

2 2 1 2 2 2 1

F# G# A# B C# D# E#
B C# D# E F# G# A#
E F# G# A B C# D#
A B C# D E F# G#
D E F# G A B C#
G A B C D E F#
C D E F G A B
F G A Bb C D E
Bb C D Eb F G A
Eb F G Ab Bb C D
Ab Bb C Db Eb F G
Db Eb F Gb Ab Bb C

2 1 2 2 2 2 1

F# G# A B C# D# E#
B C# D E F# G# A#
E F# G A B C# D#
A B C D E F# G#
D E F G A B C#
G A Bb C D E F#
C D Eb F G A B
F G Ab Bb C D E
Bb C Db Eb F G A
Eb F Gb Ab Bb C D
Ab Bb Cb Db Eb F G
Db Eb Fb Gb Ab Bb C

2 2 1 2 1 3 1

F# G# A# B C# D E#
B C# D# E F# G A#
E F# G# A B C D#
A B C# D E F G#
D E F# G A Bb C#
G A B C D Eb F#
C D E F G Ab B
F G A Bb C Db E
Bb C D Eb F Gb A
Eb F G Ab Bb Cb D
Ab Bb C Db Eb Fb G
C# D# E# F# G# A B#

2 1 2 2 1 3 1

F# G# A B C# D E#
B C# D E F# G A#
E F# G A B C D#
A B C D E F G#
D E F G A Bb C#
G A Bb C D Eb F#
C D Eb F G Ab B
F G Ab Bb C Db E
Bb C Db Eb F Gb A
Eb F Gb Ab Bb Cb D
Ab Bb Cb Db Eb Fb G
C# D# E F# G# A B#

1 3 1 2 2 2 1

F# G A# B C# D# E#
B C D# E F# G# A#
E F G# A B C# D#
A Bb C# D E F# G#
D Eb F# G A B C#
G Ab B C D E F#
C Db E F G A B
F Gb A Bb C D E
Bb Cb D Eb F G A
Eb Fb G Ab Bb C D
Ab Bbb C Db Eb F G
C# D E# F# G# A# B#

1 2 2 2 2 2 1

F# G A B C# D# E#
B C D E F# G# A#
E F G A B C# D#
A Bb C D E F# G#
D Eb F G A B C#
G Ab Bb C D E F#
C Db Eb F G A B
F Gb Ab Bb C D E
Bb Cb Db Eb F G A
Eb Fb Gb Ab Bb C D
Ab Bbb Cb Db Eb F G
C# D E F# G# A# B#

1 3 1 2 1 3 1

F# G A# B C# D E#
B C D# E F# G A#
E F G# A B C D#
A Bb C# D E F G#
D Eb F# G A Bb C#
G Ab B C D Eb F#
C Db E F G Ab B
F Gb A Bb C Db E
Bb Cb D Eb F Gb A
Eb Fb G Ab Bb Cb D
Ab Bbb C Db Eb Fb G
C# D E# F# G# A B#

1 2 2 2 1 3 1

F# G A B C# D E#
B C D E F# G A#
E F G A B C D#
A Bb C D E F G#
D Eb F G A Bb C#
G Ab Bb C D Eb F#
C Db Eb F G Ab B
F Gb Ab Bb C Db E
Bb Cb Db Eb F Gb A
Eb Fb Gb Ab Bb Cb D
Ab Bbb Cb Db Eb Fb G
C# D E F# G# A B#

2 2 3 2 3

F# G# A# C# D#
B C# D# F# G#
E F# G# B C#
A B C# E F#
D E F# A B
G A B D E
C D E G A
F G A C D
Bb C D F G
Eb F G Bb C
Ab Bb C Eb F
Db Eb F Ab Bb

3 3 2 2 2

E# G# B C# D#
A# C# E F# G#
D# F# A B C#
G# B D E F#
C# E G A B
F# A C D E
B D F G A
E G Bb C D
A C Eb F G
D F Ab Bb C
G Bb Db Eb F
C Eb Gb Ab Bb

2 2 2 4 2

F# G# A# B# E
B C# D# E# A
E F# G# A# D
A B C# D# G
D E F# G# C
G A B C# F
C D E F# Bb
F G A B Eb
Bb C D E Ab
Eb F G A Db
Ab Bb C D Gb
Db Eb F G Cb

2 2 1 1 1 2 1 1 1

F# G# A# B B# C# D# E E#
B C# D# E E# F# G# A A#
E F# G# A A# B C# D D#
A B C# D D# E F# G G#
D E F# G G# A B C C#
G A B C C# D E F F#
C D E F F# G A Bb B
F G A Bb B C D Eb E
Bb C D Eb E F G Ab A
Eb F G Ab A Bb C Db D
Ab Bb C Db D Eb F Gb G
Db Eb F Gb G Ab Bb Cb C

