FCC ID:

Power Density Simulation Report

Revision

, 2021

ASUS COMPUTER INC

1. Simulation methodology for Power Density (PD)

1.1 Simulation tool

1.1.1 Tool description

For the simulation approach to calculating power density (PD) evaluation for mobile phone with mmWave antenna modules, ANSYS Electromagnetics suite version 2021.R1 (HFSS) is used. ANSYS HFSS is one of several commercial tools for 3D full-wave electromagnetic simulation used for antenna and RF structure design of high frequency component. ANSYS Electromagnetics suite version 2021.R1 (HFSS) is implemented based on Finite Element Method (FEM), which operates in the frequency domain.

1.1.2 Mesh and Convergence criteria

To solve the PD analysis using FEM, volume area containing simulated objects should be subdivided into electrically small parts that are called finite elements as the unknown functions. To subdivide system, the adaptive mesh technique in ANSYS Electromagnetics suite version 2021.R1 (HFSS) is used. ANSYS Electromagnetics suite version 2021.R1 (HFSS) starts to refine the initial mesh based on wavelength and calculate the error to iterative process for adaptive mesh refinement.
The determination parameter of the number of iteration in ANSYS Electromagnetics suite version 2021.R1 (HFSS) is defined as convergence criteria, delta S, and the iterative adaptive mesh process repeats until the delta S is met. In ANSYS Electromagnetics suite version 2021.R1 (HFSS), the accuracy of converged results depends on the delta S. Figure 1 is an example of adaptive mesh of the device (cross-section of top view).
$6\,{}^{W}/_{m^2}$

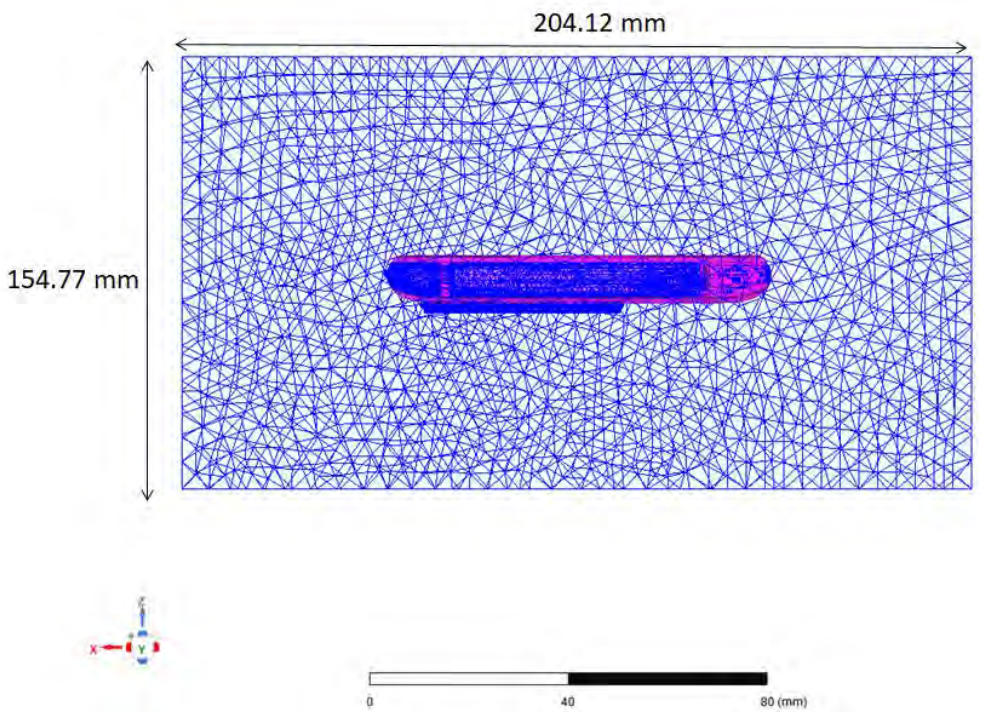


Figure1. Example of adaptive mesh Technique (Top view).

1.1.3 Power density calculation

After solving 3D full-wave electromagnetic simulation, various kinds of physical quantities can be obtained. To calculate PD evaluation, two physical quantities, an electric field ($\vec{E}$) and a magnetic field ($\vec{H}$) are needed. The actual consumption power can be expressed as the real term of the Poynting vector ($\vec{S}$) from the cross product of $\vec{E}$ and complex conjugation of $\vec{H}$ as shown below :

$$\langle\vec{S}\rangle = \mathrm{Re}\left(\frac{1}{2}\vec{E} \times \vec{H}\right)$$

$\langle\vec{S}\rangle$ can be expressed as point power density based on a peak value of each spatial point on mesh grids , and obtained directly from ANSYS Electromagnetics suite version 2021.R1 (HFSS).

From the point power density $\langle\vec{S}\rangle$, the spatial-averaged power density (PD_{av}) on an evaluated area (A) can be derived as shown below:

$$PD_{av} = \frac{1}{A}\int_A \langle\vec{S}\rangle \cdot \mathrm{ds} = \frac{1}{2A_{av}}\iint_{A_{av}} \|Re\{E \times H^*\}\| \mathrm{dA}$$

, where the spatial-averaged power density (PD_{av}) is total power density value considering on x, y and z components of point power density $\langle\vec{S}\rangle$ and the evaluated area (A) is $4cm^2$.

1.2 Simulation setup

1.2.1 3D modeling

Figure 2 shows the simulation model which is mounted two mmWave antenna modules. The simulation modeling includes most of the entire structure of device itself such as PCB, metal frame, battery, cables, and legacy antennas as well as mmWave antenna modules called as Ant 0 and Ant 1 and Ant 2.

The modeling contains the entire EUT to enable a Smart transmit GEN2, as well. Ant 0 is placed on the back side and antennas are facing the back side, and Ant 1 is placed on the right side and antennas are facing the right side of the device, and Ant 2 is placed on the left side and antennas are facing the left side of the device.

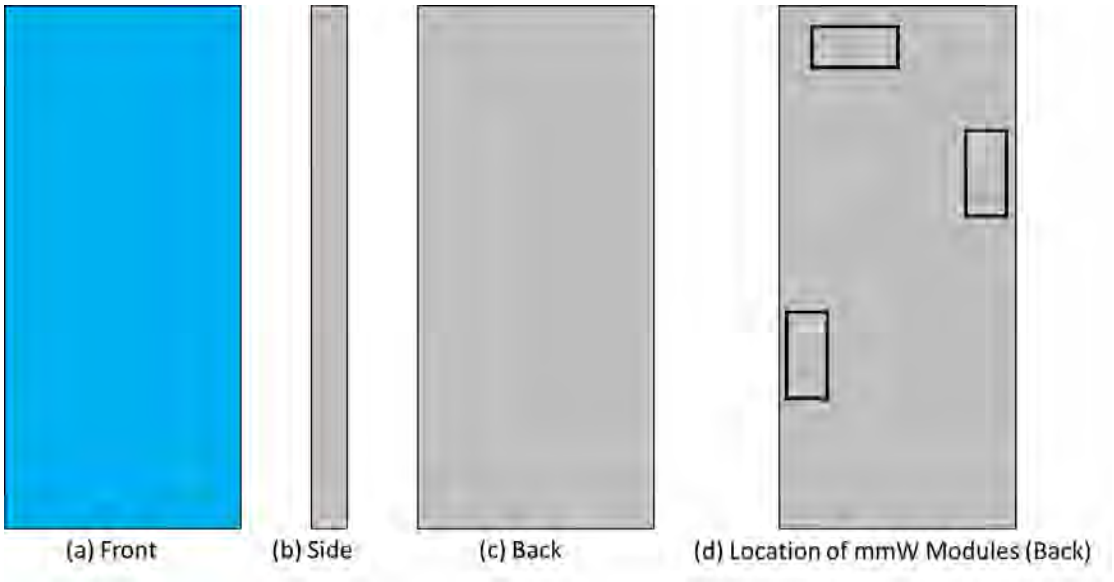


Figure2. Simulation model which is mounted three mmWave antenna modules

1.2.2 PD evaluation planes

Table 1 shows the PD evaluation planes for each mmWave antenna module and Figure 3 shows the PD evaluation planes and truncation area of the simulation model to find worst case of beamforming cases.

The Ant 0 is placed at the upper of the device and the bottom side is excluded from the worst case because the distance from the bottom side is more than 15 wavelength at 25GHz,27GHz and 39 GHz. In Ant 0 case, four PD evaluation planes except front and bottom side are set up.

The Ant 1 is placed at the lower of the device and the top side and left side are

excluded from the worst case because the distance from the bottom side and left are more than 9 and 7 wavelength at 25GHz,27GHz and 39 GHz respectively.

In Ant 1 case, four PD evaluation planes except top side and left side are set up. The Ant 2 is placed at the upper of the device and the bottom side and right side are excluded from the worst case because the distance from the bottom side and right side are more than 9 and 7 wavelength at 25GHz,27GHz and 39 GHz respectively. Please note that the “right” and “left” edge of mentioned in this report are defined from the perspective of looking at the device from the front side.

Table 1. PD evaluation planes

Module	Front	Back	Right	Left	Top	Bottom
	S1	S2	S3	S4	S5	S6
Ant0	X	O	O	O	O	X
Ant1	O	O	O	X	X	O
Ant2	O	O	X	O	O	X

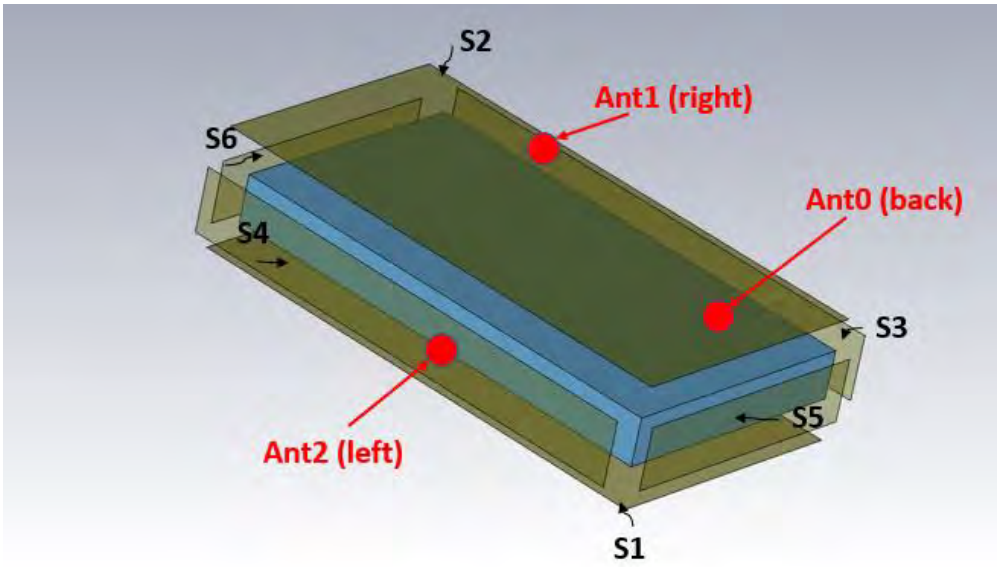


Figure3. PD Evaluation Plane

1.2.3 Boundary condition

To simulate electromagnetic tool based on FEM, the boundary condition allows electromagnetic waves to be electrically open at the boundary and radiated far away without reflection. ANSYS Electromagnetics suite version 2021.R1 (HFSS) can support the absorbing boundary condition (ABC) for radiation boundary and make normally a quarter wave length from the radiating structure. In this report, to cover all beamforming cases of mmWave antenna modules, 40 mm spacing from the device

for each surfaces were adopted. This distance is sufficiently large enough for “Qualcomm MG script”to extract valid E- and H-fields from all adjacent exposure surfaces of the EUT.

1.2.4 Source excitation condition

The number of antenna ports of ANT0 and ANT1 and Ant2 for source excitation are the same as 16. The antenna port of ANT0 and 1 and 2 is divided into 8 ports for n257/n258/ n261 4 patch array antennas, 8 ports for n260 4 patch array antennas. In the 8 ports included in each patch antenna, 4 ports are divided into vertical polarization feeding, and the other 4 ports are divided into horizontal polarization feeding.

Figure 4 shows the ANT 1 module structure and surrounding structure. The ANT 1 module is encrypted in the ANSYS Electromagnetics suite (HFSS) and can only check the feeding position.

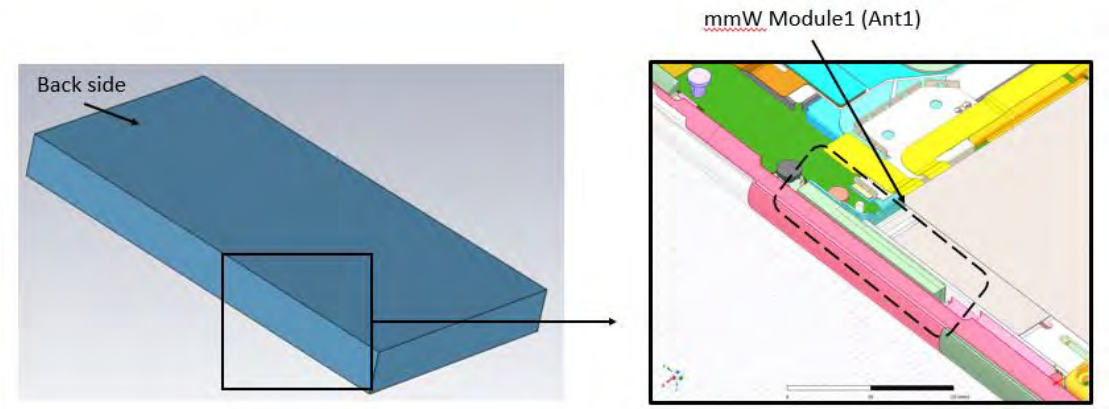


Figure 4 mmWave antenna module1 (Ant1)

After finishing 3D full wave electromagnetic simulation of modeling structure, the magnitude and phase information can be loaded for each port by using “Edit Sources”function in ANSYS Electromagnetics suite (HFSS). Figure 5 shows an example of antenna port excitations.

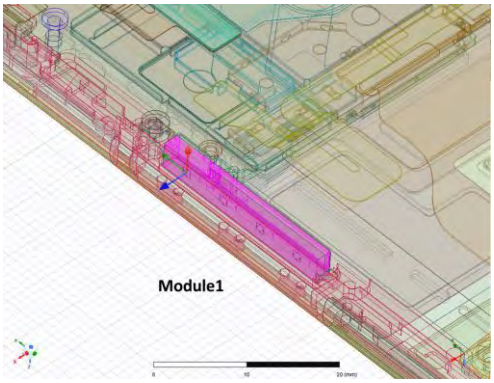


Figure 5. An example of port excitation (ANT1)

Since ANSYS Electromagnetics suite (HFSS) uses FEM solver based on frequency domain analysis method, the input source for the port excitation applies sinusoidal waveform for each frequency.

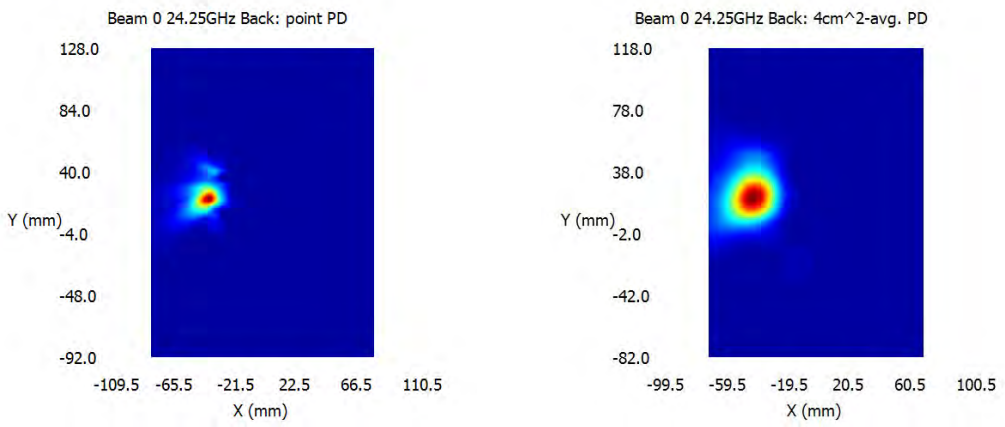
1.2.5 Condition of simulation completion

The simulation completion condition of ANSYS Electromagnetics suite (HFSS) is defined as delta S. The ANSYS Electromagnetics suite (HFSS) calculates the S-parameter for the mesh conditions of each step and determines whether to proceed with the operation of the next step by comparing the difference between the S-parameters in the previous step. A difference between the previous step and the current step of S-parameter is expressed as delta S, and the delta S generally sets 0.02. The simulation result of this report is the result of setting delta S to 0.02.

2. Simulation verification

2.1 Spatial-averaged power density and sim.$Power_{limit}$

As mentioned in the previous chapter, the Poynting vector $\langle\vec{S}\rangle$ can be obtained through cross product of an electric field ($\vec{E}$) and complex conjugate of a magnetic field ($\vec{H}$). The real term of the Poynting vector can be described as the point power density or peak power density. Using the point power density, the spatial-averaged power density can be obtained by the integral of $4cm^2$at 2.5 mm intervals of the point power density result.



(a) Point power density (b) Averaged power density

Figure 6. Power density distribution (Example)

For the Smart transmit GEN2, the"Qualcomm MG script"were used to extract E- and H-fields from the validated simulation and to assess the mutual coupling between all the mmWave antenna modules and all the beams in the codebook to determine the backoff value for each mmWave module. Note the assessment and backoff value derivation are automated with "Qualcomm MG script". Once the script is done with assessment, it will provide the sim.$Power_{limit}$ (backoff is already included) for all the beams for all three channels for the specified PD_design_target. This mode take the minimum sim.$Power_{limit}$ out of all three channels (low, mid and high) and use the resulted sim.$Power_{limit}$.

2.2 Comparison between simulation, measurement

In this section, the simulated-power density distributions and measured-power density distributions are compared to each mmWave antenna. Furthermore, to verify the Smart transmit GEN2, the PD distributions printing out from the"Qualcomm MG script"are added.

Based on comparison of power density distributions, the power densities of simulated, measured and the"Qualcomm MG Script"have a good correlation. The discrepancy in amplitude between the"Qualcomm MG Script"$4cm^2$ averaged power density and measured $4cm^2$ averaged power density is considered as housing influence and used in determining input power limit for each beam for RF exposure compliance.

The input powers per each active port are listed below for both Simulation and Measurement validation and power density characterization. For Simulation, these values were entered directly into HFSS model. For measurement, FTM S/W was used to input these values for each active port also.

Mode/Band	Antenna	Input Power (dBm) SISO	Input Power (dBm) MIMO
5G NR n257	Ant0	6	6
	Ant1	6	6
	Ant2	6	6
5G NR n258	Ant0	6	6
	Ant1	6	6
	Ant2	6	6
5G NR n260	Ant0	6	6
	Ant1	6	6
	Ant2	6	6
5G NR n261	Ant0	6	6
	Ant1	6	6
	Ant2	6	6

The below simulation and measurement result were performed at 2mm evaluation distance and four bands. The input power limit was determined based on below results.

6 dBm input measurement / For ST Simulation Report							
Band	Module	Ant Group	Beam ID	Surface	Channel	PD 4 cm^2 (W/m2)	Measure result
n257	0	Vertical (AG0)	41	Back Side	Mid Ch	8.44	6.4
		Horizontal (AG1)	170	Back Side	Mid Ch	13.13	8.22
	1	Vertical (AG0)	38	Right Side	Mid Ch	13.25	6.66
		Horizontal (AG1)	155	Right Side	Mid Ch	12.6	7.51
	2	Vertical (AG0)	35	Left Side	Mid Ch	14.1	7.85
		Horizontal (AG1)	163	Left Side	Mid Ch	12.79	8.58
n258	0	Vertical (AG0)	47	Back Side	Mid Ch	16.24	7.39
		Horizontal (AG1)	175	Back Side	Mid Ch	18.09	9.17
	1	Vertical (AG0)	28	Right Side	Mid Ch	15.33	9.97
		Horizontal (AG1)	170	Right Side	Mid Ch	13.45	7.39
	2	Vertical (AG0)	37	Left Side	Mid Ch	14.49	9.78
		Horizontal (AG1)	165	Left Side	Mid Ch	14.03	8.02

n260	0	Vertical (AG0)	32	Back Side	Mid Ch	3.12	3.17
		Horizontal (AG1)	161	Back Side	Mid Ch	2.42	3.97
	1	Vertical (AG0)	30	Right Side	Mid Ch	6.02	7.59
		Horizontal (AG1)	154	Right Side	Mid Ch	8.01	6.97
	2	Vertical (AG0)	22	Left Side	Mid Ch	3.46	7.36
		Horizontal (AG1)	153	Left Side	Mid Ch	3.04	7.32
n261	0	Vertical (AG0)	42	Back Side	Mid Ch	12.44	6.32
		Horizontal (AG1)	157	Back Side	Mid Ch	8.64	3.61
	1	Vertical (AG0)	38	Right Side	Mid Ch	10.82	6.61
		Horizontal (AG1)	166	Right Side	Mid Ch	9.29	7.27
	2	Vertical (AG0)	22	Left Side	Mid Ch	6.72	7.34
		Horizontal (AG1)	163	Left Side	Mid Ch	8.89	8.42

Table 2-1, n257 ANT0 : Mid Channel

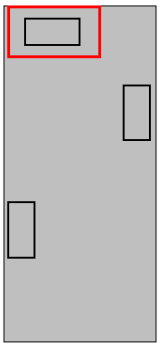
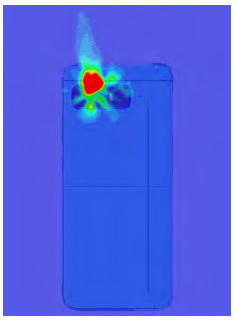
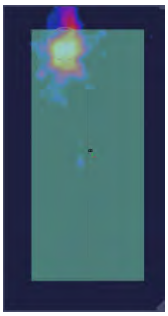
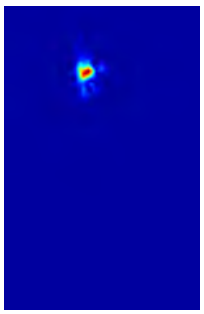
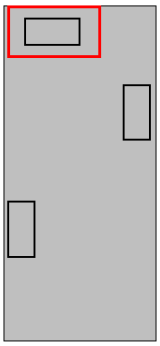
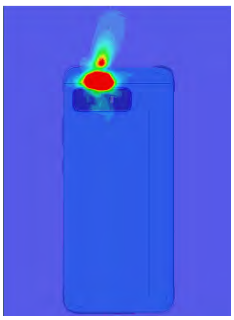
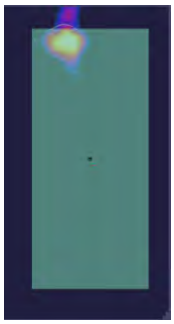
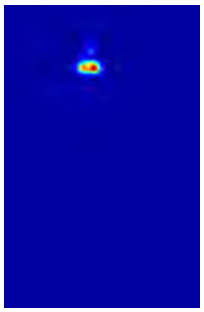
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
41	S2 (Back)				
170	S2 (Back)				

Table 2-2, n257 ANT1 : Mid Channel

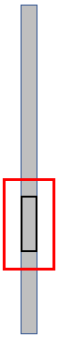
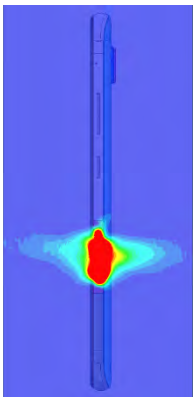
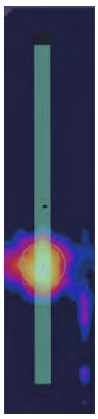
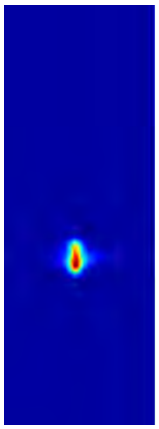
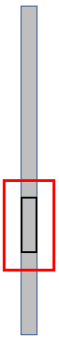
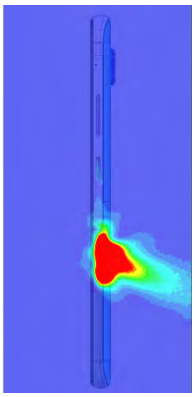
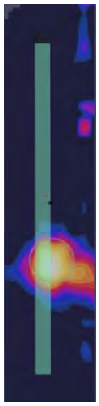
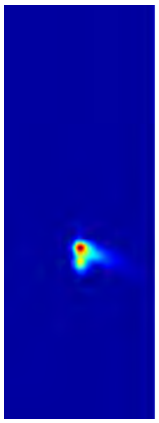
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
38	S3 (Right)				
155	S3 (Right)				

Table 2-3, n257 ANT2 : Mid Channel

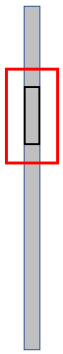
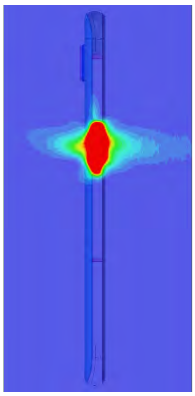
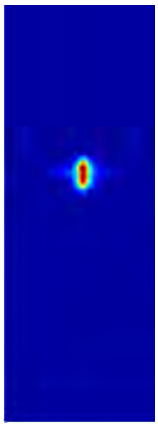
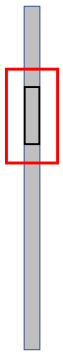
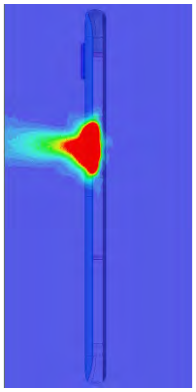
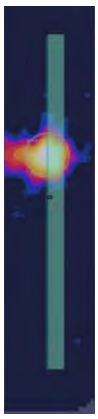
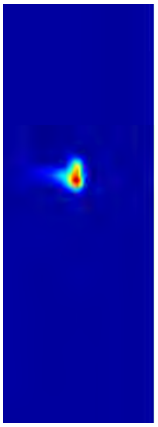
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
35	S4 (Left)				
163	S4 (Left)				

Table 2-4, n258 ANT0 : Mid Channel

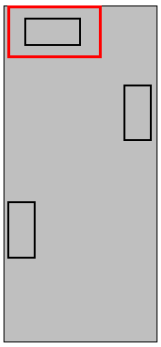
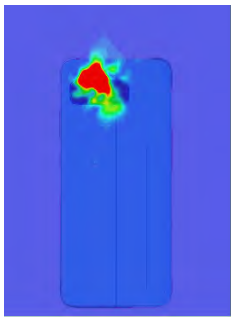
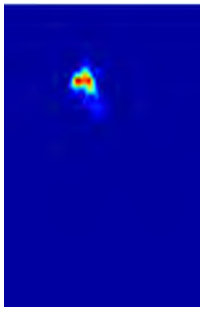
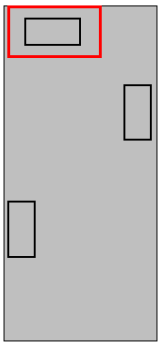
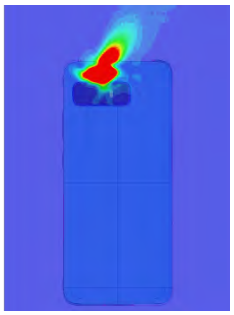
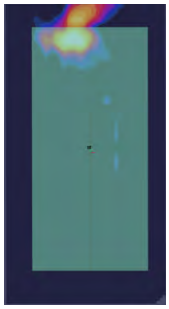
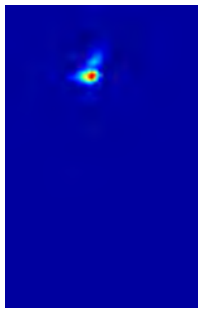
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
47	S2 (Back)				
175	S2 (Back)				

Table 2-5, n258 ANT1 : Mid Channel

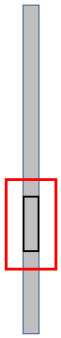
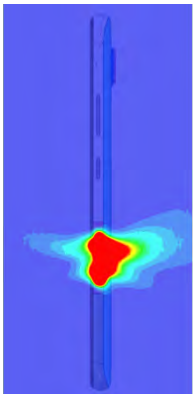
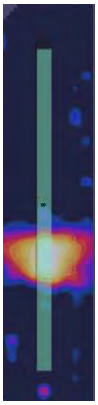
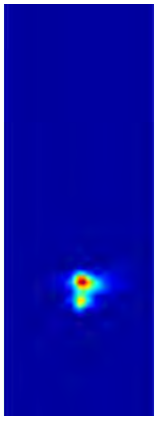
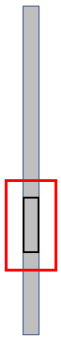
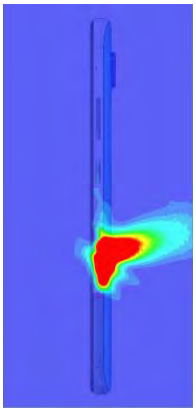
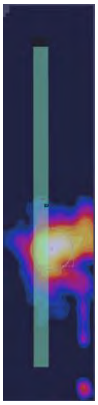
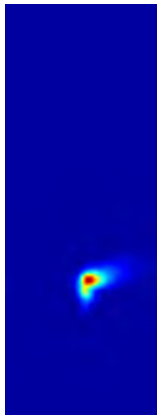
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
28	S3 (Right)				
170	S3 (Right)				

Table 2-6, n258 ANT2: Mid Channel

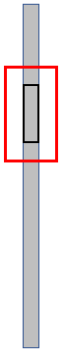
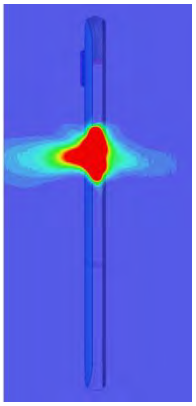
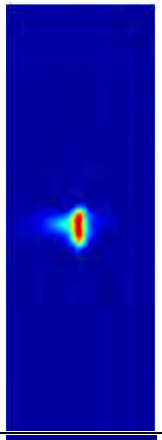
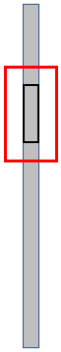
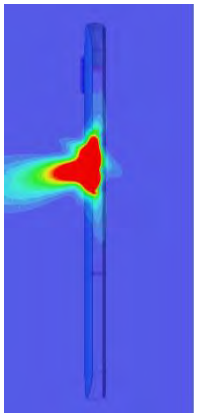
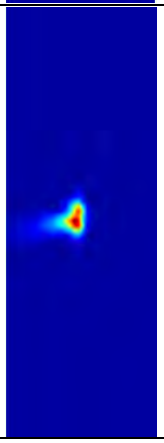
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
37	S4 (Left)				
165	S4 (Left)				

Table 2-7, n260 ANT0 : Mid Channel

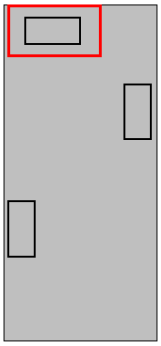
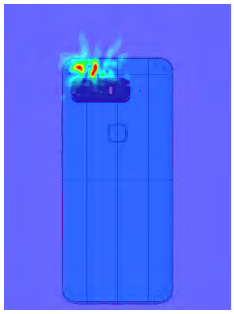
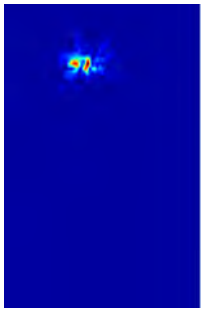
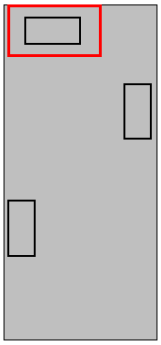
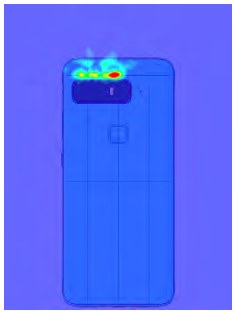
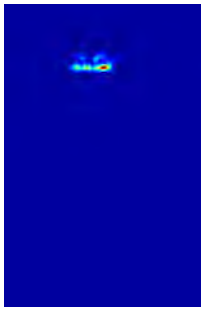
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
32	S2 (Back)				
161	S2 (Back)				

