

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: P271977

Luminaire Tested: **22CZ2-24-UNV-L930-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: P271977
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-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

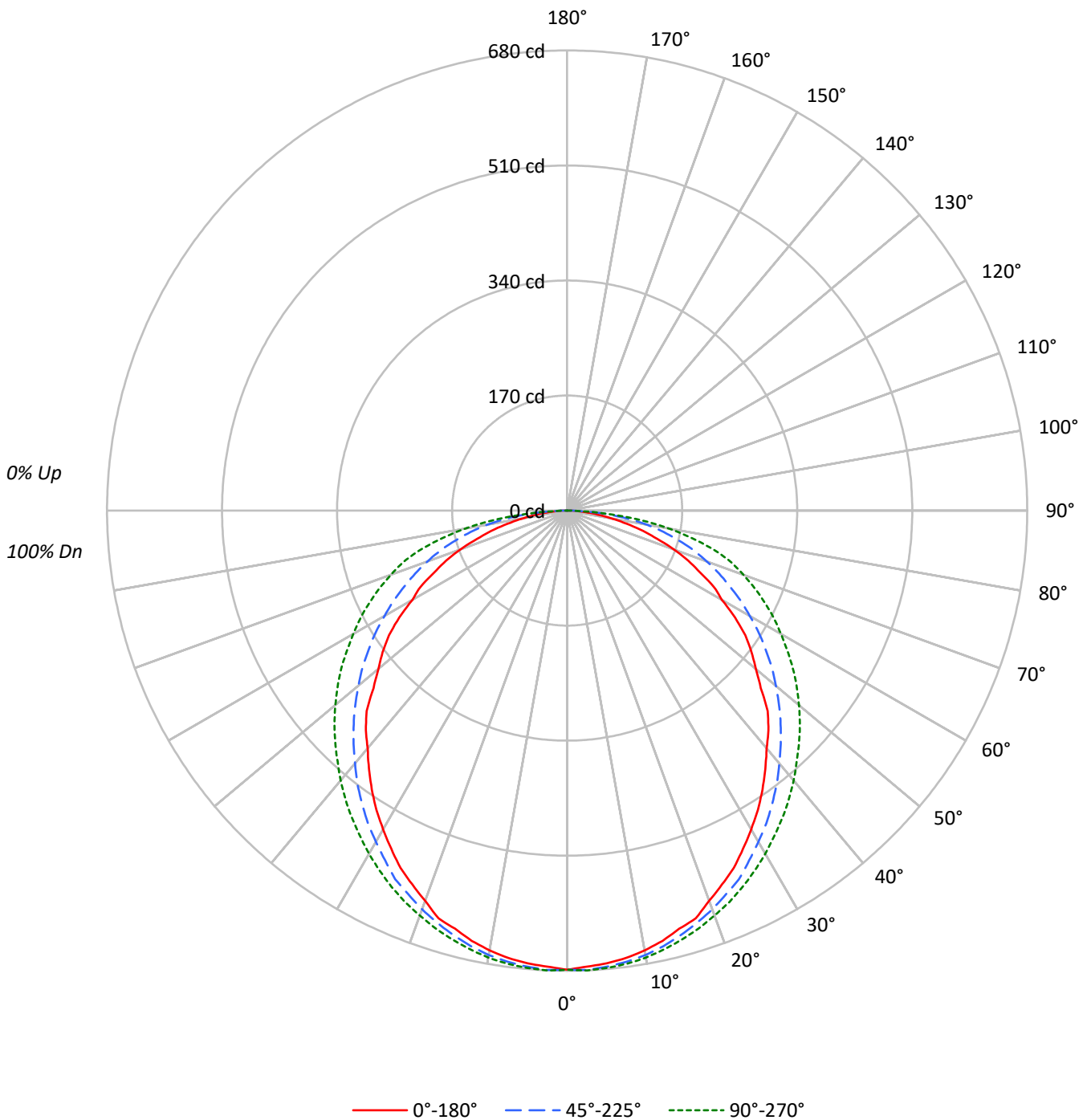
Lumens per Lamp: N/A
Luminaire Lumens: 2022.0 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1826	1826	1826
5°	1814	1827	1833
10°	1803	1822	1833
15°	1782	1809	1828
20°	1757	1796	1824
25°	1730	1784	1822
30°	1690	1756	1819
35°	1653	1736	1822
40°	1611	1713	1829
45°	1595	1698	1845
50°	1523	1685	1872
55°	1507	1680	1911
60°	1422	1677	1963
65°	1380	1689	2052
70°	1325	1729	2178
75°	1207	1781	2345
80°	1035	1844	2369
85°	837	1763	2032



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.2	3.2
10°-20°	183.1	9.1
20°-30°	275.6	13.6
30°-40°	330.8	16.4
40°-50°	345.7	17.1
50°-60°	322.2	15.9
60°-70°	264.3	13.1
70°-80°	178.1	8.8
80°-90°	58.0	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°	522.9	25.9
0°-40°	853.7	42.2
0°-60°	1521.7	75.3
0°-90°	2022.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2022.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	672	674	676	677	678	64
15°	640	644	649	655	656	181
25°	583	586	601	610	614	268
35°	503	510	528	547	554	315
45°	419	422	446	473	485	320
55°	321	327	358	392	407	285
65°	217	226	265	304	322	216
75°	116	129	171	210	226	122
85°	27	39	57	67	66	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	678.4	678.4	678.4	678.4	678.4
2.5°	674.5	676.5	679.4	680.3	680.3
5°	671.6	673.6	676.5	677.4	678.4
7.5°	666.8	668.7	672.6	674.5	675.5
10°	660.0	661.9	666.8	669.7	670.7
12.5°	651.3	653.2	659.0	662.9	663.9
15°	639.7	643.6	649.4	655.2	656.1
17.5°	631.9	631.0	638.7	645.5	647.4
20°	613.6	618.4	627.1	634.8	636.8
22.5°	598.1	601.9	613.6	622.3	626.1
25°	582.6	586.5	601.0	609.7	613.6
27.5°	563.2	569.0	582.6	595.2	600.0
30°	543.9	549.7	565.2	579.7	585.5
32.5°	524.5	531.3	547.8	563.2	570.0
35°	503.2	510.0	528.4	546.8	554.5
37.5°	481.0	489.7	509.0	529.4	538.1
40°	458.7	467.4	487.7	511.0	520.7
42.5°	440.3	444.2	467.4	492.6	502.3
45°	419.0	421.9	446.1	473.2	484.8
47.5°	388.1	398.7	424.8	454.8	466.5
50°	363.9	375.5	402.6	434.5	447.1
52.5°	343.6	351.3	381.3	413.2	427.7
55°	321.3	327.1	358.1	391.9	407.4
57.5°	294.2	304.8	335.8	370.7	386.1
60°	264.2	277.7	311.6	349.4	364.8
62.5°	244.8	252.6	289.4	327.1	344.5
65°	216.8	226.5	265.2	303.9	322.3
67.5°	193.6	203.2	242.9	281.6	300.0
70°	168.4	178.1	219.7	258.4	276.8
72.5°	139.4	152.9	196.5	235.2	254.5
75°	116.1	128.7	171.3	210.0	225.5
77.5°	90.0	106.5	146.1	178.1	189.7
80°	66.8	83.2	119.0	142.3	152.9
82.5°	45.5	61.9	89.0	106.5	112.3
85°	27.1	38.7	57.1	66.8	65.8
87.5°	12.6	16.5	23.2	23.2	22.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)