

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: P271974

Luminaire Tested: **22CZ2-24HE-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: P271974
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-UNV-L935-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (112) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2043.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

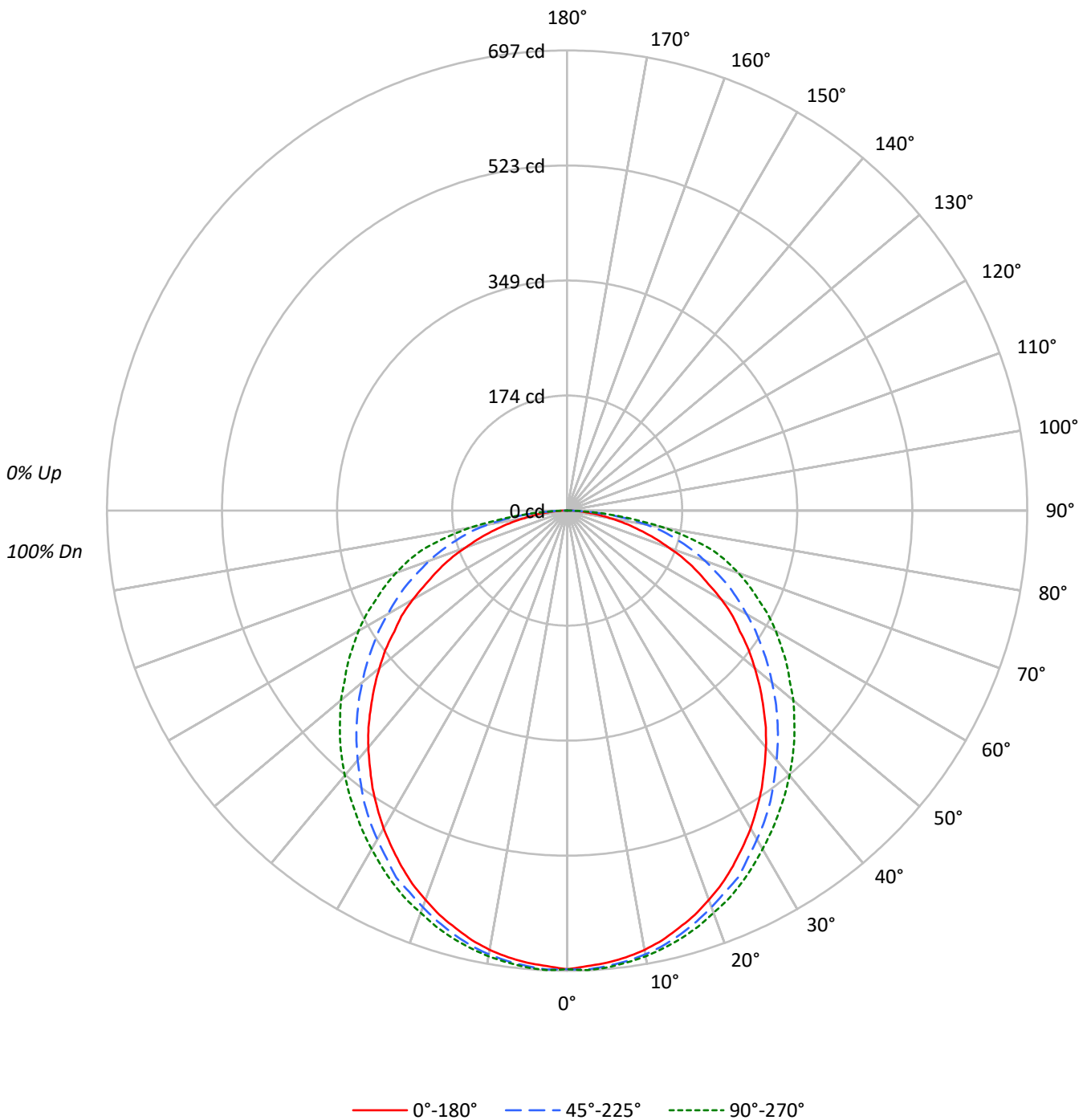
Input Watts (W): 19.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1869	1869	1869
5°	1857	1871	1877
10°	1846	1865	1873
15°	1823	1851	1868
20°	1796	1831	1857
25°	1764	1821	1851
30°	1727	1787	1840
35°	1688	1763	1836
40°	1646	1734	1840
45°	1599	1714	1852
50°	1553	1696	1873
55°	1500	1688	1905
60°	1455	1688	1964
65°	1382	1715	2036
70°	1290	1748	2168
75°	1181	1808	2341
80°	1027	1884	2306
85°	902	1677	1831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.7	3.2
10°-20°	187.1	9.2
20°-30°	280.9	13.7
30°-40°	335.7	16.4
40°-50°	349.0	17.1
50°-60°	323.5	15.8
60°-70°	265.3	13.0
70°-80°	179.4	8.8
80°-90°	56.4	2.8
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°	533.7	26.1
0°-40°	869.4	42.6
0°-60°	1541.9	75.5
0°-90°	2043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	688	689	693	694	695	65
15°	654	658	664	668	670	185
25°	594	599	613	620	623	274
35°	514	521	537	553	559	321
45°	420	428	450	476	487	324
55°	320	330	360	392	406	287
65°	217	229	269	305	320	215
75°	114	133	174	209	225	120
85°	29	40	54	60	59	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	694.7	694.7	694.7	694.7	694.7
2.5°	690.6	692.6	695.7	696.7	696.7
5°	687.6	688.6	692.6	693.7	694.7
7.5°	682.6	684.6	688.6	689.6	690.6
10°	675.6	677.6	682.6	684.6	685.6
12.5°	666.5	668.5	674.6	677.6	678.6
15°	654.4	657.5	664.5	668.5	670.5
17.5°	642.4	645.4	652.4	658.5	660.5
20°	627.3	634.3	639.4	647.4	648.4
22.5°	612.2	616.2	625.3	633.3	637.4
25°	594.1	599.2	613.2	620.3	623.3
27.5°	575.0	582.1	593.1	604.2	608.2
30°	555.9	561.0	575.0	588.1	592.1
32.5°	534.8	541.9	556.9	570.0	576.0
35°	513.7	520.7	536.8	552.9	558.9
37.5°	490.6	498.6	514.7	533.8	541.9
40°	468.5	474.5	493.6	516.7	523.8
42.5°	445.3	452.4	472.5	497.6	505.7
45°	420.2	428.3	450.4	476.5	486.6
47.5°	396.1	404.1	428.3	454.4	466.5
50°	371.0	381.0	405.1	435.3	447.4
52.5°	346.8	355.9	383.0	414.2	425.2
55°	319.7	329.7	359.9	392.1	406.1
57.5°	297.6	304.6	337.8	371.0	385.0
60°	270.4	279.5	313.7	348.8	364.9
62.5°	241.3	256.3	291.5	327.7	343.8
65°	217.1	229.2	269.4	304.6	319.7
67.5°	192.0	205.1	244.3	281.5	298.6
70°	163.9	181.0	222.2	259.4	275.5
72.5°	138.7	156.8	199.0	235.2	252.3
75°	113.6	132.7	173.9	209.1	225.2
77.5°	89.5	110.6	150.8	177.9	188.0
80°	66.3	86.5	121.6	140.7	148.8
82.5°	46.2	63.3	89.5	99.5	101.5
85°	29.2	40.2	54.3	60.3	59.3
87.5°	13.1	16.1	20.1	22.1	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)