

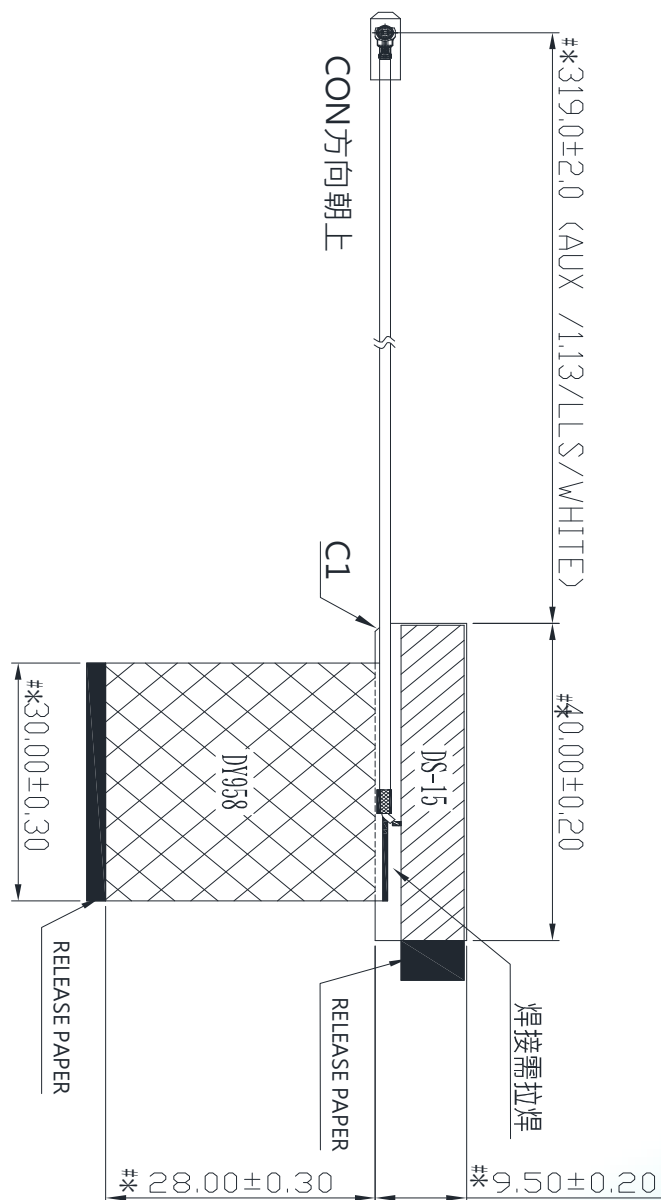
Description: BR1402 AUX ANT



Series: BR1402 AUX

ASUS P/N : 14008-05650300

PULSE P/N : TZ2486E



Features:

- WLAN Antenna
- Printed Circuit Board
- Adheres to plastic surface
- 1.13mm cable with NGFF
- RoHS Compliant

Applications:

- Notebook computer

All dimensions are in mm / inches

Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

For more information:

Pulse Worldwide Headquarters
15255 Innovation Drive #100
San Diego, CA 92128
USA
Tel: 1-858-674-8100

Pulse/Larsen Antennas
18110 SE 34th St Bldg 2 Suite 250
Vancouver, WA 98683
USA
Tel: 1-360-944-7551

Europe Headquarters
Pulse GmbH & Co, KG
Zeppelinstrasse 15
Herrenberg, Germany
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road (#29 Bldg, 4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998



Description: BR1402 AUX ANT



Series: BR1402 AUX

ASUS P/N : 14008-05650300

PULSE P/N : TZ2486E

ELECTRICAL SPECIFICATIONS

Antenna Type	PCB PIFA
Frequency	2.4-2.5GHz,5.15-5.875GHz
Nominal Impedance	50 Ω
VSWR	3:1
Radiation Pattern	Omni
Gain	Refer to gain table
Polarization	Linear
Power Withstanding	1W

MECHANICAL SPECIFICATIONS

Overall Length	40x9.5 mm
Antenna Color / Material	Black/ PCB
Connector type	See table, P3
Cable type	See table, P3
Cable length	See table, P3
Adhesive tape	HF DS15

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40 ~ +85°C
Storage Temperature	-40 ~ +85°C
RoHS Compliant	Yes

Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



Description: BR1402 AUX ANT

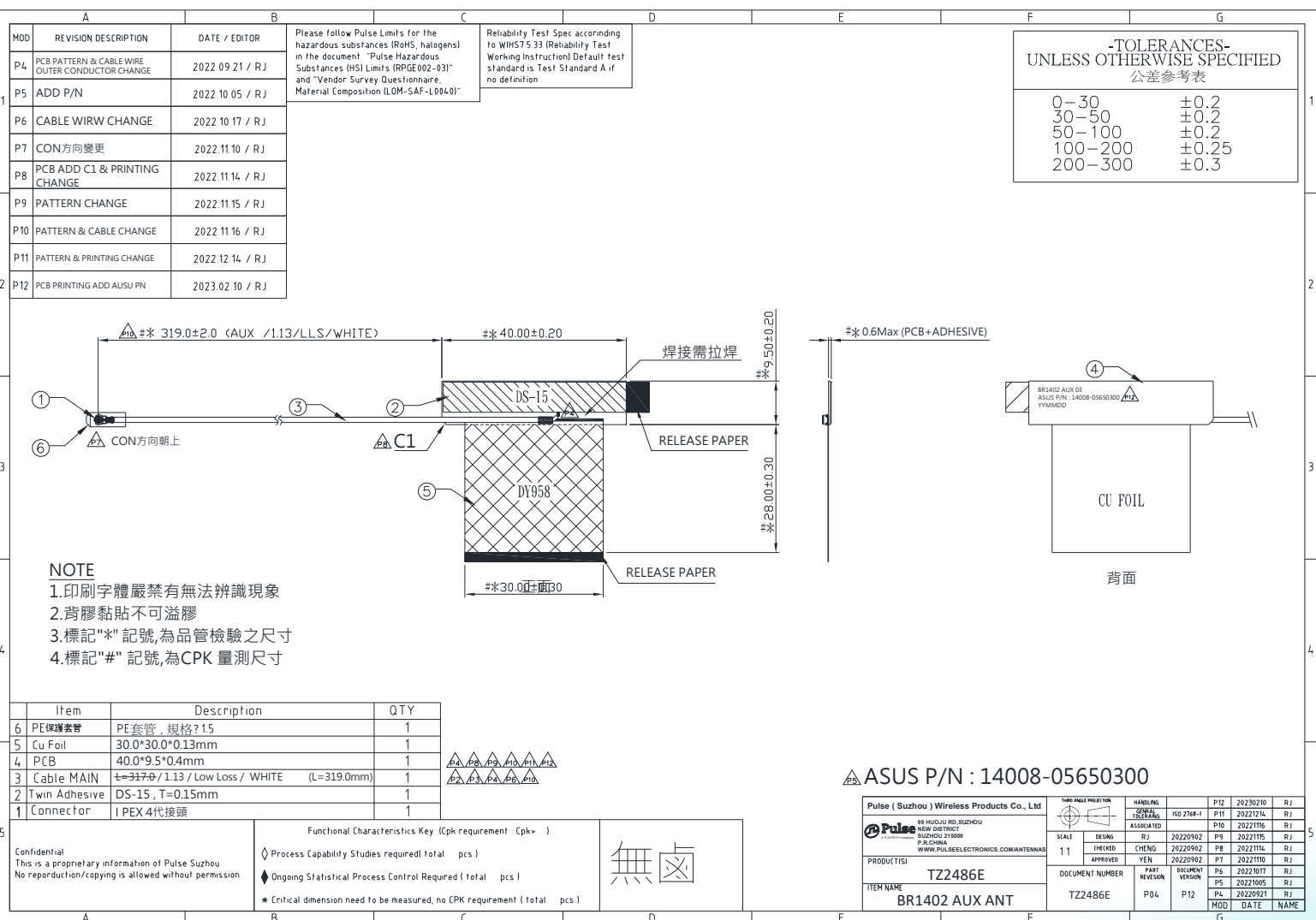
Series: BR1402 AUX

ASUS P/N : 14008-05650300

PULSE P/N : TZ2486E



MECHANICAL DRAWING



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



Description: BR1402 AUX ANT

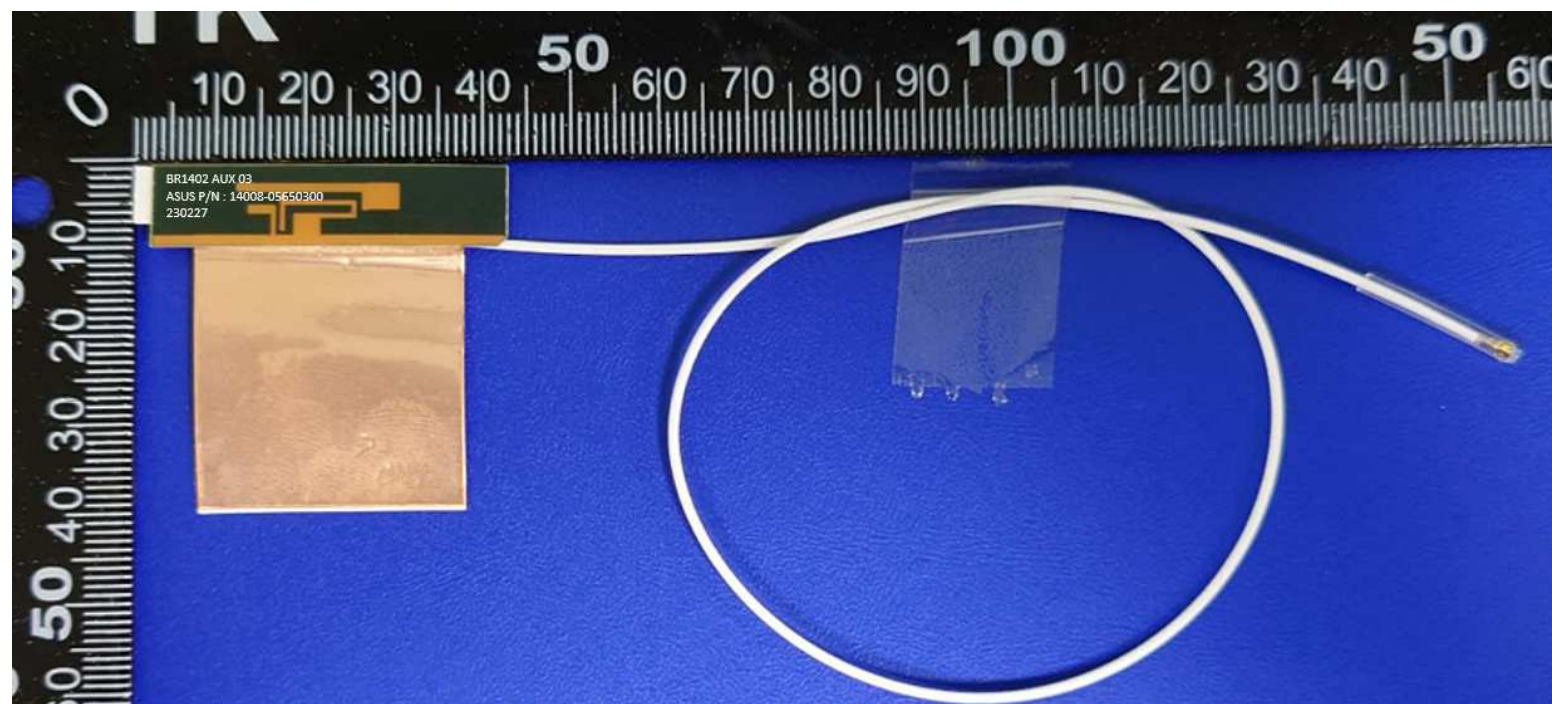
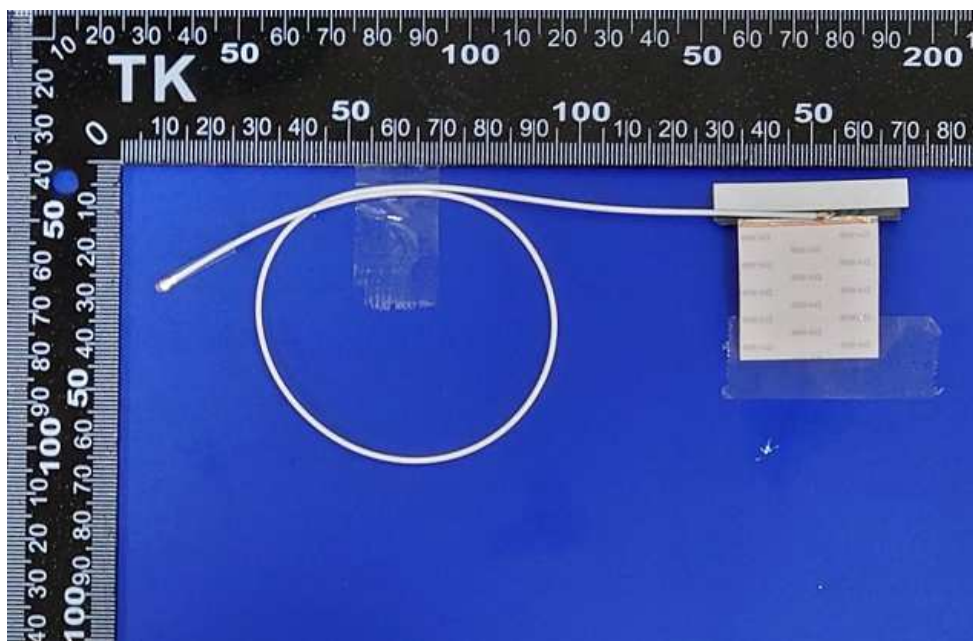
Series: BR1402 AUX

ASUS P/N : 14008-05650300

PULSE P/N : TZ2486E



ANTENNA DRAWING



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



Description: BR1402 AUX ANT

Series: BR1402 AUX

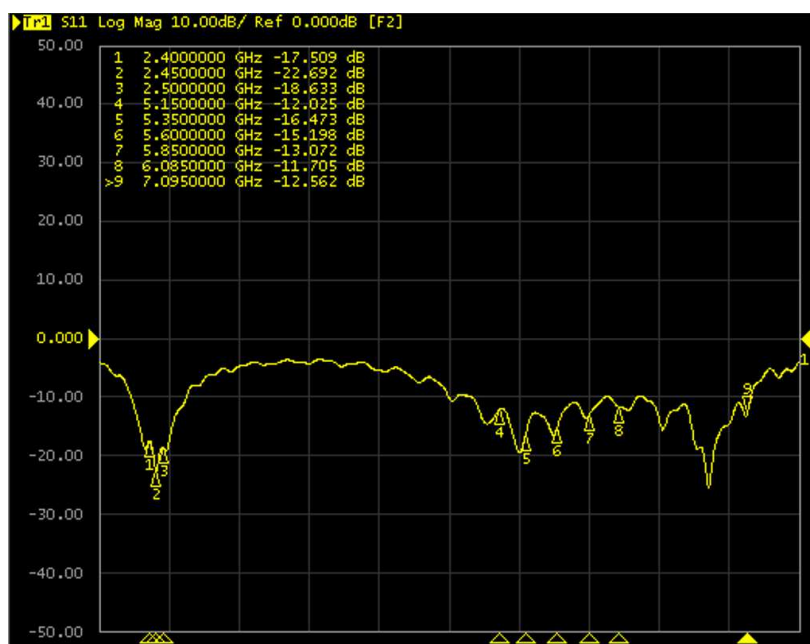
ASUS P/N : 14008-05650300

PULSE P/N : TZ2486E

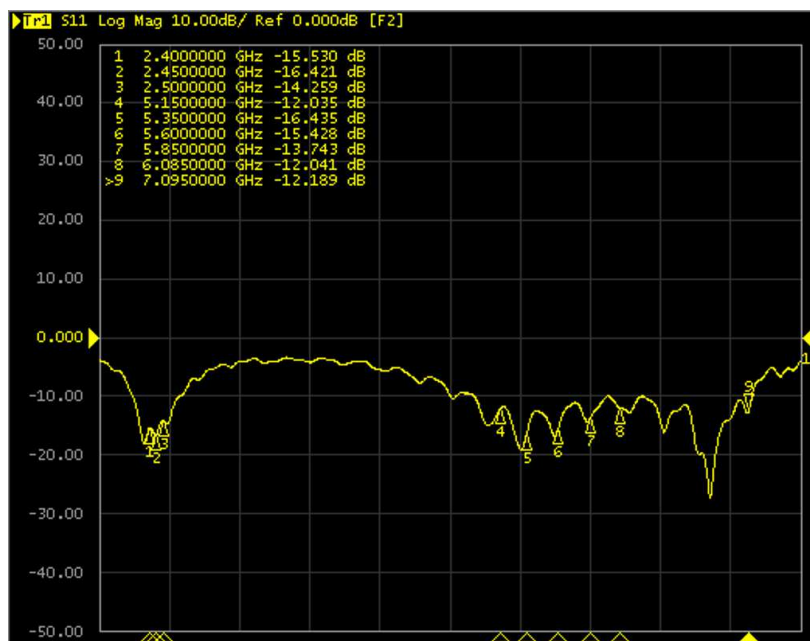


TEST SETUP

NB Mode



TB Mode



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX
ASUS P/N : 14008-05650300
PULSE P/N : TZ2486E
EFFICIENCY
NB Mode
TB Mode

aux	Frequency	Efficiency	Gain
	2400	-3.89	2.77
	2412	-3.63	2.80
	2437	-3.31	2.84
	2462	-3.63	2.76
	2500	-3.96	2.59
	5150	-3.67	3.41
	5250	-3.73	3.29
	5350	-3.69	3.48
	5470	-3.83	4.23
	5600	-4.32	4.10
	5725	-4.59	4.11
	5785	-4.56	4.15
	5850	-4.74	4.08
	5895	-4.97	4.06
	5925	-5.44	4.31
	6125	-5.37	4.33
	6425	-5.03	4.10
	6525	-5.25	3.94
	6725	-4.54	4.17
	6875	-4.96	3.60
	6925	-5.00	3.66
	7125	-5.96	3.50

aux	Frequency	Efficiency	Gain
	2400	-4.20	2.38
	2412	-4.14	2.60
	2437	-4.13	2.56
	2462	-4.28	2.33
	2500	-3.93	2.54
	5150	-3.78	3.27
	5250	-3.73	3.24
	5350	-3.63	3.55
	5470	-4.05	4.37
	5600	-4.57	3.93
	5725	-4.84	4.04
	5785	-4.72	3.90
	5850	-4.86	4.19
	5895	-5.07	3.58
	5925	-5.53	2.95
	6125	-5.27	3.75
	6425	-5.49	3.58
	6525	-5.30	3.51
	6725	-5.42	2.76
	6875	-6.15	1.73
	6925	-6.36	1.30
	7125	-6.58	1.84

Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

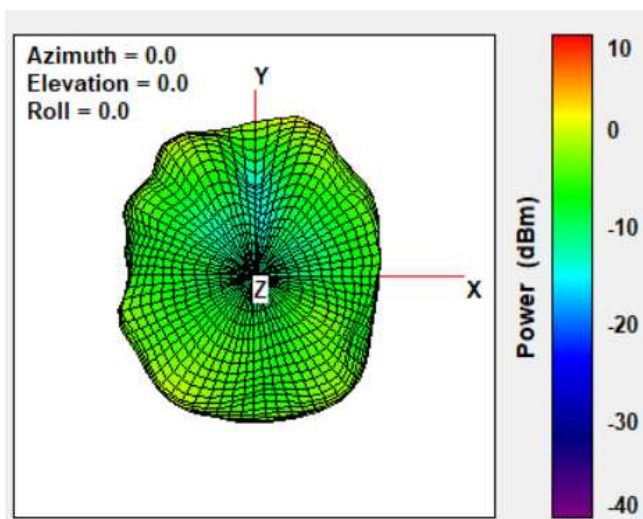
PULSE P/N : TZ2486E



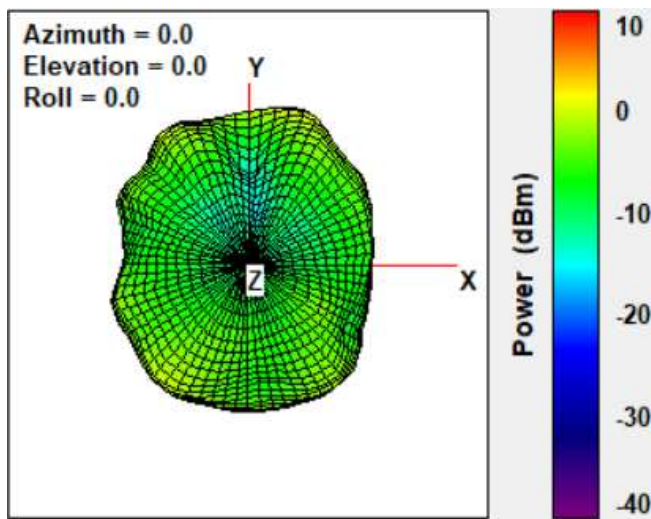
CHARTS

NB Mode

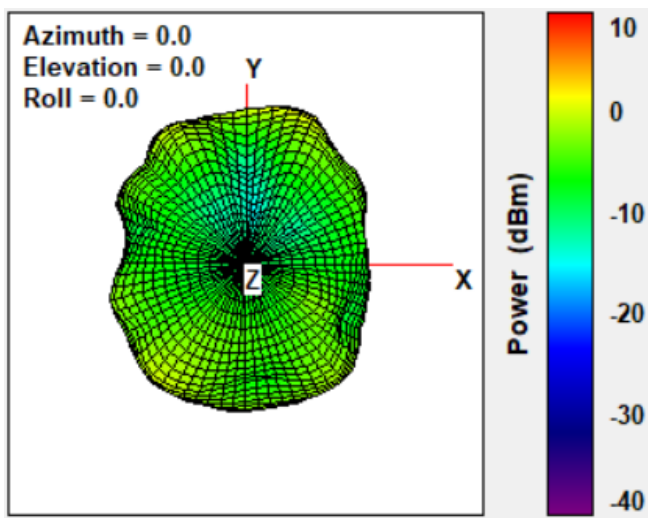
Radiation Pattern of WLAN Antenna (2400MHz)



