

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: P388012

Luminaire Tested: **22CZ2-44HE-SQR-UNV-L935-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: P388012
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-SWPD1-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: 3579.7 lumens
Efficiency: N/A
Efficacy: 102.3 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

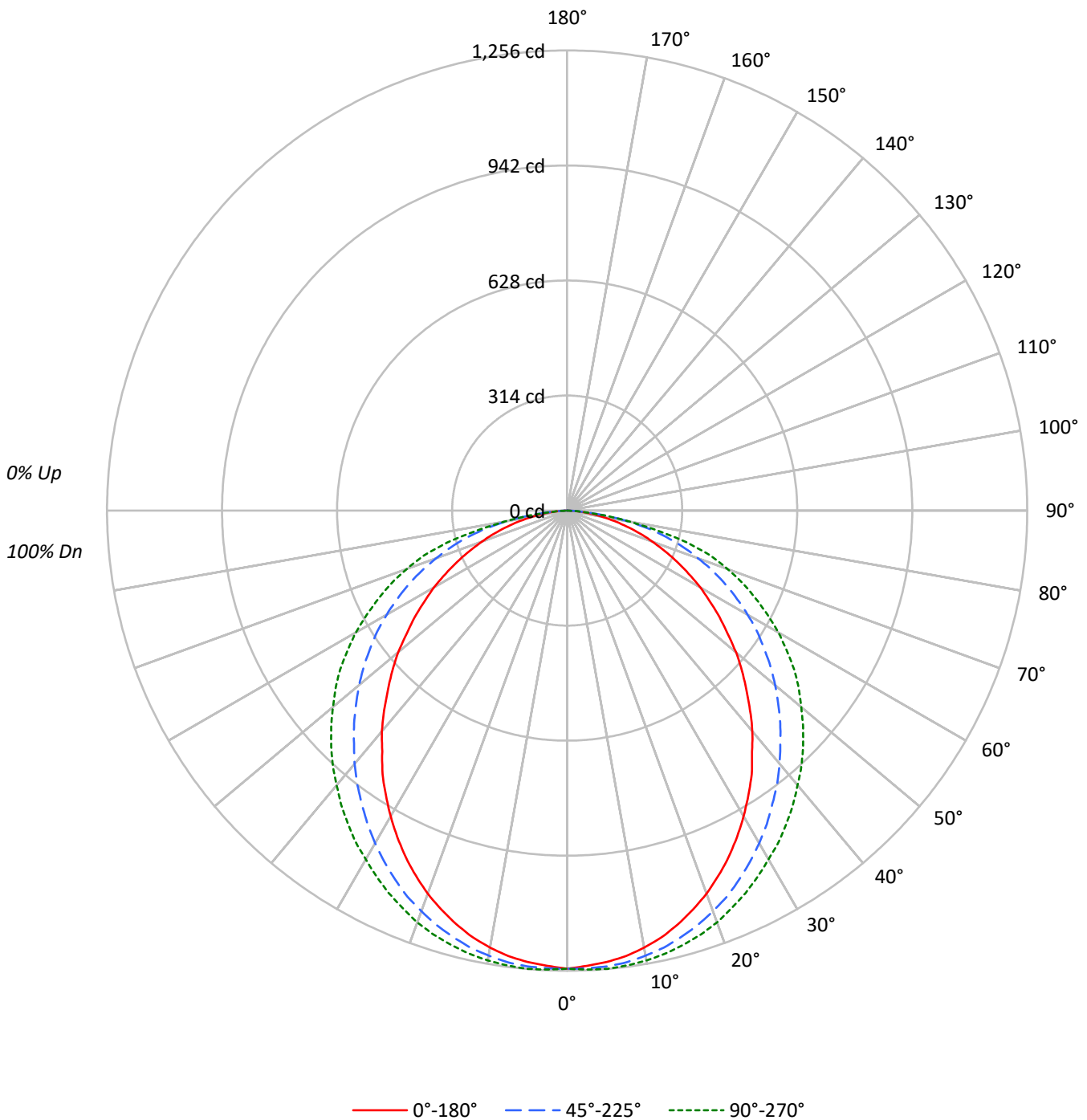
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3365	3365	3365
5°	3341	3373	3392
10°	3310	3371	3408
15°	3256	3356	3417
20°	3187	3333	3425
25°	3097	3299	3420
30°	2993	3257	3416
35°	2886	3209	3427
40°	2763	3169	3438
45°	2632	3129	3466
50°	2518	3101	3492
55°	2383	3077	3547
60°	2259	3063	3584
65°	2110	3040	3613
70°	1939	2995	3663
75°	1749	2914	3533
80°	1500	2580	2659
85°	1207	1522	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.6	3.3
10°-20°	338.9	9.5
20°-30°	509.1	14.2
30°-40°	607.1	17.0
40°-50°	627.7	17.5
50°-60°	577.1	16.1
60°-70°	459.4	12.8
70°-80°	280.7	7.8
80°-90°	61.0	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°	966.6	27.0
0°-40°	1573.7	44.0
0°-60°	2778.5	77.6
0°-90°	3579.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3579.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1250	1250	1250	1250	1250	
5°	1237	1240	1249	1254	1256	117
15°	1169	1182	1205	1222	1227	329
25°	1043	1069	1111	1142	1152	480
35°	878	916	977	1028	1043	548
45°	692	741	822	889	911	535
55°	508	564	656	731	756	454
