

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: P387899

Luminaire Tested: **22CZ2-34VHE-SQR-UNV-L950-CD1-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: P387899  
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: 22CZ2-34VHE-SQR-UNV-L950-CD1-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: 3133.1 lumens  
Efficiency: N/A  
Efficacy: 124.8 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

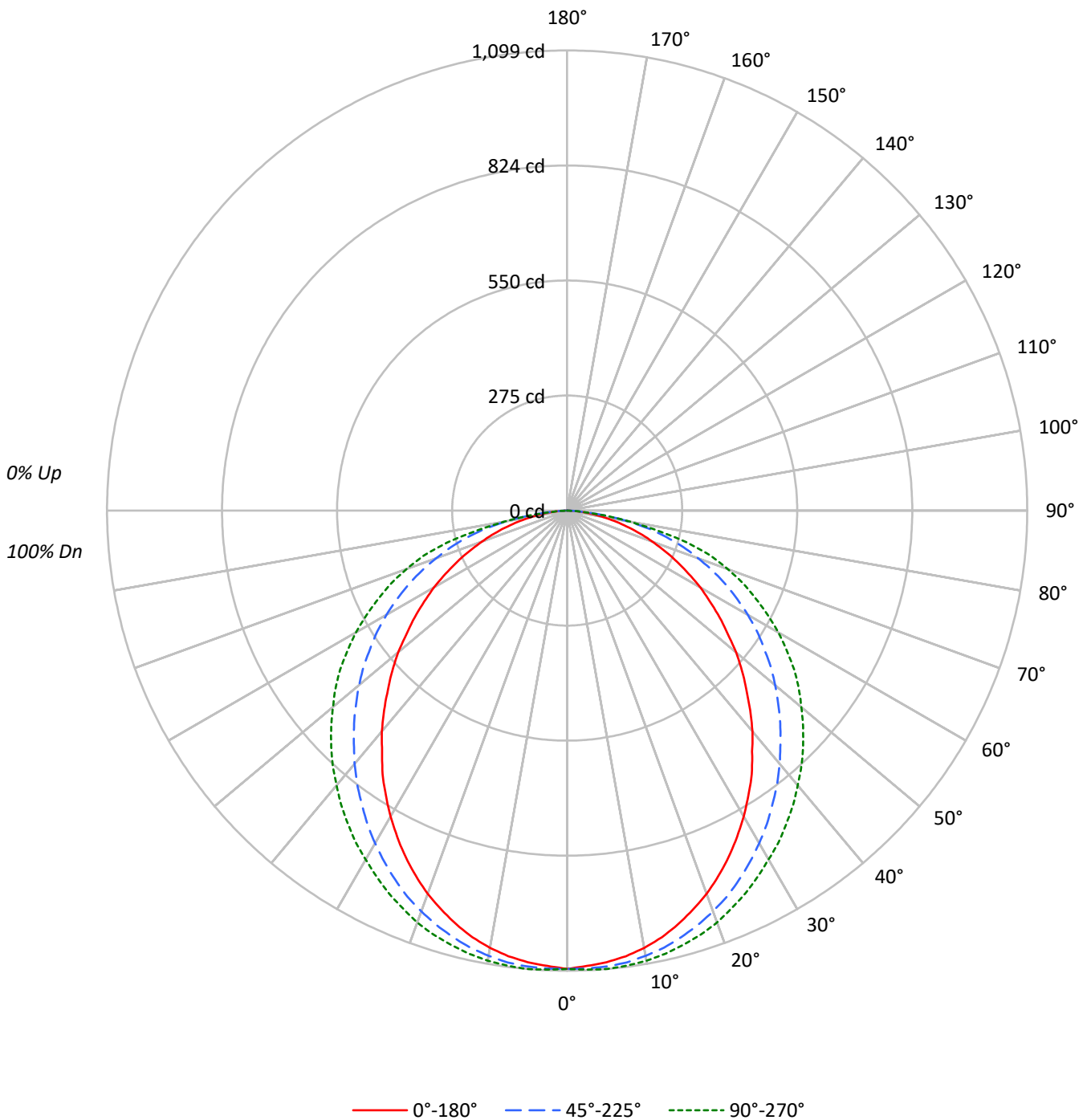
Input Watts (W): 25.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2945	2945	2945
5°	2924	2952	2968
10°	2897	2950	2983
15°	2850	2937	2991
20°	2789	2917	2998
25°	2711	2888	2994
30°	2620	2851	2990
35°	2526	2809	2999
40°	2419	2774	3009
45°	2303	2739	3033
50°	2204	2714	3057
55°	2086	2693	3104
60°	1977	2681	3137
65°	1847	2661	3163
70°	1696	2621	3206
75°	1530	2551	3092
80°	1314	2258	2328
85°	1056	1331	1056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.8	3.3
10°-20°	296.7	9.5
20°-30°	445.6	14.2
30°-40°	531.4	17.0
40°-50°	549.4	17.5
50°-60°	505.1	16.1
60°-70°	402.1	12.8
70°-80°	245.7	7.8
80°-90°	53.4	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°	846.0	27.0
0°-40°	1377.4	44.0
0°-60°	2431.9	77.6
0°-90°	3133.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3133.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1083	1086	1093	1097	1099	103
15°	1023	1035	1054	1069	1074	288
25°	913	935	972	999	1008	420
35°	769	802	855	900	913	480
45°	605	648	720	778	797	468
55°	445	494	574	639	662	398
