



Radiated emissions

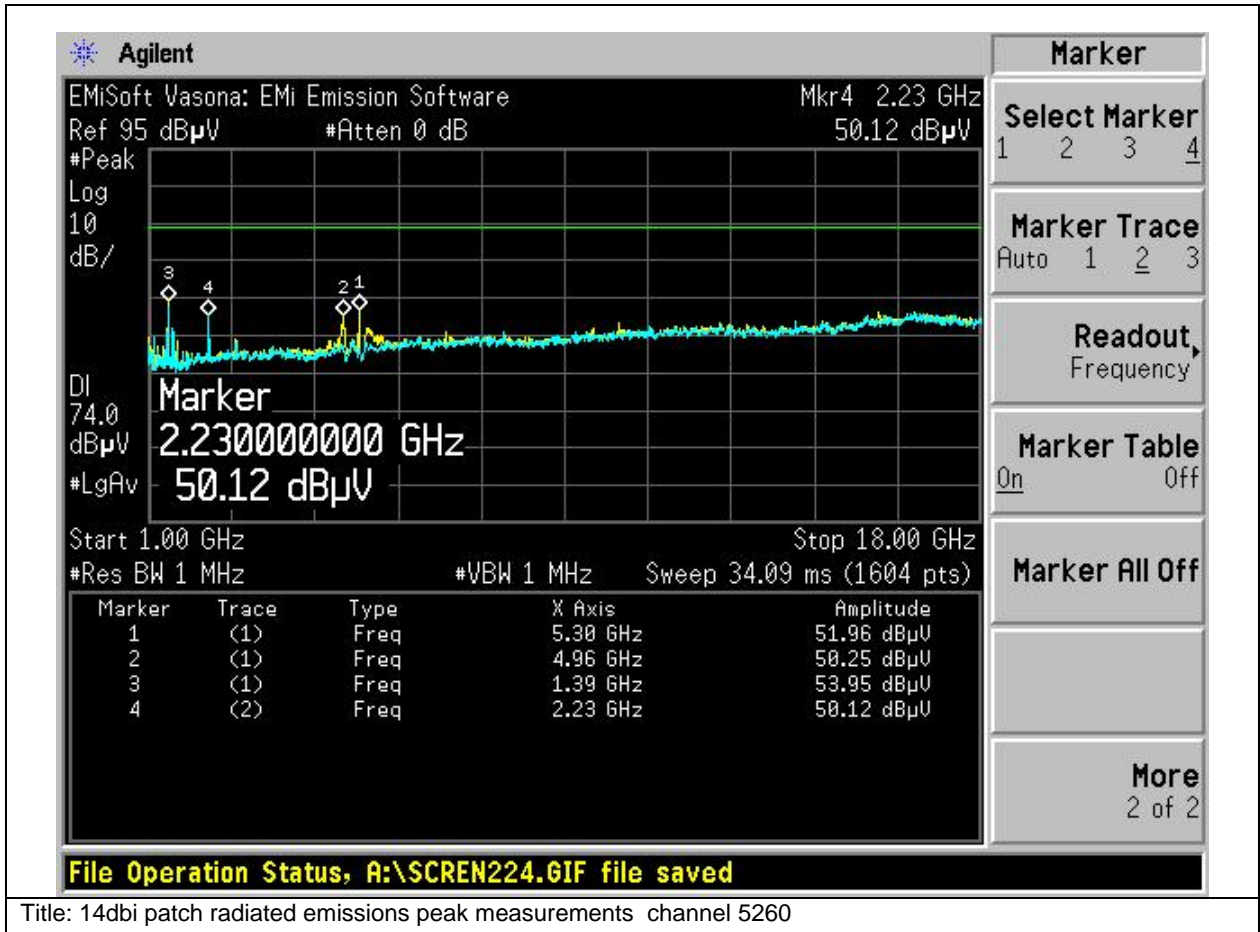
Test Number: 30416		Spec ID: 966		
Basic Standard	Applied to	Class	Freq Range	Test Details / Comments
Radiated Spurious Emissions	Enclosure	N/A	30MHz - 40GHz	CFR47 Part 15.109, CFR47 Part 15.407, RSS-210, LP0002 HKTA1039
Operating Mode	Mode : 1, Continuous Transmit			
Power Input	5, DC (+/-20%)			
Overall Result	Pass			
Comments	No further comments			
Deviation	There were no deviations from the specification			

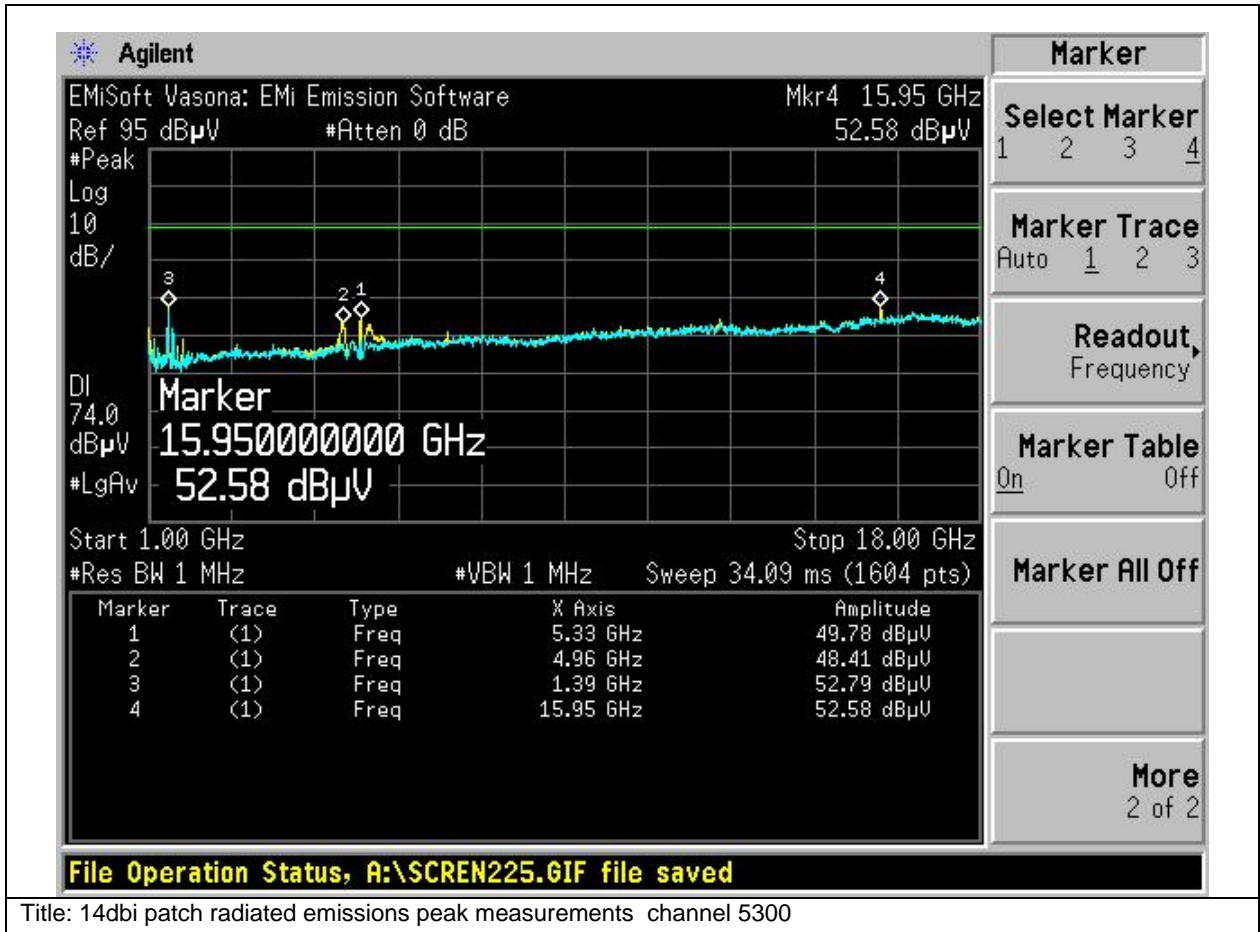
System Number	Description	Samples	System under test	Support equipment
2	Support equipment	S02, S03 and S04	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Radiated testing for the 7.5 Omni antenna	S01 and S05	<input checked="" type="checkbox"/>	<input type="checkbox"/>

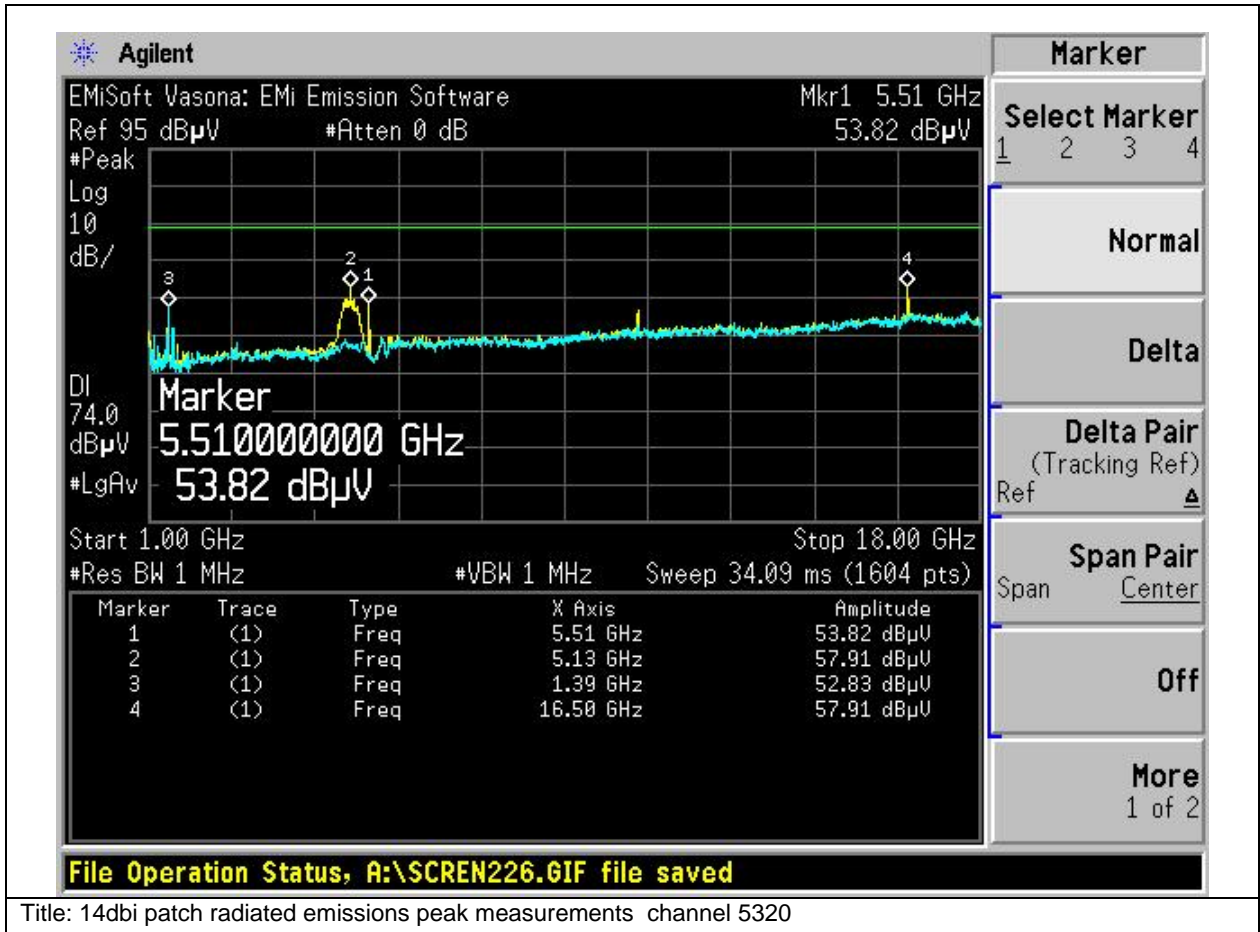
Subtest Number: 30416 - 1		Subtest Date: 15-Feb-2008
Engineer	Donald Foster	
Lab Information	Building P, 10m Anechoic	
Subtest Results		
Subtest Title	N/A	
Subtest Result	Pass	
Highest Frequency	N/A	
Lowest Frequency	N/A	
Comments on the above Test Results	No further comments	

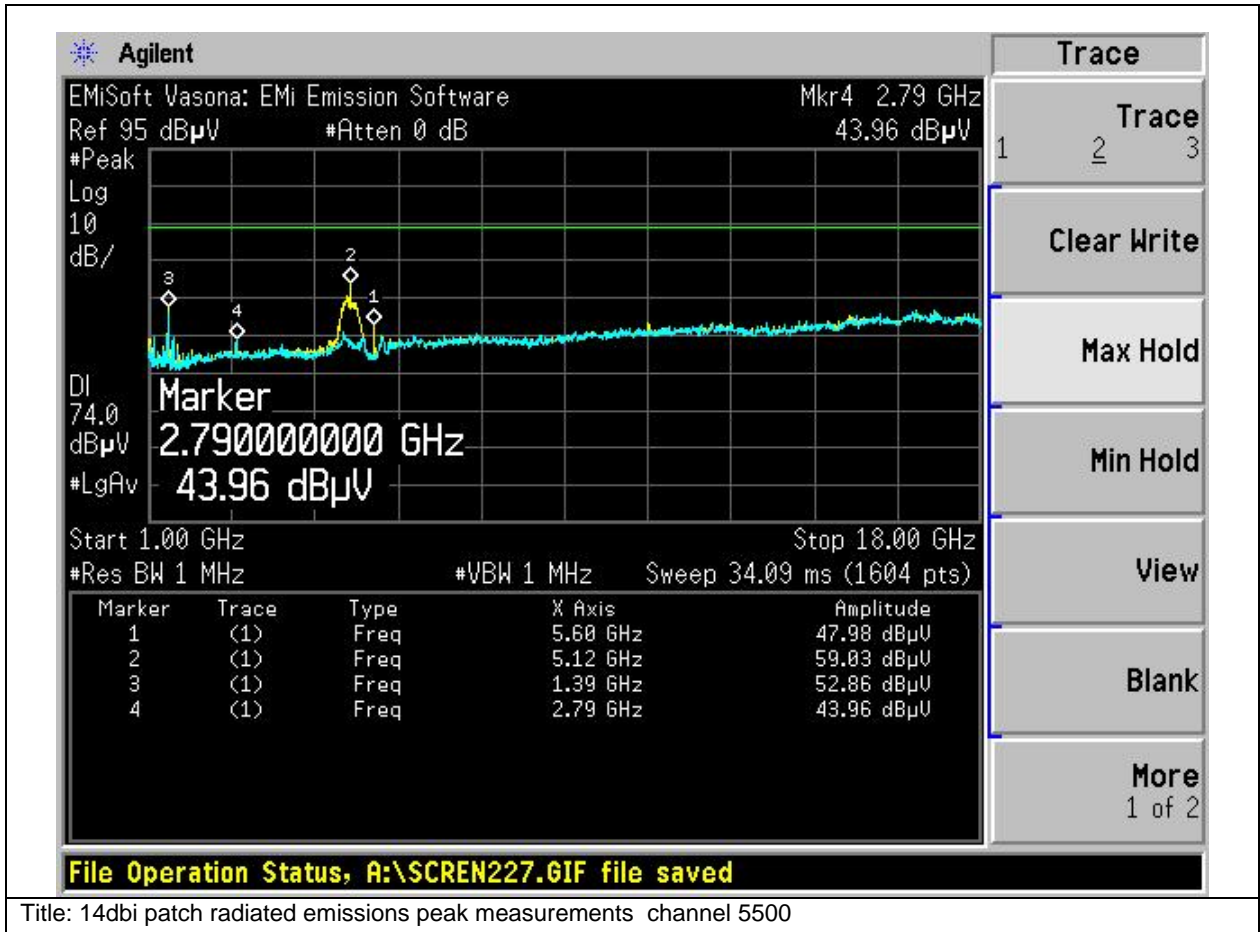
Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

