

PRELUARE DATE DIN MODULUL AIRBAG- VOLVO XC60- LOVITURA FRONTALA
STANGA, DECLANSARE AIRBAG DREAPTA
SE POATE IDENTIFICA VITEZA DE DEPLSARE CU 5 SECUNDE ININTE DE
ACCIDENT SI ALTE DATE DINAMICE- DETALII IN ANEXA ATASATA



IMPORTANT NOTICE: Robert Bosch LLC and the manufacturers whose vehicles are accessible using the CDR System urge end users to use the latest production release of the Crash Data Retrieval system software when viewing, printing or exporting any retrieved data from within the CDR program. Using the latest version of the CDR software is the best way to ensure that retrieved data has been translated using the most current information provided by the manufacturers of the vehicles supported by this product.

CDR File Information

User Entered VIN	YV1DZ8756D2465215
User	Varga Bogdan
Case Number	Premium Cars Dealer Volvo
EDR Data Imaging Date	11.14.2014
Crash Date	
Filename	YV1DZ8756D2465215_ACM.CDRX
Saved on	vineri, noiembrie 14 2014 at 10:10:07
Collected with CDR version	Crash Data Retrieval Tool 13.0
Reported with CDR version	Crash Data Retrieval Tool 13.0
EDR Device Type	Airbag Control Module
Event(s) recovered	Event record 1 (Deployment)

Comments

No comments entered.

Data Limitations

General storage information:

- The EDR can store up to two events.
- The information stored is the same for deployment events and non -deployment events
- Deployment event data is locked after writing
 - o Airbag deployment data can overwrite Other deployment data if there is no other data area available
- Non-deployment event data is unlocked
- Unlocked data can be overwritten by new data
- An event will not start capture/storage of data if there is already an ongoing event that is being captured
- An event will start a capture/storage of data if there is capture going on for an event that has finished

Data Element Sign Convention:

The following table provides an explanation of the sign notation for data elements that may be included in this CDR report.

Data Element Name	Positive Sign Notation Indicates
Longitudinal Acceleration	Forward
Delta-V, Longitudinal	Forward
Maximum Delta-V, Longitudinal	Forward
Lateral Acceleration	Leftwards
Delta-V, Lateral	Leftwards
Maximum Delta-V, Lateral	Leftwards
Normal Acceleration	Upwards
Vehicle Roll Angle	Rolling rightwards

Data limitations:

All data contained in this CDR report is indicative of what information the SRS control unit has measured or received on the vehicle communication bus at and around the time of crash. Data should be examined in conjunction with all other available evidence to give a better understanding of the situation.

All data elements have additional functional encoding, giving extra information about the data element in question when there's no data value stored:

- o 0xFF "not written" means the data element was never written (0xFF stored by default in a fresh control unit)
- o 0xFE "written but no data available" means the data element was written, but there was no information to write
- o 0xFD "not equipped" (where applicable) means the source of the information is not equipped in the car
- o 0xFC "not commanded" (where applicable) means the deployable device was never activated

Special care has to be taken when "Complete file recorded" data element does not read "Yes". The writing process of the recorder has then not been able to run its full course, and the validity of information stored cannot be guaranteed.

Signal information originating from other control units in the car have delays, this have to be taken into account when observing information at crash time. Examples of signals in the EDR record originating from other control units are:

- o Speed, vehicle indicated (ABS module)
- o Engine throttle (ECM module)
- o Service brake (ABS module)
- o Occupant size classification (OWS module)

"Time to deploy" data elements are related to TimeZero, which means that they are subject to when the restraint control algorithm becomes active. This can vary from case to case and is individual to each crash situation. These times are therefore not well suited for comparison between EDR records.

