

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: P388928

Luminaire Tested: **24CZ2-65VHE-UNV-L950-CD1-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: P388928
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: 24CZ2-65VHE-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

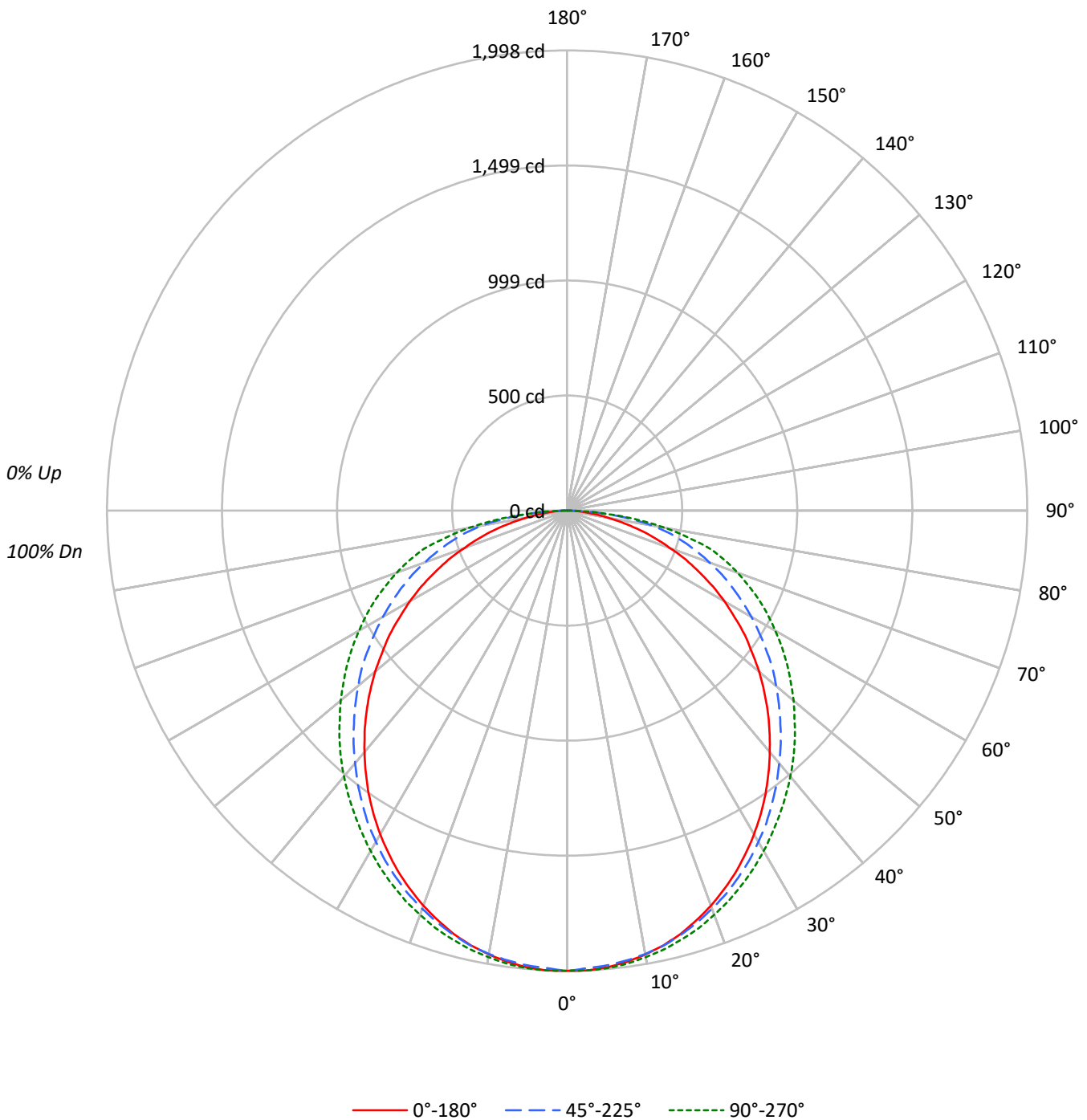
Lumens per Lamp: N/A
Luminaire Lumens: 5952.5 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 42.2
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°	2689	2689	2689
5°	2689	2678	2694
10°	2673	2671	2690
15°	2651	2657	2684
20°	2614	2634	2674
25°	2572	2610	2663
30°	2522	2580	2651
35°	2467	2548	2643
40°	2404	2516	2648
45°	2344	2491	2661
50°	2279	2478	2686
55°	2209	2475	2735
60°	2122	2486	2807
65°	2011	2524	2928
70°	1868	2587	3095
75°	1704	2716	3356
80°	1401	2925	3356
85°	1073	2699	2882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	3.2
10°-20°	539.6	9.1
20°-30°	812.0	13.6
30°-40°	973.1	16.3
40°-50°	1014.1	17.0
50°-60°	943.5	15.9
60°-70°	777.1	13.1
70°-80°	529.2	8.9
80°-90°	174.7	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°	1540.7	25.9
0°-40°	2513.8	42.2
0°-60°	4471.4	75.1
0°-90°	5952.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5952.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1998	1998	1998	1998	1998	
5°	1991	1991	1983	1993	1995	189
15°	1903	1905	1907	1925	1927	536
25°	1732	1740	1758	1788	1794	797
35°	1502	1520	1552	1593	1609	939
45°	1232	1258	1309	1375	1399	950
55°	942	973	1055	1138	1166	839
65°	632	685	793	886	920	627
