

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: P388686

Luminaire Tested: **24CZ2-150VHE-UNV-L950-CD2-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: P388686
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-150VHE-UNV-L950-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13275.2 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

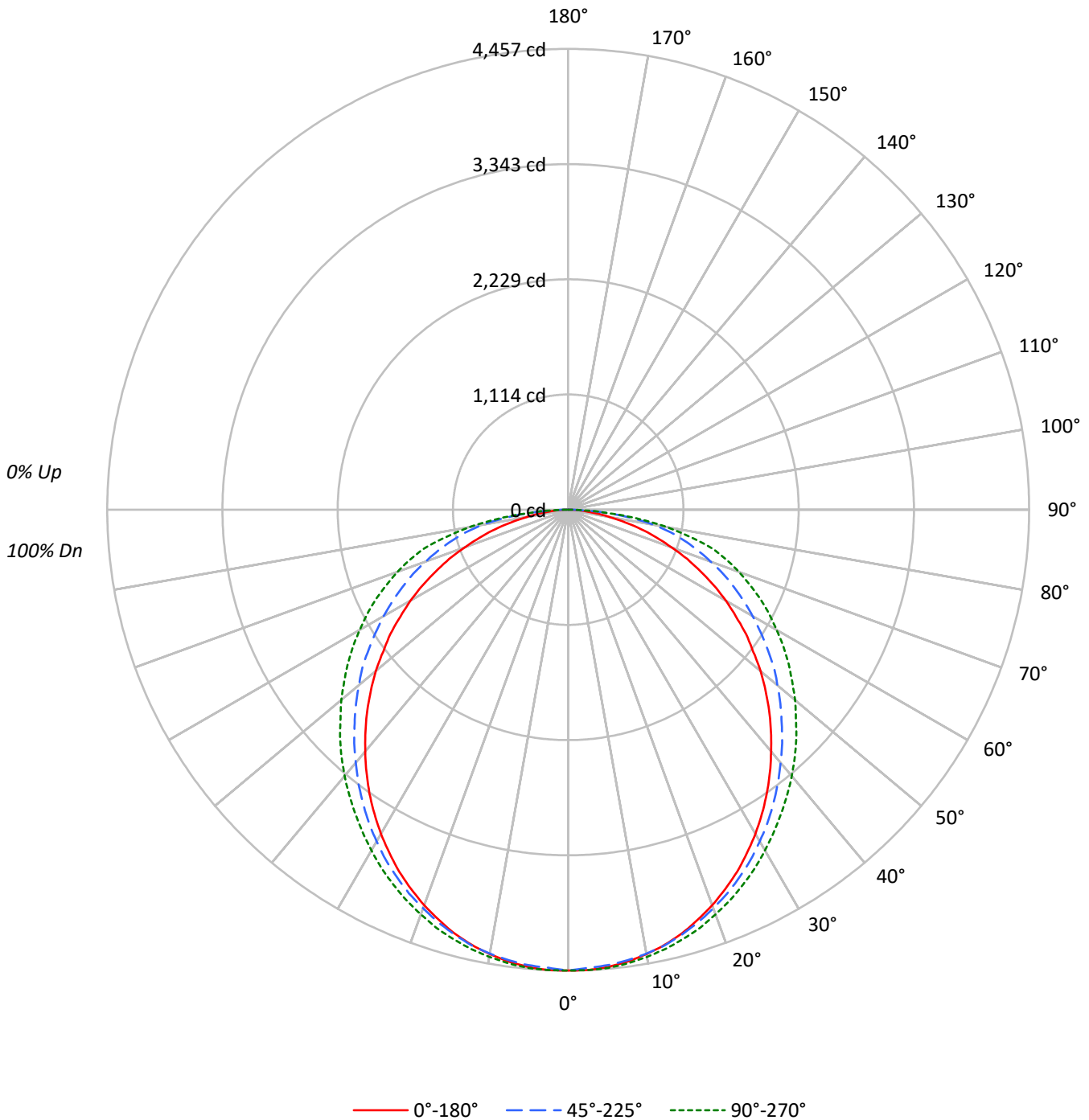
Input Watts (W): 104.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5997	5997	5997
5°	5996	5972	6008
10°	5962	5956	5999
15°	5912	5925	5986
20°	5830	5874	5963
25°	5736	5821	5940
30°	5624	5755	5913
35°	5502	5684	5895
40°	5362	5611	5906
45°	5227	5556	5935
50°	5082	5527	5991
55°	4926	5519	6101
60°	4733	5544	6259
65°	4486	5628	6531
70°	4166	5769	6902
75°	3800	6057	7485
80°	3124	6523	7484
85°	2394	6019	6430



