

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: P387604

Luminaire Tested: **22CZ2-100VHE-SQR-UNV-L935-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: P387604
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: 22CZ2-100VHE-SQR-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8105.7 lumens
Efficiency: N/A
Efficacy: 104.3 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

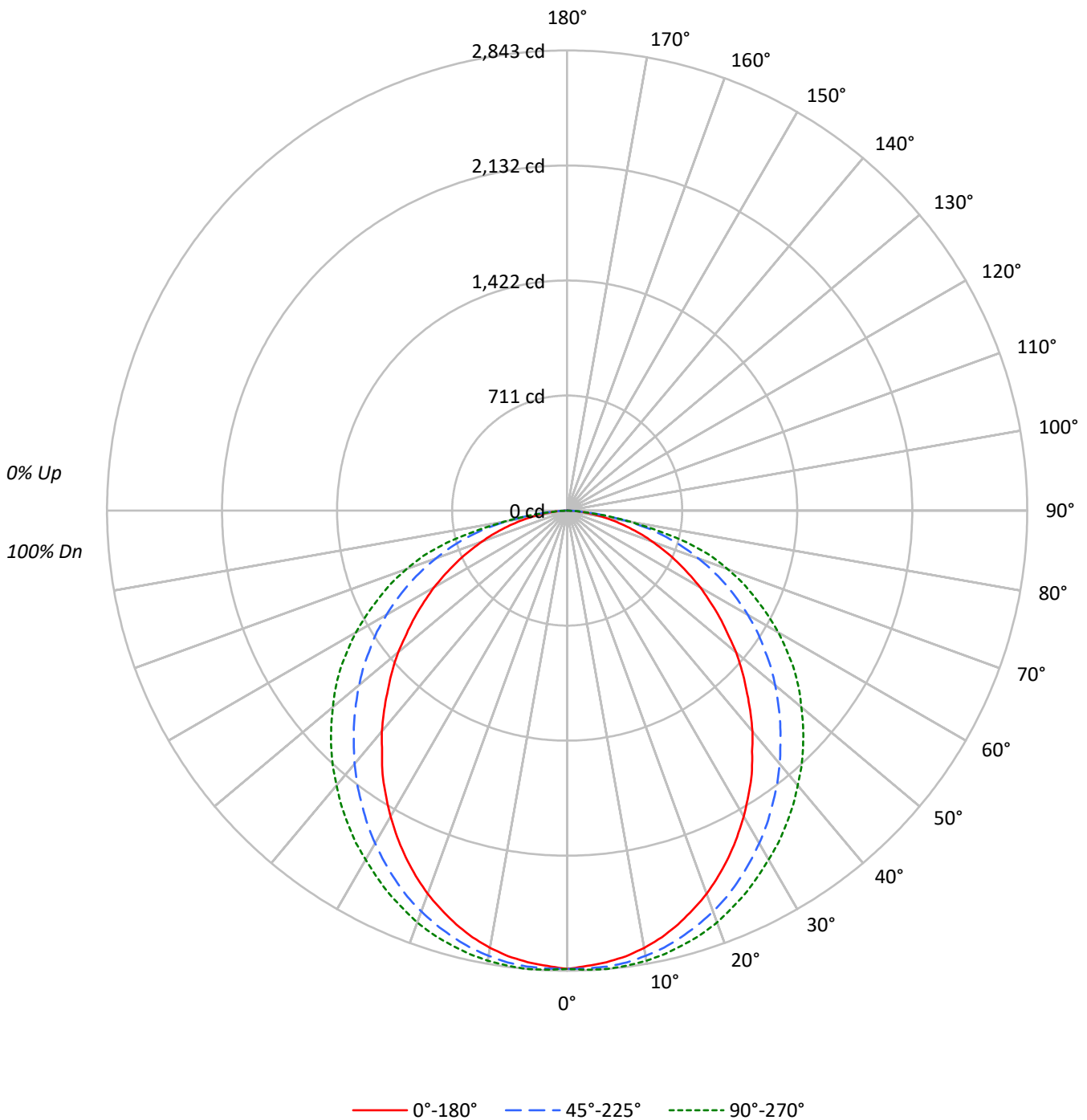
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7620	7620	7620
5°	7565	7638	7680
10°	7495	7632	7716
15°	7374	7599	7738
20°	7216	7547	7756
25°	7014	7470	7745
30°	6778	7376	7734
35°	6534	7267	7760
40°	6257	7176	7784
45°	5959	7086	7848
50°	5701	7022	7908
55°	5397	6967	8032
60°	5114	6936	8117
65°	4777	6884	8182
70°	4389	6781	8294
75°	3960	6600	8000
80°	3398	5842	6022
85°	2732	3446	2732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.4	3.3
10°-20°	767.5	9.5
20°-30°	1152.7	14.2
30°-40°	1374.8	17.0
40°-50°	1421.4	17.5
50°-60°	1306.8	16.1
60°-70°	1040.4	12.8
70°-80°	635.6	7.8
80°-90°	138.2	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°	2188.6	27.0
0°-40°	3563.4	44.0
0°-60°	6291.6	77.6
0°-90°	8105.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8105.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2832	2832	2832	2832	2832	
5°	2801	2808	2828	2839	2843	266
15°	2647	2678	2728	2766	2778	745
25°	2362	2420	2516	2585	2608	1087
35°	1989	2074	2212	2328	2362	1241
45°	1566	1677	1862	2012	2062	1211
55°	1150	1277	1485	1654	1712	1029
65°	750	877	1081	1231	1285	743
