

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: P387726

Luminaire Tested: **22CZ2-24-SQR-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: P387726
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: 22CZ2-24-SQR-UNV-L940-CD1-SDWPD1-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: 1961.1 lumens
Efficiency: N/A
Efficacy: 89.5 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

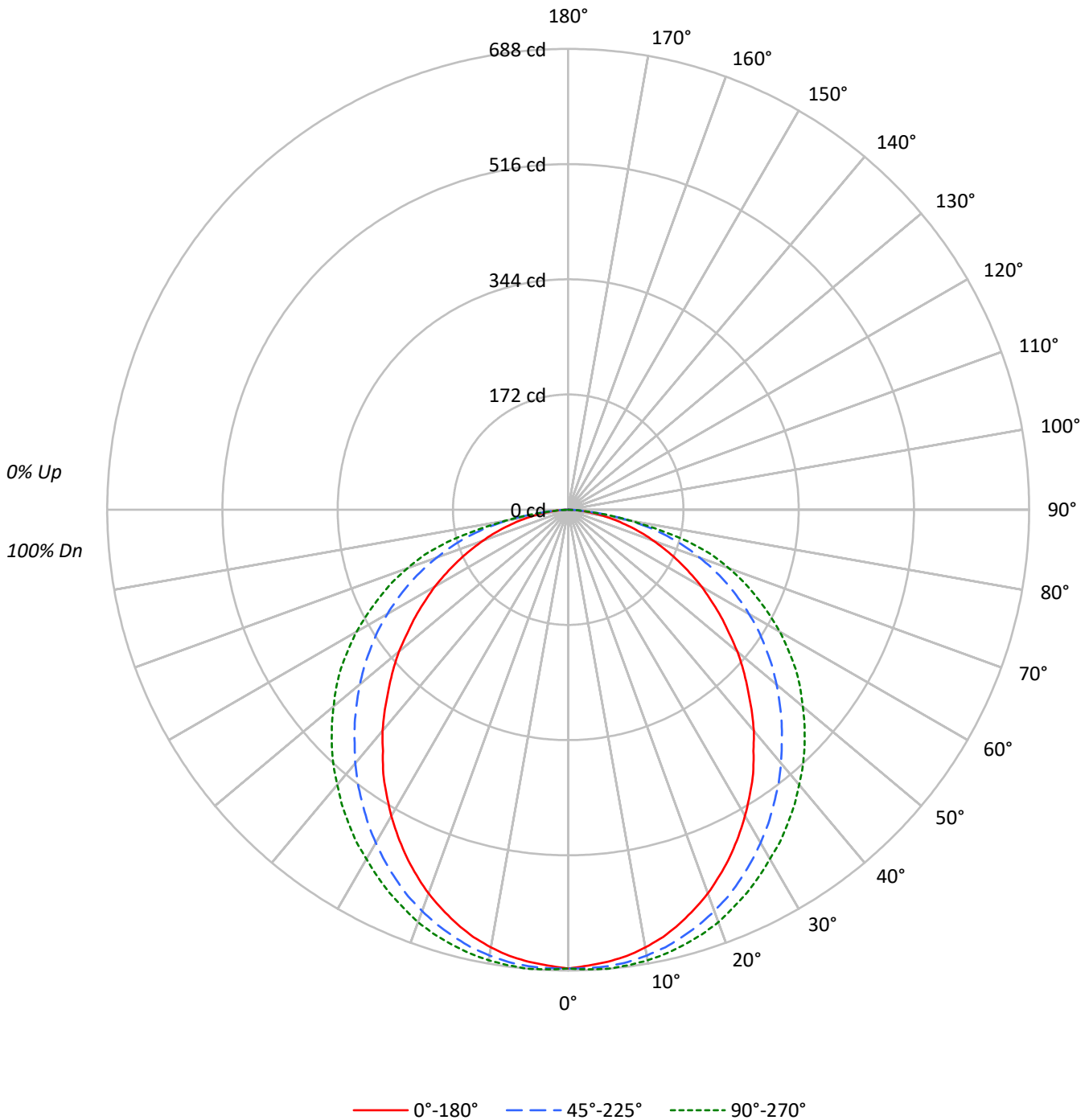
Input Watts (W): 21.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1844	1844	1844
5°	1830	1848	1858
10°	1814	1847	1867
15°	1784	1838	1872
20°	1746	1826	1877
25°	1697	1807	1874
30°	1640	1785	1871
35°	1581	1758	1877
40°	1514	1736	1883
45°	1442	1714	1899
50°	1379	1699	1913
55°	1306	1686	1943
60°	1237	1678	1964
65°	1156	1666	1980
70°	1062	1640	2006
75°	958	1597	1936
80°	823	1413	1457
85°	661	834	661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	3.3
10°-20°	185.7	9.5
20°-30°	278.9	14.2
30°-40°	332.6	17.0
40°-50°	343.9	17.5
50°-60°	316.2	16.1
60°-70°	251.7	12.8
70°-80°	153.8	7.8
80°-90°	33.4	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°	529.5	27.0
0°-40°	862.1	44.0
0°-60°	1522.2	77.6
0°-90°	1961.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	685	685	685	685	685	
5°	678	680	684	687	688	64
15°	640	648	660	669	672	180
25°	572	586	609	626	631	263
35°	481	502	535	563	572	300
45°	379	406	450	487	499	293
55°	278	309	359	400	414	249
65°	182	212	262	298	311	180
75°	92	119	154	181	186	98
85°	21	26	27	23	21	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	685.1	685.1	685.1	685.1	685.1
2.5°	681.3	682.3	685.1	686.9	686.9
5°	677.6	679.5	684.1	686.9	687.9
7.5°	672.0	674.8	681.3	685.1	686.0
10°	663.7	667.4	675.8	681.3	683.2
12.5°	653.4	659.0	669.2	676.7	678.5
15°	640.4	647.8	659.9	669.2	672.0
17.5°	625.5	634.8	649.7	660.9	664.6
20°	609.7	619.0	637.6	650.6	655.3
22.5°	591.0	603.2	624.6	639.5	643.2
25°	571.5	585.5	608.7	625.5	631.1
27.5°	550.1	566.8	592.0	612.5	617.1
30°	527.8	545.4	574.3	596.6	602.2
32.5°	504.5	525.0	555.7	580.8	588.3
35°	481.2	501.7	535.2	563.1	571.5
37.5°	454.2	478.4	515.7	544.5	554.7
40°	431.0	454.2	494.2	525.9	536.1
42.5°	404.9	430.0	471.9	506.3	518.4
45°	378.8	405.8	450.5	486.8	498.9
47.5°	354.6	381.6	428.2	466.3	478.4
50°	329.5	357.4	405.8	444.9	457.0
52.5°	302.5	333.2	383.5	422.6	436.5
55°	278.3	309.0	359.3	400.2	414.2
57.5°	253.2	284.8	336.9	376.0	389.1
60°	229.9	260.6	311.8	350.0	364.9
62.5°	204.8	236.4	286.7	323.9	337.9
65°	181.5	212.2	261.6	297.9	310.9
67.5°	158.2	188.9	235.5	269.9	284.8
70°	135.0	165.7	208.5	242.0	255.0
72.5°	114.5	141.5	182.4	213.2	225.3
75°	92.1	119.1	153.6	180.6	186.2
77.5°	71.7	95.9	124.7	136.8	138.7
80°	53.1	71.7	91.2	94.0	94.0
82.5°	35.4	49.3	56.8	57.7	56.8
85°	21.4	26.1	27.0	23.3	21.4
87.5°	7.4	7.4	4.7	2.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)