

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: P388974

Luminaire Tested: **24CZ2-75VHE-UNV-L950-CD1-SDWPD1-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: P388974
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-SDWPD1-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: 6778.2 lumens
Efficiency: N/A
Efficacy: 135.8 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

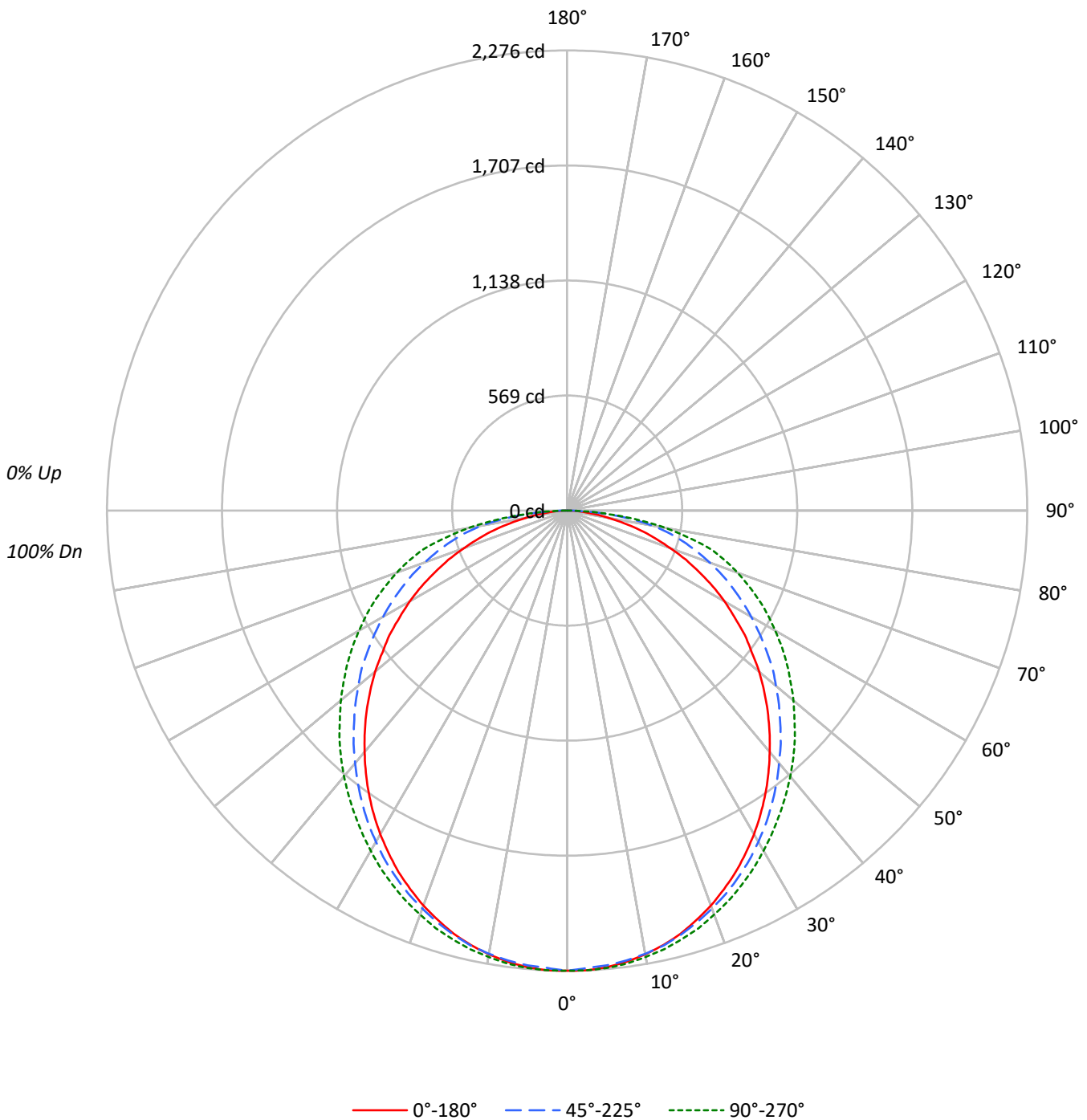
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3062	3062	3062
5°	3061	3049	3068
10°	3044	3041	3063
15°	3019	3025	3057
20°	2977	2999	3045
25°	2928	2972	3033
30°	2871	2938	3019
35°	2809	2902	3010
40°	2738	2865	3016
45°	2669	2837	3030
50°	2595	2822	3059
55°	2515	2818	3115
60°	2417	2831	3196
65°	2290	2874	3335
70°	2127	2946	3524
75°	1941	3093	3822
80°	1595	3330	3821
85°	1223	3074	3282



