

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: P389901

Luminaire Tested: **24CZ2-75VHE-S-UNV-L930-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: P389901
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-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6480.9 lumens
Efficiency: N/A
Efficacy: 129.9 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

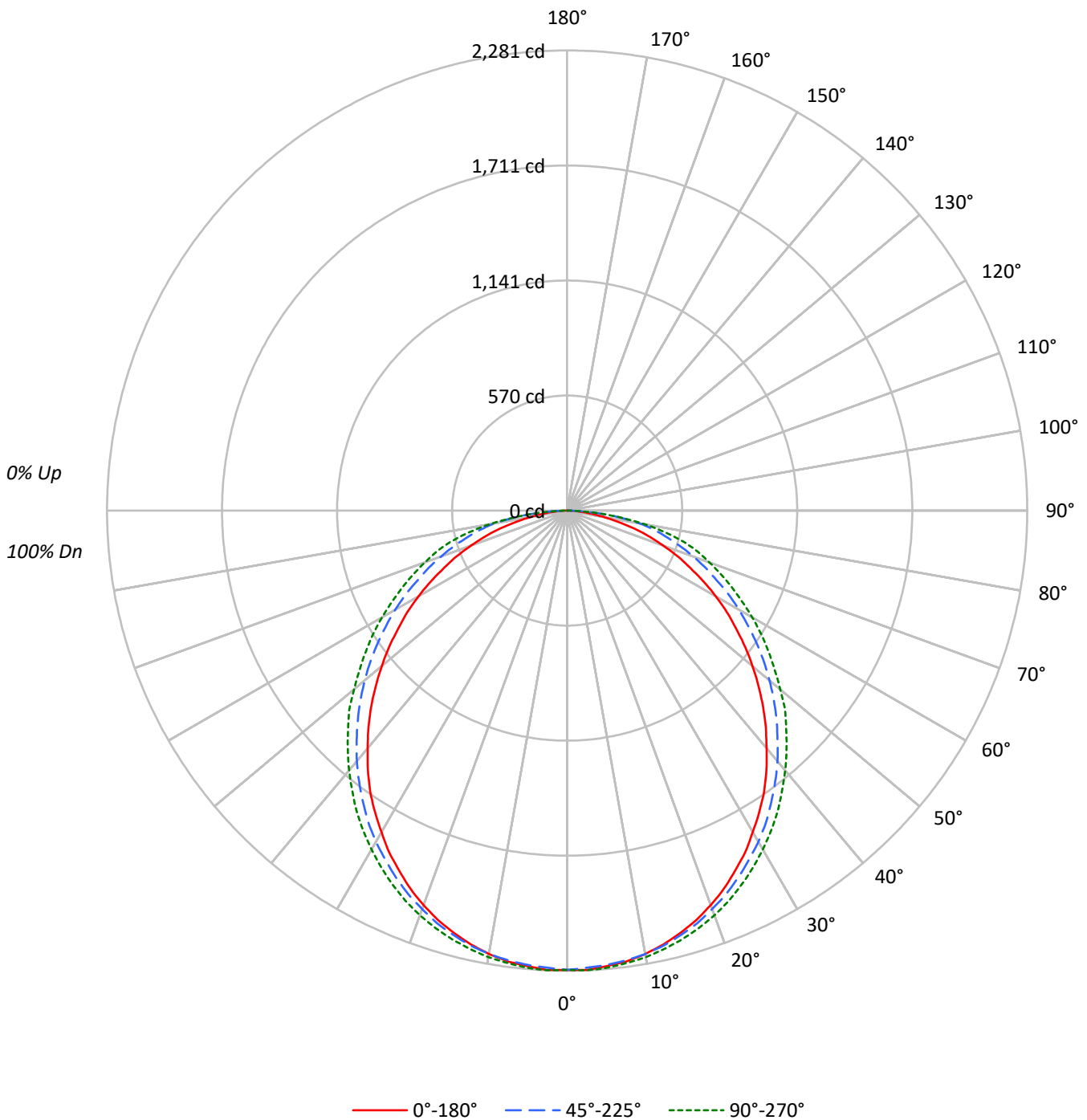
Input Watts (W): 49.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3063	3063	3063
5°	3061	3053	3072
10°	3049	3049	3071
15°	3020	3034	3065
20°	2980	3009	3057
25°	2925	2980	3038
30°	2859	2946	3013
35°	2796	2898	2989
40°	2701	2849	2954
45°	2613	2793	2922
50°	2512	2741	2887
55°	2400	2690	2859
60°	2288	2648	2853
65°	2143	2602	2871
70°	1984	2616	2948
75°	1776	2665	3114
80°	1436	2824	3047
85°	1081	2479	2416



