

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: P388413

Luminaire Tested: **22CZ2-65VHE-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: P388413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5280.1 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

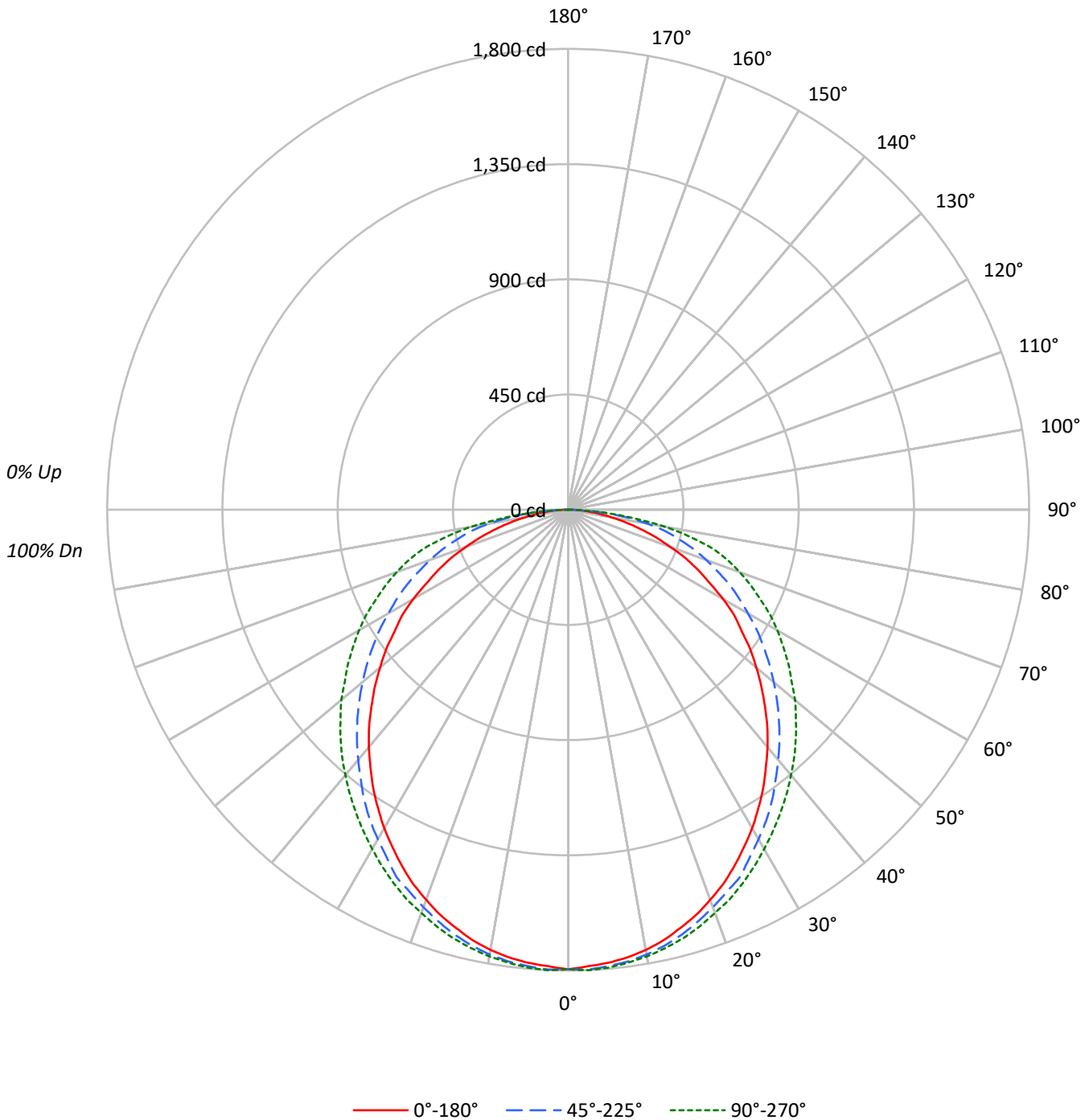
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4831	4831	4831
5°	4800	4836	4850
10°	4771	4821	4842
15°	4712	4785	4828
20°	4643	4732	4799
25°	4559	4706	4783
30°	4465	4618	4755
35°	4362	4558	4746
40°	4253	4481	4755
45°	4133	4430	4786
50°	4014	4384	4840
55°	3876	4364	4925
60°	3761	4363	5076
65°	3573	4434	5261
70°	3332	4518	5601
75°	3053	4674	6051
80°	2658	4872	5958
85°	2325	4332	4733



