

Measurement Configuration	MCS	Transmitter Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dB μ V/m)	Average Level (dB μ V/m)
MCS with Highest Power	MCS0	5510	5460	63.87	49.83
MCS with Widest Bandwidth	MCS9	5510	5460	64.19	49.09

Table 285 - Restricted Band Edge Results – Antenna 1

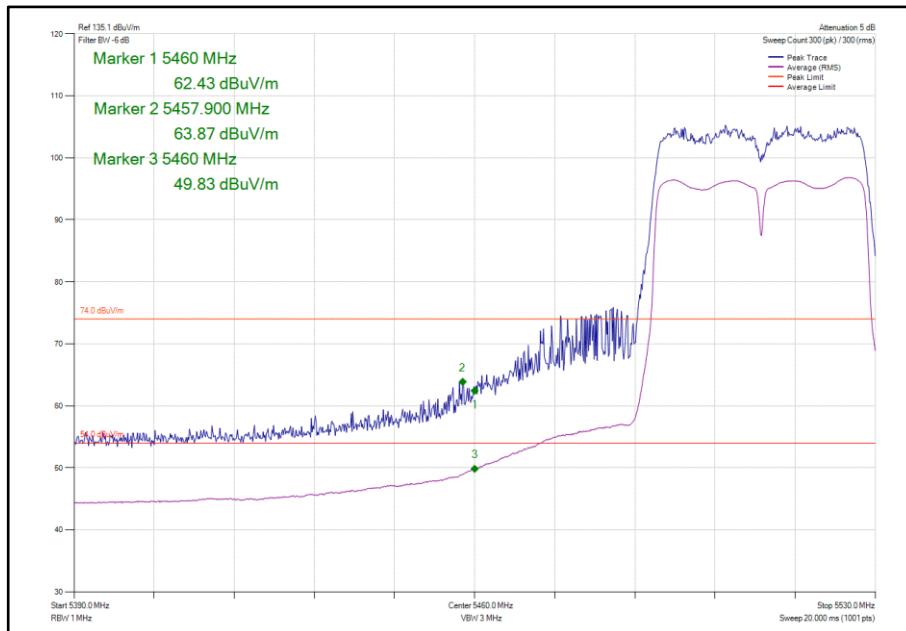


Figure 596 - Transmitter Frequency 5510 MHz, Band Edge Frequency 5460 MHz, MCS with Highest Power – Antenna 1

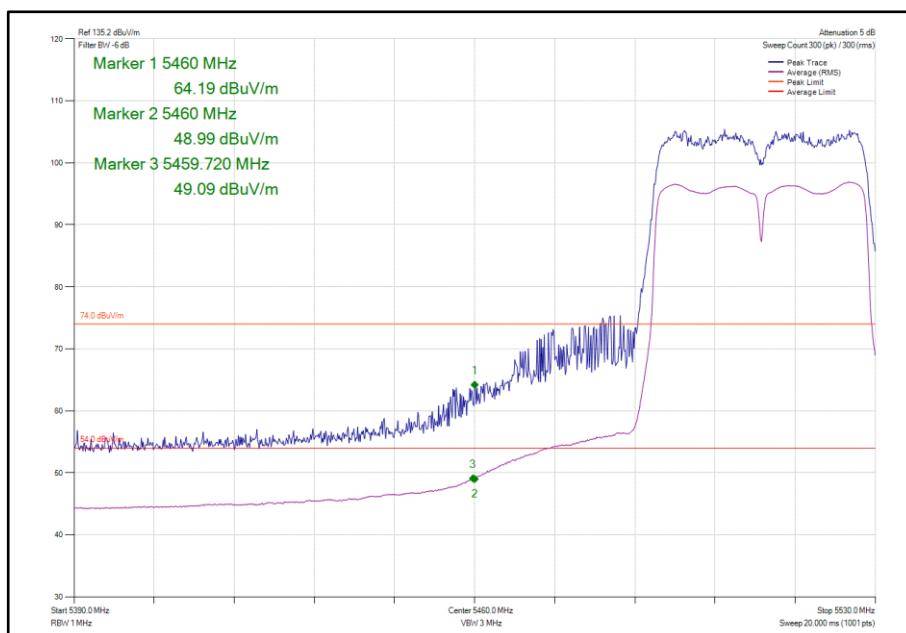


Figure 597 - Transmitter Frequency 5510 MHz, Band Edge Frequency 5460 MHz, MCS with Widest Bandwidth – Antenna 1



Measurement Configuration	MCS	Transmitter Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dB μ V/m)	Average Level (dB μ V/m)
MCS with Highest Power and Widest Bandwidth	MCS0	5510	5470	67.49	51.10

Table 286 - Restricted Band Edge Results – MIMO

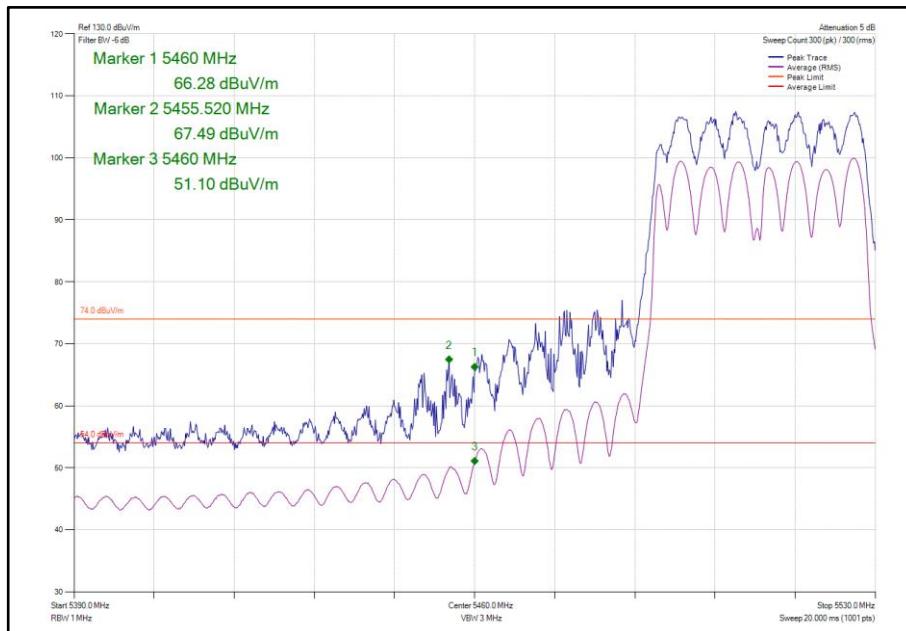


Figure 598 - Transmitter Frequency 5510 MHz, Band Edge Frequency 5460 MHz, MCS with Highest Power and Widest Bandwidth – MIMO

5 GHz WLAN - 802.11ac 80 MHz Bandwidth

Measurement Configuration	MCS	Transmitter Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dB μ V/m)	Average Level (dB μ V/m)
MCS with Highest Power	MCS5	5530	5460	67.10	51.64
MCS with Widest Bandwidth	MCS9	5530	5460	64.80	47.64

Table 287 - Restricted Band Edge Results – Antenna 0

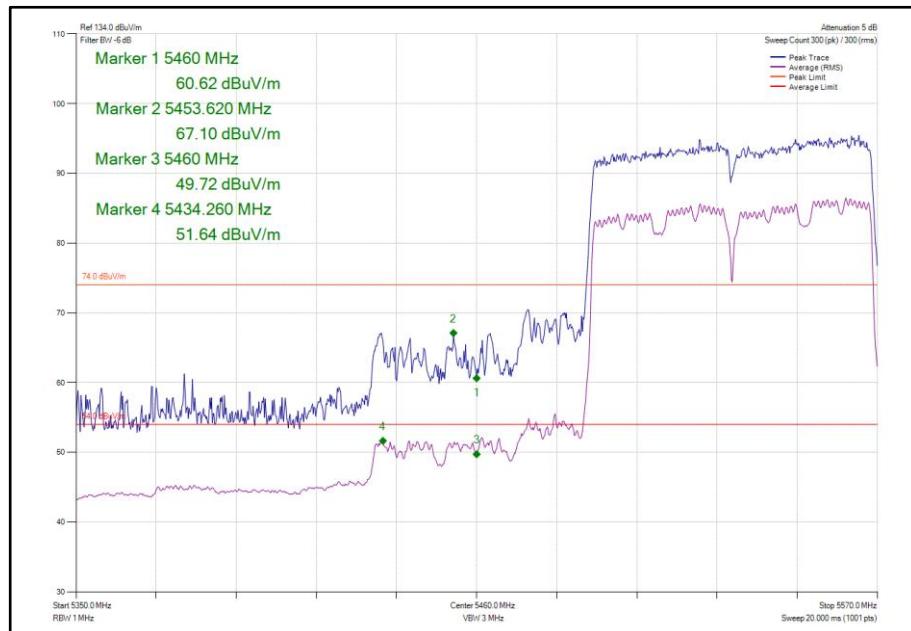


Figure 599 - Transmitter Frequency 5530 MHz, Band Edge Frequency 5460 MHz, MCS with Highest Power – Antenna 0

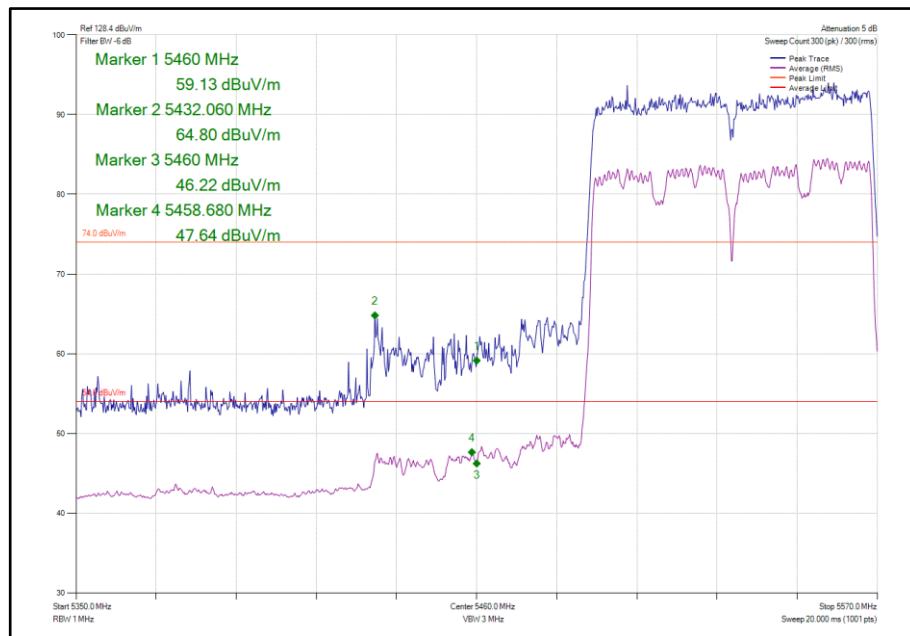


Figure 600 - Transmitter Frequency 5530 MHz, Band Edge Frequency 5460 MHz, MCS with Widest Bandwidth – Antenna 0

Measurement Configuration	MCS	Transmitter Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dB μ V/m)	Average Level (dB μ V/m)
MCS with Highest Power	MCS9	5530	5460	60.50	47.70
MCS with Widest Bandwidth	MCS6	5530	5460	59.75	47.50

Table 288 - Restricted Band Edge Results – Antenna 1

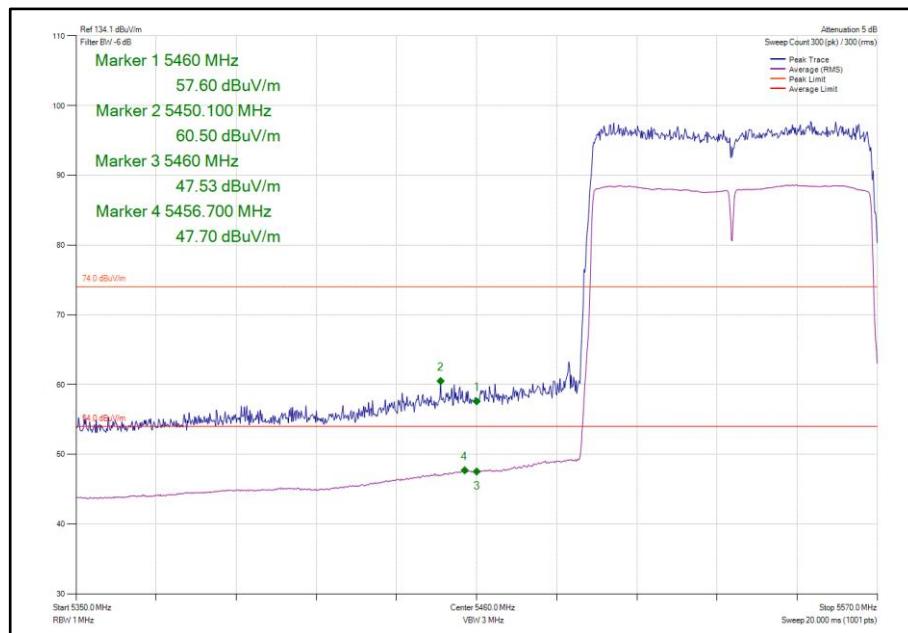


Figure 601 - Transmitter Frequency 5530 MHz, Band Edge Frequency 5460 MHz, MCS with Highest Power – Antenna 1

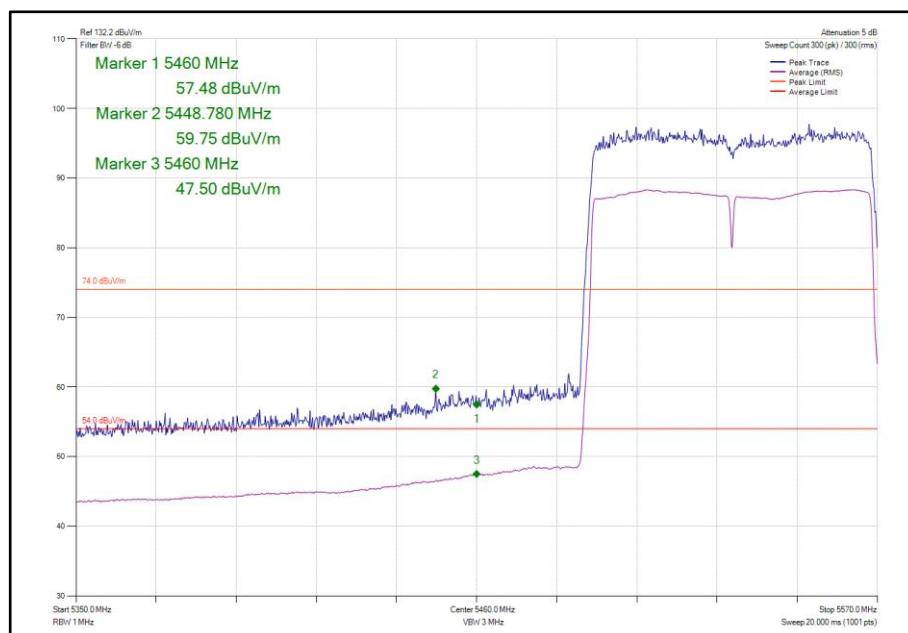


Figure 602 - Transmitter Frequency 5530 MHz, Band Edge Frequency 5460 MHz, MCS with Widest Bandwidth – Antenna 1



Measurement Configuration	MCS	Transmitter Frequency (MHz)	Band Edge Frequency (MHz)	Peak Level (dB μ V/m)	Average Level (dB μ V/m)
MCS with Highest Power and Widest Bandwidth	MCS0	5530	5460	68.28	54.26

Table 289 - Restricted Band Edge Results – MIMO

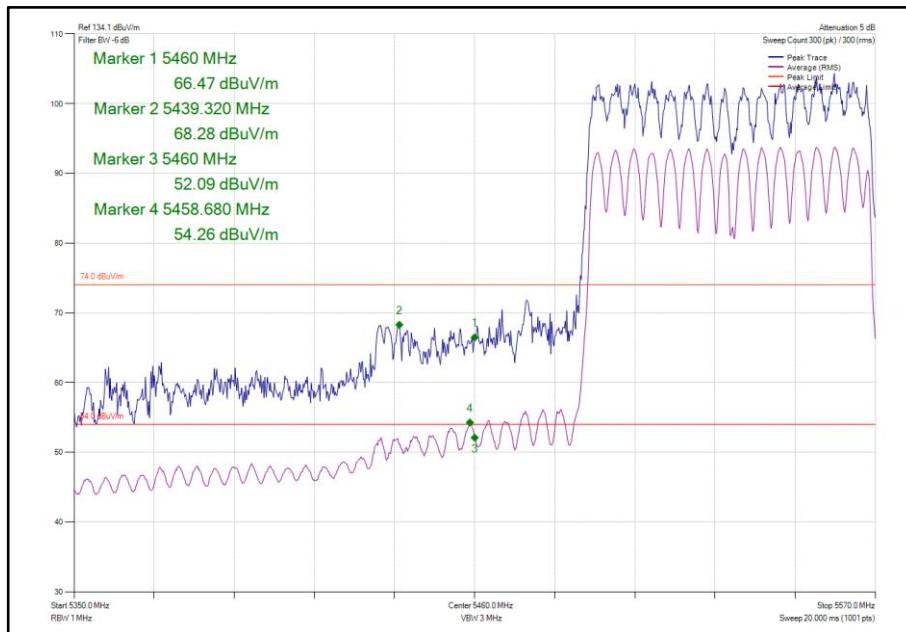


Figure 603 - Transmitter Frequency 5530 MHz, Band Edge Frequency 5460 MHz, MCS with Widest Bandwidth – MIMO

FCC 47 CFR Part 15, Limit Clause 15.205 and ISED RSS-GEN Limit Clause 8.10

	Peak (dB μ V/m)	Average (dB μ V/m)
Restricted Bands of Operation	74	54

Table 290 - Restricted Band Edge Limit Table



2.6.7 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Screened Room (5)	Rainford	Rainford	1545	36	23-Jan-2021
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygrometer	Rotronic	A1	2677	12	20-Feb-2020
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	17-Dec-2019
Mast Controller	Maturo GmbH	NCD	4810	-	TU
Tilt Antenna Mast	Maturo GmbH	TAM 4.0-P	4811	-	TU
Double Ridge Broadband Horn Antenna	Schwarzbeck	BBHA 9120 B	4848	12	11-Mar-2020
8m N-Type RF Cable	Teledyne	PR90-088-8MTR	5093	12	04-Oct-2019
Cable (18 GHz)	Rosenberger	LU7-071-2000	5109	12	05-Oct-2019
EmX Software	TÜV SUD	EmX	5125	-	Software

Table 291

TU - Traceability Unscheduled



2.7 Spurious Radiated Emissions

2.7.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (b) and 15.205
ISEDC RSS-247, Clause 6.2

2.7.2 Equipment Under Test and Modification State

Minuet 2 Module (FS5352), S/N: RAD113219 - Modification State 0

2.7.3 Date of Test

24-June-2019 to 15-July-2019

2.7.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.3, 6.5 and 6.6. The EUT was placed on the non-conducting platform in a manner typical of a normal installation. For an EUT which could reasonably be used in multiple planes, pre-scans were performed with the EUT orientated in X, Y and Z planes with reference to the ground plane.

Ports on the EUT were terminated with loads as described in ANSI C63.4 clause 6.2.4. For EUT's with multiple connectors of the same type, additional interconnecting cables were connected, and pre-scans performed to determine whether the level of the emissions were increased by >2 dB. For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10 clause 4.1.4.2.5 to characterize the EUT. Where emissions were detected, final average measurements were taken in accordance with ANSI C63.10 clause 4.1.4.2.2.

The plots shown are the characterization of the EUT. The limits on the plots represent the most stringent case for restricted bands, (74/54 dB μ V/m) when compared to -27 dBm EIRP (68.2 dB μ V/m at 3m) outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

The following conversion can be applied to convert from dB μ V/m to μ V/m:
 $10^{\log_{10}(\text{Field Strength in dB}\mu\text{V/m})/20}$.

To determine the emission characteristic of the EUT above 18 GHz, the test antenna was swept over all faces of the EUT whilst observing a spectral display. The frequency of any emissions of interest was noted for formal measurement at the correct measurement distance of 1m. This procedure was repeated for all relevant transmit operating channels.

At a measurement distance of 1 meter the limit line was increased by $20 \times \log(3/1) = 9.54$ dB. Representative noise floor plots are presented in the plot section of the report for one operating channel only.

Where formal measurements have been necessary, the results have been presented in the emissions table.

2.7.5 Environmental Conditions

Ambient Temperature 20.0 °C
Relative Humidity 59.5 %



2.7.6 Test Results

U-NII-1

5 GHz WLAN - 802.11a

Testing was performed on the Data Rate which resulted in the highest power spectral density. The Data Rate used during testing was 6 Mbps.

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
107.178	34.90	-	43.52	-	8.62	-	Vertical	Y
85.256	30.88	-	40.00	-	9.12	-	Vertical	Z

Table 292 - 5180 MHz, 30 MHz to 1 GHz – Antenna 1

No other emissions were detected within 10 dB of the limit.

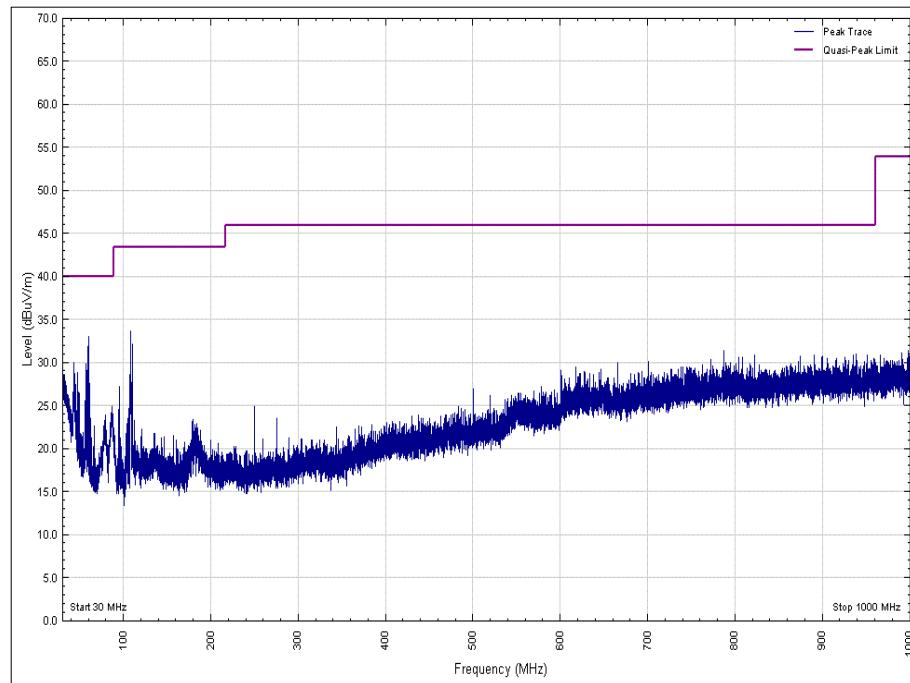


Figure 604 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X – Antenna 1

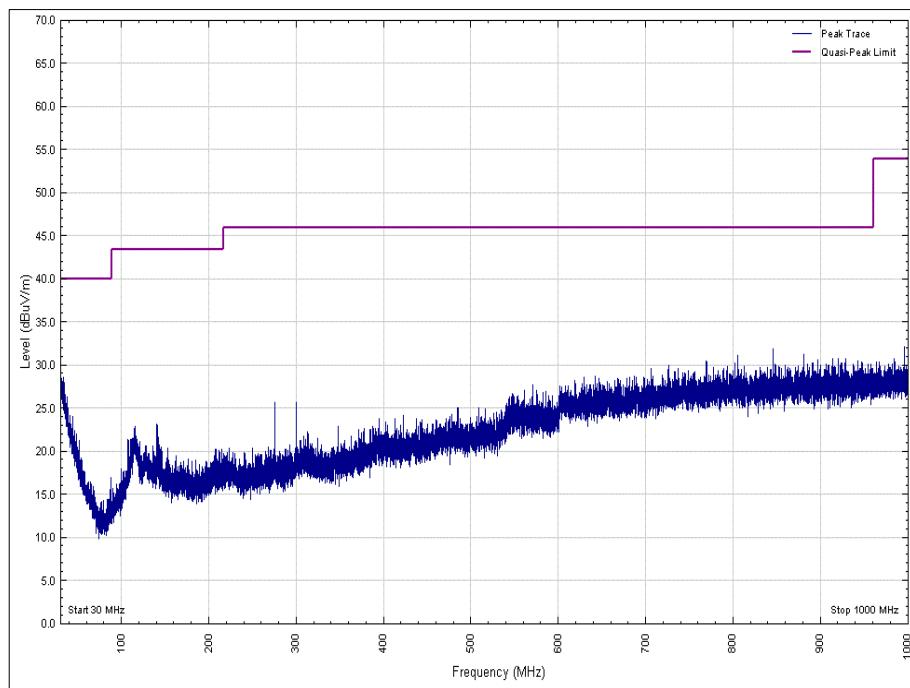


Figure 605 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X – Antenna 1

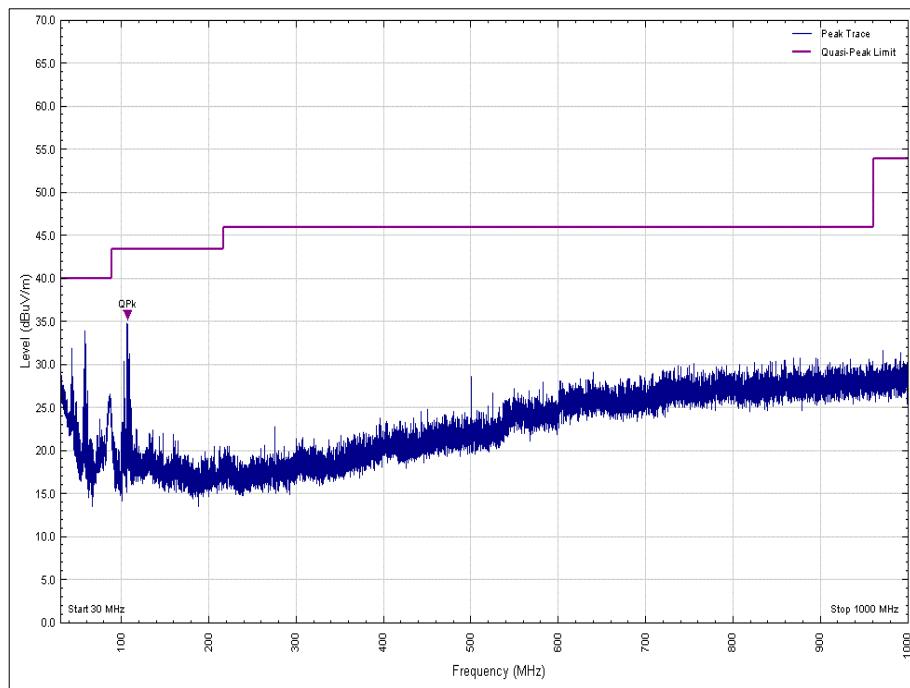


Figure 606 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y – Antenna 1

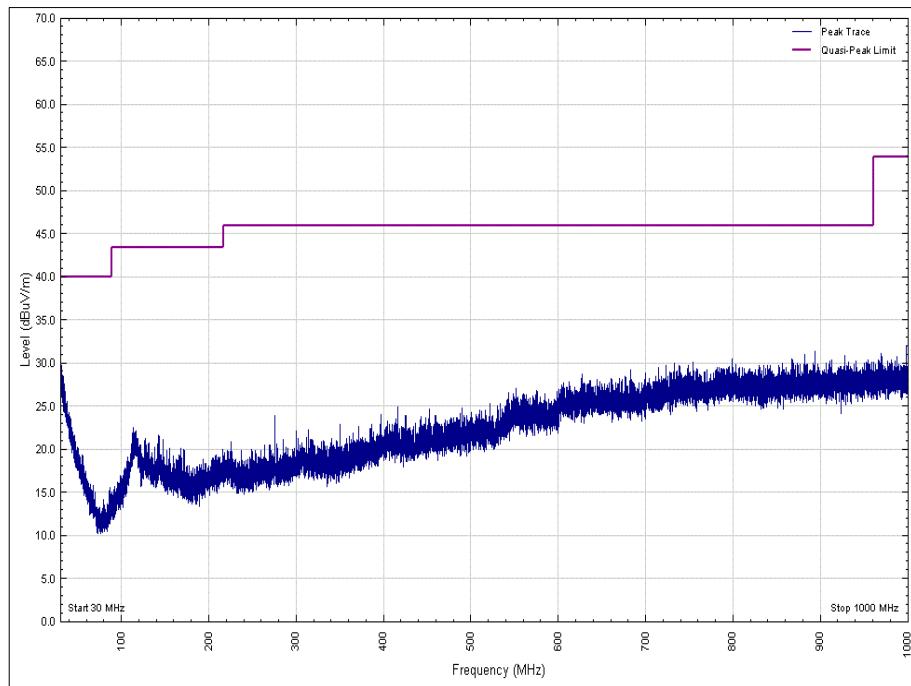


Figure 607 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y – Antenna 1

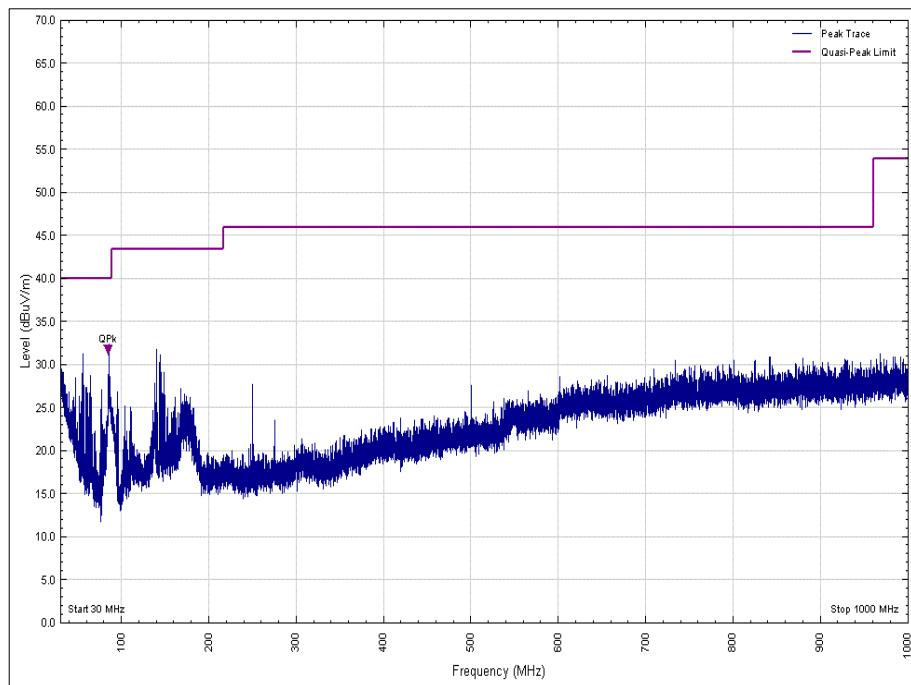


Figure 608 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z – Antenna 1

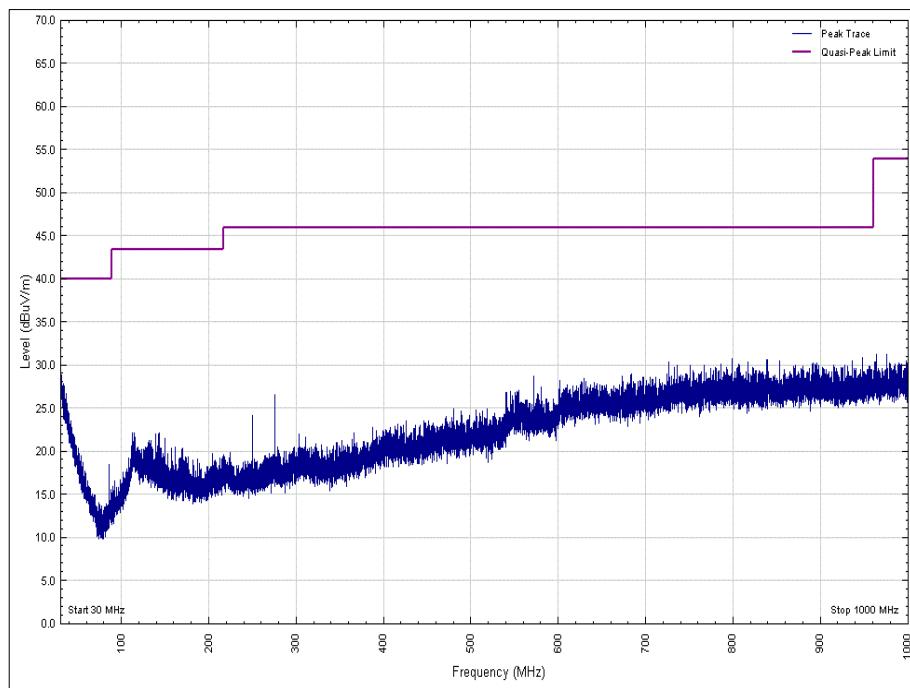
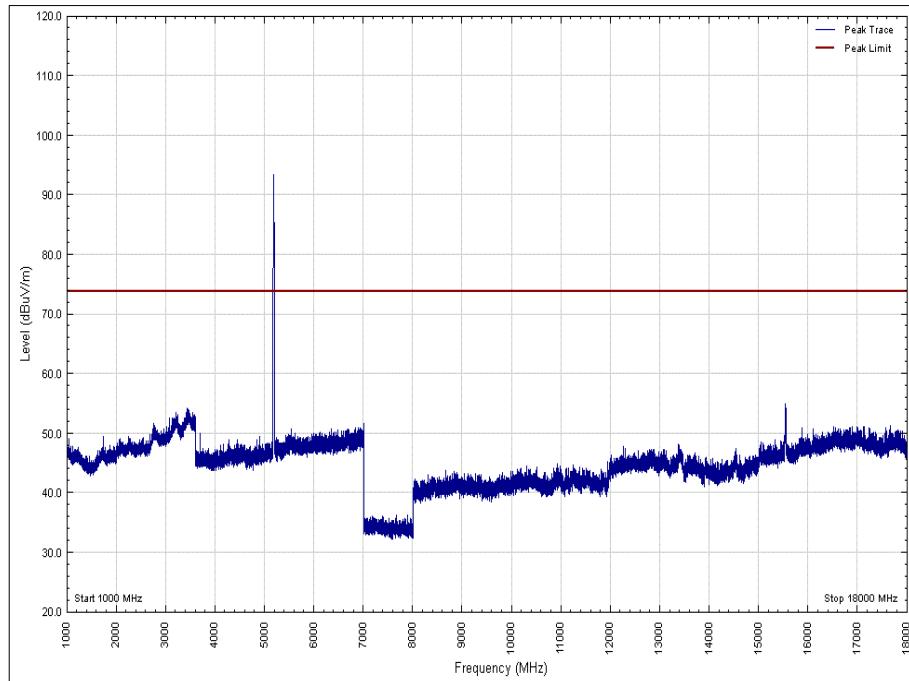


Figure 609 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z – Antenna 1

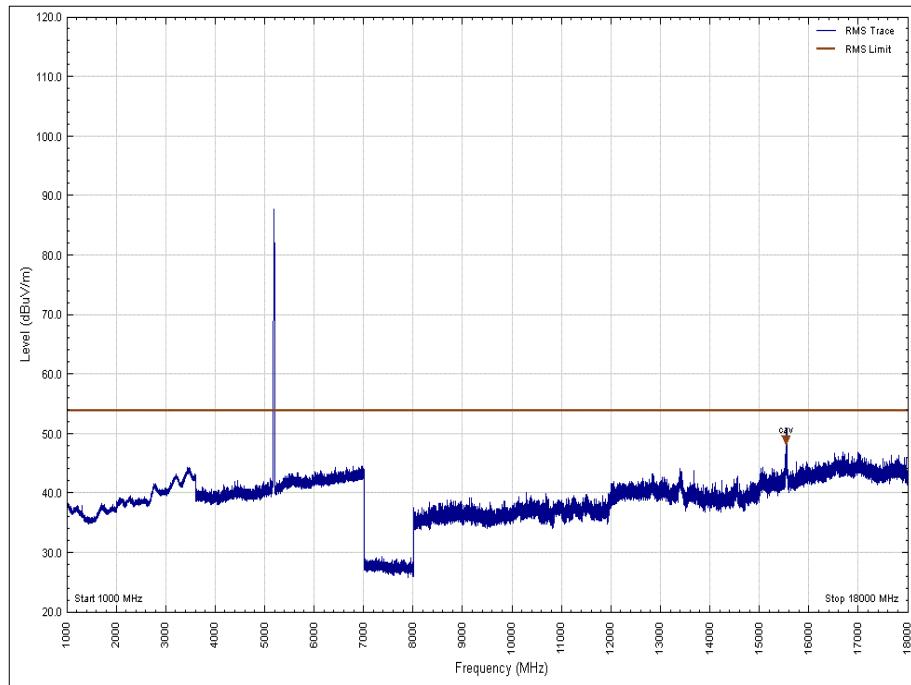
Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15.536662	-	51.13	-	53.98	-	2.85	Horizontal	X

Table 293 – 5180 MHz, 1 GHz to 40 GHz – Antenna 1

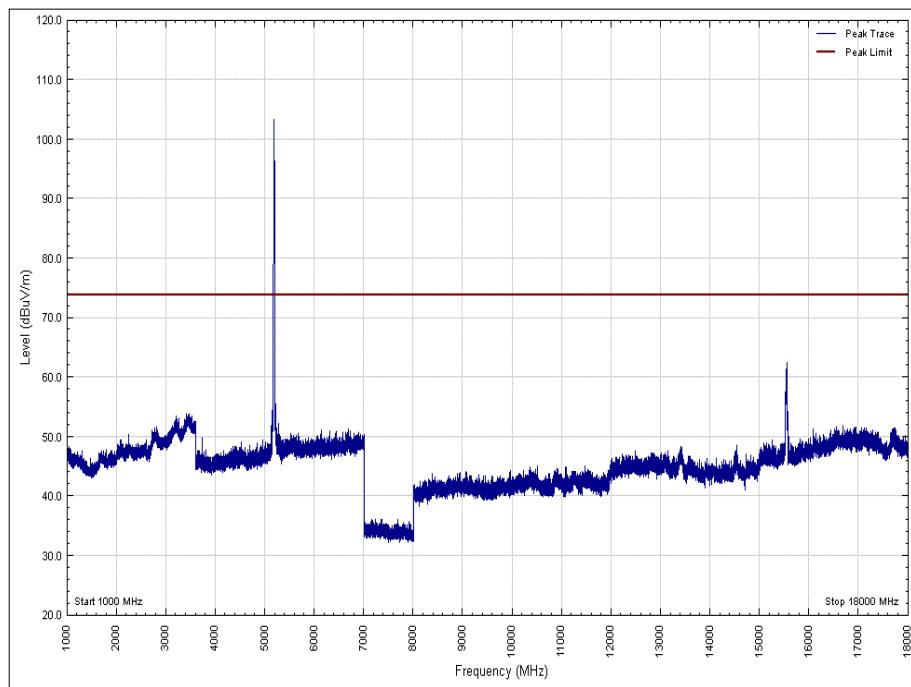
No other emissions were detected within 10 dB of the limit.



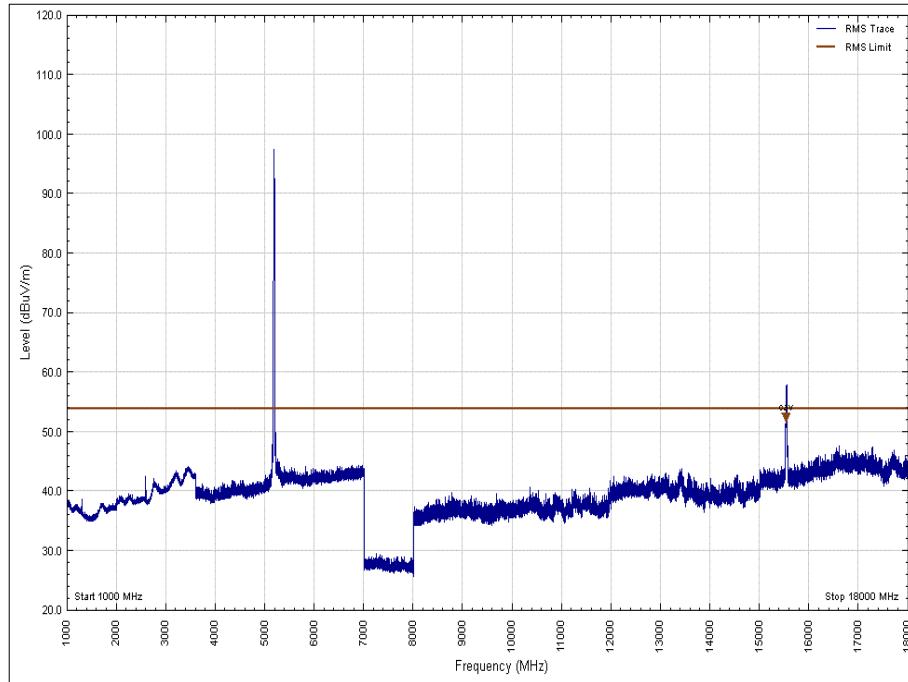
**Figure 610 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



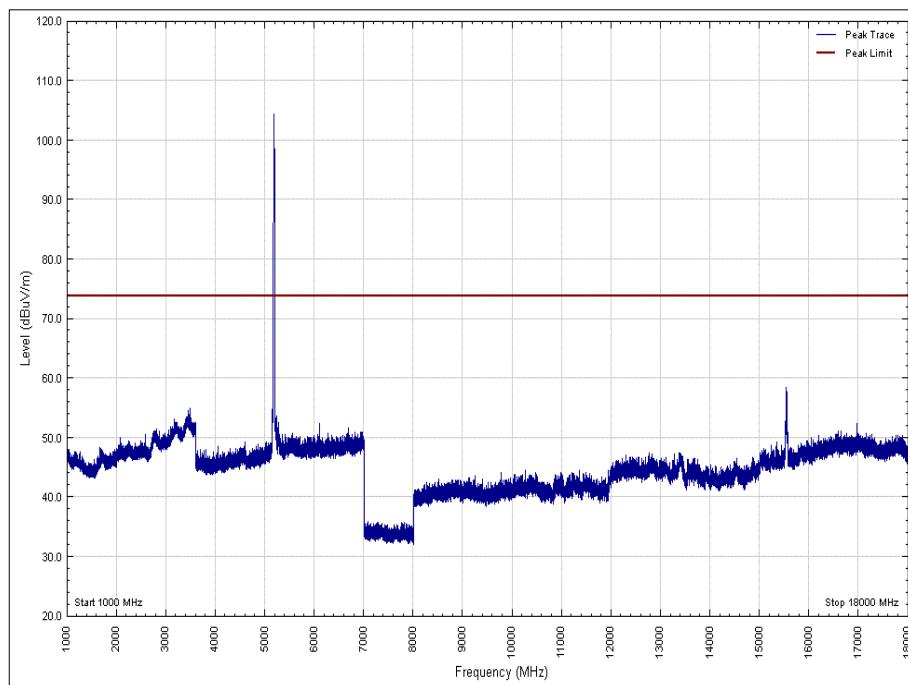
**Figure 611 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



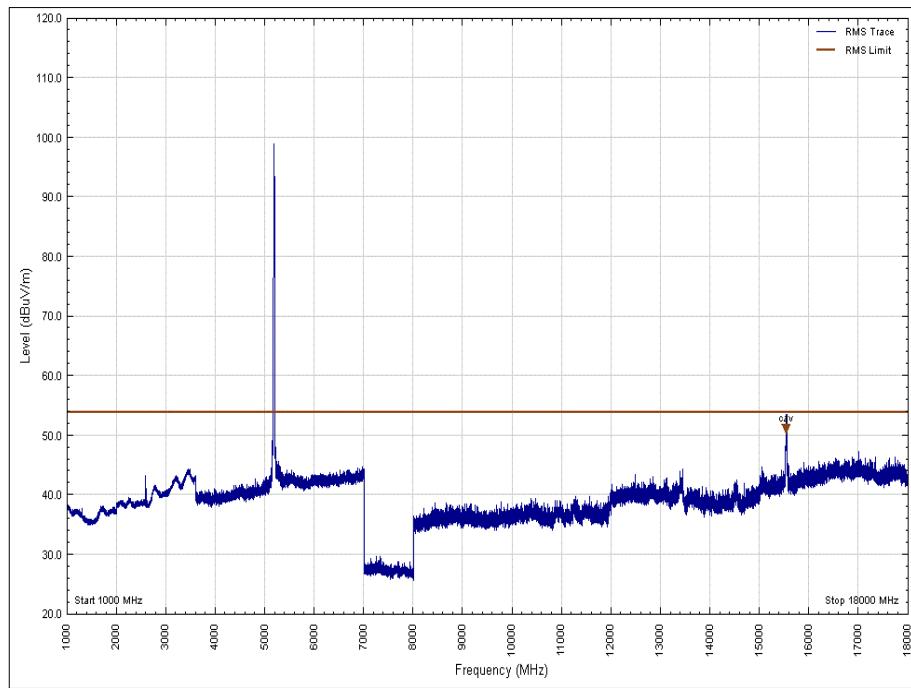
**Figure 612 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



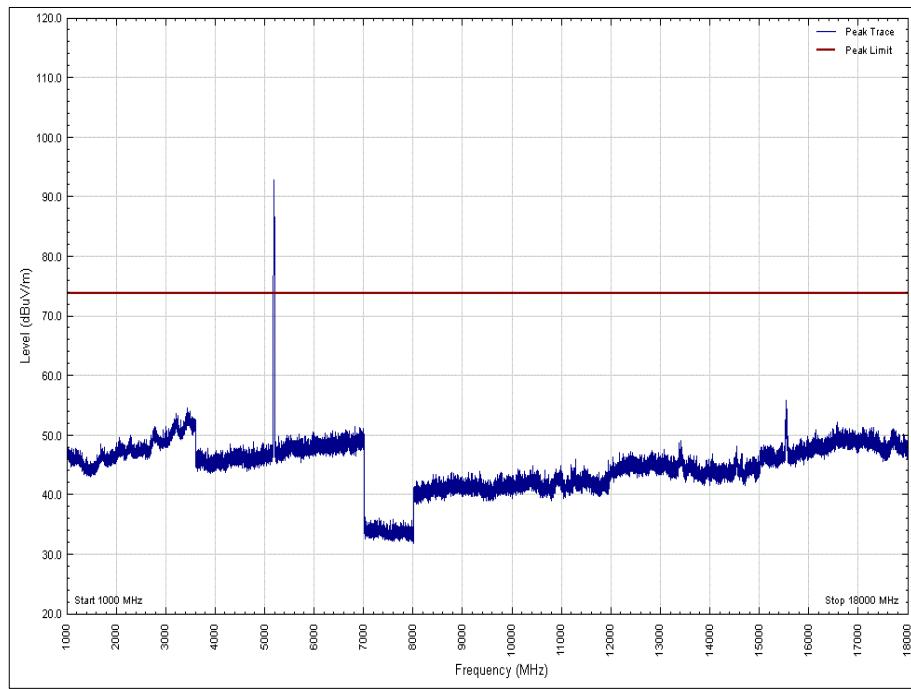
**Figure 613 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



