

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China











ANT-M4G3-SMA

Features

- Frequency Range
 - 690-960
 - 1710-2170
 - 2400-2700MHz
- Omni Directional 3 dBi Gain
- Rugged plastic finish IP65 Rated.
- Wall Mount Bracket
- 50ohm Impedance
- 3m RG58U with SMA Male
- Vertical Polarization
- V.S.W.R ≤2.5
- 270mm Long
- Operating Temp –30°C to +70°C



Applications

- 4G / LTE Applications
- GSM Applications
- WiFi

Description

A wall mount LTE and GSM antenna supplied with a 3m RG58U cable and male SMA connector. This ready to operate antenna required no tuning and provides optimum range and reliability to your application.

Ordering Information

Part No	Description
ANT-M4G3-SMA	4G LTE/GSM Outside antenna (IP65 Rated) with SMA Male Connector

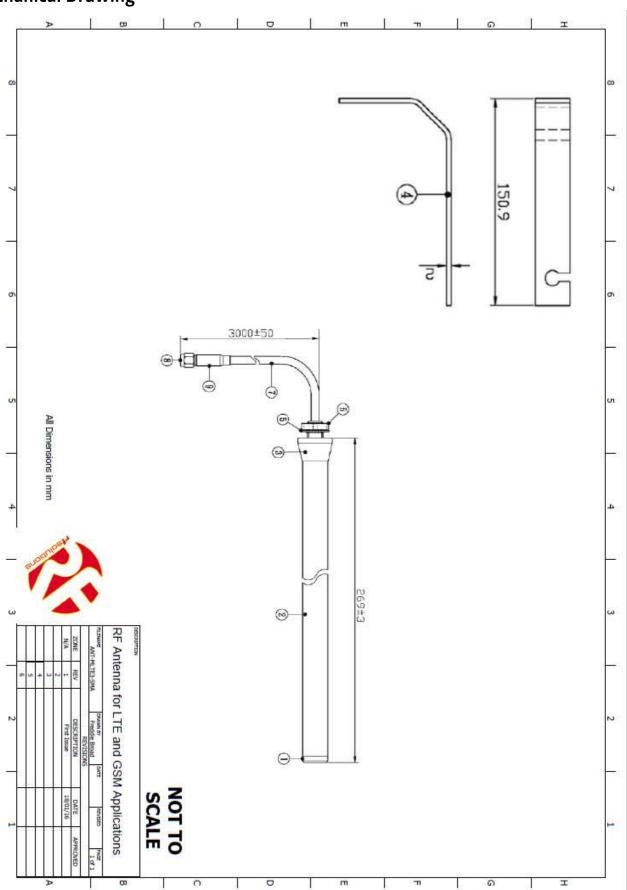




ANT-M4G3

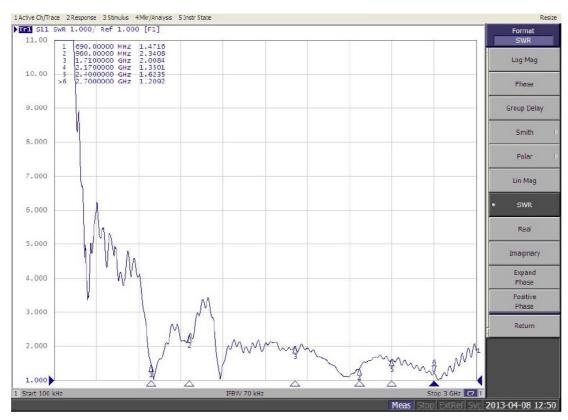


Mechanical Drawing

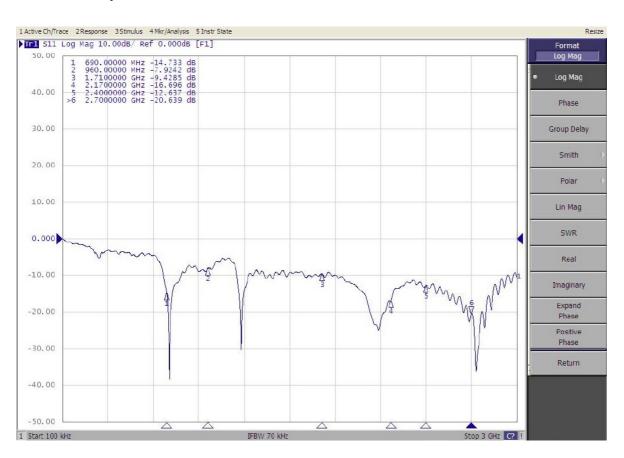




V.S.W.R Test Report



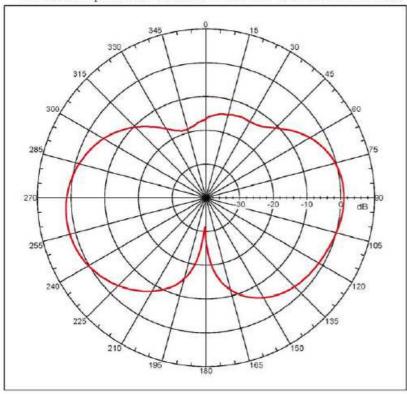
S11 Test Report





2D Pattern—E Plane 824MHz: 1.81917 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi



Fat-field amplitude, figrincipal: Linear, two = 0.005 deg Gann = 1.0727 del Mex fac-field (plobal) = -41.16811 db. Mex fer-field (plot) = -42.16011 db. Mex fer-field (plot) = -42.16011 db. Garmalization: Reference, Wetherk offset = 0.550 db. Rycan att -109.16001 deg. Vyenk att 0.600 deg 20150101-05 AWT+CALSE-3.5M-E NUTCOLOUS -05 NUTCOLOUS-3.50-E

