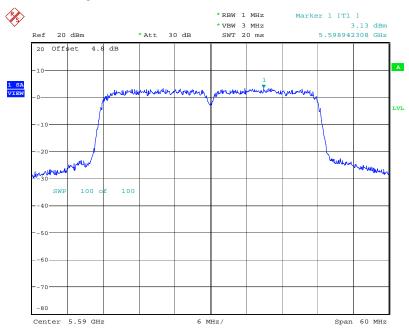


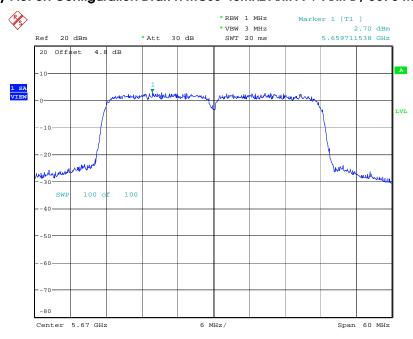


Power Density Plot on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5590 MHz



Date: 2.FEB.2008 10:45:14

Power Density Plot on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5670 MHz



Date: 2.FEB.2008 10:49:11

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4.5. Peak Excursion Measurement

4.5.1. Limit

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emissions bandwidth whichever is less.

4.5.2. Measuring Instruments and Setting

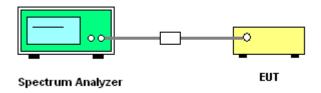
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 300 kHz (Average Trace)
Detector	Peak (Peak Trace) / Sample (Average Trace)
Trace	Max Hold
Sweep Time	60s

4.5.3. Test Procedures

- 1. The transmitter output (antenna port) was connected to the spectrum analyzer.
- 2. Set the spectrum analyzer span to view the entire emissions bandwidth. The largest difference between the following two traces (Peak Trace and Average Trace) must be ≤ 13 dB for all frequencies across the emissions bandwidth. Submit a plot.
- 3. Peak Trace: Set RBW = 1 MHz, VBW \geq 3 MHz with peak detector and max-hold settings.
- 4. Average Trace: Method #3—video averaging with max hold--and sum power across the band. Set span to encompass the entire emissions bandwidth (EBW) of the signal. Set sweep trigger to "free run". Set RBW = 1 MHz. Set VBW \geq 1/T (Draft n VBW = 300kHz \geq 1/4 μ s). Use sample detector mode if bin width (i.e., span/number of points in spectrum) < 0.5 RBW. Otherwise use peak detector mode. Set max hold. Allow max hold to run for 60 seconds.
- Measuring multiple antennas, the connector is required to link with spectrum analyzer through a combiner.

4.5.4. Test Setup Layout



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4.5.5. Test Deviation

There is no deviation with the original standard.

4.5.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.5.7. Test Result of Peak Excursion

Temperature	20 ℃	Humidity	70%
Test Engineer	Jacky Ho	Configurations	Draft n

Configuration Draft n MCS8 20MHz Ant. A + Ant. B

Cominguiation Dian in Mood 20Mil274ii.77 1 74ii. D										
Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result						
36	5180 MHz	4.85	13	Complies						
40	5200 MHz	4.57	13	Complies						
48	5240 MHz	5.07	13	Complies						
52	5260 MHz	4.91	13	Complies						
60	5300 MHz	4.96	13	Complies						
64	5320 MHz	5.29	13	Complies						
100	5500 MHz	5.09	13	Complies						
120	5600 MHz	4.76	13	Complies						
140	5700 MHz	4.75	13	Complies						

Configuration Draft n MCS8 40MHz Ant. A + Ant. B

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
38	5190 MHz	4.73	13	Complies
46	5230 MHz	4.98	13	Complies
54	5270 MHz	5.37	13	Complies
62	5310 MHz	4.53	13	Complies
102	5510MHz	4.83	13	Complies
118	5590 MHz	5.24	13	Complies
134	5670 MHz	5.15	13	Complies

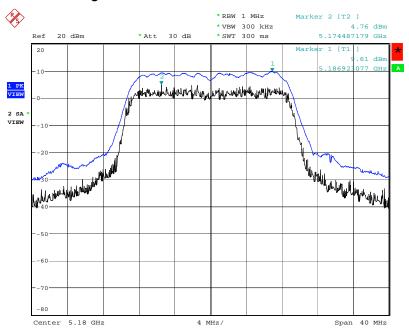
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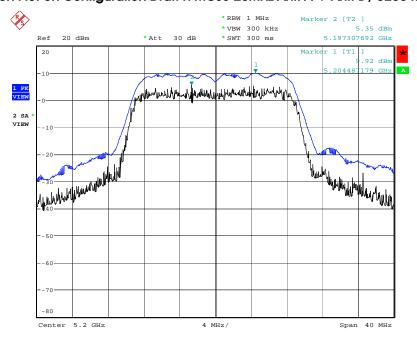


Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A \pm Ant. B / 5180 MHz



Date: 2.FEB.2008 10:56:31

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5200 MHz



Date: 2.FEB.2008 11:01:26

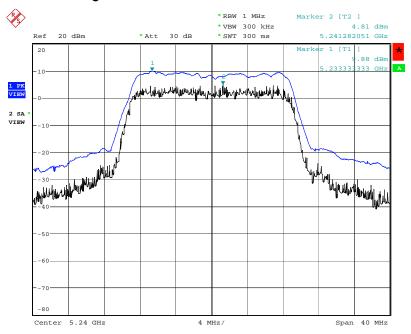
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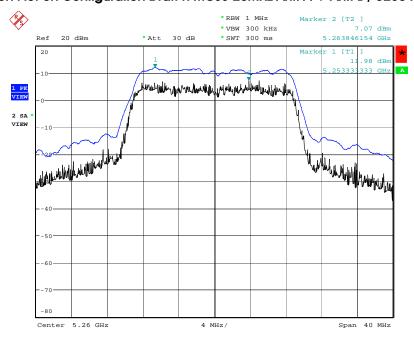


Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A \pm Ant. B / 5240 MHz



Date: 2.FEB.2008 11:04:49

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5260 MHz



Date: 2.FEB.2008 11:06:19

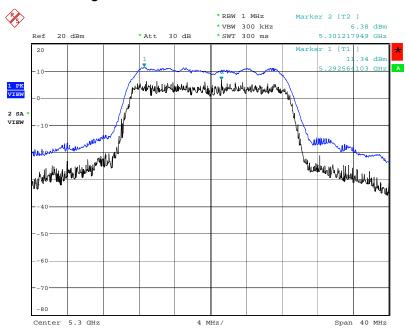
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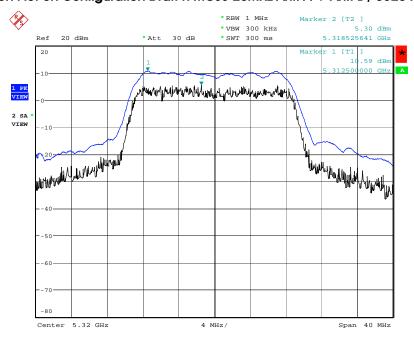


Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A \pm Ant. B / 5300 MHz



Date: 2.FEB.2008 11:11:39

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5320 MHz



Date: 2.FEB.2008 11:08:28

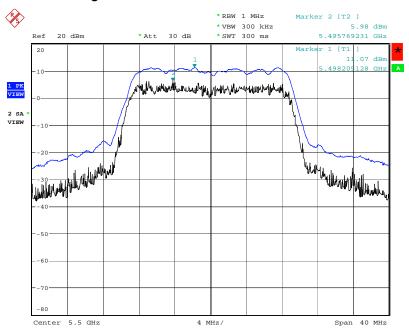
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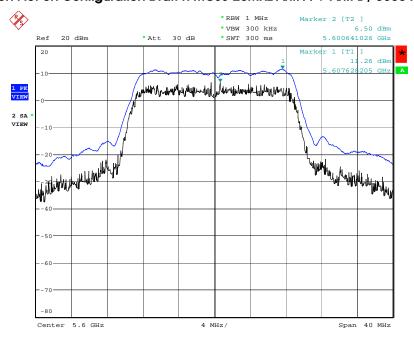


Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5500 MHz



Date: 2.FEB.2008 11:28:24

Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5600 MHz



Date: 2.FEB.2008 11:30:02

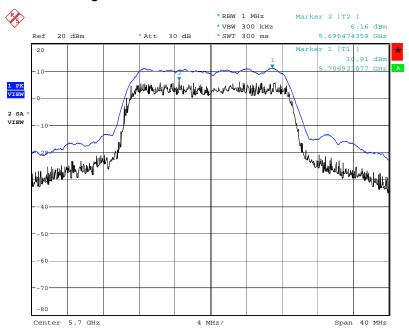
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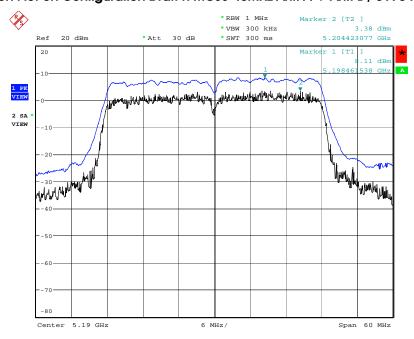


Peak Excursion Plot on Configuration Draft n MCS8 20MHz Ant. A \pm Ant. B \pm 5700 MHz



Date: 2.FEB.2008 11:32:00

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5190 MHz



Date: 2.FEB.2008 10:27:13

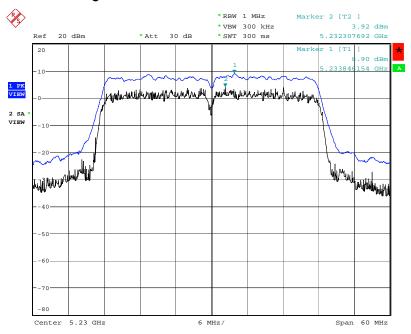
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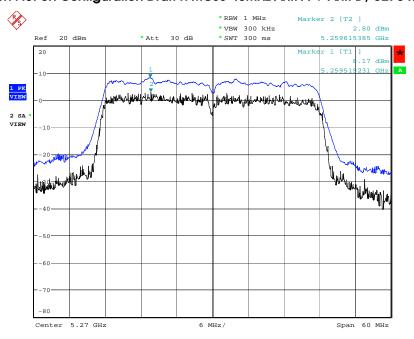


Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. A \pm Ant. B / 5230 MHz



Date: 2.FEB.2008 10:33:41

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5270 MHz



Date: 2.FEB.2008 10:35:49

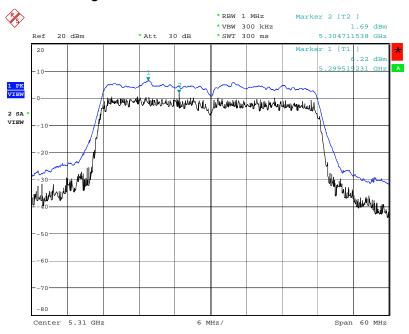
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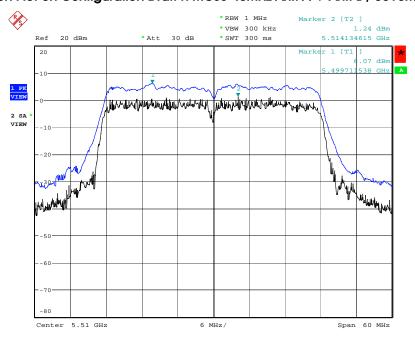


Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. A \pm Ant. B \pm 5310 MHz



Date: 2.FEB.2008 12:07:47

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5510MHz



Date: 2.FEB.2008 10:43:23

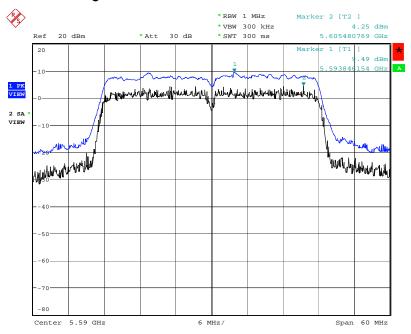
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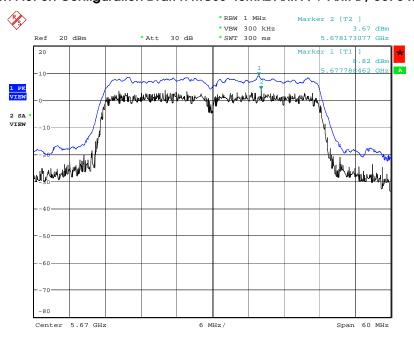


Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. A \pm Ant. B / 5590 MHz



Date: 2.FEB.2008 10:46:01

Peak Excursion Plot on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5670 MHz



Date: 2.FEB.2008 10:49:57

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4.6. Radiated Emissions Measurement

4.6.1. Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.470-5.725 GHz band: all emissions outside of the 5.470-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance			
(MHz)	(micorvolts/meter)	(meters)			
0.009~0.490	2400/F(KHz)	300			
0.490~1.705	24000/F(KHz)	30			
1.705~30.0	30	30			
30~88	100	3			
88~216	150	3			
216~960	200	3			
Above 960	500	3			

4.6.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1000KHz / 1000KHz for peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

4.6.3. Test Procedures

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Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8
meter above ground. The phase center of the receiving antenna mounted on the top of a
height-variable antenna tower was placed 3 meters far away from the turntable.

- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
- 8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

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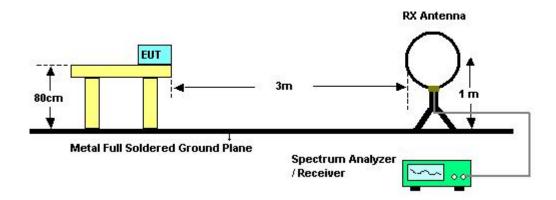
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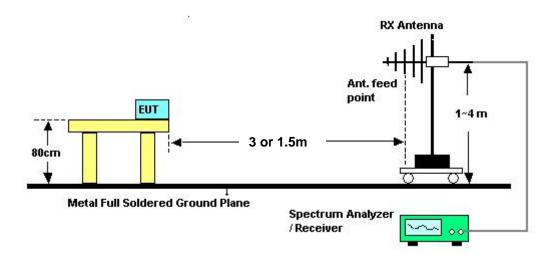


4.6.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

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4.6.7. Results of Radiated Emissions (9kHz~30MHz)

Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen		

Freq.	Level	Over Limit	Limit Line	Remark
(MHz)	(dBuV)	(dB)	(dBuV)	
-	-	-	-	See Note

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

 $\label{limit} \mbox{Limit line} = \mbox{specific limits (dBuV)} + \mbox{distance extrapolation factor}.$

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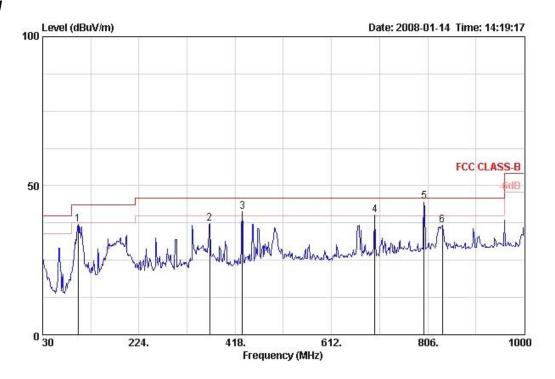


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4.6.8. Results of Radiated Emissions (30MHz~1GHz)

Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Normal Link / Mode 2

Horizontal

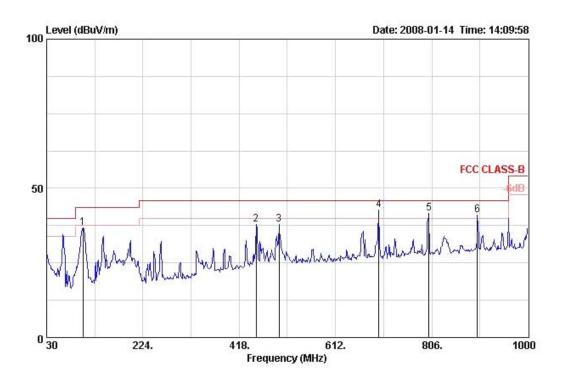


			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cau	deg	
1 @	101.780	37.05	-6.45	43.50	55.74	11.52	1.50	31.71	Peak	400	-1	HORIZONTAL
2 @	366.590	37.35	-8.65	46.00	50.22	15.80	2.50	31.17	Peak	400	-1	HORI ZONTAL
3 @	432.550	41.30	-4.70	46.00	52.44	16.99	2.83	30.96	Peak	400	-1	HORI ZONTAL
4 @	699.300	40.10	-5.90	46.00	47.22	19.80	3.60	30.52	Peak	400	-1	HORI ZONTAL
5 @	798.710	44.81	-1.20	46.00	50.50	20.68	3.80	30.18	QP	128	86	HORI ZONTAL
6 @	835.100	36.74	-9.26	46.00	41.81	21.12	3.94	30.14	Peak	400	-1	HORI ZONTAL

