Attachment Air-2 Wind and Atmospheric Stability Roses

<u>Wind Roses:</u>
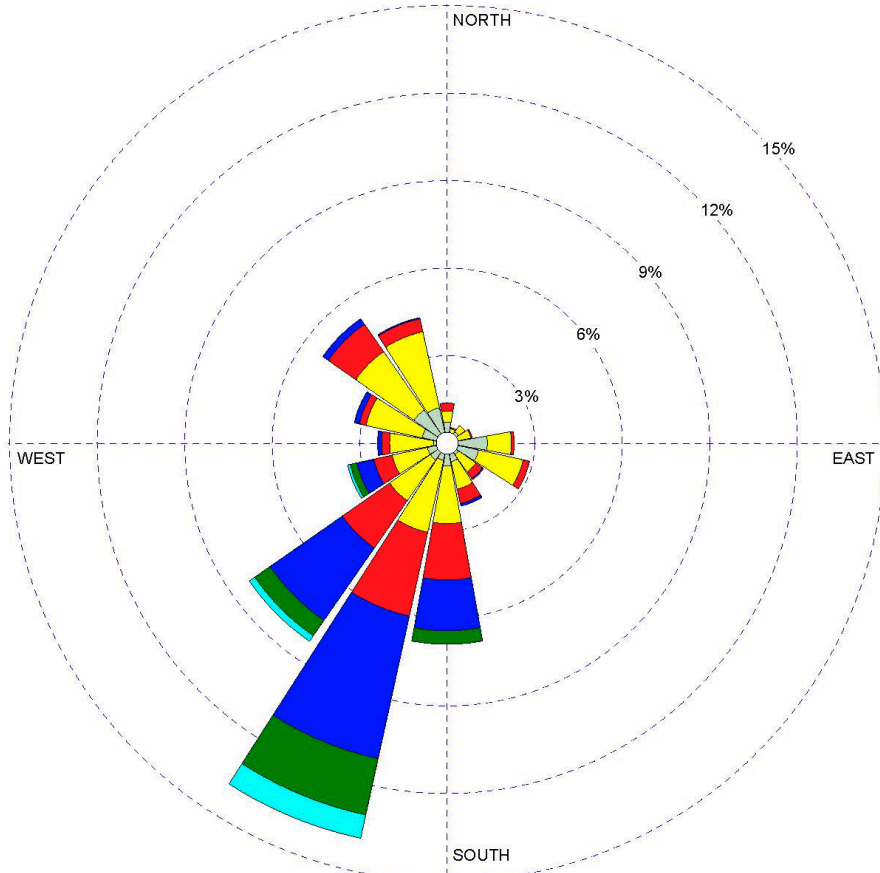

WIND ROSE PLOT:
Wind Rose - Annual 2020
Richland Airport (KRLD), Washington

DISPLAY:
Wind Speed
Direction (blowing from)

NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

WIND SPEED
(m/s)

- >= 11.10
- 8.80 - 11.10
- 5.70 - 8.80
- 3.60 - 5.70
- 2.10 - 3.60
- 0.50 - 2.10

