

Test Logs

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Test Model: SCE4255W

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**FCC Registration/
Designation Number:** 788550 / TW0003

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1 CBSD Registration Process

1.1 WINNF.FT.C.REG.1

2022-01-24T05:35:39.799Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:35:39.799Z - INFO - the selected test from the user : WINNF.FT.C.REG.1 is starting now

2022-01-24T05:35:55.961Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T05:35:56.003Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

}

2022-01-24T05:35:57.806Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T05:35:57.808Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:36:01.842Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2022-01-24T05:36:02.348Z - INFO - The final result of the test : WINNF.FT.C.REG.1 is - passed

1.2 WINNF.FT.C.REG.3

2022-01-24T05:37:41.046Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:37:41.048Z - INFO - the selected test from the user : WINNF.FT.C.REG.3 is starting now

2022-01-24T05:37:46.290Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T05:37:46.312Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

2022-01-24T05:37:48.052Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T05:37:48.052Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:37:50.019Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2022-01-24T05:37:50.354Z - INFO - The final result of the test : WINNF.FT.C.REG.3 is – passed

1.3 WINNF.FT.C.REG.8

2022-01-24T05:39:31.026Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:39:31.026Z - INFO - the selected test from the user : WINNF.FT.C.REG.8 is starting now

2022-01-24T05:39:33.602Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T05:39:33.641Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "response": {
      "responseCode": 102
    }
  }
]
```

2022-01-24T05:39:35.029Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T05:39:35.030Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:39:37.549Z - INFO - for the question : Were there RF transmissions from the CBSD1 during

the test? , the user choose n

2022-01-24T05:39:37.790Z - INFO - The final result of the test : WINNF.FT.C.REG.8 is - passed

1.4 WINNF.FT.C.REG.10

2022-01-24T05:44:32.102Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:44:32.104Z - INFO - the selected test from the user : WINNF.FT.C.REG.10 is starting now

2022-01-24T05:44:35.209Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T05:44:35.237Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "response": {
      "responseCode": 200
    }
  }
]

```

2022-01-24T05:44:37.107Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T05:44:37.108Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:44:40.750Z - INFO - for the question : Were there RF transmissions from the CBSD1 during

the test? , the user choose n

2022-01-24T05:44:41.479Z - INFO - The final result of the test : WINNF.FT.C.REG.10 is – passed

1.5 WINNF.FT.C.REG.12

2022-01-24T05:47:21.342Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:47:21.344Z - INFO - the selected test from the user : WINNF.FT.C.REG.12 is starting now

2022-01-24T05:47:25.220Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T05:47:25.259Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "response": {
      "responseCode": 103
    }
  }
]
```

2022-01-24T05:47:26.346Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T05:47:26.348Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:47:29.496Z - INFO - for the question : Were there RF transmissions from the CBSD1 during

the test? , the user choose n

2022-01-24T05:47:29.801Z - INFO - The final result of the test : WINNF.FT.C.REG.12 is - passed

1.6 WINNF.FT.C.REG.14

2022-01-24T05:52:37.638Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:52:37.640Z - INFO - the selected test from the user : WINNF.FT.C.REG.14 is starting now

2022-01-24T05:52:40.505Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T05:52:40.532Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "response": {
      "responseCode": 101
    }
  }
]
```

2022-01-24T05:52:41.642Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T05:52:41.644Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:52:54.204Z - INFO - for the question : Were there RF transmissions from the CBSD1 during

the test? , the user choose n

2022-01-24T05:52:54.388Z - INFO - The final result of the test : WINNF.FT.C.REG.14 is – passed

1.7 WINNF.FT.C.REG.16

2022-01-24T05:53:10.714Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:53:10.714Z - INFO - the selected test from the user : WINNF.FT.C.REG.16 is starting now

2022-01-24T05:53:13.658Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T05:53:13.698Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "response": {
      "responseCode": 100
    }
  }
]
```

2022-01-24T05:53:14.717Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T05:53:14.719Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:53:19.213Z - INFO - for the question : Were there RF transmissions from the CBSD1 during

the test? , the user choose n

2022-01-24T05:53:19.517Z - INFO - The final result of the test : WINNF.FT.C.REG.16 is - passed

1.8 WINNF.FT.C.REG.18

2022-01-24T05:55:53.921Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T05:55:53.921Z - INFO - the selected test from the user : WINNF.FT.C.REG.18 is starting now

2022-01-24T05:55:56.851Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T05:55:56.880Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "response": {
      "responseCode": 201
    }
  }
]
```

2022-01-24T05:55:57.924Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T05:55:57.924Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T05:56:01.739Z - INFO - for the question : Were there RF transmissions from the CBSD1 during

the test? , the user choose n

2022-01-24T05:56:02.056Z - INFO - The final result of the test : WINNF.FT.C.REG.18 is – passed

1.9 WINNF.FT.C.REG.20

2022-01-24T06:00:48.552Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T06:00:48.552Z - INFO - the selected test from the user : WINNF.FT.C.REG.20_1 is starting now

2022-01-24T06:00:55.061Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T06:00:55.119Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

2022-01-24T06:00:55.286Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
```

```

    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T06:00:55.315Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:00:55.328Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:00:55.339Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [

```

```

    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
      "grantExpireTime": "2022-01-31T06:00:55Z",
      "grantId": "633107466",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:00:55.414Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "633107466",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T06:00:55.426Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "633107466",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:04:15Z"
    }
  ]
}
2022-01-24T06:01:35.515Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "633107466",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T06:01:35.516Z - INFO - Time interval between two heartbeat request messages is: 40.102, limit
is: 65.0
2022-01-24T06:01:35.523Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "633107466",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:04:55Z"
    }
  ]
}
}

```

```
2022-01-24T06:01:56.552Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "633107466"
    }
  ]
}
2022-01-24T06:01:56.569Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "633107466",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:01:56.588Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029"
    }
  ]
}
2022-01-24T06:01:56.598Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:01:58.581Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T06:01:58.582Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the
answers :
2022-01-24T06:02:03.815Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y
2022-01-24T06:02:04.328Z - INFO - The final result of the test : WINNF.FT.C.REG.20_1 is - passed
```

2022-01-24T06:20:50.984Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2022-01-24T06:20:50.986Z - INFO - the selected test from the user : WINNF.FT.C.REG.20_2 is starting now
2022-01-24T06:21:10.967Z - INFO - registration request from CBRS : {

