

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: P387408

Luminaire Tested: **14CZ2-25-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: P387408
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: 14CZ2-25-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: 1911.9 lumens
Efficiency: N/A
Efficacy: 93.3 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

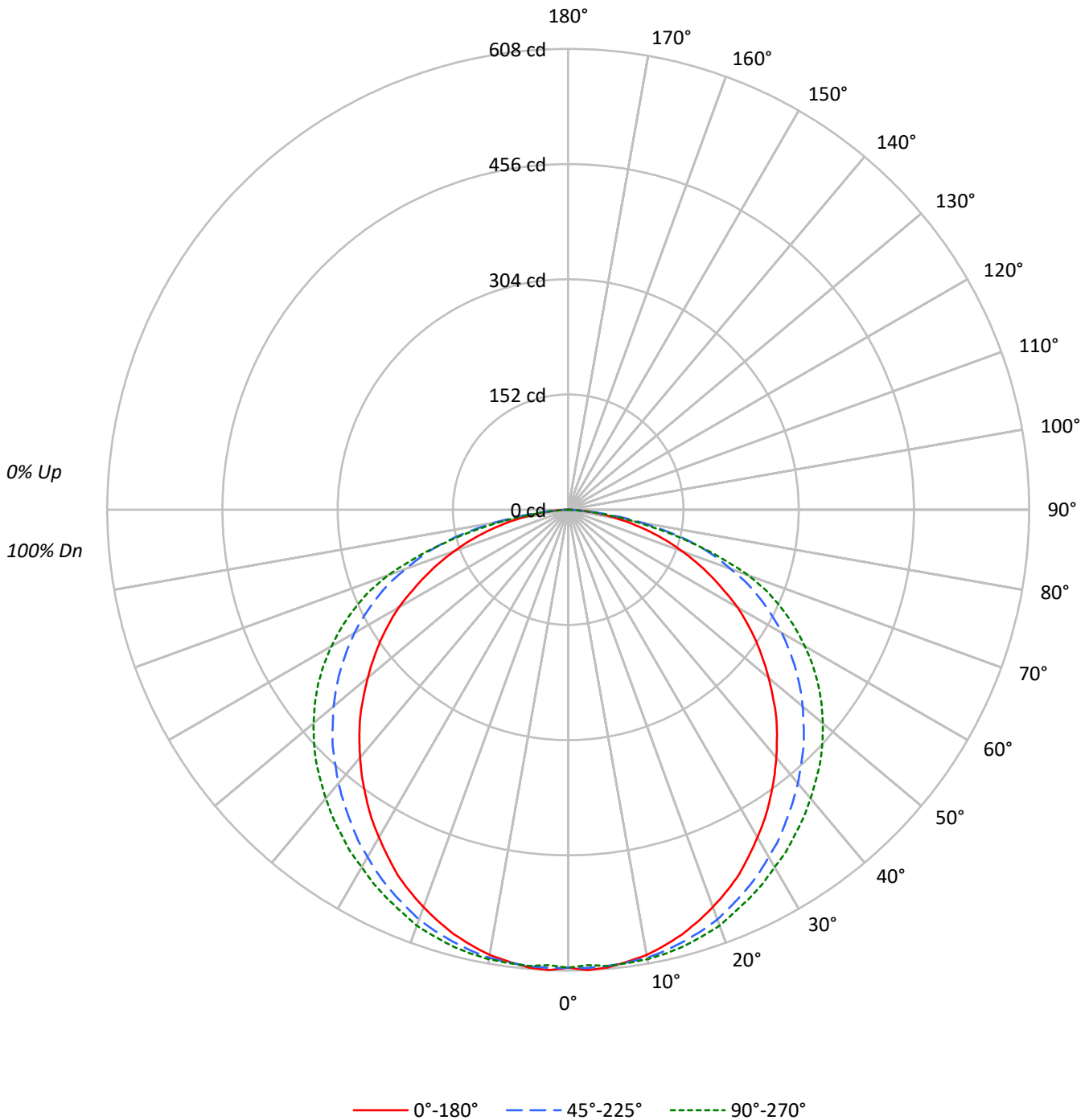
Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1626	1626	1626
5°	1637	1632	1632
10°	1630	1640	1646
15°	1616	1643	1659
20°	1598	1647	1672
25°	1579	1645	1679
30°	1551	1644	1692
35°	1526	1646	1716
40°	1500	1655	1747
45°	1478	1672	1789
50°	1444	1690	1835
55°	1420	1718	1890
60°	1390	1753	1940
65°	1325	1785	1988
70°	1259	1789	1987
75°	1152	1783	1753
80°	986	1523	1359
85°	775	861	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	3.0
10°-20°	165.9	8.7
20°-30°	253.7	13.3
30°-40°	310.9	16.3
40°-50°	334.4	17.5
50°-60°	321.3	16.8
60°-70°	267.5	14.0
70°-80°	164.2	8.6
80°-90°	36.6	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°	476.9	24.9
0°-40°	787.8	41.2
0°-60°	1443.5	75.5
0°-90°	1911.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1911.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	606	600	604	604	604	58
15°	580	578	590	594	596	164
25°	532	537	554	561	566	245
35°	464	476	501	515	522	291
45°	388	406	439	460	470	299
55°	303	329	366	391	403	270
65°	208	240	280	304	312	206
75°	111	144	172	171	169	117
85°	25	38	28	19	16	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	604.2	604.2	604.2	604.2	604.2
2.5°	608.0	602.2	605.1	604.2	601.3
5°	606.1	600.3	604.2	604.2	604.2
7.5°	601.3	596.5	602.2	603.2	603.2
10°	596.5	592.6	600.3	601.3	602.2
12.5°	588.8	585.9	595.5	597.4	599.4
15°	580.1	578.2	589.7	593.6	595.5
17.5°	569.5	570.5	583.0	587.8	589.7
20°	557.9	560.8	575.3	580.1	583.9
22.5°	545.4	549.3	564.7	570.5	574.3
25°	531.9	536.7	554.1	560.8	565.6
27.5°	515.5	523.2	542.5	551.2	556.0
30°	499.1	507.8	529.0	539.6	544.4
32.5°	482.8	492.4	516.5	527.1	534.8
35°	464.5	476.0	501.1	514.6	522.3
37.5°	446.1	459.6	486.6	502.0	510.7
40°	426.9	441.3	471.2	488.5	497.2
42.5°	407.6	424.0	454.8	474.1	483.7
45°	388.3	405.7	439.4	459.6	470.2
47.5°	366.2	387.4	421.1	444.2	454.8
50°	345.0	368.1	403.7	427.8	438.4
52.5°	323.8	347.9	385.4	410.5	421.1
55°	302.6	328.6	366.2	391.2	402.8
57.5°	280.4	307.4	345.9	371.9	382.5
60°	258.2	286.2	325.7	349.8	360.4
62.5°	232.2	265.0	303.5	327.6	337.3
65°	208.1	239.9	280.4	303.5	312.2
67.5°	184.0	216.8	256.3	277.5	285.2
70°	160.0	192.7	227.4	247.6	252.5
72.5°	135.9	168.6	201.4	213.0	211.0
75°	110.8	144.5	171.5	170.6	168.6
77.5°	86.7	119.5	135.9	129.1	126.2
80°	63.6	95.4	98.3	91.5	87.7
82.5°	43.4	68.4	61.7	54.0	50.1
85°	25.1	37.6	27.9	19.3	16.4
87.5°	10.6	9.6	2.9	2.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)