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				0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	,	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	-
10		102.750	36.74	-6.76	43.50	55.27	11.68	1.50	31.72	Peak	400	-4	VERTICAL
2 @		451.950	37.91	-8.09	46.00	48.69	17.23	2.92	30.92	Peak	400	-4	VERTICAL
3 @		498.510	37.88	-8.12	46.00	47.66	17.87	3.28	30.94	Peak	400	-4	VERTICAL
4 @		699.300	42.76	-3.24	46.00	49.88	19.80	3.60	30.52	Peak	400	-4	VERTICAL
5 @		800.180	41.58	-4.42	46.00	47.26	20.70	3.80	30.18	Peak	400	-4	VERTICAL
6 @		898.150	41.00	-5.00	46.00	45.03	21.59	4.10	29.71	Peak	400	-4	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = $20 \log Emission$ level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

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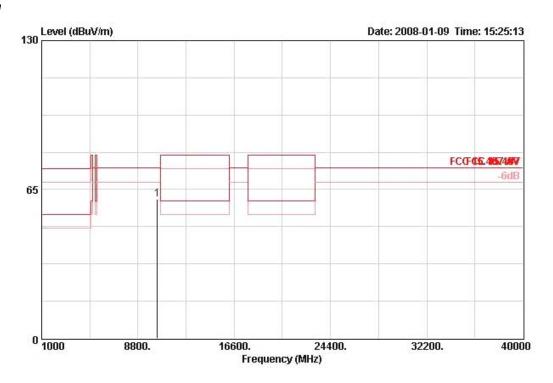


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4.6.9. Results for Radiated Emissions (1GHz~40GHz)

Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 36 Ant. A + Ant. B

Horizontal



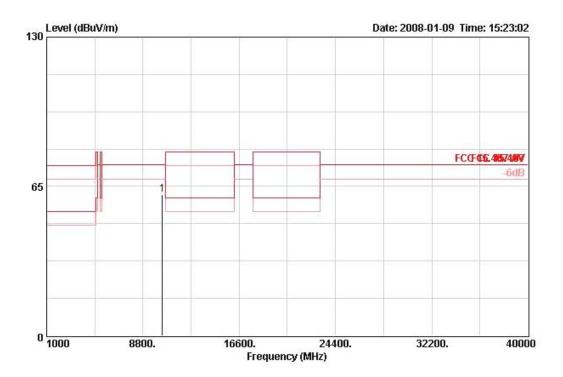
				0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos Pol/Phase
	-	MKz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm.	deg
10	103	57.480	60.73	-13.57	74.30	48.16	38.37	9.32	35.12	PEAK	131	121 HORIZONTAL

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg	
10	10357.440	61.47	-12.83	74.30	48.90	38.37	9.32	35.12	PEAK	121	279	VERTICAL

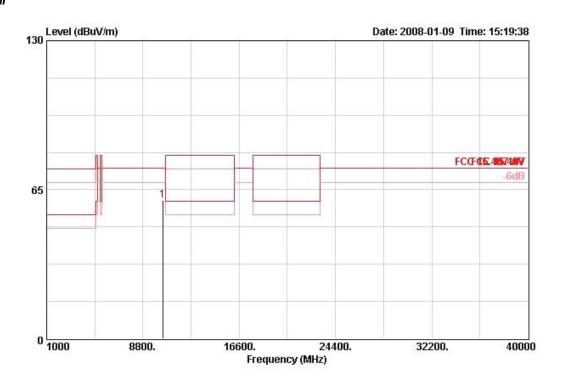
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Temperature	24 °C	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 40 Ant. A + Ant. B



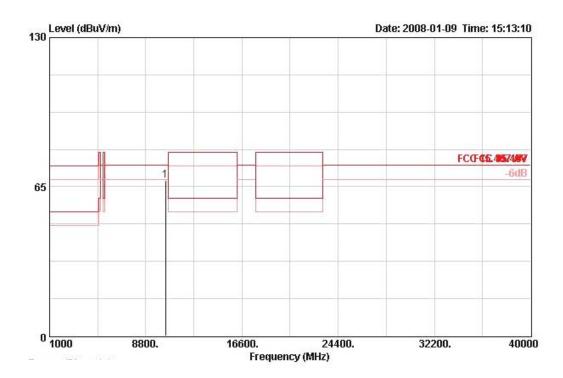
			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos Pol	/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm.	deg	
1 @	10397.240	60.42	-13.88	74.30	47.74	38.38	9.36	35.05	PEAK	130	128 HOE	IZONTAL

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm.	deg	-
1 @	10402.440	67.64	-6.66	74.30	54.95	38.38	9.36	35.05	PEAK	118	289	VERTICAL	

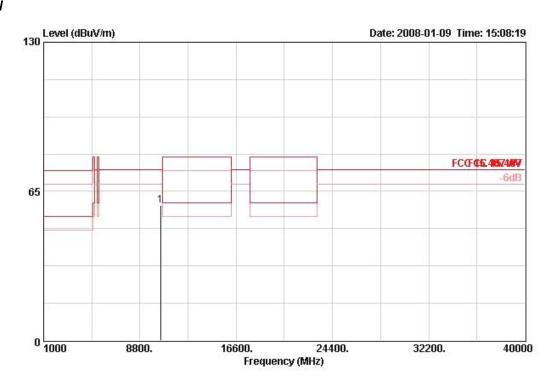
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Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 48 Ant. A + Ant. B



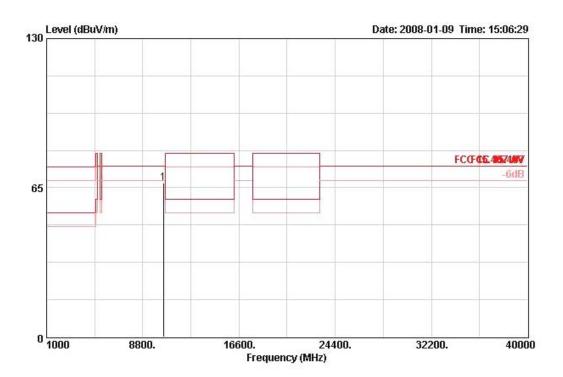
			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	-
10	10479.600	59.00	-15.30	74.30	46.16	38.40	9.41	34.96	PEAK	132	145	HORI ZONTAL	

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dВ		cm.	deg	
10	10482.440	66.97	-7.33	74.30	54.12	38.40	9.41	34.96	PEAK	121	307	VERTICAL

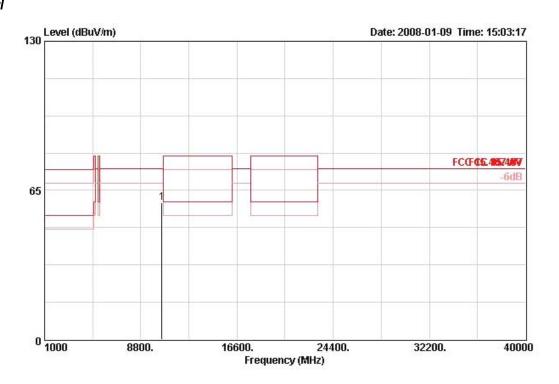
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Temperature	24 °C	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 52 Ant. A + Ant. B



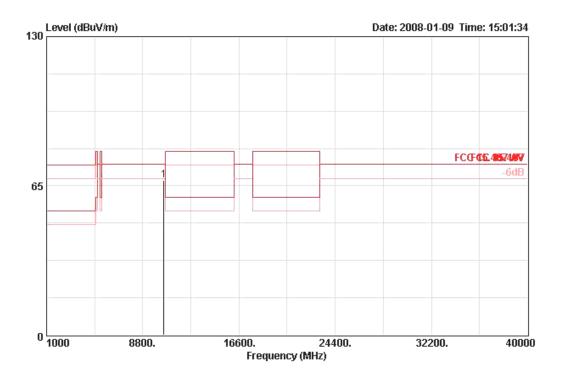
			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	10	cm	deg	
10	10519.920	59.75	-14.55	74.30	46.85	38.40	9.43	34.93	PEAK	129	142	HORIZONTAL

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	Freq	Level				Factor		_	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	
1 @	10526.240	67.36	-6.94	74.30	54.44	38.40	9.44	34.92	PEAK	122	280	VERTICAL

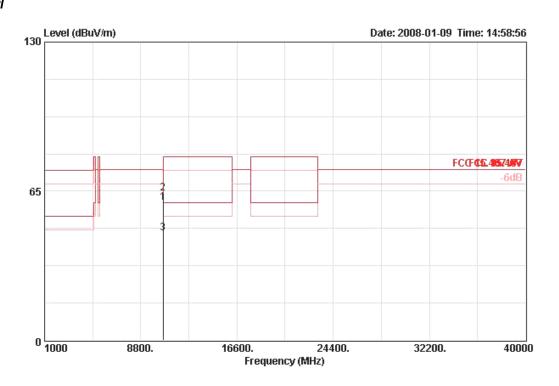
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Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 60 Ant. A + Ant. B



