

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: P388303

Luminaire Tested: **22CZ2-39VHE-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: P388303
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: 22CZ2-39VHE-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3651.7 lumens
Efficiency: N/A
Efficacy: 127.7 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

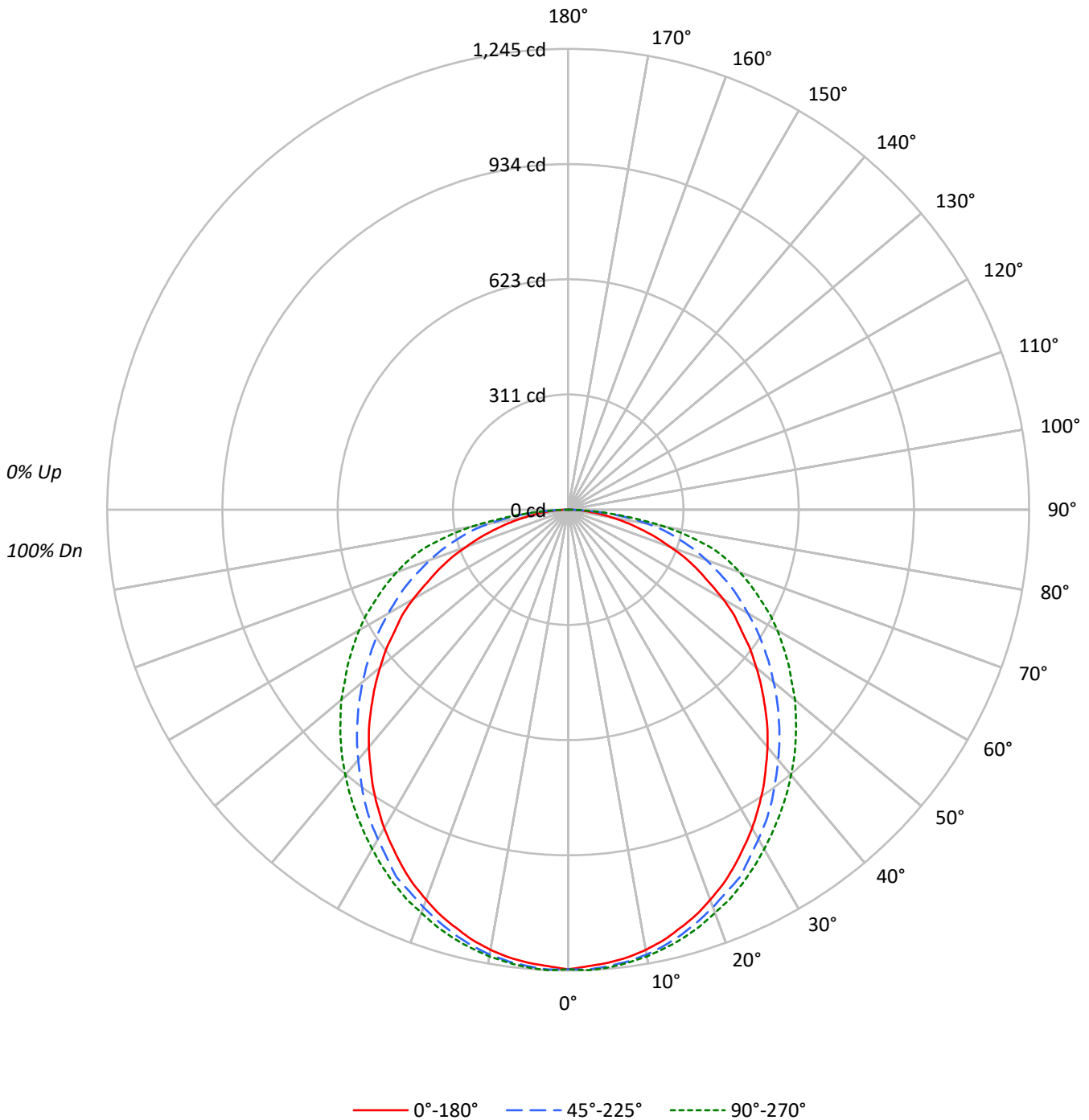
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82	82	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68	68	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56	56	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48	48	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41	41	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36	36	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32	32	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28	28	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25	25	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23	23	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3341	3341	3341
5°	3320	3344	3354
10°	3299	3334	3349
15°	3259	3309	3339
20°	3211	3273	3319
25°	3153	3255	3308
30°	3088	3194	3289
35°	3016	3152	3282
40°	2941	3099	3289
45°	2858	3064	3310
50°	2776	3031	3347
55°	2681	3018	3406
60°	2602	3017	3511
65°	2471	3067	3638
70°	2305	3124	3873
75°	2111	3232	4185
80°	1838	3369	4121
85°	1609	2995	3273