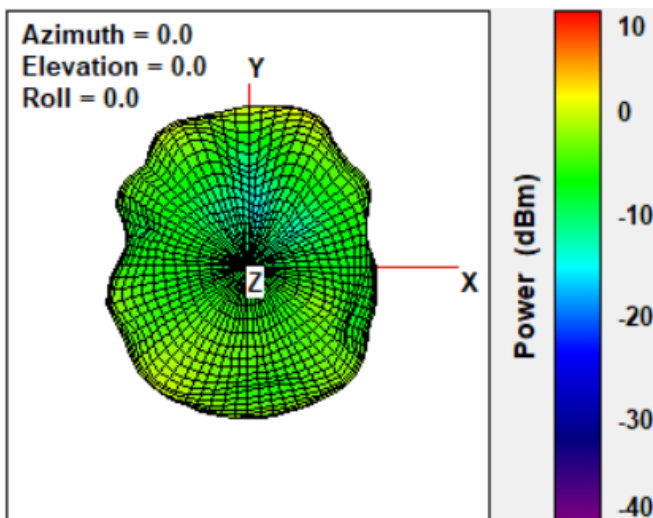
Radiation Pattern of WLAN Antenna (2412MHz)



Radiation Pattern of WLAN Antenna (2437MHz)



Radiation Pattern of WLAN Antenna (2462MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

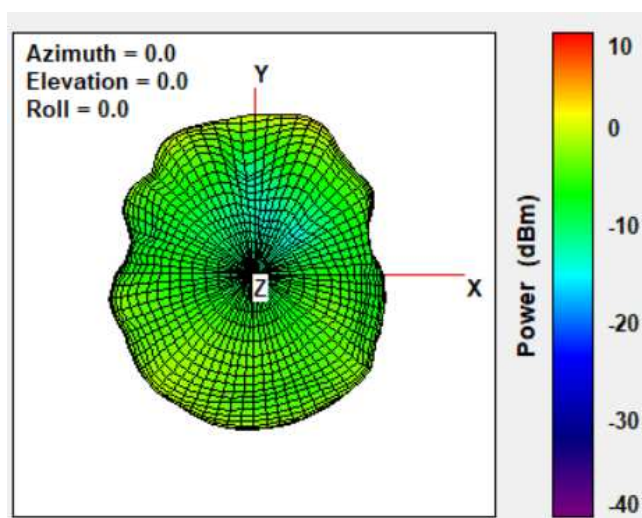
PULSE P/N : TZ2486E



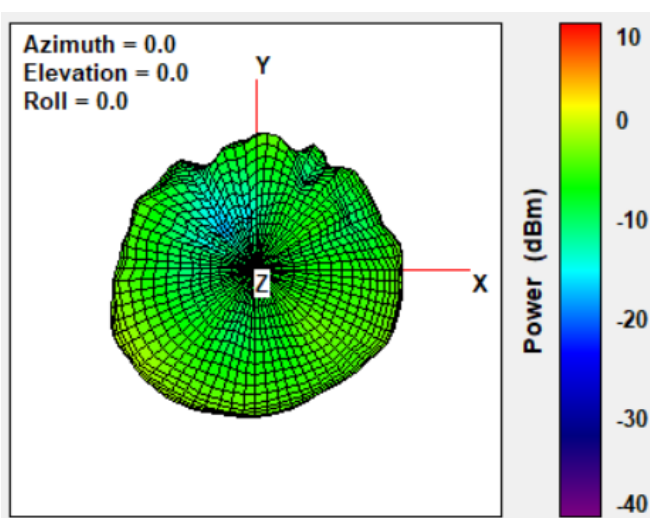
CHARTS

NB Mode

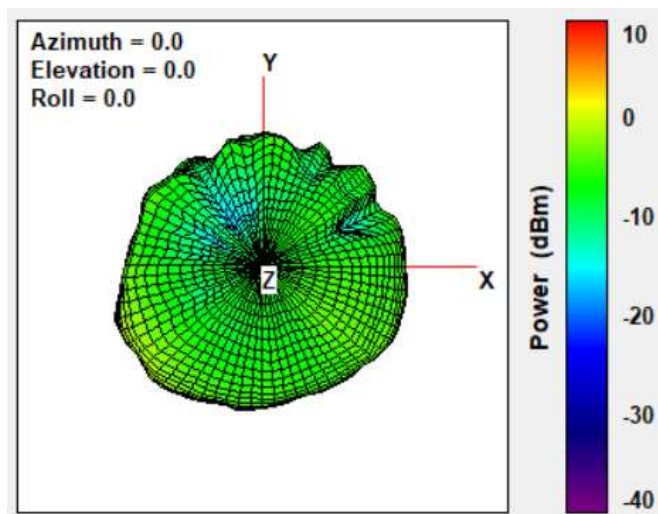
Radiation Pattern of WLAN Antenna (2500MHz)



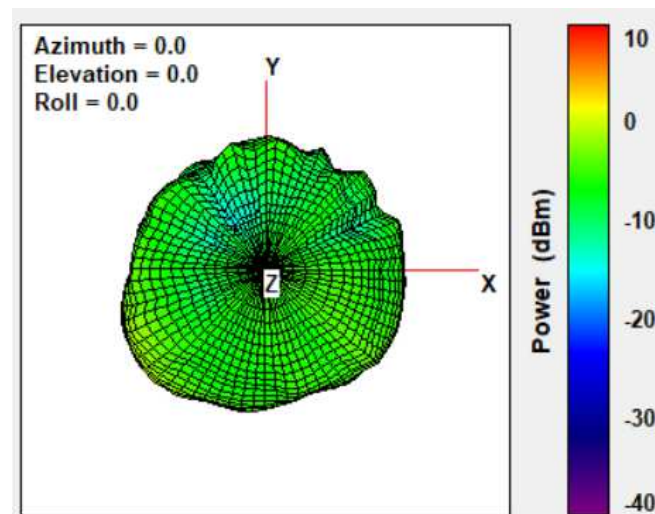
Radiation Pattern of WLAN Antenna (5150MHz)



Radiation Pattern of WLAN Antenna (5250MHz)



Radiation Pattern of WLAN Antenna (5350MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

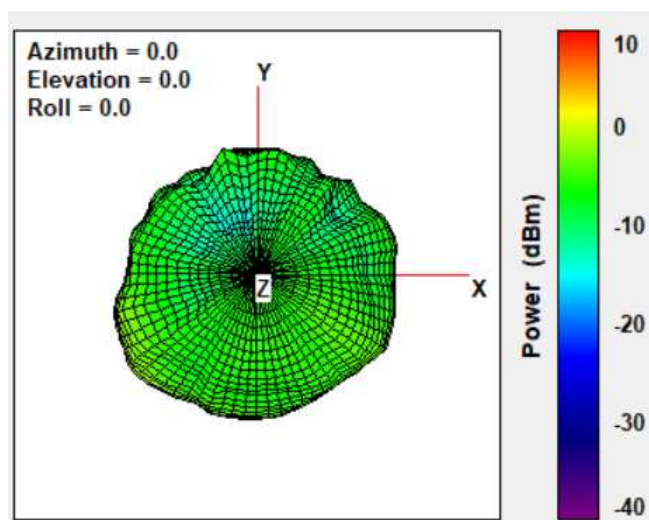
PULSE P/N : TZ2486E



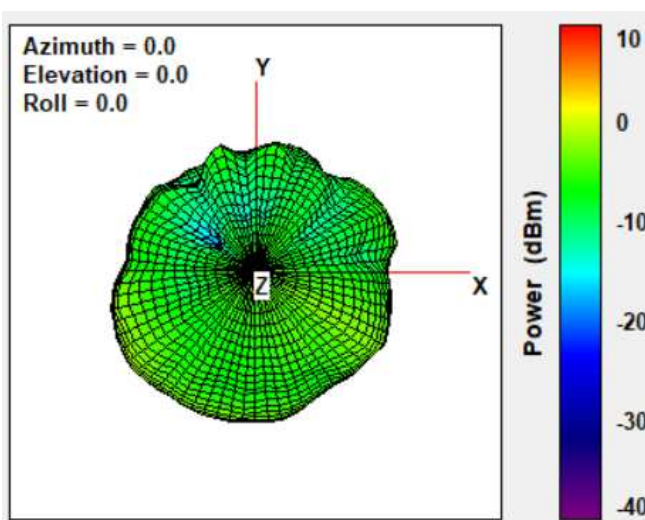
CHARTS

NB Mode

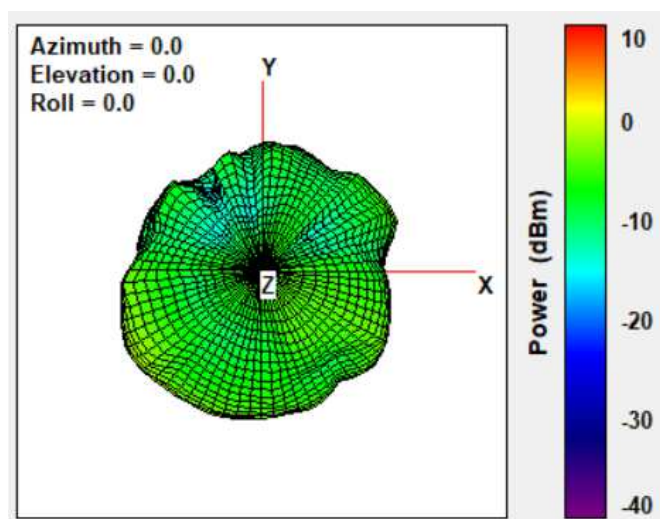
Radiation Pattern of WLAN Antenna (5470MHz)



