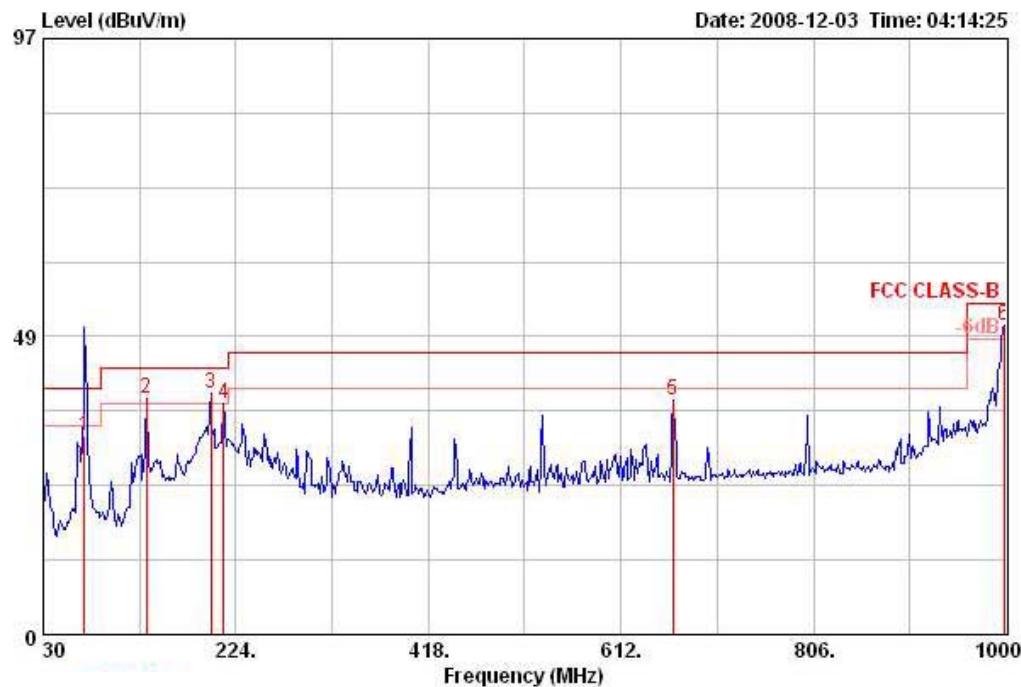


Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant
		Limit	Line	Level	Factor	Factor	Loss			
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1	71.710	32.26	-7.74	40.00	52.40	6.74	27.71	0.84 QP	130	100
2 !	133.790	38.34	-5.16	43.50	52.14	12.29	27.43	1.34 Peak	0	400
3 !	198.780	39.34	-4.16	43.50	55.50	9.25	27.11	1.70 Peak	0	400
4 !	211.390	37.51	-5.99	43.50	52.93	9.91	27.08	1.75 Peak	0	400
5	664.380	38.17	-7.83	46.00	43.79	18.98	28.04	3.44 Peak	0	400
6 @	998.060	50.31	-3.69	54.00	52.35	21.28	27.01	3.70 Peak	0	400

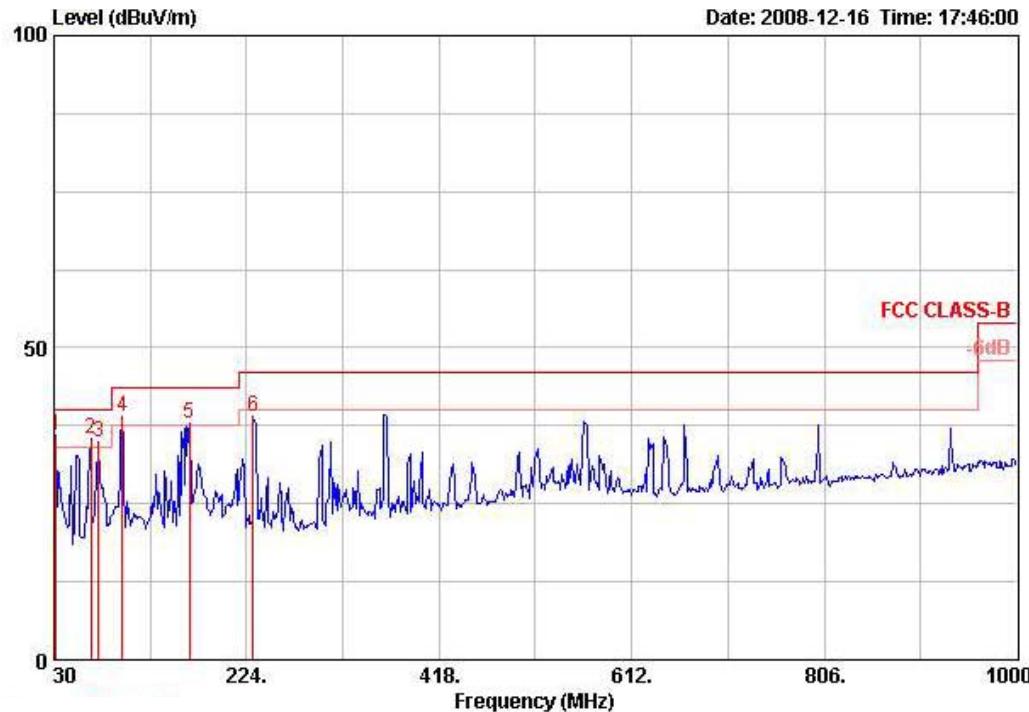
Note:

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

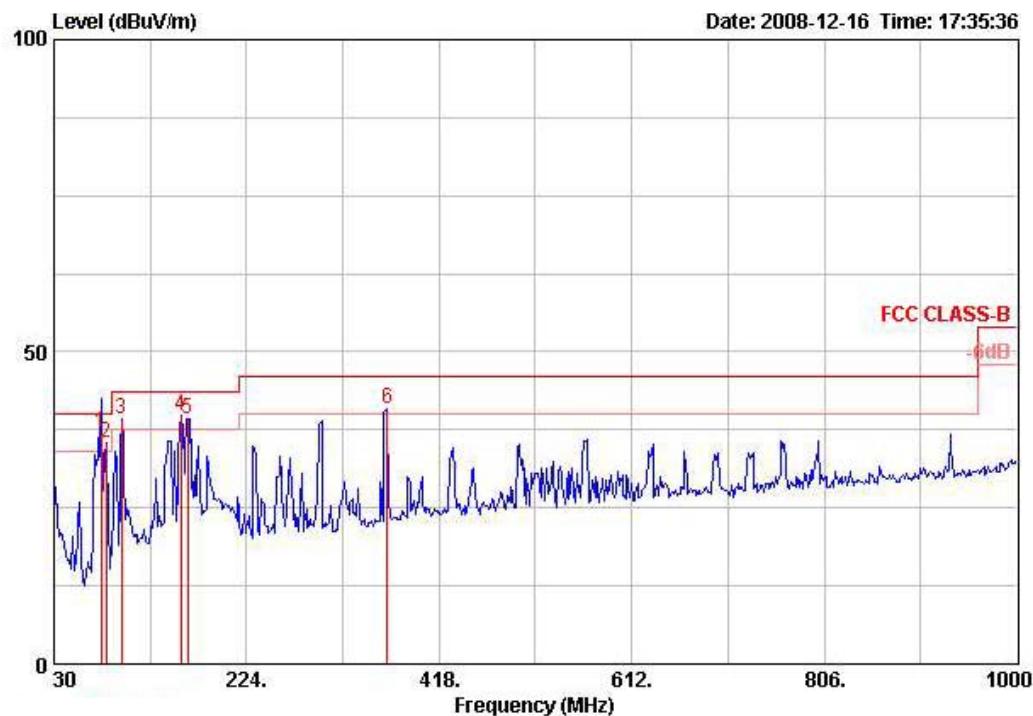
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Mode 2

Horizontal


Freq	Level	Over Limit	Limit	Read	Antenna	Cable	Preamp	Remark	Ant	Table
									Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 @	31.940	35.88	-4.12	40.00	45.61	17.69	0.38	27.80 Peak	400	360 VERTICAL
2 !	66.860	35.39	-4.61	40.00	55.83	6.68	0.61	27.73 Peak	400	360 VERTICAL
3 !	74.620	34.84	-5.16	40.00	55.00	6.88	0.66	27.70 Peak	400	360 VERTICAL
4 !	98.870	38.88	-4.62	43.50	54.92	10.79	0.78	27.61 Peak	400	360 VERTICAL
5 !	166.770	37.82	-5.68	43.50	51.43	12.54	1.12	27.27 Peak	400	360 VERTICAL
6	230.790	38.88	-7.12	46.00	53.17	11.34	1.40	27.04 Peak	400	360 VERTICAL

Vertical


Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
		Limit	Line	Level	Factor	Loss	Factor			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	77.530	37.00	-3.00	40.00	57.00	7.03	0.67	27.69	QP	135
2 !	82.380	35.54	-4.46	40.00	54.98	7.53	0.69	27.67	Peak	100
3 !	97.900	39.18	-4.32	43.50	55.43	10.59	0.78	27.61	Peak	100
4 @	158.040	39.83	-3.67	43.50	54.07	11.99	1.08	27.31	Peak	100
5 !	164.830	39.37	-4.13	43.50	53.14	12.39	1.11	27.27	Peak	100
6 !	365.620	40.78	-5.22	46.00	51.08	15.14	1.92	27.36	Peak	100

Note:

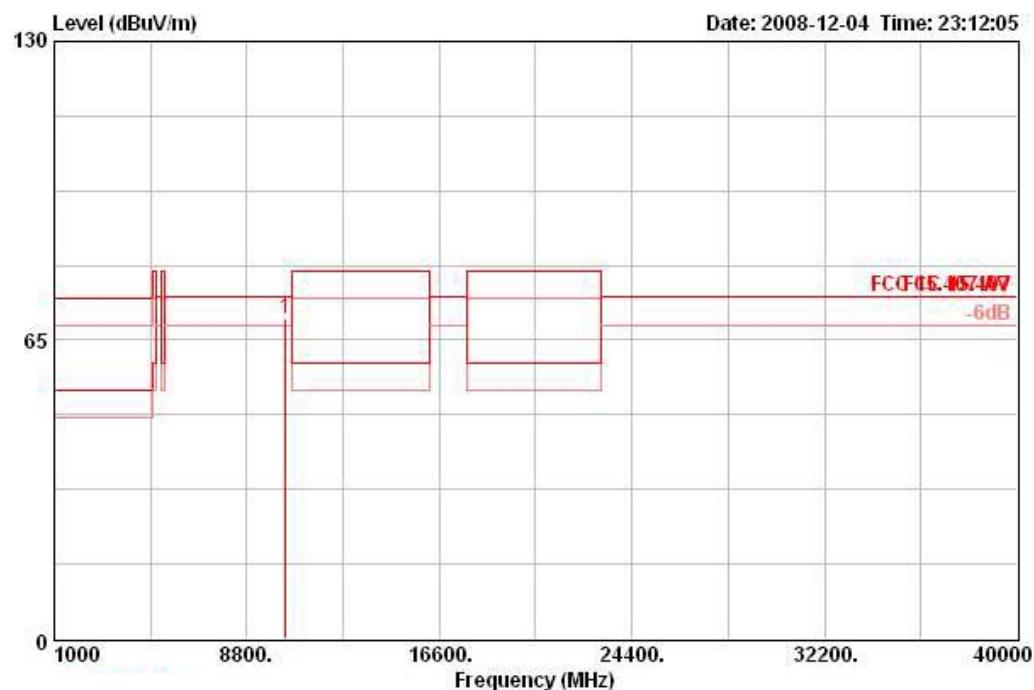
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

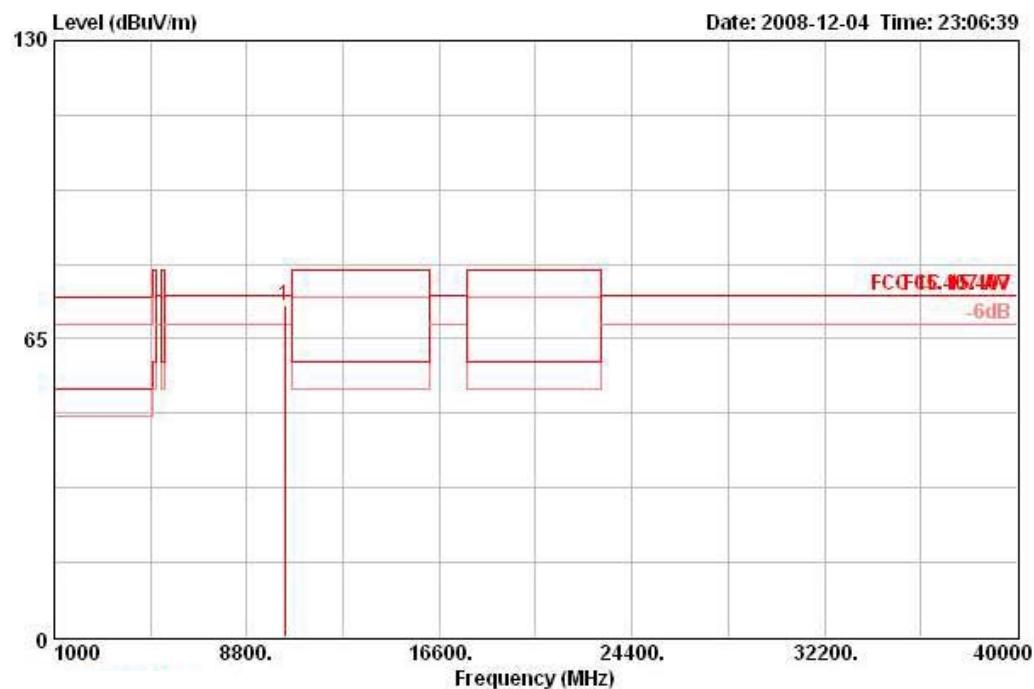
4.6.9. Results for Radiated Emissions (1GHz~40GHz)

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 36 / Ant. A + Ant. C

Horizontal

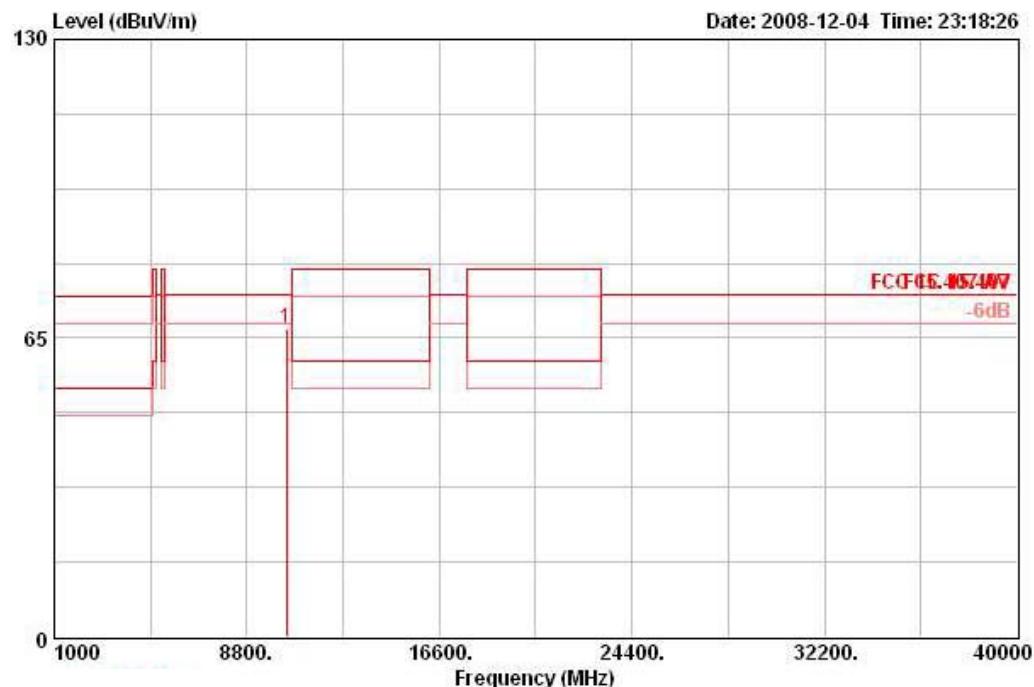


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
10361.000	69.69	-4.61	74.30	55.02	39.76	35.31	10.22	PERK	HORIZONTAL	280	117

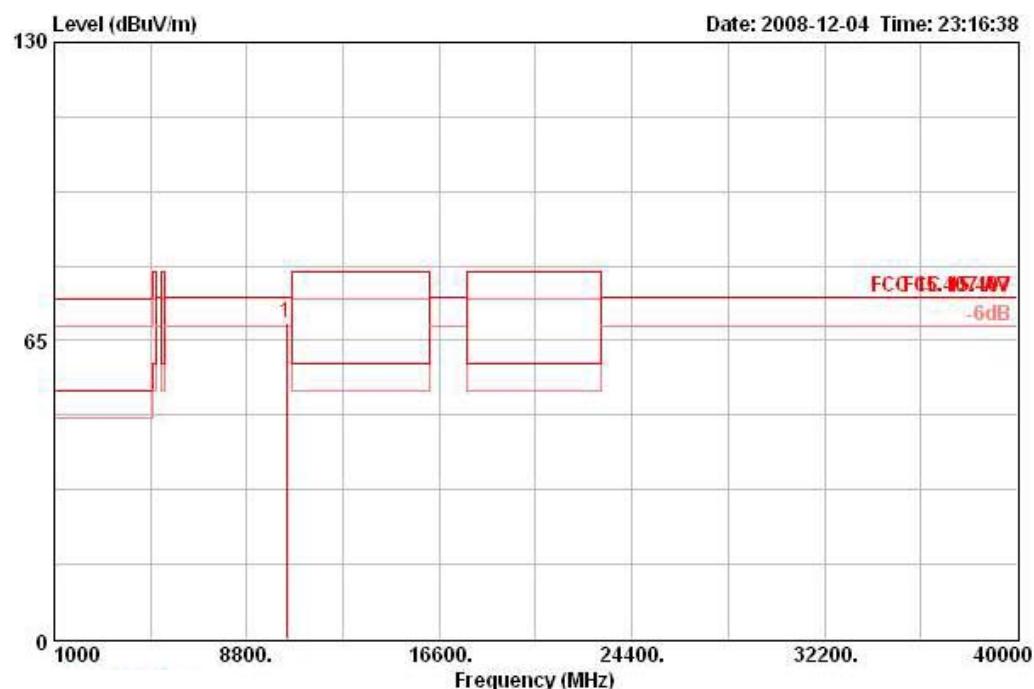
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant
		Limit	Line	Level	Factor	Factor	Loss			
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
10353.900	72.04	-2.26	74.30	57.41	39.73	35.32	10.22	PEAK	VERTICAL	98
1										106

