

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: P387921

Luminaire Tested: **22CZ2-39-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: P387921
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39-SQR-UNV-L950-CD1-SDWPD1-U
Description: 2x2 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: 3350.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

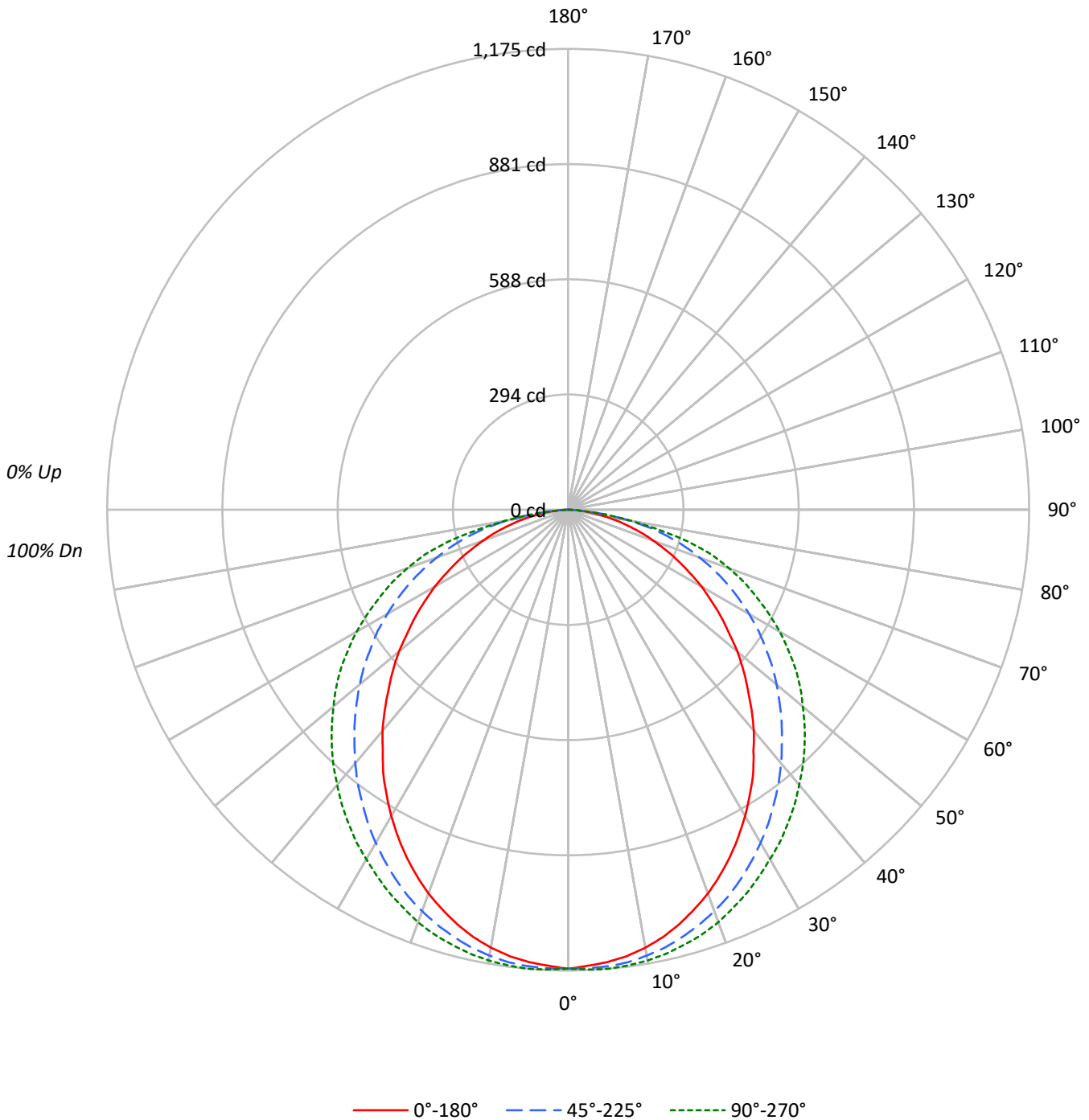
Input Watts (W): 34.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3149	3149	3149
5°	3127	3157	3174
10°	3098	3154	3189
15°	3048	3141	3198
20°	2982	3119	3206
25°	2899	3088	3201
30°	2801	3048	3196
35°	2700	3003	3207
40°	2586	2966	3217
45°	2463	2929	3243
50°	2357	2902	3268
55°	2230	2879	3319
60°	2113	2866	3355
65°	1974	2845	3382
70°	1814	2803	3428
75°	1637	2727	3306
80°	1404	2414	2489
85°	1130	1423	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.9	3.3
10°-20°	317.2	9.5
20°-30°	476.4	14.2
30°-40°	568.2	17.0
40°-50°	587.5	17.5
50°-60°	540.1	16.1
60°-70°	430.0	12.8
70°-80°	262.7	7.8
80°-90°	57.1	1.7
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°	904.5	27.0
0°-40°	1472.7	44.0
0°-60°	2600.2	77.6
0°-90°	3350.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3350.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1158	1161	1169	1173	1175	110
15°	1094	1107	1127	1143	1148	308
25°	976	1000	1040	1068	1078	449
35°	822	857	914	962	976	513
45°	647	693	770	832	852	500
55°	475	528	614	684	708	425
65°	310	362	447	509	531	307
