

# Eds Mega Data Analysis Report



Rider: **Ed**

Bike: **Ducati V4 2020**

Track: **Phillip Island Grand Prix Circuit**

Category: Superbike

Event: Practice Day

Dates: 8 December 2025 - 9 December 2025

Sessions: 10 | Flying Laps: 37

Total Distance: 164.5 km

WEEKEND BEST LAP

**1:57.340**

Day 2, Session 2, Lap 6

PERSONAL BEST

**1:55.340**

24 April 2025

Gap to PB: **+2.000s**

Phillip Island Grand Prix Circuit — 4.445 km — Clockwise — 4 Sectors



## Executive Summary

This two-day practice session at Phillip Island delivered a **weekend best of 1:57.340**, 2.000s off the personal best of 1:55.340. The data reveals a theoretical best of 1:54.827, indicating **2.513 seconds** of additional potential by combining best sector times from different laps.

Across 10 sessions and 37 flying laps over two days, the data shows progressive improvement with Day 2 producing faster lap times than Day 1. **S1 (Doohan → Southern Loop)** shows the highest variability ( $\sigma = 3.72s$ ), indicating this as the primary focus area for finding consistent lap time.

### Weekend Highlights

- ✓ **Day-on-day improvement:** Day 1 best 1:58.093 → Day 2 best 1:57.340 (0.753s faster)
- ✓ **Consistent sub-2:00 pace:** Multiple laps under 2:00 achieved across both days
- ✓ **Strong theoretical potential:** 1:54.827 achievable by combining best sectors

### Areas to Focus

- **Gap to PB:** 2.000s to match personal best of 1:55.340
- **Sector consistency:** S1 shows 3.72s variability – focus area for next session
- **Theoretical gap:** 2.513s available by combining best sectors – no single perfect lap yet

### Data Logger Note

*This analysis is based on Speed Angle data which provides lap times, sector times, GPS speed, lean angle, and G-force data. Throttle position, brake pressure, lambda/AFR, and vehicle health parameters are not available from this logger.*

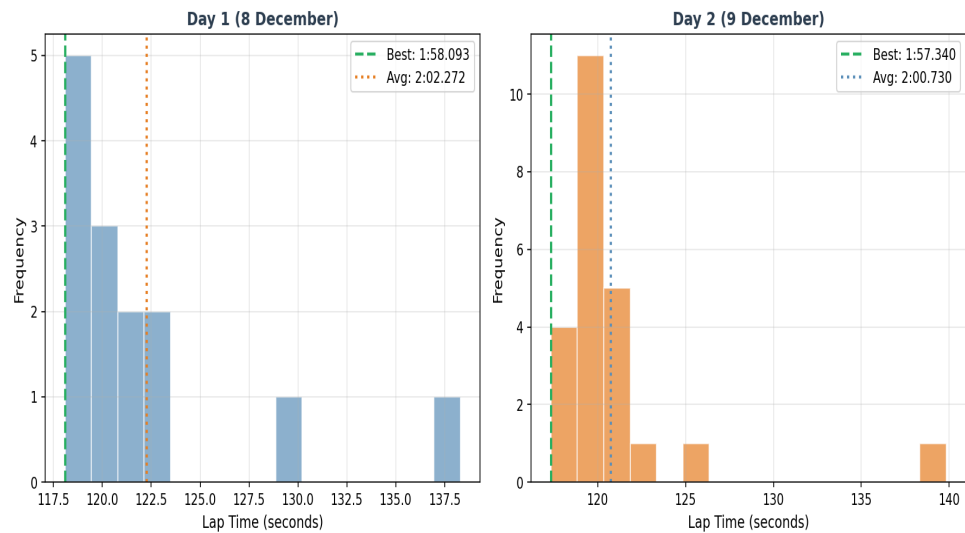
# Session Breakdown

Summary of all sessions recorded across both days with key performance metrics.

