

Molex 47950-4011

2.4/5GHz Standalone Antenna - 35.90 by 15.90mm

300mm coaxial cable length

SMART Technologies Part number 1026050

Data provided by Molex March 6, 2015

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT	
5.4.1	Frequency Range	2.3GHz~5.85GHz	2.4GHz~2.5GHz	4.8GHz~6.0GHz
5.4.2	Return Loss	Antenna loads on PC/ABS housing with 100mm; 1.13mm diameter micro coax cable. Measured by VNA5071C	< -10 dB	
5.4.3	Peak Gain	Measure antenna on recommended PC/ABS housing through OTA chamber	1.88 dBi	4.4 dBi
5.4.4	Total Efficiency	Measure antenna on recommended PC/ABS housing through OTA chamber	>70%	>70%
5.4.5	Polarization	Measure antenna through the OTA chamber	Linear	
5.4.6	Input Impedance	Measure antenna on recommended PCB through VNA E5071C	50Ohms	



RF PERFORMANCE

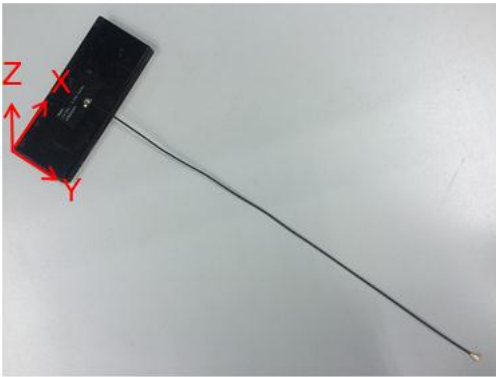


Figure 3a: Antenna on a 1mm-thick PC/ABS material plate

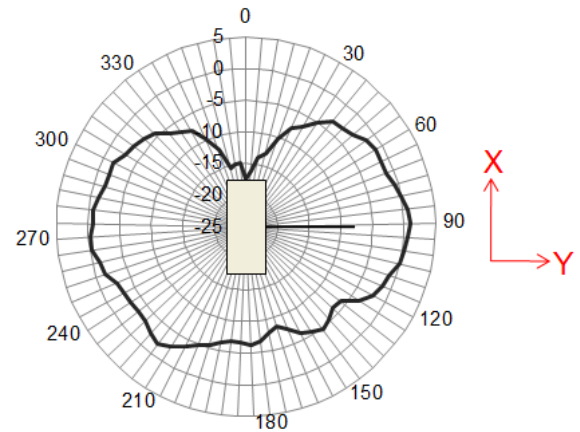


Figure 3b: Radiation diagram of X-Y plane showing combined polarizations at 2.45 GHz

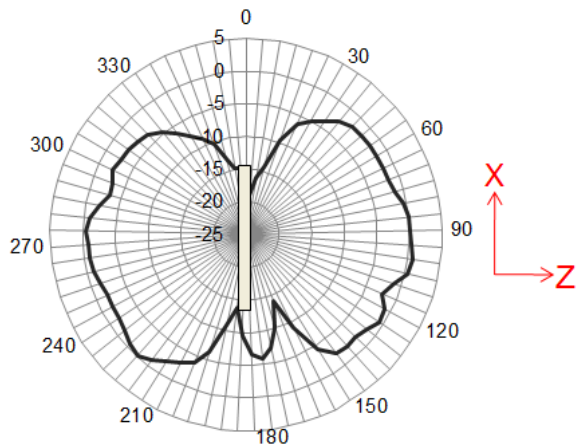


Figure 3c: Radiation diagram of X-Z plane showing combined polarizations at 2.45 GHz