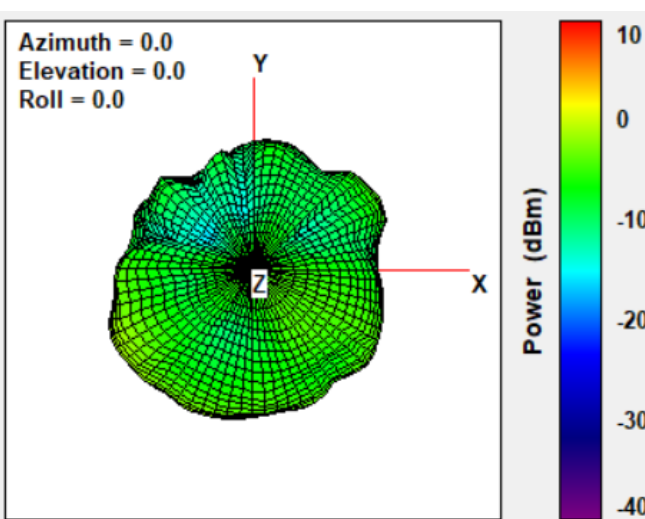
Radiation Pattern of WLAN Antenna (5600MHz)



Radiation Pattern of WLAN Antenna (5725MHz)



Radiation Pattern of WLAN Antenna (5785MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT



Series: BR1402 AUX

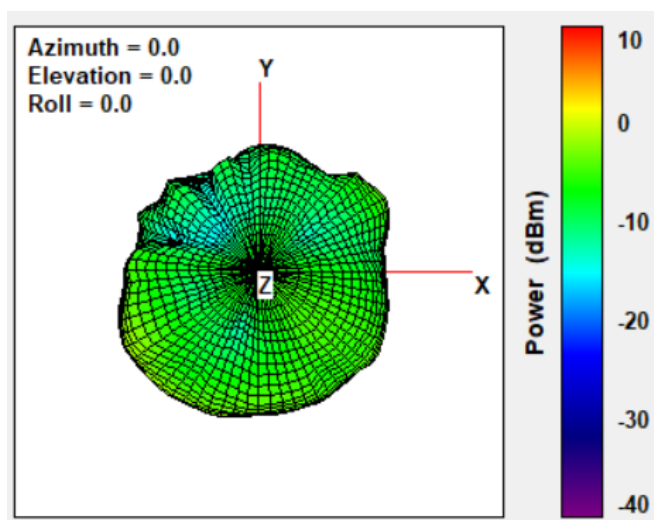
ASUS P/N : 14008-05650300

PULSE P/N : TZ2486E

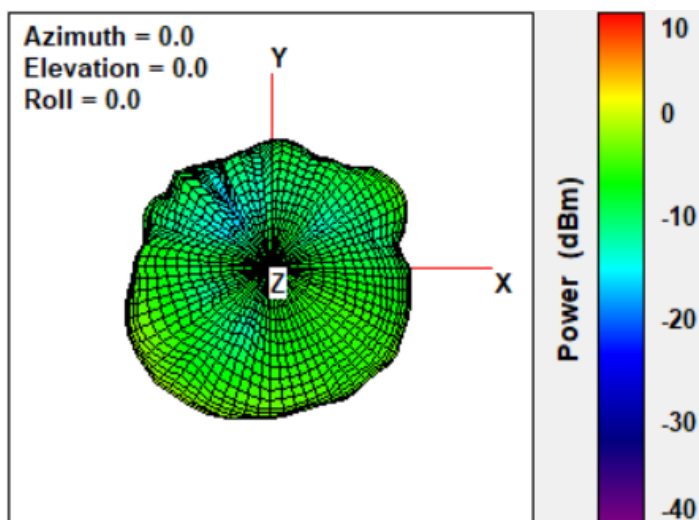
CHARTS

NB Mode

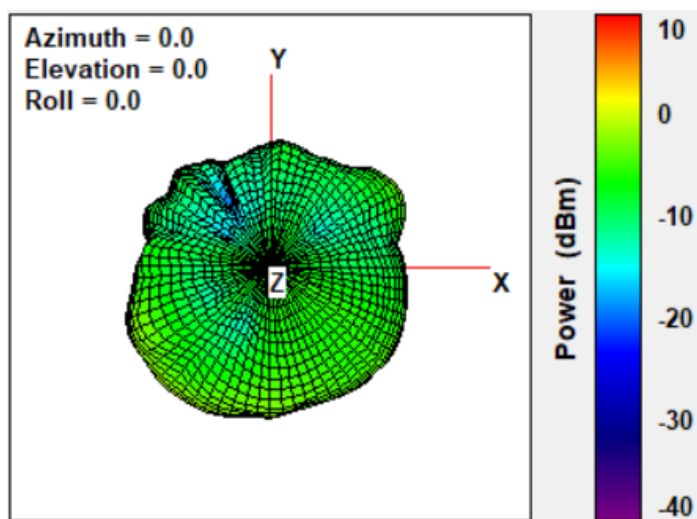
Radiation Pattern of WLAN Antenna (5850MHz)



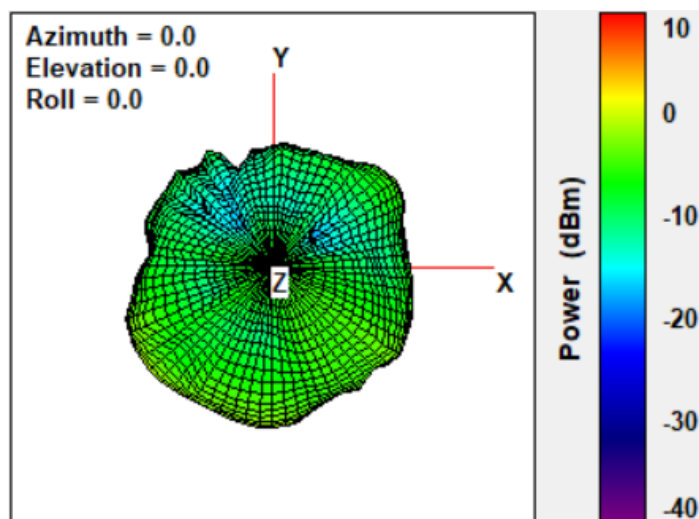
Radiation Pattern of WLAN Antenna (5895MHz)



Radiation Pattern of WLAN Antenna (5925MHz)



Radiation Pattern of WLAN Antenna (6125MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

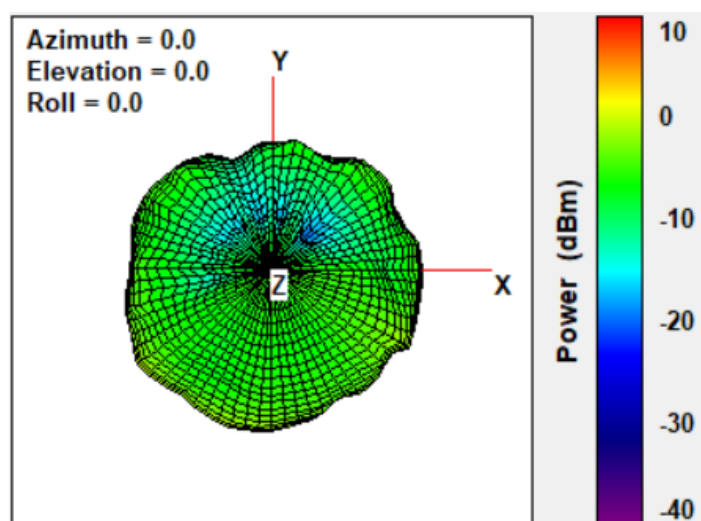
PULSE P/N : TZ2486E



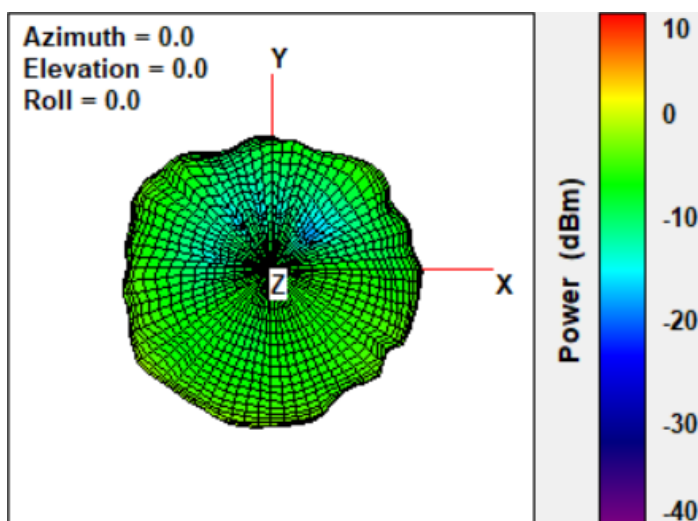
CHARTS

NB Mode

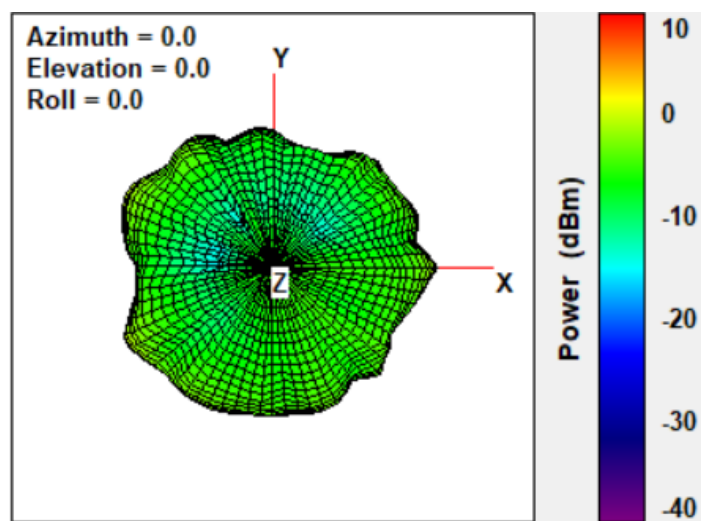
Radiation Pattern of WLAN Antenna (6425MHz)



