

Objective: To present an example case for study and demonstration of SilentRoll features

**Tire Details**

Tire Model	SilentRoll 06A
Speed (km/hr)	90.00
Outer diameter (mm)	718.31
Circumference (mm)	2256.6374
TAW (mm)	175.00
Load on Tire (kg)	892.00

**Material Properties**

Damping Coefficient	0.32
Density (kg/m3)	1190.00
Young's Modulus (N/mm2)	4.25

**Track Details**

Track no.	Track width (mm)	Max Offset (mm)	Steps
1	87.5	0	0
2	87.5	47	1

**Pitch Details**

Pitch no.	Repetitions	Pitch Length (mm)	Bounding Rectangle Length (mm)	Maximum repetitions	Pixels/mm(Circumferential)	Pixels/mm (Along TAW)
1	8	81.667	81.667	8	3.0000	3.0000
2	6	95.0	95.0	6	3.0000	3.0000
3	10	103.33	103.33	10	3.0001	3.0000

**Pinning Points**

Pitch name	X-BP (mm)	X-FP (mm)
pitch1	0.000	81.667
pitch2	0.000	95.000
pitch3	0.000	103.330

**Leading Edge Details**

Averaging Order	Arc Length (mm)
1	198.00

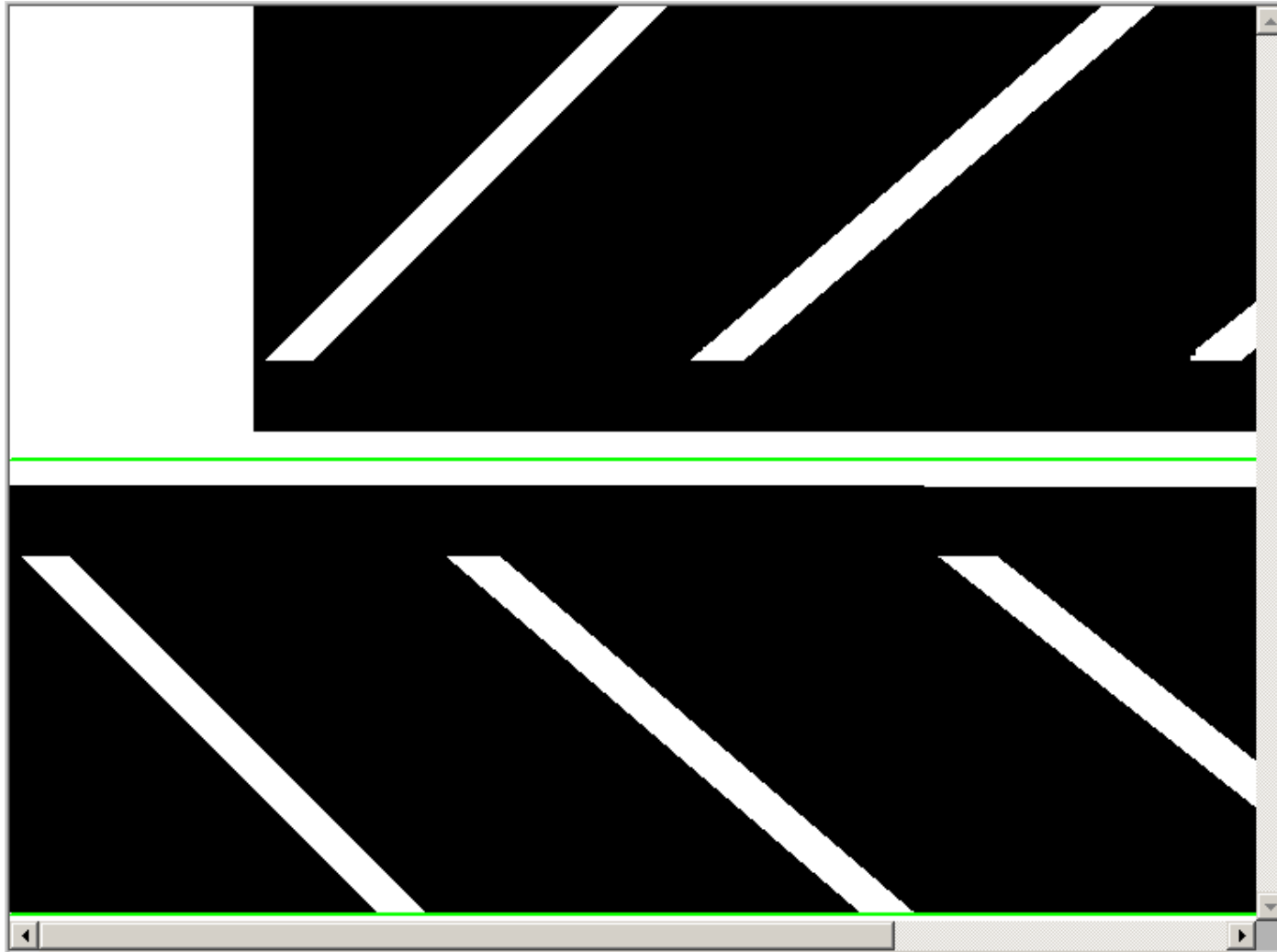
**Solver Parameters**

Solver Mode	Optimizer seed	Optimizer Runs	Last run	Depth included
Get Noise	NA	NA	NA	Yes

**Noise Results**

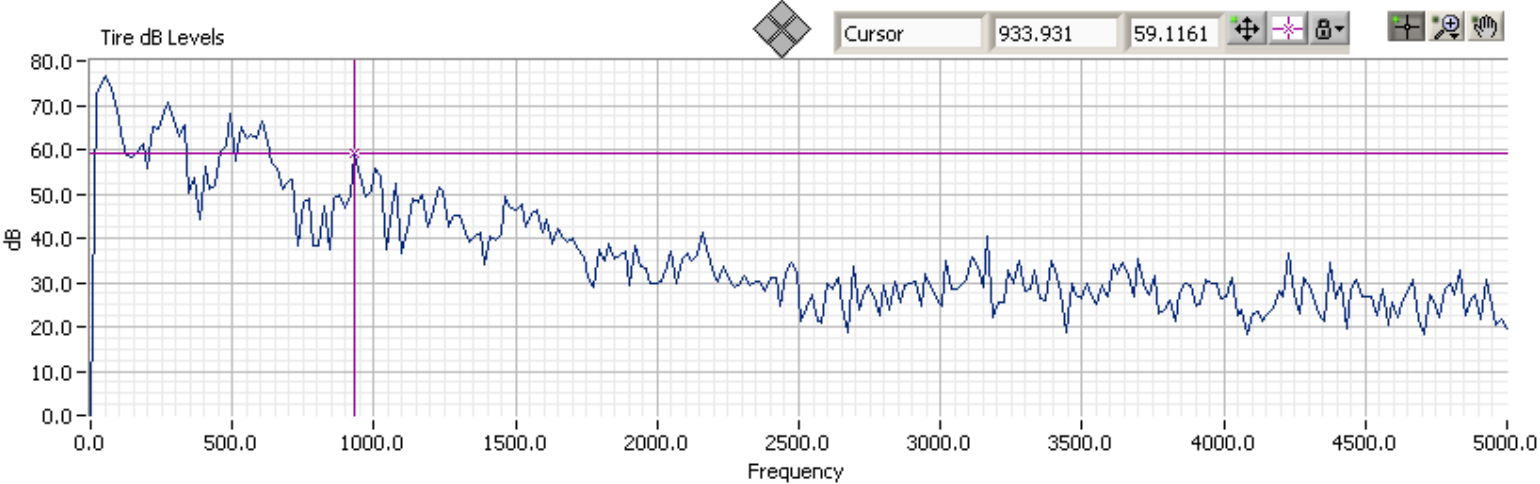
Result	Sequence	Offsets (mm)	Total dB	Total dBA	FH_Freq (Hz)	FH_dB	FH_dBA	Max dB Freq	Max dB dB	Max dB dBA
1	3-1-1-2-2-3-3-2-2-1-1-3-3-1-1-3-3-3-2-2-1-1-3-3	0, 47	72.25708	66.14802	265.8826	69.6826	61.56619	494.4342	67.97565	64.66022

