

Test Logs

FCC ID: 2AG32EG7035E96

Test Model: EG7035E-M11

Series Model: EG7035E-M2

Received Date: Mar. 24, 2020

Test Date: Jun 6 ~ Jun. 11, 2020

Issued Date: Jun. 11, 2020

Applicant: Baicells Technologies Co., Ltd.

Address: 3F, Hui Yuan Development Building, No.1 Shangdi Information Industry Base, Haidian Dist., Beijing, China

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, TAIWAN

Table of Contents

1	CBSD Registration Process.....	3
1.1	WINNF.FT.C.REG.5	3
1.1	WINNF.FT.C.REG.8	5
1.2	WINNF.FT.C.REG.10	7
1.3	WINNF.FT.C.REG.12	9
1.4	WINNF.FT.C.REG.14	11
1.5	WINNF.FT.C.REG.16	13
1.6	WINNF.FT.C.REG.18	15
2	CBSD Spectrum Grant Process	17
2.1	WINNF.FT.C.GRA.1	17
2.2	WINNF.FT.C.GRA.2	20
3	CBSD Heart Beat Process.....	22
3.1	WINNF.FT.C.HBT.1	22
3.2	WINNF.FT.C.HBT.3	28
3.3	WINNF.FT.C.HBT.4	33
3.4	WINNF.FT.C.HBT.5	39
3.5	WINNF.FT.C.HBT.6	43
3.6	WINNF.FT.C.HBT.7	48
3.7	WINNF.FT.C.HBT.9	53
3.8	WINNF.FT.C.HBT.10	56
4	CBSD Relinquishment Process.....	60
4.1	WINNF.FT.C.RLQ.1	60
5	CBSD Deregistration Process	64
5.1	WINNF.FT.C.DRG.1	64
6	CBSD Security Validation	68
6.1	WINNF.FT.C.SCS.1	68
6.2	WINNF.FT.C.SCS.2	70
6.3	WINNF.FT.C.SCS.3	70
6.4	WINNF.FT.C.SCS.4	70
6.5	WINNF.FT.C.SCS.5	70
7	CBSD RF Power Measurement.....	71
7.1	WINNF.PT.C.HBT.1(Max Eirp = 31 dBm/MHz)	71
7.2	WINNF.PT.C.HBT.1(Max Eirp = 32 dBm/MHz)	74
7.3	WINNF.PT.C.HBT.1(Max Eirp = 33 dBm/MHz)	77

2020-06-10T05:17:34.954Z - INFO - encodedCpiSignedData contents = {

```
"installationParam": {  
  "antennaAzimuth": 0,  
  "heightType": "AMSL",  
  "antennaModel": "External",  
  "longitude": -97.627096,  
  "height": 1.8,  
  "indoorDeployment": false,  
  "latitude": 47.527605,  
  "horizontalAccuracy": 3,  
  "antennaDowntilt": 0,  
  "antennaBeamwidth": 90,  
  "antennaGain": 19,  
  "verticalAccuracy": 3  
},  
"fcclId": "2AG32EG7010A",  
"professionalInstallerData": {  
  "cpiName": "",  
  "installCertificationTime": "2020-04-23T00:00:00Z",  
  "cpild": ""  
},  
"cbstdSerialNumber": "120300008019C9P0075"
```

}

2020-06-10T05:17:35.017Z - INFO - verified signature on cpiSignatureData

2020-06-10T05:17:35.017Z - INFO - cpiSignatureData data successfully validated against jsonschema

2020-06-10T05:17:35.017Z - INFO - engine sent successfully, the response to CBRS : {

```
"registrationResponse": [  
  {  
    "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",  
    "response": {  
      "responseCode": 0  
    }  
  }  
]
```

}

2020-06-10T05:17:36.657Z - INFO - arrived to nstep starting question answer session with the technician

2020-06-10T05:17:36.657Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-06-10T05:17:39.407Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-06-10T05:17:39.829Z - INFO - The final result of the test : WINNF.FT.C.REG.5 is - passed


```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fccId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpId": ""
    },
    "cbSdSerialNumber": "120300008019C9P0075"
}
2020-06-10T05:20:20.923Z - INFO - verified signature on cpiSignatureData
2020-06-10T05:20:20.923Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T05:20:20.923Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "response": {
                "responseCode": 102
            }
        }
    ]
}
2020-06-10T05:20:22.954Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T05:20:22.954Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T05:20:27.188Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T05:20:27.391Z - INFO - The final result of the test : WINNF.FT.C.REG.8 is - passed

```

1.2 WINNF.FT.C.REG.10

2020-06-10T05:23:33.138Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2020-06-10T05:23:33.138Z - INFO - the selected test from the user : WINNF.FT.C.REG.10 is starting now

2020-06-10T05:23:52.528Z - INFO - registration request from CBRS : {

"registrationRequest": [

{

"airInterface": {

"radioTechnology": "E_UTRA"

},

"callSign": "baicells",

"cbsdCategory": "B",

"cbsdSerialNumber": "120300008019C9P0075",

"cpiSignatureData": {

"digitalSignature":

"REUgFs9CGuz0xV90_MwPT0yfN87NMh04sja_CDuxYLdPhSLZ65ER6kP3oKvmNQMVisAOuaBDxQJGFw
akTaZOzQ7ktUY917HAmGiLsJLECwHubFJP_yQ9-9066Ow_x3WZ6GmnegpfK-C5oh5WtZ6sbjCT5RXf1Azt
2y6xZScQ1E-4XB5PHTpilhWWGRWy096731aLEDsTmXyXRQ7dtJHG8YuNAOybAClb_uQuUq3LFkkMZHN
wUcjc7XRjyB28XXgX85pNErpPU5XvRHURYwBEp6PcgBfBxGPny1QymTVhhZOvWy5NKO_qGlZosrIAINdC
NC8swPrw1f6ATvcuKtTvdAKJUgLLbRr-T8S0q-HTQJY_r97fWUAUkn_0Jn8D8nR2QRDGTg9bw9WApnf0Rb
nrVMjtlpQy9sm32Ynrd5GkjOUA-6rUa3ZJcpPsh3G0xJcjemdLEG4uMwMyMjRhnrwQGfjge5-bAMIXB_dbSmx
TGN8u01O-RjUSJIFC4knT48aTQ3nw_WoMP-G-Oaw9e8InfOBMH-s4ozlwZYI2hVaMz8FG0pmSyqvoSuW7
Bbl46V8m_c7M4C84RSIG2BhZL2OyxwPudnwfWKP4hNP4J6ua3VmVtkS49mxlGGkdJgT-TiBaPVqfZSHj6fVi
ql9kwKT_G_PsxRm-CdntX2S7yCFb9VAQ",

