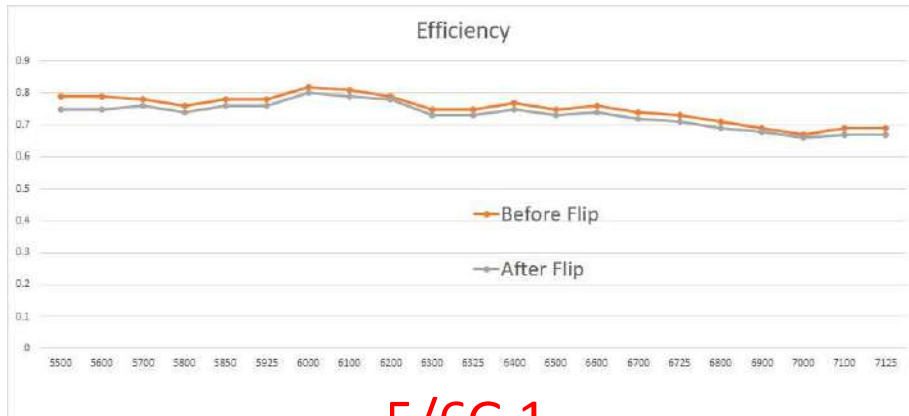




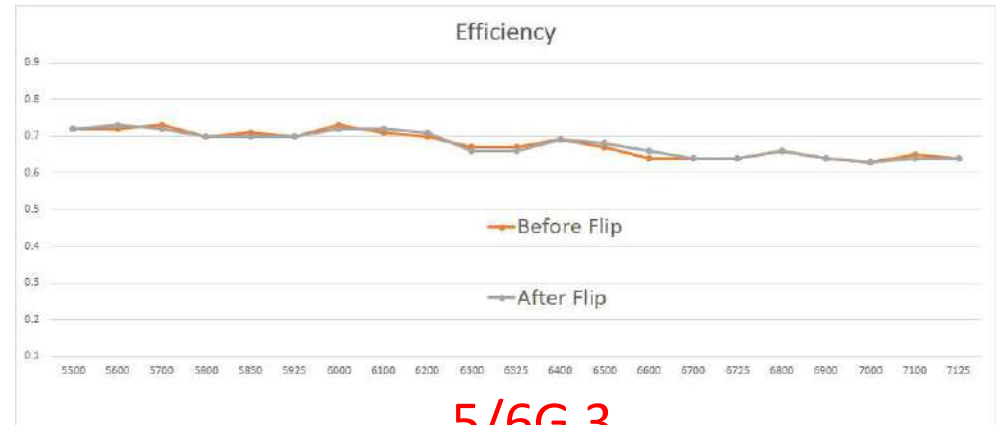
## AP-743 DVT Antenna Specification 20260319



# Efficiency Comparison Before/After Flipping 5/6G Antennas



5/6G 1



5/6G 3



5/6G 2

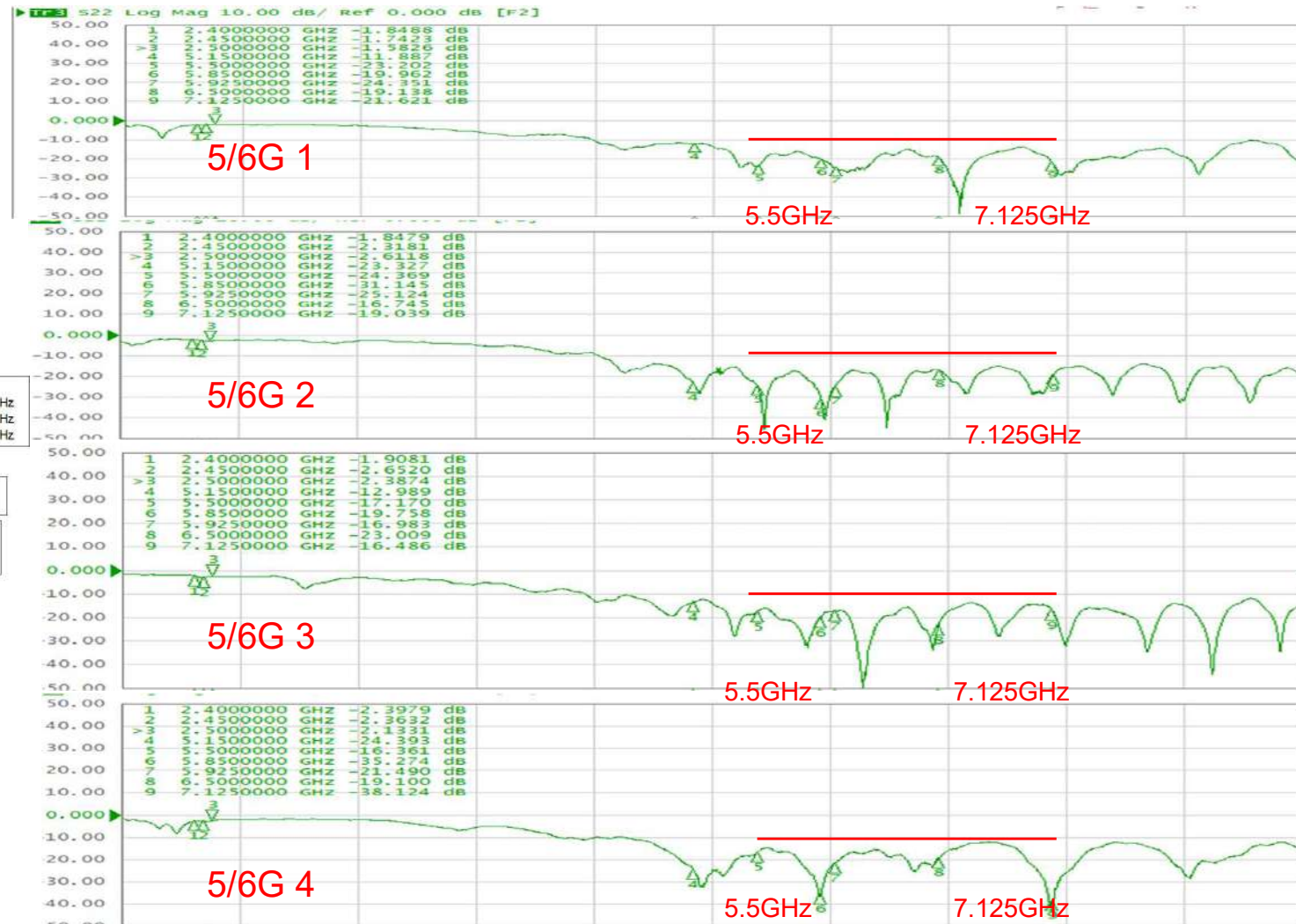
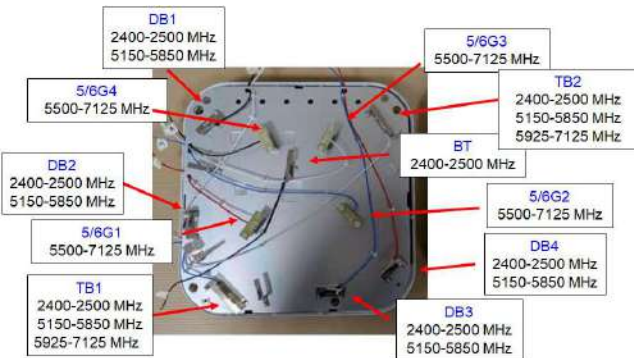


5/6G 4



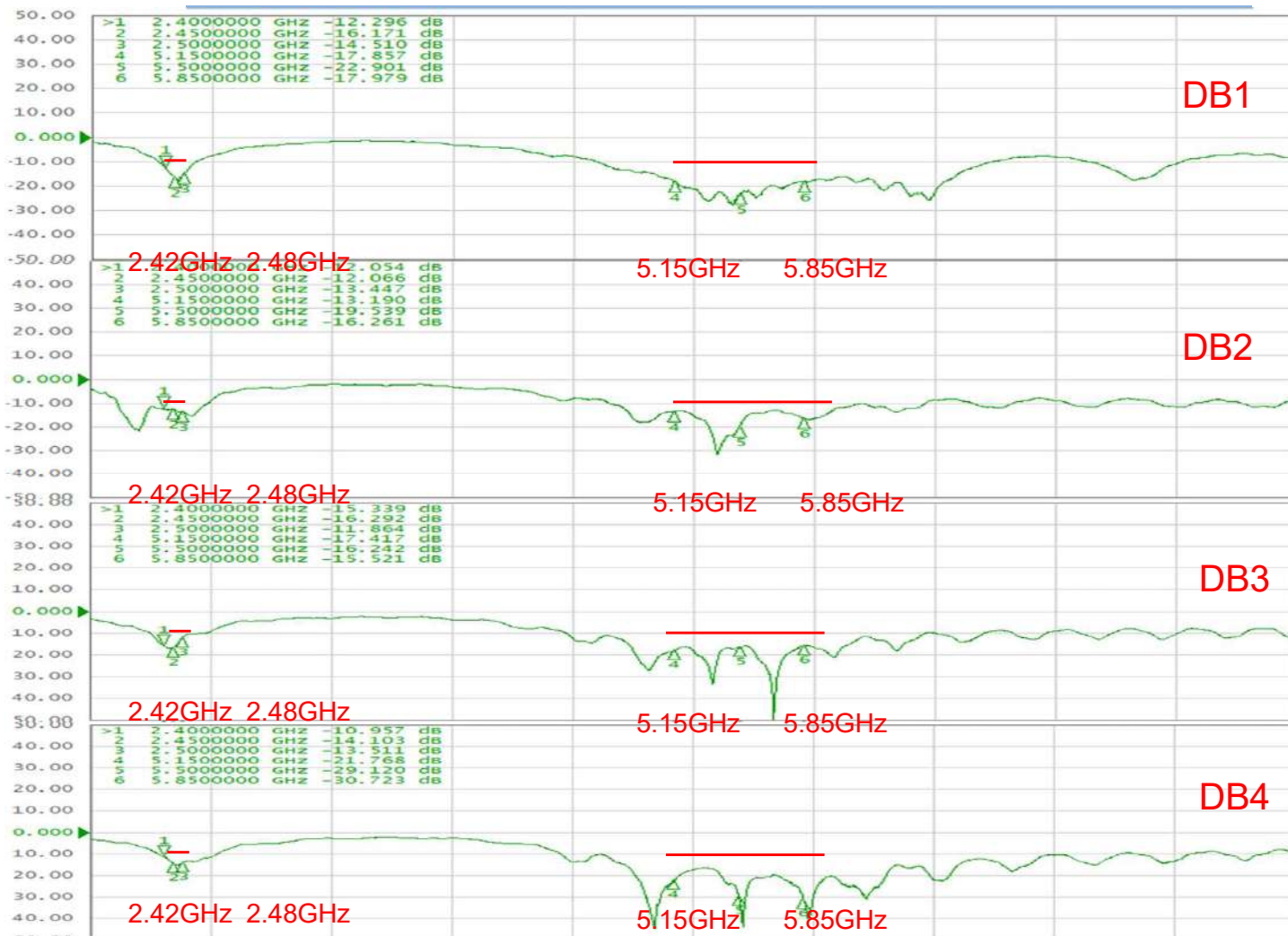
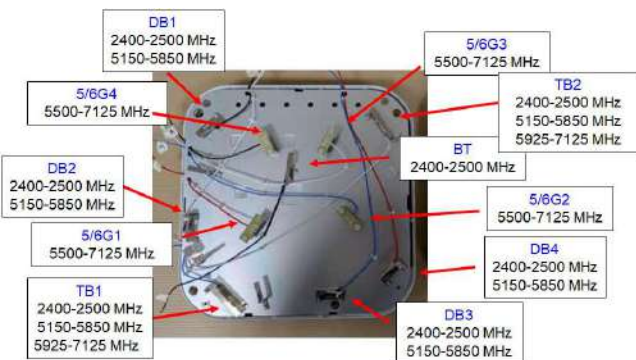
## Antenna Return Loss \_ Ant 5/6G1~4

| Antenna | Frequency     |
|---------|---------------|
| 6G1     | 5500-7125 MHz |
| 6G2     | 5500-7125 MHz |
| 6G3     | 5500-7125 MHz |
| 6G4     | 5500-7125 MHz |



