

Measuring instrument: CIM-3.

Type of measurement: H field at an HF transmitting site.

Frequency = 12.20 MHz; transmitter power \approx 15 kW.

Measurement Location	Field Intensity	
	mW/cm ²	A/m
I. Inside the transmitter building, ground floor:		
(a) Surface of probe sensor 2.5 cm from neutralizing capacitor above the transmitter cabinet	50	1.15
(b) Behind transmitter cabinet, near hot spot of standing wave on RG-17A/U coaxial cable:		
(1) Sensor touching side of coaxial cable	100	1.63
(2) 14 cm from side of cable	10	0.52
(3) 33 cm from side of cable	1	0.16
(4) 90 cm from side of cable	0.1	0.05
(c) Touching side of coaxial cable near the antenna patch panel	1	0.16
II. Feeder room in attic of transmitter building:		
(a) Touching hot spot on coaxial line, between floor and roof of attic, near head height	20	0.73
(b) 1 m below open-wire line for antenna 25 L, near head height	10	0.52
(c) Floor of attic, average field value	1	0.16
III. Outside of transmitter building, toward antenna number 2:		
(a) Touching coaxial cable on wooden pole at input to rhombic antenna, near the antenna matching transformer	2	0.23
(b) Directly beneath open-wire line at point where the line is about 4.5 m above ground:		
(1) 2.4 m above ground level	0.2	0.07
(2) head height	< 0.05	< 0.04
(c) Touching guy wire on final transmission line pole before rhombic antenna input, at head height	5	0.36
(d) Point B of antenna number 2, 15 cm above grounded end of terminating line	10	0.52
(e) Touching guy line of adjacent rhombic antenna pole, 1 m above ground	25	0.81
(f) Midway between points C & D of antenna 2:		
(1) 2.5 m above ground	0.1	0.05
(2) head height	0.05	0.04
(g) Point D of antenna 2, touching bottom end of counterweight cable, 1.8 m above ground	5	0.36
(h) Point E, near bottom of vertical line at terminating end of rhombic antenna, which is about 1 m above ground:		
(1) 15 cm horizontally from line	50	1.15
(2) 30 cm horizontally from line	10	0.52
(3) 1 m horizontally from line	1	0.16
(4) 2 m horizontally from line	0.1	0.05

Figure 7-10. Magnetic field intensity near the transmitter, transmission line and antenna number 2, Long Island.