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Kanagawa-ken 242-8502, Japan
July 23, 2004

To whom this may concern

TCB Requested Information

FCC ID : ANO20040600BTL
Applicant : International Business Machines Corporation
Correspondence Reference Number : 240720A.ANO
731 Confirmation Number : 4244
Original Requested Date : July 20, 2004

Subject 1) In the test report, the peak output power was determined by summing up the power across the 6 dB bandwidth of the emission. This is incorrect. According to the referenced test procedure, Appendix C of FCC R&O 97114, the peak output power may be measured in one of 2 ways: a spectrum analyzer in which the RBW is greater than the 6 dB BW of the emission, or, with a peak power meter. An alternative has been allowed- using the band power measurement function and summing up the power (as you did), but across the 26 dB bandwidth of the emission (similar to 15E UNII devices), and not the 6 dB bandwidth. Therefore, please remeasure the peak output power using one of the 3 methods described above, and submit the new results.

Answer 1) We re-measured the conducted transmission peak power with the third method of the above instruction. We performed the measurement for the worst cases of each transmission mode. The worst cases were chosen based on the original test report.
Please find the test results in the next page.

Sincerely, July 23, 2004

A handwritten signature in blue ink, reading "T. Murota". The signature is fluid and cursive, with the first name "T." and last name "Murota" clearly distinguishable.

Toshiya Murota,
Staff Engineer, EMC Engineering,
Yamato Laboratory, IBM Japan Ltd

Test Procedure

The spectrum analyzer was connected to the antenna terminal, while EUT was operating in continuous transmission mode at the appropriate center frequencies.

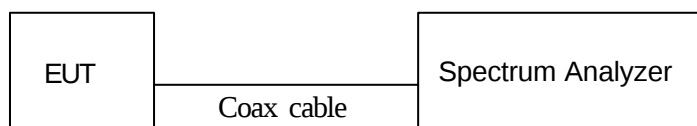
The spectrum analyzer was set to :

RBW=1MHz, VBW= RBW or more, Mode= Peak detection, Trigger= free run,
Span= 50MHz encompassing the entire 26dB emission bandwidth of the transmission signal,

The band power measurement function was used to measure the peak power for each transmission mode. The analyzer computed the peak power by integrating the spectrum across the 26 dB emission bandwidth.

Test instruments of spectrum analyzer method

Description	Model	Serial Number	Calibration Date
Spectrum Analyzer EMI Test Receiver	Rohde & Schwarz ESI26	836119/003	05/10/04
Coax cables: - Spectrum Analyzer <=> EUT	Length: 110 cm Loss: 2.4GHz 1.3 dB 5.8GHz 2.3 dB		



