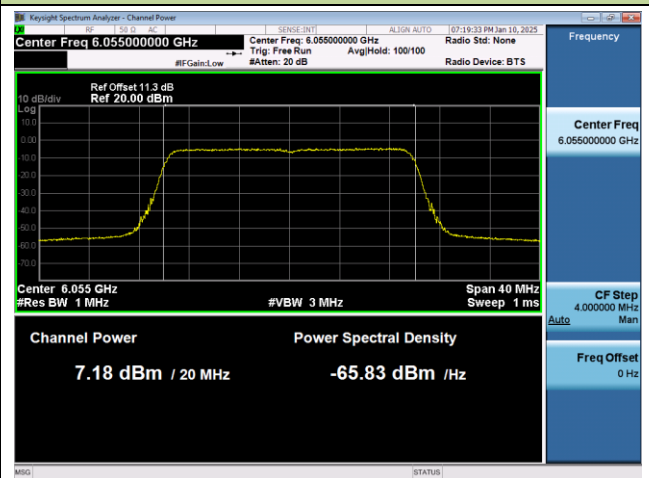
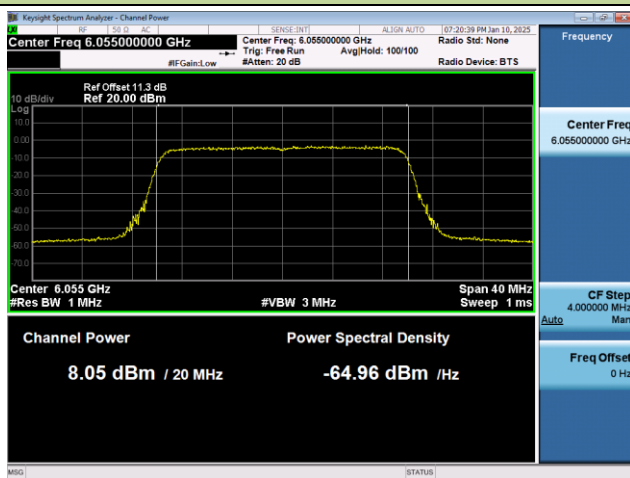