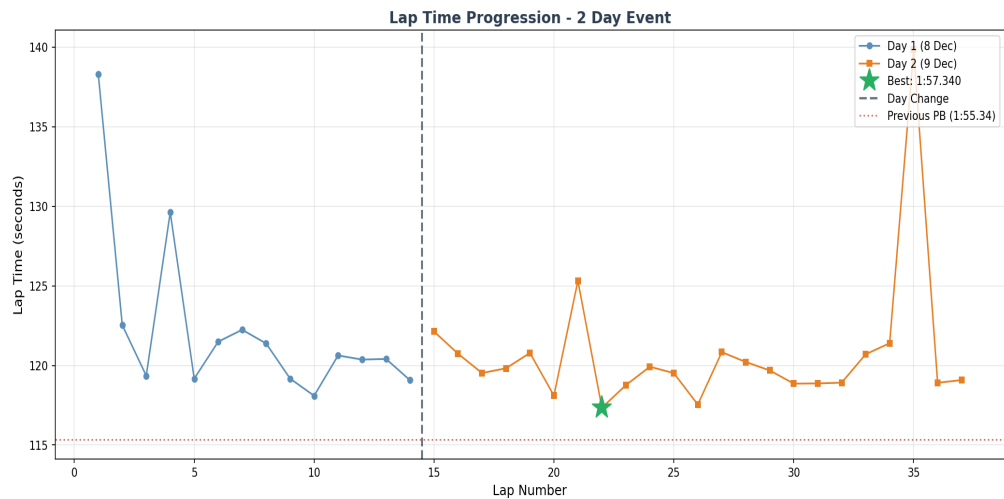
## Day Comparison

	Day 1	Day 2
Date	8 December 2025	9 December 2025
Sessions	4	5
Flying Laps	14	23
Best Lap	1:58.093	1:57.340

## Lap Time Distribution by Day



## Lap Time Progression



## Day 1 - 8 December 2025

### Session 1 - 10:22 AM

5 flying laps | Best: 1:59.166 | Top Speed: 233 km/h | Consistency:  $\pm 7.31$ s

Lap	Time	Top Speed	Delta to Best
2	2:18.296	223 km/h	+20.956s
3	2:02.532	218 km/h	+5.192s
4	1:59.352	220 km/h	+2.012s
5	2:09.621	222 km/h	+12.281s
6	1:59.166	233 km/h	+1.826s

### Session 2 - 11:47 AM

5 flying laps | Best: 1:58.093 | Top Speed: 230 km/h | Consistency:  $\pm 1.57$ s

Lap	Time	Top Speed	Delta to Best
2	2:01.491	226 km/h	+4.151s
3	2:02.240	225 km/h	+4.900s
4	2:01.376	220 km/h	+4.036s
5	1:59.170	218 km/h	+1.830s
6	1:58.093	230 km/h	+0.753s

### Session 3 - 02:24 PM

2 flying laps | Best: 2:00.367 | Top Speed: 236 km/h | Consistency:  $\pm 0.13$ s

Lap	Time	Top Speed	Delta to Best
2	2:00.625	223 km/h	+3.285s
3	2:00.367	236 km/h	+3.027s

### Session 4 - 03:44 PM

2 flying laps | Best: 1:59.068 | Top Speed: 236 km/h | Consistency:  $\pm 0.67$ s

Lap	Time	Top Speed	Delta to Best
2	2:00.406	234 km/h	+3.066s
3	1:59.068	236 km/h	+1.728s

## Day 2 - 9 December 2025

### Session 1 - 08:09 AM

4 flying laps | Best: 1:59.522 | Top Speed: 223 km/h | Consistency:  $\pm 1.01$ s

Lap	Time	Top Speed	Delta to Best
2	2:02.129	223 km/h	+4.789s
3	2:00.737	220 km/h	+3.397s
4	1:59.522	223 km/h	+2.182s
5	1:59.818	223 km/h	+2.478s

### Session 2 - 09:28 AM

4 flying laps | Best: 1:57.340 | Top Speed: 236 km/h | Consistency:  $\pm 3.12$ s

Lap	Time	Top Speed	Delta to Best
2	2:00.784	231 km/h	+3.444s
3	1:58.101	231 km/h	+0.761s
5	2:05.316	228 km/h	+7.976s
6	1:57.340	236 km/h	+0.000s

### Session 3 - 10:47 AM

5 flying laps | Best: 1:57.539 | Top Speed: 236 km/h | Consistency:  $\pm 1.11$ s

Lap	Time	Top Speed	Delta to Best
2	1:58.759	222 km/h	+1.419s
3	1:59.918	236 km/h	+2.578s
4	1:59.516	236 km/h	+2.176s
5	<b>1:57.539</b>	234 km/h	+0.199s
6	2:00.833	234 km/h	+3.493s

### Session 5 - 01:00 PM

5 flying laps | Best: 1:58.856 | Top Speed: 238 km/h | Consistency:  $\pm 0.55$ s

Lap	Time	Top Speed	Delta to Best
2	2:00.216	236 km/h	+2.876s
3	1:59.685	238 km/h	+2.345s
4	<b>1:58.856</b>	230 km/h	+1.516s
5	1:58.868	228 km/h	+1.528s
6	1:58.917	222 km/h	+1.577s

