

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: P388009

Luminaire Tested: **22CZ2-44HE-SQR-UNV-L930-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: P388009
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-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3493.3 lumens
Efficiency: N/A
Efficacy: 99.8 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

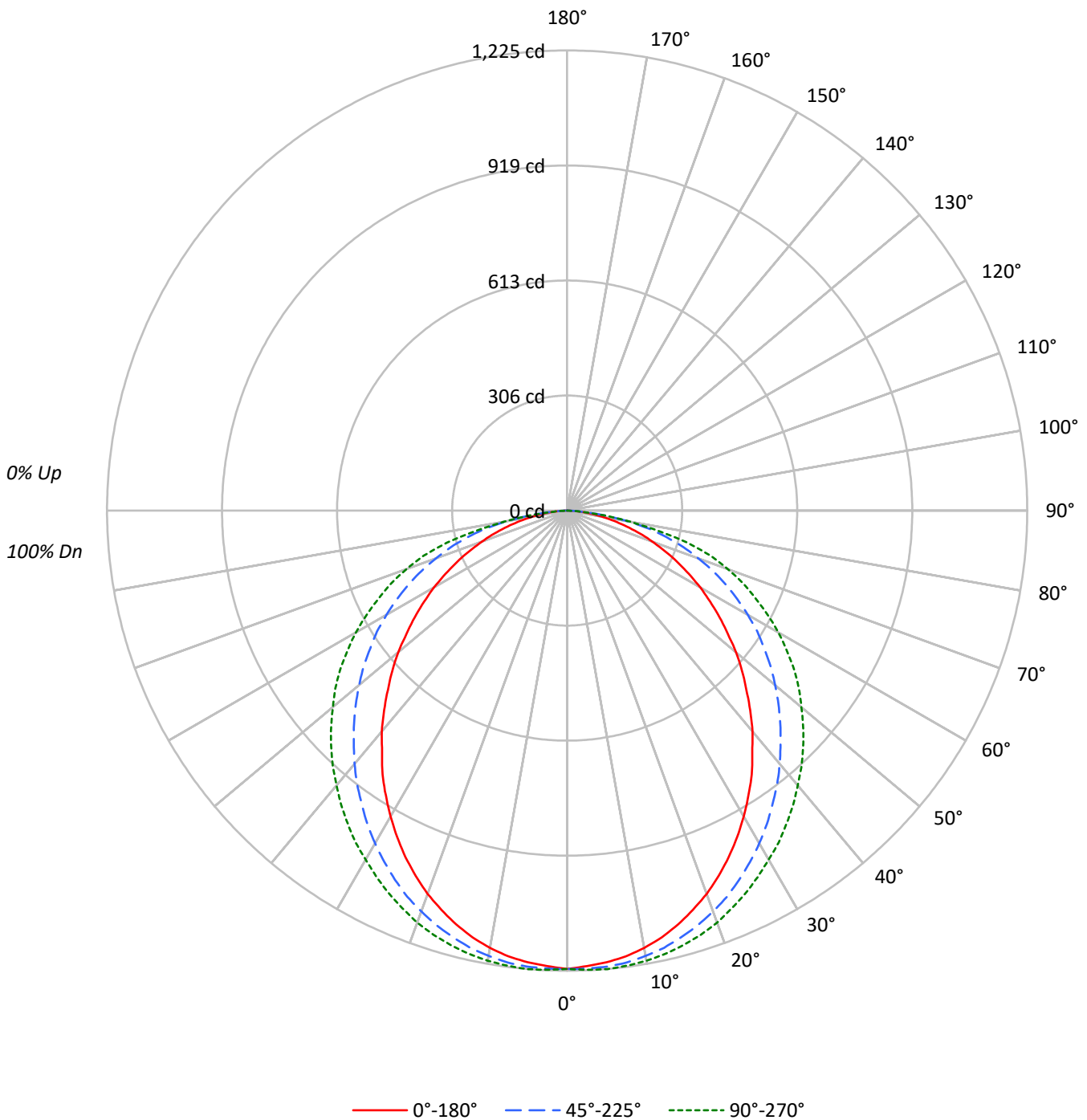
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3284	3284	3284
5°	3260	3292	3310
10°	3230	3289	3325
15°	3178	3275	3335
20°	3110	3252	3342
25°	3023	3219	3338
30°	2921	3179	3333
35°	2816	3132	3344
40°	2697	3093	3355
45°	2568	3054	3382
50°	2457	3026	3408
55°	2326	3003	3461
60°	2204	2989	3498
65°	2059	2967	3526
70°	1891	2922	3574
75°	1706	2845	3448
80°	1464	2518	2596
85°	1176	1485	1176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.7	3.3
10°-20°	330.8	9.5
20°-30°	496.8	14.2
30°-40°	592.5	17.0
40°-50°	612.6	17.5
50°-60°	563.2	16.1
60°-70°	448.4	12.8
70°-80°	273.9	7.8
80°-90°	59.6	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°	943.2	27.0
0°-40°	1535.7	44.0
0°-60°	2711.5	77.6
0°-90°	3493.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3493.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1207	1210	1219	1224	1225	114
15°	1141	1154	1176	1192	1197	321
25°	1018	1043	1084	1114	1124	468
35°	857	894	953	1003	1018	535
45°	675	723	802	867	889	522
55°	496	550	640	713	738	443
65°	323	378	466	531	554	320
