

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: P#

Luminaire Tested: **22CZ-LD5-39-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39-UNV-L840-CD1-U
Description: CRUZE 2x2 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

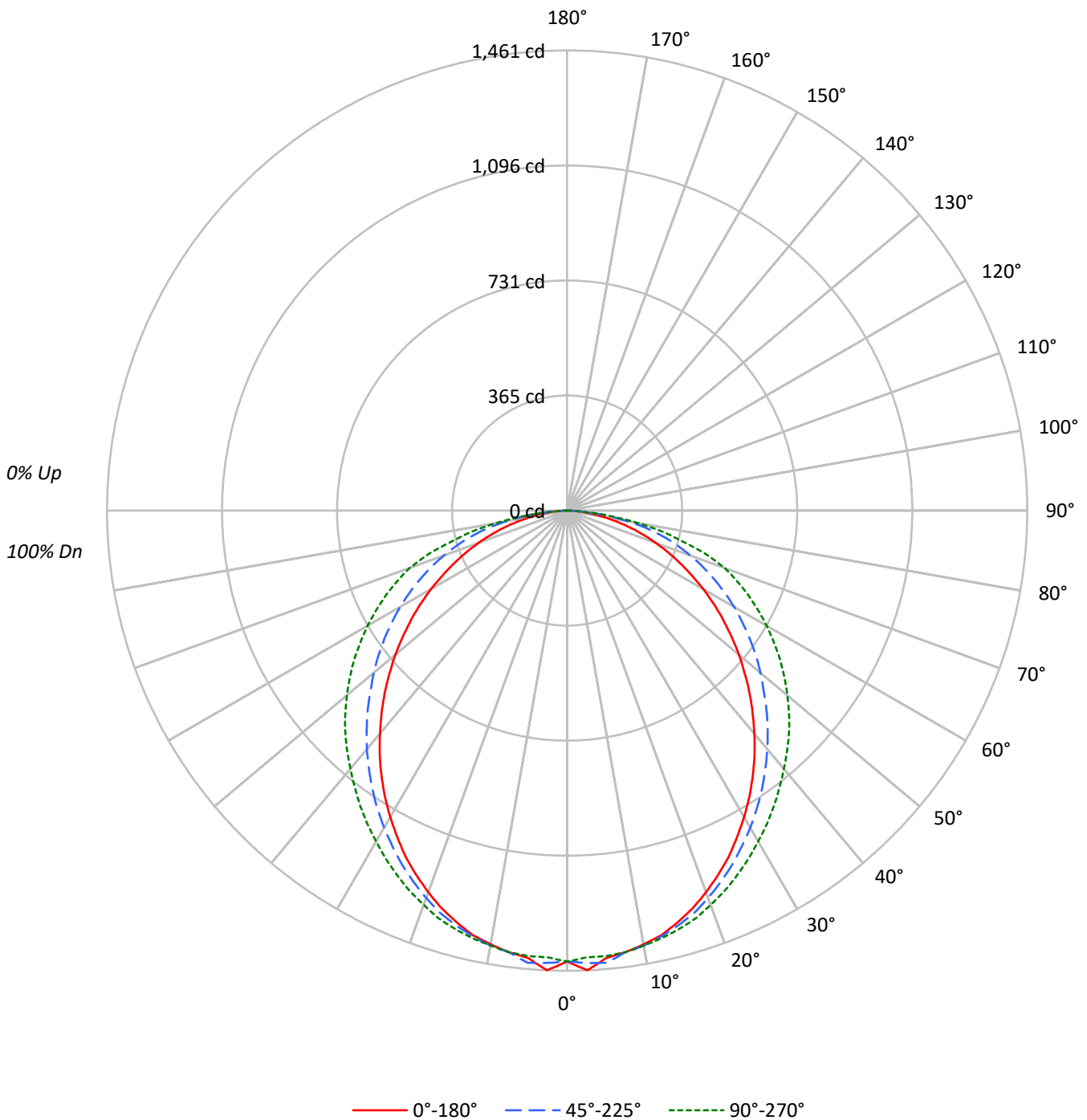
Lumens per Lamp: N/A
Luminaire Lumens: 4010.7 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')
CIE Type: Direct