Calms: 32.46%
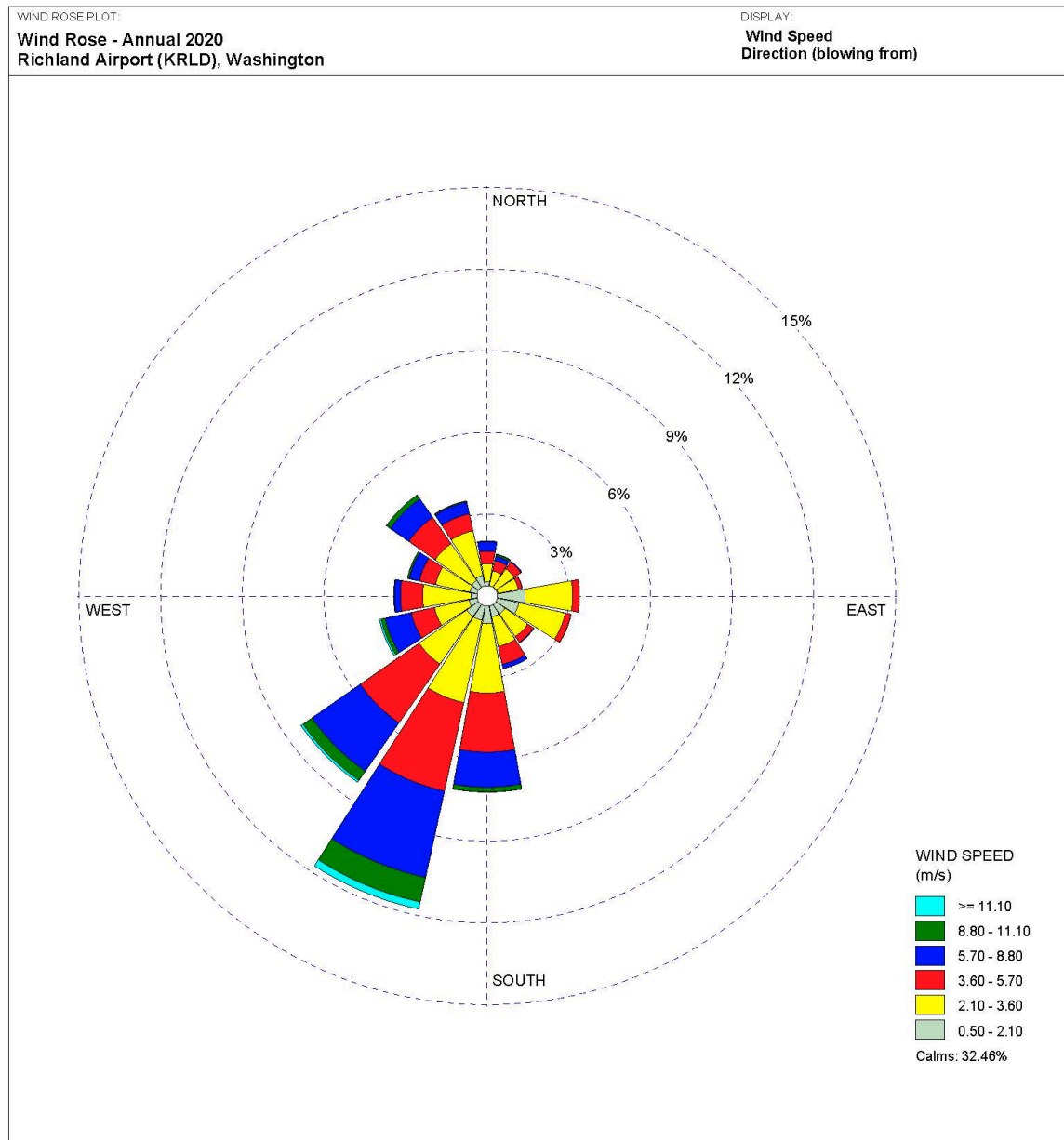
Wind Rose - Winter 2020 (January, February, December)
Richland Airport (KRLD), Washington

NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

WIND SPEED
(m/s)

