

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: P388276

Luminaire Tested: **22CZ2-34VHE-UNV-L940-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: P388276
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-SWPD1-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: 3035.4 lumens
Efficiency: N/A
Efficacy: 120.9 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

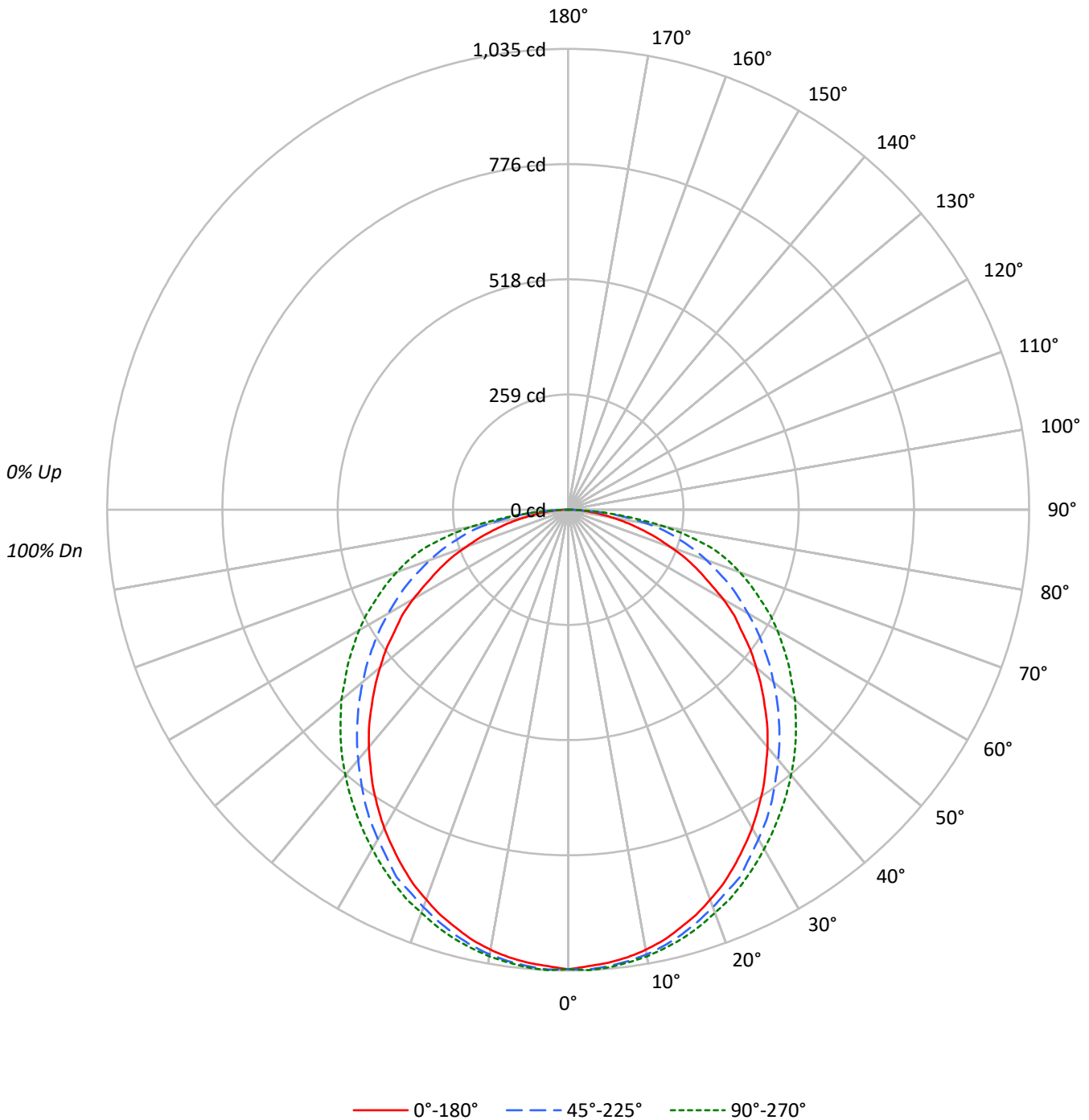
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2777	2777	2777
5°	2760	2780	2788
10°	2743	2771	2783
15°	2709	2751	2775
20°	2669	2720	2759
25°	2621	2705	2749
30°	2567	2655	2733
35°	2507	2620	2728
40°	2445	2576	2734
45°	2376	2546	2751
50°	2307	2520	2783
55°	2228	2509	2831
60°	2162	2508	2918
65°	2054	2549	3025
70°	1916	2597	3220
75°	1755	2687	3479
80°	1528	2800	3426
85°	1337	2492	2720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.6	3.2
10°-20°	278.0	9.2
20°-30°	417.4	13.7
30°-40°	498.7	16.4
40°-50°	518.6	17.1
50°-60°	480.6	15.8
60°-70°	394.2	13.0
70°-80°	266.5	8.8
80°-90°	83.8	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°	793.0	26.1
0°-40°	1291.7	42.6
0°-60°	2290.9	75.5
0°-90°	3035.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3035.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1032	1032	1032	1032	1032	
5°	1022	1023	1029	1031	1032	97
15°	972	977	987	993	996	274
25°	883	890	911	922	926	407
35°	763	774	798	822	830	477
45°	624	636	669	708	723	482
55°	475	490	535	582	603	427
