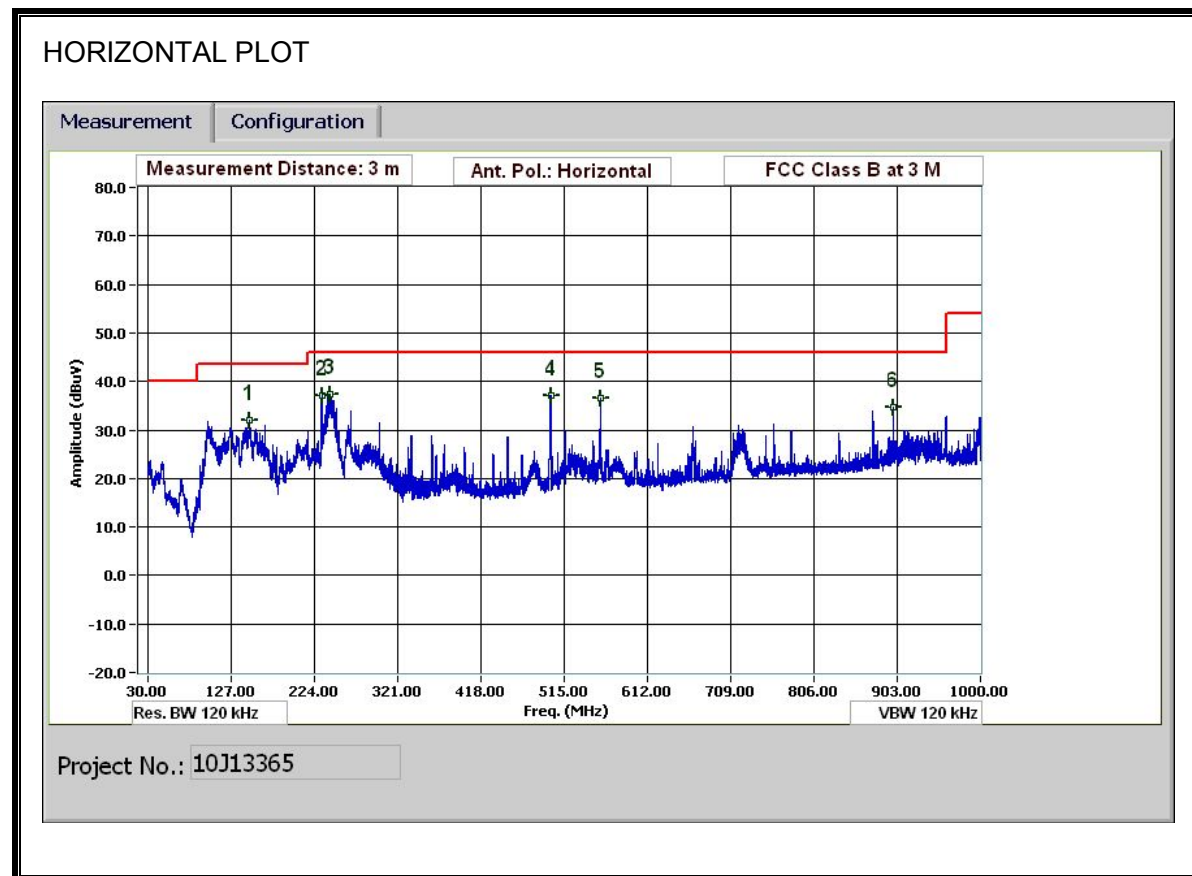


8.1.4. RECEIVER ABOVE 1 GHz FOR 20 MHz BANDWIDTH IN THE 2.4 GHz BAND

High Frequency Measurement																	
Compliance Certification Services, Fremont 5m Chamber																	
Company:		Mitsumi															
Project #:		10J13365															
Date:		8/11/2010															
Test Engineer:		Mengistu Mekuria															
Configuration:		EUT With 175 mm F Type Antennas															
Mode:		Broadband Rx Mode															
Test Equipment:																	
Horn 1-18GHz				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz				Limit	
T59; S/N: 3245 @3m				T145 Agilent 3008A0056												RX RSS 210	
Hi Frequency Cables																	
3' cable 22807700				12' cable 22807600				20' cable 22807500				HPF				Reject Filter	
3' cable 22807700				12' cable 22807600				20' cable 22807500									
<div> <div>Peak Measurements</div> <div>RBW=VBW=1MHz</div> <div>Average Measurements</div> <div>RBW=1MHz ; VBW=10Hz</div> </div>																	
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fldr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)		
1.225	3.0	48.1	42.1	24.8	2.6	-36.0	0.0	0.0	39.5	33.6	74	54	-34.5	-20.4	H		
1.448	3.0	54.4	38.8	25.6	2.9	-35.8	0.0	0.0	47.0	31.4	74	54	-27.0	-22.6	H		
1.992	3.0	48.5	31.2	27.6	3.5	-35.4	0.0	0.0	44.1	26.9	74	54	-29.9	-27.1	H		
1.200	3.0	50.9	34.6	24.7	2.6	-36.0	0.0	0.0	42.2	25.9	74	54	-31.8	-28.1	V		
1.225	3.0	58.3	37.4	24.8	2.6	-36.0	0.0	0.0	49.7	28.8	74	54	-24.3	-25.2	V		
1.448	3.0	56.0	37.7	25.6	2.9	-35.8	0.0	0.0	48.7	30.3	74	54	-25.3	-23.7	V		
1.992	3.0	50.6	32.8	27.6	3.5	-35.4	0.0	0.0	46.2	28.4	74	54	-27.8	-25.6	V		
2.490	3.0	47.3	29.9	28.5	3.9	-35.1	0.0	0.0	44.6	27.2	74	54	-29.4	-26.8	V		
Rev. 07.22.09																	
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit				
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit				
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit				
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit				
CL	Cable Loss					HPF	High Pass Filter										

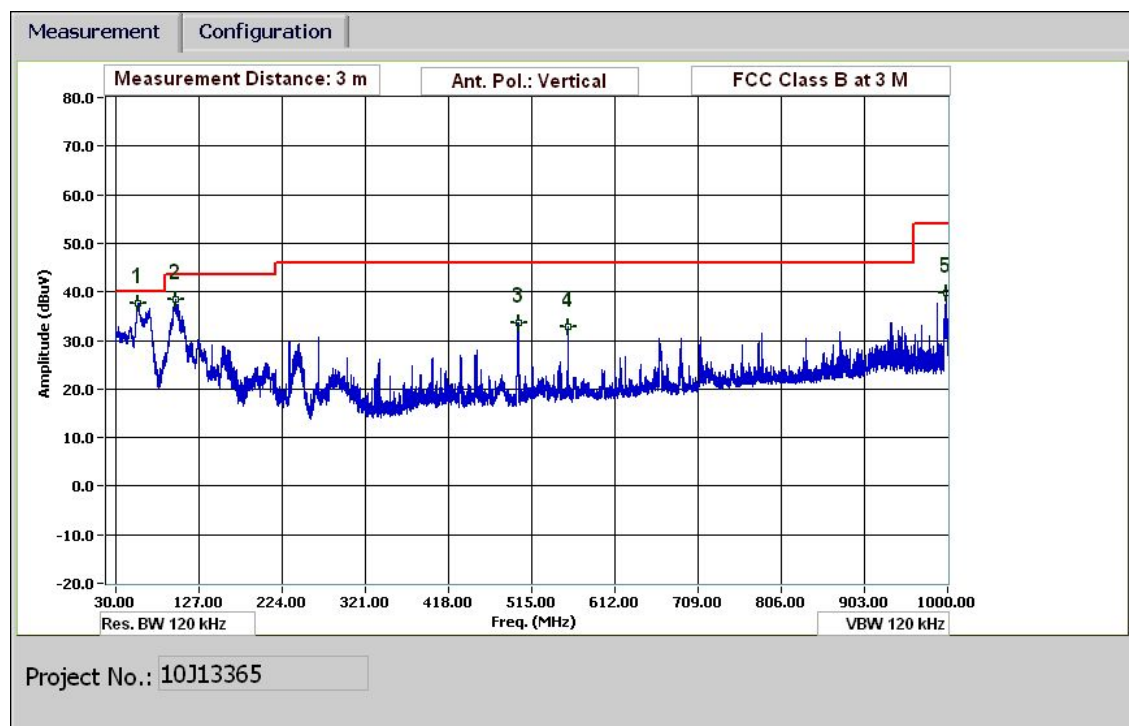
8.1.5. WORST-CASE BELOW 1 GHz

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



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

VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

30-1000MHz Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: MENGISTU MEKURIA

Date: 08/10/10

Project #: 10J13365

Company: MITSUMI

EUT Description: 802.11B/G/N WLAN MODULE WITH 175 mm F-TYPE ANTENNA

EUT M/N: DWM-W046

Test Target: FCC CLASS B

Mode Oper: TX MODE (WORST-CASE)

f	Measurement Frequency	Amp	Preamp Gain	Margin	Margin vs. Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters		
Read	Analyzer Reading	Filter	Filter Insert Loss		
AF	Antenna Factor	Corr.	Calculated Field Strength		
CL	Cable Loss	Limit	Field Strength Limit		

f MHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filter dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
148.205	3.0	47.6	12.7	1.1	29.3	0.0	0.0	32.0	43.5	-11.5	H	P	
233.168	3.0	52.7	11.9	1.4	28.8	0.0	0.0	37.1	46.0	-8.9	H	P	
242.409	3.0	53.0	11.8	1.4	28.8	0.0	0.0	37.4	46.0	-8.6	H	P	
499.099	3.0	47.9	16.8	2.1	29.7	0.0	0.0	37.1	46.0	-8.9	H	P	
556.822	3.0	46.3	17.6	2.3	29.7	0.0	0.0	36.5	46.0	-9.5	H	P	
899.076	3.0	38.9	21.5	3.0	28.6	0.0	0.0	34.8	46.0	-11.2	H	P	
56.692	3.0	58.8	7.9	0.6	29.6	0.0	0.0	37.7	40.0	-2.3	V	P	
56.692	3.0	57.1	7.9	0.6	29.6	0.0	0.0	36.0	40.0	-4.0	V	QP	
99.843	3.0	57.1	10.0	0.9	29.5	0.0	0.0	38.6	43.5	-4.9	V	P	
499.099	3.0	44.4	16.8	2.1	29.7	0.0	0.0	33.6	46.0	-12.4	V	P	
556.822	3.0	42.5	17.6	2.3	29.7	0.0	0.0	32.7	46.0	-13.3	V	P	
998.440	3.0	42.3	22.6	3.2	28.4	0.0	0.0	39.7	54.0	-14.3	V	P	

