

# GRAPHICAL SECTION PART 2 FOR RFI TEST REPORT SERIAL NO: RFI/MPTB2/RP43166A

Test Of: Red-M (Communications) Ltd. Smart Wireless Access Server

To: F.C.C. Part 15 Subpart C: 2000 (Intentional Radiators) Section 15.247 (Requested Parts Only)

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**EMC** Department

Test Of:Red-M (Communications) Ltd.<br/>Smart Wireless Access ServerTo:F.C.C. Part 15 Subpart C: 1998 (Intentional Radiators) Section 15.247<br/>(Requested Parts Only)

## **Graphical Test Results**

Graph Reference Number	Title
GPH\41366JD01\a001	Radiated Spurious Emissions, FCC Part 15.209, Receiver Mode (4 GHz to 5 GHz)
GPH\41366JD01\a002	Radiated Spurious Emissions, FCC Part 15.209, Hopping Mode (4 GHz to 5 GHz)
GPH\41366JD01\a003	Radiated Spurious Emissions, FCC Part 15.209, Bottom Channel (4 GHz to 5 GHz)
GPH\41366JD01\a004	Radiated Spurious Emissions, FCC Part 15.209, Middle Channel (4 GHz to 5 GHz)
GPH\41366JD01\a005	Radiated Spurious Emissions, FCC Part 15.209, Top Channel (4 GHz to 5 GHz)
GPH\41366JD01\a006	Radiated Spurious Emissions, FCC Part 15.209, Top Channel (5 GHz to 6 GHz)
GPH\41366JD01\a007	Radiated Spurious Emissions, FCC Part 15.209, Middle Channel (5 GHz to 6 GHz)
GPH\41366JD01\a008	Radiated Spurious Emissions, FCC Part 15.209, Bottom Channel (5 GHz to 6 GHz)
GPH\41366JD01\a009	Radiated Spurious Emissions, FCC Part 15.209, Hopping Mode (5 GHz to 6 GHz)
GPH\41366JD01\a010	Radiated Spurious Emissions, FCC Part 15.209, Receiver Mode (5 GHz to 6 GHz)
GPH\41366JD01\a011	Radiated Spurious Emissions, FCC Part 15.209, Receiver Mode (6 GHz to 8 GHz)
GPH\41366JD01\a012	Radiated Spurious Emissions, FCC Part 15.209, Hopping Mode (6 GHz to 8 GHz)

### RADIO FREQUENCY INVESTIGATION LTD.

**EMC** Department

Test Of:Red-M (Communications) Ltd.<br/>Smart Wireless Access ServerTo:F.C.C. Part 15 Subpart C: 1998 (Intentional Radiators) Section 15.247<br/>(Requested Parts Only)

## **Graphical Test Results (continued)**

Graph Reference Number	Title
GPH\41366JD01\a013	Radiated Spurious Emissions, FCC Part 15.209, Bottom Channel (6 GHz to 8 GHz)
GPH\41366JD01\a014	Radiated Spurious Emissions, FCC Part 15.209, Middle Channel (6 GHz to 8 GHz)
GPH\41366JD01\a016	Radiated Spurious Emissions, FCC Part 15.209, Top Channel (6 GHz to 8 GHz)
GPH\41366JD01\a017	Radiated Spurious Emissions, FCC Part 15.209, Top Channel (8 GHz to 12.5 GHz)
GPH\41366JD01\a018	Radiated Spurious Emissions, FCC Part 15.209, Middle Channel (8 GHz to 12.5 GHz)
GPH\41366JD01\a019	Radiated Spurious Emissions, FCC Part 15.209, Bottom Channel (8 GHz to 12.5 GHz)
GPH\41366JD01\a020	Radiated Spurious Emissions, FCC Part 15.209, Hopping Mode (8 GHz to 12.5 GHz)
GPH\41366JD01\a021	Radiated Spurious Emissions, FCC Part 15.209, Receiver Mode (8 GHz to 12.5 GHz)
GPH\41366JD01\a022	Radiated Spurious Emissions, FCC Part 15.209, Receiver Mode (12.5 GHz to 18 GHz)
GPH\41366JD01\a023	Radiated Spurious Emissions, FCC Part 15.209, Hopping Mode (12.5 GHz to 18 GHz)
GPH\41366JD01\a024	Radiated Spurious Emissions, FCC Part 15.209, Bottom Channel (12.5 GHz to 18 GHz)
GPH\41366JD01\a025	Radiated Spurious Emissions, FCC Part 15.209, Middle Channel (12.5 GHz to 18 GHz)
GPH\41366JD01\a026	Radiated Spurious Emissions, FCC Part 15.209, Top Channel (12.5 GHz to 18 GHz)
GPH\41366JD01\a027	Radiated Spurious Emissions, FCC Part 15.209, Top Channel (18 GHz to 26.5 GHz)
GPH\41366JD01\a028	Radiated Spurious Emissions, FCC Part 15.209, Middle Channel (18 GHz to 26.5 GHz)

### RADIO FREQUENCY INVESTIGATION LTD.

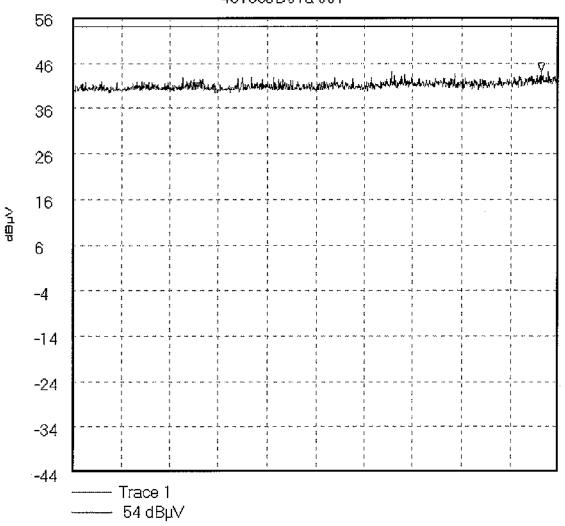
**EMC** Department

Test Of:	Red-M (Communications) Ltd.
	Smart Wireless Access Server
То:	F.C.C. Part 15 Subpart C: 1998 (Intentional Radiators) Section 15.247 (Requested Parts Only)

