

GHT25-0347

## Antenna Datasheet

TITLE : AP01ML0627490C0 SERIES  
AP01ML0627490C0 シリーズ

### 1. 特徴 Features

- LTE / 5G (Sub-6) 698-960 MHz / 1.45-6 GHz
- 小型 Compact size
- 高効率 High efficiency
- 細線同軸ケーブル付き PCB PCB with a microcoax cable

\* LTE (Long Term Evolution)

\*\* PCB (Printed Circuit Board)

### 2. 品名 Product name

単品 Single unit; AP01ML0627490C0

### 3. 形状、寸法と重量 Shape, dimensions and weight

#### 3.1. 形状 Shape

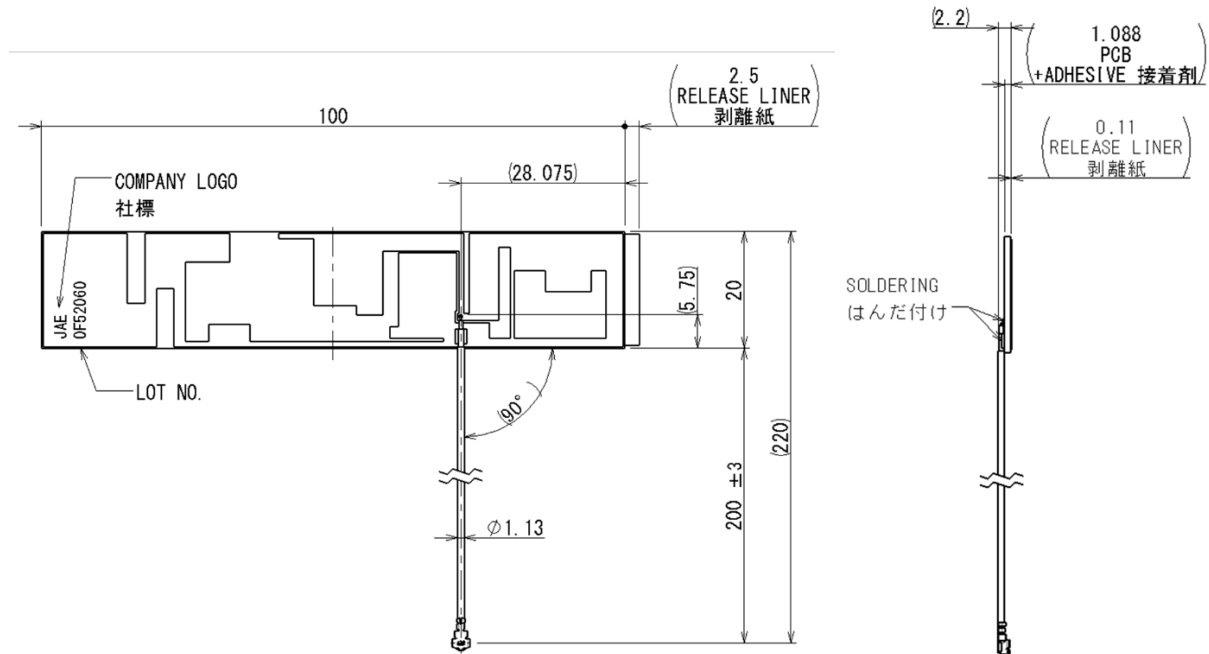


### 3.2. 寸法 Dimensions

100 (width) × 20 (depth) × 1.1 (height) mm

接着剤の厚みを含み、剥離紙の厚みを除く

Including adhesive thickness and excluding release liner thickness



### 3.3. ケーブル Cable

$\phi 1.13$  mm

Length 200 mm

### 3.4. コネクタ Connector

U.FL / MHF1 相当 U.FL / MHF1 Equivalent

### 3.5. 重量 Weight

5.0 g (typical)

