

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: P388495

Luminaire Tested: **22CZ2-80VHE-UNV-L950-CD1-SWPD1-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: P388495
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-SWPD1-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: 7246.0 lumens
Efficiency: N/A
Efficacy: 122.6 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

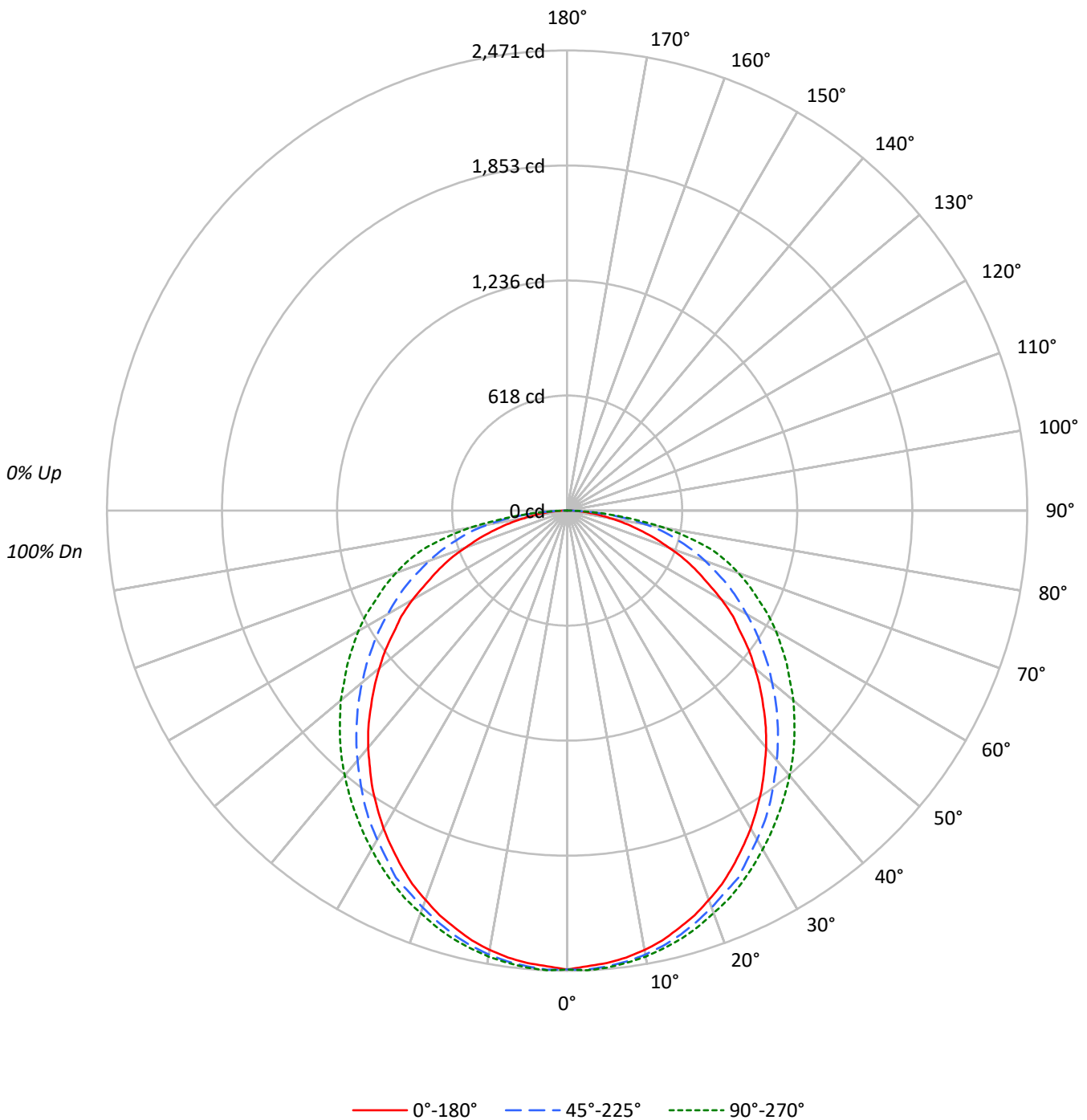
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6630	6630	6630
5°	6588	6636	6655
10°	6547	6615	6645
15°	6467	6566	6625
20°	6371	6494	6586
25°	6257	6458	6564
30°	6127	6337	6526
35°	5985	6255	6512
40°	5837	6150	6525
45°	5672	6079	6567
50°	5508	6015	6643
55°	5319	5989	6758
60°	5162	5987	6966
65°	4904	6085	7219
70°	4573	6200	7687
75°	4189	6413	8304
80°	3646	6685	8178
85°	3193	5944	6496



