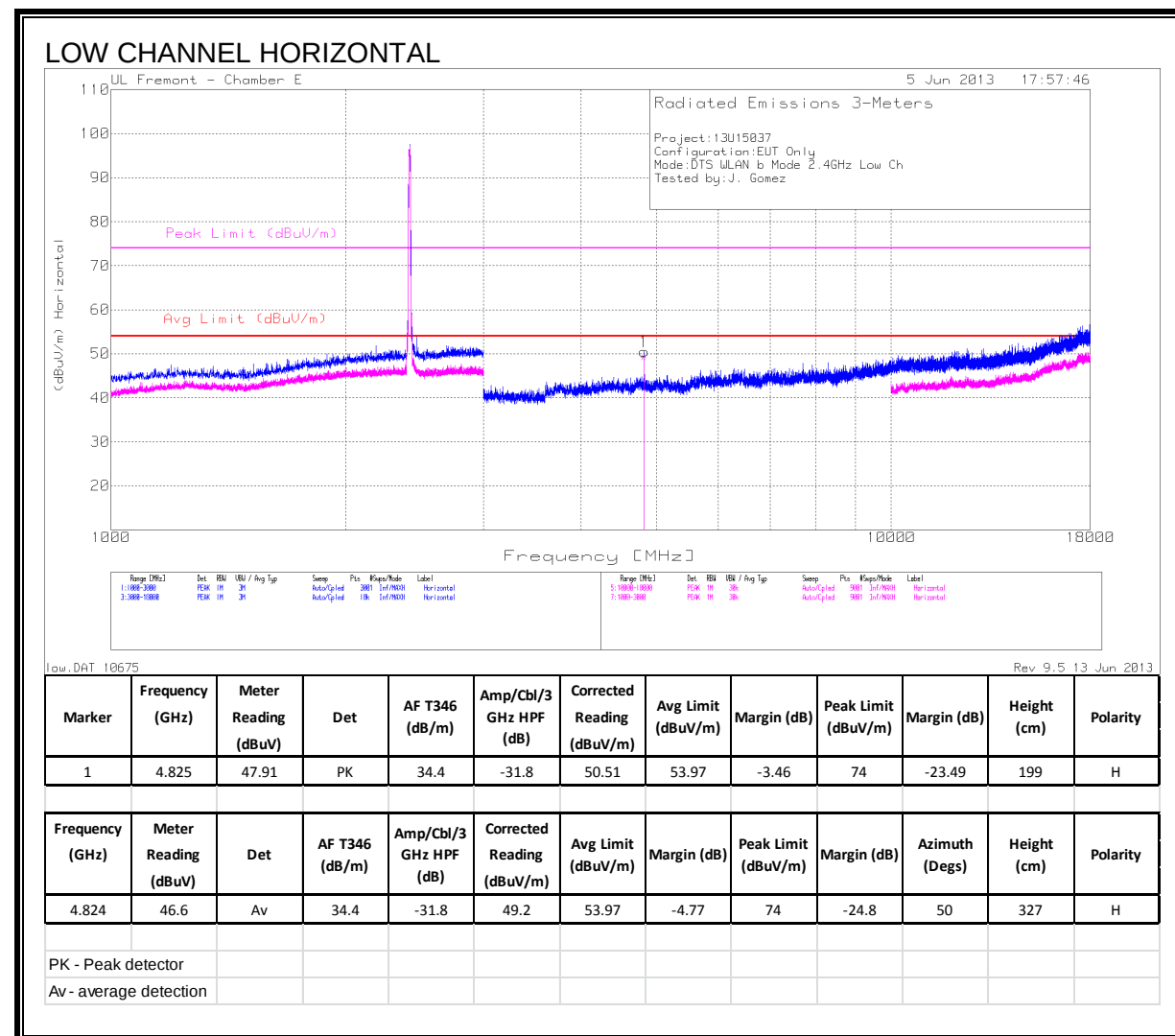
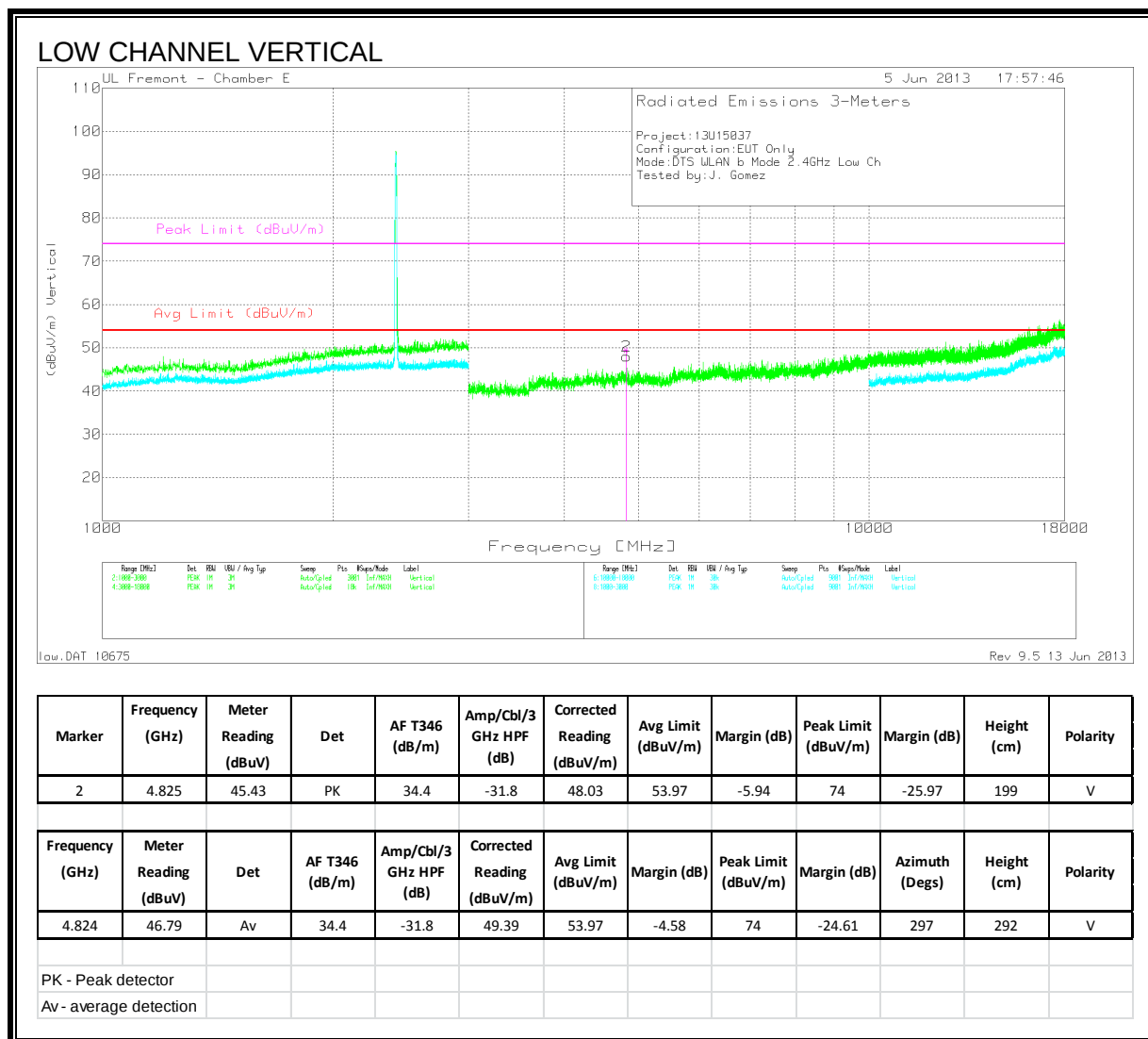
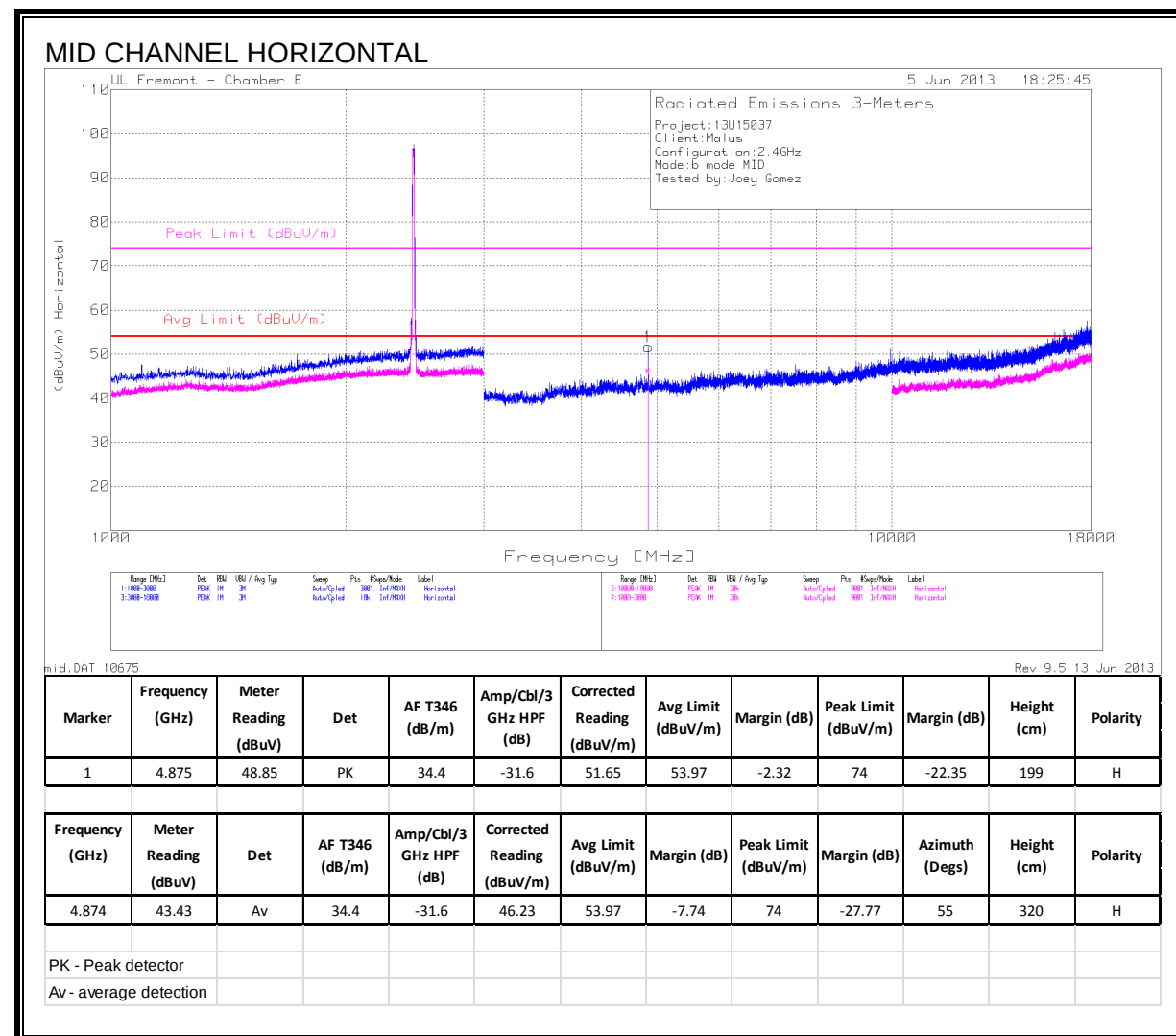
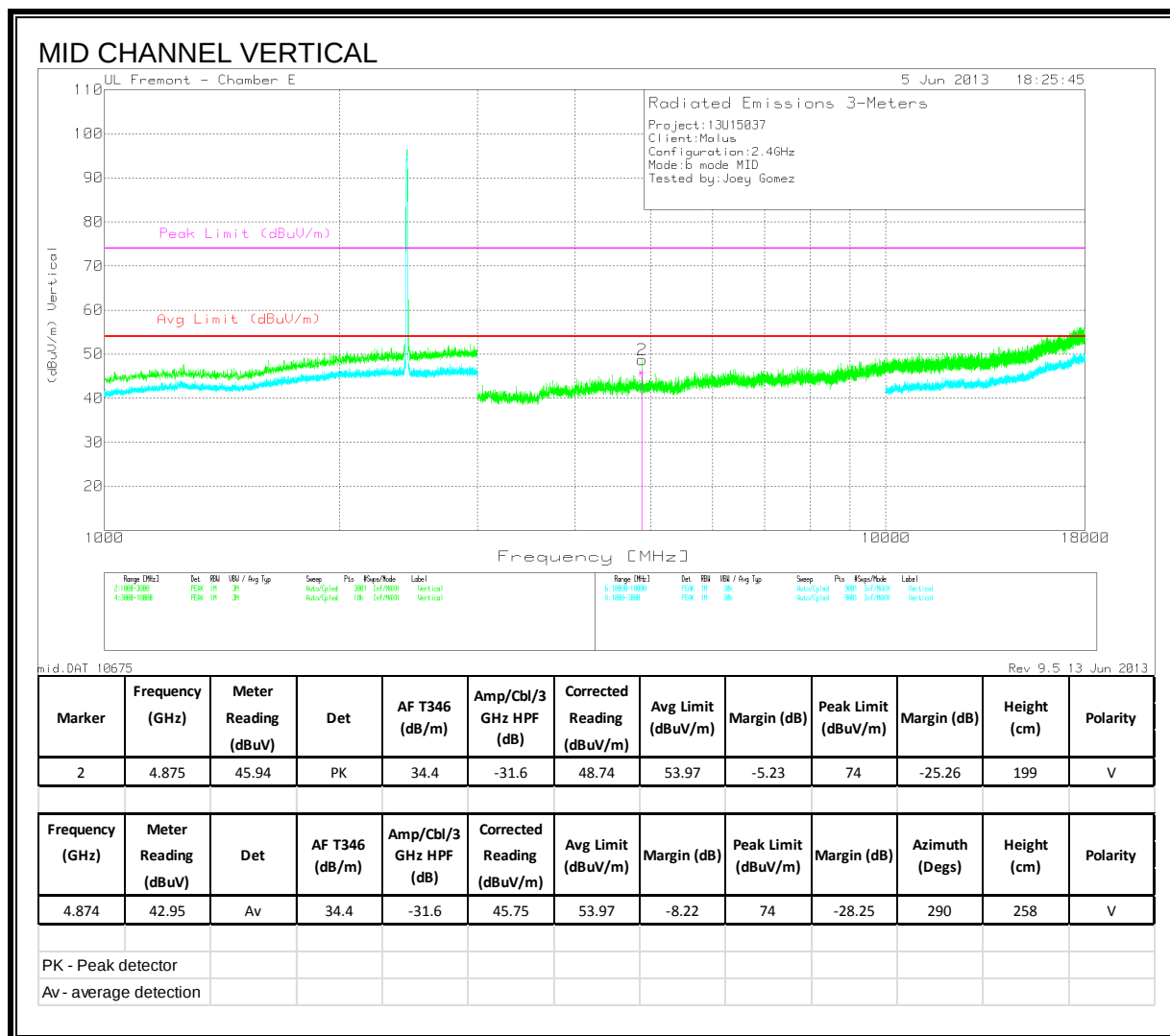


