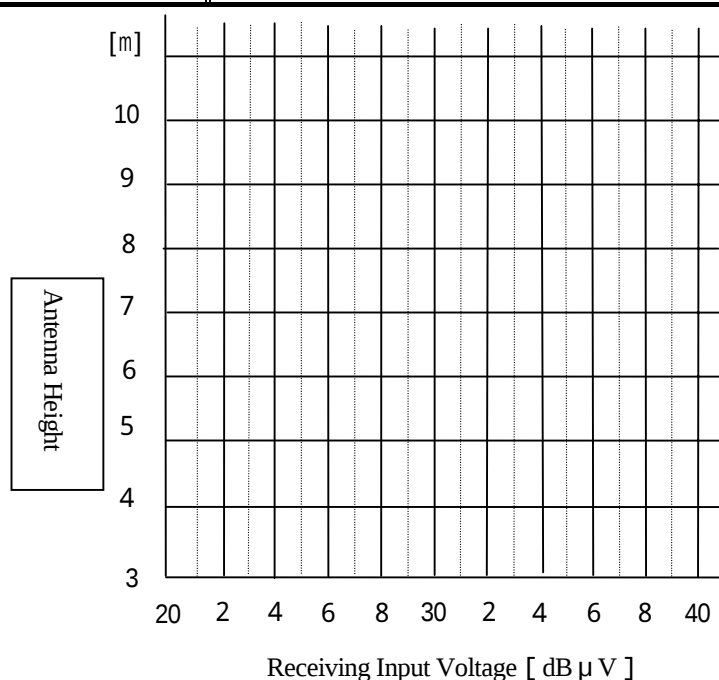


RADIO PROPAGATION TEST DATA

№-01

Test Span between	Marrakech	Oukaimeden	Date	2001/6/7	Weather	Thunder storm
			Time	08:45 –10:00		

St. code	Own Station (MS=A)					Partner Station (RP=A)				
Test Place	Coordinate				Height	Coordinate				Height
	W : 008° 00 ' 664 "				447	W : 007° 44 ' 115 "				3257
	N : 31° 37 ' 599 "				mASL	N : 31° 10 ' 468 "				mASL
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	10 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.5 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		53.0 [dB μ v]		Right Direction	N - °		50.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -6.8 [dB]		S / N = 41.9 [dB]			S = -4.8 [dB]		S / N = 42.2 [dB]		
	N = -48.7 [dB]					N = -47.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

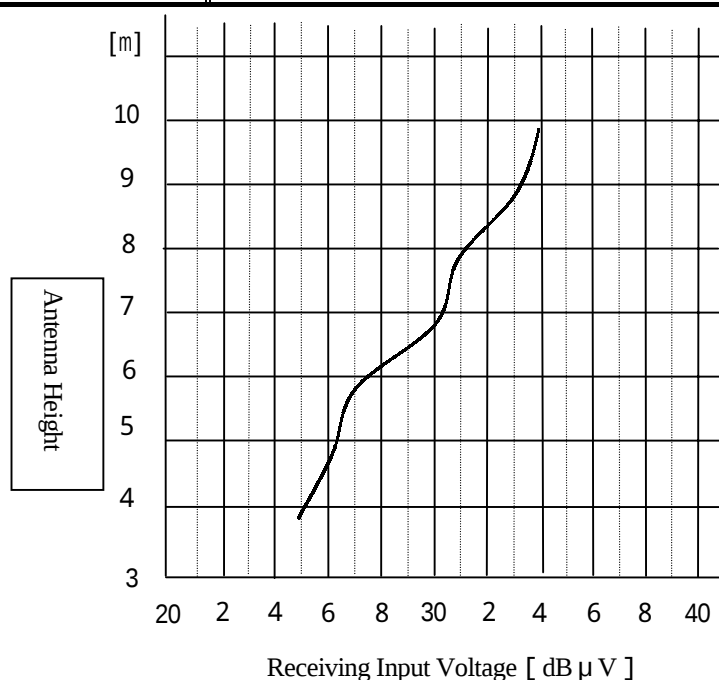
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-02

Test Span between	Marrakech	Adrar Tazaina	Date	2001/5/22	Weather	Fair
			Time	13.00 –15:00		

St. code	Own Station (MS=A)					Partner Station (RP=G)				
Test Place	Coordinate				Height	Coordinate				Height
	W : 008° 00 ' 664 "				447	W : 007° 44 ' 115 "				3010
	N : 31° 37 ' 599 "				mASL	N : 31° 10 ' 468 "				mASL
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	10 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	11.5 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		34.0 [dB μ v]		Right Direction	N - °		34.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -8.0 [dB]		S / N = 42.1 [dB]			S = -6.0 [dB]		S / N = 40.0 [dB]		
	N = -48.0 [dB]					N = -48.1 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	34
9 m	33
8 m	31
7 m	30
6 m	27
5 m	26
4 m	25

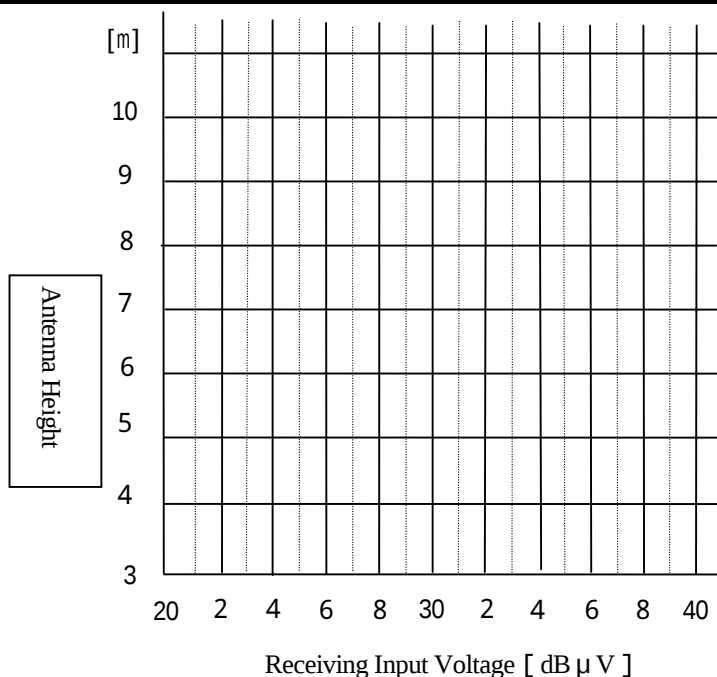
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-03

Test Span between	Marrakech	Aoulouss-2	Date	2001/6/4	Weather	Fair
			Time	13.00 –15:00		

St. code	Own Station (MS=A)				Partner Station (RP=E-2)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 008° 00 ' 664 "			447	W : 007° 38 ' 657 "			2200		
	N : 31° 37 ' 599 "			mASL	N : 31° 10 ' 468 "			mASL		
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	12 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss		dB	Length	20 m	Loss		dB
Transmission Power	Forward Power	11.0 w	Reflect Power		0 w	Forward Power	11 w	Reflect Power		0 w
Receiving Power	Right Direction	N - °		19.0 [dB μ v]		Right Direction	N - °		17.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.9 [dB]		S / N = 37.1 [dB]			S = -6.0 [dB]		S / N = 40.0 [dB]		
	N = -44.0 [dB]					N = -46.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

