

LOW CHANNEL DATA

Project No:13J14910  
 Client Name:MITSUMI  
 Model / Device:  
 Config / Other:Tx,b mode,Low ch  
 Test By:Lieu Nguyen

**Range 1 1000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRf 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
1	2809.143	47.1	PK	32.7	-28.8	0.5	51.5	74	-22.5	54	-2.5	201	Horz
2	4822.133	39.59	PK	34	-25.2	0.5	48.89	74	-25.11	54	-5.11	100	Horz
3	7234.324	44.44	PK	35.6	-23.1	0.5	57.44	68.2	-10.76	-	-	100	Horz

**Range:2 1000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRf 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
4	1598.801	51.32	PK	28.1	-31.9	0.5	48.02	68.2	-20.18	-	-	99	Vert
5	7234.324	47.93	PK	35.6	-23.1	0.5	60.93	68.2	-7.27	-	-	201	Vert

**Range:3 10000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRf 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
6	15433.283	21.27	PK	40.2	-16.4	0.5	45.57	74	-28.43	54	-8.43	201	Horz

**Range:4 10000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRf 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
7	13254.373	21.79	PK	39.1	-16.7	0.5	44.69	74	-29.31	54	-9.31	100	Vert

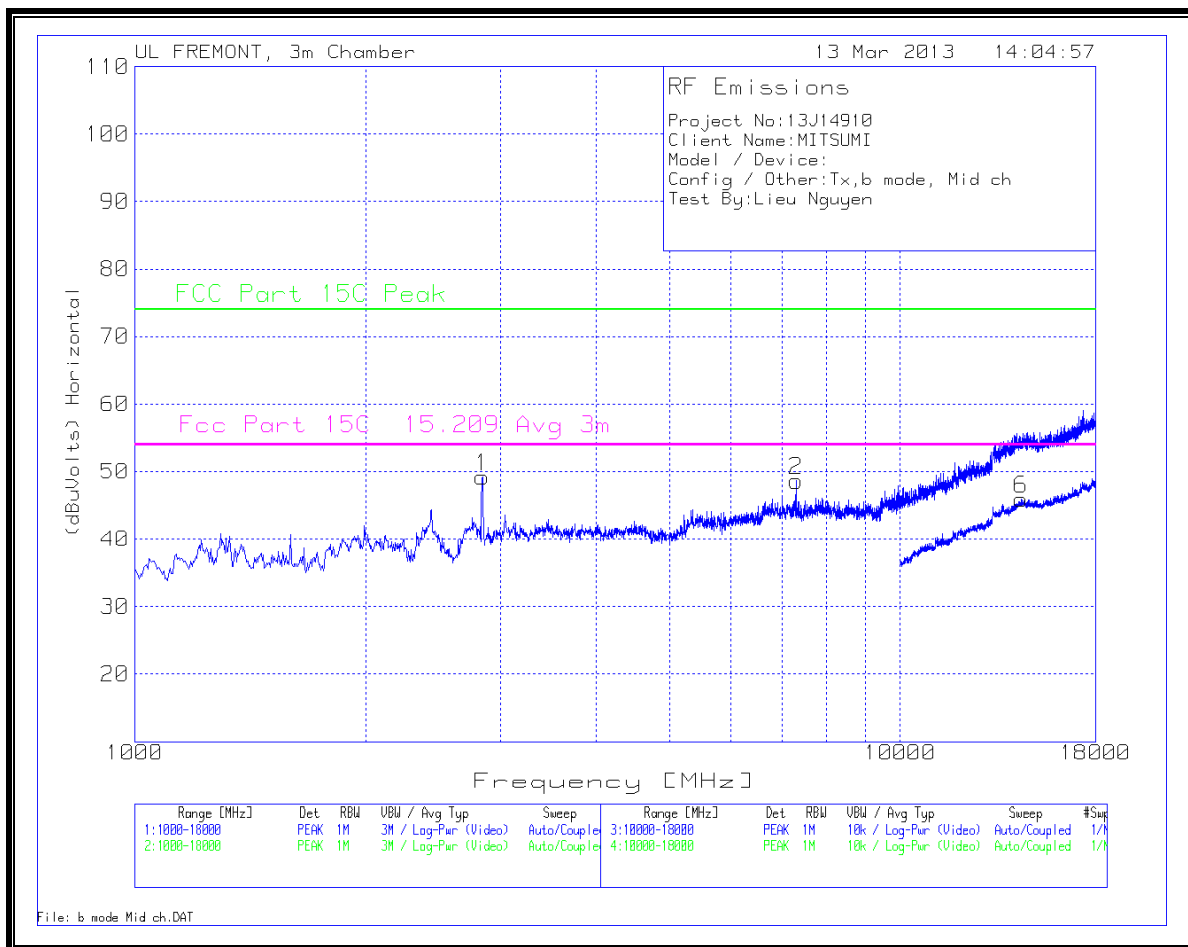
**Range 1 1000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 [dB]	Loop w/T34 [dB]	T166 BRf 2.4-2.5 GHz [dB]	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2815.44	44.9	Av	32.7	-28.8	0.5	49.3	-	-	54	-4.7	116	Horz

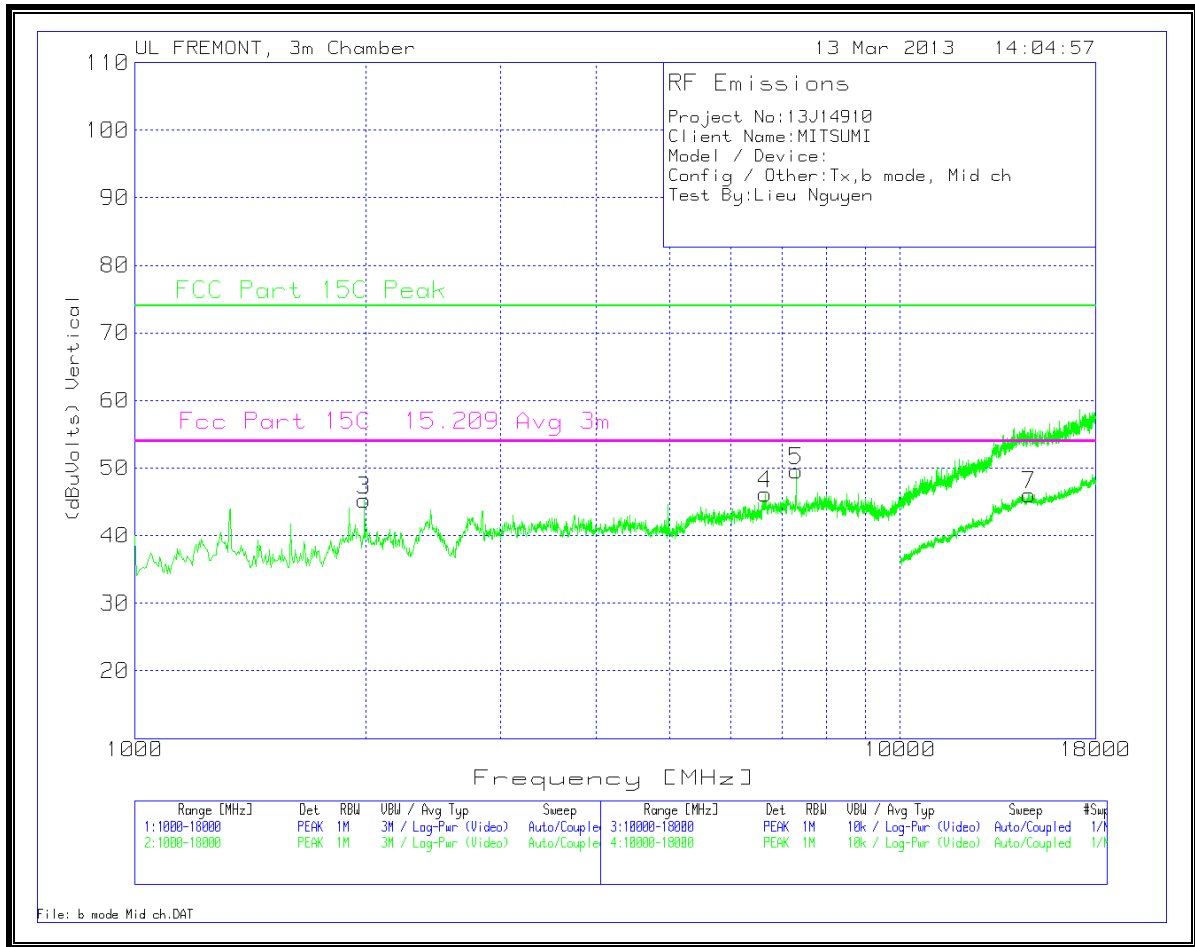
PK - Peak detector  
 QP - Quasi-Peak detector  
 Av - Average detector

**MID CHANNEL**

**HORIZONTAL PLOT**



VERTICAL PLOT



MID CHANNEL DATA

Project No:13J14910  
 Client Name:MITSUMI  
 Model / Device:  
 Config / Other:Tx,b mode, Mid ch  
 Test By:Lieu Nguyen

**Range 1 1000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
1	2843.118	44.82	PK	32.7	-28.8	0.5	49.22	74	-24.78	54	-4.78	100	Horz
2	7306.52	35.52	PK	35.6	-23	0.5	48.62	74	-25.38	54	-5.38	100	Horz

**Range:2 1000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
3	1993.755	43.84	PK	31.6	-30.7	0.5	45.24	68.2	-22.96	-	-	201	Vert
4	6669.498	33.53	PK	35.6	-23.4	0.5	46.23	68.2	-21.97	-	-	99	Vert
5	7310.767	36.45	PK	35.6	-23	0.5	49.55	74	-24.45	54	-4.45	201	Vert

**Range:3 10000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
6	14393.803	21.74	PK	39.5	-15.8	0.5	45.94	68.2	-22.26	-	-	201	Horz

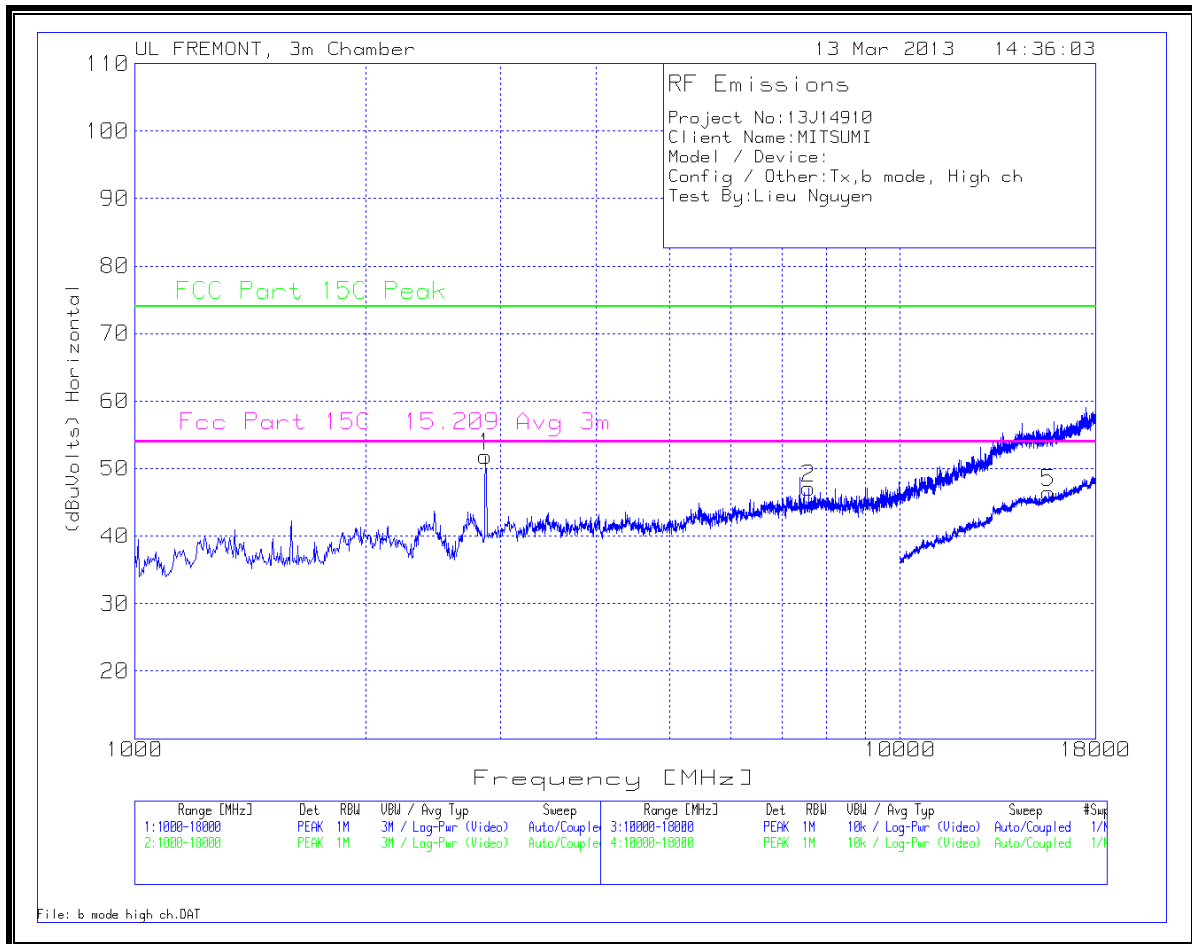
**Range:4 10000 - 18000MHz**

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
7	14733.633	21.82	PK	39.7	-16	0.5	46.02	68.2	-22.18	-	-	201	Vert

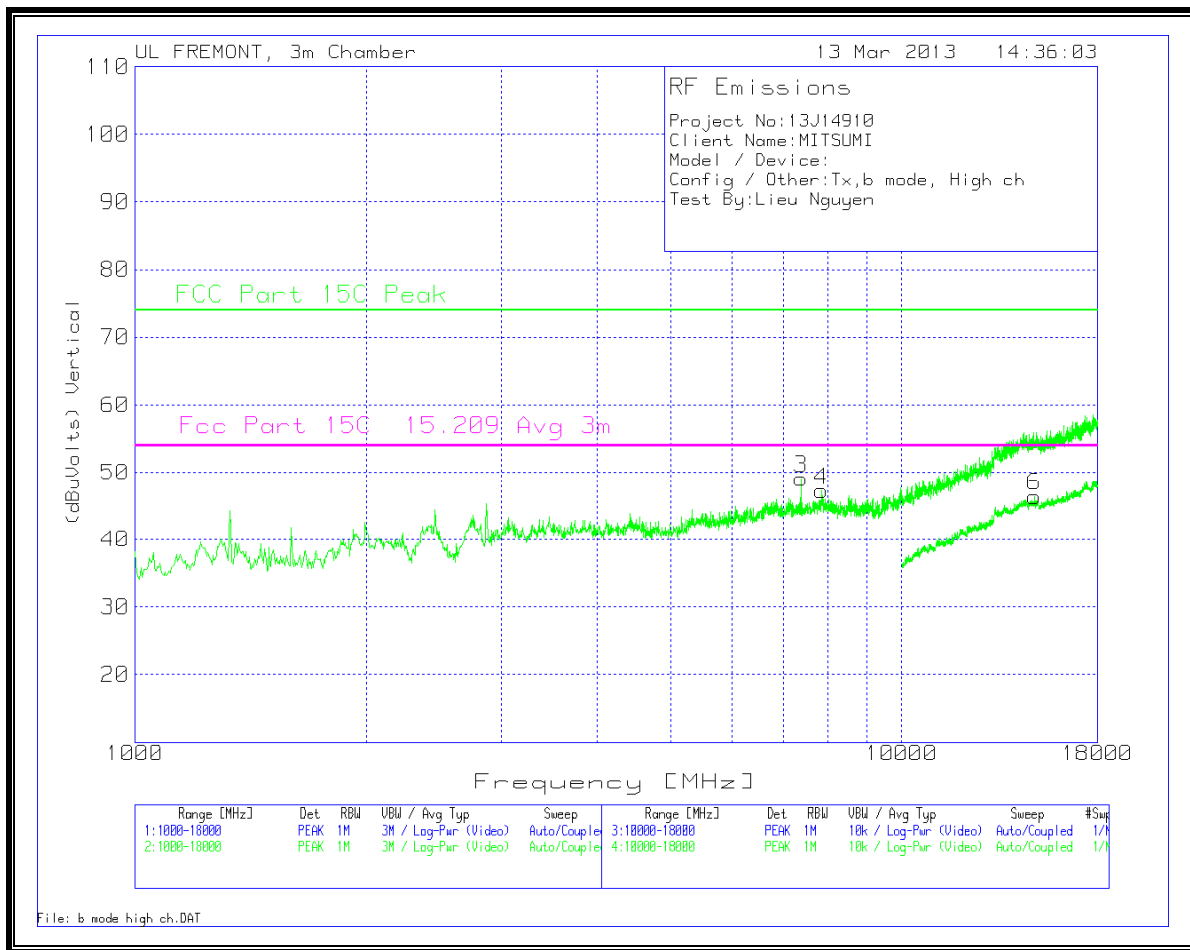
PK - Peak detector  
 QP - Quasi-Peak detector  
 Av - Average detector

**HIGH CHANNEL**

**HORIZONTAL PLOT**



VERTICAL PLOT

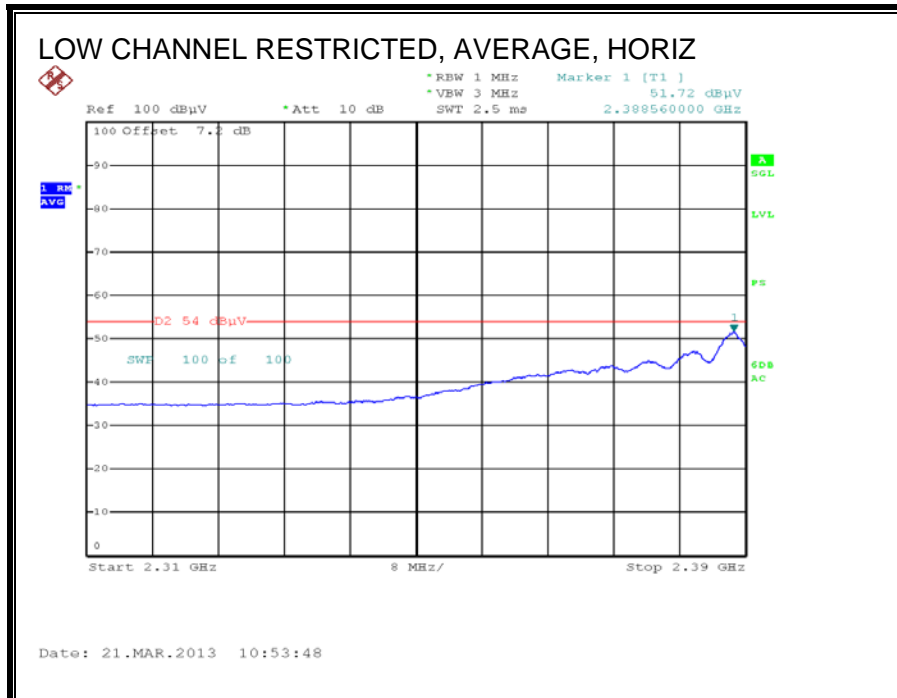
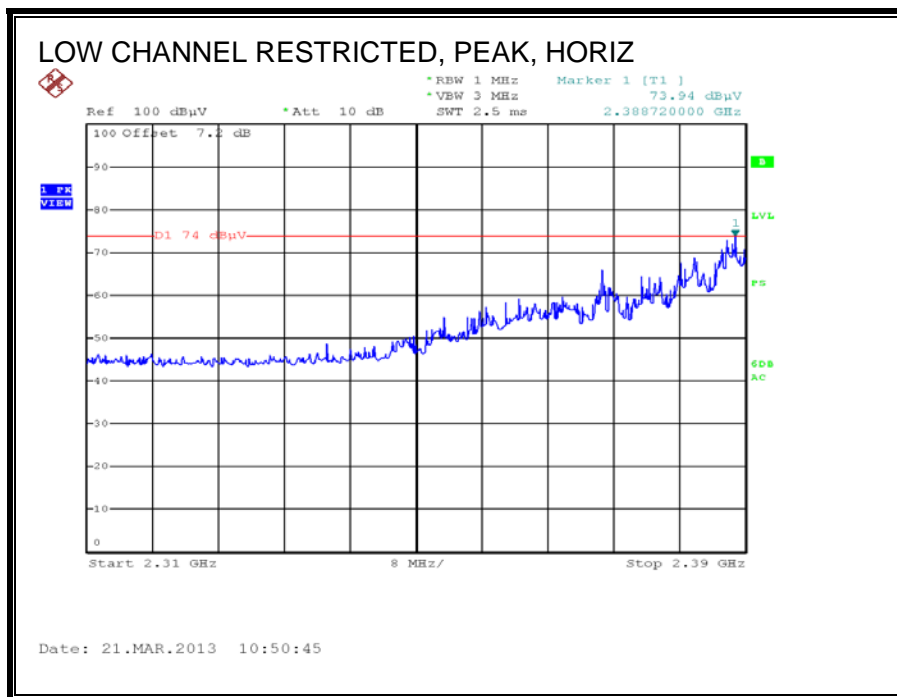