Measurement setup of spectrum analyzer method

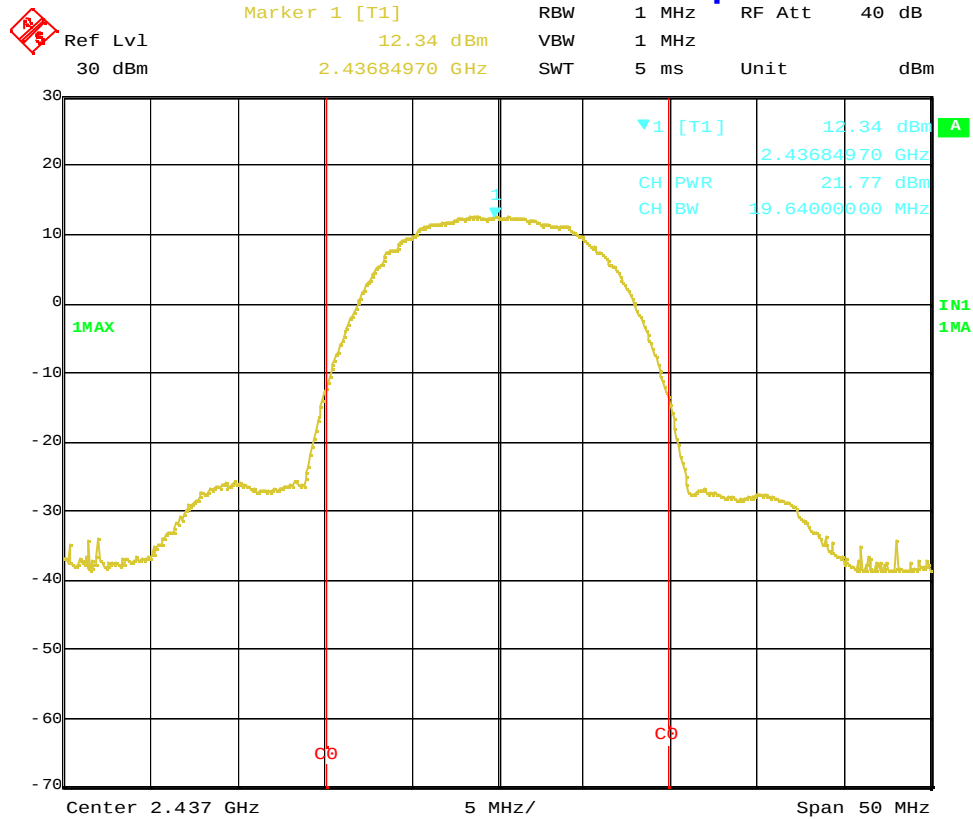
Measurement Results

Test Date: July 23, 2004

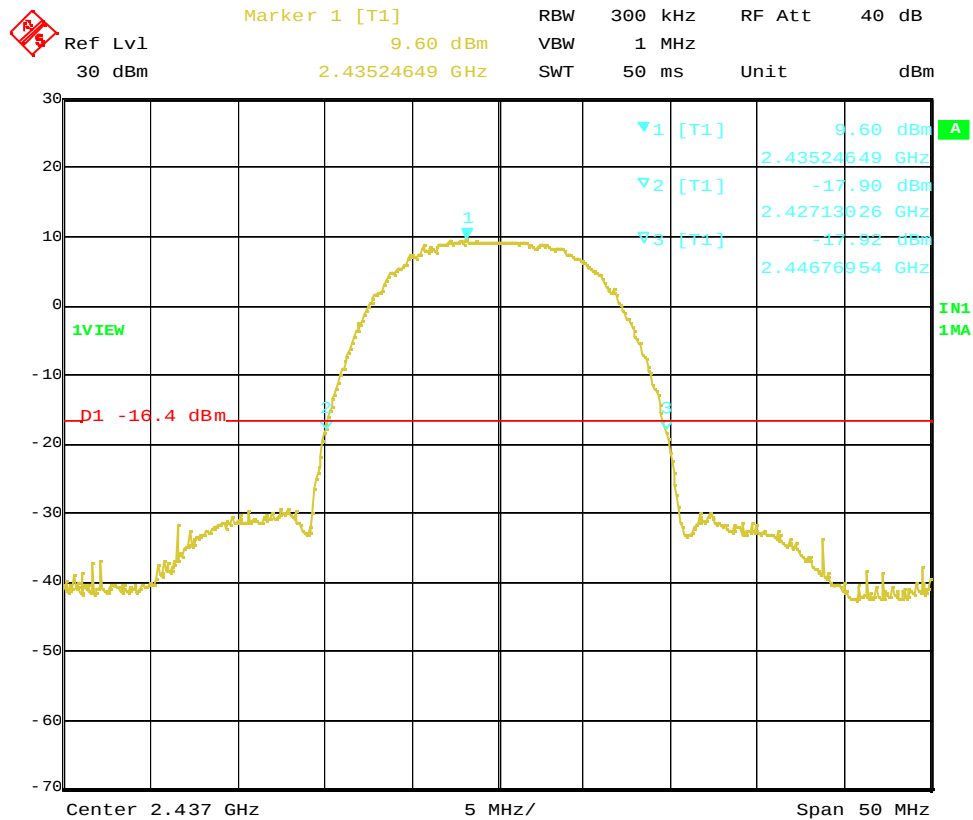
Conducted peak output power measurement results

