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APPENDIX -1

Following tables disclose required C/N for DVB-T hierarchical transmission modes to achieve a BER of $2x10^{-4}$ after Viterbi decoder.

Modulation	Code Rate	α	Required C/N for BER = 2×10^{-4} after Viterbi QEF after Reed-Solomon: Gaussian Channel	Ricean Channel (F_1)	Rayleigh Channel (P_1)	Bitrate (Mbit/s): Δ/T_U = 1/4	Δ/T_U = 1/8	Δ/T_U = 1/16	Δ/T_U = 1/32
QPSK in non-uniform 16-QAM	1/2	2	4.6	5.4	6.9	4.98	5.53	5.85	6.03
	2/3		7.1	7.7	9.8	6.64	7.37	7.81	8.04
	3/4		8.4	9.0	11.8	7.46	8.29	8.78	9.05
	5/6								
	7/8								
	1/2		13.0	13.7	14.9	9.95	11.06	11.71	12.06
	2/3		15.1	15.3	17.9	13.27	14.75	15.61	16.09
	3/4		16.3	16.9	20.0	14.93	16.59	17.56	18.10
	5/6		16.9	17.8	22.4	16.59	18.43	19.52	20.11
	7/8		17.9	18.7	24.1	17.41	19.35	20.49	21.11
QPSK in non-uniform 16-QAM	1/2	1	3.8	4.4	6.0	4.98	5.53	5.85	6.03
	2/3		5.9	6.6	8.6	6.64	7.37	7.81	8.04
	3/4		7.1	7.9	10.1	7.46	8.29	8.78	9.05
	5/6								
	7/8								
	1/2		12.3	12.8	13.6	9.95	11.06	11.71	12.06
	2/3		13.9	14.4	16.4	13.27	14.75	15.61	16.09
	3/4		14.9	15.5	18.2	14.93	16.59	17.56	18.10
	5/6		15.4	16.1	19.9	16.59	18.43	19.52	20.11
	7/8		15.8	16.5	20.8	17.41	19.35	20.49	21.11

NOTE: Figures in italics are approximate values.

Modulation	Code Rate	α	Required C/N for BER = 2×10^{-4} after Viterbi QEF after Reed-Solomon: Gaussian Channel	Ricean Channel (F_1)	Rayleigh Channel (P_1)	Bitrate (Mbit/s): Δ/T_U = 1/4	Δ/T_U = 1/8	Δ/T_U = 1/16	Δ/T_U = 1/32
QPSK in non-uniform 64-QAM	1/2	1	6.9	9.5	11.4	4.98	5.53	5.85	6.03
	2/3		12.1	12.7	14.6	6.64	7.37	7.81	8.04
	3/4		13.7	14.3	17.5	7.46	8.29	8.78	9.05
	5/6								
	7/8								
	1/2		14.6	14.9	16.4	9.95	11.06	11.71	12.06
	2/3		16.9	17.6	19.4	13.27	14.75	15.61	16.09
	3/4		18.6	19.1	22.2	14.93	16.59	17.56	18.10
	5/6		20.1	20.6	25.6	16.59	18.43	19.52	20.11
	7/8		21.1	22.2	27.6	17.42	19.35	20.49	21.11
QPSK in non-uniform 64-QAM	1/2	2	6.5	7.1	8.7	4.98	5.53	5.85	6.03
	2/3		9.0	9.9	11.7	6.64	7.37	7.81	8.04
	3/4		10.8	11.5	14.5	7.46	8.29	8.78	9.05
	5/6								
	7/8								
	1/2		16.3	16.7	18.2	9.95	11.06	11.71	12.06
	2/3		18.9	19.5	21.7	13.27	14.75	15.61	16.09
	3/4		21.0	21.6	24.5	14.93	16.59	17.56	18.10
	5/6		21.9	22.7	27.3	16.59	18.43	19.52	20.11
	7/8		22.9	23.8	29.6	17.42	19.35	20.49	21.11

NOTE: Figures in italics are approximate values.
Results for QPSK in non-uniform 64-QAM with α = 4 are not included due to the poor performance of the 64-QAM signal.

Table A1.1: Required C/N for hierarchical transmission to achieve a BER of $2x10^{-4}$ after Viterbi decoder.

