

BLiNQ Networks Inc.

FCC ID: ROR2003

Models: PC-400, PCW-400, PWRF-400, PCRF-400

CBRS test verification

Notes:

Original hardware testing for this platform was performed using the indoor variant of the product (model **PCW-400i**), certified under **FCC ID: ROR2002**. For reference, see test report **KSCR240700144905**, issued **February 21, 2025**.

All test cases listed below were re-verified with the product configured as the outdoor models **PC-400, PCW-400, PWRF-400, and PCRF-400**.

The device is configured to meet **Category B** CBRS requirements for testing purposes, even though actual field deployment will utilize **Category A**, which imposes less stringent limits.

Summary table

Section	Test Case ID	DP	Test Logs_DP	Required for Cert	Comments
6.1.4.1.1	WINNF.FT.C.REG.1	--	☒	C1	Multi-Step registration
6.1.4.1.2	WINNF.FT.D.REG.2	X	☒	C1	Domain Proxy Multi-Step registration
6.1.4.1.3	WINNF.FT.C.REG.3	--	☒	C2	Single-Step registration for Category A CBSD
6.1.4.1.4	WINNF.FT.D.REG.4	X	☒	C2	Domain Proxy Single-Step registration for Cat A CBSD
6.1.4.1.5	WINNF.FT.C.REG.5	--	☒	C3	Single-Step registration for CBSD with CPI signed data
6.1.4.1.6	WINNF.FT.D.REG.6	X	☒	C3	Domain Proxy Single-Step registration for CBSD with CPI signed data
6.1.4.1.7	WINNF.FT.C.REG.7	X	☒	C6	Registration due to change of an installation parameter
6.1.4.2.1	WINNF.FT.C.REG.8	--	☒	M	Missing Required parameters (responseCode 102)
6.1.4.2.2	WINNF.FT.D.REG.9	X	☒	M	Domain Proxy Missing Required parameters (responseCode 102)
6.1.4.2.3	WINNF.FT.C.REG.10	--	☒	M	Pending registration (responseCode 200)
6.1.4.2.4	WINNF.FT.D.REG.11	X	☒	M	Domain Proxy Pending registration (responseCode 200)
6.1.4.2.5	WINNF.FT.C.REG.12	--	☒	M	Invalid parameter (responseCode 103)
6.1.4.2.6	WINNF.FT.D.REG.13	X	☒	M	Domain Proxy Invalid parameters (responseCode 103)
6.1.4.2.7	WINNF.FT.C.REG.14	--	☒	M	Blacklisted CBSD (responseCode 101)
6.1.4.2.8	WINNF.FT.D.REG.15	X	☒	M	Domain Proxy Blacklisted CBSD (responseCode 101)
6.1.4.2.9	WINNF.FT.C.REG.16	--	☒	M	Unsupported SAS protocol version (responseCode 100)
6.1.4.2.10	WINNF.FT.D.REG.17	X	☒	M	Domain Proxy Unsupported SAS protocol version (responseCode 100)
6.1.4.2.11	WINNF.FT.C.REG.18	--	☒	M	Group Error (responseCode 201)
6.1.4.2.12	WINNF.FT.D.REG.19	X	☒	M	Domain Proxy Group Error (responseCode 201)
6.1.4.3.1	WINNF.FT.C.REG.20	X	☒	C2	Category A CBSD location update
6.3.4.2.1	WINNF.FT.C.GRA.1	X	☒	M	Unsuccessful Grant responseCode=400 (INTERFERENCE)
6.3.4.2.2	WINNF.FT.C.GRA.2	X	☒	M	Unsuccessful Grant responseCode=401 (GRANT_CONFLICT)
6.4.4.1.1	WINNF.FT.C.HBT.1	--	☒	M	Heartbeat Success Case (first Heartbeat Response)
6.4.4.1.2	WINNF.FT.D.HBT.2	X	☒	M	Domain Proxy Heartbeat Success Case (first Heartbeat Response)
6.4.4.2.1	WINNF.FT.C.HBT.3	X	☒	M	Heartbeat responseCode=105 (DEREGISTER)
6.4.4.2.2	WINNF.FT.C.HBT.4	--	☒	M	Heartbeat responseCode=500 (TERMINATED_GRANT)
6.4.4.2.3	WINNF.FT.C.HBT.5	X	☒	M	Heartbeat responseCode=501 (SUSPENDED_GRANT) in First Heartbeat Response
6.4.4.2.4	WINNF.FT.C.HBT.6	X	☒	M	Heartbeat responseCode=501 (SUSPENDED_GRANT) in Subsequent Heartbeat Response
6.4.4.2.5	WINNF.FT.C.HBT.7	X	☒	M	Heartbeat responseCode=502 (UNSYNC_OP_PARAM)
6.4.4.2.6	WINNF.FT.D.HBT.8	X	☒	M	Domain Proxy Heartbeat responseCode=500 (TERMINATED_GRANT)
6.4.4.3.1	WINNF.FT.C.HBT.9	X	☒	M	Heartbeat Response Absent (First Heartbeat)
6.4.4.3.2	WINNF.FT.C.HBT.10	X	☒	M	Heartbeat Response Absent (Subsequent Heartbeat)
6.4.4.4.1	WINNF.FT.C.HBT.11	X	☒	O	Successful Grant Renewal in Heartbeat Test Case
6.5.4.2.1	WINNF.FT.C.MES.1	--	☒	C4	Registration Response contains measReportConfig
6.5.4.2.2	WINNF.FT.D.MES.2	X	☒	C4	Domain Proxy Registration Response contains measReportConfig
6.5.4.2.3	WINNF.FT.C.MES.3	X	☒	C5	Grant Response contains measReportConfig
6.5.4.2.4	WINNF.FT.C.MES.4	--	☒	C5	Heartbeat Response contains measReportConfig
6.5.4.2.5	WINNF.FT.D.MES.5	X	☒	C5	Domain Proxy Heartbeat Response contains measReportConfig
6.6.4.1.1	WINNF.FT.C.RLQ.1	--	☒	M	Successful Relinquishment
6.6.4.1.2	WINNF.FT.D.RLQ.2	X	☒	M	Domain Proxy Successful Relinquishment
6.6.4.2.1	WINNF.FT.C.RLQ.3	--	☒	O	Unsuccessful Relinquishment, responseCode=102
6.6.4.2.2	WINNF.FT.D.RLQ.4	X	☒	O	Domain Proxy Unsuccessful Relinquishment, responseCode=102
6.6.4.3.1	WINNF.FT.C.RLQ.5	--	☒	O	Unsuccessful Relinquishment, responseCode=103
6.6.4.3.2	WINNF.FT.D.RLQ.6	X	☒	O	Domain Proxy Unsuccessful Relinquishment, responseCode=103
6.7.4.1.1	WINNF.FT.C.DRG.1	--	☒	M	Successful Deregistration
6.7.4.1.2	WINNF.FT.D.DRG.2	X	☒	M	Domain Proxy Successful Deregistration
6.7.4.2.1	WINNF.FT.C.DRG.3	--	☒	O	Deregistration responseCode=102
6.7.4.2.2	WINNF.FT.D.DRG.4	X	☒	O	Domain Proxy Deregistration responseCode=102
6.7.4.3.1	WINNF.FT.C.DRG.5	X	☒	O	Deregistration responseCode=103
6.8.4.1.1	WINNF.FT.C.SCS.1	X	☒	M	Successful TLS connection between UUT and SAS Test Harness
6.8.4.2.1	WINNF.FT.C.SCS.2	X	☒	M	TLS failure due to revoked certificate
6.8.4.2.2	WINNF.FT.C.SCS.3	X	☒	M	TLS failure due to expired server certificate
6.8.4.2.3	WINNF.FT.C.SCS.4	X	☒	M	TLS failure when SAS Test Harness certificate is issued by unknown CA
6.8.4.2.4	WINNF.FT.C.SCS.5	X	☒	M	TLS failure when certificate at SAS Test Harness is corrupted
7.1.4.1.1	WINNF.PT.C.HBT.1	X	☒	M	UUT RF Transmit Power Measurement

Logs

WINNF.FT.C.REG.1

```
2025-11-28T05:04:45.401Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T05:04:45.401Z - INFO - the selected test from the user : WINNF.FT.C.REG.1 is starting now
2025-11-28T05:05:18.922Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "fccId": "ROR2003",
      "userId": "blinq"
    }
  ]
}
2025-11-28T05:05:18.930Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T05:05:20.435Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T05:05:20.436Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T05:05:39.220Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T05:05:40.756Z - INFO - The final result of the test : WINNF.FT.C.REG.1 is - passed
```

WINNF.FT.D.REG.2

2025-11-28T05:06:59.084Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T05:06:59.084Z - INFO - the selected test from the user : WINNF.FT.D.REG.2 is starting now
2025-11-28T05:15:09.796Z - INFO - registration request from CBRs : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD1",
    "fcid": "ROR2003",
    "userId": "blinq"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD2",
    "fcid": "ROR2003",
    "userId": "blinq"
  }
]
```

2025-11-28T05:15:09.809Z - INFO - engine sent successfully, the response to CBRs : {

```
"registrationResponse": [
  {
    "cbsdlid": "ROR2003Mock-SASCBSD1",
    "response": {
      "responseCode": 0
    }
  },
  {
    "cbsdlid": "ROR2003Mock-SASCBSD2",
    "response": {
      "responseCode": 0
    }
  }
]
```

2025-11-28T05:15:11.645Z - INFO - arrived to nstep starting question answer session with the technician

2025-11-28T05:15:11.645Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2025-11-28T05:15:14.955Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2025-11-28T05:15:14.955Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :

2025-11-28T05:15:16.981Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose n

2025-11-28T05:15:18.350Z - INFO - The final result of the test : WINNF.FT.D.REG.2 is - passed

WINNF.FT.C.REG.5

```

2025-11-28T05:24:17.324Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T05:24:17.324Z - INFO - the selected test from the user : WINNF.FT.C.REG.5 is starting now
2025-11-28T05:24:51.784Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETweYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PtT5zixlGNVnh-8RJafIwNIZGVGNdH5Vfw5kclLfJ_GxmWSU9Wm-HpmGhCU7COPBVr_iDyZ3SY6RWTOMzo9rOHBYeoSypBpke18UPgX9XqMSHTMgKeJ2LaF1lR7N-BKdLvvfAUxflDiYeYN4jr_VPSOuQhOmccsd_p_0XlkFIH7zcaecZr7icd6J_D4DBqBJ5eWZ3Coqd-XSiXHVKne7VcPTu32CjYF2vqst2HTL1ia_ZYu$4SzIQuZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NiZjCI6IUPlJwMDQiLCJjYnNkU2VyaWFsTnVtYmVyIjoIQ0JRDEilCJpbN0YWxsYXRpd25YYXhSI6eyJsYXRpdHVkZSI6NDENUmtizNDU1LCJsb25naXRZUI0i05MS42NTQzMjA5ImhmaWdodCi6MTUuMDAsImhmaWdodFR5cGU0IjBR0wiLCJpbmRvb3JEZXBSb3ltZW50IjpmYWxzZSwiYW50ZW5uYUF6aW1ldGgiOjAsImFudGVubmFEb3dudGlscDci6MCwoiYW50ZW5uYUdhaw4iOiEzLCJlaXwQ2FwYVJpbGloSI6NDYslmFudGVubmFCZWZWFt2ldkdGgiOjM2MCwiaG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLCljZXXJ0aWNhbmEFjY3VyYWN5IjoxLjAwLCljbhnlRlbn5hTW9kZWwiOiJvbW5pIn0slnbYyb2Zlc3Npb25hbEluc3RhbgXtlckdGEiOnsiY3BpSWQ0IoiJjcGkwMDAxIiw3BpTmFtZSI6IlRlc3Rlcislmuc3RhbgXdlXJ0aWZpY2F0aW9uVGltZSI6IjhwMjUtMTETMjhUMDU6MjMjY291LnNlbnR5cCI6IkpxXVCj9",
        "protectedHeader": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcid": "ROR2003",
      "measCapability": {
        "RECEIVED_POWER_WITHOUT_GRANT"
      },
      "userId": "bling"
    }
  }
}
2025-11-28T05:24:51.791Z - INFO - Registration message contains cpiSignatureData
2025-11-28T05:24:51.791Z - INFO - protectedHeader = {'alg': 'u'RS256', 'typ': 'u'JWT'}
2025-11-28T05:24:51.791Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDown tilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}
2025-11-28T05:24:51.806Z - INFO - verified signature on cpiSignatureData
2025-11-28T05:24:51.809Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T05:24:51.810Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": {
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  }
}
2025-11-28T05:24:53.361Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T05:24:53.361Z - INFO - the question is : Were there RF transmissions from the CBS1 during the test? please choose one of the answers :
2025-11-28T05:25:08.050Z - INFO - for the question : Were there RF transmissions from the CBS1 during the test?, the user choose n
2025-11-28T05:25:09.233Z - INFO - The final result of the test : WINNF.FT.C.REG.5 is - passed

```



```

"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fcid": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpid": "cpi0001"
},
"cbid": "CBSD1"
}
2025-11-28T05:36:52.380Z - INFO - verified signature on cpiSignatureData
2025-11-28T05:36:52.383Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T05:36:52.387Z - INFO - Registration message contains cpiSignatureData
2025-11-28T05:36:52.387Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T05:36:52.388Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpid": "cpi0001"
  },
  "cbid": "CBSD2"
}
2025-11-28T05:36:52.388Z - INFO - verified signature on cpiSignatureData
2025-11-28T05:36:52.390Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T05:36:52.390Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbid": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbid": "ROR2003Mock-SASCBS2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T05:36:54.235Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T05:36:54.235Z - INFO - the question is : Were there RF transmissions from the CBS1 during the test? please choose one of the answers :
2025-11-28T05:37:01.487Z - INFO - for the question : Were there RF transmissions from the CBS1 during the test? , the user choose n
2025-11-28T05:37:01.487Z - INFO - the question is : Were there RF transmissions from the CBS2 during the test? please choose one of the answers :
2025-11-28T05:37:03.328Z - INFO - for the question : Were there RF transmissions from the CBS2 during the test? , the user choose n
2025-11-28T05:37:05.129Z - INFO - The final result of the test : WINNF.FT.D.REG.6 is - passed

```

WINNF.FT.C.REG.7

2025-11-28T05:56:29.504Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T05:56:29.504Z - INFO - the selected test from the user : WINNF.FT.C.REG.7 is starting now
2025-11-28T05:57:15.637Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD1",
    "fcclId": "ROR2003",
    "userId": "blinq"
  }
]
```

2025-11-28T05:57:15.645Z - INFO - engine sent successfully, the response to CBRS : {
"registrationResponse": {

```
{
  "cbsdId": "ROR2003Mock-SASCBS1",
  "response": {
    "responseCode": 0
  }
}
```

2025-11-28T05:57:16.633Z - INFO - spectrumInquiry request from CBRS : {
"spectrumInquiryRequest": {

```
{
  "cbsdId": "ROR2003Mock-SASCBS1",
  "inquiredSpectrum": [
    {
      "highFrequency": 3700000000,
      "lowFrequency": 3550000000
    }
  ]
}
```

2025-11-28T05:57:16.636Z - INFO - engine sent successfully, the response to CBRS : {
"spectrumInquiryResponse": {

```
{
  "availableChannel": [
    {
      "channelType": "GAA",
      "frequencyRange": {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      },
      "ruleApplied": "FCC_PART_96"
    }
  ],
  "cbsdId": "ROR2003Mock-SASCBS1",
  "response": {
    "responseCode": 0
  }
}
```

2025-11-28T05:57:17.634Z - INFO - grant request from CBRS : {
"grantRequest": {

```
{
  "cbsdId": "ROR2003Mock-SASCBS1",
  "operationParam": {
    "maxEirp": 36,
    "operationFrequencyRange": {
      "highFrequency": 3560000000,
      "lowFrequency": 3550000000
    }
  }
}
```

2025-11-28T05:57:17.637Z - INFO - engine sent successfully, the response to CBRS : {
"grantResponse": {

```
{
  "cbsdId": "ROR2003Mock-SASCBS1",
  "channelType": "GAA",

```

```
"grantExpireTime": "2025-12-05T05:57:17Z",
"grantId": "663883563",
"heartbeatInterval": 60,
"response": {
  "responseCode": 0
}
}
]
}
2025-11-28T05:57:18.638Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "663883563",
      "operationState": "GRANTED"
    }
  ]
}
}
2025-11-28T05:57:18.640Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "663883563",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T06:00:38Z"
    }
  ]
}
}
2025-11-28T05:58:19.703Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "663883563",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2025-11-28T05:58:19.703Z - INFO - Time interval between two heartbeat request messages is: 61.064835, limit is: 65.0
2025-11-28T05:58:19.705Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "663883563",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T06:01:39Z"
    }
  ]
}
}
2025-11-28T05:59:13.753Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "663883563"
    }
  ]
}
}
2025-11-28T05:59:13.755Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "663883563",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T05:59:14.762Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
}
2025-11-28T05:59:14.763Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
```

2025-11-28T05:59:16.685Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T05:59:16.685Z - 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 :
2025-11-28T06:00:22.918Z - 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
2025-11-28T06:00:24.823Z - INFO - The final result of the test : WINNF.FT.C.REG.7 is - passed

WINNF.FT.C.REG.8

[illegible]

WINNF.FT.D.REG.9

```

2025-11-28T06:12:12.126Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T06:12:12.126Z - INFO - the selected test from the user : WINNF.FT.D.REG.9 is starting now
2025-11-28T06:12:42.146Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD2",
      "cpiSignatureData": {
        "digitalSignature":
          "pNqB6GSDJO9ob08o77SJHuB_q7F6PhtGu333xo0XLbUjqpfcvllnsARBblcgAwqeXa2VAaYdM3bNE3JFQSQWA5vL9_ztefYDEgALq1kf8_z90etwawa3MJcccCoQAnFKWgwts_K1H9Jv
          dQlQfo2FAd-O-YhwHEYtlS8awmAlu4R8uegg462GJQYY0Yfol3Tcsqdohhtr051OdmrddtZEfFQ-
          e4NfKzizLglSYik_OjWzApLjZHswZTBh75HCA9am3Hc3j11PeD_iK_KmGh9NeSG6UVO-zq8ftYduA2btUfPt_44eYAVMs4BwO4Gc4vU0iZPmuN4xdMMgm9ijFEZXNa",
        "encodedCpiSignedData":
          "eyJmY2NZJCi6IUIpUjlwMDQiLCJYnNkU2VyaWFsTnVtYmVyljoIQ0JTRDiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQ
          zMjAsImhlaVdodCI6MTUuMDAsImhlaWdodFR5cGUoiOiBR0wiLCJpbmRvb3JEZXBsb3ItZW50IjpmbWxzZSwiYW50ZW5uYUF6aW11dGgiOiAsImFudGVubmFEb3dudGlscDI6MCwiY
          W50ZW5uYUdhYW4iOiEzLClJaXJwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZWFtd2klkdGgiOiJM2MCwiaG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWNhbiE FjY3VyYWN5IjoxL
          jAwLCJhbnRibm5hTW9kZWwiOiJvbW5pln0slnByb2Zlc3Nbpb25hbEluc3RhbgxlcRhdGEiOnsiY3BpSWQIOiJicGkwMDAxiiWiY3BpTmFTZSI6IlRlc3Rlcilslmluc3RhbgxDXJ0aWZpY2F
          0aW9uVGltZSI6IiwMjUtMTETmjhUMDU6Mjg6MDhlbn19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcld": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    },
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKPsjZo5-f53OOV4nd_g645Gb4EU674K7WETweYOFP3vAVFavAFj3JT085j1y-hsPMUjeY1PpT5zxIGNVnh-
        8RJafIwNIZGVGNdh5Vfw5kclLfj_GxmWSU9Wm-HpmGhCU7COPBvr_iDyZ3SY6RWOTOMzo9rOHBYeoSypBpke18UPgX9QMShTMgKeJ2LaF1IR7N-
        BKdLvfvIAUXdiFYenY4jr_VPSOuQH0mcgsdp_0XIKFIH7zcaecZr7icd6J_D4DBqBJ5ewZ3CoQd-X5IHVkvne7VcPTu32CjYF2vqst2HtL1iA_ZYuS4SZlQvZE3SBln6G736W3Q",
        "encodedCpiSignedData":
          "eyJmY2NZJCi6IUIpUjlwMDQiLCJYnNkU2VyaWFsTnVtYmVyljoIQ0JTRDiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQ
          zMjAsImhlaVdodCI6MTUuMDAsImhlaWdodFR5cGUoiOiBR0wiLCJpbmRvb3JEZXBsb3ItZW50IjpmbWxzZSwiYW50ZW5uYUF6aW11dGgiOiAsImFudGVubmFEb3dudGlscDI6MCwiY
          iW50ZW5uYUdhYW4iOiEzLClJaXJwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZWFtd2klkdGgiOiJM2MCwiaG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWNhbiE FjY3VyYWN5Ijo
          xLjAwLCJhbnRibm5hTW9kZWwiOiJvbW5pln0slnByb2Zlc3Nbpb25hbEluc3RhbgxlcRhdGEiOnsiY3BpSWQIOiJicGkwMDAxiiWiY3BpTmFTZSI6IlRlc3Rlcilslmluc3RhbgxDXJ0aWZpY2F
          0aW9uVGltZSI6IiwMjUtMTETmjhUMDU6Mjg6MDhlbn19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcld": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}
}
2025-11-28T06:12:42.155Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:12:42.155Z - INFO - protectedHeader = {'alg': 'u'RS256', 'typ': 'u'JWT'}
2025-11-28T06:12:42.155Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "IndoorDeployment": false,
    "antennaBeamwidth": 360,

```

```
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fcid": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:28:08Z",
  "cpild": "cpi0001"
},
"cbbsdSerialNumber": "CBSD2"
}
2025-11-28T06:12:42.178Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:12:42.180Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:12:42.189Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:12:42.189Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T06:12:42.189Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbbsdSerialNumber": "CBSD1"
}
2025-11-28T06:12:42.190Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:12:42.193Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:12:42.194Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 102
      }
    },
    {
      "response": {
        "responseCode": 102
      }
    }
  ]
}
}
2025-11-28T06:12:44.161Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:12:44.161Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :
2025-11-28T06:12:54.170Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose n
2025-11-28T06:12:54.170Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T06:12:55.892Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T06:12:56.933Z - INFO - The final result of the test : WINNF.FT.D.REG.9 is - passed
```

WINNF.FT.C.REG.10

```

2025-11-28T06:14:22.336Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-15
2025-11-28T06:14:22.336Z - INFO - the selected test from the user : WINNF.FT.C.REG.10 is starting now
2025-11-28T06:15:02.290Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-f53OOV4nd_q645Gb4EU674k7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PtT5zixlGNVnh-8RlafIwNIZGVGNDH5Vfw5KclFj_GxmWSU9Wm-HpmGhCU7COpBvr_iDyZ3SY6RWOTMzo9rOHBYeoSypBpke18UPgX9QmSHTMGKeJ2LaF1IR7N-BkdLrvfAUxftDIYeYN4j4r_VPSOQuQHmcgsdp_0XlkFIH7zcaeCzR7icd6J_D4DBqBj5eWZ3CoQd-X5lXHVKne7VcPTu32CjYF2vqst2HtL1iA_ZYuS4SzIQuZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NJZCI6IUpUjwMDQjLCJjYnNkU2VyaWFsbnVtYmVycjoiOiJBR0wiLCJpbmRvb3JEZXBSb3ltZW50IjpmYWxzZSwiYW50ZW5uYUF6aW11dGgiOiAsImFudGVubmFEb3dudGlscCl6MCwoiYWN5OZWN5uYUdhaW4iOiJlc3R5bWVjbG90eSI6NDYslmFudGVubmFCZWftd2lkZGwiOjM2MCwiaG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWVhbmEfYjY3YyYWN5IjoxljAwLCJhbG9ybW9kbW9kbW5pb0slbiByb2Zlc3Npb25hbEluc3RhbgXlcRhdGEiOnsiY3BpSpSQiOiJjcGkwMDAxliwiY3BpTmFTZSI6IlRlc3Rhcmluc3RhbgXDXJ0aWZpY2F0aW9uVGltZSI6IjwMiUtMTETMjhUMDU6MjM6MjBln19",
        "protectedHeader": "eyJhbGciOiJIUzU1NiIsInR5cCI6IkpXVCJ9"}
      ],
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}

2025-11-28T06:15:02.299Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:15:02.299Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T06:15:02.299Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}

2025-11-28T06:15:02.311Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:15:02.313Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:15:02.313Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 200
      }
    }
  ]
}

2025-11-28T06:15:03.380Z - INFO - arrived to nstep starting question session with the technician
2025-11-28T06:15:03.380Z - INFO - the question is : Were there RF transmissions from the CBS1 during the test? please choose one of the answers :
2025-11-28T06:15:08.488Z - INFO - for the question : Were there RF transmissions from the CBS1 during the test? , the user choose n
2025-11-28T06:15:10.327Z - INFO - The final result of the test : WINNF.FT.C.REG.10 is - passed