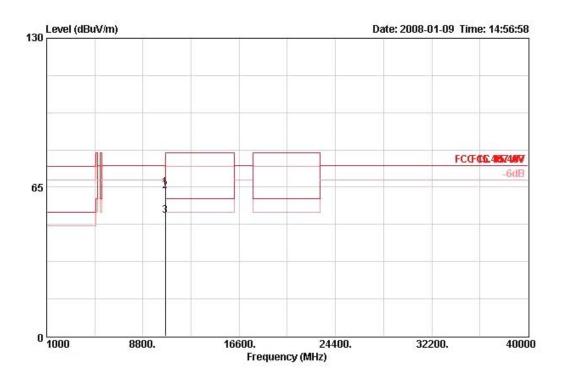
	Freq	Level				Factor		_		Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg	
1 @	10597.240	59.96	-14.34	74.30	47.00	38.38	9.47	34.90	PEAK	136	145	HORI ZONTAL
2 @	10600.000	63.94	-16.06	80.00	50.99	38.38	9.47	34.90	PEAK	136	146	HORIZONTAL
3 @	10601.240	46.50	-13.50	60.00	33.52	38.38	9.48	34.89	AVERAGE	136	145	HORI ZONTAL

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	10599.990	64.78	-9.52	74.30	51.83	38.38	9.47	34.90	PEAK	122	275	VERTICAL
2 @	10600.000	63.42	-16.58	80.00	50.47	38.38	9.47	34.90	PERK	122	278	VERTICAL
3 @	10600.010	52.45	-7.55	60.00	39.50	38.38	9.47	34.90	AVERAGE	122	275	VERTICAL

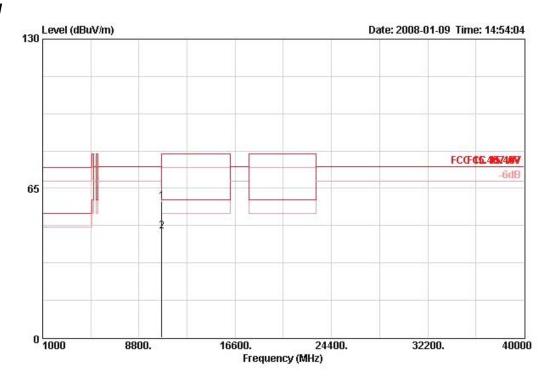
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Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MC\$8 20MHz Ch 64 Ant. A + Ant. B



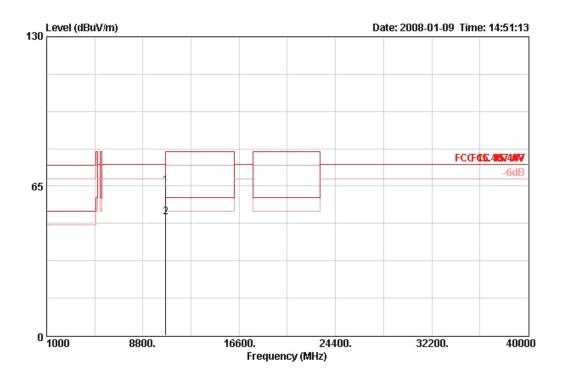
			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg	5 T
1	10637.920	59.38	-20.62	80.00	46.39	38.37	9.50	34.88	PEAK	138	141	HORIZONTAL
2 @	10638.360	46.33	-13.67	60.00	33.34	38.37	9.50	34.88	AVERAGE	138	141	HORI ZONTAL

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	Freq	Level		Limit Line				_		Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg	
1 @	10638.320	65.35	-14.65	80.00	52.36	38.37	9.50	34.88	PEAK	120	281	VERTICAL
2 @	10640.600	51.55	-8.45	60.00	38.56	38.37	9.50	34.88	AVERAGE	120	281	VERTICAL

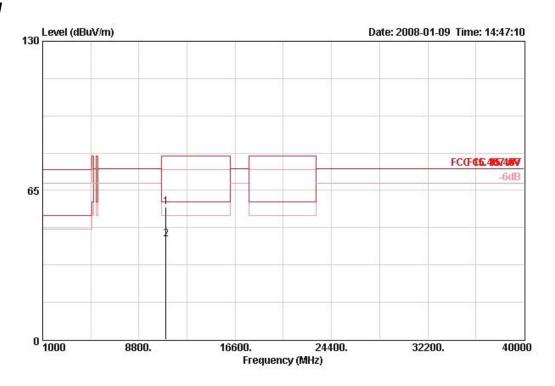
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Temperature	24℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 100 Ant. A + Ant. B



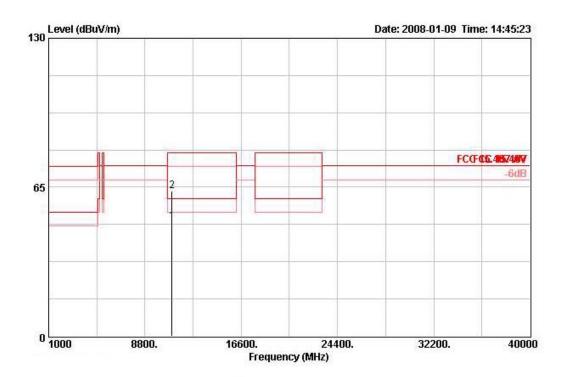
			Uver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	MHz dBuV/m	dB	dB dBuV/m d		dBuV dB/m		dB	dB cm		deg	-
1	11000.200	57.89	-22.11	80.00	44.65	38.30	9.69	34.76	PEAK	100	121	HORI ZONTAL
2 @	11004.600	43.72	-16.28	60.00	30.47	38.32	9.69	34.76	AVERAGE	100	121	HORIZONTAL

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	Freq	Level				Antenna Factor				Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg	-
10	10998.960	50.00	-10.00	60.00	36.76	38.30	9.69	34.76	AVERAGE	119	297	VERTICAL
2 @	11000.360	63.27	-16.73	80.00	50.04	38.30	9.69	34.76	PEAK	119	297	VERTICAL

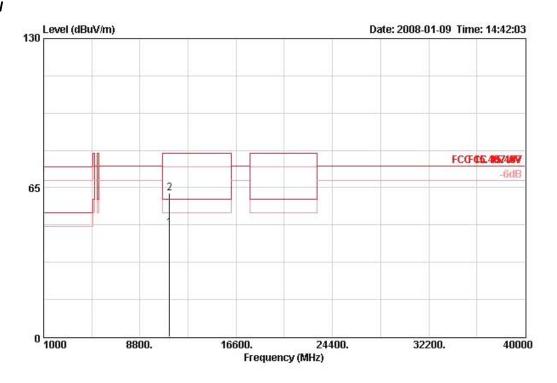
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Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 120 Ant. A + Ant. B



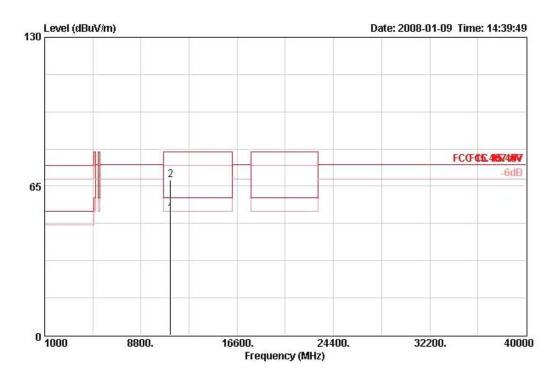
	Freq	Level	Over Limit			Antenna Factor				Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	BuV/m dBuV	dB/m	dB	dB dB	В		deg	5 0 - 1 9
10	11200.960	47.55	-12.45	60.00	34.18	38.50	9.73	34.85	AVERAGE	122	166	HORIZONTAL
2 @	11200.960	62.60	-17.40	80.00	49.22	38.50	9.73	34.85	PEAK	122	166	HORI ZONTAL

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	Freq	Level				Antenna Factor				Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1	cm.	deg	-
1 @	11198.720	52.94	-7.06	60.00	39.57	38.50	9.73	34.85	AVERAGE	113	304	VERTICAL
2 @	11200.640	67.95	-12.05	80.00	54.58	38.50	9.73	34.85	PEAK	113	304	VERTICAL

