



## Antenne combinée MIMO 8×[WiFi, Bluetooth, ZigBee, ISM] Traversante IP67/IP69 | 2.5 à 6.2 dBi

Référence GC-6B02BWG

|                      |                |
|----------------------|----------------|
| Gain                 | 2.5 à 6.2dBi   |
| Connecteur           | SMA (M-RP)     |
| Dimensions (mm)      | 199 × 167 × 53 |
| T° de fonctionnement | -40°C à +85°C  |

Disponible en noir et en blanc.

L'antenne GC-6B02BWG prend en charge les technologies Wi-Fi, Bluetooth, ZigBee et bénéficie d'une conception robuste adaptée aux environnements industriels et aux installations extérieures, notamment exposées aux conditions climatiques exigeantes.

### CONNECTIVITÉ

Compatible avec les réseaux Wi-Fi 6 / Wi-Fi 7 ainsi qu'avec les protocoles Bluetooth et ZigBee, la GC-6B02BWG couvre les bandes ISM 2,4 GHz (2410 à 2490 MHz), 5 GHz (4920 à 5925 MHz) et 6 GHz (5925 à 7125 MHz).

### PERFORMANCES

Cette antenne MIMO intègre huit câbles rayonnants à polarisation linéaire offrant une couverture omnidirectionnelle, avec une impédance de 50  $\Omega$  et une puissance pouvant atteindre 25W par voie.

Son gain atteint jusqu'à 6 dBi selon la bande utilisée, tandis que l'efficacité de rayonnement s'élève à 52,2% en 2,4GHz, 42,2% en 5GHz et 44,1% en 6GHz.

Les pertes de retour comprises entre -8,7dB et -23,5dB ainsi qu'un VSWR pouvant descendre à 1,2:1 contribuent à la qualité des transmissions.

### ALIMENTATION

Entièrement passive, cette antenne assure la transmission directe des signaux radio entre les équipements connectés et les éléments rayonnants sans nécessiter d'alimentation électrique.

### INSTALLATION

Le montage s'effectue par fixation traversante et nécessite un perçage de 27,5 mm sur des supports d'une épaisseur maximale de 8,6 mm, avec un couple de serrage recommandé de 6 Nm à l'aide d'une clé hexagonale de 41 mm.

Certifiée IP67 et IP69, cette antenne bénéficie d'un boîtier en ASA résistant aux environnements industriels et extérieurs, avec une plage de température de fonctionnement et de stockage comprise entre -40 °C et +85 °C.

Les huit câbles RF de 3 mètres sont équipés de connecteurs RP-SMA mâles (longueurs de câble et types de connecteurs personnalisables sur demande).



Sa conception indépendante du plan de masse facilite l'installation sur différents supports sans nécessiter de surface métallique porteuse.

## ENVIRONNEMENT

Cette gamme d'antenne est fabriquée sans matières dangereuses tout en maintenant une conformité totale avec REACH et RoHS.



## CARACTÉRISTIQUES

### Câble 1 : WiFi, Bluetooth, ZigBee, ISM

| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
|----------------------|-----------|-----------|-----------|
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -17,9   | ± -17,5   | ± -12,3   |
| VSWR                 | ± 1,3:1   | ± 1,4:1   | ± 2,0:1   |
| EFFICACITÉ (%)       | ± 52,2    | ± 42,2    | ± 35,1    |
| GAIN MAXIMAL (DBI)   | ± 4,0     | ± 5,2     | ± 4,1     |
| GAIN MOYEN (DB)      | ± -2,8    | ± -3,8    | ± -4,7    |

### Câble 2 : WiFi, Bluetooth, ZigBee, ISM

| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
|----------------------|-----------|-----------|-----------|
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -15,7   | ± -14,6   | ± -9,5    |
| VSWR                 | ± 1,4:1   | ± 1,5:1   | ± 2,2:1   |
| EFFICACITÉ (%)       | ± 50,7    | ± 37,5    | ± 34,1    |
| GAIN MAXIMAL (DBI)   | ± 4,3     | ± 4,7     | ± 5,7     |
| GAIN MOYEN (DB)      | ± -2,9    | ± -4,3    | ± -4,7    |



## Câble 3 : WiFi, Bluetooth, ZigBee, ISM

|                      |           |           |           |
|----------------------|-----------|-----------|-----------|
| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -23,5   | ± -17,9   | ± -10,4   |
| VSWR                 | ± 1,2:1   | ± 1,4:1   | ± 2,1:1   |
| EFFICACITÉ (%)       | ± 41,8    | ± 40,1    | ± 33,6    |
| GAIN MAXIMAL (DBI)   | ± 3,3     | ± 5,5     | ± 4,6     |
| GAIN MOYEN (DB)      | ± -3,8    | ± -4,0    | ± -4,9    |

## Câble 4 : WiFi, Bluetooth, ZigBee, ISM

|                      |           |           |           |
|----------------------|-----------|-----------|-----------|
| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -16,2   | ± -15,0   | ± -10,1   |
| VSWR                 | ± 1,4:1   | ± 1,5:1   | ± 2,1:1   |
| EFFICACITÉ (%)       | ± 51,3    | ± 39,2    | ± 35,3    |
| GAIN MAXIMAL (DBI)   | ± 3,9     | ± 5,6     | ± 5,8     |
| GAIN MOYEN (DB)      | ± -2,9    | ± -4,1    | ± -4,6    |

## Câble 5 : WiFi, Bluetooth, ZigBee, ISM

|                      |           |           |           |
|----------------------|-----------|-----------|-----------|
| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -21,2   | ± -13,6   | ± -13,8   |
| VSWR                 | ± 1,2:1   | ± 1,6:1   | ± 1,7:1   |
| EFFICACITÉ (%)       | ± 48,8    | ± 40,8    | ± 44,1    |
| GAIN MAXIMAL (DBI)   | ± 3,7     | ± 5,6     | ± 6,2     |
| GAIN MOYEN (DB)      | ± -3,1    | ± -3,9    | ± -3,6    |



## Câble 6 : WiFi, Bluetooth, ZigBee, ISM

|                      |           |           |           |
|----------------------|-----------|-----------|-----------|
| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -15,3   | ± -12,1   | ± -8,7    |
| VSWR                 | ± 1,5:1   | ± 1,7:1   | ± 2,3:1   |
| EFFICACITÉ (%)       | ± 50,8    | ± 37,1    | ± 30,4    |
| GAIN MAXIMAL (DBI)   | ± 4,2     | ± 5,4     | ± 5,1     |
| GAIN MOYEN (DB)      | ± -2,9    | ± -4,3    | ± -5,2    |

## Câble 7 : WiFi, Bluetooth, ZigBee, ISM

|                      |           |           |           |
|----------------------|-----------|-----------|-----------|
| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -15,8   | ± -15,4   | ± -8,7    |
| VSWR                 | ± 1,4:1   | ± 1,5:1   | ± 2,5:1   |
| EFFICACITÉ (%)       | ± 51,3    | ± 36,7    | ± 24,9    |
| GAIN MAXIMAL (DBI)   | ± 3,8     | ± 4,8     | ± 2,5     |
| GAIN MOYEN (DB)      | ± -2,9    | ± -4,4    | ± -6,3    |

## Câble 8 : WiFi, Bluetooth, ZigBee, ISM

|                      |           |           |           |
|----------------------|-----------|-----------|-----------|
| BANDE(S) (MHZ)       | 2,4 GHz   | 5,0 GHz   | 6,0 GHz   |
| FRÉQUENCE(S) (MHZ)   | 2410-2490 | 4920-5925 | 5925-7125 |
| PERTE DE RETOUR (DB) | ± -15,4   | ± -12,6   | ± -8,8    |
| VSWR                 | ± 1,5:1   | ± 1,7:1   | ± 2,4:1   |
| EFFICACITÉ (%)       | ± 50,2    | ± 34,8    | ± 32,2    |
| GAIN MAXIMAL (DBI)   | ± 3,8     | ± 4,2     | ± 5,7     |
| GAIN MOYEN (DB)      | ± -3,0    | ± -4,7    | ± -5,0    |



## Caractéristiques communes Câbles 1 à 8

|                          |                                                         |
|--------------------------|---------------------------------------------------------|
| IMPÉDANCE (OHMS)         | 50                                                      |
| POLARISATION             | Linéaire                                                |
| DIAGRAMME DE RAYONNEMENT | Omnidirectionnel                                        |
| LONGUEUR DU CÂBLE        | 300 cm Standard (Toutes longueurs de câble disponibles) |
| TYPE DE CÂBLE            | Norme(s) D302 (Autres câbles disponibles)               |

## Conditions de mesure de l'antenne :

- Monté sur une plaque métallique de 30 × 30 cm
- 100 cm de Câble D302
- Mesurée dans une chambre anéchoïque certifiée CTIA 3D

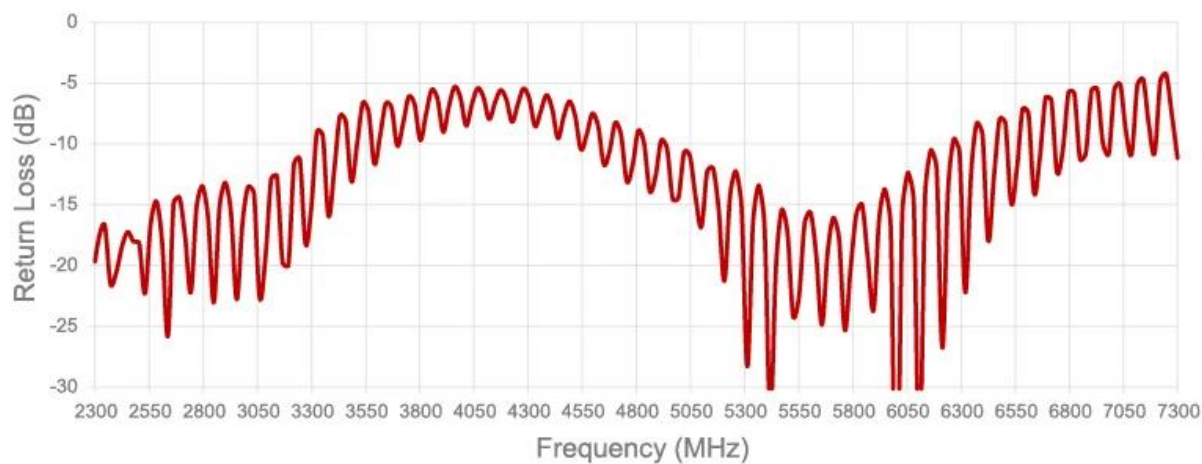
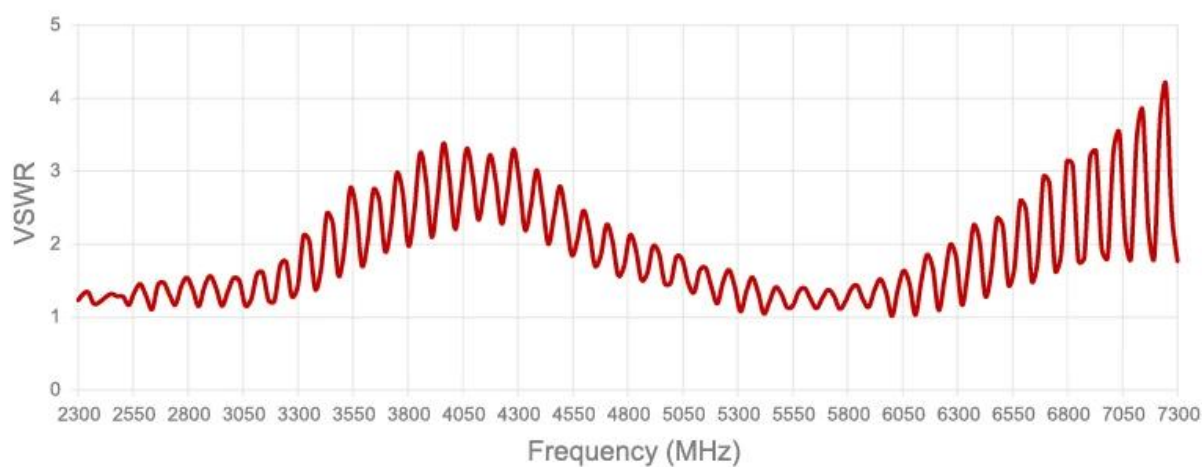
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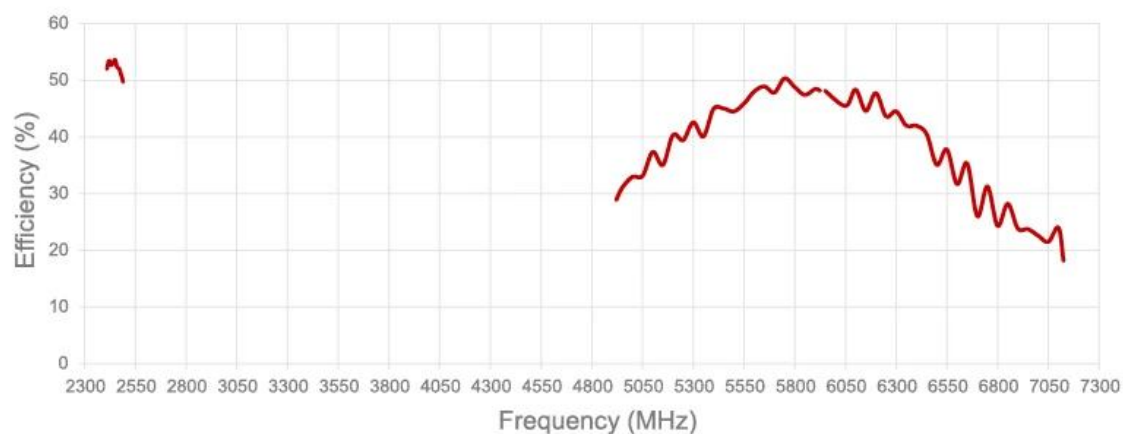
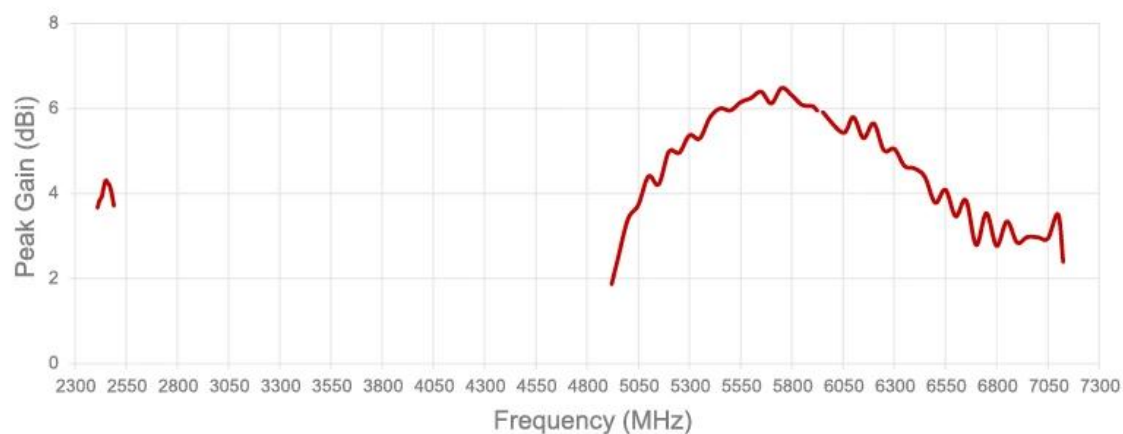
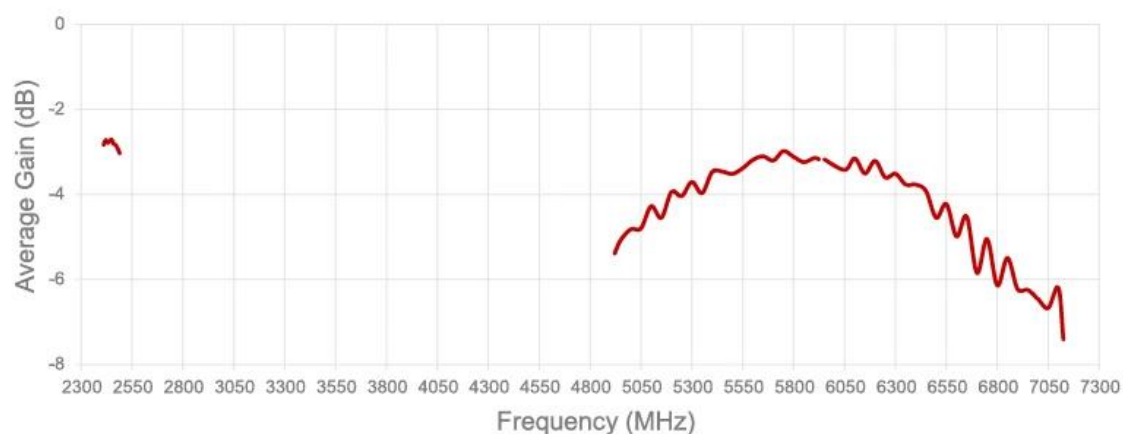
|                           |                          |
|---------------------------|--------------------------|
| TYPE DE MONTAGE           | Traversant / Montage vis |
| DIMENSIONS (MM)           | 199 × 167 × 53           |
| COUPLE DE SERRAGE (NM)    | 6 Nm                     |
| MATÉRIAU RADÔME           | ASA                      |
| COULEUR                   | Noir ou Blanc            |
| T° DE FONCTIONNEMENT (°C) | -40 à +85                |
| T° DE STOCKAGE (°C)       | -40 à +85                |
| CERTIFICATION(S)          | RoHS                     |
| INDICE(S) DE PROTECTION   | IP67, IP69               |



