

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: P389998

Luminaire Tested: **24CZ2-95VHE-S-UNV-L930-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: P389998
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-SWPD1-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: 8151.7 lumens
Efficiency: N/A
Efficacy: 124.3 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

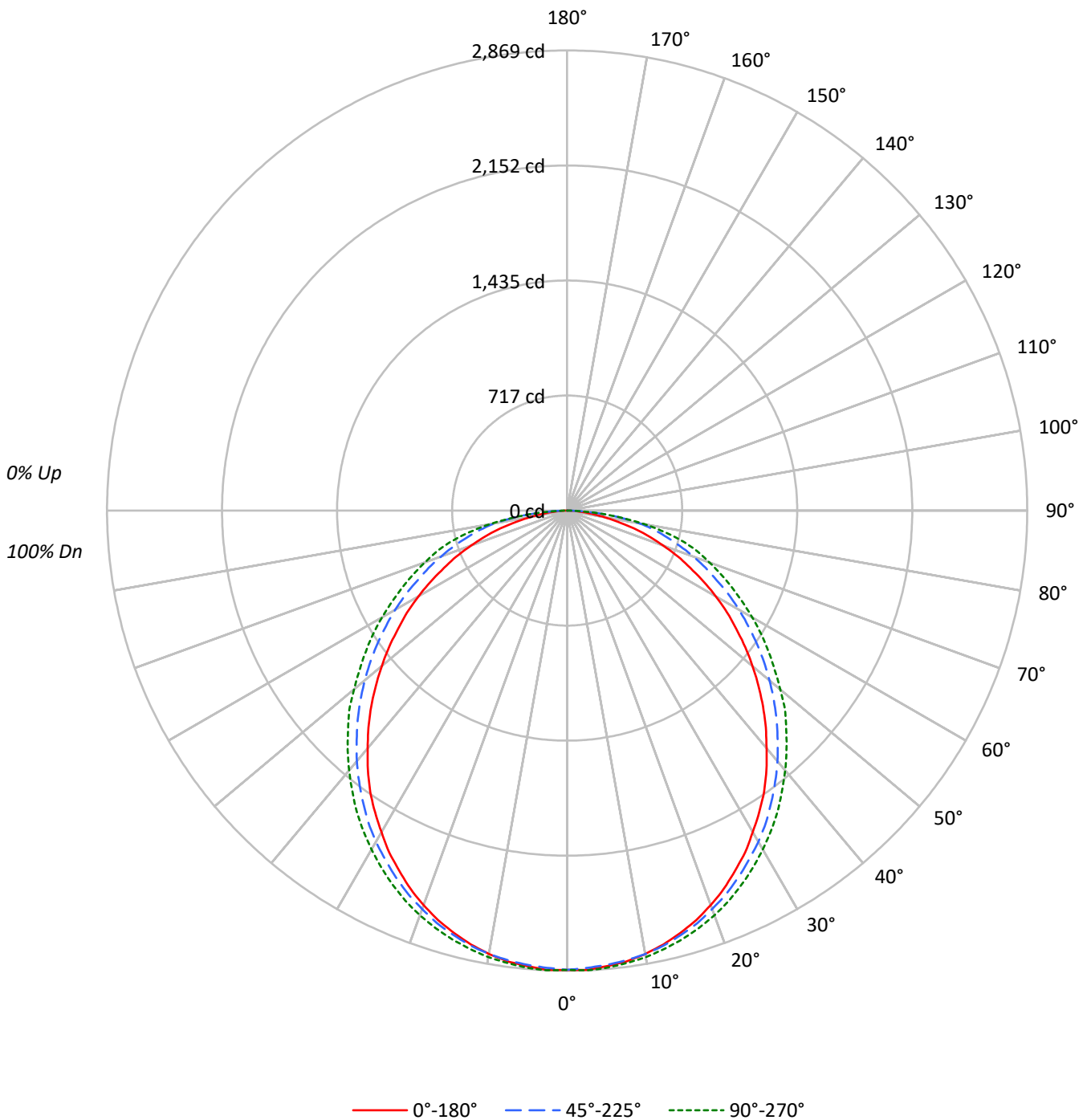
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P389998