75°	328	401	522	616	646	346
85°	70	135	175	187	187	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1998.5	1998.5	1998.5	1998.5	1998.5
2.5°	1998.5	1998.5	1988.6	1998.5	1998.5
5°	1990.6	1990.6	1982.6	1992.6	1994.6
7.5°	1976.7	1978.7	1970.7	1982.6	1984.6
10°	1956.8	1958.8	1954.8	1966.7	1968.7
12.5°	1933.0	1935.0	1935.0	1948.9	1950.9
15°	1903.2	1905.2	1907.1	1925.0	1927.0
17.5°	1865.4	1871.4	1875.4	1897.2	1901.2
20°	1825.7	1831.7	1839.6	1863.4	1867.4
22.5°	1780.0	1788.0	1801.9	1827.7	1833.6
25°	1732.3	1740.3	1758.2	1788.0	1793.9
27.5°	1678.7	1690.6	1712.5	1744.2	1752.2
30°	1623.1	1635.0	1660.8	1694.6	1706.5
32.5°	1563.5	1579.4	1609.2	1646.9	1658.8
35°	1501.9	1519.8	1551.5	1593.3	1609.2
37.5°	1436.3	1456.2	1493.9	1539.6	1559.5
40°	1368.8	1392.6	1432.3	1486.0	1507.8
42.5°	1301.2	1323.1	1372.7	1430.4	1454.2
45°	1231.7	1257.5	1309.2	1374.7	1398.6
47.5°	1160.2	1186.0	1247.6	1317.1	1339.0
50°	1088.7	1114.5	1184.0	1257.5	1283.4
52.5°	1011.2	1045.0	1124.4	1197.9	1223.8
55°	941.7	973.4	1054.9	1138.3	1166.1
57.5°	862.2	899.9	989.3	1076.7	1106.5
60°	788.7	828.4	923.8	1013.2	1043.0
62.5°	713.2	756.9	858.2	949.6	983.4
65°	631.7	685.4	792.7	886.0	919.8
67.5°	558.2	613.9	727.1	822.5	852.3
70°	474.8	542.3	657.6	752.9	786.7
72.5°	403.3	470.8	592.0	685.4	719.2
75°	327.8	401.3	522.5	615.8	645.6
77.5°	252.3	333.8	454.9	526.5	536.4
80°	180.8	266.2	377.5	419.2	433.1
82.5°	127.1	204.6	278.1	305.9	313.9
85°	69.5	135.1	174.8	186.7	186.7
87.5°	29.8	57.6	69.5	71.5	73.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)