

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: P389949

Luminaire Tested: **24CZ2-85VHE-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: P389949
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: 24CZ2-85VHE-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: 7274.3 lumens
Efficiency: N/A
Efficacy: 125.6 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

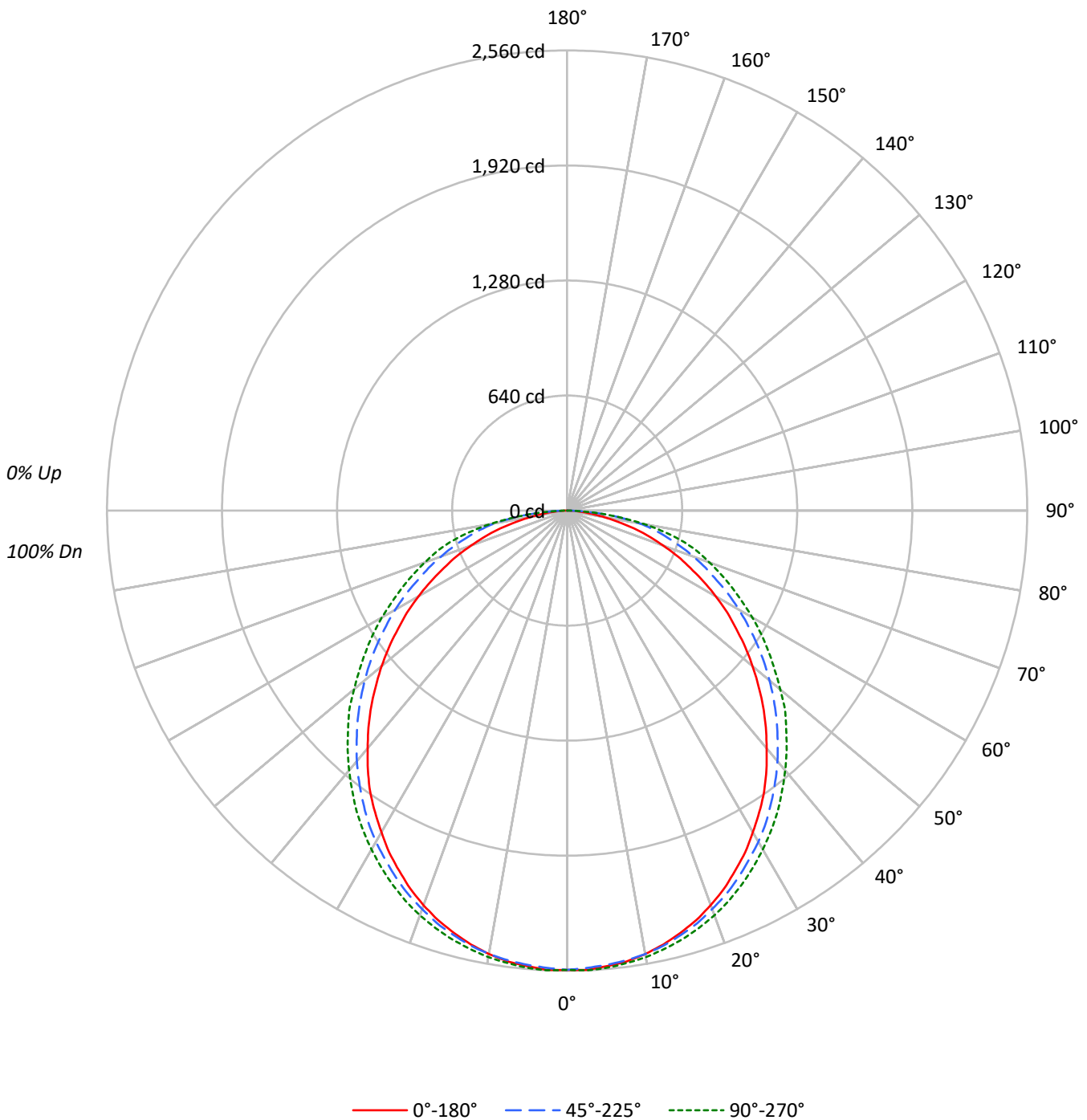
Input Watts (W): 57.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3438	3438	3438
5°	3436	3427	3448
10°	3422	3422	3447
15°	3389	3405	3441
20°	3345	3378	3431
25°	3283	3344	3410
30°	3209	3306	3382
35°	3139	3253	3355
40°	3032	3198	3316
45°	2933	3135	3280
50°	2820	3076	3240
55°	2694	3019	3209
60°	2568	2972	3202
65°	2406	2920	3222
70°	2227	2936	3309
75°	1994	2991	3496
80°	1612	3169	3419
85°	1213	2782	2711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.9	3.3
10°-20°	691.3	9.5
20°-30°	1039.2	14.3
30°-40°	1237.8	17.0
40°-50°	1266.8	17.4
50°-60°	1140.5	15.7
60°-70°	895.7	12.3
70°-80°	581.3	8.0
80°-90°	179.8	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°	1972.4	27.1
0°-40°	3210.2	44.1
0°-60°	5617.5	77.2
0°-90°	7274.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7274.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2556	2556	2556	2556	2556	
5°	2544	2549	2537	2551	2553	242
15°	2433	2440	2445	2465	2470	686
25°	2211	2230	2253	2290	2297	1019
35°	1911	1934	1980	2029	2043	1192
45°	1541	1578	1647	1710	1724	1188
55°	1148	1199	1287	1354	1368	1030
65°	756	813	917	994	1012	752