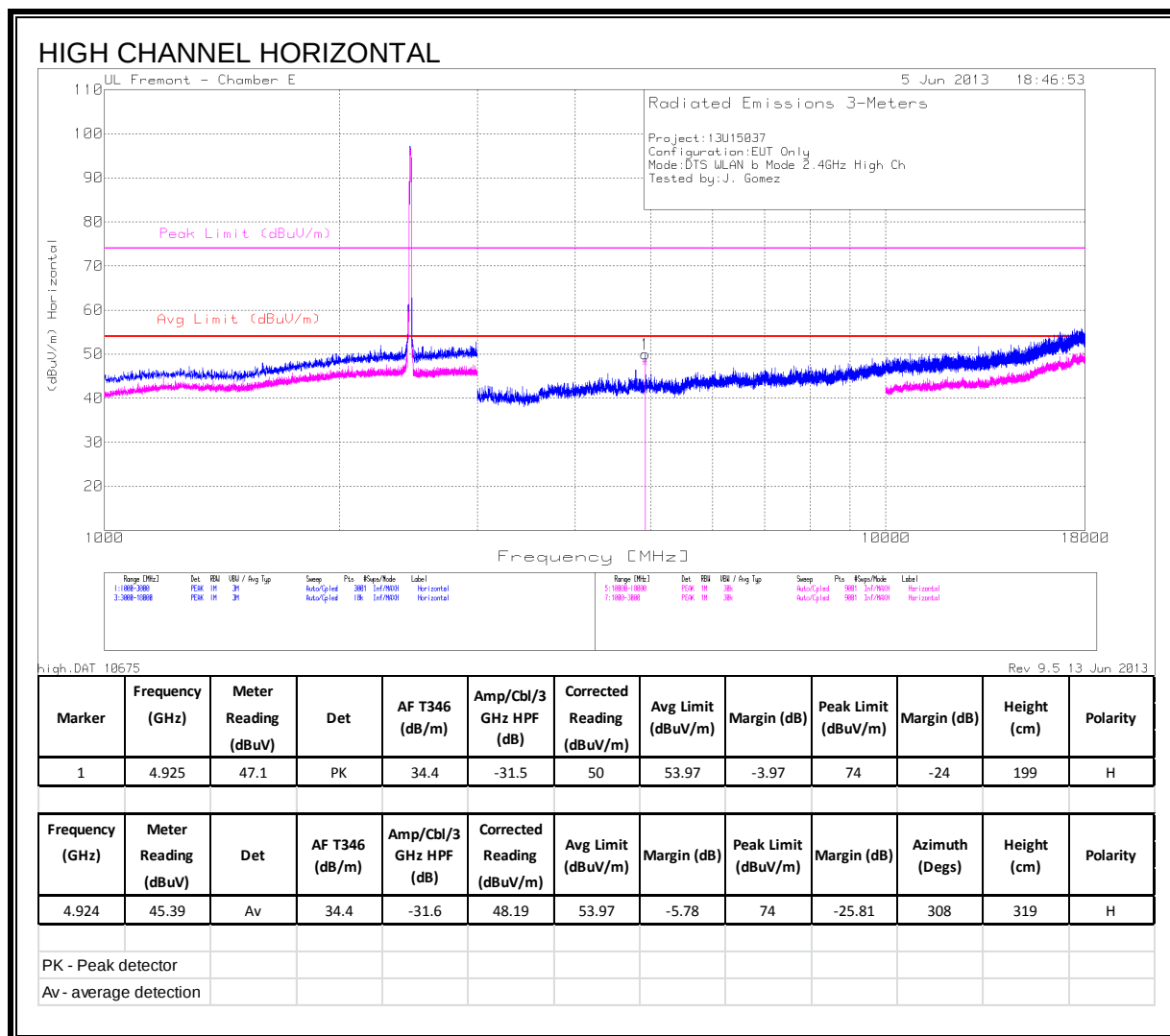
HARMONICS AND SPURIOUS EMISSIONS

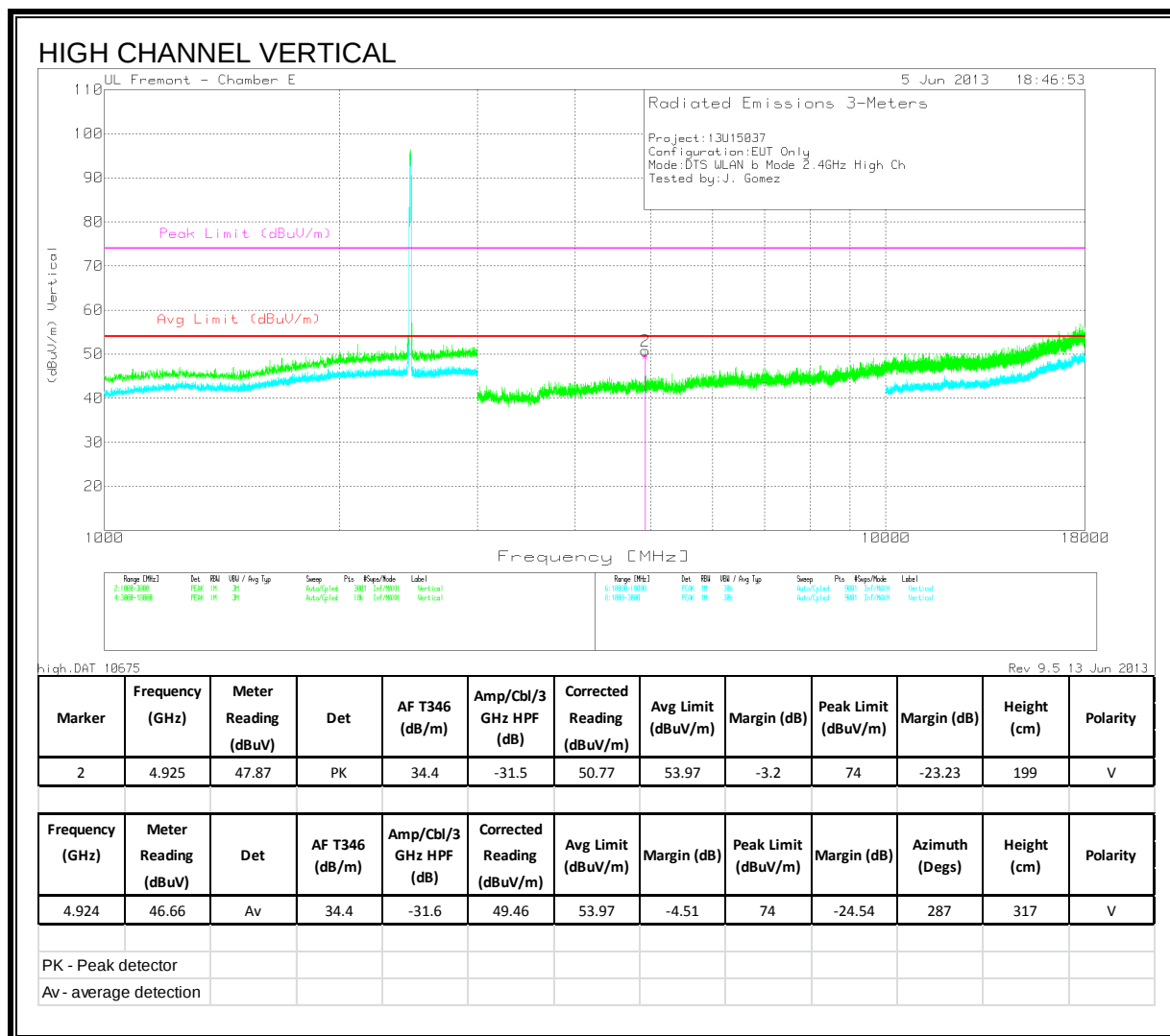






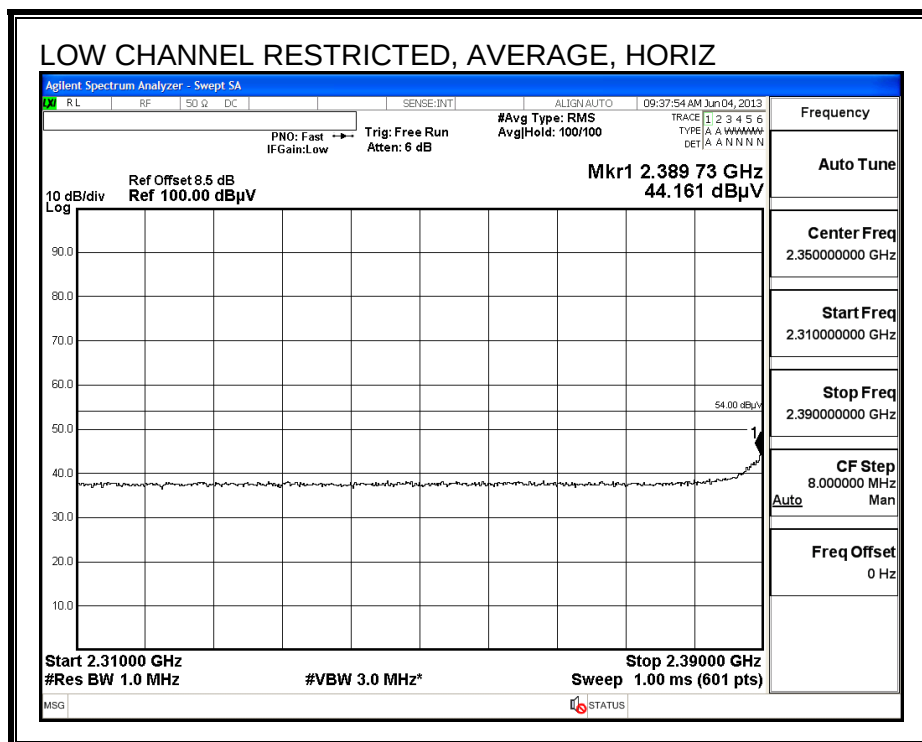
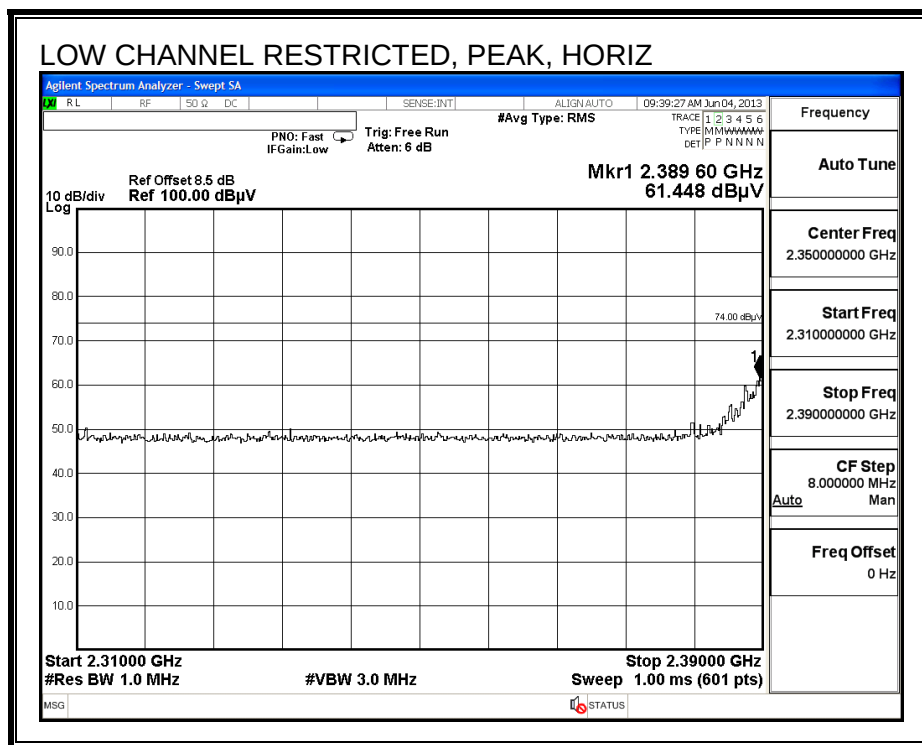


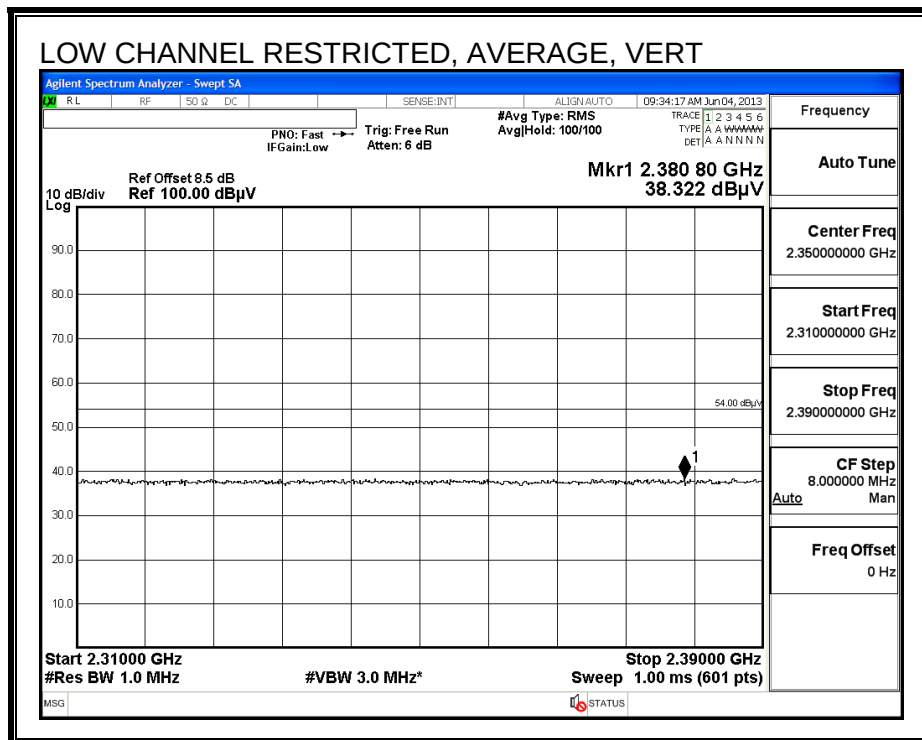
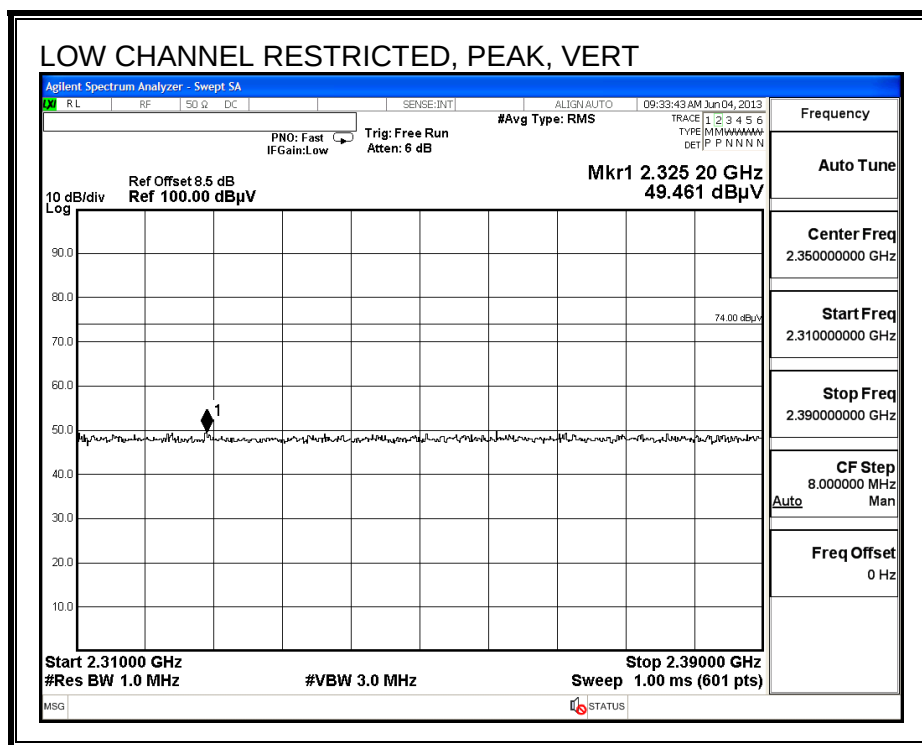




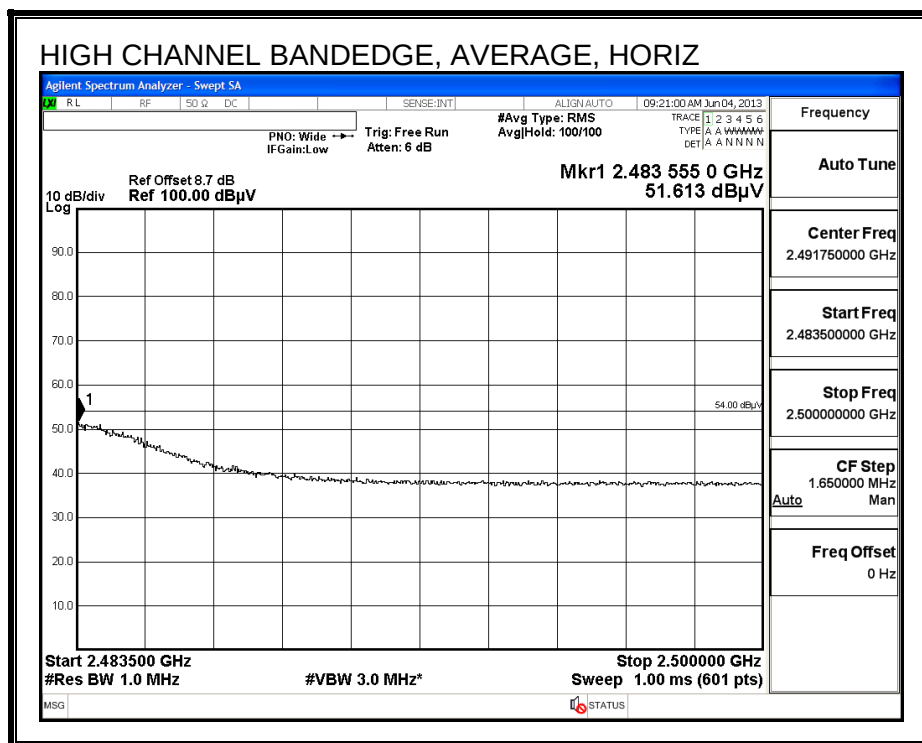
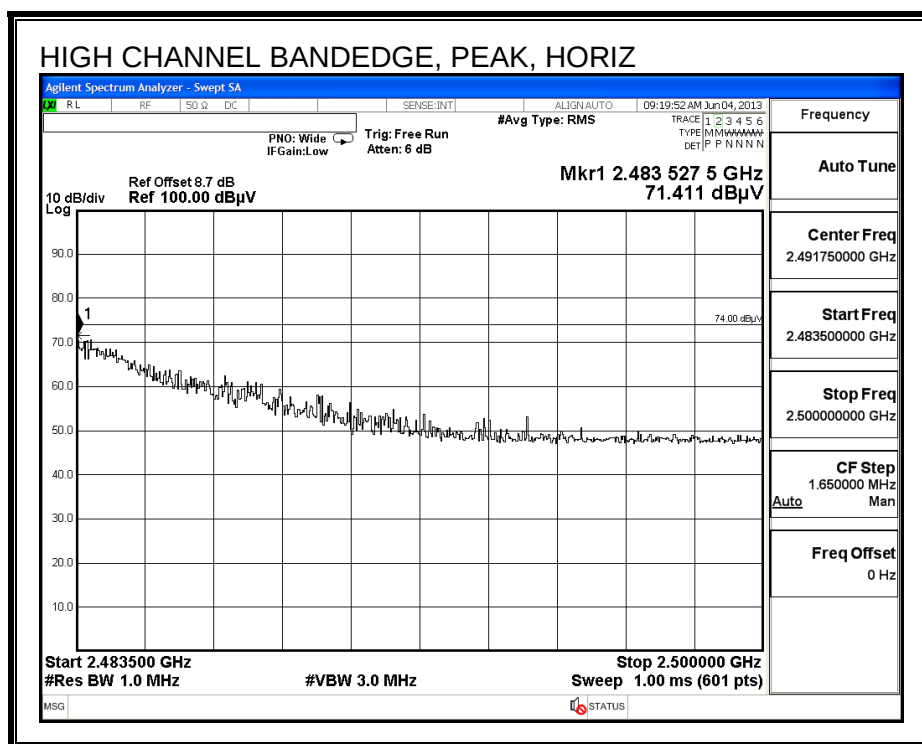
8.4. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

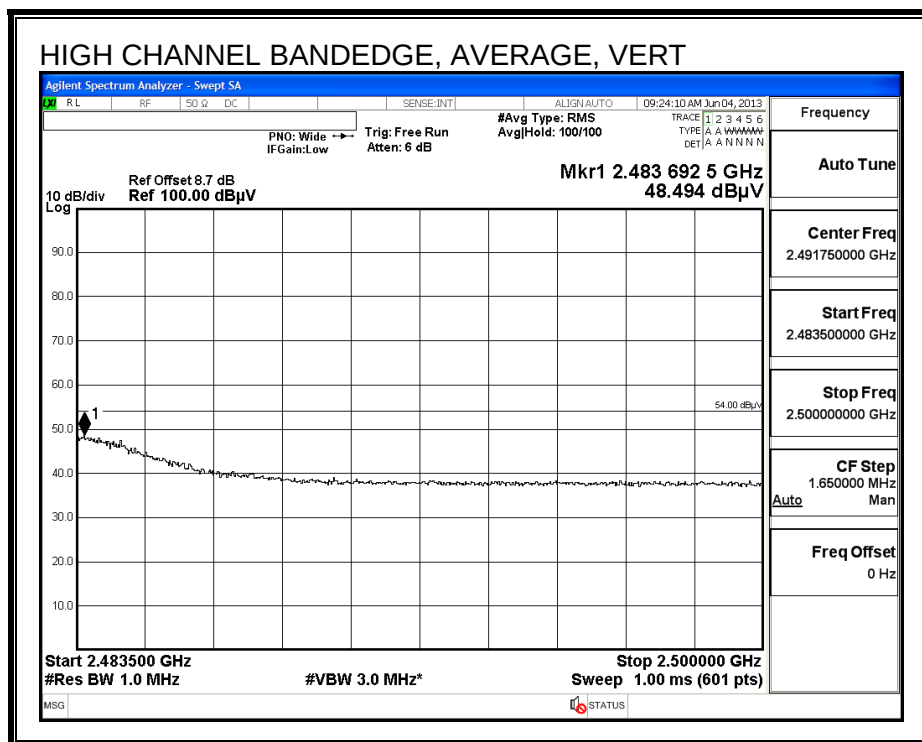
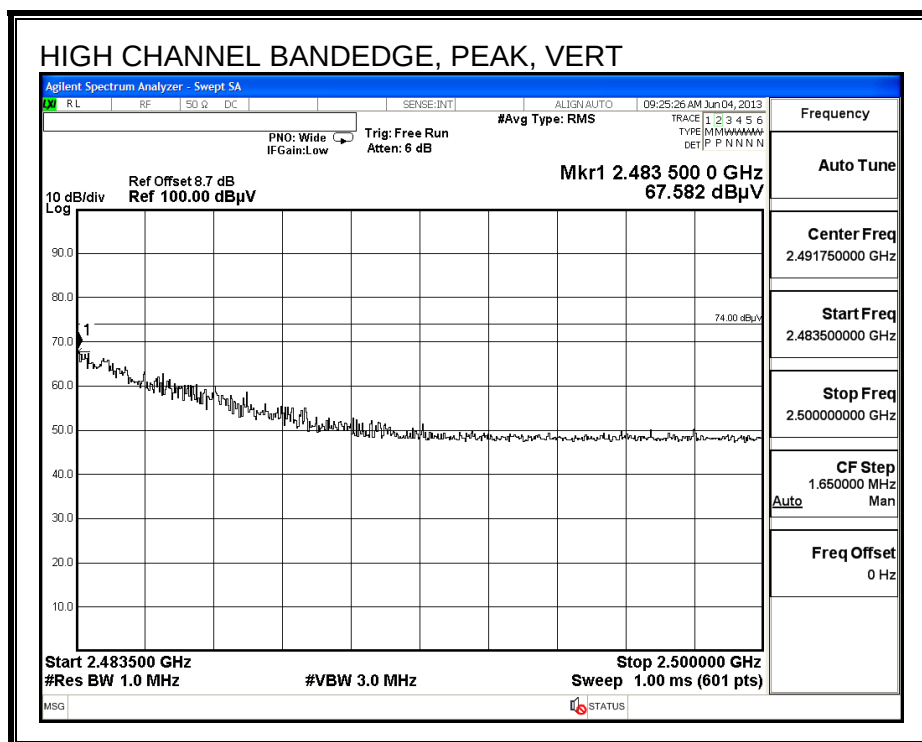
RESTRICTED BANDEDGE (LOW CHANNEL)





