

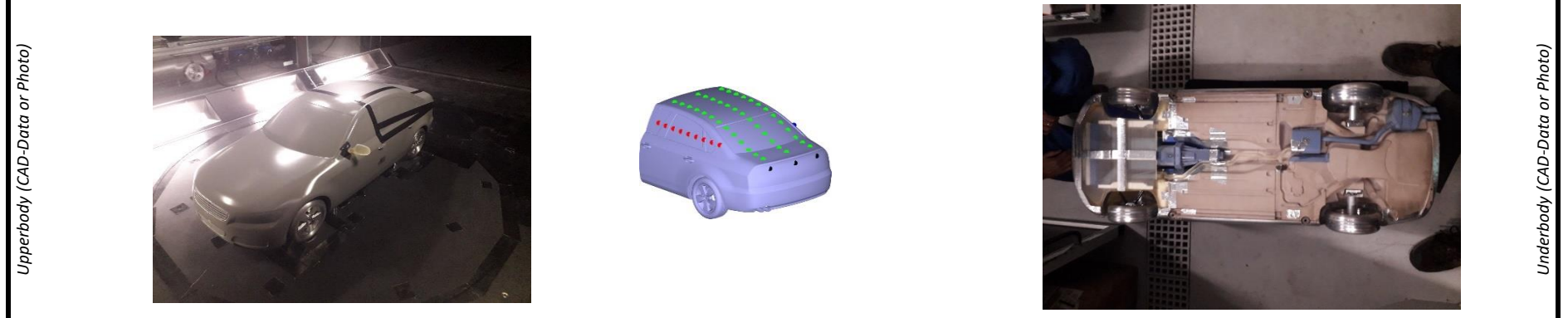



COMPANY	Loughborough University	DATE	10.9.2020	CONTACT	MARTIN PASSMORE
DrivAer Configuration	N_EB_wM_wW_woL_oG			EMAIL	M.A.PASSMORE@LBORO.AC.UK

Tires		Wheels and Track		Geometrical Data	
Wheel Type	OC DrivAer	Track Front [mm]	380	Length [mm]	1153
Wheel Type (Comments)	Rigid (no tyre defomation)	Track Rear [mm]	380	Width [mm]	438
		Tires Size Front	Scaled CAD	Height [mm]	357
		Tires Size Rear	Scaled CAD	Wheelbase [mm]	367

Cooling Package		Cooling Intakes / With Active Shutters		Ride Heights from Ground to Wheel-Arch	
Heat Exchanger (HX)	FKFS	Upper Grill	Open	Front Ride Height [mm]	172 +/- 0.5
HX Pressure Drop $\Delta p = A*v + B*v^2$	NOT MEASURED	Lower Grill	Open	Rear Ride Height [mm]	171 +/-0.5
HX x-Position [mm]	13 (top); 34 (bottom)	 Cooling Package (CAD or Photo)	 Wheels (CAD or Photo)		
HX Thickness [mm]	10				
Fan Shroud x-Pos. [mm]	58 (top); 79 (bottom)				
Sealing	Fully sealed				
Leakage Area [mm <sup>2</sup> ]	0				



Test Facility & Vehicle Setup			
Test Facility	Loughborough University Large Wind Tunnel	Windspeed [kph]	144
Data Correction	No	Road Simulation	Static
Blockage	5,45%	YAW Angle	0
Boundary Layer Treatment	None	Model Mounting	Struts in ground
Model Scale	1:4		
REMARKS (e.g. deviations from Baseline OC DrivAer model)	Mock suspension geometry is used to hold the wheels in place, images of such are available in the additional data.		
	 Front View		

Test Data			
	Standard	Mock-Up Cooling Intakes [ Δ ]	Additional Test Data
Drag Cx [-]	0.309-0.314	-	Additional data available at : <a href="https://doi.org/10.17028/rd.lboro.12881213">https://doi.org/10.17028/rd.lboro.12881213</a> Data includes: - Average and instantaneous 6 component force/moment measurements. - Average and instantaneous wall static pressure measurements on the upper/rear 1/4 of the geometry. - Average and instantaneous two component planar velocity measurements (particle image velocimetry) in the wake and notch at Y=95mm, 47.5mm, 0mm, -47.5mm, -95mm, -142.5mm and -190mm. - Average and instananeous two component planar velocity measurements (particle image velocimetry) in the stagnation region at the front of the vehicle at Y=0mm
Frontal Aera A [m <sup>2</sup> ]	0,136		
Front Lift Cz [-]	0.007-0.017	-	
Rear Lift Cz [-]	0.081-0.087	-	
Radiator Mass Flow [kg/s]	-		
Underhood Ref Pressure (#415) (Cp) [-]:	-	-	
Wheel-house Ref Pressure (#566) (Cp) [-]:	-	-	