

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: P389379

Luminaire Tested: **22CZ2-70VHE-S-UNV-L940-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: P389379
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6145.1 lumens
Efficiency: N/A
Efficacy: 122.2 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

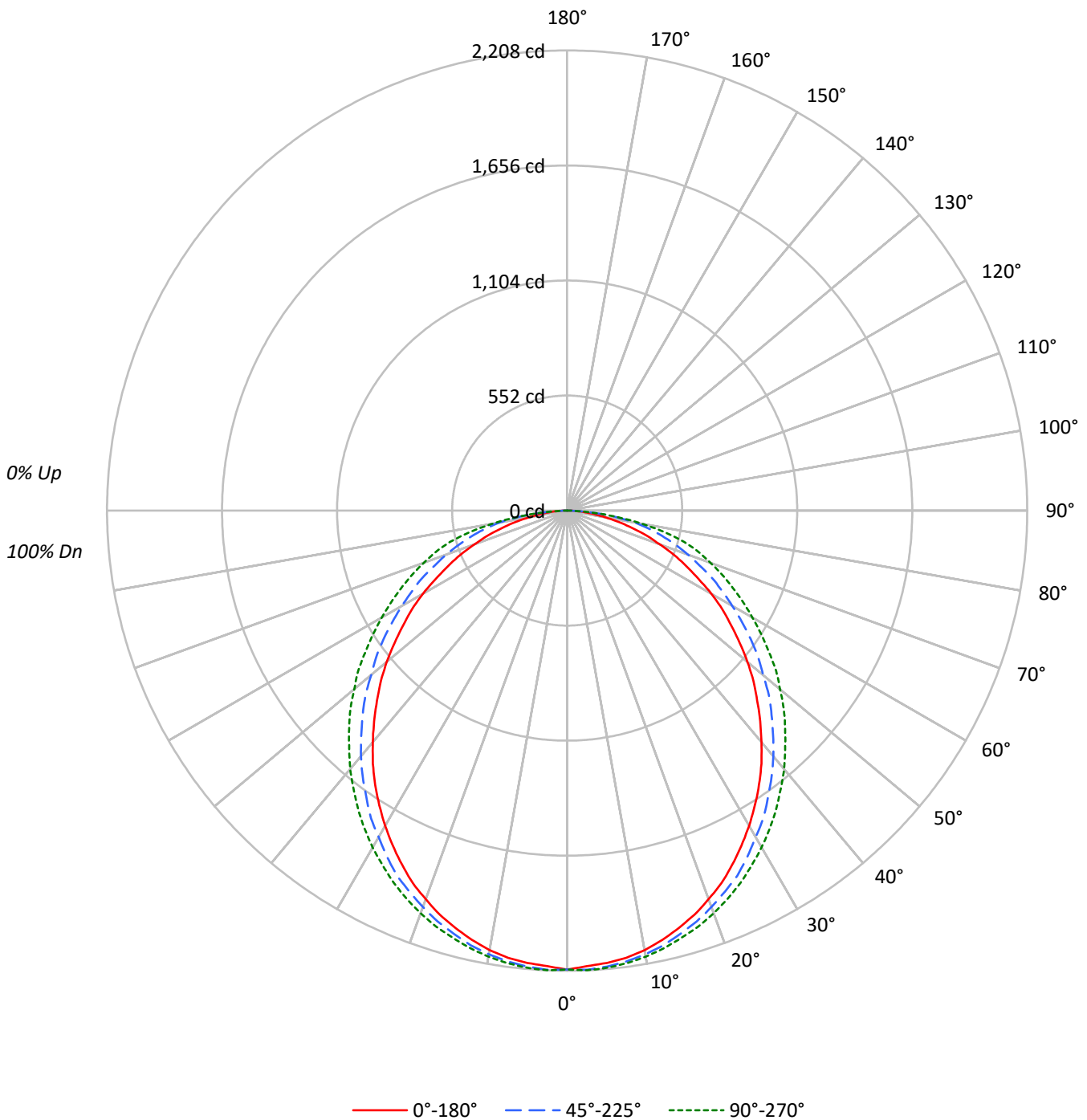
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5926	5926	5926
5°	5886	5933	5948
10°	5852	5907	5939
15°	5775	5855	5911
20°	5682	5797	5887
25°	5567	5738	5848
30°	5426	5622	5800
35°	5275	5520	5746
40°	5096	5409	5690
45°	4910	5281	5630
50°	4729	5137	5581
55°	4506	5044	5542
60°	4305	4922	5524
65°	4017	4893	5587
70°	3699	4850	5752
75°	3339	4919	6051
80°	2889	5066	5687
85°	2390	4248	4248



