

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: P474765

Luminaire Tested: **22CZ2-44-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474765
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

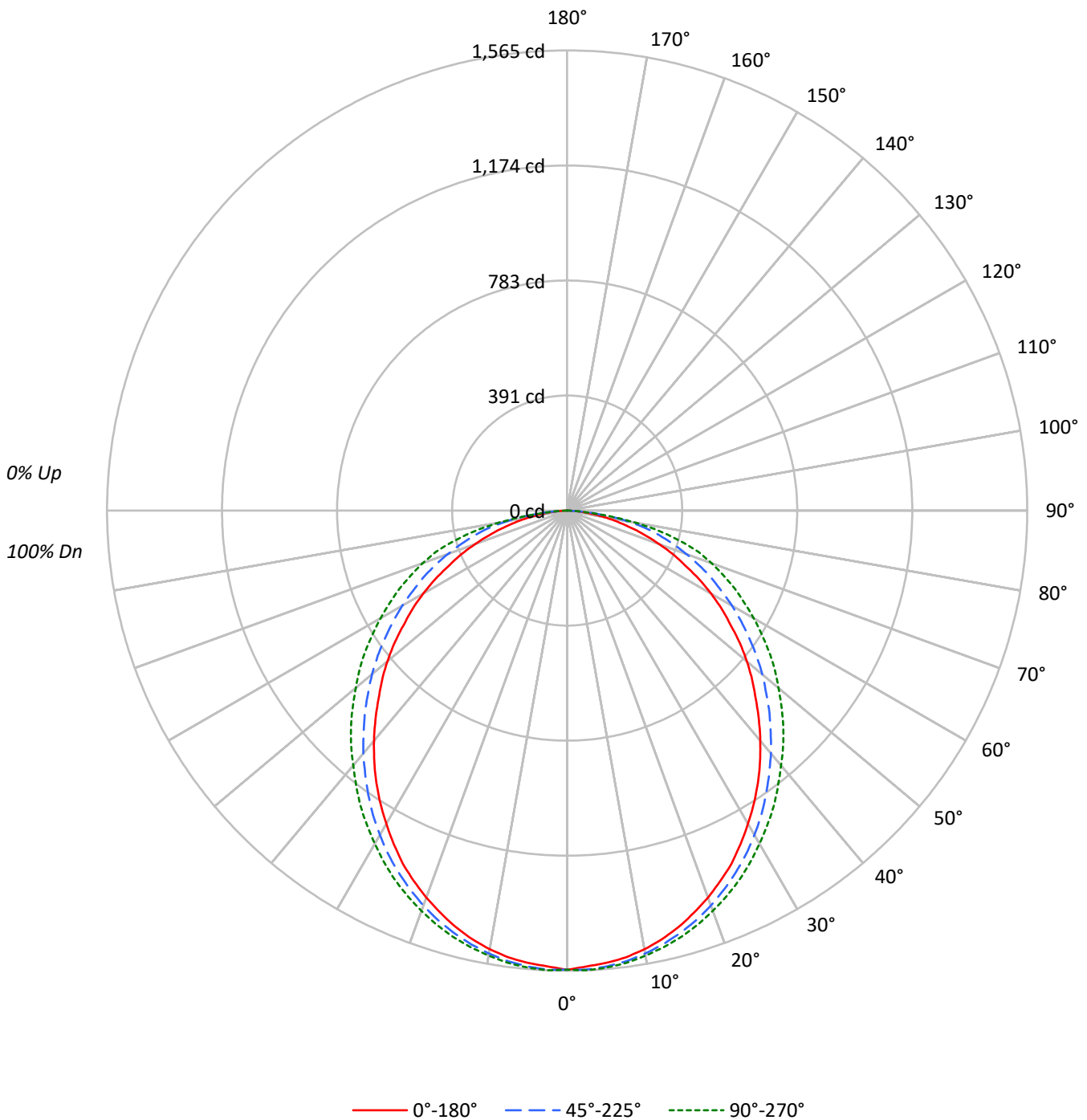
Lumens per Lamp: N/A
Luminaire Lumens: 4305.7 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.2
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°	4202	4202	4202
5°	4171	4203	4213
10°	4140	4180	4200
15°	4084	4142	4180
20°	4010	4094	4148
25°	3931	4031	4115
30°	3823	3958	4066
35°	3716	3874	4027
40°	3590	3788	3977
45°	3452	3702	3958
50°	3341	3627	3927
55°	3185	3548	3936
60°	3041	3487	3947
65°	2828	3442	4010
70°	2613	3393	4109
75°	2337	3377	4134
80°	1960	3202	3609
85°	1516	2192	2050