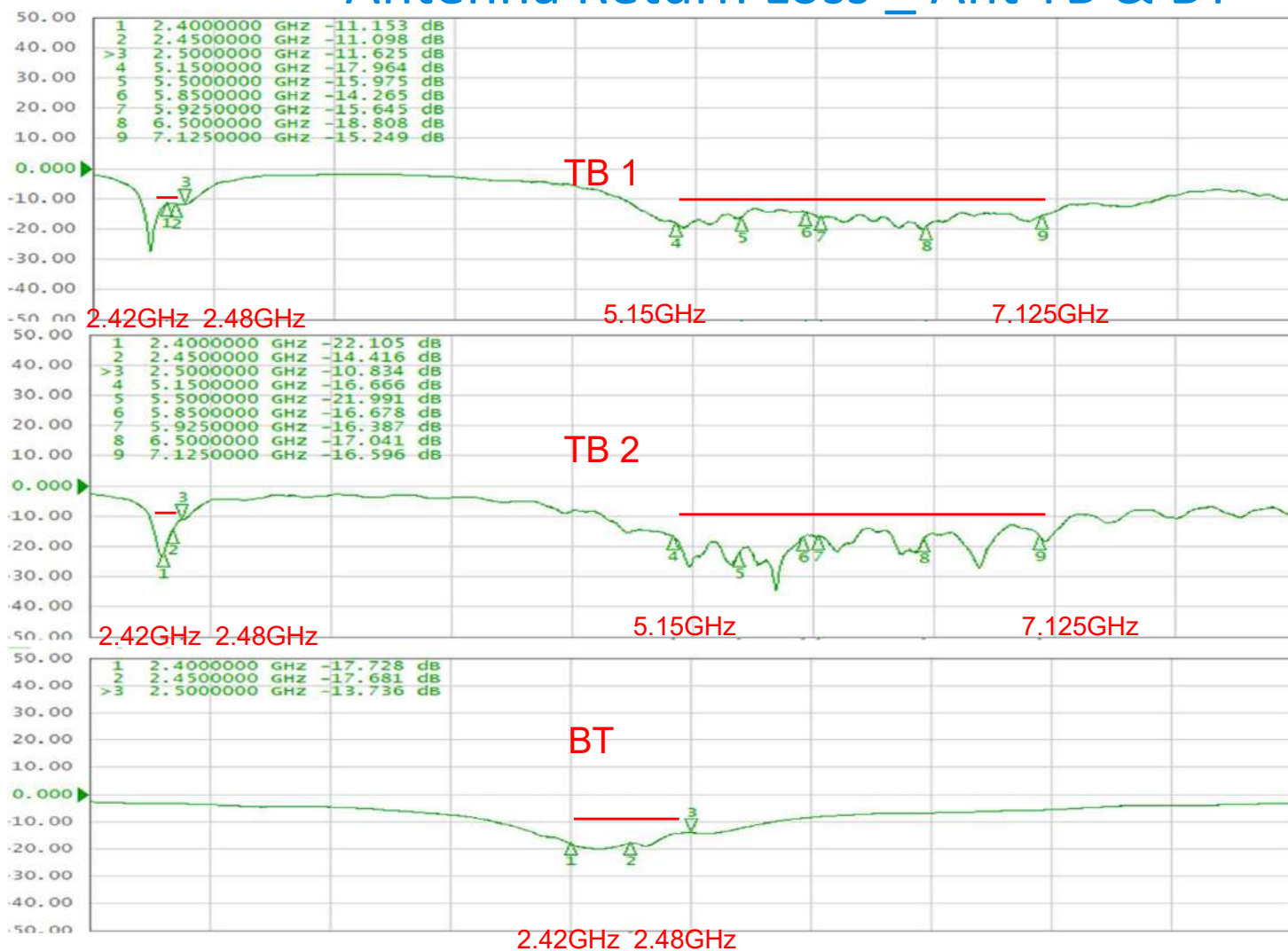
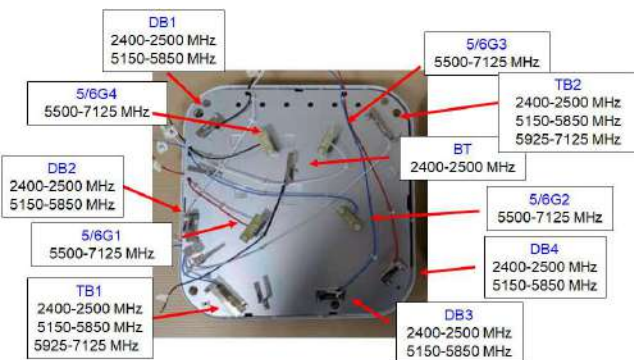


## Antenna Return Loss \_ Ant DB1~4



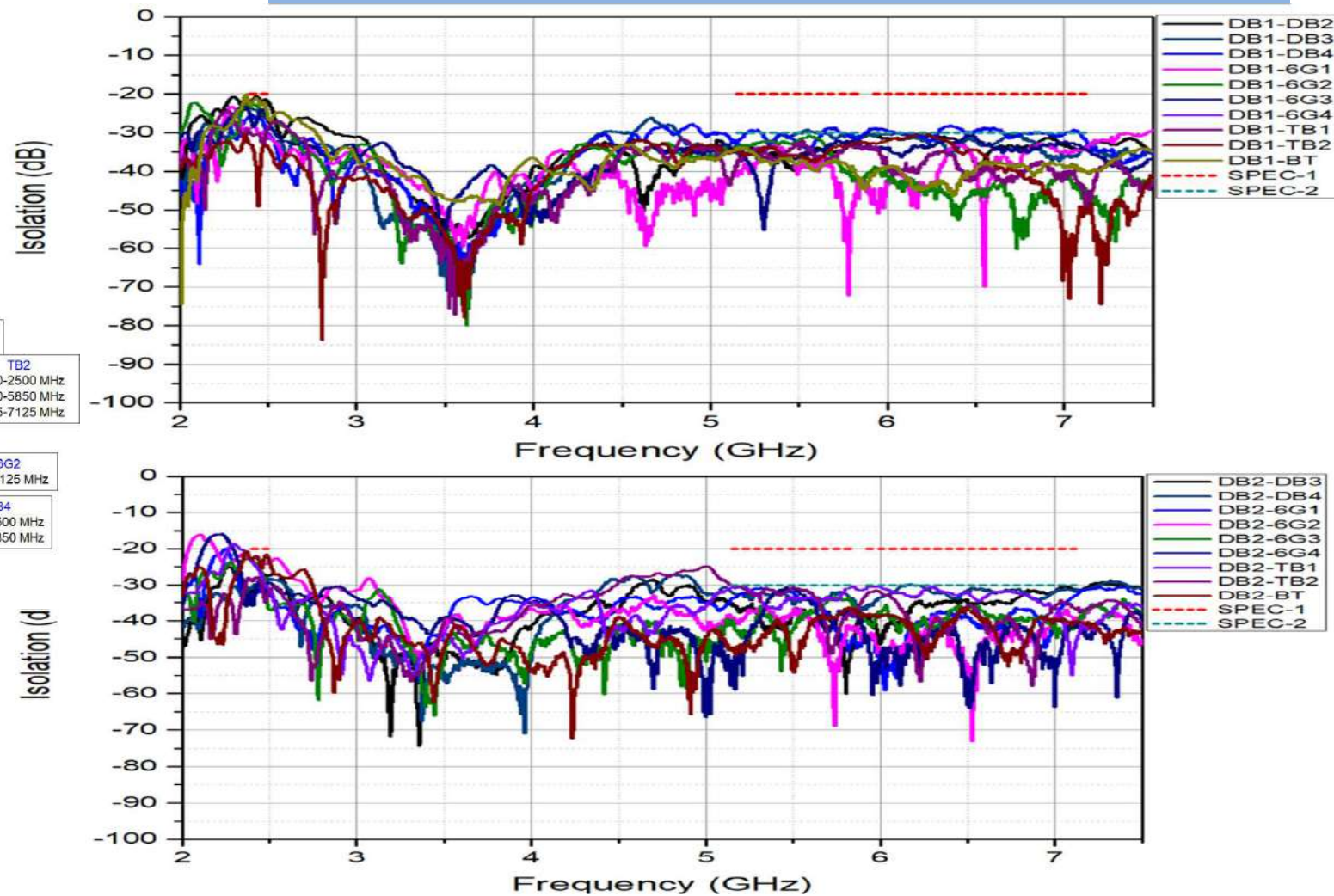
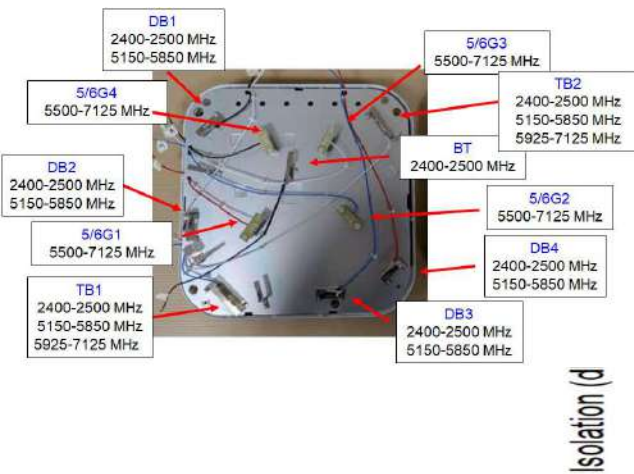