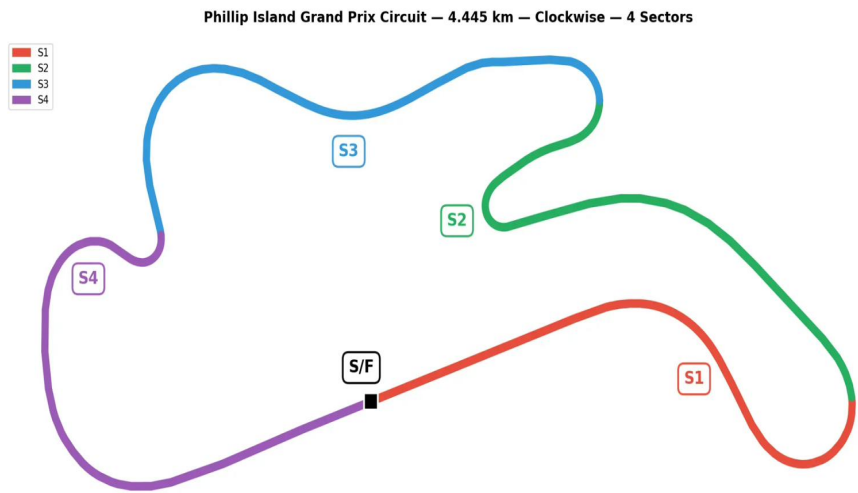
### Session 6 - 02:16 PM

5 flying laps | Best: 1:58.910 | Top Speed: 225 km/h | Consistency:  $\pm 7.99$ s

Lap	Time	Top Speed	Delta to Best
2	2:00.699	223 km/h	+3.359s
3	2:01.396	222 km/h	+4.056s
4	2:19.843	225 km/h	+22.503s
5	<b>1:58.910</b>	222 km/h	+1.570s
6	1:59.078	225 km/h	+1.738s

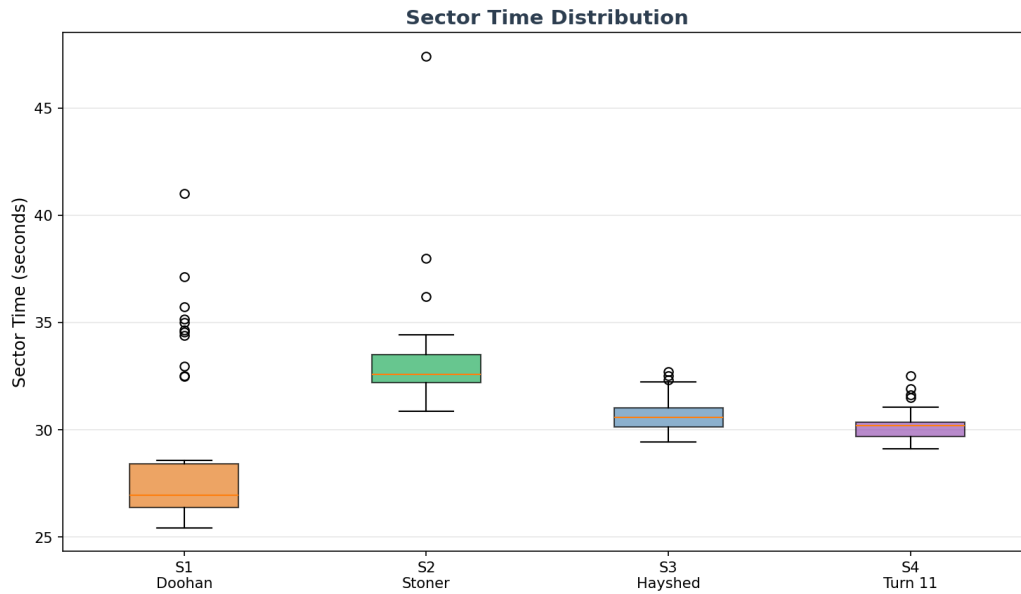
# Sector Analysis

Performance breakdown across the four track sectors showing consistency and theoretical best calculation.



Sector	Best Time	Avg Time	Std Dev	Gap to Best
S1: Doohan → Southern Loop	25.433s	28.730s	3.722s	+3.297s
S2: Stoner → Siberia	30.855s	33.194s	2.417s	+2.339s
S3: Hayshed → MG	29.438s	30.701s	0.767s	+1.263s
S4: Turn 11 → Gardner	29.101s	30.206s	0.706s	+1.105s
THEORETICAL BEST	114.827s	-	-	-

## Sector Time Distribution



## Priority Improvement Areas

### Priority 1: S1 - Doohan → Southern Loop

High variability ( $\sigma = 3.722s$ ) indicates inconsistent execution.

