

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: P387897

Luminaire Tested: **22CZ2-34VHE-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: P387897  
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-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: 3056.9 lumens  
Efficiency: N/A  
Efficacy: 121.8 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

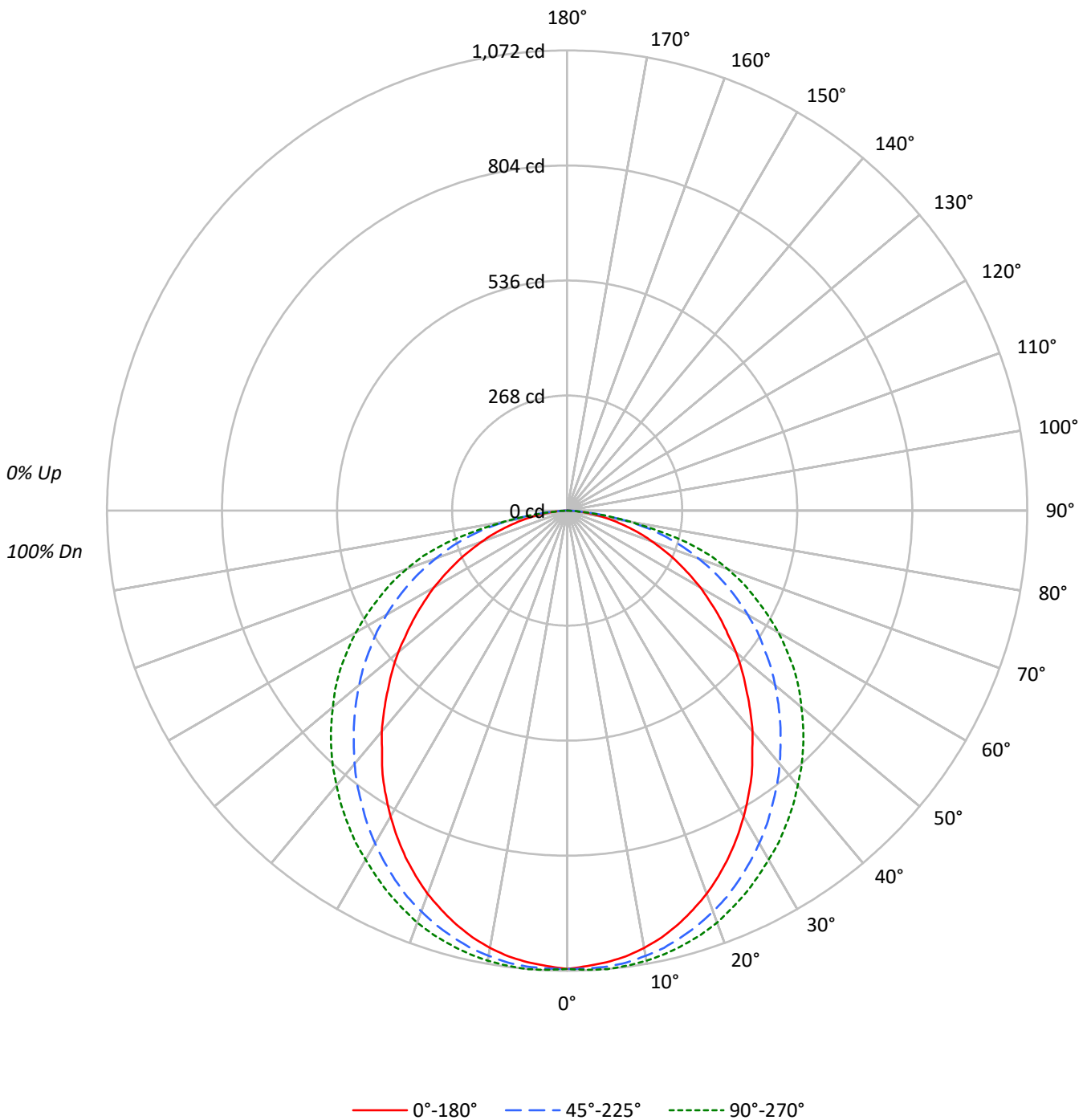
Input Watts (W): 25.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2873	2873	2873
5°	2853	2881	2896
10°	2827	2878	2910
15°	2781	2866	2918
20°	2721	2846	2925
25°	2645	2817	2921
30°	2556	2782	2917
35°	2464	2741	2926
40°	2360	2706	2936
45°	2247	2672	2960
50°	2150	2648	2982
55°	2035	2627	3029
60°	1929	2616	3061
65°	1801	2596	3086
70°	1655	2557	3127
75°	1493	2489	3017
80°	1282	2204	2270
85°	1031	1300	1031