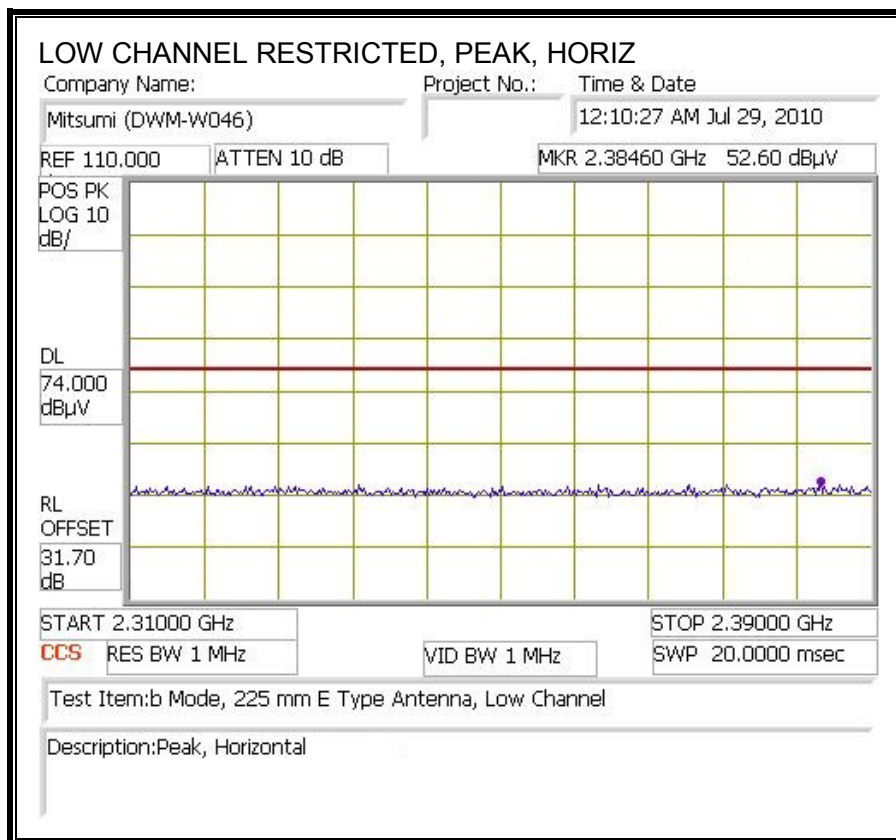
Rev. 1.27.09

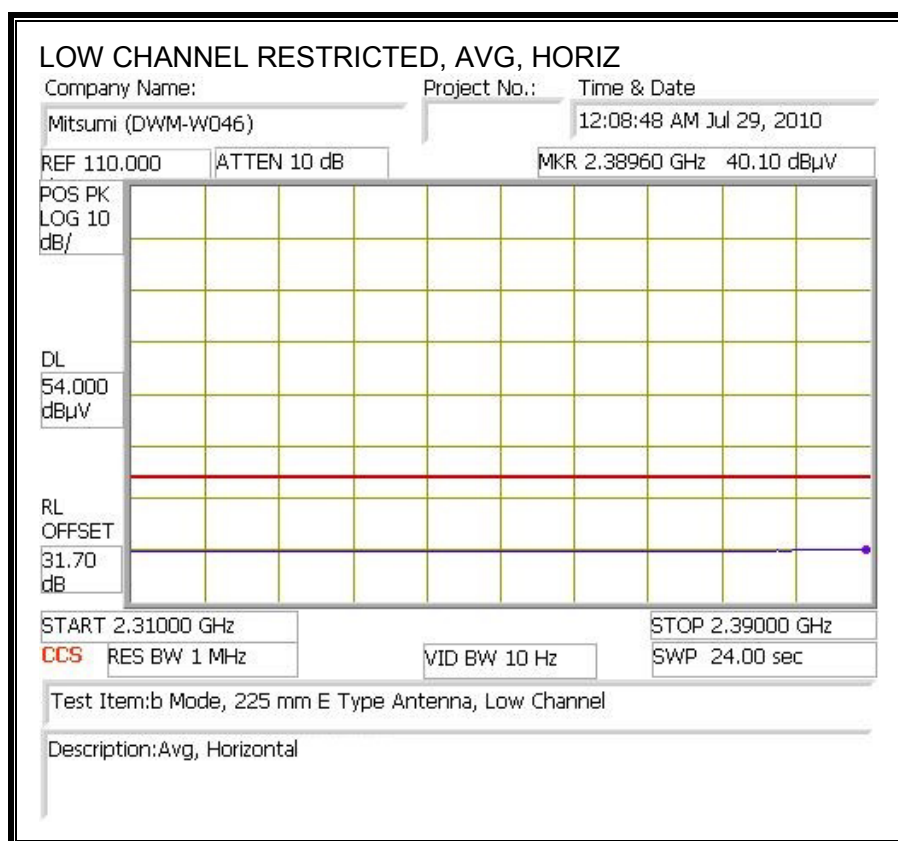
Note: No other emissions were detected above the system noise floor.

225 mm E-TYPE ANTENNA

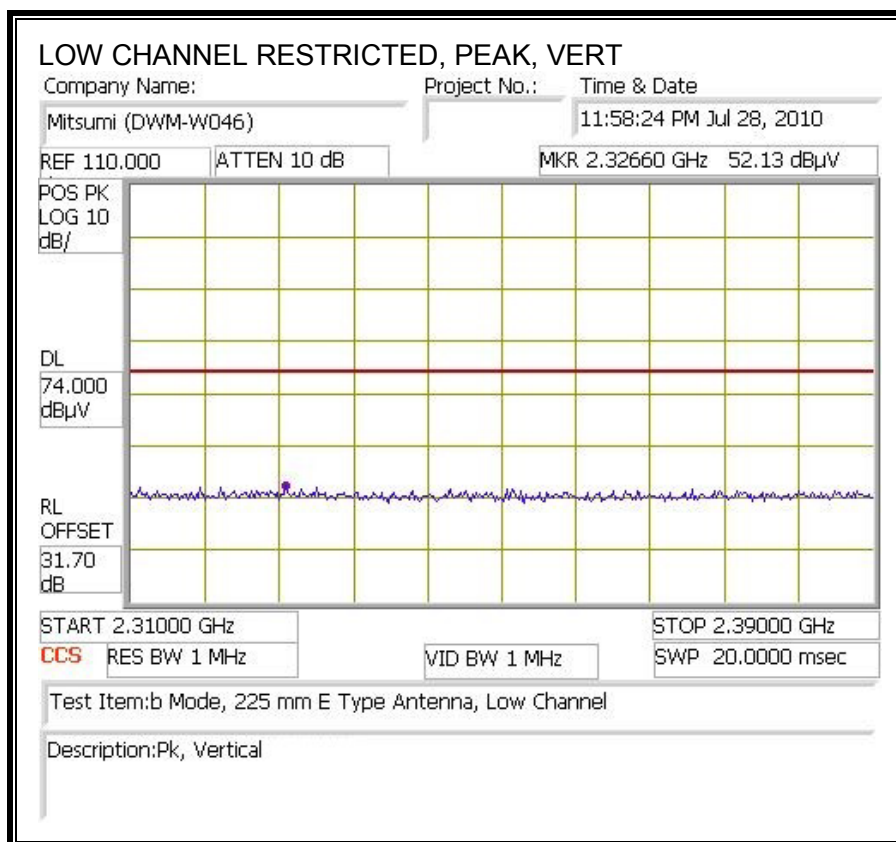
8.1.6. TRANSMITTER ABOVE 1 GHz FOR 802.11b MODE IN THE 2.4 GHz BAND

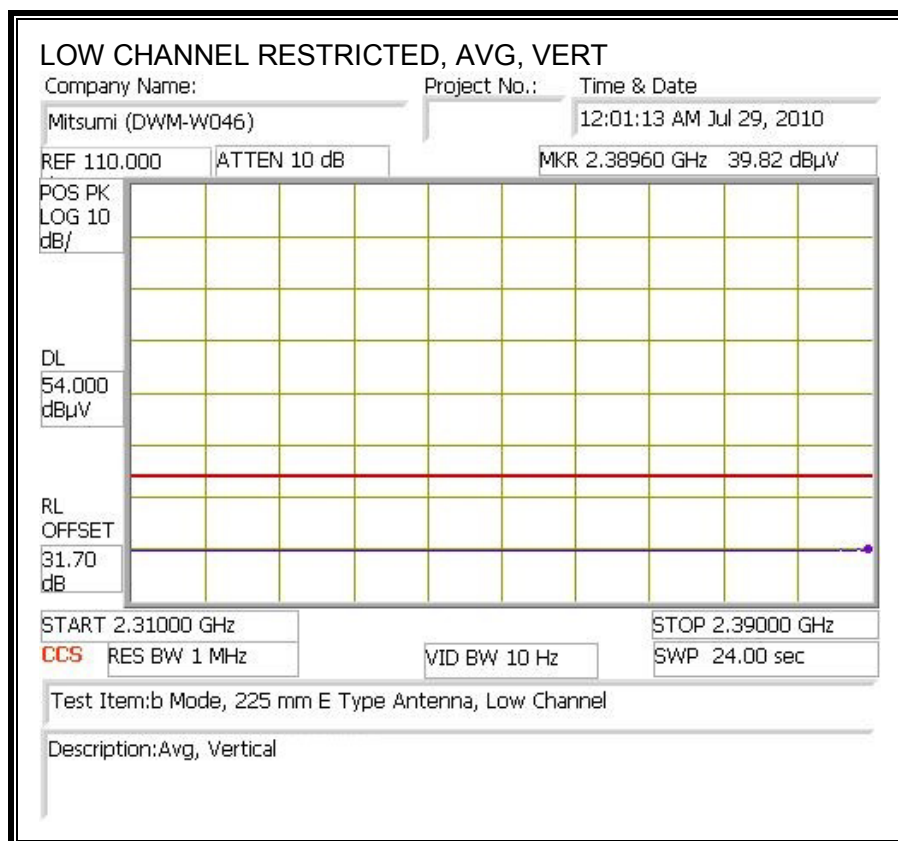
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



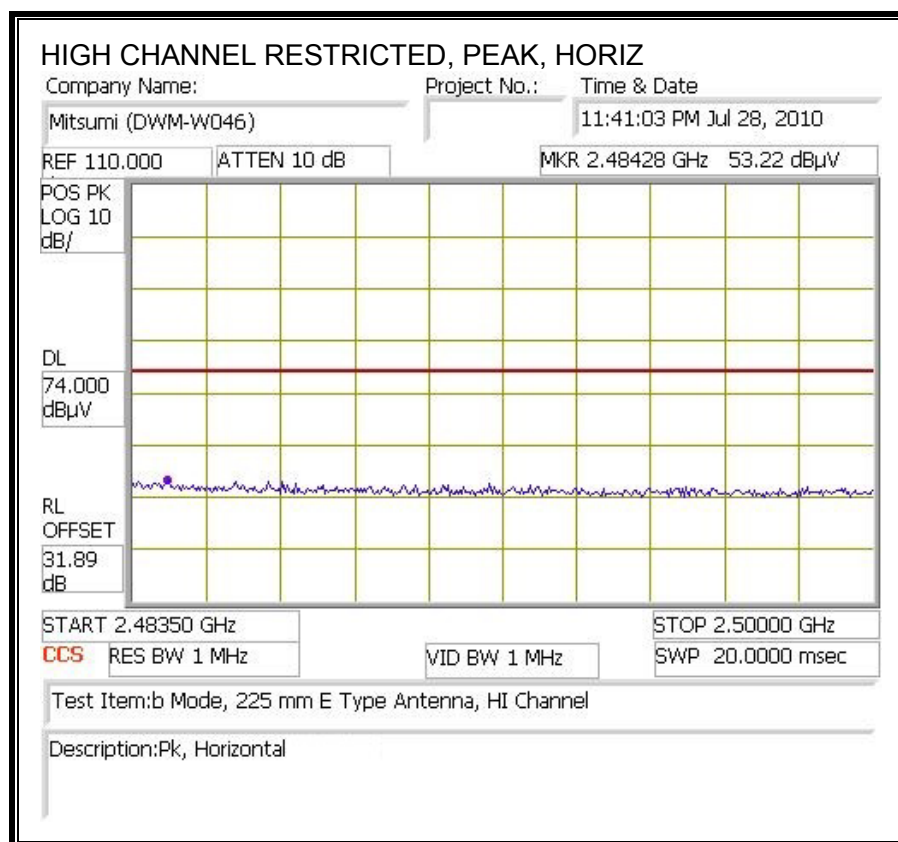


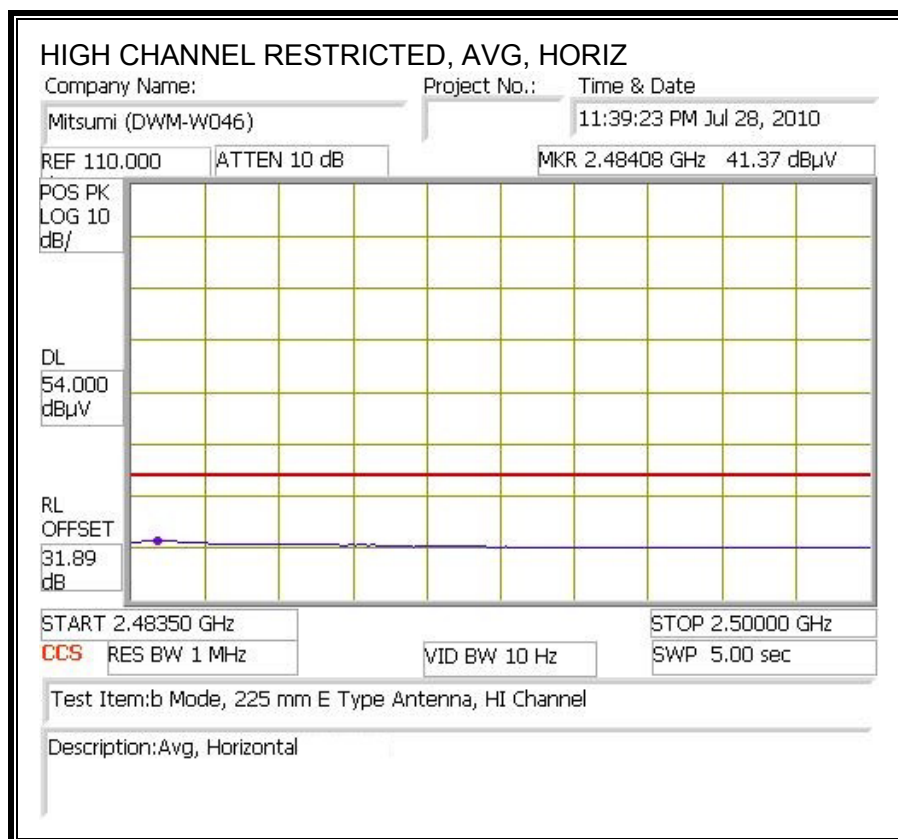
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