"encodedCpiSignedData":

"eyJjYnNkU2VyaWFsTnVtYmVyljoiMTIwMzAwMDA4MDE5QzIOMDA3NSIsImZjY0lkjoiMkFHMzJFRzZcwMT
BBIiwiaW5zdGFsbGF0aW9uUGFyYW0iOnsiYW50ZW5uYUUF6aW11dGgiOjAsImFudGVubmFCZWFTd2lkdG
giOjkwLCJhbnRlbn5hRG93bnRpbHQiOjAsImFudGVubmFHYWluljoxOSwiYW50ZW5uYU1vZGVsljoiRXh0Z
XJuYWwWLCJoZWlnaHQiOjEuOCwiaGVpZ2h0VHlwZSI6IkFNU0wiLCJob3Jpem9udGFsQWNjdXJhY3kiOjMs
ImluZG9vckRlcGxveW1lbnQiOmZhbnHNILCJsYXRpdHVkZSI6NDcuNTI3NjA1LCJsb25naXR1ZGUiOi05Ny42
MjcwOTYsInZlcnRpY2FsQWNjdXJhY3kiOjN9LCJwcm9mZXNzaW9uYWxJbnN0YWxsZXJEYXRhljlp7ImNwa
UlkljoiIiwiaW50ZW5uYU1vZGVsljoiRXh0Zl9kbGkiOjEwMzAwMDA4MDE5QzIOMDA3NSIsImZjY0lkjoiMkFHMzJFRzZcwMT
DBAln19",

"protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"

},

"fccId": "2AG32EG7010A",

"groupingParam": [

{

"groupId": "Baicells_01",

"groupType": "INTERFERENCE_COORDINATION"

}

],

"measCapability": [],

"userId": "Baicells_01"

}

]

}

2020-06-10T05:23:52.559Z - INFO - Registration message contains cpiSignatureData

2020-06-10T05:23:52.559Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}

2020-06-10T05:23:52.559Z - INFO - encodedCpiSignedData contents = {

"installationParam": {

"antennaAzimuth": 0,

"heightType": "AMSL",

"antennaModel": "External",

"longitude": -97.627096,

"height": 1.8,

```
"indoorDeployment": false,
"latitude": 47.527605,
"horizontalAccuracy": 3,
"antennaDowntilt": 0,
"antennaBeamwidth": 90,
"antennaGain": 19,
"verticalAccuracy": 3
},
"fcclId": "2AG32EG7010A",
"professionalInstallerData": {
  "cpiName": "",
  "installCertificationTime": "2020-04-23T00:00:00Z",
  "cpilId": ""
},
"cbbsdSerialNumber": "120300008019C9P0075"
}
2020-06-10T05:23:52.809Z - INFO - verified signature on cpiSignatureData
2020-06-10T05:23:52.809Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T05:23:52.809Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 200
      }
    }
  ]
}
}
2020-06-10T05:23:54.466Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T05:23:54.466Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T05:24:07.278Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T05:24:07.589Z - INFO - The final result of the test : WINNF.FT.C.REG.10 is - passed
```



```
"indoorDeployment": false,
"latitude": 47.527605,
"horizontalAccuracy": 3,
"antennaDowntilt": 0,
"antennaBeamwidth": 90,
"antennaGain": 19,
"verticalAccuracy": 3
},
"fcclId": "2AG32EG7010A",
"professionalInstallerData": {
  "cpiName": "",
  "installCertificationTime": "2020-04-23T00:00:00Z",
  "cpilId": ""
},
"cbbsdSerialNumber": "120300008019C9P0075"
}
2020-06-10T05:27:31.266Z - INFO - verified signature on cpiSignatureData
2020-06-10T05:27:31.266Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T05:27:31.266Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 103
      }
    }
  ]
}
}
2020-06-10T05:27:32.548Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T05:27:32.548Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T05:27:37.845Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T05:27:38.266Z - INFO - The final result of the test : WINNF.FT.C.REG.12 is - passed
```



```
"indoorDeployment": false,
"latitude": 47.527605,
"horizontalAccuracy": 3,
"antennaDowntilt": 0,
"antennaBeamwidth": 90,
"antennaGain": 19,
"verticalAccuracy": 3
},
"fcclId": "2AG32EG7010A",
"professionalInstallerData": {
  "cpiName": "",
  "installCertificationTime": "2020-04-23T00:00:00Z",
  "cpilId": ""
},
"cbbsdSerialNumber": "120300008019C9P0075"
}
2020-06-10T05:30:45.713Z - INFO - verified signature on cpiSignatureData
2020-06-10T05:30:45.713Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T05:30:45.713Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "response": {
        "responseCode": 101
      }
    }
  ]
}
}
2020-06-10T05:30:47.651Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T05:30:47.651Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T05:30:52.993Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T05:30:53.384Z - INFO - The final result of the test : WINNF.FT.C.REG.14 is - passed
```



```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fcclId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpilId": ""
    },
    "cbbsdSerialNumber": "120300008019C9P0075"
}
2020-06-10T05:33:20.092Z - INFO - verified signature on cpiSignatureData
2020-06-10T05:33:20.108Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T05:33:20.108Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "response": {
                "responseCode": 100
            }
        }
    ]
}
2020-06-10T05:33:21.186Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T05:33:21.186Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T05:33:27.295Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T05:33:27.592Z - INFO - The final result of the test : WINNF.FT.C.REG.16 is - passed

```



```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fcclId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpilId": ""
    },
    "cbbsdSerialNumber": "120300008019C9P0075"
}
2020-06-10T05:36:29.137Z - INFO - verified signature on cpiSignatureData
2020-06-10T05:36:29.137Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T05:36:29.137Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "response": {
                "responseCode": 201
            }
        }
    ]
}
}
2020-06-10T05:36:30.700Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T05:36:30.700Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T05:36:39.776Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T05:36:40.089Z - INFO - The final result of the test : WINNF.FT.C.REG.18 is – passed