## Antenna Return Loss \_ Ant TB & BT



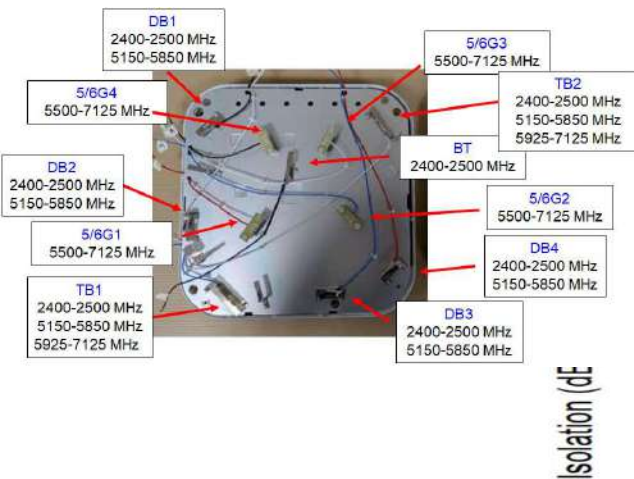


# Antenna Isolation DB1/DB2 to other ANT



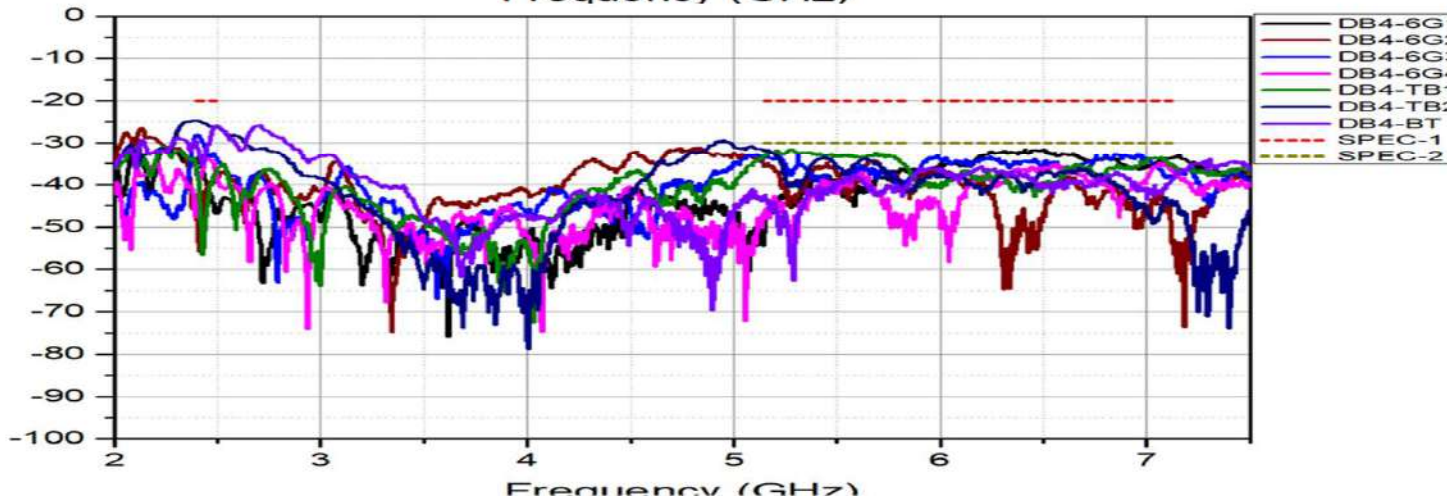
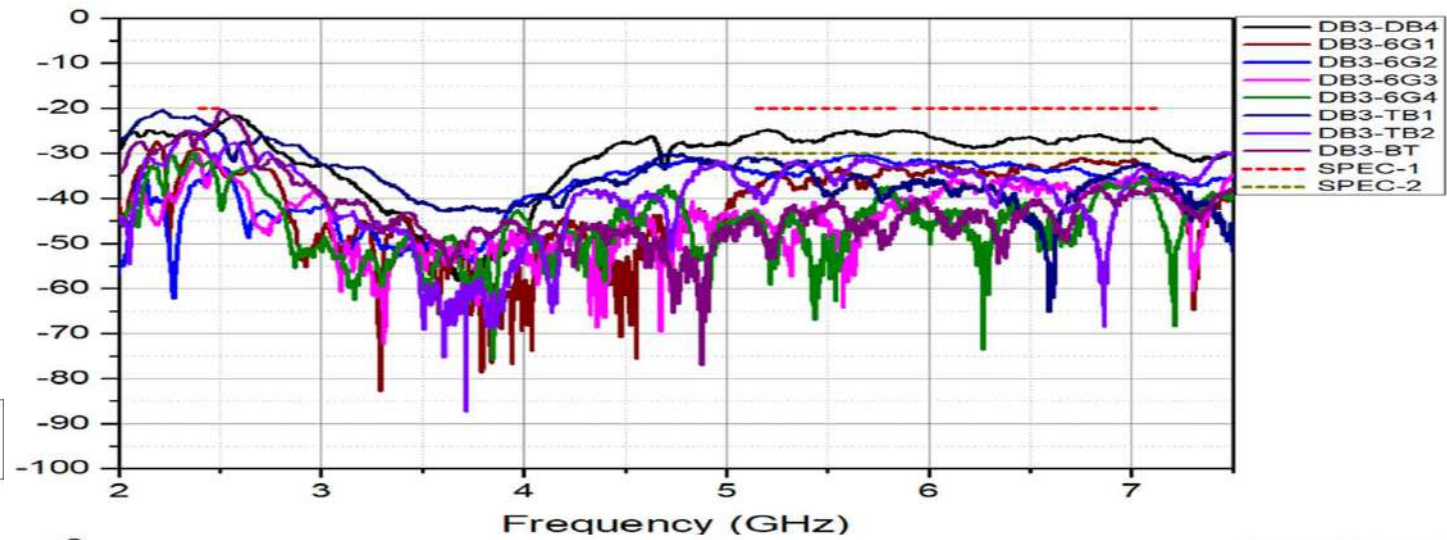


# Antenna Isolation DB3/DB4 to other ANT



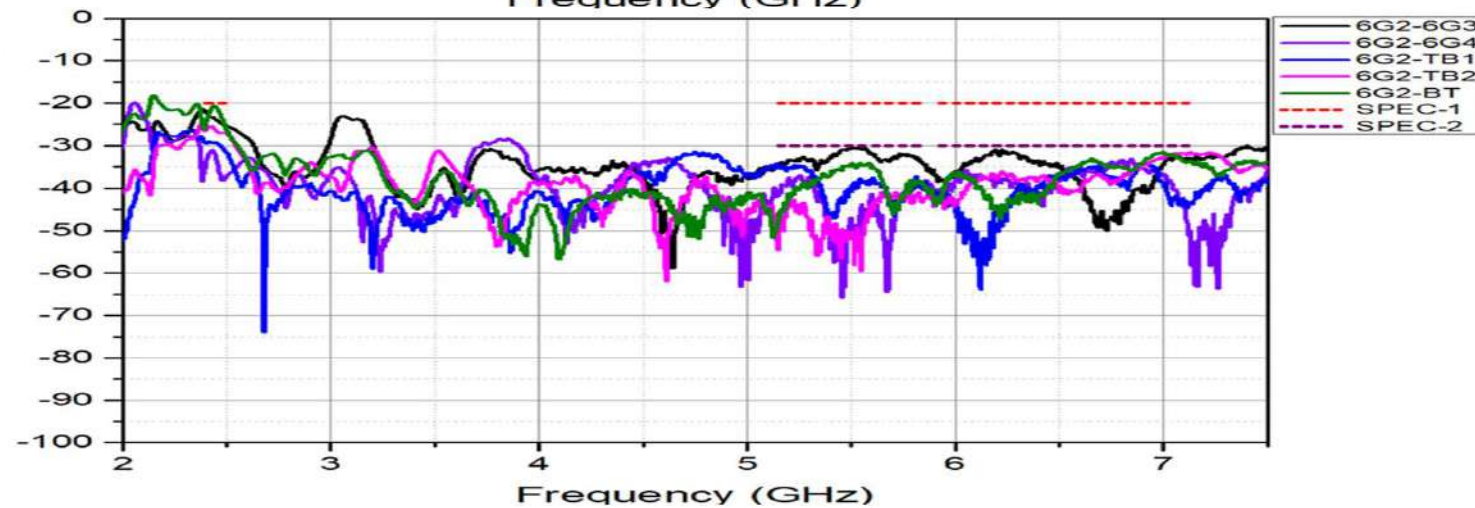
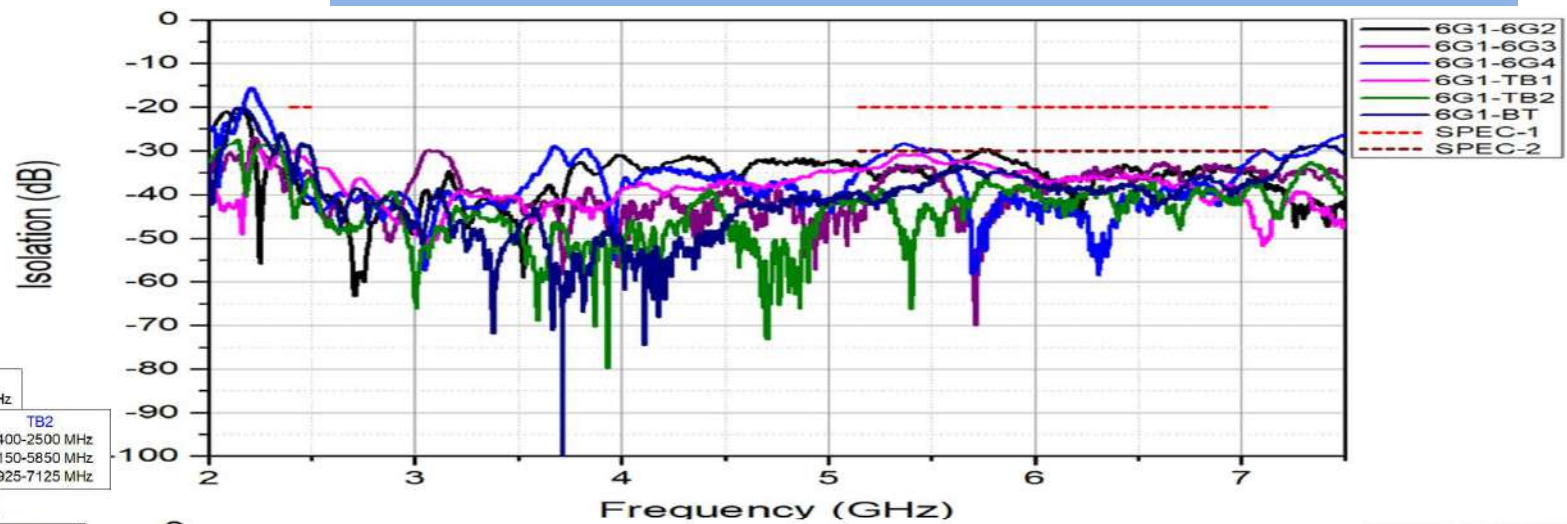
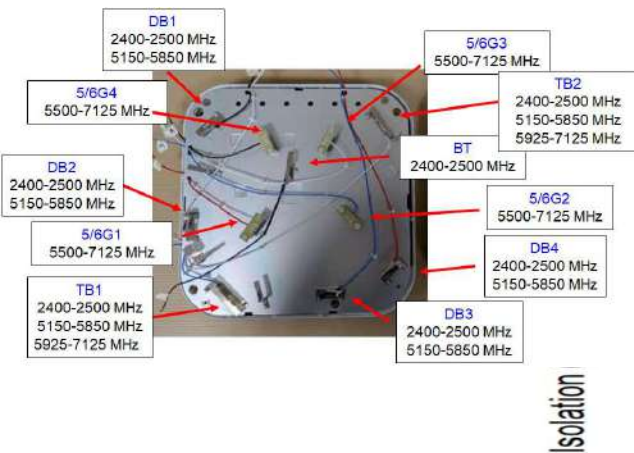
Isolation (dB)

Isolation (dB)



