

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: P389334

Luminaire Tested: **22CZ2-60VHE-S-UNV-L950-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: P389334
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: 22CZ2-60VHE-S-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5679.5 lumens
Efficiency: N/A
Efficacy: 128.8 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

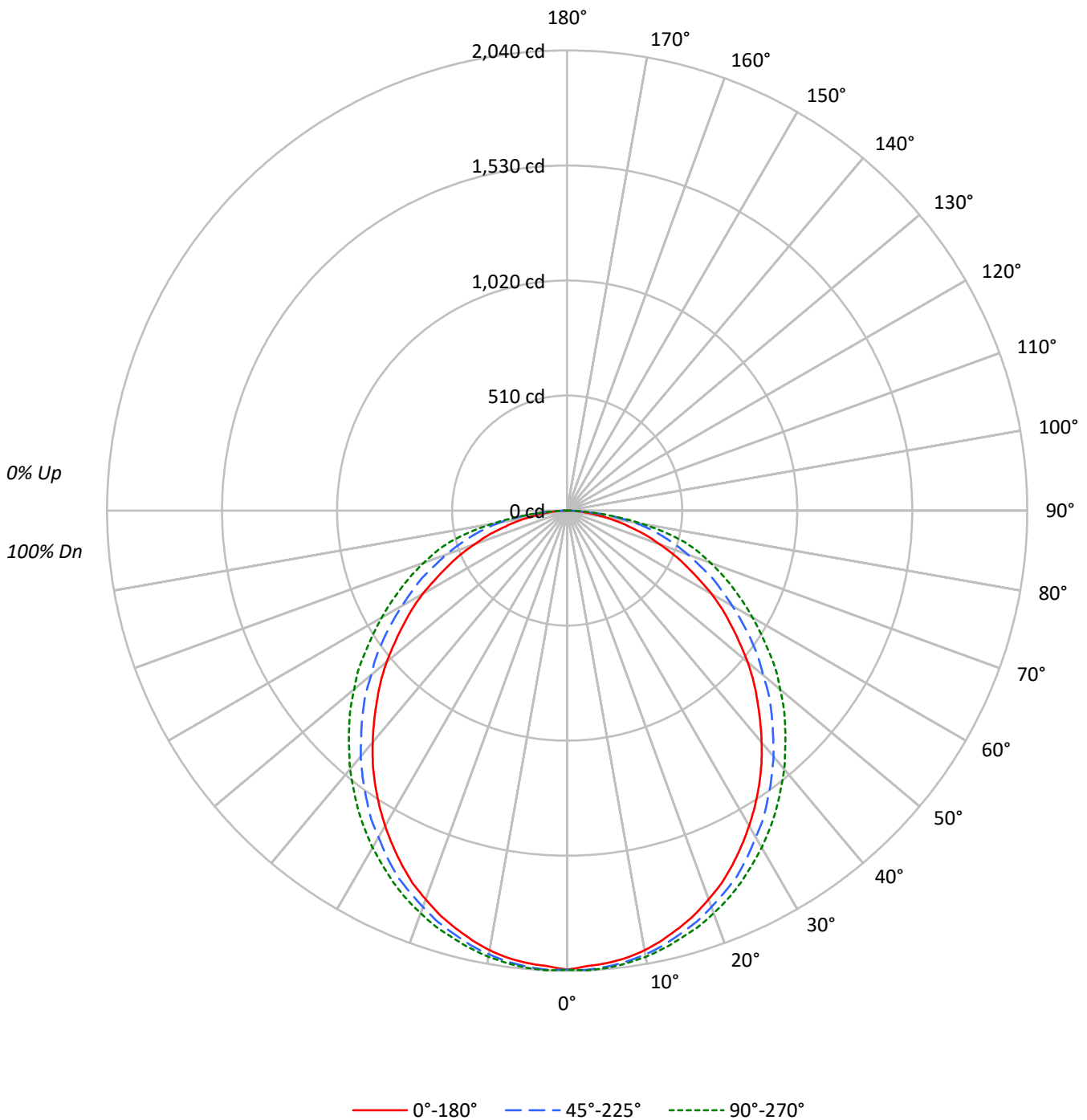
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5476	5476	5476
5°	5440	5483	5497
10°	5409	5460	5488
15°	5338	5411	5463
20°	5251	5357	5441
25°	5146	5303	5405
30°	5015	5196	5360
35°	4875	5101	5310
40°	4710	4999	5259
45°	4538	4881	5204
50°	4371	4748	5159
55°	4165	4662	5122
60°	3979	4549	5106
65°	3712	4522	5163
70°	3419	4482	5316
75°	3086	4546	5593
80°	2669	4682	5256
85°	2208	3927	3927