802.11be-EHT20 – Channel 21 (6055MHz) Average Power

Ant 0

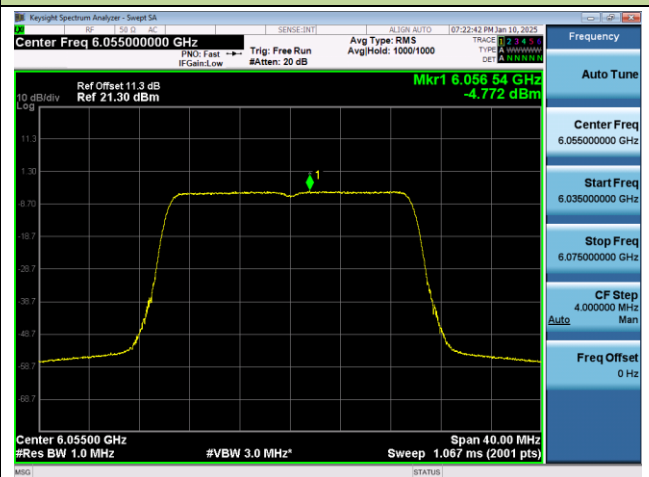
Ant 1



802.11be-EHT20 – Channel 21 (6055MHz) Power Spectral Density

Ant 0

Ant 1



2025-01-10T08:35:51Z

```
{
  "headers": {
    "Host": "testserver.wfatestorg.org",
    "User-Agent": "Go-http-client/1.1",
    "Accept": "application/json",
    "Content-Type": "application/json",
    "Accept-Encoding": "gzip",
    "X-Forwarded-For": "44.238.223.78",
    "X-Forwarded-Host": "testserver.wfatestorg.org",
    "X-Forwarded-Server": "testserver.wfatestorg.org",
    "Content-Length": "807",
    "Connection": "Keep-Alive"
  },
  "body": {
    "availableSpectrumInquiryRequests": [
      {
        "deviceDescriptor": {
          "certificationId": [
            {
              "id": "Q9DAPIN0735",
              "rulesetId": "US_47_CFR_PART_15_SUBPART_E"
            }
          ],
          "serialNumber": "CNRLM51056"
        },
        "inquiredChannels": [
          {
            "globalOperatingClass": 131
          },
          {
            "globalOperatingClass": 132
          },
          {
            "globalOperatingClass": 133
          },
          {
            "globalOperatingClass": 134
          }
        ]
      }
    ]
  }
}
```

```

    ],
    "inquiredFrequencyRange": [
      {
        "highFrequency": 7125,
        "lowFrequency": 5925
      }
    ],
    "location": {
      "elevation": {
        "height": 4,
        "heightType": "AGL",
        "verticalUncertainty": 6
      },
      "ellipse": {
        "center": {
          "latitude": 37.774921,
          "longitude": -122.4194
        },
        "majorAxis": 11,
        "minorAxis": 2,
        "orientation": 84.794651
      },
      "indoorDeployment": 1
    },
    "requestId": "CNRLM51056",
    "vendorExtensions": {
      "extensionId": "Aruba_Info",
      "parameters": {
        "Request_State": "Event",
        "Tenant_ID":
"bd3cca00b1b400932d561eedfb6fb420a16fa47475fb80074d1bd8e48cbf41b9"
      }
    }
  },
  "version": "1.4"
}

```

2025-01-10T08:35:51Z

```
{
  "availableSpectrumInquiryResponses": [
    {
      "response": {
        "responseCode": 0,
        "shortDescription": "SUCCESS"
      },
      "availableFrequencyInfo": [
        {
          "frequencyRange": {
            "highFrequency": 6045,
            "lowFrequency": 6025
          },
          "maxPsd": 14.0
        },
        {
          "frequencyRange": {
            "highFrequency": 6065,
            "lowFrequency": 6045
          },
          "maxPsd": 14.1
        },
        {
          "frequencyRange": {
            "highFrequency": 6085,
            "lowFrequency": 6065
          },
          "maxPsd": 15.0
        },
        {
          "frequencyRange": {
            "highFrequency": 6105,
            "lowFrequency": 6085
          },
          "maxPsd": 13.4
        },
        {
          "frequencyRange": {
```

```
        "highFrequency": 6205,
        "lowFrequency": 6185
    },
    "maxPsd": 9.3
},
{
    "frequencyRange": {
        "highFrequency": 6225,
        "lowFrequency": 6205
    },
    "maxPsd": 20.1
},
{
    "frequencyRange": {
        "highFrequency": 6245,
        "lowFrequency": 6225
    },
    "maxPsd": 21.4
},
{
    "frequencyRange": {
        "highFrequency": 6265,
        "lowFrequency": 6245
    },
    "maxPsd": 21.2
},
{
    "frequencyRange": {
        "highFrequency": 6285,
        "lowFrequency": 6265
    },
    "maxPsd": 14.4
},
{
    "frequencyRange": {
        "highFrequency": 6305,
        "lowFrequency": 6285
    },
    "maxPsd": 10.0
}
```

```
    },
    {
      "frequencyRange": {
        "highFrequency": 6325,
        "lowFrequency": 6305
      },
      "maxPsd": 11.5
    },
    {
      "frequencyRange": {
        "highFrequency": 6345,
        "lowFrequency": 6325
      },
      "maxPsd": 18.1
    },
    {
      "frequencyRange": {
        "highFrequency": 6685,
        "lowFrequency": 6665
      },
      "maxPsd": 16.5
    },
    {
      "frequencyRange": {
        "highFrequency": 6705,
        "lowFrequency": 6685
      },
      "maxPsd": 13.5
    },
    {
      "frequencyRange": {
        "highFrequency": 6725,
        "lowFrequency": 6705
      },
      "maxPsd": 9.3
    },
    {
      "frequencyRange": {
        "highFrequency": 6745,
```

```
        "lowFrequency": 6725
      },
      "maxPsd": 13.0
    }
  ],
  "availableChannelInfo": [
    {
      "channelCfi": [
        17,
        21,
        25,
        29,
        49,
        53,
        57,
        61,
        65,
        69,
        73,
        77,
        145,
        149,
        153,
        157
      ],
      "globalOperatingClass": 131,
      "maxEirp": [
        27.0,
        27.1,
        28.0,
        26.4,
        22.3,
        33.1,
        34.4,
        34.2,
        27.4,
        23.0,
        24.5,
        31.1,
```

```
        29.5,
        26.5,
        22.3,
        26.0
    ]
},
{
    "channelCfi": [
        19,
        27,
        51,
        59,
        67,
        75,
        147,
        155
    ],
    "globalOperatingClass": 132,
    "maxEirp": [
        30.0,
        29.4,
        25.3,
        36.0,
        26.0,
        27.5,
        29.5,
        25.3
    ]
},
{
    "channelCfi": [
        23,
        55,
        71,
        151
    ],
    "globalOperatingClass": 133,
    "maxEirp": [
        32.4,
```

```
        28.3,
        29.0,
        28.3
      ]
    },
    {
      "channelCfi": [],
      "globalOperatingClass": 134,
      "maxEirp": []
    }
  ],
  "requestId": "CNRLM51056",
  "availabilityExpireTime": "2025-01-11T08:35:51Z",
  "rulesetId": "US_47_CFR_PART_15_SUBPART_E"
}
],
"version": "1.4"
}
```

