

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: P388035

Luminaire Tested: **22CZ2-44VHE-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: P388035
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-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: 3660.1 lumens
Efficiency: N/A
Efficacy: 112.3 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

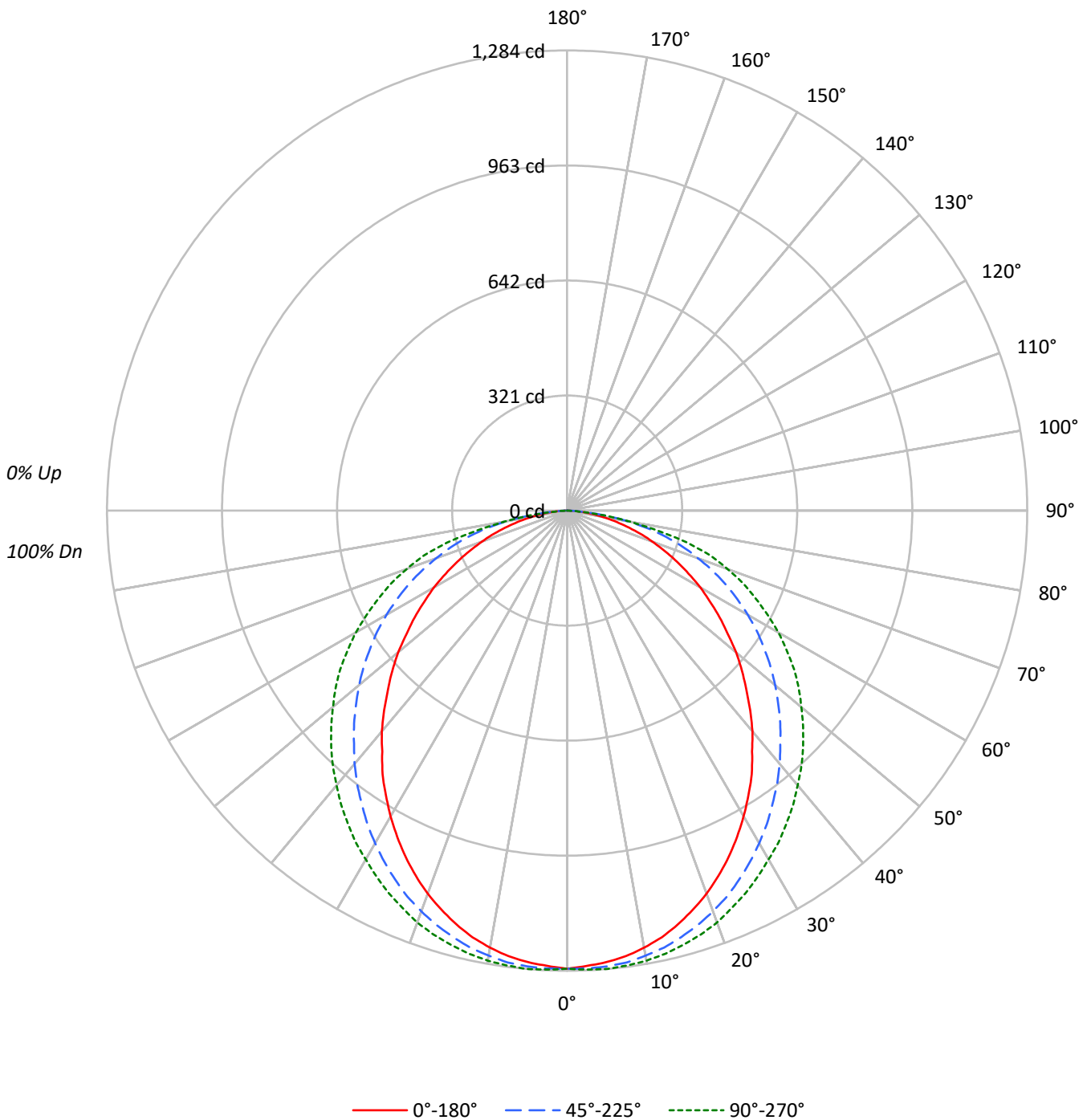
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3441	3441	3441
5°	3416	3449	3468
10°	3384	3446	3484
15°	3330	3431	3494
20°	3258	3408	3502
25°	3167	3373	3497
30°	3061	3330	3493
35°	2950	3281	3504
40°	2825	3240	3515
45°	2691	3200	3543
50°	2575	3171	3571
55°	2437	3146	3627
60°	2309	3132	3665
65°	2157	3108	3694
70°	1982	3061	3745
75°	1788	2980	3612
80°	1534	2638	2720
85°	1235	1556	1235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	3.3
10°-20°	346.6	9.5
20°-30°	520.5	14.2
30°-40°	620.8	17.0
40°-50°	641.8	17.5
50°-60°	590.1	16.1
60°-70°	469.8	12.8
70°-80°	287.0	7.8
80°-90°	62.4	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°	988.3	27.0
0°-40°	1609.0	44.0
0°-60°	2840.9	77.6
0°-90°	3660.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3660.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1279	1279	1279	1279	1279	
5°	1265	1268	1277	1282	1284	120
15°	1195	1209	1232	1249	1254	337
25°	1067	1093	1136	1167	1178	491
35°	898	936	999	1051	1067	560
45°	707	757	841	908	931	547
55°	519	577	670	747	773	465
65°	339	396	488	556	580	336
