

+2dB 'T' Bar GSM Quad Band

Features

- Quad Band Patch Antenna;
 - 824-960MHz
 - 1710-1990 MHz
 - 1900 -2200 MHz
- Active gain: +3dBi
- VSWR <2.0
- 3m RG174 Connecting Lead
- 3M adhesive sticker on Rear
- Ground plane Independent
- Alternative Connectors: FME / TNC / SMA / MMCX



Applications

- Embedded GSM
- Space Saving Applications
- Car Window

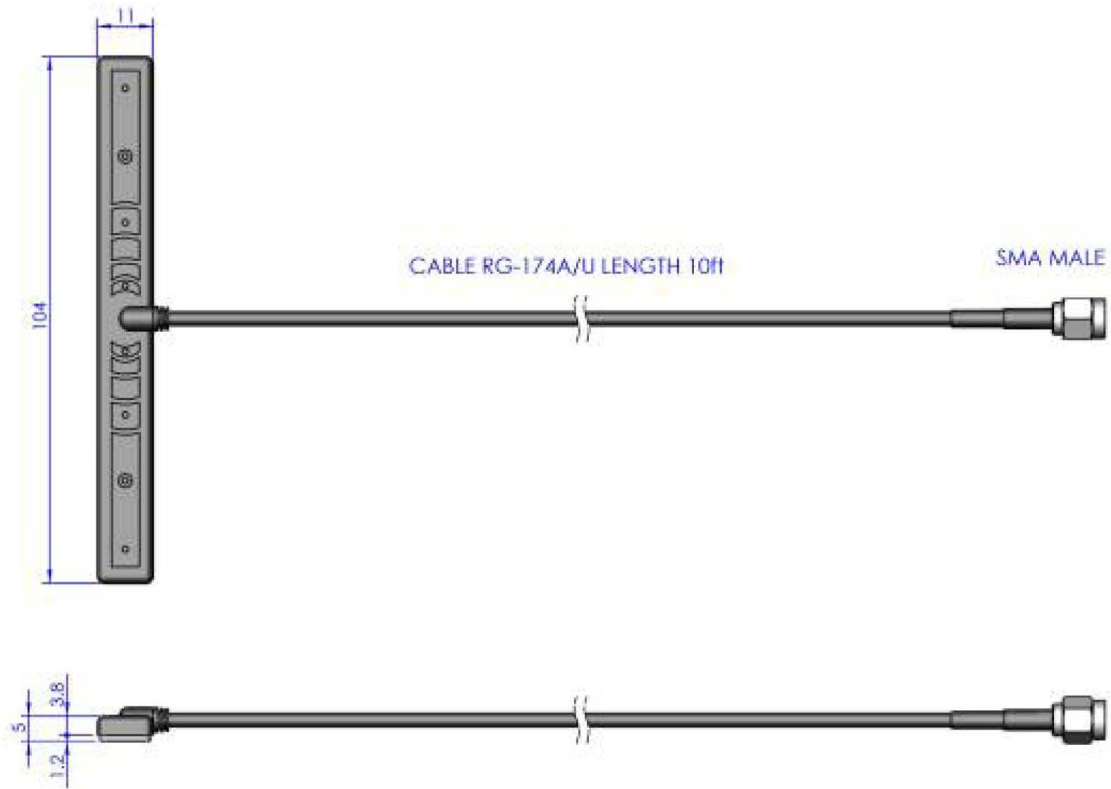
Description

A compact PCB Antenna for GSM Cellular applications where high performance is required from a small size. Using the ANT-GSMQB will give optimum range and reliability to your application.

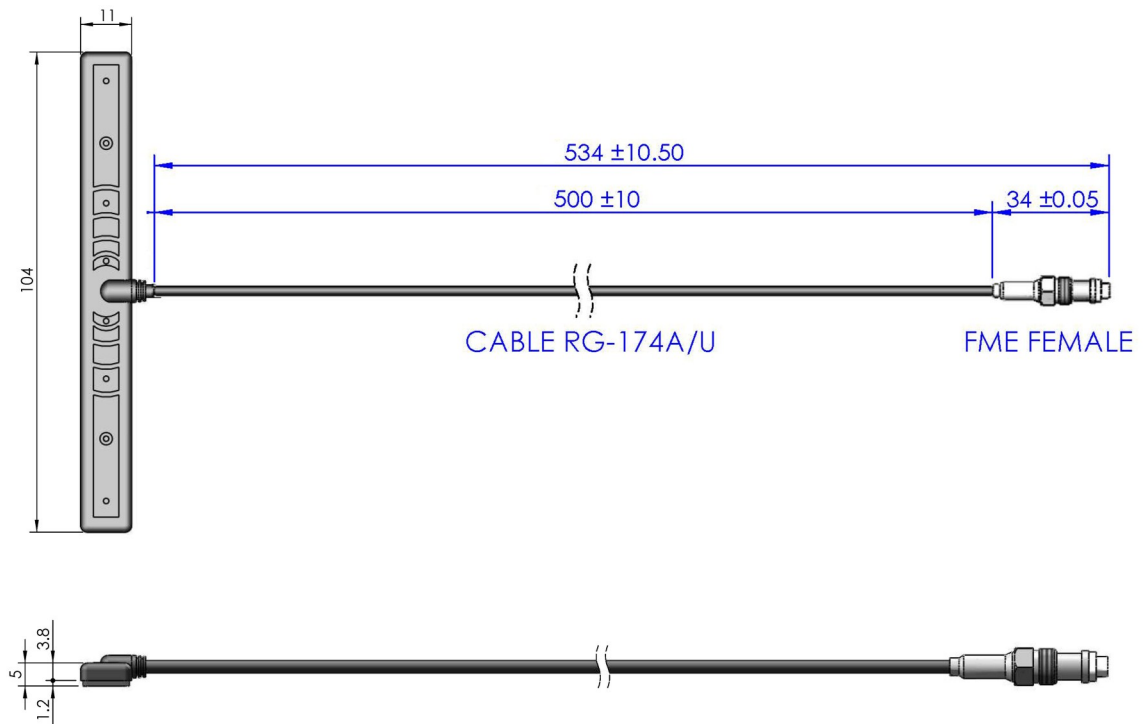
Ordering Information

Part Number	Length	Width	Max Height	Cable Length	Connector
ANT-TBARQB-SMA	104mm	10mm	3mm	3m	SMA (M)

