

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: P388277

Luminaire Tested: **22CZ2-34VHE-UNV-L940-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: P388277  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34VHE-UNV-L940-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

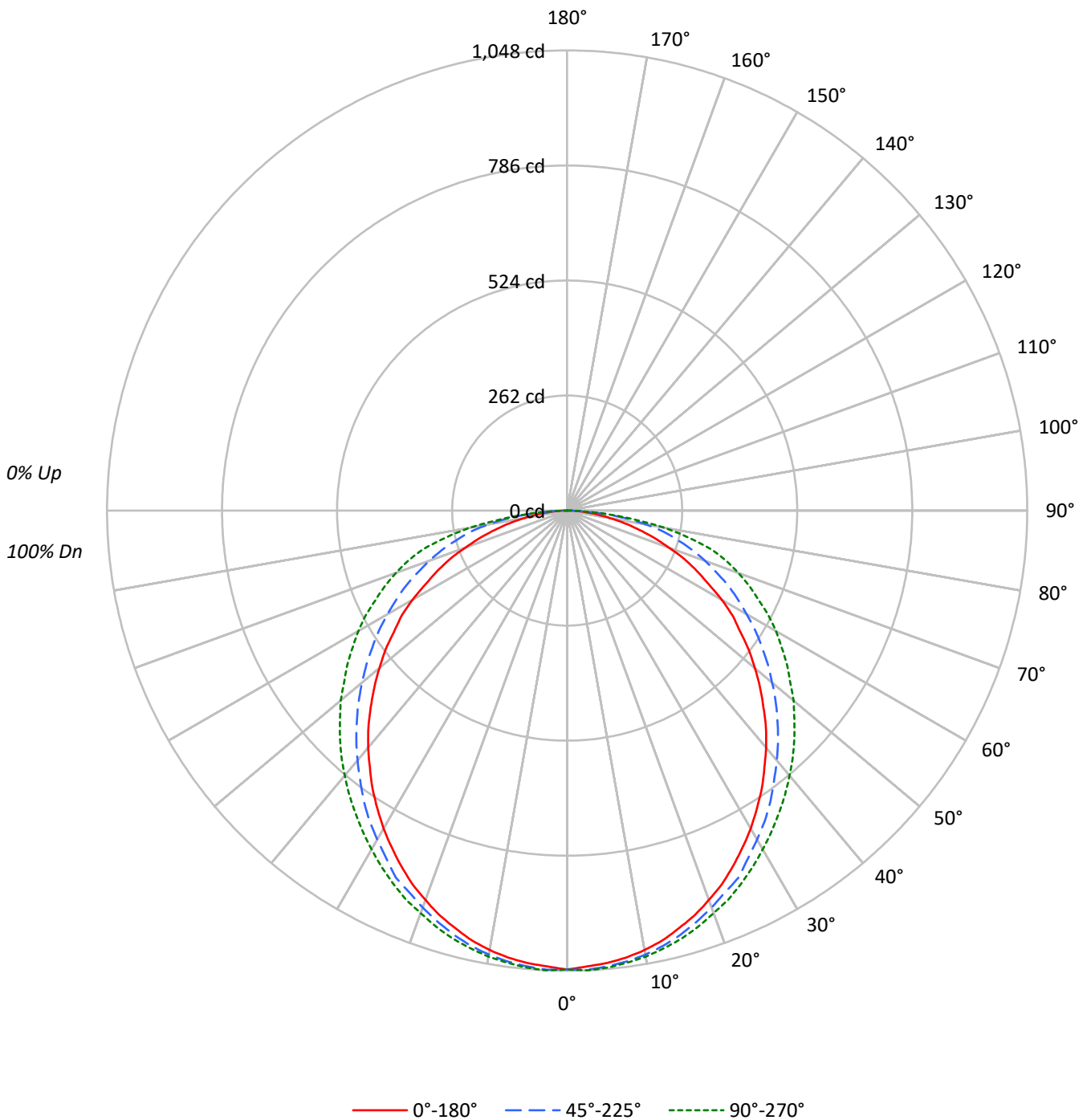
Lumens per Lamp: N/A  
Luminaire Lumens: 3073.5 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 25.1  
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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2812	2812	2812
5°	2794	2815	2823
10°	2777	2806	2818
15°	2743	2785	2810
20°	2702	2755	2794
25°	2654	2739	2784
30°	2599	2688	2768
35°	2539	2653	2762
40°	2476	2609	2768
45°	2406	2578	2786
50°	2336	2552	2817
55°	2256	2540	2867
60°	2189	2540	2955
65°	2080	2581	3062
70°	1939	2629	3260
75°	1777	2720	3523
80°	1547	2836	3468
85°	1355	2523	2754



