

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: P388017

Luminaire Tested: **22CZ2-44HE-SQR-UNV-L950-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: P388017
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-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3792.5 lumens
Efficiency: N/A
Efficacy: 108.4 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

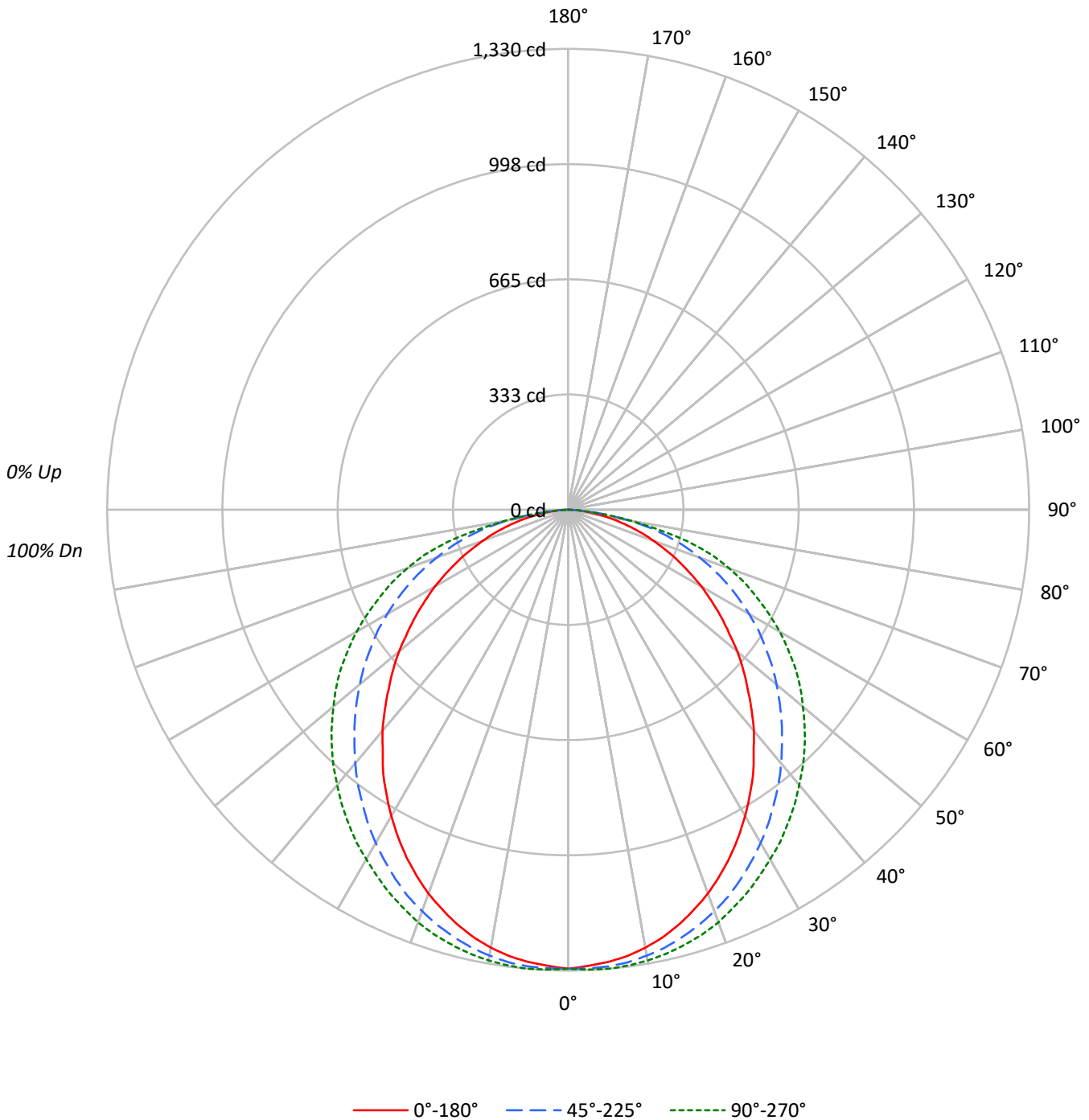
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3565	3565	3565
5°	3540	3574	3593
10°	3507	3571	3610
15°	3450	3555	3621
20°	3376	3531	3629
25°	3282	3495	3624
30°	3171	3451	3619
35°	3057	3400	3631
40°	2928	3358	3642
45°	2788	3315	3672
50°	2668	3286	3700
55°	2525	3260	3758
60°	2393	3245	3798
65°	2235	3221	3828
70°	2054	3172	3880
75°	1853	3088	3743
80°	1590	2734	2817
85°	1278	1612	1278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.6	3.3
10°-20°	359.1	9.5
20°-30°	539.3	14.2
30°-40°	643.2	17.0
40°-50°	665.0	17.5
50°-60°	611.4	16.1
60°-70°	486.8	12.8
70°-80°	297.4	7.8
80°-90°	64.6	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°	1024.0	27.0
0°-40°	1667.2	44.0
0°-60°	2943.7	77.6
0°-90°	3792.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3792.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1325	1325	1325	1325	1325	
5°	1310	1314	1323	1328	1330	124
15°	1238	1253	1276	1294	1300	349
25°	1105	1132	1177	1210	1220	508
35°	931	970	1035	1089	1105	581
45°	733	785	871	941	965	567
55°	538	598	695	774	801	481
65°	351	410	506	576	601	348