Mechanical Data SMA Version

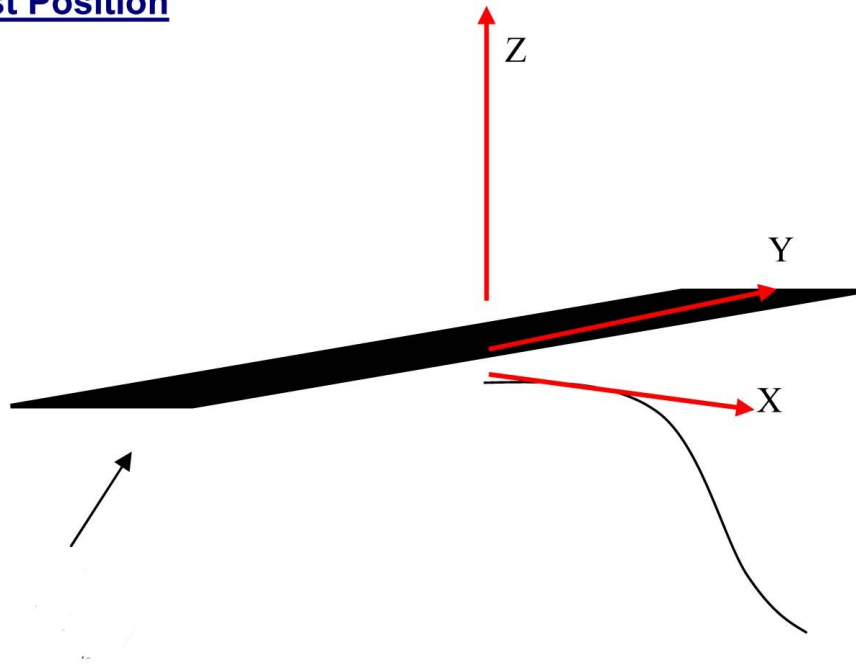


Mechanical Data FME Version



Test Performance Data

Test Position



Measurement Equipment

Vector Network Analyzer: Rohdes Schwarz ZVM

Double Ridged Horn Ant: Trimillennium Corporation DRH0018-C900

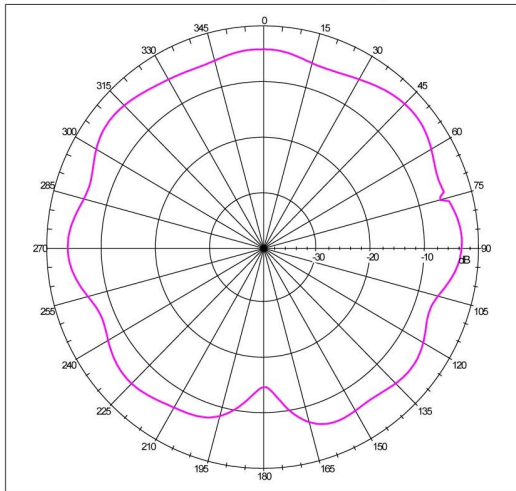
Standard Horn Antenna: Wavepro SG284
Wavepro SG187
Wavepro SG430

Spherical Antenna
Measurement System: Wavepro NSI-700S-90

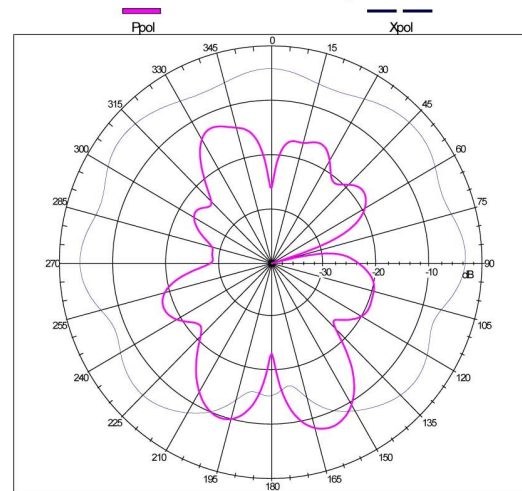
Measurement Uncertainty

The measurement uncertainty is evaluated as 1.412dBi

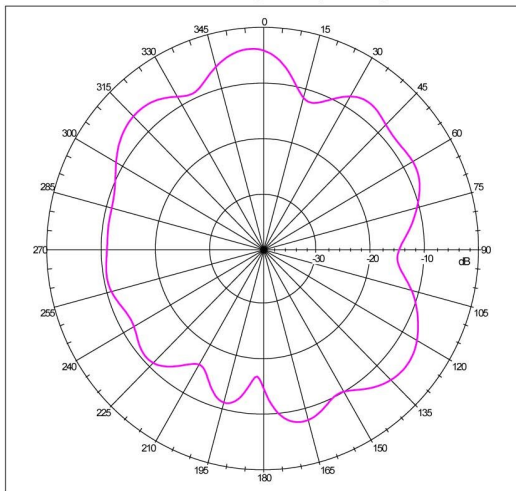
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense)
Gain=-3.31 dBi; Total Radiating Efficiency: 20.26% @0.84000 GHz



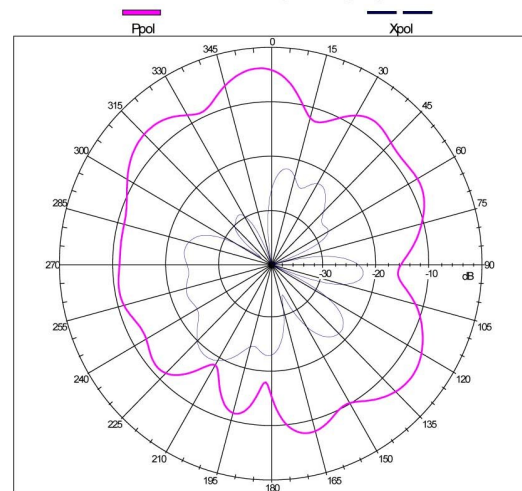
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut)
Gain=-3.31 dBi; Co-Pol Efficiency: 18.81% @Freq: 0.84000 GHz



