

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: P389240

Luminaire Tested: **22CZ2-39VHE-S-UNV-L950-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: P389240
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-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3885.1 lumens
Efficiency: N/A
Efficacy: 135.8 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

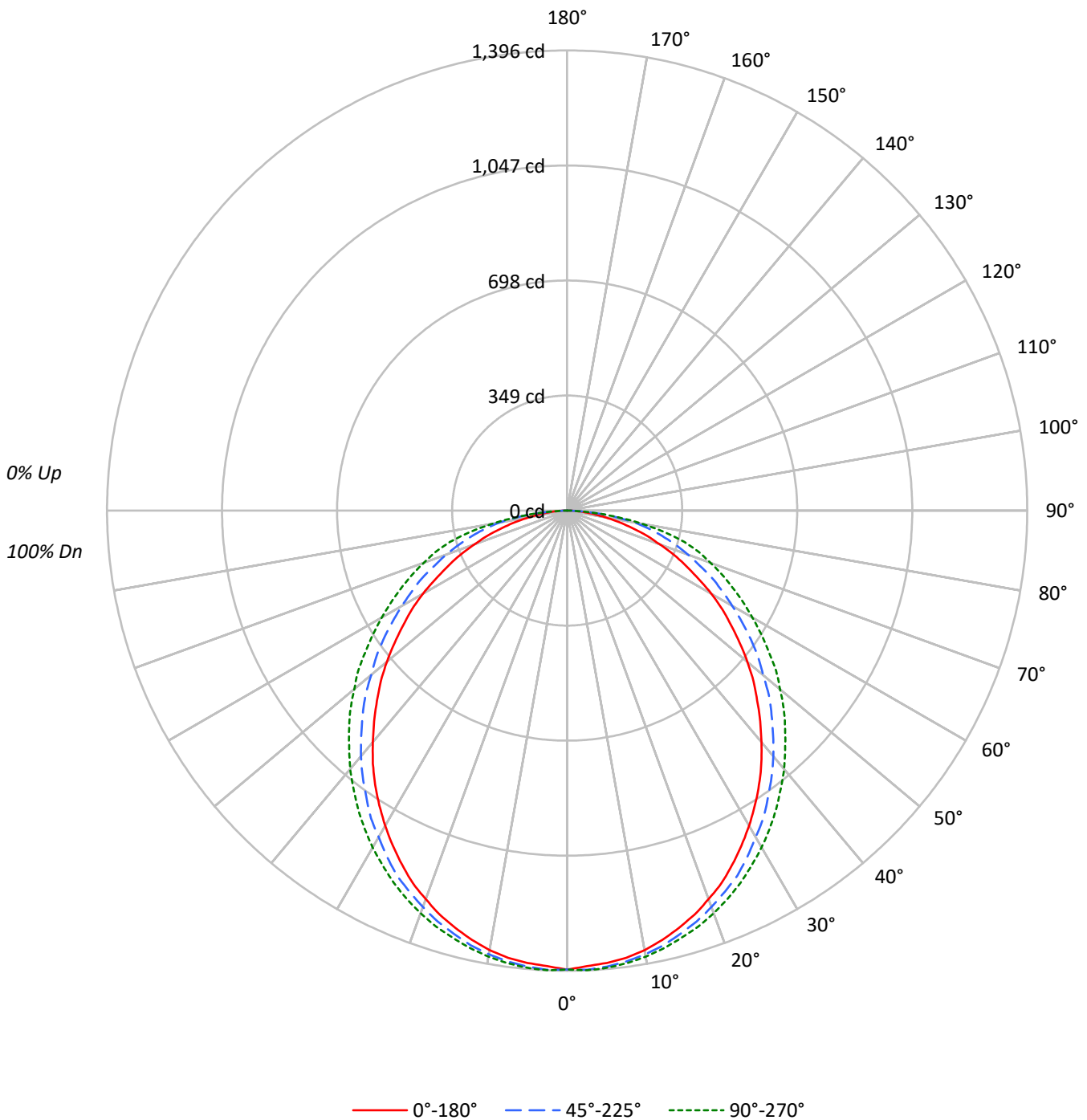
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3746	3746	3746
5°	3722	3751	3761
10°	3700	3735	3754
15°	3651	3702	3737
20°	3592	3665	3722
25°	3520	3628	3698
30°	3430	3554	3667
35°	3335	3489	3632
40°	3222	3419	3598
45°	3104	3339	3560
50°	2990	3248	3529
55°	2849	3189	3504
60°	2722	3112	3492
65°	2539	3093	3532
70°	2339	3066	3637
75°	2111	3110	3826
80°	1826	3202	3595
85°	1510	2686	2686