## MESURES

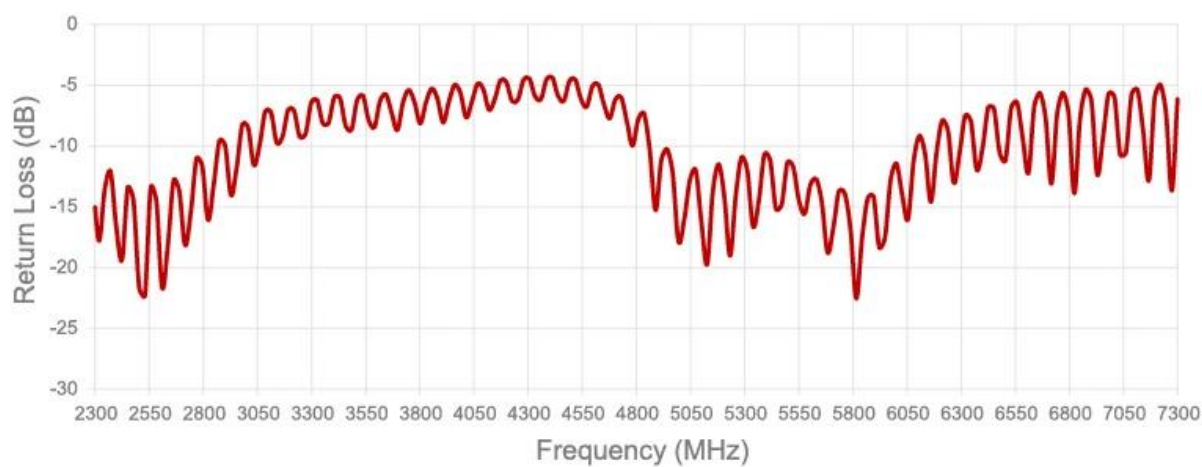
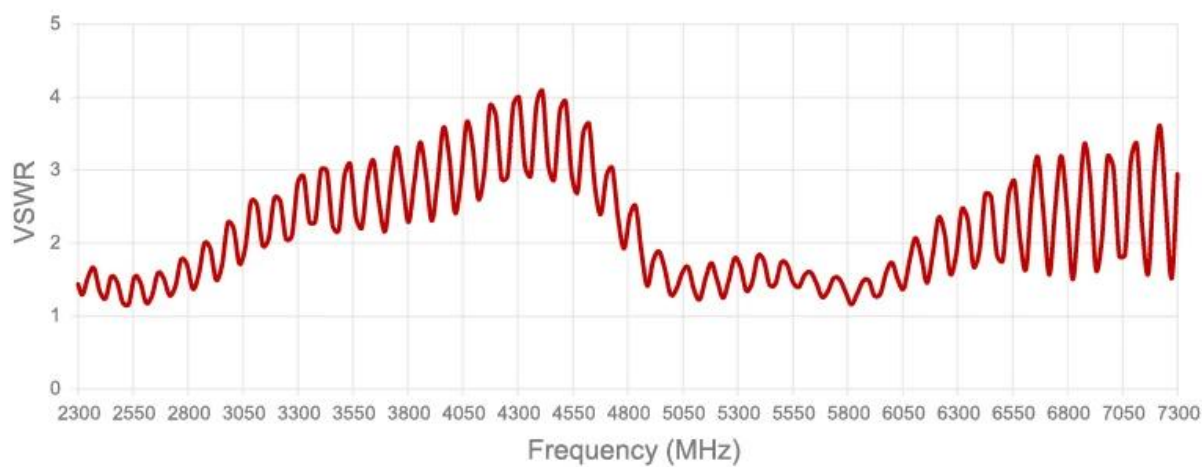
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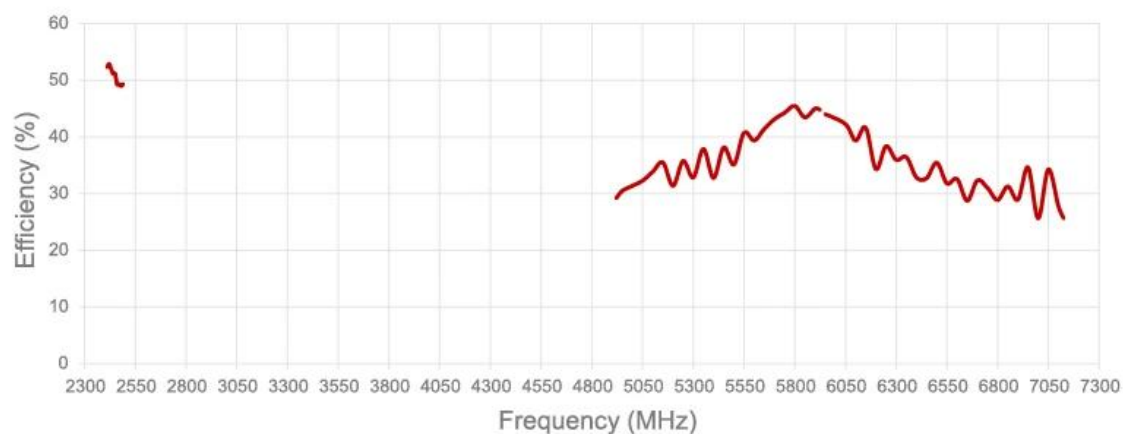
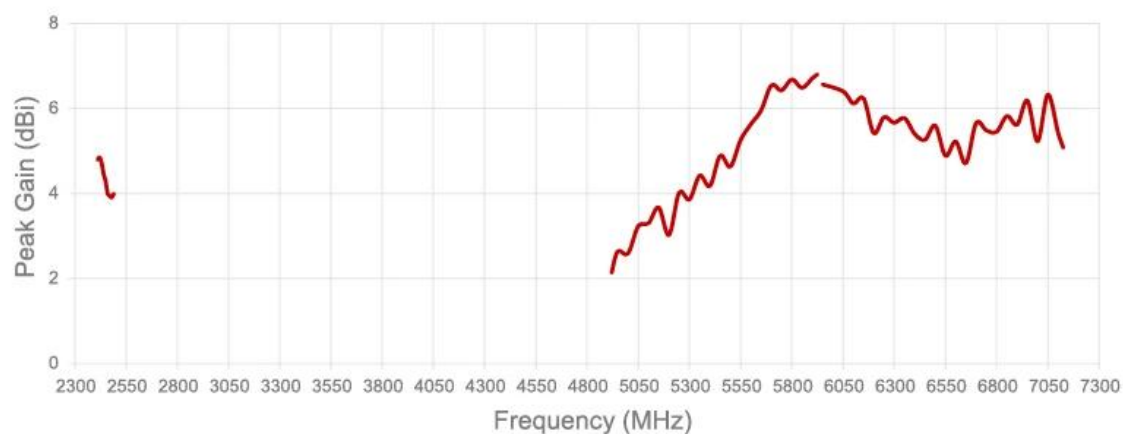
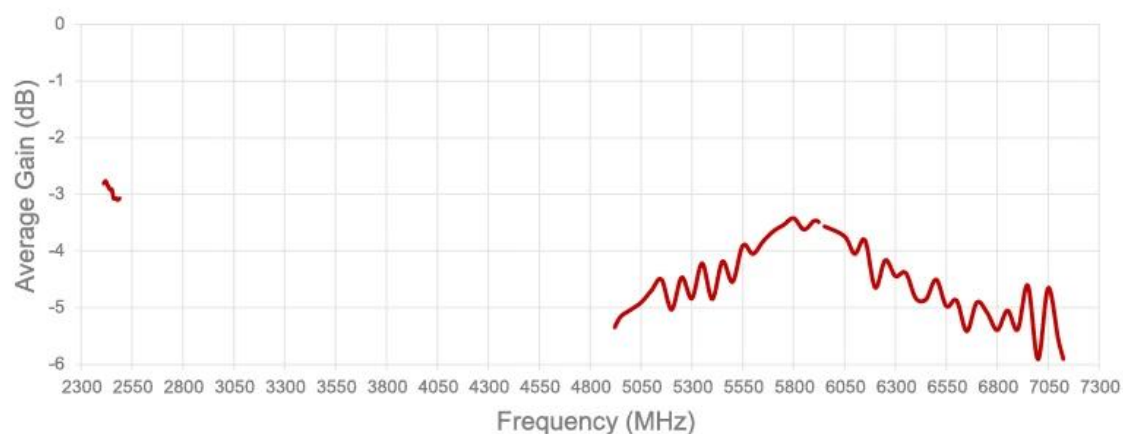






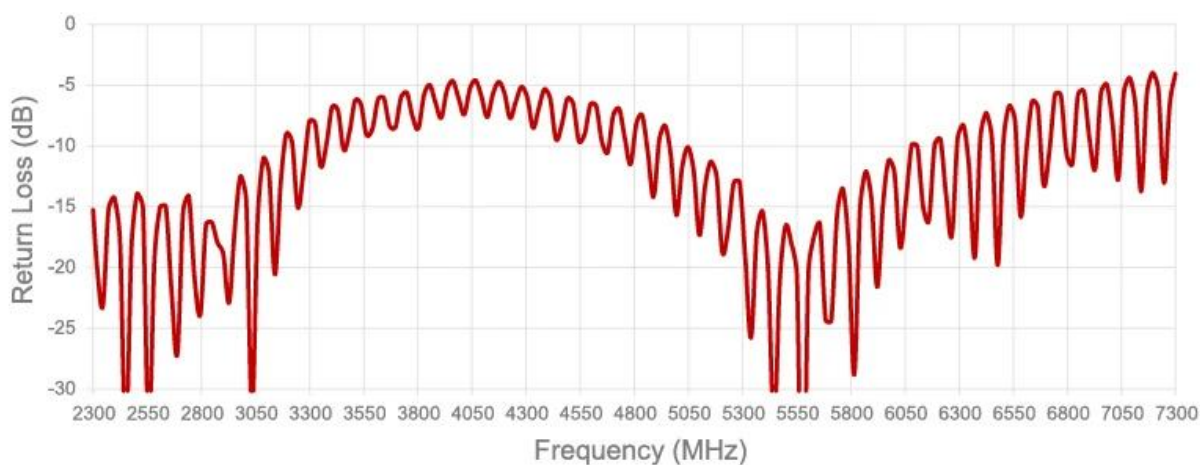
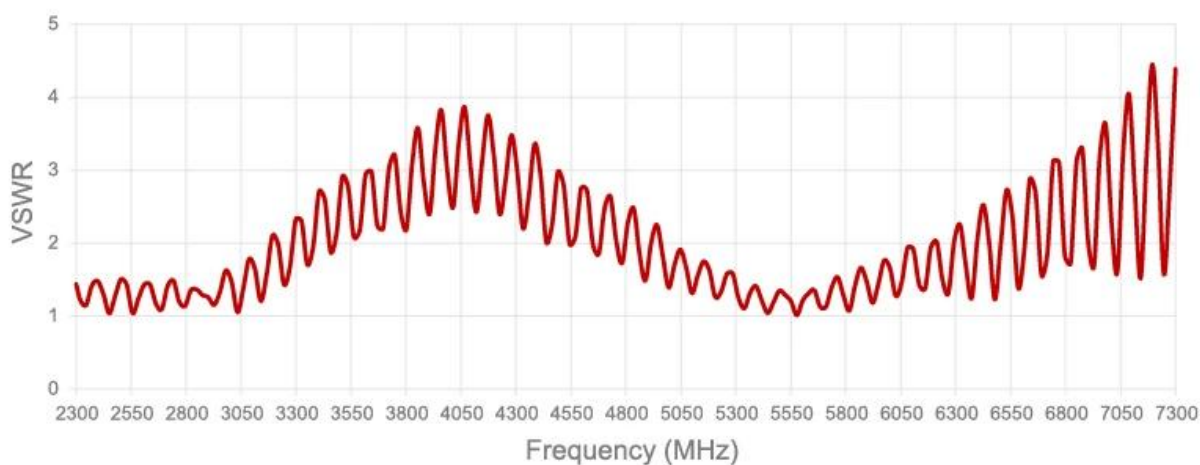
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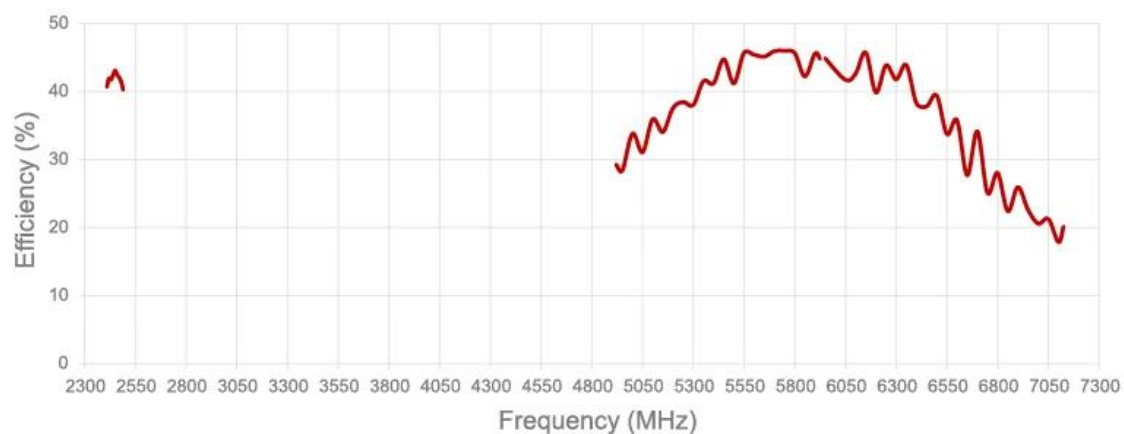
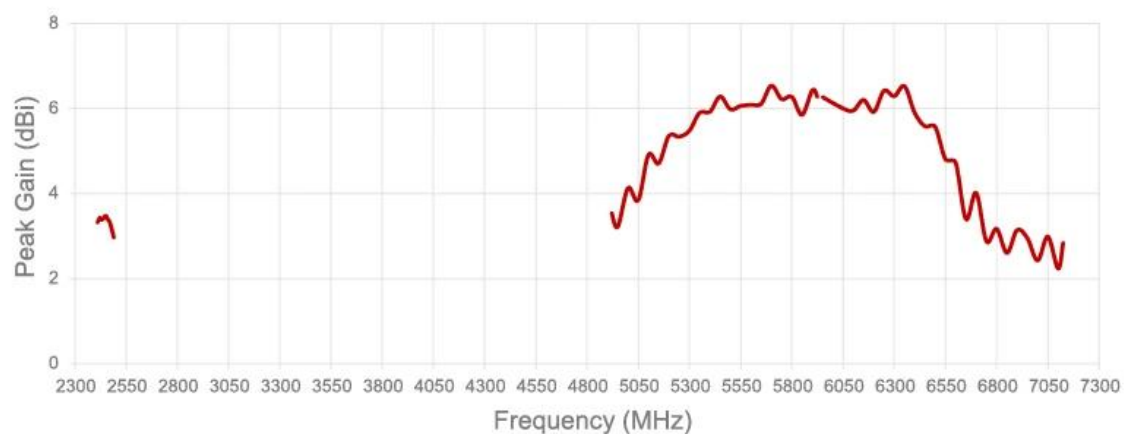
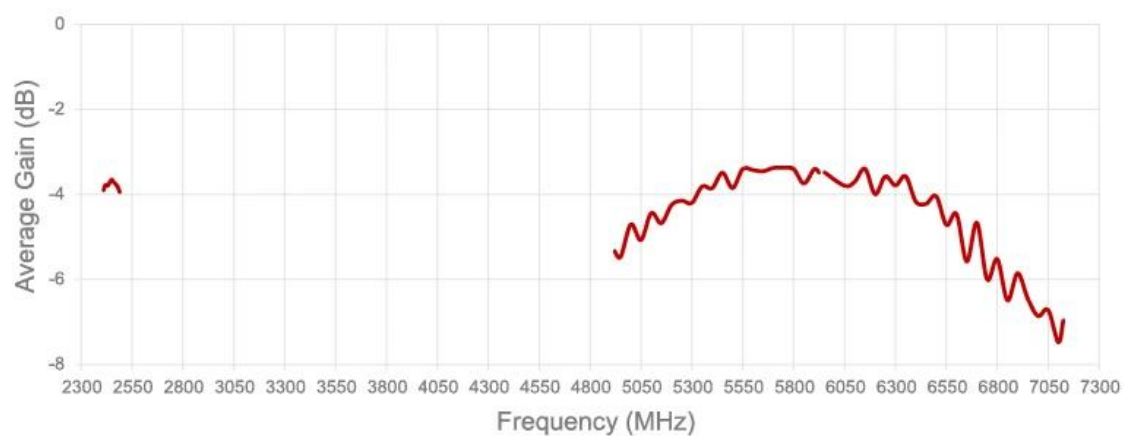






