

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: P389382

Luminaire Tested: **22CZ2-70VHE-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: P389382
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-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: 6522.6 lumens
Efficiency: N/A
Efficacy: 129.7 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

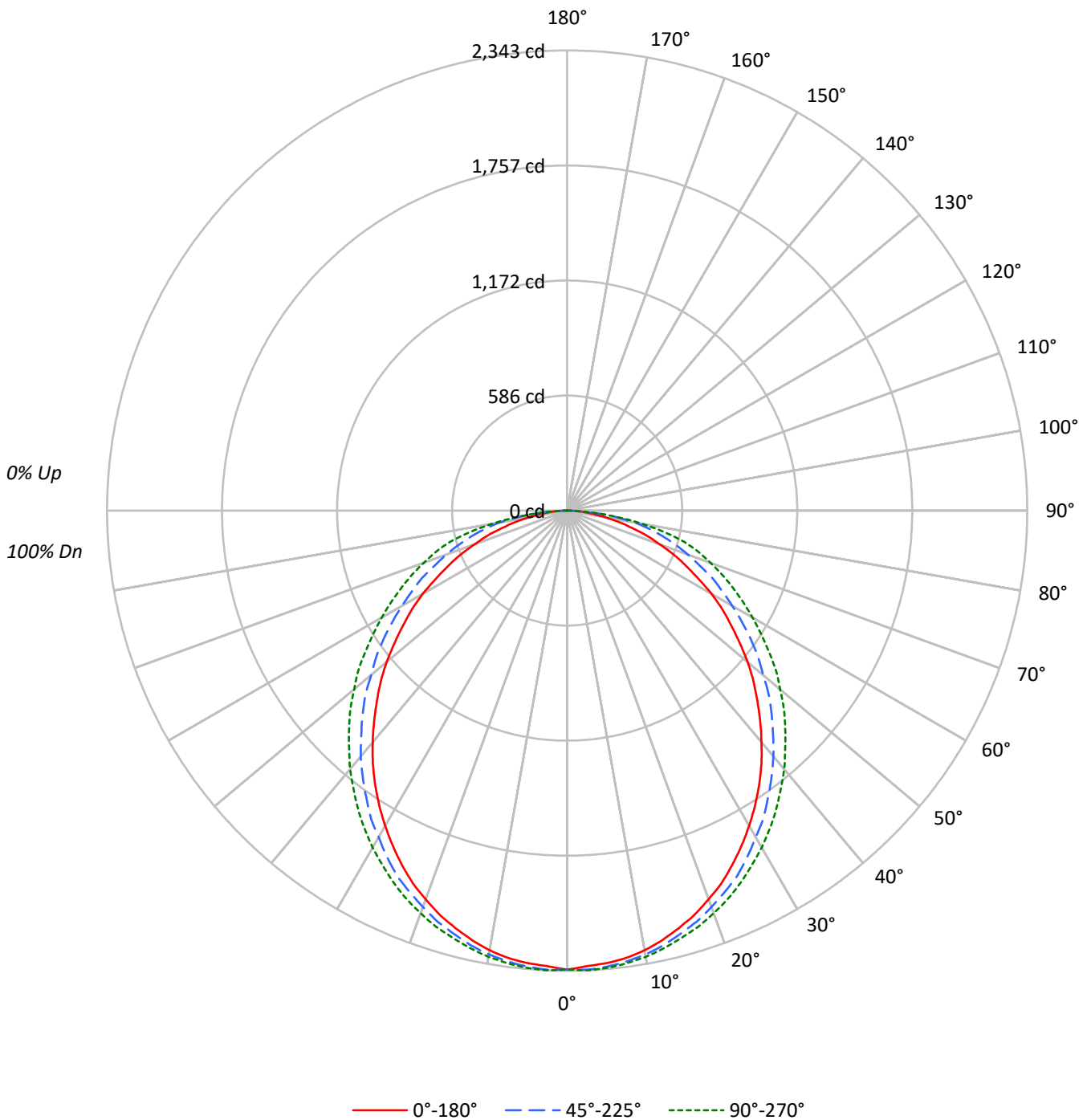
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6290	6290	6290
5°	6248	6297	6314
10°	6212	6270	6303
15°	6130	6215	6274
20°	6031	6153	6249
25°	5910	6090	6208
30°	5759	5967	6156
35°	5598	5859	6098
40°	5409	5741	6040
45°	5212	5606	5976
50°	5020	5453	5924
55°	4783	5354	5882
60°	4570	5225	5864
65°	4263	5193	5929
70°	3927	5148	6105
75°	3543	5220	6423
80°	3065	5376	6036
85°	2538	4511	4511