11001_Volvo001_r003

System Status at Retrieval

Vehicle Identification Number	YV1DZ8756D2465215
On-line Diagnostic Database Reference Number	31360455 AA
Number of Deployments	1
Ignition Cycle, Download	2,255
Lifetime Operating Timer (sec)	2,159,301

System Status at Event (Event Record 1)

Deployment Status, Event Record 1	No Close Deployment stored
Data Area Status, Event Record 1	Locked, Data Stored
Complete File Recorded (Yes/No)	Yes
Multi-Event, Number of Events (1,2)	Event Number 1
Time From Event 1 to 2 (sec)	0
Maximum Delta-V, Longitudinal (MPH [km/h])	-2.5 [-4.0]
Time, Maximum Delta-V, Longitudinal (msec)	78

Deployment Command Data (Event Record 1)

Frontal Airbag Deployment, Time to Deploy, First Stage, Driver (msec)	Not Commanded
Frontal Airbag Deployment, Time to Deploy, First Stage, Front Passenger (msec)	35
Frontal Airbag Deployment, Time to Deploy Stage 2, Passenger (msec)	210
Frontal Airbag Deployment, Time to Deploy Stage 3, Passenger (msec)	Not Equipped
Frontal Airbag Deployment, Time to Deploy Stage 2, Driver (msec)	Not Commanded
Frontal Airbag Deployment, Time to Deploy Stage 3, Driver (msec)	Not Equipped
Left Side Airbag, Time to Deploy (msec)	Not Commanded
Right Side Airbag, Time to Deploy (msec)	Not Commanded
Left Side Curtain, Time to Deploy (msec)	Not Commanded
Right Side Curtain, Time to Deploy (msec)	Not Commanded
Driver Shoulder Belt Pretensioner, Time to Deploy (msec)	35
Passenger Shoulder Belt Pretensioner, Time to Deploy (msec)	Not Commanded
Adaptive Steering Column, Time to Deploy (msec)	Not Equipped
Driver Lap Belt Pretensioner, Time to Deploy (msec)	43
Passenger Lap Belt Pretensioner, Time to Deploy (msec)	Not Commanded
Driver Belt Load Limiter, Time to Deploy (msec)	Not Commanded
Passenger Belt Load Limiter, Time to Deploy (msec)	Not Commanded
2nd Row Right Belt Pretensioner, Time to Deploy (msec)	Not Commanded
2nd Row Middle Belt Pretensioner, Time to Deploy (msec)	Not Commanded
2nd Row Left Belt Pretensioner, Time to Deploy (msec)	Not Commanded
3rd Row Right Belt Pretensioner, Time to Deploy (msec)	Not Equipped
3rd Row Left Belt Pretensioner, Time to Deploy (msec)	Not Equipped