```

WINNF.FT.D.REG.11

```

2025-11-28T06:16:30.401Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T06:16:30.401Z - INFO - the selected test from the user : WINNF.FT.D.REG.11 is starting now
2025-11-28T06:17:10.375Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WEtWEOFBp3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-8RJaftwNIZGVGNDh5Vfw5kclLFJ_GxmWSU9Wm-HpmGhCU7COpBVr_iDyZ3SY6RWTOmzo9ROHBYeoSypBpke18UPgX9XqMSHTMGKeJ2LaF1I7RN-BKdLvrfAUxfDIYeYN4jr_VPSOuQH0mcgsdp_0XIkFIH7zcaecZr7icd6J_D4DBqBj5eWZ3CoQd-XSIXHVkne7VcPtU32CjYfY2vqst2HtL1iA_ZYuS4SzIqvZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NiZjZiClIUpUjlwMDQiLCJYnNkU2VyaWFsTnVtYmVyIjoJQjTRDEiLCJpbmN0YWxsYXRpb25QYXJhbSl6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUiOi05MS42NTQzMjAsImhlhlaWdodCI6MTUuMDAsImhlhlaWdodFR5cGUOIjBR0wiLCJpbmRvb3JEZXBsbn3ltZW50ljpYWxzZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3dudGlscDI6MCwiYWN5OW50ZW5uYUdhawV4IOjEzLCJlaXJwQ2FwYWJpbGloSi6NDYslmFudGVubmFCZWFTd2lkdGgiOjM2MCwiaG9yaXpvbnRhbEFjY3VyYWN5lloxLjAwLCJ2ZXJOaWNhbEFjY3VyYWN5lloxLjAwLCJhbnRlbn5hTW9kZWwiOiJjbW5pIn0slNbByb2Zlc3Npb25hbEluc3RhbmGxlckRhGEiOnsiY3BpSWQyOiJjcGkwMDAxiiWiY3BpTmFtZSI6IlRlc3Rlcislmuc3RhbmGxGXDJ0aWZpY2FOaW9uVGltZSI6IiwMJUtMTETmJhUMDU6MjM6MjBain19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9",
        "fcld": "ROR2003",
        "measCapability": [
          "RECEIVED_POWER_WITHOUT_GRANT",
          "RECEIVED_POWER_WITH_GRANT"
        ],
        "userId": "bling"
      }
    },
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD2",
      "cpiSignatureData": {
        "digitalSignature": "pNqB6GJSJDJO9ob08o77SJHuB_g7F6PhGu333xo0XLbUjqpfvcvlInsARBlcgAWqeXa2VAaYdM3bNE3JFQSQWA5vL9_tefbYDEALg1kf8_z90etwawa3MJcccCoQAnFKWgwts_K1IH9JvdQIQfo2FAd-O-YhwHEYtlS8awmAlu4R8uegg462GJQQYYoi3Tcsqdohht0510dmrdtZEffQ-e4NfikzLglisYik_OjWzApLj2HswZTBh75HCA9am3Hc8j11PeD_iK_KmGh9NEG6UVO-zq8ftYduA2btJFpt_44eYAVMs4BwO4Gc4vU0iZPmuN4xdMMgmqijFEZxNA",
        "encodedCpiSignedData": "eyJmY2NiZjZiClIUpUjlwMDQiLCJYnNkU2VyaWFsTnVtYmVyIjoJQjTRDEiLCJpbmN0YWxsYXRpb25QYXJhbSl6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUiOi05MS42NTQzMjAsImhlhlaWdodCI6MTUuMDAsImhlhlaWdodFR5cGUOIjBR0wiLCJpbmRvb3JEZXBsbn3ltZW50ljpYWxzZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3dudGlscDI6MCwiYWN5OW50ZW5uYUdhawV4IOjEzLCJlaXJwQ2FwYWJpbGloSi6NDYslmFudGVubmFCZWFTd2lkdGgiOjM2MCwiaG9yaXpvbnRhbEFjY3VyYWN5lloxLjAwLCJ2ZXJOaWNhbEFjY3VyYWN5lloxLjAwLCJhbnRlbn5hTW9kZWwiOiJjbW5pIn0slNbByb2Zlc3Npb25hbEluc3RhbmGxlckRhGEiOnsiY3BpSWQyOiJjcGkwMDAxiiWiY3BpTmFtZSI6IlRlc3Rlcislmuc3RhbmGxGXDJ0aWZpY2FOaW9uVGltZSI6IiwMJUtMTETmJhUMDU6MjM6MjBain19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9",
        "fcld": "ROR2003",
        "measCapability": [
          "RECEIVED_POWER_WITHOUT_GRANT",
          "RECEIVED_POWER_WITH_GRANT"
        ],
        "userId": "bling"
      }
    }
  ]
}
}
2025-11-28T06:17:10.385Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:17:10.385Z - INFO - protectedHeader = {'alg': 'u'RS256', 'typ': 'u'JWT'}
2025-11-28T06:17:10.386Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,

```

```
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fccId": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpild": "cpi0001"
},
"cbbsdSerialNumber": "CBSD1"
}
2025-11-28T06:17:10.398Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:17:10.400Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:17:10.409Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:17:10.409Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T06:17:10.409Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbbsdSerialNumber": "CBSD2"
}
2025-11-28T06:17:10.410Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:17:10.411Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:17:10.411Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 200
      }
    },
    {
      "response": {
        "responseCode": 200
      }
    }
  ]
}
2025-11-28T06:17:11.448Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:17:11.448Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T06:17:14.307Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T06:17:14.307Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :
2025-11-28T06:17:16.714Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose n
2025-11-28T06:17:18.024Z - INFO - The final result of the test : WINNF.FT.D.REG.11 is - passed
```


WINNF.FT.D.REG.13

[illegible]

```
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fccId": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpild": "cpi0001"
},
"cbbsdSerialNumber": "CBSD1"
}
2025-11-28T06:21:44.059Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:21:44.061Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:21:44.069Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:21:44.069Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T06:21:44.069Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbbsdSerialNumber": "CBSD2"
}
2025-11-28T06:21:44.070Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:21:44.071Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:21:44.071Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbssId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    },
    {
      "response": {
        "responseCode": 103
      }
    }
  ]
}
}
2025-11-28T06:21:45.771Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:21:45.771Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T06:21:58.900Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T06:21:58.901Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :
2025-11-28T06:21:59.989Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose n
2025-11-28T06:22:01.275Z - INFO - The final result of the test : WINNF.FT.D.REG.13 is - passed
```

WINNF.FT.C.REG.14

```

2025-11-28T06:23:34.258Z - INFO - WINNF TEST STAPNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T06:23:34.259Z - INFO - the selected test from the user : WINNF.FTC.REG.14 is starting now
2025-11-28T06:24:15.187Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIVOWHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETweYOFBp3vAVFavAFj3JT085j1y-hsPMUJeY1PtT5zixlGNVnh-8RlafIwNIZGVGNDh5Vfw5klcLfJ_GxmWSU9Wm-HpmGhCU7COpBVr_iDyZ3SY6RWTOmzo9OHBYeoSypBpke18UPgX9XqMSHTMgKeJ2LaF1IR7N-BkdLvrfAUxfDIYeYN4jr_VPSOuQH0mcgsdp_0XlkFIH7zcaecZr7icd6J_D4DBqBj5eWZ3CoQd-X5IXHVkne7VcPTu32CjYf2vqst2HtL1iA_ZYuS4SzIQuVE3SBIn6G736W3Q",
        "encodedCpiSignedData":
          "eyJmY2NiZCjEiPUJlYWMDQiLCJjYnNkU2VyZWFiLnVtYmVyljoiQ0JRDEilClpbmN0YWxsYXRpb25QYXJhbSl6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUOI05MS42NTQzMjAsImhlalldodCI6MTUuMDAsImhlaWdodFR5cGUiOiBR0wiLCJpbmRvb3JEZXBsbn3ltZW50IjpmbWxzZW50ZW5uYUF6aW11dGgiOiAsImFudGVubmFEb3dudGlsdCI6MCwiYV50ZW5uYUdhahW4iOiEzLCJlaXJwQ2FwYWJpbGUiOiSi6NDYslmFudGVubmFCZWftd2lkGgiOiM2MCwiaG9yaXpvbnRhbmEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWVhbmEFjY3VyYWN5IjoxLjAwLCJhbnRlbm5hTW9kZWwiOiJjbW5pbn0slmByb2Zlc3Npb25hbEluc3RhbgXclckRhdGEiOnsiY3BpSW50IjoiIjcGkwMDAxiiwY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbgXGXDJ0aWZpY2F0aW9uVGltZSI6IjlmYjUUMTETmjhUMDU6MjM6MjBaIn19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      }
    },
    {
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}
}
2025-11-28T06:24:15.197Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:24:15.197Z - INFO - protectedHeader = {'alg': 'RS256', 'typ': 'JWT'}
2025-11-28T06:24:15.197Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpid": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}
2025-11-28T06:24:15.213Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:24:15.217Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:24:15.218Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 101
      }
    }
  ]
}
}
2025-11-28T06:24:16.313Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:24:16.313Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T06:24:23.162Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test?, the user choose n
2025-11-28T06:24:26.428Z - INFO - The final result of the test : WINNF.FTC.REG.14 is - passed

```

WINNF.FT.D.REG.15

```

2025-11-28T06:26:18.548Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T06:26:18.549Z - INFO - the selected test from the user : WINNF.FT.D.REG.15 is starting now
2025-11-28T06:26:51.765Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbssdCategory": "B",
      "cbssdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbssdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WEtWEOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-
8RJafIwNIZGVGNDh5Vfw5kclLFj_GxmWSU9Wm-HpmGhCU7COpBvr_iDyZ3SY6RWTOmzo9OHBYeoSypBpke18UPgX9XqMSHTMGKeJ2LaF1R7N-
BKdLvrfAUxfDIYeYN4jr_VPSOuQH0mcgsdp_0XIkFIH7zcaecZr7icd6J_D4DBqBj5eWZ3CoQd-XSIXHVkne7VcPtU32CjYf2vqst2HtL1ia_ZYuS4SzIqvZE3SBlnG6736W3Q",
        "encodedCpiSignedData": "eyJmY2NZJC6IUPlJwMDQiLCJYnNkU2VyaWFsTnVtYmVyIjoJQJTRDEiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUiOi05MS42NTQzMjAsImhlhlaWdodCI6MTUuMDAsImhlhlaWdodFR5cGUioiJBROwiLCJpbmRvb3JEZXBs3ltZW50ljpYWxzZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3duZGlscCI6MCwiYWN5OW50ZW5uYUdhbW40IjEzLCJlaXJwQ2FwYWJpbGloSi6NDYslmFudGVubmFCZWFTd2lkdGgiOjM2MCwiaG9yaXpvbnRhbmEFYjY3VyYWN5lloxLjAwLCJ2ZXJOaWNhbEFjY3VyYWN5ljoJAwLCJhbnRibm5hTW9kZWwiOiJjbW5pIn0sInByb2Zlc3Npb25hbEluc3RhbgxldGRhdGEiOnsiY3BpSWQyOiJjcGkwMDAXiwiY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbgxGXDJXJOaWZpY2F0aW9uVGItZSI6IiwMJUtMTETmjhUMDU6MjM6MjBain19",
        "protectedHeader": "eyJhbGciOiJIUSZ1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    },
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbssdCategory": "B",
      "cbssdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbssdSerialNumber": "CBSD2",
      "cpiSignatureData": {
        "digitalSignature": "pNbG6JSDJO9ob08o77SJHuB_g7F6PhGu333xo0XLbUjqpfvcvInsARBblcgAwqeXa2VAaYdM3bNE3JFQSQWA5vL9_tefbYdeALg1kf8_z90etwawa3MJcccQoAnFKWgwts_K1H9JV
dQIQfo2FAd-O-YhwHEYtlS8awmAlu4R8uegg462GJQQYYofol3Tcsqdohht0510dmrdtZEffQ-
e4NfikZLglisYik_OjWzApLj2HswZTBh75HCA9am3Hc8j11PeD_IK_KmGh9NEG6UVO-zq8ftYduA2btJFpt_44eYAVMs4BwO4Gc4vU0iZPmuN4xdMMgmqijFEZxNA",
        "encodedCpiSignedData": "eyJmY2NZJC6IUPlJwMDQiLCJYnNkU2VyaWFsTnVtYmVyIjoJQJTRDiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUiOi05MS42NTQzMjAsImhlhlaWdodCI6MTUuMDAsImhlhlaWdodFR5cGUioiJBROwiLCJpbmRvb3JEZXBs3ltZW50ljpYWxzZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3duZGlscCI6MCwiYWN5OW50ZW5uYUdhbW40IjEzLCJlaXJwQ2FwYWJpbGloSi6NDYslmFudGVubmFCZWFTd2lkdGgiOjM2MCwiaG9yaXpvbnRhbmEFYjY3VyYWN5lloxLjAwLCJ2ZXJOaWNhbEFjY3VyYWN5ljoJAwLCJhbnRibm5hTW9kZWwiOiJjbW5pIn0sInByb2Zlc3Npb25hbEluc3RhbgxldGRhdGEiOnsiY3BpSWQyOiJjcGkwMDAXiwiY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbgxGXDJXJOaWZpY2F0aW9uVGItZSI6IiwMJUtMTETmjhUMDU6MjM6MjBain19",
        "protectedHeader": "eyJhbGciOiJIUSZ1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}
}
2025-11-28T06:26:51.775Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:26:51.775Z - INFO - protectedHeader = {'alg': 'u'RS256', 'typ': 'u'JWT'}
2025-11-28T06:26:51.776Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,

```

```
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fccId": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpild": "cpi0001"
},
"cbbsdSerialNumber": "CBSD1"
}
2025-11-28T06:26:51.787Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:26:51.789Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:26:51.797Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:26:51.798Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T06:26:51.798Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbbsdSerialNumber": "CBSD2"
}
2025-11-28T06:26:51.798Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:26:51.799Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:26:51.800Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbssId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    },
    {
      "response": {
        "responseCode": 101
      }
    }
  ]
}
}
2025-11-28T06:26:53.584Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:26:53.584Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T06:27:04.108Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T06:27:04.108Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :
2025-11-28T06:27:05.033Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose n
2025-11-28T06:27:05.986Z - INFO - The final result of the test : WINNF.FT.D.REG.15 is - passed
```

WINNF.FT.C.REG.16

```

2025-11-28T06:28:04.985Z - INFO - WINNF TEST STAP RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T06:28:04.985Z - INFO - the selected test from the user : WINNF.F.T.C.REG.16 is starting now
2025-11-28T06:28:44.704Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-f53OOV4nd_q645Gb4EU674K7WEtEYOfbP3vAVFavAFJ3JT085j1y-hsPMUJeY1PtT5zixlGNVnh-8RJaflwNIZGVGNDH5Vfw5klCfJ_GxmWSU9Wm-HpmGhCU7CoPBvr_iDyZ3SY6RWToMzo9rOHBYeoSypBPke18UPgX9QMShTMgKeJ2LaF1IR7N-BkDLvfVAuxFDIYeYN4jr_VPSOuQHmcgsdp_0XIkJFIH7zcaecZR7icd6J_D4DBqBJ5eWZ3CoQd-X5IXHVkne7VcPTu32CjYF2vqtst2Htl1IA_ZYuS4SzIQvZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NJZCI6IUpUjlwMDQiLCJjYnNkU2VyYWFnbnVtYmVyljoJQTREILCjpbnN0YWxsYXRpb25XYXhsbi5eyJsYXRpdHVkZSI6NDEuMTizNDU1LCSjb25naXR1ZGUioMS42NTQzMjAsImhlalldodCl6MTUuMDAmlhlaWddoFR5cGUoiBR0wiLCJpbmRvb3JEZXBSb3ltZW50lpmpYWxzZWsiYW50ZW5uYUF6aW11dGgiOiAsImFudGVubmFEb3dudGlscCl6MCwwiYW50ZW5uYUDhaW4iOiEzLCJlaXBwbGloesi6NDYslmfudGVubmFCZFtdtkdgGjiOjM2MCMwiaG9yaXprbnRhbmEFJY3VyYWN5IjoxLjAwLCJ2ZXJoZW50ZW5uYWF6aW11dGgiOiAsImFudGVubmFEb3dudGlscCl6MCwwiLiAwLCJhbGlnbnRlbm5hdW9kbW9kaW50LnByb2Zlc3Npb25hbEluc3RhbkxlcHRhdGEiOnsiY3BpSQWiOiJjcGkwMDAxliwiY3BpTmFTZSI6IlRic3Rhcilsmruc3RhhGxDXJ0aWZpY2FOaW9uVGItZSI6IiwMiUtMtETMjhUMDU6MjM6MjBaIn19",
        "protectedHeader": "eyJhbGciOiJIUzU1NiIsInR5cCI6IkpXVCJ9"}
      ],
      "fccId": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ]
    }
  ]
}

2025-11-28T06:28:44.714Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:28:44.714Z - INFO - protectedHeader = {'alg': 'u'RS256', 'typ': 'JWT'}
2025-11-28T06:28:44.714Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirCapabiltiy": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}

2025-11-28T06:28:44.730Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:28:44.731Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:28:44.734Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 100
      }
    }
  ]
}

2025-11-28T06:28:46.030Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:28:46.031Z - INFO - the question is : Were there RF transmissions from the CBS1 during the test? please choose one of the answers :
2025-11-28T06:28:53.138Z - INFO - for the question : Were there RF transmissions from the CBS1 during the test?, the user choose n
2025-11-28T06:28:53.982Z - INFO - The final result of the test : WINNF.F.T.C.REG.16 is - passed

```



```
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fcclid": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpild": "cpi0001"
},
"cbbsdSerialNumber": "CBSD1"
}
2025-11-28T06:30:45.358Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:30:45.359Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:30:45.370Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:30:45.370Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T06:30:45.370Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcclid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbbsdSerialNumber": "CBSD2"
}
2025-11-28T06:30:45.371Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:30:45.372Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:30:45.372Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 100
      }
    },
    {
      "response": {
        "responseCode": 100
      }
    }
  ]
}
}
2025-11-28T06:30:47.311Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:30:47.311Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T06:30:53.979Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose N
2025-11-28T06:30:53.979Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :
2025-11-28T06:30:54.813Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose N
2025-11-28T06:30:55.898Z - INFO - The final result of the test : WINNF.FT.D.REG.17 is - failed
```


WINNF.FT.D.REG.19

```

2025-11-28T06:35:30.121Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T06:35:30.121Z - INFO - the selected test from the user : WINNF.FT.D.REG.19 is starting now
2025-11-28T06:36:10.813Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WEtEYOFbP3vAVFavAFJ3JT085j1y-hsPMUJeY1PtT5zixlGNVnh-
8RJaftwNIZGVGNDH5VfwSkclLcLfJ_GxmWSU9Wm-HpmGhCU7COPBVr_iDyZ3SY6RWOTMzoYoOHBYeoSypBpke18UPgX9XqMSHTMGKeJ2LaF1I7RN-
BKdLvrfAUxfDIYeYN4j4r_VPSOuQHOmcsdpd_0XIkFIH7zcaecZr7icd6J_D4DBqBJ5eWZ3CoQd-X5IXHVkne7VcPTu32CjYf2vqst2HtL1ia_ZYuS4SzIqvZE3SBlnG6736W3Q",
        "encodedCpiSignedData": "eyJmY2NZJC6IUPlJwMDQiLCJYnNkU2VyaWFsTnVtYmVyIjoIQ0JRDEiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlalldodFR5cGUoIjBR0wiLCJpbmRvb3JEZXBsbnltZW50LjpmYWxzZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3duZGlscDCl6MCwiYWN5OW50ZW5uYUdhaw4iOiElZCJlaXlwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZFwfTd2kdGgiOjM2MCwiaG9yaXpvbnRhbmEFJY3VyYWN5lloxLjAwLCJ2ZXJ0aWNnbEFjY3VyYWN5lloxljAwLCJhbnRibm5hTW9kZWwiOiJjbW5pIn0sInByb2Zlc3Npb25hbEluc3RhbGxlcRhdGEiOnsiY3BpSWQIOiJjcGkwMDAxiiWiY3BpTmFTZSI6IlRlc3Rlcilmluc3RhbGxGXDJ0aWZpY2FoAW9uVGItZSI6IiwMJUtMETEtMjhUMDU6MjM6MjBaIn19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD2",
    "cpSignatureData": {
      "digitalSignature": "pNgB6GSDJDJO9ob08o77SJHuB_g7F6PhGu333xo0XLbUjqpfvcvlInsARBlcgAwqeXa2VAaYM3bNE3JFQSQAwa5VL9_tefbyADEglAK1kf8_z90etwwa3MjcccQoAnFKWgwts_K1IH9JV
dQIQfo2FAd-O-YhwHEYtlIS8awmAlu4R8uegg462GJJYYOI3Tcsqdohhtr051OdmdrdtZEffQ-
e4NIkfizLglsYik_OjWzApLjZHswZTBh75HCA9am3Hc8j1PeD_IK_KmGh9NEG6UVO-zq8ftYduA2btJFpt_44eYAVMs4Bwo4Gc4vU0iZPmuN4xdMMgmqijFEzxNA",
      "encodedCpiSignedData": "eyJmY2NZJC6IUPlJwMDQiLCJYnNkU2VyaWFsTnVtYmVyIjoIQ0JRDEiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlalldodFR5cGUoIjBR0wiLCJpbmRvb3JEZXBsbnltZW50LjpmYWxzZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3duZGlscDCl6MCwiYWN5OW50ZW5uYUdhaw4iOiElZCJlaXlwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZFwfTd2kdGgiOjM2MCwiaG9yaXpvbnRhbmEFJY3VyYWN5lloxLjAwLCJ2ZXJ0aWNnbEFjY3VyYWN5lloxljAwLCJhbnRibm5hTW9kZWwiOiJjbW5pIn0sInByb2Zlc3Npb25hbEluc3RhbGxlcRhdGEiOnsiY3BpSWQIOiJjcGkwMDAxiiWiY3BpTmFTZSI6IlRlc3Rlcilmluc3RhbGxGXDJ0aWZpY2FoAW9uVGItZSI6IiwMJUtMETEtMjhUMDU6MjM6MjBaIn19",
      "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
    },
    "fcid": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT",
      "RECEIVED_POWER_WITH_GRANT"
    ],
    "userId": "bling"
  }
}
}

2025-11-28T06:36:10.824Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:36:10.824Z - INFO - protectedHeader = {'alg': 'u'RS256', 'typ': 'u'JWT'}
2025-11-28T06:36:10.824Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,

```

```
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fccId": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpild": "cpi0001"
},
"cbbsdSerialNumber": "CBSD1"
}
2025-11-28T06:36:10.837Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:36:10.839Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:36:10.848Z - INFO - Registration message contains cpiSignatureData
2025-11-28T06:36:10.848Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T06:36:10.849Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbbsdSerialNumber": "CBSD2"
}
2025-11-28T06:36:10.849Z - INFO - verified signature on cpiSignatureData
2025-11-28T06:36:10.850Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T06:36:10.851Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbssId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    },
    {
      "response": {
        "responseCode": 201
      }
    }
  ]
}
2025-11-28T06:36:12.170Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T06:36:12.171Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T06:36:18.274Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T06:36:18.275Z - INFO - the question is : Were there RF transmissions from the CBSD2 during the test? please choose one of the answers :
2025-11-28T06:36:19.264Z - INFO - for the question : Were there RF transmissions from the CBSD2 during the test? , the user choose n
2025-11-28T06:36:20.247Z - INFO - The final result of the test : WINNF.FT.D.REG.19 is - passed
```



```

    }
  }
}
}
2025-11-28T07:28:46.767Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:28:47.765Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T07:28:47.768Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 400
      }
    }
  ]
}
2025-11-28T07:28:49.115Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T07:28:49.115Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T07:28:56.672Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T07:28:57.556Z - INFO - The final result of the test : WINNF.FT.C.GRA.1 is - passed

