

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: P389383

Luminaire Tested: **22CZ2-70VHE-S-UNV-L950-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: P389383
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-L950-CD1-SWPD1-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: 6602.2 lumens
Efficiency: N/A
Efficacy: 131.3 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

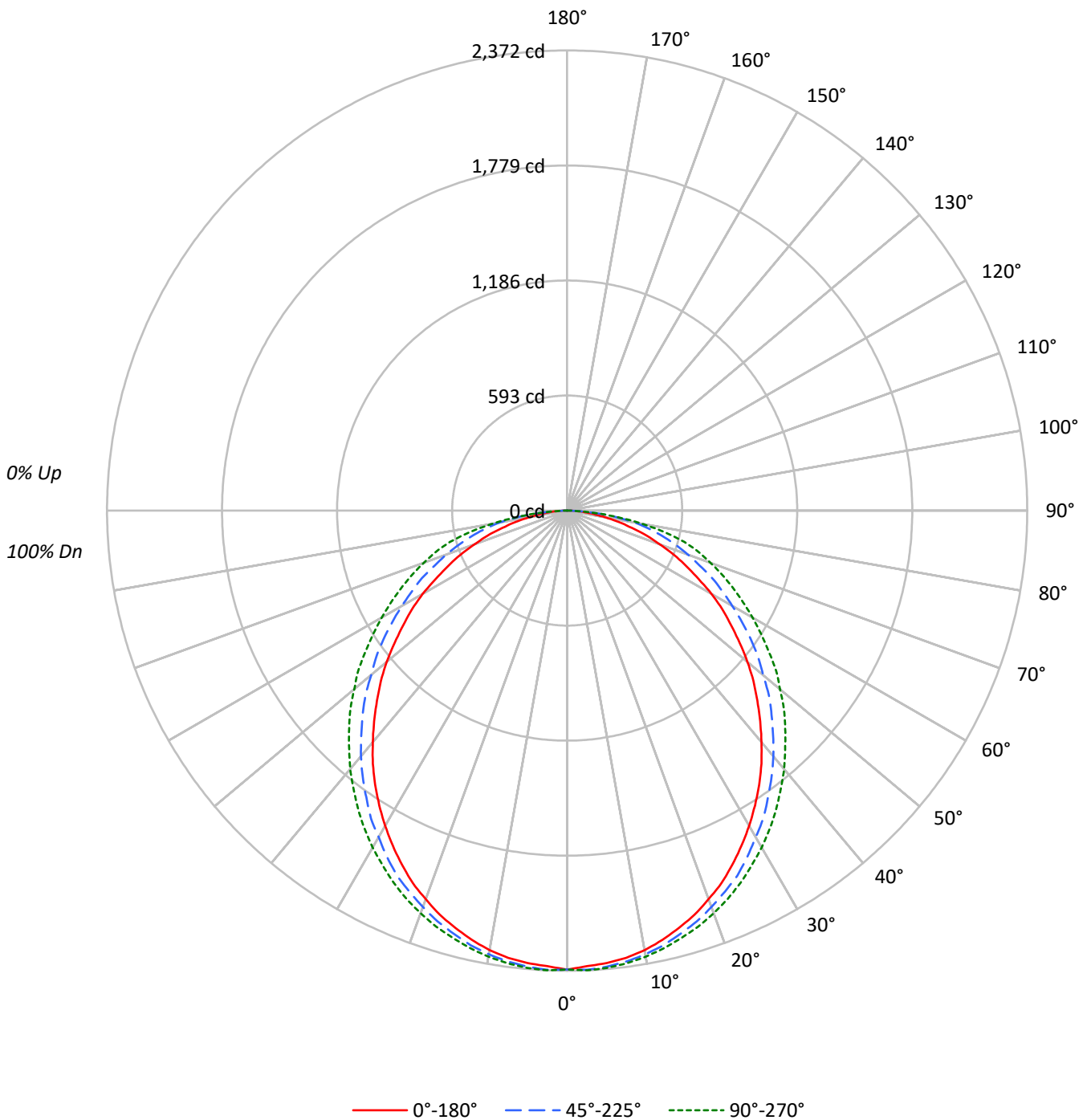
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6366	6366	6366
5°	6324	6374	6391
10°	6288	6346	6380
15°	6205	6291	6350
20°	6105	6228	6325
25°	5982	6165	6284
30°	5829	6040	6231
35°	5667	5930	6173
40°	5475	5811	6114
45°	5275	5674	6049
50°	5081	5519	5997
55°	4841	5420	5954
60°	4625	5289	5935
65°	4315	5257	6002
70°	3975	5211	6180
75°	3587	5285	6501
80°	3102	5442	6110
85°	2569	4566	4566



