

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: P390410

Luminaire Tested: **22CZ2-50VHE-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: P390410
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: 22CZ2-50VHE-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: 3656.5 lumens
Efficiency: N/A
Efficacy: 101.0 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

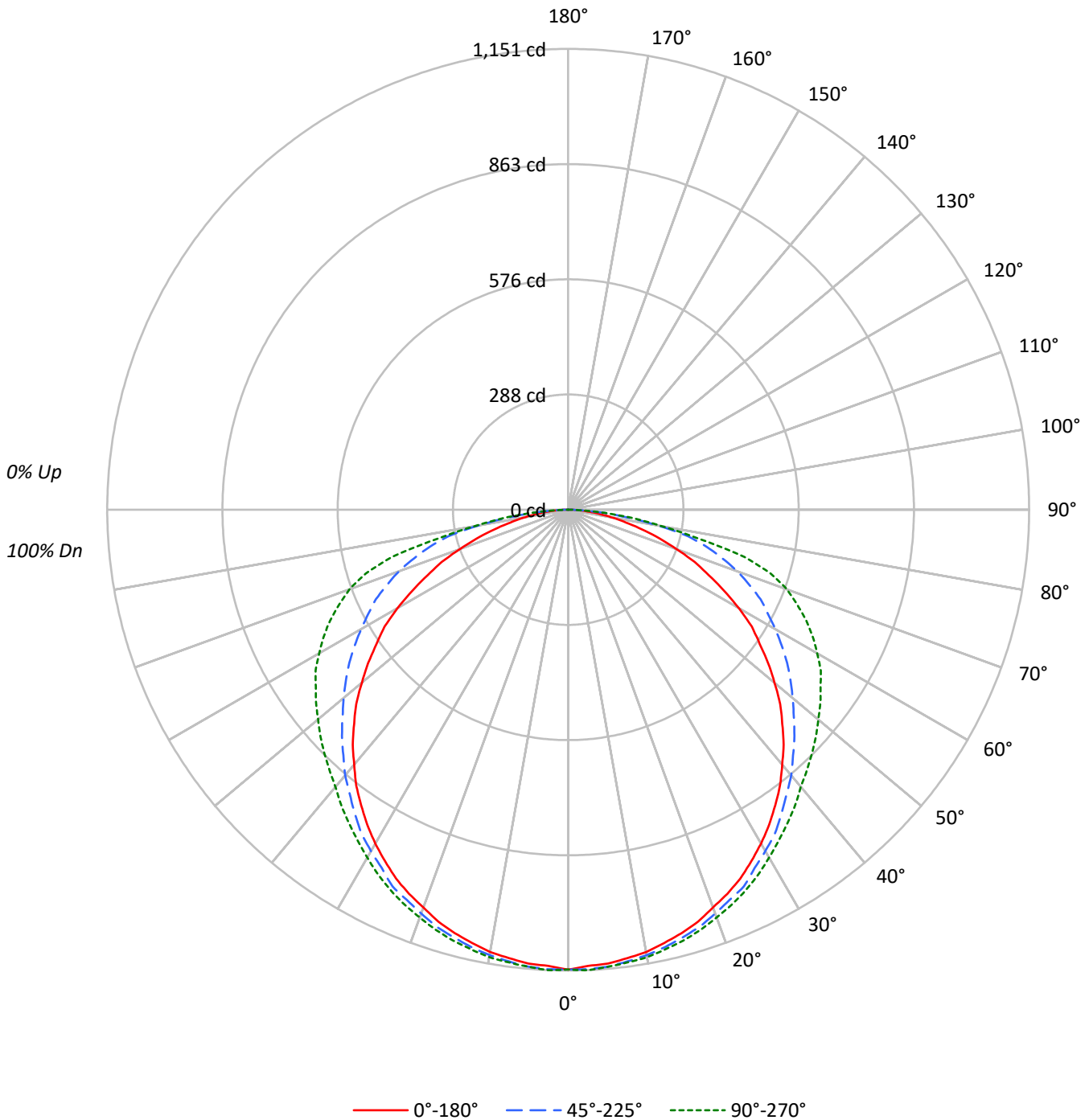
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3091	3091	3091
5°	3073	3095	3095
10°	3065	3087	3102
15°	3050	3080	3102
20°	3027	3074	3104
25°	3019	3083	3115
30°	2992	3059	3118
35°	2960	3049	3137
40°	2920	3042	3175
45°	2877	3040	3276
50°	2815	3063	3412
55°	2738	3130	3609
60°	2649	3214	3865
65°	2466	3374	4179
70°	2264	3534	4571
75°	1986	3720	4727
80°	1709	3543	3710
85°	1494	2575	2825