Table 2-8, n260 ANT1 : Mid Channel

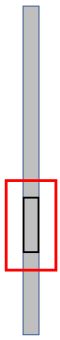
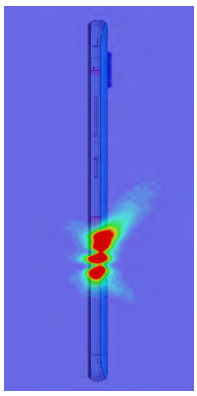
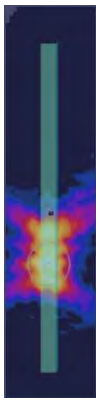
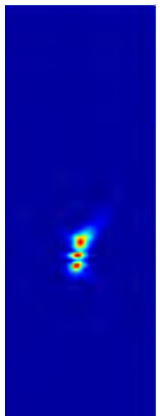
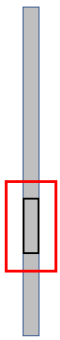
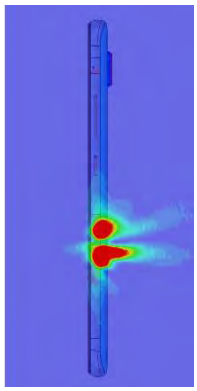
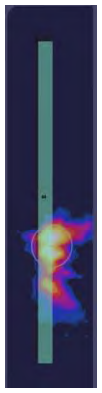
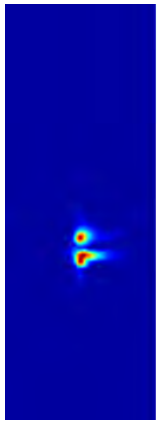
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
30	S3 (Right)				
154	S3 (Right)				

Table 2-9, n260 ANT2 : Mid Channel

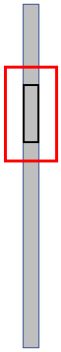
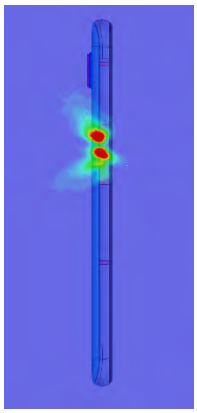
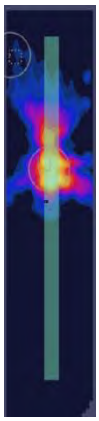
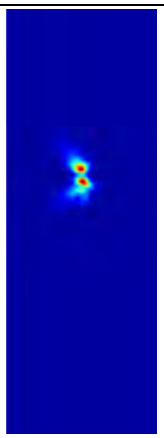
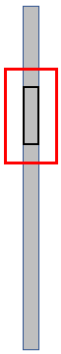
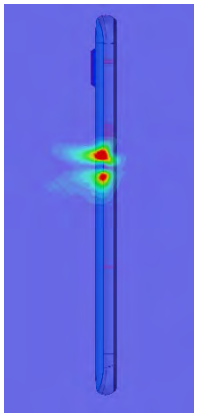
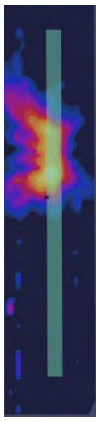
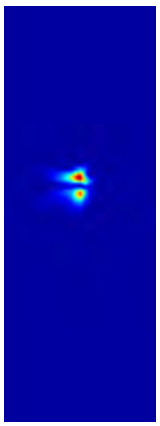
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
22	S4 (Left)				
153	S4 (Left)				

Table 2-10, n261 ANT0 : Mid Channel

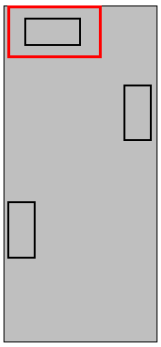
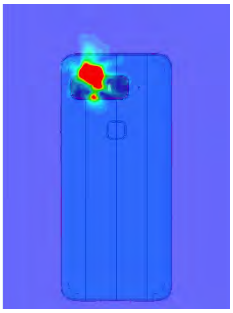
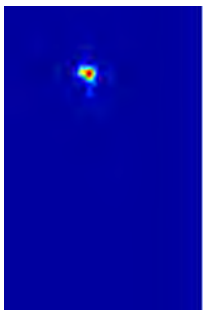
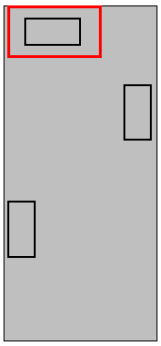
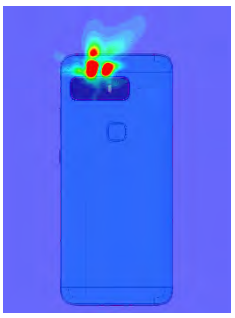
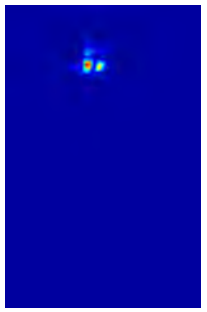
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
42	S2 (Back)				
157	S2 (Back)				

Table 2-11, n261 ANT1 : Mid Channel

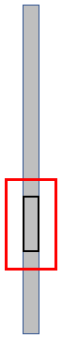
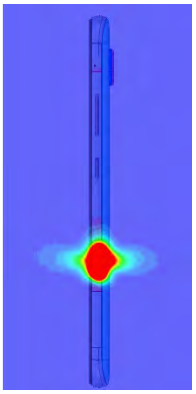
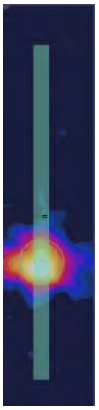
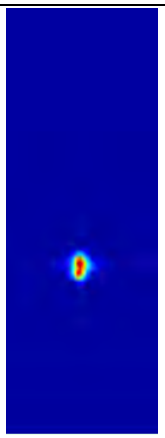
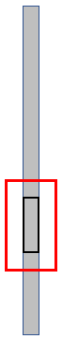
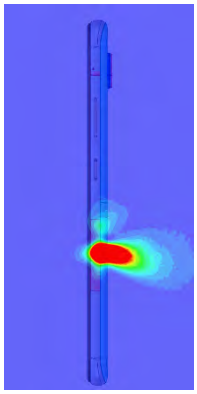
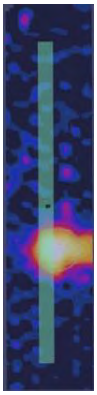
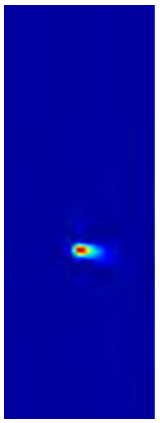
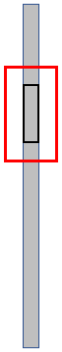
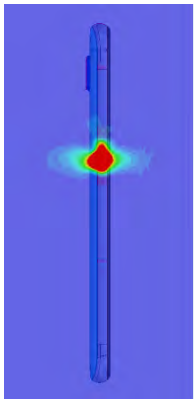
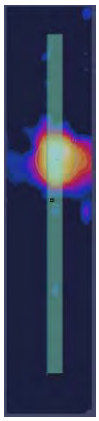
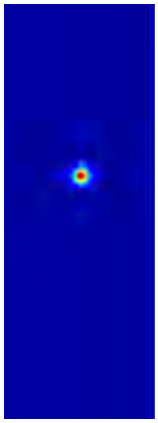
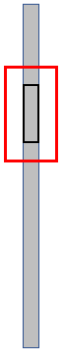
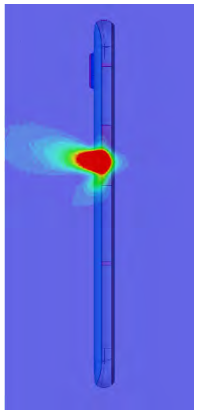
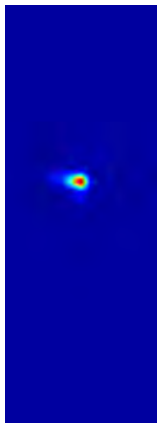
Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
38	S3 (Right)				
166	S3 (Right)				

Table 2-12, n261 ANT2 : Mid Channel

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
22	S4 (Left)				
163	S4 (Left)				

The Smart transmit GEN2 cannot be finalized until the additional verifications are performed and passed. Follow the below steps for verifications in the mid channel:

VERIFICATION 1: Use “Qualcomm MG script” to print the PD plots for all the beams selected and evaluated for model validation.

- Throughout above comparisons (Table 2-1 to 2-12), the model validation including MG script were verified.

VERIFICATION 2: Contribution factors from Qualcomm MG script and from HFSS for selected beams, and normalized combined PD verification, for device with 3 QTMs

[n257]

Worse Case Surface					S4(left)	
Worst-case location (x,y,z) in meters:					Worst 4cm2 PD value location is -0.04100m, 0.03100m, -0.01000m	
PD_design_target ($^{W}/_{m^2}$)					6	
Values printed from Qualcomm MG Script					Values obtained by OEM using EM simulation tool	
QTM #	Beam ID	c(i,j) i = beam ID j = QTM #	Backoff factor bj	verification.sim. power limit (before backoffs) [dBm]	simulated 4cm2 PD(i,j) at (-0.04100, 0.03100, -0.01000) at verification.sim.power limit on S4	Csimulated(i,j)= 4cm2PD(i,j)/ PD_design_target
0	43	0.0076	0.9772	5.73dBm	0.0457	0.0076
1	28	0.0060	0.9772	5.07dBm	0.0360	0.0060
2	135	0.9998	0.9550	5.53dBm	5.9928	0.9988
Verify 1		C(i,j) = Csimulated(i,j), i = 157,28,152 ; j = 0,1,2				
Verify 2		b 0 *c(157,0) + b 1 *c(28,1) + b 2 *c(152,2) = 0.9732				

[n258]

Worse Case Surface					S2(back)	
Worst-case location (x,y,z) in meters:					Worst 4cm2 PD value location is 0.02400m, 0.06800m, -0.01360m	
PD_design_target ($^{W}/_{m^2}$)					6	
Values printed from Qualcomm MG Script					Values obtained by OEM using EM simulation tool	
QTM #	Beam ID	c(i,j) i = beam ID j = QTM #	Backoff factor bj	verification.sim. power limit (before backoffs) [dBm]	simulated 4cm2 PD(i,j) at (0.02400, 0.06800, -0.01360) at verification.sim.power limit on S2	Csimulated(i,j)= 4cm2PD(i,j)/ PD_design_target
0	13	1.000	0.9550	4.05dBm	6.0033	1.0005
1	26	0.0235	0.9550	4.56dBm	0.1412	0.0235
2	21	0.0089	0.9550	5.09dBm	0.0537	0.0089
Verify 1		C(i,j) = Csimulated(i,j), i = 13,26,21 ; j = 0,1,2				
Verify 2		b 0 *c(13,0) + b 1 *c(26,1) + b 2 *c(21,2) = 0.9859				

[n260]

Worse Case Surface					S4(left)	
Worst-case location (x,y,z) in meters:					Worst 4cm2 PD value location is -0.04100m, 0.03200m, -0.00600m	
PD_design_target ($^{W}/_{m^2}$)					6	
Values printed from Qualcomm MG Script					Values obtained by OEM using EM simulation tool	
QTM #	Beam ID	c(i,j) i = beam ID j = QTM #	Backoff factor bj	verification.sim. power limit (before backoffs) [dBm]	simulated 4cm2 PD(i,j) at (-0.04100, 0.03200, -0.00600) at verification.sim.power limit on S4	Csimulated(i,j)= 4cm2PD(i,j)/ PD_design_target
0	14	0.0660	0.9550	16.38dBm	0.3960	0.0660
1	168	0.0030	0.9772	5.09dBm	0.0182	0.0030
2	23	0.9977	0.9120	9.73dBm	5.9799	0.9966
Verify 1		C(i,j) = Csimulated(i,j), i = 14,168,23 ; j = 0,1,2				
Verify 2		b 0 *c(14,0) + b 1 *c(168,1) + b 2 *c(23,2) = 0.9758				

[n261]

Worse Case Surface					S2(back)	
Worst-case location (x,y,z) in meters:					Worst 4cm2 PD value location is 0.02400m, 0.07000m, -0.01360m	
PD_design_target ($^{W}/_{m^2}$)					6	
Values printed from Qualcomm MG Script					Values obtained by OEM using EM simulation tool	
QTM #	Beam ID	c(i,j) i = beam ID j = QTM #	Backoff factor bj	verification.sim. power limit (before backoffs) [dBm]	simulated 4cm2 PD(i,j) at (0.02400, 0.07000, -0.01360) at verification.sim.power limit on S2	Csimulated(i,j)= 4cm2PD(i,j)/ PD_design_target
0	29	1.0000	0.9550	5.28dBm	6.0003	1.0000
1	156	0.0147	0.9772	5.16dBm	0.0881	0.0146
2	21	0.0046	0.9550	6.37dBm	0.0276	0.0046
Verify 1		C(i,j) = Csimulated(i,j), i = 29,156,21 ; j = 0,1,2				
Verify 2		b 0 *c(29,0) + b 1 *c(156,1) + b 2 *c(21,2) = 0.9737				

VERIFICATION3: Measured $4cm^2$PD on worst surface and combined PD at worst-case location for device with 3 QTMS

[n257]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface (W/m^2)
0	43	S2	2.38
1	28	S3	5.52
2	135	S4	5.2
combined PD at the worst-case location (x,y,z)			c(157,0)*meas.$4cm^2$PD(157,0) + c(28,1)*meas.$4cm^2$PD(28,1) + c(152,2)*meas.$4cm^2$PD(152,2) =5.25
PD_design_target + uncertainty at reference power level of 0.5 dB			= 6*10^(0.5/10) = 6.732 W/m^2
Verify			combined PD < PD_design_target + uncertainty at reference power level

[n258]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface (W/m^2)
0	13	S2	4.02
1	26	S3	4.19
2	21	S4	3.75
combined PD at the worst-case location (x,y,z)			c(13,0)*meas.$4cm^2$PD(13,0) + c(26,1)*meas.$4cm^2$PD(26,1) + c(21,2)*meas.$4cm^2$PD(21,2) =4.15
PD_design_target + uncertainty at reference power level of 0.5 dB			= 6*10^(0.5/10) = 6.732 W/m^2
Verify			combined PD < PD_design_target + uncertainty at reference power level

[n260]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface (W/m^2)
0	14	S2	4.56
1	168	S3	4.37
2	23	S4	3.14
combined PD at the worst-case location (x,y,z)			c(14,0)*meas.$4cm^2$PD(14,0) + c(168,1)*meas.$4cm^2$PD(168,1) + c(23,2)*meas.$4cm^2$PD(23,2) =3.44
PD_design_target + uncertainty at reference power level of 0.5 dB			= 6*10^(0.5/10) = 6.732 W/m^2
Verify			combined PD < PD_design_target + uncertainty at reference power level

[n261]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface ($W/_{m^2}$)
0	29	S2	3.5
1	156	S3	4.99
2	21	S4	3.86
combined PD at the worst-case location (x,y,z)			c(29,0)*meas.$4cm^2$PD(29,0) + c(156,1)*meas.$4cm^2$PD(156,1) + c(21,2)*meas.$4cm^2$PD(21,2) =3.59
PD_design_target + uncertainty at reference power level of 0.5 dB			= 6*10^(0.5/10) = 6.732 W/m^2
Verify			combined PD < PD_design_target + uncertainty at reference power level

VERIFICATION4: Measured $4cm^2$PD on worst surface and combined PD at S2/S3/S4 for device with 3 QTMS

[n257]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface ($W/_{m^2}$)
0	42	S2	4.41
1	155	S3	5.67
2	35	S4	5.98

Beam ID	Contribution factor		
	Ant0-S2	Ant1-S3	Ant2-S4
42	1	0.0015	0.0026
155	0.0006	1	0.0008
35	0.0009	0.0009	1

***PD_design_target* (W/m^2) + Total uncertainty 2.1 (dB) = 9.73 W/m^2**	
Location -Surface	combined PD (W/m^2)
Ant0-S2	4.41
Ant1-S3	5.68
Ant2-S4	5.99

[n258]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface (W/m^2)
0	175	S2	5.22
1	28	S3	4.50
2	165	S4	5.23

Beam ID	Contribution factor		
	Ant0-S2	Ant1-S3	Ant2-S4
175	1	0.0006	0.0031
28	0.0004	1	0.0012
165	0.0006	0.0025	1

***PD_design_target* (W/m^2) + Total uncertainty 2.1 (dB) = 9.73 W/m^2**	
Location -Surface	combined PD (W/m^2)
Ant0-S2	5.22
Ant1-S3	4.51
Ant2-S4	5.25

[n260]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface (W/m^2)
0	162	S2	4.36
1	170	S3	5.47
2	164	S4	3.82

Beam ID	Contribution factor		
	Ant0-S2	Ant1-S3	Ant2-S4
	1	0.0009	0.0073
	0.0006	1	0.0026
	0.0025	0.0019	1

***PD_design_target* (W/m^2) + Total uncertainty 2.1 (dB) = 9.73 W/m^2**	
Location -Surface	combined PD (W/m^2)
Ant0-S2	4.37
Ant1-S3	5.47
Ant2-S4	3.84

[n261]

QTM #	Beam ID	Dominant Surface	Measured 4cm2 PD at input.power.limit on QTM dominant surface (W/m^2)
0	42	S2	5.77
1	166	S3	5.74
2	163	S4	5.96

Beam ID	Contribution factor		
	Ant0-S2	Ant1-S3	Ant2-S4
42	1	0.0012	0.0013
166	0.0017	1	0.0013
163	0.0010	0.0008	1

***PD_design_target* (W/m^2) + Total uncertainty (dB) = 9.73 W/m^2**	
Location -Surface	combined PD (W/m^2)
Ant0-S2	5.78
Ant1-S3	5.75
Ant2-S4	5.97

3. Simulation results

This section shows the PD simulation results of Ant 0 and Ant 1 and Ant2 at 25GHz and 27GHz and 39GHz for each evaluation plane specified in Table 1 at two separation distances of 2mm and 10mm. The ratio of PD exposure from front surface to the worst surface at 2mm, and the ratio of PD exposure from 2mm to 10mm evaluation distance for each beam are also reported in this section to support RF exposure analysis for simultaneous transmission scenarios performed in the Part 1 Near Field PD report.

The relative phase between beam pairs is not controlled in the chipset design. Therefore, the relative phase between each beam pair was considered mathematically to identify the worst case conditions.

The below MIMO results represent the highest reported MIMO simulation results after sweeping across the relative phase between beams a 5° step interval from 0° to 360°, The worst-case simulated PD determined from the tables in this section were used for conservativeness in input power limit determination in RF Exposure Part 0 Report.

3.1 PD for n257/n258/n260/n261

Table 3 show the PD simulation evaluation of Ant 0/Ant2/Ant3 antenna at n257/n258/n260/n261 for the corresponding evaluation planes specified in Table

Table3-1 n257 PD

Frequency (GHz)	Module	Beam 2	Beam 1	sim.power.limit (dBm)	Front.4cm2PD (W/m2)	Back.4cm2PD (W/m2)	Left.4cm2PD (W/m2)	Right.4cm2PD (W/m2)	Top.4cm2PD (W/m2)	Bottom.4cm2PD (W/m2)
26.5	2		0	8.26	1.13	1.39	3.41	0.02	0.08	0.03
26.5	2		1	8.24	1.36	1.29	3.42	0.01	0.04	0.01
26.5	1		2	8.11	1.32	1.42	0.02	3.6	0.02	0.1
26.5	1		3	8.53	1.09	1.59	0.02	3.27	0.01	0.11
26.5	0		4	8.46	0.18	3.33	0.07	0.25	0.56	0.01
26.5	0		5	9.25	0.29	2.77	0.07	0.31	0.36	0.01
26.5	2		6	6.77	1.45	2.13	4.8	0.04	0.3	0.1
26.5	2		7	5.73	2.86	2.31	6.1	0.02	0.04	0.01
26.5	2		8	6.08	1.99	3.03	5.62	0.03	0.17	0.05
26.5	1		9	6.4	1.66	2.27	0.04	5.35	0.05	0.39
26.5	1		10	5.18	3.03	3.33	0.02	7.09	0.01	0.03
26.5	1		11	6.46	1.47	2.32	0.03	5.27	0.04	0.33
26.5	0		12	5.96	0.51	5.92	0.14	1.34	0.72	0.02
26.5	0		13	4.56	0.82	8.17	0.09	0.43	0.63	0.03
26.5	0		14	7.2	0.37	4.45	0.18	0.47	0.57	0.01
26.5	2		15	5.35	2.55	2.84	6.66	0.04	0.16	0.05
26.5	2		16	6.1	2.4	2.4	5.6	0.02	0.08	0.03
26.5	1		17	5.17	2.97	3.11	0.02	7.1	0.01	0.07
26.5	1		18	4.54	3.18	4.12	0.03	8.2	0.01	0.03
26.5	0		19	6.65	0.41	5.05	0.27	0.35	1.02	0.02
26.5	0		20	5.49	0.41	6.6	0.18	0.91	0.79	0.02
26.5	2		21	4.64	3.5	2.86	7.85	0.09	0.44	0.2
26.5	2		22	1.95	6.44	5.88	14.56	0.06	0.02	0.02
26.5	2		23	1.89	6.8	6.04	14.76	0.07	0.03	0.01
26.5	2		24	4.15	3.24	5.61	8.77	0.05	0.2	0.07
26.5	1		25	4.78	2.51	3.07	0.06	7.77	0.1	1.07
26.5	1		26	2.14	5.46	7.06	0.05	14.27	0.01	0.12
26.5	1		27	2.08	5.87	7.26	0.05	14.47	0.02	0.07
26.5	1		28	4.46	2.87	3.99	0.09	8.36	0.08	0.18
26.5	0		29	3.59	0.79	10.21	0.41	2.64	1.84	0.05
26.5	0		30	2.39	1.06	13.46	0.2	1.84	1.55	0.07
26.5	0		31	3.12	1.2	11.38	0.29	0.44	1.65	0.07
26.5	0		32	2.37	1.07	13.54	0.41	1.02	1.89	0.04
26.5	0		33	4.41	1.02	8.46	0.54	1.72	1.77	0.02
26.5	2		34	3.21	4.61	4.69	10.88	0.06	0.16	0.03
26.5	2		35	1.83	7.07	5.87	14.96	0.08	0.02	0.01
26.5	2		36	2.54	5.52	5.83	12.71	0.06	0.04	0.02
26.5	1		37	2.85	4.63	5.98	0.05	12.11	0.01	0.32
26.5	1		38	1.95	5.89	7.26	0.05	14.91	0.01	0.02
26.5	1		39	2.35	5.64	6.83	0.06	13.58	0.01	0.1
26.5	0		40	2.77	0.87	12.32	0.26	2.49	1.69	0.07
26.5	0		41	3.01	1.36	11.67	0.33	0.86	1.63	0.05
26.5	0		42	2.07	1.02	14.49	0.32	0.43	1.74	0.07
26.5	0		43	3.51	0.99	10.39	0.41	1.47	1.83	0.02

26.5	2		128	7.92	0.53	2.02	3.68	0.02	0.04	0.02
26.5	2		129	9.46	0.36	1.37	2.58	0.01	0.04	0.01
26.5	1		130	7.95	0.43	2.3	0.01	3.74	0.02	0.05
26.5	1		131	9.02	0.43	1.68	0.01	2.93	0.02	0.05
26.5	0		132	7.63	0.21	4.03	0.22	0.23	1.09	0
26.5	0		133	9.02	0.18	2.92	0.1	0.27	1	0
26.5	2		134	6.12	1.03	3.31	5.57	0.04	0.13	0.06
26.5	2		135	4.68	1.25	5.18	7.76	0.04	0.03	0.01
26.5	2		136	5.61	0.87	3.26	6.27	0.07	0.13	0.06
26.5	1		137	6.2	0.86	3.56	0.03	5.61	0.06	0.19
26.5	1		138	4.95	1.29	5.04	0.02	7.47	0	0.01
26.5	1		139	5.92	0.85	4.1	0.03	5.97	0.07	0.16
26.5	0		140	5.71	0.56	6.26	0.6	0.61	1.87	0.01
26.5	0		141	4.03	0.54	9.24	0.05	0.21	3.09	0
26.5	0		142	4.65	0.41	7.99	0.41	0.27	3.02	0.01
26.5	2		143	4.77	1.18	4.98	7.6	0.04	0.06	0.02
26.5	2		144	5.18	1.07	4.38	6.92	0.06	0.1	0.03
26.5	1		145	5.25	1.09	4.63	0.03	6.98	0.04	0.12
26.5	1		146	5.53	0.85	4.73	0.03	6.54	0.05	0.12
26.5	0		147	4.5	0.54	8.28	0.22	0.4	2.71	0.01
26.5	0		148	4.21	0.43	8.85	0.21	0.13	3.12	0.01
26.5	2		149	3.12	2.41	7.53	11.13	0.09	0.39	0.19
26.5	2		150	2.28	2.58	8.82	13.48	0.11	0.04	0.02
26.5	2		151	2.39	2.4	8.71	13.15	0.12	0.04	0.02
26.5	2		152	3.19	1.99	6.87	10.95	0.15	0.32	0.05
26.5	1		153	3.07	1.81	8.44	0.05	11.52	0.16	0.59
26.5	1		154	2.66	2.04	8.87	0.04	12.65	0.01	0.07
26.5	1		155	2.65	2	8.78	0.05	12.68	0.02	0.11
26.5	1		156	3.73	1.66	7.39	0.06	9.89	0.12	0.48
26.5	0		157	2.94	0.95	11.87	0.69	2.33	3.76	0.01
26.5	0		158	1.97	1.12	14.83	0.15	0.95	5.2	0.01
26.5	0		159	1.68	1.14	15.84	0.07	0.25	6.12	0.01
26.5	0		160	1.49	0.98	16.55	0.19	0.14	6.82	0.01
26.5	0		161	1.7	1.07	15.77	0.89	0.33	6.85	0.01
26.5	2		162	2.36	2.49	8.84	13.25	0.08	0.04	0.02
26.5	2		163	2.38	2.49	8.66	13.19	0.12	0.04	0.01
26.5	2		164	2.52	2.28	8.67	12.77	0.11	0.09	0.02
26.5	1		165	2.79	1.85	9.08	0.05	12.28	0.02	0.11
26.5	1		166	2.81	2.02	8.39	0.04	12.24	0.01	0.06
26.5	1		167	2.9	1.98	8.51	0.05	11.97	0.02	0.16
26.5	0		168	2.2	1.07	14.06	0.17	1.53	4.89	0.01
26.5	0		169	1.91	1.19	15.04	0.19	0.27	5.32	0.01
26.5	0		170	1.55	1.04	16.34	0.09	0.11	6.64	0.01
26.5	0		171	1.42	1.01	16.82	0.5	0.15	6.92	0.01

26.5	2	128	0	4.7	1.81	3.6	7.73	0.05	0.14	0.06
26.5	2	129	1	5.63	1.92	2.86	6.24	0.04	0.1	0.05
26.5	1	130	2	4.84	1.87	3.81	0.05	7.65	0.07	0.17
26.5	1	131	3	5.54	1.59	3.59	0.03	6.51	0.06	0.19
26.5	0	132	4	4.96	0.48	7.45	0.38	0.64	1.86	0.01
26.5	0	133	5	5.86	0.5	6.06	0.24	0.64	1.62	0.01
26.5	2	134	6	2.45	3.4	7.05	12.97	0.14	0.55	0.22
26.5	2	135	7	2	4.21	7.95	14.41	0.08	0.08	0.03
26.5	2	136	8	2.95	3.19	6.08	11.56	0.18	0.36	0.16
26.5	1	137	9	2.74	3.13	7.17	0.07	12.42	0.2	0.62
26.5	1	138	10	1.97	4.66	8.64	0.04	14.82	0.01	0.05
26.5	1	139	11	3.07	2.52	6.29	0.07	11.52	0.22	0.67
26.5	0	140	12	3.01	1.21	11.68	1.12	2.45	3.28	0.04
26.5	0	141	13	1.79	1.29	15.46	0.18	0.65	3.85	0.05
26.5	0	142	14	2.59	0.95	12.87	0.79	1.04	4.64	0.02
26.5	2	143	15	1.94	4.05	8.66	14.59	0.1	0.26	0.08
26.5	2	144	16	1.91	3.67	8.37	14.7	0.13	0.26	0.09
26.5	1	145	17	2.17	4.75	8.14	0.04	14.18	0.08	0.27
26.5	1	146	18	1.65	4.13	9.42	0.07	15.95	0.1	0.21
26.5	0	147	19	2.16	1.21	14.21	0.79	0.97	4.65	0.04
26.5	0	148	20	2.3	0.84	13.74	0.58	1.2	4.54	0.04
26.5	2	149	21	-0.39	7.65	13.85	24.97	0.24	1.04	0.46
26.5	2	150	22	-1	9.34	15.73	28.74	0.15	0.08	0.07
26.5	2	151	23	-1.15	9.58	16.3	29.7	0.19	0.09	0.06
26.5	2	152	24	-0.37	5.85	15.72	24.82	0.29	0.66	0.16
26.5	1	153	25	-0.2	6.04	14.61	0.12	24.47	0.39	1.99
26.5	1	154	26	-0.72	8.13	17.42	0.09	27.58	0.02	0.23
26.5	1	155	27	-0.89	8.17	17.27	0.14	28.66	0.08	0.23
26.5	1	156	28	0.18	5.06	13.77	0.17	22.39	0.38	1.05
26.5	0	157	29	-0.27	1.81	24.83	1.84	5.89	7.23	0.07
26.5	0	158	30	-0.52	2.67	26.31	0.42	3.27	7.67	0.12
26.5	0	159	31	-0.56	2.7	26.58	0.48	0.63	9.16	0.13
26.5	0	160	32	-1.3	2.3	31.46	0.68	1.4	11.72	0.06
26.5	0	161	33	-0.89	1.92	28.62	1.89	2.63	11.95	0.03
26.5	2	162	34	-0.69	7.83	16.04	26.71	0.19	0.32	0.09
26.5	2	163	35	-0.96	9.64	14.63	28.45	0.21	0.06	0.02
26.5	2	164	36	-1.02	8.66	17.12	28.85	0.18	0.12	0.04
26.5	1	165	37	-0.59	7.61	18.15	0.1	26.74	0.04	0.55
26.5	1	166	38	-0.71	8.13	16.11	0.15	27.51	0.03	0.12
26.5	1	167	39	-0.82	7.93	17.07	0.13	28.21	0.04	0.24
26.5	0	168	40	-0.44	2.17	25.81	0.57	4.15	7.62	0.11
26.5	0	169	41	-0.46	3.07	25.97	0.69	1.36	8.36	0.1
26.5	0	170	42	-1.17	2.45	30.57	0.48	0.71	10.9	0.14
26.5	0	171	43	-1.09	2.05	29.99	1.03	1.89	11.52	0.03

