

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: P390364

Luminaire Tested: **22CZ2-44VHE-HRP-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: P390364
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-HRP-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3308.4 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

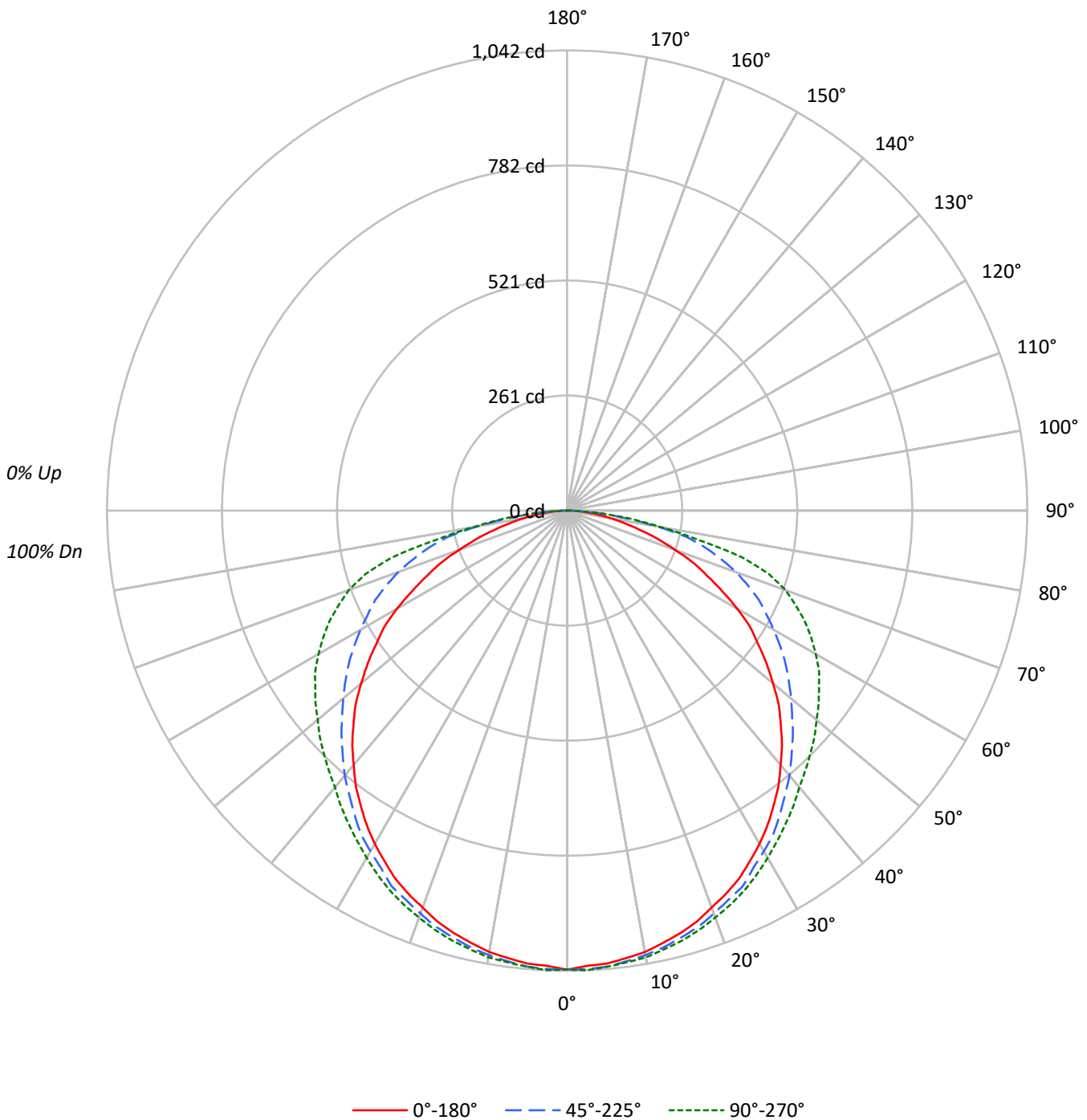
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2796	2796	2796
5°	2781	2801	2801
10°	2773	2793	2807
15°	2760	2787	2807
20°	2739	2781	2809
25°	2732	2789	2818
30°	2707	2768	2821
35°	2678	2758	2838
40°	2642	2753	2873
45°	2603	2751	2964
50°	2547	2771	3087
55°	2478	2832	3266
60°	2397	2908	3497
65°	2232	3053	3781
70°	2049	3198	4136
75°	1797	3366	4276
80°	1547	3206	3357
85°	1352	2328	2553



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	3.0
10°-20°	282.3	8.5
20°-30°	430.6	13.0
30°-40°	525.8	15.9
40°-50°	562.2	17.0
50°-60°	542.7	16.4
60°-70°	467.1	14.1
70°-80°	316.1	9.6
80°-90°	83.4	2.5
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°	811.2	24.5
0°-40°	1337.0	40.4
0°-60°	2441.8	73.8
0°-90°	3308.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3308.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1039	1039	1039	1039	1039	
5°	1030	1032	1037	1037	1037	98
15°	991	993	1000	1005	1008	279
25°	920	925	939	944	949	423
35°	815	823	840	857	864	510
45°	684	696	723	759	779	528
55°	528	545	604	664	696	473
65°	350	384	480	555	594	349
75°	173	229	324	389	411	185
85°	44	61	75	78	83	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1031.9	1034.4	1039.2	1039.2	1041.7
5°	1029.5	1031.9	1036.8	1036.8	1036.8
7.5°	1022.2	1024.6	1029.5	1031.9	1031.9
10°	1014.9	1017.3	1022.2	1024.6	1027.1
12.5°	1002.7	1005.2	1012.5	1017.3	1017.3
15°	990.6	993.0	1000.3	1005.2	1007.6
17.5°	975.9	980.8	988.1	993.0	995.4
20°	956.5	961.3	971.1	978.4	980.8
22.5°	939.4	944.3	954.0	961.3	966.2
25°	920.0	924.8	939.4	944.3	949.2
27.5°	895.6	900.5	912.7	922.4	929.7
30°	871.3	876.2	890.8	902.9	907.8
32.5°	844.5	851.8	868.9	878.6	885.9
35°	815.3	822.6	839.7	856.7	864.0
37.5°	786.1	793.4	810.5	832.4	842.1
40°	752.0	761.8	783.7	812.9	817.8
42.5°	720.4	732.6	752.0	786.1	798.3
45°	683.9	696.1	722.8	759.3	778.8
47.5°	649.8	662.0	691.2	735.0	759.3
50°	608.4	625.5	662.0	713.1	737.4
52.5°	569.5	584.1	632.8	688.8	718.0
55°	528.1	545.2	603.6	664.4	696.1
57.5°	491.6	506.2	571.9	640.1	676.6
60°	445.4	464.9	540.3	613.3	649.8
62.5°	396.7	425.9	508.7	584.1	623.0
65°	350.5	384.5	479.5	554.9	593.8
67.5°	309.1	345.6	442.9	523.3	559.8
70°	260.4	306.7	406.4	484.3	525.7
72.5°	216.6	267.7	365.1	442.9	479.5
75°	172.8	228.8	323.7	389.4	411.3
77.5°	133.9	187.4	277.5	296.9	299.4
80°	99.8	148.5	206.9	209.3	216.6
82.5°	68.1	104.7	133.9	146.0	148.5
85°	43.8	60.8	75.4	77.9	82.7
87.5°	19.5	21.9	26.8	24.3	24.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)