

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: P389284

Luminaire Tested: **22CZ2-50VHE-S-UNV-L940-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: P389284
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-L940-CD1-SWPD1-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: 4516.4 lumens
Efficiency: N/A
Efficacy: 124.8 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

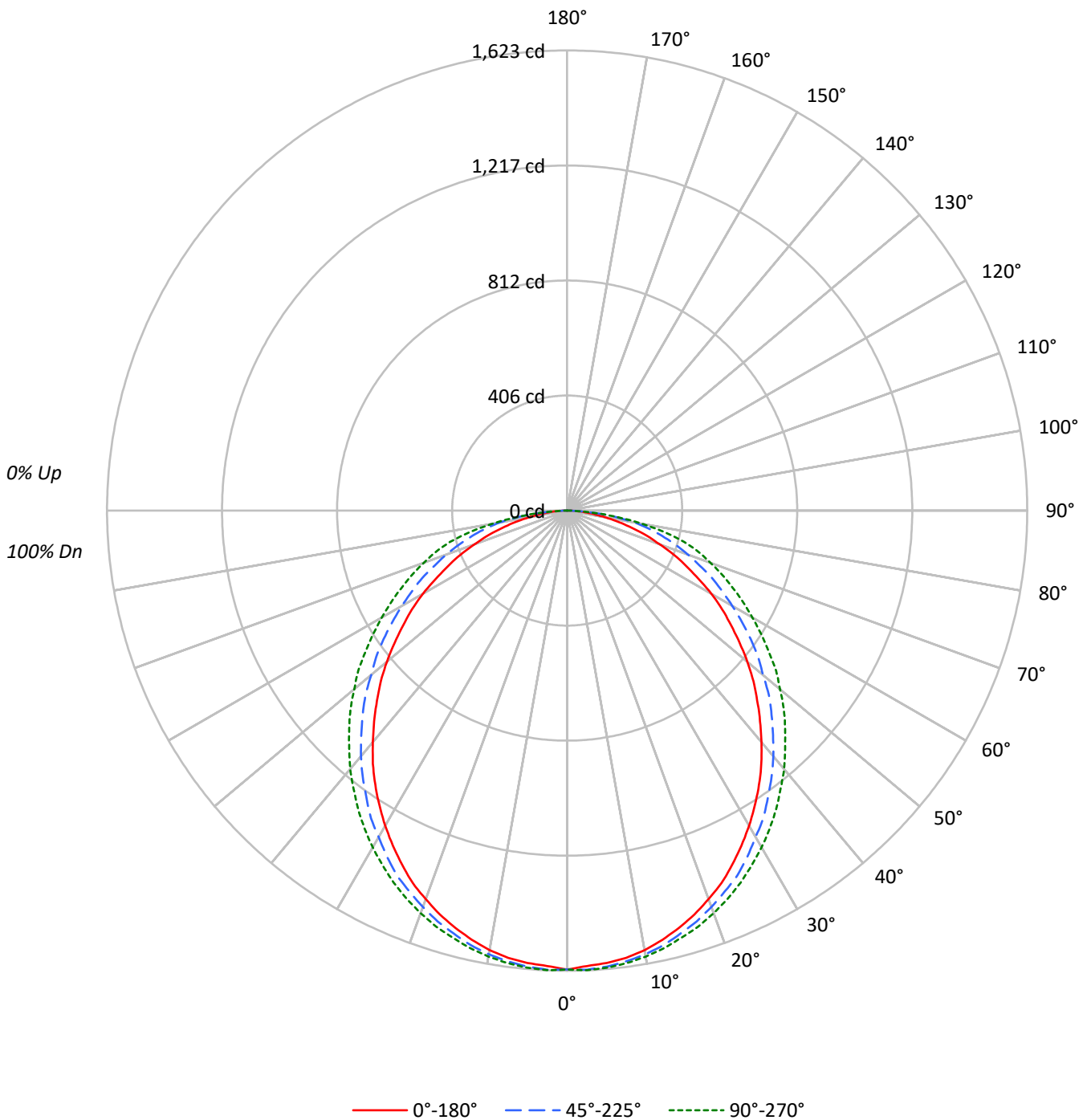
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4355	4355	4355
5°	4326	4360	4372
10°	4301	4342	4365
15°	4244	4303	4344
20°	4176	4260	4327
25°	4092	4217	4298
30°	3988	4132	4263
35°	3877	4056	4223
40°	3746	3975	4182
45°	3609	3881	4138
50°	3476	3776	4102
55°	3312	3707	4073
60°	3164	3618	4060
65°	2952	3596	4106
70°	2719	3565	4227
75°	2454	3615	4448
80°	2123	3722	4179
85°	1757	3122	3122



