

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: P474823

Luminaire Tested: **22CZ2-44-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474823
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4546.6 lumens
Efficiency: N/A
Efficacy: 136.9 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

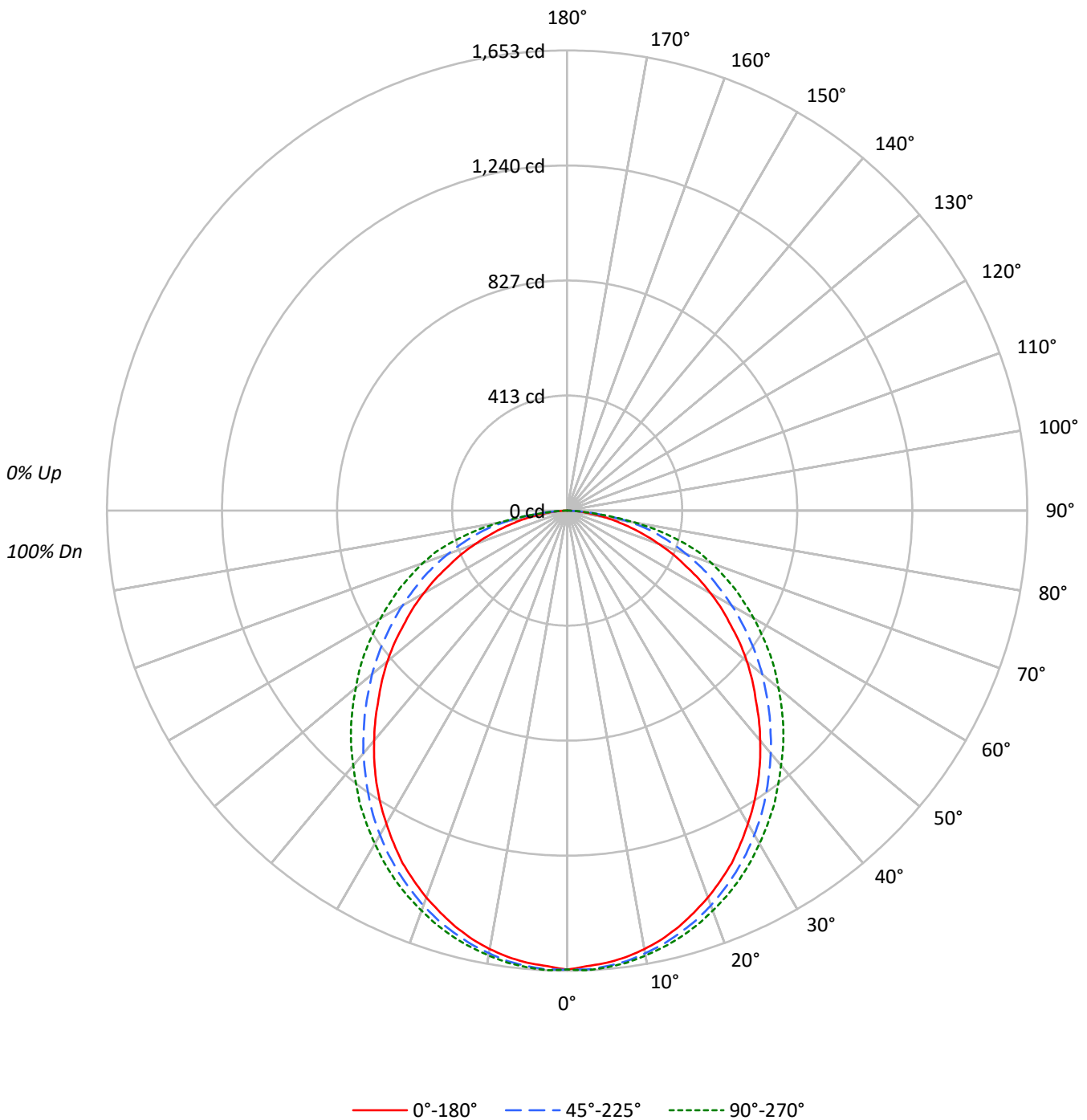
Input Watts (W): 33.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4437	4437	4437
5°	4405	4438	4449
10°	4371	4414	4435
15°	4312	4374	4414
20°	4235	4323	4381
25°	4151	4257	4345
30°	4037	4180	4293
35°	3923	4091	4252
40°	3790	4000	4199
45°	3646	3909	4180
50°	3528	3829	4147
55°	3363	3746	4156
60°	3211	3682	4168
65°	2986	3634	4234
70°	2759	3583	4339
75°	2467	3566	4366
80°	2070	3380	3812
85°	1602	2313	2164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	3.4
10°-20°	442.2	9.7
20°-30°	659.4	14.5
30°-40°	778.4	17.1
40°-50°	793.3	17.4
50°-60°	715.4	15.7
60°-70°	562.3	12.4
70°-80°	352.1	7.7
80°-90°	87.8	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°	1257.4	27.7
0°-40°	2035.7	44.8
0°-60°	3544.5	78.0
0°-90°	4546.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4546.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1631	1634	1643	1647	1647	155
15°	1548	1555	1570	1582	1584	436
25°	1398	1409	1434	1456	1463	643
35°	1194	1210	1245	1280	1294	746
45°	958	979	1027	1077	1098	741
55°	717	739	798	860	886	643
65°	469	498	571	634	665	467
75°	237	273	343	404	420	252
