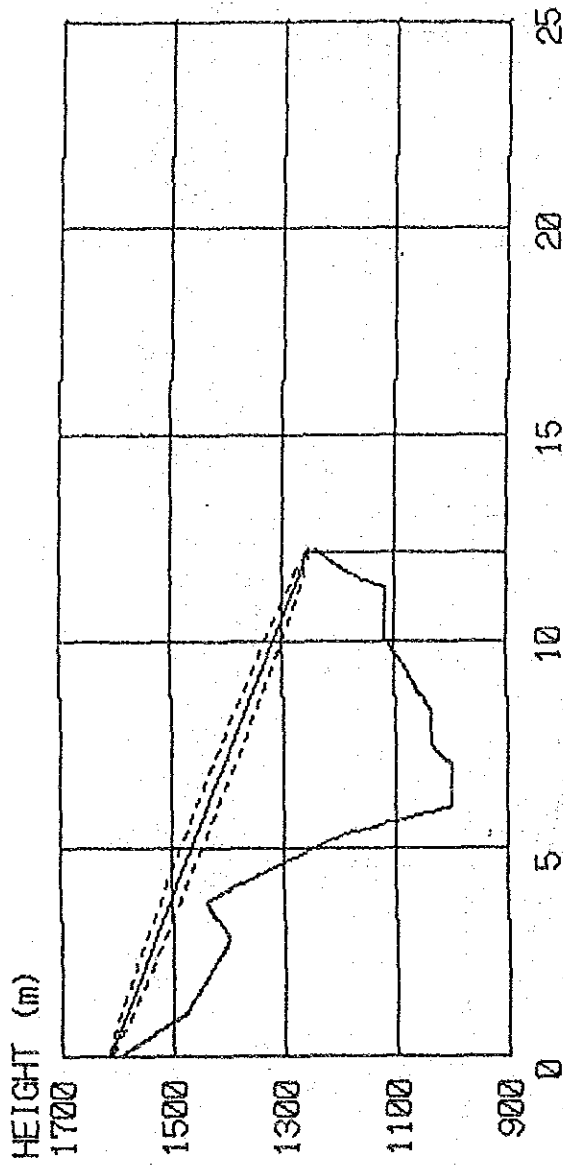


PROFILE

(K : 1.33 FREQUENCY : 2400 MHZ)



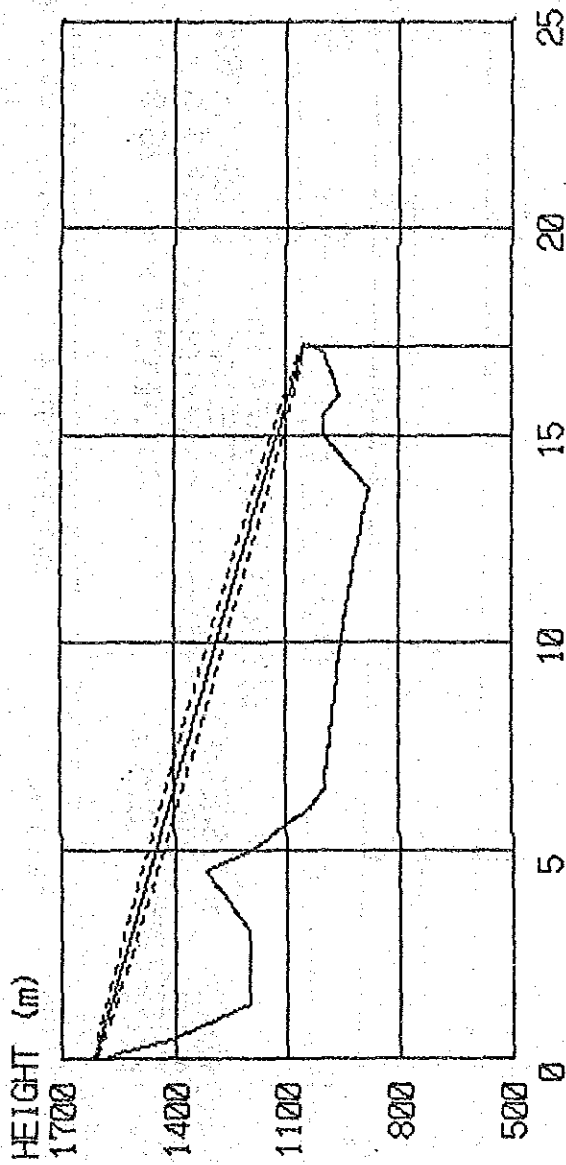
| | |
|-------------------------|-------------------------|
| SITE NAME : ARID | DISTANCE : 12.2 km |
| GROUND LEVEL : 1600.0 m | SITE NAME : YUFRUS |
| ANT.HEIGHT 1 : 15.0 m | GROUND LEVEL : 1240.0 m |
| | ANT.HEIGHT 2 : 10.0 m |

| | |
|----------------------------|-------------------------|
| ANT.HEIGHT 1 : 15.0 m | ANT.HEIGHT 2 : 10.0 m |
| CRITICAL POINT : 3.7 Km | RIDGE HEIGHT : 1440.0 m |
| TREE HEIGHT : 0.0 m | FRESNEL DEP. : 18.0 m |
| CLEARANCE : 62.5 m | CLEARANCE FAC. : 3.5 |
| FREE SPACE LOSS : 121.8 dB | RIDGE LOSS : 0.2 dB |
| TOTAL LOSS : 122.0 dB | |

| | |
|-------------|-----|
| PROFILE No. | 122 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHz)



