

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: P387489

Luminaire Tested: **14CZ2-39-SQR-UNV-L950-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: P387489
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: 14CZ2-39-SQR-UNV-L950-CD1-SDWPD1-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: 3339.8 lumens
Efficiency: N/A
Efficacy: 103.4 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

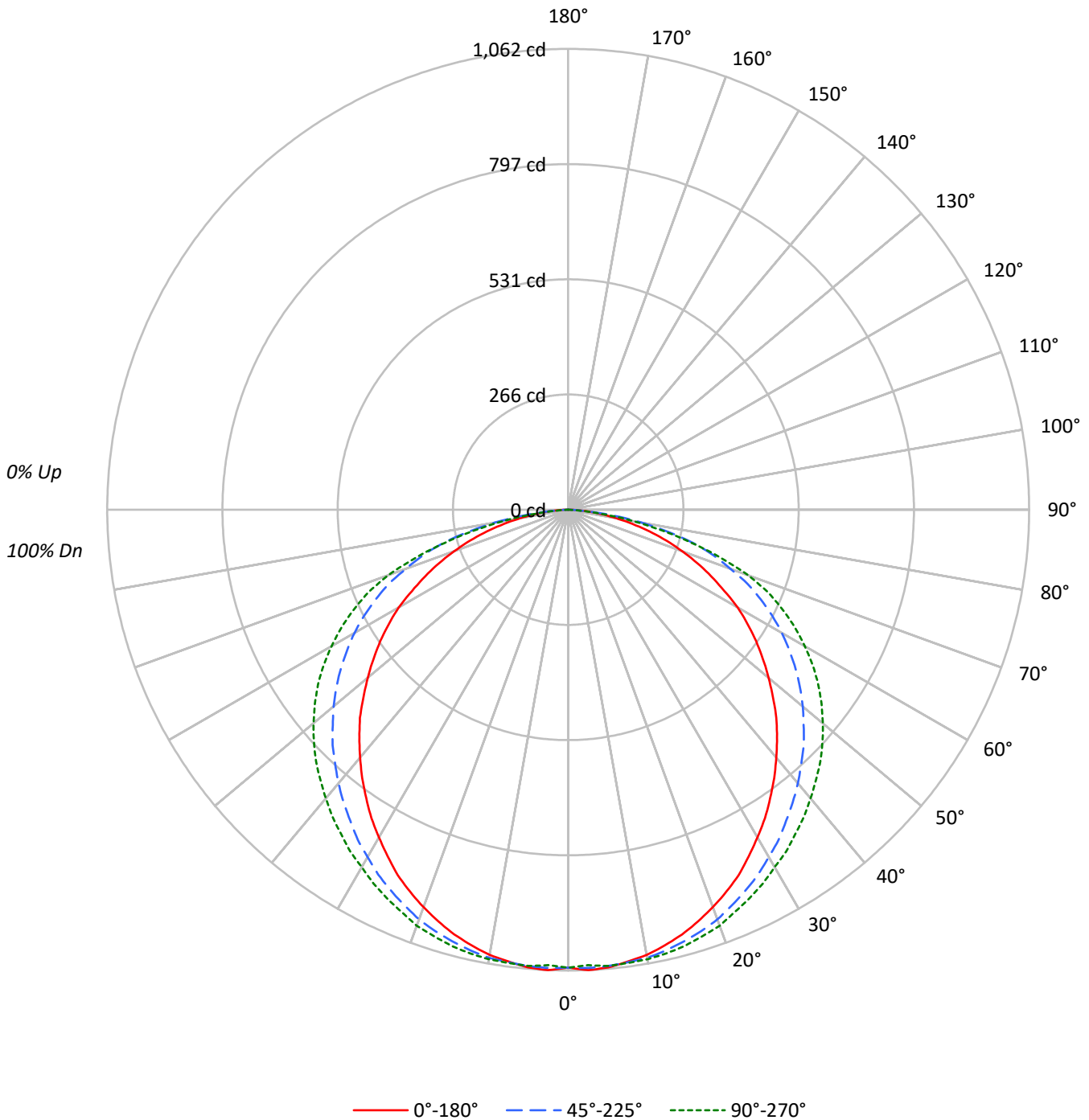
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387489

