

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: P390362

Luminaire Tested: **22CZ2-44VHE-HRP-UNV-L935-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: P390362
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-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3315.6 lumens
Efficiency: N/A
Efficacy: 101.7 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

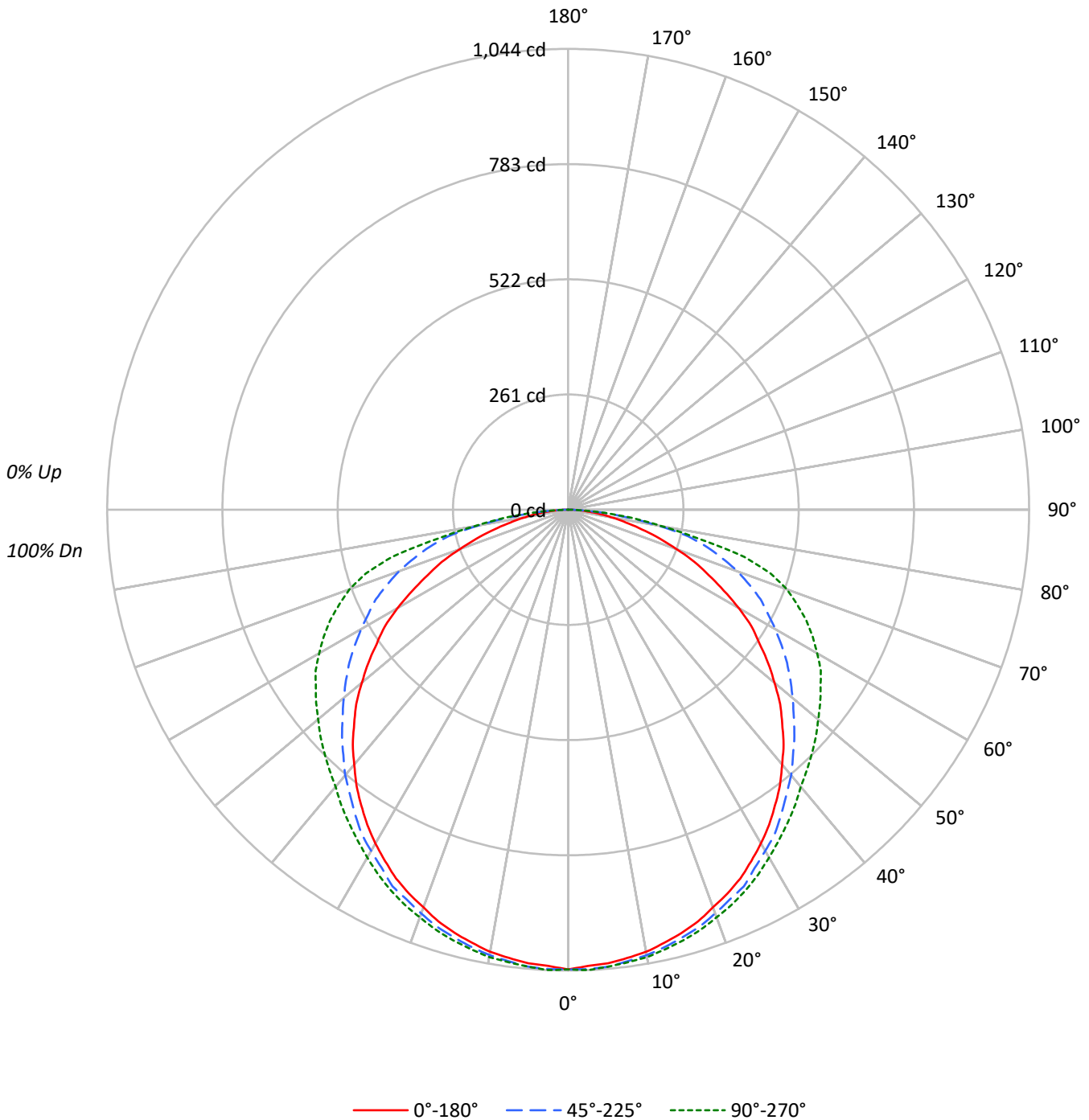
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2803	2803	2803
5°	2787	2807	2807
10°	2779	2799	2813
15°	2766	2793	2813
20°	2745	2787	2815
25°	2738	2795	2824
30°	2713	2774	2827
35°	2684	2764	2845
40°	2648	2759	2879
45°	2608	2757	2970
50°	2553	2777	3094
55°	2483	2838	3273
60°	2403	2914	3505
65°	2236	3060	3789
70°	2054	3205	4145
75°	1801	3373	4286
80°	1550	3212	3364
85°	1355	2334	2560



