

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: P388018

Luminaire Tested: **22CZ2-44HE-SQR-UNV-L950-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: P388018
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-SWPD1-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: 3838.9 lumens
Efficiency: N/A
Efficacy: 109.7 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

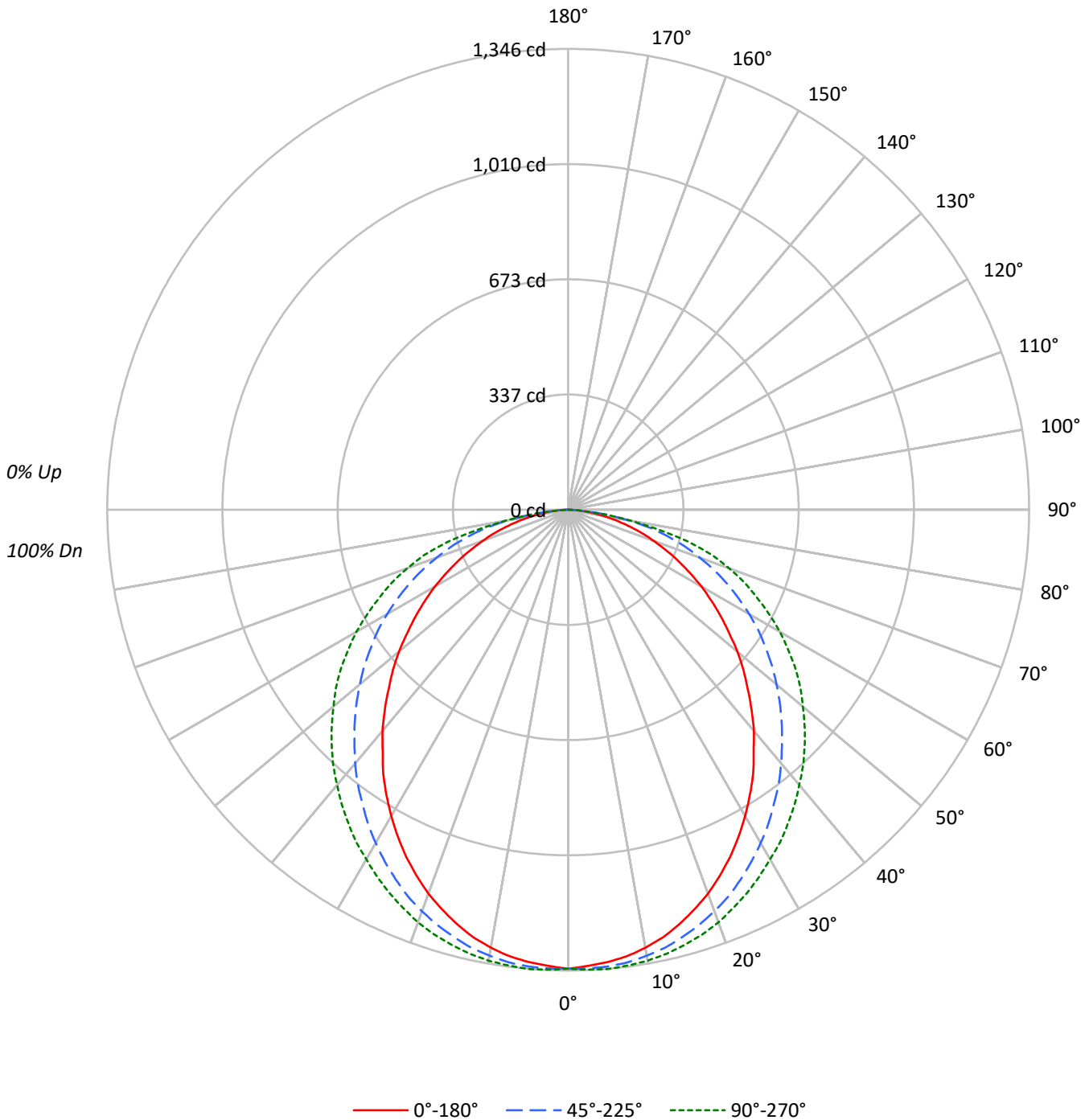
Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3609	3609	3609
5°	3583	3618	3637
10°	3550	3615	3654
15°	3492	3599	3665
20°	3418	3574	3673
25°	3322	3538	3668
30°	3210	3493	3663
35°	3095	3442	3675
40°	2963	3399	3687
45°	2822	3356	3717
50°	2700	3326	3745
55°	2556	3300	3804
60°	2422	3285	3844
65°	2262	3260	3875
70°	2079	3211	3928
75°	1876	3125	3789
80°	1610	2768	2851
85°	1294	1630	1294