```

WINNF.FT.C.GRA.2

[illegible]

```

    }
  }
}
}
2025-11-28T07:30:15.559Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:30:16.559Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3690000000
        }
      }
    }
  ]
}
2025-11-28T07:30:16.561Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 401
      }
    }
  ]
}
2025-11-28T07:30:18.261Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T07:30:18.261Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :
2025-11-28T07:30:24.381Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2025-11-28T07:30:25.451Z - INFO - The final result of the test : WINNF.FT.C.GRA.2 is - passed

```

WINNF.FT.C.HBT.1

```
2025-11-28T07:31:06.627Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T07:31:06.627Z - INFO - the selected test from the user : WINNF.FT.C.HBT.1 is starting now
2025-11-28T07:31:35.864Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtlV0VHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-8RJaIwNlZGVGNdH5Vfw5klcLFj_GxmWSU9Wm-HpmGhCU7COpBvR_iDyZ3SY6RWToMzo9rOHBYeoSypBpke18UPgX9QmSHTMGKeJ2LaF1IR7N-BKdLvrfAUxfDIYeYN4j4r_VPSOuQhOmcsdp_0XlkFIH7zcaeCzR7icd6J_D4DBqBj5eWZ3CoQd-X5lXHVkne7VcPTu32CjYF2vqst2HtL1iA_ZYUS4SzIqVZE3SBIn6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NjZC6iUUPUjJlWMDQlLCjJYnNkU2VyaWFnTnVtYmVyljoiQ0JRDEiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlaVdodCI6MTUuMDAsImhlaWdodFR5cGU0IjBR0wiLCJpbmRvb3JlZXB3b3ltZW50IjpmYWxzZSwiYW50ZW5uYUUF6aW11dGgiOiJAsImFudGVubmFEb3dudGlsdCI6MCwIYyY50ZW5uYUdhYW4iOiJlZlJlLCJlaXJwQ2FwYVJpbG0eSI6NDYslmFudGVubmFCZWZtd2lkdGgiOiJ2MCwiaG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWVhbnRhbEFjY3VyYWN5IjoxLjAwLCJhbnRlbm5hW9kZWwiOiJvbnR5b2Zlc3Npb25hbEluc3RhbGxlckRhdGEiOiNSY3BpSWQ0IjUjcGkwMDAxiwiY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbGxkZXJ0aWZpY2F0aW9uVGl0ZSI6IjJlMTI0MTU0MDU6MjM6MjBmN19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "blinq"
    }
  ]
}

2025-11-28T07:31:35.876Z - INFO - Registration message contains cpiSignatureData
2025-11-28T07:31:35.879Z - INFO - protectedHeader = {u'algo': u'RS256', u'type': u'JWT'}
2025-11-28T07:31:35.879Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpid": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}

2025-11-28T07:31:35.893Z - INFO - verified signature on cpiSignatureData
2025-11-28T07:31:35.895Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T07:31:35.895Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

2025-11-28T07:31:36.864Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
```

```

    }
  }
}
}
2025-11-28T07:31:36.866Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:31:37.867Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T07:31:37.870Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T07:31:37Z",
      "grantId": "562140416",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:31:38.868Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "562140416",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T07:31:38.870Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "562140416",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:34:58Z"
    }
  ]
}
2025-11-28T07:32:39.933Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "562140416",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:32:39.933Z - INFO - Time interval between two heartbeat request messages is: 61.06458, limit is: 65.0
2025-11-28T07:32:39.935Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",

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        "grantId": "562140416",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-11-28T07:35:59Z"
    }
}
}
2025-11-28T07:33:40.996Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "562140416",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T07:33:40.996Z - INFO - Time interval between two heartbeat request messages is: 61.062894, limit is: 65.0
2025-11-28T07:33:40.998Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "562140416",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T07:37:00Z"
        }
    ]
}
}
2025-11-28T07:34:41.061Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "562140416",
            "operationState": "AUTHORIZED"
        }
    ]
}
}
2025-11-28T07:34:41.062Z - INFO - Time interval between two heartbeat request messages is: 60.065282, limit is: 65.0
2025-11-28T07:34:41.063Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "562140416",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T07:38:01Z"
        }
    ]
}
}
2025-11-28T07:35:41.122Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "562140416",
            "operationState": "AUTHORIZED"
        }
    ]
}
}
2025-11-28T07:35:41.123Z - INFO - Time interval between two heartbeat request messages is: 60.061437, limit is: 65.0
2025-11-28T07:35:41.125Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "562140416",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T07:39:01Z"
        }
    ]
}
}
2025-11-28T07:36:41.186Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "562140416",
            "operationState": "AUTHORIZED"
        }
    ]
}
}
2025-11-28T07:36:41.186Z - INFO - Time interval between two heartbeat request messages is: 60.063538, limit is: 65.0
2025-11-28T07:36:41.188Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",

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"grantId": "562140416",
"response": {
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T07:40:01Z"
}
]
```

2025-11-28T07:36:43.000Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T07:36:43.001Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? please choose one of the answers :
2025-11-28T07:36:54.740Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? , the user choose n
2025-11-28T07:36:54.740Z - INFO - the question is : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? please choose one of the answers :
2025-11-28T07:37:03.155Z - INFO - for the question : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? , the user choose y
2025-11-28T07:37:05.172Z - INFO - The final result of the test : WINNF.FT.C.HBT.1 is - passed

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2025-11-28T07:37:35.447Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T07:37:35.447Z - INFO - the selected test from the user : WINNF.F.T.D.HBT.2 is starting now
2025-11-28T07:38:13.647Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD2",
      "cpiSignatureData": {
        "digitalSignature":
          "pNqB6GJSDJO9ob08o77SJHuB_q7F6PhtGu333xo0XLbUjqpfcvllnsARBblcgAwqeXa2VAaydM3bNE3JFQSQWA5vL9_tefbYDEgALq1kf8_z90etwwa3MJcccCoQAnFKWgwts_K1H9JvdQlQIfo2FAd-O-YhwHEytlS8awmAlu4R8uegq462GJQYY0Yfol3Tcsqdohhtr051OdmrddtZEfQ-e4NfkzizLglisYik_OjWzApLj2HswZTBh75HCA9am3Hc8j11PeD_iK_KmGh9NEG6UVO-zq8ftYduA2btJFpt_44eYAVMs4BwO4Gc4vU0iZPmuN4xdMMgqijFEZXNA",
        "encodedCpiSignedData":
          "eyJmY2NiZCIGlUPUJlwMDQiLCJYnNkU2VyaWFsTnVtYmVyljoiQ0JRDRiILCjpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUOiJBROwiLCJpbmRvb3JEZXBSb3ltZW50IjpmYWxzZSwiYW50ZW5uYUF6aW11dGgiOiQAsImFudGVubmFEb3dudGlscDI6MCwiYW50ZW5uYUdhlaW4iOiEzLCJlaXlwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZWZtdktkdGgiOiJM2MCwiaG9yaXpvbnRhbmEFjY3VyYWN5IjoxLjAwLjCjhnbiRlbn5hTW9kZWwiOiJvbW5pln0slInByb2Zlc3Npb25hbEluc3RhbmGxtckRhdGEiOnsiY3BSpwSQIOiUjcGkwMDAxliwiY3BpTmFmZSI6IlRlc3Rlcilslmluc3RhbmGxZXJ0aWZpY2F0aW9uVGltZSI6IjhwMjUtMTMtMTJhUmduMDU6Mjg6MDhlbn19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      }
    },
    {
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}
2025-11-28T07:38:13.662Z - INFO - Registration message contains cpiSignatureData
2025-11-28T07:38:13.662Z - INFO - protectedHeader = {u'alrg': u'RS256', u'typ': u'JWT'}
2025-11-28T07:38:13.662Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD2"
}
2025-11-28T07:38:13.684Z - INFO - verified signature on cpiSignatureData
2025-11-28T07:38:13.686Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T07:38:13.687Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbstdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:38:14.647Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbstdId": "ROR2003Mock-SASCBSD2",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,

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        "lowFrequency": 3550000000
    }
}
]
}
}
}
2025-11-28T07:38:14.652Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T07:38:15.649Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3690000000
        }
      }
    }
  ]
}
}
2025-11-28T07:38:15.652Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T07:38:15Z",
      "grantId": "622355736",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T07:38:16.651Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "operationState": "GRANTED"
    }
  ]
}
}
2025-11-28T07:38:16.653Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:41:36Z"
    }
  ]
}
}
2025-11-28T07:38:19.654Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",

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    "vendor": "BLINQ"
  },
  "cbsdSerialNumber": "CBSD1",
  "cpiSignatureData": {
    "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOfbP3vAVfAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-8RlafIwNIZGVNDH5Vfw5kclFj_GxmWSU9Wm-HpmGhCU7COpBvr_iDyZ3SY6RWTOmzo9OHBYeoSypBpke18UPgX9XQmSHTMgKelJ2LaF1IR7N-BkdLwfIAuxFDiYeYN4jr_VPSOuQHOmcsdp_0XlkFIH7zcaecZR7icd6J_D4DBqBJ5eWZ3CoQd-X5XiHVkne7VcPTu32CjYF2vqst2Htl1iA_ZYuS4SzlQvZE3SBIn6G736W3Q",
    "encodedCpiSignedData": ""
  },
  "protectedHeader": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9"
},
{
  "fcid": "ROR2003",
  "measCapability": [
    "RECEIVED_POWER_WITHOUT_GRANT",
    "RECEIVED_POWER_WITH_GRANT"
  ],
  "userId": "bling"
}
]
}

2025-11-28T07:38:19.665Z - INFO - Registration message contains cpiSignatureData
2025-11-28T07:38:19.665Z - INFO - protectedHeader = {'alg': 'RS256', 'typ': 'JWT'}
2025-11-28T07:38:19.666Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}

2025-11-28T07:38:19.666Z - INFO - verified signature on cpiSignatureData
2025-11-28T07:38:19.668Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T07:38:19.669Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdlId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

2025-11-28T07:38:20.651Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdlId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}

2025-11-28T07:38:20.654Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ]
    }
  ]
}

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"cbstdId": "ROR2003Mock-SASCBSD1",
"response": {
  "responseCode": 0
}
}
}
}
2025-11-28T07:38:21.652Z - INFO - grant request from CBRS :{
"grantRequest": [
  {
    "cbstdId": "ROR2003Mock-SASCBSD1",
    "operationParam": {
      "maxEirp": 36,
      "operationFrequencyRange": {
        "highFrequency": 3560000000,
        "lowFrequency": 3550000000
      }
    }
  }
]
}
}
}
2025-11-28T07:38:21.655Z - INFO - engine sent successfully, the response to CBRS :{
"grantResponse": [
  {
    "cbstdId": "ROR2003Mock-SASCBSD1",
    "channelType": "GAA",
    "grantExpireTime": "2025-12-05T07:38:21Z",
    "grantId": "215913945",
    "heartbeatInterval": 60,
    "response": {
      "responseCode": 0
    }
  }
]
}
}
}
2025-11-28T07:38:22.654Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbstdId": "ROR2003Mock-SASCBSD1",
    "grantId": "215913945",
    "operationState": "GRANTED"
  }
]
}
}
}
2025-11-28T07:38:22.655Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbstdId": "ROR2003Mock-SASCBSD1",
    "grantId": "215913945",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T07:41:42Z"
  }
]
}
}
}
2025-11-28T07:39:17.705Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbstdId": "ROR2003Mock-SASCBSD2",
    "grantId": "622355736",
    "operationState": "AUTHORIZED"
  }
]
}
}
}
2025-11-28T07:39:17.706Z - INFO - Time interval between two heartbeat request messages is: 61.054287, limit is: 65.0
2025-11-28T07:39:17.708Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbstdId": "ROR2003Mock-SASCBSD2",
    "grantId": "622355736",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T07:42:37Z"
  }
]
}
}
}
2025-11-28T07:39:23.711Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbstdId": "ROR2003Mock-SASCBSD1",
    "grantId": "215913945",
    "operationState": "AUTHORIZED"
  }
]
}
}
}
2025-11-28T07:39:23.711Z - INFO - Time interval between two heartbeat request messages is: 61.057222, limit is: 65.0

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2025-11-28T07:39:23.713Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:42:43Z"
    }
  ]
}
2025-11-28T07:40:17.771Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:40:17.772Z - INFO - Time interval between two heartbeat request messages is: 60.065916, limit is: 65.0
2025-11-28T07:40:17.773Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:43:37Z"
    }
  ]
}
2025-11-28T07:40:24.778Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:40:24.778Z - INFO - Time interval between two heartbeat request messages is: 61.066956, limit is: 65.0
2025-11-28T07:40:24.780Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:43:44Z"
    }
  ]
}
2025-11-28T07:41:17.832Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:41:17.832Z - INFO - Time interval between two heartbeat request messages is: 60.060287, limit is: 65.0
2025-11-28T07:41:17.834Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:44:37Z"
    }
  ]
}
2025-11-28T07:41:25.840Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:41:25.841Z - INFO - Time interval between two heartbeat request messages is: 61.062496, limit is: 65.0
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2025-11-28T07:41:25.843Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:44:45Z"
    }
  ]
}
2025-11-28T07:42:18.892Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:42:18.892Z - INFO - Time interval between two heartbeat request messages is: 61.060165, limit is: 65.0
2025-11-28T07:42:18.894Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:45:38Z"
    }
  ]
}
2025-11-28T07:42:26.900Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:42:26.900Z - INFO - Time interval between two heartbeat request messages is: 61.059288, limit is: 65.0
2025-11-28T07:42:26.902Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:45:46Z"
    }
  ]
}
2025-11-28T07:43:19.958Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:43:19.959Z - INFO - Time interval between two heartbeat request messages is: 61.065861, limit is: 65.0
2025-11-28T07:43:19.960Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "622355736",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:46:39Z"
    }
  ]
}
2025-11-28T07:43:27.968Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:43:27.969Z - INFO - Time interval between two heartbeat request messages is: 61.068725, limit is: 65.0
```

```
2025-11-28T07:43:27.971Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "215913945",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:46:47Z"
    }
  ]
}
2025-11-28T07:43:29.785Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T07:43:29.785Z - INFO - the question is : Did CBSD2 transmit power prior to AUTHORIZED state (first successful HBT response)? please choose one of the answers :
2025-11-28T07:44:01.515Z - INFO - for the question : Did CBSD2 transmit power prior to AUTHORIZED state (first successful HBT response)? , the user choose n
2025-11-28T07:44:01.516Z - INFO - the question is : Did CBSD2 transmit only within the frequency range specified in its grantRequest message? please choose one of the
answers :
2025-11-28T07:44:04.588Z - INFO - for the question : Did CBSD2 transmit only within the frequency range specified in its grantRequest message? , the user choose y
2025-11-28T07:44:04.588Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? please choose one of the answers :
2025-11-28T07:44:08.078Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? , the user choose n
2025-11-28T07:44:08.078Z - INFO - the question is : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? please choose one of the
answers :
2025-11-28T07:44:10.239Z - INFO - for the question : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? , the user choose y
2025-11-28T07:44:11.507Z - INFO - The final result of the test : WINNF.FT.D.HBT.2 is - passed
```

WINNF.FT.C.HBT.3

```

2025-11-28T07:44:47.874Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T07:44:47.875Z - INFO - the selected test from the user : WINNF.FT.C.HBT.3 is starting now
2025-11-28T07:45:22.746Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WEtWEOFBp3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-8RJafIwNIZGVGNDh5Yfw5kclLF_GxmWSU9Wm-HpmGhCU7COPBVr_iDyZ3SY6RWOTMzo9OHBYeoSypBpke18UPgX9QmSHTMGKeJ2LaF1IR7N-BKdLvrfAUxfDIYeYN4j4r_VPSOuQH0mcgsdp_0XIkFIH7caeCzR7icd6J_D4DBqBj5eWZ3CoQd-X5IXHVkne7VcPTu32CjYf2YF2vqst2Htl1ia_ZYuS4SzIQuZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NiZWZlCiBlUjJlbnMDQlLCJYnNkU2VyaWFsTnVtYmVyIjoIQ0JRDEilLCJpbmN0YWxsYXRpb25QYXJhbSl6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUOI0i0MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUOIjBR0wiLCJpbmRvb3JEZXBsbtltZW50IlpmYWxzZSwiYW50ZW5uYUF6aW1ldGgiOiJAsImFudGVubmFEb3dudGlscDI6MCwiyW50ZW5uYUdhawV4IOjEzLCljaXwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZWZFdtd2lkdGgiOjM2MCwiaG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLClJ2JXJ0aWNnbEFjY3VyYWN5IjoxLjAwLClJhbnRibm5hTW9kZWwiOiJvbW5pIn0slnByb2Zlc3Npb25hbEluc3RhbgxlcGRheiOnsiY3BpSWQyOiJjcGkwMDAxiwiY3BpTmFtZSI6IlRlc3Rlcilslmuc3RhbgxkZDJ0aWZpY2FOaW9uVGltZSI6IiwMjUtMTETmjhUMDU6MjM6MjBain19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fccId": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}
}

2025-11-28T07:45:22.761Z - INFO - Registration message contains cpiSignatureData
2025-11-28T07:45:22.761Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T07:45:22.762Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}

2025-11-28T07:45:22.776Z - INFO - verified signature on cpiSignatureData
2025-11-28T07:45:22.777Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T07:45:22.778Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}

2025-11-28T07:45:23.742Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}

```

```

    }
  }
}
}
2025-11-28T07:45:23.744Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:45:24.745Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T07:45:24.748Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T07:45:24Z",
      "grantId": "248542977",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:45:25.747Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "248542977",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T07:45:25.749Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "248542977",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:48:45Z"
    }
  ]
}
2025-11-28T07:46:26.815Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "248542977",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:46:26.816Z - INFO - Time interval between two heartbeat request messages is: 61.067605, limit is: 65.0
2025-11-28T07:46:26.817Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",

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```
"grantId": "248542977",
"response": {
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T07:49:46Z"
}
}
}
2025-11-28T07:47:27.871Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "248542977",
    "operationState": "AUTHORIZED"
  }
]
}
2025-11-28T07:47:27.872Z - INFO - Time interval between two heartbeat request messages is: 61.056107, limit is: 65.0
2025-11-28T07:47:27.873Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "248542977",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T07:50:47Z"
  }
]
}
}
2025-11-28T07:48:27.935Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "248542977",
    "operationState": "AUTHORIZED"
  }
]
}
}
2025-11-28T07:48:27.936Z - INFO - Time interval between two heartbeat request messages is: 60.064056, limit is: 65.0
2025-11-28T07:48:27.938Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "248542977",
    "response": {
      "responseCode": 105
    },
    "transmitExpireTime": "2025-11-28T07:48:27Z"
  }
]
}
}
2025-11-28T07:48:29.093Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T07:48:29.093Z - 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 :
2025-11-28T07:49:15.325Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 105? , the user
choose y
2025-11-28T07:49:28.772Z - INFO - The final result of the test : WINNF.FT.C.HBT.3 is - passed
```

WINNF.FT.C.HBT.4

```

2025-11-28T07:50:23.021Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T07:50:23.022Z - INFO - the selected test from the user : WINNF.FT.C.HBT.4 is starting now
2025-11-28T07:50:52.534Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIVOWHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFPb3vAVFavAFJ3JT085j1y-hsPMUJeY1PtT5zixIGNVnh-8RJafIwNIZGSGNDh5Yfw5kklCLf_GxmWSU9Wm-HpmGhCU7COpBVr_iDyZ3SY6RWTOMzo9rOHBYeoSypBPke18UPgX9XqmsHTMgKeJ2LaF1lR7N-BkdLvrfAUxfDIYeYN4j4r_VPSOuQHOmcsdpd_0XiKFih7zcaecZR7icd6J_D4DBqbJseWZ3Coqd-XSiXHvkne7VcpTu32CjYF2vqst2HtL1ia_ZYu$4SzIQvZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NiZWZCI6IUPljlwMDQiLCJjaWNoNkU2VyYWFnTsTnVtYmVyljoioQRDEilCjpbnNOYWNesYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTizNDU1LCJsb25naXR1ZGUoOi05MS42NTQzMjAsImhlalldodFR5cGUOIJBROwiLCJpbmRvb3JEZXBsbtZSW5OlljbmYxckZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3duclsdCl6MCwoiyW50ZW5uYUdhawV4IOzELCJaXwQ2FWYwpbjGI0eSl6NDYSimFudGVubmFCZWFFtd2lkdgGiOJM2MCwiaG9yaXpvbnRhbfEFJY3VyYWN5ljoxLjAwLCJ2ZXJOaWNhbEfFY3VyyWN5ljoxLjAwLCJlbmRibm5hTW9kbWwiOiJjbW5pln0slnbByb2Zlc3Npb25hbEluc3RhbGxlckRHdBGEiOnsiY3BpSWQyOiJjcGkwMDAxliWiY3BtmFTzSI6IlRlc3Rlcislmruc3RhbGxGXDJ0aWZpY2FOaW9uVGltZSI6ijlwMjtUTMtEtMjhUMDU6MjMjBaln19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"}
      ],
      "fccId": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}

2025-11-28T07:50:52.549Z - INFO - Registration message contains cpiSignatureData
2025-11-28T07:50:52.549Z - INFO - protectedHeader = {'alg': u'RS256', 'typ': u'JWT'}
2025-11-28T07:50:52.549Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpid": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}

2025-11-28T07:50:52.560Z - INFO - verified signature on cpiSignatureData
2025-11-28T07:50:52.562Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T07:50:52.562Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "statusCode": 0
      }
    }
  ]
}

2025-11-28T07:50:53.532Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000

```

```

    }
  }
}
}
2025-11-28T07:50:53.535Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:50:54.534Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T07:50:54.537Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T07:50:54Z",
      "grantId": "588170844",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:50:55.535Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "588170844",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T07:50:55.536Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "588170844",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T07:54:15Z"
    }
  ]
}
2025-11-28T07:51:56.598Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "588170844",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T07:51:56.598Z - INFO - Time interval between two heartbeat request messages is: 61.063266, limit is: 65.0
2025-11-28T07:51:56.600Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",

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```
"grantId": "588170844",
"response": {
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T07:55:16Z"
}
}
}
2025-11-28T07:52:57.650Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "588170844",
    "operationState": "AUTHORIZED"
  }
]
}
2025-11-28T07:52:57.650Z - INFO - Time interval between two heartbeat request messages is: 61.052115, limit is: 65.0
2025-11-28T07:52:57.652Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "588170844",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T07:56:17Z"
  }
]
}
}
2025-11-28T07:53:57.711Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "588170844",
    "operationState": "AUTHORIZED"
  }
]
}
}
2025-11-28T07:53:57.712Z - INFO - Time interval between two heartbeat request messages is: 60.060975, limit is: 65.0
2025-11-28T07:53:57.713Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "588170844",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T07:57:17Z"
  }
]
}
}
2025-11-28T07:54:58.778Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "588170844",
    "operationState": "AUTHORIZED"
  }
]
}
}
2025-11-28T07:54:58.779Z - INFO - Time interval between two heartbeat request messages is: 61.06731, limit is: 65.0
2025-11-28T07:54:58.780Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "588170844",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T07:58:18Z"
  }
]
}
}
2025-11-28T07:55:59.838Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "588170844",
    "operationState": "AUTHORIZED"
  }
]
}
}
2025-11-28T07:55:59.838Z - INFO - Time interval between two heartbeat request messages is: 61.059386, limit is: 65.0
2025-11-28T07:55:59.840Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
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```
"grantId": "588170844",
"response": {
  "responseCode": 500
},
"transmitExpireTime": "2025-11-28T07:55:59Z"
}
]
```

2025-11-28T07:56:01.369Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T07:56:01.369Z - 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 :
2025-11-28T07:56:05.882Z - INFO - for the question : Did the CBSD1 stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 500? , the user choose y
2025-11-28T07:56:07.518Z - INFO - The final result of the test : WINNF.FT.C.HBT.4 is - passed

WINNF.FT.C.HBT.5

[illegible]