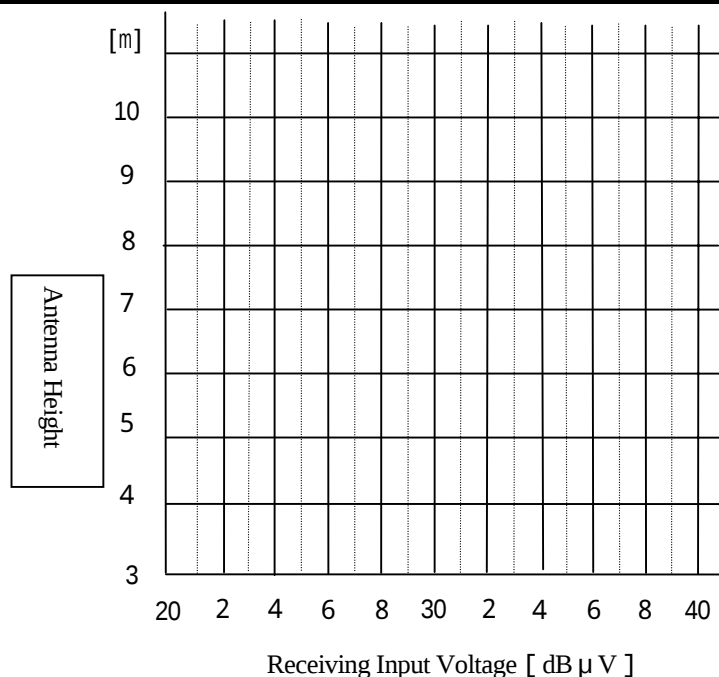
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-04

Test Span between	Marrakech	Aoulouss-1	Date	2001/6/14	Weather	Fair
			Time	11.00 –12:00		

St. code	Own Station (RP=A)				Partner Station (RP=E-1)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 008° 00 ' 664 "			447	W : 007° 38 ' 653 "			2512		
	N : 31° 37 ' 599 "			mASL	N : 31° 14 ' 973 "			mASL		
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	12m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.0 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		34.0 [dB μ v]		Right Direction	N - °		32.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.4 [dB]		S / N = 42.4 [dB]			S = -6.0 [dB]		S / N = 42.0 [dB]		
	N = -47.8 [dB]					N = -48.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

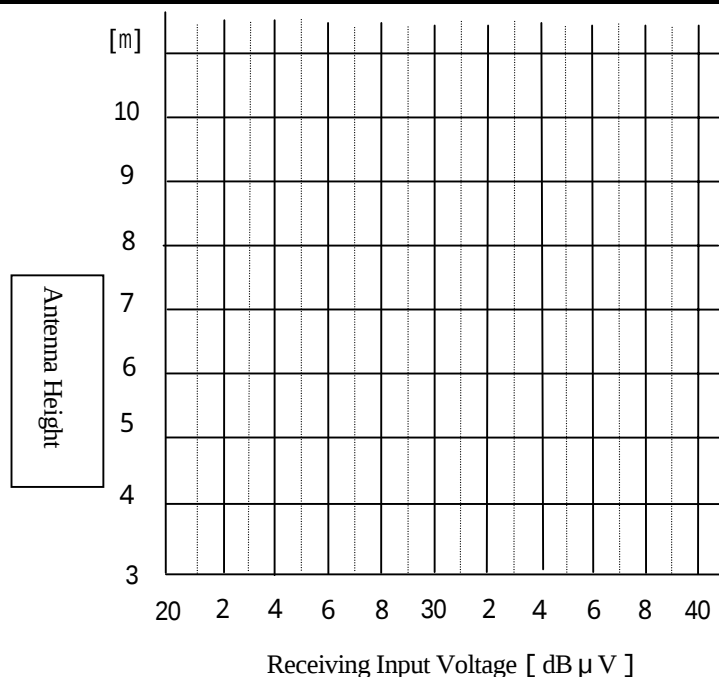
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-05

Test Span between	Oukaimeden	Adrar Tazaina	Date	2001/5/23	Weather	Fair
			Time	13.00 –15:00		

St. code	Own Station (RP=A)				Partner Station (RP=G)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 007° 44 ' 115 "			3257	W : 007° 44 ' 115 "			3010		
	N : 31° 10 ' 468 "			mASL	N : 31° 10 ' 468 "			mASL		
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	9.5 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss		dB	Length	20 m	Loss		dB
Transmission Power	Forward Power	11.0 w	Reflect Power	0 w		Forward Power	10 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		40.0 [dB μ v]		Right Direction	N - °		40.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = +9.4 [dB]		S / N = 41.4 [dB]			S = +10.0 [dB]		S / N = 39.7 [dB]		
	N = -32.0 [dB]					N = -29.7 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

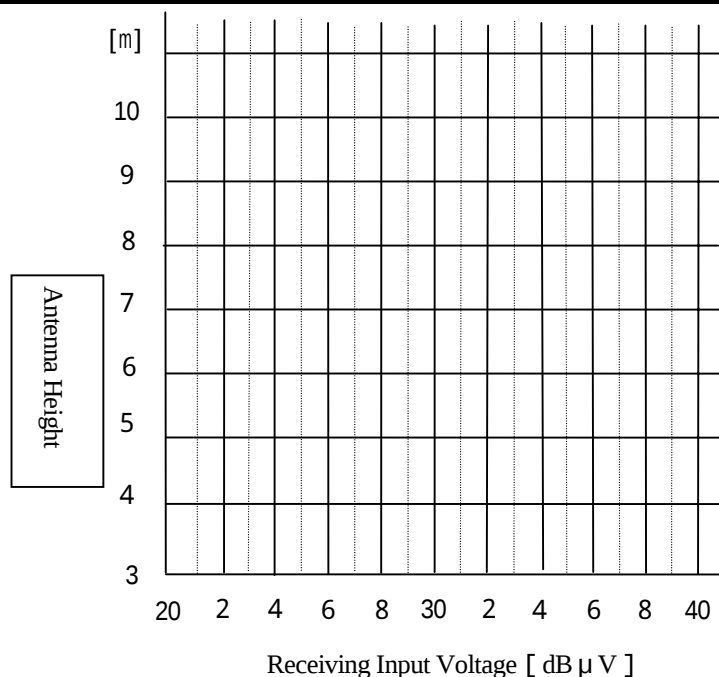
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-06

Test Span between	Oukaimeden	Aoulouss-2	Date	2001/6/6	Weather	Fair
			Time	11.45 -13:00		

St. code	Own Station (RP=A)				Partner Station (RP=E-2)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 007° 51 ' 721 "			3257	W : 007° 38 ' 657 "			2200		
	N : 31° 10 ' 408 "			mASL	N : 31° 14 ' 861 "			mASL		
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	9.5 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss		dB	Length	20 m	Loss		dB
Transmission	Forward	10.0	Reflect	0 w		Forward	10.6 w	Reflect	0 w	
Power	Power	5 w	Power			Power		Power		
Receiving Power	Right	N - °		27.0 [dB μ v]		Right	N - °		26.0 [dB μ v]	
	Direction					Direction				
S / N		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -4.9 [dB]		S / N = 40.3 [dB]			S = -5.9 [dB]		S / N = 41.1 [dB]		
	N = -45.2 [dB]					N = -47.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