200 mm ケーブルを含み剥離紙の重量を含まない、典型値

including 200 mm cable and excluding release liner weight, typical value

### 3.6. 方式 Type

ダイポール Dipole

### 3.7. PCB 材料 Material

FR-4

### 3.8. 両面テープ Double-sided tape

3M 467MP

## 4. 高周波特性 RF characteristics

4.1. 周波数帯域 Frequency range

698–960 MHz / 1.45–6 GHz

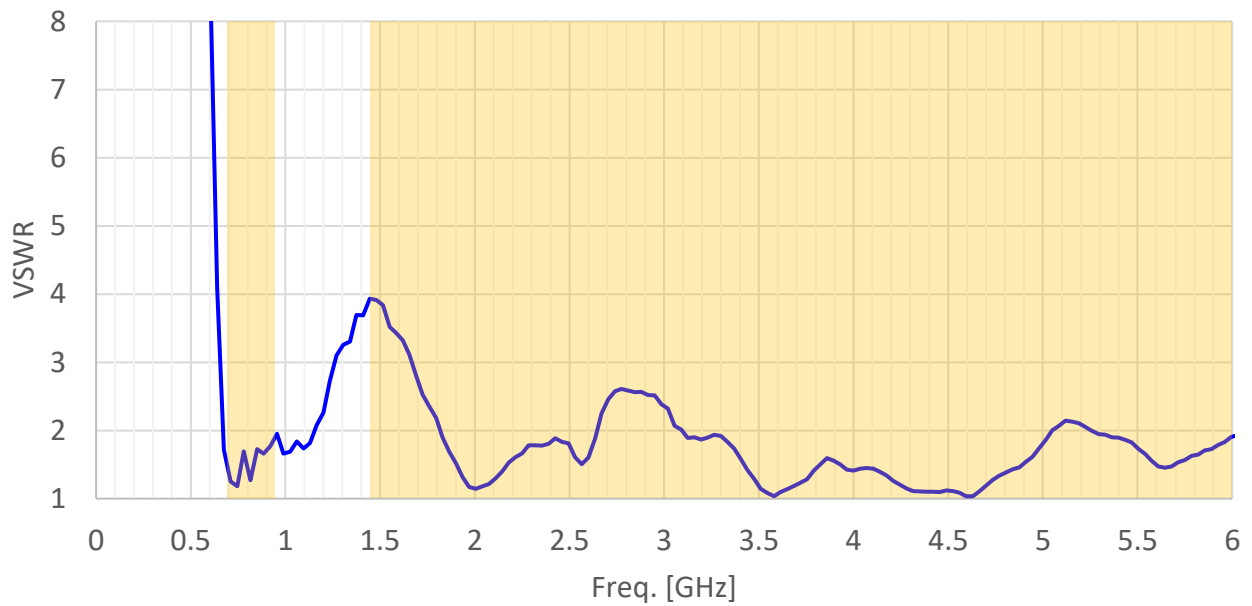
4.2. インピーダンス Impedance

50  $\Omega$

4.3. Voltage standing wave ratio (VSWR)

2mm 厚の ABS 板貼り付け時の VSWR 特性例

VSWR characteristics of the antenna on a 2-mm thickness ABS board

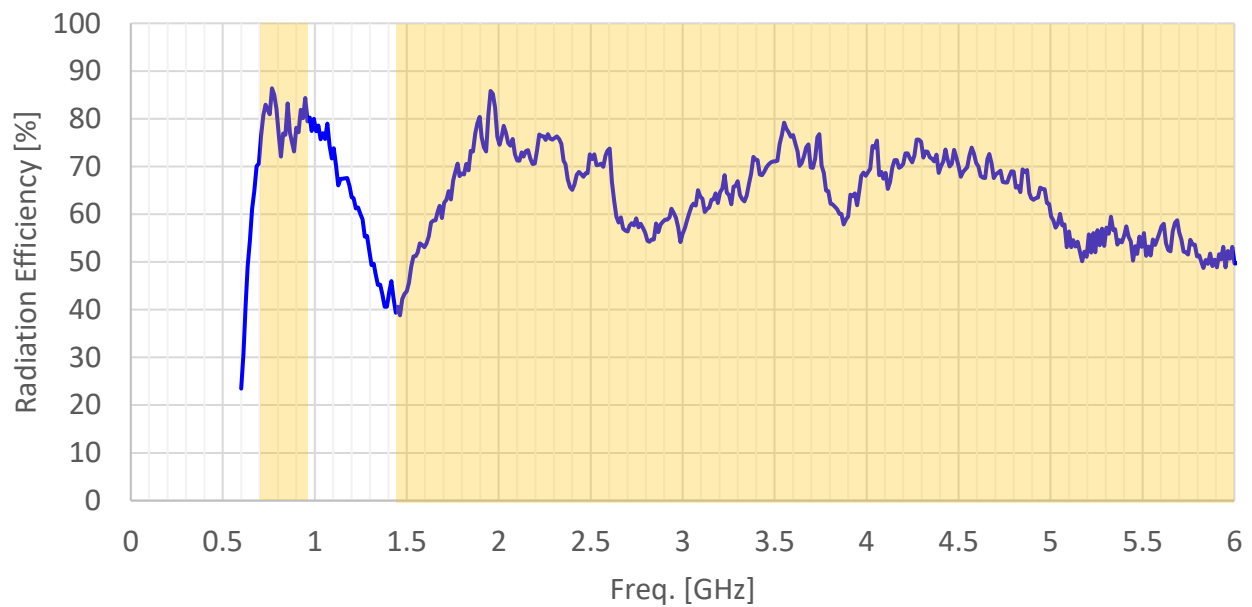


#### 4.4. 放射効率 Radiation efficiency

2mm 厚の ABS 板貼り付け時の放射効率特性例、ケーブル損を含む

Radiation efficiency of the antenna mounted on a 2-mm thickness ABS board

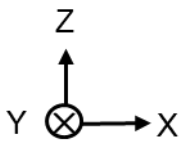
(including cable loss)



