DIESEL Bus Test Protocol

Start sec.	Time sec.	Test			Measurements
0	900	Vehicle check & preparation			> Fill forms, vehicle check and weigh, fuel sample
900	300	Snap acceleration (Bosch test)			> Percentage smoke from filter
1200	1200	Tigh vehicle on dynamometer			
		Diesel Bus Cycle 1		Test Sequence	> Real time CO, HC, NOx and CO2
2400	180	AC 2540 (cold)	**Phase 1**		> 6 bags reading
2580	20	Idle			> 6 filters sampling for PM
2600	180	AC 2540	**Phase 2**		> Real-time PM (laser scattering)
2780	180	Idle Warm Up			> Smoke opacity
2960	180	Idle	**Phase 3**		> Temperature,humidity and pressure
3140	1000	Bag Analysis			> Test time, distance, speed, dyno load
4140	180	Warming up			
		Diesel Bus Cycle 2			
4320	180	AC 2560	**Phase 1**		
4500	20	Idle			
4520	600	ETC Phase 1	**Phase 2**		
5120	1000	Bag Analysis			
6120	180	Warming up			
		Diesel Bus Cycle 3			
3140	1154	Point 2	**Phase 1**		
4294	448	Point 4	**Phase 2**		
4742	1200	Bag Analysis			
5942	6222	**Test Sequence Repeat 1 (Cycle 1, 2 and 3)**			
12164	6222	**Test Sequence Repeat 2 (if needed)**			
18386	180	Snap acceleration (Partial Flow)			> Percentage smoke from filter
18566	900	Vehicle release			
19466	180	Snap acceleration (Bosch test)			> Percentage smoke from filter
19646					

DIESEL Truck Test Protocol

Start sec.	Time sec.	Test			Measurements
0	900	Vehicle check & preparation			> Fill forms, vehicle check and weigh, fuel sample
900	300	Snap acceleration (Bosch test)			> Percentage smoke from filter
1200	1200	Tigh vehicle on dynamometer			
		Diesel Truck Cycle 1		Test Sequence	> Real time CO, HC, NOx and CO2
2400	180	AC 2540 (cold)	**Phase 1**		> 6 bags reading
2580	20	Idle			> 6 filters sampling for PM
2600	180	AC 2540	**Phase 2**		> Real-time PM (laser scattering)
2780	180	Idle Warm Up			> Smoke opacity
2960	180	Idle	**Phase 3**		> Temperature,humidity and pressure
3140	1000	Bag Analysis			> Test time, distance, speed, dyno load
4140	180	Warming up			
		Diesel Truck Cycle 2			
4320	180	AC 2560	**Phase 1**		
4500	600	ETC Phase 1	**Phase 2**		
5100	600	ETC Phase 2	**Phase 3**		
5700	1000	Bag Analysis			
6700	180	Warming up			
		Diesel Truck Cycle 3			
6880	1154	Point 2	**Phase 1**		
8034	448	Point 4	**Phase 2**		
8482	1000	Bag Analysis			
9482	7302	**Test Sequence Repeat 1 (Cycle 1, 2 and 3)**			
16784	7302	**Test Sequence Repeat 2 (if needed)**			
24086	180	Snap acceleration (Partial Flow)			> Percentage smoke from filter
24266	900	Vehicle release			
25166	180	Snap acceleration (Bosch test)			> Percentage smoke from filter
25346					

DIESEL Light-Duty Test Protocol

Start sec.	Time sec.	Test			Measurements
0	900	Vehicle check & preparation			> Fill forms, vehicle check and weigh, fuel sample
900	300	Snap acceleration (Bosch test)			> Percentage smoke from filter
1200	1200	Tigh vehicle on dynamometer			
		Diesel Light-Duty Cycle 1		Test Sequence	> Real time CO, HC, NOx and CO2
2400	180	AC 2540 (cold)	**Phase 1**		> 6 bags reading
2580	20	Idle			> 6 filters sampling for PM
2600	180	AC 2540	**Phase 2**		> Real-time PM (laser scattering)
2780	180	Idle Warm Up			> Smoke opacity
2960	360	Idle	**Phase 3**		> Temperature,humidity and pressure
3320	1000	Bag Analysis			> Test time, distance, speed, dyno load
4320	180	Warming up			
		Diesel Light-Duty Cycle 2			
4500	180	AC 2560	**Phase 1**		
4680	20	Idle			
4700	400	EUDC Phase 1	**Phase 2**		
5100	400	EUDC Phase 2	**Phase 3**		
5500	1000	Bag Analysis			
6500	180	Warming up			
		Diesel Light-Duty Cycle 3			
6680	823	Point 2	**Phase 1**		
7503	707	Point 4	**Phase 2**		
8210	1200	Bag Analysis			
9410	7330	**Test Sequence Repeat 1 (Cycle 1, 2 and 3)**			
16740	7330	**Test Sequence Repeat 2 (if needed)**			
24070	180	Snap acceleration (Partial Flow)			> Percentage smoke from filter
24250	900	Vehicle release			
25150	180	Snap acceleration (Bosch test)			> Percentage smoke from filter
25330					