

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: P390335

Luminaire Tested: **22CZ2-39VHE-RDP-UNV-L930-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: P390335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-RDP-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2262.9 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

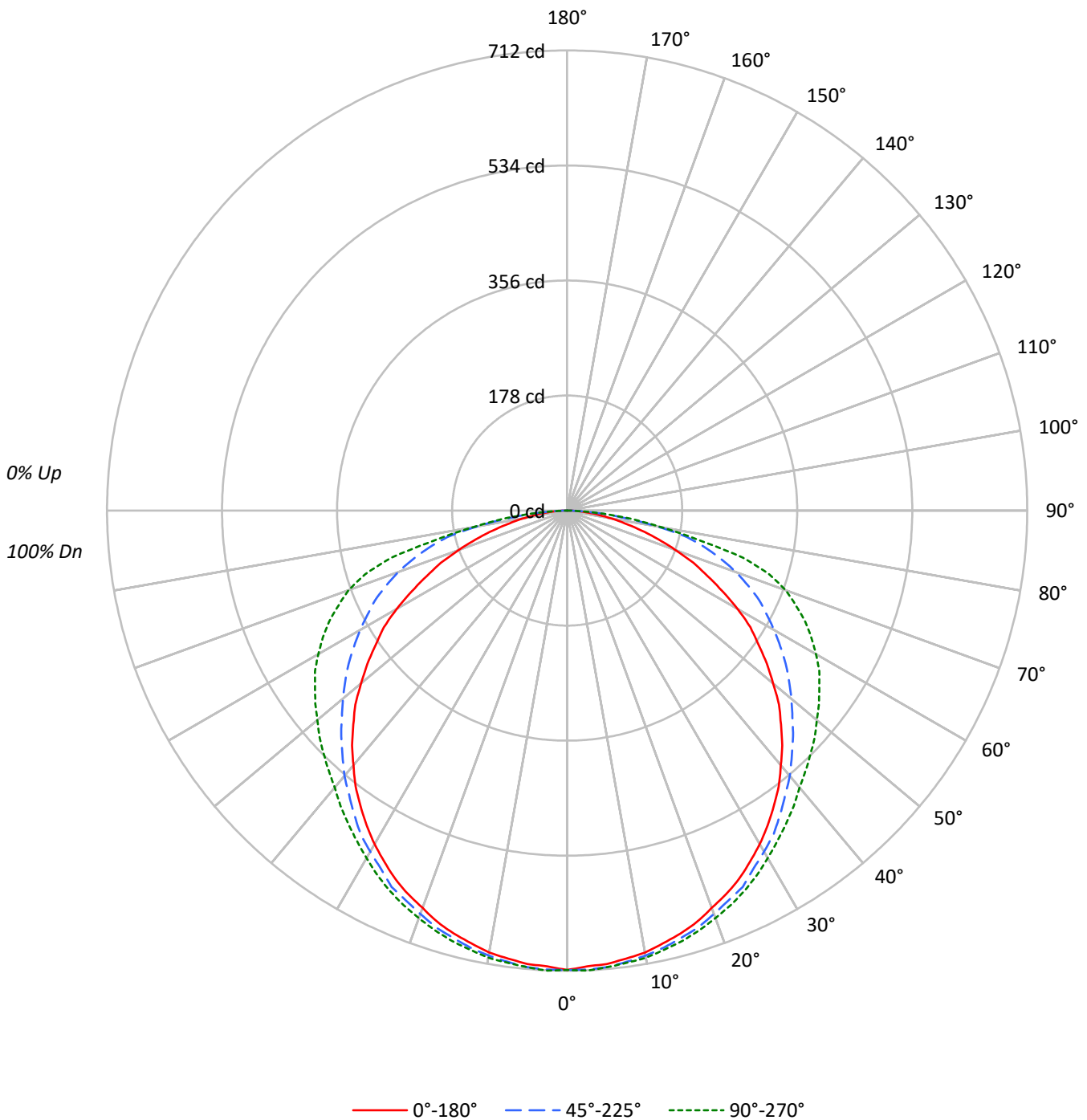
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390335

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390335

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	1913	1913	1913
5°	1902	1916	1916
10°	1897	1911	1920
15°	1887	1906	1920
20°	1873	1902	1921
25°	1868	1908	1928
30°	1852	1893	1929
35°	1832	1887	1941
40°	1807	1883	1965
45°	1780	1881	2027
50°	1742	1896	2112
55°	1695	1937	2234
60°	1639	1989	2392
65°	1526	2088	2586
70°	1401	2187	2829
75°	1229	2302	2925
80°	1058	2193	2297
85°	926	1593	1748



TEST NUMBER: P390335

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	3.0
10°-20°	193.1	8.5
20°-30°	294.5	13.0
30°-40°	359.6	15.9
40°-50°	384.5	17.0
50°-60°	371.2	16.4
60°-70°	319.5	14.1
70°-80°	216.2	9.6
80°-90°	57.0	2.5
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°	554.8	24.5
0°-40°	914.5	40.4
0°-60°	1670.2	73.8
0°-90°	2262.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2262.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	704	706	709	709	709	67
15°	678	679	684	688	689	191
25°	629	633	643	646	649	290
35°	558	563	574	586	591	349
45°	468	476	494	519	533	361
55°	361	373	413	454	476	324
65°	240	263	328	380	406	238
75°	118	156	221	266	281	127
85°	30	42	52	53	57	34
90°	0	0	0	0	0	



TEST NUMBER: P390335

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	710.8	710.8	710.8	710.8	710.8
2.5°	705.8	707.5	710.8	710.8	712.5
5°	704.2	705.8	709.2	709.2	709.2
7.5°	699.2	700.8	704.2	705.8	705.8
10°	694.2	695.8	699.2	700.8	702.5
12.5°	685.8	687.5	692.5	695.8	695.8
15°	677.5	679.2	684.2	687.5	689.2
17.5°	667.5	670.9	675.9	679.2	680.9
20°	654.2	657.5	664.2	669.2	670.9
22.5°	642.6	645.9	652.6	657.5	660.9
25°	629.2	632.6	642.6	645.9	649.2
27.5°	612.6	615.9	624.3	630.9	635.9
30°	596.0	599.3	609.3	617.6	620.9
32.5°	577.6	582.6	594.3	600.9	605.9
35°	557.7	562.7	574.3	586.0	591.0
37.5°	537.7	542.7	554.3	569.3	576.0
40°	514.4	521.0	536.0	556.0	559.3
42.5°	492.7	501.1	514.4	537.7	546.0
45°	467.8	476.1	494.4	519.4	532.7
47.5°	444.5	452.8	472.8	502.7	519.4
50°	416.2	427.8	452.8	487.7	504.4
52.5°	389.5	399.5	432.8	471.1	491.1
55°	361.2	372.9	412.8	454.5	476.1
57.5°	336.3	346.3	391.2	437.8	462.8
60°	304.6	318.0	369.6	419.5	444.5
62.5°	271.3	291.3	347.9	399.5	426.2
65°	239.7	263.0	327.9	379.5	406.2
67.5°	211.4	236.4	303.0	357.9	382.9
70°	178.1	209.7	278.0	331.3	359.6
72.5°	148.2	183.1	249.7	303.0	327.9
75°	118.2	156.5	221.4	266.3	281.3
77.5°	91.6	128.2	189.8	203.1	204.8
80°	68.3	101.5	141.5	143.2	148.2
82.5°	46.6	71.6	91.6	99.9	101.5
85°	30.0	41.6	51.6	53.3	56.6
87.5°	13.3	15.0	18.3	16.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)