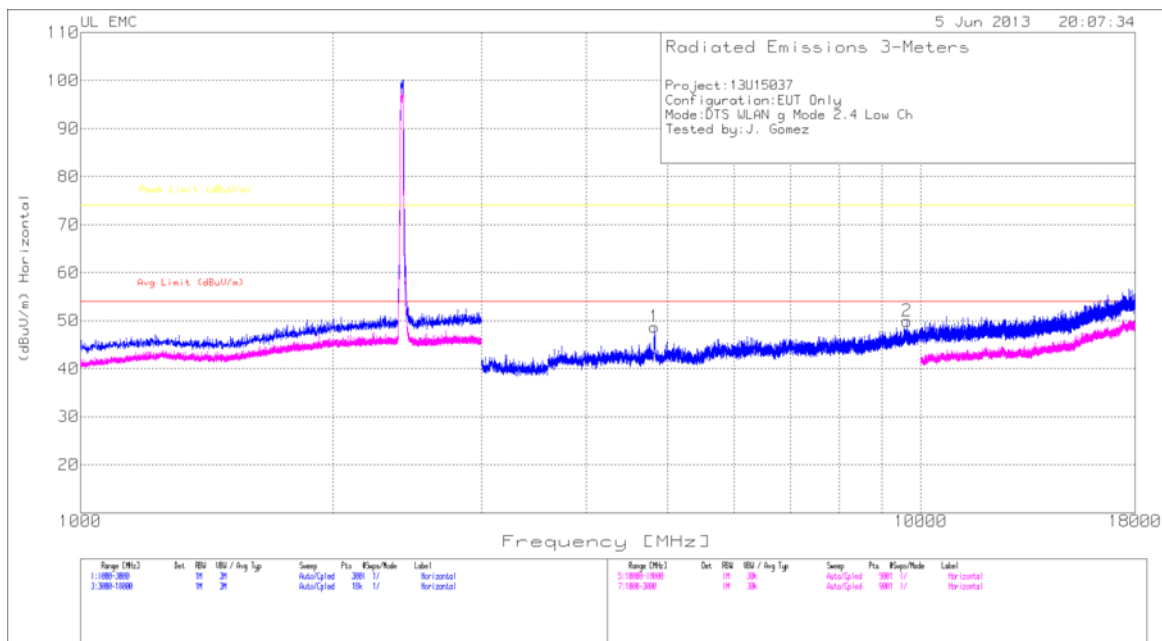
AUTHORIZED BANDEDGE (HIGH CHANNEL)





HARMONICS AND SPURIOUS EMISSIONS

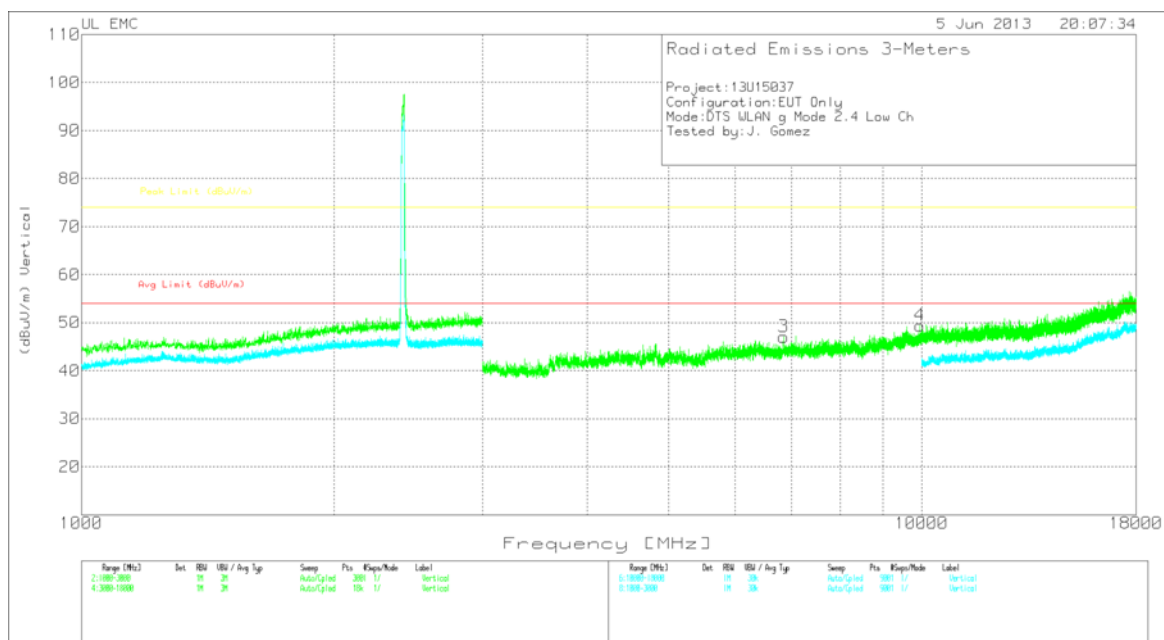
LOW CHANNEL HORIZONTAL



File: A31_MLHN_2.DAT

Horizontal 3000 - 18000MHz												
Marker No.	Test Frequency	Meter Reading (dBuV)	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	4824.899	46.08	PK	34.4	-31.8	48.68	53.97	-5.29	74	-25.32	199	Horz
2	9637.965	37.61	PK	37.6	-25.3	49.91	53.97	-4.06	74	-24.09	199	Horz
PK - Peak detector												

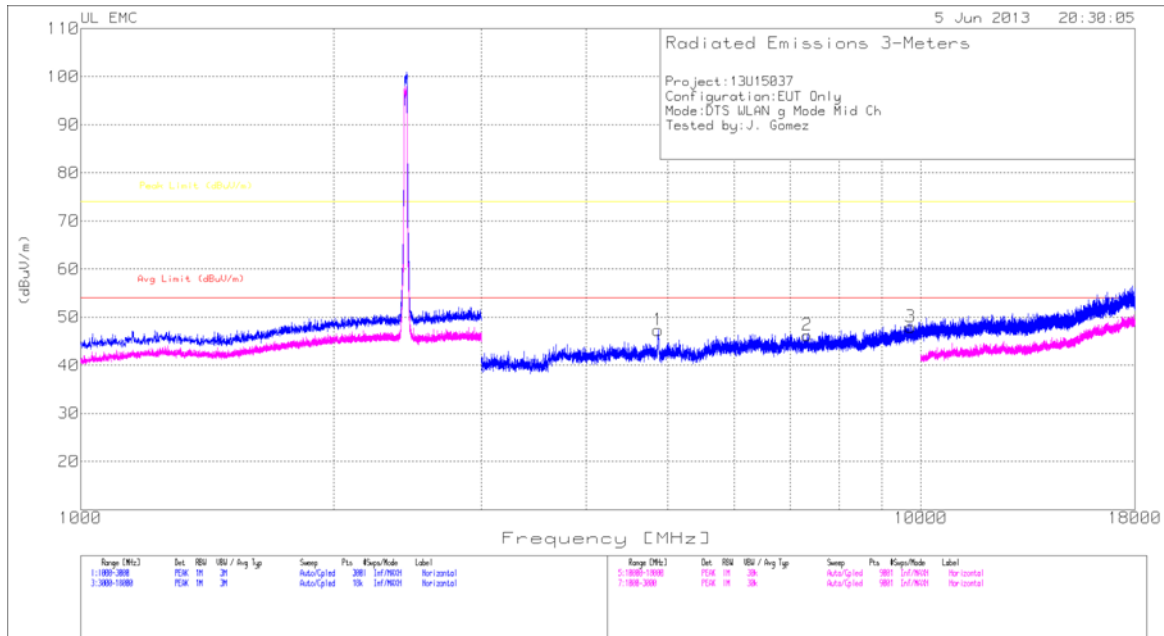
LOW CHANNEL VERTICAL



File: R31 MLAN 2.DAT

Vertical 3000 - 18000MHz												
Marker No.	Test Frequency	Meter Reading(d BuV)	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
3	6854.786	41.45	PK	35.9	-30.3	47.05	53.97	-6.92	74	-26.95	199	Vert
4	9953.78	36.51	PK	38	-25.1	49.41	53.97	-4.56	74	-24.59	199	Vert
PK - Peak detector												

MID CHANNEL HORIZONTAL

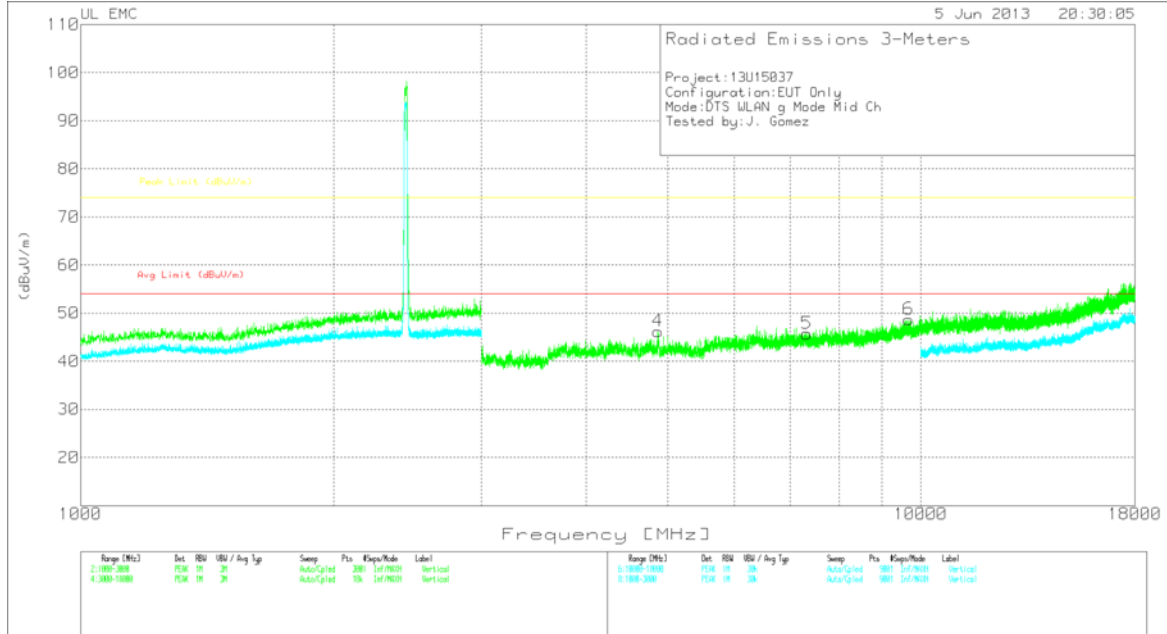


mid.DAT 10675

Rev 9.5 13 Jun

Horizontal 3000 - 18000MHz												
Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
1	4870.729	44.61	PK	34.4	-31.7	47.31	53.97	-6.66	74	-26.69	199	Horz
2	7328.926	38.5	PK	36	-28.3	46.2	53.97	-7.77	74	-27.8	199	Horz
3	9731.293	35.98	PK	37.6	-25.6	47.98	53.97	-5.99	74	-26.02	199	Horz
PK - Peak detector												

MID CHANNEL VERTICAL

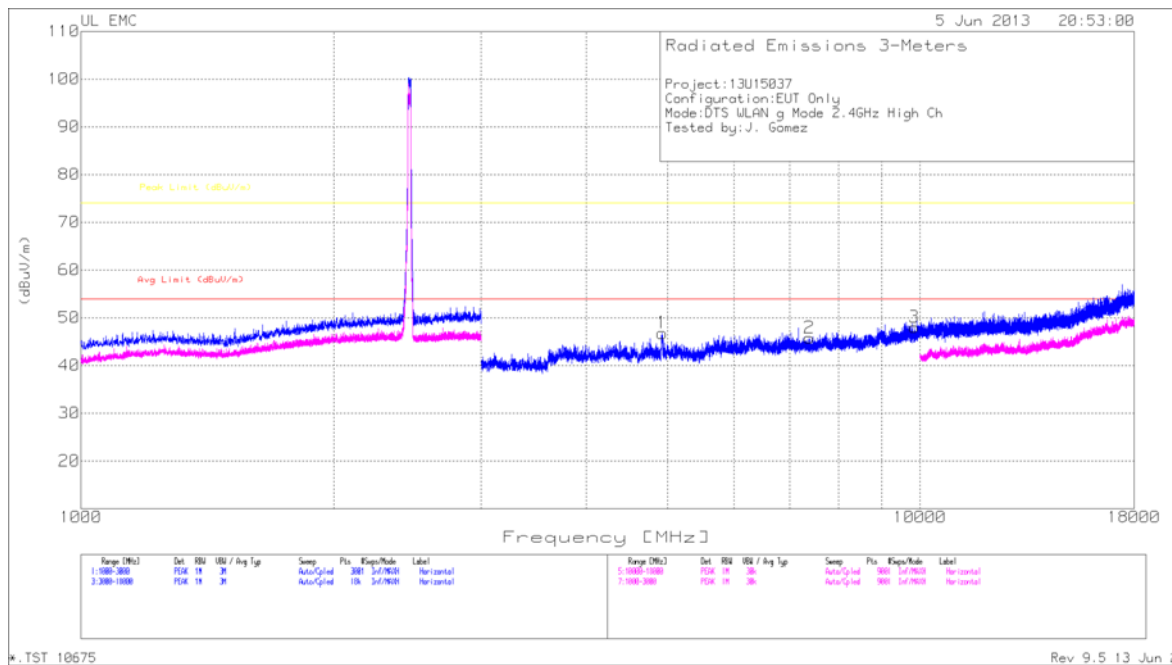


mid.DAT 10675

Rev 9.5 13 Jun

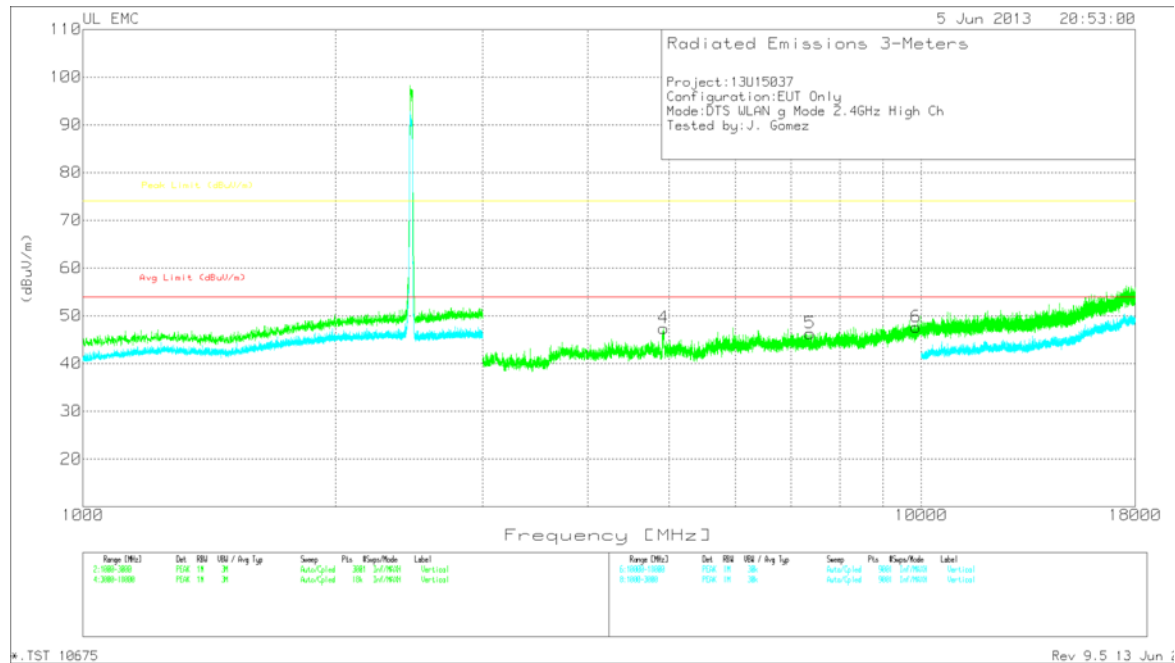
Vertical 3000 - 18000MHz												
Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
4	4867.396	43.61	PK	34.4	-31.8	46.21	53.97	-7.76	74	-27.79	199	Vert
5	7319.76	38.23	PK	36	-28.5	45.73	53.97	-8.24	74	-28.27	199	Vert
6	9682.129	36.31	PK	37.6	-25.2	48.71	53.97	-5.26	74	-25.29	199	Vert
PK - Peak detector												

HIGH CHANNEL HORIZONTAL



Horizontal 3000 - 18000MHz												
Marker No.	Test Frequency	Meter Reading (dBuV)	Detector	AFT346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
1	4824.899	46.08	PK	34.4	-31.8	48.68	53.97	-5.29	74	-25.32	199	Horz
2	7110.605	39.53	PK	36	-29.3	46.23	53.97	-7.74	74	-27.77	199	Horz
3	9637.965	37.61	PK	37.6	-25.3	49.91	53.97	-4.06	74	-24.09	199	Horz
PK - Peak detector												

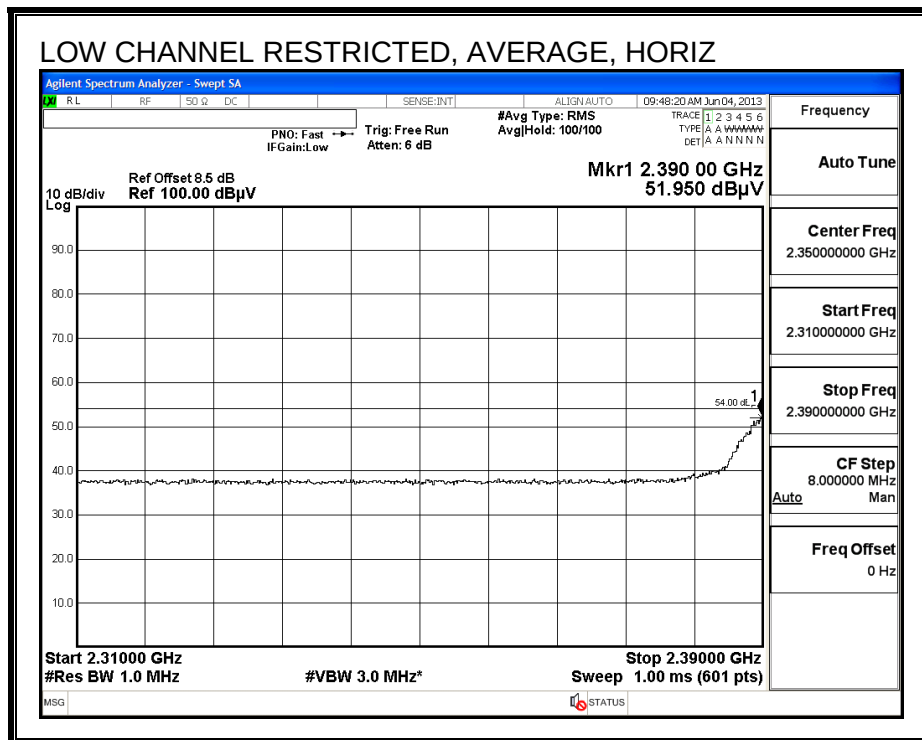
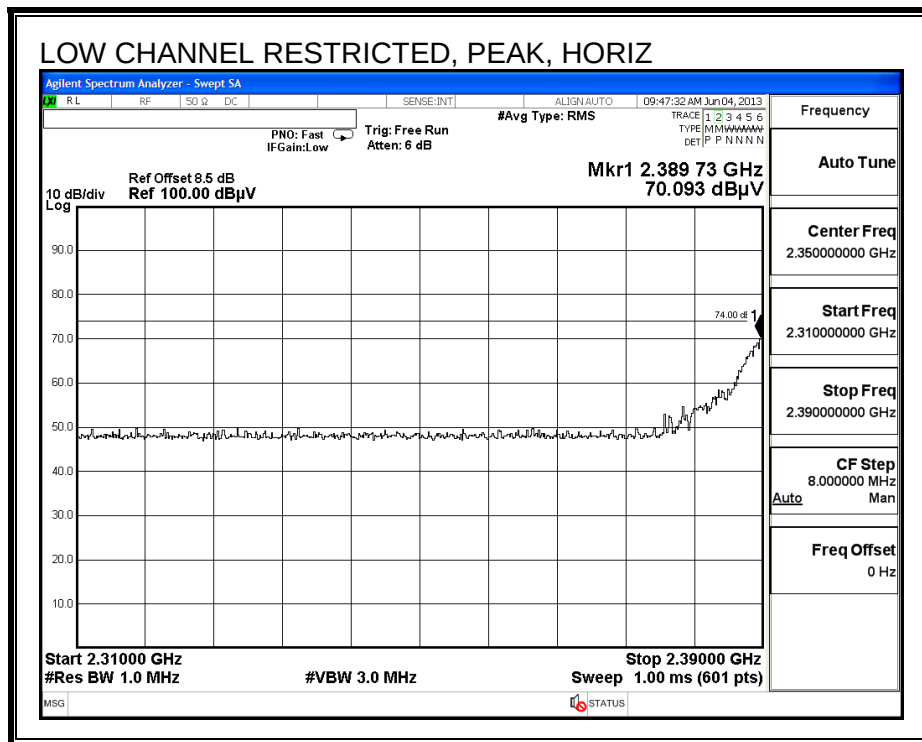
HIGH CHANNEL VERTICAL