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.8	3.2
10°-20°	281.5	9.2
20°-30°	422.6	13.7
30°-40°	505.0	16.4
40°-50°	525.1	17.1
50°-60°	486.7	15.8
60°-70°	399.2	13.0
70°-80°	269.9	8.8
80°-90°	84.8	2.8
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°	802.9	26.1
0°-40°	1307.9	42.6
0°-60°	2319.7	75.5
0°-90°	3073.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3073.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1045	1045	1045	1045	1045	
5°	1034	1036	1042	1044	1045	98
15°	985	989	1000	1006	1009	278
25°	894	901	922	933	938	412
35°	773	783	808	832	841	483
45°	632	644	678	717	732	488
55°	481	496	541	590	611	432
65°	327	345	405	458	481	323
75°	171	200	262	315	339	181
85°	44	60	82	91	89	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1045.0	1045.0	1045.0	1045.0	1045.0
2.5°	1039.0	1042.0	1046.6	1048.1	1048.1
5°	1034.5	1036.0	1042.0	1043.5	1045.0
7.5°	1026.9	1029.9	1036.0	1037.5	1039.0
10°	1016.3	1019.3	1026.9	1029.9	1031.4
12.5°	1002.7	1005.7	1014.8	1019.3	1020.8
15°	984.6	989.1	999.7	1005.7	1008.7
17.5°	966.4	970.9	981.5	990.6	993.6
20°	943.7	954.3	961.9	974.0	975.5
22.5°	921.0	927.1	940.7	952.8	958.8
25°	893.8	901.4	922.5	933.1	937.7
27.5°	865.1	875.7	892.3	908.9	915.0
30°	836.3	843.9	865.1	884.7	890.8
32.5°	804.6	815.2	837.9	857.5	866.6
35°	772.8	783.4	807.6	831.8	840.9
37.5°	738.0	750.1	774.3	803.1	815.2
40°	704.8	713.8	742.6	777.4	787.9
42.5°	670.0	680.6	710.8	748.6	760.7
45°	632.2	644.3	677.5	716.9	732.0
47.5°	595.9	608.0	644.3	683.6	701.7
50°	558.1	573.2	609.5	654.9	673.0
52.5°	521.8	535.4	576.2	623.1	639.7
55°	480.9	496.1	541.4	589.8	611.0
57.5°	447.7	458.2	508.2	558.1	579.2
60°	406.8	420.4	471.9	524.8	549.0
62.5°	363.0	385.7	438.6	493.0	517.2
65°	326.7	344.8	405.3	458.2	480.9
67.5°	288.9	308.5	367.5	423.5	449.2
70°	246.5	272.2	334.2	390.2	414.4
72.5°	208.7	235.9	299.4	353.9	379.6
75°	170.9	199.6	261.6	314.6	338.8
77.5°	134.6	166.4	226.9	267.7	282.8
80°	99.8	130.1	183.0	211.7	223.8
82.5°	69.6	95.3	134.6	149.7	152.7
85°	43.9	60.5	81.7	90.7	89.2
87.5°	19.7	24.2	30.2	33.3	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)