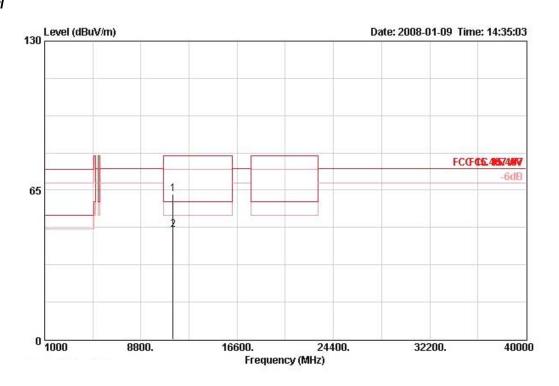
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Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 140 Ant. A + Ant. B



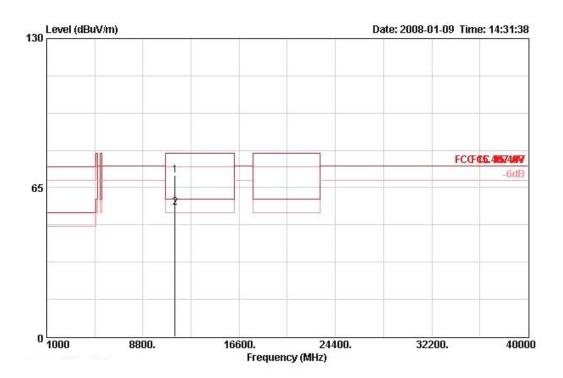
			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level		Line dBuV/m	100000000000000000000000000000000000000				Remark	Pos ————————————————————————————————————	Pos	Pol/Phase
	MHz										deg	
1 @	11393.800	63.49	-16.51	80.00	49.99	38.68	9.76	34.95	PEAK	131	131	HORI ZONTAL
2 @	11398.040	47.92	-12.08	60.00	34.41	38.70	9.76	34.95	AVERAGE	131	131	HORIZONTAL

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		req Level		Over	Limit	ReadAntenna		Loss	Factor		Ant Pos cm		Pol/Phase
	Freq			Line dBuV/m	10000000000								
	MHz												
1 @	11393.680	70.33	-9.67	80.00	56.83	38.68	9.76	34.95	PEAK	114	307	VERTICAL	
2 @	11399.240	56.48	-3.52	60.00	42.96	38.70	9.76	34.95	AVERAGE	114	307	VERTICAL	

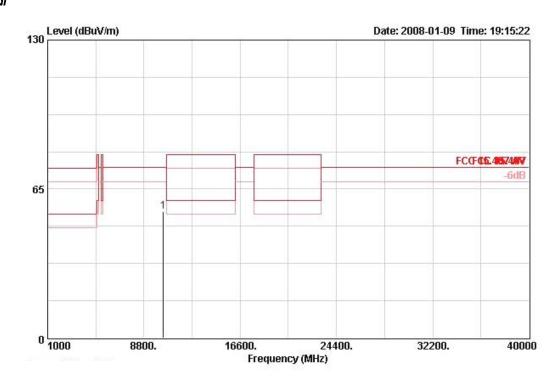
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Temperature	24 °C	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 38 Ant. A + Ant. B



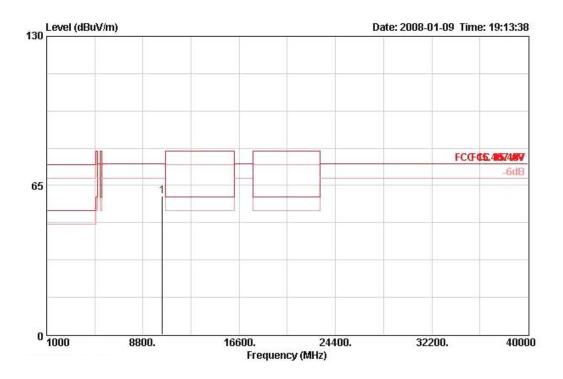
			Level Limit	Line L	ReadAntenna		Cable Preamp			Ant	Table	
	Freq	Level			Level	Level Factor		Factor	r Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m			dBuV	dB/m	m. dB	dB dB	dB	cm	deg	(a
1 @	10374.280	55.08	-19.22	74.30	42.46	38.37	9.34	35.09	PERK	117	360	HORI ZONTAL

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	Freq	Level		r Limit t Line						Pos	Pos Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1	cm -	deg
1 @	10374.280	60.37	-13.93	74.30	47.74	38.37	9.34	35.09	PEAK	120	80 VERTICAL

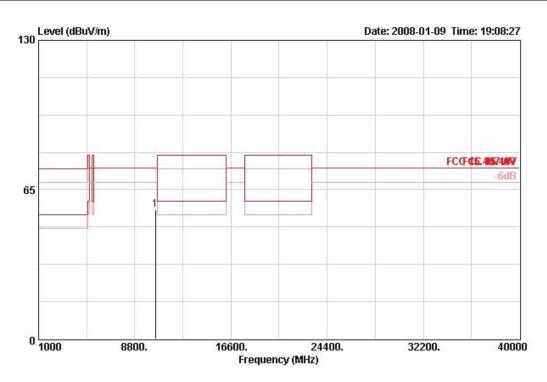
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Temperature	24 °C	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 46 Ant. A + Ant. B



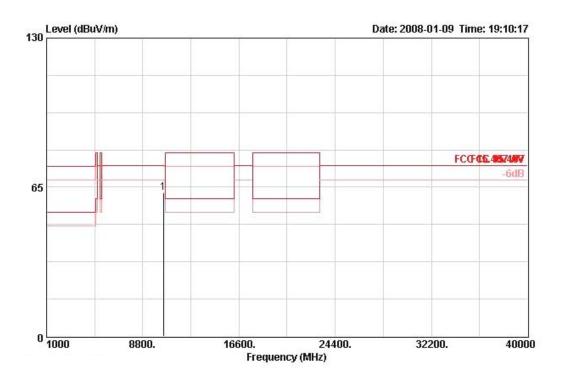
			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Line Level Fa	Factor	Loss	ss Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm.	deg	
1 @	10458.240	56.22	-18.08	74.30	43.43	38.39	9.39	34.99	PEAK	142	10	HORTZONTAL

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			Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	MHz dBuV/m	MHz dBuV/m dB dBuV/m	dBuV	dB/m	dB dB			cm	deg	*	
1 @	10458.240	62.55	-11.75	74.30	49.76	38.39	9.39	34.99	PEAK	117	66	VERTICAL

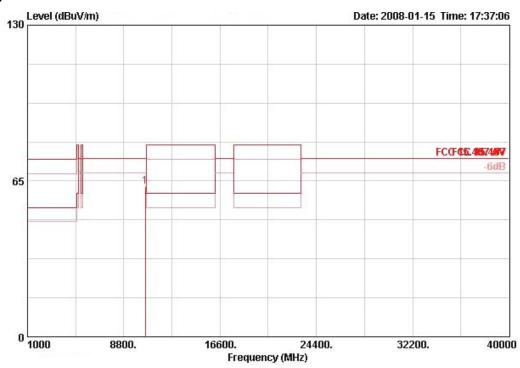
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Temperature	24 °C	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 54 Ant. A + Ant. B



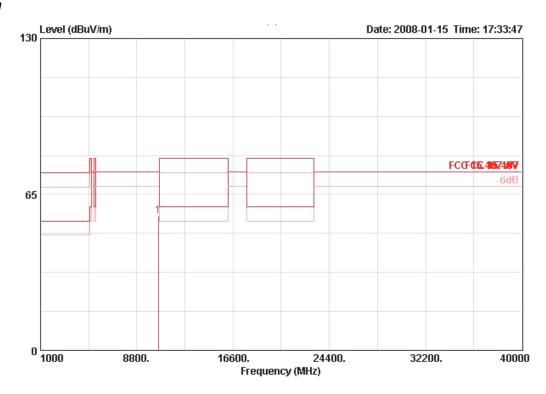
			Over	Limit	mit ReadAn		Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	×4	cm -	deg
1 @	10540.200	62.66	-11.64	74 30	45.30	39.97	11.99	34 60	PEAK	100	64 HORTZONTAL

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			Over	Limit	ReadA	intenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos P	ol/Phase
	-											
	201-			m-ara-								
	MHZ	dBuV/m	ав	dBuV/m	aBuv	dB/m	dB	dB		cm	deg	
1 @	10540.370	55 00	_10 21	74 20	20 62	20 07	11 00	24 60	DEAK	0	0.10	DRIZONTAL

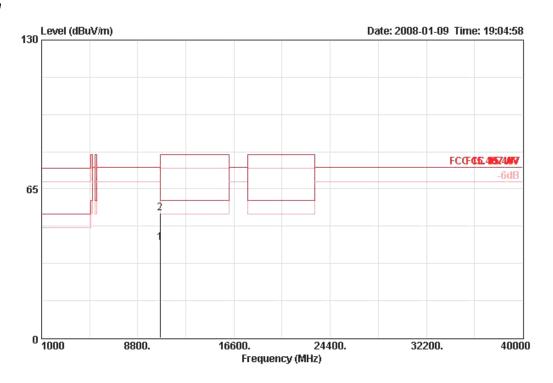
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Temperature	24℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 62 Ant. A + Ant. B



