

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: P390895

Luminaire Tested: **24CZ2-100VHE-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: P390895
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-HRP-UNV-L950-CD1-SWPD1-U
Description: 2x4 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: 7746.1 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

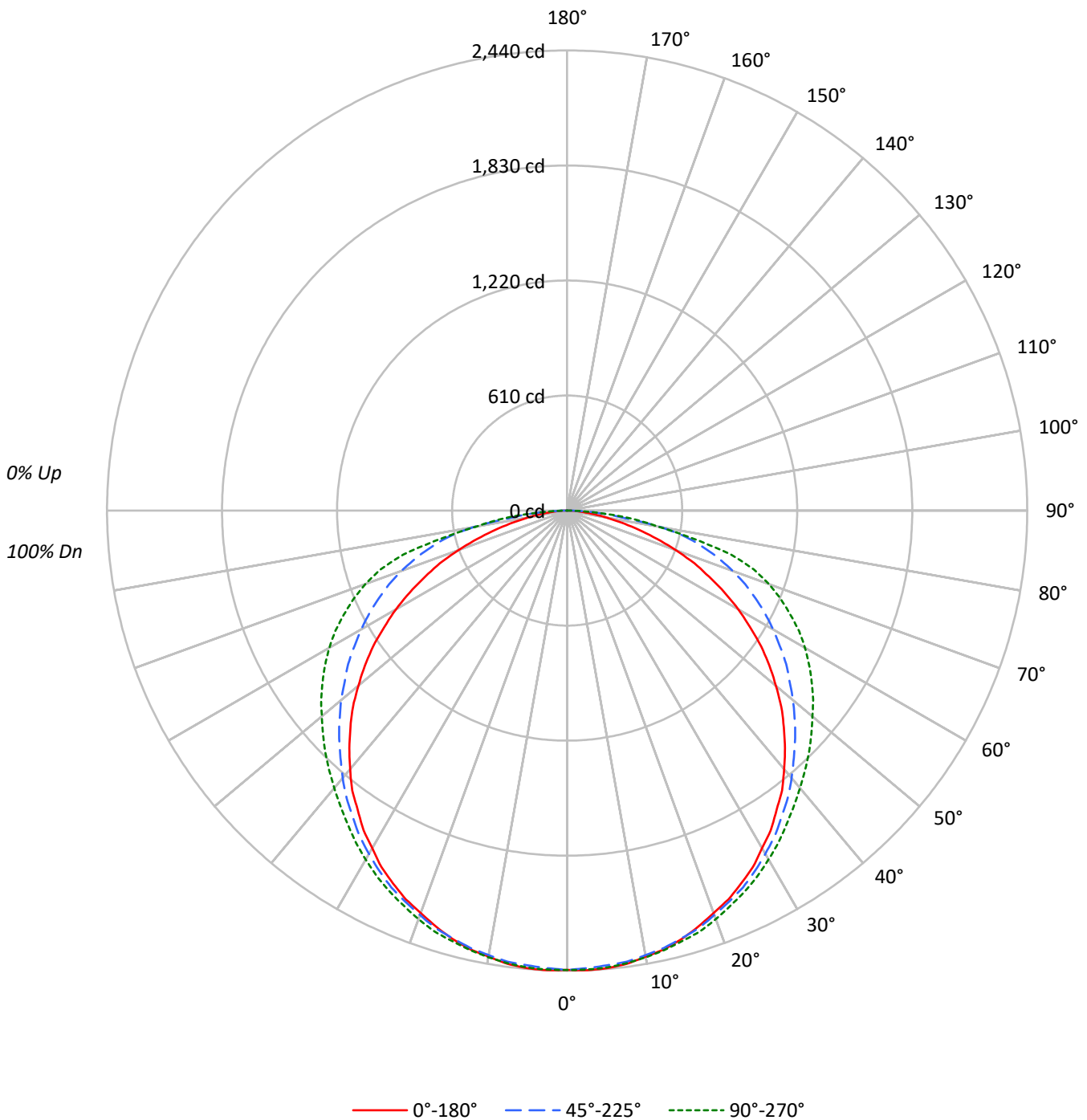
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	3277	3277	3277
5°	3290	3269	3285
10°	3281	3270	3286
15°	3275	3270	3291
20°	3251	3268	3301
25°	3240	3274	3308
30°	3212	3265	3319
35°	3181	3256	3332
40°	3145	3253	3374
45°	3092	3253	3451
50°	3024	3273	3555
55°	2947	3326	3713
60°	2823	3391	3919
65°	2642	3511	4159
70°	2403	3673	4474
75°	2037	3875	4674
80°	1608	3900	3781
85°	1186	2966	3322



