

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: P387723

Luminaire Tested: **22CZ2-24-SQR-UNV-L935-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: P387723
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-L935-CD1-SDWPD1-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: 1941.0 lumens
Efficiency: N/A
Efficacy: 88.6 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

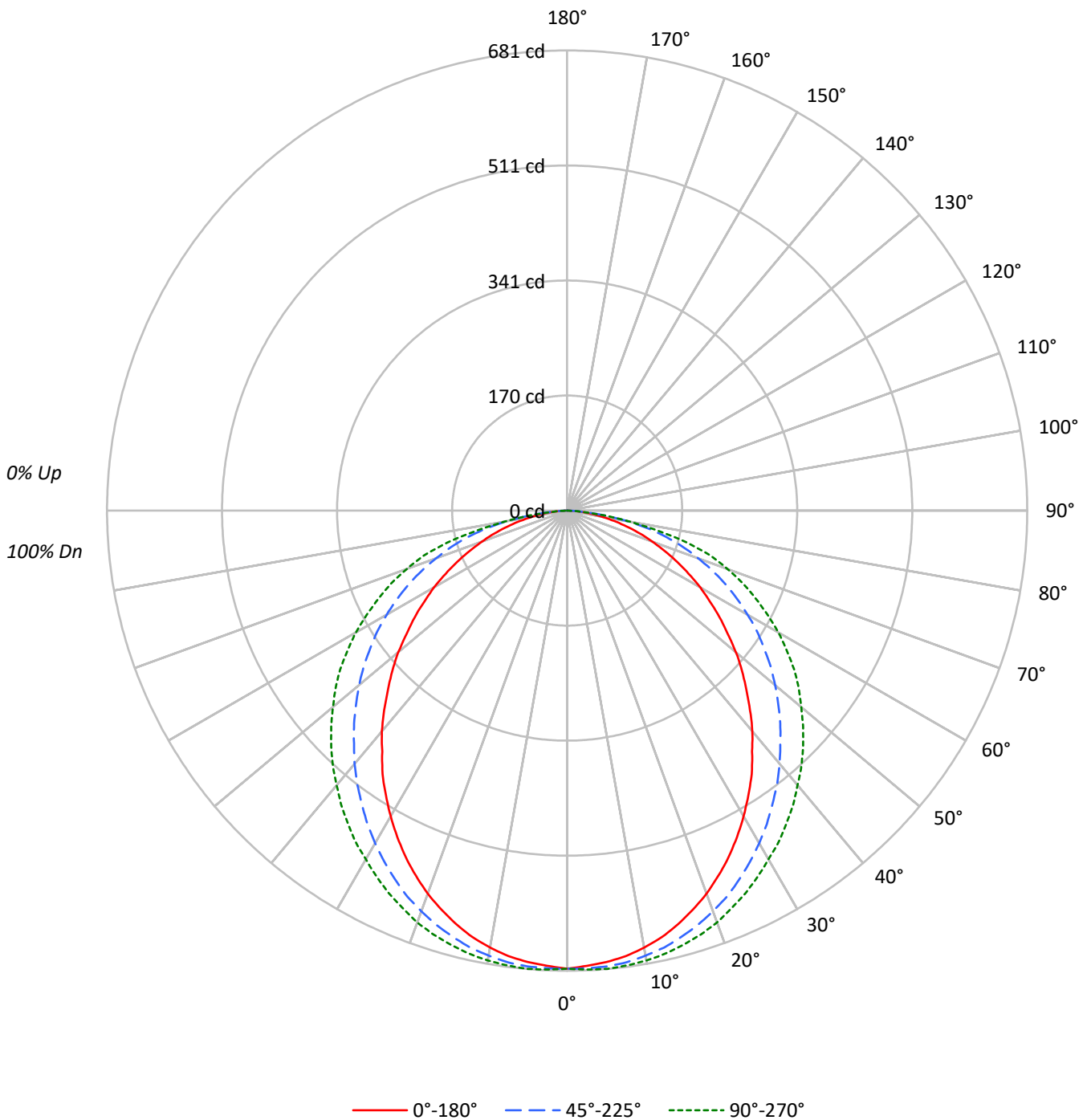
Input Watts (W): 21.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1824	1824	1824
5°	1812	1829	1839
10°	1795	1827	1848
15°	1766	1820	1853
20°	1728	1807	1857
25°	1679	1789	1855
30°	1623	1766	1852
35°	1565	1740	1858
40°	1498	1718	1864
45°	1427	1697	1879
50°	1365	1682	1894
55°	1293	1668	1924
60°	1224	1661	1943
65°	1144	1649	1959
70°	1051	1624	1986
75°	948	1580	1915
80°	814	1399	1441
85°	655	824	655



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	3.3
10°-20°	183.8	9.5
20°-30°	276.0	14.2
30°-40°	329.2	17.0
40°-50°	340.4	17.5
50°-60°	312.9	16.1
60°-70°	249.1	12.8
70°-80°	152.2	7.8
80°-90°	33.1	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°	524.1	27.0
0°-40°	853.3	44.0
0°-60°	1506.6	77.6
0°-90°	1941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1941.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	671	672	677	680	681	64
15°	634	641	653	662	665	178
25°	566	580	602	619	625	260
35°	476	497	530	557	566	297
45°	375	402	446	482	494	290
55°	276	306	356	396	410	246
65°	180	210	259	295	308	178
75°	91	118	152	179	184	97
85°	21	26	27	23	21	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	678.0	678.0	678.0	678.0	678.0
2.5°	674.4	675.3	678.0	679.9	679.9
5°	670.7	672.5	677.1	679.9	680.8
7.5°	665.1	667.9	674.4	678.0	679.0
10°	656.8	660.5	668.8	674.4	676.2
12.5°	646.7	652.2	662.4	669.7	671.6
15°	633.8	641.2	653.2	662.4	665.1
17.5°	619.1	628.3	643.0	654.1	657.8
20°	603.4	612.6	631.1	644.0	648.6
22.5°	585.0	597.0	618.2	632.9	636.6
25°	565.6	579.5	602.5	619.1	624.6
27.5°	544.5	561.0	585.9	606.2	610.8
30°	522.3	539.9	568.4	590.5	596.0
32.5°	499.3	519.6	550.0	574.9	582.2
35°	476.3	496.6	529.7	557.4	565.6
37.5°	449.6	473.5	510.4	538.9	549.1
40°	426.5	449.6	489.2	520.5	530.6
42.5°	400.7	425.6	467.1	501.2	513.1
45°	374.9	401.7	445.9	481.8	493.8
47.5°	351.0	377.7	423.8	461.5	473.5
50°	326.1	353.8	401.7	440.4	452.3
52.5°	299.4	329.8	379.6	418.2	432.1
55°	275.5	305.9	355.6	396.1	410.0
57.5°	250.6	281.9	333.5	372.2	385.1
60°	227.5	257.9	308.6	346.4	361.1
62.5°	202.7	234.0	283.7	320.6	334.4
65°	179.6	210.0	258.9	294.8	307.7
67.5°	156.6	187.0	233.1	267.2	281.9
70°	133.6	164.0	206.4	239.5	252.4
72.5°	113.3	140.0	180.6	211.0	222.9
75°	91.2	117.9	152.0	178.7	184.2
77.5°	70.9	94.9	123.4	135.4	137.3
80°	52.5	70.9	90.3	93.0	93.0
82.5°	35.0	48.8	56.2	57.1	56.2
85°	21.2	25.8	26.7	23.0	21.2
87.5°	7.4	7.4	4.6	2.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)