```
"registrationRequest": [  
  {  
    "airInterface": {  
      "radioTechnology": "E_UTRA",  
      "supportedSpec": "FFS"  
    },  
    "callSign": "",  
    "cbsdCategory": "A",  
    "cbsdSerialNumber": "2009CW5000029",  
    "fccId": "P27-SCE4255W",  
    "groupingParam": [  
      {  
        "groupId": "SERCOMM_111",  
        "groupType": "INTERFERENCE_COORDINATION"  
      }  
    ],  
    "installationParam": {  
      "antennaAzimuth": 0,  
      "antennaBeamwidth": 360,  
      "antennaDowntilt": 0,  
      "antennaGain": 5,  
      "antennaModel": "",  
      "eirpCapability": 30,  
      "height": 0.0,  
      "heightType": "AGL",  
      "horizontalAccuracy": 3,  
      "indoorDeployment": true,  
      "latitude": 31.30301,  
      "longitude": -105.024094,  
      "verticalAccuracy": 3  
    },  
    "measCapability": [  
      "RECEIVED_POWER_WITHOUT_GRANT"  
    ],  
    "userId": "XywyE9"  
  }  
]
```

2022-01-24T06:21:11.013Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [  
  {  
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
    "response": {  
      "responseCode": 0  
    }  
  }  
]
```

2022-01-24T06:21:11.117Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [  
  {  
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
    "inquiredSpectrum": [  
      {  
        "start": 0,  
        "end": 0,  
        "width": 0,  
        "power": 0,  
        "type": "UNKNOWN"  
      }  
    ]  
  }  
]
```

```

        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T06:21:11.125Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:21:11.148Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:21:11.155Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",

```



```
        "grantExpireTime": "2022-01-31T06:21:11Z",
        "grantId": "109271647",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2022-01-24T06:21:11.216Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T06:21:11.224Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:24:31Z"
        }
    ]
}
2022-01-24T06:21:51.341Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:21:51.342Z - INFO - Time interval between two heartbeat request messages is: 40.124, limit
is: 65.0
2022-01-24T06:21:51.346Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:25:11Z"
        }
    ]
}
2022-01-24T06:22:31.428Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
```

```
        "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
        "grantId": "109271647",
        "grantRenew": false,
        "operationState": "AUTHORIZED"
    }
]
}
2022-01-24T06:22:31.430Z - INFO - Time interval between two heartbeat request messages is: 40.089, limit
is: 65.0
2022-01-24T06:22:31.434Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:25:51Z"
        }
    ]
}
2022-01-24T06:23:11.516Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:23:11.517Z - INFO - Time interval between two heartbeat request messages is: 40.086, limit
is: 65.0
2022-01-24T06:23:11.526Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:26:31Z"
        }
    ]
}
2022-01-24T06:23:51.604Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "109271647",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:23:51.605Z - INFO - Time interval between two heartbeat request messages is: 40.088, limit
is: 65.0
2022-01-24T06:23:51.611Z - INFO - engine sent successfully, the response to CBRS  : {
```

```
"heartbeatResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "grantId": "109271647",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2022-01-24T06:27:11Z"
  }
]
}
2022-01-24T06:24:31.688Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "109271647",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T06:24:31.690Z - INFO - Time interval between two heartbeat request messages is: 40.085, limit is: 65.0
2022-01-24T06:24:31.696Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "109271647",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:27:51Z"
    }
  ]
}
2022-01-24T06:24:33.072Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T06:24:33.073Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? please choose one of the answers :
2022-01-24T06:25:34.811Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? , the user choose n
2022-01-24T06:25:34.812Z - INFO - the question is : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? please choose one of the answers :
2022-01-24T06:25:35.486Z - INFO - for the question : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? , the user choose y
2022-01-24T06:25:35.720Z - INFO - The final result of the test : WINNF.FT.C.REG.20_2 is – passed
```

CBSD SPECTRUM GRANT PROCESS

1.10 WINNF.FT.C.GRA.1

2022-01-24T06:26:45.940Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T06:26:45.941Z - INFO - the selected test from the user : WINNF.FT.C.GRA.1 is starting now

2022-01-24T06:26:51.749Z - INFO - registration request from CBRS : {

```

  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "E_UTRA",
        "supportedSpec": "FFS"
      },
      "callSign": "",
      "cbsdCategory": "A",
      "cbsdSerialNumber": "2009CW5000029",
      "fccId": "P27-SCE4255W",
      "groupingParam": [
        {
          "groupId": "SERCOMM_111",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 0,
        "antennaBeamwidth": 360,
        "antennaDowntilt": 0,
        "antennaGain": 5,
        "antennaModel": "",
        "eirpCapability": 30,
        "height": 0.0,
        "heightType": "AGL",
        "horizontalAccuracy": 3,
        "indoorDeployment": true,
        "latitude": 31.30201,
        "longitude": -105.024094,
        "verticalAccuracy": 3
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "XywyE9"
    }
  ]

```

2022-01-24T06:26:51.792Z - INFO - engine sent successfully, the response to CBRS : {

```

  "registrationResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]

```

2022-01-24T06:26:51.894Z - INFO - spectrumInquiry request from CBRS : {

```

  "spectrumInquiryRequest": [
    {

```

```
"cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
"inquiredSpectrum": [
  {
    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  },
  {
    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  }
]
}
]
}
2022-01-24T06:26:51.900Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:26:51.938Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:26:51.947Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
```

```
{
  "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
  "response": {
    "responseCode": 400
  }
}
]
```

2022-01-24T06:26:53.946Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T06:26:53.947Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T06:26:57.134Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2022-01-24T06:26:57.456Z - INFO - The final result of the test : WINNF.FT.C.GRA.1 is - passed

1.11 WINNF.FT.C.GRA.2

2022-01-24T06:28:58.835Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
 2022-01-24T06:28:58.836Z - INFO - the selected test from the user : WINNF.FT.C.GRA.2 is starting now
 2022-01-24T06:29:03.224Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T06:29:03.270Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

2022-01-24T06:29:03.368Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [

```

```

    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  },
  {
    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  }
]
}
]
}
2022-01-24T06:29:03.378Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:29:03.417Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:29:03.427Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {

```



```
"responseCode": 401
```

```
}
```

```
}
```

```
]
```

```
}
```

2022-01-24T06:29:04.839Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T06:29:04.841Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T06:29:10.507Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2022-01-24T06:29:10.832Z - INFO - The final result of the test : WINNF.FT.C.GRA.2 is - passed

2 CBSD Heart Beat Process

2.1 WINNF.FT.C.HBT.1

2022-01-24T06:34:22.835Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T06:34:22.835Z - INFO - the selected test from the user : WINNF.FT.C.HBT.1 is starting now