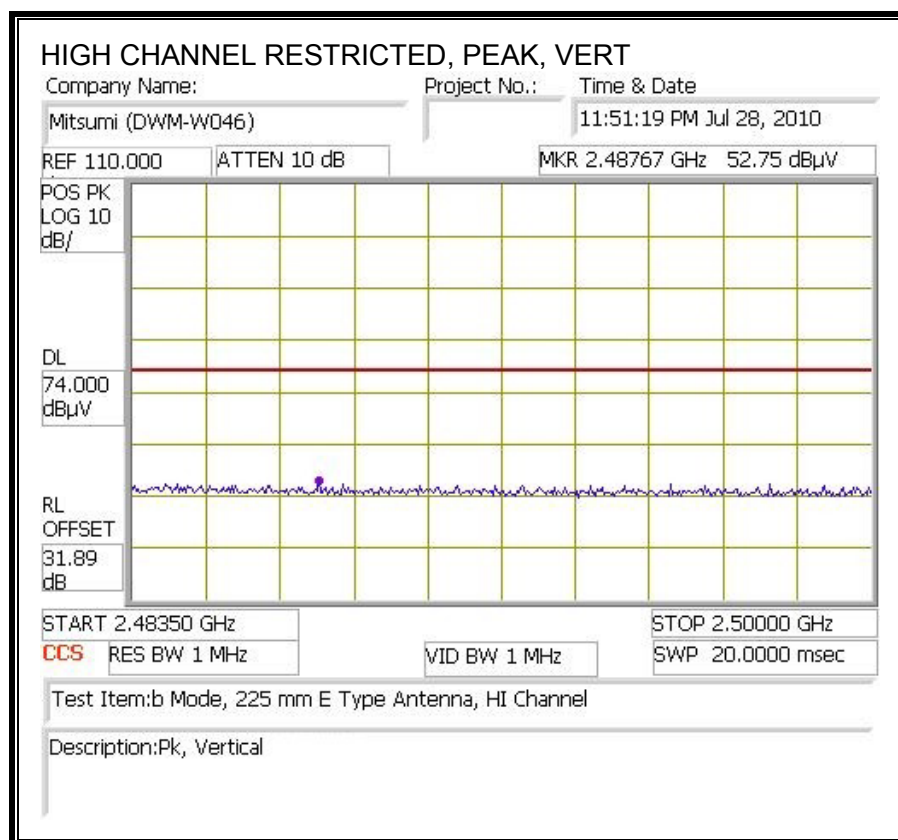


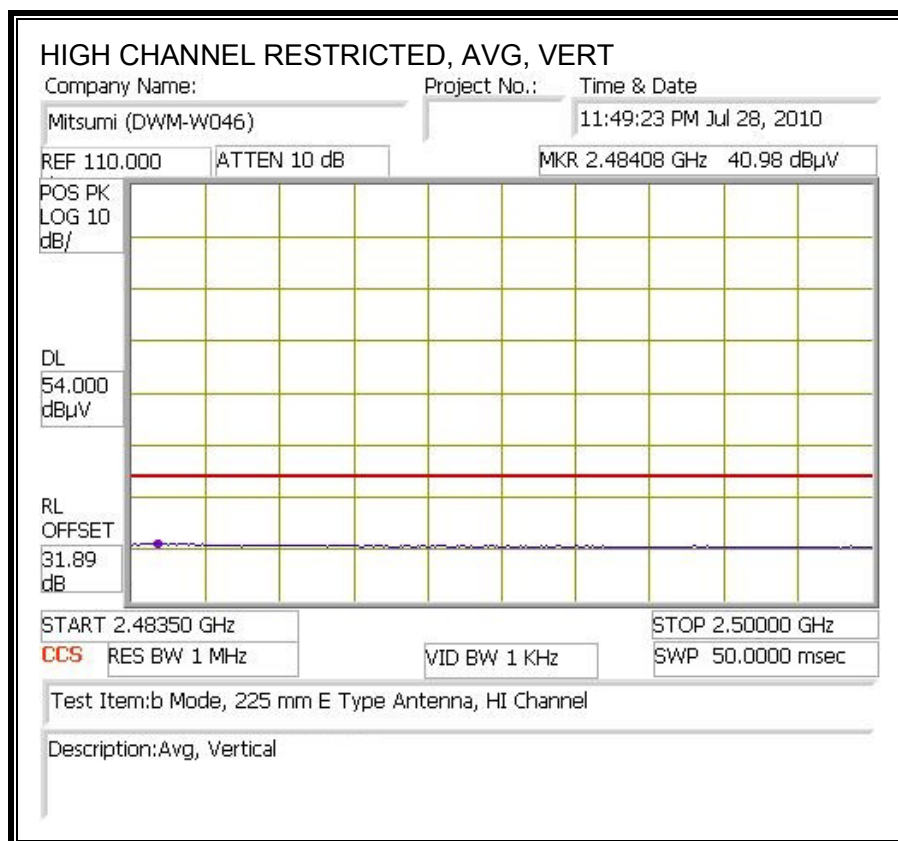
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



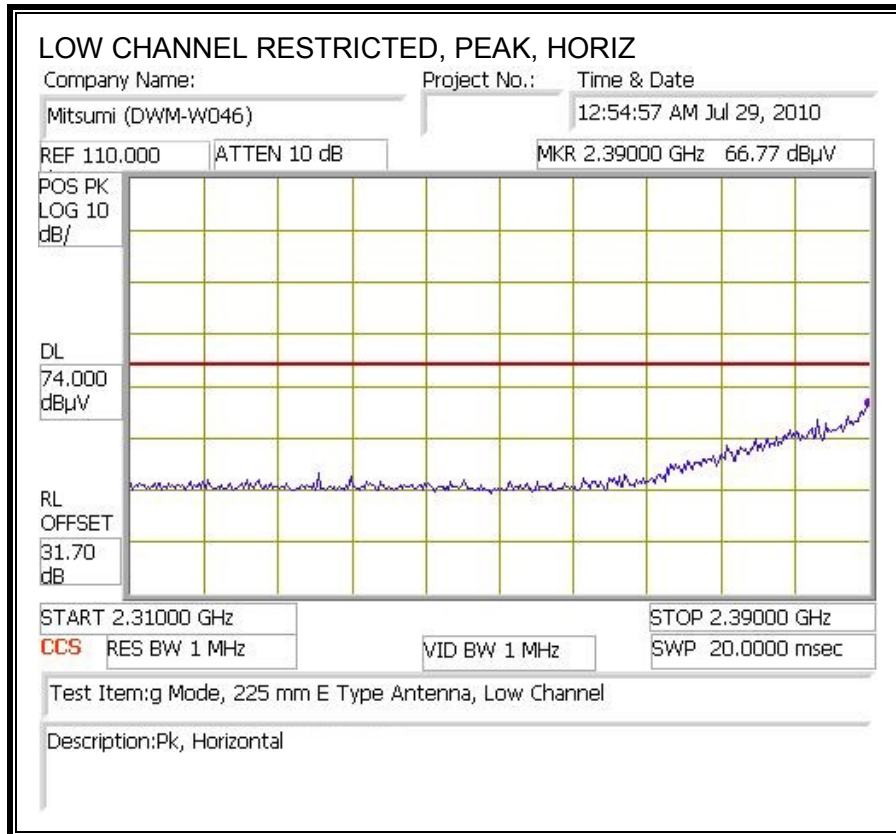


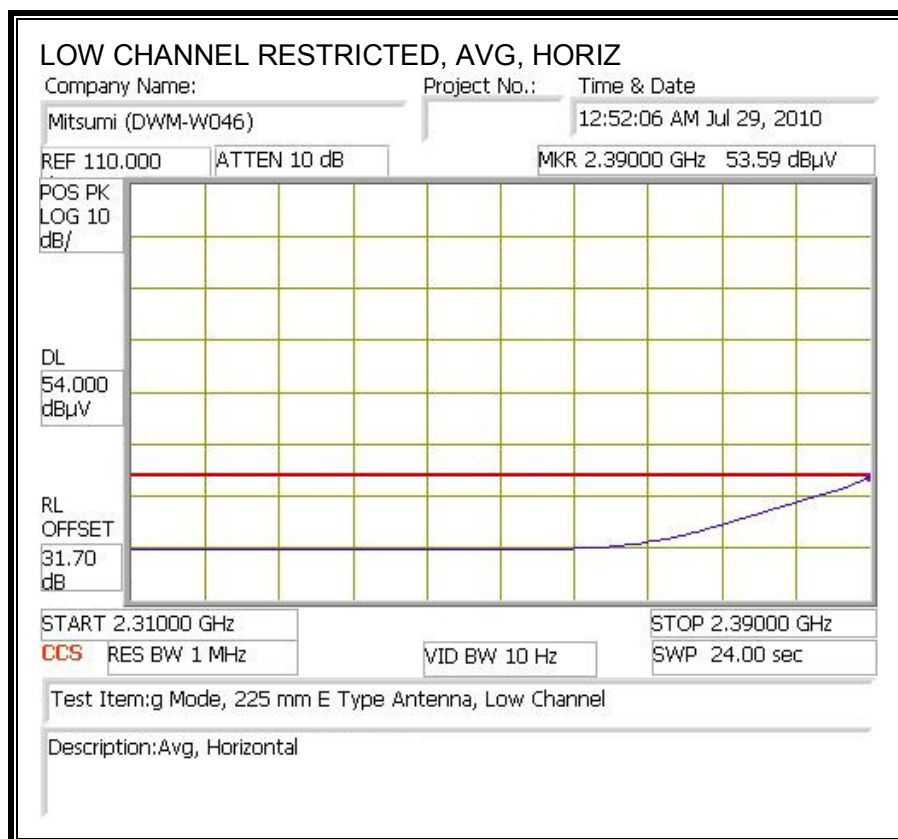
HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement																
Compliance Certification Services, Fremont 5m Chamber																
Company:		Mitsumi														
Project #:		10J13365														
Date:		8/10/2010														
Test Engineer:		Mengistu Mekuria														
Configuration:		EUT With 225 mm E Type Antenna														
Mode:		Tx, b Mode														
Test Equipment:																
Horn 1-18GHz			Pre-amplifier 1-26GHz			Pre-amplifier 26-40GHz			Horn > 18GHz			Limit				
T59; S/N: 3245 @3m			T145 Agilent 3008A0054									FCC 15.209				
Hi Frequency Cables																
3' cable 22807700			12' cable 22807600			20' cable 22807500			HPF			Reject Filter			Peak Measurements RBW=VBW=1MHz	
3' cable 22807700			12' cable 22807600			20' cable 22807500						R_001			Average Measurements RBW=1MHz ; VBW=10Hz	
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filt dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
Low Channel (2412.0 MHz)																
4.824	3.0	41.9	34.1	32.8	5.8	-34.8	0.0	0.0	45.6	37.9	74	54	-28.4	-16.1	H	
3.216	3.0	43.2	34.8	30.5	4.5	-35.1	0.0	0.0	43.1	34.6	74	54	-30.9	-19.4	H	
4.824	3.0	41.9	33.7	32.8	5.8	-34.8	0.0	0.0	45.6	37.4	74	54	-28.4	-16.6	V	
3.216	3.0	44.8	39.0	30.5	4.5	-35.1	0.0	0.0	44.7	38.9	74	54	-29.3	-15.1	V	
Mid Channel (2437.0 MHz)																
4.874	3.0	47.9	45.1	32.8	5.8	-34.9	0.0	0.0	51.7	48.9	74	54	-22.3	-5.1	H	
3.249	3.0	44.1	37.7	30.6	4.6	-35.1	0.0	0.0	44.1	37.7	74	54	-29.9	-16.3	H	
4.874	3.0	47.8	44.6	32.8	5.8	-34.9	0.0	0.0	51.5	48.4	74	54	-22.5	-5.6	V	
3.249	3.0	45.4	40.4	30.6	4.6	-35.1	0.0	0.0	45.4	40.4	74	54	-28.6	-13.6	V	
Hi Channel (2462.0 MHz)																
4.924	3.0	52.9	49.0	32.8	5.9	-34.9	0.0	0.0	56.7	52.8	74	54	-17.3	-1.2	H	
3.283	3.0	47.4	43.2	30.6	4.6	-35.1	0.0	0.0	47.5	43.3	74	54	-26.5	-10.7	H	
4.924	3.0	53.9	49.2	32.8	5.9	-34.9	0.0	0.0	57.7	53.1	74	54	-16.3	-0.9	V	
3.283	3.0	48.0	44.4	30.6	4.6	-35.1	0.0	0.0	48.1	44.5	74	54	-25.9	-9.5	V	
Rev. 07.22.09																
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit			
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit			
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit			
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit			
CL	Cable Loss					HPF	High Pass Filter									