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.4	3.2
10°-20°	334.5	9.2
20°-30°	502.1	13.7
30°-40°	600.0	16.4
40°-50°	623.9	17.1
50°-60°	578.2	15.8
60°-70°	474.3	13.0
70°-80°	320.6	8.8
80°-90°	100.7	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°	954.0	26.1
0°-40°	1553.9	42.6
0°-60°	2756.0	75.5
0°-90°	3651.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3651.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1229	1231	1238	1240	1242	117
15°	1170	1175	1188	1195	1198	330
25°	1062	1071	1096	1109	1114	489
35°	918	931	960	988	999	574
45°	751	766	805	852	870	580
55°	571	589	643	701	726	514
65°	388	410	482	544	571	384
75°	203	237	311	374	402	215
85°	52	72	97	108	106	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1241.6	1241.6	1241.6	1241.6	1241.6
2.5°	1234.5	1238.1	1243.4	1245.2	1245.2
5°	1229.1	1230.9	1238.1	1239.8	1241.6
7.5°	1220.1	1223.7	1230.9	1232.7	1234.5
10°	1207.5	1211.1	1220.1	1223.7	1225.5
12.5°	1191.3	1194.9	1205.7	1211.1	1212.9
15°	1169.8	1175.2	1187.7	1194.9	1198.5
17.5°	1148.2	1153.6	1166.2	1177.0	1180.6
20°	1121.3	1133.8	1142.8	1157.2	1159.0
22.5°	1094.3	1101.5	1117.7	1132.0	1139.2
25°	1062.0	1070.9	1096.1	1108.7	1114.1
27.5°	1027.8	1040.4	1060.2	1079.9	1087.1
30°	993.7	1002.7	1027.8	1051.2	1058.4
32.5°	955.9	968.5	995.5	1018.8	1029.6
35°	918.2	930.8	959.5	988.3	999.1
37.5°	876.9	891.3	920.0	954.1	968.5
40°	837.3	848.1	882.3	923.6	936.2
42.5°	796.0	808.6	844.5	889.5	903.8
45°	751.1	765.5	805.0	851.7	869.7
47.5°	708.0	722.3	765.5	812.2	833.8
50°	663.0	681.0	724.1	778.0	799.6
52.5°	619.9	636.1	684.6	740.3	760.1
55°	571.4	589.4	643.3	700.8	725.9
57.5°	531.9	544.5	603.8	663.0	688.2
60°	483.4	499.5	560.6	623.5	652.3
62.5°	431.3	458.2	521.1	585.8	614.5
65°	388.1	409.7	481.6	544.5	571.4
67.5°	343.2	366.6	436.6	503.1	533.7
70°	292.9	323.4	397.1	463.6	492.3
72.5°	248.0	280.3	355.8	420.5	451.0
75°	203.0	237.2	310.9	373.8	402.5
77.5°	159.9	197.7	269.5	318.0	336.0
80°	118.6	154.5	217.4	251.6	265.9
82.5°	82.7	113.2	159.9	177.9	181.5
85°	52.1	71.9	97.0	107.8	106.0
87.5°	23.4	28.8	35.9	39.5	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)