



Environmental Characteristics

Item	Test Condition	Specification
High Temperature/Humidity Operating test	1. Temperature: +60 ± 2°C 2. Humidity: 90~95%RH 3. Time: 24hrs	1. Normal function. Test must be satisfied after the test. 2. No material deformation is allowed.
Low Temperature/Humidity Operating test	1. Temperature: +20 ± 2°C 2. Humidity: 0%RH 3. Time: 24hrs	
High Temperature/Humidity Storage	1. Temperature: +65 ± 2°C 2. Humidity: 90~95%RH 3. Time: 72hrs	
Low Temperature/Humidity Storage	1. Temperature: +20 ± 2°C 2. Humidity: 0%RH 3. Time: 24hrs	
Temperature Cycle Operating Test	1. Temperature: -40~+75°C 2. Duration: <ul style="list-style-type: none"> ▪ 88 Hours ▪ 45min./dwelling@-40°C ▪ 10°C per min./transition from 40~75°C ▪ 45min./dwelling@ 75°C 	
Temperature Shock Test	1. Temperature: -40~+85°C 2. TIME: 30min./dwelling, 5minutes/transition, 24 cycles	

Physical Dimensions

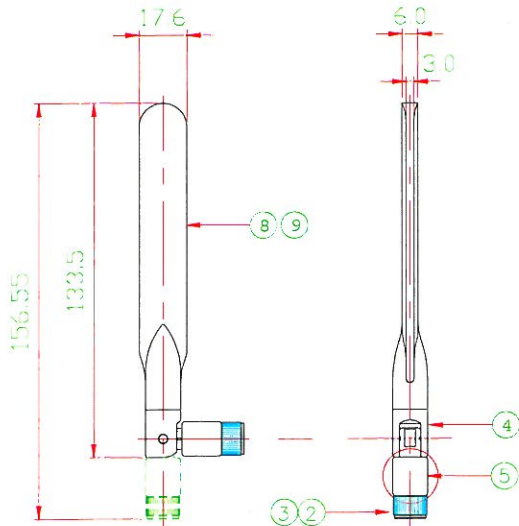
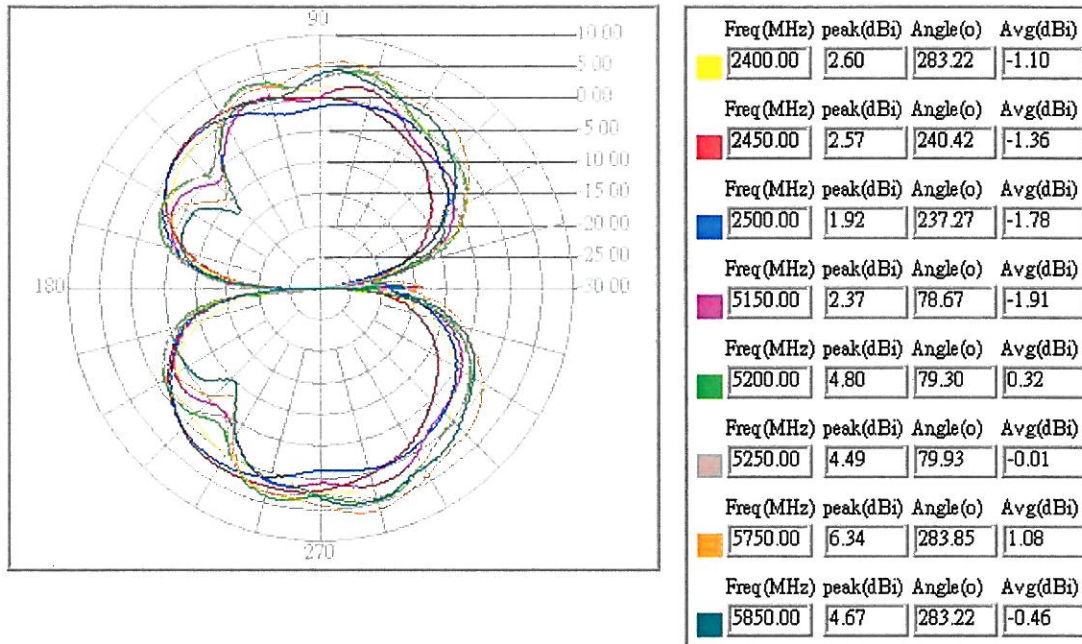