75°	381	492	635	746	769	406
85°	88	108	112	96	88	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2831.5	2831.5	2831.5	2831.5	2831.5
2.5°	2816.1	2820.0	2831.5	2839.2	2839.2
5°	2800.7	2808.4	2827.7	2839.2	2843.1
7.5°	2777.7	2789.2	2816.1	2831.5	2835.4
10°	2743.0	2758.4	2793.0	2816.1	2823.8
12.5°	2700.7	2723.8	2766.1	2796.9	2804.6
15°	2646.9	2677.6	2727.6	2766.1	2777.7
17.5°	2585.3	2623.8	2685.3	2731.5	2746.9
20°	2519.9	2558.4	2635.3	2689.2	2708.4
22.5°	2443.0	2493.0	2581.5	2643.0	2658.4
25°	2362.2	2419.9	2516.0	2585.3	2608.4
27.5°	2273.7	2342.9	2446.8	2531.4	2550.7
30°	2181.3	2254.4	2373.7	2466.0	2489.1
32.5°	2085.2	2169.8	2296.8	2400.6	2431.4
35°	1989.0	2073.6	2212.1	2327.5	2362.2
37.5°	1877.4	1977.4	2131.3	2250.6	2292.9
40°	1781.2	1877.4	2042.8	2173.7	2216.0
42.5°	1673.5	1777.4	1950.5	2092.9	2142.9
45°	1565.8	1677.4	1862.0	2012.1	2062.1
47.5°	1465.8	1577.3	1769.7	1927.4	1977.4
50°	1361.9	1477.3	1677.4	1838.9	1889.0
52.5°	1250.3	1377.3	1585.0	1746.6	1804.3
55°	1150.3	1277.3	1485.0	1654.3	1712.0
57.5°	1046.4	1177.2	1392.7	1554.3	1608.1
60°	950.3	1077.2	1288.8	1446.5	1508.1
62.5°	846.4	977.2	1184.9	1338.8	1396.5
65°	750.2	877.2	1081.1	1231.1	1285.0
67.5°	654.0	781.0	973.3	1115.7	1177.2
70°	557.8	684.8	861.8	1000.3	1054.1
72.5°	473.2	584.8	754.0	881.0	931.0
75°	380.9	492.4	634.8	746.4	769.4
77.5°	296.2	396.3	515.5	565.5	573.2
80°	219.3	296.2	377.0	388.6	388.6
82.5°	146.2	203.9	234.7	238.5	234.7
85°	88.5	107.7	111.6	96.2	88.5
87.5°	30.8	30.8	19.2	11.5	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)