

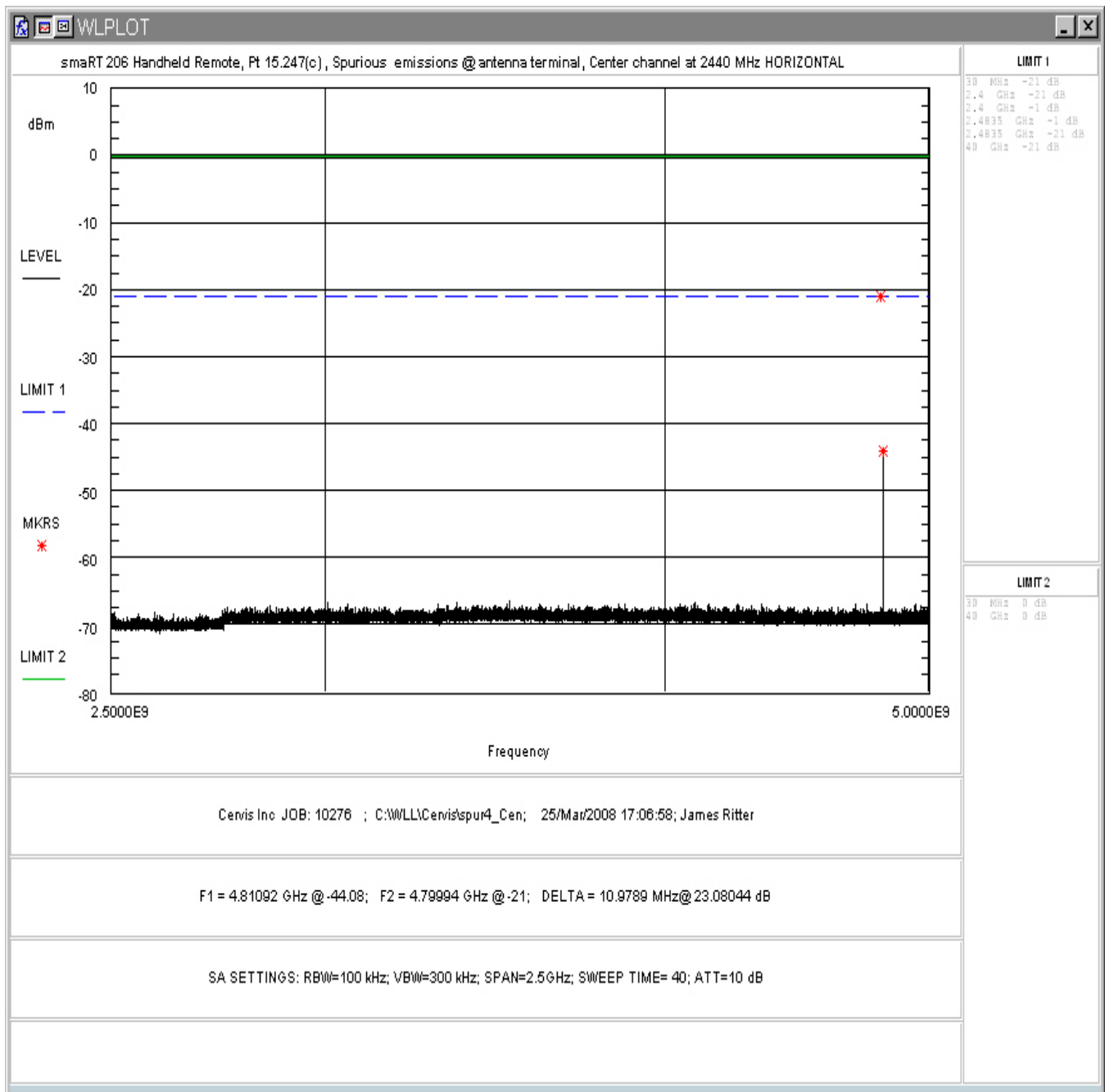


Figure 5-23. Conducted Spurious Emissions, Mid Channel 2.5 - 5GHz

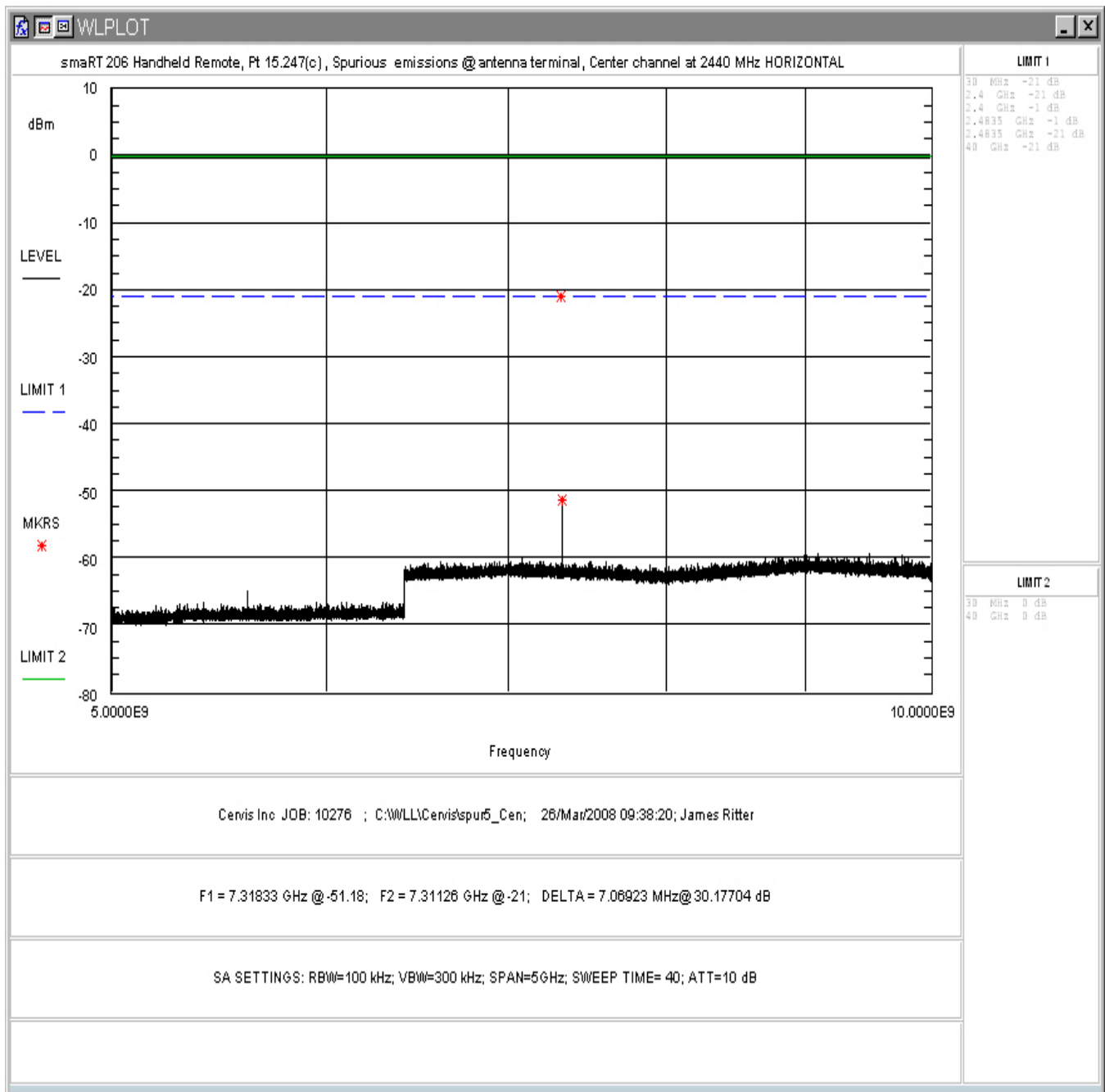


Figure 5-24. Conducted Spurious Emissions, Mid Channel 5 - 10GHz

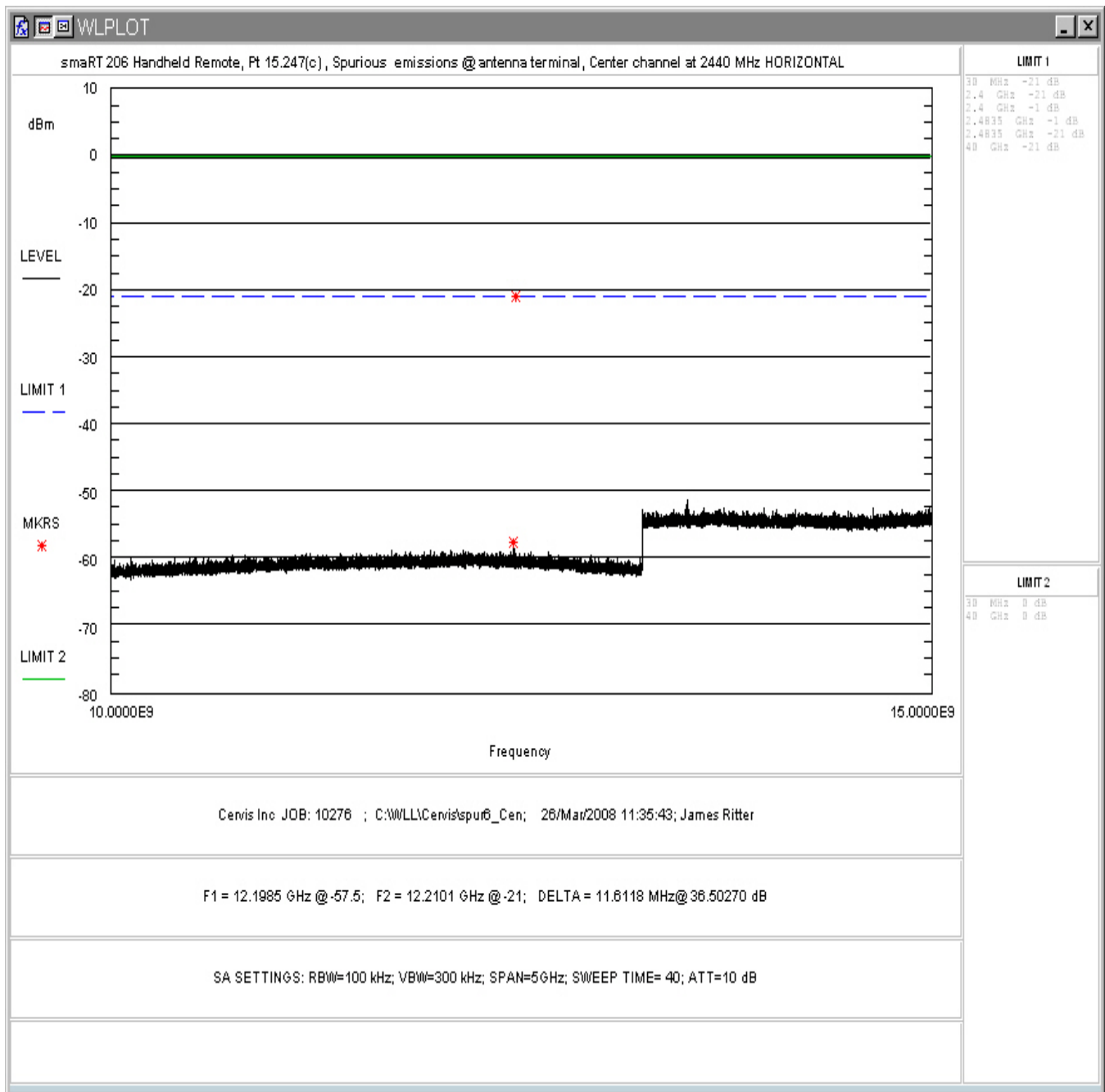


Figure 5-25. Conducted Spurious Emissions, Mid Channel 10 - 15GHz

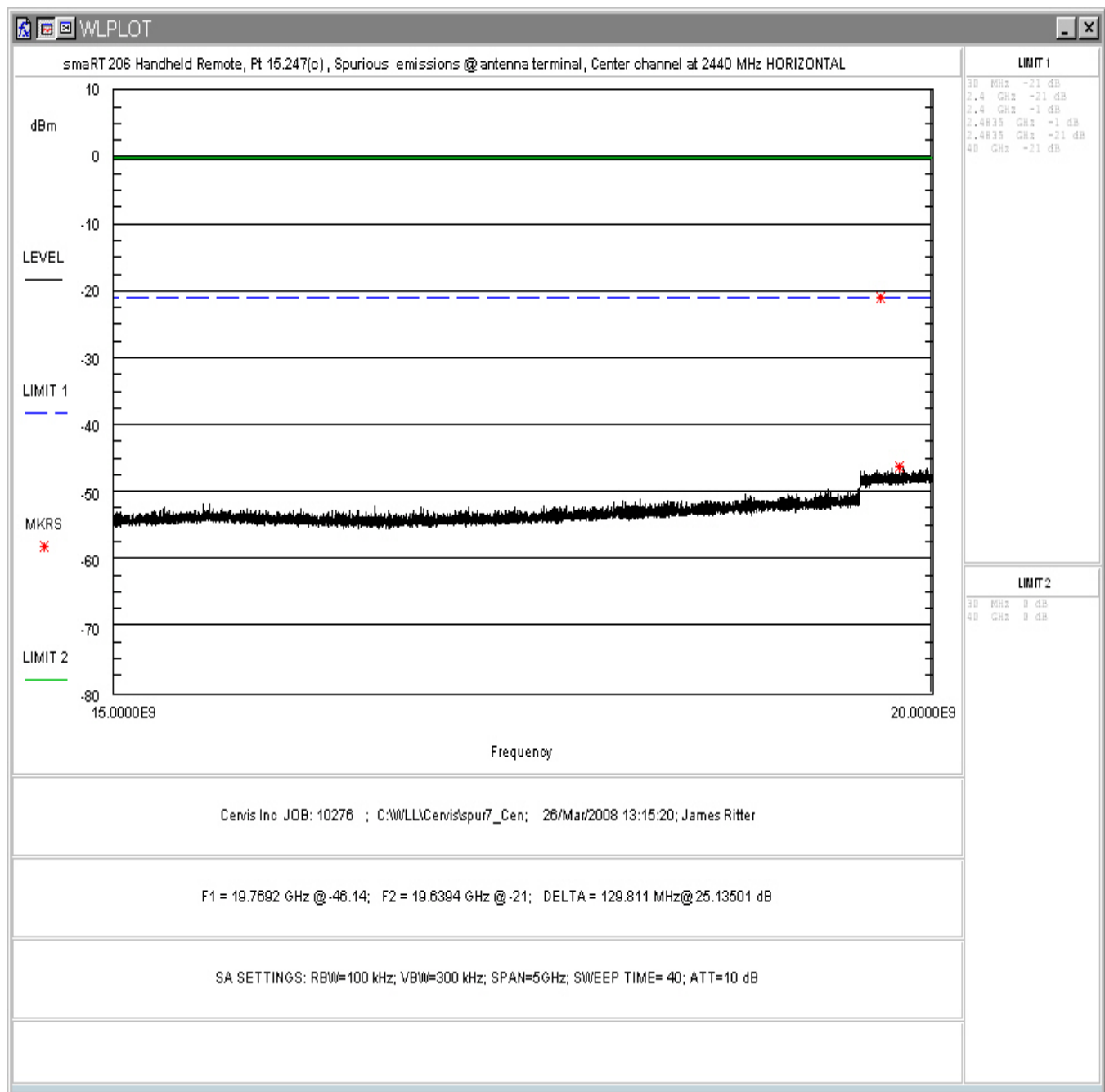


Figure 5-26. Conducted Spurious Emissions, Mid Channel 15 - 20GHz

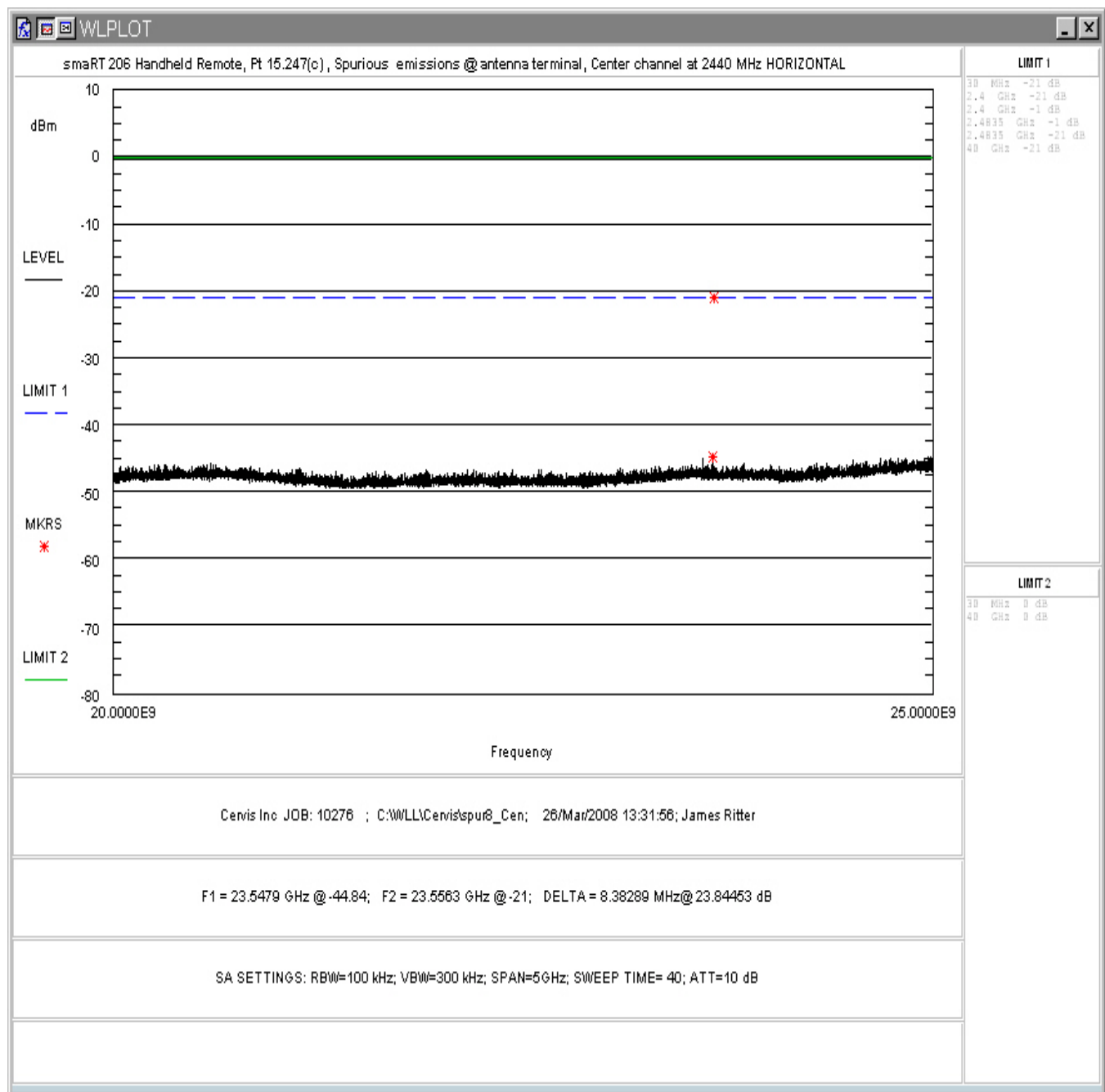


Figure 5-27. Conducted Spurious Emissions, Mid Channel 20 - 25GHz

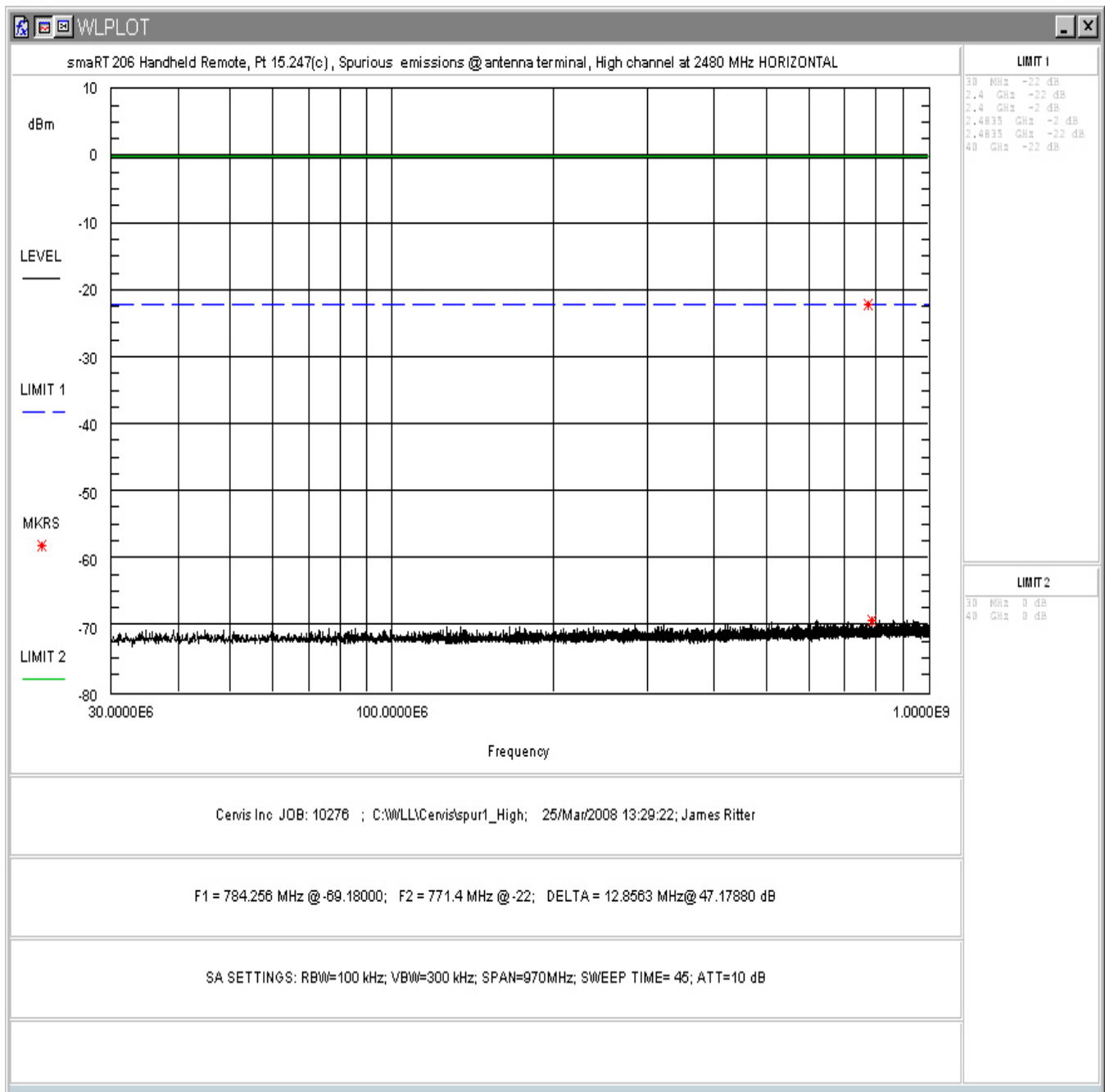


Figure 5-28. Conducted Spurious Emissions, High Channel 30 - 1000MHz

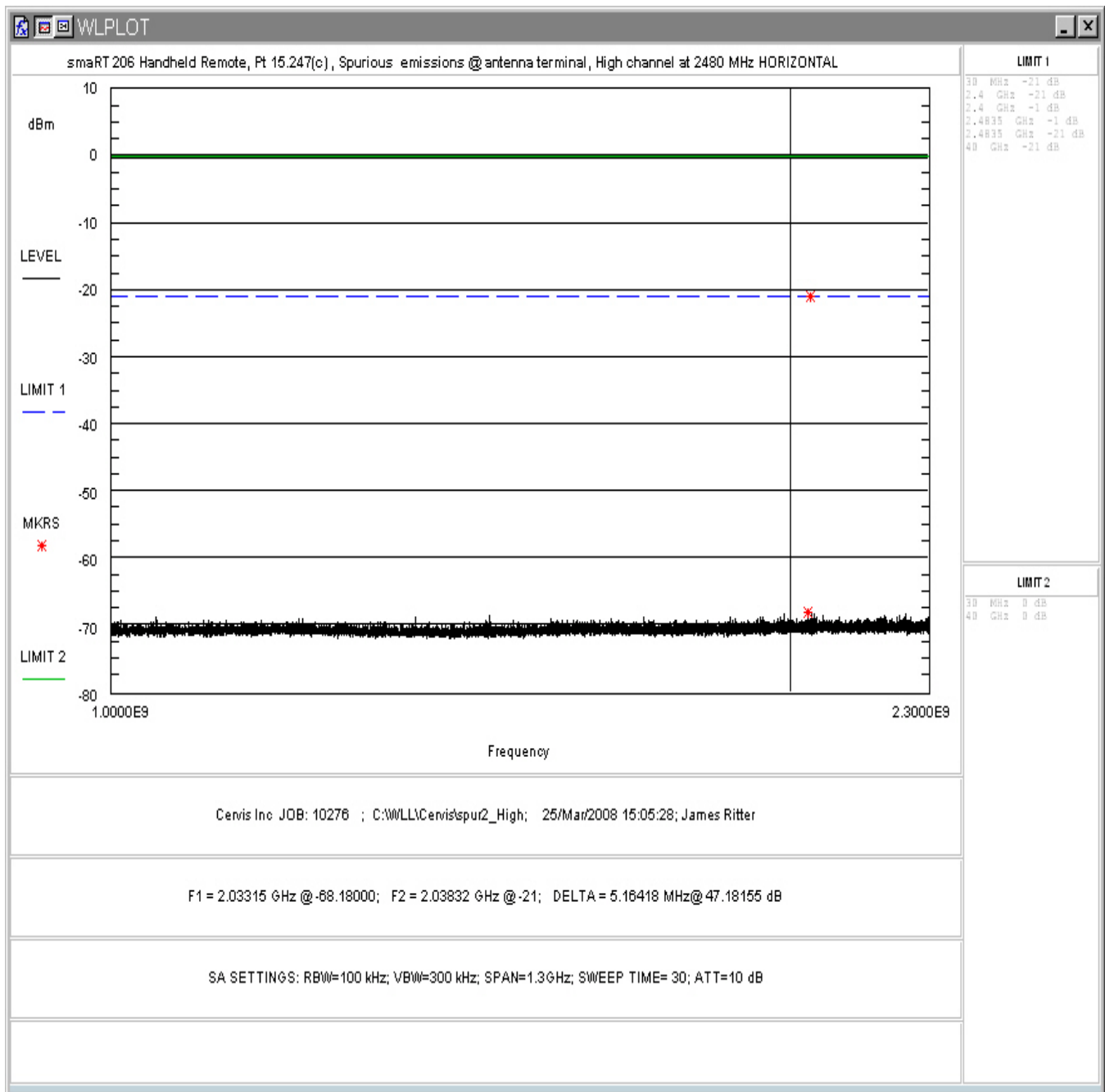


Figure 5-29. Conducted Spurious Emissions, High Channel 1 – 2.3GHz

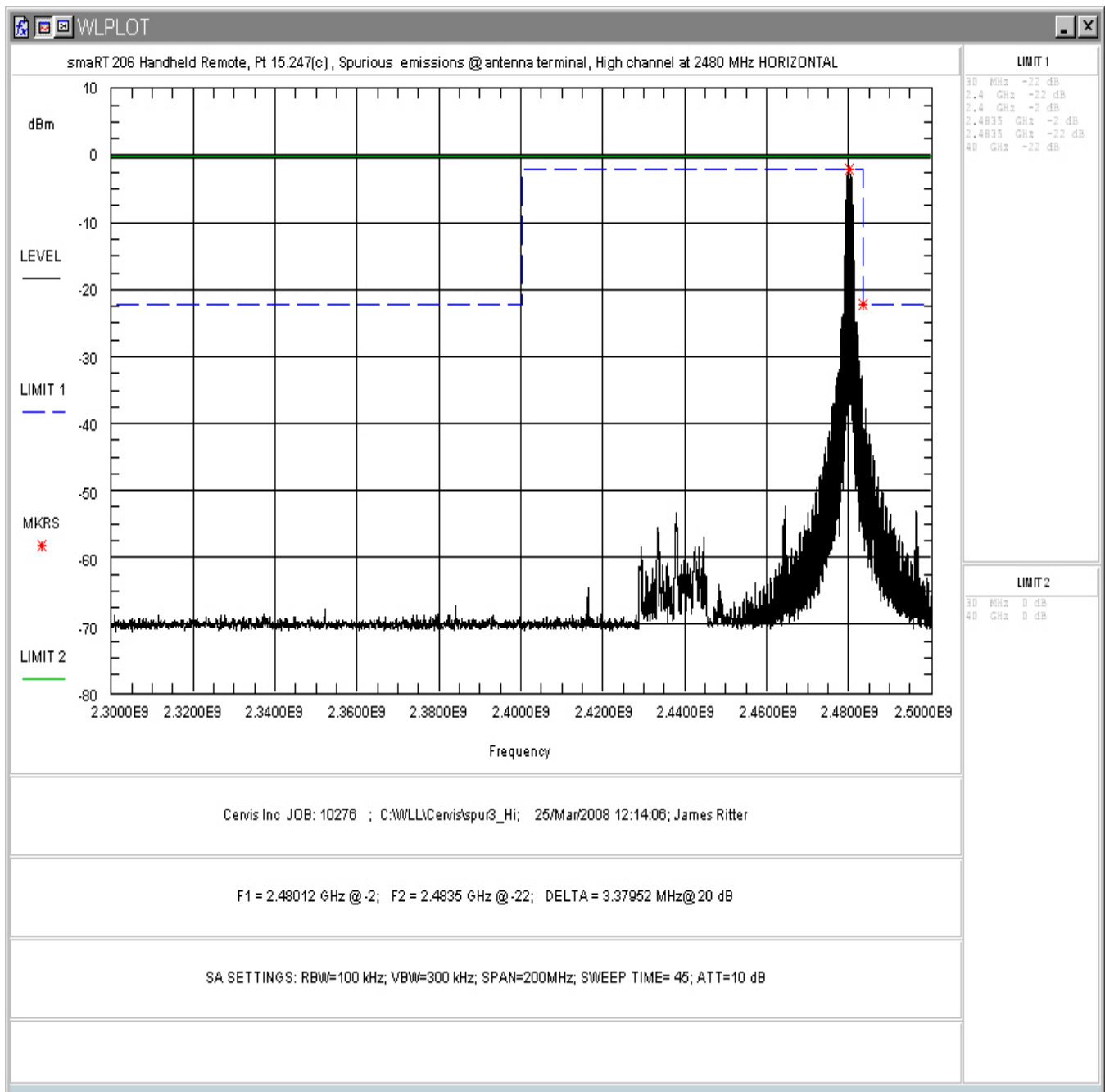