28	2		0	8.09	1.36	0.88	3.54	0.02	0.04	0.04
28	2		1	8.39	1.43	0.88	3.3	0.01	0.03	0.03
28	1		2	8.36	1.3	0.9	0.02	3.41	0.04	0.05
28	1		3	8.58	1.27	0.99	0.02	3.24	0.03	0.05
28	0		4	10	0.28	2.33	0.07	0.2	0.35	0.01
28	0		5	10.78	0.37	1.95	0.05	0.28	0.45	0.01
28	2		6	5.58	2	1.87	6.31	0.04	0.16	0.17
28	2		7	6.06	2.95	1.87	5.65	0.03	0.05	0.01
28	2		8	6	2.19	1.38	5.73	0.04	0.11	0.12
28	1		9	5.79	2.06	2.07	0.04	6.15	0.1	0.18
28	1		10	6.17	2.83	2.01	0.03	5.64	0.02	0.02
28	1		11	6.71	1.52	1.43	0.05	4.97	0.11	0.17
28	0		12	7.87	0.63	3.81	0.13	0.7	0.8	0.02
28	0		13	7.21	1.24	4.44	0.04	0.24	1.02	0.01
28	0		14	8.52	0.41	3.28	0.28	0.33	0.62	0.01
28	2		15	5	3.18	2.3	7.22	0.03	0.12	0.1
28	2		16	6.3	2.57	1.73	5.35	0.04	0.04	0.04
28	1		17	6.2	2.71	1.96	0.03	5.6	0.01	0.06
28	1		18	5.29	3.43	2.56	0.06	6.9	0.02	0.03
28	0		19	8.25	0.39	3.49	0.25	0.32	0.71	0.01
28	0		20	7.83	0.56	3.85	0.15	0.75	0.64	0.01
28	2		21	3.7	3.33	3.33	9.72	0.04	0.4	0.27
28	2		22	2.22	7.22	4.64	13.68	0.07	0.04	0.01
28	2		23	2.24	7.63	4.38	13.62	0.1	0.02	0.02
28	2		24	4.93	3.3	2.74	7.33	0.11	0.1	0.06
28	1		25	4.14	2.94	3.46	0.05	9.01	0.12	0.46
28	1		26	2.74	5.86	4.72	0.09	12.41	0.01	0.07
28	1		27	2.51	6.97	4.71	0.08	13.11	0.05	0.03
28	1		28	4.97	2.8	3.11	0.09	7.43	0.21	0.18
28	0		29	5.78	0.91	6.17	0.62	1.46	1.72	0.02
28	0		30	4.77	1.37	7.79	0.19	0.99	1.64	0.04
28	0		31	4.51	1.85	8.27	0.19	0.21	1.63	0.05
28	0		32	5.08	1.33	7.25	0.26	1.24	1.35	0.02
28	0		33	6.01	1.03	5.85	0.4	1.86	1.63	0.01
28	2		34	3.36	4.74	3.96	10.53	0.07	0.15	0.05
28	2		35	2.09	7.95	4.5	14.1	0.11	0.02	0.01
28	2		36	3.3	5.56	3.59	10.68	0.07	0.06	0.03
28	1		37	3.45	4.6	4.19	0.08	10.55	0.01	0.18
28	1		38	2.46	6.73	4.83	0.09	13.25	0.01	0.04
28	1		39	3.39	5.55	4.04	0.11	10.69	0.02	0.1
28	0		40	5.36	1.15	6.79	0.42	1.18	1.76	0.03
28	0		41	4.42	1.74	8.44	0.22	0.5	1.67	0.04
28	0		42	4.53	1.7	8.22	0.12	0.6	1.33	0.04
28	0		43	5.63	1.17	6.38	0.35	1.67	1.49	0.01

28	2		128	7.78	0.52	2.05	3.8	0.03	0.04	0.02
28	2		129	9.17	0.34	1.42	2.76	0.02	0.03	0.01
28	1		130	7.78	0.64	2.11	0.02	3.9	0.02	0.07
28	1		131	8.73	0.43	1.76	0.01	3.13	0.01	0.07
28	0		132	8.83	0.17	3.06	0.11	0.13	0.54	0
28	0		133	10.32	0.13	2.17	0.05	0.17	0.6	0
28	2		134	5.92	0.9	3.03	5.83	0.06	0.14	0.06
28	2		135	5.33	1.05	4.49	6.68	0.04	0.03	0.01
28	2		136	6.26	0.78	2.78	5.39	0.06	0.1	0.05
28	1		137	6.04	0.91	3.13	0.03	5.81	0.05	0.26
28	1		138	4.89	1.51	4.81	0.03	7.57	0.01	0.02
28	1		139	6.17	0.94	3.68	0.04	5.64	0.09	0.13
28	0		140	6.88	0.41	4.78	0.38	0.4	1.18	0
28	0		141	5.15	0.24	7.12	0.05	0.12	1.55	0.01
28	0		142	5.99	0.3	5.88	0.19	0.25	1.19	0.01
28	2		143	5.31	0.96	4.57	6.72	0.03	0.05	0.01
28	2		144	5.94	0.95	3.57	5.81	0.06	0.08	0.04
28	1		145	5.47	1.29	4.24	0.03	6.63	0.04	0.18
28	1		146	5.68	1.07	4.26	0.05	6.31	0.06	0.09
28	0		147	5.69	0.29	6.3	0.21	0.22	1.51	0.01
28	0		148	5.48	0.27	6.61	0.13	0.2	1.32	0.01
28	2		149	3.43	1.67	6.77	10.35	0.07	0.3	0.14
28	2		150	2.62	2.34	8.13	12.47	0.12	0.01	0.01
28	2		151	2.55	2.24	8.3	12.67	0.16	0.03	0.02
28	2		152	3.43	1.65	6.63	10.36	0.11	0.26	0.09
28	1		153	3.61	1.58	7.04	0.06	10.17	0.12	0.64
28	1		154	3.07	2.39	7.48	0.09	11.51	0.01	0.06
28	1		155	2.68	2.22	8.36	0.09	12.6	0.02	0.05
28	1		156	3.35	1.86	7.29	0.07	10.79	0.16	0.36
28	0		157	4.6	0.87	8.1	0.51	1.65	2.44	0.01
28	0		158	3.05	0.86	11.57	0.16	0.42	3.28	0.01
28	0		159	2.57	0.43	12.91	0.06	0.15	3.65	0.02
28	0		160	2.82	0.49	12.2	0.07	0.21	3.3	0.02
28	0		161	3.64	0.88	10.09	0.45	0.45	3.51	0.01
28	2		162	2.64	2.31	7.75	12.42	0.1	0.08	0.01
28	2		163	2.51	2.38	8.36	12.79	0.14	0.03	0.01
28	2		164	2.88	2.05	7.74	11.76	0.14	0.04	0.02
28	1		165	3	2.25	7.95	0.07	11.7	0.02	0.16
28	1		166	2.68	2.39	8.33	0.1	12.59	0.02	0.03
28	1		167	2.87	2.12	8.08	0.07	12.04	0.03	0.1
28	0		168	3.59	0.89	10.22	0.24	1.07	2.85	0.01
28	0		169	2.84	0.64	12.15	0.15	0.14	3.57	0.02
28	0		170	2.5	0.41	13.13	0.04	0.2	3.59	0.02
28	0		171	3.17	0.65	11.24	0.23	0.23	3.55	0.01

28	2	128	0	4.73	1.95	3.1	7.67	0.05	0.13	0.07
28	2	129	1	5.61	2	2.38	6.27	0.05	0.09	0.08
28	1	130	2	4.85	2.14	3.32	0.06	7.65	0.1	0.21
28	1	131	3	5.35	1.78	2.89	0.05	6.81	0.08	0.21
28	0	132	4	5.8	0.6	6.13	0.28	0.38	1.24	0.02
28	0	133	5	6.92	0.59	4.74	0.18	0.6	1.2	0.01
28	2	134	6	2.1	4.05	5.73	14.08	0.13	0.54	0.28
28	2	135	7	2.56	4.2	6.86	12.64	0.12	0.12	0.04
28	2	136	8	3.53	3.01	4.07	10.13	0.12	0.29	0.24
28	1	137	9	2.58	3.98	5.72	0.1	12.9	0.29	0.79
28	1	138	10	2.27	4.33	7.13	0.11	13.84	0.03	0.06
28	1	139	11	3.67	2.6	5.11	0.11	10.02	0.38	0.37
28	0	140	12	4.28	1.35	8.71	0.78	1.24	2.47	0.03
28	0	141	13	3.27	1.62	10.99	0.11	0.5	2.73	0.03
28	0	142	14	2.92	1.04	11.91	0.67	0.88	2.94	0.02
28	2	143	15	2.16	4.18	7.13	13.87	0.08	0.23	0.13
28	2	144	16	2.7	3.78	6.45	12.24	0.14	0.19	0.11
28	1	145	17	2.4	4.64	6.31	0.11	13.42	0.07	0.43
28	1	146	18	2.24	4.65	7.45	0.17	13.92	0.16	0.16
28	0	147	19	3.25	0.92	11.05	0.8	0.59	2.9	0.03
28	0	148	20	3.1	0.89	11.44	0.42	1.01	2.72	0.03
28	2	149	21	-0.61	7.44	13.4	26.26	0.13	1.23	0.39
28	2	150	22	-0.6	10.04	13.09	26.2	0.21	0.08	0.02
28	2	151	23	-0.96	10.84	14.68	28.48	0.36	0.07	0.05
28	2	152	24	0.48	5.23	11.48	20.43	0.32	0.46	0.25
28	1	153	25	-0.06	6.58	12.34	0.11	23.64	0.29	2.07
28	1	154	26	-0.28	8.44	12.44	0.32	24.87	0.02	0.18
28	1	155	27	-0.77	9.57	14.74	0.3	27.89	0.13	0.1
28	1	156	28	0.41	5.08	12.07	0.22	21.26	0.72	0.73
28	0	157	29	1.61	2.14	16.13	2.12	3.19	6.27	0.05
28	0	158	30	0.51	2.82	20.77	0.45	1.6	5.13	0.07
28	0	159	31	0.01	2.72	23.3	0.39	0.53	6.19	0.09
28	0	160	32	-0.16	2.45	24.23	0.51	2.05	7.4	0.06
28	0	161	33	-0.12	2.33	24.01	1.42	3.34	8.41	0.04
28	2	162	34	-0.49	7.27	14.16	25.55	0.17	0.33	0.11
28	2	163	35	-0.89	11.17	14.02	28.03	0.37	0.07	0.02
28	2	164	36	-0.4	8.5	13.8	24.99	0.32	0.14	0.07
28	1	165	37	-0.19	7.62	13.17	0.25	24.38	0.04	0.57
28	1	166	38	-0.66	8.99	14.3	0.33	27.18	0.03	0.12
28	1	167	39	-0.37	8.05	14.02	0.29	25.45	0.06	0.2
28	0	168	40	1.08	2.41	18.19	1.05	2.38	5.99	0.07
28	0	169	41	0.16	3.15	22.47	0.61	0.85	6.06	0.09
28	0	170	42	-0.18	2.57	24.33	0.2	1.28	6.41	0.07
28	0	171	43	-0.09	2.33	23.84	0.84	2.45	8.24	0.05

29.5	2		0	10.5	0.9	0.38	2.03	0.01	0.03	0.02
29.5	2		1	10.71	0.87	0.32	1.94	0.02	0.03	0.04
29.5	1		2	10.93	0.8	0.45	0.01	1.88	0.02	0.05
29.5	1		3	10.84	0.83	0.39	0.01	1.92	0.03	0.05
29.5	0		4	12.17	0.21	1.42	0.11	0.13	0.29	0
29.5	0		5	11.96	0.16	1.49	0.05	0.29	0.24	0
29.5	2		6	7.44	1.46	1.08	4.11	0.02	0.11	0.09
29.5	2		7	9.03	1.64	0.79	2.85	0.03	0.02	0.01
29.5	2		8	7.57	1.52	1.12	3.99	0.03	0.1	0.14
29.5	1		9	7.63	1.28	1.25	0.02	4.03	0.07	0.18
29.5	1		10	9.26	1.55	0.65	0.02	2.77	0.01	0.02
29.5	1		11	8.33	1.16	0.92	0.04	3.43	0.1	0.14
29.5	0		12	9.44	0.34	2.65	0.13	0.39	0.47	0.01
29.5	0		13	8.66	0.61	3.18	0.04	0.42	0.69	0.01
29.5	0		14	10.05	0.47	2.31	0.21	0.3	0.38	0.01
29.5	2		15	7.52	1.9	0.93	4.04	0.04	0.08	0.03
29.5	2		16	8.91	1.52	0.64	2.93	0.03	0.02	0.03
29.5	1		17	9.4	1.44	0.68	0.02	2.68	0.01	0.05
29.5	1		18	8.74	1.83	0.8	0.05	3.12	0.02	0.06
29.5	0		19	9.61	0.33	2.56	0.26	0.16	0.62	0.01
29.5	0		20	9.85	0.34	2.42	0.17	0.59	0.56	0.01
29.5	2		21	5.16	2.67	2.35	6.95	0.04	0.23	0.08
29.5	2		22	5.5	4.26	1.38	6.43	0.09	0.01	0
29.5	2		23	5.76	4.1	1.18	6.06	0.1	0.01	0
29.5	2		24	6.29	2.45	1.68	5.36	0.07	0.13	0.2
29.5	1		25	5.42	2.14	2.63	0.04	6.7	0.08	0.46
29.5	1		26	6.13	3.18	1.58	0.06	5.69	0.01	0.06
29.5	1		27	6.13	3.83	1.2	0.07	5.69	0.02	0.02
29.5	1		28	7.19	1.9	1.98	0.09	4.46	0.16	0.28
29.5	0		29	8.66	0.74	3.18	0.68	0.64	0.68	0.01
29.5	0		30	7.36	0.79	4.29	0.3	0.31	1.04	0.02
29.5	0		31	5.67	1.2	6.32	0.19	0.36	1.5	0.03
29.5	0		32	7	0.89	4.66	0.17	1.31	1.29	0.02
29.5	0		33	7.69	0.72	3.98	0.31	1.63	1.16	0.02
29.5	2		34	5.55	2.98	2.01	6.35	0.05	0.15	0.05
29.5	2		35	5.3	4.56	1.33	6.74	0.12	0.01	0.01
29.5	2		36	6.24	3.04	1.13	5.42	0.08	0.06	0.05
29.5	1		37	6.3	2.43	1.85	0.04	5.47	0.02	0.18
29.5	1		38	5.87	3.81	1.45	0.07	6.04	0.01	0.01
29.5	1		39	7.26	2.58	1.16	0.08	4.39	0.02	0.08
29.5	0		40	8.39	0.8	3.38	0.55	0.45	0.87	0.01
29.5	0		41	5.83	1.2	6.1	0.18	0.23	1.31	0.03
29.5	0		42	6.3	1.09	5.47	0.1	0.9	1.34	0.02
29.5	0		43	7.82	0.83	3.86	0.26	1.52	1.32	0.01

29.5	2		128	11.23	0.21	0.99	1.72	0.01	0.02	0.01
29.5	2		129	12.98	0.13	0.67	1.15	0.02	0.01	0
29.5	1		130	11.25	0.22	1.08	0.01	1.75	0.01	0.03
29.5	1		131	12.6	0.15	0.78	0.01	1.28	0.01	0.03
29.5	0		132	11.15	0.07	1.79	0.04	0.1	0.29	0
29.5	0		133	13.07	0.05	1.15	0.02	0.12	0.23	0
29.5	2		134	9.23	0.38	1.34	2.72	0.02	0.06	0.02
29.5	2		135	8.66	0.44	2.05	3.11	0.03	0.02	0.01
29.5	2		136	9.71	0.34	1.28	2.44	0.02	0.05	0.03
29.5	1		137	9.31	0.42	1.33	0.02	2.73	0.02	0.11
29.5	1		138	8.81	0.46	2.22	0.02	3.07	0	0.01
29.5	1		139	9.27	0.38	1.81	0.01	2.76	0.02	0.07
29.5	0		140	9.67	0.15	2.52	0.14	0.2	0.5	0
29.5	0		141	7.91	0.14	3.77	0.04	0.05	0.86	0
29.5	0		142	9.02	0.15	2.92	0.09	0.11	0.48	0
29.5	2		143	8.86	0.38	1.99	2.97	0.02	0.01	0
29.5	2		144	9.22	0.42	1.66	2.73	0.03	0.04	0.02
29.5	1		145	9.06	0.47	1.82	0.02	2.9	0.01	0.09
29.5	1		146	8.67	0.45	2.18	0.01	3.17	0.02	0.06
29.5	0		147	8.35	0.14	3.41	0.09	0.12	0.81	0
29.5	0		148	8.43	0.16	3.35	0.06	0.09	0.63	0
29.5	2		149	7.32	0.77	2.68	4.22	0.03	0.14	0.03
29.5	2		150	6.32	0.89	3.56	5.32	0.06	0.01	0
29.5	2		151	6.25	0.86	3.69	5.41	0.12	0.02	0
29.5	2		152	6.94	0.72	3.15	4.62	0.06	0.11	0.05
29.5	1		153	7.2	0.81	2.66	0.03	4.45	0.03	0.29
29.5	1		154	6.53	0.8	3.5	0.05	5.19	0	0.01
29.5	1		155	6.39	0.83	3.77	0.05	5.36	0.01	0.02
29.5	1		156	6.55	0.77	3.76	0.05	5.17	0.04	0.15
29.5	0		157	7.6	0.34	4.06	0.26	0.88	0.92	0.01
29.5	0		158	5.48	0.31	6.61	0.06	0.18	1.86	0.01
29.5	0		159	5.12	0.23	7.18	0.05	0.11	2.08	0.01
29.5	0		160	5.62	0.33	6.41	0.05	0.14	1.7	0.01
29.5	0		161	6.91	0.32	4.75	0.15	0.2	1.08	0.01
29.5	2		162	6.52	0.89	3.2	5.09	0.05	0.02	0.01
29.5	2		163	6.14	0.86	3.79	5.55	0.12	0.02	0
29.5	2		164	6.51	0.82	3.49	5.09	0.09	0.02	0.02
29.5	1		165	6.67	0.87	3.24	0.05	5.02	0.01	0.09
29.5	1		166	6.19	0.84	3.94	0.05	5.61	0	0.02
29.5	1		167	6.39	0.85	3.9	0.05	5.36	0.02	0.04
29.5	0		168	6.29	0.38	5.48	0.11	0.52	1.44	0.01
29.5	0		169	5.16	0.24	7.12	0.08	0.1	2.07	0.01
29.5	0		170	5.21	0.28	7.03	0.04	0.13	2	0.01
29.5	0		171	6.12	0.34	5.71	0.07	0.12	1.4	0.01

29.5	2	128	0	7.51	1.28	1.61	4.04	0.04	0.09	0.05
29.5	2	129	1	8.43	1.15	1.13	3.27	0.06	0.06	0.06
29.5	1	130	2	7.67	1.18	2.04	0.04	3.99	0.05	0.14
29.5	1	131	3	8.22	1.14	1.5	0.03	3.52	0.06	0.14
29.5	0	132	4	7.75	0.32	3.92	0.25	0.25	0.83	0.01
29.5	0	133	5	8.8	0.32	3.08	0.12	0.55	0.6	0.01
29.5	2	134	6	4.62	2.47	2.96	7.88	0.07	0.33	0.19
29.5	2	135	7	5.48	2.48	3.04	6.46	0.11	0.05	0.02
29.5	2	136	8	5.74	1.98	2.39	6.09	0.07	0.21	0.28
29.5	1	137	9	4.68	2.31	3.41	0.06	7.94	0.16	0.55
29.5	1	138	10	5.81	2.2	2.99	0.07	6.13	0.02	0.05
29.5	1	139	11	5.99	1.69	3.04	0.08	5.88	0.21	0.32
29.5	0	140	12	6.86	0.54	4.81	0.43	0.55	0.94	0.01
29.5	0	141	13	5.48	0.77	6.61	0.09	0.55	1.55	0.02
29.5	0	142	14	5.39	0.98	6.75	0.38	0.65	1.23	0.02
29.5	2	143	15	5.01	2.74	3.13	7.19	0.07	0.12	0.06
29.5	2	144	16	5.16	2.39	2.79	6.95	0.12	0.11	0.09
29.5	1	145	17	5.84	2.08	2.92	0.07	6.09	0.03	0.25
29.5	1	146	18	5.35	2.5	3.71	0.09	6.81	0.07	0.21
29.5	0	147	19	5.07	0.58	7.27	0.57	0.31	1.55	0.01
29.5	0	148	20	5.24	0.66	6.98	0.26	0.75	1.72	0.02
29.5	2	149	21	1.85	4.4	6.86	14.9	0.12	0.67	0.19
29.5	2	150	22	2.79	6.1	5.13	12.01	0.26	0.03	0.01
29.5	2	151	23	2.55	6.25	5.7	12.67	0.39	0.03	0.01
29.5	2	152	24	2.07	3.74	7.4	14.17	0.24	0.45	0.44
29.5	1	153	25	2.06	4.25	7.46	0.1	14.53	0.16	1.41
29.5	1	154	26	3.08	4.43	5.99	0.2	11.48	0.01	0.09
29.5	1	155	27	2.77	5.54	5.64	0.21	12.32	0.04	0.06
29.5	1	156	28	2.4	3.32	8.84	0.16	13.43	0.36	0.75
29.5	0	157	29	3.84	1.27	9.65	1.62	1.81	2.17	0.03
29.5	0	158	30	2.5	1.4	13.14	0.46	0.85	3.31	0.05
29.5	0	159	31	2.05	2	14.55	0.4	0.63	4.34	0.05
29.5	0	160	32	1.68	1.76	15.85	0.26	1.81	4.14	0.05
29.5	0	161	33	2.73	1.42	12.45	0.68	2.24	2.87	0.03
29.5	2	162	34	2.3	4.17	6.8	13.42	0.13	0.26	0.09
29.5	2	163	35	2.46	6.56	5.5	12.96	0.41	0.04	0.02
29.5	2	164	36	2.51	4.67	6.16	12.79	0.29	0.12	0.09
29.5	1	165	37	2.68	3.63	6.54	0.17	12.59	0.03	0.49
29.5	1	166	38	2.95	5.34	5.65	0.19	11.85	0.02	0.04
29.5	1	167	39	2.91	4.07	6.86	0.22	11.95	0.05	0.18
29.5	0	168	40	3.14	1.32	11.32	1.02	1.43	2.84	0.03
29.5	0	169	41	2.01	1.89	14.71	0.38	0.46	3.89	0.05
29.5	0	170	42	1.78	2.1	15.51	0.16	1.47	4.83	0.05
29.5	0	171	43	2.26	1.45	13.87	0.36	1.98	3.01	0.04

Table3-2 n258 PD

Frequency (GHz)	Module	Beam 2	Beam 1	sim.power.limit (dBm)	Front.4cm2PD (W/m2)	Back.4cm2PD (W/m2)	Left.4cm2PD (W/m2)	Right.4cm2PD (W/m2)	Top.4cm2PD (W/m2)	Bottom.4cm2PD (W/m2)
24.25	2		0	9.08	0.76	1.51	2.82	0.02	0.06	0.01
24.25	2		1	9.14	0.78	1.59	2.78	0.02	0.06	0.01
24.25	1		2	9.26	0.78	1.24	0.01	2.71	0	0.07
24.25	1		3	8.25	0.82	1.68	0.01	3.42	0.01	0.11
24.25	0		4	9.88	0.12	2.35	0.07	0.16	0.31	0
24.25	0		5	7.56	0.16	4	0.11	0.19	0.32	0.01
24.25	2		6	6.67	1.48	2.28	4.91	0.04	0.13	0.02
24.25	2		7	6.29	1.77	2.8	5.37	0.01	0.06	0.01
24.25	2		8	6.98	1.1	2.59	4.57	0.05	0.21	0.03
24.25	1		9	6.48	1.22	1.95	0.03	5.13	0.02	0.33
24.25	1		10	5.37	1.94	3.74	0.01	6.63	0	0.04
24.25	1		11	6.38	1.12	2.76	0.04	5.25	0.04	0.51
24.25	0		12	6.64	0.43	4.94	0.27	0.62	0.69	0.01
24.25	0		13	3.84	0.29	9.42	0.06	1.31	1.21	0.02
24.25	0		14	5.09	0.21	7.07	0.14	0.11	0.73	0.02
24.25	2		15	6.07	1.81	2.98	5.64	0.01	0.02	0.01
24.25	2		16	7.07	1.18	2.41	4.48	0.04	0.2	0.03
24.25	1		17	5.73	1.78	3.11	0.02	6.09	0.01	0.18
24.25	1		18	5.5	1.87	3.45	0.02	6.42	0.01	0.12
24.25	0		19	6.21	0.32	5.46	0.19	0.53	0.71	0.02
24.25	0		20	3.91	0.29	9.27	0.13	0.26	1.04	0.03
24.25	2		21	5.11	3.16	3.91	7.03	0.13	0.63	0.09
24.25	2		22	3.43	3.36	6	10.34	0.04	0.08	0.02
24.25	2		23	3.46	3.61	6.07	10.29	0.08	0.08	0.01
24.25	2		24	3.51	2.89	6.61	10.17	0.08	0.32	0.02
24.25	2		25	4.77	3.09	5.22	7.61	0.13	0.61	0.09
24.25	1		26	3.39	2.52	5.61	0.07	10.46	0.04	0.6
24.25	1		27	2.92	3.53	7.44	0.05	11.64	0.01	0.18
24.25	1		28	2.61	3.71	7.34	0.03	12.51	0.01	0.11
24.25	1		29	3.47	2.71	6.05	0.05	10.27	0.05	0.66
24.25	1		30	4.6	1.64	4.5	0.12	7.91	0.11	1.52
24.25	0		31	2.09	0.99	14.1	0.37	3.92	2.22	0.02
24.25	0		32	1.67	0.58	15.54	0.2	3.37	2.66	0.05
24.25	0		33	1.82	0.52	15.01	0.12	1.07	1.9	0.07
24.25	0		34	1.36	0.45	16.68	0.2	0.47	2.37	0.07
24.25	0		35	1.66	0.69	15.57	0.51	0.57	2.31	0.02
24.25	2		36	3.49	2.72	6.04	10.22	0.05	0.2	0.05
24.25	2		37	3.13	3.86	6.24	11.1	0.06	0.02	0.01
24.25	2		38	3.49	3.37	6.58	10.22	0.1	0.06	0.01
24.25	2		39	4.09	2.4	5.89	8.89	0.08	0.53	0.07
24.25	1		40	2.87	3.37	7.19	0.04	11.79	0.01	0.18
24.25	1		41	2.74	3.75	7.39	0.04	12.13	0	0.08
24.25	1		42	2.75	3.54	6.8	0.04	12.11	0.01	0.18
24.25	1		43	4.73	1.79	4.51	0.1	7.67	0.09	1.32
24.25	0		44	1.77	0.85	15.19	0.29	3.97	2.45	0.03
24.25	0		45	1.87	0.46	14.85	0.15	2.07	2.7	0.06
24.25	0		46	1.4	0.39	16.52	0.15	0.74	2.09	0.08
24.25	0		47	1.42	0.54	16.44	0.31	0.3	2.6	0.04

24.25	2		128	8.97	0.37	1.81	2.89	0.02	0.03	0.03
24.25	2		129	10.05	0.28	1.38	2.26	0.01	0.04	0.03
24.25	1		130	8.65	0.34	2	0.02	3.11	0.03	0.07
24.25	1		131	9.24	0.39	1.76	0.02	2.72	0.02	0.04
24.25	0		132	7.51	0.14	4.04	0.2	0.15	1.23	0
24.25	0		133	7	0.22	4.55	0.17	0.26	1.19	0
24.25	2		134	5.99	0.92	4.05	5.75	0.09	0.08	0.14
24.25	2		135	5.08	1.06	5.08	7.08	0.03	0.06	0.01
24.25	2		136	6.23	0.87	3.82	5.43	0.09	0.08	0.15
24.25	1		137	6.52	0.78	3.49	0.03	5.08	0.07	0.14
24.25	1		138	5.24	1	4.75	0.03	6.82	0.01	0.04
24.25	1		139	7.16	0.58	3.43	0.03	4.38	0.09	0.18
24.25	0		140	5.13	0.46	7.01	0.63	0.77	2.08	0.01
24.25	0		141	3.67	0.5	9.79	0.08	0.36	3.38	0
24.25	0		142	4.41	0.35	8.27	0.42	0.31	2.8	0.01
24.25	2		143	5.19	1.01	4.75	6.91	0.05	0.06	0.08
24.25	2		144	5.94	0.86	4.12	5.81	0.06	0.12	0.08
24.25	1		145	5.54	0.97	4.35	0.03	6.37	0.02	0.06
24.25	1		146	6.15	0.73	4.14	0.03	5.54	0.07	0.15
24.25	0		147	4.1	0.41	8.87	0.35	0.69	2.94	0.01
24.25	0		148	3.89	0.44	9.31	0.18	0.09	3.26	0
24.25	2		149	3.59	2.19	6.51	9.99	0.15	0.26	0.5
24.25	2		150	2.79	1.98	8.67	12.01	0.1	0.02	0.03
24.25	2		151	3.21	1.95	7.48	10.9	0.09	0.04	0.01
24.25	2		152	3.43	1.87	7.52	10.34	0.08	0.22	0.02
24.25	2		153	4.89	1.49	4.63	7.41	0.17	0.29	0.41
24.25	1		154	3.89	1.73	6.68	0.03	9.32	0.03	0.4
24.25	1		155	3.73	1.64	6.99	0.04	9.66	0.03	0.07
24.25	1		156	3.34	1.91	7.49	0.05	10.57	0.02	0.06
24.25	1		157	3.03	1.87	8.29	0.04	11.36	0.11	0.08
24.25	1		158	4.19	1.5	6.41	0.07	8.7	0.28	0.39
24.25	0		159	2.5	0.94	12.81	0.69	2.98	4.14	0.01
24.25	0		160	1.6	0.81	15.8	0.3	2.09	5.32	0.02
24.25	0		161	1.49	1.47	16.19	0.16	0.16	6.88	0.01
24.25	0		162	1.11	1.09	17.69	0.13	0.1	7.21	0.01
24.25	0		163	1.49	1.18	16.18	1.05	0.3	7.71	0.01
24.25	2		164	2.72	2.46	8.46	12.18	0.08	0.13	0.32
24.25	2		165	3.03	1.93	8.17	11.36	0.1	0.03	0.04
24.25	2		166	3.4	1.82	7.52	10.43	0.1	0.02	0.04
24.25	2		167	4.41	1.42	6.15	8.27	0.13	0.46	0.15
24.25	1		168	3.58	1.76	7.03	0.05	10	0.02	0.13
24.25	1		169	3.59	1.78	7.09	0.05	9.98	0.01	0.05
24.25	1		170	3.06	1.92	8.42	0.04	11.29	0.01	0.06
24.25	1		171	3.38	1.79	7.56	0.05	10.47	0.21	0.24
24.25	0		172	1.87	0.9	14.85	0.3	3.15	4.8	0.01
24.25	0		173	1.53	1.08	16.05	0.33	0.67	6.23	0.02
24.25	0		174	1.38	1.44	16.6	0.1	0.24	6.94	0.01
24.25	0		175	0.89	0.93	18.6	0.82	0.14	7.39	0.01