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 40 / Ant. A + Ant. C

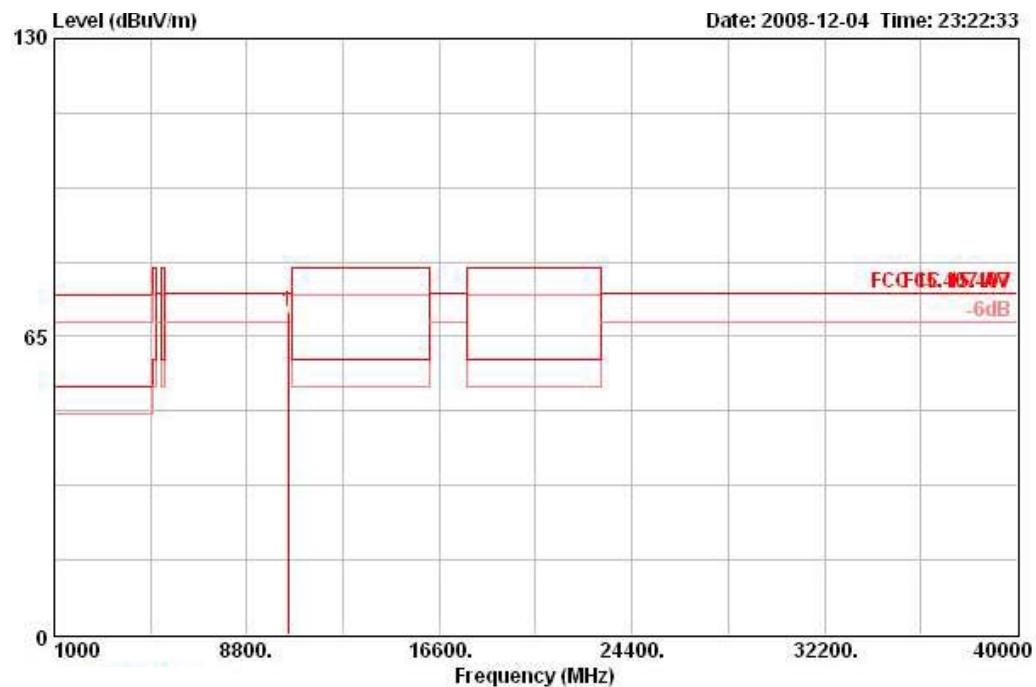
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
		Limit	Line	Level	Factor	Factor	Cable				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
10401.000	67.06	-7.24	74.30	52.25	39.82	35.28	10.27	PEAK	HORIZONTAL	280	113

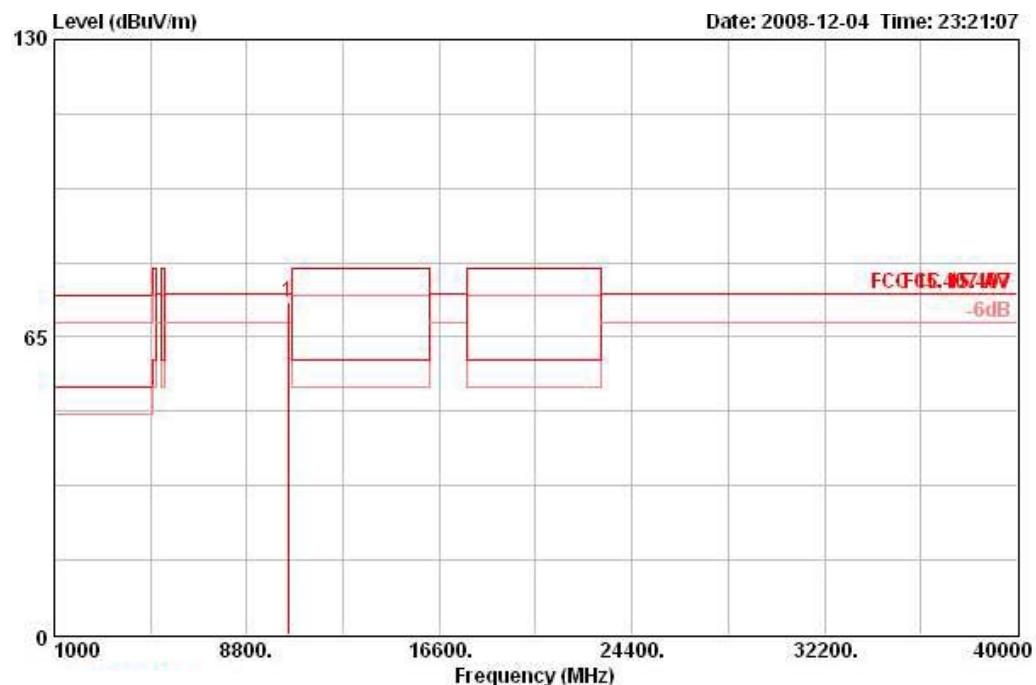
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
10401.400	69.07	-5.23	74.30	54.26	39.82	35.28	10.27	PERK	VERTICAL	98	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 48 / Ant. A + Ant. C

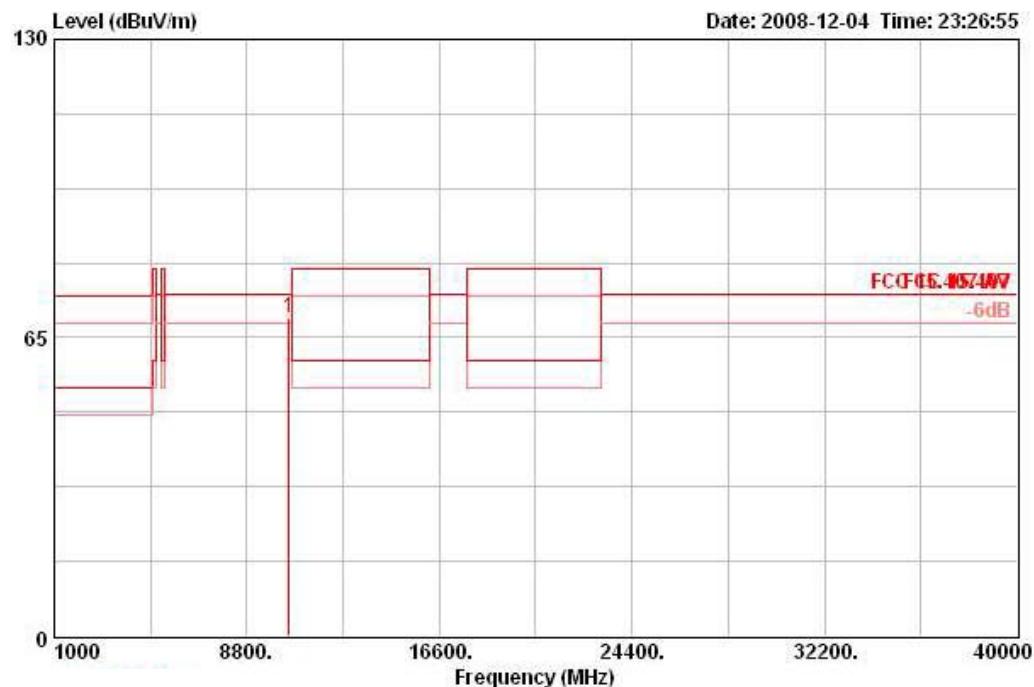
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant
		Limit	Line	Level	Factor	Factor	Loss			
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
10481.200	70.40	-3.90	74.30	55.30	39.97	35.21	10.35	PEAK	HORIZONTAL	279

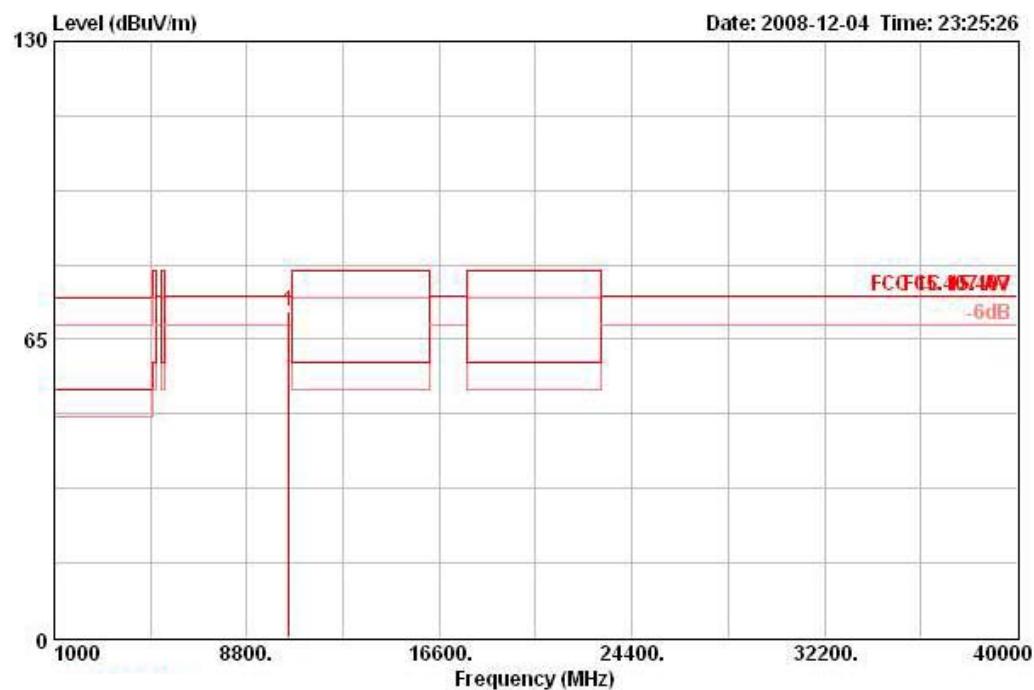
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
		Limit	Line	Level	Factor	Factor	Cable				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
10474.100	72.42	-1.88	74.30	57.36	39.94	35.23	10.35	PERK	VERTICAL	100	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 52 / Ant. A + Ant. C

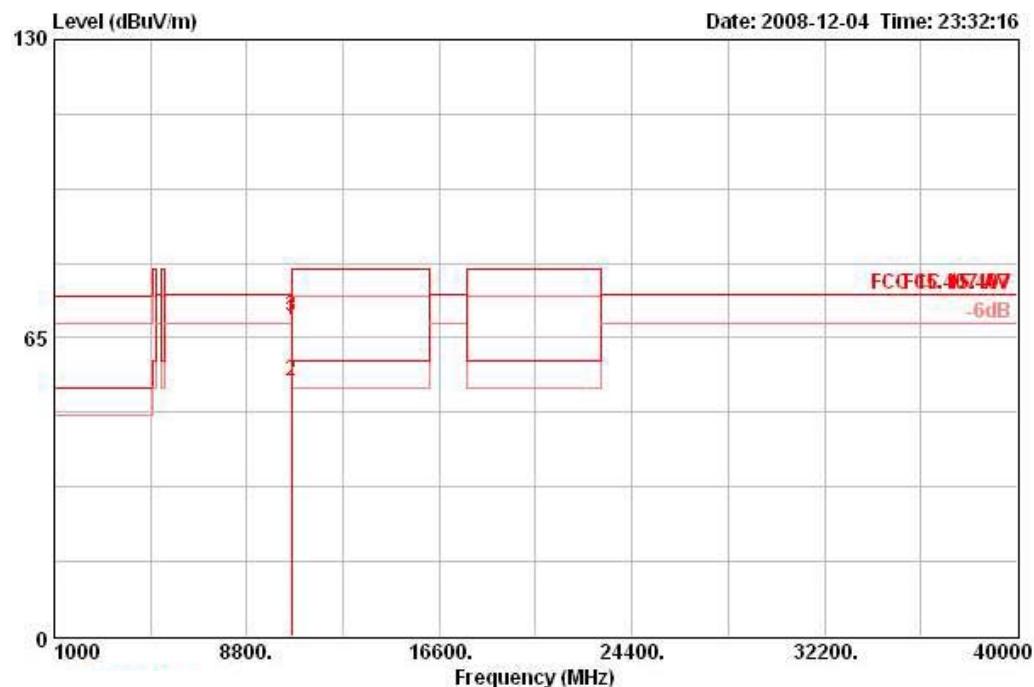
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
		Limit	Line	Level	Factor	Factor	Cable				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
10521.000	69.09	-5.21	74.30	53.92	39.98	35.19	10.37	PERK	HORIZONTAL	281	113

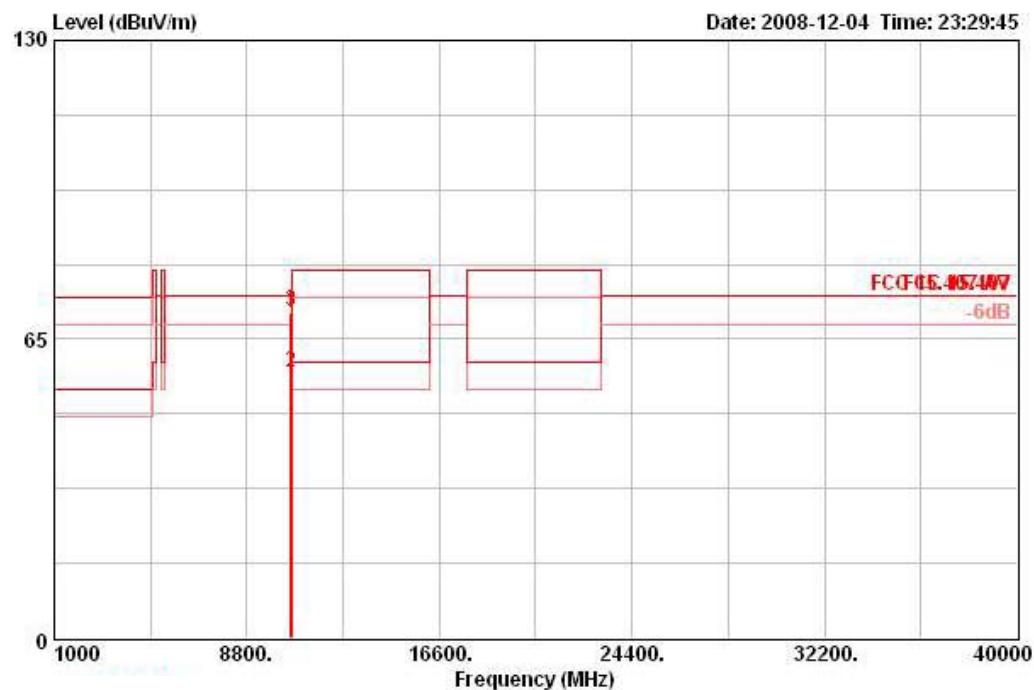
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
10521.100	70.96	-3.34	74.30	55.80	39.98	35.19	10.37	PERK	VERTICAL	99	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 60 / Ant. A + Ant. C

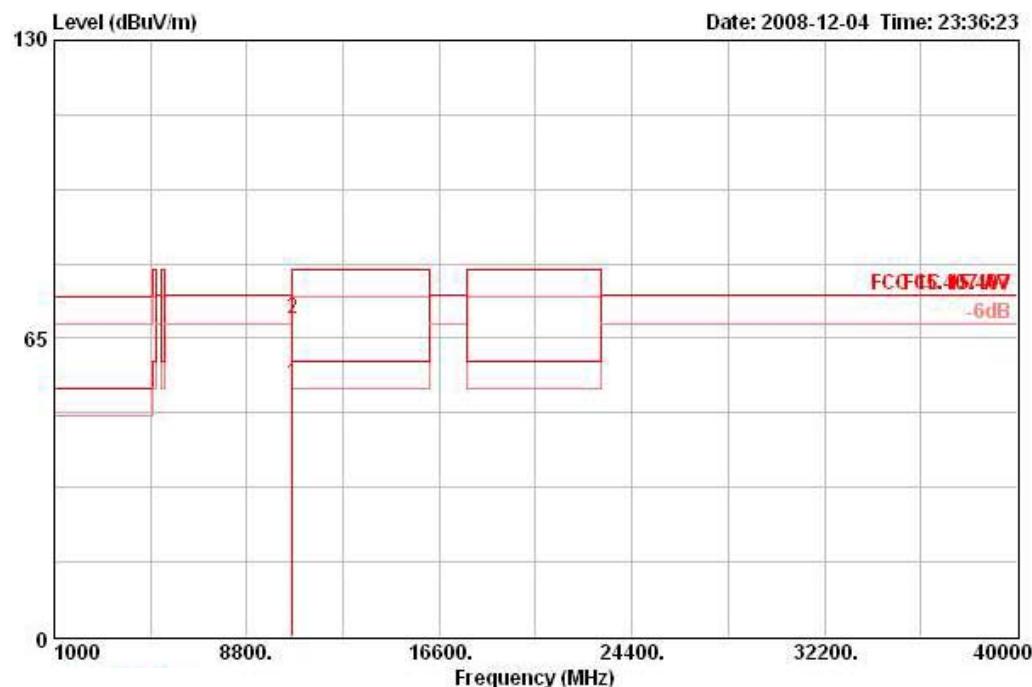
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant		
		Limit	Line	Level	Factor	Factor	Loss				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm		
1 !	10599.800	68.98	-5.32	74.30	53.85	39.90	35.12	10.36 PERK	HORIZONTAL	278	109
2 !	10600.100	55.57	-4.43	60.00	40.43	39.90	35.12	10.36 AVERAGE	HORIZONTAL	278	109
3	10600.600	69.67	-10.33	80.00	54.53	39.90	35.12	10.36 PERK	HORIZONTAL	278	109

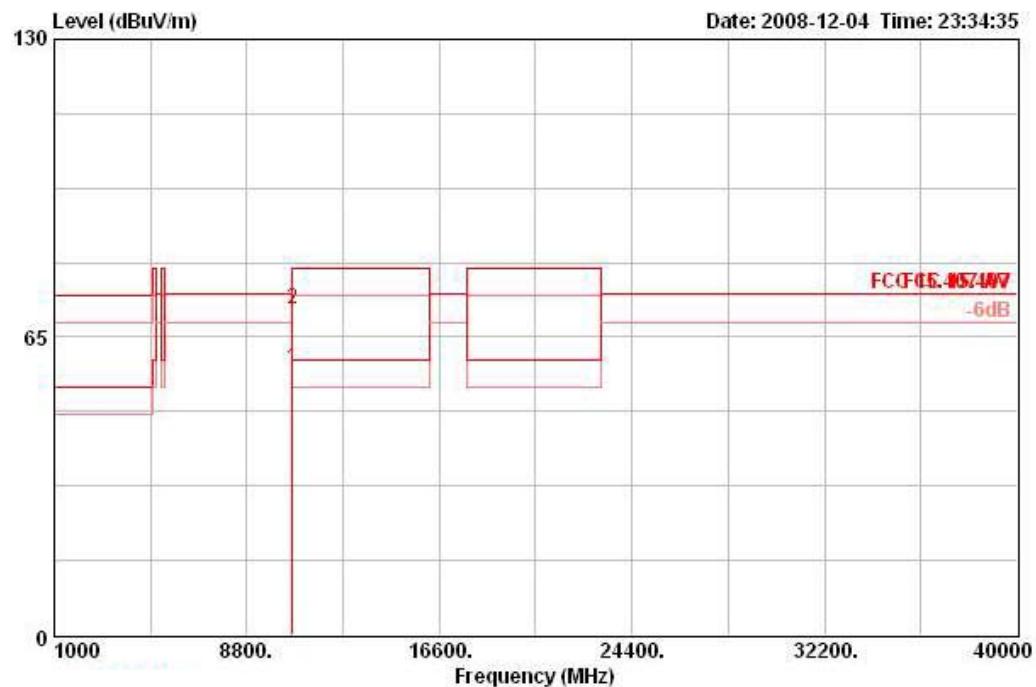
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	10594.400	70.78	-3.52	74.30	55.64	39.91	35.13	10.36 PERK	VERTICAL	99	100
2 !	10600.000	57.93	-2.07	60.00	42.79	39.90	35.12	10.36 AVERAGE	VERTICAL	99	100
3	10600.000	71.06	-8.94	80.00	55.92	39.90	35.12	10.36 PERK	VERTICAL	99	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 64 / Ant. A + Ant. C