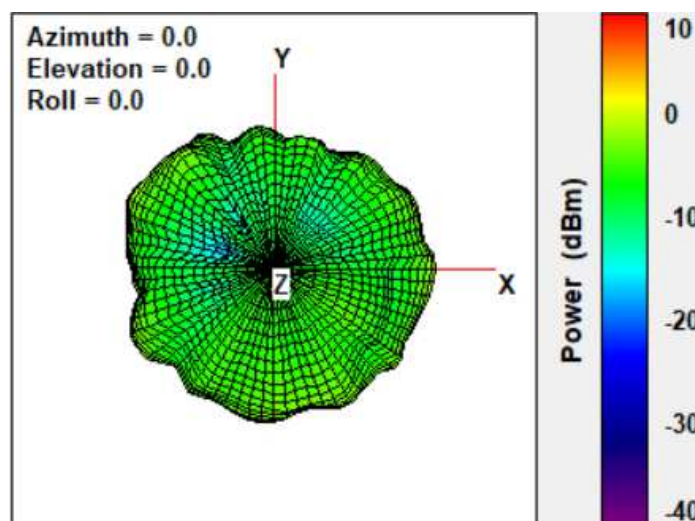
Radiation Pattern of WLAN Antenna (6525MHz)



Radiation Pattern of WLAN Antenna (6725MHz)



Radiation Pattern of WLAN Antenna (6875MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

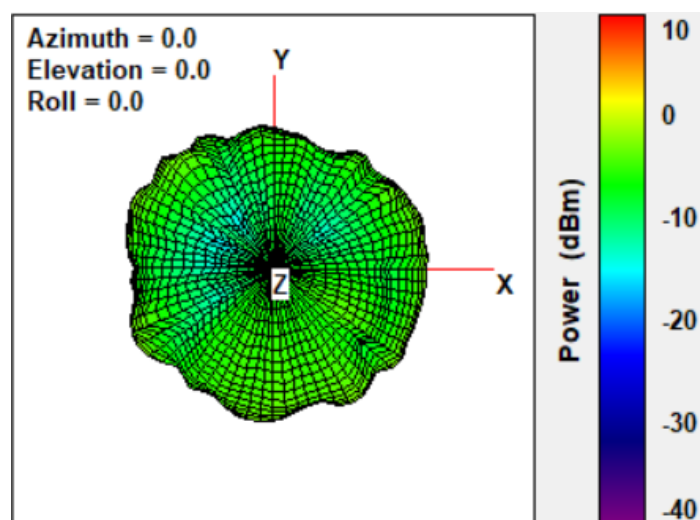
PULSE P/N : TZ2486E



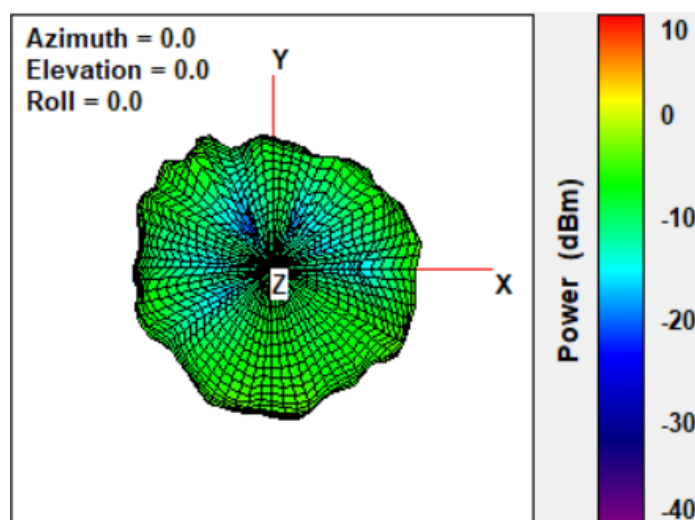
CHARTS

NB Mode

Radiation Pattern of WLAN Antenna (6925MHz)



Radiation Pattern of WLAN Antenna (7125MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

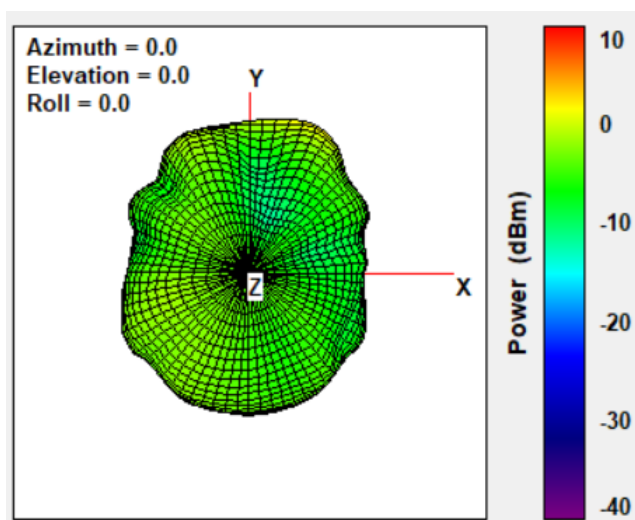
PULSE P/N : TZ2486E



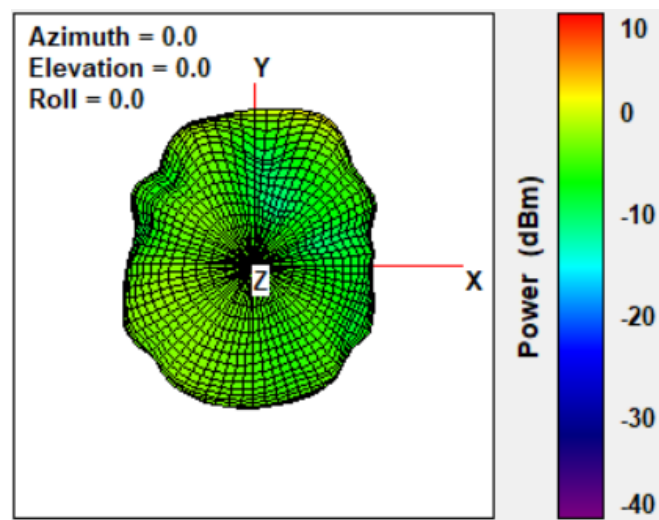
CHARTS

TB Mode

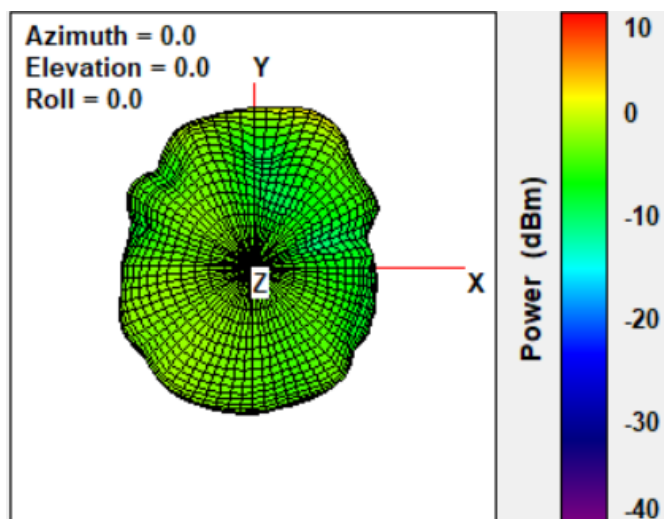
Radiation Pattern of WLAN Antenna (2400MHz)



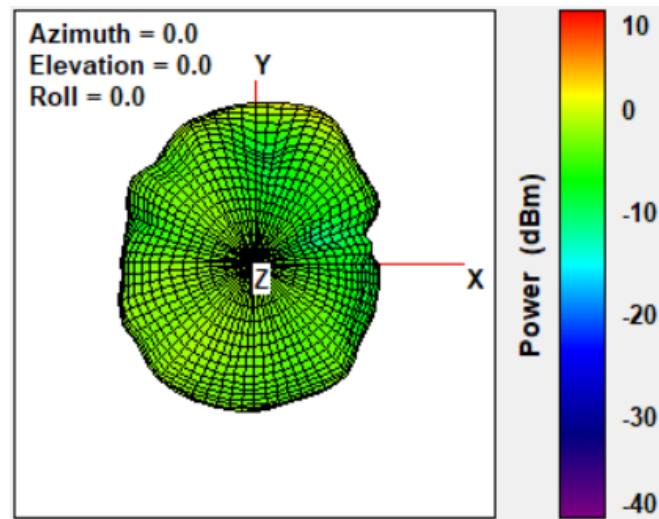
Radiation Pattern of WLAN Antenna (2412MHz)



Radiation Pattern of WLAN Antenna (2437MHz)



Radiation Pattern of WLAN Antenna (2462MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

