

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: P389377

Luminaire Tested: **22CZ2-70VHE-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: P389377
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-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: 6156.4 lumens
Efficiency: N/A
Efficacy: 122.4 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

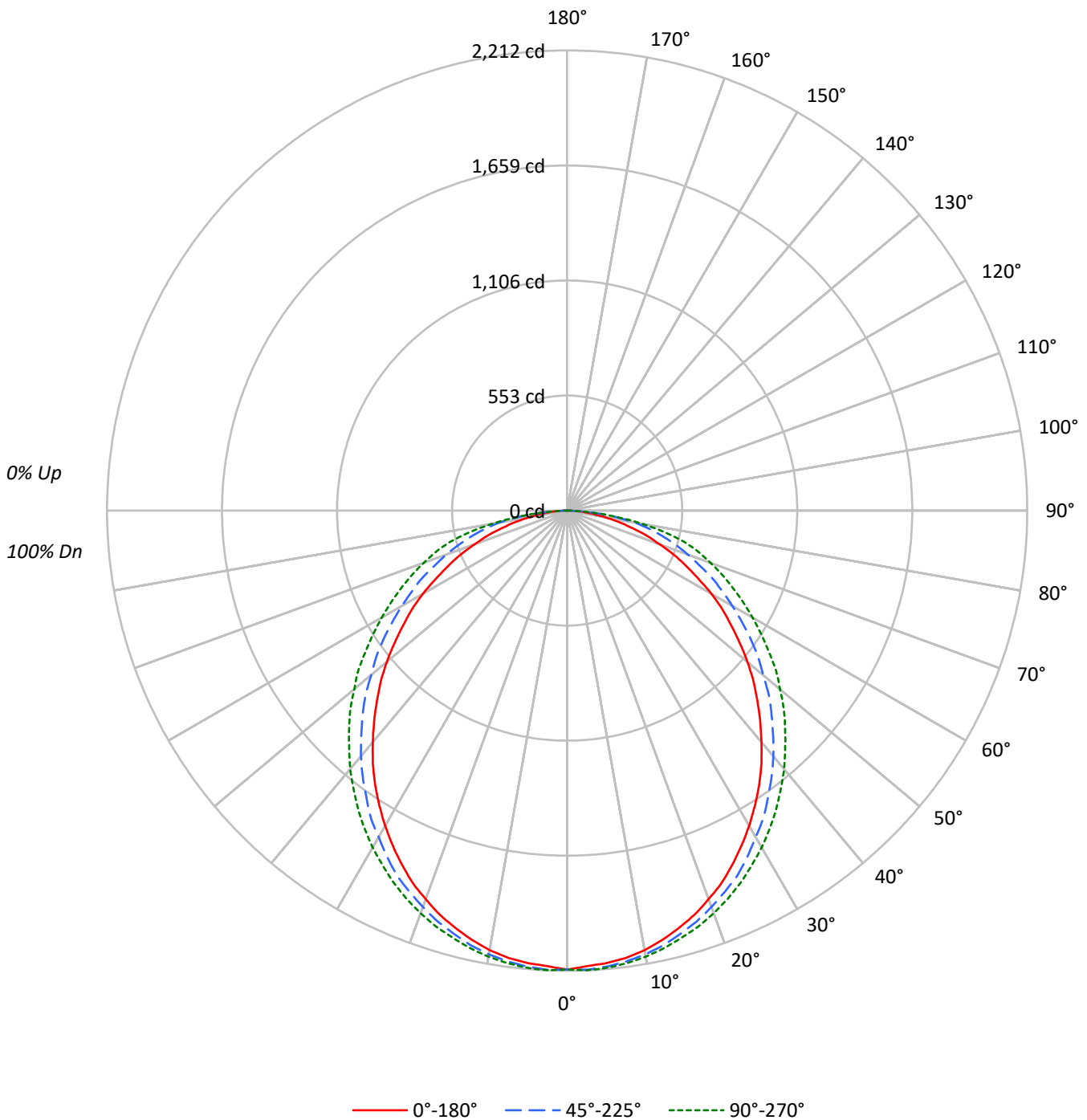
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5936	5936	5936
5°	5897	5944	5959
10°	5863	5918	5949
15°	5786	5866	5922
20°	5692	5807	5898
25°	5578	5748	5859
30°	5436	5632	5811
35°	5284	5529	5756
40°	5106	5419	5701
45°	4919	5291	5641
50°	4738	5147	5592
55°	4515	5054	5552
60°	4313	4931	5534
65°	4024	4902	5597
70°	3707	4859	5763
75°	3345	4928	6063
80°	2893	5075	5698
85°	2396	4258	4258