APPENDIX - 2

Following figures represent ITU-R P.1546 based field strength versus distance curves for frequencies in the range 300 MHz to 1 000 MHz. They are drawn by taking 600MHz as basis. Therefore should follow the procedure defined under Annex 5 & 6 of the above recommendation to obtain improved accuracy for other frequencies.

The curves in Figure A2.1 to A2.3 represent field strength values exceeded at 50% of the locations within any area of approximately 500 m by 500 m and for 50%, 10% and 1% of the time for land paths.

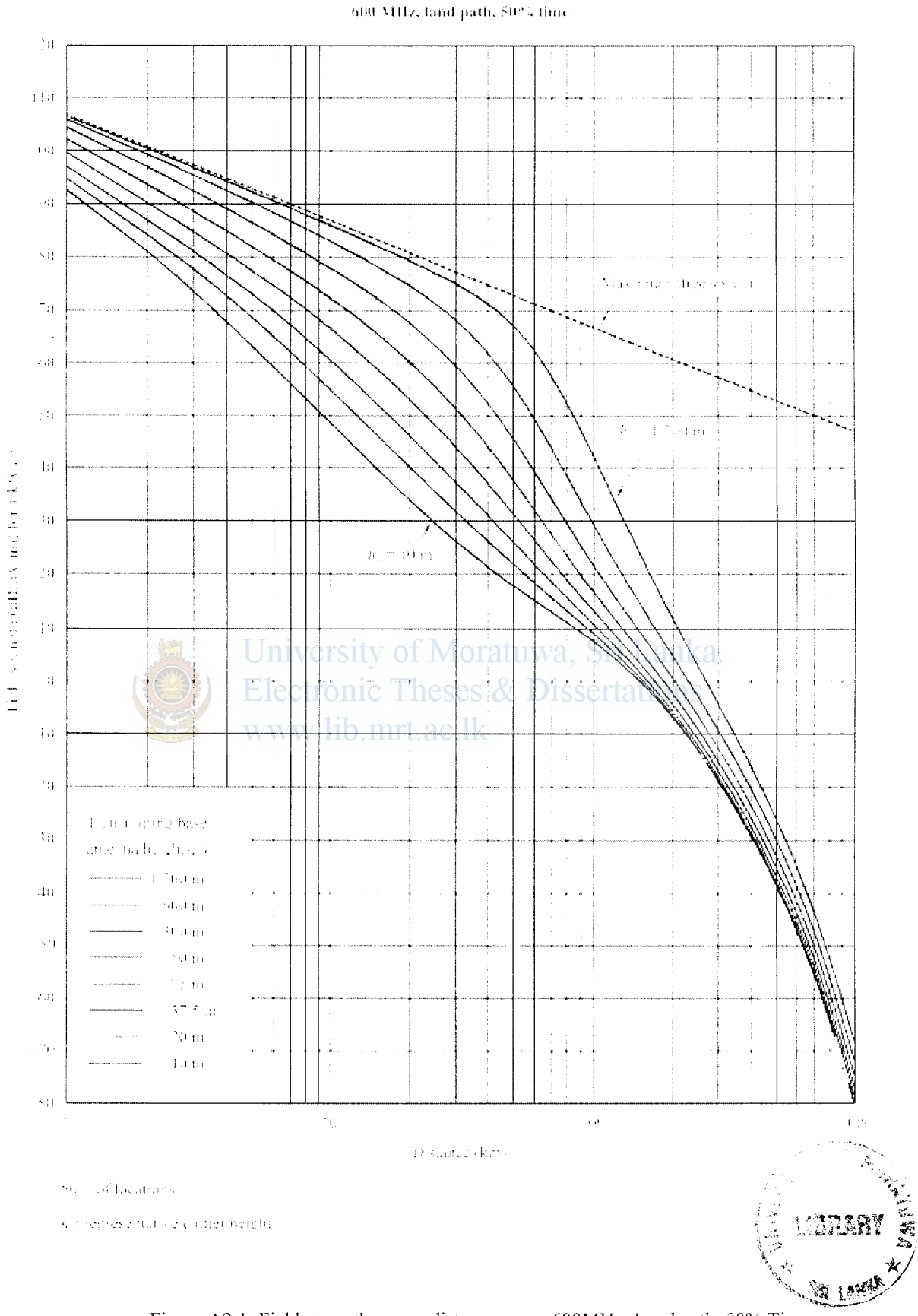