```



```

    "antennaModel": "External",
    "longitude": -97.627096,
    "height": 1.8,
    "indoorDeployment": false,
    "latitude": 47.527605,
    "horizontalAccuracy": 3,
    "antennaDowntilt": 0,
    "antennaBeamwidth": 90,
    "antennaGain": 19,
    "verticalAccuracy": 3
  },
  "fcclId": "2AG32EG7010A",
  "professionalInstallerData": {
    "cpiName": "",
    "installCertificationTime": "2020-04-23T00:00:00Z",
    "cpilId": ""
  },
  "cbSdSerialNumber": "120300008019C9P0075"
}
2020-06-10T06:14:47.259Z - INFO - verified signature on cpiSignatureData
2020-06-10T06:14:47.273Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T06:14:47.273Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbSdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T06:14:53.836Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbSdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T06:14:53.851Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbSdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 400
      }
    }
  ]
}
2020-06-10T06:14:55.321Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T06:14:55.321Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :

```

2020-06-10T06:15:00.743Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n
2020-06-10T06:15:01.085Z - INFO - The final result of the test : WINNF.FT.C.GRA.1 is – passed


```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fcclId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpilId": ""
    },
    "cbstdSerialNumber": "120300008019C9P0075"
}
2020-06-10T06:17:50.821Z - INFO - verified signature on cpiSignatureData
2020-06-10T06:17:50.821Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T06:17:50.835Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T06:18:01.680Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "operationParam": {
                "maxEirp": 33,
                "operationFrequencyRange": {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            }
        }
    ]
}
2020-06-10T06:18:01.680Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 401
            }
        }
    ]
}
2020-06-10T06:18:03.539Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T06:18:03.539Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T06:18:06.460Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T06:18:06.757Z - INFO - The final result of the test : WINNF.FT.C.GRA.2 is – passed

```



```

    "antennaModel": "External",
    "longitude": -97.627096,
    "height": 1.8,
    "indoorDeployment": false,
    "latitude": 47.527605,
    "horizontalAccuracy": 3,
    "antennaDowntilt": 0,
    "antennaBeamwidth": 90,
    "antennaGain": 19,
    "verticalAccuracy": 3
  },
  "fcclId": "2AG32EG7010A",
  "professionalInstallerData": {
    "cpiName": "",
    "installCertificationTime": "2020-04-23T00:00:00Z",
    "cpilId": ""
  },
  "cbdsId": "120300008019C9P0075"
}
2020-06-10T06:21:59.398Z - INFO - verified signature on cpiSignatureData
2020-06-10T06:21:59.398Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T06:21:59.398Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbdsId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T06:22:05.960Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbdsId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "inquiredSpectrum": [
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      ]
    }
  ]
}
2020-06-10T06:22:05.960Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ]
    },
    "cbdsId": "2AG32EG7010AMock-SAS120300008019C9P0075",

```

```

        "response": {
            "responseCode": 0
        }
    ]
}
2020-06-10T06:22:10.506Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "operationParam": {
                "maxEirp": 33,
                "operationFrequencyRange": {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            }
        }
    ]
}
2020-06-10T06:22:10.523Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "channelType": "GAA",
            "grantExpireTime": "2020-06-17T06:22:10Z",
            "grantId": "421862282",
            "heartbeatInterval": 60,
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T06:22:17.115Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "421862282",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2020-06-10T06:22:17.131Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "421862282",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2020-06-10T06:25:37Z"
        }
    ]
}
2020-06-10T06:23:17.750Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [

```

```
{
  "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
  "grantId": "421862282",
  "grantRenew": false,
  "operationState": "AUTHORIZED"
}
]
```

2020-06-10T06:23:17.750Z - INFO - Time interval between two heartbeat request messages is: 60.635, limit is: 65.0

2020-06-10T06:23:17.750Z - INFO - engine sent successfully, the response to CBRS : {

```
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:26:37Z"
    }
  ]
}
```

2020-06-10T06:24:18.390Z - INFO - heartbeat request from CBRS : {

```
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
```

2020-06-10T06:24:18.390Z - INFO - Time interval between two heartbeat request messages is: 60.639, limit is: 65.0

2020-06-10T06:24:18.404Z - INFO - engine sent successfully, the response to CBRS : {

```
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:27:38Z"
    }
  ]
}
```

2020-06-10T06:25:18.947Z - INFO - heartbeat request from CBRS : {

```
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
```

2020-06-10T06:25:18.947Z - INFO - Time interval between two heartbeat request messages is: 60.557, limit is: 65.0

```

2020-06-10T06:25:18.961Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:28:38Z"
    }
  ]
}
2020-06-10T06:26:19.513Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2020-06-10T06:26:19.513Z - INFO - Time interval between two heartbeat request messages is: 60.566, limit
is: 65.0
2020-06-10T06:26:19.513Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:29:39Z"
    }
  ]
}
2020-06-10T06:27:20.026Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2020-06-10T06:27:20.026Z - INFO - Time interval between two heartbeat request messages is: 60.513, limit
is: 65.0
2020-06-10T06:27:20.042Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "421862282",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:30:40Z"
    }
  ]
}

```

}
2020-06-10T06:27:21.651Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T06:27:21.651Z - INFO - the question is : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? please choose one of the answers :
2020-06-10T06:27:26.713Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state (first successful HBT response)? , the user choose n
2020-06-10T06:27:26.713Z - INFO - the question is : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? please choose one of the answers :
2020-06-10T06:27:27.997Z - INFO - for the question : Did CBSD1 transmit only within the frequency range specified in its grantRequest message? , the user choose y
2020-06-10T06:27:28.414Z - INFO - The final result of the test : WINNF.FT.C.HBT.1 is - passed


```

    "indoorDeployment": false,
    "latitude": 47.527605,
    "horizontalAccuracy": 3,
    "antennaDowntilt": 0,
    "antennaBeamwidth": 90,
    "antennaGain": 19,
    "verticalAccuracy": 3
  },
  "fcclId": "2AG32EG7010A",
  "professionalInstallerData": {
    "cpiName": "",
    "installCertificationTime": "2020-04-23T00:00:00Z",
    "cpilId": ""
  },
  "cbstdSerialNumber": "120300008019C9P0075"
}
2020-06-10T06:43:01.785Z - INFO - verified signature on cpiSignatureData
2020-06-10T06:43:01.785Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T06:43:01.785Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T06:43:08.362Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "inquiredSpectrum": [
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      ]
    }
  ]
}
2020-06-10T06:43:08.362Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

    }
  ]
}
2020-06-10T06:43:16.910Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
}
2020-06-10T06:43:16.924Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T06:43:16Z",
      "grantId": "659343886",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2020-06-10T06:43:23.831Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "659343886",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
}
2020-06-10T06:43:23.831Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "659343886",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:46:43Z"
    }
  ]
}
}
2020-06-10T06:44:24.594Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "659343886",

