

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: P389071

Luminaire Tested: **24CZ2-95VHE-UNV-L950-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: P389071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-UNV-L950-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8525.6 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

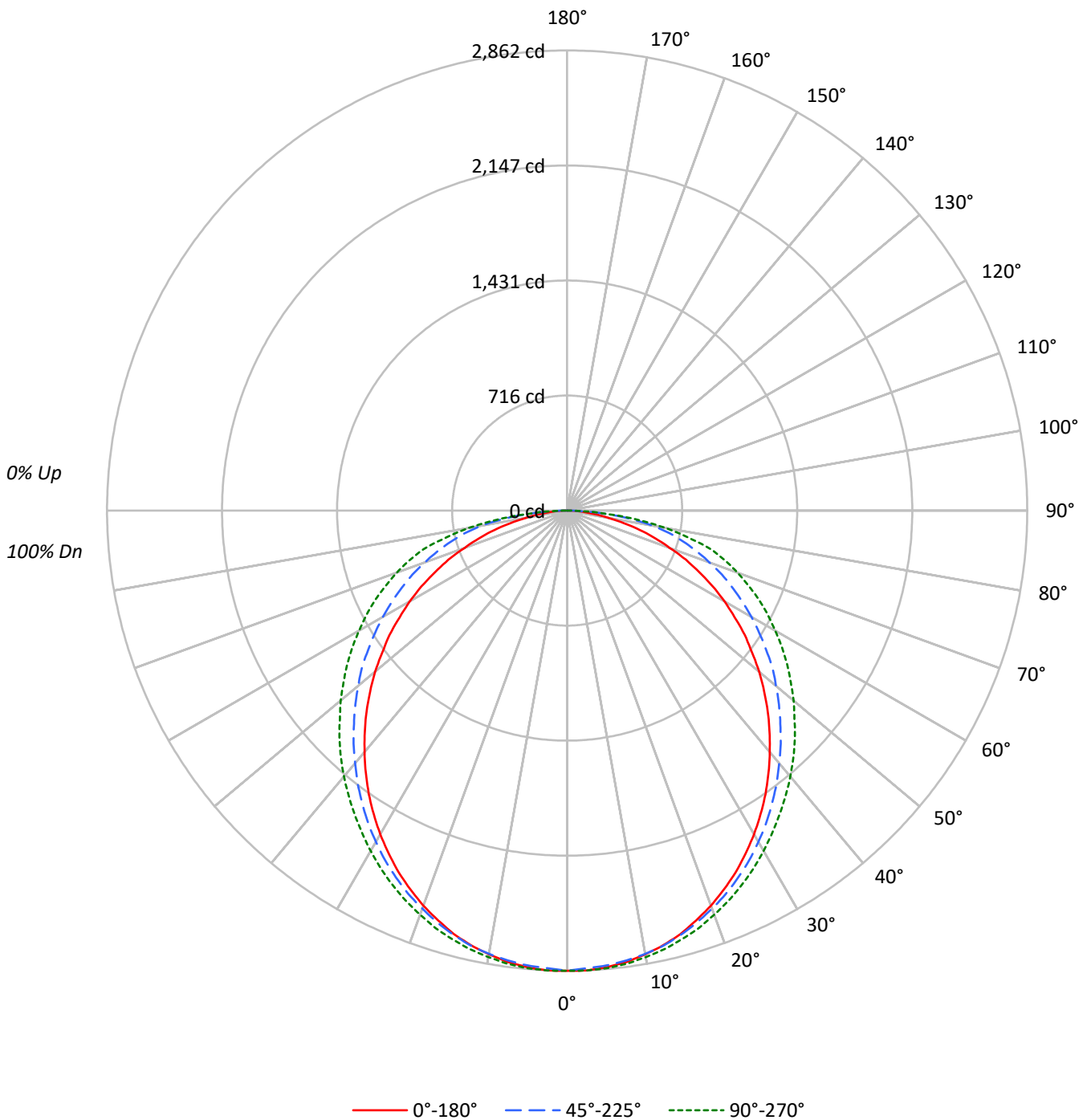
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3851	3851	3851
5°	3851	3835	3858
10°	3829	3825	3853
15°	3797	3805	3845
20°	3744	3773	3830
25°	3684	3738	3814
30°	3612	3696	3797
35°	3533	3650	3786
40°	3443	3603	3793
45°	3357	3568	3812
50°	3264	3550	3848
55°	3164	3544	3918
60°	3040	3560	4020
65°	2881	3614	4194
70°	2675	3705	4433
75°	2441	3890	4807
80°	2006	4189	4806
85°	1538	3866	4130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.7	3.2
10°-20°	772.9	9.1
20°-30°	1163.1	13.6
30°-40°	1393.8	16.3
40°-50°	1452.5	17.0
50°-60°	1351.4	15.9
60°-70°	1113.0	13.1
70°-80°	758.0	8.9
80°-90°	250.3	2.9
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°	2206.6	25.9
0°-40°	3600.4	42.2
0°-60°	6404.3	75.1
0°-90°	8525.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8525.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2862	2862	2862	2862	2862	
5°	2851	2851	2840	2854	2857	271
15°	2726	2729	2732	2757	2760	768
25°	2481	2492	2518	2561	2569	1142
35°	2151	2177	2222	2282	2305	1345
45°	1764	1801	1875	1969	2003	1361
55°	1349	1394	1511	1630	1670	1202
65°	905	982	1135	1269	1317	898
75°	470	575	748	882	925	495