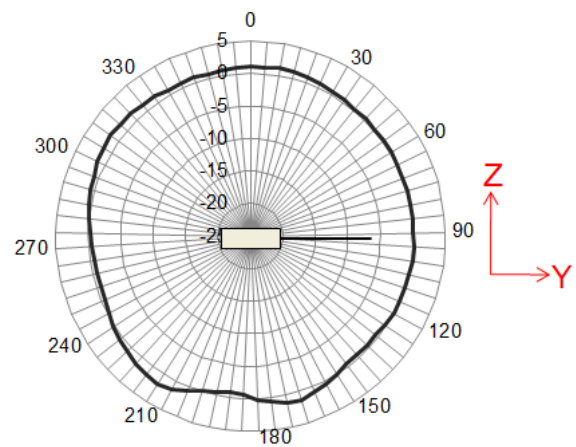


Figure 3d: Radiation diagram of Z-Y plane showing combined polarizations at 2.45 GHz

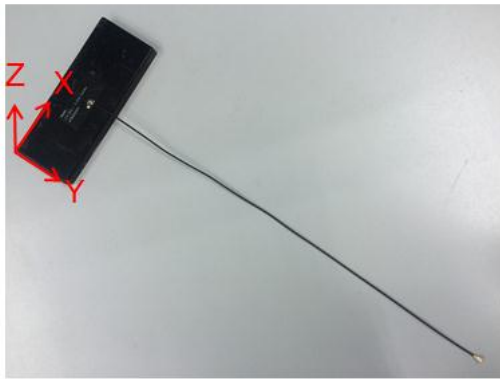


Figure 3a: Antenna on a 1mm-thick PC/ABS material plate

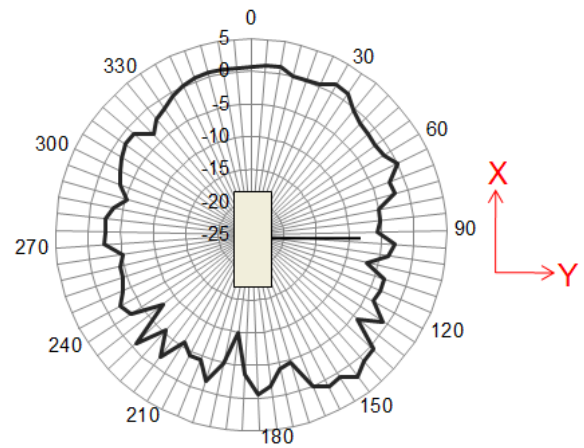


Figure 3f: Radiation diagram of X-Y plane showing combined polarizations at 5.45 GHz

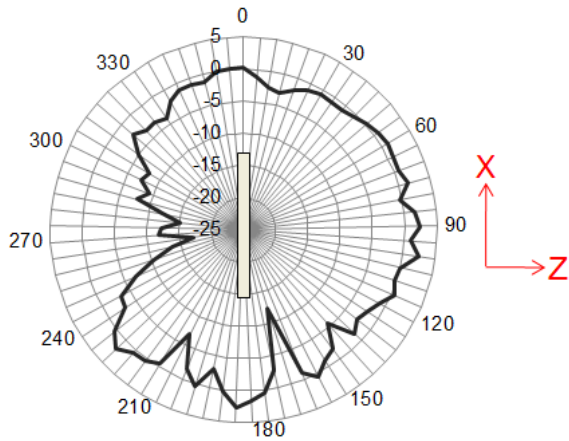


Figure 3g: Radiation diagram of X-Z plane showing combined polarizations at 5.45 GHz

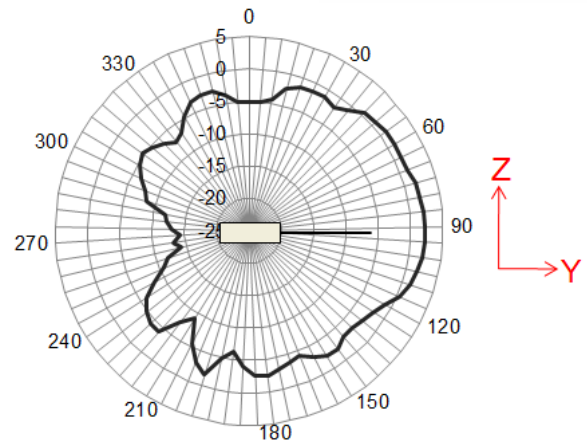


Figure 3h: Radiation diagram of Z-Y plane showing combined polarizations at 5.45 GHz