CATALOG NUMBER: 14CZ2-39-SQR-UNV-L950-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387489

CATALOG NUMBER: 14CZ2-39-SQR-UNV-L950-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°	2840	2840	2840
5°	2860	2851	2851
10°	2847	2866	2875
15°	2823	2870	2898
20°	2791	2878	2921
25°	2759	2874	2934
30°	2709	2871	2955
35°	2665	2875	2997
40°	2620	2891	3051
45°	2582	2921	3126
50°	2523	2953	3206
55°	2479	3001	3301
60°	2428	3062	3388
65°	2315	3119	3473
70°	2198	3125	3470
75°	2013	3115	3063
80°	1722	2661	2374
85°	1352	1507	883



TEST NUMBER: P387489

CATALOG NUMBER: 14CZ2-39-SQR-UNV-L950-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	3.0
10°-20°	289.7	8.7
20°-30°	443.1	13.3
30°-40°	543.1	16.3
40°-50°	584.1	17.5
50°-60°	561.3	16.8
60°-70°	467.4	14.0
70°-80°	286.8	8.6
80°-90°	63.9	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°	833.1	24.9
0°-40°	1376.2	41.2
0°-60°	2521.7	75.5
0°-90°	3339.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3339.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1055	1055	1055	1055	1055	
5°	1059	1049	1055	1055	1055	100
15°	1013	1010	1030	1037	1040	286
25°	929	938	968	980	988	427
35°	811	832	875	899	912	508
45°	678	709	768	803	821	522
55°	528	574	640	683	704	472
65°	364	419	490	530	545	360
75°	194	252	300	298	295	205
85°	44	66	49	34	29	53
90°	0	0	0	0	0	



TEST NUMBER: P387489

CATALOG NUMBER: 14CZ2-39-SQR-UNV-L950-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1055.4	1055.4	1055.4	1055.4	1055.4
2.5°	1062.1	1052.0	1057.1	1055.4	1050.4
5°	1058.8	1048.7	1055.4	1055.4	1055.4
7.5°	1050.4	1041.9	1052.0	1053.7	1053.7
10°	1041.9	1035.2	1048.7	1050.4	1052.0
12.5°	1028.5	1023.4	1040.3	1043.6	1047.0
15°	1013.3	1010.0	1030.2	1036.9	1040.3
17.5°	994.8	996.5	1018.4	1026.8	1030.2
20°	974.6	979.7	1004.9	1013.3	1020.1
22.5°	952.7	959.5	986.4	996.5	1003.2
25°	929.2	937.6	967.9	979.7	988.1
27.5°	900.5	914.0	947.7	962.8	971.2
30°	871.9	887.1	924.1	942.6	951.0
32.5°	843.3	860.1	902.2	920.7	934.2
35°	811.3	831.5	875.3	898.9	912.3
37.5°	779.4	802.9	850.0	877.0	892.1
40°	745.7	770.9	823.1	853.4	868.6
42.5°	712.0	740.6	794.5	828.2	845.0
45°	678.4	708.7	767.6	802.9	821.4
47.5°	639.6	676.7	735.6	776.0	794.5
50°	602.6	643.0	705.3	747.4	765.9
52.5°	565.6	607.7	673.3	717.1	735.6
55°	528.5	574.0	639.6	683.4	703.6
57.5°	489.8	537.0	604.3	649.7	668.3
60°	451.1	499.9	568.9	611.0	629.5
62.5°	405.7	462.9	530.2	572.3	589.1
65°	363.6	419.1	489.8	530.2	545.4
67.5°	321.5	378.7	447.7	484.8	498.2
70°	279.4	336.7	397.2	432.6	441.0
72.5°	237.3	294.6	351.8	372.0	368.6
75°	193.6	252.5	299.6	297.9	294.6
77.5°	151.5	208.7	237.3	225.6	220.5
80°	111.1	166.6	171.7	159.9	153.2
82.5°	75.7	119.5	107.7	94.3	87.5
85°	43.8	65.6	48.8	33.7	28.6
87.5°	18.5	16.8	5.0	5.0	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)