Figure 12. E-Plane (2.0 & 5.0GHz)

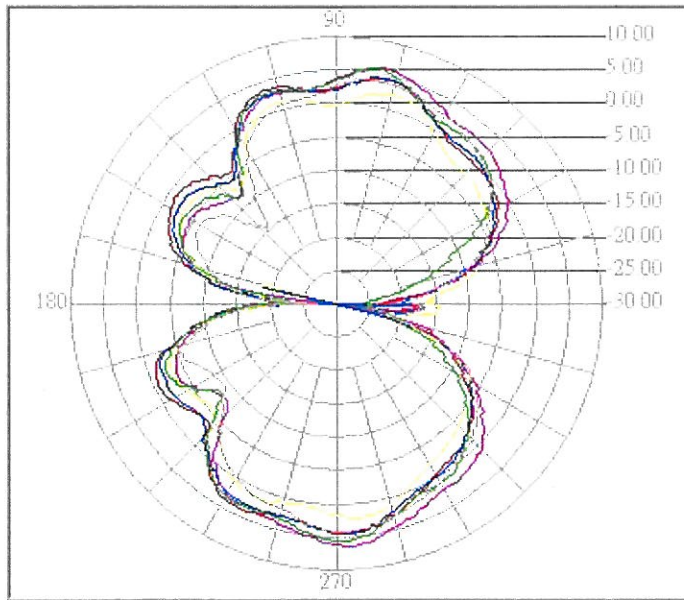


Mechanical Properties

Item	Property
Color	Black/Gray
Coaxial-Cable	RG-178
Plastic Cover	TPU
Antenna Base	PC
Connector	SMA/TNC/BNC

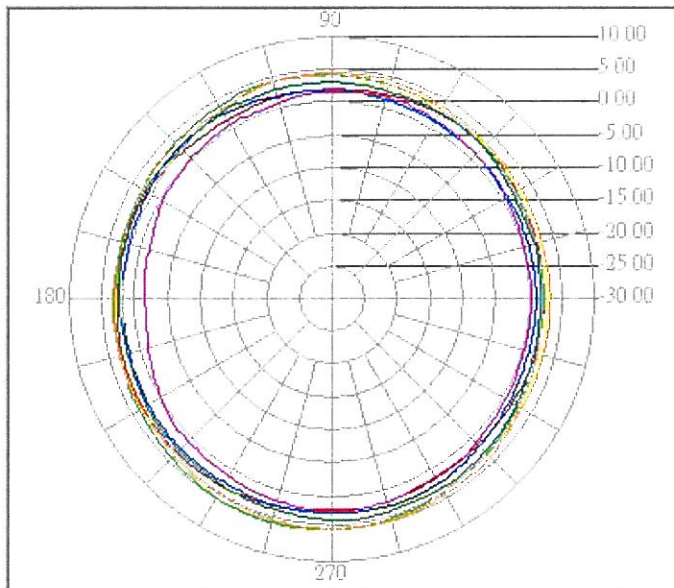
Operation Temperature : -20~+65°C
 Storage Temperature : -20~+65°C

Figure 10. E-Plane (5.0GHz)