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.0	3.2
10°-20°	663.7	9.2
20°-30°	996.3	13.7
30°-40°	1190.5	16.4
40°-50°	1237.9	17.1
50°-60°	1147.4	15.8
60°-70°	941.1	13.0
70°-80°	636.2	8.8
80°-90°	199.9	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°	1893.0	26.1
0°-40°	3083.5	42.6
0°-60°	5468.8	75.5
0°-90°	7246.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7246.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2464	2464	2464	2464	2464	
5°	2439	2442	2457	2460	2464	231
15°	2321	2332	2357	2371	2378	655
25°	2107	2125	2175	2200	2211	970
35°	1822	1847	1904	1961	1982	1139
45°	1490	1519	1597	1690	1726	1151
55°	1134	1170	1276	1391	1440	1019
65°	770	813	956	1080	1134	761
75°	403	471	617	742	799	427
85°	103	143	192	214	210	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2463.8	2463.8	2463.8	2463.8	2463.8
2.5°	2449.5	2456.6	2467.3	2470.9	2470.9
5°	2438.8	2442.4	2456.6	2460.2	2463.8
7.5°	2421.0	2428.1	2442.4	2445.9	2449.5
10°	2396.0	2403.2	2421.0	2428.1	2431.7
12.5°	2363.9	2371.1	2392.5	2403.2	2406.7
15°	2321.2	2331.8	2356.8	2371.1	2378.2
17.5°	2278.4	2289.1	2314.0	2335.4	2342.5
20°	2224.9	2249.8	2267.7	2296.2	2299.8
22.5°	2171.4	2185.7	2217.8	2246.3	2260.5
25°	2107.2	2125.0	2175.0	2199.9	2210.6
27.5°	2039.5	2064.4	2103.7	2142.9	2157.1
30°	1971.7	1989.6	2039.5	2085.8	2100.1
32.5°	1896.9	1921.8	1975.3	2021.6	2043.0
35°	1822.0	1846.9	1904.0	1961.0	1982.4
37.5°	1740.0	1768.5	1825.5	1893.3	1921.8
40°	1661.5	1682.9	1750.7	1832.7	1857.6
42.5°	1579.5	1604.5	1675.8	1764.9	1793.5
45°	1490.4	1518.9	1597.4	1690.1	1725.7
47.5°	1404.8	1433.3	1518.9	1611.6	1654.4
50°	1315.7	1351.3	1436.9	1543.9	1586.7
52.5°	1230.1	1262.2	1358.5	1469.0	1508.2
55°	1133.8	1169.5	1276.5	1390.6	1440.5
57.5°	1055.4	1080.4	1198.0	1315.7	1365.6
60°	959.1	991.2	1112.4	1237.2	1294.3
62.5°	855.7	909.2	1034.0	1162.4	1219.4
65°	770.2	812.9	955.6	1080.4	1133.8
67.5°	681.0	727.4	866.4	998.3	1059.0
70°	581.2	641.8	788.0	919.9	977.0
72.5°	492.0	556.2	706.0	834.3	894.9
75°	402.9	470.6	616.8	741.6	798.7
77.5°	317.3	392.2	534.8	631.1	666.8
80°	235.3	306.6	431.4	499.2	527.7
82.5°	164.0	224.6	317.3	353.0	360.1
85°	103.4	142.6	192.5	213.9	210.4
87.5°	46.4	57.0	71.3	78.4	74.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)