

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: P388065

Luminaire Tested: **22CZ2-50VHE-SQR-UNV-L950-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: P388065
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-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4328.7 lumens
Efficiency: N/A
Efficacy: 119.6 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

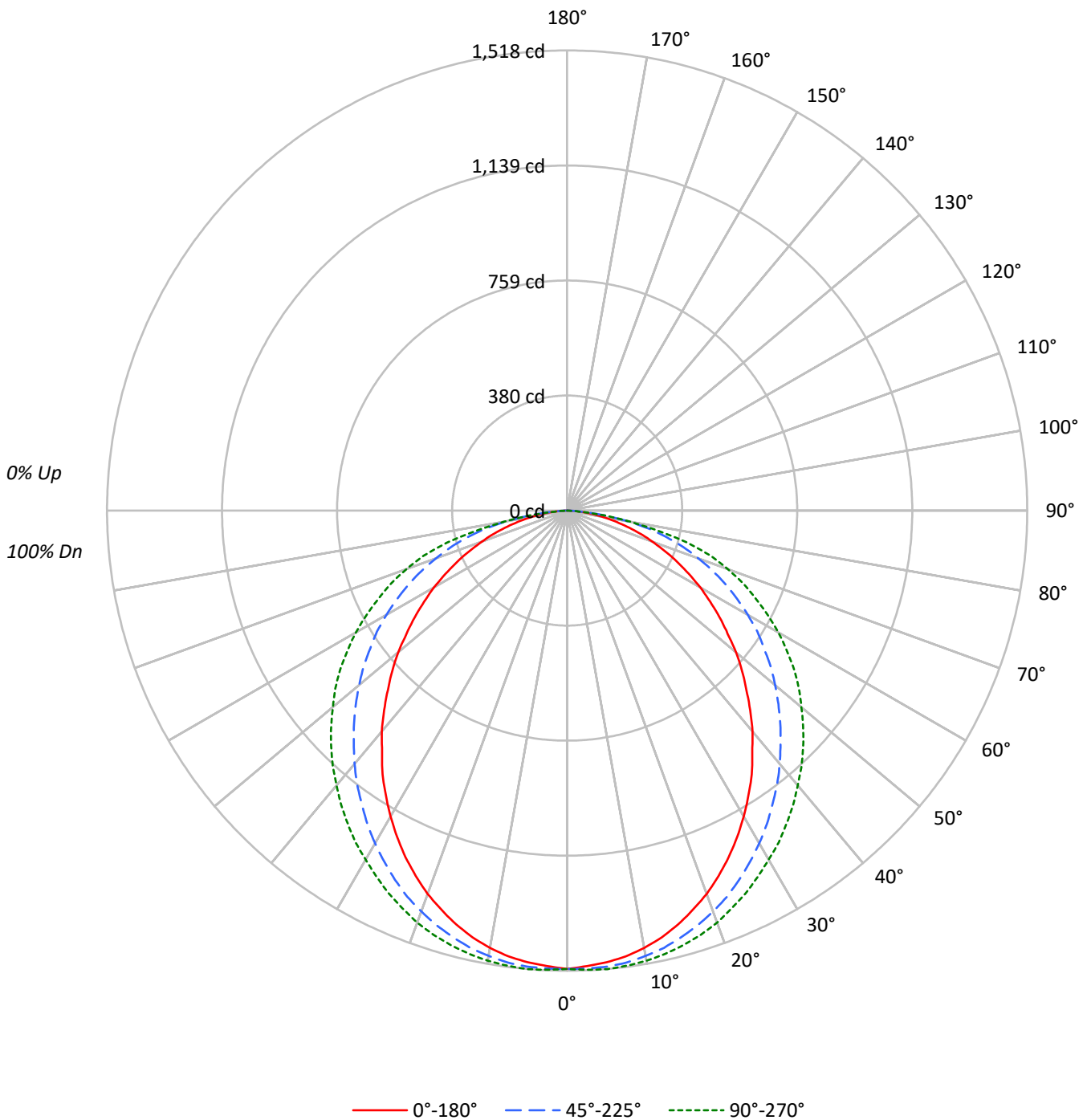
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4069	4069	4069
5°	4040	4079	4101
10°	4003	4076	4121
15°	3938	4058	4133
20°	3854	4030	4142
25°	3746	3989	4136
30°	3620	3939	4131
35°	3489	3881	4144
40°	3341	3832	4157
45°	3182	3784	4191
50°	3045	3750	4223
55°	2882	3720	4290
60°	2731	3704	4335
65°	2551	3676	4369
70°	2344	3621	4429
75°	2115	3525	4272
80°	1815	3119	3216
85°	1460	1840	1460



