

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: P387416

Luminaire Tested: **14CZ2-25-SQR-UNV-L940-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: P387416
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-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: 2028.8 lumens
Efficiency: N/A
Efficacy: 99.0 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

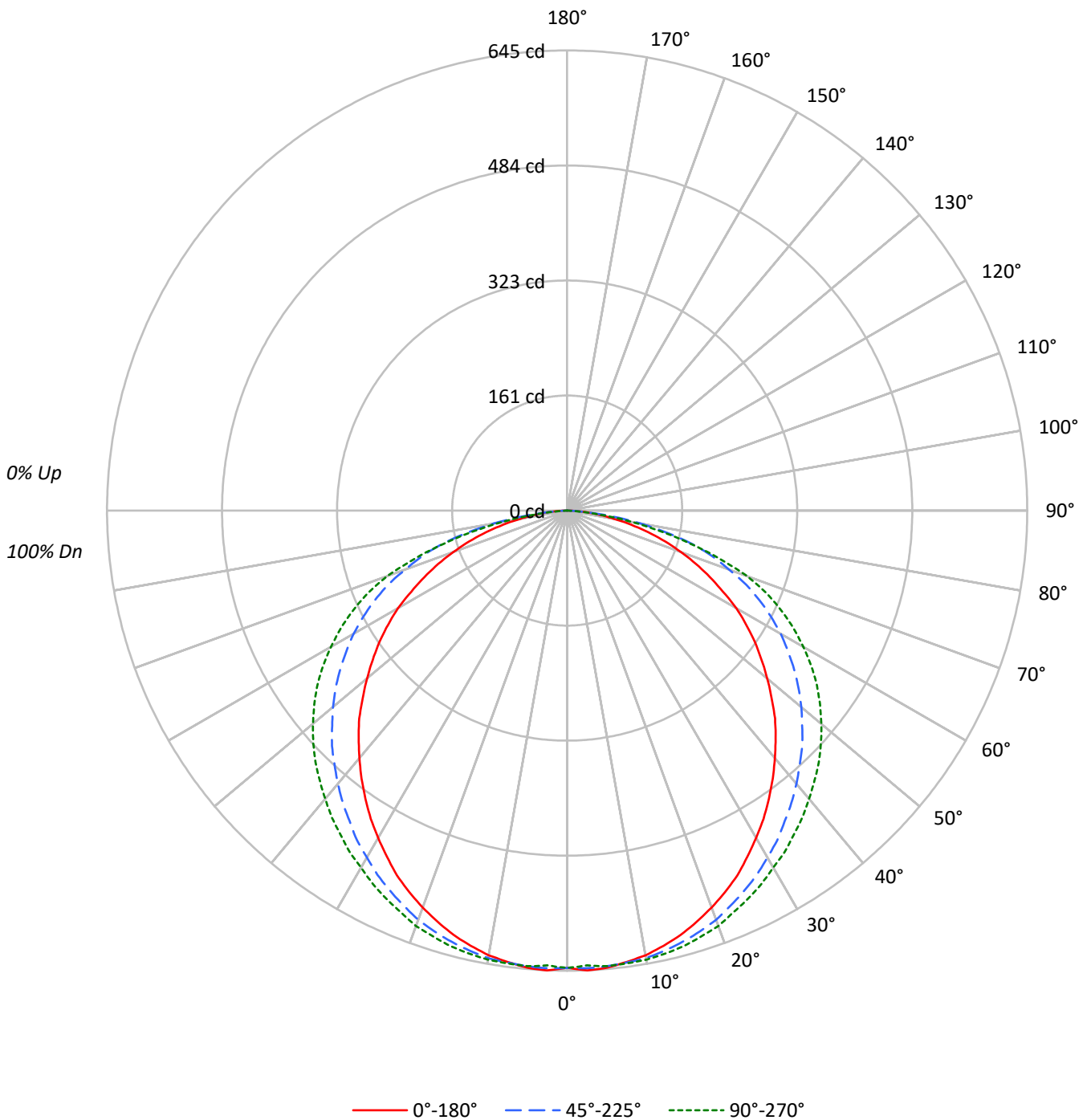
Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1725	1725	1725
5°	1737	1732	1732
10°	1729	1741	1746
15°	1715	1743	1760
20°	1695	1748	1774
25°	1676	1746	1782
30°	1646	1744	1795
35°	1619	1747	1821
40°	1591	1756	1853
45°	1568	1775	1899
50°	1533	1793	1948
55°	1506	1823	2005
60°	1475	1860	2058
65°	1407	1895	2110
70°	1335	1899	2108
75°	1223	1892	1860
80°	1046	1616	1441
85°	821	917	537



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.9	3.0
10°-20°	176.0	8.7
20°-30°	269.2	13.3
30°-40°	329.9	16.3
40°-50°	354.8	17.5
50°-60°	341.0	16.8
60°-70°	283.9	14.0
70°-80°	174.2	8.6
80°-90°	38.8	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°	506.1	24.9
0°-40°	836.0	41.2
0°-60°	1531.8	75.5
0°-90°	2028.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2028.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	643	637	641	641	641	61
15°	616	614	626	630	632	174
25°	564	570	588	595	600	260
35°	493	505	532	546	554	308
45°	412	430	466	488	499	317
55°	321	349	389	415	427	287
65°	221	255	298	322	331	219
75°	118	153	182	181	179	125
85°	27	40	30	20	17	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	641.1	641.1	641.1	641.1	641.1
2.5°	645.2	639.1	642.1	641.1	638.1
5°	643.2	637.0	641.1	641.1	641.1
7.5°	638.1	632.9	639.1	640.1	640.1
10°	632.9	628.8	637.0	638.1	639.1
12.5°	624.8	621.7	631.9	634.0	636.0
15°	615.6	613.5	625.8	629.9	631.9
17.5°	604.3	605.3	618.6	623.7	625.8
20°	592.0	595.1	610.4	615.6	619.6
22.5°	578.7	582.8	599.2	605.3	609.4
25°	564.4	569.5	587.9	595.1	600.2
27.5°	547.0	555.2	575.7	584.9	590.0
30°	529.7	538.9	561.4	572.6	577.7
32.5°	512.3	522.5	548.1	559.3	567.5
35°	492.9	505.1	531.7	546.0	554.2
37.5°	473.4	487.7	516.4	532.7	541.9
40°	453.0	468.3	500.0	518.4	527.6
42.5°	432.5	449.9	482.6	503.1	513.3
45°	412.1	430.5	466.3	487.7	499.0
47.5°	388.6	411.1	446.8	471.4	482.6
50°	366.1	390.6	428.4	454.0	465.2
52.5°	343.6	369.1	409.0	435.6	446.8
55°	321.1	348.7	388.6	415.1	427.4
57.5°	297.6	326.2	367.1	394.7	405.9
60°	274.0	303.7	345.6	371.2	382.4
62.5°	246.4	281.2	322.1	347.7	357.9
65°	220.9	254.6	297.6	322.1	331.3
67.5°	195.3	230.1	272.0	294.5	302.7
70°	169.7	204.5	241.3	262.8	267.9
72.5°	144.2	178.9	213.7	226.0	223.9
75°	117.6	153.4	182.0	181.0	178.9
77.5°	92.0	126.8	144.2	137.0	133.9
80°	67.5	101.2	104.3	97.1	93.0
82.5°	46.0	72.6	65.4	57.3	53.2
85°	26.6	39.9	29.7	20.5	17.4
87.5°	11.2	10.2	3.1	3.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)