

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: P387893

Luminaire Tested: **22CZ2-34VHE-SQR-UNV-L935-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: P387893
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-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2921.5 lumens
Efficiency: N/A
Efficacy: 116.4 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

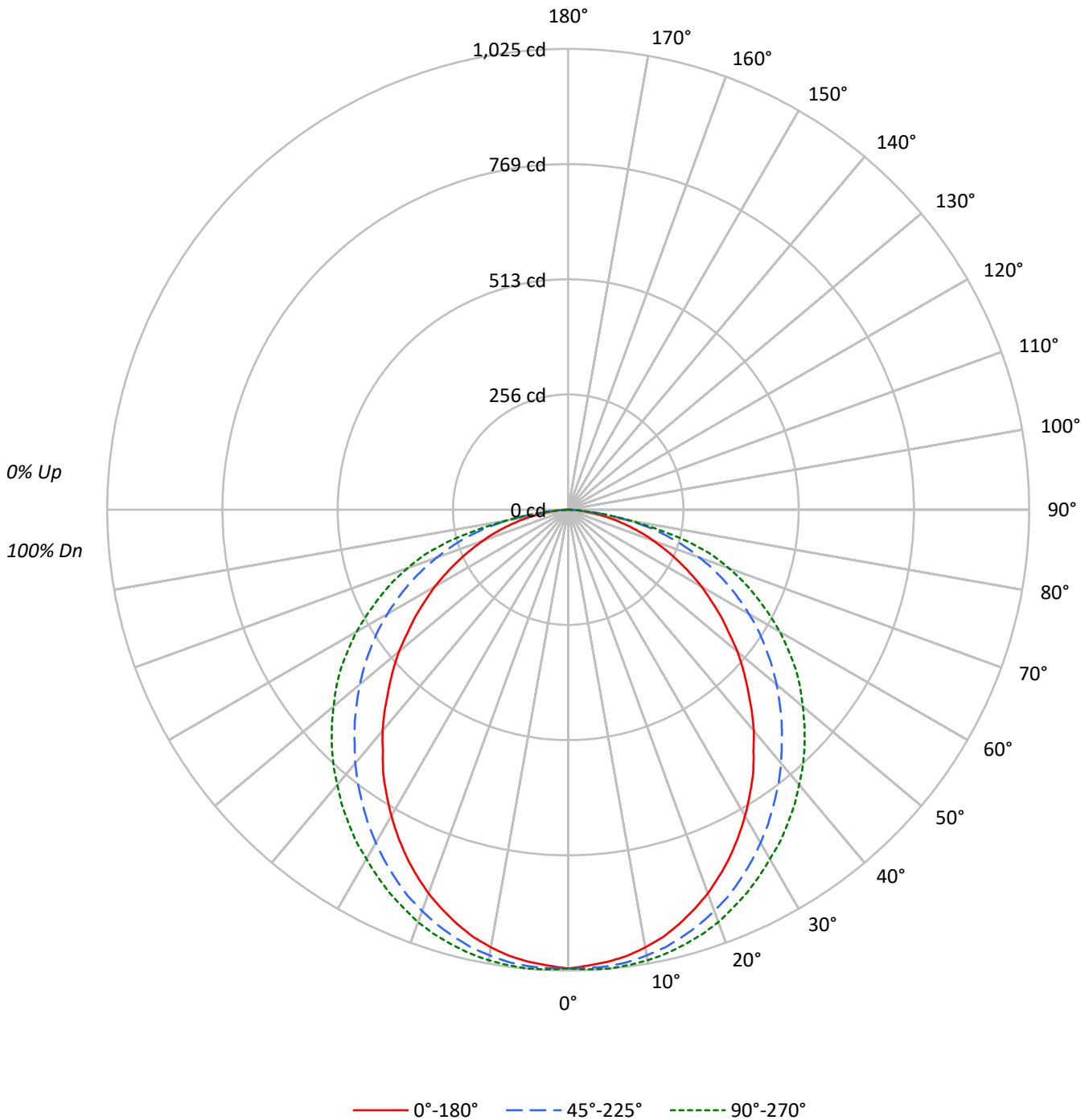
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2746	2746	2746
5°	2727	2753	2768
10°	2702	2751	2781
15°	2658	2739	2789
20°	2601	2720	2796
25°	2528	2692	2791
30°	2443	2658	2788
35°	2355	2619	2797
40°	2255	2586	2806
45°	2148	2554	2828
50°	2055	2531	2850
55°	1945	2511	2895
60°	1843	2500	2926
65°	1722	2481	2949
70°	1582	2444	2989
75°	1428	2379	2883
80°	1224	2106	2170
85°	985	1241	985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	3.3
10°-20°	276.6	9.5
20°-30°	415.5	14.2
30°-40°	495.5	17.0
40°-50°	512.3	17.5
50°-60°	471.0	16.1
60°-70°	375.0	12.8
70°-80°	229.1	7.8
80°-90°	49.8	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°	788.8	27.0
0°-40°	1284.3	44.0
0°-60°	2267.6	77.6
0°-90°	2921.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2921.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1021	1021	1021	1021	1021	
5°	1010	1012	1019	1023	1025	96
15°	954	965	983	997	1001	269
25°	851	872	907	932	940	392
35°	717	747	797	839	851	447
45°	564	605	671	725	743	436
55°	415	460	535	596	617	371
65°	270	316	390	444	463	268
75°	137	178	229	269	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°	1020.6	1020.6	1020.6	1020.6	1020.6
2.5°	1015.0	1016.4	1020.6	1023.3	1023.3
5°	1009.5	1012.2	1019.2	1023.3	1024.7
7.5°	1001.1	1005.3	1015.0	1020.6	1021.9
10°	988.7	994.2	1006.7	1015.0	1017.8
12.5°	973.4	981.7	997.0	1008.1	1010.8
15°	954.0	965.1	983.1	997.0	1001.1
17.5°	931.8	945.7	967.9	984.5	990.0
20°	908.2	922.1	949.8	969.2	976.2
22.5°	880.5	898.5	930.4	952.6	958.2
25°	851.4	872.2	906.8	931.8	940.1
27.5°	819.5	844.4	881.9	912.4	919.3
30°	786.2	812.6	855.5	888.8	897.1
32.5°	751.5	782.1	827.8	865.2	876.3
35°	716.9	747.4	797.3	838.9	851.4
37.5°	676.7	712.7	768.2	811.2	826.4
40°	642.0	676.7	736.3	783.4	798.7
42.5°	603.2	640.6	703.0	754.3	772.3
45°	564.4	604.6	671.1	725.2	743.2
47.5°	528.3	568.5	637.8	694.7	712.7
50°	490.9	532.5	604.6	662.8	680.8
52.5°	450.7	496.4	571.3	629.5	650.3
55°	414.6	460.4	535.2	596.2	617.0
57.5°	377.2	424.3	502.0	560.2	579.6
60°	342.5	388.3	464.5	521.4	543.6
62.5°	305.1	352.2	427.1	482.5	503.3
65°	270.4	316.1	389.6	443.7	463.1
67.5°	235.7	281.5	350.8	402.1	424.3
70°	201.1	246.8	310.6	360.5	379.9
72.5°	170.6	210.8	271.8	317.5	335.6
75°	137.3	177.5	228.8	269.0	277.3
77.5°	106.8	142.8	185.8	203.8	206.6
80°	79.0	106.8	135.9	140.0	140.0
82.5°	52.7	73.5	84.6	86.0	84.6
85°	31.9	38.8	40.2	34.7	31.9
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)