NUTCOLOUS-40 ANT-CALES-3.50-E

NUTCOLOUS-40 ANT-CALES-3.50-E

NUTCOLOUS-40 ANT-CALES-3.50-E

NUTCOLOUS-40 ANT-CALES-3.50-E

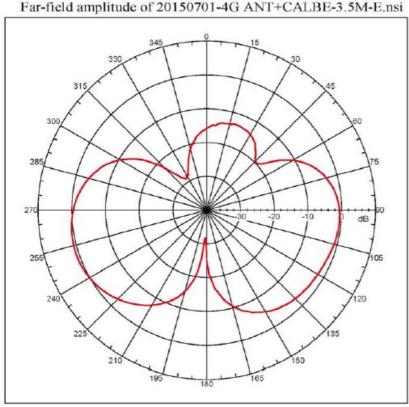
Far-field Cut Ansyria:
Any value: 4.544 48

-1.6. db bean 4.545 10.50 day

-1.6. db bean 4.55 10.50 day

-1.6 deg Elevation (deg) Center = 0.300 deg, *pt* = 3 falacted hear(x) 1 of 15 Book Frequency Account Elevation Fol 8.824 GR: Arieuth Elevation Single-pol

2D Pattern-E Plane 850MHz: 0.84165 dBi

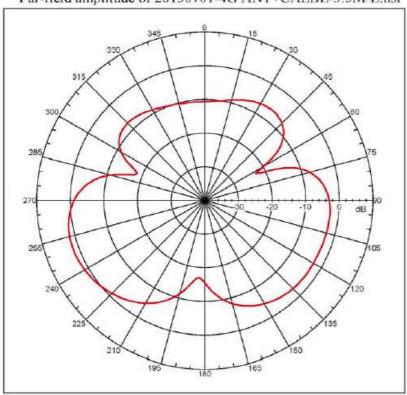


Far-field amplitude, Eprincipal: Linear, Tau = 0.008 deg Gain = 0.00485 dei Gain = 0.00485 dei Hex far-field oglobal = -40.41521 de, Max far-field (plot) = -40.41323 de Boramilaction: Reference, Methork offset = 0.000 db Heast at: -100.003 deg, Upeak at: 0.000 deg Flot contenting to 20150701-46 ANT+CALBE-3.5M-E NUTICEO VA. 1.124 Filements and Settinga NETADERS STORM NUTICES AND ANTICALES STORM NUTICES AND ANTICALES STORM NUTICES AND ANTICALES STORM NUTICES AND ANTICALES STORM NUTICES STORM NUTICES STORM NUTICES AND ANTICALES STORM NUTICES AND ANTICALES STORM NUTICES AND ANTICALES AND ANTI deg Slevation (deg) Center = 0.900 deg, Mpts = 1 Selected beam(s) 1 of 15
Beam Frequency Azimuth Elevation Fol
3 0.85G GHz Azimuth Elevation Single-pol