HIGH CHANNEL DATA

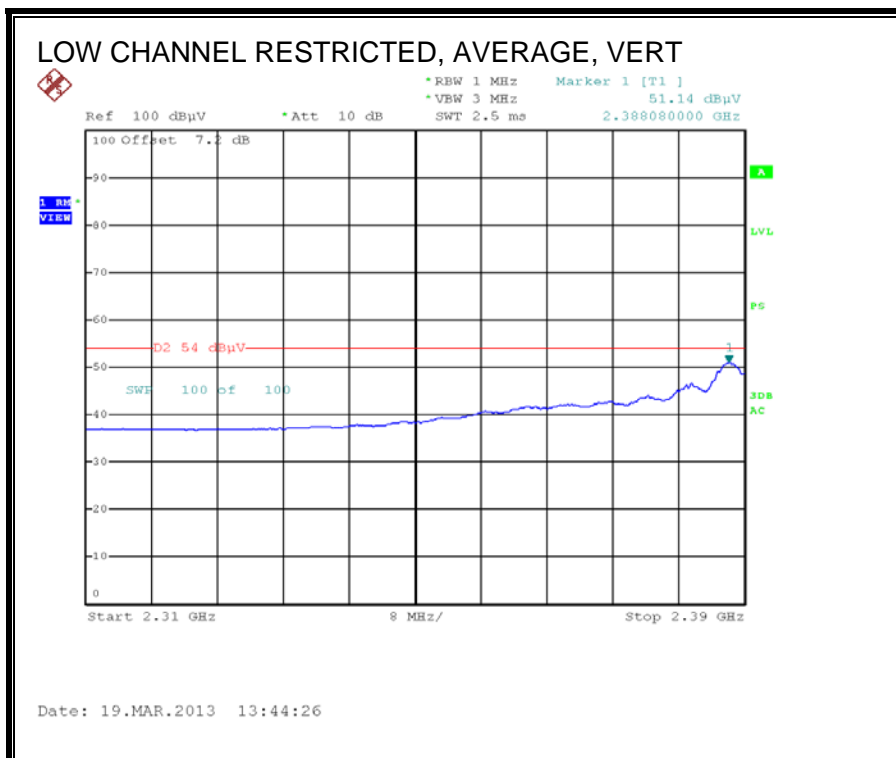
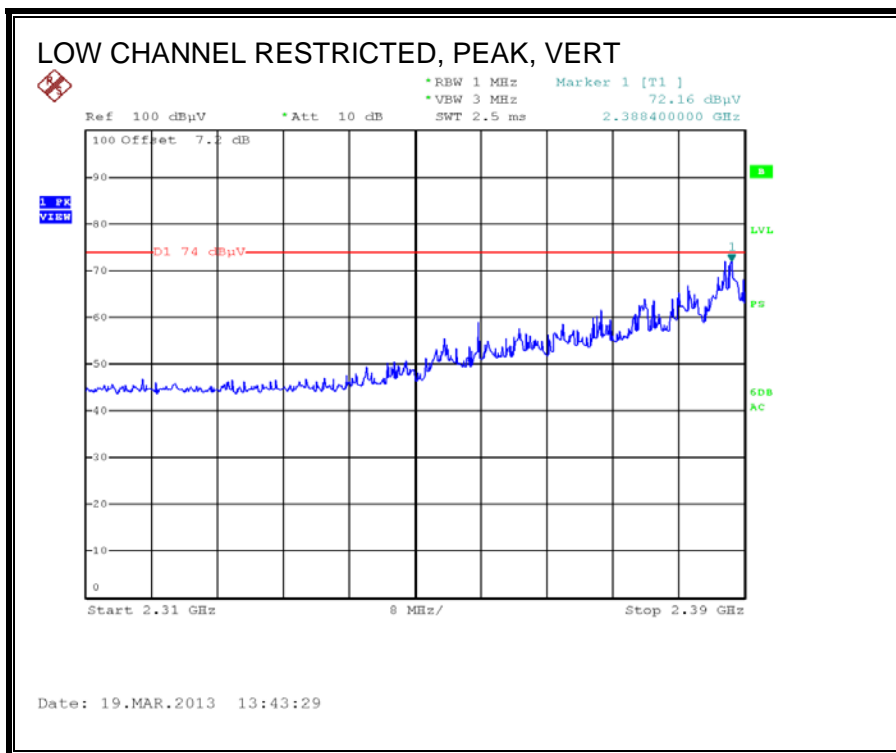
Project No:13J14910 Client Name: MITSUMI Model / Device: Config / Other: Tx, b mode, High ch Test By: Lieu Nguyen													
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
1	2872.845	47.43	PK	32.7	-28.8	0.5	51.83	74	-22.17	54	-2.17	201	Horz
2	7591.057	33.75	PK	35.7	-22.8	0.5	47.15	74	-26.85	54	-6.85	201	Horz
Range:2 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
3	7387.21	35.83	PK	35.7	-23	0.5	49.03	74	-24.97	54	-4.97	99	Vert
4	7867.1	33.56	PK	35.8	-22.6	0.5	47.26	68.2	-20.94	-	-	201	Vert
Range:3 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
5	15617.191	22.18	PK	40.4	-16.6	0.5	46.48	74	-27.52	54	-7.52	99	Horz
Range:4 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
6	14897.551	22.18	PK	39.7	-16	0.5	46.38	68.2	-21.82	-	-	201	Vert
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 [dB]	Loop w/T34 [dB]	T166 BRF 2.4-2.5 GHz [dB]	(dBuVolts)	FCC Part 15C Peak	Peak Margin	Fcc Part 15C 15.209 Avg 3m	Average Margin	Height [cm]	Polarity
1	2871.14	41.11	Av	32.7	-28.8	0.5	45.51	-	-	54	-8.49	116	Horz
3	7385.48	25.6	Av	35.7	-23	0.5	38.8	-	-	54	-15.2	128	Vert
PK - Peak detector QP - Quasi-Peak detector Av - Average detector													

### 9.2.2. 802.11g CDD 2TX MODE, 2.4 GHz BAND

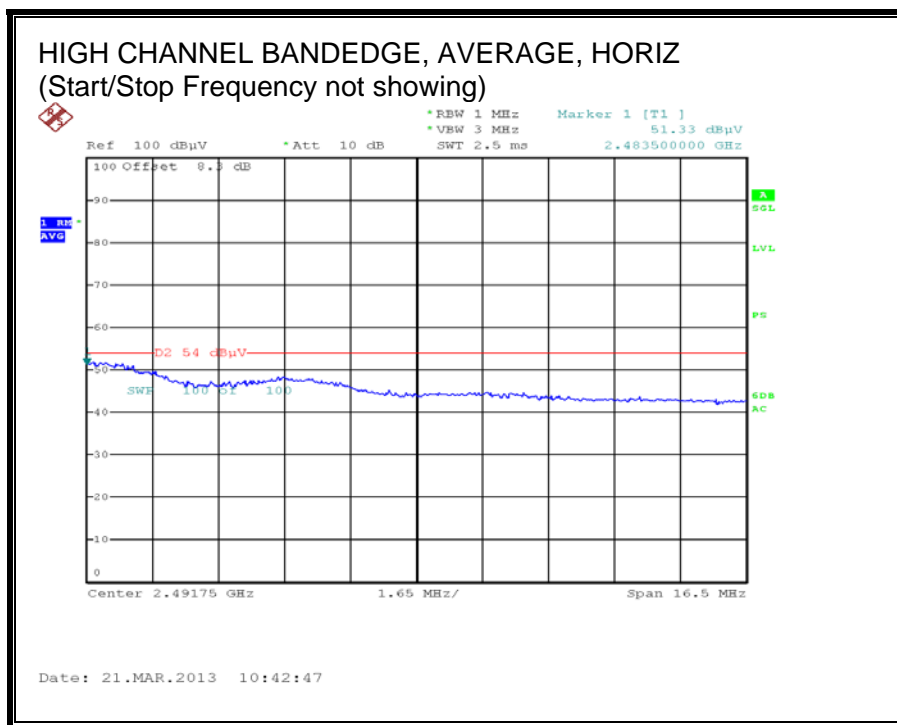
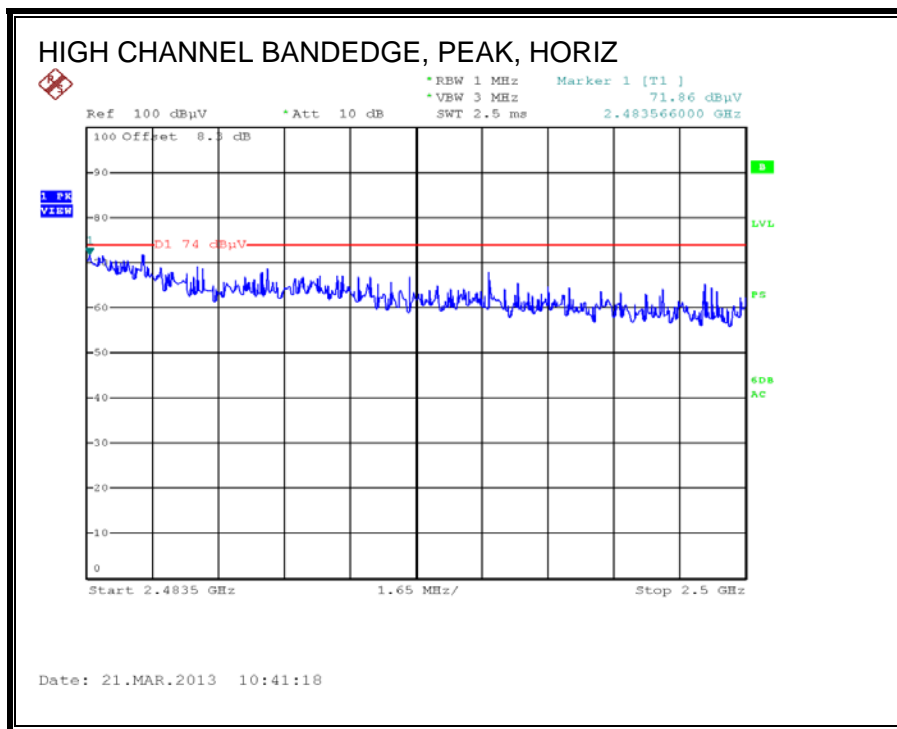
#### RESTRICTED BANDEDGE (LOW CHANNEL)

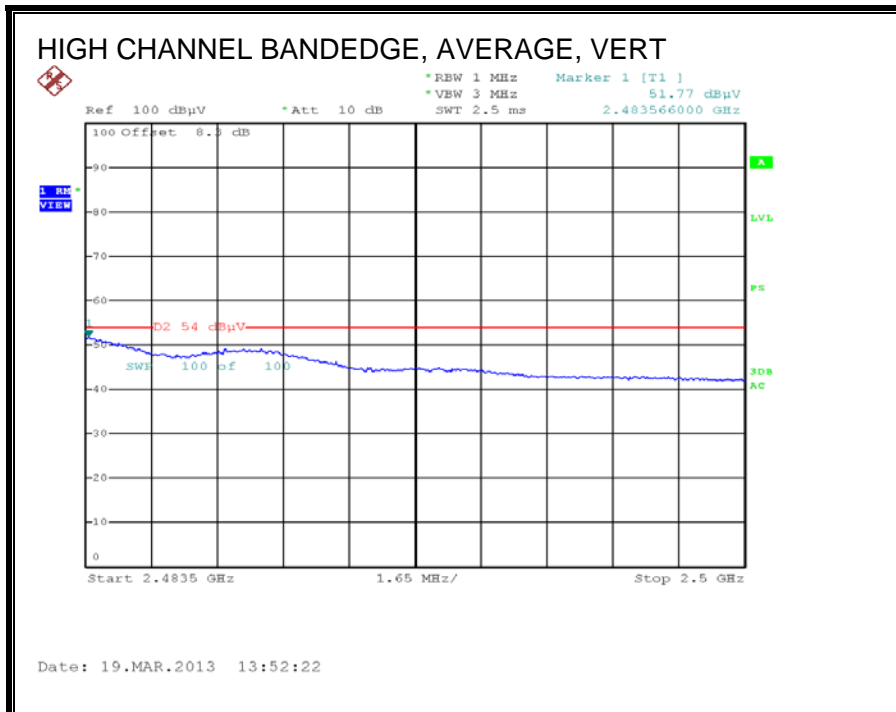
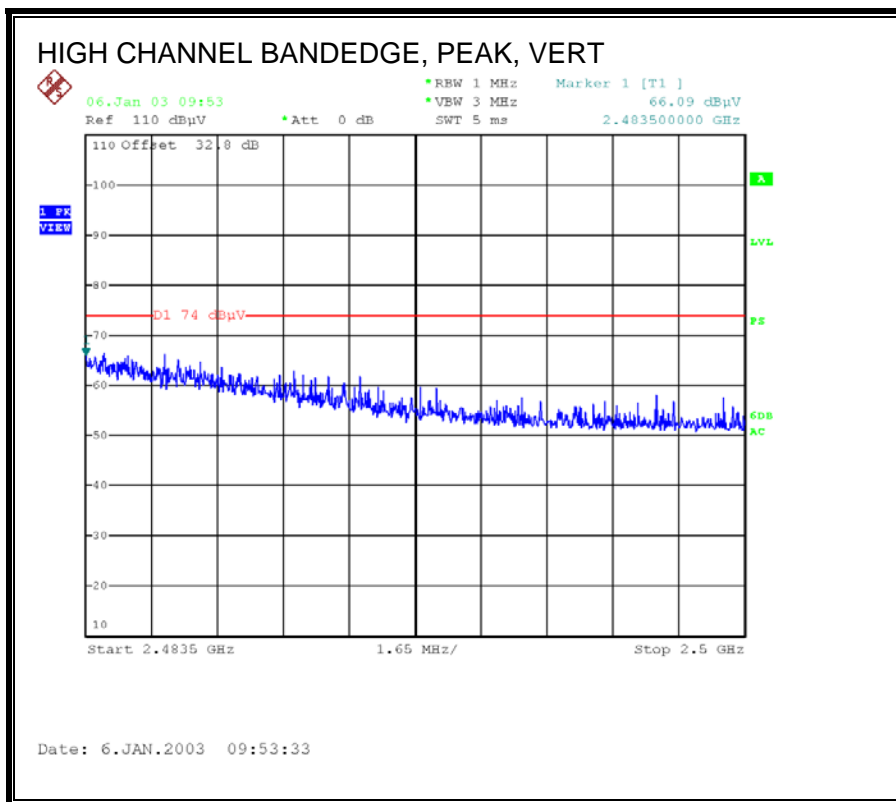






**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

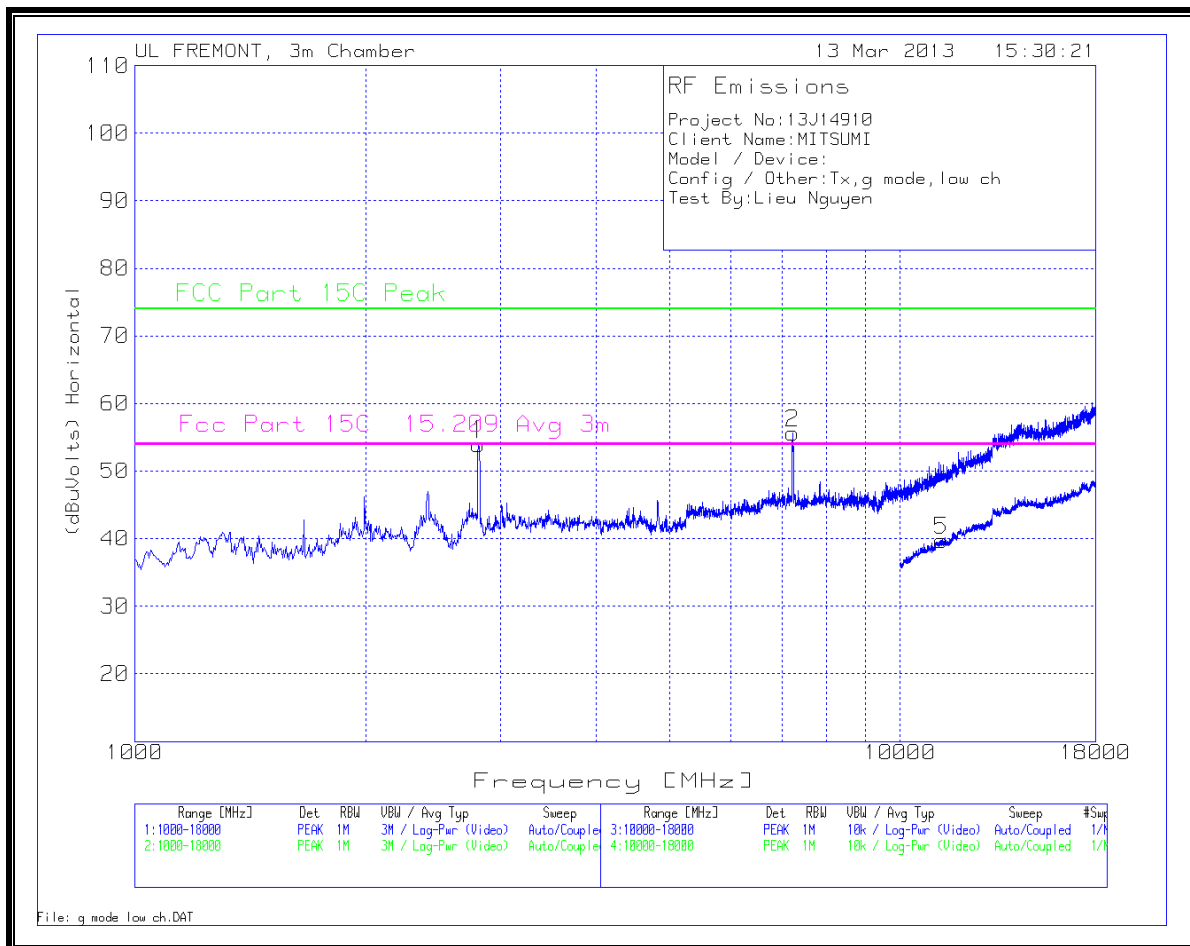




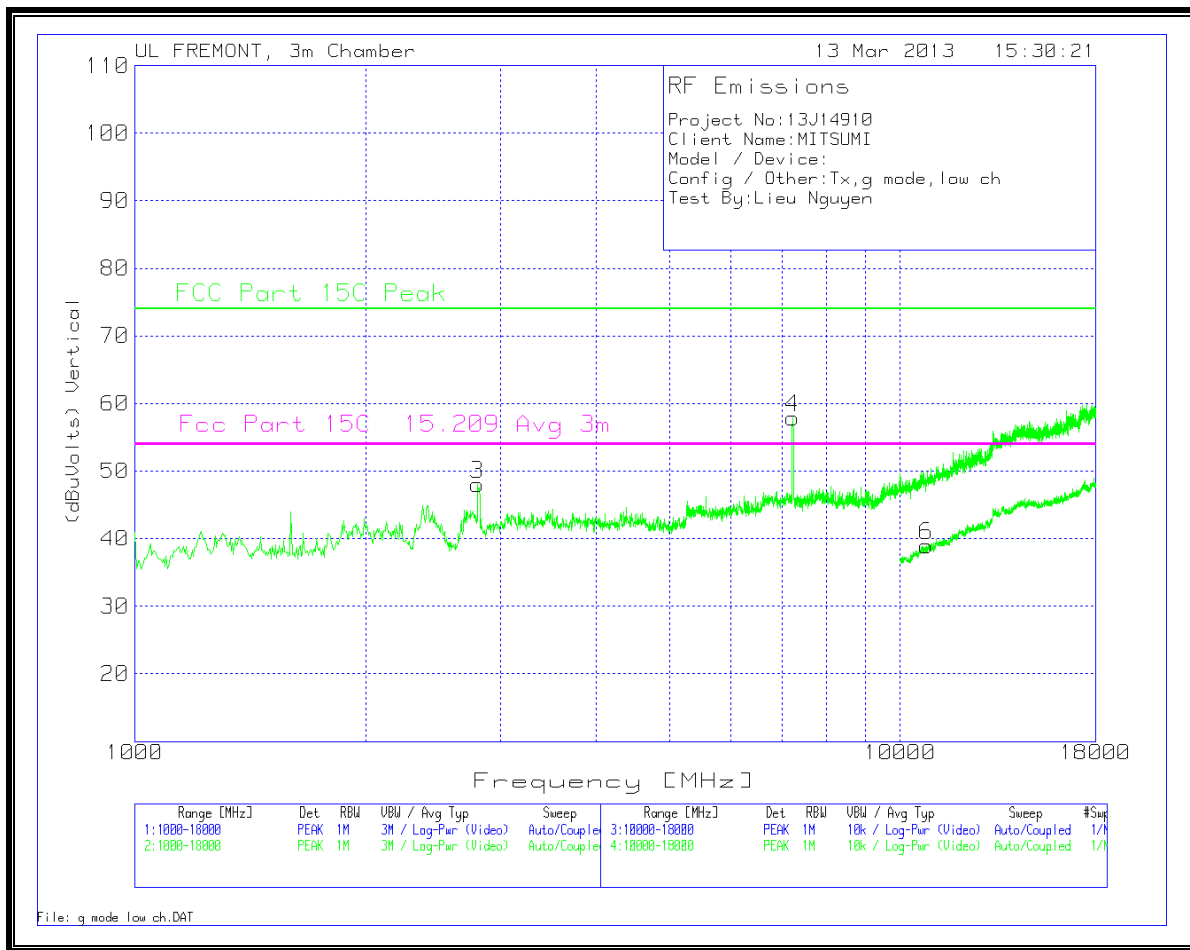
**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL**

