Differential relay:

**Case - 1**

Experimental Results: For slope m1=0.5 m2=0.9, IPU = 0.2

Load current (A) Fault Current (A) Restraining Current (PU) Differential current (PU)

0.2 1.213 0.026 0.173

2.4 1.568 0.319 0.339

3.4 1,877 0.452 0.391

4.5 2.03 0.612 0.479

5.8 2.389 0.798 0.578

6.5 2.419 0.871 0.612

8.4 3.126 1.157 0.765

9.5 3.442 1.304 0.838

10.8 4.823 1.477 1.071

12 6.416 1.643 1.297

12.8 7.351 1.763 1.41

**Case -2**

Experimental Results: For slope m1=0.5 m2=0.7, IPU = 0.2

Load current (A) Fault Current (A) Restraining Current (PU) Differential Current (PU)

0.2 1.18 0.026 0.173

2.3 1.58 0.312 0.319

2.9 1.82 0.412 0.374

5.5 2.59 0.765 0.578

8.3 3.37 1.058 0.738

9.4 3.68 1.31 0.891

10.4 4.38 1.45 0.991

11.3 5.19 1.577 1.064

12.3 5.87 1.73 1.224

12.8 6.05 1.776 1.264