65°	331	387	477	544	568	328
75°	168	218	280	330	340	179
85°	39	48	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°	1250.5	1250.5	1250.5	1250.5	1250.5
2.5°	1243.7	1245.4	1250.5	1253.9	1253.9
5°	1236.9	1240.3	1248.8	1253.9	1255.6
7.5°	1226.7	1231.8	1243.7	1250.5	1252.2
10°	1211.4	1218.2	1233.5	1243.7	1247.1
12.5°	1192.7	1202.9	1221.6	1235.2	1238.6
15°	1168.9	1182.5	1204.6	1221.6	1226.7
17.5°	1141.7	1158.7	1185.9	1206.3	1213.1
20°	1112.9	1129.8	1163.8	1187.6	1196.1
22.5°	1078.9	1101.0	1140.0	1167.2	1174.0
25°	1043.2	1068.7	1111.2	1141.7	1151.9
27.5°	1004.1	1034.7	1080.6	1118.0	1126.4
30°	963.3	995.6	1048.3	1089.1	1099.3
32.5°	920.9	958.2	1014.3	1060.2	1073.8
35°	878.4	915.8	976.9	1027.9	1043.2
37.5°	829.1	873.3	941.3	993.9	1012.6
40°	786.6	829.1	902.2	959.9	978.6
42.5°	739.1	784.9	861.4	924.3	946.4
45°	691.5	740.8	822.3	888.6	910.7
47.5°	647.3	696.6	781.5	851.2	873.3
50°	601.5	652.4	740.8	812.1	834.2
52.5°	552.2	608.2	700.0	771.4	796.8
55°	508.0	564.1	655.8	730.6	756.1
57.5°	462.1	519.9	615.0	686.4	710.2
60°	419.7	475.7	569.2	638.8	666.0
62.5°	373.8	431.5	523.3	591.3	616.7
65°	331.3	387.4	477.4	543.7	567.5
67.5°	288.8	344.9	429.9	492.7	519.9
70°	246.4	302.4	380.6	441.7	465.5
72.5°	209.0	258.3	333.0	389.1	411.2
75°	168.2	217.5	280.3	329.6	339.8
77.5°	130.8	175.0	227.7	249.8	253.2
80°	96.8	130.8	166.5	171.6	171.6
82.5°	64.6	90.0	103.6	105.3	103.6
85°	39.1	47.6	49.3	42.5	39.1
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)