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.0	3.4
10°-20°	629.0	9.6
20°-30°	941.2	14.4
30°-40°	1114.6	17.1
40°-50°	1135.9	17.4
50°-60°	1018.1	15.6
60°-70°	797.1	12.2
70°-80°	514.0	7.9
80°-90°	151.8	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°	1791.2	27.5
0°-40°	2905.8	44.5
0°-60°	5059.7	77.6
0°-90°	6522.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6522.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2337	2337	2337	2337	2337	
5°	2313	2319	2331	2334	2337	220
15°	2200	2212	2231	2249	2252	620
25°	1990	2009	2051	2079	2091	916
35°	1704	1726	1783	1838	1856	1065
45°	1370	1400	1473	1549	1570	1058
55°	1020	1053	1141	1220	1254	914
65°	670	709	816	895	931	665
75°	341	393	502	587	618	365
85°	82	113	146	146	146	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2337.3	2337.3	2337.3	2337.3	2337.3
2.5°	2322.0	2328.1	2340.3	2343.3	2343.3
5°	2312.9	2319.0	2331.2	2334.2	2337.3
7.5°	2297.7	2300.7	2315.9	2322.0	2325.1
10°	2273.3	2279.4	2294.6	2303.8	2306.8
12.5°	2239.9	2249.0	2267.3	2279.4	2282.5
15°	2200.3	2212.5	2230.7	2249.0	2252.0
17.5°	2157.7	2169.9	2194.2	2215.5	2221.6
20°	2106.0	2121.2	2148.6	2172.9	2182.0
22.5°	2054.2	2066.4	2099.9	2130.3	2139.4
25°	1990.3	2008.6	2051.2	2078.6	2090.7
27.5°	1923.4	1944.7	1987.3	2023.8	2036.0
30°	1853.4	1874.7	1920.3	1966.0	1981.2
32.5°	1780.3	1804.7	1859.5	1905.1	1920.3
35°	1704.2	1725.5	1783.4	1838.2	1856.4
37.5°	1625.1	1643.4	1710.3	1768.2	1786.4
40°	1539.9	1564.3	1634.2	1701.2	1719.5
42.5°	1454.7	1482.1	1552.1	1625.1	1643.4
45°	1369.5	1399.9	1473.0	1549.0	1570.3
47.5°	1287.3	1311.7	1393.8	1466.9	1497.3
50°	1199.1	1223.4	1302.5	1384.7	1415.1
52.5°	1107.8	1141.2	1226.4	1305.6	1342.1
55°	1019.5	1053.0	1141.2	1220.4	1253.8
57.5°	937.3	964.7	1056.0	1138.2	1171.7
60°	849.1	873.4	970.8	1059.1	1089.5
62.5°	754.7	791.3	891.7	973.9	1010.4
65°	669.5	709.1	815.6	894.7	931.2
67.5°	590.4	626.9	730.4	815.6	855.2
70°	499.1	547.8	654.3	739.5	776.0
72.5°	426.1	468.7	578.2	663.4	703.0
75°	340.8	392.6	502.1	587.4	617.8
77.5°	270.9	322.6	426.1	493.0	508.2
80°	197.8	249.6	346.9	380.4	389.5
82.5°	133.9	182.6	249.6	258.7	261.7
85°	82.2	112.6	146.1	146.1	146.1
87.5°	39.6	45.6	51.7	48.7	48.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)