## Graphical Test Results (continued)

Graph Reference Number	Title
GPH\41366JD01\a029	Radiated Spurious Emissions, FCC Part 15.209, Bottom Channel (18 GHz to 26.5 GHz)
GPH\41366JD01\a030	Radiated Spurious Emissions, FCC Part 15.209, Hopping Mode (18 GHz to 26.5 GHz)
GPH\41366JD01\a031	Radiated Spurious Emissions, FCC Part 15.209, Receiver Mode (18 GHz to 26.5 GHz)

GPH\43166JD01a\001 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Receiver Mode) Spec: FCC Part 15.209

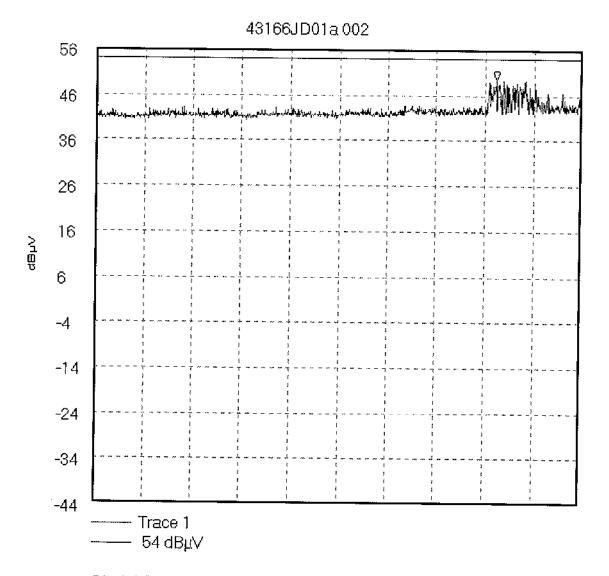


43166JD01a.001

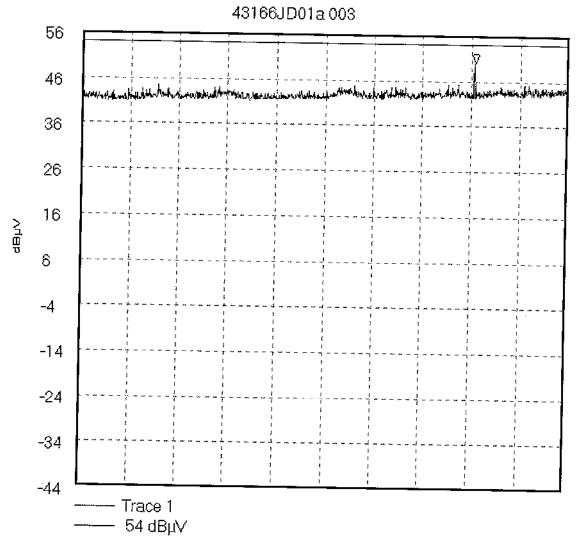
Start 4.0 GHz; Stop 5.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 4.963 GHz, 44.25 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 09:41:25

Radiated Spurious Emissions.

Tested For Red-M. EUT: Smart Wireless Access Server (Hopping Mode) Spec: FCC Part 15.209

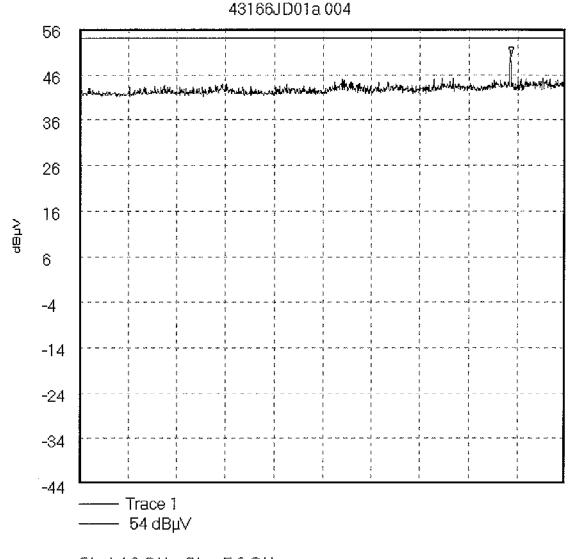


Start 4.0 GHz; Stop 5.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 4.823 GHz, 49.5 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 09:44:25 GPH\43166JD01a\003 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Bottom Channel) Spec: FCC Part 15.209

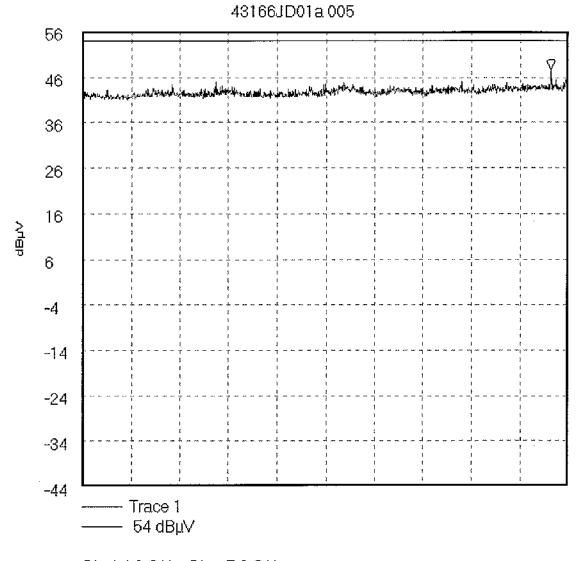


Start 4.0 GHz; Stop 5.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 4.808 GHz, 50.14 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 09:57:40