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.1	3.0
10°-20°	665.0	8.6
20°-30°	1016.9	13.1
30°-40°	1243.2	16.0
40°-50°	1325.0	17.1
50°-60°	1266.9	16.4
60°-70°	1073.2	13.9
70°-80°	721.3	9.3
80°-90°	203.5	2.6
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°	1913.0	24.7
0°-40°	3156.3	40.7
0°-60°	5748.2	74.2
0°-90°	7746.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7746.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2436	2436	2436	2436	2436	
5°	2436	2432	2421	2432	2432	231
15°	2351	2351	2348	2367	2363	663
25°	2182	2190	2205	2225	2228	1006
35°	1936	1952	1983	2021	2029	1213
45°	1625	1652	1710	1783	1814	1254
55°	1256	1302	1418	1529	1583	1119
65°	830	914	1103	1249	1306	824
75°	392	534	745	872	899	420
85°	77	158	192	208	215	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2435.9	2435.9	2435.9	2435.9	2435.9
2.5°	2439.8	2439.8	2428.2	2435.9	2435.9
5°	2435.9	2432.1	2420.6	2432.1	2432.1
7.5°	2424.4	2420.6	2412.9	2424.4	2420.6
10°	2401.3	2401.3	2393.7	2405.2	2405.2
12.5°	2382.1	2378.3	2374.5	2389.8	2386.0
15°	2351.4	2351.4	2347.6	2366.8	2362.9
17.5°	2313.0	2316.8	2320.7	2336.0	2339.9
20°	2270.7	2278.4	2282.2	2305.3	2305.3
22.5°	2232.3	2236.1	2243.8	2266.9	2266.9
25°	2182.3	2190.0	2205.4	2224.6	2228.5
27.5°	2132.4	2136.2	2155.4	2182.3	2186.2
30°	2067.1	2078.6	2101.7	2132.4	2136.2
32.5°	2009.4	2021.0	2047.9	2078.6	2086.3
35°	1936.4	1951.8	1982.6	2021.0	2028.7
37.5°	1871.1	1882.7	1921.1	1963.3	1974.9
40°	1790.4	1813.5	1851.9	1901.9	1921.1
42.5°	1709.8	1732.8	1778.9	1844.2	1867.3
45°	1625.2	1652.1	1709.8	1782.8	1813.5
47.5°	1540.7	1571.4	1636.8	1721.3	1755.9
50°	1444.7	1483.1	1563.8	1659.8	1698.2
52.5°	1352.4	1398.5	1486.9	1594.5	1644.4
55°	1256.4	1302.5	1417.8	1529.2	1583.0
57.5°	1148.8	1210.3	1337.1	1463.9	1521.5
60°	1048.9	1106.5	1260.2	1398.5	1456.2
62.5°	941.3	1018.2	1183.4	1329.4	1387.0
65°	829.9	914.4	1102.7	1248.7	1306.3
67.5°	730.0	822.2	1022.0	1168.0	1225.6
70°	610.9	726.2	933.6	1079.6	1137.3
72.5°	499.5	626.3	841.4	983.6	1037.4
75°	391.9	534.1	745.4	872.2	899.1
77.5°	292.0	441.8	645.5	699.3	680.1
80°	207.5	353.5	503.3	476.4	488.0
82.5°	134.5	269.0	311.2	353.5	365.0
85°	76.8	157.5	192.1	207.5	215.2
87.5°	34.6	57.6	76.8	76.8	73.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)