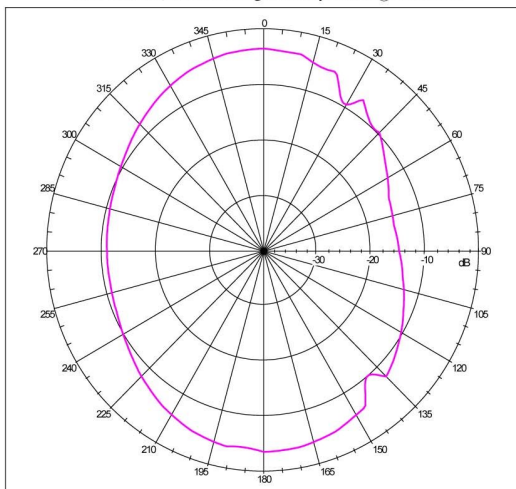
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense)
Gain=-3.31 dBi; Total Radiating Efficiency: 20.26% @0.84000 GHz



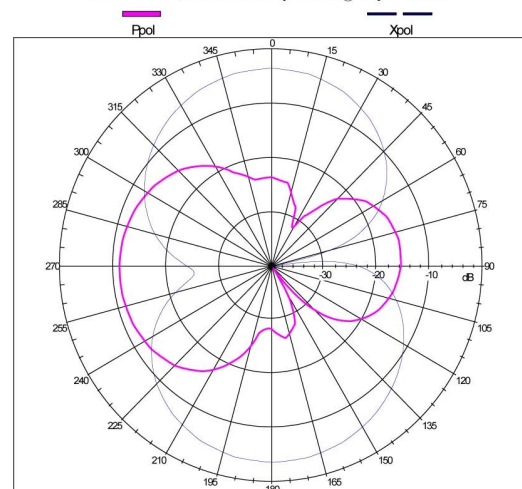
Far-field Pattern @ Phi=90 deg(E-Theta Plane-Cut)
Gain=-3.31 dBi; Co-Pol Efficiency: 18.81% @Freq: 0.84000 GHz



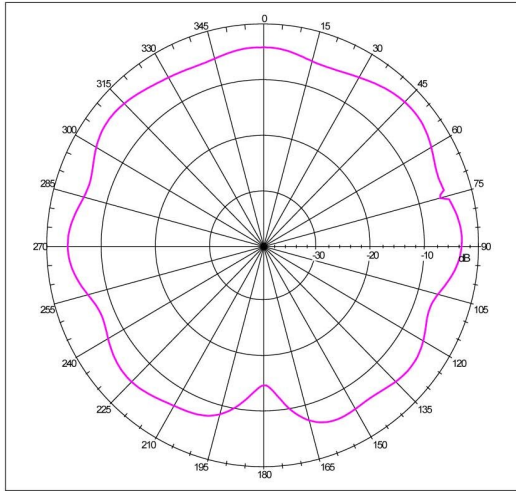
Far-field Power Distribution on X-Y Plane
Gain=-3.31 dBi; Total Radiating Efficiency: 20.26% @0.84000 GHz



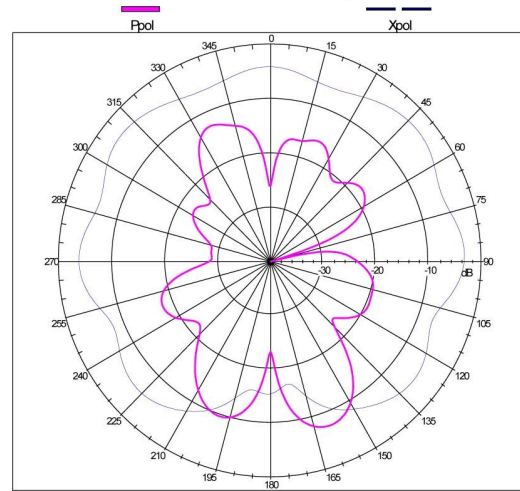
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut)
Gain=-3.31 dBi; Co-Pol Efficiency: 18.81% @Freq: 0.84000 GHz



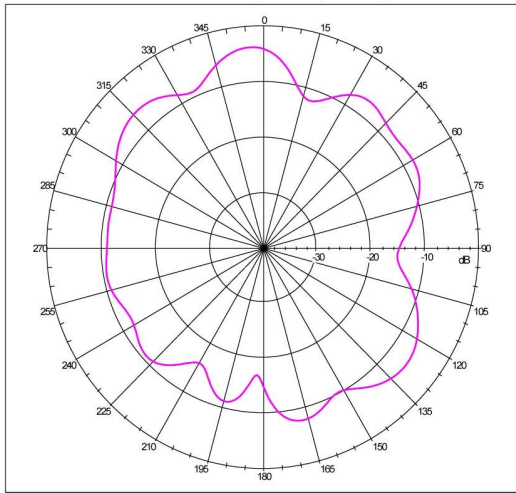
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense)
Gain=-3.31 dBi; Total Radiating Efficiency: 20.26% @0.84000 GHz



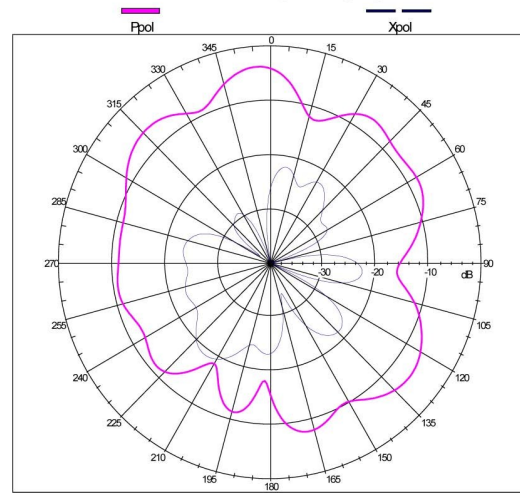
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut)
Gain=-3.31 dBi; Co-Pol Efficiency: 18.81% @Freq: 0.84000 GHz