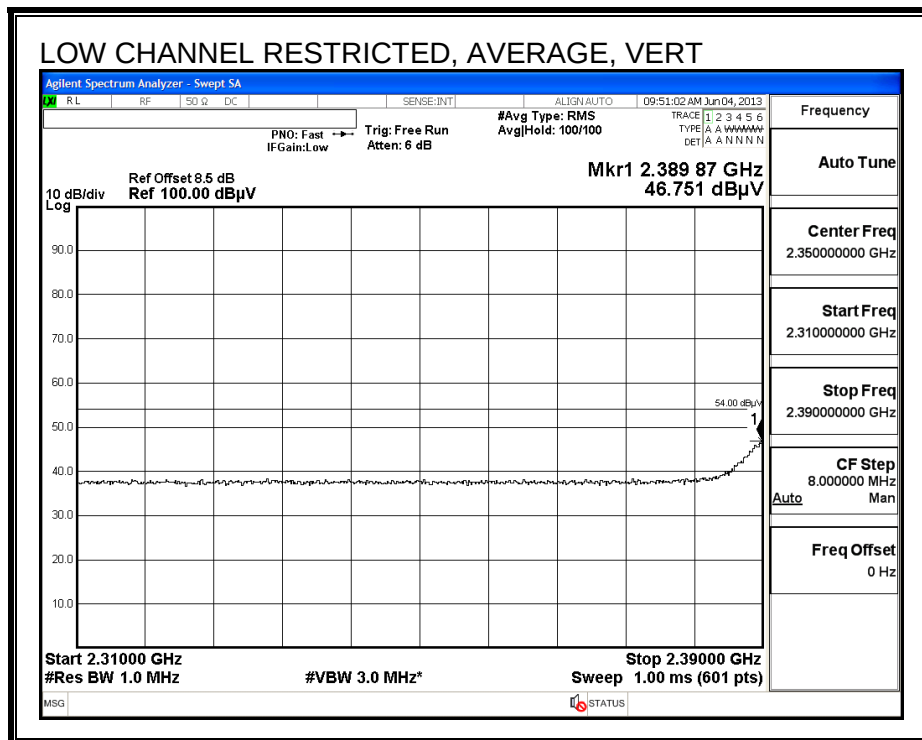
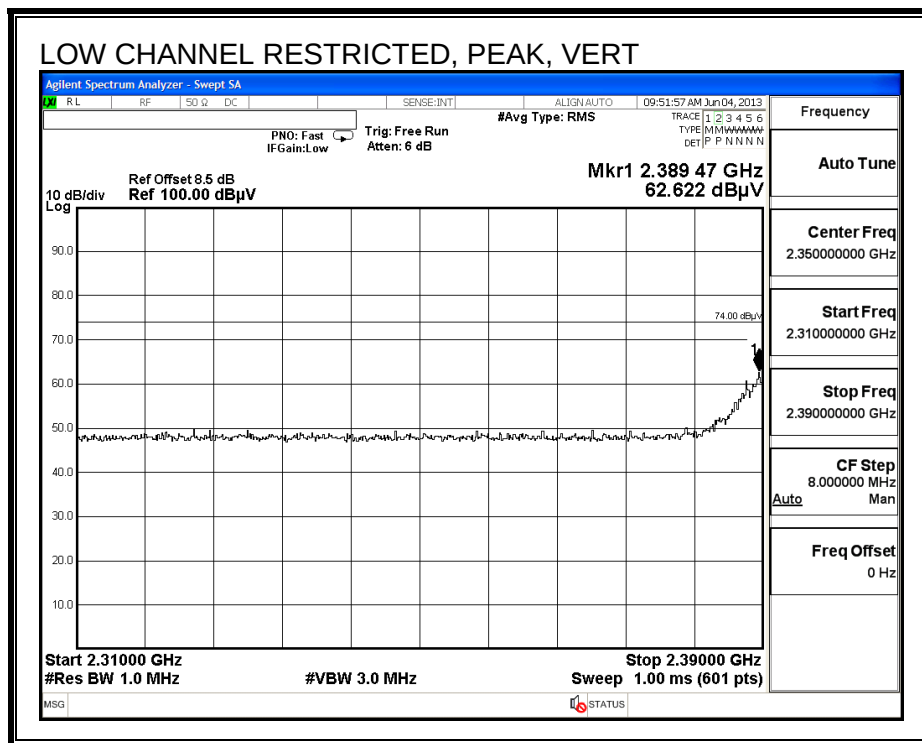


Vertical 3000 - 18000MHz												
Marker No.	Test Frequency	Meter Reading(d BuV)	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
4	4826.565	42.96	PK	34.4	-31.7	45.66	53.97	-8.31	74	-28.34	199	Vert
5	7081.44	40.08	PK	36	-28.9	47.18	53.97	-6.79	74	-26.82	199	Vert
6	9953.78	36.51	PK	38	-25.1	49.41	53.97	-4.56	74	-24.59	199	Vert
PK - Peak detector												

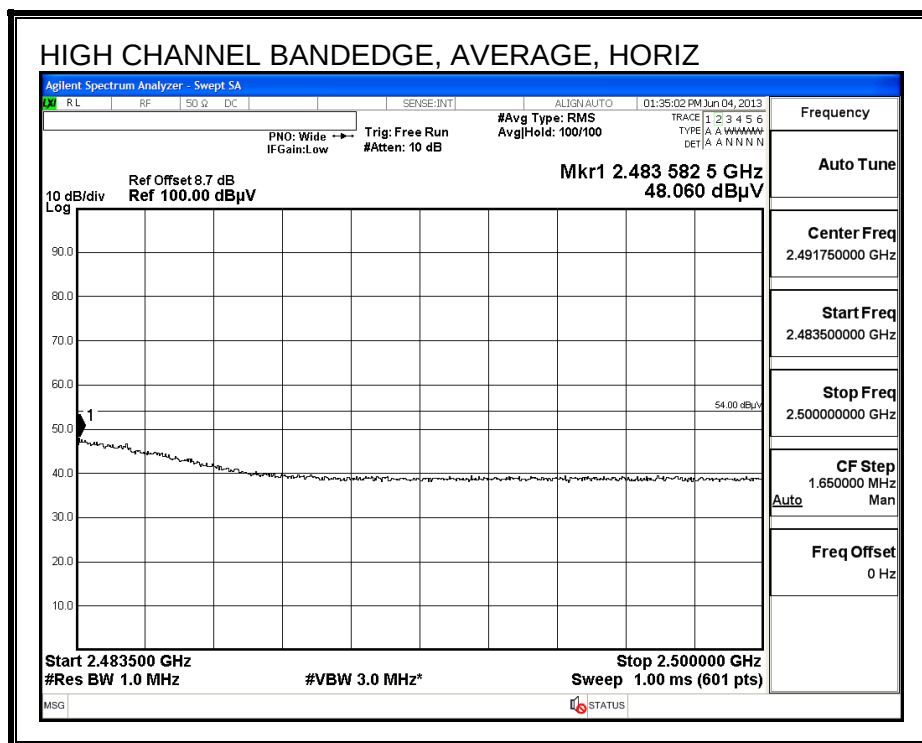
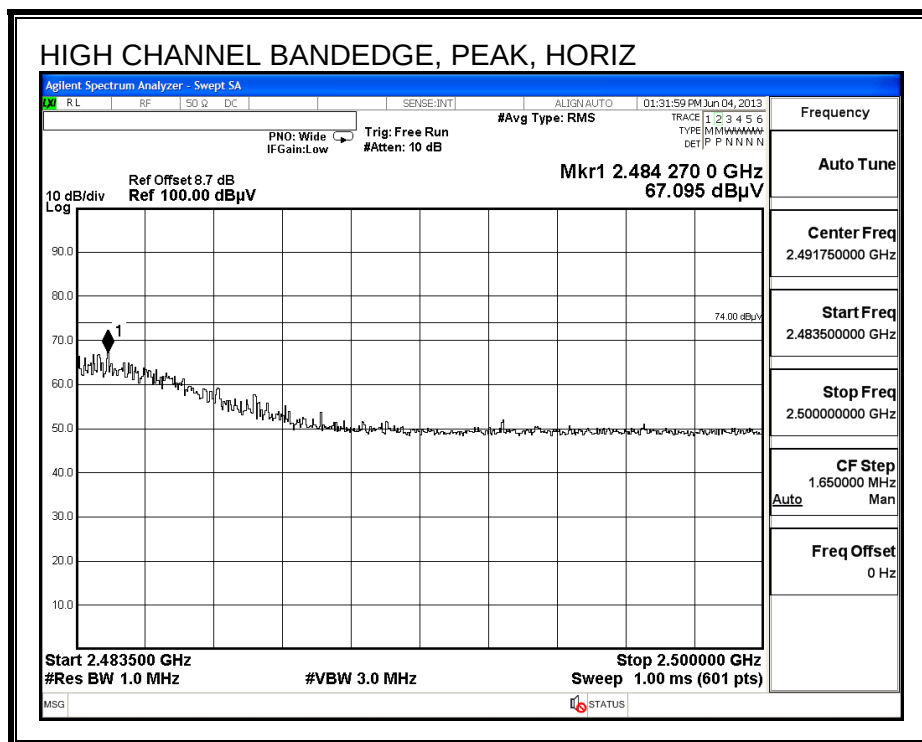
8.5. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

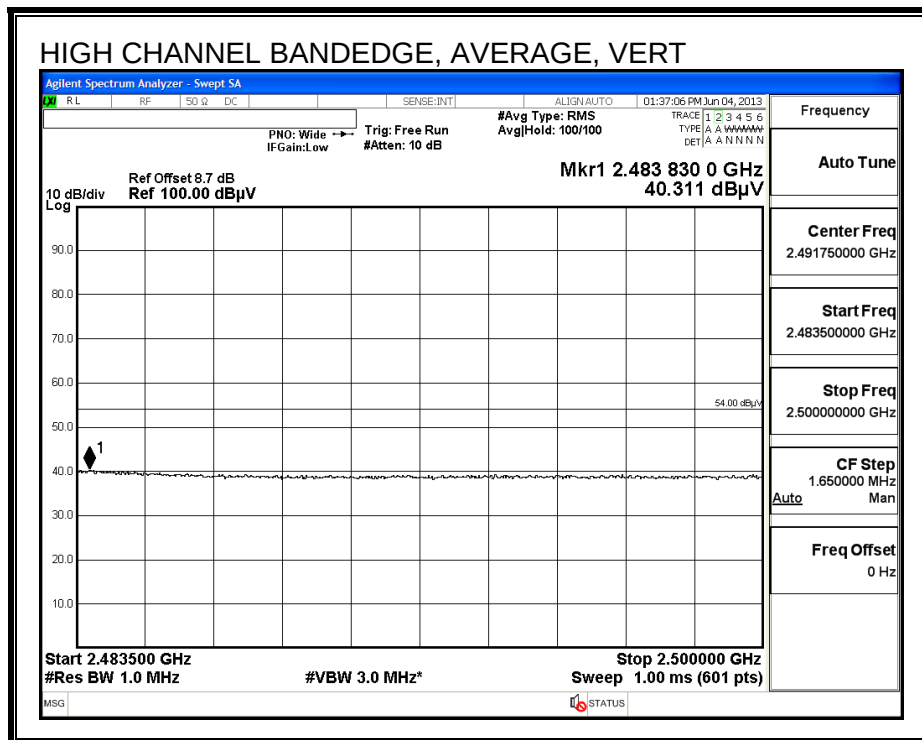
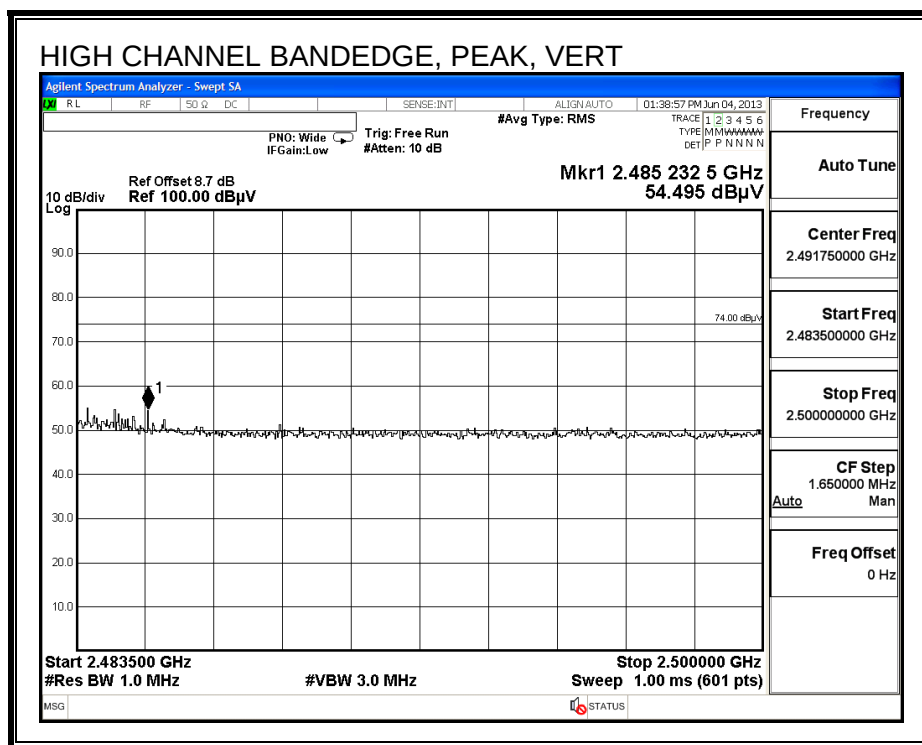
RESTRICTED BANDEDGE (LOW CHANNEL)



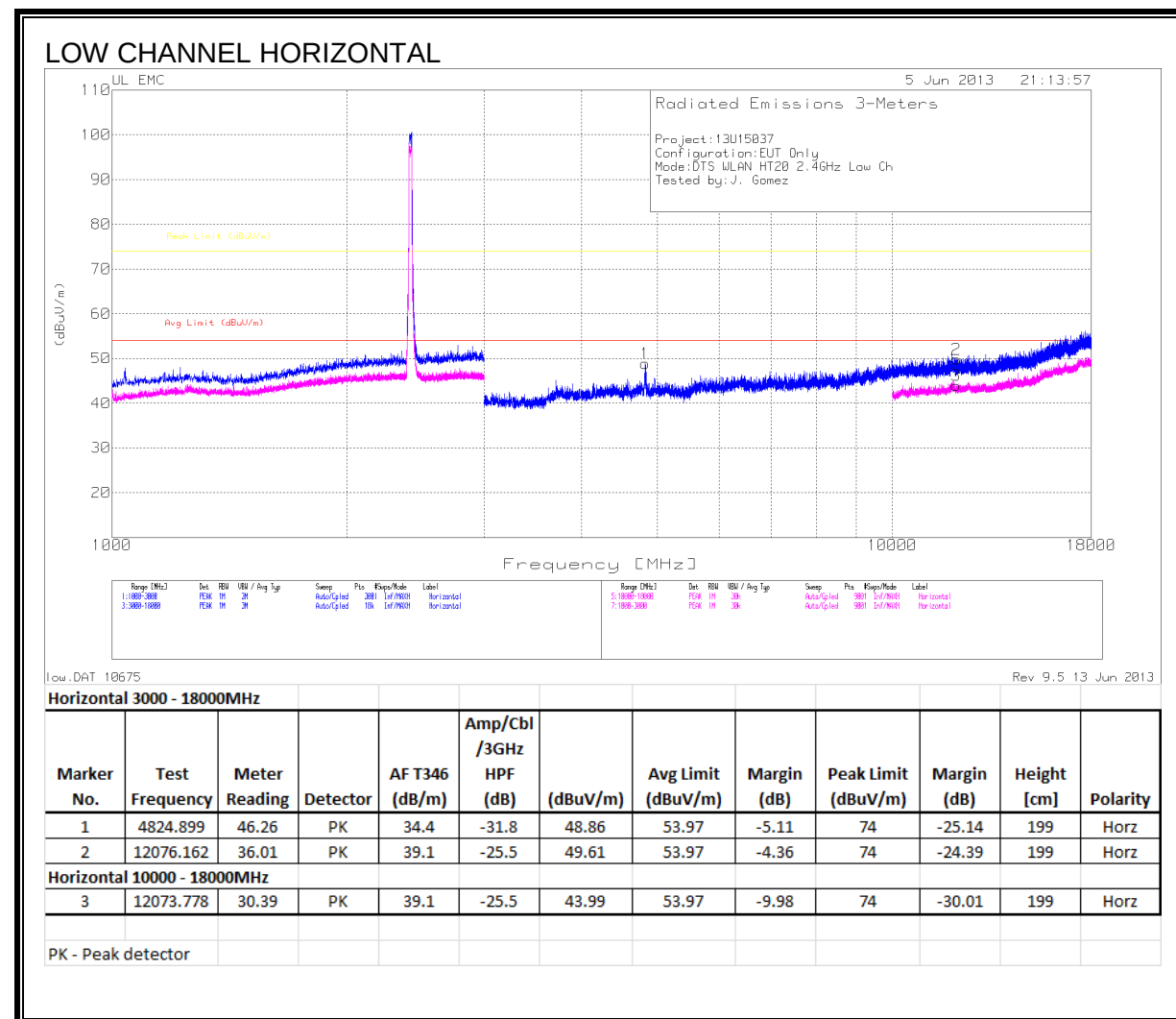


AUTHORIZED BANDEDGE (HIGH CHANNEL)