2022-01-24T06:34:27.802Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T06:34:27.835Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T06:34:27.898Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {

```

```

    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T06:34:27.904Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:34:27.970Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:34:27.976Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [

```

```

    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
      "grantExpireTime": "2022-01-31T06:34:27Z",
      "grantId": "783336528",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:34:28.069Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T06:34:28.078Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:37:48Z"
    }
  ]
}
2022-01-24T06:35:08.180Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T06:35:08.181Z - INFO - Time interval between two heartbeat request messages is: 40.111, limit
is: 65.0
2022-01-24T06:35:08.188Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:38:28Z"
    }
  ]
}
}

```

```
2022-01-24T06:35:48.265Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T06:35:48.266Z - INFO - Time interval between two heartbeat request messages is: 40.086, limit
is: 65.0
2022-01-24T06:35:48.273Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:39:08Z"
    }
  ]
}
2022-01-24T06:36:28.349Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T06:36:28.351Z - INFO - Time interval between two heartbeat request messages is: 40.084, limit
is: 65.0
2022-01-24T06:36:28.355Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:39:48Z"
    }
  ]
}
2022-01-24T06:37:08.438Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
```

```
2022-01-24T06:37:08.440Z - INFO - Time interval between two heartbeat request messages is: 40.089, limit
is: 65.0
2022-01-24T06:37:08.447Z - INFO - engine sent successfully, the response to CBRS  : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:40:28Z"
    }
  ]
}
2022-01-24T06:37:48.532Z - INFO - heartbeat request from CBRS  : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T06:37:48.533Z - INFO - Time interval between two heartbeat request messages is: 40.094, limit
is: 65.0
2022-01-24T06:37:48.539Z - INFO - engine sent successfully, the response to CBRS  : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "783336528",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T06:41:08Z"
    }
  ]
}
2022-01-24T06:37:49.915Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T06:37:49.917Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)? please choose one of the answers :
2022-01-24T06:38:11.483Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)? , the user choose n
2022-01-24T06:38:11.484Z - INFO - the question is : Did CBSD1 transmit only within the frequency range
specified in its grantRequest message? please choose one of the answers :
2022-01-24T06:38:12.309Z - INFO - for the question : Did CBSD1 transmit only within the frequency range
specified in its grantRequest message? , the user choose y
2022-01-24T06:38:12.674Z - INFO - The final result of the test : WINNF.FT.C.HBT.1 is - passed
```

2.2 WINNF.FT.C.HBT.3

2022-01-24T06:39:30.180Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T06:39:30.180Z - INFO - the selected test from the user : WINNF.FT.C.HBT.3 is starting now

2022-01-24T06:39:32.658Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T06:39:32.717Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T06:39:32.796Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [

```

```

        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T06:39:32.802Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:39:32.835Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:39:32.844Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",

```



```
        "grantExpireTime": "2022-01-31T06:39:32Z",
        "grantId": "736291942",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2022-01-24T06:39:32.950Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "736291942",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T06:39:32.957Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "736291942",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:42:52Z"
        }
    ]
}
2022-01-24T06:40:13.049Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "736291942",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:40:13.049Z - INFO - Time interval between two heartbeat request messages is: 40.098, limit
is: 65.0
2022-01-24T06:40:13.056Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "736291942",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:43:33Z"
        }
    ]
}
2022-01-24T06:40:53.138Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
```

```
        "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
        "grantId": "736291942",
        "grantRenew": false,
        "operationState": "AUTHORIZED"
    }
]
}
2022-01-24T06:40:53.138Z - INFO - Time interval between two heartbeat request messages is: 40.089, limit
is: 65.0
2022-01-24T06:40:53.144Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "736291942",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:44:13Z"
        }
    ]
}
2022-01-24T06:41:33.226Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "736291942",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:41:33.227Z - INFO - Time interval between two heartbeat request messages is: 40.089, limit
is: 65.0
2022-01-24T06:41:33.233Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "736291942",
            "response": {
                "responseCode": 105
            },
            "transmitExpireTime": "2022-01-24T06:41:33Z"
        }
    ]
}
2022-01-24T06:41:34.234Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T06:41:34.236Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 105? please choose one of the answers :
2022-01-24T06:45:12.207Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 105? , the user choose y
2022-01-24T06:45:12.421Z - INFO - The final result of the test : WINNF.FT.C.HBT.3 is - passed
```

2.3 WINNF.FT.C.HBT.4

2022-01-24T06:45:23.351Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T06:45:23.351Z - INFO - the selected test from the user : WINNF.FT.C.HBT.4 is starting now

2022-01-24T06:45:26.713Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T06:45:26.750Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T06:45:26.839Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [

```

```

        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T06:45:26.845Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:45:26.874Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:45:26.878Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",

```

```
        "grantExpireTime": "2022-01-31T06:45:26Z",
        "grantId": "553234397",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2022-01-24T06:45:26.986Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T06:45:26.992Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:48:46Z"
        }
    ]
}
2022-01-24T06:46:07.086Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:46:07.088Z - INFO - Time interval between two heartbeat request messages is: 40.102, limit
is: 65.0
2022-01-24T06:46:07.094Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:49:27Z"
        }
    ]
}
2022-01-24T06:46:47.170Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
```

```
        "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
        "grantId": "553234397",
        "grantRenew": false,
        "operationState": "AUTHORIZED"
    }
]
}
2022-01-24T06:46:47.171Z - INFO - Time interval between two heartbeat request messages is: 40.082, limit
is: 65.0
2022-01-24T06:46:47.177Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:50:07Z"
        }
    ]
}
2022-01-24T06:47:27.247Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:47:27.249Z - INFO - Time interval between two heartbeat request messages is: 40.078, limit
is: 65.0
2022-01-24T06:47:27.253Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T06:50:47Z"
        }
    ]
}
2022-01-24T06:48:07.332Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "553234397",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T06:48:07.334Z - INFO - Time interval between two heartbeat request messages is: 40.085, limit
is: 65.0
2022-01-24T06:48:07.338Z - INFO - engine sent successfully, the response to CBRS  : {
```

