

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: P387414

Luminaire Tested: **14CZ2-25-SQR-UNV-L940-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: P387414
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-L940-CD1-SDWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1979.5 lumens
Efficiency: N/A
Efficacy: 96.6 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

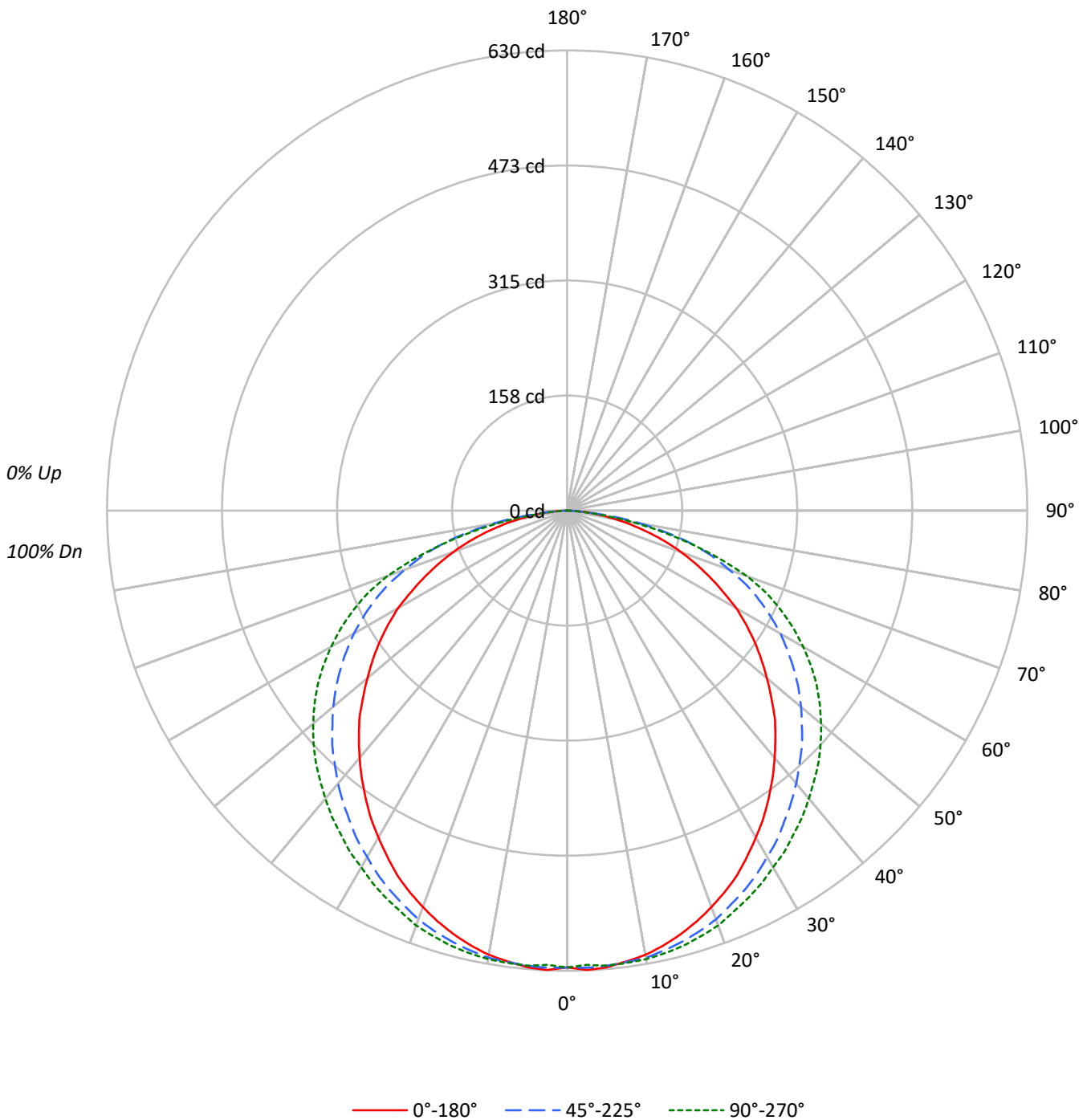
Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1683	1683	1683
5°	1695	1690	1690
10°	1688	1698	1704
15°	1673	1701	1718
20°	1654	1706	1731
25°	1635	1703	1739
30°	1606	1702	1752
35°	1580	1704	1776
40°	1553	1714	1808
45°	1530	1731	1853
50°	1495	1750	1900
55°	1470	1779	1956
60°	1439	1815	2008
65°	1372	1848	2058
70°	1303	1853	2057
75°	1193	1847	1815
80°	1020	1578	1407
85°	800	892	525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.0
10°-20°	171.7	8.7
20°-30°	262.6	13.3
30°-40°	321.9	16.3
40°-50°	346.2	17.5
50°-60°	332.7	16.8
60°-70°	277.0	14.0
70°-80°	170.0	8.6
80°-90°	37.9	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°	493.8	24.9
0°-40°	815.7	41.2
0°-60°	1494.6	75.5
0°-90°	1979.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1979.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	628	622	626	626	626	60
15°	601	599	611	615	617	169
25°	551	556	574	581	586	253
35°	481	493	519	533	541	301
45°	402	420	455	476	487	309
55°	313	340	379	405	417	280
65°	216	248	290	314	323	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°	625.5	625.5	625.5	625.5	625.5
2.5°	629.5	623.5	626.5	625.5	622.5
5°	627.5	621.5	625.5	625.5	625.5
7.5°	622.5	617.6	623.5	624.5	624.5
10°	617.6	613.6	621.5	622.5	623.5
12.5°	609.6	606.6	616.6	618.6	620.6
15°	600.6	598.6	610.6	614.6	616.6
17.5°	589.6	590.6	603.6	608.6	610.6
20°	577.7	580.6	595.6	600.6	604.6
22.5°	564.7	568.7	584.6	590.6	594.6
25°	550.7	555.7	573.7	580.6	585.6
27.5°	533.8	541.7	561.7	570.7	575.7
30°	516.8	525.8	547.7	558.7	563.7
32.5°	499.8	509.8	534.8	545.7	553.7
35°	480.9	492.8	518.8	532.8	540.7
37.5°	461.9	475.9	503.8	519.8	528.8
40°	442.0	456.9	487.9	505.8	514.8
42.5°	422.0	439.0	470.9	490.9	500.8
45°	402.1	420.0	454.9	475.9	486.9
47.5°	379.1	401.1	436.0	459.9	470.9
50°	357.2	381.1	418.0	443.0	453.9
52.5°	335.2	360.2	399.1	425.0	436.0
55°	313.3	340.2	379.1	405.1	417.0
57.5°	290.3	318.3	358.2	385.1	396.1
60°	267.4	296.3	337.2	362.2	373.1
62.5°	240.4	274.4	314.3	339.2	349.2
65°	215.5	248.4	290.3	314.3	323.2
67.5°	190.6	224.5	265.4	287.3	295.3
70°	165.6	199.5	235.5	256.4	261.4
72.5°	140.7	174.6	208.5	220.5	218.5
75°	114.7	149.7	177.6	176.6	174.6
77.5°	89.8	123.7	140.7	133.7	130.7
80°	65.8	98.8	101.8	94.8	90.8
82.5°	44.9	70.8	63.9	55.9	51.9
85°	25.9	38.9	28.9	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)