

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: P389374

Luminaire Tested: **22CZ2-70VHE-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: P389374
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: 22CZ2-70VHE-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: 6007.8 lumens
Efficiency: N/A
Efficacy: 119.4 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

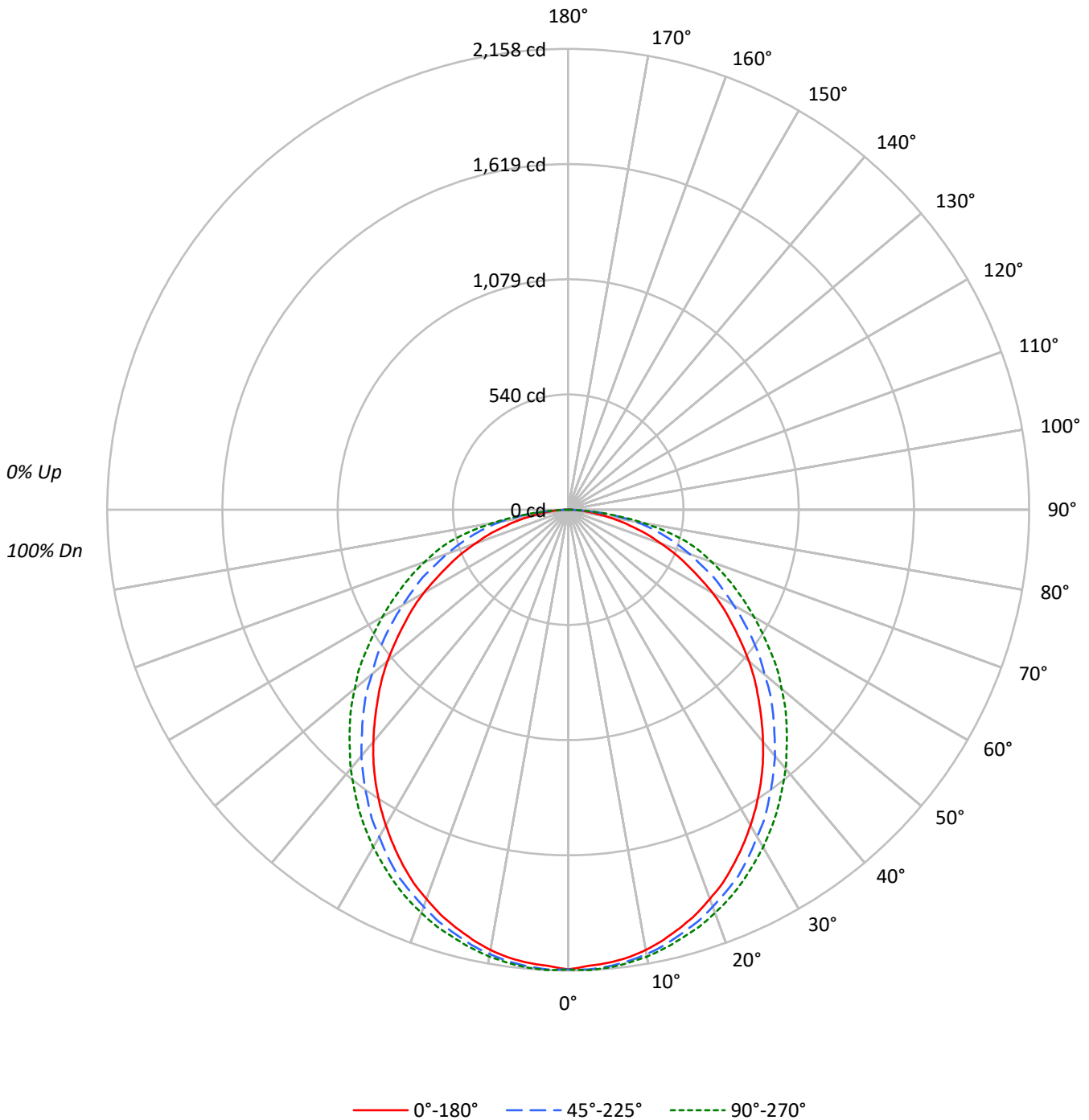
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5793	5793	5793
5°	5755	5800	5815
10°	5722	5775	5806
15°	5646	5724	5779
20°	5555	5667	5755
25°	5443	5610	5718
30°	5304	5496	5670
35°	5157	5396	5617
40°	4983	5288	5564
45°	4800	5163	5504
50°	4623	5022	5457
55°	4405	4932	5418
60°	4209	4813	5401
65°	3927	4783	5461
70°	3617	4742	5624
75°	3264	4809	5916
80°	2824	4953	5560
85°	2337	4153	4153