**HORIZONTAL PLOT**



VERTICAL PLOT

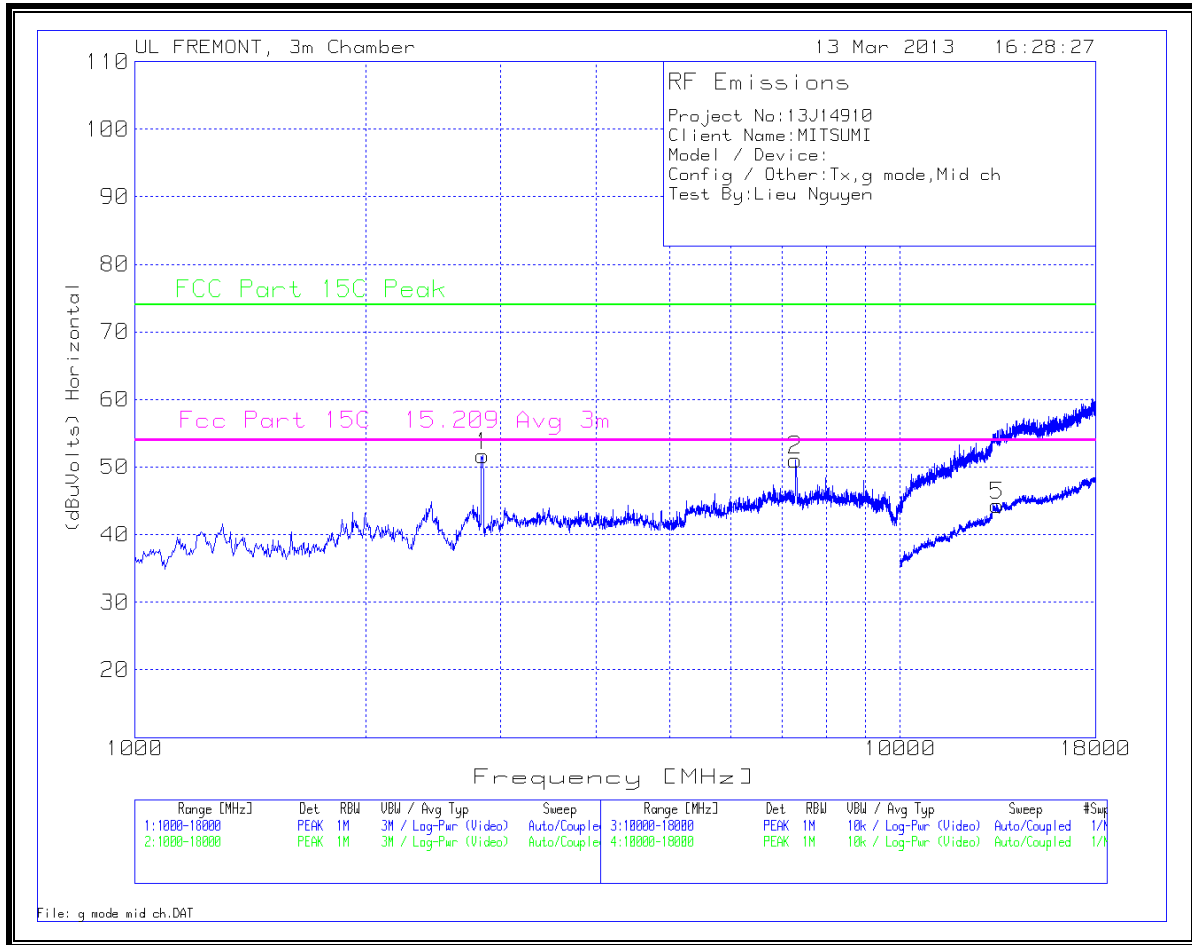


LOW CHANNEL DATA

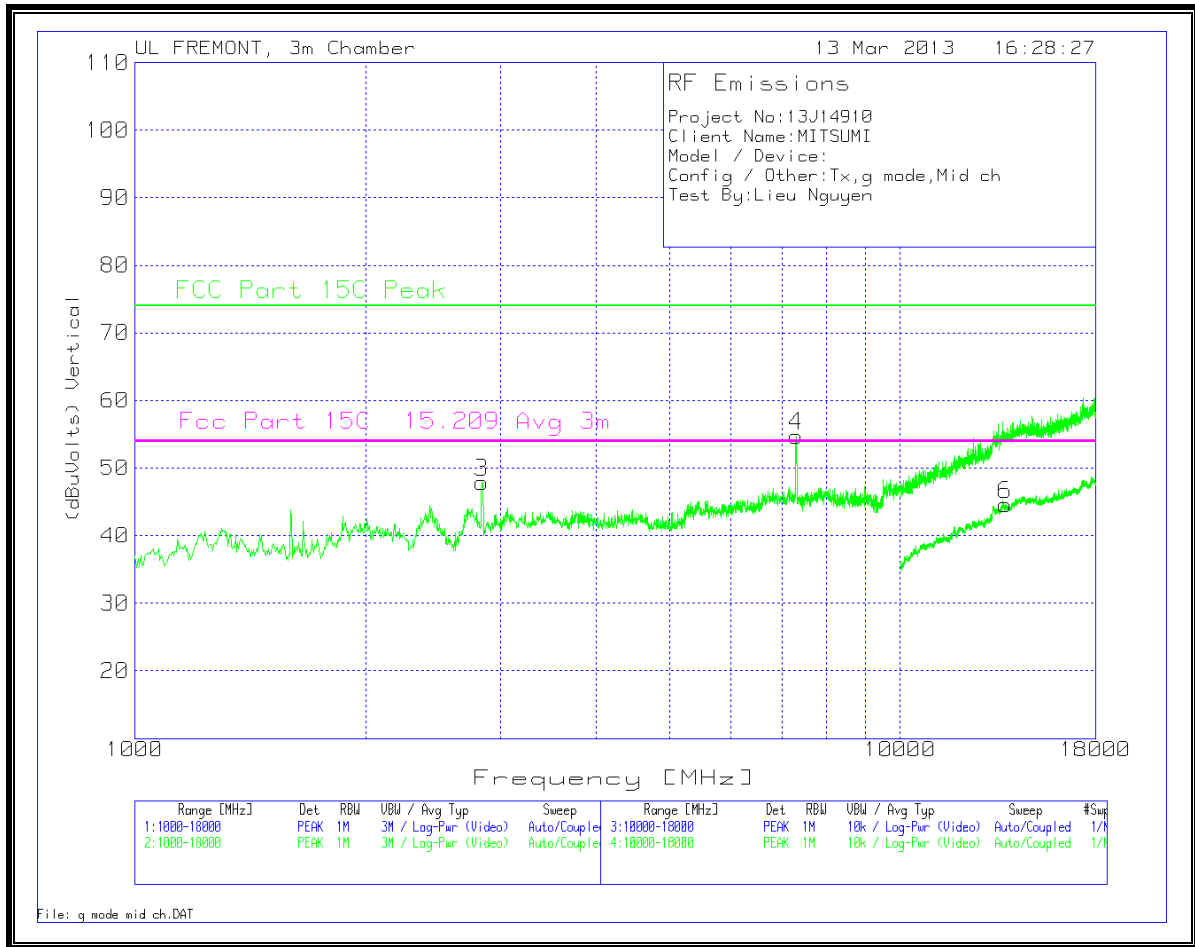
Project No:13J14910 Client Name:MITSUMI Model / Device: Config / Other:Tx,g mode,low ch Test By:Lieu Nguyen													
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2809.143	49.59	PK	32.7	-28.8	0.5	53.99	74	-20.01	54	-0.01	99	Horz
2	7230.077	42.67	PK	35.6	-23.1	0.5	55.67	68.2	-18.33	-	-	99	Horz
Range:2 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
3	2804.896	43.67	PK	32.7	-28.8	0.5	48.07	74	-25.93	54	-5.93	201	Vert
4	7234.324	44.92	PK	35.6	-23.1	0.5	57.92	68.2	-16.08	-	-	201	Vert
Range:3 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
5	11331.334	20.71	PK	38	-19.5	0.5	39.71	74	-34.29	54	-14.29	201	Horz
Range:4 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
6	10807.596	20.77	PK	37.9	-20.2	0.5	38.97	74	-35.03	54	-15.03	99	Vert
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2810.65	41.98	Av	32.7	-28.8	0.5	46.38	-	-	54	-7.62	260	Horz
PK - Peak detector QP - Quasi-Peak detector Av - Average detector													

**MID CHANNEL**

**HORIZONTAL PLOT**



VERTICAL PLOT





MID CHANNEL DATA

Project No:13J14910  
 Client Name:MITSUMI  
 Model / Device:  
 Config / Other:Tx,g mode,Mid ch  
 Test By:Lieu Nguyen

Range:1 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2845.241	47.27	PK	32.7	-28.8	0.5	51.67	74	-22.33	54	-2.33	201	Horz
2	7302.273	38	PK	35.6	-23	0.5	51.1	74	-22.9	54	-2.9	201	Horz

Range:2 1000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
3	2838.871	43.53	PK	32.7	-28.8	0.5	47.93	74	-26.07	54	-6.07	100	Vert
4	7310.767	41.68	PK	35.6	-23	0.5	54.78	74	-19.22	54	0.78	201	Vert

Range:3 10000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
5	13386.307	21.49	PK	39.1	-16.7	0.5	44.39	74	-29.61	54	-9.61	99	Horz

Range:4 10000 - 18000MHz

Marker No.	Test Frequency	Meter Reading	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
6	13722.139	21.35	PK	38.8	-16	0.5	44.65	68.2	-23.55	-	-	100	Vert

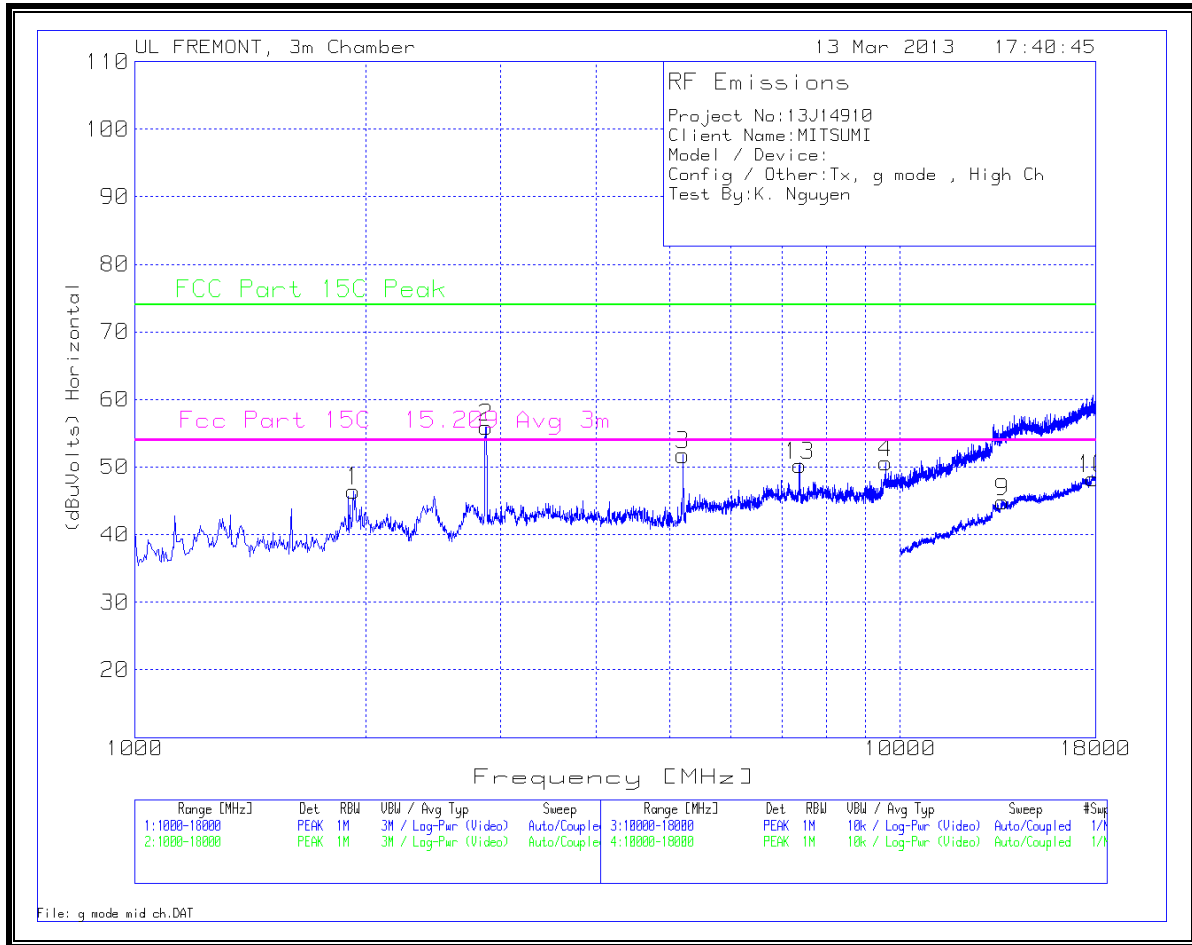
Range:1 1000 - 18000MHz

Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 [dB]	Loop w/T34 [dB]	T166 BRF 2.4-2.5 GHz [dB]	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2839.84	42.23	Av	32.7	-28.8	0.5	46.63	-	-	54	-7.37	143	Horz
2	7307.04	28.21	Av	35.6	-23	0.5	41.31	-	-	54	-12.69	196	Horz
4	7312.76	32.85	Av	35.6	-23	0.5	45.95	-	-	54	-8.05	166	Vert

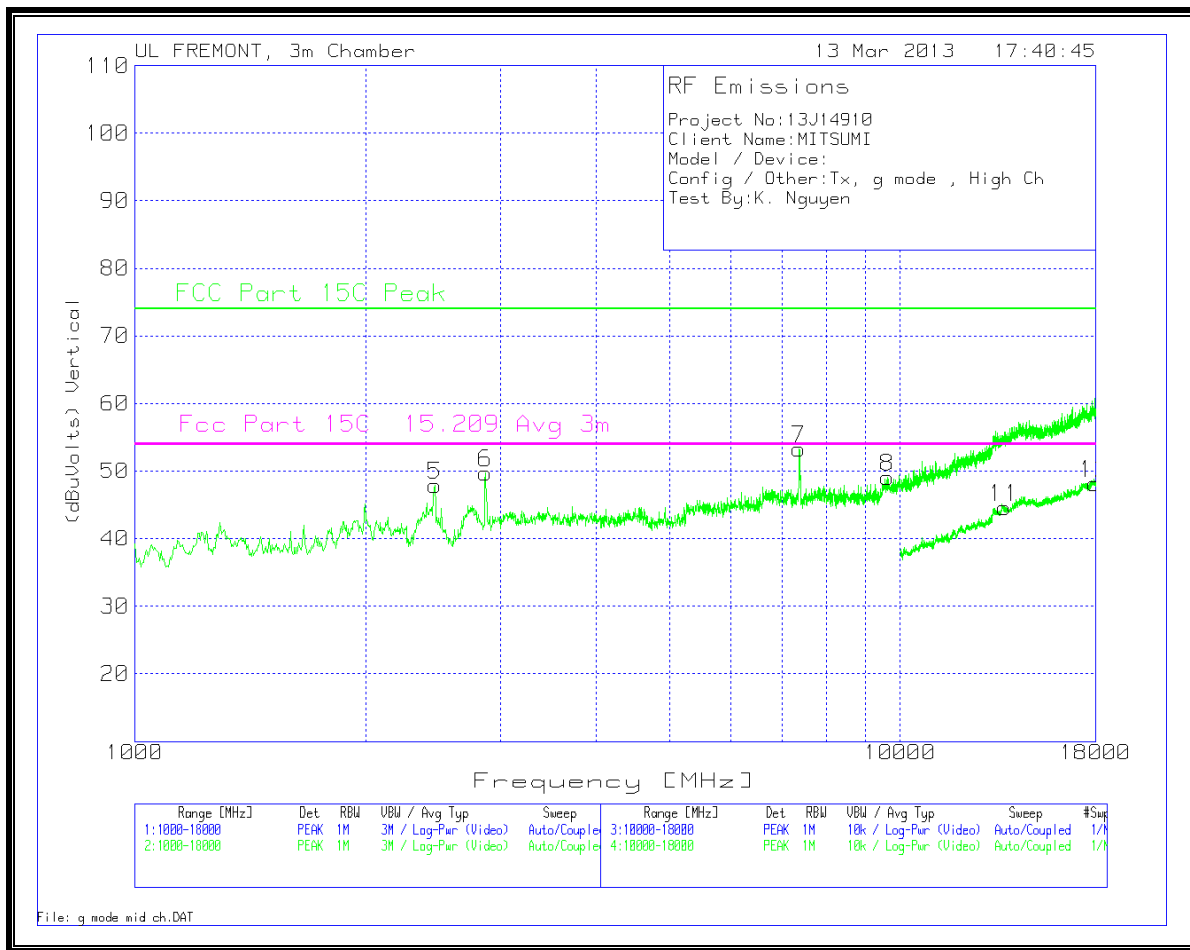
PK - Peak detector  
 QP - Quasi-Peak detector  
 Av - Average detector

**HIGH CHANNEL**

**HORIZONTAL PLOT**



VERTICAL PLOT

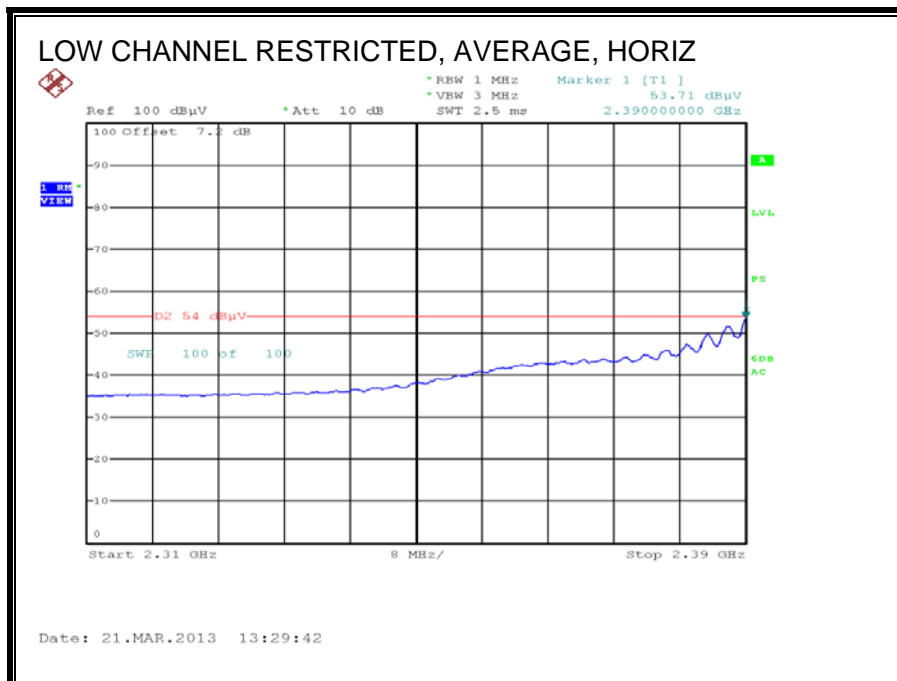
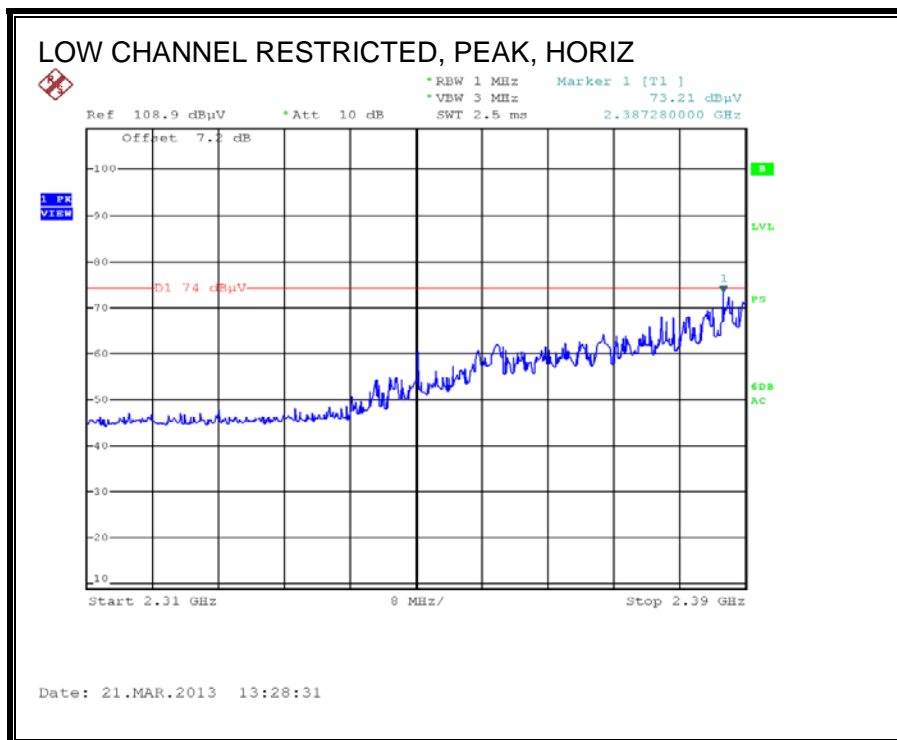


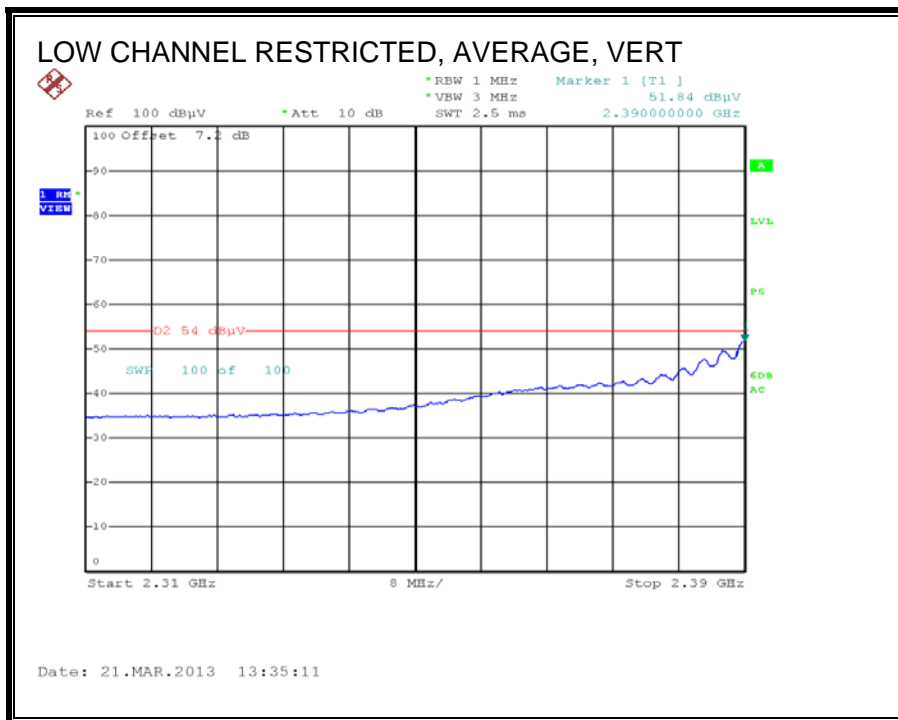
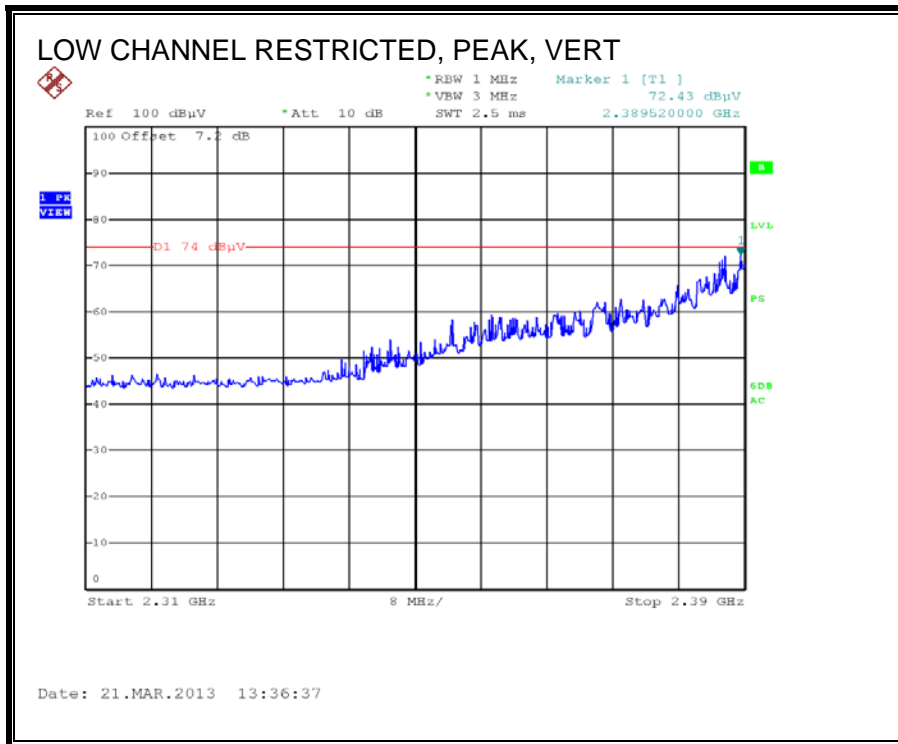
HIGH CHANNEL DATA