24.25	2	128	0	5.55	1.21	3.97	6.35	0.05	0.15	0.07
24.25	2	129	1	6.19	1.2	3.66	5.49	0.04	0.13	0.07
24.25	1	130	2	4.86	1.37	4.4	0.03	7.45	0.04	0.26
24.25	1	131	3	5.39	1.33	4.41	0.03	6.59	0.03	0.21
24.25	0	132	4	5.46	0.37	6.49	0.32	0.29	2.04	0.01
24.25	0	133	5	4.45	0.4	8.18	0.41	0.51	1.62	0.02
24.25	2	134	6	2.37	2.58	8.42	13.22	0.19	0.28	0.24
24.25	2	135	7	2.27	3.31	8.75	13.52	0.07	0.17	0.02
24.25	2	136	8	3.61	1.78	6.84	9.93	0.23	0.44	0.3
24.25	1	137	9	2.97	2.35	6.35	0.08	11.5	0.1	0.66
24.25	1	138	10	1.7	3.2	10.23	0.05	15.44	0.02	0.09
24.25	1	139	11	4.68	1.77	5.41	0.07	7.76	0.15	0.91
24.25	0	140	12	2.4	1.22	13.13	1.28	1.31	3.17	0.03
24.25	0	141	13	1.66	0.88	15.56	0.19	1.99	3.94	0.04
24.25	0	142	14	1.49	0.69	16.2	0.69	0.64	4.22	0.03
24.25	2	143	15	1.74	2.88	9.7	15.26	0.08	0.09	0.09
24.25	2	144	16	2.92	2.58	7.27	11.66	0.19	0.43	0.19
24.25	1	145	17	2.28	3.06	7.95	0.07	13.51	0.04	0.31
24.25	1	146	18	1.8	2.67	10.38	0.06	15.07	0.09	0.41
24.25	0	147	19	1.76	1.03	15.21	0.85	1.35	4.18	0.03
24.25	0	148	20	1.6	0.79	15.77	0.34	0.5	3.98	0.04
24.25	2	149	21	-0.03	5.44	15.3	22.98	0.48	1.28	0.92
24.25	2	150	22	-0.76	5.34	18.69	27.17	0.22	0.13	0.07
24.25	2	151	23	0.12	5.93	14.57	22.2	0.19	0.11	0.03
24.25	2	152	24	-0.04	6.1	17.47	23.02	0.19	0.79	0.05
24.25	2	153	25	1.32	6	12.27	16.84	0.53	1.43	0.83
24.25	1	154	26	-0.14	5.46	14.97	0.14	23.58	0.1	1.48
24.25	1	155	27	0.16	5.83	16.14	0.15	22.01	0.04	0.36
24.25	1	156	28	-0.46	6.37	17.55	0.12	25.38	0.05	0.28
24.25	1	157	29	-0.9	4.99	20.47	0.13	28.04	0.21	1
24.25	1	158	30	0.34	3.55	16.12	0.18	21.1	0.45	2.51
24.25	0	159	31	-1.15	3.33	29.74	1.35	8.15	7.49	0.03
24.25	0	160	32	-1.23	2.21	30.3	0.74	5.71	8.06	0.1
24.25	0	161	33	-0.92	2.06	28.21	0.46	1.51	9.1	0.09
24.25	0	162	34	-1.57	1.89	32.75	0.46	0.7	9.69	0.1
24.25	0	163	35	-1.71	2.29	33.8	2.05	1.33	10.7	0.04
24.25	2	164	36	-0.95	4.49	20.31	28.39	0.19	0.42	0.46
24.25	2	165	37	-0.51	6.08	16.96	25.65	0.15	0.06	0.06
24.25	2	166	38	0.22	5.54	15.61	21.69	0.25	0.11	0.08
24.25	2	167	39	0.35	5.07	15.67	21.03	0.38	1.41	0.39
24.25	1	168	40	-0.07	5.89	16.55	0.1	23.2	0.03	0.45
24.25	1	169	41	-0.08	6.19	16.25	0.12	23.26	0.02	0.22
24.25	1	170	42	-0.83	6	19.7	0.11	27.64	0.03	0.33
24.25	1	171	43	-0.41	3.95	18.98	0.15	25.06	0.4	2.05
24.25	0	172	44	-1.41	2.96	31.56	0.79	7.87	7.8	0.06
24.25	0	173	45	-0.95	1.87	28.39	0.64	2.88	8.8	0.12
24.25	0	174	46	-1.19	2.11	29.99	0.38	1.24	9.16	0.12
24.25	0	175	47	-1.92	1.69	35.51	1.55	0.48	10.77	0.06

25.875	2		0	8.12	1.12	1.54	3.51	0.03	0.1	0.02
25.875	2		1	8.36	1.26	1.55	3.32	0.01	0.09	0.02
25.875	1		2	9.47	0.95	0.96	0.02	2.57	0.01	0.03
25.875	1		3	7.51	1.37	1.64	0.02	4.05	0.02	0.07
25.875	0		4	10.75	0.27	1.92	0.09	0.12	0.37	0.01
25.875	0		5	8.46	0.25	3.25	0.09	0.23	0.45	0.01
25.875	2		6	6.19	1.94	1.74	5.49	0.04	0.19	0.08
25.875	2		7	5.75	2.53	2.74	6.07	0.03	0.06	0.01
25.875	2		8	6.69	1.49	2.86	4.89	0.04	0.34	0.06
25.875	1		9	6.57	1.64	1.34	0.06	5.02	0.05	0.15
25.875	1		10	4.67	3.03	3.85	0.01	7.79	0	0.03
25.875	1		11	6.04	1.61	1.98	0.03	5.68	0.04	0.41
25.875	0		12	6.63	0.39	4.96	0.23	0.58	0.77	0.01
25.875	0		13	3.85	0.47	9.41	0.05	1.13	0.43	0.02
25.875	0		14	6.61	0.68	4.98	0.1	0.15	1.03	0.02
25.875	2		15	5.69	2.68	2.45	6.16	0.03	0.05	0.02
25.875	2		16	6.49	1.51	2.22	5.12	0.04	0.22	0.08
25.875	1		17	5.6	2.37	2.74	0.03	6.28	0.03	0.07
25.875	1		18	4.9	2.75	3.23	0.02	7.38	0.02	0.09
25.875	0		19	6.42	0.37	5.21	0.23	0.56	0.75	0.01
25.875	0		20	3.93	0.6	9.23	0.14	0.29	0.57	0.02
25.875	2		21	4.89	3.12	5.57	7.4	0.09	0.7	0.22
25.875	2		22	2.59	5.18	5.87	12.58	0.05	0.11	0.01
25.875	2		23	2.13	6.01	6.22	13.98	0.08	0.06	0.02
25.875	2		24	3.22	4.07	6.2	10.87	0.06	0.21	0.05
25.875	2		25	4.45	2.55	6.51	8.19	0.1	0.78	0.21
25.875	1		26	4.36	2.72	3.69	0.14	8.36	0.11	0.36
25.875	1		27	2.02	5.34	7.92	0.06	14.32	0.02	0.1
25.875	1		28	1.72	5.47	8.12	0.04	15.33	0.01	0.06
25.875	1		29	3.32	3.88	4.7	0.05	10.61	0.04	0.61
25.875	1		30	4.95	2.57	3.52	0.1	7.3	0.15	1.01
25.875	0		31	3.3	0.81	10.68	0.36	2.99	2.09	0.03
25.875	0		32	1.78	0.79	15.15	0.2	3.03	1.42	0.05
25.875	0		33	2.91	0.97	11.68	0.29	0.78	1.22	0.06
25.875	0		34	2.04	1.03	14.25	0.26	0.47	1.6	0.06
25.875	0		35	1.54	0.97	16.01	0.34	0.35	1.8	0.04
25.875	2		36	4.01	3.67	4.31	9.06	0.07	0.27	0.06
25.875	2		37	1.97	6.42	6.41	14.49	0.08	0.02	0.02
25.875	2		38	2.32	5.57	6.57	13.36	0.08	0.06	0.04
25.875	2		39	4.29	2.22	6.3	8.5	0.07	0.6	0.13
25.875	1		40	2.63	4.81	6.41	0.06	12.46	0.02	0.08
25.875	1		41	2	5.37	7.98	0.06	14.41	0.01	0.04
25.875	1		42	2.08	5.04	7.15	0.04	14.12	0.02	0.18
25.875	1		43	4.38	2.87	3.15	0.07	8.33	0.11	0.98
25.875	0		44	2.48	0.83	12.9	0.3	3.24	1.85	0.03
25.875	0		45	2.01	0.95	14.37	0.22	2.07	1.18	0.06
25.875	0		46	2.6	1.05	12.53	0.25	0.51	1.45	0.06
25.875	0		47	1.48	0.94	16.24	0.3	0.46	1.66	0.06

25.875	2		128	7.89	0.54	2.14	3.71	0.03	0.04	0.02
25.875	2		129	8.81	0.43	1.73	3	0.02	0.04	0.02
25.875	1		130	8.56	0.29	1.98	0.02	3.18	0.03	0.11
25.875	1		131	7.92	0.42	2.23	0.01	3.68	0.02	0.05
25.875	0		132	7.64	0.17	3.93	0.17	0.14	1.09	0
25.875	0		133	7.28	0.21	4.27	0.18	0.22	1.24	0
25.875	2		134	5.59	0.88	4.2	6.3	0.08	0.12	0.07
25.875	2		135	4.5	1.28	5.47	8.1	0.04	0.05	0.01
25.875	2		136	5.67	0.84	3.96	6.18	0.08	0.12	0.07
25.875	1		137	5.49	0.85	4.36	0.03	6.44	0.06	0.18
25.875	1		138	4.75	0.97	5.49	0.03	7.65	0.01	0.08
25.875	1		139	6.18	0.73	3.59	0.05	5.49	0.1	0.29
25.875	0		140	5.47	0.52	6.47	0.59	0.66	1.84	0.01
25.875	0		141	3.99	0.56	9.11	0.1	0.33	3.06	0.01
25.875	0		142	4.5	0.38	8.1	0.4	0.31	3.21	0
25.875	2		143	4.84	1.09	5.07	7.49	0.06	0.09	0.04
25.875	2		144	5.23	1.03	4.44	6.85	0.07	0.14	0.06
25.875	1		145	4.97	0.95	5.1	0.03	7.26	0.03	0.09
25.875	1		146	5.55	0.78	4.57	0.04	6.35	0.08	0.24
25.875	0		147	4.63	0.54	7.86	0.34	0.49	2.68	0.01
25.875	0		148	3.92	0.42	9.25	0.17	0.1	3.17	0.01
25.875	2		149	3.55	2.3	6.61	10.08	0.12	0.52	0.26
25.875	2		150	2.15	2.59	9.7	13.91	0.1	0.03	0.02
25.875	2		151	2.21	2.54	9.08	13.7	0.13	0.04	0.01
25.875	2		152	2.33	2.42	9.24	13.33	0.1	0.21	0.01
25.875	2		153	4.38	1.85	4.93	8.32	0.16	0.44	0.23
25.875	1		154	3.1	1.99	8.23	0.05	11.18	0.09	0.48
25.875	1		155	2.44	2.13	9.03	0.07	13	0.03	0.1
25.875	1		156	2.3	2.29	9.3	0.04	13.43	0.02	0.08
25.875	1		157	2.37	2.1	9.5	0.06	13.23	0.1	0.2
25.875	1		158	3.23	2.1	7.06	0.07	10.83	0.25	0.72
25.875	0		159	3.05	0.81	11.29	0.94	2.97	3.6	0.01
25.875	0		160	1.54	1.14	16	0.19	1.6	6.09	0.01
25.875	0		161	1.51	1.39	16.12	0.16	0.23	6.58	0.01
25.875	0		162	1.26	0.96	17.07	0.16	0.16	7.16	0.01
25.875	0		163	1.21	0.97	17.25	1.02	0.26	7.69	0.01
25.875	2		164	2.76	2.53	8.49	12.08	0.06	0.37	0.17
25.875	2		165	2.11	2.6	9.39	14.03	0.1	0.05	0.03
25.875	2		166	2.23	2.59	9.15	13.66	0.12	0.03	0.04
25.875	2		167	3.41	2.05	6.64	10.39	0.15	0.49	0.12
25.875	1		168	2.42	2.16	9.19	0.05	13.05	0.01	0.12
25.875	1		169	2.55	2.15	8.62	0.06	12.67	0.02	0.06
25.875	1		170	2.29	2.18	9.65	0.05	13.45	0.02	0.06
25.875	1		171	2.56	2.17	8.66	0.07	12.65	0.2	0.49
25.875	0		172	2.21	0.9	13.72	0.39	2.63	4.69	0.01
25.875	0		173	1.46	1.35	16.28	0.25	0.9	6.62	0.02
25.875	0		174	1.4	1.34	16.53	0.1	0.24	6.8	0.01
25.875	0		175	1.01	0.85	18.09	0.67	0.22	7.54	0.01

25.875	2	128	0	4.66	1.72	4.17	7.8	0.06	0.18	0.07
25.875	2	129	1	5.32	1.88	3.76	6.69	0.03	0.19	0.06
25.875	1	130	2	5.59	1.41	3.1	0.05	6.3	0.06	0.24
25.875	1	131	3	4.57	1.9	4.33	0.05	7.96	0.05	0.19
25.875	0	132	4	5.71	0.53	6.12	0.38	0.44	1.62	0.01
25.875	0	133	5	4.59	0.51	7.93	0.29	0.64	1.94	0.02
25.875	2	134	6	2.36	2.87	7.23	13.26	0.16	0.35	0.29
25.875	2	135	7	1.76	4.17	8.78	15.22	0.08	0.16	0.05
25.875	2	136	8	2.56	2.48	7.62	12.65	0.2	0.53	0.25
25.875	1	137	9	2.54	2.5	6.87	0.14	12.7	0.17	0.59
25.875	1	138	10	1.31	4	10.09	0.06	16.86	0.02	0.13
25.875	1	139	11	3.66	2.32	5.62	0.1	9.83	0.19	0.89
25.875	0	140	12	2.61	1.05	12.52	1.09	1.93	3.44	0.02
25.875	0	141	13	1.62	1.07	15.72	0.19	1.46	3.66	0.04
25.875	0	142	14	2.09	1.33	14.1	0.72	0.52	4.75	0.03
25.875	2	143	15	1.78	3.87	8.56	15.16	0.09	0.17	0.08
25.875	2	144	16	2.08	2.9	7.76	14.12	0.16	0.44	0.27
25.875	1	145	17	1.78	3.46	8.63	0.07	15.13	0.07	0.23
25.875	1	146	18	1.68	3.72	9.22	0.09	15.5	0.13	0.53
25.875	0	147	19	1.98	0.94	14.45	0.88	1.65	4.15	0.03
25.875	0	148	20	1.49	1.09	16.17	0.34	0.42	3.99	0.03
25.875	2	149	21	-0.37	6.65	14.01	24.86	0.34	1.47	0.92
25.875	2	150	22	-1.19	8.18	18.8	30	0.19	0.2	0.05
25.875	2	151	23	-0.9	8.6	15.57	28.08	0.2	0.12	0.04
25.875	2	152	24	-1.03	7.94	17.35	28.91	0.18	0.56	0.09
25.875	2	153	25	-0.36	5.21	13.98	24.79	0.4	1.58	0.83
25.875	1	154	26	-0.42	5.6	14.11	0.23	25.1	0.33	1.28
25.875	1	155	27	-0.99	7.89	18.03	0.17	28.63	0.08	0.25
25.875	1	156	28	-1.2	8.12	19.4	0.12	30.07	0.03	0.18
25.875	1	157	29	-0.89	7.38	18.71	0.11	27.98	0.19	1.15
25.875	1	158	30	0.02	6.27	12.25	0.22	22.71	0.62	2.35
25.875	0	159	31	-0.65	1.99	26.47	2.09	6.74	7.66	0.04
25.875	0	160	32	-1.29	2.25	30.69	0.58	4.65	7.99	0.09
25.875	0	161	33	-0.77	2.68	27.22	0.66	1.24	9.99	0.11
25.875	0	162	34	-1.22	2.39	30.23	0.61	0.75	10.67	0.09
25.875	0	163	35	-1.51	1.8	32.3	1.63	0.89	11.4	0.06
25.875	2	164	36	-0.52	7.33	17.16	25.69	0.19	0.79	0.32
25.875	2	165	37	-1.29	9.06	17.74	30.72	0.15	0.08	0.09
25.875	2	166	38	-1.01	8.7	16.92	28.81	0.23	0.1	0.16
25.875	2	167	39	-0.46	5.73	15.08	25.33	0.34	1.4	0.44
25.875	1	168	40	-0.93	7.58	16.91	0.11	28.26	0.04	0.3
25.875	1	169	41	-0.89	7.88	17.23	0.2	28	0.06	0.13
25.875	1	170	42	-1.32	7.94	20.24	0.13	30.9	0.08	0.34
25.875	1	171	43	-0.42	6.86	15.11	0.15	25.15	0.47	1.93
25.875	0	172	44	-1.13	1.96	29.62	1.11	6.34	7.96	0.05
25.875	0	173	45	-0.83	2.69	27.64	0.67	2.72	8.92	0.12
25.875	0	174	46	-0.9	2.63	28.04	0.4	0.86	10.14	0.11
25.875	0	175	47	-1.59	1.94	32.92	1.1	0.82	10.71	0.09

27.5	2		0	8.01	1.31	0.99	3.6	0.02	0.06	0.04
27.5	2		1	8.04	1.53	1.04	3.58	0.02	0.06	0.04
27.5	1		2	10.33	0.92	0.57	0.01	2.11	0.02	0.02
27.5	1		3	8.18	1.22	1.1	0.02	3.47	0.04	0.05
27.5	0		4	11.58	0.21	1.59	0.18	0.09	0.18	0
27.5	0		5	9.29	0.23	2.69	0.06	0.19	0.55	0.01
27.5	2		6	6.23	1.92	1.39	5.43	0.03	0.13	0.09
27.5	2		7	6.03	2.82	1.96	5.69	0.03	0.04	0.02
27.5	2		8	6.1	1.59	1.48	5.6	0.04	0.2	0.16
27.5	1		9	7	1.27	1.21	0.03	4.55	0.13	0.13
27.5	1		10	5.68	2.95	2.46	0.02	6.17	0.02	0.02
27.5	1		11	6.2	1.61	2.04	0.03	5.47	0.13	0.26
27.5	0		12	8.34	0.41	3.34	0.39	0.39	0.66	0.01
27.5	0		13	6.14	1.05	5.55	0.07	0.44	0.92	0.02
27.5	0		14	7.17	0.43	4.38	0.11	0.21	0.85	0.01
27.5	2		15	5.86	2.91	1.94	5.91	0.02	0.05	0.02
27.5	2		16	6.63	1.36	1.34	4.96	0.04	0.13	0.09
27.5	1		17	6.56	2.02	1.79	0.03	5.04	0.08	0.07
27.5	1		18	5.83	2.67	2.18	0.02	5.96	0.03	0.08
27.5	0		19	8.22	0.37	3.43	0.36	0.35	0.73	0.01
27.5	0		20	6.2	1.11	5.48	0.08	0.49	0.96	0.01
27.5	2		21	3.6	3.77	2.9	9.97	0.06	0.45	0.43
27.5	2		22	2.34	6.26	5.06	13.32	0.06	0.1	0.02
27.5	2		23	1.9	7.66	5.07	14.71	0.08	0.03	0.03
27.5	2		24	4.01	4.02	4.02	9.06	0.07	0.12	0.07
27.5	2		25	4.02	3.33	2.84	9.03	0.07	0.4	0.4
27.5	1		26	5.47	2.41	2.88	0.1	6.47	0.43	0.28
27.5	1		27	2.16	6.93	5.66	0.06	13.88	0.04	0.05
27.5	1		28	2.12	6.53	5.94	0.07	14	0.01	0.09
27.5	1		29	3.49	3.58	4.29	0.06	10.2	0.07	0.42
27.5	1		30	3.91	3.11	2.61	0.07	9.28	0.4	0.51
27.5	0		31	4.57	0.92	7.96	0.71	2.18	1.77	0.04
27.5	0		32	3.94	1.36	9.22	0.35	1.63	1.79	0.05
27.5	0		33	3.92	1.3	9.25	0.27	0.31	1.65	0.05
27.5	0		34	3.11	1.4	11.15	0.15	0.44	1.58	0.04
27.5	0		35	4.25	1.35	8.58	0.27	1.2	1.89	0.03
27.5	2		36	3.57	4.23	3.44	10.04	0.05	0.25	0.13
27.5	2		37	1.88	7.68	5.37	14.78	0.07	0.03	0.01
27.5	2		38	2.41	6.58	4.91	13.08	0.07	0.06	0.04
27.5	2		39	5.71	2.18	3.31	6.12	0.09	0.27	0.23
27.5	1		40	3.44	4.72	4.63	0.07	10.34	0.04	0.14
27.5	1		41	2.12	6.97	5.6	0.07	13.99	0.06	0.04
27.5	1		42	2.56	5.46	5.43	0.07	12.65	0.01	0.18
27.5	1		43	3.73	3.11	3.16	0.06	9.65	0.24	0.55
27.5	0		44	4.23	1.11	8.62	0.57	1.98	1.88	0.04
27.5	0		45	3.92	1.42	9.25	0.23	1.02	1.52	0.04
27.5	0		46	3.4	1.31	10.43	0.17	0.25	1.65	0.05
27.5	0		47	3.38	1.41	10.48	0.23	0.76	1.74	0.03

27.5	2		128	7.6	0.51	2.14	3.96	0.02	0.04	0.02
27.5	2		129	8.33	0.46	1.72	3.35	0.03	0.04	0.01
27.5	1		130	9.15	0.26	1.75	0.02	2.78	0.03	0.07
27.5	1		131	7.63	0.56	2.24	0.02	3.93	0.02	0.06
27.5	0		132	8.5	0.15	3.22	0.12	0.1	0.77	0
27.5	0		133	8.19	0.18	3.46	0.14	0.14	0.7	0
27.5	2		134	5.52	0.81	3.57	6.4	0.05	0.1	0.07
27.5	2		135	4.93	1.22	4.83	7.33	0.04	0.03	0.01
27.5	2		136	5.6	0.77	3.35	6.28	0.05	0.1	0.07
27.5	1		137	5.77	0.95	4.01	0.03	6.04	0.08	0.12
27.5	1		138	5.05	1.01	5.05	0.03	7.12	0.01	0.07
27.5	1		139	6.13	0.69	3.19	0.04	5.56	0.07	0.19
27.5	0		140	6.47	0.5	5.14	0.48	0.39	1.25	0
27.5	0		141	4.89	0.33	7.39	0.12	0.23	2.01	0.01
27.5	0		142	5.25	0.35	6.81	0.26	0.24	2.09	0.01
27.5	2		143	5.03	1	4.51	7.16	0.04	0.09	0.04
27.5	2		144	5.51	1.05	3.8	6.41	0.06	0.09	0.04
27.5	1		145	5.21	1	4.81	0.03	6.87	0.04	0.07
27.5	1		146	5.73	0.73	4.16	0.04	6.1	0.05	0.19
27.5	0		147	5.66	0.34	6.2	0.33	0.34	1.76	0.01
27.5	0		148	4.73	0.29	7.67	0.08	0.11	1.98	0.01
27.5	2		149	3.53	2.05	6	10.12	0.06	0.38	0.21
27.5	2		150	2.31	2.55	8.54	13.41	0.09	0.07	0.02
27.5	2		151	2.29	2.54	8.82	13.47	0.12	0.03	0.01
27.5	2		152	2.54	2.27	8.2	12.72	0.13	0.1	0.04
27.5	2		153	4.01	1.92	4.99	9.06	0.08	0.39	0.18
27.5	1		154	3.13	2.05	7.49	0.08	11.1	0.15	0.37
27.5	1		155	2.26	2.26	9.27	0.07	13.57	0.03	0.04
27.5	1		156	2.49	2.38	8.72	0.07	12.85	0.01	0.06
27.5	1		157	2.69	2.09	9.1	0.06	12.29	0.07	0.38
27.5	1		158	3.8	1.94	6.35	0.05	9.5	0.18	0.82
27.5	0		159	4.22	1.06	8.63	0.82	1.68	2.64	0.01
27.5	0		160	2.95	0.88	11.57	0.24	1.1	3.44	0.01
27.5	0		161	2.33	0.82	13.33	0.16	0.2	3.89	0.02
27.5	0		162	2.05	0.68	14.22	0.08	0.22	4.51	0.01
27.5	0		163	2.46	0.87	12.96	0.64	0.43	5.12	0.01
27.5	2		164	2.7	2.2	7.67	12.24	0.08	0.35	0.14
27.5	2		165	2.35	2.57	8.68	13.28	0.11	0.02	0.02
27.5	2		166	2.27	2.58	8.85	13.51	0.13	0.03	0.02
27.5	2		167	3.36	1.91	6.51	10.52	0.12	0.36	0.1
27.5	1		168	2.43	2.14	8.9	0.06	13.05	0.02	0.07
27.5	1		169	2.35	2.35	9.04	0.07	13.29	0.04	0.05
27.5	1		170	2.47	2.51	8.95	0.06	12.93	0.03	0.06
27.5	1		171	3.16	1.75	7.93	0.06	11.02	0.14	0.71
27.5	0		172	3.46	1	10.3	0.51	1.65	3.11	0.01
27.5	0		173	2.63	0.87	12.46	0.22	0.4	3.56	0.02
27.5	0		174	2.07	0.7	14.18	0.07	0.16	4.06	0.02
27.5	0		175	2.28	0.77	13.51	0.34	0.22	5	0.01

27.5	2	128	0	4.48	1.97	3.41	8.13	0.04	0.12	0.08
27.5	2	129	1	4.92	2.13	2.87	7.35	0.05	0.14	0.08
27.5	1	130	2	6.49	1.22	2.57	0.03	5.12	0.1	0.15
27.5	1	131	3	4.76	1.96	3.5	0.04	7.63	0.11	0.2
27.5	0	132	4	5.6	0.55	6.29	0.48	0.31	1.16	0.01
27.5	0	133	5	5.32	0.57	6.7	0.35	0.45	1.59	0.01
27.5	2	134	6	2.28	3.12	6.35	13.49	0.08	0.29	0.21
27.5	2	135	7	2.11	4.25	7.92	14.02	0.1	0.08	0.05
27.5	2	136	8	2.34	2.95	5.6	13.32	0.13	0.43	0.32
27.5	1	137	9	3.07	2.09	6.19	0.08	11.25	0.41	0.33
27.5	1	138	10	2.11	4.28	8.13	0.09	14.04	0.03	0.13
27.5	1	139	11	3.39	2.49	5.4	0.09	10.45	0.37	0.74
27.5	0	140	12	3.84	1.47	9.41	1.5	1.19	2.74	0.02
27.5	0	141	13	2.89	1.57	11.72	0.24	0.89	2.98	0.03
27.5	0	142	14	2.55	1.19	12.68	0.45	0.58	4.01	0.03
27.5	2	143	15	2.21	4.2	6.69	13.71	0.08	0.24	0.07
27.5	2	144	16	2.69	2.47	6.11	12.27	0.12	0.27	0.19
27.5	1	145	17	2.28	3.12	7.94	0.09	13.49	0.24	0.15
27.5	1	146	18	2.55	3.87	6.29	0.06	12.68	0.13	0.47
27.5	0	147	19	3.46	1.12	10.28	1.22	0.87	3.24	0.02
27.5	0	148	20	2.58	1.49	12.61	0.22	0.7	2.87	0.02
27.5	2	149	21	-0.77	9.74	11.35	27.24	0.15	1.2	0.92
27.5	2	150	22	-0.86	9.49	15.12	27.78	0.13	0.25	0.06
27.5	2	151	23	-1.07	10.53	14.82	29.22	0.22	0.06	0.04
27.5	2	152	24	-0.56	6.72	15	25.96	0.3	0.24	0.15
27.5	2	153	25	-0.07	8	10.79	23.17	0.17	1.13	0.96
27.5	1	154	26	0.38	4.14	12.01	0.27	20.91	1.07	0.9
27.5	1	155	27	-1.22	9.64	16.93	0.18	30.24	0.14	0.15
27.5	1	156	28	-0.88	9.31	14.98	0.23	27.96	0.03	0.24
27.5	1	157	29	-0.48	7.38	15.37	0.15	25.47	0.14	1.2
27.5	1	158	30	-0.35	7.63	11.47	0.12	24.74	0.94	2.38
27.5	0	159	31	0.78	2.89	19.05	2.86	4.21	6.08	0.06
27.5	0	160	32	0.29	2.7	21.31	0.89	3.21	6.5	0.08
27.5	0	161	33	-0.21	2.65	23.94	0.74	0.63	6.38	0.09
27.5	0	162	34	-0.82	2.56	27.52	0.31	1.05	7.74	0.08
27.5	0	163	35	-0.42	2.88	25.13	1.03	2.24	9.71	0.06
27.5	2	164	36	-0.8	8.51	13.77	27.4	0.14	0.84	0.27
27.5	2	165	37	-0.93	10.73	14.22	28.23	0.14	0.07	0.04
27.5	2	166	38	-1.14	9.61	16.08	29.64	0.24	0.11	0.09
27.5	2	167	39	0.44	4.73	12.25	20.62	0.28	0.83	0.56
27.5	1	168	40	-0.81	7.41	16	0.19	27.47	0.08	0.23
27.5	1	169	41	-1.06	9.67	15.85	0.21	29.13	0.18	0.12
27.5	1	170	42	-0.6	8.67	15.4	0.18	26.18	0.08	0.34
27.5	1	171	43	-0.51	7.47	13.61	0.12	25.63	0.47	2.17
27.5	0	172	44	0.47	2.44	20.49	1.94	3.55	6.74	0.07
27.5	0	173	45	0.09	2.69	22.33	0.62	1.6	5.45	0.08
27.5	0	174	46	-0.62	2.54	26.32	0.33	0.49	6.85	0.09
27.5	0	175	47	-0.67	2.81	26.62	0.53	1.31	9.08	0.07

Table3-3 n260 PD

Frequency (GHz)	Module	Beam 2	Beam 1	sim.power.limit (dBm)	Front.4cm2PD (W/m2)	Back.4cm2PD (W/m2)	Left.4cm2PD (W/m2)	Right.4cm2PD (W/m2)	Top.4cm2PD (W/m2)	Bottom.4cm2PD (W/m2)
37.0518	2		0	14.66	0.11	0.41	0.75	0	0.02	0.01
37.0518	2		1	8.88	1.2	0.72	2.82	0.01	0.02	0
37.0518	1		2	10.24	0.84	0.52	0.01	2.21	0.01	0.03
37.0518	1		3	11.15	0.76	0.43	0.01	1.79	0	0.01
37.0518	0		4	15.43	0.02	0.65	0.02	0.06	0.17	0
37.0518	0		5	23.74	0	0.1	0.01	0.01	0.03	0
37.0518	2		6	8.07	1.17	1.01	3.4	0.02	0.05	0.01
37.0518	2		7	14.1	0.15	0.45	0.85	0	0.02	0.01
37.0518	2		8	6.27	1.74	0.96	5.14	0.03	0.05	0.01
37.0518	1		9	9.37	1.17	0.8	0.01	2.7	0.01	0.04
37.0518	1		10	10.23	0.86	0.55	0.01	2.21	0.01	0.03
37.0518	1		11	7.66	1.14	0.92	0.02	4	0.02	0.05
37.0518	0		12	10.99	0.07	1.82	0.03	0.26	0.64	0
37.0518	0		13	11.52	0.05	1.61	0.04	0.29	0.6	0
37.0518	0		14	13.69	0.03	0.98	0.06	0.14	0.22	0
37.0518	2		15	13.99	0.14	0.45	0.87	0	0.02	0.01
37.0518	2		16	6.65	2.25	1.45	4.71	0.03	0.02	0.01
37.0518	1		17	10.26	0.84	0.52	0.01	2.2	0.01	0.03
37.0518	1		18	10.19	0.83	0.49	0.01	2.24	0.01	0.03
37.0518	0		19	11.14	0.06	1.75	0.03	0.25	0.66	0
37.0518	0		20	11.72	0.05	1.53	0.06	0.2	0.35	0
37.0518	2		21	6.14	2.12	1.52	5.3	0.03	0.02	0.03
37.0518	2		22	6.08	1.66	1.25	5.38	0.03	0.14	0.01
37.0518	2		23	5.87	3.09	1.84	5.64	0.03	0.03	0.01
37.0518	2		24	6.2	2.29	1.64	5.23	0.03	0.02	0.02
37.0518	2		25	6.05	1.77	1.2	5.41	0.04	0.07	0.03
37.0518	1		26	7.16	1.8	1.27	0.02	4.48	0.01	0.12
37.0518	1		27	7.67	1.25	1.03	0.03	3.99	0.04	0.02
37.0518	1		28	7.05	2.64	1.53	0.04	4.61	0	0.02
37.0518	1		29	7.13	2.16	1.45	0.02	4.52	0.01	0.1
37.0518	1		30	7.28	1.26	1	0.02	4.37	0.03	0.07
37.0518	0		31	9.83	0.13	2.37	0.13	0.45	0.79	0
37.0518	0		32	9.76	0.07	2.41	0.14	0.4	0.99	0.01
37.0518	0		33	9.07	0.1	2.82	0.13	0.51	0.78	0.01
37.0518	0		34	9.63	0.08	2.49	0.1	0.55	0.88	0.01
37.0518	0		35	9.48	0.14	2.57	0.12	0.46	0.83	0.01
37.0518	2		36	6.05	1.77	1.2	5.41	0.04	0.07	0.03
37.0518	2		37	5.97	2.14	1.55	5.51	0.02	0.11	0.01
37.0518	2		38	5.8	3.12	2.09	5.74	0.03	0.06	0.01
37.0518	2		39	6.13	1.97	1.37	5.32	0.04	0.03	0.03
37.0518	1		40	7.13	1.44	1.1	0.02	4.52	0.02	0.1
37.0518	1		41	7.49	2.27	1.44	0.06	4.16	0.01	0.02
37.0518	1		42	6.77	2.64	1.65	0.04	4.91	0.01	0.04
37.0518	1		43	7.12	1.53	1.12	0.02	4.53	0.01	0.11
37.0518	0		44	8.85	0.12	2.98	0.11	0.37	1.13	0.01
37.0518	0		45	9.61	0.09	2.5	0.15	0.59	0.81	0.01
37.0518	0		46	9.05	0.11	2.84	0.06	0.45	0.98	0.01
37.0518	0		47	9.78	0.09	2.4	0.11	0.55	0.76	0.01

