

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: P388535

Luminaire Tested: **22CZ2-90VHE-UNV-L930-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: P388535
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: 22CZ2-90VHE-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

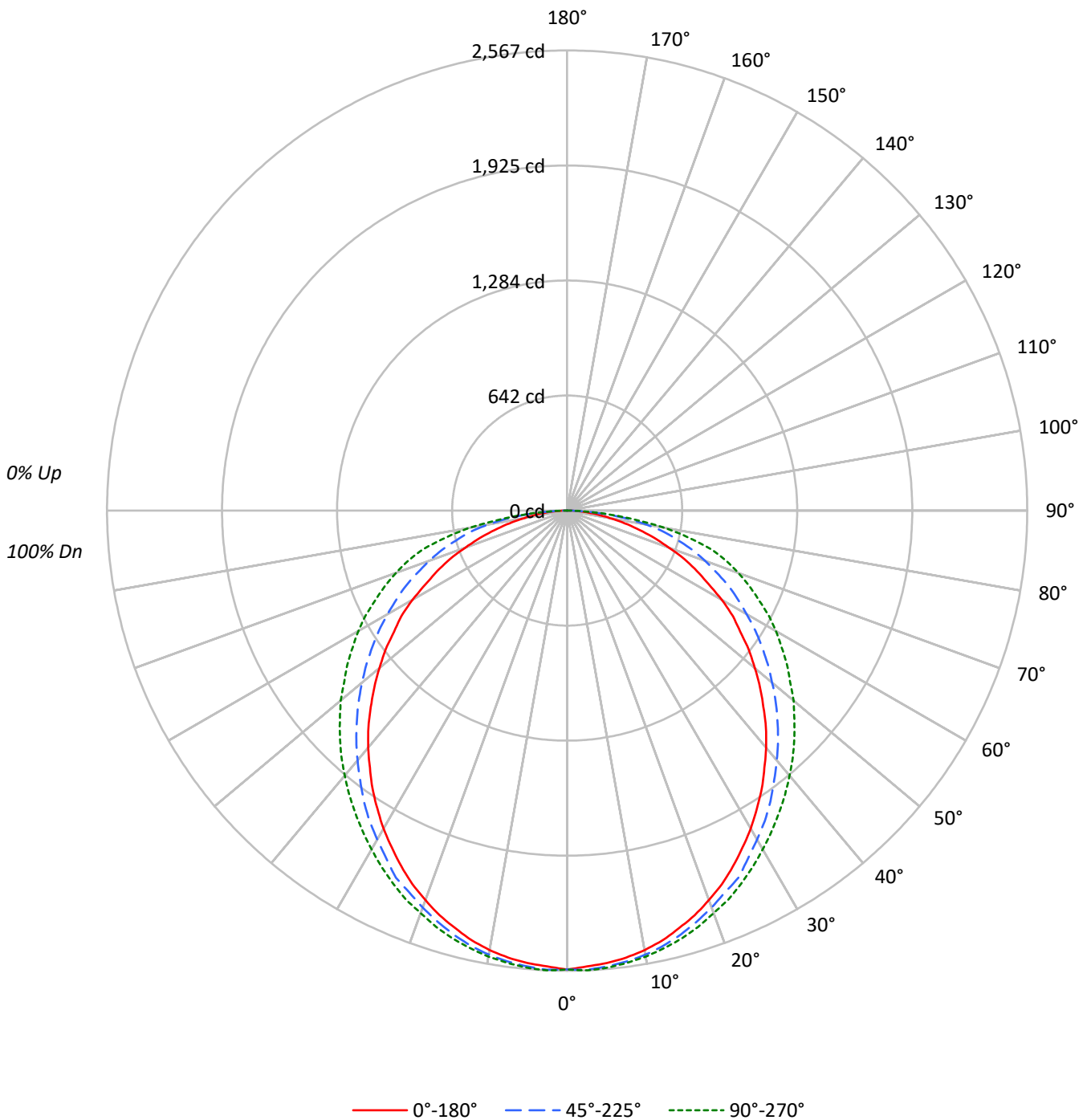
Lumens per Lamp: N/A
Luminaire Lumens: 7528.8 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 68.2
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	101	96	93	96	93	90		92	90	87		89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61		70	65	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52		63	56	51		60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44		56	49	44		54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34		46	39	34		45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31		42	35	30		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	27		38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6889	6889	6889
5°	6845	6895	6915
10°	6803	6874	6904
15°	6719	6822	6884
20°	6620	6747	6843
25°	6501	6710	6820
30°	6366	6585	6780
35°	6219	6499	6767
40°	6065	6390	6780
45°	5893	6316	6824
50°	5723	6250	6902
55°	5527	6222	7022
60°	5364	6221	7238
65°	5095	6322	7501
70°	4751	6441	7987
75°	4352	6664	8628
80°	3789	6947	8497
85°	3316	6178	6749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.1	3.2
10°-20°	689.6	9.2
20°-30°	1035.2	13.7
30°-40°	1237.0	16.4
40°-50°	1286.2	17.1
50°-60°	1192.2	15.8
60°-70°	977.9	13.0
70°-80°	661.0	8.8
80°-90°	207.7	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°	1966.9	26.1
0°-40°	3203.8	42.6
0°-60°	5682.2	75.5
0°-90°	7528.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7528.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2560	2560	2560	2560	2560	