A.4 Unsuccessful Spectrum Access Update

Test Site	WZ-SR5	Test Engineer	Dandy Li
Test Date	2025-01-10		

AFC DUT Compliance Test Report

DUT Information

AFC DUT System	Standard Power AP with Proxy
DUT Vendor Name	Hewlett Packard Enterprise
DUT Product Model	APIN0734

Test Result

FCC Requirements	TestCaseName	Test Result
15.407(k)(8)(i), 15.407(k)(8)(ii), 15.407(k)(9)(i)	CT_AFC_SP_AP_AFCDU34_FrequencyChannel_10631_1 (Unsuccessful spectrum access update)	PASS

Test Measurements

TestCaseName: CT_AFC_SP_AP_AFCDU34_FrequencyChannel_10631_1 (Unsuccessful spectrum access update)
TestResult: PASS
Band: 6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SP_OPERATION	AFC DUT transmit with standard power in the band before the Spectrum Inquiry Response	false	PASS
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	true	PASS
AFC_DUT_SPECTRUM_INQUIRYREQUEST_VALID_1	Valid mandatory registration information	true	PASS
AFC_DUT_CONFORM_SPECTRUM_INQUIRYRESPONSE_1	AFC DUT conforms to the conditions in Spectrum Response (23 dBm/MHz PSD, 36.0 dBm EIRP) on channel 37 bandwidth 20.	true	PASS
AFC_DUT_CONFORM_ADJACENT_FREQUENCIES_EMISSIONS_LIMITS	AFC DUT conforms to not exceed emissions limits in adjacent frequencies	true	PASS
AFC_DUT_SP_OPERATION_NO_REQ	AFC DUT transmit with standard power in the band in no Spectrum Inquiry Request case	false	PASS

Test Mode	Channel No.	Freq. (MHz)	Average Power (dBm)		Duty Cycle (%)	EIRP (dBm)	AFC Response Limit (dBm)
			Ant 0	Ant 1			
802.11be-EHT20	37	6135	8.06	7.62	93.88	15.23	36