```
"heartbeatResponse": [  
  {  
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
    "grantId": "553234397",  
    "response": {  
      "responseCode": 0  
    },  
    "transmitExpireTime": "2022-01-24T06:51:27Z"  
  }  
]  
}  
2022-01-24T06:48:47.417Z - INFO - heartbeat request from CBRS : {  
  "heartbeatRequest": [  
    {  
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
      "grantId": "553234397",  
      "grantRenew": false,  
      "operationState": "AUTHORIZED"  
    }  
  ]  
}  
2022-01-24T06:48:47.418Z - INFO - Time interval between two heartbeat request messages is: 40.084, limit  
is: 65.0  
2022-01-24T06:48:47.424Z - INFO - engine sent successfully, the response to CBRS : {  
  "heartbeatResponse": [  
    {  
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
      "grantId": "553234397",  
      "response": {  
        "responseCode": 500  
      },  
      "transmitExpireTime": "2022-01-24T06:48:47Z"  
    }  
  ]  
}  
2022-01-24T06:48:48.470Z - INFO - arrived to nstep starting question answer session with the technician  
2022-01-24T06:48:48.470Z - INFO - the question is : Did the CBSD1 stop RF transmission within 60 seconds  
of receiving Heartbeat response with responseCode = 500? please choose one of the answers :  
2022-01-24T06:53:41.341Z - INFO - for the question : Did the CBSD1 stop RF transmission within 60  
seconds of receiving Heartbeat response with responseCode = 500? , the user choose y  
2022-01-24T06:53:41.460Z - INFO - The final result of the test : WINNF.FT.C.HBT.4 is - passed
```

2.4 WINNF.FT.C.HBT.5

2022-01-24T06:55:17.042Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T06:55:17.043Z - INFO - the selected test from the user : WINNF.FT.C.HBT.5 is starting now

2022-01-24T06:55:23.750Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T06:55:23.796Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

2022-01-24T06:55:23.887Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [

```



```

    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  },
  {
    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  }
]
}
]
}
2022-01-24T06:55:23.891Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T06:55:23.917Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T06:55:23.924Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",

```

```
        "grantExpireTime": "2022-01-31T06:55:23Z",
        "grantId": "404240055",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2022-01-24T06:55:24.022Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "404240055",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T06:55:24.028Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "404240055",
            "response": {
                "responseCode": 501
            },
            "transmitExpireTime": "2022-01-24T06:55:24Z"
        }
    ]
}
2022-01-24T06:56:04.127Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "404240055",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T06:56:04.128Z - INFO - Time interval between two heartbeat request messages is: 40.105, limit
is: 65.0
2022-01-24T06:56:04.134Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "404240055",
            "response": {
                "responseCode": 501
            },
            "transmitExpireTime": "2022-01-24T06:56:04Z"
        }
    ]
}
2022-01-24T06:56:06.069Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T06:56:06.071Z - INFO - the question is : Did the CBSD transmit at any time during the test?
please choose one of the answers :
```

2022-01-24T07:00:15.630Z - INFO - for the question : Did the CBSD transmit at any time during the test? , the user choose n

2022-01-24T07:00:15.832Z - INFO - The final result of the test : WINNF.FT.C.HBT.5 is - passed

2.5 WINNF.FT.C.HBT.6

2022-01-24T07:00:58.128Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T07:00:58.130Z - INFO - the selected test from the user : WINNF.FT.C.HBT.6 is starting now

2022-01-24T07:01:00.494Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T07:01:00.539Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T07:01:00.594Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [

```

```

        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T07:01:00.599Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T07:01:00.641Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T07:01:00.645Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",

```

```
        "grantExpireTime": "2022-01-31T07:01:00Z",
        "grantId": "232804293",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2022-01-24T07:01:00.704Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T07:01:00.710Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:04:20Z"
        }
    ]
}
2022-01-24T07:01:40.818Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T07:01:40.819Z - INFO - Time interval between two heartbeat request messages is: 40.113, limit
is: 65.0
2022-01-24T07:01:40.825Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:05:00Z"
        }
    ]
}
2022-01-24T07:02:20.904Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
```

```
        "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
        "grantId": "232804293",
        "grantRenew": false,
        "operationState": "AUTHORIZED"
    }
]
}
2022-01-24T07:02:20.907Z - INFO - Time interval between two heartbeat request messages is: 40.087, limit
is: 65.0
2022-01-24T07:02:20.911Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:05:40Z"
        }
    ]
}
2022-01-24T07:03:01.000Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T07:03:01.002Z - INFO - Time interval between two heartbeat request messages is: 40.096, limit
is: 65.0
2022-01-24T07:03:01.006Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "response": {
                "responseCode": 501
            },
            "transmitExpireTime": "2022-01-24T07:03:01Z"
        }
    ]
}
2022-01-24T07:03:41.101Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "232804293",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T07:03:41.102Z - INFO - Time interval between two heartbeat request messages is: 40.1, limit is:
65.0
2022-01-24T07:03:41.108Z - INFO - engine sent successfully, the response to CBRS  : {
```

```
"heartbeatResponse": [  
  {  
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
    "grantId": "232804293",  
    "response": {  
      "responseCode": 501  
    },  
    "transmitExpireTime": "2022-01-24T07:03:41Z"  
  }  
]  
}
```

2022-01-24T07:03:42.213Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T07:03:42.213Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 501? please choose one of the answers :
2022-01-24T07:07:54.030Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 501? , the user choose y
2022-01-24T07:07:54.269Z - INFO - The final result of the test : WINNF.FT.C.HBT.6 is - passed

2.6 WINNF.FT.C.HBT.7

2022-01-24T07:08:25.832Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T07:08:25.832Z - INFO - the selected test from the user : WINNF.FT.C.HBT.7 is starting now

2022-01-24T07:08:28.796Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T07:08:28.838Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T07:08:28.924Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [

```

```

        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T07:08:28.930Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T07:08:28.964Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T07:08:28.970Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",

```

```
        "grantExpireTime": "2022-01-31T07:08:28Z",
        "grantId": "387961678",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2022-01-24T07:08:29.063Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T07:08:29.069Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:11:49Z"
        }
    ]
}
2022-01-24T07:09:09.157Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T07:09:09.160Z - INFO - Time interval between two heartbeat request messages is: 40.093, limit
is: 65.0
2022-01-24T07:09:09.165Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:12:29Z"
        }
    ]
}
2022-01-24T07:09:49.250Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
```

```
        "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
        "grantId": "387961678",
        "grantRenew": false,
        "operationState": "AUTHORIZED"
    }
]
}
2022-01-24T07:09:49.253Z - INFO - Time interval between two heartbeat request messages is: 40.093, limit
is: 65.0
2022-01-24T07:09:49.256Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:13:09Z"
        }
    ]
}
2022-01-24T07:10:29.339Z - INFO - heartbeat request from CBRS  : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T07:10:29.341Z - INFO - Time interval between two heartbeat request messages is: 40.089, limit
is: 65.0
2022-01-24T07:10:29.345Z - INFO - engine sent successfully, the response to CBRS  : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
            "response": {
                "responseCode": 502
            },
            "transmitExpireTime": "2022-01-24T07:10:29Z"
        }
    ]
}
2022-01-24T07:10:29.361Z - INFO - relinquishment request from CBRS  : {
    "relinquishmentRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678"
        }
    ]
}
2022-01-24T07:10:29.365Z - INFO - engine sent successfully, the response to CBRS  : {
    "relinquishmentResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "387961678",
```

```
    "response": {  
      "responseCode": 0  
    }  
  ]  
}
```

