

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: P389234

Luminaire Tested: **22CZ2-39VHE-S-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: P389234
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-S-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3622.8 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

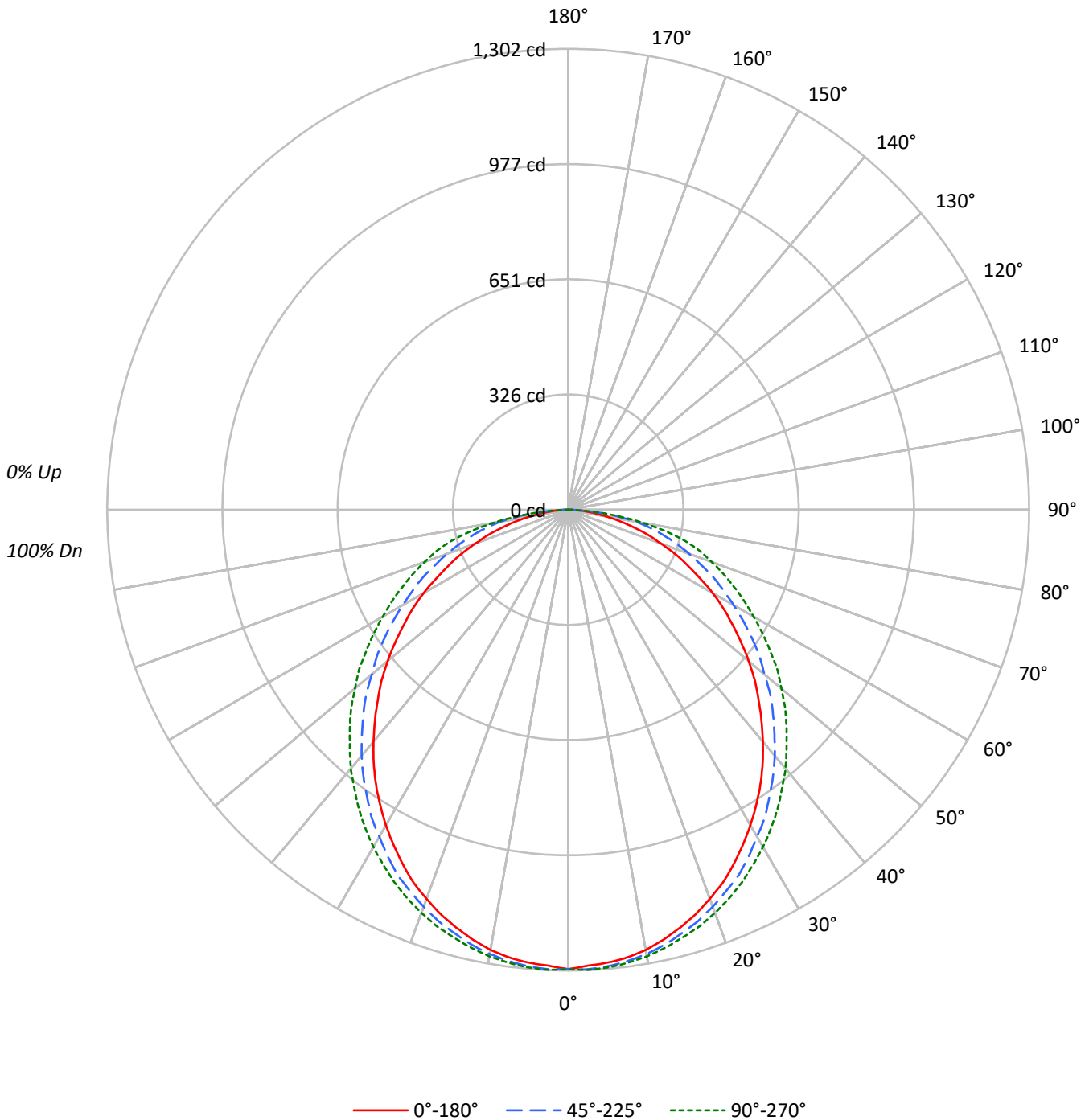
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3493	3493	3493
5°	3470	3498	3507
10°	3450	3483	3501
15°	3405	3452	3485
20°	3350	3418	3471
25°	3282	3383	3448
30°	3199	3314	3419
35°	3110	3254	3387
40°	3005	3189	3355
45°	2895	3113	3319
50°	2788	3029	3291
55°	2657	2974	3267
60°	2538	2902	3257
65°	2368	2884	3293
70°	2181	2859	3391
75°	1968	2900	3567
80°	1703	2986	3353
85°	1408	2504	2504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	3.4
10°-20°	349.4	9.6
20°-30°	522.7	14.4
30°-40°	619.1	17.1
40°-50°	630.9	17.4
50°-60°	565.5	15.6
60°-70°	442.7	12.2
70°-80°	285.5	7.9
80°-90°	84.3	2.3
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°	994.9	27.5
0°-40°	1613.9	44.5
0°-60°	2810.3	77.6
0°-90°	3622.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3622.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1285	1288	1295	1296	1298	122
15°	1222	1229	1239	1249	1251	345
25°	1106	1116	1139	1154	1161	509
35°	947	958	990	1021	1031	592
45°	761	778	818	860	872	587
55°	566	585	634	678	696	508
65°	372	394	453	497	517	369
75°	189	218	279	326	343	203