2D Pattern-E Plane 900MHz: 1.72636 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi

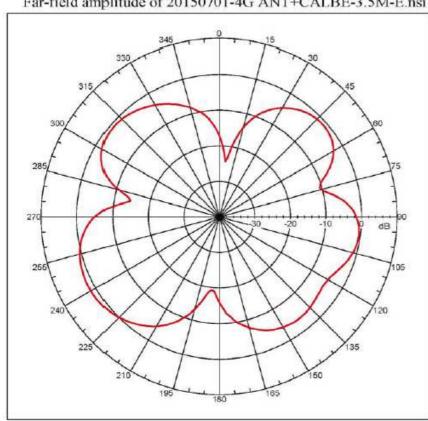


Fac-field amplitude, Eprincipal: Linear, Yau = 0.009 deg Gain = 1.72556 di.
90ain = 1.7256 di.
90ain = 1 20150701-46 ART+CALRE-3.5M-E deg Elevation (Hog) Center = 0.200 deg, Spts = 1 subseted beam(s) 1 of 15
Boom Frequency Armsuth Elevation Fol

4 0.910 GHb Krimuth Elevation Bingle-pol

2D Pattern—E Plane 960MHz: 1.60164 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi

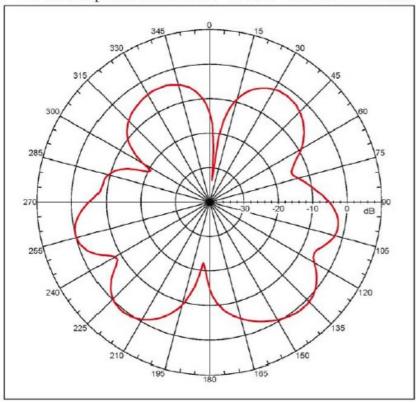


Far-field emplitude, Kprincipal: Libear, Yau = 0.000 deg Gain = 1.80164 dei: Max far-field (global) = -41.82803 de, Max far-field (plot) = -41.02003 deg Normalization: Reference, Network offser = 0.000 dB Hopal at: -18.000 deg, Vpsak at: 0.000 deg Flot contering; On 28159783- 82 AMPHICALSS- 3.5M-E Seligible V4.8.124. Filening: C:\Documents and Settings\Billocktos deg Blevetion ideg). Center = 8.888 deg, #pt# = 1 Selected Beam (s) 1 of 11
Book Frequency Arisath Slevetion Fol
5 0.980 GHz Asiauth Glevetion Eingle-pol



E-Plane 1710MHz: 1.06143 dBi

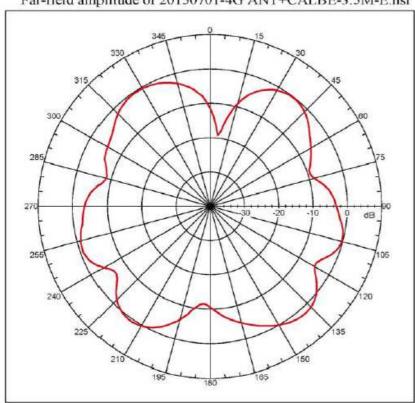
Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi



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Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gaim = 1.06132 deg:
Max far-field (global) = -44.13116 de, Max far-field (plot) =
-44.13121 deg
Normalization Reference, Network offset = 0.000 deg
Romalization Romalization Reference, Network offset = 0.000 deg
Romalization Romalization Reference, Network offset = 0.000 deg
Romalization Romalization Reference Refe
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E-Plane 1800MHz: 1.76763 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi

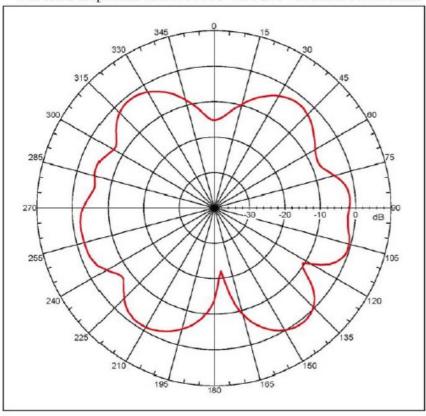


Far-field emplitude. Eprincipal: Linear, Tau = 0.008 deg Gain = 1.78753 deg Mex far-field Gulchal) = -43.05441 MB. Mex far-field Gulchal) = -43.05441 MB. Mex far-field Gulchal) = -45.02440 deg Far-field Gulchal) = -45.02441 deg Far-field Gulchal) = -45.02441 deg Far-field Gulchal) = -45.02441 deg Far-field Gulchal) = -45.0241 deg



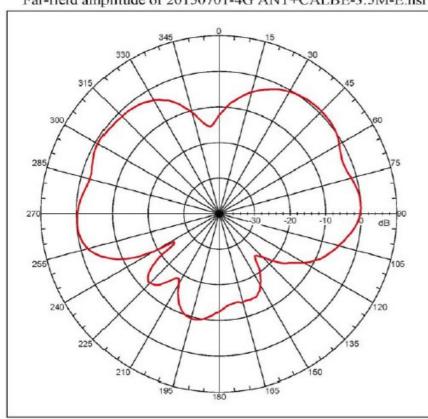
E-Plane 1900MHz: 0.96073 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi



E-Plane 2170MHz: 0.72134 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi

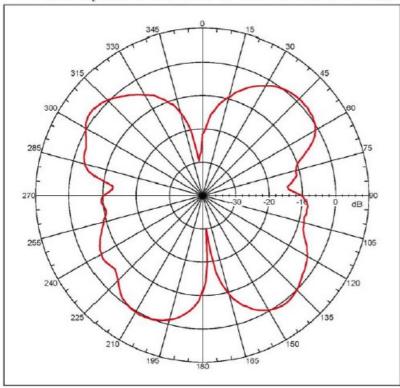


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Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
Gain = 0.72124 dis
Max far-field (global) = -46.81077 db. Max far-field (plot) =
-46.81072 db
Max far-field (global) = -46.81077 db. Max far-field (plot) =
-46.81072 db
Mormalization: Reference, Network offset = 0.000 db
Hopak at: 42.9999 deg, Vpek at: 0.000 deg
Plot centering: 0n
20150701-45 MMTHCALES-3.5M-5
NST2000 V4.0.124, Filename:C:\Documents and Settings\N91\Deaktop\20
150701-40 MMTHCALES-3.5M-5
NST2000 V4.0.124, Filename:C:\Documents and Settings\N91\Deaktop\20
150701-40 MMTHCALES-3.5M\20
150
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E-Plane 2400MHz: 1.73269 dBi

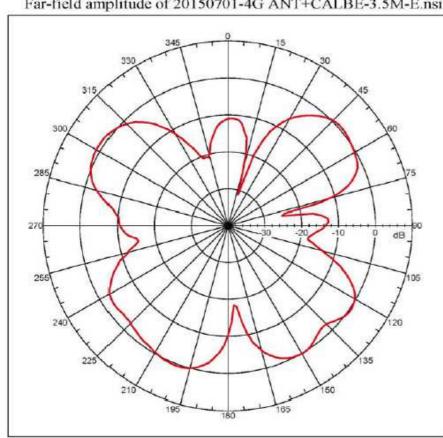
Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi