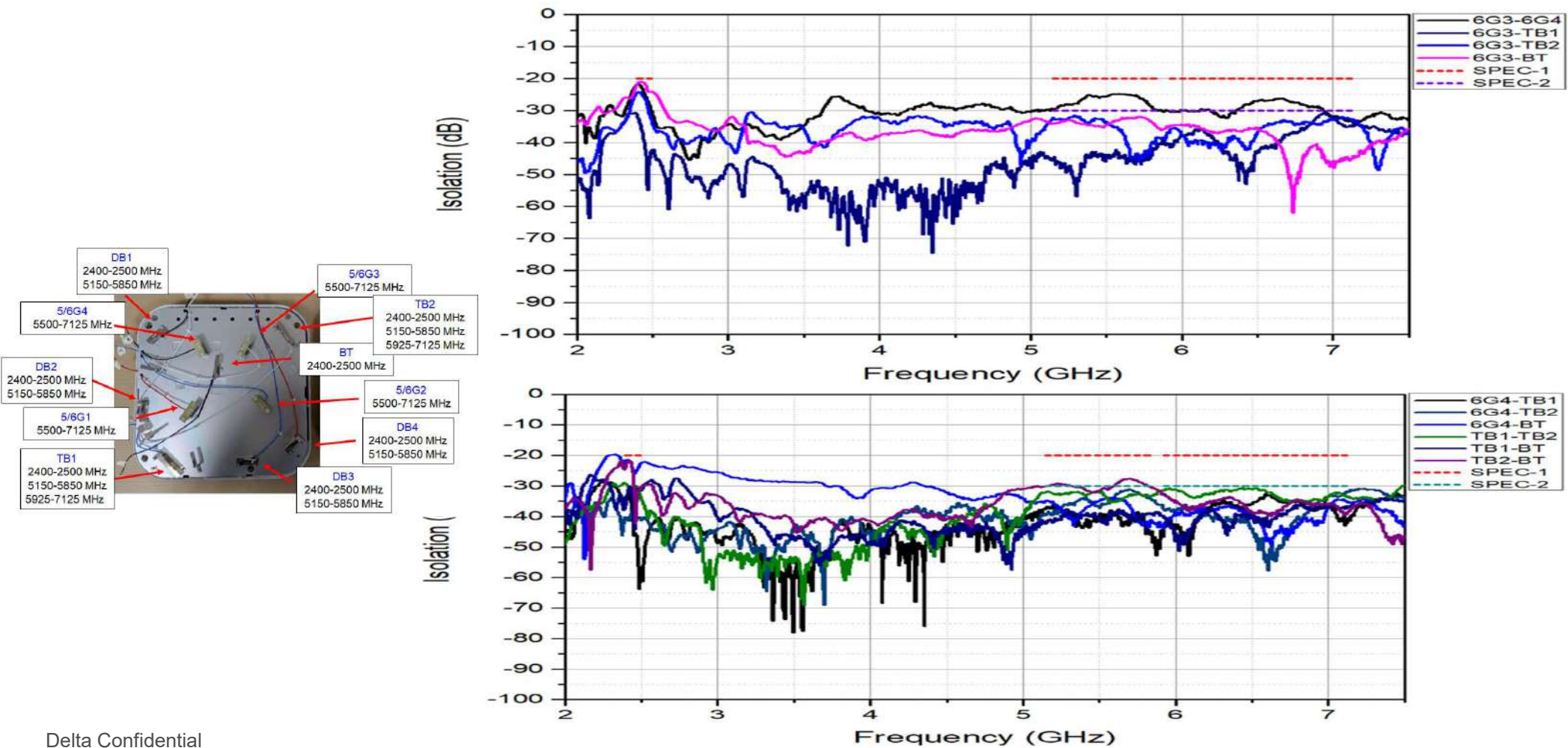


## Antenna Isolation 5/6G1 and 5/6G2 to other ANT



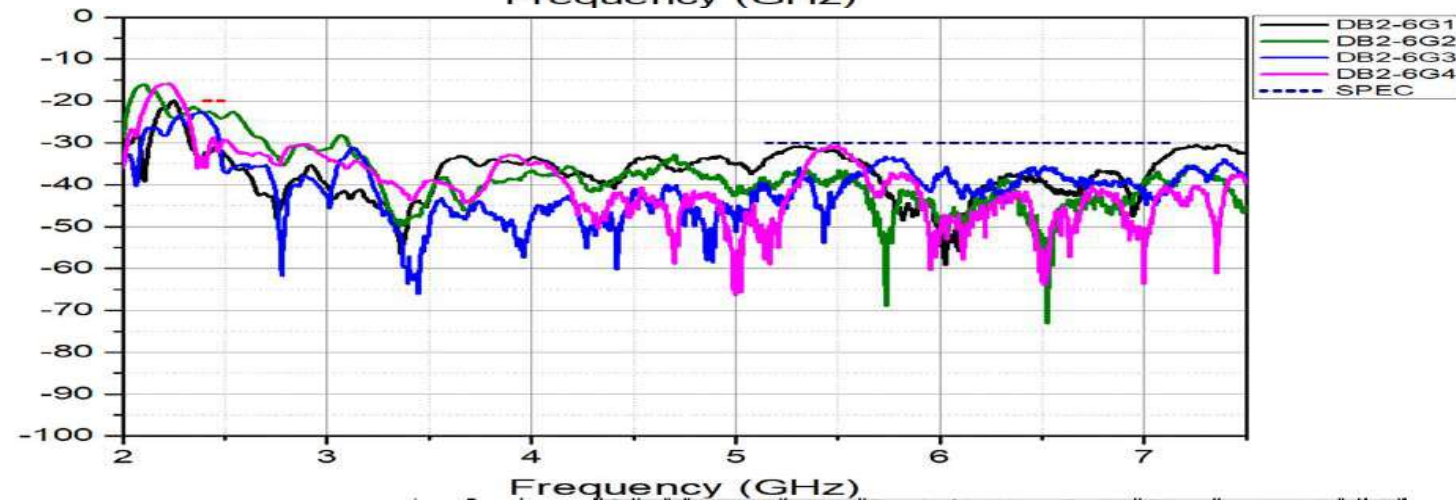
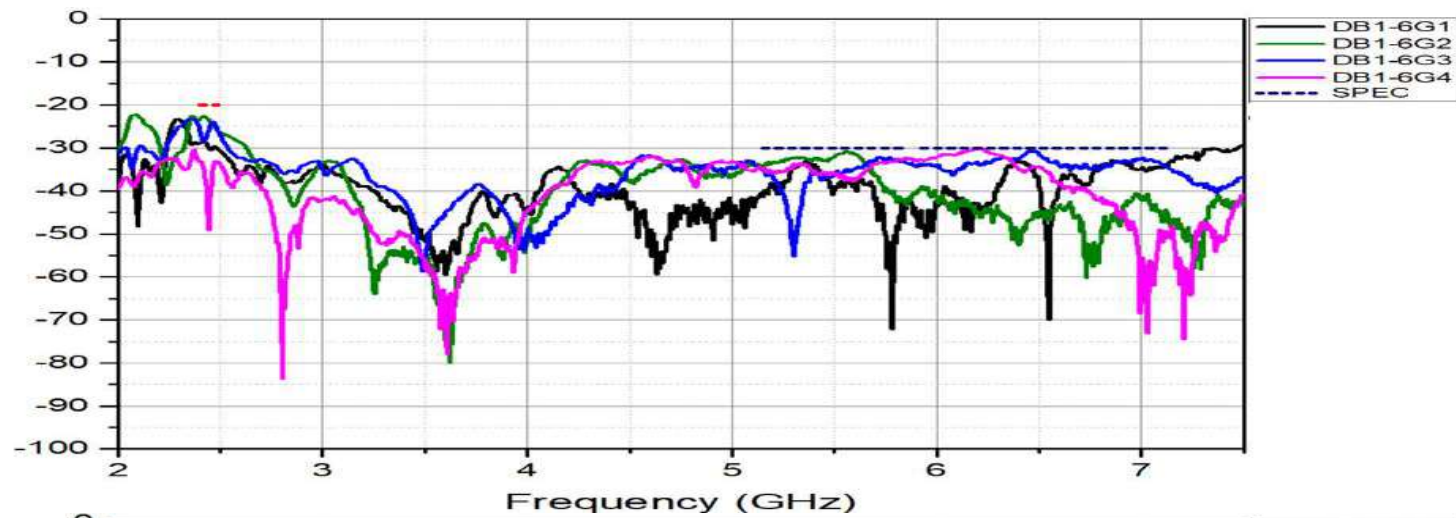
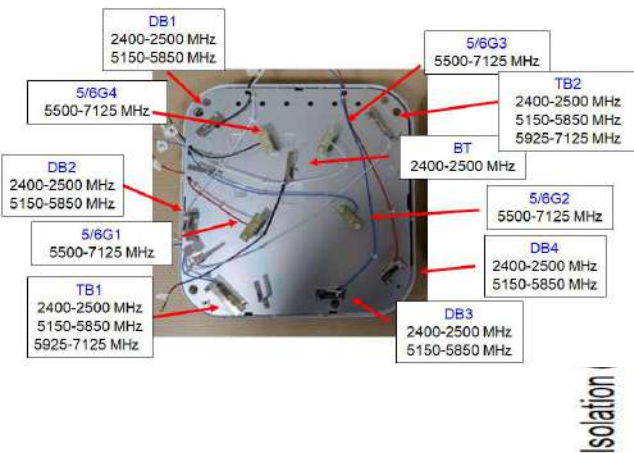


## Antenna Isolation 5/6G3 and 5/6G4 to other ANT



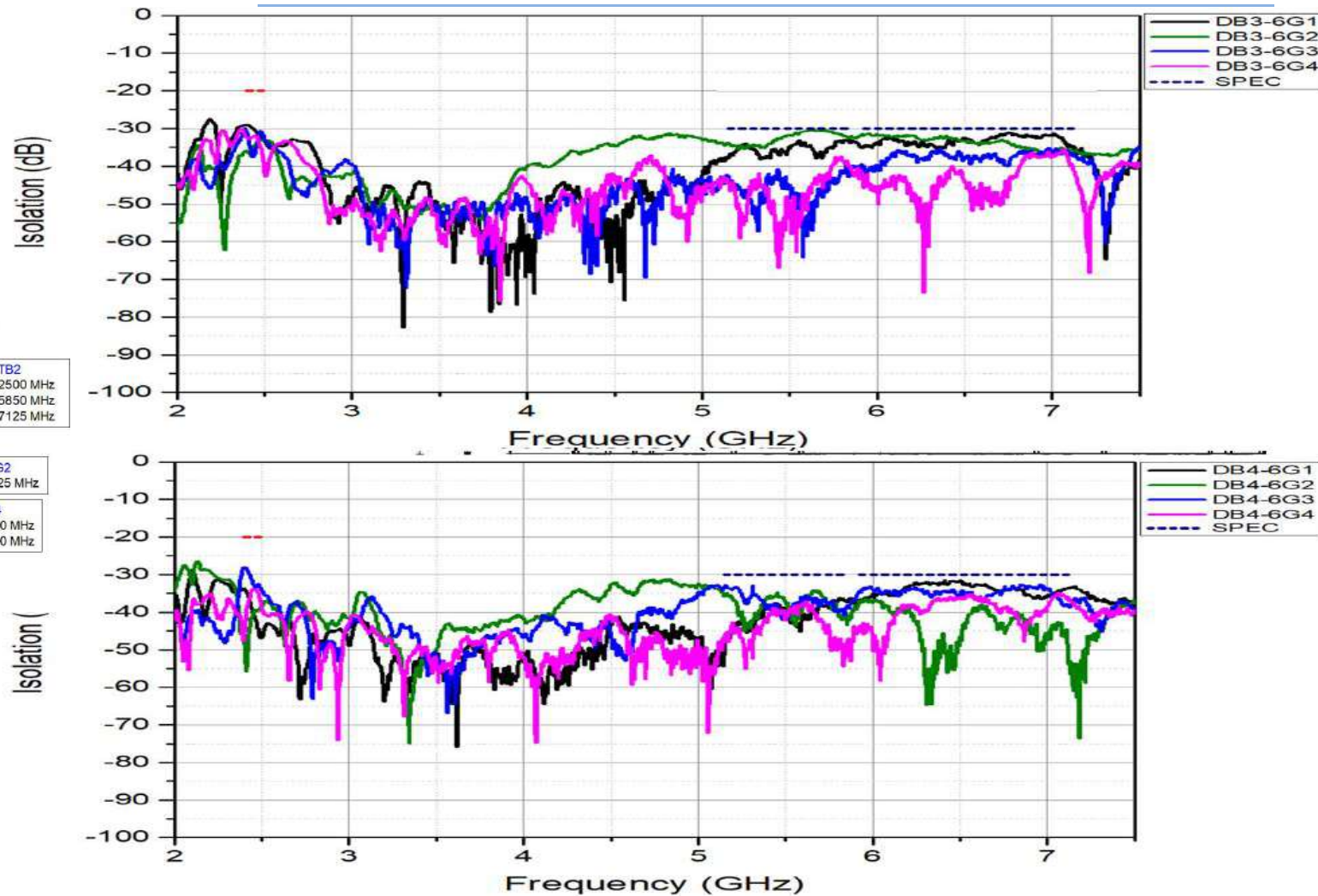
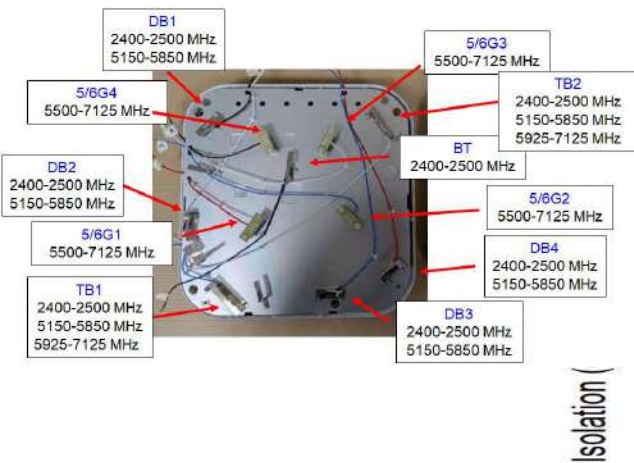


