

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: P388975

Luminaire Tested: **24CZ2-75VHE-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: P388975
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-UNV-L950-CD1-SWPD1-U
Description: 2x4 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: 6861.0 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

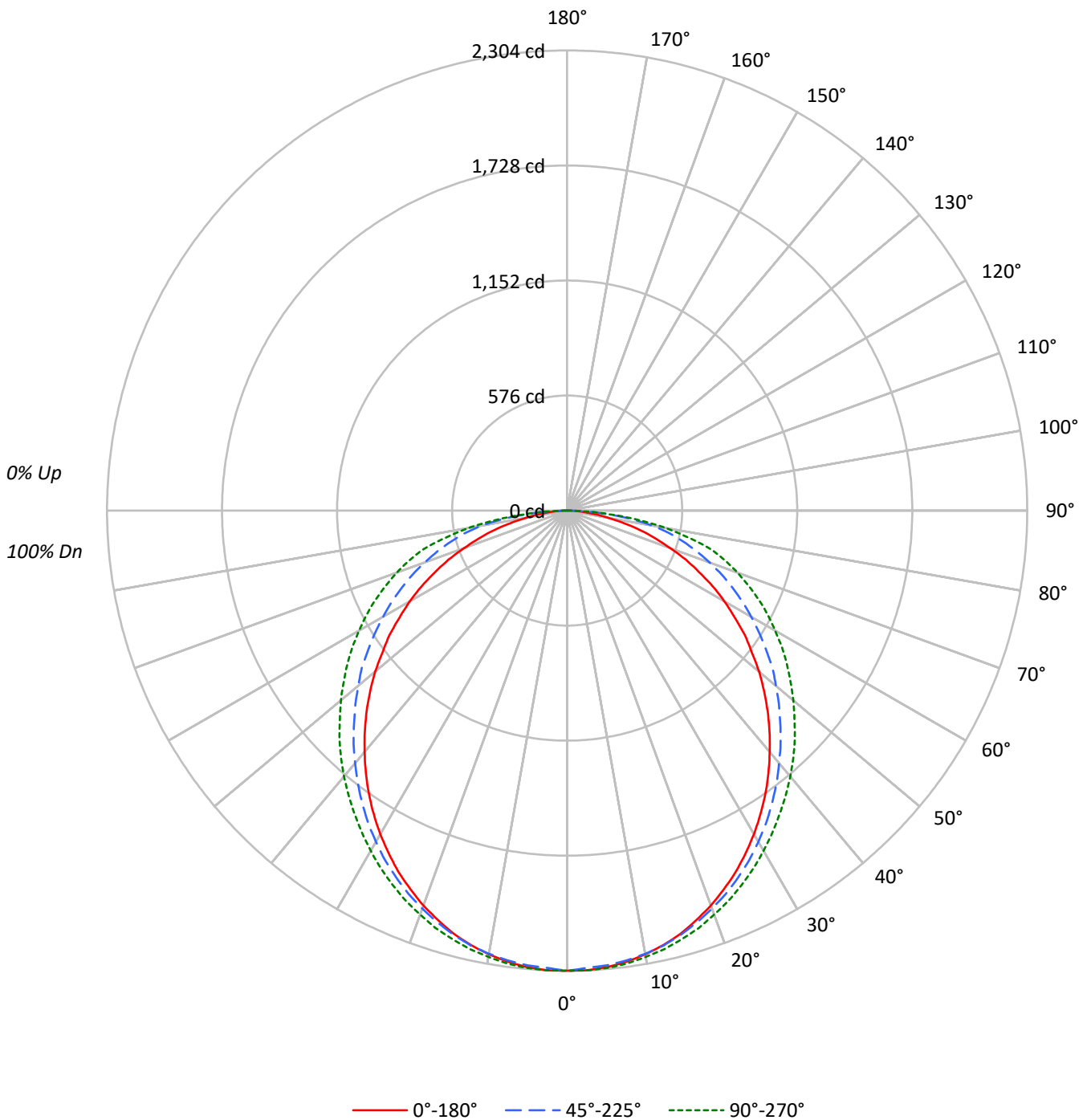
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3099	3099	3099
5°	3099	3086	3105
10°	3082	3078	3100
15°	3056	3062	3094
20°	3013	3036	3082
25°	2964	3009	3070
30°	2907	2974	3056
35°	2843	2937	3047
40°	2771	2900	3053
45°	2701	2871	3067
50°	2627	2857	3096
55°	2546	2852	3153
60°	2446	2865	3235
65°	2318	2909	3375
70°	2153	2982	3567
75°	1964	3131	3869
80°	1615	3371	3868
85°	1237	3111	3322