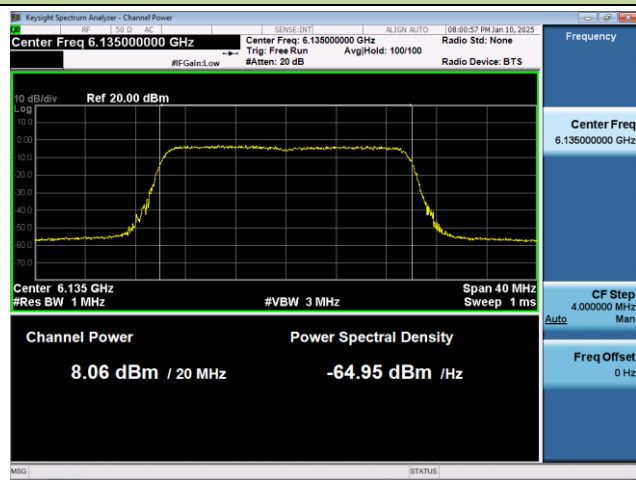
Note: EIRP (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)}\} + \text{Directional Gain for Power (dBi)} + 10 \cdot \log (1/\text{Duty Cycle})$.

Test Mode	Channel No.	Freq. (MHz)	PSD (dBm/MHz)		Duty Cycle (%)	EIRP PSD (dBm/MHz)	AFC Response Limit (dBm/MHz)
			Ant 0	Ant 1			
802.11be-HET20	37	6135	-3.765	-3.873	93.88	6.576	23.000

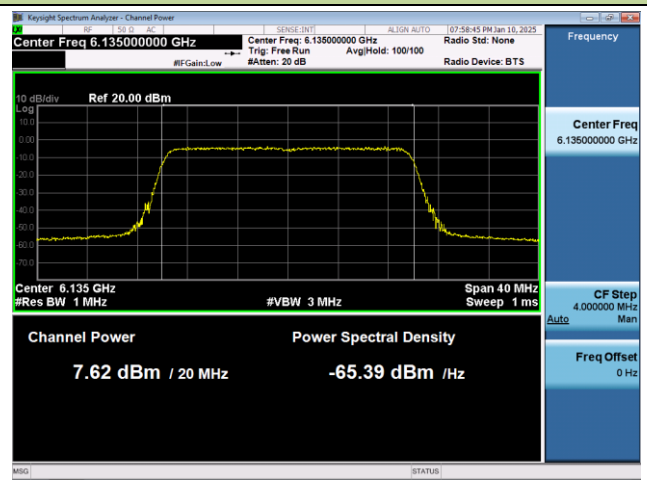
Note: EIRP PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD} / 10)} + 10^{(\text{Ant 1 PSD} / 10)}\} (\text{dBm/MHz}) + 10 \cdot \log (1/\text{Duty Cycle}) + \text{Directional Gain for PSD (dBi)}$.

