

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: P388322

Luminaire Tested: **22CZ2-44VHE-UNV-L935-CD1-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: P388322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

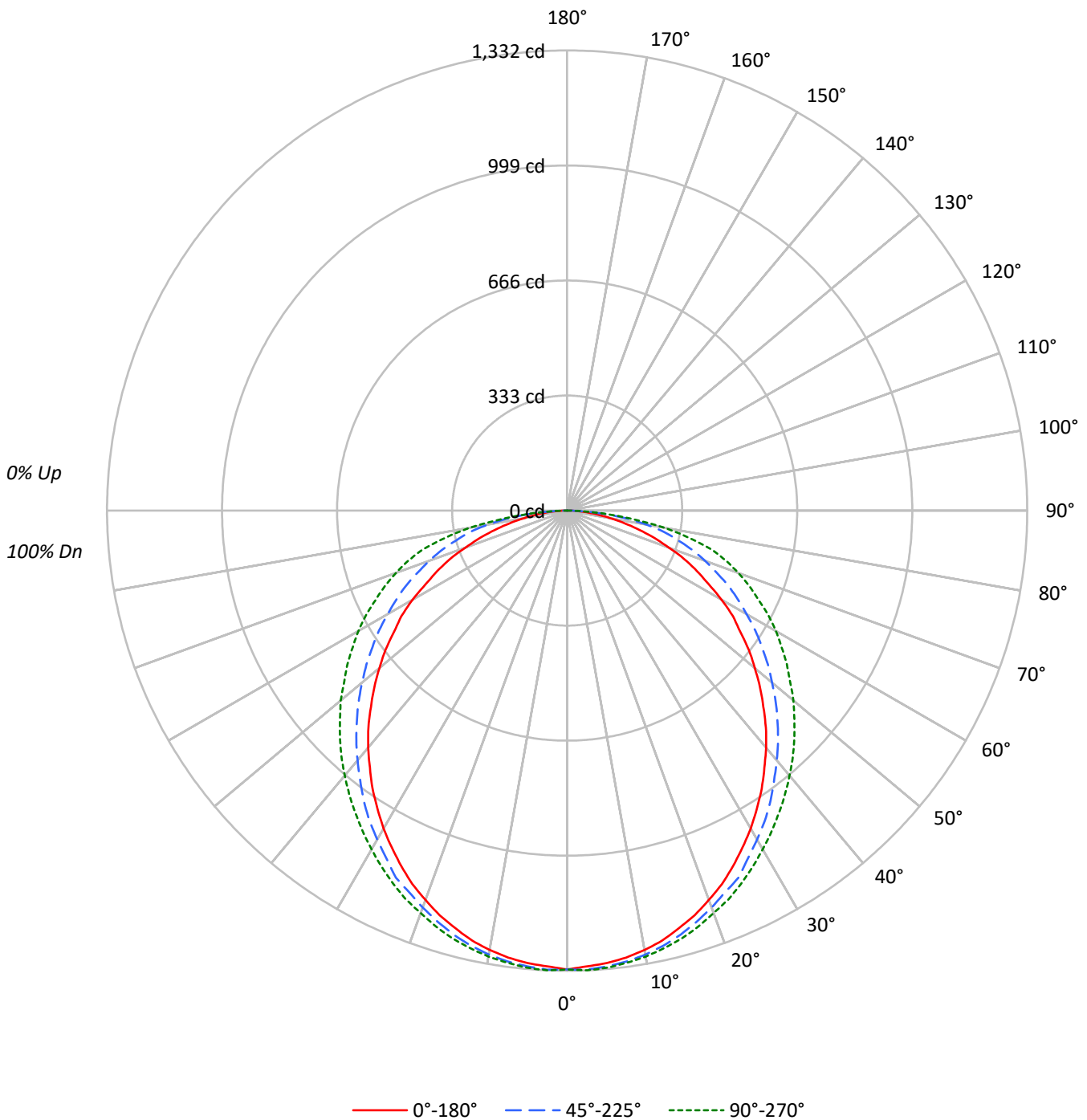
Lumens per Lamp: N/A
Luminaire Lumens: 3906.1 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 32.6
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	103	98	94	105	101	96	93	96	93	90		92	90	87		89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61		70	65	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52		63	56	51		60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44		56	49	44		54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34		46	39	34		45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31		42	35	30		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	27		38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3574	3574	3574
5°	3551	3577	3588
10°	3529	3566	3582
15°	3486	3539	3572
20°	3435	3501	3550
25°	3373	3481	3538
30°	3303	3416	3518
35°	3227	3372	3511
40°	3146	3315	3518
45°	3057	3277	3540
50°	2969	3243	3581
55°	2867	3228	3643
60°	2782	3228	3755
65°	2644	3280	3892
70°	2465	3342	4143
75°	2258	3457	4476
80°	1967	3605	4409
85°	1720	3205	3501