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	3.0
10°-20°	282.9	8.5
20°-30°	431.6	13.0
30°-40°	526.9	15.9
40°-50°	563.4	17.0
50°-60°	543.8	16.4
60°-70°	468.1	14.1
70°-80°	316.7	9.6
80°-90°	83.6	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°	812.9	24.5
0°-40°	1339.9	40.4
0°-60°	2447.2	73.8
0°-90°	3315.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3315.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1042	1042	1042	1042	1042	
5°	1032	1034	1039	1039	1039	98
15°	993	995	1002	1007	1010	280
25°	922	927	942	946	951	424
35°	817	824	842	859	866	511
45°	685	698	724	761	780	529
55°	529	546	605	666	698	474
65°	351	385	480	556	595	349
75°	173	229	324	390	412	186
85°	44	61	76	78	83	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1041.5	1041.5	1041.5	1041.5	1041.5
2.5°	1034.2	1036.6	1041.5	1041.5	1043.9
5°	1031.7	1034.2	1039.0	1039.0	1039.0
7.5°	1024.4	1026.9	1031.7	1034.2	1034.2
10°	1017.1	1019.5	1024.4	1026.9	1029.3
12.5°	1004.9	1007.3	1014.7	1019.5	1019.5
15°	992.7	995.1	1002.5	1007.3	1009.8
17.5°	978.1	982.9	990.3	995.1	997.6
20°	958.6	963.4	973.2	980.5	982.9
22.5°	941.5	946.4	956.1	963.4	968.3
25°	922.0	926.9	941.5	946.4	951.2
27.5°	897.6	902.5	914.7	924.4	931.7
30°	873.2	878.1	892.7	904.9	909.8
32.5°	846.4	853.7	870.8	880.5	887.8
35°	817.1	824.4	841.5	858.6	865.9
37.5°	787.8	795.1	812.2	834.2	843.9
40°	753.7	763.4	785.4	814.7	819.5
42.5°	722.0	734.2	753.7	787.8	800.0
45°	685.4	697.6	724.4	761.0	780.5
47.5°	651.2	663.4	692.7	736.6	761.0
50°	609.8	626.8	663.4	714.7	739.0
52.5°	570.7	585.4	634.2	690.3	719.5
55°	529.3	546.4	604.9	665.9	697.6
57.5°	492.7	507.3	573.2	641.5	678.1
60°	446.4	465.9	541.5	614.6	651.2
62.5°	397.6	426.8	509.8	585.4	624.4
65°	351.2	385.4	480.5	556.1	595.1
67.5°	309.8	346.3	443.9	524.4	561.0
70°	261.0	307.3	407.3	485.4	526.8
72.5°	217.1	268.3	365.9	443.9	480.5
75°	173.2	229.3	324.4	390.3	412.2
77.5°	134.1	187.8	278.1	297.6	300.0
80°	100.0	148.8	207.3	209.8	217.1
82.5°	68.3	104.9	134.1	146.3	148.8
85°	43.9	61.0	75.6	78.1	82.9
87.5°	19.5	22.0	26.8	24.4	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)