

5 RF POWER OUTPUT

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 conducted output power over the frequency band of operation shall not exceed 1 W (30 dBm), and limiting the maximum EIRP above 30 degrees elevation to 125 mW (21 dBm).

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.

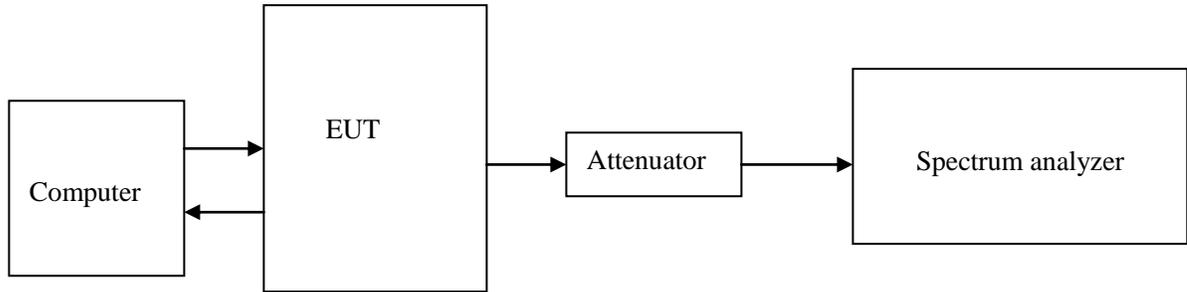
Test Equipment List and Details

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

	Spectrum Analyzer				
Greentech	10dB Attenuator	SGR-SJQ-10	09112005	2015.06.13	2016.06.13

***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

During the power test, configure RBW=1MHz, VBW=3MHz, duty cycle =100%.

Environmental Conditions

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

Test Result: Pass

Test Mode: Transmitting OFDM MIMO Access Point

Test Data:

Output Power: 20MHz(1 port)

Port	Carrier Freq. (MHz)	Output Power		
		QPSK	16QAM	64QAM
		dBm/20MHz	dBm/20MHz	dBm/20MHz
0	5160	21.75	21.77	21.77
1		21.76	21.77	21.78
2		21.77	21.78	21.95
3		21.96	21.95	21.94
0	5200	21.69	21.7	21.63
1		21.64	21.65	21.65
2		21.63	21.64	21.64
3		21.64	21.62	21.62
0	5240	22.11	21.51	21.54
1		21.53	21.53	21.52
2		21.53	21.53	21.52
3		21.55	21.56	21.54

Output Power: 20+20+20+20MHz(1 port)

Port	Carrier Freq. (MHz)	Output Power		
		QPSK	16QAM	64QAM
		dBm/80MHz	dBm/80MHz	dBm/80MHz
0	5160+5180+5200+5220	21.76	21.63	21.68
1		21.55	21.7	21.59
2		21.7	21.78	21.72
3		21.66	21.73	21.83
0	5170+5190+5210+5230	21.83	22.09	21.89
1		21.96	21.88	21.79
2		21.9	21.94	22
3		22.05	21.82	21.87
0	5180+5200+5220+5240	21.83	22.05	22.16
1		22.01	21.89	21.92
2		21.98	21.95	21.94
3		21.92	21.96	21.9
0	5160+5180+5220+5240	21.69	21.77	21.83
1		21.72	21.77	21.72
2		21.71	21.7	21.76
3		21.75	21.7	21.75

Output Power: (4 port)

Carrier Freq.(MHz)	Output Power			Limit (dBm)
	QPSK	16QAM	64QAM	
	dBm	dBm	dBm	
5160	27.83	27.84	27.88	<30
5200	27.67	27.67	27.66	
5240	27.71	27.55	27.55	
5160+5180+5200+5220	27.69	27.73	27.73	
5170+5190+5210+5230	27.96	27.95	27.91	

5180+5200+5220+5240	27.96	27.98	28
5160+5180+5220+5240	27.74	27.76	27.79

