

RS6130 Antenna report

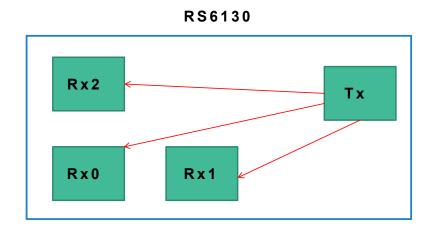
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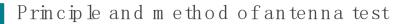
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RS6130 1T3R($Tx \rightarrow Rx0$, $Tx \rightarrow Rx1$, $Tx \rightarrow Rx2$)Antenna gain and direction diagram



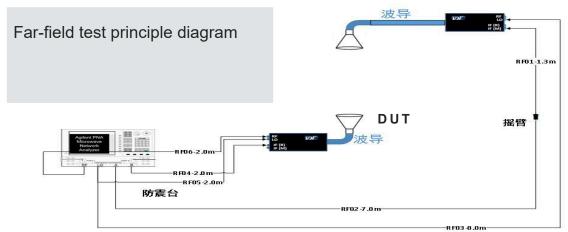




Principle: Energy conservation, that is, the signal power received by Rx is equal to the transmitted power of Tx minus the power of space loss;

Gain : comparison method, using the space loss power is equal, the Rx antenna is replaced by the horn antenna to receive and then the Rx antenna gain is obtained;

Pattern test method: using the Angle reflection to collect the level values in different directions, and then get the normalized pattern;







ANT Gain=EIRP-Tx Output Power

| Frequency | EIRP | Tx outputpower | Gain |
|-----------|-------|----------------|--------|
| 60GHz | 17.29 | 12.6dbm | 4.69dB |
| 61GHz | 17.53 | 12.5dbm | 5.03dB |
| 62GHz | 17.31 | 12.4dbm | 4.91dB |



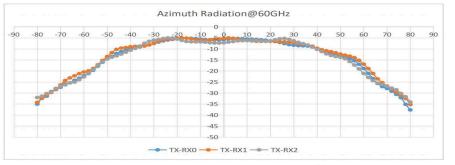


Figure 5-2 Antenna Azimuth(XOZ) Radiation Pattern^{1,2}

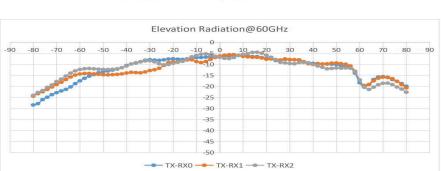


Figure 5-3 Antenna Elevation(YOZ) Radiation Pattern^{1,2}

Y = energy amplitude (dB).