

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: P388011

Luminaire Tested: **22CZ2-44HE-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: P388011
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: 22CZ2-44HE-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: 3536.6 lumens
Efficiency: N/A
Efficacy: 101.0 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

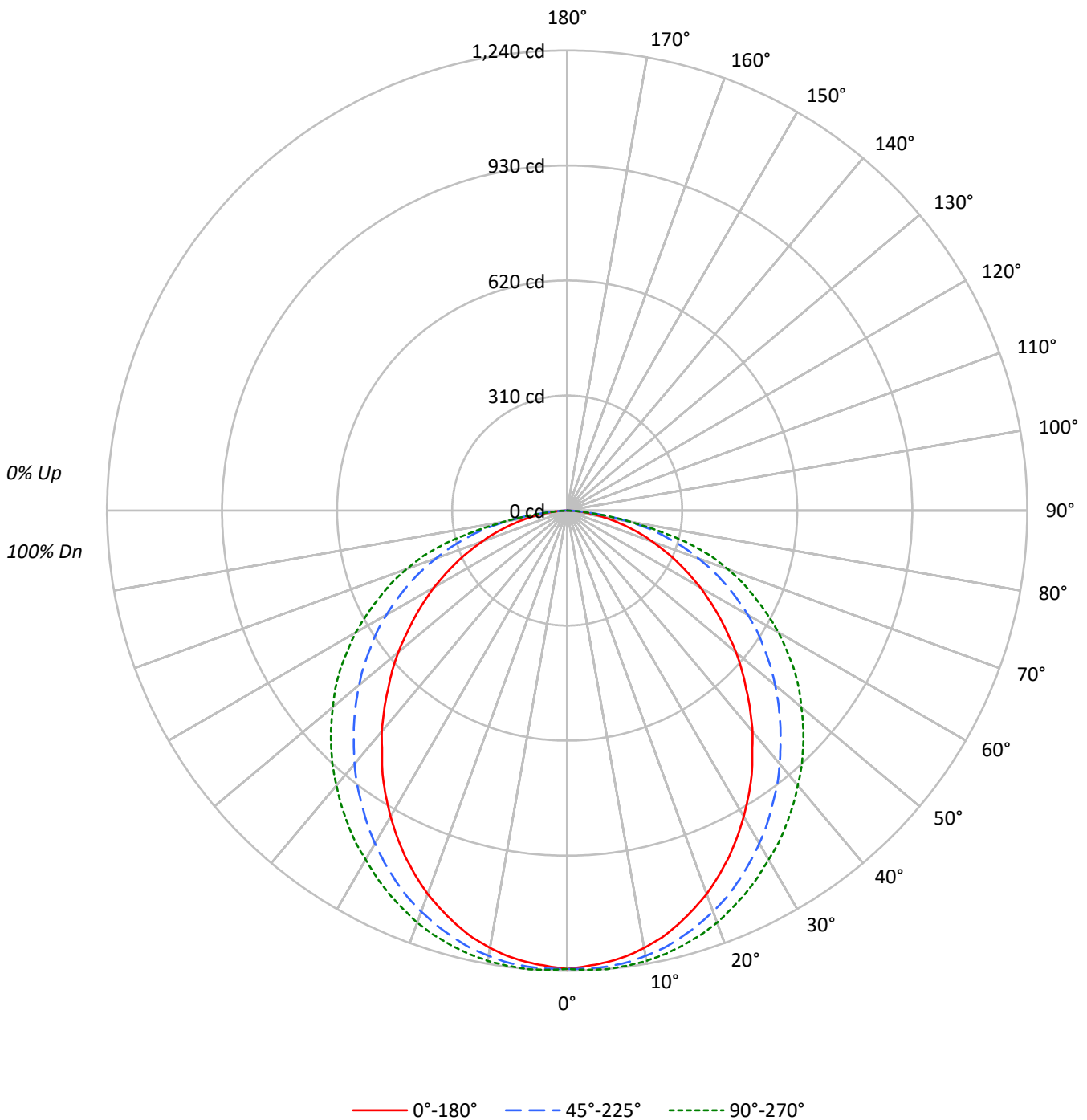
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3324	3324	3324
5°	3301	3333	3351
10°	3270	3330	3367
15°	3217	3316	3376
20°	3149	3293	3384
25°	3060	3260	3379
30°	2957	3218	3375
35°	2851	3171	3386
40°	2730	3131	3397
45°	2600	3092	3424
50°	2488	3064	3450
55°	2355	3040	3505
60°	2231	3026	3541
65°	2084	3004	3570
70°	1915	2958	3618
75°	1728	2880	3490
80°	1483	2549	2627
85°	1192	1504	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	3.3
10°-20°	334.9	9.5
20°-30°	502.9	14.2
30°-40°	599.8	17.0
40°-50°	620.2	17.5
50°-60°	570.2	16.1
60°-70°	453.9	12.8
70°-80°	277.3	7.8
80°-90°	60.3	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°	954.9	27.0
0°-40°	1554.7	44.0
0°-60°	2745.1	77.6
0°-90°	3536.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3536.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1222	1225	1234	1239	1240	116
15°	1155	1168	1190	1207	1212	325
25°	1031	1056	1098	1128	1138	474
35°	868	905	965	1016	1031	541
45°	683	732	812	878	900	528
55°	502	557	648	722	747	449
65°	327	383	472	537	561	324
