

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: P271978

Luminaire Tested: **22CZ2-24-UNV-L935-CD1-U**

Issue Date: 3/3/2020

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: P271978
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24-UNV-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2072.0 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

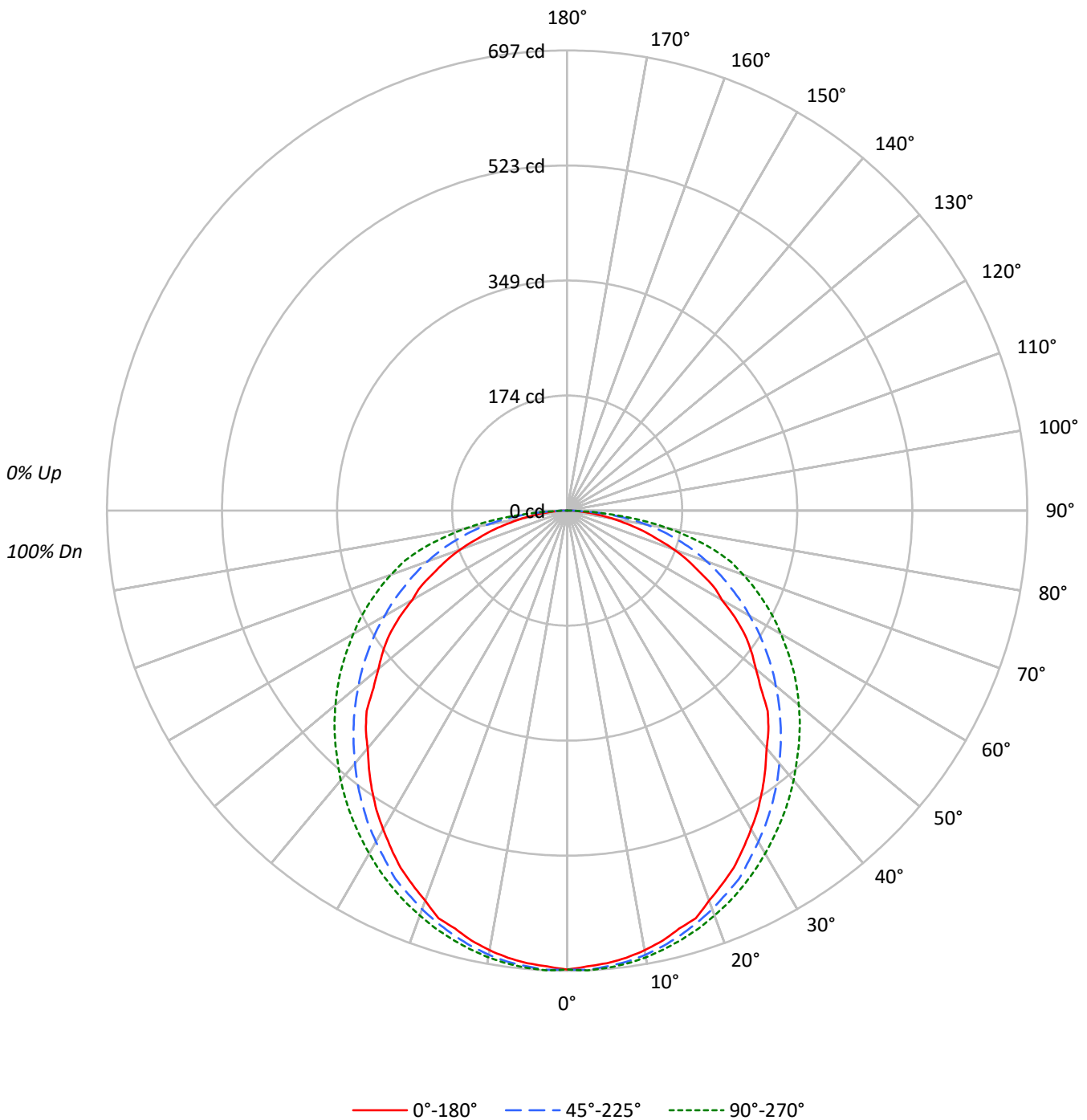
Input Watts (W): 21.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	90	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	59	56
4	81	69	60	53	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	51	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°	1871	1871	1871
5°	1859	1873	1878
10°	1848	1867	1878
15°	1826	1854	1873
20°	1800	1840	1869
25°	1773	1828	1867
30°	1732	1799	1864
35°	1694	1779	1867
40°	1651	1756	1874
45°	1634	1740	1891
50°	1561	1727	1918
55°	1544	1721	1959
60°	1457	1718	2012
65°	1414	1730	2103
70°	1358	1771	2231
75°	1237	1825	2403
80°	1060	1891	2428
85°	858	1806	2081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	3.2
10°-20°	187.7	9.1
20°-30°	282.4	13.6
30°-40°	339.0	16.4
40°-50°	354.3	17.1
50°-60°	330.2	15.9
60°-70°	270.8	13.1
70°-80°	182.5	8.8
80°-90°	59.4	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°	535.9	25.9
0°-40°	874.8	42.2
0°-60°	1559.3	75.3
0°-90°	2072.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2072.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	688	690	693	694	695	65
15°	656	660	665	671	672	185
25°	597	601	616	625	629	274
35°	516	523	542	560	568	322
45°	429	432	457	485	497	328
55°	329	335	367	402	418	292
65°	222	232	272	311	330	221
75°	119	132	176	215	231	125
85°	28	40	58	68	67	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.2	695.2	695.2	695.2	695.2
2.5°	691.2	693.2	696.2	697.2	697.2
5°	688.2	690.2	693.2	694.2	695.2
7.5°	683.3	685.3	689.2	691.2	692.2
10°	676.3	678.3	683.3	686.2	687.2
12.5°	667.4	669.4	675.3	679.3	680.3
15°	655.5	659.5	665.4	671.4	672.4
17.5°	647.6	646.6	654.5	661.5	663.4
20°	628.7	633.7	642.6	650.5	652.5
22.5°	612.9	616.8	628.7	637.7	641.6
25°	597.0	601.0	615.8	624.8	628.7
27.5°	577.2	583.1	597.0	609.9	614.8
30°	557.3	563.3	579.1	594.0	600.0
32.5°	537.5	544.4	561.3	577.2	584.1
35°	515.7	522.6	541.5	560.3	568.2
37.5°	492.9	501.8	521.6	542.5	551.4
40°	470.1	479.0	499.8	523.6	533.5
42.5°	451.2	455.2	479.0	504.8	514.7
45°	429.4	432.4	457.2	484.9	496.8
47.5°	397.7	408.6	435.4	466.1	478.0
50°	372.9	384.8	412.5	445.3	458.2
52.5°	352.0	360.0	390.7	423.5	438.3
55°	329.2	335.2	366.9	401.6	417.5
57.5°	301.5	312.4	344.1	379.8	395.7
60°	270.7	284.6	319.3	358.0	373.9
62.5°	250.9	258.8	296.5	335.2	353.0
65°	222.1	232.1	271.7	311.4	330.2
67.5°	198.3	208.3	248.9	288.6	307.4
70°	172.6	182.5	225.1	264.8	283.6
72.5°	142.8	156.7	201.3	241.0	260.8
75°	119.0	131.9	175.5	215.2	231.1
77.5°	92.2	109.1	149.7	182.5	194.4
80°	68.4	85.3	122.0	145.8	156.7
82.5°	46.6	63.5	91.2	109.1	115.0
85°	27.8	39.7	58.5	68.4	67.4
87.5°	12.9	16.9	23.8	23.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)