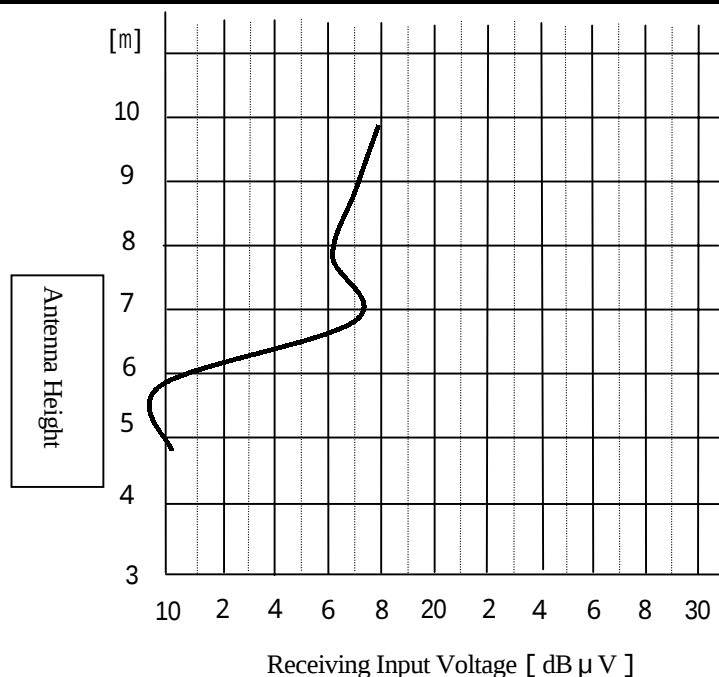
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-07

Test Span between	Agouns	Oukaimeden	Date	2001/6/8	Weather	Fair
			Time	12.10 -13:00		

St. code	Own Station (TM=7)				Partner Station (RP=A)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 007° 48 ' 056 "			2430	W : 007° 51 ' 721 "			3257		
	N : 31° 11 ' 678 "			mASL	N : 31° 10 ' 468 "			mASL		
Frequency	72.325 M H z (Vertical emission)									
Antenna	Type	3-element Yagi		Gain	8 dB	Type	Sleeve type		Gain	2 dB
	Height	10 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.0 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		18.0 [dB μ v]		Right Direction	N - °		18.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -4.9 [dB]		S / N = 38.1 [dB]			S = -6.2 [dB]		S / N = 40.8 [dB]		
	N = -43.0 [dB]					N = -47.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	18
9 m	17
8 m	16
7 m	17
6 m	10
5 m	10
4 m	

ANTENNA HEIGHT PATTERN

ANTENNA HORIZONTAL PATTERN

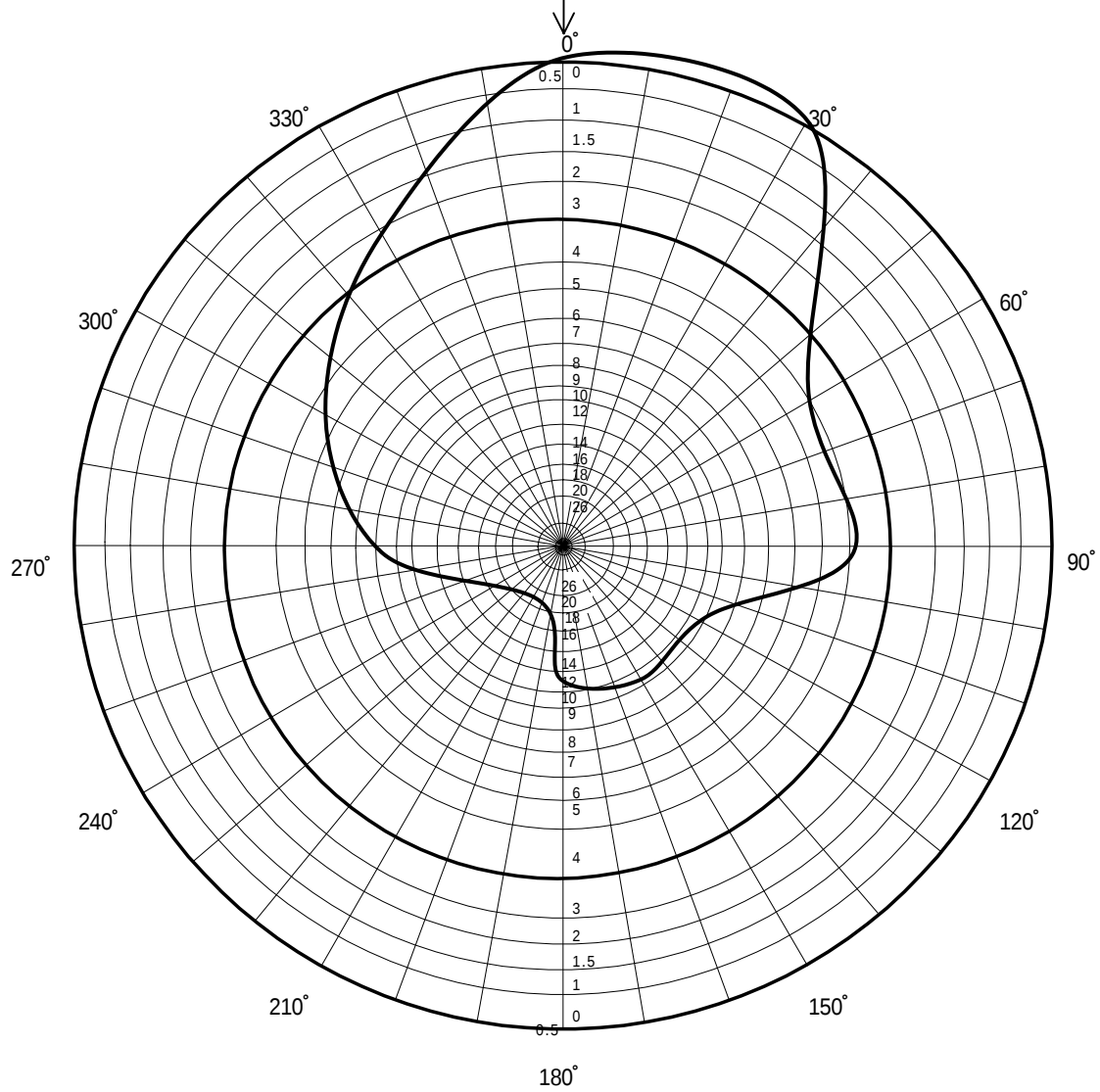
【 72.325 MHz 】

Place: Agouns

Antenna:3-element Yagi

Direction (T N :)

Antenna Height 10 m



[d B μ V]

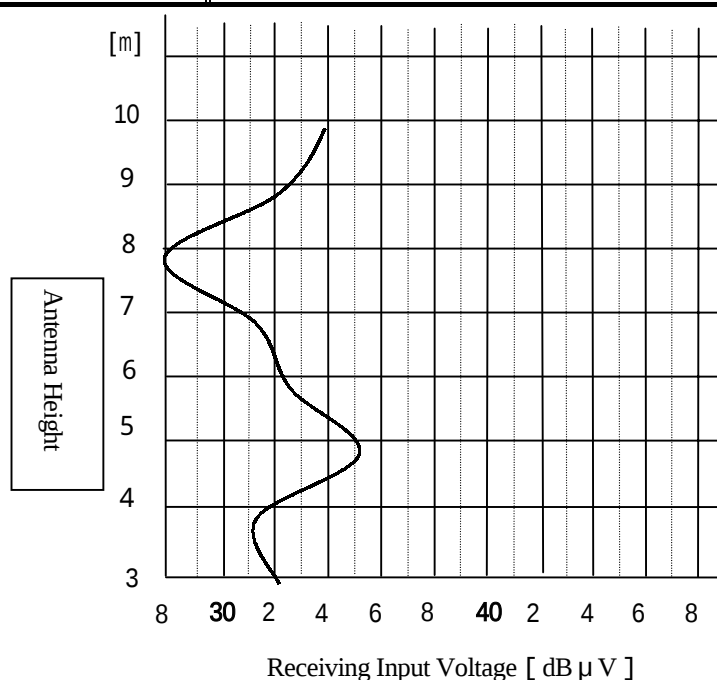
Angle	0°	30°	60°	90°	120°	150°
Receiving Input Voltage	18	18	14	14	9	4
	0	0	-4	-4	-9	-10
Angle	180°	210°	240°	270°	300°	330°
Receiving Input Voltage	5	1	5	10	12.5	16
	-13	-17	-13	-8	-5.5	-1