2022-01-24T07:10:30.898Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T07:10:30.898Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 502? please choose one of the answers :
2022-01-24T07:13:00.680Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 502? , the user choose y
2022-01-24T07:13:00.914Z - INFO - The final result of the test : WINNF.FT.C.HBT.7 is – passed

2.7 WINNF.FT.C.HBT.9

2022-01-24T07:27:02.598Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T07:27:02.598Z - INFO - the selected test from the user : WINNF.FT.C.HBT.9 is starting now

2022-01-24T07:27:05.898Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T07:27:05.934Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T07:27:06.085Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {

```

```

    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T07:27:06.092Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T07:27:06.128Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T07:27:06.134Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [

```

```
{
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "channelType": "GAA",
    "grantExpireTime": "2022-01-31T07:27:06Z",
    "grantId": "299584714",
    "heartbeatInterval": 60,
    "response": {
      "responseCode": 0
    }
  }
]
}
2022-01-24T07:27:06.198Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T07:27:36.288Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T07:27:36.288Z - INFO - request message received while HBT is absent, sleep 174 sec before
responding
2022-01-24T07:28:06.299Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T07:28:06.299Z - INFO - request message received while HBT is absent, sleep 144 sec before
responding
2022-01-24T07:28:36.266Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T07:28:36.266Z - INFO - request message received while HBT is absent, sleep 114 sec before
responding
```



```
2022-01-24T07:29:06.295Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T07:29:06.295Z - INFO - request message received while HBT is absent, sleep 84 sec before
responding
2022-01-24T07:29:36.319Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T07:29:36.319Z - INFO - request message received while HBT is absent, sleep 54 sec before
responding
2022-01-24T07:29:53.664Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714"
    }
  ]
}
2022-01-24T07:29:53.664Z - INFO - request message received while HBT is absent, sleep 37 sec before
responding
2022-01-24T07:29:53.773Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714"
    }
  ]
}
2022-01-24T07:29:53.773Z - INFO - request message received while HBT is absent, sleep 37 sec before
responding
2022-01-24T07:30:23.796Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "299584714"
    }
  ]
}
2022-01-24T07:30:23.796Z - INFO - request message received while HBT is absent, sleep 7 sec before
responding
2022-01-24T07:30:26.207Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
```

```
"grantId": "299584714",  
"response": {  
  "responseCode": 501  
},  
"transmitExpireTime": "2022-01-24T07:30:26Z"
```

```
  }  
]
```

```
}
```

2022-01-24T07:30:27.713Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T07:30:27.714Z - INFO - the question is : Were there RF transmissions from the CBSD during the test? please choose one of the answers :
2022-01-24T07:30:30.269Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:30.289Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:30.296Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:30.301Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:30.322Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:30.665Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:30.775Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:30.798Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2022-01-24T07:30:42.611Z - INFO - for the question : Were there RF transmissions from the CBSD during the test? , the user choose n
2022-01-24T07:30:42.934Z - INFO - The final result of the test : WINNF.FT.C.HBT.9 is - passed

2.8 WINNF.FT.C.HBT.10

2022-01-24T07:37:32.571Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T07:37:32.572Z - INFO - the selected test from the user : WINNF.FT.C.HBT.10 is starting now

2022-01-24T07:39:10.441Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T07:39:10.473Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

2022-01-24T07:39:10.542Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [

```

```
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T07:39:10.548Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T07:39:10.592Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T07:39:10.598Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
```

```
        "grantExpireTime": "2022-01-31T07:39:10Z",
        "grantId": "585342990",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2022-01-24T07:39:10.661Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2022-01-24T07:39:10.665Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:42:30Z"
        }
    ]
}
2022-01-24T07:39:50.780Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T07:39:50.782Z - INFO - Time interval between two heartbeat request messages is: 40.12, limit is:
65.0
2022-01-24T07:39:50.786Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2022-01-24T07:43:10Z"
        }
    ]
}
2022-01-24T07:40:30.868Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
```

```
        "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
        "grantId": "585342990",
        "grantRenew": false,
        "operationState": "AUTHORIZED"
    }
]
}
2022-01-24T07:40:30.871Z - INFO - Time interval between two heartbeat request messages is: 40.088, limit
is: 65.0
2022-01-24T07:40:30.872Z - INFO - LAST HBT RESPONSE THAT SET TRANSMIT_EXPIRE_TIME WAS AT:
2022-01-24 07:39:50.781000
2022-01-24T07:41:00.927Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2022-01-24T07:41:00.927Z - INFO - request message received while HBT is absent, sleep 174 sec before
responding
2022-01-24T07:41:24.934Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990"
        }
    ]
}
2022-01-24T07:41:24.934Z - INFO - request message received while HBT is absent, sleep 150 sec before
responding
2022-01-24T07:41:27.117Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990"
        }
    ]
}
2022-01-24T07:41:27.117Z - INFO - request message received while HBT is absent, sleep 148 sec before
responding
2022-01-24T07:41:27.233Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990"
        }
    ]
}
2022-01-24T07:41:27.233Z - INFO - request message received while HBT is absent, sleep 148 sec before
responding
2022-01-24T07:41:57.240Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "grantId": "585342990"
        }
    ]
}
```

```
    }
  ]
}
2022-01-24T07:41:57.242Z - INFO - request message received while HBT is absent, sleep 118 sec before
responding
2022-01-24T07:42:27.517Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "585342990"
    }
  ]
}
2022-01-24T07:42:27.519Z - INFO - request message received while HBT is absent, sleep 88 sec before
responding
2022-01-24T07:42:57.549Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "585342990"
    }
  ]
}
2022-01-24T07:42:57.551Z - INFO - request message received while HBT is absent, sleep 58 sec before
responding
2022-01-24T07:42:58.266Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "585342990"
    }
  ]
}
2022-01-24T07:42:58.266Z - INFO - request message received while HBT is absent, sleep 57 sec before
responding
2022-01-24T07:42:58.364Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "585342990"
    }
  ]
}
2022-01-24T07:42:58.364Z - INFO - request message received while HBT is absent, sleep 57 sec before
responding
2022-01-24T07:43:28.398Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "585342990"
    }
  ]
}
2022-01-24T07:43:28.398Z - INFO - request message received while HBT is absent, sleep 27 sec before
responding
2022-01-24T07:43:50.878Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
```

```
"cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
"grantId": "585342990",  
"response": {  
  "responseCode": 501  
},  
"transmitExpireTime": "2022-01-24T07:43:50Z"
```

```
  }  
]
```

```
}
```