Figure 5-30. Conducted Spurious Emissions, High Channel 2.3 – 2.5GHz

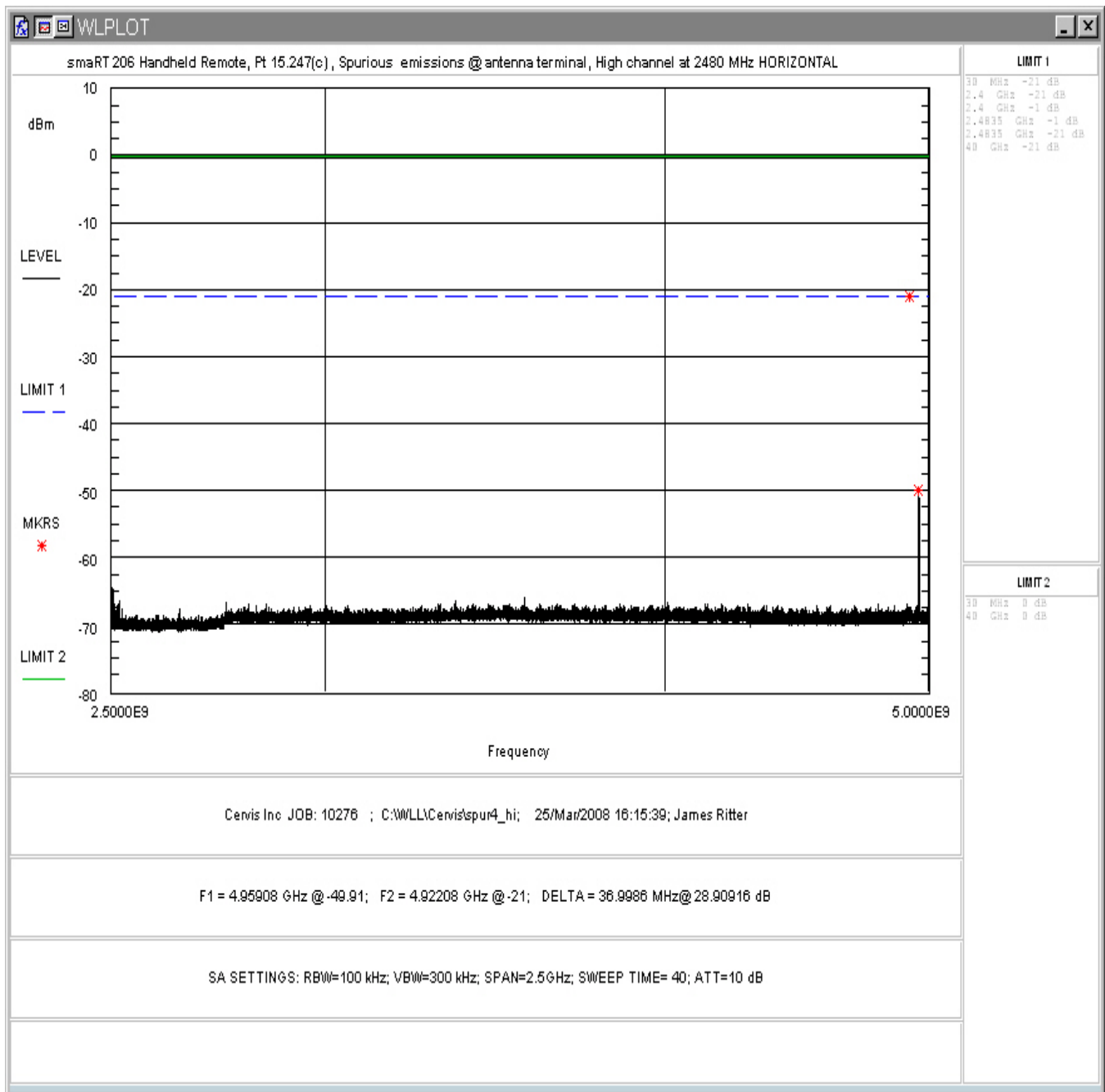


Figure 5-31. Conducted Spurious Emissions, High Channel 2.5 - 5GHz

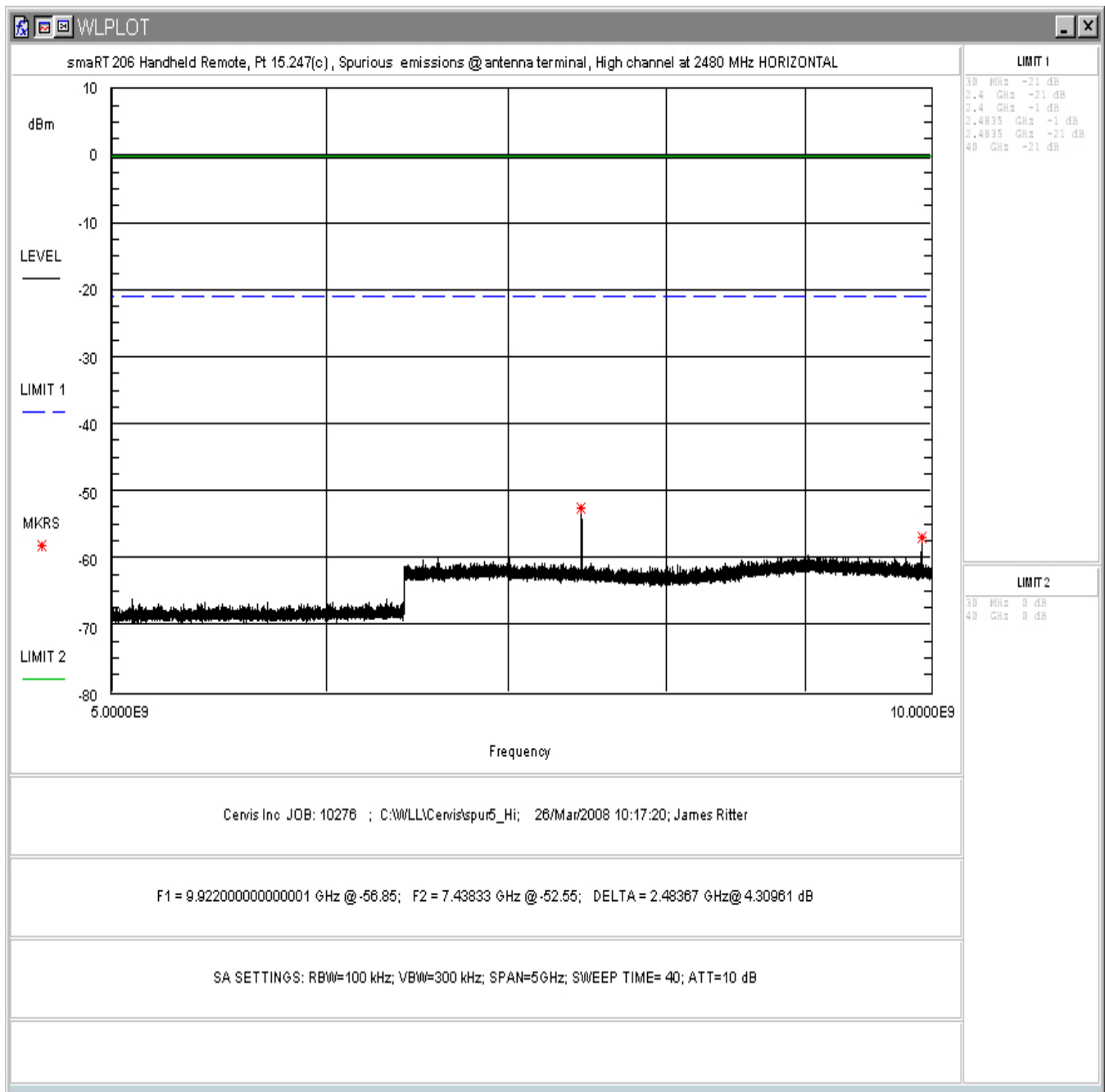


Figure 5-32. Conducted Spurious Emissions, High Channel 5 - 10GHz

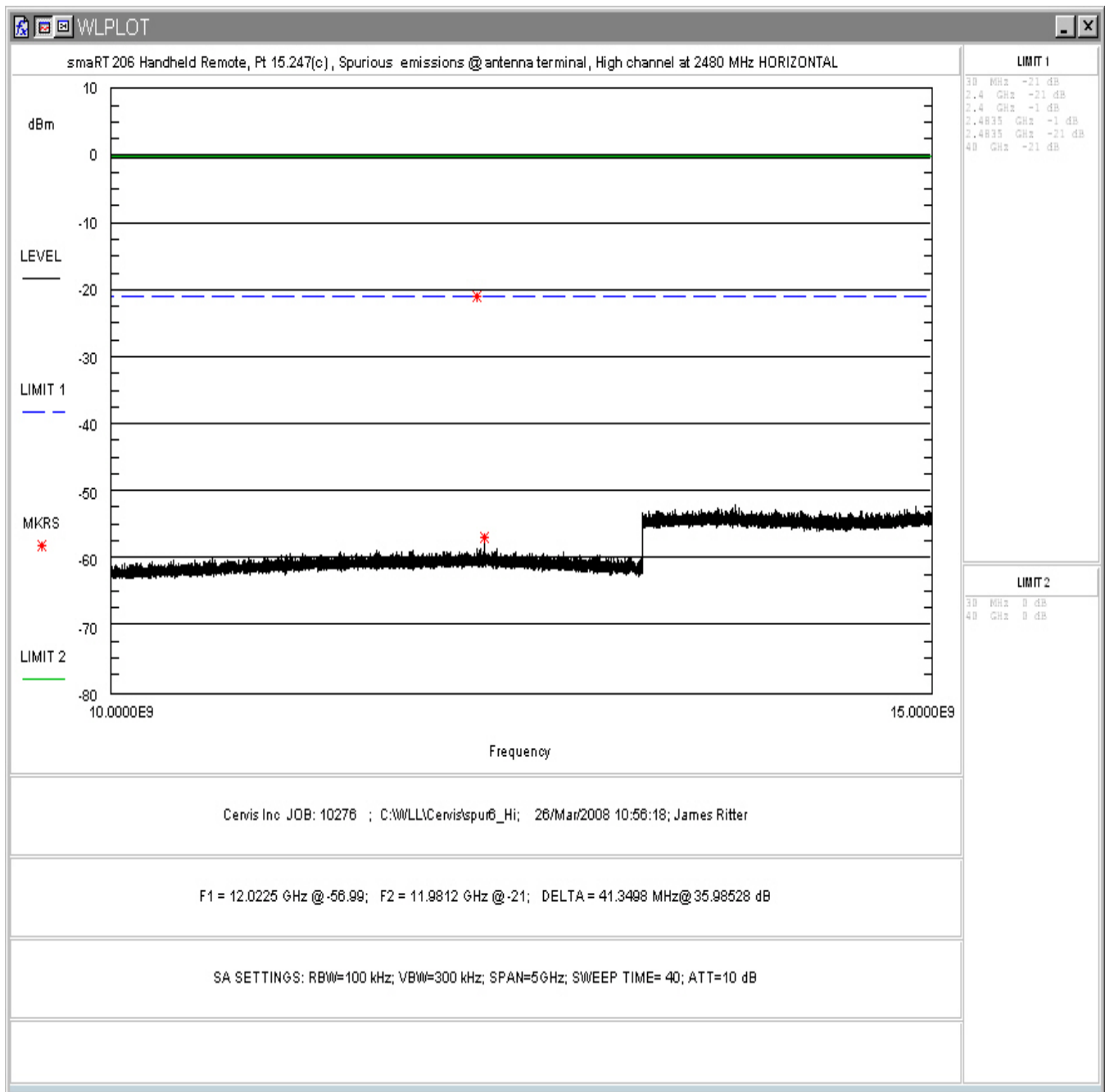


Figure 5-33. Conducted Spurious Emissions, High Channel 10 – 15 GHz

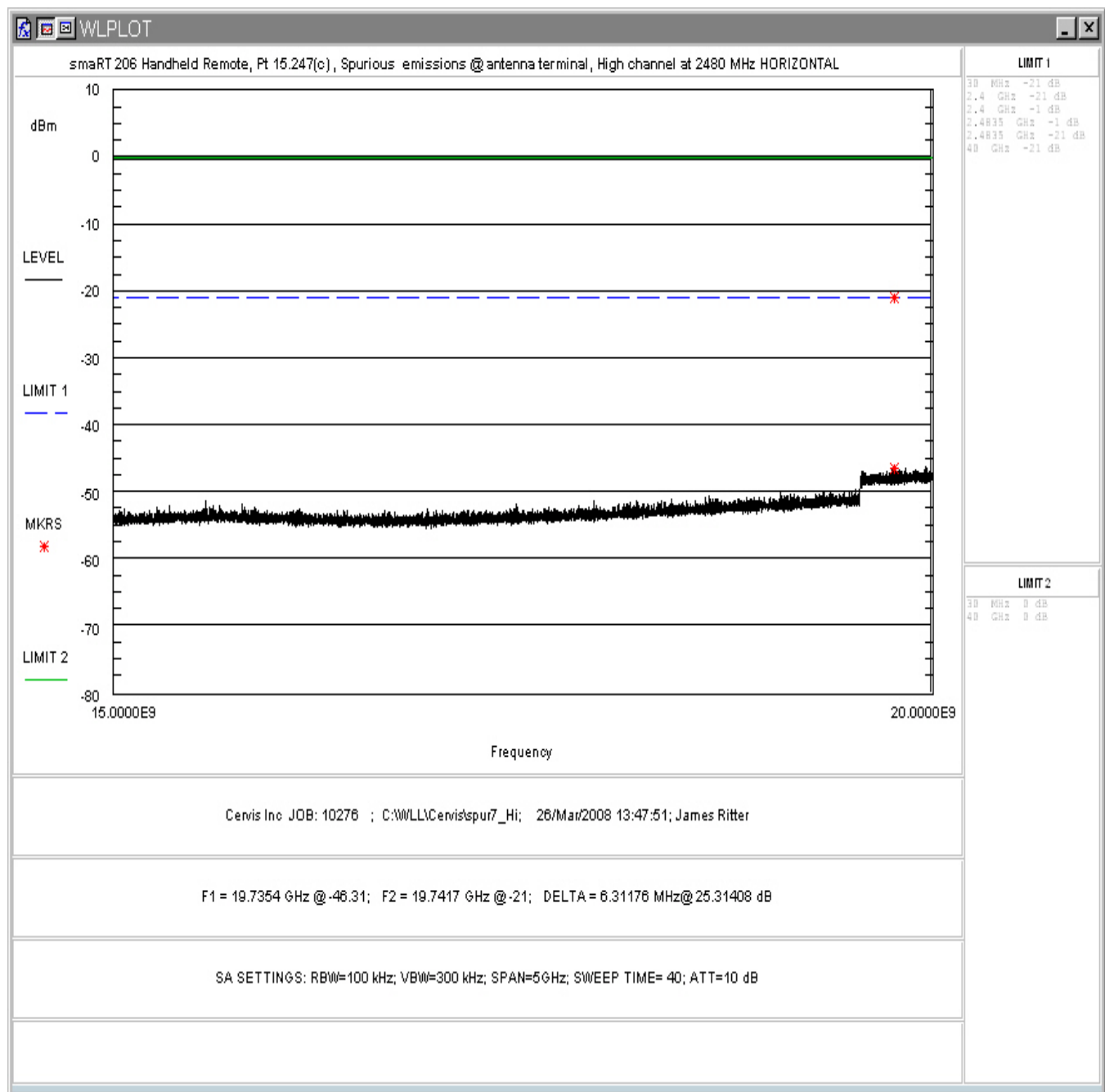


Figure 5-34. Conducted Spurious Emissions, High Channel 15 - 20GHz

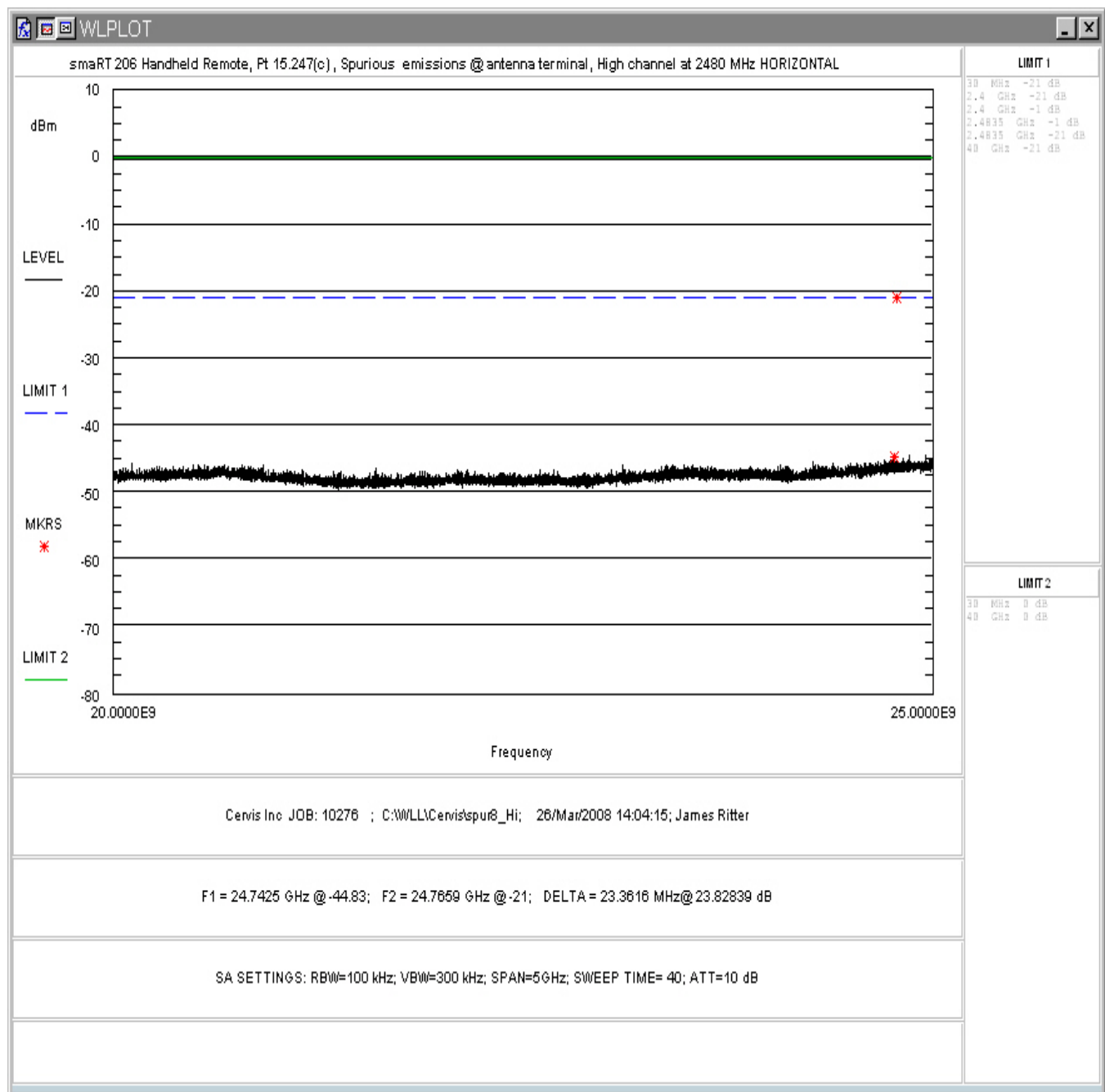


Figure 5-35. Conducted Spurious Emissions, High Channel 20 - 25GHz

5.6 Transmit Radiated Spurious Emissions: (FCC Part §15.205, §15.207, RSS210 (A.5))

The EUT must comply with the requirements for radiated spurious emissions that fall within the restricted bands. These emissions must meet the limits specified in §15.209 and §15.35(b) for peak measurements.

