

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: P388351

Luminaire Tested: **22CZ2-50VHE-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: P388351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4562.3 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

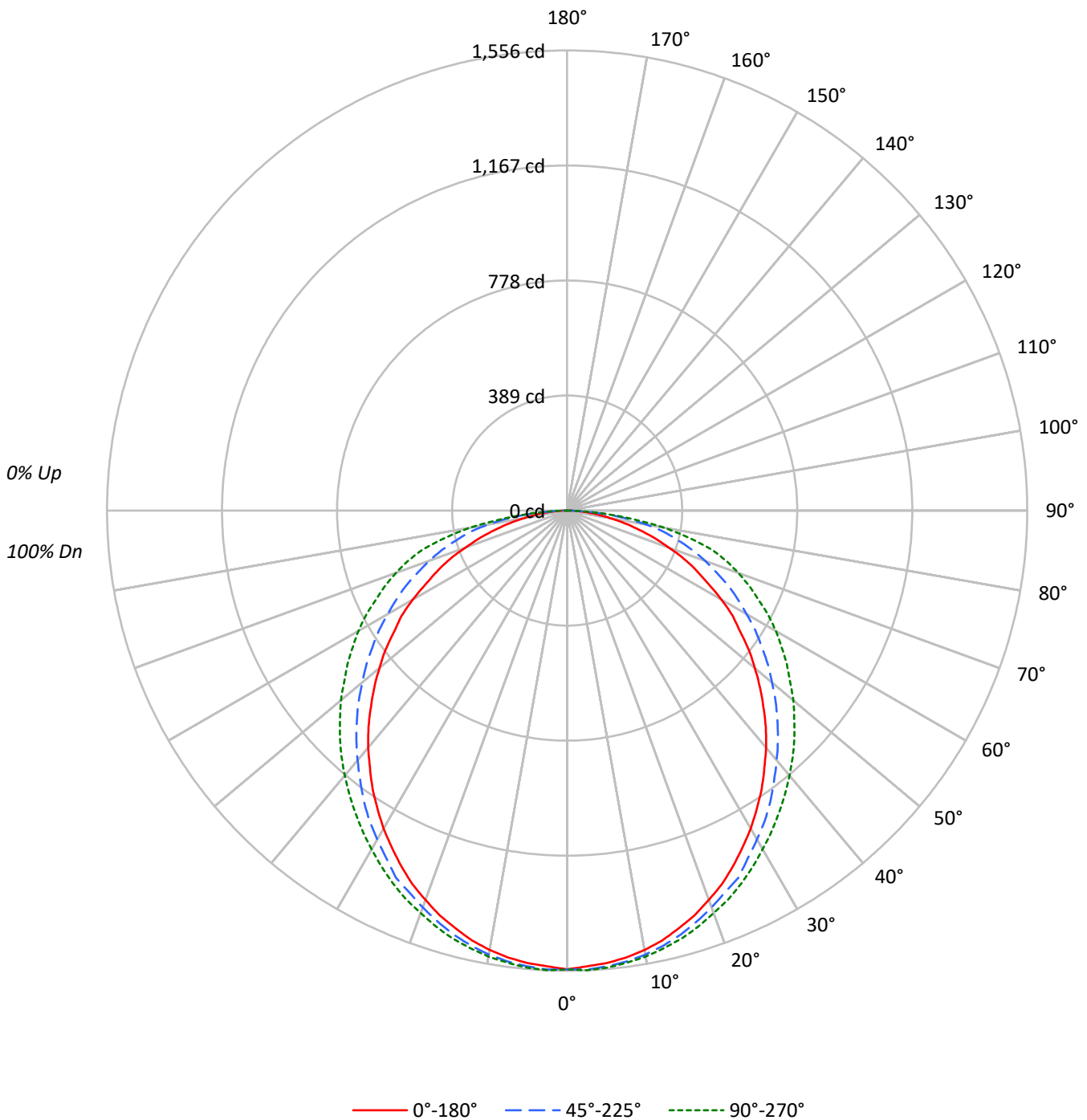
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4175	4175	4175
5°	4148	4178	4190
10°	4122	4165	4184
15°	4072	4134	4172
20°	4012	4089	4147
25°	3939	4066	4133
30°	3858	3990	4109
35°	3769	3938	4100
40°	3675	3872	4109
45°	3571	3827	4135
50°	3468	3787	4182
55°	3349	3771	4255
60°	3250	3770	4386
65°	3088	3831	4546
70°	2879	3903	4840
75°	2638	4038	5229
80°	2297	4209	5150
85°	2010	3742	4091