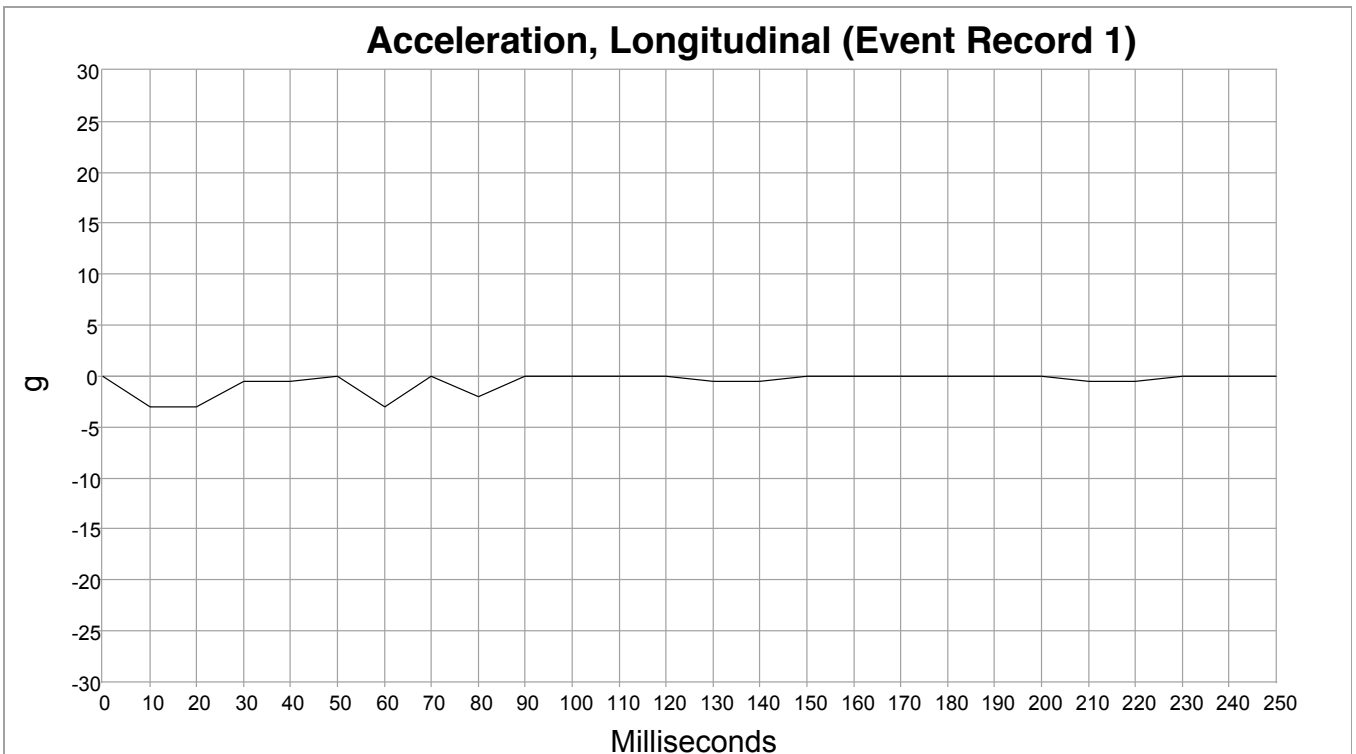