#### 4.5. 放射パターン Radiation pattern

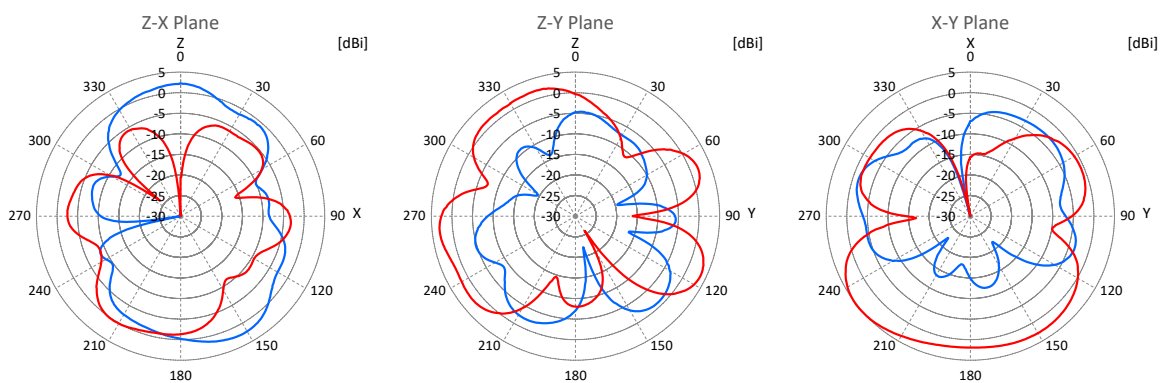
2mm 厚の ABS 板貼り付け時の放射パターン特性例

Radiation pattern of the antenna mounted on a 2-mm thickness ABS board

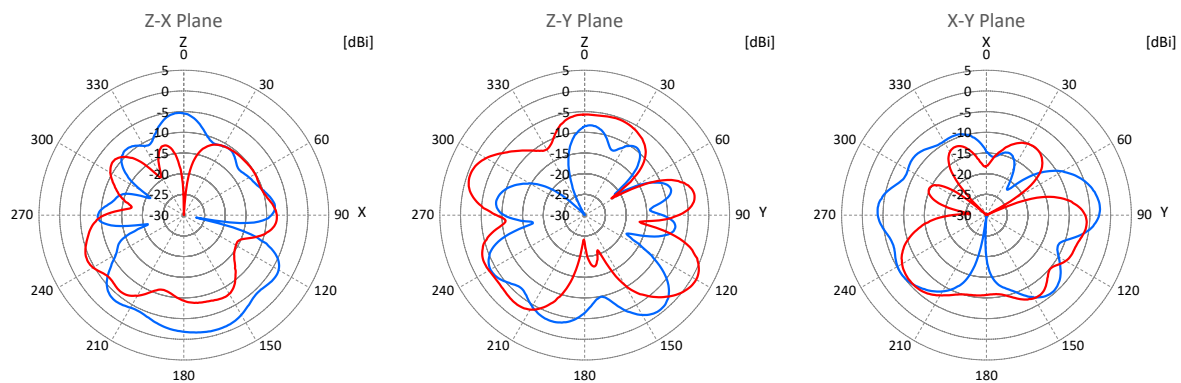


#### Radiation pattern

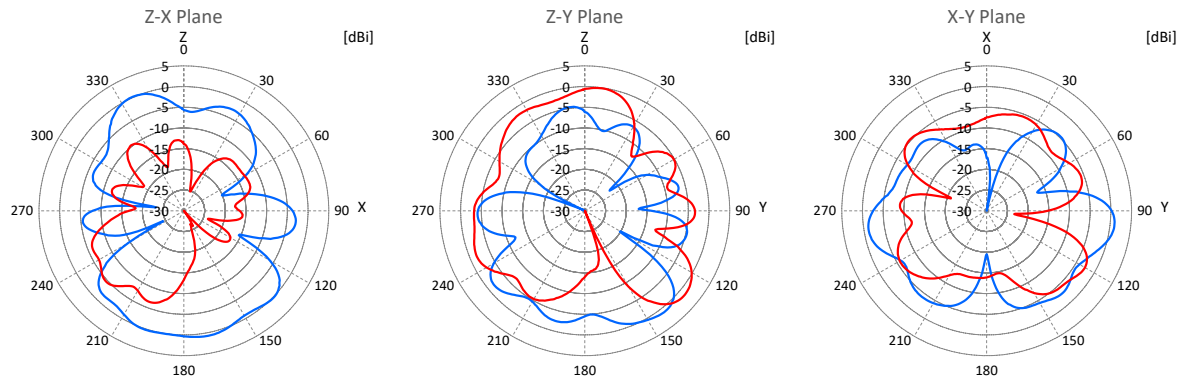
698 MHz



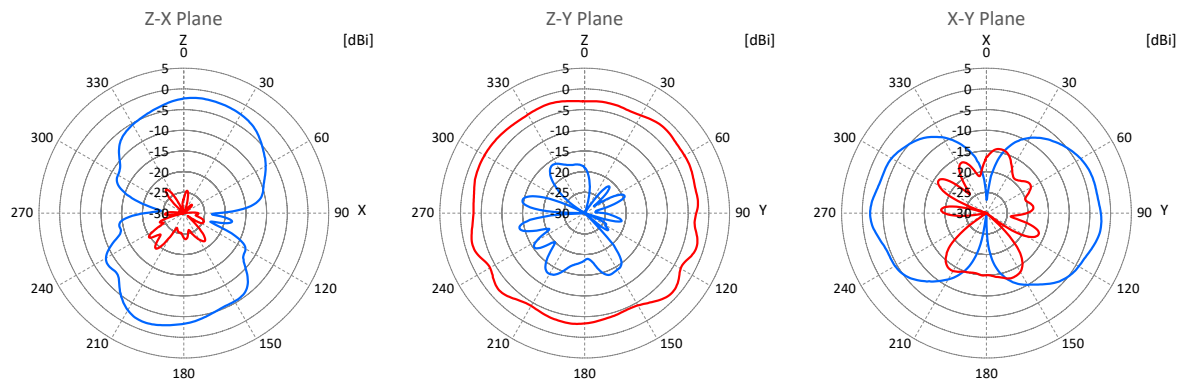