85°	46	62	81	81	81	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1298.2	1298.2	1298.2	1298.2	1298.2
2.5°	1289.7	1293.1	1299.9	1301.5	1301.5
5°	1284.6	1288.0	1294.8	1296.5	1298.2
7.5°	1276.2	1277.9	1286.3	1289.7	1291.4
10°	1262.7	1266.0	1274.5	1279.6	1281.3
12.5°	1244.1	1249.1	1259.3	1266.0	1267.7
15°	1222.1	1228.9	1239.0	1249.1	1250.8
17.5°	1198.4	1205.2	1218.7	1230.5	1233.9
20°	1169.7	1178.1	1193.4	1206.9	1212.0
22.5°	1141.0	1147.7	1166.3	1183.2	1188.3
25°	1105.5	1115.6	1139.3	1154.5	1161.2
27.5°	1068.3	1080.1	1103.8	1124.1	1130.8
30°	1029.4	1041.2	1066.6	1091.9	1100.4
32.5°	988.8	1002.4	1032.8	1058.1	1066.6
35°	946.6	958.4	990.5	1021.0	1031.1
37.5°	902.6	912.8	950.0	982.1	992.2
40°	855.3	868.8	907.7	944.9	955.0
42.5°	808.0	823.2	862.1	902.6	912.8
45°	760.6	777.5	818.1	860.4	872.2
47.5°	715.0	728.5	774.2	814.7	831.6
50°	666.0	679.5	723.5	769.1	786.0
52.5°	615.3	633.9	681.2	725.1	745.4
55°	566.3	584.8	633.9	677.8	696.4
57.5°	520.6	535.8	586.5	632.2	650.8
60°	471.6	485.1	539.2	588.2	605.1
62.5°	419.2	439.5	495.3	540.9	561.2
65°	371.9	393.8	453.0	497.0	517.2
67.5°	327.9	348.2	405.7	453.0	475.0
70°	277.2	304.3	363.4	410.7	431.0
72.5°	236.6	260.3	321.2	368.5	390.5
75°	189.3	218.1	278.9	326.2	343.1
77.5°	150.4	179.2	236.6	273.8	282.3
80°	109.9	138.6	192.7	211.3	216.4
82.5°	74.4	101.4	138.6	143.7	145.4
85°	45.6	62.5	81.1	81.1	81.1
87.5°	22.0	25.4	28.7	27.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)