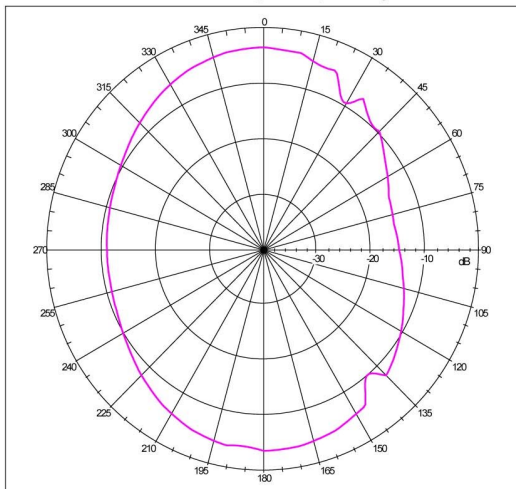
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense)
Gain=-3.31 dBi; Total Radiating Efficiency: 20.26% @0.84000 GHz



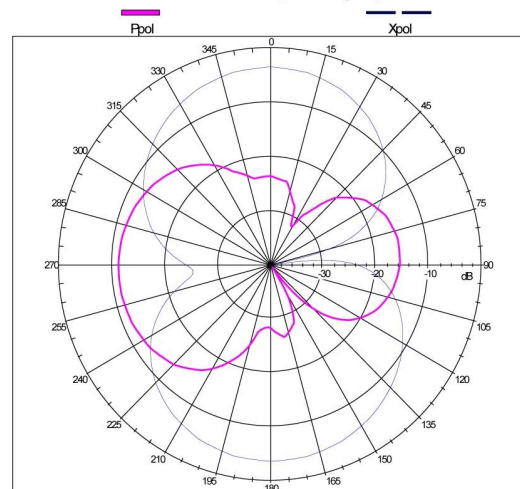
Far-field Pattern @ Phi=90 deg(E-Theta Plane-Cut)
Gain=-3.31 dBi; Co-Pol Efficiency: 18.81% @Freq: 0.84000 GHz



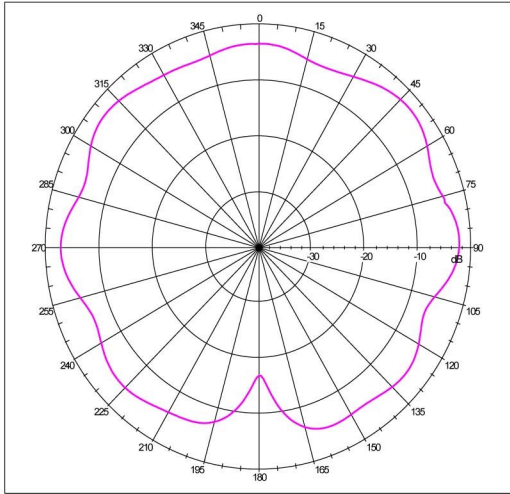
Far-field Power Distribution on X-Y Plane
Gain=-3.31 dBi; Total Radiating Efficiency: 20.26% @0.84000 GHz



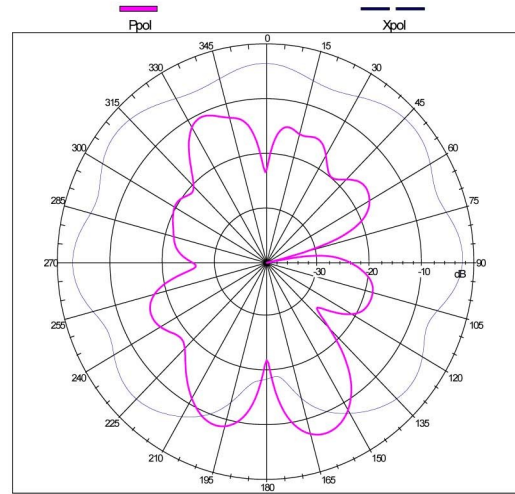
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut)
Gain=-3.31 dBi; Co-Pol Efficiency: 18.81% @Freq: 0.84000 GHz



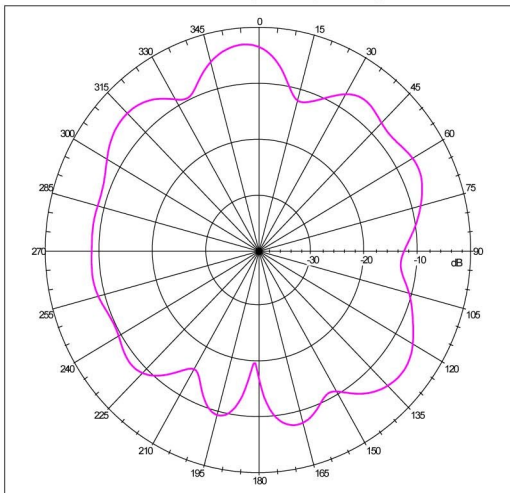
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense)
Gain=-2.51 dBi; Total Radiating Efficiency: 24.58% @0.84500 GHz



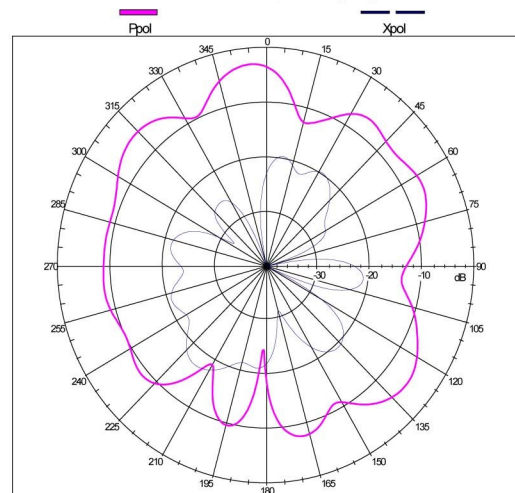
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut)
Gain=-2.51 dBi; Co-Pol Efficiency: 23.61% @Freq: 0.84500 GHz