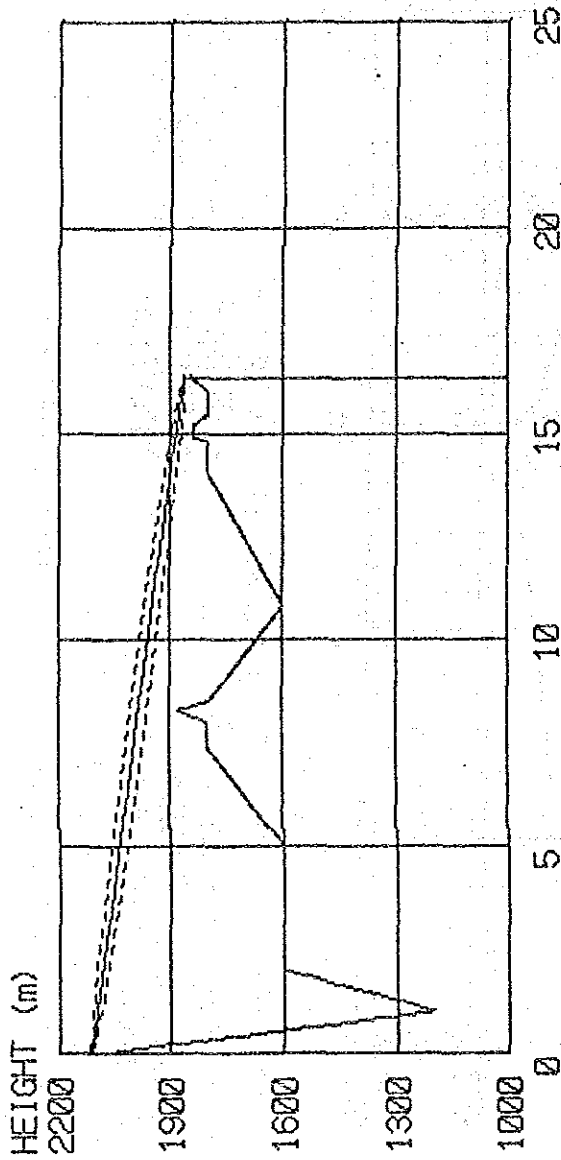
SITE NAME : ARID DISTANCE : 17.2 km SITE NAME : AL MUDAYHIS
 GROUND LEVEL : 1600.0 m GROUND LEVEL : 1040.0 m
 ANT.HEIGHT 1 : 15.0 m ANT.HEIGHT 2 : 10.0 m

| | | | | | |
|-----------------|---|----------|----------------|---|----------|
| ANT.HEIGHT 1 | : | 15.0 m | ANT.HEIGHT 2 | : | 10.0 m |
| CRITICAL POINT | : | 4.5 Km | RIDGE HEIGHT | : | 1320.0 m |
| TREE HEIGHT | : | 0.0 m | FRESNEL DEP. | : | 20.4 m |
| CLEARANCE | : | 143.8 m | CLEARANCE FAC. | : | 7.1 |
| FREE SPACE LOSS | : | 124.8 dB | RIDGE LOSS | : | 0.2 dB |
| TOTAL LOSS | : | 125.0 dB | | | |

| | |
|-------------|-----|
| PROFILE No. | 123 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHZ)



DISTANCE : 16.4 km

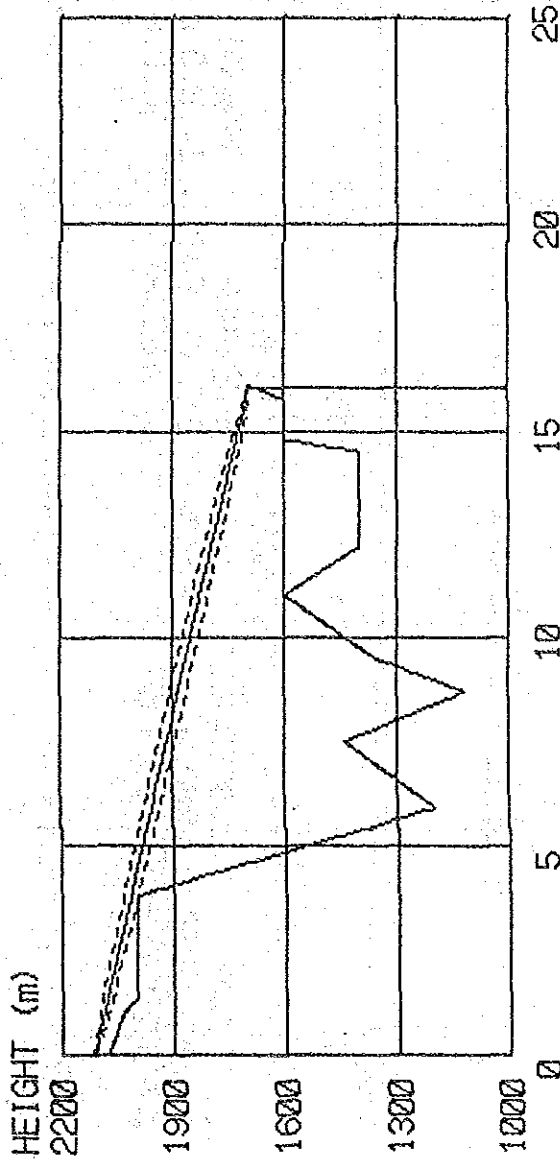
| | |
|-------------------------|-------------------------|
| SITE NAME : J. SABARAN | SITE NAME : ASH SHARAF |
| GROUND LEVEL : 2080.0 m | GROUND LEVEL : 1850.0 m |
| ANT. HEIGHT 1 : 35.0 m | ANT. HEIGHT 2 : 10.0 m |

| | |
|----------------------------|-------------------------|
| ANT. HEIGHT 1 : 35.0 m | ANT. HEIGHT 2 : 10.0 m |
| CRITICAL POINT : 15.2 Km | RIDGE HEIGHT : 1840.0 m |
| TREE HEIGHT : 0.0 m | FRESNEL DEP. : 11.8 m |
| CLEARANCE : 37.6 m | CLEARANCE FAC. : 3.2 |
| FREE SPACE LOSS : 124.4 dB | RIDGE LOSS : 0.1 dB |
| TOTAL LOSS : 124.5 dB | |

| | |
|-------------|-----|
| PROFILE No. | 124 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHz)