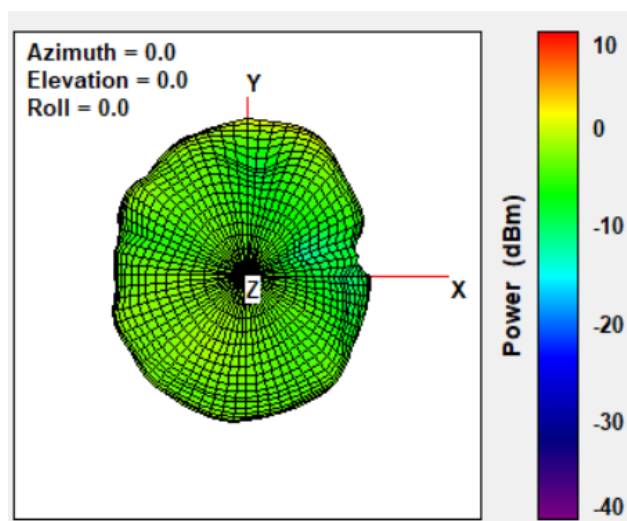
PULSE P/N : TZ2486E



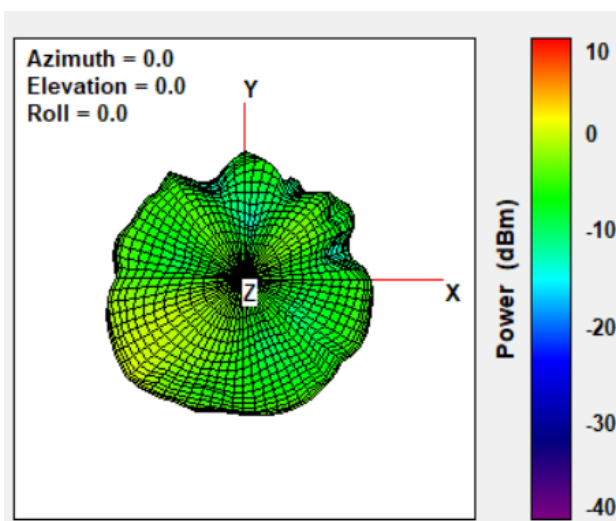
CHARTS

TB Mode

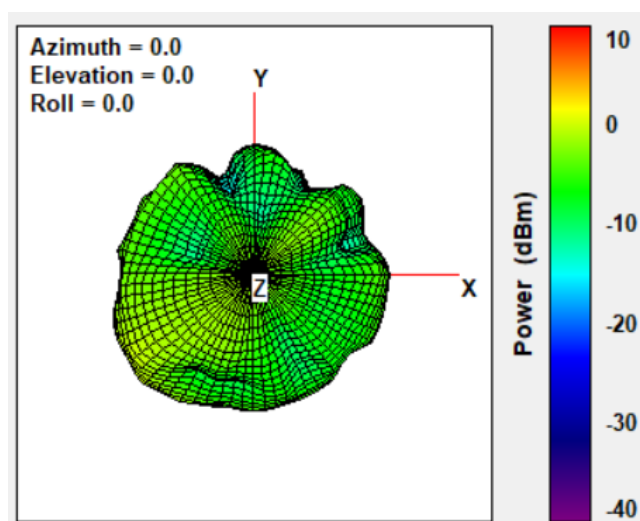
Radiation Pattern of WLAN Antenna (2500MHz)



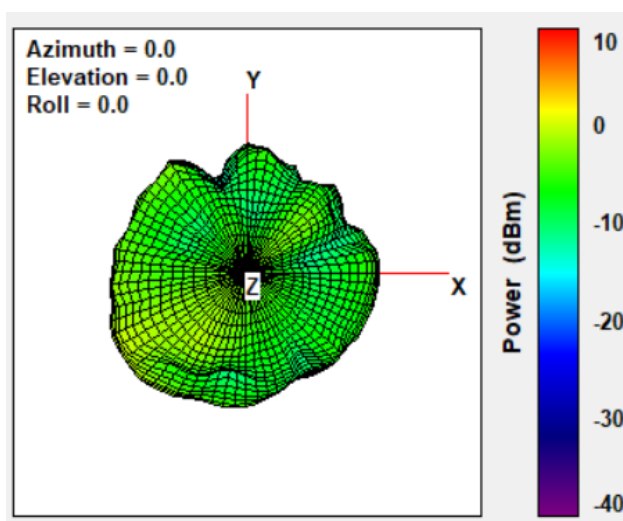
Radiation Pattern of WLAN Antenna (5150MHz)



Radiation Pattern of WLAN Antenna (5250MHz)



Radiation Pattern of WLAN Antenna (5350MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

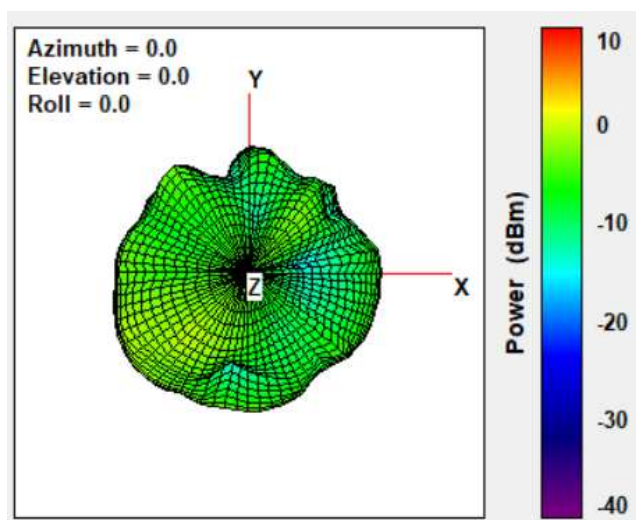
PULSE P/N : TZ2486E



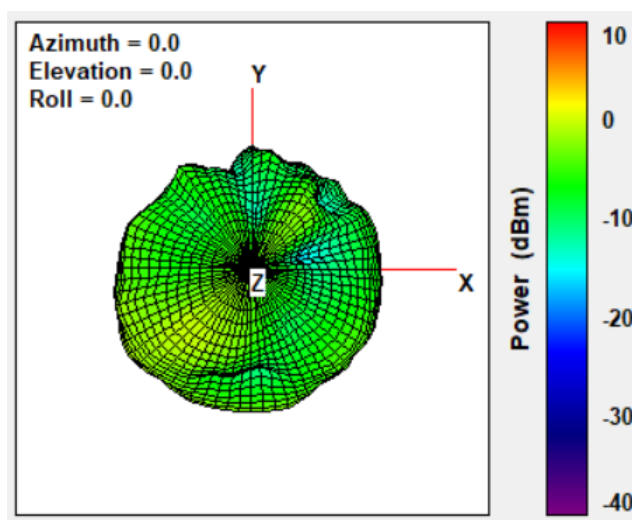
CHARTS

TB Mode

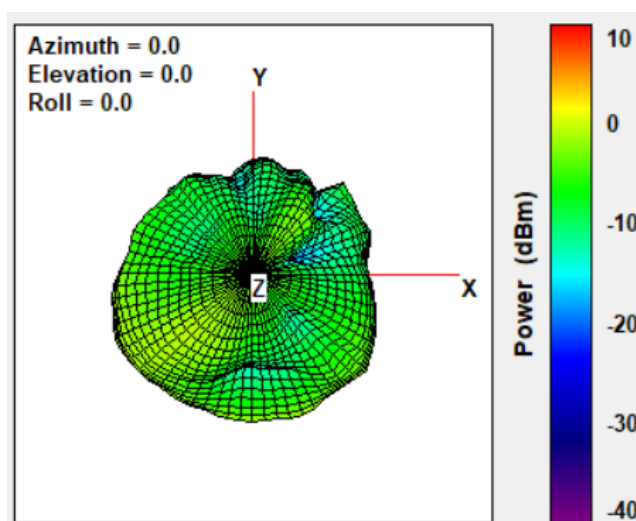
Radiation Pattern of WLAN Antenna (5470MHz)



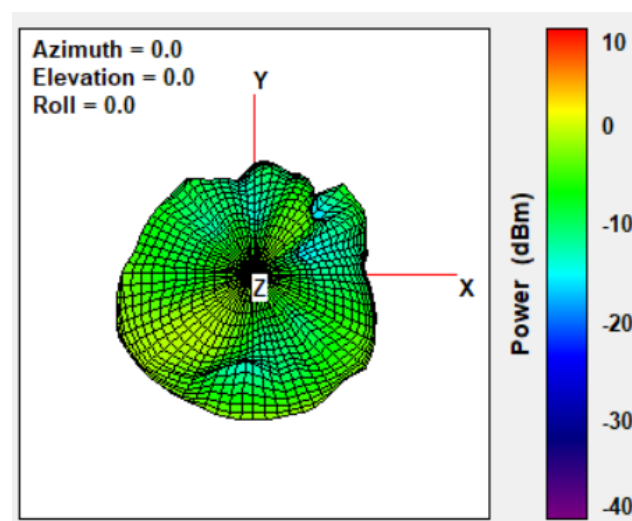
Radiation Pattern of WLAN Antenna (5600MHz)



Radiation Pattern of WLAN Antenna (5725MHz)



Radiation Pattern of WLAN Antenna (5785MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT



Series: BR1402 AUX

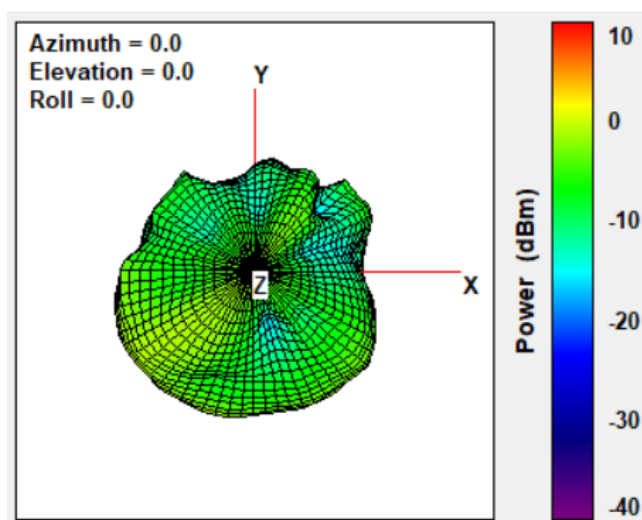
ASUS P/N : 14008-05650300

PULSE P/N : TZ2486E

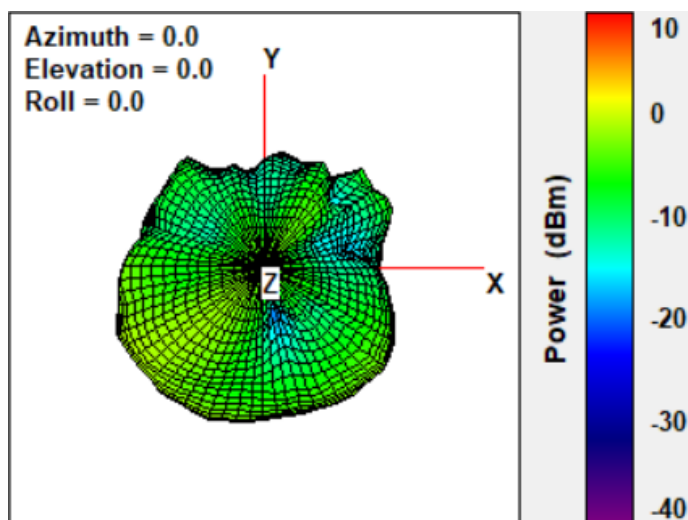
CHARTS

TB Mode

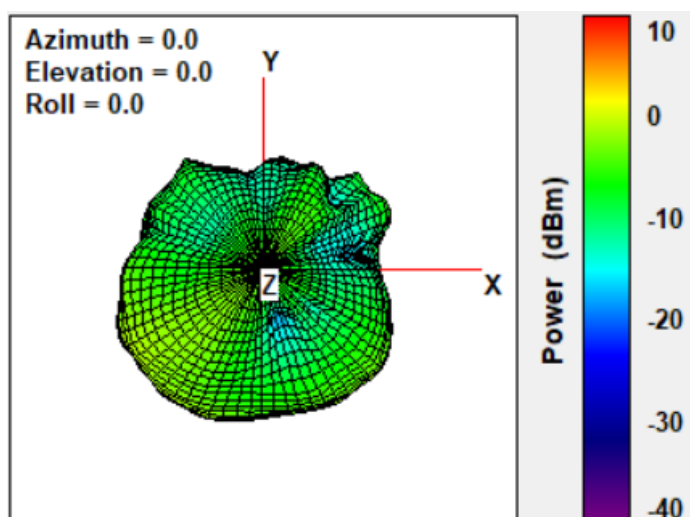
Radiation Pattern of WLAN Antenna (5850MHz)



