DIRECTIONAL ANTENNA GAIN

Tx chains are uncorrelated for power and correlated for PSD.The directional gains are as follows:

	Ant 1	Ant 2	Uncorrelated Chains	Correlated Chains
U-NII	Antenna	Antenna	Directional	Directional
Band	Gain	Gain	Gain	Gain
	(dBi)	(dBi)	(dBi)	(dBi)
UNII-1	3.30	2.50	2.92	5.92
UNII-2A	3.30	2.90	3.10	6.11
UNII-2C	3.50	4.50	4.03	7.02
UNII-3	3.90	4.50	4.21	7.22

RESULT

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9.5.1. 802.11ax HE20 MODE 1TX IN THE 5.2GHz BAND (FCC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Antenna Gain and Limits

Channel	Frequency	Directional	Power	PSD
		Gain	Limit	Limit
	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5180	3.30	24.00	11.00
Mid	5200	3.30	24.00	11.00
High	5240	3.30	24.00	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5180	14.55	14.55	24.00	-9.45
Mid	5200	14.60	14.60	24.00	-9.40
High	5240	14.58	14.58	24.00	-9.42

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5180	3.83	3.83	11.00	-7.17
Mid	5200	3.61	3.61	11.00	-7.39
High	5240	3.57	3.57	11.00	-7.43

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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Antenna Gain and Limits

Channel	Frequency	Directional	Power	PSD
		Gain	Limit	Limit
	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5180	2.50	24.00	11.00
Mid	5200	2.50	24.00	11.00
High	5240	2.50	24.00	11.00

Duty Cycle CF (dB)0.00Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5180	14.01	14.01	24.00	-9.99
Mid	5200	13.91	13.91	24.00	-10.09
High	5240	13.81	13.81	24.00	-10.19

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5180	3.322	3.32	11.00	-7.68
Mid	5200	3.101	3.10	11.00	-7.90
High	5240	3.095	3.10	11.00	-7.91



9.5.2. 802.11ax HE40 MODE 1TX IN THE 5.2GHz BAND (FCC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Antenna Gain and Limits

Channel	Frequency	Directional	Power	PSD
		Gain	Limit	Limit
		for Power		
	(MHz)	(dBi)	(dBm)	(dBm/
				1MHz)
Low	5190	3.30	24.00	11.00
High	5230	3.30	24.00	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr d Power a
--

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5190	14.52	14.52	24.00	-9.48
High	5230	14.50	14.50	24.00	-9.50

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/	(dB)
				1MHz)	
Low	5190	0.459	0.46	11.00	-10.54
High	5230	0.812	0.81	11.00	-10.19

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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Antenna Gain and Limits

Channel	Frequency	Directional	Power	PSD
		Gain	Limit	Limit
		for Power		
	(MHz)	(dBi)	(dBm)	(dBm/
				1MHz)
Low	5190	2.50	24.00	11.00
High	5230	2.50	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5190	14.00	14.00	24.00	-10.00
High	5230	13.86	13.86	24.00	-10.14

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/	(dB)
				1MHz)	
Low	5190	0.434	0.43	11.00	-10.57
High	5230	0.538	0.54	11.00	-10.46

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9.5.3. 802.11ax HE80 MODE 1TX IN THE 5.2GHz BAND (FCC)

1TX Antenna 1 OFDM MODE: SU, Single User

Fest Engineer:	16080
Test Date:	2/9/2022

Antenna Gain and Limits

Channel	Frequency	Directional	Power	PSD
		Gain	Limit	Limit
	(MHz)	(dBi)	(dBm)	(dBm/ 1MHz)
Mid	5210	3.30	24.00	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd Power & PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5210	14.63	14.63	24.00	-9.37

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/	(dBm/	(dBm/	(dB)
		1MHz)	1MHz)	1MHz)	
Mid	5210	-2.20	-2.20	11.00	-13.20



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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Antenna Gain and Limits

Channel	Frequency	Directional	Power	PSD
		Gain	Limit	Limit
	(MHz)	(dBi)	(dBm)	(dBm/
	, , , , , , , , , , , , , , , , , , ,		. ,	ÌMHz)
Mid	5210	2.50	24.00	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd Power & PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5210	13.88	13.88	24.00	-10.12

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/	(dBm/	(dBm/	(dB)
		1MHz)	1MHz)	1MHz)	
Mid	5210	-2.77	-2.77	11.00	-13.77