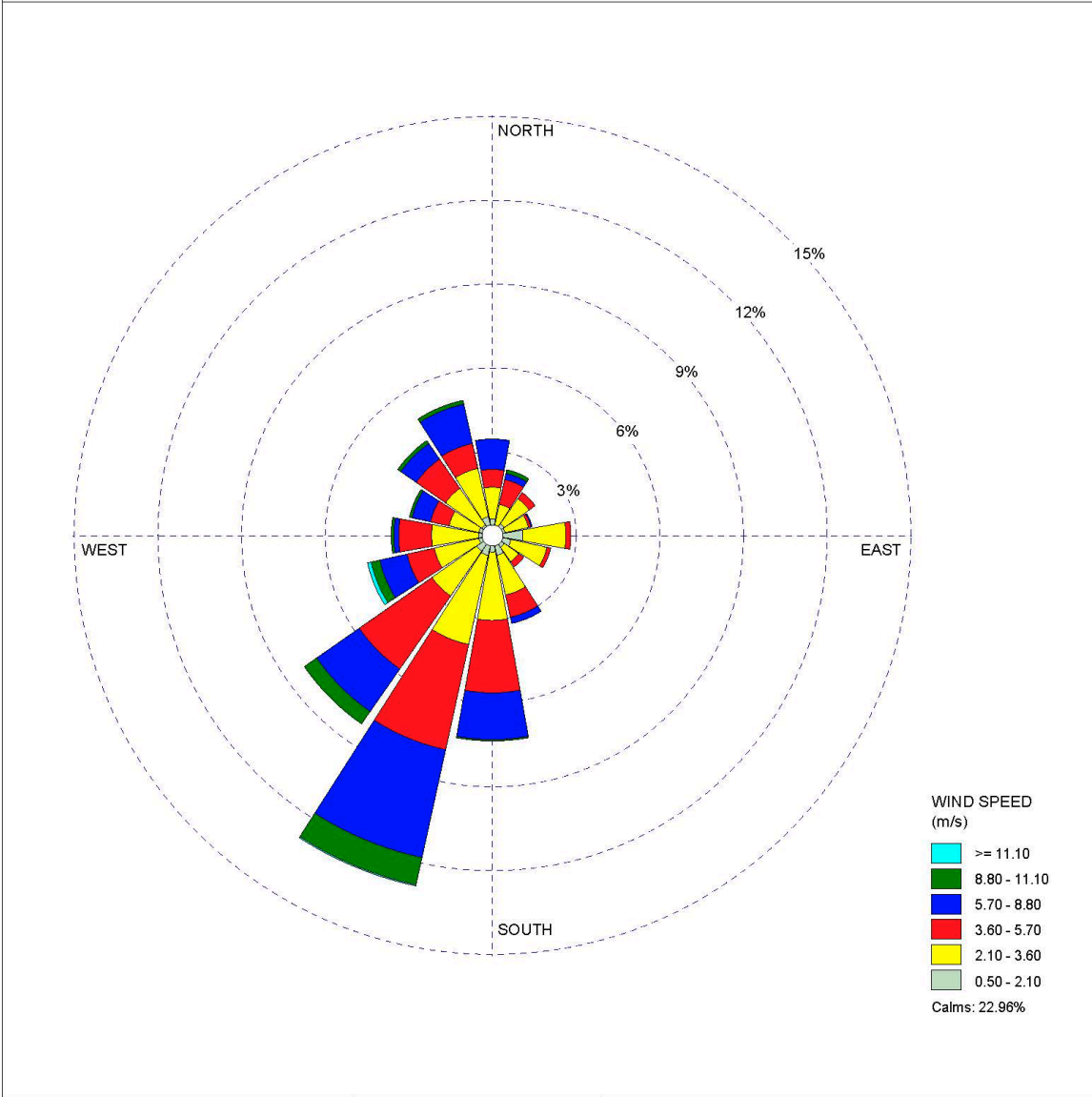|	
▨	>= 11.10
▨	8.80 - 11.10
▨	5.70 - 8.80
▨	3.60 - 5.70
▨	2.10 - 3.60
▨	0.50 - 2.10

Calms: 38.46%

Wind Rose - Spring 2020 (March, April, May)
Richland Airport (KRLD), Washington

Wind Speed
Direction (blowing from)

