Steps:

1. Turn Heat Pump to Off - Mode:
   1. Should reset both 15min Power Array & Accumulated Error
2. Ensure zone temperature and humidity conditions are met
3. Gather Accumulated Error:
   1. Positive: Bring Setpoint to severe low value relative to Zone Temperature
   2. Negative: Bring Setpoint to severe high value relative to Zone Temperature
4. Change setpoint value to get relative error differential needed
5. Repeat Steps #1-4

Test Matrix:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Condition # | Mode | Error | Acc-Error |  |  |  |  |
| 1 | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -1 | 250 | 22 | 23 | 17.8 | 50 |
| 2 | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -1 | 750 | 22 | 23 | 17.8 | 50 |
| 2a | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -0.5 | 250 | 22 | 22.5 | 17.8 | 50 |
| 2b | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | 0 | 250 | 22 | 22 | 17.8 | 50 |
| 3 | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -1 | 1250 | 22 | 23 | 17.8 | 50 |
| 4 | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -1 | 1750 | 22 | 23 | 17.8 | 50 |
| 5 | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -1 | 2250 | 22 | 23 | 17.8 | 50 |
| 6 | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -1 | 2750 | 22 | 23 | 17.8 | 50 |
| 7 | Off | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 0 | 0 | 22 | 22 | 17.8 | 50 |
| Cool | 5 | - | 22 | 17 | 17.8 | 50 |
| Cool | -1 | 3000 | 22 | 23 | 17.8 | 50 |