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.4	3.3
10°-20°	409.9	9.5
20°-30°	615.6	14.2
30°-40°	734.2	17.0
40°-50°	759.1	17.5
50°-60°	697.9	16.1
60°-70°	555.6	12.8
70°-80°	339.4	7.8
80°-90°	73.8	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°	1168.8	27.0
0°-40°	1903.0	44.0
0°-60°	3359.9	77.6
0°-90°	4328.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4328.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1496	1500	1510	1516	1518	142
15°	1414	1430	1457	1477	1483	398
25°	1262	1292	1344	1381	1393	580
35°	1062	1107	1181	1243	1262	663
45°	836	896	994	1074	1101	647
55°	614	682	793	883	914	549
65°	401	468	577	657	686	397
75°	203	263	339	399	411	217
85°	47	58	60	51	47	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1512.1	1512.1	1512.1	1512.1	1512.1
2.5°	1503.9	1506.0	1512.1	1516.2	1516.2
5°	1495.7	1499.8	1510.1	1516.2	1518.3
7.5°	1483.4	1489.5	1503.9	1512.1	1514.2
10°	1464.9	1473.1	1491.6	1503.9	1508.0
12.5°	1442.3	1454.6	1477.2	1493.6	1497.7
15°	1413.5	1429.9	1456.6	1477.2	1483.4
17.5°	1380.6	1401.2	1434.0	1458.7	1466.9
20°	1345.7	1366.2	1407.3	1436.1	1446.4
22.5°	1304.6	1331.3	1378.6	1411.4	1419.7
25°	1261.5	1292.3	1343.6	1380.6	1393.0
27.5°	1214.2	1251.2	1306.7	1351.9	1362.1
30°	1164.9	1203.9	1267.6	1316.9	1329.3
32.5°	1113.5	1158.7	1226.5	1282.0	1298.5
35°	1062.2	1107.4	1181.3	1243.0	1261.5
37.5°	1002.6	1056.0	1138.2	1201.9	1224.5
40°	951.2	1002.6	1090.9	1160.8	1183.4
42.5°	893.7	949.2	1041.6	1117.7	1144.4
45°	836.2	895.8	994.4	1074.5	1101.2
47.5°	782.8	842.3	945.1	1029.3	1056.0
50°	727.3	788.9	895.8	982.1	1008.8
52.5°	667.7	735.5	846.5	932.7	963.6
55°	614.3	682.1	793.0	883.4	914.3
57.5°	558.8	628.7	743.7	830.0	858.8
60°	507.5	575.3	688.3	772.5	805.4
62.5°	452.0	521.8	632.8	715.0	745.8
65°	400.6	468.4	577.3	657.4	686.2
67.5°	349.3	417.1	519.8	595.8	628.7
70°	297.9	365.7	460.2	534.2	562.9
72.5°	252.7	312.3	402.7	470.5	497.2
75°	203.4	263.0	339.0	398.6	410.9
77.5°	158.2	211.6	275.3	302.0	306.1
80°	117.1	158.2	201.3	207.5	207.5
82.5°	78.1	108.9	125.3	127.4	125.3
85°	47.3	57.5	59.6	51.4	47.3
87.5°	16.4	16.4	10.3	6.2	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)