

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: P390333

Luminaire Tested: **22CZ2-39VHE-RDP-UNV-L930-CD1-SDWPD1-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: P390333
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-SDWPD1-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: 2207.9 lumens
Efficiency: N/A
Efficacy: 77.2 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

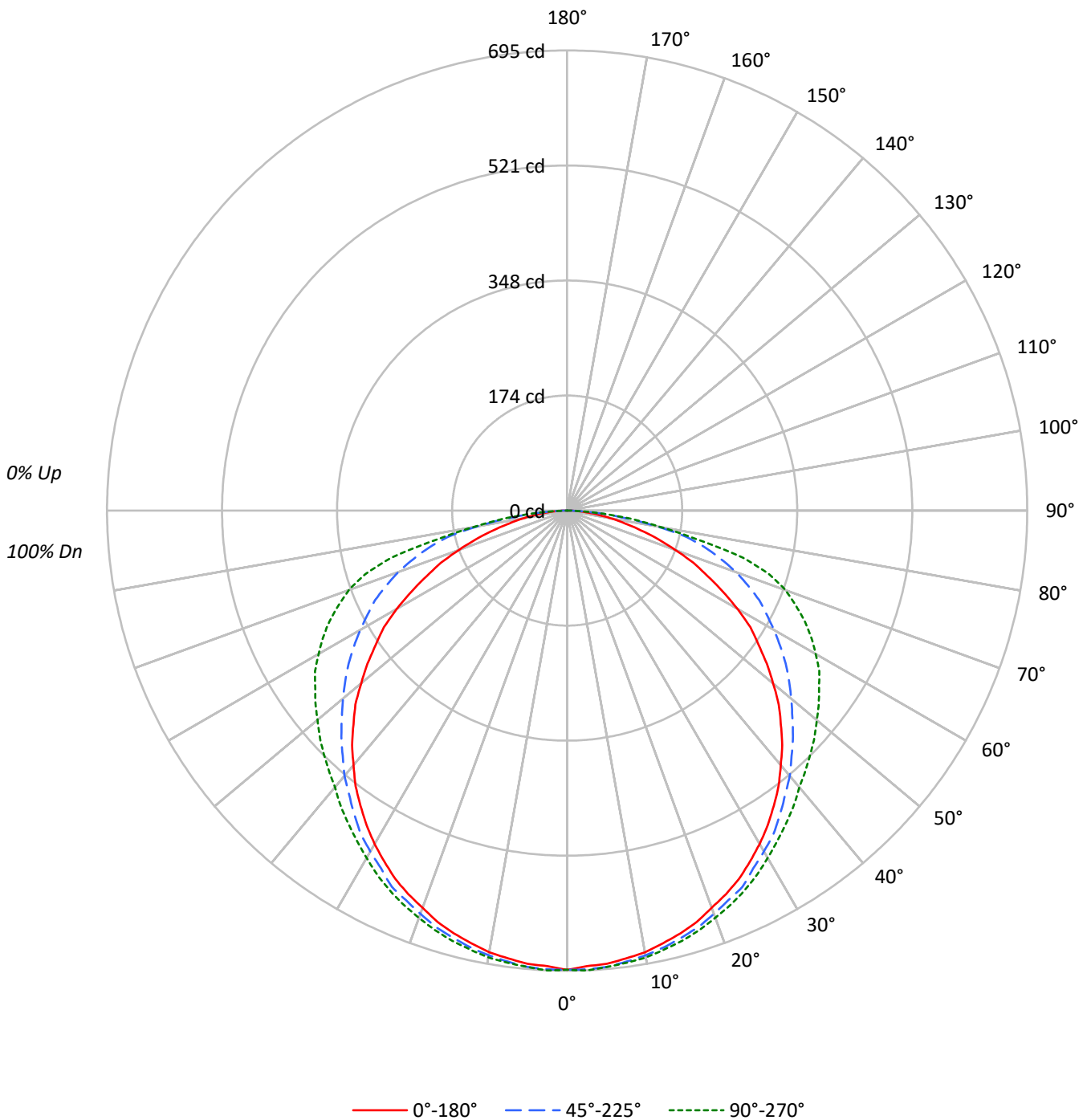
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390333