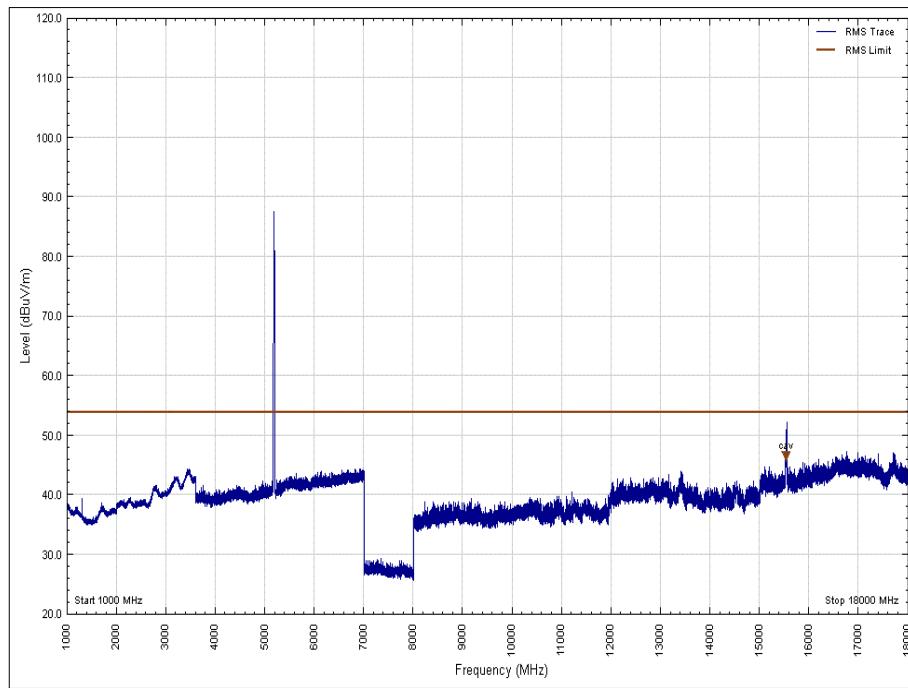
**Figure 614 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



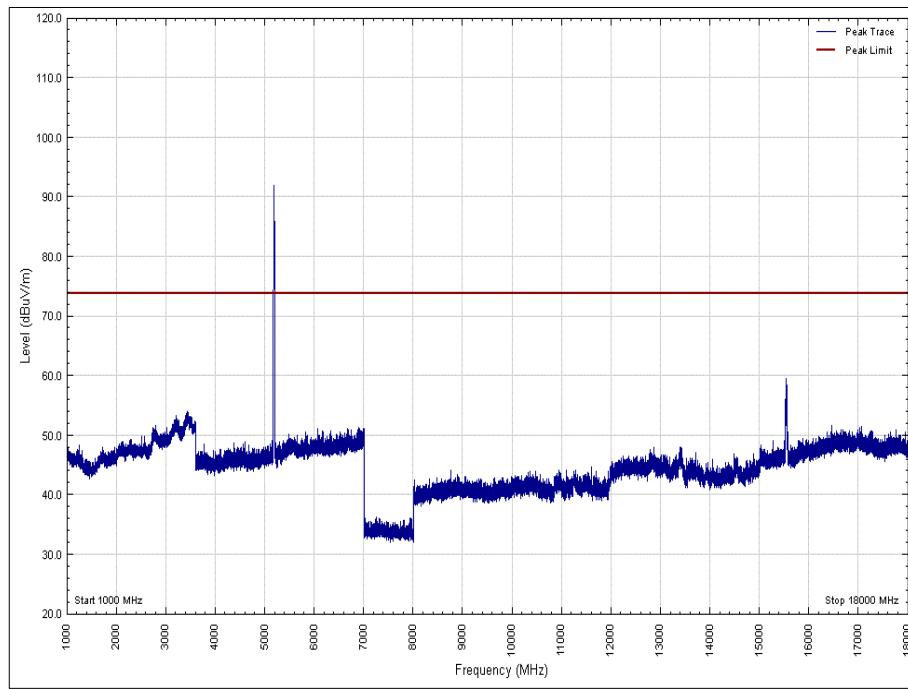
**Figure 615 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



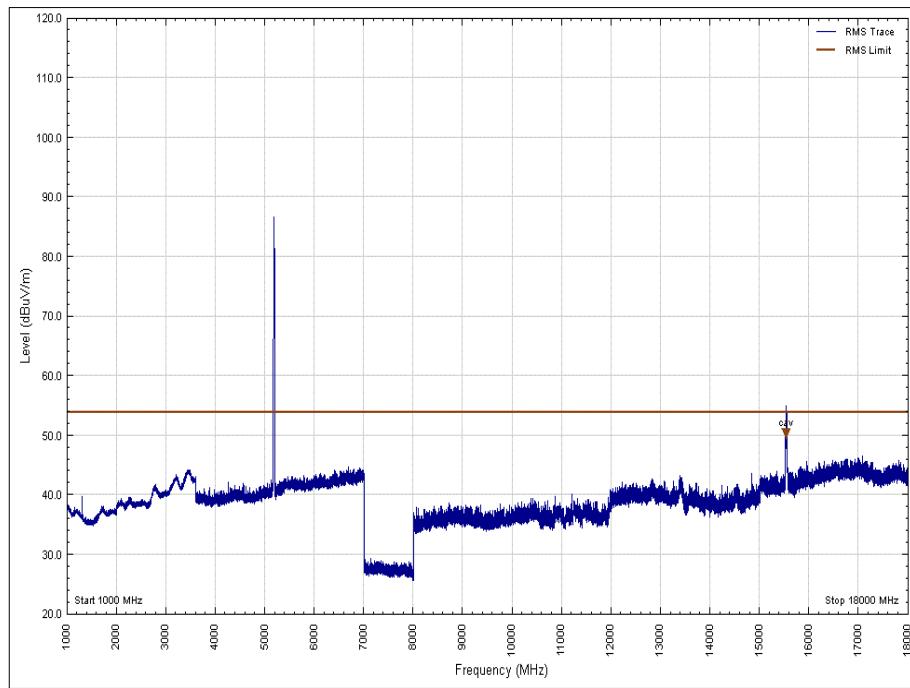
**Figure 616 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



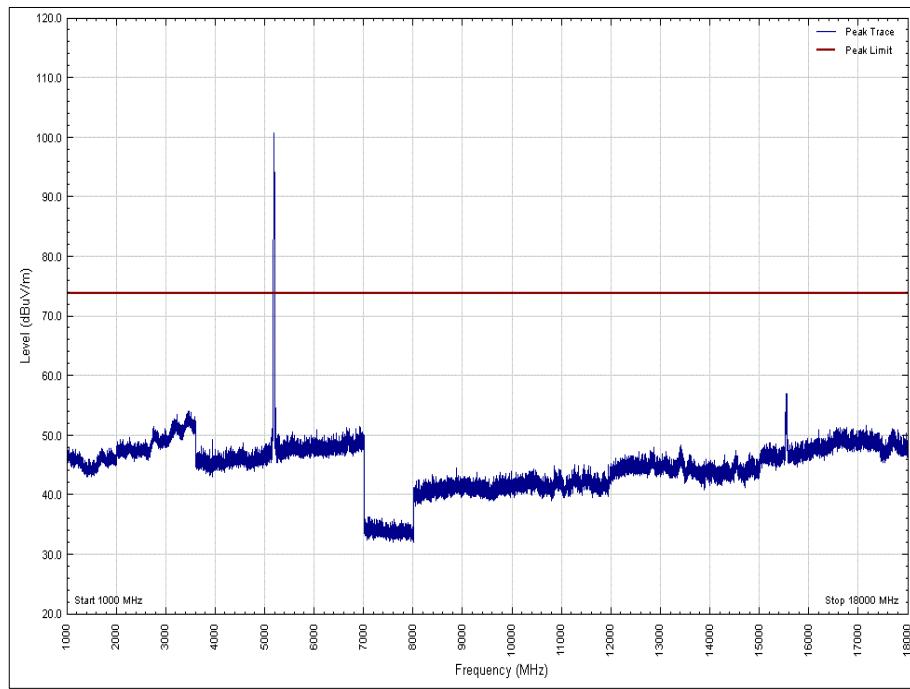
**Figure 617 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



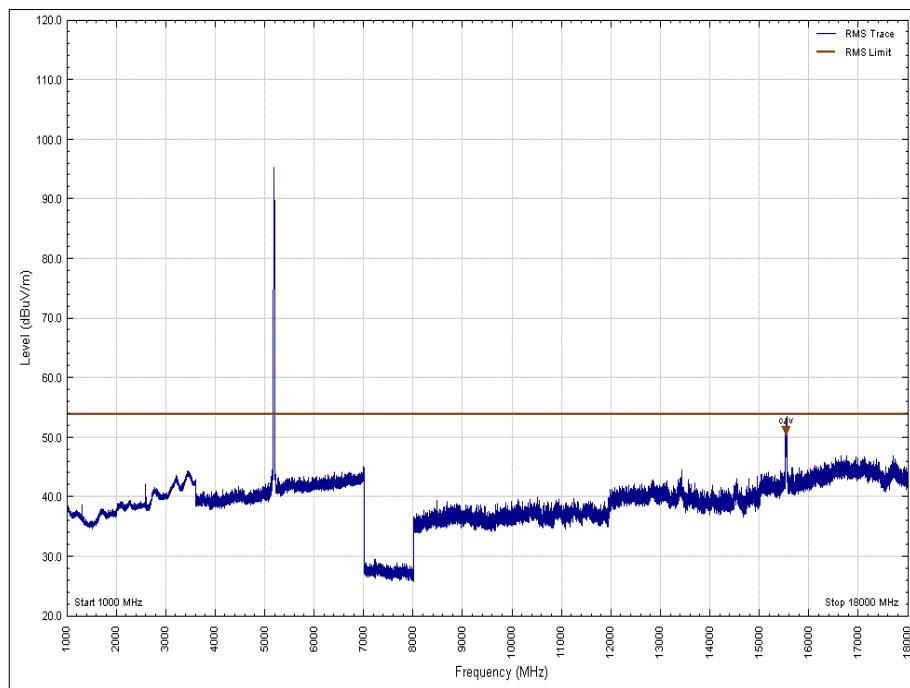
**Figure 618 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 619 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 620 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



**Figure 621 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
59.177	30.68	-	40.00	-	9.32	-	Vertical	Y
107.192	35.00	-	43.50	-	8.50	-	Vertical	Y

Table 294 – 5200 MHz - 30 MHz to 1 GHz – Antenna 1

No other emissions were detected within 10 dB of the limit.

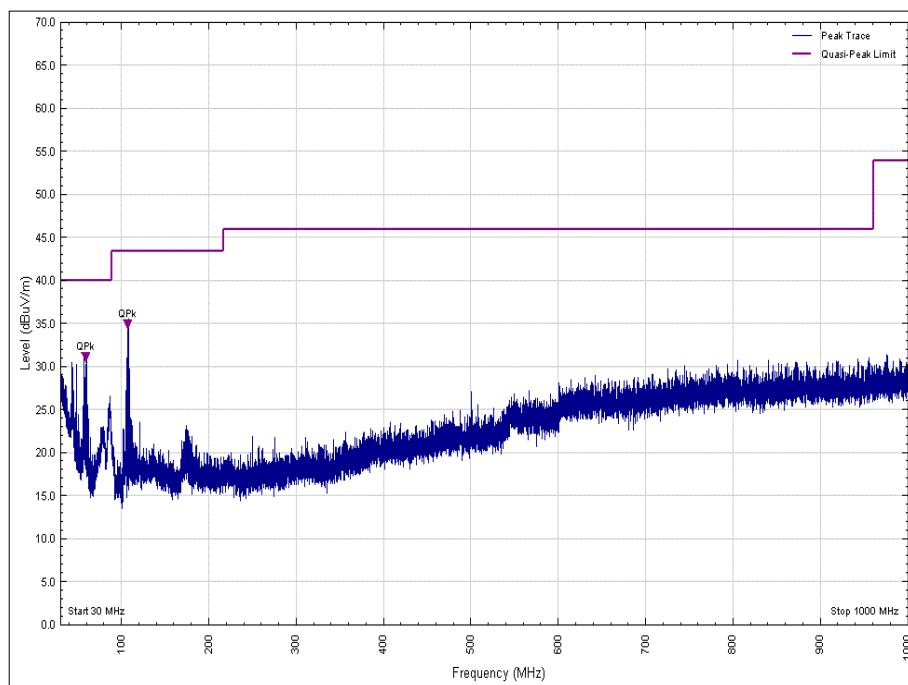


Figure 622 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X – Antenna 1

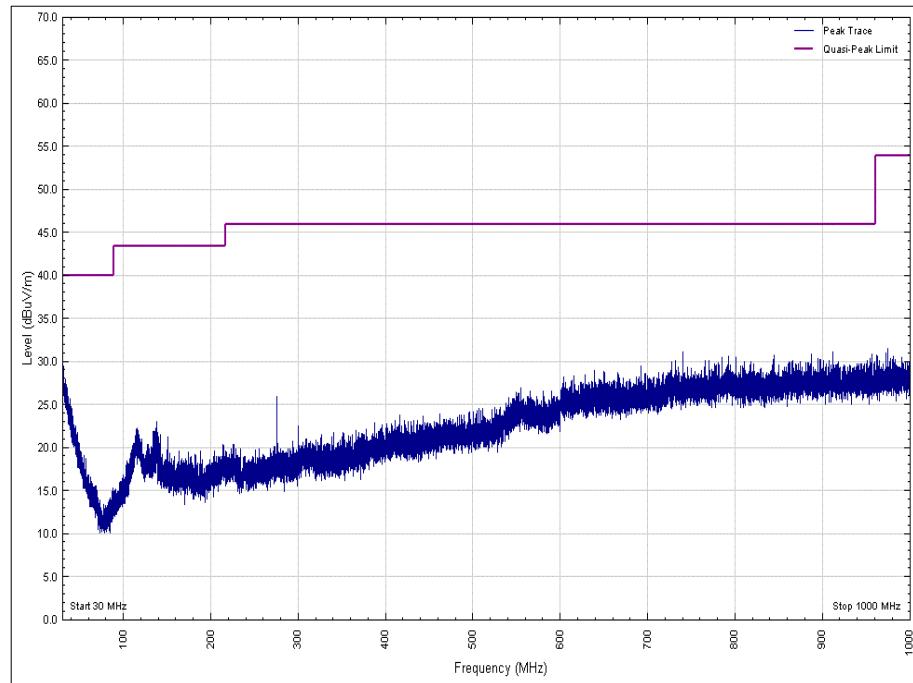


Figure 623 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X – Antenna 1

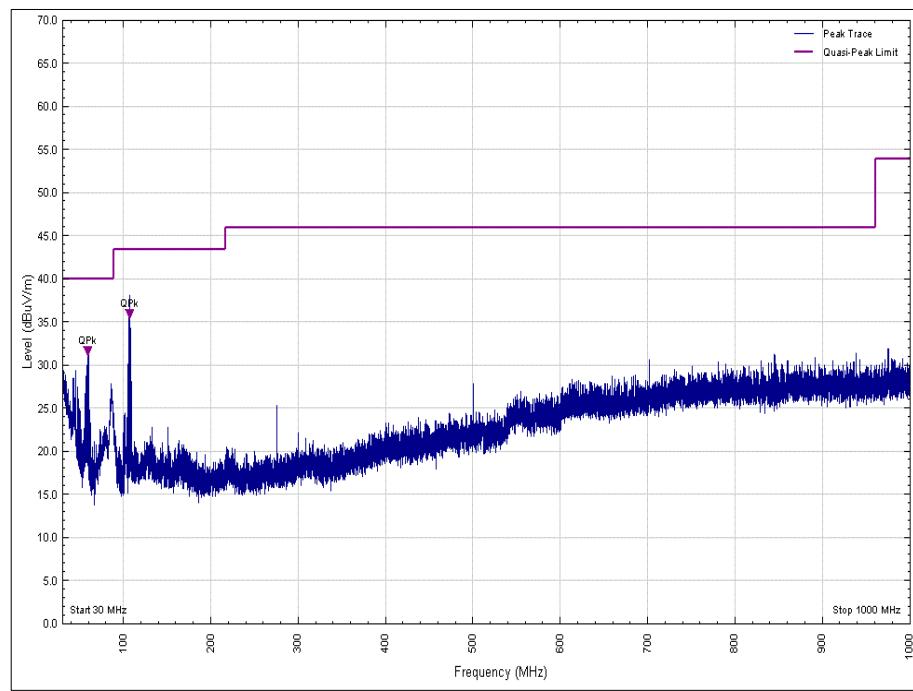


Figure 624 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y – Antenna 1

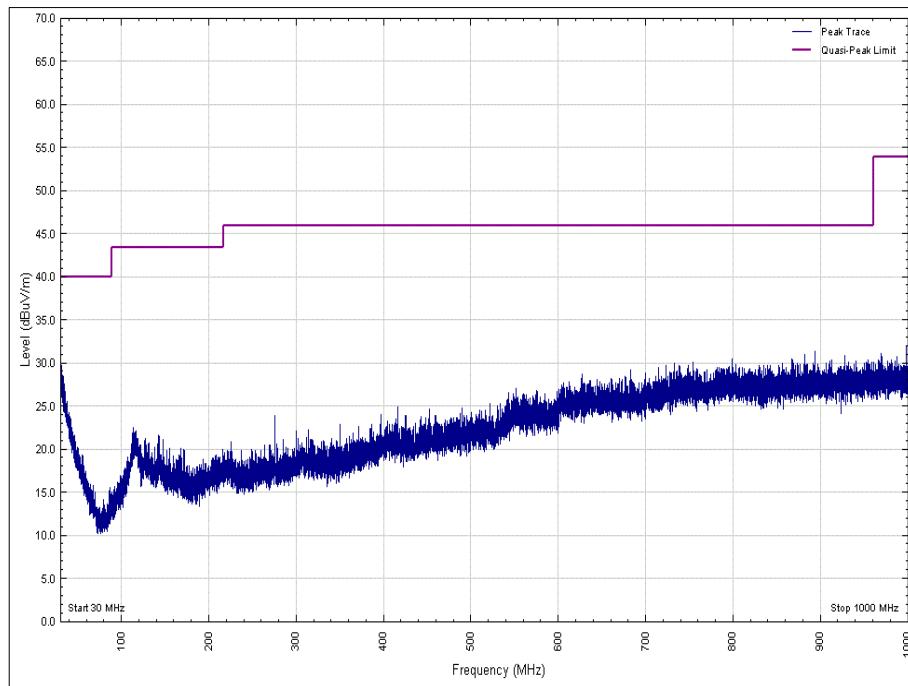


Figure 625 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y – Antenna 1

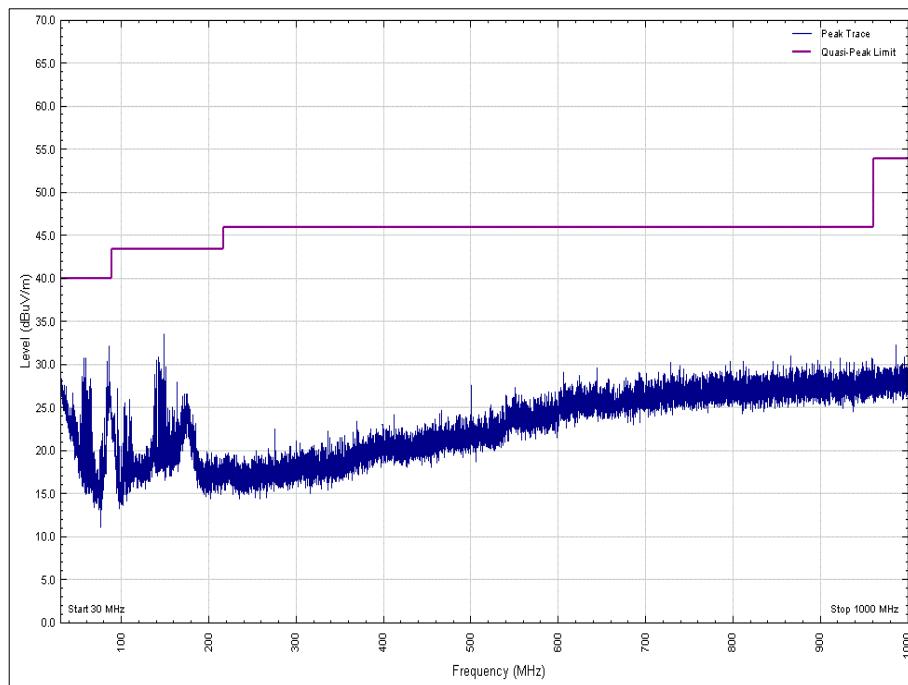


Figure 626 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z – Antenna 1

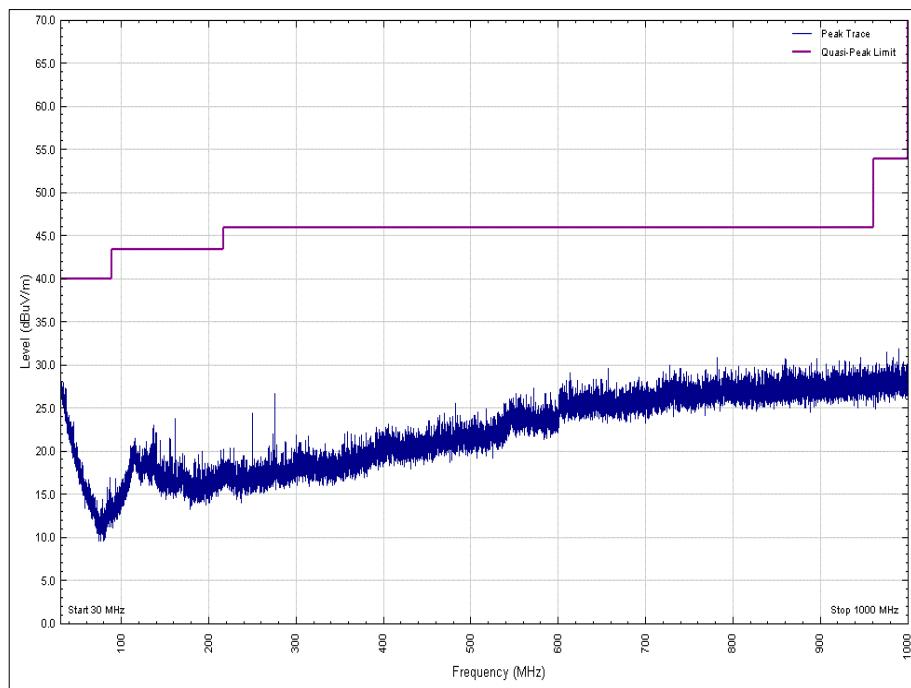
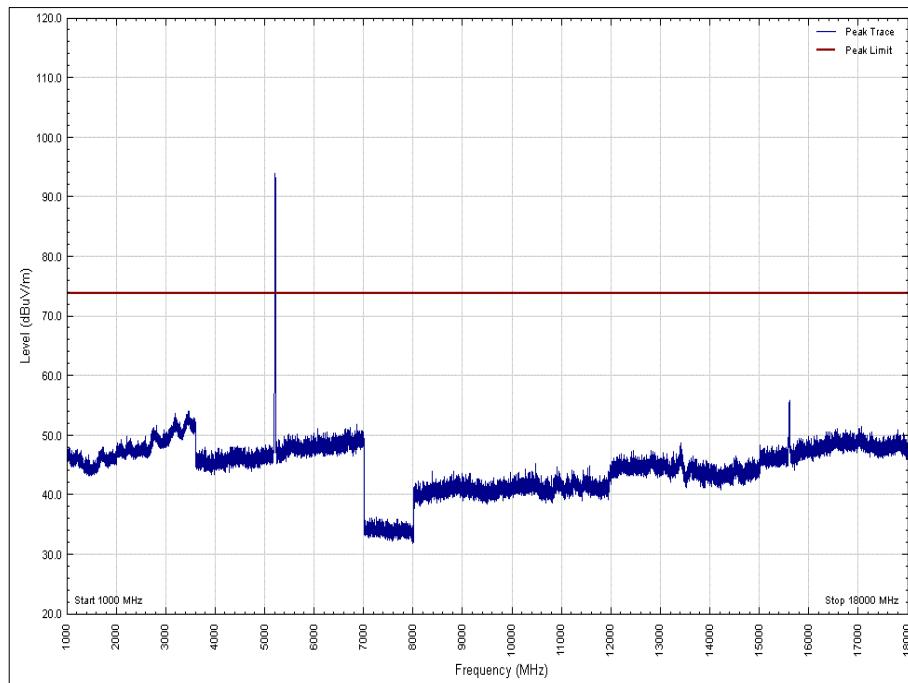


Figure 627 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z – Antenna 1

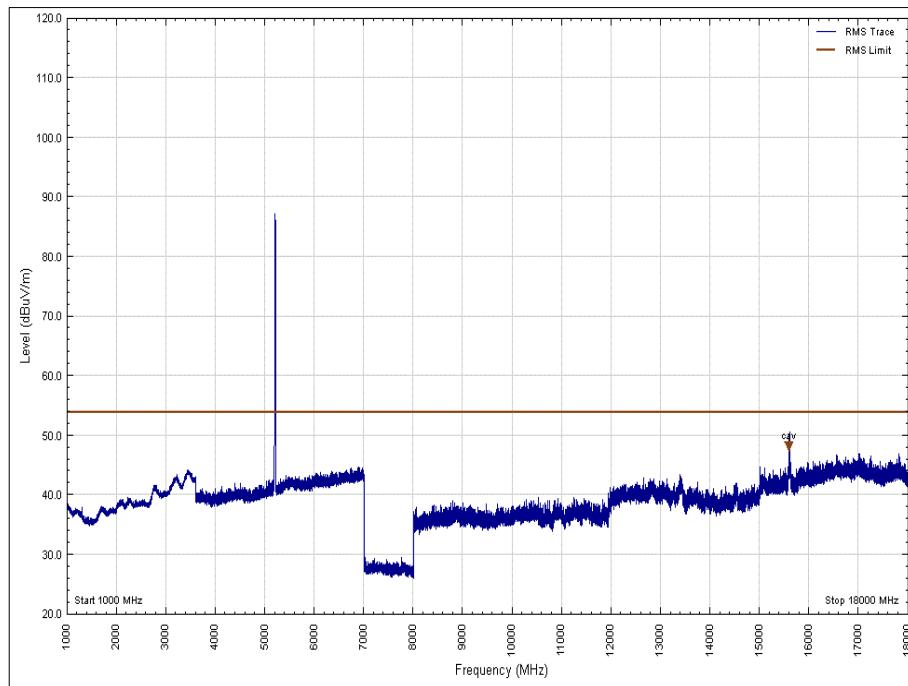
Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15603.397	64.00	52.00	73.98	53.98	9.98	1.98	Horizontal	X

Table 295 – 5200 MHz, 1 GHz to 40 GHz – Antenna 1

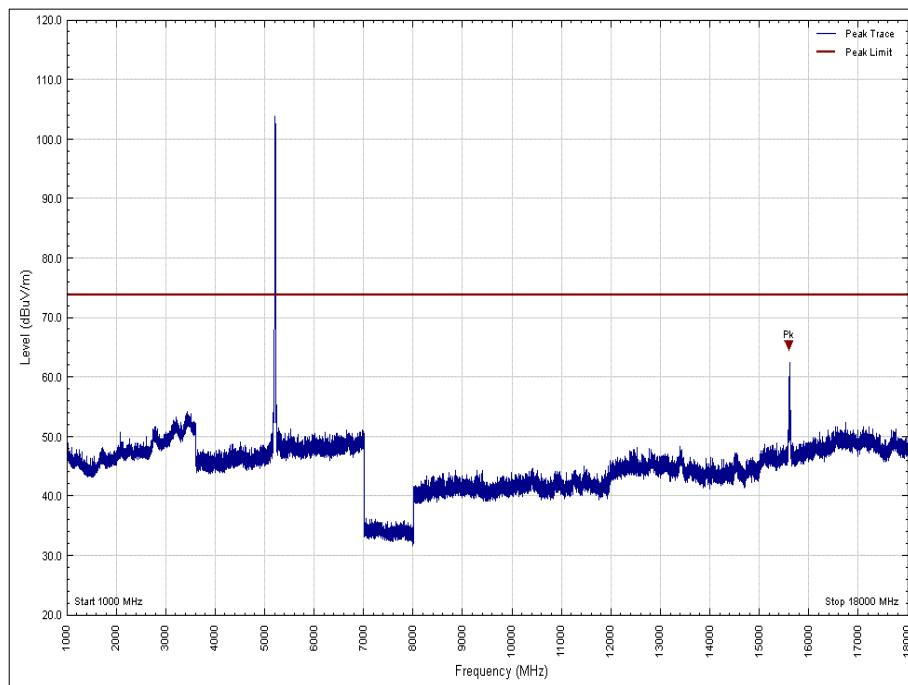
No other emissions were detected within 10 dB of the limit.



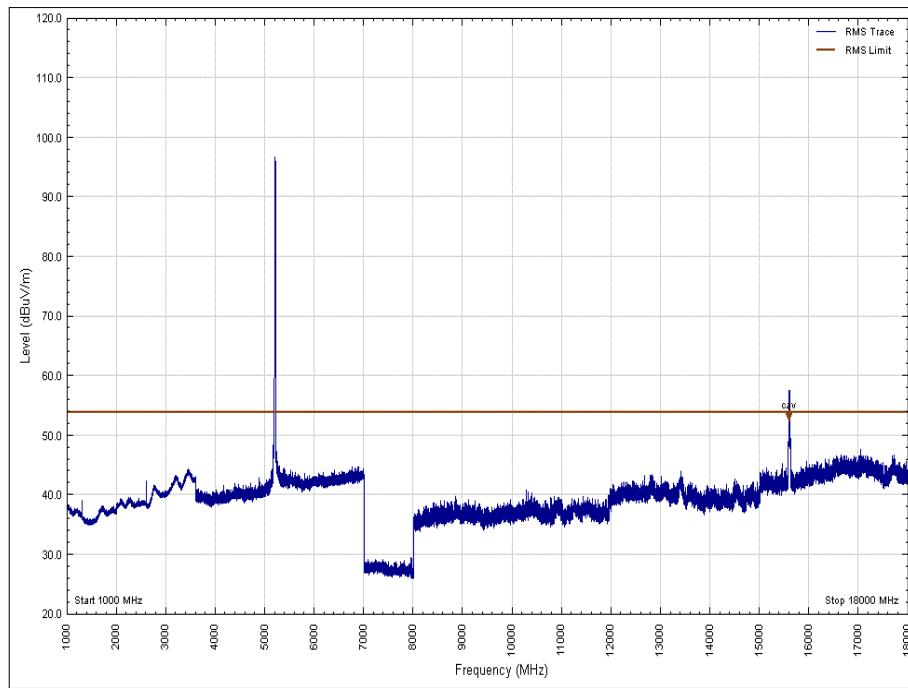
**Figure 628 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



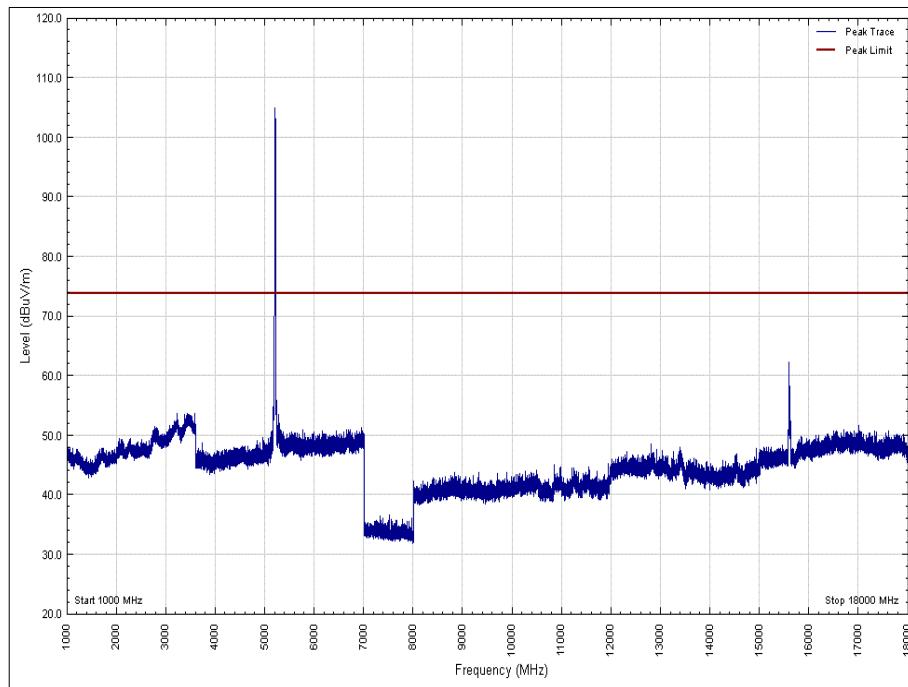
**Figure 629 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



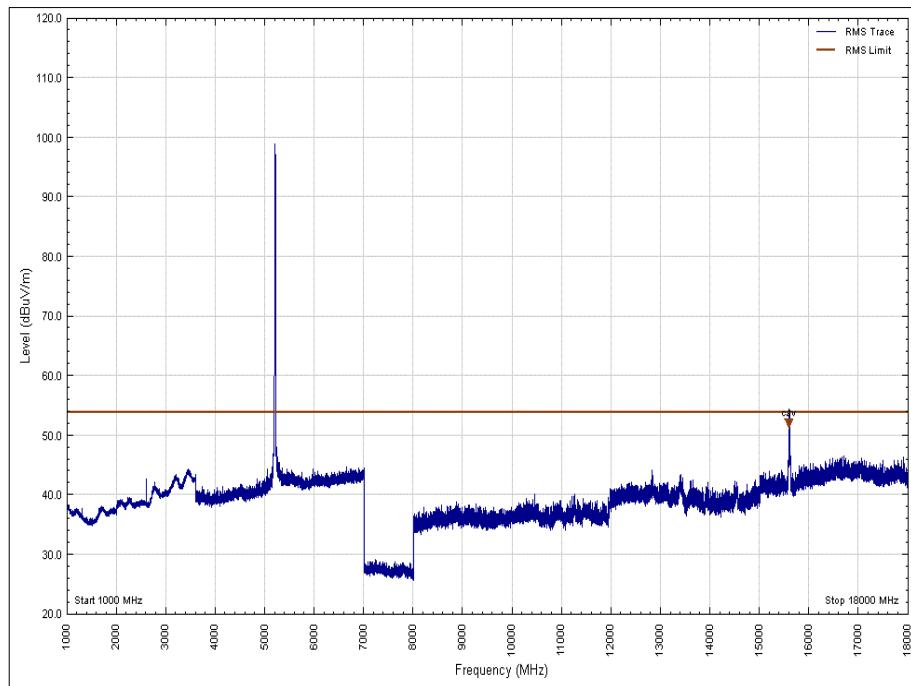
**Figure 630 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



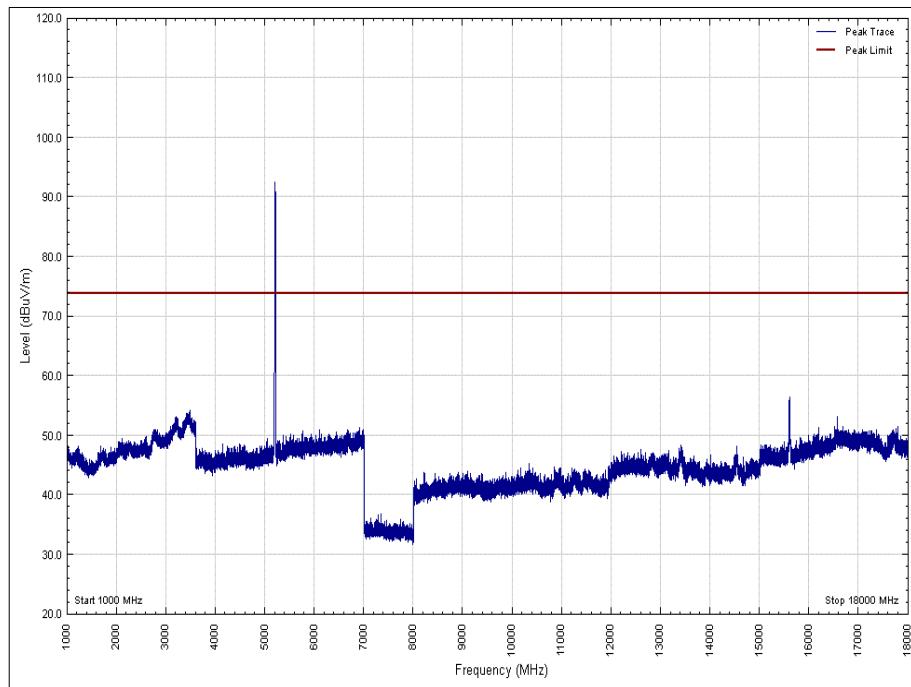
**Figure 631 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



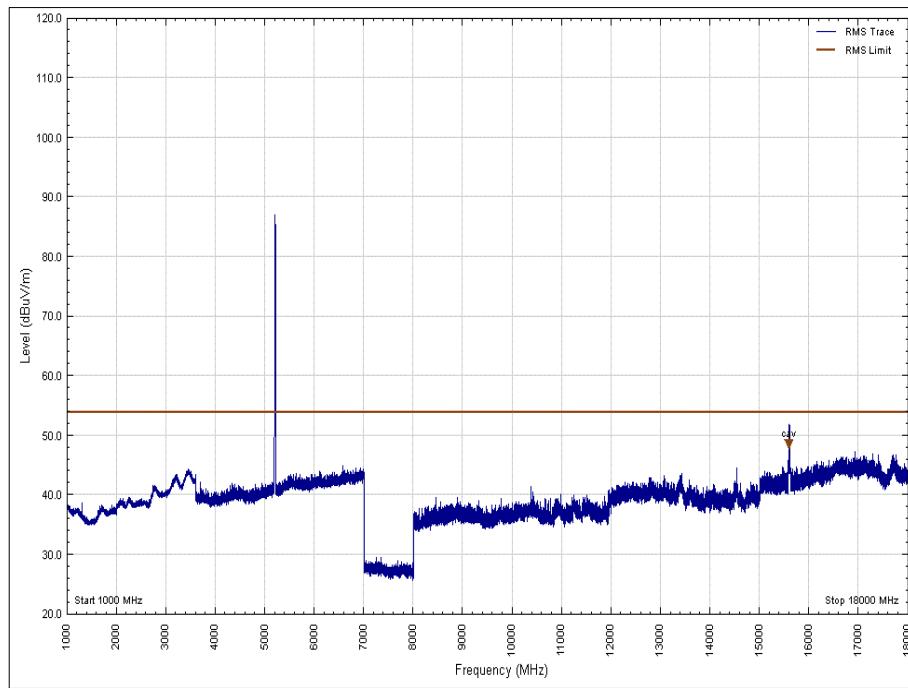
**Figure 632 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



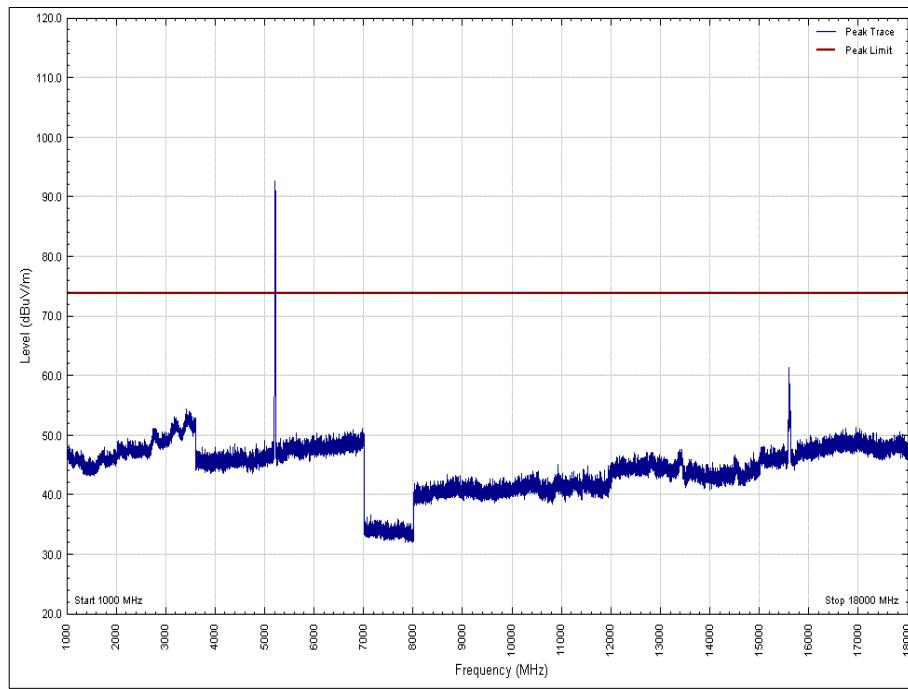
**Figure 633 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



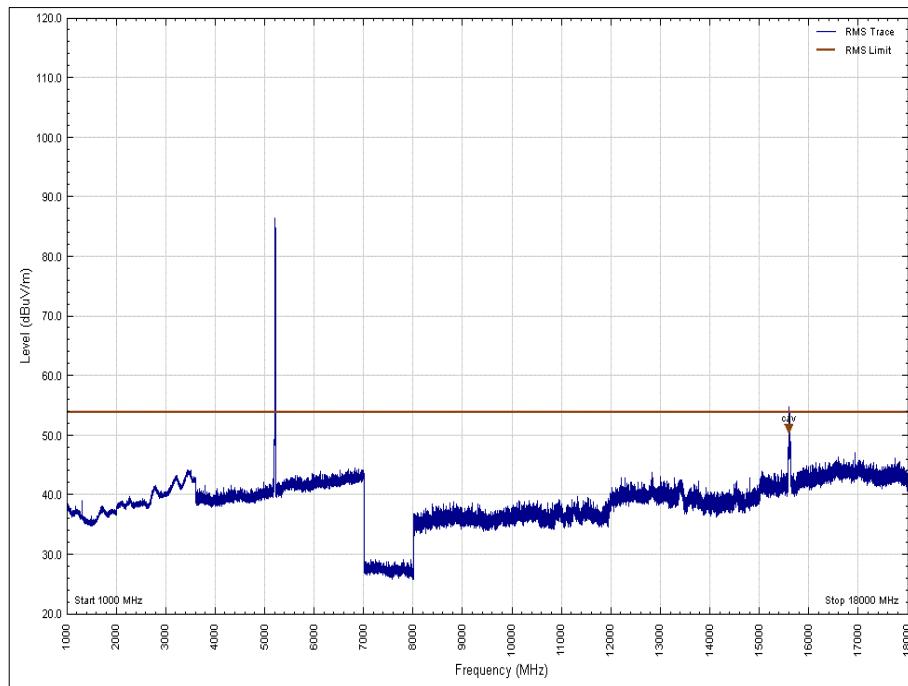
**Figure 634 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



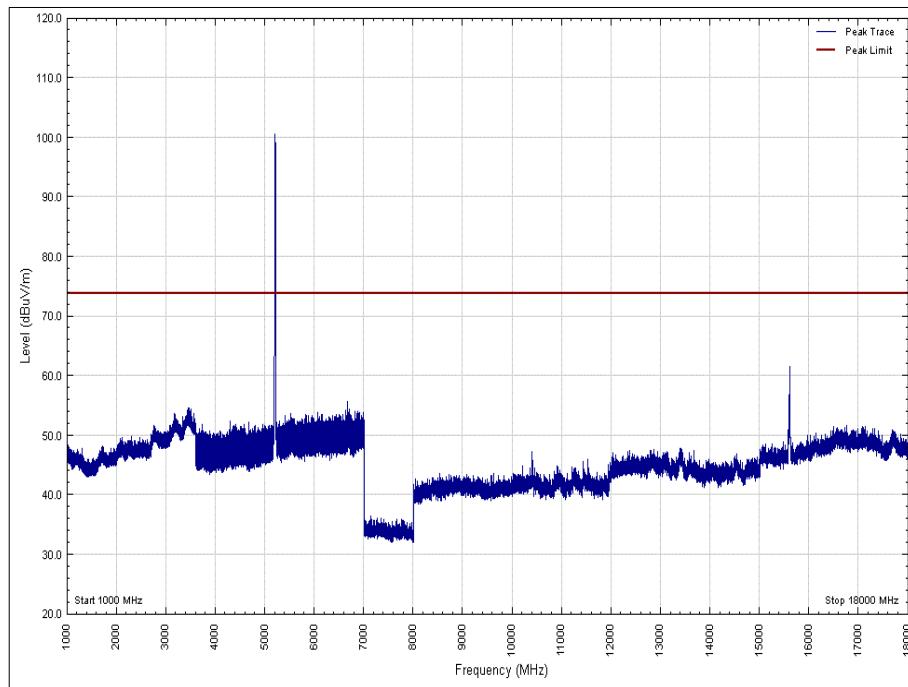
**Figure 635 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



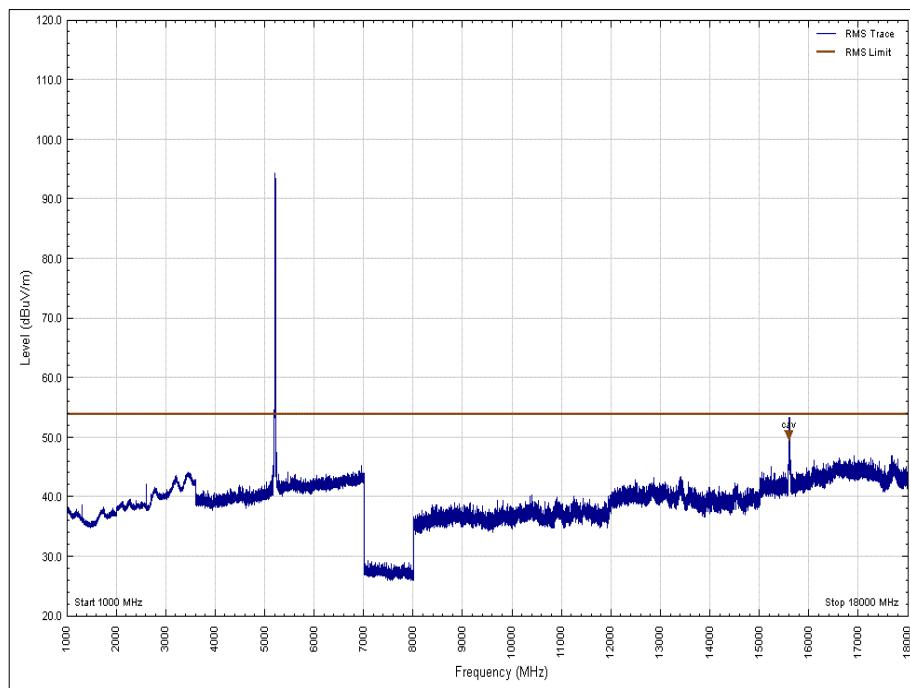
**Figure 636 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 637 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 638 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



**Figure 639 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
107.146	34.62	-	43.50	-	5.88	-	Vertical	X

Table 296 – 5240 MHz, 30 MHz to 1 GHz – Antenna 1

No other emissions were detected within 10 dB of the limit.

