

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: P387384

Luminaire Tested: **14CZ2-20-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: P387384
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-SDWPD1-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: 1552.4 lumens
Efficiency: N/A
Efficacy: 95.2 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

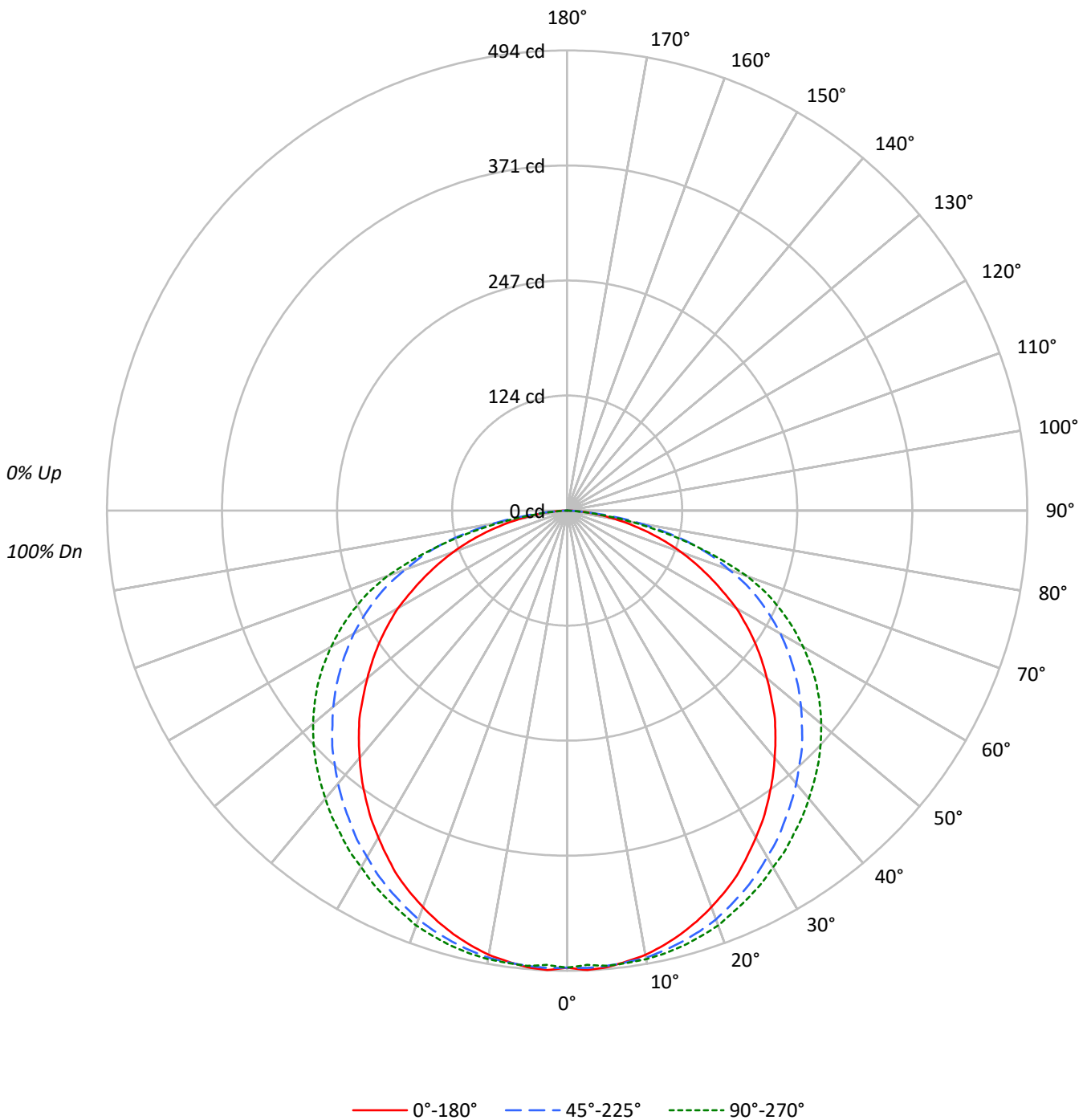
Input Watts (W): 16.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387384

