

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: P389326

Luminaire Tested: **22CZ2-60VHE-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: P389326
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-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: 5231.2 lumens
Efficiency: N/A
Efficacy: 118.6 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

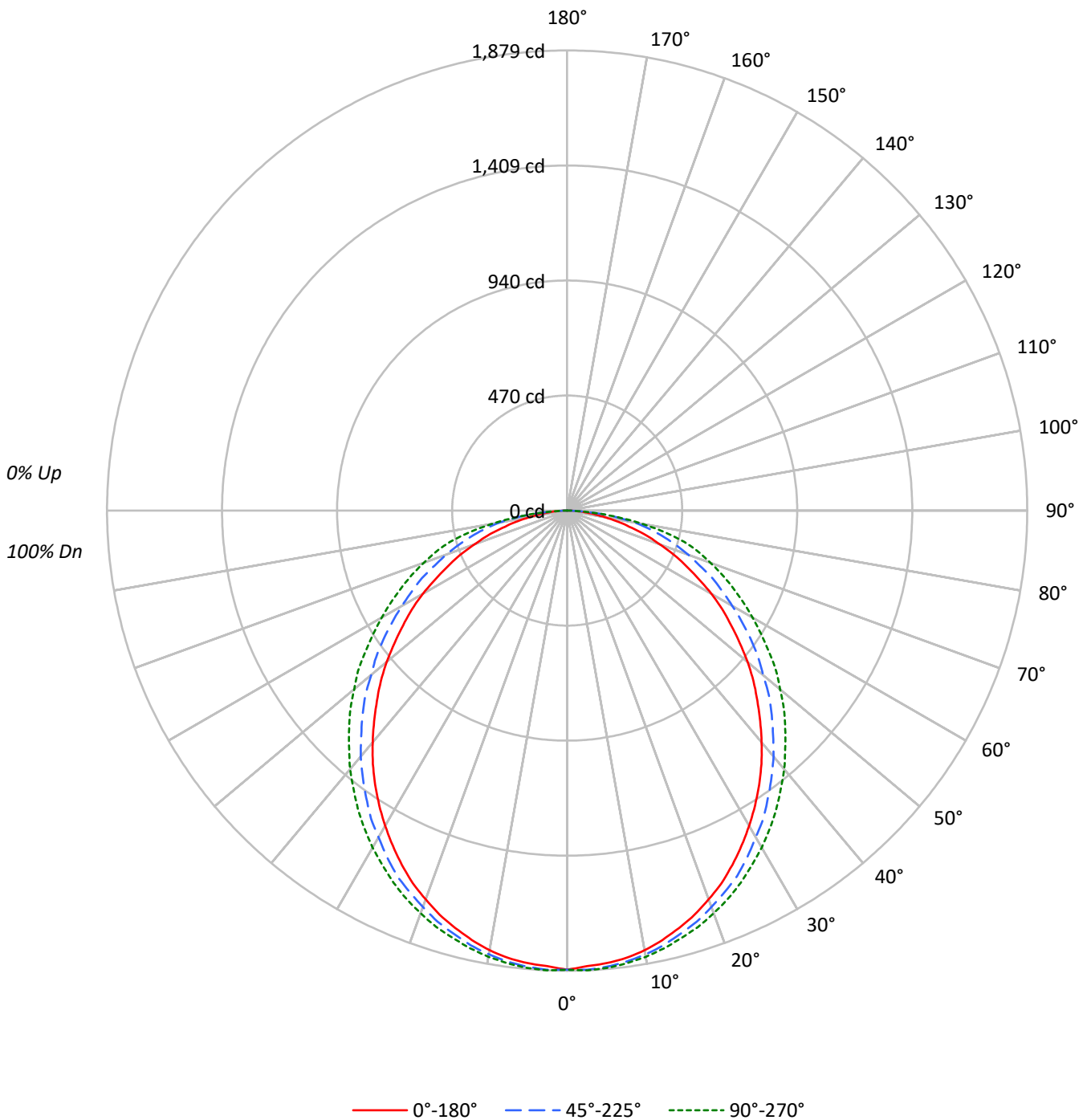
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5044	5044	5044
5°	5011	5050	5064
10°	4982	5029	5055
15°	4916	4984	5032
20°	4837	4935	5011
25°	4740	4885	4979
30°	4619	4786	4937
35°	4490	4699	4891
40°	4338	4604	4844
45°	4180	4496	4793
50°	4026	4373	4752
55°	3836	4294	4718
60°	3665	4190	4703
65°	3419	4165	4756
70°	3150	4129	4897
75°	2843	4187	5152
80°	2458	4311	4841
85°	2035	3619	3619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.3	3.4
10°-20°	504.5	9.6
20°-30°	754.8	14.4
30°-40°	893.9	17.1
40°-50°	911.0	17.4
50°-60°	816.5	15.6
60°-70°	639.3	12.2
70°-80°	412.2	7.9
80°-90°	121.8	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°	1436.6	27.5
0°-40°	2330.5	44.5
0°-60°	4057.9	77.6
0°-90°	5231.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5231.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1874	1874	1874	1874	1874	
5°	1855	1860	1870	1872	1874	176
15°	1765	1774	1789	1804	1806	498
25°	1596	1611	1645	1667	1677	735
35°	1367	1384	1430	1474	1489	854
45°	1098	1123	1181	1242	1259	848
55°	818	844	915	979	1006	733
65°	537	569	654	718	747	533