```

    }
  }
}
}
2025-11-28T07:57:18.637Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:57:19.636Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T07:57:19.639Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T07:57:19Z",
      "grantId": "33360397",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:57:20.638Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "33360397",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T07:57:20.640Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "33360397",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2025-11-28T07:57:20Z"
    }
  ]
}
2025-11-28T07:57:21.637Z - INFO - relinquishment request from CBRS :{
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "33360397"
    }
  ]
}
2025-11-28T07:57:21.638Z - INFO - engine sent successfully, the response to CBRS :{
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "33360397",
      "response": {

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"responseCode": 0
  }
}
}
```

2025-11-28T07:57:23.368Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T07:57:23.369Z - INFO - the question is : Did the CBSD transmit at any time during the test? please choose one of the answers :
2025-11-28T07:57:38.470Z - INFO - for the question : Did the CBSD transmit at any time during the test? , the user choose n
2025-11-28T07:57:39.517Z - INFO - The final result of the test : WINNF.FT.C.HBT.5 is - passed

WINNF.FT.C.HBT.6

```

2025-11-28T07:58:27.806Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T07:58:27.807Z - INFO - the selected test from the user : WINNF.FT.C.HBT.6 is starting now
2025-11-28T07:58:57.687Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtlVOWHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1Pt5zixIGNVnh-8RJafTWNI2GVOGNdH5Yfw5kclLFj_GxmWSU9Wm-HpmGHCU7COPBVr_iDyZ3SY6RWTOMzo9rOHBVeoSypBpke18UPgX9XqmSHMTmgKeJ2LaF1IR7N-BKdLvLVAUxIdIYeYN4j4r_VPSOuQhOmcsdp_0XlkFIH7zcaecZr7icd6J_D4DBqBj5eWZ3Coqd-XSiXHvkne7VCtPu32CjYF2vqst2HTL1ia_ZYu$4SzIqvZE3SBIn6G736W3Q",
        "encodedCpiSignedData":
          "eyJmY2NiZWZCI6IUPlUjJwMDQiLCJYnNkU2VyaWFsTnVtYmVyIjojQ0JRDEilLCJpbmN0YWxsYXRpb25QYXhScGl6eyJsYXRpdHVkZSI6NDEuMTZNDU1LCjsb25naXR1ZGUjOi05MS42NTQzMjAsImhlaWdodCi6MTUuMDAsImhlaWdodFR5cGUOiJBROwiLCJpbmRvb3JEZXBSb3ltZW50IlpmYWxzZSwiYW50ZW5uYUF6aW11dGgiOjAsImFudGVubmFEb3dudGlsdCI6MCwibW50ZW5uYUdhYW4iOiEzLCJaXWQ2FwYWJpbGI0eSl6NDYslmFudGVubmFCZWZFd2tkdGgiOjM2MCAwaG9yaG9yb3RhbEFjY3VyYWN5IjoxlAwLCJhbnRlbm5hTW9kZWwiOiJvbW5pIn0slnByb2Zlc3Npb25hbmEluc3RhbgXckRhdGEiOnsiY3BpSWQjOiJjcGkwMDAxliwIY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbgXGXDJ0aWZpY2FOaW9uVGltZSI6IjhwMjUtMTETMjhUMDU6MjM6MjBain19",
        "protectedHeader": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}
2025-11-28T07:58:57.700Z - INFO - Registration message contains cpiSignatureData
2025-11-28T07:58:57.700Z - INFO - protectedHeader = {u'algl': u'RS256', u'typ': u'JWT'}
2025-11-28T07:58:57.701Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}
2025-11-28T07:58:57.713Z - INFO - verified signature on cpiSignatureData
2025-11-28T07:58:57.715Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T07:58:57.715Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdid": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:58:58.687Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdid": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}

```

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    }
  }
}
}
2025-11-28T07:58:58.690Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:58:59.689Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T07:58:59.692Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T07:58:59Z",
      "grantId": "138272242",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T07:59:00.690Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T07:59:00.693Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T08:02:20Z"
    }
  ]
}
2025-11-28T08:00:01.755Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T08:00:01.755Z - INFO - Time interval between two heartbeat request messages is: 61.064627, limit is: 65.0
2025-11-28T08:00:01.757Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",

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    "grantId": "138272242",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T08:03:21Z"
  }
}
}
2025-11-28T08:01:02.797Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T08:01:02.798Z - INFO - Time interval between two heartbeat request messages is: 61.042416, limit is: 65.0
2025-11-28T08:01:02.800Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T08:04:22Z"
    }
  ]
}
}
2025-11-28T08:02:03.836Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2025-11-28T08:02:03.837Z - INFO - Time interval between two heartbeat request messages is: 61.038668, limit is: 65.0
2025-11-28T08:02:03.839Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2025-11-28T08:02:03Z"
    }
  ]
}
}
2025-11-28T08:02:04.839Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242"
    }
  ]
}
}
2025-11-28T08:02:04.841Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "138272242",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
}
2025-11-28T08:02:06.028Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T08:02:06.028Z - 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 :
2025-11-28T08:02:16.339Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 501? , the user
choose y
2025-11-28T08:02:17.673Z - INFO - The final result of the test : WINNF.FT.C.HBT.6 is - passed

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    }
  }
}
}
2025-11-28T08:08:11.177Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:08:12.171Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T08:08:12.173Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T08:08:12Z",
      "grantId": "408723344",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:08:13.176Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:08:13.178Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T08:11:33Z"
    }
  ]
}
2025-11-28T08:09:14.243Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T08:09:14.244Z - INFO - Time interval between two heartbeat request messages is: 61.067326, limit is: 65.0
2025-11-28T08:09:14.247Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",

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    "grantId": "408723344",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T08:12:34Z"
  }
}
}
2025-11-28T08:10:15.304Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T08:10:15.305Z - INFO - Time interval between two heartbeat request messages is: 61.06083, limit is: 65.0
2025-11-28T08:10:15.308Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T08:13:35Z"
    }
  ]
}
}
2025-11-28T08:11:16.368Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2025-11-28T08:11:16.368Z - INFO - Time interval between two heartbeat request messages is: 61.063467, limit is: 65.0
2025-11-28T08:11:16.370Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "response": {
        "responseCode": 502
      },
      "transmitExpireTime": "2025-11-28T08:11:16Z"
    }
  ]
}
}
2025-11-28T08:11:17.369Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344"
    }
  ]
}
}
2025-11-28T08:11:17.371Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "408723344",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
}
2025-11-28T08:11:19.326Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T08:11:19.327Z - 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 :
2025-11-28T08:13:06.730Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 502? , the user
choose y
2025-11-28T08:13:10.171Z - INFO - The final result of the test : WINNF.FT.C.HBT.7 is - passed

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    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBS2D"
}
2025-11-28T08:15:03.327Z - INFO - verified signature on cpiSignatureData
2025-11-28T08:15:03.329Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T08:15:03.345Z - INFO - Registration message contains cpiSignatureData
2025-11-28T08:15:03.345Z - INFO - protectedHeader = {u'alq': u'RS256', u'typ': u'JWT'}
2025-11-28T08:15:03.345Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBS1D"
}
2025-11-28T08:15:03.346Z - INFO - verified signature on cpiSignatureData
2025-11-28T08:15:03.348Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T08:15:03.348Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS2D",
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "ROR2003Mock-SASCBS1D",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:15:04.291Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS2D",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    },
    {
      "cbsdId": "ROR2003Mock-SASCBS1D",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-11-28T08:15:04.294Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",

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        "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
        },
        "ruleApplied": "FCC_PART_96"
    },
    ],
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "response": {
        "responseCode": 0
    }
},
{
    "availableChannel": [
        {
            "channelType": "GAA",
            "frequencyRange": {
                "highFrequency": 3700000000,
                "lowFrequency": 3550000000
            },
            "ruleApplied": "FCC_PART_96"
        }
    ],
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "response": {
        "responseCode": 0
    }
}
]
}
2025-11-28T08:15:05.293Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD2",
            "operationParam": {
                "maxEirp": 36,
                "operationFrequencyRange": {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3690000000
                }
            }
        },
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "operationParam": {
                "maxEirp": 36,
                "operationFrequencyRange": {
                    "highFrequency": 3560000000,
                    "lowFrequency": 3550000000
                }
            }
        }
    ]
}
2025-11-28T08:15:05.296Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD2",
            "channelType": "GAA",
            "grantExpireTime": "2025-12-05T08:15:05Z",
            "grantId": "554563806",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        },
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "channelType": "GAA",
            "grantExpireTime": "2025-12-05T08:15:05Z",
            "grantId": "672607089",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2025-11-28T08:15:06.295Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD2",
            "grantId": "554563806",
            "operationState": "GRANTED"
        },
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "672607089",

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"operationState": "GRANTED"
}
}
}
2025-11-28T08:15:06.298Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "554563806",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T08:18:26Z"
},
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "672607089",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T08:18:26Z"
}
]
}
2025-11-28T08:16:07.355Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "554563806",
"operationState": "AUTHORIZED"
},
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "672607089",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T08:16:07.355Z - INFO - Time interval between two heartbeat request messages is: 61.060002, limit is: 65.0
2025-11-28T08:16:07.357Z - INFO - Time interval between two heartbeat request messages is: 61.060002, limit is: 65.0
2025-11-28T08:16:07.359Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "554563806",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T08:19:27Z"
},
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "672607089",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T08:19:27Z"
}
]
}
2025-11-28T08:17:08.415Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "554563806",
"operationState": "AUTHORIZED"
},
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "672607089",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T08:17:08.416Z - INFO - Time interval between two heartbeat request messages is: 61.060447, limit is: 65.0
2025-11-28T08:17:08.418Z - INFO - Time interval between two heartbeat request messages is: 61.060447, limit is: 65.0
2025-11-28T08:17:08.419Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "554563806",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T08:20:28Z"
},
{
"cbstdId": "ROR2003Mock-SASCBSD1",

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"grantId": "672607089",
"response": {
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T08:20:28Z"
}
}
}
2025-11-28T08:18:08.471Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "554563806",
    "operationState": "AUTHORIZED"
  },
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "672607089",
    "operationState": "AUTHORIZED"
  }
]
}
2025-11-28T08:18:08.472Z - INFO - Time interval between two heartbeat request messages is: 60.055921, limit is: 65.0
2025-11-28T08:18:08.473Z - INFO - Time interval between two heartbeat request messages is: 60.055921, limit is: 65.0
2025-11-28T08:18:08.475Z - INFO - engine sent successfully, the response to CBRS : {
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "554563806",
    "response": {
      "responseCode": 500
    },
    "transmitExpireTime": "2025-11-28T08:18:08Z"
  },
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "672607089",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T08:21:28Z"
  }
]
}
2025-11-28T08:18:09.951Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T08:18:09.951Z - INFO - the question is : Did the CBSD2 stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 500? please
choose one of the answers :
2025-11-28T08:18:15.209Z - INFO - for the question : Did the CBSD2 stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 500? , the user
choose y
2025-11-28T08:18:15.209Z - INFO - the question is : Did the CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? please choose one of the
answers :
2025-11-28T08:18:20.781Z - INFO - for the question : Did the CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? , the user choose n
2025-11-28T08:18:22.361Z - INFO - The final result of the test : WINNF.FT.D.HBT.8 is - passed
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2025-11-28T08:19:10.709Z - INFO - WINNRF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T08:19:10.710Z - INFO - the selected test from the user : WINNF.F.T.C.HBT.9 is starting now
2025-11-28T08:20:14.618Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLiNQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIVOWHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETweYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-8RJaftwNIZGVGNDH5fvw5kclFj_GxmWSU9Wm-HpmGhCU7COpBVr_iDyZ3SY6RWOTOMzo9rOHBYeoSypBpke18UPgX9XQmSHTMGKeJ2LaF1IR7N-BKdLvfaUXdIveYN4j4r_VPSOuQH0mcgsdp_0XlkFIH7zcaeCzr7icd6J_D4DBqBJSeWZ3CoQd-X5lXHvkne7VcPTu32CjYf2vqst2HtL1IA_ZYuS4SzIQvZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NiZCI6IUPlujlWMDQiLCJYnNkU2VyaWFsTnVtYmVyljoiQ0JRDEILCjpbmN0YWxsYXRpb25YXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUOi05MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUiOiBR0wiLCjpbmRvb3JEZXBs3ltZW50ljpYmVWxZSwiYW50ZW5uYUF6aW11dGgiOiAsImFudGVubmFEb3dudGlsdCI6MCMwYVW50ZW5uYUdhYW4iOiEzLCJlaXJwQ2FwYWJpbGI0eSl6NDYSImFudGVubmFCZWFrd2lkdGgiOjMyMCwiaG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLnNhbmFiEFjY3VyYWN5Ijo xLjAwLCJhbRlbnm5thW9kZWwiiOiJvbW5pln0slNbByb2Zlc3Npb25hbEluc3RhbgXlckRhdGEiOnsiY3BpSWQioiUjcGkwMDAxiwiY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbgXDX0aWZpY2 F0aW9uUVgtitZSI6ljwMtJMTETmjhUMDU6MJM6MjBAln19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fccId": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "bling"
    }
  ]
}
2025-11-28T08:20:14.631Z - INFO - Registration message contains cpiSignatureData
2025-11-28T08:20:14.631Z - INFO - protectedHeader = {'alg': 'RS256', 'typ': 'JWT'}
2025-11-28T08:20:14.631Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDownTilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}
2025-11-28T08:20:14.644Z - INFO - verified signature on cpiSignatureData
2025-11-28T08:20:14.646Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T08:20:14.646Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:20:15.615Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
```

```

    }
  }
}
}
2025-11-28T08:20:15.618Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:20:16.618Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T08:20:16.621Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T08:20:16Z",
      "grantId": "678333227",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:20:17.620Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:20:47.651Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:20:47.651Z - INFO - request message received while HBT is absent, sleep 174 sec before responding
2025-11-28T08:21:17.684Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:21:17.684Z - INFO - request message received while HBT is absent, sleep 144 sec before responding
2025-11-28T08:21:47.717Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "operationState": "GRANTED"
    }
  ]
}

```

```

    }
  }
}
2025-11-28T08:21:47.717Z - INFO - request message received while HBT is absent, sleep 114 sec before responding
2025-11-28T08:22:17.750Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:22:17.750Z - INFO - request message received while HBT is absent, sleep 84 sec before responding
2025-11-28T08:22:47.785Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:22:47.785Z - INFO - request message received while HBT is absent, sleep 54 sec before responding
2025-11-28T08:23:17.818Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:23:17.819Z - INFO - request message received while HBT is absent, sleep 24 sec before responding
2025-11-28T08:23:37.647Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "678333227",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2025-11-28T08:23:37Z"
    }
  ]
}
2025-11-28T08:23:38.991Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T08:23:38.992Z - INFO - the question is : Were there RF transmissions from the CBSD during the test? please choose one of the answers :
2025-11-28T08:23:41.742Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:23:41.742Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:23:41.742Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:23:41.831Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:23:41.833Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:23:41.843Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:24:46.992Z - INFO - for the question : Were there RF transmissions from the CBSD during the test? , the user choose n
2025-11-28T08:24:48.069Z - INFO - The final result of the test : WINNF.FT.C.HBT.9 is - passed

```

WINNF.FT.C.HBT.10

[illegible]

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    }
  }
}
}
2025-11-28T08:26:01.745Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:26:02.742Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T08:26:02.744Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T08:26:02Z",
      "grantId": "904908689",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:26:03.744Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "904908689",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:26:03.746Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "904908689",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T08:29:23Z"
    }
  ]
}
2025-11-28T08:27:04.794Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "904908689",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T08:27:04.795Z - INFO - Time interval between two heartbeat request messages is: 61.049802, limit is: 65.0
2025-11-28T08:27:04.796Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",

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        "grantId": "904908689",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2025-11-28T08:30:24Z"
    }
}
}
2025-11-28T08:28:05.857Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T08:28:05.858Z - INFO - Time interval between two heartbeat request messages is: 61.062969, limit is: 65.0
2025-11-28T08:28:05.858Z - INFO - LAST HBT RESPONSE THAT SET TRANSMIT_EXPIRE_TIME WAS AT: 2025-11-28 08:27:04.794582
2025-11-28T08:28:35.896Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T08:28:35.896Z - INFO - request message received while HBT is absent, sleep 174 sec before responding
2025-11-28T08:29:05.911Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T08:29:05.911Z - INFO - request message received while HBT is absent, sleep 144 sec before responding
2025-11-28T08:29:35.944Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T08:29:35.944Z - INFO - request message received while HBT is absent, sleep 114 sec before responding
2025-11-28T08:30:04.978Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T08:30:04.978Z - INFO - request message received while HBT is absent, sleep 85 sec before responding
2025-11-28T08:30:25.998Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "operationState": "GRANTED"
        }
    ]
}
2025-11-28T08:30:25.999Z - INFO - request message received while HBT is absent, sleep 64 sec before responding
2025-11-28T08:30:56.031Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "operationState": "GRANTED"
        }
    ]
}
2025-11-28T08:30:56.032Z - INFO - request message received while HBT is absent, sleep 34 sec before responding
2025-11-28T08:31:25.960Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "904908689",
            "response": {
                "responseCode": 501
            },
            "transmitExpireTime": "2025-11-28T08:31:25Z"
        }
    ]
}

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```
}
}
}
2025-11-28T08:31:27.669Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T08:31:27.669Z - INFO - the question is : Did the CBSD stop RF transmissions within (transmitExpireTime + 60seconds) of last valid heartbeat response? please choose
one of the answers :
2025-11-28T08:31:29.964Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:31:29.999Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:31:30.012Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:31:30.013Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:31:30.062Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:31:30.065Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"
2025-11-28T08:31:42.687Z - INFO - for the question : Did the CBSD stop RF transmissions within (transmitExpireTime + 60seconds) of last valid heartbeat response? , the user
choose y
2025-11-28T08:31:43.767Z - INFO - The final result of the test : WINNF.FT.C.HBT.10 is - passed
```

WINNF.FT.C.HBT.11

```
2025-11-28T08:32:23.751Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T08:32:23.752Z - INFO - the selected test from the user : WINNF.FT.C.HBT.11 is starting now
2025-11-28T08:32:56.399Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtlV0VHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-8RJaIwNlZGVGNDh5VfW5klcLFj_GxmWSU9Wm-HpmGhCU7COpBVR_iDyZ3SY6RWToMzo9rOHBYeoSypBpke18UPgX9QmSHTMGKeJ2LaF1IR7N-BKdLvrfAUxfDIYeYN4j4r_VPSOuQhOmcsdp_0XlkFIH7zcaeCzR7icd6J_D4DBqBj5eWZ3CoQd-X5lXHVkne7VcPTu32CjYF2qst2HtL1iA_ZYUS4SzIqVZE3SBIn6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NJZC16IUPUJjIwMDQlLCJYnNkU2VyaWFnTnVtYmVyljoiQ0JRDEiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUlOi05MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUlOiJBROwiLCJpbmRvb3JlZXBsb3ItZW50IjpmYWxzZSwiYW50ZW5uYUUF6aW11dGgiOiJAslmFudGVubmFEb3dudGlsdCI6MCwIYyY50ZW5uYUdhW4iOiJlZlJlLCJlaXJwQ2FwYVJpbG0eSI6NDYslmFudGVubmFCZWZtd2lkdGgiOiJMcwIaG9yaXpbnRhbEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWVhbnRhbEFjY3VyYWN5IjoxLjAwLCJhbnRlbm5hbnRhbG9kZW50IjpbW5pln0slmByb2Zlc3Npb25hbEluc3RhbGxlckRhdGEiOiNSY3BpSWQlOiJjcGkwMDAxiwiY3BpTmFtZSI6IlRlc3RlcilslmIuc3RhbGxkZXJ0aWZpY2F0aW9uVGl0ZSI6IjIwMTU0MTU0MDU6MjM6MjBmN19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcid": "ROR2003",
      "measCapability": [
        "RECEIVED_POWER_WITHOUT_GRANT",
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "userId": "blinq"
    }
  ]
}

2025-11-28T08:32:56.418Z - INFO - Registration message contains cpiSignatureData
2025-11-28T08:32:56.418Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T08:32:56.419Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpid": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}

2025-11-28T08:32:56.431Z - INFO - verified signature on cpiSignatureData
2025-11-28T08:32:56.432Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T08:32:56.433Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

2025-11-28T08:32:57.397Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
```

```

    }
  }
}
}
2025-11-28T08:32:57.399Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:32:58.398Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T08:32:58.403Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-11-28T08:38:58Z",
      "grantId": "296463065",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T08:32:59.404Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "296463065",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T08:32:59.406Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "296463065",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T08:36:19Z"
    }
  ]
}
2025-11-28T08:34:00.463Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "296463065",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T08:34:00.464Z - INFO - Time interval between two heartbeat request messages is: 61.058904, limit is: 65.0
2025-11-28T08:34:00.466Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",

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```
"grantId": "296463065",
"response": {
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T08:37:20Z"
}
}
}
2025-11-28T08:35:01.523Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "296463065",
    "operationState": "AUTHORIZED"
  }
]
}
2025-11-28T08:35:01.524Z - INFO - Time interval between two heartbeat request messages is: 61.06026, limit is: 65.0
2025-11-28T08:35:01.525Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "296463065",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T08:38:21Z"
  }
]
}
2025-11-28T08:36:02.586Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "296463065",
    "operationState": "AUTHORIZED"
  }
]
}
2025-11-28T08:36:02.587Z - INFO - Time interval between two heartbeat request messages is: 61.062996, limit is: 65.0
2025-11-28T08:36:02.588Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "296463065",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T08:38:58Z"
  }
]
}
2025-11-28T08:37:03.652Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "296463065",
    "grantRenew": true,
    "operationState": "AUTHORIZED"
  }
]
}
2025-11-28T08:37:03.652Z - INFO - Time interval between two heartbeat request messages is: 61.065405, limit is: 65.0
2025-11-28T08:37:03.655Z - INFO - grantRenew received in HBT request message
2025-11-28T08:37:03.655Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantExpireTime": "2025-11-28T08:43:03Z",
    "grantId": "296463065",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T08:40:23Z"
  }
]
}
2025-11-28T08:38:03.716Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "296463065",
    "operationState": "AUTHORIZED"
  }
]
}
2025-11-28T08:38:03.717Z - INFO - Time interval between two heartbeat request messages is: 60.064297, limit is: 65.0
2025-11-28T08:38:03.718Z - INFO - engine sent successfully, the response to CBRS :{
```

```
"heartbeatResponse": [  
  {  
    "cbsdId": "ROR2003Mock-SASCBSD1",  
    "grantId": "296463065",  
    "response": {  
      "responseCode": 0  
    },  
    "transmitExpireTime": "2025-11-28T08:41:23Z"  
  }  
]
```

2025-11-28T08:38:05.096Z - INFO - arrived to nstep starting question answer session with the technician

2025-11-28T08:38:05.096Z - INFO - the question is : Did the CBSD renew its grant successfully? please choose one of the answers :

2025-11-28T08:38:29.342Z - INFO - for the question : Did the CBSD renew its grant successfully? , the user choose y

2025-11-28T08:38:30.549Z - INFO - The final result of the test : WINNF.FT.C.HBT.11 is - passed

WINNF.FT.C.MES.1

2025-11-28T13:47:52.279Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T13:47:52.279Z - INFO - the selected test from the user : WINNF.FT.C.MES.1 is starting now
2025-11-28T13:48:42.043Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD1",
    "fccId": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "blinq"
  }
]
```

2025-11-28T13:48:42.054Z - INFO - Response message contains measReportConfig
2025-11-28T13:48:42.054Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": {
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "measReportConfig": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "response": {
      "responseCode": 0
    }
  }
}
```

2025-11-28T13:48:43.039Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": {
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "inquiredSpectrum": [
      {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      }
    ],
    "measReport": {
      "rcvdPowerMeasReports": [
        {
          "measBandwidth": 10000000,
          "measFrequency": 3550000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3560000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3570000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3580000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3590000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3600000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3610000000,

```


WINNF.FT.D.MES.2

2025-11-28T13:49:43.372Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T13:49:43.372Z - INFO - the selected test from the user : WINNF.FT.D.MES.2 is starting now
2025-11-28T13:50:14.851Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD1",
    "fccId": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "blinq"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD2",
    "fccId": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "userId": "blinq"
  }
]
```

2025-11-28T13:50:14.862Z - INFO - Response message contains measReportConfig
2025-11-28T13:50:14.878Z - INFO - Response message contains measReportConfig
2025-11-28T13:50:14.878Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "measReportConfig": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "response": {
      "responseCode": 0
    }
  },
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "measReportConfig": [
      "RECEIVED_POWER_WITHOUT_GRANT"
    ],
    "response": {
      "responseCode": 0
    }
  }
]
```