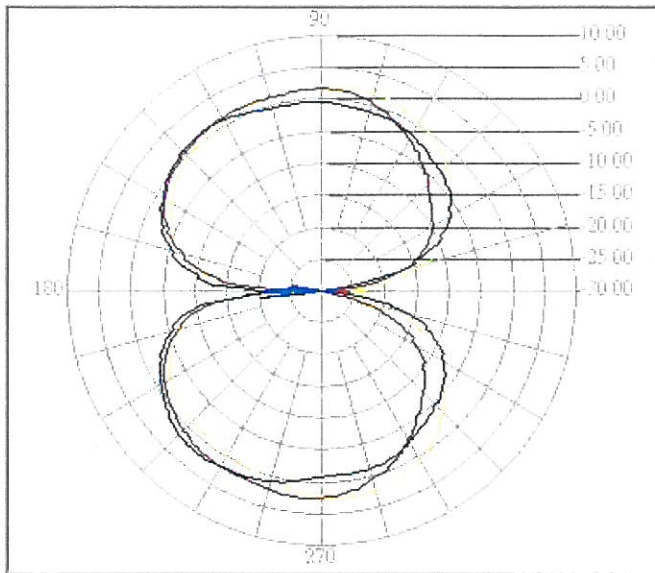
Freq (MHz)	peak (dBi)	Angle (o)	Avg (dBi)
5150.00	2.44	72.25	-2.01
5250.00	4.53	272.80	0.11
5350.00	4.51	75.99	-0.15
5750.00	6.42	274.05	0.96
5800.00	5.79	79.72	0.26
5850.00	4.20	271.56	-0.75

Figure 11. H-Plane (2.0 & 5.0GHz)



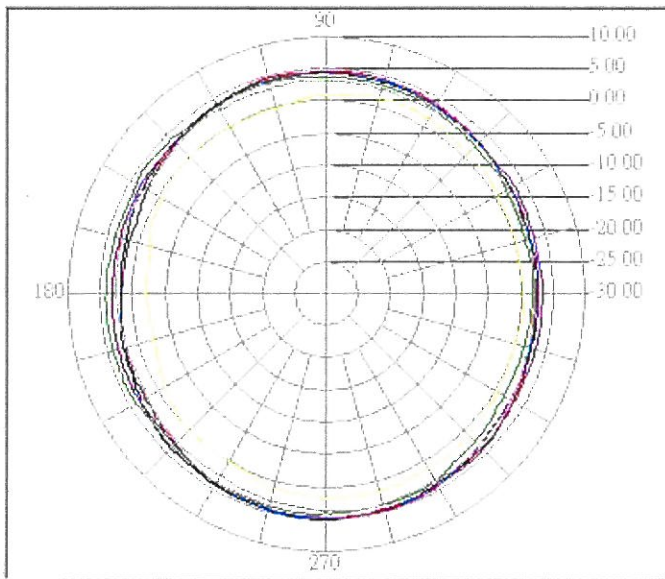
Freq (MHz)	peak (dBi)	Angle (o)	Avg (dBi)
2400.00	3.39	257.68	2.98
2450.00	3.17	214.74	2.37
2500.00	2.79	288.00	1.96
5150.00	2.25	280.42	0.82
5200.00	5.23	252.63	3.71
5250.00	4.51	272.84	3.16
5750.00	5.03	267.79	3.88
5850.00	3.83	276.63	2.74

Figure 8. E-Plane (2.0GHz)



Freq(MHz)	peak(dBi)	Angle(o)	Avg(dBi)
2400.00	2.72	277.79	-1.18
2450.00	2.71	264.08	-1.39
2490.00	2.17	232.94	-1.82

Figure 9. H-Plane (5.0GHz)



Freq(MHz)	peak(dBi)	Angle(o)	Avg(dBi)
5150.00	1.85	283.38	0.38
5250.00	4.90	277.30	3.49
5350.00	5.05	272.43	3.56
5750.00	4.95	285.81	3.81
5800.00	4.28	262.70	3.40
5850.00	4.01	279.73	2.87

