**Fading Channels & Mobile Communications**

**IIT Kharagpur**

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# 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): -20.49 dBm | Pr(d0): -16.88 dBm | n: 3.46 | fc: 2.0 Ghz | fc: 2.0 Ghz |
| Dist: 1000.0 m | TxPow: 50.0 dBm | TxPow: 50.0 dBm | TxPow: 50.0 dBm | TxPow: 50.0 dBm |
| d0: 98.0m | Dist: 1000.0 m | hTx: 30.0 m | hTx: 30.0 m | n: 4.86 |
| | Pr(d): -59.15 dBm | Dist: 1000.0 m | Dist: 1000.0 m | Dist: 1000.0 m |
| | d0:62.0m | Pr(d): -48.71 dBm | Pr(d): -29.38 dBm | Pr(d): -82.71 dBm |
| | | hRx: 1.0 m | n: 3.52 | hRx: 1.0 m |
| Pr(Entered):-40.66 dBm | n(Entered):3.5 | fc(Entered):4.84 GHz | hRx(Entered):5.59 m | hTx(Entered):31.26 m |
| Pr(Actual):-40.67 dBm | n(Actual):3.5 | fc(Actual):4.84 GHz | hRx(Actual):5.59 m | hTx(Actual):31.27 m |

## DISCUSSION:-

No discussion added.

(Signature of SANJIT U19EC008)

(Signature of Faculty)

Remarks:-