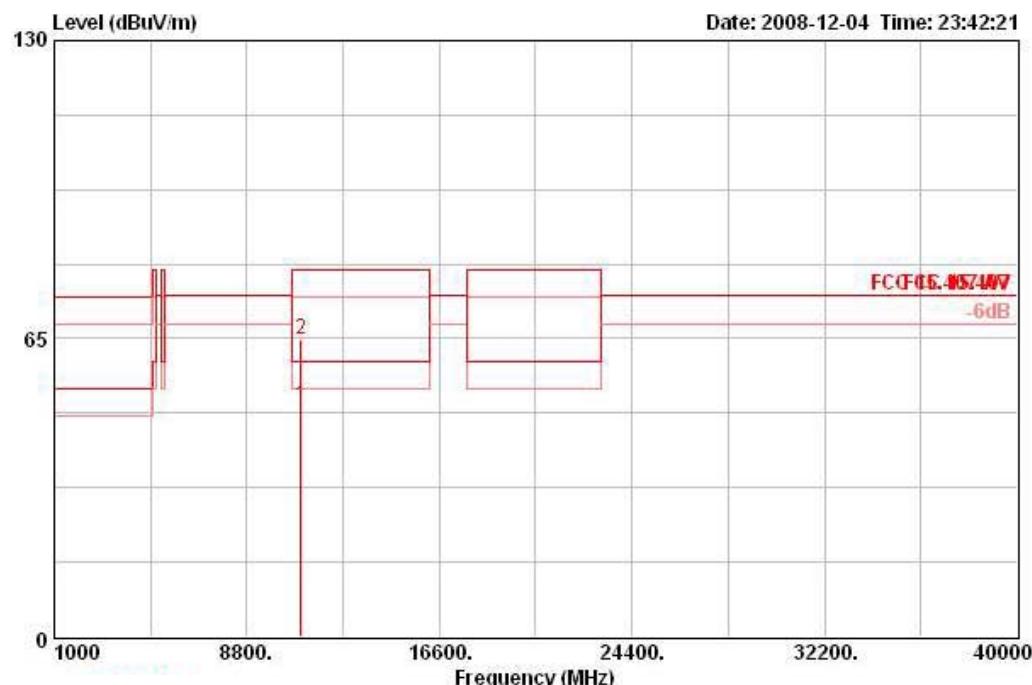
Horizontal


Freq MHz	Level dBuV/m	Over Limit		Antenna Level	Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		Limit	Line				dB	dBuV/m	dB			
1 !	10640.300	55.34	-4.66	60.00	40.22	39.86	35.09	10.35	PERVERAGE	HORIZONTAL	279	111
2	10640.700	69.20	-10.80	80.00	54.09	39.86	35.09	10.35	PERK	HORIZONTAL	279	111

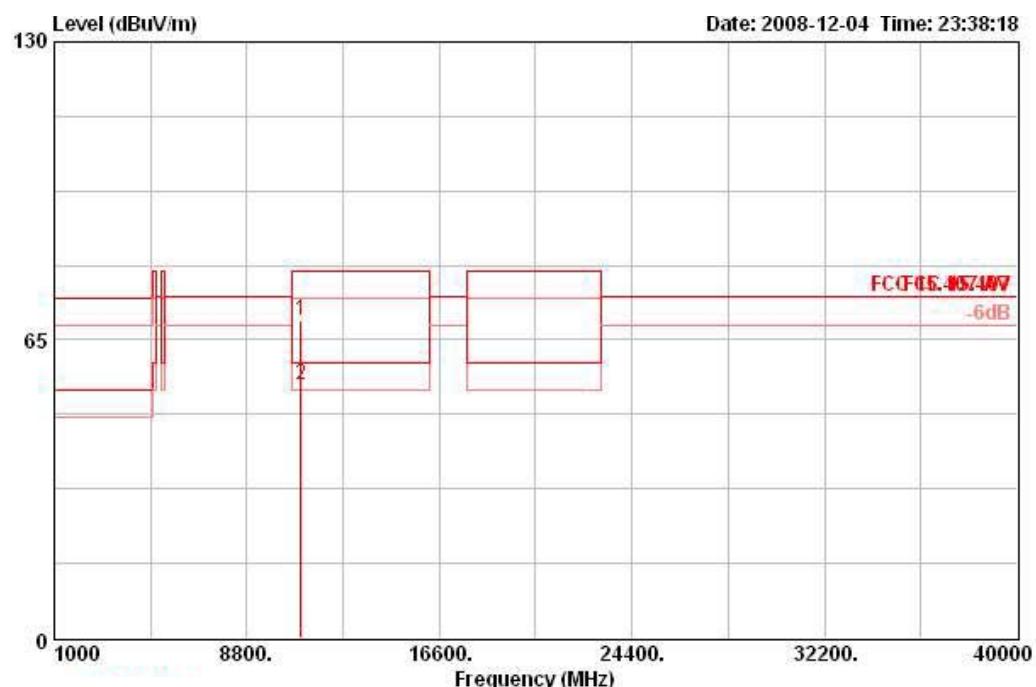
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1 !	10639.700	58.28	-1.72	60.00	43.16	39.86	35.09	10.35	AVERAGE	VERTICAL	99	100	
2	10642.240	71.11	-8.89	80.00	55.99	39.86	35.09	10.35	PEAK	VERTICAL	99	100	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 100 / Ant. A + Ant. C

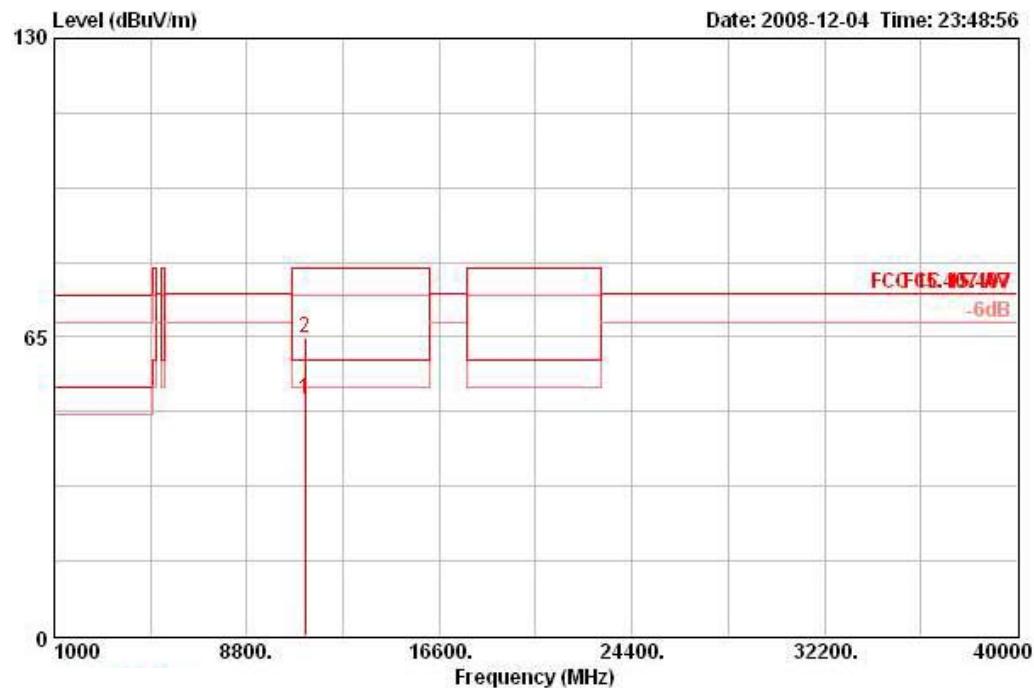
Horizontal


Freq	Level	Over Limit		Antenna	Preamp	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		Limit	Line			Level	Factor				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 11001.380	50.24	-9.76	60.00	35.26	39.50	34.80	10.28	AVERAGE	HORIZONTAL	320	135
2 11001.580	64.86	-15.14	80.00	49.88	39.50	34.80	10.28	PERK	HORIZONTAL	320	135

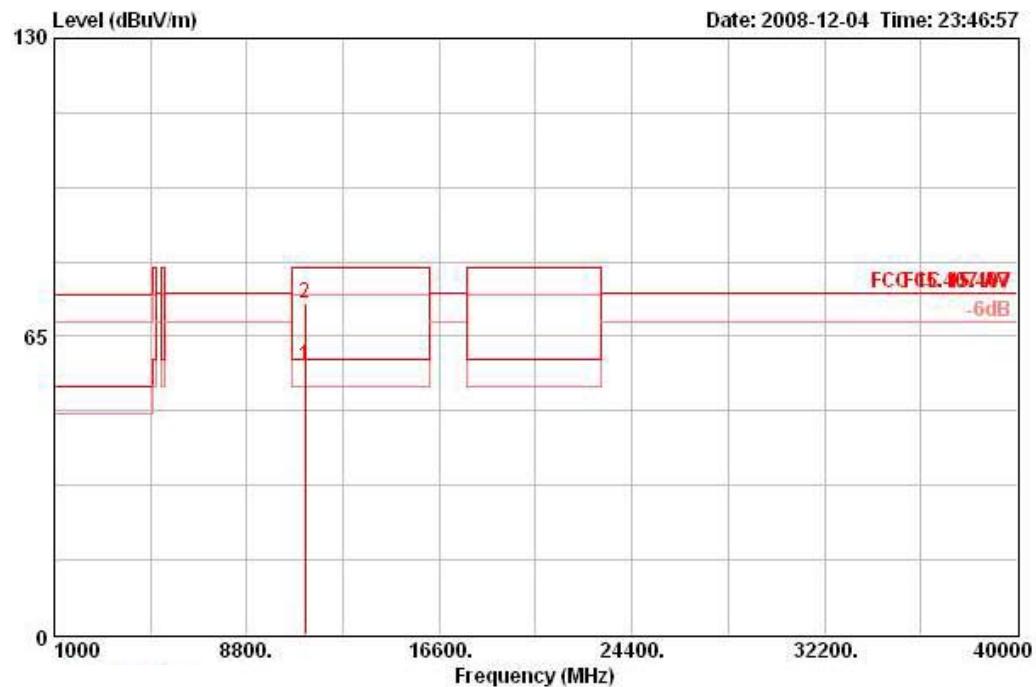
Vertical


Freq	Level	Over Limit	Limit	Read		Antenna	Preamp	Cable	Remark	Table Pos	Ant Pos
				Line	Factor						
MHz	dBuV/m	dB	dBuV/m							deg	cm
1	10999.340	69.27	-10.73	80.00	54.29	39.50	34.80	10.28	PERK	VERTICAL	100
2	10999.860	55.27	-4.73	60.00	40.29	39.50	34.80	10.28	AVERAGE	VERTICAL	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 116 / Ant. A + Ant. C

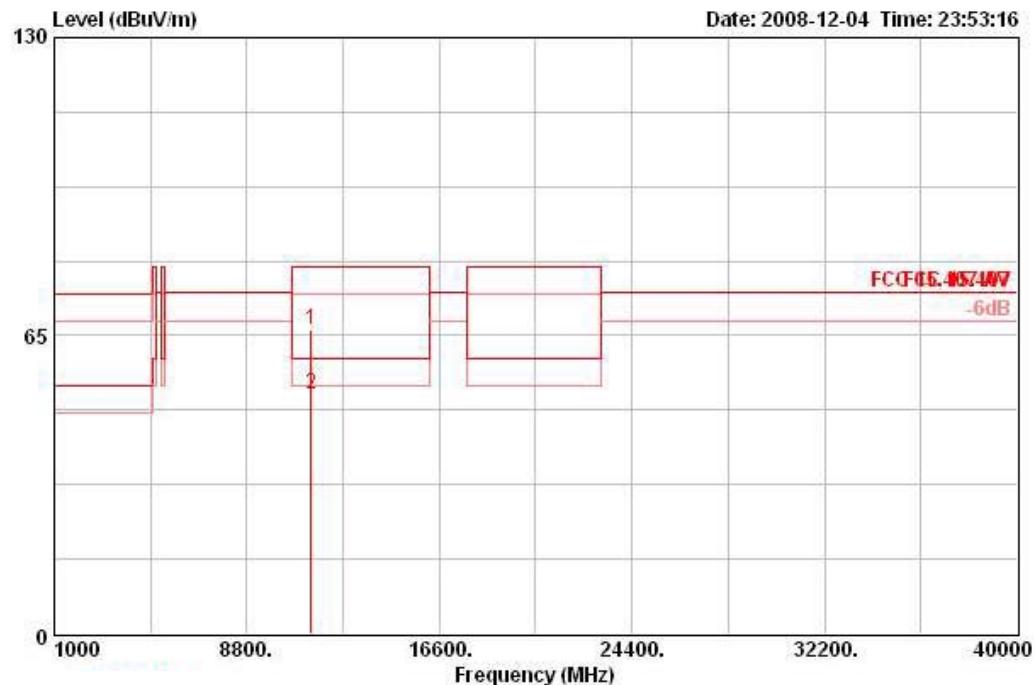
Horizontal


Freq	Level	Over Limit		Antenna	Preamp	Cable		Remark	Pol/Phase	Table Pos	Ant Pos	
		MHz	dBuV/m			dB	dBuV/m					
1	11159.160	51.56	-8.44	60.00	36.49	39.50	34.90	10.48	AVERAGE	HORIZONTAL	261	107
2	11169.400	64.98	-15.02	80.00	49.87	39.50	34.90	10.51	PERK	HORIZONTAL	261	107

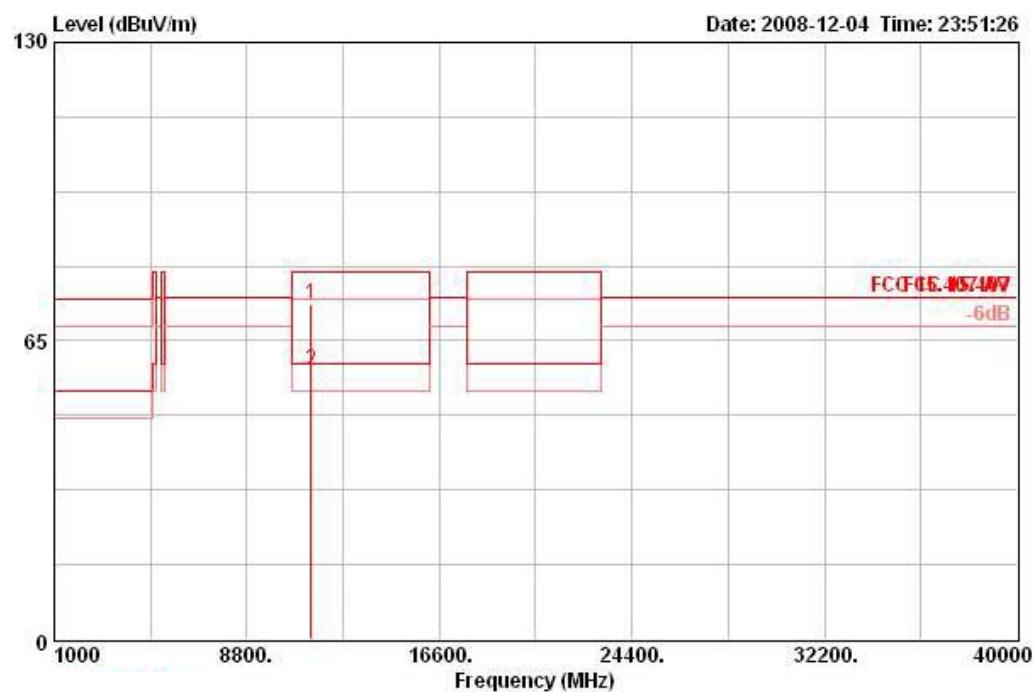
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1 !	11159.400	58.60	-1.40	60.00	43.53	39.50	34.90	10.48	AVERAGE	VERTICAL	169	132	
2	11161.400	72.22	-7.78	80.00	57.15	39.50	34.90	10.48	PERK	VERTICAL	169	132	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 140 / Ant. A + Ant. C

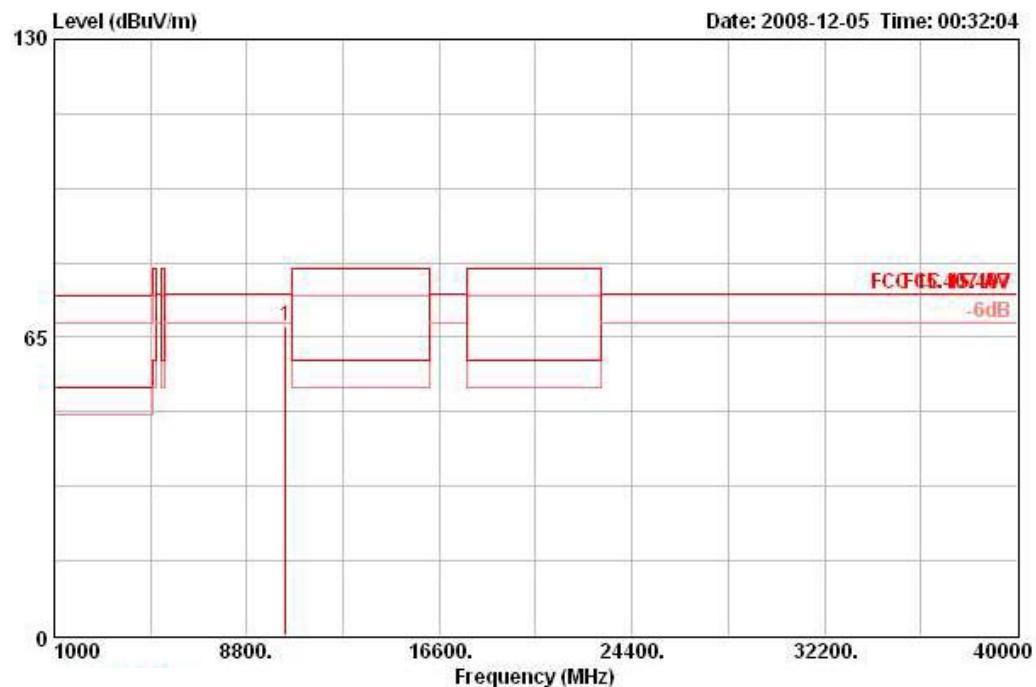
Horizontal


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1	11394.240	66.48	-13.52	80.00	51.21	39.50	35.03	10.80	PERK	HORIZONTAL	262	109	
2	11399.880	52.14	-7.86	60.00	36.88	39.50	35.04	10.80	AVERAGE	HORIZONTAL	262	109	