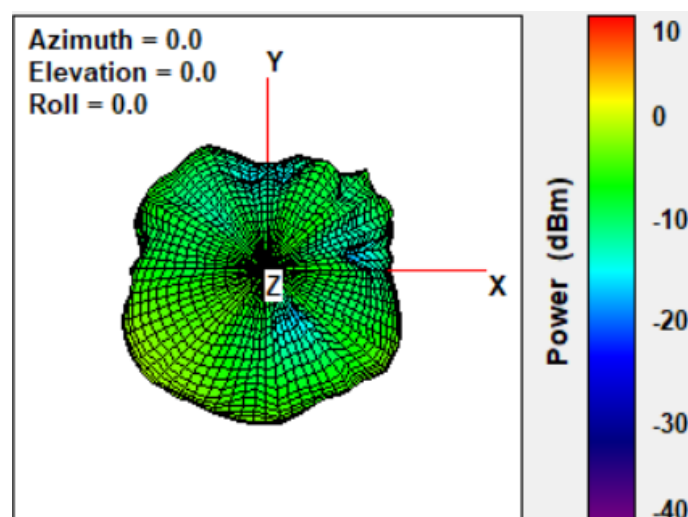
Radiation Pattern of WLAN Antenna (5895MHz)



Radiation Pattern of WLAN Antenna (5925MHz)



Radiation Pattern of WLAN Antenna (6125MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

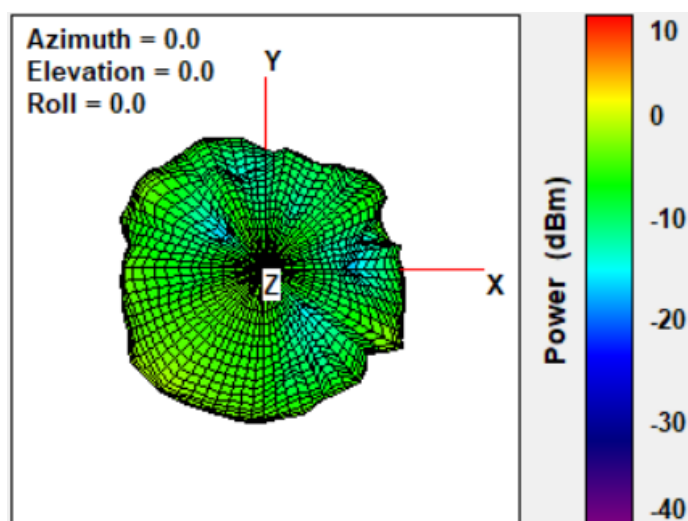
PULSE P/N : TZ2486E



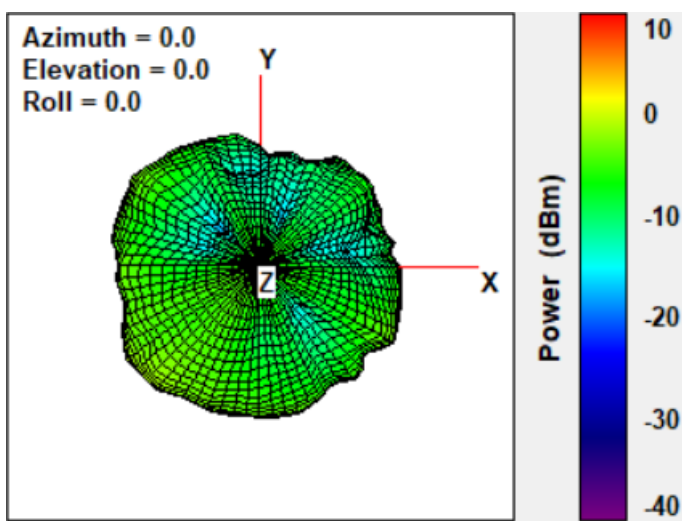
CHARTS

NB Mode

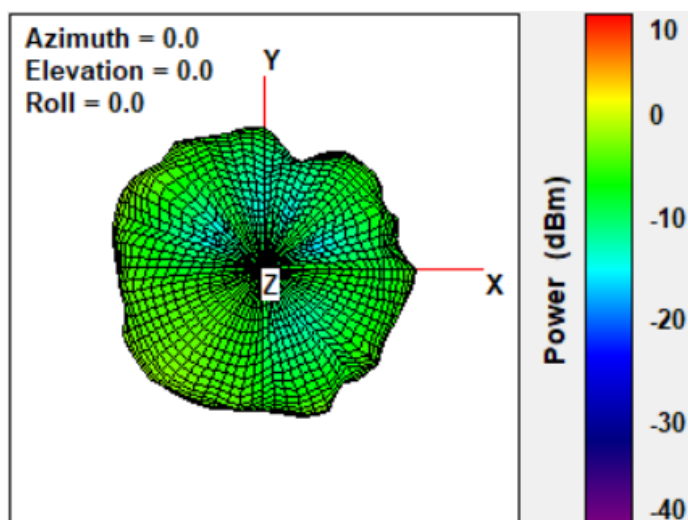
Radiation Pattern of WLAN Antenna (6425MHz)



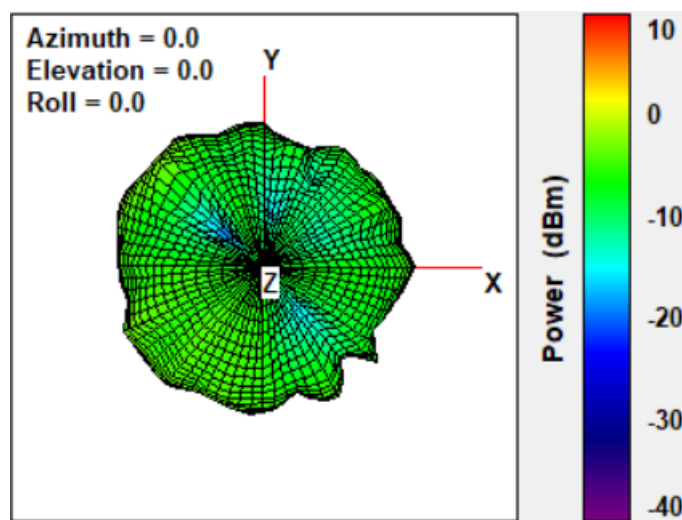
Radiation Pattern of WLAN Antenna (6525MHz)



Radiation Pattern of WLAN Antenna (6725MHz)



Radiation Pattern of WLAN Antenna (6875MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.

Description: BR1402 AUX ANT

Series: BR1402 AUX

ASUS P/N : 14008-05650300

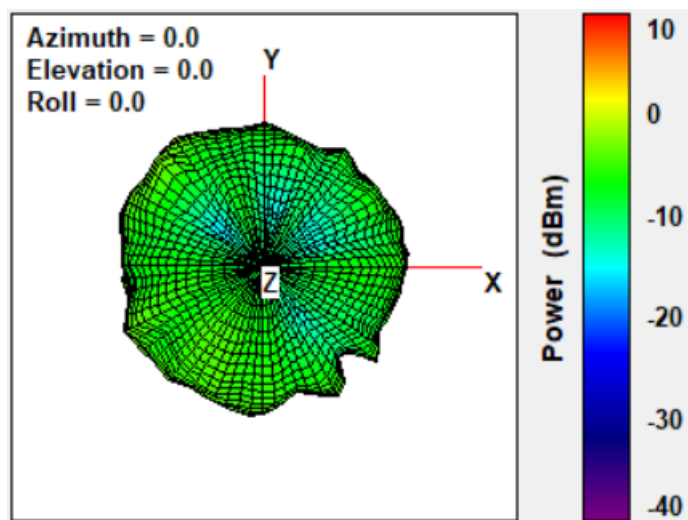
PULSE P/N : TZ2486E



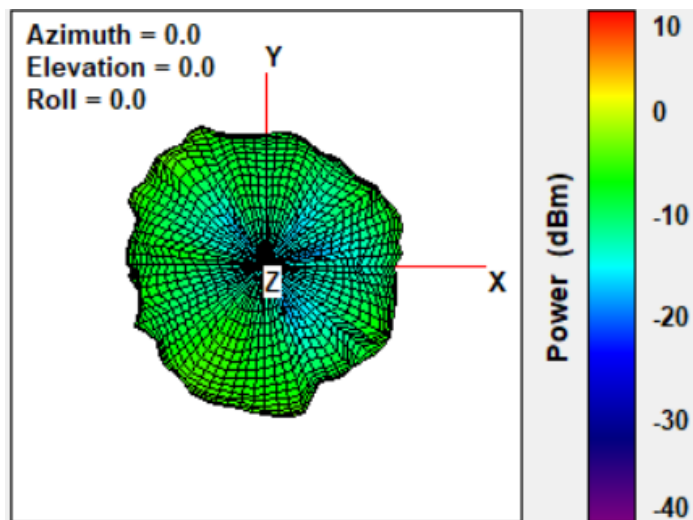
CHARTS

NB Mode

Radiation Pattern of WLAN Antenna (6925MHz)



Radiation Pattern of WLAN Antenna (7125MHz)



Issue: 2032 DRAFT RALFYE

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

CONFIDENTIAL AND PROPRIETARY INFORMATION

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden.



ZPMV2.E520266 - Wiring, Printed - Component

Wiring, Printed - Component

Anhui Yongda Electronic Technology Co., Ltd

E520266

Building 13 PCB Industrial Park Pengju Road
Guangde, 242200 China

Type	Cond Width		Max				Max						
	Min	Min Edge	Cond Thk	SS/ DSO	Area Diam	Solder Limits	Solder Process (IPC)	Assembly Solder Temp	Oper Flame	Meets UL796	C DSR	I	
	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	°C	sec	°C	Cycles	°C	Class		
Multilayer printed wiring boards													
YD-2	0.1 (0.004)	0.1 (0.004)	17 (0.67)	DS	25.4 (1)	288	20	-	-	130	V-0	All	*
Single layer metal base printed wiring boards, employing metal base laminate													
YD-3	0.138 (0.005)	0.414 (0.016)	18 (0.71)	SS	50.8 (2)	288	20	-	-	130	V-0	All	*
Single layer printed wiring boards													
YD-1	0.1 (0.004)	0.1 (0.004)	17 (0.67)	DS	25.4 (1)	288	20	-	-	130	V-0	All	*

* - CTI marking is optional and may be marked on the printed wiring board.