Measurement Set Up

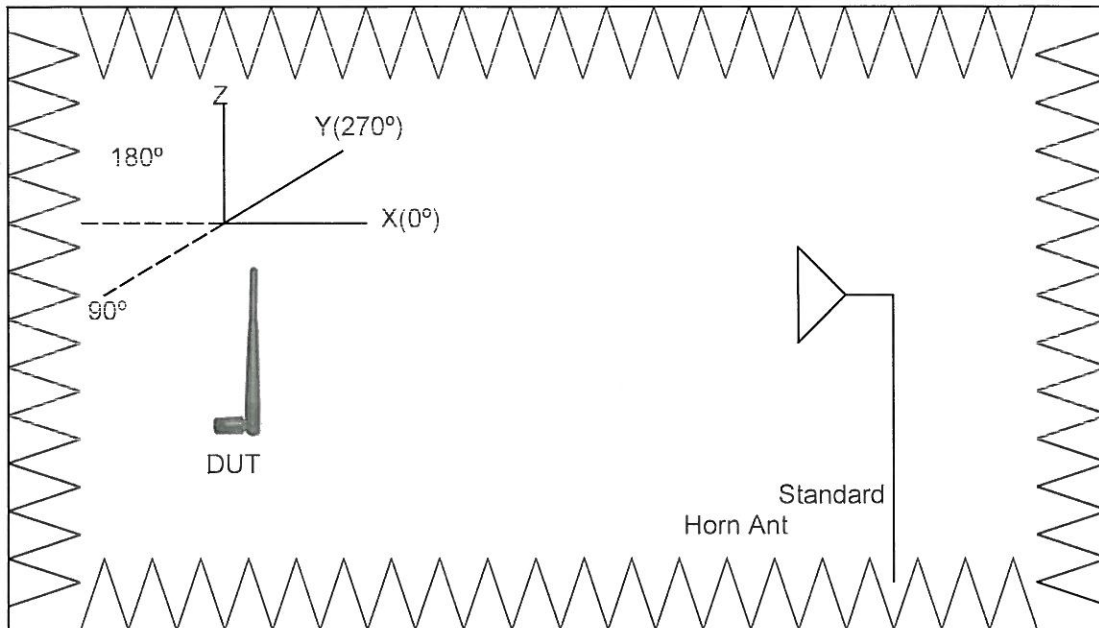


Figure 7. H-Plane (2.0GHz)

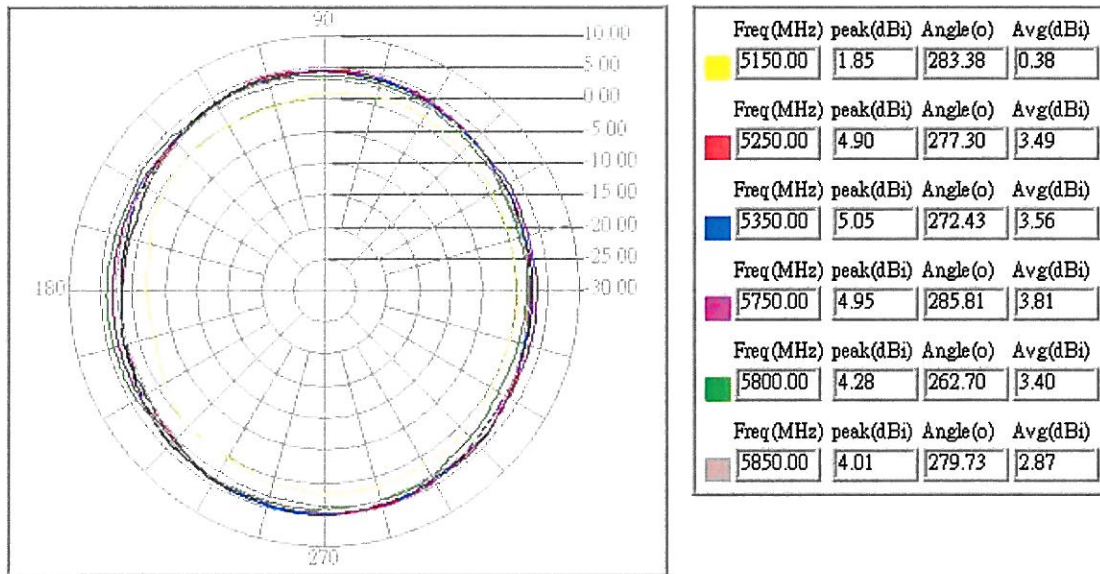




Figure 3. Return Loss (5.0GHz)

