

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: P389350

Luminaire Tested: **22CZ2-65VHE-S-UNV-L930-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: P389350
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-SWPD1-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: 5615.7 lumens
Efficiency: N/A
Efficacy: 117.2 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

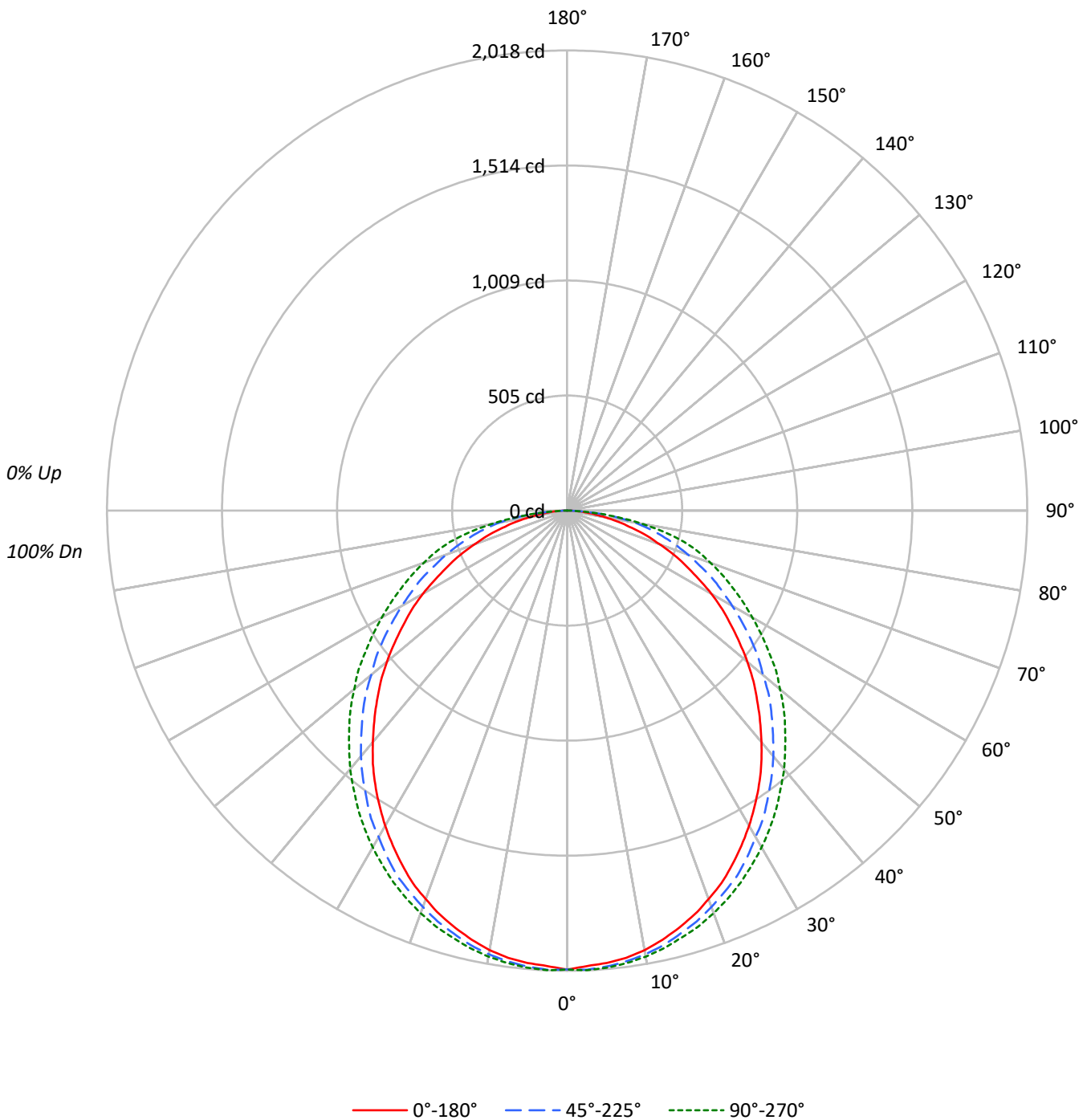
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5415	5415	5415
5°	5379	5421	5436
10°	5348	5398	5427
15°	5278	5351	5402
20°	5192	5297	5380
25°	5088	5244	5344
30°	4958	5137	5300
35°	4820	5044	5251
40°	4657	4943	5200
45°	4487	4826	5145
50°	4322	4695	5101
55°	4118	4610	5065
60°	3934	4498	5048
65°	3670	4471	5105
70°	3381	4432	5257
75°	3052	4495	5530
80°	2639	4629	5198
85°	2183	3884	3884