824 MHz



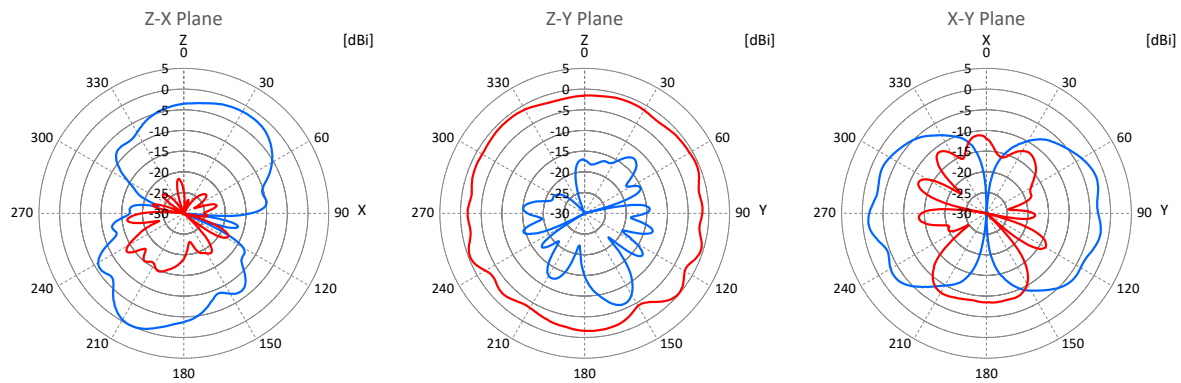
960 MHz



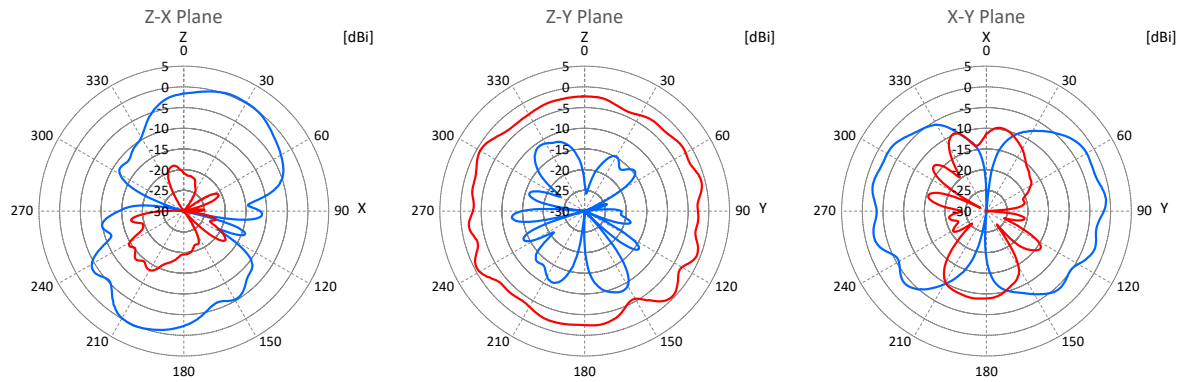
1447 MHz



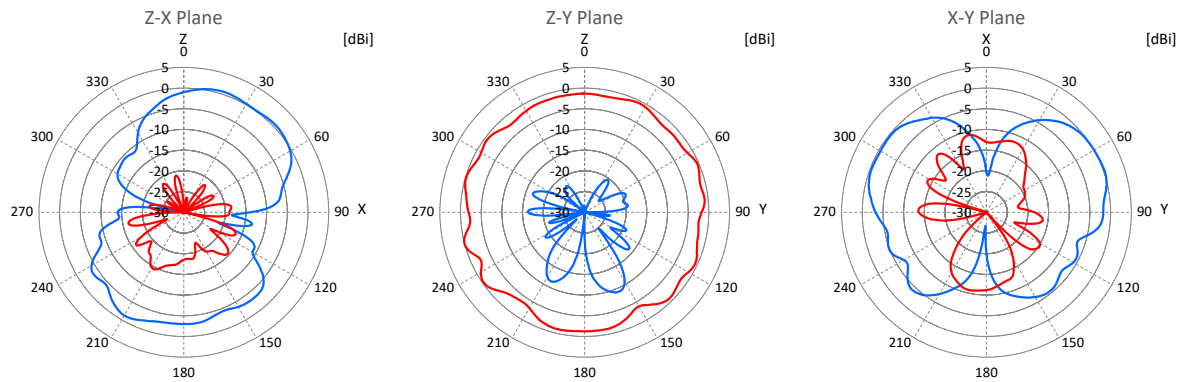
1570 MHz



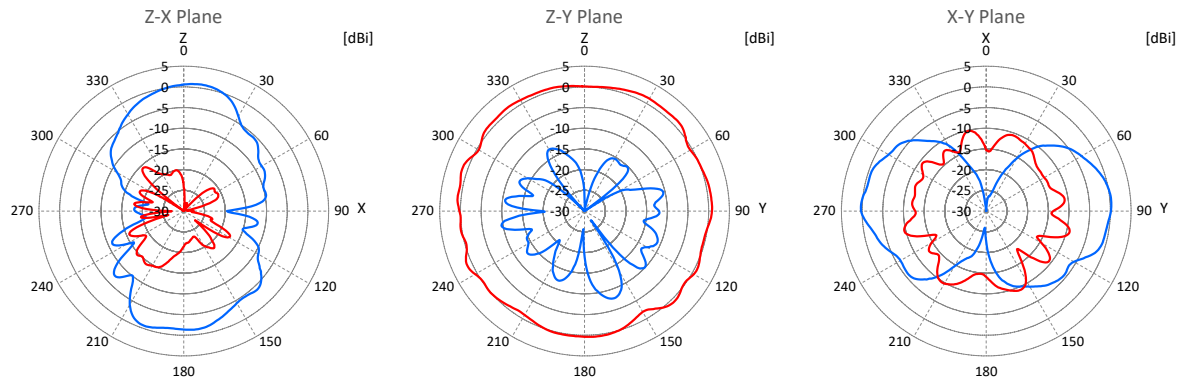
1710 MHz



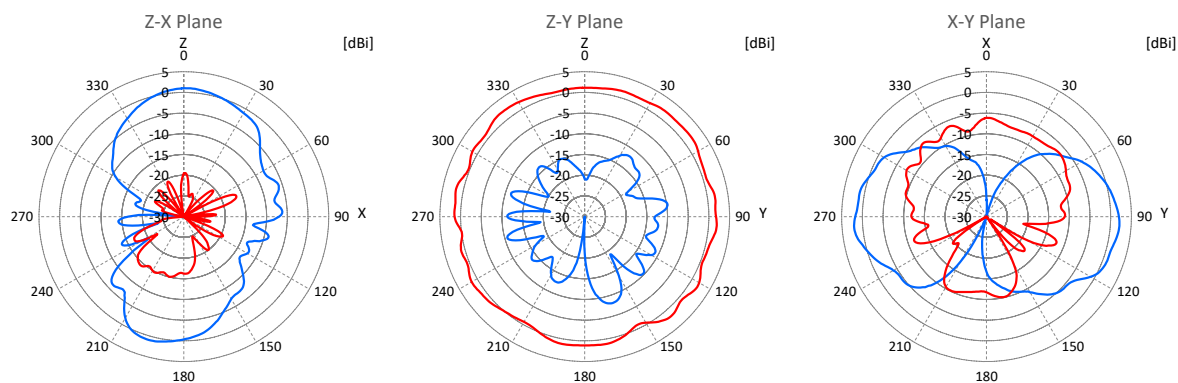
1900 MHz



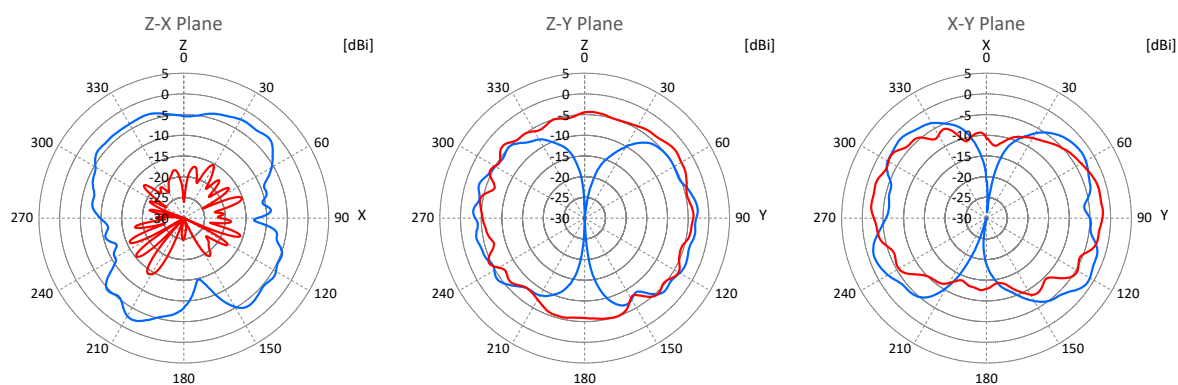
2170 MHz



