

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: P388496

Luminaire Tested: **22CZ2-80VHE-UNV-L950-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: P388496
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: 22CZ2-80VHE-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

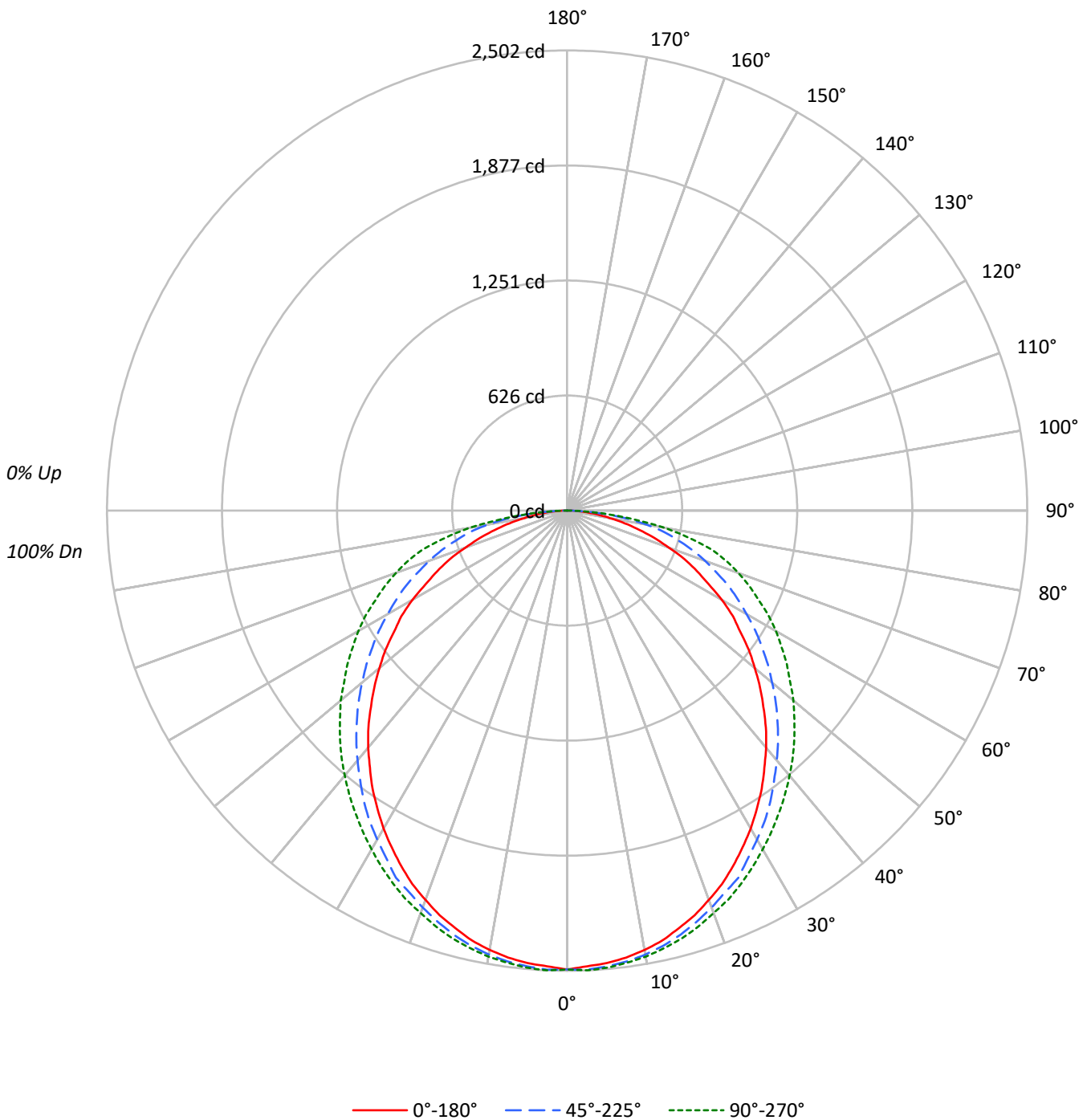
Lumens per Lamp: N/A
Luminaire Lumens: 7337.1 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 59.1
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°	6713	6713	6713
5°	6671	6719	6739
10°	6630	6698	6728
15°	6548	6648	6709
20°	6452	6576	6669
25°	6335	6539	6646
30°	6204	6417	6608
35°	6061	6333	6594
40°	5910	6227	6608
45°	5743	6155	6650
50°	5577	6091	6726
55°	5386	6064	6843
60°	5227	6062	7054
65°	4965	6161	7310
70°	4630	6278	7783
75°	4242	6494	8408
80°	3693	6771	8280
85°	3233	6021	6576