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.7	3.2
10°-20°	417.9	9.2
20°-30°	627.3	13.7
30°-40°	749.6	16.4
40°-50°	779.4	17.1
50°-60°	722.4	15.8
60°-70°	592.6	13.0
70°-80°	400.6	8.8
80°-90°	125.9	2.8
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°	1191.9	26.1
0°-40°	1941.4	42.6
0°-60°	3443.3	75.5
0°-90°	4562.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4562.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1536	1538	1547	1549	1551	146
15°	1462	1468	1484	1493	1497	412
25°	1327	1338	1369	1385	1392	611
35°	1147	1163	1199	1235	1248	717
45°	938	956	1006	1064	1087	725
55°	714	736	804	876	907	642
65°	485	512	602	680	714	479
75°	254	296	388	467	503	269
85°	65	90	121	135	132	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1551.3	1551.3	1551.3	1551.3	1551.3
2.5°	1542.3	1546.8	1553.5	1555.8	1555.8
5°	1535.6	1537.8	1546.8	1549.0	1551.3
7.5°	1524.3	1528.8	1537.8	1540.0	1542.3
10°	1508.6	1513.1	1524.3	1528.8	1531.1
12.5°	1488.4	1492.9	1506.4	1513.1	1515.3
15°	1461.5	1468.2	1483.9	1492.9	1497.4
17.5°	1434.5	1441.3	1457.0	1470.4	1474.9
20°	1400.9	1416.6	1427.8	1445.8	1448.0
22.5°	1367.2	1376.2	1396.4	1414.3	1423.3
25°	1326.8	1338.0	1369.4	1385.1	1391.9
27.5°	1284.1	1299.8	1324.5	1349.2	1358.2
30°	1241.5	1252.7	1284.1	1313.3	1322.3
32.5°	1194.3	1210.0	1243.7	1272.9	1286.4
35°	1147.2	1162.9	1198.8	1234.7	1248.2
37.5°	1095.5	1113.5	1149.4	1192.1	1210.0
40°	1046.2	1059.6	1102.3	1153.9	1169.6
42.5°	994.5	1010.2	1055.1	1111.3	1129.2
45°	938.4	956.4	1005.7	1064.1	1086.6
47.5°	884.5	902.5	956.4	1014.7	1041.7
50°	828.4	850.8	904.7	972.1	999.0
52.5°	774.5	794.7	855.3	924.9	949.6
55°	713.9	736.3	803.7	875.5	907.0
57.5°	664.5	680.2	754.3	828.4	859.8
60°	603.9	624.1	700.4	779.0	814.9
62.5°	538.8	572.5	651.0	731.9	767.8
65°	484.9	511.9	601.6	680.2	713.9
67.5°	428.8	458.0	545.5	628.6	666.8
70°	365.9	404.1	496.1	579.2	615.1
72.5°	309.8	350.2	444.5	525.3	563.5
75°	253.7	296.3	388.4	467.0	502.9
77.5°	199.8	246.9	336.7	397.4	419.8
80°	148.2	193.1	271.6	314.3	332.3
82.5°	103.3	141.4	199.8	222.3	226.7
85°	65.1	89.8	121.2	134.7	132.5
87.5°	29.2	35.9	44.9	49.4	47.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)