802.11be-EHT20 – Channel 37 (6135MHz) Average Power

Ant 0

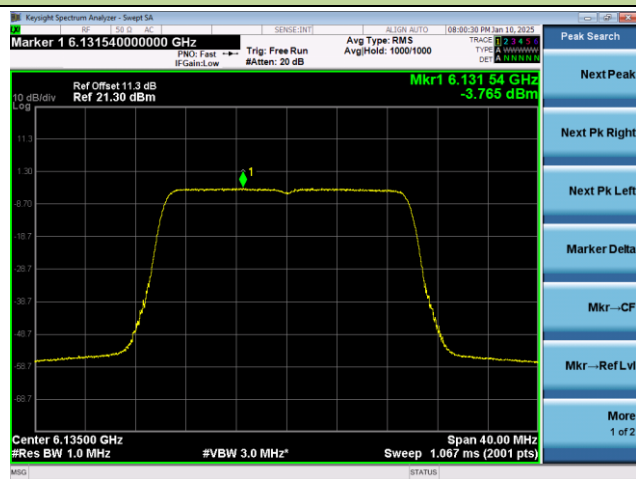


Ant 1

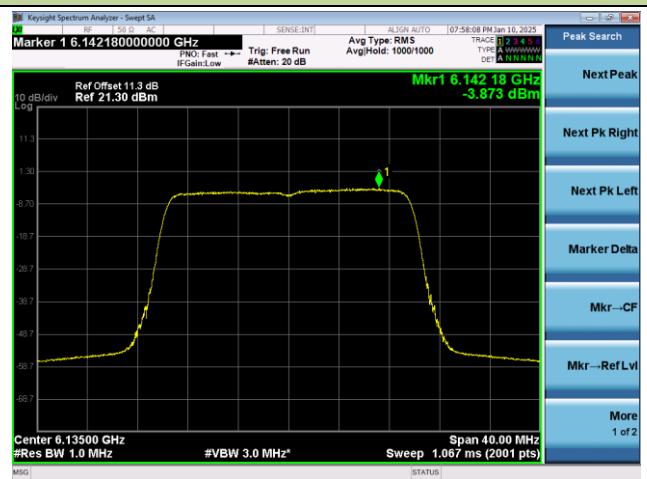


802.11be-EHT20 – Channel 37 (6135MHz) Power Spectral Density

Ant 0



Ant 1



2025-01-10T09:02:37Z

```
{
  "headers": {
    "Host": "testserver.wfatestorg.org",
    "User-Agent": "Go-http-client/1.1",
    "Accept": "application/json",
    "Content-Type": "application/json",
    "Accept-Encoding": "gzip",
    "X-Forwarded-For": "44.238.223.78",
    "X-Forwarded-Host": "testserver.wfatestorg.org",
    "X-Forwarded-Server": "testserver.wfatestorg.org",
    "Content-Length": "807",
    "Connection": "Keep-Alive"
  },
  "body": {
    "availableSpectrumInquiryRequests": [
      {
        "deviceDescriptor": {
          "certificationId": [
            {
              "id": "Q9DAPIN0735",
              "rulesetId": "US_47_CFR_PART_15_SUBPART_E"
            }
          ],
          "serialNumber": "CNRLM51056"
        },
        "inquiredChannels": [
          {
            "globalOperatingClass": 131
          },
          {
            "globalOperatingClass": 132
          },
          {
            "globalOperatingClass": 133
          },
          {
            "globalOperatingClass": 134
          }
        ]
      }
    ]
  }
}
```

```

    ],
    "inquiredFrequencyRange": [
      {
        "highFrequency": 7125,
        "lowFrequency": 5925
      }
    ],
    "location": {
      "elevation": {
        "height": 4,
        "heightType": "AGL",
        "verticalUncertainty": 6
      },
      "ellipse": {
        "center": {
          "latitude": 37.774921,
          "longitude": -122.4194
        },
        "majorAxis": 11,
        "minorAxis": 2,
        "orientation": 84.794651
      },
      "indoorDeployment": 1
    },
    "requestId": "CNRLM51056",
    "vendorExtensions": {
      "extensionId": "Aruba_Info",
      "parameters": {
        "Request_State": "Event",
        "Tenant_ID":
"bd3cca00b1b400932d561eedfb6fb420a16fa47475fb80074d1bd8e48cbf41b9"
      }
    }
  },
  "version": "1.4"
}

