

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: P387418

Luminaire Tested: **14CZ2-25-SQR-UNV-L950-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: P387418
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-L950-CD1-SWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2126.7 lumens
Efficiency: N/A
Efficacy: 103.7 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

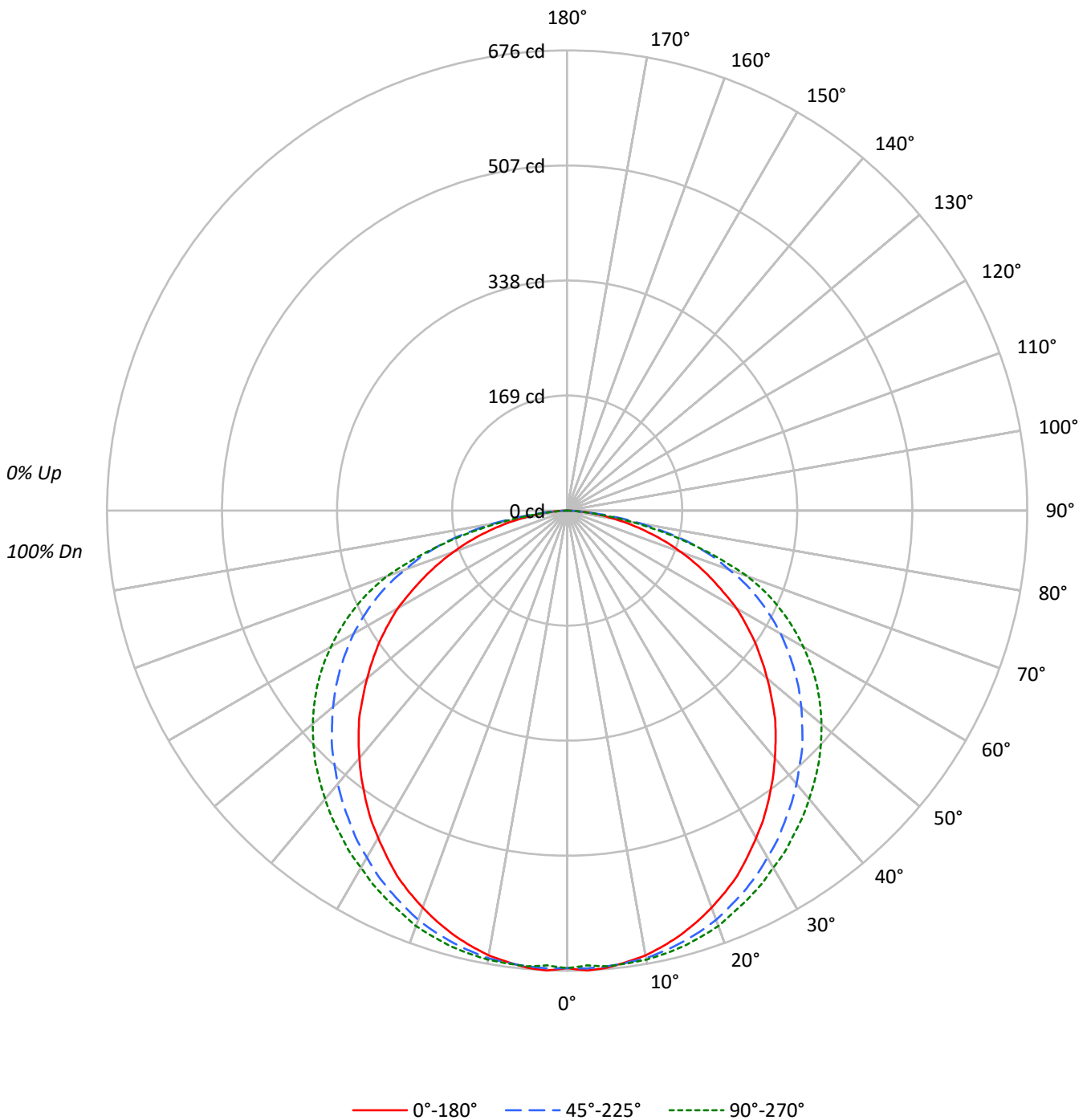
Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1809	1809	1809
5°	1821	1816	1816
10°	1813	1825	1830
15°	1798	1828	1845
20°	1777	1832	1860
25°	1757	1830	1868
30°	1725	1829	1882
35°	1697	1831	1908
40°	1668	1841	1943
45°	1644	1860	1991
50°	1606	1880	2042
55°	1579	1911	2102
60°	1546	1950	2158
65°	1474	1986	2211
70°	1400	1991	2209
75°	1282	1984	1951
80°	1096	1694	1511
85°	861	960	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	3.0
10°-20°	184.5	8.7
20°-30°	282.2	13.3
30°-40°	345.8	16.3
40°-50°	371.9	17.5
50°-60°	357.4	16.8
60°-70°	297.6	14.0
70°-80°	182.7	8.6
80°-90°	40.7	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°	530.5	24.9
0°-40°	876.4	41.2
0°-60°	1605.7	75.5
0°-90°	2126.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2126.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	674	668	672	672	672	64
15°	645	643	656	660	662	182
25°	592	597	616	624	629	272
35°	517	530	557	572	581	323
45°	432	451	489	511	523	332
55°	337	366	407	435	448	301
65°	232	267	312	338	347	229
75°	123	161	191	190	188	131
85°	28	42	31	21	18	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	672.1	672.1	672.1	672.1	672.1
2.5°	676.3	669.9	673.1	672.1	668.8
5°	674.2	667.8	672.1	672.1	672.1
7.5°	668.8	663.5	669.9	671.0	671.0
10°	663.5	659.2	667.8	668.8	669.9
12.5°	654.9	651.7	662.4	664.6	666.7
15°	645.3	643.1	656.0	660.3	662.4
17.5°	633.5	634.5	648.5	653.8	656.0
20°	620.6	623.8	639.9	645.3	649.5
22.5°	606.7	611.0	628.1	634.5	638.8
25°	591.7	597.0	616.3	623.8	629.2
27.5°	573.4	582.0	603.5	613.1	618.5
30°	555.2	564.9	588.5	600.2	605.6
32.5°	537.0	547.7	574.5	586.3	594.9
35°	516.6	529.5	557.4	572.4	580.9
37.5°	496.3	511.3	541.3	558.4	568.1
40°	474.8	490.9	524.1	543.4	553.1
42.5°	453.4	471.6	505.9	527.4	538.1
45°	432.0	451.3	488.8	511.3	523.1
47.5°	407.3	430.9	468.4	494.1	505.9
50°	383.7	409.5	449.1	475.9	487.7
52.5°	360.1	386.9	428.7	456.6	468.4
55°	336.6	365.5	407.3	435.2	448.0
57.5°	311.9	341.9	384.8	413.7	425.5
60°	287.3	318.3	362.3	389.1	400.9
62.5°	258.3	294.8	337.6	364.4	375.2
65°	231.5	266.9	311.9	337.6	347.3
67.5°	204.7	241.2	285.1	308.7	317.3
70°	177.9	214.4	253.0	275.5	280.8
72.5°	151.1	187.6	224.0	236.9	234.7
75°	123.3	160.8	190.8	189.7	187.6
77.5°	96.5	132.9	151.1	143.6	140.4
80°	70.7	106.1	109.3	101.8	97.5
82.5°	48.2	76.1	68.6	60.0	55.7
85°	27.9	41.8	31.1	21.4	18.2
87.5°	11.8	10.7	3.2	3.2	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)