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.6	3.2
10°-20°	357.8	9.2
20°-30°	537.1	13.7
30°-40°	641.7	16.4
40°-50°	667.3	17.1
50°-60°	618.5	15.8
60°-70°	507.3	13.0
70°-80°	343.0	8.8
80°-90°	107.8	2.8
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°	1020.4	26.1
0°-40°	1662.2	42.6
0°-60°	2948.0	75.5
0°-90°	3906.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3906.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1315	1317	1324	1326	1328	125
15°	1251	1257	1270	1278	1282	353
25°	1136	1146	1172	1186	1192	523
35°	982	996	1026	1057	1069	614
45°	803	819	861	911	930	620
55°	611	630	688	750	776	549
65°	415	438	515	582	611	410
75°	217	254	332	400	430	230
85°	56	77	104	115	113	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1328.1	1328.1	1328.1	1328.1	1328.1
2.5°	1320.5	1324.3	1330.1	1332.0	1332.0
5°	1314.7	1316.6	1324.3	1326.2	1328.1
7.5°	1305.1	1308.9	1316.6	1318.5	1320.5
10°	1291.6	1295.5	1305.1	1308.9	1310.8
12.5°	1274.3	1278.2	1289.7	1295.5	1297.4
15°	1251.3	1257.0	1270.5	1278.2	1282.0
17.5°	1228.2	1234.0	1247.4	1259.0	1262.8
20°	1199.4	1212.8	1222.4	1237.8	1239.7
22.5°	1170.5	1178.2	1195.5	1210.9	1218.6
25°	1135.9	1145.5	1172.5	1185.9	1191.7
27.5°	1099.4	1112.9	1134.0	1155.2	1162.8
30°	1062.9	1072.5	1099.4	1124.4	1132.1
32.5°	1022.5	1036.0	1064.8	1089.8	1101.3
35°	982.2	995.6	1026.4	1057.1	1068.7
37.5°	938.0	953.3	984.1	1020.6	1036.0
40°	895.7	907.2	943.7	987.9	1001.4
42.5°	851.5	864.9	903.4	951.4	966.8
45°	803.4	818.8	861.1	911.1	930.3
47.5°	757.3	772.7	818.8	868.8	891.8
50°	709.2	728.5	774.6	832.3	855.3
52.5°	663.1	680.4	732.3	791.9	813.0
55°	611.2	630.4	688.1	749.6	776.5
57.5°	568.9	582.4	645.8	709.2	736.2
60°	517.0	534.3	599.7	667.0	697.7
62.5°	461.3	490.1	557.4	626.6	657.3
65°	415.2	438.2	515.1	582.4	611.2
67.5°	367.1	392.1	467.1	538.2	570.9
70°	313.3	346.0	424.8	495.9	526.6
72.5°	265.2	299.8	380.6	449.8	482.4
75°	217.2	253.7	332.5	399.8	430.5
77.5°	171.1	211.4	288.3	340.2	359.4
80°	126.9	165.3	232.6	269.1	284.5
82.5°	88.4	121.1	171.1	190.3	194.1
85°	55.7	76.9	103.8	115.3	113.4
87.5°	25.0	30.8	38.4	42.3	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)