75°	384	458	575	654	672	406
85°	79	146	180	176	176	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2555.5	2555.5	2555.5	2555.5	2555.5
2.5°	2557.8	2557.8	2546.3	2557.8	2560.1
5°	2544.0	2548.6	2537.0	2550.9	2553.2
7.5°	2530.1	2530.1	2523.2	2537.0	2539.3
10°	2504.7	2507.0	2504.7	2520.9	2523.2
12.5°	2472.3	2476.9	2479.3	2495.4	2497.7
15°	2433.0	2440.0	2444.6	2465.4	2470.0
17.5°	2389.1	2396.1	2407.6	2430.7	2435.4
20°	2336.0	2345.2	2359.1	2389.1	2396.1
22.5°	2278.2	2287.5	2310.6	2338.3	2349.9
25°	2211.2	2229.7	2252.8	2289.8	2296.7
27.5°	2144.2	2160.4	2190.4	2229.7	2239.0
30°	2065.7	2091.1	2128.1	2167.3	2176.6
32.5°	1989.4	2014.8	2058.7	2100.3	2111.9
35°	1910.9	1934.0	1980.2	2028.7	2042.6
37.5°	1820.7	1850.8	1901.6	1950.1	1964.0
40°	1726.0	1763.0	1820.7	1871.6	1887.7
42.5°	1635.9	1675.2	1732.9	1788.4	1806.9
45°	1541.2	1578.1	1647.4	1709.8	1723.7
47.5°	1444.1	1485.7	1559.6	1622.0	1645.1
50°	1347.1	1391.0	1469.5	1534.2	1548.1
52.5°	1250.0	1296.2	1379.4	1448.7	1455.7
55°	1148.4	1199.2	1287.0	1354.0	1367.9
57.5°	1055.9	1099.8	1194.6	1263.9	1280.1
60°	954.3	1002.8	1104.5	1169.2	1190.0
62.5°	857.2	908.1	1014.3	1079.0	1097.5
65°	755.6	813.3	917.3	993.6	1012.0
67.5°	667.8	723.2	834.1	908.1	926.5
70°	566.1	628.5	746.3	822.6	841.1
72.5°	478.3	543.0	660.8	734.8	762.5
75°	383.6	457.5	575.3	653.9	672.4
77.5°	291.1	376.6	496.8	556.9	556.9
80°	208.0	298.1	409.0	436.7	441.3
82.5°	136.3	224.1	302.7	300.4	300.4
85°	78.6	145.6	180.2	175.6	175.6
87.5°	30.0	60.1	64.7	64.7	62.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)