

<u>APPLICANT</u>	<u>MANUFACTURER</u>
Symbol Technologies Inc One Symbol Plaza Holtsville, NY 11742	Same as Applicant

TEST SPECIFICATION: FCC Rules and Regulations Part 15, Subpart C

TEST PROCEDURE: ANSI C63.4:1992

TEST SAMPLE DESCRIPTION

BRANDNAME: Symbol

MODEL: PL470

FCC ID: H9PPL470

TYPE: 2.4 GHz Pulsed Transmitter

FREQUENCY RANGE: 2400 to 2483.5 MHz

POWER REQUIREMENTS: 9 VDC derived from Symbol Model GS-54 AC Adapter

TESTS PERFORMED

- 15.249(a) Radiated Emissions, Fundamental and Harmonics



## REPORT OF MEASUREMENTS

Applicant: Symbol Technologies, Inc.  
Device: 2.4 GHz Pulsed Transmitter  
FCC ID: H9PPL470  
Power Requirements: 9 VDC derived from Symbol Model GS-54 AC Adapter  
Applicable Rule Section: Part 15, Subpart C, Section 15.249

**Note: This Permissive Change testing was performed with a new, more cost effective antenna with the same gain characteristics as original FCC filing.**

## TEST RESULTS

- 15.203: The intentional radiator is designed to ensure that no antenna other than that furnished by the applicant can be used with the device.
- 15.249(a): The unit operates in the 2400-2483.5 MHz band. The field strength of the fundamental did not exceed 50mV/M AVERAGE. The field strength of the harmonics did not exceed 500 $\mu$ V/M AVERAGE.
- 15.249(c): Emissions radiated outside the specified frequency band were attenuated in accordance with the general radiated emissions limits of 15.209.

## GENERAL NOTES

1. All user accessible controls were adjusted to produce maximum emissions.
2. The device utilize a pulsed emission which has a worst case duty cycle of 30%. All readings above 1000 MHz were taken using a peak detector, were found to comply with the average limits.
3. The frequency range was scanned from 30 MHz to 24.82 GHz. All emissions not reported were more than 20dB below the specified limit.



EXHIBIT 4

Radiated Emissions, Fundamental & Harmonics

Para. 15.249(a)

(Please see separate e-file attachments named FundHarmLow.doc,  
FundHarmMid.doc and FundHarmHigh.doc)

## EQUIPMENT LIST

### FCC 15.249(b) Radiated Emissions, 2.4GHz to 24GHz

EN	Type	Manufacturer	Description.	Model No.	Cal Date	Due Date
061	High Gain Horn Antenna	Microlab/FXR	1 GHz - 1.7 GHz	L638A	01/25/2000	01/25/2001
062	High Gain Horn Antenna	Microlab/FXR	1.7 GHz - 2.6 GHz	R638A	01/25/2000	01/25/2001
063	High Gain Horn Antenna	Microlab/FXR	2.6 GHz-3.95 GHz	S638A	01/26/2000	01/26/2001
067	Open Area Test Site	Retlif	3 Meter	RNY	10/15/1997	10/15/2000
129D	High Gain Horn Antenna	Microlab/FXR	12.4 GHz - 18 GHz	Y638A	01/26/2000	01/26/2001
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
543	Preamplifier	Hewlett Packard	1.0 GHz - 26.5 GHz	8449B	06/16/1999	06/16/2001