

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: P387989

Luminaire Tested: **22CZ2-44-SQR-UNV-L935-CD1-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: P387989
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: 22CZ2-44-SQR-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

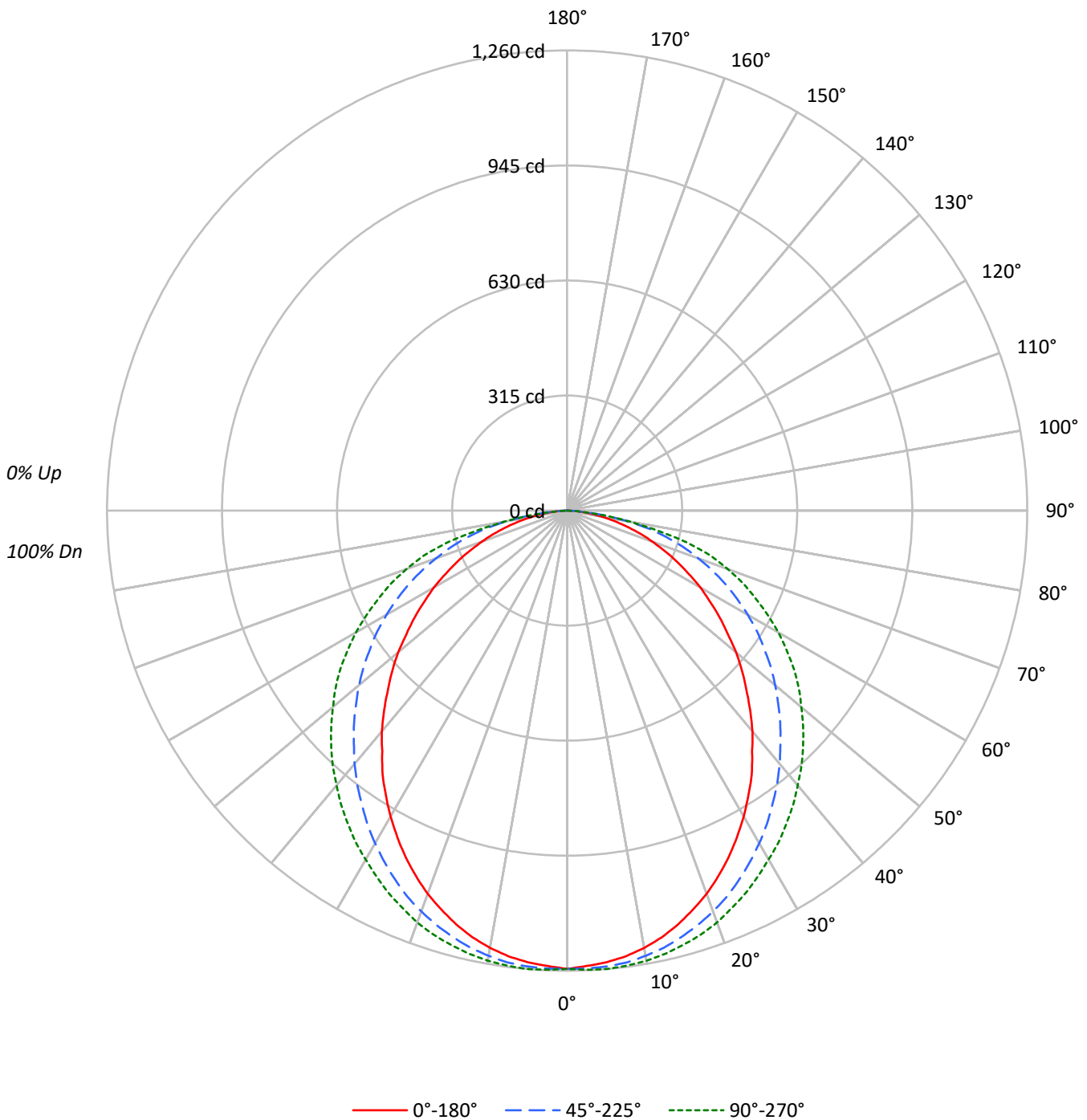
Lumens per Lamp: N/A
Luminaire Lumens: 3592.2 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 42.7
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°	3377	3377	3377
5°	3353	3385	3404
10°	3322	3382	3419
15°	3268	3368	3429
20°	3198	3344	3437
25°	3108	3311	3432
30°	3004	3269	3428
35°	2896	3220	3439
40°	2773	3180	3450
45°	2641	3140	3478
50°	2527	3112	3504
55°	2392	3088	3560
60°	2266	3074	3597
65°	2117	3051	3626
70°	1945	3005	3676
75°	1755	2925	3545
80°	1506	2590	2669
85°	1210	1525	1210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.0	3.3
10°-20°	340.1	9.5
20°-30°	510.8	14.2
30°-40°	609.3	17.0
40°-50°	629.9	17.5
50°-60°	579.1	16.1
60°-70°	461.1	12.8
70°-80°	281.7	7.8
80°-90°	61.2	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°	969.9	27.0
0°-40°	1579.2	44.0
0°-60°	2788.2	77.6
0°-90°	3592.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3592.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1255	1255	1255	1255	1255	
5°	1241	1245	1253	1258	1260	118
15°	1173	1187	1209	1226	1231	330
25°	1047	1072	1115	1146	1156	482
35°	882	919	980	1032	1047	550
45°	694	743	825	892	914	537
55°	510	566	658	733	759	456
