

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: P389353

Luminaire Tested: **22CZ2-65VHE-S-UNV-L935-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: P389353
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-SWPD1-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: 5754.6 lumens
Efficiency: N/A
Efficacy: 120.1 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

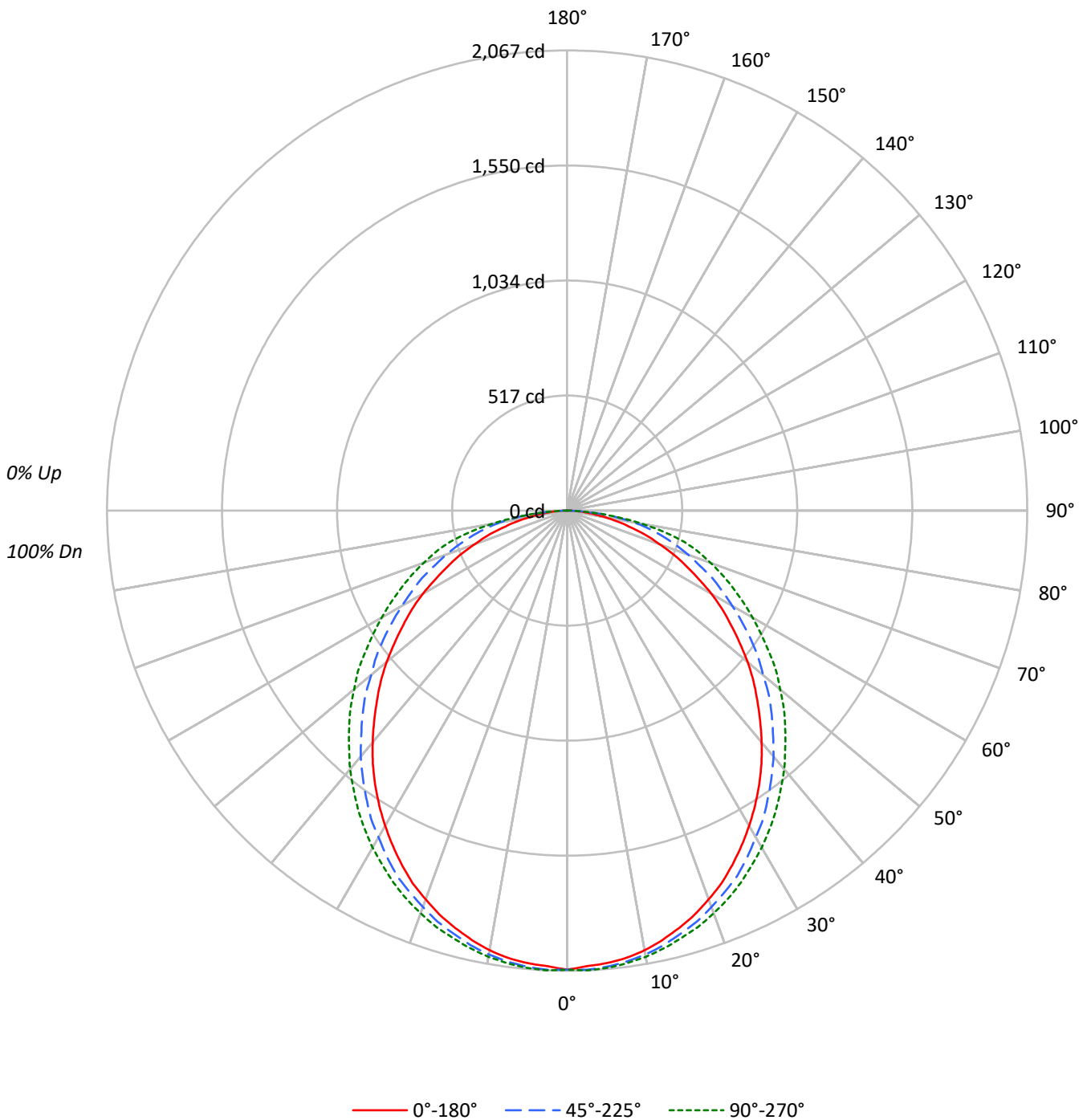
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5549	5549	5549
5°	5512	5556	5570
10°	5481	5532	5561
15°	5408	5483	5535
20°	5321	5428	5513
25°	5214	5373	5477
30°	5081	5264	5431
35°	4939	5169	5380
40°	4773	5065	5329
45°	4598	4945	5272
50°	4429	4811	5227
55°	4220	4724	5190
60°	4032	4610	5173
65°	3761	4582	5231
70°	3464	4542	5387
75°	3126	4606	5666
80°	2704	4744	5326
85°	2238	3980	3980



