

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: P387847

Luminaire Tested: **22CZ2-32-SQR-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: P387847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-SQR-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2657.5 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

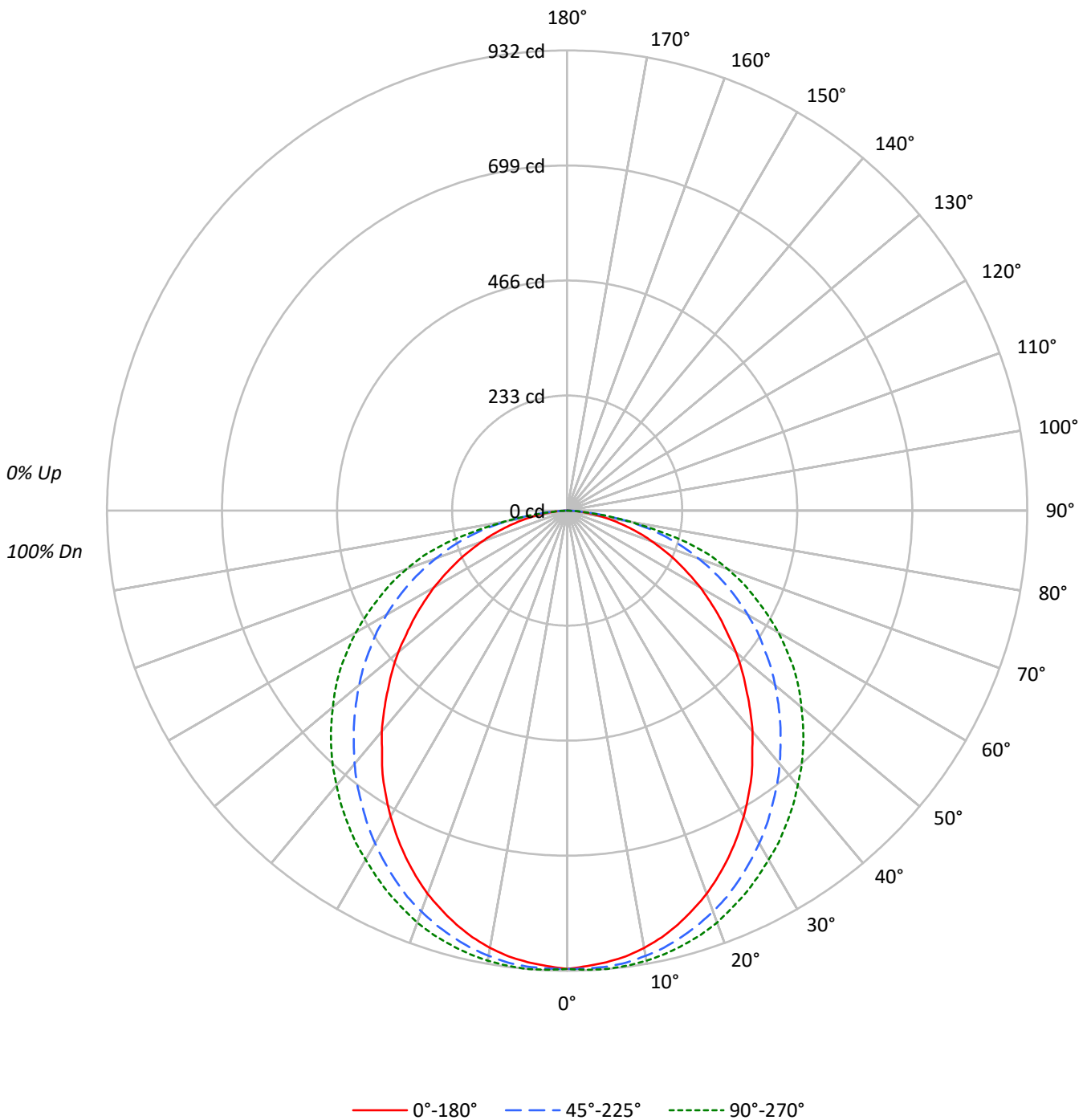
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2498	2498	2498
5°	2480	2504	2518
10°	2457	2502	2530
15°	2418	2491	2537
20°	2366	2474	2543
25°	2299	2449	2539
30°	2222	2418	2536
35°	2142	2383	2544
40°	2051	2353	2552
45°	1954	2323	2573
50°	1869	2302	2593
55°	1769	2284	2633
60°	1676	2274	2661
65°	1566	2257	2683
70°	1439	2223	2719
75°	1299	2164	2623
80°	1114	1915	1974
85°	895	1130	895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.0	3.3
10°-20°	251.6	9.5
20°-30°	377.9	14.2
30°-40°	450.7	17.0
40°-50°	466.0	17.5
50°-60°	428.5	16.1
60°-70°	341.1	12.8
70°-80°	208.4	7.8
80°-90°	45.3	1.7
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°	717.6	27.0
0°-40°	1168.3	44.0
0°-60°	2062.7	77.6
0°-90°	2657.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2657.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	918	921	927	931	932	87
15°	868	878	894	907	911	244
25°	774	793	825	848	855	356
35°	652	680	725	763	774	407
45°	513	550	610	660	676	397
55°	377	419	487	542	561	337
65°	246	288	354	404	421	244
75°	125	161	208	245	252	133
85°	29	35	37	32	29	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	928.3	928.3	928.3	928.3	928.3
2.5°	923.3	924.5	928.3	930.9	930.9
5°	918.2	920.8	927.1	930.9	932.1
7.5°	910.7	914.5	923.3	928.3	929.6
10°	899.3	904.4	915.7	923.3	925.8
12.5°	885.4	893.0	906.9	917.0	919.5
15°	867.8	877.9	894.3	906.9	910.7
17.5°	847.6	860.2	880.4	895.5	900.6
20°	826.2	838.8	864.0	881.7	888.0
22.5°	800.9	817.3	846.3	866.5	871.6
25°	774.4	793.4	824.9	847.6	855.2
27.5°	745.4	768.1	802.2	829.9	836.3
30°	715.2	739.1	778.2	808.5	816.1
32.5°	683.6	711.4	753.0	787.1	797.2
35°	652.1	679.8	725.3	763.1	774.4
37.5°	615.5	648.3	698.8	737.9	751.7
40°	584.0	615.5	669.8	712.6	726.5
42.5°	548.7	582.7	639.5	686.2	702.6
45°	513.4	549.9	610.5	659.7	676.1
47.5°	480.6	517.1	580.2	631.9	648.3
50°	446.5	484.3	549.9	602.9	619.3
52.5°	409.9	451.6	519.7	572.6	591.6
55°	377.1	418.8	486.9	542.4	561.3
57.5°	343.1	386.0	456.6	509.6	527.2
60°	311.5	353.2	422.5	474.3	494.4
62.5°	277.5	320.4	388.5	438.9	457.9
65°	246.0	287.6	354.4	403.6	421.3
67.5°	214.4	256.0	319.1	365.8	386.0
70°	182.9	224.5	282.5	327.9	345.6
72.5°	155.1	191.7	247.2	288.8	305.2
75°	124.9	161.4	208.1	244.7	252.3
77.5°	97.1	129.9	169.0	185.4	187.9
80°	71.9	97.1	123.6	127.4	127.4
82.5°	47.9	66.8	76.9	78.2	76.9
85°	29.0	35.3	36.6	31.5	29.0
87.5°	10.1	10.1	6.3	3.8	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)