85°	52	66	75	75	70	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1648.8	1648.8	1648.8	1648.8	1648.8
2.5°	1638.3	1642.1	1649.8	1652.7	1652.7
5°	1630.6	1634.4	1643.1	1646.9	1646.9
7.5°	1618.1	1621.9	1632.5	1637.3	1638.3
10°	1599.8	1604.6	1615.2	1622.9	1622.9
12.5°	1576.8	1581.6	1595.0	1604.6	1605.6
15°	1547.9	1554.7	1570.0	1581.6	1584.5
17.5°	1514.3	1524.9	1542.2	1556.6	1559.5
20°	1478.8	1489.3	1509.5	1525.8	1529.7
22.5°	1439.4	1449.0	1473.0	1493.2	1498.0
25°	1398.0	1408.6	1433.6	1455.7	1463.4
27.5°	1349.0	1361.5	1391.3	1416.3	1424.0
30°	1299.1	1314.5	1345.2	1373.1	1381.7
32.5°	1248.2	1262.6	1297.2	1326.9	1338.5
35°	1194.3	1209.7	1245.3	1279.9	1294.3
37.5°	1137.7	1153.0	1191.5	1230.9	1244.3
40°	1079.0	1097.3	1138.6	1180.9	1195.3
42.5°	1019.5	1038.7	1081.9	1129.0	1148.2
45°	958.0	979.1	1027.2	1077.1	1098.3
47.5°	902.2	919.5	969.5	1024.3	1044.5
50°	842.7	859.0	914.7	969.5	990.6
52.5°	782.1	797.5	857.1	914.7	940.7
55°	716.8	738.9	798.5	860.0	885.9
57.5°	659.1	679.3	740.8	803.3	828.3
60°	596.7	617.8	684.1	747.5	774.5
62.5°	534.2	557.3	624.6	692.8	717.8
65°	468.9	497.7	570.7	634.2	664.9
67.5°	413.2	441.0	513.1	579.4	606.3
70°	350.7	383.4	455.4	522.7	551.5
72.5°	292.1	324.8	398.8	466.0	494.8
75°	237.3	272.9	343.0	404.5	419.9
77.5°	184.5	218.1	288.3	323.8	340.1
80°	133.6	166.2	218.1	242.1	246.0
82.5°	90.3	118.2	148.0	154.7	150.9
85°	51.9	66.3	74.9	74.9	70.1
87.5°	21.1	21.1	18.3	11.5	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)