

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: P388059

Luminaire Tested: **22CZ2-50VHE-SQR-UNV-L935-CD1-SDWPD1-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: P388059
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4036.5 lumens
Efficiency: N/A
Efficacy: 111.5 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

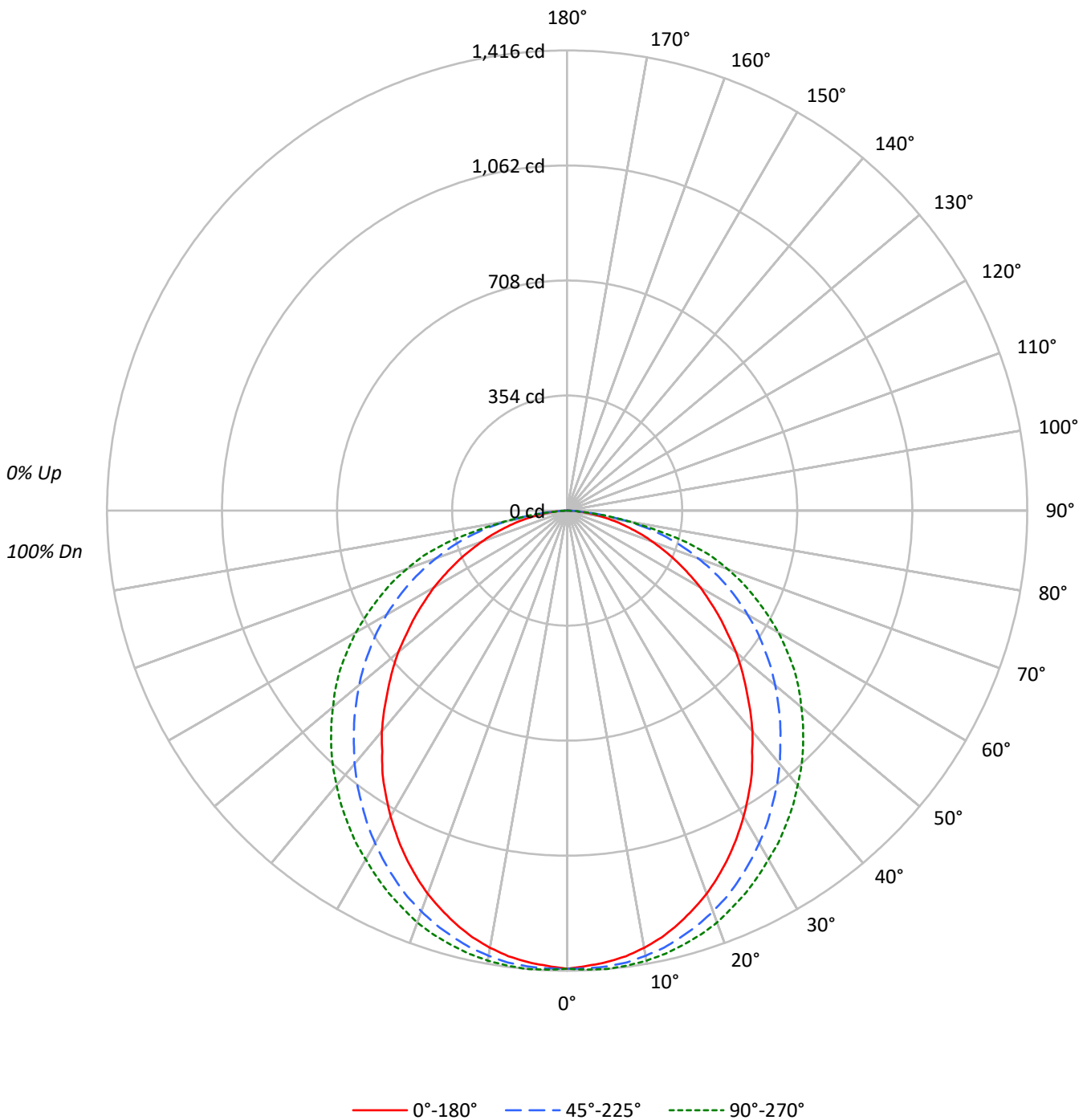
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3794	3794	3794
5°	3767	3804	3824
10°	3733	3801	3842
15°	3672	3784	3853
20°	3594	3758	3862
25°	3493	3720	3857
30°	3375	3673	3851
35°	3254	3619	3864
40°	3116	3574	3876
45°	2967	3529	3908
50°	2839	3497	3938
55°	2687	3469	4000
60°	2547	3454	4042
65°	2379	3428	4074
70°	2186	3376	4130
75°	1972	3287	3984
80°	1692	2910	2999
85°	1362	1717	1362