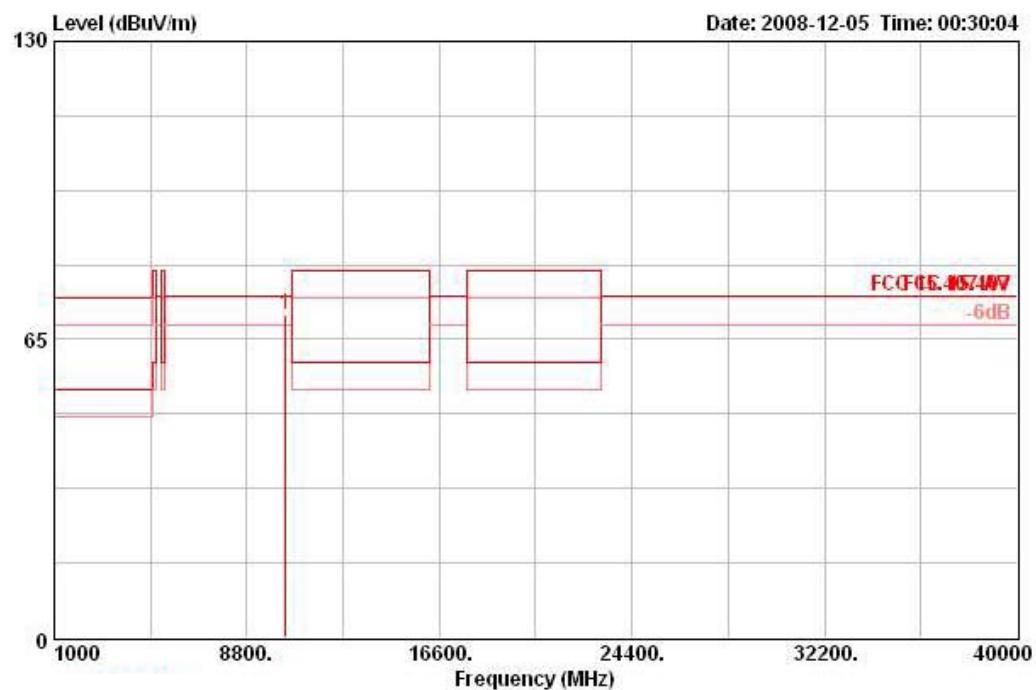
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1	11394.320	72.83	-7.17	80.00	57.56	39.50	35.03	10.80	PERK	VERTICAL	164	107	
2	11399.720	58.64	-1.36	60.00	43.38	39.50	35.04	10.80	AVERAGE	VERTICAL	164	107	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 38 / Ant. A + Ant. C

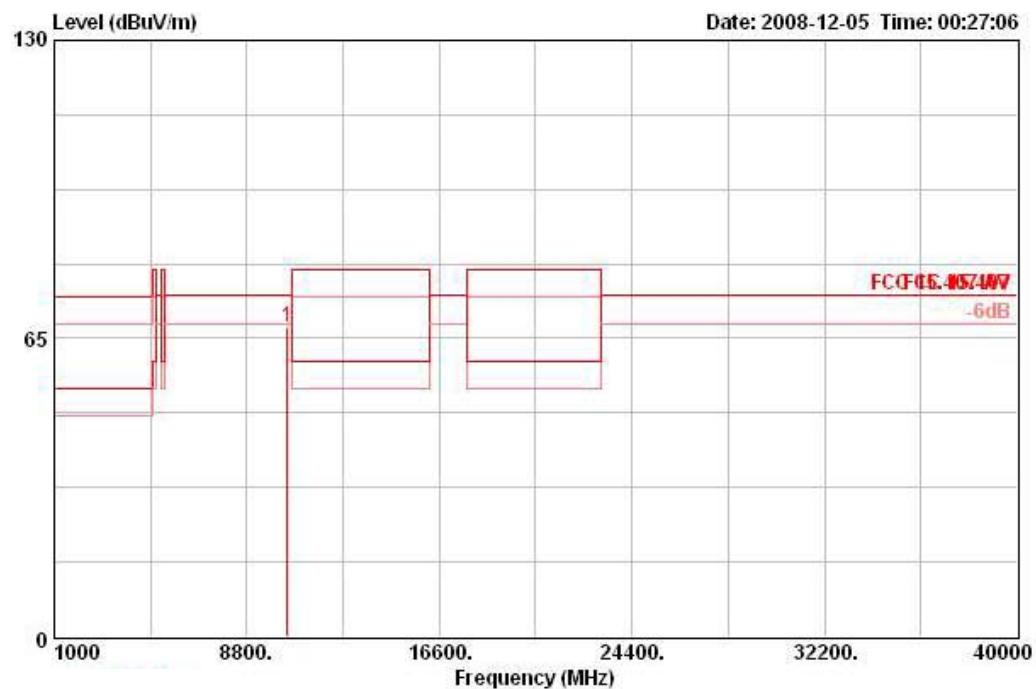
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
		Limit	Line	Level	Factor	Factor	Cable				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
10373.600	67.43	-6.87	74.30	52.74	39.76	35.31	10.25	PEAK	HORIZONTAL	281	112

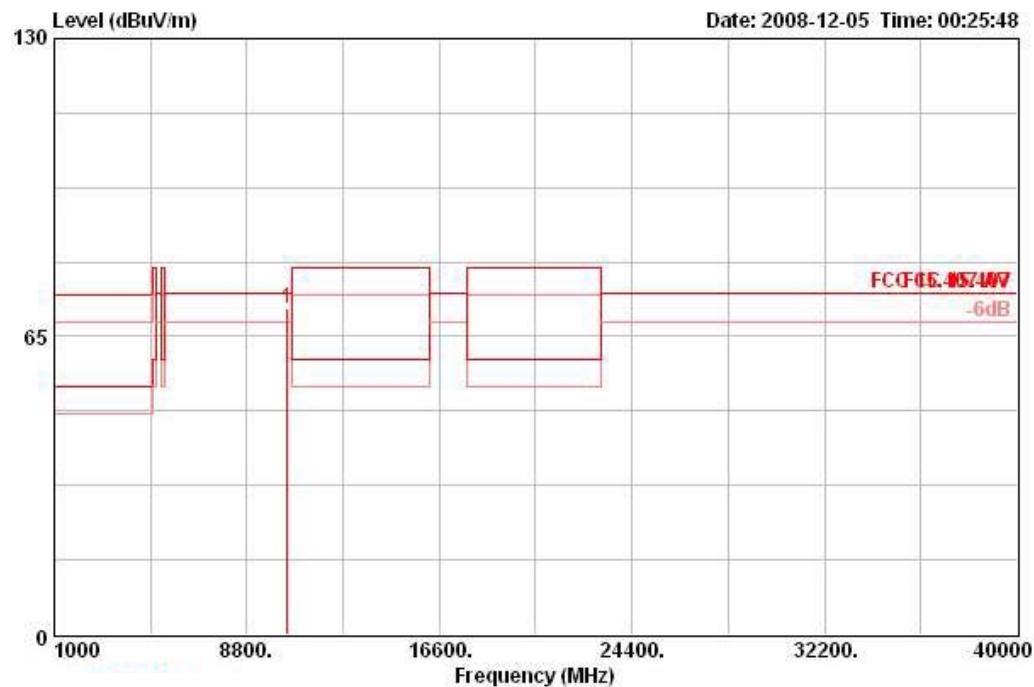
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
10374.920	70.29	-4.01	74.30	55.60	39.76	35.31	10.25	PERK	VERTICAL	100	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 46 / Ant. A + Ant. C

Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
		Limit	Line	Level	Factor	Factor	Loss				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
10456.760	67.48	-6.82	74.30	52.49	39.91	35.24	10.32	PEAK	HORIZONTAL	281	109

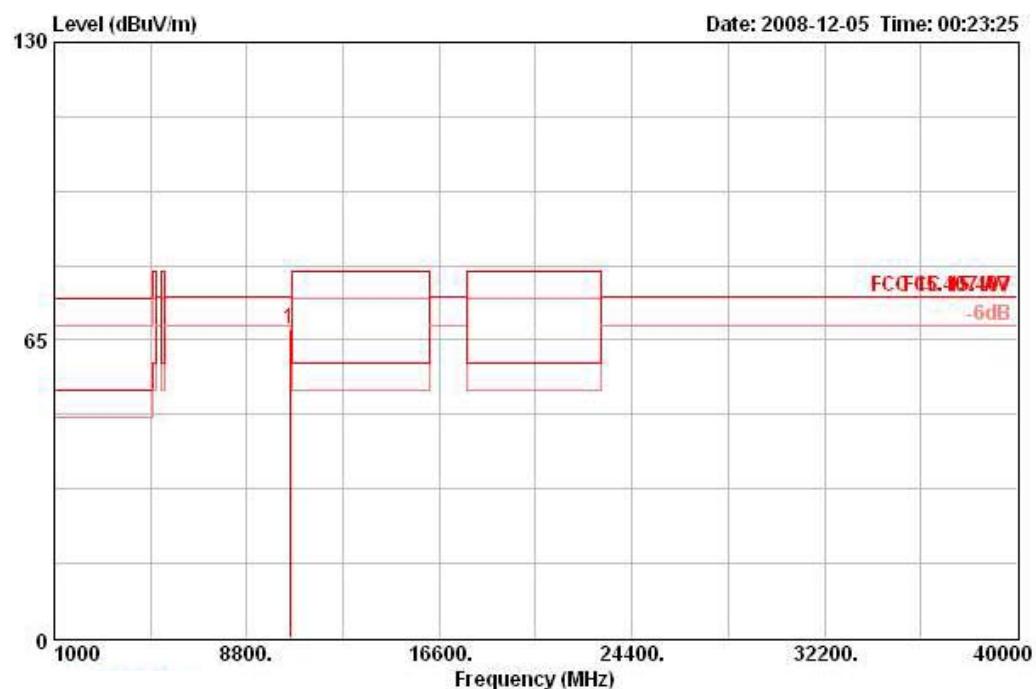
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant		
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m				
10454.880	71.05	-3.25	74.30	56.06	39.91	35.24	10.32	PEAK	VERTICAL	99	100

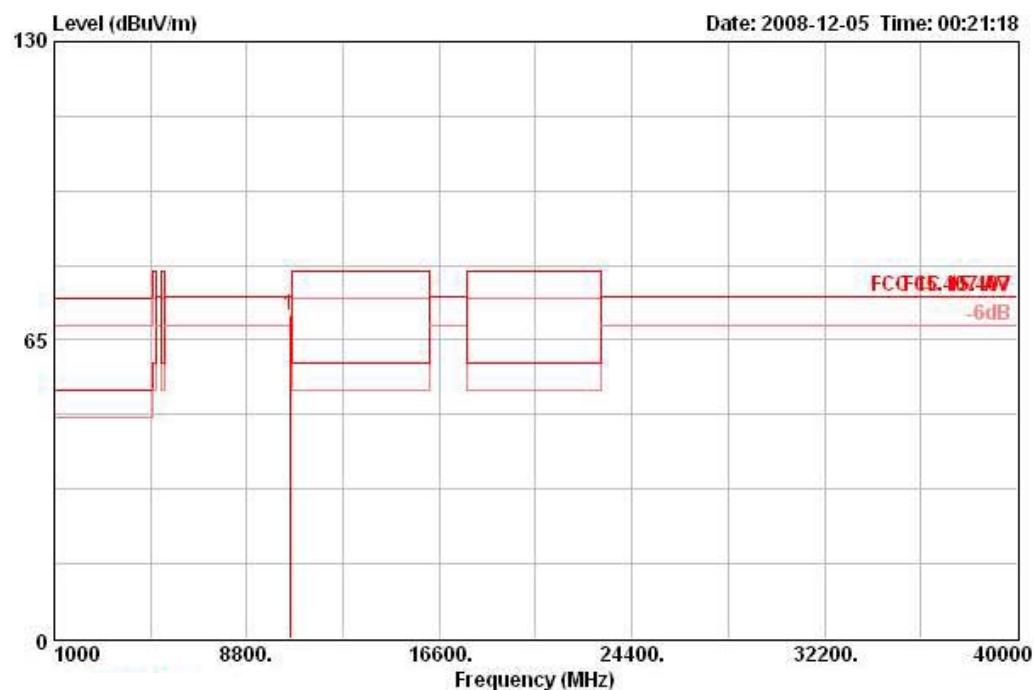


Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 54 / Ant. A + Ant. C

Horizontal



Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	10544.720	67.56	-6.74	74.30	52.40	39.97	35.17	10.37 PERK	HORIZONTAL	278	114

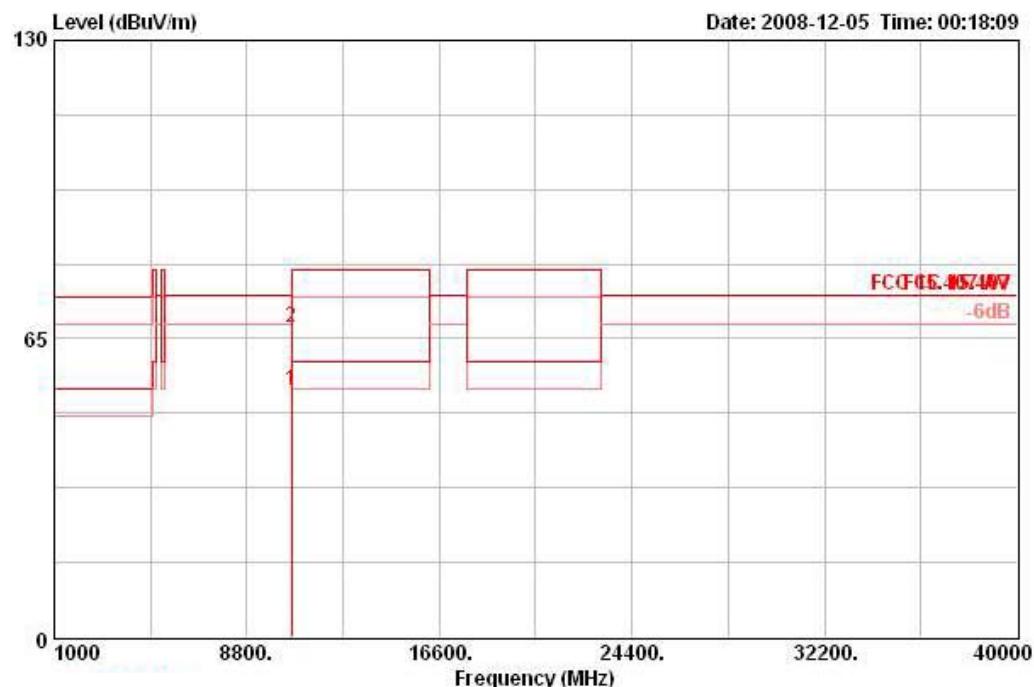
Vertical


Freq	Level	Over Limit		Read Line		Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1 !	10535.040	70.38	-3.92	74.30	55.23	39.97	35.17	10.37	PERK	VERTICAL		99	102

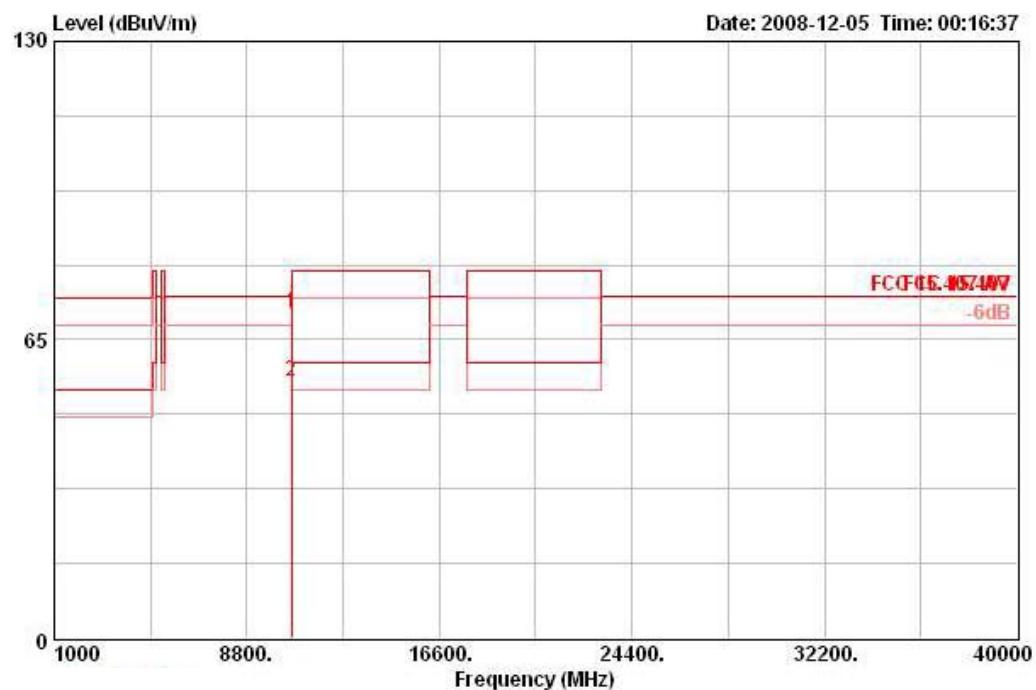


Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 62 / Ant. A + Ant. C

Horizontal

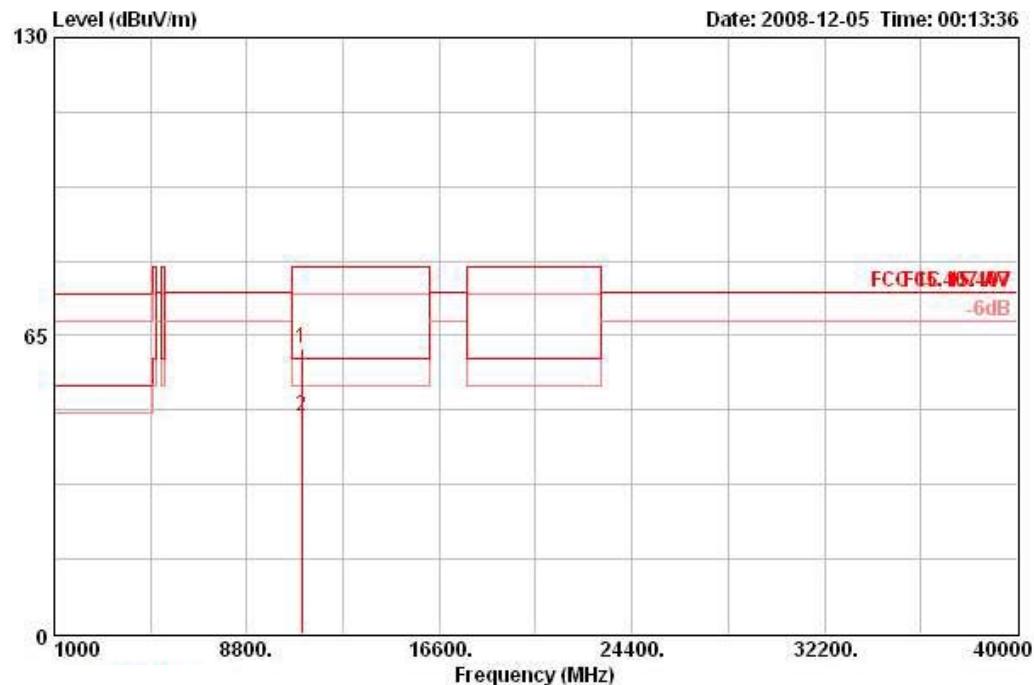


Freq	Level	Over	Limit	Read		Antenna	Preamp	Cable		Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor		Loss	Remark		Pos	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm			
1	10615.960	53.83	-6.17	60.00	38.70	39.88	35.10	10.35	AVERAGE	HORIZONTAL	279	111
2	10621.160	67.22	-12.78	80.00	52.10	39.88	35.10	10.35	PERK	HORIZONTAL	279	111