75°	172	222	287	337	347	183
85°	40	49	50	43	40	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1278.6	1278.6	1278.6	1278.6	1278.6
2.5°	1271.6	1273.3	1278.6	1282.0	1282.0
5°	1264.7	1268.1	1276.8	1282.0	1283.8
7.5°	1254.2	1259.5	1271.6	1278.6	1280.3
10°	1238.6	1245.6	1261.2	1271.6	1275.1
12.5°	1219.5	1229.9	1249.0	1262.9	1266.4
15°	1195.2	1209.1	1231.7	1249.0	1254.2
17.5°	1167.4	1184.8	1212.5	1233.4	1240.3
20°	1137.8	1155.2	1190.0	1214.3	1223.0
22.5°	1103.1	1125.7	1165.6	1193.4	1200.4
25°	1066.6	1092.7	1136.1	1167.4	1177.8
27.5°	1026.7	1057.9	1104.8	1143.1	1151.7
30°	985.0	1018.0	1071.8	1113.5	1124.0
32.5°	941.5	979.8	1037.1	1084.0	1097.9
35°	898.1	936.3	998.9	1051.0	1066.6
37.5°	847.7	892.9	962.4	1016.2	1035.4
40°	804.3	847.7	922.4	981.5	1000.6
42.5°	755.7	802.6	880.7	945.0	967.6
45°	707.0	757.4	840.8	908.5	931.1
47.5°	661.9	712.2	799.1	870.3	892.9
50°	615.0	667.1	757.4	830.4	853.0
52.5°	564.6	621.9	715.7	788.7	814.7
55°	519.4	576.7	670.5	747.0	773.0
57.5°	472.5	531.6	628.9	701.8	726.1
60°	429.1	486.4	582.0	653.2	681.0
62.5°	382.2	441.2	535.1	604.5	630.6
65°	338.7	396.1	488.1	555.9	580.2
67.5°	295.3	352.6	439.5	503.8	531.6
70°	251.9	309.2	389.1	451.7	476.0
72.5°	213.7	264.1	340.5	397.8	420.4
75°	172.0	222.4	286.6	337.0	347.4
77.5°	133.8	178.9	232.8	255.4	258.8
80°	99.0	133.8	170.2	175.5	175.5
82.5°	66.0	92.1	106.0	107.7	106.0
85°	40.0	48.6	50.4	43.4	40.0
87.5°	13.9	13.9	8.7	5.2	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)