**Pitch or Tire Image**

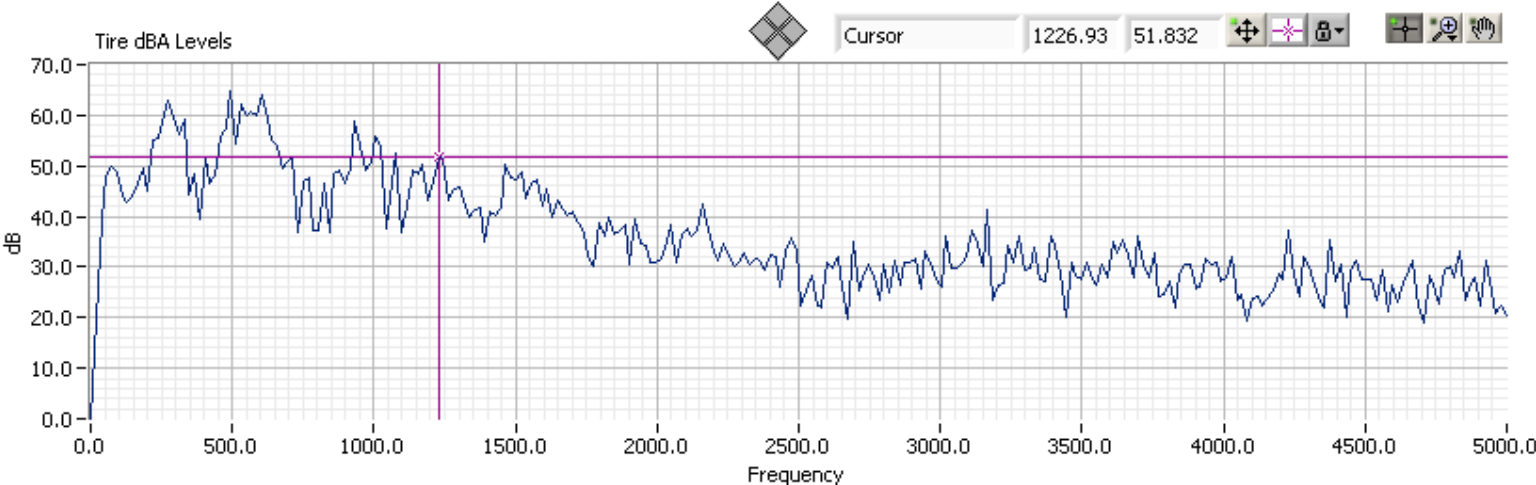


Frequency Vs dB / dBA levels of Tire

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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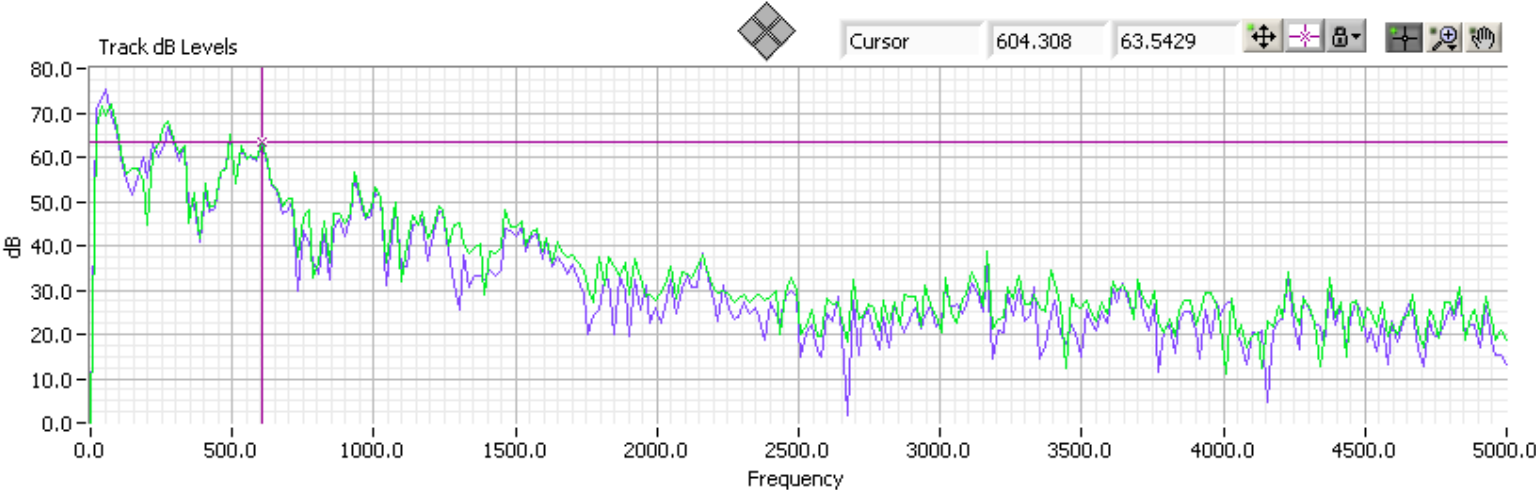