Measured Frequency (MHz)	Tx mode (Mb/s)	Analyzer reading (dBm)	Trace number	Cable Loss (dB)	Results (dBm)	Limit		Margin to limit (dBm)
						FCC (dBm)	IC (dBm)	
2437 (DSSS)	11	21.77	Plot 3-1a	1.3	23.07 (202.8 mW)	30	30	6.93
2437 (OFDM)	6	23.42	Plot 3-2a	1.3	24.72 (296.5 mW)			5.28
5785 (OFDM)	6	22.53	Plot 3-3a	2.3	24.83 (304.1 mW)			5.17

Trace Data of Conducted Peak Output Power

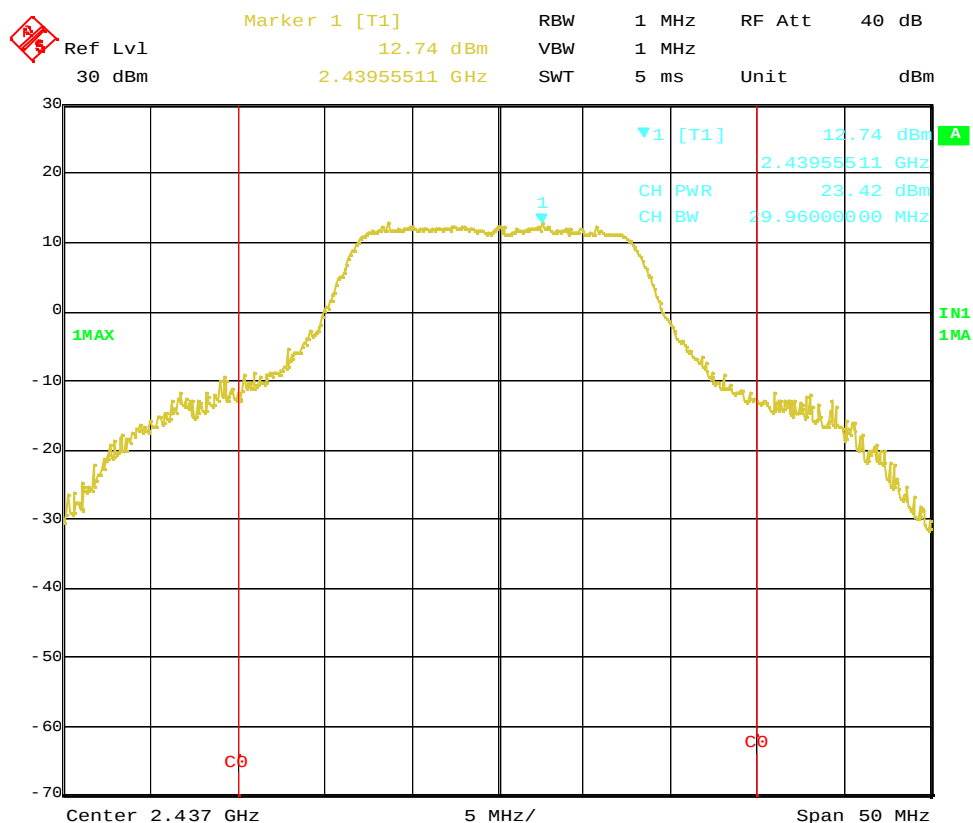


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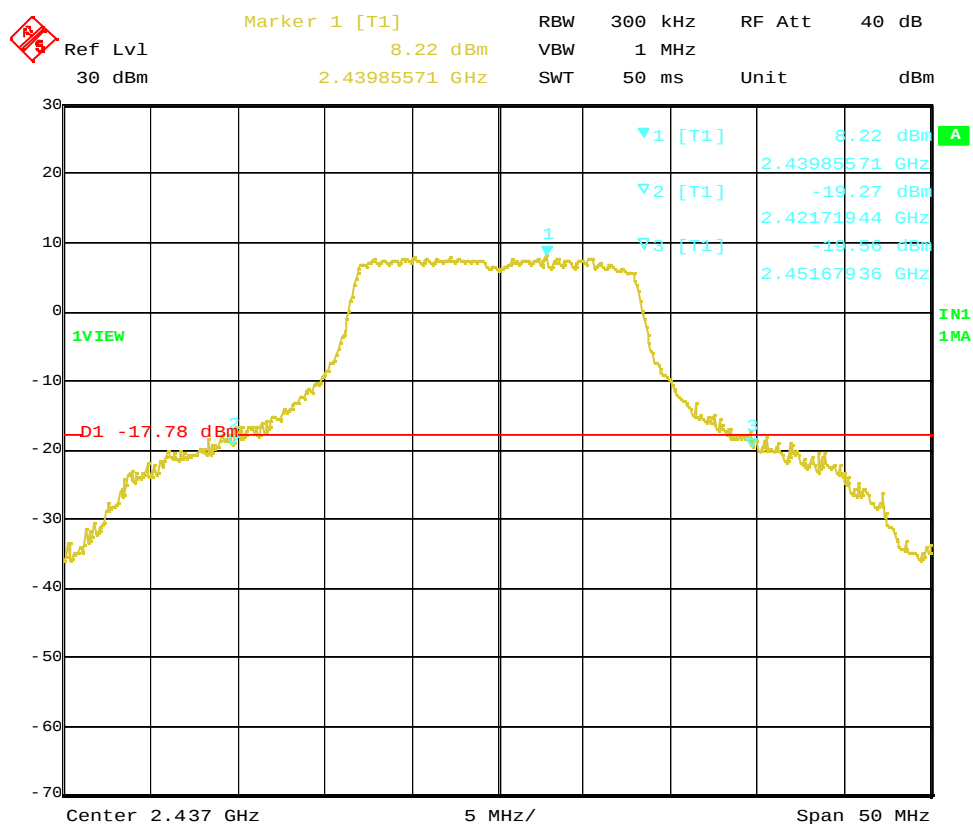
Plot 3-1a. Conducted Peak Output Power of 2437MHz (DSSS, 11Mbps)

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Plot 3-1b. 26dB Bandwidth of 2437MHz (DSSS, 11Mbps)

