DATE: 2009/04/06

CUSTOMER: ECS ELITEGROUP

TEST REPORT

| MODEL | T10-WLAN |
|-----------------|---|
| DESCRIPTION | Wireless LAN Antenna |
| | Design type:PIFA |
| | 2.4~2.5GHZ /4.9~5.875GHZ |
| INI PPIJIHK P/N | DPLP152-0002(MAIN) DPLP151-0002(AUX) |
| | 22G628000-00(MAIN) 22G637501-10(AUX) |
| FILE P/N | |

| SPEEDTECH | | CUST | OMER | |
|-----------|------------|----------|------|--|
| Manager | Supervisor | Engineer | | |
| Y.J | LUN | LUN | | |

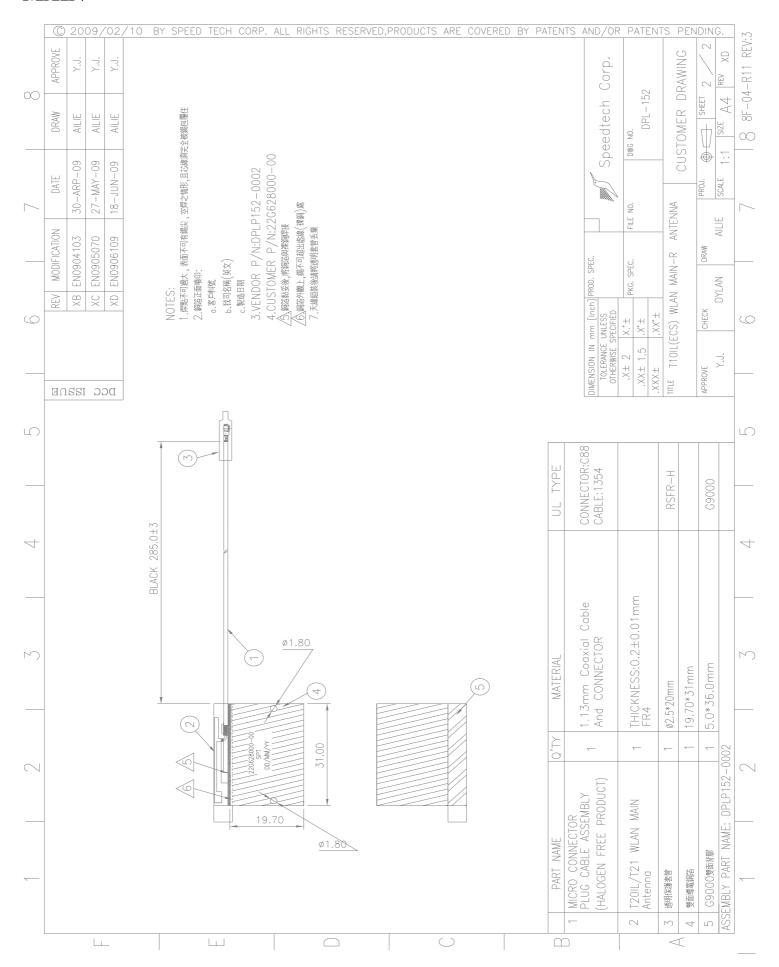


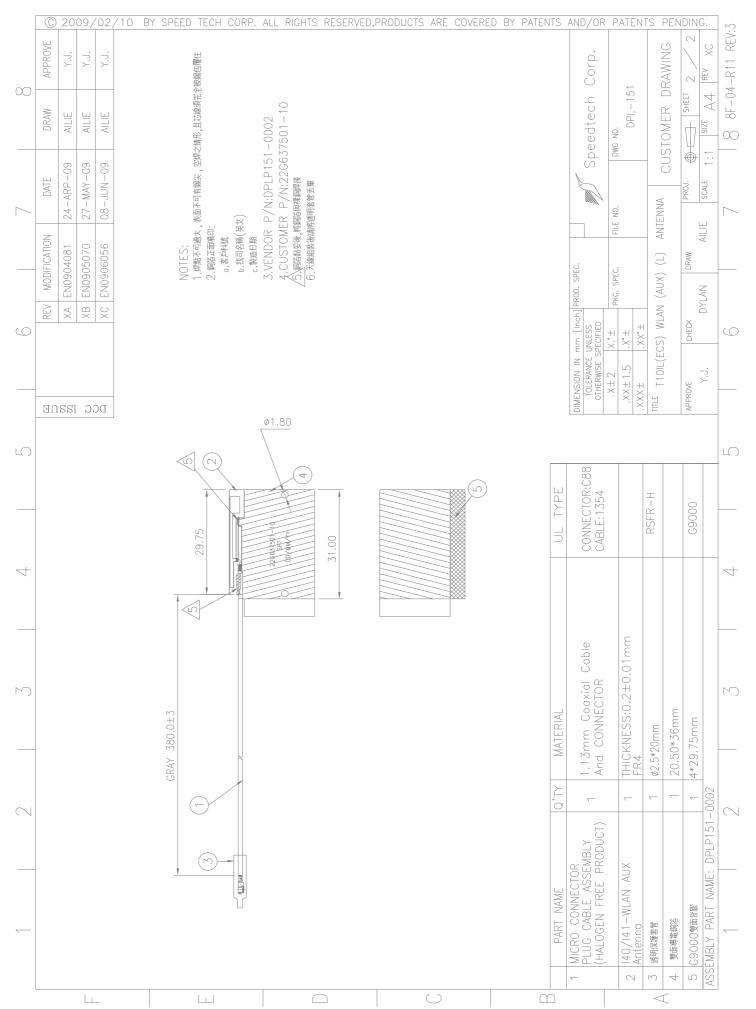
桃園縣龜山鄉民生北路一段568號 No.568, Sec. 1, Min-Sheng N.Road. Kwei-Shan Hsiang, Taoyuan Hsien, Taiwan **TEL:** 886-3-2120088 **FAX:** 886-3-2121712