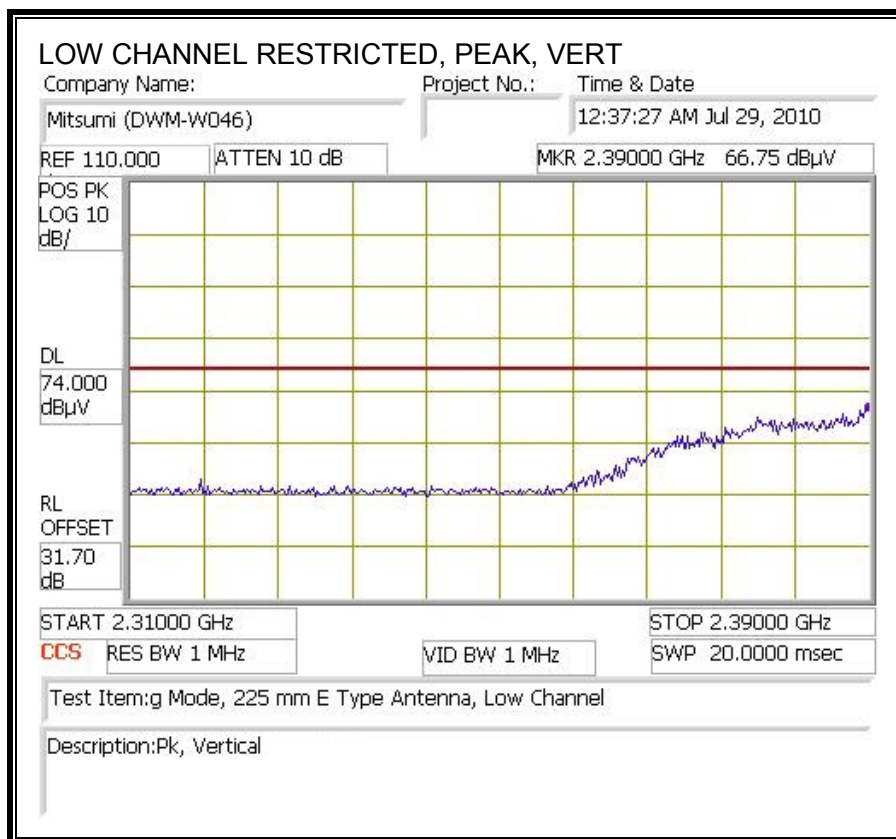
8.1.7. TRANSMITTER ABOVE 1 GHz FOR 802.11g MODE IN THE 2.4 GHz BAND

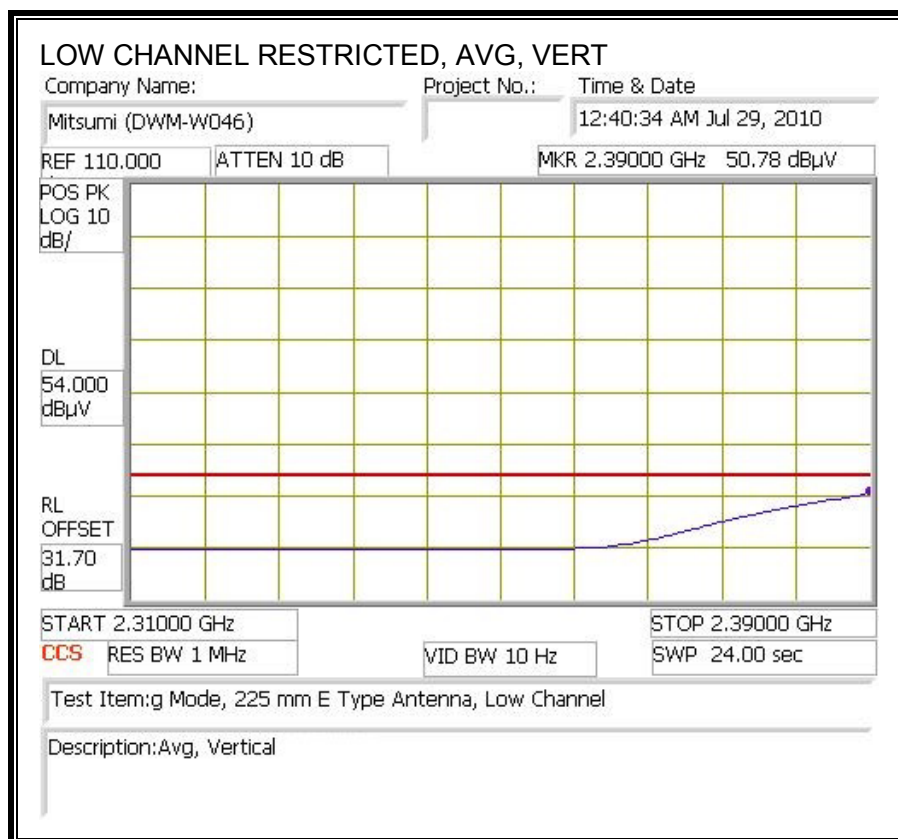
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



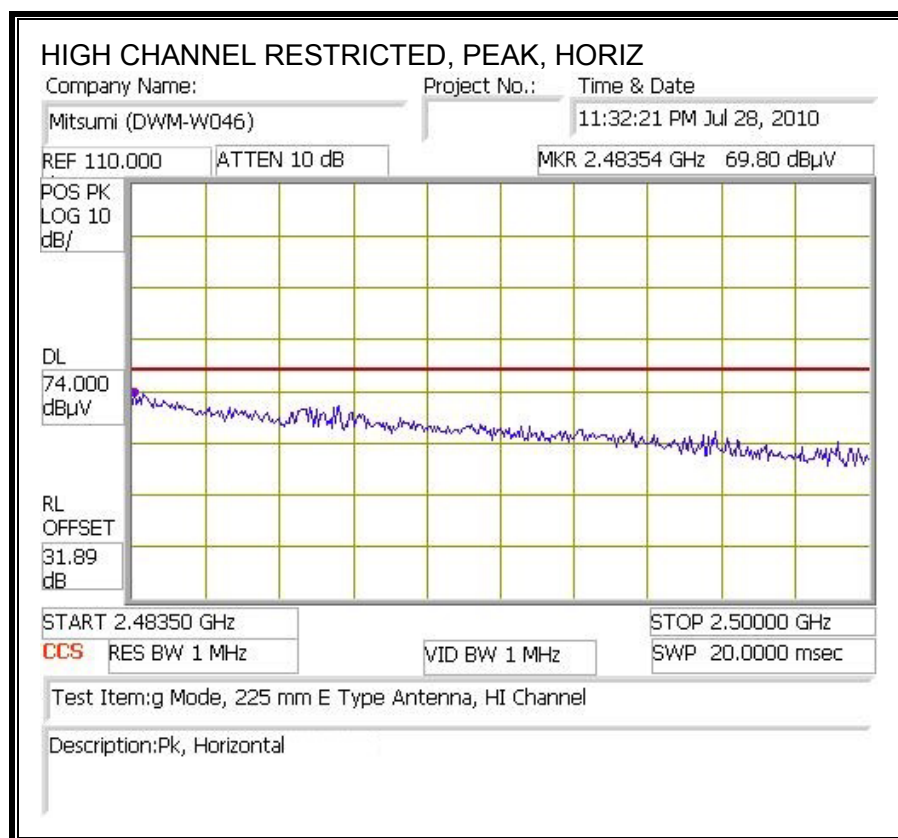


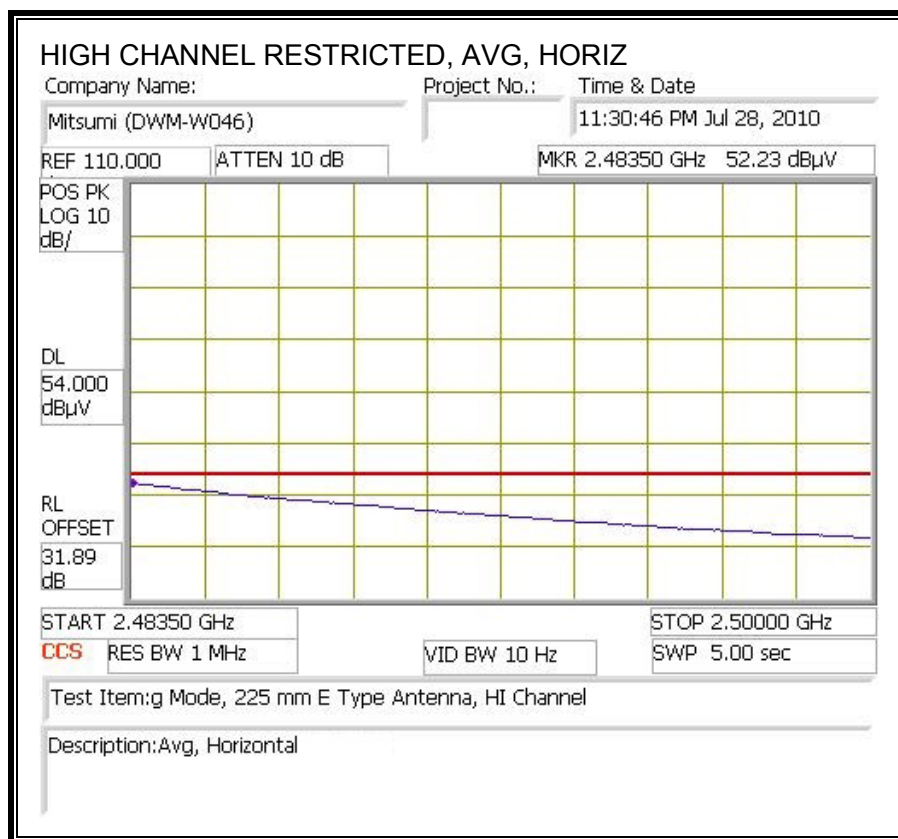
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



