

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: P387896

Luminaire Tested: **22CZ2-34VHE-SQR-UNV-L940-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: P387896
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-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: 2951.7 lumens
Efficiency: N/A
Efficacy: 117.6 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

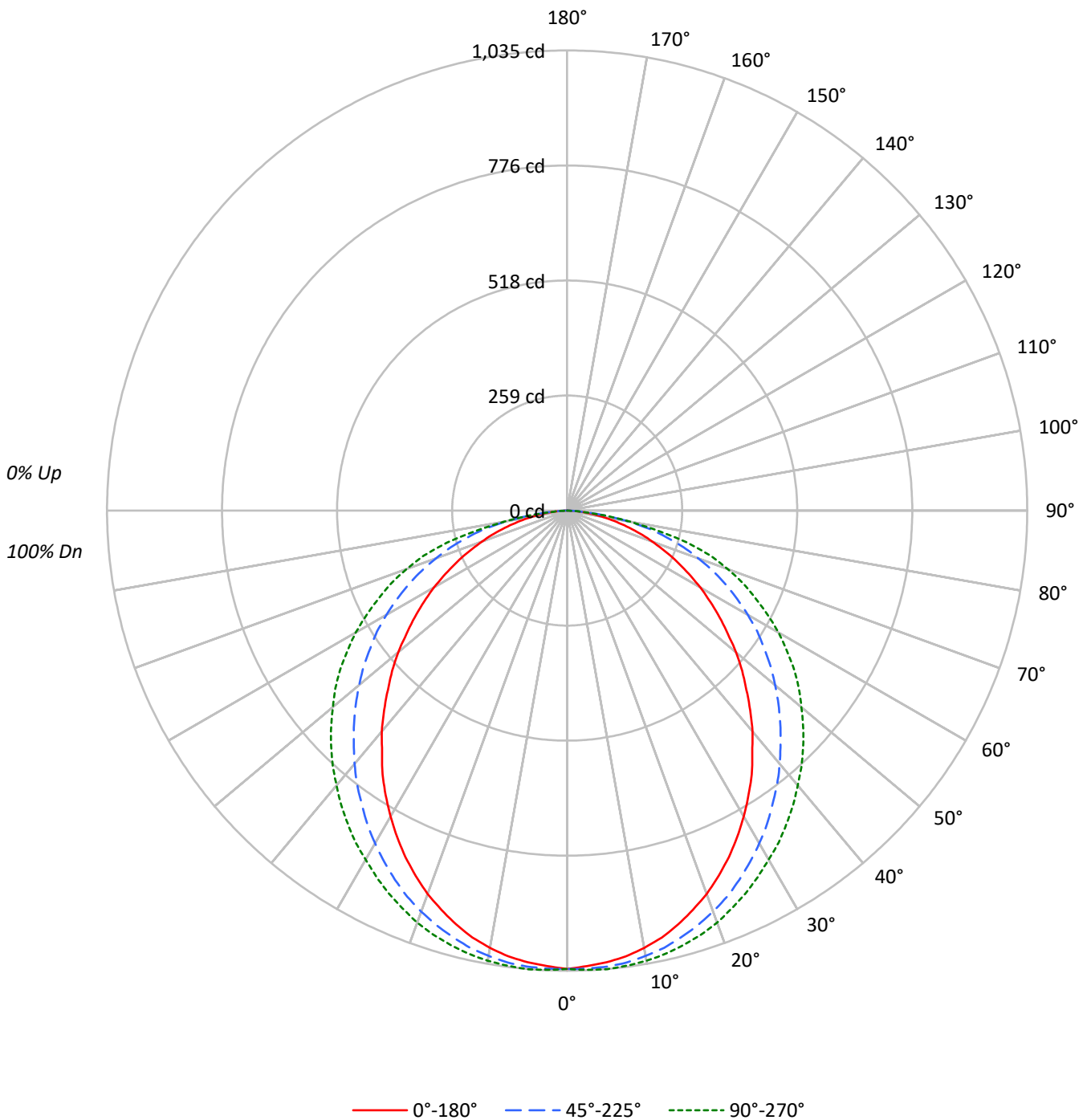
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2775	2775	2775
5°	2755	2781	2797
10°	2729	2779	2810
15°	2685	2767	2818
20°	2628	2748	2824
25°	2554	2720	2820
30°	2468	2686	2816
35°	2379	2646	2826
40°	2278	2613	2834
45°	2170	2581	2858
50°	2076	2557	2880
55°	1965	2537	2925
60°	1862	2526	2956
65°	1740	2507	2979
70°	1598	2469	3020
75°	1442	2404	2913
80°	1238	2128	2193
85°	994	1254	994



