

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: P388064

Luminaire Tested: **22CZ2-50VHE-SQR-UNV-L940-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: P388064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-SQR-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4179.9 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

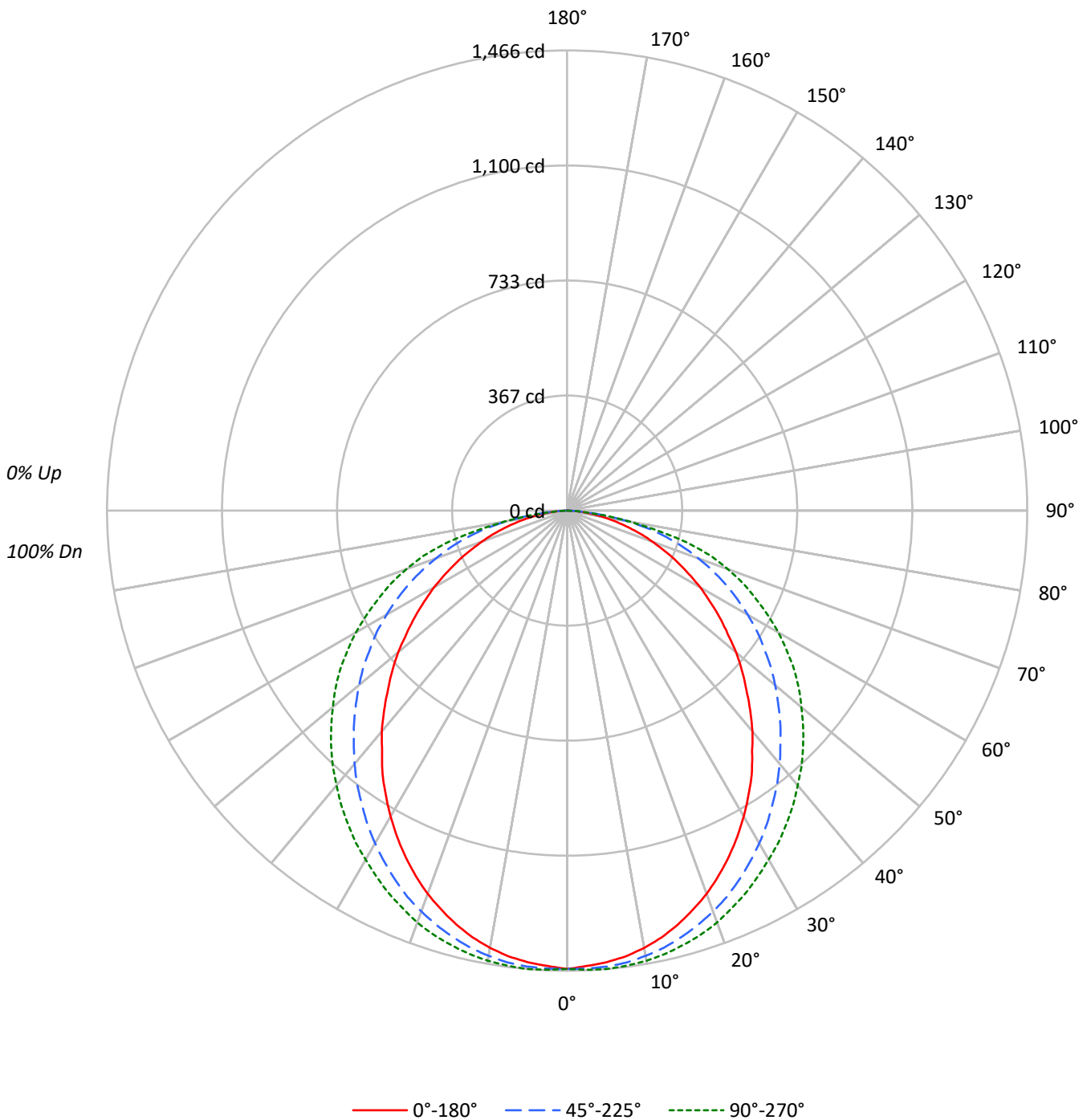
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3929	3929	3929
5°	3901	3939	3960
10°	3865	3936	3979
15°	3802	3919	3991
20°	3721	3892	4000
25°	3617	3852	3994
30°	3495	3804	3988
35°	3370	3747	4002
40°	3227	3700	4014
45°	3073	3654	4047
50°	2940	3621	4078
55°	2783	3593	4142
60°	2637	3577	4186
65°	2464	3550	4219
70°	2264	3496	4277
75°	2042	3403	4126
80°	1753	3013	3106
85°	1408	1775	1408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	3.3
10°-20°	395.8	9.5
20°-30°	594.4	14.2
30°-40°	708.9	17.0
40°-50°	733.0	17.5
50°-60°	673.9	16.1
60°-70°	536.5	12.8
70°-80°	327.8	7.8
80°-90°	71.2	1.7
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°	1128.6	27.0
0°-40°	1837.6	44.0
0°-60°	3244.4	77.6
0°-90°	4179.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4179.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1460	1460	1460	1460	1460	
5°	1444	1448	1458	1464	1466	137
15°	1365	1381	1407	1426	1432	384
25°	1218	1248	1298	1333	1345	560
35°	1026	1069	1141	1200	1218	640
45°	807	865	960	1038	1063	624
55°	593	659	766	853	883	531
65°	387	452	558	635	663	383