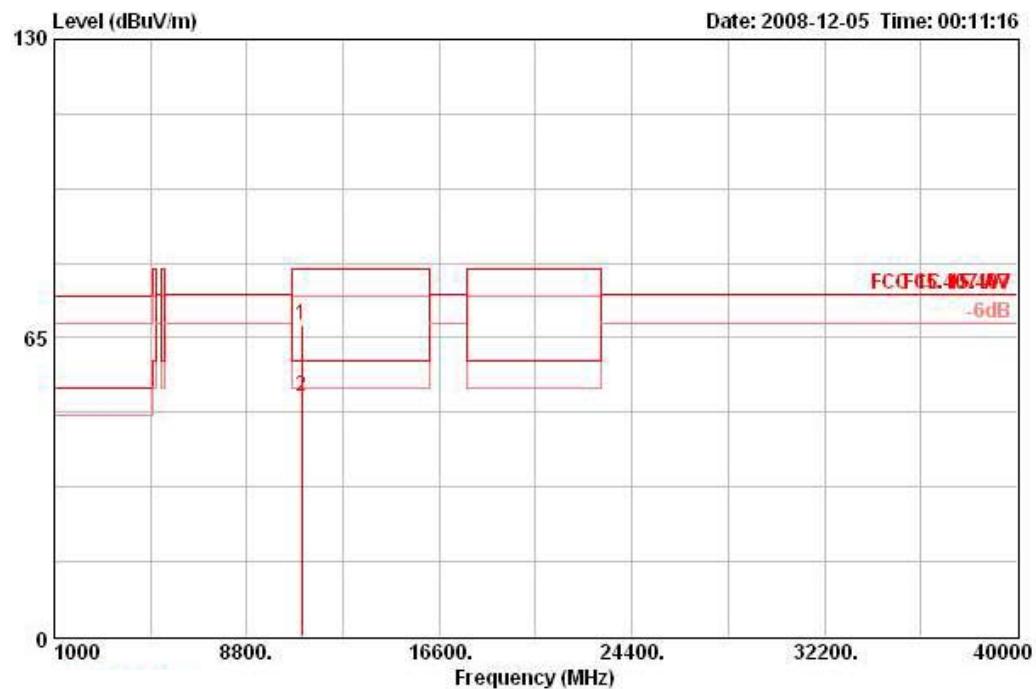
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1	10614.800	70.84	-9.16	80.00	55.72	39.88	35.10	10.35	PEAK	VERTICAL	98	100	
2	10623.360	55.74	-4.26	60.00	40.62	39.88	35.10	10.35	AVERAGE	VERTICAL	98	100	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 102 / Ant. A + Ant. C

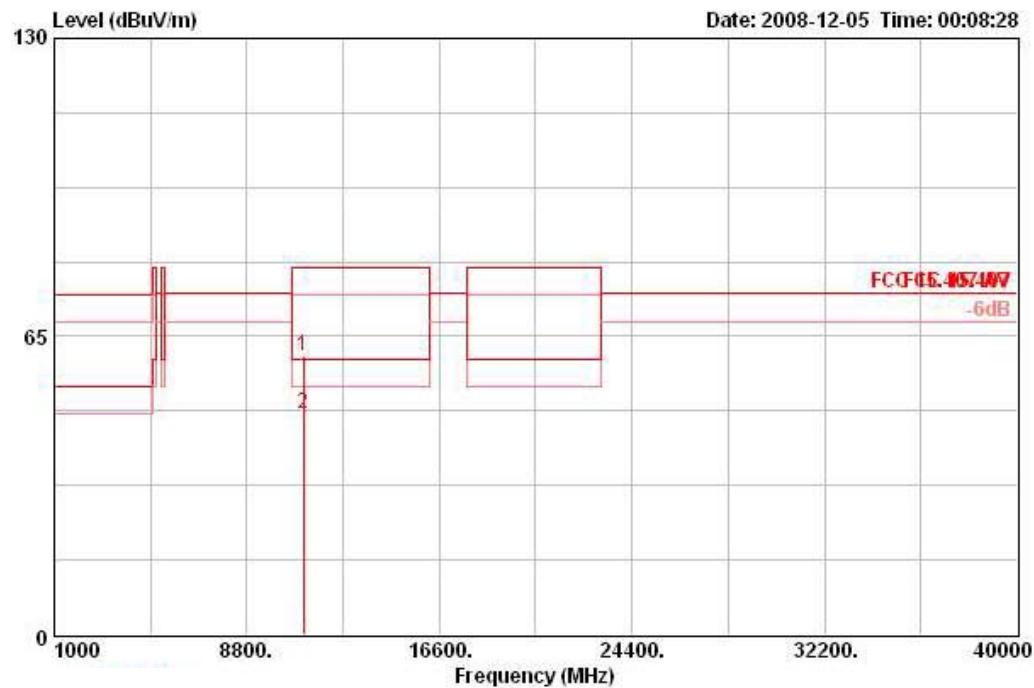
Horizontal


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1	11022.520	62.23	-17.77	80.00	47.24	39.50	34.82	10.31	PERK	HORIZONTAL	60	121	
2	11023.640	47.22	-12.78	60.00	32.23	39.50	34.82	10.31	AVERAGE	HORIZONTAL	60	121	

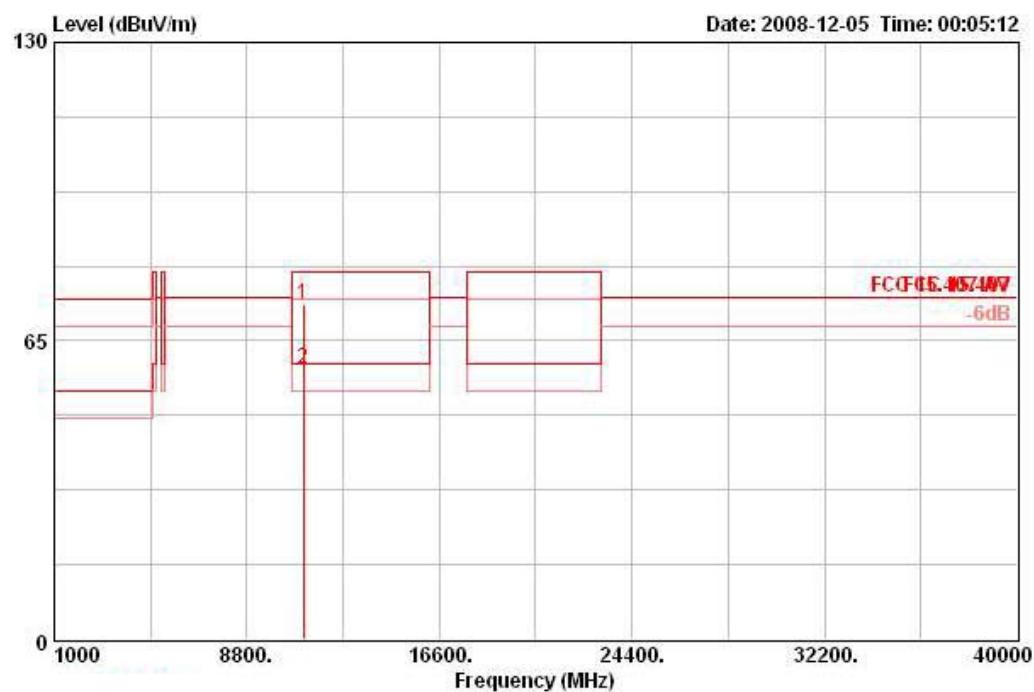
Vertical


Freq	Level	Over Limit	Limit Line	Read		Antenna	Preamp	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
				MHz	dBuV/m			dB	dBuV/m	dBuV	dB/m	dB	
1	11014.800	67.59	-12.41	80.00	52.59	39.50	34.81	10.31	PERK		VERTICAL	99	100
2	11018.800	52.40	-7.60	60.00	37.40	39.50	34.81	10.31	AVERAGE		VERTICAL	99	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 110 / Ant. A + Ant. C

Horizontal


Freq	Level	Over Limit		Antenna	Preamp	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m			dB	dBuV/m				
1	11093.400	60.91	-19.09	80.00	45.86	39.50	34.86	10.41 PERK	HORIZONTAL	259	100
2	11103.280	48.26	-11.74	60.00	33.21	39.50	34.86	10.41 AVERAGE	HORIZONTAL	259	100

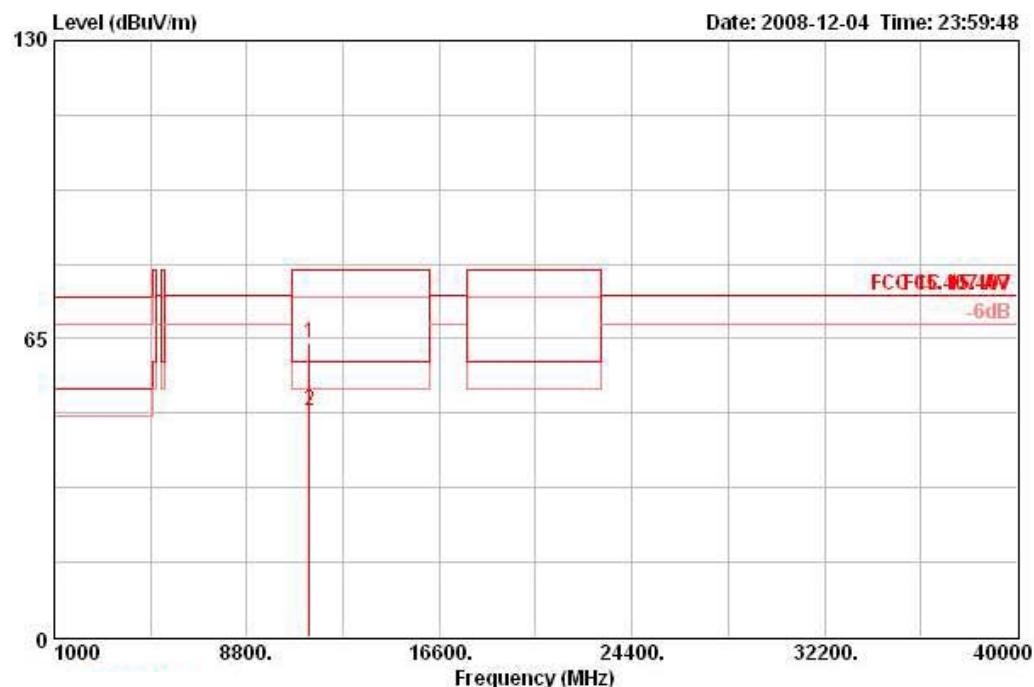
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1	11102.400	72.81	-7.19	80.00	57.76	39.50	34.86	10.41	PERK	VERTICAL	169	111	
2	11103.720	58.87	-1.13	60.00	43.82	39.50	34.86	10.41	AVERAGE	VERTICAL	169	111	

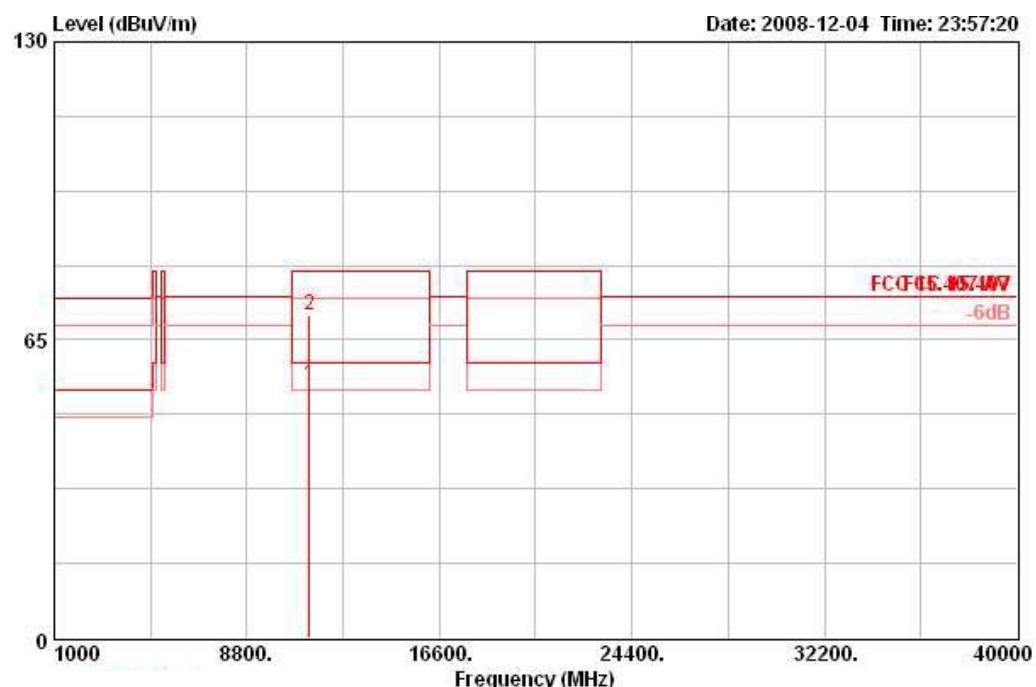


Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 134 / Ant. A + Ant. C

Horizontal

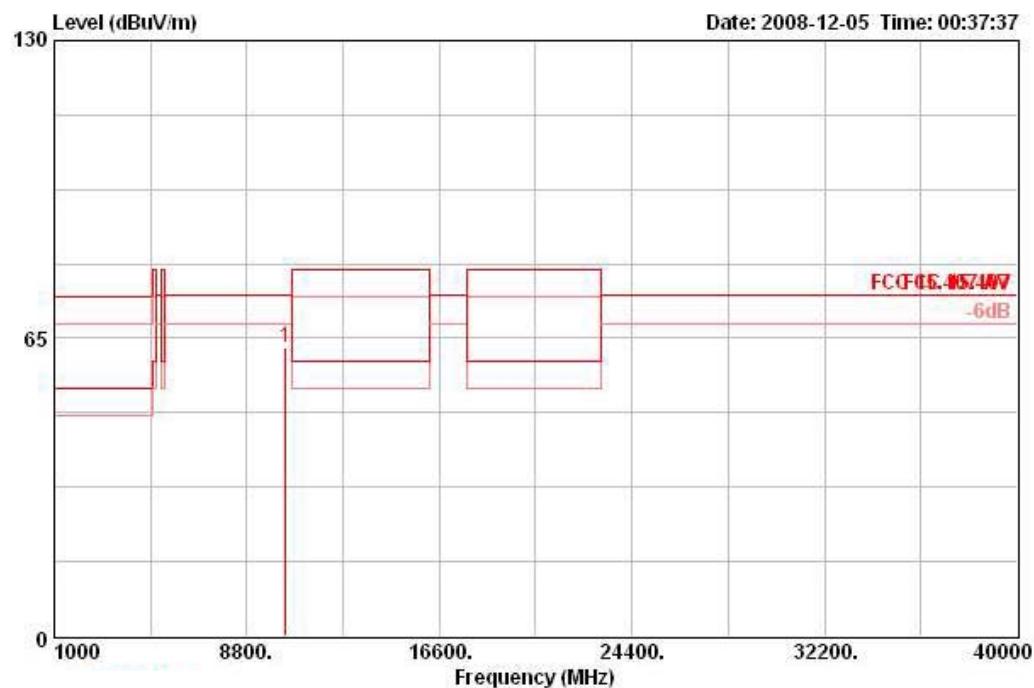


Freq	Level	Over	Limit	Read		Antenna	Preamp	Cable		Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Loss	Remark	Pos		Pos	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm			
1	11334.840	64.14	-15.86	80.00	48.94	39.50	35.00	10.70	PERK	HORIZONTAL	260	110
2	11343.680	49.22	-10.78	60.00	33.98	39.50	35.00	10.74	RVERAGE	HORIZONTAL	260	110

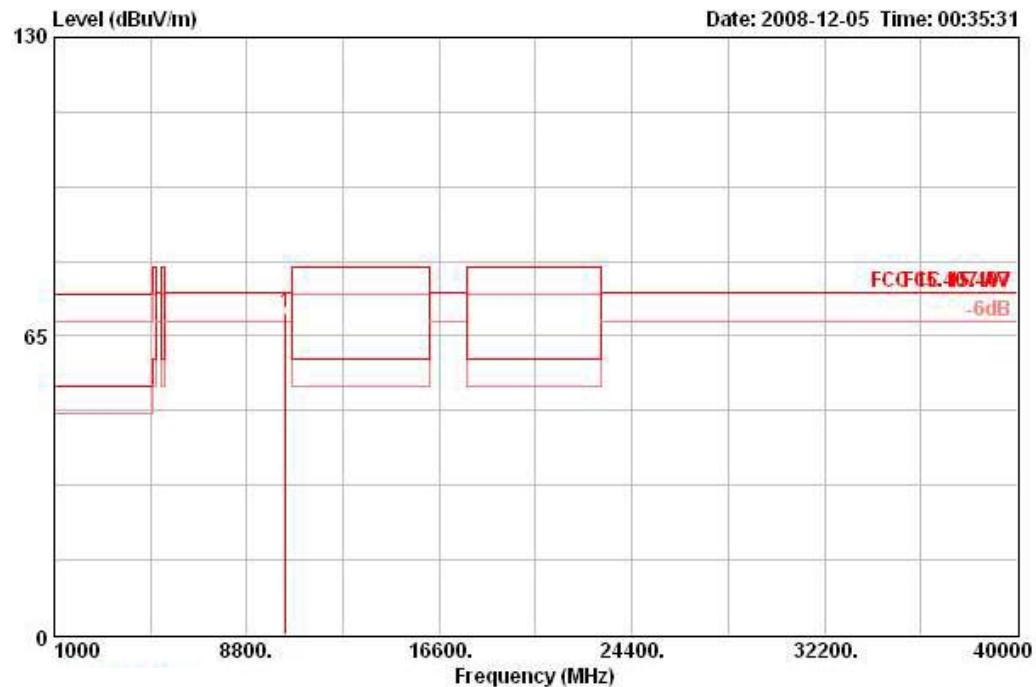
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1 !	11335.360	55.36	-4.64	60.00	40.16	39.50	35.00	10.70	AVERAGE	VERTICAL	165	111	
2	11335.440	70.41	-9.59	80.00	55.20	39.50	35.00	10.70	PERK	VERTICAL	165	111	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 36 / Ant. A