## Antenna Isolation DB vs 5/6G (1/2)



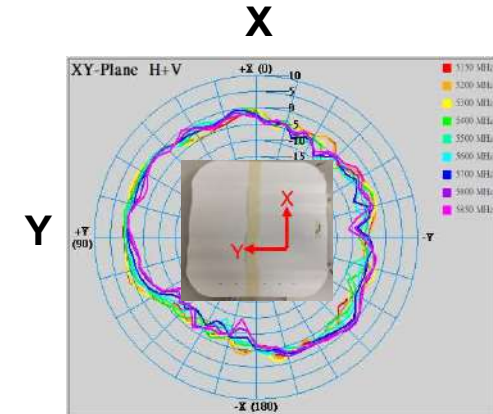
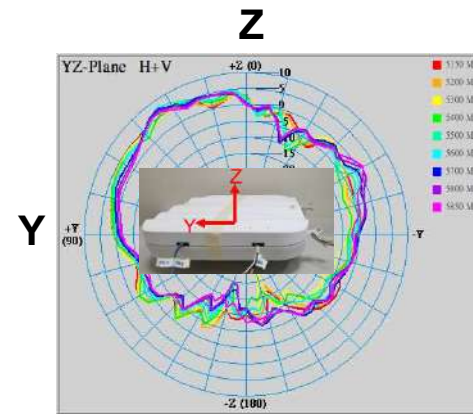
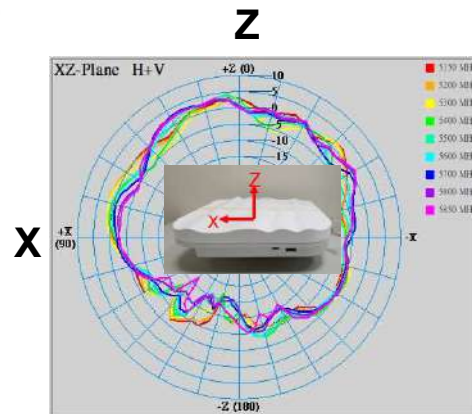
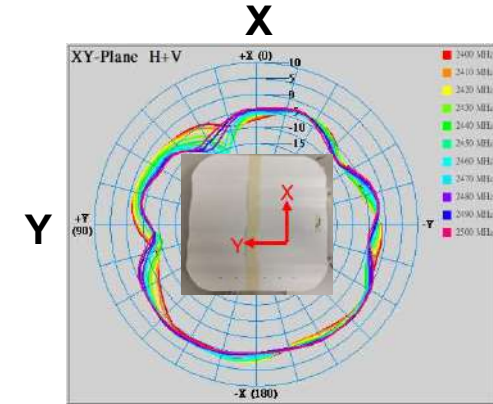
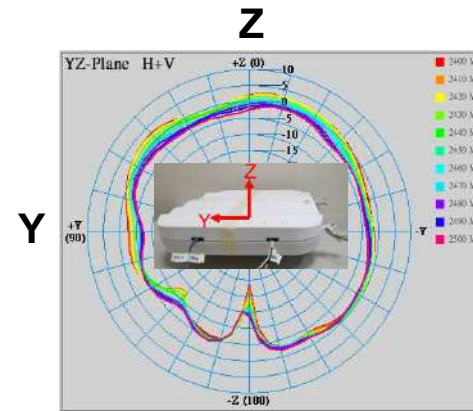
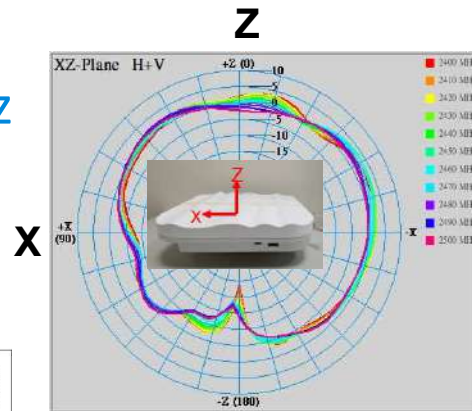


## Antenna Isolation DB vs 5/6G (2/2)

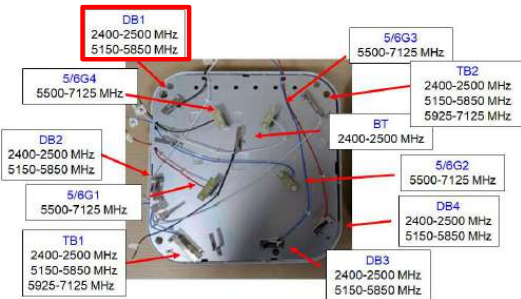


## 2D Radiation Pattern Ant DB1

2.45GHz

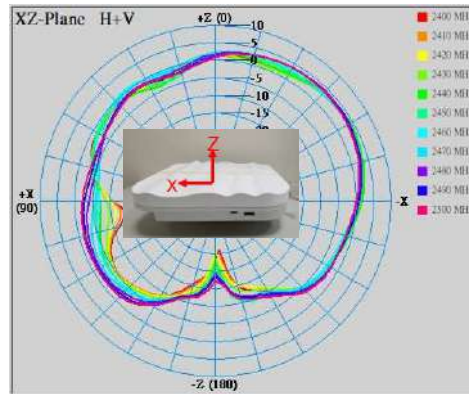


5.5GHz

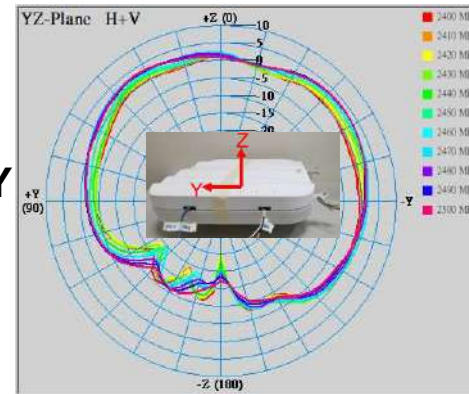


2.45GHz

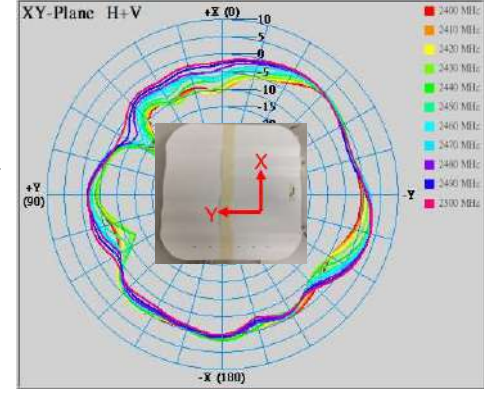
Z  
X



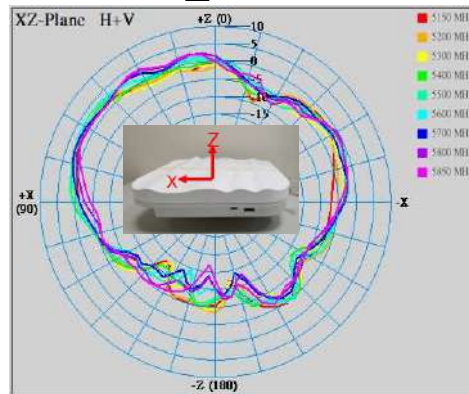
Z  
Y



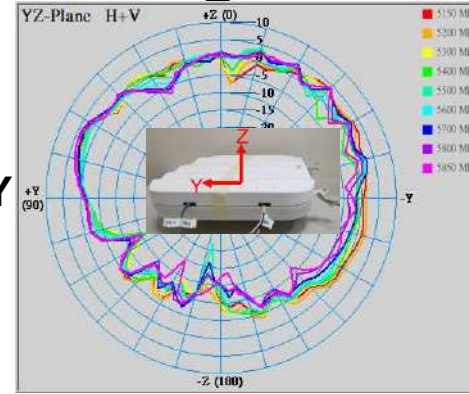
X  
Y



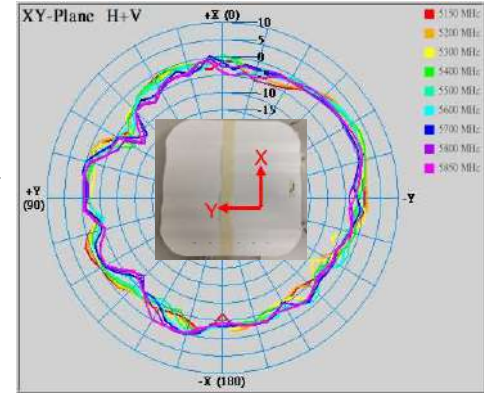
Z  
X



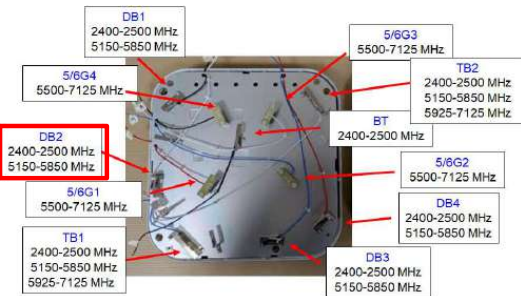
Z  
Y



X  
Y

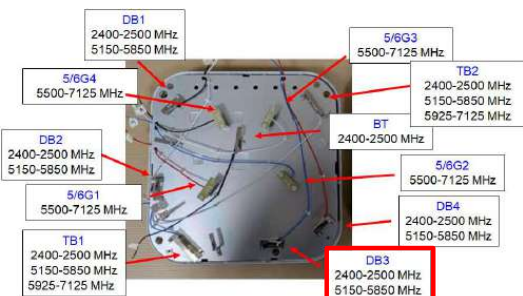
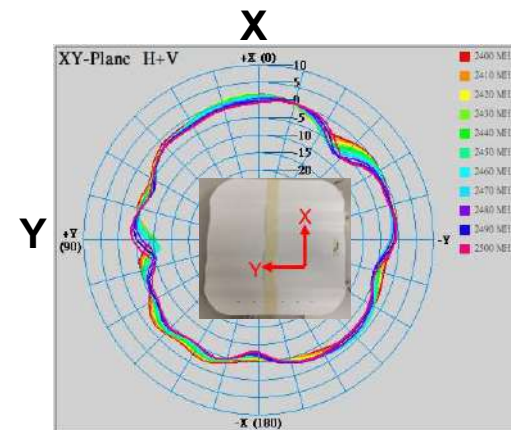
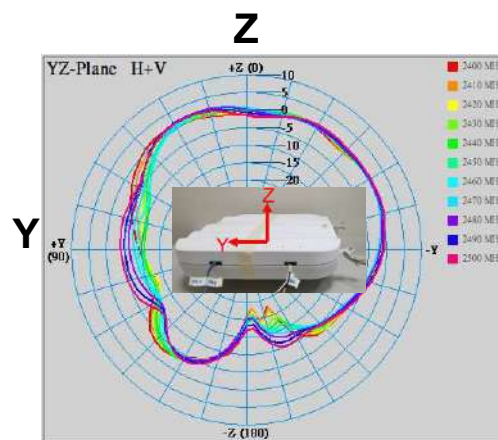
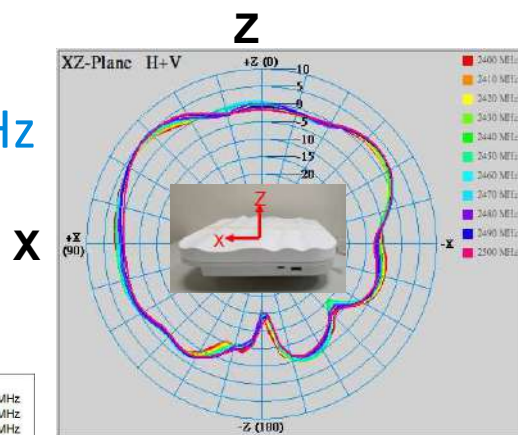


5.5GHz

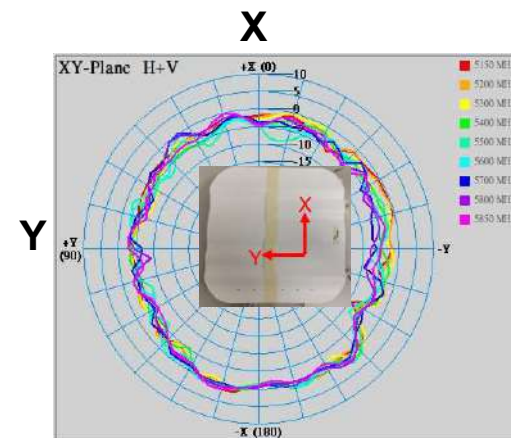
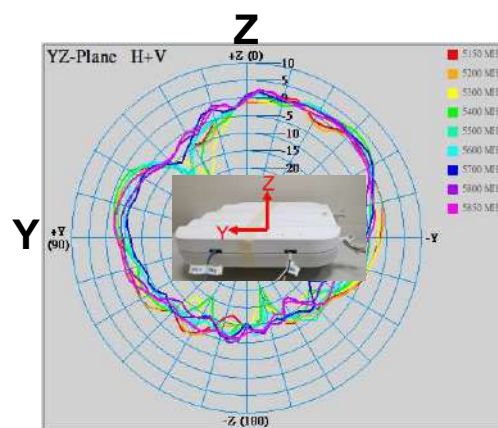
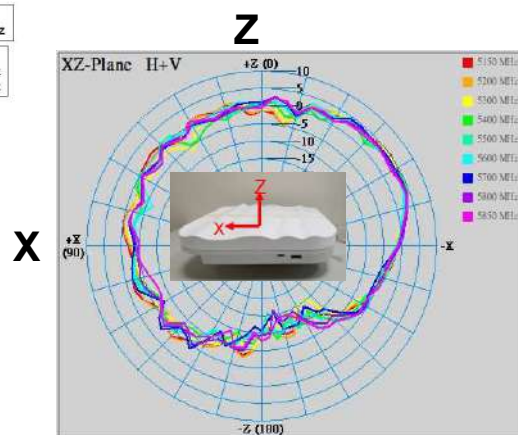