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	3.3
10°-20°	279.5	9.5
20°-30°	419.8	14.2
30°-40°	500.6	17.0
40°-50°	517.6	17.5
50°-60°	475.9	16.1
60°-70°	378.8	12.8
70°-80°	231.4	7.8
80°-90°	50.3	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°	797.0	27.0
0°-40°	1297.6	44.0
0°-60°	2291.1	77.6
0°-90°	2951.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2951.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1031	1031	1031	1031	1031	
5°	1020	1023	1030	1034	1035	97
15°	964	975	993	1007	1012	271
25°	860	881	916	941	950	396
35°	724	755	806	848	860	452
45°	570	611	678	733	751	441
55°	419	465	541	602	623	375
65°	273	319	394	448	468	271
75°	139	179	231	272	280	148
85°	32	39	41	35	32	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1031.1	1031.1	1031.1	1031.1	1031.1
2.5°	1025.5	1026.9	1031.1	1033.9	1033.9
5°	1019.9	1022.7	1029.7	1033.9	1035.3
7.5°	1011.5	1015.7	1025.5	1031.1	1032.5
10°	998.9	1004.5	1017.1	1025.5	1028.3
12.5°	983.5	991.9	1007.3	1018.5	1021.3
15°	963.9	975.1	993.3	1007.3	1011.5
17.5°	941.4	955.4	977.9	994.7	1000.3
20°	917.6	931.6	959.7	979.3	986.3
22.5°	889.6	907.8	940.0	962.5	968.1
25°	860.2	881.2	916.2	941.4	949.8
27.5°	828.0	853.2	891.0	921.8	928.8
30°	794.3	821.0	864.4	898.0	906.4
32.5°	759.3	790.1	836.4	874.2	885.4
35°	724.3	755.1	805.5	847.6	860.2
37.5°	683.7	720.1	776.1	819.6	835.0
40°	648.6	683.7	743.9	791.5	806.9
42.5°	609.4	647.2	710.3	762.1	780.3
45°	570.2	610.8	678.1	732.7	750.9
47.5°	533.8	574.4	644.4	701.9	720.1
50°	495.9	538.0	610.8	669.7	687.9
52.5°	455.3	501.5	577.2	636.0	657.0
55°	418.9	465.1	540.8	602.4	623.4
57.5°	381.1	428.7	507.1	566.0	585.6
60°	346.0	392.3	469.3	526.8	549.2
62.5°	308.2	355.8	431.5	487.5	508.5
65°	273.2	319.4	393.7	448.3	467.9
67.5°	238.2	284.4	354.4	406.3	428.7
70°	203.1	249.4	313.8	364.2	383.9
72.5°	172.3	212.9	274.6	320.8	339.0
75°	138.7	179.3	231.2	271.8	280.2
77.5°	107.9	144.3	187.7	205.9	208.7
80°	79.9	107.9	137.3	141.5	141.5
82.5°	53.2	74.3	85.5	86.9	85.5
85°	32.2	39.2	40.6	35.0	32.2
87.5°	11.2	11.2	7.0	4.2	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)