

# Coverage Report for Project\_Model\_simulink\_versionSignalBuilder\_7\_7\_Harness

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## Analysis Information

### Coverage Data Information

Collected in version (R2021a)

### Model Information

Model version 2.39  
Author A  
Last saved Sun Jul 16 22:09:06 2023

### Harness information

Harness model(s) Project\_Model\_simulink\_versionSignalBuilder\_7\_7\_Harness  
Harness model owner Project\_Model\_simulink\_versionSignalBuilder\_7\_7\_2023

### Simulation Optimization Options

Default parameter behavior inlined  
Block reduction forced off  
Conditional branch optimization on

### Coverage Options

Analyzed model Project\_Model\_simulink\_versionSignalBuilder\_7\_7\_Harness/CRDI\_Integrated\_Fuel\_Injection\_system  
Logic block short circuiting off

## Tests

Test	Started execution	Ended execution
<a href="#">Run 1 - Harness Inputs</a>	16-Jul-2023 22:24:16	16-Jul-2023 22:24:17

## Summary

Model Hierarchy/Complexity	<a href="#">Run 1 - Harness Inputs</a>			
	Decision		Execution	
1. <a href="#">CRDI_Integrated_Fuel_Injection_system</a>	38	86% <div><div></div></div>	100% <div><div></div></div>	
2. ... <a href="#">Fuel Rail</a>		NA	100% <div><div></div></div>	
3. ... <a href="#">High Pressure Pump</a>		NA	100% <div><div></div></div>	
4. ... <a href="#">Injector_Subsystem</a>	28	88% <div><div></div></div>	100% <div><div></div></div>	
5. .... <a href="#">Injector1</a>	7	88% <div><div></div></div>	100% <div><div></div></div>	
6. .... <a href="#">Injector_1Subsystem</a>	7	88% <div><div></div></div>	100% <div><div></div></div>	
7. .... <a href="#">Main_injection</a>	1	NA	100% <div><div></div></div>	
8. .... <a href="#">Pre_injection</a>	1	NA	100% <div><div></div></div>	
9. .... <a href="#">Subsystem</a>	2	100% <div><div></div></div>	100% <div><div></div></div>	
10. .... <a href="#">Injector2</a>	7	88% <div><div></div></div>	100% <div><div></div></div>	

11.....	<a href="#">Injector_2Subsystem</a>	7	88%	<div><div></div></div>	100%	<div><div></div></div>
12.....	<a href="#">Main_injection</a>	1	NA		100%	<div><div></div></div>
13.....	<a href="#">Pre_injection</a>	1	NA		100%	<div><div></div></div>
14.....	<a href="#">Subsystem</a>	2	100%	<div><div></div></div>	100%	<div><div></div></div>
15.....	<a href="#">Injector3</a>	7	88%	<div><div></div></div>	100%	<div><div></div></div>
16.....	<a href="#">Injector_3Subsystem</a>	7	88%	<div><div></div></div>	100%	<div><div></div></div>
17.....	<a href="#">Main_injection</a>	1	NA		100%	<div><div></div></div>
18.....	<a href="#">Pre_injection</a>	1	NA		100%	<div><div></div></div>
19.....	<a href="#">Subsystem</a>	2	100%	<div><div></div></div>	100%	<div><div></div></div>
20.....	<a href="#">Injector4</a>	7	88%	<div><div></div></div>	100%	<div><div></div></div>
21.....	<a href="#">Injector_4Subsystem</a>	7	88%	<div><div></div></div>	100%	<div><div></div></div>
22.....	<a href="#">Main_injection</a>	1	NA		100%	<div><div></div></div>
23.....	<a href="#">Pre_injection</a>	1	NA		100%	<div><div></div></div>
24.....	<a href="#">Subsystem</a>	2	100%	<div><div></div></div>	100%	<div><div></div></div>
25....	<a href="#">Low pressure pump</a>		NA		100%	<div><div></div></div>
26....	<a href="#">Sensors_Subsystem</a>	5	100%	<div><div></div></div>	100%	<div><div></div></div>
27.....	<a href="#">APPS</a>		NA		100%	<div><div></div></div>
28.....	<a href="#">Oxygen sensor</a>	5	100%	<div><div></div></div>	100%	<div><div></div></div>
29.....	<a href="#">MATLAB Function</a>	5	100%		NA	
30....	<a href="#">Throttle Setup</a>	4	67%	<div><div></div></div>	100%	<div><div></div></div>
31.....	<a href="#">Throttle_Motor</a>	3	50%	<div><div></div></div>	100%	<div><div></div></div>