Potential gain of 3.297s by matching best sector time consistently.

### Priority 2: S2 - Stoner → Siberia

High variability ( $\sigma = 2.417s$ ) indicates inconsistent execution.

Potential gain of 2.339s by matching best sector time consistently.

# Theoretical Best Lap

Calculated from the best sector times achieved across all laps during the weekend.

THEORETICAL BEST

1:54.827

GAP TO THEORETICAL

+2.513s

## Best Sector Composition

Sector	Best Time	Name
S1	25.433s	Doohan → Southern Loop
S2	30.855s	Stoner → Siberia
S3	29.438s	Hayshed → MG
S4	29.101s	Turn 11 → Gardner
TOTAL	1:54.827	-

## Analysis

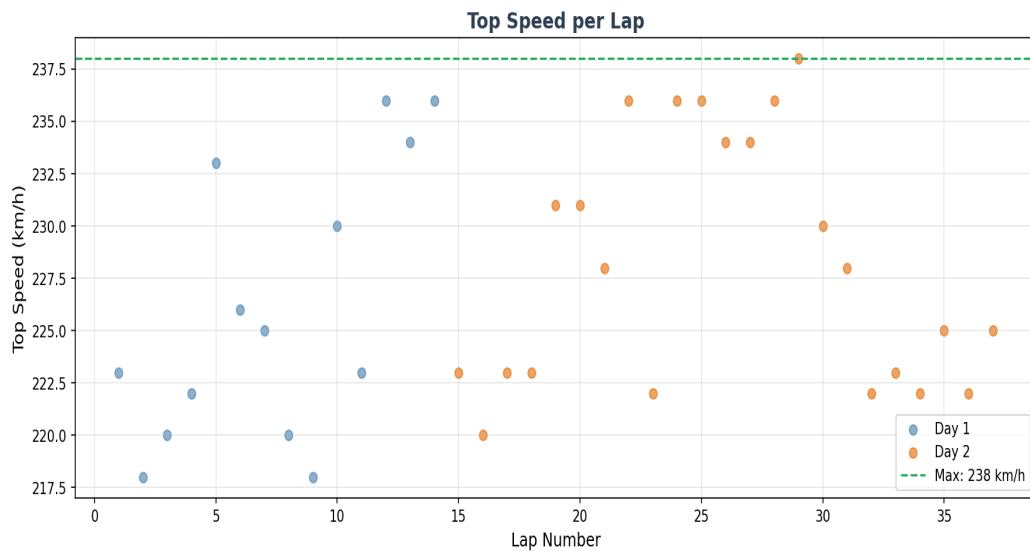
Biggest opportunity: S1 with 3.297s available between average and best.

*Best sectors came from different laps - potential to find more time*

## Top Speed Analysis

GPS-recorded maximum speeds across all sessions. Speed Angle provides accurate GPS speed data at 10Hz.

Maximum speed recorded: **238 km/h**



## Speed Observations

The data shows top speed generally correlates with lap time – faster laps tend to achieve higher maximum speeds on the main straight (Gardner Straight). This indicates the rider is carrying more momentum through the preceding corners on better laps.

## Report Summary

This Mega Data Analysis Report provides comprehensive insights from your two-day practice session at Phillip Island.

### Key Findings

- Weekend best lap: 1:57.340 (Day 2, Session 2)
- Personal best: 1:55.340 – Gap: +2.000s
- Theoretical best: 1:54.827 (Gap to actual: +2.513s)
- Total flying laps: 37 across 10 sessions
- Distance covered: 164.5 km

### What the Data Shows Went Well

- ✓ **Day-on-day improvement:** Day 2 best (1:57.340) was 0.753s faster than Day 1
- ✓ **Consistent pace:** Multiple sub-2:00 laps across different sessions
- ✓ **Session progression:** Best laps typically came mid-session after warming up

### Areas for Improvement

- **S1 consistency:** 3.72s variability indicates inconsistent execution
- **S2 consistency:** 2.42s variability – second priority area
- **Theoretical gap:** 2.513s available by combining best sectors from different laps

### Next Session Focus

Based on this analysis, the data suggests focusing on sector consistency, particularly in S1. The theoretical best of 1:54.827 shows the pace is there – the opportunity is in replicating best sectors consistently within the same lap to close the 2.000s gap to personal best.