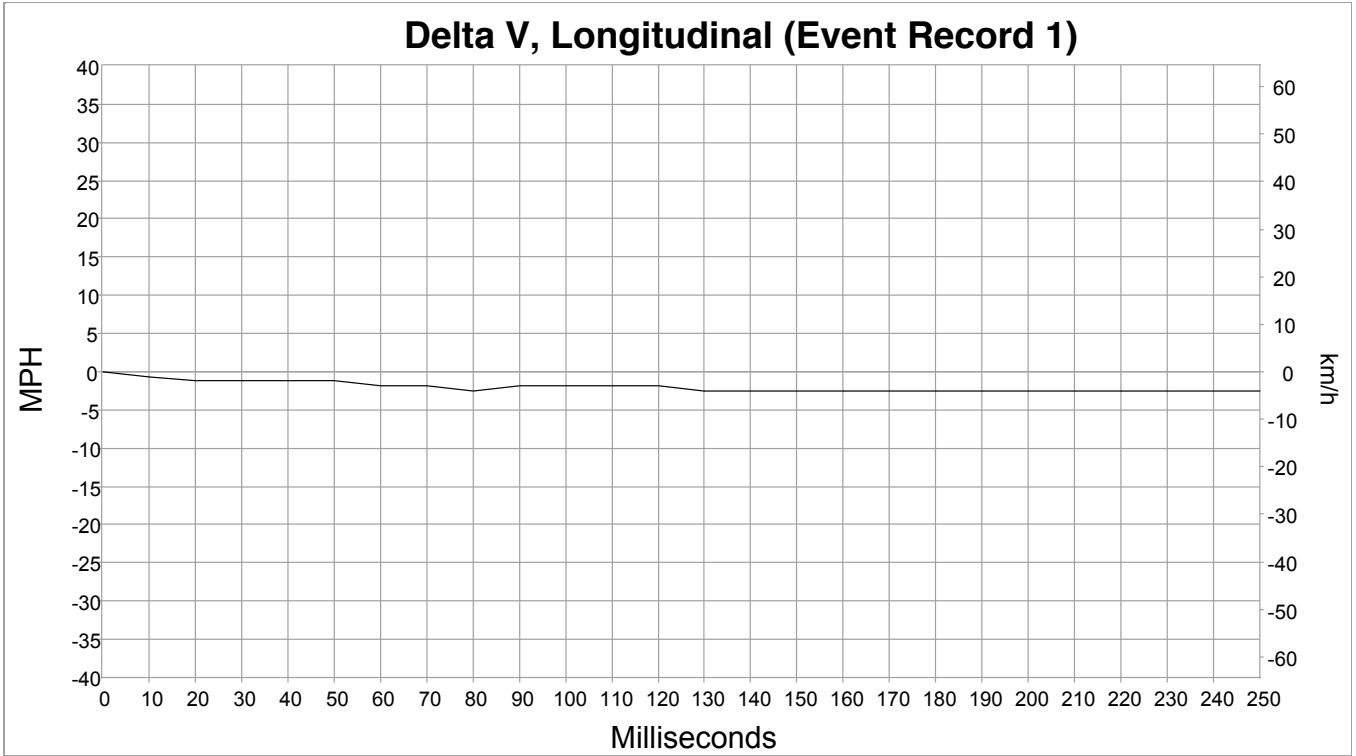
Pre-Crash Data -1 Sec (Event Record 1)

