

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: P390368

Luminaire Tested: **22CZ2-44VHE-HRP-UNV-L950-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: P390368
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-L950-CD1-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: 3555.7 lumens
Efficiency: N/A
Efficacy: 109.1 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

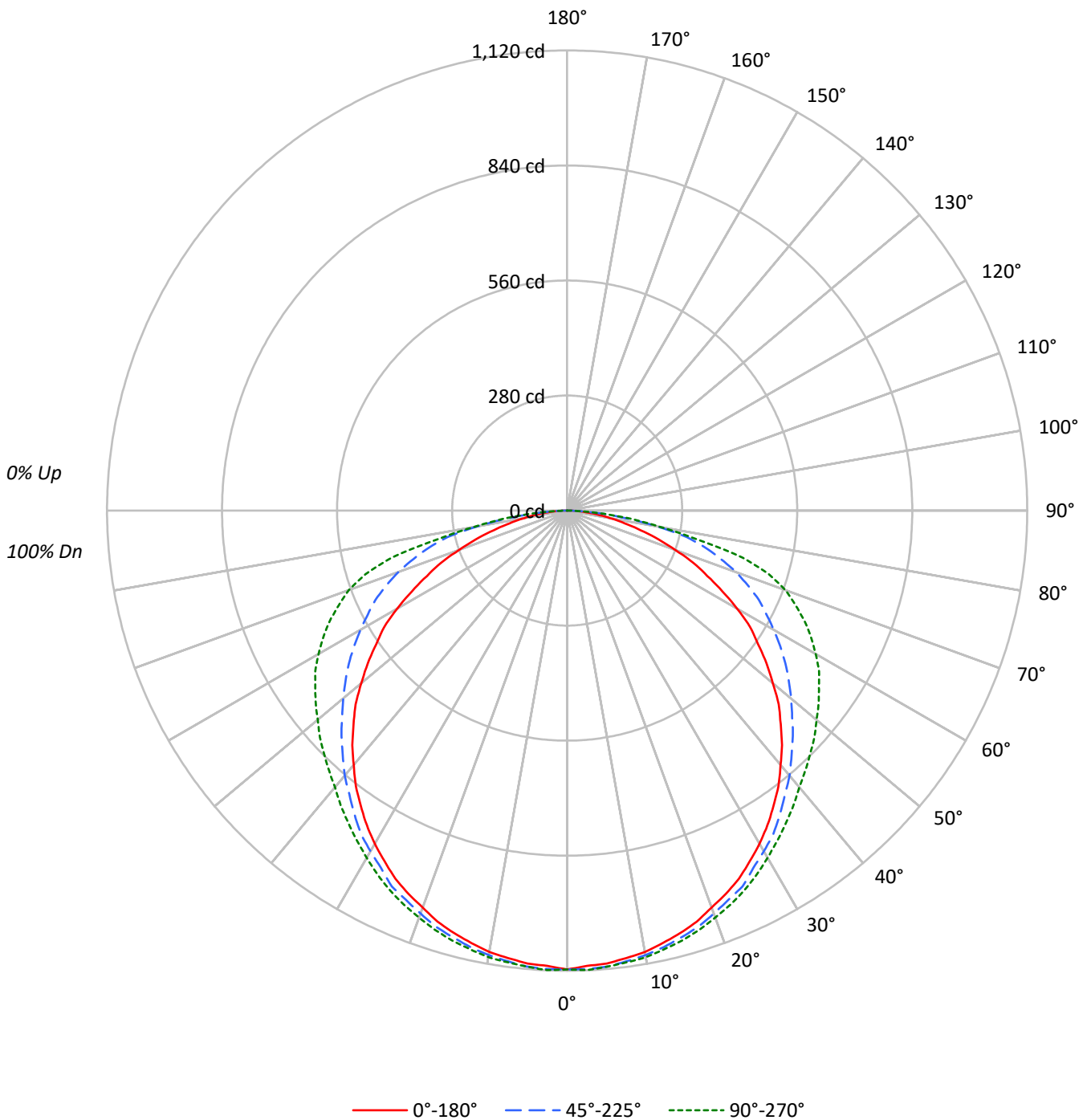
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3006	3006	3006
5°	2989	3010	3010
10°	2981	3002	3016
15°	2966	2995	3017
20°	2944	2989	3019
25°	2936	2998	3029
30°	2910	2975	3032
35°	2879	2964	3051
40°	2839	2959	3087
45°	2797	2957	3185
50°	2737	2979	3318
55°	2663	3043	3510
60°	2576	3125	3759
65°	2399	3281	4064
70°	2202	3437	4445
75°	1931	3617	4597
80°	1661	3445	3608
85°	1454	2504	2745



