

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: P390525

Luminaire Tested: **22CZ2-60VHE-RDP-UNV-L930-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: P390525
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: 22CZ2-60VHE-RDP-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3308.1 lumens
Efficiency: N/A
Efficacy: 75.0 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

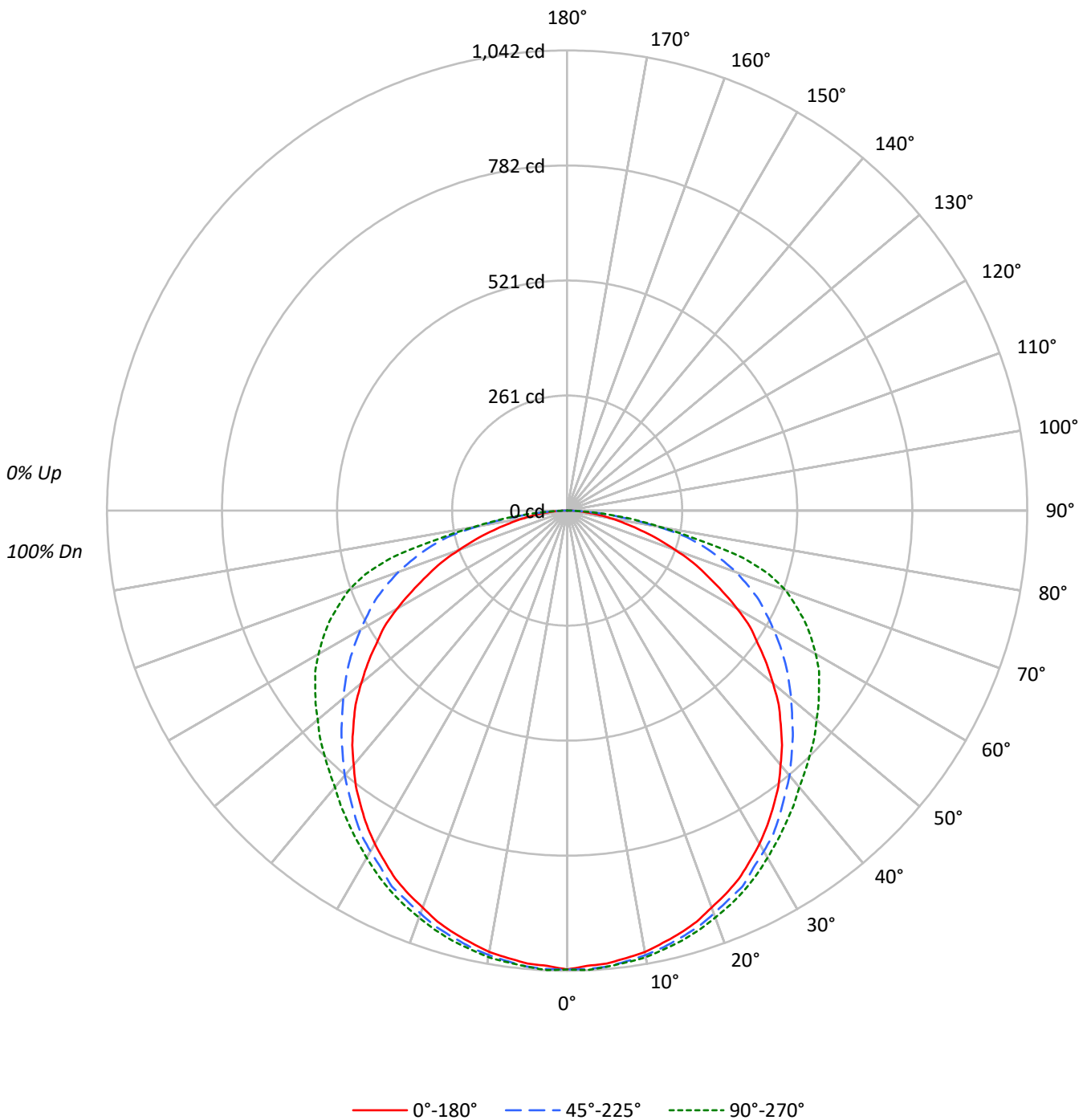
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2796	2796	2796
5°	2781	2800	2800
10°	2773	2793	2806
15°	2759	2786	2807
20°	2739	2781	2808
25°	2731	2789	2818
30°	2707	2768	2820
35°	2678	2758	2838
40°	2642	2753	2872
45°	2602	2751	2963
50°	2547	2771	3087
55°	2478	2831	3265
60°	2397	2908	3497
65°	2231	3053	3781
70°	2049	3198	4135
75°	1797	3366	4276
80°	1547	3206	3357
85°	1352	2328	2553