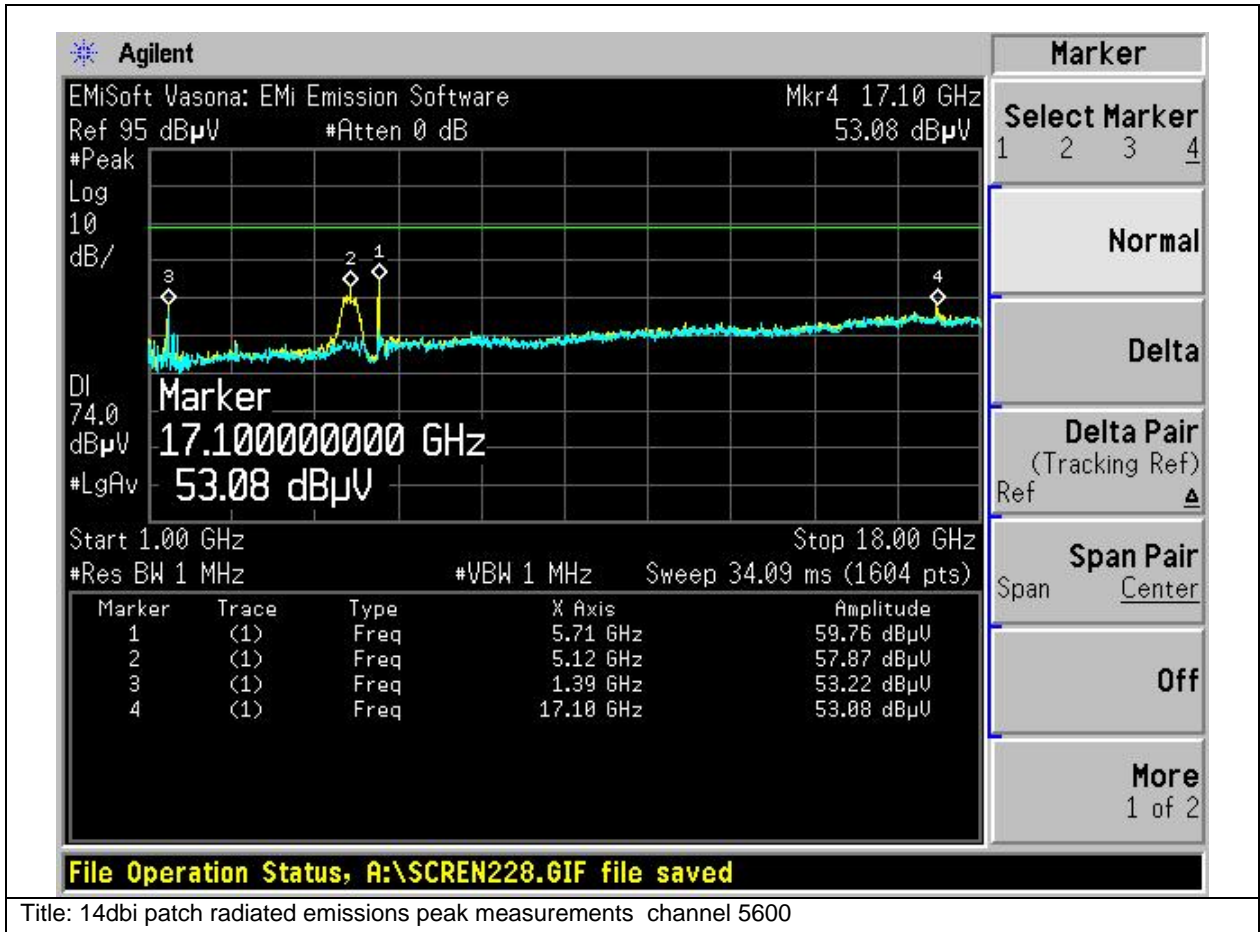




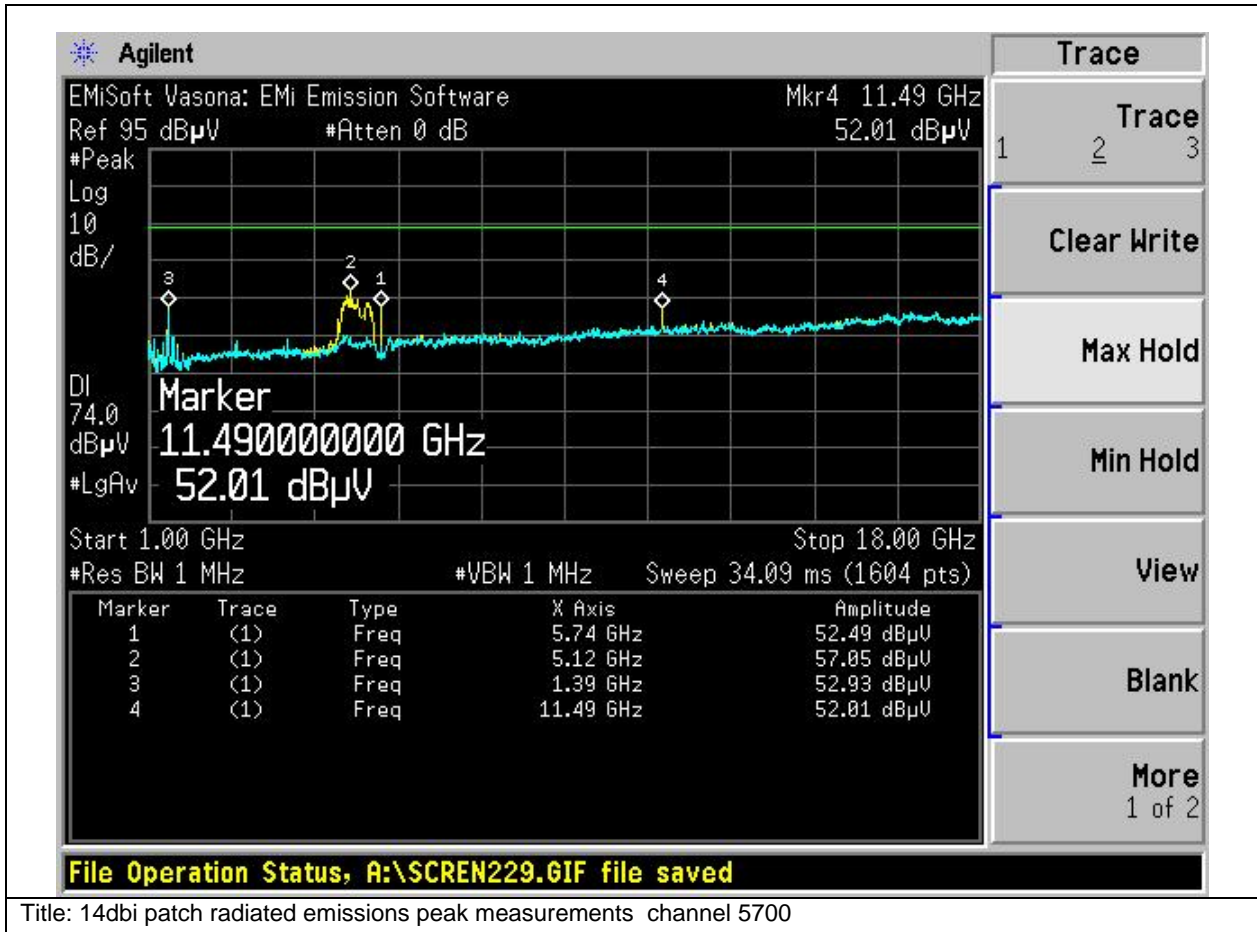




Title: 14dbi patch radiated emissions peak measurements channel 5500



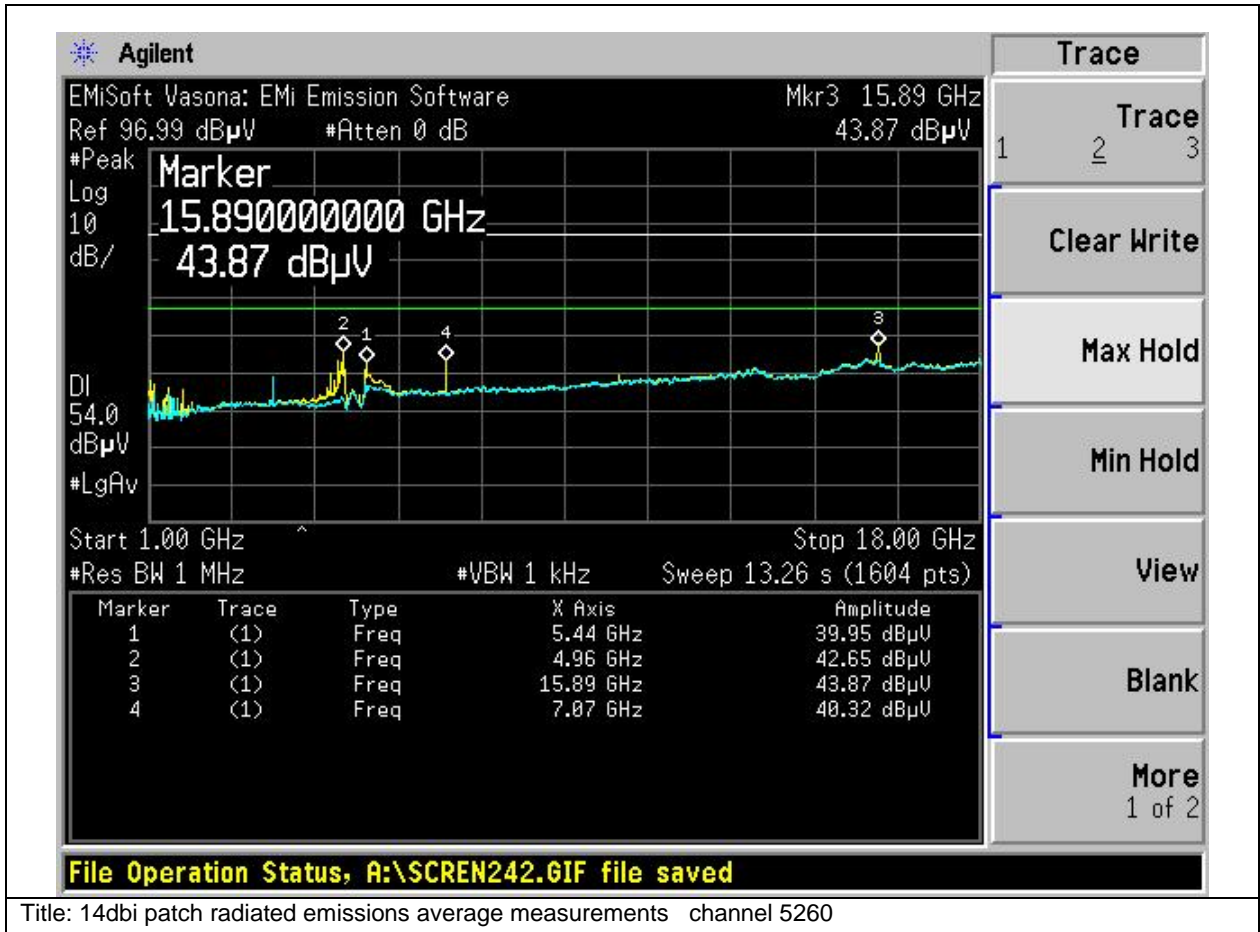
Title: 14dbi patch radiated emissions peak measurements channel 5600

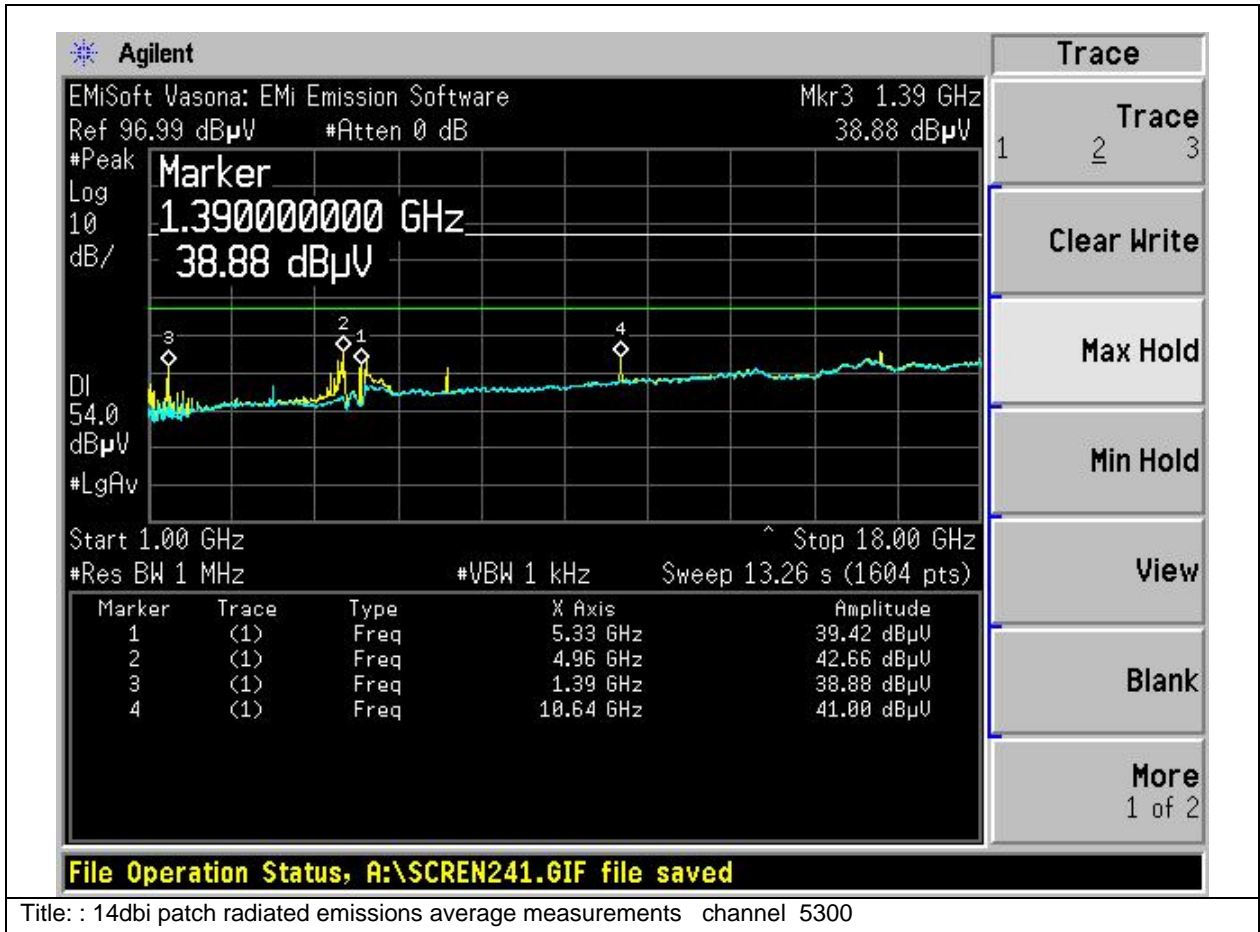


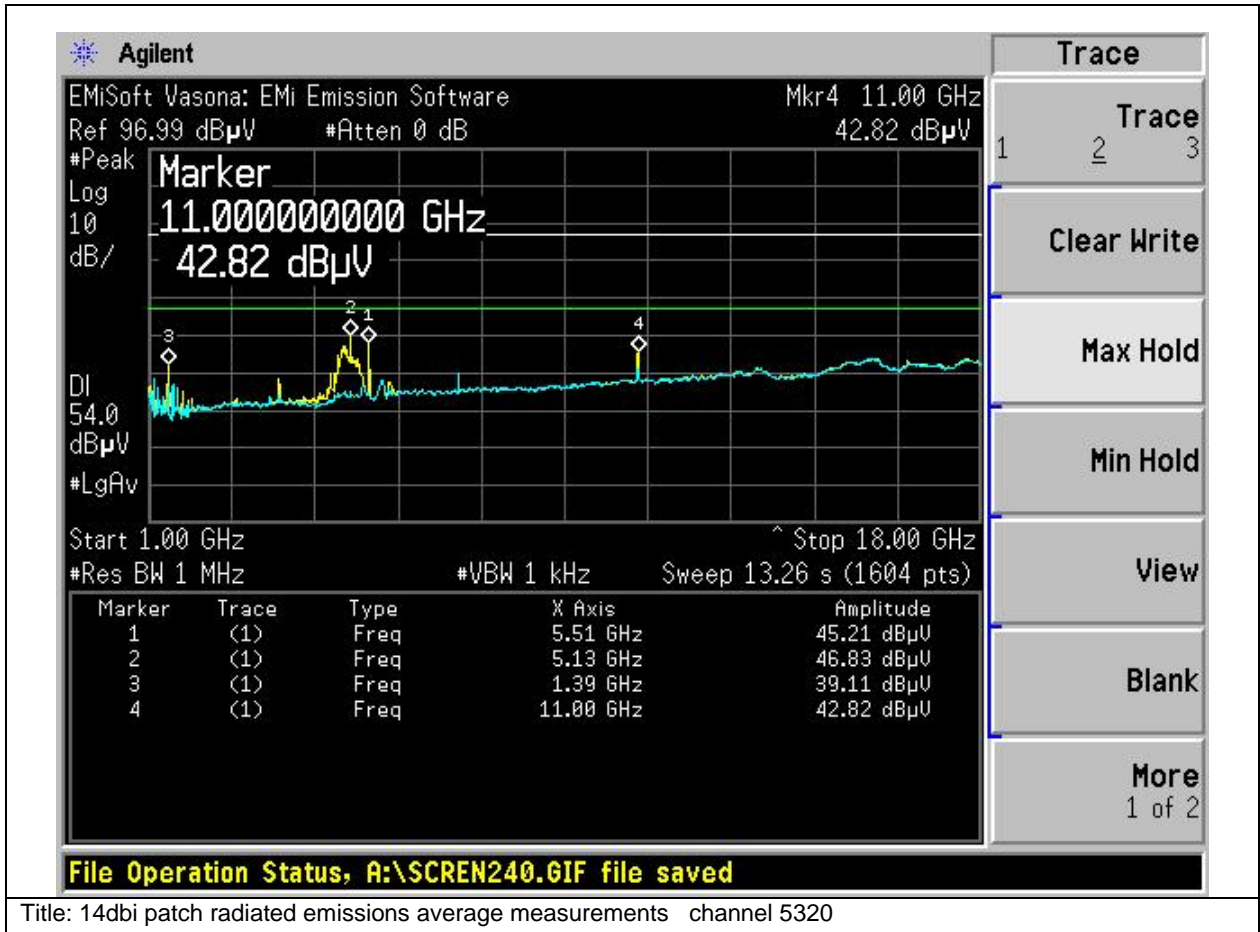
Subtest Number: 30416 - 2		Subtest Date: 15-Feb-2008	
Engineer	Donald Foster		
Lab Information	Building P, 10m Anechoic		
Subtest Results			
Subtest Title	N/A		
Subtest Result	Pass		
Highest Frequency	N/A		
Lowest Frequency	N/A		
Comments on the above Test Results	No further comments		