- Plot 1
- Plot 2
- Plot 3
- Plot 4
- Plot 5
- Plot 6
- Plot 7
- Plot 8
- Plot 9
- Plot 10
- Plot 11
- Plot 12
- Plot 13
- Plot 14
- Plot 15

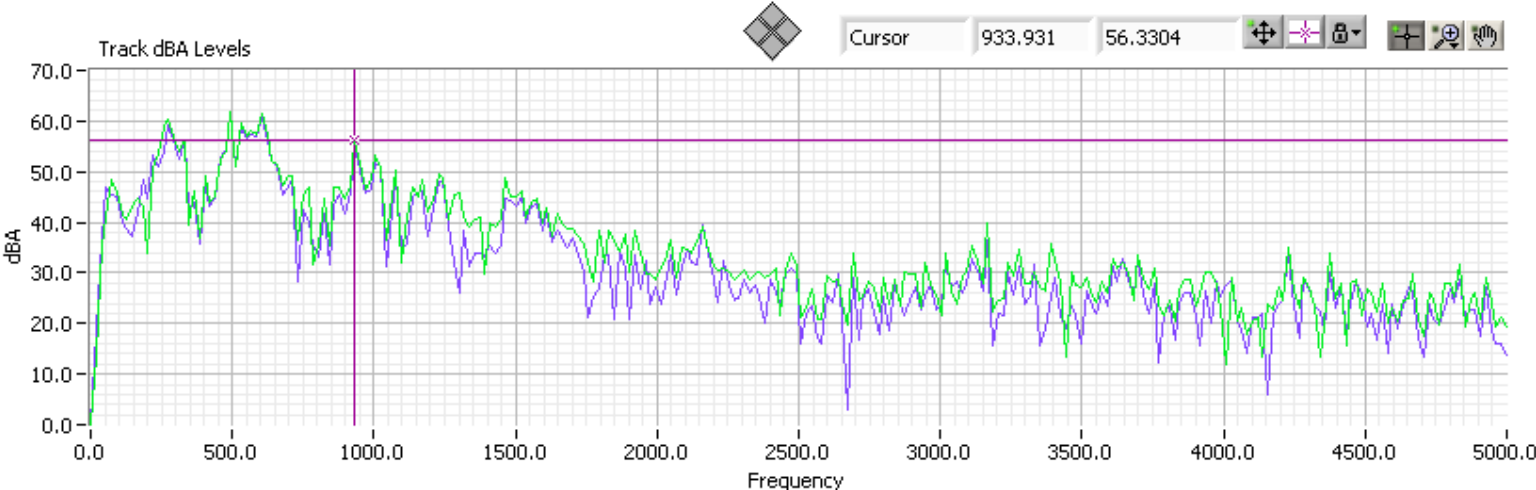


Frequency Vs dB / dBA levels of Tracks

1	2	3	4	5	6	7	8
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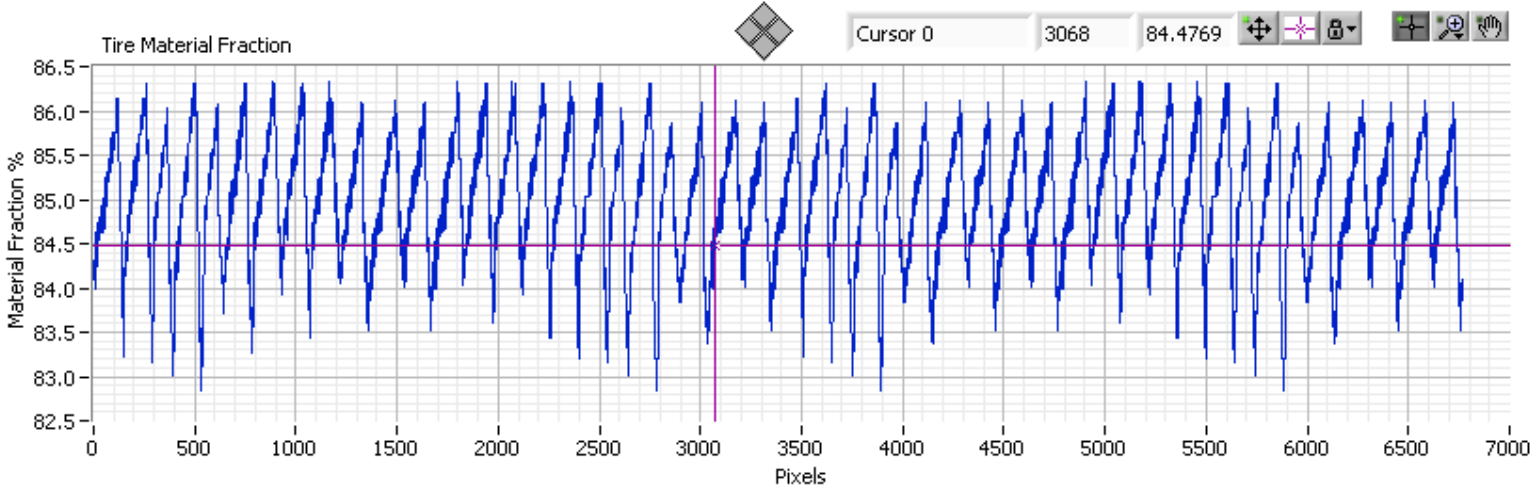
- Plot 1
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- Plot 12
- Plot 13
- Plot 14
- Plot 15