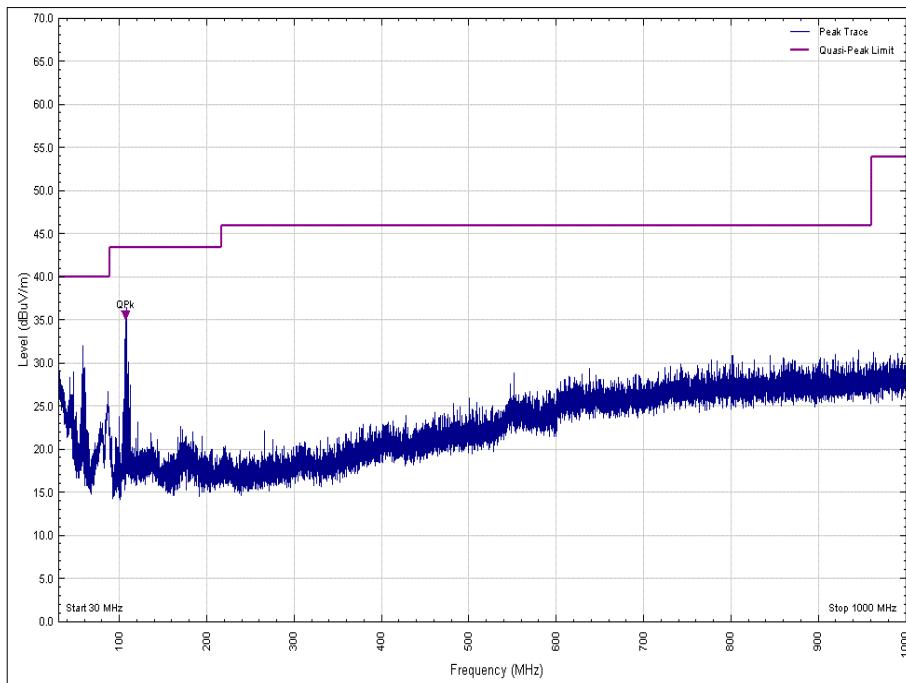


Figure 640 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X – Antenna 1

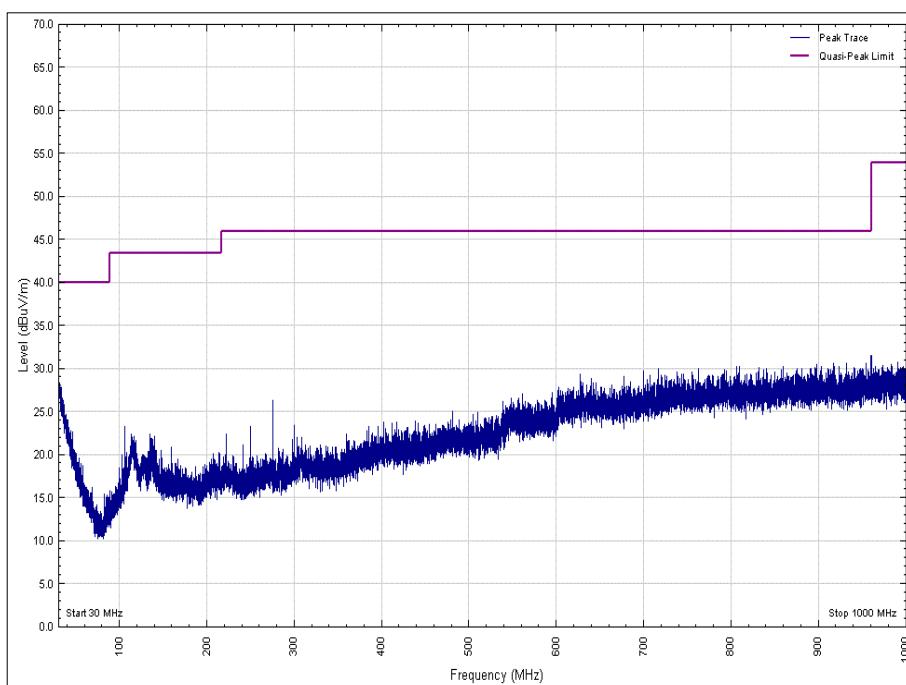


Figure 641 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X – Antenna 1

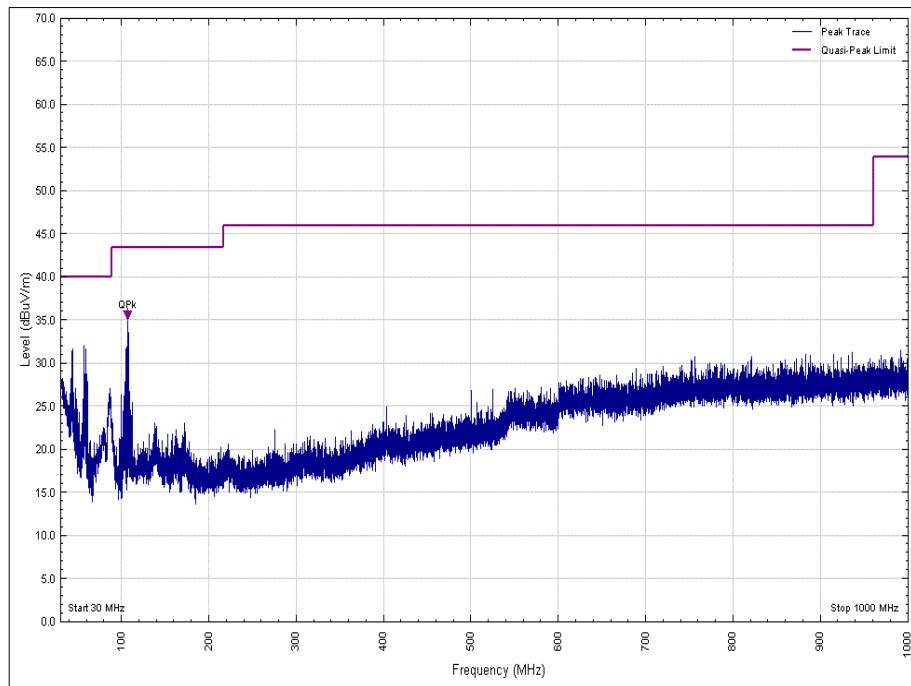


Figure 642 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y – Antenna 1

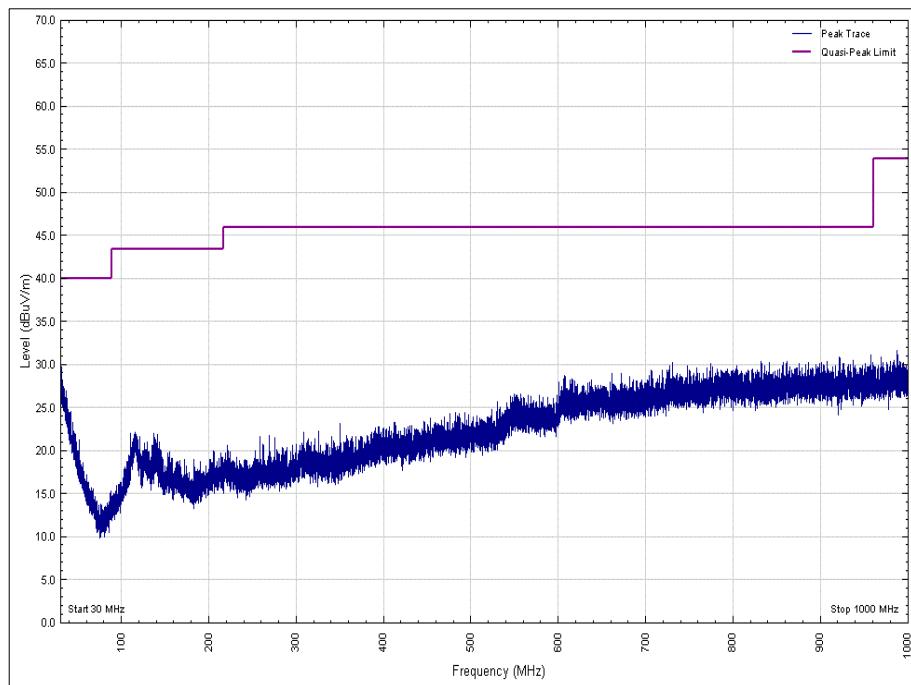


Figure 643 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y – Antenna 1

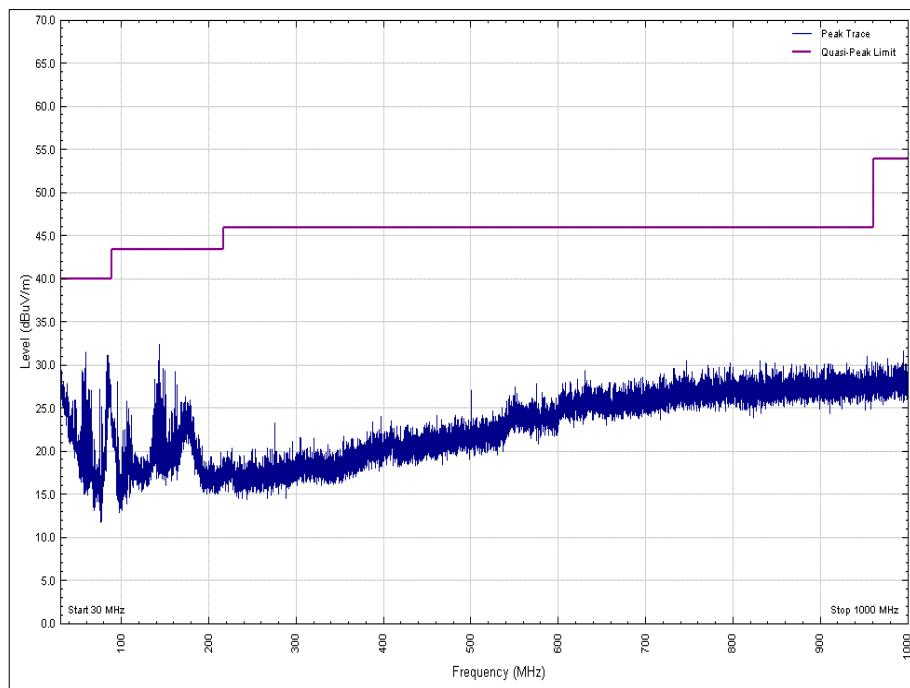


Figure 644 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z – Antenna 1

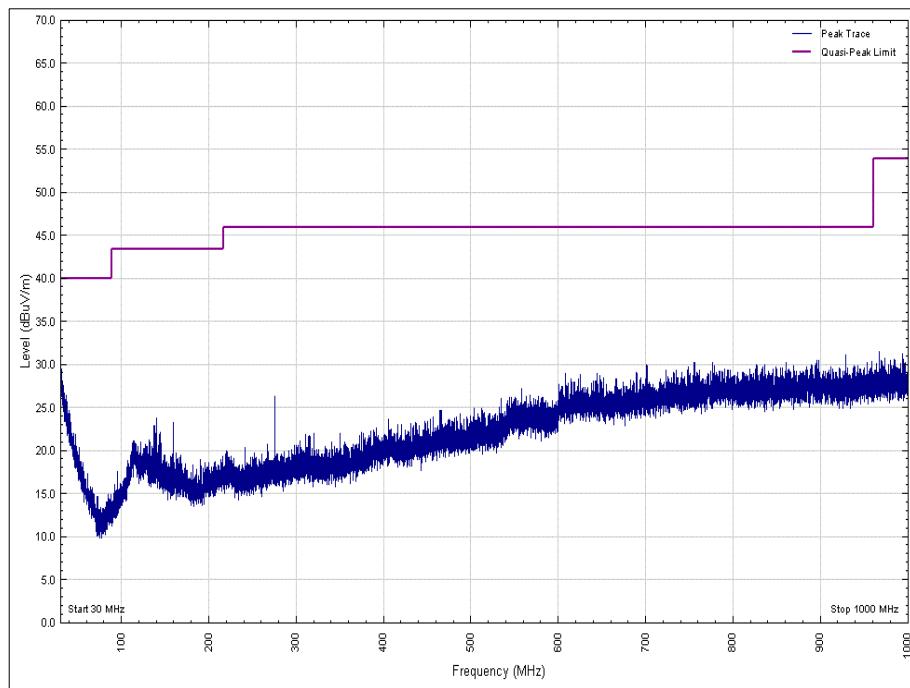


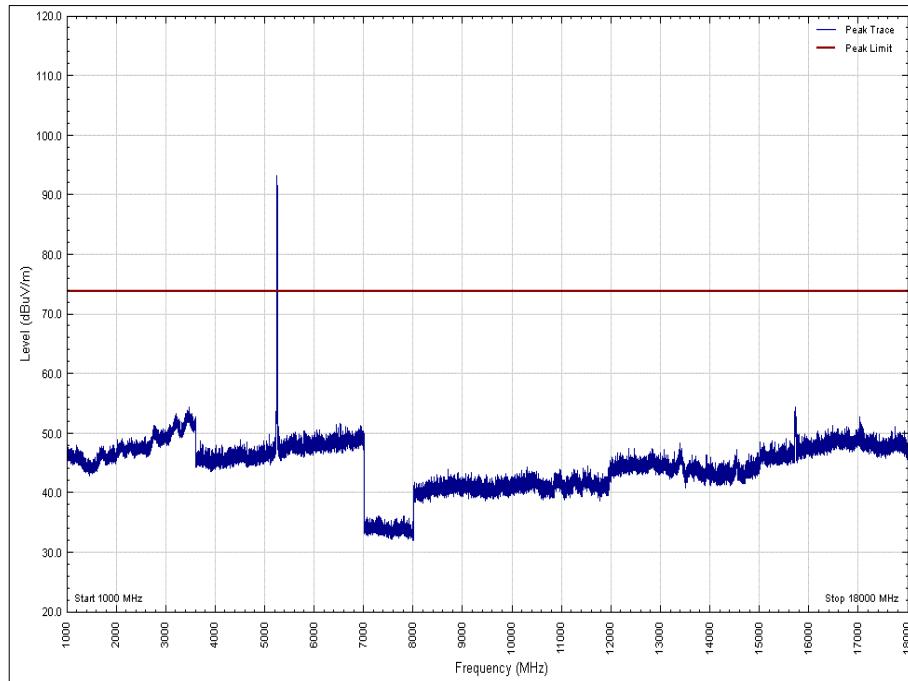
Figure 645 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z – Antenna 1



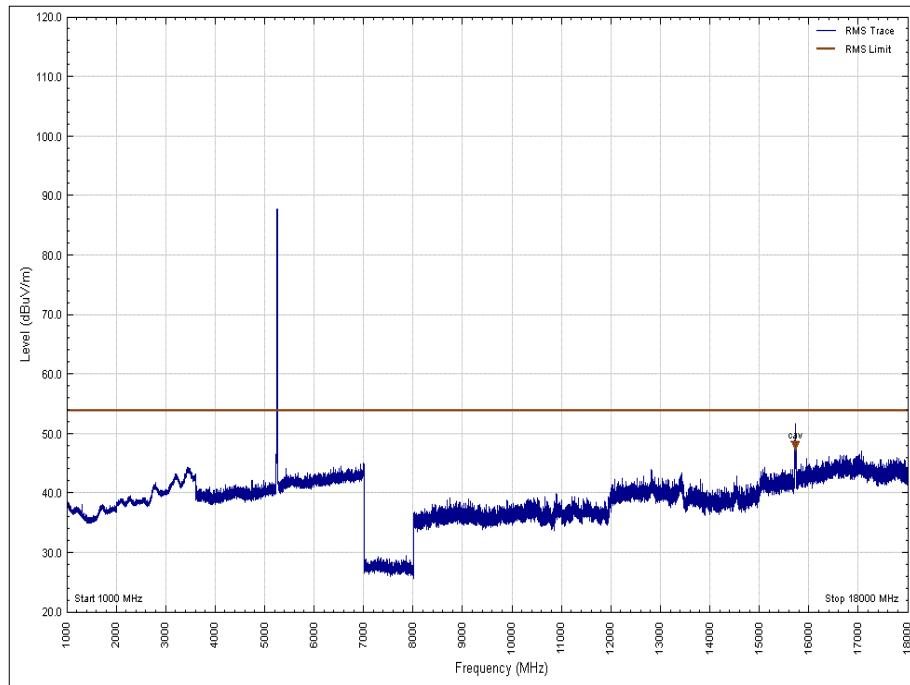
Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15721.475	-	51.38	-	53.98	-	2.60	Horizontal	X

Table 297 – 5240 MHz, 1 GHz to 40 GHz – Antenna 1

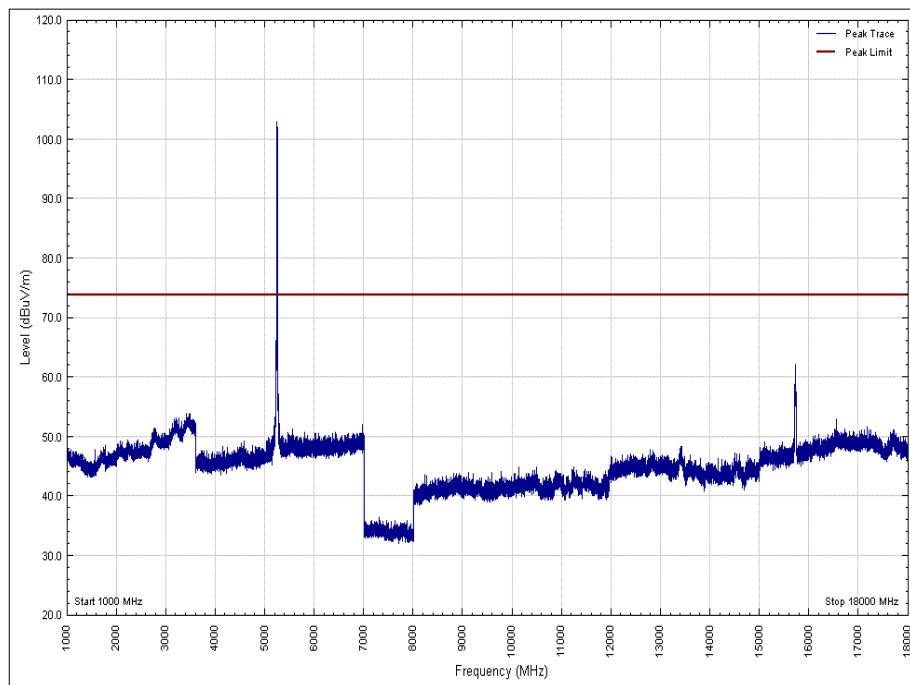
No other emissions were detected within 10 dB of the limit.



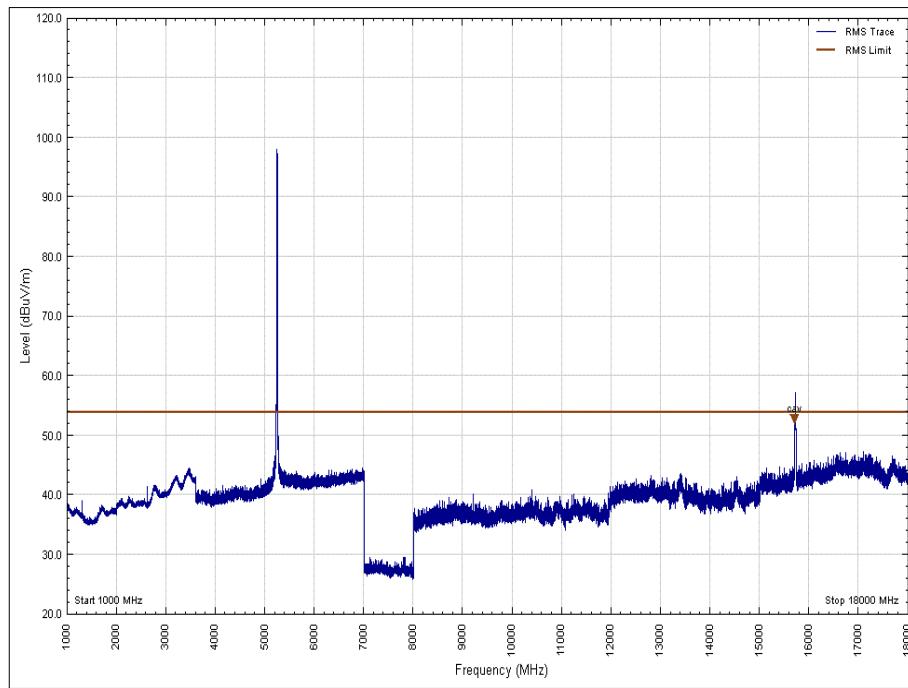
**Figure 646 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



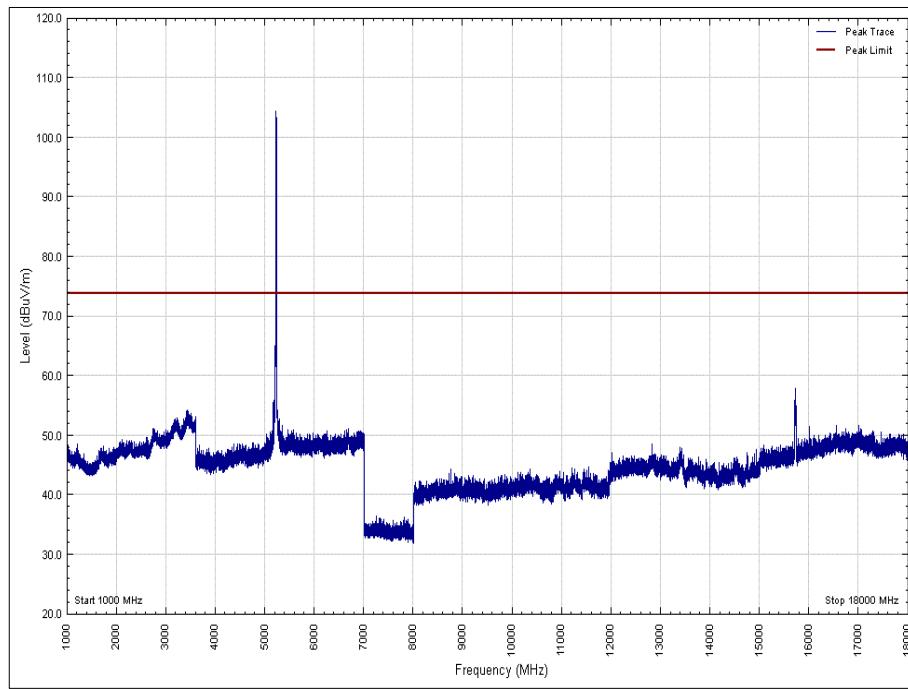
**Figure 647 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



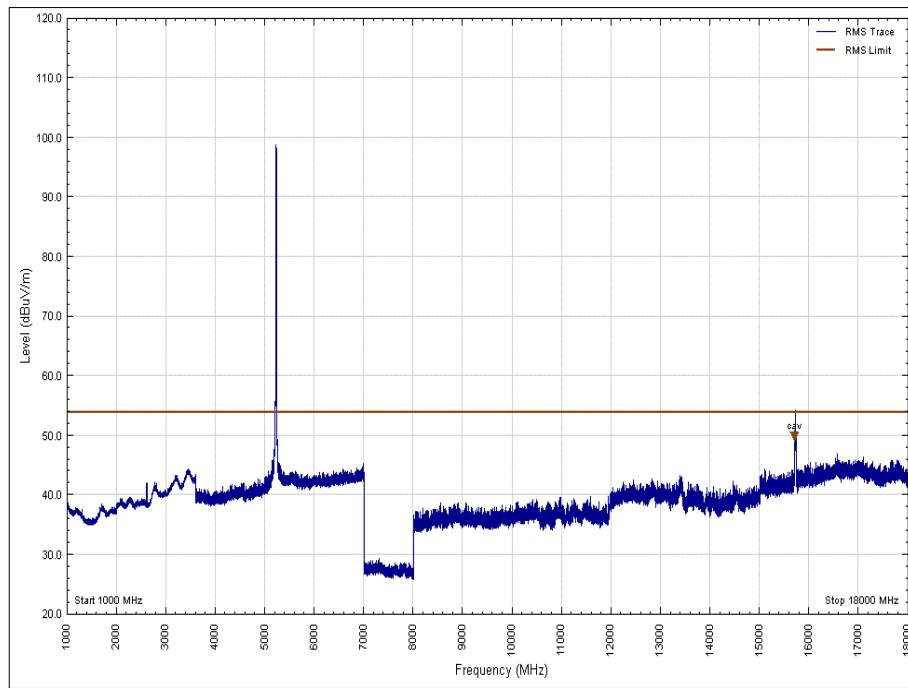
**Figure 648 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



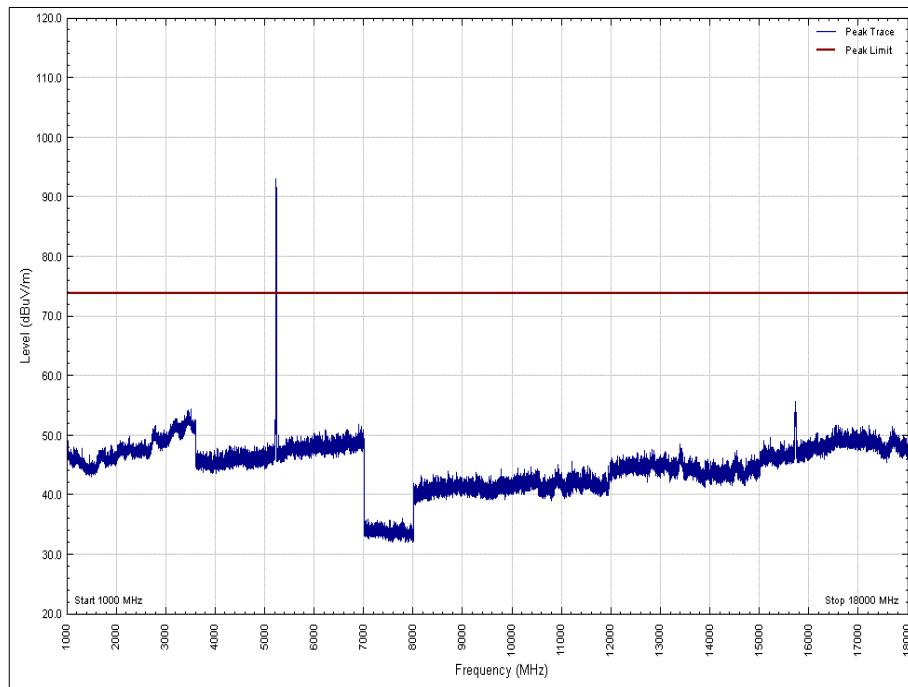
**Figure 649 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



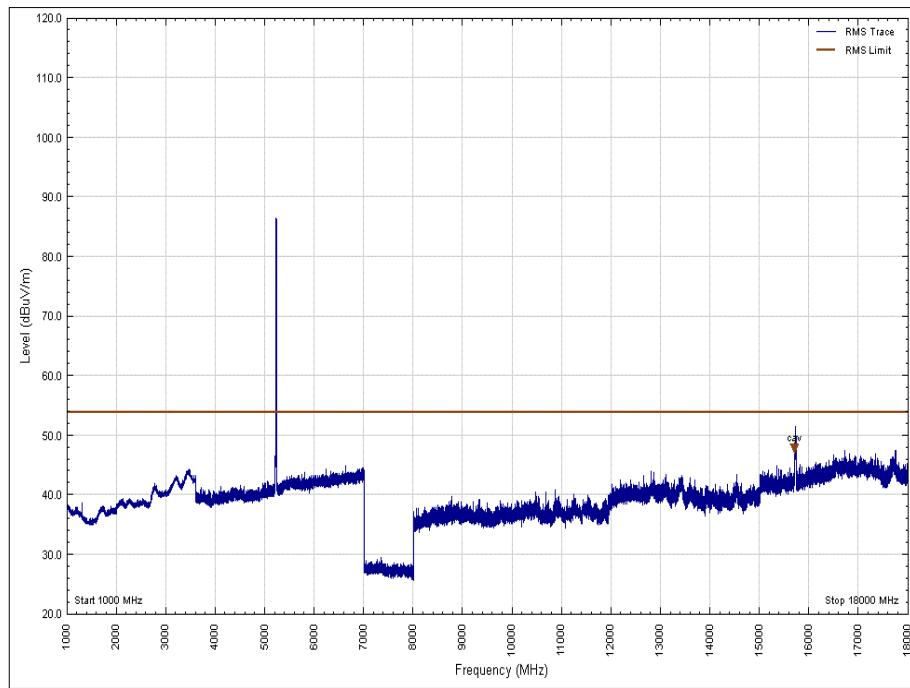
**Figure 650 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



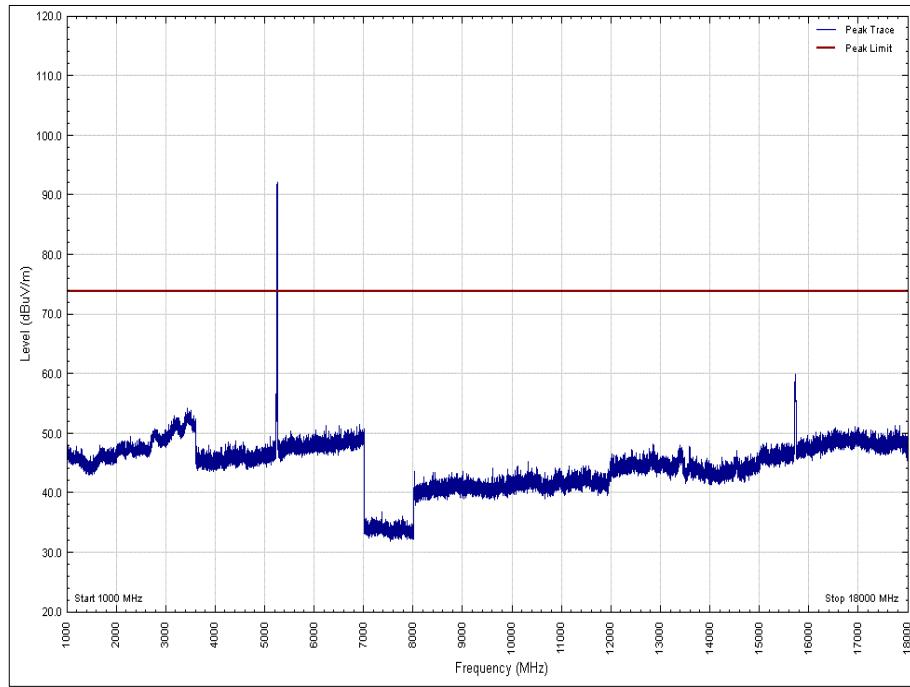
**Figure 651 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



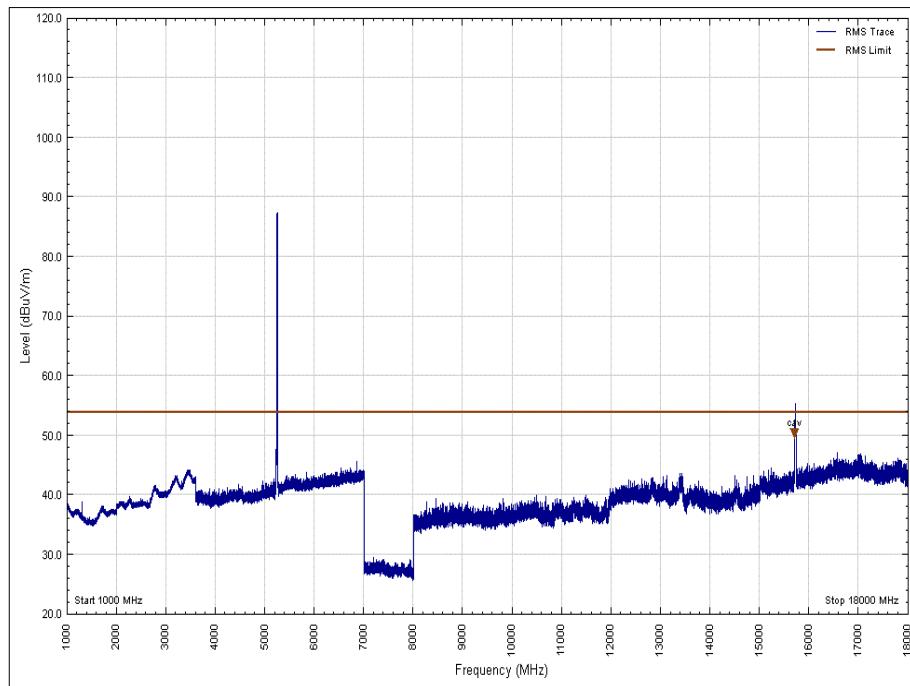
**Figure 652 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



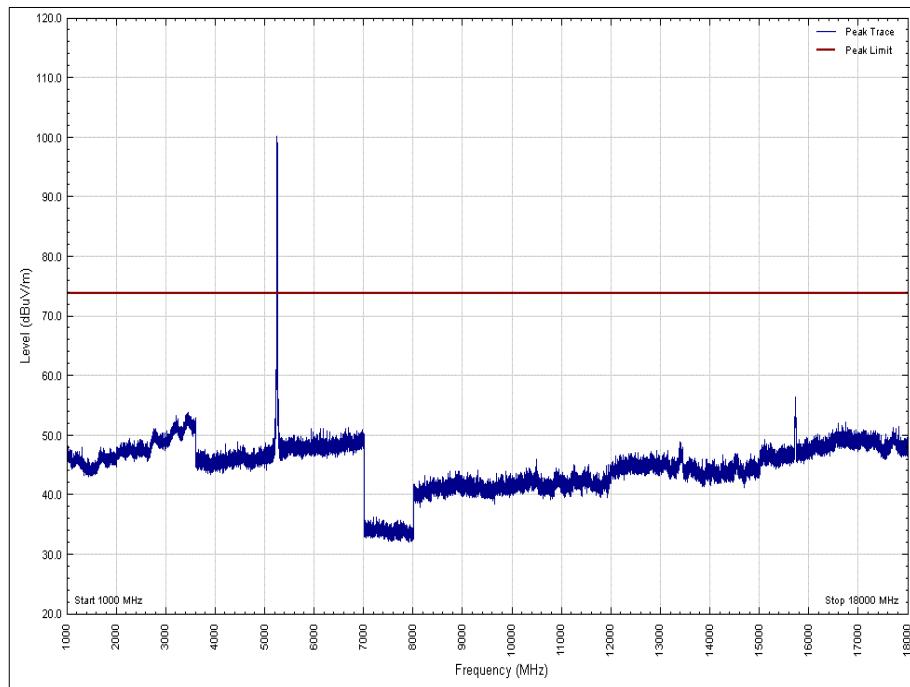
**Figure 653 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



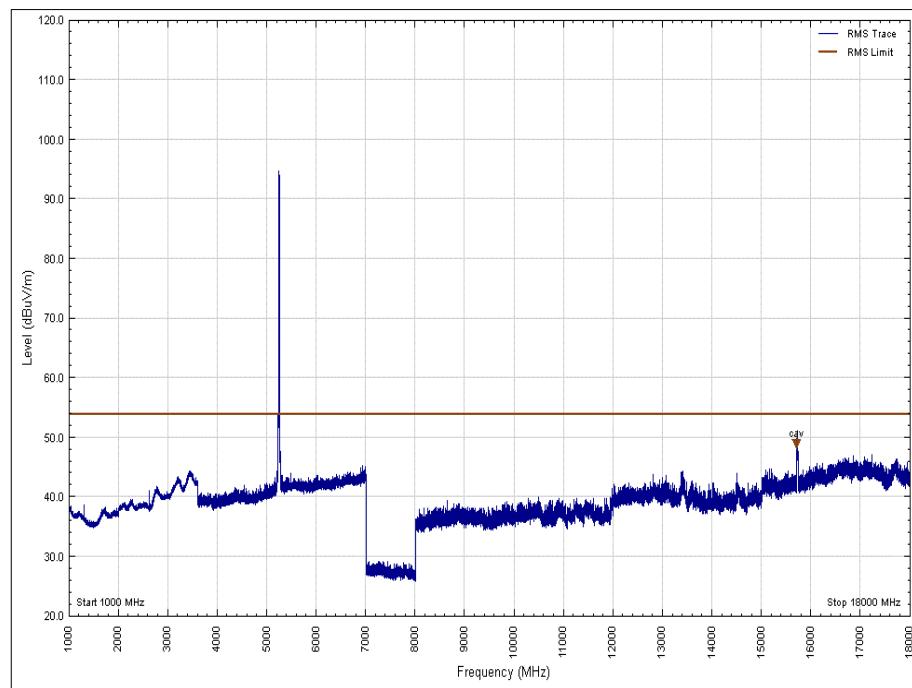
**Figure 654 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 655 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 656 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



**Figure 657 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**

5 GHz WLAN - 802.11 ac 20 MHz Bandwidth

Testing was performed on the Modulation Coding Scheme which resulted in the highest conducted output power. The Modulation Coding Scheme used during testing was MCS0.

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
59.205	33.19	-	40.00	-	6.81	-	Vertical	Z
59.548	32.68	-	40.00	-	7.32	-	Vertical	Z

Table 298 – 5180 MHz, 30 MHz to 1 GHz - MIMO

No other emissions were detected within 10 dB of the limit.

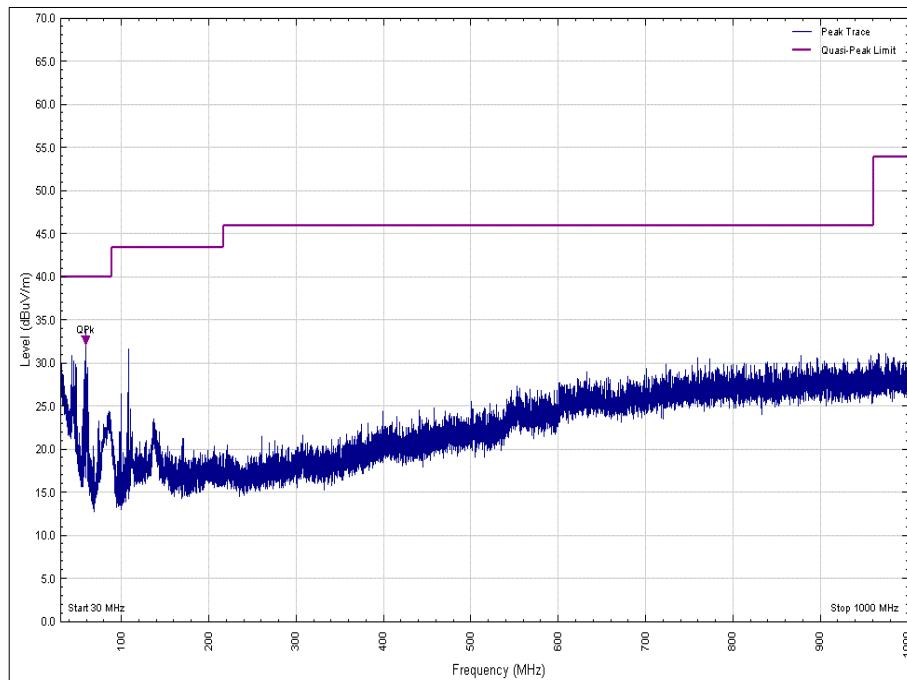


Figure 658 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X - MIMO

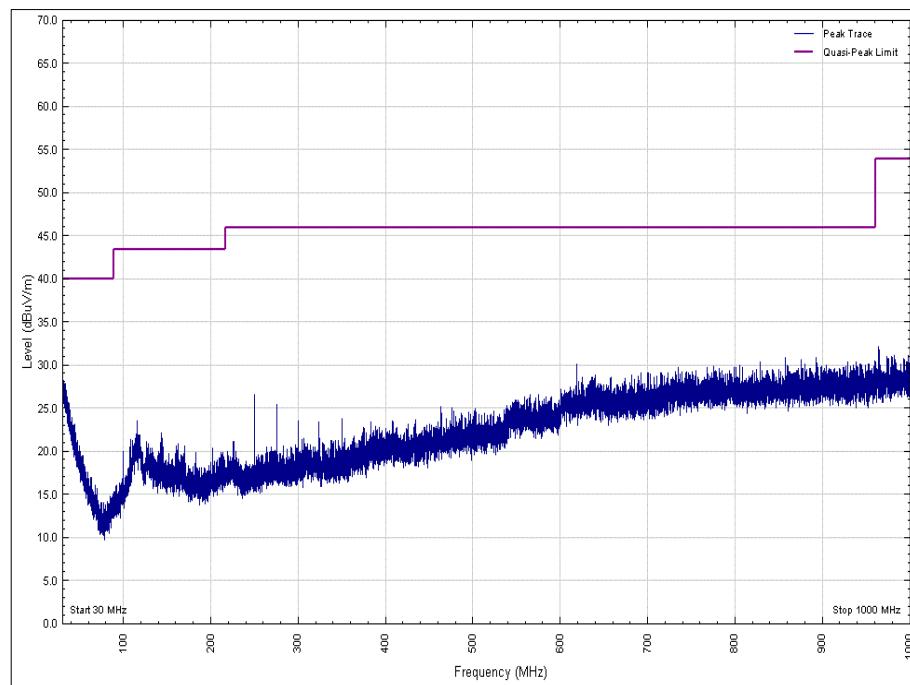


Figure 659 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X - MIMO

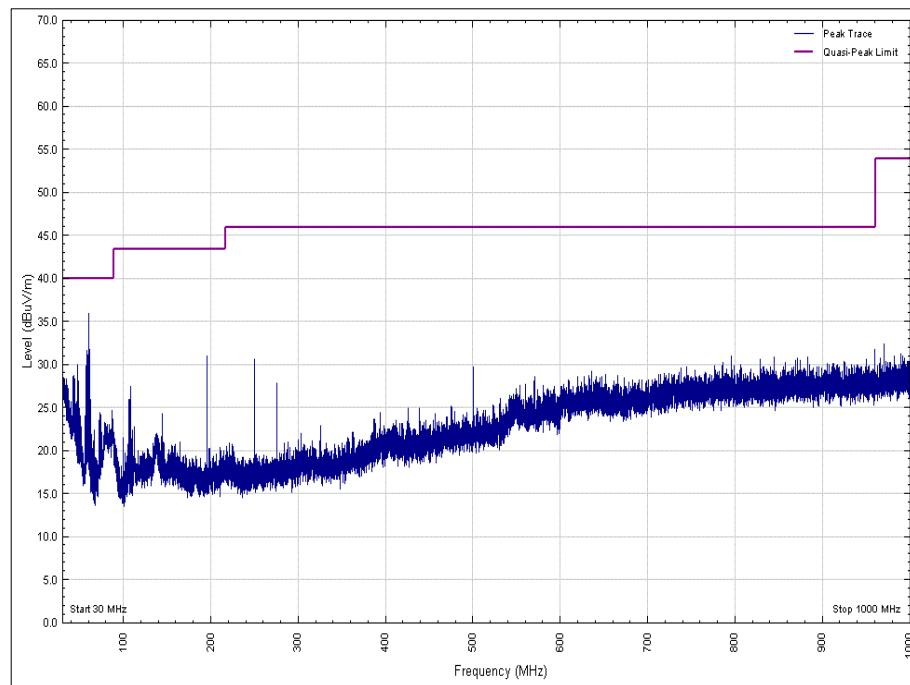


Figure 660 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y - MIMO

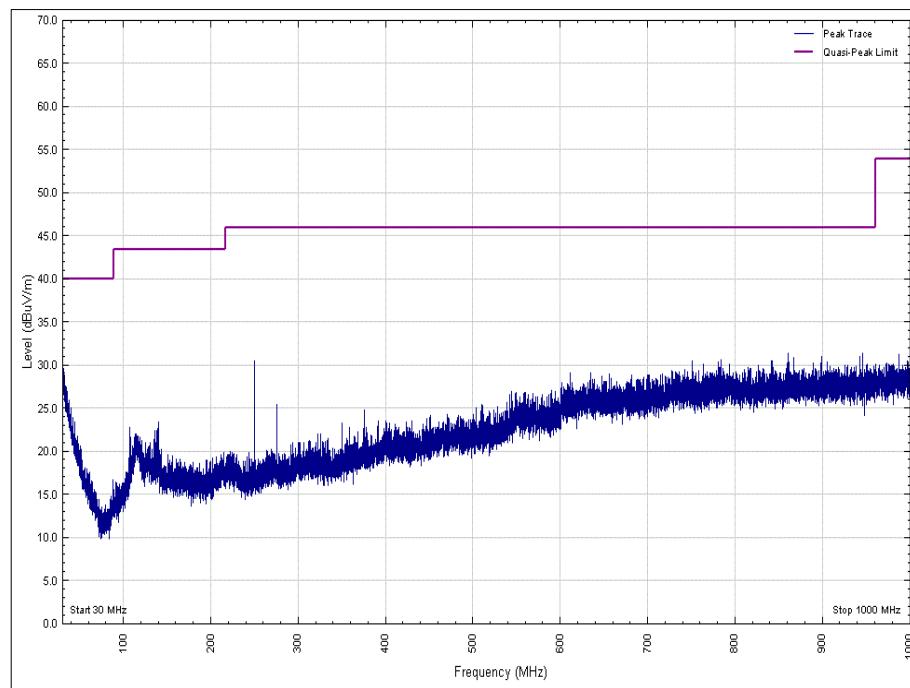


Figure 661 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y - MIMO

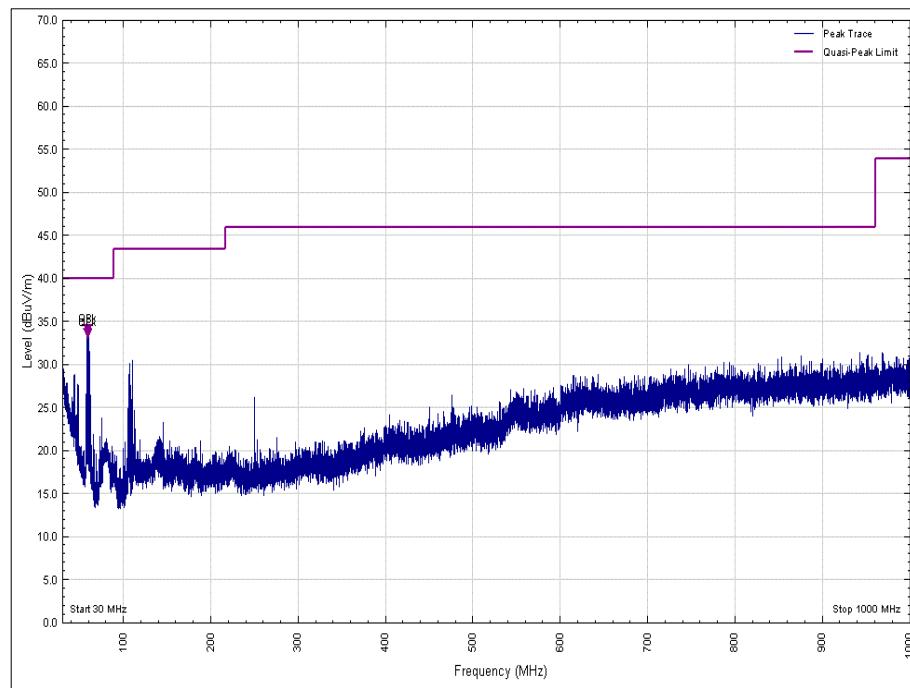


Figure 662 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z - MIMO

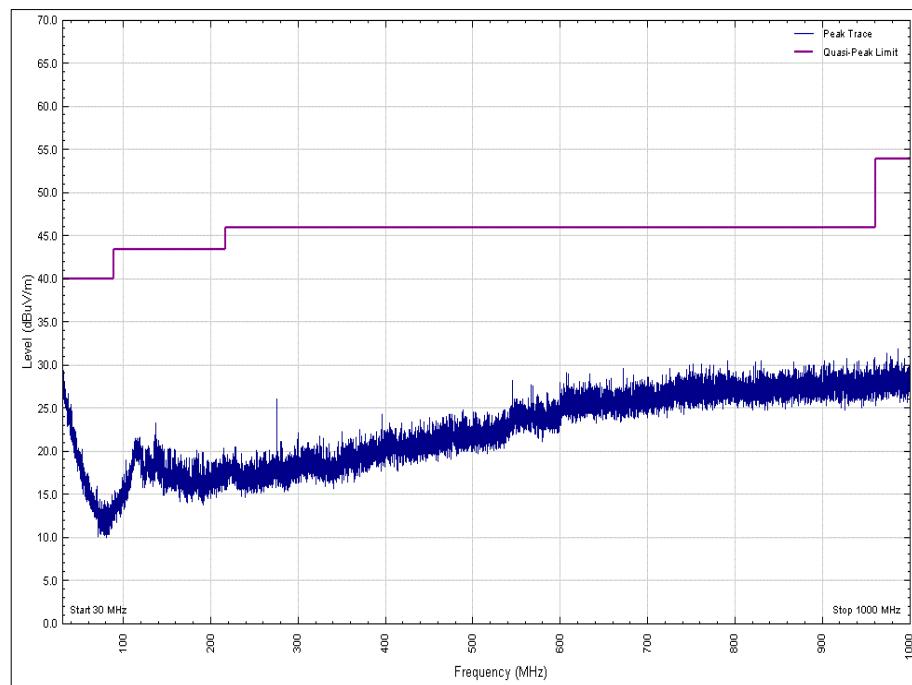


Figure 663 - 5180 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z - MIMO

Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15.538559	-	51.14	-	53.98	-	2.84	Horizontal	X

Table 299 – 5180 MHz, 1 GHz to 40 GHz - MIMO

No other emissions were detected within 10 dB of the limit.