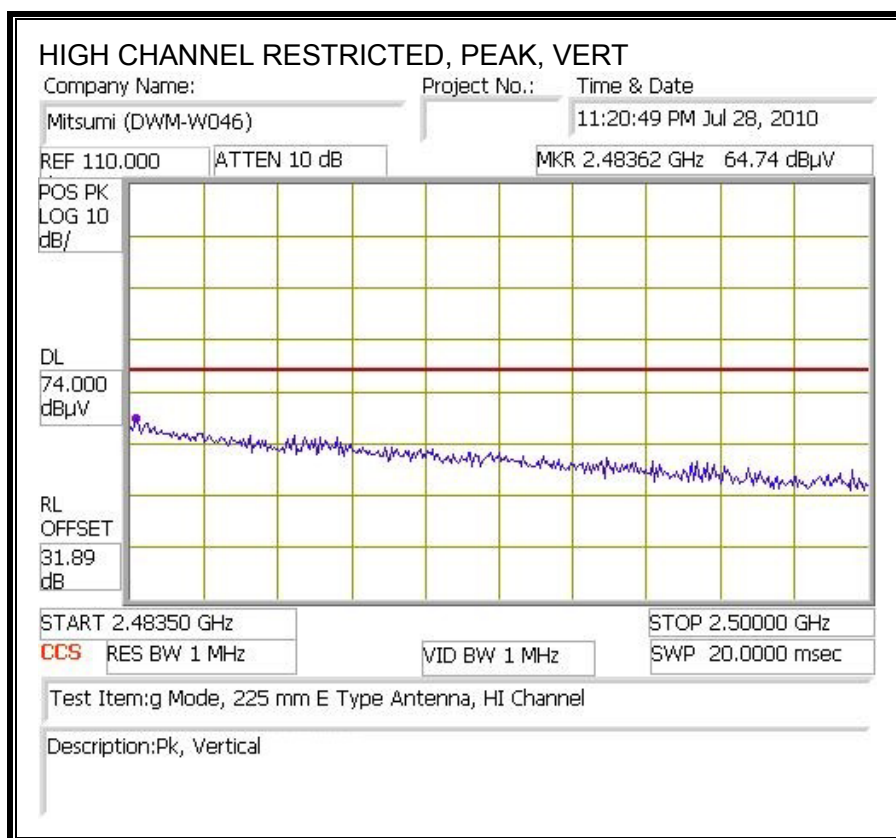


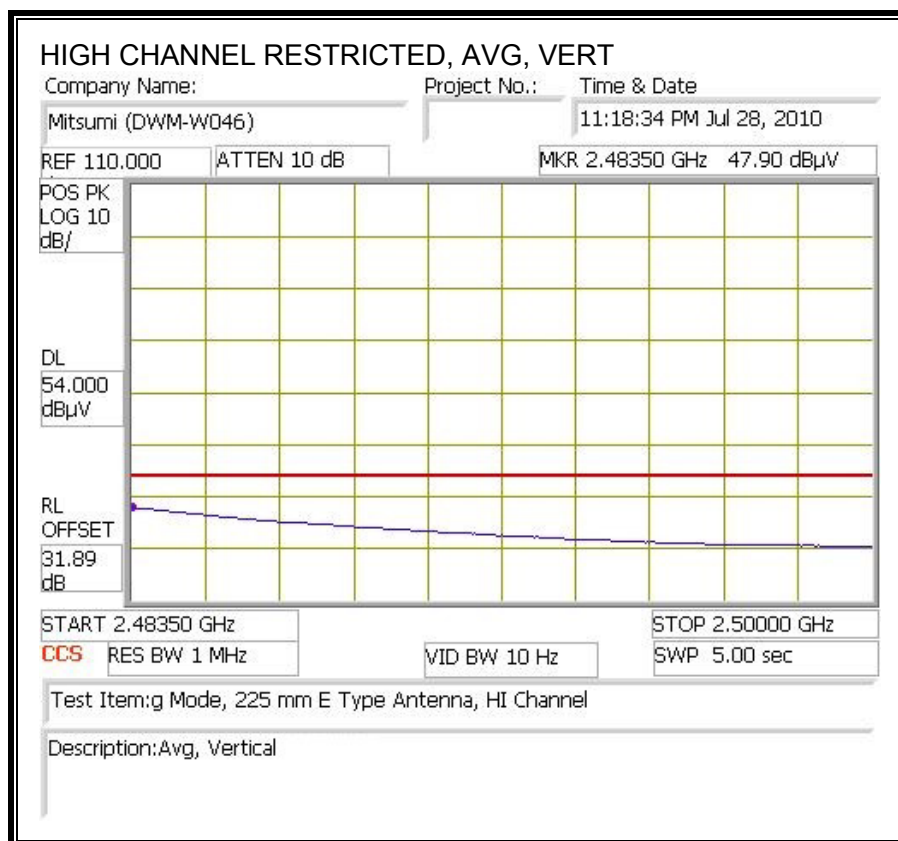
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



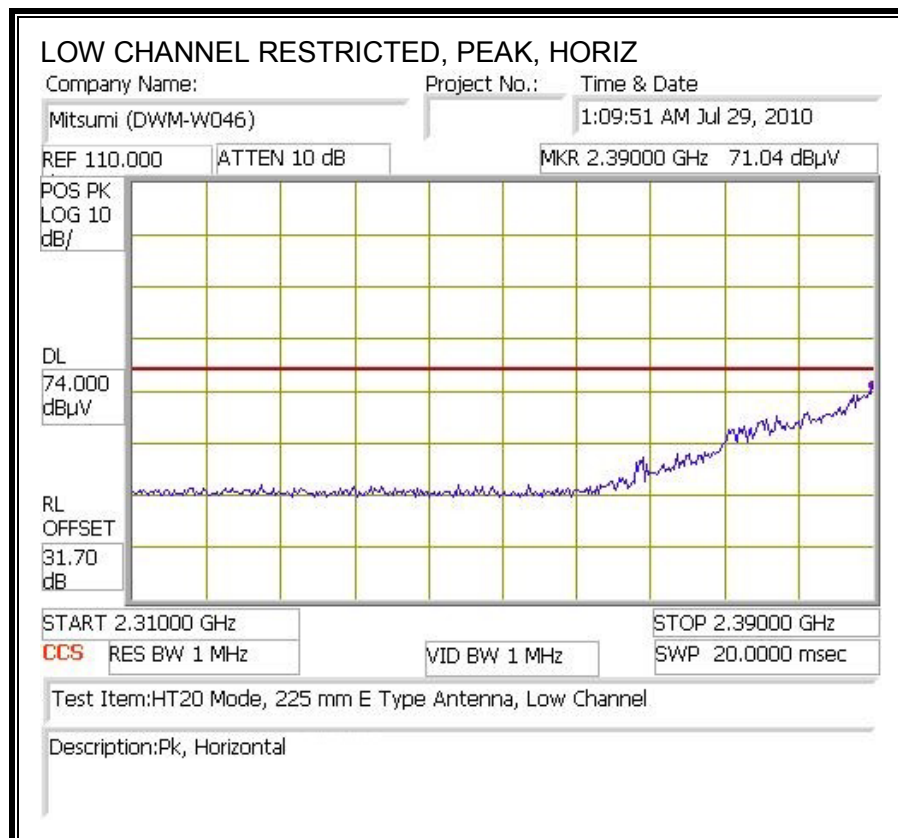


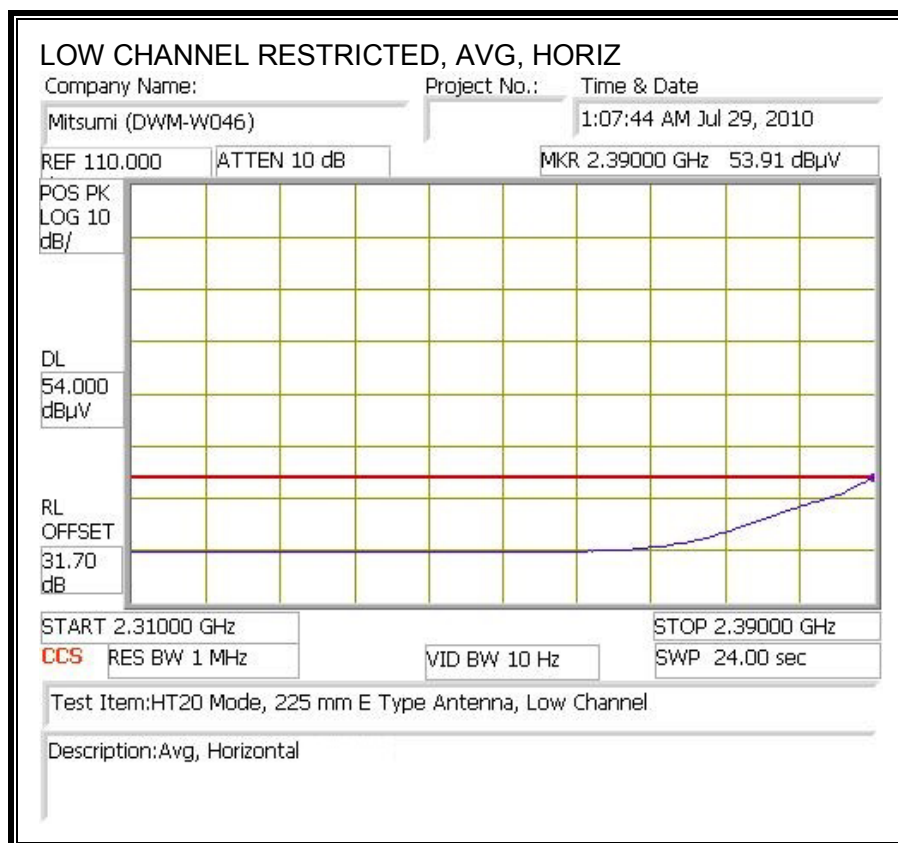
HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement																	
Compliance Certification Services, Fremont 5m Chamber																	
Company:		Mitsumi															
Project #:		10J13365															
Date:		8/10/2010															
Test Engineer:		Mengistu Mekuria															
Configuration:		EUT With 225 mm E Type Antenna															
Mode:		Tx, g Mode															
Test Equipment:																	
Horn 1-18GHz				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz				Limit	
T59; S/N: 3245 @3m				T145 Agilent 3008A0050												FCC 15.209	
Hi Frequency Cables																	
3' cable 22807700				12' cable 22807600				20' cable 22807500				HPF				Reject Filter	
3' cable 22807700				12' cable 22807600				20' cable 22807500								R_001	
<div> <div>Peak Measurements</div> <div>RBW=VBW=1MHz</div> <div>Average Measurements</div> <div>RBW=1MHz; VBW=10Hz</div> </div>																	
f	Dist	Read Pk	Read Avg	AF	CL	Amp	D Corr	Filt	Peak	Avg	Pk Lim	Avg Lim	Pk Mar	Avg Mar	Notes		
GHz	(m)	dBuV	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB	(V/H)		
Low Channel (2412.0 MHz)																	
4.824	3.0	41.9	28.5	32.8	5.8	-34.8	0.0	0.0	45.6	32.2	74	54	-28.4	-21.8	H		
3.216	3.0	45.3	39.8	30.5	4.5	-35.1	0.0	0.0	45.2	39.7	74	54	-28.8	-14.3	H		
4.824	3.0	43.0	28.9	32.8	5.8	-34.8	0.0	0.0	46.7	32.6	74	54	-27.3	-21.4	V		
3.216	3.0	46.8	42.6	30.5	4.5	-35.1	0.0	0.0	46.7	42.5	74	54	-27.3	-11.5	V		
Mid Channel (2437.0 MHz)																	
4.874	3.0	50.8	35.6	32.8	5.8	-34.9	0.0	0.0	54.6	39.4	74	54	-19.4	-14.6	H		
3.249	3.0	46.0	41.5	30.6	4.6	-35.1	0.0	0.0	46.0	41.5	74	54	-28.0	-12.5	H		
4.874	3.0	49.7	35.6	32.8	5.8	-34.9	0.0	0.0	53.5	39.4	74	54	-20.5	-14.6	V		
3.249	3.0	47.2	44.1	30.6	4.6	-35.1	0.0	0.0	47.2	44.1	74	54	-26.8	-9.9	V		
Hi Channel (2462.0 MHz)																	
4.924	3.0	57.8	43.5	32.8	5.9	-34.9	0.0	0.0	61.7	47.3	74	54	-12.3	-6.7	H		
3.283	3.0	48.9	45.5	30.6	4.6	-35.1	0.0	0.0	49.0	45.6	74	54	-25.0	-8.4	H		
4.924	3.0	59.3	43.8	32.8	5.9	-34.9	0.0	0.0	63.1	47.6	74	54	-10.9	-6.4	V		
3.283	3.0	49.6	46.8	30.6	4.6	-35.1	0.0	0.0	49.7	47.0	74	54	-24.3	-7.0	V		
Rev. 07.22.09																	
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit				
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit				
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit				
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit				
CL	Cable Loss					HPF	High Pass Filter										

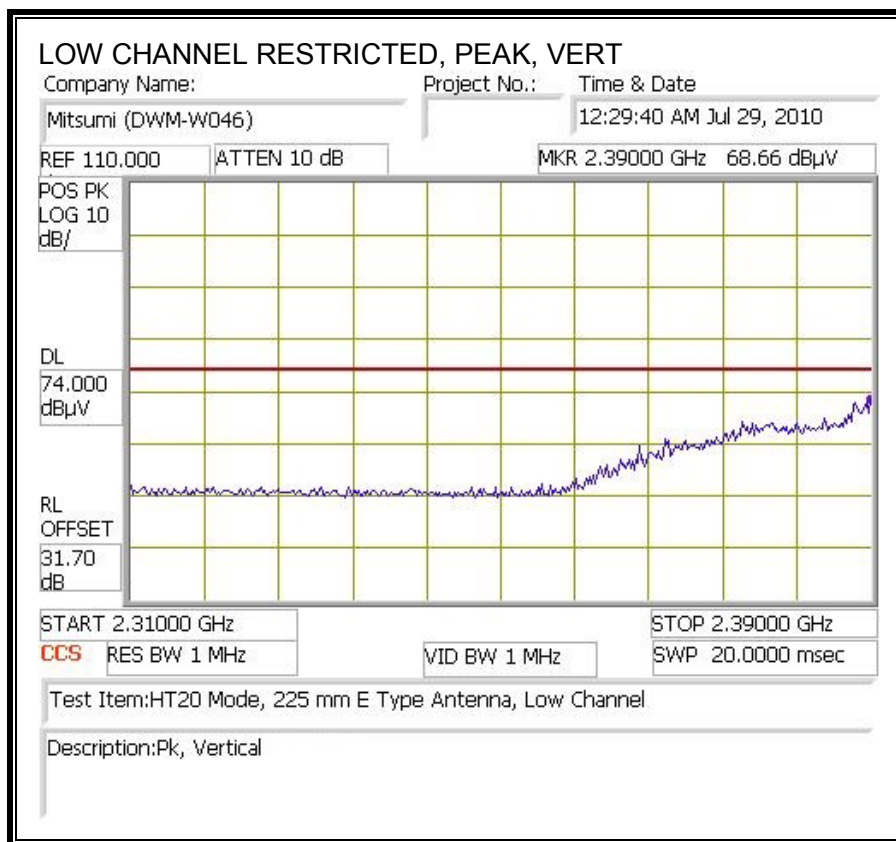
8.1.8. TRANSMITTER ABOVE 1 GHz FOR HT 20 MODE IN THE 2.4 GHz BAND