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.3	3.4
10°-20°	541.6	9.6
20°-30°	810.3	14.4
30°-40°	959.6	17.1
40°-50°	978.0	17.4
50°-60°	876.5	15.6
60°-70°	686.2	12.2
70°-80°	442.5	7.9
80°-90°	130.7	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°	1542.2	27.5
0°-40°	2501.8	44.5
0°-60°	4356.2	77.6
0°-90°	5615.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5615.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2012	2012	2012	2012	2012	
5°	1991	1997	2007	2010	2012	189
15°	1894	1905	1921	1936	1939	534
25°	1714	1729	1766	1790	1800	789
35°	1467	1486	1535	1583	1598	917
45°	1179	1205	1268	1334	1352	911
55°	878	907	983	1051	1080	787
65°	576	610	702	770	802	573
75°	294	338	432	506	532	315
85°	71	97	126	126	126	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2012.3	2012.3	2012.3	2012.3	2012.3
2.5°	1999.2	2004.4	2014.9	2017.5	2017.5
5°	1991.3	1996.6	2007.0	2009.7	2012.3
7.5°	1978.2	1980.8	1993.9	1999.2	2001.8
10°	1957.3	1962.5	1975.6	1983.5	1986.1
12.5°	1928.4	1936.3	1952.0	1962.5	1965.1
15°	1894.4	1904.9	1920.6	1936.3	1938.9
17.5°	1857.7	1868.2	1889.1	1907.5	1912.7
20°	1813.1	1826.2	1849.8	1870.8	1878.7
22.5°	1768.6	1779.1	1807.9	1834.1	1842.0
25°	1713.6	1729.3	1766.0	1789.6	1800.0
27.5°	1655.9	1674.3	1711.0	1742.4	1752.9
30°	1595.7	1614.0	1653.3	1692.6	1705.7
32.5°	1532.8	1553.8	1600.9	1640.2	1653.3
35°	1467.3	1485.6	1535.4	1582.6	1598.3
37.5°	1399.2	1414.9	1472.5	1522.3	1538.0
40°	1325.8	1346.8	1407.0	1464.7	1480.4
42.5°	1252.4	1276.0	1336.3	1399.2	1414.9
45°	1179.1	1205.3	1268.2	1333.7	1352.0
47.5°	1108.3	1129.3	1200.0	1262.9	1289.1
50°	1032.3	1053.3	1121.4	1192.2	1218.4
52.5°	953.7	982.6	1055.9	1124.0	1155.5
55°	877.8	906.6	982.6	1050.7	1079.5
57.5°	807.0	830.6	909.2	979.9	1008.8
60°	731.0	752.0	835.8	911.8	938.0
62.5°	649.8	681.2	767.7	838.5	869.9
65°	576.4	610.5	702.2	770.3	801.8
67.5°	508.3	539.8	628.8	702.2	736.3
70°	429.7	471.6	563.3	636.7	668.1
72.5°	366.8	403.5	497.8	571.2	605.3
75°	293.5	338.0	432.3	505.7	531.9
77.5°	233.2	277.7	366.8	424.5	437.6
80°	170.3	214.9	298.7	327.5	335.4
82.5°	115.3	157.2	214.9	222.7	225.3
85°	70.7	96.9	125.8	125.8	125.8
87.5°	34.1	39.3	44.5	41.9	41.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)