RADIO PROPAGATION TEST DATA

Neal-08

Test Span between	Tiourdiou	Adrar Tazaina	Date	2001/5/23	Weather	Fair
			Time	13.00 –15:00		

St. code	Own Station (TM=06)					Partner Station (RP=G)				
Test Place	Coordinate				Height	Coordinate				Height
	W : 007° 44 ' 687 "				1750	W : 007° 44 ' 115 "				3010
	N : 31° 1' 875 "				mASL	N : 31° 10 ' 468 "				mASL
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	3-element Yagi		Gain	8 dB	Type	Sleeve type		Gain	2 dB
	Height	10 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.0 w	Reflect Power	0 w		Forward Power	7 w	Reflect Power	2 w	
Receiving Power	Right Direction	N - °		34.0 [dB μ v]		Right Direction	N - °		31.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = +10.0 [dB]		S / N = 38.0 [dB]			S = +5.1 [dB]		S / N = 42.1 [dB]		
	N = -28.0 [dB]					N = -37.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	34
9 m	32
8 m	28
7 m	31
6 m	32.5
5 m	35
4 m	31

ANTENNA HEIGHT PATTERN

ANTENNA HORIZONTAL PATTERN

【 72.325 MHz 】

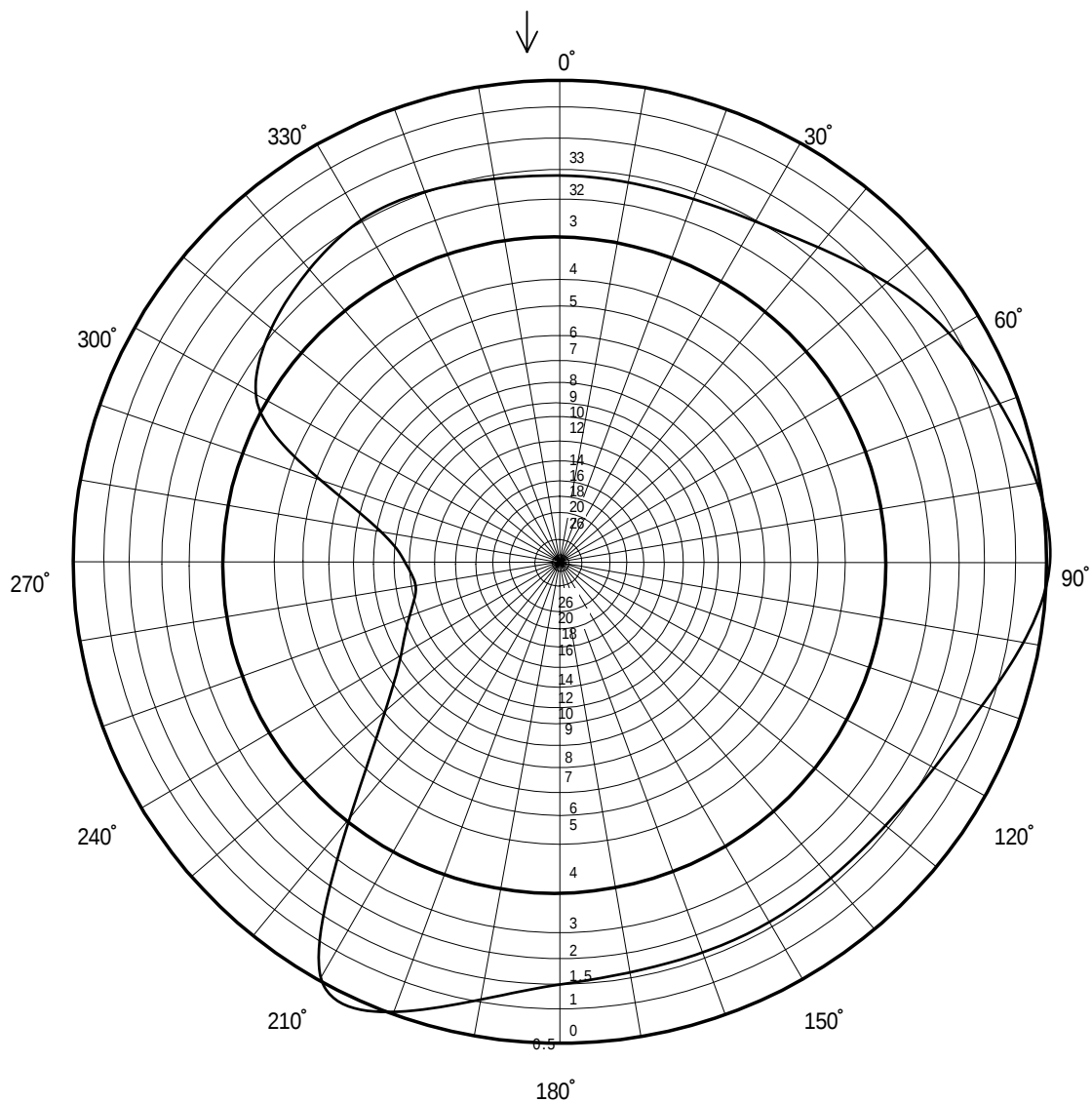
Place: Tiourdiou

Antenna: 3-element Yagi

Direction (T N : 160 °)

Antenna Height 10

m



[d B μ V]

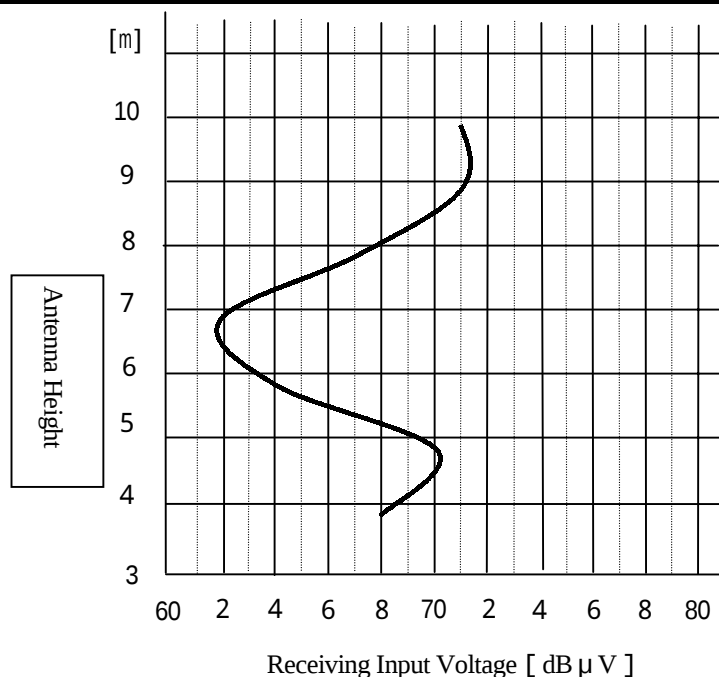
Angle	0°	30°	60°	90°	120°	150°
Receiving Input Voltage	34	34	36	37	35	35
	0	0	+2	+3	+1	+1
Angle	180°	210°	240°	270°	300°	330°
Receiving Input Voltage	35	38	24	21	30	32
	+1	-6	-10	-13	-4	-2

