

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: P474883

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474883
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24HE-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2435.3 lumens
Efficiency: N/A
Efficacy: 134.5 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

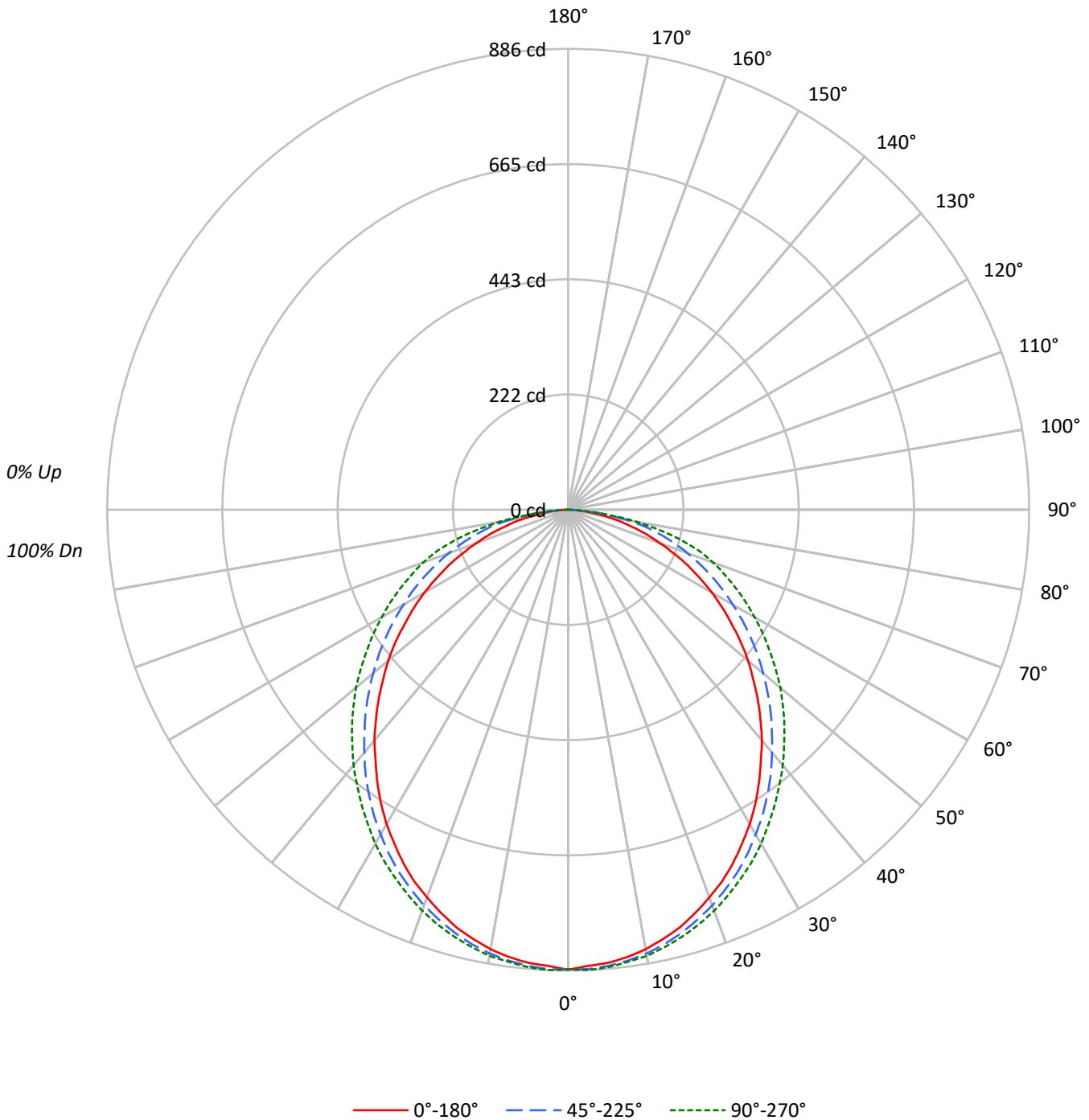
Input Watts (W): 18.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	86	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	74	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	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2379	2379	2379
5°	2363	2378	2385
10°	2345	2367	2380
15°	2315	2346	2366
20°	2272	2319	2349
25°	2226	2284	2325
30°	2168	2240	2304
35°	2100	2193	2275
40°	2035	2141	2255
45°	1960	2095	2236
50°	1890	2048	2228
55°	1800	2008	2218
60°	1719	1967	2227
65°	1613	1944	2259
70°	1474	1920	2332
75°	1324	1906	2334
80°	1114	1799	2073
85°	837	1220	1127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	3.4
10°-20°	237.1	9.7
20°-30°	353.5	14.5
30°-40°	417.2	17.1
40°-50°	425.0	17.5
50°-60°	383.3	15.7
60°-70°	301.0	12.4
70°-80°	188.2	7.7
80°-90°	46.4	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°	674.2	27.7
0°-40°	1091.3	44.8
0°-60°	1899.7	78.0
0°-90°	2435.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2435.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	875	876	880	882	883	83
15°	831	834	842	848	849	234
25°	750	754	769	780	783	345
35°	639	648	668	686	692	400
45°	515	524	550	577	588	397
55°	384	396	428	461	473	344
65°	253	267	305	340	355	250
75°	127	145	183	214	224	136
85°	27	35	40	39	36	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	884.0	884.0	884.0	884.0	884.0
2.5°	878.1	879.9	884.0	885.8	885.8
5°	874.6	876.4	880.5	882.2	882.8
7.5°	867.5	869.9	874.6	876.9	876.9
10°	858.1	861.0	866.3	869.9	871.0
12.5°	845.1	848.7	855.7	859.8	861.0
15°	831.0	833.9	842.2	848.1	849.2
17.5°	812.7	817.4	826.3	833.9	835.7
20°	793.3	798.6	809.8	818.6	820.4
22.5°	773.2	777.3	789.7	800.3	802.7
25°	749.6	753.8	769.1	780.3	783.2
27.5°	723.7	730.8	746.1	759.1	763.8
30°	697.8	704.9	720.8	736.1	741.4
32.5°	669.5	677.2	695.4	711.3	716.6
35°	639.4	648.3	667.7	686.0	692.5
37.5°	608.2	618.2	640.0	659.5	666.5
40°	579.3	586.4	609.4	631.8	641.8
42.5°	546.9	556.3	579.3	604.7	614.1
45°	515.1	523.9	550.4	577.0	587.6
47.5°	482.1	493.3	519.8	549.3	559.9
50°	451.4	460.9	489.2	520.4	532.2
52.5°	418.4	428.5	459.1	491.5	502.1
55°	383.7	396.0	427.9	460.9	472.7
57.5°	351.8	363.6	397.2	431.4	443.8
60°	319.4	331.2	365.4	400.2	413.7
62.5°	285.2	298.8	335.9	369.5	384.8
65°	253.4	267.0	305.3	339.5	354.8
67.5°	219.8	235.7	274.0	310.0	325.3
70°	187.4	206.3	244.0	279.3	296.4
72.5°	158.5	173.9	213.3	250.5	264.6
75°	127.3	145.0	183.3	214.5	224.5
77.5°	100.8	116.1	152.6	173.3	179.7
80°	71.9	89.0	116.1	128.5	133.8
82.5°	47.7	61.9	79.0	81.3	80.2
85°	27.1	34.8	39.5	38.9	36.5
87.5°	10.6	11.8	8.8	5.3	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)