NORTH
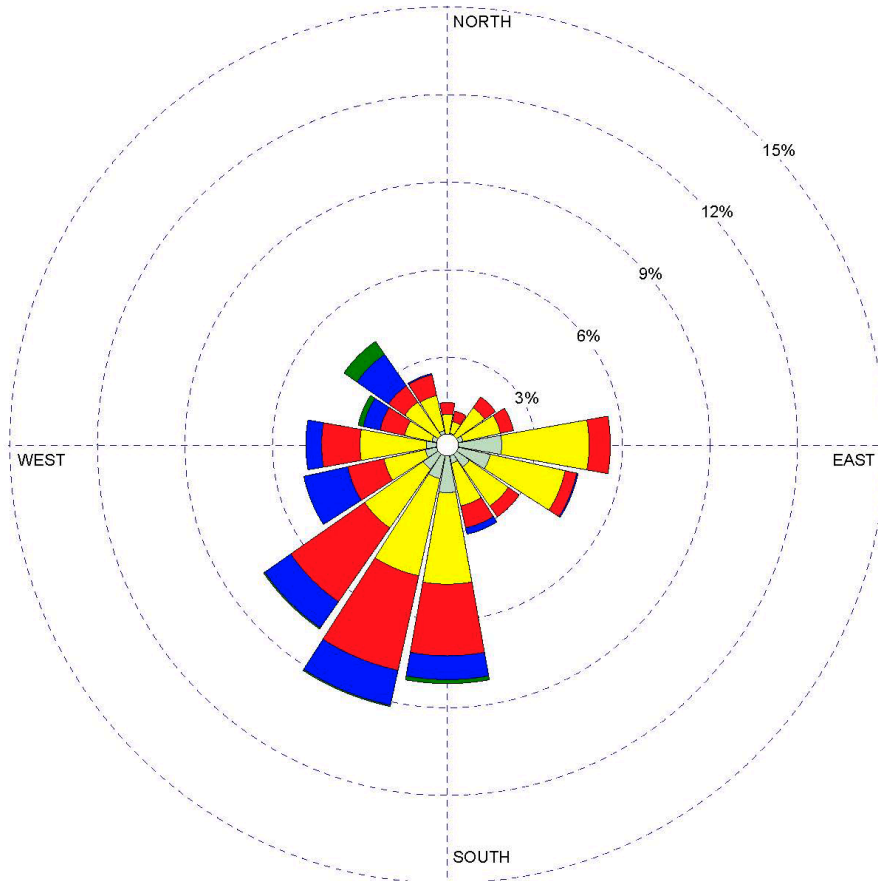
15%

12%

9%

6%

3%

WEST

EAST

SOUTH

WIND SPEED
(m/s)

▮	>= 11.10
▮	8.80 - 11.10
▮	5.70 - 8.80
▮	3.60 - 5.70
▮	2.10 - 3.60
▮	0.50 - 2.10

Calms: 22.96%

Wind Rose - Summer 2020 (June, July, August)
Richland Airport (KRLD), Washington

Wind Speed
Direction (blowing from)

NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

WIND SPEED
(m/s)