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.7	3.4
10°-20°	636.7	9.6
20°-30°	952.6	14.4
30°-40°	1128.2	17.1
40°-50°	1149.7	17.4
50°-60°	1030.5	15.6
60°-70°	806.8	12.2
70°-80°	520.2	7.9
80°-90°	153.7	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°	1813.1	27.5
0°-40°	2941.2	44.5
0°-60°	5121.5	77.6
0°-90°	6602.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6602.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2366	2366	2366	2366	2366	
5°	2341	2347	2360	2363	2366	222
15°	2227	2240	2258	2276	2280	628
25°	2015	2033	2076	2104	2116	927
35°	1725	1747	1805	1861	1879	1078
45°	1386	1417	1491	1568	1590	1070
55°	1032	1066	1155	1235	1269	925
65°	678	718	826	906	943	673
75°	345	397	508	594	625	370
85°	83	114	148	148	148	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2365.8	2365.8	2365.8	2365.8	2365.8
2.5°	2350.4	2356.5	2368.9	2371.9	2371.9
5°	2341.1	2347.3	2359.6	2362.7	2365.8
7.5°	2325.7	2328.8	2344.2	2350.4	2353.5
10°	2301.1	2307.2	2322.6	2331.9	2335.0
12.5°	2267.2	2276.4	2294.9	2307.2	2310.3
15°	2227.2	2239.5	2258.0	2276.4	2279.5
17.5°	2184.0	2196.4	2221.0	2242.6	2248.7
20°	2131.7	2147.1	2174.8	2199.4	2208.7
22.5°	2079.3	2091.6	2125.5	2156.3	2165.5
25°	2014.6	2033.1	2076.2	2103.9	2116.3
27.5°	1946.8	1968.4	2011.5	2048.5	2060.8
30°	1876.0	1897.5	1943.8	1990.0	2005.4
32.5°	1802.1	1826.7	1882.1	1928.4	1943.8
35°	1725.0	1746.6	1805.1	1860.6	1879.1
37.5°	1645.0	1663.4	1731.2	1789.7	1808.2
40°	1558.7	1583.3	1654.2	1722.0	1740.4
42.5°	1472.4	1500.2	1571.0	1645.0	1663.4
45°	1386.2	1417.0	1490.9	1567.9	1589.5
47.5°	1303.0	1327.7	1410.8	1484.8	1515.6
50°	1213.7	1238.3	1318.4	1401.6	1432.4
52.5°	1121.3	1155.2	1241.4	1321.5	1358.5
55°	1031.9	1065.8	1155.2	1235.3	1269.1
57.5°	948.8	976.5	1068.9	1152.1	1186.0
60°	859.4	884.1	982.7	1072.0	1102.8
62.5°	763.9	800.9	902.6	985.7	1022.7
65°	677.7	717.7	825.6	905.6	942.6
67.5°	597.6	634.6	739.3	825.6	865.6
70°	505.2	554.5	662.3	748.5	785.5
72.5°	431.3	474.4	585.3	671.5	711.6
75°	345.0	397.4	508.3	594.5	625.3
77.5°	274.2	326.5	431.3	499.0	514.4
80°	200.2	252.6	351.2	385.1	394.3
82.5°	135.5	184.8	252.6	261.8	264.9
85°	83.2	114.0	147.9	147.9	147.9
87.5°	40.0	46.2	52.4	49.3	49.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)