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.6	3.4
10°-20°	593.7	9.6
20°-30°	888.3	14.4
30°-40°	1052.0	17.1
40°-50°	1072.1	17.4
50°-60°	960.9	15.6
60°-70°	752.3	12.2
70°-80°	485.1	7.9
80°-90°	143.3	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°	1690.6	27.5
0°-40°	2742.6	44.5
0°-60°	4775.7	77.6
0°-90°	6156.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6156.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2206	2206	2206	2206	2206	
5°	2183	2189	2200	2203	2206	207
15°	2077	2088	2106	2123	2126	586
25°	1879	1896	1936	1962	1973	865
35°	1609	1629	1683	1735	1752	1005
45°	1293	1321	1390	1462	1482	998
55°	962	994	1077	1152	1183	863
65°	632	669	770	844	879	628
75°	322	370	474	554	583	345
85°	78	106	138	138	138	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2206.0	2206.0	2206.0	2206.0	2206.0
2.5°	2191.7	2197.4	2208.9	2211.8	2211.8
5°	2183.1	2188.8	2200.3	2203.2	2206.0
7.5°	2168.7	2171.6	2185.9	2191.7	2194.5
10°	2145.7	2151.5	2165.8	2174.4	2177.3
12.5°	2114.1	2122.7	2140.0	2151.5	2154.3
15°	2076.8	2088.3	2105.5	2122.7	2125.6
17.5°	2036.6	2048.0	2071.0	2091.1	2096.9
20°	1987.7	2002.1	2027.9	2050.9	2059.5
22.5°	1938.9	1950.4	1982.0	2010.7	2019.3
25°	1878.6	1895.8	1936.0	1961.9	1973.4
27.5°	1815.4	1835.5	1875.7	1910.2	1921.7
30°	1749.3	1769.4	1812.5	1855.6	1870.0
32.5°	1680.4	1703.4	1755.1	1798.1	1812.5
35°	1608.6	1628.7	1683.2	1735.0	1752.2
37.5°	1533.9	1551.1	1614.3	1668.9	1686.1
40°	1453.5	1476.4	1542.5	1605.7	1622.9
42.5°	1373.0	1398.9	1464.9	1533.9	1551.1
45°	1292.6	1321.3	1390.3	1462.1	1482.2
47.5°	1215.0	1238.0	1315.6	1384.5	1413.2
50°	1131.7	1154.7	1229.4	1307.0	1335.7
52.5°	1045.6	1077.2	1157.6	1232.3	1266.7
55°	962.3	993.9	1077.2	1151.8	1183.4
57.5°	884.7	910.6	996.7	1074.3	1105.9
60°	801.4	824.4	916.3	999.6	1028.3
62.5°	712.4	746.8	841.6	919.2	953.6
65°	631.9	669.3	769.8	844.5	879.0
67.5°	557.3	591.7	689.4	769.8	807.2
70°	471.1	517.0	617.6	698.0	732.5
72.5°	402.1	442.4	545.8	626.2	663.5
75°	321.7	370.5	474.0	554.4	583.1
77.5°	255.6	304.5	402.1	465.3	479.7
80°	186.7	235.5	327.5	359.1	367.7
82.5°	126.4	172.3	235.5	244.2	247.0
85°	77.6	106.3	137.9	137.9	137.9
87.5°	37.3	43.1	48.8	46.0	46.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)