>= 11.10

8.80 - 11.10

5.70 - 8.80

3.60 - 5.70

2.10 - 3.60
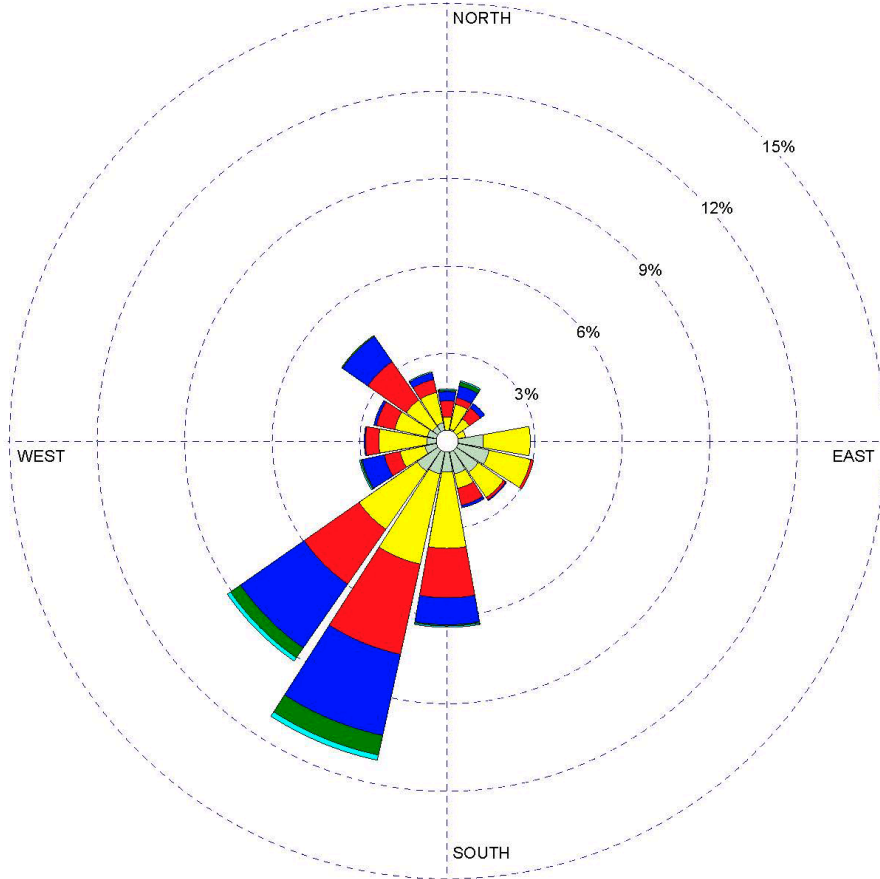
0.50 - 2.10

Calms: 27.72%

WIND ROSE PLOT:

Wind Rose - Fall 2020 (September, October, November)
Richland Airport (KRLD), Washington

DISPLAY:
Wind Speed
Direction (blowing from)

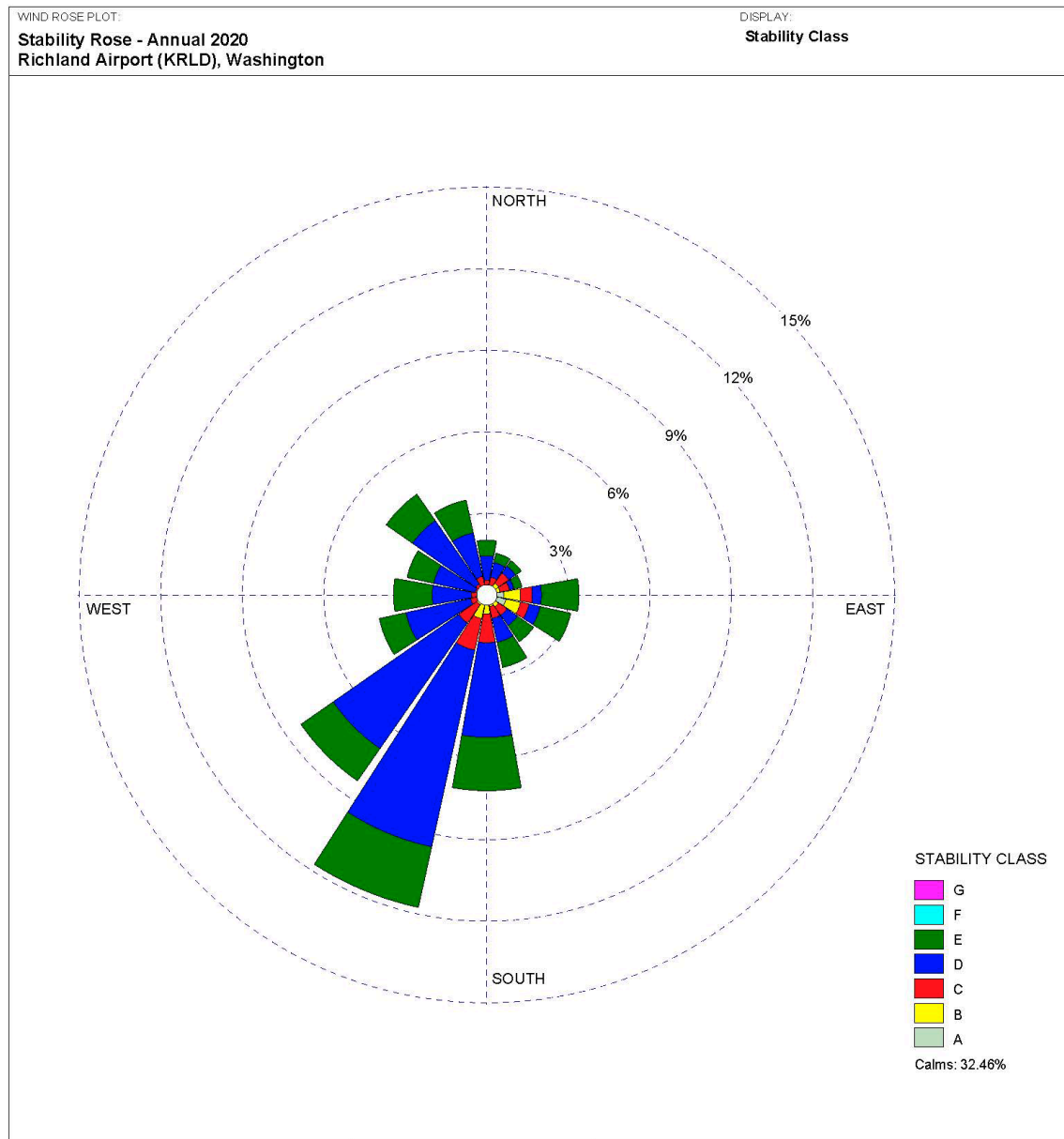NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