37.0518	2		128	16.02	0.1	0.26	0.54	0	0.01	0
37.0518	2		129	9.33	0.41	1.32	2.54	0.02	0.03	0.01
37.0518	1		130	19.82	0.04	0.13	0	0.24	0	0
37.0518	1		131	10.25	0.43	1.09	0.02	2.2	0.01	0.02
37.0518	0		132	12.1	0.03	1.41	0.06	0.15	0.26	0
37.0518	0		133	24.33	0	0.08	0	0.01	0.02	0
37.0518	2		134	9.54	0.26	1.1	2.42	0.01	0.02	0.02
37.0518	2		135	9.94	0.33	1.31	2.21	0.01	0.02	0.01
37.0518	2		136	9.55	0.25	1.09	2.42	0.01	0.02	0.01
37.0518	1		137	8.38	0.47	1.58	0.02	3.39	0.02	0.01
37.0518	1		138	8.56	0.45	1.8	0.01	3.26	0.01	0.04
37.0518	1		139	8.41	0.49	1.62	0.02	3.36	0.02	0.01
37.0518	0		140	11.11	0.03	1.76	0.11	0.12	0.48	0
37.0518	0		141	11.6	0.06	1.58	0.05	0.35	0.33	0
37.0518	0		142	10.88	0.03	1.86	0.1	0.14	0.45	0
37.0518	2		143	9.82	0.28	1.2	2.27	0.01	0.04	0.01
37.0518	2		144	9.62	0.33	1.24	2.38	0.01	0.01	0.02
37.0518	1		145	8.52	0.5	1.72	0.02	3.28	0.02	0.02
37.0518	1		146	8.4	0.42	1.64	0.01	3.37	0.02	0.03
37.0518	0		147	11.67	0.06	1.55	0.1	0.19	0.45	0
37.0518	0		148	10.65	0.03	1.97	0.08	0.22	0.3	0
37.0518	2		149	7.16	0.6	2.18	4.19	0.02	0.09	0.01
37.0518	2		150	7.02	0.7	2.27	4.33	0.03	0.02	0.01
37.0518	2		151	6.95	0.69	2.14	4.4	0.03	0.09	0.01
37.0518	2		152	7.43	0.61	2.17	3.94	0.03	0.04	0.03
37.0518	2		153	7.09	0.64	2.33	4.26	0.02	0.09	0.01
37.0518	1		154	6.16	1.19	3.13	0.03	5.65	0.02	0.12
37.0518	1		155	6.78	0.76	2.36	0.03	4.9	0.06	0.1
37.0518	1		156	6.04	1.24	2.75	0.04	5.81	0.04	0.03
37.0518	1		157	6	1.28	3.15	0.05	5.86	0.03	0.07
37.0518	1		158	6.62	0.86	2.86	0.05	5.09	0.02	0.08
37.0518	0		159	9.44	0.14	2.59	0.15	0.63	0.67	0
37.0518	0		160	10	0.16	2.28	0.2	0.81	0.55	0
37.0518	0		161	9.79	0.08	2.4	0.08	0.84	0.48	0
37.0518	0		162	9.99	0.09	2.28	0.14	0.65	0.44	0
37.0518	0		163	9.35	0.14	2.65	0.14	0.6	0.67	0
37.0518	2		164	7.03	0.68	2.43	4.31	0.03	0.07	0.02
37.0518	2		165	7.02	0.7	2.19	4.33	0.03	0.04	0.01
37.0518	2		166	7.22	0.64	2.29	4.13	0.04	0.06	0.03
37.0518	2		167	7.39	0.59	2	3.97	0.03	0.05	0.02
37.0518	1		168	6.41	0.91	2.92	0.05	5.33	0.02	0.11
37.0518	1		169	6.32	0.93	2.54	0.04	5.45	0.02	0.07
37.0518	1		170	6.1	1.32	2.85	0.04	5.74	0.05	0.04
37.0518	1		171	6.53	0.97	2.95	0.04	5.19	0.02	0.14
37.0518	0		172	9.24	0.07	2.72	0.17	0.41	0.62	0
37.0518	0		173	9.39	0.12	2.62	0.11	0.44	0.69	0
37.0518	0		174	9.48	0.14	2.57	0.08	0.74	0.53	0
37.0518	0		175	9.77	0.13	2.41	0.16	0.76	0.55	0

37.0518	2	128	0	11.45	0.24	0.87	1.56	0.01	0.04	0.01
37.0518	2	129	1	5.77	2.02	2.59	5.77	0.04	0.08	0.01
37.0518	1	130	2	9.63	0.94	0.73	0.01	2.54	0.01	0.04
37.0518	1	131	3	7.3	1.45	1.83	0.05	4.35	0.02	0.06
37.0518	0	132	4	10.25	0.04	2.15	0.12	0.22	0.42	0
37.0518	0	133	5	18.88	0.01	0.3	0.01	0.05	0.07	0
37.0518	2	134	6	5.73	1.58	2.58	5.83	0.03	0.1	0.05
37.0518	2	135	7	8.22	0.57	2.08	3.28	0.02	0.07	0.02
37.0518	2	136	8	5.65	2.08	1.99	5.93	0.05	0.08	0.03
37.0518	1	137	9	6.38	1.69	2.32	0.03	5.37	0.05	0.05
37.0518	1	138	10	6.1	1.47	2.52	0.04	5.73	0.03	0.07
37.0518	1	139	11	5.32	1.82	2.51	0.05	6.86	0.06	0.07
37.0518	0	140	12	8.95	0.11	2.91	0.14	0.4	0.88	0.01
37.0518	0	141	13	8.04	0.15	3.58	0.1	0.77	0.83	0.01
37.0518	0	142	14	8.18	0.09	3.47	0.24	0.49	0.81	0
37.0518	2	143	15	7.57	0.56	2.35	3.81	0.02	0.11	0.02
37.0518	2	144	16	5.5	2.73	2.29	6.14	0.07	0.04	0.03
37.0518	1	145	17	6.17	1.59	2.41	0.04	5.63	0.04	0.05
37.0518	1	146	18	6.12	1.39	2.26	0.03	5.7	0.05	0.06
37.0518	0	147	19	9.19	0.11	2.75	0.15	0.52	0.94	0.01
37.0518	0	148	20	6.97	0.09	4.58	0.2	0.72	0.62	0
37.0518	2	149	21	3.78	3.21	4.09	9.13	0.07	0.19	0.04
37.0518	2	150	22	3.49	2.5	4.15	9.75	0.08	0.16	0.04
37.0518	2	151	23	3.47	4.32	4.04	9.81	0.07	0.15	0.04
37.0518	2	152	24	3.56	3.12	4.38	9.59	0.07	0.1	0.08
37.0518	2	153	25	3.52	2.84	4.27	9.7	0.08	0.23	0.05
37.0518	1	154	26	3.22	3.44	5.12	0.07	11.13	0.03	0.32
37.0518	1	155	27	3.86	2.73	4.12	0.08	9.59	0.12	0.14
37.0518	1	156	28	3.37	4.67	4.65	0.14	10.75	0.07	0.07
37.0518	1	157	29	3.22	3.4	4.81	0.08	11.12	0.05	0.18
37.0518	1	158	30	3.83	2.34	4.29	0.07	9.67	0.08	0.24
37.0518	0	159	31	5.75	0.26	6.06	0.31	1.44	1.4	0.01
37.0518	0	160	32	6.33	0.32	5.32	0.45	1.43	1.82	0.02
37.0518	0	161	33	5.32	0.23	6.69	0.31	1.9	1.36	0.01
37.0518	0	162	34	5.84	0.2	5.95	0.33	1.49	1.31	0.01
37.0518	0	163	35	5.49	0.27	6.44	0.3	1.26	1.46	0.02
37.0518	2	164	36	3.33	2.79	4.27	10.11	0.08	0.15	0.07
37.0518	2	165	37	3.52	3.2	4.26	9.68	0.06	0.19	0.02
37.0518	2	166	38	3.34	4.27	4.52	10.09	0.1	0.13	0.08
37.0518	2	167	39	3.47	2.7	4.34	9.79	0.08	0.15	0.07
37.0518	1	168	40	3.6	2.54	4.49	0.07	10.19	0.05	0.3
37.0518	1	169	41	3.63	4.09	4.68	0.15	10.11	0.03	0.13
37.0518	1	170	42	3.44	4.35	4.39	0.11	10.58	0.09	0.09
37.0518	1	171	43	3.51	2.78	4.71	0.06	10.41	0.04	0.33
37.0518	0	172	44	5.54	0.21	6.37	0.4	0.9	1.66	0.01
37.0518	0	173	45	5.51	0.3	6.41	0.44	1.6	1.71	0.01
37.0518	0	174	46	5.21	0.2	6.87	0.21	1.36	1.54	0.02
37.0518	0	175	47	5.95	0.28	5.79	0.33	1.66	1.15	0.02

38.4989	2		0	14.77	0.24	0.23	0.73	0	0.01	0.01
38.4989	2		1	11.68	0.36	0.44	1.48	0.01	0.03	0.01
38.4989	1		2	11.9	0.46	0.51	0.01	1.51	0.01	0.02
38.4989	1		3	12.29	0.36	0.4	0.01	1.38	0.01	0.03
38.4989	0		4	13.63	0.04	0.99	0.1	0.11	0.27	0
38.4989	0		5	18.76	0.01	0.3	0.03	0.06	0.08	0
38.4989	2		6	10.29	0.63	0.67	2.04	0.02	0.04	0.02
38.4989	2		7	14.8	0.27	0.23	0.72	0	0.02	0.01
38.4989	2		8	8.99	0.46	0.85	2.75	0.02	0.05	0.02
38.4989	1		9	7.46	1.23	1.37	0.02	4.19	0.02	0.08
38.4989	1		10	11.94	0.51	0.5	0.01	1.49	0.01	0.02
38.4989	1		11	8.52	0.69	1.13	0.01	3.28	0.03	0.03
38.4989	0		12	9.84	0.08	2.37	0.05	0.39	0.6	0
38.4989	0		13	11.81	0.06	1.5	0.17	0.29	0.49	0
38.4989	0		14	16.18	0.02	0.55	0.07	0.09	0.16	0
38.4989	2		15	14.36	0.24	0.25	0.8	0	0.02	0.01
38.4989	2		16	9.65	0.7	0.79	2.36	0.02	0.02	0.02
38.4989	1		17	11.58	0.43	0.56	0.01	1.62	0.01	0.02
38.4989	1		18	11.46	0.54	0.59	0.01	1.67	0.01	0.02
38.4989	0		19	10.13	0.05	2.22	0.1	0.35	0.61	0
38.4989	0		20	11.99	0.06	1.44	0.11	0.18	0.38	0
38.4989	2		21	8.67	0.74	0.95	2.96	0.03	0.01	0.03
38.4989	2		22	8	0.73	1.31	3.46	0.01	0.12	0.01
38.4989	2		23	9.33	0.9	0.78	2.54	0.02	0.11	0.01
38.4989	2		24	9.03	0.68	0.85	2.72	0.03	0.01	0.03
38.4989	2		25	8.11	0.8	1.1	3.37	0.03	0.05	0.03
38.4989	1		26	6.3	1.73	2.1	0.02	5.47	0.01	0.14
38.4989	1		27	6.61	1.57	1.85	0.03	5.1	0.1	0.04
38.4989	1		28	6.89	2.35	1.39	0.05	4.78	0.01	0.05
38.4989	1		29	6.66	1.82	1.94	0.03	5.04	0.01	0.14
38.4989	1		30	5.89	1.41	2.48	0.02	6.02	0.07	0.06
38.4989	0		31	9.1	0.11	2.81	0.19	0.54	0.91	0.01
38.4989	0		32	8.64	0.1	3.12	0.23	0.51	1.08	0.01
38.4989	0		33	9.51	0.08	2.55	0.23	0.42	0.66	0
38.4989	0		34	9.52	0.17	2.55	0.22	0.36	0.9	0.01
38.4989	0		35	9.39	0.11	2.63	0.23	0.59	0.95	0.01
38.4989	2		36	8.11	0.8	1.1	3.37	0.03	0.05	0.03
38.4989	2		37	8.52	0.77	1.09	3.06	0.01	0.12	0.01
38.4989	2		38	10.2	0.83	0.82	2.08	0.02	0.04	0.03
38.4989	2		39	8.53	0.72	0.96	3.05	0.03	0.01	0.03
38.4989	1		40	5.96	1.6	2.27	0.02	5.92	0.03	0.1
38.4989	1		41	7.11	2.24	1.39	0.05	4.54	0.03	0.02
38.4989	1		42	6.93	2.11	1.63	0.05	4.73	0.02	0.12
38.4989	1		43	6.05	1.64	2.22	0.02	5.8	0.02	0.11
38.4989	0		44	8.97	0.13	2.89	0.31	0.38	1.08	0
38.4989	0		45	10.15	0.09	2.2	0.32	0.42	0.67	0.01
38.4989	0		46	9.18	0.14	2.76	0.24	0.66	0.98	0.01
38.4989	0		47	9.67	0.16	2.46	0.16	0.36	0.79	0.01

38.4989	2		128	14.74	0.14	0.38	0.73	0	0.01	0
38.4989	2		129	12.33	0.23	0.78	1.27	0.02	0.01	0
38.4989	1		130	15.94	0.08	0.34	0	0.59	0	0.01
38.4989	1		131	8.91	0.51	1.66	0.02	3	0.01	0.02
38.4989	0		132	12.06	0.04	1.42	0.07	0.05	0.32	0
38.4989	0		133	18.6	0.01	0.31	0.01	0.03	0.06	0
38.4989	2		134	11.17	0.24	0.8	1.66	0.01	0.01	0.01
38.4989	2		135	10.94	0.32	1.02	1.76	0.01	0.01	0
38.4989	2		136	11.22	0.23	0.8	1.64	0.01	0.01	0.01
38.4989	1		137	6.97	0.53	2.34	0.02	4.69	0.04	0.03
38.4989	1		138	6.73	0.65	2.85	0.02	4.96	0.02	0.03
38.4989	1		139	6.83	0.6	2.53	0.03	4.85	0.04	0.02
38.4989	0		140	11.65	0.04	1.56	0.1	0.1	0.35	0
38.4989	0		141	13.29	0.05	1.07	0.06	0.12	0.27	0
38.4989	0		142	11.58	0.04	1.59	0.1	0.13	0.35	0
38.4989	2		143	11.32	0.28	0.94	1.61	0.01	0.01	0
38.4989	2		144	10.89	0.29	0.89	1.78	0.01	0.01	0.01
38.4989	1		145	6.59	0.7	2.9	0.03	5.12	0.03	0.01
38.4989	1		146	7.07	0.49	2.39	0.02	4.59	0.03	0.03
38.4989	0		147	11.47	0.04	1.63	0.1	0.06	0.39	0
38.4989	0		148	11.07	0.04	1.78	0.12	0.16	0.31	0
38.4989	2		149	8.56	0.56	1.73	3.03	0.02	0.02	0.01
38.4989	2		150	8.88	0.49	1.59	2.82	0.03	0.01	0.01
38.4989	2		151	8.97	0.49	1.62	2.76	0.02	0.02	0.01
38.4989	2		152	9.57	0.44	1.4	2.41	0.03	0.02	0.01
38.4989	2		153	8.55	0.56	1.68	3.04	0.02	0.01	0.01
38.4989	1		154	4.64	1.36	4.72	0.05	8.01	0.04	0.09
38.4989	1		155	5.37	1.05	3.64	0.05	6.78	0.06	0.05
38.4989	1		156	4.69	1.14	3.85	0.06	7.94	0.02	0.03
38.4989	1		157	4.82	1.29	4.29	0.07	7.7	0.06	0.06
38.4989	1		158	5.09	1.24	4.26	0.06	7.24	0.02	0.1
38.4989	0		159	10.57	0.06	2	0.15	0.26	0.47	0
38.4989	0		160	10.81	0.08	1.89	0.16	0.25	0.52	0
38.4989	0		161	9.74	0.08	2.42	0.11	0.24	0.65	0
38.4989	0		162	9.94	0.06	2.31	0.16	0.28	0.46	0
38.4989	0		163	10.52	0.06	2.03	0.15	0.27	0.45	0
38.4989	2		164	8.73	0.52	1.56	2.92	0.02	0.01	0.01
38.4989	2		165	8.87	0.48	1.61	2.82	0.03	0.01	0.01
38.4989	2		166	9.52	0.45	1.42	2.44	0.03	0.01	0.01
38.4989	2		167	9.1	0.44	1.59	2.68	0.03	0.02	0.01
38.4989	1		168	4.99	1.23	4.36	0.05	7.4	0.02	0.11
38.4989	1		169	5.07	0.85	3.52	0.05	7.26	0.05	0.05
38.4989	1		170	4.77	1.24	4.12	0.07	7.78	0.04	0.04
38.4989	1		171	5.01	1.19	4.41	0.04	7.37	0.04	0.12
38.4989	0		172	10.33	0.06	2.11	0.1	0.37	0.48	0
38.4989	0		173	10.27	0.09	2.14	0.16	0.24	0.55	0
38.4989	0		174	9.74	0.07	2.42	0.15	0.25	0.59	0
38.4989	0		175	10.49	0.06	2.04	0.14	0.29	0.46	0

38.4989	2	128	0	10.96	0.56	0.67	1.75	0.01	0.03	0.01
38.4989	2	129	1	8.42	0.93	1.77	3.14	0.03	0.05	0.02
38.4989	1	130	2	9.79	0.74	0.9	0.02	2.45	0.02	0.04
38.4989	1	131	3	6.32	1.15	2.81	0.04	5.45	0.03	0.09
38.4989	0	132	4	9.44	0.11	2.59	0.19	0.2	0.55	0
38.4989	0	133	5	14.09	0.02	0.89	0.05	0.12	0.16	0
38.4989	2	134	6	7.61	1.23	1.65	3.78	0.04	0.07	0.04
38.4989	2	135	7	8.57	0.72	1.46	3.03	0.01	0.05	0.02
38.4989	2	136	8	7.39	0.85	1.63	3.97	0.05	0.08	0.04
38.4989	1	137	9	5.23	1.77	3.57	0.04	7	0.07	0.13
38.4989	1	138	10	5.04	1.2	3.93	0.04	7.31	0.04	0.07
38.4989	1	139	11	4.84	1.53	3.73	0.04	7.66	0.1	0.08
38.4989	0	140	12	8.47	0.17	3.24	0.18	0.58	1.16	0.01
38.4989	0	141	13	8.42	0.12	3.28	0.33	0.44	0.98	0.01
38.4989	0	142	14	9.13	0.09	2.79	0.22	0.34	0.65	0
38.4989	2	143	15	8.9	0.63	1.45	2.8	0.02	0.04	0.01
38.4989	2	144	16	7.47	1.21	1.63	3.9	0.05	0.04	0.04
38.4989	1	145	17	4.93	1.36	4	0.05	7.51	0.06	0.04
38.4989	1	146	18	5.54	1.09	3.33	0.04	6.51	0.05	0.1
38.4989	0	147	19	8.55	0.14	3.19	0.24	0.51	1.05	0.01
38.4989	0	148	20	7.83	0.18	3.76	0.26	0.55	0.82	0
38.4989	2	149	21	5.83	1.97	2.63	5.69	0.06	0.03	0.05
38.4989	2	150	22	5.44	1.8	2.8	6.22	0.05	0.15	0.02
38.4989	2	151	23	5.92	1.97	2.74	5.58	0.05	0.16	0.03
38.4989	2	152	24	5.44	1.24	3.22	6.22	0.08	0.03	0.06
38.4989	2	153	25	5.35	2.22	2.79	6.35	0.06	0.08	0.05
38.4989	1	154	26	2.39	3.7	7.59	0.1	13.48	0.05	0.37
38.4989	1	155	27	2.73	2.9	5.98	0.1	12.44	0.25	0.14
38.4989	1	156	28	2.5	4.18	6.28	0.18	13.12	0.04	0.09
38.4989	1	157	29	2.42	3.41	7.26	0.13	13.38	0.07	0.26
38.4989	1	158	30	2.08	3.23	7.56	0.09	14.47	0.13	0.31
38.4989	0	159	31	6.44	0.26	5.18	0.38	1	1.71	0.01
38.4989	0	160	32	5.74	0.26	6.09	0.41	0.83	2.5	0.01
38.4989	0	161	33	6.09	0.2	5.61	0.43	0.82	1.45	0.01
38.4989	0	162	34	6.05	0.37	5.66	0.42	0.7	1.71	0.01
38.4989	0	163	35	6.18	0.26	5.5	0.42	1.15	1.74	0.01
38.4989	2	164	36	5.27	2.12	2.81	6.48	0.06	0.06	0.05
38.4989	2	165	37	6.04	1.78	2.66	5.42	0.05	0.17	0.02
38.4989	2	166	38	6.63	1.76	2.59	4.74	0.06	0.09	0.04
38.4989	2	167	39	5.37	1.69	3.27	6.33	0.06	0.05	0.05
38.4989	1	168	40	2.14	3.49	7.37	0.09	14.26	0.07	0.37
38.4989	1	169	41	2.41	3.57	6.23	0.15	13.4	0.15	0.1
38.4989	1	170	42	2.47	3.93	6.62	0.15	13.21	0.09	0.2
38.4989	1	171	43	2.25	3.49	7.4	0.08	13.91	0.07	0.36
38.4989	0	172	44	5.63	0.26	6.25	0.51	1	2.14	0.01
38.4989	0	173	45	6.36	0.19	5.28	0.67	0.85	1.27	0.02
38.4989	0	174	46	5.26	0.29	6.79	0.43	1.02	1.71	0.01
38.4989	0	175	47	6.89	0.3	4.67	0.36	0.78	1.55	0.01

39.9499	2		0	11.4	0.6	0.38	1.58	0.01	0.02	0.01
39.9499	2		1	9.01	0.72	0.66	2.74	0.02	0.05	0.01
39.9499	1		2	8.69	0.97	0.8	0.02	3.15	0.02	0.05
39.9499	1		3	8.79	0.91	0.81	0.02	3.09	0.02	0.07
39.9499	0		4	12.1	0.05	1.41	0.16	0.21	0.34	0
39.9499	0		5	18.07	0.01	0.36	0.04	0.09	0.11	0
39.9499	2		6	6.11	1.79	1.36	5.33	0.03	0.07	0.03
39.9499	2		7	11.74	0.57	0.34	1.46	0.01	0.02	0.01
39.9499	2		8	5.24	1.59	1.7	6.51	0.05	0.11	0.04
39.9499	1		9	5.45	2.08	2.01	0.03	6.66	0.03	0.16
39.9499	1		10	8.88	1.12	0.74	0.02	3.02	0.01	0.06
39.9499	1		11	5.15	1.63	1.87	0.03	7.14	0.05	0.08
39.9499	0		12	10.91	0.13	1.85	0.07	0.7	0.64	0
39.9499	0		13	11.7	0.15	1.54	0.26	0.68	0.5	0.01
39.9499	0		14	10.76	0.07	1.91	0.32	0.19	0.46	0.01
39.9499	2		15	11.07	0.65	0.4	1.7	0.01	0.02	0.01
39.9499	2		16	6.38	1.83	1.38	5.01	0.04	0.05	0.04
39.9499	1		17	7.92	1.03	1.04	0.02	3.77	0.02	0.04
39.9499	1		18	7.75	1.33	1.07	0.02	3.92	0.01	0.06
39.9499	0		19	11.28	0.12	1.7	0.13	0.49	0.64	0
39.9499	0		20	7.78	0.09	3.8	0.25	0.43	0.71	0.01
39.9499	2		21	4.48	2.2	2.05	7.76	0.07	0.04	0.08
39.9499	2		22	4.8	2.26	2.29	7.21	0.04	0.23	0.02
39.9499	2		23	6.37	2	1.11	5.02	0.07	0.26	0.04
39.9499	2		24	4.81	2.25	1.81	7.2	0.07	0.04	0.08
39.9499	2		25	4.07	2.57	2.36	8.54	0.06	0.11	0.05
39.9499	1		26	3.69	3.73	3.29	0.05	9.98	0.01	0.29
39.9499	1		27	4.37	2.7	3.01	0.04	8.54	0.13	0.03
39.9499	1		28	5.97	3.21	1.5	0.05	5.9	0.02	0.35
39.9499	1		29	4.2	3.56	3.1	0.06	8.87	0.02	0.34
39.9499	1		30	3.47	2.74	3.42	0.04	10.5	0.07	0.12
39.9499	0		31	6.43	0.27	5.19	0.43	0.83	1.39	0.01
39.9499	0		32	8.07	0.16	3.55	0.58	0.84	1.11	0.01
39.9499	0		33	7.94	0.39	3.67	0.47	1.58	1.06	0.01
39.9499	0		34	6.72	0.16	4.86	0.44	1.17	1.28	0.01
39.9499	0		35	6.68	0.22	4.89	0.46	0.92	1.28	0.01
39.9499	2		36	4.07	2.57	2.36	8.54	0.06	0.11	0.05
39.9499	2		37	5.38	2.08	2.06	6.31	0.05	0.3	0.03
39.9499	2		38	6.86	2.09	1.19	4.49	0.05	0.11	0.04
39.9499	2		39	4.27	2.12	2.22	8.14	0.07	0.04	0.08
39.9499	1		40	3.32	3.47	3.36	0.03	10.87	0.02	0.21
39.9499	1		41	6.13	2.76	2.02	0.06	5.7	0.1	0.23
39.9499	1		42	5.1	3.36	2.4	0.06	7.22	0.02	0.32
39.9499	1		43	3.39	3.6	3.38	0.03	10.69	0.02	0.22
39.9499	0		44	7.1	0.19	4.45	0.58	0.86	1.28	0.01
39.9499	0		45	8.07	0.22	3.56	0.66	0.96	1.07	0.01
39.9499	0		46	6.93	0.15	4.63	0.35	1.46	1.46	0.01
39.9499	0		47	6.85	0.22	4.71	0.41	1.13	1.06	0.01

39.9499	2		128	12.11	0.14	0.88	1.34	0	0.02	0
39.9499	2		129	10.17	0.31	1.32	2.1	0.02	0.01	0.01
39.9499	1		130	14.5	0.13	0.5	0.01	0.83	0	0.01
39.9499	1		131	8.63	0.55	1.81	0.02	3.2	0.01	0.02
39.9499	0		132	11.53	0.05	1.6	0.08	0.15	0.35	0
39.9499	0		133	20.45	0.01	0.21	0.01	0.03	0.06	0
39.9499	2		134	6.79	0.4	2.52	4.56	0.03	0.05	0.03
39.9499	2		135	6.08	0.53	3.49	5.37	0.02	0.04	0.01
39.9499	2		136	6.83	0.38	2.52	4.52	0.03	0.05	0.03
39.9499	1		137	5.96	0.44	3.14	0.03	5.92	0.04	0.05
39.9499	1		138	5.85	0.5	3.88	0.03	6.07	0.02	0.04
39.9499	1		139	5.88	0.5	3.35	0.03	6.03	0.04	0.04
39.9499	0		140	10.72	0.09	1.93	0.12	0.32	0.47	0
39.9499	0		141	12.3	0.09	1.34	0.14	0.21	0.35	0
39.9499	0		142	10.61	0.07	1.98	0.12	0.34	0.48	0
39.9499	2		143	6.57	0.42	3.21	4.8	0.03	0.05	0.02
39.9499	2		144	6.4	0.48	2.86	4.99	0.03	0.02	0.03
39.9499	1		145	5.75	0.58	3.84	0.03	6.22	0.03	0.02
39.9499	1		146	6.02	0.36	3.28	0.02	5.84	0.03	0.06
39.9499	0		147	10.79	0.11	1.9	0.1	0.22	0.57	0
39.9499	0		148	10.27	0.06	2.14	0.13	0.33	0.43	0
39.9499	2		149	5.24	0.61	4.25	6.52	0.04	0.08	0.02
39.9499	2		150	5.17	0.78	4.16	6.63	0.04	0.06	0.03
39.9499	2		151	5.25	0.7	4.01	6.5	0.03	0.04	0.02
39.9499	2		152	5.62	0.69	3.66	5.97	0.04	0.04	0.04
39.9499	2		153	5.16	0.64	4.34	6.64	0.03	0.09	0.03
39.9499	1		154	3.88	1.37	5.94	0.07	9.56	0.05	0.11
39.9499	1		155	4.85	0.93	4.62	0.06	7.64	0.05	0.06
39.9499	1		156	3.96	1.28	5.18	0.06	9.39	0.02	0.04
39.9499	1		157	3.72	1.41	6.08	0.08	9.92	0.04	0.08
39.9499	1		158	4.52	1.21	5.14	0.07	8.24	0.03	0.08
39.9499	0		159	9.24	0.1	2.72	0.21	0.58	0.79	0.01
39.9499	0		160	9.33	0.18	2.66	0.13	0.32	0.69	0.01
39.9499	0		161	9.75	0.12	2.42	0.13	0.32	0.72	0.02
39.9499	0		162	9.09	0.1	2.81	0.14	0.42	0.86	0.01
39.9499	0		163	9.22	0.1	2.73	0.22	0.63	0.83	0.01
39.9499	2		164	5.16	0.71	4.3	6.64	0.03	0.08	0.03
39.9499	2		165	5.24	0.74	3.97	6.51	0.03	0.04	0.02
39.9499	2		166	5.5	0.66	3.79	6.14	0.04	0.04	0.03
39.9499	2		167	5.51	0.68	3.78	6.13	0.04	0.06	0.05
39.9499	1		168	4.27	1.3	5.41	0.07	8.73	0.03	0.15
39.9499	1		169	4.56	0.91	4.66	0.08	8.17	0.06	0.07
39.9499	1		170	3.65	1.42	5.73	0.06	10.07	0.03	0.04
39.9499	1		171	4.22	1.23	5.46	0.07	8.82	0.05	0.17
39.9499	0		172	9.17	0.11	2.76	0.24	0.72	0.78	0.01
39.9499	0		173	9.58	0.17	2.51	0.34	0.33	0.85	0.01
39.9499	0		174	9.32	0.09	2.67	0.19	0.46	0.75	0.01
39.9499	0		175	9.37	0.11	2.64	0.15	0.43	0.71	0.01