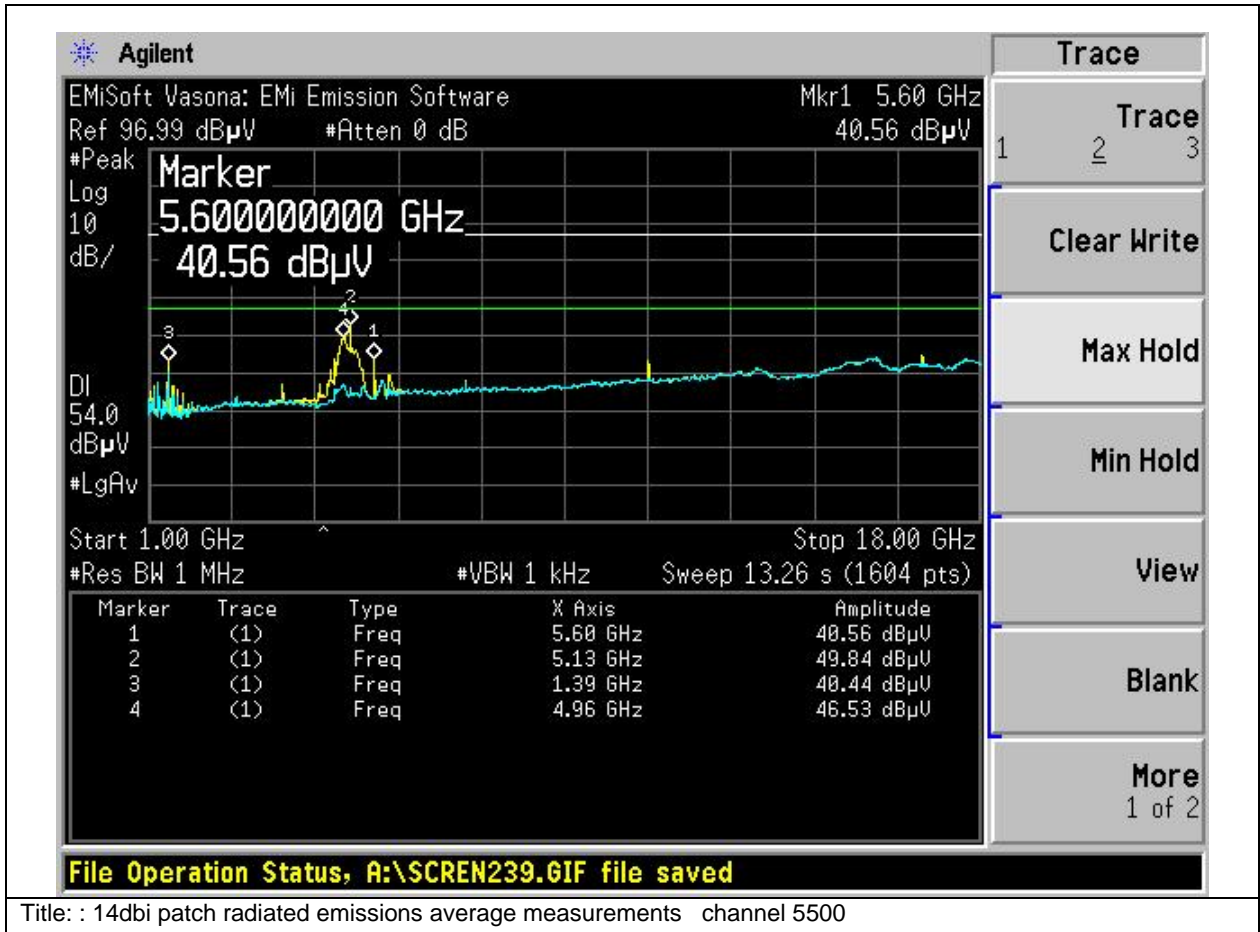
Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