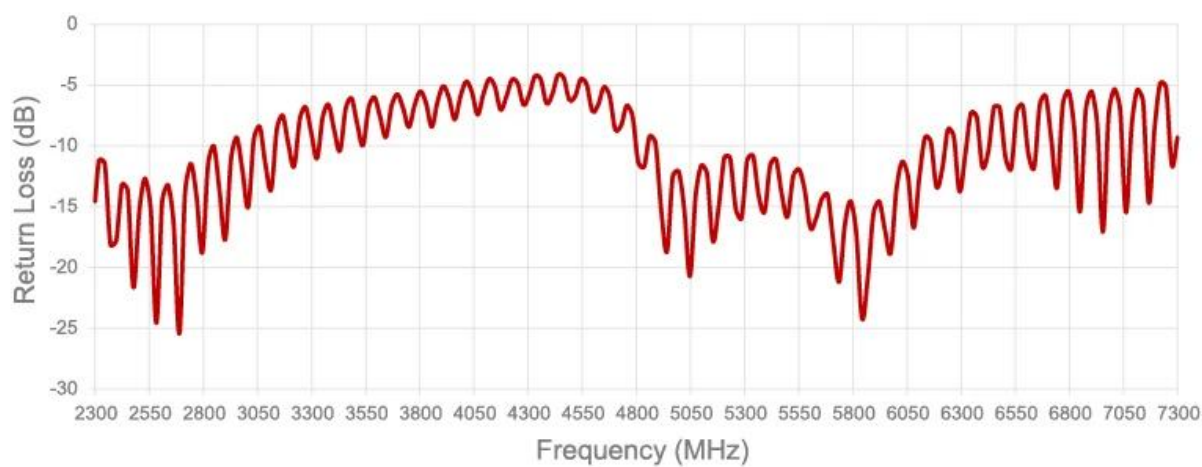
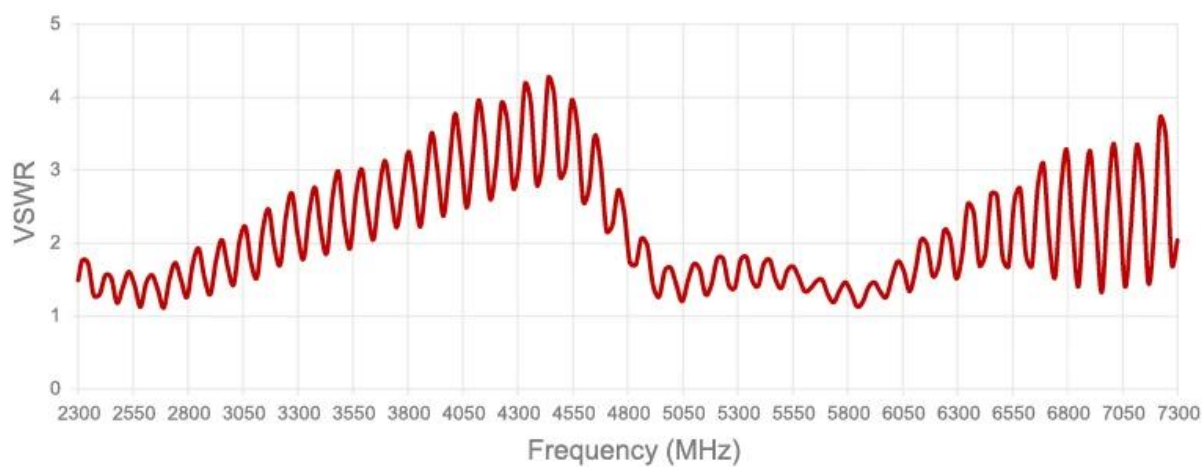
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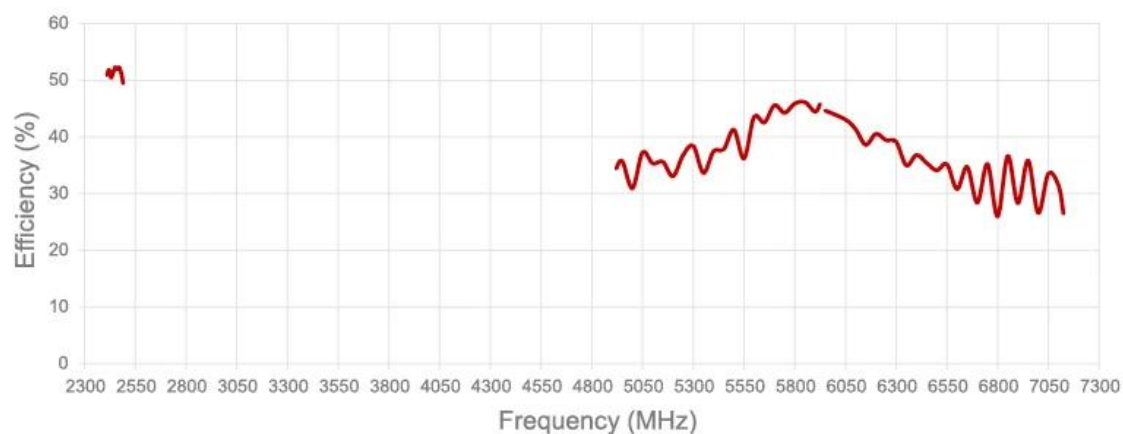
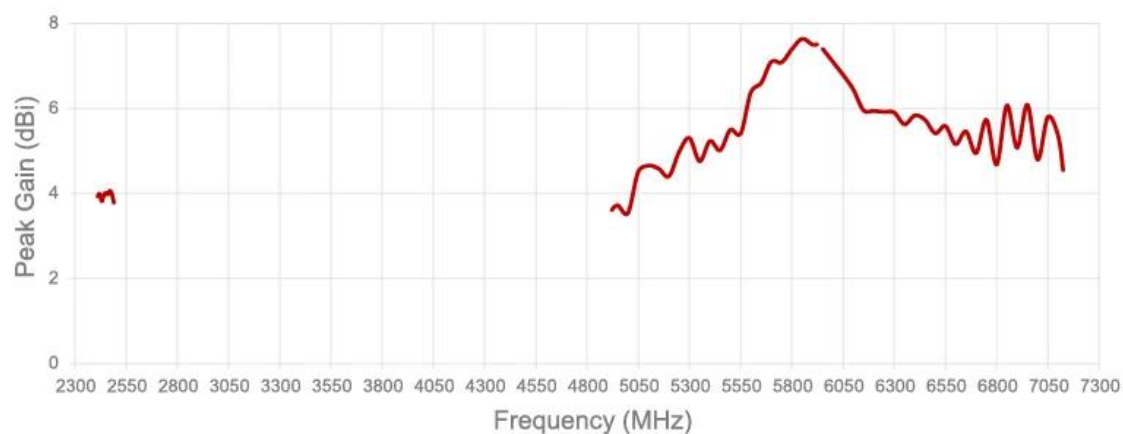
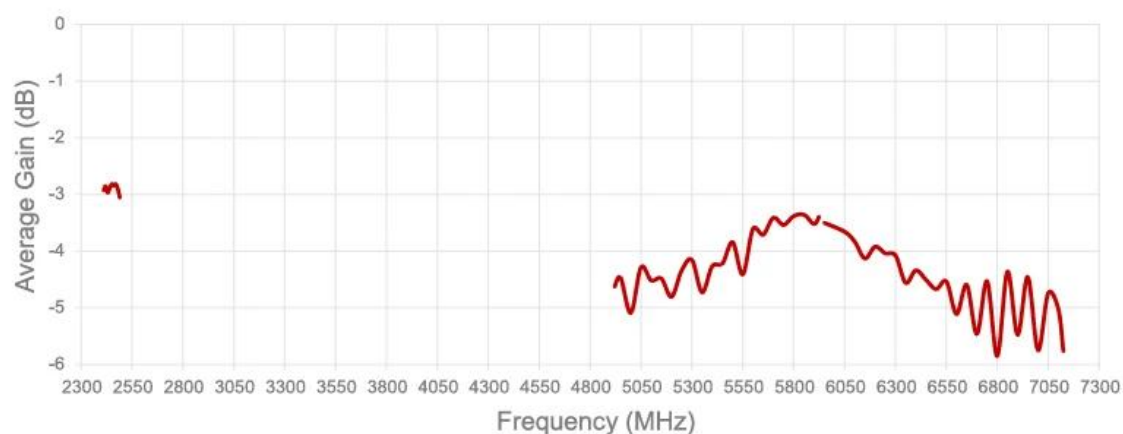






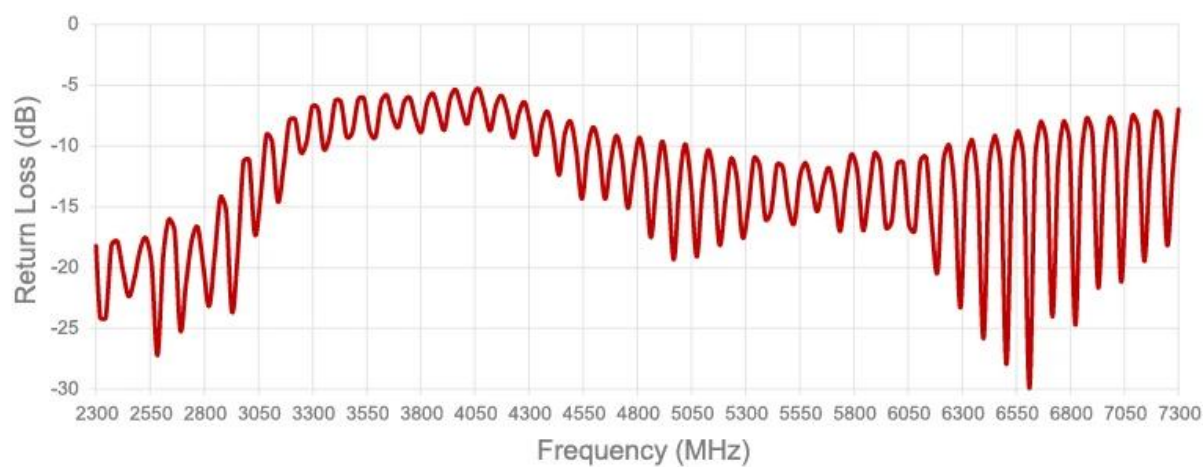
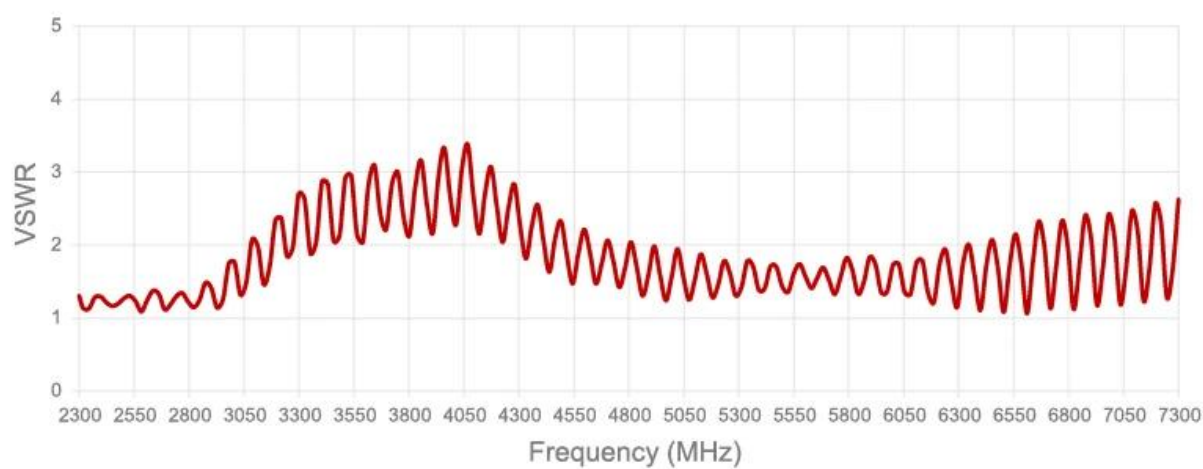
**Cable 4: 2.4/5.0/6.0 GHz ISM**

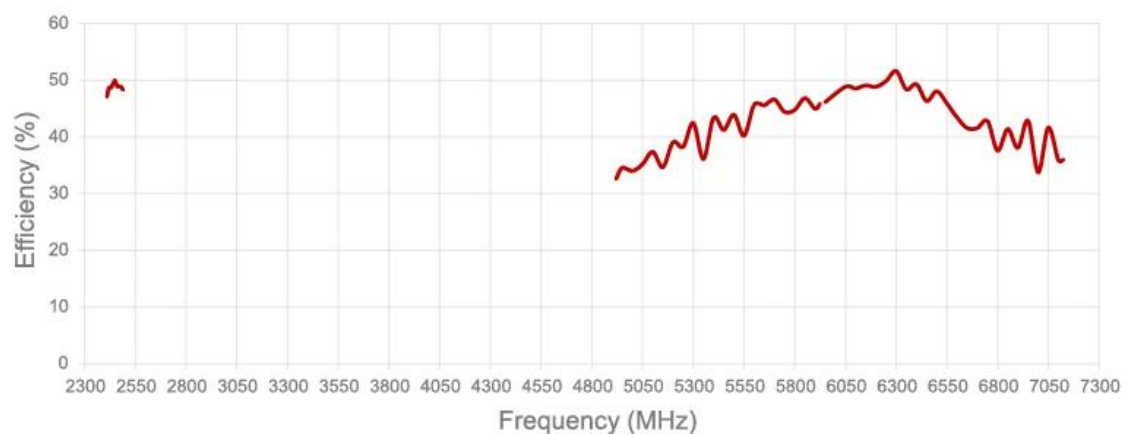
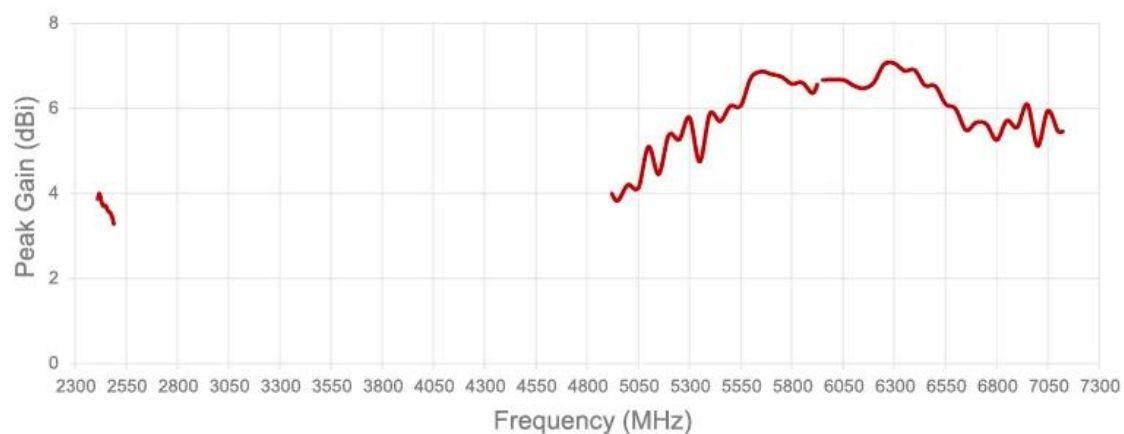
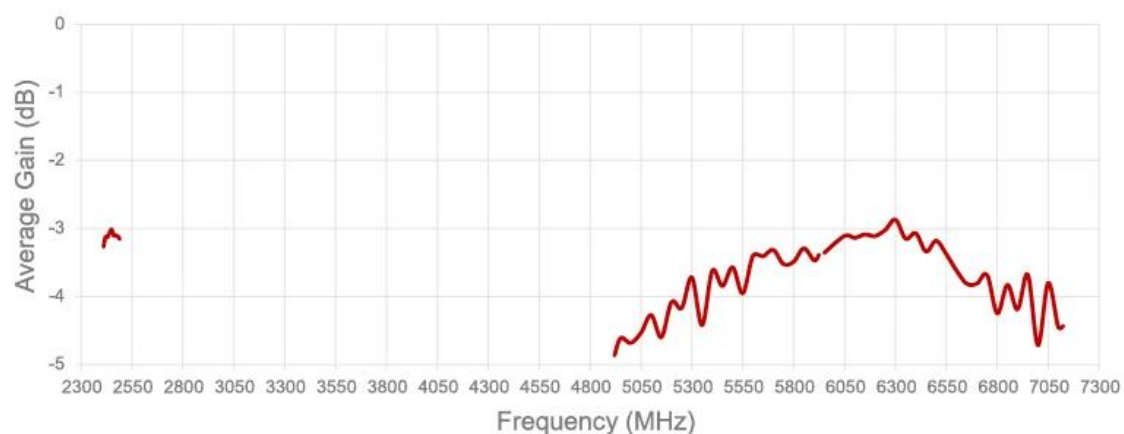