5.6.1 Test Procedure

The EUT was placed on motorized turntable for radiated testing on a 3-meter open field test site. The emissions from the EUT were measured continuously at every azimuth by rotating the turntable. Receiving antennas were mounted on an antenna mast to determine the height of maximum emissions. The height of the antenna was varied between 1 and 4 meters.

The emissions were measured using the following resolution bandwidths:

Frequency Range	Resolution Bandwidth	Video Bandwidth
30MHz-1000 MHz	120kHz	>100 kHz
>1000 MHz	1 MHz	<30 Hz (Avg.) 1MHz (Peak)

5.6.2 Test Summary

The EUT complied with the requirements for radiated emissions FCC part 15.247 and IC RSS-210e issue 7.

5.6.3 Duty Cycle Plots

FCC Part 15.35 allows a Duty Cycle correction for transmit signals that are less than 100mSec in duration. The following plots show this correction to be used in radiated emissions measurement and can not exceed 20dB. The calculation is:

$$10\text{LOG}(\text{On Time per } 100\text{ms}/100\text{ms})$$

$$10\text{LOG}(800\text{us}/100\text{ms})=21.2\text{dB (20dB maximum used)}$$

A diode detector connected to an oscilloscope was used to capture this measurement. The pulse characteristics are shown in the following figures. The pulse signal is “on” for 800us at a repetition rate of 106.4 ms. The duty cycle correction factor is in excess of 20dB, so a maximum correction of 20dB is used in the radiated emissions data tables.

Cervis smaRT 206 Handheld Remote Job 10276 FCC Pt15.247 Plot to Show Transmit Pulse Rate-
1 pulse every 106.4ms (Inverting Detector used)