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9.5.4. 802.11ax HE20 MODE 1TX IN THE 5.2GHz BAND (IC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	EIRP	Power	EIRP	PSD
		99%	Gain	Power	Limit	PSD	Limit
		BW		Limit		Limit	
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)	(dBm/1MHz)	(dBm/1MHz)
Low	5180	18.900	3.30	22.76	19.46	10.00	6.70
Mid	5200	18.855	3.30	22.75	19.45	10.00	6.70
High	5240	18.941	3.30	22.77	19.47	10.00	6.70

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
	0.00	

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5180	14.55	14.55	19.46	-4.91
Mid	5200	14.60	14.60	19.45	-4.85
High	5240	14.58	14.58	19.47	-4.89

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5180	3.829	3.83	6.70	-2.87
Mid	5200	3.608	3.61	6.70	-3.09
High	5240	3.566	3.57	6.70	-3.13

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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	EIRP	Power	EIRP	PSD
		99%	Gain	Power	Limit	PSD	Limit
		BW		Limit		Limit	
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)	(dBm/1MHz)	(dBm/1MHz)
Low	5180	18.881	2.50	22.76	20.26	10.00	7.50
Mid	5200	18.868	2.50	22.76	20.26	10.00	7.50
High	5240	18.917	2.50	22.77	20.27	10.00	7.50

Duty Cycle CF (dB)

Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5180	14.01	14.01	20.26	-6.25
Mid	5200	13.91	13.91	20.26	-6.35
High	5240	13.81	13.81	20.27	-6.46

0.00

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5180	3.322	3.32	7.50	-4.18
Mid	5200	3.101	3.10	7.50	-4.40
High	5240	3.095	3.10	7.50	-4.41

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9.5.5. 802.11ax HE40 MODE 1TX IN THE 5.2GHz BAND (IC)

1TX Antenna 1 OFDM MODE: SU, Single User

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	EIRP	Power	EIRP	PSD
		99%	Gain	Power	Limit	PSD	Limit
		BW		Limit		Limit	
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)	(dBm/	(dBm/
						1MHz)	1MHz)
Low	5190	37.684	3.30	23.00	19.70	10.00	6.70
High	5230	37.661	3.30	23.00	19.70	10.00	6.70

 Duty Cycle CF (dB)
 0.00
 Included in Calculations of Corr'd Power & PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5190	14.52	14.52	19.70	-5.18
High	5230	14.50	14.50	19.70	-5.20

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/	(dB)
				1MHz)	
Low	5190	0.459	0.46	6.70	-6.24
High	5230	0.812	0.81	6.70	-5.89

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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	EIRP	Power	EIRP	PSD
		99%	Gain	Power	Limit	PSD	Limit
		BW		Limit		Limit	
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)	(dBm/	(dBm/
						1MHz)	1MHz)
Low	5190	37.615	2.50	23.00	20.50	10.00	7.50
High	5230	37.731	2.50	23.00	20.50	10.00	7.50

Duty Cycle CF (dB)

Included in Calculations of Corr'd Power & PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5190	14.00	14.00	20.50	-6.50
High	5230	13.86	13.86	20.50	-6.64

0.00

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/	(dB)
				1MHz)	
Low	5190	0.434	0.43	7.50	-7.07
High	5230	0.538	0.54	7.50	-6.96

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9.5.6. 802.11ax HE80 MODE 1TX IN THE 5.2GHz BAND (IC)

1TX Antenna 1 OFDM MODE: SU, Single User

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	EIRP	Power	EIRP	PSD
		99%	Gain	Power	Limit	PSD	Limit
		BW		Limit		Limit	
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm)	(dBm/	(dBm/
						1MHz)	1MHz)
Mid	5210	77.248	3.30	23.00	19.70	10.00	6.70

 Duty Cycle CF (dB)
 0.00
 Included in Calculations of Corr'd Power & PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5210	14.63	14.63	19.70	-5.07

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/	(dBm/	(dBm/	(dB)
		1MHz)	1MHz)	1MHz)	
Mid	5210	-2.202	-2.20	6.70	-8.90



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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

I	Channel	Frequency	Min	Directional	EIRP	Power	EIRP	PSD
I			99%	Gain	Power	Limit	PSD	Limit
I			BW		Limit		Limit	
I		(MHz)	(MHz)	(dBi)	(dBm)	(dBm)	(dBm/	(dBm/
							1MHz)	1MHz)
ſ	Mid	5210	77 145	2 50	23.00	20.50	10.00	7.50

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd Power & PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5210	13.880	13.88	20.50	-6.62

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/	(dBm/	(dBm/	(dB)
		1MHz)	1MHz)	1MHz)	
Mid	5210	-2.773	-2.77	7.50	-10.27