E-Plane 2500 MHz: 1.04758 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi



```
Far-field amplitude, Eprincipal! Linear, 7m = 0.000 deg Galz = 1.04758 dB; 8m = -49.89041 dB. Hex for-field (plots) = -49.89041 dB. Hex for-field (plots) = -49.8959 dB Normalization: Seference, Retwork offset = 0.080 dB Hybak at: -80.00001 dbg, Vpakr at: 0.080 deg Total Galacting on
### MATHON W4.0.124. Filenzar:C:\Documents and Settimpy\EFT\Smaktos\20
150783-09 ARTHCARES.150\2015701-49 ARTHCARES.500-120
150783-09 ARTHCARES.150\2015701-49 ARTHCARES.500-120
Mossucceeth date(inc) 77/2015 3:5122 396 Filetype: MII-97
#### Mathon Arthcare 15.75 day
-1.00 Arthcare 15.75 day
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       Sujected beam | 9 | 1 of 13

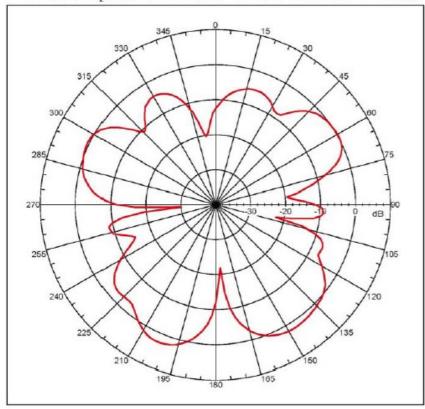
Dess Frequency Alimsth Elevation Fel

14 | 2.501 CHz Azimsth Elevation Eingle-pol
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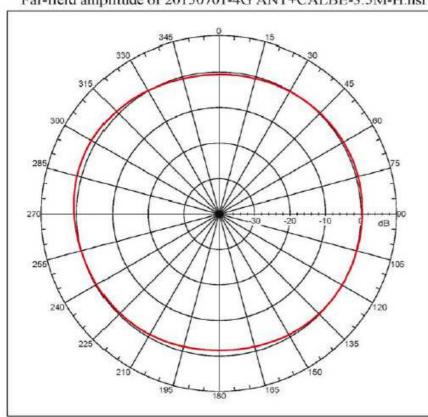
E-Plane 2600MHz: 2.59262 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-E.nsi



H-Plane 806MHz: 1.37841 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi

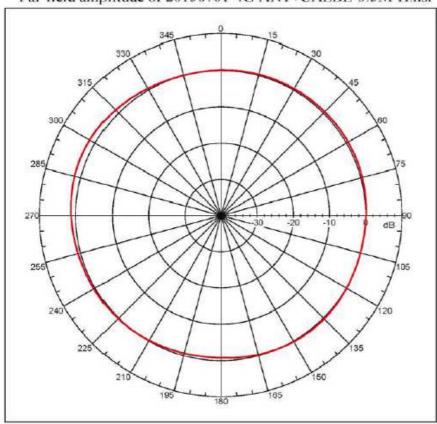


Far-field emplitude. Epcincipal: Linear, Thu = 0.000 deg
Gain = 1.3781 dEz
Gain = 1.3781 dEz
Max for-field (global) = -41.02906 dB. Max for-field (plob1) = -42.02906 dB.
Max for-field (global) = -43.02906 dB. Max for-field (plot1) = -42.02906 dB.
Goralization: Reference. Betwork offset = 8.000 dB.
Horalization: Reference. School deg
Horalization: Reference. Betwork offset = 8.000 dB.
Horalization: Reference. School dB.
Horalization: Reference. Betwork offset = 1.500 dB.
Horalization: Reference = 1.500 dB.
Horaliz



H-Plane 824MHz: 1.77902 dBi

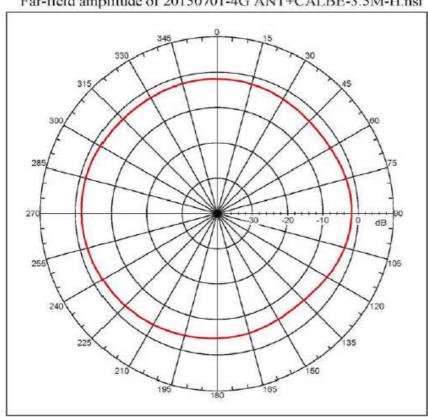
Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi





H-Plane 850 MHz: -1.60185 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi



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Far-field amplitude. Eprincipal: Linear. Tau = 0.000 deg

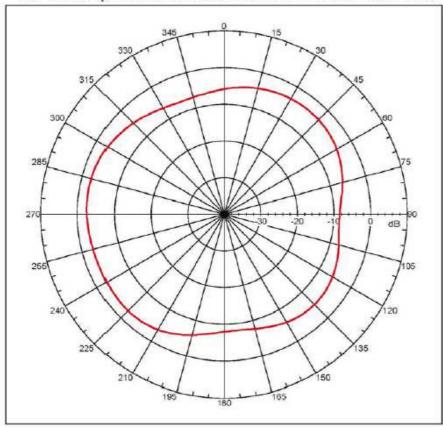
Gaim = -1.00185 dei

Max [ar-field (global) = -42.83871 dB. Mex far-field (plot) =
-42.85873 dB. Mex far-field (plot) dB.
Max f
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H-Plane 900MHz: -2.47165 dBi

