

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: P391058

Luminaire Tested: **24CZ2-130VHE-RDP-UNV-L935-CD2-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: P391058
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: 24CZ2-130VHE-RDP-UNV-L935-CD2-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: 7546.4 lumens
Efficiency: N/A
Efficacy: 83.2 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

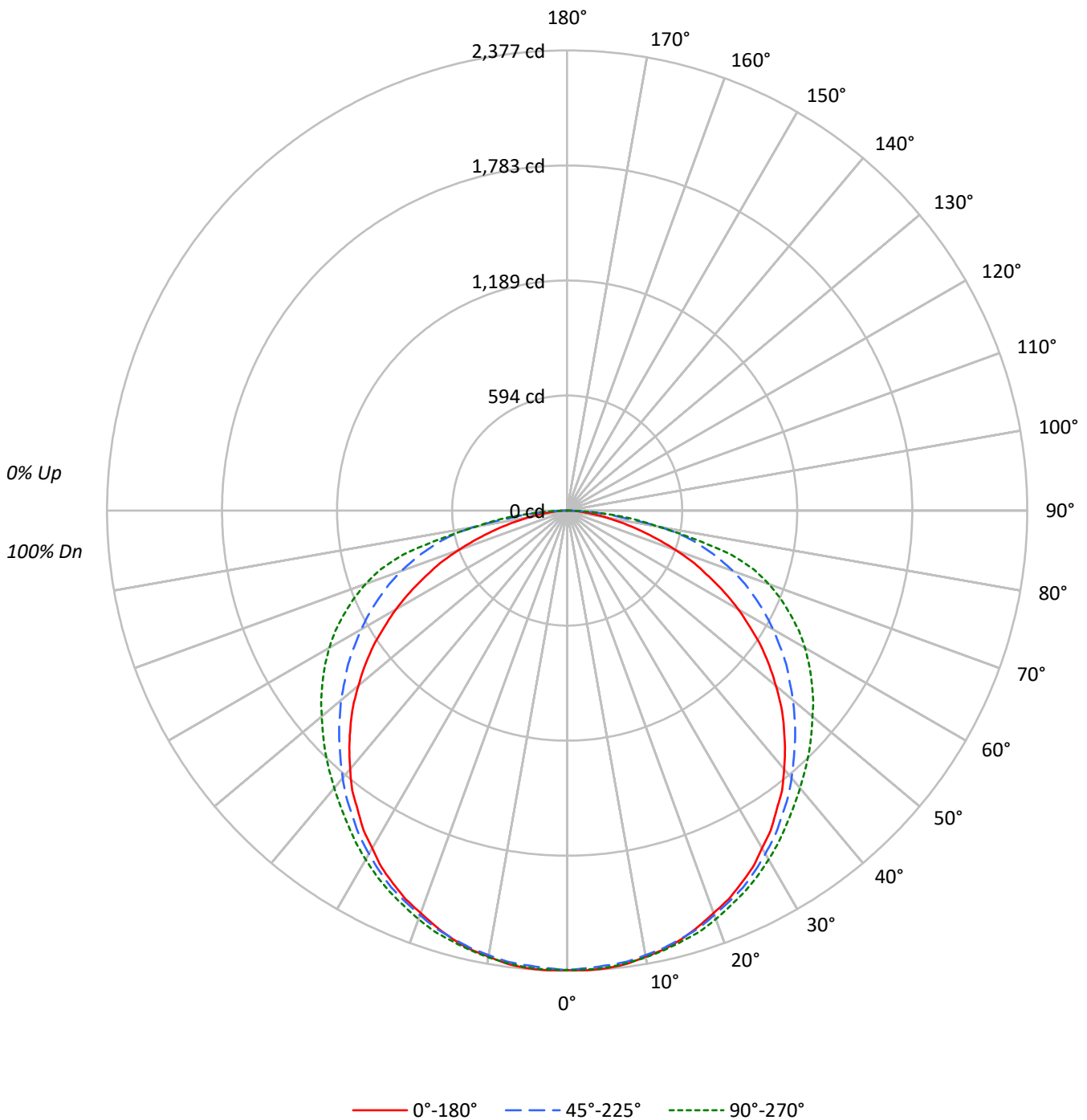
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391058