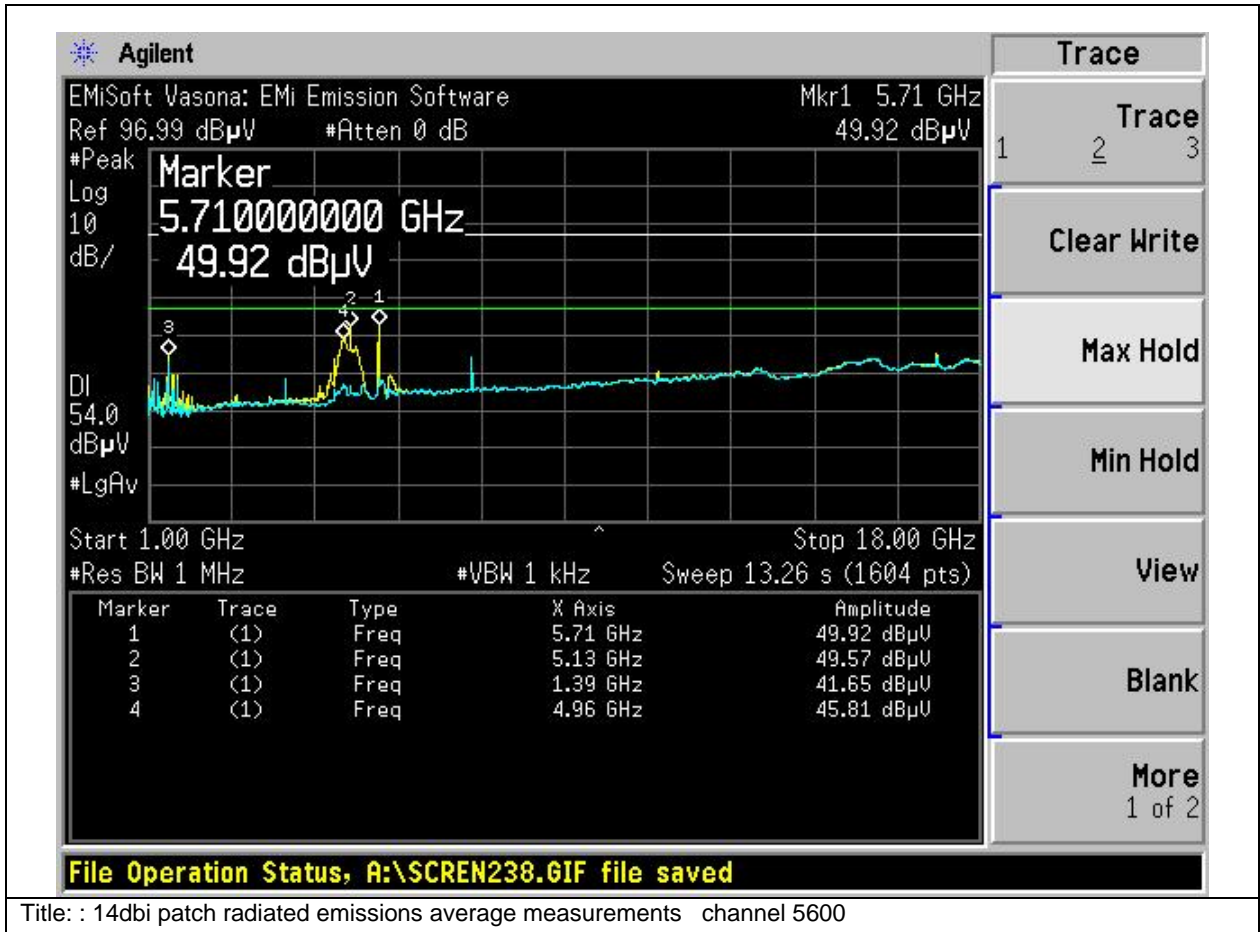


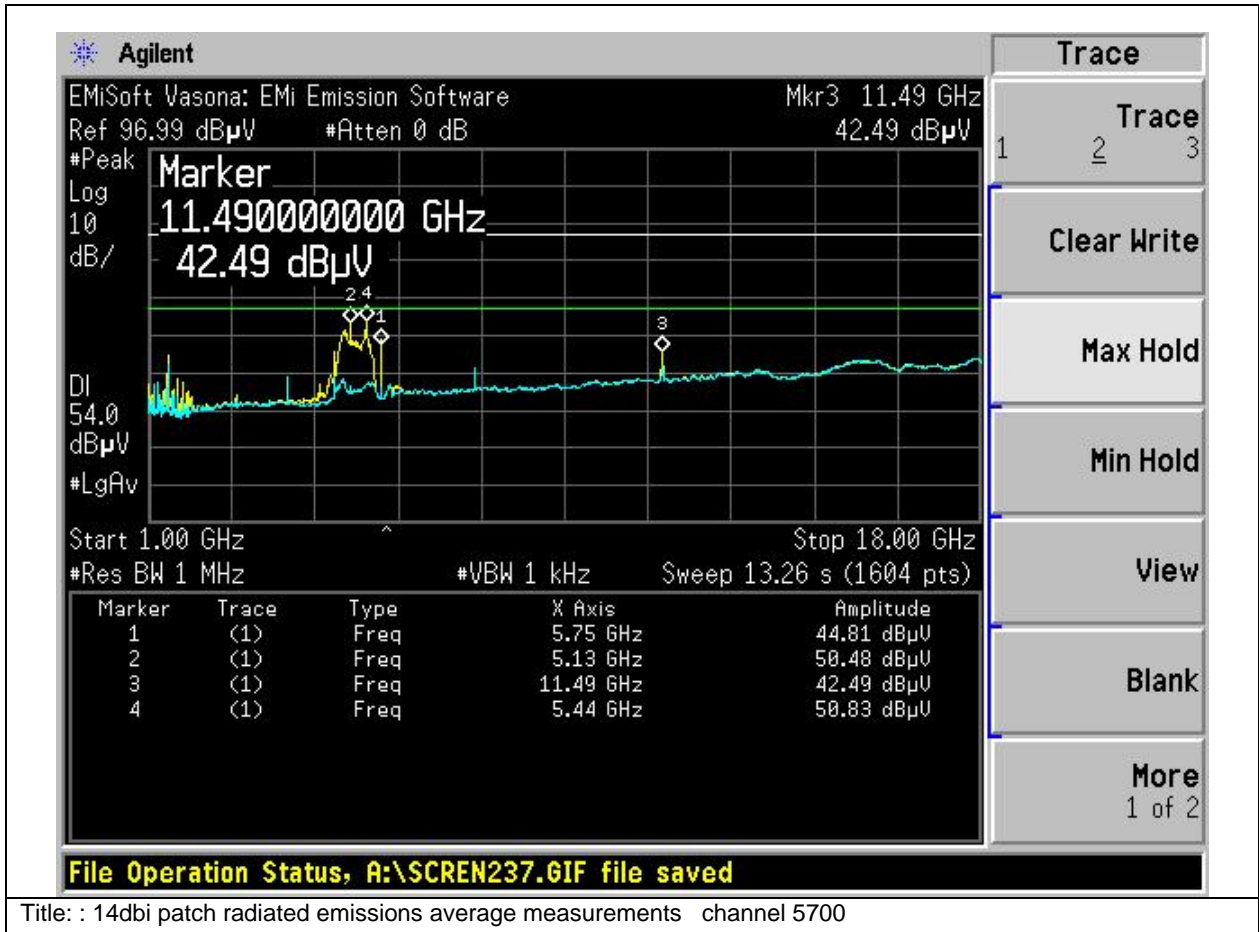






Title: : 14dbi patch radiated emissions average measurements channel 5500

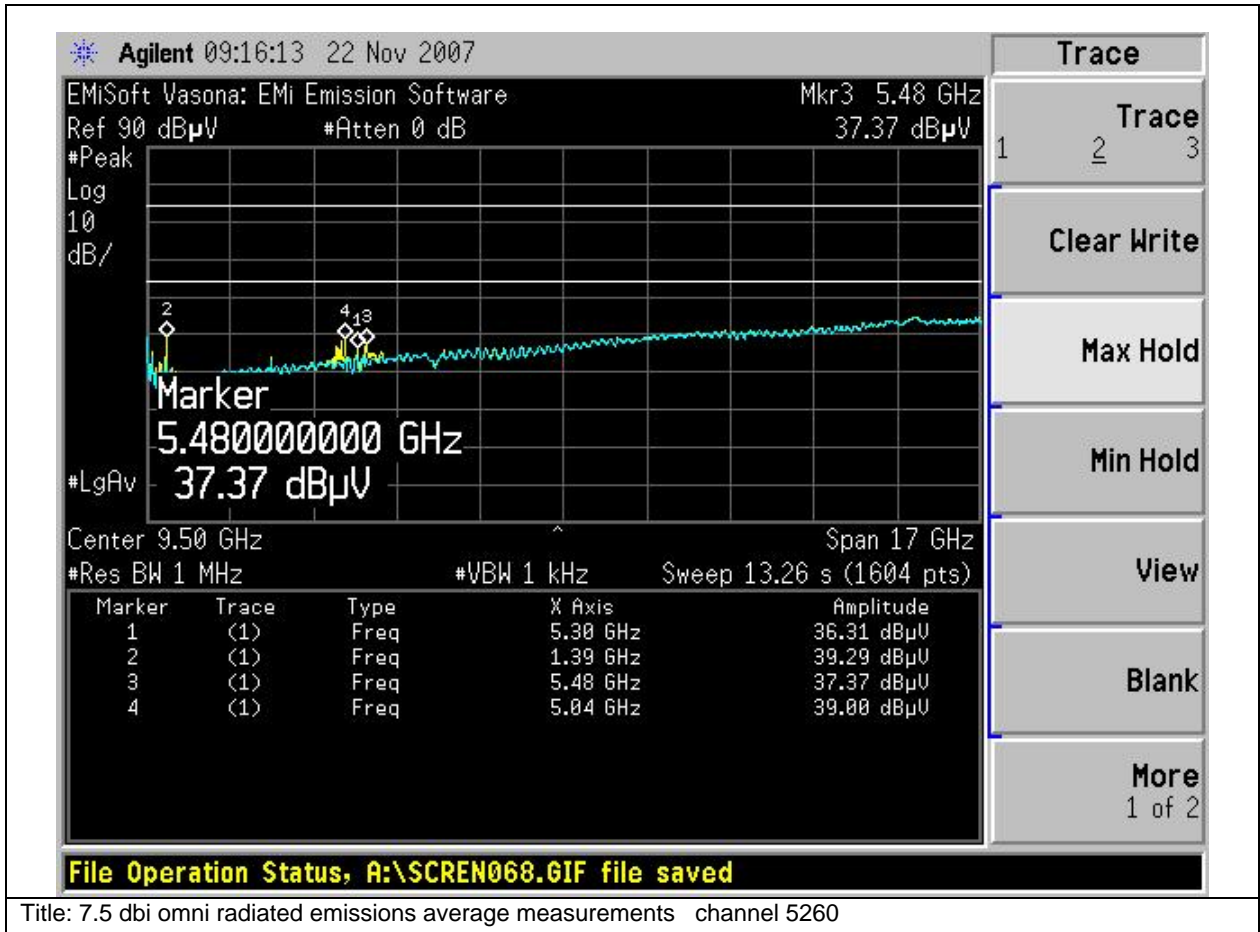


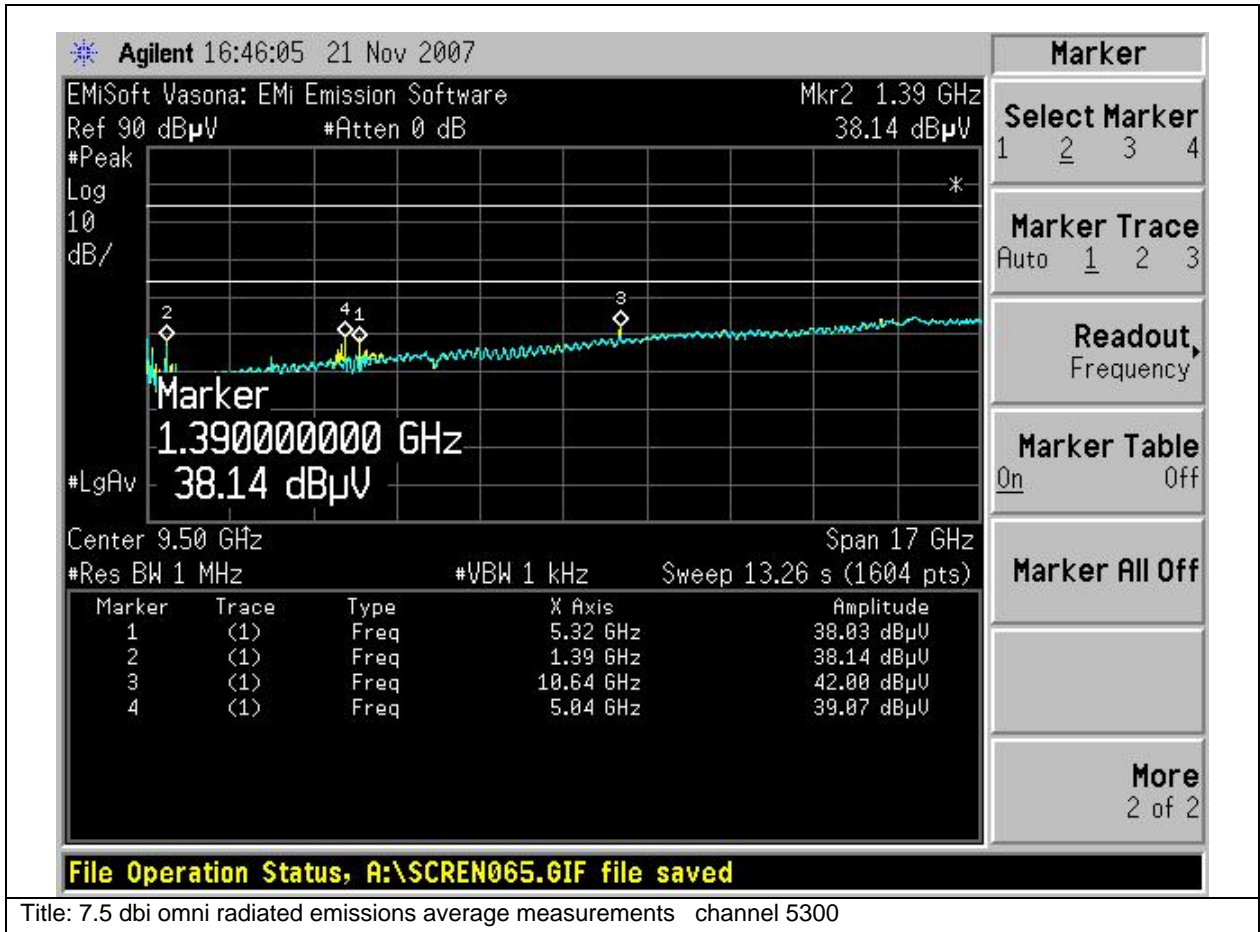


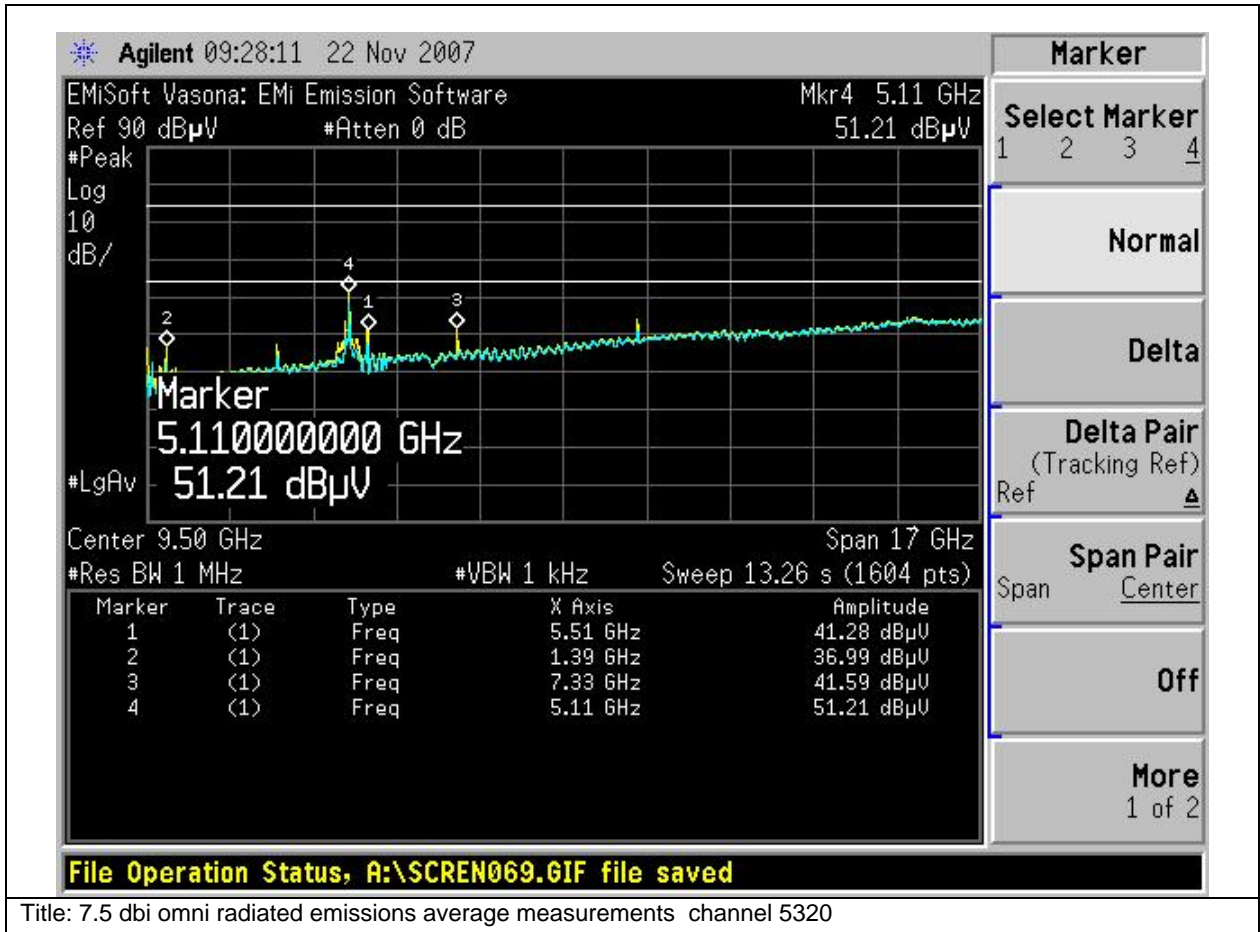
Subtest Number: 30416 - 3		Subtest Date: 15-Feb-2008	
Engineer	Donald Foster		
Lab Information	Building P, 10m Anechoic		
Subtest Results			
Subtest Title	N/A		
Subtest Result	Pass		
Highest Frequency	N/A		
Lowest Frequency	N/A		
Comments on the above Test Results	No further comments		

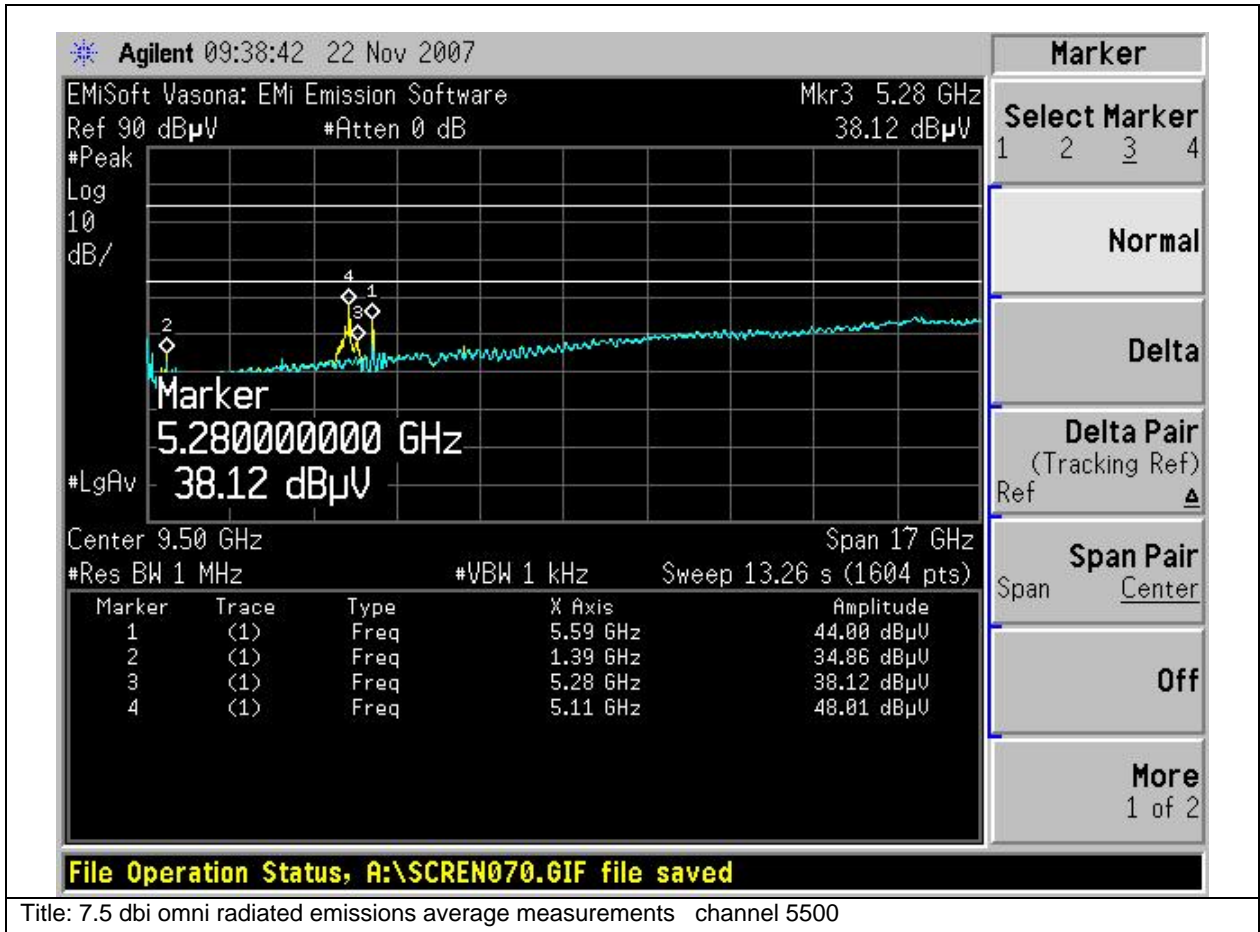
Graphical Test Results

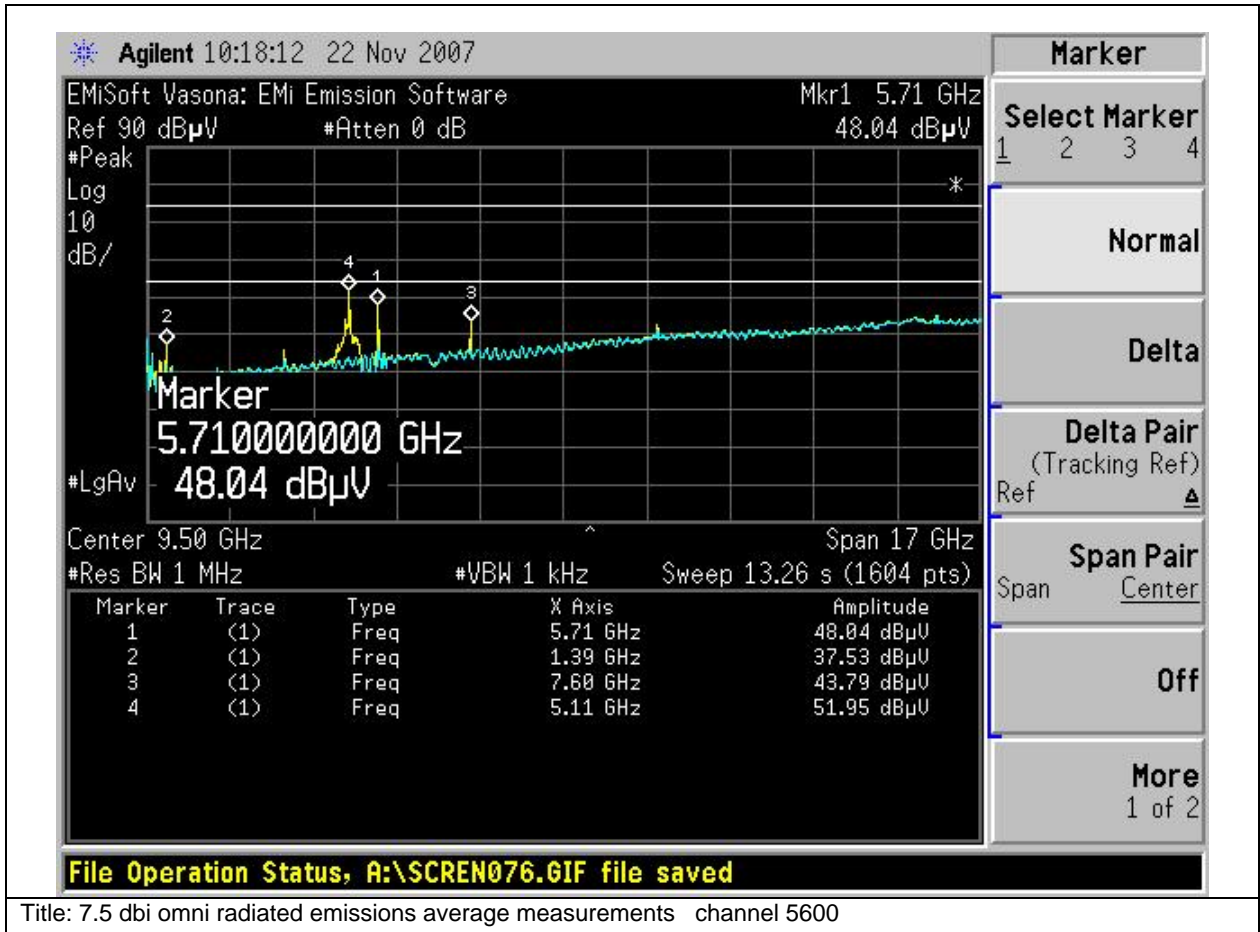
Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