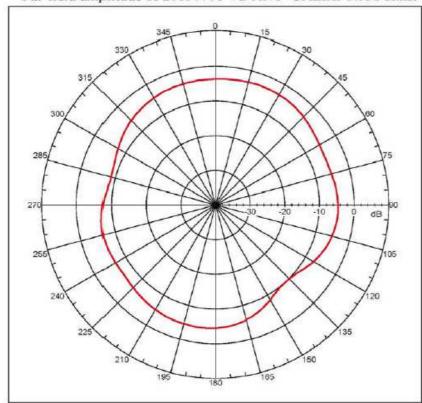
Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi



For-field amplitude. Eptincipal: Linear, Tai = 0.000 deg
Gain = -2.0166 dei
Gain = -2.0166 dei
Max for-field (pichal) = -44.80133 db. Max for-field (pichi =
-40.0124 dl
Bornalization: Reference. Retwork offset > 0.000 db
Hpoar art -82.00001 deg, Vpeak at: 0.000 deg
Flot contraction: On
D0150701-40 ANTWCALSE-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
150701-40 ANTWCALSE-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
150701-40 ANTWCALSE-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
150701-40 ANTWCALSE-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
150701-40 ANTWCALSE-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
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Action Antwcalse-3.5M-H
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Incomparison Antwcalse-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
Incomparison Antwcalse-3.5M-H
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Incomparison Antwcalse-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
Incomparison Antwcalse-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
Incomparison Antwcalse-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
Incomparison Antwcalse-3.5M-H
MAXTOR V4.0.224, Filename: C.LDoudsment and Settings/M011 beakton/20
Incomparison: C.LD

H-Plane 960MHz: -3.26146 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi



Far-field amplitude, Eprincipal Linear, Tau = 0.000 deg

Gair = -3.26145 ME:

Nax far-field (global) = -49.85113 dB, Pax far-field (plut) =
-49.9014 dR

Schmallaction (global) = -49.85113 dB, Pax far-field (plut) =
-49.9014 dR

Schmallaction Perfectors, Hetwark officer = 0.000 dB

Elot occitering on deg, Vpeak act 0.000 deg

Far-field out Analysis:
Any value: -3.582 dB

-7. on hear windth ben found

-87 value: -3.582 dB

-7. on hear windth ben found

-88 index dictored bot found

-88 index dictored bot found

-88 index dictored bot found

Far-field display setup

Far-field display setup

First the (occitering deg, Contar = 0.800 deg, spts = 181

Elot de deg both deg, Spts = 1

Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