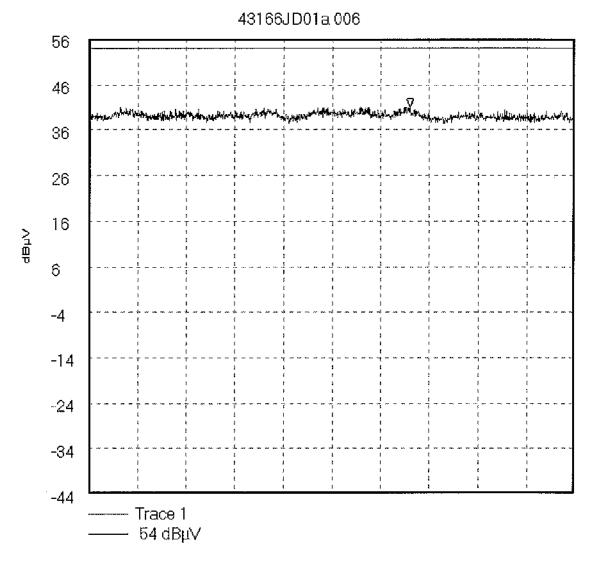
GPH\43166JD01a\004 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Middle Channel) Spec: FCC Part 15.209



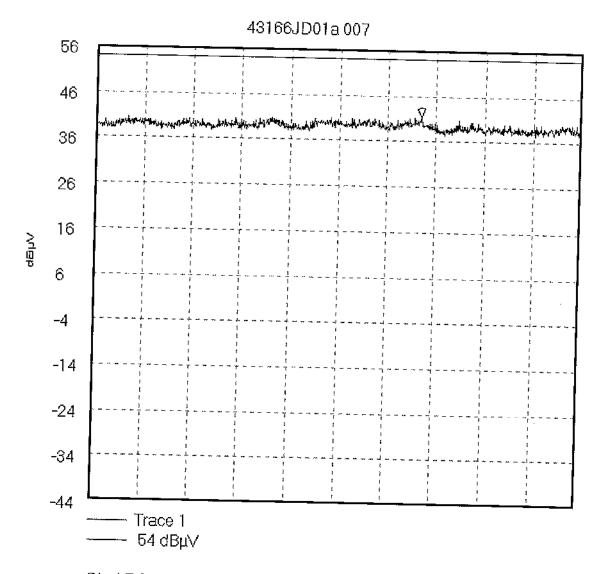
Start 4.0 GHz; Stop 5.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 4.886 GHz, 49.99 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 10:03:47 GPH\43166JD01a\005 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Top Channel) Spec: FCC Part 15.209



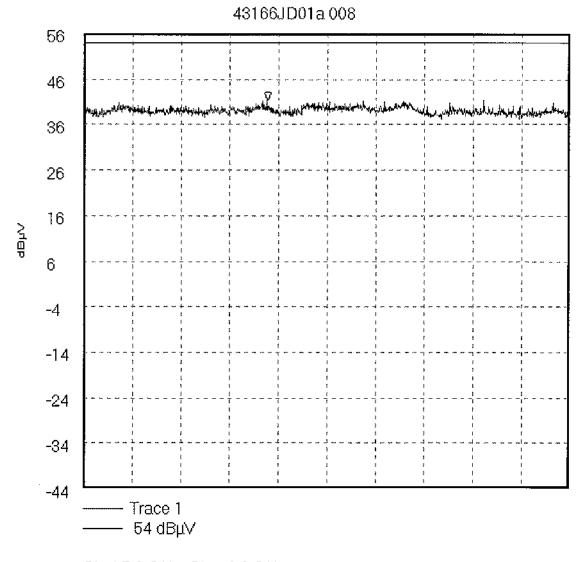
Start 4.0 GHz; Stop 5.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 4.964 GHz, 47.83 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:07:58 GPH\43166JD01a\006 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Top Channel) Spec: FCC Part 15.209



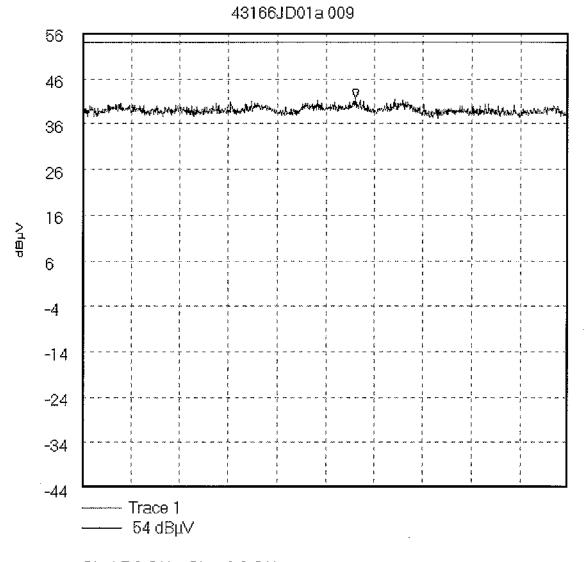
Start 5.0 GHz; Stop 6.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 5.66 GHz, 41.12 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:12:09 GPH\43166JD01a\007 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Middle Channel) Spec: FCC Part 15.209