http://www.speedtech.com.tw

1. Drawing Assembly & BOM

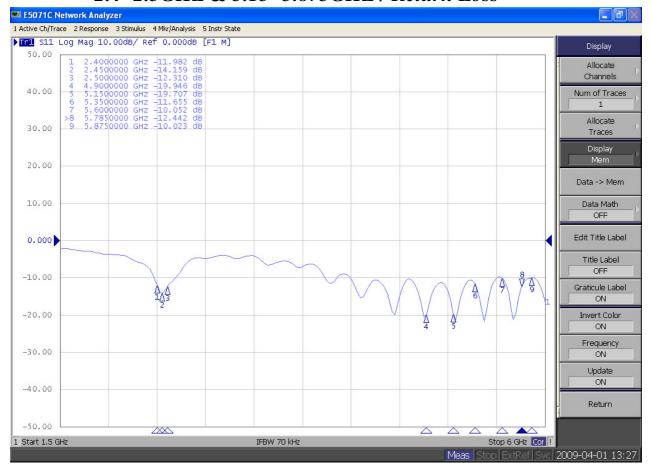
MAIN



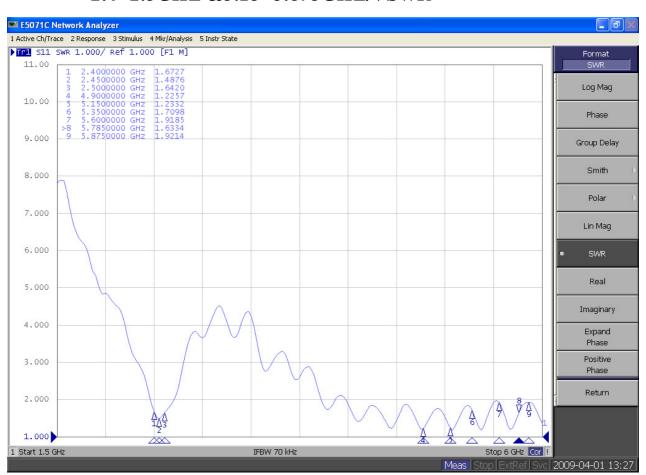


2.WLAN Ant./ (MAIN) - 22G628000-00

2.4~2.5GHZ & 5.15~5.875GHZ / Return Loss



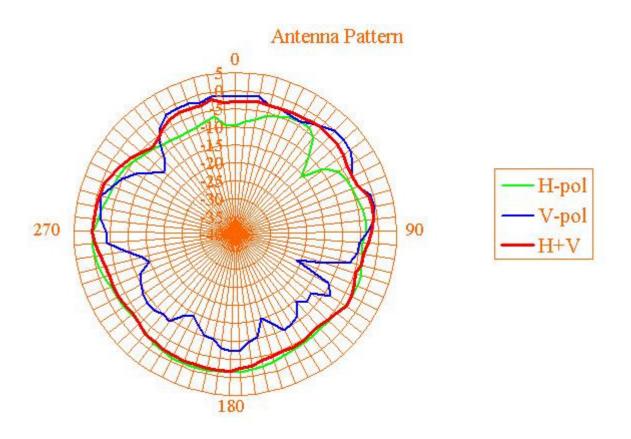
2.4~2.5GHZ &5.15~5.875GHZ/VSWR



3.Gain & Pattern -MAIN - 22G628000-00

a. 2.4GHz

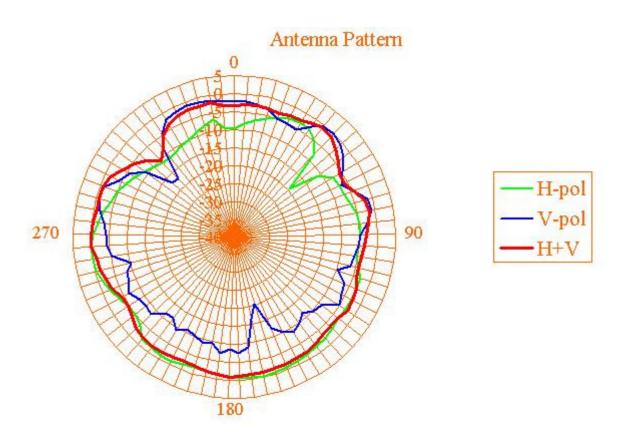




| | <mark>H-Pol</mark> | V-Pol | H+ | V |
|--------------|--------------------|-------|-----|-------|
| Average Gain | -5.55 | · 8 | .11 | -3.64 |
| Peak Gain | -1.98 | 3 -3 | .31 | -0.91 |