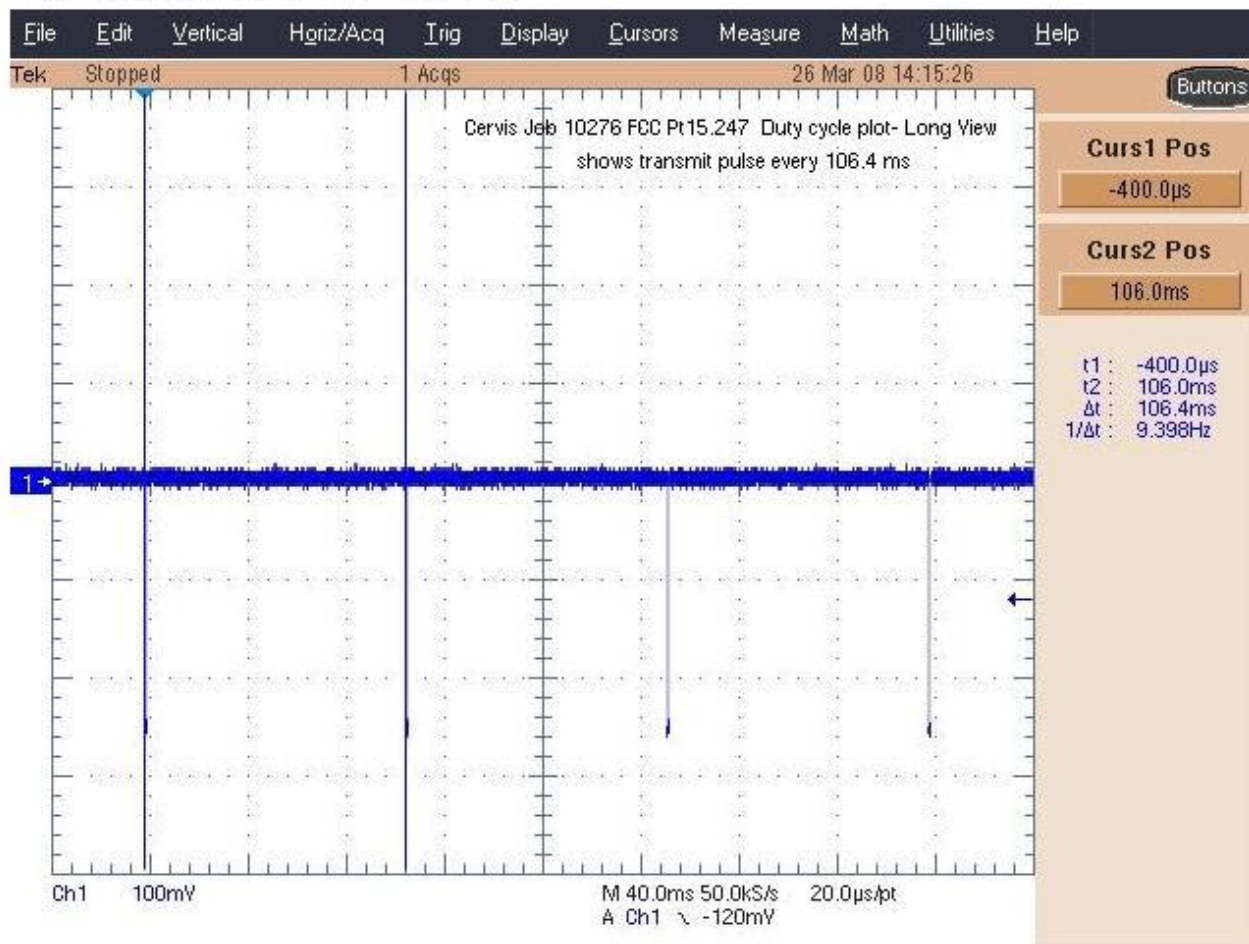


Figure 5-36. Duty Cycle- Shows Pulse Repetition Rate

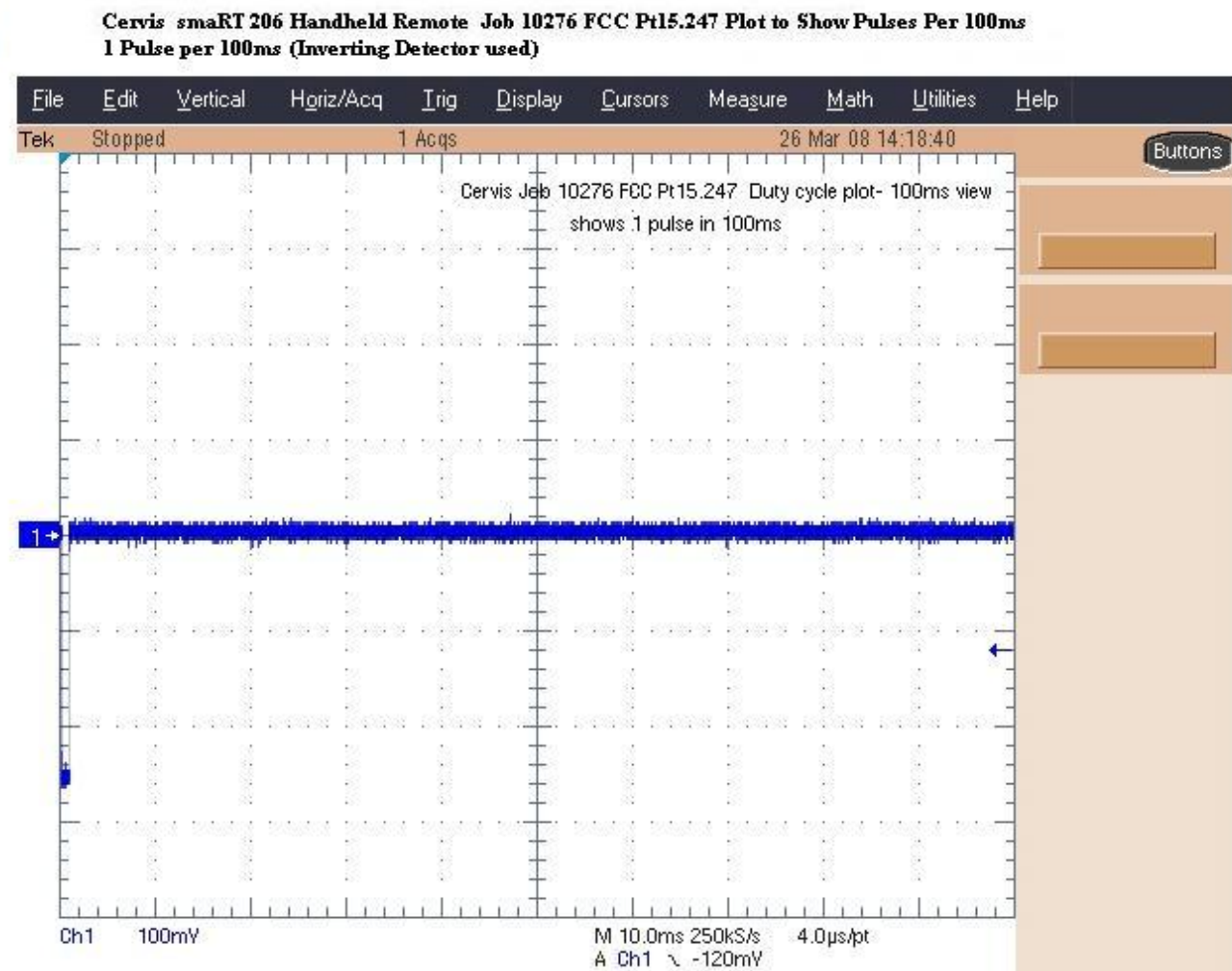


Figure 5-37. Duty Cycle- 100mSec View

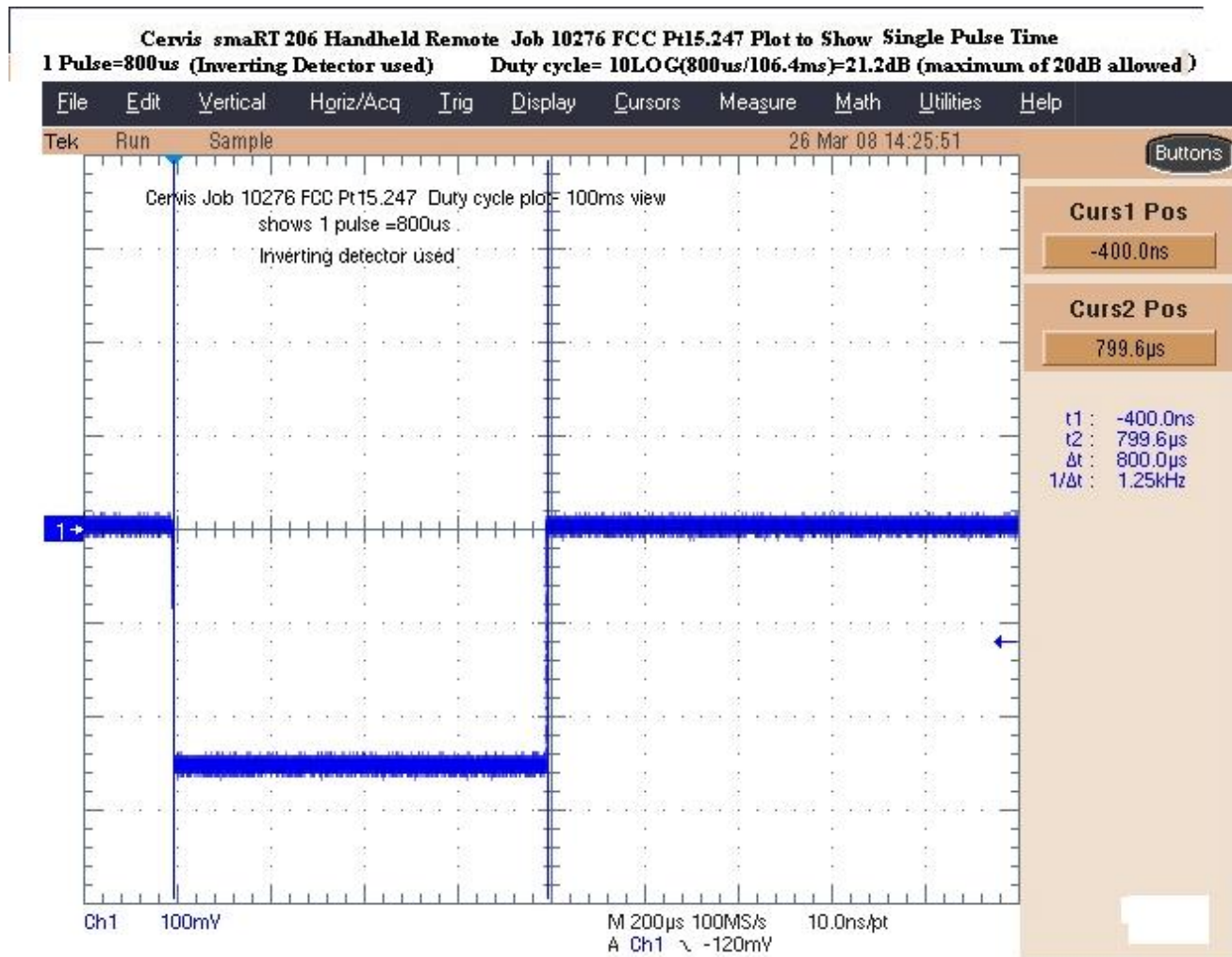


Figure 5-38. Duty Cycle- Single Pulse View

Table 6: Radiated Emission Test Data, Low Channel Unit Upright

Harmonics												
Frequency	Pol	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
Peak												
2405.00	H	180	2.6	109.8	30.1	1.3	36.2	0.0	105.1	180023.4	NA	NA
4810.00	H	270	3.6	56.2	33.1	5.0	35.5	0.0	58.8	867.8	5000.0	-15.2
12025.00	H	180	2.7	42.6	42.4	8.7	35.9	0.0	57.8	774.6	5000.0	-16.2
2405.00	V	165	3.1	101.3	30.1	1.3	36.2	0.0	96.6	67659.5	NA	NA
4810.00	V	90	2.8	59.2	33.1	5.0	35.5	0.0	61.8	1227.2	5000.0	-12.2
12025.00	V	180	2.5	42.1	42.4	8.7	35.9	0.0	57.3	731.3	5000.0	-16.7
Average												
2405.00	H	180	2.6	109.8	30.1	1.3	36.2	-20.0	85.1	18002.3	NA	NA
4810.00	H	270	3.6	56.2	33.1	5.0	35.5	-20.0	38.8	86.8	500.0	-15.2
12025.00	H	180	2.7	35.8	42.4	8.7	35.9	0.0	51.0	354.1	500.0	-3.0 ^A
2405.00	V	165	3.1	101.3	30.1	1.3	36.2	-20.0	76.6	6766.0	NA	NA
4810.00	V	90	2.8	59.2	33.1	5.0	35.5	-20.0	41.8	122.7	500.0	-12.2
12025.00	V	180	2.5	34.9	42.4	8.7	35.9	0.0	50.1	319.2	500.0	-3.9 ^A
Full Scan Data												
Frequency	Pol	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
Peak												
2390.00	H	180.0	2.6	58.5	30.1	1.4	36.2	0.0	53.8	489.8	5000.0	-20.2
2390.00	V	180.0	2.6	57.4	30.1	1.4	36.2	0.0	52.7	431.6	5000.0	-21.3
Average												
2390.00	H	180.0	2.6	58.5	30.1	1.4	36.2	-20.0	33.8	49.0	500.0	-20.2
2390.00	V	180.0	2.6	57.4	30.1	1.4	36.2	-20.0	32.7	43.2	500.0	-21.3
240.00	V	45.0	2.0	4.8	11.5	1.4	0.0	0.0	17.7	7.6	200.0	-28.4
240.00	H	180.0	2.6	3.0	11.3	1.4	0.0	0.0	15.7	6.1	200.0	-30.4

^A Ambient measurements

Table 7: Radiated Emission Test Data, Low Channel Unit Flat

Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2405.00	H	170	2.3	102.3	30.1	1.3	36.2	0.0	97.6	75915.2	NA	NA
4810.00	H	145	2.6	56.7	33.1	5.0	35.5	0.0	59.3	920.2	5000.0	-14.7
12025.00	H	180	2.8	46.1	42.4	8.7	35.9	0.0	61.3	1159.0	5000.0	-12.7
2405.00	V	190	3.3	99.8	30.1	1.3	36.2	0.0	95.1	56732.1	NA	NA
4810.00	V	270	2.7	61.3	33.1	5.0	35.5	0.0	63.9	1573.6	5000.0	-10.0
12025.00	V	180	2.7	46.5	42.4	8.7	35.9	0.0	61.7	1213.6	5000.0	-12.3
