

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: P388008

Luminaire Tested: **22CZ2-44HE-SQR-UNV-L930-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: P388008
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-SDWPD1-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: 3451.2 lumens
Efficiency: N/A
Efficacy: 98.6 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

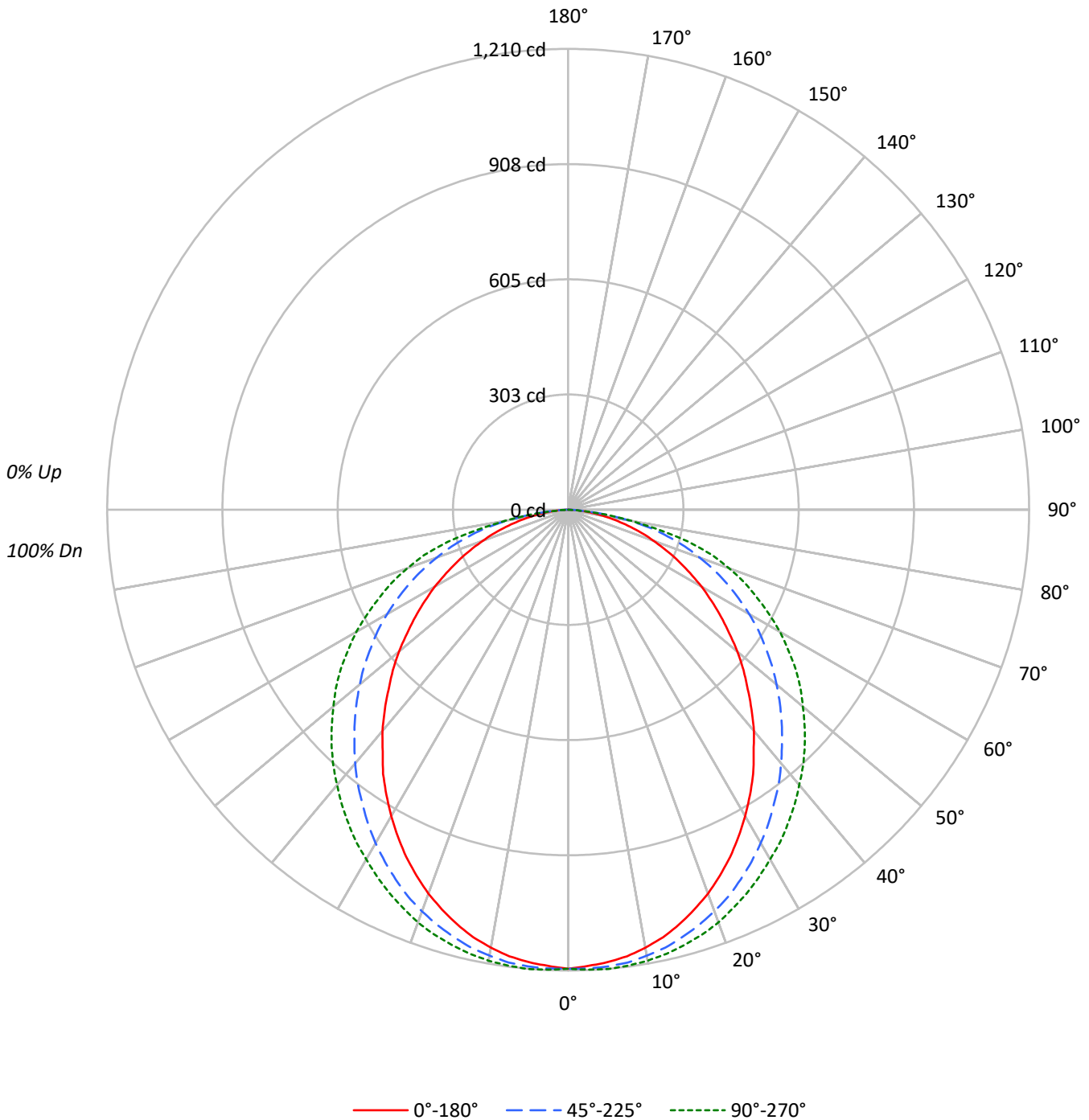
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388008