65°	290	339	418	476	497	287
75°	147	190	245	288	297	157
85°	34	42	43	37	34	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1094.5	1094.5	1094.5	1094.5	1094.5
2.5°	1088.5	1090.0	1094.5	1097.4	1097.4
5°	1082.6	1085.5	1093.0	1097.4	1098.9
7.5°	1073.6	1078.1	1088.5	1094.5	1096.0
10°	1060.3	1066.2	1079.6	1088.5	1091.5
12.5°	1043.9	1052.8	1069.2	1081.1	1084.1
15°	1023.1	1035.0	1054.3	1069.2	1073.6
17.5°	999.3	1014.2	1038.0	1055.8	1061.8
20°	974.0	988.9	1018.6	1039.4	1046.9
22.5°	944.3	963.6	997.8	1021.6	1027.6
25°	913.0	935.4	972.5	999.3	1008.2
27.5°	878.8	905.6	945.8	978.5	985.9
30°	843.2	871.4	917.5	953.2	962.1
32.5°	806.0	838.7	887.8	927.9	939.8
35°	768.8	801.5	855.1	899.7	913.0
37.5°	725.7	764.3	823.8	869.9	886.3
40°	688.5	725.7	789.6	840.2	856.5
42.5°	646.9	687.0	753.9	809.0	828.3
45°	605.2	648.4	719.7	777.7	797.1
47.5°	566.6	609.7	684.0	745.0	764.3
50°	526.4	571.0	648.4	710.8	730.1
52.5°	483.3	532.4	612.7	675.1	697.4
55°	444.6	493.7	574.0	639.4	661.7
57.5°	404.5	455.0	538.3	600.8	621.6
60°	367.3	416.4	498.2	559.1	582.9
62.5°	327.2	377.7	458.0	517.5	539.8
65°	290.0	339.0	417.9	475.9	496.7
67.5°	252.8	301.9	376.2	431.2	455.0
70°	215.6	264.7	333.1	386.6	407.5
72.5°	182.9	226.0	291.5	340.5	359.9
75°	147.2	190.3	245.4	288.5	297.4
77.5°	114.5	153.2	199.3	218.6	221.6
80°	84.8	114.5	145.7	150.2	150.2
82.5°	56.5	78.8	90.7	92.2	90.7
85°	34.2	41.6	43.1	37.2	34.2
87.5°	11.9	11.9	7.4	4.5	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)