```

2025-01-10T09:02:37Z

```
{
  "availableSpectrumInquiryResponses": [
    {
      "response": {
        "responseCode": 0,
        "shortDescription": "SUCCESS"
      },
      "availableFrequencyInfo": [
        {
          "frequencyRange": {
            "highFrequency": 5945,
            "lowFrequency": 5925
          },
          "maxPsd": 23
        },
        {
          "frequencyRange": {
            "highFrequency": 5965,
            "lowFrequency": 5945
          },
          "maxPsd": 23
        },
        {
          "frequencyRange": {
            "highFrequency": 5985,
            "lowFrequency": 5965
          },
          "maxPsd": 23
        },
        {
          "frequencyRange": {
            "highFrequency": 6005,
            "lowFrequency": 5985
          },
          "maxPsd": 23
        },
        {
          "frequencyRange": {
```

```
        "highFrequency": 6025,
        "lowFrequency": 6005
    },
    "maxPsd": 23
},
{
    "frequencyRange": {
        "highFrequency": 6045,
        "lowFrequency": 6025
    },
    "maxPsd": 23
},
{
    "frequencyRange": {
        "highFrequency": 6065,
        "lowFrequency": 6045
    },
    "maxPsd": 23
},
{
    "frequencyRange": {
        "highFrequency": 6085,
        "lowFrequency": 6065
    },
    "maxPsd": 23
},
{
    "frequencyRange": {
        "highFrequency": 6105,
        "lowFrequency": 6085
    },
    "maxPsd": 23
},
{
    "frequencyRange": {
        "highFrequency": 6125,
        "lowFrequency": 6105
    },
    "maxPsd": 23
}
```

```
    },
    {
      "frequencyRange": {
        "highFrequency": 6145,
        "lowFrequency": 6125
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6165,
        "lowFrequency": 6145
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6185,
        "lowFrequency": 6165
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6205,
        "lowFrequency": 6185
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6245,
        "lowFrequency": 6225
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6265,
```

```
        "lowFrequency": 6245
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6285,
        "lowFrequency": 6265
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6305,
        "lowFrequency": 6285
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6325,
        "lowFrequency": 6305
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6345,
        "lowFrequency": 6325
      },
      "maxPsd": 23
    },
    {
      "frequencyRange": {
        "highFrequency": 6365,
        "lowFrequency": 6345
      },
      "maxPsd": 23
    },
  ],
```

```
{
  "frequencyRange": {
    "highFrequency": 6385,
    "lowFrequency": 6365
  },
  "maxPsd": 23
},
{
  "frequencyRange": {
    "highFrequency": 6405,
    "lowFrequency": 6385
  },
  "maxPsd": 23
},
{
  "frequencyRange": {
    "highFrequency": 6425,
    "lowFrequency": 6405
  },
  "maxPsd": 23
},
{
  "frequencyRange": {
    "highFrequency": 6545,
    "lowFrequency": 6525
  },
  "maxPsd": 23
},
{
  "frequencyRange": {
    "highFrequency": 6565,
    "lowFrequency": 6545
  },
  "maxPsd": 23
},
{
  "frequencyRange": {
    "highFrequency": 6585,
    "lowFrequency": 6565
```

```
    },
    "maxPsd": 23
  },
  {
    "frequencyRange": {
      "highFrequency": 6605,
      "lowFrequency": 6585
    },
    "maxPsd": 23
  },
  {
    "frequencyRange": {
      "highFrequency": 6625,
      "lowFrequency": 6605
    },
    "maxPsd": 23
  },
  {
    "frequencyRange": {
      "highFrequency": 6645,
      "lowFrequency": 6625
    },
    "maxPsd": 23
  },
  {
    "frequencyRange": {
      "highFrequency": 6665,
      "lowFrequency": 6645
    },
    "maxPsd": 23
  },
  {
    "frequencyRange": {
      "highFrequency": 6685,
      "lowFrequency": 6665
    },
    "maxPsd": 23
  },
  {
```

164 of 174

```

        "maxPsd": 23
      },
      {
        "frequencyRange": {
          "highFrequency": 6825,
          "lowFrequency": 6805
        },
        "maxPsd": 23
      },
      {
        "frequencyRange": {
          "highFrequency": 6845,
          "lowFrequency": 6825
        },
        "maxPsd": 23
      },
      {
        "frequencyRange": {
          "highFrequency": 6865,
          "lowFrequency": 6845
        },
        "maxPsd": 23
      }
    ],
    "availableChannelInfo": [
      {
        "channelCfi": [
          1,
          5,
          9,
          13,
          17,
          21,
          25,
          29,
          33,
          37,
          41,
          45,

