

GENERAL INFORMATION REQUIREMENTS

Paragraph 2.983(a)

Name of Applicant: Symbol Technologies, Inc.

Address of Applicant: 1 Symbol Plaza
Holtsville, NY 11742

Name of Manufacturer: Symbol Technologies, Inc

Address of Manufacturer: 1101 Lakeland Ave
Bohemia, NY

Paragraph 2.983(b)

Equipment
Identification: **FCC ID: H9PPDT7532**

NOTE: This is a change in identification of presently authorized equipment. This device is presently authorized under FCC ID: N7NOEM2

Only those in which the original test results could differ are reported herein, Namely:

2.1046 RF Power Output (ERP method)

2.1053 Field Strength of Spurious Radiation

In addition SAR measurements were taken in order to comply with the RF safety requirements. Please refer to SAR.pdf for a full description of SAR testing and results.

Paragraph 2.1046

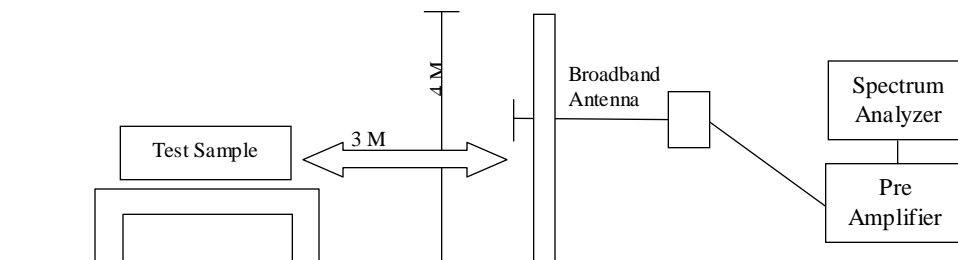
Power Output, Effective Radiated Power

POWER OUTPUT, EFFECTIVE RADIATED POWER (Para. 2.1046)

A. Measurement Procedure:

The transmitter under test was placed on an 80-cm. high non-metallic table on the Open Air Test Site with its antenna polarized vertically. A receive dipole antenna was placed three meters away from the transmitter. The turntable was rotated 360 degrees and the receive antenna was raised and lowered from 1 to 4 meters until a maximum reading was obtained. This reading was recorded. The transmitter under test was replaced with a dipole and signal generator. The signal generator was set to the frequency of the transmitter under test. The level of the signal generator was increased until the level was equal to that previously measured. The required input level from the signal generator in dBm was recorded and converted into milliwatts. This was the Effective Radiated Power of the transmitter. These measurements were recorded for the vertical and horizontal polarizations of the antenna.

Setup of the test is shown below:



B. Test Results:

The results for the above test are submitted as a separate attachment named ERP.pdf.

Para. 2.1053

Field Strength of Spurious Radiation

FIELD STRENGTH OF SPURIOUS RADIATION (PARA 2.1053)

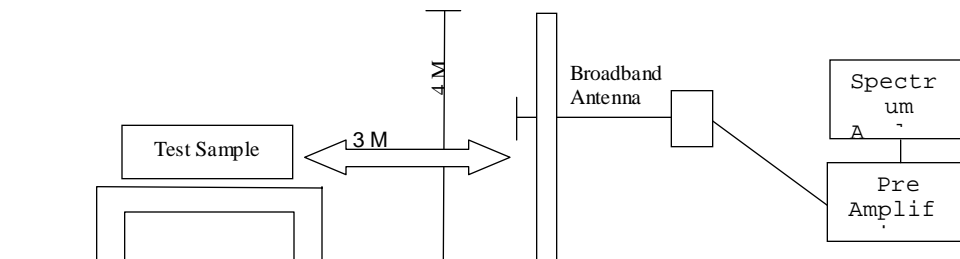
A. Measurement Procedure:

The test sample was then placed on an 80cm high wooden test stand which was located three meters from the test antenna on an FCC listed test site. The frequency range scanned was from the lowest frequency generated by the test sample to its tenth harmonic. In order to maximize the level of each emission observed from the test sample, the broadband antenna was tuned to the frequency of each emission and the test sample was rotated 360 degrees. To further maximize the each emission observed, the test antenna was both horizontally and vertically polarized, and then was raised and lowered from one to four meters from the ground plane. The limits for all of the spurious emissions was calculated utilizing the measured output power and the following equation:

$$\text{Limit } \langle \text{dB:V/M} \rangle = 20 \log \left[\left\{ (49.2 \times P_T)^{1/2} / 3 \right\} \times 10^6 \right] - (43 + 10 \log P_T)$$

The above procedure was performed at the lower, middle and upper frequencies of the device's range.

Setup of the test is shown below:



B. Test Results:

The results for the above test are submitted as a separate attachment named Spurious RE.pdf.

EQUIPMENT LIST

EFFECTIVE RADIATED POWER (ERP)

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
067	Open Area Test Site	Retlif	3 Meter	RNY	10/15/1997	10/15/2000
141	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	3/20/2000	9/20/2000
141A	Graphics Plotter	Hewlett Packard	N/A	7470A	3/8/2000	3/8/2001
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	3/20/2000	9/20/2000
3002	Tuned Dipole Antenna	Empire Devices	400 MHz - 1 GHz	T3	8/1/1997	8/1/2000
541	4 Watt BBand Amp.	ENI	500 kHz - 1.0 GHz	604L-01	7/7/1999	7/7/2000
574	Signal Generator	Marconi Instru.	9 kHz - 2.4 GHz	2024	5/1/2000	5/1/2001

EQUIPMENT LIST

Radiated Emissions Spurious, 30MHz-8.5GHz

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
032A	L.P. Filter	Microlab/FXR	160 MHz - 400 MHz	LA-04N	2/29/2000	2/28/2001
032B	L.P. Filter	Microlab/FXR	280 MHz - 700 MHz	LA-07N	2/29/2000	2/28/2001
032E	H.P. Filter	Microlab/FXR	1.5 GHz - 3 GHz	HD-15N	2/29/2000	2/28/2001
032F	H.P. Filter	Microlab/FXR	2 GHz - 3 GHz	HD-20N	7/15/1999	7/15/2000
032G	H.P. Filter	Microlab/FXR	3 GHz - 6 GHz	HA-30N	5/2/2000	5/2/2001
032H	H.P. Filter	Microlab/FXR	4 GHz - 8 GHz	HD-40N	6/21/2000	4/15/2001
067	Open Area Test Site	Retlif	3 Meter	RNY	10/15/1997	10/15/2000
128C	Double Ridge Guide	Eaton Corporation	1 GHz - 18 GHz	96001	9/16/1999	9/16/2000
133	Broadband Pre-Amplifier	Electro-Metrics	10 kHz - 1 GHz, 26dB	BPA-1000	6/13/2000	6/13/2001
141	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	3/20/2000	9/20/2000
141A	Graphics Plotter	Hewlett Packard	N/A	7470A	3/8/2000	3/8/2001
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	3/20/2000	9/20/2000
206B	6.0 dB Attenuator	Texscan	0 - 1.0 GHz	FP-50 - 6 dB	6/13/2000	6/13/2001
418	L.P. Filter	Mini-Circuits	300 MHz	NLP-300	2/29/2000	2/28/2001
523	Biconilog	Electro-Mechanics	26 - 2000 MHz	3142B	6/8/2000	6/8/2001
543	Preamplifier	Hewlett Packard	1.0 GHz - 26.5 GHz	8449B	6/16/1999	6/16/2001
722	L.P. Filter	Mini-Circuits	550 MHz	NLP-550	6/15/2000	6/15/2001
723	H.P. Filter	Mini-Circuits	1000 MHz	BHP-1000	6/15/2000	6/15/2001