65°	323	340	400	453	475	319
75°	169	197	258	311	335	179
85°	43	60	81	90	88	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1032.1	1032.1	1032.1	1032.1	1032.1
2.5°	1026.1	1029.1	1033.6	1035.1	1035.1
5°	1021.6	1023.1	1029.1	1030.6	1032.1
7.5°	1014.2	1017.2	1023.1	1024.6	1026.1
10°	1003.7	1006.7	1014.2	1017.2	1018.6
12.5°	990.3	993.3	1002.2	1006.7	1008.2
15°	972.3	976.8	987.3	993.3	996.2
17.5°	954.4	958.9	969.4	978.3	981.3
20°	932.0	942.5	949.9	961.9	963.4
22.5°	909.6	915.6	929.0	941.0	947.0
25°	882.7	890.2	911.1	921.6	926.0
27.5°	854.4	864.8	881.2	897.7	903.6
30°	826.0	833.4	854.4	873.8	879.7
32.5°	794.6	805.1	827.5	846.9	855.8
35°	763.2	773.7	797.6	821.5	830.5
37.5°	728.9	740.8	764.7	793.1	805.1
40°	696.0	705.0	733.4	767.7	778.2
42.5°	661.7	672.1	702.0	739.3	751.3
45°	624.3	636.3	669.1	708.0	722.9
47.5°	588.5	600.4	636.3	675.1	693.0
50°	551.1	566.1	601.9	646.7	664.7
52.5°	515.3	528.7	569.1	615.4	631.8
55°	475.0	489.9	534.7	582.5	603.4
57.5°	442.1	452.6	501.9	551.1	572.1
60°	401.8	415.2	466.0	518.3	542.2
62.5°	358.5	380.9	433.2	486.9	510.8
65°	322.6	340.5	400.3	452.6	475.0
67.5°	285.3	304.7	362.9	418.2	443.6
70°	243.5	268.9	330.1	385.4	409.3
72.5°	206.1	233.0	295.7	349.5	374.9
75°	168.8	197.2	258.4	310.7	334.6
77.5°	132.9	164.3	224.0	264.4	279.3
80°	98.6	128.5	180.7	209.1	221.1
82.5°	68.7	94.1	132.9	147.9	150.9
85°	43.3	59.7	80.7	89.6	88.1
87.5°	19.4	23.9	29.9	32.9	31.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)