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.5	3.2
10°-20°	1203.4	9.1
20°-30°	1811.0	13.6
30°-40°	2170.3	16.3
40°-50°	2261.7	17.0
50°-60°	2104.2	15.9
60°-70°	1733.1	13.1
70°-80°	1180.3	8.9
80°-90°	389.7	2.9
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°	3436.0	25.9
0°-40°	5606.3	42.2
0°-60°	9972.1	75.1
0°-90°	13275.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13275.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4457	4457	4457	4457	4457	
5°	4439	4439	4422	4444	4448	421
15°	4244	4249	4253	4293	4298	1196
25°	3863	3881	3921	3988	4001	1779
35°	3350	3389	3460	3553	3589	2094
45°	2747	2804	2920	3066	3119	2119
55°	2100	2171	2353	2539	2601	1872
65°	1409	1528	1768	1976	2051	1399
75°	731	895	1165	1374	1440	771
85°	155	301	390	416	416	192
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4457.1	4457.1	4457.1	4457.1	4457.1
2.5°	4457.1	4457.1	4434.9	4457.1	4457.1
5°	4439.4	4439.4	4421.7	4443.8	4448.2
7.5°	4408.4	4412.8	4395.1	4421.7	4426.1
10°	4364.1	4368.5	4359.6	4386.2	4390.6
12.5°	4310.9	4315.3	4315.3	4346.3	4350.8
15°	4244.4	4248.9	4253.3	4293.2	4297.6
17.5°	4160.3	4173.5	4182.4	4231.1	4240.0
20°	4071.6	4084.9	4102.7	4155.8	4164.7
22.5°	3969.7	3987.5	4018.5	4076.1	4089.4
25°	3863.4	3881.1	3921.0	3987.5	4000.8
27.5°	3743.8	3770.4	3819.1	3890.0	3907.7
30°	3619.7	3646.3	3703.9	3779.2	3805.8
32.5°	3486.8	3522.3	3588.7	3672.9	3699.5
35°	3349.5	3389.3	3460.2	3553.3	3588.7
37.5°	3203.3	3247.6	3331.8	3433.7	3478.0
40°	3052.6	3105.8	3194.4	3314.0	3362.8
42.5°	2902.0	2950.7	3061.5	3190.0	3243.1
45°	2746.9	2804.5	2919.7	3065.9	3119.1
47.5°	2587.4	2645.0	2782.4	2937.4	2986.2
50°	2427.9	2485.5	2640.6	2804.5	2862.1
52.5°	2255.1	2330.5	2507.7	2671.6	2729.2
55°	2100.1	2171.0	2352.6	2538.7	2600.7
57.5°	1922.8	2007.0	2206.4	2401.3	2467.8
60°	1758.9	1847.5	2060.2	2259.6	2326.0
62.5°	1590.6	1688.0	1914.0	2117.8	2193.1
65°	1408.9	1528.5	1767.8	1976.0	2051.3
67.5°	1245.0	1369.0	1621.6	1834.2	1900.7
70°	1058.9	1209.5	1466.5	1679.2	1754.5
72.5°	899.4	1050.0	1320.3	1528.5	1603.8
75°	731.0	895.0	1165.2	1373.5	1439.9
77.5°	562.7	744.3	1014.6	1174.1	1196.2
80°	403.2	593.7	841.8	934.8	965.9
82.5°	283.6	456.3	620.3	682.3	700.0
85°	155.1	301.3	389.9	416.5	416.5
87.5°	66.5	128.5	155.1	159.5	163.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)