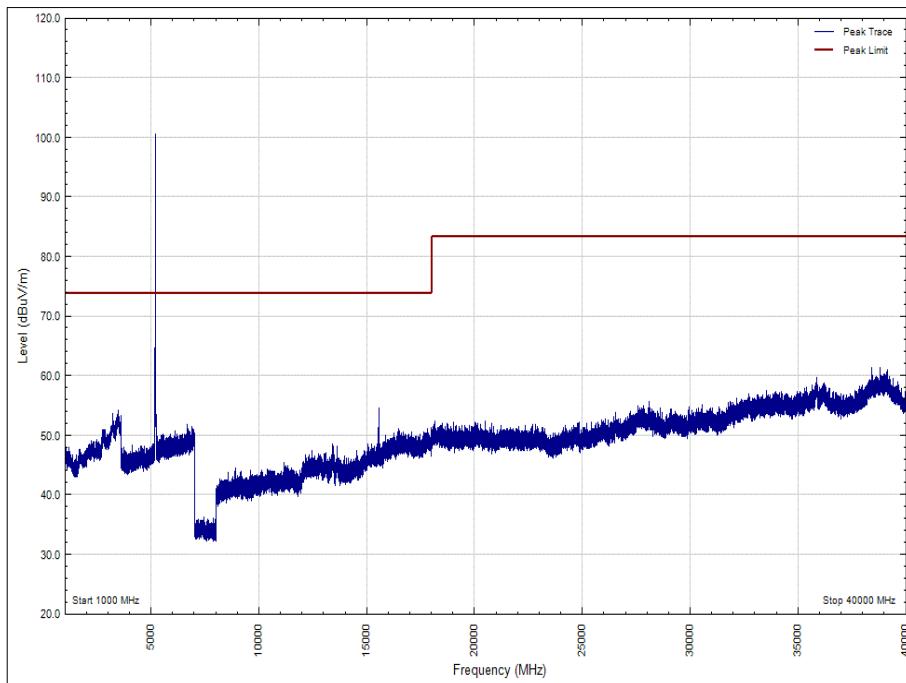


Figure 664 - 5180 MHz, 1 GHz to 40 GHz - Peak, Polarity: Vertical, EUT Orientation: X - MIMO

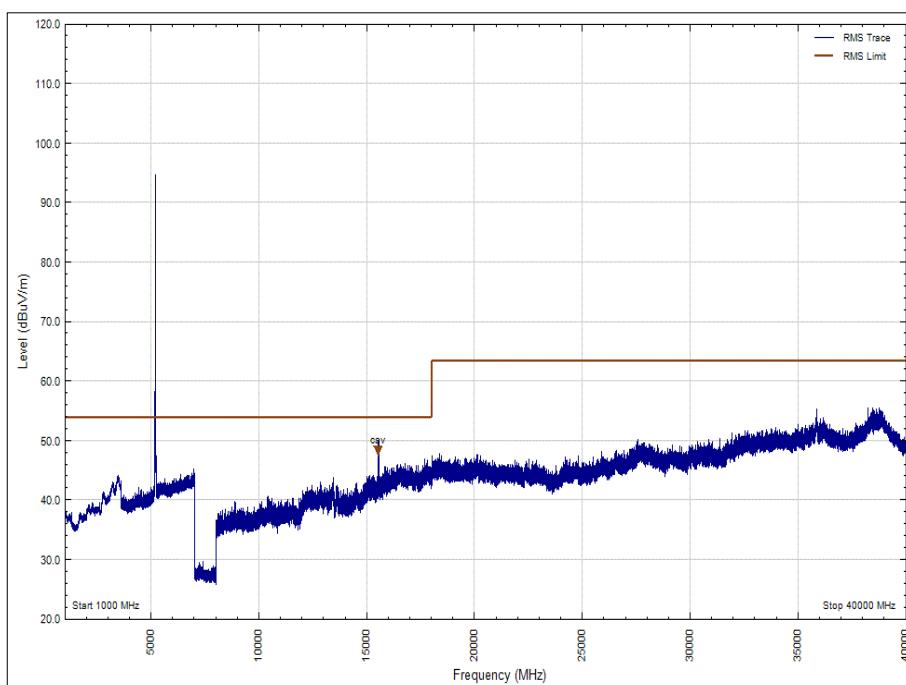
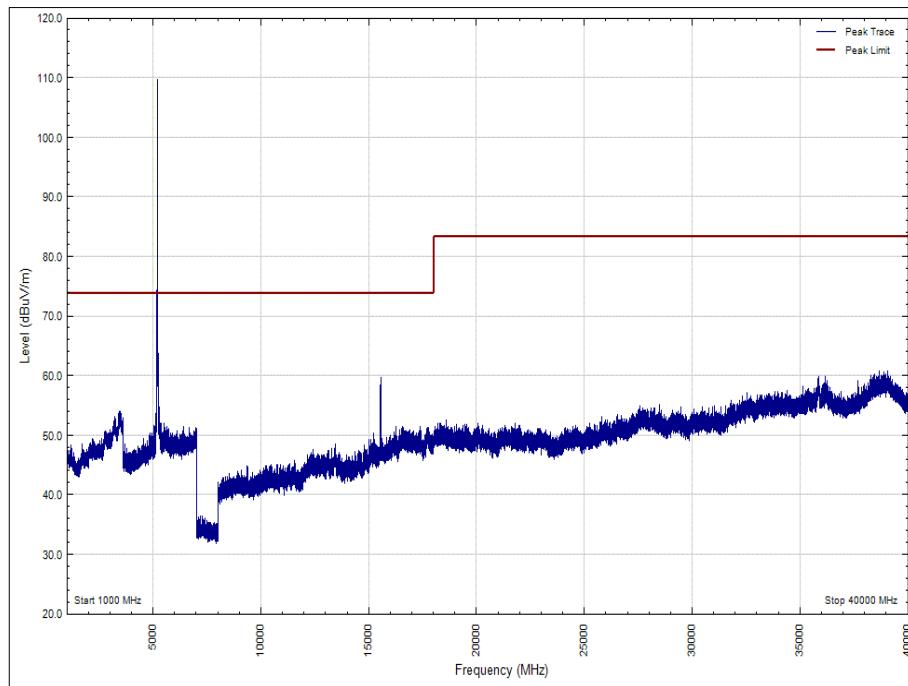
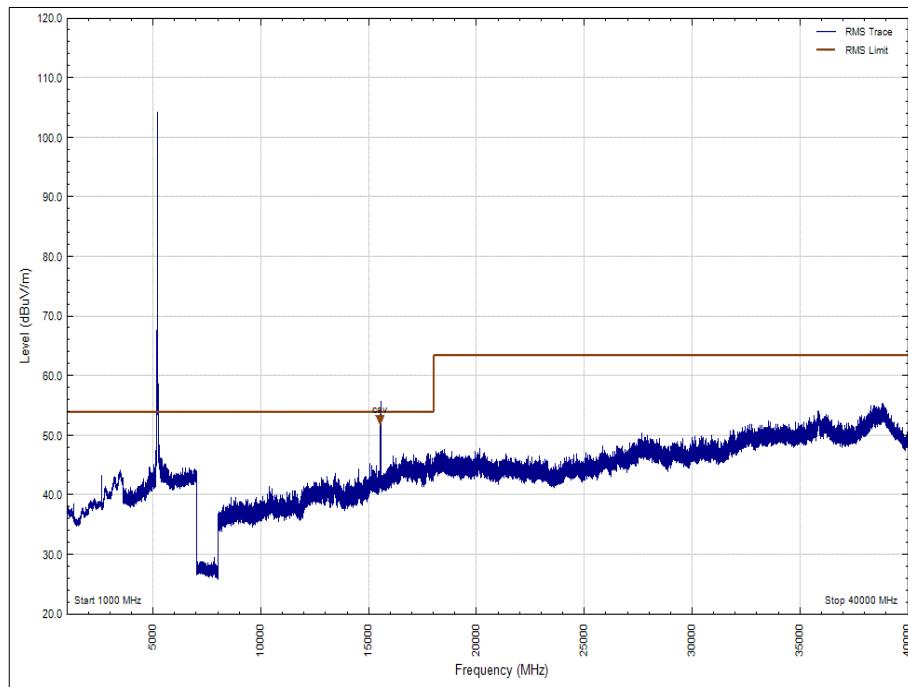


Figure 665 - 5180 MHz, 1 GHz to 40 GHz - Average, Polarity: Vertical, EUT Orientation: X - MIMO



**Figure 666 - 5180 MHz, 1 GHz to 40 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X - MIMO**



**Figure 667 - 5180 MHz, 1 GHz to 40 GHz - Average,
Polarity: Horizontal, EUT Orientation: X - MIMO**

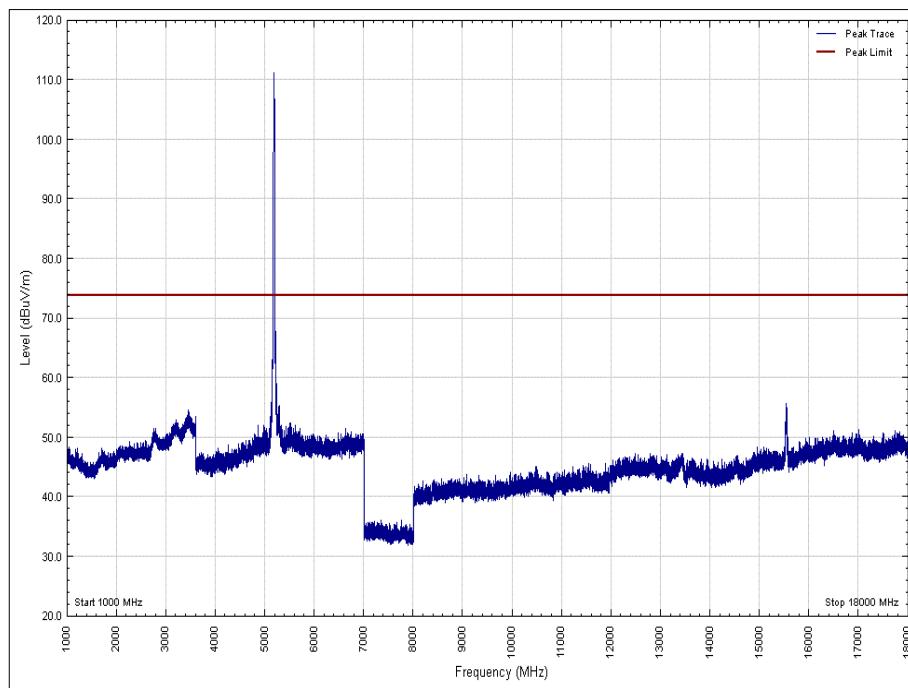


Figure 668 - 5180 MHz, 1 GHz to 18 GHz - Peak, Polarity: Vertical, EUT Orientation: Y - MIMO

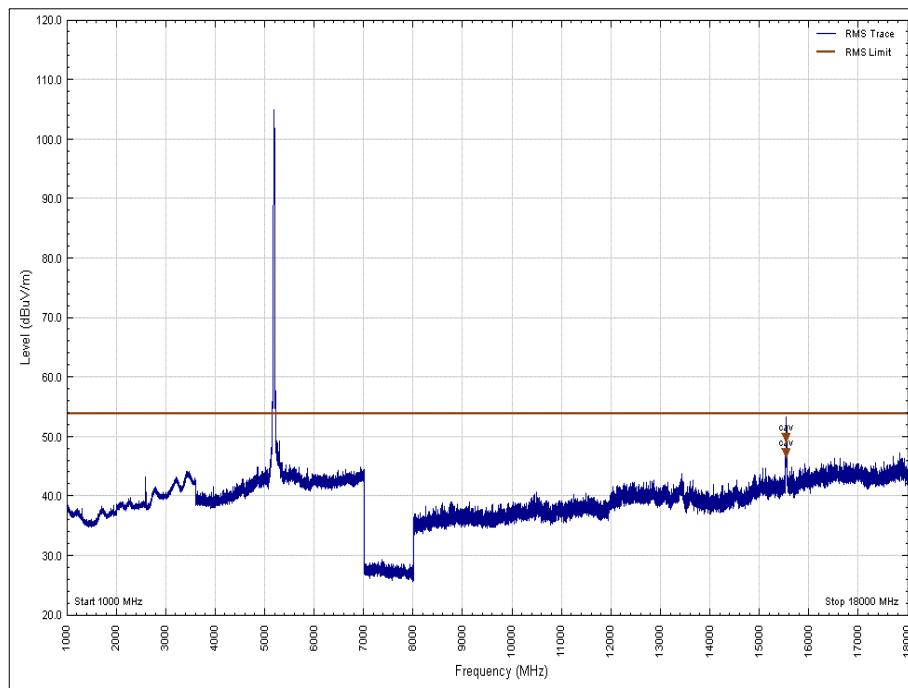
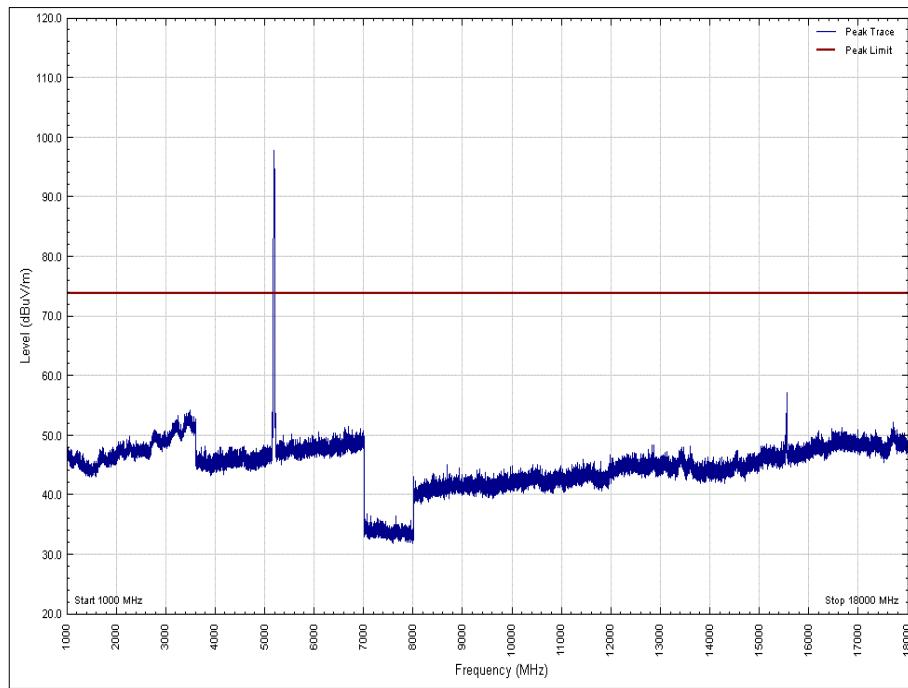
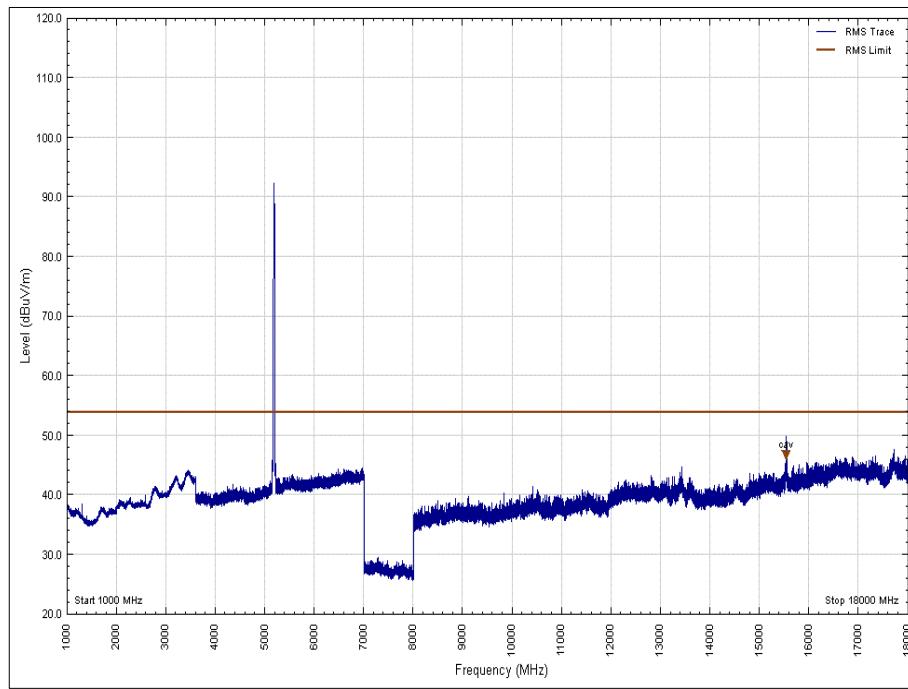


Figure 669 - 5180 MHz, 1 GHz to 18 GHz - Average, Polarity: Vertical, EUT Orientation: Y - MIMO



**Figure 670 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y - MIMO**



**Figure 671 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y - MIMO**

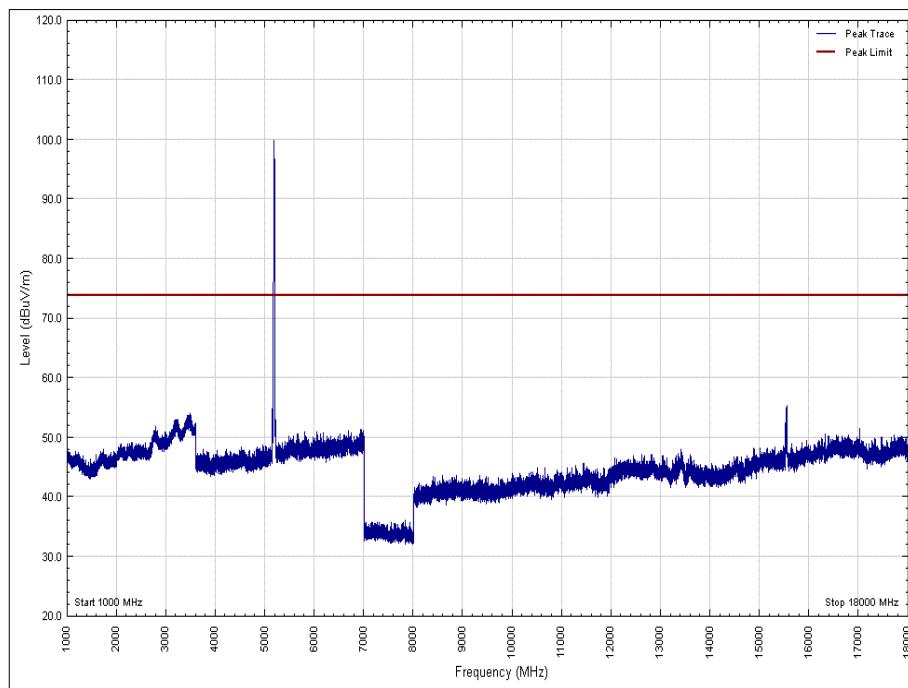


Figure 672 - 5180 MHz, 1 GHz to 18 GHz - Peak, Polarity: Vertical, EUT Orientation: Z - MIMO

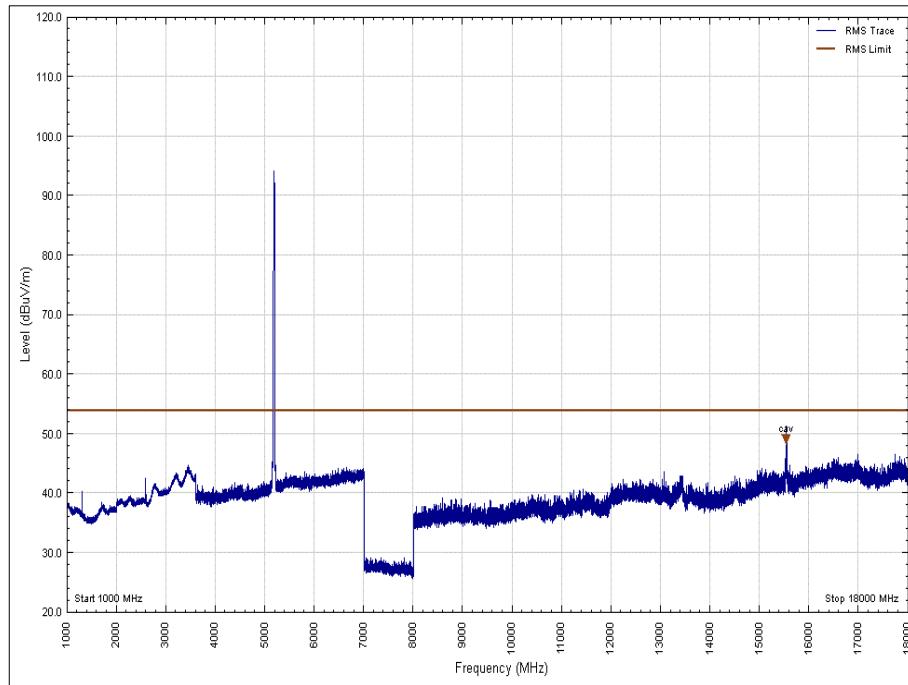
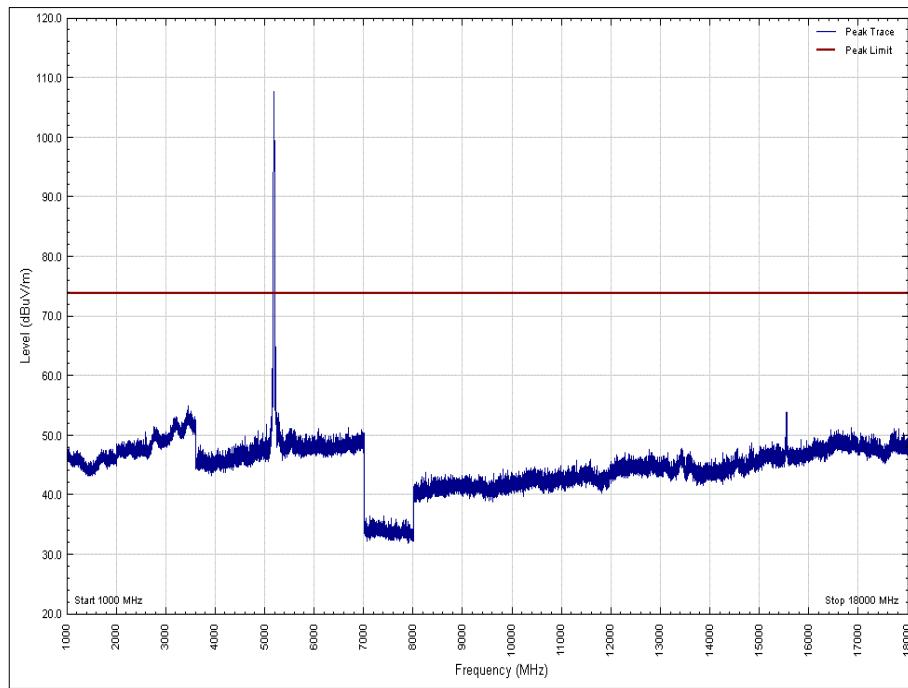
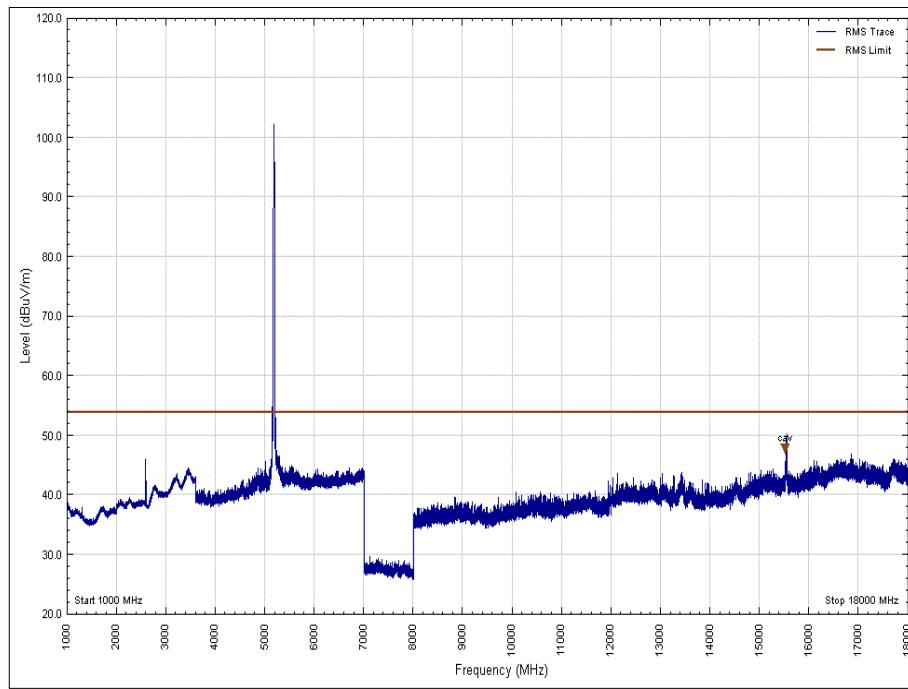


Figure 673 - 5180 MHz, 1 GHz to 18 GHz - Average, Polarity: Vertical, EUT Orientation: Z - MIMO



**Figure 674 - 5180 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z - MIMO**



**Figure 675 - 5180 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z - MIMO**

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
*								

Table 300 – 5200 MHz, 30 MHz to 1 GHz - MIMO

*No emissions were detected within 10 dB of the limit.

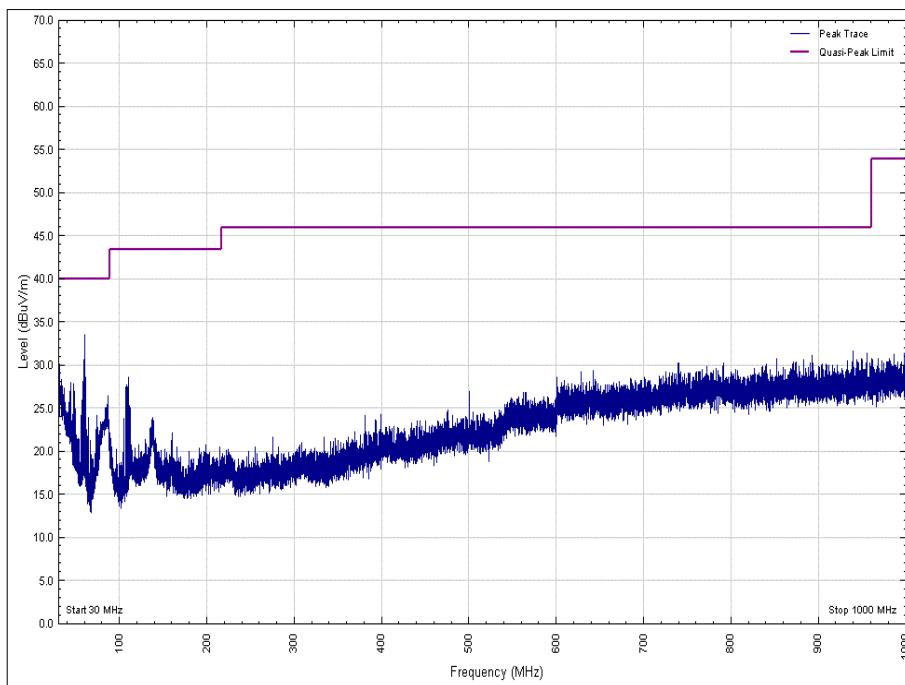


Figure 676 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X - MIMO

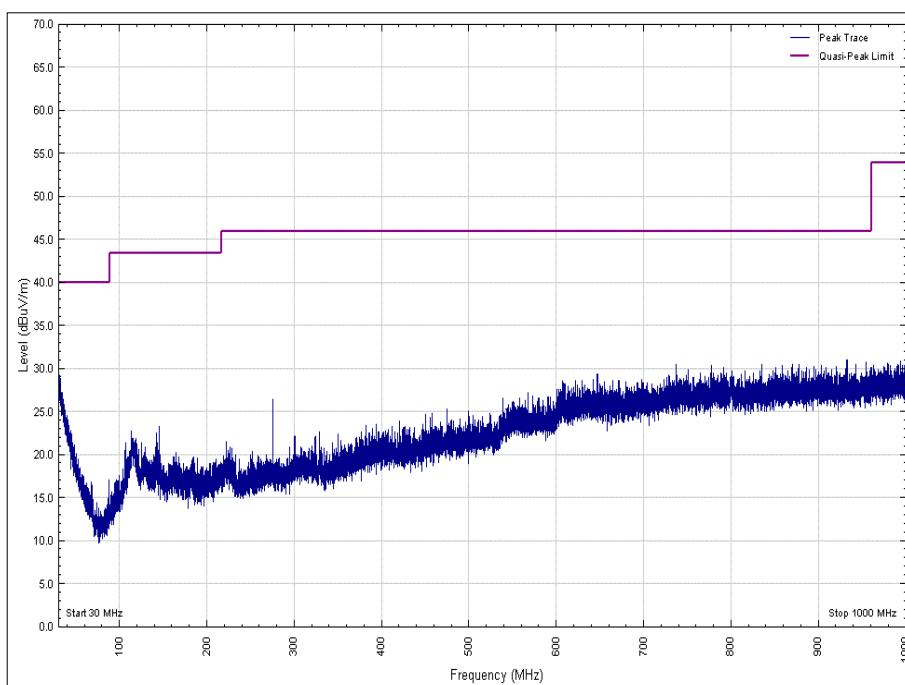


Figure 677 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X - MIMO

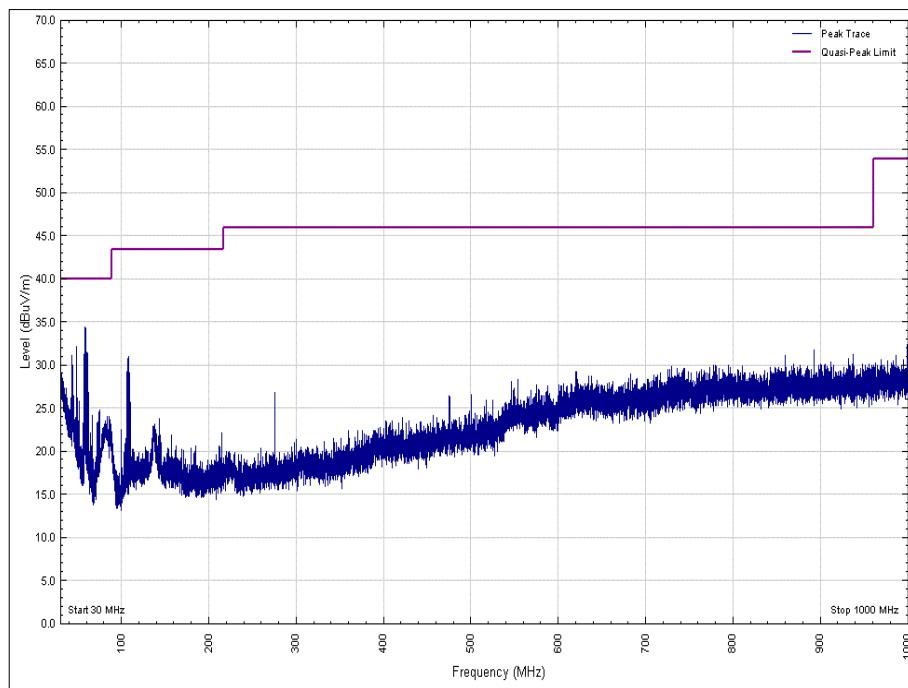


Figure 678 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y - MIMO

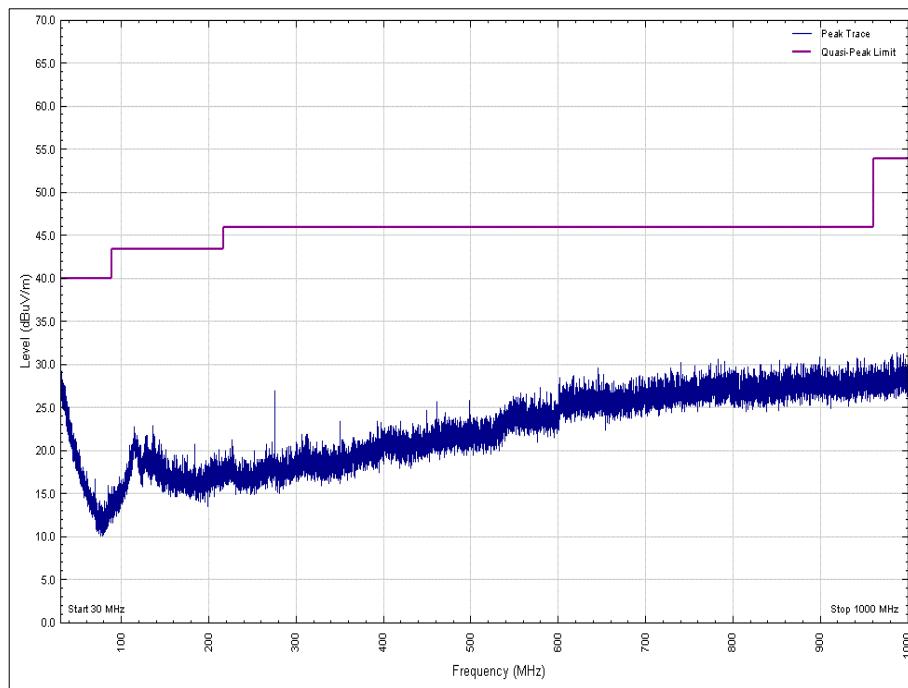


Figure 679 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y - MIMO

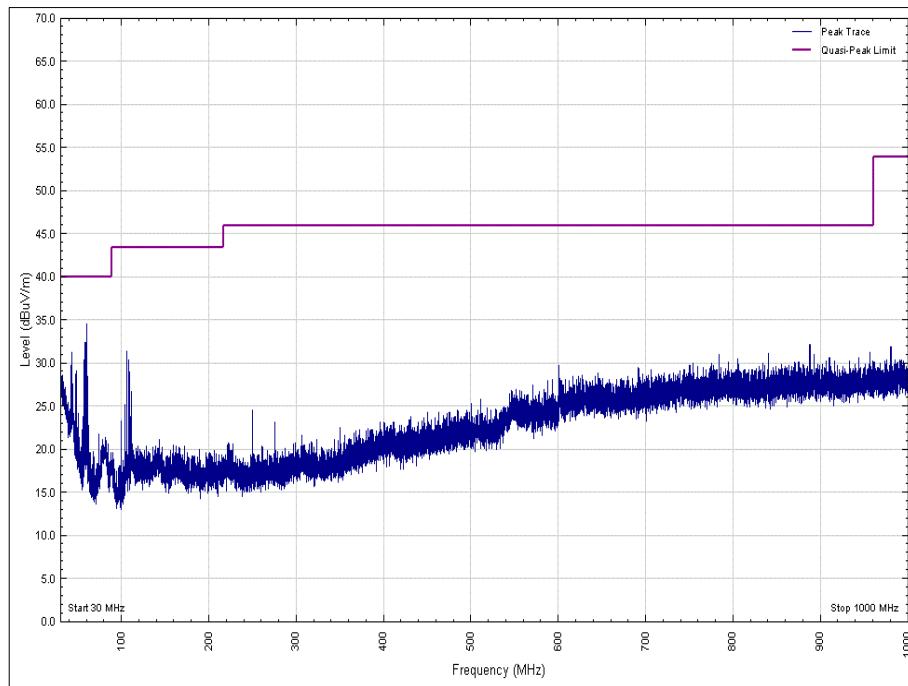


Figure 680 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z - MIMO

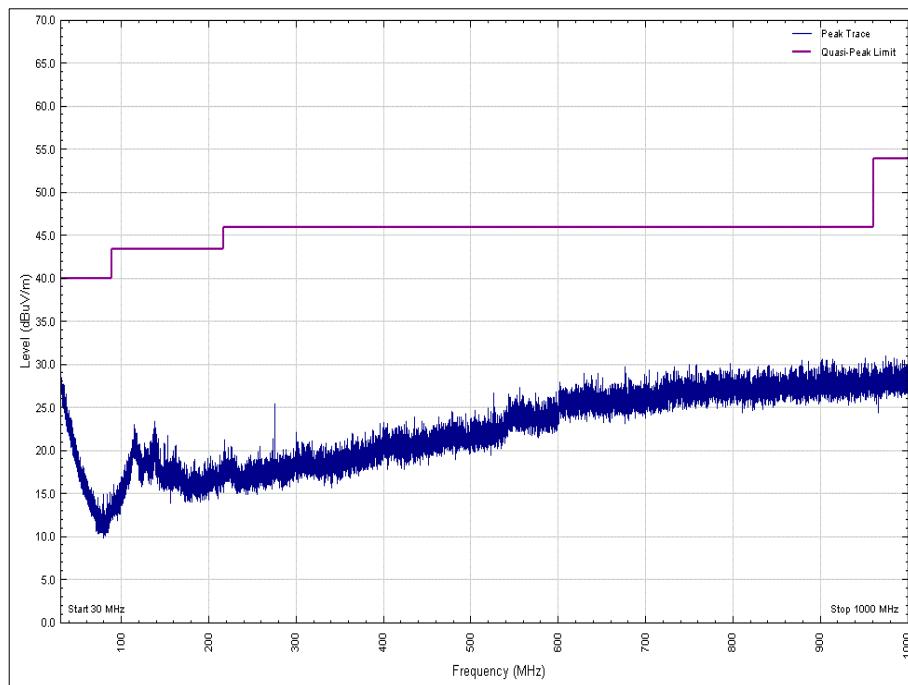


Figure 681 - 5200 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z - MIMO



Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15.559247	-	51.72	-	53.98	-	2.26	Vertical	Y

Table 301 – 5200 MHz, 1 GHz to 40 GHz - MIMO

No other emissions were detected within 10 dB of the limit.

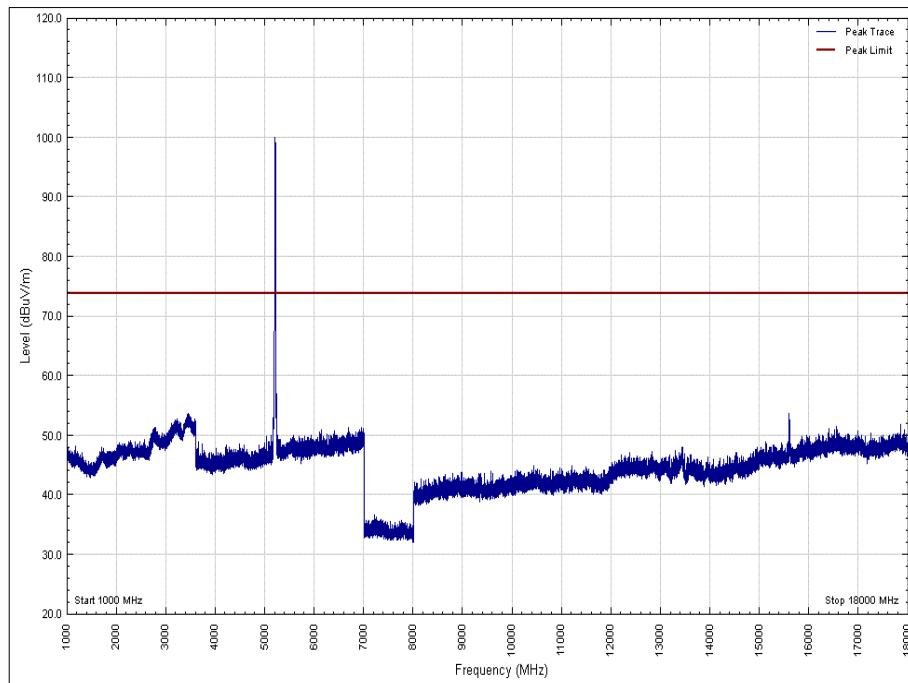


Figure 682 - 5200 MHz, 1 GHz to 18 GHz - Peak, Polarity: Vertical, EUT Orientation: X - MIMO

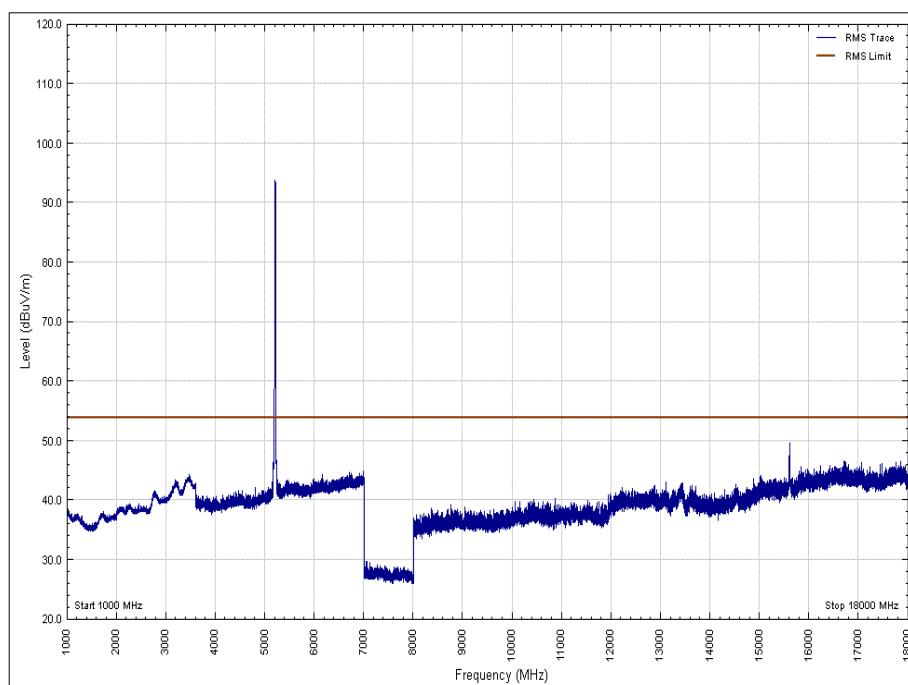
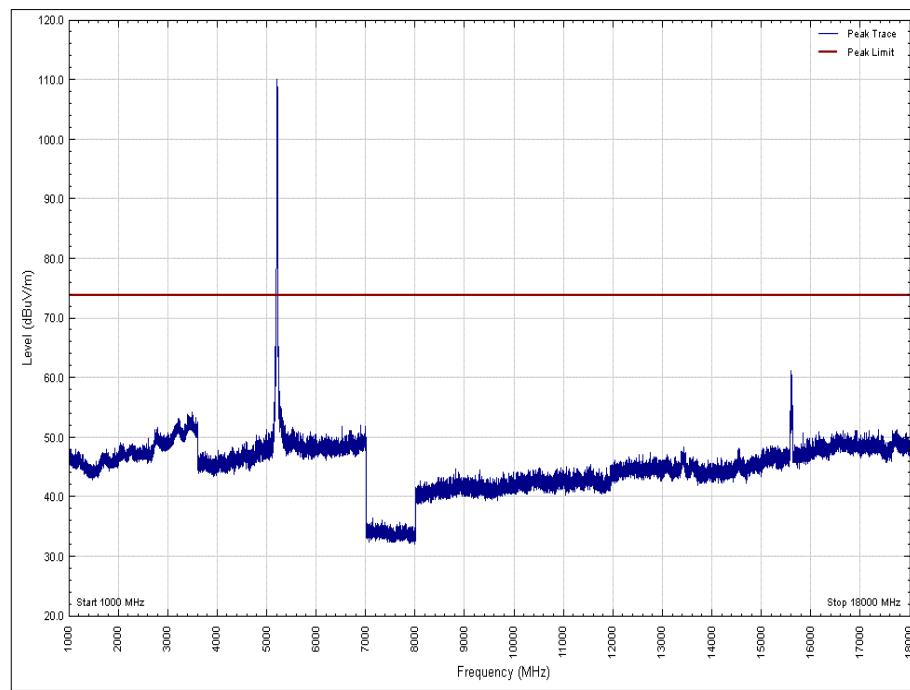
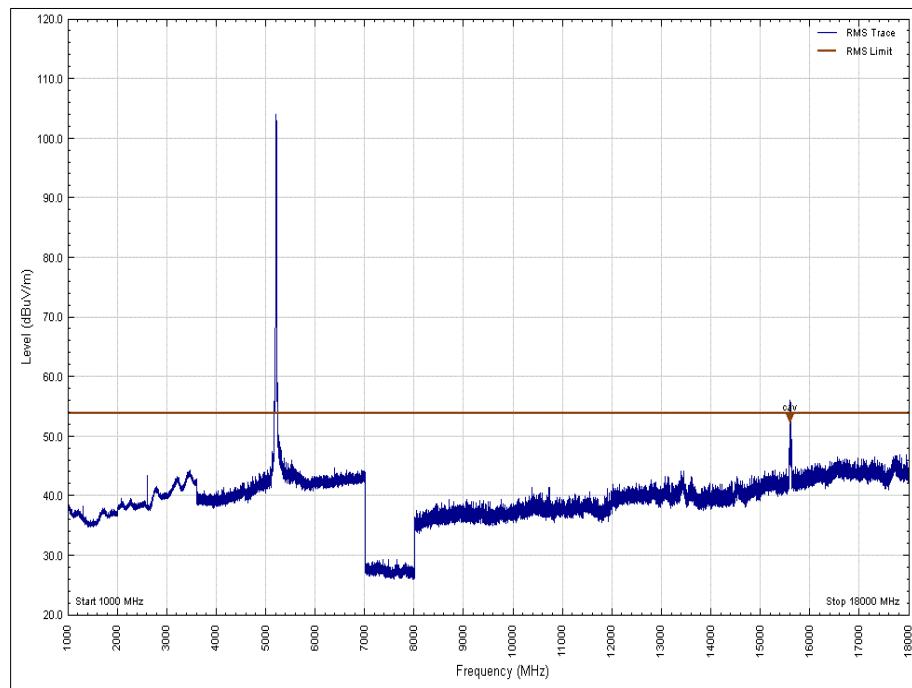


Figure 683 - 5200 MHz, 1 GHz to 18 GHz - Average, Polarity: Vertical, EUT Orientation: X – MIMO



**Figure 684 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X - MIMO**



**Figure 685 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X - MIMO**

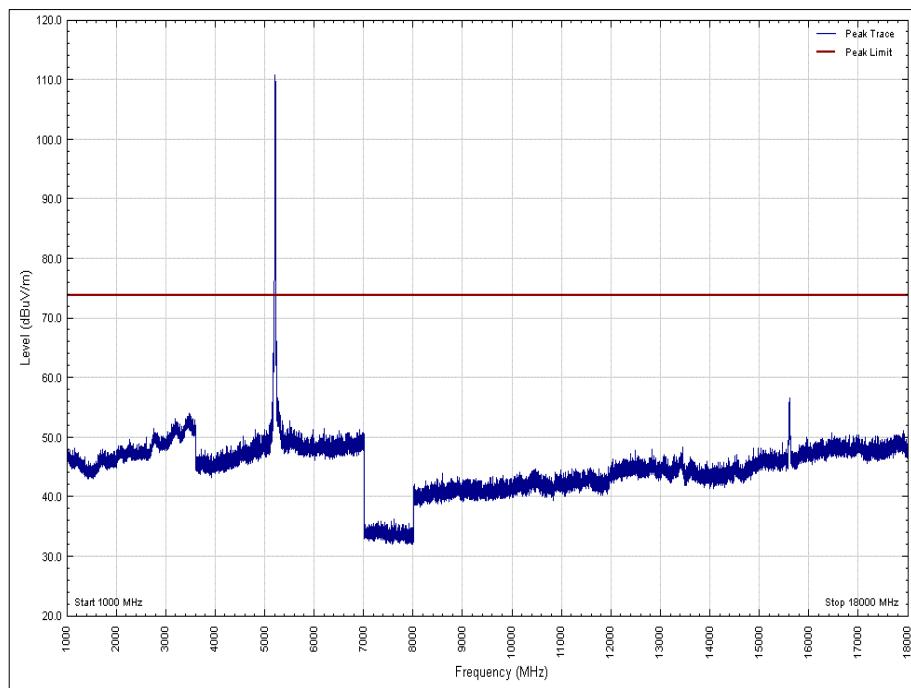


Figure 686 - 5200 MHz, 1 GHz to 18 GHz - Peak, Polarity: Vertical, EUT Orientation: Y - MIMO

