

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: P388062

Luminaire Tested: **22CZ2-50VHE-SQR-UNV-L940-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: P388062
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-SDWPD1-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: 4078.2 lumens
Efficiency: N/A
Efficacy: 112.7 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

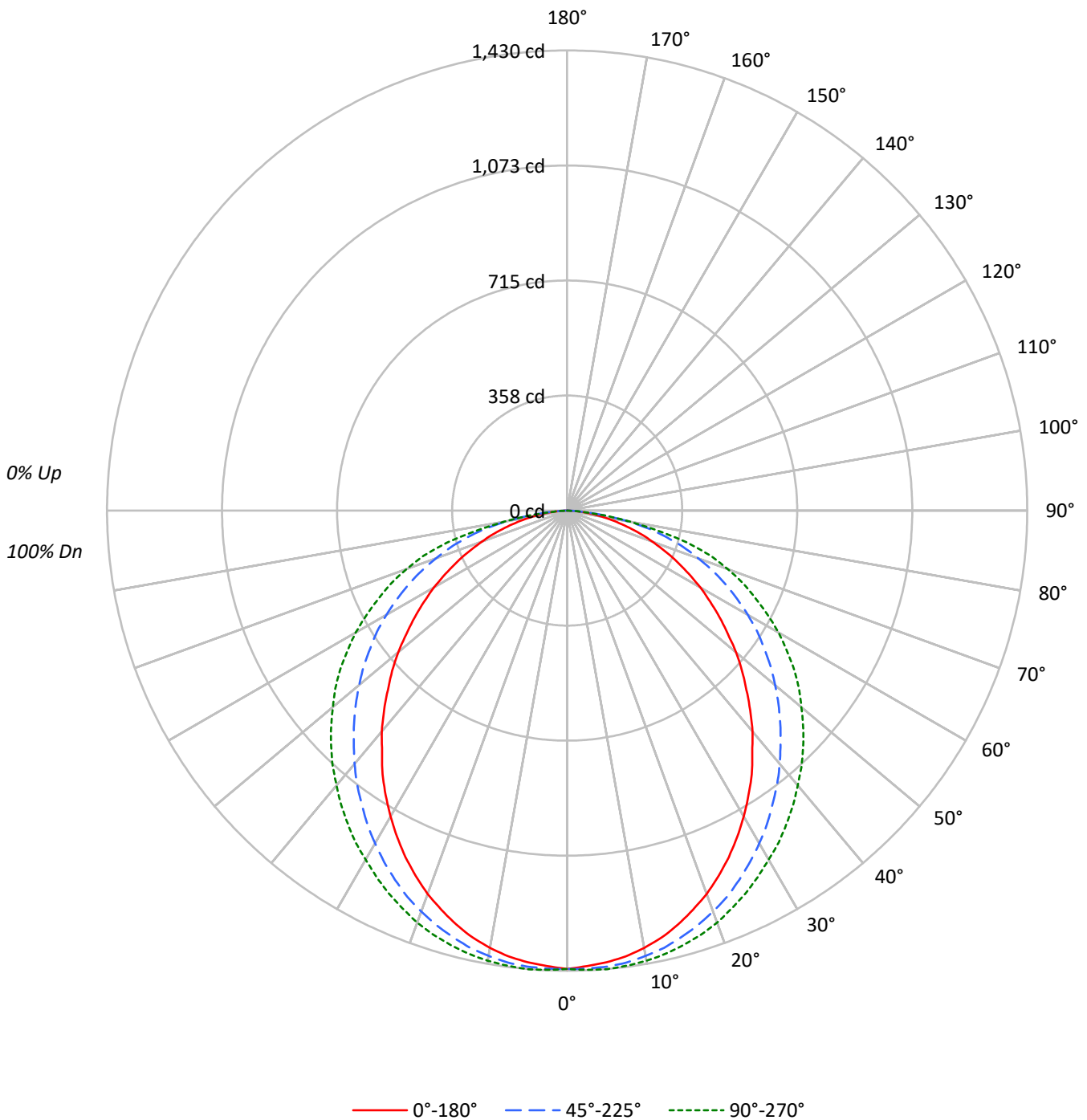
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3834	3834	3834
5°	3806	3843	3864
10°	3771	3840	3882
15°	3710	3823	3893
20°	3631	3797	3902
25°	3529	3759	3896
30°	3410	3711	3891
35°	3287	3656	3904
40°	3148	3610	3916
45°	2998	3565	3948
50°	2869	3533	3979
55°	2715	3505	4041
60°	2573	3490	4084
65°	2403	3463	4117
70°	2209	3412	4173
75°	1992	3321	4025
80°	1709	2940	3030
85°	1374	1732	1374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.1	3.3
10°-20°	386.1	9.5
20°-30°	580.0	14.2
30°-40°	691.7	17.0
40°-50°	715.1	17.5
50°-60°	657.5	16.1
60°-70°	523.4	12.8
70°-80°	319.8	7.8
80°-90°	69.5	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°	1101.2	27.0
0°-40°	1792.8	44.0
0°-60°	3165.5	77.6
0°-90°	4078.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4078.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1425	1425	1425	1425	1425	
5°	1409	1413	1423	1428	1430	134
15°	1332	1347	1372	1392	1398	375
25°	1188	1218	1266	1301	1312	547
35°	1001	1043	1113	1171	1188	624
45°	788	844	937	1012	1038	609
55°	579	643	747	832	861	518