Marking: Company name, type designation. May be followed by a suffix to denote factory identification or burning test classification.

Last Updated on 2021-04-07

并不是所有出现在本数据库中的公司名称和产品都满足了UL跟踪检验服务的要求。只有带有UL标志的产品，才应该被视为经过UL认证，并满足UL跟踪检验服务的要求。注意查看产品上的标志。

UL允许在线认证目录中所含材料的复制遵循以下条件：1.指南信息、装配、构造、设计、系统和/或认证（文件）必须在不篡改任何数据（或图纸）的情况下完整且无误导性地呈现。2.“经UL允许从在线认证目录转载”声明必须出现在所摘录材料的邻近位置。此外，转载材料必须包含以下格式的版权声明：“© 2021 UL LLC”



AVLV2.E318898 Appliance Wiring Material - Component

[Page Bottom](#)

Appliance Wiring Material - Component

[See General Information for Appliance Wiring Material - Component](#)

SHENYU COMMUNICATION TECHNOLOGY INC

E318898

275 E Waihuan Rd

Jiangyin, Jiangsu 214400 CHINA

Table of Recognized Styles							
Single-conductor, thermoplastic insulation.							
1007	1333	1589	1723	1858	1901	10111	
1226	1354	1591	1726	1859	1927	10248	
1227	1371	1592	1727	1860	10005	10362	
1330	1538	1708	1766	1882	10011	10518	
1331	1571	1709	1847	1886	10064	11149	
1332	1577	1710	1857	1887	10072		
Multiple-conductor, thermoplastic insulation.							
2464	2725	20276	21100				

Marking: Company name, voltage rating, temperature rating, conductor size, conductor material if other than copper, and use.

[Last Updated](#) on 2016-06-13

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

© 2016 UL LLC

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2016 UL LLC".

[Click here to go to UL's iQ™ for Appliance Wiring Materials Database](#)

UNDERWRITERS	LABORATORIES	APPLIANCE WIRING MATERIAL
Subj.758	Section 1	Page 1354
		Issued:1964-02-19
		Revised:2009-04-30
Style 1354	Coaxial Cable.	

Rating	60, 80 deg C, 30 Vac, Horizontal flame.
--------	---

Conductor	44 AWG min., material not specified.
-----------	--------------------------------------

Insulation	2 mils minimum at any point, 125 mils maximum. The insulation may be: Extruded solid or cellular PE, FRPE, PP, PFA, FEP, ECTFE, PTFE, ETFE, or combination thereof with or without irradiation; or tape wrapped solid or cellular PTFE, PFA, or FEP. Applied as a spiral wrapped thread (5 mils minimum, 40 mils maximum) and enclosed in a tube of insulation.
------------	---

Assembly	Insulated conductor with optional inner covering, optional inner shield, optional middle covering, required outer shield and required outer covering.
----------	---

Shield	Optional. Outer Shield required.
--------	----------------------------------

Covering	Optional Inner Covering - Extruded PVC, PFA, Polyamide, Polyester, PVDF, FEP, PTFE, ECTFE, ETFE, PE, XLPE, XLFRPE or FRPE; lacquered braids; heat sealed PTFE, PFA or FEP tape; Polyester or Polyester-Polyethylene film. Thicknesses not specified. Optional Middle Covering - Extruded PVC, PFA, PP, Polyamide, Polyester, PVDF, FEP, PTFE, ECTFE, ETFE, PE, XLPE, XLFRPE or FRPE; lacquered braids; heat sealed PTFE, PFA or FEP tape; Polyester or Polyester-Polyethylene film. Thicknesses not specified. Required Outer Covering - Extruded Irradiated PE, Irradiated PVC, Polyurethane, PVC, PFA, PP, Polyamide, Polyester, PVDF, FEP, PTFE, ECTFE, ETFE, PE, XLPE, XLFRPE or FRPE; lacquered braids; heat sealed PTFE, PVC, PFA or FEP tape; Polyester or Polyester-Polyethylene film. Thicknesses not specified.
----------	---

Standard	Appliance Wiring Material UL 758.
Marking	General.
Use	Internal wiring of Class 2 circuits of electronic equipment or as insulated single in jacketed multiconductor cables.



ZPFW2.E491030 - Wiring Harnesses - Component

Note: We are enhancing our systems and you may notice duplicate entries/missing/outdated data. During this interim period, please contact our Customer Service at <https://www.ul.com/about/locations>.

Wiring Harnesses - Component

Pulse (Suzhou) Wireless Products Co Ltd

E491030

No.99 Huo Ju Road, Suzhou New District
Suzhou, Jiangsu 215009 China

Marking: Company name and model designation.

Note: For additional marking information, refer to the [Guide Information Page](#).

Model(s): Wiring Harnesses

Last Updated on 2021-11-02

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2021 UL LLC"



Issue Date: September 1, 2021

I-PEX Inc.

Electronic Components & Devices Div,

Quality Assurance Department

Approved by	Prepared by
K. Narita	A. Watanabe

Certificate of Compliance with RoHS Directive and REACH Regulation

I-PEX Inc. warrants that the product complies with EU RoHS Directive and REACH Regulation.

MHF_4L

Certified Part Number

20565-001R-083	20565-001R-13	20565-001R-13A	20565-001R-13L	20572-001R-08	20572-002R-08
20579-001E	20579-001E-01	20632-001R-37			

➤ **EU RoHS Directive (2011/65/EU, (EU)2015/863)**

Cadmium (Cd)	<100ppm
Lead (Pb)	<1000ppm
Mercury (Hg)	<1000ppm
Hexavalent Chromium (Cr+6)	<1000ppm
Polybrominated biphenyls (PBB)	<1000ppm
Polybrominated diphenyl ethers (PBDE)	<1000ppm
Bis(2-ethylhexyl) phthalate (DEHP)	<1000ppm
Butyl benzyl phthalate (BBP)	<1000ppm
Dibutyl phthalate (DBP)	<1000ppm
Diisobutyl phthalate (DIBP)	<1000ppm

➤ **EU REACH Regulation**

REACH SVHC (as of the date of inclusion: 08 July 2021) are not contained over 1000ppm in the product.

Please refer to ECHA website below for the detail of SVHC.

<https://echa.europa.eu/candidate-list-table>

塑膠材料保證書
CERTIFICATE OF COMPLIANCE OF PLASTIC MATERIAL

供應商

VENDER I-PEX INC.

料號

PART NUMBER 20565-001R-13*

品名

PART DESCRIPTION MHF PLUG ASS'Y

數量/訂單號碼

QUANTITY/P.O. NO. _____

出貨日期

SHIPPING DATE _____

原料製造商

MATERIAL SUPPLIER POLYPLASTICS CO LTD

原料品名/規格

MATERIAL DESCRIPTION/SPEC XFR 4840 GF10 (w), 310NF (w)

原料 UL 號碼

MATERIAL UL FILE NUMBER

原料防火等級

MATERIAL FLAMMABILITY CLASS

E213445

UL94, V-0

供應商保證 VENDER GUARANTY

1. 本批產品使用之原料確實依上述規格供應，若有變更冒替，本公司願負賠償之責。
IF THERE IS ANY DEVIATION TO THE LIST ABOVE, WE WILL BE RESPONSIBLE FOR THE COST INCURRED.
2. 本批產品所使用的回收料(次料)不可超過 50% .
THE REPROCESSED MATERIAL USED IN THIS SHIPMENT DOES NOT EXCEED 50

供應商簽章及蓋公司章

VENDER SIGNATURE & COMPANY SEAL



XFR 4840 GF10 (w), 310NF (w) - Plastics - Component**Plastics - Component**

File Number: E213445

Yellow Card® **COMPANY****POLYPLASTICS CO LTD**

18-1 KONAN 2-CHOME

MINATO-KU, TOKYO 108-8280 Japan

MODEL INFO**Duranex: XFR 4840 GF10 (w), 310NF (w)**

Polybutylene Terephthalate (PBT) , furnished as pellets

--(w) Virgin and regrind up to 50% by weight inclusive, have the same flame characteristics only.

FLAMMABILITY PROPERTIES	NOMINAL VALUE	TEST METHOD
Flammability		ANSI/UL 94
0.75 mm, Color: ALL	V-0	
1.5 mm, Color: ALL	V-0	
3.0 mm, Color: ALL	5VA V-0	

ISO/IEC FLAMMABILITY PROPERTIES	NOMINAL VALUE	TEST METHOD
Flammability		IEC 60695-11-10
0.75 mm, Color: ALL	V-0	
1.5 mm, Color: ALL	V-0	
3.0 mm, Color: ALL	V-0	
Flammability (3.0 mm, Color: ALL)	5VA	IEC 60695-11-20

ELECTRICAL PROPERTIES	NOMINAL VALUE	TEST METHOD
Hot-wire Ignition (HWI)		UL 746A
0.75 mm	1 PLC	
1.5 mm	1 PLC	
3.0 mm	1 PLC	
High Amp Arc Ignition (HAI)		UL 746A
0.75 mm	0 PLC	
1.5 mm	0 PLC	
3.0 mm	0 PLC	
Comparative Tracking Index (CTI)	1 PLC	UL 746
Dielectric Strength	24 kV/mm	ASTM D149
High Voltage Arc Tracking Rate (HVTR)	0 PLC	
Volume Resistivity	1.0E+14 ohms-cm	ASTM D257/IEC 60093
High Voltage, Low Current Arc Resistance	5 PLC	
THERMAL PROPERTIES	NOMINAL VALUE	TEST METHOD
Relative Thermal Index - Electrical Strength		UL 746B
0.75 mm	130 °C	
1.5 mm	130 °C	
3.0 mm	130 °C	
Relative Thermal Index - Mechanical Impact		UL 746B
0.75 mm	125 °C	
1.5 mm	125 °C	
3.0 mm	125 °C	
Relative Thermal Index - Mechanical Strength		UL 746B
0.75 mm	125 °C	
1.5 mm	125 °C	
3.0 mm	125 °C	