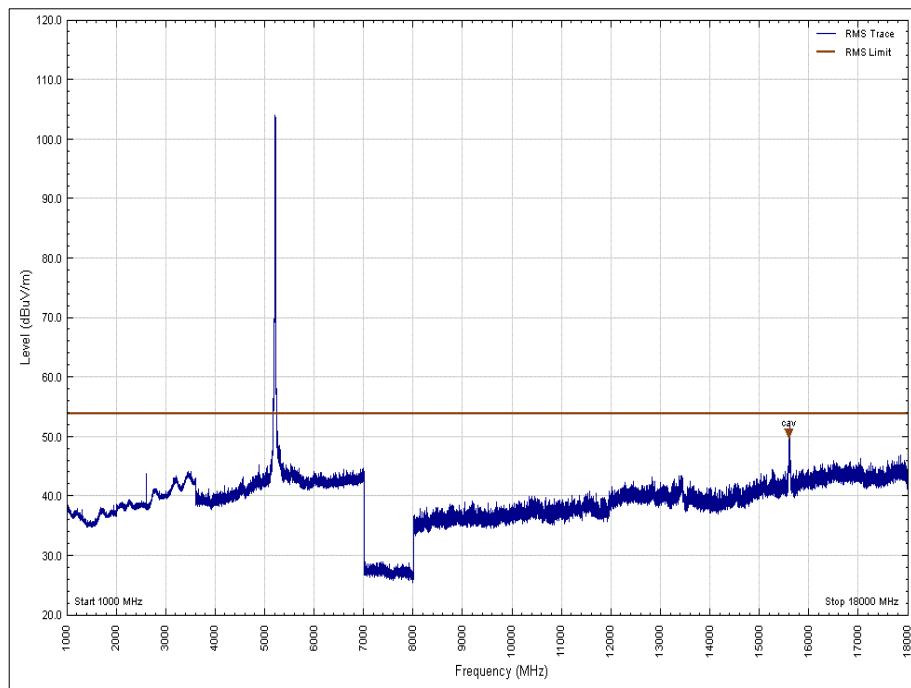
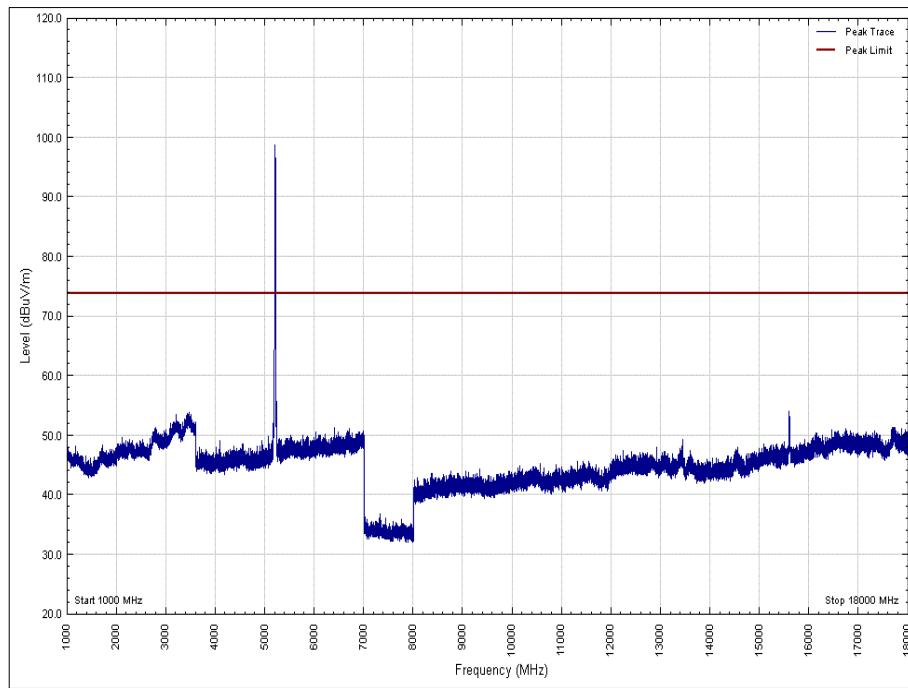
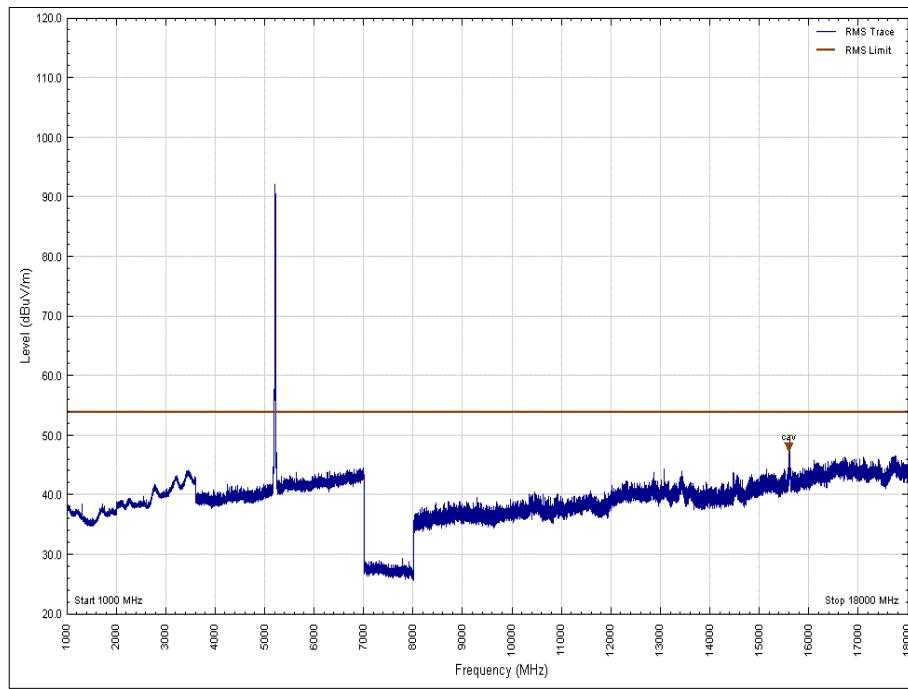


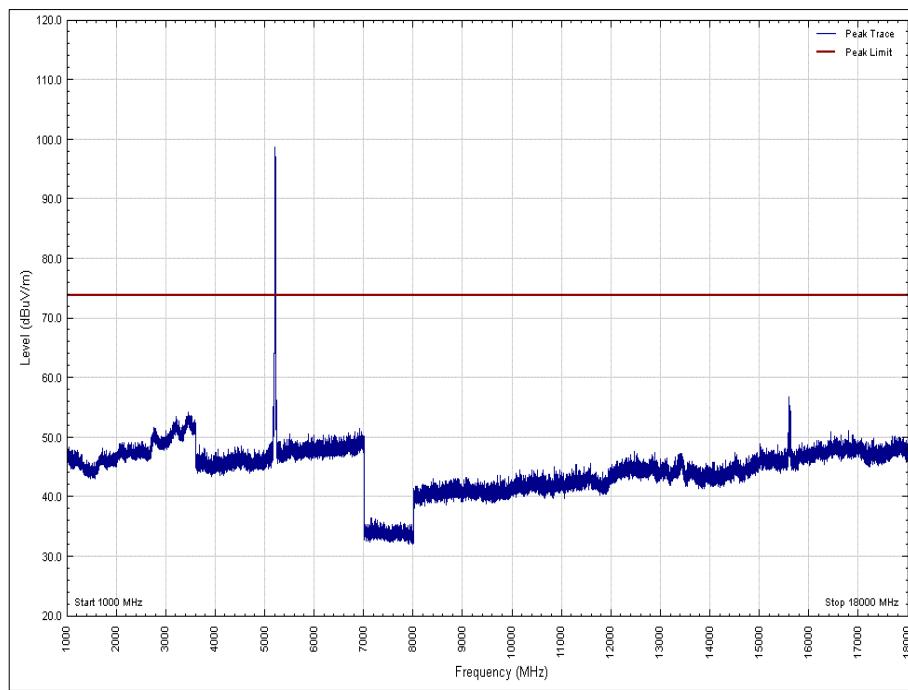
Figure 687 - 5200 MHz, 1 GHz to 18 GHz - Average, Polarity: Vertical, EUT Orientation: Y - MIMO



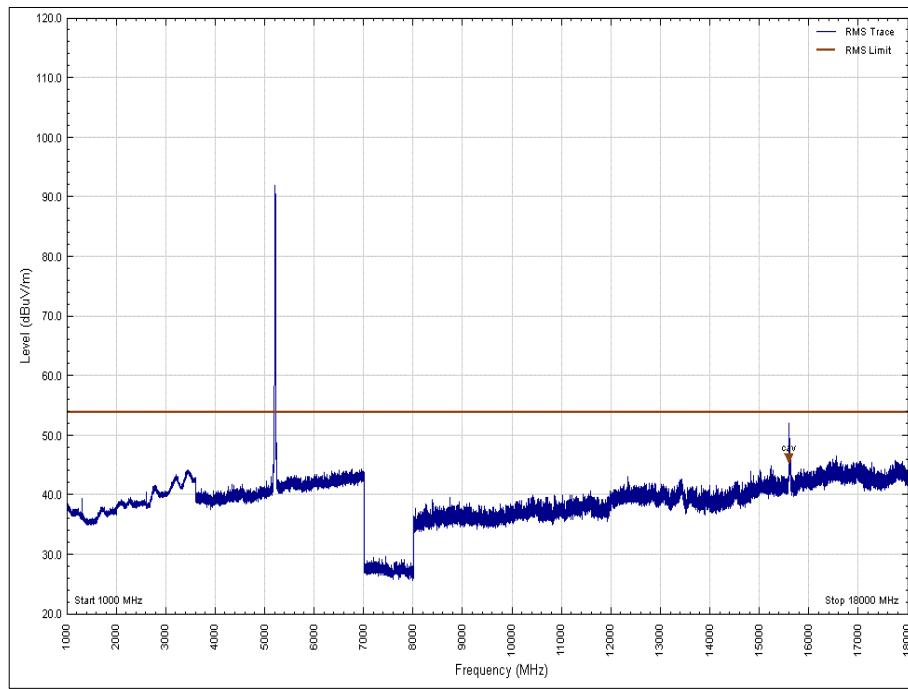
**Figure 688 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y - MIMO**



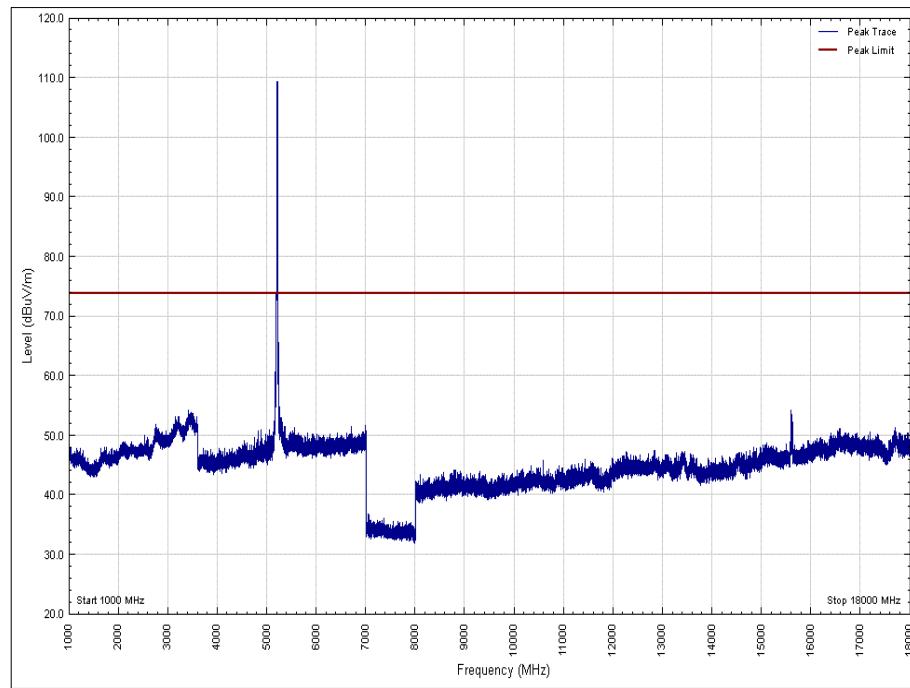
**Figure 689 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y - MIMO**



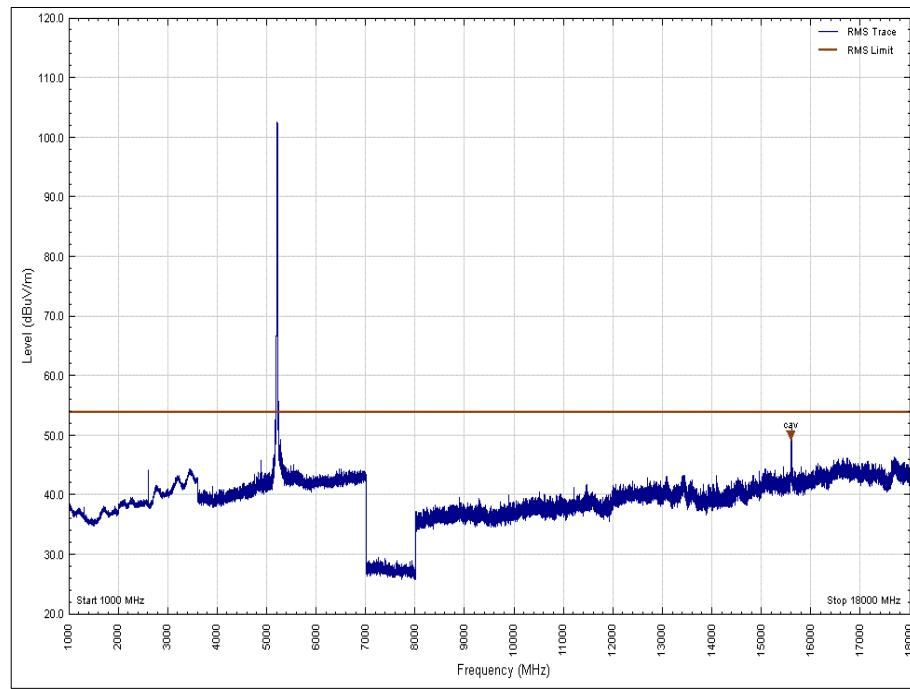
**Figure 690 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z - MIMO**



**Figure 691 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z - MIMO**



**Figure 692 - 5200 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z - MIMO**



**Figure 693 - 5200 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z - MIMO**



Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
59.594	31.67	-	40.00	-	8.33	-	Vertical	Y
59.145	33.98	-	40.00	-	6.02	-	Vertical	Z

Table 302 – 5240 MHz, 30 MHz to 1 GHz - MIMO

No other emissions were detected within 10 dB of the limit.

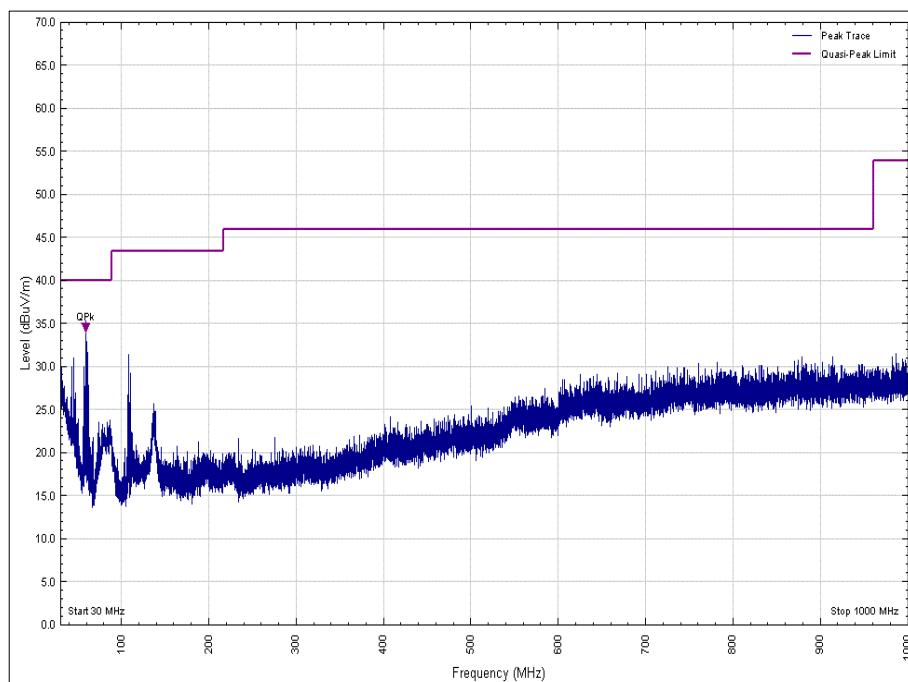


Figure 694 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X - MIMO

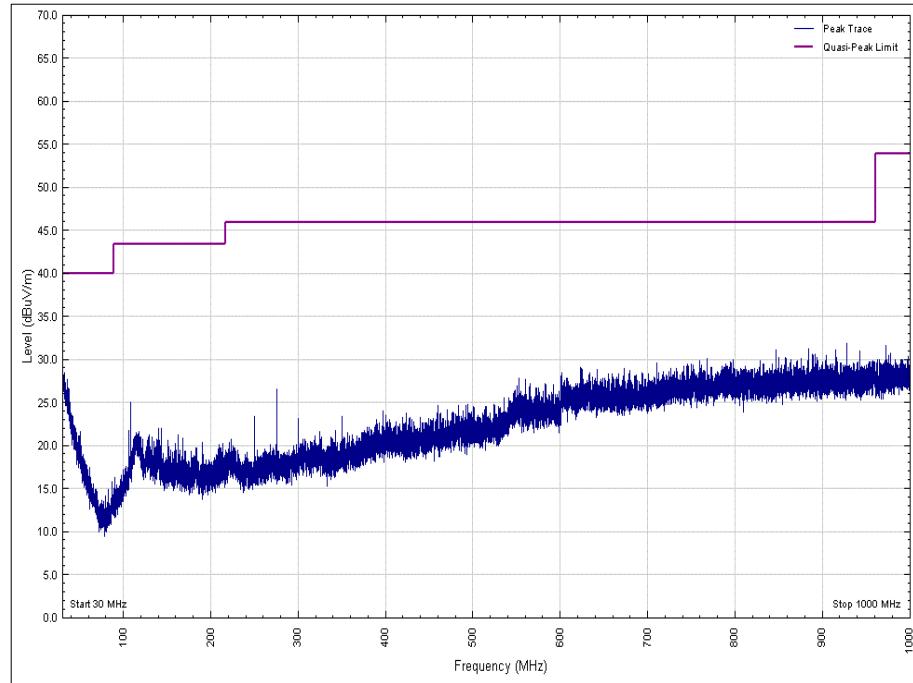


Figure 695 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X - MIMO

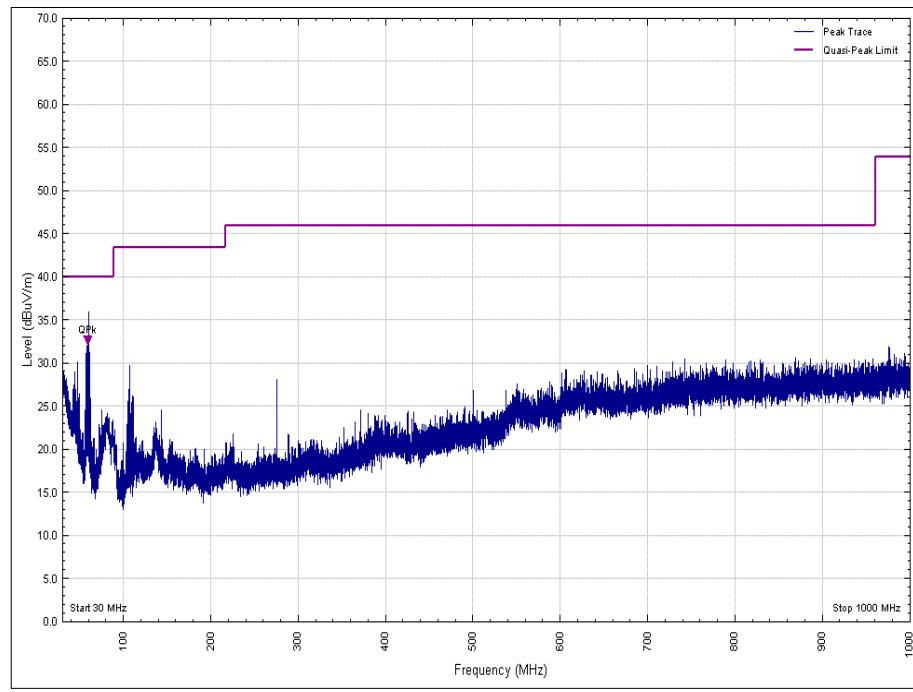


Figure 696 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y - MIMO

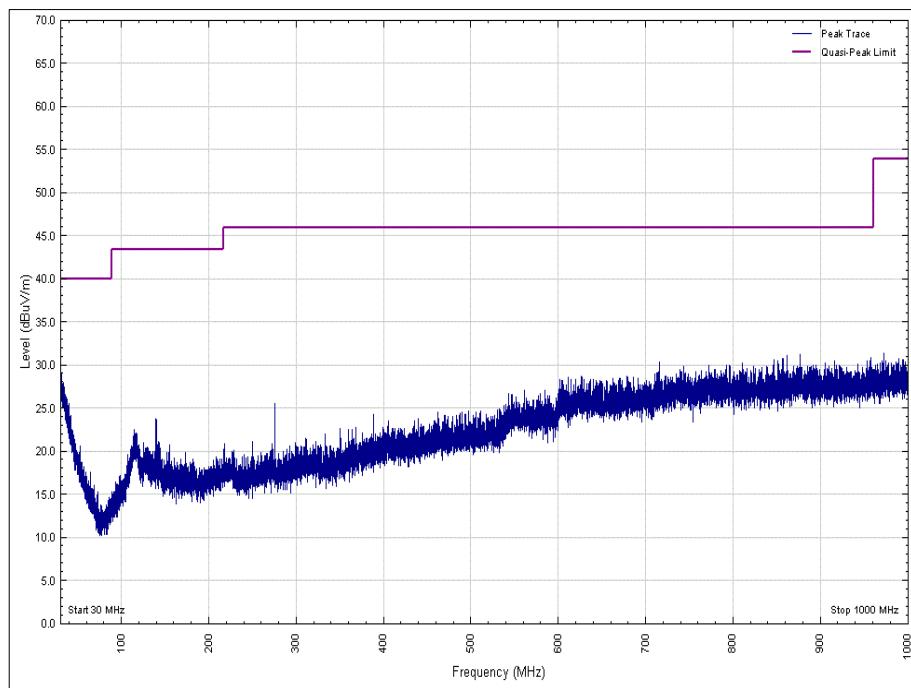


Figure 697 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y - MIMO

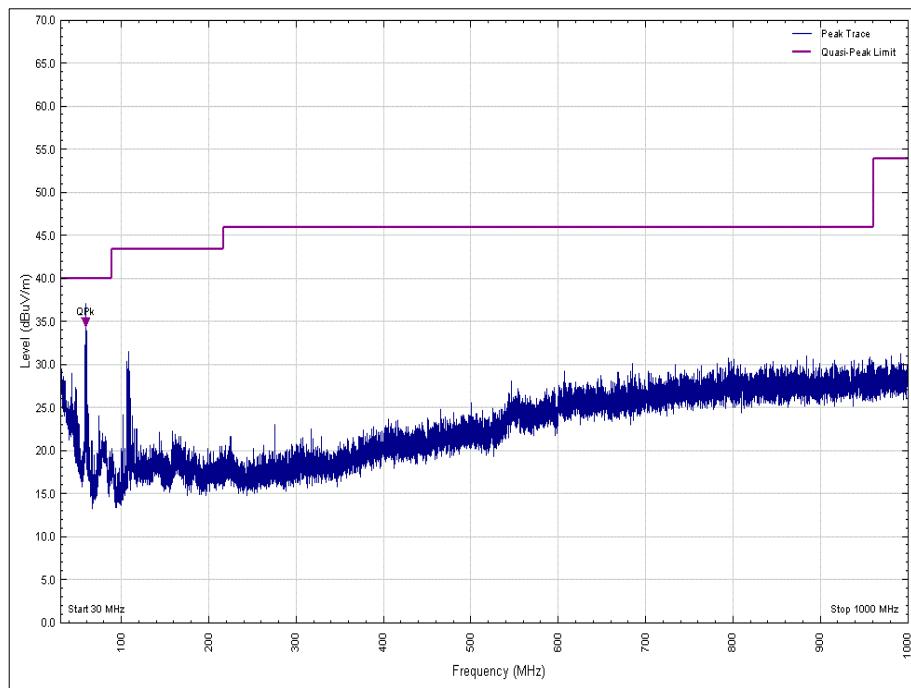


Figure 698 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z - MIMO

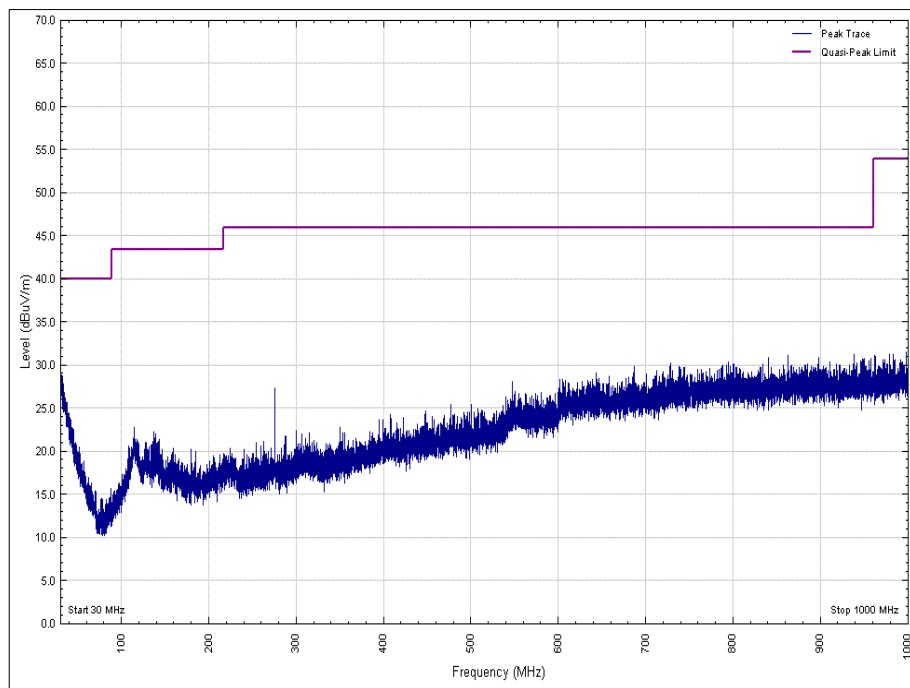
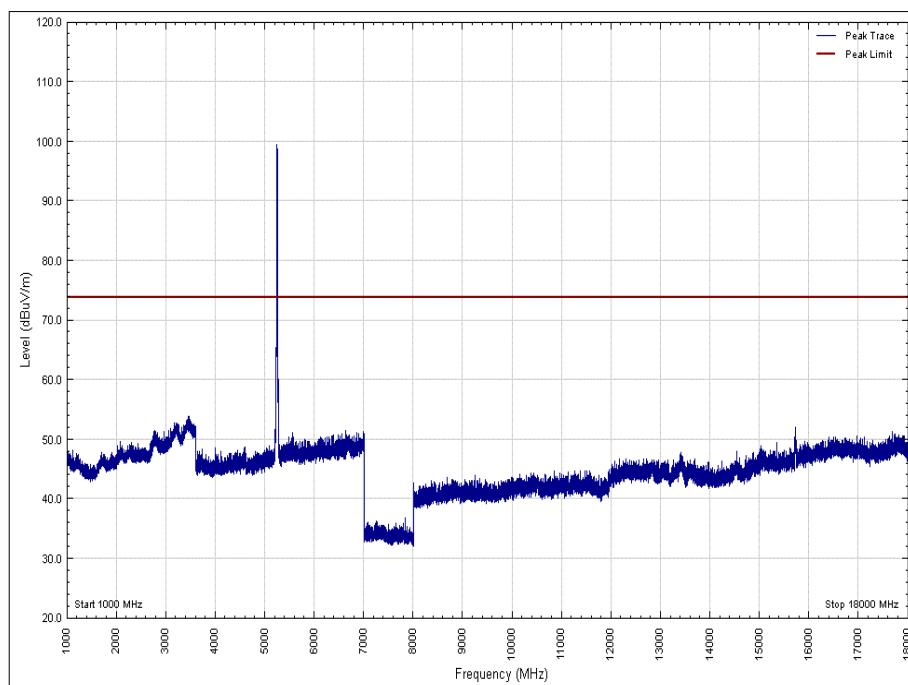


Figure 699 - 5240 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z - MIMO

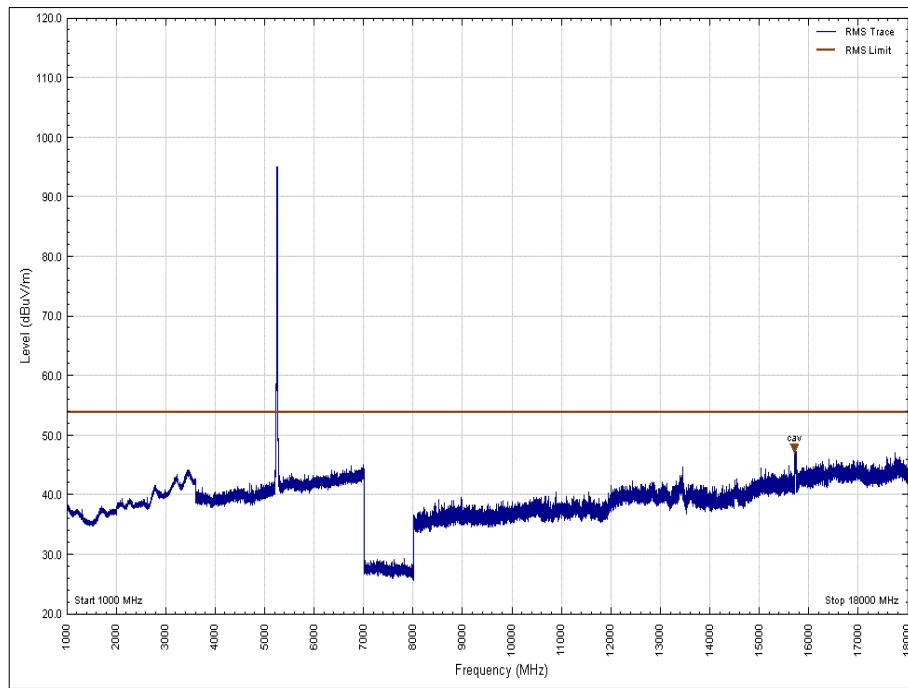
Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15.717235		50.42		53.98		3.56	Horizontal	X

Table 303 – 5240 MHz, 1 GHz to 40 GHz - MIMO

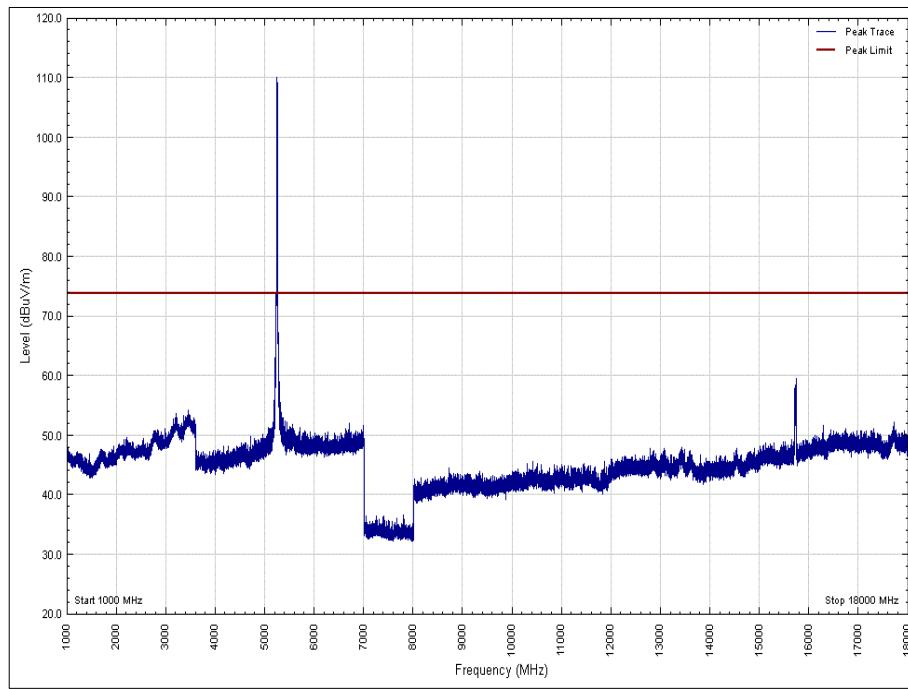
No other emissions were detected within 10 dB of the limit.



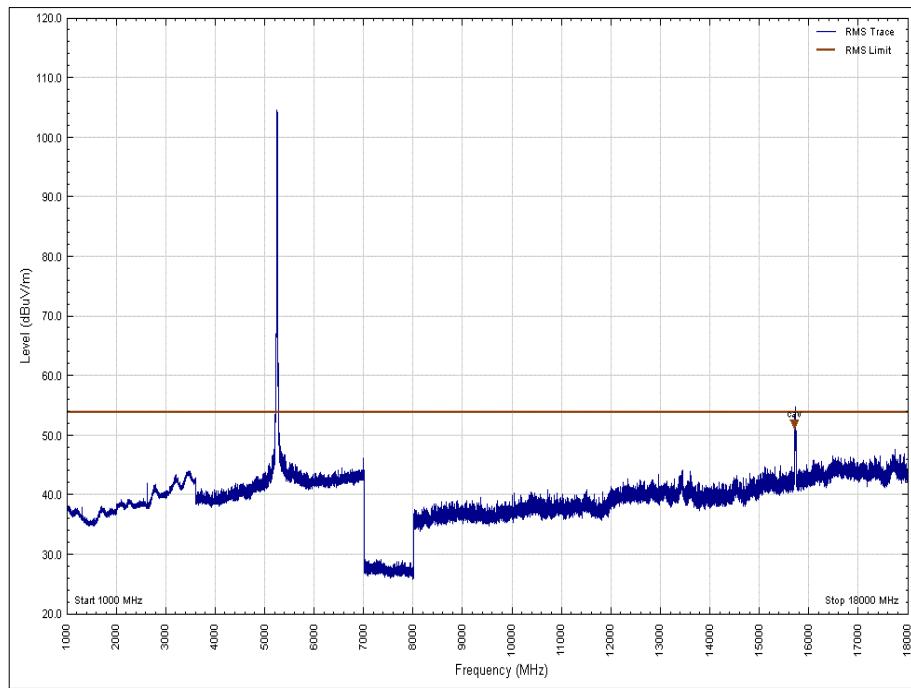
**Figure 700 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: X – MIMO**



**Figure 701 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: X - MIMO**



**Figure 702 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X - MIMO**



**Figure 703 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X - MIMO**

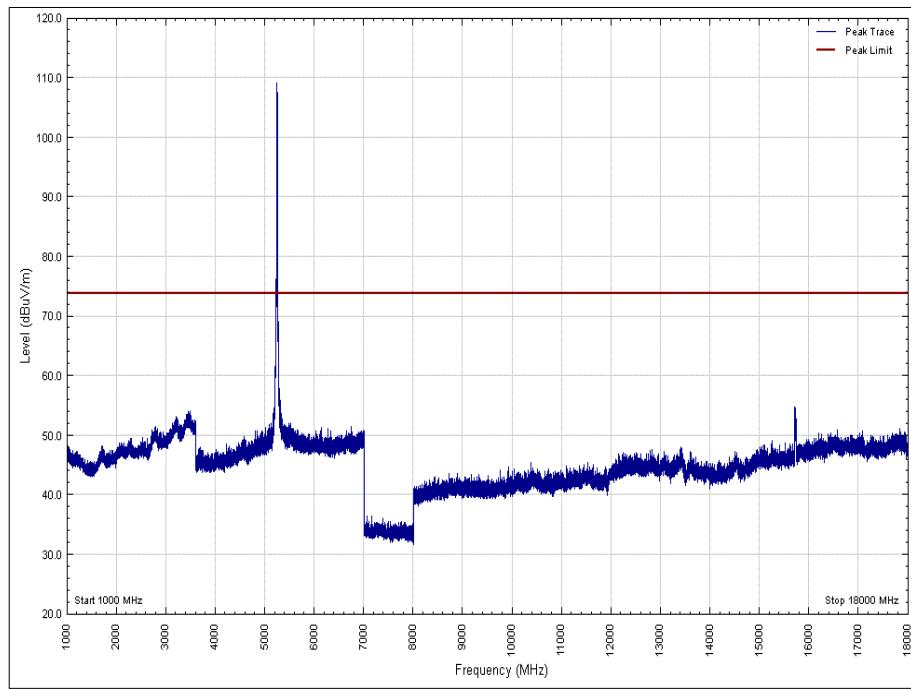
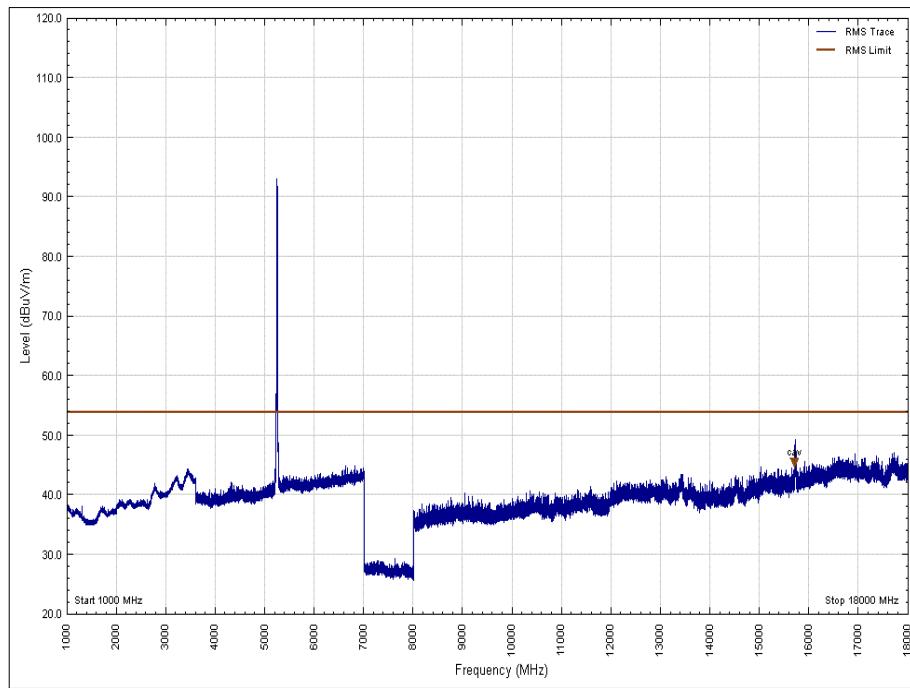
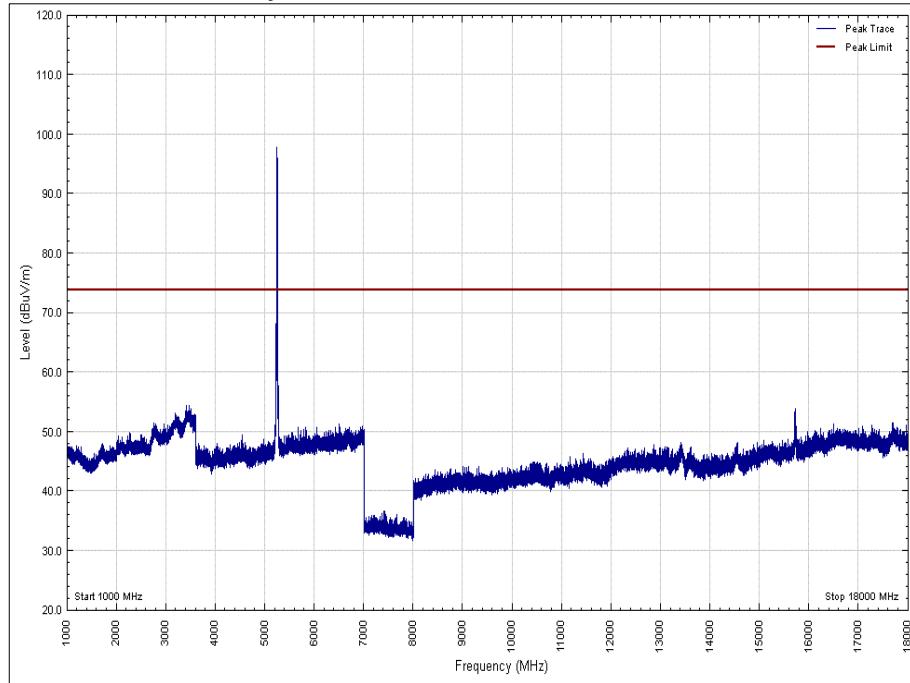


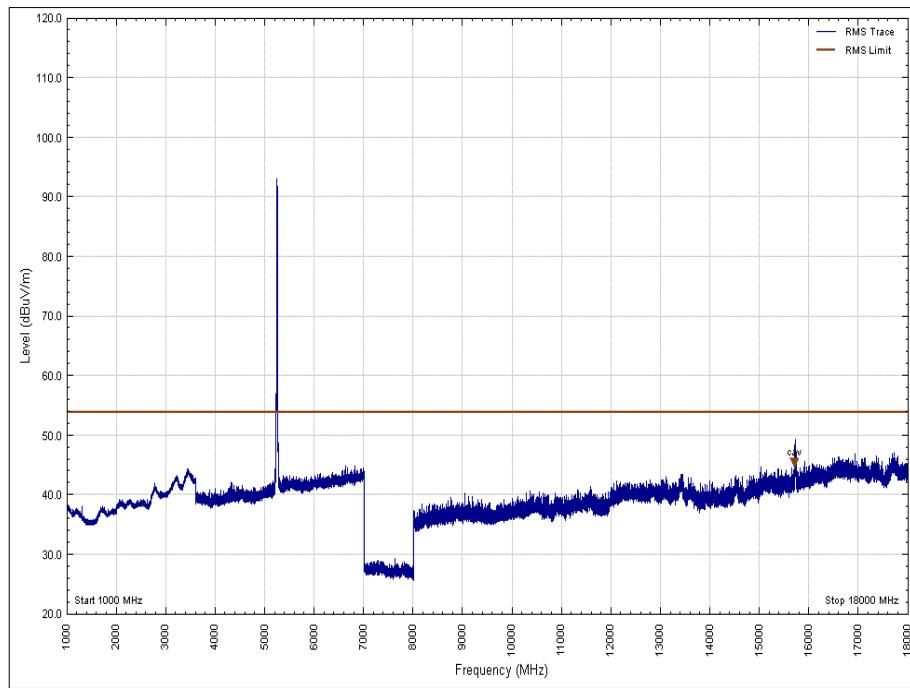
Figure 704 - 5240 MHz, 1 GHz to 18 GHz - Peak, Polarity: Vertical, EUT Orientation: Y - MIMO



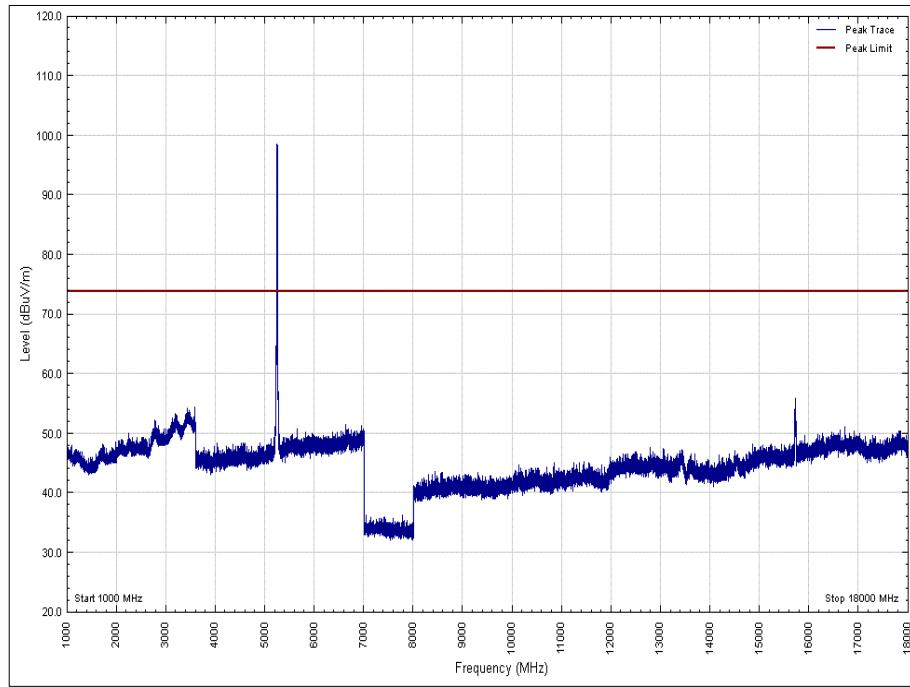
**Figure 705 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Y - MIMO**



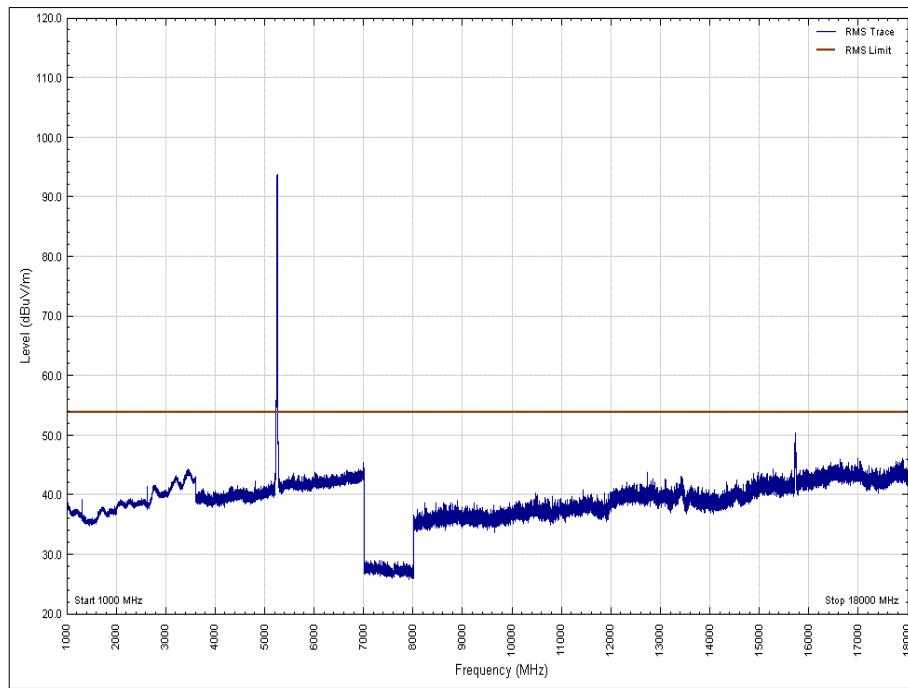
**Figure 706 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y - MIMO**



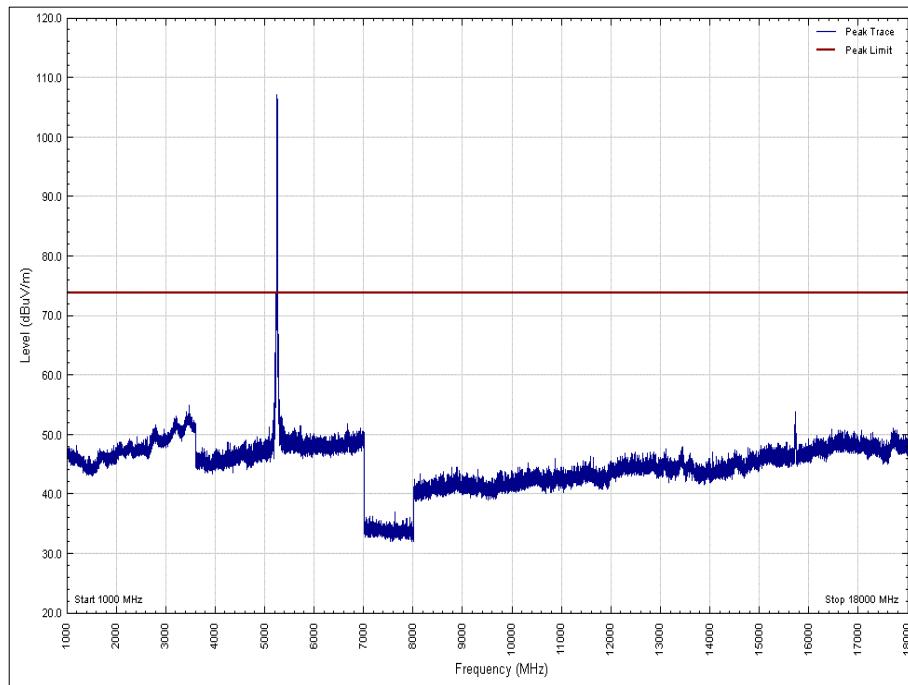
**Figure 707 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y - MIMO**



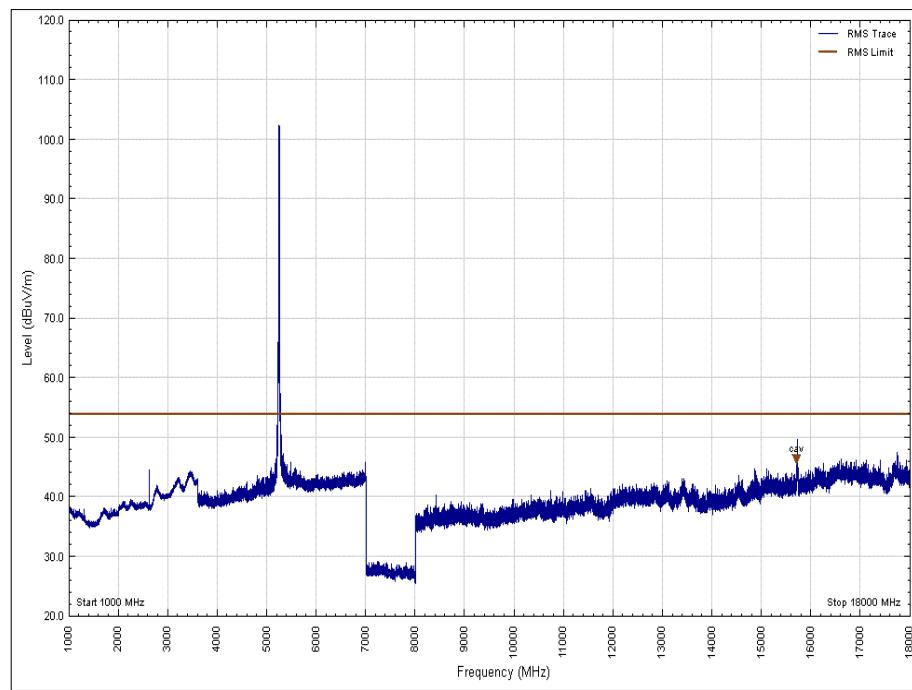
**Figure 708 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z - MIMO**



**Figure 709 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z - MIMO**



**Figure 710 - 5240 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z - MIMO**



**Figure 711 - 5240 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z - MIMO**



U-NII-2A

5 GHz WLAN - 802.11a

Testing was performed on the Data Rate which resulted in the highest power spectral density. The Data Rate used during testing was 6 Mbps.

