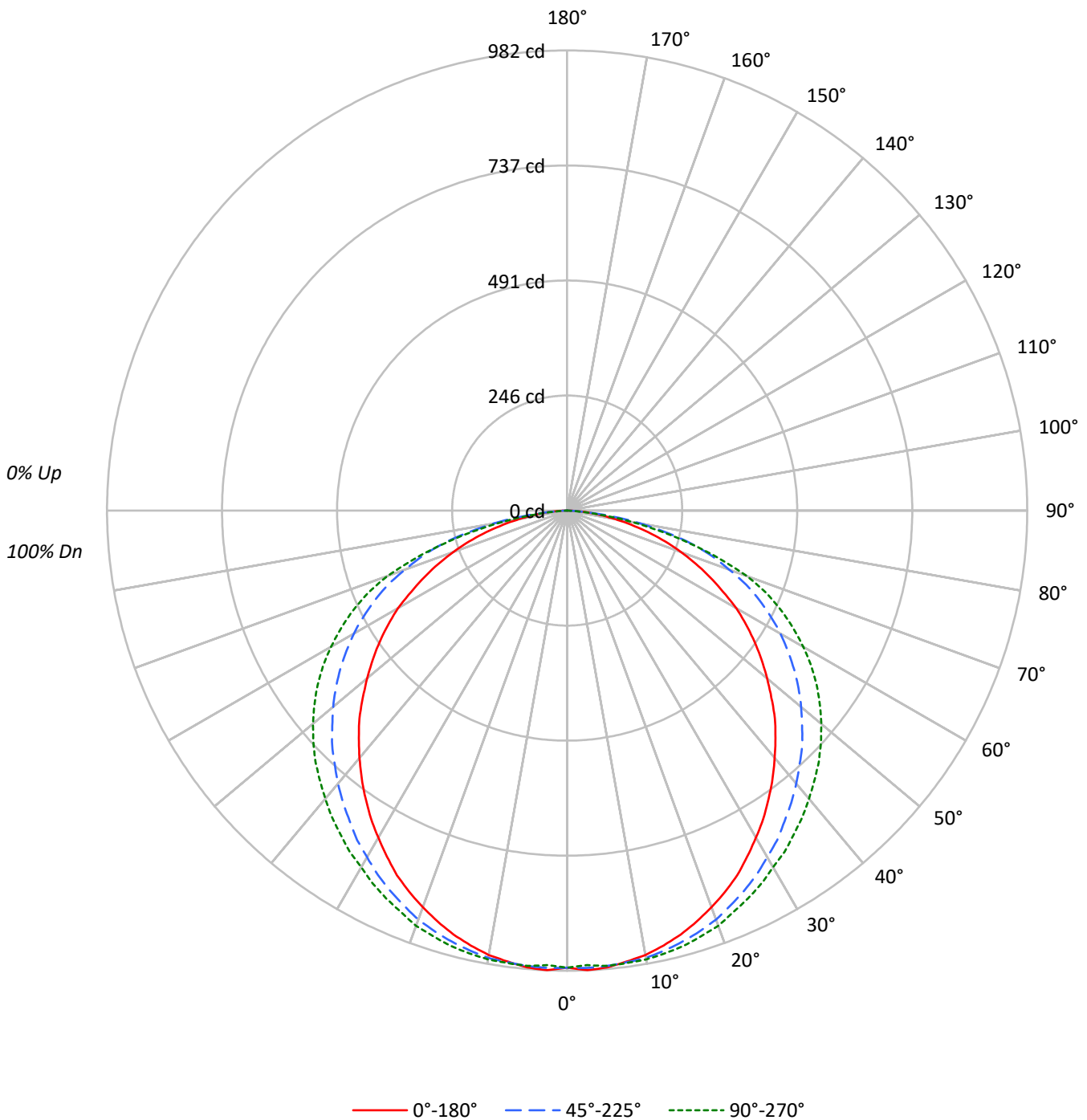
Lumens per Lamp: N/A  
Luminaire Lumens: 3086.9 lumens  
Efficiency: N/A  
Efficacy: 98.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 31.2  
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°	2625	2625	2625
5°	2643	2635	2635
10°	2631	2649	2657
15°	2609	2653	2679
20°	2580	2660	2700
25°	2550	2656	2712
30°	2504	2654	2731
35°	2463	2658	2770
40°	2421	2673	2820
45°	2386	2700	2889
50°	2332	2729	2964
55°	2292	2774	3051
60°	2244	2830	3132
65°	2140	2883	3210
70°	2032	2889	3207
75°	1860	2879	2831
80°	1592	2459	2194
85°	1250	1392	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.7	3.0
10°-20°	267.8	8.7
20°-30°	409.5	13.3
30°-40°	502.0	16.3
40°-50°	539.9	17.5
50°-60°	518.8	16.8
60°-70°	432.0	14.0
70°-80°	265.1	8.6
80°-90°	59.1	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°	770.0	24.9
0°-40°	1272.0	41.2
0°-60°	2330.7	75.5
0°-90°	3086.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3086.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	976	976	976	976	976	
5°	979	969	976	976	976	93
15°	937	934	952	958	962	264
25°	859	867	895	906	913	395
35°	750	769	809	831	843	469
45°	627	655	709	742	759	483
55°	488	530	591	632	650	436
65°	336	387	453	490	504	333
75°	179	233	277	275	272	189
85°	40	61	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°	975.5	975.5	975.5	975.5	975.5
2.5°	981.7	972.4	977.0	975.5	970.8
5°	978.6	969.3	975.5	975.5	975.5
7.5°	970.8	963.0	972.4	973.9	973.9
10°	963.0	956.8	969.3	970.8	972.4
12.5°	950.6	945.9	961.5	964.6	967.7
15°	936.6	933.5	952.2	958.4	961.5
17.5°	919.5	921.0	941.3	949.0	952.2
20°	900.8	905.5	928.8	936.6	942.8
22.5°	880.6	886.8	911.7	921.0	927.3
25°	858.8	866.6	894.6	905.5	913.3
27.5°	832.4	844.8	875.9	889.9	897.7
30°	805.9	819.9	854.1	871.2	879.0
32.5°	779.5	795.0	833.9	851.0	863.5
35°	749.9	768.6	809.0	830.8	843.2
37.5°	720.3	742.1	785.7	810.6	824.6
40°	689.2	712.6	760.8	788.8	802.8
42.5°	658.1	684.6	734.3	765.5	781.0
45°	627.0	655.0	709.4	742.1	759.2
47.5°	591.2	625.4	679.9	717.2	734.3
50°	557.0	594.3	651.9	690.8	707.9
52.5°	522.7	561.6	622.3	662.8	679.9
55°	488.5	530.5	591.2	631.7	650.3
57.5°	452.7	496.3	558.5	600.5	617.7
60°	417.0	462.1	525.9	564.8	581.9
62.5°	374.9	427.8	490.1	529.0	544.5
65°	336.1	387.4	452.7	490.1	504.1
67.5°	297.2	350.1	413.8	448.1	460.5
70°	258.3	311.2	367.2	399.8	407.6
72.5°	219.4	272.3	325.2	343.8	340.7
75°	178.9	233.4	276.9	275.4	272.3
77.5°	140.0	192.9	219.4	208.5	203.8
80°	102.7	154.0	158.7	147.8	141.6
82.5°	70.0	110.5	99.6	87.1	80.9
85°	40.5	60.7	45.1	31.1	26.4
87.5°	17.1	15.6	4.7	4.7	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)