2 2 1 2 1 1 2 1

F# G# A# B C# D D# E#
B C# D# E F# G G# A#
E F# G# A B C C# D#
A B C# D E F F# G#
D E F# G A Bb B C#
G A B C D Eb E F#
C D E F G Ab A B
F G A Bb C Db D E
Bb C D Eb F Gb G A
Eb F G Ab Bb Cb C D
Ab Bb C Db Eb Fb F G
C# D# E# F# G# A A# B#

2 2 2 2 2 2

C D E F# G# Bb
C# Eb F G A B

1 2 1 2 1 2 1 2

C Db Eb E F# G A Bb
C# D E F G Ab Bb B
D Eb F F# G# A B C

1 2 3 1 2 3

C Db Eb F# G A D# E F# A Bb C
C# D E G Ab Bb E F G A# B C#
D Eb F G# A B F Gb Ab B C D

1 3 2 1 3 2

C Db E F# G Bb D# E G A Bb C#
C# D F G Ab B E F G# A# B D
D Eb F# G# A C F Gb A B C Eb

2 1 1 2 1 1 2 1 1

C D Eb E F# G Ab Bb B
C# D# E F G G# A B C
D E F F# G# A Bb C C#
Eb F F# G A Bb B C# D

3 1 3 1 3 1

C Eb E G Ab B
C# E F G# A C
D F F# A Bb C#
Eb F# G Bb B D

1 1 2 1 1 1 1 2 1 1

C Db D E F F# G Ab Bb B
C# D Eb F F# G Ab A B C
D Eb E F# G G# A Bb C C#
D# E F G G# A Bb B C# D
E F F# G# A A# B C D D#
F Gb G A Bb B C Db Eb E

1 3 1 1 1 3 1 1

C Db E F F# G Bb B
C# D F F# G Ab B C
D Eb F# G G# A C C#
D# E G G# A Bb C# D
E F G# A A# B D D#
F Gb A Bb B C Eb E

1 2 2 1 1 2 2 1

C Db Eb F F# G A B
C# D E F# G Ab Bb C
D Eb F G G# A B C#
D# E F# G# A Bb C D
E F G A A# B C# D#
F Gb Ab Bb B C D E

1 4 1 1 4 1

C Db F F# G B
C# D F# G Ab C
D Eb G G# A C#
D# E G# A Bb D
E F A A# B D#
F Gb Bb B C E

1 1 1 1 1 1 1 1 1 1 1 1

C Db D Eb E F F# G Ab A Bb B

1 1 1 1 2 1 1 1 2

F# G G# A A# B C# D D# E
B C C# D D# E F# G G# A
E F F# G G# A B C C# D
A Bb B C C# D E F F# G
D Eb E F F# G A Bb B C
G Ab A Bb B C D Eb E F
C Db D Eb E F G Ab A Bb
F Gb G Ab A Bb C Db D Eb
Bb Cb C Db D Eb F Gb G Ab
Eb Fb F Gb G Ab Bb Cb C Db
G# A A# B B# C# D# E E# F#
C# D D# E E# F# G# A A# B

1 1 1 1 3 1 1 3

F# G G# A A# C# D D#
B C C# D D# F# G G#
E F F# G G# B C C#
A Bb B C C# E F F#
D Eb E F F# A Bb B
G Ab A Bb B D Eb E
C Db D Eb E G Ab A
F Gb G Ab A C Db D
Bb Cb C Db D F Gb G
Eb Fb F Gb G Bb Cb C
G# A A# B B# D# E E#
C# D D# E E# G# A A#

1 1 1 2 2 1 2 2

F# G G# A B C# D E
B C C# D E F# G A
E F F# G A B C D
A Bb B C D E F G
D Eb E F G A Bb C
G Ab A Bb C D Eb F
C Db D Eb F G Ab Bb
F Gb G Ab Bb C Db Eb
Bb Cb C Db Eb F Gb Ab
Eb Fb F Gb Ab Bb Cb Db
G# A A# B C# D# E F#
C# D D# E F# G# A B

1 1 1 4 1 4

F# G G# A C# D
B C C# D F# G
E F F# G B C
A Bb B C E F
D Eb E F A Bb
G Ab A Bb D Eb
C Db D Eb G Ab
F Gb G Ab C Db
Bb Cb C Db F Gb
Eb Fb F Gb Bb Cb
G# A A# B D# E
C# D D# E G# A