Figure A2.1: Field strength versus distance curve 600MHz, Land path, 50% Time

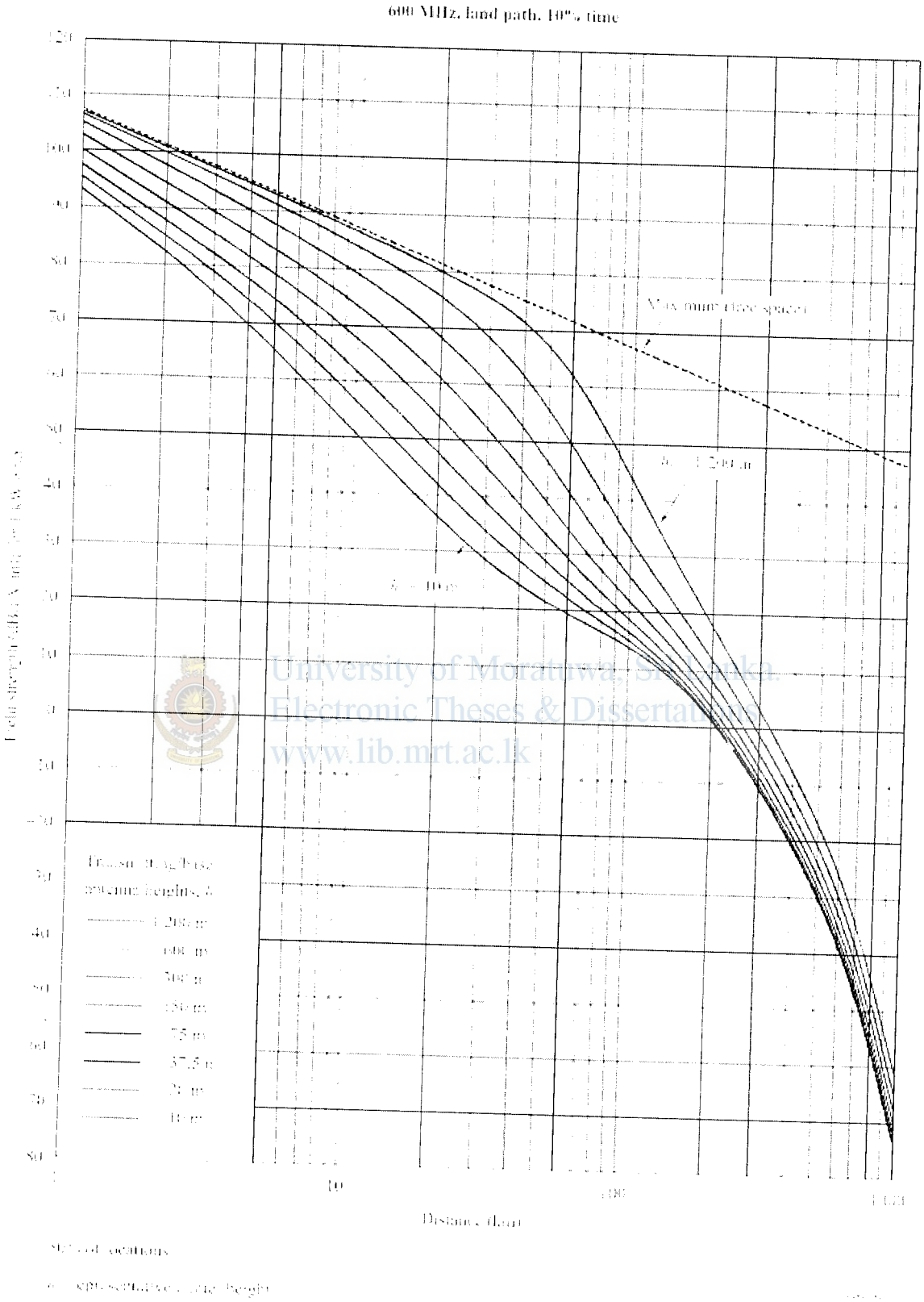

Figure A2.2: Field strength versus distance curve 600MHz, Land path, 10% Time

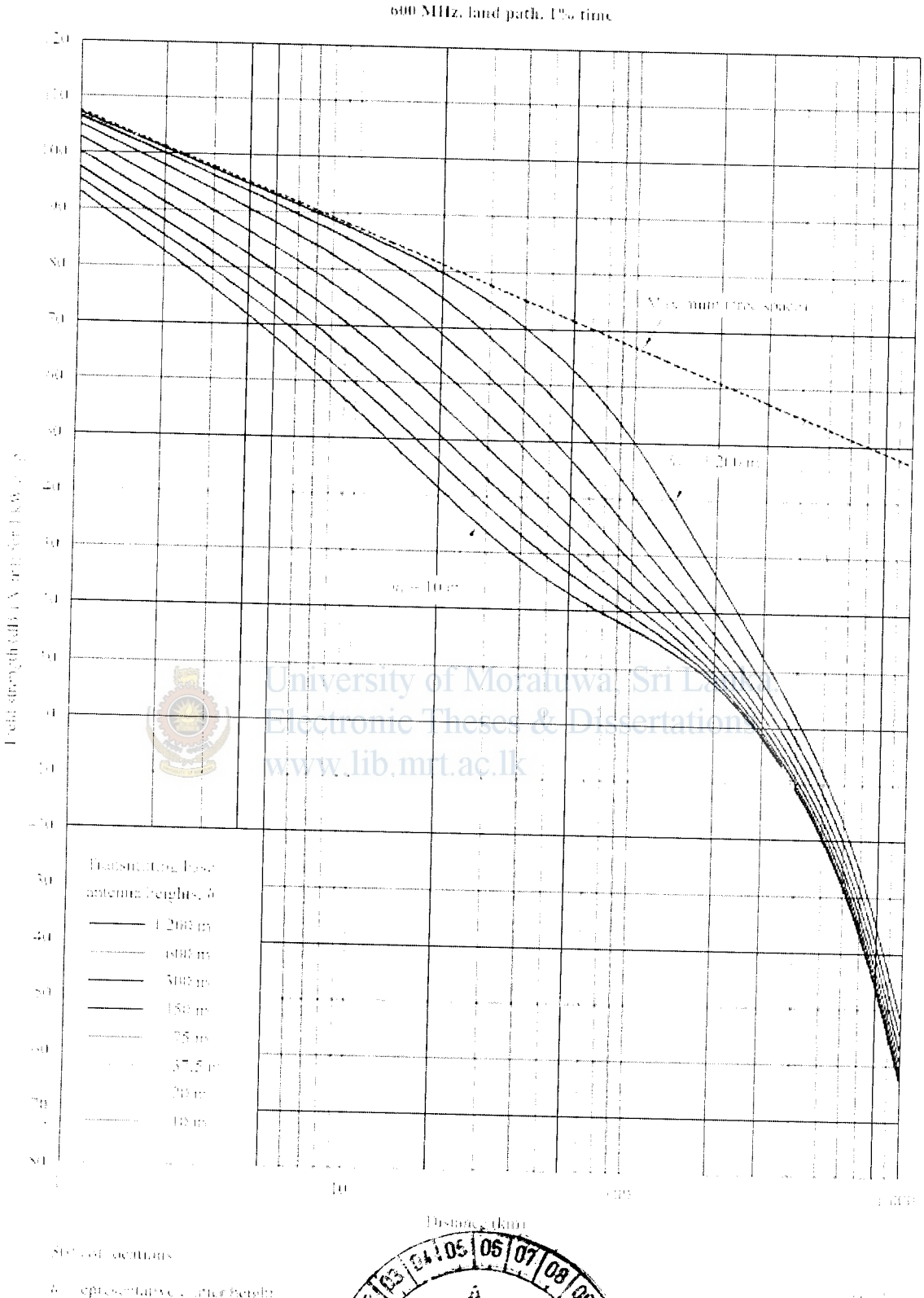

Figure A2.3: Field strength versus distance curve 600 MHz, Land path, 1% Time