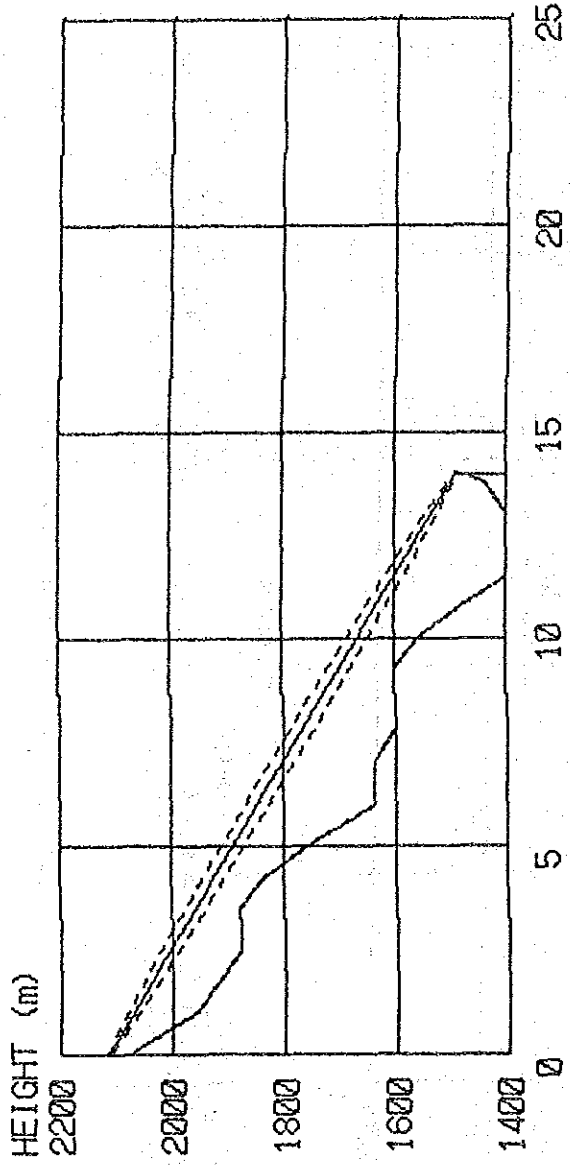
DISTANCE : 16.1 km
 SITE NAME : HAYFAN
 GROUND LEVEL : 1680.0 m
 ANT.HEIGHT 2 : 10.0 m
 SITE NAME : J.SABARAN
 GROUND LEVEL : 2080.0 m
 ANT.HEIGHT 1 : 35.0 m

| | | | | | |
|-----------------|---|----------|----------------|---|----------|
| ANT.HEIGHT 1 | : | 35.0 m | ANT.HEIGHT 2 | : | 10.0 m |
| CRITICAL POINT | : | 3.8 Km | RIDGE HEIGHT | : | 2000.0 m |
| TREE HEIGHT | : | 0.0 m | FRESNEL DEP. | : | 19.0 m |
| CLEARANCE | : | 11.9 m | CLEARANCE FAC. | : | 0.6 |
| FREE SPACE LOSS | : | 124.2 dB | RIDGE LOSS | : | -0.6 dB |
| TOTAL LOSS | : | 123.6 dB | | | |

| | |
|-------------|-----|
| PROFILE No. | 125 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHz)



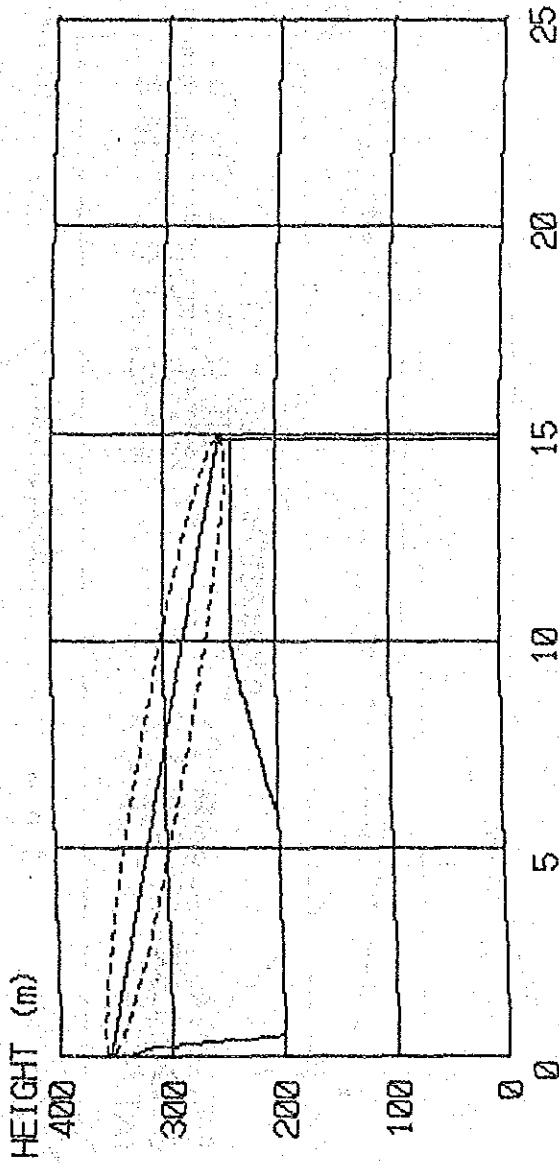
SITE NAME : J.SABARAN DISTANCE : 14 km
 SITE NAME : SHAWHAT
 GROUND LEVEL : 2080.0 m GROUND LEVEL : 1480.0 m
 ANT.HEIGHT 1 : 35.0 m ANT.HEIGHT 2 : 10.0 m

| | | | | | |
|-----------------|---|----------|----------------|---|----------|
| ANT.HEIGHT 1 | : | 35.0 m | ANT.HEIGHT 2 | : | 10.0 m |
| CRITICAL POINT | : | 3.5 Km | RIDGE HEIGHT | : | 1880.0 m |
| TREE HEIGHT | : | 0.0 m | FRESNEL DEP. | : | 18.1 m |
| CLEARANCE | : | 76.6 m | CLEARANCE FAC. | : | 4.2 |
| FREE SPACE LOSS | : | 123.0 dB | RIDGE LOSS | : | 0.3 dB |
| TOTAL LOSS | : | 123.3 dB | | | |

| | |
|-------------|-----|
| PROFILE No. | 126 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHZ)