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
107.147	35.14	-	43.50	-	8.36	-	Vertical	Y

Table 304 – 5260 MHz, 30 MHz to 1 GHz – Antenna 1

No other emissions were detected within 10 dB of the limit.

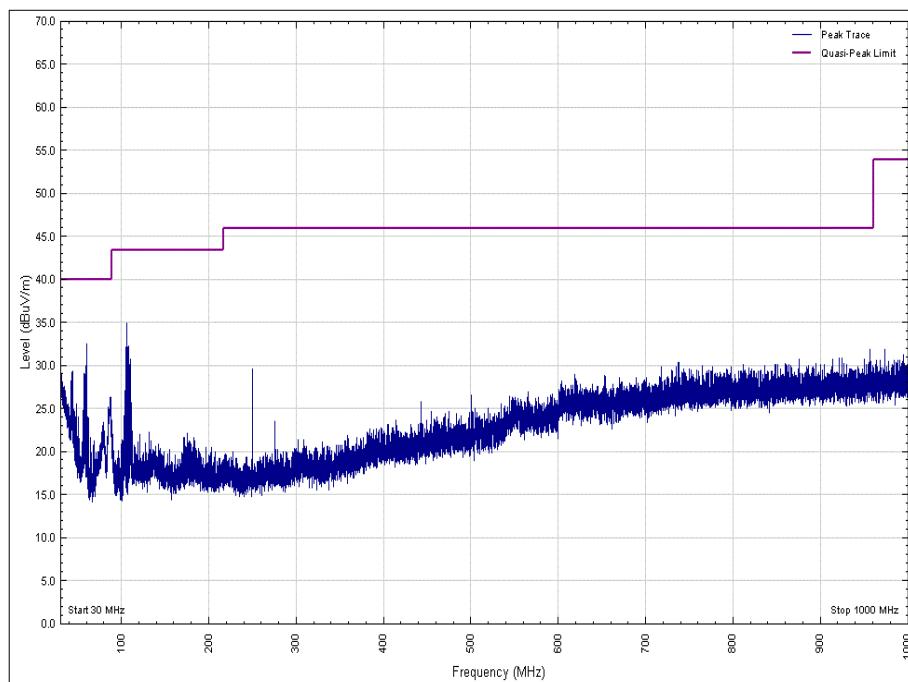


Figure 712 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X – Antenna 1

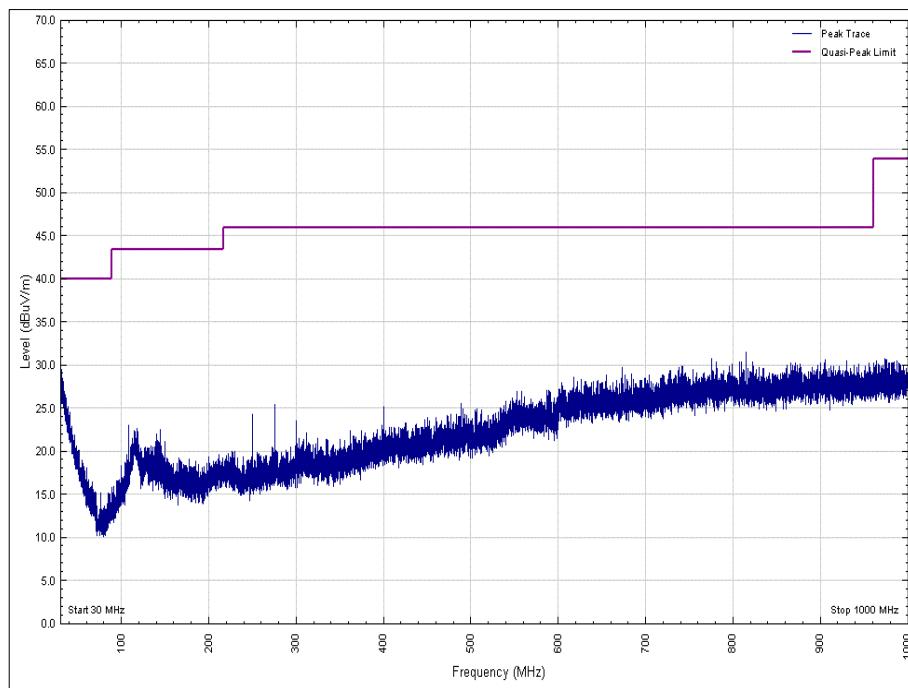


Figure 713 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X – Antenna 1

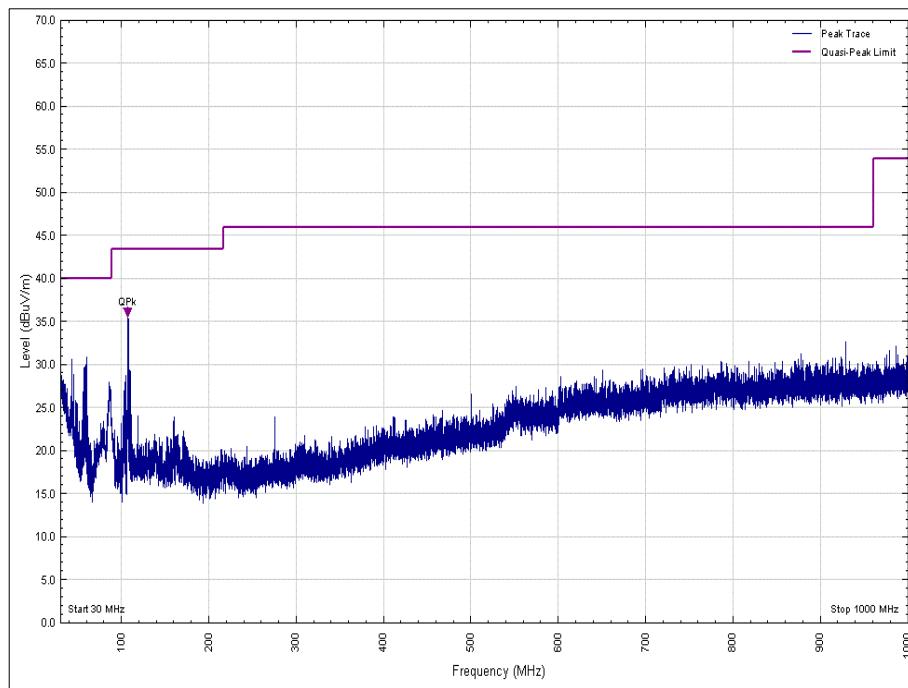


Figure 714 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y – Antenna 1

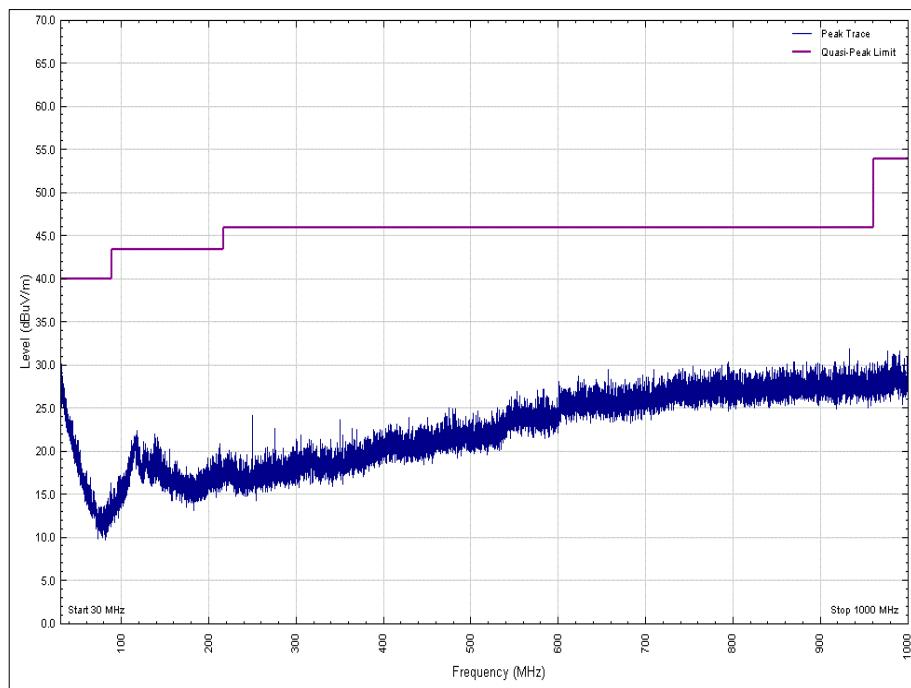


Figure 715 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y – Antenna 1

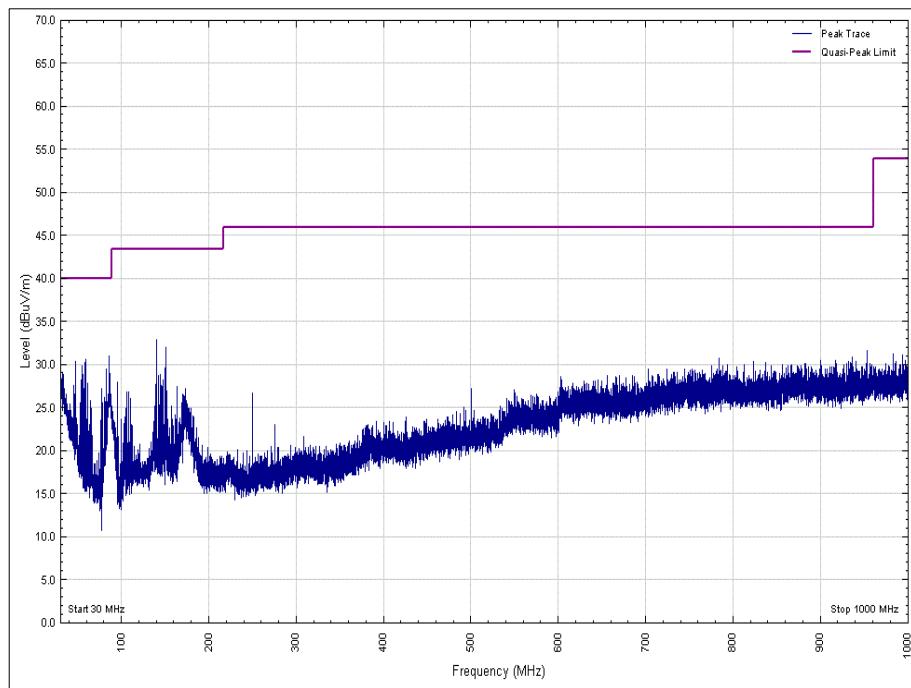


Figure 716 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z – Antenna 1

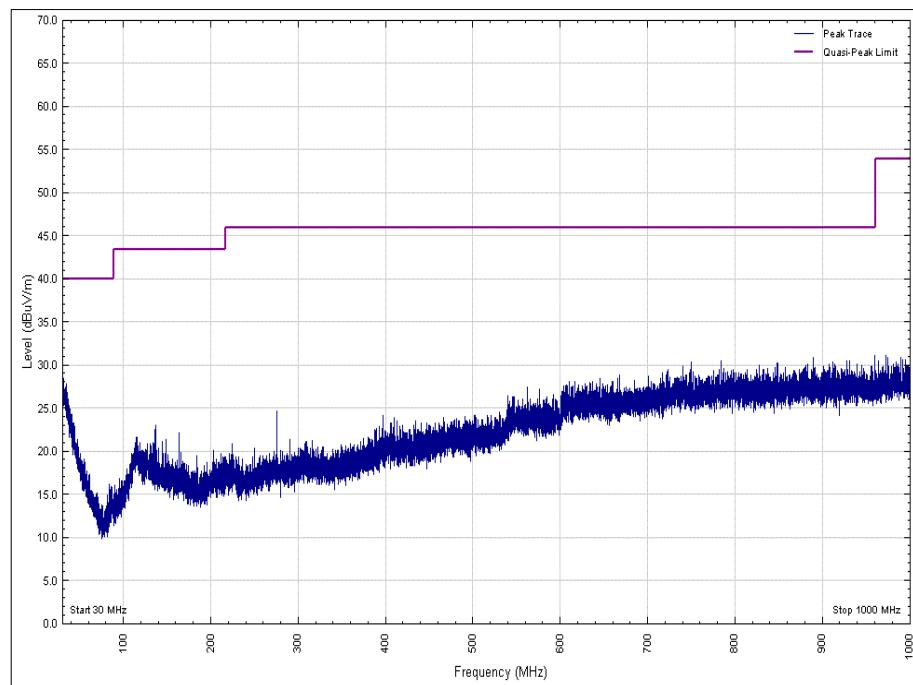


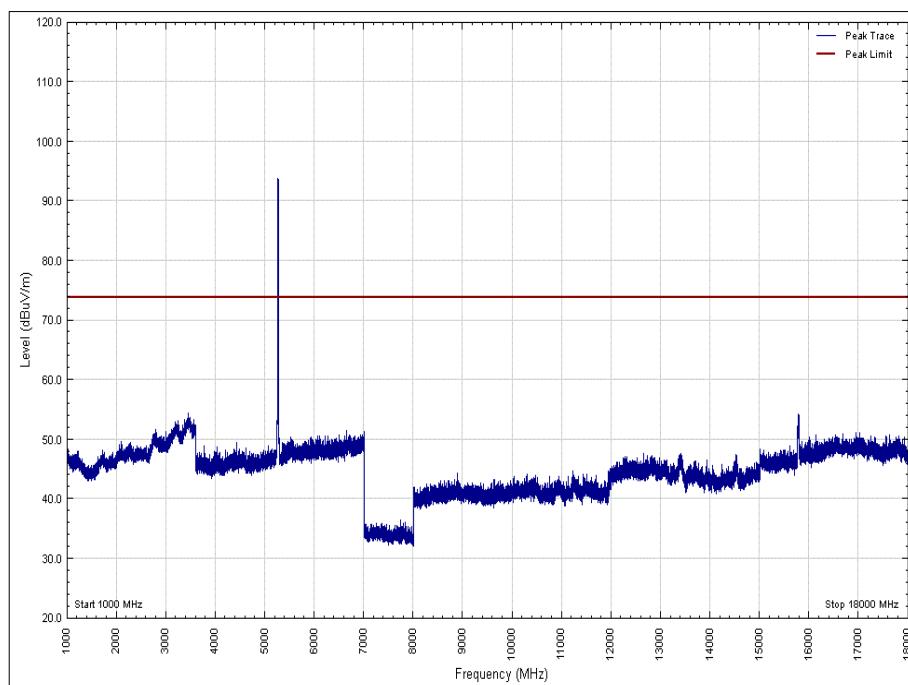
Figure 717 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z – Antenna 1



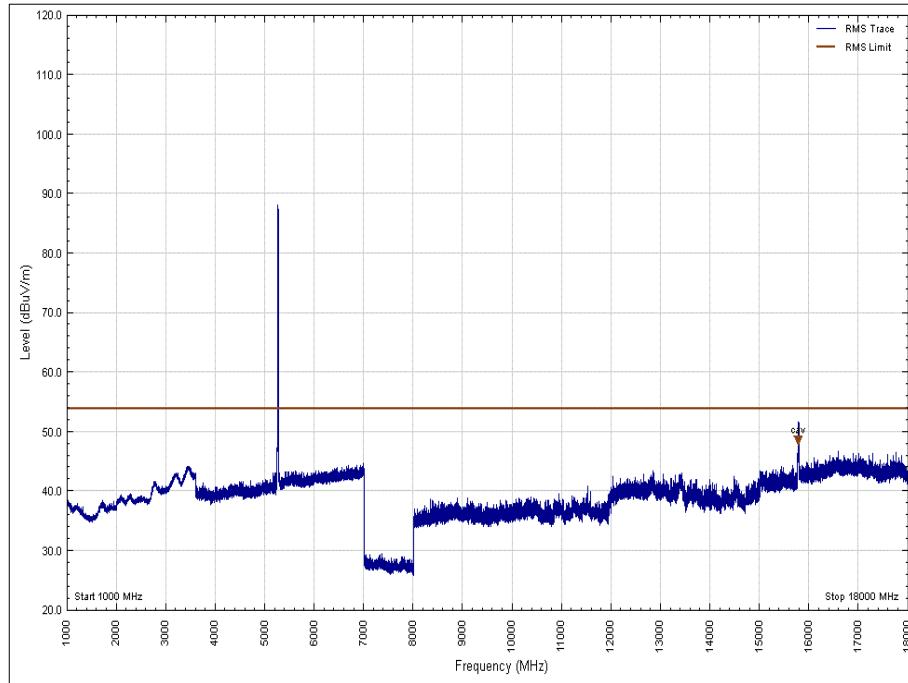
Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15781.535	-	50.75	-	53.98	-	3.23	Vertical	Y

Table 305 – 5260 MHz, 1 GHz to 40 GHz – Antenna 1

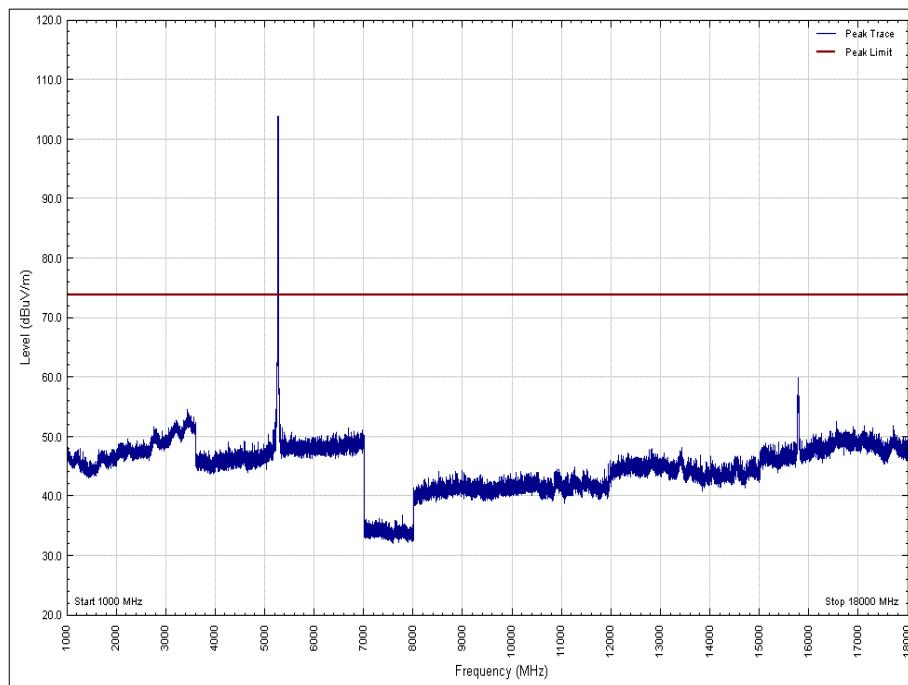
No other emissions were detected within 10 dB of the limit.



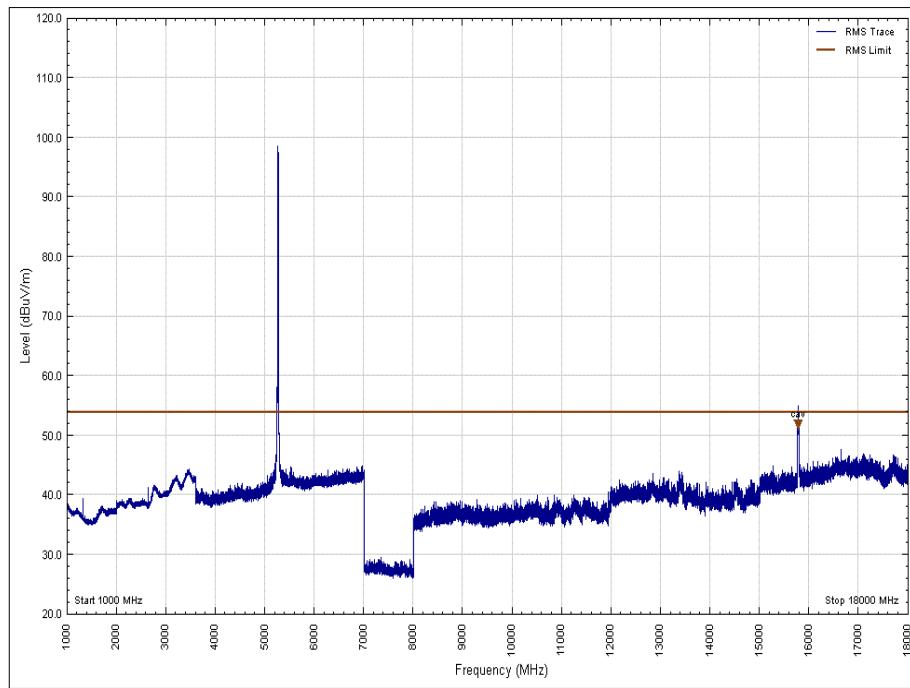
**Figure 718 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



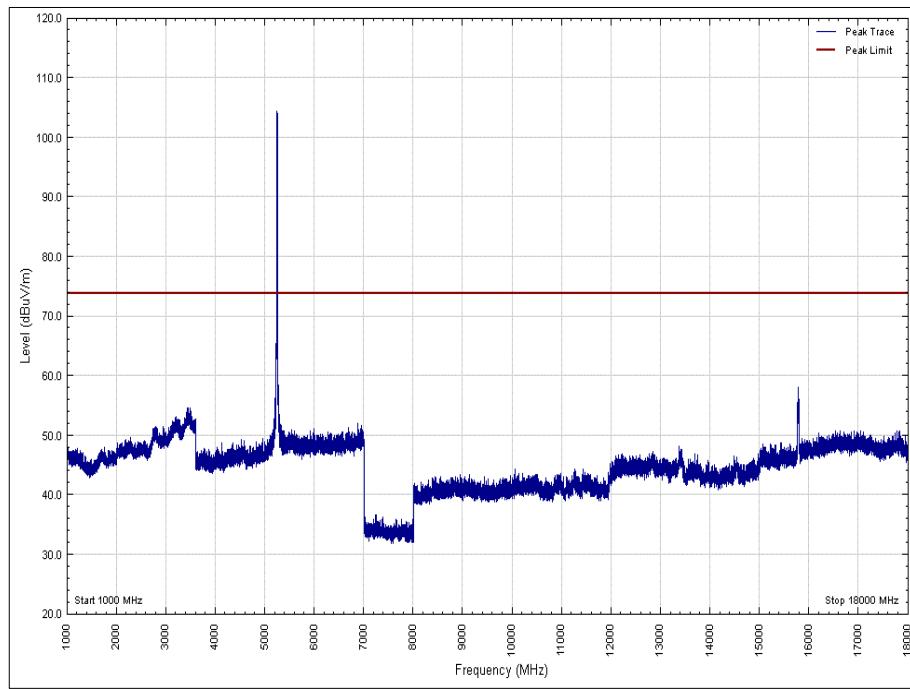
**Figure 719 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



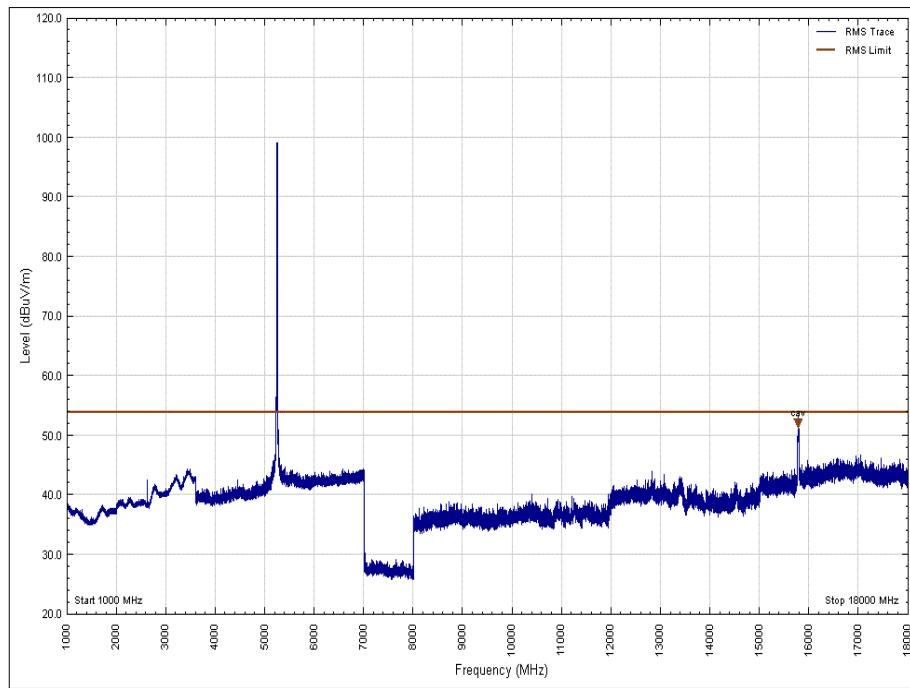
**Figure 720 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



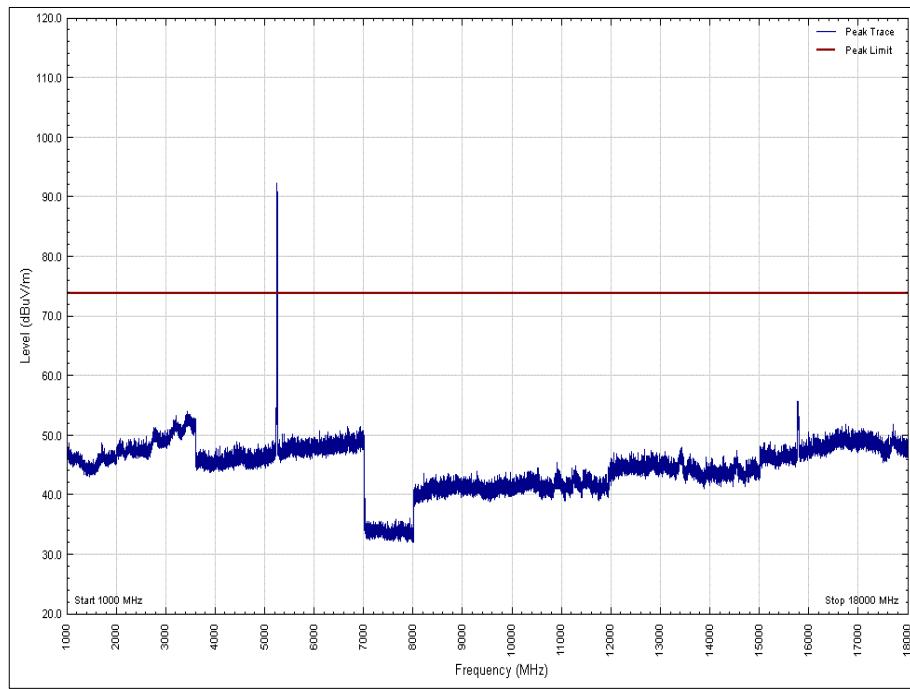
**Figure 721 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



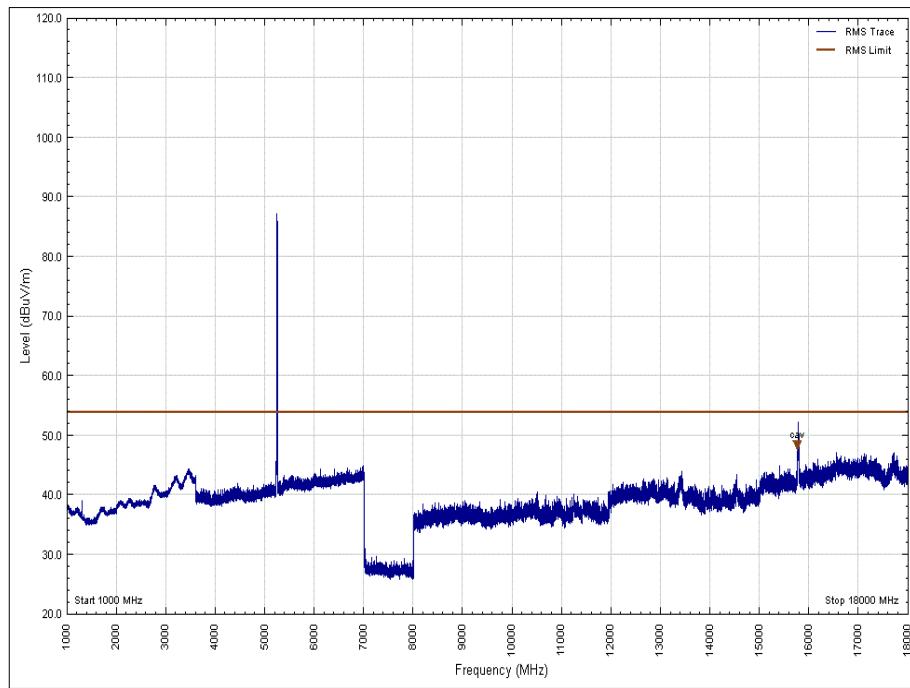
**Figure 722 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



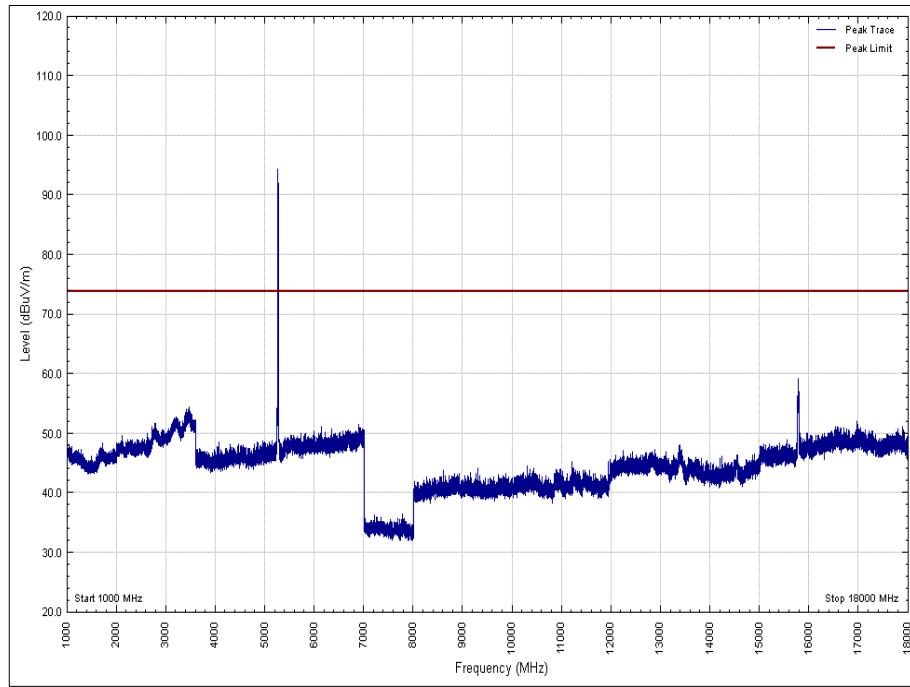
**Figure 723 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



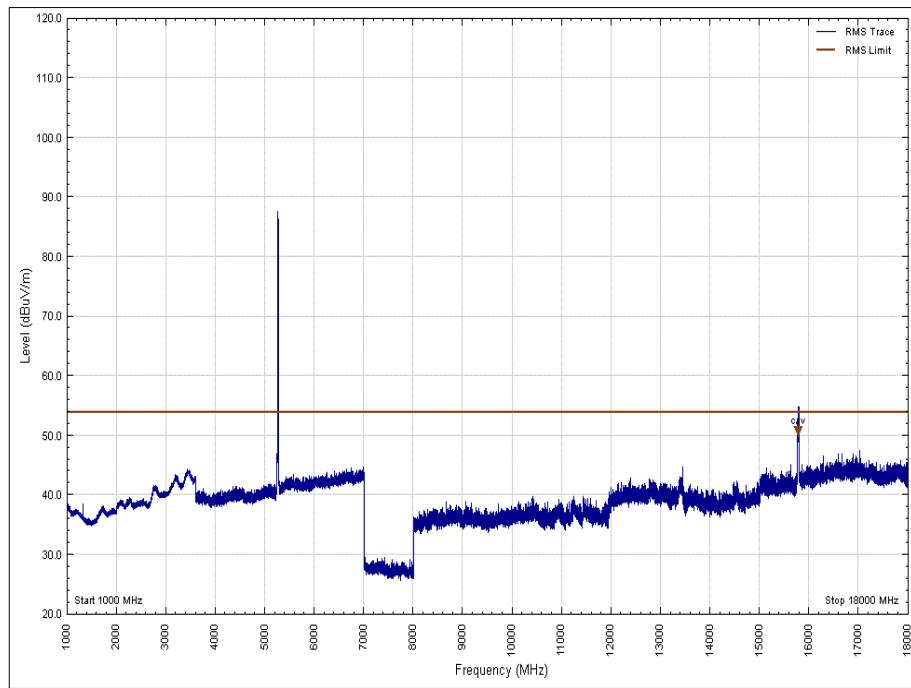
**Figure 724 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



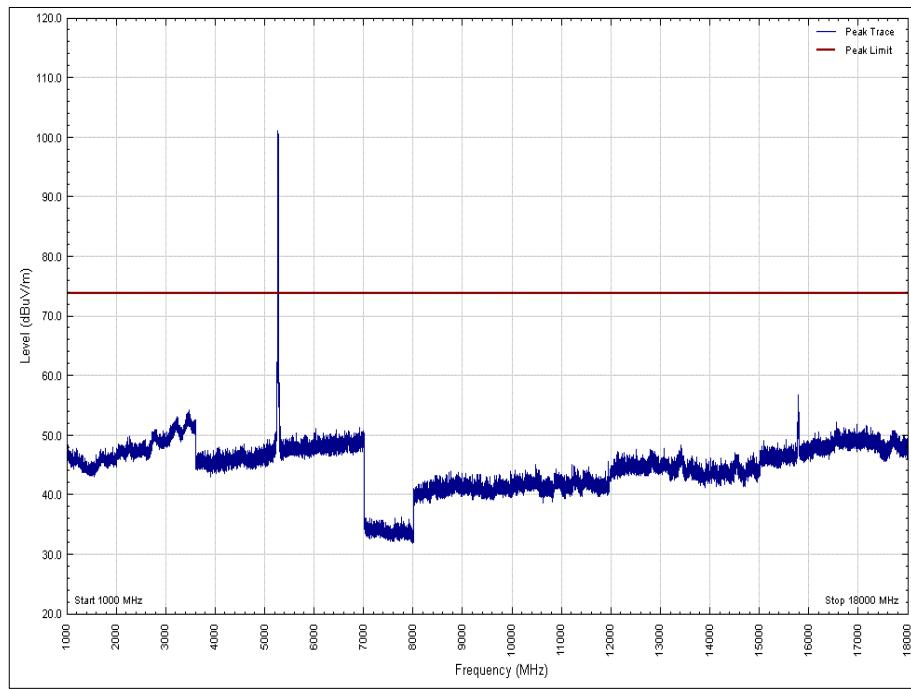
**Figure 725 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



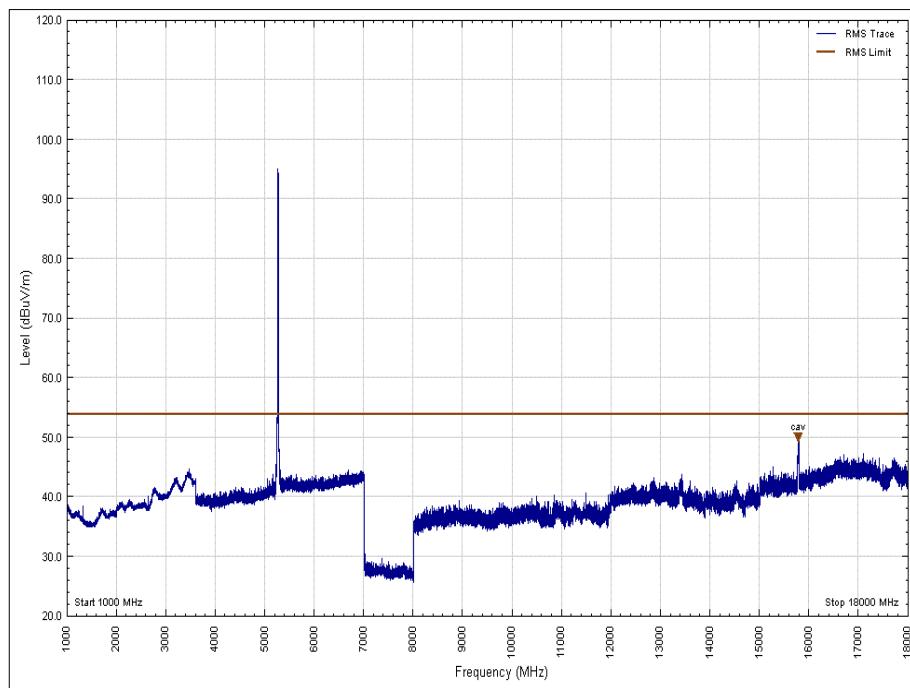
**Figure 726 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 727 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 728 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



**Figure 729 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
59.138	30.06	-	40.00	-	9.94	-	Vertical	Y
107.170	35.69	-	43.50	-	7.81	-	Vertical	Y

Table 306 – 5300 MHz, 30 MHz to 1 GHz – Antenna 1

No other emissions were detected within 10 dB of the limit.

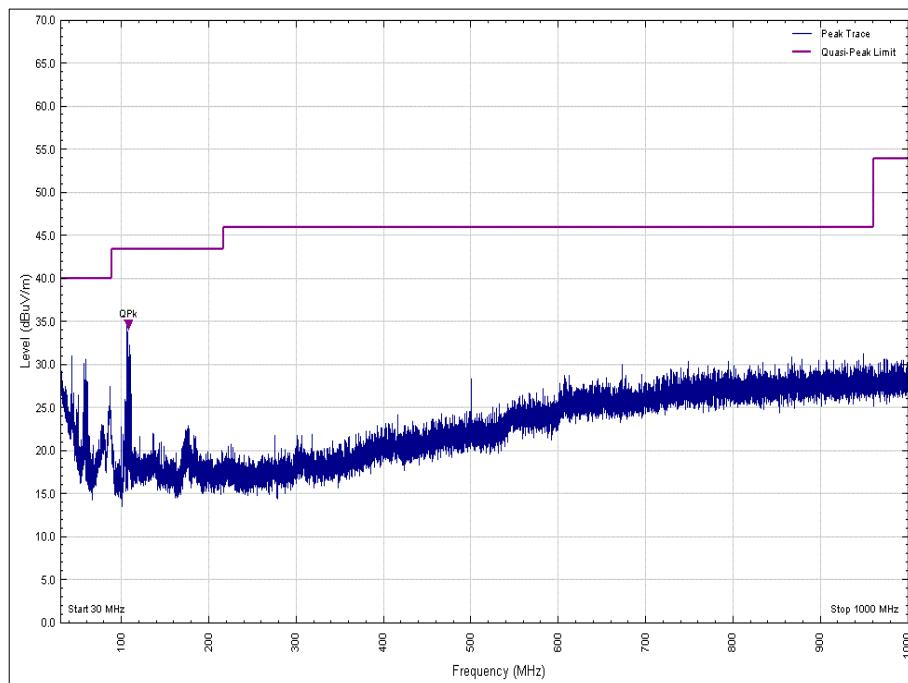


Figure 730 - 5300 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X – Antenna 1

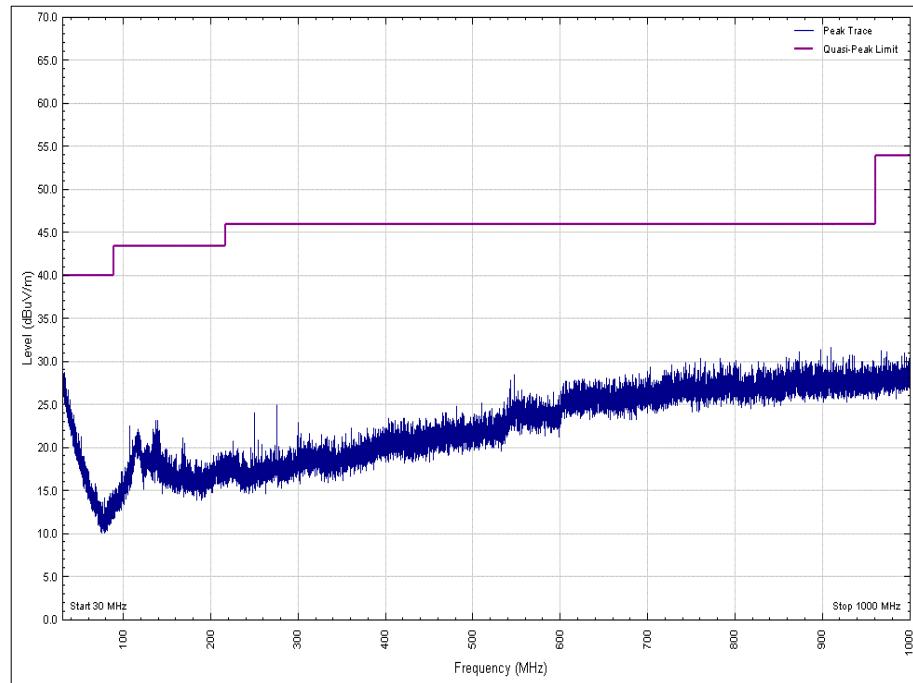


Figure 731 - 5300 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X – Antenna 1

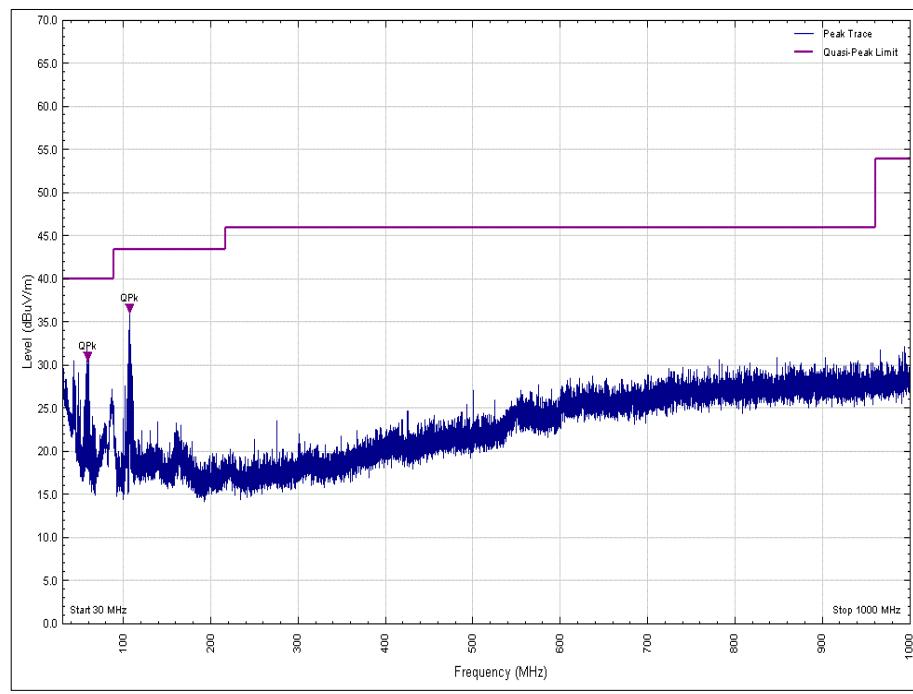


Figure 732 - 5300 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y – Antenna 1

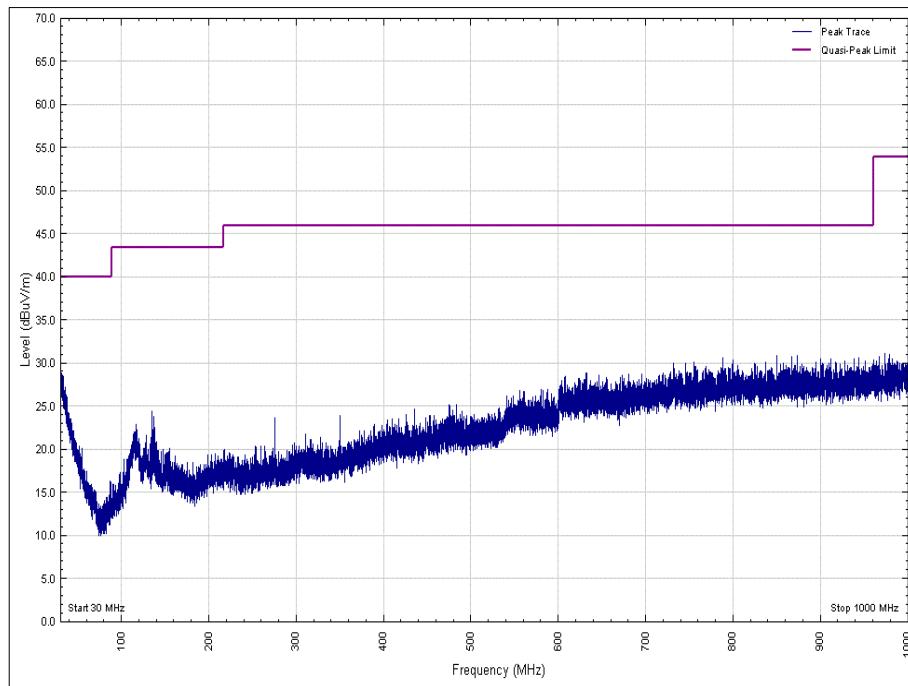


Figure 733 - 5300 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y – Antenna 1

