

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: P390340

Luminaire Tested: **22CZ2-39VHE-RDP-UNV-L940-CD1-SWPD1-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: P390340
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-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2313.8 lumens
Efficiency: N/A
Efficacy: 80.9 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

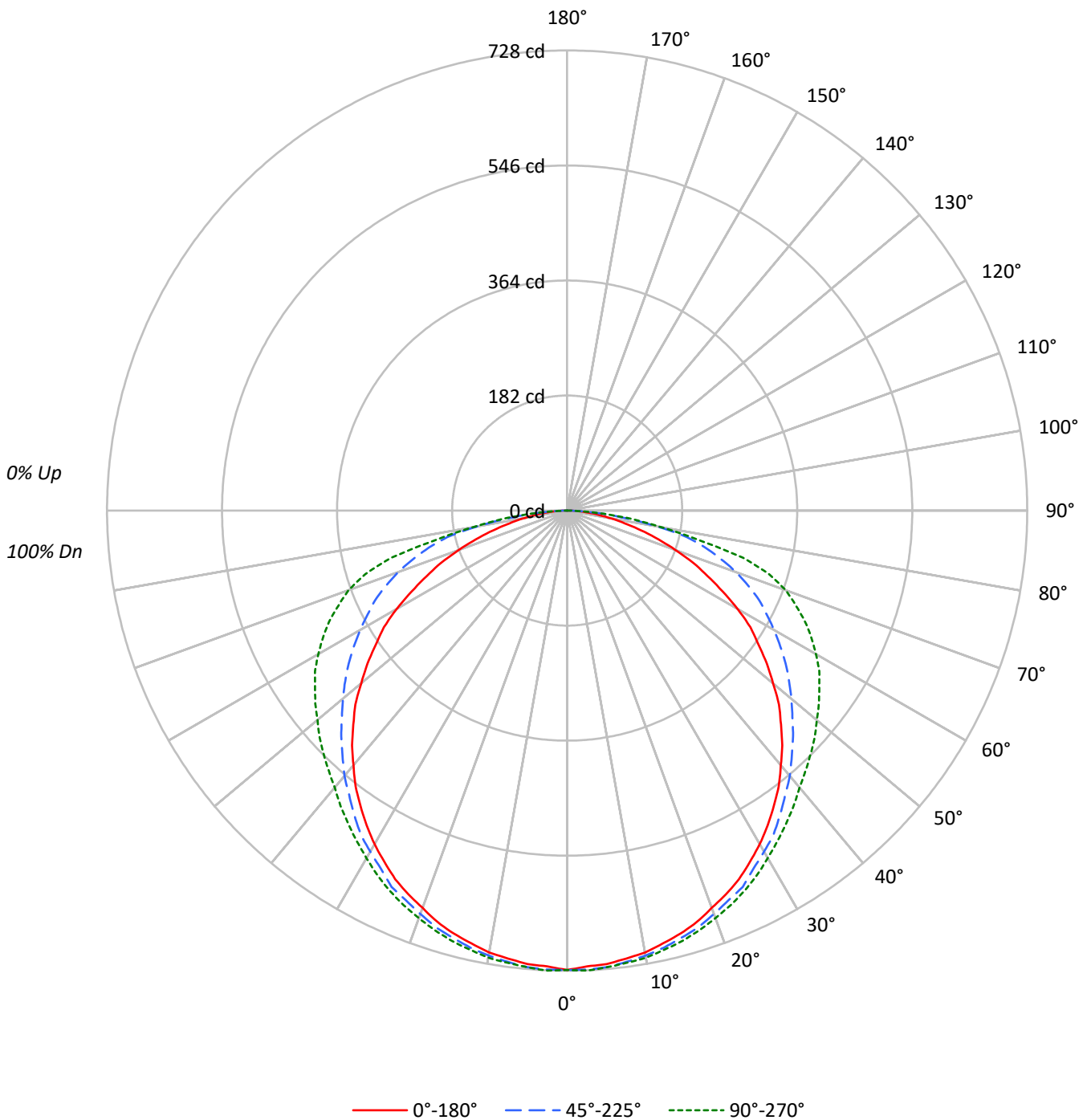
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1956	1956	1956
5°	1945	1959	1959
10°	1940	1953	1963
15°	1930	1949	1963
20°	1916	1945	1964
25°	1910	1951	1971
30°	1894	1936	1973
35°	1873	1929	1985
40°	1848	1925	2009
45°	1820	1924	2073
50°	1781	1938	2159
55°	1733	1980	2284
60°	1676	2034	2446
65°	1561	2135	2644
70°	1433	2237	2893
75°	1257	2354	2991
80°	1082	2242	2348
85°	945	1630	1788



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	3.0
10°-20°	197.4	8.5
20°-30°	301.2	13.0
30°-40°	367.7	15.9
40°-50°	393.2	17.0
50°-60°	379.5	16.4
60°-70°	326.7	14.1
70°-80°	221.0	9.6
80°-90°	58.3	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°	567.3	24.5
0°-40°	935.0	40.4
0°-60°	1707.8	73.8
0°-90°	2313.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2313.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	720	722	725	725	725	68
15°	693	694	700	703	705	195
25°	643	647	657	660	664	296
35°	570	575	587	599	604	357
45°	478	487	506	531	545	369
55°	369	381	422	465	487	331
65°	245	269	335	388	415	244
75°	121	160	226	272	288	130
85°	31	43	53	54	58	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	726.8	726.8	726.8	726.8	726.8
2.5°	721.7	723.4	726.8	726.8	728.5
5°	720.0	721.7	725.1	725.1	725.1
7.5°	714.9	716.6	720.0	721.7	721.7
10°	709.8	711.5	714.9	716.6	718.3
12.5°	701.3	703.0	708.1	711.5	711.5
15°	692.8	694.5	699.6	703.0	704.7
17.5°	682.5	686.0	691.1	694.5	696.2
20°	668.9	672.3	679.1	684.3	686.0
22.5°	657.0	660.4	667.2	672.3	675.7
25°	643.4	646.8	657.0	660.4	663.8
27.5°	626.4	629.8	638.3	645.1	650.2
30°	609.4	612.8	623.0	631.5	634.9
32.5°	590.6	595.7	607.7	614.5	619.6
35°	570.2	575.3	587.2	599.1	604.3
37.5°	549.8	554.9	566.8	582.1	588.9
40°	526.0	532.8	548.1	568.5	571.9
42.5°	503.8	512.3	526.0	549.8	558.3
45°	478.3	486.8	505.5	531.1	544.7
47.5°	454.5	463.0	483.4	514.0	531.1
50°	425.5	437.4	463.0	498.7	515.7
52.5°	398.3	408.5	442.6	481.7	502.1
55°	369.4	381.3	422.1	464.7	486.8
57.5°	343.8	354.0	400.0	447.7	473.2
60°	311.5	325.1	377.9	428.9	454.5
62.5°	277.4	297.9	355.7	408.5	435.7
65°	245.1	268.9	335.3	388.1	415.3
67.5°	216.2	241.7	309.8	366.0	391.5
70°	182.1	214.5	284.3	338.7	367.7
72.5°	151.5	187.2	255.3	309.8	335.3
75°	120.9	160.0	226.4	272.3	287.7
77.5°	93.6	131.1	194.0	207.7	209.4
80°	69.8	103.8	144.7	146.4	151.5
82.5°	47.7	73.2	93.6	102.1	103.8
85°	30.6	42.6	52.8	54.5	57.9
87.5°	13.6	15.3	18.7	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)