b. 2.45GHz

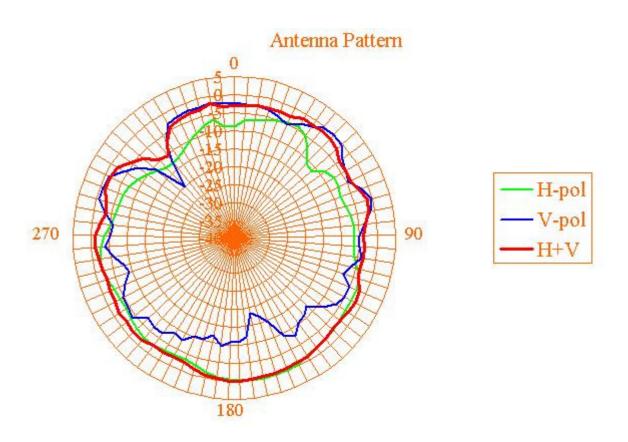




| | H-Pol | V-Pol | H+V |
|--------------|-------|-------|-----------|
| Average Gain | -5.25 | 5 -7 | -3.32 |
| Peak Gain | -1.78 | 3 -2 | .80 -0.76 |

c. 2.5GHz

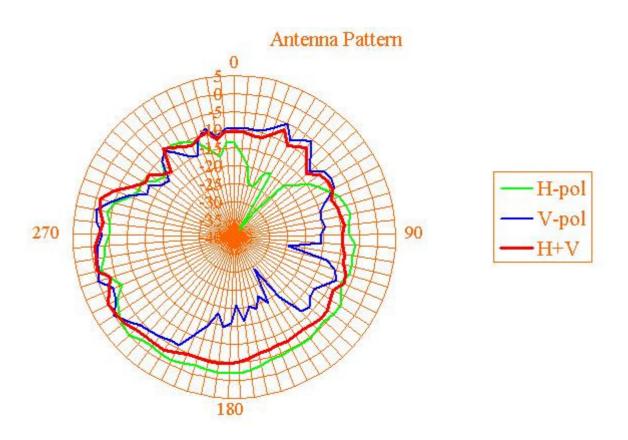




| | H-Pol | V-Pol | H- | ⊦V |
|--------------|-------|-------|-----|-------|
| Average Gain | -5.71 | l -8 | .16 | -3.76 |
| Peak Gain | -1.62 | 2 -3 | .44 | -1.44 |

d. 4.9GHz

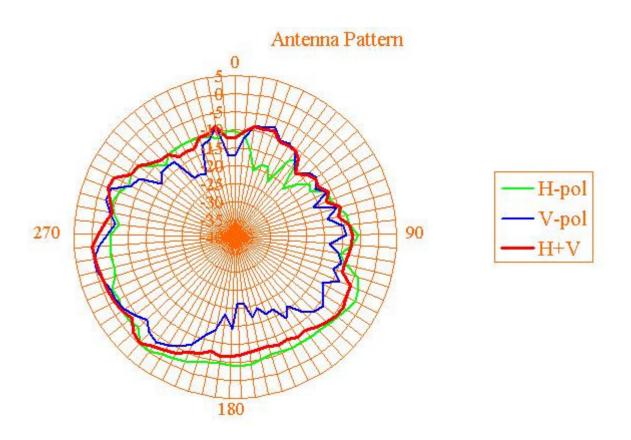




| | <mark>H-Pol</mark> | V-Pol | H+V |
|--------------|--------------------|-------|-------|
| Average Gain | -6.89 | 9 -7 | -4.33 |
| Peak Gain | -1.4 | 7 -C | 1.31 |

e. 5.15GHz

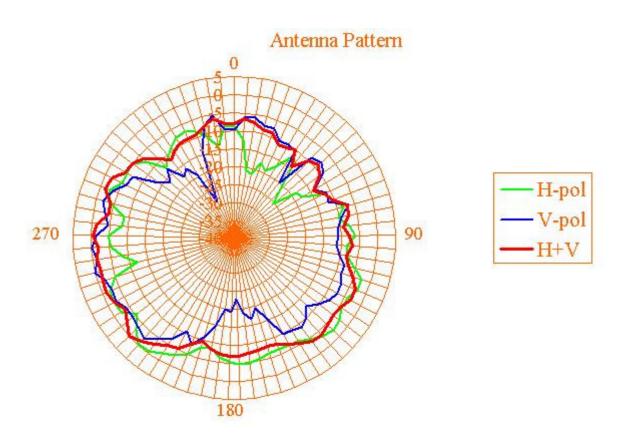




| | H-Pol | V-Pol | H | +V |
|--------------|-------|-------|-----|-------|
| Average Gain | -7.54 | -7 | .22 | -4.36 |
| Peak Gain | -1.88 | 3 0 | .27 | 1.07 |

