

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: P389351

Luminaire Tested: **22CZ2-65VHE-S-UNV-L930-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: P389351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-S-UNV-L930-CD1-U
Description: 2x2 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: 5686.2 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

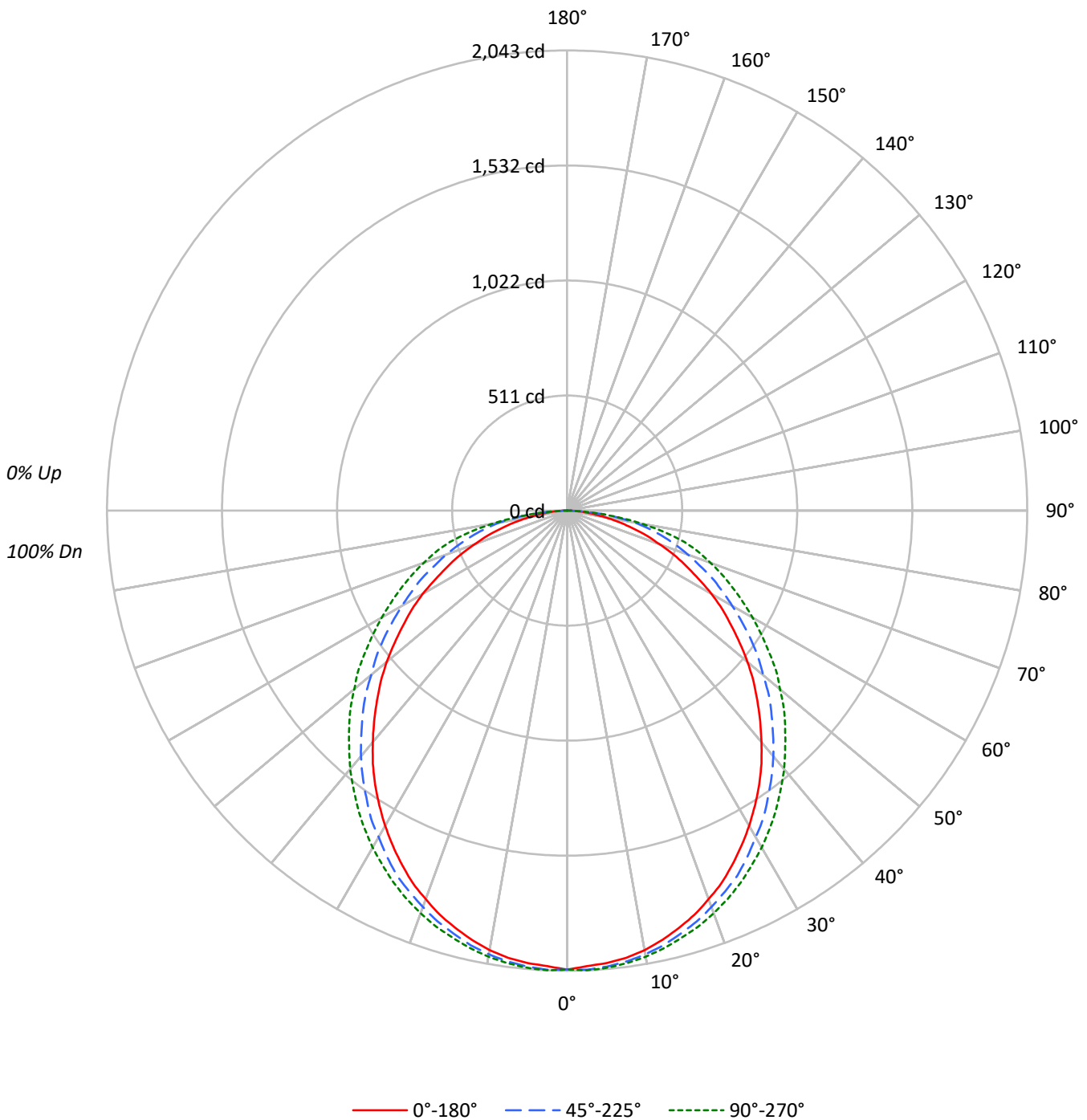
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5483	5483	5483
5°	5447	5489	5504
10°	5415	5466	5495
15°	5344	5418	5470
20°	5257	5364	5447
25°	5152	5309	5412
30°	5020	5202	5367
35°	4881	5107	5317
40°	4716	5005	5266
45°	4544	4887	5210
50°	4376	4754	5165
55°	4170	4668	5128
60°	3984	4555	5112
65°	3717	4527	5169
70°	3423	4488	5323
75°	3089	4552	5600
80°	2672	4686	5263
85°	2211	3930	3930