RADIO PROPAGATION TEST DATA

Neal-09

Test Span between	Amenzal	Adrar Tazaina	Date	2001/5/25	Weather	Fair
			Time	13.00 –15:00		

St. code	Own Station (TM=5)				Partner Station (RP=G)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 007° 43 ' 242 "			2200	W : 007° 44 ' 115 "			3010		
	N : 31° 10 ' 265 "			mASL	N : 31° 10 ' 468 "			mASL		
Frequency	72.025 M H z (Vertical emission)									
Antenna	Type	3-element Yagi		Gain	8 dB	Type	Sleeve type		Gain	2 dB
	Height	10 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.0 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - 300°		71.0 [dB μ v]		Right Direction	N - °		71.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = +9.3 [dB]		S / N = 42.8 [dB]			S = +10.0 [dB]		S / N = 39.7 [dB]		
	N = -33.5 [dB]					N = -29.7 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	71
9 m	71
8 m	67
7 m	62
6 m	64
5 m	70
4 m	68

ANTENNA HEIGHT PATTERN

ANTENNA HORIZONTAL PATTERN

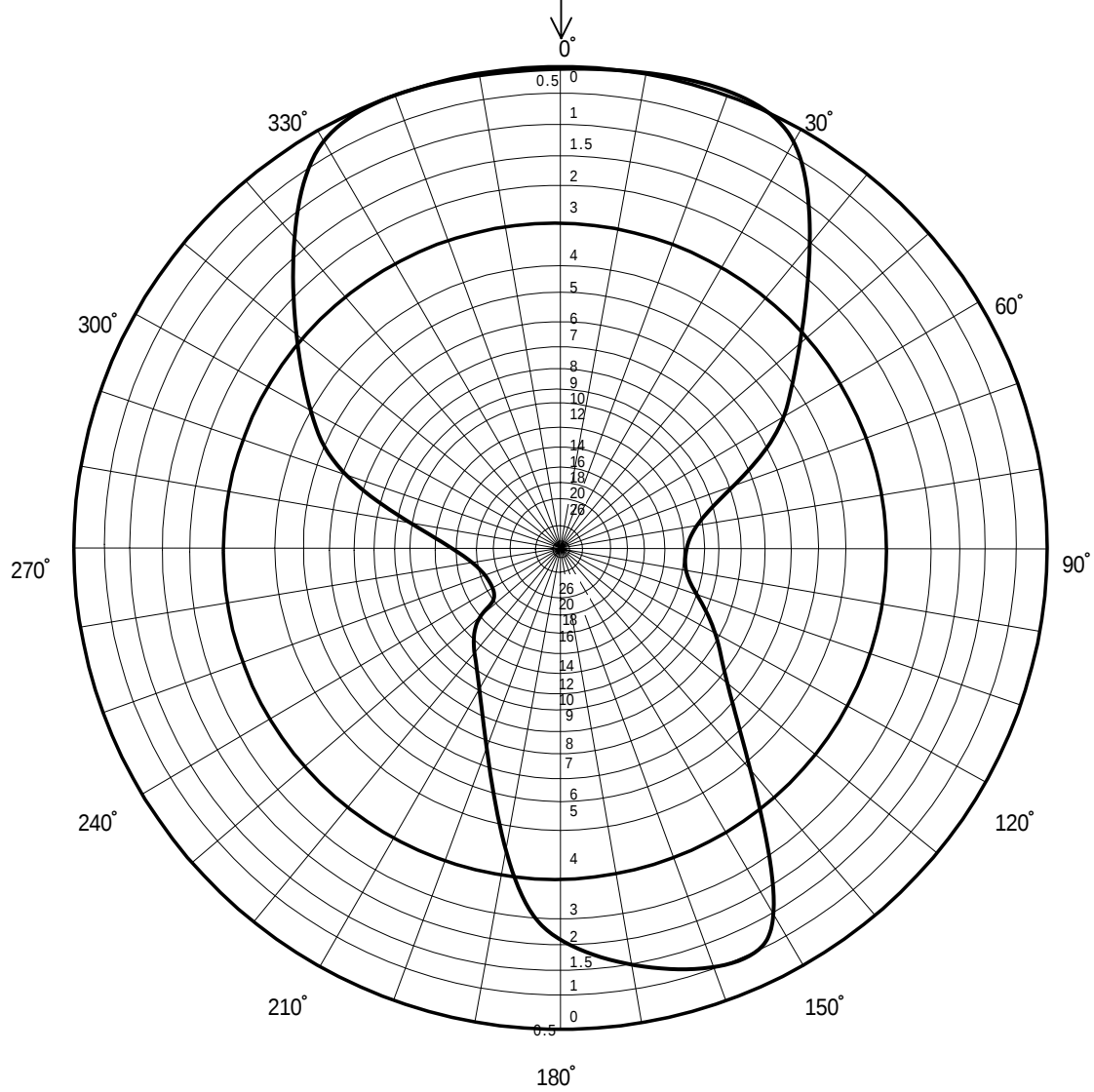
【 72.325 MHz 】

Place: Amenzal

Antenna: 3-element Yagi

Direction(T N : 300 °)

Antenna Height 10 m



[d B μ V]

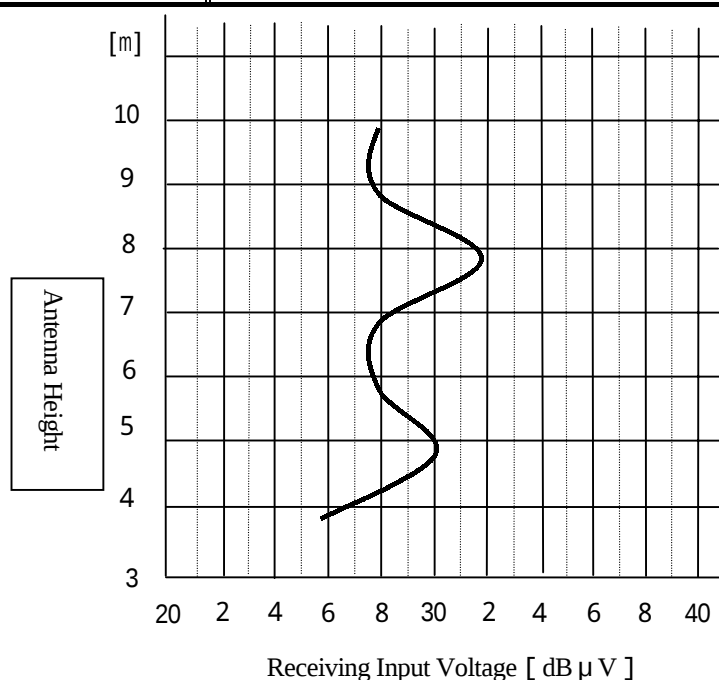
Angle	0°	30°	60°	90°	120°	150°
Receiving Input Voltage	71	71	67	62	64	70
	0	0	-4	-9	-7	-1
Angle	180°	210°	240°	270°	300°	330°
Receiving Input Voltage	68	57	53	66	70	71
	-3	-14	-18	-5	-1	0

RADIO PROPAGATION TEST DATA

Neal-010

Test Span between	Tazzitount	Aoulouss-2	Date	2001/6/5	Weather	Fair
			Time	9.00 - 10:00		

St. code	Own Station (TM=03)					Partner Station (RP=E-2)				
Test Place	Coordinate				Height	Coordinate				Height
	W : 007° 41 ' 223 "				1240	W : 007° 44 ' 115 "				2200
	N : 31° 16 ' 281 "				mASL	N : 31° 10 ' 468 "				mASL
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	3-element Yagi		Gain	8 dB	Type	Sleeve type		Gain	2 dB
	Height	8.0 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.0 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		28.0 [dB μ v]		Right Direction	N - °		24.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.4 [dB]		S / N = 42.6 [dB]			S = -5.7 [dB]		S / N = 41.5 [dB]		
	N = -48.0 [dB]					N = -47.2 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	28
9 m	28
8 m	32
7 m	28
6 m	28
5 m	30
4 m	26