Project No:13J14910 Client Name:MITSUMI Model / Device: Config / Other:Tx, g mode , High Ch Test By:K. Nguyen													
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	1930.052	45.41	PK	31.4	-30.8	0.5	46.51	68.2	-21.69	-	-	99	Horz
2	2877.092	51.55	PK	32.7	-28.8	0.5	55.95	74	-18.05	54	1.95	200	Horz
3	5204.347	41.67	PK	34.3	-24.7	0.5	51.77	74	-22.23	54	-2.23	99	Horz
4	9570.072	35.3	PK	36.7	-21.8	0.5	50.7	68.2	-23.3	-	-	200	Horz
13	7395.703	37.02	PK	35.7	-23	0.5	50.22	74	-23.78	54	-3.78	99	Horz
Range:2 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
5	2465.151	44.84	PK	32.2	-29.6	0.5	47.94	68.2	-23.3	-	-	201	Vert
6	2868.599	45.33	PK	32.7	-28.8	0.5	49.73	74	-24.27	54	-4.27	201	Vert
7	7378.716	40.12	PK	35.7	-23	0.5	53.32	74	-20.68	54	-0.68	201	Vert
8	9633.775	33.59	PK	36.8	-21.8	0.5	49.09	68.2	-23.3	-	-	99	Vert
Range:3 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
9	13606.197	21.53	PK	38.9	-16.1	0.5	44.83	68.2	-23.3	-	-	201	Horz
10	17852.074	20.34	PK	41.5	-14	0.5	48.34	74	-25.66	54	-5.66	201	Horz
Range:4 10000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 (dB)	Loop w/T34 (dB)	T166 BRF 2.4-2.5 GHz (dB)	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
11	13674.163	21.42	PK	38.8	-16.1	0.5	44.62	68.2	-23.3	-	-	99	Vert
12	17944.028	19.99	PK	41.6	-13.9	0.5	48.19	74	-25.81	54	-5.81	99	Vert
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T119 [dB]	Loop w/T34 [dB]	T166 BRF 2.4-2.5 GHz [dB]	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
2	2868.6	42.15	Av	32.7	-28.8	0.5	46.55	-	-	54	-7.45	294	Horz
3	5215.45	24.91	Av	34.3	-24.7	0.5	35.01	-	-	54	-18.99	110	Horz
6	2876.49	35.35	Av	32.7	-28.8	0.5	39.75	-	-	54	-14.25	236	Vert
7	7385.22	32	Av	35.7	-23	0.5	45.2	-	-	54	-8.8	148	Horz
13	7386.43	30.79	Av	35.7	-23	0.5	43.99	-	-	54	-10.01	206	Vert
PK - Peak detector QP - Quasi-Peak detector Av - Average detector													

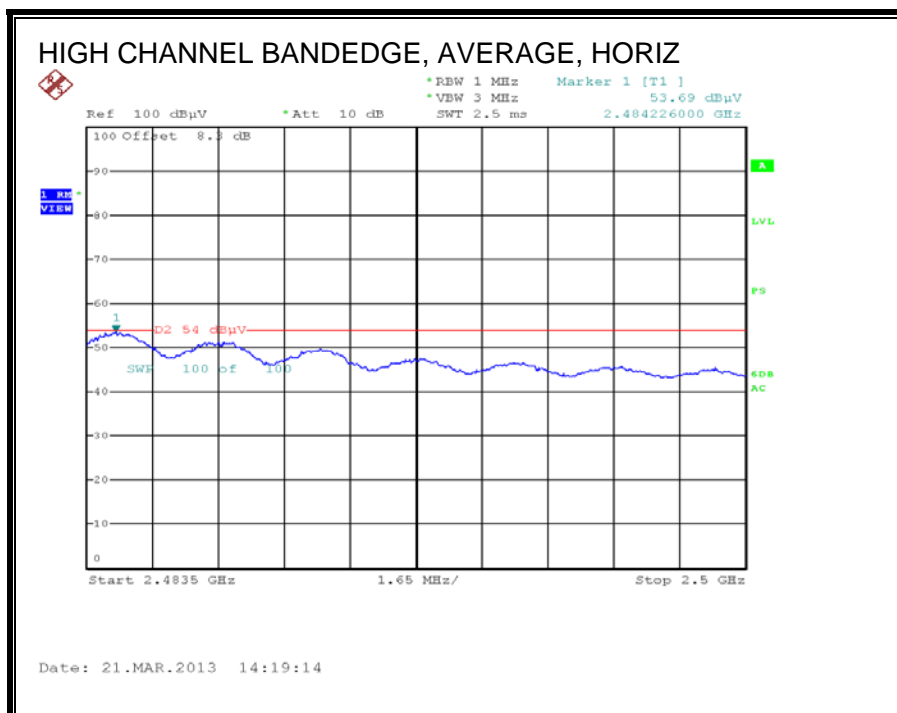
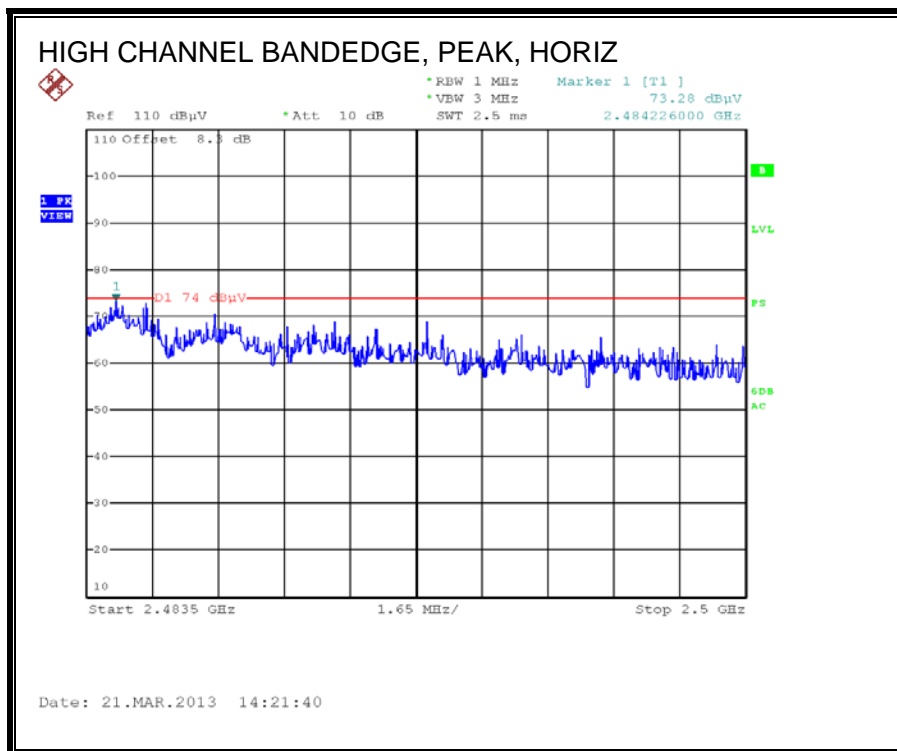
### 9.2.3 802.11n HT20 CDD MCS0 2TX MODE, 2.4 GHZ BAND

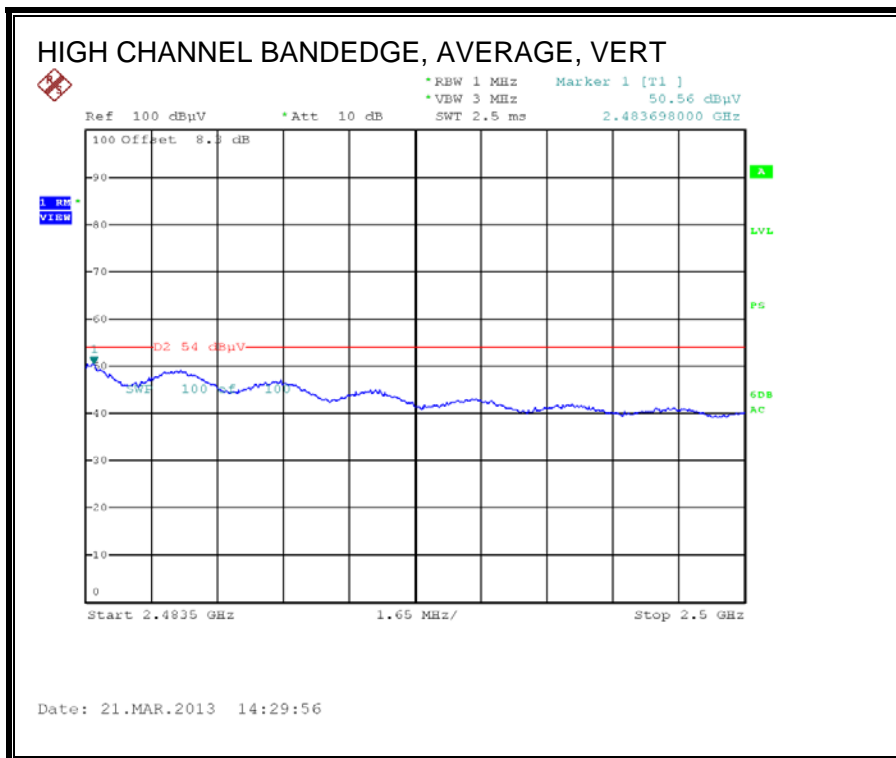
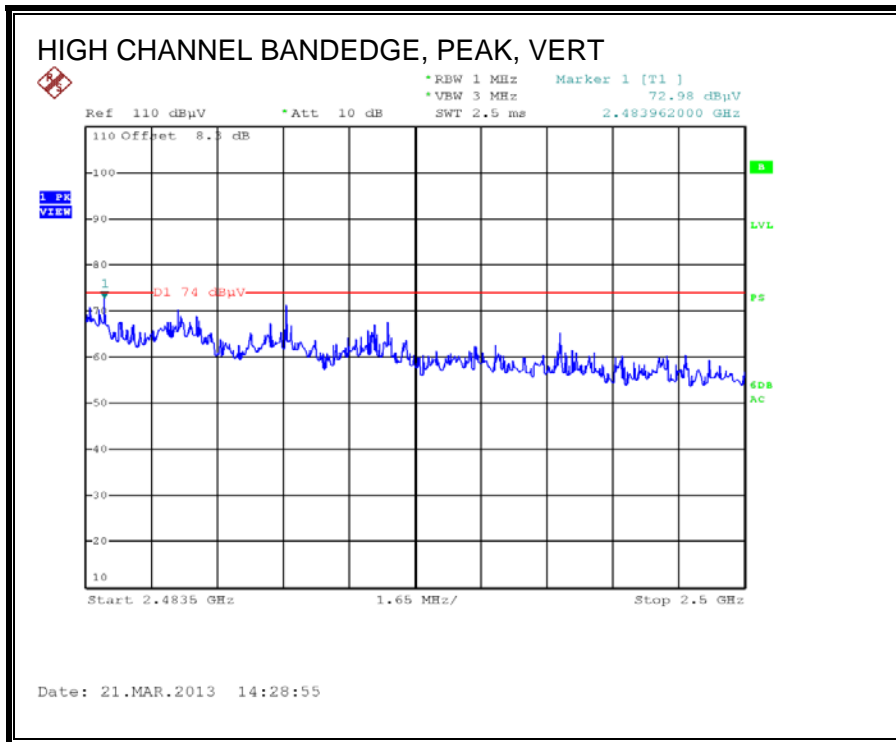
#### RESTRICTED BANDEDGE (LOW CHANNEL)





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



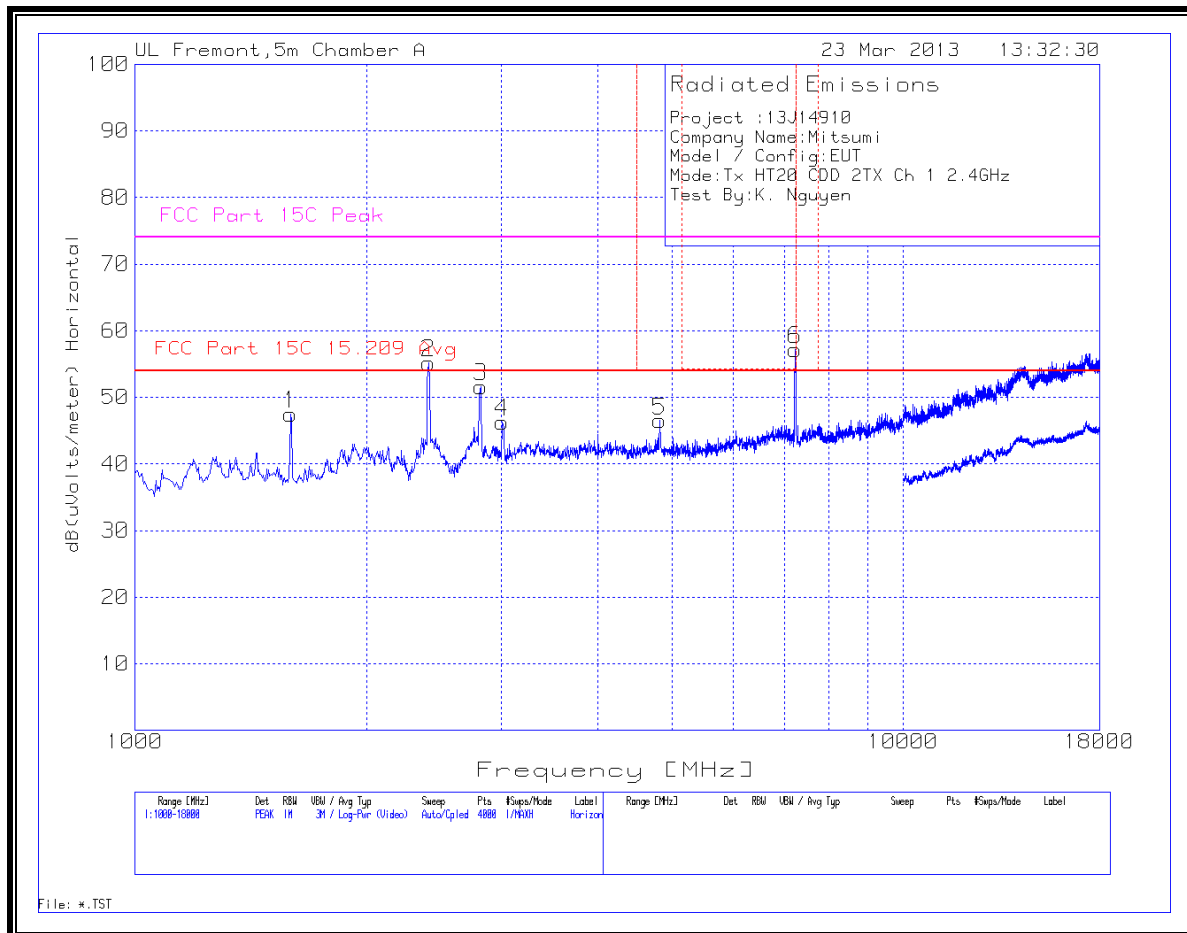




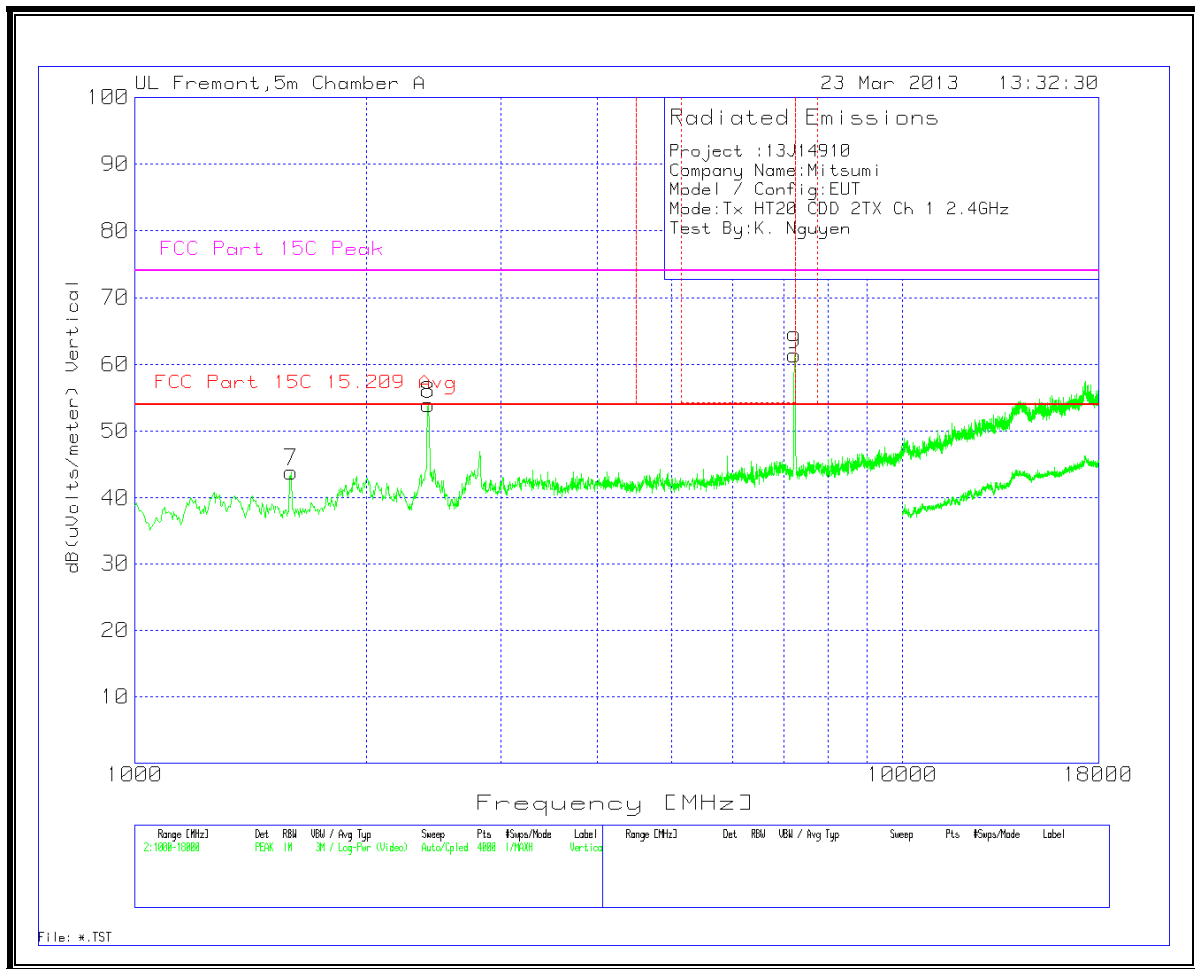
**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL**

