PSD, CHAIN 2





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802.11n HT40 CHAIN 0 MODE IN THE 5.8 GHz BAND 8.16.

8.16.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5755	36.300	0.5
High	5795	36.355	0.5

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6 dB BANDWIDTH





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8.16.2. **26 dB BANDWIDTH**

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5755	40.982
High	5795	40.982

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26 dB BANDWIDTH





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8.16.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	99% Bandwidth	
	(MHz)	(MHz)	
Low	5755	36.362	
High	5795	36.374	

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99% BANDWIDTH





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8.16.4. AVERAGE POWER (FCC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	43	3573	Date:	9/7/16		
Chann	el	Frequency		Power		
		(MHz)		(dBm)		
Low		5755		17.89		
High		57	95	17.97		

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8.16.5. OUTPUT POWER (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

ID:	43573	Date:	9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	4.00	30.00
High	5795	4.00	30.00

Output Power Results

Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
1					
LOW	5755	17.89	17.89	30.00	-12.11

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8.16.6. PSD (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	4.00	30.00
High	5795	4.00	30.00

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

PSD Results

Channel	Frequency	Chain 0 Meas	Total Corr'd	PSD Limit	PSD Margin
		PSD	PSD	Linin	Margin
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	0.726	0.73	30.00	-29.27
High	5795	0.774	0.77	30.00	-29.23

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<u>PSD</u>





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8.16.7. AVERAGE POWER (IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30	606	Date:	9/14/16		
Chann	el	Frequ	Jency	Power		
		(MHz)		(dBm)		
Low		5755		12.70		
High		57	'95	12.75		

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8.16.8. OUTPUT POWER (IC)

LIMITS

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

ID:	30606	Date:	9/14/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	4.00	30.00	
High	5795	4.00	30.00	

Output Power Results

Channel	Frequency	Chain 0	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	12.70	12.70	30.00	-17.30
High	5795	12.75	12.75	30.00	-17.25

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8.16.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	4.00	30.00	
High	5795	4.00	30.00	

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

PSD Results

Channel	Frequency	Chain 0	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
	(1411 12)	(ubiii)	(ubiii)	(abiii)	(ub)
Low	5755	-5.542	-5.54	30.00	-35.54

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<u>PSD</u>





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8.17. 802.11n HT40 CHAIN 1 MODE IN THE 5.8 GHz BAND

8.17.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5755	36.355	0.5
High	5795	36.410	0.5

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6 dB BANDWIDTH





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8.17.2. **26 dB BANDWIDTH**

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5755	41.280
High	5795	40.920

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26 dB BANDWIDTH





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8.17.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5755	36.468
High	5795	36.495

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99% BANDWIDTH





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8.17.4. AVERAGE POWER (FCC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	43	3573 Date:		9/7/16	
Chann	el	Frequency		Power	
		(MHz)		(dBm)	
Low		5755		17.7	
High		5795		17.93	

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8.17.5. OUTPUT POWER (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	Power	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	6.30	29.70	
High	5795	6.30	29.70	

Output Power Results

Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	17.7	17.70	29.70	-12.00
High	5795	17.93	17.93	29.70	-11.77

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8.17.6. PSD (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	6.30	29.70	
High	5795	6.30	29.70	

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

PSD Results

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
	(101112)	(abiii)	(abiii)	(abiii)	
Low	5755	0.615	0.62	29.70	-29.09

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<u>PSD</u>





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8.17.7. AVERAGE POWER (IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30	606	Date:	9/14/16		
Chann	Channel Frequ		Jency	Power		
		(MHz)		(dBm)		
Low		5755		12.75		
High	1	5795		12.70		

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8.17.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

|--|

Antenna Gain and Limit

Channel	Frequency	Directional	Power	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	6.30	29.70	
High	5795	6.30	29.70	

Output Power Results

Channel	Frequency	Chain 1	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	12.75	12.75	29.70	-16.95
High	5795	12.70	12.70	29.70	-17.00

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8.17.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	6.30	29.70
High	5795	6.30	29.70

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

PSD Results

Channel	Frequency	Chain 1	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	-5.167	-5.17	29.70	-34.87
High	5795	-5 296	-5.30	29.70	-35.00

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<u>PSD</u>





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8.18. 802.11n HT40 CHAIN 2 MODE IN THE 5.8 GHz BAND

8.18.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5755	36.465	0.5
High	5795	36.025	0.5

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6 dB BANDWIDTH





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8.18.2. **26 dB BANDWIDTH**

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency	26 dB Bandwidth
	(MHz)	(MHz)
Low	5755	42.160
High	5795	40.858

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26 dB BANDWIDTH





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8.18.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