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	3.0
10°-20°	282.2	8.5
20°-30°	430.6	13.0
30°-40°	525.7	15.9
40°-50°	562.1	17.0
50°-60°	542.6	16.4
60°-70°	467.1	14.1
70°-80°	316.0	9.6
80°-90°	83.4	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°	811.1	24.5
0°-40°	1336.9	40.4
0°-60°	2441.6	73.8
0°-90°	3308.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3308.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1039	1039	1039	1039	1039	
5°	1029	1032	1037	1037	1037	98
15°	990	993	1000	1005	1008	279
25°	920	925	939	944	949	423
35°	815	822	840	857	864	510
45°	684	696	723	759	779	528
55°	528	545	604	664	696	473
65°	350	384	479	555	594	349
75°	173	229	324	389	411	185
85°	44	61	75	78	83	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1039.1	1039.1	1039.1	1039.1	1039.1
2.5°	1031.8	1034.3	1039.1	1039.1	1041.6
5°	1029.4	1031.8	1036.7	1036.7	1036.7
7.5°	1022.1	1024.5	1029.4	1031.8	1031.8
10°	1014.8	1017.2	1022.1	1024.5	1027.0
12.5°	1002.6	1005.1	1012.4	1017.2	1017.2
15°	990.5	992.9	1000.2	1005.1	1007.5
17.5°	975.9	980.7	988.0	992.9	995.3
20°	956.4	961.3	971.0	978.3	980.7
22.5°	939.4	944.2	954.0	961.3	966.1
25°	919.9	924.8	939.4	944.2	949.1
27.5°	895.6	900.4	912.6	922.3	929.6
30°	871.2	876.1	890.7	902.9	907.7
32.5°	844.4	851.7	868.8	878.5	885.8
35°	815.2	822.5	839.6	856.6	863.9
37.5°	786.0	793.3	810.4	832.3	842.0
40°	752.0	761.7	783.6	812.8	817.7
42.5°	720.3	732.5	752.0	786.0	798.2
45°	683.8	696.0	722.8	759.3	778.7
47.5°	649.8	661.9	691.1	734.9	759.3
50°	608.4	625.4	661.9	713.0	737.4
52.5°	569.5	584.1	632.7	688.7	717.9
55°	528.1	545.1	603.5	664.4	696.0
57.5°	491.6	506.2	571.9	640.0	676.5
60°	445.3	464.8	540.3	613.3	649.8
62.5°	396.7	425.9	508.6	584.1	623.0
65°	350.4	384.5	479.4	554.9	593.8
67.5°	309.1	345.6	442.9	523.2	559.7
70°	260.4	306.6	406.4	484.3	525.6
72.5°	216.6	267.7	365.0	442.9	479.4
75°	172.8	228.8	323.7	389.4	411.3
77.5°	133.8	187.4	277.4	296.9	299.3
80°	99.8	148.4	206.9	209.3	216.6
82.5°	68.1	104.6	133.8	146.0	148.4
85°	43.8	60.8	75.4	77.9	82.7
87.5°	19.5	21.9	26.8	24.3	24.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)