ANTENNA HEIGHT PATTERN

ANTENNA HORIZONTAL PATTERN

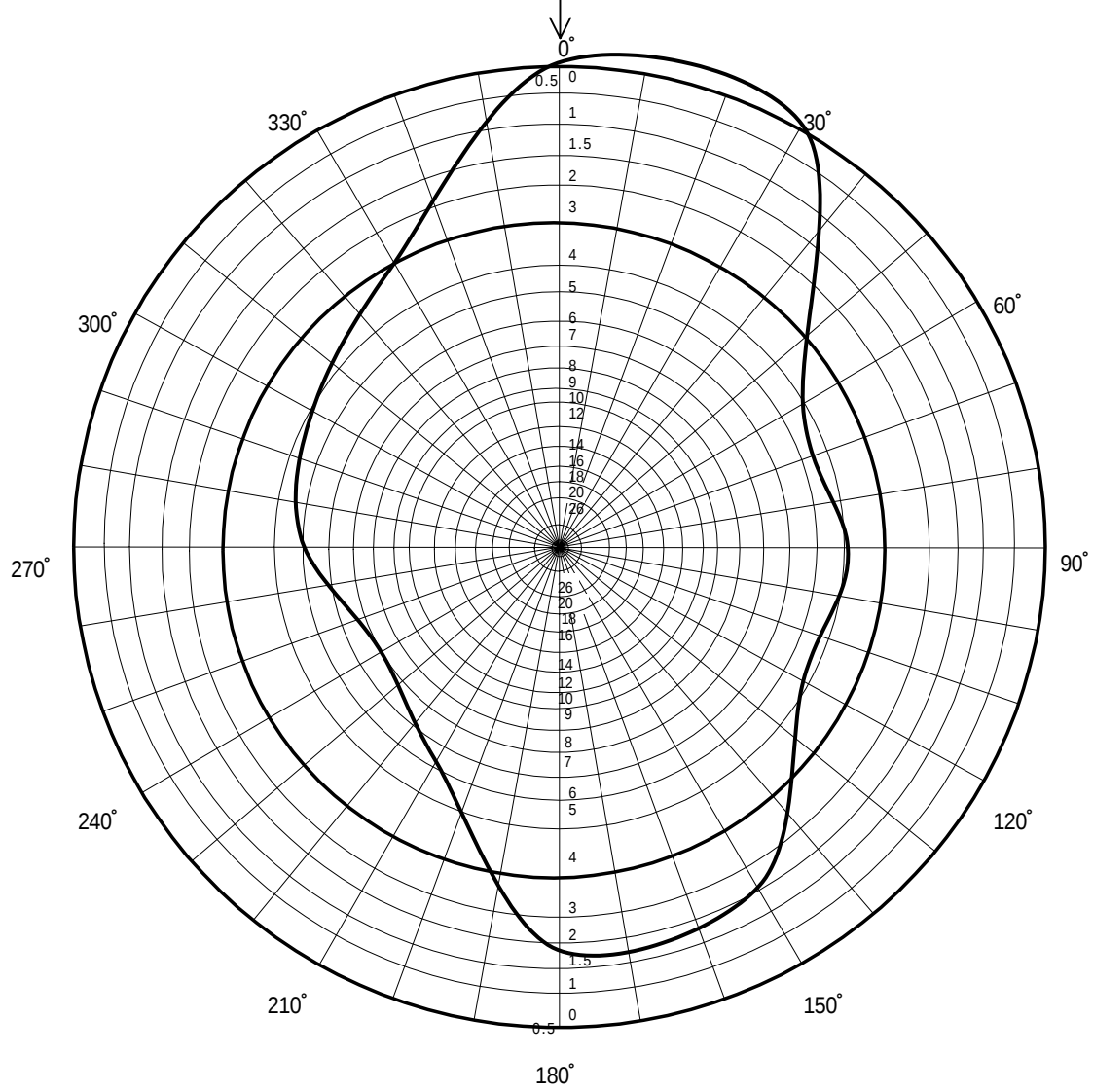
【 72.325 MHz 】

Place: Tazzitount

Antenna: 3-element Yagi

Direction (T N :)

Antenna Height : 8 m



[d B μ V]

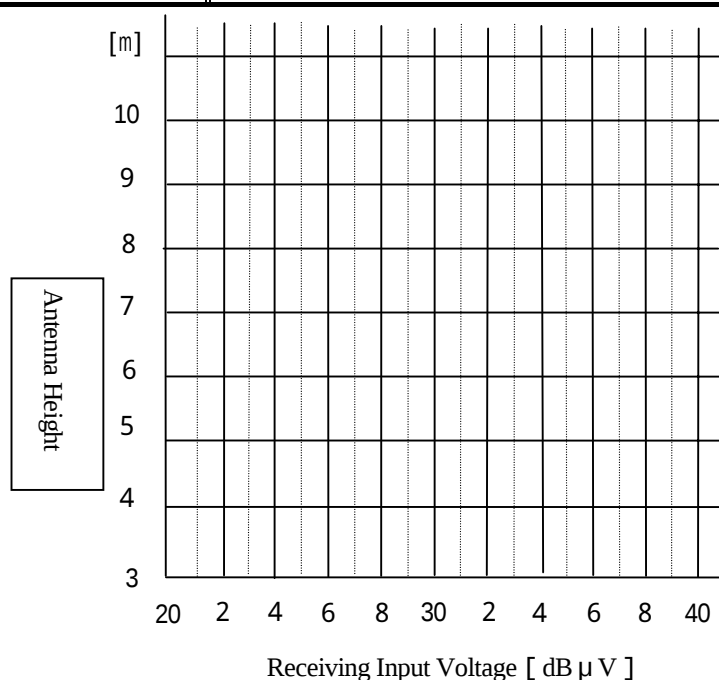
Angle	0°	30°	60°	90°	120°	150°
Receiving Input Voltage	28	28	24	24	24	26
	0	0	-4	-4	-4	-2
Angle	180°	210°	240°	270°	300°	330°
Receiving Input Voltage	26	23	21	23	24	25
	-2	-5	-7	-5	-4	-3

RADIO PROPAGATION TEST DATA

Neal-011

Test Span between	Tazzitount	Aoulouss-1	Date	2001/6/14	Weather	Fair
			Time	14.30 –15:00		

St. code	Own Station (TM=03)					Partner Station (RP=E-2)				
Test Place	Coordinate				Height	Coordinate				Height
	W : 007° 41 ' 223 "				1240	W : 007° 44 ' 115 "				2512
	N : 31° 16 ' 281 "				mASL	N : 31° 10 ' 468 "				mASL
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	3-element Yagi		Gain	8 dB	Type	Sleeve type		Gain	2 dB
	Height	8.0 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.0 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		43.0 [dB μ v]		Right Direction	N - °		56.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.4 [dB]		S / N = 42.6 [dB]			S = -6.3 [dB]		S / N = 43.0 [dB]		
	N = -48.0 [dB]					N = -49.3 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

