

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: P389925

Luminaire Tested: **24CZ2-80VHE-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: P389925
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: 24CZ2-80VHE-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: 6875.1 lumens
Efficiency: N/A
Efficacy: 127.8 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

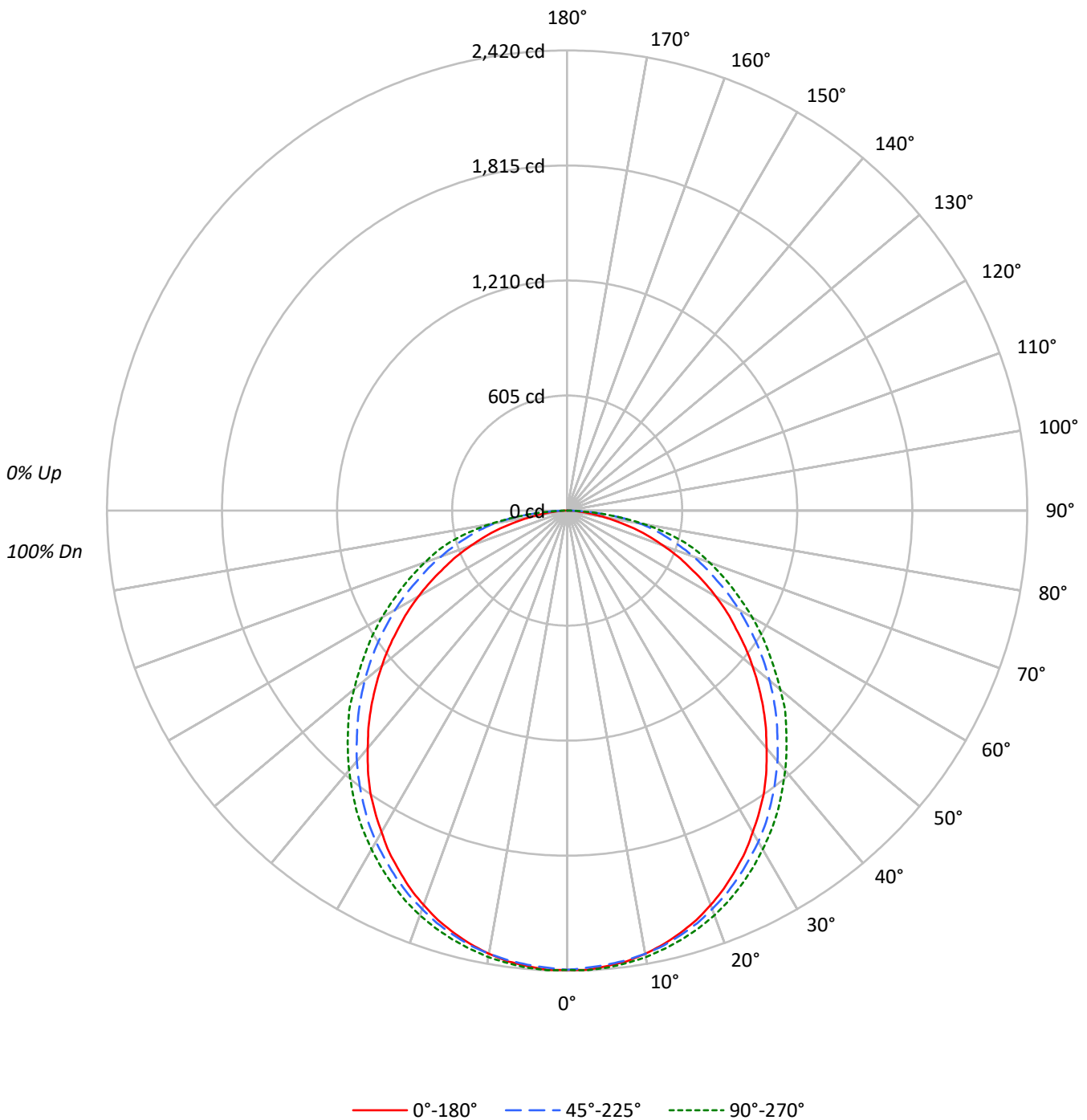
Input Watts (W): 53.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3250	3250	3250
5°	3247	3239	3259
10°	3234	3234	3258
15°	3203	3218	3252
20°	3161	3192	3243
25°	3103	3161	3223
30°	3033	3125	3196
35°	2966	3074	3171
40°	2865	3022	3134
45°	2772	2963	3100
50°	2665	2907	3063
55°	2546	2853	3033
60°	2427	2809	3026
65°	2273	2760	3045
70°	2105	2775	3127
75°	1884	2827	3304
80°	1523	2995	3232
85°	1145	2629	2563