2022-01-24T07:43:52.779Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T07:43:52.780Z - INFO - the question is : Did the CBSD stop RF transmissions within
(transmitExpireTime + 60seconds) of last valid heartbeat response? please choose one of the answers :

2022-01-24T07:43:54.928Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:54.936Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.118Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.234Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.243Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.267Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.367Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.401Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.519Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:43:55.552Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"

2022-01-24T07:44:03.568Z - INFO - for the question : Did the CBSD stop RF transmissions within
(transmitExpireTime + 60seconds) of last valid heartbeat response? , the user choose y

2022-01-24T07:44:04.052Z - INFO - The final result of the test : WINNF.FT.C.HBT.10 is – passed

3 CBSD Measurement Report

3.1 WINNF.FT.C.MES.1

2022-01-24T08:31:08.226Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T08:31:08.227Z - INFO - the selected test from the user : WINNF.FT.C.MES.1 is starting now

2022-01-24T08:31:16.153Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T08:31:16.203Z - INFO - Response message contains measReportConfig

2022-01-24T08:31:16.203Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "measReportConfig": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "response": {
      "responseCode": 0
    }
  }
]

```

```
    }
  }
]
}
2022-01-24T08:31:16.328Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "inquiredSpectrum": [
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        },
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      ],
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
```

```
        "measRcvdPower": -100.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -100.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -100.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -100.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -100.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -100.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -100.0
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -100.0
      }
    ]
  }
}
2022-01-24T08:31:16.335Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
```

```
        "lowFrequency": 3615000000
      },
      "ruleApplied": "FCC_PART_96"
    }
  ],
  "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
  "response": {
    "responseCode": 0
  }
}
]
}
2022-01-24T08:31:16.392Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -100.0
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -100.0
          }
        ]
      }
    }
  ]
}
```

```

    {
      "measBandwidth": 1000000,
      "measFrequency": 363000000,
      "measRcvdPower": -100.0
    },
    {
      "measBandwidth": 1000000,
      "measFrequency": 364000000,
      "measRcvdPower": -100.0
    },
    {
      "measBandwidth": 1000000,
      "measFrequency": 365000000,
      "measRcvdPower": -100.0
    },
    {
      "measBandwidth": 1000000,
      "measFrequency": 366000000,
      "measRcvdPower": -100.0
    },
    {
      "measBandwidth": 1000000,
      "measFrequency": 367000000,
      "measRcvdPower": -100.0
    },
    {
      "measBandwidth": 1000000,
      "measFrequency": 368000000,
      "measRcvdPower": -100.0
    },
    {
      "measBandwidth": 1000000,
      "measFrequency": 369000000,
      "measRcvdPower": -100.0
    }
  ]
},
"operationParam": {
  "maxEirp": 16,
  "operationFrequencyRange": {
    "highFrequency": 363500000,
    "lowFrequency": 361500000
  }
}
}
]
}
2022-01-24T08:31:16.401Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
      "grantExpireTime": "2022-01-31T08:31:16Z",
      "grantId": "172003526",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

}
]
}

2022-01-24T08:31:18.232Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T08:31:20.568Z - INFO - The final result of the test : WINNF.FT.C.MES.1 is - passed

4 CBSD Relinquishment Process

4.1 WINNF.FT.C.RLQ.1

2022-01-24T08:35:45.990Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T08:35:45.992Z - INFO - the selected test from the user : WINNF.FT.C.RLQ.1 is starting now

2022-01-24T08:35:50.780Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T08:35:50.809Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

2022-01-24T08:35:50.885Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
```

```

    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T08:35:50.891Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T08:35:50.940Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T08:35:50.946Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [

```



```
{
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "channelType": "GAA",
    "grantExpireTime": "2022-01-31T08:35:50Z",
    "grantId": "341407999",
    "heartbeatInterval": 60,
    "response": {
      "responseCode": 0
    }
  }
}
]
}
2022-01-24T08:35:51.046Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "341407999",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
}
2022-01-24T08:35:51.052Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "341407999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T08:39:11Z"
    }
  ]
}
}
2022-01-24T08:36:31.144Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "341407999",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2022-01-24T08:36:31.144Z - INFO - Time interval between two heartbeat request messages is: 40.097, limit
is: 65.0
2022-01-24T08:36:31.150Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "341407999",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T08:39:51Z"
    }
  ]
}
}
```

2022-01-24T08:36:36.940Z - INFO - relinquishment request from CBRS : {

"relinquishmentRequest": [

{

"cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",

"grantId": "341407999"

}

]

}

2022-01-24T08:36:36.946Z - INFO - engine sent successfully, the response to CBRS : {

"relinquishmentResponse": [

{

"cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",

"grantId": "341407999",

"response": {

"responseCode": 0

}

}

]

}

2022-01-24T08:36:38.029Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T08:36:38.029Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :

2022-01-24T08:36:40.151Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y

2022-01-24T08:36:40.387Z - INFO - The final result of the test : WINNF.FT.C.RLQ.1 is - passed

5 CBSD Deregistration Process

5.1 WINNF.FT.C.DRG.1

2022-01-24T08:39:53.493Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T08:39:53.494Z - INFO - the selected test from the user : WINNF.FT.C.DRG.1 is starting now

2022-01-24T08:39:56.450Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T08:39:56.474Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T08:39:56.555Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {

```

```
"cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
"inquiredSpectrum": [
  {
    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  },
  {
    "highFrequency": 3635000000,
    "lowFrequency": 3615000000
  }
]
}
]
}
2022-01-24T08:39:56.561Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T08:39:56.575Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T08:39:56.582Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
```

```

    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
      "grantExpireTime": "2022-01-31T08:39:56Z",
      "grantId": "140646831",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T08:39:56.641Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "140646831",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T08:39:56.647Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "140646831",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T08:43:16Z"
    }
  ]
}
2022-01-24T08:40:36.759Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "140646831",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T08:40:36.760Z - INFO - Time interval between two heartbeat request messages is: 40.119, limit
is: 65.0
2022-01-24T08:40:36.766Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "140646831",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T08:43:56Z"
    }
  ]
}
}