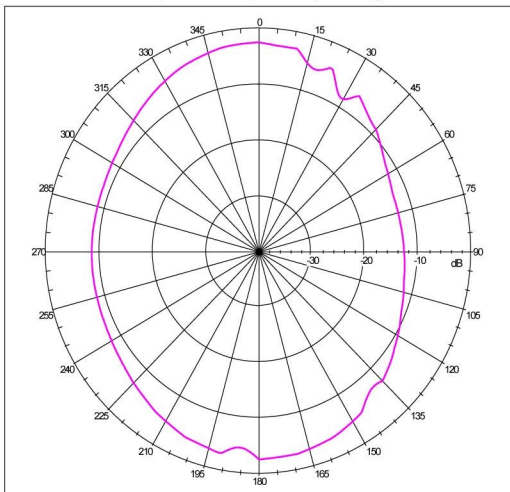
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense)
Gain=-2.51 dBi; Total Radiating Efficiency: 24.58% @0.84500 GHz



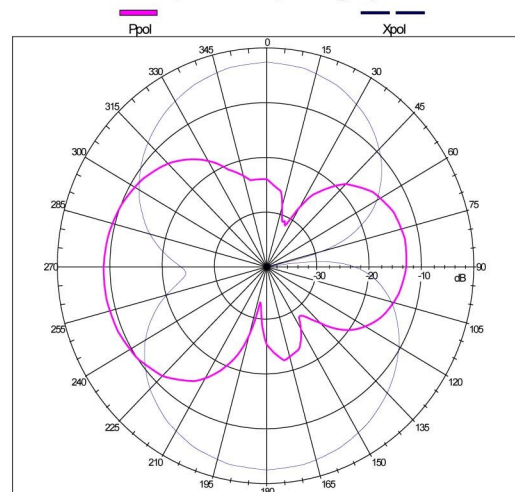
Far-field Pattern @ Phi=90 deg(E-Theta Plane-Cut)
Gain=-2.51 dBi; Co-Pol Efficiency: 23.61% @Freq: 0.84500 GHz



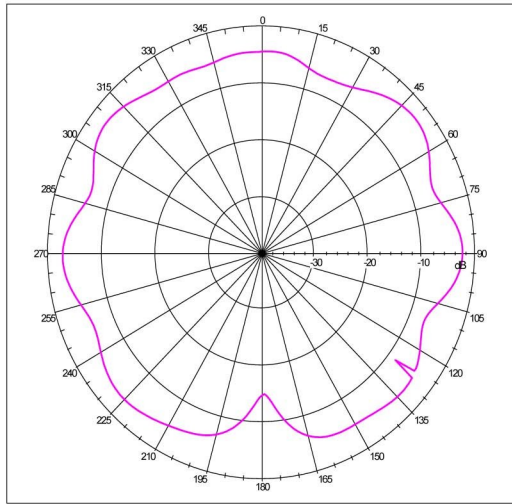
Far-field Power Distribution on X-Y Plane
Gain=-2.51 dBi; Total Radiating Efficiency: 24.58% @0.84500 GHz



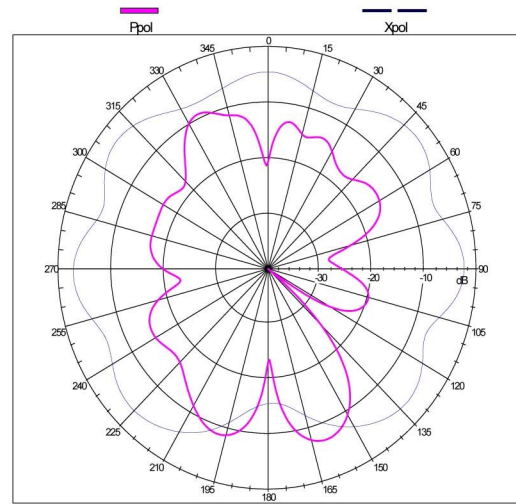
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut)
Gain=-2.51 dBi; Co-Pol Efficiency: 23.61% @Freq: 0.84500 GHz



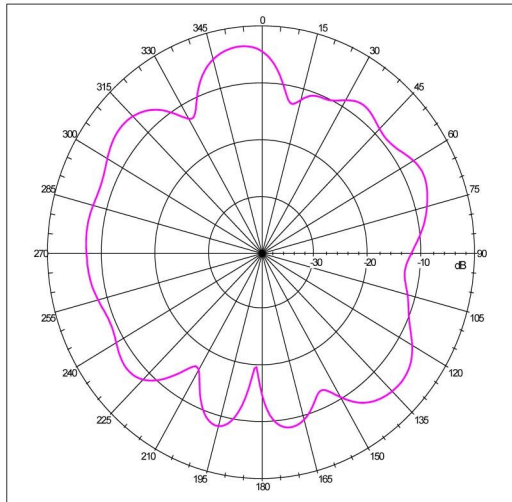
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense)
Gain=-2.61 dBi; Total Radiating Efficiency: 23.47% @0.85000 GHz



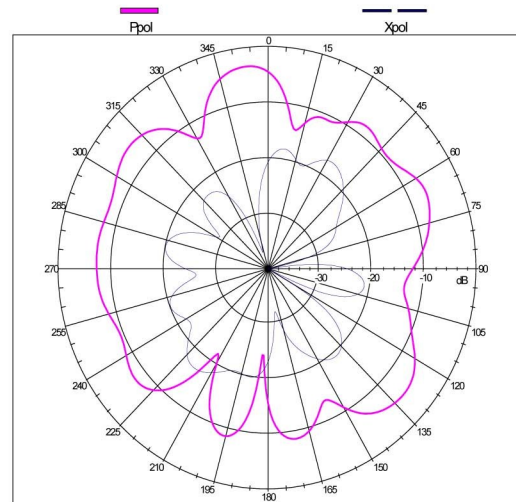
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut)
Gain=-2.61 dBi; Co-Pol Efficiency: 22.43% @Freq: 0.85000 GHz



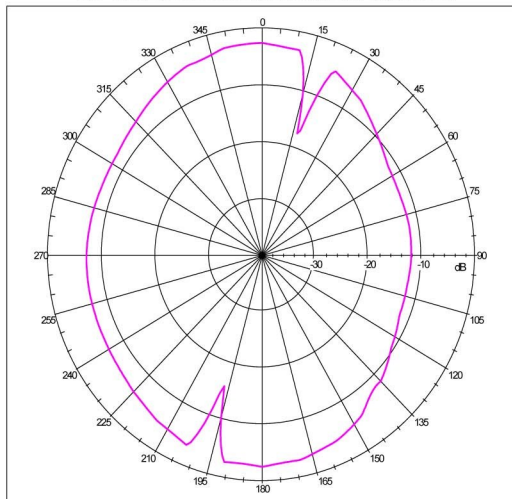
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense)
Gain=-2.61 dBi; Total Radiating Efficiency: 23.47% @0.85000 GHz