DISTANCE : 14.9 km

SITE NAME : J.WADI BISYAN
 GROUND LEVEL : 240.0 m
 ANT.HEIGHT 2 : 10.0 m

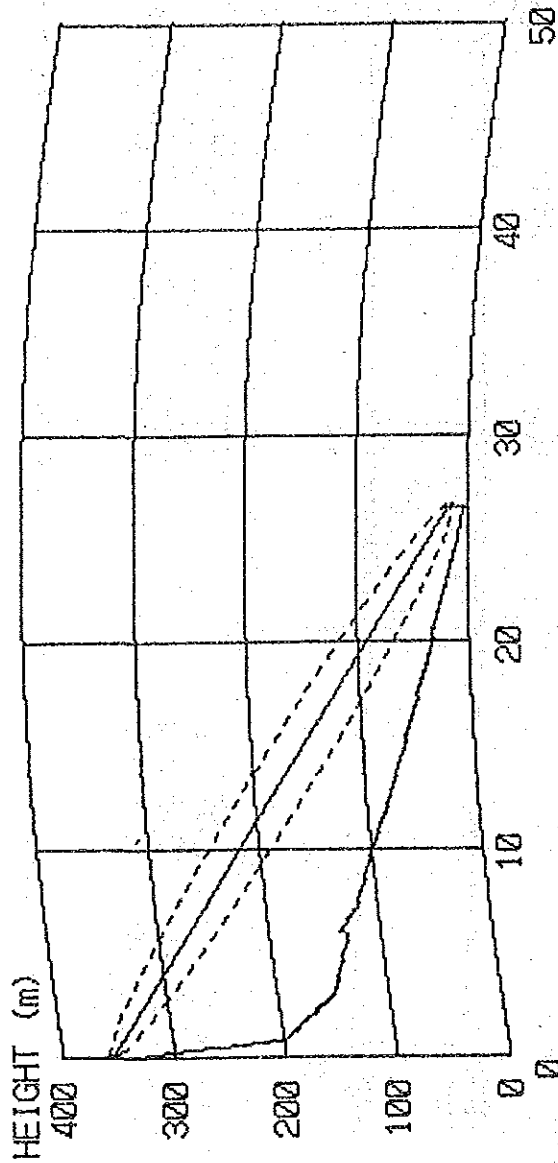
SITE NAME : J.AN NAR
 GROUND LEVEL : 340.0 m
 ANT.HEIGHT 1 : 15.0 m

| | | | | | |
|-----------------|---|----------|----------------|---|---------|
| ANT.HEIGHT 1 | : | 15.0 m | ANT.HEIGHT 2 | : | 10.0 m |
| CRITICAL POINT | : | 12.6 km | RIDGE HEIGHT | : | 240.0 m |
| TREE HEIGHT | : | 0.0 m | FRESNEL DEP. | : | 15.6 m |
| CLEARANCE | : | 24.5 m | CLEARANCE FAC. | : | 1.6 |
| FREE SPACE LOSS | : | 123.5 dB | RIDGE LOSS | : | -0.5 dB |
| TOTAL LOSS | : | 123.0 dB | | | |

| | |
|-------------|-----|
| PROFILE No. | 127 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHz)



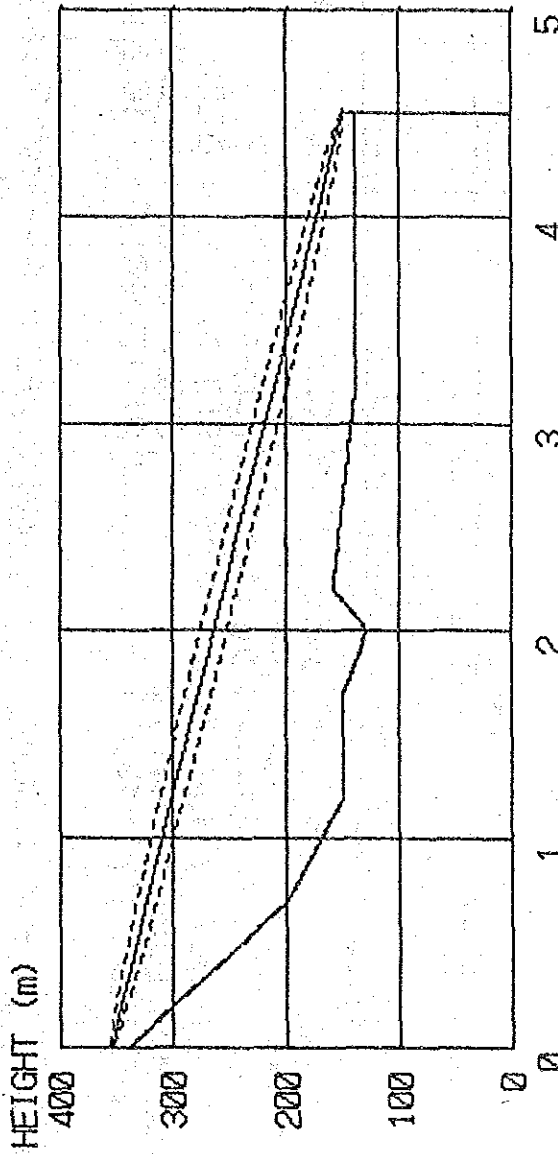
SITE NAME : J. AN NAR DISTANCE : 26.5 km SITE NAME : YAKHTUL
 GROUND LEVEL : 340.0 m GROUND LEVEL : 5.0 m
 ANT. HEIGHT 1 : 15.0 m ANT. HEIGHT 2 : 10.0 m

| | | | | | | |
|-----------------|---|----------|---|----------------|---|---------|
| ANT. HEIGHT 1 | : | 15.0 m | : | ANT. HEIGHT 2 | : | 10.0 m |
| CRITICAL POINT | : | 24.8 Km | : | RIDGE HEIGHT | : | 10.0 m |
| TREE HEIGHT | : | 0.0 m | : | FRESNEL DEP. | : | 14.1 m |
| CLEARANCE | : | 24.3 m | : | CLEARANCE FAC. | : | 1.7 |
| FREE SPACE LOSS | : | 128.5 dB | : | RIDGE LOSS | : | -0.6 dB |
| TOTAL LOSS | : | 127.9 dB | : | | : | |