Ignition Cycle, Crash	2,233
Safety Belt Status, Driver	On, Belted
Safety Belt Status, Passenger	Off, Unbelted
Frontal Airbag Warning Lamp	Off
Frontal Airbag Suppression Switch Status, Front Passenger	On
Seat Track Position Switch, Foremost, Status, Driver	Not Equipped
Seat Track Position Switch, Foremost, Status, Front Passenger	Not Equipped
Occupant Size Right Front Passenger Child	Not Equipped

Pre-Crash -5 to 0 sec (Event Record 1)

Time (sec)	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal, % Full (%)	Service Brake (On, Off)
-5.0	26.1 [42.0]	15.0	Off
-4.5	26.1 [42.0]	0.0	Off
-4.0	24.9 [40.0]	0.0	Off
-3.5	23.6 [38.0]	0.0	Off
-3.0	21.7 [35.0]	0.0	On
-2.5	19.3 [31.0]	0.0	On
-2.0	16.2 [26.0]	0.0	On
-1.5	13.0 [21.0]	0.0	On
-1.0	10.6 [17.0]	0.0	On
-0.5	8.7 [14.0]	0.0	Off
0.0	4.3 [7.0]	0.0	On

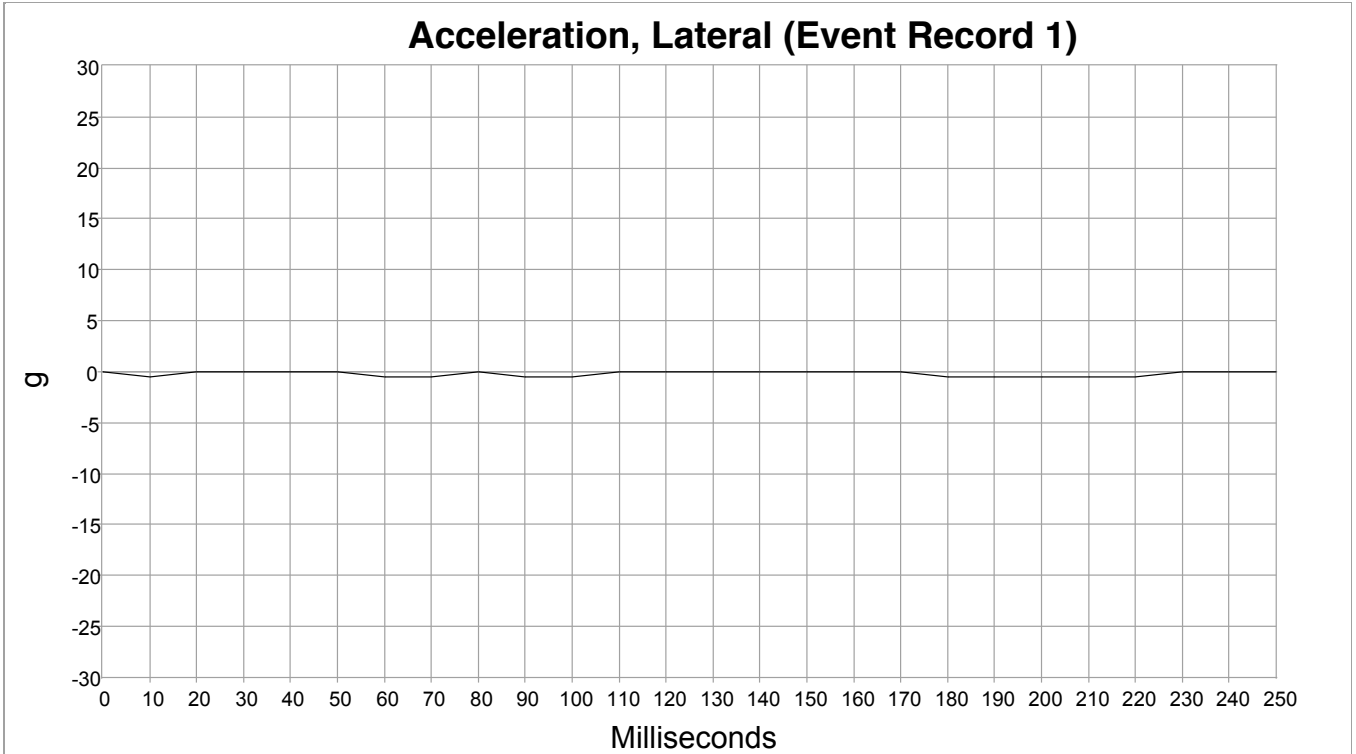
Longitudinal Crash Pulse (Event Record 1)



Longitudinal Crash Pulse (Event Record 1)