2025-11-28T13:50:15.849Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "inquiredSpectrum": [
      {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      }
    ],
    "measReport": {
      "rcvdPowerMeasReports": [
        {

```

```

        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
    }
    ]
},
{
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "inquiredSpectrum": [
        {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
        }
    ]
},
"measReport": {
    "rcvdPowerMeasReports": [
        {

```



```

    },
    "ruleApplied": "FCC_PART_96"
  }
],
"cbstdId": "ROR2003Mock-SASCBS1",
"response": {
  "responseCode": 0
}
},
{
  "availableChannel": [
    {
      "channelType": "GAA",
      "frequencyRange": {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      },
      "ruleApplied": "FCC_PART_96"
    }
  ],
  "cbstdId": "ROR2003Mock-SASCBS2",
  "response": {
    "responseCode": 0
  }
}
]
}
}
2025-11-28T13:50:16.851Z - INFO - grant request from CBRS :{
"grantRequest": [
  {
    "cbstdId": "ROR2003Mock-SASCBS1",
    "measReport": {
      "rcvdPowerMeasReports": [
        {
          "measBandwidth": 10000000,
          "measFrequency": 3550000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3560000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3570000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3580000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3590000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3600000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3610000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3620000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3630000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3640000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3650000000,
          "measRcvdPower": -90
        }
      ]
    }
  }
]
},

```

```

    {
      "measBandwidth": 10000000,
      "measFrequency": 3660000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3670000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3680000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3690000000,
      "measRcvdPower": -90
    }
  ],
  "operationParam": {
    "maxEirp": 36,
    "operationFrequencyRange": {
      "highFrequency": 3560000000,
      "lowFrequency": 3550000000
    }
  }
},
{
  "cbsdId": "ROR2003Mock-SASCBS2",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
      }
    ]
  }
}

```


WINNF.FT.C.MES.3

2025-11-28T13:51:04.261Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T13:51:04.262Z - INFO - the selected test from the user : WINNF.FT.C.MES.3 is starting now
2025-11-28T13:51:37.087Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD1",
    "fcclid": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITH_GRANT"
    ],
    "userId": "blinq"
  }
]
```

2025-11-28T13:51:37.099Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "response": {
      "responseCode": 0
    }
  }
]
```

2025-11-28T13:51:38.086Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "inquiredSpectrum": [
      {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      }
    ]
  }
]
```

2025-11-28T13:51:38.089Z - INFO - engine sent successfully, the response to CBRS : {

```
"spectrumInquiryResponse": [
  {
    "availableChannel": [
      {
        "channelType": "GAA",
        "frequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        },
        "ruleApplied": "FCC_PART_96"
      }
    ],
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "response": {
      "responseCode": 0
    }
  }
]
```

2025-11-28T13:51:39.083Z - INFO - grant request from CBRS : {

```
"grantRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "operationParam": {
      "maxEirp": 36,
      "operationFrequencyRange": {
        "highFrequency": 3560000000,
        "lowFrequency": 3550000000
      }
    }
  }
]
```

2025-11-28T13:51:39.085Z - INFO - Response message contains measReportConfig

2025-11-28T13:51:39.085Z - INFO - engine sent successfully, the response to CBRS : {

```
"grantResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "channelType": "GAA",
    "grantExpireTime": "2025-12-05T13:51:39Z",
    "grantId": "55525271",
    "heartbeatInterval": 60,
    "measReportConfig": [
      "RECEIVED_POWER_WITH_GRANT"
    ],
    "response": {
      "responseCode": 0
    }
  }
]
}
2025-11-28T13:51:40.088Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "grantId": "55525271",
    "measReport": {
      "rcvdPowerMeasReports": [
        {
          "measBandwidth": 10000000,
          "measFrequency": 3550000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3560000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3570000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3580000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3590000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3600000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3610000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3620000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3630000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3640000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3650000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3660000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3670000000,
          "measRcvdPower": -90
        }
      ]
    }
  }
],
}
```

```
{
  "measBandwidth": 10000000,
  "measFrequency": 3680000000,
  "measRcvdPower": -90
},
{
  "measBandwidth": 10000000,
  "measFrequency": 3690000000,
  "measRcvdPower": -90
}
]
},
"operationState": "GRANTED"
}
]
}
```

2025-11-28T13:51:40.089Z - INFO - measReport received in heartbeat message

2025-11-28T13:51:40.091Z - INFO - engine sent successfully, the response to CBRS : {

```
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "grantId": "55525271",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T13:55:00Z"
  }
]
```

2025-11-28T13:52:41.148Z - INFO - heartbeat request from CBRS : {

```
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "grantId": "55525271",
    "measReport": {
      "rcvdPowerMeasReports": [
        {
          "measBandwidth": 10000000,
          "measFrequency": 3550000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3560000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3570000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3580000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3590000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3600000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3610000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3620000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3630000000,
          "measRcvdPower": -90
        },
        {
          "measBandwidth": 10000000,
          "measFrequency": 3640000000,
          "measRcvdPower": -90
        }
      ]
    }
  }
]
```

```

        "measFrequency": 3650000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
    }
    ],
    "operationState": "AUTHORIZED"
}
]
}
2025-11-28T13:52:41.149Z - INFO - Time interval between two heartbeat request messages is: 61.06057, limit is: 65.0
2025-11-28T13:52:41.151Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "55525271",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T13:56:01Z"
    }
  ]
}
2025-11-28T13:53:42.204Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "55525271",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -90
          }
        ]
      }
    }
  ]
}

```

```

    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3630000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3640000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3650000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3660000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3670000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3680000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3690000000,
      "measRcvdPower": -90
    }
  ]
},
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T13:53:42.204Z - INFO - Time interval between two heartbeat request messages is: 61.055384, limit is: 65.0
2025-11-28T13:53:42.206Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "55525271",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T13:57:02Z"
    }
  ]
}
2025-11-28T13:54:42.256Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "55525271",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -90
          }
        ]
      }
    }
  ]
}

```

```
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
    }
    ]
},
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T13:54:42.257Z - INFO - Time interval between two heartbeat request messages is: 60.052122, limit is: 65.0
2025-11-28T13:54:42.259Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsId": "ROR2003Mock-SASCBS1",
      "grantId": "55525271",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T13:58:02Z"
    }
  ]
}
2025-11-28T13:55:43.317Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsId": "ROR2003Mock-SASCBS1",
      "grantId": "55525271",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
```

```
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
      }
    ]
  },
  "operationState": "AUTHORIZED"
}
}
}
2025-11-28T13:55:43.318Z - INFO - Time interval between two heartbeat request messages is: 61.061104, limit is: 65.0
2025-11-28T13:55:43.320Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "55525271",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T13:59:03Z"
    }
  ]
}
}
2025-11-28T13:55:44.551Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T13:56:12.641Z - INFO - The final result of the test : WINNF.FT.C.MES.3 is - passed
```

WINNF.FT.C.MES.4

2025-11-28T13:56:58.640Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T13:56:58.640Z - INFO - the selected test from the user : WINNF.FT.C.MES.4 is starting now
2025-11-28T13:57:29.329Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD1",
    "fccId": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITH_GRANT"
    ],
    "userId": "blinq"
  }
]
```

2025-11-28T13:57:29.341Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "response": {
      "responseCode": 0
    }
  }
]
```

2025-11-28T13:57:30.327Z - INFO - spectrumInquiry request from CBRS : {

```
"spectrumInquiryRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "inquiredSpectrum": [
      {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      }
    ]
  }
]
```

2025-11-28T13:57:30.330Z - INFO - engine sent successfully, the response to CBRS : {

```
"spectrumInquiryResponse": [
  {
    "availableChannel": [
      {
        "channelType": "GAA",
        "frequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        },
        "ruleApplied": "FCC_PART_96"
      }
    ],
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "response": {
      "responseCode": 0
    }
  }
]
```

2025-11-28T13:57:31.328Z - INFO - grant request from CBRS : {

```
"grantRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "operationParam": {
      "maxEirp": 36,
      "operationFrequencyRange": {
        "highFrequency": 3560000000,
        "lowFrequency": 3550000000
      }
    }
  }
]
```

2025-11-28T13:57:31.331Z - INFO - engine sent successfully, the response to CBRS : {

```
"grantResponse": [
```

```

{
  "cbsdId": "ROR2003Mock-SASCBSD1",
  "channelType": "GAA",
  "grantExpiryTime": "2025-12-05T13:57:31Z",
  "grantId": "177396022",
  "heartbeatInterval": 60,
  "response": {
    "responseCode": 0
  }
}
]
}
2025-11-28T13:57:32.330Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T13:57:32.332Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "response": {
        "responseCode": 0
      },
      "transmitExpiryTime": "2025-11-28T14:00:52Z"
    }
  ]
}
2025-11-28T13:58:33.392Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T13:58:33.393Z - INFO - Time interval between two heartbeat request messages is: 61.062252, limit is: 65.0
2025-11-28T13:58:33.394Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "response": {
        "responseCode": 0
      },
      "transmitExpiryTime": "2025-11-28T14:01:53Z"
    }
  ]
}
2025-11-28T13:59:34.451Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T13:59:34.451Z - INFO - Time interval between two heartbeat request messages is: 61.058501, limit is: 65.0
2025-11-28T13:59:34.453Z - INFO - Response message contains measReportConfig
2025-11-28T13:59:34.453Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "measReportConfig": [
        "RECEIVED_POWER_WITH_GRANT"
      ],
      "response": {
        "responseCode": 0
      },
      "transmitExpiryTime": "2025-11-28T14:02:54Z"
    }
  ]
}
2025-11-28T14:00:34.515Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "measReport": {
        "rcvdPowerMeasReports": [

```

```
{
  {
    "measBandwidth": 10000000,
    "measFrequency": 3550000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3560000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3570000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3580000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3590000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3600000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3610000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3620000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3630000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3640000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3650000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3660000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3670000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3680000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3690000000,
    "measRcvdPower": -90
  }
}
},
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:00:34.516Z - INFO - Time interval between two heartbeat request messages is: 60.064523, limit is: 65.0
2025-11-28T14:00:34.517Z - INFO - measReport received in heartbeat message
2025-11-28T14:00:34.518Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
```

```
"response":{
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:03:54Z"
}
]
}
}
2025-11-28T14:01:35.571Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
  "cbsdId": "ROR2003Mock-SASCBSD1",
  "grantId": "177396022",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
      }
    ]
  }
}
]
```

```
    }
  ]
},
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:01:35.572Z - INFO - Time interval between two heartbeat request messages is: 61.056339, limit is: 65.0
2025-11-28T14:01:35.574Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:04:55Z"
    }
  ]
}
2025-11-28T14:02:36.635Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3630000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3640000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3650000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3660000000,
            "measRcvdPower": -90
          }
        ]
      }
    }
  ]
}
```

```
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
    }
]
},
"operationState": "AUTHORIZED"
}
}
}
2025-11-28T14:02:36.635Z - INFO - Time interval between two heartbeat request messages is: 61.063153, limit is: 65.0
2025-11-28T14:02:36.637Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdlId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:05:56Z"
    }
  ]
}
}
2025-11-28T14:03:36.697Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdlId": "ROR2003Mock-SASCBSD1",
      "grantId": "177396022",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3630000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3640000000,
```

```

        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
    }
]
},
"operationState": "AUTHORIZED"
}
}
}
2025-11-28T14:03:36.698Z - INFO - Time interval between two heartbeat request messages is: 60.062484, limit is: 65.0
2025-11-28T14:03:36.699Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "177396022",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T14:06:56Z"
        }
    ]
}
}
2025-11-28T14:04:37.765Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "177396022",
            "measReport": {
                "rcvdPowerMeasReports": [
                    {
                        "measBandwidth": 10000000,
                        "measFrequency": 3550000000,
                        "measRcvdPower": -90
                    },
                    {
                        "measBandwidth": 10000000,
                        "measFrequency": 3560000000,
                        "measRcvdPower": -90
                    },
                    {
                        "measBandwidth": 10000000,
                        "measFrequency": 3570000000,
                        "measRcvdPower": -90
                    },
                    {
                        "measBandwidth": 10000000,
                        "measFrequency": 3580000000,
                        "measRcvdPower": -90
                    },
                    {
                        "measBandwidth": 10000000,
                        "measFrequency": 3600000000,
                        "measRcvdPower": -90
                    },
                    {
                        "measBandwidth": 10000000,
                        "measFrequency": 3610000000,
                        "measRcvdPower": -90
                    }
                ]
            }
        }
    ]
}

```

```
{
  {
    "measBandwidth": 10000000,
    "measFrequency": 3620000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3630000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3640000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3650000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3660000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3670000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3680000000,
    "measRcvdPower": -90
  },
  {
    "measBandwidth": 10000000,
    "measFrequency": 3690000000,
    "measRcvdPower": -90
  }
}
},
"operationState": "AUTHORIZED"
}
}
}
2025-11-28T14:04:37.765Z - INFO - Time interval between two heartbeat request messages is: 61.067245, limit is: 65.0
2025-11-28T14:04:37.768Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "177396022",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:07:57Z"
    }
  ]
}
}
2025-11-28T14:04:39.113Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T14:04:45.187Z - INFO - The final result of the test : WINNF.FT.C.MES.4 is - passed
```

WINNF.FT.D.MES.5

2025-11-28T14:05:11.377Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T14:05:11.377Z - INFO - the selected test from the user : WINNF.FT.D.MES.5 is starting now
2025-11-28T14:05:56.615Z - INFO - registration request from CBRS : {

```
"registrationRequest": [
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD1",
    "fccId": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITH_GRANT"
    ],
    "userId": "blinq"
  },
  {
    "airInterface": {
      "radioTechnology": "NR"
    },
    "callSign": "test",
    "cbsdCategory": "B",
    "cbsdInfo": {
      "firmwareVersion": "1.0.0",
      "hardwareVersion": "1.0.0",
      "model": "PCW-400",
      "softwareVersion": "1.0.0",
      "vendor": "BLINQ"
    },
    "cbsdSerialNumber": "CBSD2",
    "fccId": "ROR2003",
    "measCapability": [
      "RECEIVED_POWER_WITH_GRANT"
    ],
    "userId": "blinq"
  }
]
```

2025-11-28T14:05:56.637Z - INFO - engine sent successfully, the response to CBRS : {
"registrationResponse": {

```
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "response": {
      "responseCode": 0
    }
  },
  {
    "cbsdId": "ROR2003Mock-SASCBS2",
    "response": {
      "responseCode": 0
    }
  }
}
```

2025-11-28T14:05:57.613Z - INFO - spectrumInquiry request from CBRS : {
"spectrumInquiryRequest": {

```
  {
    "cbsdId": "ROR2003Mock-SASCBS1",
    "inquiredSpectrum": [
      {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      }
    ]
  },
  {
    "cbsdId": "ROR2003Mock-SASCBS2",
    "inquiredSpectrum": [
      {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      }
    ]
  }
}
```

2025-11-28T14:05:57.618Z - INFO - engine sent successfully, the response to CBRS : {

```

"spectrumInquiryResponse": [
  {
    "availableChannel": [
      {
        "channelType": "GAA",
        "frequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        },
        "ruleApplied": "FCC_PART_96"
      }
    ],
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "response": {
      "responseCode": 0
    }
  },
  {
    "availableChannel": [
      {
        "channelType": "GAA",
        "frequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        },
        "ruleApplied": "FCC_PART_96"
      }
    ],
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "response": {
      "responseCode": 0
    }
  }
]
}
2025-11-28T14:05:58.610Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3690000000
        }
      }
    }
  ]
}
2025-11-28T14:05:58.615Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T14:05:58Z",
      "grantId": "249248318",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T14:05:58Z",
      "grantId": "829691980",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:05:59.614Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",

```

```

"operationState": "GRANTED"
},
{
  "cbsdId": "ROR2003Mock-SASCBSD2",
  "grantId": "829691980",
  "operationState": "GRANTED"
}
]
}
2025-11-28T14:05:59.617Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:09:19Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "829691980",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:09:19Z"
    }
  ]
}
2025-11-28T14:06:59.678Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "829691980",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:06:59.678Z - INFO - Time interval between two heartbeat request messages is: 60.064203, limit is: 65.0
2025-11-28T14:06:59.680Z - INFO - Time interval between two heartbeat request messages is: 60.064203, limit is: 65.0
2025-11-28T14:06:59.681Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:10:19Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "829691980",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:10:19Z"
    }
  ]
}
2025-11-28T14:08:00.737Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "829691980",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:08:00.737Z - INFO - Time interval between two heartbeat request messages is: 61.059002, limit is: 65.0
2025-11-28T14:08:00.738Z - INFO - Response message contains measReportConfig
2025-11-28T14:08:00.739Z - INFO - Time interval between two heartbeat request messages is: 61.059002, limit is: 65.0
2025-11-28T14:08:00.740Z - INFO - Response message contains measReportConfig
2025-11-28T14:08:00.741Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",

```

```
"measReportConfig": [
  "RECEIVED_POWER_WITH_GRANT"
],
"response": {
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:11:20Z"
},
{
  "cbsdId": "ROR2003Mock-SASCBSD2",
  "grantId": "829691980",
  "measReportConfig": [
    "RECEIVED_POWER_WITH_GRANT"
  ],
  "response": {
    "responseCode": 0
  },
  "transmitExpireTime": "2025-11-28T14:11:20Z"
}
]
}
2025-11-28T14:09:00.801Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3630000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3640000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3650000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3660000000,
            "measRcvdPower": -90
          }
        ]
      }
    }
  ]
}
```

```
{
  "measBandwidth": 10000000,
  "measFrequency": 3670000000,
  "measRcvdPower": -90
},
{
  "measBandwidth": 10000000,
  "measFrequency": 3680000000,
  "measRcvdPower": -90
},
{
  "measBandwidth": 10000000,
  "measFrequency": 3690000000,
  "measRcvdPower": -90
}
]
},
"operationState": "AUTHORIZED"
},
{
  "cbsdId": "ROR2003Mock-SASCBS2",
  "grantId": "829691980",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
      }
    ]
  }
}
```

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    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3680000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3690000000,
      "measRcvdPower": -90
    }
  ]
},
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:09:00.802Z - INFO - Time interval between two heartbeat request messages is: 60.064227, limit is: 65.0
2025-11-28T14:09:00.802Z - INFO - measReport received in heartbeat message
2025-11-28T14:09:00.804Z - INFO - Time interval between two heartbeat request messages is: 60.064227, limit is: 65.0
2025-11-28T14:09:00.805Z - INFO - measReport received in heartbeat message
2025-11-28T14:09:00.807Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdlId": "ROR2003Mock-SASCBS1",
      "grantId": "249248318",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:12:20Z"
    },
    {
      "cbsdlId": "ROR2003Mock-SASCBS2",
      "grantId": "829691980",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:12:20Z"
    }
  ]
}
}
2025-11-28T14:10:01.866Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdlId": "ROR2003Mock-SASCBS1",
      "grantId": "249248318",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3590000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3600000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3610000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3620000000,
            "measRcvdPower": -90
          }
        ]
      }
    }
  ]
},

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    {
      "measBandwidth": 10000000,
      "measFrequency": 3630000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3640000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3650000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3660000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3670000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3680000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3690000000,
      "measRcvdPower": -90
    }
  ],
  "operationState": "AUTHORIZED"
},
{
  "cbsdId": "ROR2003Mock-SASCBSD2",
  "grantId": "829691980",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      }
    ]
  }
}

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    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3640000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3650000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3660000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3670000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3680000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3690000000,
      "measRcvdPower": -90
    }
  ]
},
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:10:01.867Z - INFO - Time interval between two heartbeat request messages is: 61.065138, limit is: 65.0
2025-11-28T14:10:01.868Z - INFO - Time interval between two heartbeat request messages is: 61.065138, limit is: 65.0
2025-11-28T14:10:01.869Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:13:21Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "829691980",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:13:21Z"
    }
  ]
}
2025-11-28T14:11:01.931Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3560000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3570000000,
            "measRcvdPower": -90
          },
          {
            "measBandwidth": 10000000,
            "measFrequency": 3580000000,
            "measRcvdPower": -90
          }
        ]
      }
    }
  ]
}

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        "measFrequency": 3590000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
    }
    ],
    "operationState": "AUTHORIZED"
},
{
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "829691980",
    "measReport": {
        "rcvdPowerMeasReports": [
            {
                "measBandwidth": 10000000,
                "measFrequency": 3550000000,
                "measRcvdPower": -90
            },
            {
                "measBandwidth": 10000000,
                "measFrequency": 3560000000,
                "measRcvdPower": -90
            },
            {
                "measBandwidth": 10000000,
                "measFrequency": 3570000000,
                "measRcvdPower": -90
            },
            {
                "measBandwidth": 10000000,
                "measFrequency": 3580000000,
                "measRcvdPower": -90
            },
            {
                "measBandwidth": 10000000,
                "measFrequency": 3590000000,
                "measRcvdPower": -90
            }
        ],
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
    },
    {

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        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
    },
    {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
    }
    ]
},
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:11:01.932Z - INFO - Time interval between two heartbeat request messages is: 60.065263, limit is: 65.0
2025-11-28T14:11:01.934Z - INFO - Time interval between two heartbeat request messages is: 60.065263, limit is: 65.0
2025-11-28T14:11:01.937Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:14:21Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "829691980",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:14:21Z"
    }
  ]
}
}
2025-11-28T14:12:02.994Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "measReport": {
        "rcvdPowerMeasReports": [
          {
            "measBandwidth": 10000000,
            "measFrequency": 3550000000,
            "measRcvdPower": -90
          }
        ]
      }
    }
  ]
}
```

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    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3560000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3570000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3580000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3590000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3600000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3610000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3620000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3630000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3640000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3650000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3660000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3670000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3680000000,
      "measRcvdPower": -90
    },
    {
      "measBandwidth": 10000000,
      "measFrequency": 3690000000,
      "measRcvdPower": -90
    }
  ]
},
"operationState": "AUTHORIZED"
},
{
  "cbsdId": "ROR2003Mock-SASCBSD2",
  "grantId": "829691980",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,

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        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
      }
    ]
  },
  "operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:12:02.995Z - INFO - Time interval between two heartbeat request messages is: 61.062961, limit is: 65.0
2025-11-28T14:12:02.997Z - INFO - Time interval between two heartbeat request messages is: 61.062961, limit is: 65.0
2025-11-28T14:12:02.999Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "249248318",
      "response": {
        "responseCode": 0
      }
    },
    "transmitExpireTime": "2025-11-28T14:15:22Z"
  ],
  {
    "cbsdId": "ROR2003Mock-SASCBS2",
    "grantId": "829691980",
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"response":{
  "responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:15:22Z"
}
]
}
}
2025-11-28T14:13:03.042Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
  "cbsdId": "ROR2003Mock-SASCBSD1",
  "grantId": "249248318",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
      }
    ]
  }
}
]
```

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}
]
},
"operationState": "AUTHORIZED"
},
{
  "cbsdId": "ROR2003Mock-SASCBSD2",
  "grantId": "829691980",
  "measReport": {
    "rcvdPowerMeasReports": [
      {
        "measBandwidth": 10000000,
        "measFrequency": 3550000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3560000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3570000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3580000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3590000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3600000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3610000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3620000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3630000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3640000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3650000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3660000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3670000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3680000000,
        "measRcvdPower": -90
      },
      {
        "measBandwidth": 10000000,
        "measFrequency": 3690000000,
        "measRcvdPower": -90
      }
    ]
  }
},
"operationState": "AUTHORIZED"
```

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}
]
}
2025-11-28T14:13:03.043Z - INFO - Time interval between two heartbeat request messages is: 60.04753, limit is: 65.0
2025-11-28T14:13:03.045Z - INFO - Time interval between two heartbeat request messages is: 60.04753, limit is: 65.0
2025-11-28T14:13:03.047Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "249248318",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:16:23Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "829691980",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:16:23Z"
    }
  ]
}
2025-11-28T14:13:04.859Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T14:13:32.462Z - INFO - The final result of the test : WINNF.FT.D.MES.5 is - passed
```

