

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: P388465

Luminaire Tested: **24CZ2-30-SQR-UNV-L930-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: P388465
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30-SQR-UNV-L930-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2372.7 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

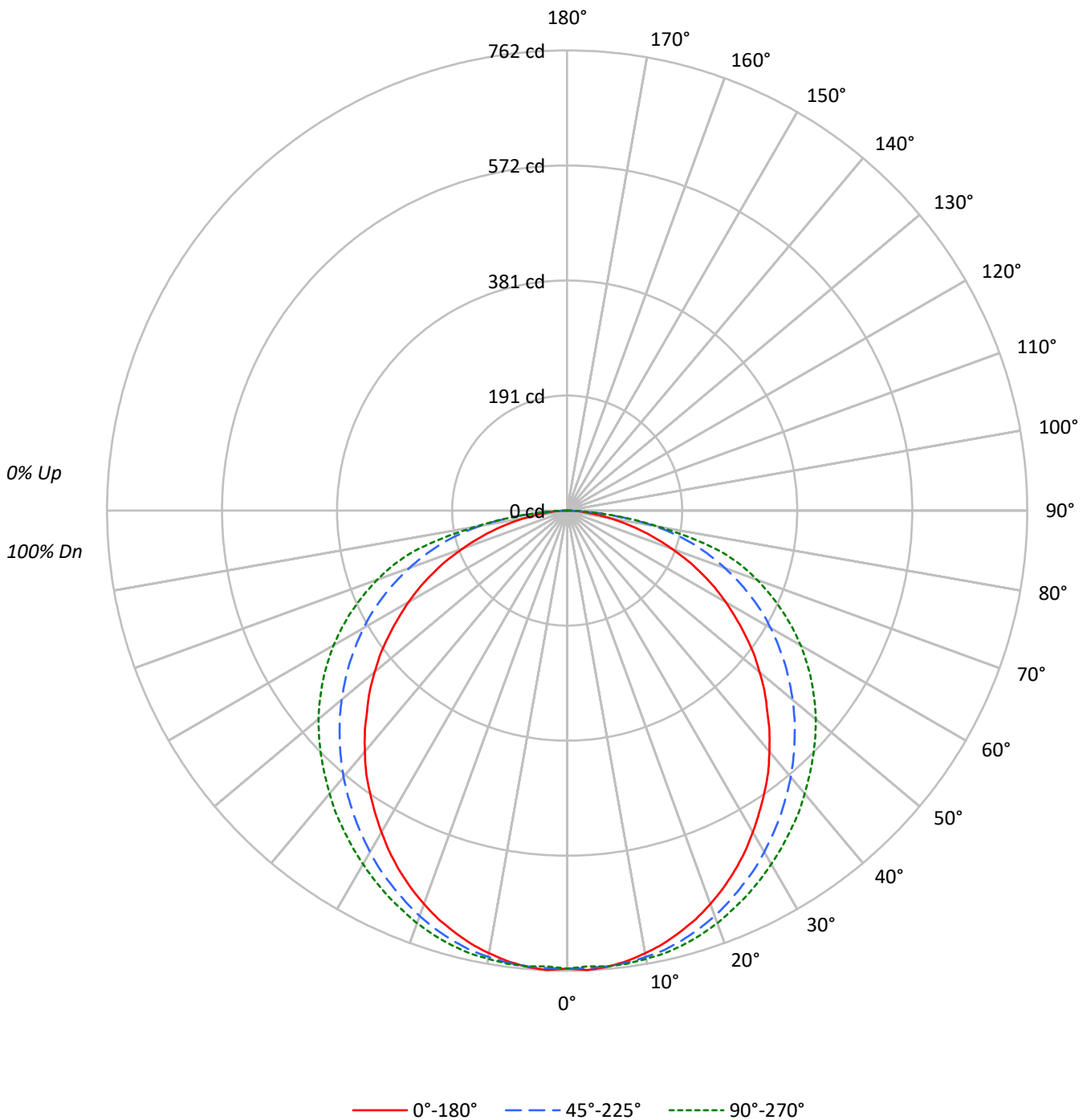
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1020	1020	1020
5°	1024	1023	1023
10°	1017	1026	1030
15°	1006	1026	1037
20°	993	1023	1041
25°	976	1018	1045
30°	955	1014	1051
35°	936	1011	1060
40°	915	1012	1075
45°	891	1014	1096
50°	871	1020	1125
55°	845	1031	1160
60°	816	1048	1202
65°	781	1067	1252
70°	724	1094	1316
75°	656	1132	1377
80°	552	1135	1184
85°	423	858	858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	3.0
10°-20°	207.1	8.7
20°-30°	314.6	13.3
30°-40°	382.7	16.1
40°-50°	407.4	17.2
50°-60°	388.1	16.4
60°-70°	324.5	13.7
70°-80°	216.4	9.1
80°-90°	59.9	2.5
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°	593.7	25.0
0°-40°	976.4	41.2
0°-60°	1771.9	74.7
0°-90°	2372.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2372.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	758	754	758	758	758	72
15°	722	724	736	742	744	204
25°	657	666	686	697	704	303
35°	570	586	616	636	646	356
45°	468	494	533	563	576	362
55°	360	392	440	478	494	322
65°	245	281	335	377	393	242
75°	126	166	218	255	265	134
85°	27	51	56	55	56	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.4	758.4	758.4	758.4	758.4
2.5°	761.6	756.1	758.4	758.4	755.3
5°	758.4	753.7	757.6	757.6	757.6
7.5°	752.9	749.0	755.3	756.9	756.9
10°	744.3	742.8	750.6	752.9	753.7
12.5°	734.9	734.1	745.1	748.2	750.6
15°	722.4	724.0	736.5	742.0	744.3
17.5°	709.1	712.2	726.3	734.1	736.5
20°	693.4	698.1	714.6	722.4	727.1
22.5°	676.2	683.2	700.5	709.9	715.3
25°	657.4	666.0	685.6	697.3	703.6
27.5°	637.0	648.0	670.7	684.0	690.3
30°	615.0	627.6	652.7	668.3	676.2
32.5°	592.3	607.2	634.6	651.9	661.3
35°	569.6	586.1	615.8	636.2	645.6
37.5°	546.9	563.3	596.2	618.2	629.9
40°	521.0	540.6	575.9	600.2	611.9
42.5°	496.0	517.1	554.7	581.4	593.9
45°	468.5	493.6	532.8	562.6	575.9
47.5°	443.5	468.5	510.8	542.2	557.1
50°	416.0	442.7	487.3	521.8	537.5
52.5°	389.4	416.8	463.8	500.7	516.3
55°	360.4	391.8	439.5	477.9	494.4
57.5°	331.4	365.1	414.5	454.4	470.9
60°	303.2	337.7	389.4	429.4	446.6
62.5°	275.0	309.5	363.5	404.3	420.7
65°	245.2	281.3	335.3	376.9	393.3
67.5°	215.5	253.1	307.1	348.7	364.3
70°	184.1	224.1	278.1	318.9	334.6
72.5°	155.1	195.1	248.4	288.3	303.2
75°	126.1	166.1	217.8	254.6	264.8
77.5°	97.9	137.9	184.1	208.4	210.8
80°	71.3	108.9	146.5	153.6	152.8
82.5°	47.8	81.5	101.1	101.9	104.2
85°	27.4	50.9	55.6	54.8	55.6
87.5°	11.0	18.0	15.7	11.8	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)