

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: P387438

Luminaire Tested: **14CZ2-29-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: P387438
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: 14CZ2-29-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: 2304.4 lumens
Efficiency: N/A
Efficacy: 94.8 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

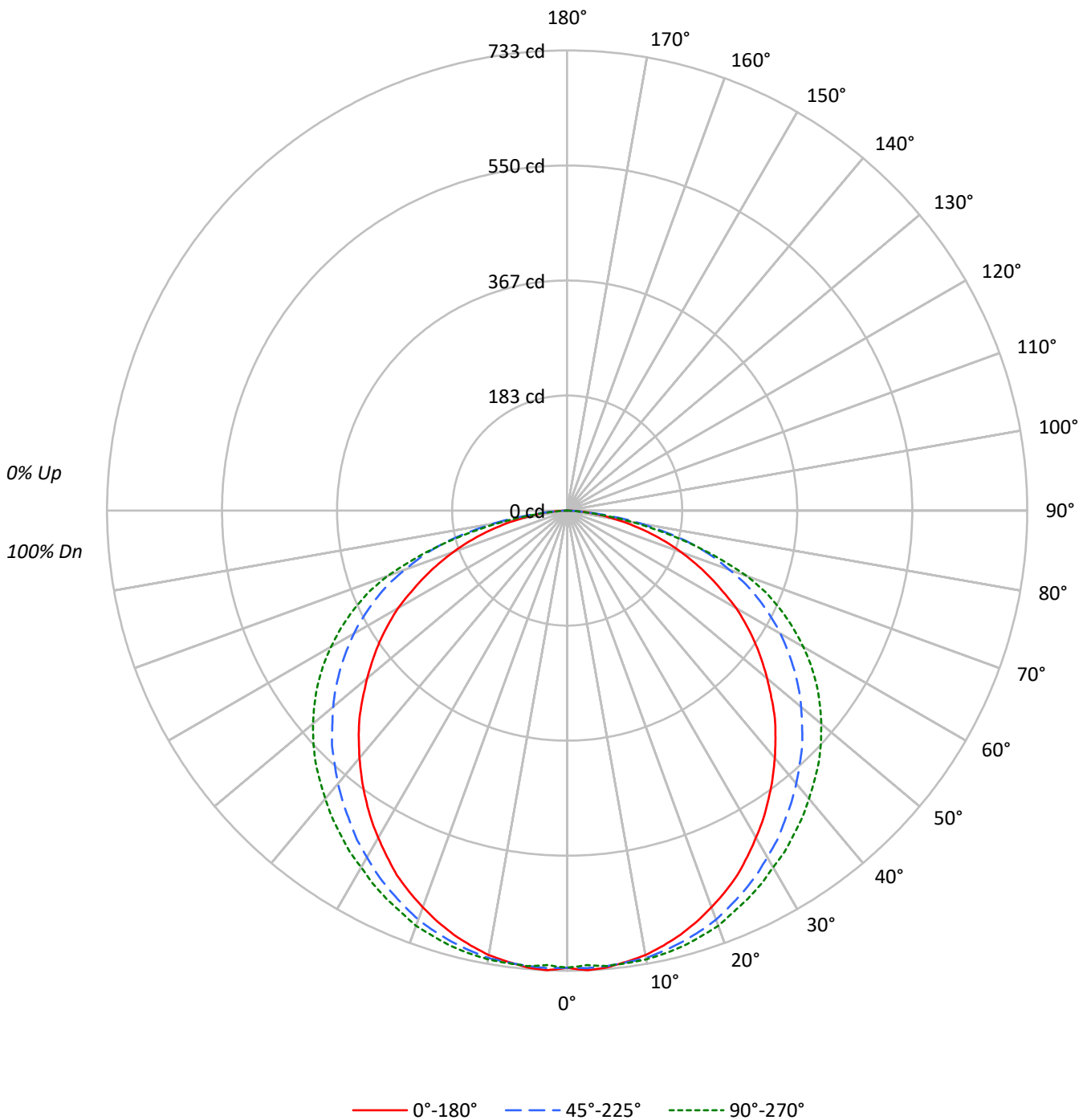
Input Watts (W): 24.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387438