f. 5.25GHz

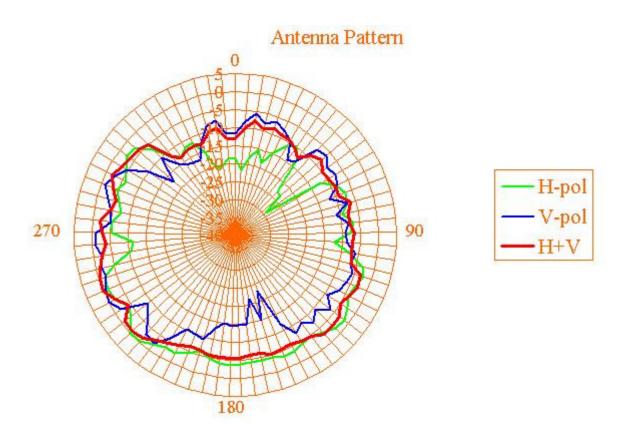




| | H-Pol | V-Pol | H+` | V |
|--------------|-------|-------|-----|-------|
| Average Gain | -7.23 | 3 -7 | .43 | -4.31 |
| Peak Gain | -1.31 | -0 | .50 | 0.89 |

g. 5.35GHz

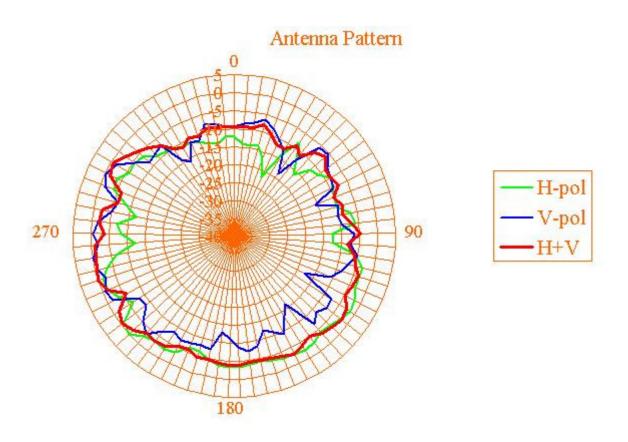




| | H-Pol | V-Pol | Н | +V |
|--------------|-------|-------|------|-------|
| Average Gain | -7.05 | 5 -8 | 3.23 | -4.59 |
| Peak Gain | -1.70 | -1 | .84 | 0.33 |

h. 5.47GHz

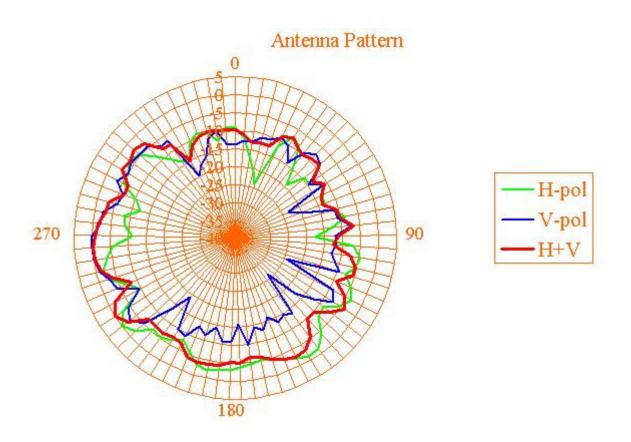




| | H-Pol | V-Pol | H+V |
|--------------|-------|-------|-----------|
| Average Gain | -6.75 | 5 -8 | .30 -4.45 |
| Peak Gain | -1.39 | -2 | .12 0.05 |

i. 5.6GHz

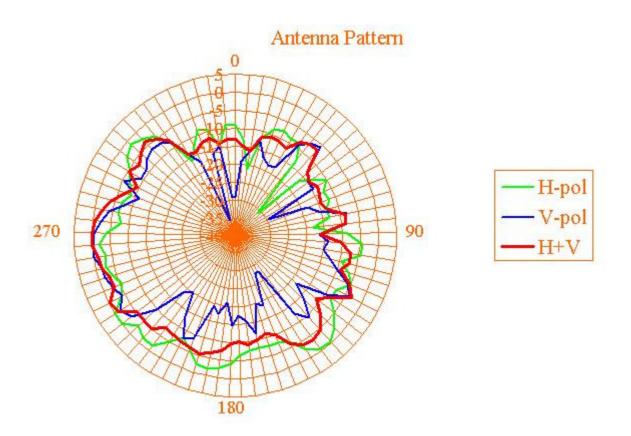




| | H-Pol | V-Pol | H+V |
|--------------|-------|-------|----------|
| Average Gain | -6.65 | ·8. | 19 -4.34 |
| Peak Gain | -0.65 | ·0. | 81 1.07 |

j. 5.725GHz

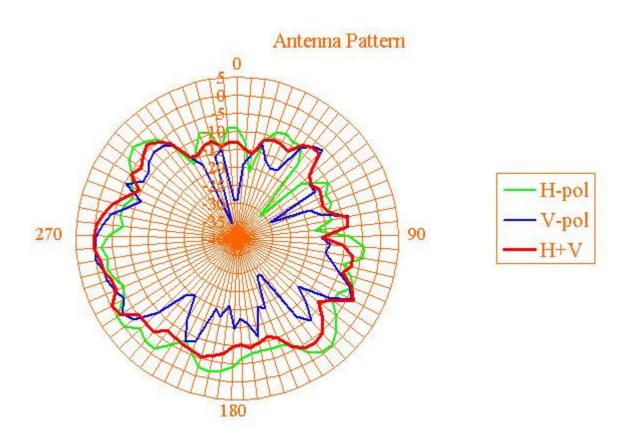




| | H-Pol | V-Pol | H | +V |
|--------------|-------|-------|-----|-------|
| Average Gain | -7.84 | 1 -7 | .55 | -4.68 |
| Peak Gain | -2.48 | 3 0 | .31 | 1.31 |

