

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: P387385

Luminaire Tested: **14CZ2-20-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: P387385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-20-SQR-UNV-L930-CD1-SWPD1-U
Description: 1x4 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: 1571.4 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

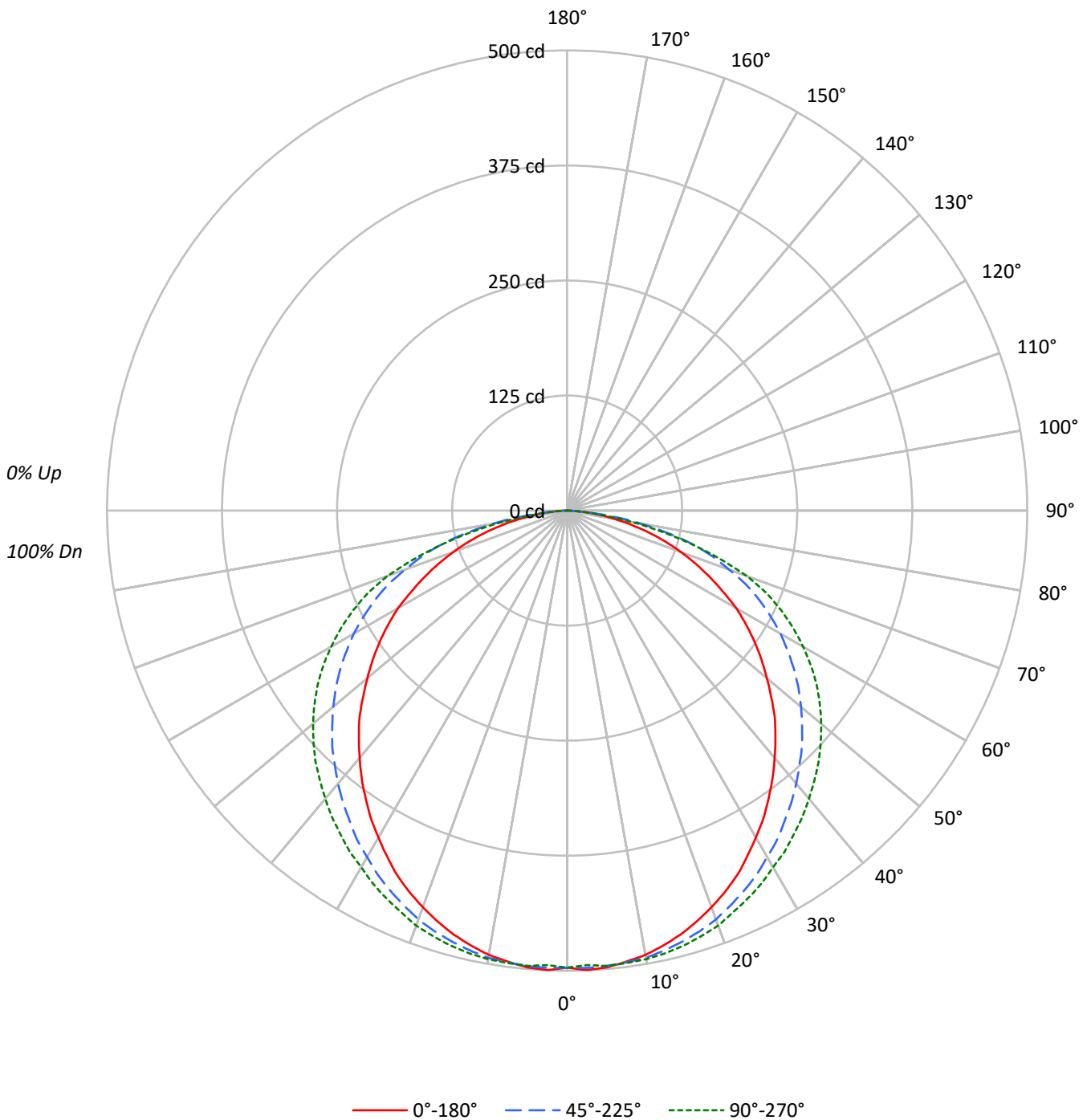
Input Watts (W): 16.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	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°	1336	1336	1336
5°	1346	1341	1341
10°	1339	1348	1353
15°	1328	1350	1363
20°	1313	1354	1374
25°	1298	1352	1380
30°	1275	1351	1391
35°	1254	1353	1410
40°	1233	1361	1436
45°	1215	1374	1471
50°	1187	1389	1509
55°	1167	1412	1553
60°	1143	1441	1594
65°	1089	1468	1634
70°	1035	1471	1633
75°	947	1466	1441
80°	810	1252	1117
85°	636	710	417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.2	3.0
10°-20°	136.3	8.7
20°-30°	208.5	13.3
30°-40°	255.5	16.3
40°-50°	274.8	17.5
50°-60°	264.1	16.8
60°-70°	219.9	14.0
70°-80°	135.0	8.6
80°-90°	30.1	1.9
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°	392.0	24.9
0°-40°	647.5	41.2
0°-60°	1186.5	75.5
0°-90°	1571.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1571.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	497	497	497	497	497	
5°	498	493	497	497	497	47
15°	477	475	485	488	489	134
25°	437	441	455	461	465	201
35°	382	391	412	423	429	239
45°	319	333	361	378	386	246
55°	249	270	301	322	331	222
65°	171	197	230	250	257	170
75°	91	119	141	140	139	96
85°	21	31	23	16	14	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	496.6	496.6	496.6	496.6	496.6
2.5°	499.7	495.0	497.4	496.6	494.2
5°	498.2	493.4	496.6	496.6	496.6
7.5°	494.2	490.2	495.0	495.8	495.8
10°	490.2	487.1	493.4	494.2	495.0
12.5°	483.9	481.5	489.4	491.0	492.6
15°	476.8	475.2	484.7	487.9	489.4
17.5°	468.1	468.9	479.2	483.1	484.7
20°	458.6	460.9	472.8	476.8	479.9
22.5°	448.3	451.4	464.1	468.9	472.0
25°	437.2	441.1	455.4	460.9	464.9
27.5°	423.7	430.0	445.9	453.0	457.0
30°	410.2	417.4	434.8	443.5	447.5
32.5°	396.8	404.7	424.5	433.2	439.6
35°	381.7	391.2	411.8	422.9	429.3
37.5°	366.7	377.8	400.0	412.6	419.8
40°	350.9	362.7	387.3	401.5	408.7
42.5°	335.0	348.5	373.8	389.7	397.6
45°	319.2	333.4	361.1	377.8	386.5
47.5°	301.0	318.4	346.1	365.1	373.8
50°	283.5	302.5	331.8	351.6	360.4
52.5°	266.1	285.9	316.8	337.4	346.1
55°	248.7	270.1	301.0	321.5	331.1
57.5°	230.5	252.6	284.3	305.7	314.4
60°	212.3	235.2	267.7	287.5	296.2
62.5°	190.9	217.8	249.5	269.3	277.2
65°	171.1	197.2	230.5	249.5	256.6
67.5°	151.3	178.2	210.7	228.1	234.4
70°	131.5	158.4	186.9	203.5	207.5
72.5°	111.7	138.6	165.5	175.0	173.4
75°	91.1	118.8	141.0	140.2	138.6
77.5°	71.3	98.2	111.7	106.1	103.8
80°	52.3	78.4	80.8	75.2	72.1
82.5°	35.6	56.2	50.7	44.4	41.2
85°	20.6	30.9	23.0	15.8	13.5
87.5°	8.7	7.9	2.4	2.4	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)