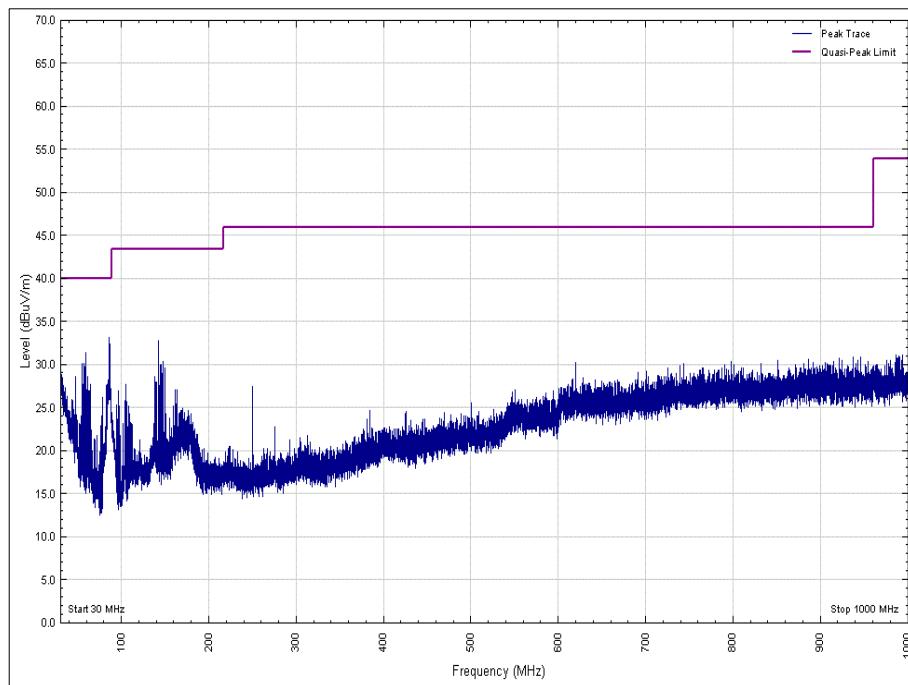


Figure 734 - 5300 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z – Antenna 1

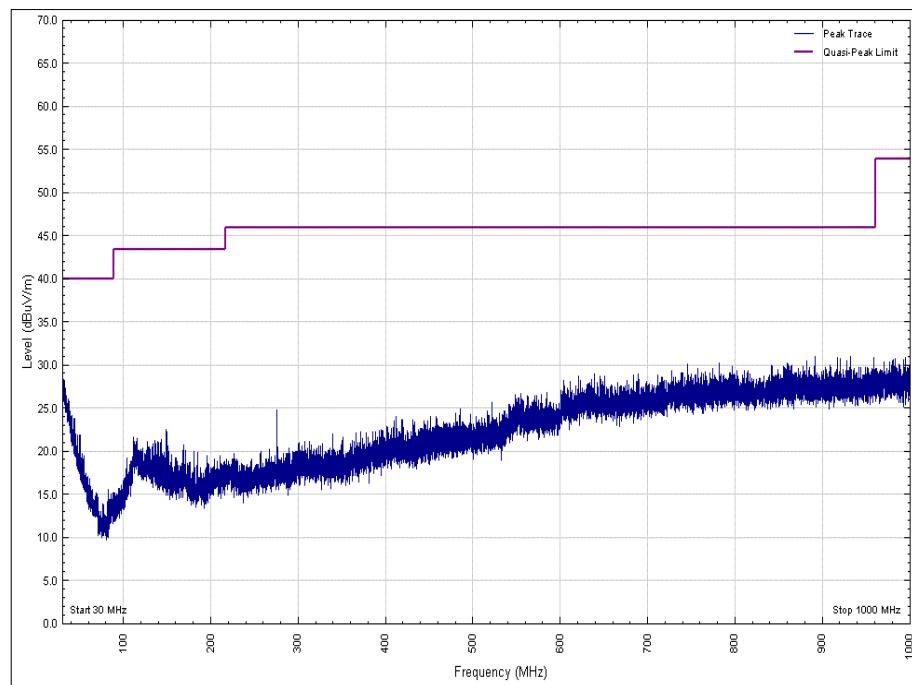


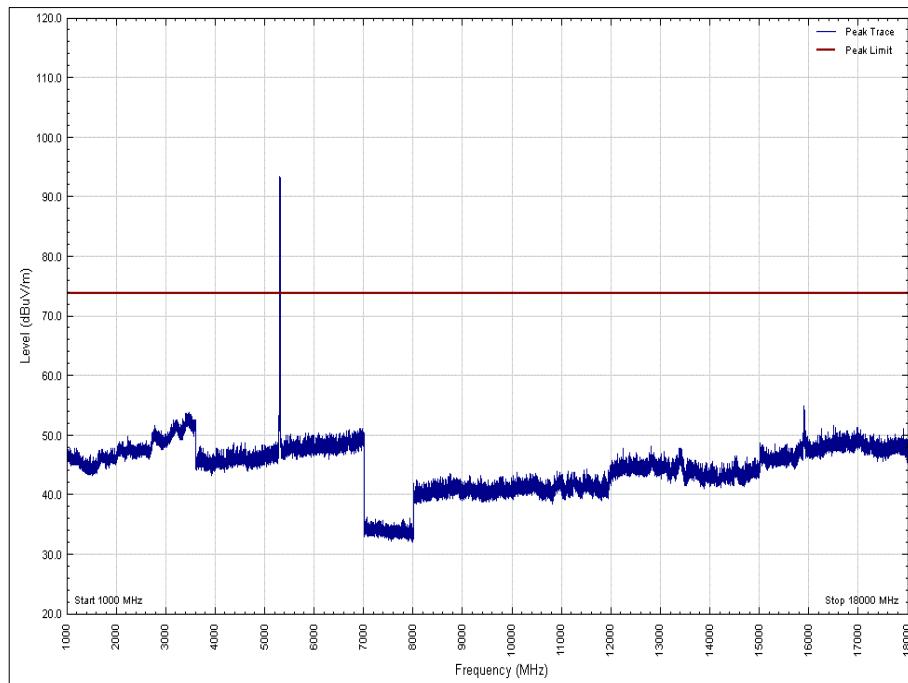
Figure 735 - 5300 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z – Antenna 1



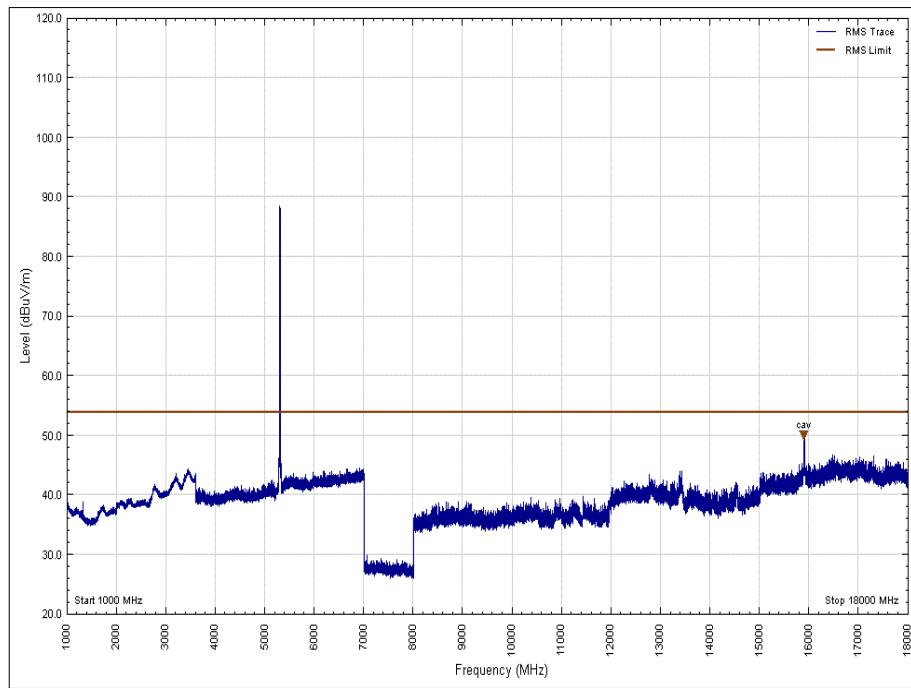
Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15.895790	-	50.94	-	53.98	-	3.04	Vertical	Y

Table 307 – 5300 MHz, 1 GHz to 40 GHz – Antenna 1

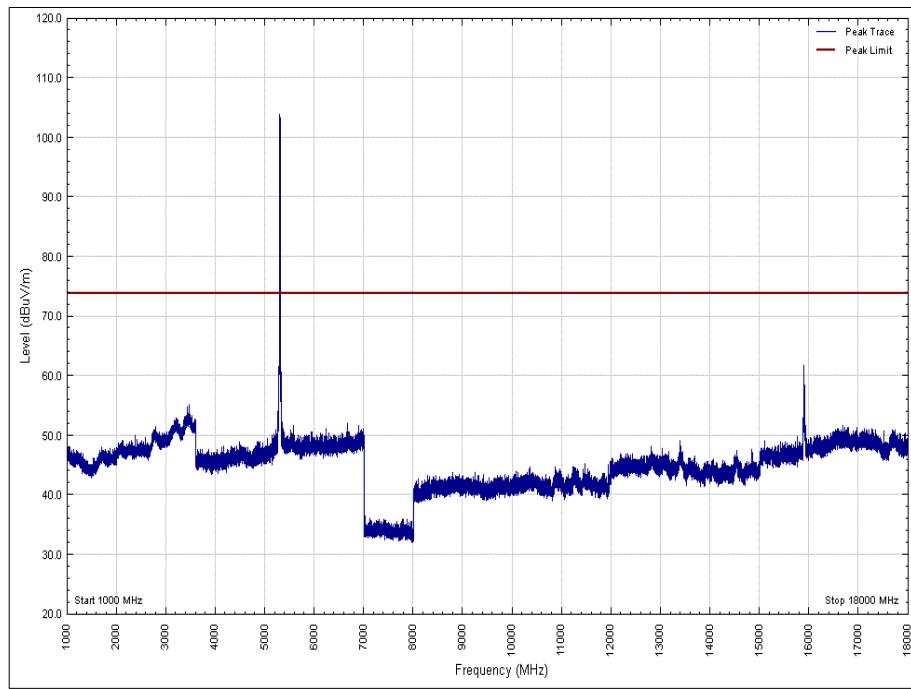
No other emissions were detected within 10 dB of the limit.



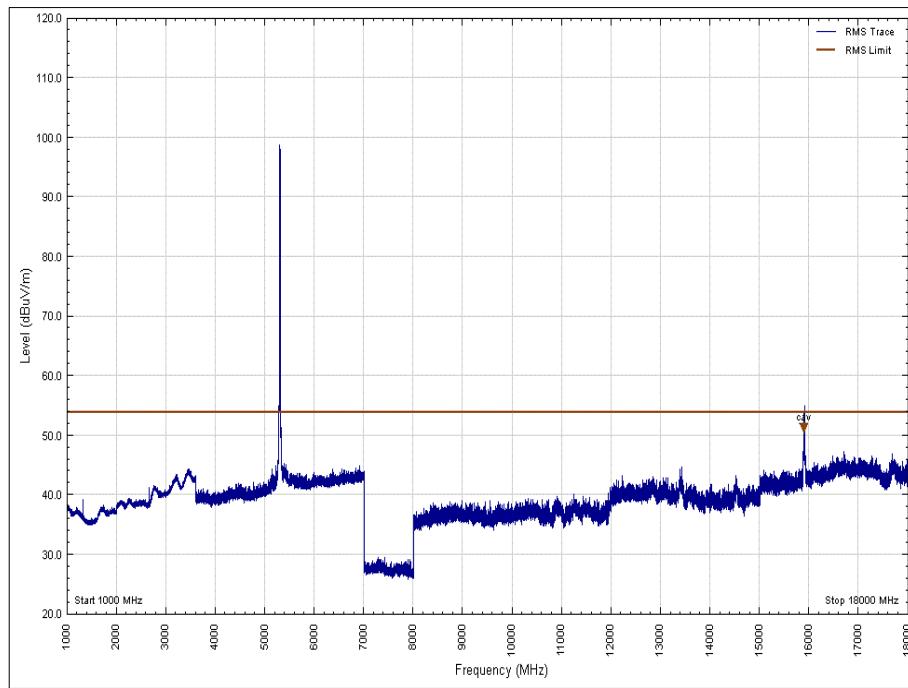
**Figure 736 - 5300 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



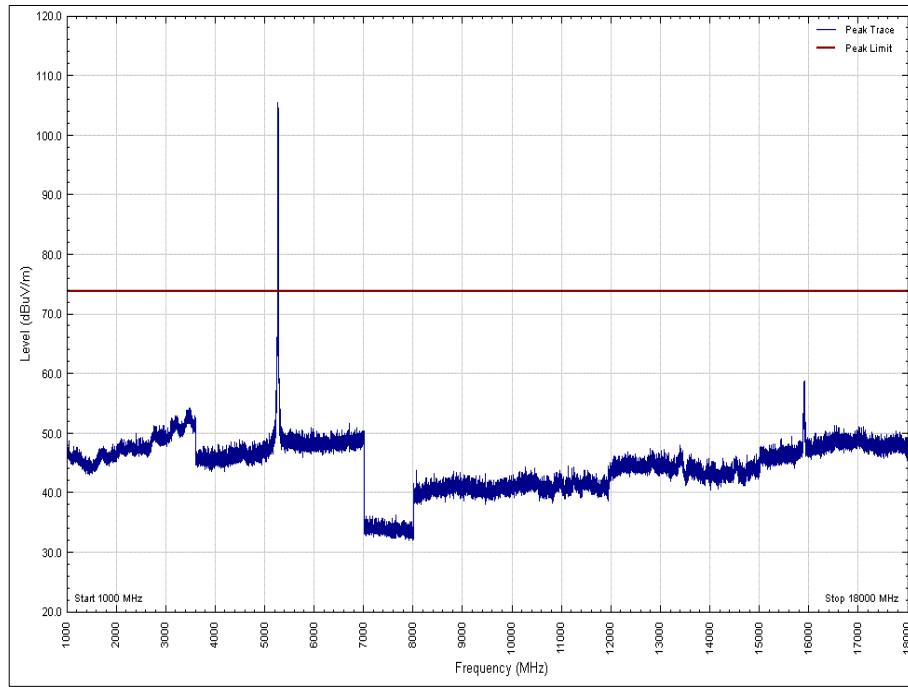
**Figure 737 - 5300 MHz, 1 GHz to 18 GHz - Average, P
olarity: Vertical, EUT Orientation: X – Antenna 1**



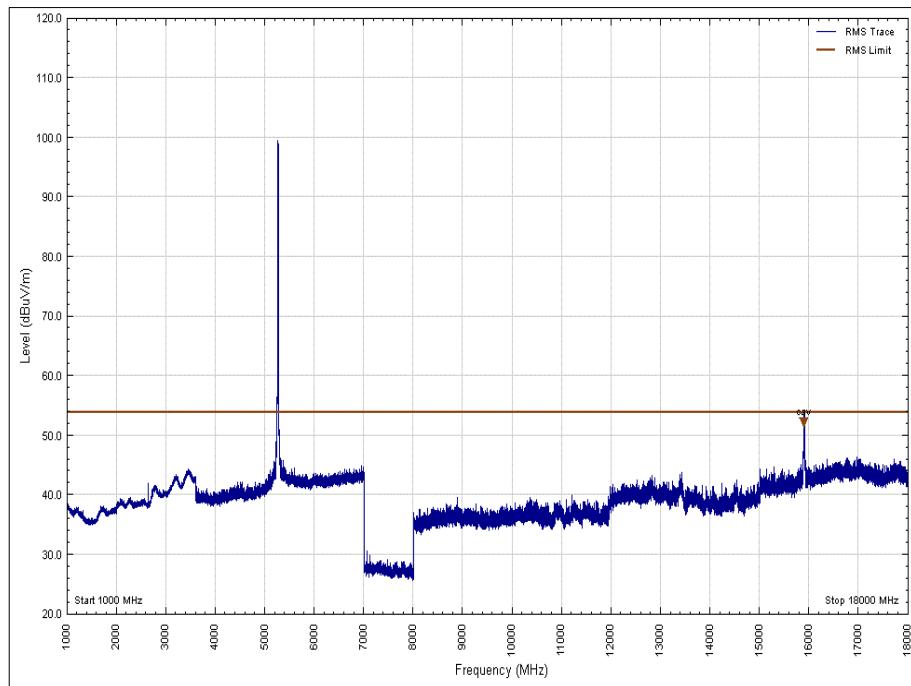
**Figure 738 - 5300 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



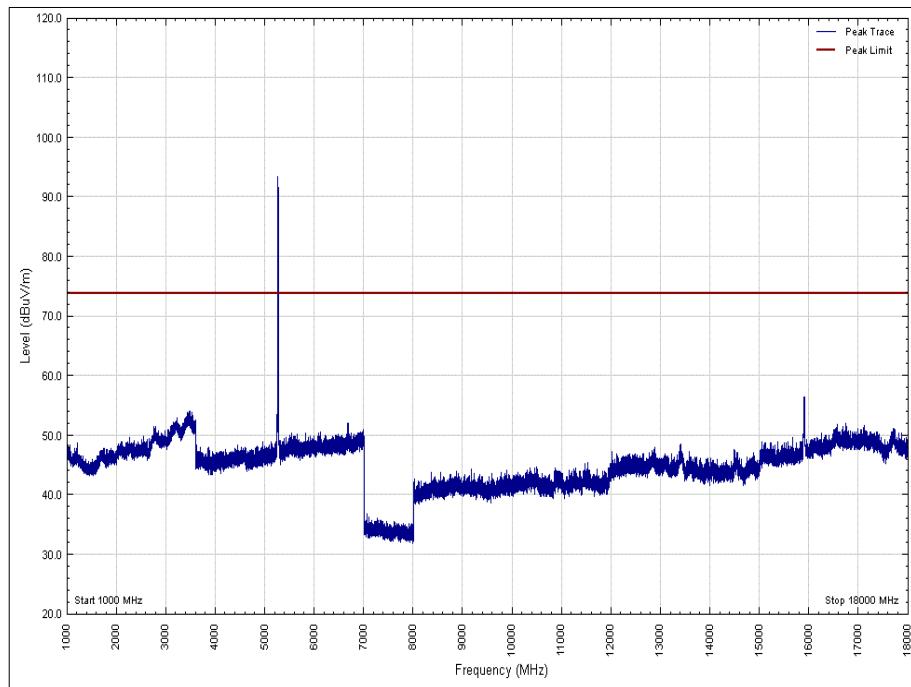
**Figure 739 - 5300 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



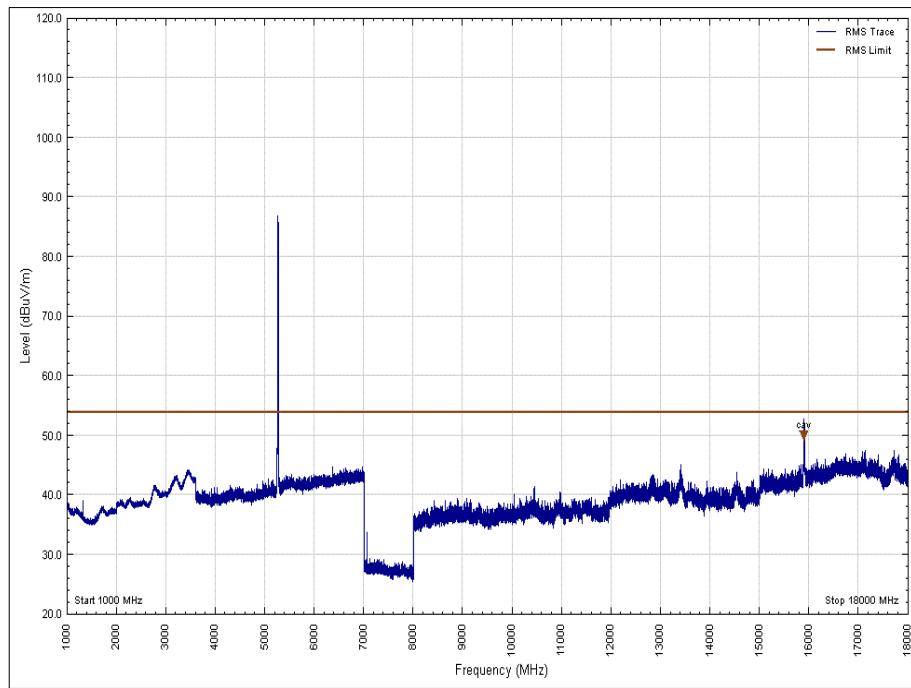
**Figure 740 - 5300 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



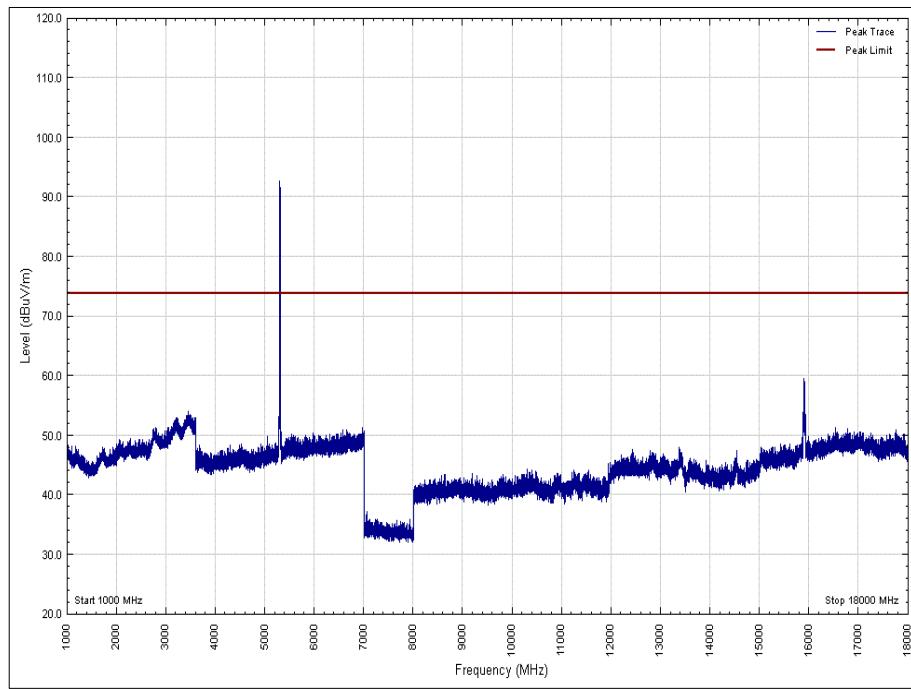
**Figure 741 - 5300 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



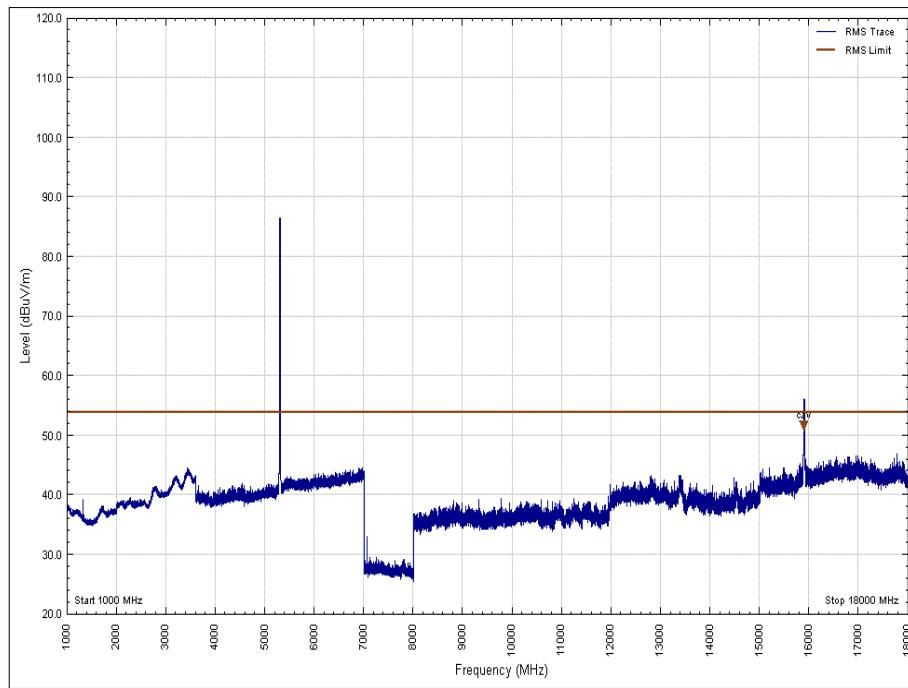
**Figure 742 - 5300 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



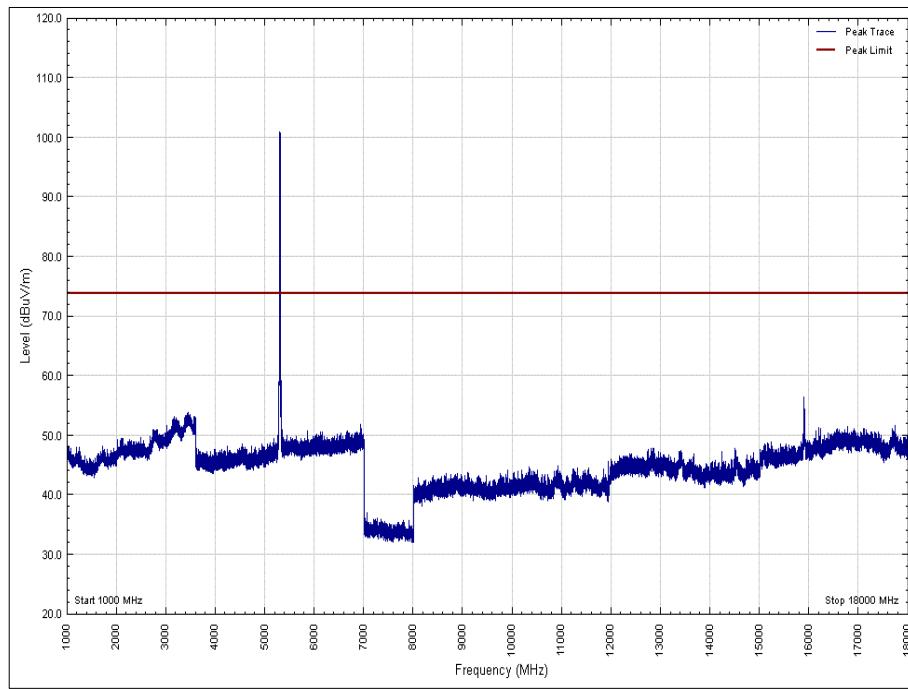
**Figure 743 - 5300 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



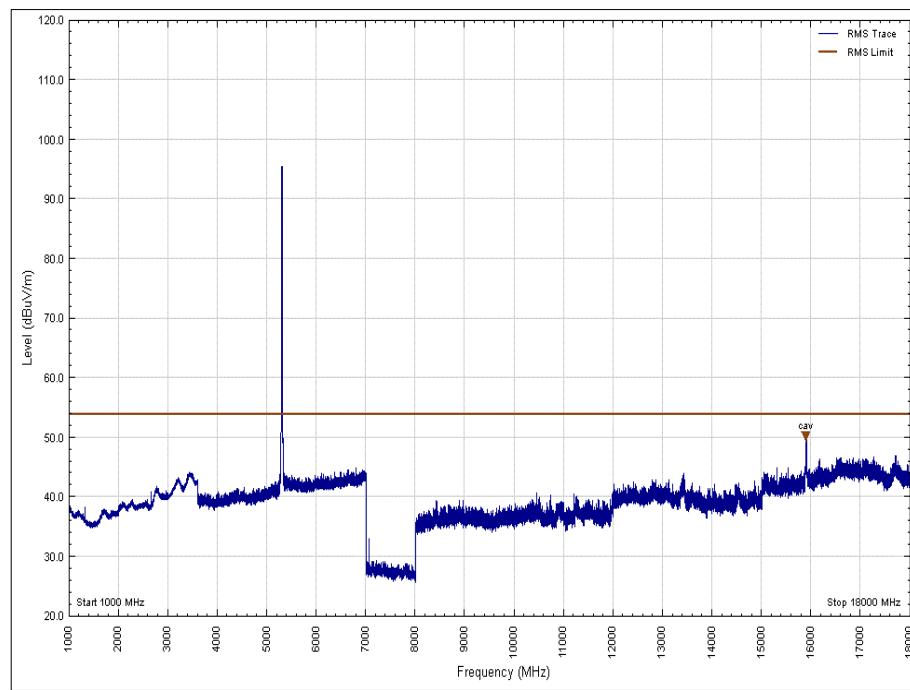
**Figure 744 - 5300 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 745 - 5300 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 746 - 5300 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



**Figure 747 - 5300 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
*								

Table 308 – 5320 MHz, 30 MHz to 1 GHz – Antenna 1

*No emissions were detected within 10 dB of the limit.

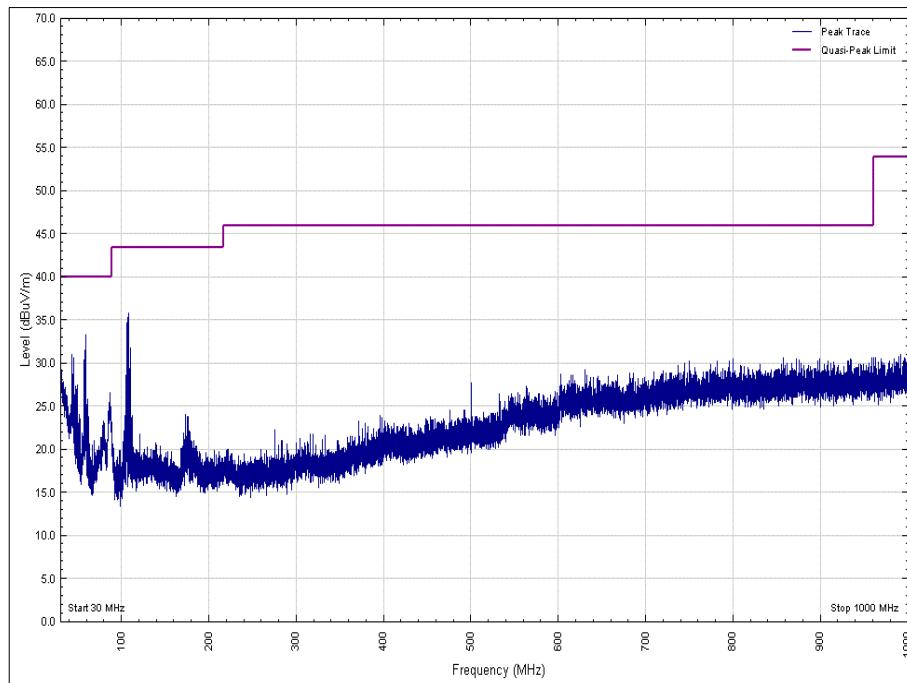


Figure 748 - 5320 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X – Antenna 1

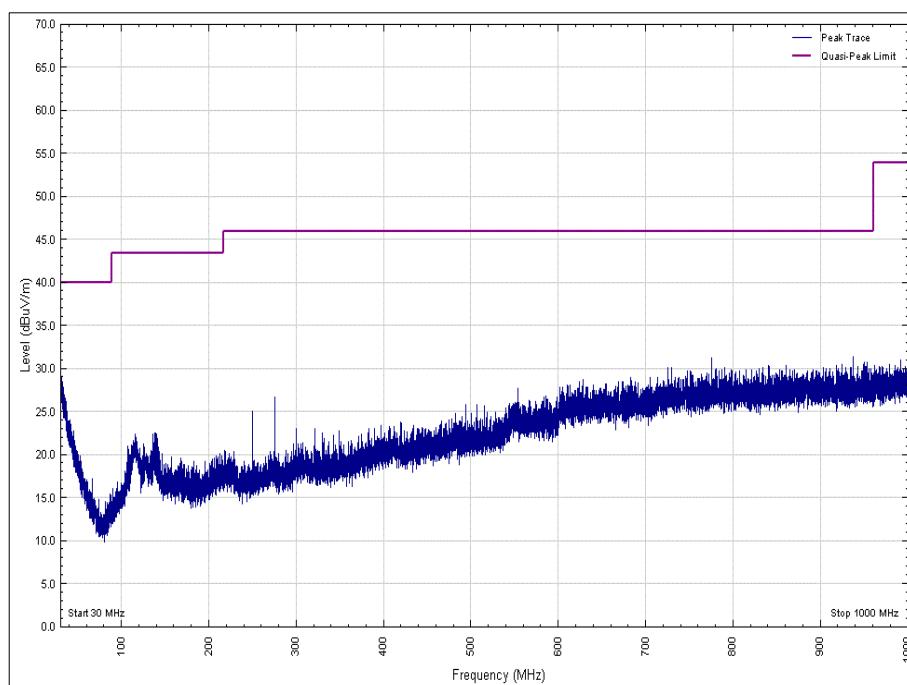


Figure 749 - 5320 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X – Antenna 1

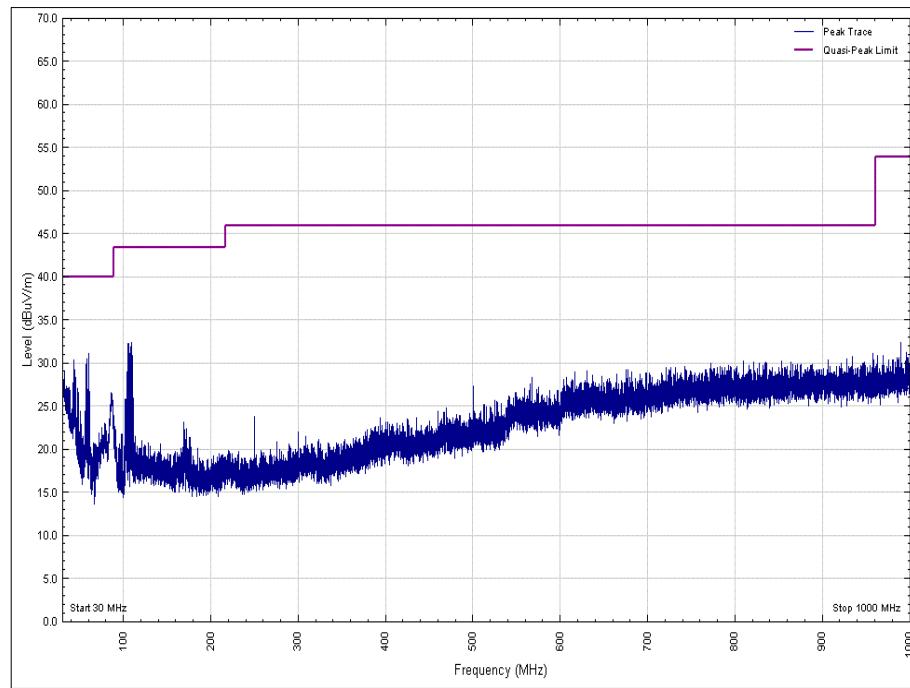


Figure 750 - 5320 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y – Antenna 1

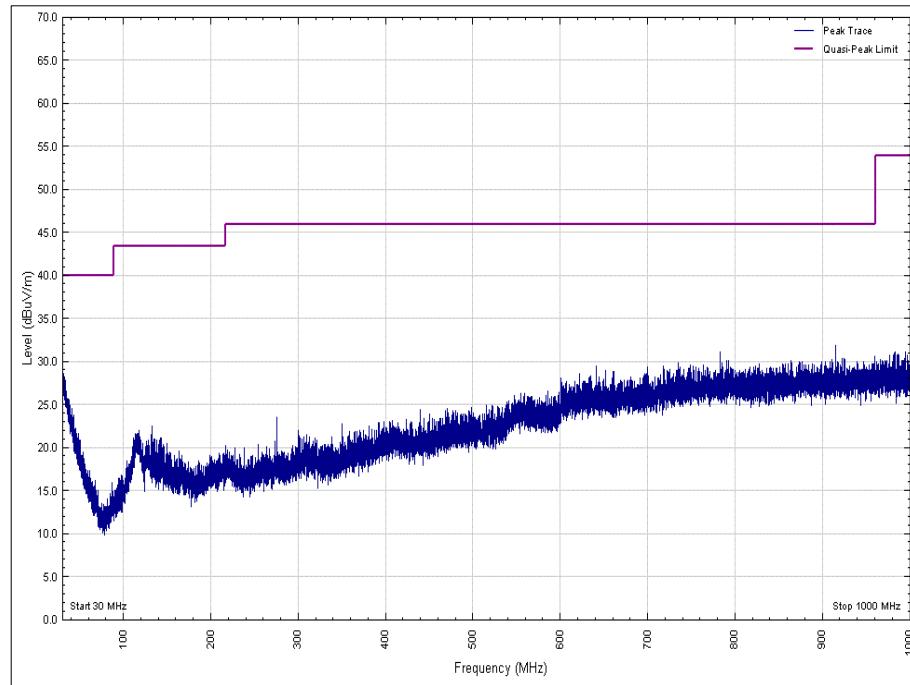


Figure 751 - 5320 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y – Antenna 1

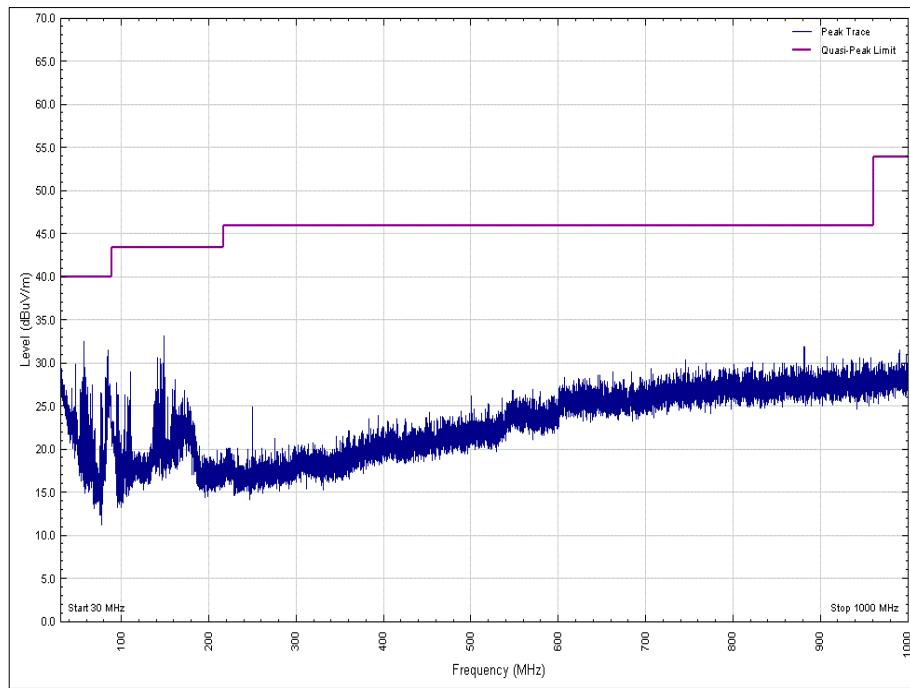


Figure 752 - 5320 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z – Antenna 1

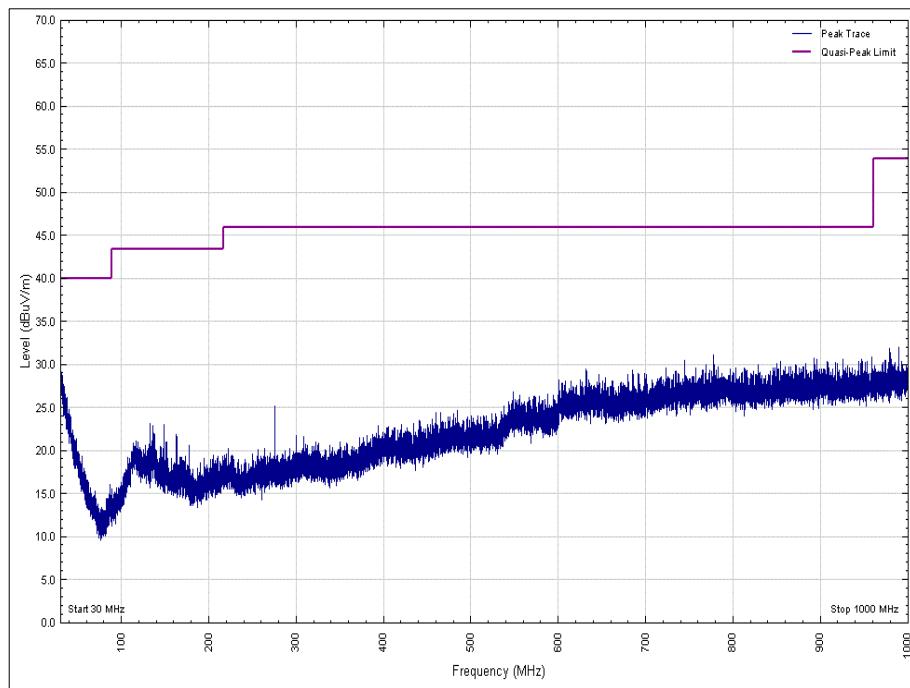
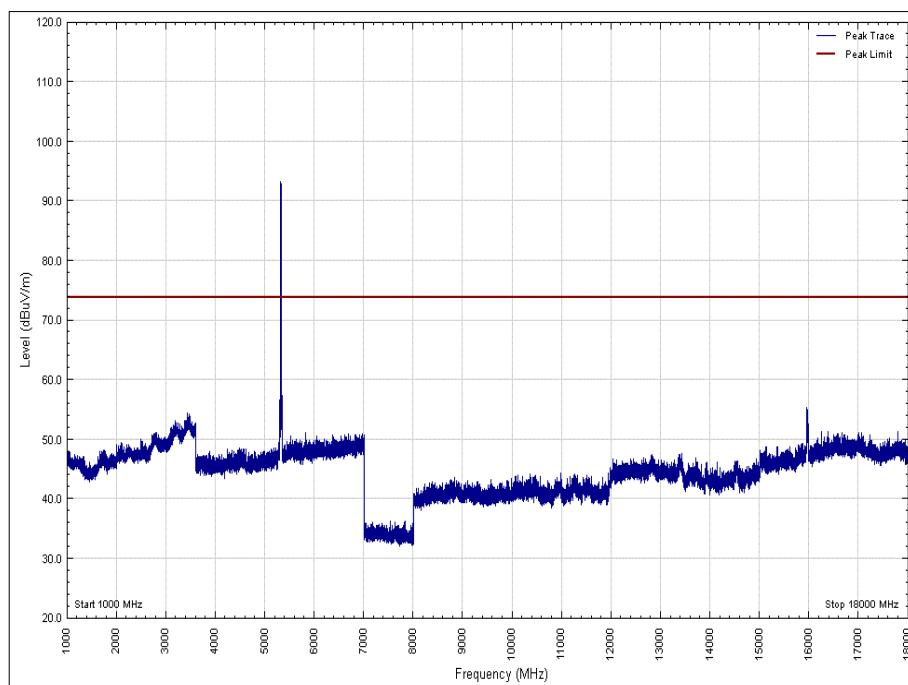


Figure 753 - 5320 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z – Antenna 1

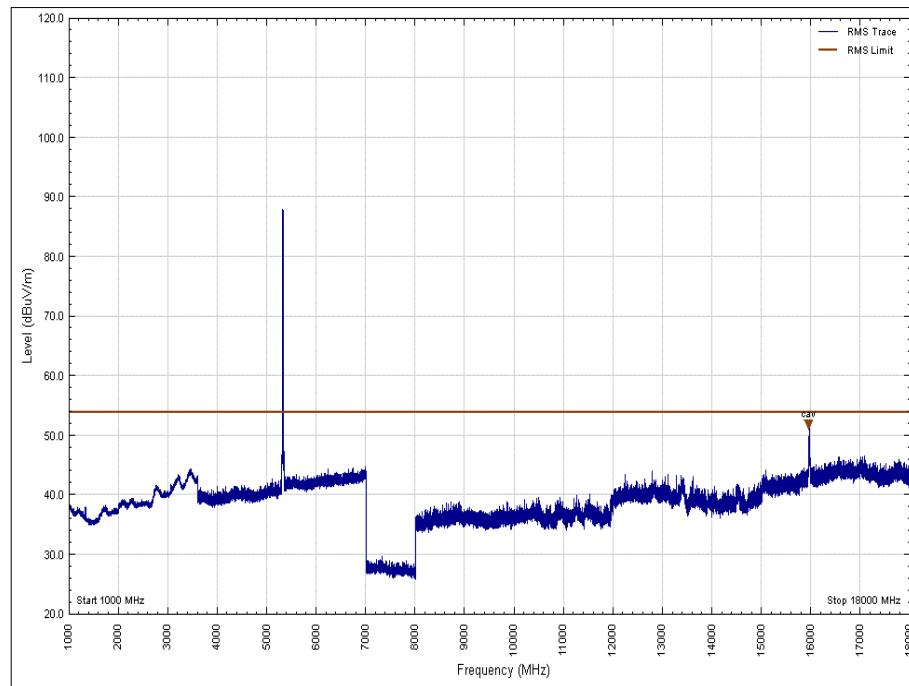
Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15.956260	-	51.04	-	53.98	-	2.94	Vertical	Z

Table 309 – 5320 MHz, 1 GHz to 40 GHz – Antenna 1

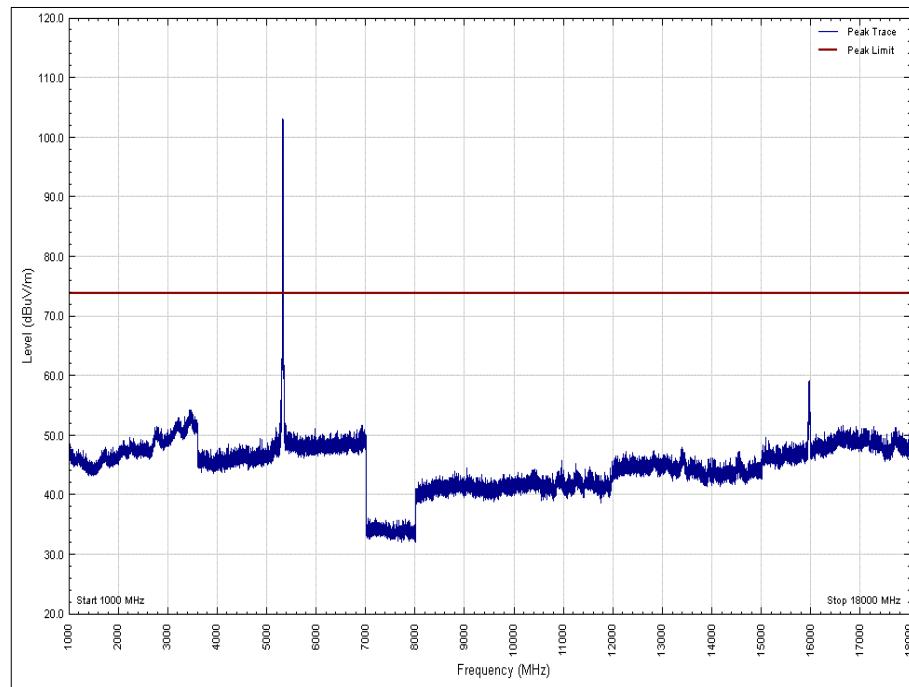
No other emissions were detected within 10 dB of the limit.