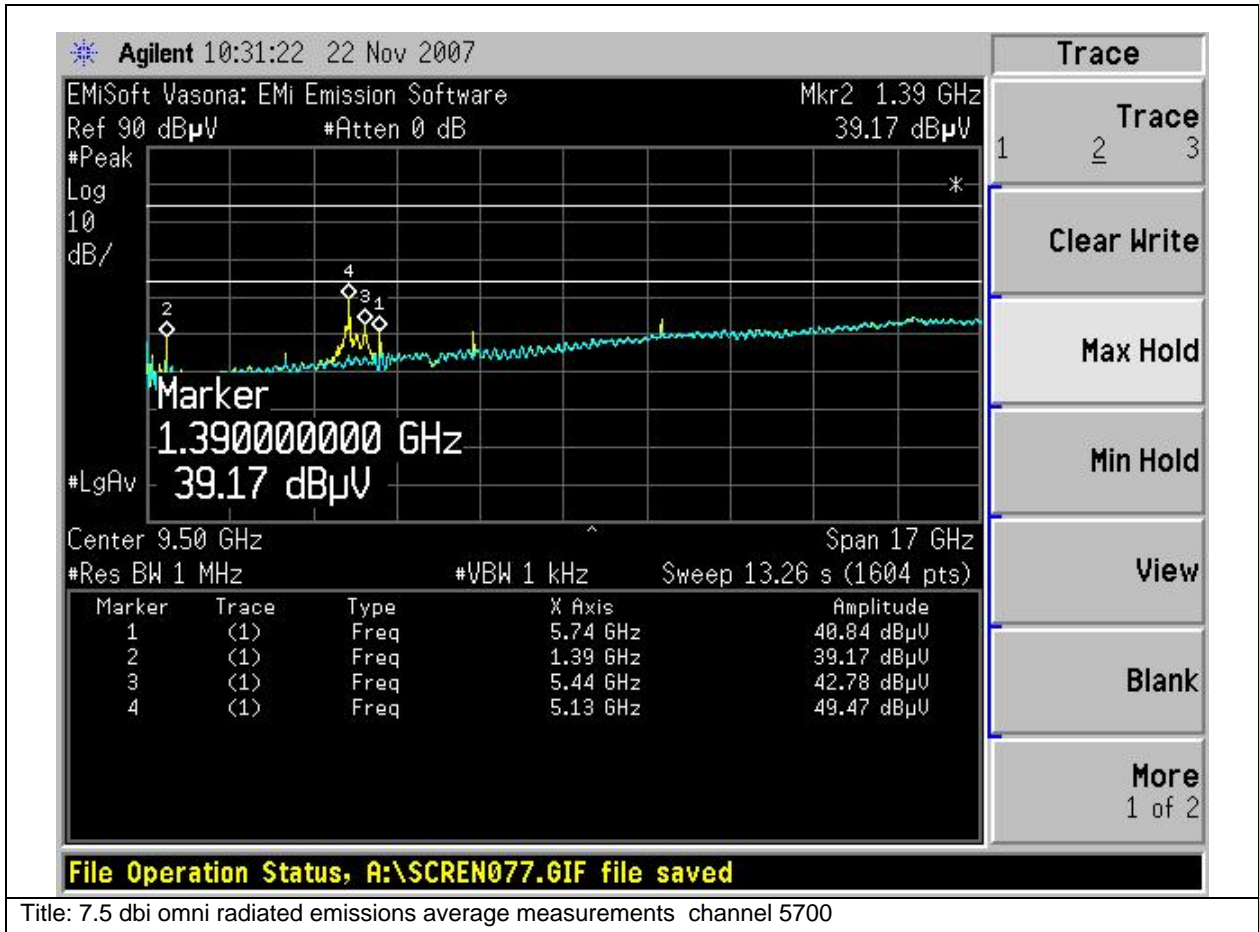










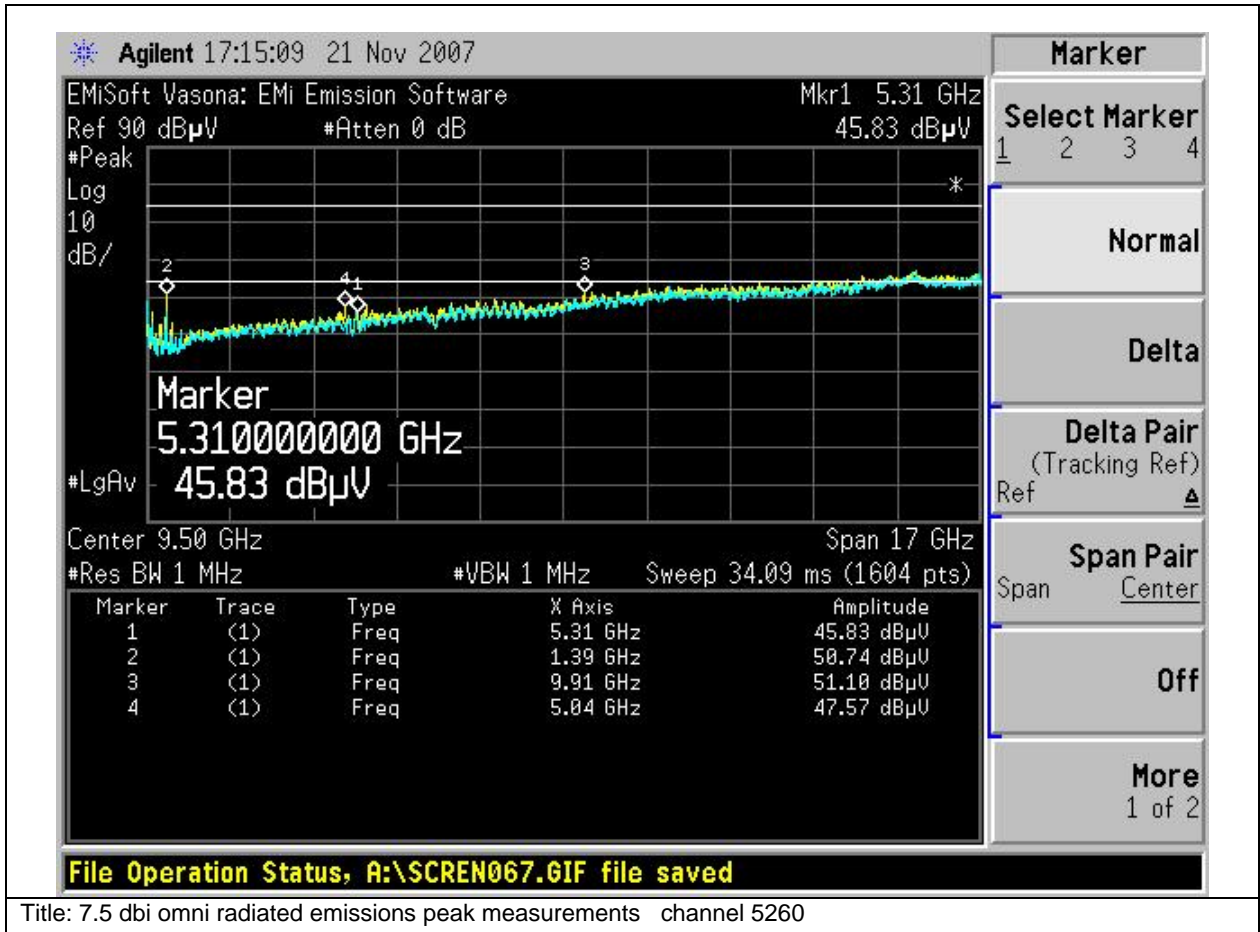


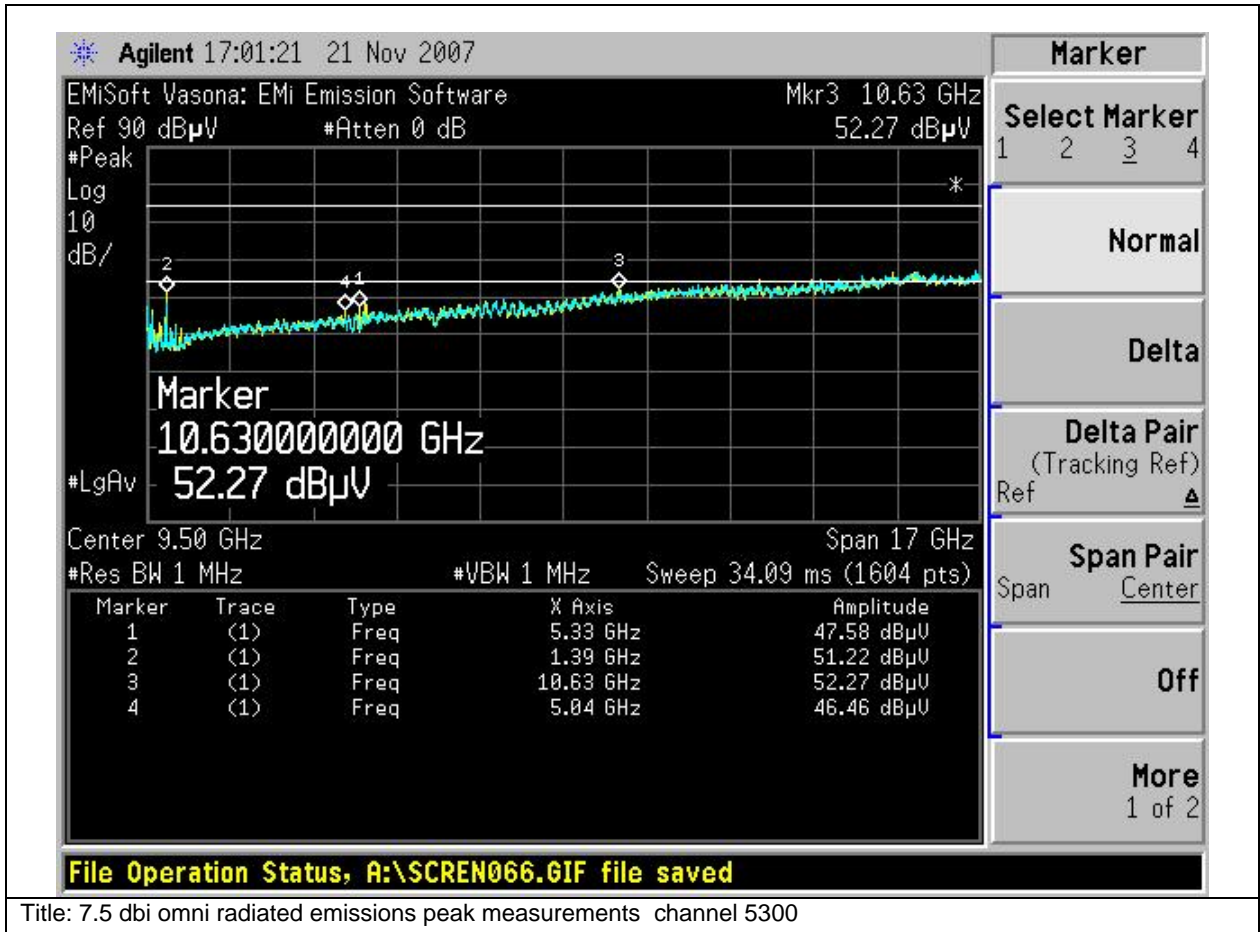
Title: 7.5 dbi omni radiated emissions average measurements channel 5700

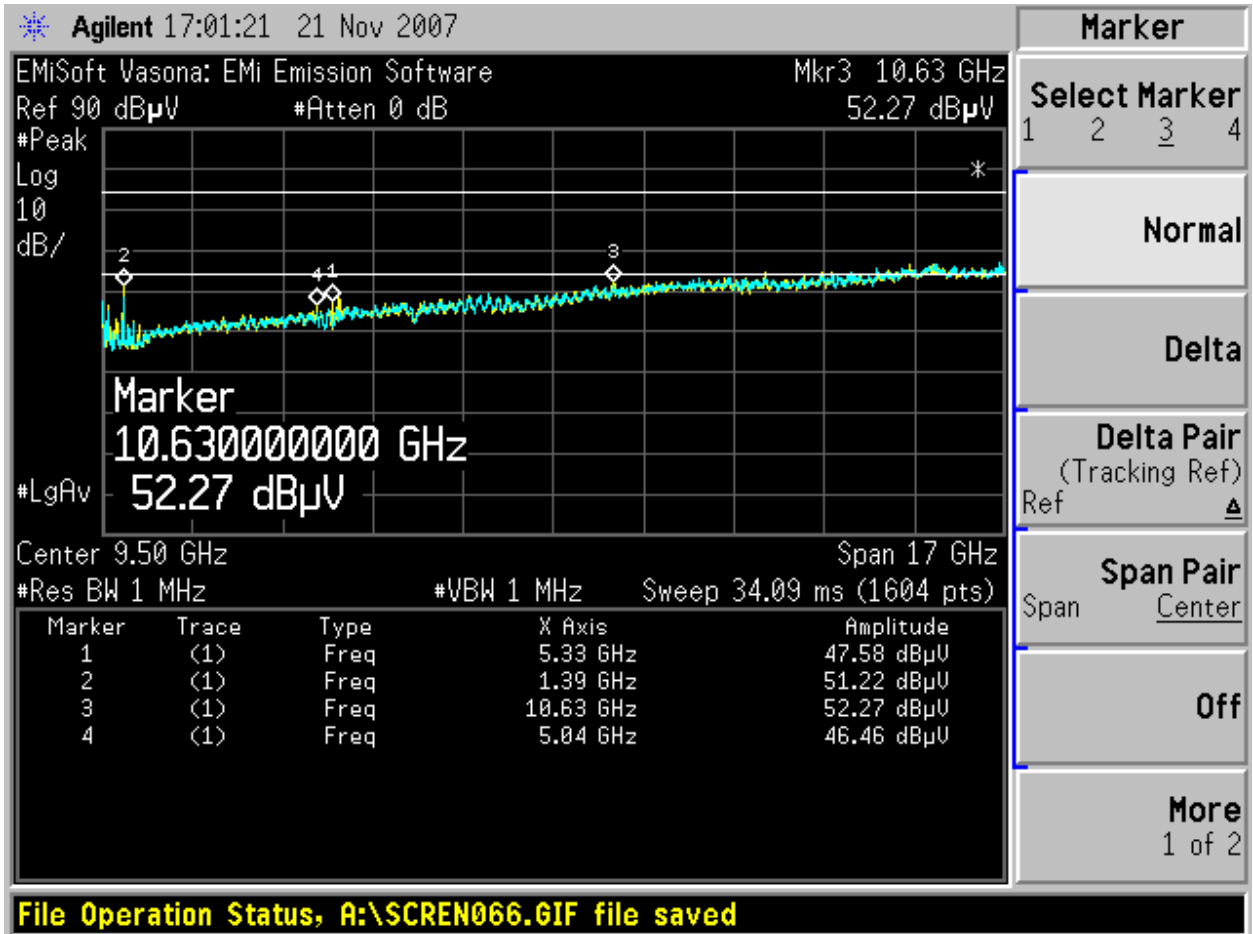
Subtest Number: 30416 - 4		Subtest Date: 15-Feb-2008	
Engineer	Donald Foster		
Lab Information	Building P, 10m Anechoic		
Subtest Results			
Subtest Title	N/A		
Subtest Result	Pass		
Highest Frequency	N/A		
Lowest Frequency	N/A		
Comments on the above Test Results	No further comments		

Graphical Test Results

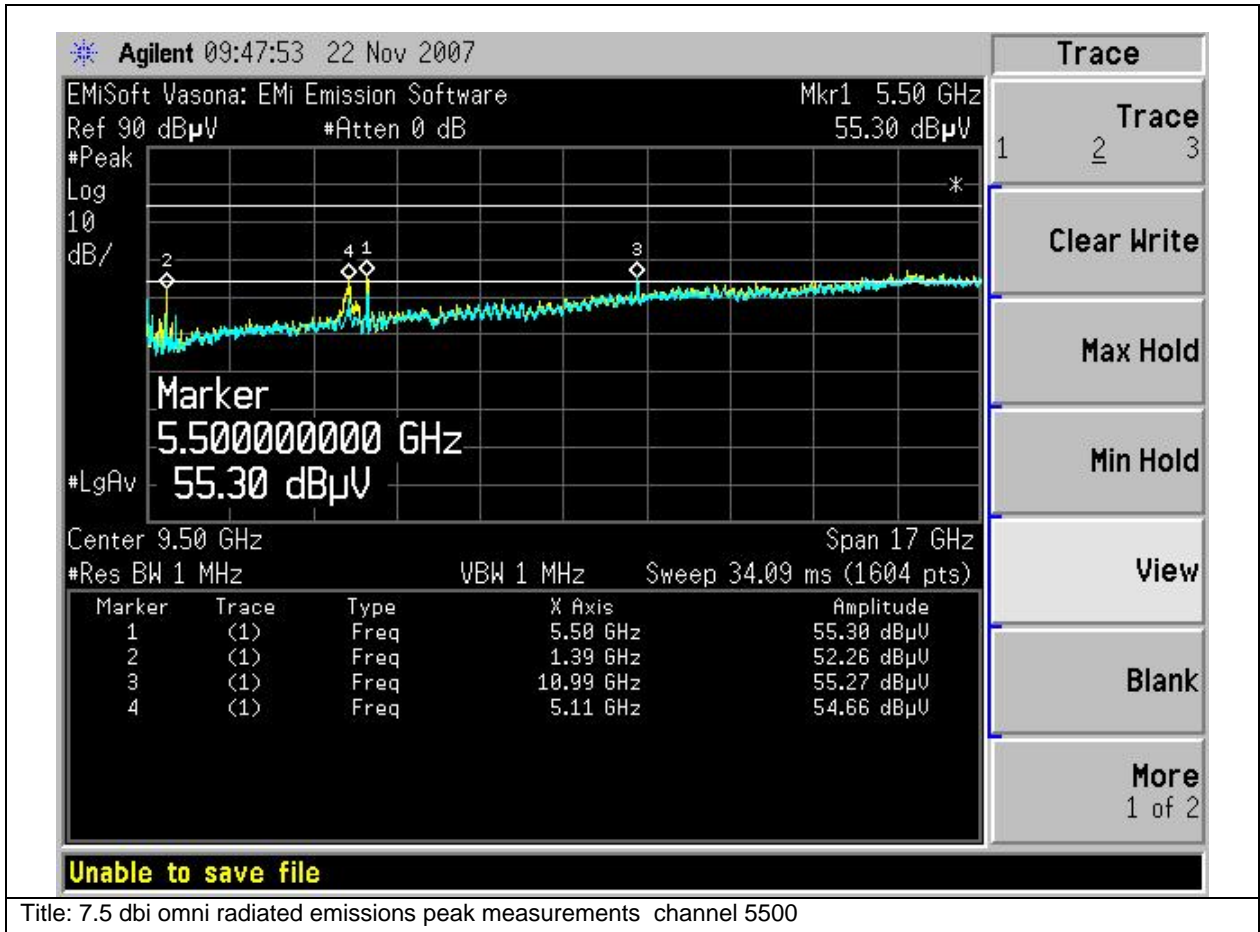
Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