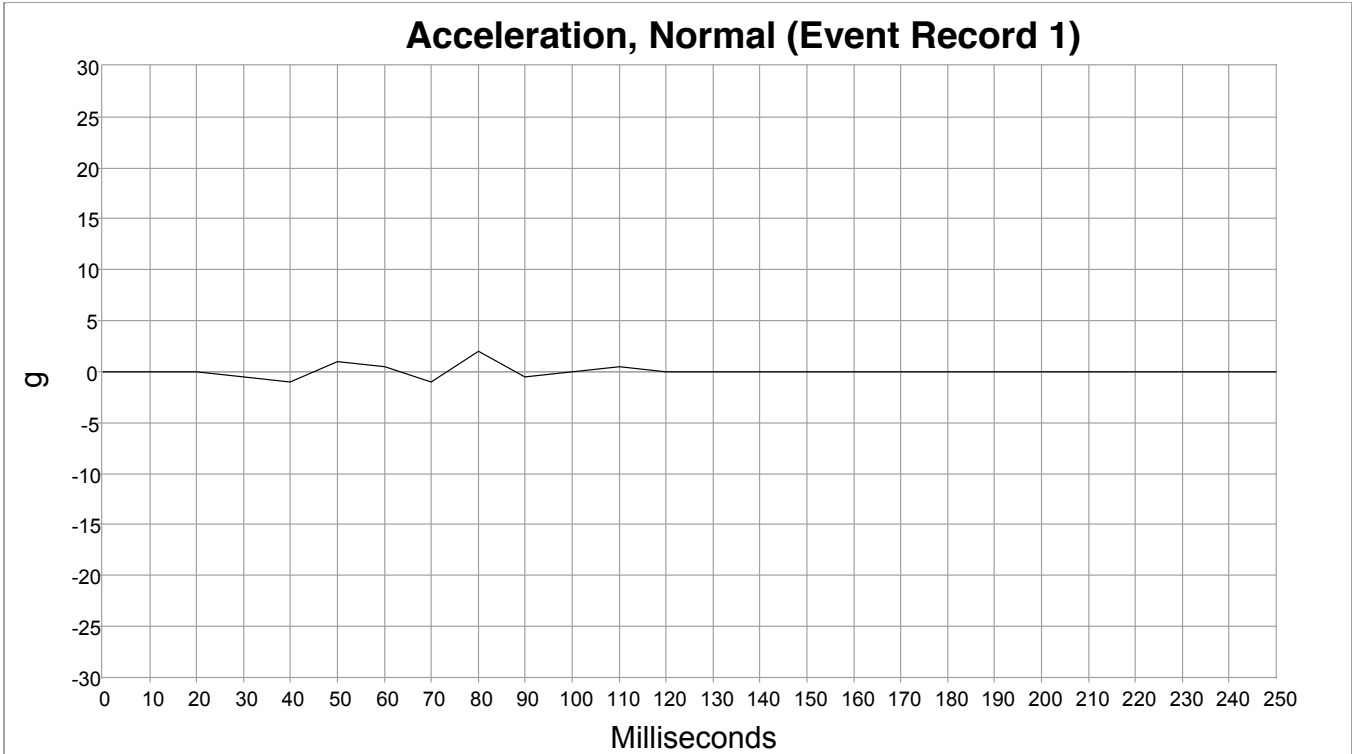
Time (msec)	Delta-V, Longitudinal (MPH [km/h])	Longitudinal Acceleration (g)
0	0.0 [0.0]	0.0
10	-0.6 [-1.0]	-3.0
20	-1.2 [-2.0]	-3.0
30	-1.2 [-2.0]	-0.5
40	-1.2 [-2.0]	-0.5
50	-1.2 [-2.0]	0.0
60	-1.9 [-3.0]	-3.0
70	-1.9 [-3.0]	0.0
80	-2.5 [-4.0]	-2.0
90	-1.9 [-3.0]	0.0
100	-1.9 [-3.0]	0.0
110	-1.9 [-3.0]	0.0
120	-1.9 [-3.0]	0.0
130	-2.5 [-4.0]	-0.5
140	-2.5 [-4.0]	-0.5
150	-2.5 [-4.0]	0.0
160	-2.5 [-4.0]	0.0
170	-2.5 [-4.0]	0.0
180	-2.5 [-4.0]	0.0
190	-2.5 [-4.0]	0.0
200	-2.5 [-4.0]	0.0
210	-2.5 [-4.0]	-0.5
220	-2.5 [-4.0]	-0.5
230	-2.5 [-4.0]	0.0
240	-2.5 [-4.0]	0.0
250	-2.5 [-4.0]	0.0

Lateral Crash Pulse (Event Record 1)