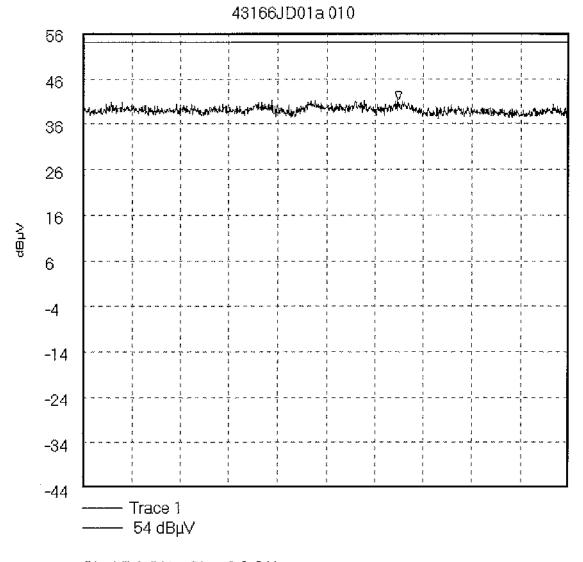
Start 5.0 GHz; Stop 6.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 5.671 GHz, 41.43 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:15:28 GPH\43166JD01a\008 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Bottom Channel) Spec: FCC Part 15.209



Start 5.0 GHz; Stop 6.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 5.377 GHz, 41.3 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:19:01 GPH\43166JD01a\009 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Hopping Mode) Spec: FCC Part 15.209



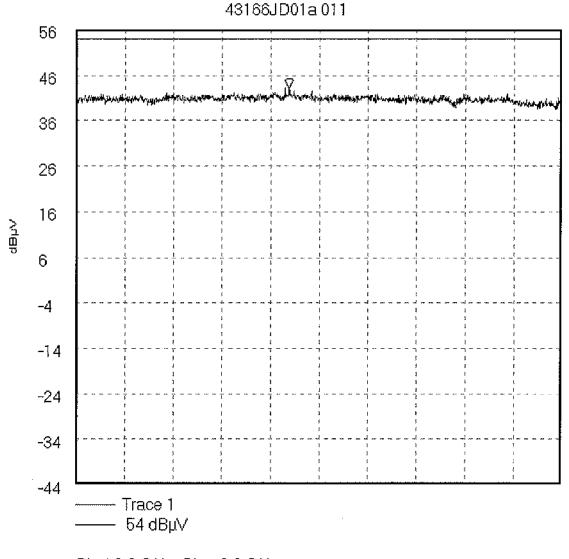
Start 5.0 GHz; Stop 6.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 5.561 GHz, 41.71 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 10:21:38 GPH\43166JD01a\010 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Receiver Mode) Spec: FCC Part 15.209



Start 5.0 GHz; Stop 6.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 5.647 GHz, 41.33 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 10:24:29

Radiated Spurious Emissions.

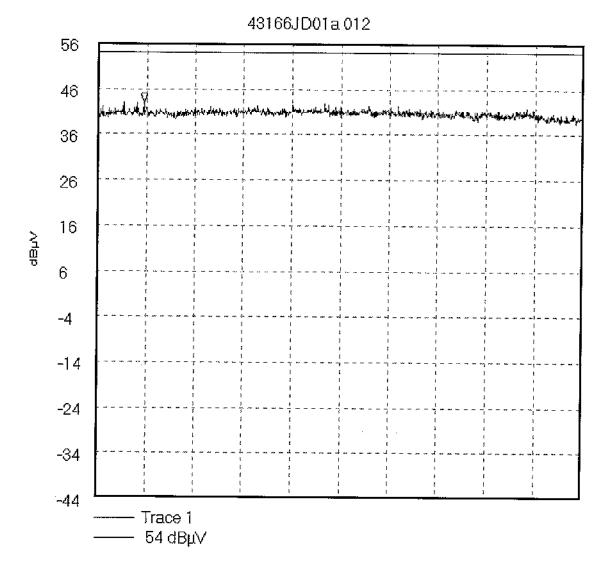
Tested For Red-M. EUT: Smart Wireless Access Server (Receiver Mode) Spec: FCC Part 15.209



Start 6.0 GHz; Stop 8.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 6.876 GHz, 43.38 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 10:28:44

Radiated Spurious Emissions.

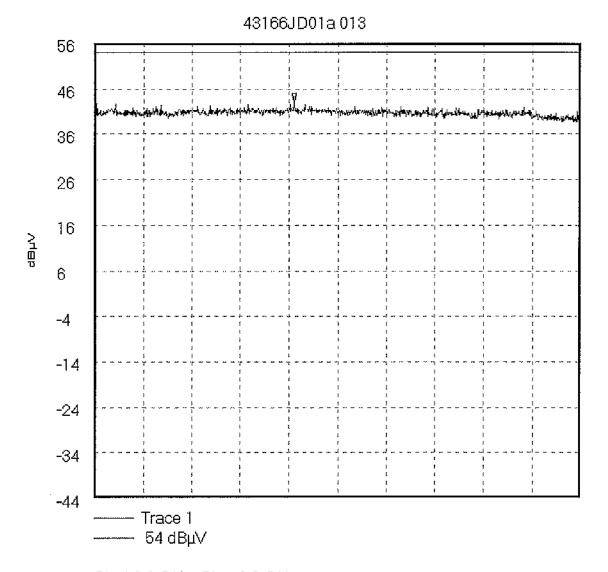
Tested For Red-M. EUT: Smart Wireless Access Server (Hopping Mode) Spec: FCC Part 15.209



Start 6.0 GHz; Stop 8.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 6.189 GHz, 43.08 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:30:52

Radiated Spurious Emissions.