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L930-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P389998

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L930-CD1-SWPD1-U

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°	3853	3853	3853
5°	3850	3840	3864
10°	3835	3835	3863
15°	3798	3816	3856
20°	3748	3785	3845
25°	3679	3748	3821
30°	3596	3705	3789
35°	3517	3645	3760
40°	3397	3584	3716
45°	3286	3513	3675
50°	3160	3447	3631
55°	3019	3383	3596
60°	2878	3331	3588
65°	2696	3273	3611
70°	2496	3290	3708
75°	2234	3352	3917
80°	1805	3551	3832
85°	1359	3118	3038



TEST NUMBER: P389998

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L930-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.1	3.3
10°-20°	774.7	9.5
20°-30°	1164.5	14.3
30°-40°	1387.1	17.0
40°-50°	1419.6	17.4
50°-60°	1278.1	15.7
60°-70°	1003.7	12.3
70°-80°	651.4	8.0
80°-90°	201.5	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°	2210.3	27.1
0°-40°	3597.4	44.1
0°-60°	6295.1	77.2
0°-90°	8151.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8151.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2864	2864	2864	2864	2864	
5°	2851	2856	2843	2859	2861	271
15°	2726	2734	2740	2763	2768	769
25°	2478	2499	2524	2566	2574	1142
35°	2141	2167	2219	2273	2289	1336
45°	1727	1768	1846	1916	1932	1332
55°	1287	1344	1442	1517	1533	1154
65°	847	911	1028	1113	1134	843
75°	430	513	645	733	754	455
85°	88	163	202	197	197	106
90°	0	0	0	0	0	



TEST NUMBER: P389998

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L930-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2863.7	2863.7	2863.7	2863.7	2863.7
2.5°	2866.3	2866.3	2853.4	2866.3	2868.9
5°	2850.8	2856.0	2843.0	2858.6	2861.2
7.5°	2835.3	2835.3	2827.5	2843.0	2845.6
10°	2806.8	2809.4	2806.8	2824.9	2827.5
12.5°	2770.5	2775.7	2778.3	2796.4	2799.0
15°	2726.5	2734.3	2739.5	2762.8	2767.9
17.5°	2677.3	2685.1	2698.0	2723.9	2729.1
20°	2617.8	2628.1	2643.7	2677.3	2685.1
22.5°	2553.0	2563.4	2589.3	2620.4	2633.3
25°	2477.9	2498.7	2524.5	2566.0	2573.7
27.5°	2402.9	2421.0	2454.6	2498.7	2509.0
30°	2314.8	2343.3	2384.7	2428.7	2439.1
32.5°	2229.4	2257.9	2307.0	2353.7	2366.6
35°	2141.3	2167.2	2219.0	2273.4	2288.9
37.5°	2040.4	2074.0	2131.0	2185.4	2200.9
40°	1934.2	1975.6	2040.4	2097.3	2115.4
42.5°	1833.2	1877.2	1942.0	2004.1	2024.8
45°	1727.1	1768.5	1846.2	1916.1	1931.6
47.5°	1618.3	1664.9	1747.8	1817.7	1843.6
50°	1509.6	1558.7	1646.8	1719.3	1734.8
52.5°	1400.8	1452.6	1545.8	1623.5	1631.2
55°	1286.9	1343.8	1442.2	1517.3	1532.9
57.5°	1183.3	1232.5	1338.7	1416.3	1434.5
60°	1069.4	1123.7	1237.7	1310.2	1333.5
62.5°	960.6	1017.6	1136.7	1209.2	1229.9
65°	846.7	911.4	1027.9	1113.4	1134.1
67.5°	748.3	810.4	934.7	1017.6	1038.3
70°	634.4	704.3	836.3	921.8	942.5
72.5°	536.0	608.5	740.5	823.4	854.5
75°	429.8	512.7	644.7	732.8	753.5
77.5°	326.2	422.1	556.7	624.0	624.0
80°	233.0	334.0	458.3	489.4	494.6
82.5°	152.8	251.2	339.2	336.6	336.6
85°	88.0	163.1	202.0	196.8	196.8
87.5°	33.7	67.3	72.5	72.5	69.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)