WIND SPEED
(m/s)

- >= 11.10
- 8.80 - 11.10
- 5.70 - 8.80
- 3.60 - 5.70
- 2.10 - 3.60
- 0.50 - 2.10

Calms: 40.84%

Stability Roses:

Frequency of wind stability by wind direction, using Pasquill-Gifford stability classes (A – Extremely unstable, B – Moderately unstable, C – Slightly unstable, D – Neutral conditions, E – Slightly stable, F – Moderately stable, G – Extremely stable).
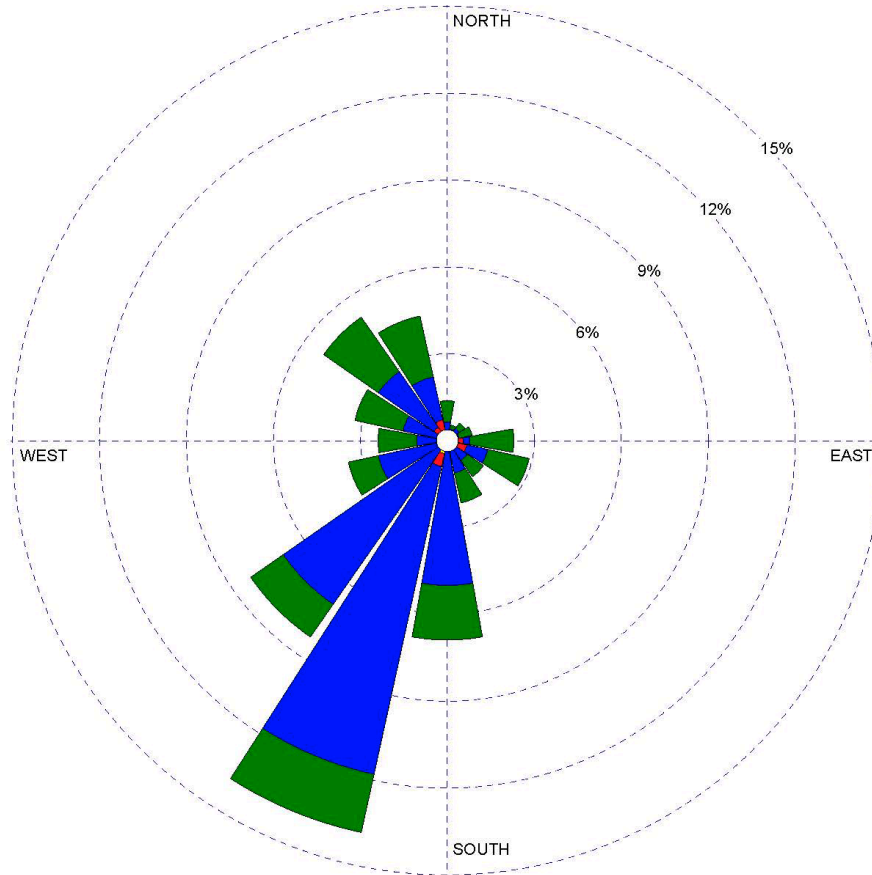