Average												
2405.00	H	170	2.3	102.3	30.1	1.3	36.2	-20.0	77.6	7591.5	NA	NA
4810.00	H	145	2.6	56.7	33.1	5.0	35.5	-20.0	39.3	92.0	500.0	-14.7
12025.00	H	180	2.8	35.0	42.4	8.7	35.9	0.0	50.2	322.9	500.0	-3.8 ^A
2405.00	V	190	3.3	99.8	30.1	1.3	36.2	-20.0	75.1	5673.2	NA	NA
4810.00	V	270	2.7	61.3	33.1	5.0	35.5	-20.0	43.9	157.4	500.0	-10.0
12025.00	V	180	2.7	34.8	42.4	8.7	35.9	0.0	50.0	315.6	500.0	-4.0 ^A
Full Scan Data												
Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2390.00	H	90.0	2.9	59.2	30.1	1.4	36.2	0.0	54.5	531.0	5000.0	-19.5
2390.00	V	190.0	3.3	54.5	30.1	1.4	36.2	0.0	49.8	309.1	5000.0	-24.2
Average												
2390.00	H	90.0	2.9	59.2	30.1	1.4	36.2	-20.0	34.5	53.1	500.0	-19.5
2390.00	V	190.0	3.3	54.5	30.1	1.4	36.2	-20.0	29.8	30.9	500.0	-24.2
240.00	V	190.0	1.7	3.7	11.5	1.4	0.0	0.0	16.6	6.7	200.0	-29.5

^AAmbient measurements

Table 8: Radiated Emission Test Data, Low Channel Unit On Side

Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2405.00	H	200	2.9	99.7	30.1	1.3	36.2	0.0	94.9	55889.3	NA	NA
4810.00	H	270	2.2	62.3	33.1	5.0	35.5	0.0	64.9	1765.6	5000.0	-9.0
12025.00	H	190	2.9	46.2	42.4	8.7	35.9	0.0	61.4	1172.4	5000.0	-12.6
2405.00	V	180	2.9	102.1	30.1	1.3	36.2	0.0	97.4	73931.4	NA	NA
4810.00	V	270	2.6	58.2	33.1	5.0	35.5	0.0	60.8	1097.5	5000.0	-13.2
12025.00	V	180	2.7	46.3	42.4	8.7	35.9	0.0	61.5	1186.0	5000.0	-12.5
Average												
2405.00	H	200	2.9	99.7	30.1	1.3	36.2	-20.0	74.9	5588.9	NA	NA
4810.00	H	270	2.2	62.3	33.1	5.0	35.5	-20.0	44.9	176.6	500.0	-9.0
12025.00	H	190	2.9	34.9	42.4	8.7	35.9	0.0	50.1	319.2	500.0	-3.9 ^A
2405.00	V	180	2.9	102.1	30.1	1.3	36.2	-20.0	77.4	7393.1	NA	NA
4810.00	V	270	2.6	58.2	33.1	5.0	35.5	-20.0	40.8	109.7	500.0	-13.2
12025.00	V	180	2.7	35.0	42.4	8.7	35.9	0.0	50.2	322.9	500.0	-3.8 ^A
Full Scan Data												
Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2390.00	H	0.0	3.2	52.7	30.1	1.4	36.2	0.0	48.0	250.4	5000.0	-26.0
2390.00	V	190.0	2.8	54.1	30.1	1.4	36.2	0.0	49.4	295.2	5000.0	-24.6
Average												
2390.00	H	0.0	3.2	52.7	30.1	1.4	36.2	-20.0	28.0	25.0	500.0	-26.0
2390.00	V	190.0	2.8	54.1	30.1	1.4	36.2	-20.0	29.4	29.5	500.0	-24.6
240.00	V	0.0	2.5	5.0	11.3	1.4	0.0	0.0	17.7	7.6	200.0	-28.4
240.00	H	0.0	3.5	3.4	11.3	1.4	0.0	0.0	16.1	6.4	200.0	-30.0