WINNF.FT.C.RLQ.1

```

2025-11-28T14:14:28.170Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T14:14:28.170Z - INFO - the selected test from the user : WINNF.FT.C.RLQ.1 is starting now
2025-11-28T14:27:15.673Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixIGNVnh-8RJafIwNIZGVGNdh5Yfw5kicLFj_GxmWSU9Wm-HpmGhCU7COPBvr_iDyZ3SY6RWTOmzo9OHBYeoSypBpke18UPgX9XqMSHTMgKeJ2LaF1IR7N-BKdLvrfAUxfDIYeYN4j4r_VPSOuQH0mcgsdp_0XIkFIH7zcaecZR7icd6J_D4DBqBj5eWZ3Coqd-X5IXHVkne7VcPTu32CjYf2vqst2HtL1ia_ZYuS4SzIqvZE3SBlnG6736W3Q",
        "encodedCpiSignedData": "eyJmY2NiZCI6IUUpJlwmMDQlLCJYnNkU2VyaWFsTnVtYmVyIjoIQJTRDEILCjpbmN0YWxsYXRpd25YYXBhbSI6eyJsYXRpdHVkZSI6NDExMTizNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlaWdodCI6MTUuMDA5bmhlaWdodFR5cGUoIjBR0wiLCjpbmRvb3JEZXBSb3ItZW50IjpmaWxzSWiYW50ZW5uYUF6aWw1IGgiOiJAslmFudGVubmFEb3duGlscGl6MCwIiw5OZW5uYUdhYW4iOiJELCJlaXwQ2FwYVJpbGI0eSI6NDYslmFudGVubmFCZWFTd2lkdGgiOiJM2McwiaG9yaXpvbnRhbEFfY3VyYWN5IjoxLjAwLCJ2ZXJ0aWVnbEFfY3VyYWN5IjoxLjAwLCJhbnRlbm5hTW9kZWwiOiJjbW5pIn0slbnByb2Zlc3Npb25hbEluc3RhbgxldGRGEiOnsiY3BpSWQyOiJjcGkwMDAxiiWiY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbgxldXJ0aWZpY2FOaW9uVGltZSI6IjllwMjUtMTetMjhUMDU6MjM6MjBaIn19",
        "protectedHeader": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9",
        "fcid": "ROR2003",
        "userId": "bling"
      }
    }
  }
}

2025-11-28T14:27:15.684Z - INFO - Registration message contains cpiSignatureData
2025-11-28T14:27:15.684Z - INFO - protectedHeader = (u'al': u'RS256', u'typ': u'JWT')
2025-11-28T14:27:15.684Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}

2025-11-28T14:27:15.700Z - INFO - verified signature on cpiSignatureData
2025-11-28T14:27:15.702Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T14:27:15.702Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": {
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  }
}

2025-11-28T14:27:16.668Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": {
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": {
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      }
    }
  }
}

```

```

}
2025-11-28T14:27:16.671Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:27:17.668Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T14:27:17.669Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T14:27:17Z",
      "grantId": "995916525",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:27:18.670Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "995916525",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T14:27:18.671Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "995916525",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:30:38Z"
    }
  ]
}
2025-11-28T14:28:19.734Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "995916525",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:28:19.734Z - INFO - Time interval between two heartbeat request messages is: 61.063904, limit is: 65.0
2025-11-28T14:28:19.736Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "995916525",
      "response": {
        "responseCode": 0
      },
    }
  ]
}

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"transmitExpireTime": "2025-11-28T14:31:39Z"
}
}
}
2025-11-28T14:29:20.792Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:29:20.793Z - INFO - Time interval between two heartbeat request messages is: 61.057981, limit is: 65.0
2025-11-28T14:29:20.794Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:32:40Z"
}
]
}
}
2025-11-28T14:30:20.850Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:30:20.851Z - INFO - Time interval between two heartbeat request messages is: 60.058486, limit is: 65.0
2025-11-28T14:30:20.853Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:33:40Z"
}
]
}
}
2025-11-28T14:31:20.911Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:31:20.911Z - INFO - Time interval between two heartbeat request messages is: 60.06025, limit is: 65.0
2025-11-28T14:31:20.914Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:34:40Z"
}
]
}
}
2025-11-28T14:32:21.962Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:32:21.963Z - INFO - Time interval between two heartbeat request messages is: 61.05132, limit is: 65.0
2025-11-28T14:32:21.964Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},

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"transmitExpireTime": "2025-11-28T14:35:41Z"
}
}
}
2025-11-28T14:33:22.023Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:33:22.023Z - INFO - Time interval between two heartbeat request messages is: 60.060612, limit is: 65.0
2025-11-28T14:33:22.025Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:36:42Z"
}
]
}
2025-11-28T14:34:22.090Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:34:22.090Z - INFO - Time interval between two heartbeat request messages is: 60.067309, limit is: 65.0
2025-11-28T14:34:22.092Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:37:42Z"
}
]
}
2025-11-28T14:35:22.154Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:35:22.154Z - INFO - Time interval between two heartbeat request messages is: 60.063699, limit is: 65.0
2025-11-28T14:35:22.157Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:38:42Z"
}
]
}
2025-11-28T14:36:22.220Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:36:22.221Z - INFO - Time interval between two heartbeat request messages is: 60.066917, limit is: 65.0
2025-11-28T14:36:22.223Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},

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"transmitExpireTime": "2025-11-28T14:39:42Z"
}
}
}
2025-11-28T14:37:22.286Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:37:22.287Z - INFO - Time interval between two heartbeat request messages is: 60.065436, limit is: 65.0
2025-11-28T14:37:22.288Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:40:42Z"
}
]
}
2025-11-28T14:38:22.353Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:38:22.353Z - INFO - Time interval between two heartbeat request messages is: 60.06666, limit is: 65.0
2025-11-28T14:38:22.354Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:41:42Z"
}
]
}
2025-11-28T14:39:23.414Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:39:23.415Z - INFO - Time interval between two heartbeat request messages is: 61.061335, limit is: 65.0
2025-11-28T14:39:23.416Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:42:43Z"
}
]
}
2025-11-28T14:39:24.415Z - INFO - relinquishment request from CBRS :{
"relinquishmentRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525"
}
]
}
2025-11-28T14:39:24.417Z - INFO - engine sent successfully, the response to CBRS :{
"relinquishmentResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "995916525",
"response": {
"responseCode": 0
}
}
]
}
```

}

2025-11-28T14:39:25.765Z - INFO - arrived to nstep starting question answer session with the technician

2025-11-28T14:39:25.765Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :

2025-11-28T14:39:54.288Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y

2025-11-28T14:39:56.881Z - INFO - The final result of the test : WINNF.FT.C.RLQ.1 is - passed

WINNF.FT.D.RLQ.2

```
2025-11-28T14:41:06.132Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T14:41:06.132Z - INFO - the selected test from the user : WINNF.FT.D.RLQ.2 is starting now
2025-11-28T14:41:58.318Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtiV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixlGNVnh-8RJaWfNiZGVGNdH5Vfw5kclFj_GxmWSU9Wm-HpmGhCU7COpBVR_iDyZ3SY6RWTOmzo9rOHBYeoSypBpke18UPgX9QmSHTMgKeJ2LaF1IR7N-BKdLvVfAUxrdIYeYN4j4r_VPSOuQhOmcsdp_0XlkFIH7zcaeCzR7icd6J_D4DBqBj5eWZ3CoQd-X5lXHVKne7VcPtU32CjYF2Vqst2HtL1iA_ZYuS4SzIQuZE3S8In6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NJZCI6IUPUjIwMDQlClJjYnNkU2VyaWFsTnVtYmVyljoiQ0JRDEiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUioiJBROwiLCJpbmRvb3JlZXBsb3ItZW50IjpmYWxzZSwiYW50ZW5uYUJF6aW11dGgiOjAsImFudGVubmFEb3dudGlsdCI6MCMwIYWN50ZW5uYUdhZW4iOjEzLCJlaXJwQ2FwYWJpbG0eSI6NDYslmFudGVubmFCZWZtd2lkdGgiOjM2MCMwG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWVhbnRhbEFjY3VyYWN5IjoxLjAwLCJhbnRlbm5hTW9kZWw0IjVbW5pln0slmByb2Zlc3Npb25hbEluc3RhbGxlcRhdGEiOjY3BpSWQ0IjVjGkwMDAxiwiY3BpTmFtZSI6IiRlc3RlcilslmIuc3RhbGxkZXJ0aWZpY2F0aW9uVGltZSI6IjVhMjU0MTETMjU0MDU6Mjg6MDh19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcclid": "ROR2003",
      "userid": "blinq"
    },
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD2",
      "cpiSignatureData": {
        "digitalSignature": "pNqB6GSDJO9ob08o77SJHuB_q7F6PhtGu333xo0XLbUjqpfvcIlnsARBblcgAwqeXa2VaaYdM3bNE3JFQSQWA5vL9_tefbYDEgAlq1kf8_z90etwwa3MJcccCoQAnFKWgwts_K1H9JvDQIQo2FfAd-O_YhwhEYtIS8awmAlu4R8uegq462GJQYy0Yfol3Tcsqdohhtr051OdmrddZEFfQ-e4NfKzIzlglsYik_OjWzApLj2HswZTBh75HCA9am3Hc8j1PeD_iK_KmGh9NEG6UVO-zq8ftYduA2btJFpt_44eYAVMs4BwO4Gc4vU0IZPmuN4xdMMGqijFEZxNA",
        "encodedCpiSignedData": "eyJmY2NJZCI6IUPUjIwMDQlClJjYnNkU2VyaWFsTnVtYmVyljoiQ0JRDEiLCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUioiJBROwiLCJpbmRvb3JlZXBsb3ItZW50IjpmYWxzZSwiYW50ZW5uYUJF6aW11dGgiOjAsImFudGVubmFEb3dudGlsdCI6MCMwIYWN50ZW5uYUdhZW4iOjEzLCJlaXJwQ2FwYWJpbG0eSI6NDYslmFudGVubmFCZWZtd2lkdGgiOjM2MCMwG9yaXpvbnRhbEFjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWVhbnRhbEFjY3VyYWN5IjoxLjAwLCJhbnRlbm5hTW9kZWw0IjVbW5pln0slmByb2Zlc3Npb25hbEluc3RhbGxlcRhdGEiOjY3BpSWQ0IjVjGkwMDAxiwiY3BpTmFtZSI6IiRlc3RlcilslmIuc3RhbGxkZXJ0aWZpY2F0aW9uVGltZSI6IjVhMjU0MTETMjU0MDU6Mjg6MDh19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fcclid": "ROR2003",
      "userid": "blinq"
    }
  ]
}
2025-11-28T14:41:58.330Z - INFO - Registration message contains cpiSignatureData
2025-11-28T14:41:58.330Z - INFO - protectedHeader = {u'alq': u'RS256', u'typ': u'JWT'}
2025-11-28T14:41:58.330Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcclid": "ROR2003",
  "professionalInstallerData": {
```

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"cpiName": "Tester",
"installCertificationTime": "2025-11-28T05:23:20Z",
"cpild": "cpi0001"
},
"cbstdSerialNumber": "CBSD1"
}
2025-11-28T14:41:58.343Z - INFO - verified signature on cpiSignatureData
2025-11-28T14:41:58.344Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T14:41:58.352Z - INFO - Registration message contains cpiSignatureData
2025-11-28T14:41:58.353Z - INFO - protectedHeader = {u'alq': u'RS256', u'typ': u'JWT'}
2025-11-28T14:41:58.353Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD2"
}
2025-11-28T14:41:58.353Z - INFO - verified signature on cpiSignatureData
2025-11-28T14:41:58.354Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T14:41:58.355Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbstdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:41:59.318Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    },
    {
      "cbstdId": "ROR2003Mock-SASCBSD2",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-11-28T14:41:59.323Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ]
    },
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
```

```
"response":{
  "responseCode": 0
},
{
  "availableChannel": [
    {
      "channelType": "GAA",
      "frequencyRange": {
        "highFrequency": 3700000000,
        "lowFrequency": 3550000000
      },
      "ruleApplied": "FCC_PART_96"
    }
  ],
  "cbsdId": "ROR2003Mock-SASCBSD2",
  "response": {
    "responseCode": 0
  }
}
}
}
}
2025-11-28T14:42:00.320Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3690000000
        }
      }
    }
  ]
}
}
2025-11-28T14:42:00.324Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T14:42:00Z",
      "grantId": "246825044",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T14:42:00Z",
      "grantId": "36231410",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T14:42:01.321Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "operationState": "GRANTED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "operationState": "GRANTED"
    }
  ]
}
}
2025-11-28T14:42:01.325Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
```

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    "grantId": "246825044",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T14:45:21Z"
  },
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "36231410",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T14:45:21Z"
  }
]
}
}
2025-11-28T14:43:02.382Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2025-11-28T14:43:02.382Z - INFO - Time interval between two heartbeat request messages is: 61.06025, limit is: 65.0
2025-11-28T14:43:02.384Z - INFO - Time interval between two heartbeat request messages is: 61.06025, limit is: 65.0
2025-11-28T14:43:02.386Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:46:22Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:46:22Z"
    }
  ]
}
}
2025-11-28T14:44:03.438Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2025-11-28T14:44:03.438Z - INFO - Time interval between two heartbeat request messages is: 61.055934, limit is: 65.0
2025-11-28T14:44:03.439Z - INFO - Time interval between two heartbeat request messages is: 61.055934, limit is: 65.0
2025-11-28T14:44:03.440Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:47:23Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:47:23Z"
    }
  ]
}
}
}

```

```
2025-11-28T14:45:03.497Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:45:03.498Z - INFO - Time interval between two heartbeat request messages is: 60.059782, limit is: 65.0
2025-11-28T14:45:03.500Z - INFO - Time interval between two heartbeat request messages is: 60.059782, limit is: 65.0
2025-11-28T14:45:03.503Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:48:23Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:48:23Z"
    }
  ]
}
2025-11-28T14:46:03.561Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:46:03.562Z - INFO - Time interval between two heartbeat request messages is: 60.063507, limit is: 65.0
2025-11-28T14:46:03.564Z - INFO - Time interval between two heartbeat request messages is: 60.063507, limit is: 65.0
2025-11-28T14:46:03.567Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:49:23Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:49:23Z"
    }
  ]
}
2025-11-28T14:47:04.627Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "operationState": "AUTHORIZED"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:47:04.627Z - INFO - Time interval between two heartbeat request messages is: 61.065973, limit is: 65.0
2025-11-28T14:47:04.629Z - INFO - Time interval between two heartbeat request messages is: 61.065973, limit is: 65.0
```

```
2025-11-28T14:47:04.631Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:50:24Z"
    },
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:50:24Z"
    }
  ]
}
2025-11-28T14:48:02.683Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044"
    }
  ]
}
2025-11-28T14:48:02.685Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "246825044",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:48:03.693Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
2025-11-28T14:48:03.693Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:48:05.691Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:48:05.692Z - INFO - Time interval between two heartbeat request messages is: 61.064633, limit is: 65.0
2025-11-28T14:48:05.693Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:51:25Z"
    }
  ]
}
2025-11-28T14:48:07.690Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "36231410"
    }
  ]
}
2025-11-28T14:48:07.692Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
```

```
{
  "cbsdId": "ROR2003Mock-SASCBSD2",
  "grantId": "36231410",
  "response": {
    "responseCode": 0
  }
}
```

2025-11-28T14:48:09.572Z - INFO - arrived to nstep starting question answer session with the technician

2025-11-28T14:48:09.573Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :

2025-11-28T14:48:18.279Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y

2025-11-28T14:48:18.279Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :

2025-11-28T14:48:19.568Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y

2025-11-28T14:48:20.665Z - INFO - The final result of the test : WINNF.F.T.D.RLQ.2 is - passed

WINNF.FT.C.RLQ.3

```

2025-11-28T14:49:44.991Z - INFO - WINNF TEST STAPNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T14:49:44.991Z - INFO - the selected test from the user : WINNF.FT.C.RLQ.3 is starting now
2025-11-28T14:50:29.157Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtlV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOfbP3vAVFavAFj3JT085j1y-hsPMUJeY1Pt5zixIGNVnh-
8RJafTWNI2GVGNdH5Yfw5klCLFj_GxmWSU9Wm-HpmGhCU7COpBVr_iDyZ3SY6RWTOmzo9OHBYeoSypBPke18UPgX9QMShTMgKeJ2LaF1I7Rn-
BKdLvLfAUxDIYeYN4j4r_VPSOuqhOmcgsdp_0XlkFIh7zcaecZR7icd6J_D4DBqBJ5eWZ3Coqd-X5IXHVkne7VcPTu32CjYf2vqst2HTtLiA_ZYuS4SzIqvZE3SBln6G736W3Q",
        "encodedCpiSignedData":
          "eyJmY2NIZCI6IUPlUjlWMdQiLCJYnNkU2VyaWFsTnVtYmVyIjoIQ0JRDEilCJpbmNOYWxsYXRpd25ZYXBhSl6eyJsYXRpdHVkZSI6NDExMTIzNDU1LCJsb25naXR1ZGU0Oi0MS42NT
QzMjAsImhlaWdobGl6MTUuMDAsImhlaWdobFR5cGU0iUBR0wiLCJpbmRvb3JEZXBsbt3ItZW50IlpmYWxzZSwiYW50ZW5uYUF6aW1ldGgiOiJAslmFudGVubmFEb3tudGsldCl6MCw
iYW50ZW5uYUdhaw4IOjEzLCJaXWQ2FwYWJpbGI0eSi6NDYSImFudGVubmFCZVFwdt2kdGgiOiJM2MciaG9yaXpvbnRhEFJY3VyYWN5IjoxLjAwLCJ2ZXJOaWNhbEFjY3VyYWN5Ijo
xLjAwLCJhbnRlbm5hTW9kZWwiOiJybW5pIn0slNbByb2Zlc3Npb25hbEluc3RhbgXclrdGEiOnsiY3BSPWQ0OiJjcGkwMDAxiiWiY3BpTmFtZSI6IlRlc3Rlcismluc3RhbgXcdXJOaWZpY2
FOaW9uVGltZSI6IjhwMjUtMTetMjhUMDU6MjM6MjBaLn19",
          "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
        },
        "fcclid": "ROR2003",
        "userid": "bling"
      }
    }
  }
}
2025-11-28T14:50:29.166Z - INFO - Registration message contains cpiSignatureData
2025-11-28T14:50:29.166Z - INFO - protectedHeader = {'alg': 'RSAES-PSS', 'typ': 'JWT'}
2025-11-28T14:50:29.167Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcclid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}
2025-11-28T14:50:29.179Z - INFO - verified signature on cpiSignatureData
2025-11-28T14:50:29.181Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T14:50:29.181Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": {
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  }
}
2025-11-28T14:50:30.155Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": {
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  }
}

```

```

}
2025-11-28T14:50:30.158Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:50:31.156Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T14:50:31.159Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T14:50:31Z",
      "grantId": "936844258",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T14:50:32.153Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "936844258",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T14:50:32.155Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "936844258",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T14:53:52Z"
    }
  ]
}
2025-11-28T14:51:33.221Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "936844258",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T14:51:33.222Z - INFO - Time interval between two heartbeat request messages is: 61.068113, limit is: 65.0
2025-11-28T14:51:33.224Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "936844258",
      "response": {
        "responseCode": 0
      },
    }
  ]
}

```

```
"transmitExpireTime": "2025-11-28T14:54:53Z"
}
}
}
2025-11-28T14:52:34.282Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T14:52:34.283Z - INFO - Time interval between two heartbeat request messages is: 61.060653, limit is: 65.0
2025-11-28T14:52:34.284Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:55:54Z"
}
]
}
}
2025-11-28T14:53:34.345Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:53:34.346Z - INFO - Time interval between two heartbeat request messages is: 60.063276, limit is: 65.0
2025-11-28T14:53:34.347Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:56:54Z"
}
]
}
}
2025-11-28T14:54:35.407Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:54:35.408Z - INFO - Time interval between two heartbeat request messages is: 61.06171, limit is: 65.0
2025-11-28T14:54:35.409Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T14:57:55Z"
}
]
}
}
2025-11-28T14:55:35.471Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T14:55:35.472Z - INFO - Time interval between two heartbeat request messages is: 60.064327, limit is: 65.0
2025-11-28T14:55:35.473Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "936844258",
"response": {
"responseCode": 0
},

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        "transmitExpireTime": "2025-11-28T14:58:55Z"
    }
}
}
2025-11-28T14:56:35.538Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "936844258",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T14:56:35.538Z - INFO - Time interval between two heartbeat request messages is: 60.066367, limit is: 65.0
2025-11-28T14:56:35.540Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "936844258",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T14:59:55Z"
        }
    ]
}
2025-11-28T14:57:35.601Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "936844258",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T14:57:35.602Z - INFO - Time interval between two heartbeat request messages is: 60.063655, limit is: 65.0
2025-11-28T14:57:35.603Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "936844258",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T15:00:55Z"
        }
    ]
}
2025-11-28T14:58:35.653Z - INFO - heartbeat request from CBRS :{
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "936844258",
            "operationState": "AUTHORIZED"
        }
    ]
}
2025-11-28T14:58:35.653Z - INFO - Time interval between two heartbeat request messages is: 60.051163, limit is: 65.0
2025-11-28T14:58:35.655Z - INFO - engine sent successfully, the response to CBRS :{
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "936844258",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T15:01:55Z"
        }
    ]
}
2025-11-28T14:59:14.694Z - INFO - relinquishment request from CBRS :{
    "relinquishmentRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "936844258"
        }
    ]
}
2025-11-28T14:59:14.696Z - INFO - engine sent successfully, the response to CBRS :{
    "relinquishmentResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "response": {
                "responseCode": 102,
                "responseData": [
                    "grantId"
                ]
            }
        }
    ]
}

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}  
}  
}  
2025-11-28T14:59:16.600Z - INFO - arrived to nstep starting question answer session with the technician  
2025-11-28T14:59:16.600Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the  
answers :  
2025-11-28T15:00:26.534Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y  
2025-11-28T15:00:27.454Z - INFO - The final result of the test : WINNF.FT.C.RLQ.3 is - passed
```



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    ]
  }
}
2025-11-28T15:01:43.616Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:01:44.615Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3690000000
        }
      }
    }
  ]
}
2025-11-28T15:01:44.618Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T15:01:44Z",
      "grantId": "995296291",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:01:45.616Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T15:01:45.618Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:05:05Z"
    }
  ]
}
2025-11-28T15:02:46.672Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:02:46.673Z - INFO - Time interval between two heartbeat request messages is: 61.056412, limit is: 65.0
2025-11-28T15:02:46.675Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

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    "transmitExpireTime": "2025-11-28T15:06:06Z"
  }
}
}
2025-11-28T15:03:47.694Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2025-11-28T15:03:47.694Z - INFO - Time interval between two heartbeat request messages is: 61.021465, limit is: 65.0
2025-11-28T15:03:47.697Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:07:07Z"
    }
  ]
}
}
2025-11-28T15:04:48.760Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2025-11-28T15:04:48.761Z - INFO - Time interval between two heartbeat request messages is: 61.066273, limit is: 65.0
2025-11-28T15:04:48.762Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:08:08Z"
    }
  ]
}
}
2025-11-28T15:05:18.797Z - INFO - registration request from CBRS : {
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpisignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETweYOFbFp3vAVFavAFJ3JT085j1y-hsPMUJeY1PPt5zixlGNVnh-8RJafTWNI2GVNDH5Vfw5kclLfj_GxmWSU9Wm-HpmGhCU7COpBVr_iDYzSY6RWOTOMzo9OHBYeoSypBpkE18UPgX9QMShTMgKeJ2LaF1IR7N-BkdLvlfAUxldIYeYN4jr_VPSOuQH0mcgsdp_0XiKFih7caeCzR7icd6J_D4DBqBJ5eWZ3Coqd-XSiXHVKne7VcPTu32CjYf2vqst2Htl1ia_ZYuS4SzIqvZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NJZCI6IUpJlwMDQjLCJYnNkU2VyaWFsTVltYmVyljoIQ0JRDEilCJpbN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEUMTIzMduDU1LCjsb25naXR1ZGUioiO5MS42NTQzMjAsImhlaWdobGlMTUuMdaslmhlaWdobFR5cGUioiJBROwiLCljbmlRvb3JEZXBsbn3ltZW50ljpmYWxzZSwiYW50ZW5uYUF6aWw1dGgiOiJAslmFudGVubmFEb3dudGlsdCI6MCwwiTYW50ZW5uYUdhawQieOjEzLCJaXWQ2FwYWJpbGI0eSl6NDYslmFudGVubmFCZWZFdt2lkodGgiOjM2MCwiaG9yaXpvbnRhbmEFYjY3VyYWN5ljojLjAwLCl2ZXUoaWNNbGEFYjY3VyYWN5ljoXLjAwLCljbmlRbm5hTW9kZWwiOiJybW5pIn0sInBybzZlc3Nb25hbEluc3RhbgxlckRhdGEiOnsiY3BpSWQyOiJpcGkwMDAxiwiY3BpTmFtZSI6IlRlc3RicilsImLuc3RhbgxkZXUoZWZpY2F0aW9uVGItZSI6IiwuJUUtMETMjcjhUMDU6MjMjMjBaLn19",
        "protectedHeader": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9"}
      },
      "fcid": "ROR2003",
      "userId": "bling"
    }
  ]
}
}
}
2025-11-28T15:05:18.808Z - INFO - Registration message contains cpiSignatureData
2025-11-28T15:05:18.808Z - INFO - protectedHeader = {'alg': 'RS256', 'typ': 'JWT'}
2025-11-28T15:05:18.808Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,

