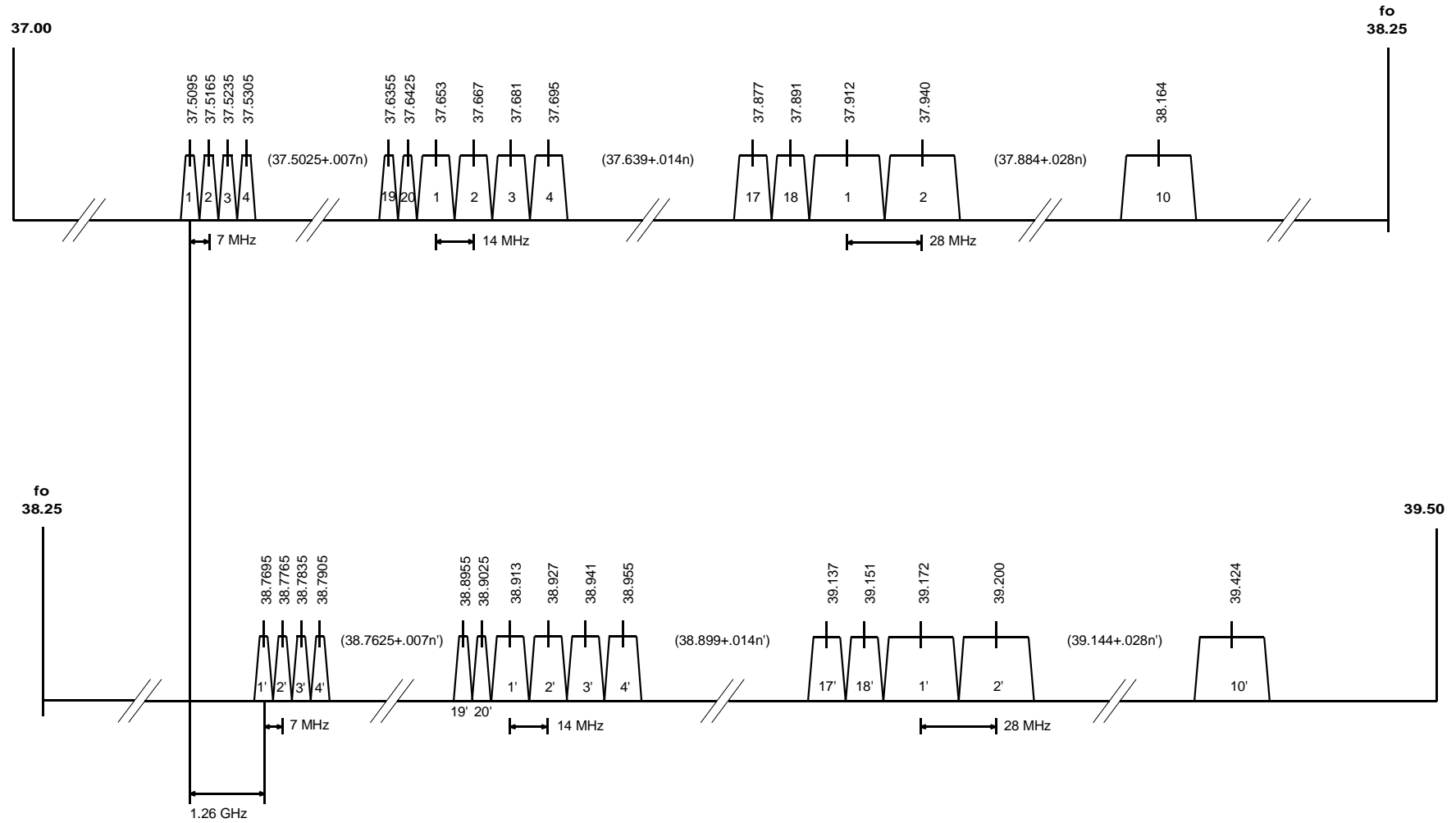


# THE 38 GHz BAND (37 - 39.5 GHz)

## RF CHANNEL ARRANGEMENTS



Channel centre frequencies are listed on the next page.

## THE 38 GHz BAND (37 - 39.5 GHz)

### CHANNELLING

CHANNEL CENTRE FREQUENCIES (GHz)							
Channels		7 MHz Channels		14 MHz Channels		28 MHz Channels	
1	1'	37.5095	38.7695	37.653	38.913	37.912	39.172
2	2'	37.5165	38.7765	37.667	38.927	37.940	39.200
3	3'	37.5235	38.7835	37.681	38.941	37.968	39.228
4	4'	37.5305	38.7905	37.695	38.955	37.996	39.256
5	5'	37.5375	38.7975	37.709	38.969	38.024	39.284
6	6'	37.5445	38.8045	37.723	38.983	38.052	39.312
7	7'	37.5515	38.8115	37.737	38.997	38.080	39.340
8	8'	37.5585	38.8185	37.751	39.011	38.108	39.368
9	9'	37.5655	38.8255	37.765	39.025	38.136	39.396
10	10'	37.5725	38.8325	37.779	39.039	38.164	39.424
11	11'	37.5795	38.8395	37.793	39.053		
12	12'	37.5865	38.8465	37.807	39.067		
13	13'	37.5935	38.8535	37.821	39.081		
14	14'	37.6005	38.8605	37.835	39.095		
15	15'	37.6075	38.8675	37.849	39.109		
16	16'	37.6145	38.8745	37.863	39.123		
17	17'	37.6215	38.8815	37.877	39.137		
18	18'	37.6285	38.8885	37.891	39.151		
19	19'	37.6355	38.8955				
20	20'	37.6425	38.9025				

### ASSIGNMENT INSTRUCTIONS

This band is designated for use by short haul low-medium capacity fixed point-to-point services.

