

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: P390357

Luminaire Tested: **22CZ2-44VHE-HRP-UNV-L930-CD1-SDWPD1-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: P390357
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-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3156.9 lumens
Efficiency: N/A
Efficacy: 96.8 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

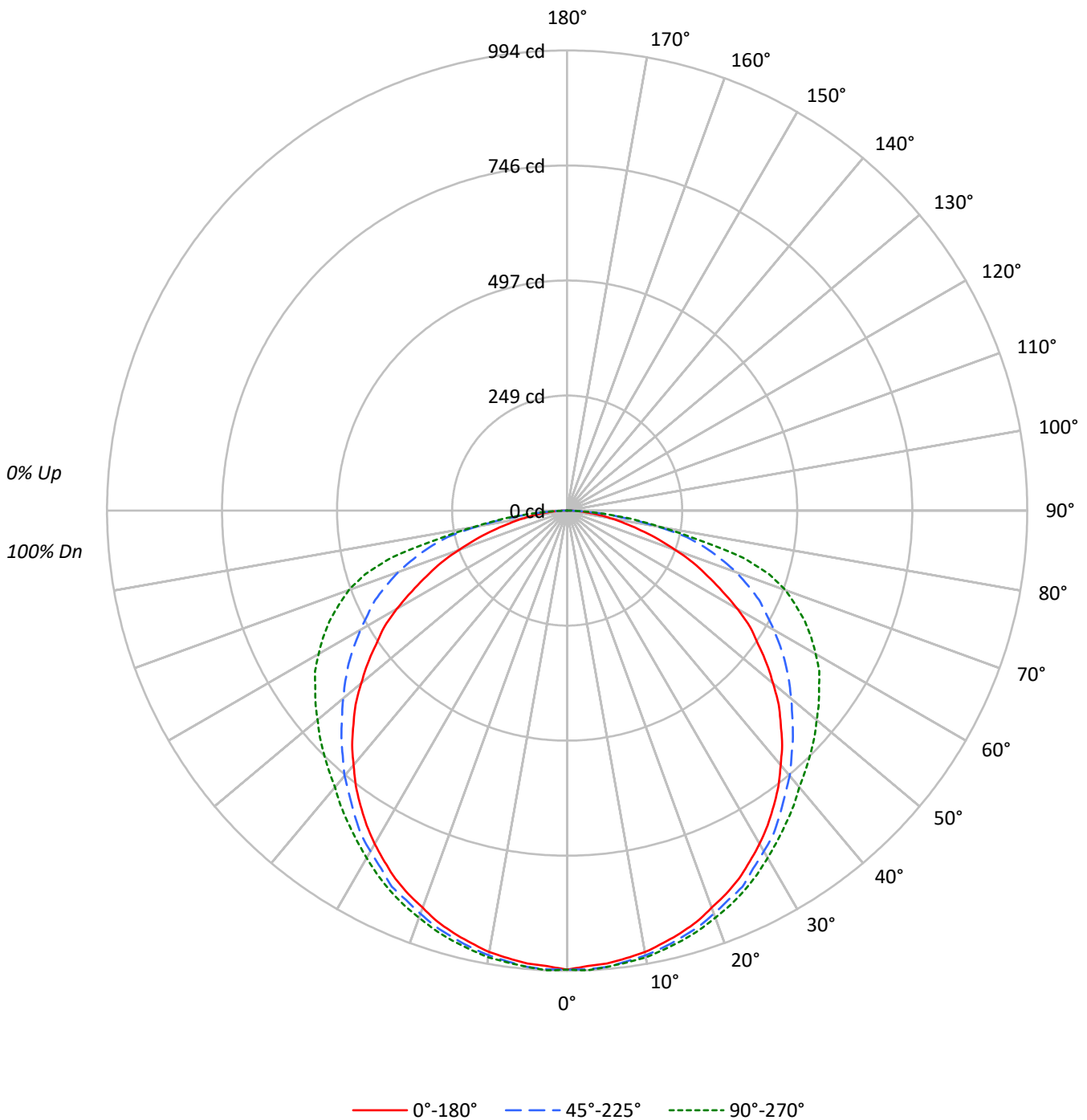
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2668	2668	2668
5°	2653	2672	2672
10°	2646	2665	2678
15°	2633	2659	2678
20°	2614	2653	2680
25°	2606	2662	2689
30°	2583	2641	2692
35°	2556	2632	2708
40°	2521	2627	2741
45°	2484	2625	2828
50°	2431	2645	2946
55°	2364	2702	3116
60°	2287	2775	3337
65°	2129	2913	3608
70°	1955	3051	3947
75°	1714	3212	4081
80°	1475	3059	3203
85°	1291	2223	2439



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	3.0
10°-20°	269.3	8.5
20°-30°	410.9	13.0
30°-40°	501.7	15.9
40°-50°	536.5	17.0
50°-60°	517.8	16.4
60°-70°	445.7	14.1
70°-80°	301.6	9.6
80°-90°	79.6	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°	774.0	24.5
0°-40°	1275.8	40.4
0°-60°	2330.0	73.8
0°-90°	3156.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3156.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	982	985	989	989	989	93
15°	945	948	954	959	961	267
25°	878	882	896	901	906	404
35°	778	785	801	818	824	487
45°	653	664	690	725	743	504
55°	504	520	576	634	664	452
65°	334	367	458	530	567	333
75°	165	218	309	372	392	177
85°	42	58	72	74	79	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.6	991.6	991.6	991.6	991.6
2.5°	984.7	987.0	991.6	991.6	994.0
5°	982.3	984.7	989.3	989.3	989.3
7.5°	975.4	977.7	982.3	984.7	984.7
10°	968.4	970.7	975.4	977.7	980.0
12.5°	956.8	959.1	966.1	970.7	970.7
15°	945.2	947.5	954.5	959.1	961.4
17.5°	931.3	935.9	942.9	947.5	949.8
20°	912.7	917.3	926.6	933.6	935.9
22.5°	896.4	901.1	910.4	917.3	922.0
25°	877.8	882.5	896.4	901.1	905.7
27.5°	854.6	859.3	870.9	880.2	887.1
30°	831.4	836.0	850.0	861.6	866.2
32.5°	805.9	812.8	829.1	838.4	845.3
35°	778.0	784.9	801.2	817.5	824.4
37.5°	750.1	757.1	773.3	794.2	803.5
40°	717.6	726.9	747.8	775.7	780.3
42.5°	687.4	699.0	717.6	750.1	761.7
45°	652.6	664.2	689.7	724.6	743.1
47.5°	620.1	631.7	659.5	701.3	724.6
50°	580.6	596.8	631.7	680.4	703.7
52.5°	543.4	557.4	603.8	657.2	685.1
55°	503.9	520.2	575.9	634.0	664.2
57.5°	469.1	483.0	545.7	610.8	645.6
60°	425.0	443.6	515.6	585.2	620.1
62.5°	378.5	406.4	485.4	557.4	594.5
65°	334.4	366.9	457.5	529.5	566.6
67.5°	294.9	329.8	422.7	499.3	534.1
70°	248.5	292.6	387.8	462.1	501.6
72.5°	206.7	255.5	348.4	422.7	457.5
75°	164.9	218.3	308.9	371.6	392.5
77.5°	127.7	178.8	264.7	283.3	285.6
80°	95.2	141.7	197.4	199.7	206.7
82.5°	65.0	99.9	127.7	139.3	141.7
85°	41.8	58.1	72.0	74.3	79.0
87.5°	18.6	20.9	25.5	23.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)