

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: P388274

Luminaire Tested: **22CZ2-34VHE-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: P388274
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-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

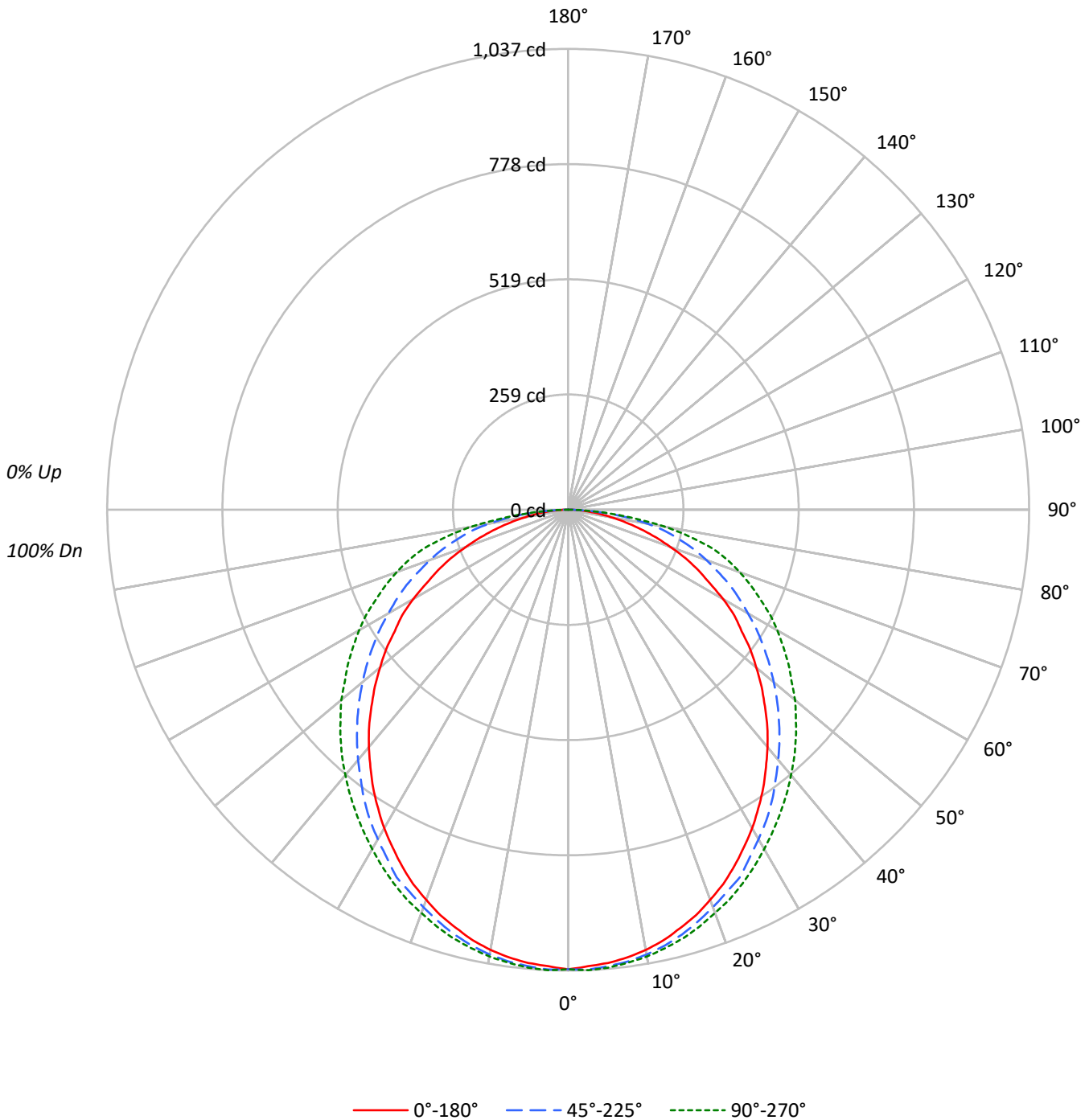
Lumens per Lamp: N/A
Luminaire Lumens: 3042.0 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2783	2783	2783
5°	2766	2786	2794
10°	2749	2777	2790
15°	2715	2756	2781
20°	2675	2726	2765
25°	2627	2711	2756
30°	2572	2660	2740
35°	2513	2626	2734
40°	2450	2582	2740
45°	2381	2552	2757
50°	2312	2525	2789
55°	2233	2514	2837
60°	2167	2513	2925
65°	2059	2555	3031
70°	1920	2603	3227
75°	1758	2693	3486
80°	1531	2806	3433
85°	1340	2495	2726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	3.2
10°-20°	278.6	9.2
20°-30°	418.3	13.7
30°-40°	499.8	16.4
40°-50°	519.7	17.1
50°-60°	481.7	15.8
60°-70°	395.1	13.0
70°-80°	267.1	8.8
80°-90°	83.9	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°	794.7	26.1
0°-40°	1294.5	42.6
0°-60°	2295.9	75.5
0°-90°	3042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3042.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1024	1025	1031	1033	1034	97
15°	974	979	989	995	998	275
25°	885	892	913	924	928	407
35°	765	775	799	823	832	478
45°	626	638	671	710	724	483
55°	476	491	536	584	605	428
65°	323	341	401	454	476	320
75°	169	198	259	311	335	179
85°	43	60	81	90	88	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.3	1034.3	1034.3	1034.3	1034.3
2.5°	1028.3	1031.3	1035.8	1037.3	1037.3
5°	1023.9	1025.4	1031.3	1032.8	1034.3
7.5°	1016.4	1019.4	1025.4	1026.9	1028.3
10°	1005.9	1008.9	1016.4	1019.4	1020.9
12.5°	992.4	995.4	1004.4	1008.9	1010.4
15°	974.5	979.0	989.4	995.4	998.4
17.5°	956.5	961.0	971.5	980.4	983.4
20°	934.0	944.5	952.0	964.0	965.5
22.5°	911.6	917.6	931.1	943.0	949.0
25°	884.6	892.1	913.1	923.6	928.1
27.5°	856.2	866.7	883.2	899.6	905.6
30°	827.8	835.3	856.2	875.7	881.7
32.5°	796.3	806.8	829.3	848.7	857.7
35°	764.9	775.4	799.3	823.3	832.3
37.5°	730.5	742.4	766.4	794.8	806.8
40°	697.5	706.5	735.0	769.4	779.9
42.5°	663.1	673.6	703.5	740.9	752.9
45°	625.7	637.7	670.6	709.5	724.5
47.5°	589.8	601.7	637.7	676.6	694.5
50°	552.3	567.3	603.2	648.1	666.1
52.5°	516.4	529.9	570.3	616.7	633.2
55°	476.0	491.0	535.9	583.8	604.7
57.5°	443.1	453.6	502.9	552.3	573.3
60°	402.7	416.1	467.0	519.4	543.4
62.5°	359.2	381.7	434.1	488.0	511.9
65°	323.3	341.3	401.2	453.6	476.0
67.5°	285.9	305.4	363.7	419.1	444.6
70°	244.0	269.4	330.8	386.2	410.1
72.5°	206.6	233.5	296.4	350.3	375.7
75°	169.1	197.6	259.0	311.3	335.3
77.5°	133.2	164.7	224.5	264.9	279.9
80°	98.8	128.7	181.1	209.6	221.5
82.5°	68.9	94.3	133.2	148.2	151.2
85°	43.4	59.9	80.8	89.8	88.3
87.5°	19.5	23.9	29.9	32.9	31.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)