

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: P389527

Luminaire Tested: **24CZ2-100VHE-S-UNV-L950-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: P389527
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-S-UNV-L950-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9588.6 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

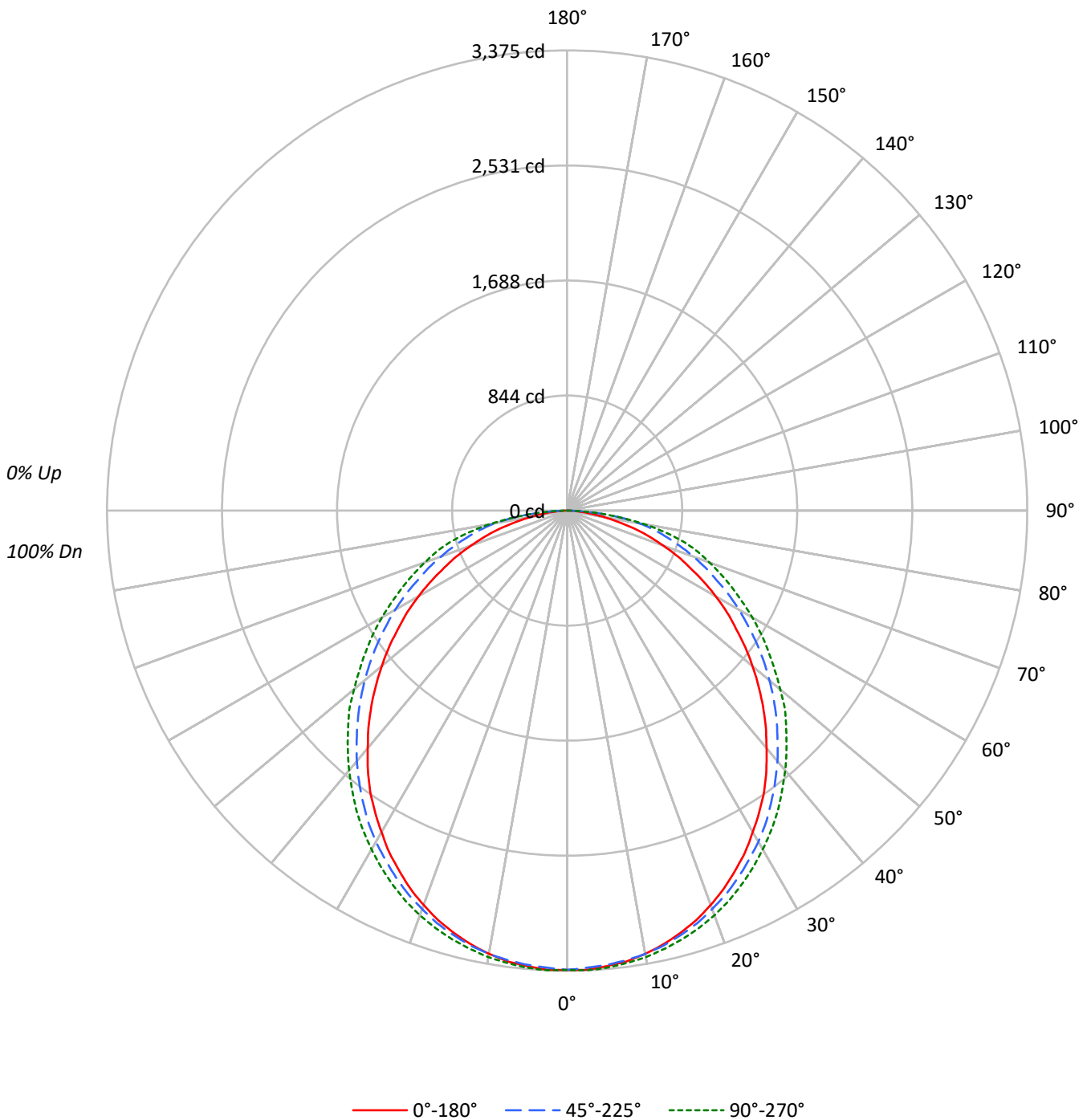
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4532	4532	4532
5°	4529	4517	4546
10°	4511	4511	4544
15°	4467	4489	4535
20°	4409	4453	4522
25°	4327	4409	4494
30°	4230	4358	4457
35°	4137	4287	4422
40°	3996	4215	4370
45°	3866	4132	4323
50°	3717	4055	4271
55°	3551	3980	4230
60°	3385	3918	4221
65°	3171	3849	4247
70°	2936	3870	4361
75°	2628	3943	4607
80°	2124	4177	4507
85°	1599	3668	3574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.9	3.3
10°-20°	911.2	9.5
20°-30°	1369.8	14.3
30°-40°	1631.6	17.0
40°-50°	1669.9	17.4
50°-60°	1503.4	15.7
60°-70°	1180.6	12.3
70°-80°	766.2	8.0
80°-90°	237.0	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°	2599.9	27.1
0°-40°	4231.5	44.1
0°-60°	7404.7	77.2
0°-90°	9588.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9588.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3368	3368	3368	3368	3368	
5°	3353	3359	3344	3362	3366	319
15°	3207	3216	3222	3250	3256	904
25°	2915	2939	2970	3018	3027	1343
35°	2519	2549	2610	2674	2692	1571
45°	2032	2080	2172	2254	2272	1566
55°	1514	1581	1696	1785	1803	1357
65°	996	1072	1209	1310	1334	991
75°	506	603	758	862	886	535
