

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: P389384

Luminaire Tested: **22CZ2-70VHE-S-UNV-L950-CD1-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: P389384
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-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: 6685.1 lumens
Efficiency: N/A
Efficacy: 132.9 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

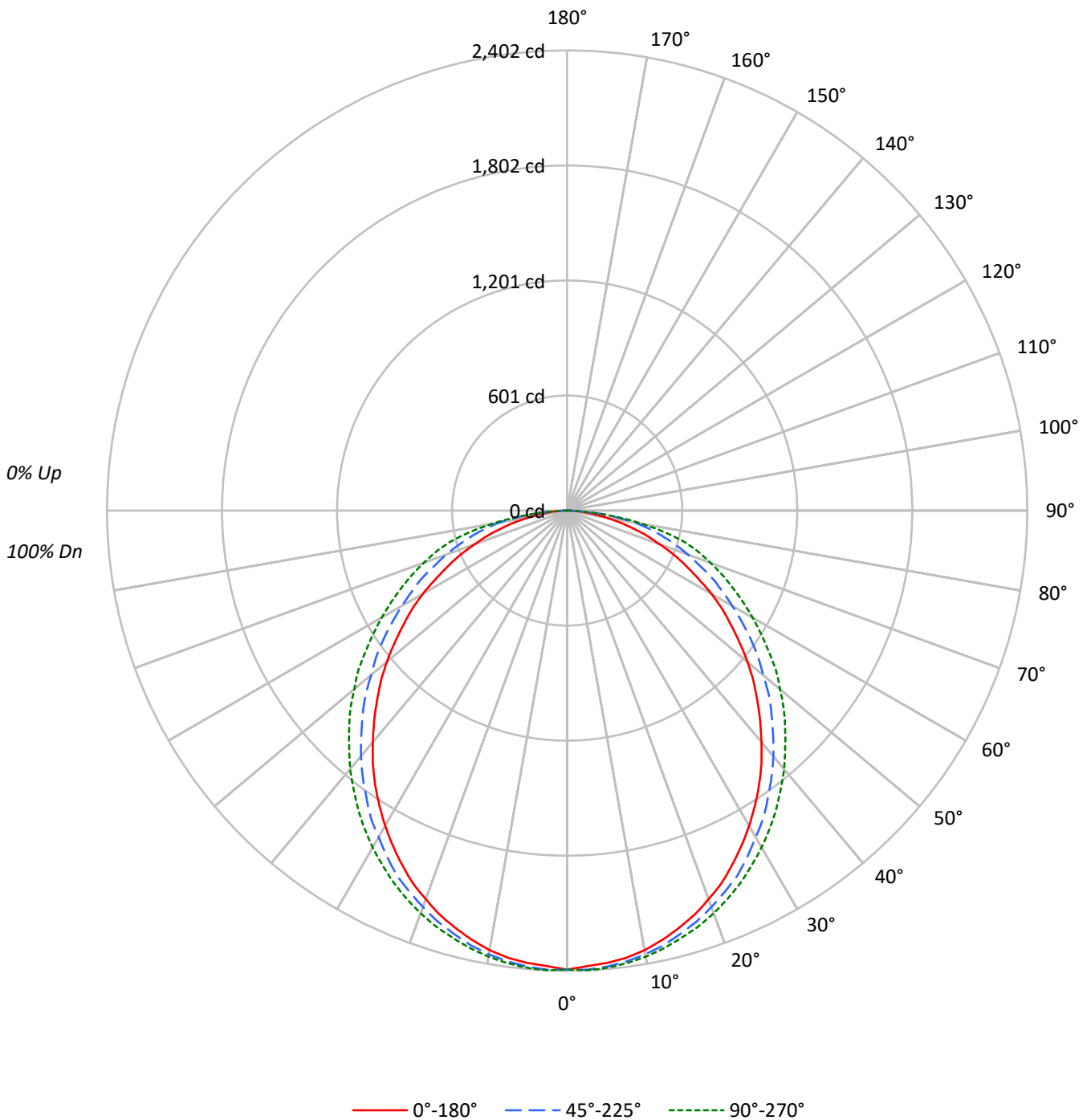
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6446	6446	6446
5°	6403	6454	6471
10°	6367	6426	6460
15°	6282	6369	6430
20°	6181	6306	6404
25°	6057	6242	6362
30°	5902	6116	6309
35°	5738	6004	6251
40°	5544	5884	6191
45°	5342	5745	6125
50°	5145	5589	6072
55°	4902	5488	6029
60°	4683	5355	6009
65°	4369	5323	6077
70°	4024	5276	6258
75°	3632	5351	6583
80°	3141	5511	6186
85°	2600	4622	4622



