

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: P389208

Luminaire Tested: **22CZ2-34VHE-S-UNV-L935-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: P389208
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-SDWPD1-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: 3118.6 lumens
Efficiency: N/A
Efficacy: 124.2 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

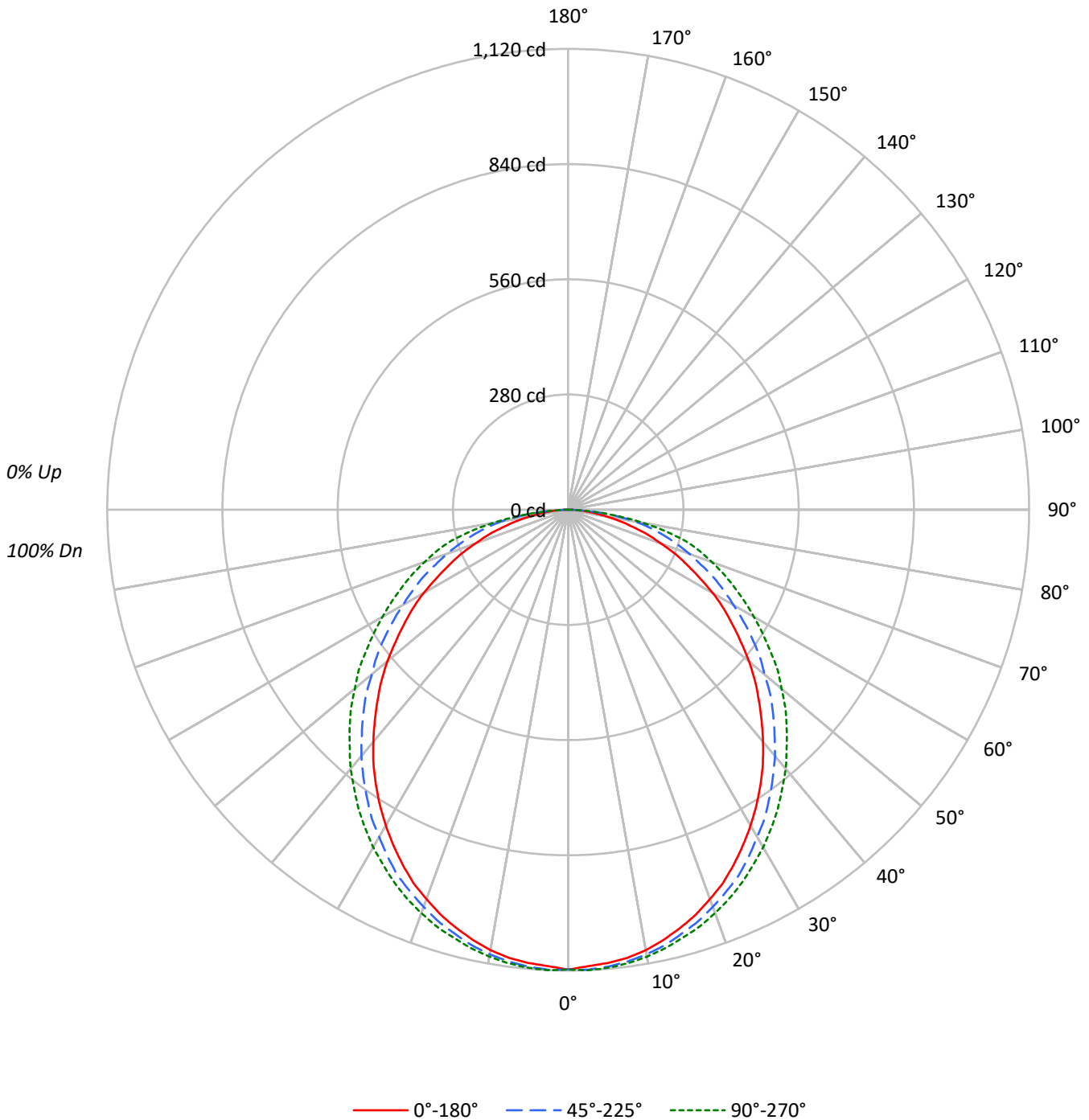
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3007	3007	3007
5°	2987	3011	3019
10°	2970	2998	3014
15°	2931	2971	3000
20°	2883	2942	2988
25°	2825	2912	2968
30°	2753	2853	2943
35°	2677	2801	2916
40°	2586	2745	2888
45°	2492	2680	2857
50°	2400	2607	2833
55°	2287	2560	2813
60°	2185	2498	2803
65°	2038	2483	2835
70°	1877	2461	2919
75°	1695	2496	3071
80°	1466	2571	2885
85°	1213	2155	2155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	3.4
10°-20°	300.7	9.6
20°-30°	450.0	14.4
30°-40°	532.9	17.1
40°-50°	543.1	17.4
50°-60°	486.8	15.6
60°-70°	381.1	12.2
70°-80°	245.7	7.9
80°-90°	72.6	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°	856.4	27.5
0°-40°	1389.3	44.5
0°-60°	2419.2	77.6
0°-90°	3118.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3118.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1106	1109	1115	1116	1118	105
15°	1052	1058	1067	1075	1077	297
25°	952	960	981	994	1000	438
35°	815	825	853	879	888	509
45°	655	669	704	741	751	506
55°	487	504	546	584	600	437
65°	320	339	390	428	445	318