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.5	3.3
10°-20°	615.9	9.5
20°-30°	925.8	14.3
30°-40°	1102.8	17.0
40°-50°	1128.7	17.4
50°-60°	1016.1	15.7
60°-70°	798.0	12.3
70°-80°	517.9	8.0
80°-90°	160.2	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°	1757.2	27.1
0°-40°	2860.0	44.1
0°-60°	5004.8	77.2
0°-90°	6480.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6480.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2277	2277	2277	2277	2277	
5°	2266	2271	2260	2273	2275	215
15°	2168	2174	2178	2196	2201	611
25°	1970	1986	2007	2040	2046	908
35°	1702	1723	1764	1807	1820	1062
45°	1373	1406	1468	1523	1536	1059
55°	1023	1068	1147	1206	1219	917
65°	673	725	817	885	902	670
75°	342	408	513	583	599	362
85°	70	130	161	156	156	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2276.8	2276.8	2276.8	2276.8	2276.8
2.5°	2278.8	2278.8	2268.5	2278.8	2280.9
5°	2266.5	2270.6	2260.3	2272.7	2274.7
7.5°	2254.1	2254.1	2248.0	2260.3	2262.4
10°	2231.5	2233.6	2231.5	2245.9	2248.0
12.5°	2202.7	2206.8	2208.8	2223.3	2225.3
15°	2167.7	2173.9	2178.0	2196.5	2200.6
17.5°	2128.6	2134.7	2145.0	2165.6	2169.7
20°	2081.2	2089.5	2101.8	2128.6	2134.7
22.5°	2029.8	2038.0	2058.6	2083.3	2093.6
25°	1970.1	1986.5	2007.1	2040.0	2046.2
27.5°	1910.4	1924.8	1951.5	1986.5	1994.8
30°	1840.4	1863.0	1895.9	1930.9	1939.2
32.5°	1772.4	1795.1	1834.2	1871.2	1881.5
35°	1702.4	1723.0	1764.2	1807.4	1819.8
37.5°	1622.2	1648.9	1694.2	1737.4	1749.8
40°	1537.8	1570.7	1622.2	1667.4	1681.9
42.5°	1457.5	1492.5	1543.9	1593.3	1609.8
45°	1373.1	1406.0	1467.8	1523.3	1535.7
47.5°	1286.6	1323.7	1389.5	1445.1	1465.7
50°	1200.1	1239.3	1309.3	1366.9	1379.2
52.5°	1113.7	1154.9	1229.0	1290.7	1296.9
55°	1023.1	1068.4	1146.6	1206.3	1218.7
57.5°	940.8	979.9	1064.3	1126.0	1140.4
60°	850.2	893.4	984.0	1041.6	1060.2
62.5°	763.7	809.0	903.7	961.4	977.8
65°	673.2	724.6	817.3	885.2	901.7
67.5°	594.9	644.3	743.1	809.0	825.5
70°	504.4	559.9	664.9	732.9	749.3
72.5°	426.1	483.8	588.8	654.6	679.3
75°	341.7	407.6	512.6	582.6	599.0
77.5°	259.4	335.5	442.6	496.1	496.1
80°	185.3	265.6	364.4	389.1	393.2
82.5°	121.5	199.7	269.7	267.6	267.6
85°	70.0	129.7	160.6	156.5	156.5
87.5°	26.8	53.5	57.6	57.6	55.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)