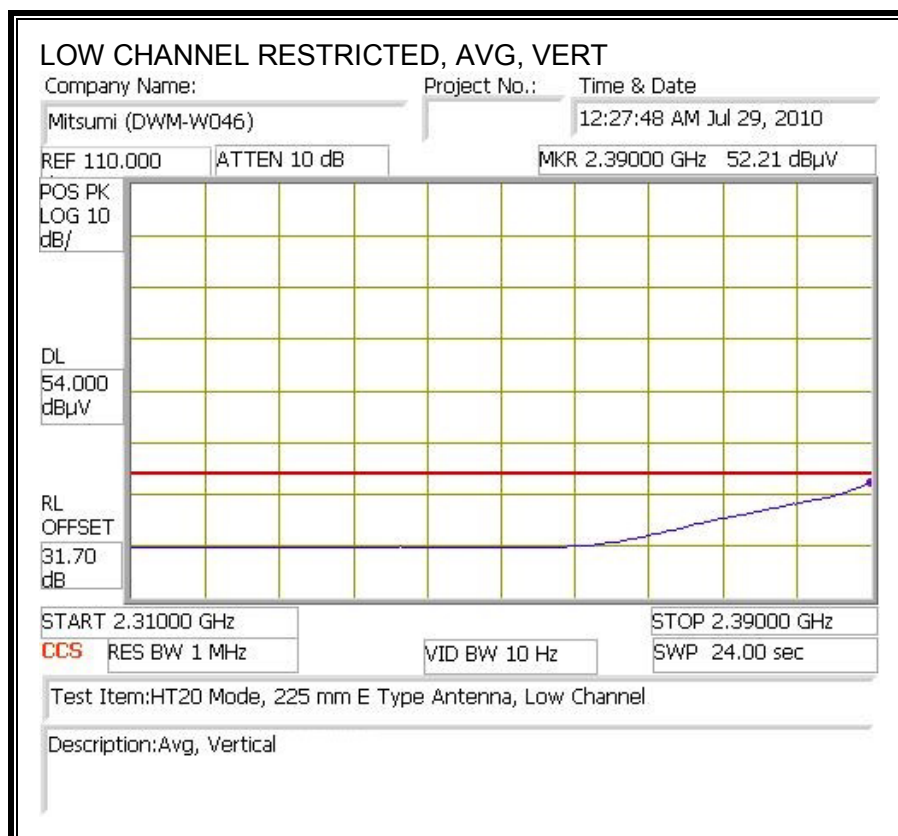
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



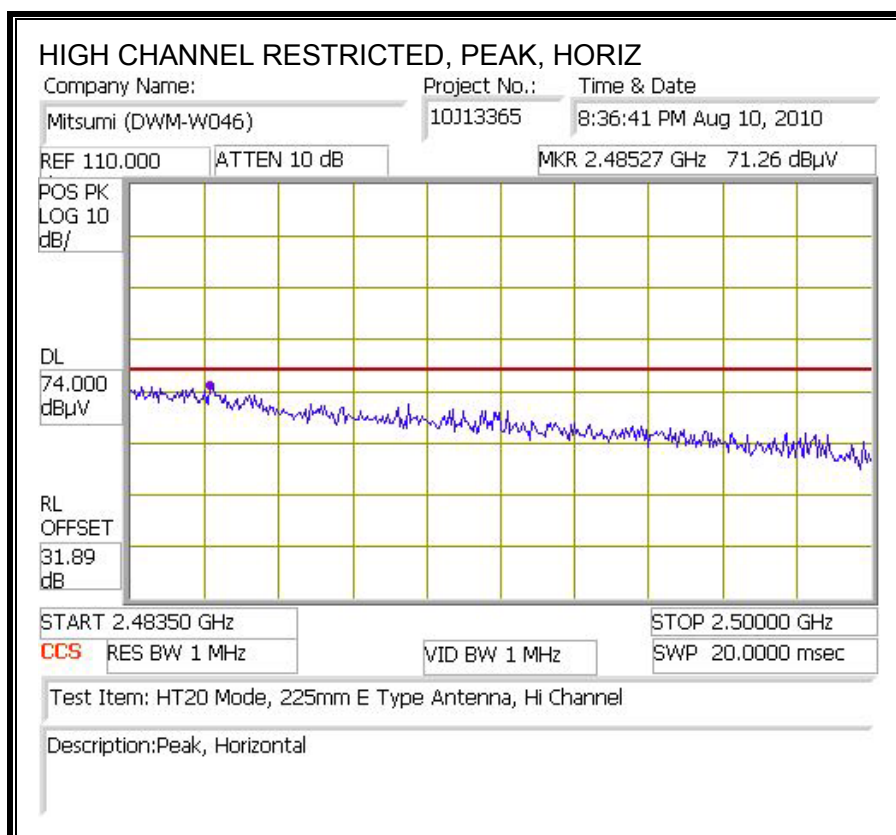


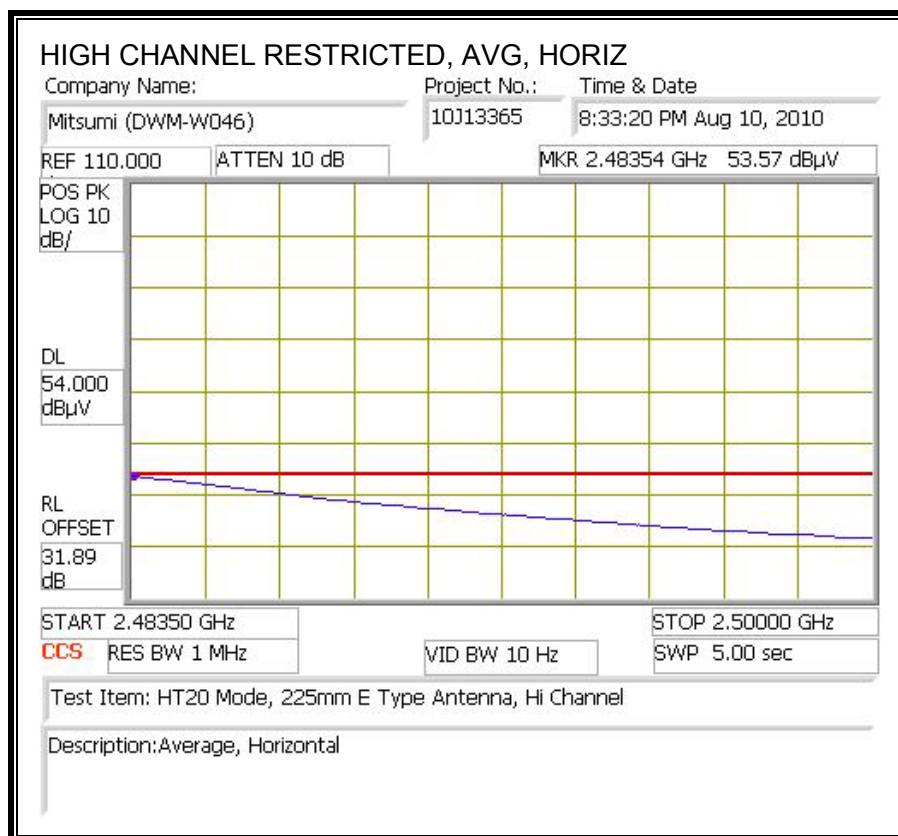
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



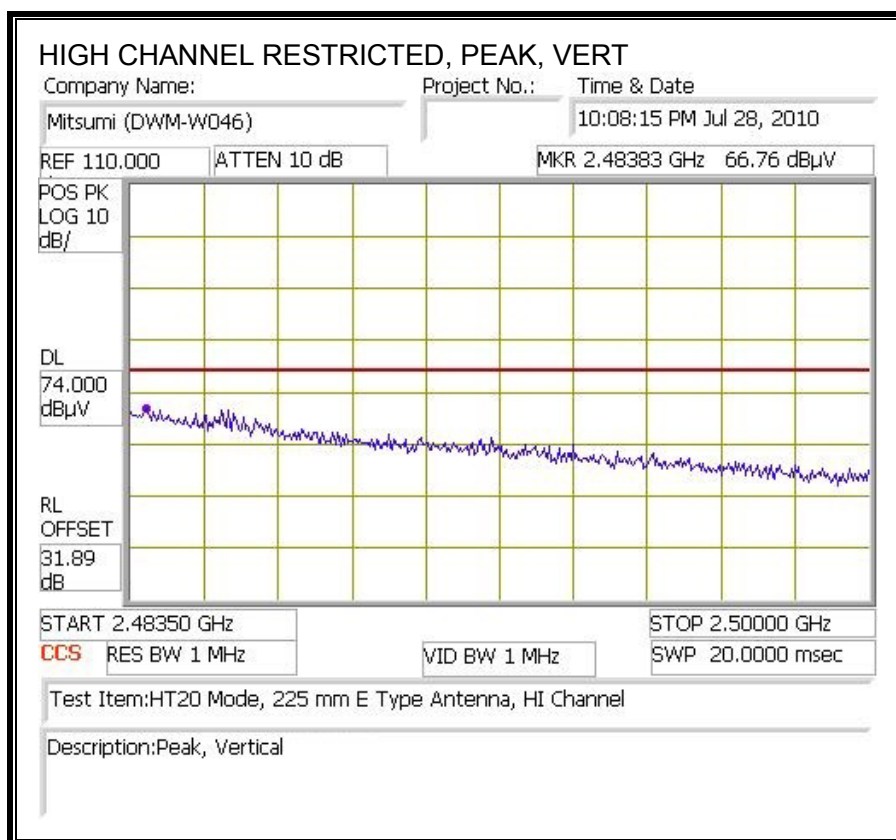


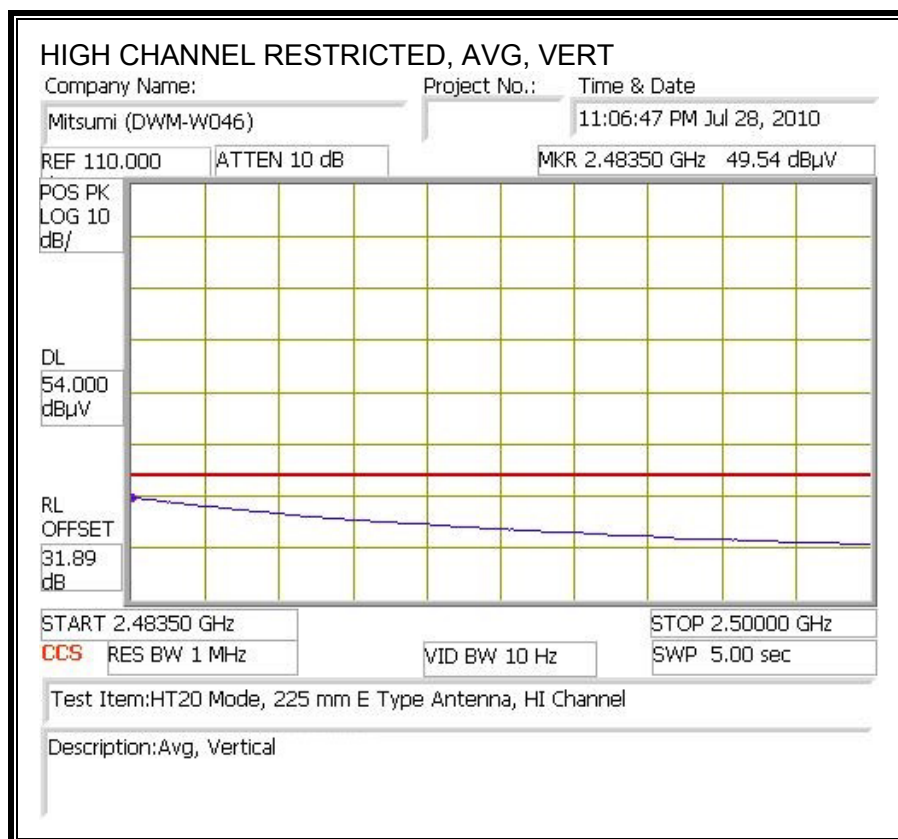
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