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9.5.7. 802.11ax HE20 MODE 1TX IN THE 5.3GHz BAND (FCC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5260	21.00	3.30	24.00	11.00
Mid	5300	20.96	3.30	24.00	11.00
High	5320	21.00	3.30	24.00	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5260	14.92	14.92	24.00	-9.08
Mid	5300	14.52	14.52	24.00	-9.48
High	5320	14.78	14.78	24.00	-9.22

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5260	3.497	3.50	11.00	-7.50
Mid	5300	3.227	3.23	11.00	-7.77
High	5320	3.197	3.20	11.00	-7.80



 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5260	20.88	2.90	24.00	11.00
Mid	5300	21.04	2.90	24.00	11.00
High	5320	21.00	2.90	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5260	14.05	14.05	24.00	-9.95
Mid	5300	14.04	14.04	24.00	-9.96
High	5320	13.85	13.85	24.00	-10.15

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5260	3.002	3.00	11.00	-8.00
Mid	5300	2.671	2.67	11.00	-8.33
High	5320	2.868	2.87	11.00	-8.13

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9.5.8. 802.11ax HE40 MODE 1TX IN THE 5.3GHz BAND (FCC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5270	41.12	3.30	24.00	11.00
Hiah	5310	41.36	3.30	24.00	11.00

Duty Cycle CF (dB)0.00Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5270	14.80	14.80	24.00	-9.20
High	5310	14.60	14.60	24.00	-9.40

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
		(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
					(ub)
Low	5270	0.708	0.71	11.00	-10.29

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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5270	41.44	2.90	24.00	11.00
Hiah	5310	41.20	2.90	24.00	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5270	14.03	14.03	24.00	-9.97
High	5310	13.95	13.95	24.00	-10.05

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	(MHz) 5270	(dBm/1MHz) -0.074	(dBm/1MHz) -0.07	(dBm/1MHz) 11.00	(dB) -11.07



9.5.9. 802.11ax HE80 MODE 1TX IN THE 5.3GHz BAND (FCC)

1TX Antenna 1 OFDM MODE: SU, Single User

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5290	82.40	3.30	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5290	14.70	14.70	24.00	-9.30

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5290	-2.154	-2.15	11.00	-13.15



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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		26 dB	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5290	82.72	2.90	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5290	14.00	14.00	24.00	-10.00

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5290	-2.882	-2.88	11.00	-13.88



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9.5.10. 802.11ax HE20 MODE 1TX IN THE 5.3GHz BAND (IC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		99%	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5260	18.855	3.30	23.75	11.00
Mid	5300	18.950	3.30	23.78	11.00
High	5320	18.884	3.30	23.76	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5260	14.92	14.92	23.75	-8.83
Mid	5300	14.52	14.52	23.78	-9.26
High	5320	14.78	14.78	23.76	-8.98

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5260	3.497	3.50	11.00	-7.50
Mid	5300	3.227	3.23	11.00	-7.77
High	5320	3.197	3.20	11.00	-7.80



 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		99%	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5260	18.908	2.90	23.77	11.00
Mid	5300	18.941	2.90	23.77	11.00
High	5320	18.898	2.90	23.76	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5260	14.05	14.05	23.77	-9.72
Mid	5300	14.04	14.04	23.77	-9.73
High	5320	13.85	13.85	23.76	-9.91

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5260	3.002	3.00	11.00	-8.00
Mid	5300	2.671	2.67	11.00	-8.33
High	5320	2.868	2.87	11.00	-8.13

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9.5.11. 802.11ax HE40 MODE 1TX IN THE 5.3GHz BAND (IC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		99%	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5270	37.681	3.30	24.00	11.00
High	5310	37.731	3.30	24.00	11.00

Duty Cycle CF (dB)0.00Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5270	14.80	14.80	24.00	-9.20
High	5310	14.60	14.60	24.00	-9.40

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	5270	0.708	0.71	11.00	-10.29

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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		99%	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Low	5270	37.676	2.90	24.00	11.00
High	5310	27 725	2 90	24.00	11.00

0.00

Duty Cycle CF (dB)

Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5270	14.03	14.03	24.00	-9.97
High	5310	13.95	13.95	24.00	-10.05

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Low	(MHz) 5270	(dBm/1MHz) -0.074	(dBm/1MHz) -0.07	(dBm/1MHz) 11.00	(dB) -11.07



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9.5.12. 802.11ax HE80 MODE 1TX IN THE 5.3GHz BAND (IC)

1TX Antenna 1 OFDM MODE: SU, Single User

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		99%	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5290	77.208	3.30	24.00	11.00

Duty Cycle CF (dB)0.00Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5290	14.70	14.70	24.00	-9.30

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5290	-2.154	-2.15	11.00	-13.15