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.7	3.4
10°-20°	374.7	9.6
20°-30°	560.6	14.4
30°-40°	663.9	17.1
40°-50°	676.6	17.4
50°-60°	606.4	15.6
60°-70°	474.8	12.2
70°-80°	306.1	7.9
80°-90°	90.4	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°	1066.9	27.5
0°-40°	1730.8	44.5
0°-60°	3013.8	77.6
0°-90°	3885.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3885.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1392	1392	1392	1392	1392	
5°	1378	1381	1388	1390	1392	131
15°	1311	1318	1329	1340	1341	369
25°	1186	1196	1222	1238	1245	546
35°	1015	1028	1062	1095	1106	634
45°	816	834	877	923	935	630
55°	607	627	680	727	747	544
65°	399	422	486	533	555	396
75°	203	234	299	350	368	218
85°	49	67	87	87	87	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1392.2	1392.2	1392.2	1392.2	1392.2
2.5°	1383.1	1386.7	1394.0	1395.8	1395.8
5°	1377.7	1381.3	1388.5	1390.3	1392.2
7.5°	1368.6	1370.4	1379.5	1383.1	1384.9
10°	1354.1	1357.7	1366.8	1372.2	1374.0
12.5°	1334.1	1339.6	1350.5	1357.7	1359.5
15°	1310.6	1317.8	1328.7	1339.6	1341.4
17.5°	1285.2	1292.5	1307.0	1319.6	1323.3
20°	1254.4	1263.5	1279.8	1294.3	1299.7
22.5°	1223.6	1230.8	1250.8	1268.9	1274.3
25°	1185.5	1196.4	1221.8	1238.1	1245.3
27.5°	1145.6	1158.3	1183.7	1205.4	1212.7
30°	1103.9	1116.6	1143.8	1171.0	1180.1
32.5°	1060.4	1074.9	1107.6	1134.7	1143.8
35°	1015.1	1027.8	1062.2	1094.9	1105.7
37.5°	968.0	978.9	1018.7	1053.2	1064.1
40°	917.2	931.7	973.4	1013.3	1024.2
42.5°	866.5	882.8	924.5	968.0	978.9
45°	815.7	833.8	877.3	922.7	935.4
47.5°	766.8	781.3	830.2	873.7	891.8
50°	714.2	728.7	775.8	824.8	842.9
52.5°	659.8	679.8	730.5	777.6	799.4
55°	607.3	627.2	679.8	726.9	746.8
57.5°	558.3	574.6	629.0	677.9	697.9
60°	505.7	520.2	578.3	630.8	648.9
62.5°	449.5	471.3	531.1	580.1	601.8
65°	398.8	422.4	485.8	532.9	554.7
67.5°	351.7	373.4	435.0	485.8	509.4
70°	297.3	326.3	389.7	440.5	462.2
72.5°	253.8	279.2	344.4	395.2	418.7
75°	203.0	233.8	299.1	349.9	368.0
77.5°	161.3	192.1	253.8	293.7	302.7
80°	117.8	148.6	206.6	226.6	232.0
82.5°	79.8	108.8	148.6	154.1	155.9
85°	48.9	67.1	87.0	87.0	87.0
87.5°	23.6	27.2	30.8	29.0	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)