^A Ambient measurements

Table 9: Radiated Emission Test Data, Center Channel Unit Upright

Frequency	Pol	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
Peak												
2440.00	H	180	2.5	109.0	30.2	1.2	36.2	0.0	104.2	162553.0	NA	NA
4880.00	H	170	2.5	61.8	33.3	5.1	35.5	0.0	64.6	1697.7	5000.0	-9.4
7320.00	H	180	2.7	60.3	37.4	6.4	35.8	0.0	68.4	2641.5	5000.0	-5.5
12200.00	H	180	3.0	46.2	42.3	8.5	35.7	0.0	61.3	1155.4	5000.0	-12.7
2440.00	V	180	3.1	99.7	30.2	1.2	36.2	0.0	94.9	55525.8	NA	NA
4880.00	V	90	3.2	57.5	33.3	5.1	35.5	0.0	60.3	1031.2	5000.0	-13.7
7320.00	V	165	3.1	55.7	37.4	6.4	35.8	0.0	63.8	1544.7	5000.0	-10.2
12200.00	V	180	3.1	46.2	42.3	8.5	35.7	0.0	61.3	1155.4	5000.0	-12.7
Average												
2440.00	H	180	2.5	109.0	30.2	1.2	36.2	-20.0	84.2	16255.3	NA	NA
4880.00	H	170	2.5	61.8	33.3	5.1	35.5	-20.0	44.6	169.8	500.0	-9.4
7320.00	H	180	2.7	60.3	37.4	6.4	35.8	-20.0	48.4	264.1	500.0	-5.5
12200.00	H	180	3.0	33.4	42.3	8.5	35.7	0.0	48.4	263.8	500.0	-5.6 ^A
2440.00	V	180	3.1	99.7	30.2	1.2	36.2	-20.0	74.9	5552.6	NA	NA
4880.00	V	90	3.2	57.5	33.3	5.1	35.5	-20.0	40.3	103.1	500.0	-13.7
7320.00	V	165	3.1	55.7	37.4	6.4	35.8	-20.0	43.8	154.5	500.0	-10.2
12200.00	V	180	3.1	34.1	42.3	8.5	35.7	0.0	49.2	286.9	500.0	-4.8 ^A
Full Scan Data												
Frequency	Pol	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
Peak												
2390.00	H	170.0	3.6	46.7	30.1	1.4	36.2	0.0	42.0	125.9	5000.0	-32.0
2390.00	V	90.0	3.0	46.6	30.1	1.4	36.2	0.0	41.9	124.5	5000.0	-32.1
2483.50	H	190.0	2.7	46.9	30.2	1.1	36.2	0.0	42.1	126.6	5000.0	-31.9
2483.50	V	180.0	2.5	46.3	30.2	1.1	36.2	0.0	41.5	118.2	5000.0	-32.5
Average												
2390.00	H	170.0	3.6	35.7	30.1	1.4	36.2	0.0	31.0	35.4	500.0	-23.0
2390.00	V	90.0	3.0	35.5	30.1	1.4	36.2	0.0	30.8	34.7	500.0	-23.2
2483.50	H	190.0	2.7	36.3	30.2	1.1	36.2	0.0	31.5	37.5	500.0	-22.5
2483.50	V	180.0	2.5	36.1	30.2	1.1	36.2	0.0	31.3	36.5	500.0	-22.7
240.00	V	45.0	2.0	4.8	11.5	1.4	0.0	0.0	17.7	7.6	200.0	-28.4
240.00	H	180.0	2.6	3.0	11.3	1.4	0.0	0.0	15.7	6.1	200.0	-30.4

^A Ambient measurements

Table 10: Radiated Emission Test Data, Center Channel Unit Flat

Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
2440.00	H	45	3.5	101.2	30.2	1.2	36.2	0.0	96.4	65992.5	NA	NA
4880.00	H	270	3.2	55.7	33.3	5.1	35.5	0.0	58.4	835.3	5000.0	-15.5
7320.00	H	0	2.4	54.5	37.4	6.4	35.8	0.0	62.6	1350.0	5000.0	-11.4
12200.00	H	190	3.0	48.1	42.3	8.5	35.7	0.0	63.2	1437.9	5000.0	-10.8
2440.00	V	170	2.7	99.4	30.2	1.2	36.2	0.0	94.6	53826.3	NA	NA
4880.00	V	270	2.7	57.3	33.3	5.1	35.5	0.0	60.1	1011.3	5000.0	-13.9
7320.00	V	165	3.6	54.8	37.4	6.4	35.8	0.0	62.9	1402.3	5000.0	-11.0
12200.00	V	170	3.1	48.6	42.3	8.5	35.7	0.0	63.7	1523.1	5000.0	-10.3
2440.00	H	45	3.5	101.2	30.2	1.2	36.2	-20.0	76.4	6599.3	NA	NA
4880.00	H	270	3.2	55.7	33.3	5.1	35.5	-20.0	38.4	83.5	500.0	-15.5
7320.00	H	0	2.4	54.5	37.4	6.4	35.8	-20.0	42.6	135.0	500.0	-11.4
12200.00	H	190	3.0	35.0	42.3	8.5	35.7	0.0	50.1	318.2	500.0	-3.9 ^A
2440.00	V	170	2.7	99.4	30.2	1.2	36.2	-20.0	74.6	5382.6	NA	NA
4880.00	V	270	2.7	57.3	33.3	5.1	35.5	-20.0	40.1	101.1	500.0	-13.9
7320.00	V	165	3.6	54.8	37.4	6.4	35.8	-20.0	42.9	140.2	500.0	-11.0
12200.00	V	170	3.1	35.1	42.3	8.5	35.7	0.0	50.2	321.9	500.0	-3.8 ^A
Full Scan Data												
Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2390.00	H	180.0	3.0	49.2	30.1	1.4	36.2	0.0	44.5	167.9	5000.0	-29.5
2390.00	V	180.0	2.9	48.4	30.1	1.4	36.2	0.0	43.7	153.1	5000.0	-30.3
2483.50	H	170.0	2.9	46.9	30.2	1.1	36.2	0.0	42.1	126.6	5000.0	-31.9
2483.50	V	170.0	2.8	48.2	30.2	1.1	36.2	0.0	43.4	147.1	5000.0	-30.6
Average												
2390.00	H	180.0	3.0	36.7	30.1	1.4	36.2	0.0	32.0	39.8	500.0	-22.0
2390.00	V	180.0	2.9	35.1	30.1	1.4	36.2	0.0	30.4	33.1	500.0	-23.6
2483.50	H	170.0	2.9	35.9	30.2	1.1	36.2	0.0	31.1	35.7	500.0	-22.9
2483.50	V	170.0	2.8	36.1	30.2	1.1	36.2	0.0	31.3	36.5	500.0	-22.7
240.00	V	190.0	1.7	3.7	11.5	1.4	0.0	0.0	16.6	6.7	200.0	-29.5

^A Ambient measurements

Table 11: Radiated Emission Test Data, Center Channel Unit On Side

Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2440.00	H	225	2.3	100.8	30.2	1.2	36.2	0.0	96.0	63459.2	NA	NA
4880.00	H	270	2.1	59.5	33.3	5.1	35.5	0.0	62.3	1298.3	5000.0	-11.7
7320.00	H	90	3.4	53.6	37.4	6.4	35.8	0.0	61.7	1217.2	5000.0	-12.3
12200.00	H	180	2.7	46.3	42.3	8.5	35.7	0.0	61.4	1168.7	5000.0	-12.6
2440.00	V	180	3.0	107.0	30.2	1.2	36.2	0.0	102.2	129120.4	NA	NA
4880.00	V	190	2.7	61.0	33.3	5.1	35.5	0.0	63.8	1543.0	5000.0	-10.2
7320.00	V	100	3.2	53.8	37.4	6.4	35.8	0.0	61.9	1249.8	5000.0	-12.0
12200.00	V	180	2.8	46.8	42.3	8.5	35.7	0.0	61.9	1238.0	5000.0	-12.1
Average												
2440.00	H	225	2.3	100.8	30.2	1.2	36.2	-20.0	76.0	6345.9	NA	NA
4880.00	H	270	2.1	59.5	33.3	5.1	35.5	-20.0	42.3	129.8	500.0	-11.7
7320.00	H	90	3.4	53.6	37.4	6.4	35.8	-20.0	41.7	121.7	500.0	-12.3
12200.00	H	180	2.7	34.5	42.3	8.5	35.7	0.0	49.6	300.4	500.0	-4.4 ^A
2440.00	V	180	3.0	107.0	30.2	1.2	36.2	-20.0	82.2	12912.0	NA	NA
4880.00	V	190	2.7	61.0	33.3	5.1	35.5	-20.0	43.8	154.3	500.0	-10.2
7320.00	V	100	3.2	53.8	37.4	6.4	35.8	-20.0	41.9	125.0	500.0	-12.0
12200.00	V	180	2.8	35.3	42.3	8.5	35.7	0.0	50.4	329.4	500.0	-3.6 ^A
Full Scan Data												
Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2390.00	H	170.0	3.1	48.3	30.1	1.4	36.2	0.0	43.6	151.4	5000.0	-30.4
2390.00	V	180.0	3.0	46.7	30.1	1.4	36.2	0.0	42.0	125.9	5000.0	-32.0
2483.50	H	190.0	2.8	47.1	30.2	1.1	36.2	0.0	42.3	129.6	5000.0	-31.7
2483.50	V	190.0	2.7	46.5	30.2	1.1	36.2	0.0	41.7	120.9	5000.0	-32.3
Average												
2390.00	H	170.0	3.1	36.4	30.1	1.4	36.2	0.0	31.7	38.5	500.0	-22.3
2390.00	V	180.0	3.0	35.5	30.1	1.4	36.2	0.0	30.8	34.7	500.0	-23.2
2483.50	H	190.0	2.8	36.0	30.2	1.1	36.2	0.0	31.2	36.1	500.0	-22.8
2483.50	V	190.0	2.7	35.8	30.2	1.1	36.2	0.0	31.0	35.4	500.0	-23.0
240.00	V	0.0	2.5	5.0	11.3	1.4	0.0	0.0	17.7	7.6	200.0	-28.4
240.00	H	0.0	3.5	3.4	11.3	1.4	0.0	0.0	16.1	6.4	200.0	-30.0

^A Ambient measurements

Table 12: Radiated Emission Test Data, High Channel Unit Upright

Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2480.00	H	180	2.4	107.2	30.2	1.1	36.2	0.0	102.4	131161.2	NA	NA
4960.00	H	245	2.5	56.6	33.4	5.1	35.6	0.0	59.5	949.1	5000.0	-14.4
7440.00	H	90	3.0	56.4	37.6	6.3	35.8	0.0	64.6	1691.5	5000.0	-9.4
12400.00	H	180	3.0	49.2	42.1	8.4	35.6	0.0	64.1	1605.3	5000.0	-9.9
2480.00	V	190	3.0	102.5	30.2	1.1	36.2	0.0	97.7	76349.4	NA	NA
4960.00	V	90	2.9	56.0	33.4	5.1	35.6	0.0	58.9	885.8	5000.0	-15.0
7440.00	V	90	3.1	59.0	37.6	6.3	35.8	0.0	67.2	2281.7	5000.0	-6.8
12400.00	V	180	3.0	48.3	42.1	8.4	35.6	0.0	63.2	1447.3	5000.0	-10.8
Average												
2480.00	H	180	2.4	107.2	30.2	1.1	36.2	-20.0	82.4	13116.1	NA	NA
4960.00	H	245	2.5	56.6	33.4	5.1	35.6	-20.0	39.5	94.9	500.0	-14.4
7440.00	H	90	3.0	56.4	37.6	6.3	35.8	-20.0	44.6	169.1	500.0	-9.4
12400.00	H	180	3.0	35.6	42.1	8.4	35.6	0.0	50.5	335.4	500.0	-3.5 ^A
2480.00	V	190	3.0	102.5	30.2	1.1	36.2	-20.0	77.7	7634.9	NA	NA
4960.00	V	90	2.9	56.0	33.4	5.1	35.6	-20.0	38.9	88.6	500.0	-15.0
7440.00	V	90	3.1	59.0	37.6	6.3	35.8	-20.0	47.2	228.2	500.0	-6.8
12400.00	V	180	3.0	34.6	42.1	8.4	35.6	0.0	49.5	298.9	500.0	-4.5 ^A
Full Scan Data												
Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2483.50	H	200.0	2.4	74.8	30.2	1.1	36.2	0.0	70.0	3155.2	5000.0	-4.0
2483.50	V	190.0	3.0	69.0	30.2	1.1	36.2	0.0	64.2	1612.6	5000.0	-9.8
Average												
2483.50	H	200.0	2.4	74.8	30.2	1.1	36.2	-20.0	50.0	315.5	500.0	-4.0
2483.50	V	190.0	3.0	69.0	30.2	1.1	36.2	-20.0	44.2	161.3	500.0	-9.8
240.00	V	45.0	2.0	4.8	11.5	1.4	0.0	0.0	17.7	7.6	200.0	-28.4
240.00	H	180.0	2.6	3.0	11.3	1.4	0.0	0.0	15.7	6.1	200.0	-30.4