39.9499	2	128	0	8.01	0.78	1.5	3.44	0.02	0.05	0.02
39.9499	2	129	1	6.15	1.5	2.46	5.28	0.05	0.09	0.03
39.9499	1	130	2	6.96	1.38	1.81	0.04	4.71	0.02	0.08
39.9499	1	131	3	5.07	2.17	3.68	0.05	7.26	0.05	0.16
39.9499	0	132	4	8.38	0.16	3.32	0.26	0.36	0.91	0.01
39.9499	0	133	5	14.62	0.03	0.79	0.08	0.15	0.18	0
39.9499	2	134	6	3.58	2.22	4.41	9.55	0.07	0.2	0.1
39.9499	2	135	7	4.36	1.14	4.82	7.97	0.04	0.09	0.04
39.9499	2	136	8	4.03	2.14	4.48	8.62	0.11	0.28	0.1
39.9499	1	137	9	3.74	2.51	5.53	0.08	9.86	0.11	0.28
39.9499	1	138	10	3.43	1.95	6.3	0.06	10.58	0.06	0.18
39.9499	1	139	11	2.57	2.26	6.21	0.05	12.9	0.15	0.21
39.9499	0	140	12	8.58	0.2	3.16	0.28	0.98	1.2	0.01
39.9499	0	141	13	8.3	0.25	3.38	0.67	1.04	1.09	0.01
39.9499	0	142	14	7.21	0.14	4.34	0.48	0.97	1.28	0.01
39.9499	2	143	15	4.44	1.14	4.59	7.84	0.04	0.13	0.04
39.9499	2	144	16	3.88	2.67	4.27	8.92	0.08	0.1	0.11
39.9499	1	145	17	3.37	1.65	5.87	0.07	10.75	0.1	0.08
39.9499	1	146	18	3.28	2.12	6.07	0.05	10.96	0.06	0.2
39.9499	0	147	19	8.37	0.18	3.32	0.34	0.66	1.23	0.01
39.9499	0	148	20	5.34	0.19	6.67	0.61	1.19	1.47	0.02
39.9499	2	149	21	2.08	3.33	6.84	13.5	0.11	0.15	0.14
39.9499	2	150	22	2.34	3.4	6.7	12.71	0.1	0.43	0.05
39.9499	2	151	23	3.41	3.47	5.35	9.93	0.14	0.39	0.08
39.9499	2	152	24	1.7	3.72	7.07	14.72	0.14	0.12	0.21
39.9499	2	153	25	1.84	3.66	7.69	14.26	0.12	0.32	0.1
39.9499	1	154	26	0.39	6.49	11.86	0.16	21.32	0.06	0.66
39.9499	1	155	27	0.93	4.52	8.98	0.16	18.84	0.33	0.11
39.9499	1	156	28	1.72	6.39	8.39	0.16	15.72	0.05	0.53
39.9499	1	157	29	0.57	5.79	11.12	0.18	20.45	0.09	0.61
39.9499	1	158	30	0.58	5.33	10.13	0.14	20.43	0.15	0.37
39.9499	0	159	31	4.28	0.43	8.52	0.74	2.1	2.8	0.02
39.9499	0	160	32	5.25	0.44	6.81	0.8	1.66	2.16	0.03
39.9499	0	161	33	5.46	0.52	6.49	0.89	1.97	2.32	0.03
39.9499	0	162	34	4.46	0.37	8.18	0.68	1.99	2.15	0.02
39.9499	0	163	35	4.41	0.36	8.26	0.85	2.05	3.09	0.02
39.9499	2	164	36	1.96	3.62	7.31	13.89	0.13	0.28	0.12
39.9499	2	165	37	2.76	3.24	6.07	11.54	0.11	0.48	0.07
39.9499	2	166	38	2.84	3.15	6.17	11.34	0.13	0.22	0.1
39.9499	2	167	39	1.82	3.75	6.76	14.34	0.14	0.18	0.16
39.9499	1	168	40	0.44	6.22	10.89	0.14	21.09	0.09	0.67
39.9499	1	169	41	1.52	4.89	9.18	0.21	16.43	0.29	0.48
39.9499	1	170	42	1.05	6.01	9.58	0.14	18.31	0.07	0.53
39.9499	1	171	43	0.46	6.29	11.06	0.14	20.98	0.08	0.75
39.9499	0	172	44	4.46	0.35	8.18	1.28	2.2	3.02	0.02
39.9499	0	173	45	5.1	0.49	7.05	1.82	1.34	2.18	0.02
39.9499	0	174	46	4.63	0.32	7.85	0.89	2.13	2.76	0.03
39.9499	0	175	47	4.56	0.36	7.99	0.66	1.72	1.98	0.03

Table3-4 n261 PD

Frequency (GHz)	Module	Beam 2	Beam 1	sim.power.limit (dBm)	Front.4cm2PD (W/m2)	Back.4cm2PD (W/m2)	Left.4cm2PD (W/m2)	Right.4cm2PD (W/m2)	Top.4cm2PD (W/m2)	Bottom.4cm2PD (W/m2)
27.5593	2		0	18.65	0.11	0.1	0.31	0	0	0
27.5593	2		1	8.42	1.04	1.01	3.28	0.01	0.05	0.02
27.5593	1		2	8.2	1.04	1.07	0.02	3.53	0.02	0.04
27.5593	1		3	8.9	0.99	0.94	0.02	3	0.02	0.03
27.5593	0		4	7.15	0.05	4.4	0.21	0.29	0.27	0.01
27.5593	0		5	7.37	0.05	4.18	0.1	0.5	0.33	0.01
27.5593	2		6	6.32	1.56	1.85	5.32	0.03	0.13	0.06
27.5593	2		7	8.17	1.23	1.28	3.48	0.01	0.04	0.02
27.5593	2		8	9.38	1.02	0.8	2.63	0.01	0.03	0.02
27.5593	1		9	5.92	1.72	1.97	0.03	5.97	0.06	0.12
27.5593	1		10	5.04	2.92	3.17	0.03	7.32	0	0.03
27.5593	1		11	6.82	1.32	1.47	0.03	4.85	0.06	0.12
27.5593	0		12	6.01	0.18	5.71	0.3	1.78	0.73	0.02
27.5593	0		13	4.36	0.15	8.36	0.11	0.77	0.74	0.03
27.5593	0		14	7.16	0.05	4.39	0.21	0.29	0.26	0.01
27.5593	2		15	7.77	1.44	1.39	3.81	0.01	0.03	0.01
27.5593	2		16	8.4	0.89	1.04	3.3	0.02	0.06	0.03
27.5593	1		17	5.39	2.51	2.56	0.05	6.76	0.01	0.05
27.5593	1		18	8.2	1.04	1.07	0.02	3.53	0.02	0.04
27.5593	0		19	7.14	0.04	4.4	0.2	0.29	0.28	0.01
27.5593	0		20	4.64	0.1	7.84	0.35	0.73	0.81	0.02
27.5593	2		21	6.02	1.7	1.99	5.7	0.04	0.13	0.06
27.5593	2		22	5.15	3.12	2.65	6.97	0.03	0.03	0.01
27.5593	2		23	5.83	2.49	2.53	5.95	0.02	0.02	0.02
27.5593	2		24	6.36	1.72	2.08	5.27	0.03	0.09	0.05
27.5593	1		25	4.77	2.24	2.7	0.04	7.78	0.1	0.22
27.5593	1		26	3.62	3.61	3.99	0.04	10.15	0.02	0.07
27.5593	1		27	3.24	4.4	4.78	0.1	11.08	0.01	0.04
27.5593	1		28	4.99	2.48	2.68	0.07	7.4	0.06	0.13
27.5593	0		29	4.33	0.25	8.41	0.84	2.66	1.1	0.02
27.5593	0		30	2.74	0.13	12.15	0.43	2.7	1.06	0.03
27.5593	0		31	2.55	0.16	12.68	0.14	0.8	1.02	0.06
27.5593	0		32	2.75	0.17	12.11	0.32	0.99	1.16	0.03
27.5593	0		33	4.03	0.32	9.02	0.48	1.97	1.3	0.02
27.5593	2		34	5.59	2.46	2.4	6.29	0.03	0.08	0.03
27.5593	2		35	5.39	2.97	2.6	6.59	0.02	0.02	0
27.5593	2		36	6.22	2.06	2.36	5.45	0.03	0.05	0.04
27.5593	1		37	4.11	2.95	3.36	0.04	9.06	0.04	0.16
27.5593	1		38	3.13	4.43	5.04	0.08	11.36	0.01	0.02
27.5593	1		39	4.03	3.44	3.78	0.09	9.23	0.03	0.07
27.5593	0		40	3.43	0.19	10.36	0.67	2.71	1.06	0.02
27.5593	0		41	2.43	0.16	13.03	0.11	1.91	1.15	0.04
27.5593	0		42	2.43	0.13	13.04	0.26	0.34	0.9	0.07
27.5593	0		43	3.42	0.27	10.37	0.43	1.58	1.32	0.02

27.5593	2		128	8.68	0.35	1.81	3.09	0.01	0.03	0.02
27.5593	2		129	7.99	0.48	1.97	3.62	0.01	0.05	0.02
27.5593	1		130	7.85	0.43	2.19	0.02	3.83	0.02	0.04
27.5593	1		131	8.69	0.36	1.86	0.01	3.16	0.01	0.05
27.5593	0		132	21.52	0	0.16	0	0.01	0.04	0
27.5593	0		133	8.1	0.06	3.53	0.06	0.32	1.11	0
27.5593	2		134	6.67	0.83	2.75	4.91	0.02	0.11	0.05
27.5593	2		135	5.4	1.11	4.32	6.58	0.02	0.05	0.03
27.5593	2		136	10.81	0.25	1.05	1.89	0.01	0.02	0.01
27.5593	1		137	6.04	0.8	3.77	0.05	5.8	0.01	0.05
27.5593	1		138	6	0.71	3.96	0.03	5.87	0.03	0.07
27.5593	1		139	7.14	0.52	2.3	0.05	4.51	0.08	0.12
27.5593	0		140	8.63	0.05	3.13	0.11	0.12	0.77	0
27.5593	0		141	8.2	0.06	3.45	0.08	0.05	1	0
27.5593	0		142	8.13	0.05	3.51	0.08	0.44	1.03	0
27.5593	2		143	5.18	1.11	4.54	6.91	0.02	0.03	0
27.5593	2		144	5.94	0.87	3.2	5.8	0.03	0.1	0.06
27.5593	1		145	5.84	0.77	4.15	0.04	6.08	0.01	0.03
27.5593	1		146	8.69	0.36	1.86	0.01	3.16	0.01	0.05
27.5593	0		147	8.29	0.05	3.38	0.08	0.06	0.95	0
27.5593	0		148	8.44	0.07	3.26	0.12	0.1	0.93	0
27.5593	2		149	4.41	1.36	5.15	8.27	0.04	0.17	0.06
27.5593	2		150	4.14	1.64	5.95	8.79	0.03	0.02	0.01
27.5593	2		151	4.21	1.55	5.7	8.65	0.05	0.05	0.03
27.5593	2		152	5.78	1.04	3.62	6.03	0.05	0.18	0.12
27.5593	1		153	4.62	1.29	5.59	0.05	8.06	0.04	0.14
27.5593	1		154	4.15	1.26	6.29	0.05	8.98	0.03	0.08
27.5593	1		155	4.03	1.41	6.44	0.05	9.23	0.03	0.07
27.5593	1		156	5.12	1.01	4.62	0.08	7.18	0.1	0.29
27.5593	0		157	3.95	0.28	9.19	0.29	0.53	3.43	0.01
27.5593	0		158	5.07	0.15	7.1	0.42	0.98	2.39	0.01
27.5593	0		159	5.19	0.25	6.91	0.18	1.58	2.16	0.01
27.5593	0		160	5.41	0.09	6.56	0.31	0.94	2.33	0.01
27.5593	0		161	4.52	0.14	8.05	0.21	1.03	2.72	0.01
27.5593	2		162	4.28	1.59	5.64	8.51	0.04	0.05	0.01
27.5593	2		163	4.1	1.65	6	8.87	0.03	0.02	0.02
27.5593	2		164	5.01	1.26	4.59	7.2	0.04	0.11	0.08
27.5593	1		165	4.27	1.35	6.16	0.05	8.74	0.02	0.1
27.5593	1		166	4.02	1.39	6.47	0.04	9.26	0.04	0.05
27.5593	1		167	4.27	1.26	5.97	0.06	8.72	0.06	0.2
27.5593	0		168	4.14	0.24	8.79	0.35	0.55	2.94	0.01
27.5593	0		169	5.34	0.21	6.68	0.3	1.42	2.23	0.01
27.5593	0		170	5.1	0.21	7.05	0.23	1.3	1.88	0
27.5593	0		171	4.91	0.11	7.36	0.24	1.02	2.69	0.01

27.5593	2	128	0	7.82	0.59	2.03	3.77	0.02	0.04	0.02
27.5593	2	129	1	4.75	1.74	3.31	7.64	0.04	0.11	0.06
27.5593	1	130	2	4.82	1.75	3.49	0.05	7.7	0.06	0.1
27.5593	1	131	3	5.47	1.49	3.08	0.04	6.63	0.04	0.12
27.5593	0	132	4	6.74	0.05	4.83	0.22	0.32	0.39	0.01
27.5593	0	133	5	4.53	0.11	8.04	0.25	1.08	1.99	0.02
27.5593	2	134	6	2.47	3.03	5.52	12.93	0.06	0.34	0.2
27.5593	2	135	7	3.07	2.49	6.59	11.24	0.05	0.11	0.07
27.5593	2	136	8	6.81	1.29	2	4.75	0.03	0.08	0.06
27.5593	1	137	9	2.88	2.97	6.65	0.1	12.04	0.11	0.26
27.5593	1	138	10	2.25	4.05	7.6	0.09	13.9	0.04	0.09
27.5593	1	139	11	4.36	1.91	3.5	0.08	8.56	0.19	0.31
27.5593	0	140	12	5.18	0.21	6.93	0.65	2.13	1.4	0.03
27.5593	0	141	13	3.75	0.18	9.61	0.27	0.87	1.41	0.04
27.5593	0	142	14	4.9	0.11	7.38	0.37	0.92	1.33	0.02
27.5593	2	143	15	3.03	2.54	6.29	11.34	0.05	0.09	0.02
27.5593	2	144	16	3.64	1.85	5.01	9.86	0.05	0.18	0.14
27.5593	1	145	17	2.83	3.19	6.89	0.11	12.16	0.02	0.11
27.5593	1	146	18	5.45	1.6	2.82	0.04	6.66	0.06	0.11
27.5593	0	147	19	4.9	0.12	7.39	0.42	0.42	1.59	0.02
27.5593	0	148	20	3.5	0.25	10.19	0.67	0.9	2.32	0.03
27.5593	2	149	21	1.3	3.78	8.72	16.89	0.1	0.51	0.2
27.5593	2	150	22	1.43	4.78	8.94	16.42	0.1	0.08	0.03
27.5593	2	151	23	1.39	4.25	9.57	16.57	0.1	0.11	0.08
27.5593	2	152	24	2.36	2.89	6.69	13.24	0.09	0.36	0.3
27.5593	1	153	25	1.19	4.62	9.98	0.1	17.74	0.19	0.53
27.5593	1	154	26	0.72	5.42	10.96	0.12	19.77	0.08	0.15
27.5593	1	155	27	0.38	6.04	11.96	0.17	21.39	0.04	0.17
27.5593	1	156	28	1.86	3.51	7.98	0.14	15.22	0.25	0.49
27.5593	0	157	29	1.43	0.49	16.42	1.03	3.98	4.78	0.04
27.5593	0	158	30	0.81	0.23	18.93	1.15	4.07	3.32	0.05
27.5593	0	159	31	0.69	0.33	19.47	0.39	2.33	3.37	0.08
27.5593	0	160	32	0.78	0.32	19.05	0.67	2.33	3.34	0.04
27.5593	0	161	33	1.08	0.54	17.79	1.05	2.52	4.13	0.03
27.5593	2	162	34	1.62	4.04	8.88	15.71	0.1	0.18	0.07
27.5593	2	163	35	1.36	4.86	9.24	16.69	0.09	0.05	0.03
27.5593	2	164	36	1.95	3.39	8.37	14.55	0.09	0.25	0.18
27.5593	1	165	37	1.19	4.94	11.17	0.11	17.74	0.08	0.37
27.5593	1	166	38	0.36	6.28	12.21	0.13	21.5	0.06	0.09
27.5593	1	167	39	0.85	4.79	10.51	0.18	19.21	0.11	0.33
27.5593	0	168	40	1.3	0.39	16.89	1.09	3.89	3.8	0.04
27.5593	0	169	41	0.55	0.31	20.12	0.51	2.92	3.43	0.06
27.5593	0	170	42	0.7	0.34	19.43	0.53	1.54	3.01	0.07
27.5593	0	171	43	0.86	0.43	18.69	0.82	2.57	4.11	0.04

27.927	2		0	19.47	0.09	0.09	0.26	0	0	0
27.927	2		1	8.58	1.02	0.88	3.16	0.01	0.05	0.02
27.927	1		2	8.27	1.08	1.06	0.02	3.48	0.02	0.04
27.927	1		3	9.02	0.98	0.84	0.03	2.92	0.01	0.03
27.927	0		4	7.07	0.03	4.48	0.17	0.24	0.29	0.01
27.927	0		5	7.85	0.06	3.74	0.11	0.42	0.41	0.01
27.927	2		6	6.36	1.51	1.84	5.28	0.03	0.15	0.05
27.927	2		7	8.41	1.21	1.12	3.29	0.01	0.04	0.02
27.927	2		8	9.33	1.07	0.73	2.66	0.02	0.03	0.02
27.927	1		9	5.9	1.83	1.75	0.03	6	0.05	0.12
27.927	1		10	5.3	2.83	3.03	0.04	6.88	0	0.04
27.927	1		11	6.98	1.33	1.25	0.05	4.68	0.05	0.13
27.927	0		12	6.56	0.19	5.03	0.3	1.56	0.58	0.01
27.927	0		13	4.78	0.17	7.59	0.1	0.68	0.86	0.03
27.927	0		14	7.06	0.03	4.49	0.17	0.24	0.28	0.01
27.927	2		15	8.1	1.37	1.17	3.53	0.01	0.03	0.01
27.927	2		16	8.5	0.91	0.96	3.22	0.02	0.06	0.02
27.927	1		17	5.54	2.57	2.37	0.06	6.52	0.01	0.05
27.927	1		18	8.27	1.08	1.06	0.02	3.48	0.02	0.04
27.927	0		19	7.09	0.03	4.46	0.17	0.23	0.3	0.01
27.927	0		20	4.67	0.1	7.78	0.33	0.77	0.88	0.02
27.927	2		21	6.17	1.51	1.94	5.51	0.03	0.15	0.05
27.927	2		22	5.31	3.23	2.34	6.72	0.03	0.03	0.01
27.927	2		23	6.01	2.51	2.24	5.72	0.03	0.02	0.02
27.927	2		24	6.45	1.65	2.02	5.17	0.03	0.08	0.04
27.927	1		25	4.78	2.33	2.48	0.03	7.76	0.09	0.24
27.927	1		26	3.8	3.71	3.49	0.05	9.73	0.01	0.08
27.927	1		27	3.51	4.38	4.32	0.12	10.4	0.01	0.04
27.927	1		28	5.29	2.37	2.37	0.11	6.91	0.06	0.14
27.927	0		29	5.08	0.2	7.08	0.78	2.36	0.8	0.02
27.927	0		30	3.06	0.09	11.27	0.44	2.47	0.81	0.02
27.927	0		31	2.85	0.22	11.83	0.11	0.75	1.26	0.06
27.927	0		32	2.79	0.17	12.01	0.33	1.03	1.2	0.02
27.927	0		33	4.08	0.34	8.92	0.48	1.98	1.25	0.02
27.927	2		34	5.79	2.43	2.13	6.01	0.03	0.08	0.03
27.927	2		35	5.55	3.06	2.27	6.35	0.04	0.02	0.01
27.927	2		36	6.36	2.03	2.16	5.28	0.03	0.04	0.03
27.927	1		37	4.19	3.06	3.01	0.04	8.89	0.03	0.17
27.927	1		38	3.34	4.48	4.72	0.09	10.82	0.01	0.02
27.927	1		39	4.39	3.35	3.26	0.14	8.5	0.03	0.08
27.927	0		40	3.93	0.13	9.23	0.64	2.41	0.77	0.02
27.927	0		41	2.69	0.19	12.29	0.12	1.8	1.13	0.04
27.927	0		42	2.63	0.18	12.44	0.19	0.36	1.25	0.06
27.927	0		43	3.44	0.29	10.32	0.44	1.61	1.27	0.02

27.927	2		128	8.89	0.33	1.74	2.95	0.02	0.03	0.02
27.927	2		129	7.88	0.5	1.98	3.72	0.02	0.05	0.02
27.927	1		130	7.78	0.46	2.22	0.03	3.89	0.02	0.04
27.927	1		131	8.8	0.38	1.76	0.01	3.07	0.01	0.04
27.927	0		132	22.7	0	0.12	0	0.01	0.03	0
27.927	0		133	8.11	0.07	3.52	0.06	0.3	1.06	0
27.927	2		134	6.54	0.86	2.67	5.06	0.03	0.13	0.05
27.927	2		135	5.5	1.09	4.22	6.43	0.03	0.05	0.03
27.927	2		136	10.66	0.25	1.05	1.96	0.01	0.02	0.01
27.927	1		137	6.14	0.77	3.74	0.07	5.67	0.01	0.06
27.927	1		138	5.93	0.77	3.98	0.04	5.96	0.04	0.07
27.927	1		139	6.88	0.56	2.45	0.05	4.78	0.07	0.13
27.927	0		140	8.9	0.04	2.94	0.09	0.11	0.67	0
27.927	0		141	8.47	0.06	3.25	0.07	0.06	0.86	0
27.927	0		142	8.24	0.06	3.42	0.07	0.39	0.97	0
27.927	2		143	5.26	1.09	4.49	6.8	0.03	0.04	0.01
27.927	2		144	5.95	0.84	3.13	5.8	0.04	0.09	0.07
27.927	1		145	5.89	0.81	4.13	0.05	6.01	0.02	0.03
27.927	1		146	8.81	0.38	1.76	0.01	3.07	0.01	0.04
27.927	0		147	8.59	0.05	3.16	0.07	0.06	0.79	0
27.927	0		148	8.68	0.06	3.09	0.09	0.1	0.81	0
27.927	2		149	4.59	1.31	4.91	7.92	0.05	0.2	0.07
27.927	2		150	4.15	1.65	5.93	8.78	0.04	0.02	0.01
27.927	2		151	4.3	1.52	5.63	8.48	0.06	0.04	0.04
27.927	2		152	5.64	1.04	3.66	6.23	0.06	0.16	0.12
27.927	1		153	4.86	1.12	5.42	0.06	7.63	0.03	0.13
27.927	1		154	4.2	1.38	6.13	0.07	8.88	0.04	0.07
27.927	1		155	4.07	1.5	6.26	0.06	9.15	0.03	0.06
27.927	1		156	5.06	1.13	4.47	0.07	7.29	0.1	0.26
27.927	0		157	4.21	0.3	8.64	0.27	0.5	3.11	0.01
27.927	0		158	5.05	0.15	7.12	0.34	1.07	2.2	0.01
27.927	0		159	5.3	0.27	6.73	0.18	1.55	2.05	0.01
27.927	0		160	5.42	0.11	6.55	0.28	0.91	2.25	0.01
27.927	0		161	4.62	0.13	7.87	0.2	0.98	2.43	0.01
27.927	2		162	4.4	1.51	5.43	8.28	0.05	0.07	0.01
27.927	2		163	4.09	1.66	5.99	8.89	0.04	0.02	0.03
27.927	2		164	5.03	1.21	4.56	7.16	0.05	0.1	0.08
27.927	1		165	4.52	1.24	5.9	0.08	8.24	0.02	0.1
27.927	1		166	4	1.54	6.36	0.05	9.29	0.04	0.05
27.927	1		167	4.28	1.36	5.81	0.07	8.71	0.06	0.18
27.927	0		168	4.26	0.25	8.55	0.36	0.62	2.53	0.01
27.927	0		169	5.42	0.24	6.54	0.28	1.45	2.18	0.01
27.927	0		170	5.13	0.22	7.01	0.23	1.25	1.86	0.01
27.927	0		171	5.03	0.11	7.17	0.23	0.98	2.4	0.01

27.927	2	128	0	8.14	0.57	1.92	3.5	0.02	0.04	0.02
27.927	2	129	1	4.89	1.69	3.13	7.39	0.04	0.14	0.05
27.927	1	130	2	4.72	1.77	3.62	0.06	7.87	0.05	0.11
27.927	1	131	3	5.57	1.52	2.91	0.07	6.47	0.04	0.12
27.927	0	132	4	6.69	0.04	4.88	0.18	0.27	0.39	0.01
27.927	0	133	5	4.62	0.14	7.88	0.23	0.95	1.94	0.02
27.927	2	134	6	2.6	2.92	5.25	12.54	0.07	0.42	0.17
27.927	2	135	7	3.28	2.57	6.15	10.71	0.06	0.09	0.07
27.927	2	136	8	6.62	1.37	1.93	4.97	0.03	0.09	0.05
27.927	1	137	9	3.01	3.03	6.26	0.13	11.68	0.08	0.32
27.927	1	138	10	2.39	3.95	7.2	0.11	13.46	0.05	0.09
27.927	1	139	11	4.42	2.12	3.83	0.1	8.43	0.19	0.33
27.927	0	140	12	5.51	0.24	6.41	0.61	1.91	1.19	0.02
27.927	0	141	13	4.05	0.2	8.98	0.27	0.72	1.44	0.03
27.927	0	142	14	4.83	0.15	7.49	0.29	0.77	1.34	0.02
27.927	2	143	15	3.23	2.61	5.96	10.86	0.07	0.12	0.02
27.927	2	144	16	3.73	1.99	4.73	9.67	0.06	0.19	0.13
27.927	1	145	17	2.98	3.33	6.42	0.15	11.74	0.02	0.14
27.927	1	146	18	5.46	1.6	2.75	0.06	6.63	0.05	0.11
27.927	0	147	19	5.03	0.12	7.17	0.38	0.38	1.39	0.02
27.927	0	148	20	3.51	0.24	10.17	0.61	1.06	2.26	0.03
27.927	2	149	21	1.53	3.63	8.17	16.05	0.1	0.64	0.17
27.927	2	150	22	1.54	5.02	8.41	16	0.13	0.08	0.03
27.927	2	151	23	1.48	4.45	9.16	16.23	0.13	0.1	0.08
27.927	2	152	24	2.13	2.92	6.77	13.97	0.11	0.36	0.28
27.927	1	153	25	1.46	4.48	8.95	0.13	16.7	0.16	0.67
27.927	1	154	26	0.85	5.71	10.14	0.14	19.21	0.08	0.17
27.927	1	155	27	0.56	6.14	11.1	0.28	20.53	0.04	0.16
27.927	1	156	28	1.95	3.57	7.67	0.19	14.88	0.26	0.5
27.927	0	157	29	1.63	0.59	15.66	1.02	3.73	4.31	0.04
27.927	0	158	30	0.92	0.23	18.46	1.08	3.78	2.94	0.04
27.927	0	159	31	0.94	0.39	18.39	0.35	2.23	3.39	0.07
27.927	0	160	32	0.82	0.3	18.87	0.6	2.23	3.26	0.04
27.927	0	161	33	1.15	0.54	17.52	0.97	2.82	3.77	0.03
27.927	2	162	34	1.81	3.89	8.24	15.02	0.11	0.25	0.05
27.927	2	163	35	1.41	5.17	8.88	16.47	0.13	0.06	0.04
27.927	2	164	36	1.96	3.42	8.19	14.51	0.12	0.23	0.17
27.927	1	165	37	1.4	5.02	10.18	0.13	16.92	0.06	0.47
27.927	1	166	38	0.48	6.45	11.54	0.2	20.88	0.05	0.08
27.927	1	167	39	1.08	4.81	9.58	0.3	18.2	0.12	0.33
27.927	0	168	40	1.5	0.47	16.16	1.01	3.63	3.17	0.04
27.927	0	169	41	0.69	0.34	19.45	0.55	2.79	3.54	0.05
27.927	0	170	42	0.76	0.33	19.14	0.45	1.56	3.15	0.07
27.927	0	171	43	0.95	0.39	18.34	0.76	2.47	3.82	0.03

28.2922	2		0	20.81	0.06	0.06	0.19	0	0	0
28.2922	2		1	8.81	1.05	0.78	3	0.01	0.04	0.02
28.2922	1		2	8.49	1.08	0.97	0.02	3.3	0.02	0.04
28.2922	1		3	9.17	0.96	0.8	0.04	2.83	0.01	0.05
28.2922	0		4	7.46	0.04	4.09	0.14	0.26	0.33	0.01
28.2922	0		5	8.18	0.06	3.47	0.11	0.38	0.4	0.01
28.2922	2		6	6.45	1.5	1.71	5.17	0.02	0.15	0.05
28.2922	2		7	8.65	1.21	0.98	3.11	0.01	0.03	0.02
28.2922	2		8	9.33	1.08	0.66	2.66	0.02	0.04	0.02
28.2922	1		9	5.93	1.71	1.75	0.03	5.95	0.04	0.16
28.2922	1		10	5.7	2.72	2.68	0.06	6.28	0	0.05
28.2922	1		11	6.95	1.41	1.27	0.06	4.71	0.04	0.13
28.2922	0		12	7.26	0.18	4.29	0.34	1.24	0.54	0.01
28.2922	0		13	4.92	0.19	7.34	0.09	0.68	0.88	0.02
28.2922	0		14	7.44	0.04	4.12	0.14	0.26	0.33	0.01
28.2922	2		15	8.45	1.31	0.99	3.26	0.01	0.03	0.01
28.2922	2		16	8.69	0.98	0.86	3.08	0.01	0.05	0.02
28.2922	1		17	5.76	2.52	2.19	0.08	6.2	0.01	0.07
28.2922	1		18	8.49	1.08	0.97	0.02	3.3	0.02	0.04
28.2922	0		19	7.47	0.04	4.08	0.14	0.25	0.33	0.01
28.2922	0		20	5.1	0.1	7.05	0.24	0.8	0.88	0.02
28.2922	2		21	6.37	1.44	1.75	5.27	0.03	0.16	0.05
28.2922	2		22	5.55	3.23	2	6.36	0.04	0.04	0.01
28.2922	2		23	6.22	2.55	1.87	5.45	0.04	0.03	0.02
28.2922	2		24	6.59	1.66	1.85	5.01	0.03	0.06	0.05
28.2922	1		25	4.78	2.23	2.38	0.04	7.77	0.07	0.31
28.2922	1		26	4.07	3.58	3.27	0.07	9.14	0.01	0.09
28.2922	1		27	3.92	4.15	3.83	0.17	9.46	0.01	0.05
28.2922	1		28	5.56	2.36	2.24	0.13	6.48	0.05	0.14
28.2922	0		29	5.84	0.18	5.95	0.8	1.91	0.68	0.02
28.2922	0		30	3.47	0.11	10.26	0.5	2.23	0.91	0.03
28.2922	0		31	3.1	0.28	11.17	0.07	0.67	1.4	0.05
28.2922	0		32	3.12	0.17	11.11	0.23	1.01	1.15	0.03
28.2922	0		33	4.58	0.32	7.94	0.33	1.93	1.11	0.02
28.2922	2		34	5.98	2.41	1.88	5.76	0.03	0.09	0.03
28.2922	2		35	5.82	3.05	1.89	5.97	0.05	0.03	0.01
28.2922	2		36	6.5	2.08	1.88	5.11	0.03	0.04	0.04
28.2922	1		37	4.35	2.94	2.9	0.06	8.57	0.02	0.21
28.2922	1		38	3.68	4.38	4.25	0.12	10	0.01	0.02
28.2922	1		39	4.81	3.14	2.92	0.17	7.7	0.03	0.08
28.2922	0		40	4.57	0.12	7.96	0.7	1.97	0.76	0.02
28.2922	0		41	2.91	0.24	11.67	0.11	1.74	1.26	0.04
28.2922	0		42	2.89	0.23	11.71	0.17	0.33	1.36	0.04
28.2922	0		43	3.88	0.27	9.33	0.3	1.61	1.14	0.02