## 2D Radiation Pattern Ant DB3

2.45GHz

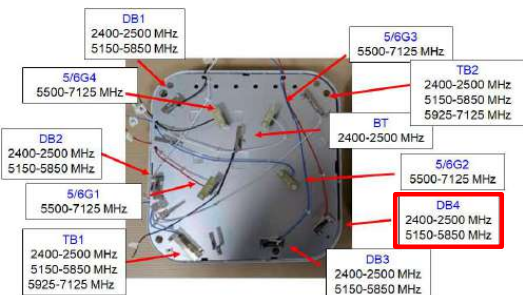
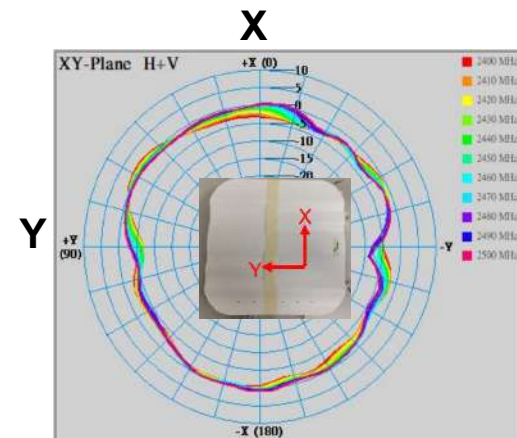
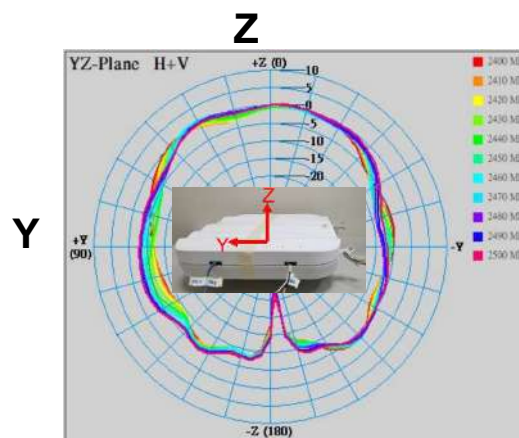
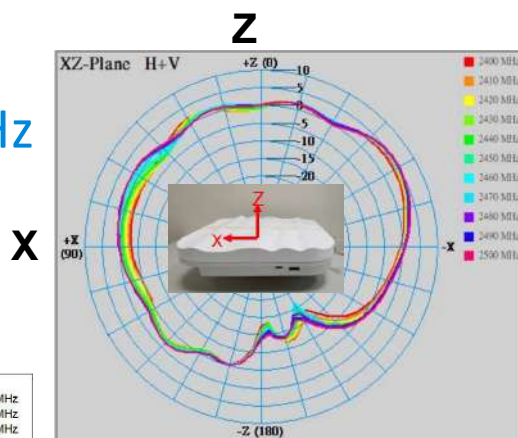


5.5GHz

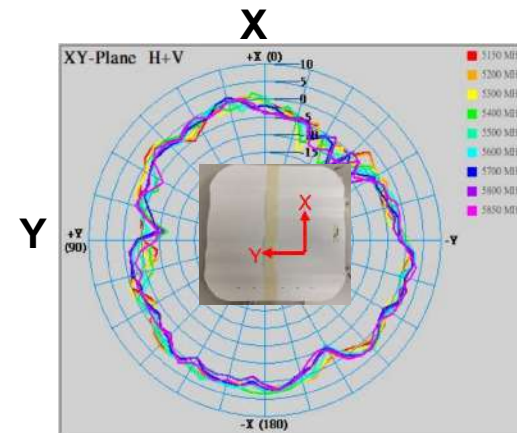
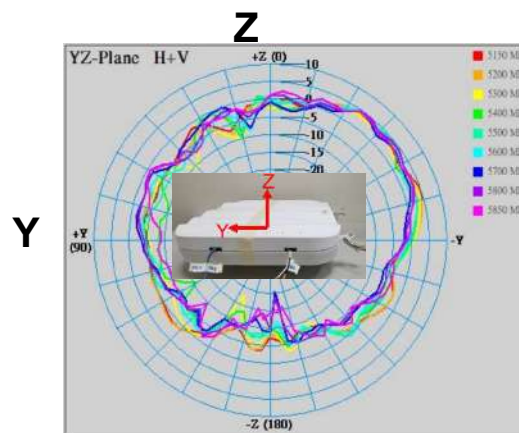
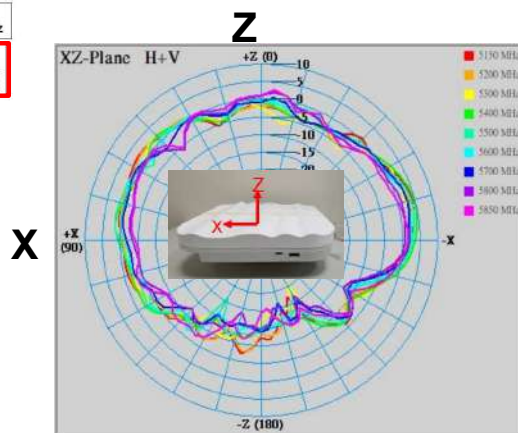


## 2D Radiation Pattern Ant DB4

2.45GHz



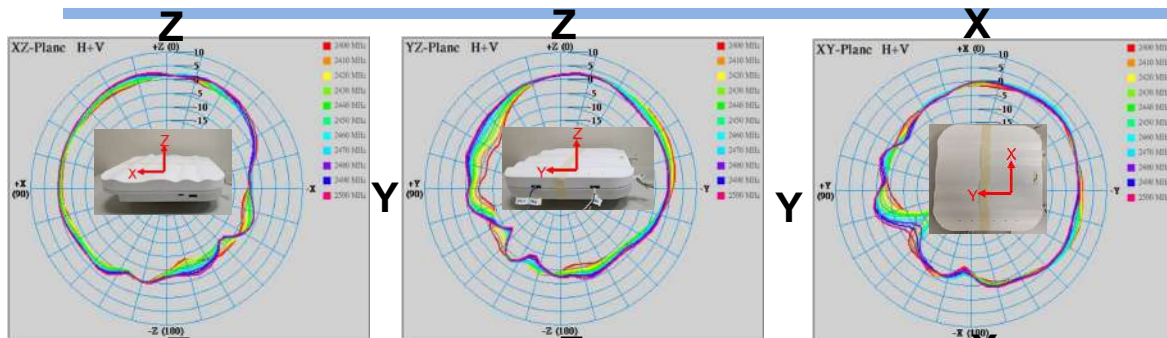
5.5GHz



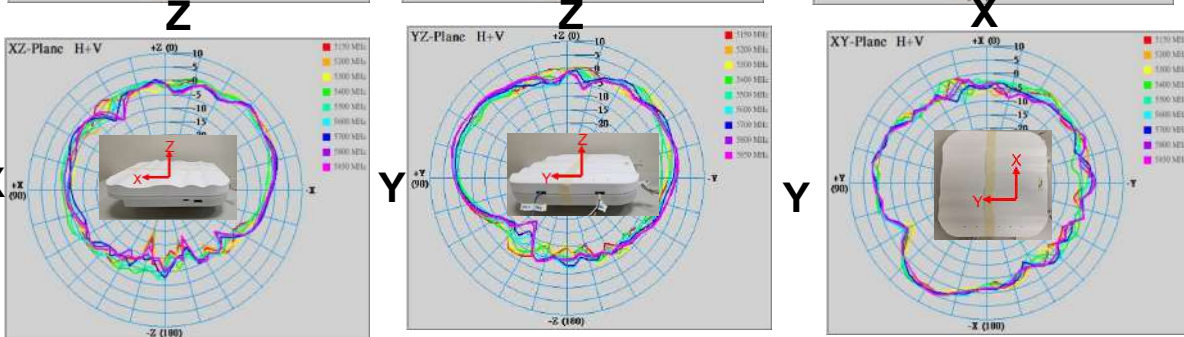


## 2D Radiation Pattern Ant TB1

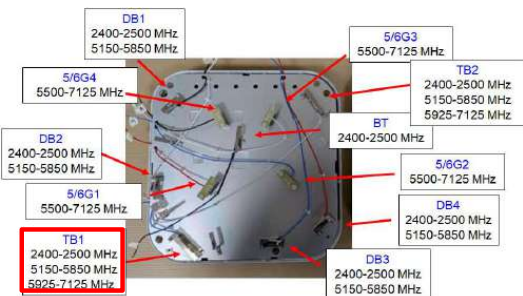
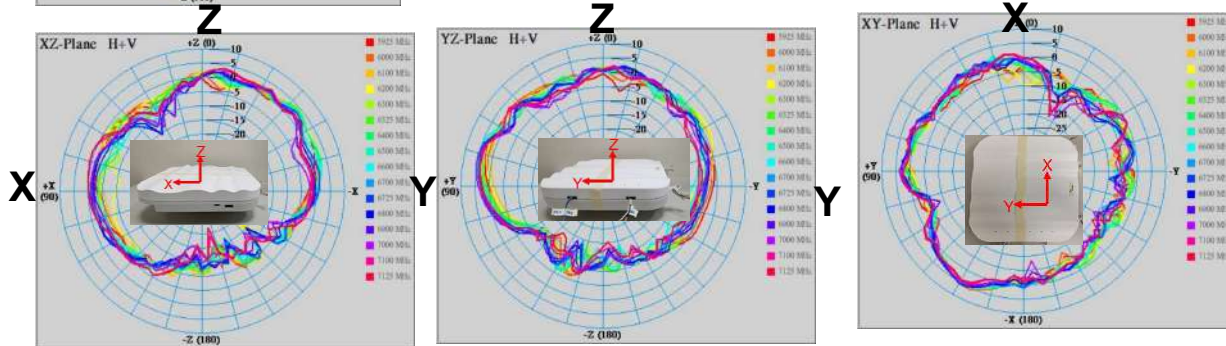
2.45GHz X



