

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: P389623

Luminaire Tested: **24CZ2-150VHE-S-UNV-L950-CD2-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: P389623
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: 24CZ2-150VHE-S-UNV-L950-CD2-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: 14118.9 lumens
Efficiency: N/A
Efficacy: 135.5 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

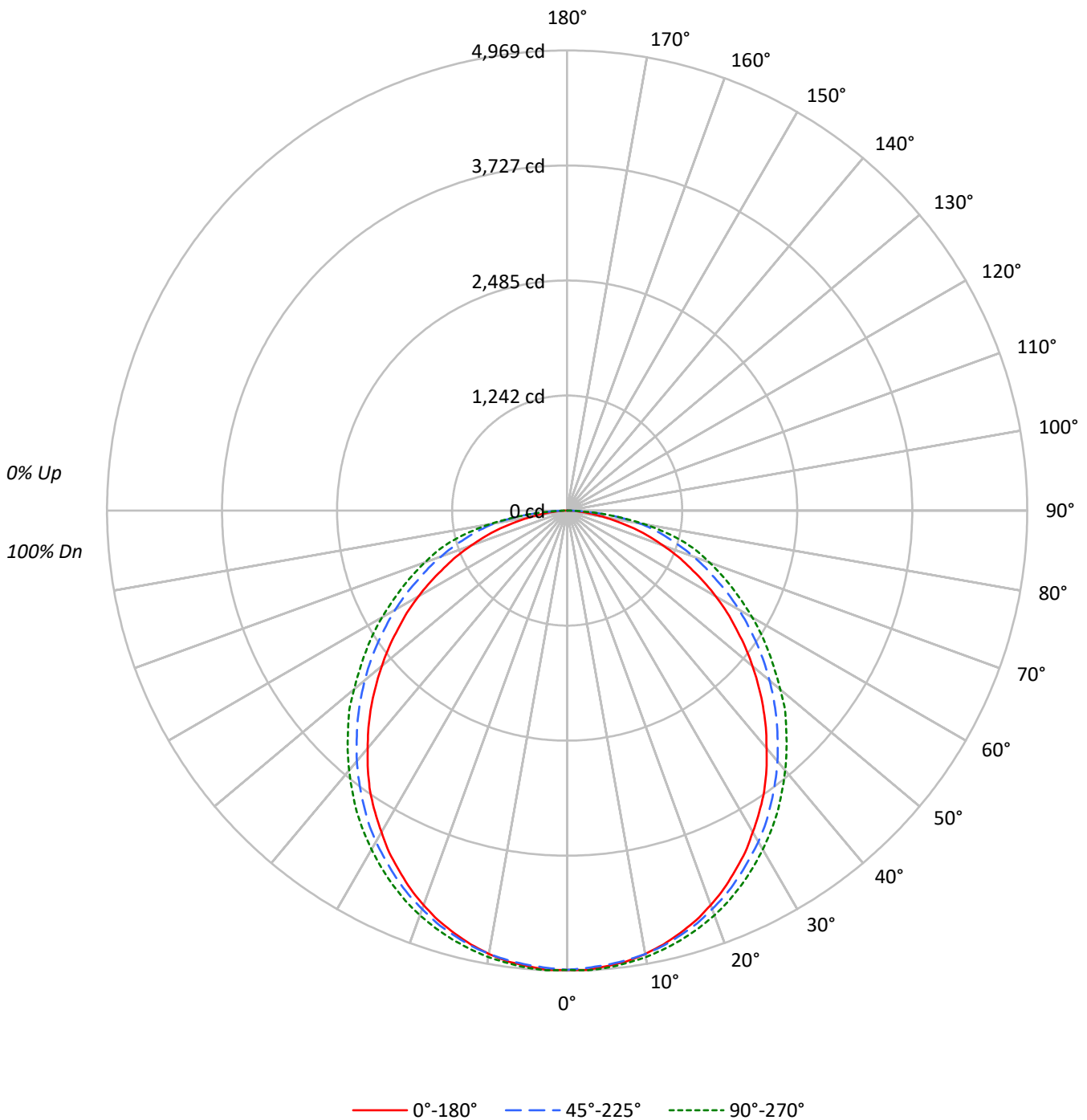
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6674	6674	6674
5°	6669	6651	6693
10°	6642	6642	6691
15°	6578	6609	6678
20°	6492	6556	6659
25°	6372	6491	6618
30°	6229	6417	6563
35°	6092	6313	6512
40°	5884	6207	6435
45°	5692	6084	6366
50°	5473	5970	6289
55°	5229	5860	6228
60°	4984	5769	6215
65°	4669	5668	6254
70°	4322	5699	6422
75°	3870	5805	6784
80°	3127	6151	6637
85°	2354	5400	5261