^AAmbient measurements

Table 13: Radiated Emission Test Data, High Channel Unit Flat

Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
2480.00	H	90	1.8	106.2	30.2	1.1	36.2	0.0	101.3	116494.5	NA	NA
4960.00	H	165	2.0	57.3	33.4	5.1	35.6	0.0	60.3	1032.3	5000.0	-13.7
7440.00	H	45	1.8	59.8	37.6	6.3	35.8	0.0	68.0	2510.5	5000.0	-6.0
12400.00	H	180	3.0	49.2	42.1	8.4	35.6	0.0	64.1	1605.3	5000.0	-9.9
2480.00	V	170	2.0	100.2	30.2	1.1	36.2	0.0	95.3	58385.5	NA	NA
4960.00	V	270	2.6	59.8	33.4	5.1	35.6	0.0	62.8	1373.5	5000.0	-11.2
7440.00	V	290	2.5	58.5	37.6	6.3	35.8	0.0	66.7	2154.1	5000.0	-7.3
12400.00	V	180	3.1	48.3	42.1	8.4	35.6	0.0	63.2	1447.3	5000.0	-10.8
2480.00	H	90	1.8	106.2	30.2	1.1	36.2	-20.0	81.3	11649.4	NA	NA
4960.00	H	165	2.0	57.3	33.4	5.1	35.6	-20.0	40.3	103.2	500.0	-13.7
7440.00	H	45	1.8	59.8	37.6	6.3	35.8	-20.0	48.0	251.1	500.0	-6.0
12400.00	H	180	3.0	34.2	42.1	8.4	35.6	0.0	49.1	285.5	500.0	-4.9 ^A
2480.00	V	170	2.0	100.2	30.2	1.1	36.2	-20.0	75.3	5838.6	NA	NA
4960.00	V	270	2.6	59.8	33.4	5.1	35.6	-20.0	42.8	137.3	500.0	-11.2
7440.00	V	290	2.5	58.5	37.6	6.3	35.8	-20.0	46.7	215.4	500.0	-7.3
12400.00	V	180	3.1	34.8	42.1	8.4	35.6	0.0	49.7	305.9	500.0	-4.3 ^A
Full Scan Data												
Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Duty Cycle Corr (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB
Peak												
2483.50	H	90.0	1.8	72.1	30.2	1.1	36.2	0.0	67.2	2296.3	5000.0	-6.8
2483.50	V	170.0	2.1	68.4	30.2	1.1	36.2	0.0	63.6	1505.0	5000.0	-10.4
Average												
2483.50	H	90.0	1.8	72.1	30.2	1.1	36.2	-20.0	47.2	229.6	500.0	-6.8
2483.50	V	170.0	2.1	68.4	30.2	1.1	36.2	-20.0	43.6	150.5	500.0	-10.4
240.00	V	190.0	1.7	3.7	11.5	1.4	0.0	0.0	16.6	6.7	200.0	-29.5

^AAmbient measurements

Table 14: Radiated Emission Test Data, High Channel Unit On Side

Frequency	Pol	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
Peak												
2480.00	H	245	3.0	99.8	30.2	1.1	36.2	0.0	95.0	56144.3	NA	NA
4960.00	H	180	3.4	55.3	33.4	5.1	35.6	0.0	58.3	820.0	5000.0	-15.7
7440.00	H	90	3.3	58.2	37.6	6.3	35.8	0.0	66.3	2073.8	5000.0	-7.6
12400.00	H	180	3.2	48.9	42.1	8.4	35.6	0.0	63.8	1550.8	5000.0	-10.2
2480.00	V	270	2.4	101.8	30.2	1.1	36.2	0.0	97.0	70681.4	NA	NA
4960.00	V	270	3.2	55.3	33.4	5.1	35.6	0.0	58.3	820.0	5000.0	-15.7
7440.00	V	270	3.4	58.8	37.6	6.3	35.8	0.0	67.0	2237.5	5000.0	-7.0
12400.00	V	180	2.9	48.4	42.1	8.4	35.6	0.0	63.3	1464.0	5000.0	-10.7
Average												
2480.00	H	245	3.0	99.8	30.2	1.1	36.2	-20.0	75.0	5614.4	NA	NA
4960.00	H	180	3.4	55.3	33.4	5.1	35.6	-20.0	38.3	82.0	500.0	-15.7
7440.00	H	90	3.3	58.2	37.6	6.3	35.8	-20.0	46.3	207.4	500.0	-7.6
12400.00	H	180	3.2	35.6	42.1	8.4	35.6	0.0	50.5	335.4	500.0	-3.5 ^A
2480.00	V	270	2.4	101.8	30.2	1.1	36.2	-20.0	77.0	7068.1	NA	NA
4960.00	V	270	3.2	55.3	33.4	5.1	35.6	-20.0	38.3	82.0	500.0	-15.7
7440.00	V	270	3.4	58.8	37.6	6.3	35.8	-20.0	47.0	223.8	500.0	-7.0
12400.00	V	180	2.9	35.0	42.1	8.4	35.6	0.0	49.9	313.0	500.0	-4.1 ^A
Full Scan Data												
Frequency	Pol	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
Peak												
2483.50	H	245.0	3.0	68.5	30.2	1.1	36.2	0.0	63.7	1522.4	5000.0	-10.3
2483.50	V	270.0	2.4	68.3	30.2	1.1	36.2	0.0	63.5	1492.9	5000.0	-10.5
Average												
2483.50	H	245.0	3.0	68.5	30.2	1.1	36.2	-20.0	43.7	152.2	500.0	-10.3
2483.50	V	270.0	2.4	68.3	30.2	1.1	36.2	-20.0	43.5	149.3	500.0	-10.5
240.00	V	0.0	2.5	5.0	11.3	1.4	0.0	0.0	17.7	7.6	200.0	-28.4
240.00	H	0.0	3.5	3.4	11.3	1.4	0.0	0.0	16.1	6.4	200.0	-30.0

^A Ambient measurements

5.7 Receiver Radiated Spurious Emissions: (FCC Part §15.209, RSS-Gen [7.2.3.2])

The EUT must comply with the requirements for radiated spurious emissions from the receiver. These emissions must meet the limits specified in §15.209 and RSS-Gen.

5.7.1 Test Procedure

The EUT was placed on motorized turntable for radiated testing on a 3-meter open field test site. The emissions from the EUT were measured continuously at every azimuth by rotating the turntable. Receiving antennas were mounted on an antenna mast to determine the height of maximum emissions. The height of the antenna was varied between 1 and 4 meters. The emissions were measured using the following resolution bandwidths:

Frequency Range	Resolution Bandwidth	Video Bandwidth
30MHz-1000 MHz	120kHz	>100 kHz
>1000 MHz	1 MHz	<30 Hz (Avg.)

5.7.2 Test Summary

The EUT complied with the requirements for receiver radiated emissions IC RSS-Gen. FCC does not have a receiver requirement for receivers operating above 960MHz.

5.7.3 Receiver Radiated Spurious Test Data

Table 15: Receiver Radiated Test Data

Frequency (MHz)	Pol H/V	Az Deg	Ant. Hght (m)	SA Level (QP) (dBμV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Corr. Level (dBμV/m)	Corr. Level (μV/m)	Limit (μV/m)	Margin (dB)
Unit on Side										
31.750	V	180.0	1.0	9.2	18.9	0.2	28.3	26.0	100.0	-11.7
47.810	V	0.0	1.2	5.2	8.8	1.0	15.0	5.6	100.0	-25.0
63.984	V	265.0	1.2	5.6	7.1	3.2	15.9	6.2	100.0	-24.1
144.000	V	180.0	2.0	4.1	12.4	1.0	17.5	7.5	150.0	-26.0
239.992	V	270.0	1.4	3.8	11.3	1.4	16.5	6.7	200.0	-29.6
240.000	V	0.0	2.5	5.0	11.3	1.4	17.7	7.6	200.0	-28.4
320.000	V	300.0	1.3	4.9	14.0	1.7	20.6	10.7	200.0	-25.4
832.000	V	180.0	1.0	1.8	21.8	4.1	27.7	24.3	200.0	-18.3
896.000	V	190.0	1.2	2.9	22.6	3.9	29.4	29.6	200.0	-16.6
928.000	V	0.0	1.0	6.7	22.8	3.9	33.4	46.9	200.0	-12.6
47.810	H	180.0	4.0	3.3	8.8	1.0	13.1	4.5	100.0	-26.9
160.000	H	0.0	2.8	3.7	11.5	1.3	16.5	6.7	150.0	-27.0
240.000	H	0.0	3.5	3.4	11.3	1.4	16.1	6.4	200.0	-30.0
320.000	H	90.0	2.9	2.8	14.0	1.7	18.5	8.4	200.0	-27.5
Unit Upright										
32.000	V	190.0	1.0	6.4	18.7	0.2	25.3	18.4	100.0	-14.7
48.000	V	190.0	1.2	4.1	8.7	1.0	13.8	4.9	100.0	-26.2
63.984	V	265.0	1.2	5.6	7.1	3.2	15.9	6.2	100.0	-24.1
144.000	V	200.0	1.4	3.9	12.4	1.0	17.3	7.3	150.0	-26.2
240.000	V	270.0	1.3	3.2	11.3	1.4	15.9	6.2	200.0	-30.2
240.000	V	45.0	2.0	4.8	11.3	1.4	17.5	7.5	200.0	-28.6
832.000	V	200.0	1.0	2.0	21.8	4.1	27.9	24.9	200.0	-18.1
928.000	V	180.0	1.0	5.1	22.8	3.9	31.8	39.0	200.0	-14.2
48.000	H	190.0	4.0	3.0	8.7	1.0	12.7	4.3	100.0	-27.3
160.000	H	10.0	2.6	3.4	11.5	1.3	16.2	6.5	150.0	-27.3
240.000	H	180.0	2.6	3.0	11.3	1.4	15.7	6.1	200.0	-30.4
320.000	H	270.0	2.9	2.6	14.0	1.7	18.3	8.2	200.0	-27.7
Unit Flat										
48.000	V	90.0	1.0	4.4	8.7	1.0	14.1	5.1	100.0	-25.9
63.984	V	270.0	1.2	4.2	7.1	3.2	14.5	5.3	100.0	-25.5
160.000	V	180.0	1.3	3.2	11.5	1.3	16.0	6.3	150.0	-27.5
240.000	V	190.0	1.7	3.7	11.3	1.4	16.4	6.6	200.0	-29.7
48.000	H	0.0	3.4	3.1	8.7	1.0	12.8	4.4	100.0	-27.2
160.000	H	45.0	2.4	3.8	11.5	1.3	16.6	6.8	150.0	-26.9
320.000	H	180.0	2.1	2.9	14.0	1.7	18.6	8.5	200.0	-27.4