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Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

Elotodo beam(p) 1 of th

Elot foundation deg, Spts = 1

Elotodo deg, Spts = 10.0000 deg, Spts = 10.0000 deg

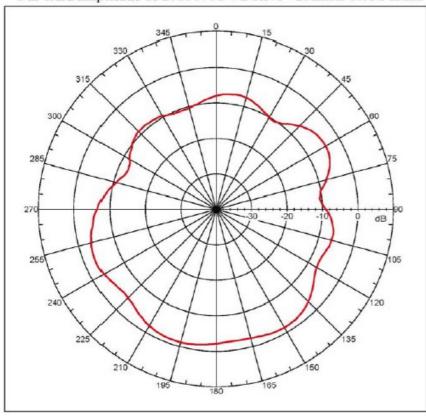
Elot foundation deg, Spts = 10.0000 deg, Spts = 10.0000 deg

Elotodo degree de



H-Plane 1710MHz -1.21375 dBi

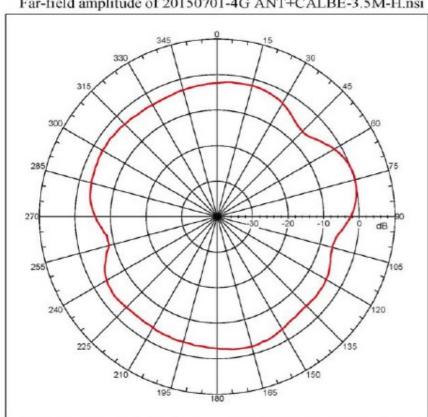
Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi





H-Plane 1800MHz: 0.29161 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi

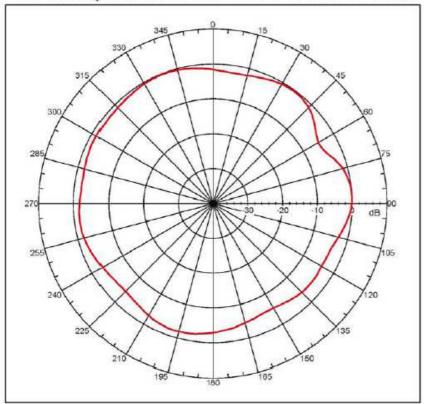


20150761-49 ANT+CALSE-3.5M-H ## 1200 V4.0.124, Filename:Citpouments and Settings\#21\Desktop\20
159702-05_NNT:CALES-3.504.20159703-46_ANT=CALES-3.50-N.real
Measurement date/time: 74/372015_3:10:28 FM, Filetype: N3I-97
For-file10 Cut Analysis:
Ang value-3.467 48.246 deg
-3. db Bona width: 32.46 deg
-10. dB beam width: Not Found
Left Sidelabe: -2.12 dB at 15.058 deg
Right Sidelabe: -2.12 dB at 15.058 deg
For-file10 display setup
Almanth Google State-3.6001 deg, State-181
State-180.6001 deg, Center = 0.000 deg, Sptm = 181
State-180.60001 deg, Stop = 183.60001 deg, Delta = 2.008
deg deg Elevation (deg) Center = 0.000 deg, Spts = 1 Selected beam(s) 1 of 15 Beam Frequency Arimuth Elevation Fol 10 1.803 GHz Azimuth Elevation Single-pol



H-Plane 1900MHz: -0.03944 dBi

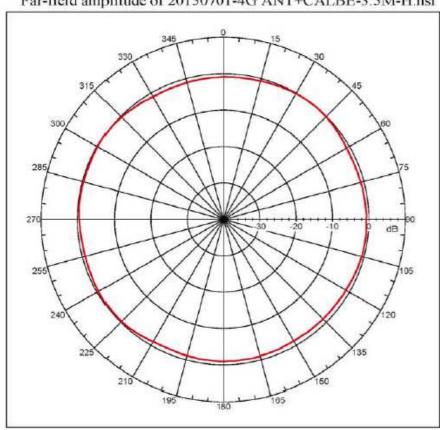
Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi



Far-field ampliteds. Eprincipal: Linear, 7au = 0.800 deg Gais = -0.0244 Gai Max far-field (global) = -47.0364 db. Max far-field (global) = -47.0364 db. Max far-field plot) = -67.0361 dB. Normalization: Reference. Network offset = 0.060 dB mpask at: 63.0999 deg. Vpmsk at: 0.000 deg 20150701-42 AMT+CALSE-3.5M-H NETURN VALUE - 1.00 - Files special Communication and Settings (MET) Insistop (ME deg Elevation (deg) Setter = 0.000 deg, #pts = 1 Delarted Sear(#) 1 of 15 Seam Frequency Aliasth Elevation Fol. 11 1.000 UHz Azimuth Elevation Single-pol

H-Plane 2170MHz: 0.020 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi

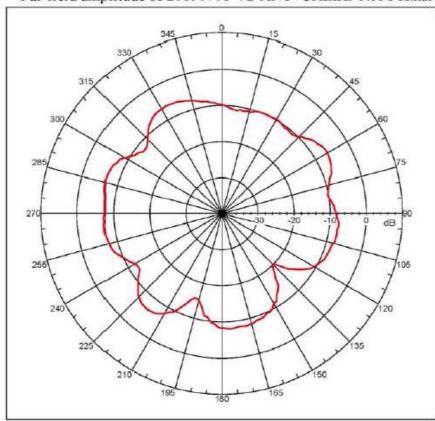


