

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: P387412

Luminaire Tested: **14CZ2-25-SQR-UNV-L935-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: P387412  
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-L935-CD1-SWPD1-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: 1983.1 lumens  
Efficiency: N/A  
Efficacy: 96.7 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

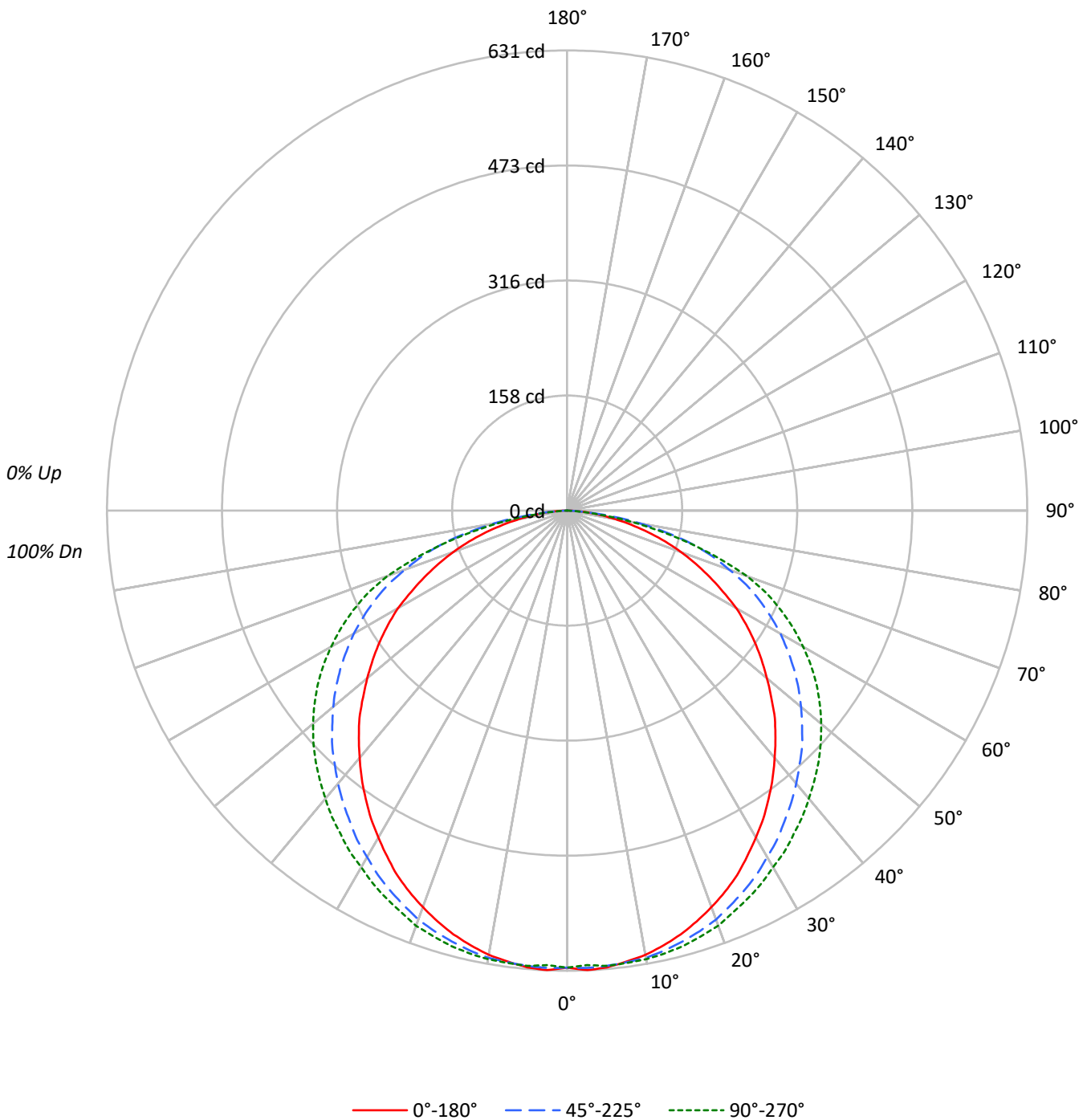
Input Watts (W): 20.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1686	1686	1686
5°	1698	1693	1693
10°	1691	1702	1707
15°	1676	1704	1721
20°	1657	1709	1735
25°	1638	1706	1742
30°	1609	1705	1755
35°	1583	1707	1780
40°	1555	1717	1812
45°	1533	1735	1856
50°	1498	1753	1904
55°	1472	1782	1960
60°	1442	1818	2012
65°	1375	1852	2062
70°	1305	1856	2061
75°	1195	1850	1818
80°	1023	1579	1410
85°	803	895	525



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	3.0
10°-20°	172.0	8.7
20°-30°	263.1	13.3
30°-40°	322.5	16.3
40°-50°	346.8	17.5
50°-60°	333.3	16.8
60°-70°	277.5	14.0
70°-80°	170.3	8.6
80°-90°	38.0	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°	494.7	24.9
0°-40°	817.2	41.2
0°-60°	1497.3	75.5
0°-90°	1983.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1983.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	629	623	627	627	627	60
15°	602	600	612	616	618	170
25°	552	557	575	582	587	254
35°	482	494	520	534	542	301
45°	403	421	456	477	488	310
55°	314	341	380	406	418	280
65°	216	249	291	315	324	214
75°	115	150	178	177	175	122
85°	26	39	29	20	17	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	626.7	626.7	626.7	626.7	626.7
2.5°	630.7	624.7	627.7	626.7	623.7
5°	628.7	622.7	626.7	626.7	626.7
7.5°	623.7	618.7	624.7	625.7	625.7
10°	618.7	614.7	622.7	623.7	624.7
12.5°	610.7	607.7	617.7	619.7	621.7
15°	601.7	599.7	611.7	615.7	617.7
17.5°	590.7	591.7	604.7	609.7	611.7
20°	578.7	581.7	596.7	601.7	605.7
22.5°	565.7	569.7	585.7	591.7	595.7
25°	551.7	556.7	574.7	581.7	586.7
27.5°	534.7	542.7	562.7	571.7	576.7
30°	517.7	526.7	548.7	559.7	564.7
32.5°	500.7	510.7	535.7	546.7	554.7
35°	481.8	493.7	519.7	533.7	541.7
37.5°	462.8	476.8	504.7	520.7	529.7
40°	442.8	457.8	488.7	506.7	515.7
42.5°	422.8	439.8	471.8	491.7	501.7
45°	402.8	420.8	455.8	476.8	487.7
47.5°	379.8	401.8	436.8	460.8	471.8
50°	357.8	381.8	418.8	443.8	454.8
52.5°	335.8	360.8	399.8	425.8	436.8
55°	313.8	340.8	379.8	405.8	417.8
57.5°	290.8	318.8	358.8	385.8	396.8
60°	267.9	296.8	337.8	362.8	373.8
62.5°	240.9	274.9	314.8	339.8	349.8
65°	215.9	248.9	290.8	314.8	323.8
67.5°	190.9	224.9	265.9	287.9	295.8
70°	165.9	199.9	235.9	256.9	261.9
72.5°	140.9	174.9	208.9	220.9	218.9
75°	114.9	149.9	177.9	176.9	174.9
77.5°	90.0	123.9	140.9	133.9	130.9
80°	66.0	98.9	101.9	95.0	91.0
82.5°	45.0	71.0	64.0	56.0	52.0
85°	26.0	39.0	29.0	20.0	17.0
87.5°	11.0	10.0	3.0	3.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)