

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: P388536

Luminaire Tested: **24CZ2-35-SQR-UNV-L930-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: P388536
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: 24CZ2-35-SQR-UNV-L930-CD1-SDWPD1-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: 2812.6 lumens
Efficiency: N/A
Efficacy: 93.4 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

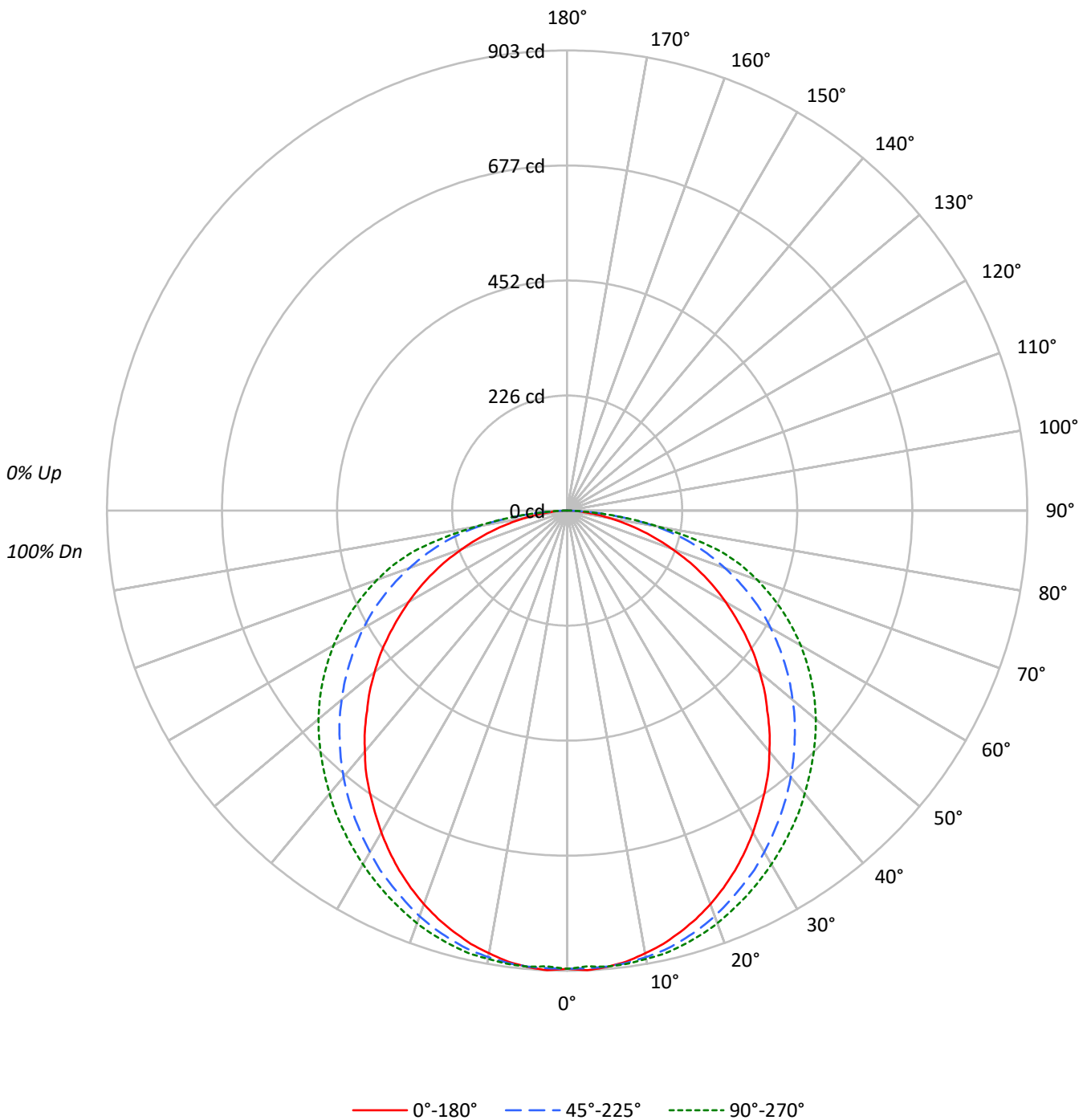
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1210	1210	1210
5°	1214	1213	1213
10°	1205	1216	1221
15°	1193	1216	1229
20°	1177	1213	1234
25°	1157	1207	1238
30°	1133	1202	1245
35°	1109	1199	1257
40°	1085	1199	1274
45°	1057	1202	1299
50°	1032	1209	1334
55°	1002	1222	1375
60°	967	1242	1425
65°	926	1266	1484
70°	859	1297	1560
75°	777	1342	1632
80°	655	1346	1403
85°	502	1017	1017



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	3.0
10°-20°	245.5	8.7
20°-30°	372.9	13.3
30°-40°	453.6	16.1
40°-50°	483.0	17.2
50°-60°	460.0	16.4
60°-70°	384.7	13.7
70°-80°	256.5	9.1
80°-90°	71.0	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°	703.8	25.0
0°-40°	1157.5	41.2
0°-60°	2100.4	74.7
0°-90°	2812.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2812.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	899	899	899	899	899	
5°	899	894	898	898	898	85
15°	856	858	873	880	882	241
25°	779	789	813	827	834	359
35°	675	695	730	754	765	423
45°	555	585	632	667	683	429
55°	427	464	521	566	586	382
65°	291	333	398	447	466	287
75°	150	197	258	302	314	158
85°	32	60	66	65	66	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	899.0	899.0	899.0	899.0	899.0
2.5°	902.8	896.3	899.0	899.0	895.3
5°	899.0	893.5	898.1	898.1	898.1
7.5°	892.5	887.9	895.3	897.2	897.2
10°	882.3	880.5	889.8	892.5	893.5
12.5°	871.2	870.3	883.3	887.0	889.8
15°	856.3	858.2	873.0	879.5	882.3
17.5°	840.5	844.2	861.0	870.3	873.0
20°	822.0	827.5	847.0	856.3	861.9
22.5°	801.5	809.9	830.3	841.5	848.0
25°	779.2	789.4	812.7	826.6	834.0
27.5°	755.1	768.1	795.0	810.8	818.2
30°	729.1	743.9	773.7	792.2	801.5
32.5°	702.1	719.8	752.3	772.7	783.9
35°	675.2	694.7	730.0	754.2	765.3
37.5°	648.3	667.8	706.8	732.8	746.7
40°	617.6	640.8	682.6	711.4	725.4
42.5°	587.9	613.0	657.6	689.1	704.0
45°	555.4	585.1	631.6	666.9	682.6
47.5°	525.7	555.4	605.6	642.7	660.4
50°	493.2	524.8	577.7	618.6	637.1
52.5°	461.6	494.1	549.8	593.5	612.1
55°	427.2	464.4	521.0	566.5	586.1
57.5°	392.9	432.8	491.3	538.7	558.2
60°	359.4	400.3	461.6	509.0	529.4
62.5°	326.0	366.9	430.9	479.2	498.7
65°	290.7	333.4	397.5	446.7	466.2
67.5°	255.4	300.0	364.1	413.3	431.9
70°	218.3	265.6	329.7	378.0	396.6
72.5°	183.9	231.3	294.4	341.8	359.4
75°	149.5	196.9	258.2	301.8	313.9
77.5°	116.1	163.5	218.3	247.1	249.8
80°	84.5	129.1	173.7	182.0	181.1
82.5°	56.7	96.6	119.8	120.7	123.5
85°	32.5	60.4	65.9	65.0	65.9
87.5°	13.0	21.4	18.6	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)