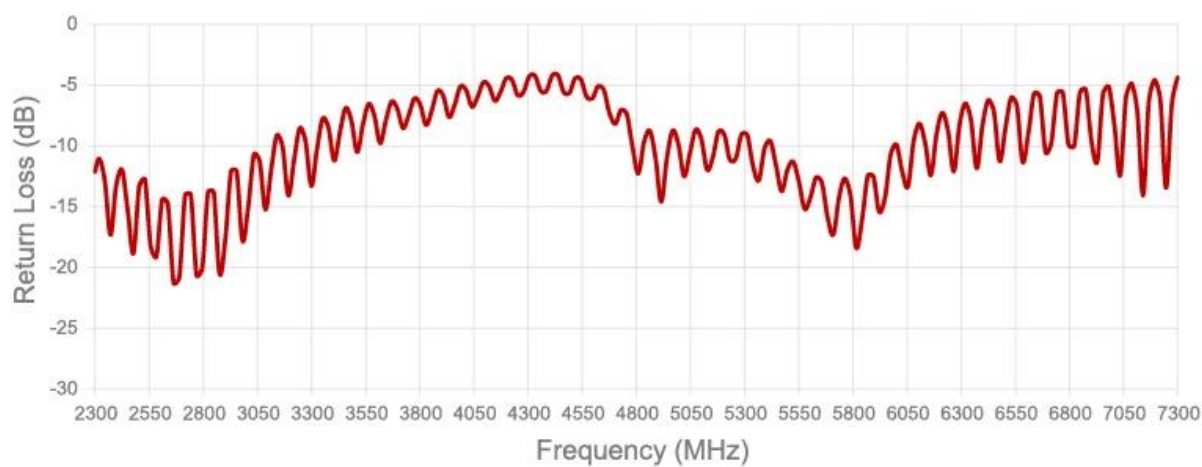
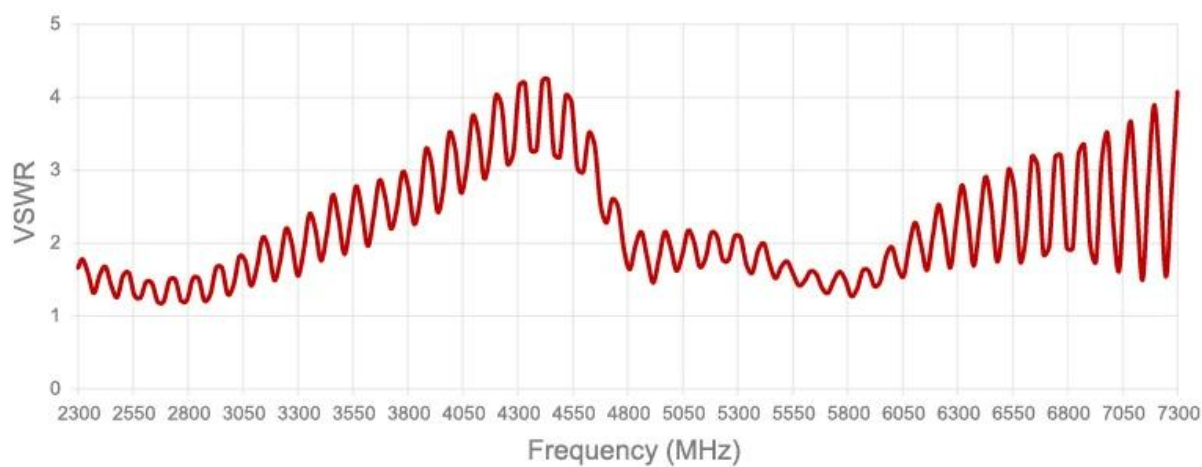
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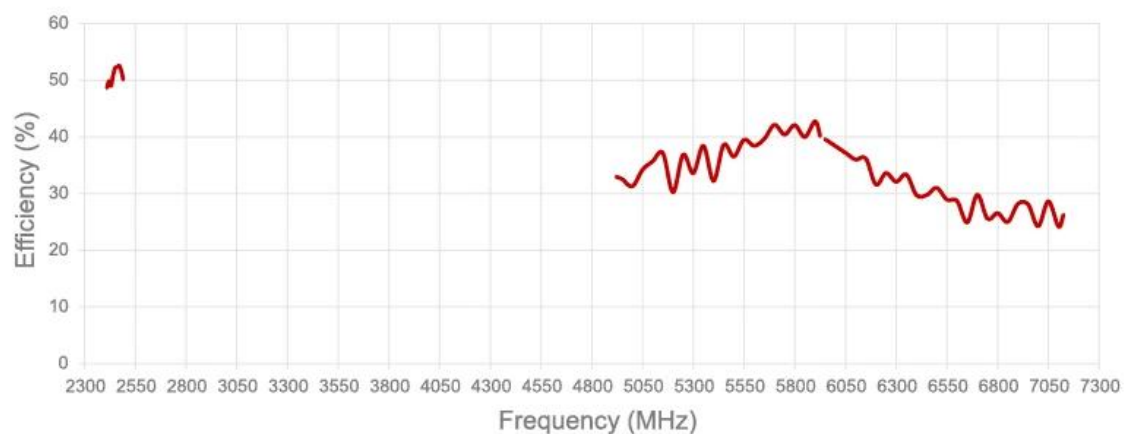
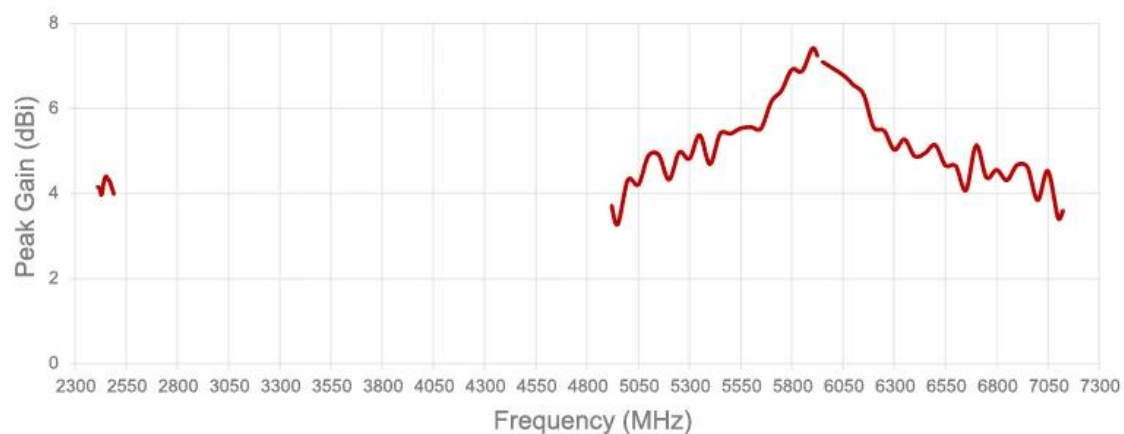
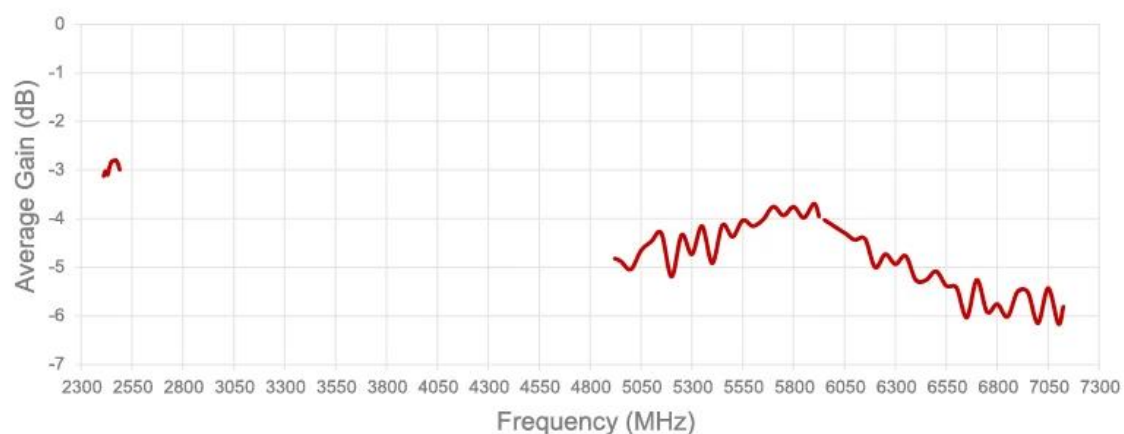






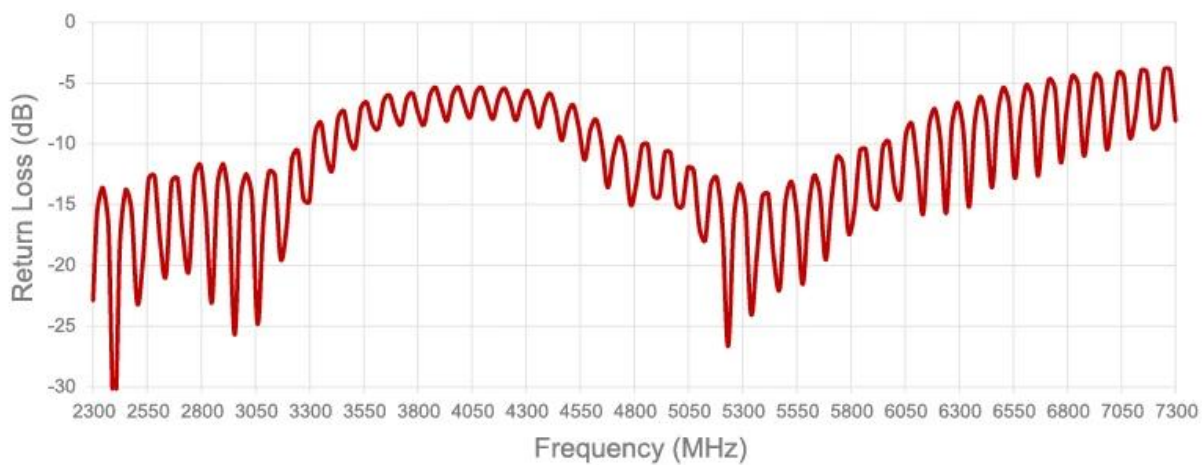
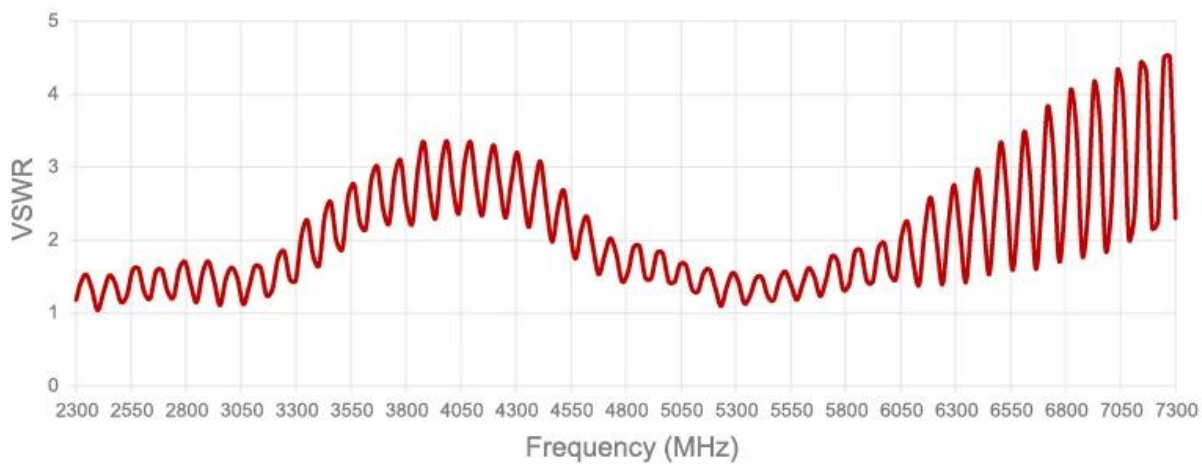
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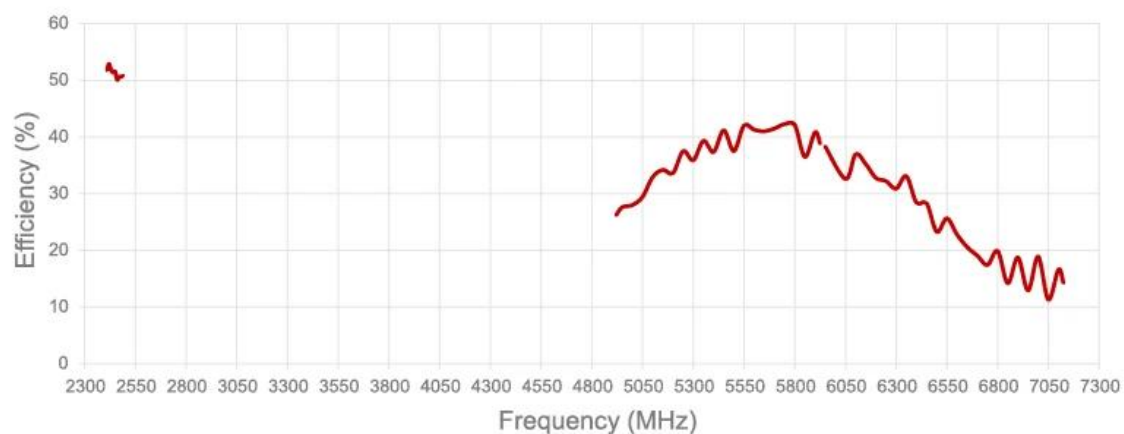
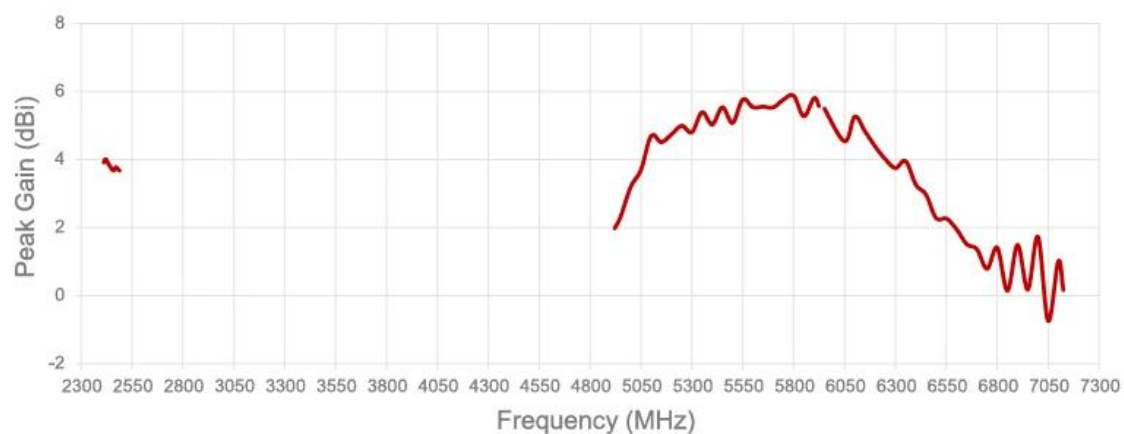
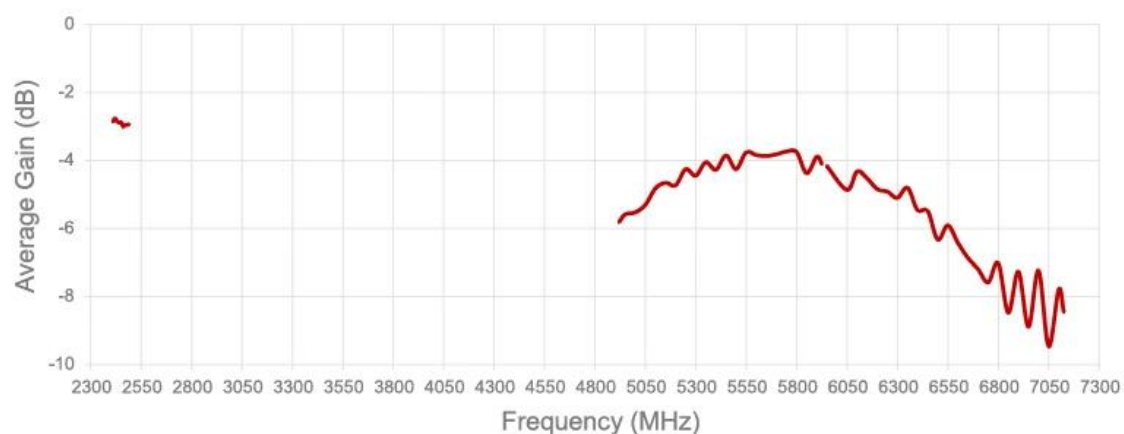