65°	332	389	479	546	570	329
75°	169	218	281	331	341	180
85°	39	48	49	43	39	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1254.8	1254.8	1254.8	1254.8	1254.8
2.5°	1248.0	1249.7	1254.8	1258.3	1258.3
5°	1241.2	1244.6	1253.1	1258.3	1260.0
7.5°	1231.0	1236.1	1248.0	1254.8	1256.5
10°	1215.6	1222.4	1237.8	1248.0	1251.4
12.5°	1196.9	1207.1	1225.9	1239.5	1242.9
15°	1173.0	1186.6	1208.8	1225.9	1231.0
17.5°	1145.7	1162.8	1190.1	1210.5	1217.3
20°	1116.7	1133.8	1167.9	1191.8	1200.3
22.5°	1082.6	1104.8	1144.0	1171.3	1178.1
25°	1046.8	1072.4	1115.0	1145.7	1156.0
27.5°	1007.6	1038.3	1084.3	1121.9	1130.4
30°	966.7	999.1	1052.0	1092.9	1103.1
32.5°	924.1	961.6	1017.9	1063.9	1077.5
35°	881.5	919.0	980.3	1031.5	1046.8
37.5°	832.0	876.3	944.5	997.4	1016.1
40°	789.4	832.0	905.3	963.3	982.1
42.5°	741.7	787.7	864.4	927.5	949.7
45°	693.9	743.4	825.2	891.7	913.9
47.5°	649.6	699.0	784.3	854.2	876.3
50°	603.6	654.7	743.4	815.0	837.1
52.5°	554.1	610.4	702.4	774.0	799.6
55°	509.8	566.0	658.1	733.1	758.7
57.5°	463.7	521.7	617.2	688.8	712.7
60°	421.1	477.4	571.2	641.1	668.3
62.5°	375.1	433.1	525.1	593.3	618.9
65°	332.5	388.7	479.1	545.6	569.5
67.5°	289.8	346.1	431.4	494.4	521.7
70°	247.2	303.5	381.9	443.3	467.2
72.5°	209.7	259.2	334.2	390.4	412.6
75°	168.8	218.2	281.3	330.8	341.0
77.5°	131.3	175.6	228.5	250.6	254.0
80°	97.2	131.3	167.1	172.2	172.2
82.5°	64.8	90.4	104.0	105.7	104.0
85°	39.2	47.7	49.4	42.6	39.2
87.5°	13.6	13.6	8.5	5.1	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)