

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: P387410

Luminaire Tested: **14CZ2-25-SQR-UNV-L930-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: P387410
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-U
Description: 1x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

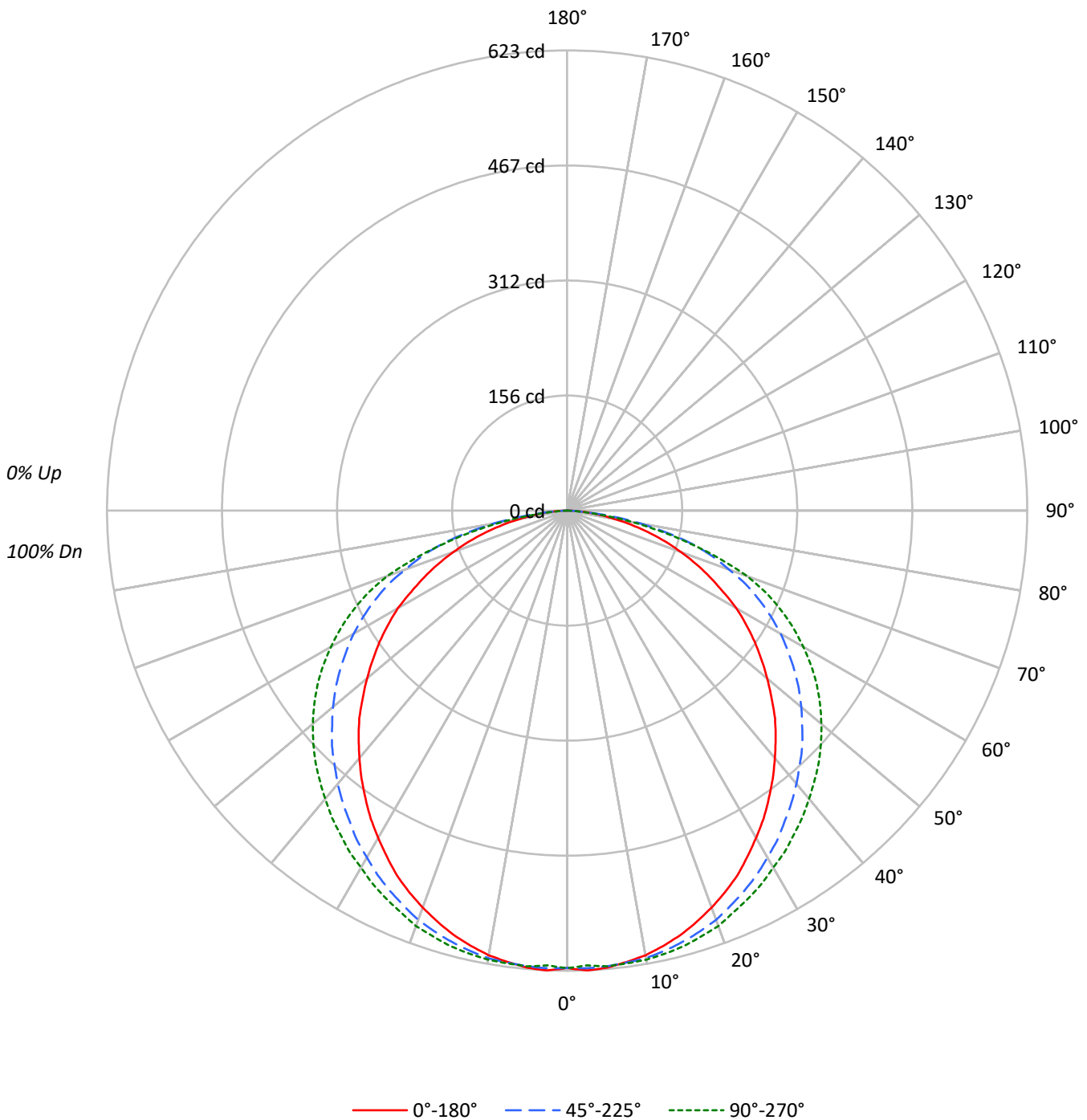
Lumens per Lamp: N/A
Luminaire Lumens: 1959.6 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	1667	1667	1667
5°	1678	1673	1673
10°	1670	1681	1687
15°	1656	1684	1701
20°	1637	1688	1714
25°	1619	1686	1721
30°	1590	1685	1734
35°	1564	1687	1759
40°	1537	1697	1790
45°	1515	1714	1834
50°	1480	1732	1881
55°	1455	1761	1937
60°	1425	1796	1988
65°	1358	1830	2038
70°	1290	1834	2036
75°	1181	1828	1797
80°	1010	1561	1393
85°	794	883	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	3.0
10°-20°	170.0	8.7
20°-30°	260.0	13.3
30°-40°	318.7	16.3
40°-50°	342.7	17.5
50°-60°	329.3	16.8
60°-70°	274.2	14.0
70°-80°	168.3	8.6
80°-90°	37.5	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°	488.8	24.9
0°-40°	807.5	41.2
0°-60°	1479.6	75.5
0°-90°	1959.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1959.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	621	615	619	619	619	59
15°	595	593	604	608	610	168
25°	545	550	568	575	580	251
35°	476	488	514	527	535	298
45°	398	416	450	471	482	306
55°	310	337	375	401	413	277
65°	213	246	287	311	320	211
75°	114	148	176	175	173	120
85°	26	38	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°	619.3	619.3	619.3	619.3	619.3
2.5°	623.2	617.3	620.2	619.3	616.3
5°	621.2	615.3	619.3	619.3	619.3
7.5°	616.3	611.3	617.3	618.3	618.3
10°	611.3	607.4	615.3	616.3	617.3
12.5°	603.4	600.5	610.4	612.3	614.3
15°	594.6	592.6	604.4	608.4	610.4
17.5°	583.7	584.7	597.5	602.5	604.4
20°	571.8	574.8	589.6	594.6	598.5
22.5°	559.0	563.0	578.8	584.7	588.6
25°	545.2	550.1	567.9	574.8	579.7
27.5°	528.4	536.3	556.0	564.9	569.9
30°	511.6	520.5	542.2	553.1	558.0
32.5°	494.8	504.7	529.4	540.2	548.1
35°	476.0	487.9	513.6	527.4	535.3
37.5°	457.3	471.1	498.8	514.6	523.4
40°	437.5	452.3	483.0	500.7	509.6
42.5°	417.8	434.6	466.2	485.9	495.8
45°	398.0	415.8	450.4	471.1	482.0
47.5°	375.3	397.0	431.6	455.3	466.2
50°	353.6	377.3	413.8	438.5	449.4
52.5°	331.8	356.5	395.1	420.7	431.6
55°	310.1	336.8	375.3	401.0	412.8
57.5°	287.4	315.1	354.6	381.2	392.1
60°	264.7	293.3	333.8	358.5	369.4
62.5°	238.0	271.6	311.1	335.8	345.7
65°	213.3	245.9	287.4	311.1	320.0
67.5°	188.6	222.2	262.7	284.4	292.3
70°	163.9	197.5	233.1	253.8	258.8
72.5°	139.3	172.8	206.4	218.3	216.3
75°	113.6	148.1	175.8	174.8	172.8
77.5°	88.9	122.5	139.3	132.3	129.4
80°	65.2	97.8	100.7	93.8	89.9
82.5°	44.4	70.1	63.2	55.3	51.4
85°	25.7	38.5	28.6	19.8	16.8
87.5°	10.9	9.9	3.0	3.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)