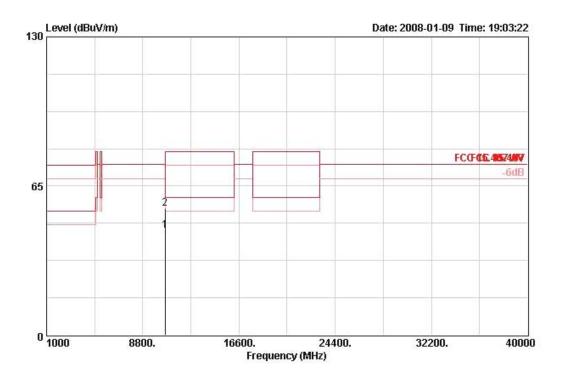
	Freq	Level				Antenna Factor		_		Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg	
1 @ 2	10623.000 10625.080							34.89 34.89	AVERAGE PEAK	113 113		HORI ZONTAL HORI ZONTAL

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	Freq	Level				Factor				Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	ib db		cm.	deg	S
1 @	10618.160	45.70	-14.30	60.00	32.73	38.38	9.48	34.89	AVERAGE	120	66	VERTICAL
2	10623.040	55.32	-24.68	80.00	42.35	38.38	9.48	34.89	PEAK	120	66	VERTICAL

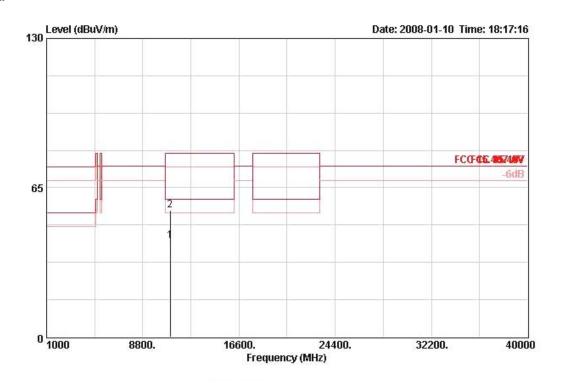
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Temperature	24℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 102 Ant. A + Ant. B



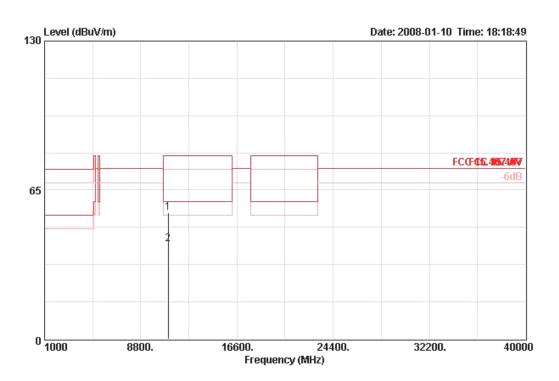
	Freq	Level	Over Limit			Antenna Factor		700 PM		Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	9		deg	3
1 @	11022.360	41.87	-18.13	60.00	28.60	38.33	9.69	34.77	AVERAGE	133	5	HORIZONTAL
2	11022.450	55.25	-24.75	80.00	41.99	38.33	9.69	34.77	PEAK	133	5	HORIZONTAL

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	Freq	Level				Factor		_	Pos	Pos	Pol/Phase
	Mtz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	caur	deg	
1 2 @	11019.370 11019.910								 155 155		VERTICAL VERTICAL

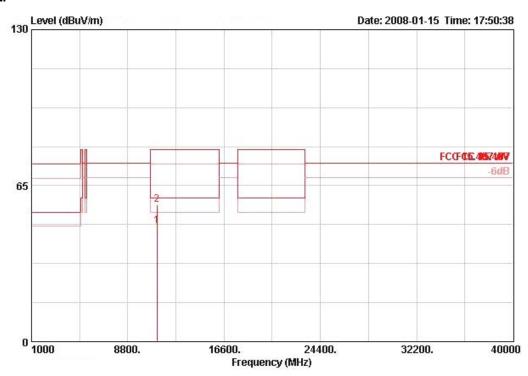
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Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 118 Ant. A + Ant. B



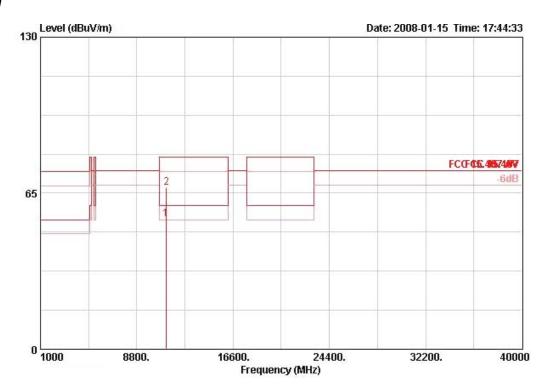
			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Factor Remark		Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB				deg	£2
1 @	11179.500	48.13	-11.87	60.00	31.51	39.50	11.96	34.84	AVERAGE	101	360	HORIZONTAL
2	11179.640	56.88	-23.12	80.00	40.25	39.50	11.96	34.84	PEAK	101	360	HORIZONTAL

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	Ever	Lowel				Antenna				Ant Pos	Table	Pol/Phase
	rreq	Dever	тишс	dB dBuV/m	rever	ractor	LUSS	ractor	Remark	rus	rus	ru1/rnase
	MHz	dBuV/m	dB		/m dBuV	dB/m	dB	dB	}	cm	deg	
1 @	11179.500	54.07	-5.93	60.00	37.44	39.50	11.96	34.84	AVERAGE	100	30	VERTICAL
2 @	11180.030	67.18	-12.82	80.00	50.55	39.50	11.96	34.84	PEAK	100	30	VERTICAL

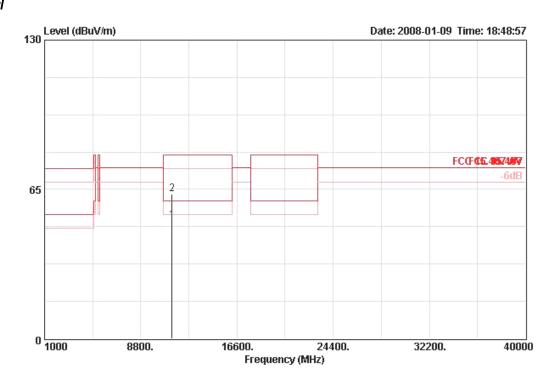
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Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 134 Ant. A + Ant. B

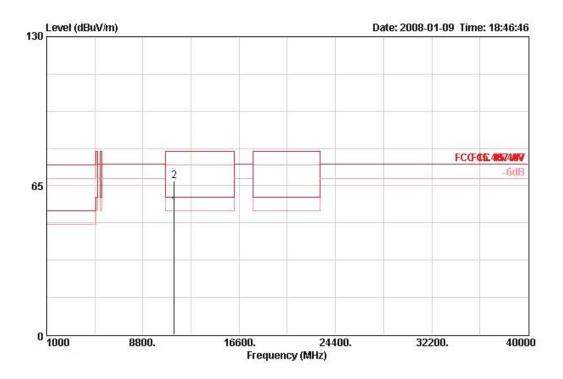


	Freq	Level				Antenna Factor		_	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	 	deg	
1 @ 2 @	11342.560 11344.320								132 132		HORI ZONTAL HORI ZONTAL

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	Freq	Level				Antenna Factor				Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
10	11346.960	56.04	-3.96	60.00	42.56	38.65	9.75	34.92	AVERAGE	117	78	VERTICAL
2 @	11350.000	66.89	-13.11	80.00	53.41	38.65	9.75	34.92	PEAK	117	78	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = $20 \log Emission$ level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

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4.7. Band Edge Emissions Measurement

4.7.1. Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.470-5.725 GHz band: all emissions outside of the 5.470-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

4.7.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1 MHz /1 MHz for Peak

4.7.3. Test Procedures

- 1. The test procedure is the same as section 4.6.3, only the frequency range investigated is limited to 100MHz around bandedges.
- 2. In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

4.7.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.6.4.

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4.7.5. Test Deviation

There is no deviation with the original standard.

