



LG2851(C0) Box Module Antenna Specification

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LG2851-Antenna Specification

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1 Antenna Definition

LG2851 C0 operate with array antenna with horizontal polarization in package substrate, so called Antenna in Package (AiP). With rotating antenna module 90 degrees, vertical polarization can be implemented.

*Please refer to the operational description for this section in detail because of the confidential information.

2 Antenna Specification

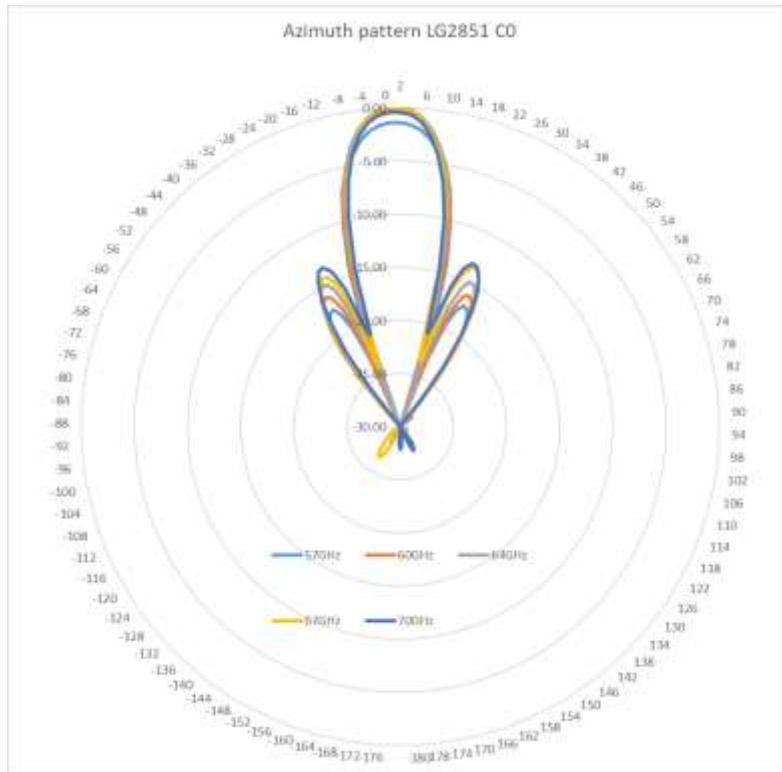
This chapter describes the array antenna specifications of LG2851 C0, including operating frequency, radiation characteristics, return loss and antenna impedance.

Parameters		Min.	Typ.	Max.	Units
LG2851 C0					
Antenna Type		Patch Array Antenna			
Polarization		Horizontal Polarization			
Operating Frequency		57.24		65.88	GHz
Transmit and receive mode	Number of Antenna Elements		32		
	Peak Realized Gain	18.6		20	dBi
	Peak Beam Direction (Phi/Theta)		0 / +90		Degree
	HPBW	14.5		18.1	Degree
	Side lobe level	-15.5		-14.5	dB
Return Loss				-10	dB
Impedance			50		Ohm

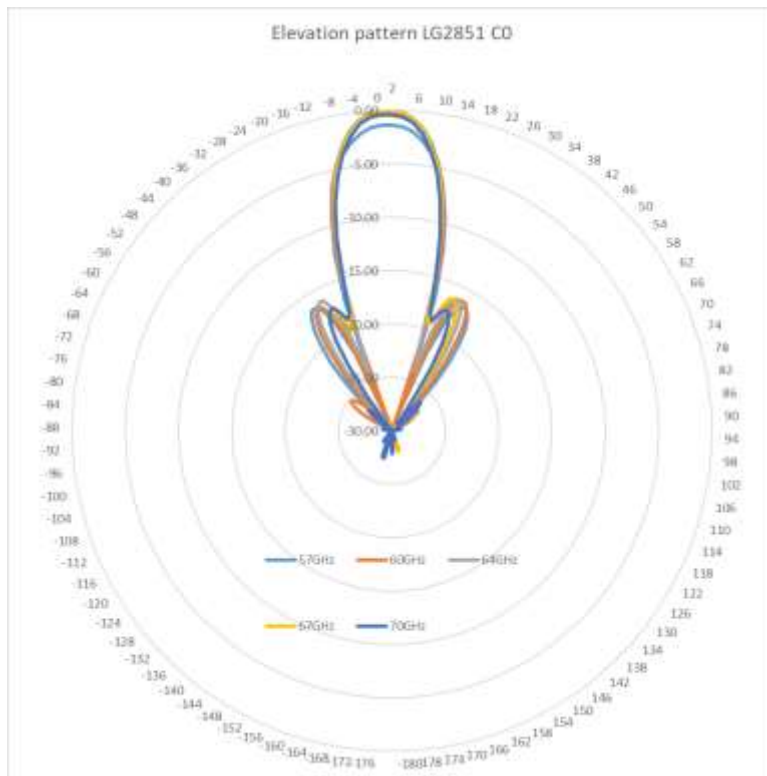
3 Radiation Pattern

This chapter describes simulated beam patterns. Normalized beam patterns are represented for transmit and receive mode with uniform phase control. The coordinate of beam pattern and main beam direction is summarized below.

*Please refer to the operational description for this section in detail because of the confidential information.



Azimuth (X-Y plane) beam pattern



Elevation (X-Z plane) beam pattern