Input Watts (W): 36.41
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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	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	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	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°	3852	3852	3852
5°	3834	3869	3819
10°	3788	3785	3798
15°	3721	3727	3780
20°	3626	3654	3747
25°	3520	3565	3707
30°	3393	3470	3664
35°	3262	3376	3634
40°	3117	3279	3610
45°	2969	3182	3612
50°	2813	3095	3606
55°	2647	3017	3613
60°	2473	2936	3623
65°	2277	2847	3645
70°	2064	2737	3670
75°	1794	2583	3332
80°	1437	2157	2731
85°	996	1265	1419



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	3.4
10°-20°	384.6	9.6
20°-30°	572.1	14.3
30°-40°	676.6	16.9
40°-50°	695.5	17.3
50°-60°	635.5	15.8
60°-70°	508.4	12.7
70°-80°	319.0	8.0
80°-90°	83.1	2.1
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°	1092.5	27.2
0°-40°	1769.1	44.1
0°-60°	3100.1	77.3
0°-90°	4010.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4010.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1432	1432	1432	1432	1432	
5°	1426	1426	1441	1432	1420	136
15°	1354	1356	1363	1371	1375	381
25°	1213	1221	1240	1262	1278	558
35°	1028	1042	1078	1120	1145	642
45°	819	841	895	962	997	632
55°	605	634	708	786	825	541
65°	396	431	515	593	634	393
75°	205	244	314	361	380	217
85°	51	64	74	72	72	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1431.5	1431.5	1431.5	1431.5	1431.5
2.5°	1460.8	1454.9	1437.4	1425.7	1419.8
5°	1425.7	1425.7	1441.3	1431.5	1419.8
7.5°	1414.0	1414.0	1414.0	1443.2	1414.0
10°	1398.4	1400.3	1402.3	1414.0	1402.3
12.5°	1380.8	1380.8	1384.7	1388.6	1390.6
15°	1353.5	1355.5	1363.3	1371.1	1375.0
17.5°	1324.3	1330.1	1339.9	1349.6	1357.4
20°	1289.2	1297.0	1308.7	1324.3	1332.1
22.5°	1252.1	1259.9	1275.5	1293.1	1306.7
25°	1213.1	1220.9	1240.4	1261.9	1277.5
27.5°	1168.2	1178.0	1201.4	1230.6	1246.3
30°	1123.4	1135.1	1162.4	1195.5	1213.1
32.5°	1076.6	1090.2	1121.4	1158.5	1179.9
35°	1027.8	1041.5	1078.5	1119.5	1144.8
37.5°	977.1	992.7	1033.7	1080.5	1107.8
40°	924.5	942.0	988.8	1039.5	1070.7
42.5°	871.8	891.3	942.0	1002.5	1033.7
45°	819.1	840.6	895.2	961.5	996.6
47.5°	764.5	789.9	846.4	920.5	955.7
50°	711.9	737.2	801.6	877.6	912.7
52.5°	657.3	686.5	754.8	832.8	869.8
55°	604.6	633.9	708.0	786.0	825.0
57.5°	551.9	581.2	659.2	739.2	778.2
60°	499.3	530.5	612.4	690.4	731.4
62.5°	446.6	479.8	563.6	643.6	682.6
65°	395.9	431.0	514.9	592.9	633.9
67.5°	347.2	384.2	466.1	542.2	583.1
70°	298.4	335.5	415.4	489.5	530.5
72.5°	251.6	288.6	366.7	433.0	464.2
75°	204.8	243.8	314.0	360.8	380.3
77.5°	159.9	198.9	259.4	290.6	312.1
80°	119.0	152.1	195.0	218.4	226.2
82.5°	81.9	109.2	136.5	142.4	146.3
85°	50.7	64.4	74.1	72.2	72.2
87.5°	23.4	25.4	21.5	15.6	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)