## Details

### 1. SubSystem block "[CRDI\\_Integrated\\_Fuel\\_Injection\\_system](#)"

**Child Systems:** [Fuel Rail](#), [High Pressure Pump](#), [Injector\\_Subsystem](#), [Low pressure pump](#), [Sensors\\_Subsystem](#), [Throttle Setup](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	38
Decision	NA	86% (37/43) decision outcomes
Execution	NA	100% (130/130) objective outcomes

### 2. SubSystem block "[Fuel Rail](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (5/5) objective outcomes

#### Full Coverage

Model Object	Metric
Lookup_n-D block " <a href="#">1-D Lookup Table</a> "	Execution
Product block " <a href="#">Product</a> "	Execution
Product block " <a href="#">Product1</a> "	Execution
Sum block " <a href="#">Subtract</a> "	Execution
Sum block " <a href="#">Subtract1</a> "	Execution

### 3. SubSystem block "[High Pressure Pump](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (3/3) objective outcomes

#### Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution
Product block " <a href="#">Product</a> "	Execution
Sum block " <a href="#">Subtract</a> "	Execution

#### 4. SubSystem block "[Injector\\_Subsystem](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system](#)  
**Child Systems:** [Injector1](#), [Injector2](#), [Injector3](#), [Injector4](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	28
Decision	NA	88% (28/32) decision outcomes
Execution	NA	100% (105/105) objective outcomes

#### 5. SubSystem block "[Injector1](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem](#)  
**Child Systems:** [Injector\\_1Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (26/26) objective outcomes

#### Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution
Gain block " <a href="#">Gain1</a> "	Execution
Gain block " <a href="#">Gain2</a> "	Execution
Product block " <a href="#">Divide2</a> "	Execution
Product block " <a href="#">Divide3</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution
Constant block " <a href="#">Constant4</a> "	Execution

#### 6. SubSystem block "[Injector\\_1Subsystem](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector1](#)  
**Child Systems:** [Main\\_injection](#), [Pre\\_injection](#), [Subsystem](#)


Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (19/19) objective outcomes

#### If block "[If](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector1/Injector\\_1Subsystem](#)

Uncovered ➡  
Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	75% (3/4) decision outcomes
Execution	100% (1/1) objective outcomes
Decisions analyzed	
input 1 "if" condition	100%
false	46/51
true	5/51
input 2 "elseif" condition	50%
false	0/46 
true	46/46

Full Coverage

Model Object	Metric
Constant block " <a href="#">Constant</a> "	Execution

7. SubSystem block "[Main\\_injection](#)"

[Justify or Exclude](#)  
Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDL\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector1/Injector\\_1Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Main_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Main_Inj_trg_angle_inj2</a> "	Execution

8. SubSystem block "[Pre\\_injection](#)"

[Justify or Exclude](#)  
Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDL\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector1/Injector\\_1Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution

Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj3</a> "	Execution

## 9. SubSystem block "[Subsystem](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector1/Injector\\_1Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	2
Decision	NA	100% (4/4) decision outcomes
Execution	NA	100% (3/3) objective outcomes

### Full Coverage

Model Object	Metric
Switch block " <a href="#">Switch1</a> "	Decision, Execution
Switch block " <a href="#">Switch2</a> "	Decision, Execution
Constant block " <a href="#">Constant</a> "	Execution

## 10. SubSystem block "[Injector2](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem](#)

**Child Systems:** [Injector\\_2Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (26/26) objective outcomes

### Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution
Gain block " <a href="#">Gain1</a> "	Execution
Gain block " <a href="#">Gain2</a> "	Execution
Product block " <a href="#">Divide2</a> "	Execution
Product block " <a href="#">Divide3</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution
Constant block " <a href="#">Constant4</a> "	Execution

## 11. SubSystem block "[Injector\\_2Subsystem](#)"

[Justify or Exclude](#)


**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector2](#)


**Child Systems:** [Main\\_injection](#), [Pre\\_injection](#), [Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (19/19) objective outcomes