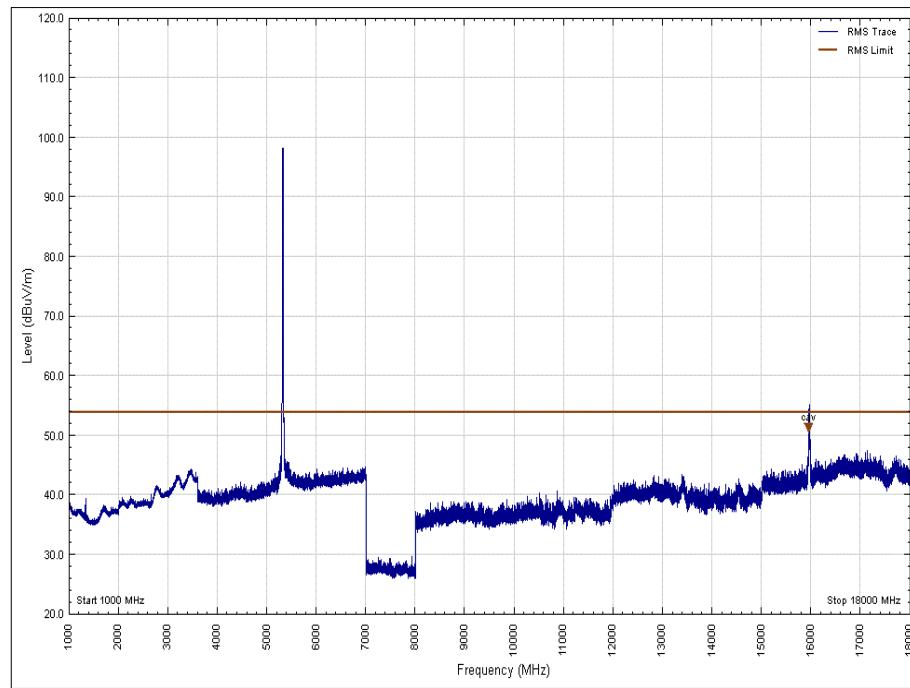
**Figure 754 - 5320 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



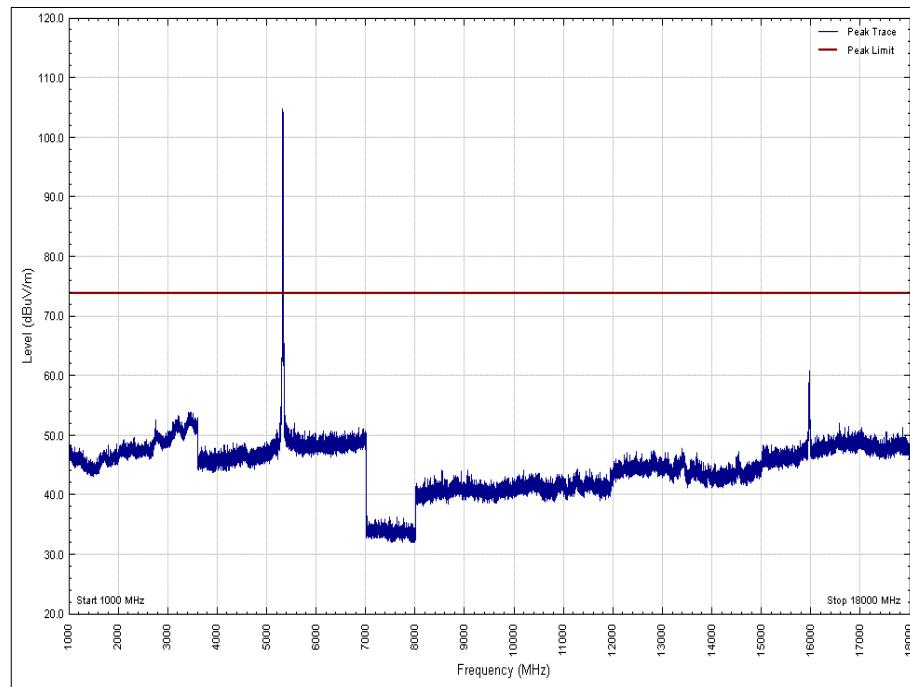
**Figure 755 - 5320 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: X – Antenna 1**



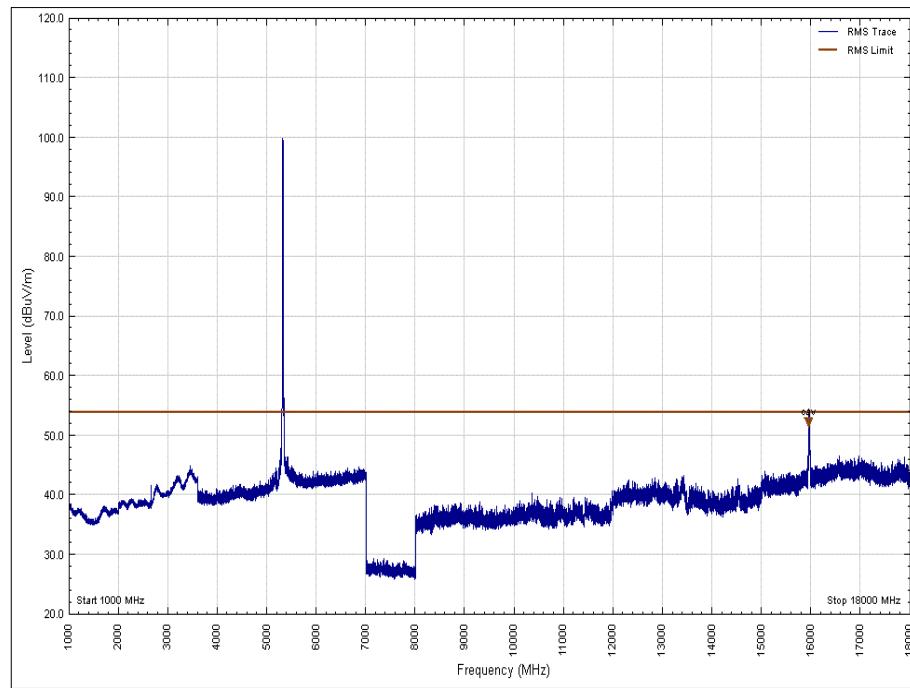
**Figure 756 - 5320 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



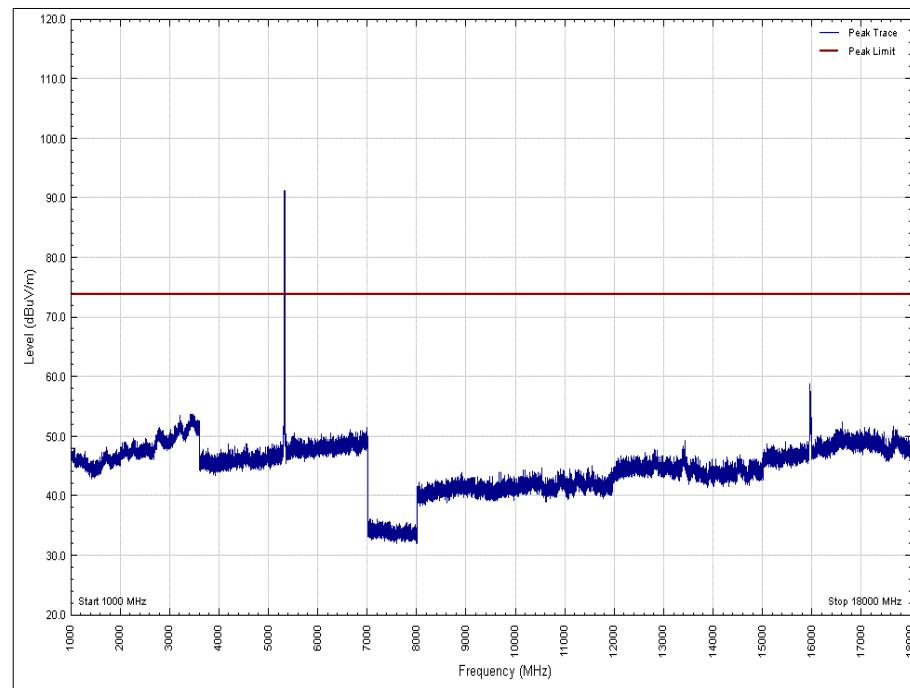
**Figure 757 - 5320 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X – Antenna 1**



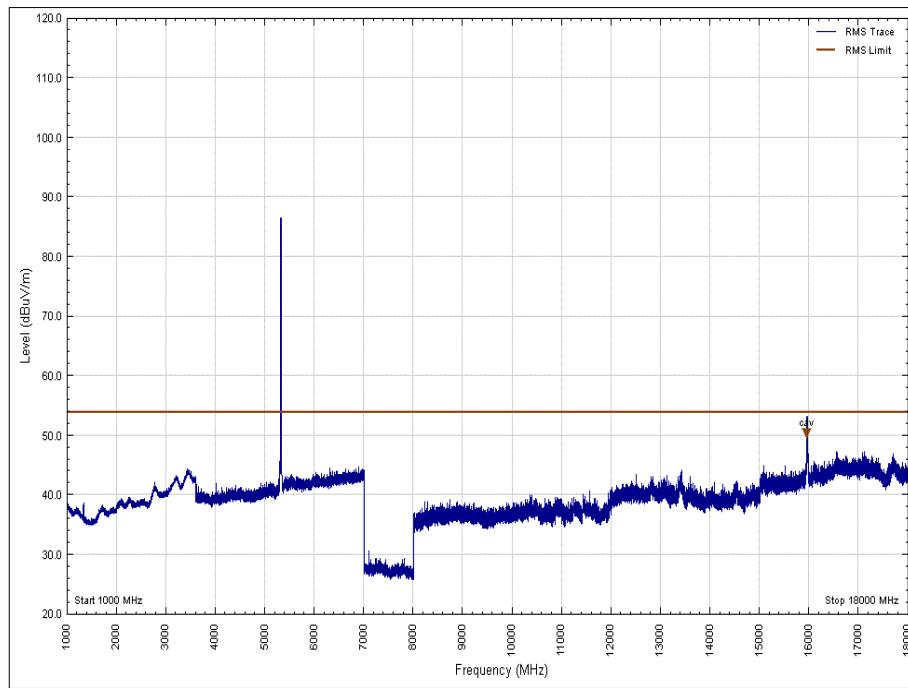
**Figure 758 - 5320 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



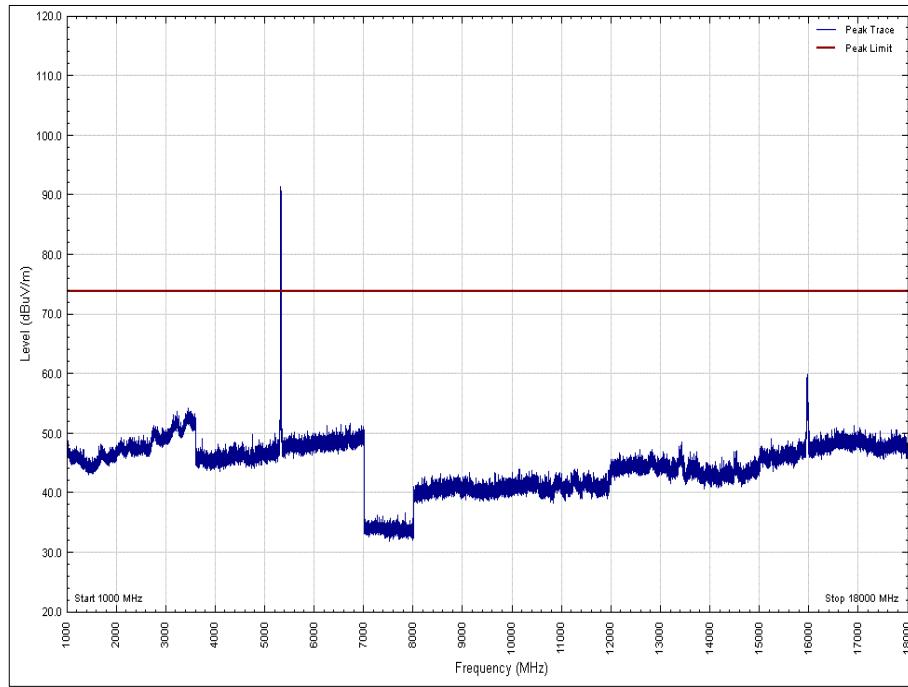
**Figure 759 - 5320 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Y – Antenna 1**



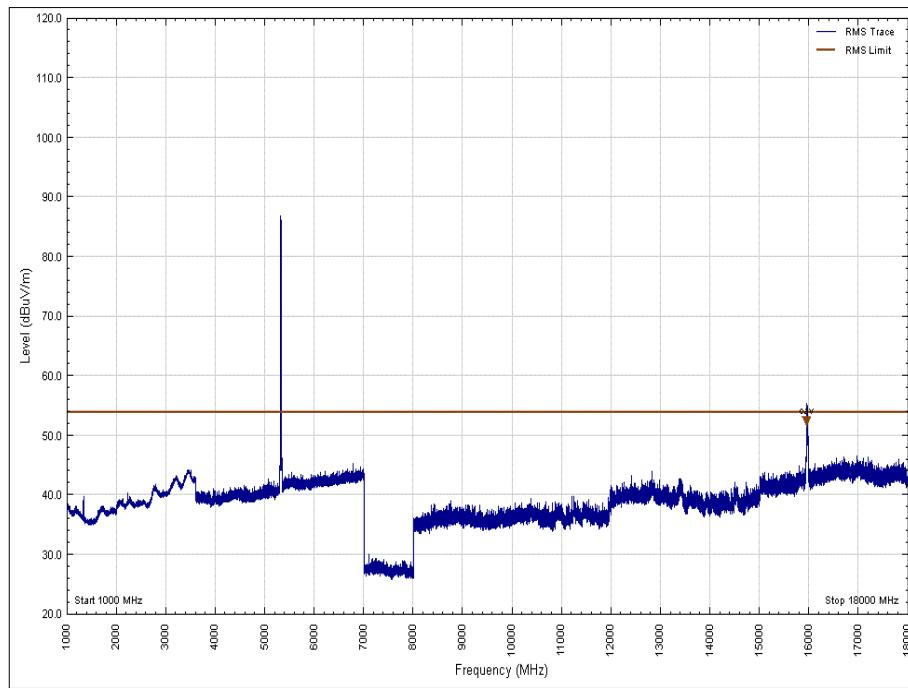
**Figure 760 - 5320 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



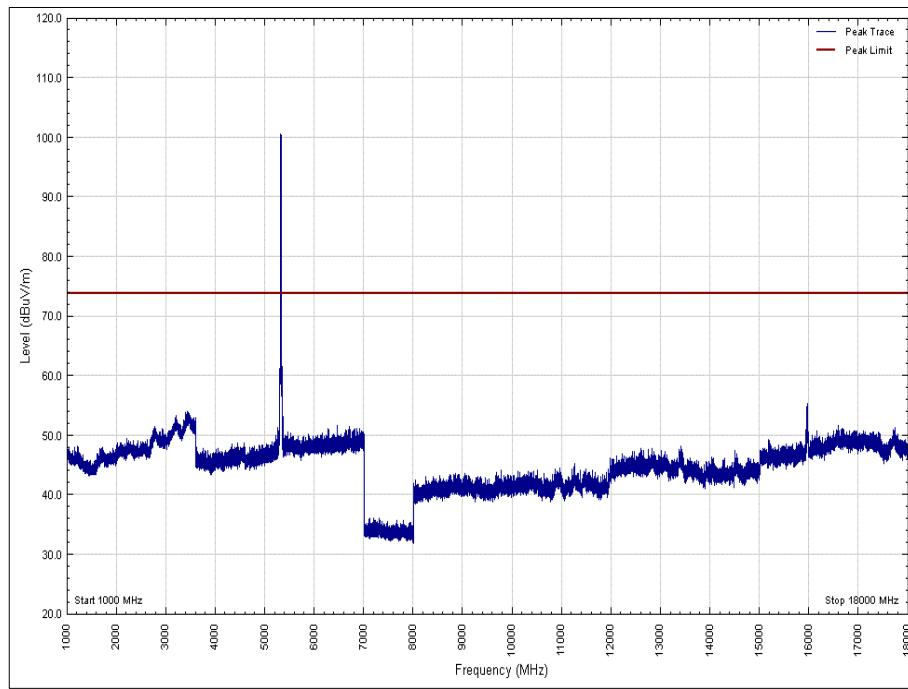
**Figure 761 - 5320 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y – Antenna 1**



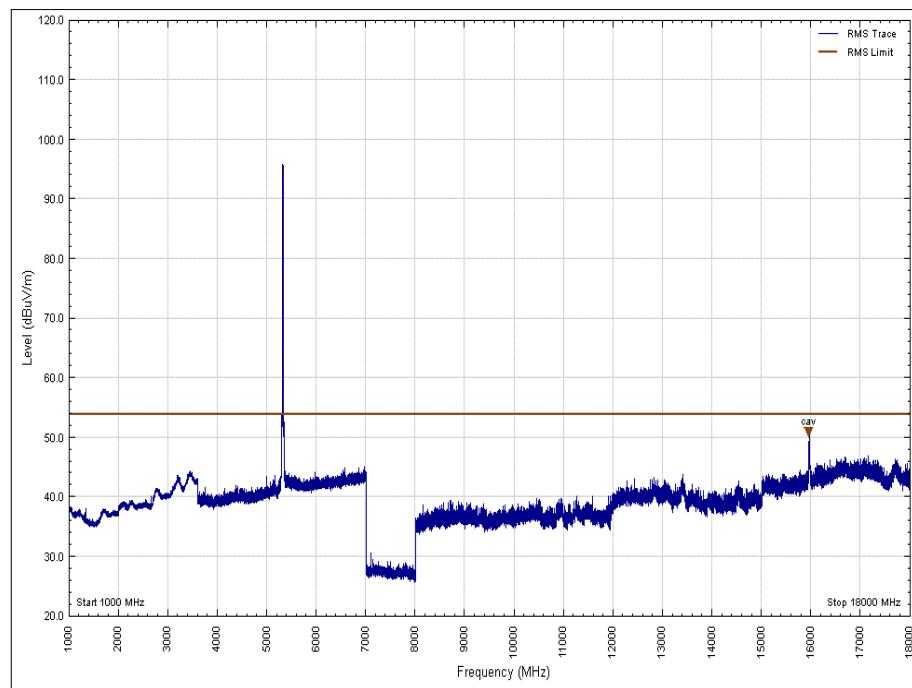
**Figure 762 - 5320 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 763 - 5320 MHz, 1 GHz to 18 GHz - Average,
Polarity: Vertical, EUT Orientation: Z – Antenna 1**



**Figure 764 - 5320 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



**Figure 765 - 5320 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Z – Antenna 1**



5 GHz WLAN 802.11ac 20 MHz Bandwidth

Frequency (MHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
59.141	33.59	-	40.00	-	6.41	-	Vertical	Y

Table 310 – 5260 MHz, 30 MHz to 1 GHz - MIMO

No other emissions were detected within 10 dB of the limit.

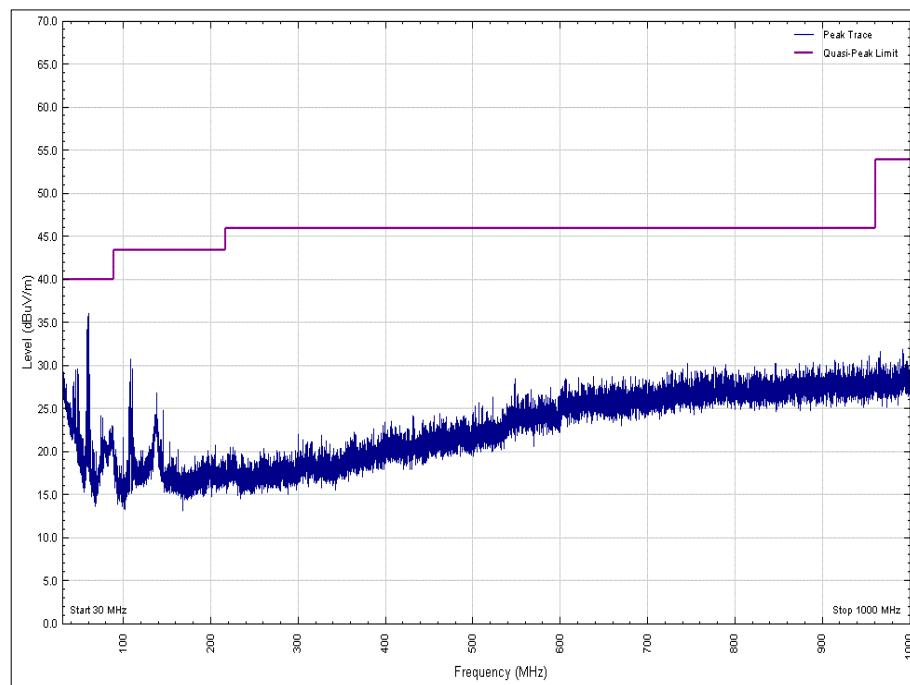


Figure 766 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: X - MIMO

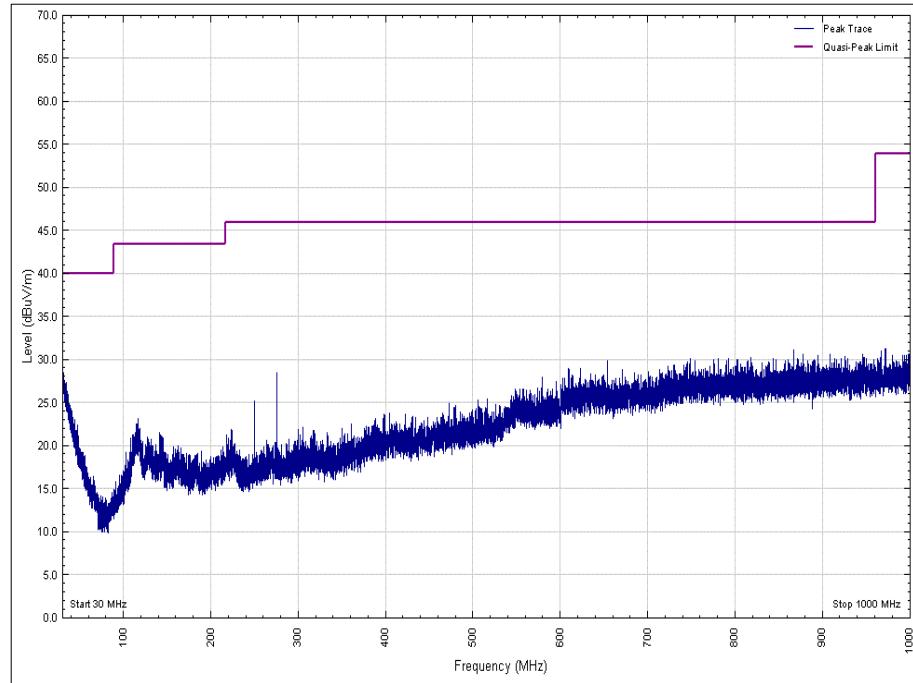


Figure 767 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: X - MIMO

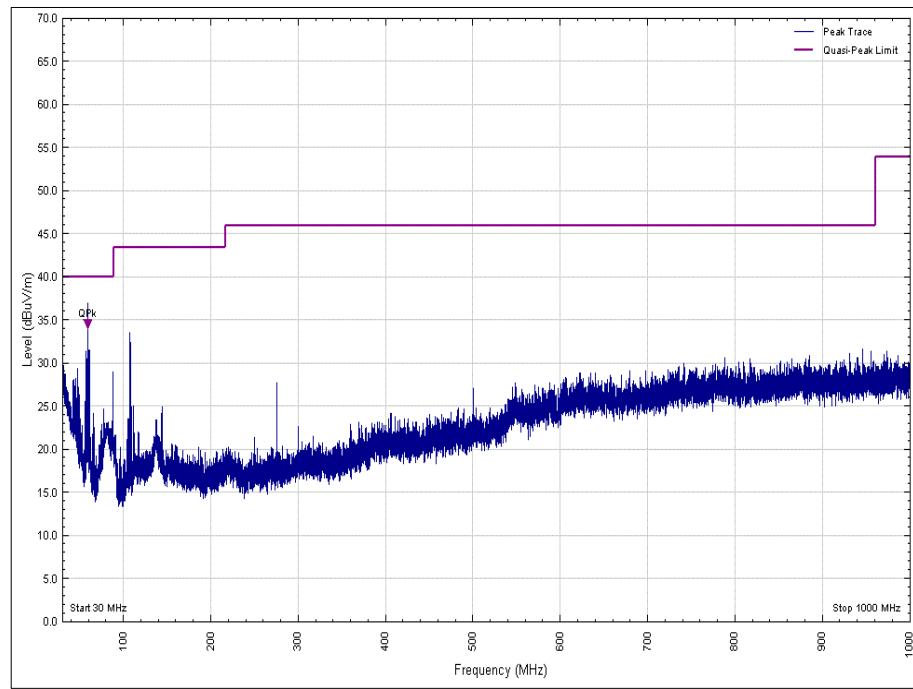


Figure 768 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Y - MIMO

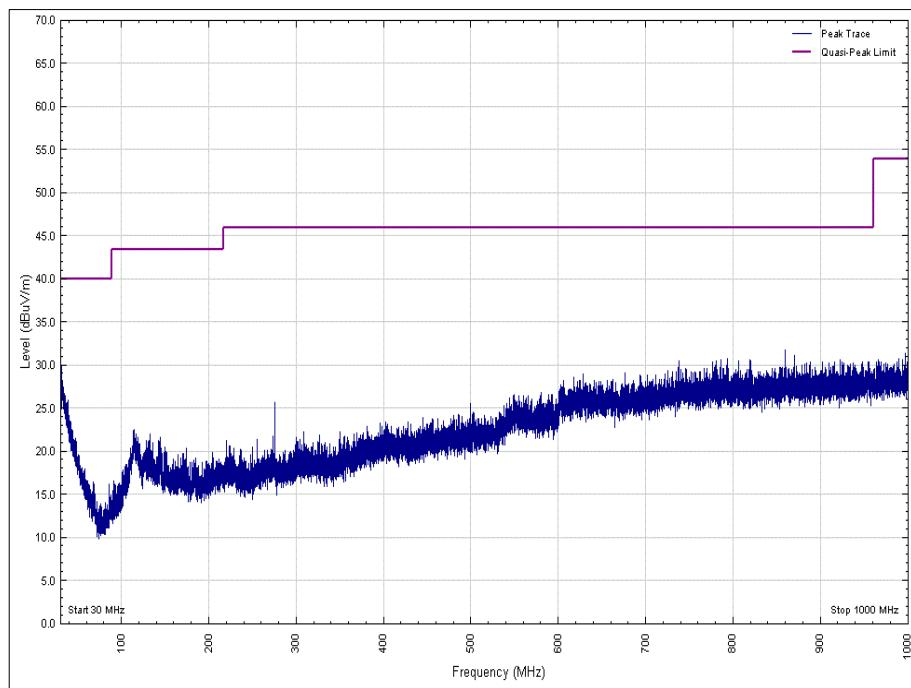


Figure 769 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Y - MIMO

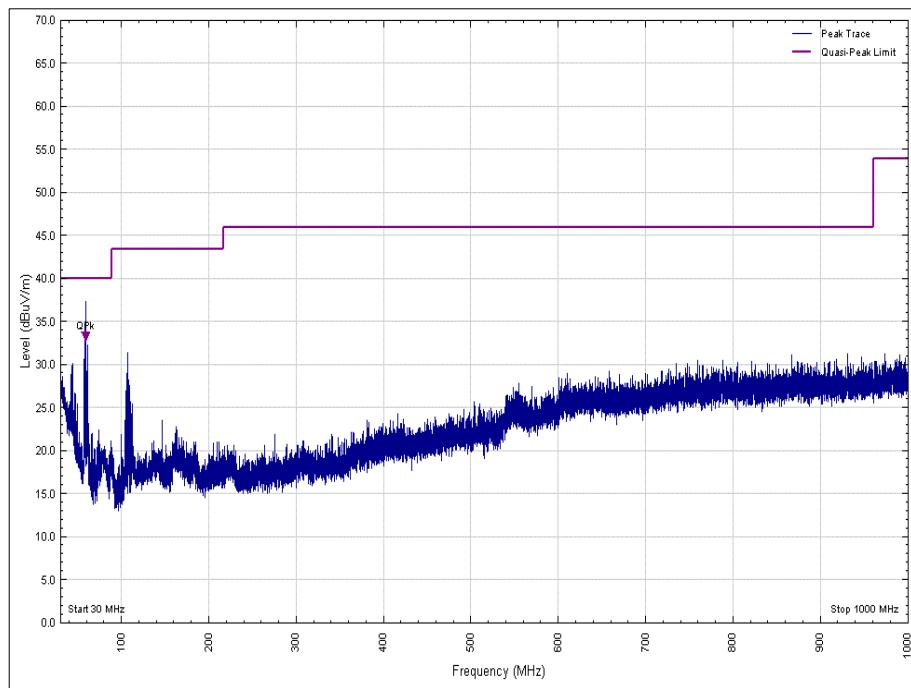


Figure 770 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Vertical, EUT Orientation: Z - MIMO

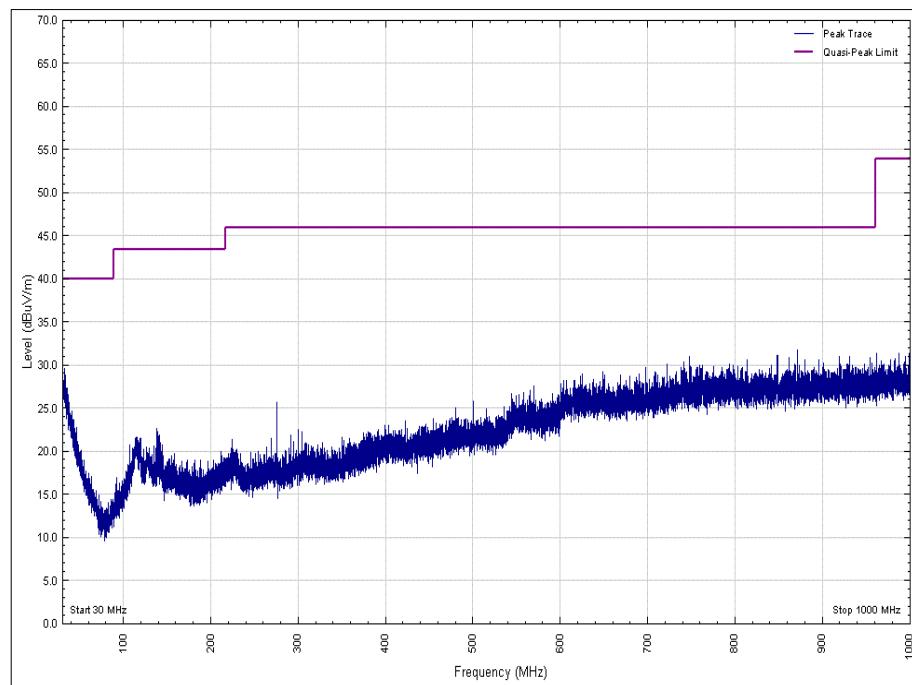


Figure 771 - 5260 MHz, 30 MHz to 1 GHz, Polarity: Horizontal, EUT Orientation: Z - MIMO

Frequency (GHz)	Result (dB μ V/m)		Limit (dB μ V/m)		Margin (dB)		Polarity	EUT Orientation
	Peak	Average	Peak	Average	Peak	Average		
15.778407	-	51.31	-	53.98	-	2.67	Horizontal	X

Table 311 – 5260 MHz, 1 GHz to 40 GHz - MIMO

No other emissions were detected within 10 dB of the limit.

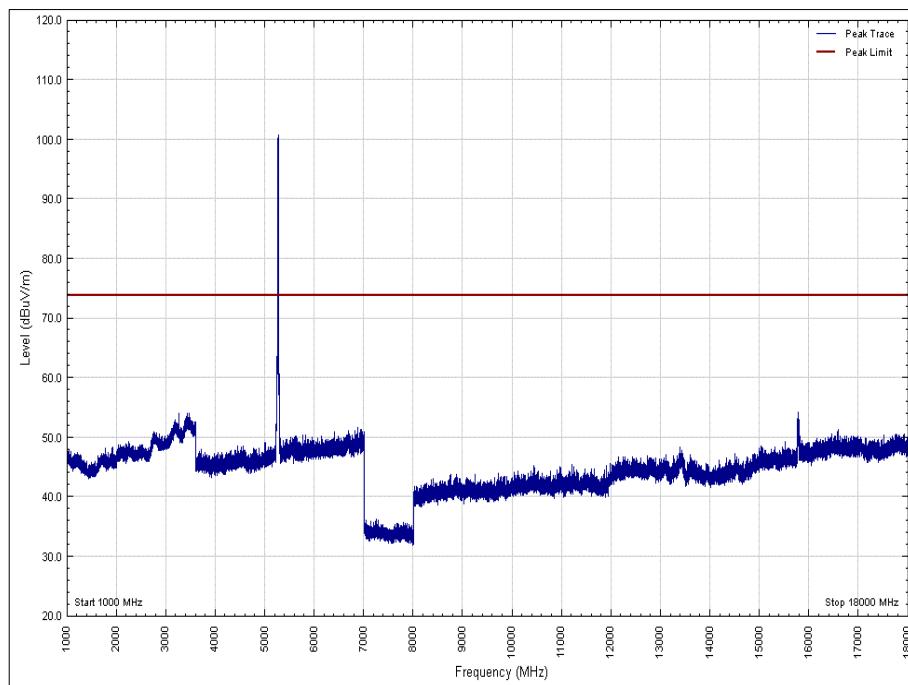


Figure 772 - 5260 MHz, 1 GHz to 18 GHz - Peak, Polarity: Vertical, EUT Orientation: X - MIMO

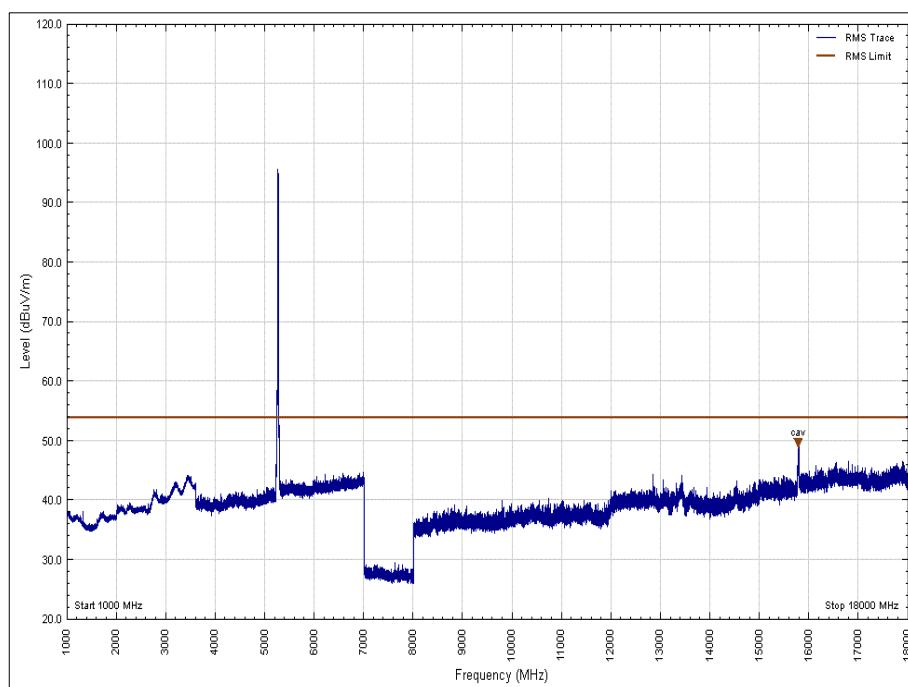
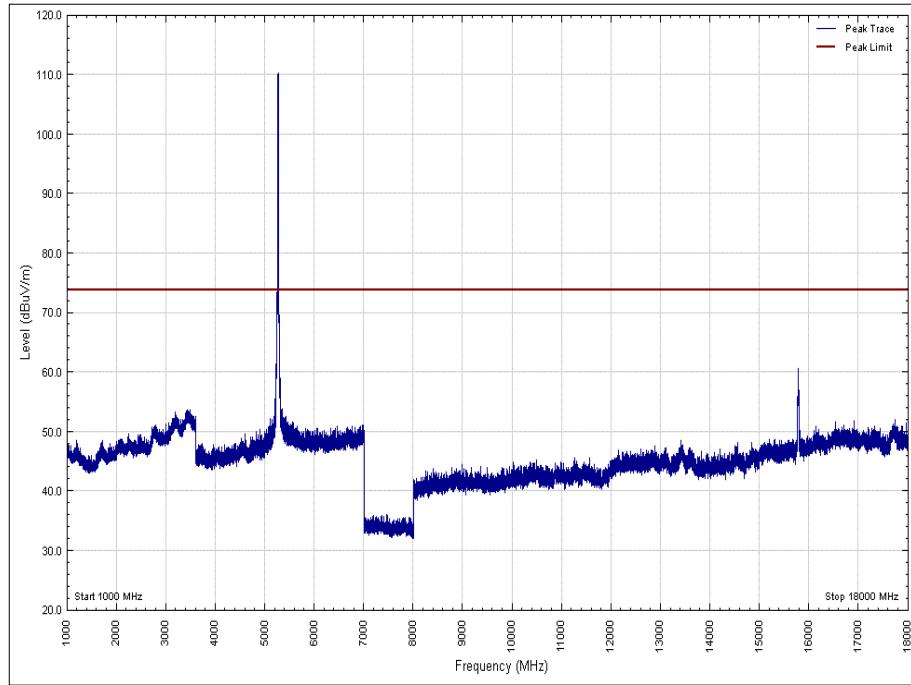
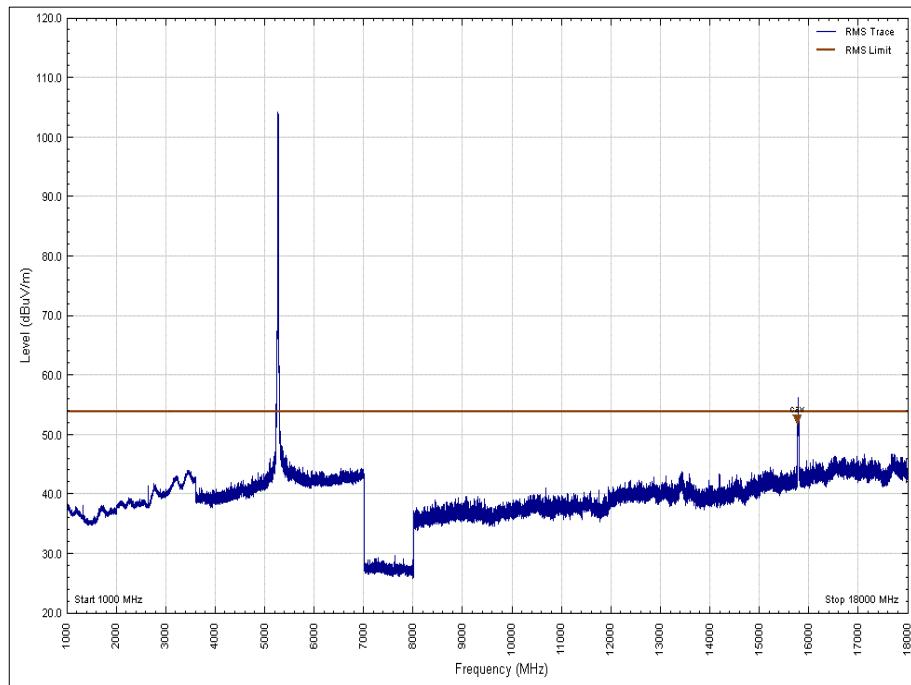


Figure 773 - 5260 MHz, 1 GHz to 18 GHz - Average, Polarity: Vertical, EUT Orientation: X - MIMO



**Figure 774 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: X - MIMO**



**Figure 775 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: X - MIMO**

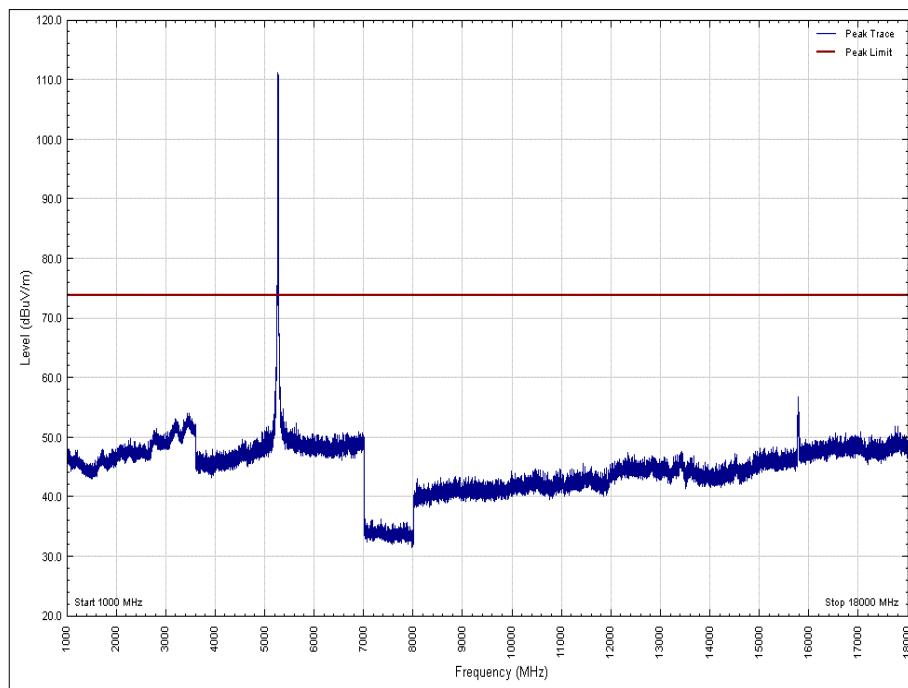


Figure 776 - 5260 MHz, 1 GHz to 18 GHz - Peak, Polarity: Vertical, EUT Orientation: Y - MIMO

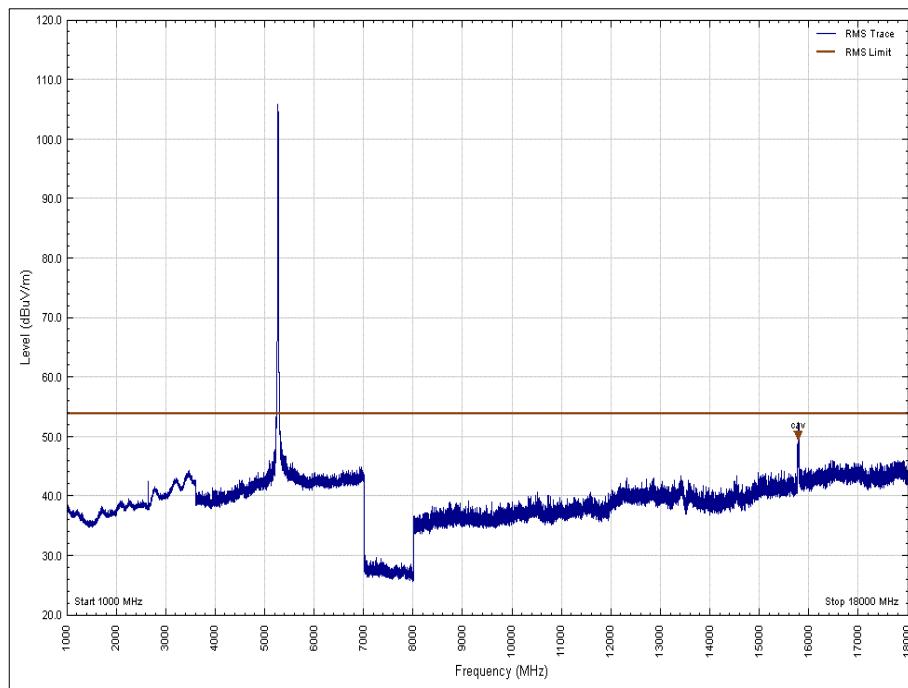
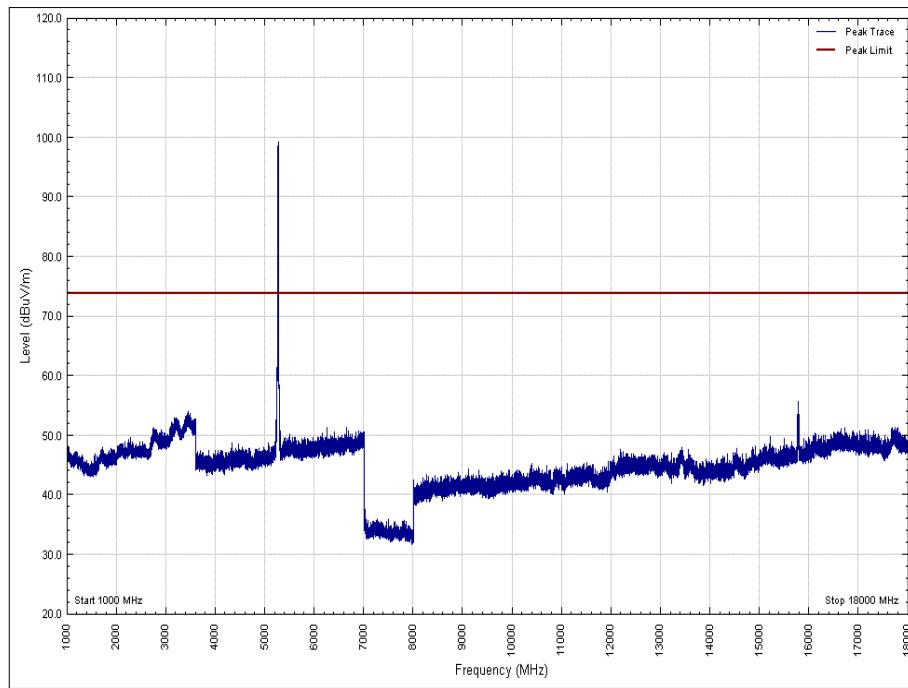
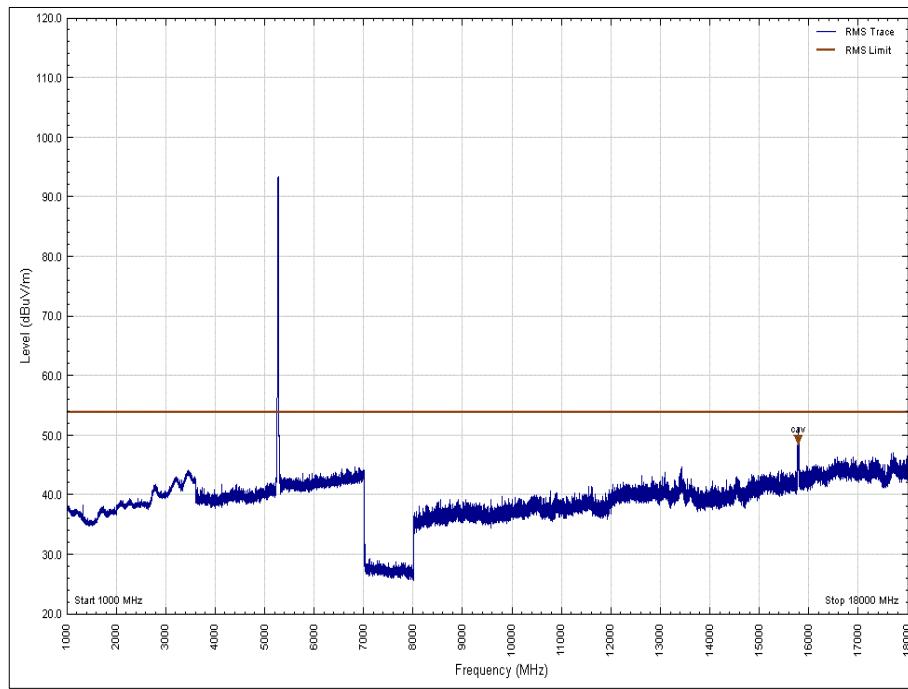


Figure 777 - 5260 MHz, 1 GHz to 18 GHz - Average, Polarity: Vertical, EUT Orientation: Y - MIMO



**Figure 778 - 5260 MHz, 1 GHz to 18 GHz - Peak,
Polarity: Horizontal, EUT Orientation: Y - MIMO**



**Figure 779 - 5260 MHz, 1 GHz to 18 GHz - Average,
Polarity: Horizontal, EUT Orientation: Y - MIMO**