4.7.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.7.7. Test Result of Band Edge and Fundamental Emissions

Temperature	24 ℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 36,40, 60, 64 Ant. A + Ant.
Test Engineer	Jax Chen		В

Channel 36

			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	<u> </u>
1 @	5150.000	56.48	-3.52	60.00	16.27	33.67	6.54	0.00	AVERAGE	100	135	VERTICAL
2 @	5150.000	67.47	-12.53	80.00	27.26	33.67	6.54	0.00	PEAK	100	135	VERTICAL
3 @	5176.800	110.53			70.24	33.73	6.55	0.00	PEAK	100	135	VERTICAL
4 @	5187.400	100.02			59.73	33.73	6.55	0.00	AVERAGE	100	135	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

Channel 52

				0ver	Limit	Readi	Intenna	Cable	Preamp		Ant	Table	
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm.	deg	<u> </u>
1	. е	5150.000	56.22	-3.78	60.00	16.01	33.67	6.54	0.00	AVERAGE	100	134	VERTICAL
2	. e	5150.000	67.66	-12.34	80.00	27.44	33.67	6.54	0.00	PEAK	100	134	VERTICAL
3	· @	5192.600	99.27			58.96	33.76	6.55	0.00	AVERAGE	100	134	VERTICAL
4		5197.200	108.09			67.76	33.76	6.57	0.00	PEAK	100	134	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

Channel 60

			Over	Limit	Readi	intenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	Mtz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg	
1 @	5296.600	98.67			58.13	33.94	6.60	0.00	AVERAGE	100	128	VERTICAL
2 @	5301.200	108.51			67.95	33.94	6.62	0.00	PEAK	100	128	VERTICAL
3 @	5350.000	57.04	-2.96	60.00	16.37	34.03	6.64	0.00	AVERAGE	100	128	VERTICAL
4 @	5350.000	68.25	-11.75	80.00	27.58	34.03	6.64	0.00	PEAK	100	128	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

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Channel 64

			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	${\bf Factor}$	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	
1 0	5312.800	106.13			65.54	33.97	6.62	0.00	PEAK	100	131	VERTICAL
2 @	5325.200	98.49			57.90	33.97	6.63	0.00	AVERAGE	100	131	VERTICAL
3 @	5350.000	57.24	-2.76	60.00	16.57	34.03	6.64	0.00	AVERAGE	100	131	VERTICAL
4 @	5350.000	67.37	-12.63	80.00	26.70	34.03	6.64	0.00	PEAK	100	131	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

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Temperature	24℃	Humidity	56%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 20MHz Ch 100, 140 Ant. A + Ant. B

Channel 100

	Freq	Level	Over Limit	02500		Antenna Factor			Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-		deg	3
1 @	5460.000	56.86	-3.14	60.00	15.96	34.21	6.69	0.00	AVERAGE	100	184	VERTICAL
2 @	5460.000	67.91	-12.09	80.00	27.01	34.21	6.69	0.00	PEAK	100	184	VERTICAL
3 @	5470.000	68.07	-6.23	74.30	27.14	34.24	6.69	0.00	PEAK	100	184	VERTICAL
4 @	5498.600	109.50			68.50	34.30	6.70	0.00	PEAK	100	184	VERTICAL
5 @	5504.000	99.55			58.54	34.30	6.71	0.00	AVERAGE	100	184	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 140

	Freq	Level	Over Limit			Antenna Factor		_		Ant Pos		Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	5692.600	101.81			60.66	34.34	6.81	0.00	AVERAGE	129	192	VERTICAL
2 @	5695.600	111.99			70.84	34.34	6.81	0.00	PEAK	129	192	VERTICAL
3 @	5725.000	74.17	-0.13	74.30	33.00	34.34	6.82	0.00	PEAK	129	192	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



Temperature	20℃	Humidity	70%
Test Engineer	Jax Chen	Configurations	Draft n MCS8 40MHz Ch 38, 46, 54, 62 Ant. A +
lesi Engineer	Jax Chen	Configurations	Ant. B

Channel 38

			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	<u> </u>
1 0	5144.800	73.19	-6.81	80.00	32.97	33.67	6.54	0.00	PEAK	146	37	HORI ZONTAL
2 @	5150.000	58.93	-1.07	60.00	18.72	33.67	6.54	0.00	AVERAGE	146	37	HORIZONTAL
3 @	5174.800	97.20			56.91	33.73	6.55	0.00	AVERAGE	146	37	HORIZONTAL
4 @	5176.400	108.06			67.77	33.73	6.55	0.00	PEAK	146	37	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

Channel 46

				0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	<u> </u>
1	. е	5149.600	67.15	-12.85	80.00	26.93	33.67	6.54	0.00	PEAK	100	0	HORI ZONTAL
2	e	5150.000	56.00	-4.00	60.00	15.79	33.67	6.54	0.00	AVERAGE	100	0	HORIZONTAL
3	0	5239.600	90.49			50.09	33.82	6.58	0.00	AVERAGE	100	0	HORIZONTAL
4	0	5240.800	100.82			60.42	33.82	6.58	0.00	PEAK	100	0	HORI ZONTAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

Channel 54

				0ver	Limit	ReadA	intenna	Cable	Preamp		Ant	Table	
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
		MHz	dBuV/m	dB	dBuV/m	dВuV	dB/m	dB	dВ	, 1		deg	7
1	L @	5282.000	98.76			56.26	34.27	8.23	0.00	AVERAGE	100	360	VERTICAL
2		5282.400	107.22			64.72	34.27	8.23	0.00	PEAK	100	360	VERTICAL
3	@	5350.000	58.73	-1.27	60.00	16.05	34.40	8.27	0.00	AVERAGE	100	360	VERTICAL
4	. e	5351.600	70.28	-9.72	80.00	27.61	34.40	8.27	0.00	PEAK	100	360	VERTICAL

Item 1, 2 are the fundamental frequency at 5270 MHz.

Channel 62

			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	Mtz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- cm	deg	<u> </u>
1 @	5300.400	100.84			60.29	33.94	6.62	0.00	AVERAGE	143	14	HORI ZONTAL
2 @	5313.600	111.16			70.58	33.97	6.62	0.00	PEAK	143	14	HORIZONTAL
3 @	5350.000	59.46	-0.54	60.00	18.79	34.03	6.64	0.00	AVERAGE	143	14	HORI ZONTAL
4 @	5353.600	73.00	-7.00	80.00	32.33	34.03	6.64	0.00	PEAK	143	14	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5310 MHz.

Temperature	20℃	Humidity	70%
Test Engineer	Jax	Configurations	Draft n MCS8 40MHz Ch 102, 118, 134 Ant. A + Ant. B
lesi Erigirieei	Chen	Comigurations	DIGITITINGS 40IVINZ CIT 102, 110, 134 ATII. A + ATII. B

Channel 102

			Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	S
10	5434.400	69.74	-10.26	80.00	28.88	34.18	6.68	0.00	PEAK	126	201	VERTICAL
2 @	5460.000	57.15	-2.85	60.00	16.26	34.21	6.69	0.00	AVERAGE	126	201	VERTICAL
3 @	5469.200	70.56	-3.74	74.30	29.63	34.24	6.69	0.00	PEAK	126	201	VERTICAL
4 @	5499.200	96.55			55.55	34.30	6.70	0.00	AVERAGE	126	201	VERTICAL
5 @	5500.000	107.88			66.88	34.30	6.70	0.00	PEAK	126	201	VERTICAL

Item 4, 5 are the fundamental frequency at 5510MHz.

Channel 118

	Freq	Level	Over Limit			Antenna Factor				Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	8 9 70		deg	5
1 @	5595.600	98.94			55.79	34.77	8.38	0.00	AVERAGE	116	0	HORIZONTAL
2 @	5598.000	110.44			67.29	34.77	8.38	0.00	PEAK	116	0	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5590 MHz.

Channel 134

			Over rel Limit	r Limit t Line B dBuV/m			Cable Preamp		Ant	Table		
	Freq	Level dBuV/m						Factor dB		Pos ————————————————————————————————————	deg	Pol/Phase
	Mz		dB									
1 @	5666.800	114.31			73.18	34.33	6.79	0.00	AVERAGE	147	11	HORIZONTAL
2 @	5667.200	104.34			63.21	34.33	6.79	0.00	AVERAGE	147	11	HORIZONTAL
3 @	5726.600	72.37	-1.93	74.30	31.20	34.34	6.82	0.00	PEAK	147	11	HORI ZONTAL

Item 1, 2 are the fundamental frequency at 5670 MHz.