If block "If"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector2/Injector\\_2Subsystem](#)  
Uncovered   
Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	75% (3/4) decision outcomes
Execution	100% (1/1) objective outcomes
Decisions analyzed	
input 1 "if" condition	100%
false	47/51
true	4/51
input 2 "elseif" condition	50%
false	0/47 
true	47/47

Full Coverage

Model Object	Metric
Constant block " <a href="#">Constant</a> "	Execution

12. SubSystem block "[Main\\_injection](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector2/Injector\\_2Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Main_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Main_Inj_trg_angle_inj2</a> "	Execution

13. SubSystem block "[Pre\\_injection](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector2/Injector\\_2Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

#### Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj2</a> "	Execution

#### 14. SubSystem block "[Subsystem](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector2/Injector\\_2Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	2
Decision	NA	100% (4/4) decision outcomes
Execution	NA	100% (3/3) objective outcomes

#### Full Coverage

Model Object	Metric
Switch block " <a href="#">Switch1</a> "	Decision, Execution
Switch block " <a href="#">Switch2</a> "	Decision, Execution
Constant block " <a href="#">Constant</a> "	Execution

#### 15. SubSystem block "[Injector3](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem](#)

Child Systems: [Injector\\_3Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (27/27) objective outcomes

#### Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution
Gain block " <a href="#">Gain1</a> "	Execution
Gain block " <a href="#">Gain2</a> "	Execution
Product block " <a href="#">Divide2</a> "	Execution
Product block " <a href="#">Divide3</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution
Constant block " <a href="#">Constant4</a> "	Execution

#### 16. SubSystem block "[Injector\\_3Subsystem](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector3](#)


Child Systems: [Main\\_injection](#), [Pre\\_injection](#), [Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (20/20) objective outcomes

If block "**If**"


[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector3/Injector\\_3Subsystem](#)

Uncovered   
Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	75% (3/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input 1 "if" condition	100%
false	48/51
true	3/51
input 2 "elseif" condition	50%
false	0/48 
true	48/48

Full Coverage

Model Object	Metric
DataTypeConversion block " <a href="#">Data Type Conversion</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution

## 17. SubSystem block "[Main\\_injection](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector3/Injector\\_3Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Main_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Main_Inj_trg_angle_inj2</a> "	Execution

## 18. SubSystem block "[Pre\\_injection](#)"



[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector3/Injector\\_3Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

#### Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj2</a> "	Execution

### 19. SubSystem block "[Subsystem](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector3/Injector\\_3Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	2
Decision	NA	100% (4/4) decision outcomes
Execution	NA	100% (3/3) objective outcomes

#### Full Coverage

Model Object	Metric
Switch block " <a href="#">Switch1</a> "	Decision, Execution
Switch block " <a href="#">Switch2</a> "	Decision, Execution
Constant block " <a href="#">Constant</a> "	Execution

### 20. SubSystem block "[Injector4](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem](#)

**Child Systems:** [Injector\\_4Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (26/26) objective outcomes

#### Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution
Gain block " <a href="#">Gain1</a> "	Execution
Gain block " <a href="#">Gain2</a> "	Execution
Product block " <a href="#">Divide2</a> "	Execution
Product block " <a href="#">Divide3</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution

Constant block "[Constant4](#)"

Execution

## 21. SubSystem block "[Injector\\_4Subsystem](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector4](#)


**Child Systems:** [Main\\_injection](#), [Pre\\_injection](#), [Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	7
Decision	NA	88% (7/8) decision outcomes
Execution	NA	100% (19/19) objective outcomes

If block "[If](#)"

[Justify or Exclude](#)


**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector4/Injector\\_4Subsystem](#)

**Uncovered** 

**Links:**

Metric	Coverage
Cyclomatic Complexity	2
Decision	75% (3/4) decision outcomes
Execution	100% (1/1) objective outcomes

**Decisions analyzed**

input 1 "if" condition	100%
false	47/51
true	4/51
input 2 "elseif" condition	50%
false	0/47 
true	47/47

**Full Coverage**

Model Object	Metric
Constant block " <a href="#">Constant</a> "	Execution

## 22. SubSystem block "[Main\\_injection](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector4/Injector\\_4Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

**Full Coverage**

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution

Constant block " <a href="#">Main_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Main_Inj_trg_angle_inj2</a> "	Execution

