

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: P390031

Luminaire Tested: **22CZ2-100VHE-HRP-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: P390031
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-SWPD1-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: 7683.0 lumens
Efficiency: N/A
Efficacy: 98.9 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

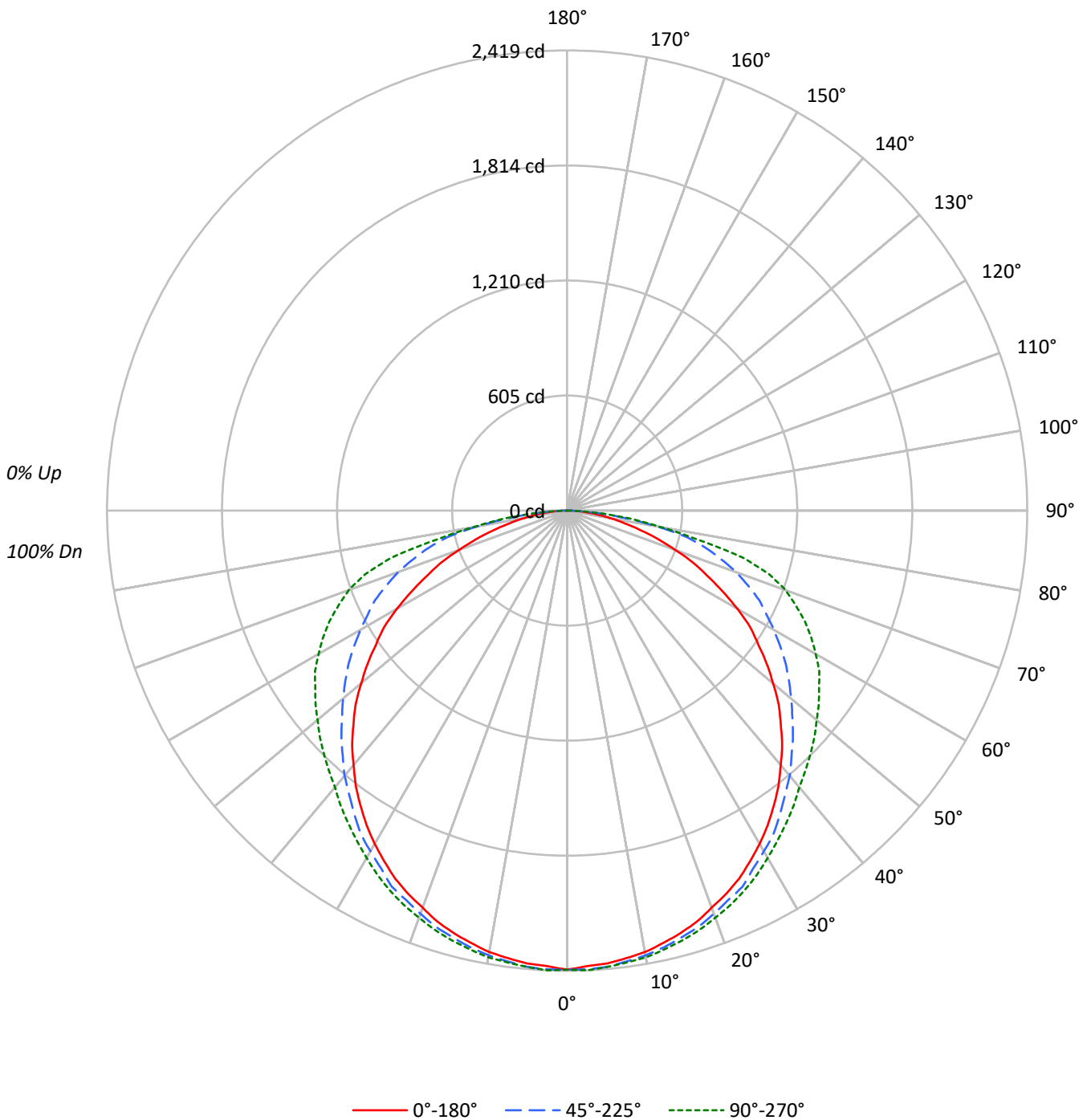
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6494	6494	6494
5°	6458	6504	6504
10°	6440	6486	6517
15°	6408	6471	6519
20°	6361	6458	6523
25°	6343	6478	6545
30°	6287	6428	6551
35°	6220	6406	6591
40°	6135	6393	6671
45°	6044	6388	6883
50°	5915	6436	7169
55°	5754	6576	7583
60°	5567	6753	8122
65°	5182	7089	8781
70°	4759	7427	9605
75°	4172	7816	9931
80°	3591	7445	7795
85°	3140	5409	5934