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.9	3.2
10°-20°	622.0	9.1
20°-30°	936.0	13.6
30°-40°	1121.7	16.3
40°-50°	1168.9	17.0
50°-60°	1087.5	15.9
60°-70°	895.7	13.1
70°-80°	610.0	8.9
80°-90°	201.4	2.9
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°	1775.8	25.9
0°-40°	2897.5	42.2
0°-60°	5153.9	75.1
0°-90°	6861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6861.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2304	2304	2304	2304	2304	
5°	2294	2294	2285	2297	2299	218
15°	2194	2196	2198	2219	2221	618
25°	1997	2006	2026	2061	2068	919
35°	1731	1752	1788	1836	1855	1082
45°	1420	1450	1509	1585	1612	1095
55°	1085	1122	1216	1312	1344	967
65°	728	790	914	1021	1060	723
75°	378	462	602	710	744	398
85°	80	156	202	215	215	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2303.6	2303.6	2303.6	2303.6	2303.6
2.5°	2303.6	2303.6	2292.1	2303.6	2303.6
5°	2294.4	2294.4	2285.2	2296.7	2299.0
7.5°	2278.4	2280.7	2271.5	2285.2	2287.5
10°	2255.5	2257.8	2253.2	2266.9	2269.2
12.5°	2228.0	2230.3	2230.3	2246.3	2248.6
15°	2193.6	2195.9	2198.2	2218.8	2221.1
17.5°	2150.1	2157.0	2161.6	2186.8	2191.4
20°	2104.3	2111.2	2120.4	2147.8	2152.4
22.5°	2051.7	2060.8	2076.9	2106.6	2113.5
25°	1996.7	2005.9	2026.5	2060.8	2067.7
27.5°	1934.9	1948.6	1973.8	2010.5	2019.6
30°	1870.8	1884.5	1914.3	1953.2	1967.0
32.5°	1802.1	1820.4	1854.8	1898.3	1912.0
35°	1731.1	1751.7	1788.3	1836.4	1854.8
37.5°	1655.5	1678.4	1721.9	1774.6	1797.5
40°	1577.7	1605.2	1651.0	1712.8	1738.0
42.5°	1499.8	1525.0	1582.3	1648.7	1676.1
45°	1419.7	1449.5	1509.0	1584.6	1612.0
47.5°	1337.3	1367.0	1438.0	1518.1	1543.3
50°	1254.8	1284.6	1364.7	1449.5	1479.2
52.5°	1165.5	1204.4	1296.0	1380.8	1410.5
55°	1085.4	1122.0	1215.9	1312.1	1344.1
57.5°	993.8	1037.3	1140.3	1241.1	1275.4
60°	909.1	954.9	1064.8	1167.8	1202.2
62.5°	822.0	872.4	989.2	1094.5	1133.5
65°	728.2	790.0	913.6	1021.3	1060.2
67.5°	643.4	707.6	838.1	948.0	982.3
70°	547.3	625.1	757.9	867.8	906.8
72.5°	464.8	542.7	682.4	790.0	828.9
75°	377.8	462.5	602.2	709.8	744.2
77.5°	290.8	384.7	524.4	606.8	618.3
80°	208.4	306.8	435.1	483.2	499.2
82.5°	146.5	235.9	320.6	352.6	361.8
85°	80.1	155.7	201.5	215.2	215.2
87.5°	34.3	66.4	80.1	82.4	84.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)