

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: P390032

Luminaire Tested: **22CZ2-100VHE-HRP-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: P390032
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: 22CZ2-100VHE-HRP-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7779.5 lumens
Efficiency: N/A
Efficacy: 100.1 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

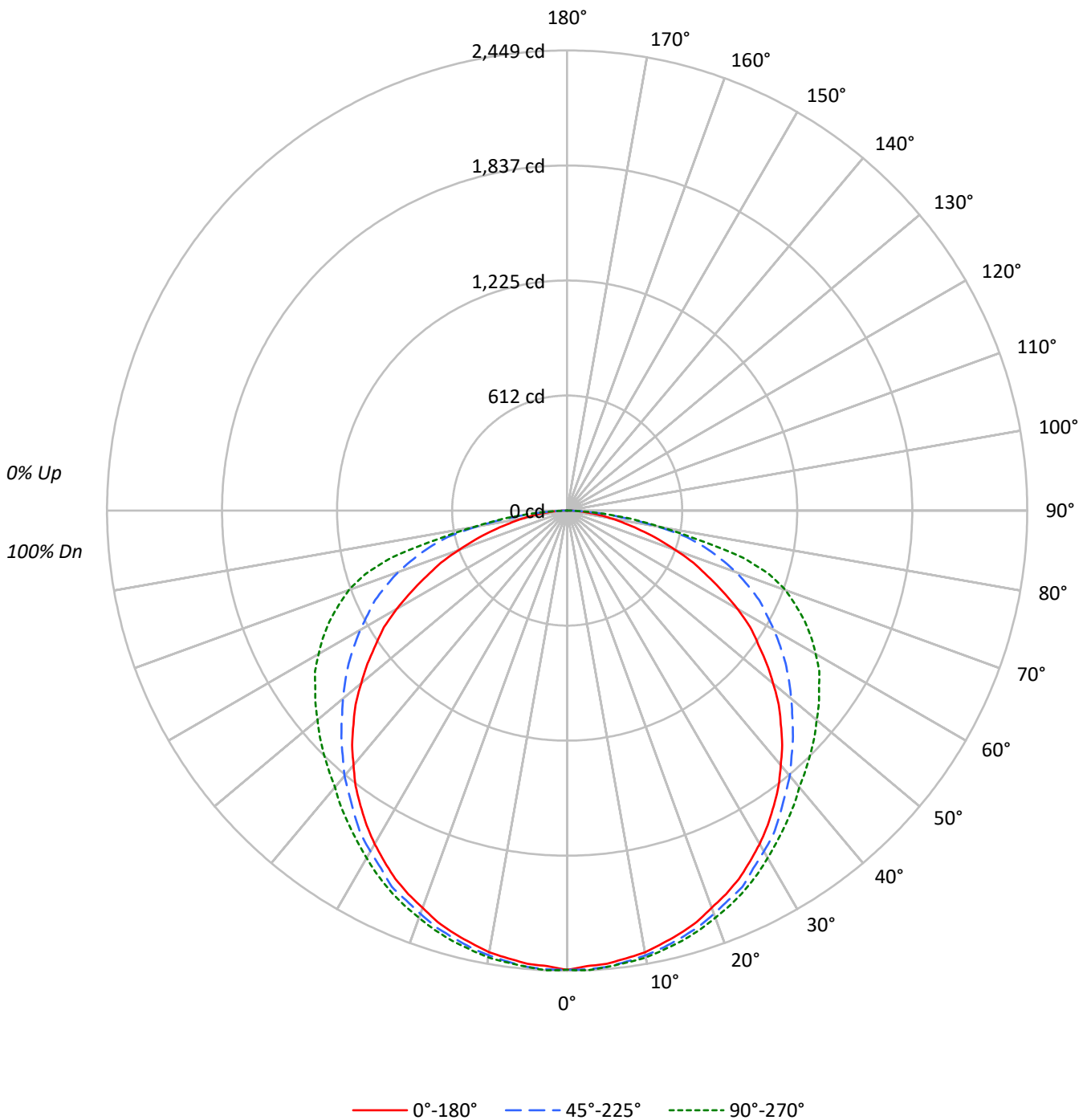
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	6576	6576	6576
5°	6539	6586	6586
10°	6521	6568	6599
15°	6489	6553	6601
20°	6441	6539	6605
25°	6423	6559	6627
30°	6366	6508	6633
35°	6298	6486	6674
40°	6212	6473	6755
45°	6120	6468	6969
50°	5990	6517	7259
55°	5826	6659	7679
60°	5637	6838	8224
65°	5247	7179	8891
70°	4818	7519	9726
75°	4224	7913	10056
80°	3636	7538	7892
85°	3180	5477	6008



