

EXHIBIT # 19

FCC Requirements CFR 47 Part 2.1033,c (14)

Data Package

JXB24X4P-08T

Devices Under Test

24 GHz B1 Low T1

Part Number: 860-202241-011

Serial Number: ARU0024637

Range: 24.255 – 24.445 GHz

Power Measurements

TEMP -33C

		ARU0018225	
Channel	Frequency (MHz)*	Maximum Power (dBm)	Mute (dBm)
Low	24255.00	22.40	< -40
Mid	24355.00	21.52	< -40
High	24455.00	21.90	< -40

TEMP +30C

		ARU0018225	
Channel	Frequency (MHz)*	Maximum Power (dBm)	Mute (dBm)
Low	24255.00	22.14	< -40
Mid	24355.00	22.16	< -40
High	24455.00	22.46	< -40

TEMP +55c

		ARU0018225	
Channel	Frequency (MHz)*	Maximum Power (dBm)	Mute (dBm)
Low	24255.00	20.28	< -40
Mid	24355.00	20.87	< -40
High	24455.00	21.34	< -40

**Transmitter Frequency Stability
24 GHz T1 4X/ARU0024637**

Temp (c)	VDC	Channel	Frequency Setting	Frequency Actual	PPM
55	21.6	Low	24252.50	24252.463	1.52
55	21.6	Mid	24347.50	24347.467	1.35
55	21.6	High	24447.50	24447.467	1.34
55	72.0	Low	24252.50	24252.463	1.52
55	72.0	Mid	24347.50	24347.467	1.35
55	72.0	High	24447.50	24447.467	1.34
50	21.6	Low	24252.50	24252.469	1.27
50	21.6	Mid	24347.50	24347.473	1.11
50	21.6	High	24447.50	24447.473	1.10
50	72.0	Low	24252.50	24252.469	1.27
50	72.0	Mid	24347.50	24347.473	1.11
50	72.0	High	24447.50	24447.473	1.10
40	21.6	Low	24252.50	24252.498	0.08
40	21.6	Mid	24347.50	24347.502	0.08
40	21.6	High	24447.50	24447.502	0.08
40	72.0	Low	24252.50	24252.498	0.08
40	72.0	Mid	24347.50	24347.502	0.08
40	72.0	High	24447.50	24447.502	0.08
30	21.6	Low	24252.50	24252.520	0.02
30	21.6	Mid	24347.50	24347.525	1.03
30	21.6	High	24447.50	24447.525	1.02
30	72.0	Low	24252.50	24252.520	0.02
30	72.0	Mid	24347.50	24347.525	1.03
30	72.0	High	24447.50	24447.525	1.02
20	21.6	Low	24252.50	24252.533	1.36
20	21.6	Mid	24347.50	24347.538	1.56
20	21.6	High	24447.50	24447.538	1.55
20	72.0	Low	24252.50	24252.533	1.36
20	72.0	Mid	24347.50	24347.538	1.56
20	72.0	High	24447.50	24447.538	1.55
10	21.6	Low	24252.50	24252.536	1.48
10	21.6	Mid	24347.50	24347.540	1.64
10	21.6	High	24447.50	24447.540	1.63
10	72.0	Low	24252.50	24252.536	1.48
10	72.0	Mid	24347.50	24347.540	1.64
10	72.0	High	24447.50	24447.540	1.63
0	21.6	Low	24252.50	24252.527	1.11
0	21.6	Mid	24347.50	24347.532	1.31
0	21.6	High	24447.50	24447.532	1.30
0	72.0	Low	24252.50	24252.527	1.11
0	72.0	Mid	24347.50	24347.532	1.31

-33	72.0	Low	24255.00	24255.001	0.04
-33	72.0	Mid	24355.00	24345.005	0.21
-33	72.0	High	24455.00	24445.005	0.20