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|-------------|-----|
| PROFILE No. | 128 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHz)



DISTANCE : 4.5 km

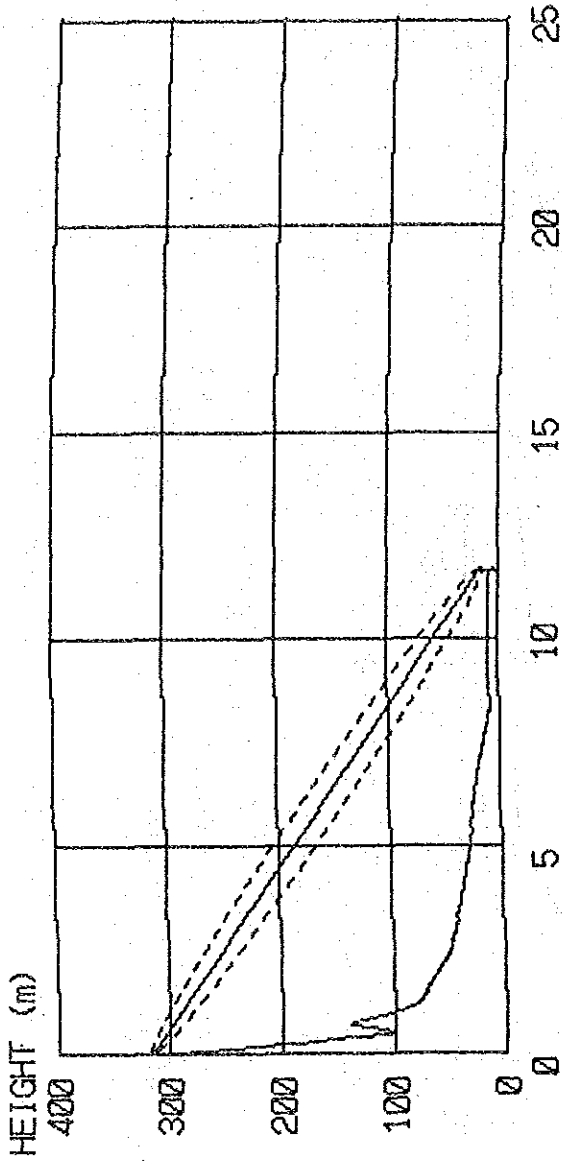
SITE NAME : J. AN NAR SITE NAME : ATH THAMBANI
 GROUND LEVEL : 340.0 m GROUND LEVEL : 140.0 m
 ANT. HEIGHT 1 : 15.0 m ANT. HEIGHT 2 : 10.0 m

| | | | |
|-----------------|------------|----------------|-----------|
| ANT. HEIGHT 1 | : 15.0 m | ANT. HEIGHT 2 | : 10.0 m |
| CRITICAL POINT | : 4.0 Km | RIDGE HEIGHT | : 140.0 m |
| TREE HEIGHT | : 0.0 m | FRESNEL DEP. | : 7.5 m |
| CLEARANCE | : 32.7 m | CLEARANCE FAC. | : 4.4 |
| FREE SPACE LOSS | : 113.1 dB | RIDGE LOSS | : -0.1 dB |
| TOTAL LOSS | : 113.1 dB | | |

| | |
|-------------|-----|
| PROFILE No. | 129 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHz)



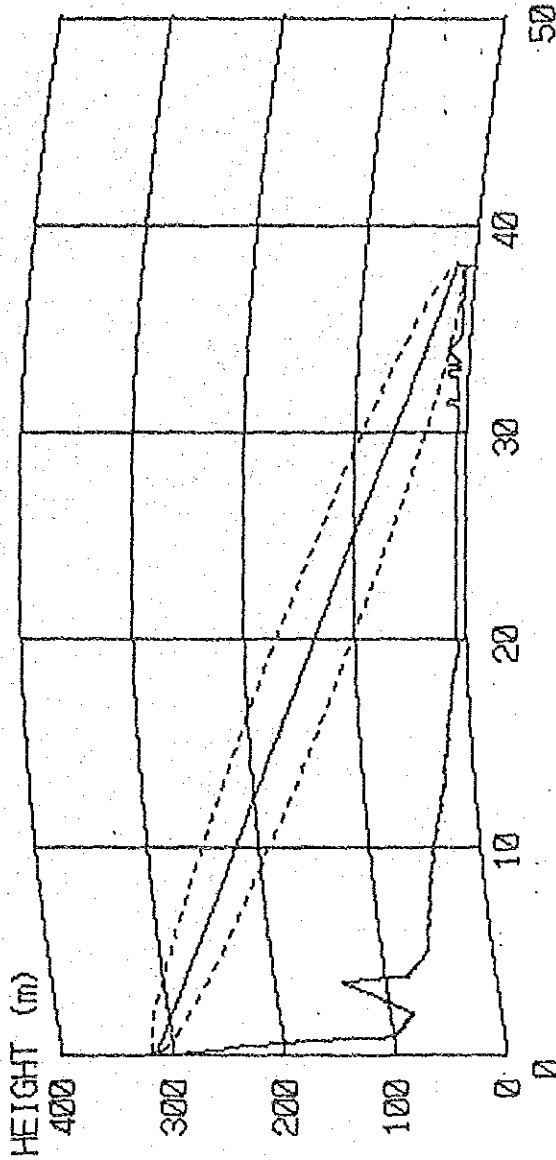
SITE NAME : J. AL UMARI DISTANCE : 11.7 km SITE NAME : DHUBAB
 GROUND LEVEL : 300.0 m GROUND LEVEL : 5.0 m
 ANT. HEIGHT 1 : 15.0 m ANT. HEIGHT 2 : 10.0 m