Far-field emplitude. Eprincipal: Linear, Thu = 0.000 deg Gain = 0.020 del Max for-field (plobal) = -47.51211 dB. Max for-field (plot) = -47.51213 dB Max for-field (plot) = -47.51213 dB Max for-field (plot) = 0.000 dB Max for-f 2015/0701-45 MMTHCALSG-3.5M-H HEIZEND 45.324. Filmings:C.\Documence and Settings\RIT\Desktop\ZO
150781-00 sirvetames.5.0010157011-40 anvectames.5.00+0.n1
Measurement date/limit 71/2013 313018 FM. Filetype: WI-97
Per-field Cut Amelyydis
Any Value: - 10 anvectames 10 anvectames 1.00+0.n1
Any Value: - 10 anvectames 10 anvectames 1.00
Any Value: - 10 anvectames 10 anvec Seg Shrvatinn (deg) Senter = 0.000 deg, spts = 1 Delected Beam (a) 1 of 15 Beam Frequency Asimuth Elevation Fol 12 2.170 GHz Asimuth Elevation Eingle-pol



H-Plane 2400MHz -6.23579 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi



Far-field amplitude. Eprincipal: Linear, Tau = 0.000 deg

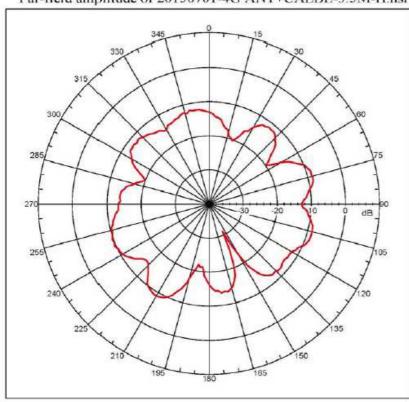
Gain = -6.25219 dei

Mar for field [global] = -55.24242 dm. Nam far-field (plot) =
-55.24366 dm.

Mormalization (inference, Network offset = 6.000 dm.

H-Plane 2500MHz: -8.61832 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi



Far-field moditude, Eptinoipal Linear, Tau = 3.808 deg

Unit = -0.01812 deg

Nex for-field (global) = -50.75431 db, Nex for-field (plot) =
-0.7540 deg

Normalization: Reference, Hetwork offset = 0.000 dB

Hypean str 75.7599 deg, ypear all 0.000 deg

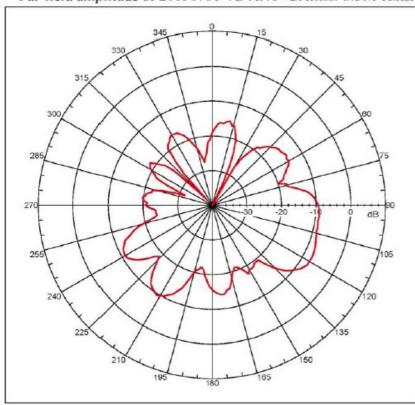
Elot contrained to the street of the street of

ANT-M4G3



H-Plane 2600MHz: -7.49977 dBi

Far-field amplitude of 20150701-4G ANT+CALBE-3.5M-H.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg Gain = -0.49977 cm;
Mex far-field (global) = -57.91050 dm, Mex far-field (plot) = -57.01660 dm
Normalization: Reference, Netwerk offset = 0.000 dm
Hpmak at: 117.99999 dmg, Vpmak at: 0.000 dm
Lot centering: 00 20150701-4C AMT+CALBE-3.5M-H imuth (deg) Span = 363.00001 deg, Center = 0.000 deg, #pts = 101 Start= -180.00001 deg, Stop = 190.00001 deg, Delta = 2.000 Bievation (deg) Center = 0.000 deg, #pts = 1 ted beam(s) 1 of 15 Frequency Arisuth Elevation Pol 2.600 GHz Azimuth Elevation Single-pol

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. Solutions Ltd., fulfills 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.

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