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.5	3.4
10°-20°	644.7	9.6
20°-30°	964.6	14.4
30°-40°	1142.3	17.1
40°-50°	1164.2	17.4
50°-60°	1043.4	15.6
60°-70°	816.9	12.2
70°-80°	526.8	7.9
80°-90°	155.6	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°	1835.8	27.5
0°-40°	2978.2	44.5
0°-60°	5185.8	77.6
0°-90°	6685.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6685.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2396	2396	2396	2396	2396	
5°	2370	2377	2389	2392	2396	225
15°	2255	2268	2286	2305	2308	636
25°	2040	2059	2102	2130	2143	939
35°	1747	1768	1828	1884	1903	1092
45°	1404	1435	1510	1588	1610	1084
55°	1045	1079	1170	1251	1285	937
65°	686	727	836	917	954	682
75°	349	402	515	602	633	375
85°	84	115	150	150	150	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2395.5	2395.5	2395.5	2395.5	2395.5
2.5°	2379.9	2386.1	2398.6	2401.7	2401.7
5°	2370.5	2376.8	2389.2	2392.4	2395.5
7.5°	2354.9	2358.1	2373.6	2379.9	2383.0
10°	2330.0	2336.2	2351.8	2361.2	2364.3
12.5°	2295.7	2305.0	2323.7	2336.2	2339.3
15°	2255.1	2267.6	2286.3	2305.0	2308.1
17.5°	2211.5	2223.9	2248.9	2270.7	2277.0
20°	2158.4	2174.0	2202.1	2227.0	2236.4
22.5°	2105.4	2117.9	2152.2	2183.4	2192.7
25°	2039.9	2058.6	2102.3	2130.4	2142.8
27.5°	1971.3	1993.1	2036.8	2074.2	2086.7
30°	1899.5	1921.4	1968.2	2014.9	2030.5
32.5°	1824.7	1849.6	1905.8	1952.6	1968.2
35°	1746.7	1768.5	1827.8	1883.9	1902.7
37.5°	1665.6	1684.3	1752.9	1812.2	1830.9
40°	1578.3	1603.2	1675.0	1743.6	1762.3
42.5°	1490.9	1519.0	1590.7	1665.6	1684.3
45°	1403.6	1434.8	1509.7	1587.6	1609.5
47.5°	1319.4	1344.3	1428.6	1503.4	1534.6
50°	1228.9	1253.9	1335.0	1419.2	1450.4
52.5°	1135.4	1169.7	1257.0	1338.1	1375.5
55°	1044.9	1079.2	1169.7	1250.8	1285.1
57.5°	960.7	988.8	1082.3	1166.5	1200.9
60°	870.2	895.2	995.0	1085.5	1116.6
62.5°	773.5	811.0	913.9	998.1	1035.5
65°	686.2	726.8	835.9	917.0	954.4
67.5°	605.1	642.5	748.6	835.9	876.5
70°	511.5	561.4	670.6	757.9	795.4
72.5°	436.7	480.3	592.6	680.0	720.5
75°	349.3	402.4	514.7	602.0	633.2
77.5°	277.6	330.6	436.7	505.3	520.9
80°	202.7	255.8	355.6	389.9	399.2
82.5°	137.2	187.1	255.8	265.1	268.2
85°	84.2	115.4	149.7	149.7	149.7
87.5°	40.5	46.8	53.0	49.9	49.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)