<u>RESULTS</u>

Channel	Frequency	99% Bandwidth
	(MHz)	(MHz)
Low	5755	36.510
High	5795	36.417

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99% BANDWIDTH





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8.18.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	43573		Date:	9/7/16
Chann	el	Frequ	uency	Power
		(MHz)		(dBm)
Low		5755		17.78
High		5795		17.86

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8.18.5. OUTPUT POWER (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

ID:	43573	Date:	9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	4.70	30.00
High	5795	4.70	30.00

Output Power Results

Channel	Frequency	Chain 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	17.78	17.78	30.00	-12.22
High	5795	17.86	17.86	30.00	-12.14

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8.18.6. PSD (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	4.70	30.00
High	5795	4.70	30.00

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

PSD Results

Channel	Frequency	Chain 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
			· · ·	• •	· · ·
Low	5755	0.501	0.50	30.00	-29.50

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<u>PSD</u>





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8.18.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30	0606 Date:		9/14/16	
Chann	el	Frequency		Power	
		(MHz)		(dBm)	
Low	,	5755		12.73	
High	1	57	'95	12.75	

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8.18.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

ID: 30606 Date: 9/14/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	4.70	30.00
High	5795	4.70	30.00

Output Power Results

Channel	Frequency	Chain 2	Total	Power	Power
		Meas	Corr'd	Limit	Margin
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	12.73	12.73	30.00	-17.27
High	5795	12.75	12.75	30.00	-17.25

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8.18.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

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RESULTS

Antenna Gain and Limits

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	4.70	30.00
High	5795	4.70	30.00

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

PSD Results

Channel	Frequency	Chain 2	Total	PSD	PSD
		Meas	Corr'd	Limit	Margin
		PSD	PSD		
		(dDm)	(dDm)	(dBm)	(dP)
		(ubiii)	(ubiii)	(ubiii)	(UD)
Low	5755	-5.258	-5.26	30.00	-35.26

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<u>PSD</u>





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8.19. 802.11n HT40 2Tx (CHAIN 0 + CHAIN 1) CDD MODE IN THE 5.8 GHz BAND

8.19.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 1	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Low	5755	36.520	36.355	0.5
High	5795	36.300	36.355	0.5

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6 dB BANDWIDTH, CHAIN 0





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6 dB BANDWIDTH, CHAIN 1





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8.19.2. **26 dB BANDWIDTH**

LIMITS

None, for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5755	40.982	40.321
High	5795	40.858	40.443

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26 dB BANDWIDTH, CHAIN 0





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26 dB BANDWIDTH, CHAIN 1





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8.19.3. **99% BANDWIDTH**

<u>LIMITS</u>

None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 1
	(MHz)	(MHz)	(MHz)
Low	5755	36.349	36.462
High	5795	36.465	36.372

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99% BANDWIDTH, CHAIN 0





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99% BANDWIDTH, CHAIN 1





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8.19.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 43573 Date: 9/7/16

Channel	Frequency	Chain 0 Chain 1		Total	
		Power	Power	Power	
	(MHz)	(dBm)	(dBm)	(dBm)	
Low	5755	12.72	12.66	15.70	
High	5795	12.70	12.69	15.71	

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8.19.5. OUTPUT POWER (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 1	Uncorrelated Chains		
Antenna	Antenna	Directional		
Gain	Gain	Gain		
(dBi)	(dBi)	(dBi)		
4.00	6.30	5.30		

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RESULTS

ID: 43573 **Date:** 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	5.30	30.00	
High	5795	5.30	30.00	

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	12.72	12.66	15.70	30.00	-14.30
High	5795	12.70	12.69	15.71	30.00	-14.29

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8.19.6. PSD (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 1	Correlated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
4.00	6.30	8.24	

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RESULTS

Antenna Gain and Limit

Channel	Frequency	Directional	PSD	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	8.24	27.76	
High	5795	8.24	27.76	

Duty Cycle CE (dB)	0.00	Included in Calculations of Corr'd PSD
Duly Oycle Of (ub)	0.00	

PSD Results

Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	-4.712	-4.504	-1.60	27.76	-29.36
High	5795	-4 562	-4 592	-1 57	27.76	-29.33

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PSD, CHAIN 0





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PSD, CHAIN 1





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8.19.7. AVERAGE POWER (IC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

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Channel	Frequency	Chain 0	Chain 1	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5755	11.84	11.93	14.90
High	5795	12.70	12.69	15.71

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8.19.8. OUTPUT POWER (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 1	Uncorrelated Chain		
Antenna	Antenna	Directional		
Gain	Gain	Gain		
(dBi)	(dBi)	(dBi)		
4.00	6.30	5.30		

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Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	5.30	30.00
High	5795	5.30	30.00

Output Power Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	11.84	11.93	14.90	30.00	-15.10

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8.19.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 1	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	6.30	8.24

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Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	8.24	27.76
High	5795	8.24	27.76

Duty Cycle CE (dB)	0.00	Included in Calculations of Corr'd PSD
Duty Oyole Of (ub)	0.00	