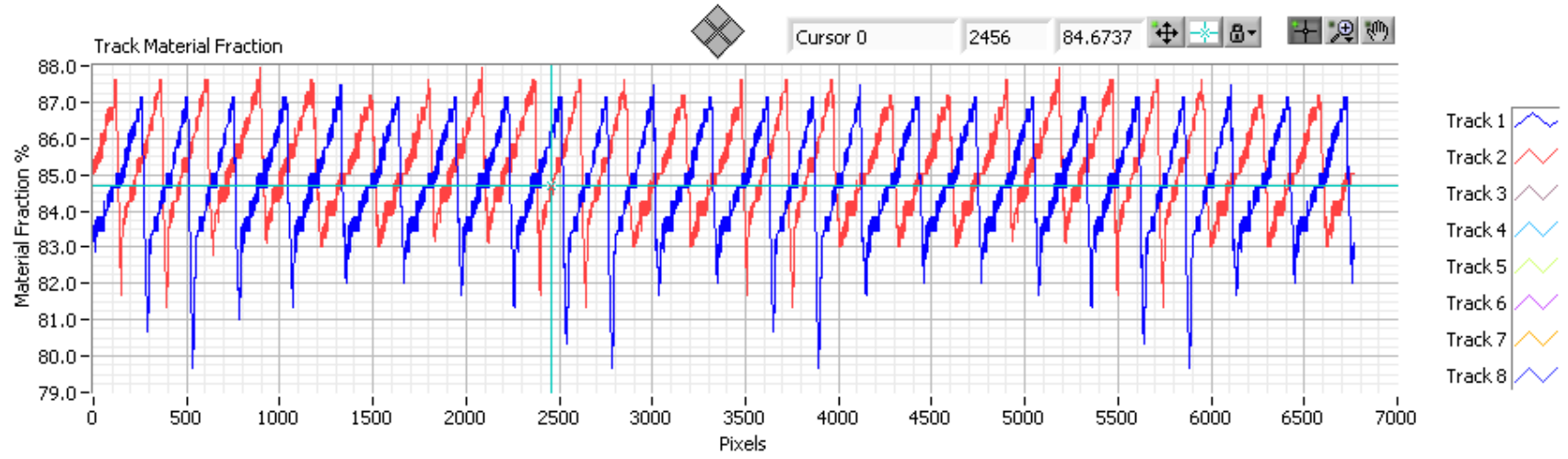


Material Fraction of Selected Sequence

Choose Sequence

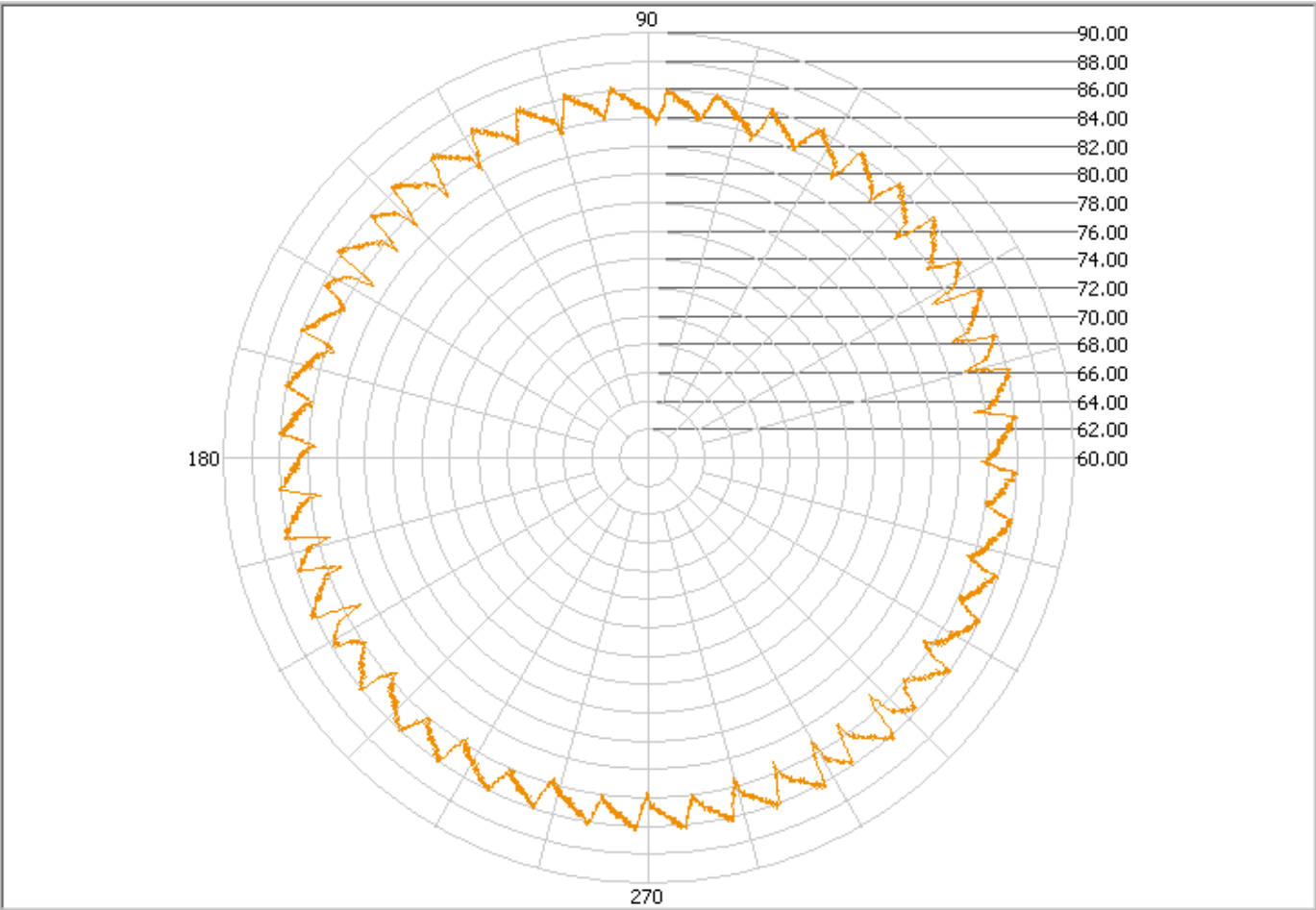