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.2	3.2
10°-20°	614.5	9.1
20°-30°	924.7	13.6
30°-40°	1108.1	16.3
40°-50°	1154.8	17.0
50°-60°	1074.4	15.9
60°-70°	884.9	13.1
70°-80°	602.7	8.9
80°-90°	199.0	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°	1754.4	25.9
0°-40°	2862.5	42.2
0°-60°	5091.7	75.1
0°-90°	6778.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6778.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2276	2276	2276	2276	2276	
5°	2267	2267	2258	2269	2271	215
15°	2167	2169	2172	2192	2194	611
25°	1973	1982	2002	2036	2043	908
35°	1710	1731	1767	1814	1832	1069
45°	1403	1432	1491	1565	1593	1082
55°	1072	1108	1201	1296	1328	956
65°	719	780	903	1009	1047	714
75°	373	457	595	701	735	394
85°	79	154	199	213	213	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2275.8	2275.8	2275.8	2275.8	2275.8
2.5°	2275.8	2275.8	2264.4	2275.8	2275.8
5°	2266.7	2266.7	2257.7	2269.0	2271.2
7.5°	2250.9	2253.1	2244.1	2257.7	2259.9
10°	2228.3	2230.5	2226.0	2239.6	2241.8
12.5°	2201.1	2203.4	2203.4	2219.2	2221.5
15°	2167.2	2169.4	2171.7	2192.1	2194.3
17.5°	2124.2	2131.0	2135.5	2160.4	2164.9
20°	2078.9	2085.7	2094.8	2121.9	2126.5
22.5°	2026.9	2036.0	2051.8	2081.2	2088.0
25°	1972.6	1981.7	2002.0	2036.0	2042.8
27.5°	1911.5	1925.1	1950.0	1986.2	1995.2
30°	1848.2	1861.8	1891.2	1929.6	1943.2
32.5°	1780.3	1798.4	1832.4	1875.4	1888.9
35°	1710.2	1730.6	1766.8	1814.3	1832.4
37.5°	1635.6	1658.2	1701.2	1753.2	1775.8
40°	1558.6	1585.8	1631.0	1692.1	1717.0
42.5°	1481.7	1506.6	1563.2	1628.8	1655.9
45°	1402.6	1432.0	1490.8	1565.4	1592.6
47.5°	1321.1	1350.5	1420.7	1499.8	1524.7
50°	1239.7	1269.1	1348.3	1432.0	1461.4
52.5°	1151.5	1189.9	1280.4	1364.1	1393.5
55°	1072.3	1108.5	1201.2	1296.2	1327.9
57.5°	981.8	1024.8	1126.6	1226.1	1260.0
60°	898.1	943.3	1051.9	1153.7	1187.6
62.5°	812.1	861.9	977.3	1081.3	1119.8
65°	719.4	780.5	902.6	1008.9	1047.4
67.5°	635.7	699.0	828.0	936.5	970.5
70°	540.7	617.6	748.8	857.4	895.8
72.5°	459.2	536.1	674.1	780.5	818.9
75°	373.3	457.0	595.0	701.3	735.2
77.5°	287.3	380.0	518.0	599.5	610.8
80°	205.9	303.1	429.8	477.3	493.2
82.5°	144.8	233.0	316.7	348.4	357.4
85°	79.2	153.8	199.1	212.6	212.6
87.5°	33.9	65.6	79.2	81.4	83.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)