

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: P474950

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474950
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-S-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4582.9 lumens
Efficiency: N/A
Efficacy: 151.8 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

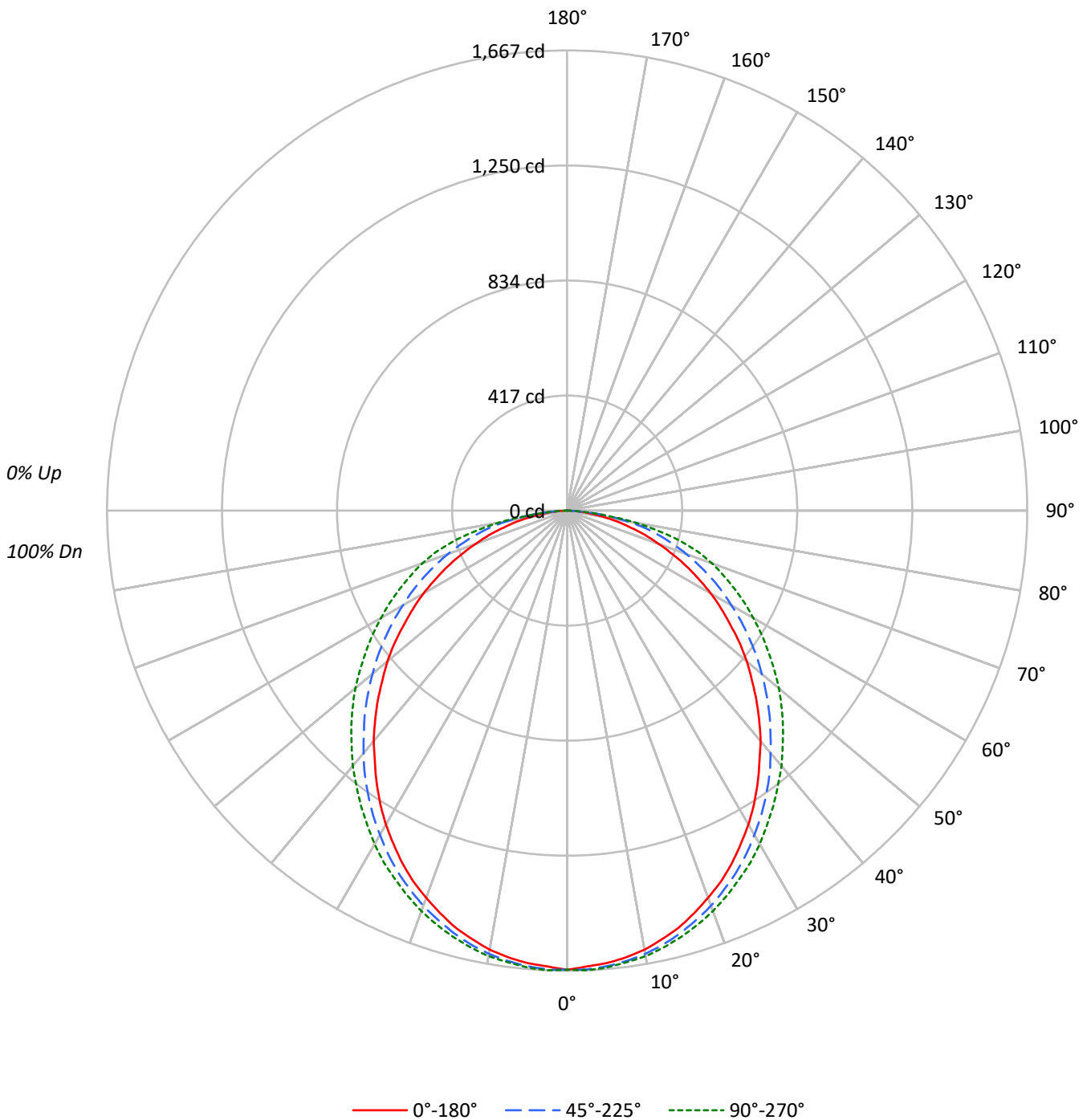
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4477	4477	4477
5°	4446	4476	4488
10°	4412	4455	4479
15°	4357	4415	4452
20°	4275	4364	4421
25°	4189	4297	4376
30°	4080	4215	4335
35°	3953	4128	4281
40°	3830	4029	4243
45°	3689	3942	4208
50°	3556	3854	4193
55°	3387	3778	4173
60°	3235	3701	4190
65°	3037	3658	4252
70°	2775	3612	4389
75°	2491	3586	4394
80°	2097	3386	3902
85°	1575	2294	2124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.1	3.4
10°-20°	446.2	9.7
20°-30°	665.3	14.5
30°-40°	785.0	17.1
40°-50°	799.8	17.5
50°-60°	721.3	15.7
60°-70°	566.5	12.4
70°-80°	354.2	7.7
80°-90°	87.3	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°	1268.7	27.7
0°-40°	2053.7	44.8
0°-60°	3574.9	78.0
0°-90°	4582.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4582.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1664	1664	1664	1664	1664	
5°	1646	1649	1657	1660	1661	156
15°	1564	1569	1585	1596	1598	440
25°	1411	1418	1447	1468	1474	649
35°	1203	1220	1257	1291	1303	753
45°	969	986	1036	1086	1106	748
55°	722	745	805	867	890	648
65°	477	502	574	639	668	471
75°	240	273	345	404	423	256
