

06/09/03 High Frequency Measurement
 Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: VIEN TRAN
 Project #: 0311880-1
 Company: Alvarion
 EUT Descrip.: Alvarion 902-928MHz DTS Device w/ 6dBi OMNI
 EUT M/N: TBD
 Test Target: FCC15.247
 Mode Oper: Constant Tx_Low ch

Test Equipment:

EMCO Horn 1-18GHz T60; S/N: 2238 @3m	Pre-amplifier 1-26GHz Miteq NSP2600-44	Spectrum Analyzer 8593EM Analyzer	Horn > 18GHz
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Hi Frequency Cables

(2 ft)
 (2 ~ 3 ft)
 (4 ~ 6 ft)
 (12 ft)

Peak Measurements: 1 MHz Resolution Bandwidth
 1MHz Video Bandwidth

Average Measurements: 1 MHz Resolution Bandwidth
 10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
0.904				1.0	0.8	-1.5		1.0			#N/A	#N/A			V
1.808	9.8	55.2	46.4	27.9	1.5	-36.4	0.0	1.0	49.3	40.5	74.0	54.0	-24.7	-13.5	V, 2nd Har
2.712	9.8	46.4	32.4	30.1	2.3	-36.3	0.0	1.0	43.5	29.6	74.0	54.0	-30.5	-24.4	V
3.616	9.8	44.2	31.3	31.9	2.9	-36.2	0.0	1.0	43.7	30.8	74.0	54.0	-30.3	-23.2	V
4.520	9.8	44.6	31.7	32.9	3.3	-36.1	0.0	1.0	45.7	32.8	74.0	54.0	-28.3	-21.2	V
5.424	9.8	43.1	31.1	33.8	3.7	-36.1	0.0	1.0	45.3	33.4	74.0	54.0	-28.7	-20.6	V
6.328	9.8	43.8	31.8	34.9	4.1	-36.3	0.0	1.0	47.4	35.5	74.0	54.0	-26.6	-18.5	V
7.232	9.8	44.1	32.5	36.1	4.4	-36.3	0.0	1.0	49.3	37.6	74.0	54.0	-24.7	-16.4	V
8.136	9.8	42.3	30.8	37.3	4.7	-35.8	0.0	1.0	49.5	38.0	74.0	54.0	-24.5	-16.0	V
9.040	9.8	41.3	30.0	38.8	5.1	-35.3	0.0	1.0	50.8	39.6	74.0	54.0	-23.2	-14.4	V
1.808	9.8	50.3	41.3	27.9	1.5	-36.4	0.0	1.0	44.3	35.3	74.0	54.0	-29.7	-18.7	H, 2nd har.
2.712	9.8	45.7	32.7	30.1	2.3	-36.3	0.0	1.0	42.9	29.9	74.0	54.0	-31.1	-24.1	H
3.616	9.8	43.4	31.0	31.9	2.9	-36.2	0.0	1.0	43.0	30.5	74.0	54.0	-31.0	-23.5	H
4.520	9.8	42.7	31.6	32.9	3.3	-36.1	0.0	1.0	43.8	32.7	74.0	54.0	-30.2	-21.3	H
5.424	9.8	44.6	32.6	33.8	3.7	-36.1	0.0	1.0	46.9	34.9	74.0	54.0	-27.1	-19.1	H
6.328	9.8	42.9	31.2	34.9	4.1	-36.3	0.0	1.0	46.5	34.8	74.0	54.0	-27.5	-19.2	H
7.232	9.8	44.7	32.4	36.1	4.4	-36.3	0.0	1.0	49.8	37.6	74.0	54.0	-24.2	-16.4	H
8.136	9.8	42.6	31.1	37.3	4.7	-35.8	0.0	1.0	49.9	38.3	74.0	54.0	-24.1	-15.7	H
9.040	9.8	42.5	30.3	38.8	5.1	-35.3	0.0	1.0	52.0	39.8	74.0	54.0	-22.0	-14.2	H

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

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 1MHz Video Bandwidth

Average Measurements: 1 MHz Resolution Bandwidth
 10Hz Video Bandwidth

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
0.915				3.6	0.8	-5.5		1.0			#N/A	#N/A			V
1.830	9.8	56.6	48.9	28.1	1.6	-36.4	0.0	1.0	50.8	43.1	74.0	54.0	-23.2	-10.9	V, 2nd Har
2.745	9.8	47.4	34.9	30.2	2.4	-36.3	0.0	1.0	44.6	32.1	74.0	54.0	-29.4	-21.9	V
3.660	9.8	55.1	40.0	31.9	2.9	-36.2	0.0	1.0	54.7	39.6	74.0	54.0	-19.3	-14.4	V
4.575	9.8	56.4	42.6	33.0	3.3	-36.1	0.0	1.0	57.6	43.8	74.0	54.0	-16.4	-10.2	V
5.490	9.8	44.5	31.6	33.8	3.7	-36.2	0.0	1.0	46.9	34.0	74.0	54.0	-27.1	-20.0	V
6.405	9.8	43.8	31.8	35.0	4.1	-36.3	0.0	1.0	47.5	35.6	74.0	54.0	-26.5	-18.4	V
7.320	9.8	44.5	32.1	36.2	4.4	-36.3	0.0	1.0	49.8	37.5	74.0	54.0	-24.2	-16.5	V
8.235	9.8	42.7	30.6	37.5	4.8	-35.7	0.0	1.0	50.2	38.1	74.0	54.0	-23.8	-15.9	V
9.150	9.8	42.2	30.4	38.8	5.1	-35.3	0.0	1.0	51.7	39.9	74.0	54.0	-22.3	-14.1	V
1.830	9.8	52.5	44.5	28.1	1.6	-36.4	0.0	1.0	46.7	38.6	74.0	54.0	-27.3	-15.4	H, 2nd har.
2.745	9.8	46.0	32.4	30.2	2.4	-36.3	0.0	1.0	43.3	29.7	74.0	54.0	-30.7	-24.3	H
3.660	9.8	45.4	32.9	31.9	2.9	-36.2	0.0	1.0	45.1	32.5	74.0	54.0	-28.9	-21.5	H
4.575	9.8	46.5	32.8	33.0	3.3	-36.1	0.0	1.0	47.7	34.0	74.0	54.0	-26.3	-20.0	H
5.490	9.8	42.9	31.7	33.8	3.7	-36.2	0.0	1.0	45.2	34.1	74.0	54.0	-28.8	-19.9	H
6.405	9.8	44.2	32.2	35.0	4.1	-36.3	0.0	1.0	47.9	36.0	74.0	54.0	-26.1	-18.0	H
7.320	9.8	44.1	32.1	36.2	4.4	-36.3	0.0	1.0	49.5	37.5	74.0	54.0	-24.5	-16.5	H
8.235	9.8	41.7	30.5	37.5	4.8	-35.7	0.0	1.0	49.1	38.0	74.0	54.0	-24.9	-16.0	H
9.150	9.8	42.7	30.2	38.8	5.1	-35.3	0.0	1.0	52.2	39.7	74.0	54.0	-21.8	-14.3	H

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