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.7	3.4
10°-20°	548.4	9.6
20°-30°	820.5	14.4
30°-40°	971.6	17.1
40°-50°	990.2	17.4
50°-60°	887.5	15.6
60°-70°	694.9	12.2
70°-80°	448.1	7.9
80°-90°	132.4	2.3
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°	1561.5	27.5
0°-40°	2533.2	44.5
0°-60°	4410.9	77.6
0°-90°	5686.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5686.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2038	2038	2038	2038	2038	
5°	2016	2022	2032	2035	2038	191
15°	1918	1929	1945	1961	1963	541
25°	1735	1751	1788	1812	1823	799
35°	1486	1504	1555	1602	1618	929
45°	1194	1220	1284	1350	1369	922
55°	889	918	995	1064	1093	797
65°	584	618	711	780	812	580
75°	297	342	438	512	539	319
85°	72	98	127	127	127	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2037.5	2037.5	2037.5	2037.5	2037.5
2.5°	2024.3	2029.6	2040.2	2042.8	2042.8
5°	2016.3	2021.6	2032.2	2034.9	2037.5
7.5°	2003.1	2005.7	2019.0	2024.3	2026.9
10°	1981.8	1987.1	2000.4	2008.4	2011.0
12.5°	1952.6	1960.6	1976.5	1987.1	1989.8
15°	1918.2	1928.8	1944.7	1960.6	1963.3
17.5°	1881.0	1891.6	1912.8	1931.4	1936.7
20°	1835.9	1849.2	1873.1	1894.3	1902.2
22.5°	1790.8	1801.4	1830.6	1857.1	1865.1
25°	1735.1	1751.0	1788.2	1812.0	1822.6
27.5°	1676.7	1695.3	1732.4	1764.3	1774.9
30°	1615.7	1634.3	1674.1	1713.9	1727.1
32.5°	1552.0	1573.3	1621.0	1660.8	1674.1
35°	1485.7	1504.3	1554.7	1602.4	1618.4
37.5°	1416.7	1432.6	1491.0	1541.4	1557.3
40°	1342.4	1363.7	1424.7	1483.1	1499.0
42.5°	1268.2	1292.0	1353.1	1416.7	1432.6
45°	1193.9	1220.4	1284.1	1350.4	1369.0
47.5°	1122.2	1143.5	1215.1	1278.8	1305.3
50°	1045.3	1066.5	1135.5	1207.1	1233.7
52.5°	965.7	994.9	1069.2	1138.2	1170.0
55°	888.8	918.0	994.9	1063.9	1093.1
57.5°	817.1	841.0	920.6	992.2	1021.4
60°	740.2	761.4	846.3	923.3	949.8
62.5°	658.0	689.8	777.3	849.0	880.8
65°	583.7	618.2	711.0	780.0	811.8
67.5°	514.7	546.5	636.7	711.0	745.5
70°	435.1	477.5	570.4	644.7	676.5
72.5°	371.4	408.6	504.1	578.4	612.9
75°	297.1	342.2	437.8	512.0	538.6
77.5°	236.1	281.2	371.4	429.8	443.1
80°	172.4	217.6	302.4	331.6	339.6
82.5°	116.7	159.2	217.6	225.5	228.2
85°	71.6	98.2	127.3	127.3	127.3
87.5°	34.5	39.8	45.1	42.4	42.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)