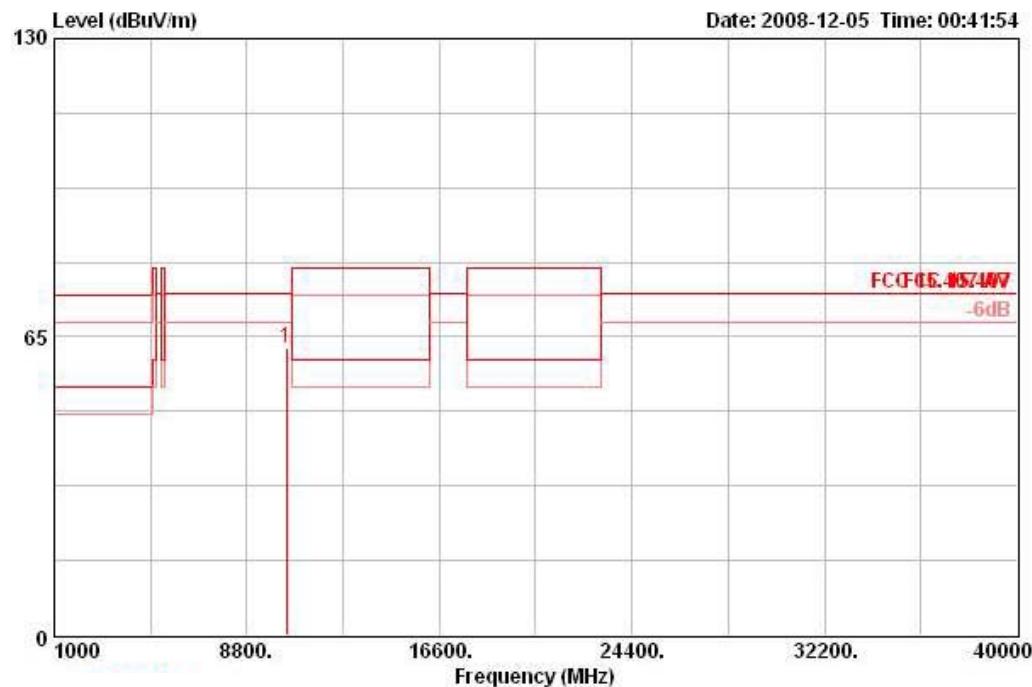
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	deg	cm			
10362.960	63.07	-11.23	74.30	48.40	39.76	35.31	10.22	PERK	HORIZONTAL	274	116

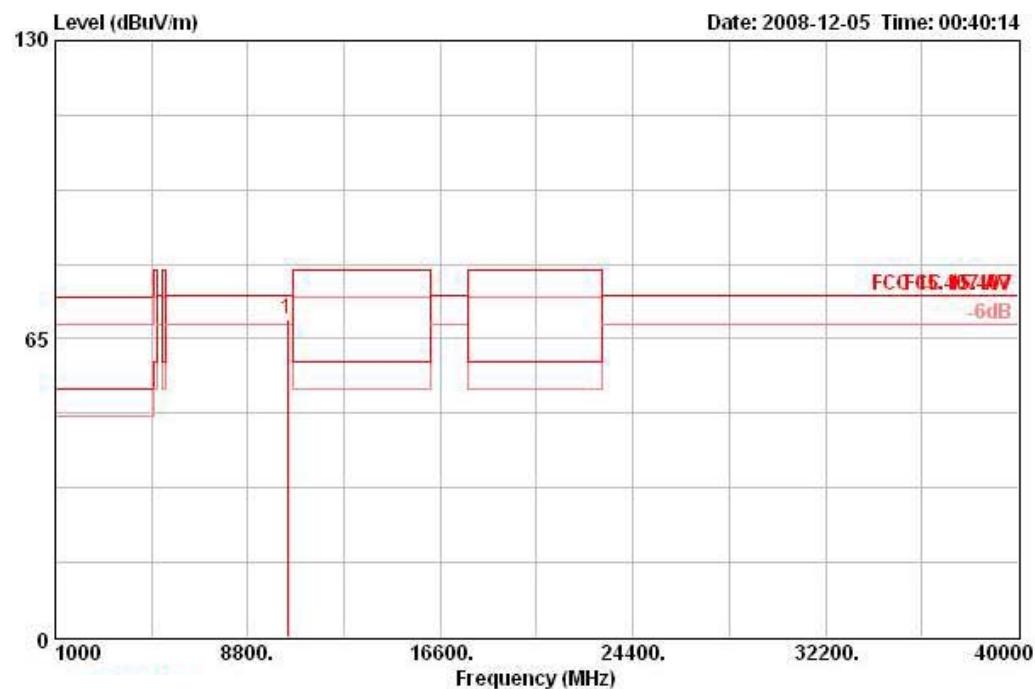
Vertical


Freq	Level	Over Limit		Read Line		Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
10360.520	69.99	-4.31	74.30	55.32	39.76	35.31	10.22	PERK		VERTICAL	99	101	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 40 / Ant. A

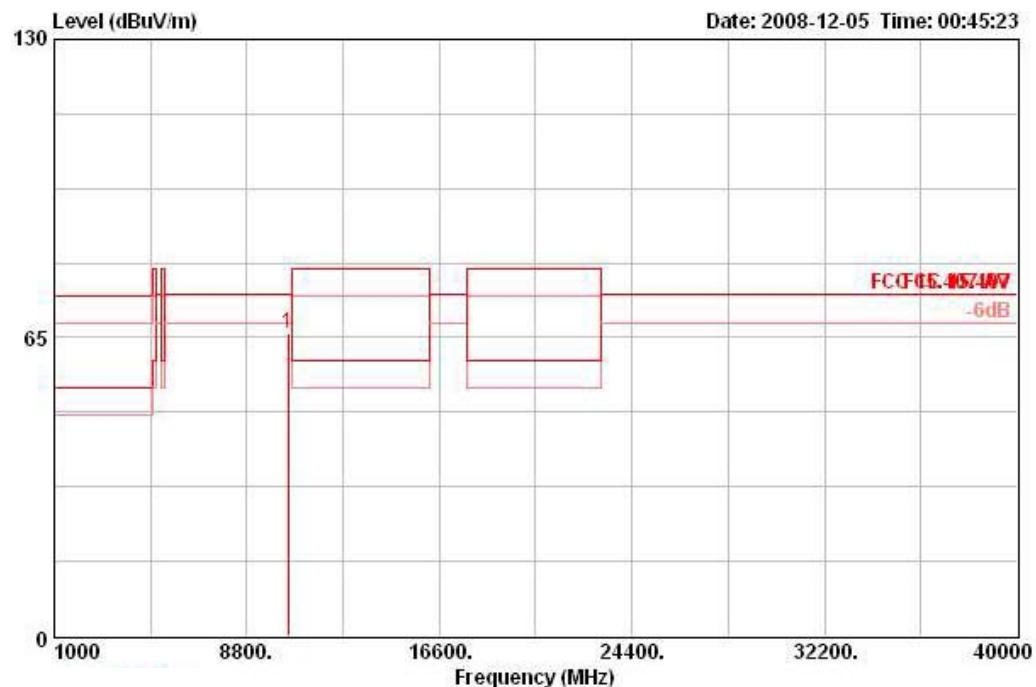
Horizontal


Freq	Level	Over Limit		Read Line	Antenna	Preamp	Cable		Remark	Table	Pos	Ant Pos
		MHz	dBuV/m				dB	dBuV/m	dBuV	dB/m	dB	
10401.600	62.77	-11.53	74.30	47.96	39.82	35.28	10.27	PERK		HORIZONTAL	275	115

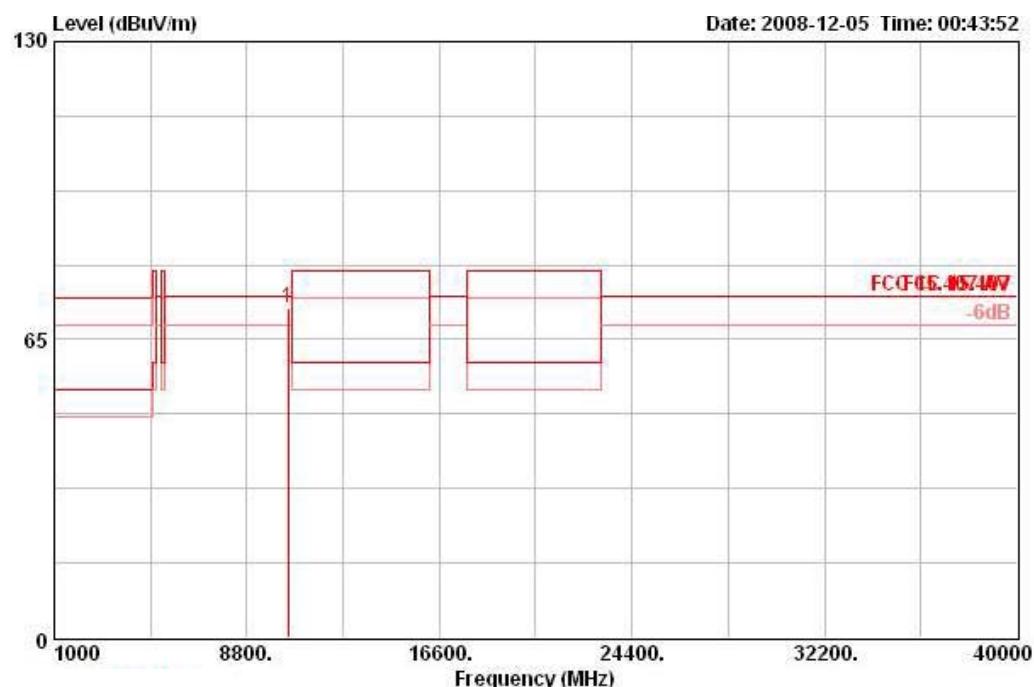
Vertical


Freq MHz	Level dBuV/m	Over	Limit	Read	Antenna	Preamp	Cable	Table Pos	Ant Pos	
		Limit	Line	Level	Factor	Factor	Loss			
		dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1 !	10400.800	69.26	-5.04	74.30	54.45	39.82	35.28	10.27 PEAK	VERTICAL	99 100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 48 / Ant. A

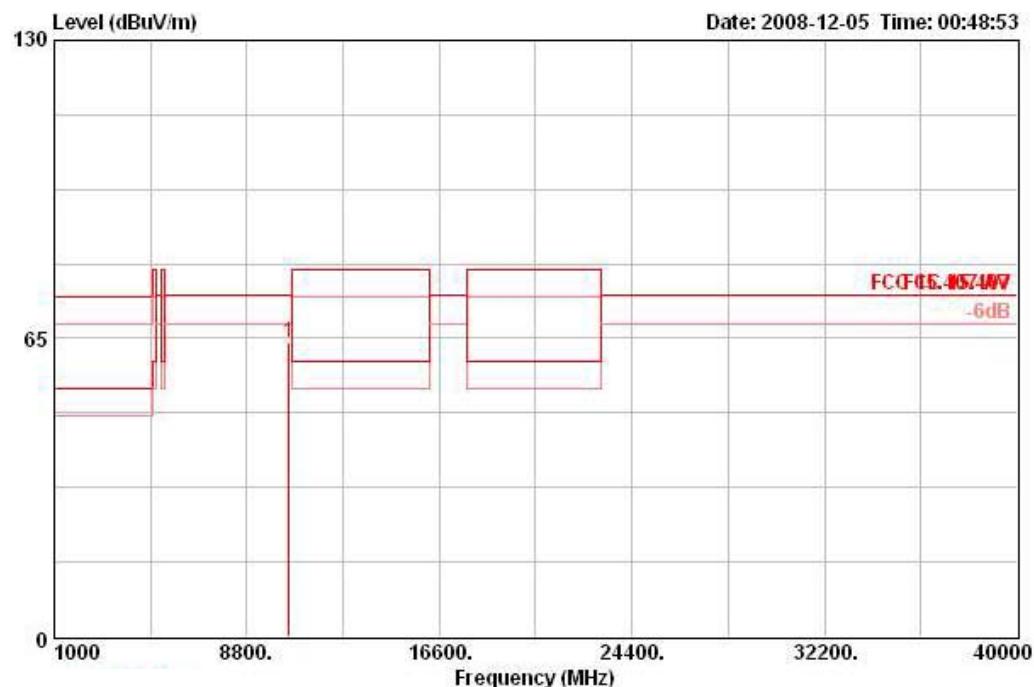
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant		
		Limit	Line	Level	Factor	Factor	Loss				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm		
10482.880	65.90	-8.40	74.30	50.80	39.97	35.21	10.35	PERK	HORIZONTAL	279	114

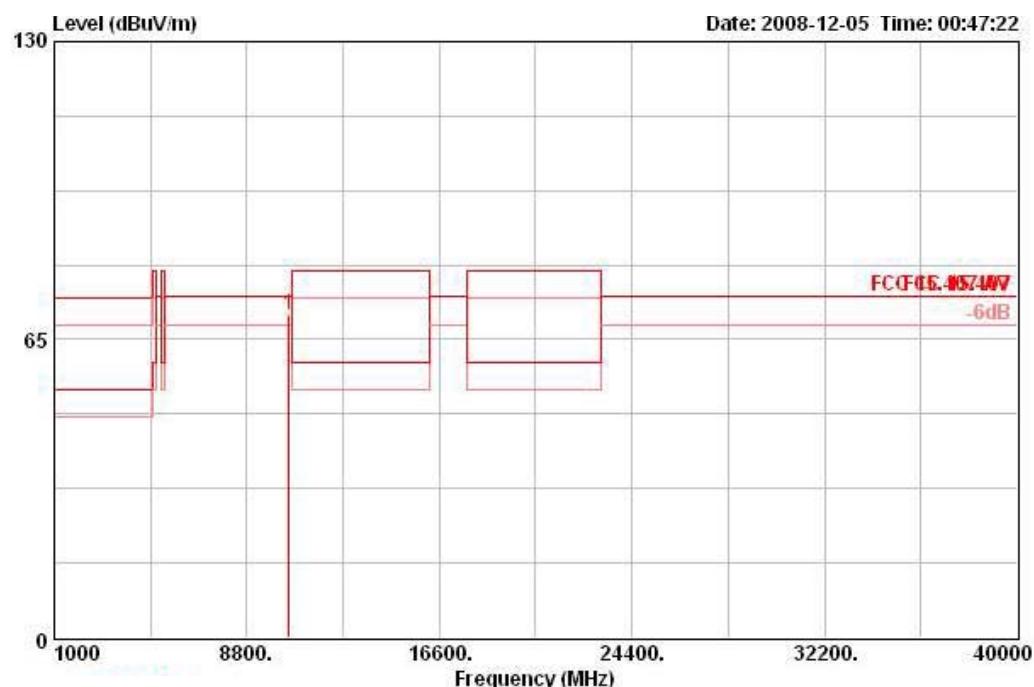
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
10482.800	72.00	-2.30	74.30	56.90	39.97	35.21	10.35	PERK	VERTICAL	100	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 52 / Ant. A

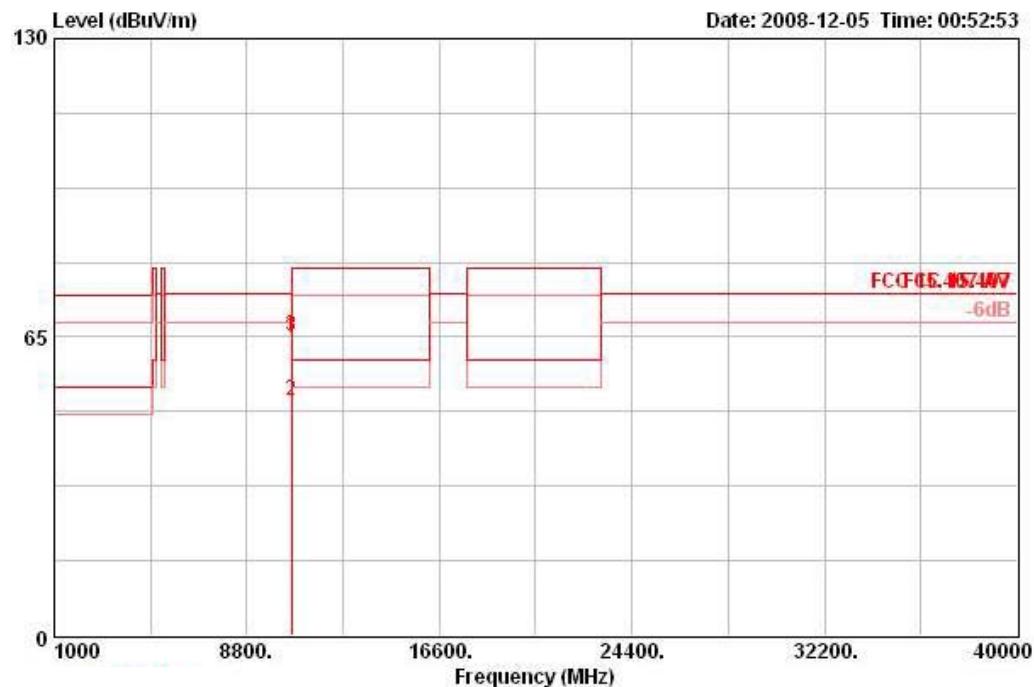
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
		Limit	Line	Level	Factor	Factor	Loss				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
10520.600	64.26	-10.04	74.30	49.09	39.98	35.19	10.37	PEAK	HORIZONTAL	279	107

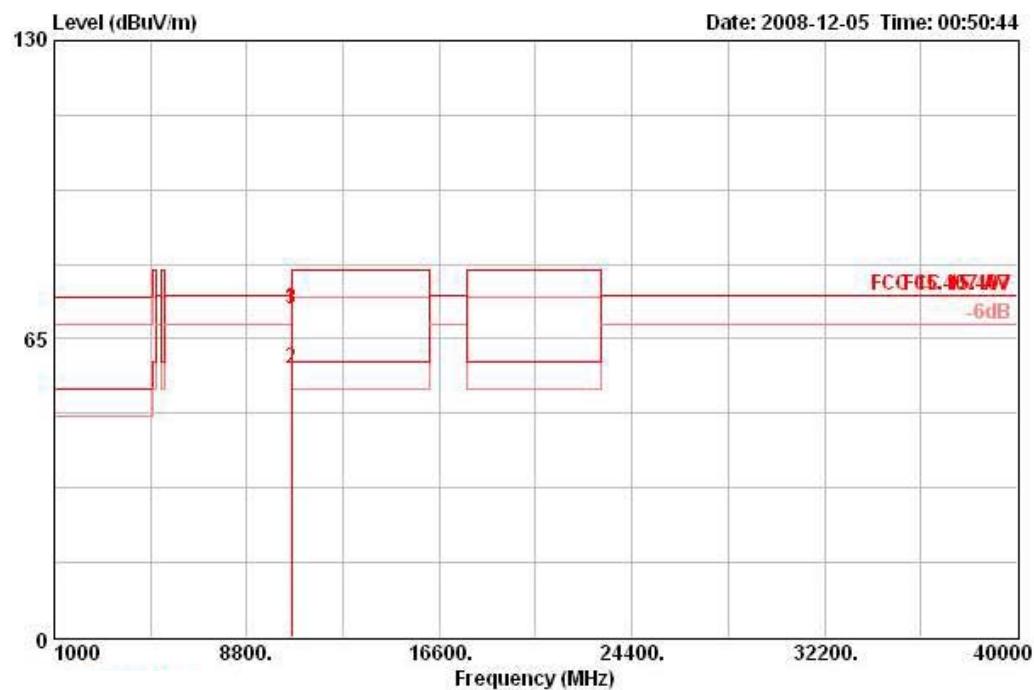
Vertical


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
		Limit	Line	Level	Factor	Factor	Cable			Pos	Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
10520.720	70.38	-3.92	74.30	55.21	39.98	35.19	10.37	PERK	VERTICAL	100	100