**HORIZONTAL**



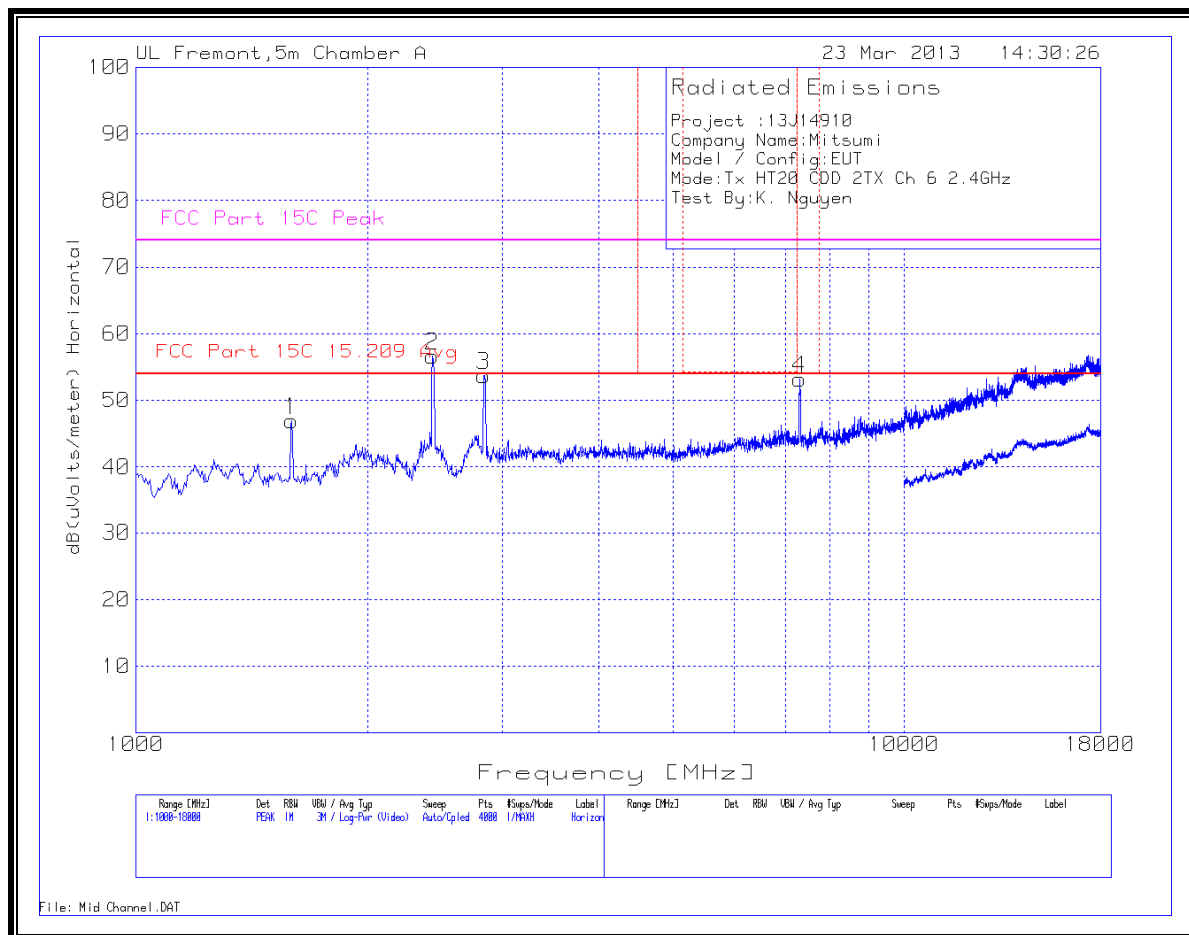
VERTICAL



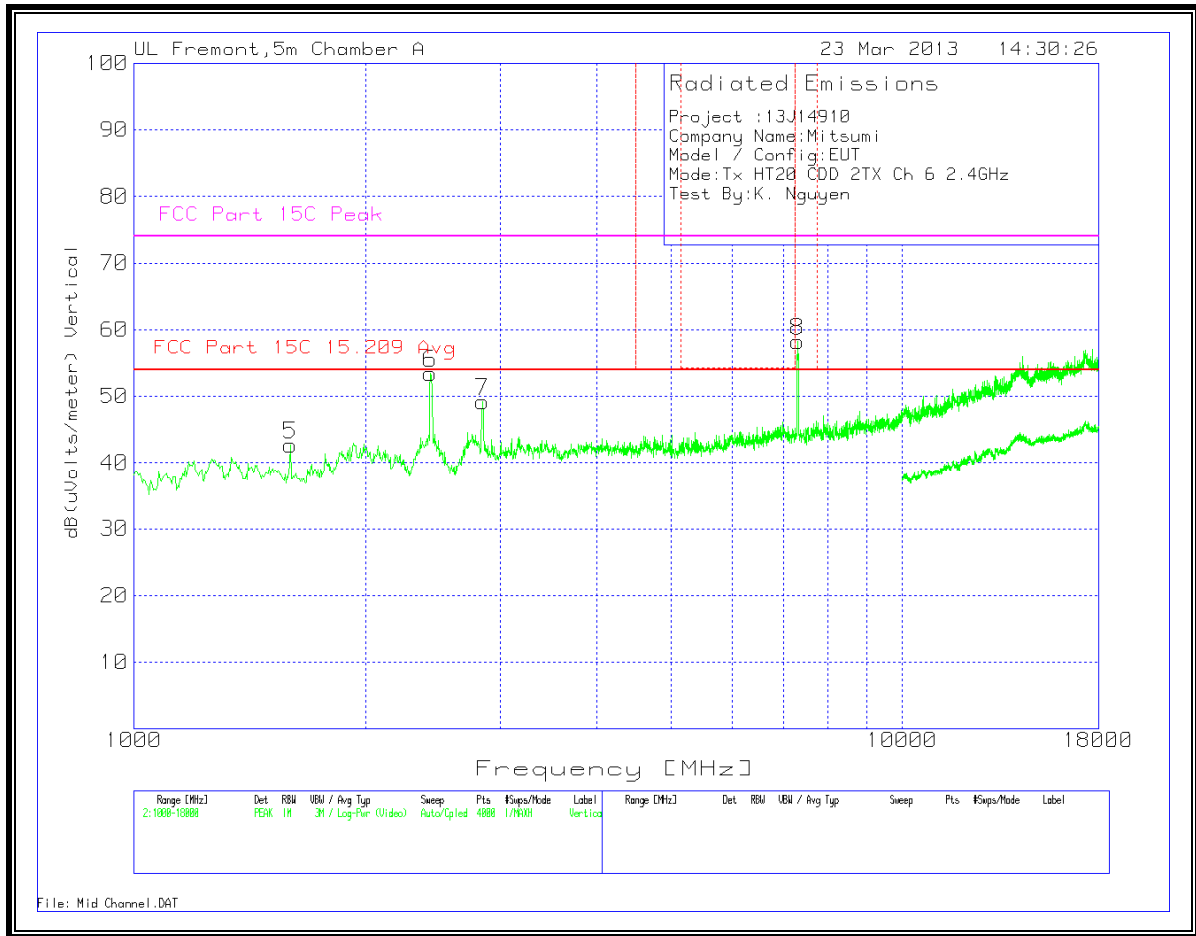
LOW CHANNEL DATA

Project :13J14910														
Company Name:Mitsumi														
Model / Config:EUT														
Mode:Tx HT20 CDD 2TX Ch 1 2.4GHz														
Test By:K. Nguyen														
Horizontal 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts /meter)	FCC Part 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
1	1594.554	52.62	PK	28.3	-37.6	3.6	0.6	47.52	-	-	68.2	-20.68	100	Horz
2	2409.943	54.67	PK	32.1	-36.9	4.4	0.9	55.17	-	-	68.2	-13.03	200	Horz
3	2817.637	49.93	PK	32.6	-36.7	4.9	0.9	51.63	54	-2.37	74	-22.37	200	Horz
4	3008.743	44.35	PK	32.7	-36.7	5.1	0.8	46.25	-	-	68.2	-21.95	200	Horz
5	4817.887	41.39	PK	33.9	-35.7	6.7	0.2	46.49	54	-7.51	74	-27.51	100	Horz
6	7234.324	48.65	PK	35.4	-35.8	8.6	0.3	57.15	-	-	68.2	-11.05	100	Horz
Vertical 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts /meter)	FCC Part 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
7	1598.801	48.99	PK	28.3	-37.6	3.6	0.6	43.89	-	-	68.2	-24.31	100	Vert
8	2409.943	53.52	PK	32.1	-36.9	4.4	0.9	54.02	-	-	68.2	-14.18	200	Vert
9	7234.324	52.99	PK	35.4	-35.8	8.6	0.3	61.49	-	-	68.2	-6.71	54	Vert
Horizontal 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts /meter)	FCC Part 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
3	2816.73	43.93	Av	32.6	-36.7	4.9	0.9	45.63	54	-8.37	-	-	156	Horz
PK - Peak detector QP - Quasi-Peak detector Av - Average detector														

**MID CHANNEL  
 HORIZONTAL**



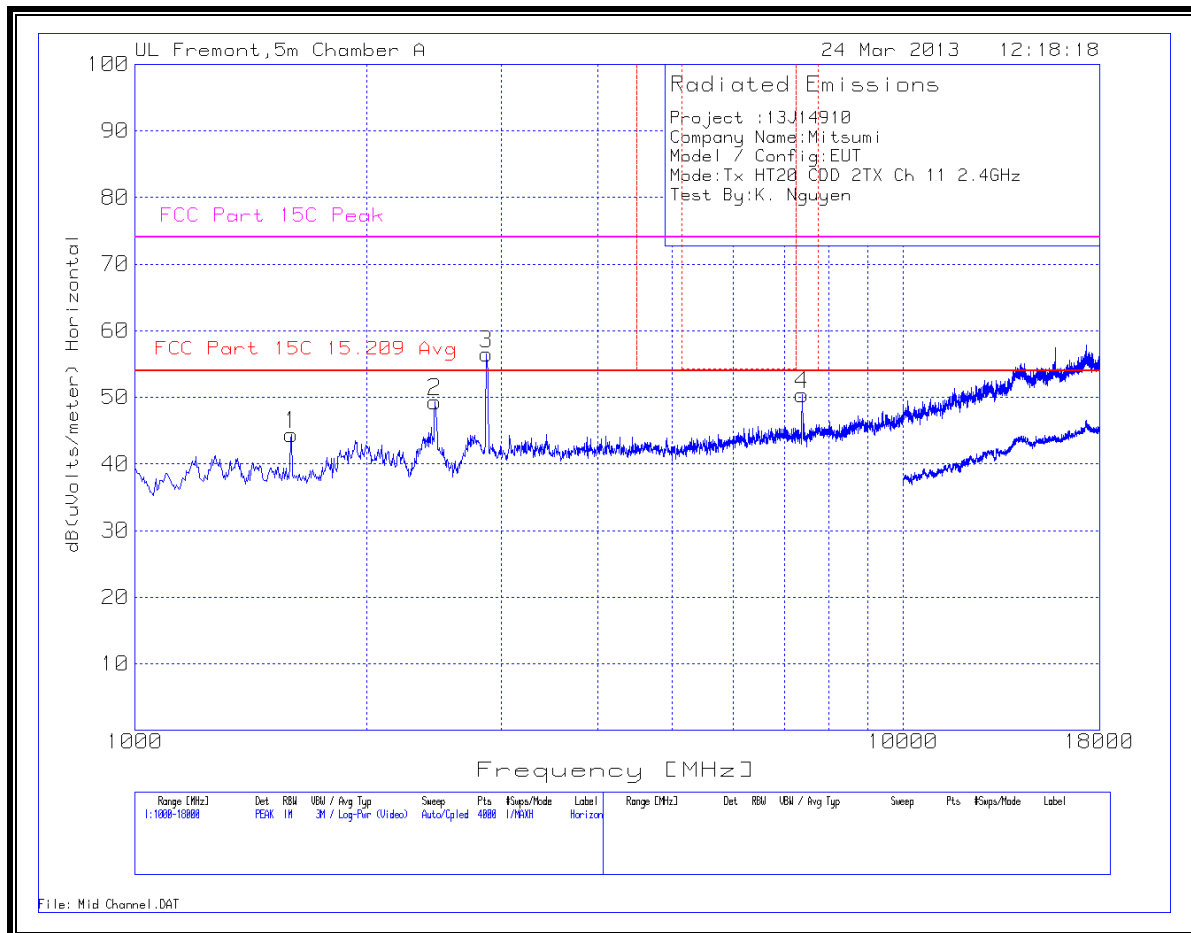
VERTICAL



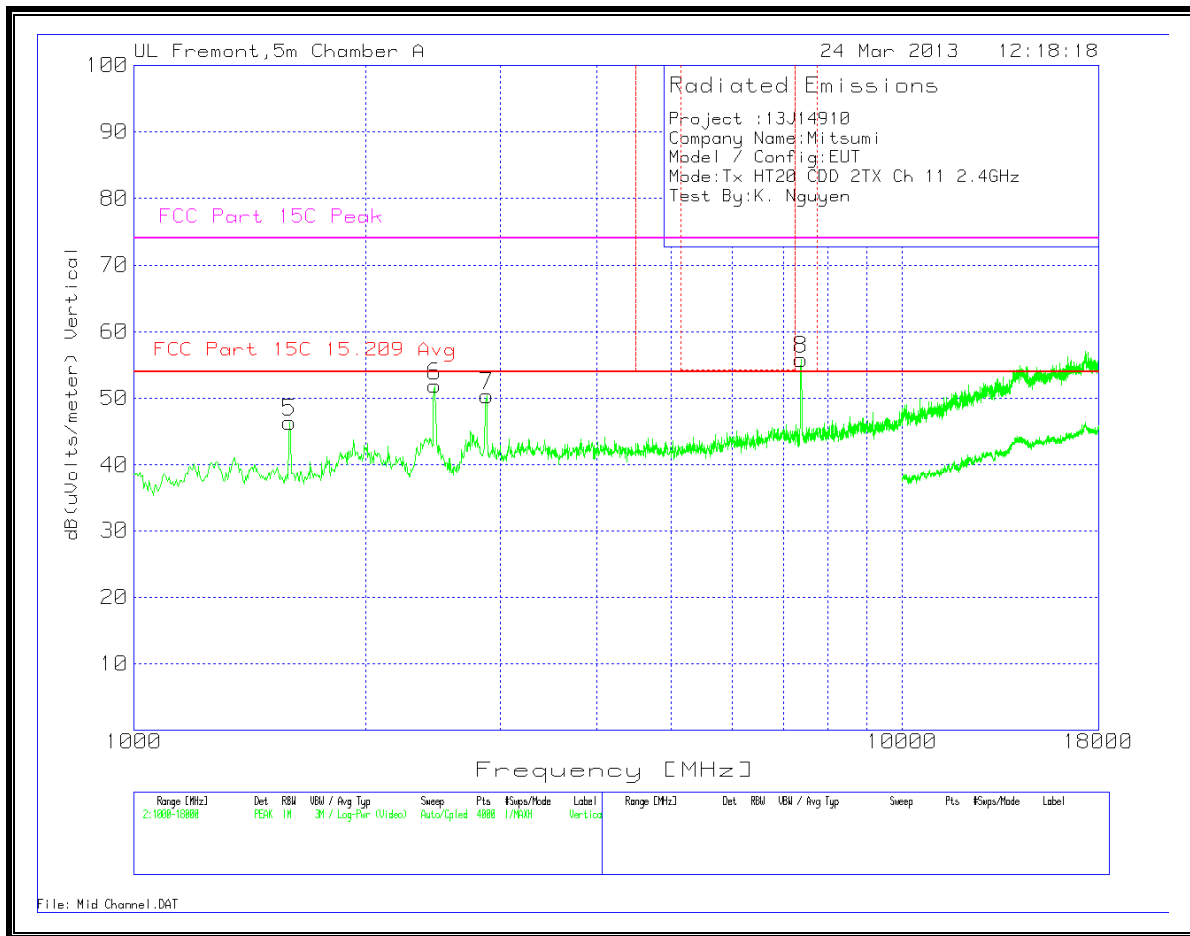
MID CHANNEL DATA

Project :13J14910														
Company Name:Mitsumi														
Model / Config:EUT														
Mode:Tx HT20 CDD 2TX Ch 6 2.4GHz														
Test By:K. Nguyen														
<b>Horizontal 1000 - 18000MHz</b>														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts/ meter)	FCC Part 15C 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
1	1594.554	52.1	PK	28.3	-37.6	3.6	0.6	47	-	-	68.2	-21.2	200	Horz
2	2431.177	55.84	PK	32.3	-36.9	4.5	0.9	56.64	-	-	68.2	-11.56	200	Horz
3	2834.624	52.17	PK	32.5	-36.7	4.9	0.9	53.77	54	-0.23	74	-20.23	157	Horz
4	7315.014	44.69	PK	35.3	-35.8	8.7	0.3	53.19	54	-0.81	74	-20.81	200	Horz
<b>Vertical 1000 - 18000MHz</b>														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts/ meter)	FCC Part 15C 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
5	1598.801	47.81	PK	28.3	-37.6	3.6	0.6	42.71	-	-	68.2	-25.49	100	Vert
6	2431.177	52.7	PK	32.3	-36.9	4.5	0.9	53.5	-	-	68.2	-14.7	200	Vert
7	2838.871	47.61	PK	32.5	-36.7	4.9	0.9	49.21	54	-4.79	74	-24.79	200	Vert
8	7310.767	49.76	PK	35.3	-35.8	8.7	0.3	58.26	54	4.26	74	-15.74	200	Vert
<b>Average Measurements</b>														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts/ meter)	FCC Part 15C 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
3	2834.624	45.81	Av	32.5	-36.7	4.9	0.6	47.11	54	-6.89	-	-	152	Horz
4	7315.014	35.48	Av	35.3	-35.8	8.7	0.3	43.98	54	-10.02	-	-	171	Horz
7	2838.871	40.61	Av	32.5	-36.7	4.9	0.7	42.01	54	-11.99	-	-	344	Vert
8	7310.767	42.37	Av	35.3	-35.8	8.7	0.3	50.87	54	-3.13	-	-	182	Vert
PK - Peak detector QP - Quasi-Peak detector Av - Average detector														

**HIGH CHANNEL  
 HORIZONTAL**



VERTICAL



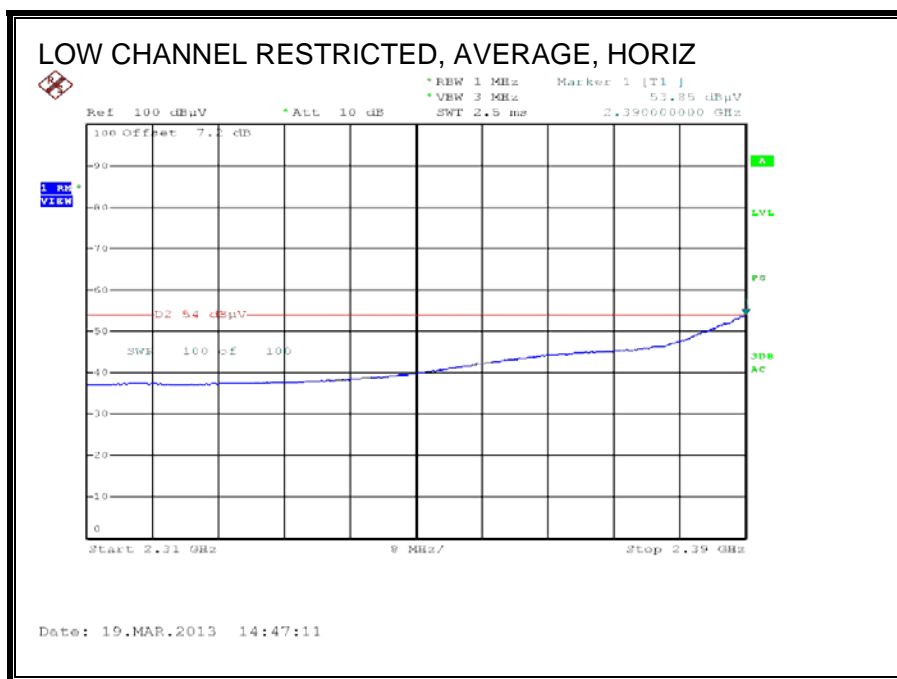
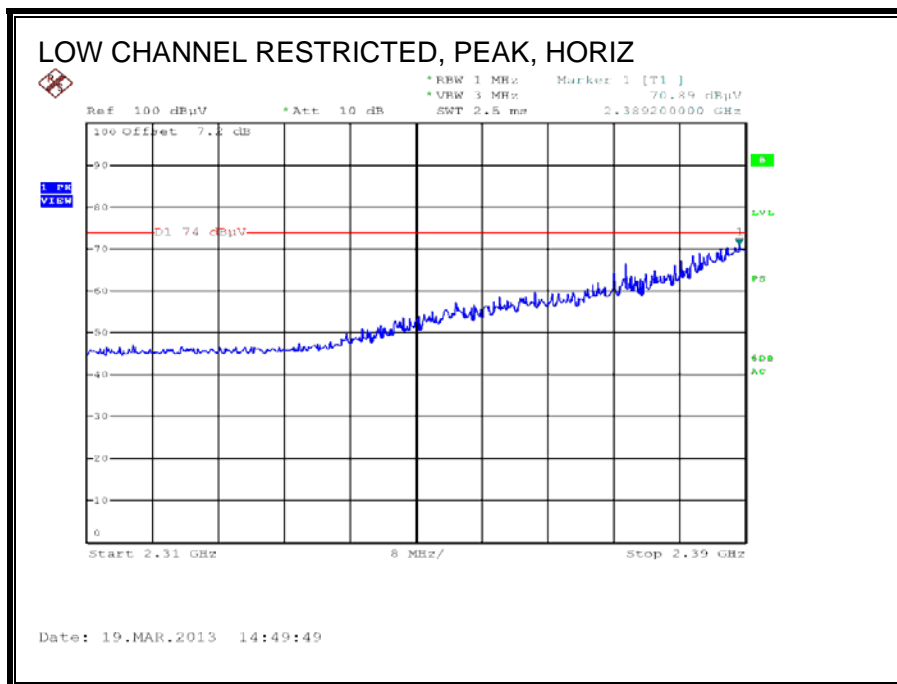


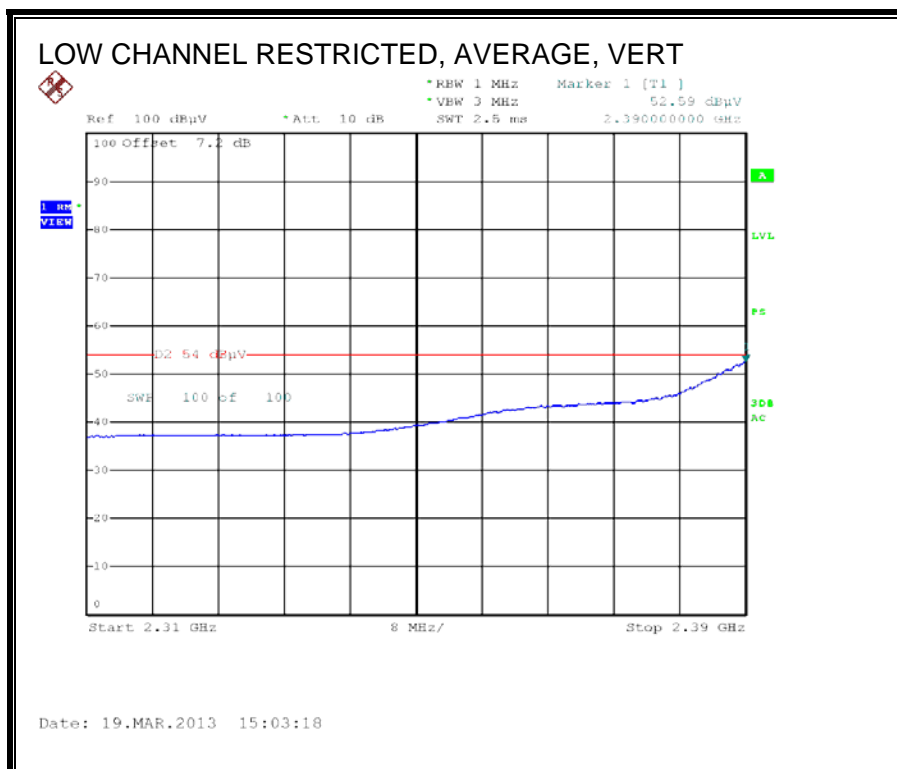
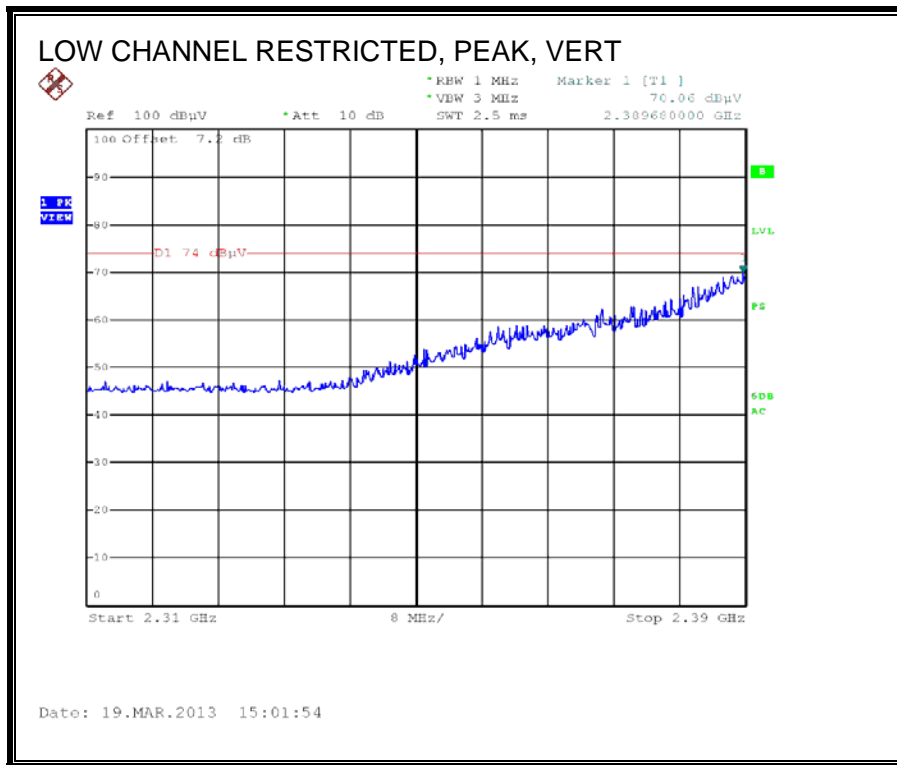
HIGH CHANNEL DATA

Project :13J14910														
Company Name:Mitsumi														
Model / Config:EUT														
Mode:Tx HT20 CDD 2TX Ch 11 2.4GHz														
Test By:K. Nguyen														
Horizontal 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts/m eter)	FCC Part 15C 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
1	1598.801	49.56	PK	28.3	-37.6	3.6	0.6	44.46	-	-	68.2	-23.74	200	Horz
2	2456.658	48.39	PK	32.4	-36.8	4.5	0.9	49.39	-	-	68.2	-18.81	155	Horz
3	2868.599	54.96	PK	32.5	-36.7	4.9	0.9	56.56	-	-	74	-17.44	155	Horz
4	7382.963	41.83	PK	35.4	-35.8	8.7	0.3	50.43	54	-3.57	74	-23.57	200	Horz
Vertical 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts/m eter)	FCC Part 15C 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
5	1594.554	51.56	PK	28.3	-37.6	3.6	0.6	46.46	-	-	68.2	-21.74	200	Vert
6	2460.904	50.93	PK	32.4	-36.8	4.5	0.9	51.93	-	-	68.2	-16.27	200	Vert
7	2877.092	48.92	PK	32.4	-36.7	4.9	0.9	50.42	54	-3.58	74	-23.58	200	Vert
8	7391.456	47.22	PK	35.4	-35.8	8.8	0.2	55.82	-	-	74	-18.18	100	Vert
Average Measurements														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T136 ETS 3117	T144 HP8449B	Cable Factor	T160 BRF	dB(uVolts/m eter)	FCC Part 15C 15.209 Avg	Average Margin	FCC Part 15C Peak	Peak Margin	Height [cm]	Polarity
3	2874.7	48.31	Av	32.5	-36.7	4.9	0.9	49.91	54	-4.09	-	-	219	Horz
4	7385.45	31.55	Av	35.4	-35.8	8.7	0.2	40.05	54	-13.95	-	-	217	Horz
7	2875.4	43.33	Av	32.4	-36.7	4.9	0.9	44.83	54	-9.17	-	-	249	Vert
8	7385.3	38.06	Av	35.4	-35.8	8.7	0.2	46.56	54	-7.44	-	-	235	Vert
PK - Peak detector QP - Quasi-Peak detector Av - Average detector														