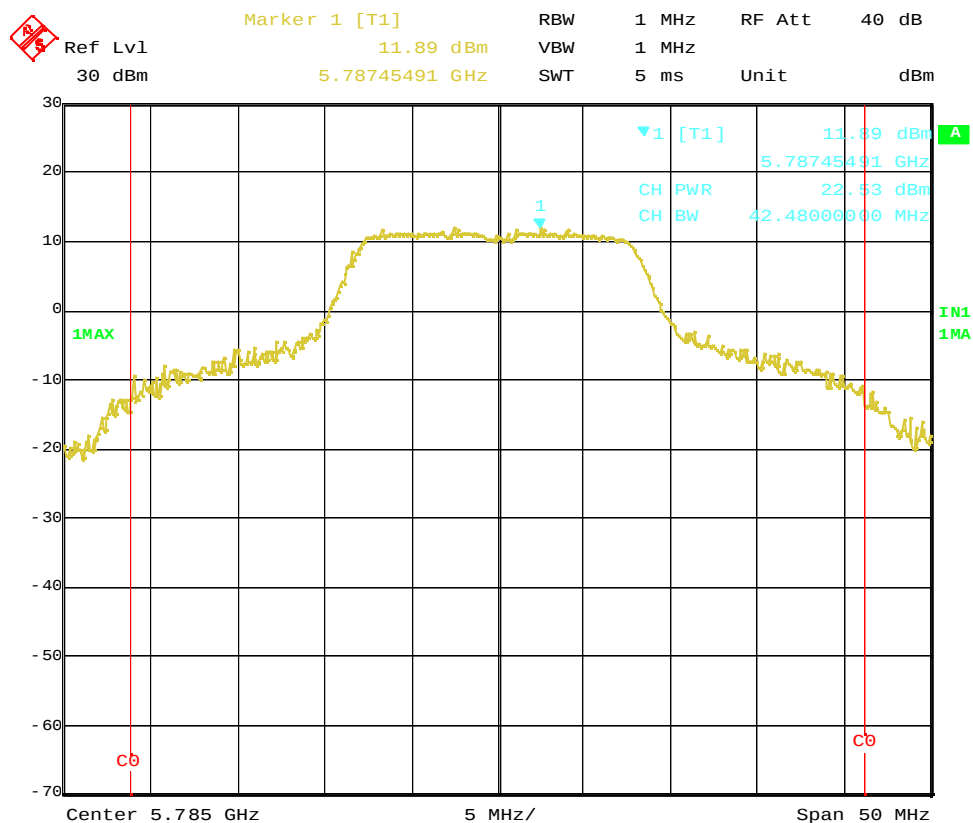


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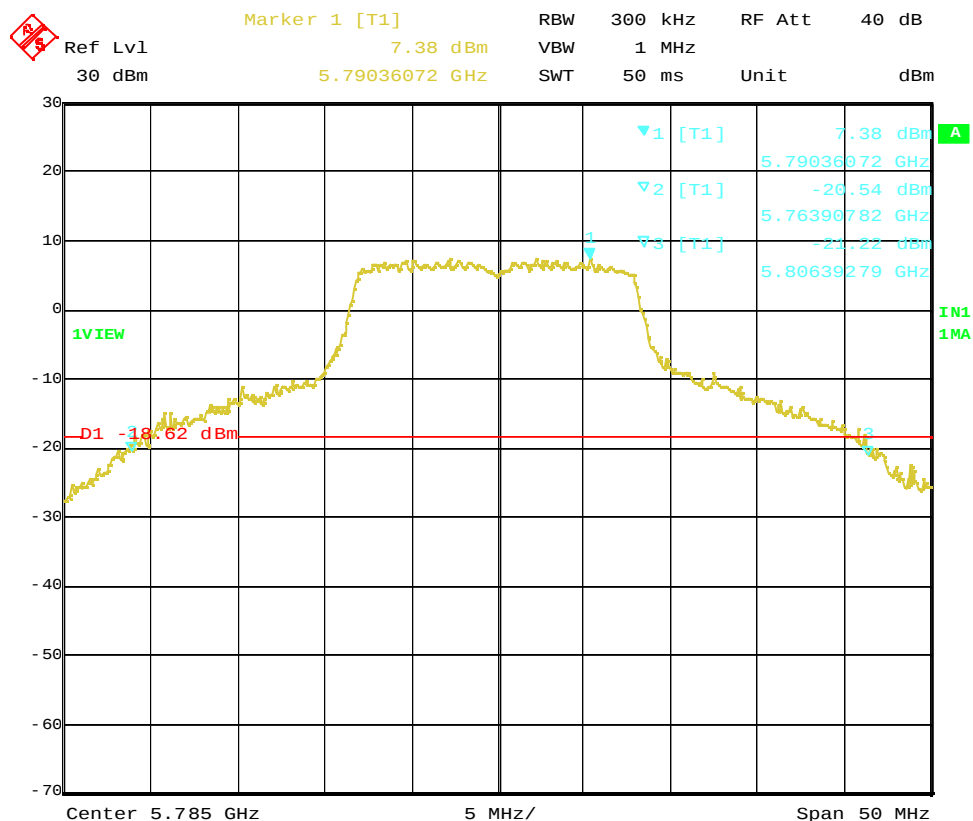
Plot 3-2a. Conducted Peak Output Power of 2437MHz (OFDM, 6Mbps)

Date: 23.JUL.2004 16:43:18

Plot 3-2b. 26dB Bandwidth of 2437MHz (OFDM, 6Mbps)



Date: 23.JUL.2004 16:50:45

Plot 3-3a. Conducted Peak Output Power of 5785MHz (OFDM, 6Mbps)

Date: 23.JUL.2004 16:47:13

Plot 3-3b. 26dB Bandwidth of 5785MHz (OFDM, 6Mbps)