

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: P387895

Luminaire Tested: **22CZ2-34VHE-SQR-UNV-L940-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: P387895  
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-L940-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2915.1 lumens  
Efficiency: N/A  
Efficacy: 116.1 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

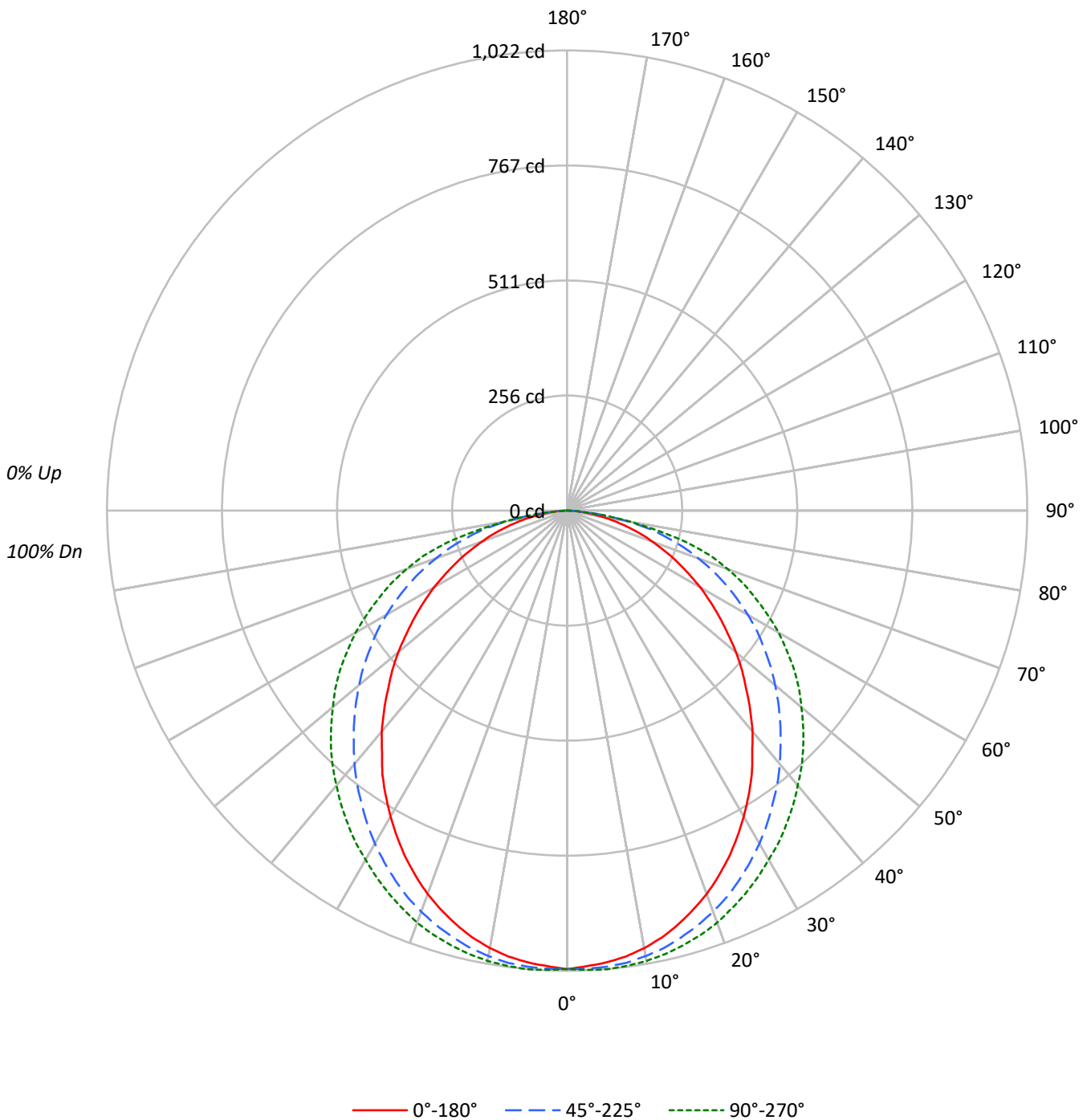
Input Watts (W): 25.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2740	2740	2740
5°	2721	2747	2762
10°	2696	2745	2775
15°	2652	2733	2783
20°	2595	2714	2789
25°	2522	2687	2785
30°	2438	2653	2782
35°	2350	2614	2791
40°	2250	2581	2799
45°	2143	2549	2822
50°	2051	2525	2844
55°	1941	2506	2889
60°	1839	2495	2919
65°	1718	2476	2942
70°	1578	2438	2983
75°	1424	2374	2877
80°	1223	2101	2165
85°	982	1238	982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.5	3.3
10°-20°	276.0	9.5
20°-30°	414.6	14.2
30°-40°	494.4	17.0
40°-50°	511.2	17.5
50°-60°	470.0	16.1
60°-70°	374.1	12.8
70°-80°	228.6	7.8
80°-90°	49.7	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°	787.1	27.0
0°-40°	1281.5	44.0
0°-60°	2262.7	77.6
0°-90°	2915.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2915.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1007	1010	1017	1021	1022	96
15°	952	963	981	995	999	268
25°	850	870	905	930	938	391
35°	715	746	796	837	850	446
45°	563	603	670	724	742	435
55°	414	459	534	595	616	370
65°	270	316	389	443	462	267
75°	137	177	228	268	277	146
85°	32	39	40	35	32	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1018.3	1018.3	1018.3	1018.3	1018.3
2.5°	1012.8	1014.2	1018.3	1021.1	1021.1
5°	1007.2	1010.0	1016.9	1021.1	1022.5
7.5°	998.9	1003.1	1012.8	1018.3	1019.7
10°	986.5	992.0	1004.5	1012.8	1015.5
12.5°	971.3	979.6	994.8	1005.9	1008.6
15°	951.9	963.0	981.0	994.8	998.9
17.5°	929.8	943.6	965.7	982.3	987.9
20°	906.2	920.1	947.8	967.1	974.0
22.5°	878.6	896.6	928.4	950.5	956.1
25°	849.5	870.3	904.9	929.8	938.1
27.5°	817.7	842.6	880.0	910.4	917.3
30°	784.5	810.8	853.7	886.9	895.2
32.5°	749.9	780.3	826.0	863.4	874.4
35°	715.3	745.7	795.6	837.1	849.5
37.5°	675.2	711.2	766.5	809.4	824.6
40°	640.6	675.2	734.7	781.7	796.9
42.5°	601.9	639.2	701.5	752.7	770.7
45°	563.1	603.2	669.7	723.6	741.6
47.5°	527.1	567.3	636.4	693.2	711.2
50°	489.8	531.3	603.2	661.4	679.3
52.5°	449.7	495.3	570.0	628.1	648.9
55°	413.7	459.3	534.1	594.9	615.7
57.5°	376.3	423.4	500.9	559.0	578.3
60°	341.7	387.4	463.5	520.2	542.4
62.5°	304.4	351.4	426.1	481.5	502.2
65°	269.8	315.5	388.8	442.7	462.1
67.5°	235.2	280.9	350.0	401.2	423.4
70°	200.6	246.3	309.9	359.7	379.1
72.5°	170.2	210.3	271.2	316.8	334.8
75°	137.0	177.1	228.3	268.4	276.7
77.5°	106.5	142.5	185.4	203.4	206.2
80°	78.9	106.5	135.6	139.7	139.7
82.5°	52.6	73.3	84.4	85.8	84.4
85°	31.8	38.7	40.1	34.6	31.8
87.5°	11.1	11.1	6.9	4.2	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)