

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: P389997

Luminaire Tested: **24CZ2-95VHE-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: P389997
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: 24CZ2-95VHE-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: 8053.3 lumens
Efficiency: N/A
Efficacy: 122.8 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

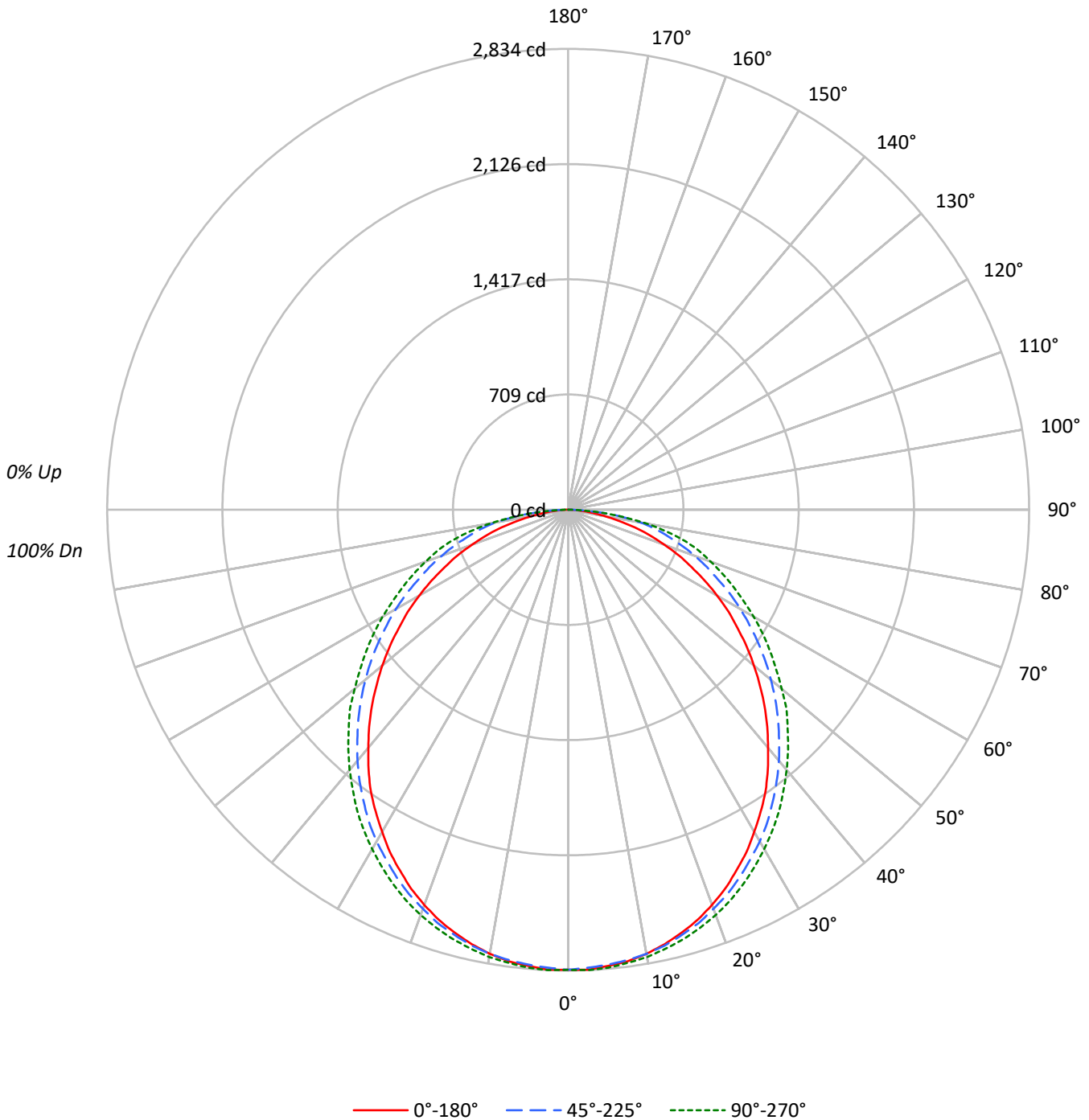
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3807	3807	3807
5°	3804	3794	3818
10°	3788	3788	3816
15°	3752	3770	3809
20°	3703	3740	3798
25°	3634	3703	3775
30°	3553	3660	3744
35°	3475	3601	3714
40°	3356	3540	3671
45°	3247	3471	3631
50°	3122	3405	3588
55°	2982	3342	3552
60°	2843	3290	3545
65°	2663	3233	3567
70°	2465	3250	3663
75°	2207	3311	3870
80°	1784	3508	3786
85°	1343	3080	3001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.8	3.3
10°-20°	765.3	9.5
20°-30°	1150.4	14.3
30°-40°	1370.4	17.0
40°-50°	1402.5	17.4
50°-60°	1262.7	15.7
60°-70°	991.6	12.3
70°-80°	643.6	8.0
80°-90°	199.0	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°	2183.6	27.1
0°-40°	3553.9	44.1
0°-60°	6219.1	77.2
0°-90°	8053.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8053.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2816	2822	2809	2824	2827	268
15°	2694	2701	2706	2729	2734	760
25°	2448	2468	2494	2535	2543	1128
35°	2116	2141	2192	2246	2261	1320
45°	1706	1747	1824	1893	1908	1315
55°	1271	1328	1425	1499	1514	1140
65°	836	900	1016	1100	1120	833
75°	425	506	637	724	744	449