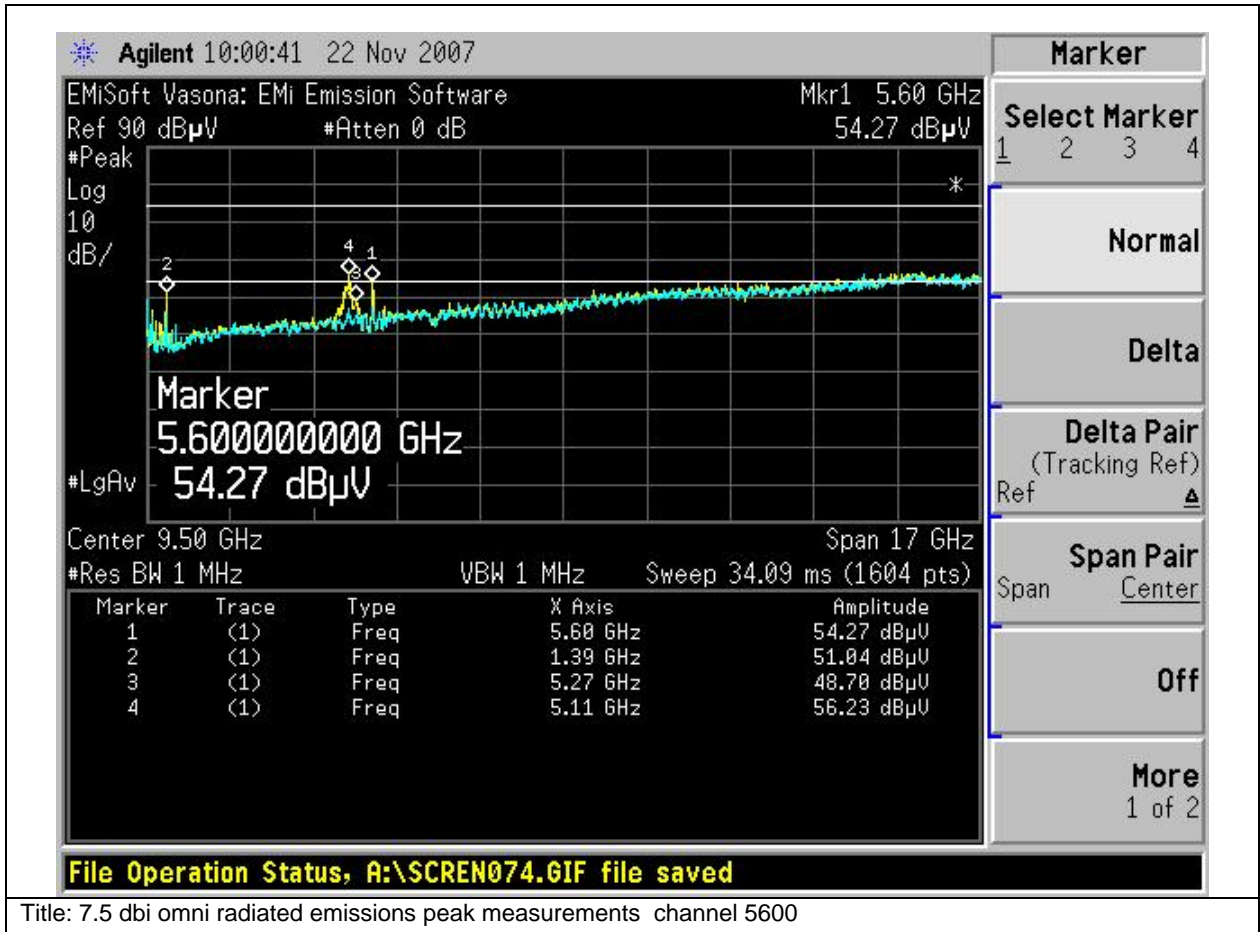


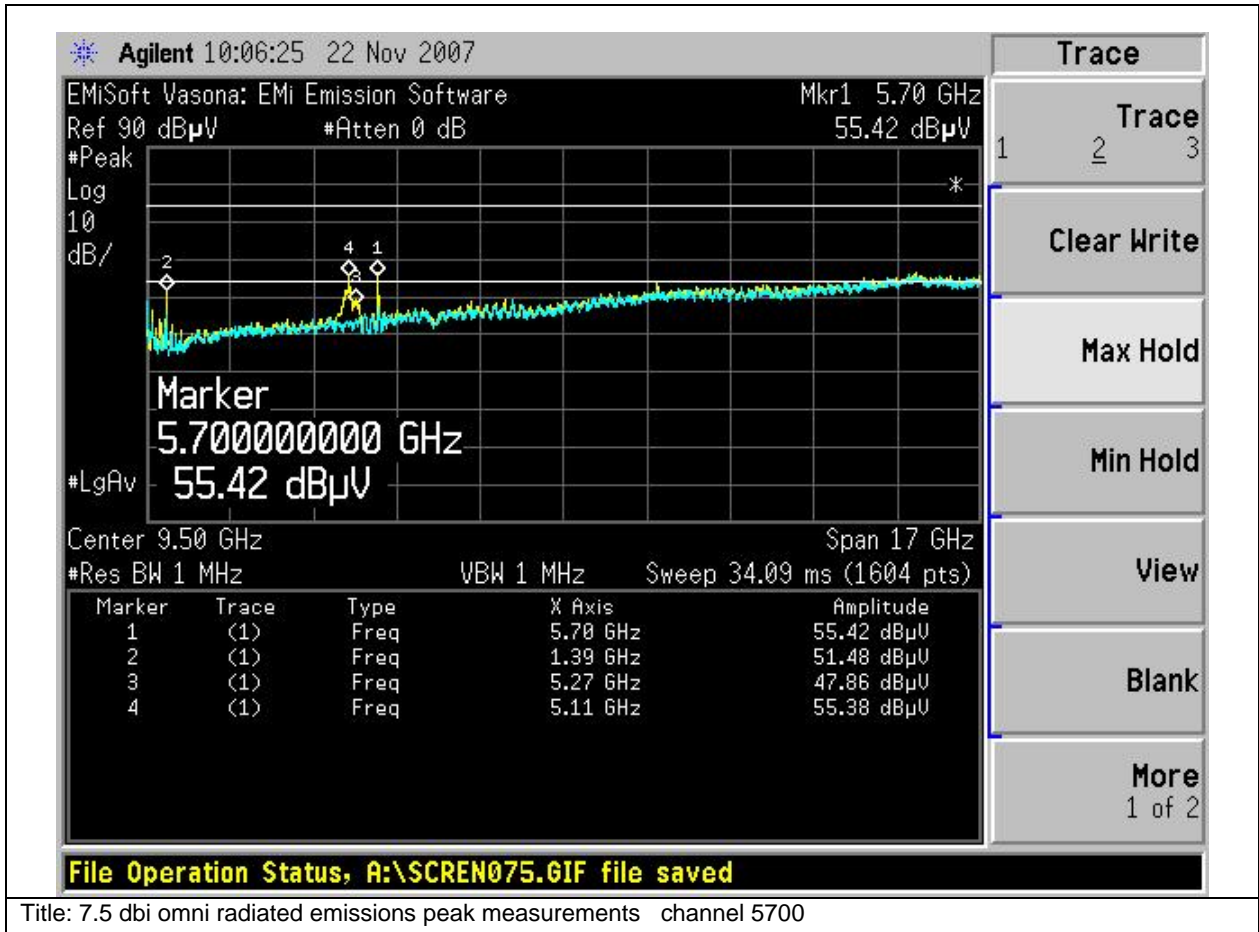




Title: 7.5 dbi omni radiated emissions peak measurements channel 5320







Graphical Test Results

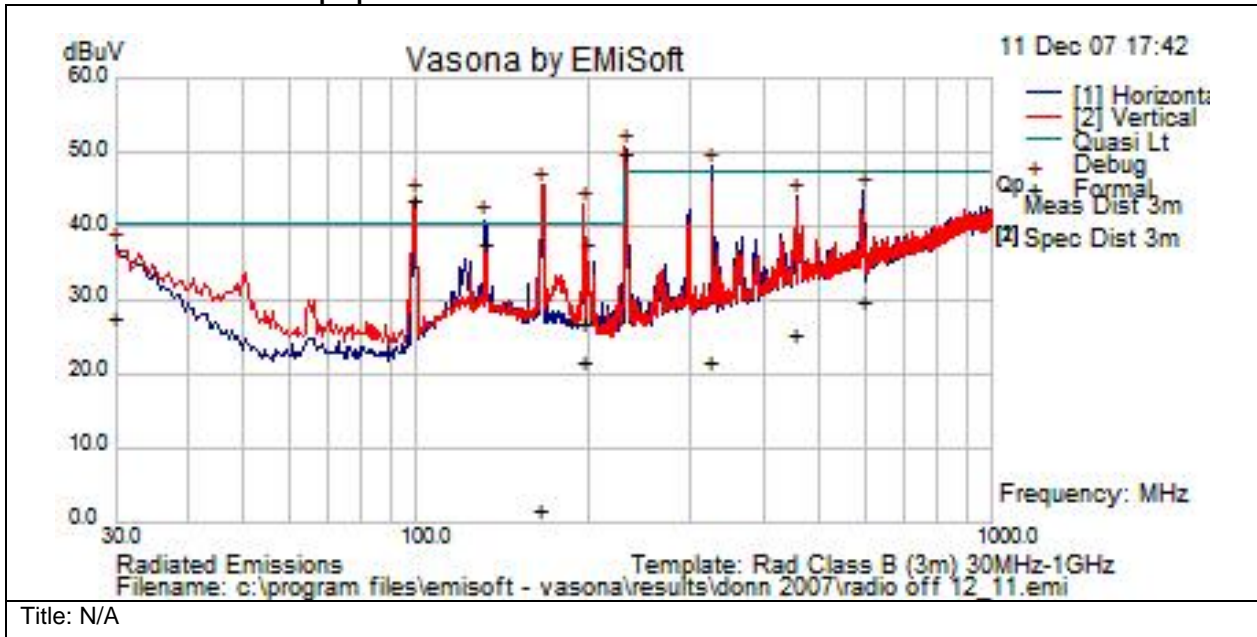
Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Note:

Due to the test jig architecture the internal signals from the PC were drawn out through the PCI slot which the test jig uses. The first scan is of the PC and test jig with the radio not running and the second scan shows how the PC noise is increased when the power to the radio is turned on. All the freqs. Shown are related to the PC and not the radio.



Radio not installed in the laptop



Test Results Table

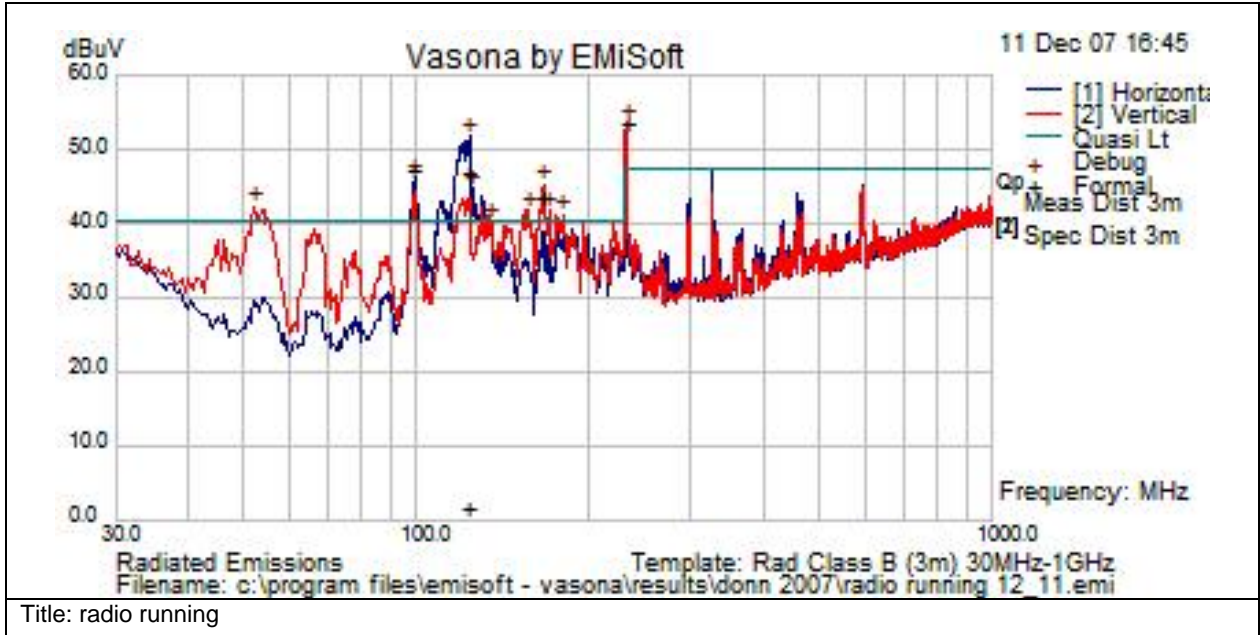
Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
164.407	37.9	1.4	11.9	50.2	Qp	V	193	360	40.5	9.7	Fail	
99.828	30.6	1.1	10.2	41.8	Qp	V	120	291	40.5	1.3	Fail	
230.128	35.5	1.6	11.1	48.2	Qp	V	234	275	47.5	0.7	Fail	
195.403	6.6	1.5	12	20	Qp	V	185	0	40.5	-20.5	Pass	
326.414	4.1	1.9	13.9	19.9	Qp	H	208	333	47.5	-27.6	Pass	
131.521	21	1.2	13.8	36	Qp	H	224	1	40.5	-4.5	Pass	

Subtest Number: 29607 - 4		Subtest Date: 17-Dec-2007	
Engineer	Donald Foster		
Lab Information	Building P, 10m Anechoic		
Subtest Results			
Subtest Title	30-1000MHz.		
Subtest Result	Pass		
Highest Frequency	1000.0		
Lowest Frequency	30.0		
Comments on the above Test Results	No further comments		

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

Radio running in the laptop



Test Results Table

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV	Margin dB	Pass /Fail	Comments
123.726	30.1	1.2	14	45.2	Qp	H	199	361	40.5	4.7	Fail	
232.826	38.9	1.6	11.3	51.8	Qp	V	218	0	47.5	4.3	Fail	
99.762	34.2	1.1	10.1	45.4	Qp	H	161	320	40.5	4.9	Fail	
166.282	28.5	1.4	11.8	41.8	Qp	V	146	360	40.5	1.3	Fail	



Physical Test arrangement Photograph:



Title: Radiated emissions test setup

Comments on the above Photograph:

No further comments



Title: Radiated emissions test setup

Comments on the above Photograph:

No further comments



Title: Radiated emissions test setup

Comments on the above Photograph:

No further comments



Radiated emissions

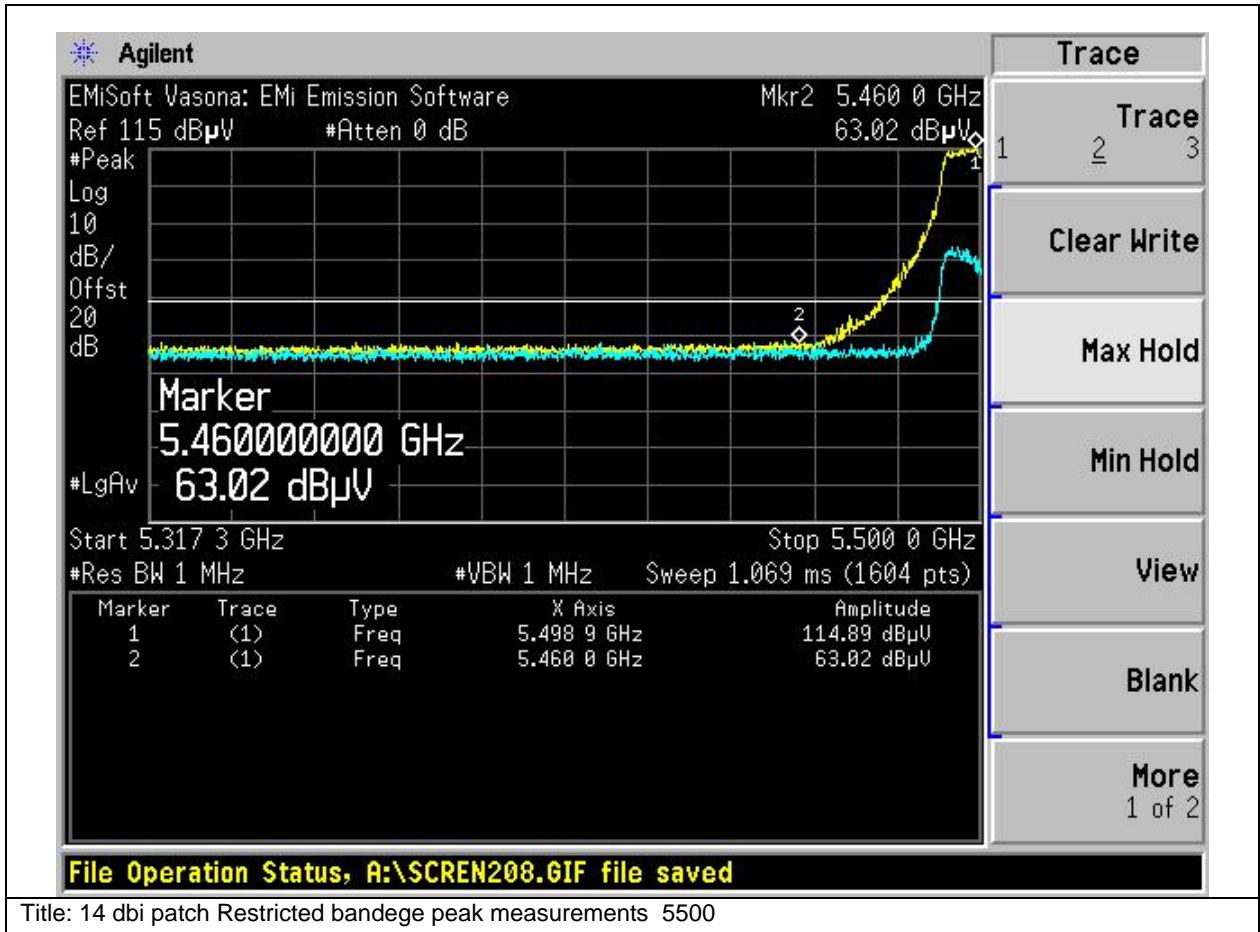
Test Number: 30418		Spec ID: 648		
Basic Standard	Applied to	Class	Freq Range	Test Details / Comments
Restricted Bandedge Measurements	Enclosure	B	2.4GHz - 5.825GHz	CFR47 Part 15.205,CFR47 Part 15.209,LP002, RSS210HKTA1039
Operating Mode	Mode : 1, Continuous Transmit			
Power Input	5 , DC (+/-20%)			
Overall Result	Pass			
Comments	No further comments			
Deviation	There were no deviations from the specification			

System Number	Description	Samples	System under test	Support equipment
2	Support equipment	S02, S03 and S04	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Radiated testing for the 7.5 Omni antenna	S01 and S05	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Radiated testing for the 14dbi patch	S01 and S06	<input checked="" type="checkbox"/>	<input type="checkbox"/>

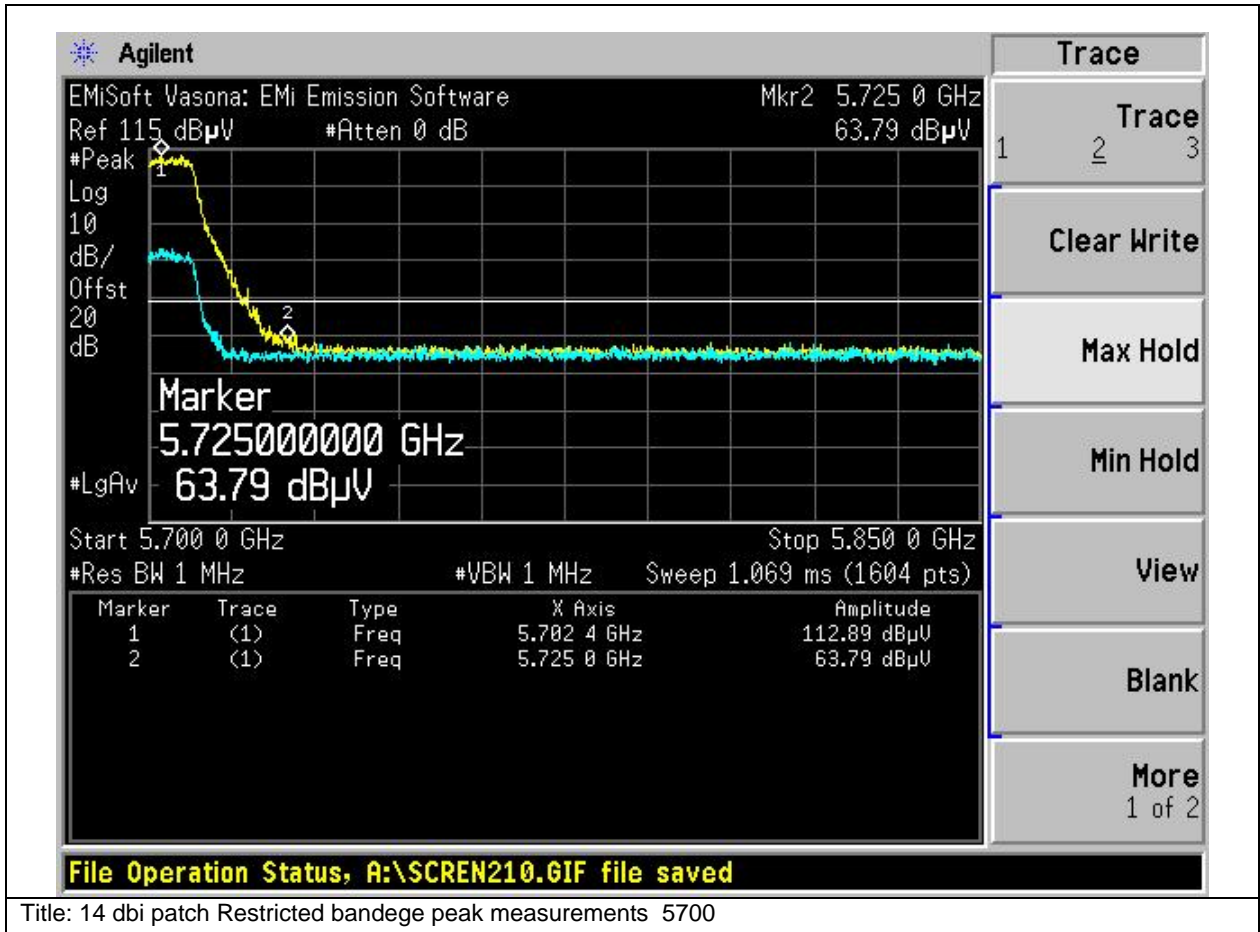
Subtest Number: 30418 - 1		Subtest Date: 15-Feb-2008
Engineer	Donald Foster	
Lab Information	Building P, 10m Anechoic	
Subtest Results		
Subtest Title	N/A	
Subtest Result	Pass	
Highest Frequency	N/A	
Lowest Frequency	N/A	
Comments on the above Test Results	No further comments	

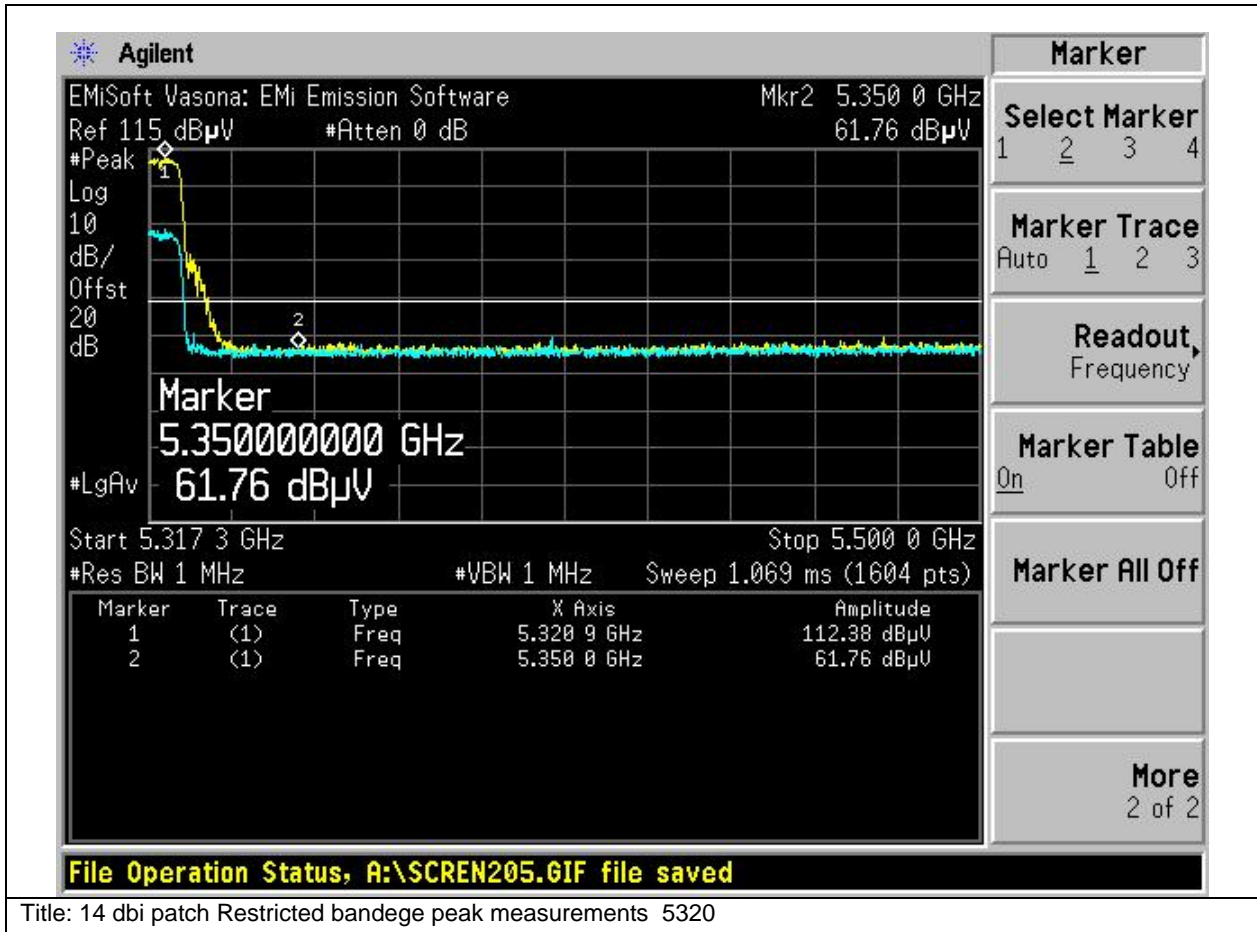
Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