85°	100	194	250	268	268	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2862.4	2862.4	2862.4	2862.4	2862.4
2.5°	2862.4	2862.4	2848.2	2862.4	2862.4
5°	2851.1	2851.1	2839.7	2853.9	2856.7
7.5°	2831.1	2834.0	2822.6	2839.7	2842.5
10°	2802.7	2805.5	2799.8	2816.9	2819.8
12.5°	2768.5	2771.4	2771.4	2791.3	2794.2
15°	2725.9	2728.7	2731.6	2757.2	2760.0
17.5°	2671.8	2680.3	2686.0	2717.3	2723.0
20°	2614.9	2623.4	2634.8	2669.0	2674.6
22.5°	2549.4	2560.8	2580.7	2617.7	2626.3
25°	2481.2	2492.5	2518.2	2560.8	2569.4
27.5°	2404.3	2421.4	2452.7	2498.2	2509.6
30°	2324.7	2341.7	2378.7	2427.1	2444.2
32.5°	2239.3	2262.1	2304.7	2358.8	2375.9
35°	2151.1	2176.7	2222.2	2282.0	2304.7
37.5°	2057.2	2085.7	2139.7	2205.2	2233.6
40°	1960.5	1994.6	2051.5	2128.3	2159.6
42.5°	1863.7	1895.0	1966.1	2048.7	2082.8
45°	1764.1	1801.1	1875.1	1969.0	2003.1
47.5°	1661.7	1698.7	1786.9	1886.5	1917.8
50°	1559.3	1596.3	1695.8	1801.1	1838.1
52.5°	1448.3	1496.7	1610.5	1715.8	1752.7
55°	1348.7	1394.2	1510.9	1630.4	1670.2
57.5°	1234.9	1289.0	1417.0	1542.2	1584.9
60°	1129.6	1186.5	1323.1	1451.1	1493.8
62.5°	1021.5	1084.1	1229.2	1360.1	1408.5
65°	904.8	981.7	1135.3	1269.0	1317.4
67.5°	799.5	879.2	1041.4	1178.0	1220.7
70°	680.0	776.8	941.8	1078.4	1126.8
72.5°	577.6	674.4	847.9	981.7	1030.0
75°	469.5	574.8	748.3	882.1	924.7
77.5°	361.4	478.0	651.6	754.0	768.2
80°	258.9	381.3	540.6	600.4	620.3
82.5°	182.1	293.1	398.4	438.2	449.6
85°	99.6	193.5	250.4	267.5	267.5
87.5°	42.7	82.5	99.6	102.4	105.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)