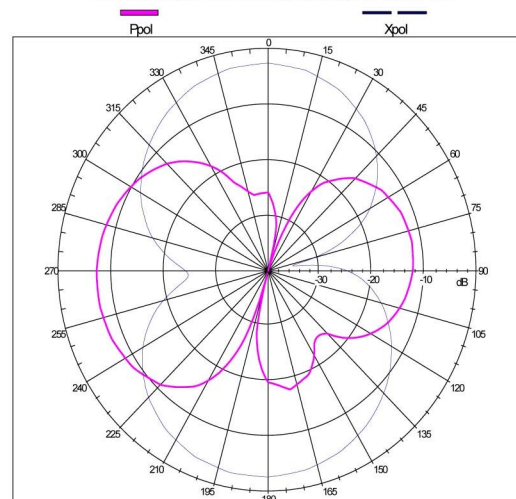
Far-field Pattern @ Phi=90 deg(E-Theta Plane-Cut)
Gain=-2.61 dBi; Co-Pol Efficiency: 22.43% @Freq: 0.85000 GHz



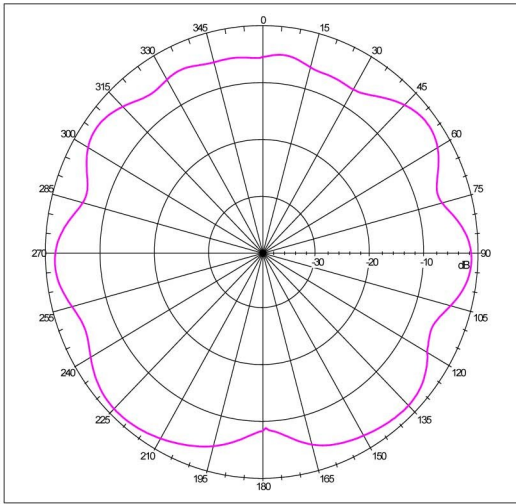
Far-field Power Distribution on X-Y Plane
Gain=-2.61 dBi; Total Radiating Efficiency: 23.47% @0.85000 GHz



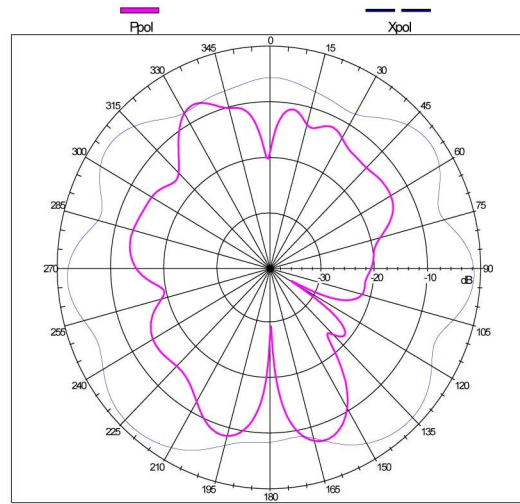
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut)
Gain=-2.61 dBi; Co-Pol Efficiency: 22.43% @Freq: 0.85000 GHz



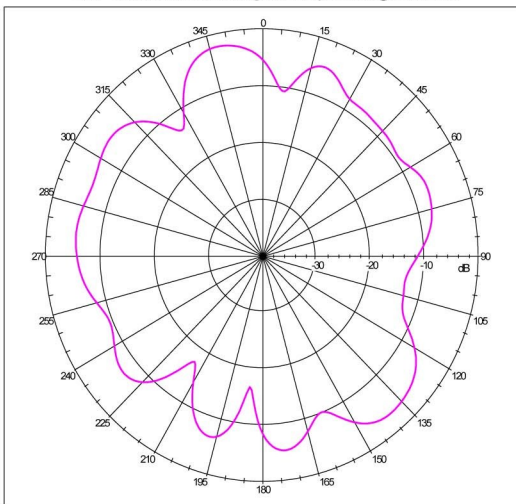
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense)
Gain=-1.33 dBi; Total Radiating Efficiency: 29.83% @0.85500 GHz



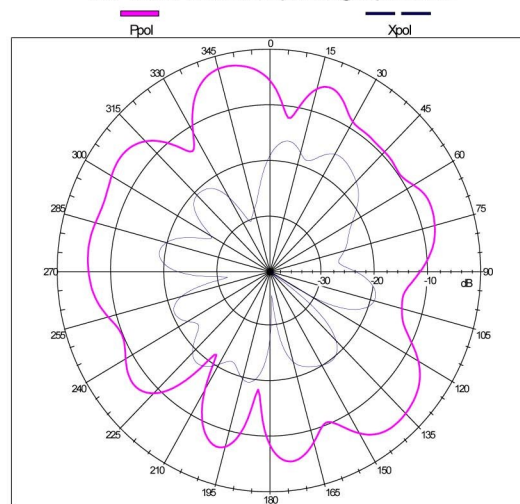
Far-field Pattern @ Phi=0 deg(E-Theta Plane-Cut)
Gain=-1.33 dBi; Co-Pol Efficiency: 26.67% @Freq: 0.85500 GHz



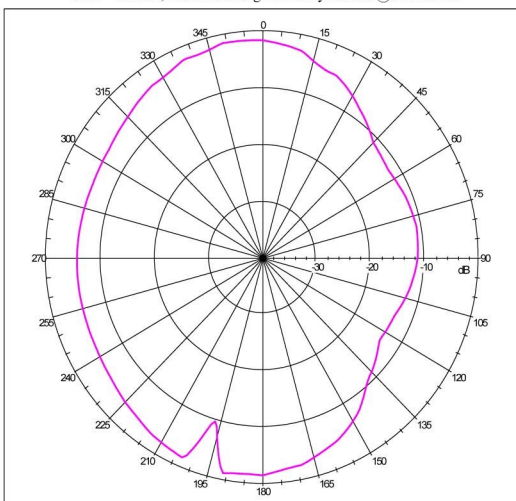
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense)
Gain=-1.33 dBi; Total Radiating Efficiency: 29.83% @0.85500 GHz