k. 5.785GHz

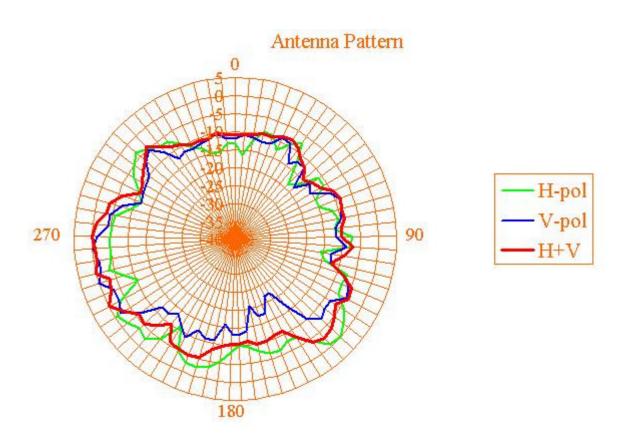




| | H-Pol | V-Pol | Н | [+V |
|--------------|-------|-------|-----|-------|
| Average Gain | -7.65 | 5 -7 | .09 | -4.35 |
| Peak Gain | -1.36 | 5 1 | .32 | 2.22 |

1. 5.85GHz

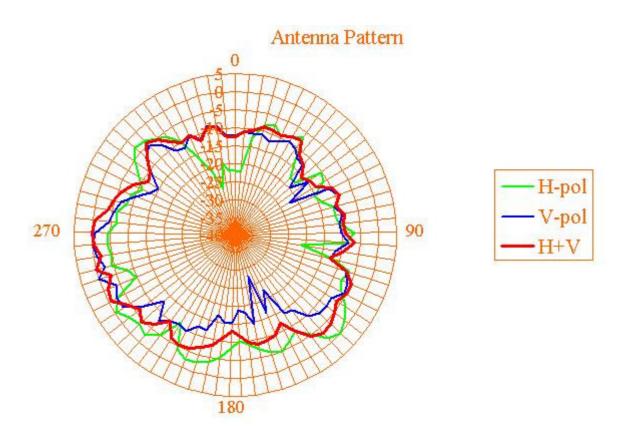




| | <mark>H-Pol</mark> | V-Pol | H+V | |
|--------------|--------------------|-------|-----|-------|
| Average Gain | -8.48 | -6 | .76 | -4.52 |
| Peak Gain | -2.15 | 5 1 | .10 | 1.50 |

m. 5.875GHz

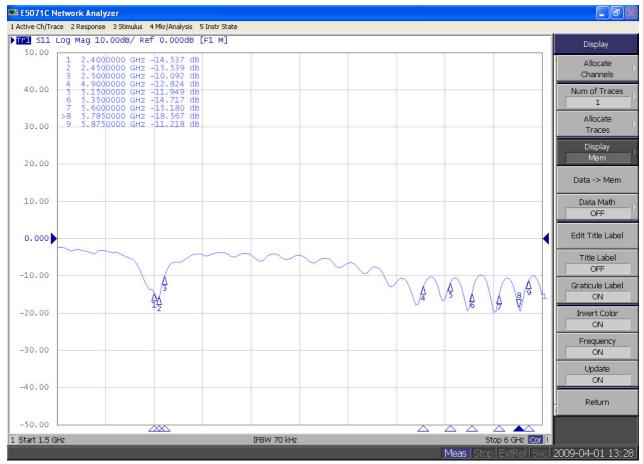




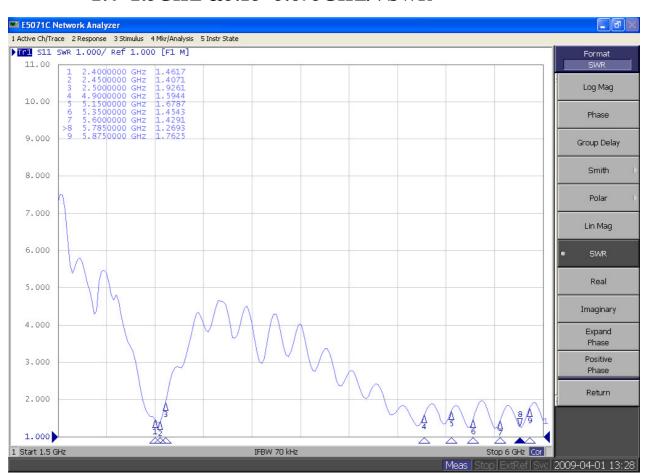
| | H-Pol | V-Pol | H+` | V |
|--------------|-------|-------|------|-------|
| Average Gain | -8.80 |) -(| 6.75 | -4.65 |
| Peak Gain | -2.60 | | 1.09 | 1.48 |

