

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: P389905

Luminaire Tested: **24CZ2-75VHE-S-UNV-L935-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: P389905
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-L935-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6722.3 lumens
Efficiency: N/A
Efficacy: 134.7 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

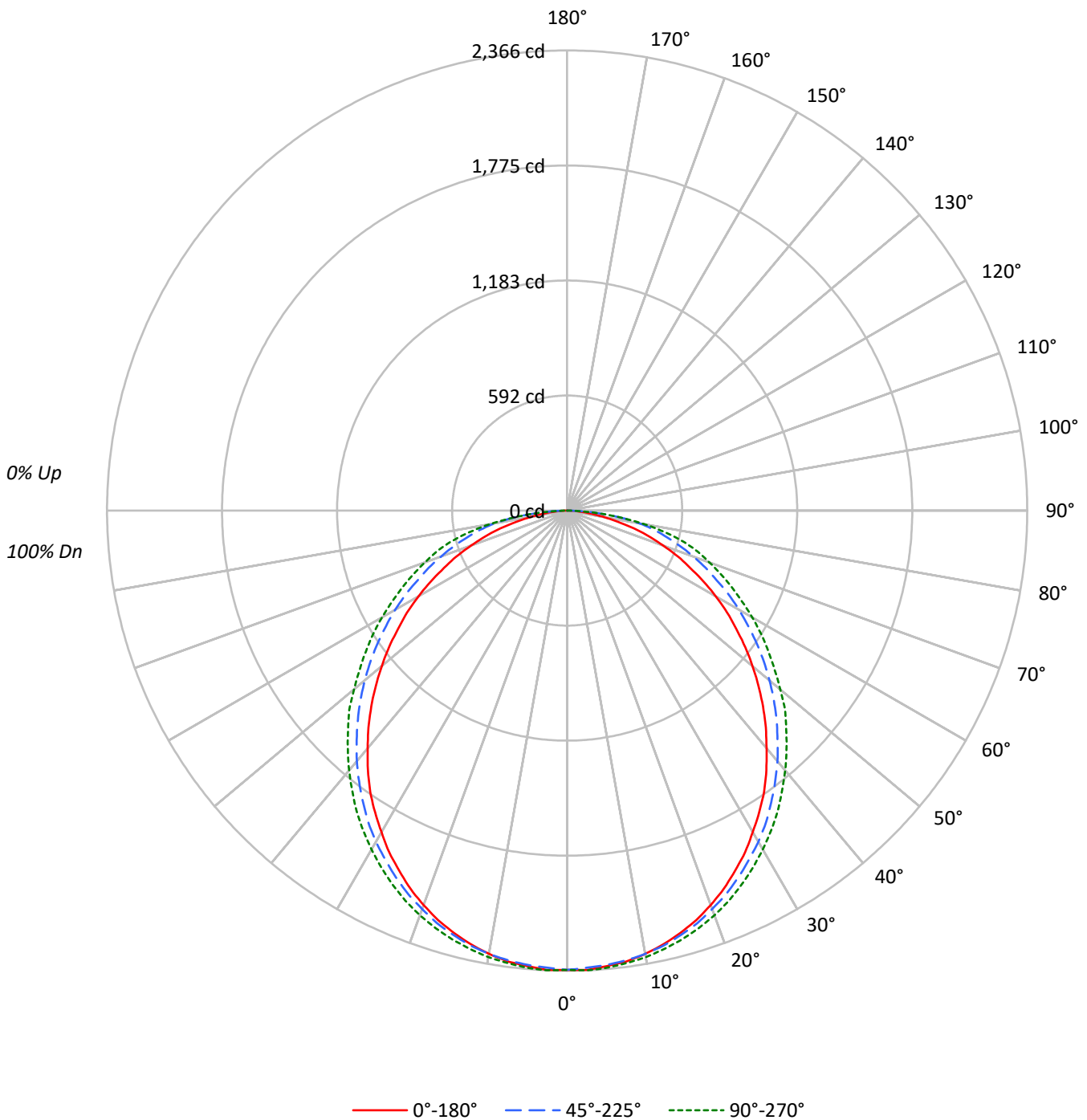
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3178	3178	3178
5°	3175	3167	3187
10°	3162	3162	3186
15°	3132	3147	3180
20°	3091	3122	3171
25°	3034	3091	3151
30°	2966	3055	3125
35°	2901	3006	3100
40°	2801	2955	3064
45°	2710	2897	3031
50°	2606	2843	2995
55°	2489	2790	2965
60°	2373	2747	2959
65°	2223	2699	2977
70°	2058	2713	3057
75°	1843	2764	3230
80°	1489	2928	3160
85°	1121	2570	2506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.6	3.3
10°-20°	638.8	9.5
20°-30°	960.3	14.3
30°-40°	1143.9	17.0
40°-50°	1170.7	17.4
50°-60°	1054.0	15.7
60°-70°	827.7	12.3
70°-80°	537.2	8.0
80°-90°	166.1	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°	1822.7	27.1
0°-40°	2966.6	44.1
0°-60°	5191.3	77.2
0°-90°	6722.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6722.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2362	2362	2362	2362	2362	
5°	2351	2355	2344	2357	2360	223
15°	2248	2255	2259	2278	2283	634
25°	2043	2060	2082	2116	2122	941
35°	1766	1787	1830	1875	1888	1102
45°	1424	1458	1522	1580	1593	1098
55°	1061	1108	1189	1251	1264	951
65°	698	752	848	918	935	695