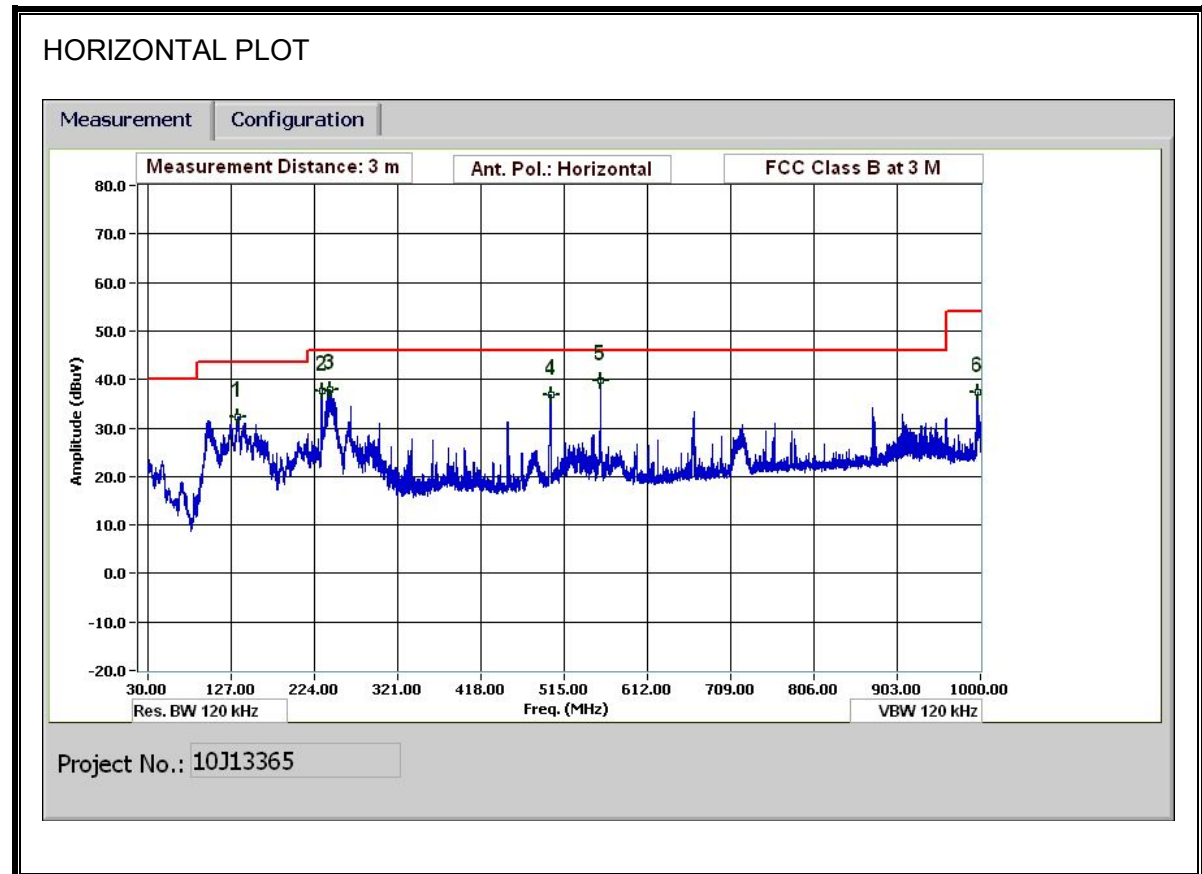
High Frequency Measurement																	
Compliance Certification Services, Fremont 5m Chamber																	
Company:		Mitsumi															
Project #:		10J13365															
Date:		8/10/2010															
Test Engineer:		Mengistu Mekuria															
Configuration:		EUT With 225 mm E Type Antenna															
Mode:		Tx HT20 Mode															
Test Equipment:																	
Horn 1-18GHz				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz				Limit	
T59; S/N: 3245 @3m				T145 Agilent 3008A0054												FCC 15.209	
Hi Frequency Cables																	
3' cable 22807700				12' cable 22807600				20' cable 22807500				HPF				Reject Filter	
3' cable 22807700				12' cable 22807600				20' cable 22807500								R_001	
<div> <div>Peak Measurements</div> <div>RBW=VBW=1MHz</div> <div>Average Measurements</div> <div>RBW=1MHz ; VBW=10Hz</div> </div>																	
f	Dist	Read Pk	Read Avg	AF	CL	Amp	D Corr	Ftr	Peak	Avg	Pk Lim	Avg Lim	Pk Mar	Avg Mar	Notes		
GHz	(m)	dBuV	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB	(V/H)		
Low Channel (2412.0 MHz)																	
4.824	3.0	41.0	28.3	32.8	5.8	-34.8	0.0	0.0	44.7	32.0	74	54	-29.3	-22.0	H		
3.216	3.0	45.7	39.8	30.5	4.5	-35.1	0.0	0.0	45.5	39.7	74	54	-28.5	-14.3	H		
4.824	3.0	40.5	28.1	32.8	5.8	-34.8	0.0	0.0	44.3	31.8	74	54	-29.7	-22.2	V		
3.216	3.0	46.9	41.9	30.5	4.5	-35.1	0.0	0.0	46.8	41.7	74	54	-27.2	-12.3	V		
Mid Channel (2437.0 MHz)																	
4.874	3.0	50.1	35.4	32.8	5.8	-34.9	0.0	0.0	53.9	39.2	74	54	-20.1	-14.8	H		
3.249	3.0	45.8	41.5	30.6	4.6	-35.1	0.0	0.0	45.8	41.5	74	54	-28.2	-12.5	H		
4.874	3.0	49.0	34.7	32.8	5.8	-34.9	0.0	0.0	52.8	38.5	74	54	-21.2	-15.5	V		
3.249	3.0	47.0	43.6	30.6	4.6	-35.1	0.0	0.0	47.0	43.6	74	54	-27.0	-10.4	V		
Hi Channel (2462.0 MHz)																	
4.924	3.0	57.0	42.7	32.8	5.9	-34.9	0.0	0.0	60.9	46.6	74	54	-13.1	-7.4	H		
3.283	3.0	48.9	45.5	30.6	4.6	-35.1	0.0	0.0	49.0	45.6	74	54	-25.0	-8.4	H		
4.924	3.0	58.4	42.6	32.8	5.9	-34.9	0.0	0.0	62.3	46.5	74	54	-11.7	-7.5	V		
3.283	3.0	49.7	46.4	30.6	4.6	-35.1	0.0	0.0	49.8	46.5	74	54	-24.2	-7.5	V		
Rev. 07.22.09																	
f	Measurement Frequency		Amp	Preamp Gain		Avg Lim	Average Field Strength Limit										
Dist	Distance to Antenna		D Corr	Distance Correct to 3 meters		Pk Lim	Peak Field Strength Limit										
Read	Analyzer Reading		Avg	Average Field Strength @ 3 m		Avg Mar	Margin vs. Average Limit										
AF	Antenna Factor		Peak	Calculated Peak Field Strength		Pk Mar	Margin vs. Peak Limit										
CL	Cable Loss		HPF	High Pass Filter													

8.1.9. RECEIVER ABOVE 1 GHz FOR 20 MHz BANDWIDTH IN THE 2.4 GHz BAND

High Frequency Measurement																	
Compliance Certification Services, Fremont 5m Chamber																	
Company:		Mitsumi															
Project #:		10J13365															
Date:		8/11/2010															
Test Engineer:		Mengistu Mekuria															
Configuration:		EUT With 225 mm E Type Antennas															
Mode:		Broadband Rx Mode															
Test Equipment:																	
Horn 1-18GHz				Pre-amplifier 1-26GHz				Pre-amplifier 26-40GHz				Horn > 18GHz				Limit	
T59; S/N: 3245 @3m				T145 Agilent 3008A0056												RX RSS 210	
Hi Frequency Cables																	
3' cable 22807700				12' cable 22807600				20' cable 22807500				HPF				Reject Filter	
3' cable 22807700				12' cable 22807600				20' cable 22807500									
<div> <div>Peak Measurements</div> <div>RBW=VBW=1MHz</div> <div>Average Measurements</div> <div>RBW=1MHz ; VBW=10Hz</div> </div>																	
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Ftr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)		
1.200	3.0	51.0	34.8	24.7	2.6	-36.0	0.0	0.0	42.3	26.1	74	54	-31.7	-27.9	H		
1.225	3.0	48.7	43.0	24.8	2.6	-36.0	0.0	0.0	40.1	34.5	74	54	-33.9	-19.5	H		
1.330	3.0	54.3	35.6	25.2	2.7	-35.9	0.0	0.0	46.3	27.6	74	54	-27.7	-26.4	H		
1.448	3.0	55.1	38.6	25.6	2.9	-35.8	0.0	0.0	47.7	31.2	74	54	-26.3	-22.8	H		
1.992	3.0	49.0	32.3	27.6	3.5	-35.4	0.0	0.0	44.6	28.0	74	54	-29.4	-26.0	H		
1.225	3.0	58.0	38.5	24.8	2.6	-36.0	0.0	0.0	49.4	29.9	74	54	-24.6	-24.1	V		
1.330	3.0	54.6	36.1	25.2	2.7	-35.9	0.0	0.0	46.6	28.1	74	54	-27.4	-25.9	V		
1.448	3.0	57.4	38.7	25.6	2.9	-35.8	0.0	0.0	50.1	31.3	74	54	-23.9	-22.7	V		
1.992	3.0	52.7	33.9	27.6	3.5	-35.4	0.0	0.0	48.3	29.5	74	54	-25.7	-24.5	V		
2.490	3.0	49.4	23.5	28.5	3.9	-35.1	0.0	0.0	46.7	20.8	74	54	-27.3	-33.2	V		
Rev. 07.22.09																	
f	Measurement Frequency			Amp	Preamp Gain			Avg Lim	Average Field Strength Limit								
Dist	Distance to Antenna			D Corr	Distance Correct to 3 meters			Pk Lim	Peak Field Strength Limit								
Read	Analyzer Reading			Avg	Average Field Strength @ 3 m			Avg Mar	Margin vs. Average Limit								
AF	Antenna Factor			Peak	Calculated Peak Field Strength			Pk Mar	Margin vs. Peak Limit								
CL	Cable Loss			HPF	High Pass Filter												

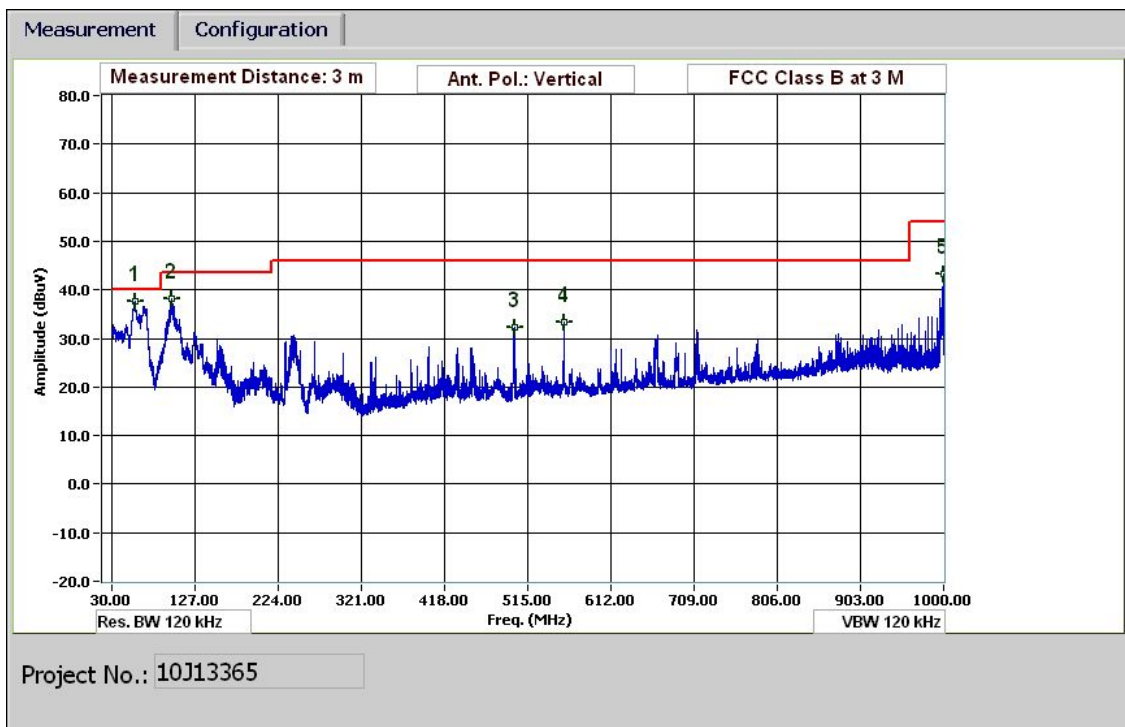
8.1.10. WORST-CASE BELOW 1 GHz

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



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

VERTICAL PLOT



HORIZONTAL AND VERTICAL DATA

30-1000MHz Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: MENGISTU MEKURIA

