

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: P391448

Luminaire Tested: **24CZ2-50VHE-RDP-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: P391448
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-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: 3088.1 lumens
Efficiency: N/A
Efficacy: 94.4 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

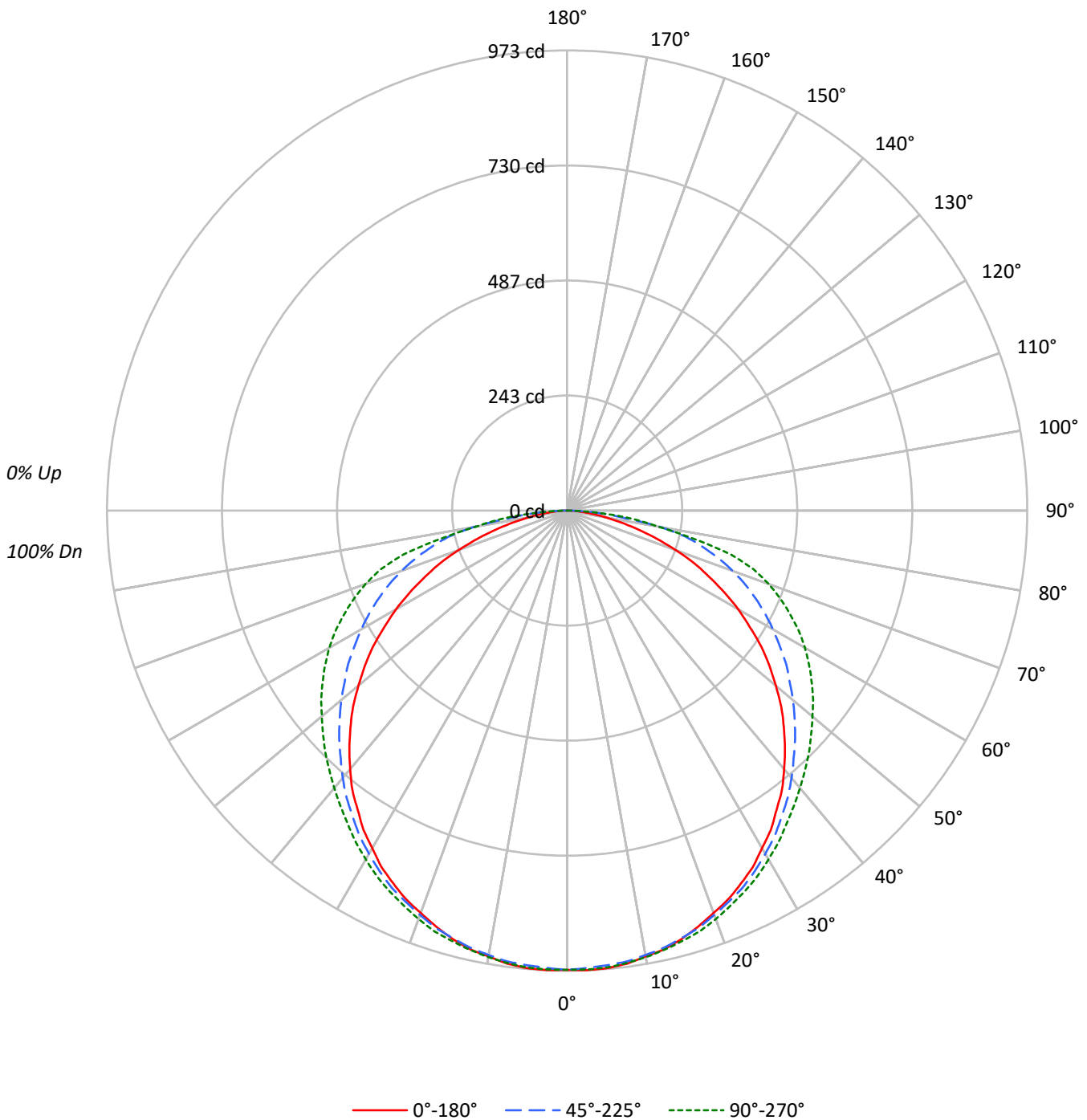
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1307	1307	1307
5°	1312	1303	1310
10°	1308	1304	1310
15°	1306	1304	1312
20°	1296	1303	1316
25°	1292	1305	1319
30°	1280	1302	1323
35°	1268	1298	1328
40°	1254	1297	1345
45°	1233	1297	1376
50°	1205	1305	1417
55°	1175	1326	1480
60°	1125	1352	1562
65°	1053	1400	1658
70°	958	1464	1784
75°	812	1545	1863
80°	641	1555	1507
85°	472	1183	1325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.1	3.0
10°-20°	265.1	8.6
20°-30°	405.4	13.1
30°-40°	495.6	16.0
40°-50°	528.2	17.1
50°-60°	505.1	16.4
60°-70°	427.9	13.9
70°-80°	287.5	9.3
80°-90°	81.1	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°	762.7	24.7
0°-40°	1258.3	40.7
0°-60°	2291.6	74.2
0°-90°	3088.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3088.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	971	970	965	970	970	92
15°	937	937	936	944	942	264
25°	870	873	879	887	888	401
35°	772	778	790	806	809	484
45°	648	659	682	711	723	500
55°	501	519	565	610	631	446
65°	331	365	440	498	521	328
75°	156	213	297	348	358	167
85°	31	63	77	83	86	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	971.1	971.1	971.1	971.1	971.1
2.5°	972.7	972.7	968.1	971.1	971.1
5°	971.1	969.6	965.0	969.6	969.6
7.5°	966.5	965.0	961.9	966.5	965.0
10°	957.3	957.3	954.3	958.9	958.9
12.5°	949.7	948.1	946.6	952.7	951.2
15°	937.4	937.4	935.9	943.5	942.0
17.5°	922.1	923.6	925.2	931.3	932.8
20°	905.3	908.3	909.8	919.0	919.0
22.5°	889.9	891.5	894.5	903.7	903.7
25°	870.0	873.1	879.2	886.9	888.4
27.5°	850.1	851.6	859.3	870.0	871.6
30°	824.1	828.7	837.9	850.1	851.6
32.5°	801.1	805.7	816.4	828.7	831.7
35°	772.0	778.1	790.4	805.7	808.8
37.5°	746.0	750.5	765.9	782.7	787.3
40°	713.8	723.0	738.3	758.2	765.9
42.5°	681.6	690.8	709.2	735.2	744.4
45°	647.9	658.6	681.6	710.7	723.0
47.5°	614.2	626.5	652.5	686.2	700.0
50°	575.9	591.2	623.4	661.7	677.0
52.5°	539.2	557.6	592.8	635.7	655.6
55°	500.9	519.3	565.2	609.6	631.1
57.5°	458.0	482.5	533.0	583.6	606.6
60°	418.2	441.1	502.4	557.6	580.5
62.5°	375.3	405.9	471.8	530.0	553.0
65°	330.9	364.6	439.6	497.8	520.8
67.5°	291.0	327.8	407.4	465.6	488.6
70°	243.5	289.5	372.2	430.4	453.4
72.5°	199.1	249.7	335.4	392.1	413.6
75°	156.2	212.9	297.2	347.7	358.4
77.5°	116.4	176.1	257.3	278.8	271.1
80°	82.7	140.9	200.7	189.9	194.5
82.5°	53.6	107.2	124.1	140.9	145.5
85°	30.6	62.8	76.6	82.7	85.8
87.5°	13.8	23.0	30.6	30.6	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)