

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: P388149

Luminaire Tested: **22CZ2-100VHE-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: P388149
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8137.0 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

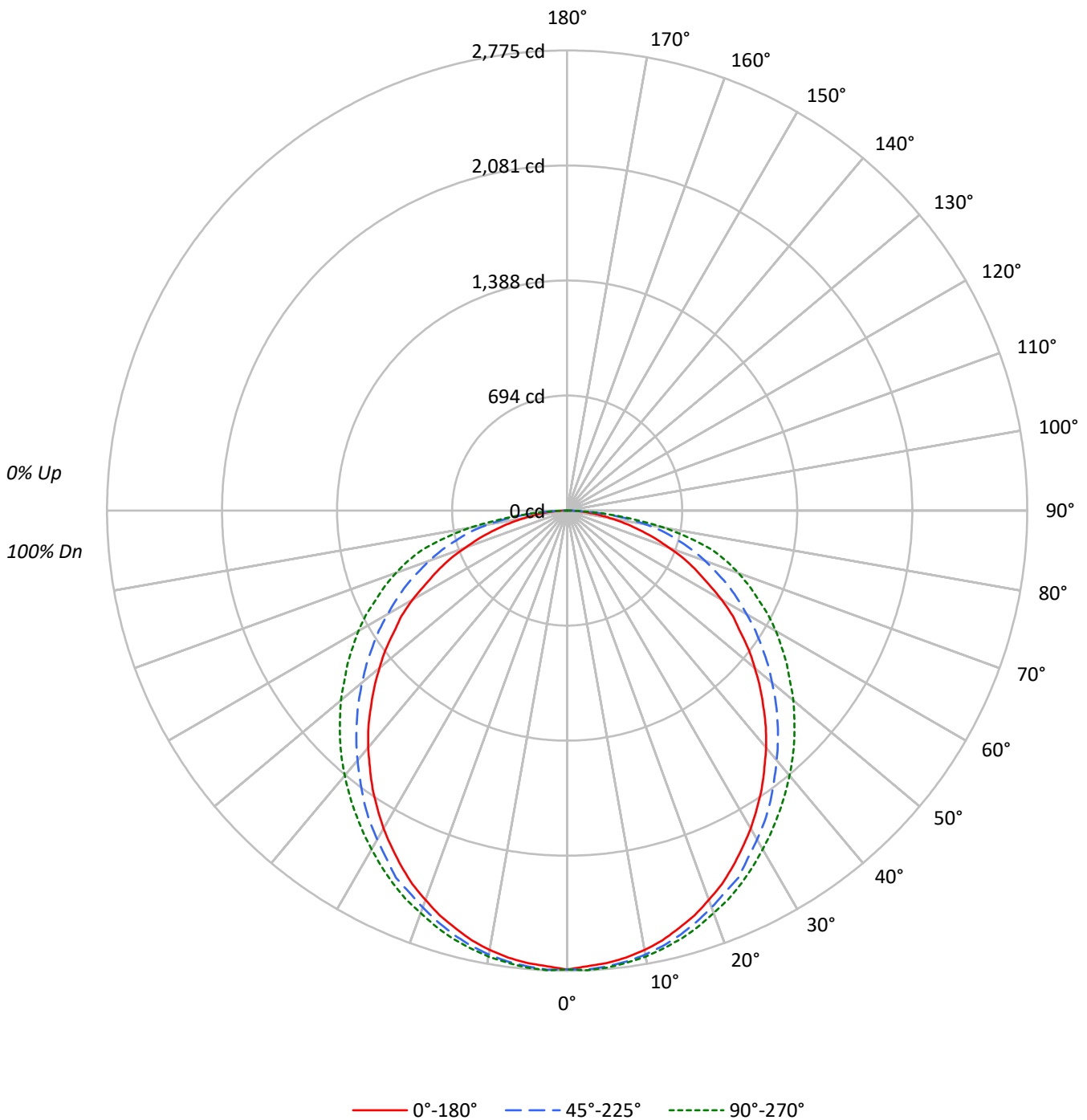
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7445	7445	7445
5°	7398	7452	7474
10°	7352	7429	7462
15°	7262	7373	7440
20°	7155	7292	7395
25°	7026	7252	7371
30°	6880	7117	7328
35°	6721	7024	7313
40°	6554	6906	7328
45°	6369	6827	7375
50°	6185	6755	7459
55°	5974	6725	7589
60°	5797	6723	7822
65°	5507	6833	8108
70°	5135	6962	8632
75°	4704	7202	9325
80°	4096	7508	9183
85°	3585	6675	7293



