

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: P387514

Luminaire Tested: **14CZ2-39HE-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: P387514
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: 14CZ2-39HE-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: 3409.8 lumens
Efficiency: N/A
Efficacy: 116.4 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

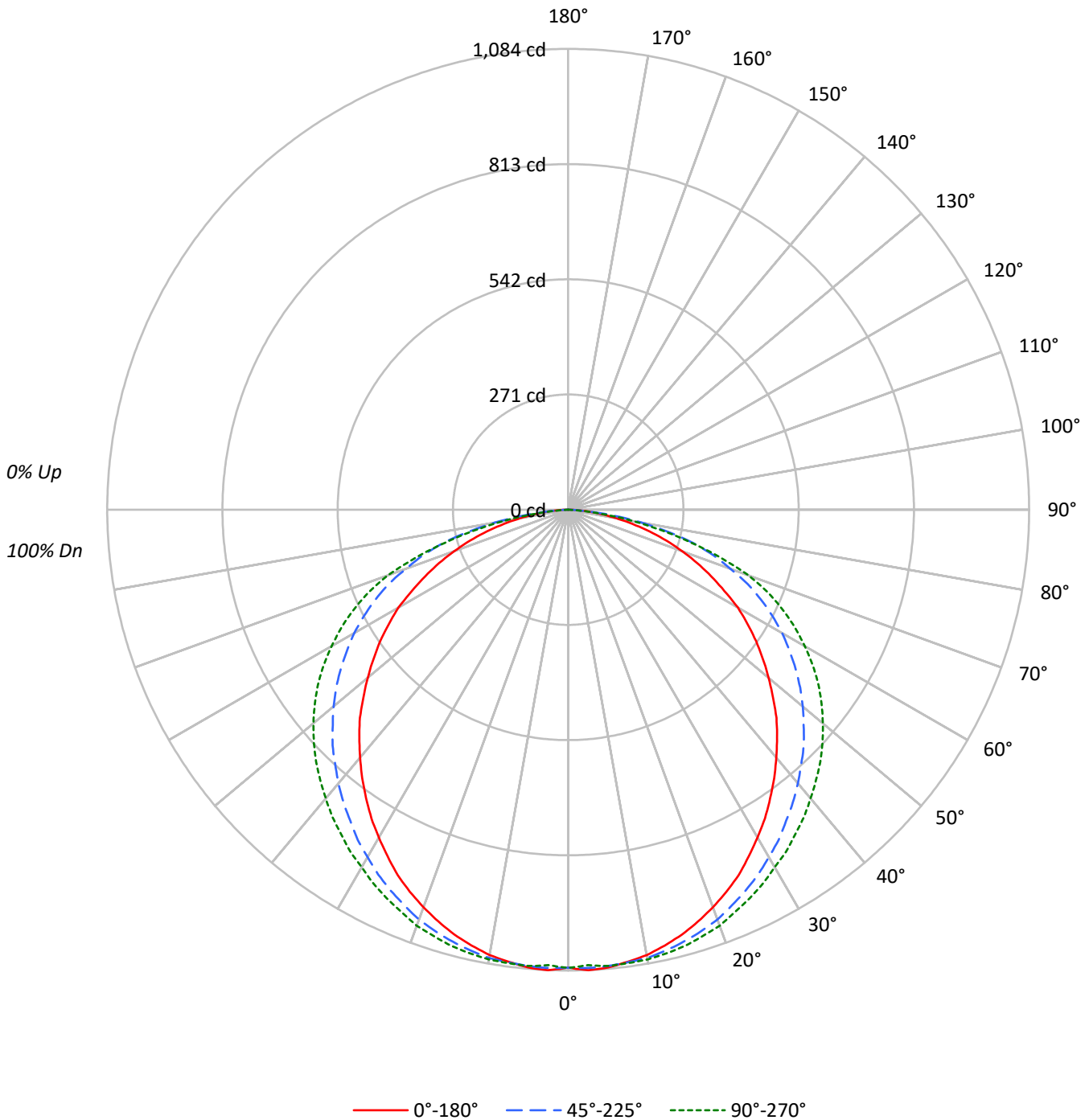
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2900	2900	2900
5°	2920	2911	2911
10°	2907	2926	2935
15°	2882	2930	2959
20°	2849	2938	2982
25°	2817	2934	2995
30°	2766	2932	3017
35°	2721	2936	3060
40°	2674	2952	3115
45°	2636	2982	3191
50°	2575	3015	3273
55°	2532	3064	3370
60°	2479	3126	3459
65°	2364	3184	3545
70°	2245	3191	3543
75°	2054	3180	3126
80°	1757	2717	2424
85°	1380	1538	902