5.5GHz X

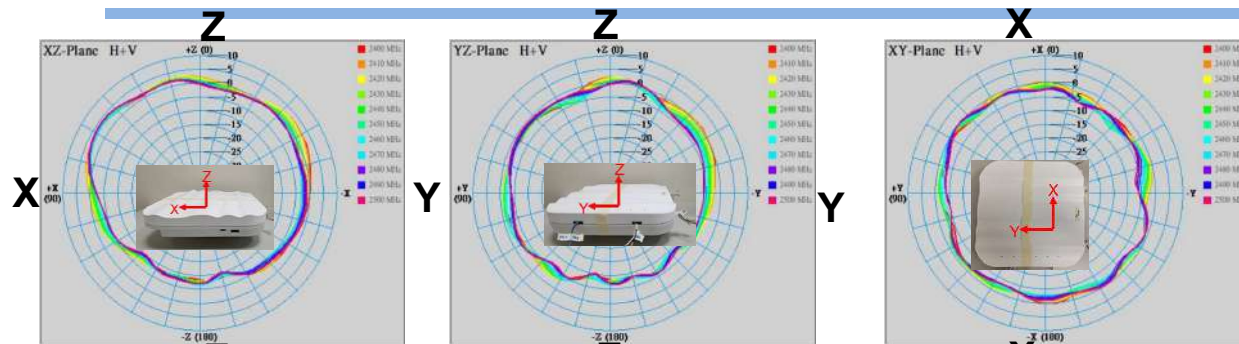


6.5GHz

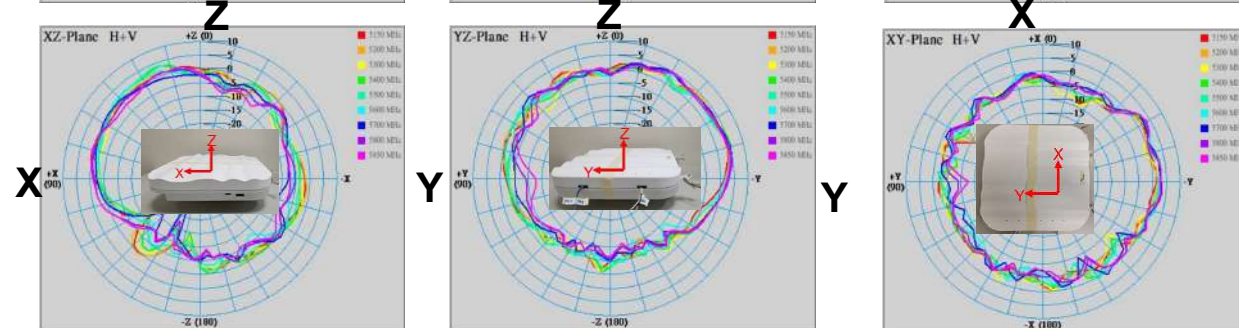


## 2D Radiation Pattern Ant TB2

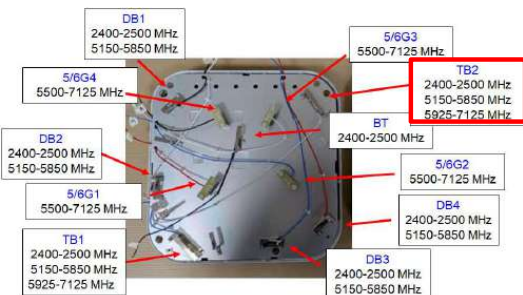
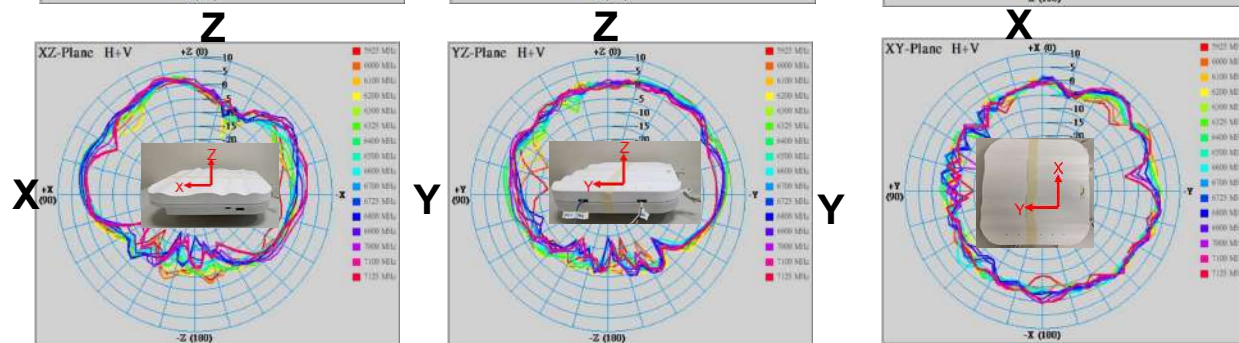
2.45GHz



5.5GHz



6.5GHz

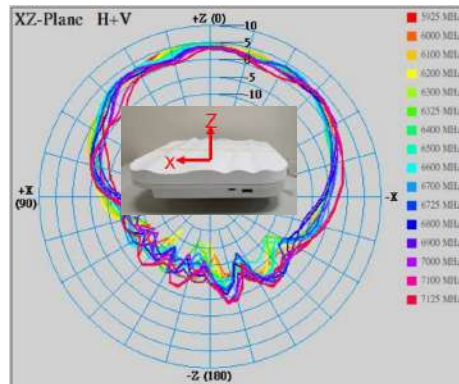


# 2D Radiation Pattern Ant 5/6G1~5/6G2

5/6G1

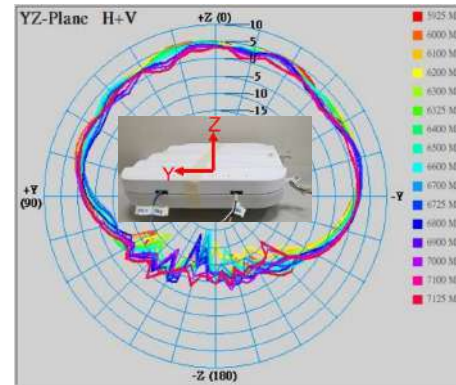
X

Z



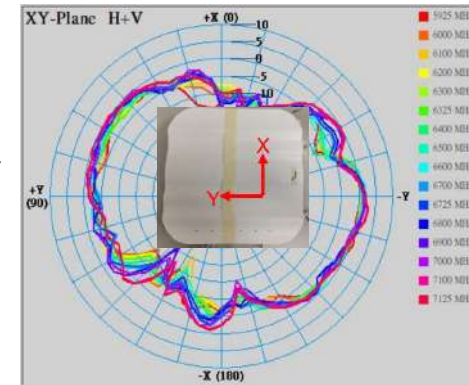
Y

Z

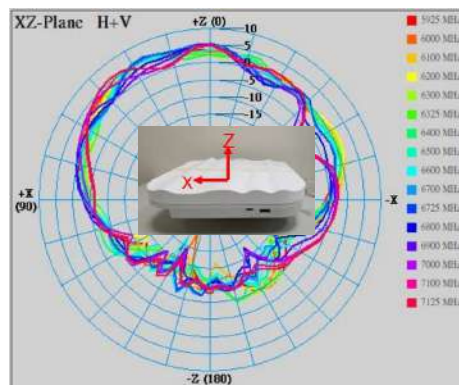


Y

X

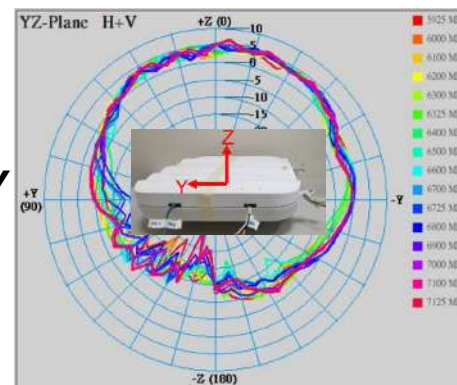


Z



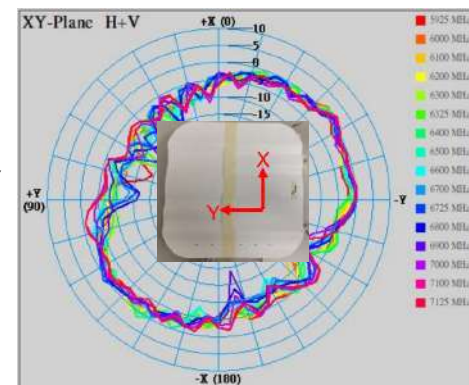
Y

Z



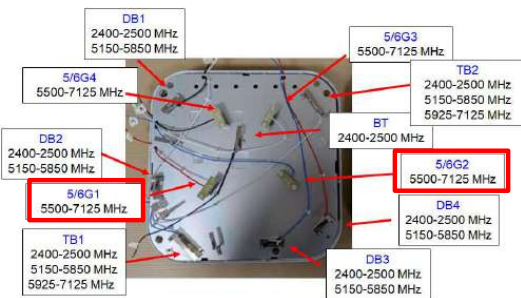
Y

X



5/6G2

X

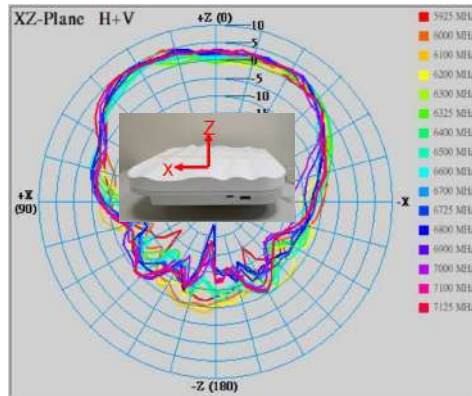


# 2D Radiation Pattern Ant 5/6G3~5/6G4

5/6G3

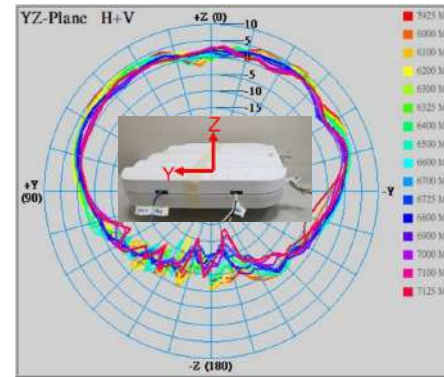
X

Z



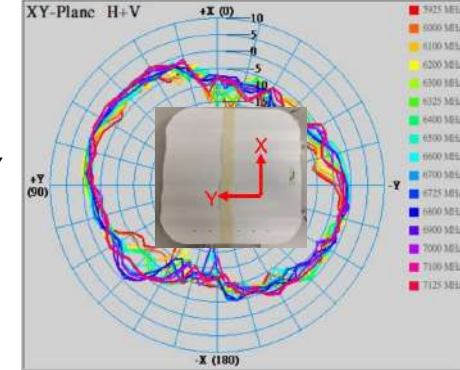
Y

Z

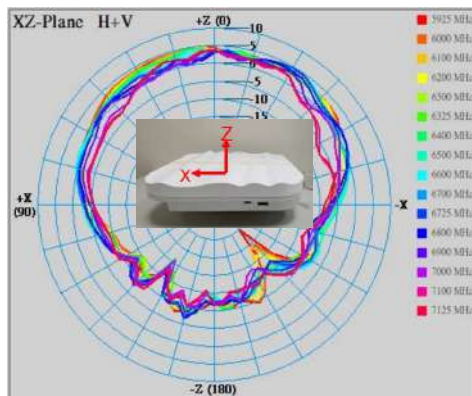


Y

X

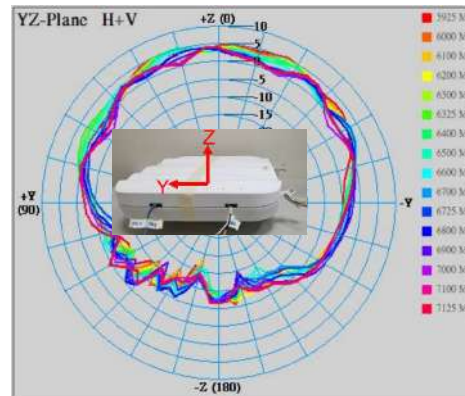


Z



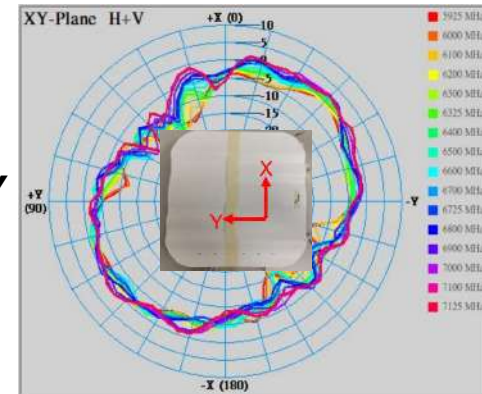
Y

Z



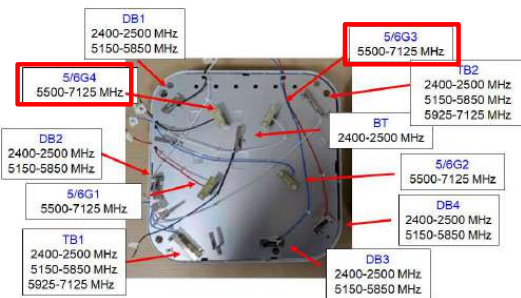
Y

X

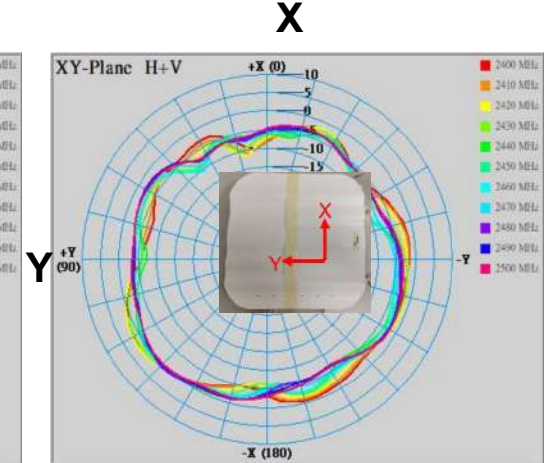
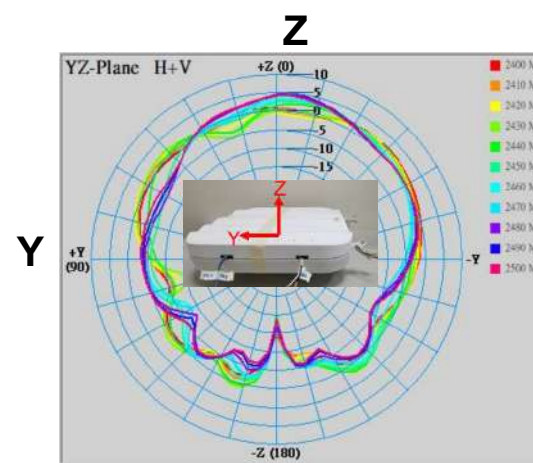
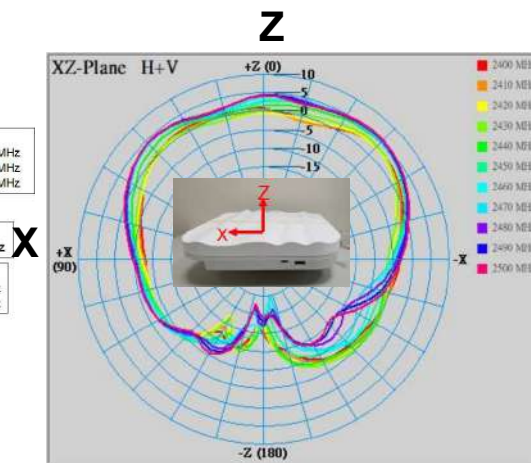
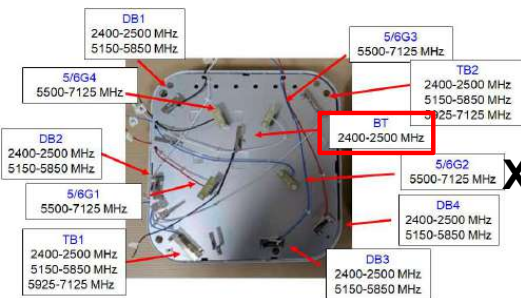