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.7	3.2
10°-20°	745.3	9.2
20°-30°	1118.8	13.7
30°-40°	1336.9	16.4
40°-50°	1390.2	17.1
50°-60°	1288.5	15.8
60°-70°	1056.9	13.0
70°-80°	714.4	8.8
80°-90°	224.5	2.8
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°	2125.7	26.1
0°-40°	3462.6	42.6
0°-60°	6141.2	75.5
0°-90°	8137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8137.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2767	2767	2767	2767	2767	
5°	2739	2743	2759	2763	2767	260
15°	2607	2619	2647	2663	2671	735
25°	2366	2386	2442	2470	2482	1090
35°	2046	2074	2138	2202	2226	1279
45°	1674	1706	1794	1898	1938	1292
55°	1273	1313	1433	1562	1618	1144
65°	865	913	1073	1213	1273	855
75°	452	528	693	833	897	480
85°	116	160	216	240	236	132
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2766.7	2766.7	2766.7	2766.7	2766.7
2.5°	2750.7	2758.7	2770.7	2774.7	2774.7
5°	2738.7	2742.7	2758.7	2762.7	2766.7
7.5°	2718.7	2726.7	2742.7	2746.7	2750.7
10°	2690.7	2698.7	2718.7	2726.7	2730.7
12.5°	2654.6	2662.6	2686.7	2698.7	2702.7
15°	2606.6	2618.6	2646.6	2662.6	2670.6
17.5°	2558.5	2570.5	2598.6	2622.6	2630.6
20°	2498.5	2526.5	2546.5	2578.5	2582.5
22.5°	2438.4	2454.4	2490.5	2522.5	2538.5
25°	2366.3	2386.4	2442.4	2470.4	2482.4
27.5°	2290.3	2318.3	2362.3	2406.4	2422.4
30°	2214.2	2234.2	2290.3	2342.3	2358.3
32.5°	2130.1	2158.1	2218.2	2270.2	2294.3
35°	2046.0	2074.0	2138.1	2202.2	2226.2
37.5°	1953.9	1986.0	2050.0	2126.1	2158.1
40°	1865.8	1889.9	1965.9	2058.0	2086.1
42.5°	1773.8	1801.8	1881.9	1982.0	2014.0
45°	1673.7	1705.7	1793.8	1897.9	1937.9
47.5°	1577.6	1609.6	1705.7	1809.8	1857.8
50°	1477.5	1517.5	1613.6	1733.7	1781.8
52.5°	1381.4	1417.4	1525.5	1649.6	1693.7
55°	1273.3	1313.3	1433.4	1561.5	1617.6
57.5°	1185.2	1213.2	1345.3	1477.5	1533.5
60°	1077.1	1113.1	1249.2	1389.4	1453.4
62.5°	960.9	1021.0	1161.1	1305.3	1369.4
65°	864.9	912.9	1073.1	1213.2	1273.3
67.5°	764.8	816.8	973.0	1121.1	1189.2
70°	652.6	720.7	884.9	1033.0	1097.1
72.5°	552.5	624.6	792.8	936.9	1005.0
75°	452.4	528.5	692.7	832.8	896.9
77.5°	356.4	440.4	600.6	708.7	748.7
80°	264.3	344.3	484.5	560.6	592.6
82.5°	184.2	252.2	356.4	396.4	404.4
85°	116.1	160.2	216.2	240.2	236.2
87.5°	52.1	64.1	80.1	88.1	84.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)