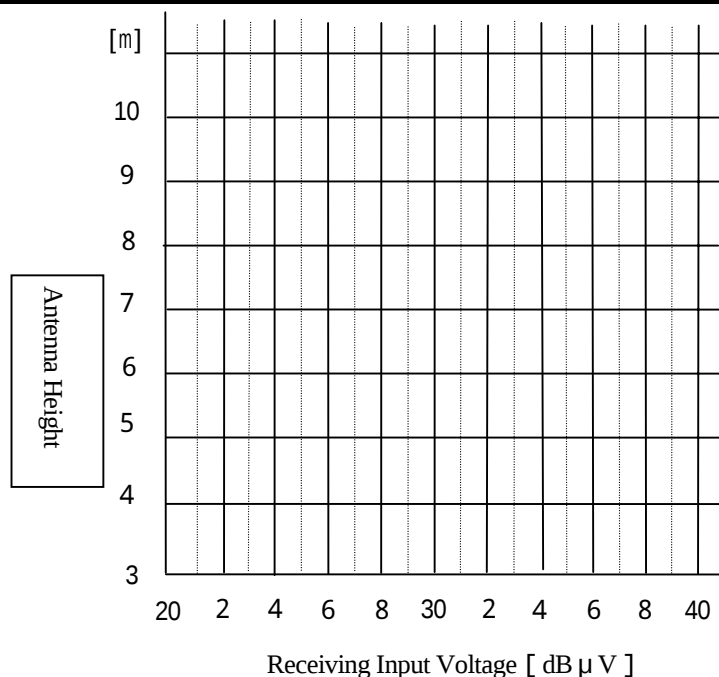
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-012

Test Span between	Tazzitount	Aoulouss-1	Date	2001/6/14	Weather	Fair
			Time	14.30 –15:00		

St. code	Own Station (TM=03)				Partner Station (RP=E-2)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 007° 41 ' 223 "			1240	W : 007° 44 ' 115 "			2512		
	N : 31° 16 ' 281 "			mASL	N : 31° 10 ' 468 "			mASL		
Frequency	72.325 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	8.0 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss		dB	Length	20 m	Loss		dB
Transmission Power	Forward Power	10.0 w	Reflect Power	0 w		Forward Power	11 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		48.0 [dB μ v]		Right Direction	N - °		56.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.4 [dB]		S / N = 43.0 [dB]			S = -6.3 [dB]		S / N = 43.7 [dB]		
	N = -48.4 [dB]					N = -50.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

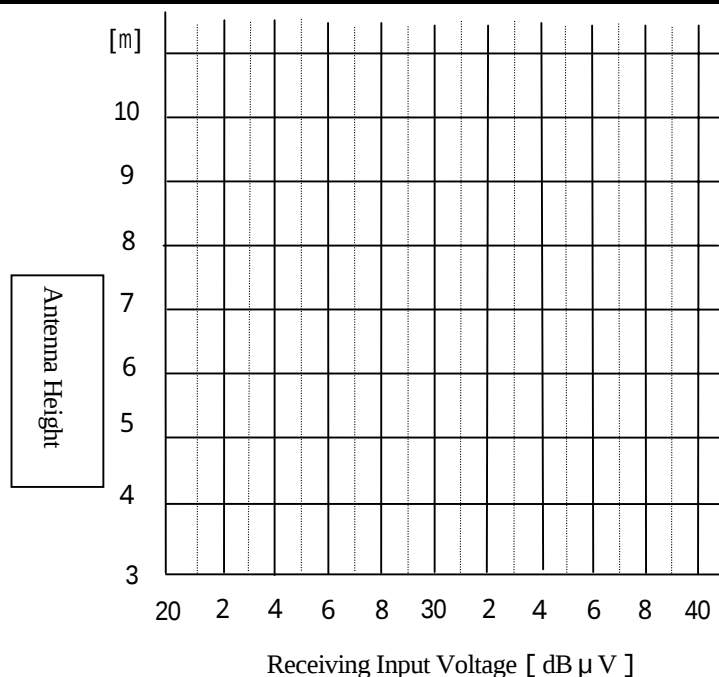
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-013

Test Span between	Touichit	Aoulouss-2	Date	2001/6/5	Weather	Fair
			Time	13.30 -15:00		

St. code	Own Station (TM=5)				Partner Station (RP=G)					
Test Place	Coordinate			Height	Coordinate			Height		
	W : 007° 38 ' 205 "			1600	W : 007° 38 ' 657 "			2200		
	N : 31° 14 ' 291 "			mASL	N : 31° 14 ' 861 "			mASL		
Frequency	72.025 MH z (Vertical emission)									
Antenna	Type	3-element Yagi		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	10 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	8.0 w	Reflect Power	2 w		Forward Power	10.5 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		43.0 [dB μ v]		Right Direction	N - °		43.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.4 [dB]		S / N = 42.4 [dB]			S = -5.9 [dB]		S / N = 42.7 [dB]		
	N = -47.8 [dB]					N = -48.6 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