5/6G4

X



2.45GHz



| Frequency (MHz) |     | 2400 | 2450 | 2500 |
|-----------------|-----|------|------|------|
| 2G              | DB1 | 8.75 | 9.67 | 9.16 |
|                 | DB2 |      |      |      |
|                 | DB3 |      |      |      |
|                 | DB4 |      |      |      |

| Frequency (MHz) |     | 5150 | 5500 | 5850 |
|-----------------|-----|------|------|------|
| 5G              | DB1 | 9.20 | 8.32 | 9.24 |
|                 | DB2 |      |      |      |
|                 | DB3 |      |      |      |
|                 | DB4 |      |      |      |

| Frequency (MHz) |     | 5500  | 5850  | 5925  | 6500 | 7125  |
|-----------------|-----|-------|-------|-------|------|-------|
| 6G              | 6G1 | 10.99 | 10.43 | 10.51 | 9.79 | 10.05 |
|                 | 6G2 |       |       |       |      |       |
|                 | 6G3 |       |       |       |      |       |
|                 | 6G4 |       |       |       |      |       |

| Frequency (MHz) |     | 2400 | 2450 | 2500 |
|-----------------|-----|------|------|------|
| 2G              | TB1 | 6.11 | 7.00 | 6.72 |
|                 | TB2 |      |      |      |

| Frequency (MHz) |     | 5150 | 5500 | 5850 |
|-----------------|-----|------|------|------|
| 5G              | TB1 | 7.98 | 7.65 | 8.24 |
|                 | TB2 |      |      |      |

| Frequency (MHz) |     | 5925 | 6500 | 7125 |
|-----------------|-----|------|------|------|
| 6G              | TB1 | 8.54 | 6.68 | 6.65 |
|                 | TB2 |      |      |      |



## Peak gain & Efficiency

| Frequency<br>(MHz) | DB1                |                   | DB2                |                   | DB3                |                   | DB4                |                   |
|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
|                    | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) |
| 2400               | 4.60               | 72                | 6.06               | 68                | 4.45               | 70                | 4.48               | 70                |
| 2410               | 4.17               | 73                | 5.73               | 66                | 4.37               | 68                | 4.71               | 71                |
| 2420               | 4.13               | 78                | 5.48               | 67                | 4.52               | 67                | 4.83               | 73                |
| 2430               | 4.14               | 76                | 4.80               | 66                | 4.58               | 67                | 4.90               | 74                |
| 2440               | 4.14               | 72                | 4.49               | 72                | 4.77               | 69                | 4.93               | 74                |
| 2450               | 4.34               | 72                | 4.16               | 72                | 4.78               | 67                | 4.90               | 75                |
| 2460               | 4.29               | 72                | 4.24               | 75                | 4.83               | 66                | 4.79               | 75                |
| 2470               | 4.17               | 72                | 4.26               | 72                | 4.93               | 66                | 4.96               | 75                |
| 2480               | 4.37               | 71                | 4.34               | 73                | 5.07               | 66                | 5.11               | 75                |
| 2490               | 4.31               | 71                | 4.12               | 75                | 5.08               | 66                | 5.15               | 75                |
| 2500               | 4.10               | 70                | 4.17               | 75                | 4.98               | 66                | 5.26               | 76                |

| Frequency<br>(MHz) | DB1                |                   | DB2                |                   | DB3                |                   | DB4                |                   |
|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
|                    | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) |
| 5150               | 7.75               | 70                | 5.58               | 71                | 5.95               | 70                | 5.79               | 70                |
| 5200               | 8.04               | 71                | 5.63               | 72                | 5.65               | 69                | 5.63               | 70                |
| 5300               | 8.34               | 69                | 5.73               | 68                | 5.42               | 67                | 5.98               | 65                |
| 5400               | 7.87               | 68                | 5.52               | 68                | 5.20               | 65                | 6.18               | 68                |
| 5500               | 8.48               | 69                | 5.79               | 66                | 5.75               | 65                | 6.22               | 69                |
| 5600               | 8.05               | 68                | 6.07               | 67                | 5.80               | 68                | 6.43               | 69                |
| 5700               | 8.64               | 69                | 6.90               | 66                | 5.42               | 67                | 7.08               | 67                |
| 5800               | 8.49               | 70                | 6.61               | 66                | 6.32               | 67                | 7.21               | 67                |
| 5850               | 8.71               | 71                | 7.37               | 67                | 7.20               | 66                | 7.39               | 70                |



## Peak gain & Efficiency

| Frequency<br>(MHz) | 6G1                |                   | 6G2                |                   | 6G3                |                   | 6G4                |                   |
|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
|                    | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) |
| 5500               | 6.18               | 75                | 6.89               | 72                | 5.86               | 72                | 6.24               | 75                |
| 5600               | 6.26               | 75                | 6.12               | 73                | 6.20               | 73                | 6.12               | 77                |
| 5700               | 5.53               | 76                | 5.89               | 70                | 6.21               | 72                | 5.93               | 79                |
| 5800               | 5.50               | 74                | 5.92               | 68                | 6.00               | 70                | 5.91               | 79                |
| 5850               | 5.56               | 76                | 6.04               | 72                | 5.80               | 70                | 5.98               | 79                |
| 5925               | 5.66               | 76                | 5.71               | 71                | 6.18               | 70                | 6.10               | 79                |
| 6000               | 5.54               | 80                | 5.66               | 72                | 6.15               | 72                | 5.88               | 81                |
| 6100               | 6.03               | 79                | 5.76               | 70                | 6.41               | 72                | 5.98               | 79                |
| 6200               | 5.79               | 78                | 5.50               | 70                | 6.17               | 71                | 6.42               | 78                |
| 6300               | 5.22               | 73                | 5.71               | 68                | 5.33               | 66                | 5.61               | 76                |
| 6325               | 5.27               | 73                | 5.68               | 68                | 5.34               | 66                | 5.56               | 76                |

| Frequency<br>(MHz) | 6G1                |                   | 6G2                |                   | 6G3                |                   | 6G4                |                   |
|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
|                    | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) |
| 6400               | 5.65               | 75                | 6.03               | 68                | 5.57               | 69                | 5.46               | 78                |
| 6500               | 5.43               | 73                | 5.40               | 62                | 4.87               | 68                | 5.54               | 75                |
| 6600               | 6.11               | 74                | 5.83               | 66                | 4.77               | 66                | 5.46               | 73                |
| 6700               | 5.66               | 72                | 6.53               | 66                | 4.64               | 64                | 5.36               | 70                |
| 6725               | 5.77               | 71                | 6.42               | 66                | 4.80               | 64                | 5.46               | 69                |
| 6800               | 5.75               | 69                | 5.73               | 61                | 5.22               | 66                | 5.03               | 68                |
| 6900               | 5.66               | 68                | 5.73               | 60                | 5.07               | 64                | 5.27               | 68                |
| 7000               | 5.29               | 66                | 5.76               | 60                | 5.23               | 60                | 5.64               | 68                |
| 7100               | 5.65               | 67                | 6.72               | 64                | 5.02               | 61                | 4.82               | 69                |
| 7125               | 5.56               | 67                | 6.84               | 63                | 4.98               | 62                | 4.71               | 68                |

| Frequency<br>(MHz) | TB1                |                   | TB2                |                   |
|--------------------|--------------------|-------------------|--------------------|-------------------|
|                    | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) |
| 2400               | 4.67               | 68                | 4.11               | 70                |
| 2410               | 4.45               | 69                | 4.05               | 69                |
| 2420               | 4.25               | 69                | 4.05               | 69                |
| 2430               | 4.07               | 68                | 4.12               | 68                |
| 2440               | 4.04               | 70                | 4.30               | 69                |
| 2450               | 4.19               | 76                | 4.44               | 67                |
| 2460               | 4.13               | 75                | 4.42               | 69                |
| 2470               | 4.12               | 74                | 4.06               | 67                |
| 2480               | 4.07               | 73                | 4.20               | 66                |
| 2490               | 4.02               | 73                | 4.51               | 66                |
| 2500               | 4.03               | 74                | 4.78               | 67                |

| Frequency<br>(MHz) | TB1                |                   | TB2                |                   |
|--------------------|--------------------|-------------------|--------------------|-------------------|
|                    | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) |
| 5150               | 7.68               | 74                | 7.30               | 69                |
| 5200               | 7.53               | 74                | 7.50               | 70                |
| 5300               | 7.76               | 74                | 7.53               | 69                |
| 5400               | 8.59               | 77                | 8.11               | 71                |
| 5500               | 8.11               | 74                | 8.29               | 69                |
| 5600               | 7.87               | 72                | 8.29               | 70                |
| 5700               | 8.24               | 73                | 8.09               | 69                |
| 5800               | 8.42               | 70                | 8.16               | 67                |
| 5850               | 8.66               | 71                | 8.50               | 66                |
| 5925               | 8.63               | 71                | 8.84               | 67                |
| 6000               | 8.38               | 73                | 8.72               | 71                |

| Frequency<br>(MHz) | TB1                |                   | TB2                |                   | Frequency<br>(MHz) | BT                 |                   |
|--------------------|--------------------|-------------------|--------------------|-------------------|--------------------|--------------------|-------------------|
|                    | Peak Gain<br>(dBi) | Efficiency<br>(%) | Peak Gain<br>(dBi) | Efficiency<br>(%) |                    | Peak Gain<br>(dBi) | Efficiency<br>(%) |
| 6100               | 8.00               | 71                | 7.89               | 71                | 2400               | 4.45               | 68                |
| 6200               | 7.86               | 71                | 7.07               | 68                | 2410               | 4.66               | 67                |
| 6300               | 8.00               | 71                | 6.70               | 65                | 2420               | 4.78               | 67                |
| 6325               | 8.00               | 71                | 6.82               | 67                | 2430               | 4.95               | 66                |
| 6400               | 7.50               | 71                | 7.05               | 70                | 2440               | 5.27               | 66                |
| 6500               | 7.44               | 69                | 6.80               | 67                | 2450               | 5.63               | 69                |
| 6600               | 7.51               | 68                | 6.29               | 66                | 2460               | 5.25               | 69                |
| 6700               | 7.78               | 72                | 6.07               | 68                | 2470               | 4.82               | 71                |
| 6725               | 7.78               | 71                | 6.11               | 68                | 2480               | 5.38               | 73                |
| 6800               | 7.87               | 70                | 6.54               | 68                | 2490               | 5.69               | 74                |
| 6900               | 7.98               | 69                | 6.62               | 67                | 2500               | 5.83               | 74                |
| 7000               | 8.03               | 66                | 6.38               | 68                |                    |                    |                   |
| 7100               | 6.96               | 66                | 6.01               | 66                |                    |                    |                   |
| 7125               | 6.50               | 66                | 5.81               | 66                |                    |                    |                   |



## Antenna Location

天線製造商: 譚裕實業股份有限公司

Name of the antenna manufacturer:

WHA YU Industrial Co., Ltd.

製造商地址: 新竹市公道五路二段326號

Address of the antenna manufacturer:

No. 326, Sec. 2, Gongdao 5th Rd., East Dist.,

Hsinchu City 300043, Taiwan (R.O.C.)

天線型號: C393-510417-A

Model number of the antenna:

C393-510417-A

天線型態:

Antenna type:

DB1~DB4 : PIFA

TB1~TB2 : PIFA

5/6G1~5/6G4: PCB Dipole Antenna

BT: PIFA