```

```

    "grantRenew": false,
    "operationState": "AUTHORIZED"
  }
]
}
2020-06-10T06:44:24.594Z - INFO - Time interval between two heartbeat request messages is: 60.763, limit
is: 65.0
2020-06-10T06:44:24.594Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "659343886",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:47:44Z"
    }
  ]
}
}
2020-06-10T06:45:25.157Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "659343886",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2020-06-10T06:45:25.157Z - INFO - Time interval between two heartbeat request messages is: 60.563, limit
is: 65.0
2020-06-10T06:45:25.157Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "659343886",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:48:45Z"
    }
  ]
}
}
}
2020-06-10T06:46:25.871Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "659343886",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
}
2020-06-10T06:46:25.871Z - INFO - Time interval between two heartbeat request messages is: 60.714, limit
is: 65.0
2020-06-10T06:46:25.871Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {

```

```
"cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",  
"grantId": "659343886",  
"response": {  
  "responseCode": 105  
},  
"transmitExpireTime": "2020-06-10T06:46:25Z"
```

```
}
```

```
]
```

```
}
```

2020-06-10T06:46:27.746Z - INFO - arrived to nstep starting question answer session with the technician

2020-06-10T06:46:27.746Z - 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 :

2020-06-10T06:47:24.150Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 105? , the user choose y

2020-06-10T06:47:24.525Z - INFO - The final result of the test : WINNF.FT.C.HBT.3 is - passed


```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fcclId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpilId": ""
    },
    "cbstdSerialNumber": "120300008019C9P0075"
}
2020-06-10T06:51:25.213Z - INFO - verified signature on cpiSignatureData
2020-06-10T06:51:25.230Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T06:51:25.230Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T06:51:29.823Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            ]
        }
    ]
}
2020-06-10T06:51:29.823Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3635000000,
                        "lowFrequency": 3615000000
                    },
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}

```

```

    }
  ]
}
2020-06-10T06:51:36.385Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T06:51:36.385Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T06:51:36Z",
      "grantId": "22779309",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T06:51:42.994Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "22779309",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2020-06-10T06:51:42.994Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "22779309",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:55:02Z"
    }
  ]
}
2020-06-10T06:52:44.144Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "22779309",

```

```

    "grantRenew": false,
    "operationState": "AUTHORIZED"
  }
]
}
2020-06-10T06:52:44.144Z - INFO - Time interval between two heartbeat request messages is: 61.15, limit is:
65.0
2020-06-10T06:52:44.144Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "22779309",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:56:04Z"
    }
  ]
}
}
2020-06-10T06:53:44.868Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "22779309",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2020-06-10T06:53:44.868Z - INFO - Time interval between two heartbeat request messages is: 60.723, limit
is: 65.0
2020-06-10T06:53:44.868Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "22779309",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T06:57:04Z"
    }
  ]
}
}
}
2020-06-10T06:54:45.427Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "22779309",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
}
2020-06-10T06:54:45.427Z - INFO - Time interval between two heartbeat request messages is: 60.56, limit is:
65.0
2020-06-10T06:54:45.427Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {

```

```

        "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
        "grantId": "22779309",
        "response": {
            "responseCode": 0
        },
        "transmitExpireTime": "2020-06-10T06:58:05Z"
    }
}
2020-06-10T06:55:45.941Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "22779309",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2020-06-10T06:55:45.941Z - INFO - Time interval between two heartbeat request messages is: 60.514, limit
is: 65.0
2020-06-10T06:55:45.941Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "22779309",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2020-06-10T06:59:05Z"
        }
    ]
}
2020-06-10T06:56:46.502Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "22779309",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
2020-06-10T06:56:46.502Z - INFO - Time interval between two heartbeat request messages is: 60.56, limit is:
65.0
2020-06-10T06:56:46.502Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "22779309",
            "response": {
                "responseCode": 500
            },
            "transmitExpireTime": "2020-06-10T06:56:46Z"
        }
    ]
}
2020-06-10T06:56:47.611Z - INFO - arrived to nstep starting question answer session with the technician

```

2020-06-10T06:56:47.611Z - 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 :
2020-06-10T06:57:08.516Z - INFO - for the question : Did the CBSD1 stop RF transmission within 60 seconds of receiving Heartbeat response with responseCode = 500? , the user choose y
2020-06-10T06:57:08.750Z - INFO - The final result of the test : WINNF.FT.C.HBT.4 is - passed


```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fcclId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpilId": ""
    },
    "cbstdSerialNumber": "120300008019C9P0075"
}
2020-06-10T07:07:43.516Z - INFO - verified signature on cpiSignatureData
2020-06-10T07:07:43.516Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T07:07:43.516Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T07:07:50.125Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            ]
        }
    ]
}
2020-06-10T07:07:50.141Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3635000000,
                        "lowFrequency": 3615000000
                    },
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}

```

```

    }
  ]
}
2020-06-10T07:07:56.734Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T07:07:56.734Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T07:07:56Z",
      "grantId": "757745850",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T07:08:03.657Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "757745850",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2020-06-10T07:08:03.657Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "757745850",
      "response": {
        "responseCode": 501
      },
      "transmitExpireTime": "2020-06-10T07:08:03Z"
    }
  ]
}
2020-06-10T07:13:48.792Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "757745850"
    }
  ]
}