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390333

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-CD1-SDWPD1-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°	1866	1866	1866
5°	1856	1869	1869
10°	1851	1864	1873
15°	1842	1860	1873
20°	1828	1856	1875
25°	1823	1861	1881
30°	1807	1847	1882
35°	1787	1841	1894
40°	1763	1837	1917
45°	1737	1836	1978
50°	1700	1850	2060
55°	1654	1890	2179
60°	1600	1941	2334
65°	1489	2038	2523
70°	1367	2134	2760
75°	1199	2246	2854
80°	1032	2140	2241
85°	902	1556	1704



TEST NUMBER: P390333

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	3.0
10°-20°	188.4	8.5
20°-30°	287.4	13.0
30°-40°	350.9	15.9
40°-50°	375.2	17.0
50°-60°	362.1	16.4
60°-70°	311.7	14.1
70°-80°	210.9	9.6
80°-90°	55.7	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°	541.4	24.5
0°-40°	892.3	40.4
0°-60°	1629.6	73.8
0°-90°	2207.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2207.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	694	694	694	694	694	
5°	687	689	692	692	692	65
15°	661	663	668	671	672	187
25°	614	617	627	630	633	283
35°	544	549	560	572	577	340
45°	456	464	482	507	520	352
55°	352	364	403	443	464	316
65°	234	257	320	370	396	233
75°	115	153	216	260	274	124
85°	29	41	50	52	55	33
90°	0	0	0	0	0	



TEST NUMBER: P390333

CATALOG NUMBER: 22CZ2-39VHE-RDP-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	693.5	693.5	693.5	693.5	693.5
2.5°	688.7	690.3	693.5	693.5	695.2
5°	687.0	688.7	691.9	691.9	691.9
7.5°	682.2	683.8	687.0	688.7	688.7
10°	677.3	678.9	682.2	683.8	685.4
12.5°	669.2	670.8	675.7	678.9	678.9
15°	661.1	662.7	667.6	670.8	672.4
17.5°	651.3	654.6	659.4	662.7	664.3
20°	638.3	641.6	648.1	652.9	654.6
22.5°	626.9	630.2	636.7	641.6	644.8
25°	614.0	617.2	626.9	630.2	633.4
27.5°	597.7	601.0	609.1	615.6	620.5
30°	581.5	584.7	594.5	602.6	605.8
32.5°	563.6	568.5	579.8	586.3	591.2
35°	544.1	549.0	560.4	571.7	576.6
37.5°	524.6	529.5	540.9	555.5	562.0
40°	501.9	508.4	523.0	542.5	545.7
42.5°	480.8	488.9	501.9	524.6	532.7
45°	456.4	464.5	482.4	506.8	519.7
47.5°	433.7	441.8	461.3	490.5	506.8
50°	406.1	417.4	441.8	475.9	492.1
52.5°	380.1	389.8	422.3	459.7	479.1
55°	352.5	363.8	402.8	443.4	464.5
57.5°	328.1	337.8	381.7	427.2	451.5
60°	297.2	310.2	360.6	409.3	433.7
62.5°	264.7	284.2	339.5	389.8	415.8
65°	233.9	256.6	320.0	370.3	396.3
67.5°	206.3	230.6	295.6	349.2	373.6
70°	173.8	204.7	271.2	323.2	350.8
72.5°	144.6	178.7	243.6	295.6	320.0
75°	115.3	152.7	216.0	259.9	274.5
77.5°	89.3	125.1	185.2	198.2	199.8
80°	66.6	99.1	138.1	139.7	144.6
82.5°	45.5	69.8	89.3	97.5	99.1
85°	29.2	40.6	50.4	52.0	55.2
87.5°	13.0	14.6	17.9	16.2	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)