CATALOG NUMBER: 24CZ2-130VHE-RDP-UNV-L935-CD2-U

Luminous Intensity Polar Plot





TEST NUMBER: P391058

CATALOG NUMBER: 24CZ2-130VHE-RDP-UNV-L935-CD2-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°	3193	3193	3193
5°	3205	3185	3200
10°	3196	3186	3201
15°	3191	3186	3207
20°	3168	3184	3216
25°	3156	3190	3223
30°	3129	3181	3233
35°	3099	3172	3246
40°	3064	3169	3287
45°	3013	3170	3362
50°	2946	3189	3463
55°	2871	3240	3618
60°	2750	3304	3817
65°	2574	3420	4052
70°	2341	3578	4359
75°	1985	3775	4553
80°	1566	3799	3684
85°	1156	2890	3236



TEST NUMBER: P391058

CATALOG NUMBER: 24CZ2-130VHE-RDP-UNV-L935-CD2-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.1	3.0
10°-20°	647.9	8.6
20°-30°	990.7	13.1
30°-40°	1211.2	16.0
40°-50°	1290.8	17.1
50°-60°	1234.2	16.4
60°-70°	1045.5	13.9
70°-80°	702.7	9.3
80°-90°	198.2	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°	1863.7	24.7
0°-40°	3074.9	40.7
0°-60°	5600.0	74.2
0°-90°	7546.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7546.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2373	2373	2373	2373	2373	
5°	2373	2369	2358	2369	2369	225
15°	2291	2291	2287	2306	2302	646
25°	2126	2134	2148	2167	2171	980
35°	1886	1902	1931	1969	1976	1182
45°	1583	1610	1666	1737	1767	1221
55°	1224	1269	1381	1490	1542	1090
65°	808	891	1074	1216	1273	803
75°	382	520	726	850	876	409
85°	75	154	187	202	210	93
90°	0	0	0	0	0	



TEST NUMBER: P391058

CATALOG NUMBER: 24CZ2-130VHE-RDP-UNV-L935-CD2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2373.1	2373.1	2373.1	2373.1	2373.1
2.5°	2376.9	2376.9	2365.6	2373.1	2373.1
5°	2373.1	2369.4	2358.2	2369.4	2369.4
7.5°	2361.9	2358.2	2350.7	2361.9	2358.2
10°	2339.4	2339.4	2332.0	2343.2	2343.2
12.5°	2320.7	2317.0	2313.2	2328.2	2324.5
15°	2290.8	2290.8	2287.0	2305.8	2302.0
17.5°	2253.3	2257.1	2260.8	2275.8	2279.5
20°	2212.2	2219.7	2223.4	2245.9	2245.9
22.5°	2174.7	2178.5	2186.0	2208.4	2208.4
25°	2126.1	2133.6	2148.5	2167.3	2171.0
27.5°	2077.4	2081.2	2099.9	2126.1	2129.8
30°	2013.8	2025.0	2047.5	2077.4	2081.2
32.5°	1957.6	1968.9	1995.1	2025.0	2032.5
35°	1886.5	1901.5	1931.4	1968.9	1976.4
37.5°	1822.9	1834.1	1871.6	1912.7	1924.0
40°	1744.3	1766.7	1804.2	1852.8	1871.6
42.5°	1665.7	1688.1	1733.1	1796.7	1819.1
45°	1583.3	1609.5	1665.7	1736.8	1766.7
47.5°	1501.0	1530.9	1594.6	1676.9	1710.6
50°	1407.4	1444.8	1523.4	1617.0	1654.5
52.5°	1317.6	1362.5	1448.6	1553.4	1602.0
55°	1224.0	1268.9	1381.2	1489.8	1542.2
57.5°	1119.2	1179.1	1302.6	1426.1	1482.3
60°	1021.9	1078.0	1227.7	1362.5	1418.6
62.5°	917.1	991.9	1152.9	1295.1	1351.3
65°	808.5	890.9	1074.3	1216.5	1272.7
67.5°	711.2	801.0	995.7	1137.9	1194.0
70°	595.2	707.4	909.6	1051.8	1108.0
72.5°	486.6	610.1	819.7	958.2	1010.6
75°	381.8	520.3	726.2	849.7	875.9
77.5°	284.5	430.5	628.8	681.2	662.5
80°	202.1	344.4	490.3	464.1	475.4
82.5°	131.0	262.0	303.2	344.4	355.6
85°	74.9	153.5	187.2	202.1	209.6
87.5°	33.7	56.1	74.9	74.9	71.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)