Title: 14 dbi patch Restricted bandedge peak measurements 5500

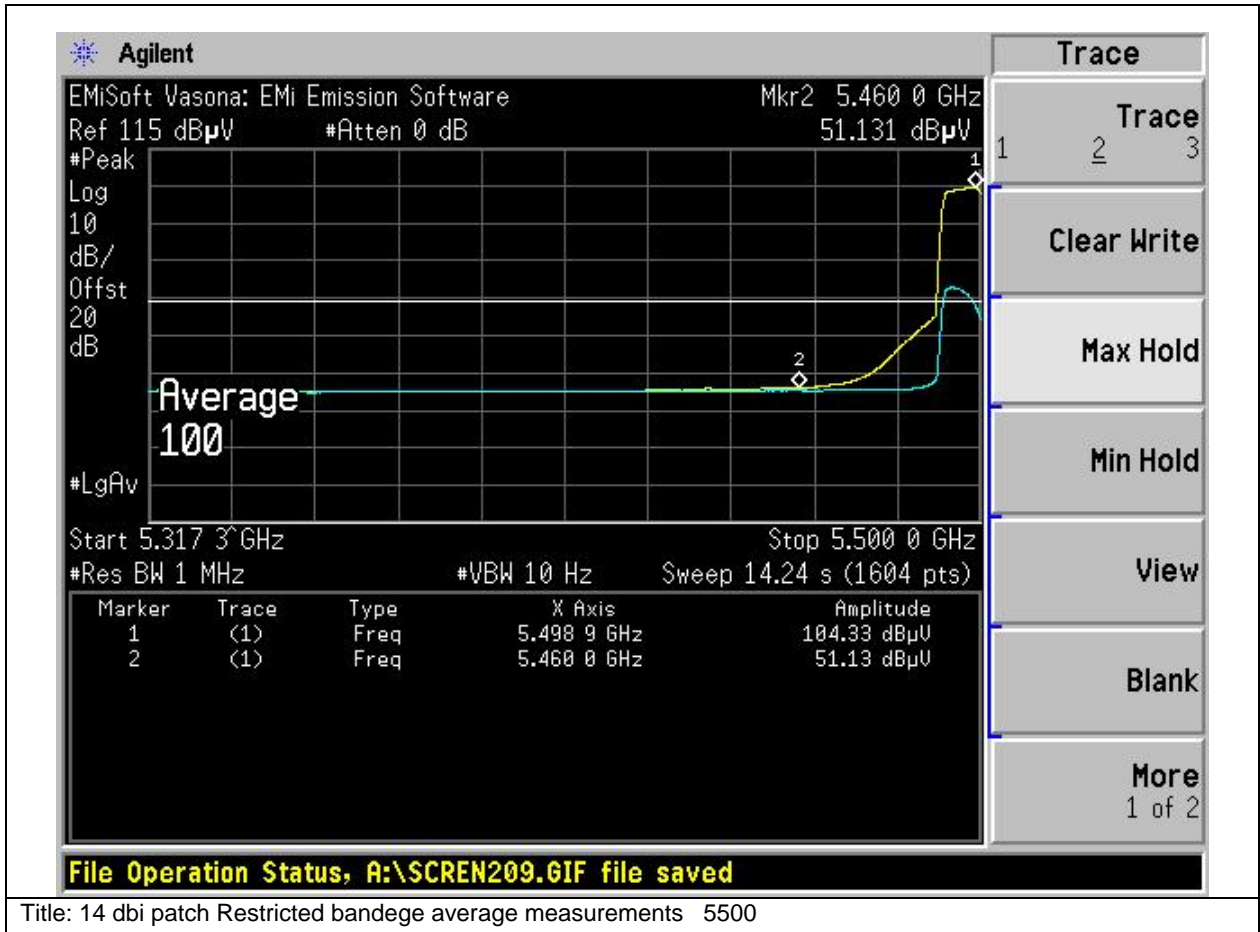


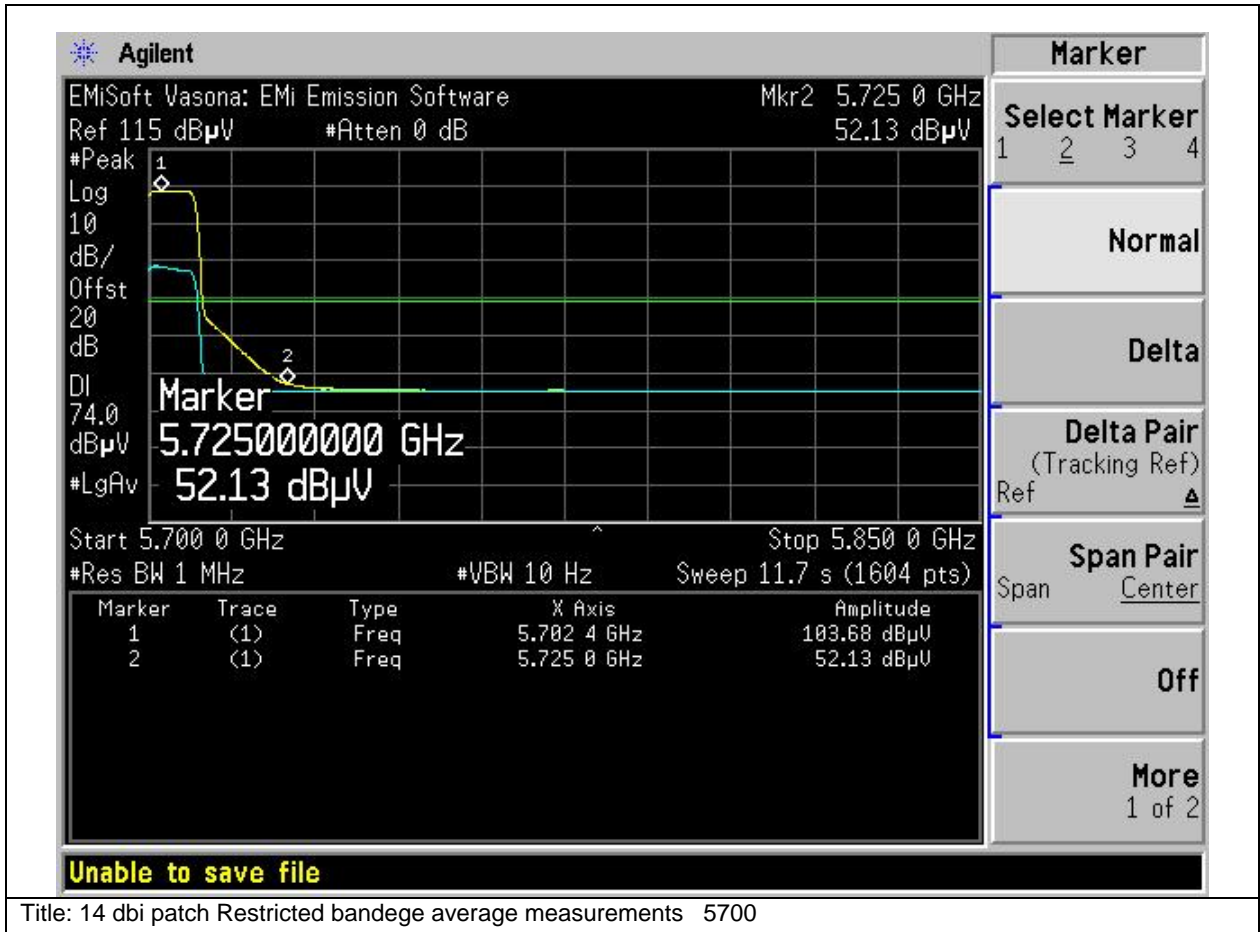


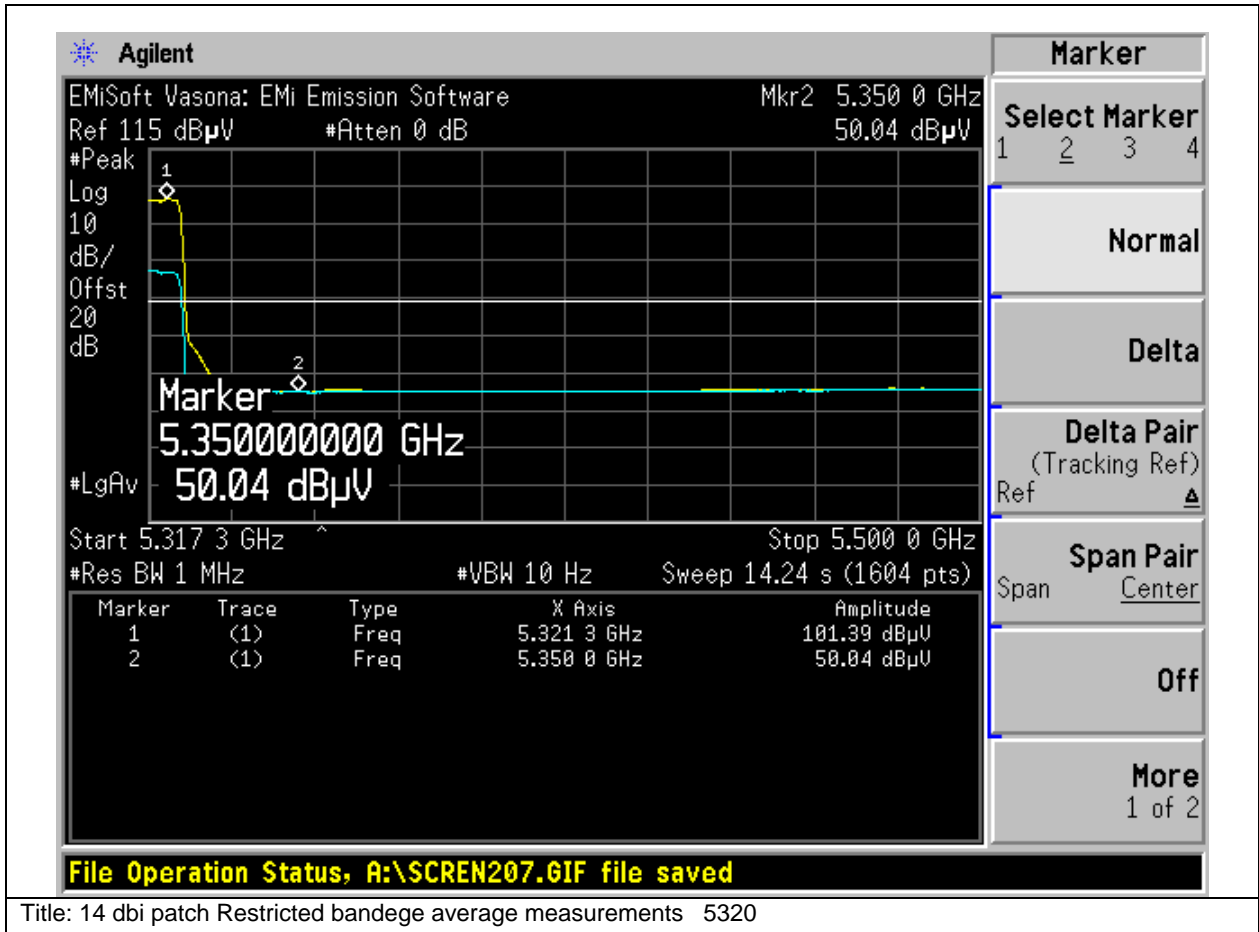
Subtest Number: 30418 - 2		Subtest Date: 15-Feb-2008	
Engineer	Donald Foster		
Lab Information	Building P, 10m Anechoic		
Subtest Results			
Subtest Title	N/A		
Subtest Result	Pass		
Highest Frequency	N/A		
Lowest Frequency	N/A		
Comments on the above Test Results	No further comments		

