

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: P390363

Luminaire Tested: **22CZ2-44VHE-HRP-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: P390363
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3268.5 lumens
Efficiency: N/A
Efficacy: 100.3 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

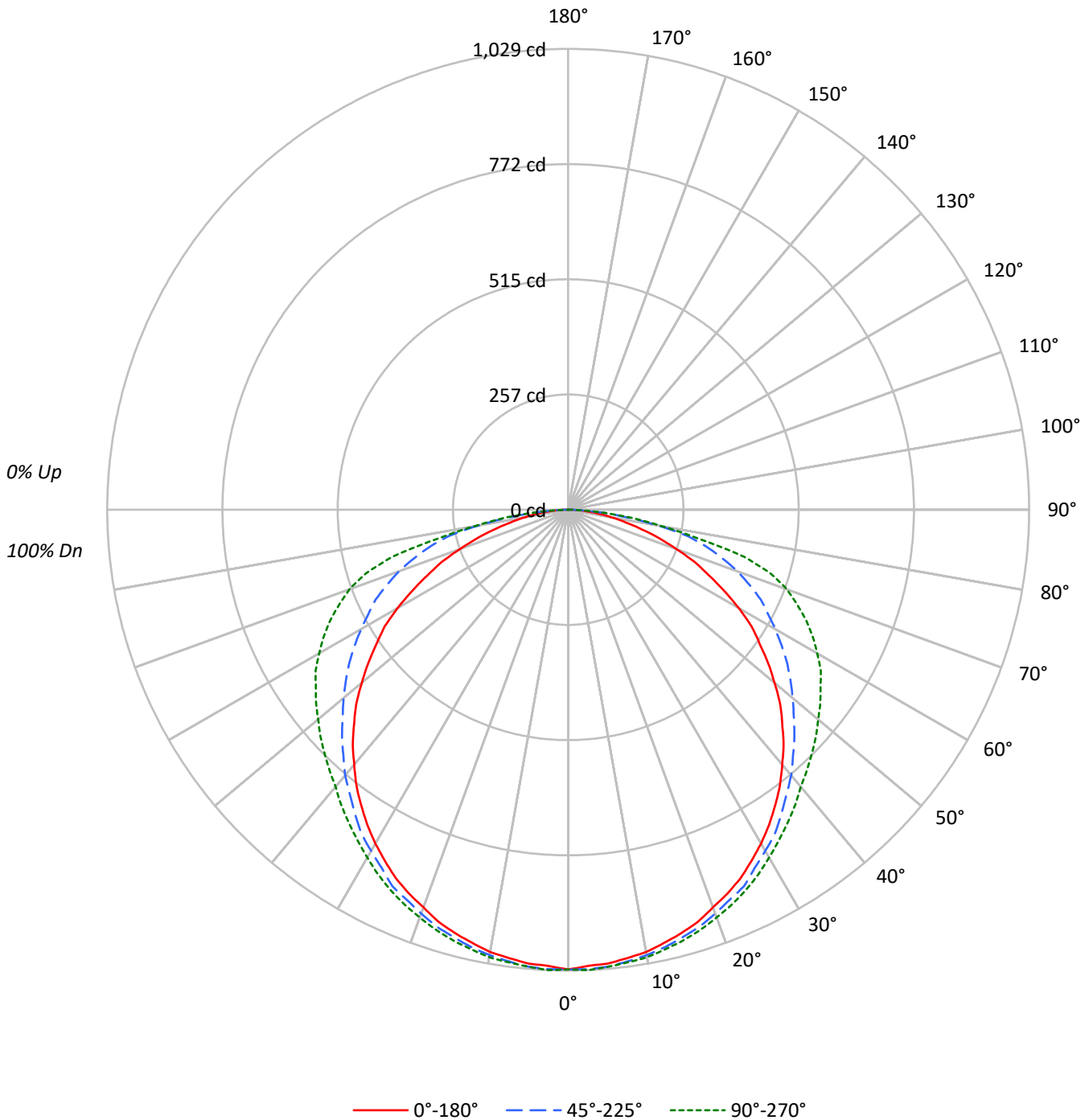
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2763	2763	2763
5°	2747	2767	2767
10°	2740	2760	2773
15°	2726	2753	2773
20°	2706	2747	2775
25°	2699	2756	2784
30°	2675	2734	2787
35°	2646	2725	2804
40°	2610	2720	2838
45°	2571	2718	2928
50°	2516	2738	3050
55°	2448	2798	3226
60°	2368	2873	3455
65°	2204	3016	3736
70°	2024	3159	4087
75°	1775	3325	4224
80°	1528	3168	3316
85°	1337	2300	2526



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.1	3.0
10°-20°	278.8	8.5
20°-30°	425.4	13.0
30°-40°	519.5	15.9
40°-50°	555.4	17.0
50°-60°	536.1	16.4
60°-70°	461.5	14.1
70°-80°	312.2	9.6
80°-90°	82.4	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°	801.4	24.5
0°-40°	1320.9	40.4
0°-60°	2412.4	73.8
0°-90°	3268.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3268.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1027	1027	1027	1027	1027	
5°	1017	1020	1024	1024	1024	97
15°	979	981	988	993	995	276
25°	909	914	928	933	938	418
35°	806	813	830	846	854	504
45°	676	688	714	750	769	522
55°	522	539	596	656	688	468
65°	346	380	474	548	587	344
75°	171	226	320	385	406	183
85°	43	60	74	77	82	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1026.7	1026.7	1026.7	1026.7	1026.7
2.5°	1019.5	1021.9	1026.7	1026.7	1029.1
5°	1017.1	1019.5	1024.3	1024.3	1024.3
7.5°	1009.9	1012.3	1017.1	1019.5	1019.5
10°	1002.6	1005.1	1009.9	1012.3	1014.7
12.5°	990.6	993.0	1000.2	1005.1	1005.1
15°	978.6	981.0	988.2	993.0	995.4
17.5°	964.2	969.0	976.2	981.0	983.4
20°	944.9	949.8	959.4	966.6	969.0
22.5°	928.1	932.9	942.5	949.8	954.6
25°	908.9	913.7	928.1	932.9	937.7
27.5°	884.8	889.6	901.7	911.3	918.5
30°	860.8	865.6	880.0	892.0	896.9
32.5°	834.3	841.6	858.4	868.0	875.2
35°	805.5	812.7	829.5	846.4	853.6
37.5°	776.6	783.8	800.7	822.3	831.9
40°	743.0	752.6	774.2	803.1	807.9
42.5°	711.7	723.7	743.0	776.6	788.7
45°	675.6	687.7	714.1	750.2	769.4
47.5°	642.0	654.0	682.9	726.1	750.2
50°	601.1	617.9	654.0	704.5	728.5
52.5°	562.6	577.1	625.2	680.5	709.3
55°	521.8	538.6	596.3	656.4	687.7
57.5°	485.7	500.1	565.0	632.4	668.4
60°	440.0	459.2	533.8	605.9	642.0
62.5°	391.9	420.8	502.5	577.1	615.5
65°	346.2	379.9	473.7	548.2	586.7
67.5°	305.4	341.4	437.6	517.0	553.0
70°	257.3	303.0	401.5	478.5	519.4
72.5°	214.0	264.5	360.7	437.6	473.7
75°	170.7	226.0	319.8	384.7	406.3
77.5°	132.2	185.1	274.1	293.3	295.7
80°	98.6	146.7	204.4	206.8	214.0
82.5°	67.3	103.4	132.2	144.3	146.7
85°	43.3	60.1	74.5	76.9	81.8
87.5°	19.2	21.6	26.4	24.0	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)