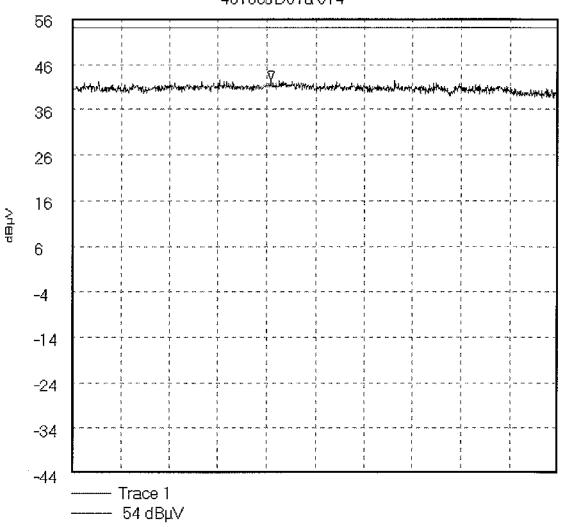
Tested For Red-M. EUT: Smart Wireless Access Server (Bottom Channel) Spec: FCC Part 15.209



Start 6.0 GHz; Stop 8.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 6.822 GHz, 42.98 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:33:16

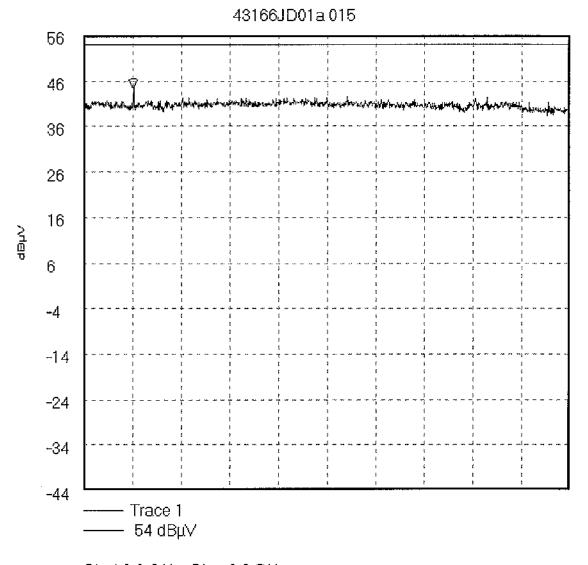
Radiated Spurious Emissions.

Tested For Red-M. EUT: Smart Wireless Access Server (Middle Channel) Spec: FCC Part 15.209

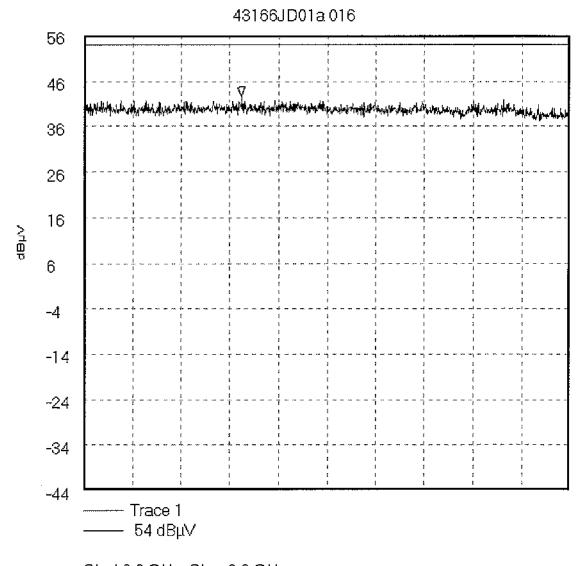


43166JD01a014

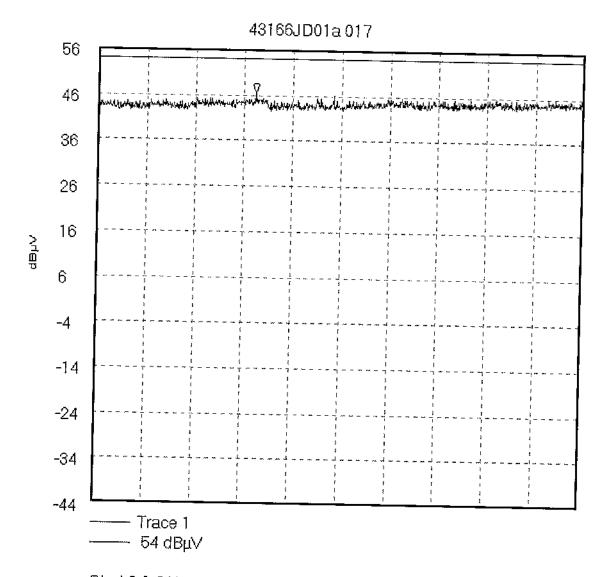
Start 6.0 GHz; Stop 8.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 6.816 GHz, 42.7 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 10:36:24 GPH\43166JD01a\015 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Middle Channel) Spec: FCC Part 15.209



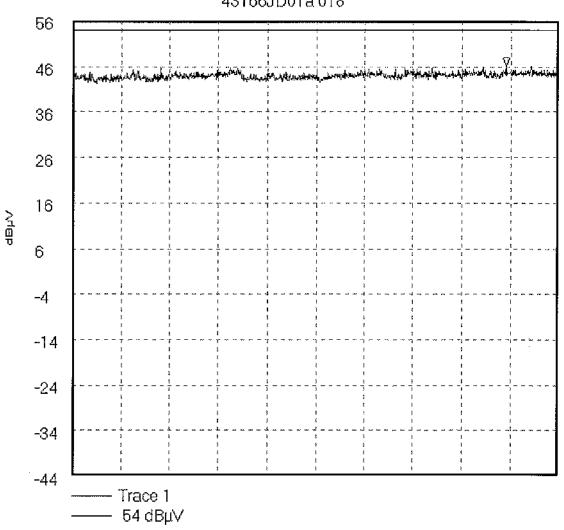
Start 6.0 GHz; Stop 8.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 6.204 GHz, 44.7 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:38:34 GPH\43166JD01a\016 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Top Channel) Spec: FCC Part 15.209



Start 6.0 GHz; Stop 8.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 20.0 mS Peak 6.649 GHz, 42.75 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 10:39:51 GPH\43166JD01a\017 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Top Channel) Spec: FCC Part 15.209

