

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: P388014

Luminaire Tested: **22CZ2-44HE-SQR-UNV-L940-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: P388014
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3573.1 lumens
Efficiency: N/A
Efficacy: 102.1 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

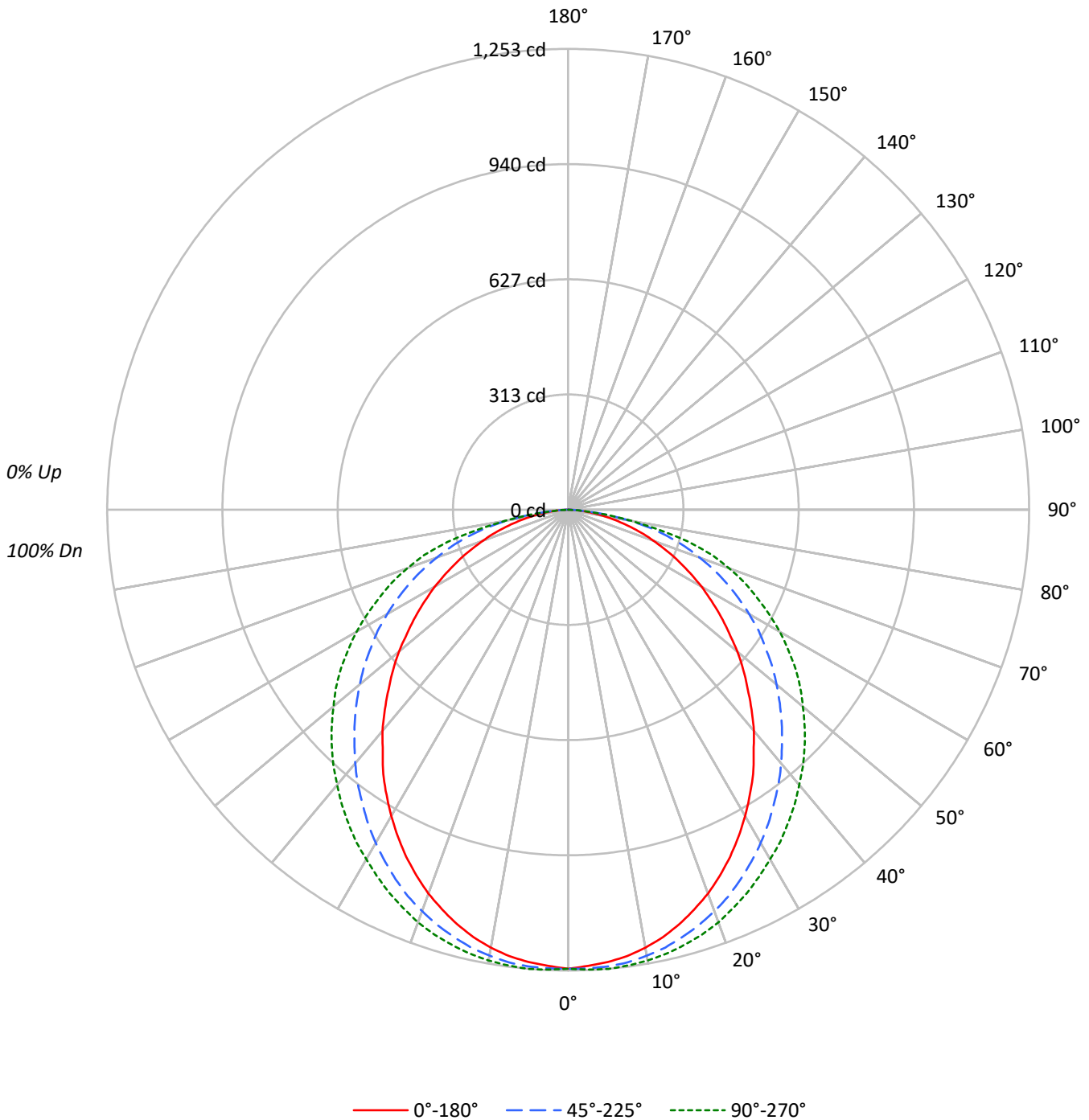
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3359	3359	3359
5°	3335	3367	3385
10°	3304	3364	3401
15°	3251	3350	3411
20°	3181	3327	3419
25°	3092	3293	3414
30°	2988	3251	3409
35°	2880	3203	3421
40°	2758	3163	3431
45°	2627	3124	3459
50°	2513	3095	3486
55°	2379	3071	3541
60°	2255	3057	3578
65°	2106	3034	3606
70°	1935	2989	3656
75°	1746	2909	3527
80°	1499	2576	2655
85°	1204	1519	1204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	3.3
10°-20°	338.3	9.5
20°-30°	508.1	14.2
30°-40°	606.0	17.0
40°-50°	626.6	17.5
50°-60°	576.0	16.1
60°-70°	458.6	12.8
70°-80°	280.2	7.8
80°-90°	60.9	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°	964.8	27.0
0°-40°	1570.8	44.0
0°-60°	2773.4	77.6
0°-90°	3573.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3573.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1235	1238	1246	1252	1253	117
15°	1167	1180	1202	1219	1224	329
25°	1041	1067	1109	1140	1150	479
35°	877	914	975	1026	1041	547
45°	690	739	821	887	909	534
55°	507	563	655	729	755	454
65°	331	387	476	543	566	328
75°	168	217	280	329	339	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°	1248.2	1248.2	1248.2	1248.2	1248.2
2.5°	1241.4	1243.1	1248.2	1251.6	1251.6
5°	1234.6	1238.0	1246.5	1251.6	1253.3
7.5°	1224.4	1229.5	1241.4	1248.2	1249.9
10°	1209.2	1215.9	1231.2	1241.4	1244.8
12.5°	1190.5	1200.7	1219.3	1232.9	1236.3
15°	1166.8	1180.3	1202.4	1219.3	1224.4
17.5°	1139.6	1156.6	1183.7	1204.1	1210.9
20°	1110.8	1127.8	1161.7	1185.4	1193.9
22.5°	1076.9	1098.9	1137.9	1165.1	1171.9
25°	1041.3	1066.7	1109.1	1139.6	1149.8
27.5°	1002.3	1032.8	1078.6	1115.9	1124.4
30°	961.6	993.8	1046.4	1087.1	1097.2
32.5°	919.2	956.5	1012.4	1058.2	1071.8
35°	876.8	914.1	975.1	1026.0	1041.3
37.5°	827.6	871.7	939.5	992.1	1010.7
40°	785.2	827.6	900.5	958.2	976.8
42.5°	737.7	783.5	859.8	922.6	944.6
45°	690.2	739.4	820.8	886.9	909.0
47.5°	646.1	695.3	780.1	849.6	871.7
50°	600.3	651.2	739.4	810.6	832.7
52.5°	551.2	607.1	698.7	769.9	795.4
55°	507.1	563.0	654.6	729.2	754.7
57.5°	461.3	518.9	613.9	685.1	708.9
60°	418.9	474.8	568.1	637.7	664.8
62.5°	373.1	430.8	522.3	590.2	615.6
65°	330.7	386.7	476.5	542.7	566.4
67.5°	288.3	344.3	429.1	491.8	518.9
70°	245.9	301.9	379.9	440.9	464.7
72.5°	208.6	257.8	332.4	388.4	410.4
75°	167.9	217.1	279.8	329.0	339.2
77.5°	130.6	174.7	227.2	249.3	252.7
80°	96.7	130.6	166.2	171.3	171.3
82.5°	64.4	89.9	103.4	105.1	103.4
85°	39.0	47.5	49.2	42.4	39.0
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)