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



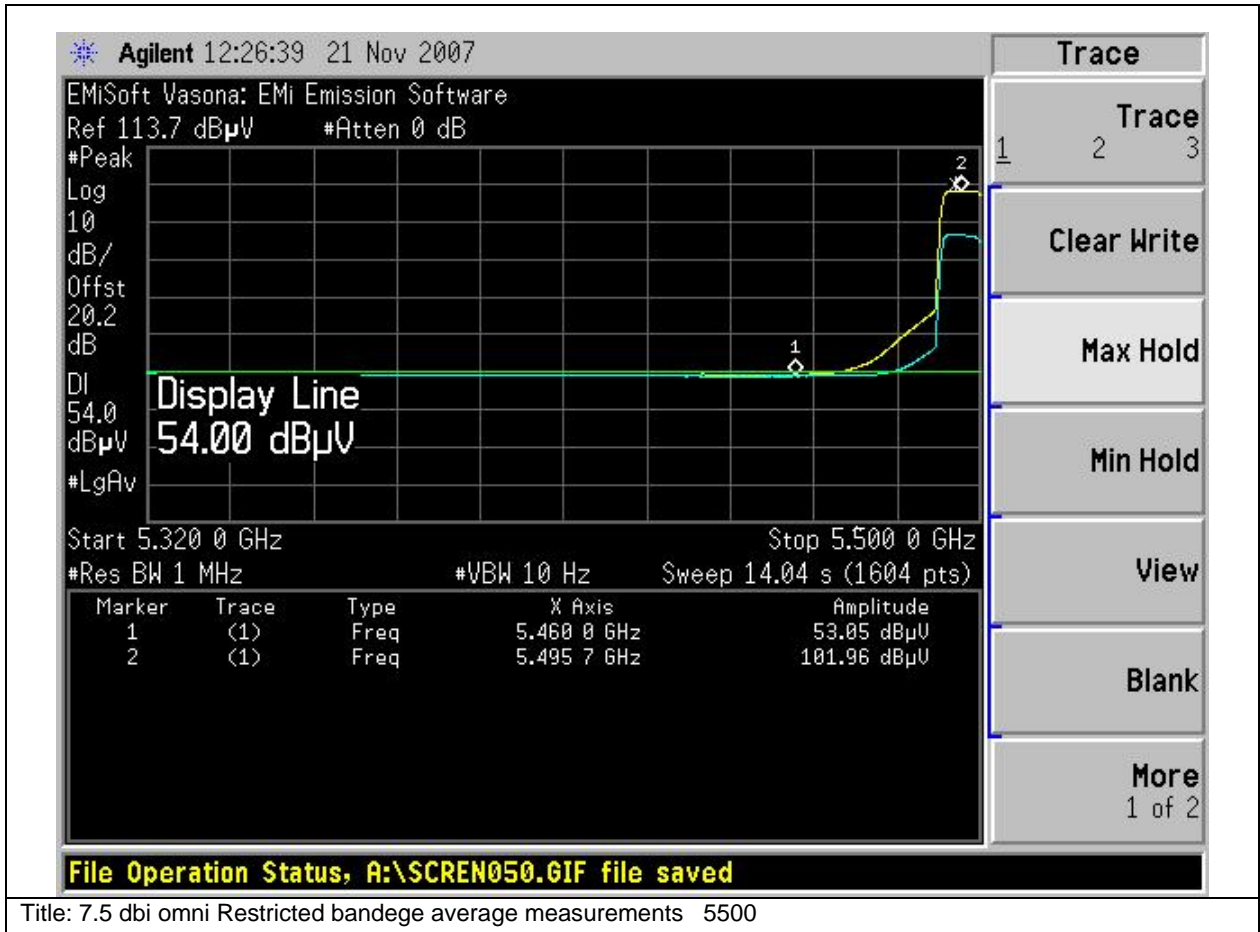


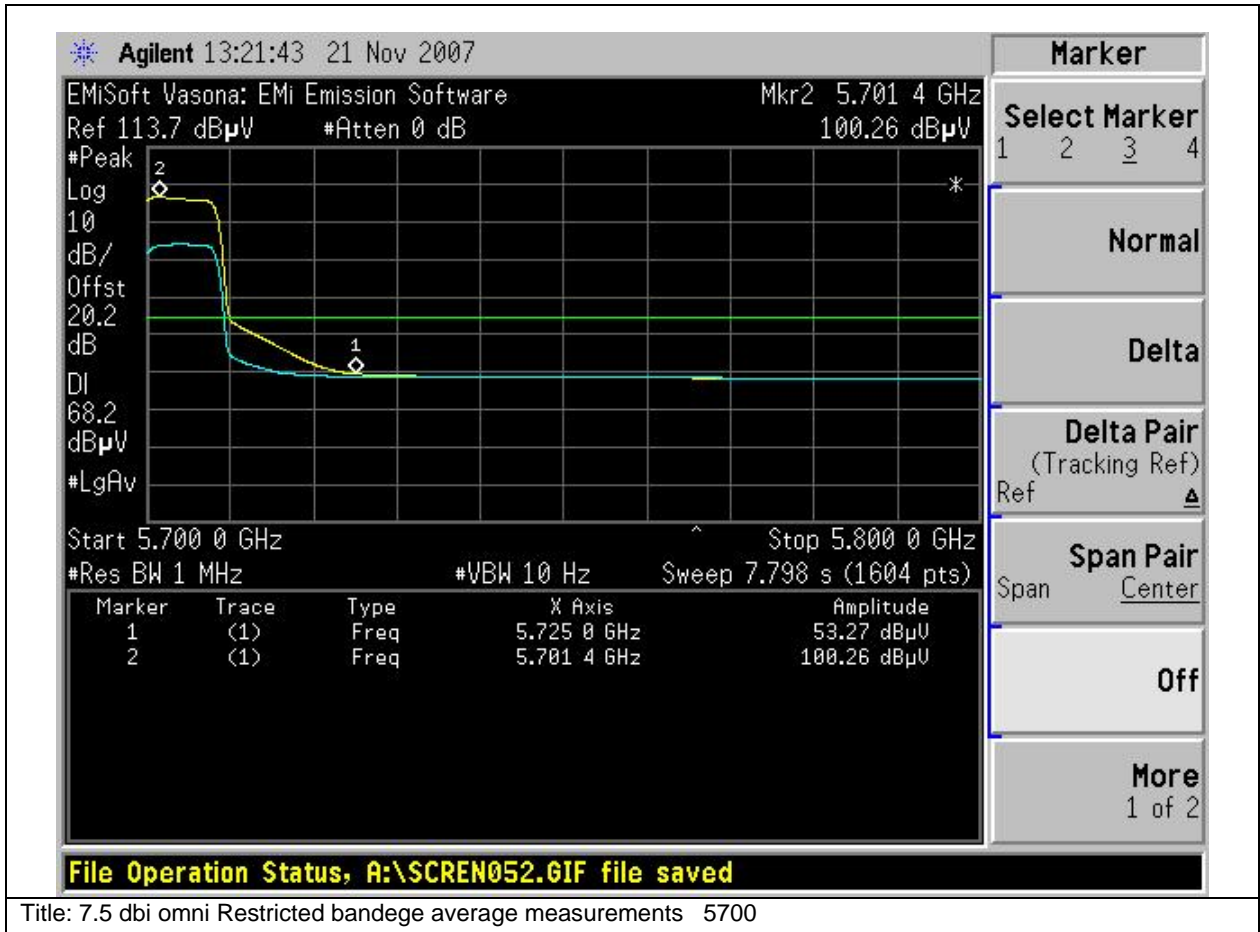


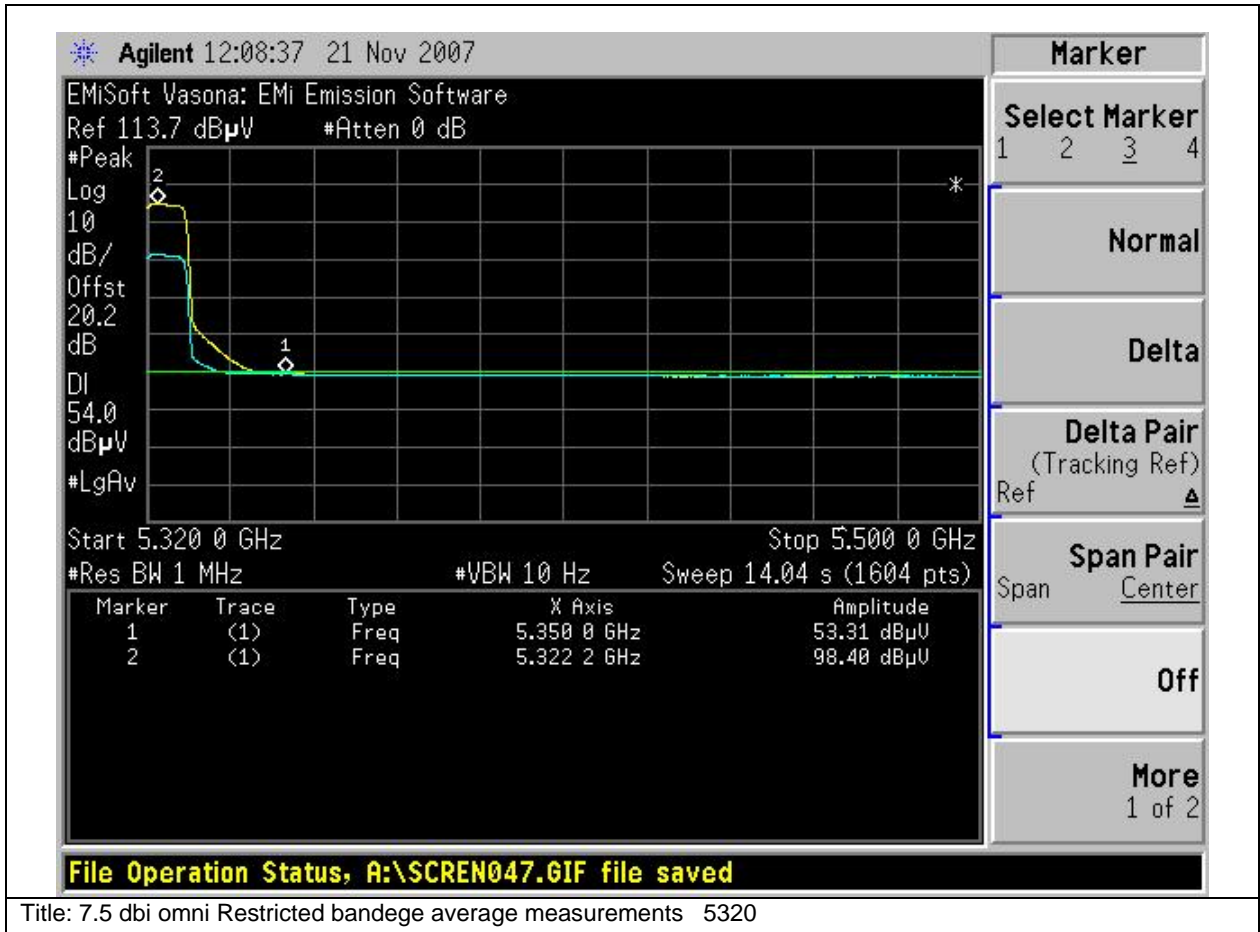
Subtest Number: 30418 - 3		Subtest Date: 15-Feb-2008	
Engineer	Donald Foster		
Lab Information	Building P, 10m Anechoic		
Subtest Results			
Subtest Title	N/A		
Subtest Result	Pass		
Highest Frequency	N/A		
Lowest Frequency	N/A		
Comments on the above Test Results	No further comments		

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



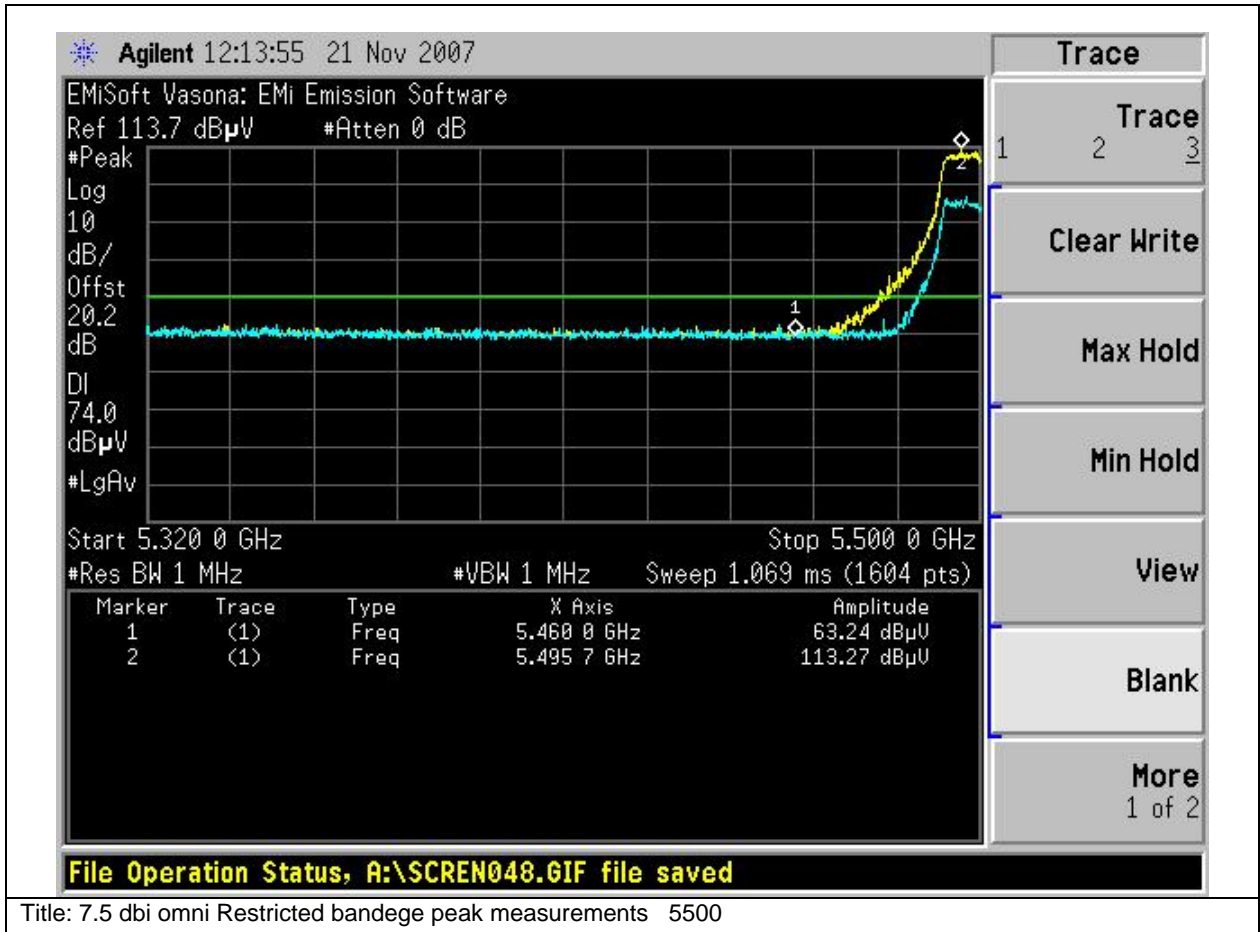


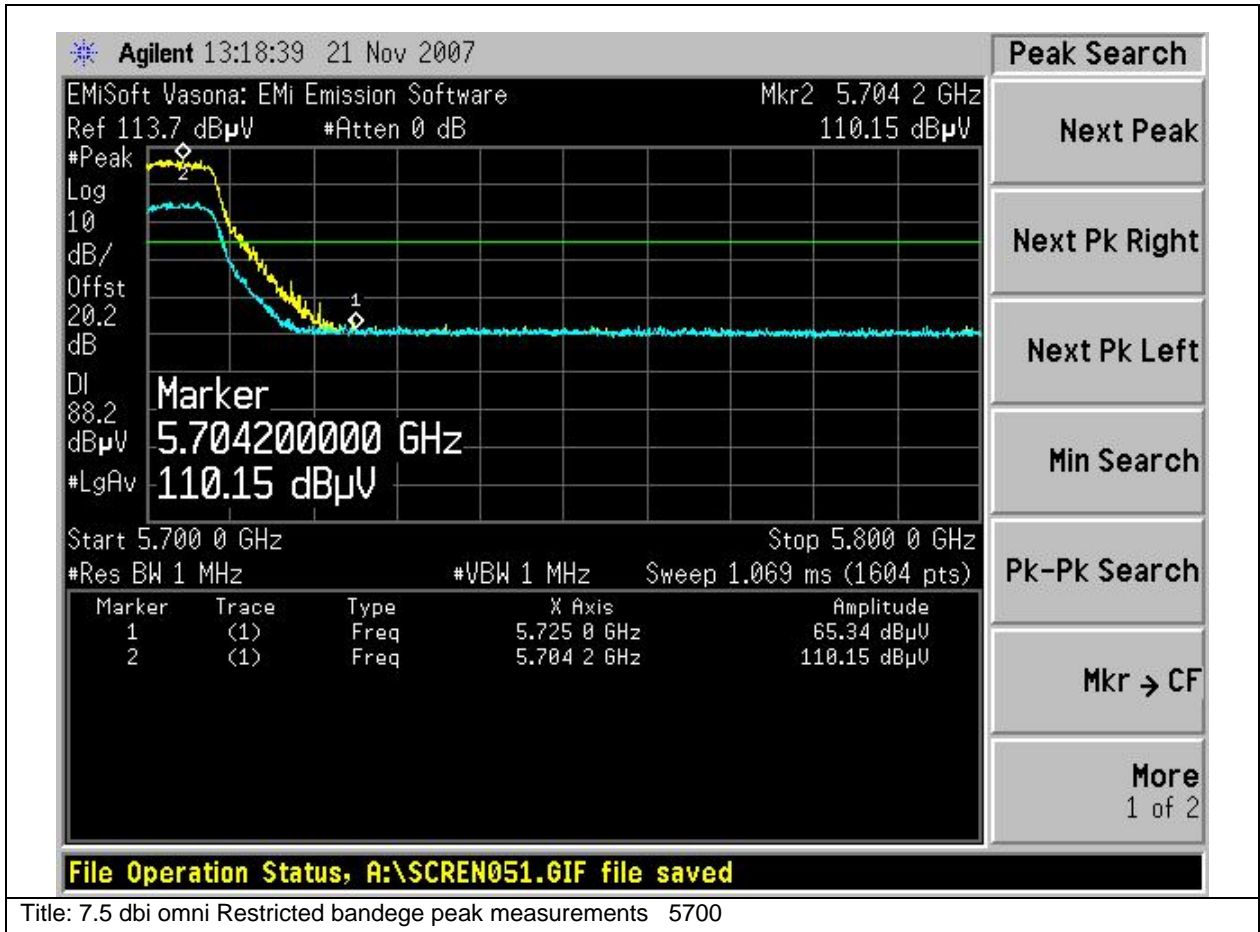


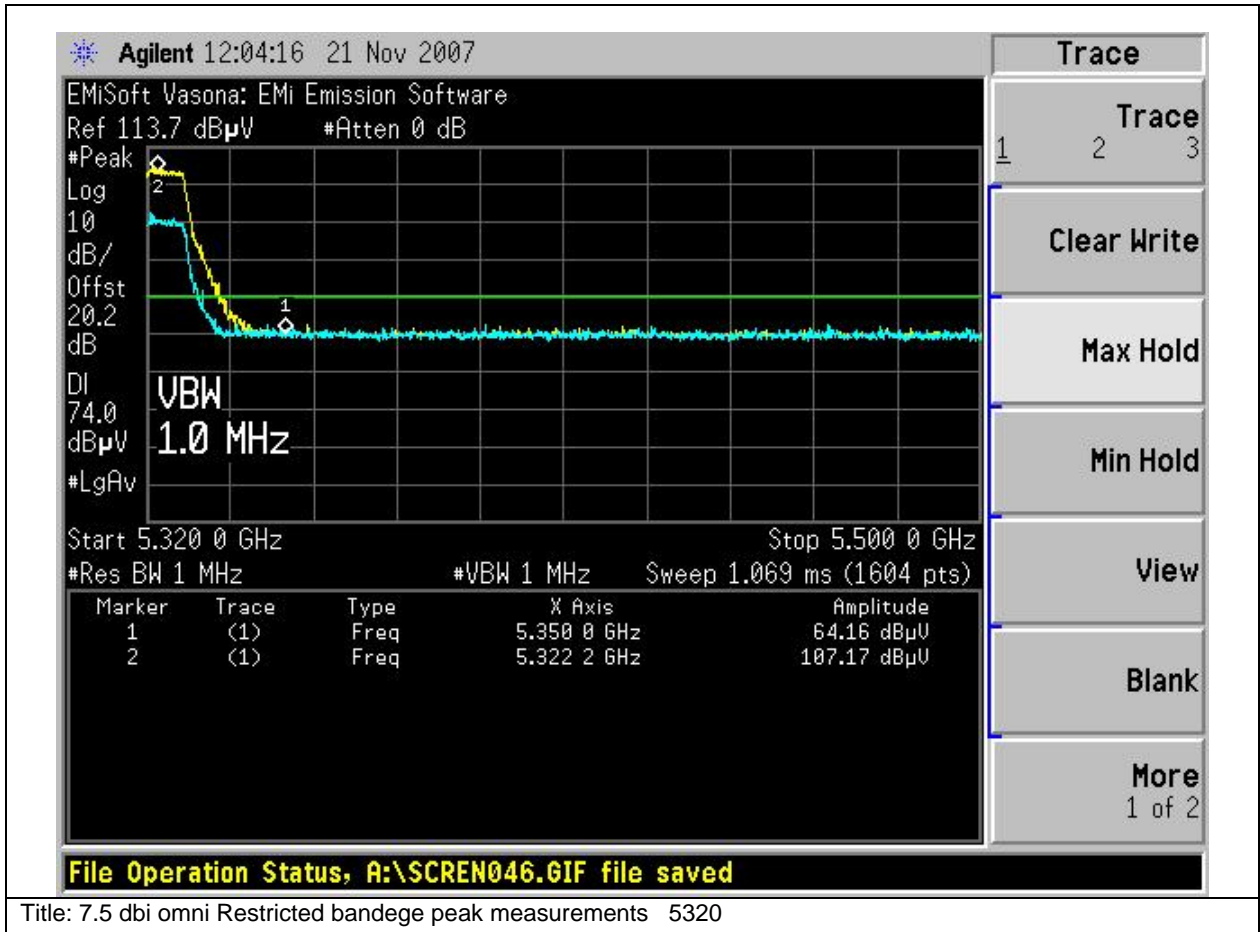
Subtest Number: 30418 - 4		Subtest Date: 15-Feb-2008	
Engineer	Donald Foster		
Lab Information	Building P, 10m Anechoic		
Subtest Results			
Subtest Title	N/A		
Subtest Result	Pass		
Highest Frequency	N/A		
Lowest Frequency	N/A		
Comments on the above Test Results	No further comments		

Graphical Test Results

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements







Physical Test arrangement Photograph:



Title: Restricted Bandedge test setup

Comments on the above Photograph:

No further comments



Title: Restricted Bandedge test setup

Comments on the above Photograph:

No further comments



Title: Restricted Bandedge test setup

Comments on the above Photograph:

No further comments



Title: Restricted Bandedge test setup

Comments on the above Photograph:

No further comments