

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: P389352

Luminaire Tested: **22CZ2-65VHE-S-UNV-L935-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: P389352
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5685.2 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

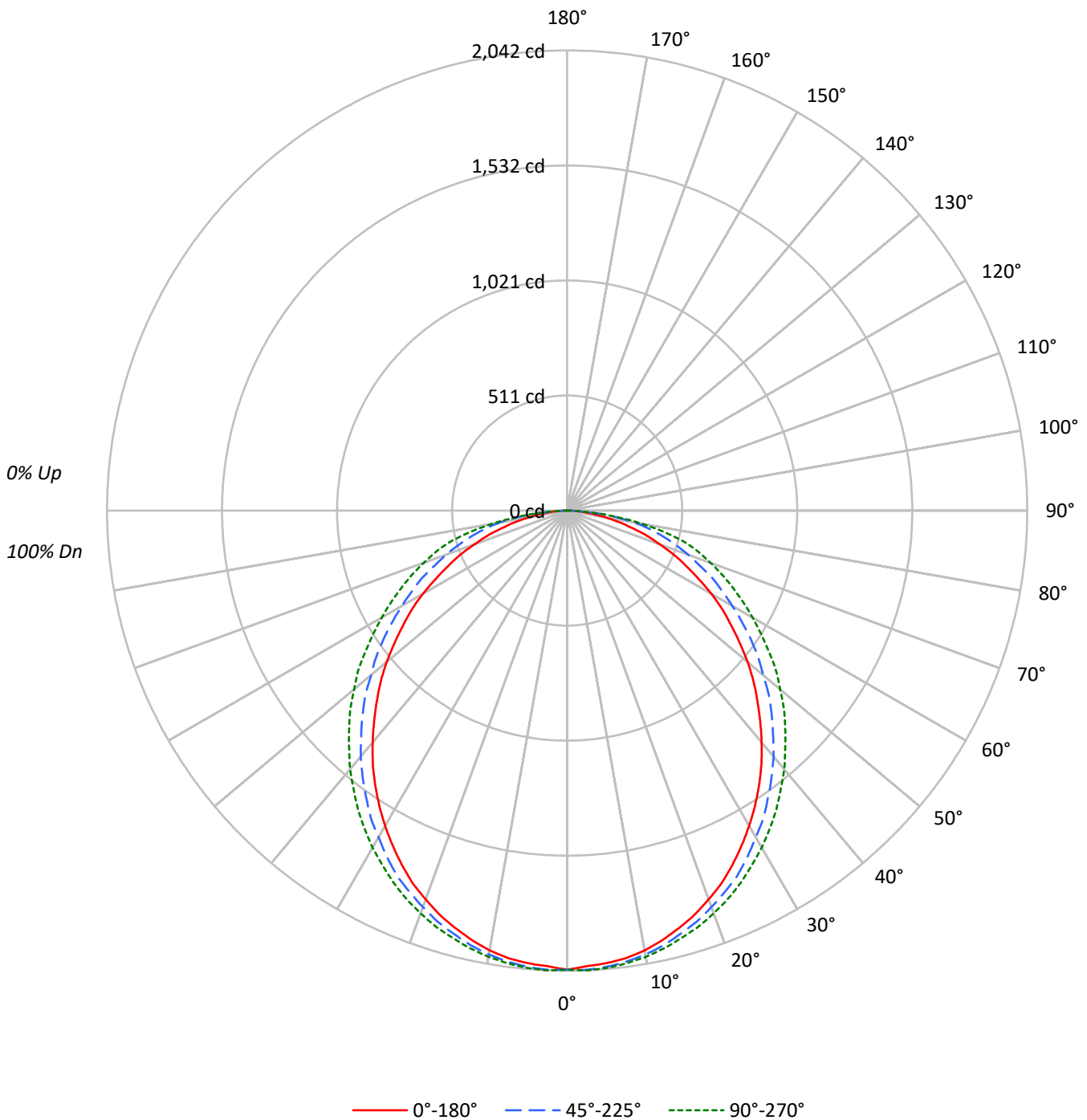
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5482	5482	5482
5°	5446	5489	5503
10°	5414	5465	5494
15°	5343	5417	5468
20°	5257	5363	5446
25°	5151	5308	5411
30°	5019	5201	5366
35°	4880	5106	5316
40°	4715	5004	5265
45°	4543	4886	5209
50°	4375	4753	5164
55°	4169	4667	5127
60°	3983	4554	5111
65°	3716	4527	5168
70°	3423	4487	5322
75°	3089	4551	5599
80°	2672	4686	5261
85°	2211	3930	3930



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.6	3.4
10°-20°	548.3	9.6
20°-30°	820.3	14.4
30°-40°	971.5	17.1
40°-50°	990.1	17.4
50°-60°	887.4	15.6
60°-70°	694.7	12.2
70°-80°	448.0	7.9
80°-90°	132.3	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°	1561.2	27.5
0°-40°	2532.7	44.5
0°-60°	4410.1	77.6
0°-90°	5685.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5685.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2037	2037	2037	2037	2037	
5°	2016	2021	2032	2034	2037	191
15°	1918	1928	1944	1960	1963	541
25°	1735	1751	1788	1812	1822	799
35°	1485	1504	1554	1602	1618	928
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	538	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°	2037.2	2037.2	2037.2	2037.2	2037.2
2.5°	2023.9	2029.2	2039.8	2042.5	2042.5
5°	2016.0	2021.3	2031.9	2034.5	2037.2
7.5°	2002.7	2005.4	2018.6	2023.9	2026.6
10°	1981.5	1986.8	2000.0	2008.0	2010.7
12.5°	1952.3	1960.3	1976.2	1986.8	1989.4
15°	1917.8	1928.4	1944.3	1960.3	1962.9
17.5°	1880.7	1891.3	1912.5	1931.1	1936.4
20°	1835.6	1848.9	1872.7	1893.9	1901.9
22.5°	1790.5	1801.1	1830.3	1856.8	1864.8
25°	1734.8	1750.7	1787.8	1811.7	1822.3
27.5°	1676.4	1695.0	1732.1	1764.0	1774.6
30°	1615.4	1634.0	1673.8	1713.6	1726.8
32.5°	1551.8	1573.0	1620.7	1660.5	1673.8
35°	1485.4	1504.0	1554.4	1602.2	1618.1
37.5°	1416.5	1432.4	1490.8	1541.2	1557.1
40°	1342.2	1363.4	1424.4	1482.8	1498.7
42.5°	1267.9	1291.8	1352.8	1416.5	1432.4
45°	1193.7	1220.2	1283.9	1350.2	1368.7
47.5°	1122.0	1143.3	1214.9	1278.5	1305.1
50°	1045.1	1066.3	1135.3	1206.9	1233.5
52.5°	965.5	994.7	1069.0	1138.0	1169.8
55°	888.6	917.8	994.7	1063.7	1092.9
57.5°	817.0	840.9	920.4	992.1	1021.2
60°	740.1	761.3	846.2	923.1	949.6
62.5°	657.8	689.7	777.2	848.8	880.7
65°	583.6	618.1	710.9	779.9	811.7
67.5°	514.6	546.4	636.6	710.9	745.4
70°	435.0	477.5	570.3	644.6	676.4
72.5°	371.4	408.5	504.0	578.3	612.7
75°	297.1	342.2	437.7	511.9	538.5
77.5°	236.1	281.2	371.4	429.7	443.0
80°	172.4	217.5	302.4	331.6	339.5
82.5°	116.7	159.2	217.5	225.5	228.1
85°	71.6	98.1	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)