Note:

Emission level (dBuV/m) = $20 \log Emission$ level (uV/m)

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

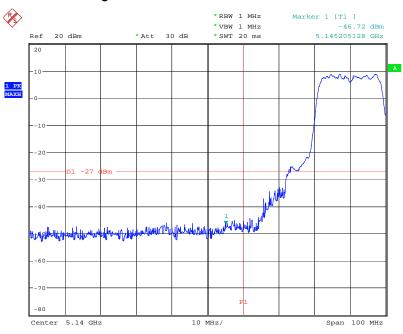
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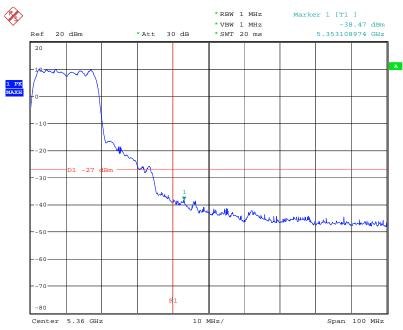


EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5180 MHz



Date: 2.FEB.2008 10:57:25

EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5320 MHz



Date: 2.FEB.2008 11:09:32

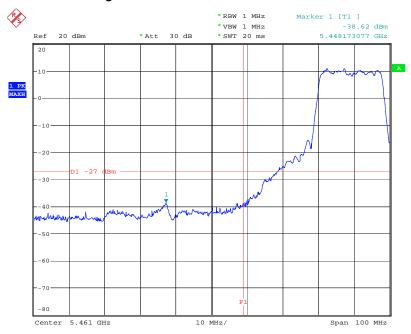
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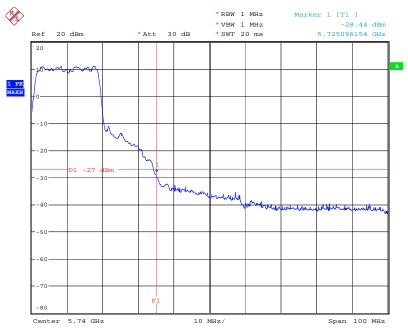


EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5500 MHz



Date: 2.FEB.2008 11:26:02

EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. A + Ant. B / 5700 MHz



Date: 2.FEB.2008 12:22:49

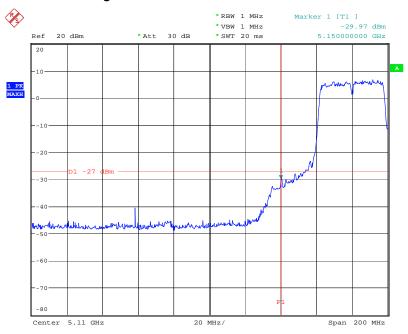
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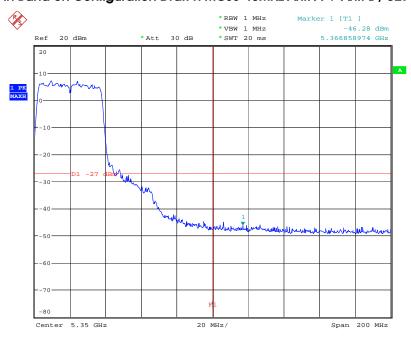


EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5190 MHz



Date: 2.FEB.2008 10:31:06

EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5270 MHz



Date: 2.FEB.2008 10:37:49

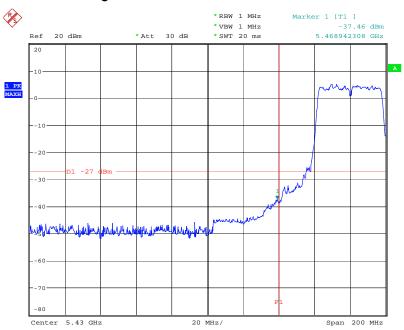
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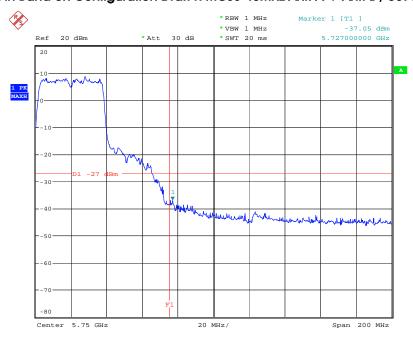


EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5510 MHz



Date: 2.FEB.2008 10:44:14

EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. A + Ant. B / 5670MHz



Date: 2.FEB.2008 10:48:46

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4.8. Frequency Stability Measurement

4.8.1. Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or ± 20 ppm (Draft n specification).

4.8.2. Measuring Instruments and Setting

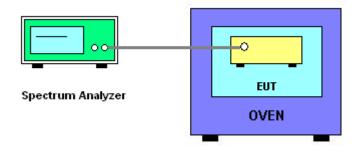
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

4.8.3. Test Procedures

- 1. The transmitter output (antenna port) was connected to the spectrum analyser.
- 2. EUT have transmitted absence of modulation signal and fixed channelize.
- 3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
- 4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
- 5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc \times 10⁶ ppm and the limit is less than \pm 20ppm (Draft n specification).
- 6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
- 7. Extreme temperature rule is -30°C~50°C.

4.8.4. Test Setup Layout



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4.8.5. Test Deviation

There is no deviation with the original standard.

4.8.6. EUT Operation during Test

The EUT was programmed to be in continuously un-modulation transmitting mode.

4.8.7. Test Result of Frequency Stability

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5260			
126.50	5260.009300			
110.00	5260.023500			
93.50	5259.993200			
Max. Deviation (MHz)	0.023500			
Max. Deviation (ppm)	4.47			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5260
-30	5260.046300
-20	5260.050570
-10	5260.045700
0	5260.014100
10	5260.012900
20	5259.983500
30	5259.965300
40	5259.961200
50	5259.955600
Max. Deviation (MHz)	0.050570
Max. Deviation (ppm)	9.61

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4.9. Antenna Requirements

4.9.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

4.9.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

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5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	C Receiver R&S		100174	9kHz – 2.75GHz	Mar. 03, 2007	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2007	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2007	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2007	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz –30MHz Mar. 27, 2007		Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	Conduction (CO04-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 14, 2007	Radiation (03CH03-HY)
Amplifier	SCHAFFNER	COA9231A	18667	9 kHz - 2 GHz	Jan. 14, 2008	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1 GHz - 26.5 GHz	Jun. 07, 2007	Radiation (03CH03-HY)
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5 GHz - 40 GHz	Jan. 22, 2007*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP40	100305	9 kHz - 40 GHz	Sep. 27, 2007	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	May 23, 2006*	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz – 1 GHz	Jul. 21, 2007	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 04, 2007	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15 GHz - 40 GHz	Jan. 18, 2008	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
RF Cable-HIGH SUHNER		SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 – 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast HD		MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)
Spectrum Analyzer R&S		FSP30	100023	9kHz ~ 30GHz	Jan. 10, 2008	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100458	DC ~ 30GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jun. 27, 2007	Conducted (TH01-HY)
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	May 04, 2007*	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 03, 2007	Conducted (TH01-HY)
Temp. and Humidity Chamber	KSON	THS-C3L	612	N/A	Jan. 14, 2008	Conducted (TH01-HY)
RF CABLE-1 m Jye Bao		RG142	CB034-1m	20MHz ~ 7GHz	Jan. 04, 2008	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Jan. 04, 2008	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Nov. 14, 2007	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 07, 2007	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

Note: Calibration Interval of instruments listed above is two year.

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6. TEST LOCATION

SHIJR	ADD	:	6FI., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C.
	TEL	:	886-2-2696-2468
	FAX	:	886-2-2696-2255
HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
	TEL	:	886-3-327-3456
	FAX	:	886-3-318-0055
LINKOU	ADD	:	No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C
	TEL	:	886-2-2601-1640
	FAX	:	886-2-2601-1695
DUNGHU	ADD	:	No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C.
	TEL	:	886-2-2631-4739
	FAX	:	886-2-2631-9740
JUNGHE	ADD	:	7FI., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C.
	TEL	:	886-2-8227-2020
	FAX	:	886-2-8227-2626
NEIHU	ADD	:	4FI., No. 339, Hsin Hu 2 nd Rd., Taipei 114, Taiwan, R.O.C.
	TEL	:	886-2-2794-8886
	FAX	:	886-2-2794-9777
JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
	TEL	:	886-3-656-9065
	FAX	:	886-3-656-9085

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7. TAF CERTIFICATE OF ACCREDITATION



Certificate No. : L1190-070110

財團法人全國認證基金會 Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.

EMC & Wireless Communications Laboratory

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria

: ISO/IEC 17025:2005

Accreditation Number

: 1190

Originally Accredited

: December 15, 2003

Effective Period

: January 10, 2007 to January 09, 2010

Accredited Scope

: Testing Field, see described in the Appendix

6.000 84

Accreditation Program for Designated Testing Laboratory

Specific Accreditation

. for Commodities Inspection

Program

Accreditation Program for Telecommunication Equipment

Testing Laboratory

Jay-San Chen

President, Taiwan Accreditation Foundation

Date: January 10, 2007

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The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix.

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