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.8	3.2
10°-20°	483.6	9.2
20°-30°	726.0	13.7
30°-40°	867.5	16.4
40°-50°	902.1	17.1
50°-60°	836.1	15.8
60°-70°	685.8	13.0
70°-80°	463.6	8.8
80°-90°	145.7	2.8
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°	1379.4	26.1
0°-40°	2246.9	42.6
0°-60°	3985.0	75.5
0°-90°	5280.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5280.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1795	1795	1795	1795	1795	
5°	1777	1780	1790	1793	1795	169
15°	1691	1699	1717	1728	1733	477
25°	1536	1548	1585	1603	1611	707
35°	1328	1346	1387	1429	1445	830
45°	1086	1107	1164	1232	1258	839
55°	826	852	930	1013	1050	743
65°	561	592	696	787	826	555
75°	294	343	450	540	582	311
85°	75	104	140	156	153	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1795.3	1795.3	1795.3	1795.3	1795.3
2.5°	1784.9	1790.1	1797.9	1800.5	1800.5
5°	1777.1	1779.7	1790.1	1792.7	1795.3
7.5°	1764.2	1769.3	1779.7	1782.3	1784.9
10°	1746.0	1751.2	1764.2	1769.3	1771.9
12.5°	1722.6	1727.8	1743.4	1751.2	1753.8
15°	1691.4	1699.2	1717.4	1727.8	1733.0
17.5°	1660.2	1668.0	1686.2	1701.8	1707.0
20°	1621.3	1639.4	1652.4	1673.2	1675.8
22.5°	1582.3	1592.7	1616.1	1636.8	1647.2
25°	1535.5	1548.5	1584.9	1603.1	1610.9
27.5°	1486.1	1504.3	1532.9	1561.5	1571.9
30°	1436.8	1449.8	1486.1	1519.9	1530.3
32.5°	1382.2	1400.4	1439.4	1473.2	1488.7
35°	1327.7	1345.8	1387.4	1429.0	1444.6
37.5°	1267.9	1288.7	1330.3	1379.6	1400.4
40°	1210.7	1226.3	1275.7	1335.5	1353.6
42.5°	1151.0	1169.2	1221.1	1286.1	1306.9
45°	1086.0	1106.8	1164.0	1231.5	1257.5
47.5°	1023.7	1044.5	1106.8	1174.4	1205.5
50°	958.7	984.7	1047.1	1125.0	1156.2
52.5°	896.4	919.8	989.9	1070.4	1099.0
55°	826.2	852.2	930.1	1013.3	1049.7
57.5°	769.1	787.2	873.0	958.7	995.1
60°	698.9	722.3	810.6	901.6	943.1
62.5°	623.6	662.5	753.5	847.0	888.6
65°	561.2	592.4	696.3	787.2	826.2
67.5°	496.2	530.0	631.4	727.5	771.7
70°	423.5	467.7	574.2	670.3	711.9
72.5°	358.5	405.3	514.4	608.0	652.1
75°	293.6	343.0	449.5	540.4	582.0
77.5°	231.2	285.8	389.7	459.9	485.9
80°	171.5	223.4	314.4	363.7	384.5
82.5°	119.5	163.7	231.2	257.2	262.4
85°	75.3	103.9	140.3	155.9	153.3
87.5°	33.8	41.6	52.0	57.2	54.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)