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	3.0
10°-20°	303.3	8.5
20°-30°	462.8	13.0
30°-40°	565.1	15.9
40°-50°	604.2	17.0
50°-60°	583.2	16.4
60°-70°	502.0	14.1
70°-80°	339.7	9.6
80°-90°	89.6	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°	871.8	24.5
0°-40°	1436.9	40.4
0°-60°	2624.4	73.8
0°-90°	3555.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3555.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1117	1117	1117	1117	1117	
5°	1106	1109	1114	1114	1114	105
15°	1065	1067	1075	1080	1083	300
25°	989	994	1010	1015	1020	455
35°	876	884	902	921	929	548
45°	735	748	777	816	837	567
55°	568	586	649	714	748	509
65°	377	413	515	596	638	375
75°	186	246	348	418	442	199
85°	47	65	81	84	89	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.9	1116.9	1116.9	1116.9	1116.9
2.5°	1109.1	1111.7	1116.9	1116.9	1119.5
5°	1106.4	1109.1	1114.3	1114.3	1114.3
7.5°	1098.6	1101.2	1106.4	1109.1	1109.1
10°	1090.8	1093.4	1098.6	1101.2	1103.8
12.5°	1077.7	1080.3	1088.1	1093.4	1093.4
15°	1064.6	1067.2	1075.1	1080.3	1082.9
17.5°	1048.9	1054.1	1062.0	1067.2	1069.8
20°	1028.0	1033.2	1043.7	1051.5	1054.1
22.5°	1009.7	1014.9	1025.4	1033.2	1038.4
25°	988.7	994.0	1009.7	1014.9	1020.1
27.5°	962.6	967.8	980.9	991.4	999.2
30°	936.4	941.7	957.3	970.4	975.7
32.5°	907.7	915.5	933.8	944.3	952.1
35°	876.3	884.1	902.4	920.7	928.6
37.5°	844.9	852.7	871.0	894.6	905.0
40°	808.3	818.7	842.3	873.6	878.9
42.5°	774.2	787.3	808.3	844.9	858.0
45°	735.0	748.1	776.9	816.1	837.0
47.5°	698.4	711.5	742.9	789.9	816.1
50°	653.9	672.2	711.5	766.4	792.6
52.5°	612.1	627.8	680.1	740.2	771.6
55°	567.6	585.9	648.7	714.1	748.1
57.5°	528.4	544.1	614.7	687.9	727.2
60°	478.7	499.6	580.7	659.2	698.4
62.5°	426.4	457.7	546.7	627.8	669.6
65°	376.7	413.3	515.3	596.4	638.2
67.5°	332.2	371.4	476.1	562.4	601.6
70°	279.9	329.6	436.8	520.5	565.0
72.5°	232.8	287.7	392.4	476.1	515.3
75°	185.7	245.9	347.9	418.5	442.1
77.5°	143.9	201.4	298.2	319.1	321.7
80°	107.2	159.6	222.3	225.0	232.8
82.5°	73.2	112.5	143.9	156.9	159.6
85°	47.1	65.4	81.1	83.7	88.9
87.5°	20.9	23.5	28.8	26.2	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)