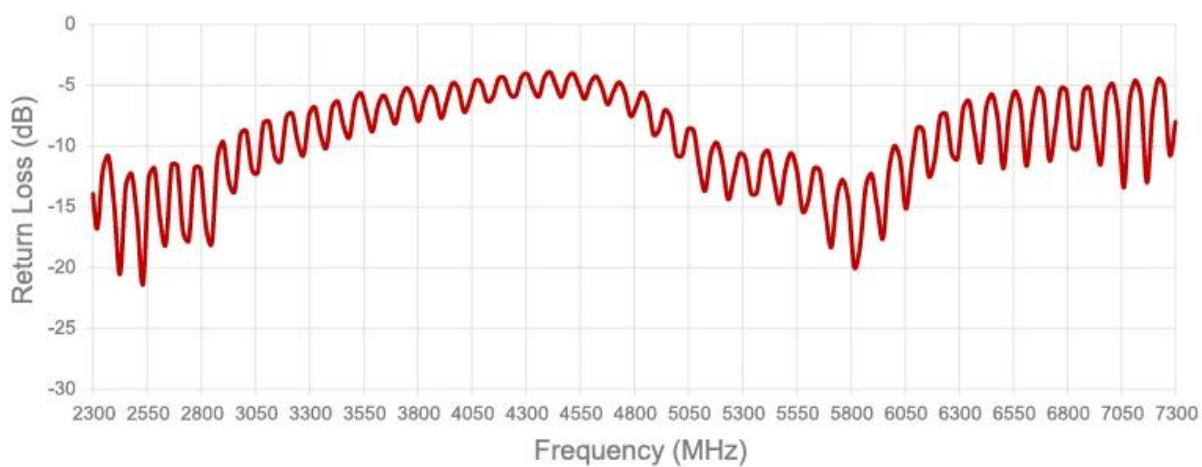
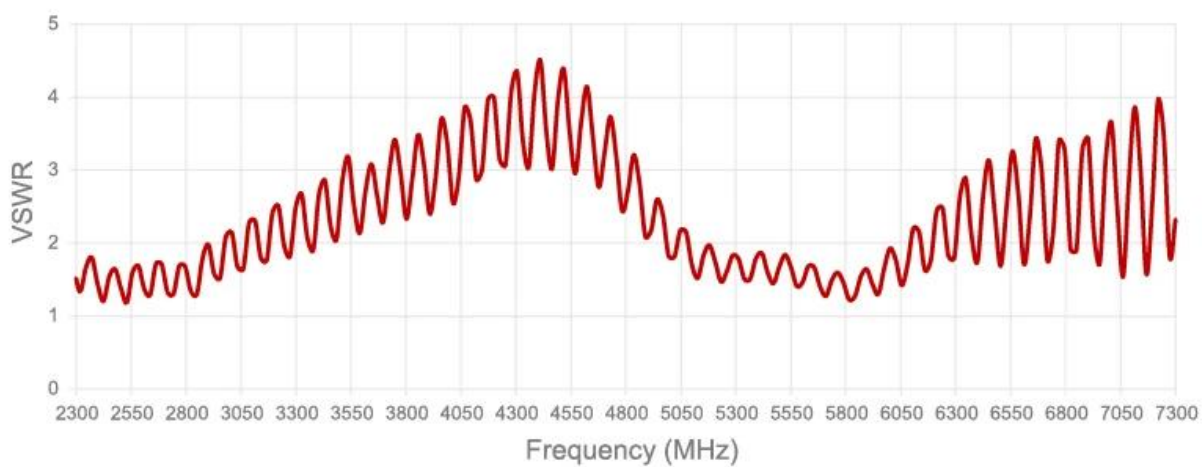
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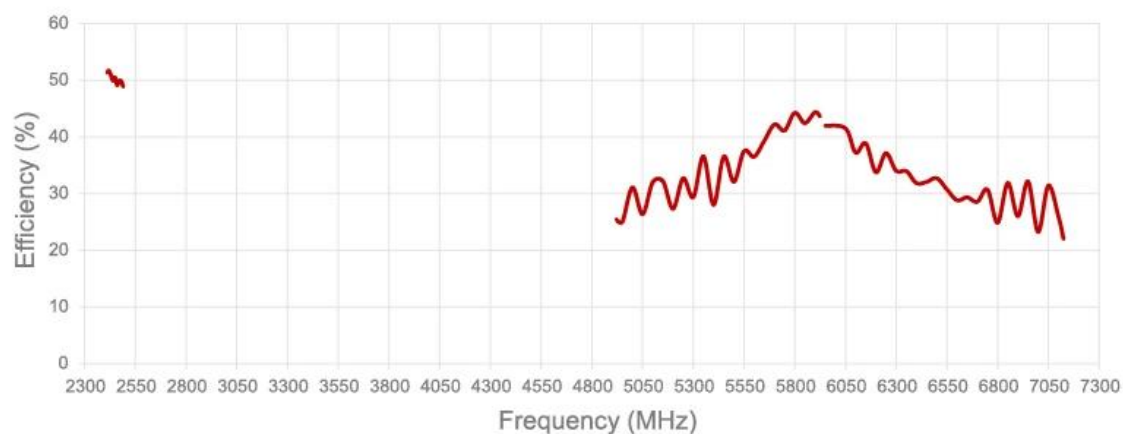
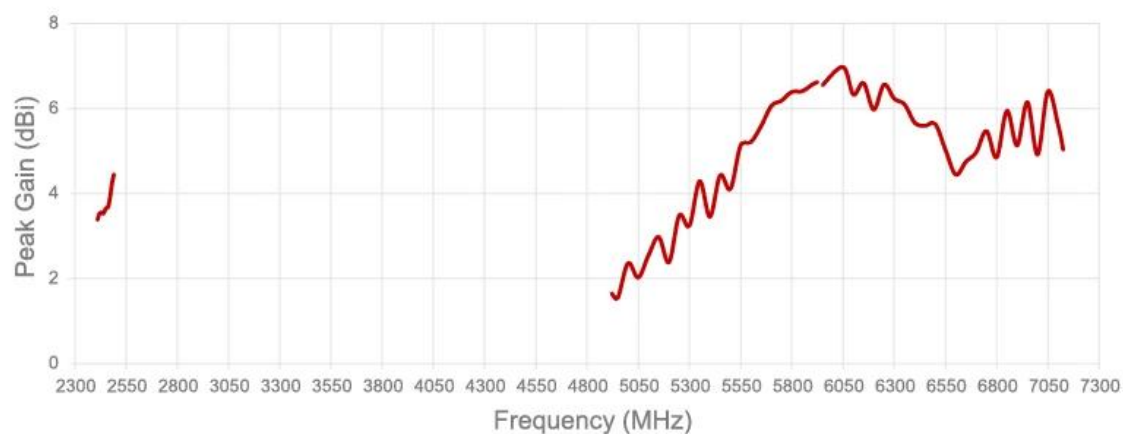
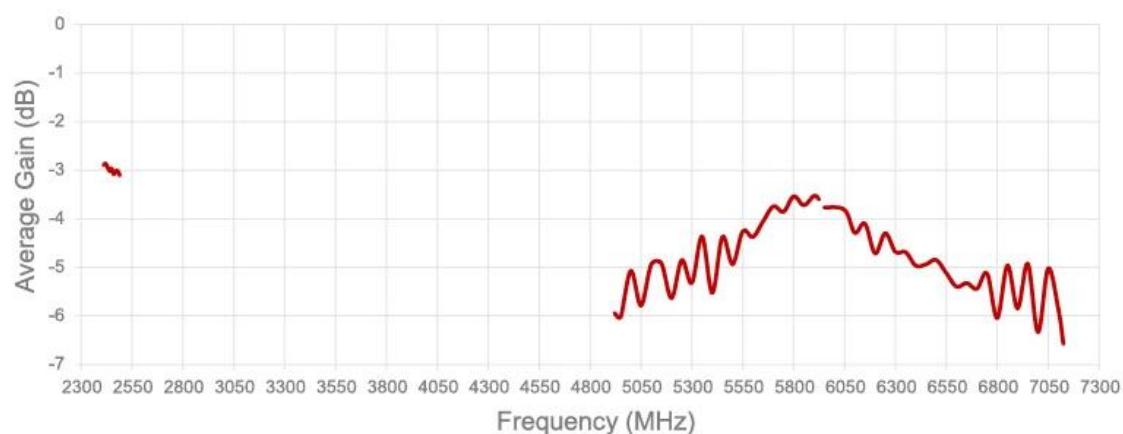






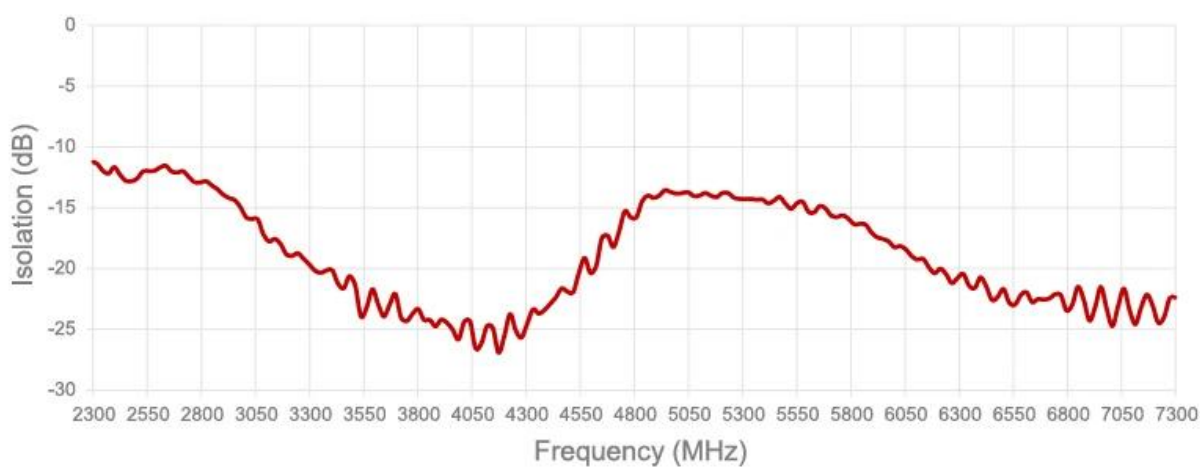
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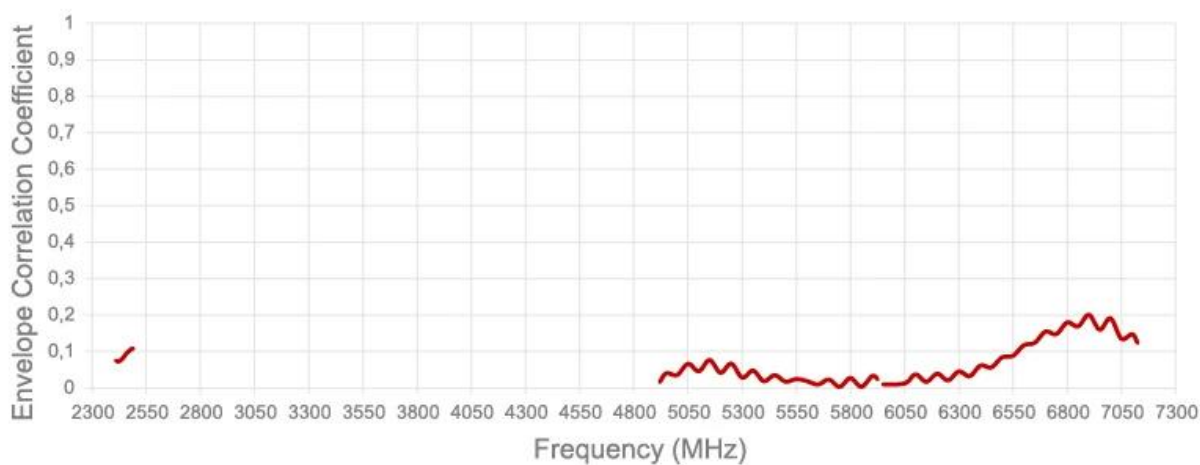




