

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: P389910

Luminaire Tested: **24CZ2-75VHE-S-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: P389910
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-S-UNV-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7122.1 lumens
Efficiency: N/A
Efficacy: 142.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

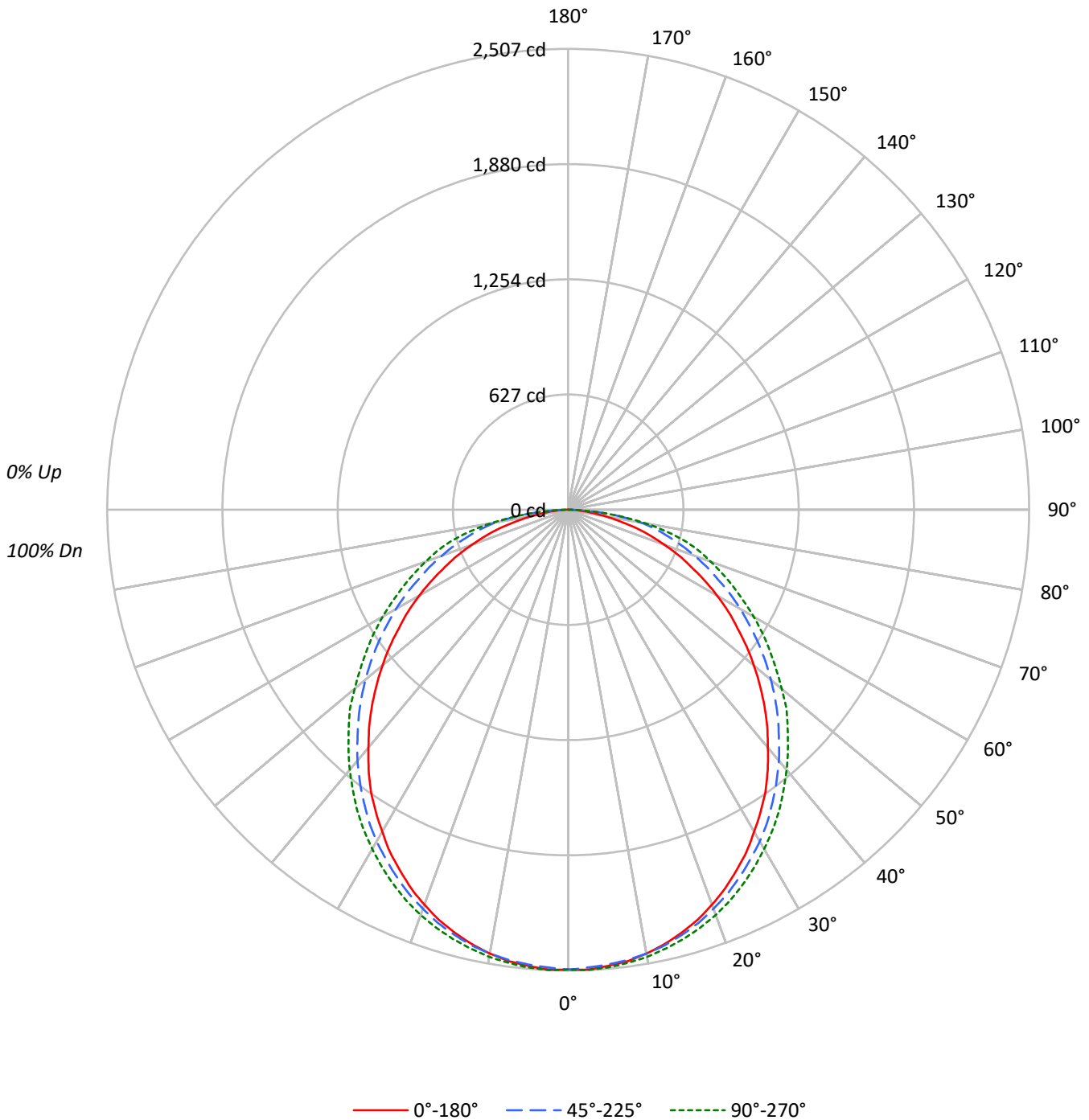
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3366	3366	3366
5°	3364	3355	3376
10°	3350	3350	3375
15°	3318	3334	3369
20°	3275	3307	3359
25°	3214	3275	3338
30°	3142	3237	3311
35°	3073	3184	3285
40°	2968	3131	3246
45°	2871	3069	3211
50°	2761	3012	3173
55°	2637	2956	3141
60°	2514	2910	3135
65°	2355	2859	3155
70°	2180	2875	3240
75°	1952	2928	3422
80°	1578	3102	3348
85°	1187	2725	2654