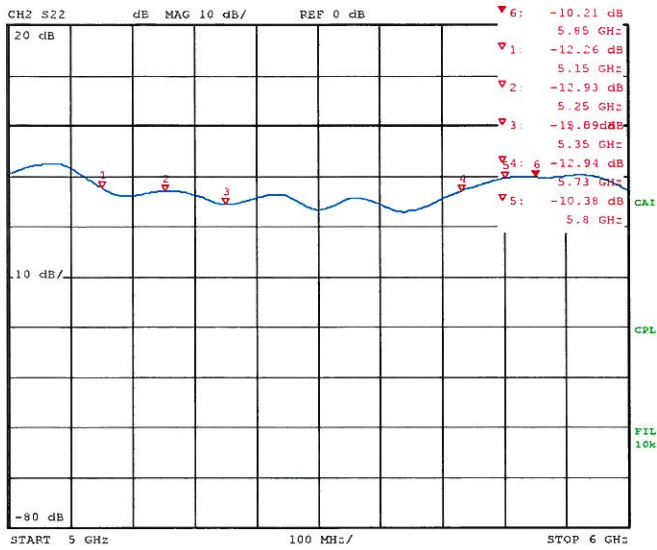


Figure 4. V.S.W.R (5.0GHz)

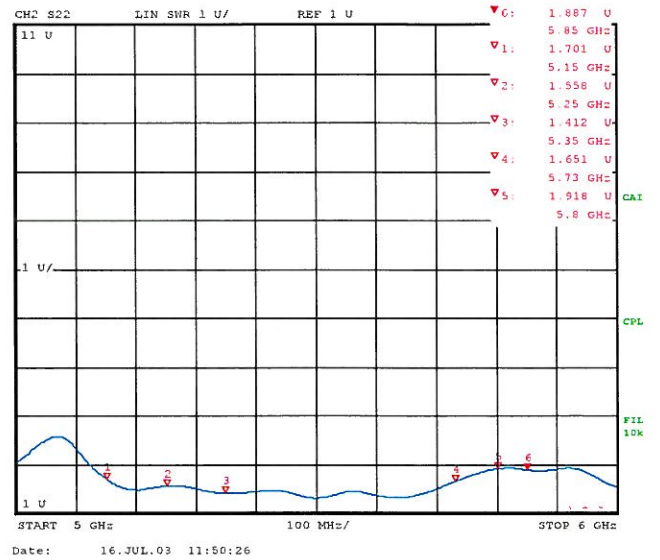


Figure 5. Return Loss (2.0 & 5.0GHz)

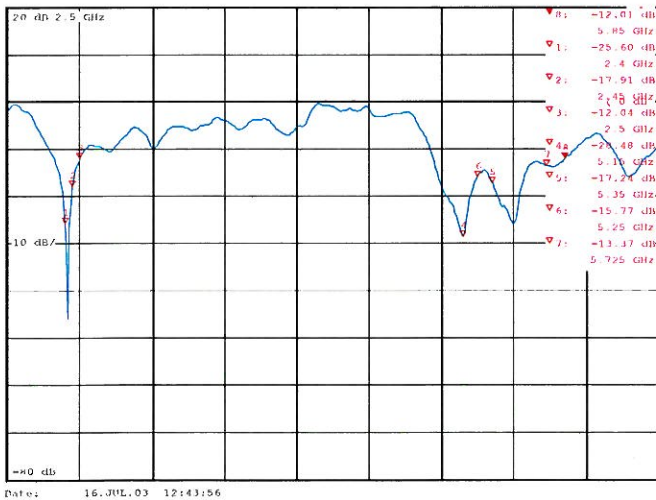
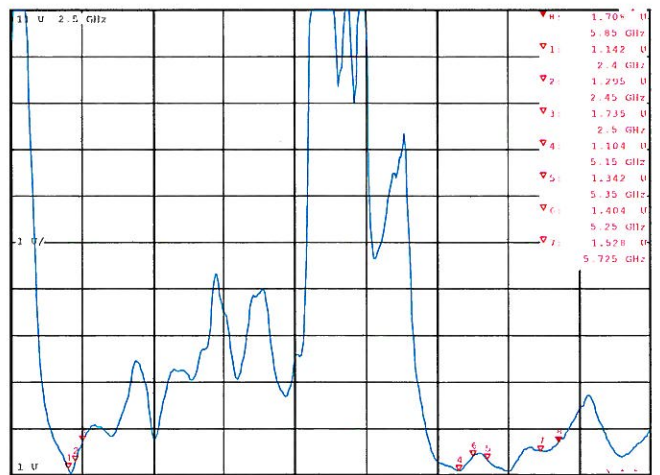