PSD Results

Channel	Frequency	Chain 0	Chain 1	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	-4.84	-4.957	-1.89	27.76	-29.65
Hiah	5795	-4.562	-4.592	-1.57	27.76	-29.33

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PSD, CHAIN 0





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PSD, CHAIN 1





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8.20. 802.11n HT40 2Tx (CHAIN 0 + CHAIN 2) CDD MODE IN THE 5.8 GHz BAND

8.20.1. 6 dB BANDWIDTH

<u>LIMITS</u>

FCC §15.407 (e)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency	6 dB BW	6 dB BW	Minimum
		Chain 0	Chain 2	Limit
	(MHz)	(MHz)	(MHz)	(MHz)
Low	5755	36.300	36.355	0.5
High	5795	36.410	36.355	0.5

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6 dB BANDWIDTH, CHAIN 0





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6 dB BANDWIDTH, CHAIN 2





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8.20.2. **26 dB BANDWIDTH**

<u>LIMITS</u>

None, for reporting purposes only.

RESULTS

Channel	Frequency	26 dB BW	26 dB BW
		Chain 0	Chain 2
	(MHz)	(MHz)	(MHz)
Low	5755	40.734	40.565
High	5795	40.858	40.443

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26 dB BANDWIDTH, CHAIN 0





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26 dB BANDWIDTH, CHAIN 2





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8.20.3. 99% BANDWIDTH

<u>LIMITS</u>

None; for reporting purposes only.

RESULTS

Channel	Frequency	99% BW	99% BW
		Chain 0	Chain 2
	(MHz)	(MHz)	(MHz)
Low	5755	36.337	36.421
High	5795	36.406	36.279

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99% BANDWIDTH, CHAIN 0





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99% BANDWIDTH, CHAIN 2





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8.20.4. AVERAGE POWER (FCC)

<u>LIMITS</u>

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

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Channel	Frequency	Chain 0	Chain 2	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5755	12.59	12.68	15.65
High	5795	12.63	12.66	15.66

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8.20.5. OUTPUT POWER (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	4.36

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ID: 43573 **Date:** 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	4.36	30.00
High	5795	4.36	30.00

Output Power Results

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	12.59	12.68	15.65	30.00	-14.35
High	5795	12.63	12.66	15.66	30.00	-14.34

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8.20.6. PSD (FCC)

<u>LIMITS</u>

FCC §15.407 (a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 2	Correlated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	7.37

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Antenna Gain and Limit

Channel	Frequency	Directional	PSD
		Gain	Limit
	(MHz)	(dBi)	(dBm)
Low	5755	7.37	28.63
High	5795	7.37	28.63

Duty Cycle CE (dB)	0.00	Included in Calculations of Corr'd PSD
Duly Oycle Of (ub)	0.00	

PSD Results

Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	-4.562	-4.493	-1.52	28.63	-30.15
High	5795	-4.712	-4.479	-1.58	28.63	-30.21

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PSD, CHAIN 0





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PSD, CHAIN 2





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8.20.7. AVERAGE POWER (IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID: 43573 Date: 9/7/16	1
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Channel	Frequency	Chain 0	Chain 2	Total
		Power	Power	Power
	(MHz)	(dBm)	(dBm)	(dBm)
Low	5755	11.87	11.92	14.91
High	5795	12.63	12.66	15.66

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8.20.8. OUTPUT POWER (IC)

LIMITS

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 2	Uncorrelated Chains
Antenna	Antenna	Directional
Gain	Gain	Gain
(dBi)	(dBi)	(dBi)
4.00	4.70	4.36

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ID: 43573 **Date:** 9/7/16

Antenna Gain and Limit

Channel	Frequency	Directional	Power	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	4.36	30.00	
High	5795	4.36	30.00	

Output Power Results

Channel	Frequency	Chain 0	Chain 2	Total	Power	Power
		Meas	Meas	Corr'd	Limit	Margin
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
	5755	11.87	11 02	14 91	30.00	-15 09
LOW	0100	11.07	11.52	11.01	00.00	10.00

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8.20.9. PSD (IC)

<u>LIMITS</u>

IC RSS-247 (6.2.4) (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0	Chain 2	Correlated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
4.00	4.70	7.37	

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Antenna Gain and Limit

Channel	Frequency	Directional	PSD	
		Gain	Limit	
	(MHz)	(dBi)	(dBm)	
Low	5755	7.37	28.63	
High	5795	7.37	28.63	

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

PSD Results

Channel	Frequency	Chain 0	Chain 2	Total	PSD	PSD
		Meas	Meas	Corr'd	Limit	Margin
		PSD	PSD	PSD		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
Low	5755	-4.901	-4.912	-1.90	28.63	-30.53
High	5795	-4.712	-4.479	-1.58	28.63	-30.21

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