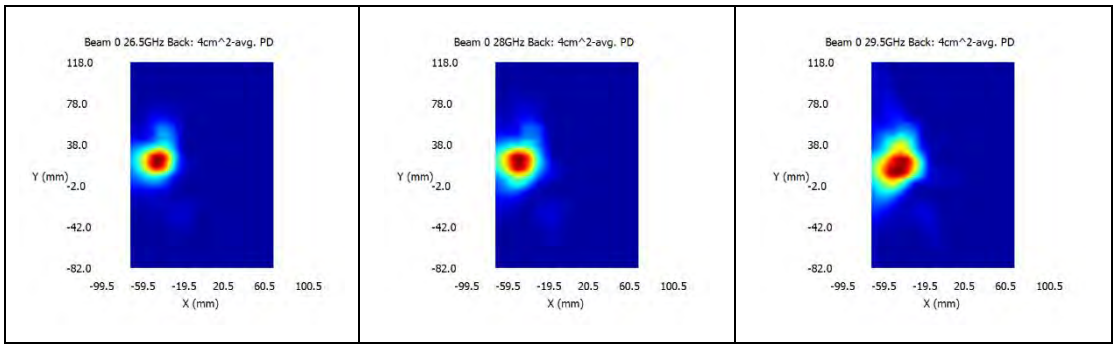
28.2922	2		128	9.28	0.32	1.6	2.69	0.02	0.03	0.02
28.2922	2		129	7.92	0.47	1.96	3.68	0.02	0.07	0.02
28.2922	1		130	7.83	0.47	2.13	0.03	3.85	0.02	0.04
28.2922	1		131	9.29	0.35	1.55	0.02	2.75	0.01	0.04
28.2922	0		132	23.58	0	0.1	0	0.01	0.02	0
28.2922	0		133	8.36	0.06	3.33	0.05	0.25	0.92	0
28.2922	2		134	6.48	0.82	2.59	5.13	0.03	0.15	0.05
28.2922	2		135	5.77	1.01	3.92	6.04	0.03	0.06	0.03
28.2922	2		136	10.47	0.26	1.09	2.05	0.01	0.02	0.01
28.2922	1		137	6.23	0.82	3.55	0.08	5.57	0.01	0.06
28.2922	1		138	5.85	0.84	3.9	0.04	6.06	0.04	0.07
28.2922	1		139	6.71	0.59	2.53	0.05	4.98	0.07	0.13
28.2922	0		140	9.83	0.02	2.37	0.08	0.08	0.51	0
28.2922	0		141	9.43	0.04	2.6	0.06	0.05	0.61	0
28.2922	0		142	8.57	0.05	3.17	0.07	0.32	0.85	0
28.2922	2		143	5.55	0.99	4.23	6.36	0.04	0.04	0.01
28.2922	2		144	6.14	0.82	2.95	5.55	0.03	0.1	0.06
28.2922	1		145	5.91	0.88	3.96	0.06	5.98	0.02	0.03
28.2922	1		146	9.29	0.35	1.55	0.02	2.75	0.01	0.04
28.2922	0		147	9.51	0.03	2.55	0.06	0.05	0.59	0
28.2922	0		148	9.67	0.04	2.46	0.08	0.09	0.54	0
28.2922	2		149	4.95	1.21	4.66	7.3	0.05	0.22	0.05
28.2922	2		150	4.37	1.55	5.68	8.33	0.04	0.03	0.02
28.2922	2		151	4.5	1.48	5.29	8.1	0.06	0.05	0.04
28.2922	2		152	5.6	1.07	3.8	6.29	0.06	0.18	0.1
28.2922	1		153	5.05	1.15	5.01	0.07	7.29	0.02	0.12
28.2922	1		154	4.37	1.44	5.64	0.06	8.53	0.04	0.07
28.2922	1		155	4.23	1.46	5.95	0.07	8.82	0.04	0.05
28.2922	1		156	5.21	1.19	4.16	0.08	7.03	0.1	0.22
28.2922	0		157	4.74	0.29	7.66	0.24	0.46	2.66	0.01
28.2922	0		158	5.32	0.17	6.7	0.33	1.07	1.91	0.01
28.2922	0		159	5.61	0.25	6.27	0.17	1.29	1.79	0.01
28.2922	0		160	5.62	0.11	6.25	0.32	0.71	2	0.01
28.2922	0		161	4.88	0.12	7.41	0.18	0.74	2.26	0.01
28.2922	2		162	4.66	1.37	5.09	7.79	0.05	0.09	0.01
28.2922	2		163	4.27	1.58	5.73	8.53	0.05	0.03	0.03
28.2922	2		164	5.1	1.24	4.45	7.05	0.05	0.1	0.07
28.2922	1		165	4.79	1.28	5.35	0.07	7.75	0.02	0.08
28.2922	1		166	4.15	1.55	6.01	0.05	8.97	0.04	0.05
28.2922	1		167	4.46	1.37	5.5	0.07	8.37	0.07	0.17
28.2922	0		168	4.81	0.24	7.54	0.33	0.72	2.13	0.01
28.2922	0		169	5.64	0.23	6.22	0.28	1.22	1.96	0.01
28.2922	0		170	5.56	0.19	6.34	0.2	1.04	1.73	0.01
28.2922	0		171	5.25	0.1	6.81	0.24	0.71	2.1	0.01

28.2922	2	128	0	8.54	0.52	1.83	3.2	0.02	0.04	0.02
28.2922	2	129	1	5.06	1.63	2.96	7.11	0.04	0.16	0.05
28.2922	1	130	2	4.89	1.8	3.41	0.07	7.57	0.04	0.11
28.2922	1	131	3	5.92	1.42	2.68	0.09	5.97	0.04	0.14
28.2922	0	132	4	7.09	0.05	4.46	0.15	0.28	0.42	0.01
28.2922	0	133	5	4.8	0.17	7.56	0.21	0.85	1.67	0.02
28.2922	2	134	6	2.92	3.05	4.88	11.66	0.07	0.48	0.15
28.2922	2	135	7	3.66	2.55	5.56	9.83	0.06	0.1	0.07
28.2922	2	136	8	6.46	1.4	1.9	5.15	0.04	0.11	0.05
28.2922	1	137	9	3.18	3.05	5.77	0.14	11.22	0.08	0.36
28.2922	1	138	10	2.63	3.93	6.68	0.13	12.74	0.06	0.1
28.2922	1	139	11	4.22	2.47	4.1	0.11	8.83	0.16	0.35
28.2922	0	140	12	6.25	0.23	5.41	0.6	1.51	1.09	0.01
28.2922	0	141	13	4.22	0.22	8.64	0.23	0.73	1.25	0.03
28.2922	0	142	14	5.08	0.16	7.08	0.23	0.65	1.28	0.02
28.2922	2	143	15	3.64	2.56	5.51	9.86	0.08	0.12	0.02
28.2922	2	144	16	3.87	2.11	4.25	9.35	0.06	0.2	0.12
28.2922	1	145	17	3.12	3.39	6.23	0.19	11.39	0.03	0.15
28.2922	1	146	18	5.7	1.56	2.48	0.06	6.28	0.04	0.1
28.2922	0	147	19	5.55	0.11	6.35	0.32	0.33	1.18	0.01
28.2922	0	148	20	3.91	0.24	9.27	0.5	1.03	1.91	0.03
28.2922	2	149	21	1.93	3.71	7.63	14.64	0.1	0.65	0.15
28.2922	2	150	22	1.83	5.05	7.71	14.96	0.14	0.09	0.04
28.2922	2	151	23	1.76	4.55	8.23	15.21	0.13	0.12	0.1
28.2922	2	152	24	2.06	3.17	6.65	14.2	0.11	0.37	0.25
28.2922	1	153	25	1.46	4.48	8.23	0.12	16.66	0.12	0.74
28.2922	1	154	26	1.17	5.61	9.32	0.15	17.81	0.07	0.2
28.2922	1	155	27	0.91	5.84	10.02	0.34	18.91	0.05	0.13
28.2922	1	156	28	2.16	3.83	7.86	0.21	14.19	0.23	0.49
28.2922	0	157	29	1.93	0.55	14.61	0.97	3.09	3.79	0.03
28.2922	0	158	30	1.27	0.23	17.01	1.12	3.33	2.69	0.04
28.2922	0	159	31	1.11	0.37	17.66	0.33	1.82	3.18	0.06
28.2922	0	160	32	1.29	0.33	16.95	0.55	1.82	3.07	0.04
28.2922	0	161	33	1.35	0.57	16.7	0.7	2.84	3.38	0.03
28.2922	2	162	34	2.03	3.98	7.59	14.31	0.12	0.28	0.05
28.2922	2	163	35	1.7	5.14	8.14	15.41	0.15	0.08	0.04
28.2922	2	164	36	2.09	3.68	7.48	14.11	0.11	0.23	0.16
28.2922	1	165	37	1.56	4.84	9.28	0.14	16.29	0.04	0.51
28.2922	1	166	38	0.82	6.34	10.61	0.25	19.35	0.06	0.07
28.2922	1	167	39	1.56	4.68	8.66	0.35	16.3	0.1	0.32
28.2922	0	168	40	1.83	0.44	14.97	1.07	3.11	2.72	0.04
28.2922	0	169	41	0.86	0.32	18.69	0.5	2.52	3.33	0.05
28.2922	0	170	42	1.01	0.35	18.07	0.47	1.35	2.9	0.06
28.2922	0	171	43	1.26	0.4	17.07	0.58	2.11	3.21	0.03

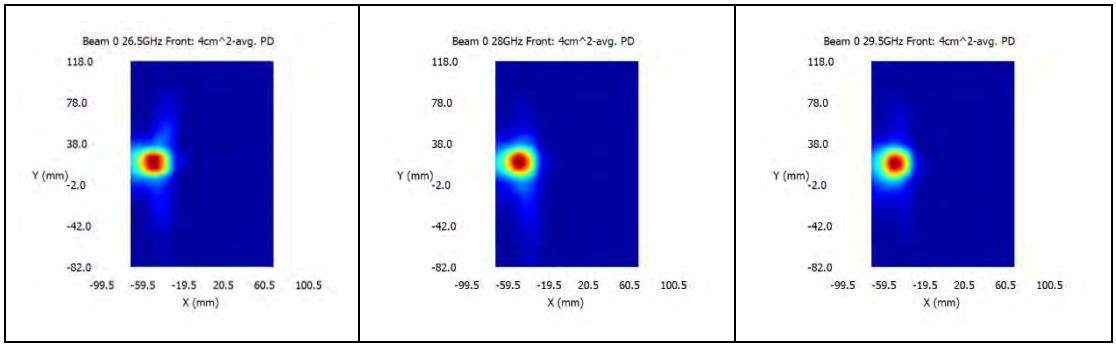
Appendix A – Simulated PD Distributions for 3QTMs transmission analysis

This section shows the 4cm2 10 PD simulation plots with 10 dB contour for each beam IDs, channels of Ant. 0 (Back /Front surfaces). These figures are normalized to peak 4cm2 PD values of each beam ID.