| | | | |
|-----------------|------------|----------------|-----------|
| ANT. HEIGHT 1 | : 15.0 m | ANT. HEIGHT 2 | : 10.0 m |
| CRITICAL POINT | : 11.6 Km | RIDGE HEIGHT | : 10.0 m |
| TREE HEIGHT | : 0.0 m | FRESNEL DEP. | : 3.5 m |
| CLEARANCE | : 7.5 m | CLEARANCE FAC. | : 2.1 |
| FREE SPACE LOSS | : 121.4 dB | RIDGE LOSS | : -0.5 dB |
| TOTAL LOSS | : 120.9 dB | | |

| | |
|-------------|-----|
| PROFILE No. | 130 |
|-------------|-----|

PROFILE

(K : 1.33 FREQUENCY : 2400 MHz)



SITE NAME : J. AL UMARI DISTANCE : 38.1 km
 GROUND LEVEL : 300.0 m SITE NAME : BAB AL MANDAB
 ANT. HEIGHT 1 : 15.0 m GROUND LEVEL : 5.0 m
 ANT. HEIGHT 2 : 10.0 m ANT. HEIGHT 2 : 10.0 m

| | | | |
|-----------------|------------|----------------|-----------|
| ANT. HEIGHT 1 | : 15.0 m | ANT. HEIGHT 2 | : 10.0 m |
| CRITICAL POINT | : 34.0 Km | RIDGE HEIGHT | : 20.0 m |
| TREE HEIGHT | : 0.0 m | FRESNEL DEP. | : 21.4 m |
| CLEARANCE | : 19.1 m | CLEARANCE FAC. | : 0.9 |
| FREE SPACE LOSS | : 131.7 dB | RIDGE LOSS | : -1.4 dB |
| TOTAL LOSS | : 130.3 dB | | |

| | |
|-------------|-----|
| PROFILE No. | 131 |
|-------------|-----|

付 属 資 料 3-2

フ ェ ー デ ィ ン グ 解 析

RADIO SYSTEM DESIGN - 7

BASE STATION (HUDAYDAH)
 (BASE/REP. REP./REP.)

| Profile No. | 54 | 55 | 56 | 57 | 58 |
|----------------------------|--------------|-------------|-------------|-------------|-------------|
| Station A | AZ ZAYDIYAH | DAYR KHALIL | DAYR KHALIL | AL KAIB | HUDAYDAH |
| Station B | DAYR AKHRASH | AL ABBASI | AL KAIB | AZ ZAYDIYAH | DAYR KHALIL |
| Radio Freq.(GHz) | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| Ground Level(STA.A:M) | 60 | 140 | 140 | 100 | 6 |
| Ground Level(STA.B:M) | 60 | 90 | 100 | 60 | 140 |
| Antenna Height(STA.A:M) | 60 | 40 | 40 | 30 | 25 |
| Antenna Height(STA.B:M) | 34 | 58 | 25 | 59 | 40 |
| Feeder Length(STA.A:M) | 90 | 44 | 44 | 34 | 40 |
| Feeder Length(STA.B:M) | 38 | 62 | 29 | 89 | 44 |
| Feeder Loss(M(STA.A:dB) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss(M(STA.B:dB) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss(STA.A:dB) | 6.8 | 3.3 | 3.3 | 2.6 | 3 |
| Feeder Loss(STA.B:dB) | 2.9 | 4.7 | 2.2 | 6.7 | 3.3 |
| Hop Distance(KM) | 31.2 | 35.9 | 22.4 | 30.1 | 31.4 |
| Free Space Loss(dB) | 129.9 | 131.1 | 127 | 129.6 | 130 |
| Antenna Type(STA.A) | OMNI | OMNI | OMNI | OMNI | OMNI |
| Antenna Type(STA.B) | 2.4mD G.P | 3.0mD G.P | 1.2mD G.P | 3.0mD G.P | 3.0mD G.P |
| Antenna Gain(STA.A:dBi) | 10 | 10 | 10 | 10 | 10 |
| Antenna Gain(STA.B:dBi) | 32.9 | 34.8 | 27.5 | 34.8 | 34.8 |
| Branching Loss(dB) | 4 | 4 | 4 | 4 | 4 |
| TX Out Put Power(dBm) | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| RX Input Level(dBm) | -69.2 | -66.8 | -67.5 | -66.6 | -64 |
| RX Level (dBm)(BER:E-03) | -92 | -92 | -92 | -92 | -92 |
| Fading Margin(dB) | 22.8 | 25.2 | 24.5 | 25.4 | 28 |
| Fading Depth Estimated(dB) | 12 | 14.1 | 7 | 11.4 | 12.1 |
| System Margin(dB) | 10.8 | 11.1 | 17.5 | 14 | 15.9 |
| Path Condition | PLAIN | PLAIN | PLAIN | PLAIN | PLAIN |