```

```
    }  
  ]  
}  
2020-06-10T07:13:48.806Z - INFO - engine sent successfully, the response to CBRS : {  
  "relinquishmentResponse": [  
    {  
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",  
      "grantId": "757745850",  
      "response": {  
        "responseCode": 0  
      }  
    }  
  ]  
}  
2020-06-10T07:13:50.135Z - INFO - arrived to nstep starting question answer session with the technician  
2020-06-10T07:13:50.135Z - INFO - the question is : Did the CBSD transmit at any time during the test?  
please choose one of the answers :  
2020-06-10T07:13:53.572Z - INFO - for the question : Did the CBSD transmit at any time during the test? , the  
user choose n  
2020-06-10T07:13:53.869Z - INFO - The final result of the test : WINNF.FT.C.HBT.5 is - passed
```



```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fcclId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpilId": ""
    },
    "cbstdSerialNumber": "120300008019C9P0075"
}
2020-06-10T07:17:44.052Z - INFO - verified signature on cpiSignatureData
2020-06-10T07:17:44.052Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T07:17:44.066Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T07:17:50.644Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            ]
        }
    ]
}
2020-06-10T07:17:50.644Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3635000000,
                        "lowFrequency": 3615000000
                    },
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}

```

```

    }
  ]
}
2020-06-10T07:17:55.207Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
}
2020-06-10T07:17:55.207Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T07:17:55Z",
      "grantId": "471037943",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2020-06-10T07:18:02.078Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
}
2020-06-10T07:18:02.078Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T07:21:22Z"
    }
  ]
}
}
2020-06-10T07:19:02.686Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",

```

```

    "grantRenew": false,
    "operationState": "AUTHORIZED"
  }
]
}
2020-06-10T07:19:02.686Z - INFO - Time interval between two heartbeat request messages is: 60.607, limit
is: 65.0
2020-06-10T07:19:02.686Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T07:22:22Z"
    }
  ]
}
}
2020-06-10T07:20:03.513Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2020-06-10T07:20:03.513Z - INFO - Time interval between two heartbeat request messages is: 60.828, limit
is: 65.0
2020-06-10T07:20:03.529Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T07:23:23Z"
    }
  ]
}
}
}
2020-06-10T07:21:04.118Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
}
2020-06-10T07:21:04.118Z - INFO - Time interval between two heartbeat request messages is: 60.604, limit
is: 65.0
2020-06-10T07:21:04.118Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {

```

```

    "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
    "grantId": "471037943",
    "response": {
      "responseCode": 501
    },
    "transmitExpireTime": "2020-06-10T07:21:04Z"
  }
]
}
2020-06-10T07:22:22.927Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943"
    }
  ]
}
2020-06-10T07:22:22.927Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "471037943",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T07:22:23.990Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T07:22:23.990Z - 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 :
2020-06-10T07:22:29.326Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 501? , the user choose y
2020-06-10T07:22:29.713Z - INFO - The final result of the test : WINNF.FT.C.HBT.6 is - passed

```

3.6 WINNF.FT.C.HBT.7

2020-06-10T07:33:55.512Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2020-06-10T07:33:55.512Z - INFO - the selected test from the user : WINNF.FT.C.HBT.7 is starting now

2020-06-10T07:34:14.698Z - INFO - registration request from CBRS : {

"registrationRequest": [

{

"airInterface": {

"radioTechnology": "E_UTRA"

},

"callSign": "baicells",

"cbsdCategory": "B",

"cbsdSerialNumber": "120300008019C9P0075",

"cpiSignatureData": {

"digitalSignature":

"REUgFs9CGuz0xV90_MwPT0yfN87NMh04sja_CDuxYLdPhSLZ65ER6kP3oKvmNQMVisAOuaBDxQJGFw
akTaZOzQ7ktUY917HAmGiLsJLECwHubFJP_yQ9-9066Ow_x3WZ6GmnegpfK-C5oh5WtZ6sbjCT5RXf1Azt
2y6xZScQ1E-4XB5PHTpilhWWGRWy096731aLEDsTmXyXRQ7dtJHG8YuNAOybAClb_uQuUq3LFkkMZHN
wUcjc7XRjyB28XXgX85pNErpPU5XvRHURYwBEp6PcgBfBxGPny1QymTVhhZOvWy5NKO_qGlZosrIAINdC
NC8swPrw1f6ATvcuKtTvdAKJUgLLbRr-T8S0q-HTQJY_r97fWUAUkn_0Jn8D8nR2QRDGTg9bw9WApnf0Rb
nrVMjtLpQy9sm32Ynrds5GkjOUA-6rUa3ZJcpPsh3G0xJcjemdLEG4uMwMyMjRhnrwQGfjge5-bAMIXB_dbSmx
TGN8u01O-RjUSJIFC4knT48aTQ3nw_WoMP-G-Oaw9e8InfOBMH-s4ozlwZYI2hVaMz8FG0pmSyqvoSuW7
Bbl46V8m_c7M4C84RSIG2BhZL2OyxwPudnwfWKP4hNP4J6ua3VmVtkS49mxlGGkdJgT-TiBaPVqfZSHj6fVi
ql9kwKT_G_PsxRm-CdntX2S7yCFb9VAQ",

"encodedCpiSignedData":

"eyJjYnNkU2VyaWFsTnVtYmVyljoiMTIwMzAwMDA4MDE5QzIOMDA3NSIsImZjY0lkjoiMkFHMzJFRzcwMT
BBIiwiaW5zdGFsbGF0aW9uUGFyYW0iOnsiYW50ZW5uYUUF6aW11dGgiOjAsImFudGVubmFCZWFTd2lkdG
giOjkwLCJhbnRlbn5hRG93bnRpbHQiOjAsImFudGVubmFHYWwuljoxOSwiYW50ZW5uYU1vZGVsljoiRXh0Z
XJuYWwWLCJoZWlnaHQiOjEuOCwiaGVpZ2h0VHlwZSI6IkFNU0wiLCJob3Jpem9udGFsQWNjdXJhY3kiOjMs
ImluZG9vckRlcGxveW1lbnQiOmZhbnHNILCJsYXRpdHVkZSI6NDcuNTI3NjA1LCJsb25naXR1ZGUiOi05Ny42
MjcwOTYsInZlcnRpbY2FsQWNjdXJhY3kiOjN9LCJwcm9mZXNzaW9uYWwXJbnN0YWxsZXJlYXhRhljlp7ImNwa
UlkljoiIiwiaW50ZW5uYU1vZGVsljoiRXh0Zl9kZS00aW9uVGl0ZSI6IjIwMjAwMDA4MDE5QzIOMDA3NSIsImZjY0lkjoiMkFHMzJFRzcwMT
DBAln19",

"protectedHeader": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"

},

"fccId": "2AG32EG7010A",

"groupingParam": [

{

"groupId": "Baicells_01",

"groupType": "INTERFERENCE_COORDINATION"