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 60 / Ant. A

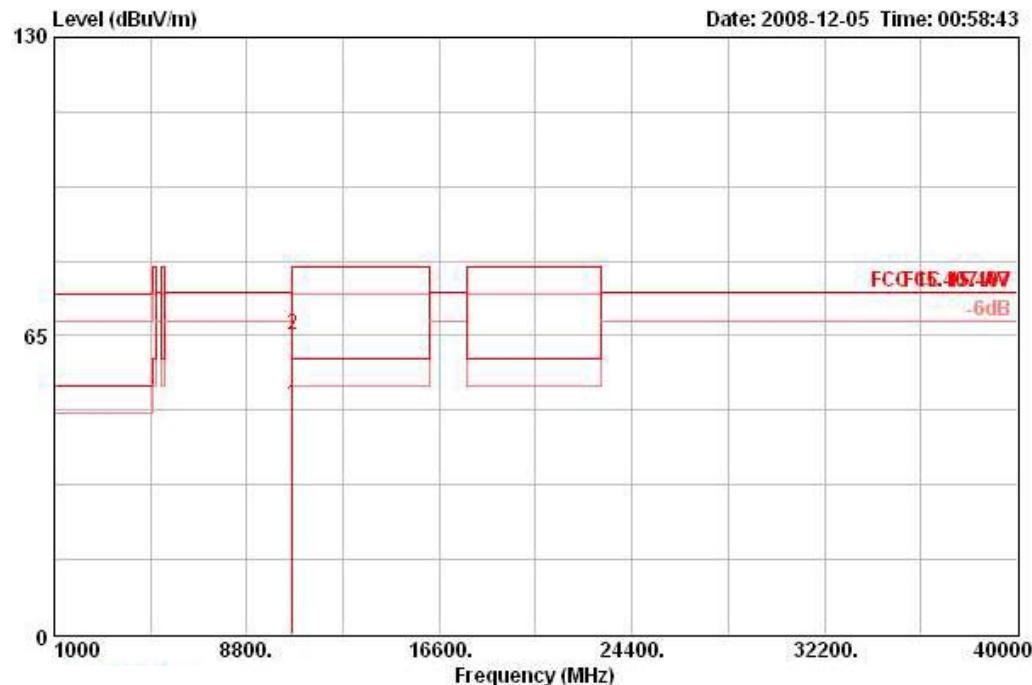
Horizontal


Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant
		Limit	Line	Level	Factor	Factor	Loss		
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm
10596.880	64.79	-9.51	74.30	49.66	39.90	35.12	10.36	PEAK	HORIZONTAL
10600.440	51.18	-8.82	60.00	36.05	39.90	35.12	10.36	AVERAGE	HORIZONTAL
10600.760	65.18	-14.82	80.00	50.05	39.90	35.12	10.35	PEAK	HORIZONTAL

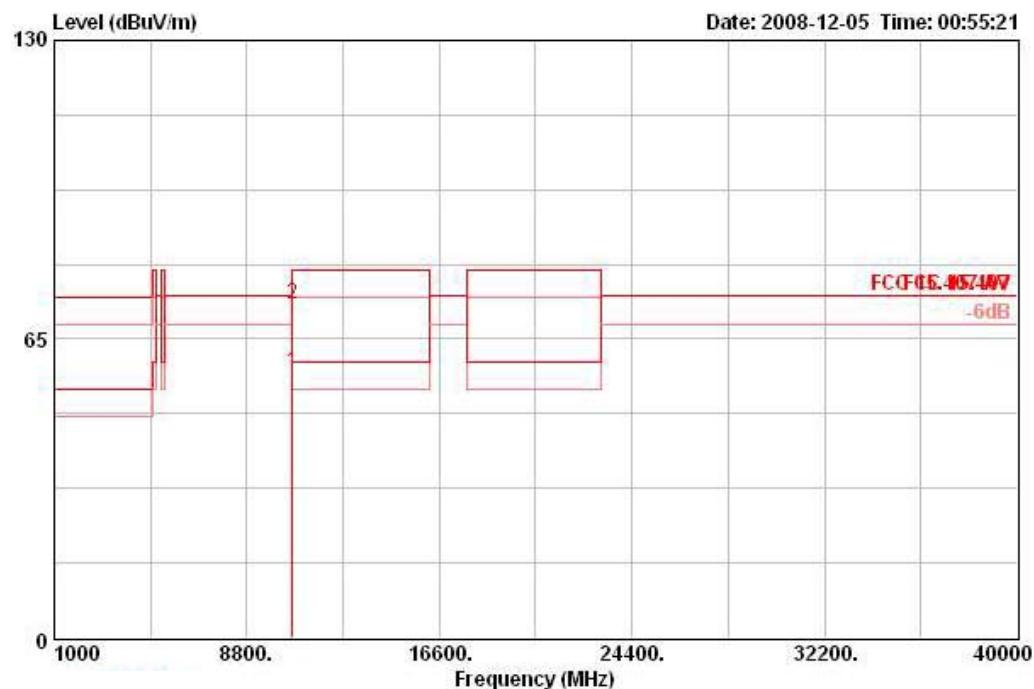
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1 !	10596.720	71.52	-2.78	74.30	56.38	39.90	35.12	10.36	PERK	VERTICAL	100	100	
2 !	10600.320	58.53	-1.47	60.00	43.40	39.90	35.12	10.36	AVERAGE	VERTICAL	100	100	
3	10600.880	71.46	-8.54	80.00	56.33	39.90	35.12	10.35	PERK	VERTICAL	100	100	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 64 / Ant. A

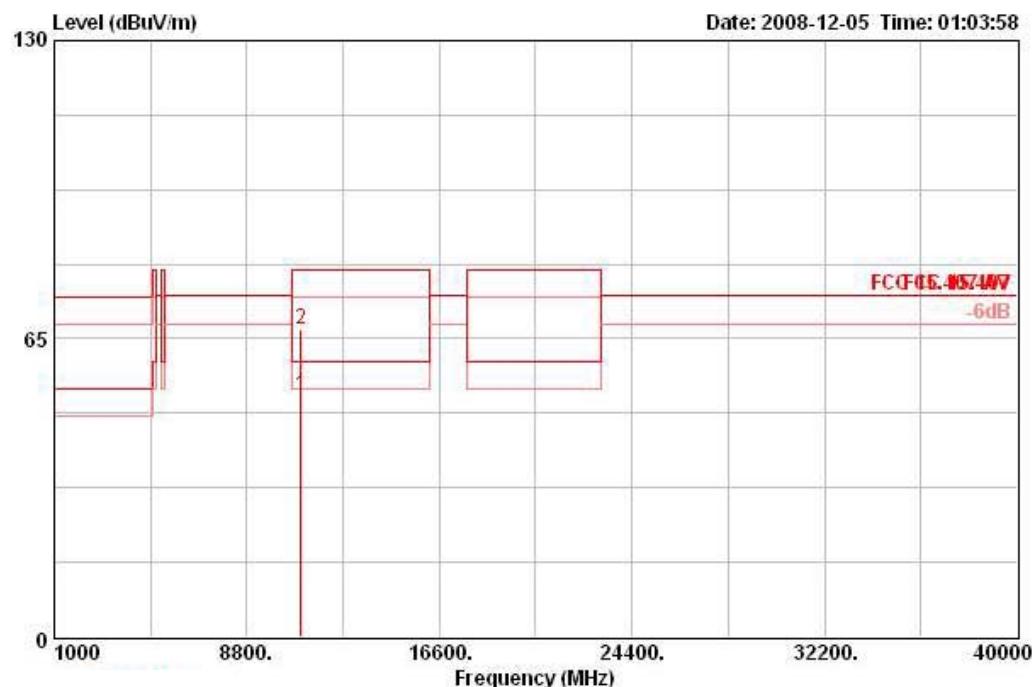
Horizontal


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1	10640.640	50.15	-9.85	60.00	35.03	39.86	35.09	10.35	RVERAGE	HORIZONTAL	275	109	
2	10643.000	65.10	-14.90	80.00	49.98	39.86	35.09	10.35	PERK	HORIZONTAL	275	109	

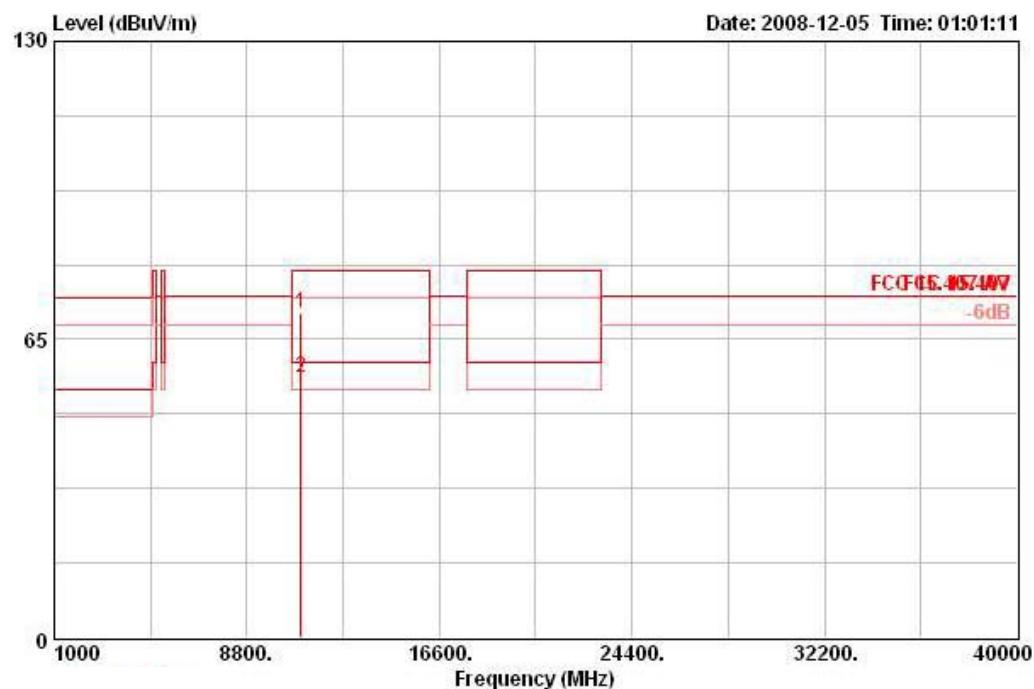
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1 !	10640.600	57.72	-2.28	60.00	42.60	39.86	35.09	10.35	AVERAGE	VERTICAL	98	100	
2	10642.920	72.47	-7.53	80.00	57.35	39.86	35.09	10.35	PERK	VERTICAL	98	100	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 100 / Ant. A

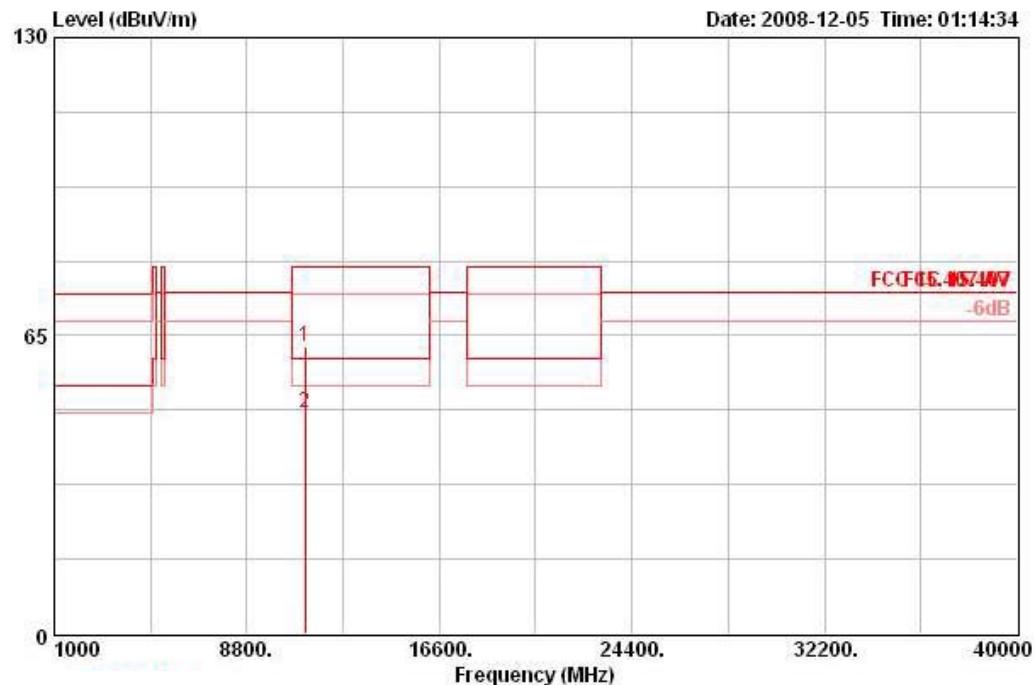
Horizontal


Freq	Level	Over Limit	Limit Line	Read		Antenna	Preamp	Cable	Table	Ant	
				Level	Factor						
	MHz	dBuV/m		dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm
1	11000.520	52.68	-7.32	60.00	37.70	39.50	34.80	10.28	AVERAGE	HORIZONTAL	177
2	11002.480	66.93	-13.07	80.00	51.95	39.50	34.80	10.28	PERK	HORIZONTAL	177

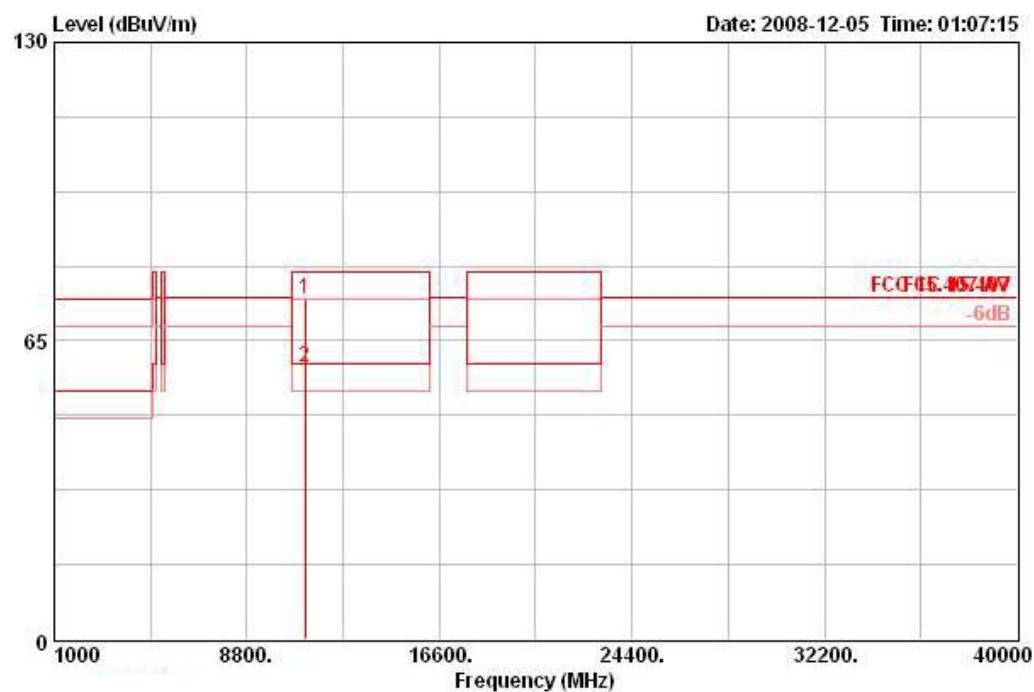
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable Loss		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1	11000.520	70.78	-9.22	80.00	55.80	39.50	34.80	10.28	PERK	VERTICAL	99	100	
2	11000.560	56.83	-3.17	60.00	41.85	39.50	34.80	10.28	AVERAGE	VERTICAL	99	100	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 116 / Ant. A

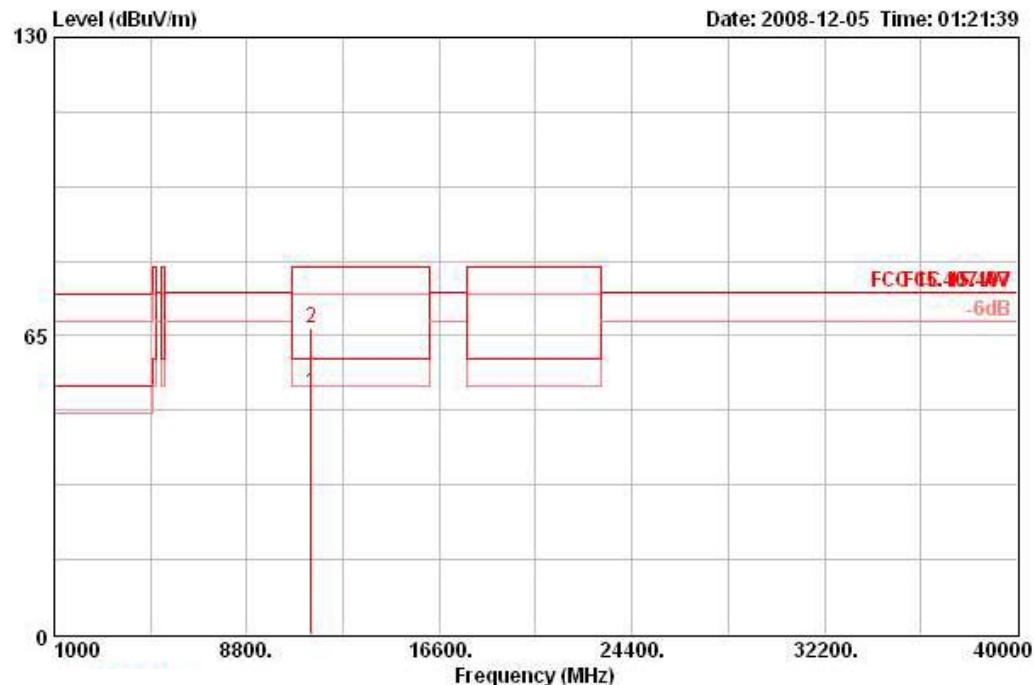
Horizontal


Freq	Level	Over Limit	Limit Line	Read		Antenna	Preamp	Cable	Table	Ant	
				Level	Factor						
	MHz	dBuV/m		dB	dBuV/m	dBuV	dB/m	dB	dB	deg	cm
1	11159.480	62.57	-17.43	80.00	47.49	39.50	34.90	10.48	PERK	HORIZONTAL	263 123
2	11160.480	48.05	-11.95	60.00	32.97	39.50	34.90	10.48	AVERAGE	HORIZONTAL	263 123