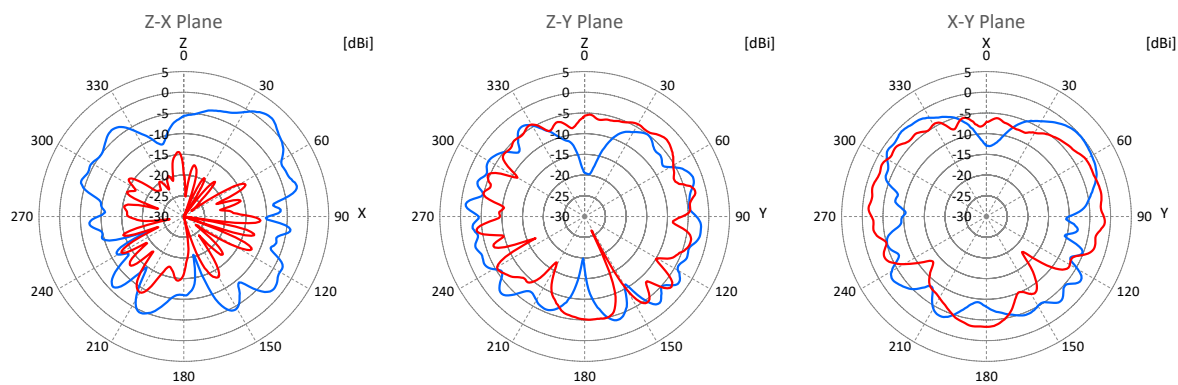
2300 MHz



2690 MHz

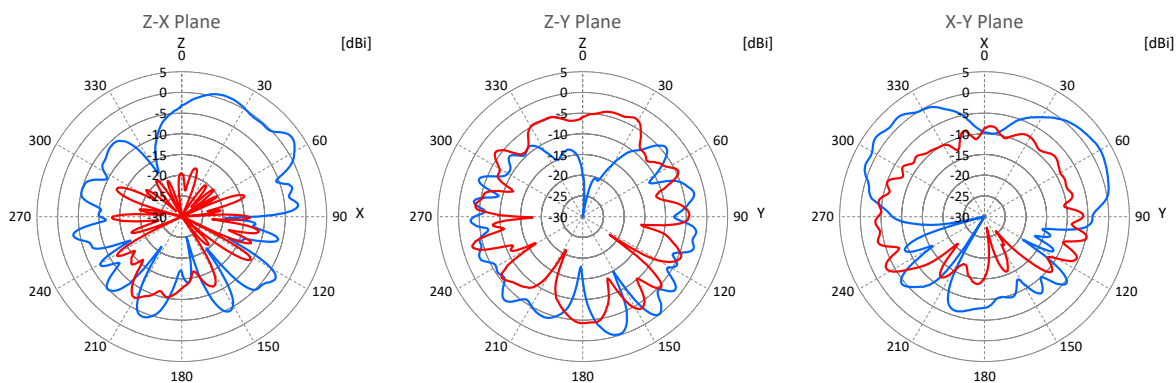


3300 MHz

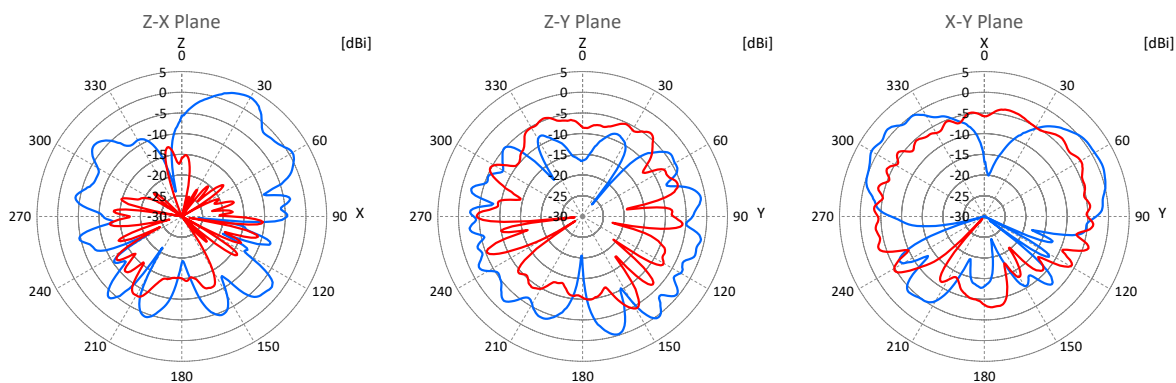




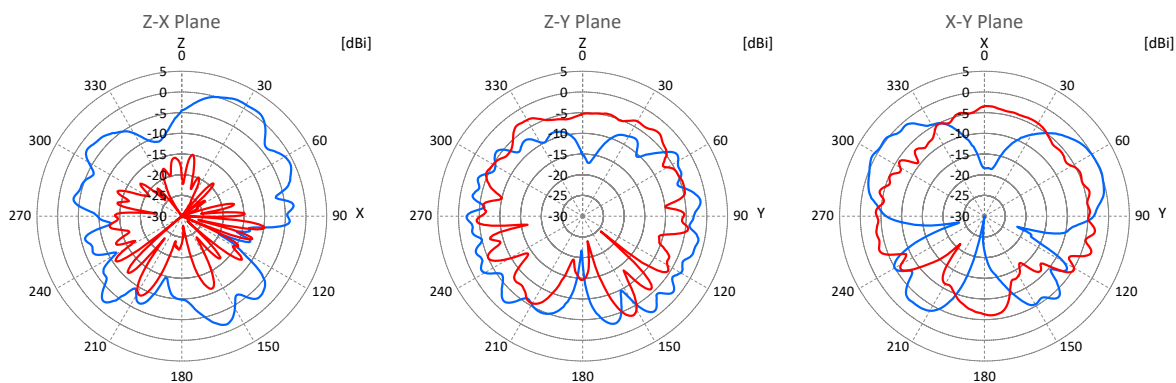
3550 MHz



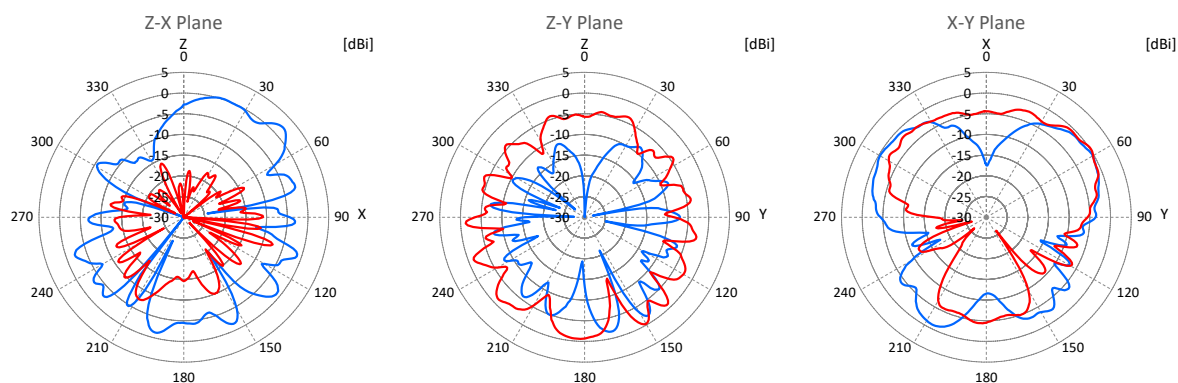
3700 MHz



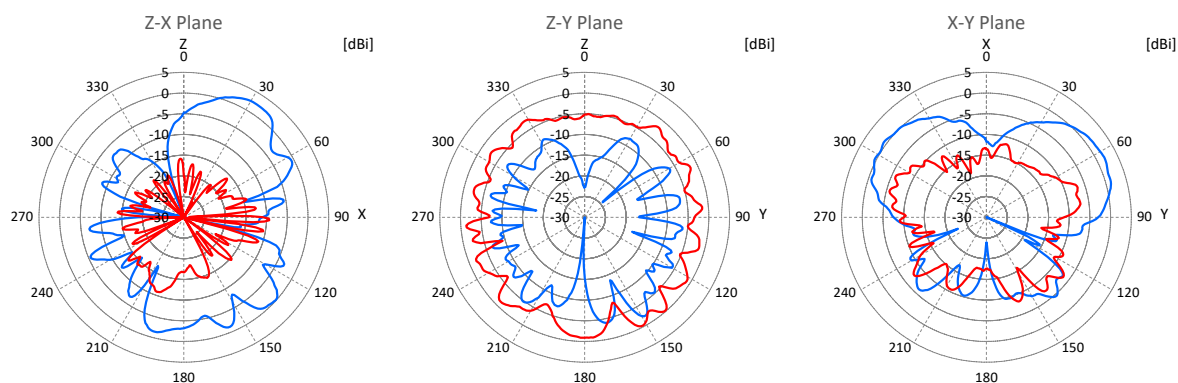
3800 MHz



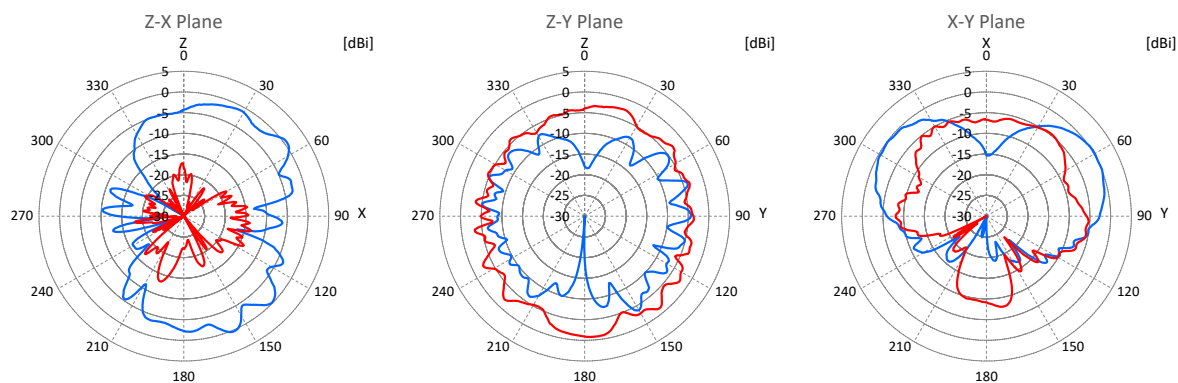