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.2	3.3
10°-20°	289.4	9.5
20°-30°	434.7	14.2
30°-40°	518.5	17.0
40°-50°	536.1	17.5
50°-60°	492.8	16.1
60°-70°	392.3	12.8
70°-80°	239.7	7.8
80°-90°	52.1	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°	825.4	27.0
0°-40°	1343.9	44.0
0°-60°	2372.8	77.6
0°-90°	3056.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3056.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1068	1068	1068	1068	1068	
5°	1056	1059	1066	1071	1072	100
15°	998	1010	1029	1043	1048	281
25°	891	913	949	975	984	410
35°	750	782	834	878	891	468
45°	590	633	702	759	778	457
55°	434	482	560	624	646	388
65°	283	331	408	464	485	280
75°	144	186	239	282	290	153
85°	33	41	42	36	33	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1067.8	1067.8	1067.8	1067.8	1067.8
2.5°	1062.0	1063.5	1067.8	1070.8	1070.8
5°	1056.2	1059.1	1066.4	1070.8	1072.2
7.5°	1047.5	1051.9	1062.0	1067.8	1069.3
10°	1034.5	1040.3	1053.3	1062.0	1064.9
12.5°	1018.5	1027.2	1043.2	1054.8	1057.7
15°	998.2	1009.8	1028.7	1043.2	1047.5
17.5°	975.0	989.5	1012.7	1030.1	1035.9
20°	950.3	964.8	993.9	1014.2	1021.4
22.5°	921.3	940.2	973.5	996.8	1002.6
25°	890.8	912.6	948.9	975.0	983.7
27.5°	857.5	883.6	922.8	954.7	961.9
30°	822.6	850.2	895.2	930.0	938.7
32.5°	786.4	818.3	866.2	905.4	917.0
35°	750.1	782.0	834.3	877.8	890.8
37.5°	708.0	745.8	803.8	848.8	864.7
40°	671.8	708.0	770.4	819.7	835.7
42.5°	631.1	670.3	735.6	789.3	808.1
45°	590.5	632.6	702.2	758.8	777.7
47.5°	552.8	594.9	667.4	726.9	745.8
50°	513.6	557.1	632.6	693.5	712.4
52.5°	471.5	519.4	597.8	658.7	680.5
55°	433.8	481.7	560.0	623.9	645.6
57.5°	394.6	444.0	525.2	586.2	606.5
60°	358.4	406.2	486.0	545.5	568.7
62.5°	319.2	368.5	446.9	504.9	526.7
65°	282.9	330.8	407.7	464.3	484.6
67.5°	246.6	294.5	367.1	420.8	444.0
70°	210.4	258.3	325.0	377.2	397.5
72.5°	178.5	220.5	284.4	332.3	351.1
75°	143.6	185.7	239.4	281.5	290.2
77.5°	111.7	149.4	194.4	213.3	216.2
80°	82.7	111.7	142.2	146.5	146.5
82.5°	55.1	76.9	88.5	90.0	88.5
85°	33.4	40.6	42.1	36.3	33.4
87.5°	11.6	11.6	7.3	4.4	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)