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.0	3.4
10°-20°	555.0	9.6
20°-30°	830.3	14.4
30°-40°	983.3	17.1
40°-50°	1002.1	17.4
50°-60°	898.2	15.6
60°-70°	703.2	12.2
70°-80°	453.5	7.9
80°-90°	134.0	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°	1580.3	27.5
0°-40°	2563.6	44.5
0°-60°	4464.0	77.6
0°-90°	5754.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5754.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2062	2062	2062	2062	2062	
5°	2041	2046	2057	2059	2062	194
15°	1941	1952	1968	1984	1987	547
25°	1756	1772	1810	1834	1845	808
35°	1504	1522	1573	1622	1638	940
45°	1208	1235	1300	1367	1385	933
55°	900	929	1007	1077	1106	806
65°	591	626	720	789	822	587
75°	301	346	443	518	545	322
85°	72	99	129	129	129	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2062.1	2062.1	2062.1	2062.1	2062.1
2.5°	2048.6	2054.0	2064.7	2067.4	2067.4
5°	2040.6	2045.9	2056.7	2059.4	2062.1
7.5°	2027.1	2029.8	2043.3	2048.6	2051.3
10°	2005.7	2011.0	2024.5	2032.5	2035.2
12.5°	1976.1	1984.2	2000.3	2011.0	2013.7
15°	1941.2	1952.0	1968.1	1984.2	1986.9
17.5°	1903.6	1914.4	1935.9	1954.7	1960.0
20°	1858.0	1871.4	1895.6	1917.1	1925.1
22.5°	1812.4	1823.1	1852.6	1879.5	1887.5
25°	1756.0	1772.1	1809.7	1833.8	1844.6
27.5°	1696.9	1715.7	1753.3	1785.5	1796.2
30°	1635.1	1653.9	1694.2	1734.5	1747.9
32.5°	1570.7	1592.2	1640.5	1680.8	1694.2
35°	1503.6	1522.4	1573.4	1621.7	1637.8
37.5°	1433.8	1449.9	1508.9	1560.0	1576.1
40°	1358.6	1380.1	1441.8	1500.9	1517.0
42.5°	1283.4	1307.6	1369.3	1433.8	1449.9
45°	1208.2	1235.1	1299.5	1366.6	1385.4
47.5°	1135.7	1157.2	1229.7	1294.2	1321.0
50°	1057.9	1079.4	1149.2	1221.7	1248.5
52.5°	977.3	1006.9	1082.0	1151.8	1184.1
55°	899.5	929.0	1006.9	1076.7	1106.2
57.5°	827.0	851.1	931.7	1004.2	1033.7
60°	749.1	770.6	856.5	934.4	961.2
62.5°	665.9	698.1	786.7	859.2	891.4
65°	590.7	625.6	719.6	789.4	821.6
67.5°	520.9	553.1	644.4	719.6	754.5
70°	440.3	483.3	577.3	652.4	684.7
72.5°	375.9	413.5	510.1	585.3	620.2
75°	300.7	346.4	443.0	518.2	545.0
77.5°	239.0	284.6	375.9	435.0	448.4
80°	174.5	220.2	306.1	335.6	343.7
82.5°	118.1	161.1	220.2	228.2	230.9
85°	72.5	99.3	128.9	128.9	128.9
87.5°	34.9	40.3	45.6	43.0	43.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)