

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

Test Engr: Thanh Nguyen
 Project #: 03U1919
 Company: ALVARION
 EUT Descr.: SU-I-900
 EUT M/N: SU-I-900 FCC ID LKT-ASU-900
 Test Target: FCC Part 15.247
 Mode Oper: Transmit 904MHz, Low Channel.

Test Equipment:

EMCO Horn 1-18GHz	Pre-amplifier 1-26GHz	Spectrum Analyzer	Horn > 18GHz
173; S/N: 6717 @3m	Miteq NSP2600-44	8593EM Analyzer	

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																														
2.719	9.8	44.2	31.4	30.0	1.8	-36.3	0.0	1.0	40.7	27.8	74.0	54.0	-33.3	-26.2	Noise Floor																														
3.616	9.8	63.2	49.0	31.8	2.4	-36.2	0.0	1.0	62.2	48.0	74.0	54.0	-11.8	-6.0	V																														
4.520	9.8	58.1	44.1	33.1	3.0	-36.1	0.0	1.0	59.0	45.1	74.0	54.0	-15.0	-8.9	V																														
5.428	9.8	44.6	30.8	33.9	3.6	-36.1	0.0	1.0	46.9	33.1	74.0	54.0	-27.1	-20.9	V																														
3.616	9.8	50.9	36.7	31.8	2.4	-36.2	0.0	1.0	49.9	35.7	74.0	54.0	-24.1	-18.3	H																														
4.520	9.8	43.9	30.8	33.1	3.0	-36.1	0.0	1.0	44.8	31.7	74.0	54.0	-29.2	-22.3	Noise Flor																														
No more noise signal above the system noise floor up to 9.28GHz																																													
<table border="0"> <tr> <td>f</td> <td>Measurement Frequency</td> <td>Amp</td> <td>Preamp Gain</td> <td>Avg Lim</td> <td>Average Field Strength Limit</td> </tr> <tr> <td>Dist</td> <td>Distance to Antenna</td> <td>D Corr</td> <td>Distance Correct to 3 meters</td> <td>Pk Lim</td> <td>Peak Field Strength Limit</td> </tr> <tr> <td>Read</td> <td>Analyzer Reading</td> <td>Avg</td> <td>Average Field Strength @ 3 m</td> <td>Avg Mar</td> <td>Margin vs. Average Limit</td> </tr> <tr> <td>AF</td> <td>Antenna Factor</td> <td>Peak</td> <td>Calculated Peak Field Strength</td> <td>Pk Mar</td> <td>Margin vs. Peak Limit</td> </tr> <tr> <td>CL</td> <td>Cable Loss</td> <td>HPF</td> <td>High Pass Filter</td> <td></td> <td></td> </tr> </table>																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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 EUT M/N: SU-I-900 FCC ID LKT-ASU-900
 Test Target: FCC Part 15.247
 Mode Oper: Transmit at High Channel 926MHz

Test Equipment:

EMCO Horn 1-18GHz	Pre-amplifier 1-26GHz	Spectrum Analyzer	Horn > 18GHz
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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	
2.778	9.8	45.0	33.5	30.1	1.8	-36.3	0.0	1.0	41.7	30.1	74.0	54.0	-32.3	-23.9	V	
3.660	9.8	64.7	50.8	31.9	2.4	-36.2	0.0	1.0	63.9	49.9	74.0	54.0	-10.1	-4.1	V	
4.630	9.8	53.9	40.1	33.2	3.1	-36.1	0.0	1.0	55.0	41.2	74.0	54.0	-19.0	-12.8	V	
5.556	9.8	42.1	31.2	34.0	3.7	-36.2	0.0	1.0	44.6	33.7	74.0	54.0	-29.4	-20.3	V	
3.704	9.8	55.0	42.2	32.0	2.5	-36.2	0.0	1.0	54.3	41.4	74.0	54.0	-19.7	-12.6	H	
4.630	9.8	46.6	34.5	33.2	3.1	-36.1	0.0	1.0	47.8	35.6	74.0	54.0	-26.2	-18.4	H	
5.556	9.8	43.2	30.9	34.0	3.7	-36.2	0.0	1.0	45.6	33.3	74.0	54.0	-28.4	-20.7	Noise Floor	
No more noise signal above the system noise floor up to 9.28GHz																
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			
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CL	Cable Loss					HPF	High Pass Filter									

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 Mode Oper: Transmit at MID Channel 915MHz

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3.660	9.8	59.3	46.9	31.9	2.4	-36.2	0.0	1.0	58.4	46.0	74.0	54.0	-15.6	-8.0	V	
4.575	9.8	56.1	42.5	33.1	3.1	-36.1	0.0	1.0	57.1	43.5	74.0	54.0	-16.9	-10.5	V	
5.490	9.8	42.1	31.2	33.9	3.7	-36.2	0.0	1.0	44.5	33.6	74.0	54.0	-29.5	-20.4	V	
3.660	9.8	43.4	31.7	31.9	2.4	-36.2	0.0	1.0	42.5	30.9	74.0	54.0	-31.5	-23.1	H	
4.575	9.8	50.2	36.9	33.1	3.1	-36.1	0.0	1.0	51.2	38.0	74.0	54.0	-22.8	-16.0	H	
5.490	9.8	40.7	30.6	33.9	3.7	-36.2	0.0	1.0	43.1	33.0	74.0	54.0	-30.9	-21.0	Noise Floor	
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