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.5	3.4
10°-20°	547.7	9.6
20°-30°	819.5	14.4
30°-40°	970.5	17.1
40°-50°	989.1	17.4
50°-60°	886.5	15.6
60°-70°	694.0	12.2
70°-80°	447.5	7.9
80°-90°	132.2	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°	1559.7	27.5
0°-40°	2530.2	44.5
0°-60°	4405.7	77.6
0°-90°	5679.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5679.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2035	2035	2035	2035	2035	
5°	2014	2019	2030	2032	2035	191
15°	1916	1926	1942	1958	1961	540
25°	1733	1749	1786	1810	1820	798
35°	1484	1502	1553	1601	1616	927
45°	1192	1219	1283	1349	1367	921
55°	888	917	994	1063	1092	796
65°	583	617	710	779	811	579
75°	297	342	437	511	538	318
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°	2035.1	2035.1	2035.1	2035.1	2035.1
2.5°	2021.9	2027.2	2037.8	2040.4	2040.4
5°	2013.9	2019.2	2029.8	2032.5	2035.1
7.5°	2000.7	2003.3	2016.6	2021.9	2024.5
10°	1979.5	1984.8	1998.0	2006.0	2008.6
12.5°	1950.3	1958.3	1974.2	1984.8	1987.4
15°	1915.9	1926.5	1942.4	1958.3	1960.9
17.5°	1878.8	1889.4	1910.6	1929.1	1934.4
20°	1833.7	1847.0	1870.8	1892.0	1900.0
22.5°	1788.7	1799.3	1828.4	1854.9	1862.9
25°	1733.1	1749.0	1786.0	1809.9	1820.5
27.5°	1674.8	1693.3	1730.4	1762.2	1772.8
30°	1613.8	1632.4	1672.1	1711.9	1725.1
32.5°	1550.2	1571.4	1619.1	1658.9	1672.1
35°	1484.0	1502.5	1552.9	1600.6	1616.5
37.5°	1415.1	1431.0	1489.3	1539.6	1555.5
40°	1340.9	1362.1	1423.0	1481.3	1497.2
42.5°	1266.7	1290.5	1351.5	1415.1	1431.0
45°	1192.5	1219.0	1282.6	1348.8	1367.4
47.5°	1120.9	1142.1	1213.7	1277.3	1303.8
50°	1044.1	1065.3	1134.2	1205.7	1232.2
52.5°	964.6	993.7	1067.9	1136.8	1168.6
55°	887.7	916.9	993.7	1062.6	1091.8
57.5°	816.2	840.0	919.5	991.1	1020.2
60°	739.3	760.5	845.3	922.2	948.7
62.5°	657.2	689.0	776.4	848.0	879.8
65°	583.0	617.4	710.2	779.1	810.9
67.5°	514.1	545.9	636.0	710.2	744.6
70°	434.6	477.0	569.7	643.9	675.7
72.5°	371.0	408.1	503.5	577.7	612.1
75°	296.8	341.8	437.2	511.4	537.9
77.5°	235.8	280.9	371.0	429.3	442.5
80°	172.2	217.3	302.1	331.2	339.2
82.5°	116.6	159.0	217.3	225.2	227.9
85°	71.5	98.0	127.2	127.2	127.2
87.5°	34.4	39.7	45.0	42.4	42.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)