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.3	3.0
10°-20°	655.5	8.5
20°-30°	1000.0	13.0
30°-40°	1221.1	15.9
40°-50°	1305.6	17.0
50°-60°	1260.2	16.4
60°-70°	1084.8	14.1
70°-80°	734.0	9.6
80°-90°	193.7	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°	1883.8	24.5
0°-40°	3104.8	40.4
0°-60°	5670.6	73.8
0°-90°	7683.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7683.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2413	2413	2413	2413	2413	
5°	2391	2396	2408	2408	2408	227
15°	2300	2306	2323	2334	2340	649
25°	2136	2148	2182	2193	2204	983
35°	1893	1910	1950	1990	2006	1185
45°	1588	1616	1679	1763	1809	1226
55°	1226	1266	1402	1543	1616	1099
65°	814	893	1113	1289	1379	809
75°	401	531	752	904	955	431
85°	102	141	175	181	192	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2413.4	2413.4	2413.4	2413.4	2413.4
2.5°	2396.4	2402.1	2413.4	2413.4	2419.0
5°	2390.8	2396.4	2407.7	2407.7	2407.7
7.5°	2373.8	2379.5	2390.8	2396.4	2396.4
10°	2356.8	2362.5	2373.8	2379.5	2385.1
12.5°	2328.6	2334.2	2351.2	2362.5	2362.5
15°	2300.3	2306.0	2322.9	2334.2	2339.9
17.5°	2266.4	2277.7	2294.7	2306.0	2311.6
20°	2221.2	2232.5	2255.1	2272.1	2277.7
22.5°	2181.6	2192.9	2215.5	2232.5	2243.8
25°	2136.4	2147.7	2181.6	2192.9	2204.2
27.5°	2079.9	2091.2	2119.5	2142.1	2159.0
30°	2023.4	2034.7	2068.6	2096.9	2108.2
32.5°	1961.2	1978.2	2017.7	2040.3	2057.3
35°	1893.4	1910.3	1949.9	1989.5	2006.4
37.5°	1825.6	1842.5	1882.1	1933.0	1955.6
40°	1746.4	1769.0	1819.9	1887.7	1899.0
42.5°	1673.0	1701.2	1746.4	1825.6	1853.8
45°	1588.2	1616.4	1678.6	1763.4	1808.6
47.5°	1509.1	1537.3	1605.1	1706.9	1763.4
50°	1413.0	1452.5	1537.3	1656.0	1712.5
52.5°	1322.5	1356.5	1469.5	1599.5	1667.3
55°	1226.5	1266.0	1401.7	1543.0	1616.4
57.5°	1141.7	1175.6	1328.2	1486.5	1571.2
60°	1034.3	1079.5	1254.7	1424.3	1509.1
62.5°	921.3	989.1	1181.2	1356.5	1446.9
65°	813.9	893.0	1113.4	1288.6	1379.1
67.5°	717.8	802.6	1028.6	1215.2	1299.9
70°	604.8	712.1	943.9	1124.7	1220.8
72.5°	503.0	621.7	847.8	1028.6	1113.4
75°	401.3	531.3	751.7	904.3	955.2
77.5°	310.9	435.2	644.3	689.5	695.2
80°	231.7	344.8	480.4	486.1	503.0
82.5°	158.3	243.0	310.9	339.1	344.8
85°	101.7	141.3	175.2	180.9	192.2
87.5°	45.2	50.9	62.2	56.5	56.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)