

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: P389278

Luminaire Tested: **22CZ2-50VHE-S-UNV-L930-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: P389278
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: 22CZ2-50VHE-S-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4362.2 lumens
Efficiency: N/A
Efficacy: 120.5 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

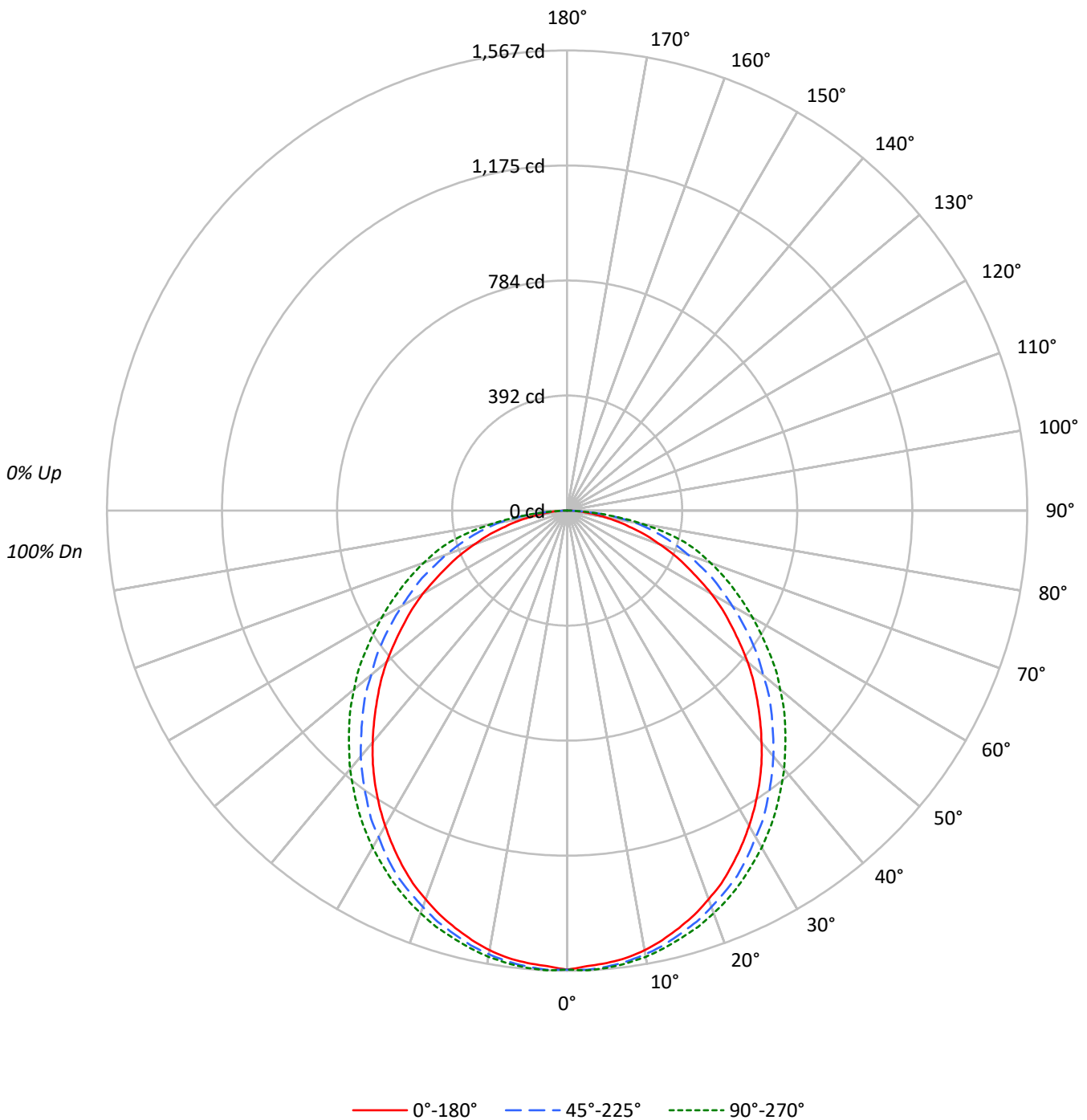
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4206	4206	4206
5°	4178	4211	4222
10°	4154	4193	4216
15°	4099	4156	4196
20°	4033	4115	4179
25°	3952	4073	4152
30°	3851	3991	4117
35°	3744	3918	4078
40°	3618	3840	4039
45°	3486	3749	3997
50°	3357	3647	3962
55°	3199	3581	3934
60°	3056	3495	3921
65°	2851	3473	3966
70°	2626	3443	4083
75°	2371	3491	4296
80°	2050	3595	4037
85°	1698	3017	3017