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	3.4
10°-20°	418.8	9.7
20°-30°	624.4	14.5
30°-40°	737.1	17.1
40°-50°	751.3	17.4
50°-60°	677.5	15.7
60°-70°	532.5	12.4
70°-80°	333.4	7.7
80°-90°	83.1	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°	1190.7	27.7
0°-40°	1927.8	44.8
0°-60°	3356.6	78.0
0°-90°	4305.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4305.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1562	1562	1562	1562	1562	
5°	1544	1548	1556	1560	1560	147
15°	1466	1472	1487	1498	1500	413
25°	1324	1334	1358	1379	1386	609
35°	1131	1146	1179	1212	1226	707
45°	907	927	973	1020	1040	702
55°	679	700	756	814	839	609
65°	444	471	540	601	630	443
75°	225	258	325	383	398	239
85°	49	63	71	71	66	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1561.5	1561.5	1561.5	1561.5	1561.5
2.5°	1551.4	1555.1	1562.4	1565.1	1565.1
5°	1544.2	1547.8	1556.0	1559.6	1559.6
7.5°	1532.3	1536.0	1546.0	1550.5	1551.4
10°	1515.0	1519.6	1529.6	1536.9	1536.9
12.5°	1493.2	1497.8	1510.5	1519.6	1520.5
15°	1465.9	1472.3	1486.8	1497.8	1500.5
17.5°	1434.1	1444.1	1460.5	1474.1	1476.8
20°	1400.4	1410.4	1429.5	1445.0	1448.6
22.5°	1363.1	1372.2	1394.9	1414.0	1418.6
25°	1324.0	1334.0	1357.6	1378.6	1385.8
27.5°	1277.6	1289.4	1317.6	1341.2	1348.5
30°	1230.2	1244.8	1273.9	1300.3	1308.5
32.5°	1182.0	1195.7	1228.4	1256.6	1267.5
35°	1131.1	1145.6	1179.3	1212.0	1225.7
37.5°	1077.4	1091.9	1128.3	1165.6	1178.4
40°	1021.9	1039.2	1078.3	1118.3	1132.0
42.5°	965.4	983.6	1024.6	1069.2	1087.4
45°	907.2	927.2	972.7	1020.0	1040.1
47.5°	854.4	870.8	918.1	970.0	989.1
50°	798.0	813.5	866.3	918.1	938.1
52.5°	740.7	755.2	811.7	866.3	890.8
55°	678.8	699.7	756.2	814.4	839.0
57.5°	624.2	643.3	701.6	760.7	784.4
60°	565.1	585.1	647.9	707.9	733.4
62.5°	505.9	527.8	591.5	656.1	679.7
65°	444.1	471.3	540.5	600.6	629.7
67.5°	391.3	417.7	485.9	548.7	574.2
70°	332.1	363.1	431.3	495.0	522.3
72.5°	276.6	307.6	377.6	441.3	468.6
75°	224.8	258.4	324.8	383.1	397.6
77.5°	174.7	206.6	273.0	306.6	322.1
80°	126.5	157.4	206.6	229.3	232.9
82.5°	85.5	111.9	140.1	146.5	142.9
85°	49.1	62.8	71.0	71.0	66.4
87.5°	20.0	20.0	17.3	10.9	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)