CATALOG NUMBER: 14CZ2-20-SQR-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387384

CATALOG NUMBER: 14CZ2-20-SQR-UNV-L930-CD1-SDWPD1-U

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°	1320	1320	1320
5°	1329	1325	1325
10°	1323	1332	1336
15°	1312	1334	1347
20°	1297	1338	1358
25°	1282	1336	1364
30°	1259	1335	1374
35°	1239	1337	1393
40°	1218	1344	1418
45°	1200	1358	1453
50°	1173	1372	1490
55°	1153	1395	1534
60°	1129	1424	1575
65°	1076	1450	1614
70°	1022	1452	1613
75°	936	1448	1423
80°	800	1237	1103
85°	627	701	411



TEST NUMBER: P387384

CATALOG NUMBER: 14CZ2-20-SQR-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	3.0
10°-20°	134.7	8.7
20°-30°	206.0	13.3
30°-40°	252.5	16.3
40°-50°	271.5	17.5
50°-60°	260.9	16.8
60°-70°	217.2	14.0
70°-80°	133.3	8.6
80°-90°	29.7	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°	387.3	24.9
0°-40°	639.7	41.2
0°-60°	1172.1	75.5
0°-90°	1552.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1552.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	492	487	491	491	491	47
15°	471	469	479	482	484	133
25°	432	436	450	455	459	199
35°	377	386	407	418	424	236
45°	315	329	357	373	382	243
55°	246	267	297	318	327	219
65°	169	195	228	246	254	167
75°	90	117	139	138	137	95
85°	20	30	23	16	13	24
90°	0	0	0	0	0	



TEST NUMBER: P387384

CATALOG NUMBER: 14CZ2-20-SQR-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	490.6	490.6	490.6	490.6	490.6
2.5°	493.7	489.0	491.4	490.6	488.2
5°	492.1	487.4	490.6	490.6	490.6
7.5°	488.2	484.3	489.0	489.8	489.8
10°	484.3	481.2	487.4	488.2	489.0
12.5°	478.1	475.7	483.5	485.1	486.7
15°	471.0	469.4	478.8	482.0	483.5
17.5°	462.4	463.2	473.4	477.3	478.8
20°	453.0	455.4	467.1	471.0	474.1
22.5°	442.8	446.0	458.5	463.2	466.3
25°	431.9	435.8	449.9	455.4	459.3
27.5°	418.6	424.8	440.5	447.5	451.5
30°	405.3	412.3	429.5	438.2	442.1
32.5°	392.0	399.8	419.4	428.0	434.2
35°	377.1	386.5	406.9	417.8	424.1
37.5°	362.3	373.2	395.1	407.6	414.7
40°	346.6	358.3	382.6	396.7	403.7
42.5°	331.0	344.3	369.3	384.9	392.8
45°	315.3	329.4	356.8	373.2	381.8
47.5°	297.3	314.5	341.9	360.7	369.3
50°	280.1	298.9	327.8	347.4	356.0
52.5°	262.9	282.5	313.0	333.3	341.9
55°	245.7	266.8	297.3	317.7	327.0
57.5°	227.7	249.6	280.9	302.0	310.6
60°	209.7	232.4	264.5	284.0	292.6
62.5°	188.6	215.2	246.5	266.0	273.8
65°	169.0	194.8	227.7	246.5	253.5
67.5°	149.4	176.0	208.1	225.3	231.6
70°	129.9	156.5	184.6	201.1	205.0
72.5°	110.3	136.9	163.5	172.9	171.3
75°	90.0	117.4	139.3	138.5	136.9
77.5°	70.4	97.0	110.3	104.8	102.5
80°	51.6	77.5	79.8	74.3	71.2
82.5°	35.2	55.6	50.1	43.8	40.7
85°	20.3	30.5	22.7	15.6	13.3
87.5°	8.6	7.8	2.3	2.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)