RADIO SYSTEM DESIGN --10

BASE STATION (HUYDAYDAH)
(REP./SUB. 3)

| Profile No. | 76 | 77 | 78 | 79 | 80 |
|----------------------------|----------------|--------------------------|---------------------|------------|------------------------|
| Station A | DAYR KHALIL | DAYR KHALIL | DAYR KHALIL | AL ABBASI | AL ABBASI |
| Station B | AD DAWM | AZ ZUBAYRIYAHMUDAWWAR | DAYR AL MUDAWWAR | KUSMA | MARKAZ BILAD ATTAAM |
| Radio Freq.(GHz) | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| Ground Level(STA.A:M) | 140 | 140 | 140 | 90 | 90 |
| Ground Level(STA.B:M) | 100 | 90 | 130 | 2680 | 1680 |
| Antenna Height(STA.A:M) | 40 | 40 | 40 | 58 | 58 |
| Antenna Height(STA.B:M) | 10 | 10 | 10 | 10 | 10 |
| Feeder Length(STA.A:M) | 44 | 44 | 44 | 62 | 62 |
| Feeder Length(STA.B:M) | 14 | 14 | 14 | 14 | 14 |
| Feeder Loss/M(STA.A:dB) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss/M(STA.B:dB) | 0.13 | 0.13 | 0.13 | 0.075 | 0.075 |
| Feeder Loss(STA.A:dB) | 3.3 | 3.3 | 3.3 | 4.7 | 4.7 |
| Feeder Loss(STA.B:dB) | 1.8 | 1.8 | 1.8 | 1.1 | 1.1 |
| Hop Distance(KM) | 8.8 | 7.1 | 7.1 | 40.5 | 39.5 |
| Free Space Loss(dB) | 118.9 | 117.1 | 117.1 | 132.2 | 132 |
| Antenna Type(STA.A) | OMNI | OMNI | OMNI | OMNI | OMNI |
| Antenna Type(STA.B) | HORN | HORN | HORN | 1.8mD G.P. | 1.8mD G.P. |
| Antenna Gain(STA.A:dBi) | 10 | 10 | 10 | 10 | 10 |
| Antenna Gain(STA.B:dBi) | 20 | 20 | 20 | 31.3 | 31.3 |
| Branching Loss(dB) | 4 | 4 | 4 | 4 | 4 |
| TX Out Put Power(dBm) | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| RX Input Level(dBm) | -66.5 | -64.7 | -64.7 | -69.2 | -69 |
| RX Level (dBm)(BER:E-03) | -92 | -92 | -92 | -92 | -92 |
| Fading Margin(dB) | 25.5 | 27.3 | 27.3 | 22.8 | 23 |
| Fading Depth Estimated(dB) | 0 | 0 | 0 | 11.9 | 11.5 |
| System Margin(dB) | 25.5 | 27.3 | 27.3 | 10.9 | 11.5 |
| Path Condition | PLAIN | PLAIN | PLAIN | MOUNTAIN | MOUNTAIN |

RADIO SYSTEM DESIGN - 11

BASE STATION (IBB)
(BASE/REP. REP./REP.)

| Profile No. | 81 | 82 | 83 | 84 |
|----------------------------|--------------|------------------|--------------|--------------|
| Station A | IBB | IBB | J.AL QABRAYN | J.AL QABRAYN |
| Station B | J.AL QABRAYN | MASHWARAH J.SAID | J.SUMARAH | |
| Radio Freq.(GHz) | 2.4 | 2.4 | 2.4 | 2.4 |
| Ground Level(STA.A:M) | 1985 | 1985 | 2948 | 2948 |
| Ground Level(STA.B:M) | 2948 | 2300 | 2480 | 2973 |
| Antenna Height(STA.A:M) | 20 | 20 | 15 | 15 |
| Antenna Height(STA.B:M) | 10 | 10 | 10 | 10 |
| Feeder Length(STA.A:M) | 35 | 35 | 26 | 26 |
| Feeder Length(STA.B:M) | 21 | 14 | 14 | 21 |
| Feeder Loss(M(STA.A:dB) | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss(M(STA.B:dB) | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss(STA.A:dB) | 2.6 | 2.6 | 2 | 2 |
| Feeder Loss(STA.B:dB) | 1.6 | 1.1 | 1.1 | 1.6 |
| Hop Distance(KM) | 13.1 | 9.1 | 21.5 | 37.3 |
| Free Space Loss(dB) | 122.4 | 119.2 | 126.7 | 131.5 |
| Antenna Type(STA.A) | OMNI | OMNI | OMNI | OMNI |
| Antenna Type(STA.B) | HORN | HORN | 1.2mD G.P | |
| Antenna Gain(STA.A:dBi) | 10 | 10 | 10 | 10 |
| Antenna Gain(STA.B:dBi) | 20 | 20 | 20 | 27.5 |
| Branching Loss(dB) | 4 | 4 | 4 | 4 |
| TX Out Put Power(dBm) | 31.5 | 31.5 | 31.5 | 31.5 |
| RX Input Level(dBm) | -69.1 | -65.4 | -72.3 | -70.1 |
| RX Level (dBm)(BER:E-03) | -92 | -92 | -92 | -92 |
| Fading Margin(dB) | 22.9 | 26.6 | 19.7 | 21.9 |
| Fading Depth Estimated(dB) | 0 | 0 | 3 | 11.4 |
| System Margin(dB) | 22.9 | 26.6 | 16.7 | 10.5 |
| Path Condition | MOUNTAIN | MOUNTAIN | MOUNTAIN | MOUNTAIN |

RADIO SYSTEM DESIGN -14

BASE STATION (TAIZZ)
(BASE/REP. REP./REP.)