## ISOLATION FOR CABLES 1 AND 2

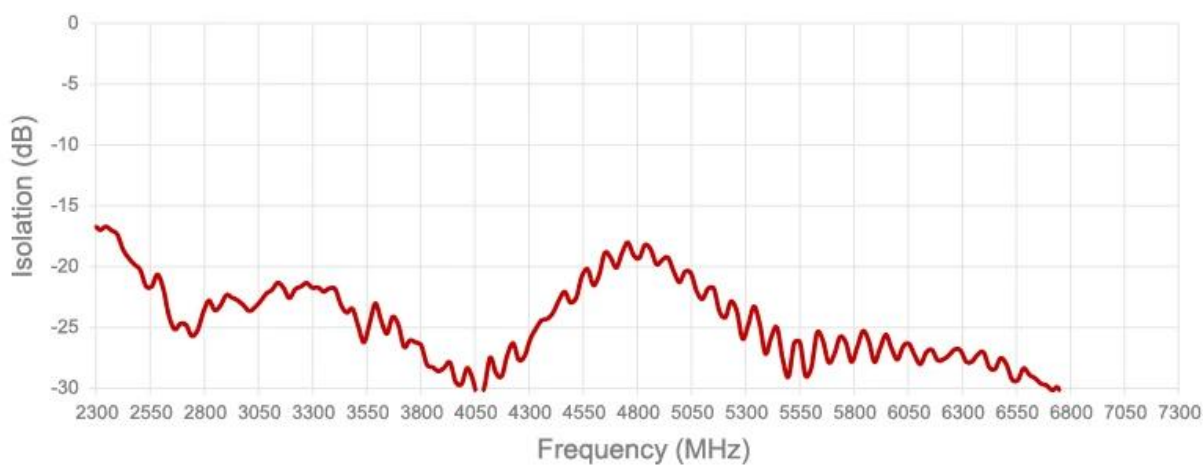


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2

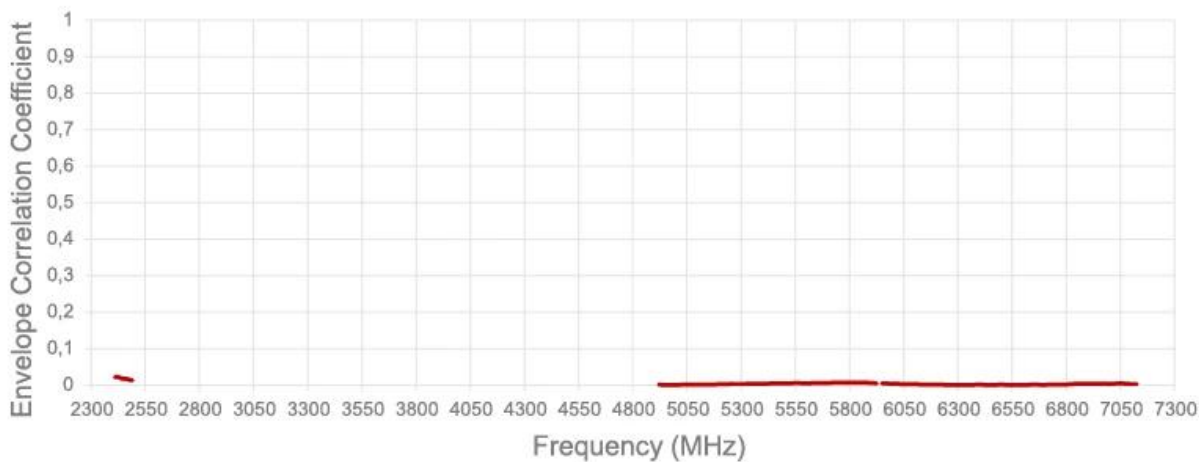




## ISOLATION FOR CABLES 1 AND 3

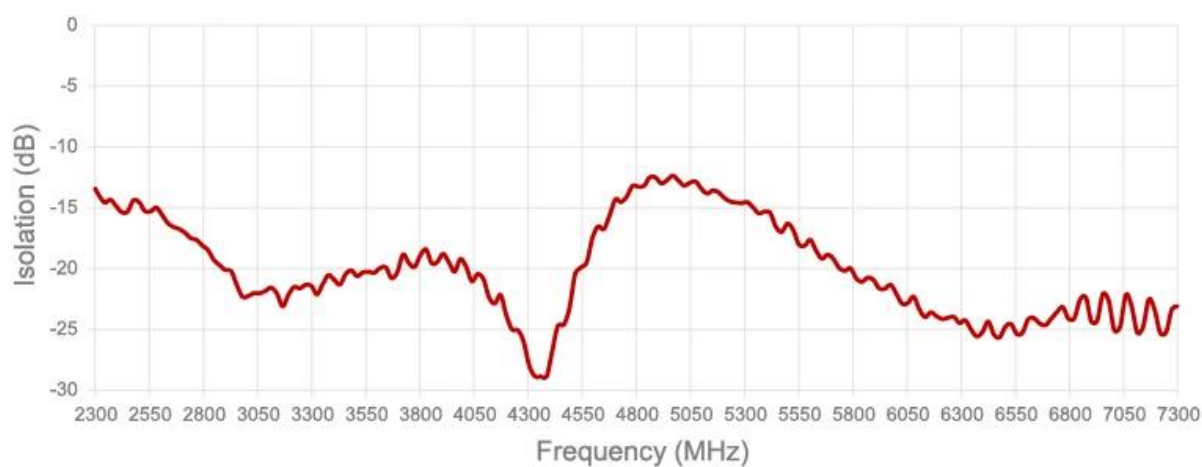


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 3

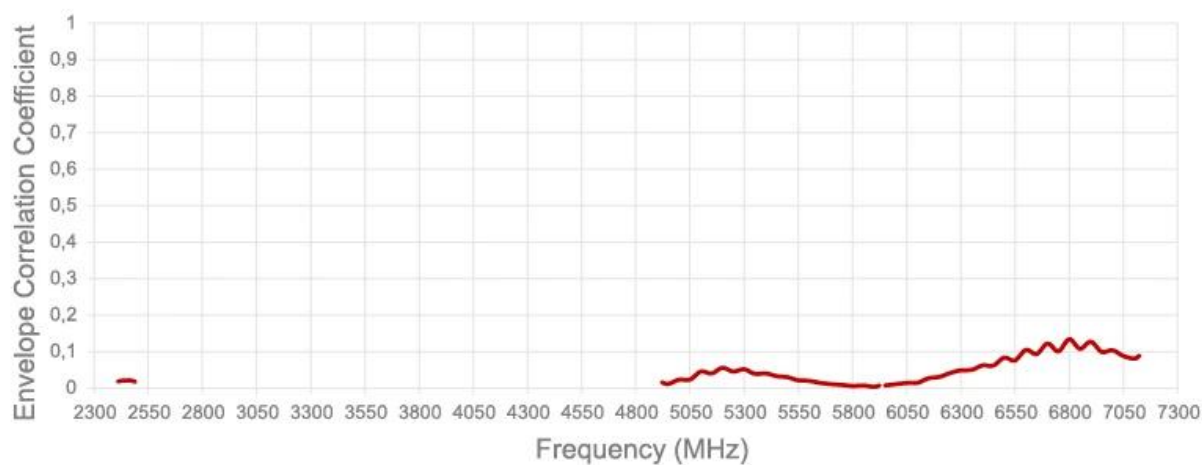




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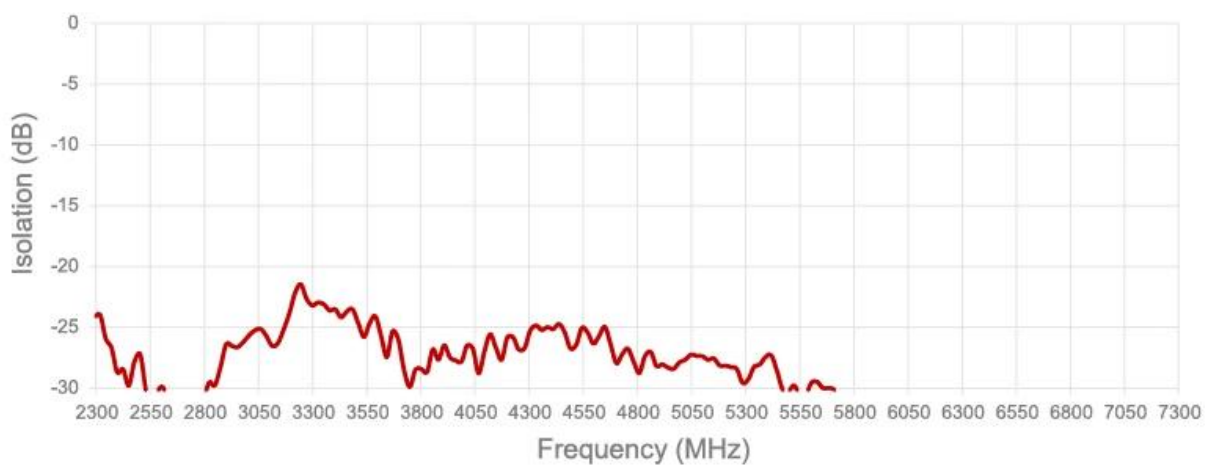


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 4

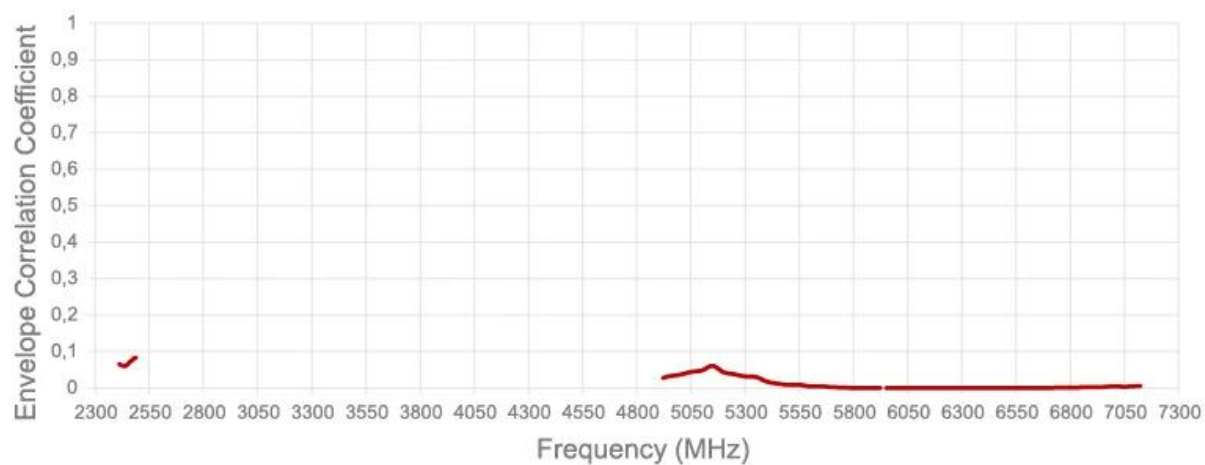




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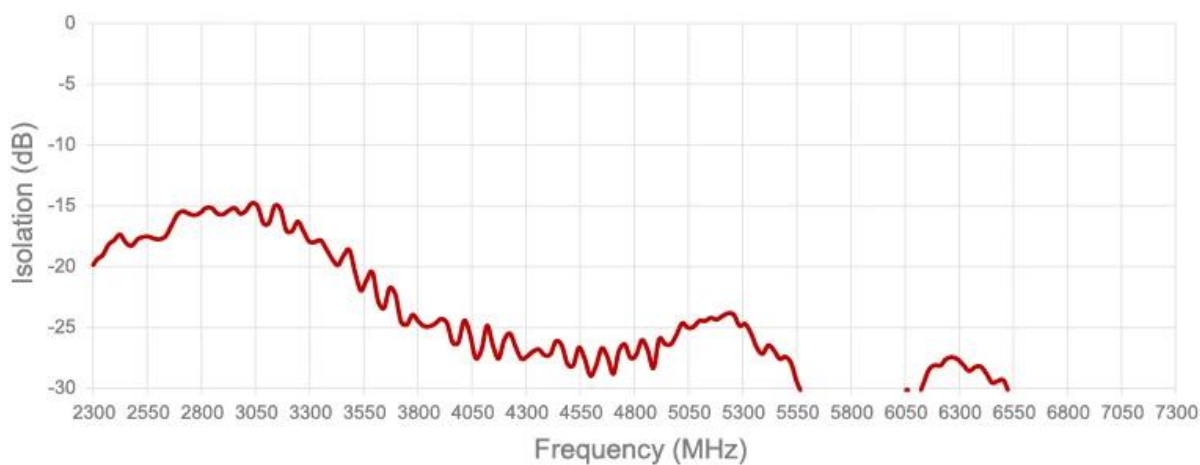


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 5

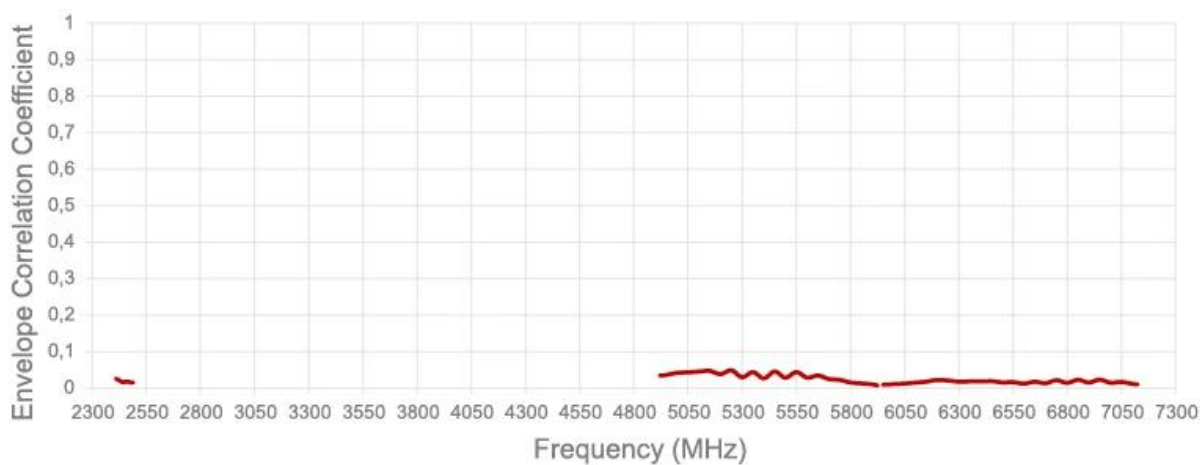




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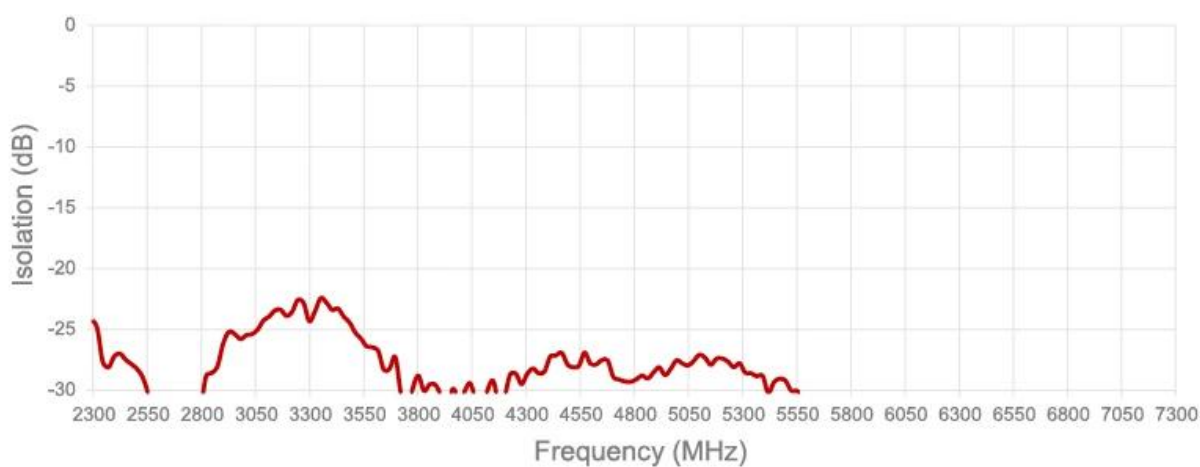


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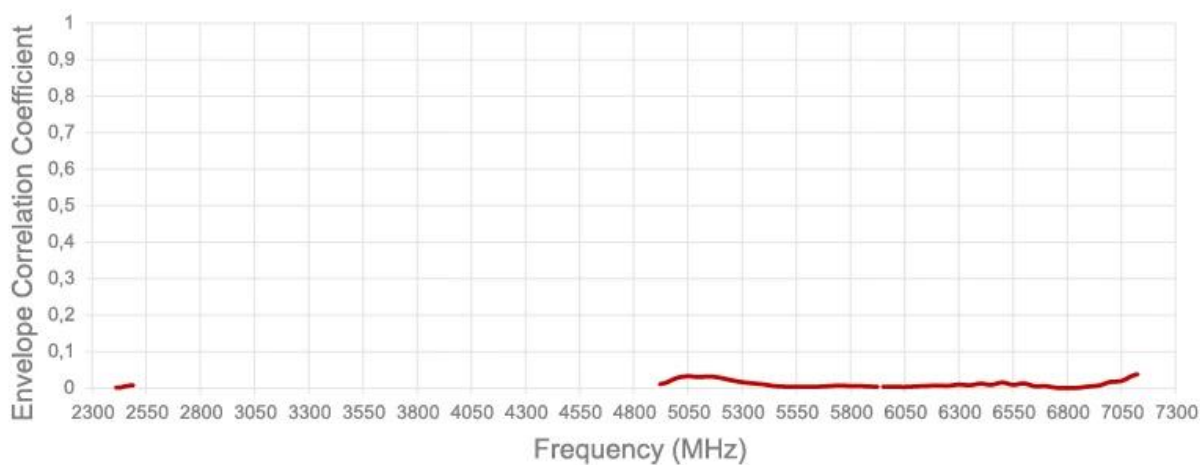




