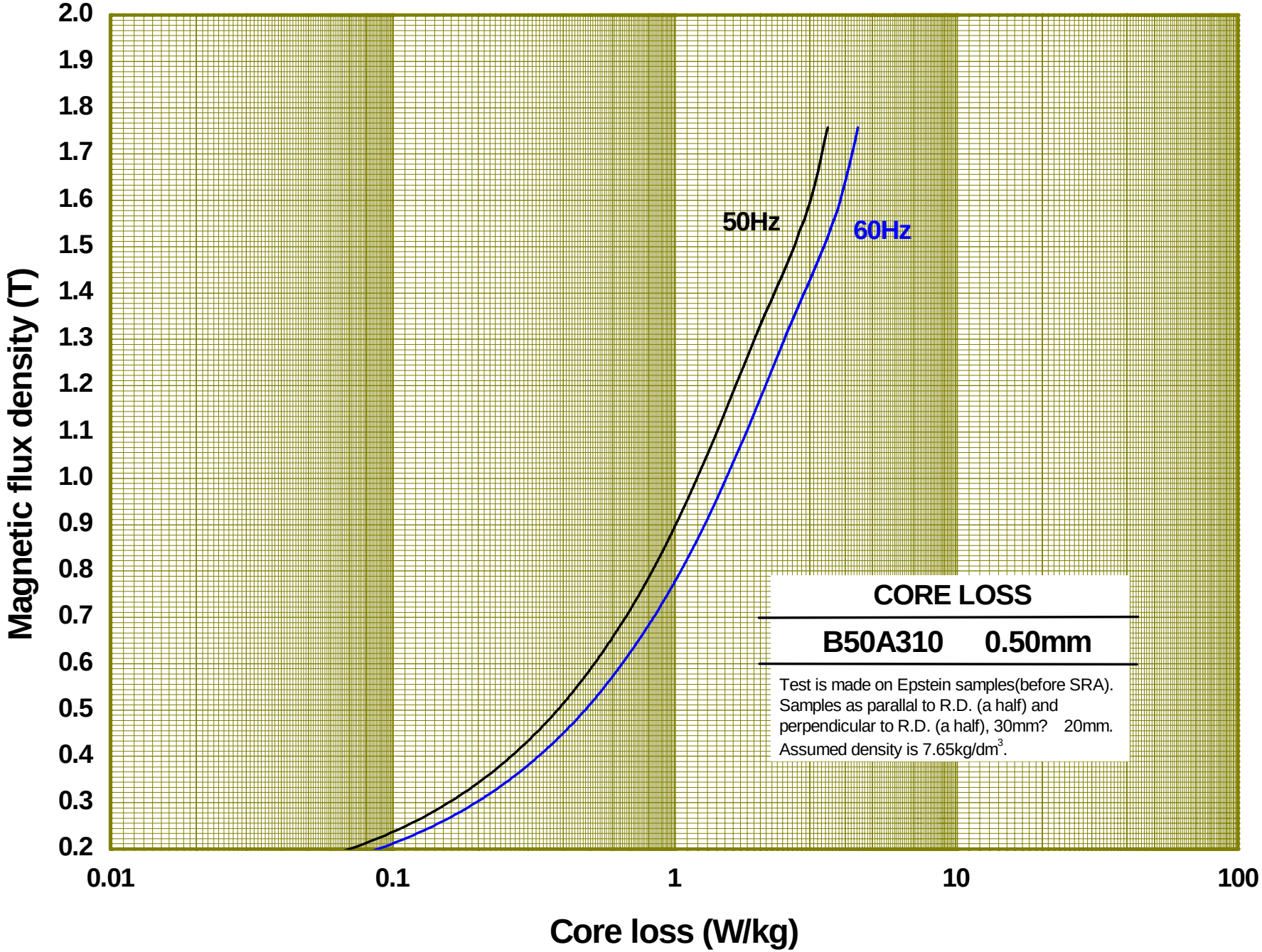
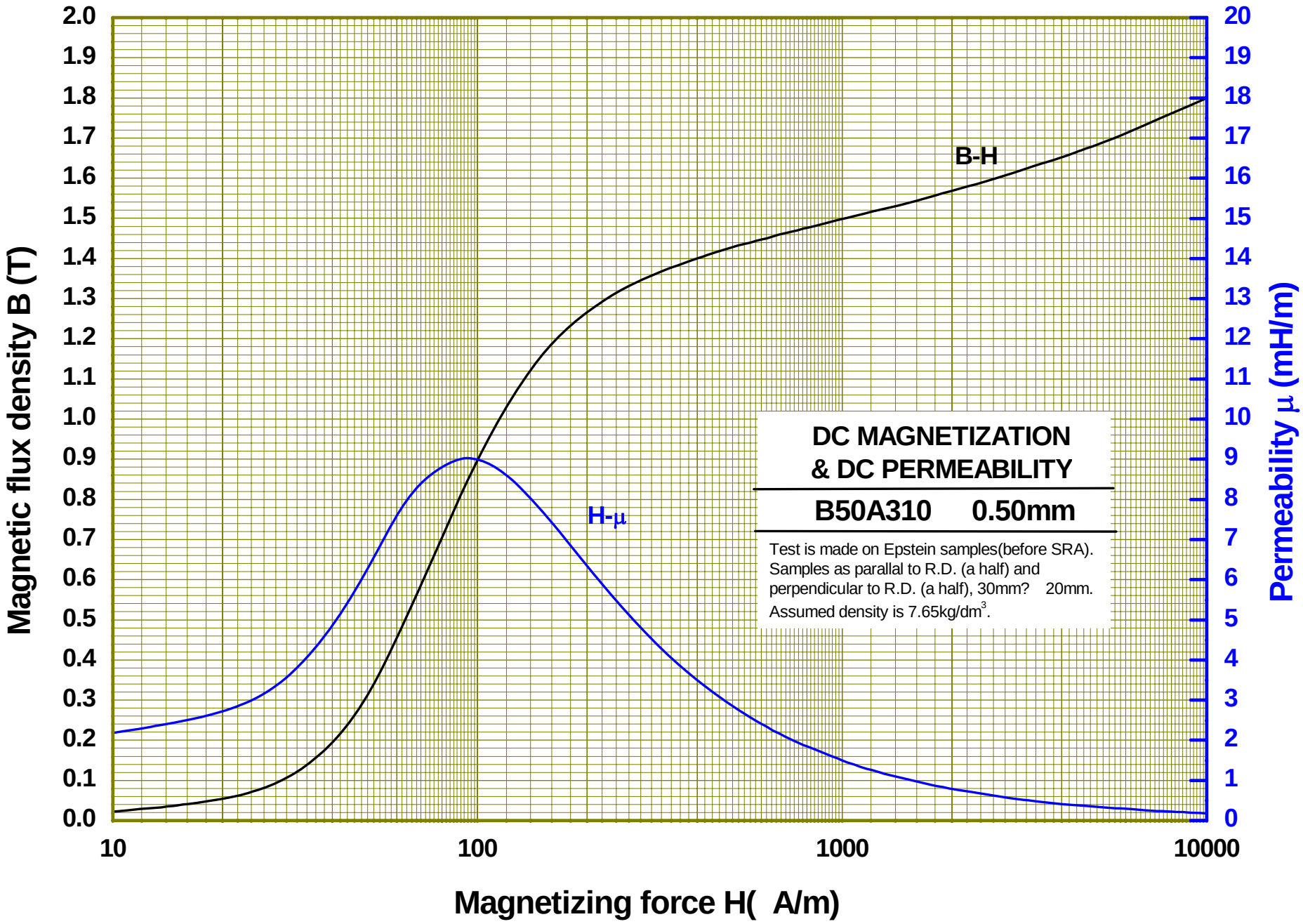
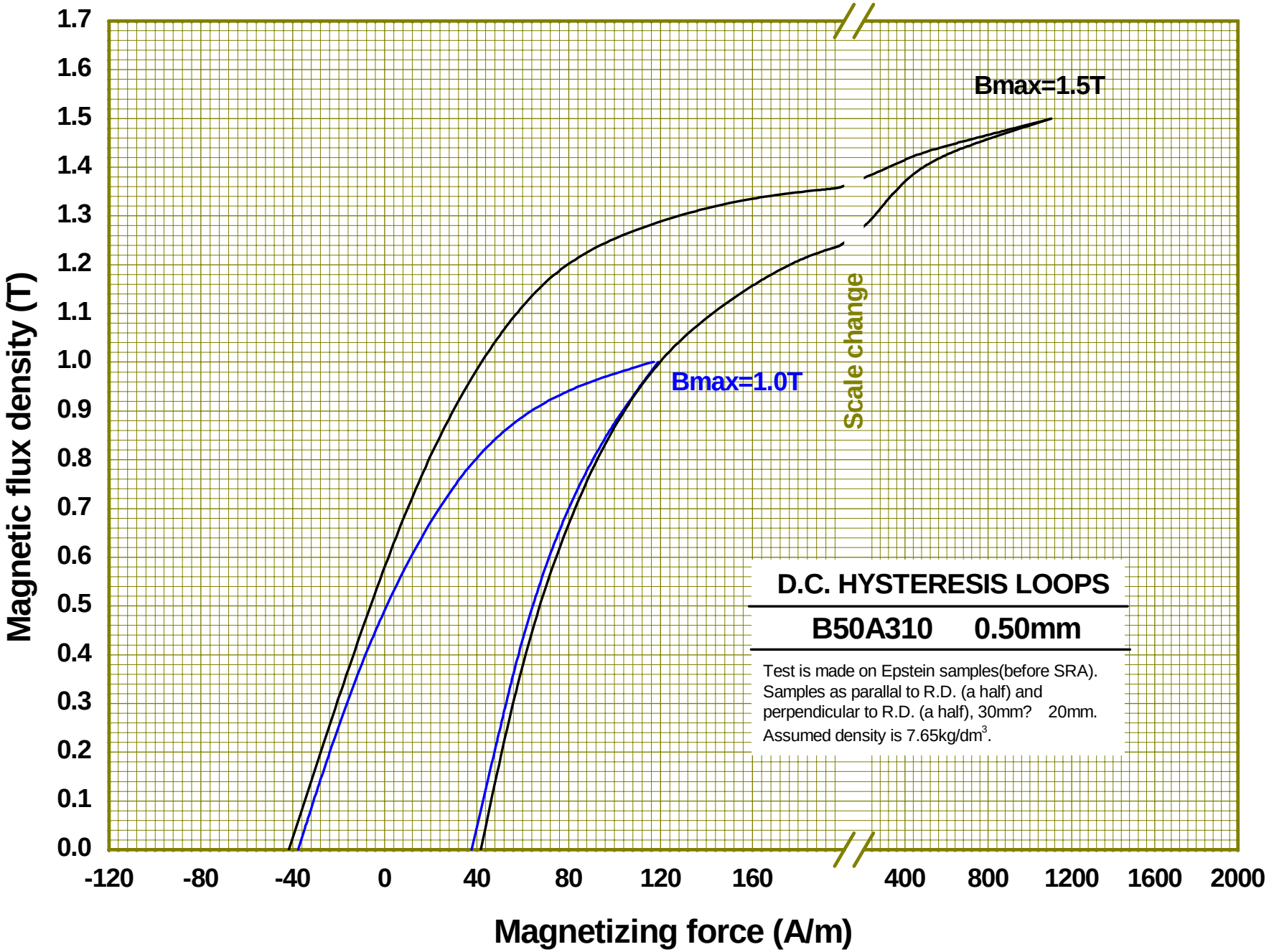
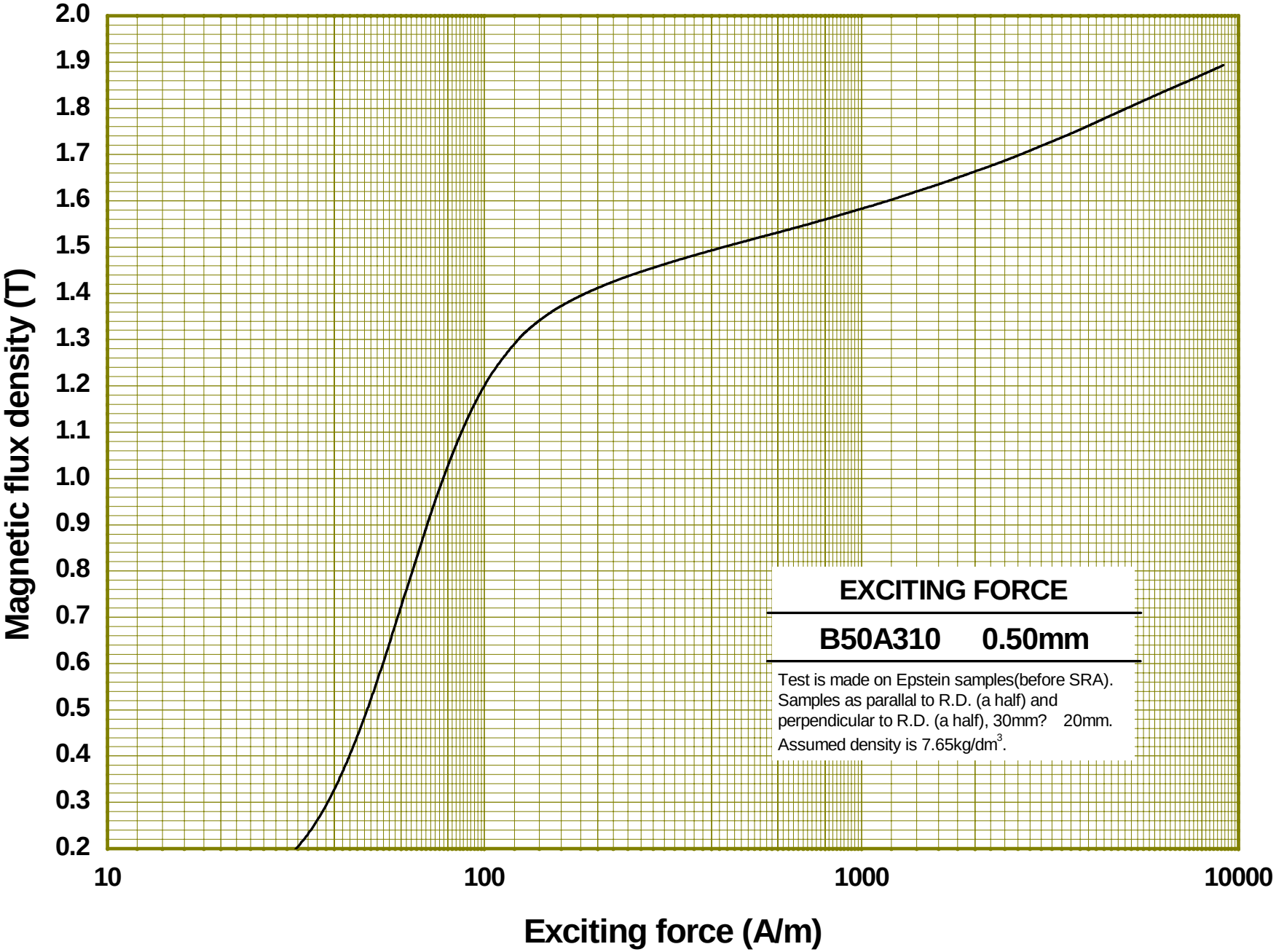
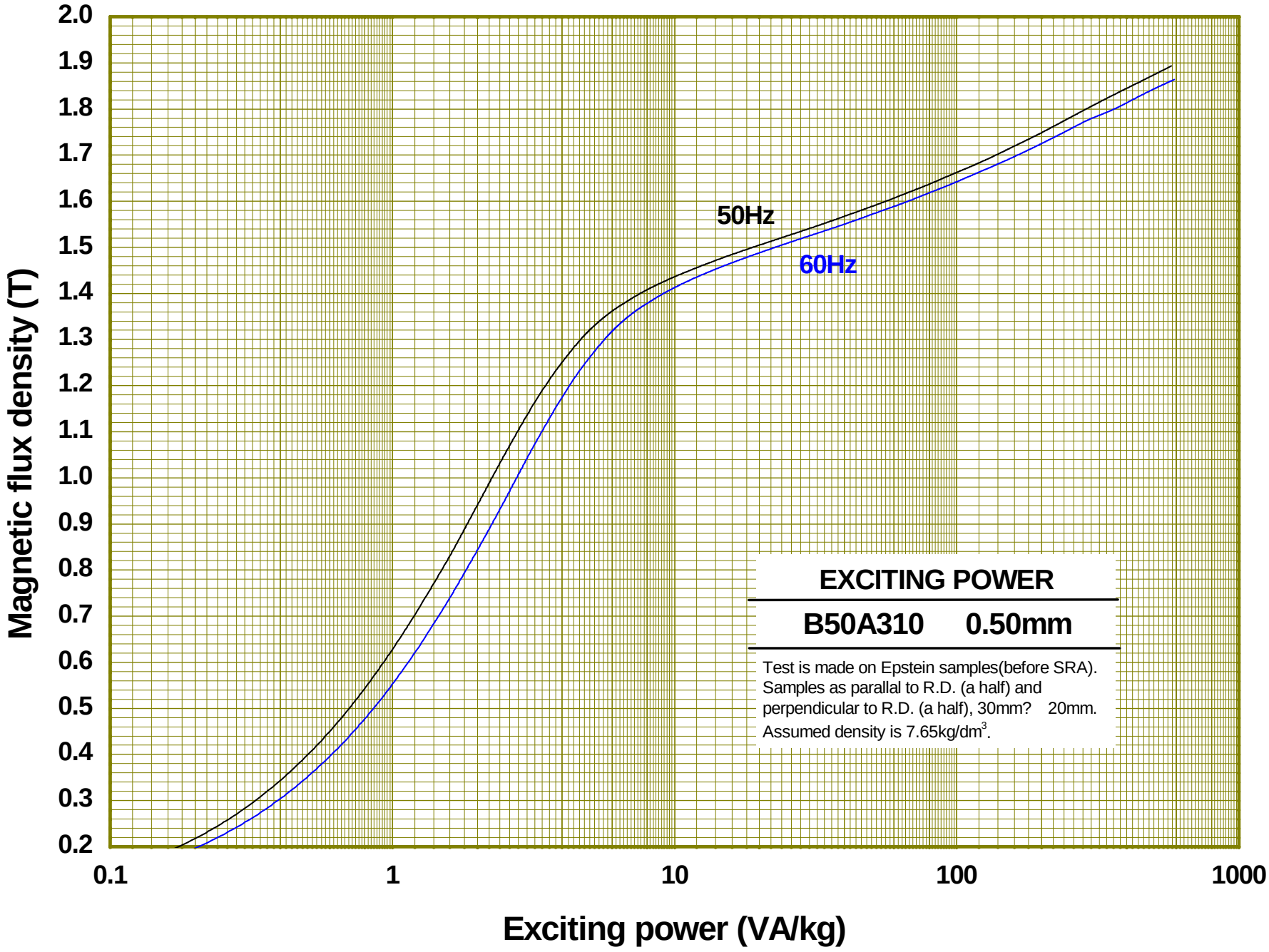
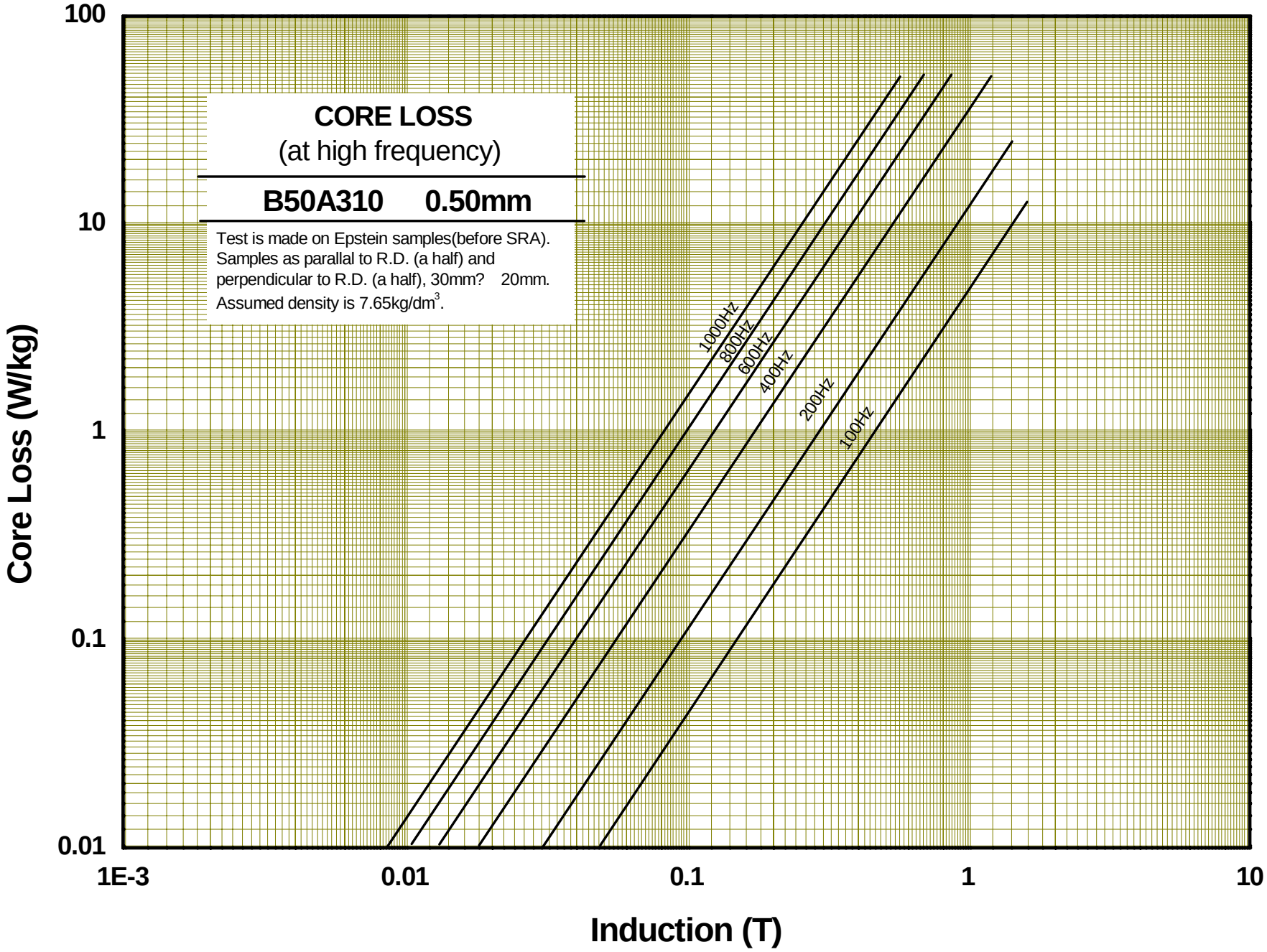

Magnetic flux density (T)
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.01
0.1
1
10
100
Core loss (W/kg)
50Hz
60Hz
CORE LOSS
