

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: P390429

Luminaire Tested: **22CZ2-50VHE-RDP-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: P390429  
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-RDP-UNV-L930-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2758.5 lumens  
Efficiency: N/A  
Efficacy: 76.2 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

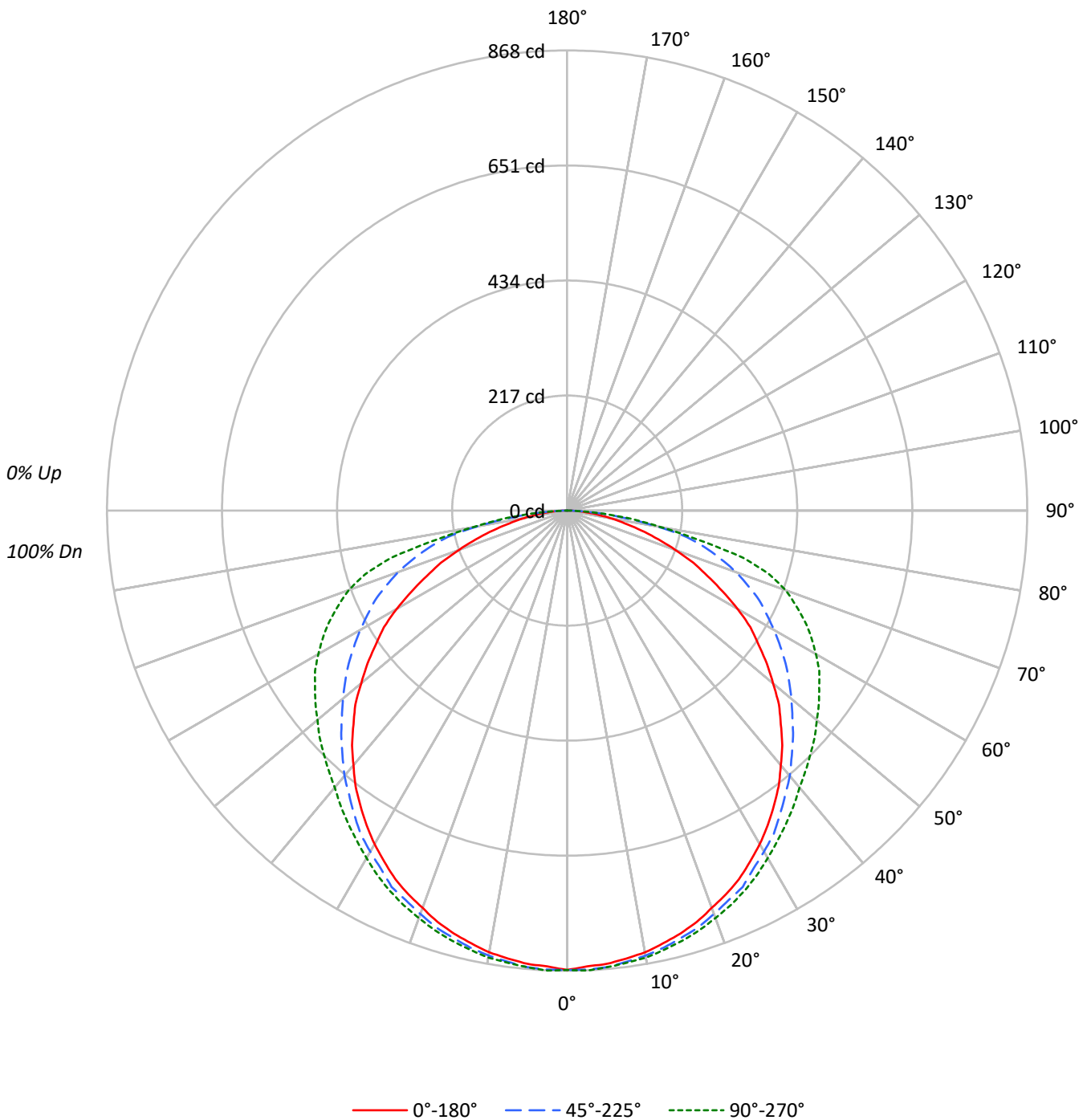
Input Watts (W): 36.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2332	2332	2332
5°	2319	2335	2335
10°	2312	2329	2340
15°	2301	2323	2340
20°	2284	2319	2342
25°	2278	2326	2350
30°	2257	2308	2352
35°	2233	2300	2367
40°	2203	2295	2395
45°	2170	2294	2471
50°	2124	2311	2574
55°	2066	2361	2723
60°	1999	2425	2916
65°	1861	2546	3152
70°	1708	2666	3448
75°	1498	2806	3565
80°	1289	2673	2799
85°	1127	1942	2130



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	3.0
10°-20°	235.3	8.5
20°-30°	359.1	13.0
30°-40°	438.4	15.9
40°-50°	468.8	17.0
50°-60°	452.5	16.4
60°-70°	389.5	14.1
70°-80°	263.5	9.6
80°-90°	69.5	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°	676.4	24.5
0°-40°	1114.8	40.4
0°-60°	2036.0	73.8
0°-90°	2758.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2758.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	858	860	864	864	864	82
15°	826	828	834	838	840	233
25°	767	771	783	787	791	353
35°	680	686	700	714	720	425
45°	570	580	603	633	649	440
55°	440	455	503	554	580	395
65°	292	321	400	463	495	291
75°	144	191	270	325	343	155
85°	36	51	63	65	69	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	866.5	866.5	866.5	866.5	866.5
2.5°	860.4	862.4	866.5	866.5	868.5
5°	858.4	860.4	864.5	864.5	864.5
7.5°	852.3	854.3	858.4	860.4	860.4
10°	846.2	848.2	852.3	854.3	856.3
12.5°	836.1	838.1	844.2	848.2	848.2
15°	825.9	827.9	834.0	838.1	840.1
17.5°	813.7	817.8	823.9	827.9	830.0
20°	797.5	801.6	809.7	815.8	817.8
22.5°	783.3	787.4	795.5	801.6	805.6
25°	767.1	771.1	783.3	787.4	791.4
27.5°	746.8	750.8	761.0	769.1	775.2
30°	726.5	730.5	742.7	752.9	756.9
32.5°	704.2	710.2	724.4	732.6	738.6
35°	679.8	685.9	700.1	714.3	720.4
37.5°	655.5	661.5	675.7	694.0	702.1
40°	627.0	635.2	653.4	677.8	681.8
42.5°	600.7	610.8	627.0	655.5	665.6
45°	570.2	580.4	602.7	633.1	649.4
47.5°	541.8	552.0	576.3	612.8	633.1
50°	507.3	521.5	552.0	594.6	614.9
52.5°	474.8	487.0	527.6	574.3	598.6
55°	440.3	454.6	503.3	554.0	580.4
57.5°	409.9	422.1	476.9	533.7	564.1
60°	371.4	387.6	450.5	511.4	541.8
62.5°	330.8	355.1	424.1	487.0	519.5
65°	292.2	320.6	399.8	462.7	495.1
67.5°	257.7	288.2	369.3	436.3	466.7
70°	217.1	255.7	338.9	403.8	438.3
72.5°	180.6	223.2	304.4	369.3	399.8
75°	144.1	190.8	269.9	324.7	342.9
77.5°	111.6	156.3	231.3	247.6	249.6
80°	83.2	123.8	172.5	174.5	180.6
82.5°	56.8	87.3	111.6	121.8	123.8
85°	36.5	50.7	62.9	64.9	69.0
87.5°	16.2	18.3	22.3	20.3	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)