

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: P389209

Luminaire Tested: **22CZ2-34VHE-S-UNV-L935-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: P389209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34VHE-S-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3156.7 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

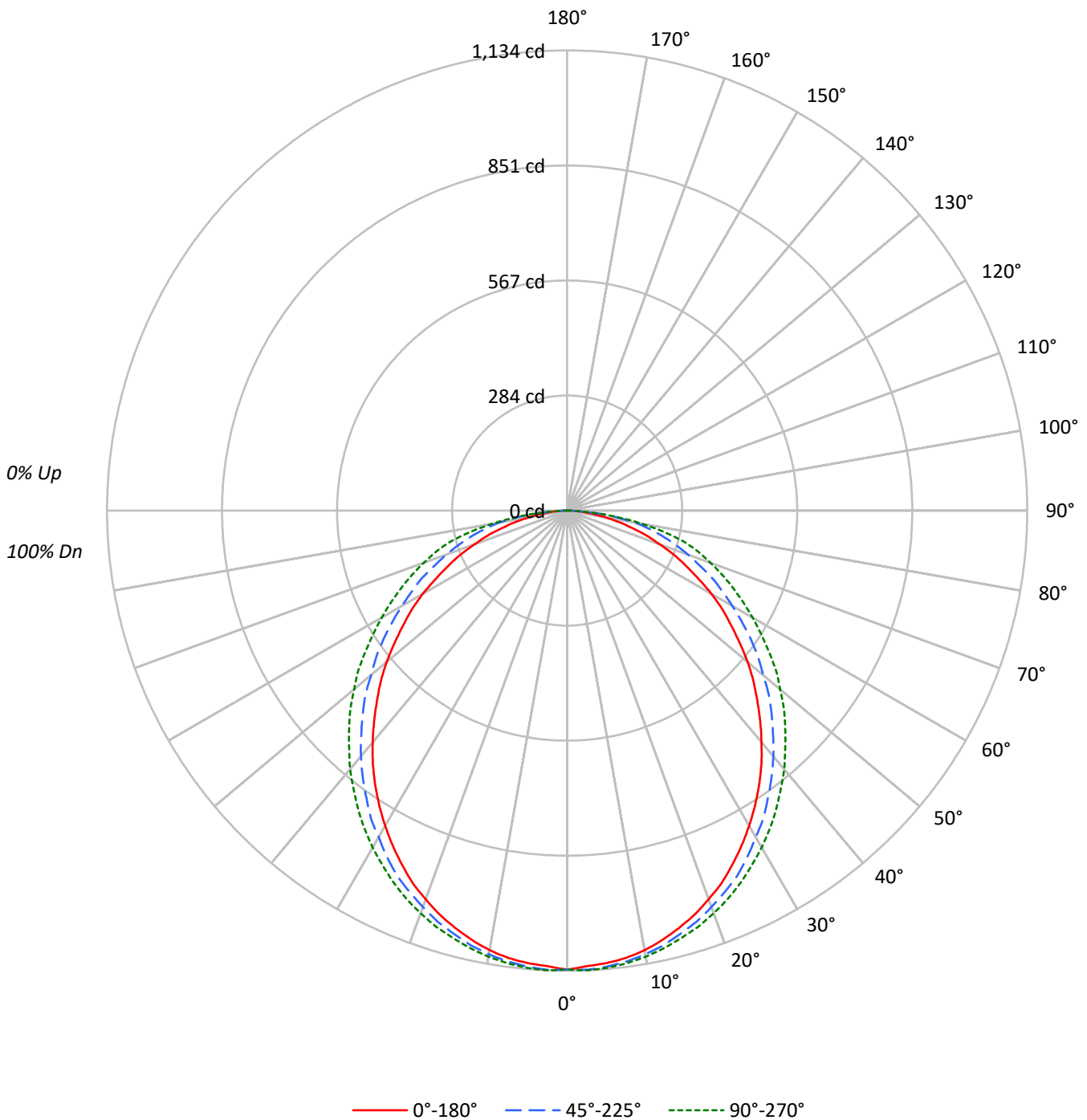
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3044	3044	3044
5°	3024	3048	3055
10°	3006	3034	3051
15°	2967	3008	3036
20°	2919	2978	3024
25°	2860	2947	3004
30°	2787	2888	2979
35°	2710	2835	2951
40°	2618	2778	2923
45°	2522	2713	2892
50°	2429	2639	2867
55°	2315	2591	2847
60°	2211	2528	2838
65°	2063	2513	2870
70°	1900	2492	2955
75°	1716	2527	3109
80°	1483	2602	2921
85°	1229	2183	2183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.0	3.4
10°-20°	304.4	9.6
20°-30°	455.5	14.4
30°-40°	539.4	17.1
40°-50°	549.7	17.4
50°-60°	492.7	15.6
60°-70°	385.7	12.2
70°-80°	248.7	7.9
80°-90°	73.5	2.3
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°	866.9	27.5
0°-40°	1406.3	44.5
0°-60°	2448.7	77.6
0°-90°	3156.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3156.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1131	1131	1131	1131	1131	
5°	1119	1122	1128	1130	1131	106
15°	1065	1071	1080	1088	1090	300
25°	963	972	993	1006	1012	443
35°	825	835	863	890	898	515
45°	663	678	713	750	760	512
55°	493	510	552	591	607	442
65°	324	343	395	433	451	322