}

],

"measCapability": [],

"userId": "Baicells_01"

}

]

}

2020-06-10T07:34:14.730Z - INFO - Registration message contains cpiSignatureData

2020-06-10T07:34:14.730Z - INFO - protectedHeader = {u'alg': u'RS256', u'typ': u'JWT'}

2020-06-10T07:34:14.730Z - INFO - encodedCpiSignedData contents = {

"installationParam": {

"antennaAzimuth": 0,

"heightType": "AMSL",

"antennaModel": "External",

"longitude": -97.627096,

"height": 1.8,

```

    "indoorDeployment": false,
    "latitude": 47.527605,
    "horizontalAccuracy": 3,
    "antennaDowntilt": 0,
    "antennaBeamwidth": 90,
    "antennaGain": 19,
    "verticalAccuracy": 3
  },
  "fcclId": "2AG32EG7010A",
  "professionalInstallerData": {
    "cpiName": "",
    "installCertificationTime": "2020-04-23T00:00:00Z",
    "cpilId": ""
  },
  "cbstdSerialNumber": "120300008019C9P0075"
}
2020-06-10T07:34:14.808Z - INFO - verified signature on cpiSignatureData
2020-06-10T07:34:14.808Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T07:34:14.808Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T07:34:21.417Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "inquiredSpectrum": [
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      ]
    }
  ]
}
2020-06-10T07:34:21.433Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```
    }
  ]
}
2020-06-10T07:34:27.994Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T07:34:27.994Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T07:34:27Z",
      "grantId": "210291928",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T07:34:34.619Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "210291928",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2020-06-10T07:34:34.635Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "210291928",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T07:37:54Z"
    }
  ]
}
2020-06-10T07:35:35.191Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "210291928",
```

```

    "grantRenew": false,
    "operationState": "AUTHORIZED"
  }
]
}
2020-06-10T07:35:35.191Z - INFO - Time interval between two heartbeat request messages is: 60.572, limit
is: 65.0
2020-06-10T07:35:35.191Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "210291928",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T07:38:55Z"
    }
  ]
}
}
2020-06-10T07:36:35.724Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "210291928",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
2020-06-10T07:36:35.724Z - INFO - Time interval between two heartbeat request messages is: 60.533, limit
is: 65.0
2020-06-10T07:36:35.724Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "210291928",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T07:39:55Z"
    }
  ]
}
}
}
2020-06-10T07:37:36.543Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "210291928",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
}
}
2020-06-10T07:37:36.543Z - INFO - Time interval between two heartbeat request messages is: 60.819, limit
is: 65.0
2020-06-10T07:37:36.543Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {

```

```

        "cbid": "2AG32EG7010AMock-SAS120300008019C9P0075",
        "grantId": "210291928",
        "response": {
            "responseCode": 502
        },
        "transmitExpireTime": "2020-06-10T07:37:36Z"
    }
}
2020-06-10T07:38:31.467Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
        {
            "cbid": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "210291928"
        }
    ]
}
2020-06-10T07:38:31.467Z - INFO - engine sent successfully, the response to CBRS : {
    "relinquishmentResponse": [
        {
            "cbid": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "210291928",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T07:38:33.434Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T07:38:33.434Z - 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 :
2020-06-10T07:38:38.420Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 502? , the user choose y
2020-06-10T07:38:38.842Z - INFO - The final result of the test : WINNF.FT.C.HBT.7 is - passed

```



```

        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fccId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpId": ""
    },
    "cbsdSerialNumber": "120300008019C9P0075"
}
2020-06-10T07:54:35.667Z - INFO - verified signature on cpiSignatureData
2020-06-10T07:54:35.667Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T07:54:35.667Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T07:54:40.371Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            ]
        }
    ]
}
2020-06-10T07:54:40.371Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3635000000,
                        "lowFrequency": 3615000000
                    },
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}

```

```

    ]
  }
  2020-06-10T07:54:45.121Z - INFO - grant request from CBRS : {
    "grantRequest": [
      {
        "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
        "operationParam": {
          "maxEirp": 33,
          "operationFrequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          }
        }
      }
    ]
  }
  2020-06-10T07:54:45.137Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
      {
        "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
        "channelType": "GAA",
        "grantExpireTime": "2020-06-17T07:54:45Z",
        "grantId": "513678043",
        "heartbeatInterval": 60,
        "response": {
          "responseCode": 0
        }
      }
    ]
  }
  2020-06-10T07:54:53.760Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
      {
        "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
        "grantId": "513678043",
        "grantRenew": false,
        "operationState": "GRANTED"
      }
    ]
  }
  2020-06-10T07:58:13.780Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
      {
        "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
        "grantId": "513678043",
        "response": {
          "responseCode": 501
        },
        "transmitExpireTime": "2020-06-10T07:58:13Z"
      }
    ]
  }
  2020-06-10T07:58:15.749Z - INFO - arrived to nstep starting question answer session with the technician
  2020-06-10T07:58:15.749Z - INFO - the question is : Were there RF transmissions from the CBSD during the
  test? please choose one of the answers :
  2020-06-10T07:58:21.405Z - INFO - for the question : Were there RF transmissions from the CBSD during
  the test? , the user choose n
  2020-06-10T07:58:21.780Z - INFO - The final result of the test : WINNF.FT.C.HBT.9 is - passed

```



```

        "indoorDeployment": false,
        "latitude": 47.527605,
        "horizontalAccuracy": 3,
        "antennaDowntilt": 0,
        "antennaBeamwidth": 90,
        "antennaGain": 19,
        "verticalAccuracy": 3
    },
    "fcclId": "2AG32EG7010A",
    "professionalInstallerData": {
        "cpiName": "",
        "installCertificationTime": "2020-04-23T00:00:00Z",
        "cpilId": ""
    },
    "cbstdSerialNumber": "120300008019C9P0075"
}
2020-06-10T08:01:14.632Z - INFO - verified signature on cpiSignatureData
2020-06-10T08:01:14.648Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T08:01:14.648Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}
2020-06-10T08:01:21.242Z - INFO - spectrumInquiry request from CBRS : {
    "spectrumInquiryRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "inquiredSpectrum": [
                {
                    "highFrequency": 3635000000,
                    "lowFrequency": 3615000000
                }
            ]
        }
    ]
}
2020-06-10T08:01:21.242Z - INFO - engine sent successfully, the response to CBRS : {
    "spectrumInquiryResponse": [
        {
            "availableChannel": [
                {
                    "channelType": "GAA",
                    "frequencyRange": {
                        "highFrequency": 3635000000,
                        "lowFrequency": 3615000000
                    },
                    "ruleApplied": "FCC_PART_96"
                }
            ],
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "response": {
                "responseCode": 0
            }
        }
    ]
}

