# **1** Instructions for Experiment 4:-Boundary Coverage

Follow the instructions given below to perform the experiments:-

## **1.1 Starting the Experiment :-**

• Step 1:-Click on the button START. A page appears with a dialogue box asking for your name. Enter your name and click OK.

Vertual Labe - III Abar agree - Hooita De Call Yeen - Hooita Call Call Yeen - Hooita Mark Nort Vicard & Cesing Stated & Vi Nort Vicard & Cesing Stated & Vi Vertual Labe - III Kharagaw	Reduz dr. 1960 1960 Al 21 180/AL STANCE of Andre, Expl. Hull reduce Media Al A C C C C C C C C C C C C C C C C C C	rom man along +	ب ه . م د د
	Home Aim of experiment Theor	y Instructions Quz Experiments References	
Dote	dar		v 11:48 #41

### **1.2** Performing the experiment :-

- Step 1:-Adjust the slider to position your mobile. You can use the +,- buttons also to change the locations of your mobile.
- Step 2:- Click on the button TAKE READING to record the value of Pr(d) dBm and the angular distance of the mobile from the base station in degrees. You can view the table of Pr(d) dBm vs Degrees on the RHS of the page. Take 40 readings.



• Step 3:- Click on the button FINISH once you finish taking 40 readings. The values of the input parameters  $\overline{P_r}$  dBm,sigma,threshold will be displayed on the LHS of the page.



- Step 4:- Now, calculate the probability that the received signal level>=some threshold( $\gamma$ ) by using the formulas given in the theory section.Enter the values of the manually calculated unknown parameter in the box provided in the LHS of the page.
- Step 5:-Now, click on the button CHECK to verify whether your calculated value matches with the computed value. If, both the values doesnt match then the correct value will be displayed in the LHS of the page.



### **1.3 Generating the report :-**

- Step 6:- Click on the button GENERATE REPORT to generate a report of the experiment you have performed. A dialogue box appears.
- Step 7:- Now, Click on the button SAVE given in the dialogue box to save your report.

Virtual Labs - IIT Kharogpur + Horrie	Aim of experiment Theory Instr	a industrie -	veriments References	
	Save As	ans 63.1  ans 63.1  and ans 63.1  and ans 63.1  block	A Cancel	
		NIVELS BACHLE COMMUNICATION	n nan nan nan nan nan nan nan nan nan n	

• Step 8:- Once you click on the button SAVE in the dialogue box, another dialogue box appears with the message that your report is successfully generated. Click on the button OK in the dialogue box.

Virtual Labs - IIT Kharagpur - Mozilla I Ele Edt Yen Higtory Bookmarks To	Pedex dr: 965	- 8 X
Inter Varied      Getting Stated      We	With All Works Specific Accelerating Excellution     USE 2010 (Section 2010)       With All Works Specific Acceleration 2010 (SECONT)     Standa methyper -       With All Works Specific Acceleration 2010 (SECONT)     Standa methyper -       With All Works Specific Acceleration 2010 (SECONT)     Standa methyper -       With All Works Specific Acceleration 2010 (SECONT)     Standa methyper -       With All Works Specific Acceleration 2010 (SECONT)     Standa methyper -       With All Works Specific Acceleration 2010 (SECONT)     Standa methyper -       With All Works Specific Acceleration 2010 (SECONT)     Standa methyper -	•
	Monadon 🔀	
	Your Report is Generated Successfully at CPP organic Residences 63.91CBK_Exp1_XOX_Abn_17_2011pdf     DK	
	VADING COMMENTS ACCERTE COMPONENTING LARS - IT DEPARTURE	×
Done Start O Virtual Labs - IIT	dar 🖆 espēl juuder; jave 🧳 MATURE 7.10.0 (20) 🤤	📓 📌 🗊 🧐 🧭 12:14 PM

• Step 9:- Now, you can view your pdf report.

Fading Channels & Mobile Communications IIT Kharagpur Date: Jun 17 2011

#### Exp 4: Boundary Coverage Name: XXX

Tx.Power	Dist	fc	Pr(Th)	Pr(Mean)	Sigma	Caculated Prob%	Entered Prob%
30 dBm	1000 m	2.0 GHz	-90.0 dBm	-91.02 dBm	6.85	44.08 %	66.46 %

Sr.No	Pr(dBm)	Angle(deg)		
1	-94.26	59.0		
2	-92.0	61.0		
3	-91.08	63.0		
4	-84.6	66.0		
5	-110.19	68.0		
6	-94.21	70.0		
7	-92.73	72.0		
8	-100.3	74.0		
9	-81.42	77.0		
10	-88.68	79.0		
11	-88.37	81.0		
12	-88.59	83.0		
13	-92.64	86.0		
14	-112.7	88.0		
15	-88.5	91.0		
16	-89.92	92.0		
17	-91.67	93.0		
18	-89.84	94.0		
19	-83.92	95.0		
20	-90.69	96.0		
21	-95.07	97.0		
22	-94.81	98.0		
23	-82.06	99.0		
24	-90.82	100.0		
25	-81.68	105.0		
26	-87.39	107.0		
27	-90.79	109.0		
28	-85.51	111.0		
29	-81.27	116.0		
30	-89.28	119.0		
31	-78.81	121.0		
32	-85.53	125.0		
33	-99.72	128.0		
34	-90.24	170.0		
35	-92.08	171.0		
36	-96.5	173.0		
37	-91.21	176.0		
38	-97.27	178.0		
39	-92.5	180.0		
40	-91.83	182.0		

(Signature of the Candidate)

(Signature of Faculty)