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	3.0
10°-20°	295.8	8.7
20°-30°	452.4	13.3
30°-40°	554.5	16.3
40°-50°	596.3	17.5
50°-60°	573.1	16.8
60°-70°	477.2	14.0
70°-80°	292.9	8.6
80°-90°	65.2	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°	850.6	24.9
0°-40°	1405.1	41.2
0°-60°	2574.5	75.5
0°-90°	3409.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3409.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1081	1071	1078	1078	1078	103
15°	1035	1031	1052	1059	1062	292
25°	949	957	988	1000	1009	436
35°	828	849	894	918	932	518
45°	693	724	784	820	839	533
55°	540	586	653	698	718	482
65°	371	428	500	541	557	368
75°	198	258	306	304	301	209
85°	45	67	50	34	29	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1077.5	1077.5	1077.5	1077.5	1077.5
2.5°	1084.4	1074.1	1079.2	1077.5	1072.4
5°	1081.0	1070.7	1077.5	1077.5	1077.5
7.5°	1072.4	1063.8	1074.1	1075.8	1075.8
10°	1063.8	1056.9	1070.7	1072.4	1074.1
12.5°	1050.0	1044.9	1062.1	1065.5	1068.9
15°	1034.6	1031.1	1051.7	1058.6	1062.1
17.5°	1015.7	1017.4	1039.7	1048.3	1051.7
20°	995.0	1000.2	1026.0	1034.6	1041.4
22.5°	972.7	979.6	1007.1	1017.4	1024.3
25°	948.6	957.2	988.2	1000.2	1008.8
27.5°	919.4	933.2	967.5	983.0	991.6
30°	890.2	905.7	943.5	962.4	971.0
32.5°	861.0	878.2	921.1	940.0	953.8
35°	828.3	849.0	893.6	917.7	931.5
37.5°	795.7	819.7	867.9	895.4	910.8
40°	761.3	787.1	840.4	871.3	886.8
42.5°	726.9	756.2	811.2	845.5	862.7
45°	692.6	723.5	783.7	819.7	838.6
47.5°	653.0	690.9	751.0	792.2	811.2
50°	615.2	656.5	720.1	763.0	781.9
52.5°	577.4	620.4	687.4	732.1	751.0
55°	539.6	586.0	653.0	697.7	718.4
57.5°	500.1	548.2	617.0	663.4	682.3
60°	460.6	510.4	580.9	623.8	642.7
62.5°	414.2	472.6	541.3	584.3	601.5
65°	371.2	427.9	500.1	541.3	556.8
67.5°	328.2	386.7	457.1	494.9	508.7
70°	285.3	343.7	405.6	441.7	450.3
72.5°	242.3	300.7	359.2	379.8	376.4
75°	197.6	257.8	305.9	304.2	300.7
77.5°	154.7	213.1	242.3	230.3	225.1
80°	113.4	170.1	175.3	163.3	156.4
82.5°	77.3	122.0	110.0	96.2	89.4
85°	44.7	67.0	49.8	34.4	29.2
87.5°	18.9	17.2	5.2	5.2	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)