75°	166	215	277	326	336	177
85°	39	47	49	42	39	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1235.4	1235.4	1235.4	1235.4	1235.4
2.5°	1228.7	1230.4	1235.4	1238.8	1238.8
5°	1222.0	1225.3	1233.7	1238.8	1240.5
7.5°	1211.9	1217.0	1228.7	1235.4	1237.1
10°	1196.8	1203.5	1218.6	1228.7	1232.1
12.5°	1178.3	1188.4	1206.9	1220.3	1223.7
15°	1154.8	1168.3	1190.1	1206.9	1211.9
17.5°	1128.0	1144.8	1171.6	1191.8	1198.5
20°	1099.5	1116.2	1149.8	1173.3	1181.7
22.5°	1065.9	1087.7	1126.3	1153.2	1159.9
25°	1030.6	1055.8	1097.8	1128.0	1138.1
27.5°	992.0	1022.2	1067.6	1104.5	1112.9
30°	951.7	983.6	1035.7	1076.0	1086.0
32.5°	909.8	946.7	1002.1	1047.4	1060.8
35°	867.8	904.7	965.2	1015.5	1030.6
37.5°	819.1	862.8	929.9	982.0	1000.4
40°	777.2	819.1	891.3	948.4	966.9
42.5°	730.2	775.5	851.0	913.1	935.0
45°	683.2	731.9	812.4	877.9	899.7
47.5°	639.5	688.2	772.1	841.0	862.8
50°	594.2	644.6	731.9	802.4	824.2
52.5°	545.5	600.9	691.6	762.1	787.2
55°	501.9	557.3	647.9	721.8	747.0
57.5°	456.6	513.6	607.6	678.1	701.6
60°	414.6	470.0	562.3	631.1	658.0
62.5°	369.3	426.4	517.0	584.1	609.3
65°	327.3	382.7	471.7	537.1	560.6
67.5°	285.4	340.7	424.7	486.8	513.6
70°	243.4	298.8	376.0	436.4	459.9
72.5°	206.5	255.1	329.0	384.4	406.2
75°	166.2	214.9	277.0	325.6	335.7
77.5°	129.2	172.9	224.9	246.7	250.1
80°	95.7	129.2	164.5	169.5	169.5
82.5°	63.8	89.0	102.4	104.1	102.4
85°	38.6	47.0	48.7	42.0	38.6
87.5°	13.4	13.4	8.4	5.0	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)