

6 POWER SPECTRAL DENISTY

Applicable Standard: FCC §15.407(a)

According to FCC §15.407(a)

For outdoor operations devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 17dBm in any 1 megahertz band.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

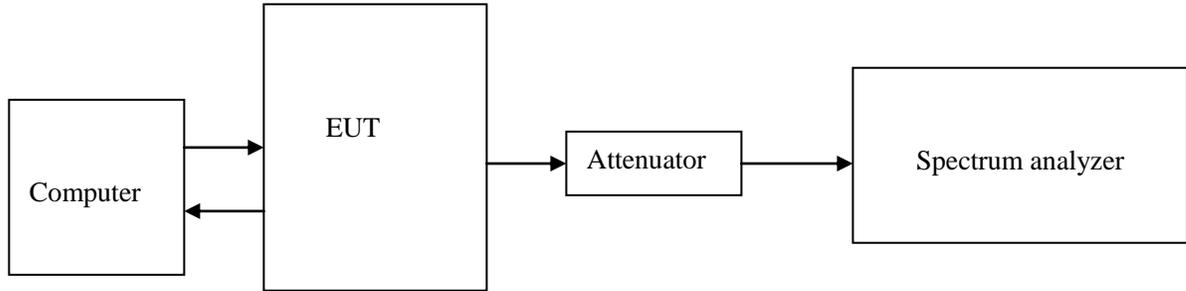
Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	MXA Series Spectrum Analyzer	N9020A	MY51240300	2015.12.10	2016.12.10

Greentech	10dB Attenuator	SGR-SJQ-10	09112005	2015.06.13	2016.06.13
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***statement of traceability:** ZTE Corporation Reliability Testing Center attests that all calibration has been performed per the NVLAP requirements, traceable to NIST.

Test Procedure



The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation. Radiated power (dBm) = Conducted power (dBm) + Portenna gain (dBi) – Signal attenuation in the connecting cable between the transmitter and Portenna (dB)

Portenna gain (dBi):6dBi

Signal attenuation in the connecting cable between the transmitter and Portenna (dB):0dB

Environmental Conditions

Temperature:	20 °C
Relative Humidity:	53 %
ATM Pressure:	1009 mbar

Test Result: Pass

Test Mode: Transmitting OFDM MIMO Access Point

Test Data:

Power Spectral Denisty: 20M

Port	Carrier Freq. (MHz)	Power Spectral Denisty		
		QPSK(dBm/MHz)	16QAM(dBm/MHz)	64QAM(dBm/MHz)
0	5160	10.29	10.44	10.4
1		10.02	10.26	10.27

2		10.37	10.61	10.61
3		10.22	10.41	10.41
0	5200	9.95	10.17	10.22
1		9.92	10.02	9.95
2		10.18	10.42	10.4
3		10.15	10.38	10.41
0		5240	9.96	9.98
1	9.47		9.64	9.73
2	9.81		10.11	10.2
3	9.6		10.07	9.29

Power Spectral Denisty: 20+20+20+20M

Port	Carrier Freq. (MHz)	Power Spectral Denisty		
		QPSK(dBm/MHz)	16QAM(dBm/MHz)	64QAM(dBm/MHz)
0	5160+5180+5200+5220	4.33	4.33	4.29
1		4.17	4.12	3.58
2		4.36	4.32	4.29
3		4.22	4.19	4.17
0	5170+5190+5210+5230	4.11	4.56	4.61
1		4.31	4.48	4.16
2		4.63	4.35	4.8
3		4.82	4.63	4.48
0	5180+5200+5220+5240	4.47	4.45	4.33
1		4.02	3.98	4.33
2		4.19	4.51	4.32
3		4.29	4.27	4.18
0	5160+5180+5220+5240	4.01	3.75	3.88
1		3.28	3.1	3.17
2		3.79	3.52	3.71
3		3.78	3.67	3.55

Power Spectral Denisty: (4 port)

Carrier Freq.(MHz)	Output Power			Limit (dBm /MHz)
	QPSK	16QAM	64QAM	
	QPSK(dBm/MHz)	16QAM(dBm/MHz)	64QAM(dBm/MHz)	
5160	16.25	16.45	16.44	<17
5200	16.07	16.27	16.27	
5240	15.73	15.97	15.85	
5160+5180+5200+5220	10.29	10.26	10.11	
5170+5190+5210+5230	10.50	10.53	10.54	
5180+5200+5220+5240	10.27	10.33	10.31	
5160+5180+5220+5240	9.74	9.54	9.61	