Date: 08/10/10

Project #: 10J13365

Company: MITSUMI

EUT Description: 802.11B/G/N WLAN MODULE WITH 225 mm E-TYPE ANTENNA

EUT M/N: DWM-W046

Test Target: FCC CLASS B

Mode Oper: TX MODE (WORST-CASE)

f	Measurement Frequency	Amp	Preamp Gain	Margin	Margin vs. Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters		
Read	Analyzer Reading	Filter	Filter Insert Loss		
AF	Antenna Factor	Corr.	Calculated Field Strength		
CL	Cable Loss	Limit	Field Strength Limit		

f MHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filter dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol V/H	Det P/A/QP	Notes
56.761	3.0	58.7	7.9	0.7	29.6	0.0	0.0	37.7	40.0	-2.3	V	P	
56.452	3.0	56.3	7.9	0.6	29.6	0.0	0.0	35.2	40.0	-4.8	V	QP	
100.083	3.0	56.7	10.1	0.9	29.5	0.0	0.0	38.2	43.5	-5.3	V	P	
499.219	3.0	43.1	16.8	2.1	29.7	0.0	0.0	32.3	46.0	-13.7	V	P	
556.822	3.0	43.0	17.6	2.3	29.7	0.0	0.0	33.3	46.0	-12.8	V	P	
999.400	3.0	45.9	22.6	3.2	28.4	0.0	0.0	43.3	54.0	-10.7	V	P	
134.284	3.0	47.1	13.5	1.0	29.4	0.0	0.0	32.2	43.5	-11.3	H	P	
233.048	3.0	53.2	11.9	1.4	28.8	0.0	0.0	37.6	46.0	-8.4	H	P	
241.929	3.0	53.5	11.8	1.4	28.8	0.0	0.0	38.0	46.0	-8.0	H	P	
499.099	3.0	47.5	16.8	2.1	29.7	0.0	0.0	36.7	46.0	-9.3	H	P	
556.942	3.0	49.6	17.6	2.3	29.7	0.0	0.0	39.8	46.0	-6.2	H	P	
997.480	3.0	39.9	22.6	3.2	28.4	0.0	0.0	37.2	54.0	-16.8	H	P	

Rev. 1.27.09

Note: No other emissions were detected above the system noise floor.

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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

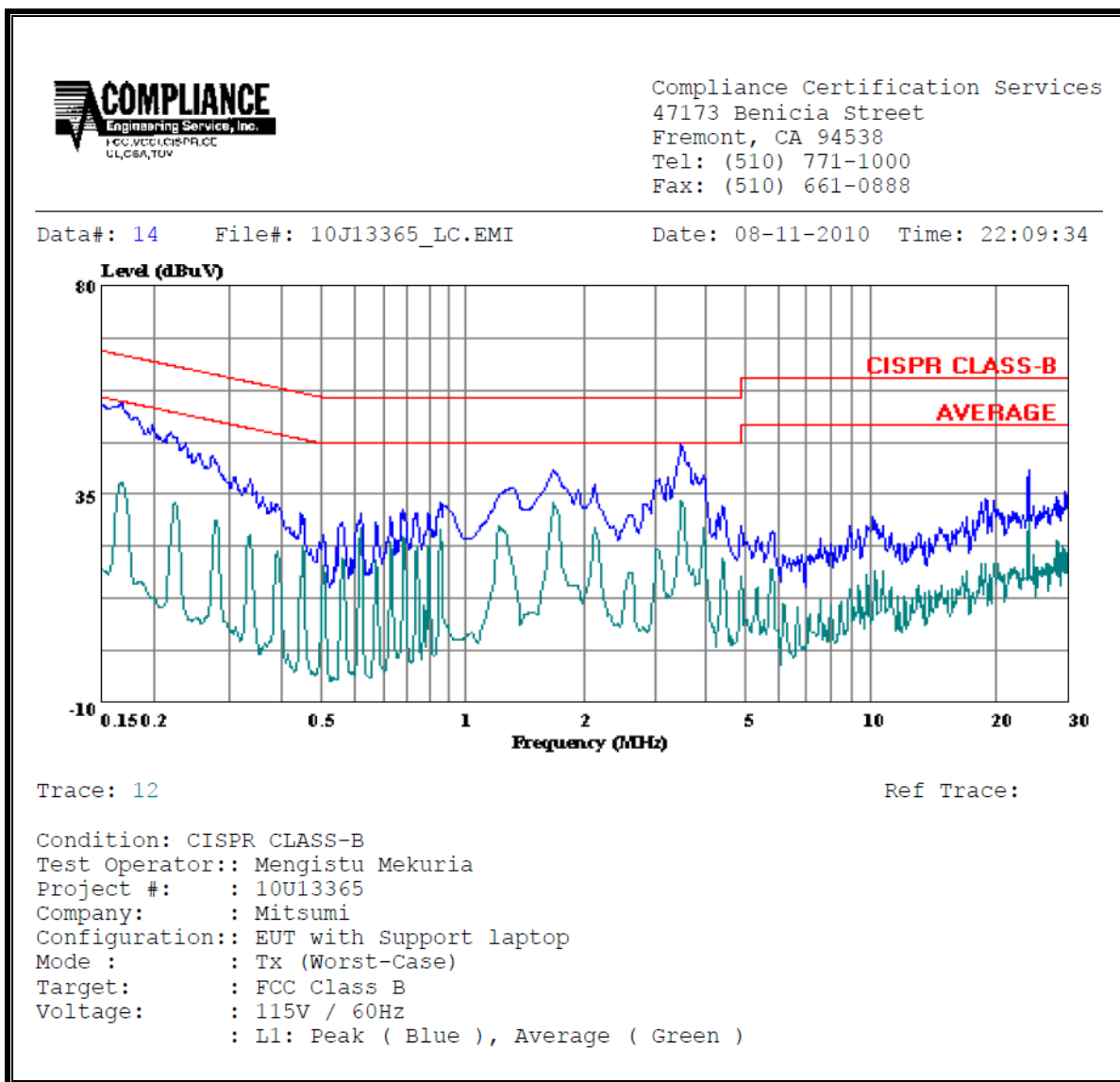
ANSI C63.4

RESULTS

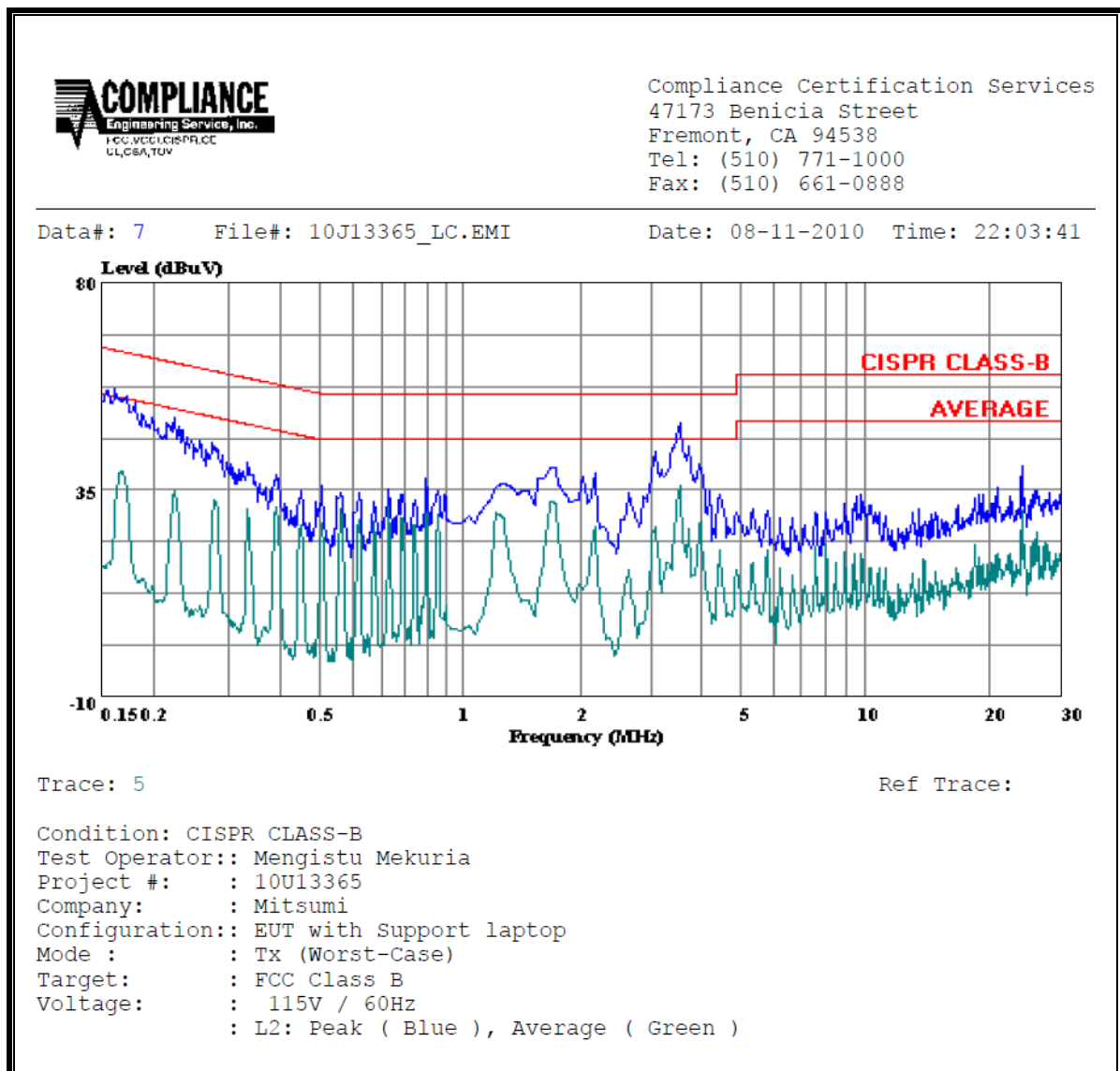
6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq. (MHz)	Reading			Class (dB)	Limit QP	EN_B AV	Margin		Remark L1 / L2
	PK (dBuV)	QP (dBuV)	AV (dBuV)				QP (dB)	AV (dB)	
0.17	54.86	--	37.60	0.00	65.06	55.06	-10.20	-17.46	L1
3.58	45.90	--	33.75	0.00	56.00	46.00	-10.10	-12.25	L1
24.01	40.37	--	30.07	0.00	60.00	50.00	-19.63	-19.93	L1
0.16	56.85	--	39.22	0.00	65.41	55.41	-8.56	-16.19	L2
3.64	49.47	--	36.05	0.00	56.00	46.00	-6.53	-9.95	L2
24.01	40.21	--	30.50	0.00	60.00	50.00	-19.79	-19.50	L2
6 Worst Data									

LINE 1 RESULTS



LINE 2 RESULTS



10. MAXIMUM PERMISSIBLE EXPOSURE

FCC RULES

§1.1310 The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f ²)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)—Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

EQUATIONS

Power density is given by:

$$S = \text{EIRP} / (4 * \pi * D^2)$$

where

S = Power density in W/m²

EIRP = Equivalent Isotropic Radiated Power in W

D = Separation distance in m

Power density in units of W/m² is converted to units of mW/cm² by dividing by 10.

In the table(s) below, Power and Gain are entered in units of dBm and dBi respectively and conversions to linear forms are used for the calculations.

LIMITS

From FCC §1.1310 Table 1 (B), the maximum value of S = 1.0 mW/cm²

RESULTS

Band	Mode	Separation Distance (m)	Output Power (dBm)	Antenna Gain (dBi)	IC Power Density (W/m ²)	FCC Power Density (mW/cm ²)
2.4 GHz	b mode	0.20	17.43	-4.56	0.04	0.004
2.4 GHz	g mode	0.20	25.48	-4.56	0.25	0.025
2.4 GHz	HT20	0.20	26.24	-4.56	0.29	0.029