40	72.0	High	24455.00	24445.001	0.04
30	21.6	Low	24255.00	24255.021	0.87
30	21.6	Mid	24355.00	24345.024	0.99
30	21.6	High	24455.00	24445.024	0.98
30	72.0	Low	24255.00	24255.021	0.87
30	72.0	Mid	24355.00	24345.024	0.99
30	72.0	High	24455.00	24445.024	0.98
20	21.6	Low	24255.00	24255.033	1.36
20	21.6	Mid	24355.00	24345.037	1.52
20	21.6	High	24455.00	24445.037	1.51
20	72.0	Low	24255.00	24255.033	1.36
20	72.0	Mid	24355.00	24345.027	1.52
20	72.0	High	24455.00	24445.037	1.51
10	21.6	Low	24255.00	24255.036	1.48
10	21.6	Mid	24355.00	24345.040	1.64
10	21.6	High	24455.00	24445.040	1.64
10	72.0	Low	24255.00	24255.036	1.48
10	72.0	Mid	24355.00	24345.040	1.64
10	72.0	High	24455.00	24445.040	1.64
0	21.6	Low	24255.00	24255.027	1.11
0	21.6	Mid	24355.00	24345.031	1.27
0	21.6	High	24455.00	24445.031	1.27
0	72.0	Low	24255.00	24255.027	1.11
0	72.0	Mid	24355.00	24345.031	1.27
0	72.0	High	24455.00	24445.031	1.27
-10	21.6	Low	24255.00	24255.014	0.58
-10	21.6	Mid	24355.00	24345.017	0.70
-10	21.6	High	24455.00	24445.017	0.70
-10	72.0	Low	24255.00	24255.014	0.58
-10	72.0	Mid	24355.00	24345.017	0.70
-10	72.0	High	24455.00	24445.017	0.70
-20	21.6	Low	24255.00	24254.998	0.08
-20	21.6	Mid	24355.00	24345.002	0.08
-20	21.6	High	24455.00	24445.002	0.08
-20	72.0	Low	24255.00	24254.998	0.08
-20	72.0	Mid	24355.00	24345.002	0.08
-20	72.0	High	24455.00	24445.002	0.08
-30	21.6	Low	24255.00	24254.995	0.21
-30	21.6	Mid	24355.00	24344.998	0.08
-30	21.6	High	24455.00	24444.998	0.08
-30	72.0	Low	24255.00	24254.995	0.21
-30	72.0	Mid	24355.00	24344.998	0.08
-30	72.0	High	24455.00	24444.998	0.08
-33	21.6	Low	24255.00	24255.001	0.04
-33	21.6	Mid	24355.00	24345.005	0.21
-33	21.6	High	24455.00	24445.005	0.20

0	72.0	High	24447.50	24447.532	1.30
-10	21.6	Low	24252.50	24252.513	0.54
-10	21.6	Mid	24347.50	24347.518	0.74
-10	21.6	High	24447.50	24447.518	0.74
-10	72.0	Low	24252.50	24252.513	0.54
-10	72.0	Mid	24347.50	24347.518	0.74
-10	72.0	High	24447.50	24447.518	0.74
-20	21.6	Low	24252.50	24252.498	0.08
-20	21.6	Mid	24347.50	24347.502	0.08
-20	21.6	High	24447.50	24447.502	0.08
-20	72.0	Low	24252.50	24252.498	0.08
-20	72.0	Mid	24347.50	24347.502	0.08
-20	72.0	High	24447.50	24447.502	0.08
-30	21.6	Low	24252.50	24252.494	0.25
-30	21.6	Mid	24347.50	24347.499	0.04
-30	21.6	High	24447.50	24447.499	0.04
-30	72.0	Low	24252.50	24252.494	0.25
-30	72.0	Mid	24347.50	24347.499	0.04
-30	72.0	High	24447.50	24447.499	0.04
-30	21.6	Low	24252.50	24252.501	0.01
-30	21.6	Mid	24347.50	24347.505	0.21
-30	21.6	High	24447.50	24447.505	0.20
-30	72.0	Low	24252.50	24252.501	0.01
-30	72.0	Mid	24347.50	24347.505	0.21
-30	72.0	High	24447.50	24447.505	0.20

24 GHz T1 8X/ARU0024637

Temp (c)	VDC	Channel	Frequency Setting	Frequency Actual	PPM
55	21.6	Low	24255.00	24254.964	1.48
55	21.6	Mid	24355.00	24344.967	1.36
55	21.6	High	24455.00	24444.967	1.35
55	72.0	Low	24255.00	24254.964	1.48
55	72.0	Mid	24355.00	24344.967	1.36
55	72.0	High	24455.00	24444.967	1.35
50	21.6	Low	24255.00	24254.969	1.28
50	21.6	Mid	24355.00	24344.973	1.11
50	21.6	High	24455.00	24444.972	1.15
50	72.0	Low	24255.00	24254.969	1.28
50	72.0	Mid	24355.00	24344.973	1.11
50	72.0	High	24455.00	24444.972	1.15
40	21.6	Low	24255.00	24254.998	0.08
40	21.6	Mid	24355.00	24345.002	0.08
40	21.6	High	24455.00	24445.001	0.04
40	72.0	Low	24255.00	24254.998	0.08
40	72.0	Mid	24355.00	24345.002	0.08

