

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: P390339

Luminaire Tested: **22CZ2-39VHE-RDP-UNV-L940-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: P390339
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-SDWPD1-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: 2285.9 lumens
Efficiency: N/A
Efficacy: 79.9 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

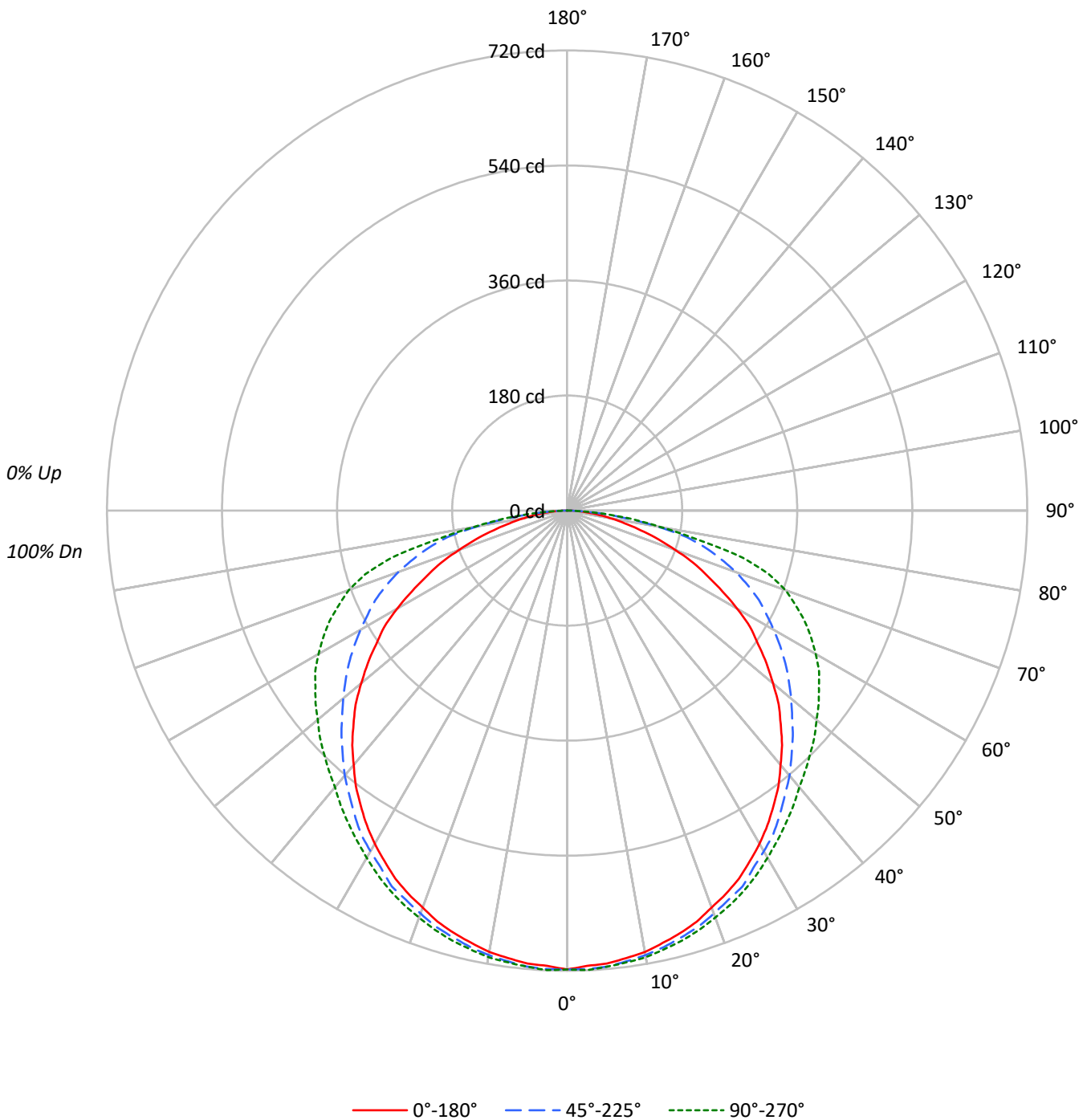
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1932	1932	1932
5°	1921	1935	1935
10°	1916	1930	1939
15°	1907	1925	1940
20°	1893	1922	1941
25°	1887	1927	1947
30°	1871	1913	1949
35°	1850	1906	1961
40°	1825	1902	1985
45°	1798	1901	2048
50°	1760	1915	2133
55°	1712	1956	2256
60°	1656	2009	2416
65°	1542	2110	2613
70°	1415	2209	2858
75°	1241	2326	2955
80°	1068	2214	2320
85°	936	1609	1766



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	3.0
10°-20°	195.0	8.5
20°-30°	297.5	13.0
30°-40°	363.3	15.9
40°-50°	388.5	17.0
50°-60°	374.9	16.4
60°-70°	322.8	14.1
70°-80°	218.4	9.6
80°-90°	57.6	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°	560.5	24.5
0°-40°	923.8	40.4
0°-60°	1687.2	73.8
0°-90°	2285.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2285.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	711	713	716	716	716	68
15°	684	686	691	694	696	193
25°	636	639	649	652	656	293
35°	563	568	580	592	597	352
45°	472	481	499	525	538	365
55°	365	377	417	459	481	327
65°	242	266	331	383	410	241
75°	119	158	224	269	284	128
85°	30	42	52	54	57	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.0	718.0	718.0	718.0	718.0
2.5°	713.0	714.7	718.0	718.0	719.7
5°	711.3	713.0	716.4	716.4	716.4
7.5°	706.3	708.0	711.3	713.0	713.0
10°	701.2	702.9	706.3	708.0	709.6
12.5°	692.8	694.5	699.5	702.9	702.9
15°	684.4	686.1	691.1	694.5	696.2
17.5°	674.3	677.7	682.7	686.1	687.8
20°	660.9	664.2	671.0	676.0	677.7
22.5°	649.1	652.5	659.2	664.2	667.6
25°	635.6	639.0	649.1	652.5	655.8
27.5°	618.8	622.2	630.6	637.3	642.4
30°	602.0	605.4	615.5	623.9	627.2
32.5°	583.5	588.6	600.3	607.1	612.1
35°	563.3	568.4	580.2	591.9	597.0
37.5°	543.2	548.2	560.0	575.1	581.8
40°	519.6	526.3	541.5	561.7	565.0
42.5°	497.8	506.2	519.6	543.2	551.6
45°	472.5	480.9	499.4	524.7	538.1
47.5°	449.0	457.4	477.6	507.8	524.7
50°	420.4	432.2	457.4	492.7	509.5
52.5°	393.5	403.6	437.2	475.9	496.1
55°	364.9	376.7	417.0	459.1	480.9
57.5°	339.7	349.8	395.2	442.3	467.5
60°	307.7	321.2	373.3	423.8	449.0
62.5°	274.1	294.3	351.5	403.6	430.5
65°	242.1	265.7	331.3	383.4	410.3
67.5°	213.6	238.8	306.1	361.5	386.8
70°	179.9	211.9	280.8	334.6	363.2
72.5°	149.7	185.0	252.2	306.1	331.3
75°	119.4	158.1	223.7	269.1	284.2
77.5°	92.5	129.5	191.7	205.2	206.8
80°	68.9	102.6	142.9	144.6	149.7
82.5°	47.1	72.3	92.5	100.9	102.6
85°	30.3	42.0	52.1	53.8	57.2
87.5°	13.5	15.1	18.5	16.8	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)