

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: P388042

Luminaire Tested: **22CZ2-44VHE-SQR-UNV-L950-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: P388042
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: 22CZ2-44VHE-SQR-UNV-L950-CD1-SWPD1-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: 3973.1 lumens
Efficiency: N/A
Efficacy: 121.9 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

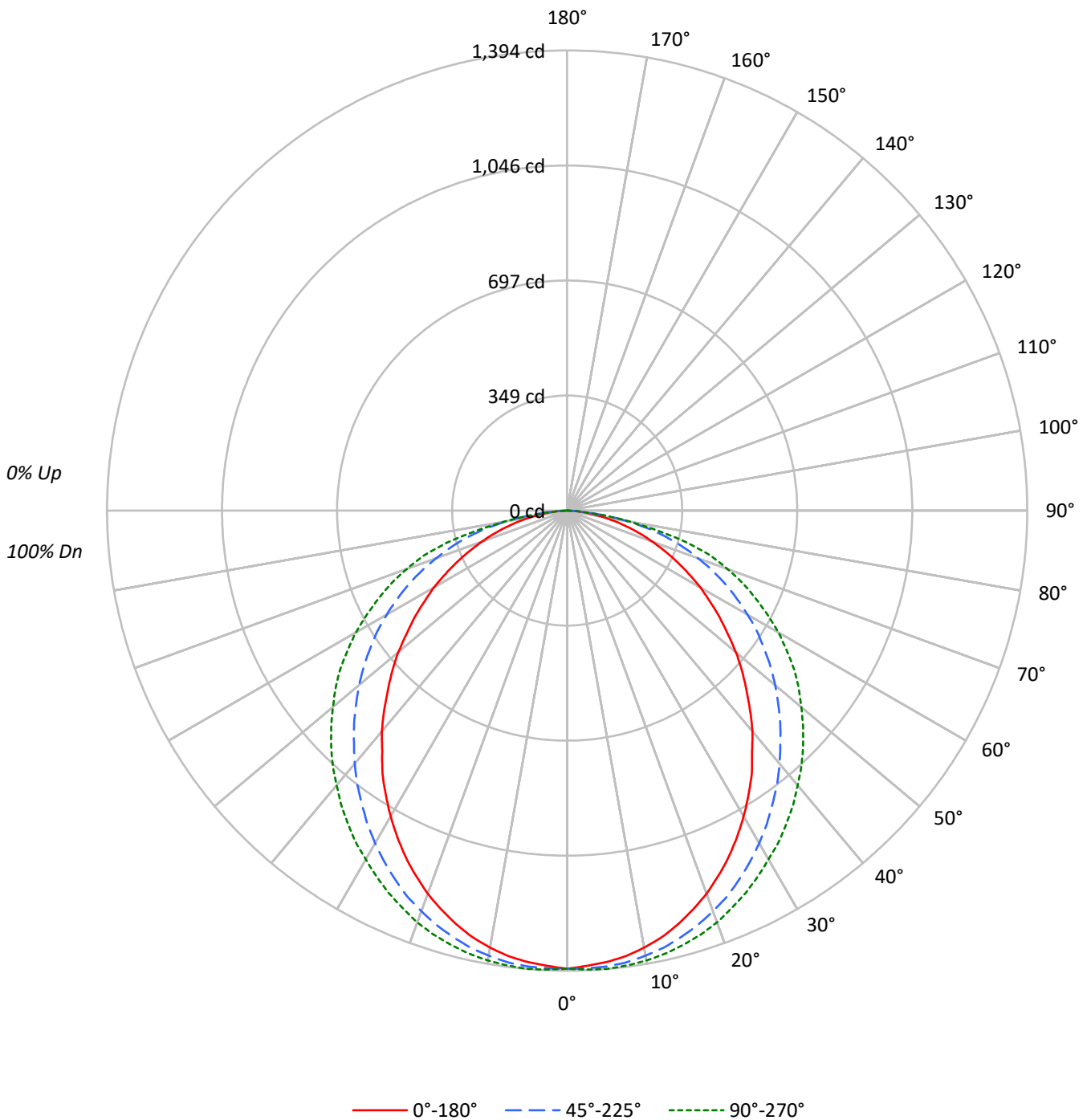
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3735	3735	3735
5°	3708	3744	3764
10°	3674	3741	3782
15°	3614	3725	3793
20°	3537	3699	3802
25°	3438	3662	3796
30°	3322	3615	3791
35°	3203	3562	3803
40°	3067	3517	3816
45°	2921	3473	3847
50°	2794	3442	3876
55°	2645	3415	3937
60°	2507	3400	3978
65°	2341	3374	4010
70°	2151	3323	4065
75°	1941	3235	3921
80°	1666	2864	2952
85°	1340	1689	1340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	3.3
10°-20°	376.2	9.5
20°-30°	565.0	14.2
30°-40°	673.9	17.0
40°-50°	696.7	17.5
50°-60°	640.5	16.1
60°-70°	509.9	12.8
70°-80°	311.5	7.8
80°-90°	67.7	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°	1072.8	27.0
0°-40°	1746.6	44.0
0°-60°	3083.9	77.6
0°-90°	3973.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3973.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1373	1377	1386	1392	1394	130
15°	1297	1312	1337	1356	1362	365
25°	1158	1186	1233	1267	1278	533
35°	975	1016	1084	1141	1158	608
45°	768	822	913	986	1011	594
55°	564	626	728	811	839	504
65°	368	430	530	603	630	364