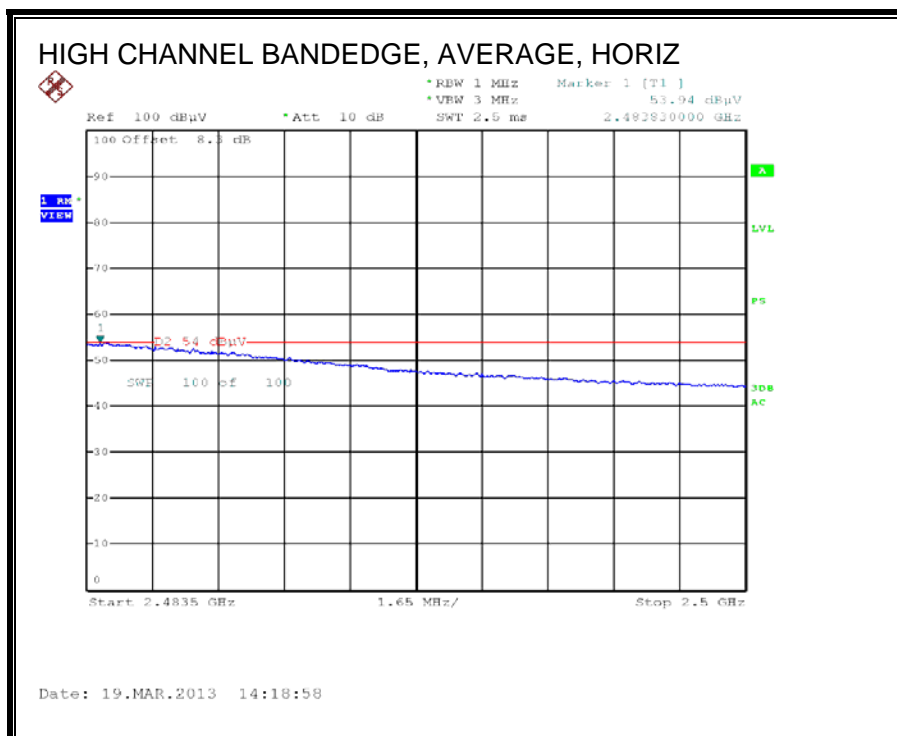
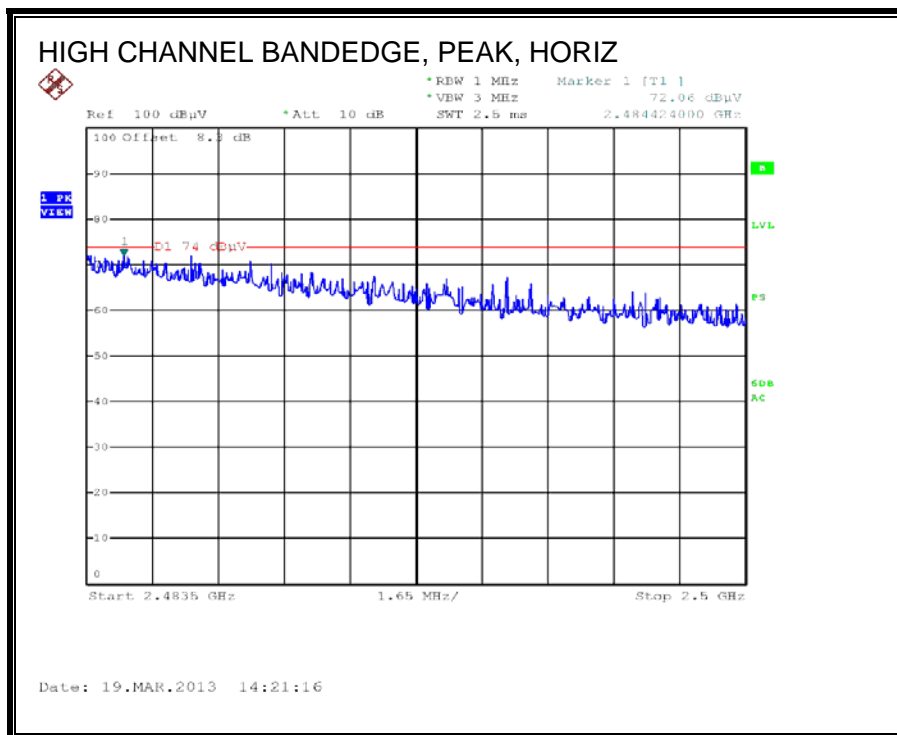
### 9.2.4 802.11n HT20 SDM MCS8 2TX MODE, 2.4 GHz BAND

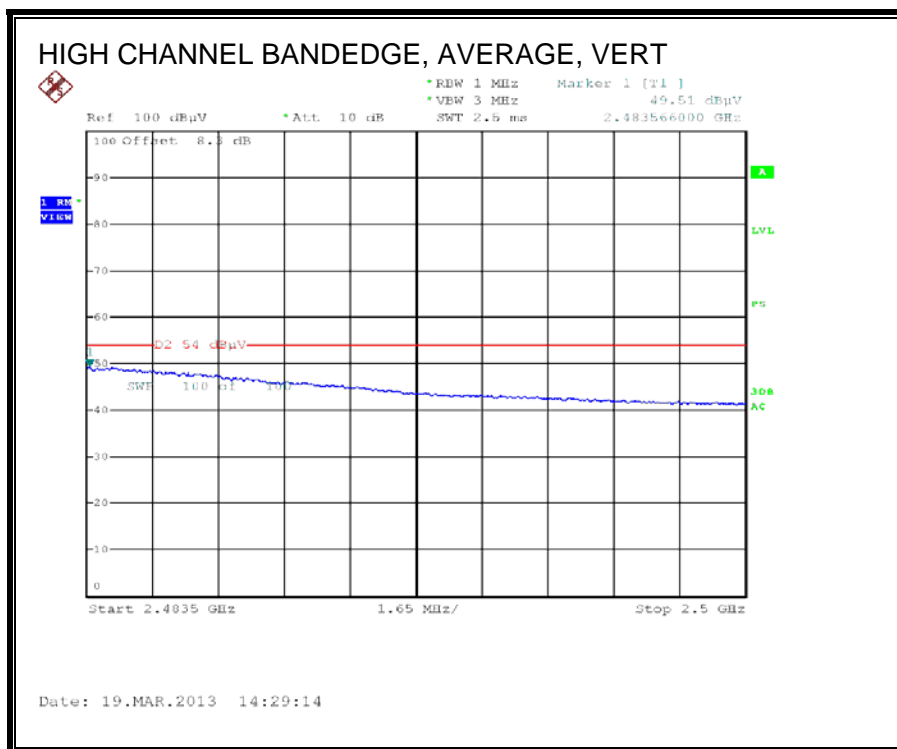
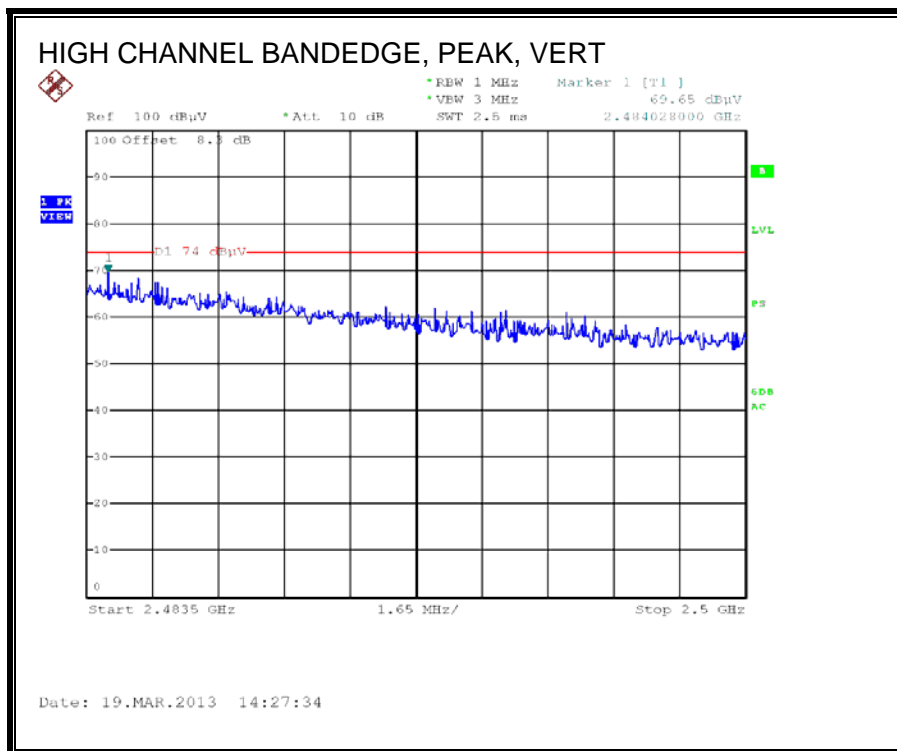
#### RESTRICTED BANDEDGE (LOW CHANNEL)





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

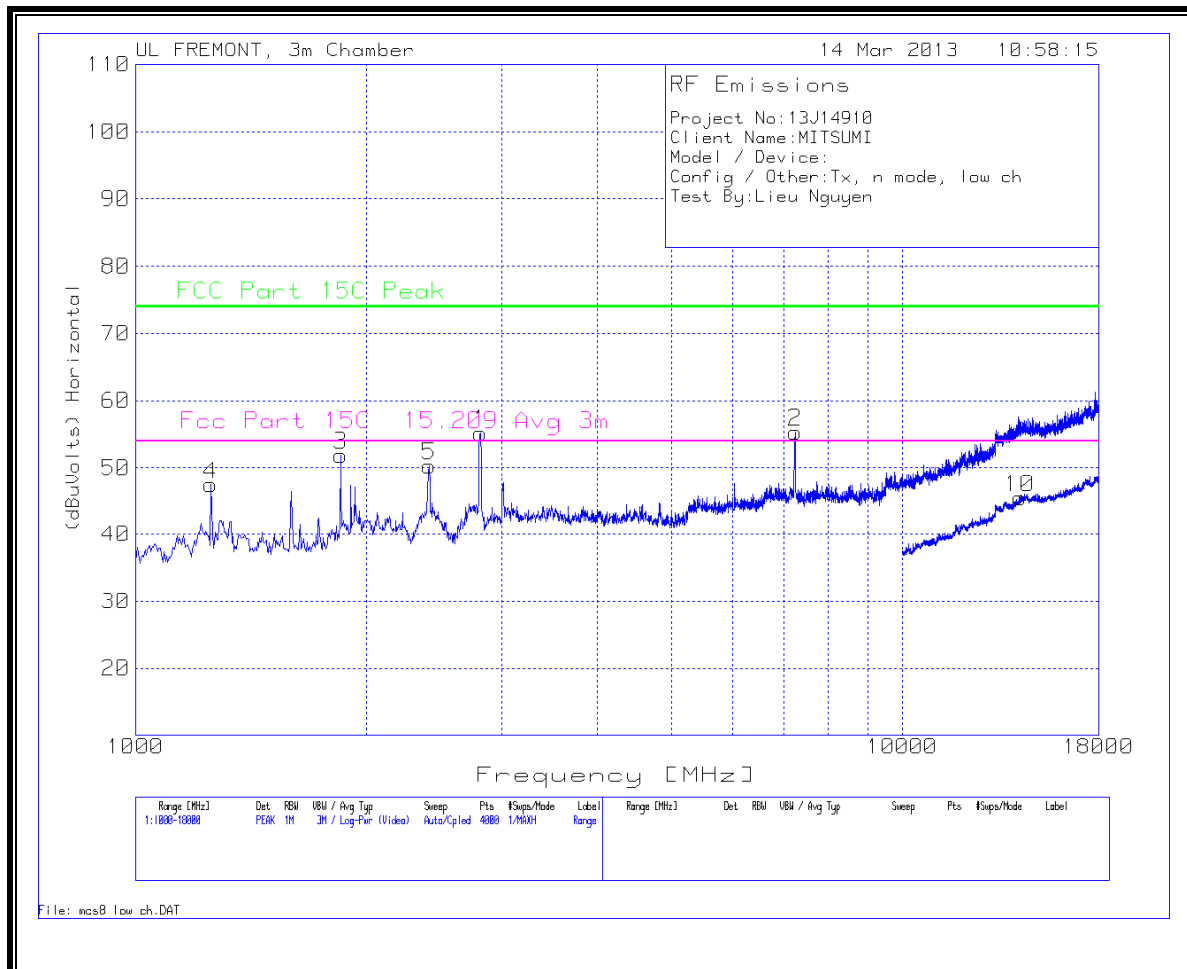




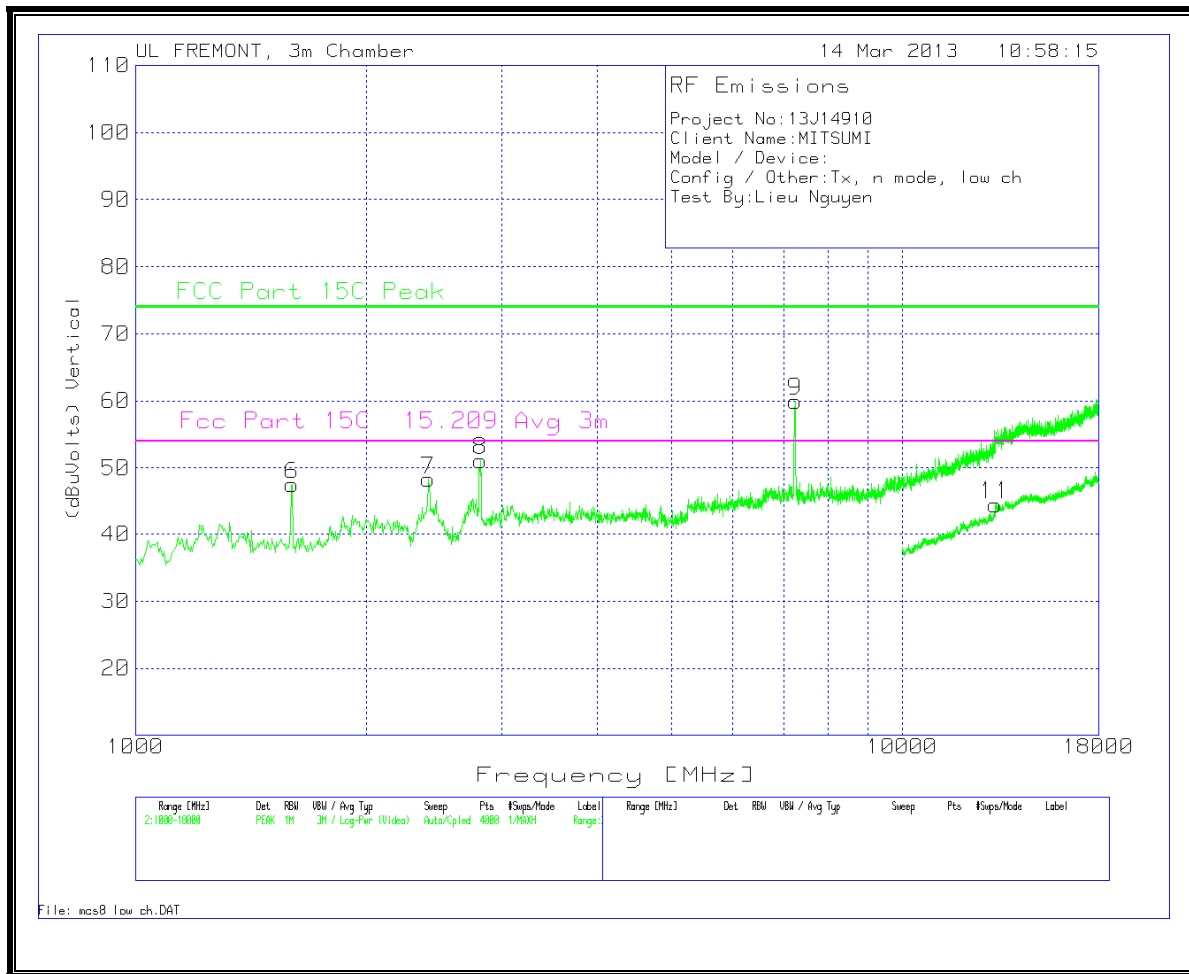
**HARMONICS AND SPURIOUS EMISSIONS**

**LOW CHANNEL**

**HORIZONTAL**



VERTICAL



LOW CHANNEL DATA

Project No:13J14910  
 Client Name:MITSUMI  
 Model / Device:  
 Config / Other:Tx, n mode, low ch  
 Test By:Lieu Nguyen

**Range 1 1000 - 18000MHz**

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2813.39	50.77	PK	32.7	-28.8	0.5	55.17	74	-18.83	54	1.17	201	Horz
2	7242.818	42.36	PK	35.6	-23.1	0.5	55.36	68.2	-12.84	-	-	99	Horz
3	1849.363	51.7	PK	30.7	-31	0.5	51.9	68.2	-16.3	-	-	99	Horz
4	1254.809	50.16	PK	29.8	-33.1	0.5	47.36	68.2	-20.84	-	-	99	Horz
5	2414.189	47.44	PK	32.1	-29.7	0.5	50.34	68.2	-17.86	-	-	201	Horz

**Range:2 1000 - 18000MHz**

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
6	1598.801	50.65	PK	28.1	-31.9	0.5	47.35	68.2	-20.85	-	-	200	Vert
7	2409.943	45.28	PK	32.1	-29.7	0.5	48.18	68.2	-20.02	-	-	99	Vert
8	2817.637	46.66	PK	32.7	-28.8	0.5	51.06	74	-22.94	54	-2.94	99	Vert
9	7238.571	46.97	PK	35.6	-23.1	0.5	59.97	68.2	-8.23	-	-	99	Vert

**Range:3 10000 - 18000MHz**

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
10	14217.891	21.51	PK	39.2	-15.8	0.5	45.41	68.2	-22.79	-	-	201	Horz

**Range:4 10000 - 18000MHz**

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
11	13198.401	21.72	PK	39	-16.8	0.5	44.42	68.2	-23.78	-	-	201	Vert

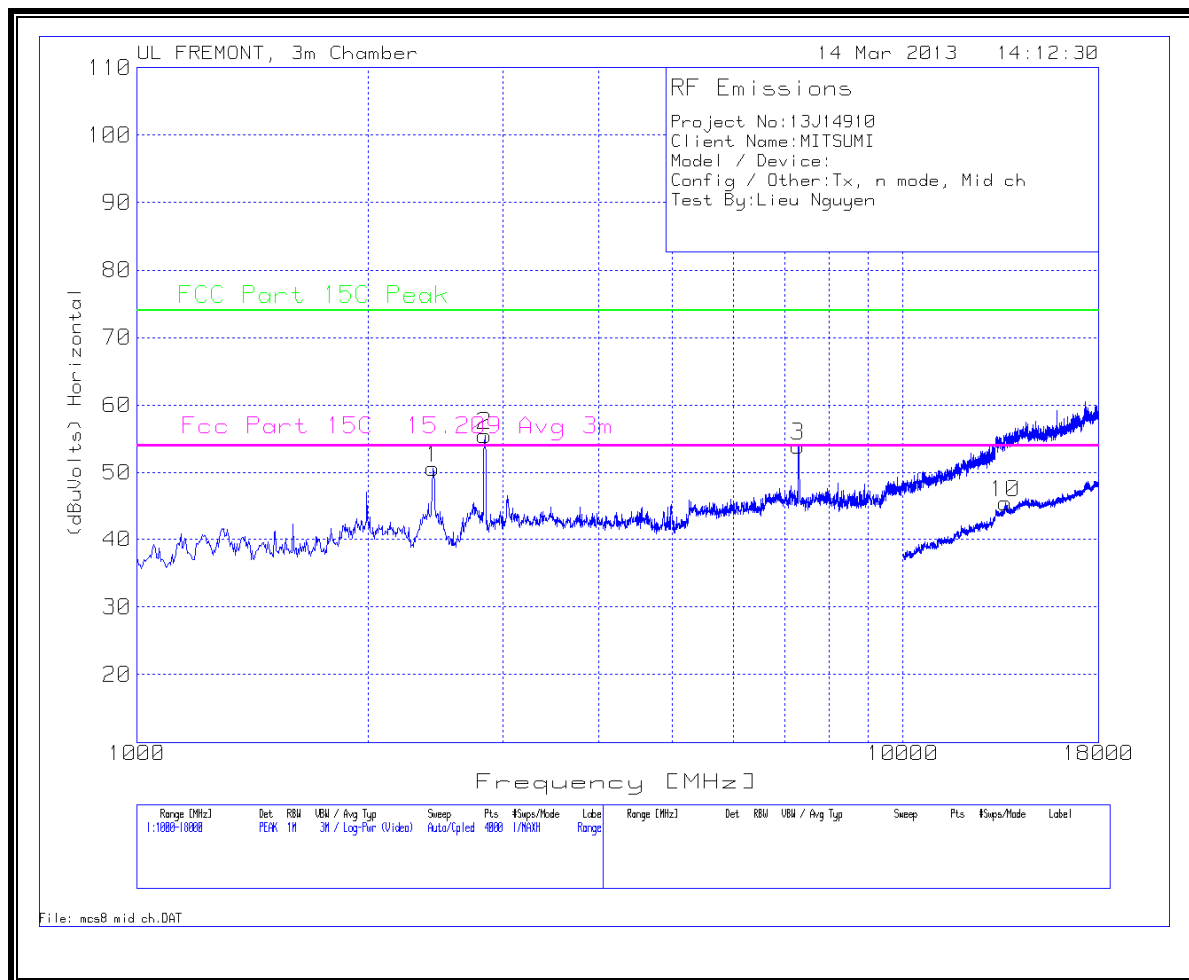
**Range 1 1000 - 18000MHz**

Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2816.5	41.38	Av	32.7	-28.8	0.5	45.78	-	-	54	-8.22	106	Horz
8	2811.78	34.74	Av	32.7	-28.8	0.5	39.14	-	-	54	-14.86	301	Vert