ANTENNA HEIGHT PATTERN

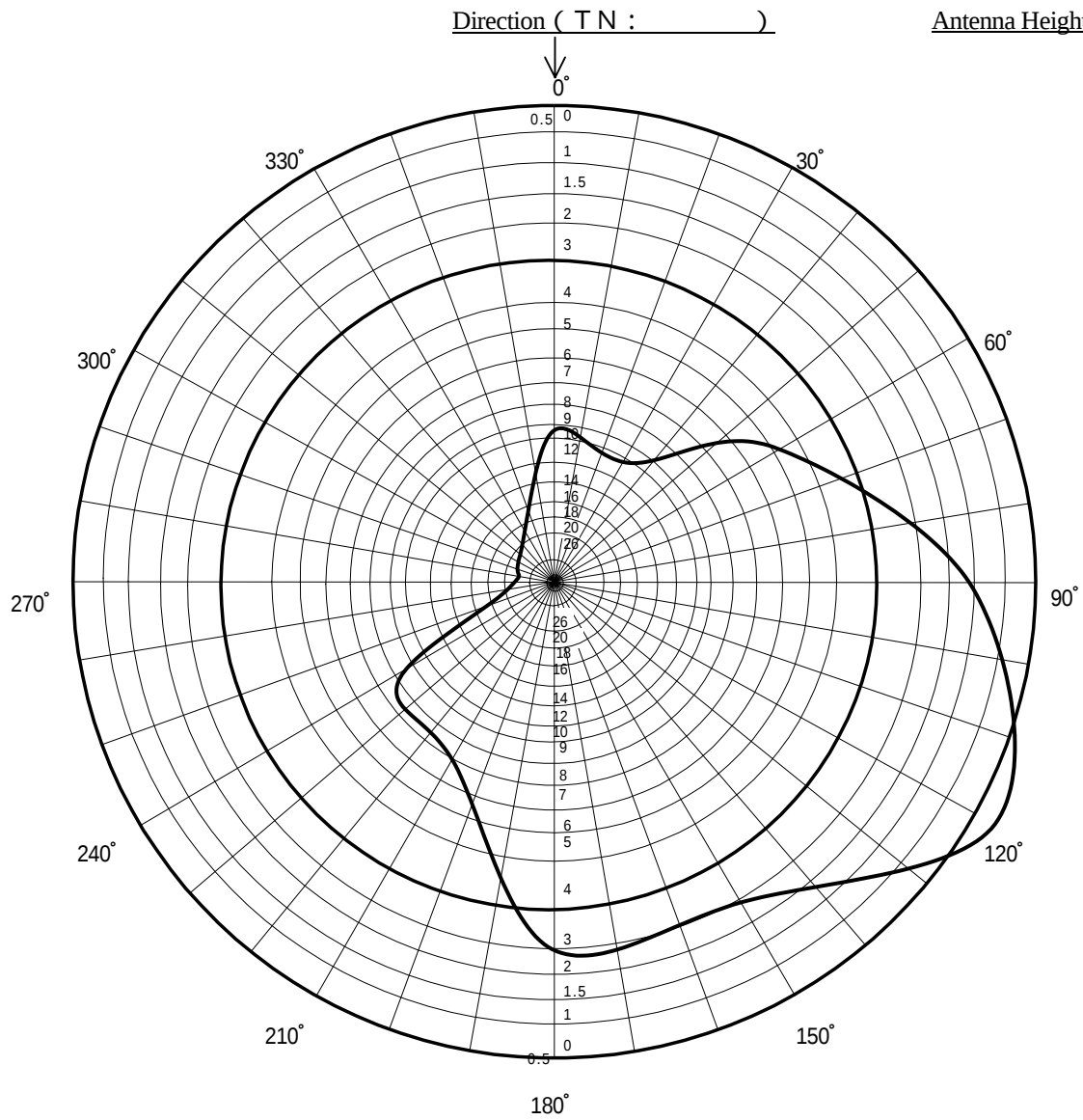
ANTENNA HORIZONTAL PATTERN

【 72.325 MHz 】

Place: Tourchit

Antenna: 3-elemet Yagi

Antenna Height :6 m



[d B μ V]

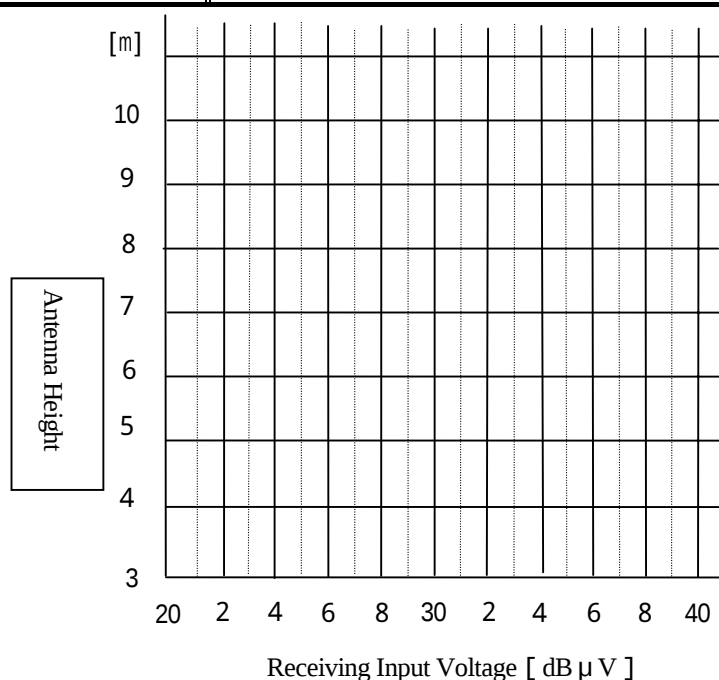
Angle	0°	30°	60°	90°	120°	150°
Receiving Input Voltage	43	43	48	52	54	50
	0	0	+5	+9	+11	+7
Angle	180°	210°	240°	270°	300°	330°
Receiving Input Voltage	50	46	44	33	33	28
	+7	+3	+1	-10	-10	-15

RADIO PROPAGATION TEST DATA

Neal-014

Test Span between	Touichit	Aoulouss-1	Date	2001/6/5	Weather	Fair
			Time	13.30 -15:00		

St. code	Own Station (TM=5)					Partner Station (RP=G)				
Test Place	Coordinate				Height	Coordinate				Height
	W : 007° 38 ' 205 "				1600	W : 007° 38 ' 653 "				2512
	N : 31° 14 ' 291 "				mASL	N : 31° 14 ' 973 "				mASL
Frequency	72.025 MH z (Vertical emission)									
Antenna	Type	3-element Yagi		Gain	8 dB	Type	Sleeve type		Gain	2 dB
	Height	5.0 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	8.0 w	Reflect Power	2 w		Forward Power	10.5 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		50.0 [dB μ v]		Right Direction	N - °		50.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.3 [dB]		S / N = 42.0 [dB]			S = -6.2 [dB]		S / N = 42.8 [dB]		
	N = -47.3 [dB]					N = -49.0 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

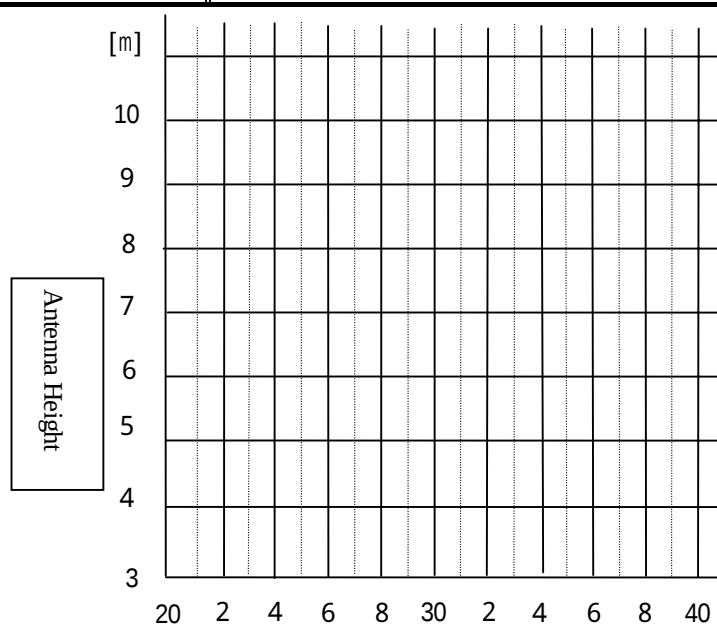
ANTENNA HEIGHT PATTERN

RADIO PROPAGATION TEST DATA

Neal-015

Test Span between	Touichit	Aoulouss-1	Date	2001/6/5	Weather	Fair
			Time	13.30 –15:00		

St. code	Own Station (TM=5)					Partner Station (RP=G)				
Test Place	Coordinate				Height	Coordinate				Height
	W : 007° 38 ' 205 "				1600	W : 007° 38 ' 653 "				2512
	N : 31° 14 ' 291 "				mASL	N : 31° 14 ' 973 "				mASL
Frequency	72.025 MH z (Vertical emission)									
Antenna	Type	Sleeve type		Gain	2 dB	Type	Sleeve type		Gain	2 dB
	Height	10 m above ground level				Height	10 m above ground level			
Coaxial Cable	Type	8D-2V				Type	8D-2V			
	Length	20 m	Loss	dB		Length	20 m	Loss	dB	
Transmission Power	Forward Power	10.5 w	Reflect Power	0 w		Forward Power	10.5 w	Reflect Power	0 w	
Receiving Power	Right Direction	N - °		57.0 [dB μ v]		Right Direction	N - °		58.0 [dB μ v]	
		N - °		[dB μ v]			N - °		[dB μ v]	
S / N	S = -5.4 [dB]		S / N = 42.4 [dB]			S = -5.9 [dB]		S / N = 42.7 [dB]		
	N = -47.8 [dB]					N = -48.6 [dB]				
Field Strength	Anritsu Corp. ML518A, M22265					Anritsu Corp. ML518A, M21562				
Signal Generator	Fujisoku Corp. FS-1015A-II, 2856K					Fujisoku Corp. FS-1015A-II, 2857K				
Level Meter	Oi Electric Co. Ltd., LM-312, OY250283					Oi Electric Co. Ltd., LM-312, 79210179				



Antenna Height [m]	Receiving Input [dB μ v]
10 m	
9 m	
8 m	
7 m	
6 m	
5 m	
4 m	

ANTENNA HEIGHT PATTERN