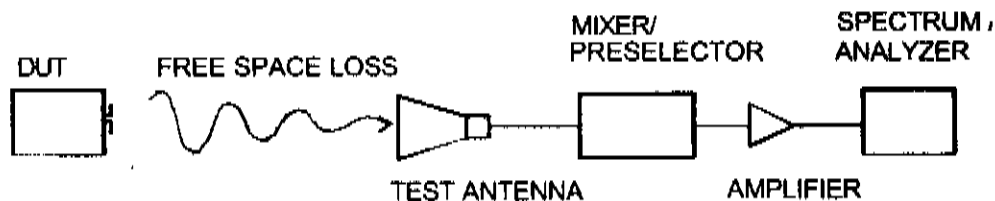
Radiated Emissions Analysis – 0 to 170 GHz

Frequency (Mhz)	Polarity	Level (dBm)	Spec. (dBm)	Margin (dBm)	Pass Fail
36.0	Horizontal	-52.0	-29.0	23.0	Pass
43.0	Horizontal	-50.0	-29.0	21.0	Pass
148.0	Horizontal	-41.0	-29.0	12.0	Pass
172.0	Horizontal	-52.0	-29.0	23.0	Pass
188.0	Horizontal	-39.0	-29.0	10.0	Pass
197.0	Horizontal	-48.0	-29.0	19.0	Pass
199.0	Horizontal	-47.0	-29.0	18.0	Pass
222.0	Horizontal	-48.0	-29.0	19.0	Pass
232.0	Horizontal	-53.0	-29.0	24.0	Pass
246.0	Horizontal	-54.0	-29.0	25.0	Pass
271.0	Horizontal	-52.0	-29.0	23.0	Pass
344.0	Horizontal	-53.0	-29.0	24.0	Pass
369.0	Horizontal	-52.0	-29.0	23.0	Pass
443.0	Horizontal	-56.0	-29.0	27.0	Pass
463.0	Horizontal	-55.0	-29.0	26.0	Pass
482.0	Horizontal	-56.0	-29.0	27.0	Pass
492.0	Horizontal	-52.0	-29.0	23.0	Pass
519.0	Horizontal	-51.0	-29.0	22.0	Pass
699.0	Horizontal	-50.0	-29.0	21.0	Pass
43.0	Vertical	-45.0	-29.0	16.0	Pass
75.0	Vertical	-49.0	-29.0	20.0	Pass
80.0	Vertical	-48.0	-29.0	19.0	Pass
120.0	Vertical	-45.0	-29.0	16.0	Pass
145.0	Vertical	-46.0	-29.0	17.0	Pass
165.0	Vertical	-40.0	-29.0	21.0	Pass
190.0	Vertical	-47.0	-29.0	18.0	Pass
201.0	Vertical	-48.0	-29.0	19.0	Pass
203.0	Vertical	-45.0	-29.0	16.0	Pass
303.0	Vertical	-46.0	-29.0	17.0	Pass
305.0	Vertical	-44.0	-29.0	15.0	Pass
500.0	Vertical	-49.0	-29.0	20.0	Pass
500 MHz to 170 GHz No spurious with in 20 db of the limit					
Data collected - July 99 by AB					

Spurious, Cabinet Radiation Limit Line, Calculation Table

Frequency Band	26MHz-2GHz	2-18 GHz	18-26.5 GHz	26.5-40 GHz	40-50 GHz	50-75 GHz	75-110 GHz	110-170 GHz
** Space Loss db	-48.0	-67.15	-70.5	-74.0	-76.02	-79.55	-82.87	-110.0
** Horn Gain db	5.5	8.2	24.0	15.0	24.0	25.0	24.1	25.0
Dipole Gain db	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Mixer Loss db	N/A	N/A	N/A	N/A	N/A	N/A	-34	-46
Carrier Level dbm	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Cable Loss db		-3.9	-4.3	-4.7	-5.6	N/A	N/A	N/A
Pre Sel Cal db	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A
Amplifier Gain db	N/A	N/A	N/A	N/A	N/A	N/A	N/A	72.0

Net Power @ Spec/Amp dbm	-25.9	-43.7	-31.6	-44.6	-38.8	-35.43	-52.6	-40.9
Reference Level Offset db	25.9	43.7	31.6	44.6	38.8	35.43	52.6	40.9



Procedure:

1. Set up DUT on rotating table and place test antenna to the appropriate distance.
2. Assemble test equipment for frequency range required.
3. Fill in calibration table for values as required, with test antenna gain and space loss for worst case with in the band being tested.
4. Set up spectrum analyzer for necessary parameters with offset and specification limits determined by table #1, pass fail read directly from display at -29dbm.
5. Activate DUT and rotate table at a rate not to exceed 2deg per sweep time of spectrum analyzer.
6. Perform test for both the vertical and horizontal polarizations.
7. Note significant frequency values and record in table # 2.