<b>Typical Use</b>	: not specified
<b>Assignment Priority</b>	: not specified
<b>Minimum Path Length</b>	: not specified
<b>Antenna Requirements</b>	: refer to Appendix 11

#### References

1. Rec. ITU-R F.749-1, "Radio-frequency channel arrangements for radio-relay systems operating in the 38 GHz band".

## THE 38 GHz BAND (37 - 39.5 GHz)

### PROTECTION RATIOS

1. Protection ratios required between digital systems operating on the same channel arrangements.

Co channel	60 dB
1st Adjacent Channel	30 dB
2nd Adjacent Channel	0 dB

2. Protection ratios required between digital systems operating on 7 and 14 MHz channels.

Frequency Offset (MHz)	PROTECTION RATIO (dB)	
	Digital Interferer Tx → Digital Victim Rx	
	7 MHz → 14 MHz	14 MHz → 7 MHz
10.5	30	30

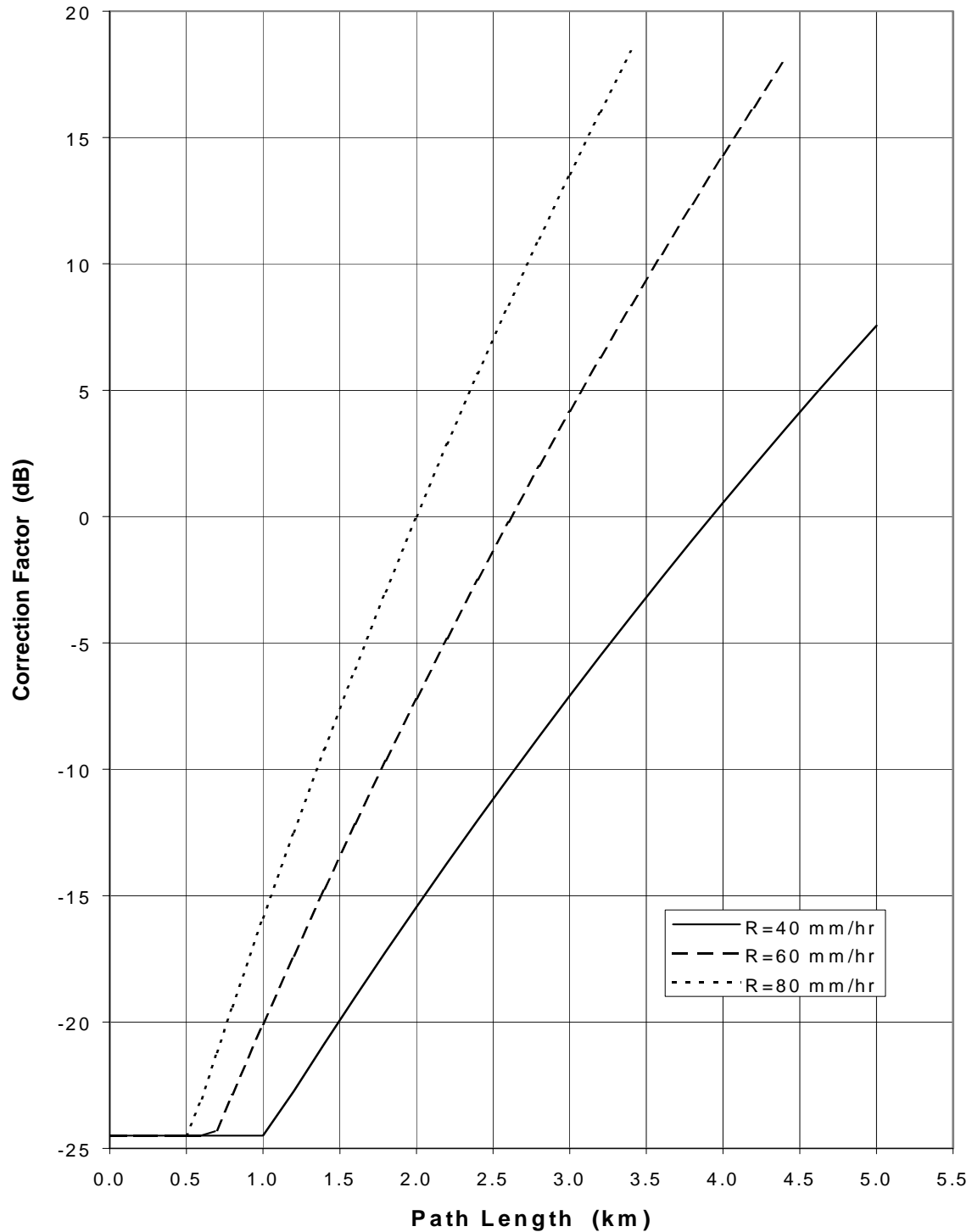
#### Notes:

1. Protection ratio for digital systems are based on a 2 km path length and R (*Rainfall rate in mm/hr for 0.01% of the worst month*) of 80 mm/hr. For other path lengths and rainfall rates refer to the appropriate protection ratio correction factors graph on the following page.

# THE 38 GHz BAND (37 -39.5 GHz)

## PROTECTION RATIO CORRECTION FACTORS

### RAIN FADE



R: Rainfall rate in mm/hr for 0.01% of the worst month.  
For further details refer to Annex A to Appendix 1.