

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: P390361

Luminaire Tested: **22CZ2-44VHE-HRP-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: P390361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-HRP-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3274.5 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

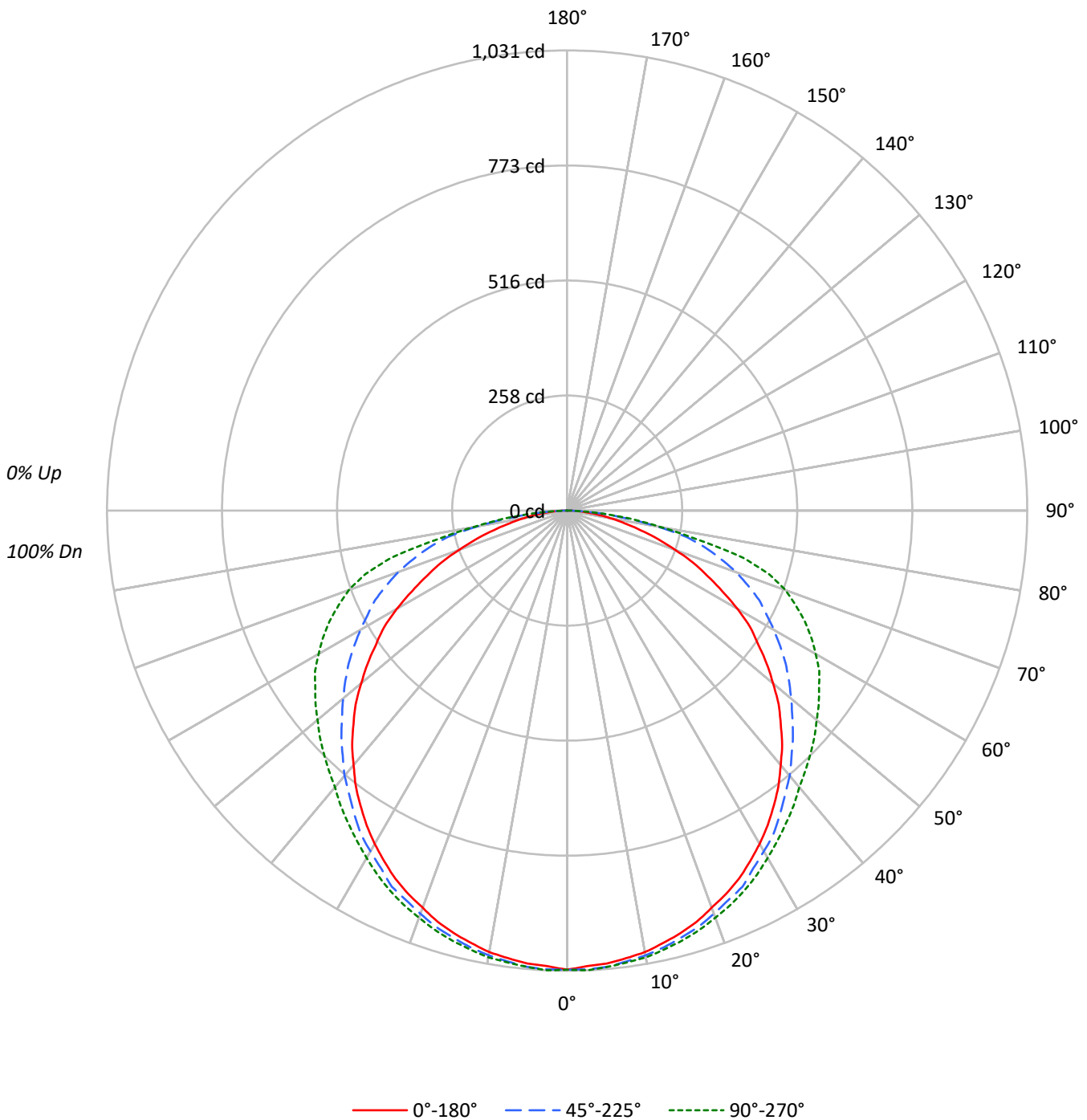
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2768	2768	2768
5°	2752	2772	2772
10°	2745	2764	2778
15°	2731	2758	2778
20°	2711	2752	2780
25°	2703	2761	2790
30°	2680	2739	2792
35°	2651	2730	2809
40°	2615	2725	2843
45°	2576	2723	2933
50°	2521	2743	3056
55°	2452	2803	3232
60°	2372	2878	3462
65°	2209	3021	3743
70°	2028	3165	4094
75°	1778	3331	4233
80°	1531	3174	3322
85°	1340	2306	2529



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.3	3.0
10°-20°	279.4	8.5
20°-30°	426.2	13.0
30°-40°	520.4	15.9
40°-50°	556.4	17.0
50°-60°	537.1	16.4
60°-70°	462.3	14.1
70°-80°	312.8	9.6
80°-90°	82.5	2.5
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°	802.9	24.5
0°-40°	1323.3	40.4
0°-60°	2416.8	73.8
0°-90°	3274.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3274.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	1019	1021	1026	1026	1026	97
15°	980	983	990	995	997	277
25°	910	915	930	935	940	419
35°	807	814	831	848	855	505
45°	677	689	715	752	771	522
55°	523	540	597	658	689	468
65°	347	381	474	549	588	345
75°	171	226	320	385	407	183
85°	43	60	75	77	82	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1028.6	1028.6	1028.6	1028.6	1028.6
2.5°	1021.4	1023.8	1028.6	1028.6	1031.0
5°	1018.9	1021.4	1026.2	1026.2	1026.2
7.5°	1011.7	1014.1	1018.9	1021.4	1021.4
10°	1004.5	1006.9	1011.7	1014.1	1016.5
12.5°	992.4	994.9	1002.1	1006.9	1006.9
15°	980.4	982.8	990.0	994.9	997.3
17.5°	965.9	970.8	978.0	982.8	985.2
20°	946.7	951.5	961.1	968.4	970.8
22.5°	929.8	934.6	944.3	951.5	956.3
25°	910.5	915.4	929.8	934.6	939.5
27.5°	886.5	891.3	903.3	913.0	920.2
30°	862.4	867.2	881.6	893.7	898.5
32.5°	835.9	843.1	860.0	869.6	876.8
35°	807.0	814.2	831.1	847.9	855.1
37.5°	778.1	785.3	802.1	823.8	833.5
40°	744.3	754.0	775.6	804.6	809.4
42.5°	713.0	725.1	744.3	778.1	790.1
45°	676.9	688.9	715.4	751.6	770.8
47.5°	643.2	655.2	684.1	727.5	751.6
50°	602.2	619.1	655.2	705.8	729.9
52.5°	563.7	578.1	626.3	681.7	710.6
55°	522.7	539.6	597.4	657.6	688.9
57.5°	486.6	501.0	566.1	633.5	669.7
60°	440.8	460.1	534.8	607.0	643.2
62.5°	392.6	421.5	503.4	578.1	616.7
65°	346.9	380.6	474.5	549.2	587.8
67.5°	305.9	342.1	438.4	517.9	554.0
70°	257.7	303.5	402.3	479.4	520.3
72.5°	214.4	265.0	361.3	438.4	474.5
75°	171.0	226.4	320.4	385.4	407.1
77.5°	132.5	185.5	274.6	293.9	296.3
80°	98.8	146.9	204.8	207.2	214.4
82.5°	67.4	103.6	132.5	144.5	146.9
85°	43.4	60.2	74.7	77.1	81.9
87.5°	19.3	21.7	26.5	24.1	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)