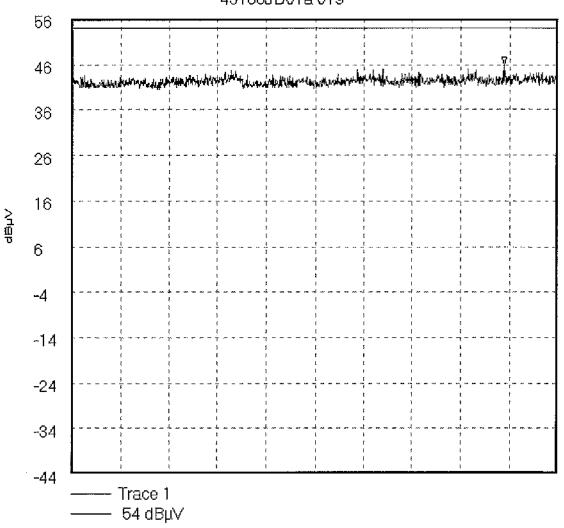


Start 8.0 GHz; Stop 12.5 GHz Ref 56 dBµV: Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 9.455 GHz, 46.53 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 10:45:07 GPH\43166JD01a\018 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Middle Channel) Spec: FCC Part 15.209



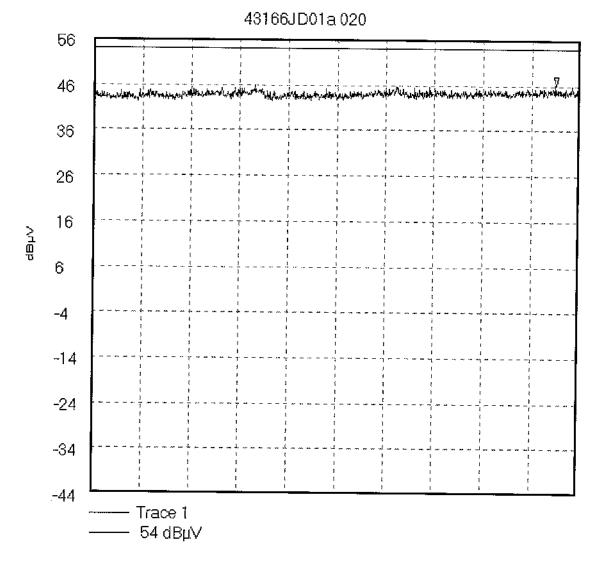
43166JD01a018

Start 8.0 GHz; Stop 12.5 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 12.01 GHz, 46.23 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:52:54 GPH\43166JD01a\019 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Bottom Channel) Spec: FCC Part 15.209

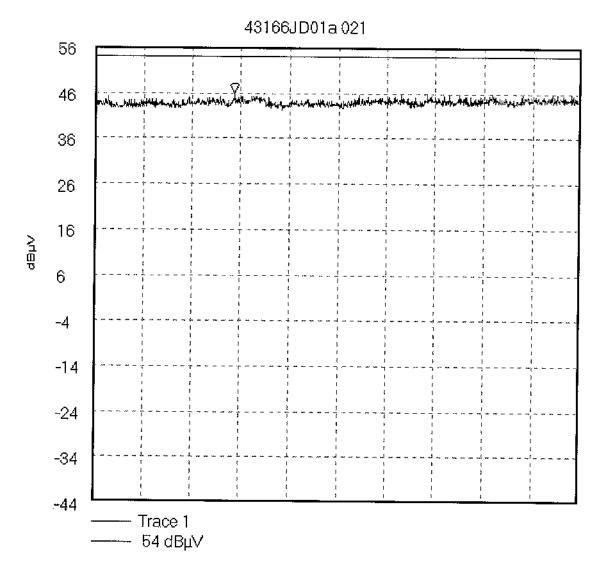


43166JD01a019

Start 8.0 GHz; Stop 12.5 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 12.0 GHz, 45.62 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:55:52 GPH\43166JD01a\020 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Hopping Mode) Spec: FCC Part 15.209

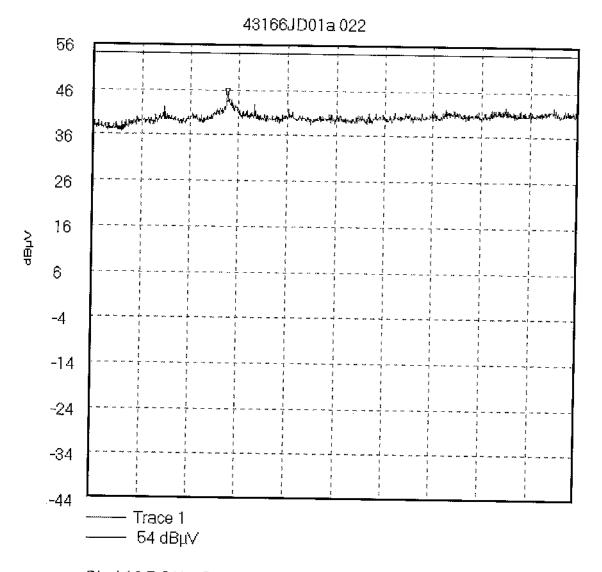


Start 8.0 GHz; Stop 12.5 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 12.275 GHz, 46.05 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 10:58:29 GPH\43166JD01a\021 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Receiver Mode) Spec: FCC Part 15.209

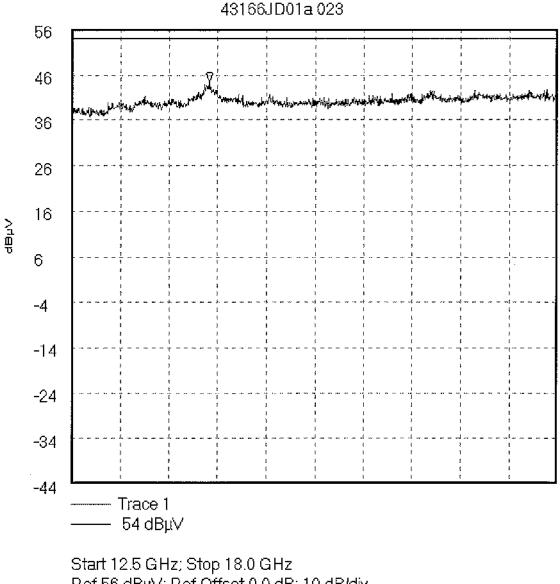


Start 8.0 GHz; Stop 12.5 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 9.295 GHz, 46.2 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:01:15