Sequence 1 ▼

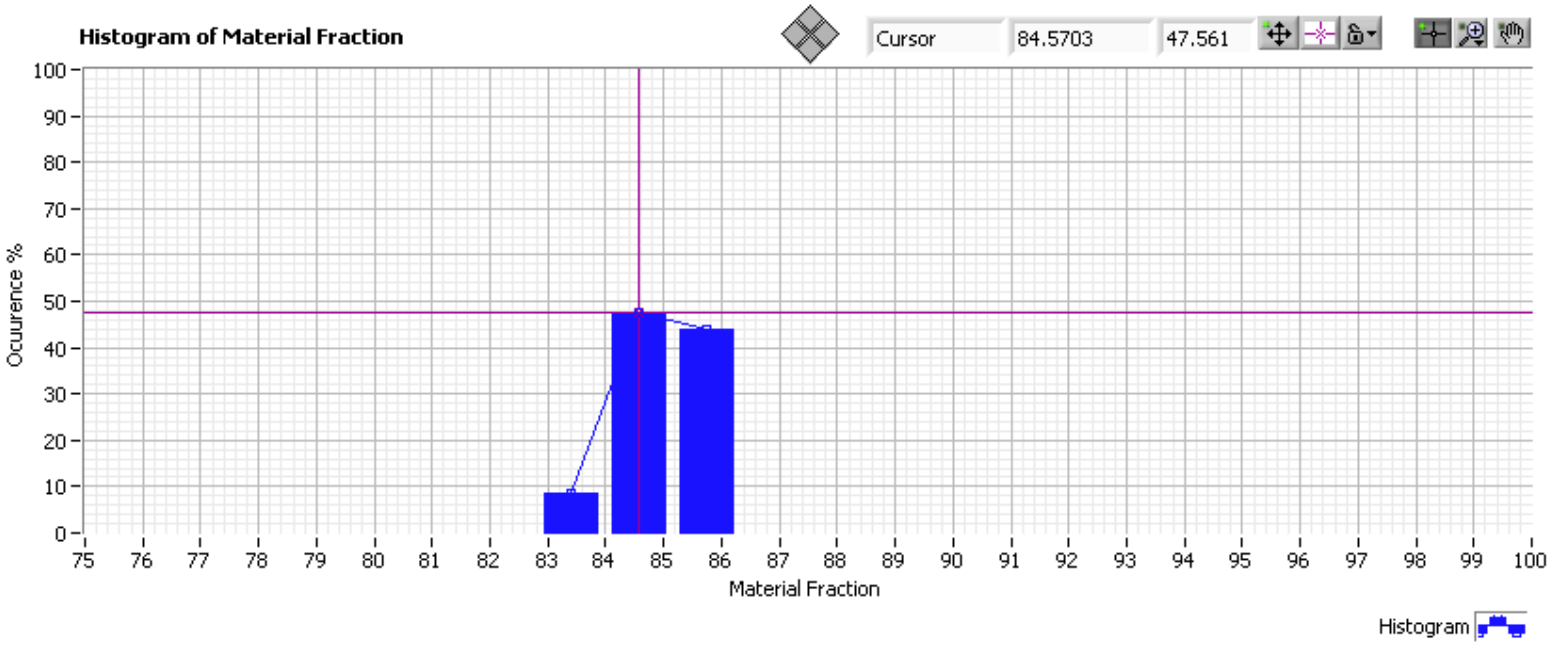




**Polar Plot and Material Distribution**

Choose Sequence  
Sequence 1 ▼





**Remarks:**

Speed = 90 kmph  
Tracks = 2, 47mm offset in track 2  
Pitch = Auto, top  
NSD = Full, curved, 8mm max depth  
LE = curved, avg scheme 1