

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: P388275

Luminaire Tested: **22CZ2-34VHE-UNV-L940-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: P388275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34VHE-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2998.8 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

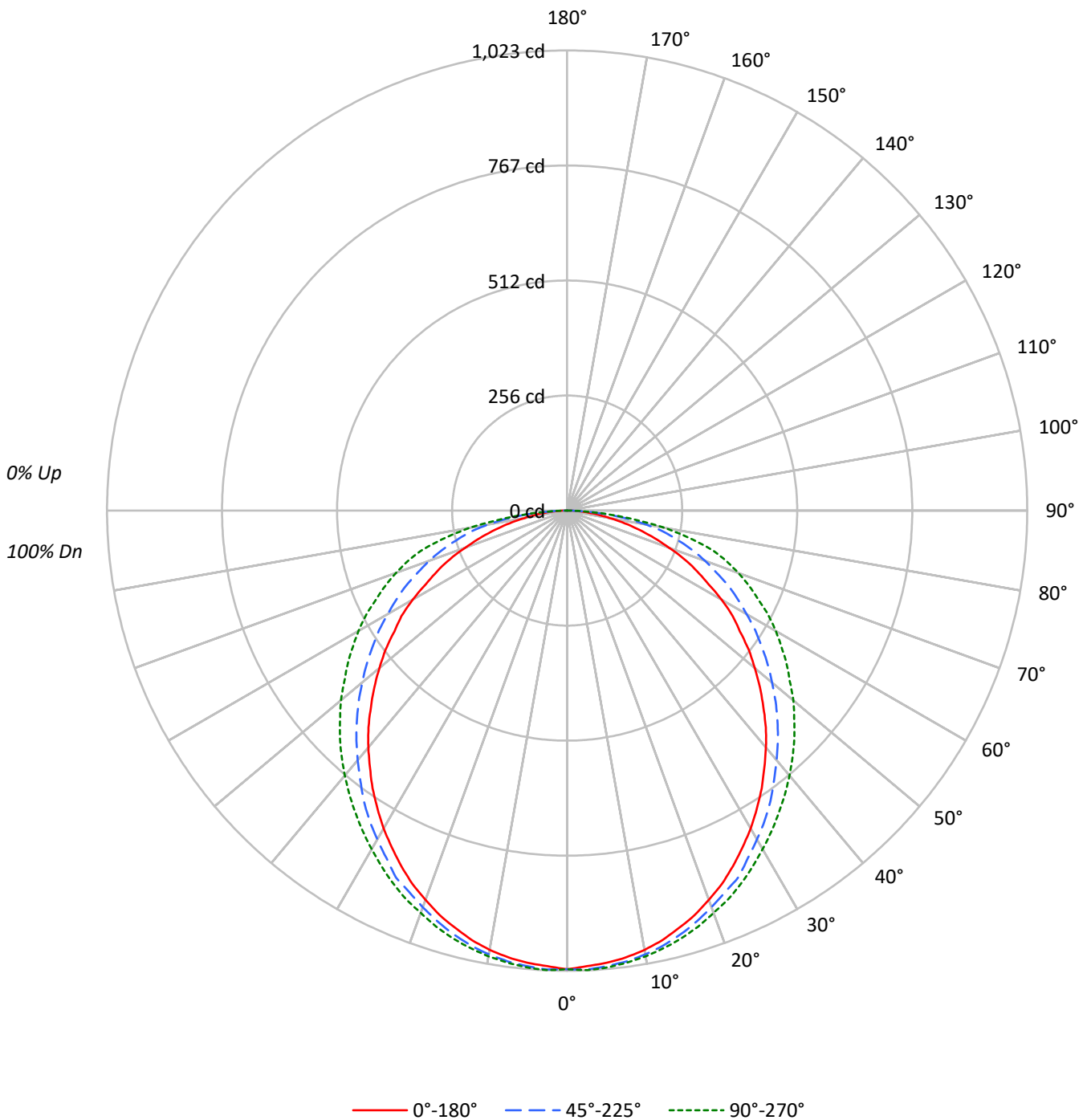
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2744	2744	2744
5°	2726	2746	2754
10°	2710	2738	2750
15°	2676	2717	2742
20°	2637	2688	2726
25°	2589	2673	2716
30°	2536	2623	2701
35°	2477	2589	2695
40°	2415	2545	2701
45°	2347	2516	2718
50°	2280	2490	2749
55°	2201	2479	2797
60°	2136	2478	2883
65°	2029	2518	2988
70°	1892	2566	3181
75°	1733	2654	3436
80°	1509	2766	3384
85°	1321	2461	2689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	3.2
10°-20°	274.7	9.2
20°-30°	412.3	13.7
30°-40°	492.7	16.4
40°-50°	512.3	17.1
50°-60°	474.8	15.8
60°-70°	389.5	13.0
70°-80°	263.3	8.8
80°-90°	82.7	2.8
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°	783.4	26.1
0°-40°	1276.1	42.6
0°-60°	2263.3	75.5
0°-90°	2998.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2998.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	1009	1011	1017	1018	1020	96
15°	961	965	975	981	984	271
25°	872	880	900	910	915	402
35°	754	764	788	812	820	471
45°	617	629	661	699	714	476
55°	469	484	528	576	596	422
65°	319	336	396	447	469	315
75°	167	195	255	307	330	177
85°	43	59	80	88	87	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1019.6	1019.6	1019.6	1019.6	1019.6
2.5°	1013.7	1016.7	1021.1	1022.6	1022.6
5°	1009.3	1010.8	1016.7	1018.2	1019.6
7.5°	1001.9	1004.9	1010.8	1012.3	1013.7
10°	991.6	994.6	1001.9	1004.9	1006.4
12.5°	978.3	981.3	990.1	994.6	996.0
15°	960.6	965.0	975.4	981.3	984.2
17.5°	942.9	947.3	957.7	966.5	969.5
20°	920.8	931.1	938.5	950.3	951.8
22.5°	898.6	904.5	917.8	929.6	935.5
25°	872.1	879.5	900.1	910.5	914.9
27.5°	844.0	854.4	870.6	886.8	892.7
30°	816.0	823.4	844.0	863.2	869.1
32.5°	785.0	795.4	817.5	836.7	845.5
35°	754.0	764.4	788.0	811.6	820.4
37.5°	720.1	731.9	755.5	783.5	795.4
40°	687.6	696.5	724.5	758.5	768.8
42.5°	653.7	664.0	693.5	730.4	742.2
45°	616.8	628.6	661.1	699.4	714.2
47.5°	581.4	593.2	628.6	667.0	684.7
50°	544.5	559.3	594.7	638.9	656.6
52.5°	509.1	522.4	562.2	608.0	624.2
55°	469.2	484.0	528.3	575.5	596.1
57.5°	436.8	447.1	495.8	544.5	565.2
60°	396.9	410.2	460.4	512.0	535.6
62.5°	354.1	376.3	427.9	481.0	504.7
65°	318.7	336.4	395.5	447.1	469.2
67.5°	281.8	301.0	358.6	413.2	438.3
70°	240.5	265.6	326.1	380.7	404.3
72.5°	203.6	230.2	292.2	345.3	370.4
75°	166.7	194.8	255.3	306.9	330.5
77.5°	131.3	162.3	221.3	261.2	275.9
80°	97.4	126.9	178.5	206.6	218.4
82.5°	67.9	93.0	131.3	146.1	149.0
85°	42.8	59.0	79.7	88.5	87.1
87.5°	19.2	23.6	29.5	32.5	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)