75°	196	254	327	385	397	209
85°	46	56	58	50	46	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1460.1	1460.1	1460.1	1460.1	1460.1
2.5°	1452.2	1454.2	1460.1	1464.1	1464.1
5°	1444.3	1448.2	1458.2	1464.1	1466.1
7.5°	1432.4	1438.3	1452.2	1460.1	1462.1
10°	1414.5	1422.4	1440.3	1452.2	1456.2
12.5°	1392.7	1404.6	1426.4	1442.3	1446.3
15°	1364.9	1380.8	1406.6	1426.4	1432.4
17.5°	1333.2	1353.0	1384.8	1408.6	1416.5
20°	1299.4	1319.3	1359.0	1386.7	1396.7
22.5°	1259.8	1285.6	1331.2	1362.9	1370.9
25°	1218.1	1247.9	1297.5	1333.2	1345.1
27.5°	1172.5	1208.2	1261.8	1305.4	1315.3
30°	1124.9	1162.6	1224.1	1271.7	1283.6
32.5°	1075.3	1118.9	1184.4	1237.9	1253.8
35°	1025.7	1069.3	1140.7	1200.3	1218.1
37.5°	968.1	1019.7	1099.1	1160.6	1182.4
40°	918.5	968.1	1053.4	1120.9	1142.7
42.5°	863.0	916.6	1005.8	1079.2	1105.0
45°	807.4	865.0	960.2	1037.6	1063.4
47.5°	755.9	813.4	912.6	993.9	1019.7
50°	702.3	761.8	865.0	948.3	974.1
52.5°	644.8	710.2	817.4	900.7	930.4
55°	593.2	658.7	765.8	853.1	882.8
57.5°	539.6	607.1	718.2	801.5	829.3
60°	490.0	555.5	664.6	745.9	777.7
62.5°	436.5	503.9	611.0	690.4	720.2
65°	386.9	452.3	557.5	634.8	662.6
67.5°	337.3	402.7	501.9	575.3	607.1
70°	287.7	353.1	444.4	515.8	543.6
72.5°	244.0	301.6	388.8	454.3	480.1
75°	196.4	253.9	327.3	384.9	396.8
77.5°	152.8	204.3	265.8	291.6	295.6
80°	113.1	152.8	194.4	200.4	200.4
82.5°	75.4	105.1	121.0	123.0	121.0
85°	45.6	55.5	57.5	49.6	45.6
87.5°	15.9	15.9	9.9	6.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)