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.2	3.0
10°-20°	663.7	8.5
20°-30°	1012.6	13.0
30°-40°	1236.4	15.9
40°-50°	1322.0	17.0
50°-60°	1276.0	16.4
60°-70°	1098.4	14.1
70°-80°	743.2	9.6
80°-90°	196.1	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°	1907.4	24.5
0°-40°	3143.8	40.4
0°-60°	5741.8	73.8
0°-90°	7779.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7779.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2444	2444	2444	2444	2444	
5°	2421	2426	2438	2438	2438	230
15°	2329	2335	2352	2364	2369	657
25°	2163	2175	2209	2220	2232	996
35°	1917	1934	1974	2014	2032	1200
45°	1608	1637	1700	1786	1831	1241
55°	1242	1282	1419	1562	1637	1113
65°	824	904	1127	1305	1396	820
75°	406	538	761	916	967	436
85°	103	143	177	183	195	116
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2443.7	2443.7	2443.7	2443.7	2443.7
2.5°	2426.5	2432.2	2443.7	2443.7	2449.4
5°	2420.8	2426.5	2438.0	2438.0	2438.0
7.5°	2403.6	2409.3	2420.8	2426.5	2426.5
10°	2386.4	2392.2	2403.6	2409.3	2415.1
12.5°	2357.8	2363.6	2380.7	2392.2	2392.2
15°	2329.2	2334.9	2352.1	2363.6	2369.3
17.5°	2294.9	2306.3	2323.5	2334.9	2340.7
20°	2249.1	2260.5	2283.4	2300.6	2306.3
22.5°	2209.0	2220.5	2243.4	2260.5	2272.0
25°	2163.3	2174.7	2209.0	2220.5	2231.9
27.5°	2106.0	2117.5	2146.1	2169.0	2186.1
30°	2048.8	2060.2	2094.6	2123.2	2134.6
32.5°	1985.8	2003.0	2043.1	2066.0	2083.1
35°	1917.2	1934.3	1974.4	2014.5	2031.6
37.5°	1848.5	1865.7	1905.7	1957.2	1980.1
40°	1768.4	1791.3	1842.8	1911.4	1922.9
42.5°	1694.0	1722.6	1768.4	1848.5	1877.1
45°	1608.1	1636.7	1699.7	1785.5	1831.3
47.5°	1528.0	1556.6	1625.3	1728.3	1785.5
50°	1430.7	1470.8	1556.6	1676.8	1734.0
52.5°	1339.2	1373.5	1488.0	1619.6	1688.3
55°	1241.9	1281.9	1419.3	1562.4	1636.7
57.5°	1156.0	1190.4	1344.9	1505.1	1591.0
60°	1047.3	1093.1	1270.5	1442.2	1528.0
62.5°	932.8	1001.5	1196.1	1373.5	1465.1
65°	824.1	904.2	1127.4	1304.8	1396.4
67.5°	726.8	812.7	1041.6	1230.4	1316.3
70°	612.3	721.1	955.7	1138.9	1236.1
72.5°	509.3	629.5	858.4	1041.6	1127.4
75°	406.3	538.0	761.1	915.7	967.2
77.5°	314.8	440.7	652.4	698.2	703.9
80°	234.6	349.1	486.4	492.2	509.3
82.5°	160.2	246.1	314.8	343.4	349.1
85°	103.0	143.1	177.4	183.1	194.6
87.5°	45.8	51.5	63.0	57.2	57.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)