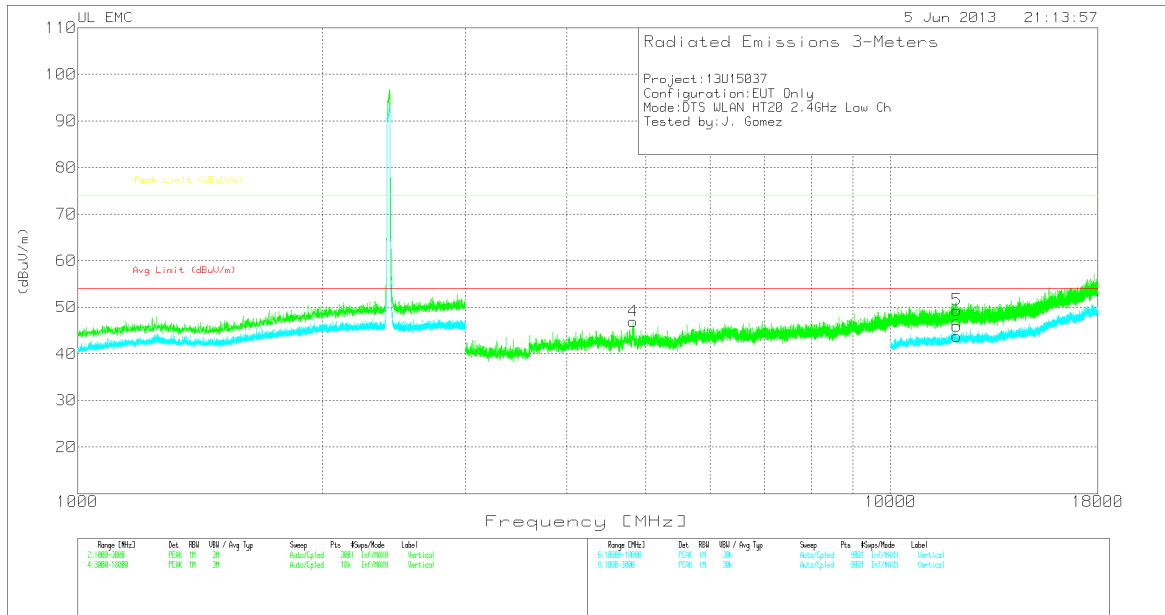




HARMONICS AND SPURIOUS EMISSIONS



LOW CHANNEL VERTICAL



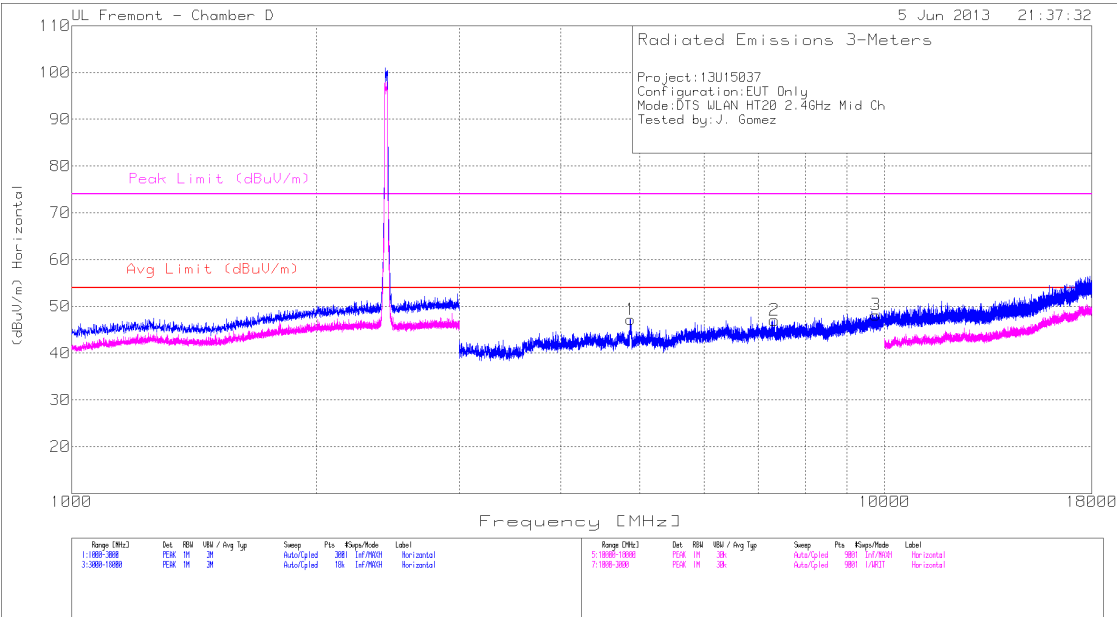
Low_DAT 10675

Rev 9.5 13 Jun 2013

Vertical 3000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
4	4824.899	44.37	PK	34.4	-31.8	46.97	53.97	-7	74	-27.03	199	Vert
5	12056.997	37.76	PK	39.1	-25.7	51.16	53.97	-2.81	74	-22.84	199	Vert
Vertical 10000 - 18000MHz												
6	12072	30.3	PK	39.1	-25.6	43.8	53.97	-10.17	74	-30.2	199	Vert
PK - Peak detector												

MID CHANNEL HORIZONTAL

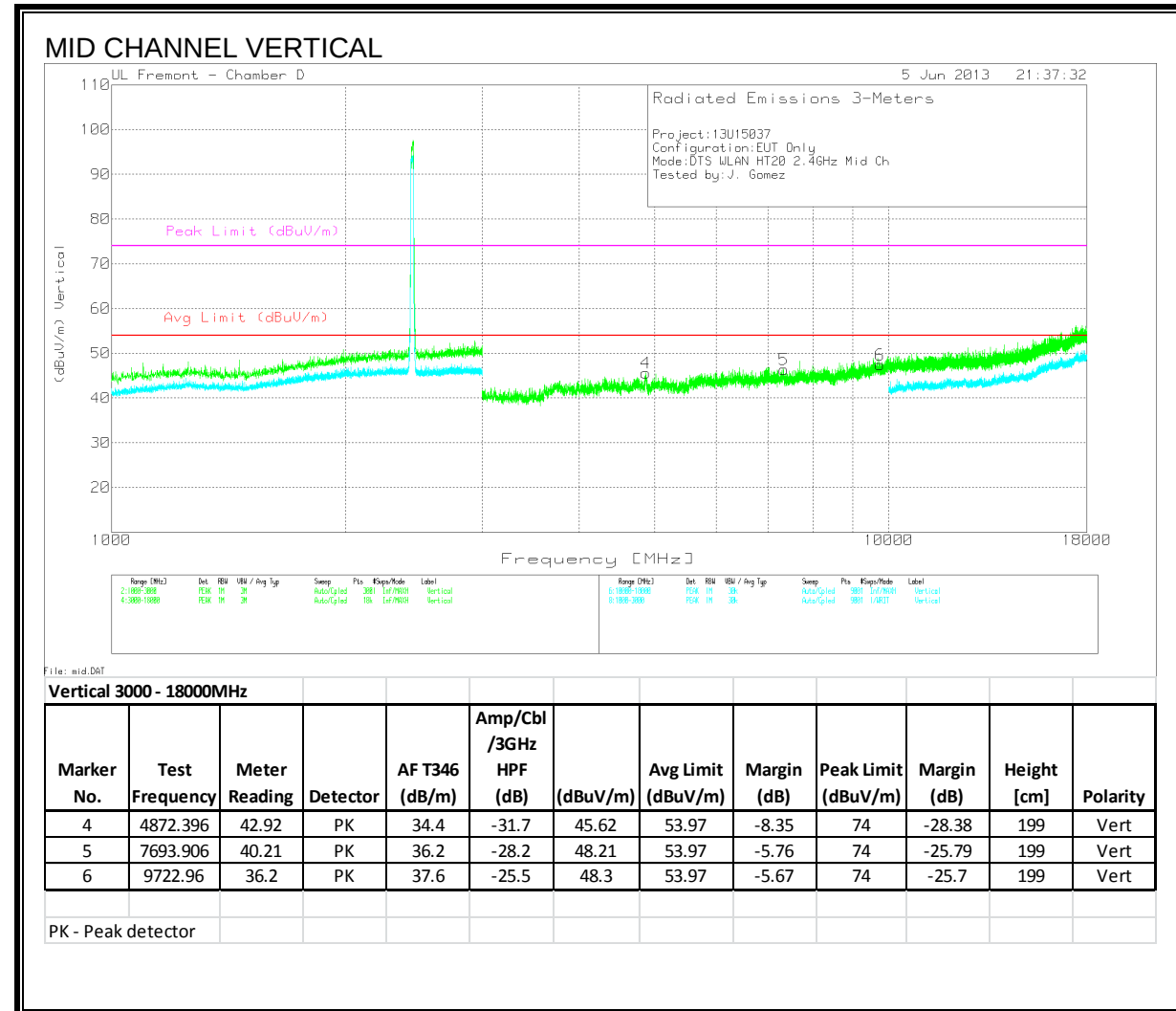


File: mid.DAT

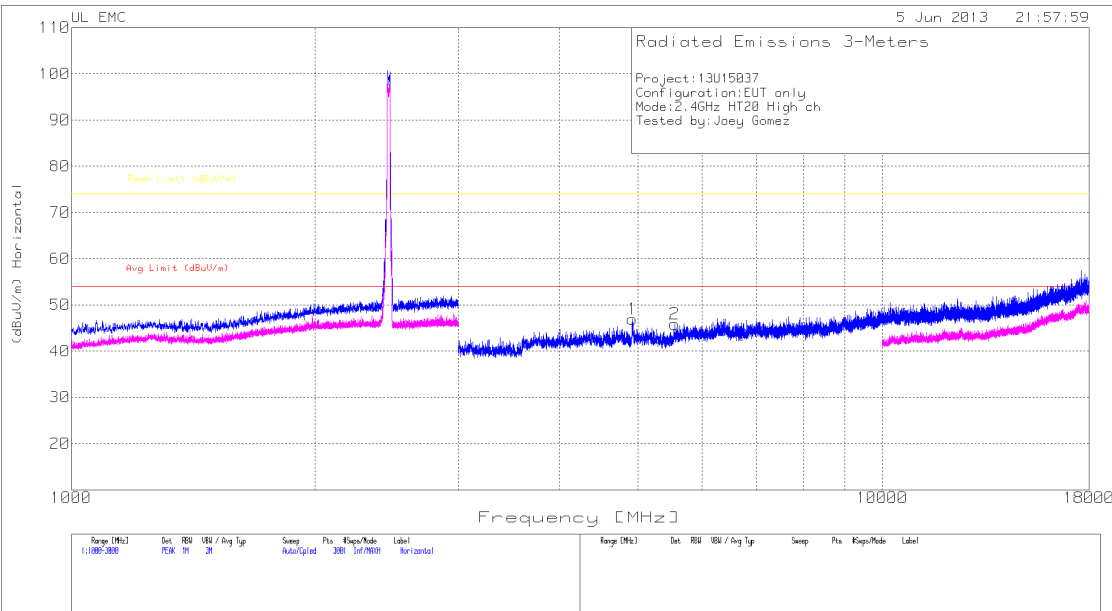
Horizontal 3000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
1	4873.229	44.41	PK	34.4	-31.6	47.21	53.97	-6.76	74	-26.79	199	Horz
2	7321.427	39.45	PK	36	-28.4	47.05	53.97	-6.92	74	-26.95	199	Horz
3	9759.624	36.46	PK	37.6	-25.9	48.16	53.97	-5.81	74	-25.84	199	Horz

PK - Peak detector



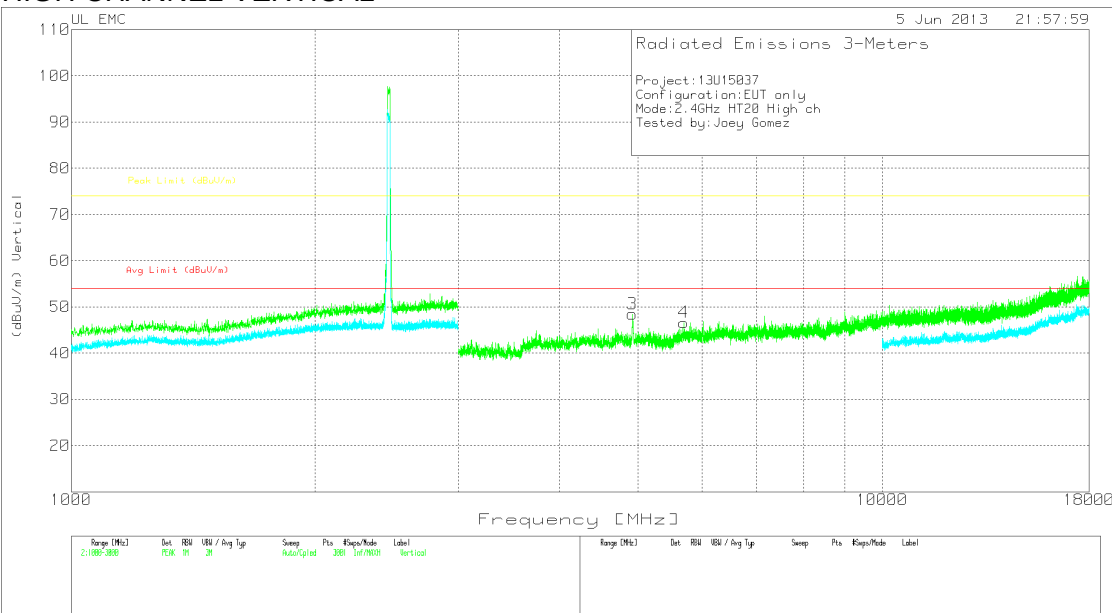
HIGH CHANNEL HORIZONTAL



File: high.DAT

Marker No.	Test Frequency	Meter Reading (dBuV)	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
Horizontal 3000 - 18000MHz												
1	4922.393	44.11	PK	34.4	-31.6	46.91	53.97	-7.06	74	-27.09	199	Horz
2	5549.858	41.89	PK	34.9	-30.9	45.89	53.97	-8.08	74	-28.11	199	Horz
PK - Peak detector												