75°	187	241	311	366	377	199
85°	43	53	55	47	43	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1387.9	1387.9	1387.9	1387.9	1387.9
2.5°	1380.4	1382.2	1387.9	1391.7	1391.7
5°	1372.8	1376.6	1386.0	1391.7	1393.6
7.5°	1361.5	1367.2	1380.4	1387.9	1389.8
10°	1344.5	1352.1	1369.0	1380.4	1384.1
12.5°	1323.8	1335.1	1355.8	1370.9	1374.7
15°	1297.4	1312.5	1337.0	1355.8	1361.5
17.5°	1267.2	1286.1	1316.2	1338.9	1346.4
20°	1235.2	1254.0	1291.7	1318.1	1327.6
22.5°	1197.4	1222.0	1265.3	1295.5	1303.0
25°	1157.8	1186.1	1233.3	1267.2	1278.5
27.5°	1114.5	1148.4	1199.3	1240.8	1250.2
30°	1069.2	1105.0	1163.5	1208.8	1220.1
32.5°	1022.1	1063.6	1125.8	1176.7	1191.8
35°	974.9	1016.4	1084.3	1140.9	1157.8
37.5°	920.2	969.3	1044.7	1103.2	1123.9
40°	873.1	920.2	1001.3	1065.4	1086.2
42.5°	820.3	871.2	956.1	1025.8	1050.4
45°	767.5	822.2	912.7	986.2	1010.8
47.5°	718.5	773.2	867.4	944.8	969.3
50°	667.5	724.1	822.2	901.4	925.9
52.5°	612.9	675.1	776.9	856.1	884.4
55°	563.8	626.1	727.9	810.9	839.2
57.5°	512.9	577.0	682.6	761.8	788.2
60°	465.8	528.0	631.7	709.0	739.2
62.5°	414.9	479.0	580.8	656.2	684.5
65°	367.7	429.9	529.9	603.4	629.8
67.5°	320.6	382.8	477.1	546.9	577.0
70°	273.4	335.7	422.4	490.3	516.7
72.5°	231.9	286.6	369.6	431.8	456.3
75°	186.7	241.4	311.1	365.8	377.1
77.5°	145.2	194.2	252.7	277.2	281.0
80°	107.5	145.2	184.8	190.5	190.5
82.5°	71.7	99.9	115.0	116.9	115.0
85°	43.4	52.8	54.7	47.1	43.4
87.5°	15.1	15.1	9.4	5.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)