75°	178	230	297	349	360	190
85°	41	50	52	45	41	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1324.8	1324.8	1324.8	1324.8	1324.8
2.5°	1317.6	1319.4	1324.8	1328.4	1328.4
5°	1310.4	1314.0	1323.0	1328.4	1330.2
7.5°	1299.6	1305.0	1317.6	1324.8	1326.6
10°	1283.4	1290.6	1306.8	1317.6	1321.2
12.5°	1263.6	1274.4	1294.2	1308.6	1312.2
15°	1238.4	1252.8	1276.2	1294.2	1299.6
17.5°	1209.6	1227.6	1256.4	1278.0	1285.2
20°	1179.0	1197.0	1233.0	1258.2	1267.2
22.5°	1143.0	1166.4	1207.8	1236.6	1243.8
25°	1105.2	1132.2	1177.2	1209.6	1220.4
27.5°	1063.8	1096.2	1144.8	1184.4	1193.4
30°	1020.6	1054.8	1110.6	1153.8	1164.6
32.5°	975.6	1015.2	1074.6	1123.2	1137.6
35°	930.6	970.2	1035.0	1089.0	1105.2
37.5°	878.4	925.2	997.2	1053.0	1072.8
40°	833.4	878.4	955.8	1017.0	1036.8
42.5°	783.0	831.6	912.6	979.2	1002.6
45°	732.6	784.8	871.2	941.4	964.8
47.5°	685.8	738.0	828.0	901.8	925.2
50°	637.2	691.2	784.8	860.4	883.8
52.5°	585.0	644.4	741.6	817.2	844.2
55°	538.2	597.6	694.8	774.0	801.0
57.5°	489.6	550.8	651.6	727.2	752.4
60°	444.6	504.0	603.0	676.8	705.6
62.5°	396.0	457.2	554.4	626.4	653.4
65°	351.0	410.4	505.8	576.0	601.2
67.5°	306.0	365.4	455.4	522.0	550.8
70°	261.0	320.4	403.2	468.0	493.2
72.5°	221.4	273.6	352.8	412.2	435.6
75°	178.2	230.4	297.0	349.2	360.0
77.5°	138.6	185.4	241.2	264.6	268.2
80°	102.6	138.6	176.4	181.8	181.8
82.5°	68.4	95.4	109.8	111.6	109.8
85°	41.4	50.4	52.2	45.0	41.4
87.5°	14.4	14.4	9.0	5.4	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)