WIND ROSE PLOT:
Stability Rose - Annual 2020
Richland Airport (KRLD), Washington

DISPLAY:
Stability Class

STABILITY CLASS

- G
- F
- E
- D
- C
- B
- A

Calms: 32.46%

Stability Rose - Winter 2020 (January, February, December)
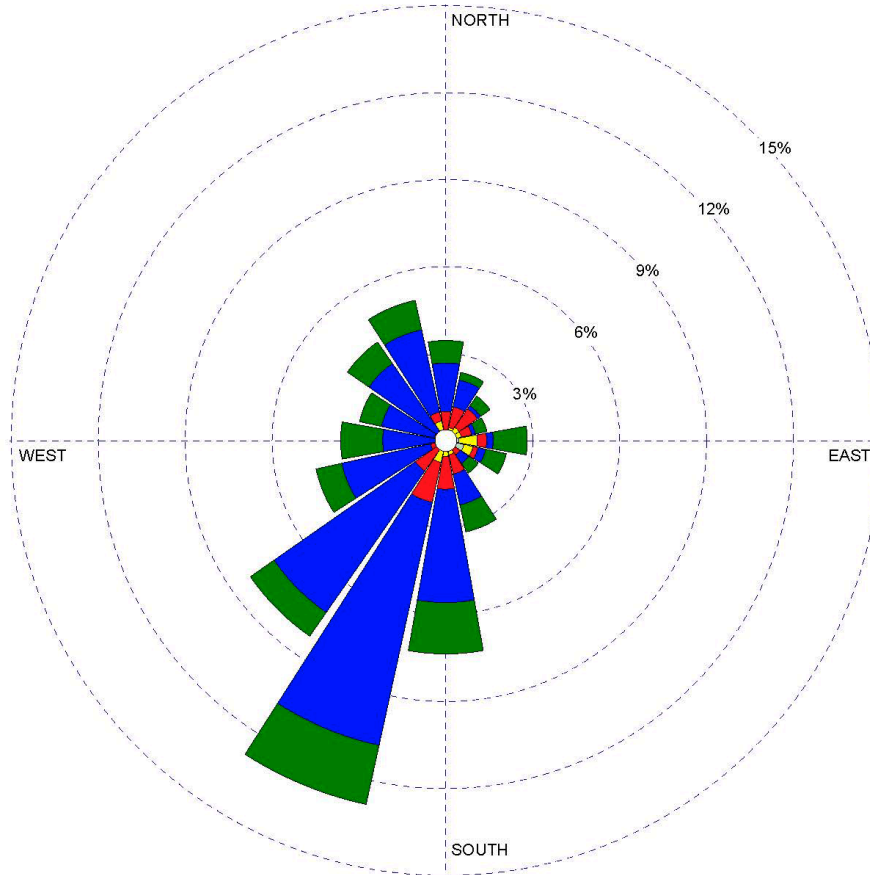Richland Airport (KRLD), Washington

Stability Class

NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

STABILITY CLASS

G
F
E
D
C
B
A

Calms: 38.46%

Stability Rose - Spring 2020 (March, April, May)
Richland Airport (KRLD), Washington

Stability Class

NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

STABILITY CLASS

G

F

E

D

C

B

A

Calms: 22.96%

Stability Rose - Summer 2020 (June, July, August)
Richland Airport (KRLD), Washington

NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

STABILITY CLASS

- G
- F
- E
- D
- C
- B
- A

Calms: 27.72%

Stability Rose - Fall 2020 (September, October, November)
Richland Airport (KRLD), Washington

Stability Class

NORTH

15%

12%

9%

6%

3%

WEST

EAST

SOUTH

STABILITY CLASS

STABILITY CLASS

- G (magenta)
- F (cyan)
- E (green)
- D (blue)
- C (red)
- B (yellow)
- A (grey)

Calms: 40.84%