## ISOLATION FOR CABLES 3 AND 7

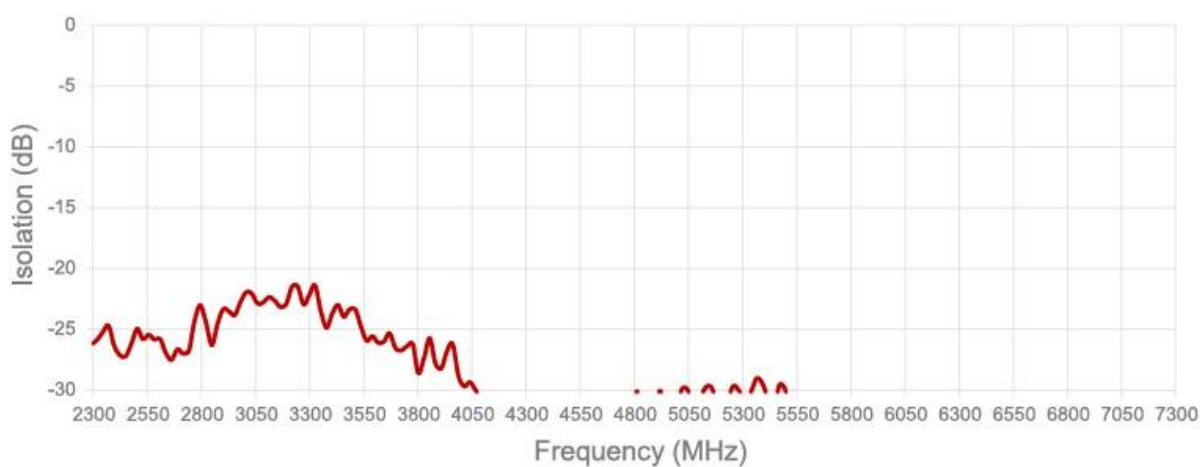


## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 3 AND 7

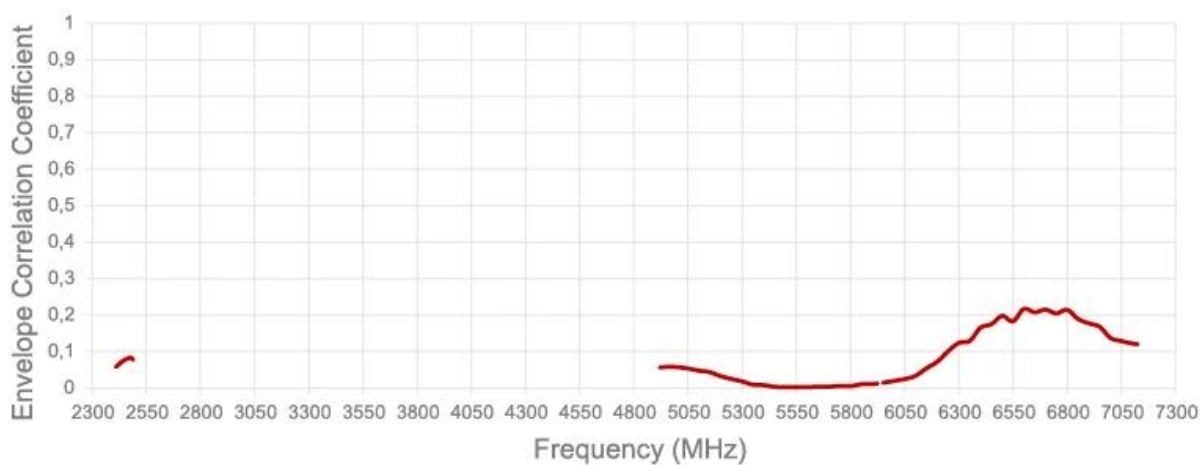


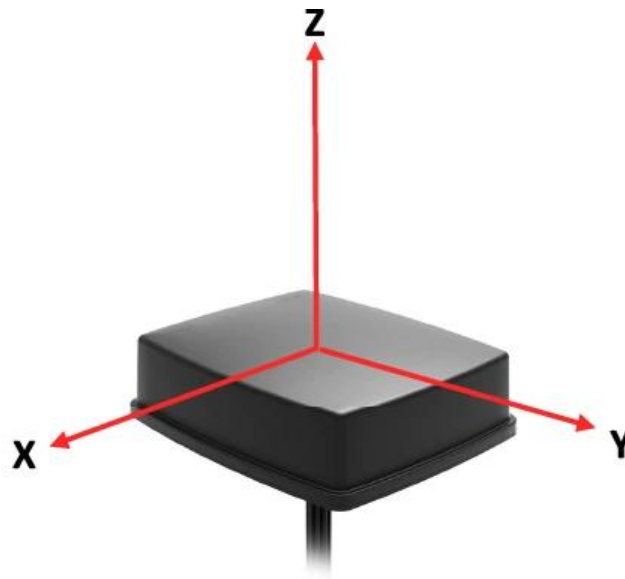


## ISOLATION FOR CABLES 4 AND 8



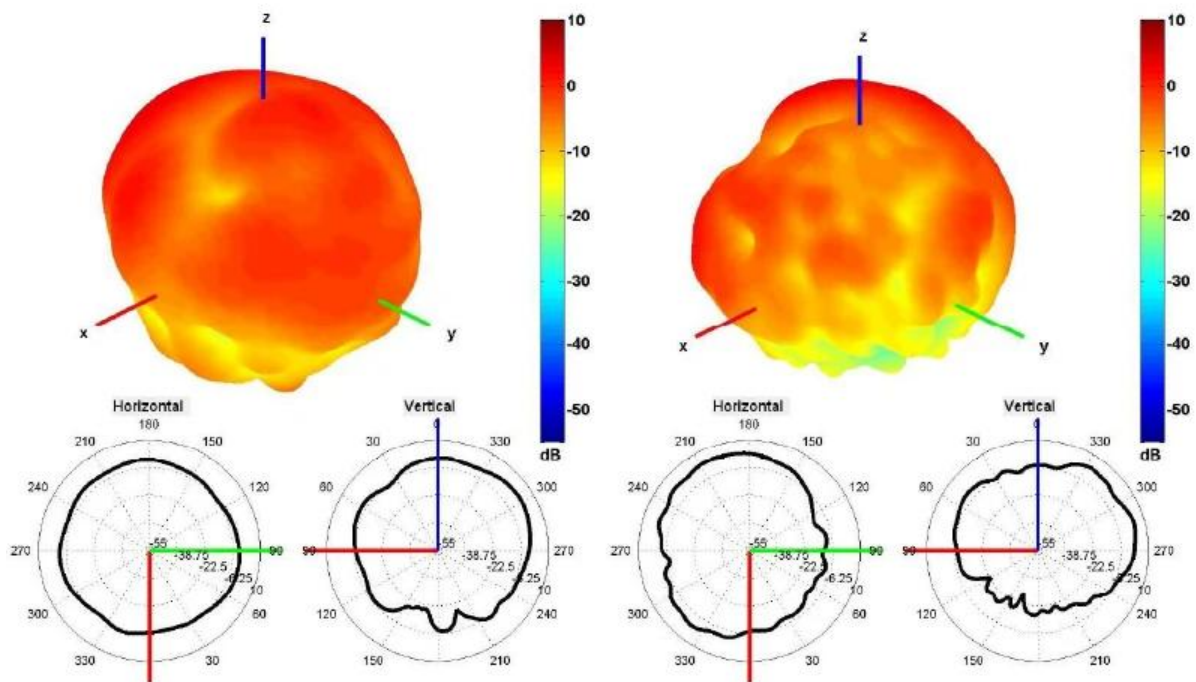
## ENVELOPE CORRELATION COEFFICIENT FOR CABLES 4 AND 8