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.8	3.4
10°-20°	420.7	9.6
20°-30°	629.4	14.4
30°-40°	745.4	17.1
40°-50°	759.7	17.4
50°-60°	680.9	15.6
60°-70°	533.1	12.2
70°-80°	343.7	7.9
80°-90°	101.5	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°	1197.9	27.5
0°-40°	1943.3	44.5
0°-60°	3383.9	77.6
0°-90°	4362.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4362.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1563	1563	1563	1563	1563	
5°	1547	1551	1559	1561	1563	147
15°	1472	1480	1492	1504	1506	415
25°	1331	1343	1372	1390	1398	613
35°	1140	1154	1193	1229	1242	712
45°	916	936	985	1036	1050	707
55°	682	704	763	816	838	611
65°	448	474	546	598	623	445
75°	228	263	336	393	413	244
85°	55	75	98	98	98	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.1	1563.1	1563.1	1563.1	1563.1
2.5°	1552.9	1557.0	1565.1	1567.2	1567.2
5°	1546.8	1550.9	1559.0	1561.1	1563.1
7.5°	1536.7	1538.7	1548.9	1552.9	1555.0
10°	1520.4	1524.4	1534.6	1540.7	1542.8
12.5°	1498.0	1504.1	1516.3	1524.4	1526.5
15°	1471.5	1479.7	1491.9	1504.1	1506.1
17.5°	1443.0	1451.2	1467.5	1481.7	1485.8
20°	1408.4	1418.6	1436.9	1453.2	1459.3
22.5°	1373.8	1382.0	1404.4	1424.7	1430.8
25°	1331.1	1343.3	1371.8	1390.1	1398.3
27.5°	1286.3	1300.6	1329.1	1353.5	1361.6
30°	1239.5	1253.7	1284.3	1314.8	1325.0
32.5°	1190.7	1206.9	1243.6	1274.1	1284.3
35°	1139.8	1154.0	1192.7	1229.3	1241.5
37.5°	1086.9	1099.1	1143.8	1182.5	1194.7
40°	1029.9	1046.1	1093.0	1137.7	1149.9
42.5°	972.9	991.2	1038.0	1086.9	1099.1
45°	915.9	936.2	985.1	1036.0	1050.2
47.5°	860.9	877.2	932.2	981.0	1001.4
50°	801.9	818.2	871.1	926.1	946.4
52.5°	740.9	763.2	820.2	873.1	897.6
55°	681.8	704.2	763.2	816.2	838.5
57.5°	626.9	645.2	706.2	761.2	783.6
60°	567.8	584.1	649.3	708.3	728.6
62.5°	504.8	529.2	596.3	651.3	675.7
65°	447.8	474.2	545.5	598.4	622.8
67.5°	394.8	419.3	488.5	545.5	571.9
70°	333.8	366.4	437.6	494.6	519.0
72.5°	284.9	313.4	386.7	443.7	470.2
75°	228.0	262.6	335.8	392.8	413.2
77.5°	181.1	215.7	284.9	329.7	339.9
80°	132.3	166.9	232.0	254.4	260.5
82.5°	89.6	122.1	166.9	173.0	175.0
85°	55.0	75.3	97.7	97.7	97.7
87.5°	26.5	30.5	34.6	32.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)