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.9	3.3
10°-20°	676.8	9.5
20°-30°	1017.4	14.3
30°-40°	1211.9	17.0
40°-50°	1240.3	17.4
50°-60°	1116.7	15.7
60°-70°	877.0	12.3
70°-80°	569.1	8.0
80°-90°	176.0	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°	1931.1	27.1
0°-40°	3143.0	44.1
0°-60°	5500.0	77.2
0°-90°	7122.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7122.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2502	2502	2502	2502	2502	
5°	2491	2495	2484	2498	2500	237
15°	2382	2389	2394	2414	2418	672
25°	2165	2183	2206	2242	2249	997
35°	1871	1894	1939	1986	2000	1167
45°	1509	1545	1613	1674	1688	1163
55°	1124	1174	1260	1326	1339	1008
65°	740	796	898	973	991	736
75°	376	448	563	640	658	397
85°	77	142	176	172	172	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2502.0	2502.0	2502.0	2502.0	2502.0
2.5°	2504.3	2504.3	2493.0	2504.3	2506.6
5°	2490.7	2495.3	2483.9	2497.5	2499.8
7.5°	2477.2	2477.2	2470.4	2483.9	2486.2
10°	2452.3	2454.5	2452.3	2468.1	2470.4
12.5°	2420.6	2425.1	2427.4	2443.2	2445.5
15°	2382.1	2388.9	2393.5	2413.8	2418.3
17.5°	2339.2	2345.9	2357.3	2379.9	2384.4
20°	2287.1	2296.2	2309.7	2339.2	2345.9
22.5°	2230.6	2239.6	2262.2	2289.4	2300.7
25°	2165.0	2183.1	2205.7	2241.9	2248.7
27.5°	2099.4	2115.2	2144.6	2183.1	2192.1
30°	2022.4	2047.3	2083.5	2122.0	2131.0
32.5°	1947.8	1972.7	2015.7	2056.4	2067.7
35°	1870.9	1893.5	1938.7	1986.2	1999.8
37.5°	1782.6	1812.1	1861.8	1909.3	1922.9
40°	1689.9	1726.1	1782.6	1832.4	1848.3
42.5°	1601.7	1640.1	1696.7	1751.0	1769.1
45°	1508.9	1545.1	1613.0	1674.1	1687.6
47.5°	1413.9	1454.6	1527.0	1588.1	1610.7
50°	1318.9	1361.9	1438.8	1502.1	1515.7
52.5°	1223.9	1269.1	1350.6	1418.4	1425.2
55°	1124.3	1174.1	1260.1	1325.7	1339.2
57.5°	1033.8	1076.8	1169.6	1237.4	1253.3
60°	934.3	981.8	1081.4	1144.7	1165.1
62.5°	839.3	889.1	993.1	1056.5	1074.6
65°	739.8	796.3	898.1	972.8	990.9
67.5°	653.8	708.1	816.7	889.1	907.2
70°	554.2	615.3	730.7	805.4	823.5
72.5°	468.3	531.6	647.0	719.4	746.5
75°	375.5	447.9	563.3	640.2	658.3
77.5°	285.0	368.7	486.4	545.2	545.2
80°	203.6	291.8	400.4	427.6	432.1
82.5°	133.5	219.4	296.4	294.1	294.1
85°	76.9	142.5	176.5	171.9	171.9
87.5°	29.4	58.8	63.3	63.3	61.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)