75°	157	204	262	308	318	168
85°	37	44	46	40	37	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.2	1170.2	1170.2	1170.2	1170.2
2.5°	1163.9	1165.5	1170.2	1173.4	1173.4
5°	1157.5	1160.7	1168.6	1173.4	1175.0
7.5°	1148.0	1152.7	1163.9	1170.2	1171.8
10°	1133.7	1140.0	1154.3	1163.9	1167.1
12.5°	1116.2	1125.7	1143.2	1155.9	1159.1
15°	1093.9	1106.6	1127.3	1143.2	1148.0
17.5°	1068.5	1084.4	1109.8	1128.9	1135.3
20°	1041.4	1057.3	1089.1	1111.4	1119.4
22.5°	1009.6	1030.3	1066.9	1092.3	1098.7
25°	976.3	1000.1	1039.9	1068.5	1078.0
27.5°	939.7	968.3	1011.2	1046.2	1054.2
30°	901.5	931.7	981.0	1019.2	1028.7
32.5°	861.8	896.8	949.2	992.2	1004.9
35°	822.0	857.0	914.2	961.9	976.3
37.5°	775.9	817.3	880.9	930.1	947.6
40°	736.2	775.9	844.3	898.3	915.8
42.5°	691.6	734.6	806.1	865.0	885.6
45°	647.1	693.2	769.6	831.6	852.2
47.5°	605.8	651.9	731.4	796.6	817.3
50°	562.9	610.6	693.2	760.0	780.7
52.5°	516.7	569.2	655.1	721.9	745.7
55°	475.4	527.9	613.7	683.7	707.5
57.5°	432.5	486.5	575.6	642.4	664.6
60°	392.7	445.2	532.6	597.8	623.3
62.5°	349.8	403.9	489.7	553.3	577.2
65°	310.0	362.5	446.8	508.8	531.1
67.5°	270.3	322.8	402.3	461.1	486.5
70°	230.5	283.0	356.2	413.4	435.7
72.5°	195.6	241.7	311.6	364.1	384.8
75°	157.4	203.5	262.3	308.5	318.0
77.5°	122.4	163.8	213.1	233.7	236.9
80°	90.6	122.4	155.8	160.6	160.6
82.5°	60.4	84.3	97.0	98.6	97.0
85°	36.6	44.5	46.1	39.7	36.6
87.5°	12.7	12.7	7.9	4.8	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)