75°	164	212	274	322	332	175
85°	38	46	48	42	38	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.3	1220.3	1220.3	1220.3	1220.3
2.5°	1213.7	1215.3	1220.3	1223.6	1223.6
5°	1207.0	1210.3	1218.6	1223.6	1225.3
7.5°	1197.1	1202.1	1213.7	1220.3	1222.0
10°	1182.2	1188.8	1203.7	1213.7	1217.0
12.5°	1163.9	1173.9	1192.1	1205.4	1208.7
15°	1140.7	1154.0	1175.5	1192.1	1197.1
17.5°	1114.2	1130.8	1157.3	1177.2	1183.8
20°	1086.0	1102.6	1135.7	1158.9	1167.2
22.5°	1052.8	1074.4	1112.5	1139.1	1145.7
25°	1018.0	1042.9	1084.3	1114.2	1124.1
27.5°	979.9	1009.7	1054.5	1091.0	1099.3
30°	940.1	971.6	1023.0	1062.8	1072.7
32.5°	898.6	935.1	989.8	1034.6	1047.9
35°	857.2	893.7	953.4	1003.1	1018.0
37.5°	809.1	852.2	918.5	969.9	988.2
40°	767.7	809.1	880.4	936.8	955.0
42.5°	721.2	766.0	840.6	902.0	923.5
45°	674.8	722.9	802.5	867.1	888.7
47.5°	631.7	679.8	762.7	830.7	852.2
50°	586.9	636.7	722.9	792.5	814.1
52.5°	538.9	593.6	683.1	752.7	777.6
55°	495.7	550.5	640.0	712.9	737.8
57.5°	451.0	507.4	600.2	669.8	693.0
60°	409.5	464.2	555.4	623.4	649.9
62.5°	364.8	421.1	510.7	577.0	601.9
65°	323.3	378.0	465.9	530.6	553.8
67.5°	281.9	336.6	419.5	480.8	507.4
70°	240.4	295.1	371.4	431.1	454.3
72.5°	203.9	252.0	325.0	379.7	401.2
75°	164.1	212.2	273.6	321.7	331.6
77.5°	127.7	170.8	222.2	243.7	247.0
80°	94.5	127.7	162.5	167.5	167.5
82.5°	63.0	87.9	101.1	102.8	101.1
85°	38.1	46.4	48.1	41.5	38.1
87.5°	13.3	13.3	8.3	5.0	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)