

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: P391442

Luminaire Tested: **24CZ2-50VHE-RDP-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: P391442
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-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2879.6 lumens
Efficiency: N/A
Efficacy: 88.1 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

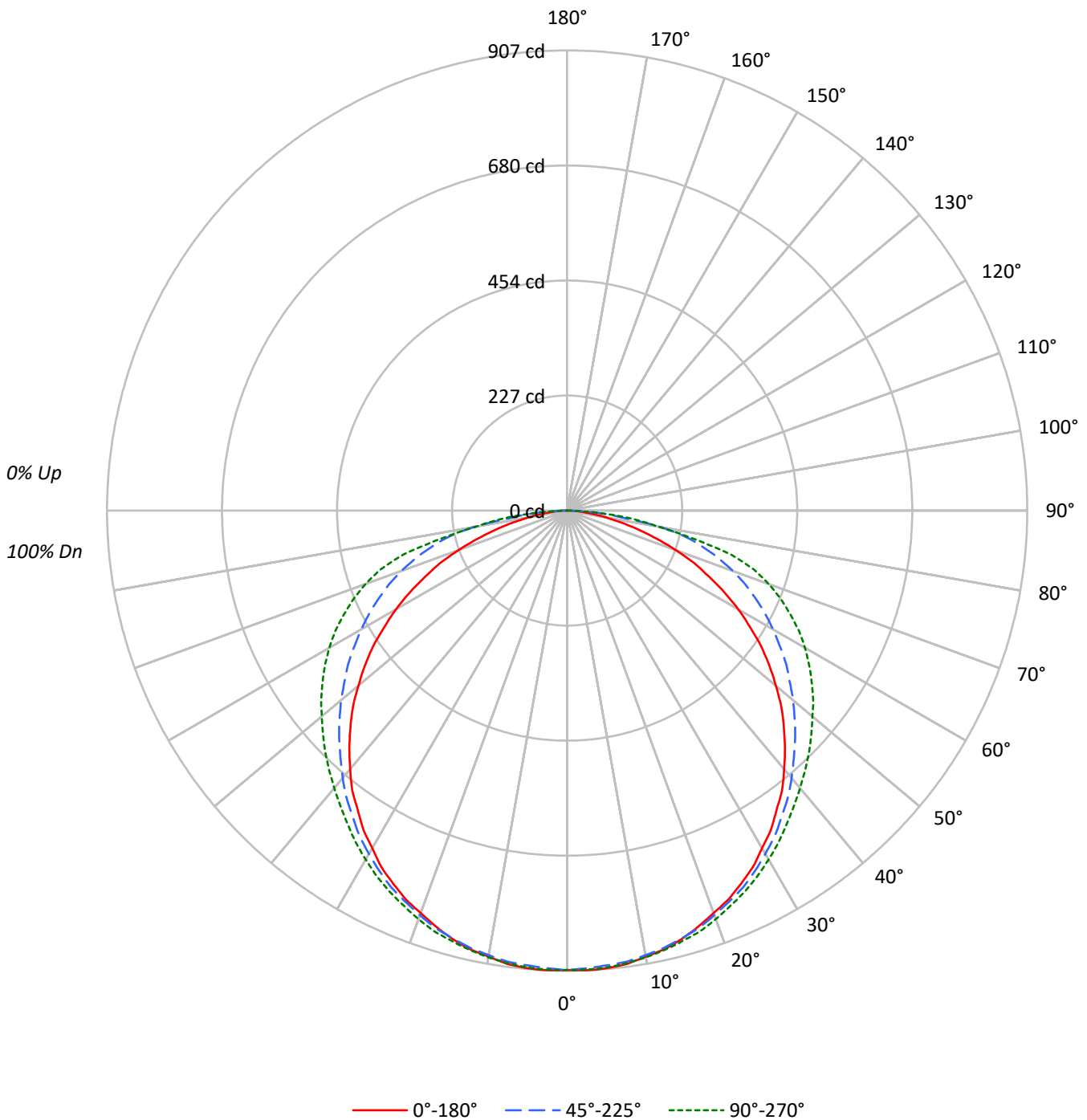
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391442