5°	2534	2538	2552	2556	2560	241
15°	2412	2423	2449	2464	2471	680
25°	2190	2208	2260	2286	2297	1008
35°	1893	1919	1978	2038	2060	1183
45°	1549	1578	1660	1756	1793	1196
55°	1178	1215	1326	1445	1497	1059
65°	800	845	993	1122	1178	791
75°	419	489	641	771	830	444
85°	107	148	200	222	219	122
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2559.9	2559.9	2559.9	2559.9	2559.9
2.5°	2545.1	2552.5	2563.6	2567.3	2567.3
5°	2534.0	2537.7	2552.5	2556.2	2559.9
7.5°	2515.5	2522.9	2537.7	2541.4	2545.1
10°	2489.5	2497.0	2515.5	2522.9	2526.6
12.5°	2456.2	2463.6	2485.8	2497.0	2500.7
15°	2411.7	2422.9	2448.8	2463.6	2471.0
17.5°	2367.3	2378.4	2404.3	2426.6	2434.0
20°	2311.7	2337.7	2356.2	2385.8	2389.5
22.5°	2256.1	2271.0	2304.3	2333.9	2348.8
25°	2189.5	2208.0	2259.9	2285.8	2296.9
27.5°	2119.1	2145.0	2185.8	2226.5	2241.3
30°	2048.7	2067.2	2119.1	2167.2	2182.1
32.5°	1970.9	1996.8	2052.4	2100.6	2122.8
35°	1893.1	1919.0	1978.3	2037.6	2059.8
37.5°	1807.9	1837.5	1896.8	1967.2	1996.8
40°	1726.4	1748.6	1819.0	1904.2	1930.1
42.5°	1641.2	1667.1	1741.2	1833.8	1863.5
45°	1548.6	1578.2	1659.7	1756.0	1793.1
47.5°	1459.6	1489.3	1578.2	1674.5	1719.0
50°	1367.0	1404.1	1493.0	1604.1	1648.6
52.5°	1278.1	1311.5	1411.5	1526.3	1567.1
55°	1178.1	1215.1	1326.3	1444.8	1496.7
57.5°	1096.6	1122.5	1244.8	1367.0	1418.9
60°	996.6	1029.9	1155.9	1285.5	1344.8
62.5°	889.1	944.7	1074.4	1207.7	1267.0
65°	800.2	844.7	992.9	1122.5	1178.1
67.5°	707.6	755.8	900.2	1037.3	1100.3
70°	603.9	666.8	818.7	955.8	1015.1
72.5°	511.2	577.9	733.5	866.9	929.9
75°	418.6	489.0	640.9	770.6	829.8
77.5°	329.7	407.5	555.7	655.7	692.8
80°	244.5	318.6	448.3	518.7	548.3
82.5°	170.4	233.4	329.7	366.8	374.2
85°	107.4	148.2	200.1	222.3	218.6
87.5°	48.2	59.3	74.1	81.5	77.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)