### GPH\43166JD01a\022 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Receiver Mode) Spec: FCC Part 15.209



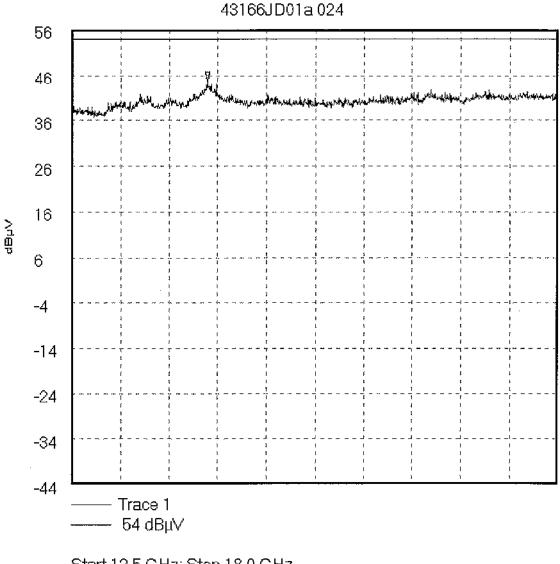
Start 12.5 GHz; Stop 18.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 14.016 GHz, 44.27 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:07:06 GPH\43166JD01a\023 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Hopping Mode) Spec: FCC Part 15.209. Test Distance: 1m



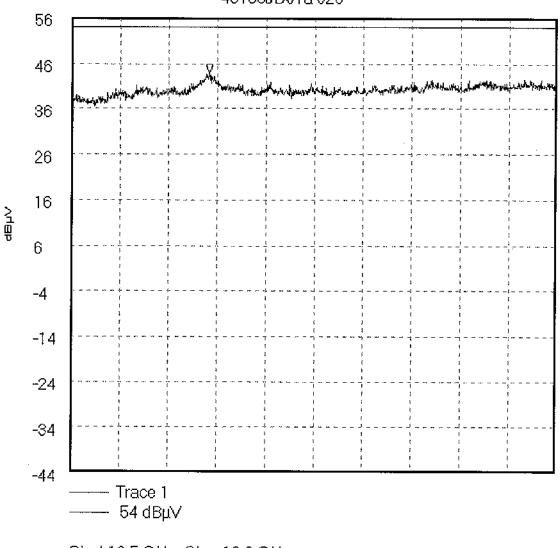
Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 14.052 GHz, 44.63 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:11:58

Radiated Spurious Emissions.

Tested For Red-M. EUT: Smart Wireless Access Server (Bottom Channel) Spec: FCC Part 15.209. Test Distance: 1m

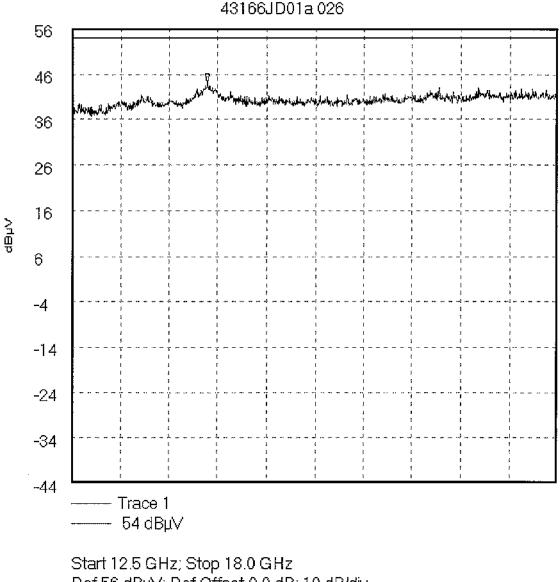


Start 12.5 GHz; Stop 18.0 GHz Ref 56 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 14.028 GHz, 44.73 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 11:15:58 GPH\43166JD01a\025 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Middle Channel) Spec: FCC Part 15.209. Test Distance: 1m

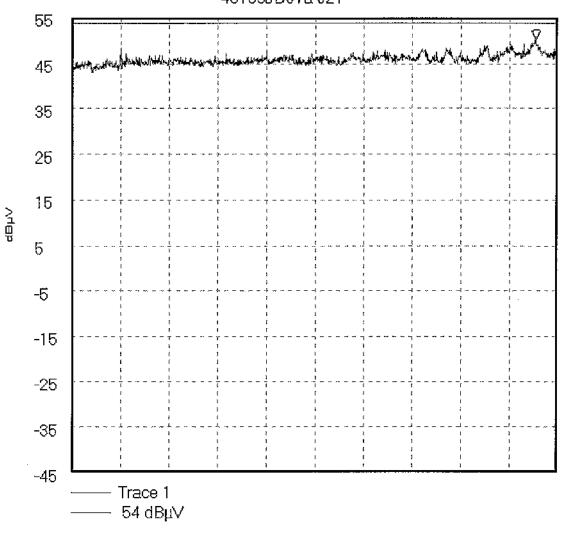


43166JD01a025

Start 12.5 GHz; Stop 18.0 GHz Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 14.052 GHz, 43.99 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:18:51 GPH\43166JD01a\026 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Top Channel) Spec: FCC Part 15.209. Test Distance: 1m