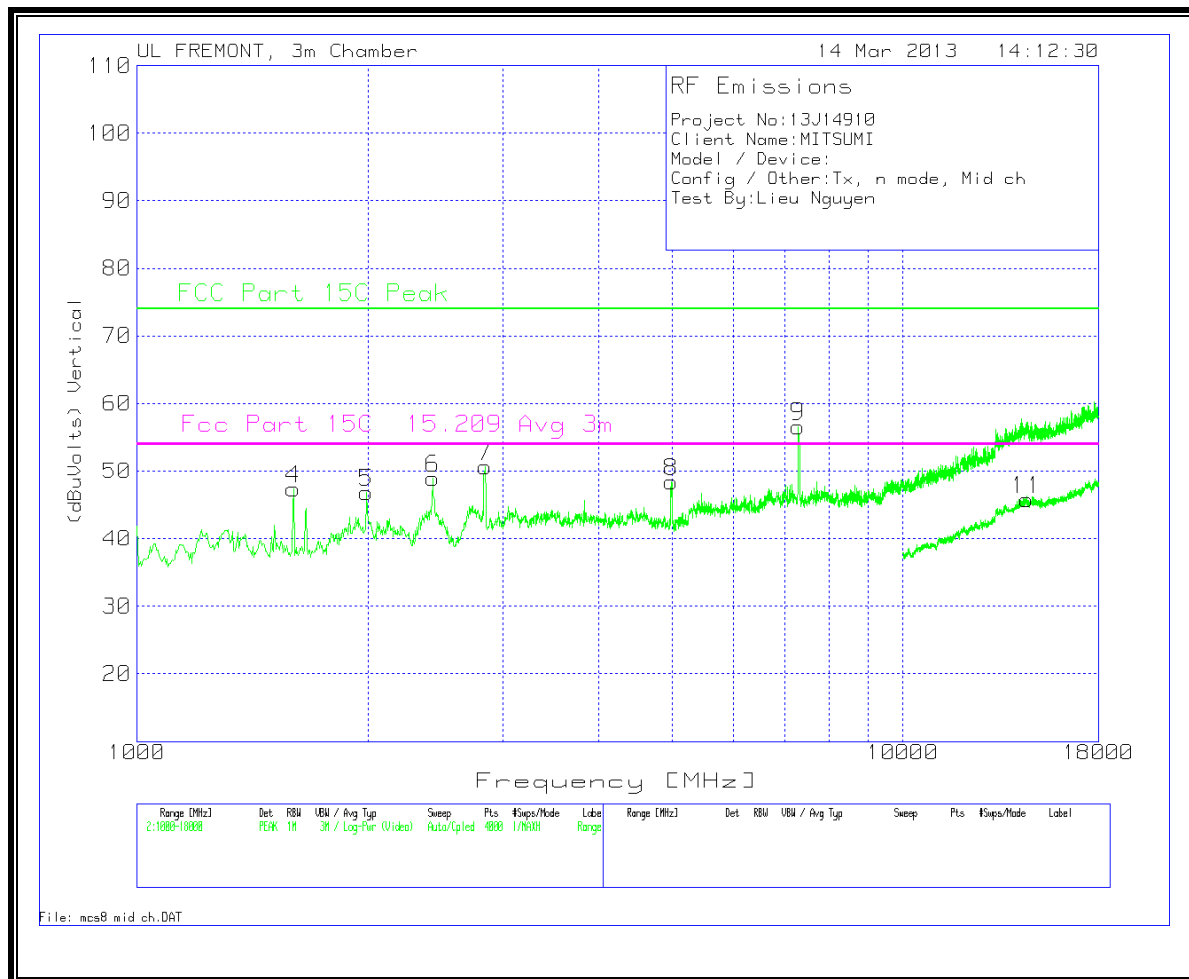
PK - Peak detector  
 QP - Quasi-Peak detector  
 Av - Average detector



**MID CHANNEL  
 HORIZONTAL**



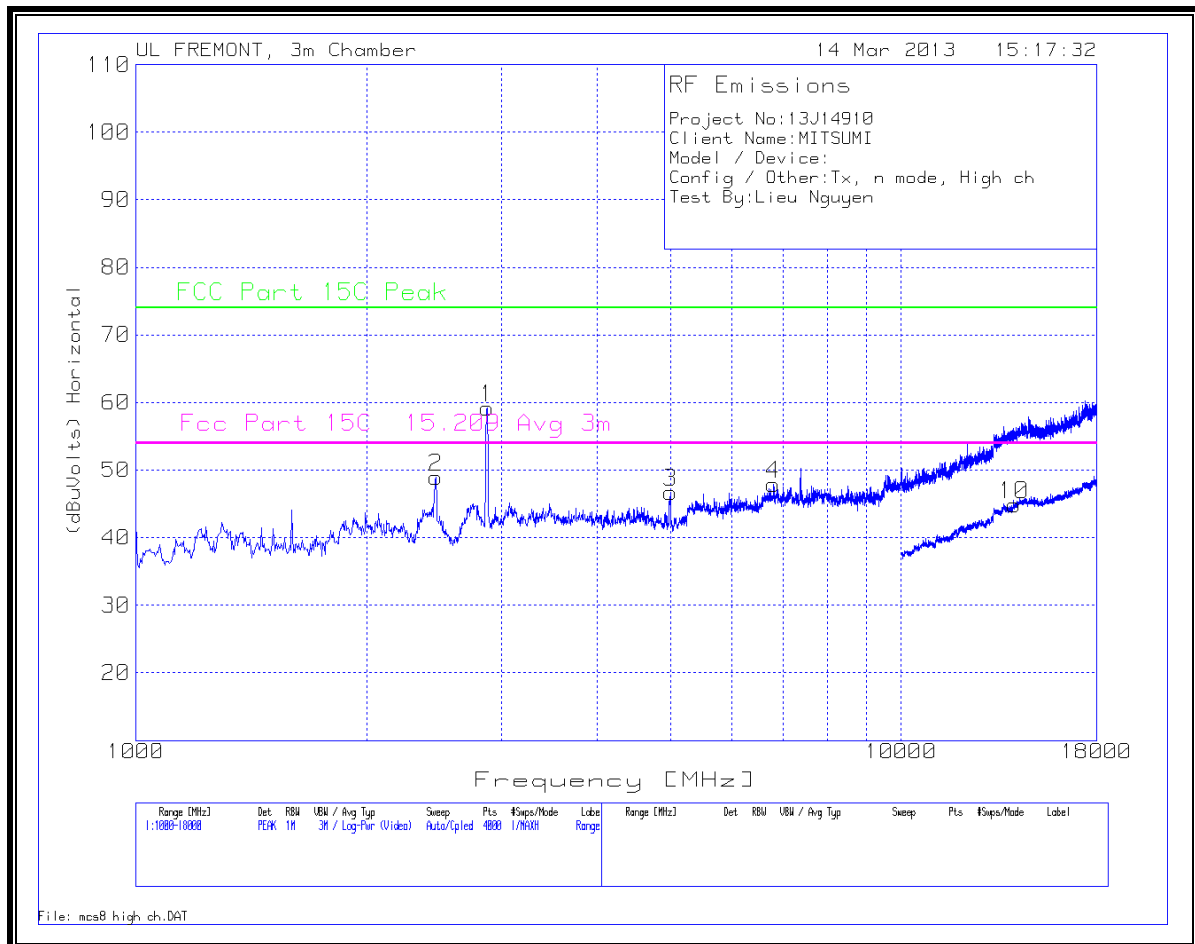
VERTICAL



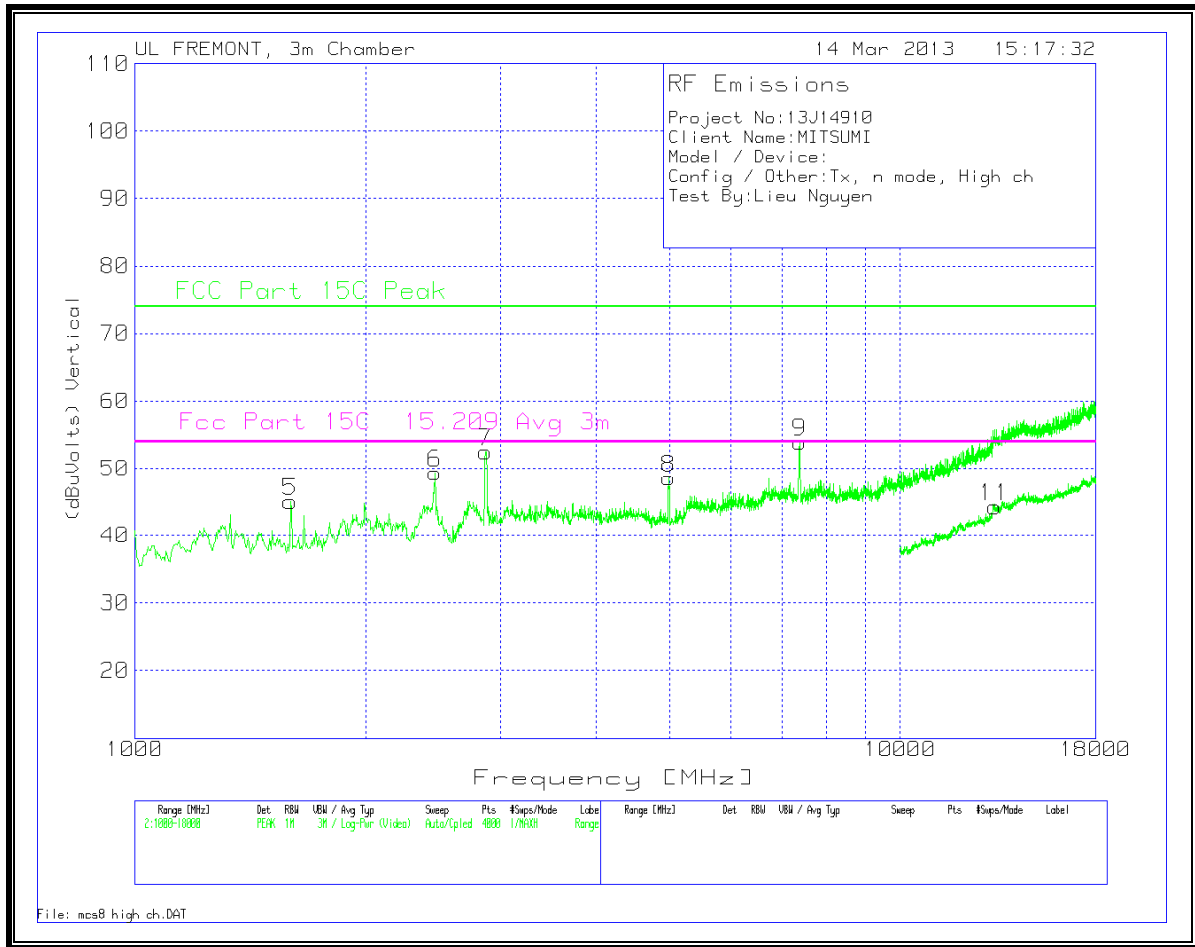
MID CHANNEL DATA

Project No:13J14910													
Client Name:MITSUMI													
Model / Device:													
Config / Other:Tx, n mode, Mid ch													
Test By:Lieu Nguyen													
1 1000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2431.177	47.62	PK	32.2	-29.7	0.5	50.62	74	-23.38	54	-3.38	200	Horz
2	2843.118	51.15	PK	32.7	-28.8	0.5	55.55	74	-18.45	54	1.55	200	Horz
3	7302.273	40.82	PK	35.6	-23	0.5	53.92	74	-20.08	54	-0.08	200	Horz
2 1000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
4	1598.801	50.65	PK	28.1	-31.9	0.5	47.35	74	-26.65	54	-6.65	99	Vert
5	1993.755	45.48	PK	31.6	-30.7	0.5	46.88	74	-27.12	54	-7.12	99	Vert
6	2431.177	45.98	PK	32.2	-29.7	0.5	48.98	74	-25.02	54	-5.02	200	Vert
7	2847.364	46.25	PK	32.7	-28.8	0.5	50.65	74	-23.35	54	-3.35	99	Vert
8	4979.266	38.95	PK	34	-25	0.5	48.45	74	-25.55	54	-5.55	200	Vert
9	7298.026	43.52	PK	35.6	-23	0.5	56.62	74	-17.38	54	2.62	99	Vert
3 10000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
10	13622.189	22.14	PK	38.8	-16.1	0.5	45.34	74	-28.66	54	-8.66	200	Horz
4 10000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
11	14501.749	21.69	PK	39.6	-16	0.5	45.79	74	-28.21	54	-8.21	201	Vert

**HIGH CHANNEL  
 HORIZONTAL**



VERTICAL



PEAK DATA

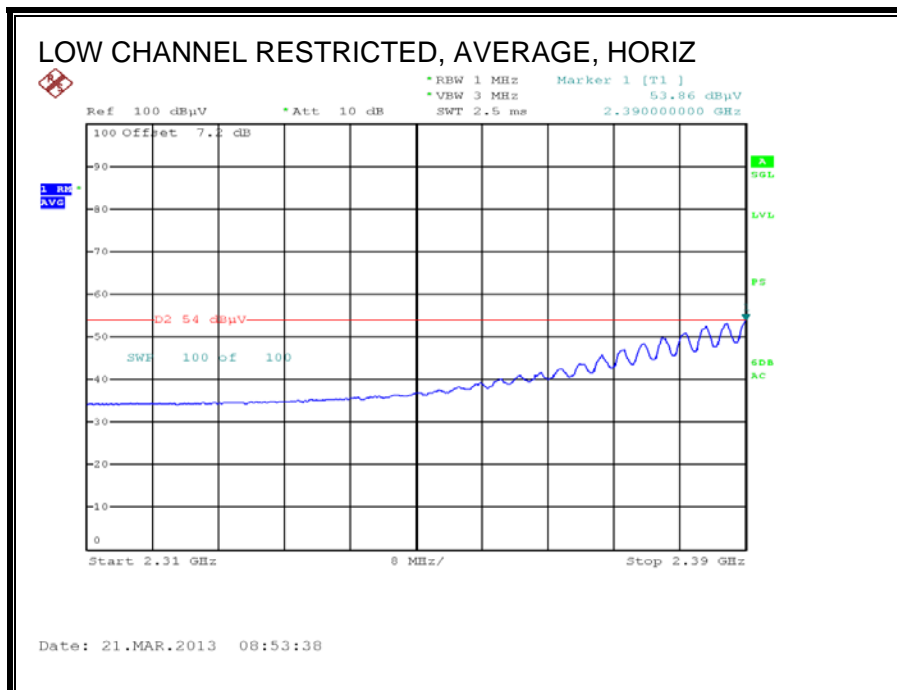
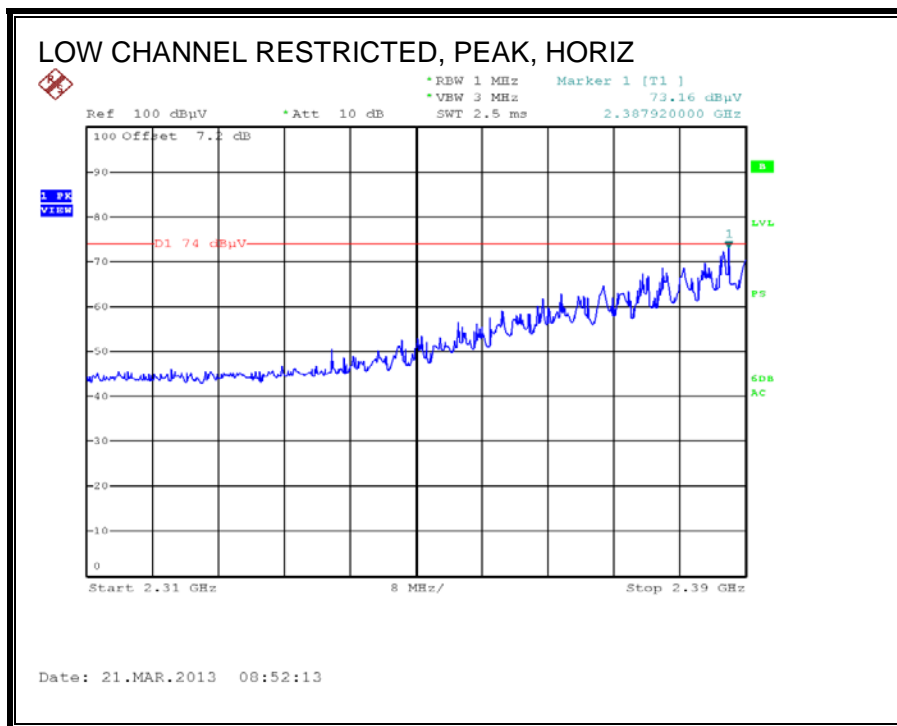
Project No:13J14910													
Client Name:MITSUMI													
Model / Device:													
Config / Other:Tx, n mode, High ch													
Test By:Lieu Nguyen													
Range 1 1000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
1	2877.092	54.73	PK	32.7	-28.8	0.5	59.13	74	-14.87	54	5.13	200	Horz
2	2465.151	45.79	PK	32.2	-29.6	0.5	48.89	74	-25.11	54	-5.11	200	Horz
3	4992.006	37.16	PK	34	-25	0.5	46.66	74	-27.34	54	-7.34	200	Horz
4	6805.396	35.06	PK	35.6	-23.3	0.5	47.86	74	-26.14	54	-6.14	100	Horz
Range:2 1000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
5	1594.554	48.31	PK	28.1	-31.9	0.5	45.01	74	-28.99	54	-8.99	201	Vert
6	2465.151	46.27	PK	32.2	-29.6	0.5	49.37	74	-24.63	54	-4.63	201	Vert
7	2868.599	48.11	PK	32.7	-28.8	0.5	52.51	74	-21.49	54	-1.49	201	Vert
8	4987.759	38.99	PK	34	-25	0.5	48.49	74	-25.51	54	-5.51	201	Vert
9	7382.963	40.78	PK	35.7	-23	0.5	53.98	74	-20.02	54	-0.02	100	Vert
Range:3 10000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
10	14041.979	21.32	PK	38.9	-15.8	0.5	44.92	74	-29.08	54	-9.08	201	Horz
Range:4 10000 - 18000MHz													
Marker No.	Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBuVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Height [cm]	Polarity
11	13286.357	21.2	PK	39.2	-16.7	0.5	44.2	74	-29.8	54	-9.8	100	Vert

AVERAGE DATA

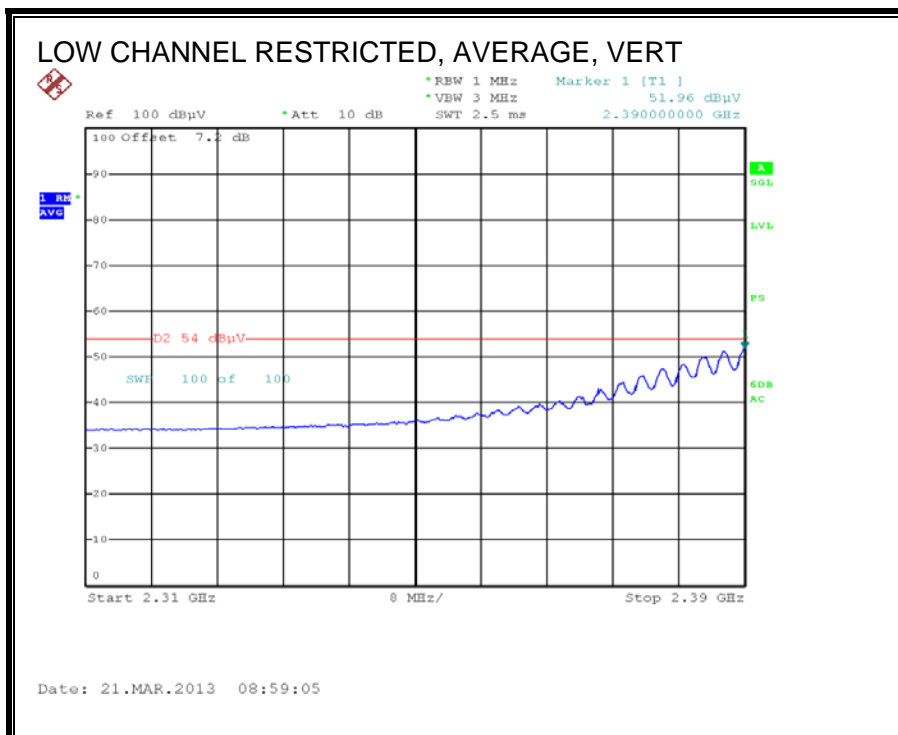
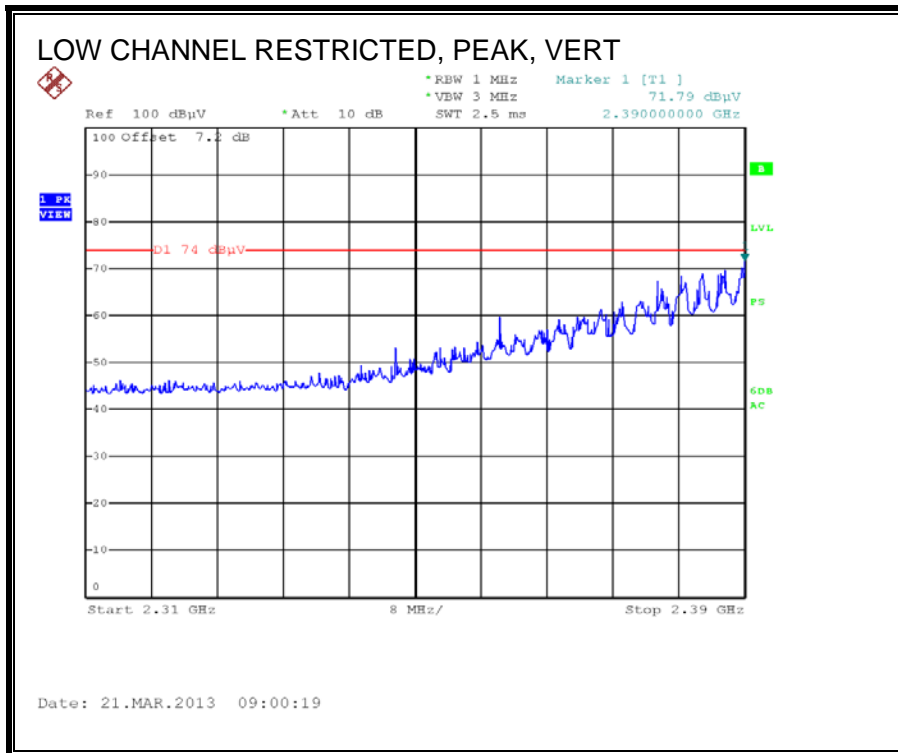
Project No:13J14910													
Client Name:MITSUMI													
Model / Device:													
Config / Other:Tx, n mode, High ch													
Test By:Lieu Nguyen													
1 1000 - 18000MHz													
Test Frequency	Meter Reading	Detector	T119	Loop w/T34	T166 BRF 2.4-2.5 GHz	(dBUVolts)	FCC Part 15C Peak	Margin	Fcc Part 15C 15.209 Avg 3m	Margin	Azimuth [Degs]	Height [cm]	Polarity
7382.48	28.91	MAv1	35.7	-23	0.5	42.11	74	-31.89	54	-11.89	0	100	Vert
4983.04	25.08	MAv1	34	-25	0.5	34.58	74	-39.42	54	-19.42	252	156	Vert
2870.16	38.69	MAv1	32.7	-28.8	0.5	43.09	74	-30.91	54	-10.91	116	146	Vert
2876.12	42.23	MAv1	32.7	-28.8	0.5	46.63	74	-27.37	54	-7.37	0	216	Horz