75°	163	188	240	281	295	175
85°	39	54	70	70	70	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1117.5	1117.5	1117.5	1117.5	1117.5
2.5°	1110.2	1113.1	1118.9	1120.4	1120.4
5°	1105.9	1108.8	1114.6	1116.0	1117.5
7.5°	1098.6	1100.0	1107.3	1110.2	1111.7
10°	1086.9	1089.8	1097.1	1101.5	1102.9
12.5°	1070.9	1075.3	1084.0	1089.8	1091.3
15°	1052.0	1057.8	1066.6	1075.3	1076.7
17.5°	1031.6	1037.5	1049.1	1059.3	1062.2
20°	1006.9	1014.2	1027.3	1038.9	1043.3
22.5°	982.2	988.0	1004.0	1018.5	1022.9
25°	951.6	960.3	980.7	993.8	999.6
27.5°	919.6	929.8	950.2	967.6	973.4
30°	886.1	896.3	918.1	940.0	947.2
32.5°	851.2	862.9	889.0	910.9	918.1
35°	814.8	825.0	852.7	878.9	887.6
37.5°	777.0	785.7	817.7	845.4	854.1
40°	736.3	747.9	781.4	813.4	822.1
42.5°	695.5	708.6	742.1	777.0	785.7
45°	654.8	669.3	704.3	740.6	750.8
47.5°	615.5	627.1	666.4	701.3	715.9
50°	573.3	584.9	622.8	662.1	676.6
52.5°	529.6	545.7	586.4	624.2	641.7
55°	487.4	503.5	545.7	583.5	599.5
57.5°	448.2	461.3	504.9	544.2	560.2
60°	406.0	417.6	464.2	506.4	520.9
62.5°	360.9	378.3	426.3	465.6	483.1
65°	320.1	339.0	390.0	427.8	445.3
67.5°	282.3	299.7	349.2	390.0	408.9
70°	238.6	261.9	312.8	353.6	371.0
72.5°	203.7	224.1	276.5	317.2	336.1
75°	163.0	187.7	240.1	280.8	295.4
77.5°	129.5	154.2	203.7	235.7	243.0
80°	94.6	119.3	165.9	181.9	186.2
82.5°	64.0	87.3	119.3	123.7	125.1
85°	39.3	53.8	69.8	69.8	69.8
87.5°	18.9	21.8	24.7	23.3	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)