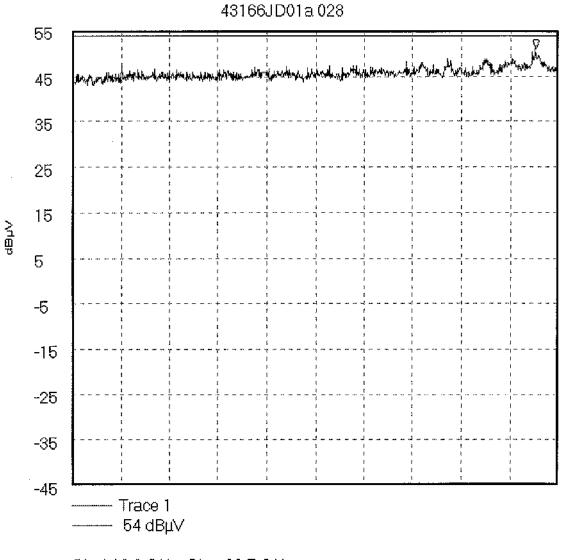


Ref 56 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 40.0 mS Peak 14.034 GHz, 44.1 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:21:48 GPH\43166JD01a\027 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Top Channel) Spec: FCC Part 15.209. Test Distance: 1m

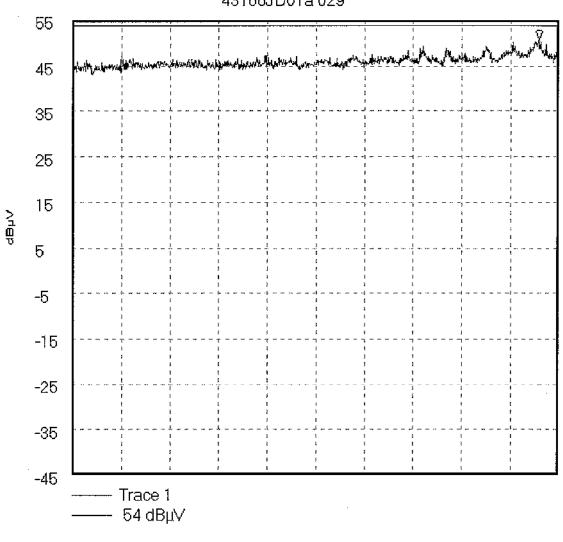


43166JD01a027

Start 18.0 GHz; Stop 26.5 GHz Ref 55 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 60.0 mS Peak 26.122 GHz, 50.48 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 11:26:11 GPH\43166JD01a\028 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Middle Channel) Spec: FCC Part 15.209. Test Distance: 1m



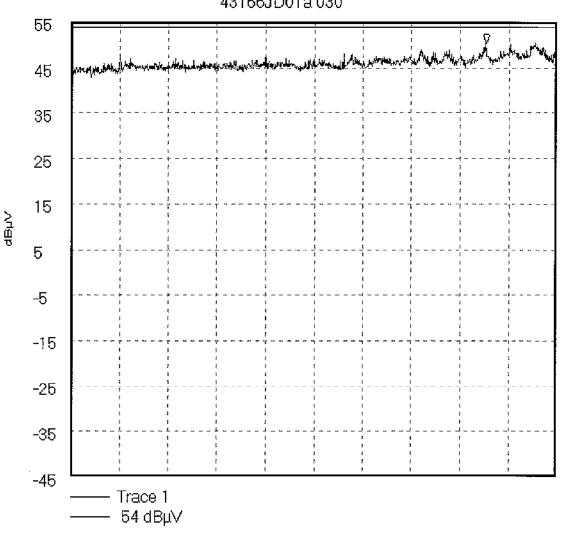
Start 18.0 GHz; Stop 26.5 GHz Ref 55 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 60.0 mS Peak 26.094 GHz, 51.12 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:30:01 GPH\43166JD01a\029 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Bottom Channel) Spec: FCC Part 15.209. Test Distance: 1m



43166JD01a029

Start 18.0 GHz; Stop 26.5 GHz Ref 55 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 60.0 mS Peak 26.151 GHz, 50.79 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:32:27

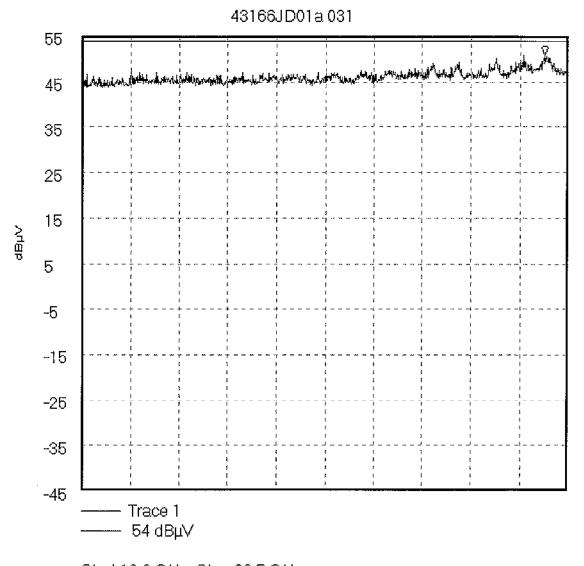
GPH\43166JD01a\030 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Hopping Mode) Spec: FCC Part 15.209. Test Distance: 1m



43166JD01a 030

Start 18.0 GHz; Stop 26.5 GHz Ref 55 dBµV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 60.0 mS Peak 25.253 GHz, 50.43 dBµV Display Line: 54 dBµV; ; Limit Test Passed 21/02/02 11:35:20

GPH\43166JD01a\031 Radiated Spurious Emissions. Tested For Red-M. EUT: Smart Wireless Access Server (Receiver Mode) Spec: FCC Part 15.209. Test Distance: 1m



Start 18.0 GHz; Stop 26.5 GHz Ref 55 dBμV; Ref Offset 0.0 dB; 10 dB/div RBW 1000.0 kHz; VBW 1.0 MHz; Att 0 dB; Swp 60.0 mS Peak 26.084 GHz, 50.87 dBμV Display Line: 54 dBμV; ; Limit Test Passed 21/02/02 11:38:59