B50A310 0.50mm
Test is made on Epstein samples(before SRA).
Samples as parallal to R.D. (a half) and
perpendicular to R.D. (a half), 30mm? 20mm.
Assumed density is 7.65kg/dm3.


DC MAGNETIZATION
& DC PERMEABILITY
B50A310 0.50mm
Test is made on Epstein samples(before SRA).
Samples as parallal to R.D. (a half) and
perpendicular to R.D. (a half), 30mm? 20mm.
Assumed density is 7.65kg/dm3.
B-H
H-μ
Magnetic flux density B (T)
Permeability μ (mH/m)
Magnetizing force H( A/m)
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
10
100
1000
10000


Magnetic flux density (T)
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-120
-80
-40
0
40
80
120
160
400
800
1200
1600
2000
Magnetizing force (A/m)
Bmax=1.5T
Bmax=1.0T
Scale change
D.C. HYSTERESIS LOOPS
B50A310 0.50mm
Test is made on Epstein samples(before SRA).
Samples as parallal to R.D. (a half) and
perpendicular to R.D. (a half), 30mm? 20mm.
Assumed density is 7.65kg/dm3.


2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
Magnetic flux density (T)
10
100
1000
10000
Exciting force (A/m)
EXCITING FORCE
B50A310 0.50mm
Test is made on Epstein samples(before SRA).
Samples as parallal to R.D. (a half) and
perpendicular to R.D. (a half), 30mm? 20mm.
Assumed density is 7.65kg/dm3.


2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
Magnetic flux density (T)
0.1
1
10
100
1000
Exciting power (VA/kg)
50Hz
60Hz
EXCITING POWER
B50A310 0.50mm
Test is made on Epstein samples(before SRA).
Samples as parallal to R.D. (a half) and
perpendicular to R.D. (a half), 30mm? 20mm.
Assumed density is 7.65kg/dm3.


CORE LOSS
(at high frequency)
B50A310 0.50mm
Test is made on Epstein samples(before SRA).
Samples as parallal to R.D. (a half) and
perpendicular to R.D. (a half), 30mm? 20mm.
Assumed density is 7.65kg/dm3.
1000Hz
800Hz
600Hz
400Hz
200Hz
100Hz
100
10
1
0.1
0.01
1E-3
0.01
0.1
1
10
Core Loss (W/kg)
Induction (T)