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"heightType": "AGL",
"antennaModel": "omni",
"longitude": -91.65432,
"height": 15.0,
"indoorDeployment": false,
"antennaBeamwidth": 360,
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fcid": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpid": "cpi0001"
},
"cbid": "CBSD1"
}
2025-11-28T15:05:18.809Z - INFO - verified signature on cpiSignatureData
2025-11-28T15:05:18.811Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T15:05:18.811Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbid": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:05:19.798Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbid": "ROR2003Mock-SASCBS1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-11-28T15:05:19.801Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbid": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:05:20.799Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbid": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T15:05:20.802Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbid": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpirationTime": "2025-12-05T15:05:20Z",
      "grantId": "352632987",
      "heartbeatInterval": 60,
      "response": {

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"responseCode": 0
    }
  }
}
}
2025-11-28T15:05:21.801Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "352632987",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T15:05:21.803Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "352632987",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:08:41Z"
    }
  ]
}
2025-11-28T15:05:48.829Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:05:48.829Z - INFO - Time interval between two heartbeat request messages is: 60.06879, limit is: 65.0
2025-11-28T15:05:48.831Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:09:08Z"
    }
  ]
}
2025-11-28T15:06:21.865Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "352632987",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:06:21.865Z - INFO - Time interval between two heartbeat request messages is: 60.063935, limit is: 65.0
2025-11-28T15:06:21.867Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "352632987",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:09:41Z"
    }
  ]
}
2025-11-28T15:06:49.893Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:06:49.894Z - INFO - Time interval between two heartbeat request messages is: 61.064098, limit is: 65.0
2025-11-28T15:06:49.895Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291",
      "response": {
        "responseCode": 0
      },
    },
  ]
}
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"transmitExpireTime": "2025-11-28T15:10:09Z"
}
}
}
2025-11-28T15:07:22.930Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T15:07:22.930Z - INFO - Time interval between two heartbeat request messages is: 61.065017, limit is: 65.0
2025-11-28T15:07:22.933Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:10:42Z"
}
]
}
}
2025-11-28T15:07:50.958Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:07:50.958Z - INFO - Time interval between two heartbeat request messages is: 61.064899, limit is: 65.0
2025-11-28T15:07:50.960Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:11:10Z"
}
]
}
}
2025-11-28T15:08:23.973Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:08:23.973Z - INFO - Time interval between two heartbeat request messages is: 61.043343, limit is: 65.0
2025-11-28T15:08:23.975Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:11:43Z"
}
]
}
}
2025-11-28T15:08:52.002Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:08:52.002Z - INFO - Time interval between two heartbeat request messages is: 61.044032, limit is: 65.0
2025-11-28T15:08:52.004Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"response": {
"responseCode": 0
},

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"transmitExpireTime": "2025-11-28T15:12:12Z"
}
}
}
2025-11-28T15:09:23.033Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T15:09:23.034Z - INFO - Time interval between two heartbeat request messages is: 59.06046, limit is: 65.0
2025-11-28T15:09:23.036Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:12:43Z"
}
]
}
}
2025-11-28T15:09:52.065Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:09:52.065Z - INFO - Time interval between two heartbeat request messages is: 60.062916, limit is: 65.0
2025-11-28T15:09:52.067Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:13:12Z"
}
]
}
}
2025-11-28T15:10:23.096Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:10:23.097Z - INFO - Time interval between two heartbeat request messages is: 60.062781, limit is: 65.0
2025-11-28T15:10:23.098Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:13:43Z"
}
]
}
}
2025-11-28T15:10:52.124Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:10:52.125Z - INFO - Time interval between two heartbeat request messages is: 60.059608, limit is: 65.0
2025-11-28T15:10:52.127Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"response": {
"responseCode": 0
},

```

```
"transmitExpireTime": "2025-11-28T15:14:12Z"
}
}
}
2025-11-28T15:11:23.157Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T15:11:23.158Z - INFO - Time interval between two heartbeat request messages is: 60.060924, limit is: 65.0
2025-11-28T15:11:23.159Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:14:43Z"
}
]
}
}
2025-11-28T15:11:53.189Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:11:53.190Z - INFO - Time interval between two heartbeat request messages is: 61.064475, limit is: 65.0
2025-11-28T15:11:53.192Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:15:13Z"
}
]
}
}
2025-11-28T15:12:23.224Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:12:23.224Z - INFO - Time interval between two heartbeat request messages is: 60.066615, limit is: 65.0
2025-11-28T15:12:23.226Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "352632987",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:15:43Z"
}
]
}
}
2025-11-28T15:12:53.253Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:12:53.254Z - INFO - Time interval between two heartbeat request messages is: 60.064483, limit is: 65.0
2025-11-28T15:12:53.256Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "995296291",
"response": {
"responseCode": 0
},

```

```
"transmitExpireTime": "2025-11-28T15:16:13Z"
}
}
}
2025-11-28T15:13:08.268Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "352632987"
    }
  ]
}
2025-11-28T15:13:08.269Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 102,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}
}
2025-11-28T15:13:09.276Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
}
2025-11-28T15:13:09.276Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 400
      }
    }
  ]
}
}
2025-11-28T15:13:11.272Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "995296291"
    }
  ]
}
}
2025-11-28T15:13:11.274Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 102,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}
}
}
2025-11-28T15:13:12.950Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T15:13:12.950Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the
answers :
2025-11-28T15:13:18.144Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y
2025-11-28T15:13:18.144Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the
answers :
2025-11-28T15:13:19.248Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y
2025-11-28T15:13:20.133Z - INFO - The final result of the test : WINNF.FT.D.RLQ.4 is - passed
```



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}
2025-11-28T15:14:38.892Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:14:39.890Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T15:14:39.893Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T15:14:39Z",
      "grantId": "816511861",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:14:40.892Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "816511861",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T15:14:40.894Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "816511861",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:18:00Z"
    }
  ]
}
2025-11-28T15:15:41.961Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "816511861",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:15:41.961Z - INFO - Time interval between two heartbeat request messages is: 61.06848, limit is: 65.0
2025-11-28T15:15:41.962Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "816511861",
      "response": {
        "responseCode": 0
      },
    }
  ]
}

```

```
"transmitExpireTime": "2025-11-28T15:19:01Z"
}
}
}
2025-11-28T15:16:43.004Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T15:16:43.004Z - INFO - Time interval between two heartbeat request messages is: 61.043382, limit is: 65.0
2025-11-28T15:16:43.006Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:20:03Z"
}
]
}
}
2025-11-28T15:17:43.067Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:17:43.068Z - INFO - Time interval between two heartbeat request messages is: 60.063436, limit is: 65.0
2025-11-28T15:17:43.070Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:21:03Z"
}
]
}
}
2025-11-28T15:18:43.123Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:18:43.123Z - INFO - Time interval between two heartbeat request messages is: 60.055146, limit is: 65.0
2025-11-28T15:18:43.124Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:22:03Z"
}
]
}
}
2025-11-28T15:19:43.184Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:19:43.185Z - INFO - Time interval between two heartbeat request messages is: 60.061549, limit is: 65.0
2025-11-28T15:19:43.186Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "816511861",
"response": {
"responseCode": 0
},

```

```
"transmitExpireTime": "2025-11-28T15:23:03Z"
}
}
}
2025-11-28T15:20:43.248Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "816511861",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:20:43.248Z - INFO - Time interval between two heartbeat request messages is: 60.063579, limit is: 65.0
2025-11-28T15:20:43.250Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "816511861",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:24:03Z"
    }
  ]
}
}
2025-11-28T15:21:20.283Z - INFO - relinquishment request from CBRS :{
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "816511861"
    }
  ]
}
}
2025-11-28T15:21:20.285Z - INFO - engine sent successfully, the response to CBRS :{
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 103,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}
}
}
2025-11-28T15:21:22.275Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T15:21:22.276Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :
2025-11-28T15:26:06.135Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y
2025-11-28T15:26:06.944Z - INFO - The final result of the test : WINNF.FT.C.RLQ.5 is - passed
```

WINNF.FT.D.RLQ.6

```

2025-11-28T15:35:38.177Z - INFO - WINNF TEST STAPNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T15:35:38.177Z - INFO - the selected test from the user : WINNF.FT.D.RLQ.6 is starting now
2025-11-28T15:35:51.647Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIV0WHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFPbP3vAVFavAFj3JT085j1y-hsPMUJeY1PpT5zixIGNVnh-8RJafIwNIZGVGNdh5Yfw5kicLFj_GxmWSU9Wm-HpmGhCU7COpBVr_iDyZ3SY6RWTOmzo9OHBYeoSypBpke18UPgX9XQMShTMgKeJ2LaF1IR7N-BKdLvrfAUxfDIYeYN4j4r_VPSOuQH0mcgsdp_0XIkFIH7zcaecZR7icd6J_D4DBqBj5eWZ3Coqd-X5IXHVkne7VcPTu32CjYf2vqst2HtL1iA_ZYuS4SzIQuZE3SBlnG6736W3Q",
        "encodedCpiSignedData": "eyJmY2NZCl6IUPlJwMDQlClJYnNkU2VyaWFsTnVtYmVyIjoIQJTRDEILCjpbN0YwXsYXRpb25QYXhkbSI6eyJsYXRpdHVkZSI6NDExMTIzNDU1LCJsb25naXR1ZGUioi05MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUoIjBR0wiLCjpbmRvb3JEZXBSb3ltZW50IjpbnYwXzZSWiYW50ZW5uYUF6aW1ldGgiOiJAsImFudGVubmFEb3duGlscGl6MCwIiwW50ZW5uYUdhawV4IOjEzLCJlaXJwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZWFTd2lkdgGjOjM2McwiaG9yaXpvbnRhbEFfY3VyYWN5IjoxLjAwLCJ2J0aWNhbEFfY3VyYWN5IjoxLjAwLCJhbnRlbm5hTW9kZWwiOiJjbW5pIn0slnbYyb2Zlc3Npb25hbEluc3RhbgxlcHRkdGEiOnsiY3BpSWQzOiJjcGkwMDAxiiWi3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbgxlcXJ0aWZpY2FOaW9uVGltZSI6IjhwMjUtMTetMjhUMDU6MjM6MjBaIn19",
        "protectedHeader": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9",
        "fcid": "ROR2003",
        "userid": "bling"
      }
    }
  }
}

2025-11-28T15:35:51.657Z - INFO - Registration message contains cpiSignatureData
2025-11-28T15:35:51.657Z - INFO - protectedHeader = {u'al': u'RS256', u'typ': u'JWT'}
2025-11-28T15:35:51.657Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}

2025-11-28T15:35:51.669Z - INFO - verified signature on cpiSignatureData
2025-11-28T15:35:51.670Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T15:35:51.671Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": {
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  }
}

2025-11-28T15:35:52.645Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": {
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": {
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      }
    }
  }
}

```

```

2025-11-28T15:35:52.647Z - INFO - engine sent successfully, the response to CBRS : {
"spectrumInquiryResponse": [
{
"availableChannel": [
{
"channelType": "GAA",
"frequencyRange": {
"highFrequency": 3700000000,
"lowFrequency": 3550000000
},
"ruleApplied": "FCC_PART_96"
}
],
"cbsdId": "ROR2003Mock-SASCBSD1",
"response": {
"responseCode": 0
}
}
]
}
}

2025-11-28T15:35:52.648Z - INFO - registration request from CBRS : {
"registrationRequest": [
{
"airInterface": {
"radioTechnology": "NR"
},
"callSign": "test",
"cbstdCategory": "B",
"cbstdInfo": {
"firmwareVersion": "1.0.0",
"hardwareVersion": "1.0.0",
"model": "PCW-400",
"softwareVersion": "1.0.0",
"vendor": "BLINQ"
},
"cbstdSerialNumber": "CBSD2",
"cpisignatureData": {
"digitalSignature":


"pNqB6GSDJO9ob08o77SJHuB_q7F6PhtGu333xo0XLbUjqpfcvlInsARBblcgAwqeXa2VAaYdM3bNE3JFQSQWA5vL9_tefbYEDEgALq1kf8_z90etwwa3MJcccCoQAnFKWgwts_K1H9JvdQIQfo2FiAd-O-YhwHEYtlS8awmAlu4R8uegq462GJQQY0Yfol3Tcsqdohhtr0510dmrddtZEfFQ-e4NIkfizLgisYik_OjWzApLj2HswZTBh75HCA9am3Hc8j11PeD_IK_KmGh9NEG6UVO-zq8ftYduA2btJFpt_44eYAVMs4BwO4Gc4vU0iZPmuN4xdMMGqijFEZXnA",


"encodedCpiSignedData":


"eyJmY2NiZGlIUjUwMDQlClJybnNkU2VyaWFsTnVtYmVyIjojQ0JRDIiLCJpbmN0YWxsYXRpb25QYXhScGeyJSYXRpdHVkZSI6NDUuMTIzNDU1LCJs25naXR1ZGUioi0MS42NTQzMjAsImhlaWdodCI6MTUuMDAsImhlaWdodFR5cGUuOiJBROwiLCJpbmRvb3JEZXBsb3ltZW50IjpmbWxzSWiYW50ZW5uYUF6aW11dGgiOiAsImFudGVubmFEb3dudGlsdCI6MCwiYW50ZW5uYUdhYW4iOiEzLCJlaXJwQ2FwYWJpbGItOiEiSi6NDYslmFudGVubmFCZWRTd2lkdGgiOiJM2MCwiaG9yaXpvbnRhbmEFjY3VyYWN5IjoxLjAwLjZJZCJ2ZXI0aWNhbEFjY3VyYWN5IjoxLjAwLjChbnRlbm5hTW9kZWwiOiJvbW5pbn0slmByb2Zlc3Npb25hbEluc3RhbmGxlckRhGEiOnsiY3BpSWQIOiJjcGkwMDAxiiwiY3BpTmFtZSI6IlRlc3Rlcilslmluc3RhbmGxZCkXJ0aWZpY2F0aW9uVGltZSI6IiwJUtMTETmjhUMDU6Mjg6MDhln19",


"protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
},
"fcclid": "ROR2003",
"userld": "blingq"
}
}
]
}

2025-11-28T15:35:52.656Z - INFO - Registration message contains cpiSignatureData
2025-11-28T15:35:52.656Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T15:35:52.656Z - INFO - encodedCpiSignedData contents = {
"installationParam": {
"eirpCapability": 46,
"antennaAzimuth": 0,
"heightType": "AGL",
"antennaModel": "omni",
"longitude": -91.65432,
"height": 15.0,
"indoorDeployment": false,
"antennaBeamwidth": 360,
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fcclid": "ROR2003",
"professionalInstallerData": {
"cpiname": "Tester",
"installCertificationTime": "2025-11-28T05:28:08Z",
"cpild": "cpi0001"
},
"cbstdSerialNumber": "CBSD2"
}
}

2025-11-28T15:35:52.657Z - INFO - verified signature on cpiSignatureData
2025-11-28T15:35:52.659Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T15:35:52.659Z - INFO - engine sent successfully, the response to CBRS : {
"registrationResponse": [
{
"cbsdId": "ROR2003Mock-SASCBSD2",
"response": {

```

```

        "responseCode": 0
    }
}
}
}
2025-11-28T15:35:53.641Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "operationParam": {
                "maxEirp": 36,
                "operationFrequencyRange": {
                    "highFrequency": 3560000000,
                    "lowFrequency": 3550000000
                }
            }
        }
    ]
}
}
2025-11-28T15:35:53.646Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "channelType": "GAA",
            "grantExpireTime": "2025-12-05T15:35:53Z",
            "grantId": "807012214",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
}
2025-11-28T15:35:53.651Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD2",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3700000000,
                    "lowFrequency": 3550000000
                }
            ]
        }
    ]
}
}
2025-11-28T15:35:53.654Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3700000000,
                        "lowFrequency": 3550000000
                    },
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbsdId": "ROR2003Mock-SASCBSD2",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
}
2025-11-28T15:35:54.640Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "807012214",
            "operationState": "GRANTED"
        }
    ]
}
}
2025-11-28T15:35:54.643Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "ROR2003Mock-SASCBSD1",
            "grantId": "807012214",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2025-11-28T15:39:14Z"
        }
    ]
}
}
2025-11-28T15:35:54.649Z - INFO - grant request from CBRS : {

```

```

"grantRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "operationParam": {
      "maxEirp": 36,
      "operationFrequencyRange": {
        "highFrequency": 3700000000,
        "lowFrequency": 3690000000
      }
    }
  }
]
}
}
}
2025-11-28T15:35:54.652Z - INFO - engine sent successfully, the response to CBRS :{
"grantResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "channelType": "GAA",
    "grantExpireTime": "2025-12-05T15:35:54Z",
    "grantId": "918444595",
    "heartbeatInterval": 60,
    "response": {
      "responseCode": 0
    }
  }
]
}
}
2025-11-28T15:35:55.641Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "918444595",
    "operationState": "GRANTED"
  }
]
}
}
2025-11-28T15:35:55.643Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "918444595",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T15:39:15Z"
  }
]
}
}
2025-11-28T15:36:54.702Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "807012214",
    "operationState": "AUTHORIZED"
  }
]
}
}
2025-11-28T15:36:54.702Z - INFO - Time interval between two heartbeat request messages is: 60.061181, limit is: 65.0
2025-11-28T15:36:54.704Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "grantId": "807012214",
    "response": {
      "responseCode": 0
    },
    "transmitExpireTime": "2025-11-28T15:40:14Z"
  }
]
}
}
2025-11-28T15:36:56.704Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "918444595",
    "operationState": "AUTHORIZED"
  }
]
}
}
2025-11-28T15:36:56.704Z - INFO - Time interval between two heartbeat request messages is: 61.062307, limit is: 65.0
2025-11-28T15:36:56.706Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD2",
    "grantId": "918444595",
    "response": {
      "responseCode": 0
    },
  },
]
}
}

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"transmitExpireTime": "2025-11-28T15:40:16Z"
}
}
}
2025-11-28T15:37:54.769Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T15:37:54.770Z - INFO - Time interval between two heartbeat request messages is: 60.067666, limit is: 65.0
2025-11-28T15:37:54.771Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:41:14Z"
}
]
}
}
2025-11-28T15:37:57.772Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:37:57.773Z - INFO - Time interval between two heartbeat request messages is: 61.06877, limit is: 65.0
2025-11-28T15:37:57.775Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:41:17Z"
}
]
}
}
2025-11-28T15:38:55.833Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:38:55.833Z - INFO - Time interval between two heartbeat request messages is: 61.063383, limit is: 65.0
2025-11-28T15:38:55.835Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:42:15Z"
}
]
}
}
2025-11-28T15:38:58.836Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:38:58.837Z - INFO - Time interval between two heartbeat request messages is: 61.063456, limit is: 65.0
2025-11-28T15:38:58.838Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"response": {
"responseCode": 0
},

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```
"transmitExpireTime": "2025-11-28T15:42:18Z"
}
}
}
2025-11-28T15:39:55.897Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T15:39:55.897Z - INFO - Time interval between two heartbeat request messages is: 60.064162, limit is: 65.0
2025-11-28T15:39:55.899Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:43:15Z"
}
]
}
}
2025-11-28T15:39:59.901Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:39:59.902Z - INFO - Time interval between two heartbeat request messages is: 61.065216, limit is: 65.0
2025-11-28T15:39:59.904Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:43:19Z"
}
]
}
}
2025-11-28T15:40:55.959Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:40:55.960Z - INFO - Time interval between two heartbeat request messages is: 60.062403, limit is: 65.0
2025-11-28T15:40:55.960Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "807012214",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:44:15Z"
}
]
}
}
2025-11-28T15:41:00.964Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:41:00.965Z - INFO - Time interval between two heartbeat request messages is: 61.063306, limit is: 65.0
2025-11-28T15:41:00.967Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "918444595",
"response": {
"responseCode": 0
},

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"transmitExpireTime": "2025-11-28T15:44:20Z"
}
}
}
2025-11-28T15:41:24.992Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "807012214"
    }
  ]
}
2025-11-28T15:41:24.994Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 103,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}
2025-11-28T15:41:25.999Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
2025-11-28T15:41:25.999Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:41:27.001Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "918444595"
    }
  ]
}
2025-11-28T15:41:27.003Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 103,
        "responseData": [
          "grantId"
        ]
      }
    }
  ]
}
2025-11-28T15:41:28.555Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T15:41:28.556Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :
2025-11-28T15:41:33.663Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y
2025-11-28T15:41:33.663Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :
2025-11-28T15:41:35.187Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y
2025-11-28T15:41:37.196Z - INFO - The final result of the test : WINNF.FT.D.RLQ.6 is - passed
```

WINNF.FT.C.DRG.1

```

2025-11-28T11:28T15:44:16.504Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T15:44:16.504Z - INFO - the selected test from the user : WINNF.FT.C.DRG.1 is starting now
2025-11-28T15:45:26.463Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIVOWHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUjeY1PpT5zixIGNVnh-8RJafIwNIZGVGNdH5Yfw5kicLFj_GxmWSU9Wm-HpmGhCU7COpBvr_iDyZ3SY6RWOTOMzo9rOHBYeoSypBpke18UPgX9XqMShTMgKeJ2LaF1R7N-BKdLvrfAUxfDIYeYN4j4r_VPSOuQhOmcgsdp_0XikFIH7zcaecZr7icd6J_D4DBqBj5eWZ3CoQd-X5IXHVkne7VcPTu32CjYF2vqst2HTL1ia_ZYu$4SzIQvZE3SBln6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NZCl6IUUpJlwMDQlCjJYnNkU2VyaWFfsTnYtVmVyIjoJQTRDEilCjpbN0YXxsYXRxb25QYXJhbSI6eyJsYXRpdHVKZSl6NDEuMTizNDU1LCJsb25naXRZUGUiOi0MS42NTQzMjAsImhlaWdodCI6MTUuMDA5ImhlaWdodFR5cGUlBR0wiLCJpbmRvb3JEZXBSb3ltZW50IjpmYWxzZSwiYW50ZW5uYUF6aW1ldGgiOjAsImFudGVubmFEb3dudGlscCI6MCwIYW50ZW5uYUdhV4lOjEzLCJlaXJwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZWFTd2lkdggiOjM2MCwiaG9yaXpvbnRhbmEFYjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWNnbEFjY3VyYWN5IjoxLjAwLCJhbnRibm5hTW9kZWwiOiJvbW5pln0slInByb2Zlc3Npb25hbEluc3RhbGxlcHRhdGEiOnsiY3BpSWQjOiJjcGkwMDAxIiwib3RmFtZSI6IlRlc3Rlcilslmluc3RhbGxkZDZJ0aWZpY2FOaW9uVGltZSI6IjhwMjUtMTetMjhUMDU6MjMjBain19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fccId": "ROR2003",
      "userId": "bling"
    }
  }
}
2025-11-28T15:45:26.471Z - INFO - Registration message contains cpiSignatureData
2025-11-28T15:45:26.471Z - INFO - protectedHeader = (u'al': u'RS256', u'typ': u'JWT')
2025-11-28T15:45:26.472Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD1"
}
2025-11-28T15:45:26.488Z - INFO - verified signature on cpiSignatureData
2025-11-28T15:45:26.490Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T15:45:26.492Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": {
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  }
}
2025-11-28T15:45:27.464Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": {
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  }
}