85°	51	65	74	73	69	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1663.6	1663.6	1663.6	1663.6	1663.6
2.5°	1652.5	1655.8	1663.6	1666.9	1666.9
5°	1645.8	1649.2	1656.9	1660.3	1661.4
7.5°	1632.5	1637.0	1645.8	1650.3	1650.3
10°	1614.8	1620.3	1630.3	1637.0	1639.2
12.5°	1590.4	1597.0	1610.4	1618.1	1620.3
15°	1563.8	1569.3	1584.8	1595.9	1598.2
17.5°	1529.4	1538.3	1554.9	1569.3	1572.6
20°	1492.8	1502.8	1523.8	1540.5	1543.8
22.5°	1455.1	1462.8	1486.1	1506.1	1510.5
25°	1410.7	1418.5	1447.3	1468.4	1473.9
27.5°	1361.9	1375.2	1404.1	1428.5	1437.3
30°	1313.1	1326.4	1356.4	1385.2	1395.2
32.5°	1259.9	1274.3	1308.7	1338.6	1348.6
35°	1203.3	1220.0	1256.6	1290.9	1303.1
37.5°	1144.5	1163.4	1204.4	1241.0	1254.3
40°	1090.2	1103.5	1146.8	1188.9	1207.8
42.5°	1029.2	1047.0	1090.2	1137.9	1155.6
45°	969.3	986.0	1035.9	1085.8	1105.7
47.5°	907.2	928.3	978.2	1033.6	1053.6
50°	849.5	867.3	920.5	979.3	1001.5
52.5°	787.4	806.3	864.0	925.0	944.9
55°	722.0	745.3	805.2	867.3	889.5
57.5°	662.1	684.3	747.5	811.8	835.1
60°	601.1	623.3	687.6	753.1	778.6
62.5°	536.8	562.3	632.2	695.4	724.2
65°	476.9	502.4	574.5	638.8	667.7
67.5°	413.7	443.6	515.7	583.4	612.2
70°	352.7	388.2	459.1	525.7	557.9
72.5°	298.3	327.2	401.5	471.3	498.0
75°	239.6	272.8	344.9	403.7	422.6
77.5°	189.6	218.5	287.2	326.1	338.3
80°	135.3	167.5	218.5	241.8	251.8
82.5°	89.8	116.5	148.6	153.0	150.8
85°	51.0	65.4	74.3	73.2	68.8
87.5°	20.0	22.2	16.6	10.0	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)