### 9.2.5 802.11n HT40 CDD MCS0 2TX MODE, 2.4 GHz BAND

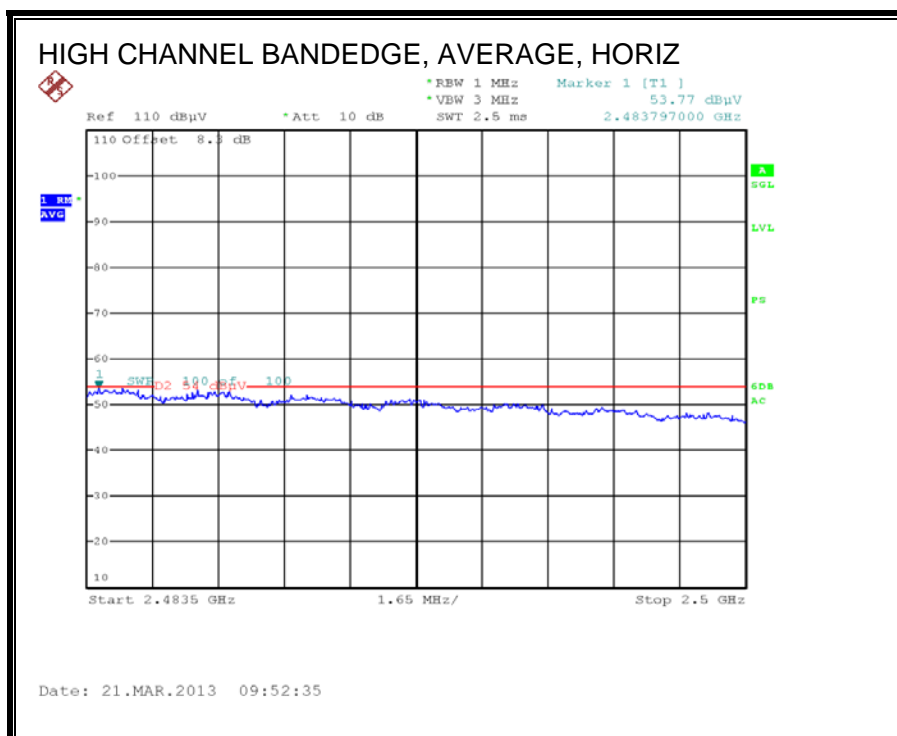
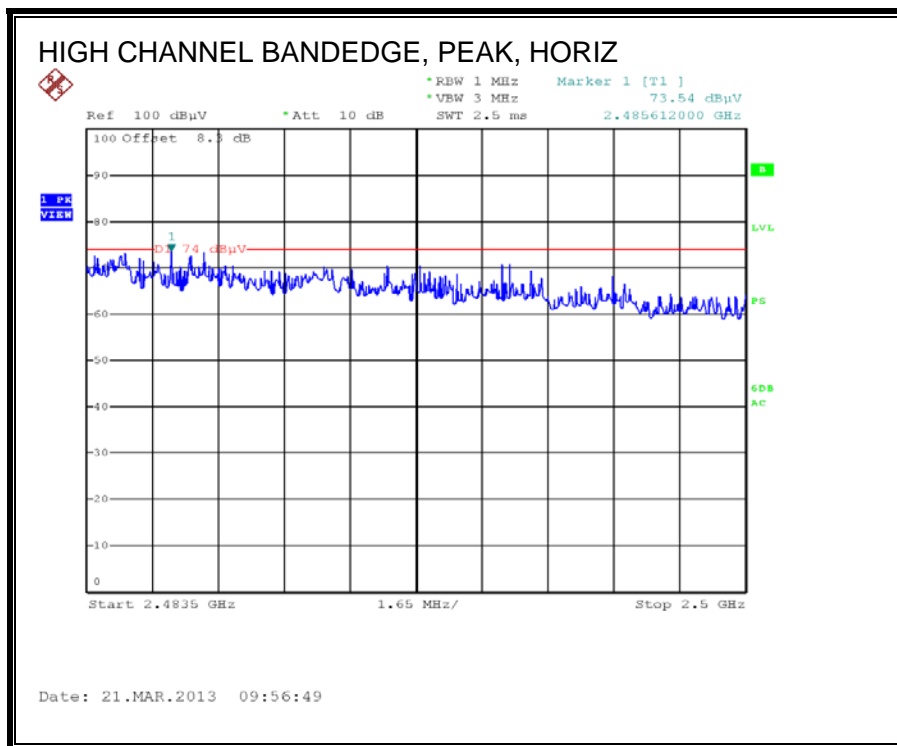
#### RESTRICTED BANDEDGE (LOW CHANNEL)

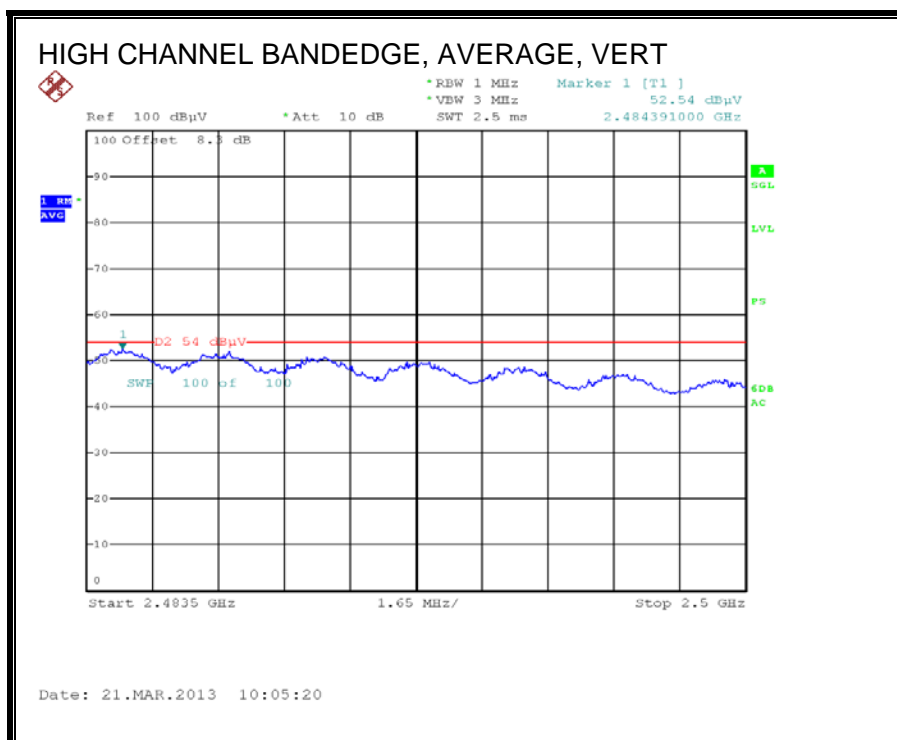
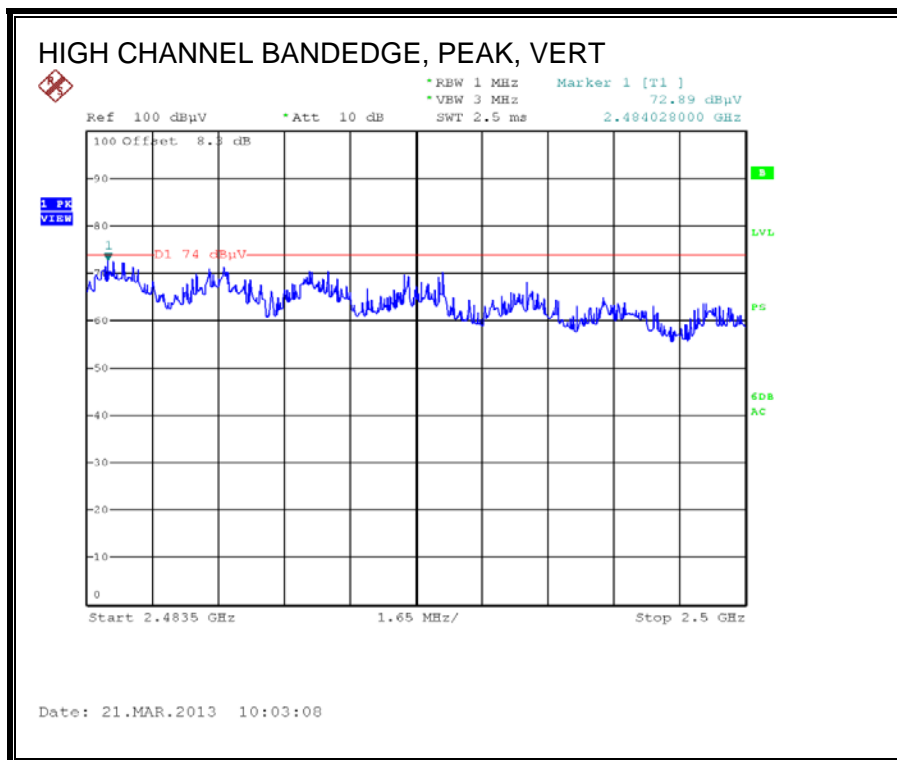




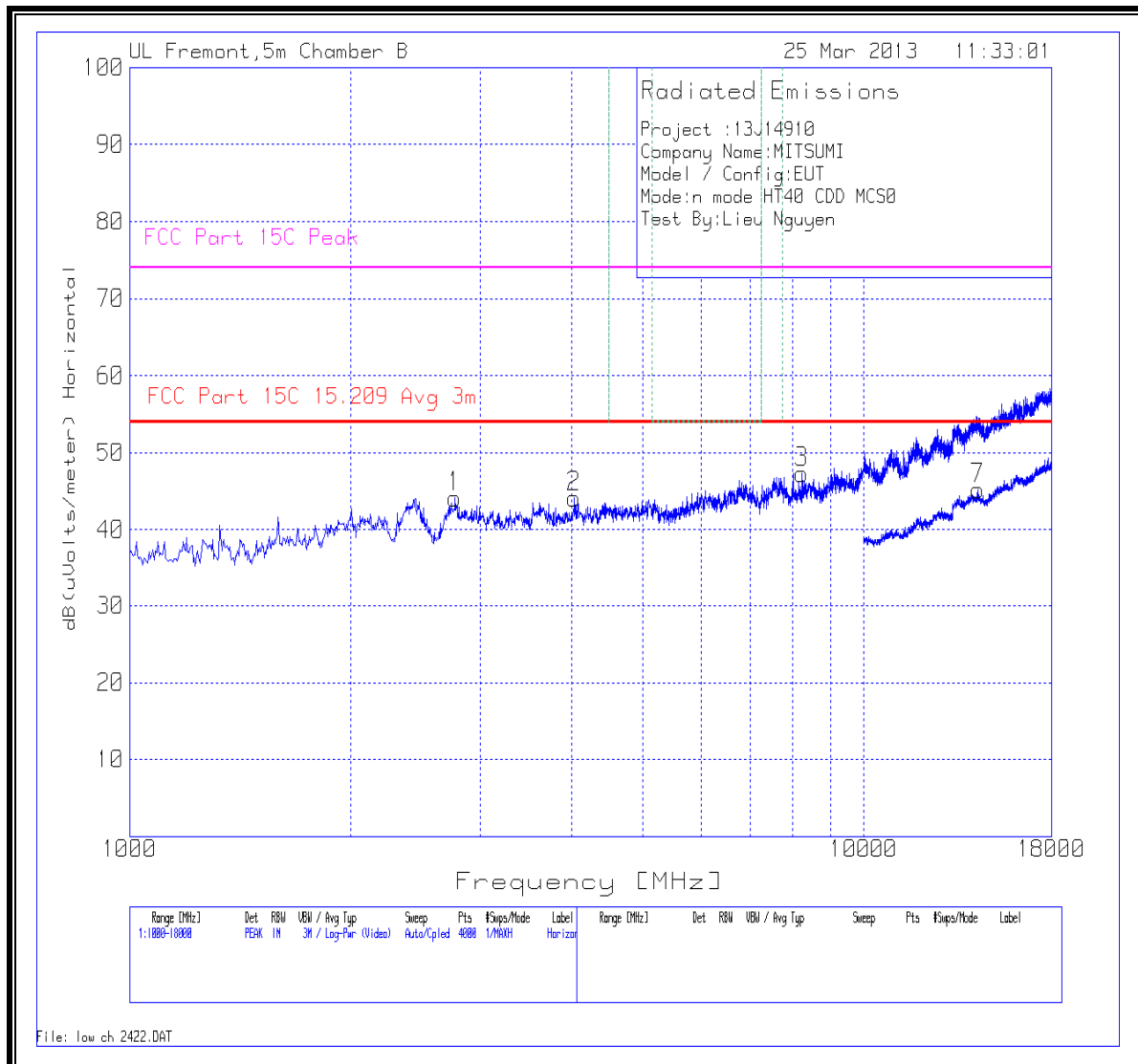


**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

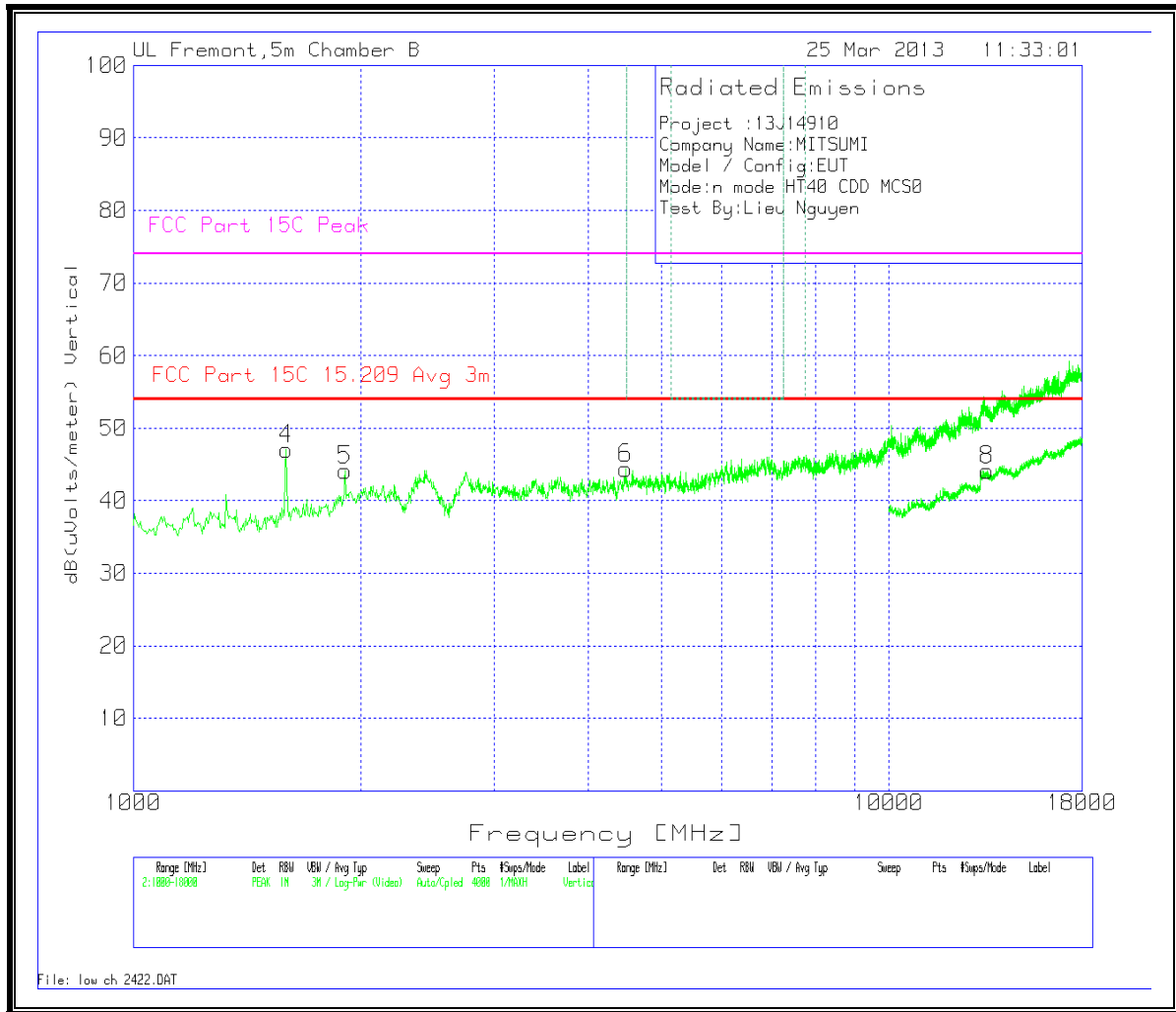




**HARMONICS AND SPURIOUS EMISSIONS**  
**LOW CHANNEL**  
**HORIZONTAL**



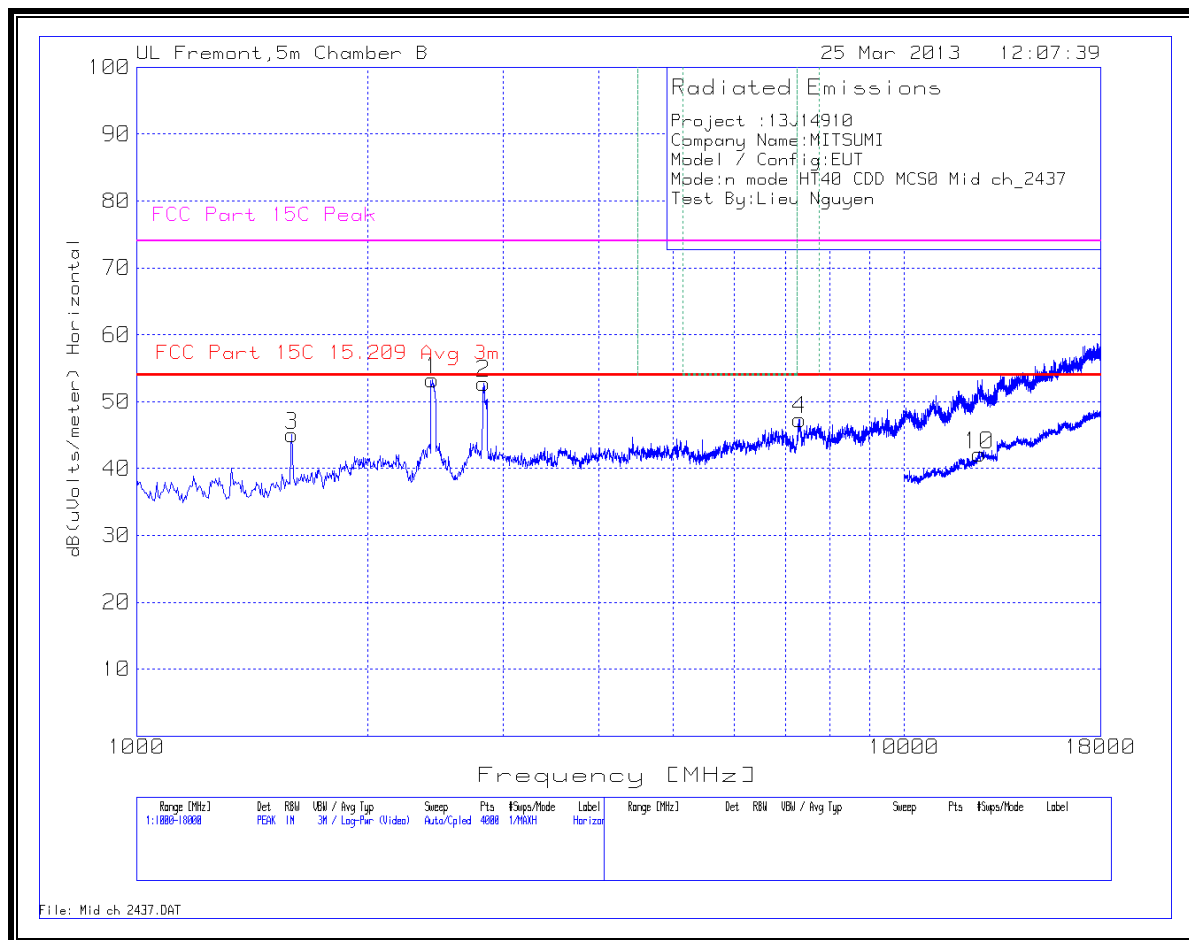
VERTICAL



LOW CHANNEL DATA

Project :13J14910														
Company Name: MITSUMI														
Model / Config: EUT														
Mode: n mode HT40 CDD MCS0														
Test By: Lieu Nguyen														
Horizontal 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T345 Ant Factor [dB/m]	Preamp Gain	Cable Factor	T160 BRF	dB(uVolts /meter)	FCC Part 15C 15.209 Avg 3m	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
1	2775.169	40.56	PK	32.8	-35.1	5	0.9	44.16	54	-9.84	74	-29.84	100	Horz
2	4032.226	38.44	PK	33.9	-34.8	6.3	0.3	44.14	54	-9.86	74	-29.86	200	Horz
3	8240.819	36.61	PK	36.1	-35.2	9.4	0.4	47.31	54	-6.69	74	-26.69	200	Horz
Vertical 1000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T345 Ant Factor [dB/m]	Preamp Gain	Cable Factor	T160 BRF	dB(uVolts /meter)	FCC Part 15C 15.209 Avg 3m	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
4	1594.554	48.96	PK	28.9	-35.2	3.8	0.6	47.06	-	-	68.2	-21.14	200	Vert
5	1908.818	43.05	PK	31.2	-35	4.1	0.8	44.15	-	-	68.2	-24.05	100	Vert
6	4478.141	37.87	PK	34.5	-34.9	6.7	0.3	44.47	-	-	68.2	-23.73	200	Vert
Horizontal 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T345 Ant Factor [dB/m]	Preamp Gain	Cable Factor	T160 BRF	dB(uVolts /meter)	FCC Part 15C 15.209 Avg 3m	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
7	14289.855	24.94	PK	39.5	-32.4	12.8	0.4	45.24	-	-	68.2	-22.96	100	Horz
Vertical 10000 - 18000MHz														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	T345 Ant Factor [dB/m]	Preamp Gain	Cable Factor	T160 BRF	dB(uVolts /meter)	FCC Part 15C 15.209 Avg 3m	Margin	FCC Part 15C Peak	Margin	Height [cm]	Polarity
8	13482.259	24.25	PK	39.1	-32	12.4	0.4	44.15	-	-	68.2	-24.05	200	Vert
PK - Peak detector QP - Quasi-Peak detector Av - Average detector														

**MID CHANNEL  
 HORIZONTAL**



VERTICAL