4.WLAN Ant./ (AUX) - 22G637501-10

2.4~2.5GHZ & 5.15~5.875GHZ / Return Loss



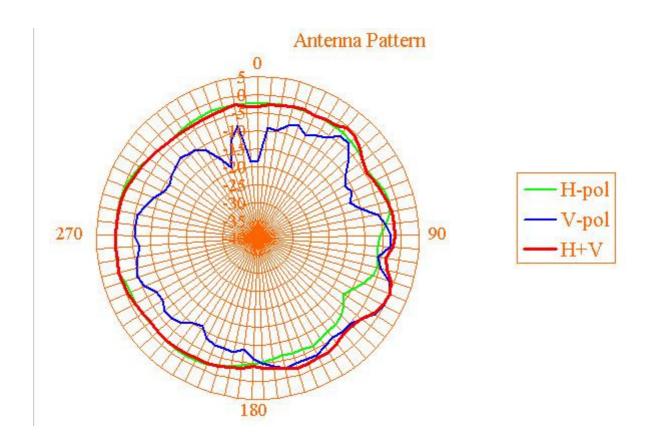
2.4~2.5GHZ &5.15~5.875GHZ/VSWR



n. 5.Gain & Pattern -AUX - 22G637501-10

o. 2.4GHz

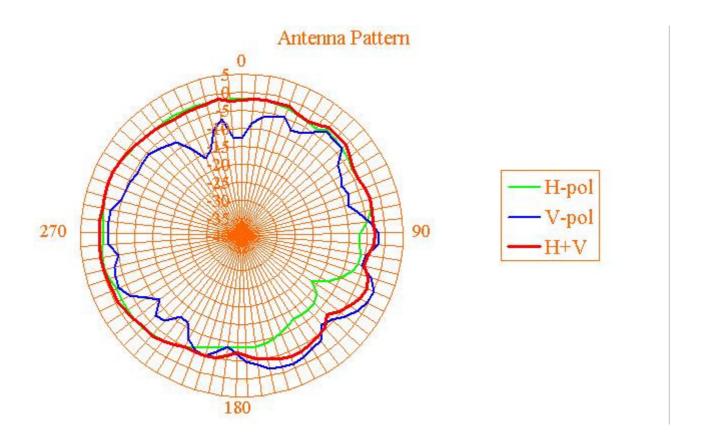




| | <mark>H-Pol</mark> | V-Pol | H+V | |
|--------------|--------------------|-------|-----|-------|
| Average Gain | -5.78 | -8 | .28 | -3.84 |
| Peak Gain | -2.91 | -2 | .35 | -1.75 |

p. 2.45GHz

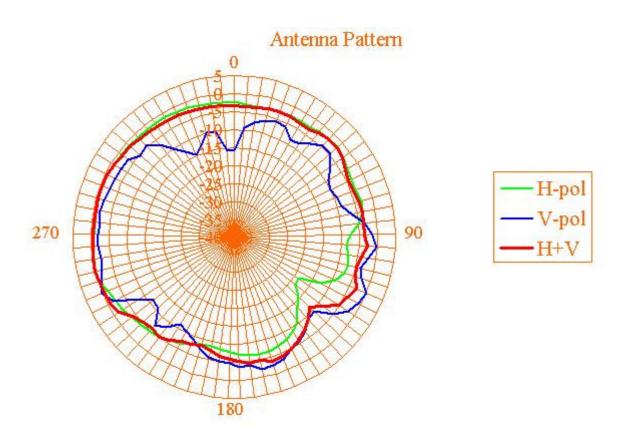




| | H-Pol | V-Pol | H+V | V |
|--------------|-------|-------|-----|-------|
| Average Gain | -5.21 | l -8 | .61 | -3.57 |
| Peak Gain | -1.83 | l -3 | .89 | -1.13 |

q. 2.5GHz

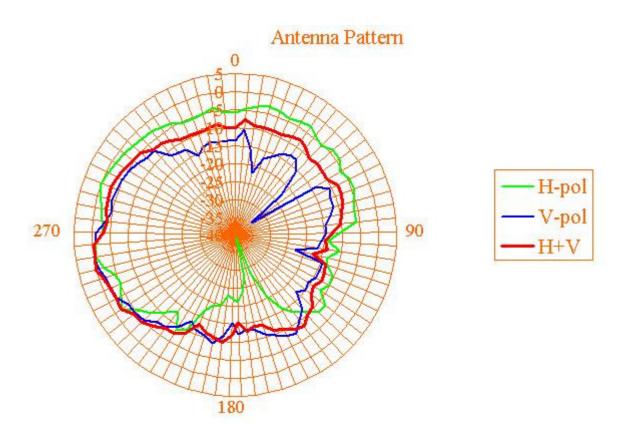




| | H-Pol | V-Pol | H+V | 7 |
|--------------|-------|-------|-----|-------|
| Average Gain | -5.26 | ·8. | .71 | -3.64 |
| Peak Gain | -1.79 | -4. | .16 | -0.51 |

r. 4.9GHz

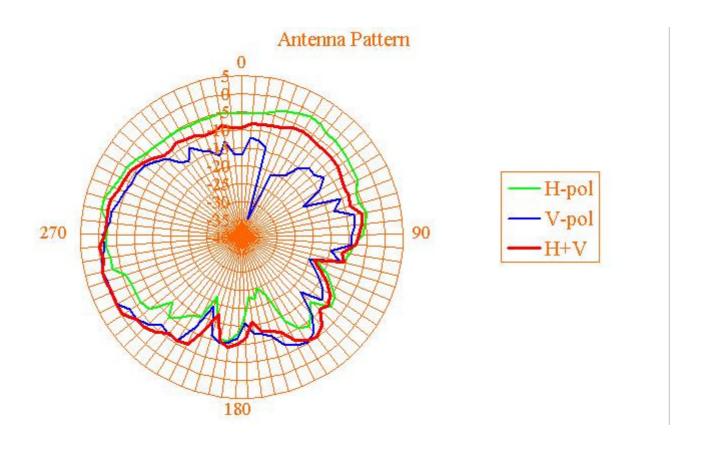




| | H-Pol | V-Pol | H- | +V |
|--------------|-------|-------|------|-------|
| Average Gain | -9.12 | 2 -6 | 5.29 | -4.47 |
| Peak Gain | -3.88 | 3 1 | 1.51 | 2.18 |