CATALOG NUMBER: 24CZ2-50VHE-RDP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391442

CATALOG NUMBER: 24CZ2-50VHE-RDP-UNV-L935-CD1-U

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°	1218	1218	1218
5°	1223	1215	1221
10°	1220	1216	1222
15°	1218	1216	1224
20°	1209	1215	1227
25°	1204	1217	1230
30°	1194	1214	1234
35°	1182	1211	1239
40°	1169	1209	1254
45°	1150	1209	1283
50°	1124	1217	1321
55°	1096	1236	1380
60°	1049	1261	1457
65°	982	1305	1546
70°	893	1365	1663
75°	757	1441	1737
80°	597	1450	1406
85°	442	1102	1235



TEST NUMBER: P391442

CATALOG NUMBER: 24CZ2-50VHE-RDP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	3.0
10°-20°	247.2	8.6
20°-30°	378.0	13.1
30°-40°	462.2	16.0
40°-50°	492.6	17.1
50°-60°	471.0	16.4
60°-70°	399.0	13.9
70°-80°	268.1	9.3
80°-90°	75.6	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°	711.2	24.7
0°-40°	1173.3	40.7
0°-60°	2136.9	74.2
0°-90°	2879.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2879.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	906	904	900	904	904	86
15°	874	874	873	880	878	246
25°	811	814	820	827	828	374
35°	720	726	737	751	754	451
45°	604	614	636	663	674	466
55°	467	484	527	568	588	416
65°	308	340	410	464	486	306
75°	146	198	277	324	334	156
85°	29	59	71	77	80	35
90°	0	0	0	0	0	



TEST NUMBER: P391442

CATALOG NUMBER: 24CZ2-50VHE-RDP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	905.6	905.6	905.6	905.6	905.6
2.5°	907.0	907.0	902.7	905.6	905.6
5°	905.6	904.1	899.8	904.1	904.1
7.5°	901.3	899.8	897.0	901.3	899.8
10°	892.7	892.7	889.8	894.1	894.1
12.5°	885.6	884.1	882.7	888.4	887.0
15°	874.1	874.1	872.7	879.8	878.4
17.5°	859.8	861.3	862.7	868.4	869.8
20°	844.1	847.0	848.4	857.0	857.0
22.5°	829.9	831.3	834.1	842.7	842.7
25°	811.3	814.1	819.9	827.0	828.4
27.5°	792.7	794.1	801.3	811.3	812.7
30°	768.4	772.7	781.3	792.7	794.1
32.5°	747.0	751.3	761.3	772.7	775.6
35°	719.9	725.6	737.0	751.3	754.2
37.5°	695.6	699.9	714.2	729.9	734.2
40°	665.6	674.2	688.4	707.0	714.2
42.5°	635.6	644.2	661.3	685.6	694.2
45°	604.2	614.2	635.6	662.7	674.2
47.5°	572.8	584.2	608.5	639.9	652.7
50°	537.0	551.3	581.3	617.0	631.3
52.5°	502.8	519.9	552.8	592.8	611.3
55°	467.1	484.2	527.0	568.5	588.5
57.5°	427.1	449.9	497.1	544.2	565.6
60°	389.9	411.4	468.5	519.9	541.3
62.5°	349.9	378.5	439.9	494.2	515.6
65°	308.5	339.9	409.9	464.2	485.6
67.5°	271.4	305.7	379.9	434.2	455.6
70°	227.1	270.0	347.1	401.4	422.8
72.5°	185.7	232.8	312.8	365.6	385.6
75°	145.7	198.5	277.1	324.2	334.2
77.5°	108.6	164.3	240.0	260.0	252.8
80°	77.1	131.4	187.1	177.1	181.4
82.5°	50.0	100.0	115.7	131.4	135.7
85°	28.6	58.6	71.4	77.1	80.0
87.5°	12.9	21.4	28.6	28.6	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)