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	469.6	3.3
10°-20°	1341.7	9.5
20°-30°	2016.9	14.3
30°-40°	2402.5	17.0
40°-50°	2458.8	17.4
50°-60°	2213.7	15.7
60°-70°	1738.4	12.3
70°-80°	1128.3	8.0
80°-90°	348.9	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°	3828.2	27.1
0°-40°	6230.7	44.1
0°-60°	10903.2	77.2
0°-90°	14118.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14118.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4960	4960	4960	4960	4960	
5°	4938	4947	4924	4951	4956	469
15°	4722	4736	4745	4785	4794	1332
25°	4292	4328	4373	4444	4458	1977
35°	3709	3754	3843	3938	3964	2314
45°	2991	3063	3198	3319	3346	2306
55°	2229	2328	2498	2628	2655	1998
65°	1466	1579	1780	1928	1964	1460
75°	744	888	1117	1269	1305	788
85°	152	282	350	341	341	184
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4960.1	4960.1	4960.1	4960.1	4960.1
2.5°	4964.5	4964.5	4942.1	4964.5	4969.0
5°	4937.6	4946.6	4924.2	4951.1	4955.6
7.5°	4910.7	4910.7	4897.3	4924.2	4928.7
10°	4861.4	4865.9	4861.4	4892.8	4897.3
12.5°	4798.6	4807.6	4812.1	4843.5	4847.9
15°	4722.4	4735.8	4744.8	4785.2	4794.1
17.5°	4637.2	4650.6	4673.0	4717.9	4726.9
20°	4534.0	4552.0	4578.9	4637.2	4650.6
22.5°	4421.9	4439.8	4484.7	4538.5	4560.9
25°	4291.8	4327.7	4372.6	4444.3	4457.8
27.5°	4161.8	4193.2	4251.5	4327.7	4345.7
30°	4009.3	4058.6	4130.4	4206.6	4224.6
32.5°	3861.3	3910.6	3995.9	4076.6	4099.0
35°	3708.8	3753.7	3843.4	3937.6	3964.5
37.5°	3533.9	3592.2	3690.9	3785.1	3812.0
40°	3350.1	3421.8	3533.9	3632.6	3664.0
42.5°	3175.2	3251.4	3363.5	3471.1	3507.0
45°	2991.3	3063.0	3197.6	3318.7	3345.6
47.5°	2802.9	2883.7	3027.2	3148.2	3193.1
50°	2614.6	2699.8	2852.3	2977.8	3004.7
52.5°	2426.2	2515.9	2677.4	2811.9	2825.4
55°	2228.9	2327.6	2498.0	2628.0	2654.9
57.5°	2049.5	2134.7	2318.6	2453.1	2484.5
60°	1852.2	1946.4	2143.7	2269.3	2309.6
62.5°	1663.8	1762.5	1968.8	2094.3	2130.2
65°	1466.5	1578.6	1780.4	1928.4	1964.3
67.5°	1296.1	1403.7	1619.0	1762.5	1798.4
70°	1098.7	1219.8	1448.6	1596.5	1632.4
72.5°	928.3	1053.9	1282.6	1426.1	1479.9
75°	744.5	888.0	1116.7	1269.2	1305.0
77.5°	565.1	731.0	964.2	1080.8	1080.8
80°	403.6	578.5	793.8	847.6	856.6
82.5°	264.6	435.0	587.5	583.0	583.0
85°	152.5	282.5	349.8	340.8	340.8
87.5°	58.3	116.6	125.6	125.6	121.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)