HIGH CHANNEL VERTICAL

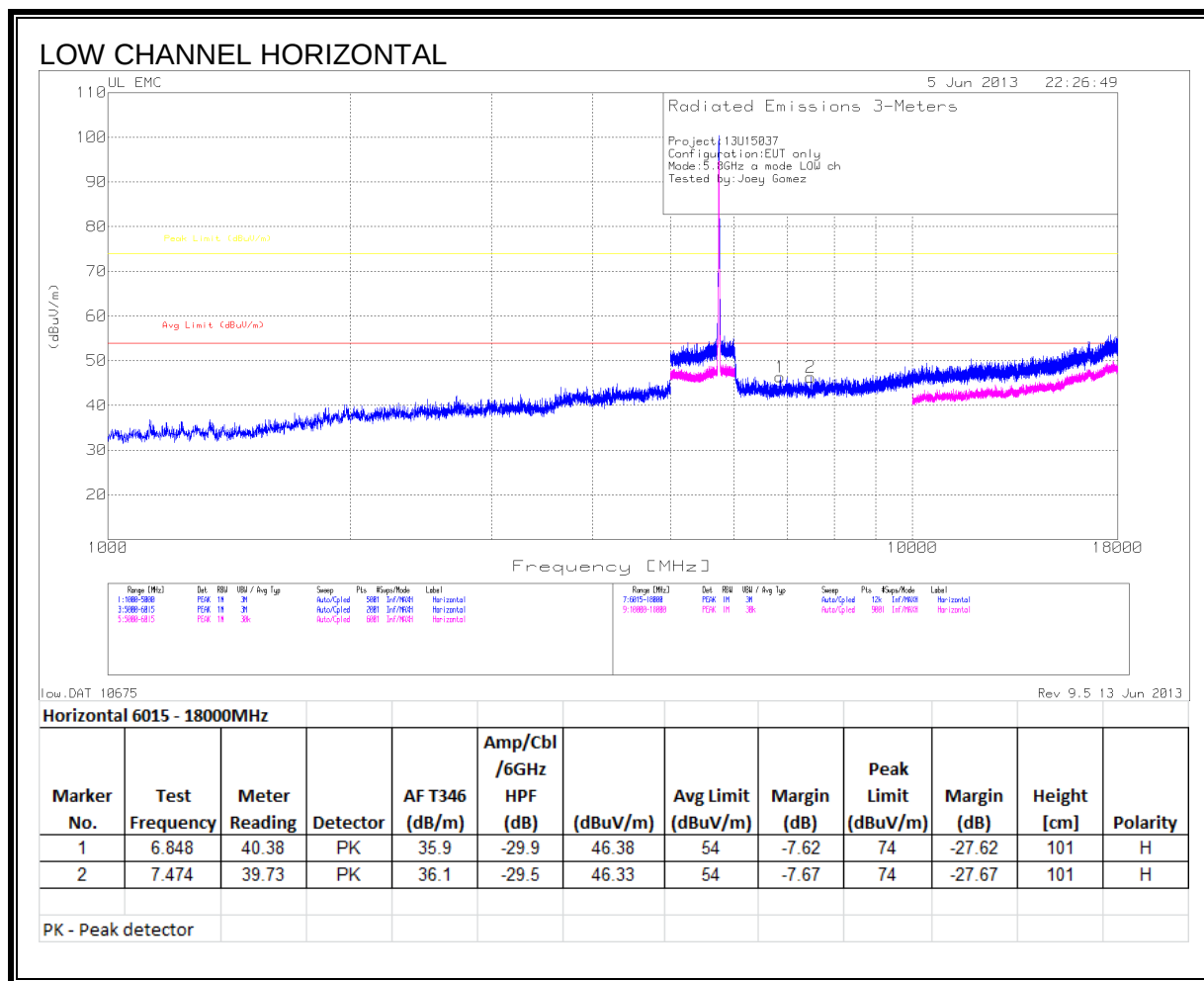


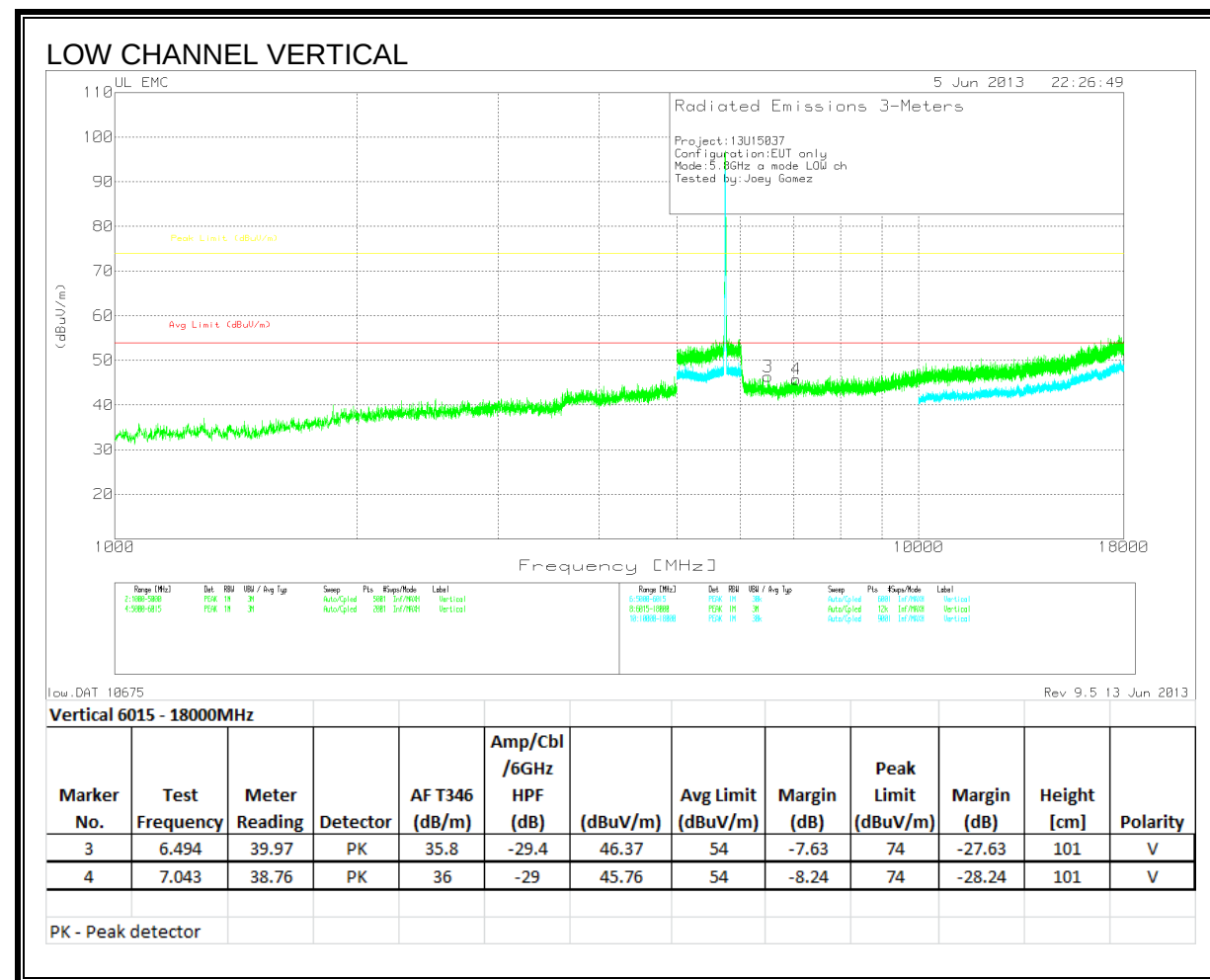
File: high.DAT

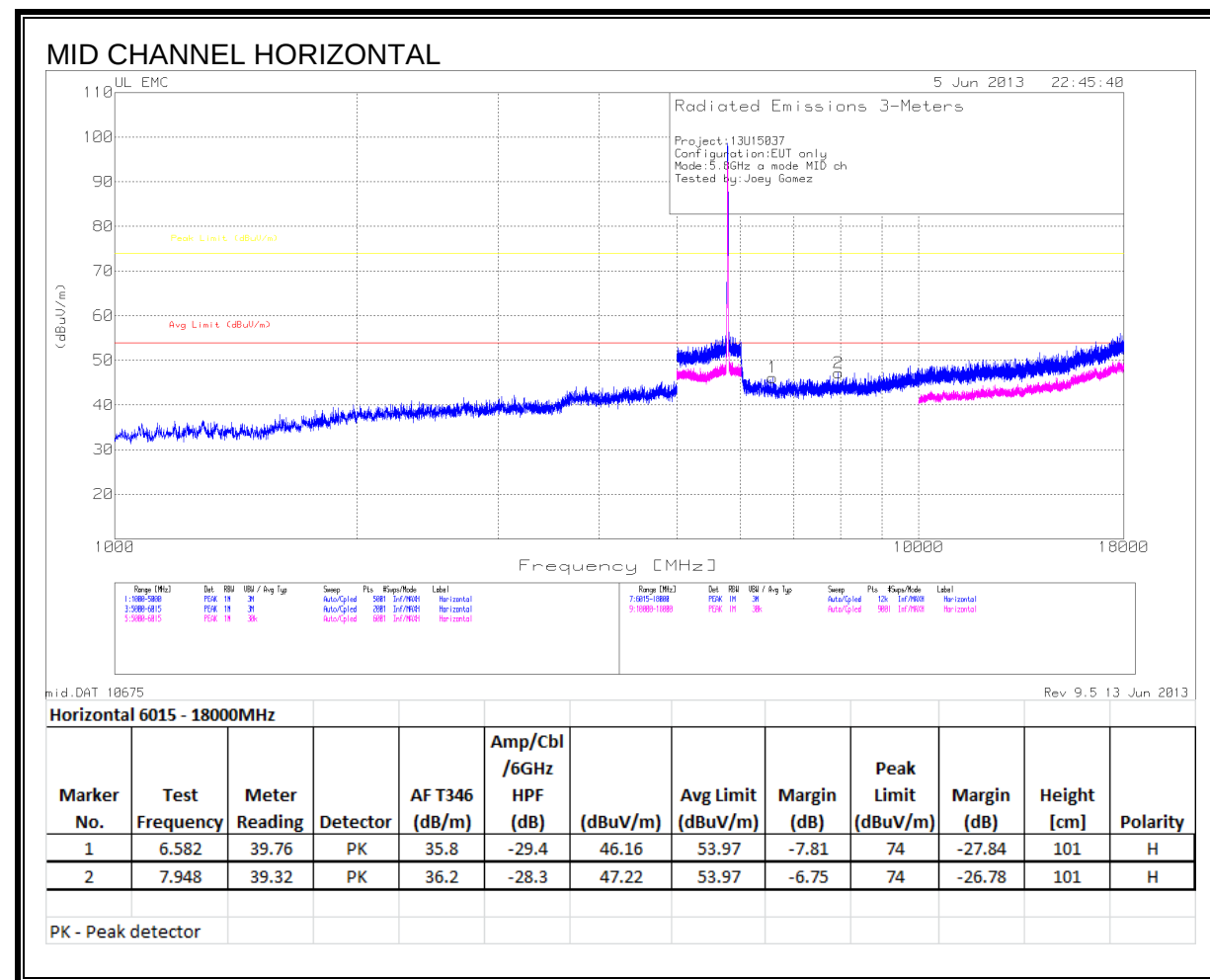
Marker No.	Test Frequency	Meter Reading (dBuV)	Detector	AF T346 (dB/m)	Amp/Cbl /3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
Vertical 3000 - 18000MHz												
3	4921.56	45.66	PK	34.4	-31.6	48.46	53.97	-5.51	74	-25.54	199	Vert
4	5695.684	41.5	PK	35.3	-30.2	46.6	53.97	-7.37	74	-27.4	199	Vert
PK - Peak detector												

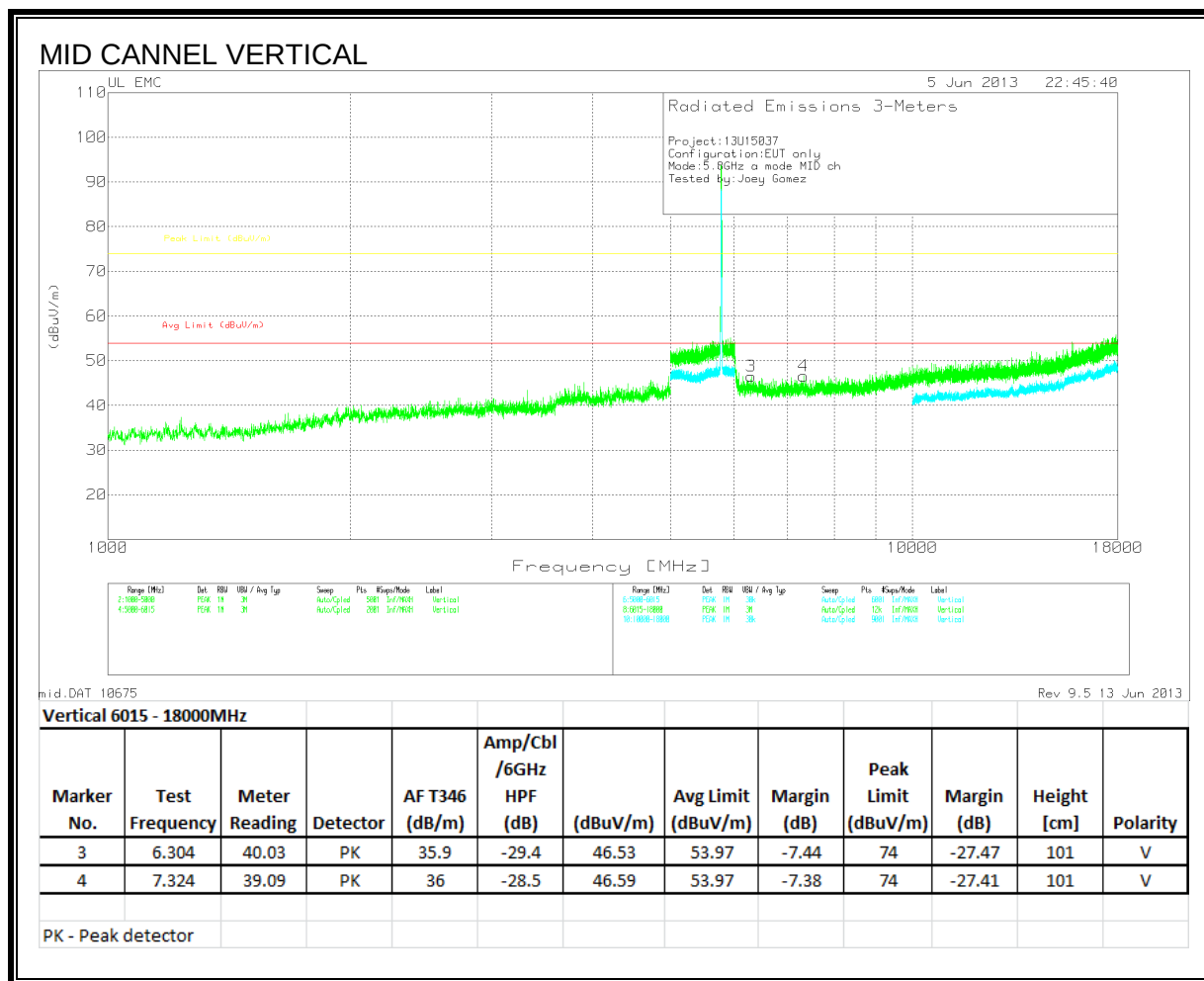
8.6. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND

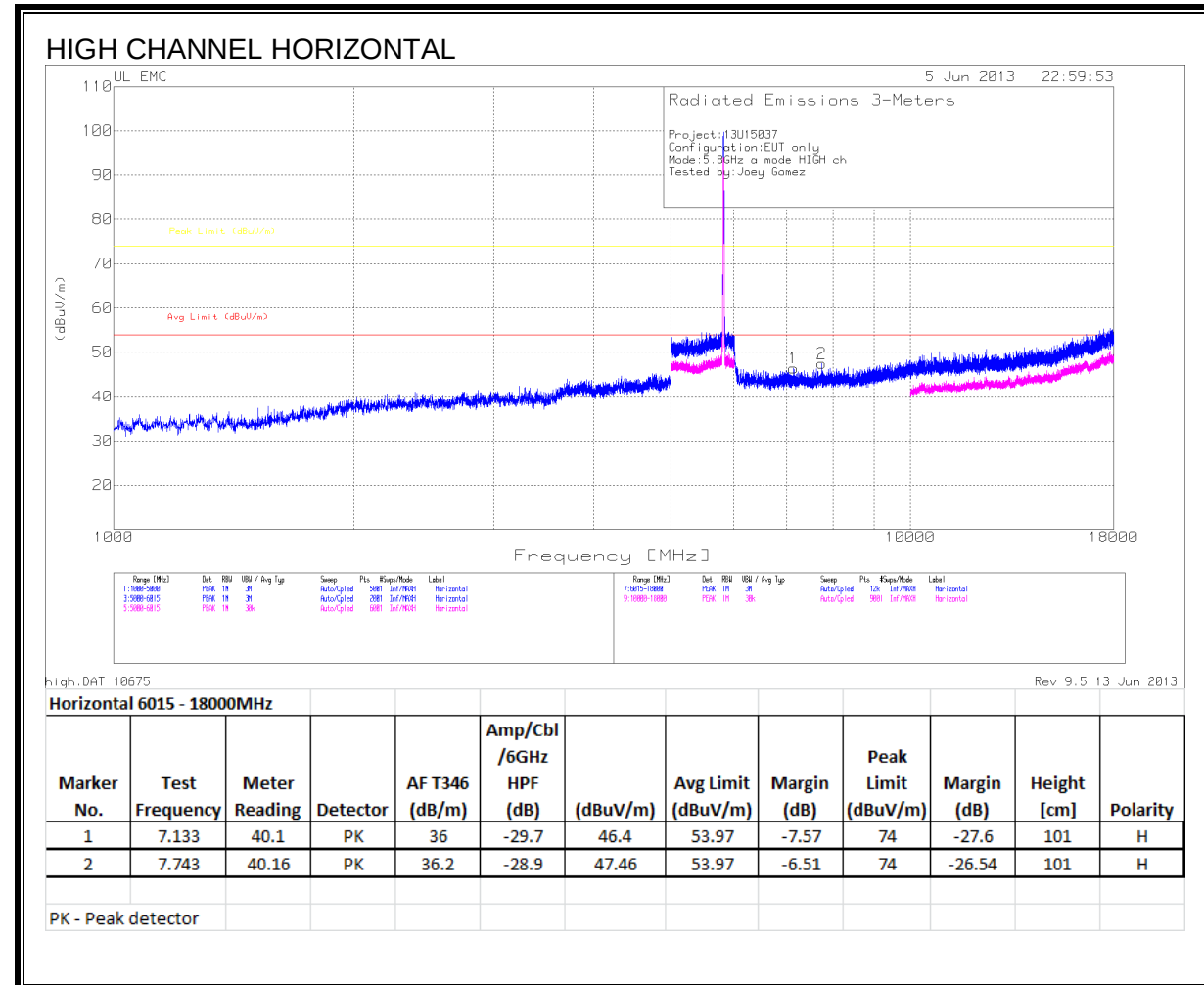
HARMONICS AND SPURIOUS EMISSIONS

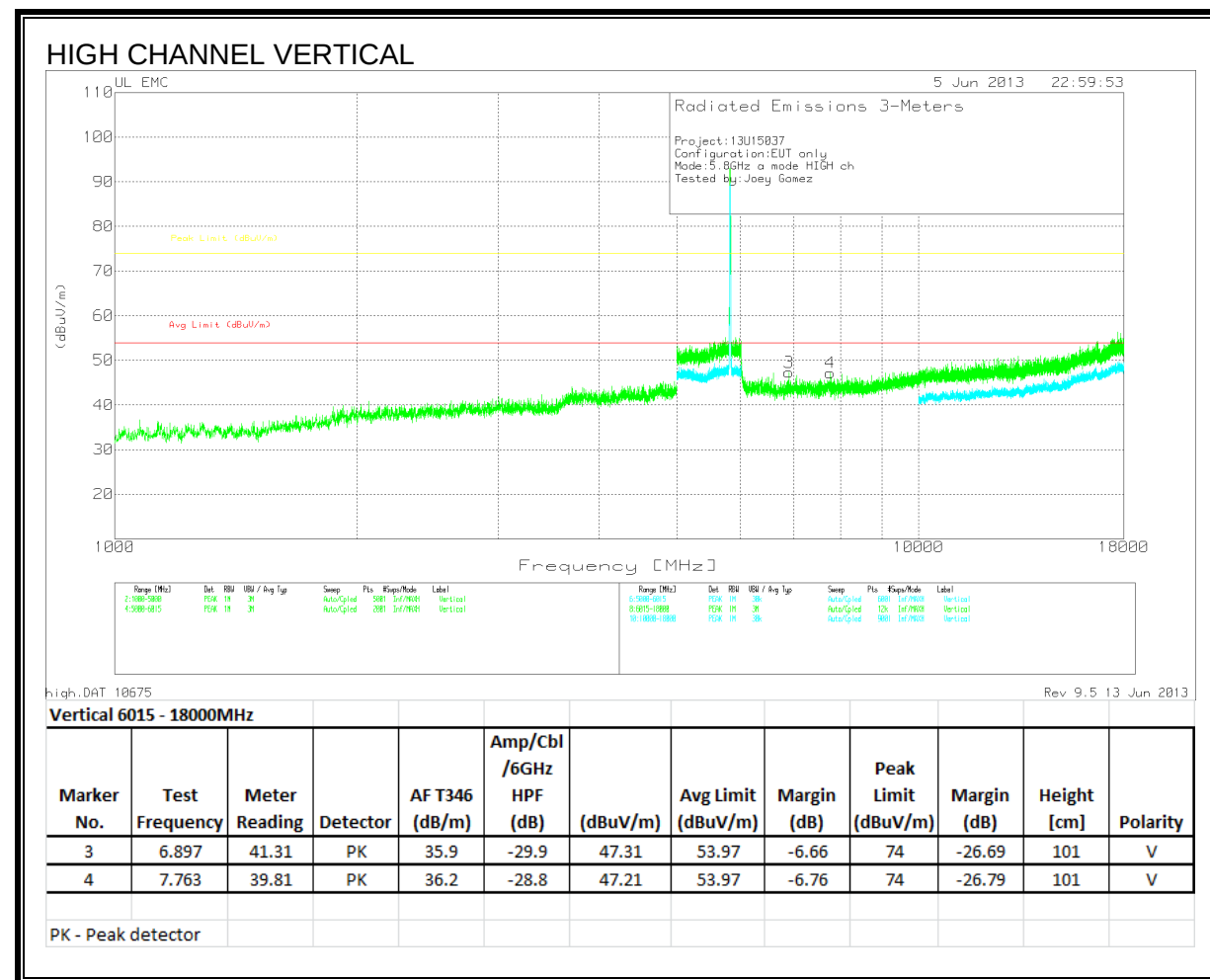






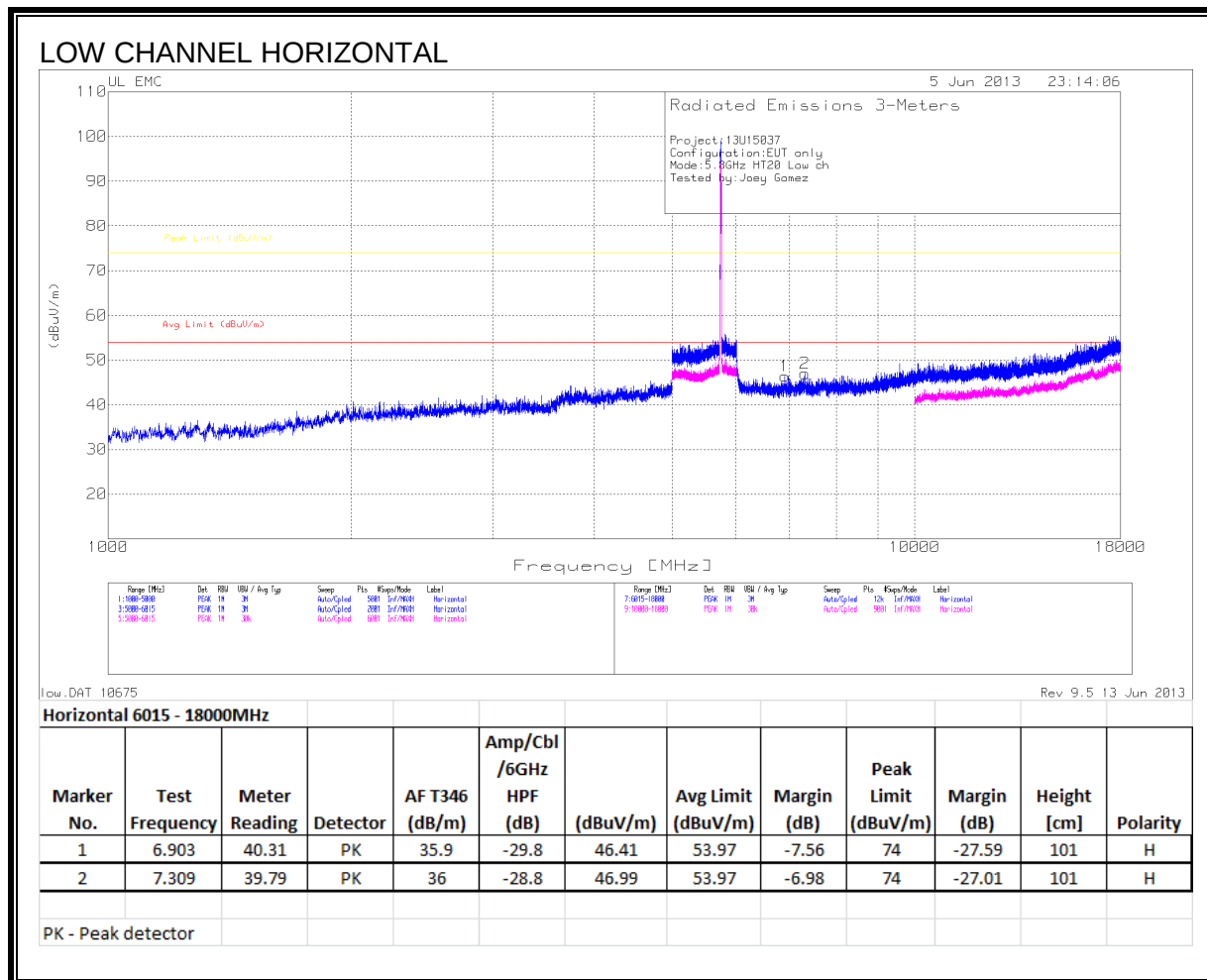


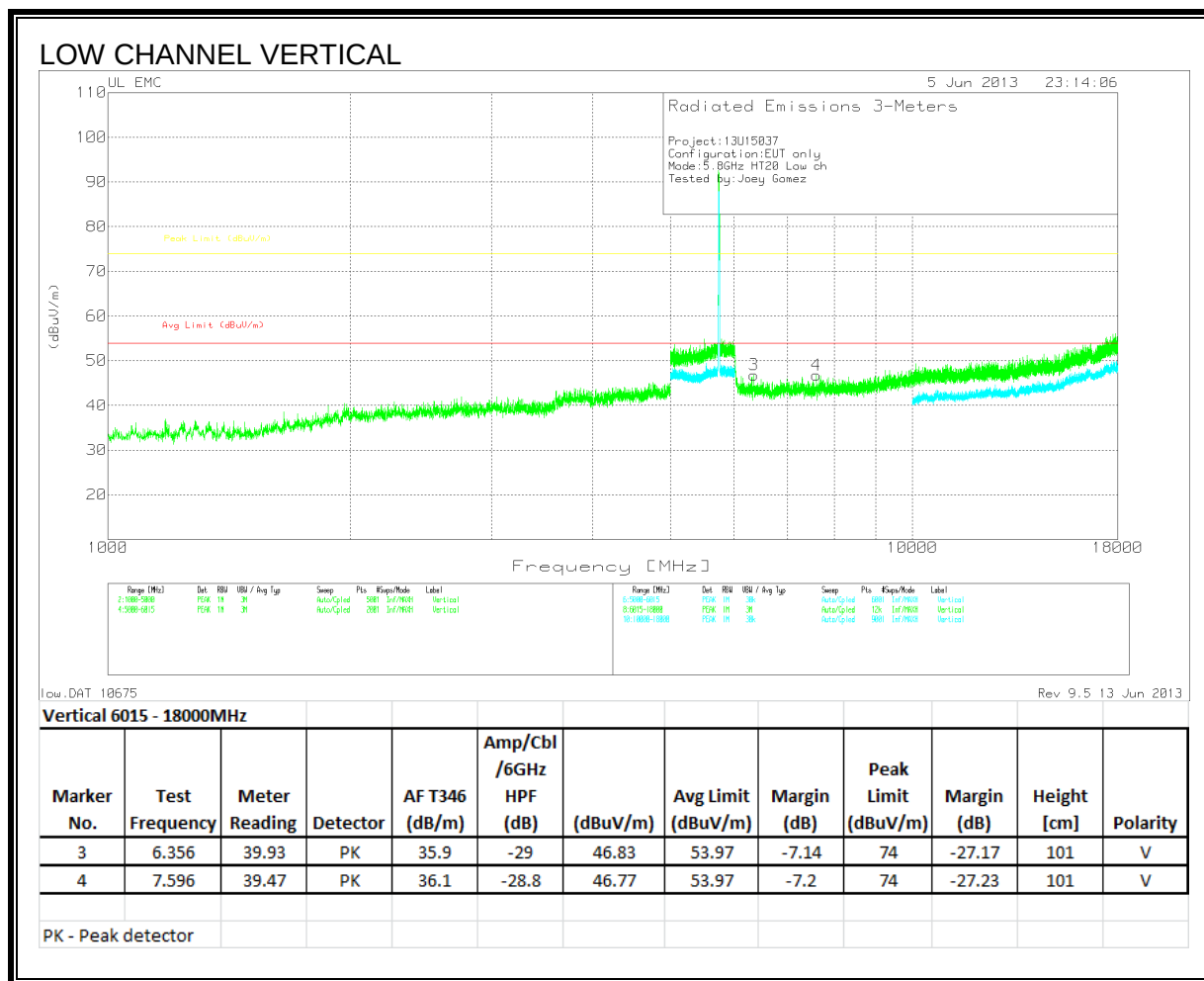


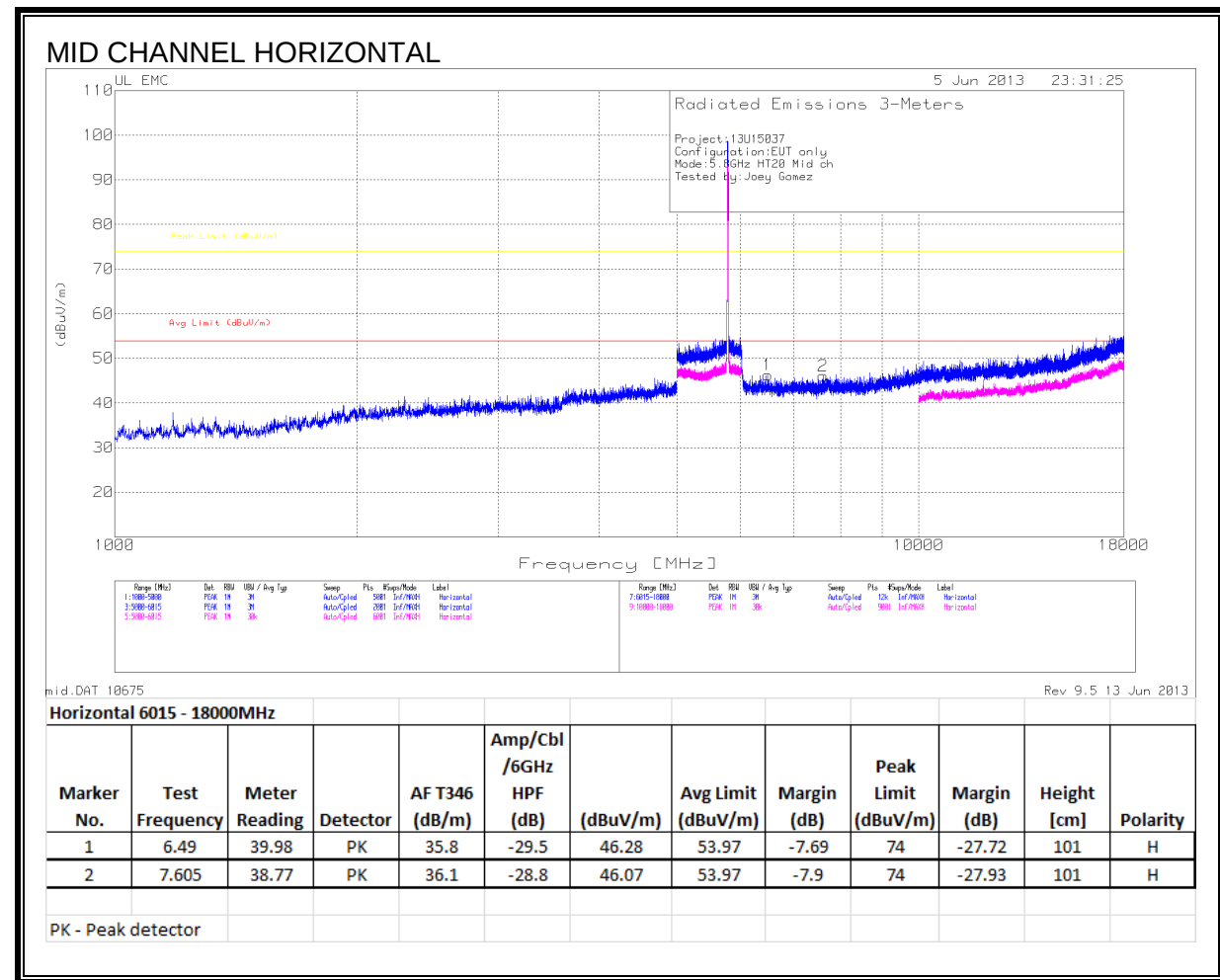


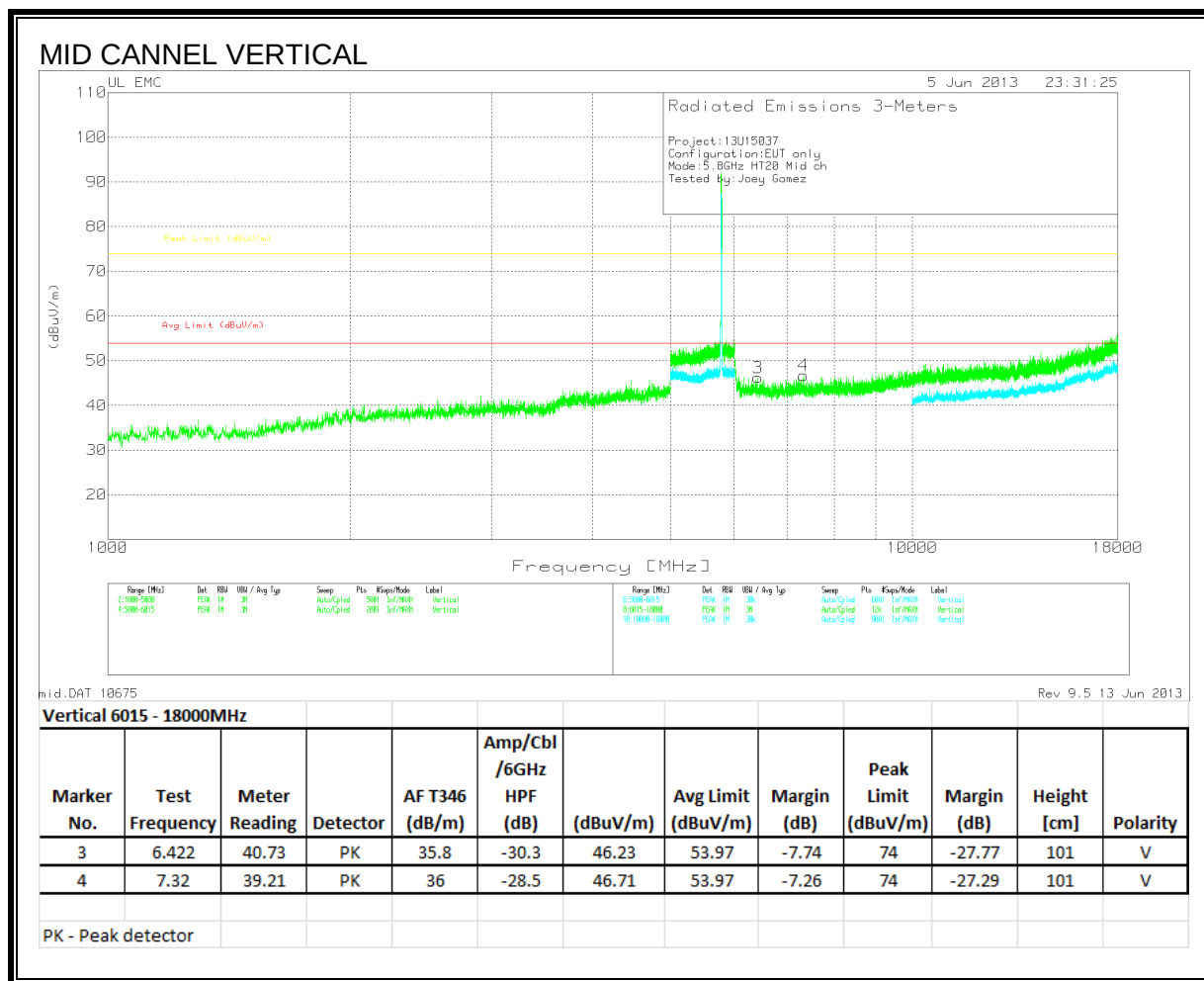
8.7. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

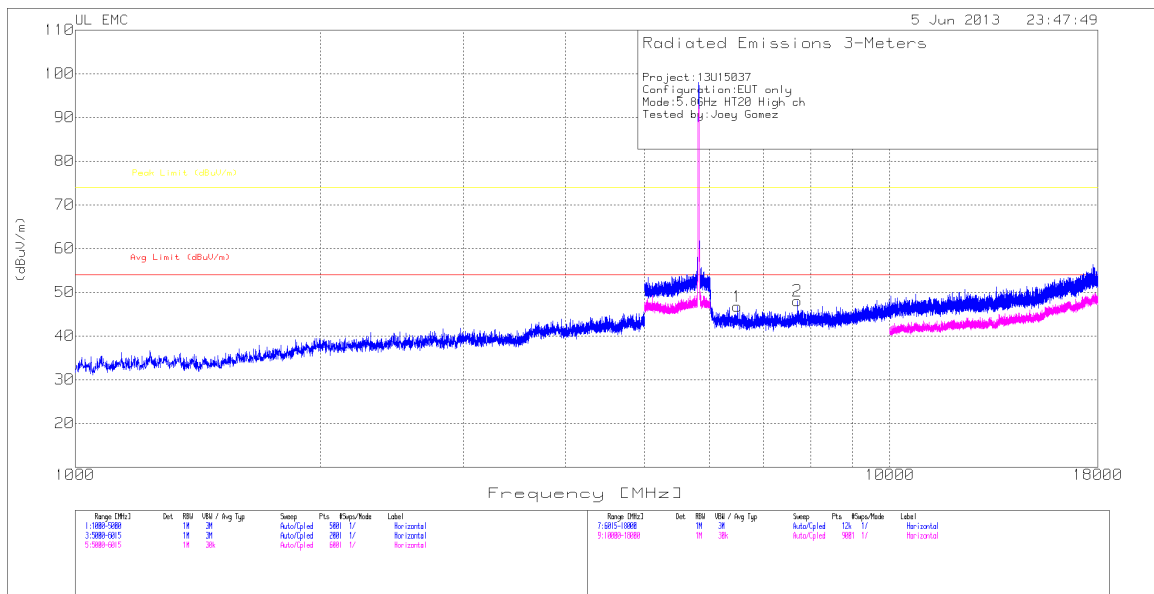








HIGH CHANNEL HORIZONTAL



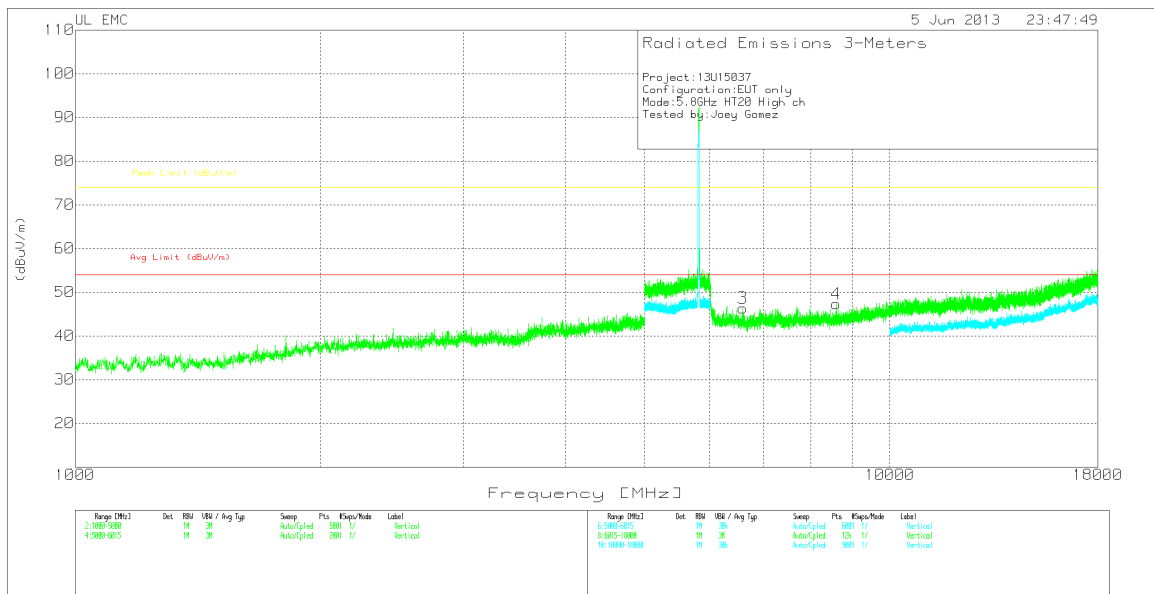
high.DAT 10675

Rev 9.5 13 Jun 2013

Horizontal 6015 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
1	6.494	40.34	PK	35.8	-29.4	46.74	53.97	-7.23	74	-27.26	101	H
2	7.704	40.21	PK	36.2	-28.4	48.01	53.97	-5.96	74	-25.99	101	H
PK - Peak detector												

HIGH CHANNEL VERTICAL



high.DAT 10675

Rev 9.5 13 Jun 2013

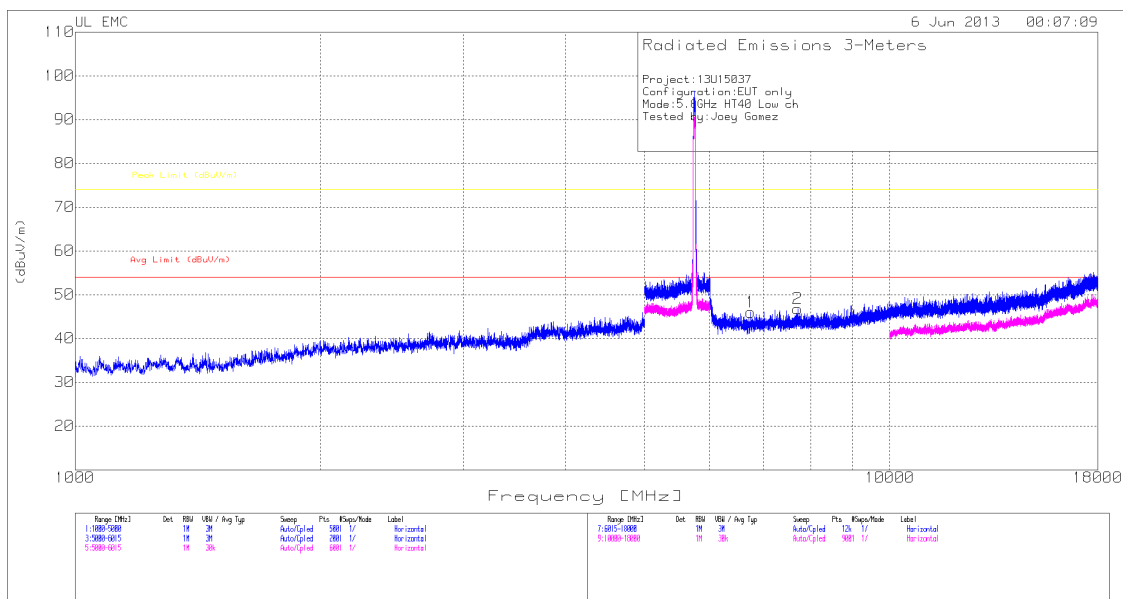
Vertical 6015 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
3	6.595	39.86	PK	35.8	-29.3	46.36	53.97	-7.61	74	-27.64	101	V
4	8.595	38.43	PK	36.4	-27.5	47.33	53.97	-6.64	74	-26.67	101	V
PK - Peak detector												

8.8. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

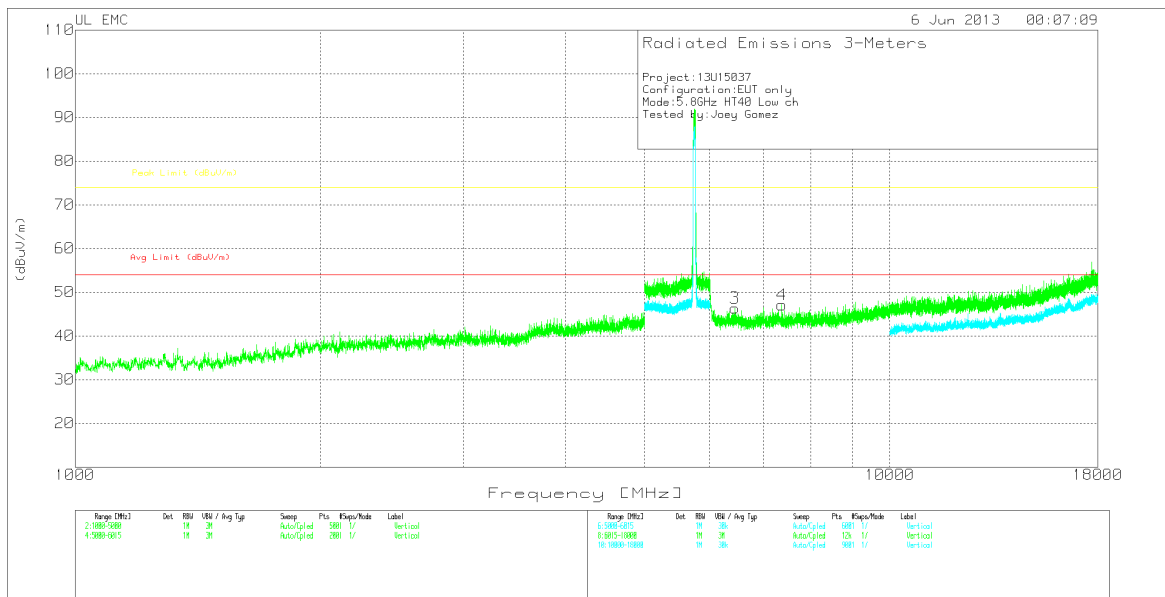
LOW CHANNEL HORIZONTAL



Low DAT 18675 Rev 9.5 13 Jun 2013

Horizontal 6015 - 18000MHz												
Marker	Test	Meter		AF T346	Amp/Cbl /6GHz				Peak			
No.	Frequency	Reading	Detector	(dB/m)	HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
1	6.746	40.09	PK	35.8	-29.9	45.99	53.97	-7.98	74	-28.01	101	H
2	7.707	39	PK	36.2	-28.4	46.8	53.97	-7.17	74	-27.2	101	H
PK - Peak detector												