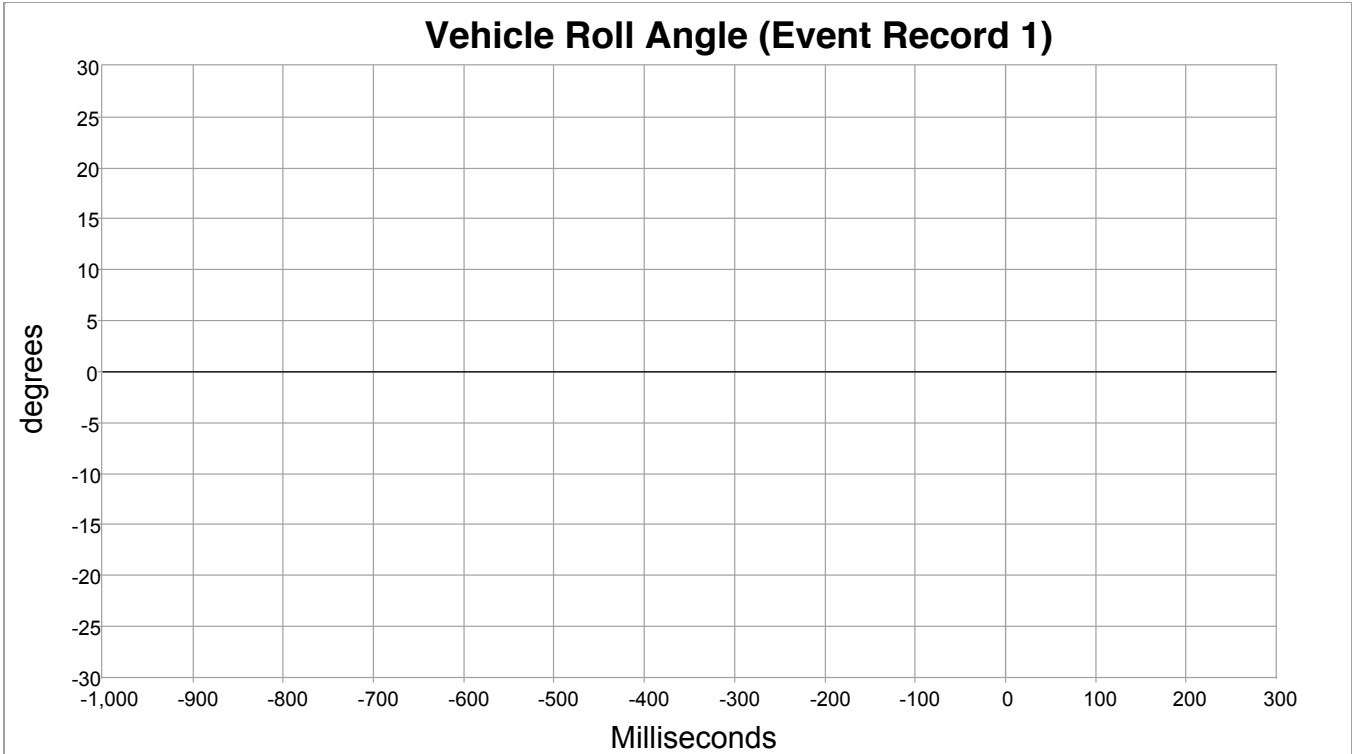
Time (msec)	Lateral Acceleration (g)
0	0.0
10	-0.5
20	0.0
30	0.0
40	0.0
50	0.0
60	-0.5
70	-0.5
80	0.0
90	-0.5
100	-0.5
110	0.0
120	0.0
130	0.0
140	0.0
150	0.0
160	0.0
170	0.0
180	-0.5
190	-0.5
200	-0.5
210	-0.5
220	-0.5
230	0.0
240	0.0
250	0.0

Vertical Crash Pulse (Event Record 1)



Time (msec)	Normal Acceleration (g)
0	0.0
10	0.0
20	0.0
30	-0.5
40	-1.0
50	1.0
60	0.5
70	-1.0
80	2.0
90	-0.5
100	0.0
110	0.5
120	0.0
130	0.0
140	0.0
150	0.0
160	0.0
170	0.0
180	0.0
190	0.0
200	0.0
210	0.0
220	0.0
230	0.0
240	0.0
250	0.0

Rollover Crash Pulse (Event Record 1)



Time (msec)	Vehicle Roll Angle (deg)
-1000	0.0
-900	0.0
-800	0.0
-700	0.0
-600	0.0
-500	0.0
-400	0.0
-300	0.0
-200	0.0
-100	0.0
0	0.0
100	0.0
200	0.0
300	0.0


```
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF  
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
```

EE0B 00

EE0C 00

EE0D 00

EE0E 01

F190 59 56 31 44 5A 38 37 35 36 44 32 34 36 35 32 31
35 00 00 00 00 00 00 00

F1A2 33 31 33 36 30 34 35 35 20 41 41 00 00 00 00 00
00 00 00 00 00 00 00 00

Disclaimer of Liability

The users of the CDR product and reviewers of the CDR reports and exported data shall ensure that data and information supplied is applicable to the vehicle, vehicle's system(s) and the vehicle ECU. Robert Bosch LLC and all its directors, officers, employees and members shall not be liable for damages arising out of or related to incorrect, incomplete or misinterpreted software and/or data. Robert Bosch LLC expressly excludes all liability for incidental, consequential, special or punitive damages arising from or related to the CDR data, CDR software or use thereof.