

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: P387728

Luminaire Tested: **22CZ2-24-SQR-UNV-L940-CD1-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: P387728
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-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

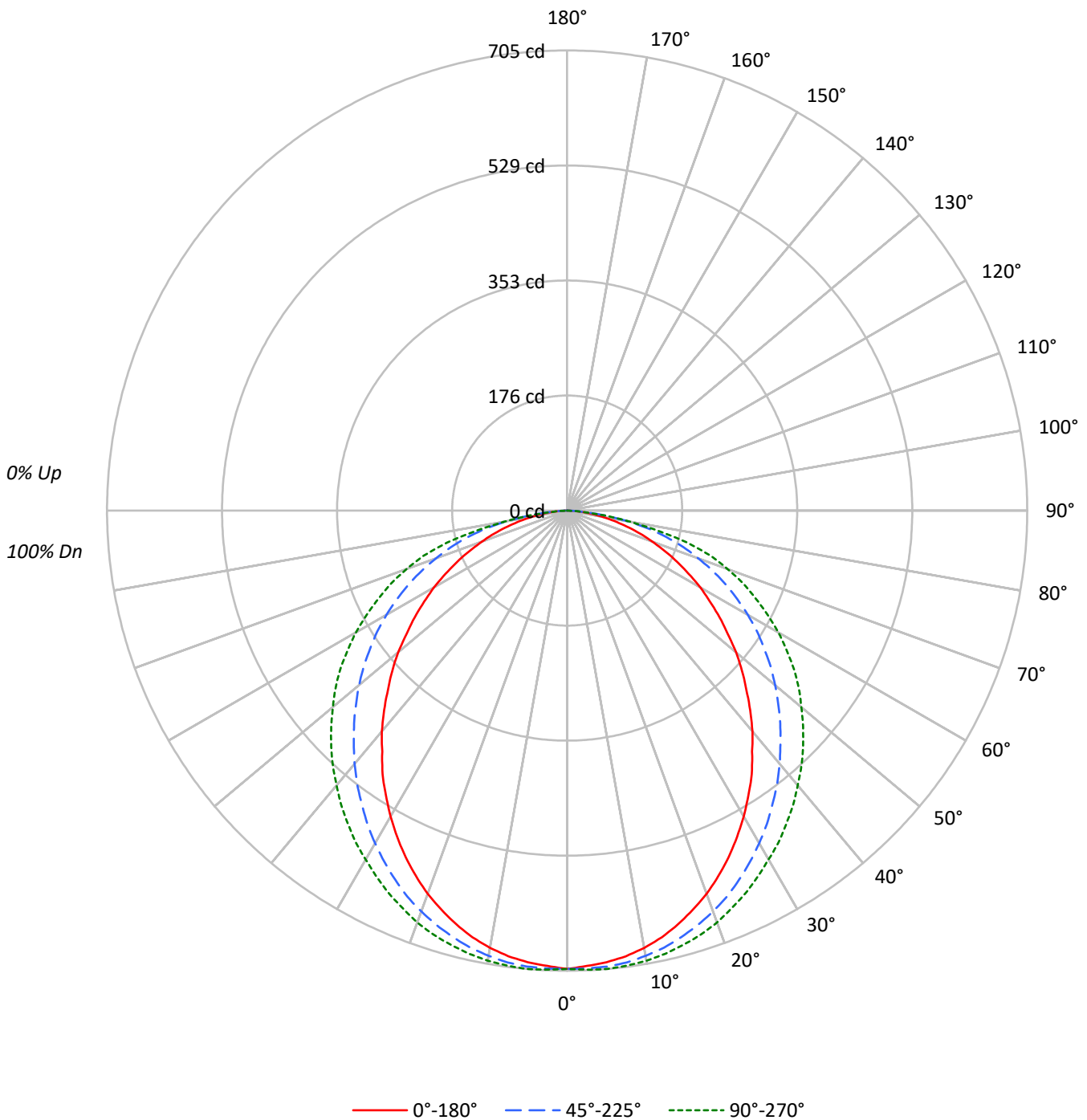
Lumens per Lamp: N/A
Luminaire Lumens: 2009.9 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1889	1889	1889
5°	1876	1894	1904
10°	1859	1893	1913
15°	1828	1884	1919
20°	1789	1871	1923
25°	1739	1852	1920
30°	1681	1829	1918
35°	1620	1802	1924
40°	1552	1779	1930
45°	1478	1757	1946
50°	1414	1741	1961
55°	1338	1727	1992
60°	1268	1720	2012
65°	1184	1707	2029
70°	1088	1681	2057
75°	981	1637	1984
80°	843	1449	1492
85°	676	855	676



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	3.3
10°-20°	190.3	9.5
20°-30°	285.8	14.2
30°-40°	340.9	17.0
40°-50°	352.4	17.5
50°-60°	324.0	16.1
60°-70°	258.0	12.8
70°-80°	157.6	7.8
80°-90°	34.3	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°	542.7	27.0
0°-40°	883.6	44.0
0°-60°	1560.1	77.6
0°-90°	2009.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2009.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	694	696	701	704	705	66
15°	656	664	676	686	689	185
25°	586	600	624	641	647	269
35°	493	514	548	577	586	308
45°	388	416	462	499	511	300
55°	285	317	368	410	424	255
65°	186	218	268	305	319	184
75°	94	122	157	185	191	101
85°	22	27	28	24	22	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.1	702.1	702.1	702.1	702.1
2.5°	698.3	699.2	702.1	704.0	704.0
5°	694.5	696.4	701.2	704.0	705.0
7.5°	688.8	691.6	698.3	702.1	703.1
10°	680.2	684.0	692.6	698.3	700.2
12.5°	669.7	675.4	685.9	693.5	695.4
15°	656.3	663.9	676.3	685.9	688.8
17.5°	641.1	650.6	665.9	677.3	681.1
20°	624.8	634.4	653.5	666.8	671.6
22.5°	605.8	618.2	640.1	655.4	659.2
25°	585.7	600.0	623.9	641.1	646.8
27.5°	563.8	581.0	606.7	627.7	632.5
30°	540.9	559.0	588.6	611.5	617.2
32.5°	517.0	538.0	569.5	595.3	602.9
35°	493.2	514.2	548.5	577.1	585.7
37.5°	465.5	490.3	528.5	558.1	568.6
40°	441.7	465.5	506.5	539.0	549.5
42.5°	415.0	440.7	483.7	518.9	531.3
45°	388.3	415.9	461.7	498.9	511.3
47.5°	363.5	391.1	438.8	477.9	490.3
50°	337.7	366.3	415.9	456.0	468.4
52.5°	310.0	341.5	393.0	433.1	447.4
55°	285.2	316.7	368.2	410.2	424.5
57.5°	259.5	291.9	345.3	385.4	398.8
60°	235.6	267.1	319.6	358.7	373.9
62.5°	209.9	242.3	293.8	332.0	346.3
65°	186.0	217.5	268.1	305.3	318.6
67.5°	162.2	193.7	241.3	276.6	291.9
70°	138.3	169.8	213.7	248.0	261.4
72.5°	117.3	145.0	187.0	218.5	230.9
75°	94.4	122.1	157.4	185.1	190.8
77.5°	73.5	98.3	127.8	140.2	142.1
80°	54.4	73.5	93.5	96.3	96.3
82.5°	36.3	50.6	58.2	59.1	58.2
85°	21.9	26.7	27.7	23.8	21.9
87.5°	7.6	7.6	4.8	2.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)