

































Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Voltage						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.4	25	-0.001053	± 2.5	PASS
		3.85	25	-0.000826	± 2.5	PASS
		4.5	25	0.001303	± 2.5	PASS
	MCH	3.4	25	-0.000749	± 2.5	PASS
		3.85	25	0.000383	± 2.5	PASS
		4.5	25	-0.003769	± 2.5	PASS
	HCH	3.4	25	0.000827	± 2.5	PASS
		3.85	25	-0.000846	± 2.5	PASS
		4.5	25	-0.001026	± 2.5	PASS
16QAM	LCH	3.4	25	0.001937	± 2.5	PASS
		3.85	25	-0.000745	± 2.5	PASS
		4.5	25	-0.000704	± 2.5	PASS
	MCH	3.4	25	-0.000871	± 2.5	PASS
		3.85	25	-0.000040	± 2.5	PASS
		4.5	25	-0.000445	± 2.5	PASS
	HCH	3.4	25	-0.001903	± 2.5	PASS
		3.85	25	0.002317	± 2.5	PASS
		4.5	25	-0.000927	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.85	-30	0.003163	± 2.5	PASS
		3.85	-20	-0.000604	± 2.5	PASS
		3.85	-10	0.000581	± 2.5	PASS
		3.85	0	-0.005674	± 2.5	PASS
		3.85	10	-0.003108	± 2.5	PASS
		3.85	20	-0.000421	± 2.5	PASS
		3.85	30	-0.000526	± 2.5	PASS
		3.85	40	-0.001093	± 2.5	PASS
	MCH	3.85	50	-0.001762	± 2.5	PASS
		3.85	-30	-0.002389	± 2.5	PASS
		3.85	-20	-0.001209	± 2.5	PASS
		3.85	-10	0.002921	± 2.5	PASS
		3.85	0	0.001894	± 2.5	PASS
		3.85	10	0.001350	± 2.5	PASS
		3.85	20	0.000401	± 2.5	PASS
3.85	30	-0.001885	± 2.5	PASS		

		3.85	40	0.000942	± 2.5	PASS
		3.85	50	-0.004712	± 2.5	PASS
	HCH	3.85	-30	0.001856	± 2.5	PASS
		3.85	-20	0.001150	± 2.5	PASS
		3.85	-10	0.001574	± 2.5	PASS
		3.85	0	-0.001453	± 2.5	PASS
		3.85	10	-0.000343	± 2.5	PASS
		3.85	20	-0.001310	± 2.5	PASS
		3.85	30	0.000020	± 2.5	PASS
		3.85	40	-0.000564	± 2.5	PASS
		3.85	50	0.000080	± 2.5	PASS
16QAM		LCH	3.85	-30	-0.000161	± 2.5
	3.85		-20	-0.003586	± 2.5	PASS
	3.85		-10	-0.000081	± 2.5	PASS
	3.85		0	-0.000121	± 2.5	PASS
	3.85		10	-0.000543	± 2.5	PASS
	3.85		20	-0.001710	± 2.5	PASS
	3.85		30	-0.001247	± 2.5	PASS
	3.85		40	-0.000825	± 2.5	PASS
	3.85		50	-0.000486	± 2.5	PASS
	MCH		3.85	-30	-0.001066	± 2.5
		3.85	-20	-0.001247	± 2.5	PASS
		3.85	-10	-0.000201	± 2.5	PASS
		3.85	0	-0.002092	± 2.5	PASS
		3.85	10	0.000377	± 2.5	PASS
		3.85	20	0.000423	± 2.5	PASS
		3.85	30	0.000242	± 2.5	PASS
		3.85	40	-0.000322	± 2.5	PASS
		3.85	50	0.002015	± 2.5	PASS
		HCH	3.85	-30	0.000242	± 2.5
	3.85		-20	0.001917	± 2.5	PASS
	3.85		-10	0.000646	± 2.5	PASS
	3.85		0	0.001251	± 2.5	PASS
	3.85		10	-0.000947	± 2.5	PASS
	3.85		20	0.001223	± 2.5	PASS
	3.85		30	-0.000140	± 2.5	PASS
	3.85		40	0.000180	± 2.5	PASS
	3.85		50	0.000040	± 2.5	PASS

Note: All bandwidth and modulation are tested, only the worst result is reported.

Appendix G :Field Strength of Spurious Radiation Measurement Test Result

Bandwidth:	5M		Test channel:	Lowest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1413.0	Vertical	-35.17	-13.00	PASS
2119.5	V	-45.56		
-	V	-		
1413.0	Horizontal	-34.34		
2119.5	H	-46.08		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1420.0	Vertical	-35.79	-13.00	PASS
2130.0	V	-43.65		
-	V	-		
1420.0	Horizontal	-34.27		
2130.0	H	-45.43		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1427.0	Vertical	-33.75	-13.00	PASS
2140.5	V	-45.29		
-	V	-		
1427.0	Horizontal	-32.33		
2140.5	H	-45.84		
-	H	-		

Bandwidth:	5M		Test channel:	Lowest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1413.0	Vertical	-35.04	-13.00	PASS
2119.5	V	-45.58		
-	V	-		
1413.0	Horizontal	-34.96		
2119.5	H	-46.47		
-	H	-		
Bandwidth:	5M		Test channel:	Middle
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1420.0	Vertical	-33.03	-13.00	PASS
2130.0	V	-42.21		
-	V	-		
1420.0	Horizontal	-35.80		
2130.0	H	-46.97		
-	H	-		
Bandwidth:	5M		Test channel:	Highest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1427.0	Vertical	-34.40	-13.00	PASS
2140.5	V	-46.85		
-	V	-		
1427.0	Horizontal	-33.04		
2140.5	H	-45.52		
-	H	-		

Note: All bandwidth and modulation are tested, only the worst result is reported.