```

```
2022-01-24T08:40:39.937Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "140646831"
    }
  ]
}
2022-01-24T08:40:39.941Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "140646831",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T08:40:39.987Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029"
    }
  ]
}
2022-01-24T08:40:39.992Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T08:40:41.526Z - INFO - arrived to nstep starting question answer session with the technician
2022-01-24T08:40:41.526Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the
answers :
2022-01-24T08:40:44.681Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y
2022-01-24T08:40:44.914Z - INFO - The final result of the test : WINNF.FT.C.DRG.1 is - passed
```

6 CBSD Security Validation

6.1 WINNF.FT.C.SCS.1

2022-01-24T08:49:51.742Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T08:49:51.742Z - INFO - the selected test from the user : WINNF.FT.C.SCS.1 is starting now

2022-01-24T08:49:54.750Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]
```

2022-01-24T08:49:54.772Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

2022-01-24T08:49:56.746Z - INFO - arrived to nstep starting question answer session with the technician

2022-01-24T08:49:56.747Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2022-01-24T08:49:59.667Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2022-01-24T08:50:00.160Z - INFO - The final result of the test : WINNF.FT.C.SCS.1 is – passed

6.2 WINNF.FT.C.SCS.2

2022-01-24T08:58:11.752Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T08:58:11.752Z - INFO - the selected test from the user : WINNF.FT.C.SCS.2 is starting now

6.3 WINNF.FT.C.SCS.3

2022-01-24T09:00:33.147Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T09:00:33.148Z - INFO - the selected test from the user : WINNF.FT.C.SCS.3 is starting now

6.4 WINNF.FT.C.SCS.4

2022-01-24T09:11:29.576Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T09:11:29.576Z - INFO - the selected test from the user : WINNF.FT.C.SCS.4 is starting now

6.5 WINNF.FT.C.SCS.5

2022-01-24T09:13:42.687Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T09:13:42.688Z - INFO - the selected test from the user : WINNF.FT.C.SCS.5 is starting now

CBSD RF POWER MEASUREMENT

6.6 WINNF.PT.C.HBT.1(Max Eirp = -14 dBm/MHz)

2022-01-24T09:19:27.006Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T09:19:27.007Z - INFO - Selected spectrum frequency is {'lowFrequency': 361500000L, 'highFrequency': 3635000000L}

2022-01-24T09:19:27.009Z - INFO - Granted Spectrum Max Eirp = -14dBm/MHz

2022-01-24T09:19:27.009Z - INFO - the selected test from the user : PowerMeasTest is starting now

2022-01-24T09:19:31.209Z - INFO - registration request from CBRS : {

```

  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "E_UTRA",
        "supportedSpec": "FFS"
      },
      "callSign": "",
      "cbsdCategory": "A",
      "cbsdSerialNumber": "2009CW5000029",
      "fccId": "P27-SCE4255W",
      "groupingParam": [
        {
          "groupId": "SERCOMM_111",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 0,
        "antennaBeamwidth": 360,
        "antennaDowntilt": 0,
        "antennaGain": 5,
        "antennaModel": "",
        "eirpCapability": 30,
        "height": 0.0,
        "heightType": "AGL",
        "horizontalAccuracy": 3,
        "indoorDeployment": true,
        "latitude": 31.30201,
        "longitude": -105.024094,
        "verticalAccuracy": 3
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "XywyE9"
    }
  ]

```

2022-01-24T09:19:31.236Z - INFO - engine sent successfully, the response to CBRS : {

```

  "registrationResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

2022-01-24T09:19:31.335Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
```

}
2022-01-24T09:19:31.339Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0

2022-01-24T09:19:31.339Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0

2022-01-24T09:19:31.341Z - INFO - engine sent successfully, the response to CBRS : {

```
"spectrumInquiryResponse": [
  {
    "availableChannel": [
      {
        "channelType": "GAA",
        "frequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        },
        "maxEirp": -14,
        "ruleApplied": "FCC_PART_96"
      },
      {
        "channelType": "GAA",
        "frequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        },
        "maxEirp": -14,
        "ruleApplied": "FCC_PART_96"
      }
    ],
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]
```

}
2022-01-24T09:19:31.371Z - INFO - grant request from CBRS : {

```
"grantRequest": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "operationParam": {
      "maxEirp": 16,
      "operationFrequencyRange": {
```

```

                "highFrequency": 3635000000,
                "lowFrequency": 3615000000
            }
        }
    ]
}
2022-01-24T09:19:31.374Z - INFO - The requested maxEirp value is too high
2022-01-24T09:19:31.375Z - INFO - The Grant response code is not 0, applicable spectrum parameters have
been sent out.
2022-01-24T09:19:31.375Z - INFO - engine sent successfully, the response to CBRS  : {
    "grantResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "operationParam": {
                "maxEirp": -14,
                "operationFrequencyRange": {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            },
            "response": {
                "responseCode": 400
            }
        }
    ]
}
2022-01-24T09:19:31.427Z - INFO - grant request from CBRS  : {
    "grantRequest": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "operationParam": {
                "maxEirp": 16,
                "operationFrequencyRange": {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            }
        }
    ]
}
2022-01-24T09:19:31.431Z - INFO - The requested maxEirp value is too high
2022-01-24T09:19:31.431Z - INFO - The Grant response code is not 0, applicable spectrum parameters have
been sent out.
2022-01-24T09:19:31.433Z - INFO - engine sent successfully, the response to CBRS  : {
    "grantResponse": [
        {
            "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
            "operationParam": {
                "maxEirp": -14,
                "operationFrequencyRange": {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            },
            "response": {
                "responseCode": 400
            }
        }
    ]
}

```

```
    }
  ]
}
2022-01-24T09:19:31.486Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": -14,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T09:19:31.490Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
      "grantExpireTime": "2022-01-31T09:19:31Z",
      "grantId": "535267201",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T09:19:31.589Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "535267201",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T09:19:31.595Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "535267201",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T09:22:51Z"
    }
  ]
}
2022-01-24T09:20:11.690Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "535267201",
```