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L940-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387438

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L940-CD1-SDWPD1-U

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°	1960	1960	1960
5°	1973	1967	1967
10°	1964	1977	1984
15°	1948	1980	2000
20°	1926	1986	2015
25°	1904	1983	2024
30°	1869	1981	2039
35°	1839	1984	2068
40°	1807	1995	2105
45°	1781	2015	2157
50°	1741	2037	2212
55°	1711	2070	2278
60°	1675	2113	2338
65°	1598	2152	2396
70°	1517	2157	2394
75°	1389	2149	2113
80°	1189	1836	1638
85°	932	1041	608



TEST NUMBER: P387438

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L940-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	3.0
10°-20°	199.9	8.7
20°-30°	305.7	13.3
30°-40°	374.7	16.3
40°-50°	403.0	17.5
50°-60°	387.3	16.8
60°-70°	322.5	14.0
70°-80°	197.9	8.6
80°-90°	44.1	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°	574.9	24.9
0°-40°	949.6	41.2
0°-60°	1739.9	75.5
0°-90°	2304.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2304.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	730	724	728	728	728	69
15°	699	697	711	715	718	197
25°	641	647	668	676	682	295
35°	560	574	604	620	630	350
45°	468	489	530	554	567	360
55°	365	396	441	472	486	326
65°	251	289	338	366	376	249
75°	134	174	207	206	203	141
85°	30	45	34	23	20	36
90°	0	0	0	0	0	



TEST NUMBER: P387438

CATALOG NUMBER: 14CZ2-29-SQR-UNV-L940-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	728.2	728.2	728.2	728.2	728.2
2.5°	732.9	725.9	729.4	728.2	724.7
5°	730.5	723.6	728.2	728.2	728.2
7.5°	724.7	718.9	725.9	727.0	727.0
10°	718.9	714.3	723.6	724.7	725.9
12.5°	709.6	706.1	717.8	720.1	722.4
15°	699.2	696.9	710.8	715.4	717.8
17.5°	686.4	687.6	702.7	708.5	710.8
20°	672.5	675.9	693.4	699.2	703.8
22.5°	657.4	662.0	680.6	687.6	692.2
25°	641.1	646.9	667.8	675.9	681.8
27.5°	621.4	630.7	653.9	664.3	670.1
30°	601.6	612.1	637.6	650.4	656.2
32.5°	581.9	593.5	622.5	635.3	644.6
35°	559.8	573.7	603.9	620.2	629.5
37.5°	537.7	554.0	586.5	605.1	615.6
40°	514.5	531.9	567.9	588.8	599.3
42.5°	491.3	511.0	548.2	571.4	583.0
45°	468.1	489.0	529.6	554.0	566.8
47.5°	441.3	466.9	507.5	535.4	548.2
50°	415.8	443.7	486.6	515.7	528.4
52.5°	390.2	419.3	464.6	494.8	507.5
55°	364.7	396.0	441.3	471.5	485.5
57.5°	338.0	370.5	416.9	448.3	461.1
60°	311.3	344.9	392.6	421.6	434.4
62.5°	279.9	319.4	365.8	394.9	406.5
65°	250.9	289.2	338.0	365.8	376.3
67.5°	221.8	261.3	308.9	334.5	343.8
70°	192.8	232.3	274.1	298.5	304.3
72.5°	163.8	203.2	242.7	256.7	254.4
75°	133.6	174.2	206.7	205.6	203.2
77.5°	104.5	144.0	163.8	155.6	152.1
80°	76.7	115.0	118.5	110.3	105.7
82.5°	52.3	82.5	74.3	65.0	60.4
85°	30.2	45.3	33.7	23.2	19.7
87.5°	12.8	11.6	3.5	3.5	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)