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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Power	PSD
		99%	Gain	Limit	Limit
		BW			
	(MHz)	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5290	77.167	2.90	24.00	11.00

0.00

Duty Cycle CF (dB)

Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5290	14.00	14.00	24.00	-10.00

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5290	-2.282	-2.28	11.00	-13.28



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9.5.13. 802.11ax HE160 MODE 1TX IN THE 5.2GHz & 5.3GHz BAND (FCC)

1TX Antenna 1 OFDM MODE: SU, Single User

Test Engineer:	16080
Test Date:	2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	166.08	3.30	3.30	24.00	11.00

Duty Cycle CF (dB) 0.00 Included in Calculations of Corr'd PSD	
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Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	14.66	14.66	24.00	-9.34

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	-5.561	-5.56	11.00	-16.56



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 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	166.08	2.50	2.50	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency		Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	13.86	13.86	24.00	-10.14

PSD Results

Channel	Frequency		Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	-5.742	-5.74	11.00	-16.74



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9.5.14. 802.11ax HE160 MODE 2TX IN THE 5.2GHz & 5.3GHz BAND (FCC)

Note for OFDMA - With a worst case 26dB BW of 20MHz, the FCC Power Limit is 24 dBm. All HE160 power is less than 24dBm therefore since each respective tone is the same power and PSD across bandwidths, the HE160 Power and PSD is representative of HE20/40/80.

2TX Antenna 1 + Antenna 2 CDD OFDM MODE: SU, Single User

Test Engineer:	44352
Test Date:	5/17/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	168.96	2.92	5.92	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
	0.00	

Output Power Results

Channel	Frequency	Antenna 1	Antenna 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	12.84	13.25	16.06	24.00	-7.94

PSD Results

Channel	Frequency	Antenna 1	Antenna 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	-7.084	-6.754	-3.91	11.00	-14.91



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PSD

2TX Antenna 1 + Antenna 2 CDD OFDMA MODE: 2x 996-Tones, Index 68

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	172.48	2.92	5.92	24.00	11.00

Duty Cycle CF (dB) 0.10 Included in Calculations of Corr	Duty Cycle CF (dB)	0.10	Included in Calculations of Corr
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Output Power Results

Channel	Frequency	Antenna 1	Antenna 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	11.63	11.12	14.39	24.00	-9.61

PSD Results

Channel	Frequency	Antenna 1	Antenna 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	-8.448	-9.250	-5.72	11.00	-16.72



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PSD

2TX Antenna 1 + Antenna 2 CDD OFDMA MODE: 996-Tones, RU Index 67

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	167.68	2.92	5.92	24.00	11.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd
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Output Power Results

Channel	Frequency	Antenna 1	Antenna 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	12.73	13.72	16.26	24.00	-7.74

PSD Results

Channel	Frequency	Antenna 1	Antenna 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	-5.427	-4.725	-1.95	11.00	-12.95



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PSD

2TX Antenna 1 + Antenna 2 CDD OFDMA MODE: 996-Tones, RU Index S67

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	167.36	2.92	5.92	24.00	11.00

Duty Cycle CF (dB) 0.10	Included in Calculations of Corr'd
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Output Power Results

Channel	Frequency	Antenna 1	Antenna 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	12.70	13.64	16.21	24.00	-7.79

PSD Results

Channel	Frequency	Antenna 1	Antenna 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	-5.529	-4.577	-1.92	11.00	-12.92



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2TX Antenna 1 + Antenna 2 CDD OFDMA MODE: 106-Tones, RU Index 53

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	166.40	2.92	5.92	24.00	11.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd PSD
		

Output Power Results

Channel	Frequency	Antenna 1	Antenna 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	12.03	13.07	15.59	24.00	-8.41

PSD Results

Channel	Frequency	Antenna 1	Antenna 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	6.779	7.106	10.06	11.00	-0.94



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2TX Antenna 1 + Antenna 2 CDD OFDMA MODE: 106-Tones, RU Index 60

 Test Engineer:
 16080

 Test Date:
 2/9/2022

Bandwidth, Antenna Gain, and Limits

Channel	Frequency	Min	Directional	Directional	Power	PSD
		26 dB	Gain	Gain	Limit	Limit
		BW	for Power	for PSD		
	(MHz)	(MHz)	(dBi)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5250	160.64	2.92	5.92	24.00	11.00

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd PSD
	vv	

Output Power Results

Channel	Frequency	Antenna 1	Antenna 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5250	12.35	13.62	16.04	24.00	-7.96

PSD Results

Channel	Frequency	Antenna 1	Antenna 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5250	6.365	7.064	9.84	11.00	-1.16



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