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.7	3.3
10°-20°	653.3	9.5
20°-30°	982.1	14.3
30°-40°	1169.9	17.0
40°-50°	1197.3	17.4
50°-60°	1077.9	15.7
60°-70°	846.5	12.3
70°-80°	549.4	8.0
80°-90°	169.9	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°	1864.1	27.1
0°-40°	3034.0	44.1
0°-60°	5309.2	77.2
0°-90°	6875.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6875.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2415	2415	2415	2415	2415	
5°	2404	2409	2398	2411	2413	228
15°	2300	2306	2310	2330	2334	648
25°	2090	2107	2129	2164	2171	963
35°	1806	1828	1872	1917	1930	1127
45°	1457	1492	1557	1616	1629	1123
55°	1085	1133	1216	1280	1293	973
65°	714	769	867	939	956	711
75°	362	432	544	618	636	384
85°	74	138	170	166	166	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2415.3	2415.3	2415.3	2415.3	2415.3
2.5°	2417.5	2417.5	2406.5	2417.5	2419.6
5°	2404.3	2408.7	2397.8	2410.9	2413.1
7.5°	2391.2	2391.2	2384.7	2397.8	2400.0
10°	2367.2	2369.4	2367.2	2382.5	2384.7
12.5°	2336.7	2341.0	2343.2	2358.5	2360.7
15°	2299.5	2306.1	2310.4	2330.1	2334.5
17.5°	2258.0	2264.6	2275.5	2297.3	2301.7
20°	2207.8	2216.5	2229.6	2258.0	2264.6
22.5°	2153.2	2161.9	2183.8	2210.0	2220.9
25°	2089.9	2107.4	2129.2	2164.1	2170.7
27.5°	2026.6	2041.8	2070.2	2107.4	2116.1
30°	1952.3	1976.3	2011.3	2048.4	2057.1
32.5°	1880.2	1904.3	1945.8	1985.1	1996.0
35°	1806.0	1827.8	1871.5	1917.4	1930.5
37.5°	1720.8	1749.2	1797.3	1843.1	1856.2
40°	1631.3	1666.2	1720.8	1768.9	1784.2
42.5°	1546.1	1583.2	1637.8	1690.3	1707.7
45°	1456.6	1491.5	1557.0	1616.0	1629.1
47.5°	1364.9	1404.2	1474.1	1533.0	1554.9
50°	1273.1	1314.6	1388.9	1450.0	1463.1
52.5°	1181.4	1225.1	1303.7	1369.2	1375.8
55°	1085.3	1133.4	1216.4	1279.7	1292.8
57.5°	998.0	1039.5	1129.0	1194.5	1209.8
60°	901.9	947.8	1043.8	1105.0	1124.6
62.5°	810.2	858.2	958.7	1019.8	1037.3
65°	714.1	768.7	867.0	939.0	956.5
67.5°	631.1	683.5	788.3	858.2	875.7
70°	535.0	594.0	705.4	777.4	794.9
72.5°	452.0	513.2	624.6	694.4	720.6
75°	362.5	432.4	543.8	618.0	635.5
77.5°	275.2	356.0	469.5	526.3	526.3
80°	196.5	281.7	386.5	412.7	417.1
82.5°	128.8	211.8	286.1	283.9	283.9
85°	74.2	137.6	170.3	166.0	166.0
87.5°	28.4	56.8	61.1	61.1	59.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)