75°	354	423	532	604	621	375
85°	73	134	166	162	162	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2361.6	2361.6	2361.6	2361.6	2361.6
2.5°	2363.7	2363.7	2353.0	2363.7	2365.9
5°	2350.9	2355.2	2344.5	2357.3	2359.5
7.5°	2338.1	2338.1	2331.7	2344.5	2346.6
10°	2314.6	2316.7	2314.6	2329.6	2331.7
12.5°	2284.7	2289.0	2291.1	2306.1	2308.2
15°	2248.4	2254.8	2259.1	2278.3	2282.6
17.5°	2207.8	2214.3	2224.9	2246.3	2250.6
20°	2158.7	2167.3	2180.1	2207.8	2214.3
22.5°	2105.4	2113.9	2135.3	2160.9	2171.6
25°	2043.4	2060.5	2081.9	2116.0	2122.4
27.5°	1981.5	1996.5	2024.2	2060.5	2069.1
30°	1908.9	1932.4	1966.6	2002.9	2011.4
32.5°	1838.5	1861.9	1902.5	1940.9	1951.6
35°	1765.9	1787.2	1829.9	1874.8	1887.6
37.5°	1682.6	1710.3	1757.3	1802.2	1815.0
40°	1595.0	1629.2	1682.6	1729.6	1744.5
42.5°	1511.8	1548.1	1601.4	1652.7	1669.8
45°	1424.2	1458.4	1522.4	1580.1	1592.9
47.5°	1334.5	1373.0	1441.3	1498.9	1520.3
50°	1244.9	1285.4	1358.0	1417.8	1430.6
52.5°	1155.2	1197.9	1274.7	1338.8	1345.2
55°	1061.2	1108.2	1189.3	1251.3	1264.1
57.5°	975.8	1016.4	1103.9	1168.0	1182.9
60°	881.9	926.7	1020.7	1080.4	1099.7
62.5°	792.2	839.2	937.4	997.2	1014.2
65°	698.2	751.6	847.7	918.2	935.2
67.5°	617.1	668.3	770.8	839.2	856.2
70°	523.1	580.8	689.7	760.1	777.2
72.5°	442.0	501.8	610.7	679.0	704.6
75°	354.5	422.8	531.7	604.3	621.4
77.5°	269.0	348.0	459.1	514.6	514.6
80°	192.2	275.4	377.9	403.6	407.8
82.5°	126.0	207.1	279.7	277.6	277.6
85°	72.6	134.5	166.5	162.3	162.3
87.5°	27.8	55.5	59.8	59.8	57.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)