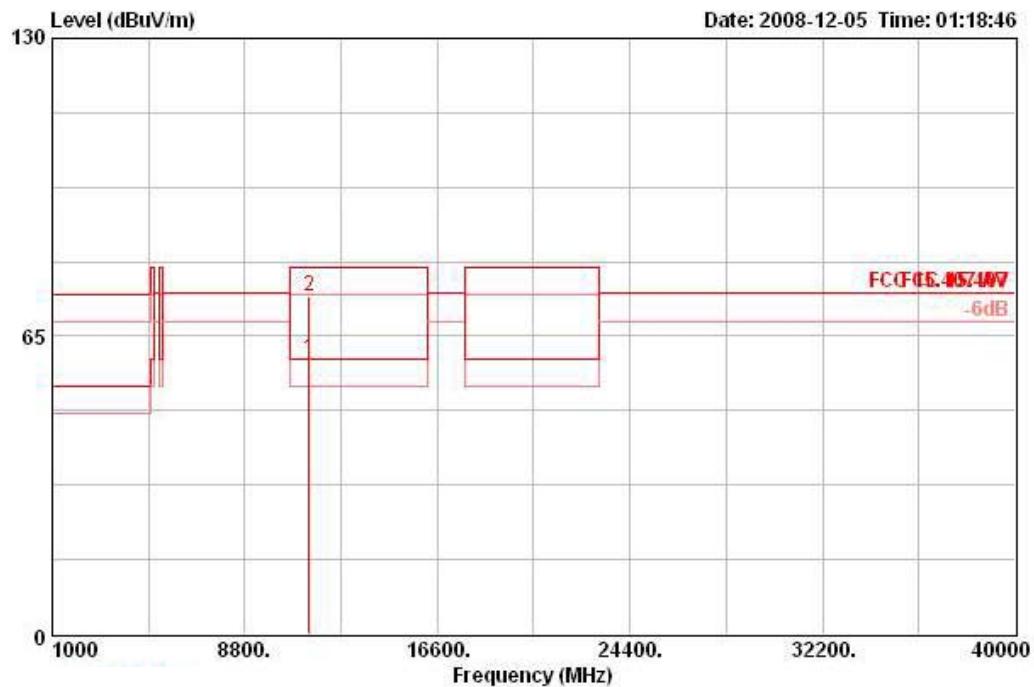
Vertical


Freq	Level	Over Limit		Read		Antenna Factor	Preamp Factor	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m	dB	dBuV/m			dBuV	dB/m	dB			
1 !	11155.880	74.20	-5.80	80.00	59.12	39.50	34.89	10.48	PERK	VERTICAL	169	112	
2 !	11160.440	59.20	-0.80	60.00	44.13	39.50	34.90	10.48	AVERAGE	VERTICAL	169	112	

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 140 / Ant. A

Horizontal


Freq	Level	Over Limit		Antenna	Preamp	Cable		Remark	Pol/Phase	Table Pos	Ant Pos
		MHz	dBuV/m			dB	dBuV/m				
1	11400.560	52.66	-7.34	60.00	37.40	39.50	35.04	10.80	AVERAGE	HORIZONTAL	261
2	11401.840	66.73	-13.27	80.00	51.47	39.50	35.04	10.80	PERK	HORIZONTAL	261

Vertical


Freq	Level	Over Limit	Limit Line	Read		Antenna Factor	Preamp Factor	Cable Loss	Remark	Pol/Phase	Table Pos	Ant Pos
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 !	11400.560	59.91	-0.09	60.00	44.65	39.50	35.04	10.80	AVERAGE	VERTICAL	170	112
2	11400.560	73.69	-6.31	80.00	58.43	39.50	35.04	10.80	PEAK	VERTICAL	170	112

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 from 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].

4.7. 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 (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (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.

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	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 36, 40 / Ant. A + Ant. C
Test Date	Dec. 05, 2008		

Channel 36

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant		
			Line	Level	Level	Factor	Factor	Loss				
			MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	deg	cm	
1 !	5150.000	56.01	-3.99	60.00	17.57	34.00	0.00	4.44	AVERAGE	VERTICAL	319	125
2	5150.000	67.90	-12.10	80.00	29.46	34.00	0.00	4.44	PERK	VERTICAL	319	125
3 @	5184.800	115.75			77.25	34.07	0.00	4.43	PERK	VERTICAL	319	125
4	5185.800	104.14			65.64	34.07	0.00	4.43	AVERAGE	VERTICAL	319	125

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

Channel 40

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant		
			Line	Level	Level	Factor	Factor	Loss				
			MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	deg	cm	
1 !	5118.800	69.50	-10.50	80.00	31.12	33.93	0.00	4.45	PERK	VERTICAL	320	125
2 !	5124.560	57.56	-2.44	60.00	19.14	33.97	0.00	4.45	AVERAGE	VERTICAL	320	125
3	5203.200	113.72			75.19	34.10	0.00	4.43	PERK	VERTICAL	320	125
4	5204.800	104.00			65.47	34.10	0.00	4.43	AVERAGE	VERTICAL	320	125

Item 3, 4 are the fundamental frequency at 5200 MHz.

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 60, 64 / Ant. A + Ant. C
Test Date	Dec. 05, 2008		

Channel 60

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1	5304.800	104.11			65.42	34.30	0.00	4.40	AVERAGE	VERTICAL	318	124
2 @	5306.400	115.78			77.09	34.30	0.00	4.40	PERK	VERTICAL	318	124
3	5377.200	72.07	-7.93	80.00	33.26	34.43	0.00	4.37	PERK	VERTICAL	318	124
4 !	5378.800	58.77	-1.23	60.00	19.93	34.47	0.00	4.37	AVERAGE	VERTICAL	318	124

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

Channel 64

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1	5316.600	103.95			65.22	34.33	0.00	4.40	AVERAGE	VERTICAL	318	124
2 @	5326.400	115.69			76.97	34.33	0.00	4.39	PERK	VERTICAL	318	124
3	5350.000	70.56	-9.44	80.00	31.78	34.40	0.00	4.38	PERK	VERTICAL	318	124
4 !	5354.000	56.87	-3.13	60.00	18.09	34.40	0.00	4.38	AVERAGE	VERTICAL	318	124

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 20MHz Ch 100, 120, 140 / Ant. A + Ant. C
Test Date	Dec. 05, 2008		

Channel 100

Freq	Level	Over Limit		Read			Antenna Factor	Preamp Factor	Cable		Table Pos	Ant Pos
		Line	Limit	dBuV	dB/m	dB			dB	dB		
1 !	5452.600	57.25	-2.75	60.00	18.30	34.60	0.00	4.35	AVERAGE	VERTICAL	332	100
2	5460.000	68.99	-11.01	80.00	30.04	34.60	0.00	4.35	PERK	VERTICAL	332	100
3 !	5470.000	69.74	-4.56	74.30	30.76	34.63	0.00	4.35	PERK	VERTICAL	332	100
4 @	5496.200	116.63			77.62	34.67	0.00	4.34	PERK	VERTICAL	332	100
5	5496.800	104.74			65.70	34.70	0.00	4.34	AVERAGE	VERTICAL	332	100

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

Channel 140

Freq	Level	Over Limit		Read			Antenna Factor	Preamp Factor	Cable		Table Pos	Ant Pos
		Line	Limit	dBuV	dB/m	dB			dB	dB		
1	5696.000	102.84			63.60	34.85	0.00	4.39	AVERAGE	VERTICAL	204	100
2	5701.400	113.99			74.73	34.87	0.00	4.39	PERK	VERTICAL	204	100
3 !	5725.000	69.85	-4.45	74.30	30.58	34.88	0.00	4.40	PERK	VERTICAL	204	100

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 38, 46 / Ant. A + Ant. C
Test Date	Dec. 05, 2008		

Channel 38

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 !	5117.200	56.72	-3.28	60.00	18.33	33.93	0.00	4.46	AVERAGE	VERTICAL	320	127
2	5124.000	70.21	-9.79	80.00	31.79	33.97	0.00	4.45	PERK	VERTICAL	320	127
3	5197.200	101.55			63.02	34.10	0.00	4.43	AVERAGE	VERTICAL	320	127
4	5198.400	113.89			75.36	34.10	0.00	4.43	PERK	VERTICAL	320	127

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

Channel 46

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1	5139.600	69.36	-10.64	80.00	30.91	34.00	0.00	4.45	PERK	VERTICAL	319	127
2 !	5145.200	56.73	-3.27	60.00	18.29	34.00	0.00	4.44	AVERAGE	VERTICAL	319	127
3	5220.000	112.18			73.62	34.13	0.00	4.43	PERK	VERTICAL	319	127
4	5220.400	101.47			62.92	34.13	0.00	4.42	AVERAGE	VERTICAL	319	127

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 54, 62 / Ant. A + Ant. C
Test Date	Dec. 05, 2008		

Channel 54

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1	5260.000	113.52			74.87	34.23	0.00	4.41	PERK	VERTICAL	319	125
2	5276.800	102.23			63.56	34.27	0.00	4.40	AVERAGE	VERTICAL	319	125
3	5352.000	70.78	-9.22	80.00	32.00	34.40	0.00	4.38	PERK	VERTICAL	319	125
4 !	5353.200	58.57	-1.43	60.00	19.79	34.40	0.00	4.38	AVERAGE	VERTICAL	319	125

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

Channel 62

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1	5299.600	100.78			62.08	34.30	0.00	4.40	AVERAGE	VERTICAL	321	122
2	5300.400	113.33			74.63	34.30	0.00	4.40	PERK	VERTICAL	321	122
3 !	5379.200	58.17	-1.83	60.00	19.33	34.47	0.00	4.37	AVERAGE	VERTICAL	321	122
4	5403.600	71.78	-8.22	80.00	32.92	34.50	0.00	4.36	PERK	VERTICAL	321	122

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	Draft n MCS8 40MHz Ch 102, 110, 134 / Ant. A + Ant. C
Test Date	Dec. 05, 2008		

Channel 102

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant	
			Line	Level	Factor	Factor	Loss	Remark			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1	5415.200	71.61	-8.39	80.00	32.71	34.53	0.00	4.36 PERK	VERTICAL	336	100
2 !	5418.800	59.68	-0.32	60.00	20.78	34.53	0.00	4.36 AVERAGE	VERTICAL	336	100
3 !	5470.000	69.76	-4.54	74.30	30.78	34.63	0.00	4.35 PERK	VERTICAL	336	100
4	5498.000	112.23			73.19	34.70	0.00	4.34 PERK	VERTICAL	336	100
5	5499.600	101.54			62.50	34.70	0.00	4.34 AVERAGE	VERTICAL	336	100

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

Channel 110

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant	
			Line	Level	Factor	Factor	Loss	Remark			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1	5458.800	71.40	-8.60	80.00	32.45	34.60	0.00	4.35 PERK	VERTICAL	333	104
2 !	5459.600	59.23	-0.77	60.00	20.28	34.60	0.00	4.35 AVERAGE	VERTICAL	333	104
3 !	5470.000	69.98	-4.32	74.30	31.00	34.63	0.00	4.35 PERK	VERTICAL	333	104
4	5539.200	102.30			63.22	34.73	0.00	4.35 AVERAGE	VERTICAL	333	104
5	5546.800	112.56			73.48	34.73	0.00	4.35 PERK	VERTICAL	333	104

Item 4, 5 are the fundamental frequency at 5550 MHz.

Channel 134

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Ant	
			Line	Level	Factor	Factor	Loss	Remark			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm
1	5674.800	110.19			70.97	34.84	0.00	4.39 PERK	VERTICAL	327	124
2	5676.000	98.85			59.63	34.84	0.00	4.39 AVERAGE	VERTICAL	327	124
3 !	5725.000	68.59	-5.71	74.30	29.31	34.88	0.00	4.40 PERK	VERTICAL	327	124

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 from 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].

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 36, 40 / Ant. A
Test Date	Dec. 05, 2008		

Channel 36

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
			Limit	Line	Level	Factor	Factor	Loss				
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 !	5150.000	55.72	-4.28	60.00	17.28	34.00	0.00	4.44	AVERAGE	VERTICAL	320	100
2	5150.000	68.27	-11.73	80.00	29.83	34.00	0.00	4.44	PERK	VERTICAL	320	100
3	5176.800	113.68			75.17	34.07	0.00	4.43	PERK	VERTICAL	320	100
4	5185.400	102.92			64.42	34.07	0.00	4.43	AVERAGE	VERTICAL	320	100

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

Channel 40

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table	Pos	Ant	
			Limit	Line	Level	Factor	Factor	Loss				
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1	5117.600	69.00	-11.00	80.00	30.61	33.93	0.00	4.46	PERK	VERTICAL	320	126
2 !	5123.600	56.83	-3.17	60.00	18.41	33.97	0.00	4.45	AVERAGE	VERTICAL	320	126
3	5193.200	113.33			74.80	34.10	0.00	4.43	PERK	VERTICAL	320	126
4	5196.800	103.36			64.84	34.10	0.00	4.43	AVERAGE	VERTICAL	320	126

Item 3, 4 are the fundamental frequency at 5200 MHz.

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 60, 64 / Ant. A
Test Date	Dec. 05, 2008		

Channel 60

Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table Pos	Ant Pos		
		Line	Level	Factor	Factor	Loss	Remark				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 @	5301.600	114.31		75.62	34.30	0.00	4.40 PERK	VERTICAL	318	124	
2	5303.200	103.77		65.07	34.30	0.00	4.40 AVERAGE	VERTICAL	318	124	
3	5375.200	70.42	-9.58	80.00	31.61	34.43	0.00	4.37 PERK	VERTICAL	318	124
4 !	5376.680	58.29	-1.71	60.00	19.49	34.43	0.00	4.37 AVERAGE	VERTICAL	318	124

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

Channel 64

Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Table Pos	Ant Pos		
		Line	Level	Factor	Factor	Loss	Remark				
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		deg	cm	
1 @	5317.000	114.31		75.58	34.33	0.00	4.40 PERK	VERTICAL	323	124	
2	5326.200	103.69		64.97	34.33	0.00	4.39 AVERAGE	VERTICAL	323	124	
3 !	5354.200	56.82	-3.18	60.00	18.04	34.40	0.00	4.38 AVERAGE	VERTICAL	323	124
4	5354.400	71.40	-8.60	80.00	32.62	34.40	0.00	4.38 PERK	VERTICAL	323	124

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

Temperature	25.6°C	Humidity	56%
Test Engineer	Johnson Chang	Configurations	802.11a Ch 100, 140 / Ant. A
Test Date	Dec. 05, 2008		

Channel 100

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			deg	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1 !	5460.000	56.68	-3.32	60.00	17.73	34.60	0.00	4.35	AVERAGE	VERTICAL	334	100
2	5460.000	69.27	-10.73	80.00	30.32	34.60	0.00	4.35	PERK	VERTICAL	334	100
3 !	5470.000	69.09	-5.21	74.30	30.11	34.63	0.00	4.35	PERK	VERTICAL	334	100
4 @	5496.800	114.35			75.31	34.70	0.00	4.34	PERK	VERTICAL	334	100
5	5498.600	103.64			64.60	34.70	0.00	4.34	AVERAGE	VERTICAL	334	100

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

Channel 140

	Freq	Level	Over	Limit	Read	Antenna	Preamp	Cable	Remark	Pol/Phase	Table	Ant
			Limit	Line	Level	Factor	Factor	Loss			deg	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	cm
1	5695.800	103.58			64.34	34.85	0.00	4.39	AVERAGE	VERTICAL	331	118
2 @	5696.000	114.04			74.79	34.85	0.00	4.39	PERK	VERTICAL	331	118
3 !	5725.000	70.09	-4.21	74.30	30.82	34.88	0.00	4.40	PERK	VERTICAL	331	118

Item 1, 2 are the fundamental frequency at 5700 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 from 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].

4.8. 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 $\pm 20\text{ppm}$ (Draft n specification).

4.8.2. Measuring Instruments and Setting

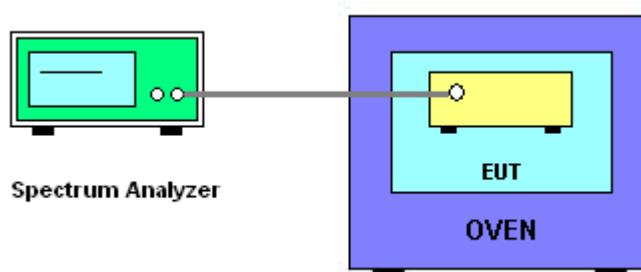
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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 $(fc-f)/fc \times 10^6 \text{ ppm}$ and the limit is less than $\pm 20\text{ppm}$ (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 $-30^\circ\text{C} \sim 50^\circ\text{C}$.
8. Measuring multiple antennas, the connector is required to link with spectrum analyzer through a combiner.

4.8.4. Test Setup Layout



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	5260.007200
110.00	5260.003600
93.50	5259.999400
Max. Deviation (MHz)	0.007200
Max. Deviation (ppm)	1.37

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5260
-30	5260.059600
-20	5260.051000
-10	5260.043200
0	5260.035400
10	5260.025200
20	5260.013200
30	5260.008400
40	5259.997600
50	5259.992800
Max. Deviation (MHz)	0.059600
Max. Deviation (ppm)	11.33

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.

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	Mar. 03, 2008	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2008	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2008	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2008	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN ST08	21653	9kHz – 30MHz	Mar. 27, 2008	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, 2008	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	Jul. 21, 2008	Radiation (03CH03-HY)
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5 GHz - 40 GHz	Jan. 22, 2007*	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP30	100023	9 kHz - 30 GHz	Jan. 10, 2008	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	Jul. 28, 2008*	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz – 1 GHz	Jul. 12, 2008	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	Apr. 04, 2008	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, 2008	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec. 03, 2008	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	Jul. 11, 2008	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100458	DC ~ 30GHz	Jul. 11, 2008	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jul. 11, 2008	Conducted (TH01-HY)
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	May 30, 2008*	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 13, 2008	Conducted (TH01-HY)
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-001	N/A	Jul. 18, 2008	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 01, 2008	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 01, 2008	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Dec. 14, 2008	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 10, 2008	Conducted (TH01-HY)
Oscilloscope	Tektonix	TDS380	B016197	400MHz/ 2GS/s	Jun. 27, 2008	Conducted (TH01-HY)

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

* Calibration Interval of instruments listed above is two year.

6. TEST LOCATION

SHIJR	ADD : 6Fl., 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 : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. TEL : 886-2-8227-2020 FAX : 886-2-8227-2626
NEIHU	ADD : 4Fl., 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

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

Sportun 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
Specific Accreditation Program	:	Accreditation Program for Designated Testing Laboratory for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory



Jay-San Chen
President, Taiwan Accreditation Foundation
Date : January 10, 2007

PI, total 9 pages

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