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.1	3.3
10°-20°	363.5	9.5
20°-30°	545.9	14.2
30°-40°	651.1	17.0
40°-50°	673.2	17.5
50°-60°	618.9	16.1
60°-70°	492.7	12.8
70°-80°	301.0	7.8
80°-90°	65.4	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°	1036.5	27.0
0°-40°	1687.6	44.0
0°-60°	2979.7	77.6
0°-90°	3838.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3838.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1341	1341	1341	1341	1341	
5°	1326	1330	1339	1345	1346	126
15°	1254	1268	1292	1310	1316	353
25°	1119	1146	1192	1224	1235	515
35°	942	982	1048	1102	1119	588
45°	742	794	882	953	977	573
55°	545	605	703	784	811	487
65°	355	415	512	583	609	352
75°	180	233	301	354	364	192
85°	42	51	53	46	42	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1341.0	1341.0	1341.0	1341.0	1341.0
2.5°	1333.7	1335.6	1341.0	1344.7	1344.7
5°	1326.4	1330.1	1339.2	1344.7	1346.5
7.5°	1315.5	1321.0	1333.7	1341.0	1342.8
10°	1299.1	1306.4	1322.8	1333.7	1337.4
12.5°	1279.1	1290.0	1310.0	1324.6	1328.3
15°	1253.6	1268.1	1291.8	1310.0	1315.5
17.5°	1224.4	1242.6	1271.8	1293.6	1300.9
20°	1193.4	1211.7	1248.1	1273.6	1282.7
22.5°	1157.0	1180.7	1222.6	1251.7	1259.0
25°	1118.7	1146.1	1191.6	1224.4	1235.3
27.5°	1076.8	1109.6	1158.8	1198.9	1208.0
30°	1033.1	1067.7	1124.2	1167.9	1178.9
32.5°	987.5	1027.6	1087.8	1137.0	1151.5
35°	942.0	982.1	1047.7	1102.3	1118.7
37.5°	889.2	936.5	1009.4	1065.9	1085.9
40°	843.6	889.2	967.5	1029.5	1049.5
42.5°	792.6	841.8	923.8	991.2	1014.9
45°	741.6	794.4	881.9	952.9	976.6
47.5°	694.2	747.0	838.1	912.8	936.5
50°	645.0	699.7	794.4	870.9	894.6
52.5°	592.2	652.3	750.7	827.2	854.5
55°	544.8	604.9	703.3	783.5	810.8
57.5°	495.6	557.5	659.6	736.1	761.6
60°	450.0	510.2	610.4	685.1	714.2
62.5°	400.8	462.8	561.2	634.1	661.4
65°	355.3	415.4	512.0	583.1	608.6
67.5°	309.7	369.9	461.0	528.4	557.5
70°	264.2	324.3	408.1	473.7	499.2
72.5°	224.1	276.9	357.1	417.2	440.9
75°	180.4	233.2	300.6	353.5	364.4
77.5°	140.3	187.7	244.2	267.8	271.5
80°	103.9	140.3	178.6	184.0	184.0
82.5°	69.2	96.6	111.1	113.0	111.1
85°	41.9	51.0	52.8	45.6	41.9
87.5°	14.6	14.6	9.1	5.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)