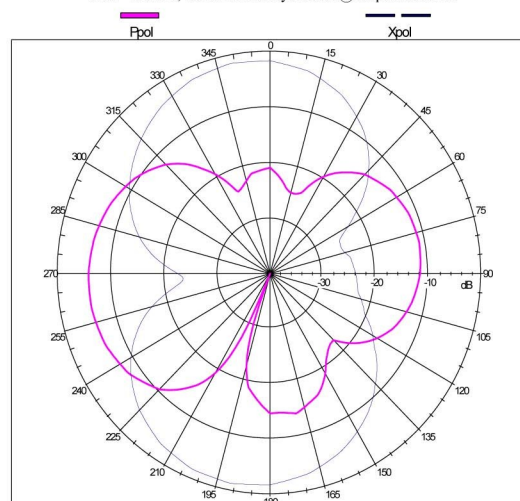
Far-field Pattern @ Phi=90 deg(E-Theta Plane-Cut)
Gain=-1.33 dBi; Co-Pol Efficiency: 26.67% @Freq: 0.85500 GHz



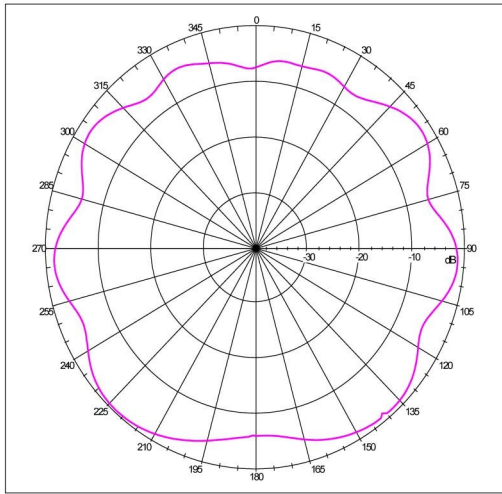
Far-field Power Distribution on X-Y Plane
Gain=-1.33 dBi; Total Radiating Efficiency: 29.83% @0.85500 GHz



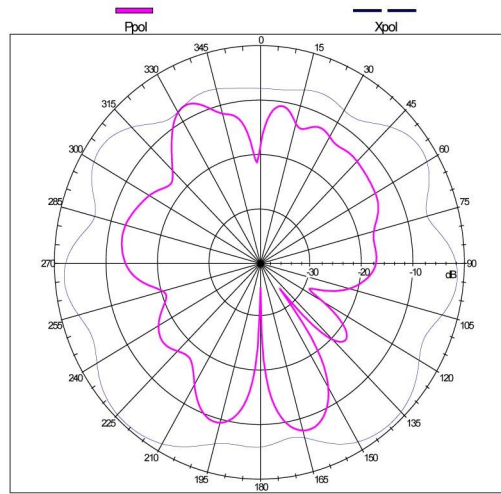
Far-field Pattern @ Theta=90 deg(E-Phi Plane-Cut)
Gain=-1.33 dBi; Co-Pol Efficiency: 26.67% @Freq: 0.85500 GHz



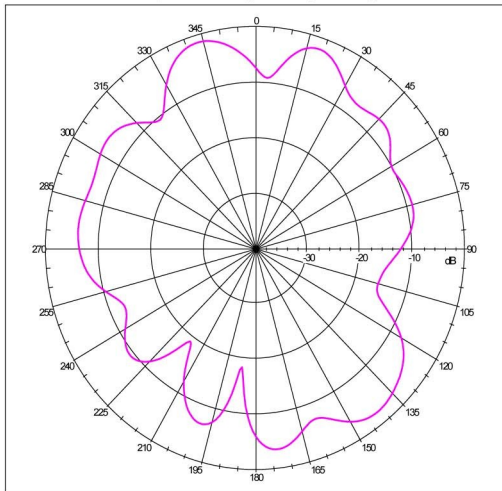
Far-field Power Distribution on X-Z Plane(E-Plane of L3 Pol Sense)
Gain=-0.58 dBi; Total Radiating Efficiency: 31.68% @0.86000 GHz



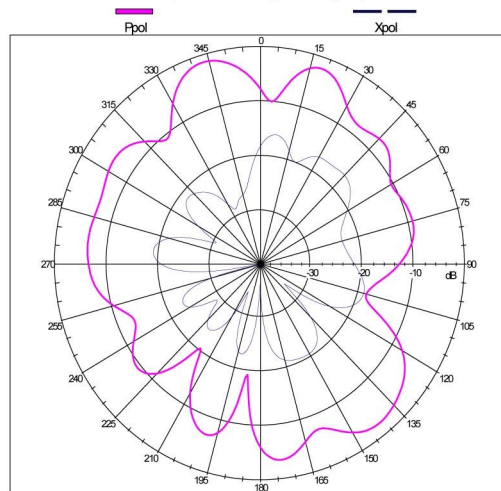
Far-field Pattern @Phi=0 deg(E-Theta Plane-Cut)
Gain=-0.58 dBi; Co-Pol Efficiency: 29.35% @Freq: 0.86000 GHz



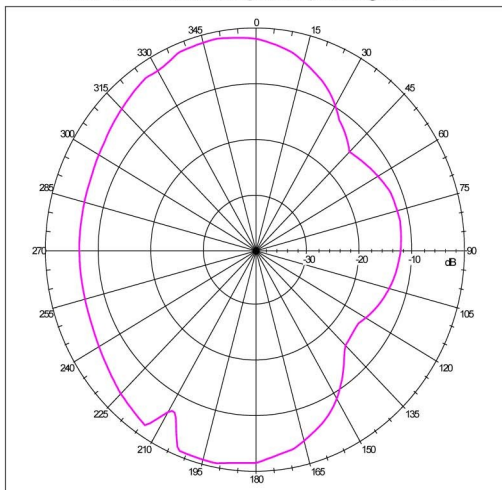
Far-field Power Distribution on Y-Z Plane(H-Plane of L3 Pol Sense)
Gain=-0.58 dBi; Total Radiating Efficiency: 31.68% @0.86000 GHz