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.6	3.0
10°-20°	311.9	8.5
20°-30°	475.9	13.0
30°-40°	581.1	15.9
40°-50°	621.3	17.0
50°-60°	599.7	16.4
60°-70°	516.3	14.1
70°-80°	349.3	9.6
80°-90°	92.2	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°	896.5	24.5
0°-40°	1477.6	40.4
0°-60°	2698.7	73.8
0°-90°	3656.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3656.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1138	1140	1146	1146	1146	108
15°	1095	1098	1106	1111	1114	309
25°	1017	1022	1038	1044	1049	468
35°	901	909	928	947	955	564
45°	756	769	799	839	861	583
55°	584	602	667	734	769	523
65°	387	425	530	613	656	385
75°	191	253	358	430	455	205
85°	48	67	83	86	92	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.6	1148.6	1148.6	1148.6	1148.6
2.5°	1140.5	1143.2	1148.6	1148.6	1151.3
5°	1137.8	1140.5	1145.9	1145.9	1145.9
7.5°	1129.7	1132.4	1137.8	1140.5	1140.5
10°	1121.7	1124.4	1129.7	1132.4	1135.1
12.5°	1108.2	1110.9	1119.0	1124.4	1124.4
15°	1094.8	1097.5	1105.5	1110.9	1113.6
17.5°	1078.6	1084.0	1092.1	1097.5	1100.2
20°	1057.1	1062.5	1073.3	1081.3	1084.0
22.5°	1038.3	1043.7	1054.4	1062.5	1067.9
25°	1016.8	1022.1	1038.3	1043.7	1049.0
27.5°	989.9	995.2	1008.7	1019.5	1027.5
30°	963.0	968.3	984.5	997.9	1003.3
32.5°	933.4	941.5	960.3	971.0	979.1
35°	901.1	909.2	928.0	946.8	954.9
37.5°	868.8	876.9	895.7	919.9	930.7
40°	831.2	841.9	866.1	898.4	903.8
42.5°	796.2	809.6	831.2	868.8	882.3
45°	755.9	769.3	798.9	839.2	860.8
47.5°	718.2	731.6	763.9	812.3	839.2
50°	672.5	691.3	731.6	788.1	815.0
52.5°	629.4	645.6	699.4	761.2	793.5
55°	583.7	602.5	667.1	734.3	769.3
57.5°	543.4	559.5	632.1	707.4	747.8
60°	492.2	513.8	597.1	677.8	718.2
62.5°	438.4	470.7	562.2	645.6	688.6
65°	387.3	425.0	529.9	613.3	656.3
67.5°	341.6	382.0	489.6	578.3	618.7
70°	287.8	338.9	449.2	535.3	581.0
72.5°	239.4	295.9	403.5	489.6	529.9
75°	191.0	252.8	357.8	430.4	454.6
77.5°	147.9	207.1	306.6	328.2	330.9
80°	110.3	164.1	228.6	231.3	239.4
82.5°	75.3	115.7	147.9	161.4	164.1
85°	48.4	67.2	83.4	86.1	91.5
87.5°	21.5	24.2	29.6	26.9	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)