s. 5.15GHz

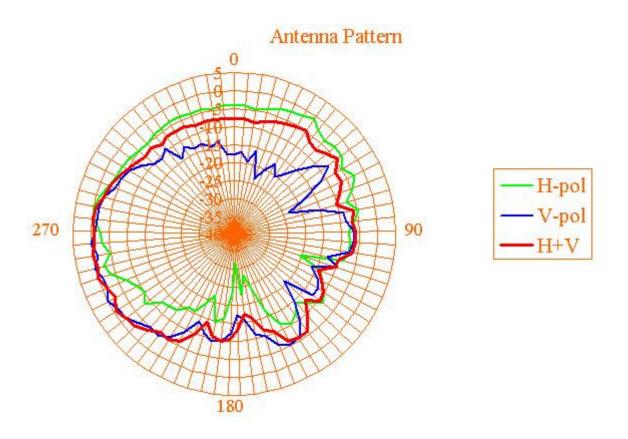




| | H-Pol | V-Pol | Н | I+V |
|--------------|-------|-------|------|-------|
| Average Gain | -8.12 | 2 -5 | 5.41 | -3.55 |
| Peak Gain | -2.7 | 1 1 | 1.64 | 2.03 |

t. 5.25GHz

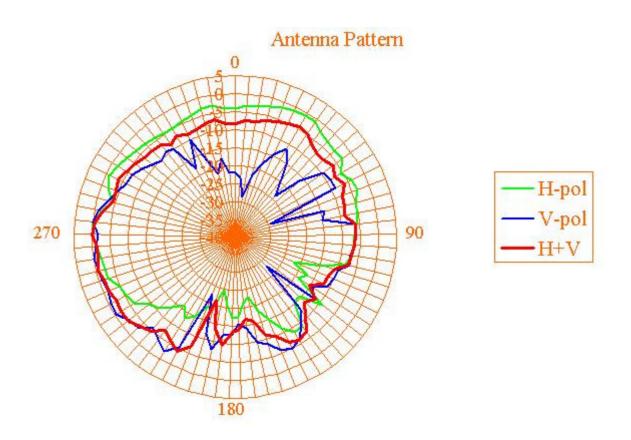




| | H-Pol | V-Pol | Н | +V |
|--------------|-------|-------|-----|-------|
| Average Gain | -7.59 | -5 | .45 | -3.38 |
| Peak Gain | -2.01 | . 1 | .17 | 1.94 |

u. 5.35GHz

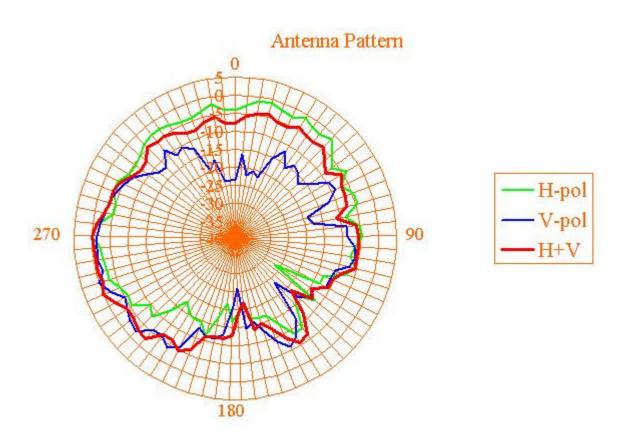




| | H-Pol | V-Pol | H+ | V |
|--------------|-------|-------|-----|-------|
| Average Gain | -8.16 | · -7 | .12 | -4.60 |
| Peak Gain | -3.19 | -0 | .74 | 1.11 |

v. 5.47GHz

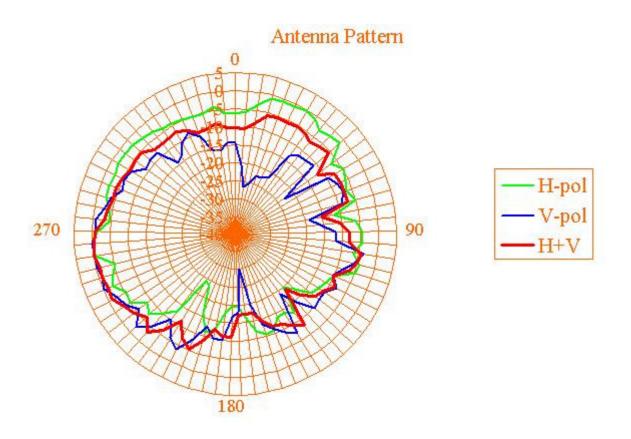




| | H-Pol | V-Pol | Н | +V |
|--------------|-------|-------|-----|-------|
| Average Gain | -7.63 | -6. | .75 | -4.16 |
| Peak Gain | -2.38 | 3 0. | .55 | 1.20 |