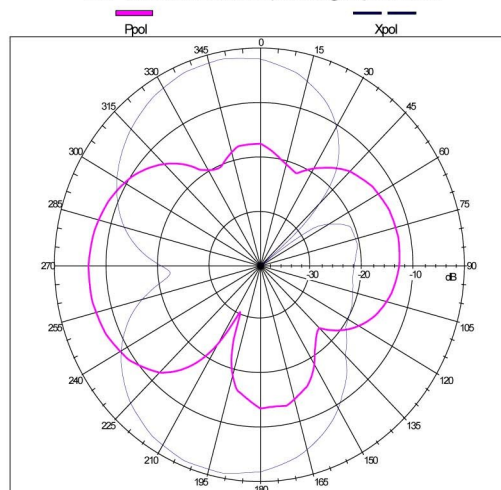
Far-field Pattern @Phi=90 deg(E-Theta Plane-Cut)
Gain=-0.58 dBi; Co-Pol Efficiency: 29.35% @Freq: 0.86000 GHz



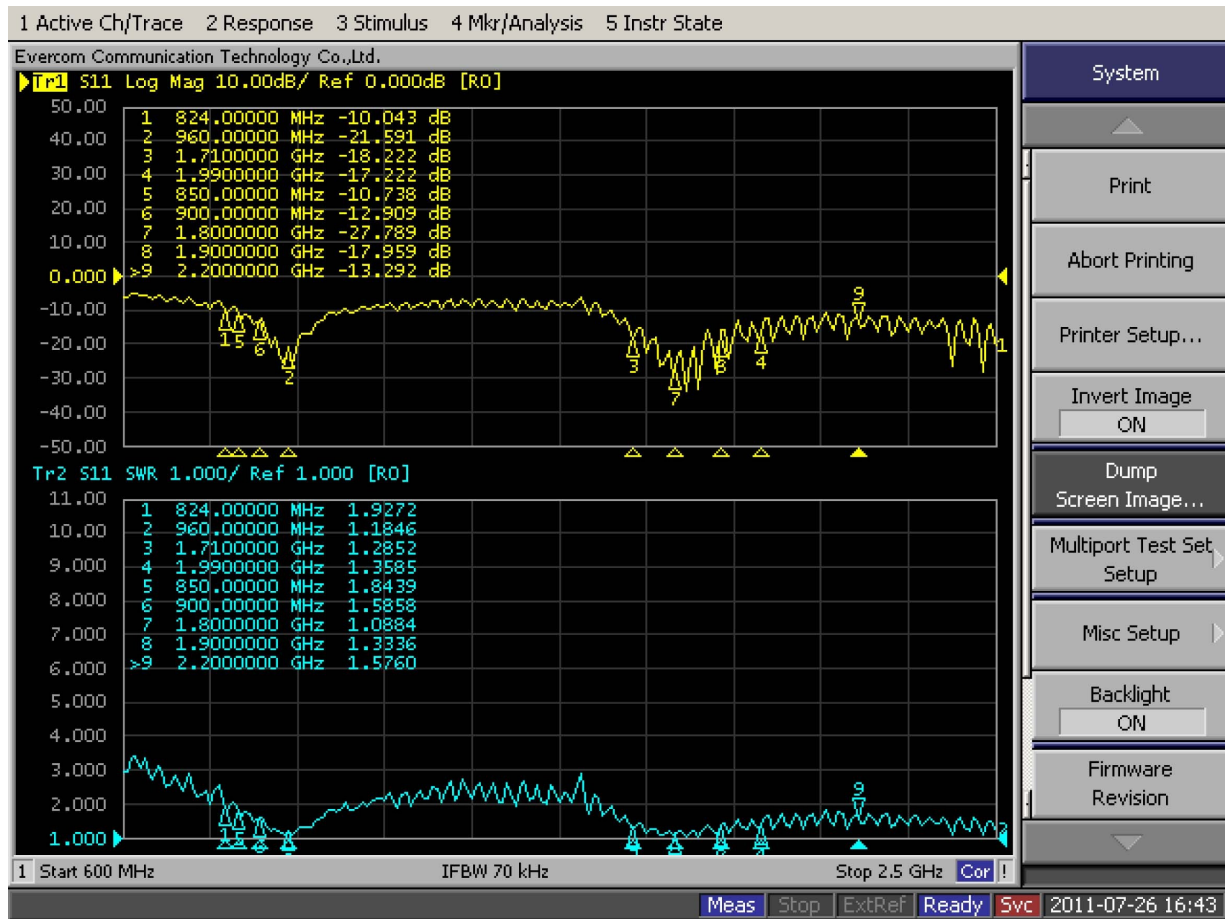
Far-field Power Distribution on X-Y Plane
Gain=-0.58 dBi; Total Radiating Efficiency: 31.68% @0.86000 GHz



Far-field Pattern @Theta=90 deg(E-Phi Plane-Cut)
Gain=-0.58 dBi; Co-Pol Efficiency: 29.35% @Freq: 0.86000 GHz



Performance Data : VSWR



RF Solutions Ltd. Recycling Notice

Meets the following EC Directives:

DO NOT

Discard with normal waste, please recycle.

ROHS Directive 2002/95/EC

Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC

Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfils its WEEE obligations by membership of an approved compliance scheme.

Waste Batteries and Accumulators

Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

Environment Agency producer registration number: WEE/JB0104WV.

Disclaimer:

Whilst the information in this document is believed to be correct at the time of issue, RF Solutions Ltd does not accept any liability whatsoever for its accuracy, adequacy or completeness. No express or implied warranty or representation is given relating to the information contained in this document. RF Solutions Ltd reserves the right to make changes and improvements to the product(s) described herein without notice. Buyers and other users should determine for themselves the suitability of any such information or products for their own particular requirements or specification(s). RF Solutions Ltd shall not be liable for any loss or damage caused as a result of user's own determination of how to deploy or use RF Solutions Ltd's products. Use of RF Solutions Ltd products or components in life support and/or safety applications is not authorised except with express written approval. No licences are created, implicitly or otherwise, under any of RF Solutions Ltd's intellectual property rights. Liability for loss or damage resulting or caused by reliance on the information contained herein or from the use of the product (including liability resulting from negligence or where RF Solutions Ltd was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict RF Solutions Ltd's liability for death or personal injury resulting from its negligence.