Fading Channels & Mobile Communications IIT Kharagpur

Date: 25 Mar 2022

Exp 1: Understanding of PathLoss

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| REPORT | | | | |
|-----------------------------------|--------------------------------------|--|--|--|
| 1A: Calculation of Received Power | 1B: Calculation of Pathloss Exponent | 1C: Calculation of Carrier Frequency | 1D: Calculation of Receiver Antenna Height | 1E: Calculation of BS Antenna Height |
| Pr(d0): -14.94 dBm | Pr(d0): -13.69 dBm | n: 3.84 | fc: 2.0 Ghz | fc: 2.0 Ghz |
| Dist: 1500.0 m | TxPow: 50.0 dBm | TxPow: 50.0 dBm | TxPow: 50.0 dBm | TxPow: 50.0 dBm |
| d0: 60.0m | Dist: 1500.0 m | hTx: 30.0 m | hTx: 30.0 m | n: 3.58 |
| | Pr(d): -55.21 dBm | Dist: 1500.0 m | Dist: 1500.0 m | Dist: 1500.0 m |
| | d0:68.0m | Pr(d): -59.32 dBm | Pr(d): -48.26 dBm | Pr(d): -51.87 dBm |
| | | hRx: 1.0 m | n: 3.67 | hRx: 1.0 m |
| Pr(Entered):-42.89 dBm | n(Entered):3.09 | fc(Entered):2.03 GHz | hRx(Entered):2.03 m | hTx(Entered):26.62 m |
| Pr(Actual):-42.9 dBm | n(Actual):3.09 | fc(Actual):2.03 GHz | hRx(Actual):2.03 m | hTx(Actual):26.64 m |

DISCUSSION:-

No discussion added.

(Signature of SANJIT U19EC008)

(Signature of Faculty)

Remarks:-