65°	377	441	544	619	646	374
75°	192	248	319	376	387	204
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°	1424.6	1424.6	1424.6	1424.6	1424.6
2.5°	1416.9	1418.8	1424.6	1428.5	1428.5
5°	1409.1	1413.0	1422.7	1428.5	1430.4
7.5°	1397.5	1403.3	1416.9	1424.6	1426.5
10°	1380.1	1387.8	1405.3	1416.9	1420.7
12.5°	1358.8	1370.4	1391.7	1407.2	1411.1
15°	1331.7	1347.2	1372.4	1391.7	1397.5
17.5°	1300.7	1320.1	1351.1	1374.3	1382.0
20°	1267.8	1287.2	1325.9	1353.0	1362.7
22.5°	1229.1	1254.3	1298.8	1329.8	1337.5
25°	1188.5	1217.5	1265.9	1300.7	1312.3
27.5°	1143.9	1178.8	1231.1	1273.6	1283.3
30°	1097.5	1134.3	1194.3	1240.7	1252.3
32.5°	1049.1	1091.7	1155.6	1207.8	1223.3
35°	1000.7	1043.3	1113.0	1171.0	1188.5
37.5°	944.6	994.9	1072.3	1132.3	1153.6
40°	896.2	944.6	1027.8	1093.6	1114.9
42.5°	842.0	894.3	981.4	1053.0	1078.1
45°	787.8	843.9	936.8	1012.3	1037.5
47.5°	737.5	793.6	890.4	969.7	994.9
50°	685.2	743.3	843.9	925.2	950.4
52.5°	629.1	693.0	797.5	878.8	907.8
55°	578.7	642.6	747.1	832.3	861.3
57.5°	526.5	592.3	700.7	782.0	809.1
60°	478.1	542.0	648.4	727.8	758.8
62.5°	425.8	491.6	596.2	673.6	702.6
65°	377.4	441.3	543.9	619.4	646.5
67.5°	329.1	392.9	489.7	561.3	592.3
70°	280.7	344.5	433.6	503.3	530.4
72.5°	238.1	294.2	379.4	443.3	468.4
75°	191.6	247.8	319.4	375.5	387.1
77.5°	149.0	199.4	259.4	284.5	288.4
80°	110.3	149.0	189.7	195.5	195.5
82.5°	73.6	102.6	118.1	120.0	118.1
85°	44.5	54.2	56.1	48.4	44.5
87.5°	15.5	15.5	9.7	5.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)