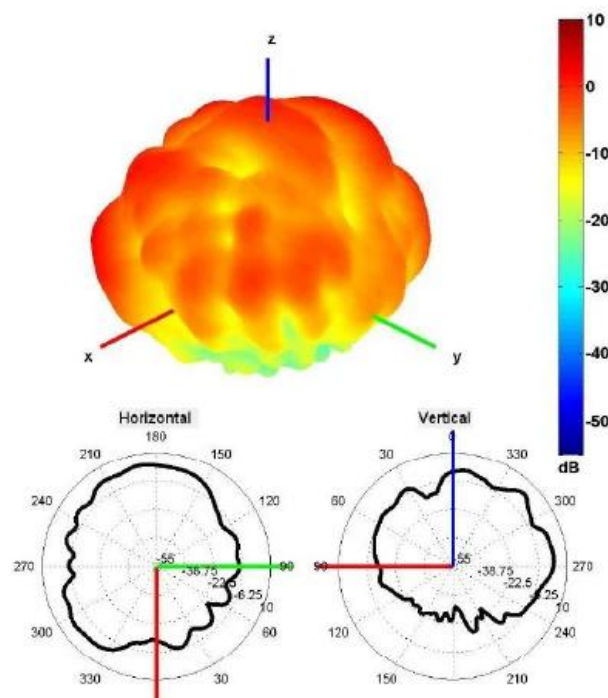


Radiation pattern reference

Cable 1: 2.4/5.0/6.0 GHz ISM

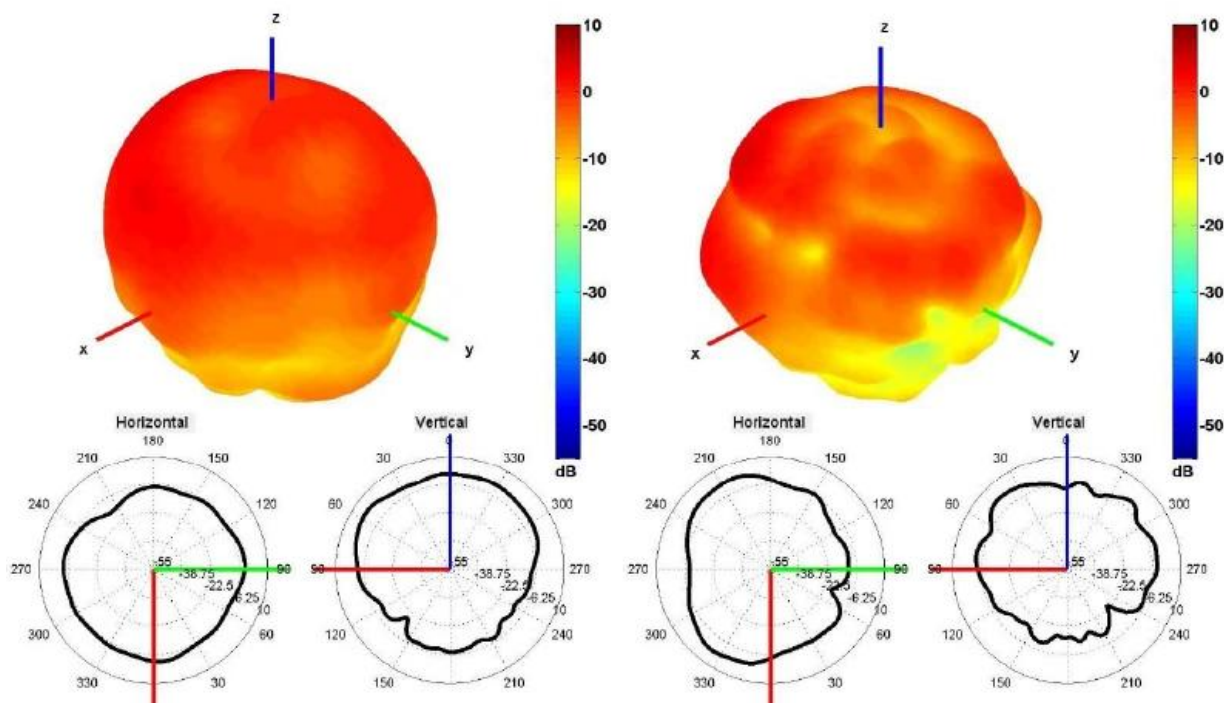


2450 and 5500 MHz Radiation pattern

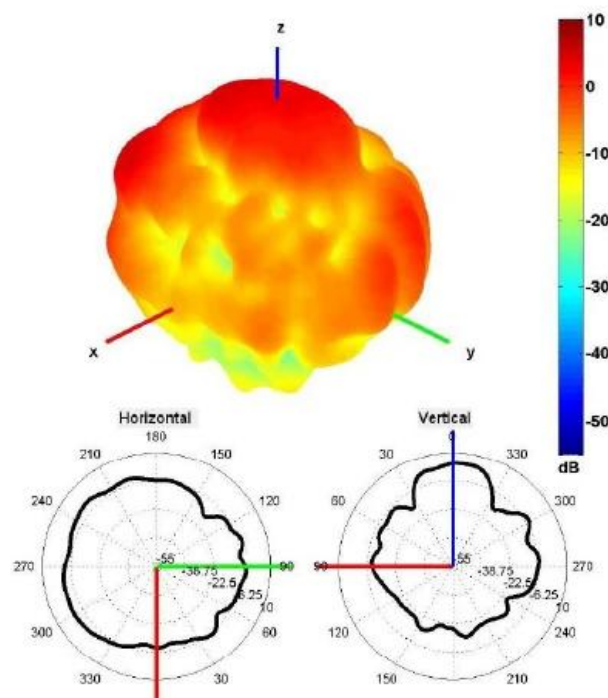


6500 MHz Radiation pattern

Cable 2: 2.4/5.0/6.0 GHz ISM

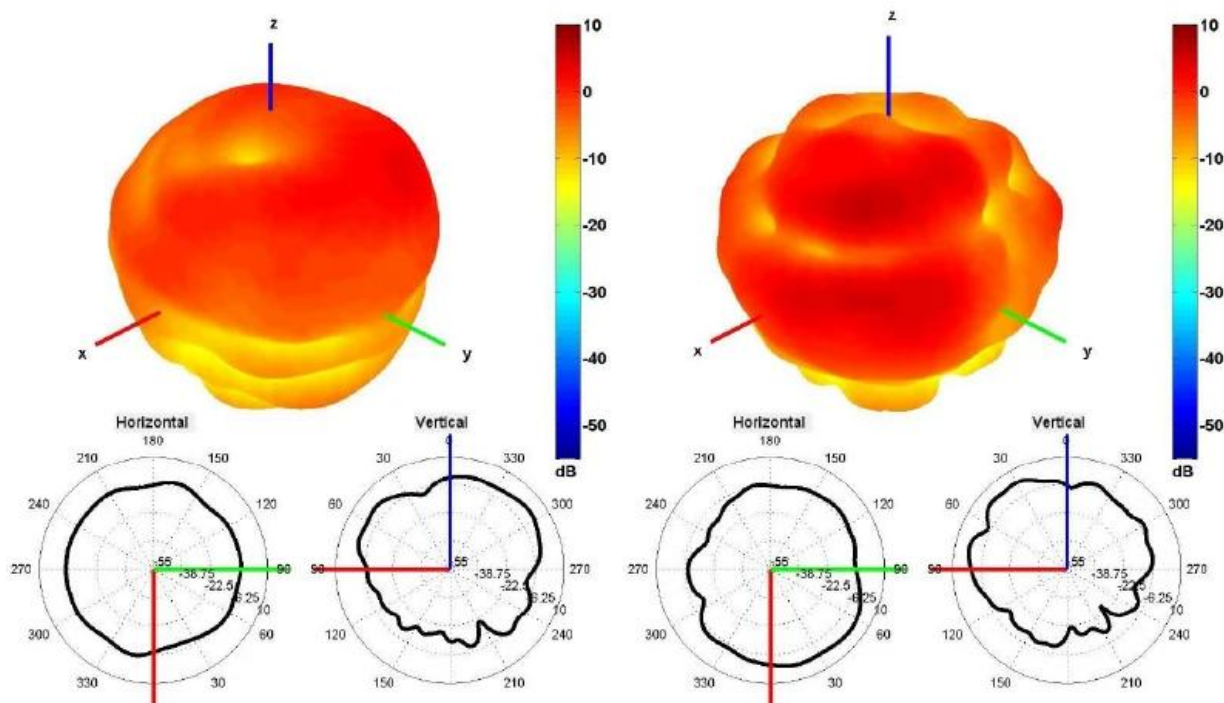


2450 and 5500 MHz Radiation pattern

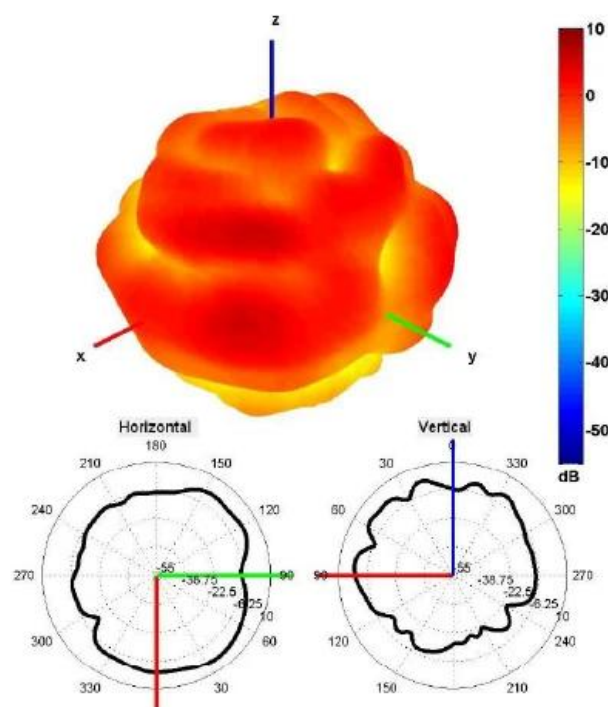


6500 MHz Radiation pattern

Cable 3: 2.4/5.0/6.0 GHz ISM

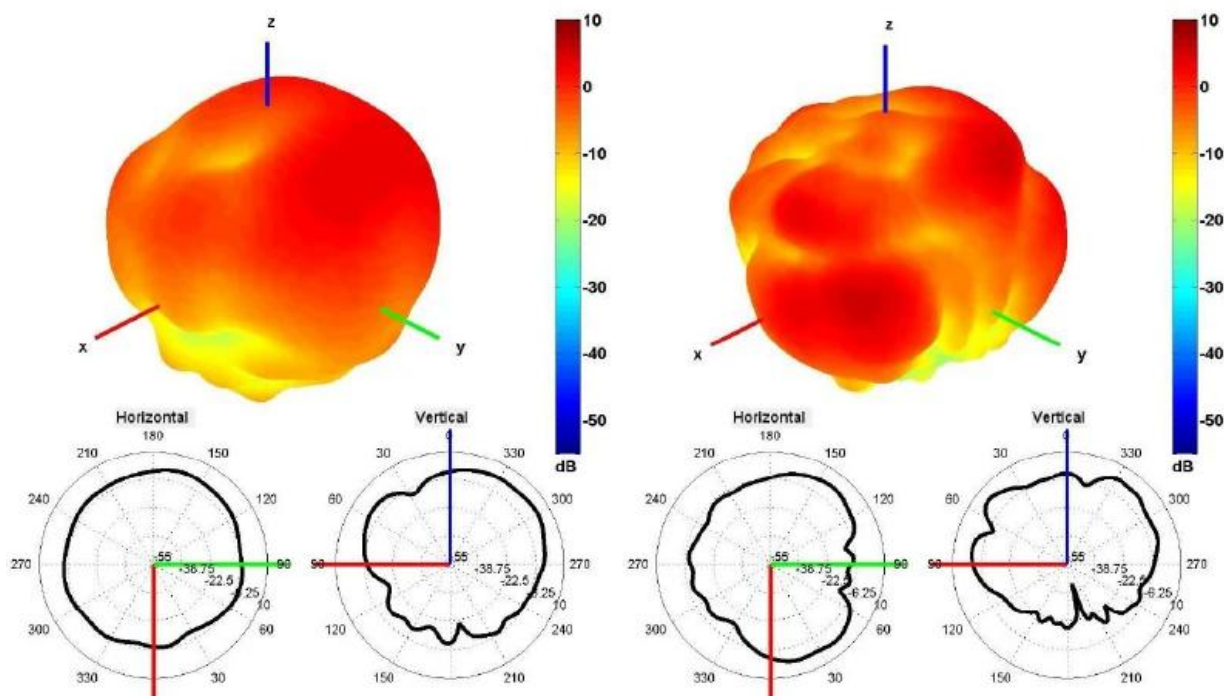


2450 and 5500 MHz Radiation pattern

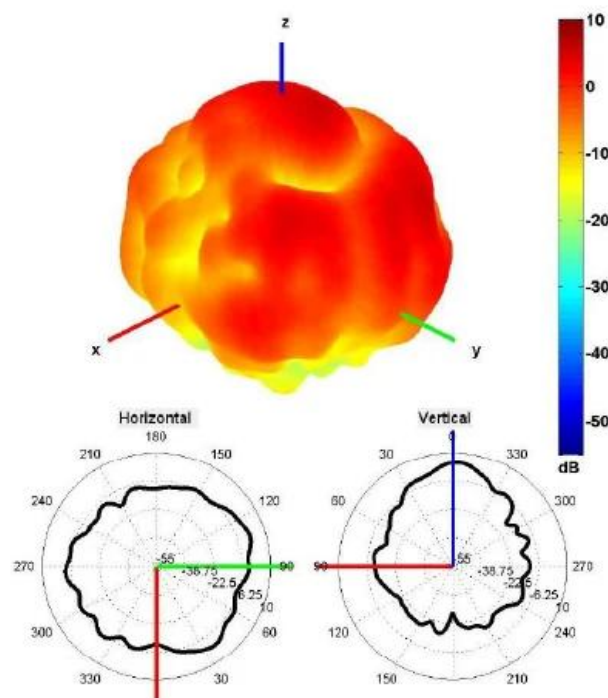


6500 MHz Radiation pattern

Cable 4: 2.4/5.0/6.0 GHz ISM

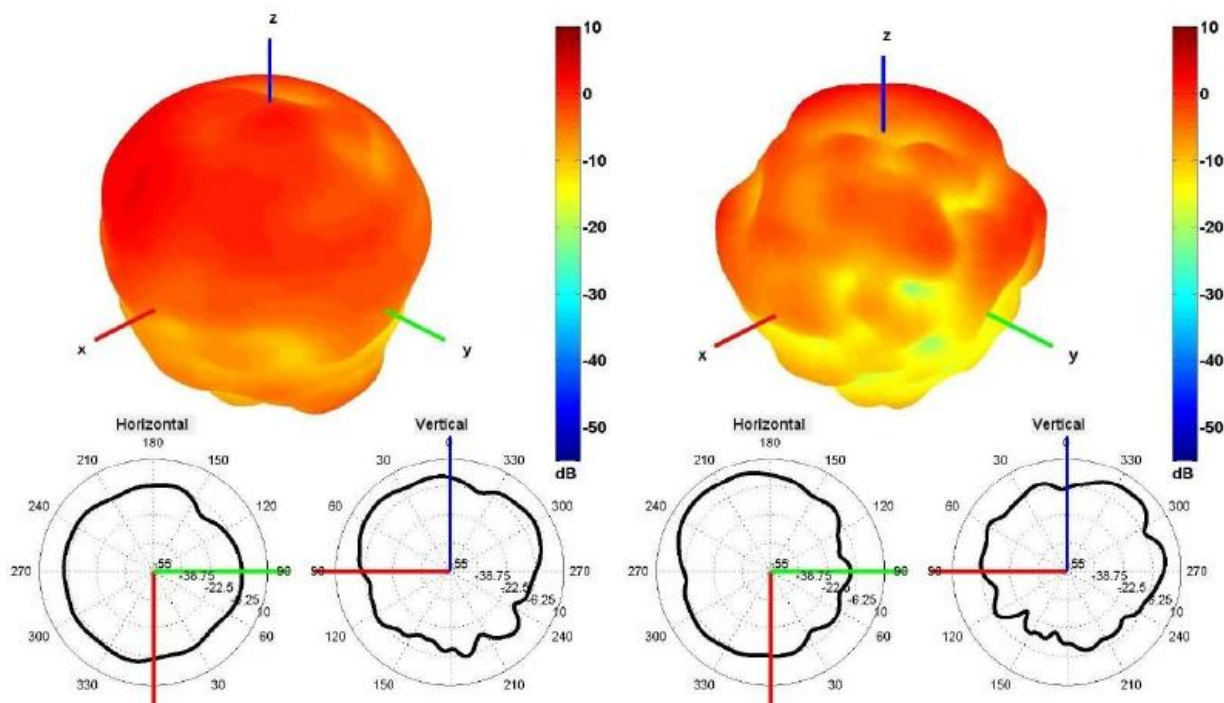


2450 and 5500 MHz Radiation pattern

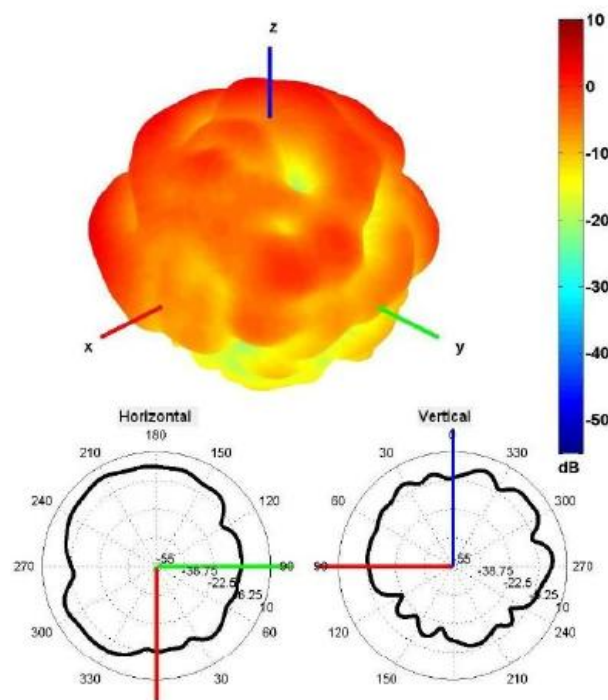


6500 MHz Radiation pattern

Cable 5: 2.4/5.0/6.0 GHz ISM

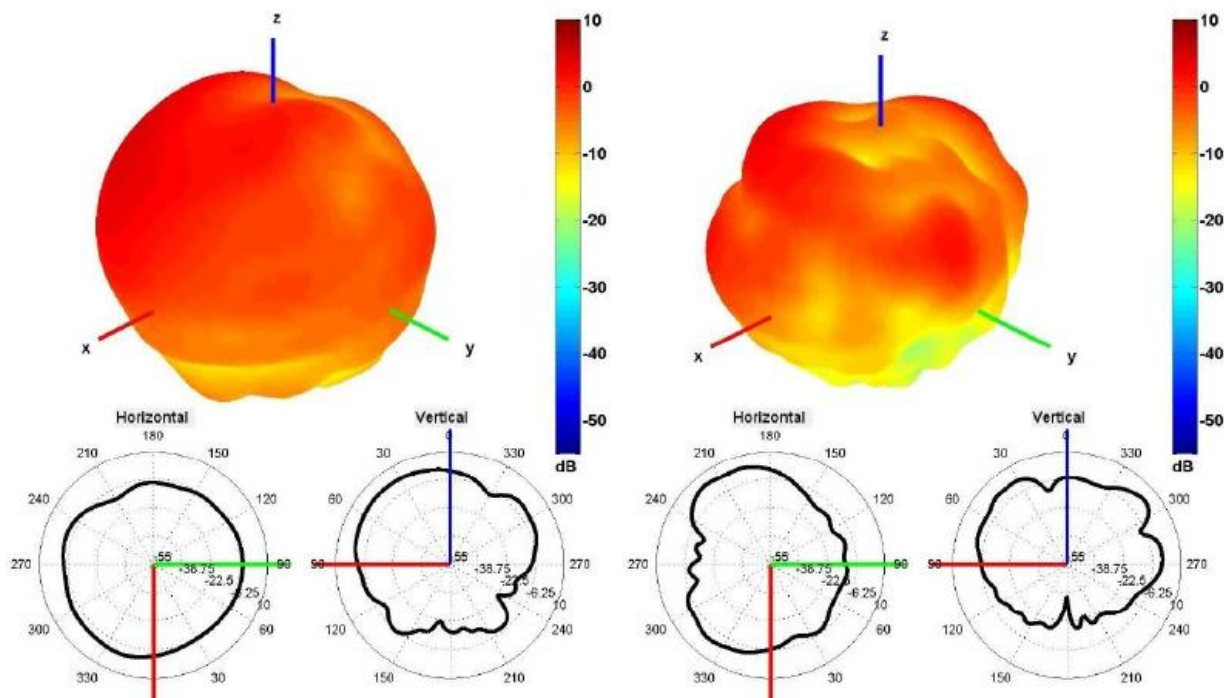


2450 and 5500 MHz Radiation pattern

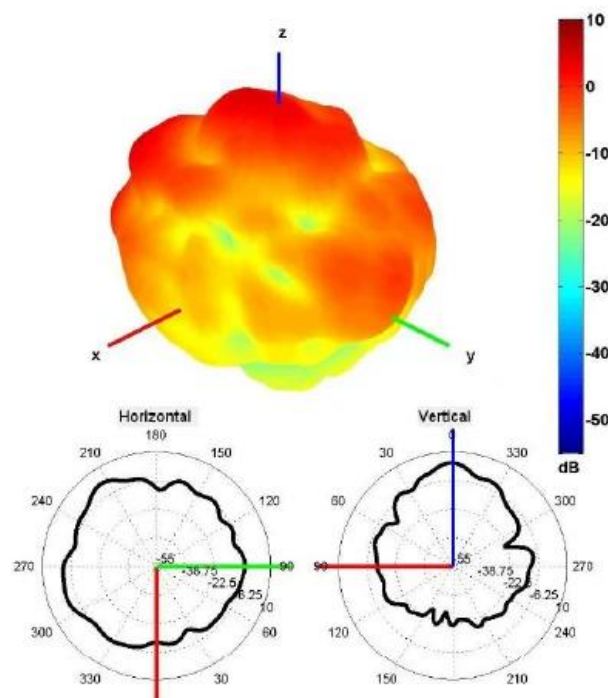


6500 MHz Radiation pattern

Cable 6: 2.4/5.0/6.0 GHz ISM

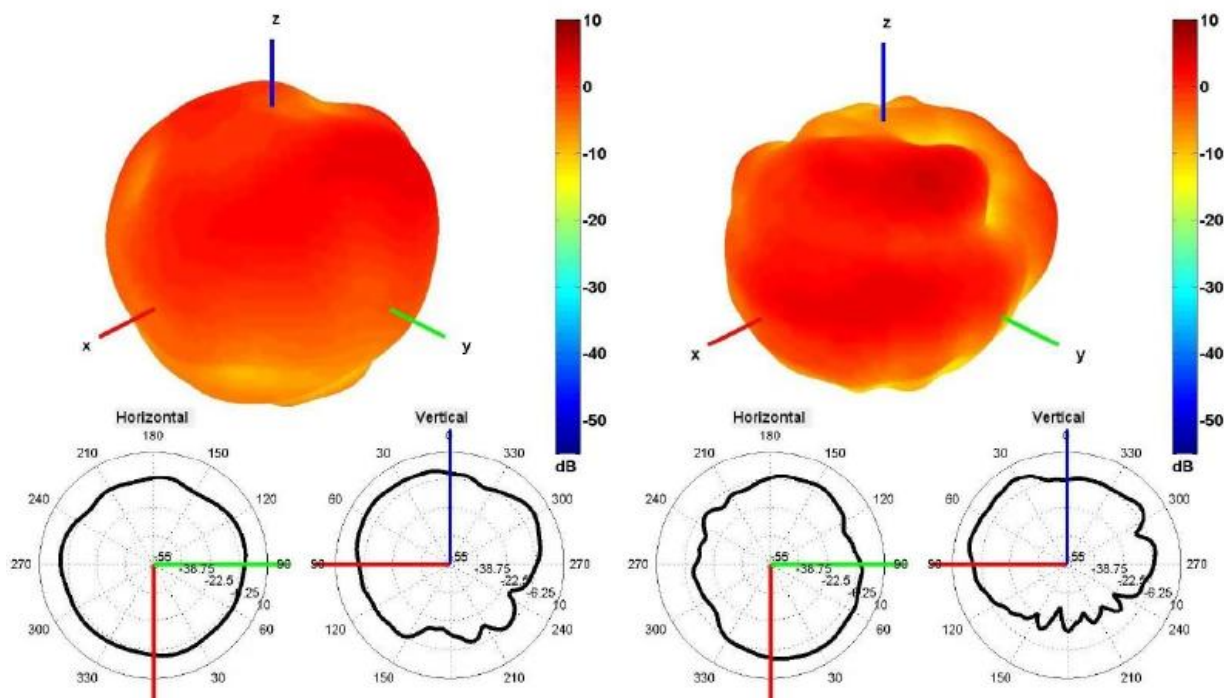


2450 and 5500 MHz Radiation pattern

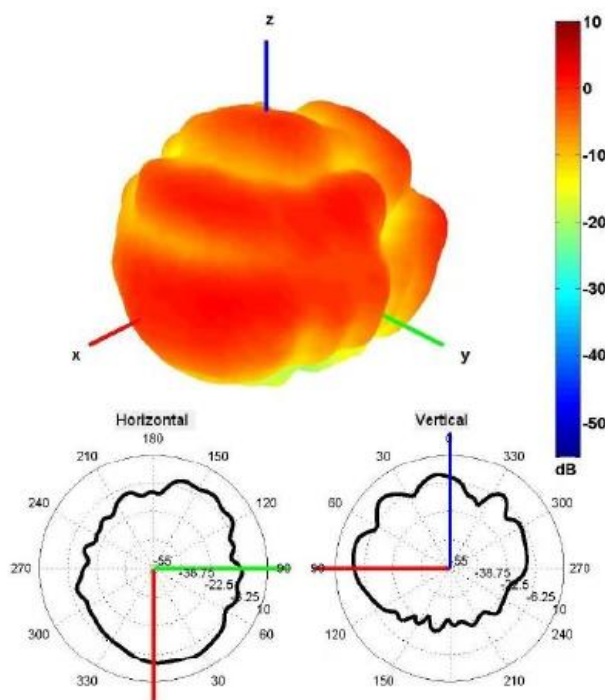


6500 MHz Radiation pattern

Cable 7: 2.4/5.0/6.0 GHz ISM

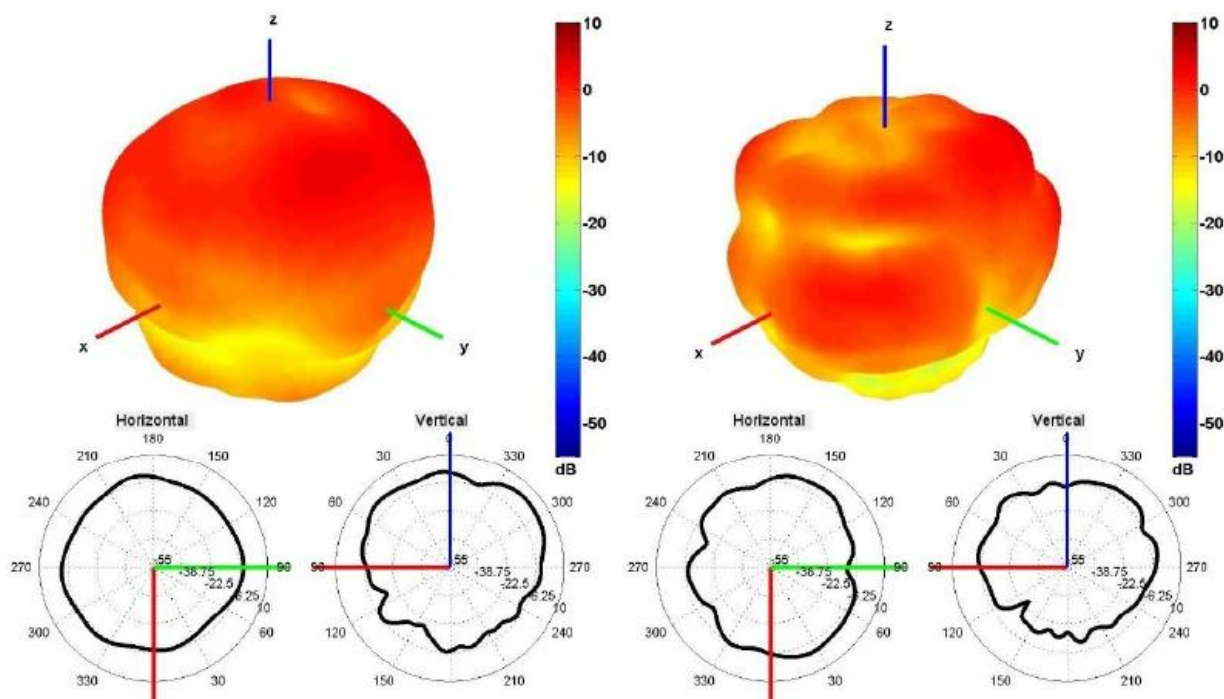


2450 and 5500 MHz Radiation pattern

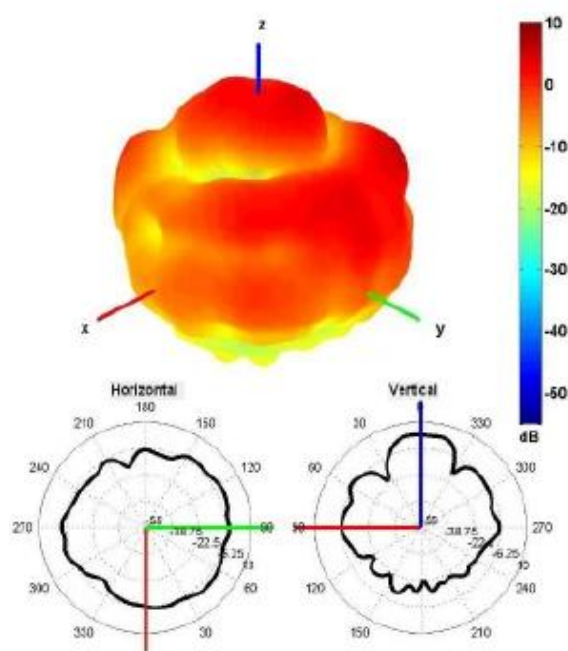


6500 MHz Radiation pattern

Cable 8: 2.4/5.0/6.0 GHz ISM



2450 and 5500 MHz Radiation pattern



6500 MHz Radiation pattern



## SCHÉMA(S)

