

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: P387462

Luminaire Tested: **14CZ2-35-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: P387462
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: 14CZ2-35-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: 2837.5 lumens
Efficiency: N/A
Efficacy: 90.9 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

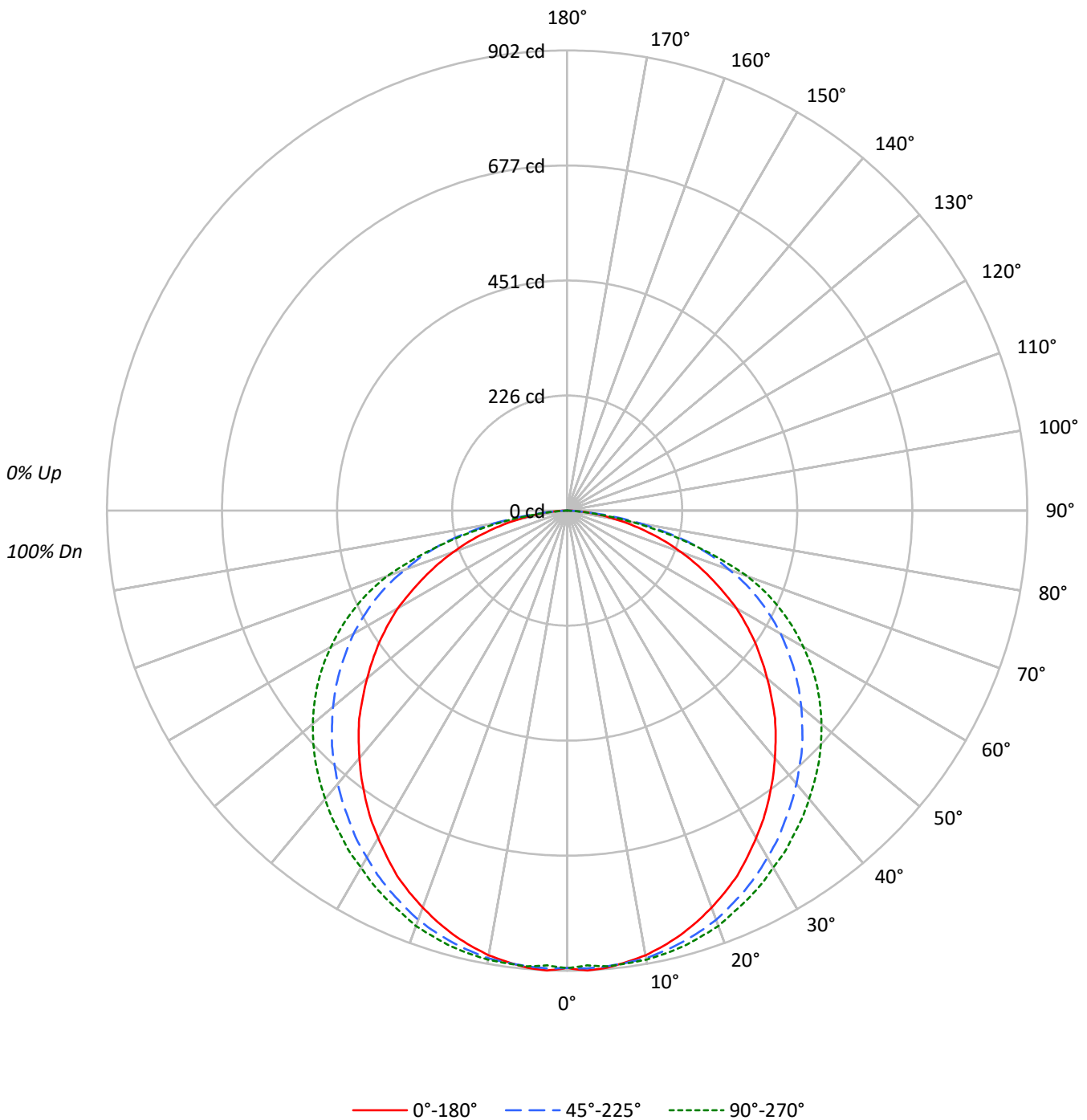
Input Watts (W): 31.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2413	2413	2413
5°	2430	2422	2422
10°	2419	2435	2442
15°	2398	2438	2462
20°	2371	2445	2482
25°	2344	2442	2493
30°	2302	2440	2511
35°	2264	2443	2546
40°	2225	2457	2592
45°	2193	2482	2656
50°	2143	2509	2724
55°	2107	2549	2805
60°	2063	2602	2879
65°	1967	2650	2951
70°	1868	2655	2948
75°	1710	2647	2602
80°	1463	2261	2016
85°	1149	1281	750



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	3.0
10°-20°	246.2	8.7
20°-30°	376.4	13.3
30°-40°	461.4	16.3
40°-50°	496.3	17.5
50°-60°	476.9	16.8
60°-70°	397.1	14.0
70°-80°	243.7	8.6
80°-90°	54.3	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°	707.8	24.9
0°-40°	1169.3	41.2
0°-60°	2142.4	75.5
0°-90°	2837.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2837.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	900	891	897	897	897	85
15°	861	858	875	881	884	243
25°	789	797	822	832	840	363
35°	689	706	744	764	775	431
45°	576	602	652	682	698	444
55°	449	488	543	581	598	401
65°	309	356	416	450	463	306
75°	164	214	255	253	250	174
85°	37	56	42	29	24	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.7	896.7	896.7	896.7	896.7
2.5°	902.4	893.8	898.1	896.7	892.4
5°	899.5	891.0	896.7	896.7	896.7
7.5°	892.4	885.2	893.8	895.2	895.2
10°	885.2	879.5	891.0	892.4	893.8
12.5°	873.8	869.5	883.8	886.7	889.5
15°	860.9	858.1	875.2	880.9	883.8
17.5°	845.2	846.6	865.2	872.4	875.2
20°	828.0	832.3	853.8	860.9	866.6
22.5°	809.4	815.2	838.0	846.6	852.3
25°	789.4	796.6	822.3	832.3	839.5
27.5°	765.1	776.5	805.1	818.0	825.2
30°	740.8	753.7	785.1	800.9	808.0
32.5°	716.5	730.8	766.5	782.3	793.7
35°	689.3	706.5	743.7	763.7	775.1
37.5°	662.1	682.2	722.2	745.1	758.0
40°	633.5	655.0	699.3	725.1	737.9
42.5°	604.9	629.2	675.0	703.6	717.9
45°	576.3	602.1	652.1	682.2	697.9
47.5°	543.4	574.9	625.0	659.3	675.0
50°	512.0	546.3	599.2	635.0	650.7
52.5°	480.5	516.3	572.0	609.2	625.0
55°	449.1	487.7	543.4	580.6	597.8
57.5°	416.2	456.2	513.4	552.0	567.8
60°	383.3	424.7	483.4	519.1	534.9
62.5°	344.7	393.3	450.5	486.2	500.5
65°	308.9	356.1	416.2	450.5	463.4
67.5°	273.1	321.8	380.4	411.9	423.3
70°	237.4	286.0	337.5	367.5	374.7
72.5°	201.6	250.3	298.9	316.1	313.2
75°	164.5	214.5	254.6	253.1	250.3
77.5°	128.7	177.3	201.6	191.6	187.3
80°	94.4	141.6	145.9	135.9	130.1
82.5°	64.4	101.5	91.5	80.1	74.4
85°	37.2	55.8	41.5	28.6	24.3
87.5°	15.7	14.3	4.3	4.3	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)