

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: P387747

Luminaire Tested: **22CZ2-24HE-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: P387747
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: 22CZ2-24HE-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: 1914.0 lumens
Efficiency: N/A
Efficacy: 99.7 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

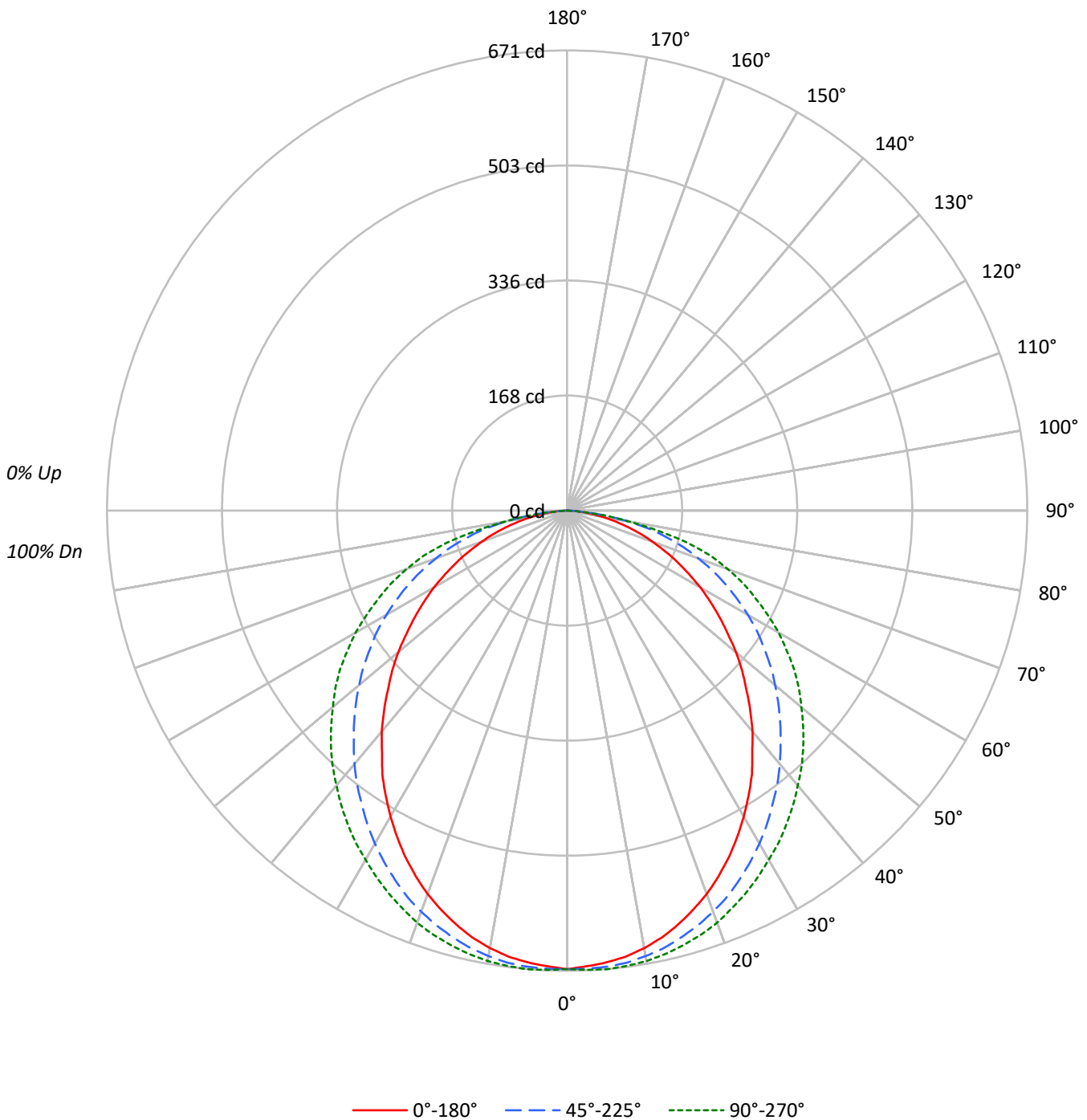
Input Watts (W): 19.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1799	1799	1799
5°	1786	1804	1813
10°	1770	1802	1822
15°	1741	1794	1827
20°	1704	1782	1831
25°	1656	1764	1829
30°	1601	1742	1826
35°	1543	1716	1832
40°	1477	1695	1838
45°	1407	1673	1853
50°	1346	1658	1867
55°	1274	1645	1897
60°	1208	1638	1917
65°	1128	1626	1932
70°	1036	1601	1958
75°	935	1559	1889
80°	803	1379	1423
85°	645	812	645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	3.3
10°-20°	181.2	9.5
20°-30°	272.2	14.2
30°-40°	324.6	17.0
40°-50°	335.6	17.5
50°-60°	308.6	16.1
60°-70°	245.6	12.8
70°-80°	150.1	7.8
80°-90°	32.6	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°	516.8	27.0
0°-40°	841.4	44.0
0°-60°	1485.6	77.6
0°-90°	1914.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1914.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	661	663	668	670	671	63
15°	625	632	644	653	656	176
25°	558	571	594	610	616	257
35°	470	490	522	550	558	293
45°	370	396	440	475	487	286
55°	272	302	351	391	404	243
65°	177	207	255	291	303	175
75°	90	116	150	176	182	96
85°	21	25	26	23	21	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	668.6	668.6	668.6	668.6	668.6
2.5°	665.0	665.9	668.6	670.4	670.4
5°	661.3	663.2	667.7	670.4	671.3
7.5°	655.9	658.6	665.0	668.6	669.5
10°	647.7	651.3	659.5	665.0	666.8
12.5°	637.7	643.2	653.2	660.4	662.2
15°	625.0	632.3	644.1	653.2	655.9
17.5°	610.5	619.6	634.1	645.0	648.6
20°	595.0	604.1	622.3	635.0	639.5
22.5°	576.9	588.7	609.6	624.1	627.7
25°	557.8	571.4	594.1	610.5	615.9
27.5°	536.9	553.2	577.8	597.7	602.3
30°	515.1	532.3	560.5	582.3	587.8
32.5°	492.4	512.4	542.3	566.9	574.1
35°	469.7	489.6	522.3	549.6	557.8
37.5°	443.3	466.9	503.3	531.4	541.4
40°	420.6	443.3	482.4	513.3	523.3
42.5°	395.2	419.7	460.6	494.2	506.0
45°	369.7	396.1	439.7	475.1	486.9
47.5°	346.1	372.5	417.9	455.1	466.9
50°	321.6	348.8	396.1	434.2	446.0
52.5°	295.2	325.2	374.3	412.4	426.1
55°	271.6	301.6	350.7	390.6	404.3
57.5°	247.1	278.0	328.9	367.0	379.7
60°	224.4	254.4	304.3	341.6	356.1
62.5°	199.9	230.7	279.8	316.1	329.8
65°	177.1	207.1	255.3	290.7	303.4
67.5°	154.4	184.4	229.8	263.4	278.0
70°	131.7	161.7	203.5	236.2	248.9
72.5°	111.7	138.1	178.1	208.0	219.8
75°	89.9	116.3	149.9	176.2	181.7
77.5°	69.9	93.6	121.7	133.5	135.4
80°	51.8	69.9	89.0	91.8	91.8
82.5°	34.5	48.1	55.4	56.3	55.4
85°	20.9	25.4	26.3	22.7	20.9
87.5°	7.3	7.3	4.5	2.7	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)