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.0	3.4
10°-20°	435.5	9.6
20°-30°	651.7	14.4
30°-40°	771.8	17.1
40°-50°	786.5	17.4
50°-60°	704.9	15.6
60°-70°	551.9	12.2
70°-80°	355.9	7.9
80°-90°	105.1	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°	1240.3	27.5
0°-40°	2012.0	44.5
0°-60°	3503.5	77.6
0°-90°	4516.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4516.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1602	1606	1614	1616	1618	152
15°	1524	1532	1545	1557	1559	430
25°	1378	1391	1420	1439	1448	634
35°	1180	1195	1235	1273	1285	738
45°	948	969	1020	1073	1087	732
55°	706	729	790	845	868	633
65°	464	491	565	620	645	461
75°	236	272	348	407	428	253
85°	57	78	101	101	101	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1618.4	1618.4	1618.4	1618.4	1618.4
2.5°	1607.8	1612.0	1620.5	1622.6	1622.6
5°	1601.5	1605.7	1614.2	1616.3	1618.4
7.5°	1591.0	1593.1	1603.6	1607.8	1609.9
10°	1574.1	1578.3	1588.9	1595.2	1597.3
12.5°	1550.9	1557.3	1569.9	1578.3	1580.4
15°	1523.5	1532.0	1544.6	1557.3	1559.4
17.5°	1494.0	1502.5	1519.3	1534.1	1538.3
20°	1458.2	1468.8	1487.7	1504.6	1510.9
22.5°	1422.4	1430.8	1454.0	1475.1	1481.4
25°	1378.1	1390.8	1420.3	1439.3	1447.7
27.5°	1331.8	1346.5	1376.0	1401.3	1409.7
30°	1283.3	1298.1	1329.7	1361.3	1371.8
32.5°	1232.7	1249.6	1287.5	1319.1	1329.7
35°	1180.1	1194.8	1234.8	1272.8	1285.4
37.5°	1125.3	1137.9	1184.3	1224.3	1237.0
40°	1066.3	1083.1	1131.6	1178.0	1190.6
42.5°	1007.3	1026.2	1074.7	1125.3	1137.9
45°	948.3	969.3	1019.9	1072.6	1087.3
47.5°	891.4	908.2	965.1	1015.7	1036.8
50°	830.3	847.1	901.9	958.8	979.9
52.5°	767.0	790.2	849.2	904.0	929.3
55°	705.9	729.1	790.2	845.0	868.2
57.5°	649.0	668.0	731.2	788.1	811.3
60°	587.9	604.8	672.2	733.3	754.4
62.5°	522.6	547.9	617.4	674.3	699.6
65°	463.6	491.0	564.7	619.5	644.8
67.5°	408.8	434.1	505.7	564.7	592.1
70°	345.6	379.3	453.1	512.1	537.3
72.5°	295.0	324.5	400.4	459.4	486.8
75°	236.0	271.8	347.7	406.7	427.8
77.5°	187.5	223.4	295.0	341.4	351.9
80°	137.0	172.8	240.2	263.4	269.7
82.5°	92.7	126.4	172.8	179.1	181.2
85°	56.9	78.0	101.1	101.1	101.1
87.5°	27.4	31.6	35.8	33.7	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)