85°	104	192	238	232	232	125
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3368.5	3368.5	3368.5	3368.5	3368.5
2.5°	3371.6	3371.6	3356.4	3371.6	3374.6
5°	3353.3	3359.4	3344.2	3362.4	3365.5
7.5°	3335.0	3335.0	3325.9	3344.2	3347.2
10°	3301.5	3304.6	3301.5	3322.9	3325.9
12.5°	3258.9	3265.0	3268.0	3289.3	3292.4
15°	3207.1	3216.3	3222.3	3249.8	3255.8
17.5°	3149.2	3158.4	3173.6	3204.1	3210.2
20°	3079.2	3091.4	3109.7	3149.2	3158.4
22.5°	3003.1	3015.2	3045.7	3082.2	3097.5
25°	2914.7	2939.1	2969.6	3018.3	3027.4
27.5°	2826.4	2847.7	2887.3	2939.1	2951.3
30°	2722.9	2756.4	2805.1	2856.9	2869.0
32.5°	2622.3	2655.8	2713.7	2768.5	2783.8
35°	2518.8	2549.2	2610.2	2674.1	2692.4
37.5°	2400.0	2439.6	2506.6	2570.6	2588.8
40°	2275.1	2323.9	2400.0	2467.0	2488.3
42.5°	2156.4	2208.1	2284.3	2357.4	2381.7
45°	2031.5	2080.2	2171.6	2253.8	2272.1
47.5°	1903.6	1958.4	2055.8	2138.1	2168.5
50°	1775.6	1833.5	1937.1	2022.3	2040.6
52.5°	1647.7	1708.6	1818.3	1909.7	1918.8
55°	1513.7	1580.7	1696.5	1784.8	1803.1
57.5°	1391.9	1449.8	1574.6	1666.0	1687.3
60°	1257.9	1321.8	1455.8	1541.1	1568.5
62.5°	1130.0	1197.0	1337.1	1422.3	1446.7
65°	995.9	1072.1	1209.1	1309.6	1334.0
67.5°	880.2	953.3	1099.5	1197.0	1221.3
70°	746.2	828.4	983.8	1084.3	1108.6
72.5°	630.5	715.7	871.1	968.5	1005.1
75°	505.6	603.0	758.4	861.9	886.3
77.5°	383.8	496.4	654.8	734.0	734.0
80°	274.1	392.9	539.1	575.6	581.7
82.5°	179.7	295.4	399.0	395.9	395.9
85°	103.6	191.9	237.6	231.5	231.5
87.5°	39.6	79.2	85.3	85.3	82.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)