```

```

}
2025-11-28T15:45:27.468Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:45:28.466Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T15:45:28.469Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T15:45:28Z",
      "grantId": "503504577",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:45:29.467Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "503504577",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T15:45:29.469Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "503504577",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T15:48:49Z"
    }
  ]
}
2025-11-28T15:46:30.531Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "503504577",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:46:30.531Z - INFO - Time interval between two heartbeat request messages is: 61.063752, limit is: 65.0
2025-11-28T15:46:30.534Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "503504577",
      "response": {
        "responseCode": 0
      },
    }
  ]
}

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"transmitExpireTime": "2025-11-28T15:49:50Z"
}
}
}
2025-11-28T15:47:31.590Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T15:47:31.590Z - INFO - Time interval between two heartbeat request messages is: 61.058799, limit is: 65.0
2025-11-28T15:47:31.592Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:50:51Z"
}
]
}
}
2025-11-28T15:48:32.646Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:48:32.647Z - INFO - Time interval between two heartbeat request messages is: 61.056159, limit is: 65.0
2025-11-28T15:48:32.648Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:51:52Z"
}
]
}
}
2025-11-28T15:49:32.697Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:49:32.698Z - INFO - Time interval between two heartbeat request messages is: 60.051297, limit is: 65.0
2025-11-28T15:49:32.699Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T15:52:52Z"
}
]
}
}
2025-11-28T15:50:32.761Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T15:50:32.761Z - INFO - Time interval between two heartbeat request messages is: 60.063541, limit is: 65.0
2025-11-28T15:50:32.763Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "503504577",
"response": {
"responseCode": 0
},

```

```
"transmitExpireTime": "2025-11-28T15:53:52Z"
}
}
}
2025-11-28T15:50:58.791Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "503504577"
    }
  ]
}
2025-11-28T15:50:58.793Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "503504577",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T15:50:59.797Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
2025-11-28T15:50:59.799Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T15:51:00.933Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T15:51:00.933Z - 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 :
2025-11-28T15:51:53.141Z - 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
2025-11-28T15:51:57.994Z - INFO - The final result of the test : WINNF.FT.C.DRG.1 is - passed
```

[illegible]

```

}
2025-11-28T15:56:40.544Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:56:41.545Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T15:56:41.547Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T15:56:41Z",
      "grantId": "233491764",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:56:42.547Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "233491764",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T15:56:42.549Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "233491764",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:00:02Z"
    }
  ]
}
2025-11-28T15:56:46.552Z - INFO - registration request from CBRS :{
  "registrationRequest": [
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbsdCategory": "B",
      "cbsdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbsdSerialNumber": "CBS123",
      "cpiSignatureData": {

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    "digitalSignature":
      "pNqB6GJSdJO9ob08o77SJHuB_q7F6PhtGu333xo0XLbUjqpfvclnsARBblcgAwqeXa2VAAdM3NE3JfQSQSWA5vL9_tefbYDEgALq1kf8_z90etwwa3MJcccCoQAAnFKWgwts_K1H9JvdQIQfo2FFAd-O-YhwHEYtllS8awmAlu4R8uegq462GJQYY0Yfol3Tcsqdohhtr051OdmrddtZEffQ-e4nNFkizLgisYik_ojVzApLj2HswZTBh75HCA9am3Hc8j11PeD_iK_KmGh9NEG6UVo-zq8ftYduA2btJFpt_44eYAVMs4BwO4Gc4vU0iZPmuN4xdMMgqijFEZxNA",
      "encodedCpiSignedData":
        "eyJmY2NJZCI6IUIUjWMDQiLCJYnNkU2VyaWFsTnVtYmVyljojQ0JTRDiILCJpbmN0YWxsYXRpb25QYXJhbSI6eyJsYXRpdHVkZSI6NDEuMTlzMNTQzMTQzMTUuMDAsImhlaWdodFR5cGUOiIBR0wiLCJpbmRvb3JEZXBs3ltZW50IjpmYWxzZSwiYW50ZW5uYUF6aW1ldGgiOjAsImFudGVubmFEb3dudGlsdCI6MCwiYW50ZW5uYUdhdaW4iOiEzLCJlaXJwQ2FwYWJpbGl0eSI6NDYsImFudGVubmFCZWFrtd2ktkdGgiOjMCMciaG9yaXpvbnRhbEFfY3VyYWN5IjoxLjAwLjCjZ2XJ0aWNhbmEFfY3VyYWN5IjoxLjAwW9uVGltZSI6IjWjUtMTETmjhUMDU6Mjg6MDhlbn19",
      "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"}
  },
  "fcclid": "ROR2003",
  "userid": "blingq"
}
}
}
2025-11-28T15:56:46.561Z - INFO - Registration message contains cpiSignatureData
2025-11-28T15:56:46.561Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}
2025-11-28T15:56:46.561Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fcclid": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:28:08Z",
    "cpild": "cpi0001"
  },
  "cbsdSerialNumber": "CBSD2"
}
2025-11-28T15:56:46.561Z - INFO - verified signature on cpiSignatureData
2025-11-28T15:56:46.563Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T15:56:46.563Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:56:47.549Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-11-28T15:56:47.551Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}

```

```

2025-11-28T15:56:48.550Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3700000000,
          "lowFrequency": 3690000000
        }
      }
    }
  ]
}
2025-11-28T15:56:48.552Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T15:56:48Z",
      "grantId": "881921877",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T15:56:49.551Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T15:56:49.553Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:00:09Z"
    }
  ]
}
2025-11-28T15:57:43.603Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:57:43.603Z - INFO - Time interval between two heartbeat request messages is: 61.055733, limit is: 65.0
2025-11-28T15:57:43.604Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:01:03Z"
    }
  ]
}
2025-11-28T15:57:50.604Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:57:50.604Z - INFO - Time interval between two heartbeat request messages is: 61.052694, limit is: 65.0
2025-11-28T15:57:50.606Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

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    },
    "transmitExpireTime": "2025-11-28T16:01:10Z"
  }
}
}
2025-11-28T15:58:43.661Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:58:43.661Z - INFO - Time interval between two heartbeat request messages is: 60.058048, limit is: 65.0
2025-11-28T15:58:43.662Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:02:03Z"
    }
  ]
}
2025-11-28T15:58:51.670Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:58:51.670Z - INFO - Time interval between two heartbeat request messages is: 61.065982, limit is: 65.0
2025-11-28T15:58:51.672Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:02:11Z"
    }
  ]
}
2025-11-28T15:59:44.724Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:59:44.724Z - INFO - Time interval between two heartbeat request messages is: 61.063054, limit is: 65.0
2025-11-28T15:59:44.725Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:03:04Z"
    }
  ]
}
2025-11-28T15:59:52.733Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T15:59:52.733Z - INFO - Time interval between two heartbeat request messages is: 61.06274, limit is: 65.0
2025-11-28T15:59:52.735Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
```

```
    },
    "transmitExpireTime": "2025-11-28T16:03:12Z"
  }
}
}
2025-11-28T16:00:44.783Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T16:00:44.784Z - INFO - Time interval between two heartbeat request messages is: 60.059461, limit is: 65.0
2025-11-28T16:00:44.785Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:04:04Z"
    }
  ]
}
2025-11-28T16:00:53.793Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T16:00:53.794Z - INFO - Time interval between two heartbeat request messages is: 61.060554, limit is: 65.0
2025-11-28T16:00:53.795Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:04:13Z"
    }
  ]
}
2025-11-28T16:01:34.841Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764"
    }
  ]
}
2025-11-28T16:01:34.843Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "233491764",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:01:35.848Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
2025-11-28T16:01:35.850Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:01:36.850Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
```

```
"cbsdId": "ROR2003Mock-SASCBSD2",
"grantId": "881921877"
}
}
}
2025-11-28T16:01:36.851Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "881921877",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T16:01:37.847Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2"
    }
  ]
}
}
2025-11-28T16:01:37.848Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T16:01:39.481Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T16:01:39.482Z - 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 :
2025-11-28T16:01:46.707Z - 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
2025-11-28T16:01:46.707Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of Relinquishment request (if sent) or Deregistration request at Test
Harness? please choose one of the answers :
2025-11-28T16:01:47.922Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of Relinquishment request (if sent) or Deregistration request at Test
Harness?, the user choose y
2025-11-28T16:01:48.596Z - INFO - The final result of the test : WINNF.FT.D.DRG.2 is - passed
```



```

}
2025-11-28T16:03:20.385Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:03:21.384Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T16:03:21.386Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T16:03:21Z",
      "grantId": "675820872",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:03:22.385Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "675820872",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T16:03:22.387Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "675820872",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:06:42Z"
    }
  ]
}
2025-11-28T16:04:23.451Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "675820872",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T16:04:23.451Z - INFO - Time interval between two heartbeat request messages is: 61.065721, limit is: 65.0
2025-11-28T16:04:23.453Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "675820872",
      "response": {
        "responseCode": 0
      },
    }
  ]
}

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"transmitExpireTime": "2025-11-28T16:07:43Z"
}
}
}
2025-11-28T16:05:24.512Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T16:05:24.512Z - INFO - Time interval between two heartbeat request messages is: 61.060835, limit is: 65.0
2025-11-28T16:05:24.513Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:08:44Z"
}
]
}
2025-11-28T16:06:25.574Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T16:06:25.574Z - INFO - Time interval between two heartbeat request messages is: 61.061608, limit is: 65.0
2025-11-28T16:06:25.575Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:09:45Z"
}
]
}
2025-11-28T16:07:25.634Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T16:07:25.634Z - INFO - Time interval between two heartbeat request messages is: 60.060094, limit is: 65.0
2025-11-28T16:07:25.635Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:10:45Z"
}
]
}
2025-11-28T16:08:25.691Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T16:08:25.691Z - INFO - Time interval between two heartbeat request messages is: 60.057496, limit is: 65.0
2025-11-28T16:08:25.692Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "675820872",
"response": {
"responseCode": 0
},

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    "transmitExpireTime": "2025-11-28T16:11:45Z"
  }
}
}
2025-11-28T16:09:25.754Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "675820872",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T16:09:25.755Z - INFO - Time interval between two heartbeat request messages is: 60.063292, limit is: 65.0
2025-11-28T16:09:25.756Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "675820872",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:12:45Z"
    }
  ]
}
}
2025-11-28T16:10:20.811Z - INFO - relinquishment request from CBRS :{
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "675820872"
    }
  ]
}
}
2025-11-28T16:10:20.812Z - INFO - engine sent successfully, the response to CBRS :{
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "675820872",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T16:10:21.818Z - INFO - deregistration request from CBRS :{
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
}
2025-11-28T16:10:21.819Z - INFO - engine sent successfully, the response to CBRS :{
  "deregistrationResponse": [
    {
      "response": {
        "responseCode": 102
      }
    }
  ]
}
}
2025-11-28T16:10:23.583Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T16:10:23.583Z - 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 :
2025-11-28T16:10:33.363Z - 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
2025-11-28T16:10:34.475Z - INFO - The final result of the test : WINNF.FT.C.DRG.3 is - passed

```



```
"antennaAzimuth": 0,
"heightType": "AGL",
"antennaModel": "omni",
"longitude": -91.65432,
"height": 15.0,
"indoorDeployment": false,
"antennaBeamwidth": 360,
"horizontalAccuracy": 1.0,
"antennaDowntilt": 0,
"latitude": 41.123455,
"antennaGain": 13,
"verticalAccuracy": 1.0
},
"fcid": "ROR2003",
"professionalInstallerData": {
  "cpiName": "Tester",
  "installCertificationTime": "2025-11-28T05:23:20Z",
  "cpild": "cpi0001"
},
"cbbsdSerialNumber": "CBSD1"
}
2025-11-28T16:11:48.176Z - INFO - verified signature on cpiSignatureData
2025-11-28T16:11:48.177Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T16:11:48.178Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbssld": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:11:49.158Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbssld": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T16:11:49.160Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbssld": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:15:09Z"
    }
  ]
}
2025-11-28T16:11:49.162Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbssld": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": [
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      ]
    }
  ]
}
2025-11-28T16:11:49.165Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbssld": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:11:50.159Z - INFO - grant request from CBRS : {
```

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"grantRequest": [
  {
    "cbsdId": "ROR2003Mock-SASCBSD1",
    "operationParam": {
      "maxEirp": 36,
      "operationFrequencyRange": {
        "highFrequency": 3560000000,
        "lowFrequency": 3550000000
      }
    }
  }
]
}
}
}
2025-11-28T16:11:50.161Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T16:11:50Z",
      "grantId": "270246502",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
}
2025-11-28T16:11:51.161Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502",
      "operationState": "GRANTED"
    }
  ]
}
}
}
2025-11-28T16:11:51.162Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:15:11Z"
    }
  ]
}
}
}
2025-11-28T16:12:49.221Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
}
2025-11-28T16:12:49.222Z - INFO - Time interval between two heartbeat request messages is: 60.063234, limit is: 65.0
2025-11-28T16:12:49.223Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:16:09Z"
    }
  ]
}
}
}
2025-11-28T16:12:52.225Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502",
      "operationState": "AUTHORIZED"
    }
  ]
}
}
}
2025-11-28T16:12:52.226Z - INFO - Time interval between two heartbeat request messages is: 61.064342, limit is: 65.0
2025-11-28T16:12:52.227Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502",
      "response": {
        "responseCode": 0
      },
    }
  ]
}
}
}

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"transmitExpireTime": "2025-11-28T16:16:12Z"
}
}
}
2025-11-28T16:13:49.278Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "959952485",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T16:13:49.279Z - INFO - Time interval between two heartbeat request messages is: 60.057146, limit is: 65.0
2025-11-28T16:13:49.280Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "959952485",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:17:09Z"
}
]
}
}
2025-11-28T16:13:53.282Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "270246502",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T16:13:53.283Z - INFO - Time interval between two heartbeat request messages is: 61.057174, limit is: 65.0
2025-11-28T16:13:53.284Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "270246502",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:17:13Z"
}
]
}
}
2025-11-28T16:14:50.339Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "959952485",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T16:14:50.340Z - INFO - Time interval between two heartbeat request messages is: 61.060735, limit is: 65.0
2025-11-28T16:14:50.340Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD2",
"grantId": "959952485",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:18:10Z"
}
]
}
}
2025-11-28T16:14:54.343Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "270246502",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T16:14:54.343Z - INFO - Time interval between two heartbeat request messages is: 61.060198, limit is: 65.0
2025-11-28T16:14:54.344Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "270246502",
"response": {
"responseCode": 0
},

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"transmitExpireTime": "2025-11-28T16:18:14Z"
}
}
}
2025-11-28T16:15:50.401Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T16:15:50.401Z - INFO - Time interval between two heartbeat request messages is: 60.061463, limit is: 65.0
2025-11-28T16:15:50.402Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:19:10Z"
    }
  ]
}
2025-11-28T16:15:55.406Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T16:15:55.407Z - INFO - Time interval between two heartbeat request messages is: 61.06381, limit is: 65.0
2025-11-28T16:15:55.408Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:19:15Z"
    }
  ]
}
2025-11-28T16:16:38.441Z - INFO - relinquishment request from CBRS :{
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502"
    }
  ]
}
2025-11-28T16:16:38.442Z - INFO - engine sent successfully, the response to CBRS :{
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "270246502",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:16:39.448Z - INFO - deregistration request from CBRS :{
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
2025-11-28T16:16:39.451Z - INFO - engine sent successfully, the response to CBRS :{
  "deregistrationResponse": [
    {
      "response": {
        "responseCode": 102
      }
    }
  ]
}
2025-11-28T16:16:39.452Z - INFO - relinquishment request from CBRS :{
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485"
```

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}
}
}
2025-11-28T16:16:39.453Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2",
      "grantId": "959952485",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2025-11-28T16:16:40.443Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD2"
    }
  ]
}
}
2025-11-28T16:16:40.444Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "response": {
        "responseCode": 102
      }
    }
  ]
}
}
2025-11-28T16:16:42.446Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T16:16:42.446Z - INFO - the question is : Did CBSD2 cease RF transmission before receipt of Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the answers :
2025-11-28T16:17:30.186Z - INFO - for the question : Did CBSD2 cease RF transmission before receipt of Relinquishment request (if sent) or Deregistration request at Test Harness? , the user choose y
2025-11-28T16:17:30.186Z - 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 :
2025-11-28T16:17:31.166Z - 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
2025-11-28T16:17:32.528Z - INFO - The final result of the test : WINNF.FT.D.DRG.4 is - passed
```

WINNF.FT.C.DRG.5

```

2025-11-28T16:18:12.256Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2025-11-28T16:18:12.256Z - INFO - the selected test from the user : WINNF.FT.C.DRG.5 is starting now
2025-11-28T16:18:56.260Z - INFO - registration request from CBRS : {
  "registrationRequest": {
    {
      "airInterface": {
        "radioTechnology": "NR"
      },
      "callSign": "test",
      "cbstdCategory": "B",
      "cbstdInfo": {
        "firmwareVersion": "1.0.0",
        "hardwareVersion": "1.0.0",
        "model": "PCW-400",
        "softwareVersion": "1.0.0",
        "vendor": "BLINQ"
      },
      "cbstdSerialNumber": "CBSD1",
      "cpiSignatureData": {
        "digitalSignature": "PyhtIVOWHOKP5jQZo5-r53OOV4nd_q645Gb4EU674K7WETwEYOFbP3vAVFavAFj3JT085j1y-hsPMUJeY1Pt5zixIGNVnh-8RJafIwNIZGVGNdH5Yfw5klcLfJ_GxmWSU9Wm-HpmGhCU7COpBVr_iDyZ3SY6RWTOmZo9rOHBYeoSypBpk18UPgX9XqMshTMgKeJ2LaF1R7N-BKdLvrfAUxfDIYeYN4j4r_VPSOuQhOmcgsdp_0XikFIH7zcaecZr7icd6J_D4DBqBj5eWZ3CoQd-X5IXHVkne7VcPTu32CjYF2vqst2HTL1ia_ZYuS4SzIQvZE3SBIn6G736W3Q",
        "encodedCpiSignedData": "eyJmY2NZJCi6IUpJlwMDQiLCJYnNkU2VyaWFsTWtYtmVyIjoIQJTRDEilCJpbN0YWsXsYXRpb25ZYXJhbSI6eyJsYXRpdHVKZSI6NDEuMTizNDU1LCJsb25naXRZUGUiOi0MS42NTQzMjAsImhlYWdodCI6MTUuMDA5ImhlYWdodFR5cGUlOiBR0wiLCJpbmRvb3JEZXBSb3ltZW50IjpmYWxzZSwiYW50ZW5uYUF6aW1ldGgiOiJAsImFudGVubmFEb3dudGlscCI6MCwIyW50ZW5uYUdhV4IoiEzLCJlaXJwQ2FwYWJpbGI0eSI6NDYslmFudGVubmFCZWFTd2lkdggiOiJM2MCwiaG9yaXpvbnRhEFYjY3VyYWN5IjoxLjAwLCJ2ZXJ0aWNnbEFjY3VyYWN5IjoxLjAwLCJhbnRibm5hTW9kZWwiOiJjbW5pln0slmByb2Zlc3Npb25hbEluc3RhbgXclckRhdGEiOnsiY3BpSWQjOiJjcGkwMDAxIiwib3RmTmFtZSI6IlRlc3Rlcilslmluc3RhbgXDXJ0aWZpY2FOaW9uVGltZSI6IjhwMjUtMTetMjhUMDU6MjM6MjBaIn19",
        "protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"
      },
      "fccId": "ROR2003",
      "userId": "bling"
    }
  ]
}
2025-11-28T16:18:56.270Z - INFO - Registration message contains cpiSignatureData
2025-11-28T16:18:56.270Z - INFO - protectedHeader = (u'al': u'RS256', u'typ': u'JWT')
2025-11-28T16:18:56.270Z - INFO - encodedCpiSignedData contents = {
  "installationParam": {
    "eirpCapability": 46,
    "antennaAzimuth": 0,
    "heightType": "AGL",
    "antennaModel": "omni",
    "longitude": -91.65432,
    "height": 15.0,
    "indoorDeployment": false,
    "antennaBeamwidth": 360,
    "horizontalAccuracy": 1.0,
    "antennaDowntilt": 0,
    "latitude": 41.123455,
    "antennaGain": 13,
    "verticalAccuracy": 1.0
  },
  "fccId": "ROR2003",
  "professionalInstallerData": {
    "cpiName": "Tester",
    "installCertificationTime": "2025-11-28T05:23:20Z",
    "cpild": "cpi0001"
  },
  "cbstdSerialNumber": "CBSD1"
}
2025-11-28T16:18:56.285Z - INFO - verified signature on cpiSignatureData
2025-11-28T16:18:56.287Z - INFO - cpiSignatureData data successfully validated against jsonschema
2025-11-28T16:18:56.287Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": {
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:18:57.258Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": {
    {
      "cbstdId": "ROR2003Mock-SASCBSD1",
      "inquiredSpectrum": {
        {
          "highFrequency": 3700000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}

```

```

}
2025-11-28T16:18:57.261Z - INFO - engine sent successfully, the response to CBRS :{
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3700000000,
            "lowFrequency": 3550000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "ROR2003Mock-SASCBS1",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:18:58.261Z - INFO - grant request from CBRS :{
  "grantRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "operationParam": {
        "maxEirp": 36,
        "operationFrequencyRange": {
          "highFrequency": 3560000000,
          "lowFrequency": 3550000000
        }
      }
    }
  ]
}
2025-11-28T16:18:58.263Z - INFO - engine sent successfully, the response to CBRS :{
  "grantResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "channelType": "GAA",
      "grantExpireTime": "2025-12-05T16:18:58Z",
      "grantId": "319683013",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:18:59.259Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "319683013",
      "operationState": "GRANTED"
    }
  ]
}
2025-11-28T16:18:59.261Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "319683013",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2025-11-28T16:22:19Z"
    }
  ]
}
2025-11-28T16:20:00.310Z - INFO - heartbeat request from CBRS :{
  "heartbeatRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "319683013",
      "operationState": "AUTHORIZED"
    }
  ]
}
2025-11-28T16:20:00.310Z - INFO - Time interval between two heartbeat request messages is: 61.050743, limit is: 65.0
2025-11-28T16:20:00.312Z - INFO - engine sent successfully, the response to CBRS :{
  "heartbeatResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBS1",
      "grantId": "319683013",
      "response": {
        "responseCode": 0
      },
    }
  ]
}

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"transmitExpireTime": "2025-11-28T16:23:20Z"
}
}
}
2025-11-28T16:21:01.369Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"operationState": "AUTHORIZED"
}
]
}
2025-11-28T16:21:01.369Z - INFO - Time interval between two heartbeat request messages is: 61.059122, limit is: 65.0
2025-11-28T16:21:01.371Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:24:21Z"
}
]
}
}
2025-11-28T16:22:02.431Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T16:22:02.432Z - INFO - Time interval between two heartbeat request messages is: 61.062706, limit is: 65.0
2025-11-28T16:22:02.434Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:25:22Z"
}
]
}
}
2025-11-28T16:23:03.474Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T16:23:03.475Z - INFO - Time interval between two heartbeat request messages is: 61.042769, limit is: 65.0
2025-11-28T16:23:03.477Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"response": {
"responseCode": 0
},
"transmitExpireTime": "2025-11-28T16:26:23Z"
}
]
}
}
2025-11-28T16:24:04.540Z - INFO - heartbeat request from CBRS :{
"heartbeatRequest": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"operationState": "AUTHORIZED"
}
]
}
}
2025-11-28T16:24:04.541Z - INFO - Time interval between two heartbeat request messages is: 61.066062, limit is: 65.0
2025-11-28T16:24:04.542Z - INFO - engine sent successfully, the response to CBRS :{
"heartbeatResponse": [
{
"cbstdId": "ROR2003Mock-SASCBSD1",
"grantId": "319683013",
"response": {
"responseCode": 0
},

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"transmitExpireTime": "2025-11-28T16:27:24Z"
}
}
}
2025-11-28T16:24:22.558Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "319683013"
    }
  ]
}
2025-11-28T16:24:22.560Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1",
      "grantId": "319683013",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2025-11-28T16:24:23.566Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbsdId": "ROR2003Mock-SASCBSD1"
    }
  ]
}
2025-11-28T16:24:23.568Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "response": {
        "responseCode": 103,
        "responseData": [
          "cbsdId"
        ]
      }
    }
  ]
}
2025-11-28T16:24:24.650Z - INFO - arrived to nstep starting question answer session with the technician
2025-11-28T16:24:24.650Z - 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 :
2025-11-28T16:24:36.391Z - 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
2025-11-28T16:24:37.636Z - INFO - The final result of the test : WINNF.FT.C.DRG.5 is - passed
```