

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: P390318

Luminaire Tested: **22CZ2-39VHE-HRP-UNV-L950-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: P390318
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: 22CZ2-39VHE-HRP-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3062.3 lumens
Efficiency: N/A
Efficacy: 107.1 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

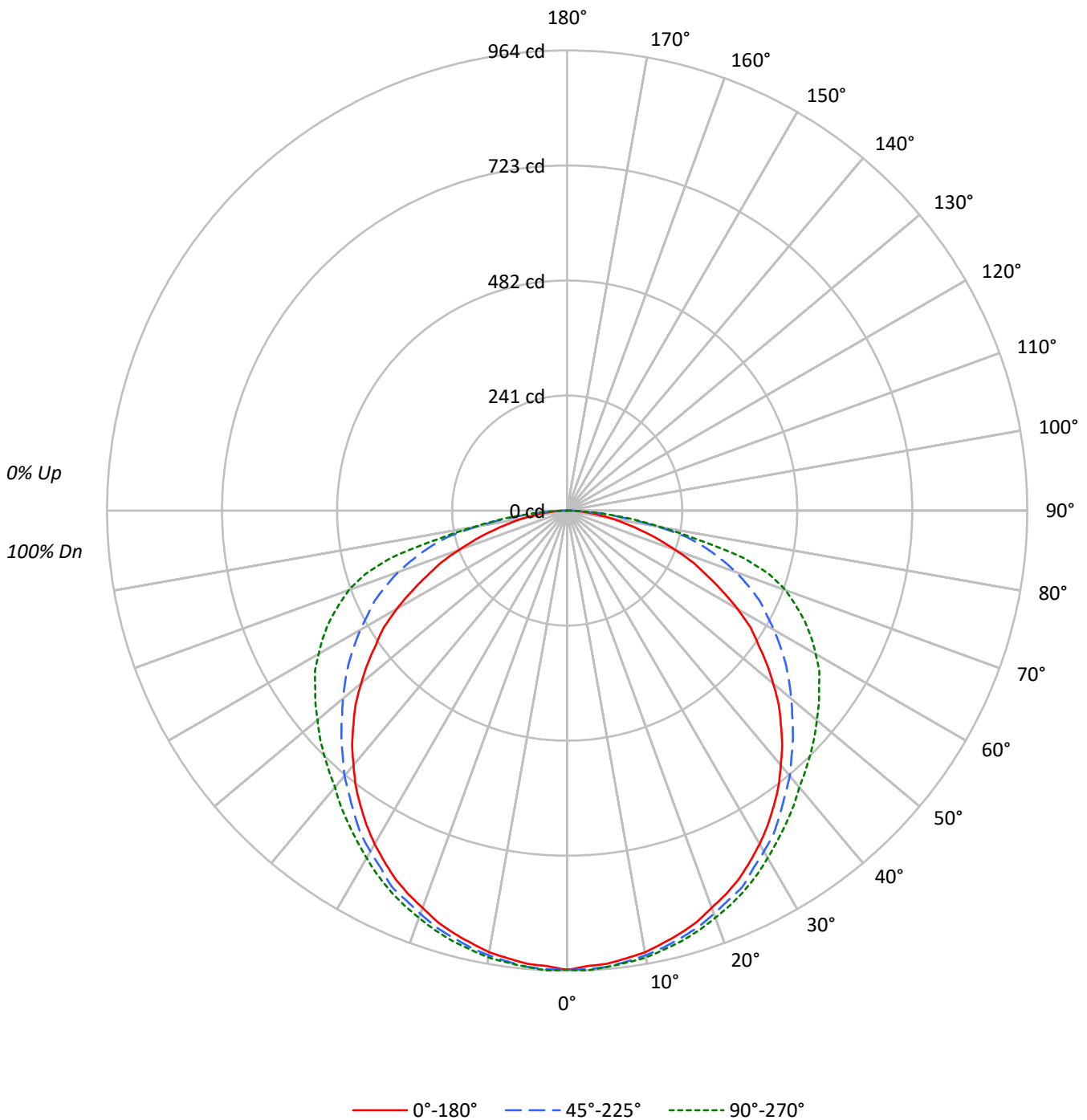
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2588	2588	2588
5°	2574	2592	2592
10°	2567	2585	2598
15°	2554	2579	2598
20°	2535	2574	2600
25°	2528	2582	2609
30°	2506	2562	2611
35°	2479	2553	2627
40°	2445	2548	2659
45°	2409	2546	2743
50°	2358	2565	2858
55°	2293	2621	3023
60°	2219	2692	3237
65°	2066	2826	3500
70°	1896	2960	3829
75°	1663	3115	3958
80°	1432	2968	3107
85°	1250	2155	2365



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	3.0
10°-20°	261.3	8.5
20°-30°	398.6	13.0
30°-40°	486.7	15.9
40°-50°	520.4	17.0
50°-60°	502.3	16.4
60°-70°	432.4	14.1
70°-80°	292.5	9.6
80°-90°	77.2	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°	750.8	24.5
0°-40°	1237.5	40.4
0°-60°	2260.2	73.8
0°-90°	3062.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3062.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	953	955	960	960	960	90
15°	917	919	926	930	933	259
25°	852	856	870	874	879	392
35°	755	761	777	793	800	472
45°	633	644	669	703	721	489
55°	489	505	559	615	644	438
65°	324	356	444	514	550	323
75°	160	212	300	360	381	172
85°	40	56	70	72	77	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.9	961.9	961.9	961.9	961.9
2.5°	955.2	957.4	961.9	961.9	964.2
5°	952.9	955.2	959.7	959.7	959.7
7.5°	946.2	948.4	952.9	955.2	955.2
10°	939.4	941.6	946.2	948.4	950.7
12.5°	928.1	930.4	937.1	941.6	941.6
15°	916.9	919.1	925.9	930.4	932.6
17.5°	903.4	907.9	914.6	919.1	921.4
20°	885.3	889.8	898.8	905.6	907.9
22.5°	869.6	874.1	883.1	889.8	894.3
25°	851.5	856.0	869.6	874.1	878.6
27.5°	829.0	833.5	844.8	853.8	860.5
30°	806.5	811.0	824.5	835.8	840.3
32.5°	781.7	788.5	804.2	813.2	820.0
35°	754.7	761.4	777.2	793.0	799.7
37.5°	727.6	734.4	750.2	770.4	779.4
40°	696.1	705.1	725.4	752.4	756.9
42.5°	666.8	678.1	696.1	727.6	738.9
45°	633.0	644.3	669.1	702.9	720.9
47.5°	601.5	612.7	639.8	680.3	702.9
50°	563.2	579.0	612.7	660.1	682.6
52.5°	527.1	540.7	585.7	637.5	664.6
55°	488.8	504.6	558.7	615.0	644.3
57.5°	455.1	468.6	529.4	592.5	626.3
60°	412.3	430.3	500.1	567.7	601.5
62.5°	367.2	394.2	470.8	540.7	576.7
65°	324.4	355.9	443.8	513.6	549.7
67.5°	286.1	319.9	410.0	484.3	518.1
70°	241.0	283.8	376.2	448.3	486.6
72.5°	200.5	247.8	337.9	410.0	443.8
75°	159.9	211.8	299.6	360.4	380.7
77.5°	123.9	173.5	256.8	274.8	277.1
80°	92.4	137.4	191.5	193.7	200.5
82.5°	63.1	96.9	123.9	135.2	137.4
85°	40.5	56.3	69.8	72.1	76.6
87.5°	18.0	20.3	24.8	22.5	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)