LOW CHANNEL VERTICAL



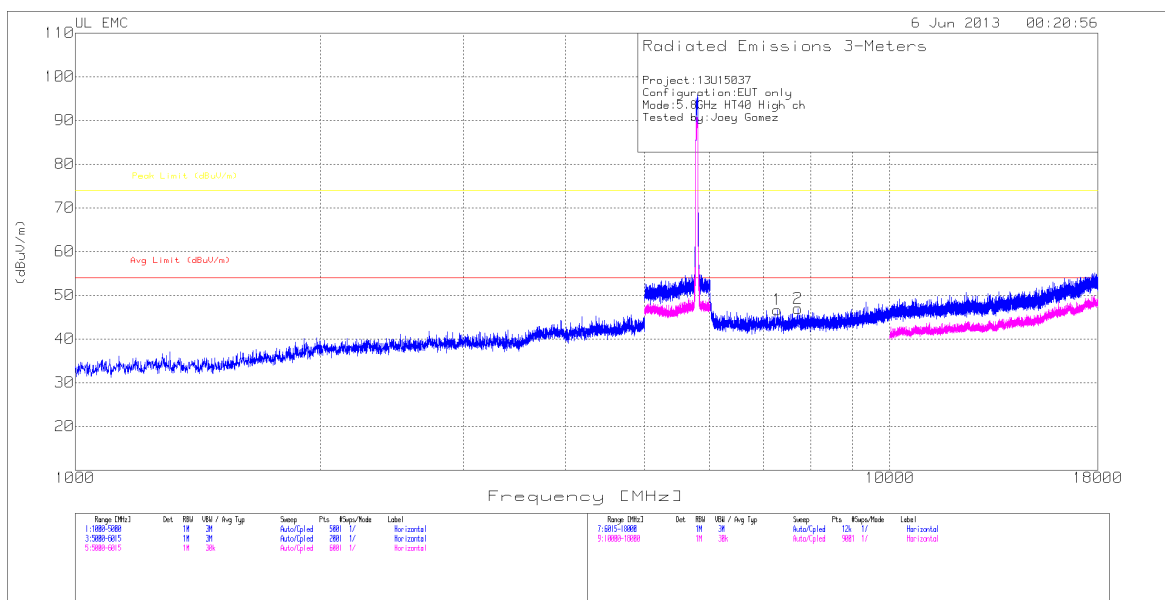
Low.DAT 18675

Rev 9.5 13 Jun 2013

Vertical 6015 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
3	6.455	40.77	PK	35.8	-30.2	46.37	53.97	-7.6	74	-27.63	101	V
4	7.37	39.79	PK	36	-28.7	47.09	53.97	-6.88	74	-26.91	101	V
PK - Peak detector												

HIGH CHANNEL HORIZONTAL



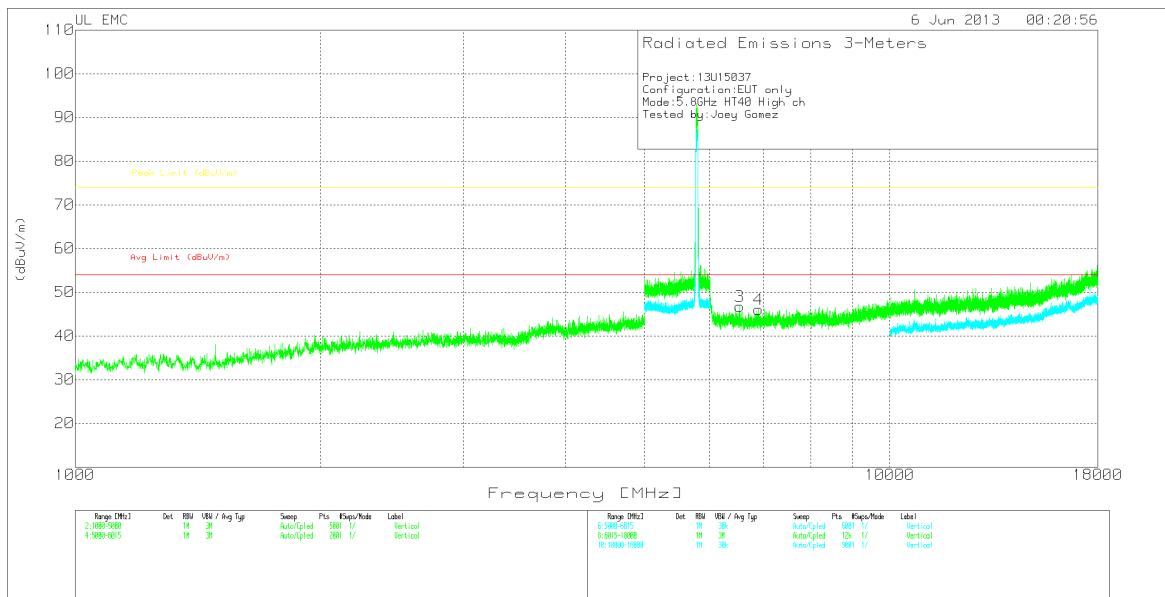
high.DAT 10675

Rev 9.5 13 Jun 2013

Horizontal 6015 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
1	7.28	39.46	PK	36	-28.8	46.66	53.97	-7.31	74	-27.34	101	H
2	7.714	39.25	PK	36.2	-28.5	46.95	53.97	-7.02	74	-27.05	101	H
PK - Peak detector												

HIGH CHANNEL VERTICAL



high.DAT 10675

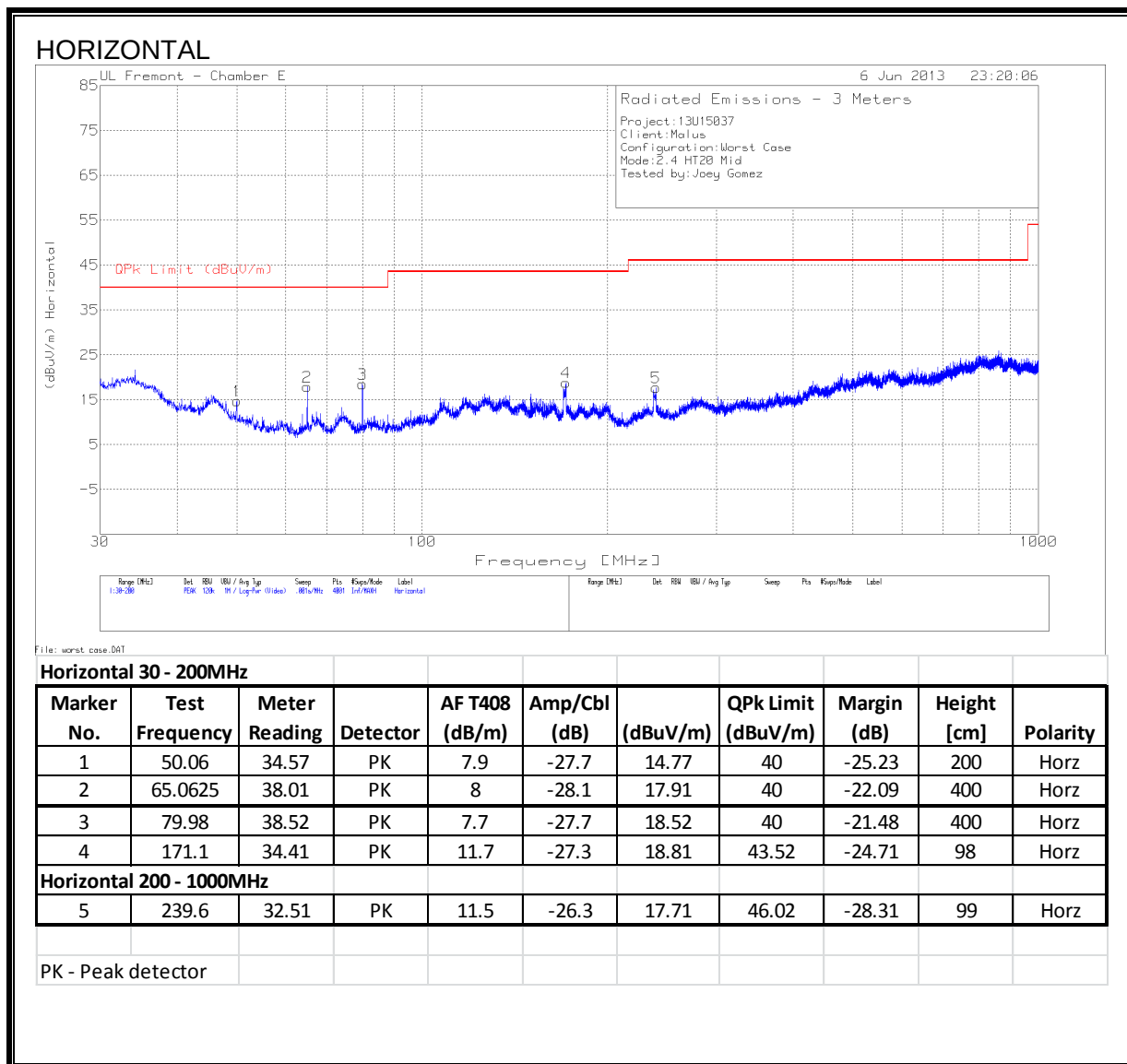
Rev 9.5 13 Jun 2013

Vertical 6015 - 18000MHz

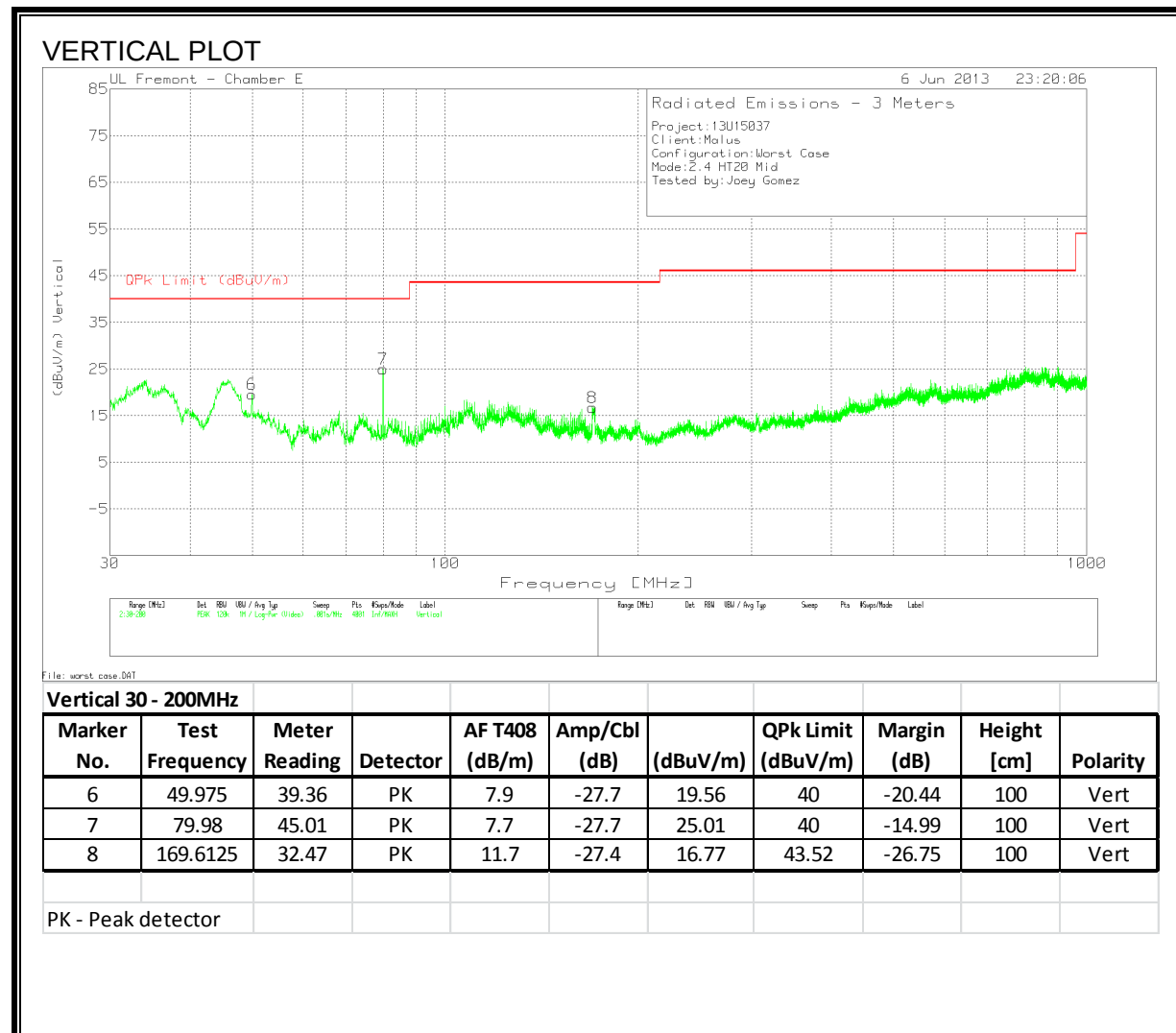
Marker No.	Test Frequency	Meter Reading	Detector	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	(dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height [cm]	Polarity
3	6.542	40.12	PK	35.8	-29.2	46.72	53.97	-7.25	74	-27.28	101	V
4	6.896	40.02	PK	35.9	-29.9	46.02	53.97	-7.95	74	-27.98	101	V
PK - Peak detector												

8.9. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)



9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

Line-L1 .15 - 30MHz

Test Frequency	Meter Reading	Detector	T24 IL L1.TXT (dB)	LC Cables 1&3.TXT (dB)	dB(uVolts)	CISPR 11/22 Class B Quasi-peak	Margin	CISPR 11/22 Class B Average	Margin
0.159	54.38	QP	0.1	0	54.48	65.52	-11.04	-	-
0.159	48.7	Av	0.1	0	48.8	-	-	55.5	-6.7
0.8295	48.8	PK	0.1	0	48.9	56	-7.1	-	-
0.8295	30.76	Av	0.1	0	30.86	-	-	46	-15.14
7.278	39.71	PK	0.1	0.1	39.91	60	-20.09	-	-
7.278	25.72	Av	0.1	0.1	25.92	-	-	50	-24.08
16.854	45.42	PK	0.2	0.2	45.82	60	-14.18	-	-
16.854	28.85	Av	0.2	0.2	29.25	-	-	50	-20.75

Line-L2 .15 - 30MHz

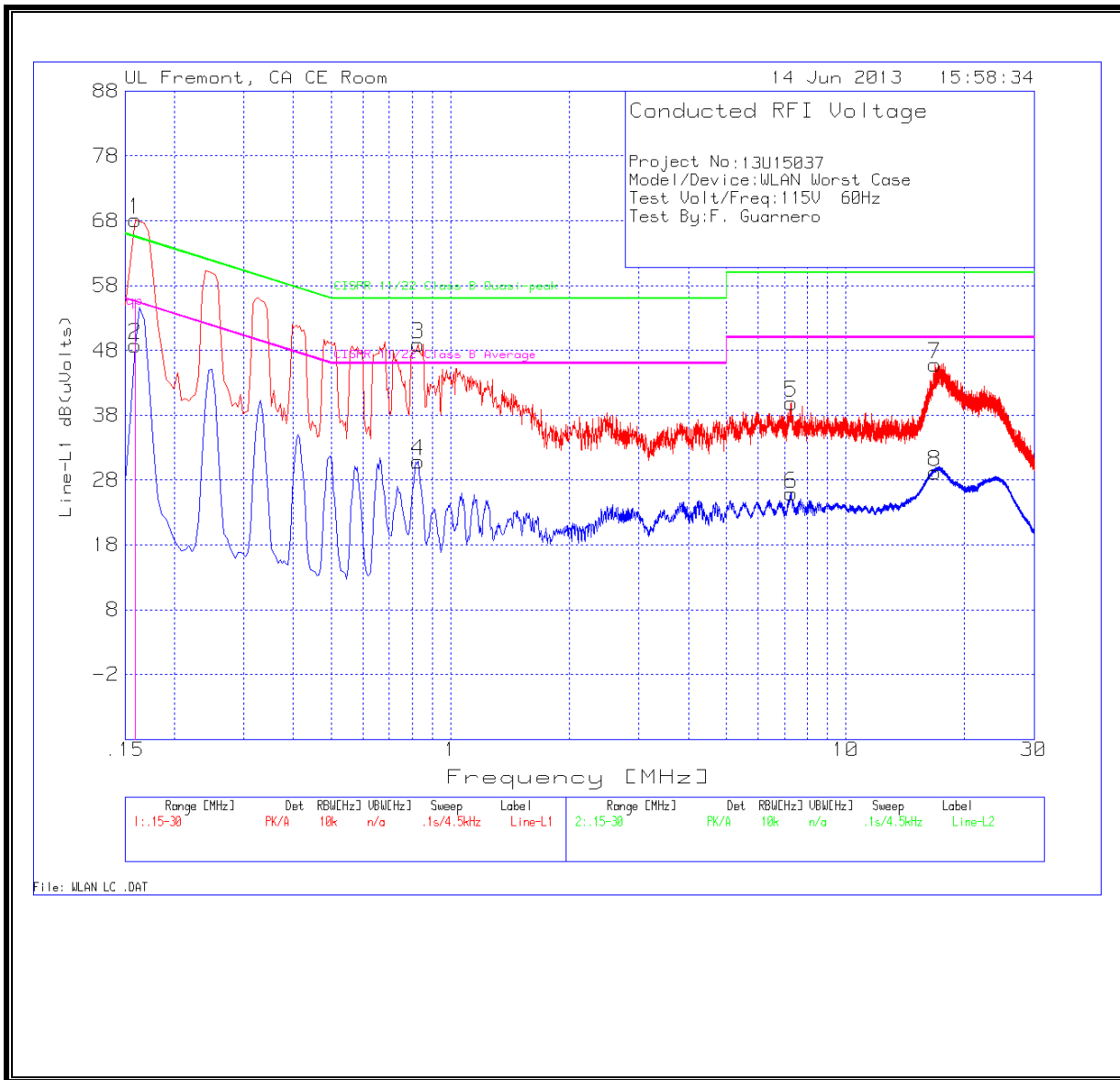
Test Frequency	Meter Reading	Detector	T24 IL L2.TXT (dB)	LC Cables 2&3.TXT (dB)	dB(uVolts)	CISPR 11/22 Class B Quasi-peak	Margin	CISPR 11/22 Class B Average	Margin
0.1545	54.75	PK	0.1	0	54.85	65.8	-10.95	-	-
0.1545	40.25	Av	0.1	0	40.35	-	-	55.8	-15.45
0.78	42.3	PK	0.1	0	42.4	56	-13.6	-	-
0.78	24.89	Av	0.1	0	24.99	-	-	46	-21.01
2.4585	35.55	PK	0.1	0.1	35.75	56	-20.25	-	-
2.4585	22.07	Av	0.1	0.1	22.27	-	-	46	-23.73
17.5425	42	PK	0.2	0.2	42.4	60	-17.6	-	-
17.5425	29.72	Av	0.2	0.2	30.12	-	-	50	-19.88

PK - Peak detector

QP - Quasi-Peak detector

Av - Average detector

LINE 1 RESULTS



LINE 2 RESULTS