```

```

    }
  ]
}
2020-06-10T08:01:27.803Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T08:01:27.803Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T08:01:27Z",
      "grantId": "853187475",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T08:01:32.398Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "853187475",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2020-06-10T08:01:32.414Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "853187475",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T08:04:52Z"
    }
  ]
}
2020-06-10T08:02:32.970Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "853187475",

```

```

        "grantRenew": false,
        "operationState": "AUTHORIZED"
    }
]
}
2020-06-10T08:02:32.970Z - INFO - Time interval between two heartbeat request messages is: 60.573, limit
is: 65.0
2020-06-10T08:02:32.970Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "853187475",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2020-06-10T08:05:52Z"
        }
    ]
}
}
2020-06-10T08:03:33.608Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "853187475",
            "grantRenew": false,
            "operationState": "AUTHORIZED"
        }
    ]
}
}
2020-06-10T08:03:33.608Z - INFO - Time interval between two heartbeat request messages is: 60.638, limit
is: 65.0
2020-06-10T08:03:33.608Z - INFO - LAST HBT RESPONSE THAT SET TRANSMIT_EXPIRE_TIME WAS AT:
2020-06-10 08:02:32.971000
2020-06-10T08:06:53.625Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "853187475",
            "response": {
                "responseCode": 501
            },
            "transmitExpireTime": "2020-06-10T08:06:53Z"
        }
    ]
}
}
}
2020-06-10T08:06:55.437Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T08:06:55.437Z - INFO - the question is : Did the CBSD stop RF transmissions within
(transmitExpireTime + 60seconds) of last valid heartbeat response? please choose one of the answers :
2020-06-10T08:07:08.280Z - INFO - for the question : Did the CBSD stop RF transmissions within
(transmitExpireTime + 60seconds) of last valid heartbeat response? , the user choose y
2020-06-10T08:07:08.546Z - INFO - The final result of the test : WINNF.FT.C.HBT.10 is – passed

```



```

    "antennaModel": "External",
    "longitude": -97.627096,
    "height": 1.8,
    "indoorDeployment": false,
    "latitude": 47.527605,
    "horizontalAccuracy": 3,
    "antennaDowntilt": 0,
    "antennaBeamwidth": 90,
    "antennaGain": 19,
    "verticalAccuracy": 3
  },
  "fcclId": "2AG32EG7010A",
  "professionalInstallerData": {
    "cpiName": "",
    "installCertificationTime": "2020-04-23T00:00:00Z",
    "cpilId": ""
  },
  "cbSdSerialNumber": "120300008019C9P0075"
}
2020-06-10T08:10:05.892Z - INFO - verified signature on cpiSignatureData
2020-06-10T08:10:05.892Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T08:10:05.908Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbSdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T08:10:12.595Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbSdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T08:10:12.595Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbSdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T08:10:12Z",
      "grantId": "696797416",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```

}
2020-06-10T08:10:23.188Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "696797416",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2020-06-10T08:10:23.188Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "696797416",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T08:13:43Z"
    }
  ]
}
2020-06-10T08:11:24.183Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "696797416",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2020-06-10T08:11:24.183Z - INFO - Time interval between two heartbeat request messages is: 60.994, limit
is: 65.0
2020-06-10T08:11:24.198Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "696797416",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T08:14:44Z"
    }
  ]
}
2020-06-10T08:12:24.743Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "696797416"
    }
  ]
}
2020-06-10T08:12:24.759Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {

```

```
"cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",  
"grantId": "696797416",  
"response": {  
  "responseCode": 0  
}
```

```
}
```

```
]
```

```
}
```

2020-06-10T08:12:26.322Z - INFO - arrived to nstep starting question answer session with the technician

2020-06-10T08:12:26.322Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers :

2020-06-10T08:13:11.364Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y

2020-06-10T08:13:11.614Z - INFO - The final result of the test : WINNF.FT.C.RLQ.1 is - passed


```

    "antennaModel": "External",
    "longitude": -97.627096,
    "height": 1.8,
    "indoorDeployment": false,
    "latitude": 47.527605,
    "horizontalAccuracy": 3,
    "antennaDowntilt": 0,
    "antennaBeamwidth": 90,
    "antennaGain": 19,
    "verticalAccuracy": 3
  },
  "fcclId": "2AG32EG7010A",
  "professionalInstallerData": {
    "cpiName": "",
    "installCertificationTime": "2020-04-23T00:00:00Z",
    "cpilId": ""
  },
  "cbdsId": "120300008019C9P0075"
}
2020-06-10T08:15:16.740Z - INFO - verified signature on cpiSignatureData
2020-06-10T08:15:16.740Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T08:15:16.740Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbdsId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T08:15:23.598Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbdsId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T08:15:23.615Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbdsId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "channelType": "GAA",
      "grantExpireTime": "2020-06-17T08:15:23Z",
      "grantId": "371100248",
      "heartbeatInterval": 60,
      "response": {
        "responseCode": 0
      }
    }
  ]
}

```

```
}
2020-06-10T08:15:30.240Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "371100248",
      "grantRenew": false,
      "operationState": "GRANTED"
    }
  ]
}
2020-06-10T08:15:30.240Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "371100248",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T08:18:50Z"
    }
  ]
}
2020-06-10T08:16:30.828Z - INFO - heartbeat request from CBRS : {
  "heartbeatRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "371100248",
      "grantRenew": false,
      "operationState": "AUTHORIZED"
    }
  ]
}
2020-06-10T08:16:30.828Z - INFO - Time interval between two heartbeat request messages is: 60.588, limit is: 65.0
2020-06-10T08:16:30.828Z - INFO - engine sent successfully, the response to CBRS : {
  "heartbeatResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "371100248",
      "response": {
        "responseCode": 0
      },
      "transmitExpireTime": "2020-06-10T08:19:50Z"
    }
  ]
}
2020-06-10T08:17:31.388Z - INFO - relinquishment request from CBRS : {
  "relinquishmentRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "grantId": "371100248"
    }
  ]
}
2020-06-10T08:17:31.388Z - INFO - engine sent successfully, the response to CBRS : {
  "relinquishmentResponse": [
    {
```

```

    "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
    "grantId": "371100248",
    "response": {
      "responseCode": 0
    }
  ]
}
2020-06-10T08:17:31.867Z - INFO - deregistration request from CBRS : {
  "deregistrationRequest": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075"
    }
  ]
}
2020-06-10T08:17:31.874Z - INFO - engine sent successfully, the response to CBRS : {
  "deregistrationResponse": [
    {
      "cbstdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T08:17:33.661Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T08:17:33.661Z - 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 :
2020-06-10T08:17:39.772Z - 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
2020-06-10T08:17:39.990Z - INFO - The final result of the test : WINNF.FT.C.DRG.1 is - passed