75°	273	315	403	471	496	293
85°	66	90	117	117	117	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1874.5	1874.5	1874.5	1874.5	1874.5
2.5°	1862.3	1867.2	1876.9	1879.4	1879.4
5°	1855.0	1859.9	1869.6	1872.1	1874.5
7.5°	1842.8	1845.2	1857.4	1862.3	1864.7
10°	1823.2	1828.1	1840.3	1847.7	1850.1
12.5°	1796.4	1803.7	1818.4	1828.1	1830.6
15°	1764.7	1774.4	1789.1	1803.7	1806.2
17.5°	1730.5	1740.3	1759.8	1776.9	1781.8
20°	1689.0	1701.2	1723.2	1742.7	1750.0
22.5°	1647.5	1657.3	1684.1	1708.5	1715.9
25°	1596.3	1610.9	1645.1	1667.0	1676.8
27.5°	1542.6	1559.6	1593.8	1623.1	1632.9
30°	1486.4	1503.5	1540.1	1576.7	1588.9
32.5°	1427.8	1447.4	1491.3	1527.9	1540.1
35°	1366.8	1383.9	1430.3	1474.2	1488.9
37.5°	1303.4	1318.0	1371.7	1418.1	1432.7
40°	1235.0	1254.5	1310.7	1364.4	1379.0
42.5°	1166.7	1188.6	1244.8	1303.4	1318.0
45°	1098.3	1122.7	1181.3	1242.3	1259.4
47.5°	1032.4	1052.0	1117.9	1176.4	1200.9
50°	961.7	981.2	1044.6	1110.5	1135.0
52.5°	888.4	915.3	983.6	1047.1	1076.4
55°	817.7	844.5	915.3	978.7	1005.6
57.5°	751.8	773.7	846.9	912.8	939.7
60°	681.0	700.5	778.6	849.4	873.8
62.5°	605.3	634.6	715.1	781.0	810.3
65°	537.0	568.7	654.1	717.6	746.9
67.5°	473.5	502.8	585.8	654.1	685.9
70°	400.3	439.3	524.8	593.1	622.4
72.5°	341.7	375.9	463.7	532.1	563.8
75°	273.4	314.9	402.7	471.1	495.5
77.5°	217.2	258.7	341.7	395.4	407.6
80°	158.6	200.1	278.2	305.1	312.4
82.5°	107.4	146.4	200.1	207.5	209.9
85°	65.9	90.3	117.2	117.2	117.2
87.5°	31.7	36.6	41.5	39.1	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)