85°	87	161	200	194	194	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2829.2	2829.2	2829.2	2829.2	2829.2
2.5°	2831.7	2831.7	2818.9	2831.7	2834.3
5°	2816.4	2821.5	2808.7	2824.1	2826.6
7.5°	2801.0	2801.0	2793.4	2808.7	2811.3
10°	2772.9	2775.5	2772.9	2790.8	2793.4
12.5°	2737.1	2742.2	2744.8	2762.7	2765.2
15°	2693.6	2701.3	2706.4	2729.4	2734.5
17.5°	2645.0	2652.7	2665.5	2691.0	2696.2
20°	2586.2	2596.4	2611.7	2645.0	2652.7
22.5°	2522.2	2532.4	2558.0	2588.7	2601.5
25°	2448.0	2468.5	2494.1	2535.0	2542.7
27.5°	2373.8	2391.8	2425.0	2468.5	2478.7
30°	2286.9	2315.0	2355.9	2399.4	2409.7
32.5°	2202.5	2230.6	2279.2	2325.2	2338.0
35°	2115.5	2141.1	2192.2	2245.9	2261.3
37.5°	2015.7	2049.0	2105.3	2159.0	2174.3
40°	1910.8	1951.8	2015.7	2072.0	2089.9
42.5°	1811.1	1854.6	1918.5	1979.9	2000.4
45°	1706.2	1747.1	1823.9	1892.9	1908.3
47.5°	1598.8	1644.8	1726.7	1795.7	1821.3
50°	1491.3	1539.9	1626.9	1698.5	1713.9
52.5°	1383.9	1435.1	1527.1	1603.9	1611.6
55°	1271.3	1327.6	1424.8	1499.0	1514.4
57.5°	1169.0	1217.6	1322.5	1399.2	1417.1
60°	1056.5	1110.2	1222.7	1294.4	1317.4
62.5°	949.0	1005.3	1123.0	1194.6	1215.1
65°	836.5	900.4	1015.5	1100.0	1120.4
67.5°	739.3	800.7	923.4	1005.3	1025.8
70°	626.7	695.8	826.2	910.7	931.1
72.5°	529.5	601.1	731.6	813.5	844.1
75°	424.6	506.5	636.9	723.9	744.4
77.5°	322.3	417.0	550.0	616.5	616.5
80°	230.2	330.0	452.8	483.5	488.6
82.5°	150.9	248.1	335.1	332.5	332.5
85°	87.0	161.2	199.5	194.4	194.4
87.5°	33.3	66.5	71.6	71.6	69.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)