75°	165	190	243	284	299	177
85°	40	54	71	71	71	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1131.1	1131.1	1131.1	1131.1	1131.1
2.5°	1123.8	1126.7	1132.6	1134.1	1134.1
5°	1119.4	1122.3	1128.2	1129.7	1131.1
7.5°	1112.0	1113.5	1120.8	1123.8	1125.3
10°	1100.2	1103.2	1110.5	1114.9	1116.4
12.5°	1084.0	1088.4	1097.3	1103.2	1104.6
15°	1064.9	1070.8	1079.6	1088.4	1089.9
17.5°	1044.2	1050.1	1061.9	1072.2	1075.2
20°	1019.2	1026.6	1039.8	1051.6	1056.0
22.5°	994.2	1000.1	1016.3	1031.0	1035.4
25°	963.2	972.1	992.7	1006.0	1011.8
27.5°	930.8	941.1	961.8	979.4	985.3
30°	897.0	907.3	929.4	951.5	958.8
32.5°	861.6	873.4	899.9	922.0	929.4
35°	824.8	835.1	863.1	889.6	898.4
37.5°	786.5	795.3	827.7	855.7	864.6
40°	745.3	757.0	790.9	823.3	832.2
42.5°	704.0	717.3	751.2	786.5	795.3
45°	662.8	677.5	712.9	749.7	760.0
47.5°	623.0	634.8	674.6	709.9	724.6
50°	580.3	592.1	630.4	670.1	684.9
52.5°	536.1	552.3	593.6	631.8	649.5
55°	493.4	509.6	552.3	590.6	606.8
57.5°	453.6	466.9	511.1	550.8	567.0
60°	410.9	422.7	469.8	512.5	527.3
62.5°	365.3	382.9	431.5	471.3	489.0
65°	324.0	343.2	394.7	433.0	450.7
67.5°	285.7	303.4	353.5	394.7	413.9
70°	241.5	265.1	316.7	357.9	375.6
72.5°	206.2	226.8	279.8	321.1	340.2
75°	165.0	190.0	243.0	284.3	299.0
77.5°	131.1	156.1	206.2	238.6	246.0
80°	95.7	120.8	167.9	184.1	188.5
82.5°	64.8	88.4	120.8	125.2	126.7
85°	39.8	54.5	70.7	70.7	70.7
87.5°	19.1	22.1	25.0	23.6	23.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)