

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: P389206

Luminaire Tested: **22CZ2-34VHE-S-UNV-L930-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: P389206
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-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3080.5 lumens
Efficiency: N/A
Efficacy: 122.7 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

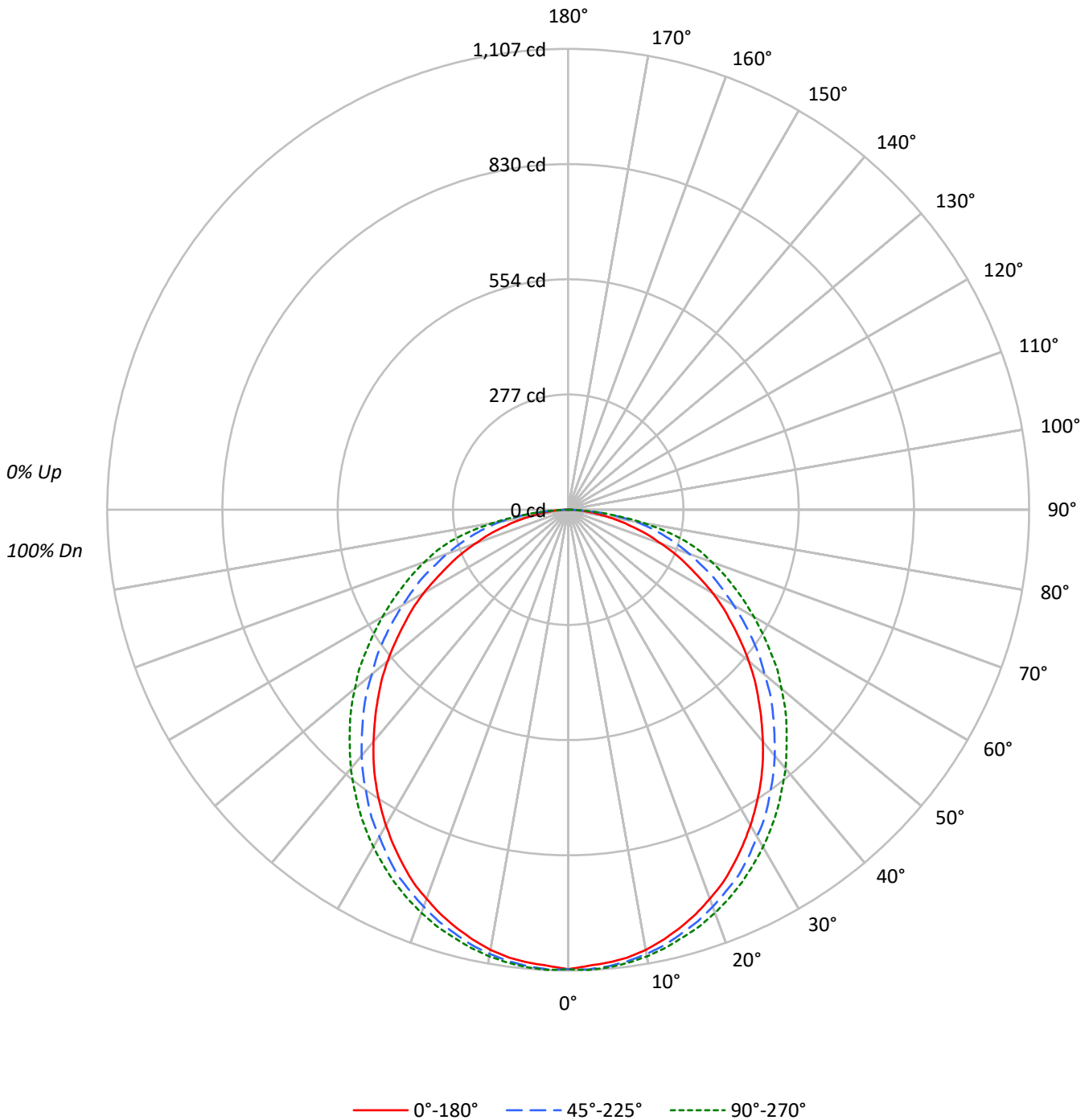
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2970	2970	2970
5°	2951	2974	2982
10°	2934	2961	2977
15°	2895	2935	2963
20°	2848	2906	2951
25°	2791	2876	2932
30°	2720	2818	2907
35°	2644	2767	2880
40°	2555	2711	2853
45°	2461	2647	2822
50°	2371	2575	2798
55°	2259	2529	2778
60°	2158	2468	2770
65°	2013	2453	2800
70°	1854	2431	2884
75°	1674	2466	3034
80°	1447	2540	2851
85°	1198	2130	2130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	3.4
10°-20°	297.1	9.6
20°-30°	444.5	14.4
30°-40°	526.4	17.1
40°-50°	536.5	17.4
50°-60°	480.8	15.6
60°-70°	376.4	12.2
70°-80°	242.7	7.9
80°-90°	71.7	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°	845.9	27.5
0°-40°	1372.3	44.5
0°-60°	2389.6	77.6
0°-90°	3080.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3080.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1092	1095	1101	1102	1104	104
15°	1039	1045	1054	1062	1064	293
25°	940	949	969	982	987	433
35°	805	815	842	868	877	503
45°	647	661	696	732	742	499
55°	482	497	539	576	592	432
65°	316	335	385	423	440	314
75°	161	185	237	277	292	173
85°	39	53	69	69	69	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1103.8	1103.8	1103.8	1103.8	1103.8
2.5°	1096.7	1099.5	1105.3	1106.7	1106.7
5°	1092.3	1095.2	1101.0	1102.4	1103.8
7.5°	1085.2	1086.6	1093.8	1096.7	1098.1
10°	1073.7	1076.5	1083.7	1088.0	1089.5
12.5°	1057.8	1062.2	1070.8	1076.5	1078.0
15°	1039.2	1044.9	1053.5	1062.2	1063.6
17.5°	1019.0	1024.8	1036.3	1046.3	1049.2
20°	994.6	1001.8	1014.7	1026.2	1030.5
22.5°	970.2	975.9	991.7	1006.1	1010.4
25°	940.0	948.6	968.7	981.7	987.4
27.5°	908.4	918.4	938.6	955.8	961.5
30°	875.3	885.4	906.9	928.5	935.7
32.5°	840.8	852.3	878.2	899.7	906.9
35°	804.9	814.9	842.3	868.1	876.7
37.5°	767.5	776.1	807.8	835.1	843.7
40°	727.3	738.8	771.8	803.4	812.1
42.5°	687.0	700.0	733.0	767.5	776.1
45°	646.8	661.2	695.6	731.6	741.6
47.5°	608.0	619.5	658.3	692.8	707.1
50°	566.3	577.8	615.2	654.0	668.3
52.5°	523.2	539.0	579.2	616.6	633.8
55°	481.5	497.3	539.0	576.4	592.2
57.5°	442.7	455.6	498.7	537.5	553.4
60°	401.0	412.5	458.5	500.2	514.6
62.5°	356.4	373.7	421.1	459.9	477.2
65°	316.2	334.9	385.2	422.6	439.8
67.5°	278.8	296.1	344.9	385.2	403.9
70°	235.7	258.7	309.0	349.3	366.5
72.5°	201.2	221.3	273.1	313.3	332.0
75°	161.0	185.4	237.2	277.4	291.8
77.5°	127.9	152.4	201.2	232.8	240.0
80°	93.4	117.9	163.9	179.7	184.0
82.5°	63.2	86.2	117.9	122.2	123.6
85°	38.8	53.2	69.0	69.0	69.0
87.5°	18.7	21.6	24.4	23.0	23.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)