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.2	3.4
10°-20°	592.6	9.6
20°-30°	886.7	14.4
30°-40°	1050.1	17.1
40°-50°	1070.1	17.4
50°-60°	959.1	15.6
60°-70°	750.9	12.2
70°-80°	484.2	7.9
80°-90°	143.0	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°	1687.5	27.5
0°-40°	2737.6	44.5
0°-60°	4766.9	77.6
0°-90°	6145.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6145.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2202	2202	2202	2202	2202	
5°	2179	2185	2196	2199	2202	207
15°	2073	2084	2102	2119	2122	584
25°	1875	1892	1932	1958	1970	863
35°	1606	1626	1680	1732	1749	1003
45°	1290	1319	1388	1459	1480	996
55°	960	992	1075	1150	1181	861
65°	631	668	768	843	877	627
75°	321	370	473	553	582	344
85°	77	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°	2202.0	2202.0	2202.0	2202.0	2202.0
2.5°	2187.6	2193.4	2204.8	2207.7	2207.7
5°	2179.0	2184.8	2196.2	2199.1	2202.0
7.5°	2164.7	2167.6	2181.9	2187.6	2190.5
10°	2141.8	2147.5	2161.8	2170.4	2173.3
12.5°	2110.2	2118.8	2136.0	2147.5	2150.4
15°	2073.0	2084.4	2101.6	2118.8	2121.7
17.5°	2032.8	2044.3	2067.2	2087.3	2093.0
20°	1984.1	1998.4	2024.2	2047.2	2055.8
22.5°	1935.3	1946.8	1978.3	2007.0	2015.6
25°	1875.1	1892.3	1932.5	1958.3	1969.7
27.5°	1812.0	1832.1	1872.3	1906.7	1918.1
30°	1746.1	1766.2	1809.2	1852.2	1866.5
32.5°	1677.3	1700.2	1751.8	1794.8	1809.2
35°	1605.6	1625.7	1680.2	1731.8	1749.0
37.5°	1531.1	1548.3	1611.3	1665.8	1683.0
40°	1450.8	1473.7	1539.7	1602.7	1619.9
42.5°	1370.5	1396.3	1462.3	1531.1	1548.3
45°	1290.2	1318.9	1387.7	1459.4	1479.5
47.5°	1212.8	1235.7	1313.2	1382.0	1410.6
50°	1129.7	1152.6	1227.1	1304.6	1333.2
52.5°	1043.6	1075.2	1155.5	1230.0	1264.4
55°	960.5	992.0	1075.2	1149.7	1181.3
57.5°	883.1	908.9	994.9	1072.3	1103.9
60°	799.9	822.9	914.6	997.8	1026.4
62.5°	711.1	745.5	840.1	917.5	951.9
65°	630.8	668.0	768.4	842.9	877.4
67.5°	556.2	590.6	688.1	768.4	805.7
70°	470.2	516.1	616.4	696.7	731.1
72.5°	401.4	441.5	544.8	625.0	662.3
75°	321.1	369.9	473.1	553.4	582.0
77.5°	255.2	303.9	401.4	464.5	478.8
80°	186.4	235.1	326.9	358.4	367.0
82.5°	126.2	172.0	235.1	243.7	246.6
85°	77.4	106.1	137.6	137.6	137.6
87.5°	37.3	43.0	48.7	45.9	45.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)