

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: P391447

Luminaire Tested: **24CZ2-50VHE-RDP-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: P391447
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50VHE-RDP-UNV-L950-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3049.8 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

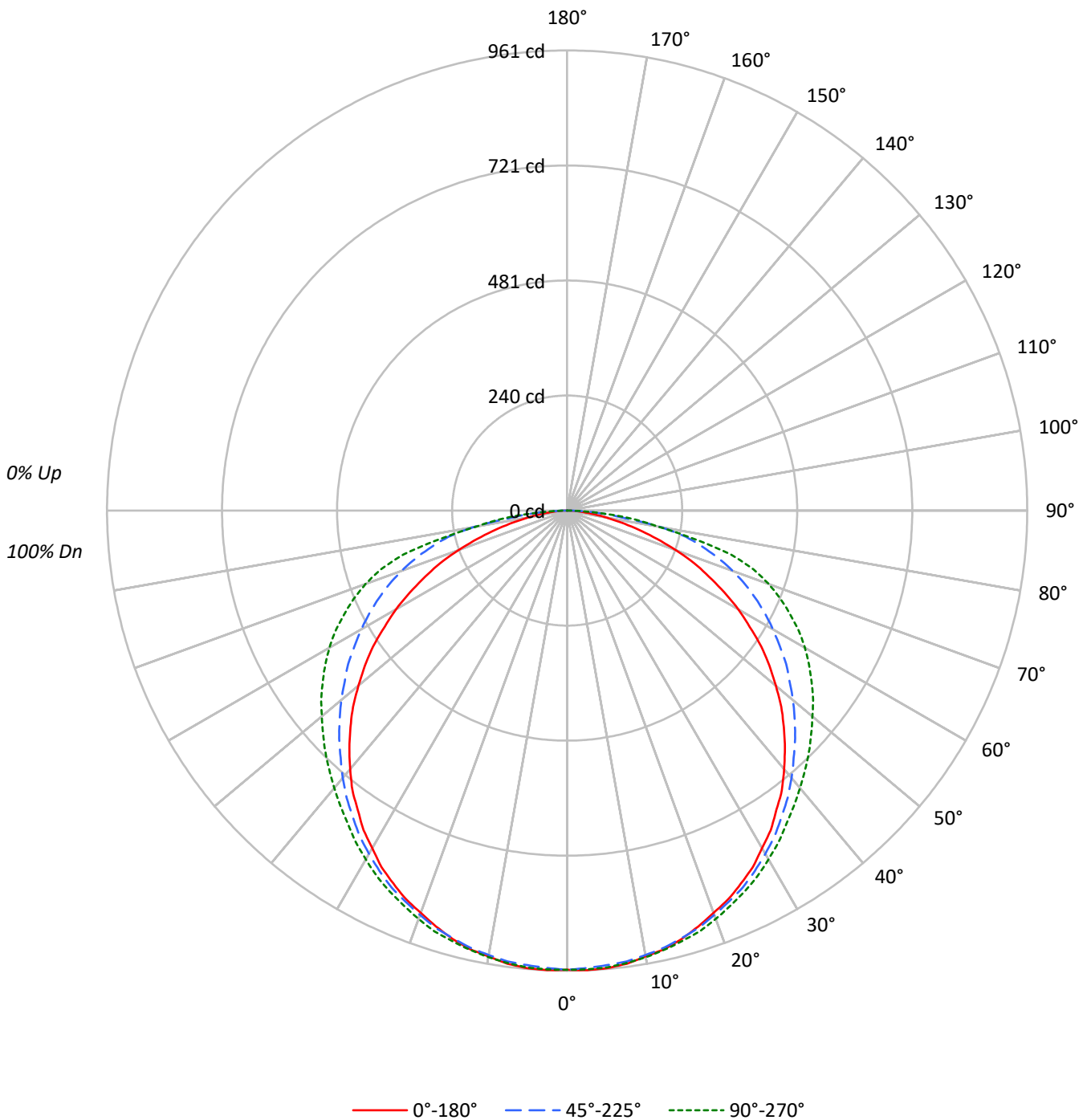
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1290	1290	1290
5°	1295	1287	1293
10°	1292	1288	1294
15°	1290	1288	1296
20°	1280	1287	1300
25°	1276	1289	1303
30°	1265	1286	1307
35°	1252	1282	1312
40°	1238	1281	1329
45°	1218	1281	1359
50°	1191	1289	1400
55°	1160	1309	1462
60°	1111	1335	1543
65°	1040	1382	1637
70°	946	1446	1762
75°	802	1526	1840
80°	633	1536	1488
85°	468	1167	1308



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	3.0
10°-20°	261.8	8.6
20°-30°	400.4	13.1
30°-40°	489.5	16.0
40°-50°	521.7	17.1
50°-60°	498.8	16.4
60°-70°	422.5	13.9
70°-80°	284.0	9.3
80°-90°	80.1	2.6
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°	753.2	24.7
0°-40°	1242.7	40.7
0°-60°	2263.2	74.2
0°-90°	3049.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3049.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	959	958	953	958	958	91
15°	926	926	924	932	930	261
25°	859	862	868	876	877	396
35°	762	768	781	796	799	478
45°	640	650	673	702	714	494
55°	495	513	558	602	623	441
65°	327	360	434	492	514	324
75°	154	210	294	343	354	165
85°	30	62	76	82	85	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.1	959.1	959.1	959.1	959.1
2.5°	960.6	960.6	956.0	959.1	959.1
5°	959.1	957.6	953.0	957.6	957.6
7.5°	954.5	953.0	950.0	954.5	953.0
10°	945.5	945.5	942.4	947.0	947.0
12.5°	937.9	936.4	934.9	940.9	939.4
15°	925.8	925.8	924.3	931.8	930.3
17.5°	910.7	912.2	913.7	919.7	921.3
20°	894.0	897.1	898.6	907.6	907.6
22.5°	878.9	880.4	883.4	892.5	892.5
25°	859.2	862.3	868.3	875.9	877.4
27.5°	839.6	841.1	848.6	859.2	860.7
30°	813.9	818.4	827.5	839.6	841.1
32.5°	791.2	795.7	806.3	818.4	821.4
35°	762.4	768.5	780.6	795.7	798.7
37.5°	736.7	741.2	756.4	773.0	777.5
40°	704.9	714.0	729.1	748.8	756.4
42.5°	673.2	682.2	700.4	726.1	735.2
45°	639.9	650.5	673.2	701.9	714.0
47.5°	606.6	618.7	644.4	677.7	691.3
50°	568.8	583.9	615.7	653.5	668.6
52.5°	532.5	550.6	585.4	627.8	647.5
55°	494.7	512.8	558.2	602.1	623.2
57.5°	452.3	476.5	526.4	576.4	599.0
60°	413.0	435.7	496.2	550.6	573.3
62.5°	370.6	400.9	465.9	523.4	546.1
65°	326.8	360.0	434.2	491.6	514.3
67.5°	287.4	323.7	402.4	459.9	482.6
70°	240.5	285.9	367.6	425.1	447.8
72.5°	196.7	246.6	331.3	387.3	408.4
75°	154.3	210.3	293.5	343.4	354.0
77.5°	115.0	174.0	254.1	275.3	267.8
80°	81.7	139.2	198.2	187.6	192.1
82.5°	52.9	105.9	122.5	139.2	143.7
85°	30.3	62.0	75.6	81.7	84.7
87.5°	13.6	22.7	30.3	30.3	28.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)