```
        "grantRenew": false,  
        "operationState": "AUTHORIZED"  
    }  
]  
}  
2022-01-24T09:20:11.694Z - INFO - engine sent successfully, the response to CBRS : {  
  "heartbeatResponse": [  
    {  
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",  
      "grantId": "535267201",  
      "response": {  
        "responseCode": 0  
      },  
      "transmitExpireTime": "2022-01-24T09:23:31Z"  
    }  
  ]  
}
```

6.7 WINNF.PT.C.HBT.1(Max Eirp = 3 dBm/MHz)

2022-01-24T09:18:24.813Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T09:18:24.815Z - INFO - Selected spectrum frequency is {'lowFrequency': 361500000L, 'highFrequency': 3635000000L}

2022-01-24T09:18:24.815Z - INFO - Granted Spectrum Max Eirp = 3dBm/MHz

2022-01-24T09:18:24.815Z - INFO - the selected test from the user : PowerMeasTest is starting now

2022-01-24T09:18:27.282Z - INFO - registration request from CBRS : {

```

"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "E_UTRA",
      "supportedSpec": "FFS"
    },
    "callSign": "",
    "cbsdCategory": "A",
    "cbsdSerialNumber": "2009CW5000029",
    "fccId": "P27-SCE4255W",
    "groupingParam": [
      {
        "groupId": "SERCOMM_111",
        "groupType": "INTERFERENCE_COORDINATION"
      }
    ],
    "installationParam": {
      "antennaAzimuth": 0,
      "antennaBeamwidth": 360,
      "antennaDowntilt": 0,
      "antennaGain": 5,
      "antennaModel": "",
      "eirpCapability": 30,
      "height": 0.0,
      "heightType": "AGL",
      "horizontalAccuracy": 3,
      "indoorDeployment": true,
      "latitude": 31.30201,
      "longitude": -105.024094,
      "verticalAccuracy": 3
    },
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "XywyE9"
  }
]

```

2022-01-24T09:18:27.311Z - INFO - engine sent successfully, the response to CBRS : {

```

"registrationResponse": [
  {
    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "response": {
      "responseCode": 0
    }
  }
]

```

2022-01-24T09:18:27.401Z - INFO - spectrumInquiry request from CBRS : {

```

"spectrumInquiryRequest": [
  {

```

```

    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T09:18:27.407Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0
2022-01-24T09:18:27.407Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0
2022-01-24T09:18:27.407Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "maxEirp": 3,
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "maxEirp": 3,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T09:18:27.441Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}

```



```
    }
  }
]
}
2022-01-24T09:18:27.446Z - INFO - The requested maxEirp value is too high
2022-01-24T09:18:27.447Z - INFO - The Grant response code is not 0, applicable spectrum parameters have
been sent out.
2022-01-24T09:18:27.447Z - INFO - engine sent successfully, the response to CBRS  : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 3,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      },
      "response": {
        "responseCode": 400
      }
    }
  ]
}
2022-01-24T09:18:27.492Z - INFO - grant request from CBRS  : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T09:18:27.496Z - INFO - The requested maxEirp value is too high
2022-01-24T09:18:27.496Z - INFO - The Grant response code is not 0, applicable spectrum parameters have
been sent out.
2022-01-24T09:18:27.497Z - INFO - engine sent successfully, the response to CBRS  : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 3,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      },
      "response": {
        "responseCode": 400
      }
    }
  ]
}
```

```
2022-01-24T09:18:27.556Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 3,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2022-01-24T09:18:27.562Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
      "grantExpireTime": "2022-01-31T09:18:27Z",
      "grantId": "956833922",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T09:18:27.621Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "956833922",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T09:18:27.627Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "956833922",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T09:21:47Z"
    }
  ]
}
2022-01-24T09:19:07.757Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "956833922",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
```

```
]
}
2022-01-24T09:19:07.763Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "956833922",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T09:22:27Z"
    }
  ]
}
```

6.8 WINNF.PT.C.HBT.1(Max Eirp = 20 dBm/MHz)

2022-01-24T09:17:17.040Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2022-01-24T09:17:17.042Z - INFO - Selected spectrum frequency is {'lowFrequency': 361500000L, 'highFrequency': 3635000000L}

2022-01-24T09:17:17.042Z - INFO - Granted Spectrum Max Eirp = 20dBm/MHz

2022-01-24T09:17:17.043Z - INFO - the selected test from the user : PowerMeasTest is starting now

2022-01-24T09:17:28.328Z - INFO - registration request from CBRS : {

```

  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "E_UTRA",
        "supportedSpec": "FFS"
      },
      "callSign": "",
      "cbsdCategory": "A",
      "cbsdSerialNumber": "2009CW5000029",
      "fccId": "P27-SCE4255W",
      "groupingParam": [
        {
          "groupId": "SERCOMM_111",
          "groupType": "INTERFERENCE_COORDINATION"
        }
      ],
      "installationParam": {
        "antennaAzimuth": 0,
        "antennaBeamwidth": 360,
        "antennaDowntilt": 0,
        "antennaGain": 5,
        "antennaModel": "",
        "eirpCapability": 30,
        "height": 0.0,
        "heightType": "AGL",
        "horizontalAccuracy": 3,
        "indoorDeployment": true,
        "latitude": 31.30201,
        "longitude": -105.024094,
        "verticalAccuracy": 3
      },
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT"
      ],
      "userId": "XywyE9"
    }
  ]

```

2022-01-24T09:17:28.371Z - INFO - engine sent successfully, the response to CBRS : {

```

  "registrationResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]

```

2022-01-24T09:17:28.474Z - INFO - spectrumInquiry request from CBRS : {

```

  "spectrumInquiryRequest": [
    {

```

```

    "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
    "inquiredSpectrum": [
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      },
      {
        "highFrequency": 3635000000,
        "lowFrequency": 3615000000
      }
    ]
  }
]
}
2022-01-24T09:17:28.486Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0
2022-01-24T09:17:28.486Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0
2022-01-24T09:17:28.486Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "maxEirp": 20,
          "ruleApplied": "FCC_PART_96"
        },
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "maxEirp": 20,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T09:17:28.512Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "operationParam": {
        "maxEirp": 16,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}

```

```
    }
  ]
}
2022-01-24T09:17:28.525Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "channelType": "GAA",
      "grantExpireTime": "2022-01-31T09:17:28Z",
      "grantId": "841704925",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2022-01-24T09:17:28.641Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "841704925",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2022-01-24T09:17:28.651Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "841704925",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2022-01-24T09:20:48Z"
    }
  ]
}
2022-01-24T09:18:08.749Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "841704925",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2022-01-24T09:18:08.756Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "P27-SCE4255WMock-SAS2009CW5000029",
      "grantId": "841704925",
      "response": {
        "responseCode": 0
      },
    }
  ]
}
```

```
    "transmitExpireTime": "2022-01-24T09:21:28Z"  
  }  
]  
}
```