```

```
49,  
53,  
57,  
61,  
65,  
69,  
73,  
77,  
81,  
85,  
89,  
93,  
117,  
121,  
125,  
129,  
133,  
137,  
141,  
145,  
149,  
153,  
157,  
161,  
165,  
169,  
173,  
177,  
181  
],  
"globalOperatingClass": 131,  
"maxEirp": [  
36.0,  
36.0,  
36.0,  
36.0,  
36.0,  
36.0,  
36.0,  
36.0,
```

[illegible]

[illegible]

```

        36.0,
        36.0,
        36.0
    ]
},
{
    "channelCfi": [
        7,
        23,
        39,
        55,
        71,
        87,
        135,
        151,
        167
    ],
    "globalOperatingClass": 133,
    "maxEirp": [
        36.0,
        36.0,
        36.0,
        36.0,
        36.0,
        36.0,
        36.0,
        36.0,
        36.0
    ]
},
{
    "channelCfi": [
        15,
        47,
        79,
        143
    ],
    "globalOperatingClass": 134,
    "maxEirp": [

```

```
        36.0,  
        36.0,  
        36.0,  
        36.0  
    ]  
  }  
],  
  "requestId": "CNRLM51056",  
  "availabilityExpireTime": "2025-01-11T09:02:37Z",  
  "rulesetId": "US_47_CFR_PART_15_SUBPART_E"  
}  
],  
  "version": "1.4"  
}
```

A.5 Unsuccessful Server Validation

Test Site	WZ-SR5	Test Engineer	Dandy Li
Test Date	2025-01-15		

AFC DUT Compliance Test Report

DUT Information

AFC DUT System	Standard Power AP with Proxy
DUT Vendor Name	Hewlett Packard Enterprise
DUT Product Model	APIN0734

Test Result

FCC Requirements	TestCaseName	Test Result
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_NoRootCA_10639_1 (Unsuccessful server validation)	PASS
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_TLSCipherSuiteENULL_10638_1 (Unsuccessful server validation)	PASS
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_StapledOCSPRespExpired_10637_1 (Unsuccessful server validation)	PASS
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_OCSPStaplingDisabled_10636_1 (Unsuccessful server validation)	PASS
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_ServerCertRevoked_10635_1 (Unsuccessful server validation)	PASS
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_MatchSuffixSAN_10634_1 (Unsuccessful server validation)	PASS
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_DifferentRootCA_10633_1 (Unsuccessful server validation)	PASS
15.407(k)(8)(v)	CT_AFC_ServerValidation_AP_AFCDUSV35_NonMatchSAN_10632_1 (Unsuccessful server validation)	PASS

Test Measurements

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_NoRootCA_10639_1 (Unsuccessful server validation)

TestResult:PASS

Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_TLSCipherSuiteENULL_10638_1 (Unsuccessful server validation)

TestResult:PASS

Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_StapledOCSPRespExpired_10637_1 (Unsuccessful server validation)

TestResult:PASS

Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_OCSPStaplingDisabled_10636_1 (Unsuccessful server validation)

TestResult:PASS

Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_ServerCertRevoked_10635_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_MatchSuffixSAN_10634_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_DifferentRootCA_10633_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

TestCaseName: CT_AFC_ServerValidation_AP_AFCDUSV35_NonMatchSAN_10632_1 (Unsuccessful server validation)
TestResult:PASS
Band:6GHz

Measurements Name	Description	Value	Validation Result
AFC_DUT_SEND_SPECTRUM_INQUIRYREQUEST	AFC DUT sends an Available Spectrum Inquiry Request	false	PASS

Appendix B – Test Setup Photograph

Refer to “2311RSU031-UT” file.

Appendix C – EUT Photograph

Refer to “2311RSU031-UE” file.

_____ The End _____