w.5.6GHz

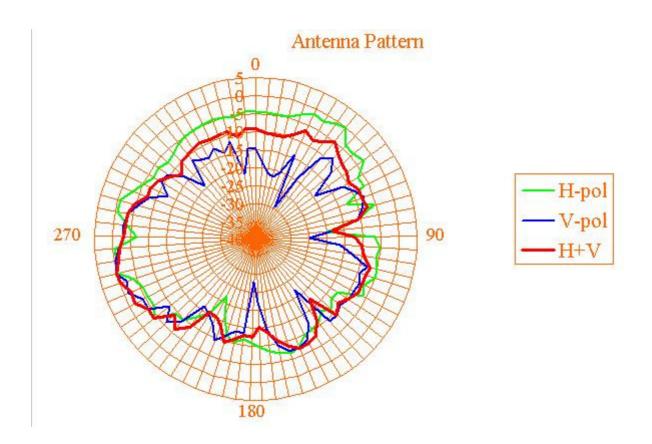




| | <mark>H-Pol</mark> | V-Pol | H+V |
|--------------|--------------------|-------|---------|
| Average Gain | -8.56 | -6.6 | -4.46 |
| Peak Gain | -3.59 | 0.2 | 24 1.59 |

x. 5.725GHz

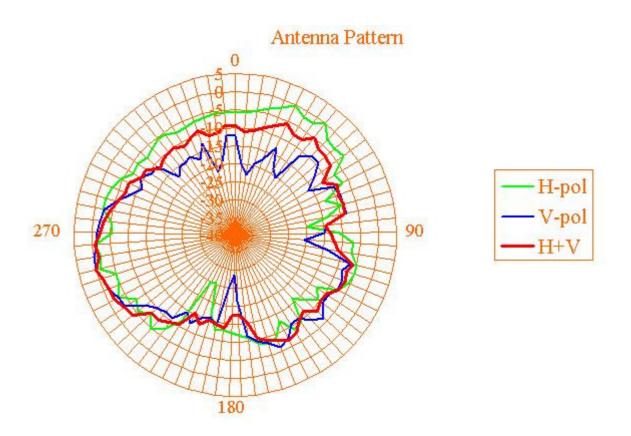




| | H-Pol | V-Pol | H- | +V |
|--------------|-------|-------|-----|-------|
| Average Gain | -8.94 | 1 -6 | .61 | -4.61 |
| Peak Gain | -3.58 | 3 1 | .58 | 2.42 |

y. 5.785GHz

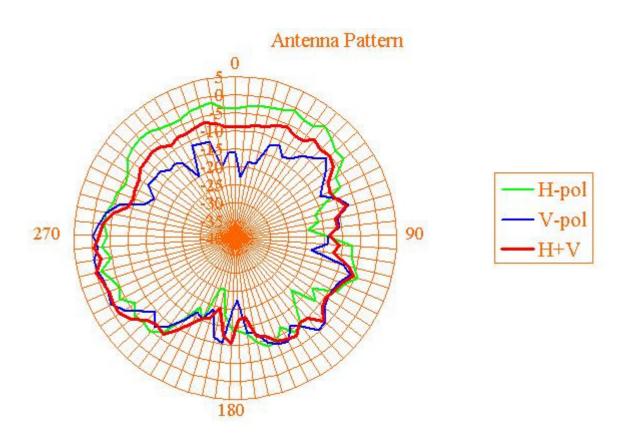




| | H-Pol | V-Pol | H+ | V |
|--------------|-------|-------|-----|-------|
| Average Gain | -9.36 | ·-6 | .60 | -4.75 |
| Peak Gain | -3.64 | 1 | .17 | 2.15 |

z. 5.85GHz

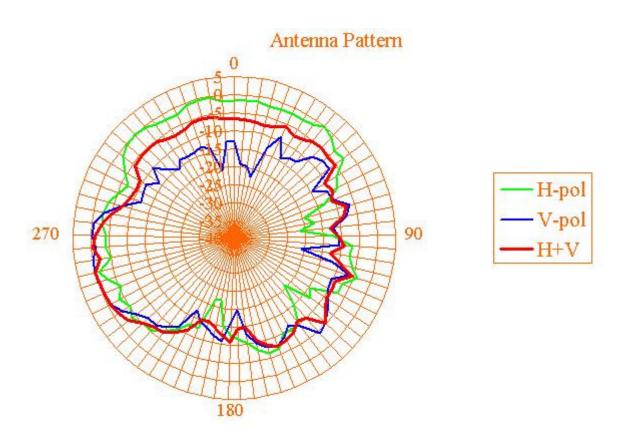




| | H-Pol | V-Pol | Н | +V |
|--------------|-------|-------|------|-------|
| Average Gain | -9.18 | 3 -6 | 5.57 | -4.67 |
| Peak Gain | -4.10 |) (|).93 | 1.80 |

aa.5.875GHz





| | <mark>H-Pol</mark> | V-Pol | Н | +V |
|--------------|--------------------|-------|-----|-------|
| Average Gain | -9.04 | 1 -6 | .80 | -4.76 |
| Peak Gain | -4.59 | 9 0 | .22 | 1.20 |