

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: P474767

Luminaire Tested: **22CZ2-24HE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474767
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2387.3 lumens
Efficiency: N/A
Efficacy: 131.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

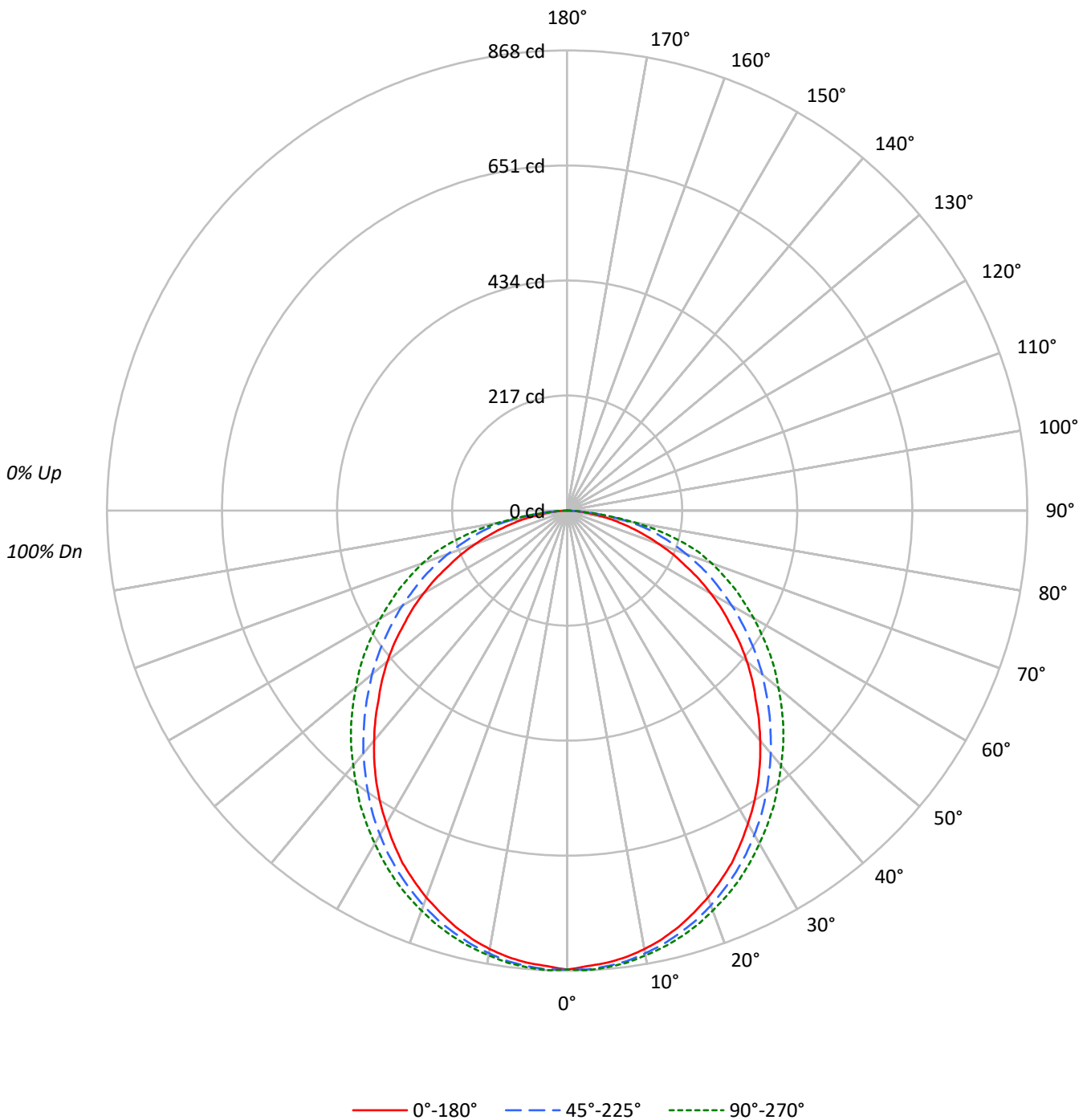
Input Watts (W): 18.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2330	2330	2330
5°	2313	2330	2336
10°	2295	2317	2328
15°	2264	2297	2318
20°	2224	2270	2300
25°	2180	2235	2282
30°	2119	2195	2254
35°	2060	2148	2233
40°	1990	2100	2205
45°	1914	2052	2195
50°	1852	2011	2178
55°	1766	1967	2183
60°	1686	1933	2188
65°	1568	1908	2223
70°	1449	1881	2279
75°	1295	1873	2293
80°	1086	1774	2002
85°	840	1216	1136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	3.4
10°-20°	232.2	9.7
20°-30°	346.2	14.5
30°-40°	408.7	17.1
40°-50°	416.6	17.4
50°-60°	375.6	15.7
60°-70°	295.3	12.4
70°-80°	184.9	7.7
80°-90°	46.1	1.9
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°	660.2	27.7
0°-40°	1068.9	44.8
0°-60°	1861.1	78.0
0°-90°	2387.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2387.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	856	858	863	865	865	81
15°	813	816	824	830	832	229
25°	734	740	753	764	768	337
35°	627	635	654	672	680	392
45°	503	514	539	566	577	389
55°	376	388	419	452	465	338
65°	246	261	300	333	349	245
75°	125	143	180	212	220	132
85°	27	35	39	39	37	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	865.8	865.8	865.8	865.8	865.8
2.5°	860.2	862.2	866.3	867.8	867.8
5°	856.2	858.2	862.7	864.8	864.8
7.5°	849.6	851.6	857.2	859.7	860.2
10°	840.0	842.6	848.1	852.1	852.1
12.5°	827.9	830.4	837.5	842.6	843.1
15°	812.8	816.3	824.4	830.4	832.0
17.5°	795.1	800.7	809.8	817.3	818.8
20°	776.5	782.0	792.6	801.2	803.2
22.5°	755.8	760.8	773.4	784.0	786.6
25°	734.1	739.6	752.8	764.4	768.4
27.5°	708.4	714.9	730.6	743.7	747.7
30°	682.1	690.2	706.3	721.0	725.5
32.5°	655.4	662.9	681.1	696.7	702.8
35°	627.1	635.2	653.9	672.0	679.6
37.5°	597.4	605.4	625.6	646.3	653.4
40°	566.6	576.2	597.9	620.1	627.6
42.5°	535.3	545.4	568.1	592.8	602.9
45°	503.0	514.1	539.3	565.6	576.7
47.5°	473.7	482.8	509.1	537.8	548.4
50°	442.5	451.0	480.3	509.1	520.2
52.5°	410.7	418.8	450.0	480.3	493.9
55°	376.4	388.0	419.3	451.5	465.2
57.5°	346.1	356.7	389.0	421.8	434.9
60°	313.3	324.4	359.2	392.5	406.6
62.5°	280.5	292.6	327.9	363.8	376.9
65°	246.2	261.3	299.7	333.0	349.1
67.5°	216.9	231.6	269.4	304.2	318.4
70°	184.2	201.3	239.1	274.5	289.6
72.5°	153.4	170.5	209.4	244.7	259.8
75°	124.6	143.3	180.1	212.4	220.5
77.5°	96.9	114.5	151.4	170.0	178.6
80°	70.1	87.3	114.5	127.1	129.2
82.5°	47.4	62.1	77.7	81.2	79.2
85°	27.2	34.8	39.4	39.4	36.8
87.5°	11.1	11.1	9.6	6.1	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)