

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: P387389

Luminaire Tested: **14CZ2-20-SQR-UNV-L935-CD1-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: P387389
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-L935-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

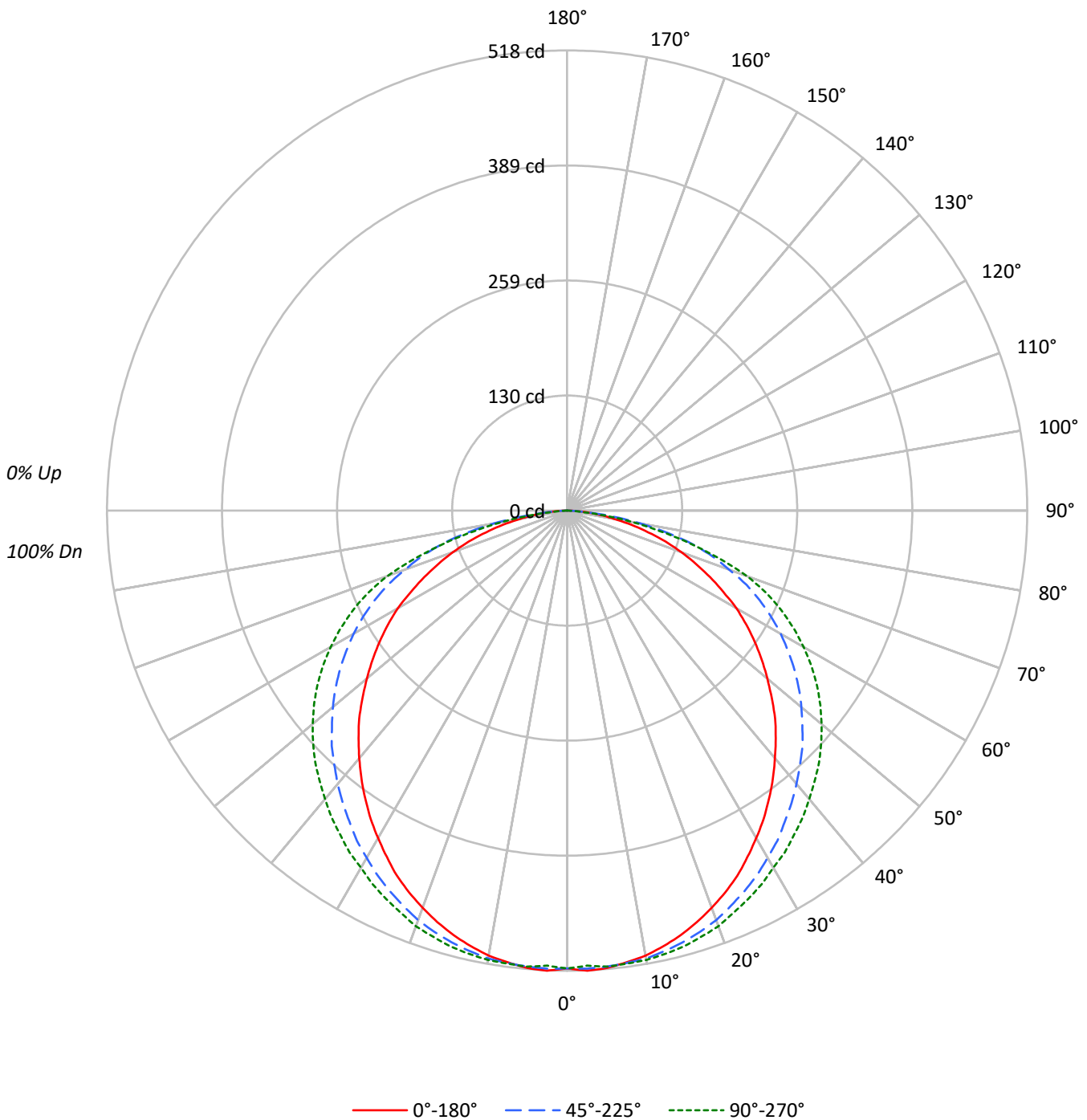
Lumens per Lamp: N/A
Luminaire Lumens: 1630.5 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	1387	1387	1387
5°	1396	1392	1392
10°	1390	1399	1403
15°	1378	1401	1415
20°	1363	1405	1426
25°	1347	1403	1432
30°	1323	1402	1443
35°	1301	1404	1463
40°	1279	1411	1489
45°	1260	1426	1526
50°	1232	1441	1565
55°	1210	1465	1612
60°	1185	1495	1654
65°	1130	1522	1696
70°	1073	1526	1694
75°	983	1521	1495
80°	840	1299	1159
85°	661	735	432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	3.0
10°-20°	141.5	8.7
20°-30°	216.3	13.3
30°-40°	265.1	16.3
40°-50°	285.2	17.5
50°-60°	274.0	16.8
60°-70°	228.2	14.0
70°-80°	140.1	8.6
80°-90°	31.2	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°	406.7	24.9
0°-40°	671.9	41.2
0°-60°	1231.1	75.5
0°-90°	1630.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1630.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	515	515	515	515	515	
5°	517	512	515	515	515	49
15°	495	493	503	506	508	139
25°	454	458	472	478	482	209
35°	396	406	427	439	445	248
45°	331	346	375	392	401	255
55°	258	280	312	334	344	230
65°	178	205	239	259	266	176
75°	94	123	146	146	144	100
85°	21	32	24	16	14	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	515.3	515.3	515.3	515.3	515.3
2.5°	518.5	513.6	516.1	515.3	512.8
5°	516.9	512.0	515.3	515.3	515.3
7.5°	512.8	508.7	513.6	514.4	514.4
10°	508.7	505.4	512.0	512.8	513.6
12.5°	502.1	499.6	507.9	509.5	511.1
15°	494.7	493.1	502.9	506.2	507.9
17.5°	485.7	486.5	497.2	501.3	502.9
20°	475.8	478.3	490.6	494.7	498.0
22.5°	465.1	468.4	481.6	486.5	489.8
25°	453.6	457.7	472.5	478.3	482.4
27.5°	439.6	446.2	462.7	470.1	474.2
30°	425.7	433.1	451.2	460.2	464.3
32.5°	411.7	419.9	440.5	449.5	456.1
35°	396.1	406.0	427.3	438.8	445.4
37.5°	380.5	392.0	415.0	428.1	435.5
40°	364.0	376.4	401.8	416.6	424.0
42.5°	347.6	361.6	387.9	404.3	412.5
45°	331.2	346.0	374.7	392.0	401.0
47.5°	312.3	330.4	359.1	378.8	387.9
50°	294.2	313.9	344.3	364.9	373.9
52.5°	276.1	296.7	328.7	350.1	359.1
55°	258.0	280.2	312.3	333.6	343.5
57.5°	239.1	262.1	295.0	317.2	326.2
60°	220.2	244.1	277.8	298.3	307.3
62.5°	198.0	226.0	258.9	279.4	287.6
65°	177.5	204.6	239.1	258.9	266.3
67.5°	157.0	184.9	218.6	236.7	243.2
70°	136.4	164.4	193.9	211.2	215.3
72.5°	115.9	143.8	171.8	181.6	180.0
75°	94.5	123.3	146.3	145.5	143.8
77.5°	74.0	101.9	115.9	110.1	107.7
80°	54.2	81.4	83.8	78.1	74.8
82.5°	37.0	58.3	52.6	46.0	42.7
85°	21.4	32.0	23.8	16.4	14.0
87.5°	9.0	8.2	2.5	2.5	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)