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	3.3
10°-20°	382.2	9.5
20°-30°	574.0	14.2
30°-40°	684.6	17.0
40°-50°	707.8	17.5
50°-60°	650.8	16.1
60°-70°	518.1	12.8
70°-80°	316.5	7.8
80°-90°	68.8	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°	1089.9	27.0
0°-40°	1774.5	44.0
0°-60°	3133.1	77.6
0°-90°	4036.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4036.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1410	1410	1410	1410	1410	
5°	1395	1399	1408	1414	1416	132
15°	1318	1333	1358	1378	1383	371
25°	1176	1205	1253	1287	1299	541
35°	990	1033	1102	1159	1176	618
45°	780	835	927	1002	1027	603
55°	573	636	740	824	852	512
65°	374	437	538	613	640	370
75°	190	245	316	372	383	202
85°	44	54	56	48	44	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1410.0	1410.0	1410.0	1410.0	1410.0
2.5°	1402.4	1404.3	1410.0	1413.9	1413.9
5°	1394.7	1398.6	1408.1	1413.9	1415.8
7.5°	1383.2	1389.0	1402.4	1410.0	1412.0
10°	1366.0	1373.6	1390.9	1402.4	1406.2
12.5°	1344.9	1356.4	1377.5	1392.8	1396.6
15°	1318.1	1333.4	1358.3	1377.5	1383.2
17.5°	1287.4	1306.6	1337.2	1360.2	1367.9
20°	1254.9	1274.0	1312.3	1339.2	1348.7
22.5°	1216.5	1241.5	1285.5	1316.2	1323.8
25°	1176.3	1205.1	1252.9	1287.4	1298.9
27.5°	1132.3	1166.7	1218.5	1260.6	1270.2
30°	1086.3	1122.7	1182.1	1228.0	1239.5
32.5°	1038.4	1080.5	1143.7	1195.5	1210.8
35°	990.5	1032.6	1101.6	1159.1	1176.3
37.5°	934.9	984.7	1061.4	1120.8	1141.8
40°	887.0	934.9	1017.3	1082.4	1103.5
42.5°	833.4	885.1	971.3	1042.2	1067.1
45°	779.7	835.3	927.3	1002.0	1026.9
47.5°	729.9	785.5	881.3	959.8	984.7
50°	678.2	735.7	835.3	915.8	940.7
52.5°	622.6	685.9	789.3	869.8	898.5
55°	572.8	636.1	739.5	823.8	852.5
57.5°	521.1	586.2	693.5	774.0	800.8
60°	473.2	536.4	641.8	720.3	751.0
62.5°	421.5	486.6	590.1	666.7	695.4
65°	373.6	436.8	538.3	613.1	639.9
67.5°	325.7	388.9	484.7	555.6	586.2
70°	277.8	341.0	429.1	498.1	524.9
72.5°	235.6	291.2	375.5	438.7	463.6
75°	189.7	245.2	316.1	371.7	383.2
77.5°	147.5	197.3	256.7	281.6	285.5
80°	109.2	147.5	187.8	193.5	193.5
82.5°	72.8	101.5	116.9	118.8	116.9
85°	44.1	53.6	55.6	47.9	44.1
87.5°	15.3	15.3	9.6	5.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)