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.6	3.4
10°-20°	579.4	9.6
20°-30°	866.9	14.4
30°-40°	1026.6	17.1
40°-50°	1046.2	17.4
50°-60°	937.7	15.6
60°-70°	734.1	12.2
70°-80°	473.4	7.9
80°-90°	139.8	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°	1649.8	27.5
0°-40°	2676.4	44.5
0°-60°	4660.4	77.6
0°-90°	6007.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6007.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2153	2153	2153	2153	2153	
5°	2130	2136	2147	2150	2153	202
15°	2027	2038	2055	2072	2074	571
25°	1833	1850	1889	1914	1926	844
35°	1570	1589	1643	1693	1710	981
45°	1261	1289	1357	1427	1446	974
55°	939	970	1051	1124	1155	842
65°	617	653	751	824	858	613
75°	314	362	462	541	569	337
85°	76	104	134	134	134	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2152.8	2152.8	2152.8	2152.8	2152.8
2.5°	2138.8	2144.4	2155.6	2158.4	2158.4
5°	2130.4	2136.0	2147.2	2150.0	2152.8
7.5°	2116.3	2119.1	2133.2	2138.8	2141.6
10°	2093.9	2099.5	2113.5	2121.9	2124.8
12.5°	2063.1	2071.5	2088.3	2099.5	2102.3
15°	2026.6	2037.9	2054.7	2071.5	2074.3
17.5°	1987.4	1998.6	2021.0	2040.7	2046.3
20°	1939.7	1953.8	1979.0	2001.4	2009.8
22.5°	1892.1	1903.3	1934.1	1962.2	1970.6
25°	1833.2	1850.0	1889.3	1914.5	1925.7
27.5°	1771.6	1791.2	1830.4	1864.1	1875.3
30°	1707.1	1726.7	1768.8	1810.8	1824.8
32.5°	1639.8	1662.2	1712.7	1754.7	1768.8
35°	1569.7	1589.4	1642.6	1693.1	1709.9
37.5°	1496.9	1513.7	1575.3	1628.6	1645.4
40°	1418.4	1440.8	1505.3	1566.9	1583.8
42.5°	1339.9	1365.1	1429.6	1496.9	1513.7
45°	1261.4	1289.4	1356.7	1426.8	1446.4
47.5°	1185.7	1208.1	1283.8	1351.1	1379.1
50°	1104.4	1126.8	1199.7	1275.4	1303.4
52.5°	1020.3	1051.2	1129.6	1202.5	1236.2
55°	939.0	969.9	1051.2	1124.0	1154.9
57.5°	863.4	888.6	972.7	1048.4	1079.2
60°	782.1	804.5	894.2	975.5	1003.5
62.5°	695.2	728.8	821.3	897.0	930.6
65°	616.7	653.1	751.2	824.1	857.7
67.5°	543.8	577.4	672.7	751.2	787.7
70°	459.7	504.6	602.7	681.2	714.8
72.5°	392.4	431.7	532.6	611.1	647.5
75°	313.9	361.6	462.5	541.0	569.0
77.5°	249.5	297.1	392.4	454.1	468.1
80°	182.2	229.9	319.6	350.4	358.8
82.5°	123.3	168.2	229.9	238.3	241.1
85°	75.7	103.7	134.5	134.5	134.5
87.5°	36.4	42.0	47.7	44.8	44.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)