```



```
"antennaModel": "External",
"longitude": -97.627096,
"height": 1.8,
"indoorDeployment": false,
"latitude": 47.527605,
"horizontalAccuracy": 3,
"antennaDowntilt": 0,
"antennaBeamwidth": 90,
"antennaGain": 19,
"verticalAccuracy": 3
},
"fcclId": "2AG32EG7010A",
"professionalInstallerData": {
  "cpiName": "",
  "installCertificationTime": "2020-04-23T00:00:00Z",
  "cpId": ""
},
"cbSdSerialNumber": "120300008019C9P0075"
}
2020-06-10T03:28:06.661Z - INFO - verified signature on cpiSignatureData
2020-06-10T03:28:06.674Z - INFO - cpiSignatureData data successfully validated against jsonschema
2020-06-10T03:28:06.677Z - INFO - engine sent successfully, the response to CBRS : {
  "registrationResponse": [
    {
      "cbSdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
}
2020-06-10T03:28:07.947Z - INFO - arrived to nstep starting question answer session with the technician
2020-06-10T03:28:07.947Z - INFO - the question is : Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers :
2020-06-10T03:28:10.492Z - INFO - for the question : Were there RF transmissions from the CBSD1 during
the test? , the user choose n
2020-06-10T03:28:10.917Z - INFO - The final result of the test : WINNF.FT.C.SCS.1 is - passed
```

6.2 WINNF.FT.C.SCS.2

2020-06-10T03:36:02.017Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2020-06-10T03:36:02.017Z - INFO - the selected test from the user : WINNF.FT.C.SCS.2 is starting now

6.3 WINNF.FT.C.SCS.3

2020-06-10T03:37:38.276Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2020-06-10T03:37:38.276Z - INFO - the selected test from the user : WINNF.FT.C.SCS.3 is starting now

6.4 WINNF.FT.C.SCS.4

2020-06-10T03:39:04.026Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2020-06-10T03:39:04.042Z - INFO - the selected test from the user : WINNF.FT.C.SCS.4 is starting now

6.5 WINNF.FT.C.SCS.5

2020-06-10T03:40:06.839Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13

2020-06-10T03:40:06.839Z - INFO - the selected test from the user : WINNF.FT.C.SCS.5 is starting now


```

    }
  }
]
}
2020-06-10T03:16:43.250Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "inquiredSpectrum": [
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      ]
    }
  ]
}
2020-06-10T03:16:43.266Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0
2020-06-10T03:16:43.266Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "maxEirp": 31,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T03:16:53.852Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 31,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T03:16:53.852Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",

```

```
        "channelType": "GAA",
        "grantExpireTime": "2020-06-17T03:16:53Z",
        "grantId": "16848399",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2020-06-10T03:17:02.746Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "16848399",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2020-06-10T03:17:02.746Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "16848399",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2020-06-10T03:20:22Z"
        }
    ]
}
```



```

    }
  }
]
}
2020-06-10T03:08:49.914Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "inquiredSpectrum": [
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      ]
    }
  ]
}
2020-06-10T03:08:49.914Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0
2020-06-10T03:08:49.914Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "maxEirp": 32,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T03:08:56.523Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 32,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T03:08:56.523Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",

```

```
        "channelType": "GAA",
        "grantExpireTime": "2020-06-17T03:08:56Z",
        "grantId": "320651474",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2020-06-10T03:09:03.352Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "320651474",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2020-06-10T03:09:03.368Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "320651474",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2020-06-10T03:12:23Z"
        }
    ]
}
```



```

    }
  }
]
}
2020-06-10T02:57:41.693Z - INFO - spectrumInquiry request from CBRS : {
  "spectrumInquiryRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "inquiredSpectrum": [
        {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      ]
    }
  ]
}
2020-06-10T02:57:41.693Z - INFO - The requested spectrum is in the range, SpectrumInquiry response code is 0
2020-06-10T02:57:41.693Z - INFO - engine sent successfully, the response to CBRS : {
  "spectrumInquiryResponse": [
    {
      "availableChannel": [
        {
          "channelType": "GAA",
          "frequencyRange": {
            "highFrequency": 3635000000,
            "lowFrequency": 3615000000
          },
          "maxEirp": 33,
          "ruleApplied": "FCC_PART_96"
        }
      ],
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "response": {
        "responseCode": 0
      }
    }
  ]
}
2020-06-10T02:57:48.256Z - INFO - grant request from CBRS : {
  "grantRequest": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
      "operationParam": {
        "maxEirp": 33,
        "operationFrequencyRange": {
          "highFrequency": 3635000000,
          "lowFrequency": 3615000000
        }
      }
    }
  ]
}
2020-06-10T02:57:48.256Z - INFO - engine sent successfully, the response to CBRS : {
  "grantResponse": [
    {
      "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",

```

```
        "channelType": "GAA",
        "grantExpireTime": "2020-06-17T02:57:48Z",
        "grantId": "648607633",
        "heartbeatInterval": 60,
        "response": {
            "responseCode": 0
        }
    ]
}
2020-06-10T02:57:54.943Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "648607633",
            "grantRenew": false,
            "operationState": "GRANTED"
        }
    ]
}
2020-06-10T02:57:54.943Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdId": "2AG32EG7010AMock-SAS120300008019C9P0075",
            "grantId": "648607633",
            "response": {
                "responseCode": 0
            },
            "transmitExpireTime": "2020-06-10T03:01:14Z"
        }
    ]
}
```