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.9	3.2
10°-20°	672.0	9.2
20°-30°	1008.8	13.7
30°-40°	1205.5	16.4
40°-50°	1253.5	17.1
50°-60°	1161.8	15.8
60°-70°	953.0	13.0
70°-80°	644.2	8.8
80°-90°	202.4	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°	1916.8	26.1
0°-40°	3122.2	42.6
0°-60°	5537.5	75.5
0°-90°	7337.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7337.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2495	2495	2495	2495	2495	
5°	2470	2473	2488	2491	2495	234
15°	2350	2361	2386	2401	2408	663
25°	2134	2152	2202	2228	2238	983
35°	1845	1870	1928	1986	2007	1153
45°	1509	1538	1617	1711	1747	1165
55°	1148	1184	1292	1408	1459	1032
65°	780	823	968	1094	1148	771
75°	408	477	625	751	809	433
85°	105	144	195	217	213	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2494.7	2494.7	2494.7	2494.7	2494.7
2.5°	2480.3	2487.5	2498.4	2502.0	2502.0
5°	2469.5	2473.1	2487.5	2491.1	2494.7
7.5°	2451.4	2458.6	2473.1	2476.7	2480.3
10°	2426.2	2433.4	2451.4	2458.6	2462.3
12.5°	2393.7	2400.9	2422.5	2433.4	2437.0
15°	2350.3	2361.2	2386.4	2400.9	2408.1
17.5°	2307.0	2317.8	2343.1	2364.8	2372.0
20°	2252.9	2278.1	2296.2	2325.1	2328.7
22.5°	2198.7	2213.1	2245.6	2274.5	2289.0
25°	2133.7	2151.8	2202.3	2227.6	2238.4
27.5°	2065.1	2090.4	2130.1	2169.8	2184.3
30°	1996.5	2014.6	2065.1	2112.1	2126.5
32.5°	1920.7	1946.0	2000.1	2047.1	2068.7
35°	1844.9	1870.2	1927.9	1985.7	2007.4
37.5°	1761.8	1790.7	1848.5	1917.1	1946.0
40°	1682.4	1704.1	1772.7	1855.7	1881.0
42.5°	1599.4	1624.7	1696.9	1787.1	1816.0
45°	1509.1	1538.0	1617.4	1711.3	1747.4
47.5°	1422.5	1451.4	1538.0	1631.9	1675.2
50°	1332.2	1368.3	1455.0	1563.3	1606.6
52.5°	1245.6	1278.1	1375.5	1487.5	1527.2
55°	1148.1	1184.2	1292.5	1408.0	1458.6
57.5°	1068.7	1093.9	1213.1	1332.2	1382.8
60°	971.2	1003.7	1126.4	1252.8	1310.6
62.5°	866.5	920.6	1047.0	1177.0	1234.7
65°	779.8	823.2	967.6	1093.9	1148.1
67.5°	689.6	736.5	877.3	1010.9	1072.3
70°	588.5	649.9	797.9	931.5	989.2
72.5°	498.2	563.2	714.8	844.8	906.2
75°	408.0	476.6	624.6	751.0	808.7
77.5°	321.3	397.1	541.6	639.0	675.1
80°	238.3	310.5	436.9	505.4	534.3
82.5°	166.1	227.5	321.3	357.4	364.6
85°	104.7	144.4	195.0	216.6	213.0
87.5°	46.9	57.8	72.2	79.4	75.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)