### 23. SubSystem block "[Pre\\_injection](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector4/Injector\\_4Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (7/7) objective outcomes

#### Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator</a> "	Execution
Product block " <a href="#">Divide</a> "	Execution
Sum block " <a href="#">Add</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj1</a> "	Execution
Constant block " <a href="#">Pre_Inj_trg_angle_inj2</a> "	Execution

### 24. SubSystem block "[Subsystem](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Injector\\_Subsystem/Injector4/Injector\\_4Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	2
Decision	NA	100% (4/4) decision outcomes
Execution	NA	100% (3/3) objective outcomes

#### Full Coverage

Model Object	Metric
Switch block " <a href="#">Switch1</a> "	Decision, Execution
Switch block " <a href="#">Switch2</a> "	Decision, Execution
Constant block " <a href="#">Constant</a> "	Execution

### 25. SubSystem block "[Low pressure pump](#)"

[Justify or Exclude](#)

Parent: [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

#### Full Coverage

Model Object	Metric
Gain block " <a href="#">Gain</a> "	Execution

## 26. SubSystem block "[Sensors\\_Subsystem](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system](#)  
**Child Systems:** [APPS](#), [Oxygen sensor](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	5
Decision	NA	100% (5/5) decision outcomes
Execution	NA	100% (2/2) objective outcomes

## 27. SubSystem block "[APPS](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Sensors\\_Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

### Full Coverage

Model Object	Metric
Lookup_n-D block " <a href="#">1-D Lookup Table</a> "	Execution

## 28. SubSystem block "[Oxygen sensor](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Sensors\\_Subsystem](#)  
**Child Systems:** [MATLAB Function](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	5
Decision	NA	100% (5/5) decision outcomes
Execution	NA	100% (1/1) objective outcomes

### Full Coverage

Model Object	Metric
DataTypeConversion block " <a href="#">Data Type Conversion</a> "	Execution

## 29. MATLAB Function "[MATLAB Function](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Sensors\\_Subsystem/Oxygen sensor](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	5
Decision	NA	100% (5/5) decision outcomes

### Full Coverage

Model Object	Metric
MATLAB Function " <a href="#">fcn</a> "	Decision

## 30. SubSystem block "[Throttle Setup](#)"

[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system](#)

**Child Systems:** [Throttle\\_Motor](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (14/14) objective outcomes

#### Full Coverage

Model Object	Metric
Logic block " <a href="#">Logical Operator1</a> "	Execution
Lookup_n-D block " <a href="#">MAPressure_To_RPM</a> "	Execution
Lookup_n-D block " <a href="#">RPM_TO_Throttle_Opening_In_Degrees</a> "	Execution
Switch block " <a href="#">Switch</a> "	Decision, Execution
Product block " <a href="#">Product</a> "	Execution
Sum block " <a href="#">Subtract</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator</a> "	Execution
RelationalOperator block " <a href="#">Relational Operator1</a> "	Execution
Constant block " <a href="#">Constant</a> "	Execution
Constant block " <a href="#">Constant1</a> "	Execution
Constant block " <a href="#">Constant2</a> "	Execution
Constant block " <a href="#">Constant3</a> "	Execution

### 31. SubSystem block "[Throttle\\_Motor](#)"


[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Throttle Setup](#)

**Uncovered Links:** 

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	2	3
Decision	50% (1/2) decision outcomes	50% (2/4) decision outcomes
Execution	NA	100% (2/2) objective outcomes

#### Decisions analyzed

enable logical value	50%
false	0/51 
true	51/51

#### Switch block "[Switch](#)"


[Justify or Exclude](#)

**Parent:** [Project\\_Model\\_simulink\\_versionSignalBuilder\\_7\\_7\\_Harness/CRDI\\_Integrated\\_Fuel\\_Injection\\_system/Throttle Setup/Throttle\\_Motor](#)

**Uncovered Links:** 

Metric	Coverage
Cyclomatic Complexity	1
Decision	50% (1/2) decision outcomes
Execution	100% (1/1) objective outcomes

#### Decisions analyzed

trigger > threshold	50%
false (output is from 3rd input port)	51/51
true (output is from 1st input port)	0/51 

Full Coverage

Model Object	Metric
Constant block <a href="#">"Constant"</a>	Execution