| Profile No. | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 |
|-----------------------------|-----------|------------|------------|-----------------|------------|-----------|-------------|-----------|
| Station A | TAIZZ | ARUS(O/H) | ARUS(O/H) | J. HABASHI | J. HABASHI | ARID | H. AN HANAN | J. AN NAR |
| Station B | ARUS(O/H) | H. OMAIMAH | J. HABASHI | H. AN HANANARID | J. SABARAN | J. AN NAR | J. AL UMARI | |
| Radio Freq. (GHz) | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| Ground Level (STA.A:M) | 1345 | 2820 | 2820 | 2320 | 2320 | 1600 | 460 | 340 |
| Ground Level (STA.B:M) | 2820 | 1320 | 2320 | 460 | 1600 | 2080 | 340 | 300 |
| Antenna Height (STA.A:M) | 20 | 15 | 15 | 43 | 43 | 15 | 15 | 15 |
| Antenna Height (STA.B:M) | 10 | 10 | 10 | 10 | 15 | 10 | 10 | 10 |
| Feeder Length (STA.A:M) | 40 | 48 | 48 | 47 | 47 | 19 | 19 | 19 |
| Feeder Length (STA.B:M) | 43 | 14 | 14 | 14 | 19 | 14 | 14 | 14 |
| Feeder Loss/M (STA.A:dB) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss/M (STA.B:dB) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss (STA.A:dB) | 3 | 3.6 | 3.6 | 3.5 | 3.5 | 1.4 | 1.4 | 1.4 |
| Feeder Loss (STA.B:dB) | 3.2 | 1.1 | 1.1 | 1.1 | 1.4 | 1.1 | 1.1 | 1.1 |
| Hop Distance (KM) | 5.2 | 29.4 | 20.4 | 22.2 | 13.8 | 27.2 | 23.8 | 32.8 |
| Free Space Loss (dB) | 114.4 | 129.4 | 126.2 | 127 | 122.8 | 128.7 | 127.6 | 130.4 |
| Antenna Type (STA.A) | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI |
| Antenna Type (STA.B) | HORN | 1.2mD G.P | HORN | HORN | HORN | HORN | HORN | 1.2mD G.P |
| Antenna Gain (STA.A:dBi) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Antenna Gain (STA.B:dBi) | 20 | 27.5 | 20 | 20 | 20 | 20 | 20 | 27.5 |
| Branching Loss (dB) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| TX Out Put Power (dBm) | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| RX Input Level (dBm) | -63.1 | -69.1 | -73.4 | -74.1 | -70.2 | -73.7 | -72.6 | -67.9 |
| RX Level (dBm) (BER:E-03) | -92 | -92 | -92 | -92 | -92 | -92 | -92 | -92 |
| Fading Margin (dB) | 28.9 | 22.9 | 18.6 | 17.9 | 21.8 | 18.3 | 19.4 | 24.1 |
| Fading Depth Estimated (dB) | 0 | 7.8 | 2.2 | 3.5 | 0 | 6.6 | 8.7 | 13.6 |
| System Margin (dB) | 28.9 | 15.1 | 16.4 | 14.4 | 21.8 | 11.7 | 10.7 | 10.5 |
| Path Condition | MOUNTAIN | MOUNTAIN | MOUNTAIN | MOUNTAIN | MOUNTAIN | MOUNTAIN | PLAIN | PLAIN |

RADIO SYSTEM DESIGN -16

BASE STATION (TAIZZ)
(REP./SUB. 2)

| Profile No. | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 |
|----------------------------|----------|-------------|------------------|-----------|---------------|----------|--------------|----------|---------------|------------|
| Station A | ARID | ARID | J.SABARAN | J.SABARAN | J.SABARAN | J.AN NAR | J.AN NAR | J.AN NAR | J.AL UMARI | J.AL UMARI |
| Station B | YUFRUS | AL MUDAYHIS | ASH SHARAFHAYFAN | SHAWHAT | J.WADI BISYAN | YAKHTUL | ATH THAWBANI | DHUBAB | BAB AL MANDAB | |
| Radio Freq.(GHz) | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| Ground Level(STA.A:M) | 1600 | 1600 | 2080 | 2080 | 2080 | 340 | 340 | 340 | 300 | 300 |
| Ground Level(STA.B:M) | 1240 | 1040 | 1850 | 1680 | 1480 | 240 | 5 | 140 | 5 | 5 |
| Antenna Height(STA.A:M) | 15 | 15 | 35 | 35 | 35 | 15 | 15 | 15 | 15 | 15 |
| Antenna Height(STA.B:M) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Feeder Length(STA.A:M) | 19 | 19 | 39 | 39 | 39 | 19 | 19 | 19 | 19 | 19 |
| Feeder Length(STA.B:M) | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Feeder Loss/M(STA.A:dB) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |
| Feeder Loss/M(STA.B:dB) | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.075 | 0.13 | 0.13 | 0.075 |
| Feeder Loss(STA.A:dB) | 1.4 | 1.4 | 2.9 | 2.9 | 2.9 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| Feeder Loss(STA.B:dB) | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.1 | 1.8 | 1.8 | 1.1 |
| Hop Distance(KM) | 12.2 | 17.2 | 16.4 | 16.1 | 14 | 14.9 | 26.5 | 4.5 | 11.7 | 38.1 |
| Free Space Loss(dB) | 121.8 | 124.8 | 124.3 | 124.2 | 123 | 123.5 | 128.5 | 113.1 | 121.4 | 131.7 |
| Antenna Type(STA.A) | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI | OMNI |
| Antenna Type(STA.B) | HORN | HORN | HORN | HORN | HORN | HORN | 1.2mD G.P | HORN | HORN | 2.4mD G.P |
| Antenna Gain(STA.A:dBi) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Antenna Gain(STA.B:dBi) | 20 | 20 | 20 | 20 | 20 | 20 | 27.5 | 20 | 20 | 32.9 |
| Branching Loss(dB) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| TX Out Put Power(dBm) | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| RX Input Level(dBm) | -67.5 | -70.5 | -71.5 | -71.4 | -70.2 | -69.2 | -66 | -58.8 | -67.1 | -63.8 |
| RX Level (dBm)(BER:E-03) | -92 | -92 | -92 | -92 | -92 | -92 | -92 | -92 | -92 | -92 |
| Fading Margin(dB) | 24.5 | 21.5 | 20.5 | 20.6 | 21.8 | 22.8 | 26 | 33.2 | 24.9 | 28.2 |
| Fading Depth Estimated(dB) | 0 | 0 | 0 | 0 | 0 | 0 | 17.5 | 0 | 5.3 | 23.2 |
| System Margin(dB) | 24.5 | 21.5 | 20.5 | 20.6 | 21.8 | 22.8 | 8.5 | 33.2 | 19.6 | 5 |
| Path Condition | MOUNTAIN | MOUNTAIN | MOUNTAIN | MOUNTAIN | MOUNTAIN | MOUNTAIN | SEA | PLAIN | SEA | SEA |