CATALOG NUMBER: 22CZ2-44HE-SQR-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388008

CATALOG NUMBER: 22CZ2-44HE-SQR-UNV-L930-CD1-SDWPD1-U

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°	3244	3244	3244
5°	3221	3252	3270
10°	3191	3249	3285
15°	3140	3236	3295
20°	3072	3213	3302
25°	2986	3181	3298
30°	2886	3141	3293
35°	2782	3094	3304
40°	2664	3055	3314
45°	2537	3017	3341
50°	2428	2990	3367
55°	2298	2966	3420
60°	2178	2953	3456
65°	2034	2931	3484
70°	1869	2887	3531
75°	1686	2810	3406
80°	1447	2487	2563
85°	1164	1467	1164



TEST NUMBER: P388008

CATALOG NUMBER: 22CZ2-44HE-SQR-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	3.3
10°-20°	326.8	9.5
20°-30°	490.8	14.2
30°-40°	585.3	17.0
40°-50°	605.2	17.5
50°-60°	556.4	16.1
60°-70°	443.0	12.8
70°-80°	270.6	7.8
80°-90°	58.8	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°	931.9	27.0
0°-40°	1517.2	44.0
0°-60°	2678.8	77.6
0°-90°	3451.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3451.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1206	1206	1206	1206	1206	
5°	1192	1196	1204	1209	1210	113
15°	1127	1140	1161	1178	1183	317
25°	1006	1030	1071	1101	1111	463
35°	847	883	942	991	1006	528
45°	667	714	793	857	878	516
55°	490	544	632	704	729	438
65°	319	374	460	524	547	316
75°	162	210	270	318	328	173
85°	38	46	48	41	38	43
90°	0	0	0	0	0	



TEST NUMBER: P388008

CATALOG NUMBER: 22CZ2-44HE-SQR-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1205.6	1205.6	1205.6	1205.6	1205.6
2.5°	1199.0	1200.7	1205.6	1208.9	1208.9
5°	1192.5	1195.8	1203.9	1208.9	1210.5
7.5°	1182.7	1187.6	1199.0	1205.6	1207.2
10°	1167.9	1174.5	1189.2	1199.0	1202.3
12.5°	1149.9	1159.7	1177.7	1190.8	1194.1
15°	1127.0	1140.1	1161.4	1177.7	1182.7
17.5°	1100.8	1117.1	1143.3	1163.0	1169.6
20°	1072.9	1089.3	1122.0	1145.0	1153.2
22.5°	1040.1	1061.4	1099.1	1125.3	1131.9
25°	1005.7	1030.3	1071.3	1100.8	1110.6
27.5°	968.1	997.6	1041.8	1077.8	1086.0
30°	928.8	959.9	1010.7	1050.0	1059.8
32.5°	887.8	923.8	977.9	1022.1	1035.2
35°	846.9	882.9	941.9	991.0	1005.7
37.5°	799.4	841.9	907.5	958.2	976.3
40°	758.4	799.4	869.8	925.5	943.5
42.5°	712.5	756.8	830.5	891.1	912.4
45°	666.7	714.2	792.8	856.7	878.0
47.5°	624.1	671.6	753.5	820.7	841.9
50°	579.9	629.0	714.2	783.0	804.3
52.5°	532.4	586.4	674.9	743.7	768.2
55°	489.8	543.8	632.3	704.4	728.9
57.5°	445.5	501.2	593.0	661.8	684.7
60°	404.6	458.6	548.7	615.9	642.1
62.5°	360.4	416.1	504.5	570.0	594.6
65°	319.4	373.5	460.3	524.2	547.1
67.5°	278.5	332.5	414.4	475.0	501.2
70°	237.5	291.6	366.9	425.9	448.8
72.5°	201.5	249.0	321.1	375.1	396.4
75°	162.2	209.7	270.3	317.8	327.6
77.5°	126.1	168.7	219.5	240.8	244.1
80°	93.4	126.1	160.5	165.4	165.4
82.5°	62.2	86.8	99.9	101.6	99.9
85°	37.7	45.9	47.5	41.0	37.7
87.5°	13.1	13.1	8.2	4.9	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)