4200 MHz



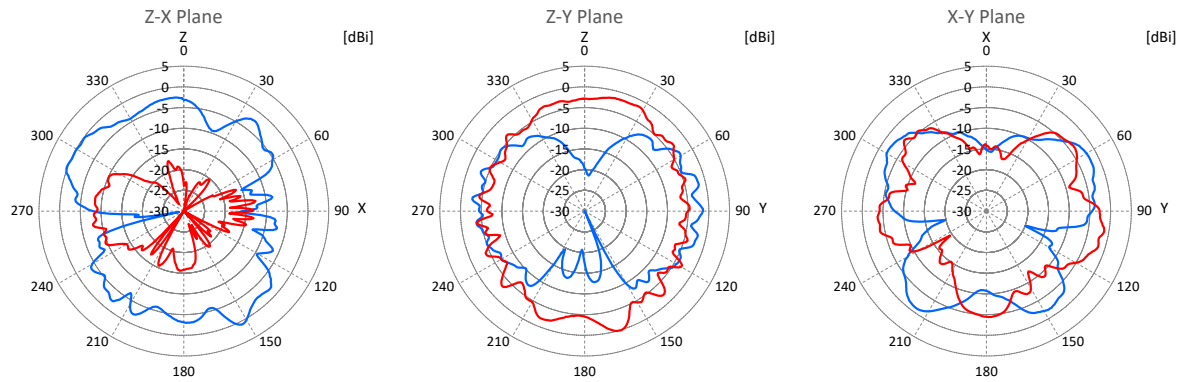
4600 MHz



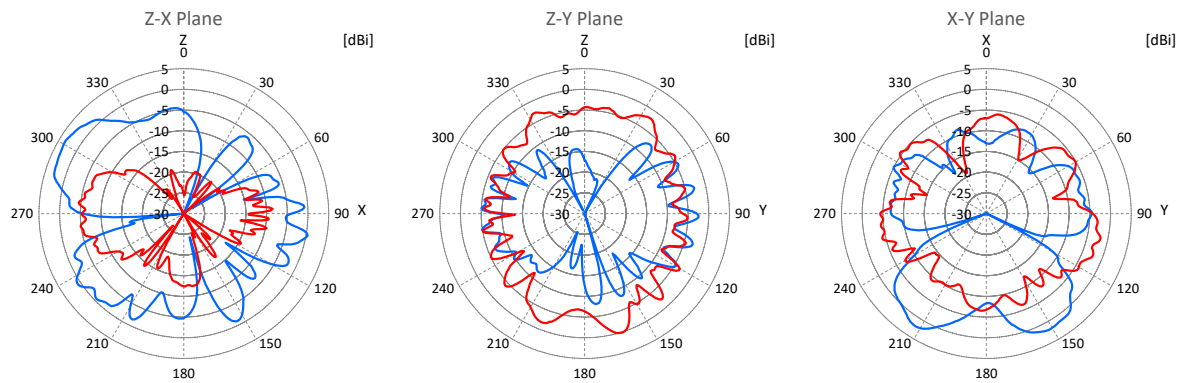
5150 MHz



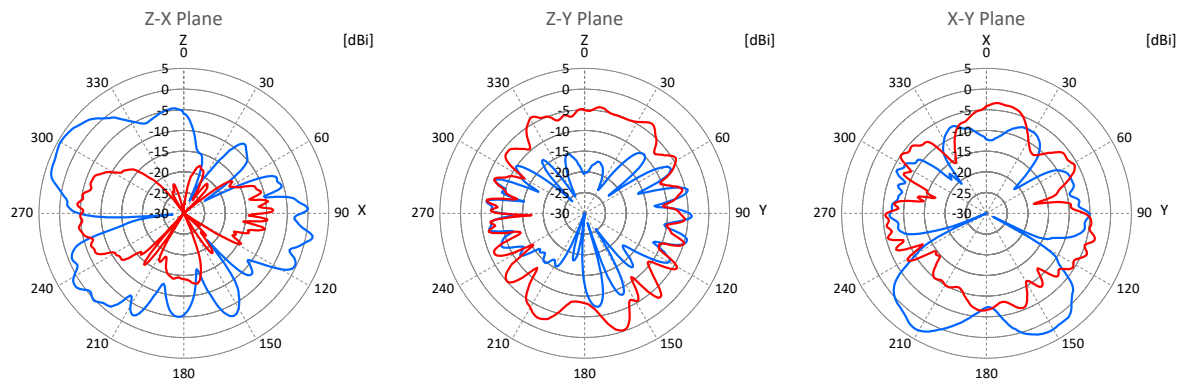
5600 MHz



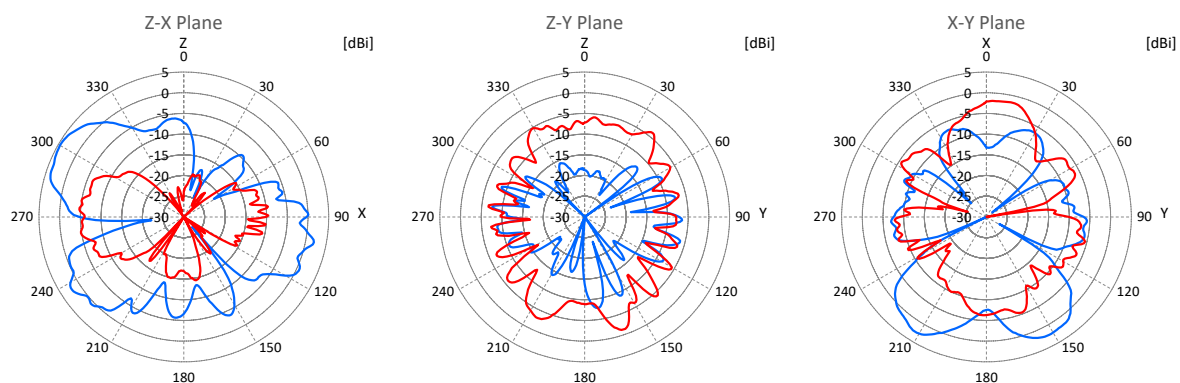
5850 MHz



5925 MHz



6000 MHz



青線 Blue line: 水平偏波 Horizontal polarization

赤線 Red line: 垂直偏波 Vertical polarization

Peak gain of the main polarization component in the ZX, ZY and XY planes

Frequency [MHz]	Peak gain [dBi]
698	5.09
824	1.12
960	1.55
1447	-1.42
1570	0.01
1710	0.35
1900	0.67
2170	1.36
2300	2.20
2690	-1.04
3300	1.85
3550	2.77
3700	3.19
3800	1.16
4200	2.34
4600	2.48
5150	0.66
5600	0.79
5850	3.56
5925	4.41
6000	4.58

- 5. 環境条件 Environmental conditions
  - 5.1. 使用温度範囲 Operating temperature range  
-40 °C to +85 °C
  - 5.2. 保存条件 Storage conditions  
IEC 60721-3-1  
保存温度 Stock temperature range  
-5 °C to +45 °C  
相对湿度 Relative humidity  
5 % to 95 %

改版履歴 Revision history

文書番号 Document number	日付 Date	改版 Revision
GHT25-0347	07 Mar. 2025	初版 Initial version