Figure 6. V.S.W.R (2.0 & 5.0GHz)





Tri-band
2.45/5.2/5.8GHz
Hi-Gain Dipole

WPANTE3 Series

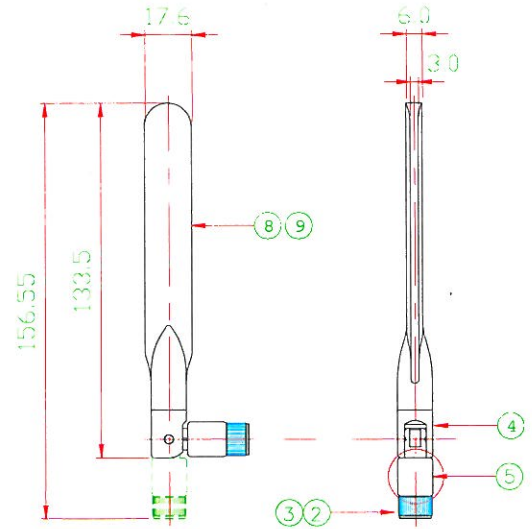
Explanation of Part Number

WPANT E3
(1) (2)

- (1) Product type: Antenna
- (2) Appearance Series: E3

Electrical Properties

Item	Property
Frequency Range	2.4~2.4835 GHz / 5.15~5.35/5.725~5.85GHz
Impedance	50Ω
VSWR (see Fig. 1)	2.0 max
Return Loss (see Fig 2)	-10 dB max
Gain (see Fig 3, Fig 4)	5 dBi (Typ.)
Polarization	Linear
Radiation Pattern	Near omni-directional in the horizontal plane
Admitted Power	1 W
Electrical	1/2 λ Dipole



Application

This tri-band high-gain dipole antenna is an ideal solution for dual or tri-band WLAN access points operating in the ISM 2.45GHz or UNII/III 5.2/5.8GHz bands. Two antennas may be deployed for diversity antenna applications/requirements. These antennas are available in a variety of standard coaxial terminations or optionally as a “snap-in” mounted version. Please contact wireless@worldproducts.com with your specific requirements.

Figure 1. Return Loss (2.4GHz)

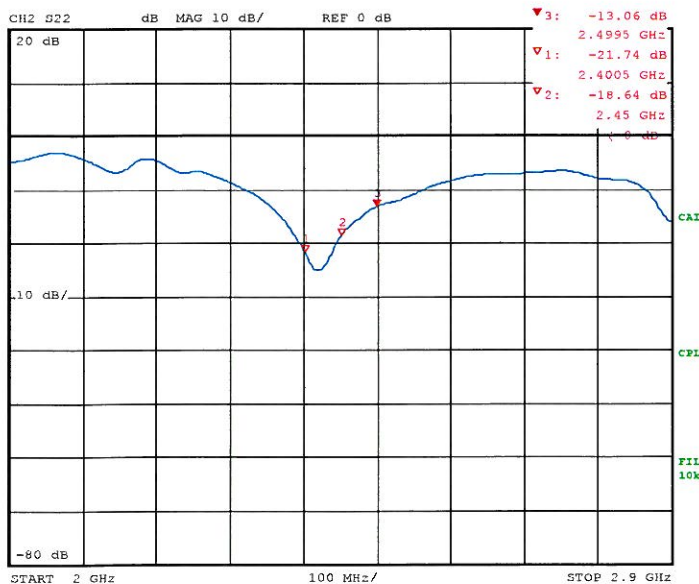


Figure 2. V.S.W.R (2.4GHz)

