

## 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: H9PPDT7530**

**NOTE: This is a change in identification of presently authorized equipment. This device is presently authorized under FCC ID:MKMPW1100-1.**

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

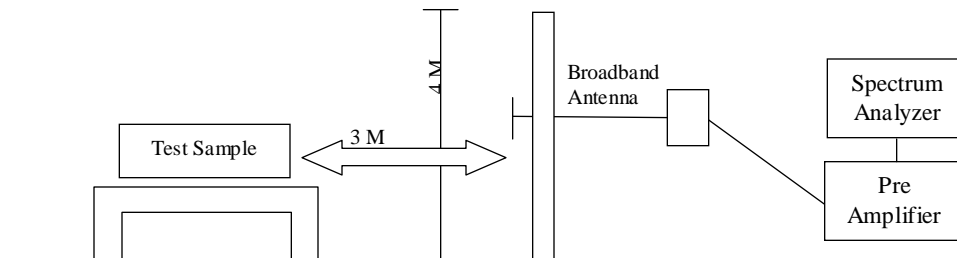
Power Output, Effective Radiated Power

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)

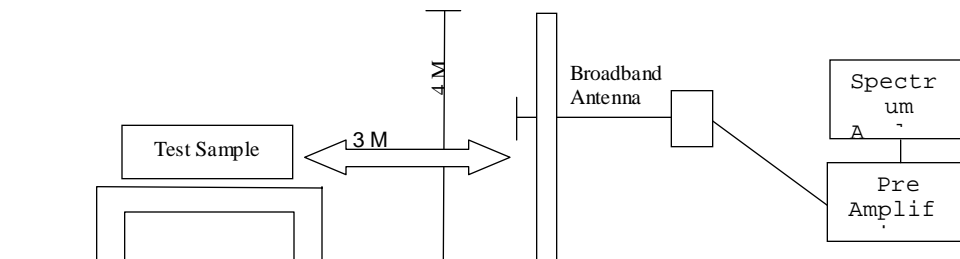
### A. Measurement Procedure:

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 LISTS

### 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	03/20/2000	09/20/2000
141A	Graphics Plotter	Hewlett Packard	N/A	7470A	03/08/2000	03/08/2001
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	03/20/2000	09/20/2000
3002	Tuned Dipole Antenna	Empire Devices	400 MHz - 1 GHz	T3	08/01/1997	08/01/2000
332	Attenuator	Narda	DC - 11 GHz	768-10	07/07/1999	07/07/2000
333	Attenuator	Narda	DC - 11 GHz	768-10	06/22/1999	06/22/2000
479	20 dB Attenuator	Weinschel	25 W IN, 5 kW Peak	33-20-34	05/01/2000	05/01/2001
523	Biconilog	Electro-Mechanics	26 - 2000 MHz	3142B	06/08/2000	06/08/2001
541	4 Watt BBand Amp.	ENI	500 kHz - 1.0 GHz	604L-01	07/07/1999	07/07/2000
574	Signal Generator	Marconi Instru.	9 kHz - 2.4 GHz	2024	05/01/2000	05/01/2001

### Radiated Emissions, Spurious, 30MHz-8.25GHz

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
032E	H.P. Filter	Microlab/FXR	1.5 GHz - 3 GHz	HD-15N	02/29/2000	02/28/2001
032F	H.P. Filter	Microlab/FXR	2 GHz - 3 GHz	HD-20N	07/15/1999	07/15/2000
032G	H.P. Filter	Microlab/FXR	3 GHz - 6 GHz	HA-30N	05/02/2000	05/02/2001
032H	H.P. Filter	Microlab/FXR	4 GHz - 8 GHz	HD-40N	06/22/1999	06/22/2000
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	09/16/1999	09/16/2000
133	Broadband Pre-Amplifier	Electro-Metrics	10 kHz - 1 GHz, 26dB	BPA-1000	06/13/2000	06/13/2001
141	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	03/20/2000	09/20/2000
141A	Graphics Plotter	Hewlett Packard	N/A	7470A	03/08/2000	03/08/2001
141B	Quasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	03/20/2000	09/20/2000
206B	6.0 dB Attenuator	Texscan	0 - 1.0 GHz	FP-50 - 6 dB	06/13/2000	06/13/2001
523	Biconilog	Electro-Mechanics	26 - 2000 MHz	3142B	06/08/2000	06/08/2001
543	Preamplifier	Hewlett Packard	1.0 GHz - 26.5 GHz	8449B	06/16/1999	06/16/2001