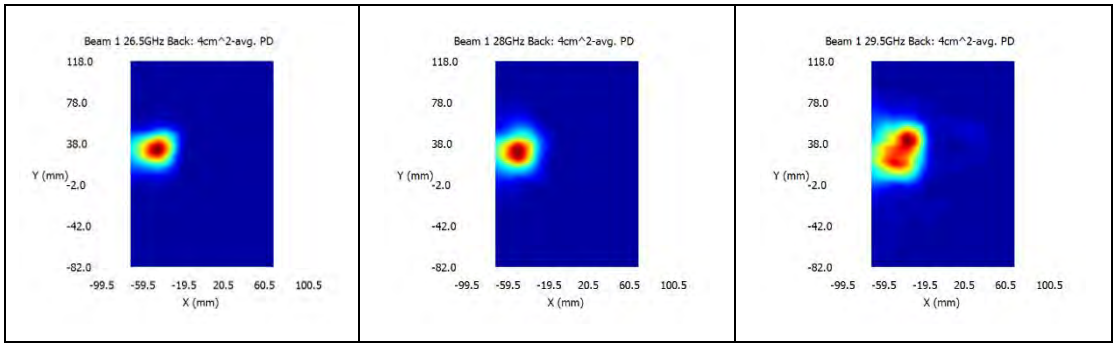
n257 / Beam ID: 0 / Back surface



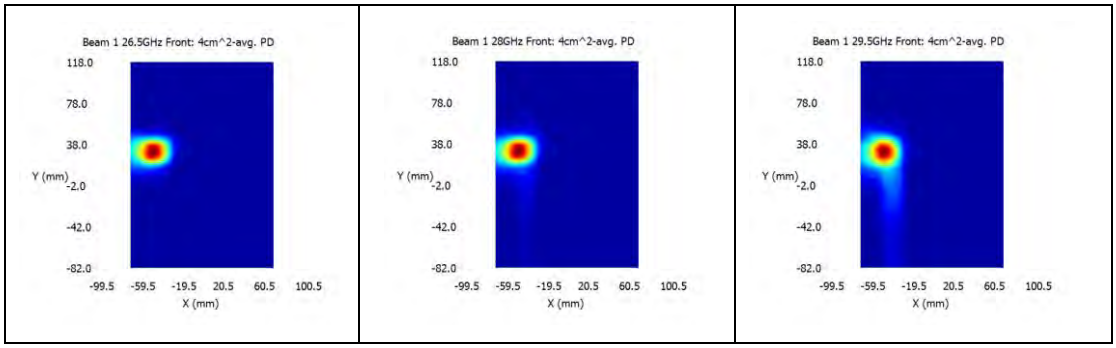
n257 / Beam ID: 0 / Front surface



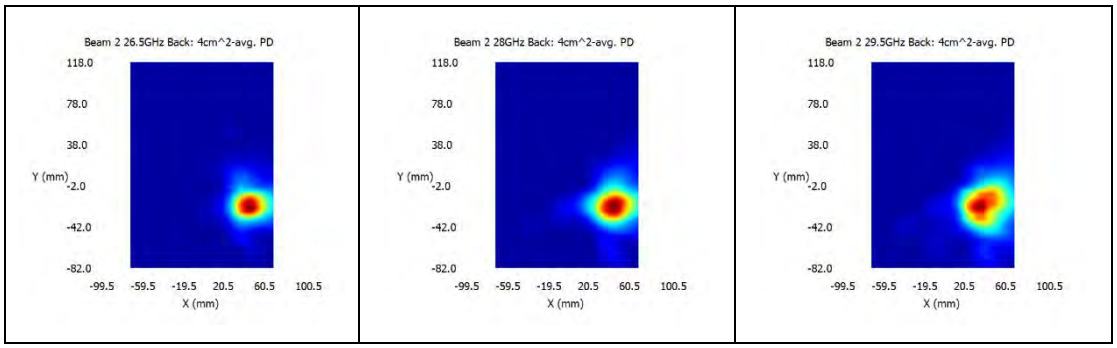
n257 / Beam ID: 1 / Back surface



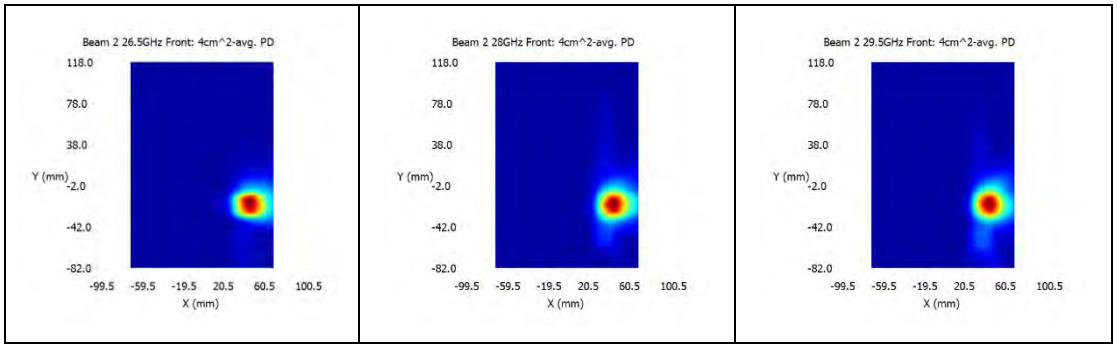
n257 / Beam ID: 1 / Front surface



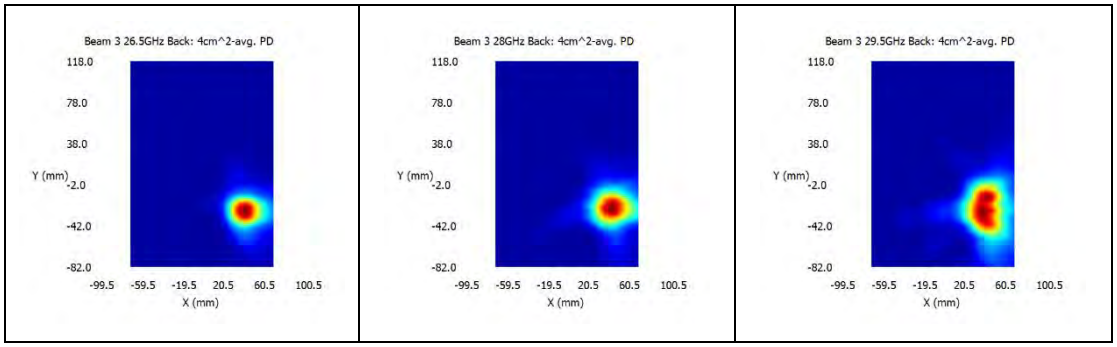
n257 / Beam ID: 2 / Back surface



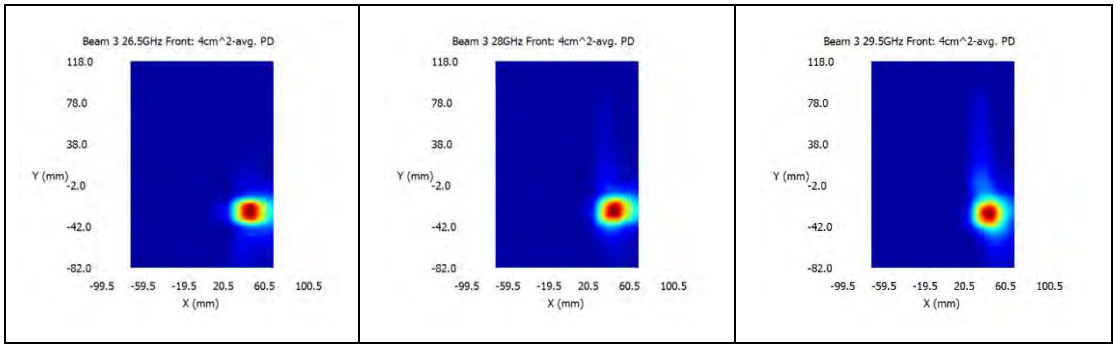
n257 / Beam ID: 2 / Front surface



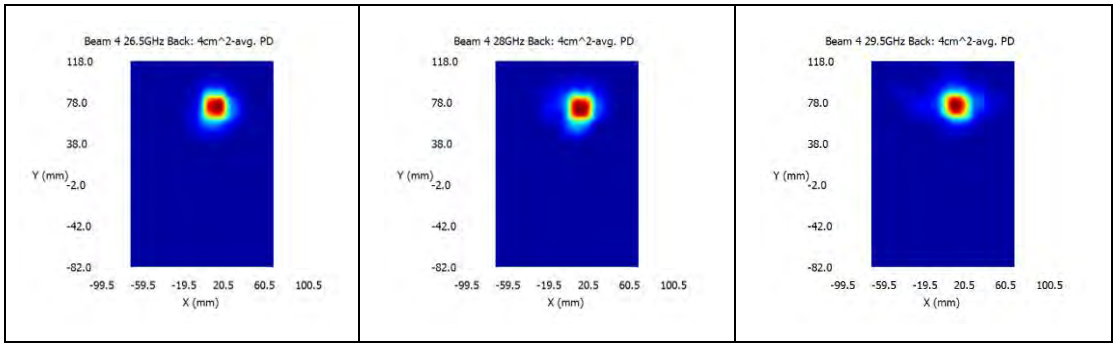
n257 / Beam ID: 3 / Back surface



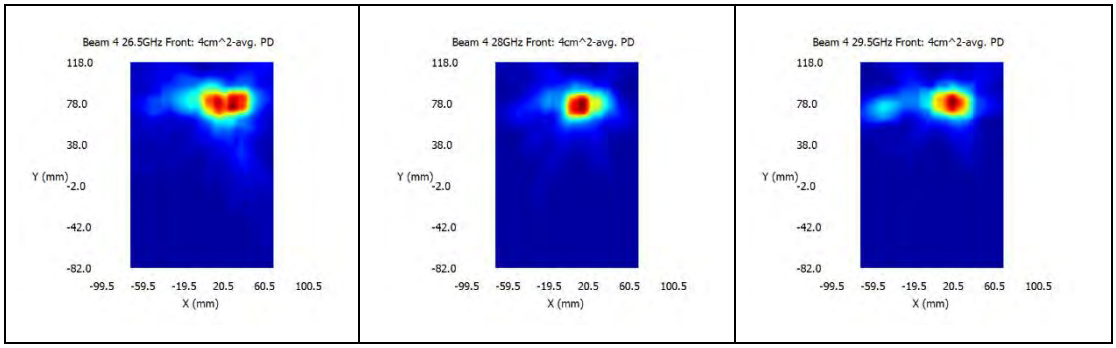
n257 / Beam ID: 3 / Front surface



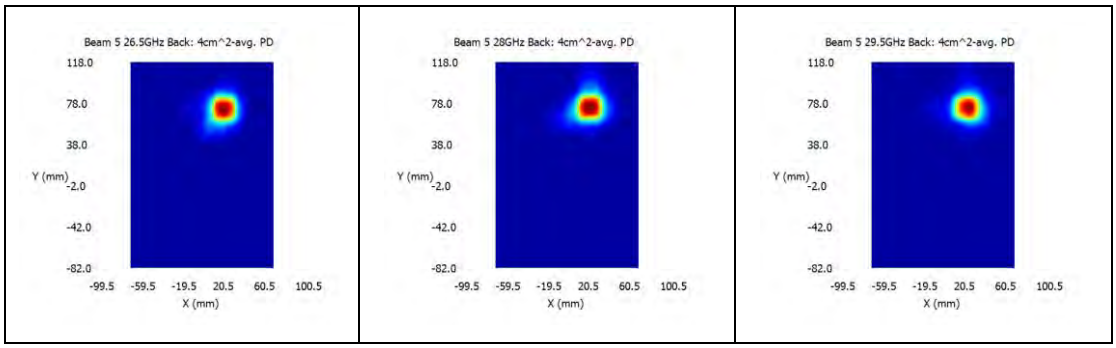
n257 / Beam ID: 4 / Back surface



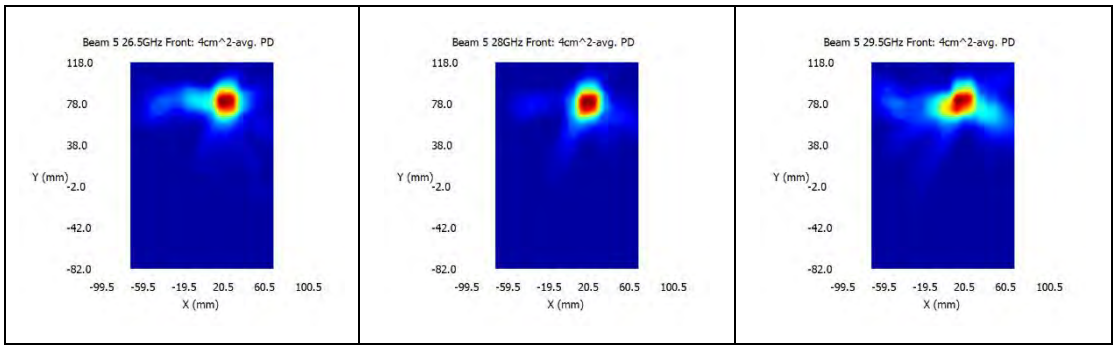
n257 / Beam ID: 4 / Front surface



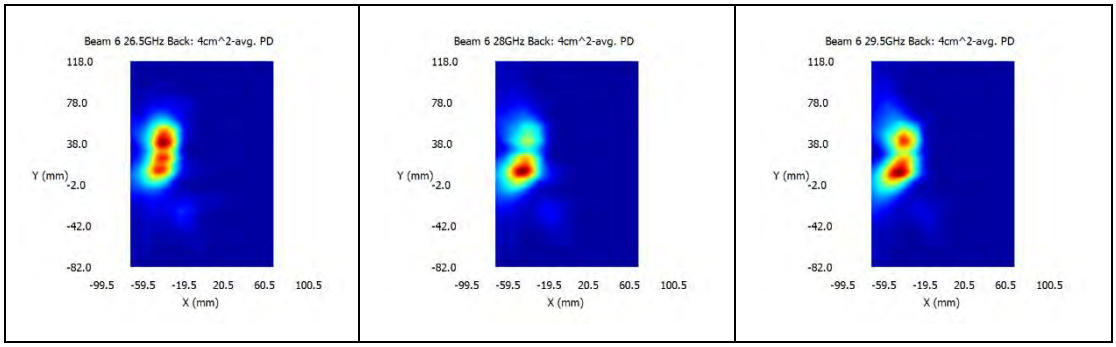
n257 / Beam ID: 5 / Back surface



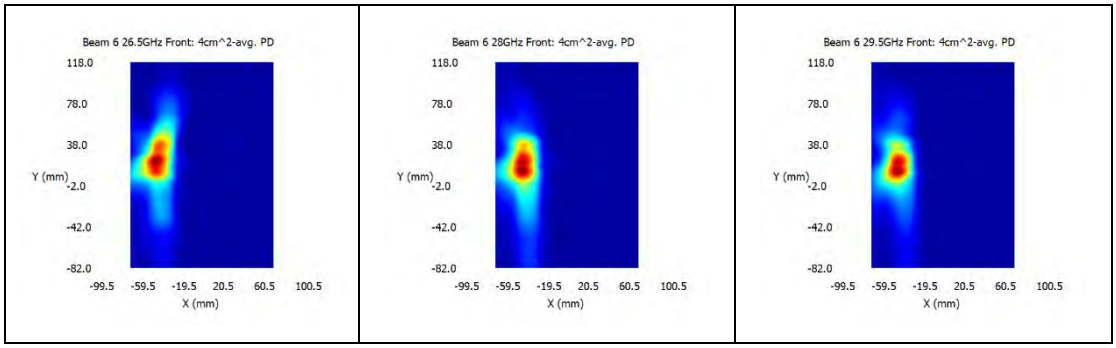
n257 / Beam ID: 5 / Front surface



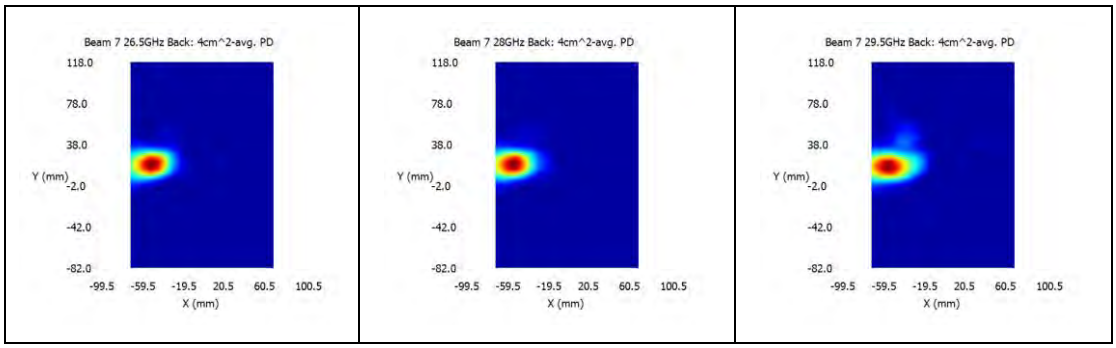
n257 / Beam ID: 6 / Back surface



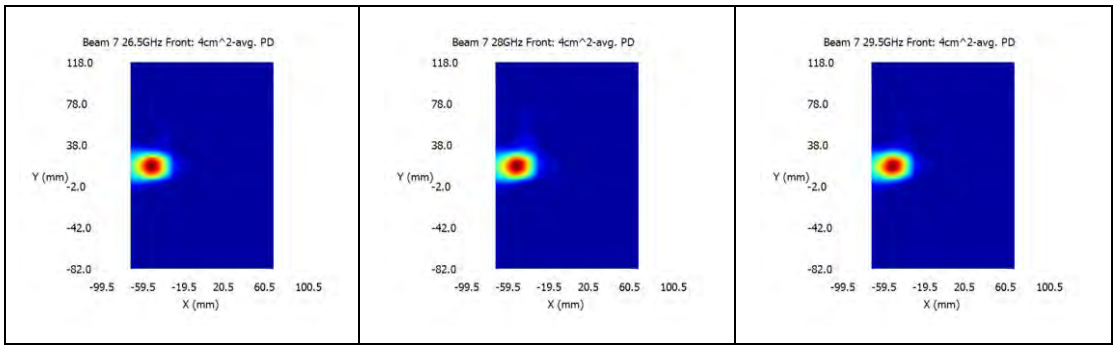
n257 / Beam ID: 6 / Front surface



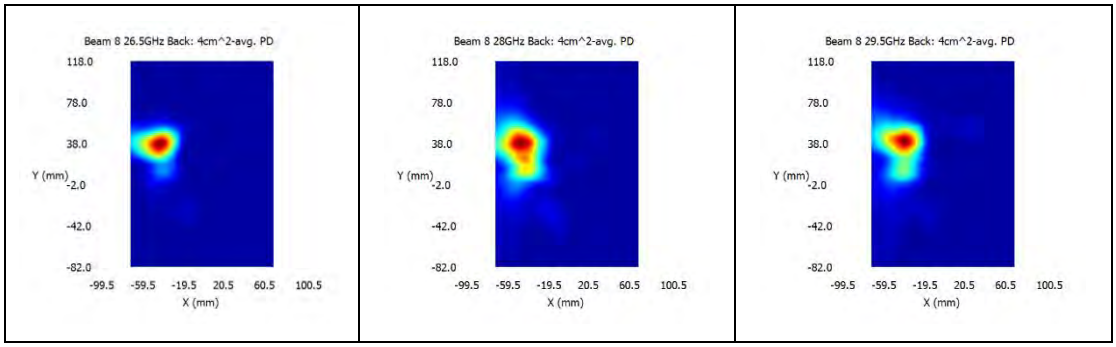
n257 / Beam ID: 7 / Back surface



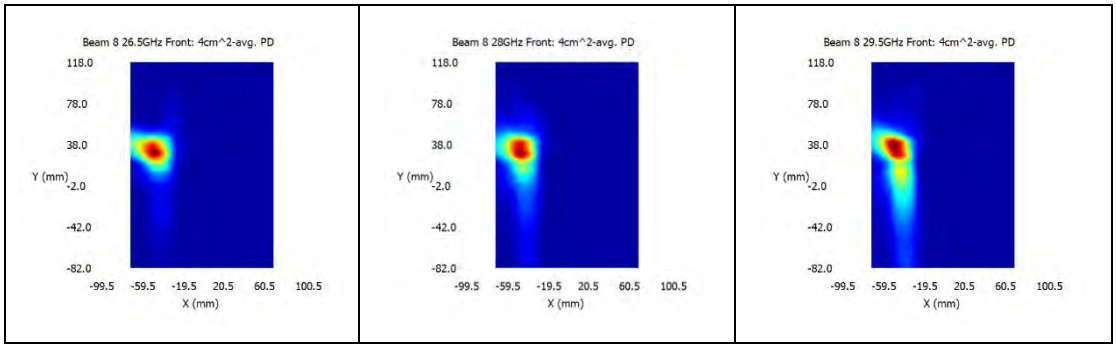
n257 / Beam ID: 7 / Front surface



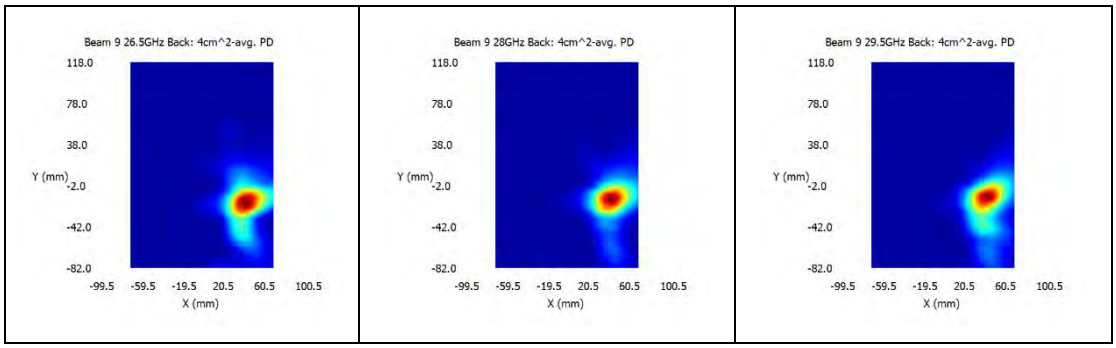
n257 / Beam ID: 8 / Back surface



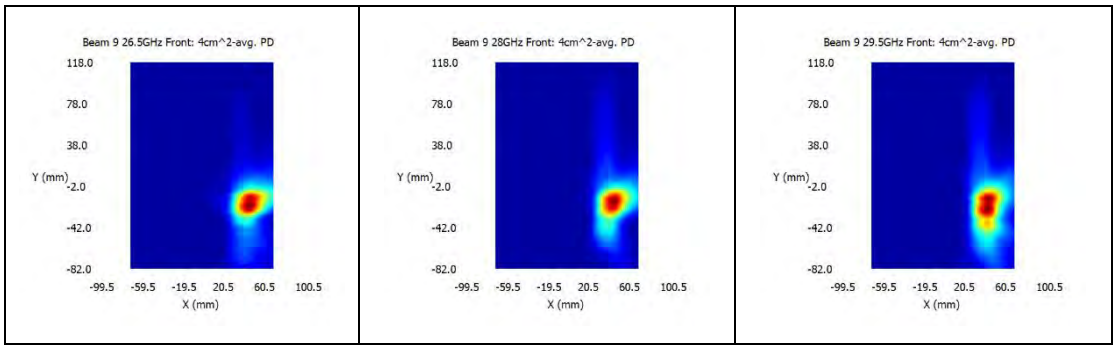
n257 / Beam ID: 8 / Front surface



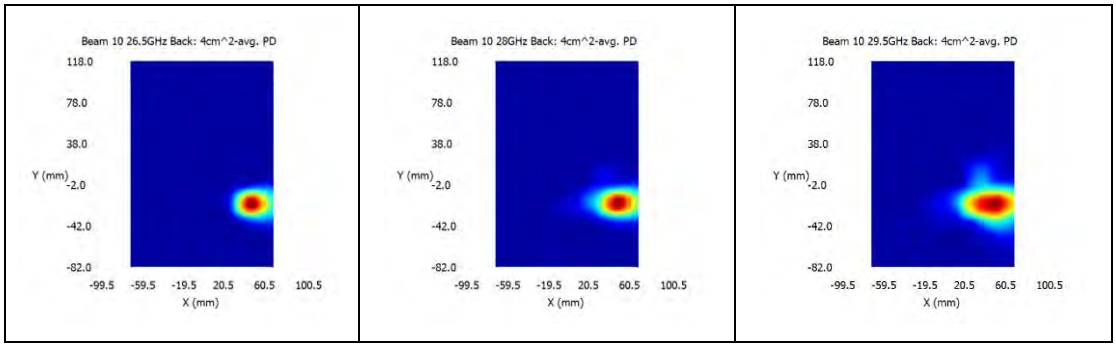
n257 / Beam ID: 9 / Back surface



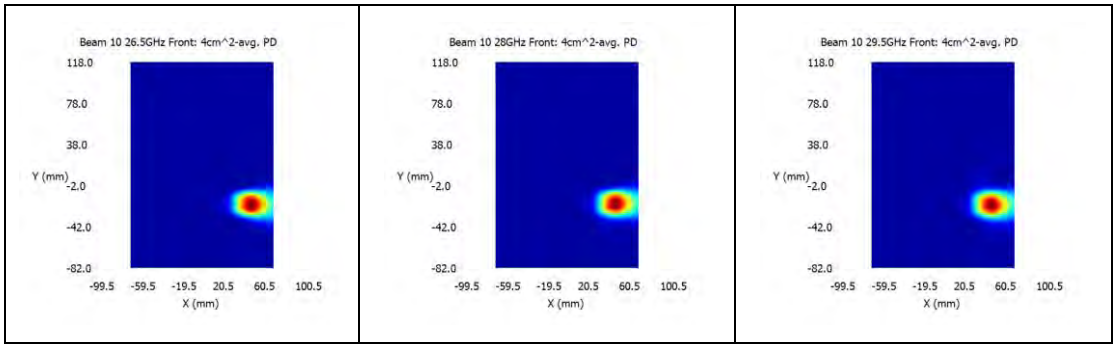
n257 / Beam ID: 9 / Front surface



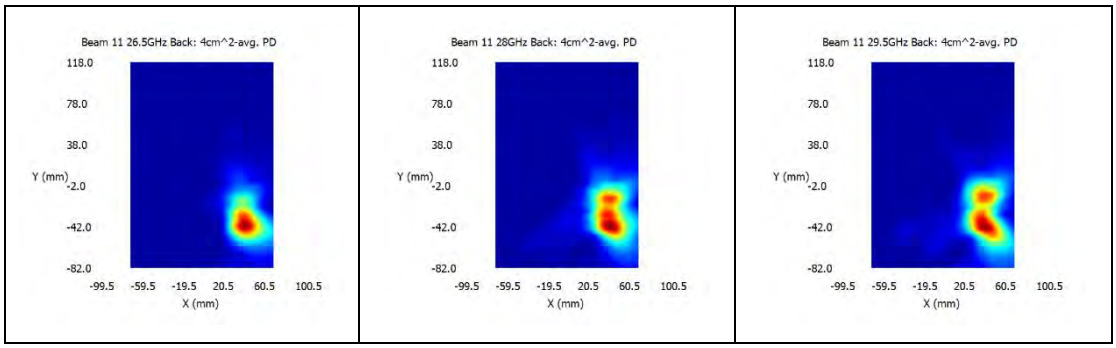
n257 / Beam ID: 10 / Back surface



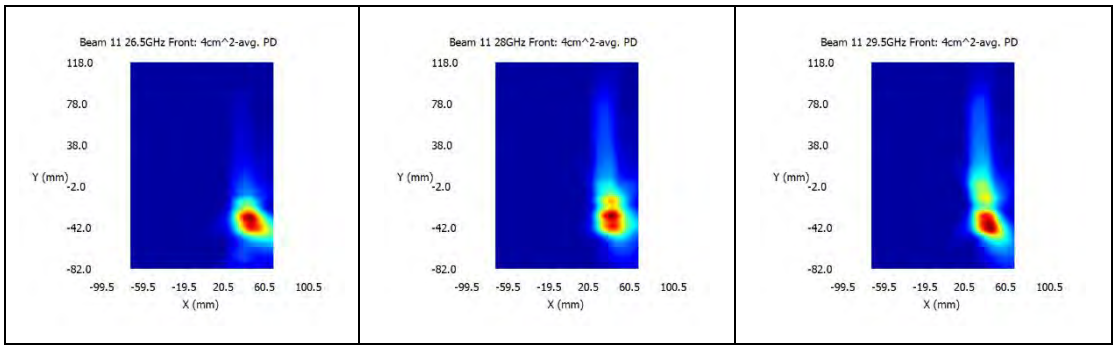
n257 / Beam ID: 10 / Front surface



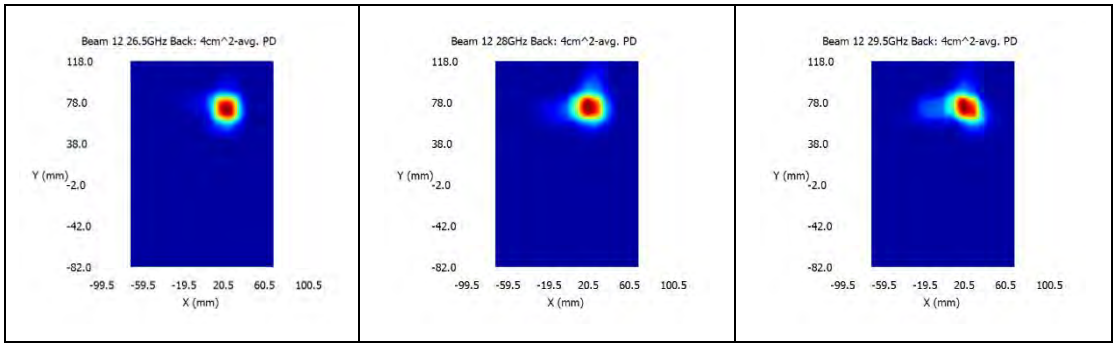
n257 / Beam ID: 11 / Back surface



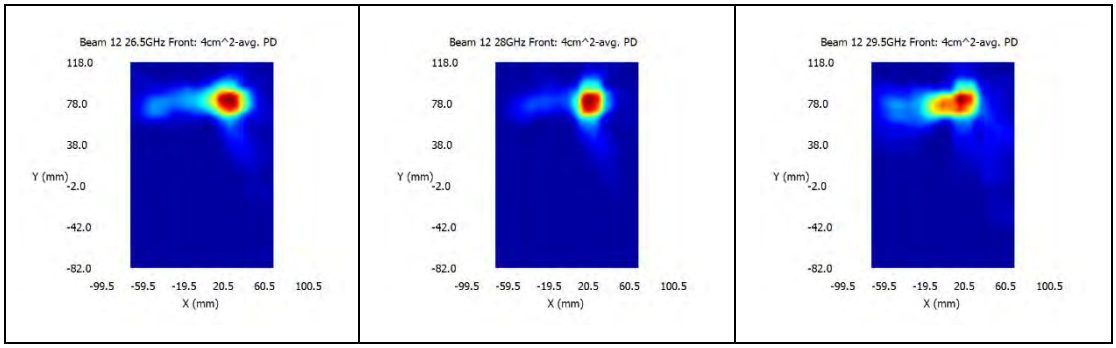
n257 / Beam ID: 11 / Front surface



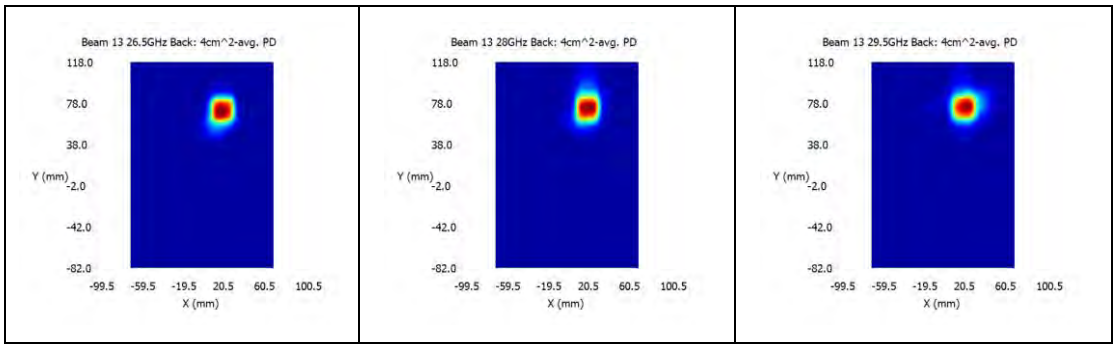
n257 / Beam ID: 12 / Back surface



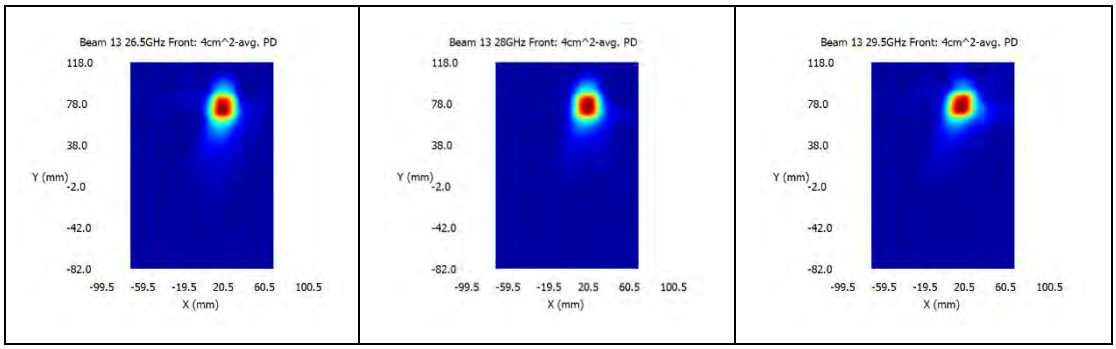
n257 / Beam ID: 12 / Front surface



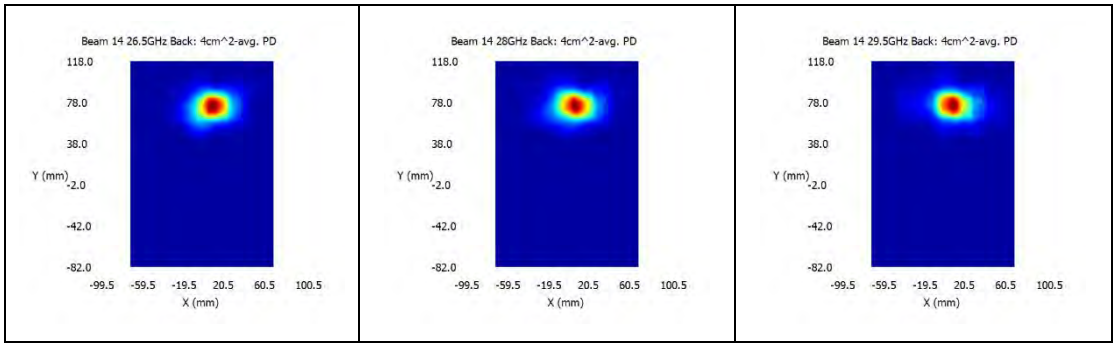
n257 / Beam ID: 13 / Back surface



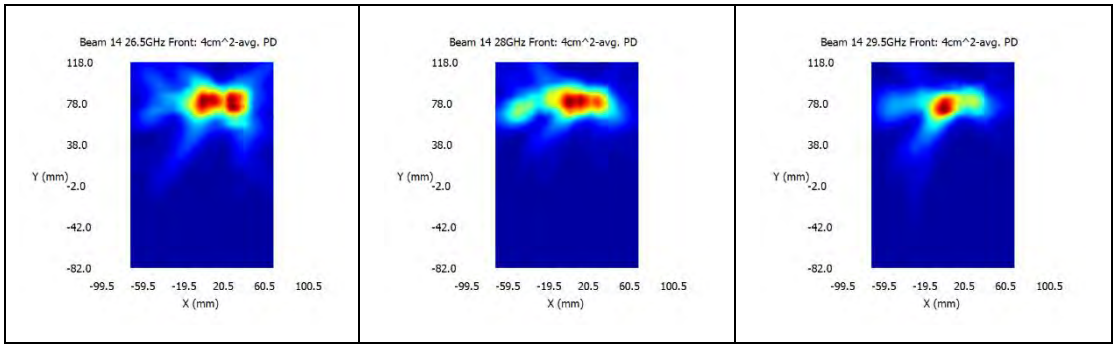
n257 / Beam ID: 13 / Front surface



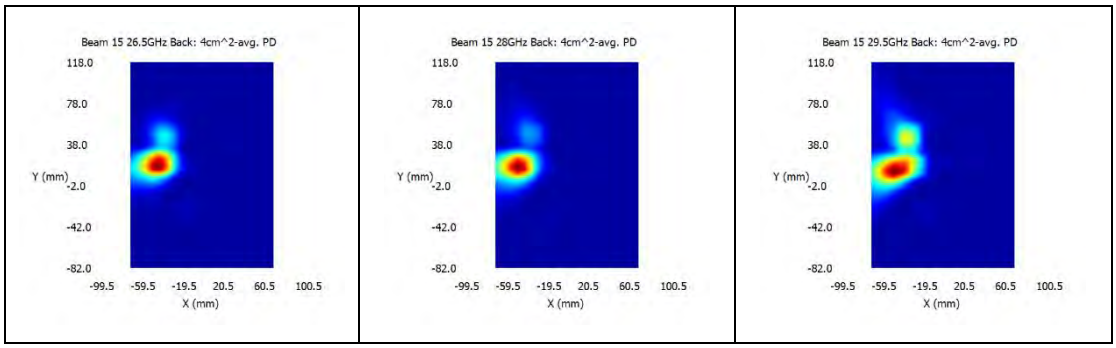
n257 / Beam ID: 14 / Back surface



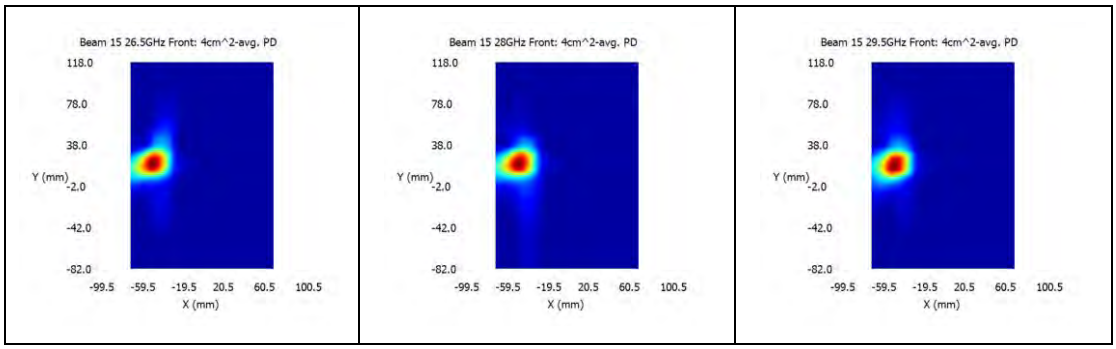
n257 / Beam ID: 14 / Front surface



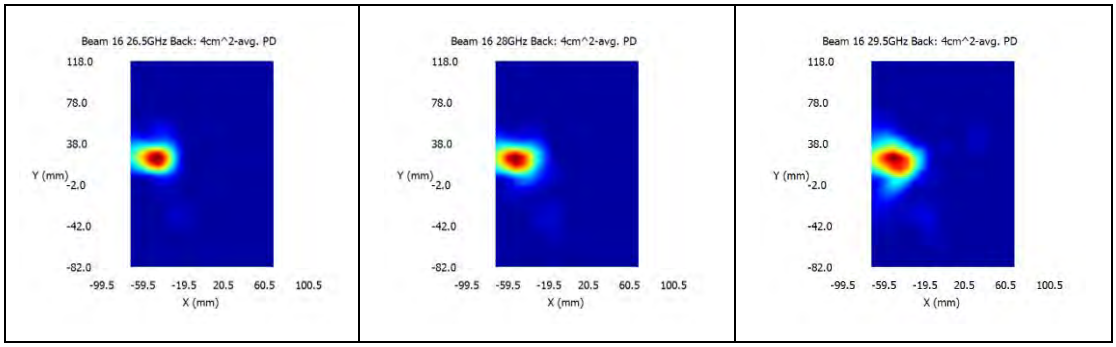
n257 / Beam ID: 15 / Back surface



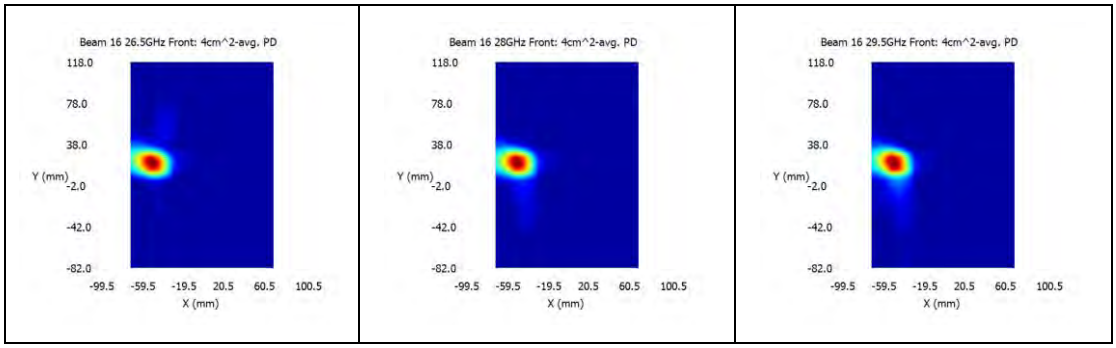
n257 / Beam ID: 15 / Front surface



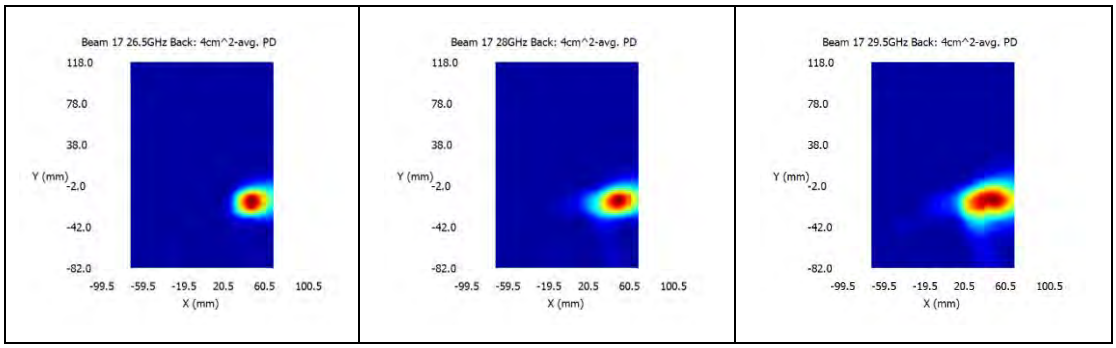
n257 / Beam ID: 16 / Back surface



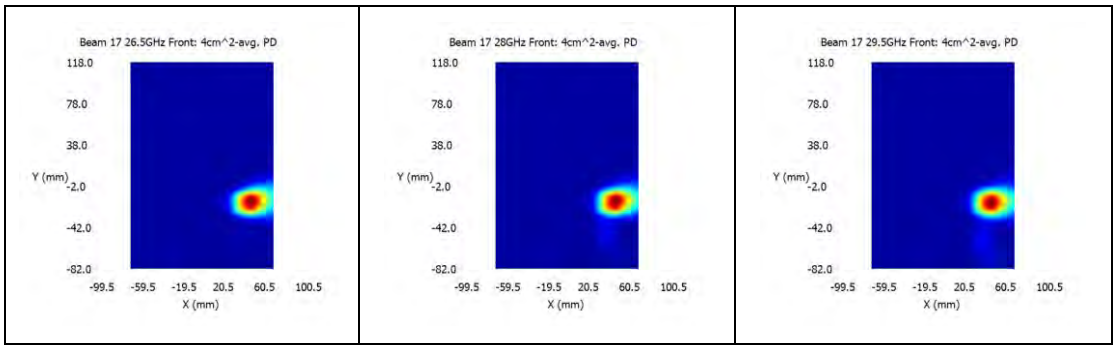
n257 / Beam ID: 16 / Front surface



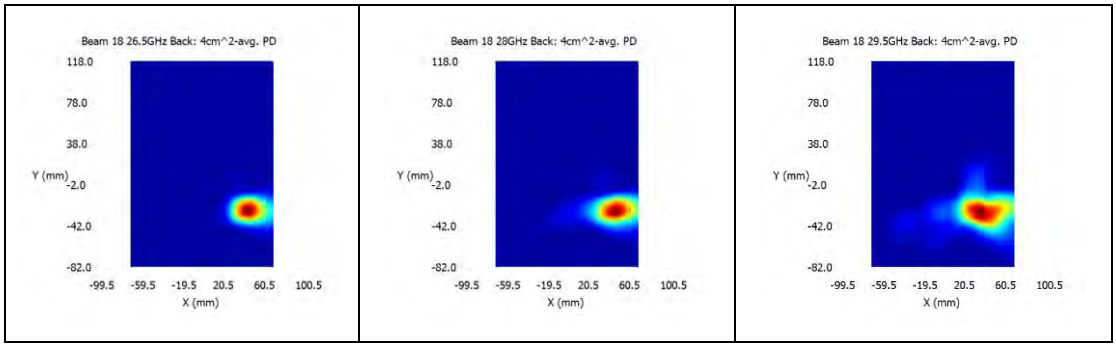
n257 / Beam ID: 17 / Back surface



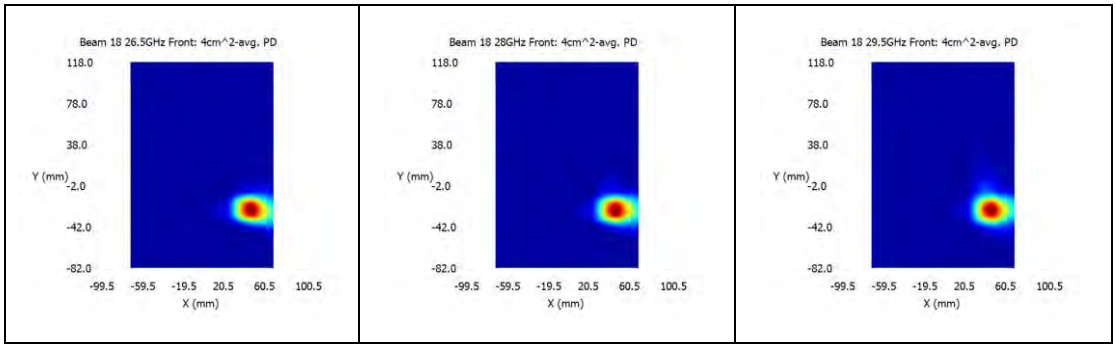
n257 / Beam ID: 17 / Front surface



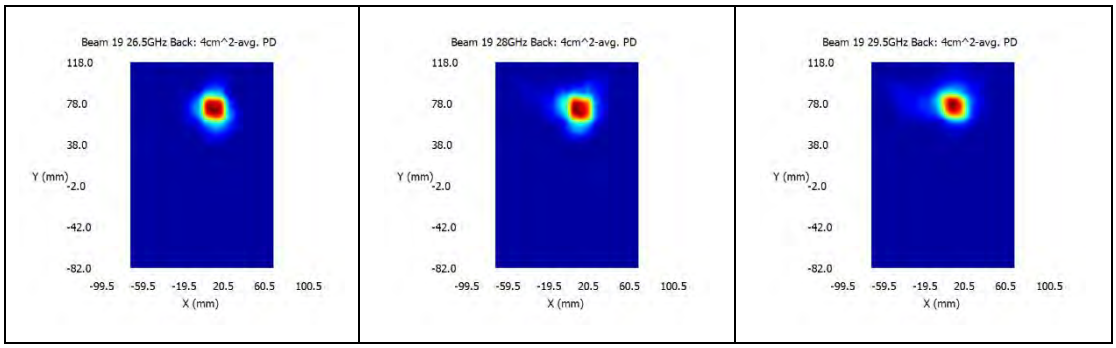
n257 / Beam ID: 18 / Back surface



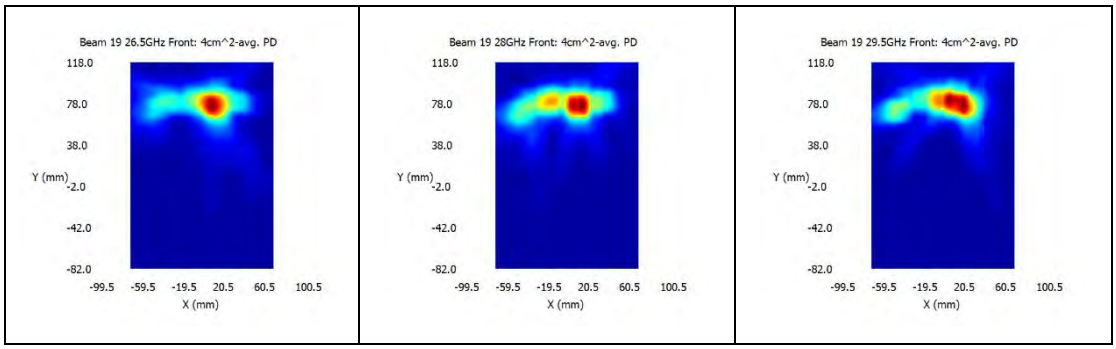
n257 / Beam ID: 18 / Front surface



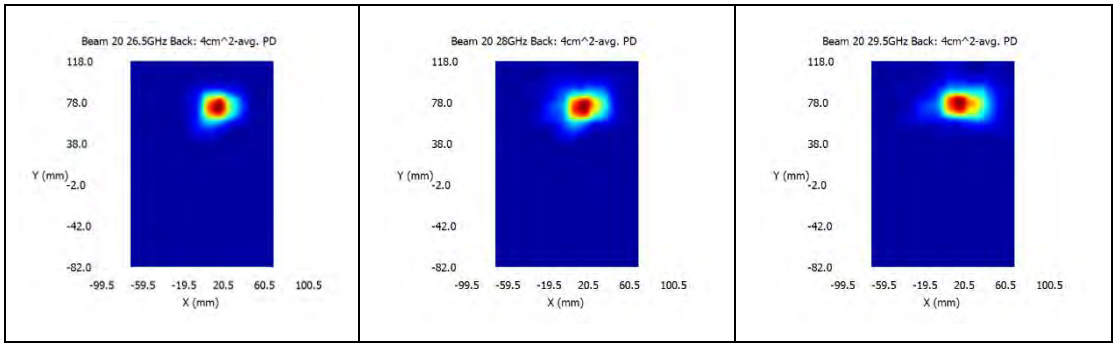
n257 / Beam ID: 19 / Back surface



n257 / Beam ID: 19 / Front surface



n257 / Beam ID: 20 / Back surface



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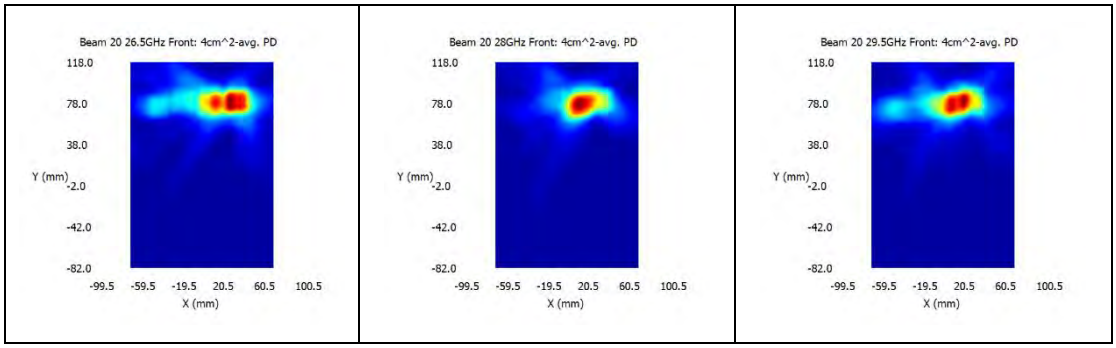
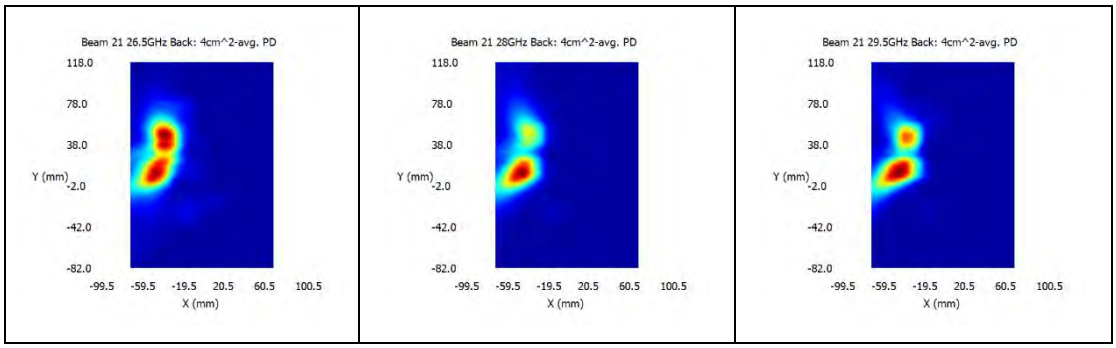
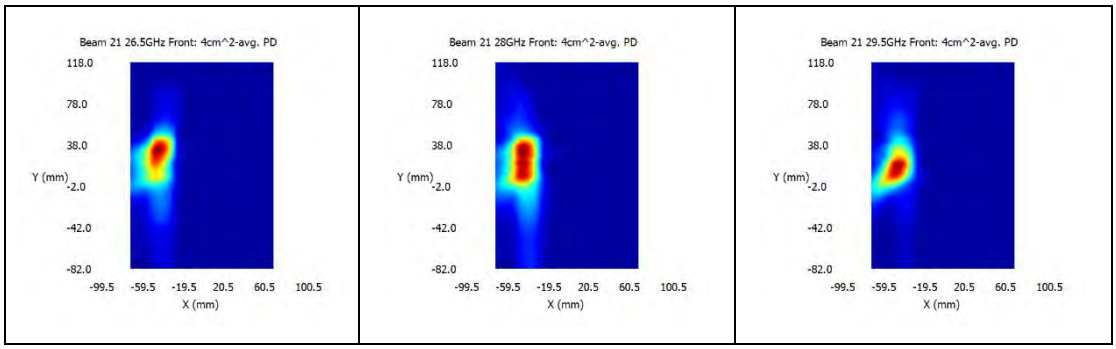


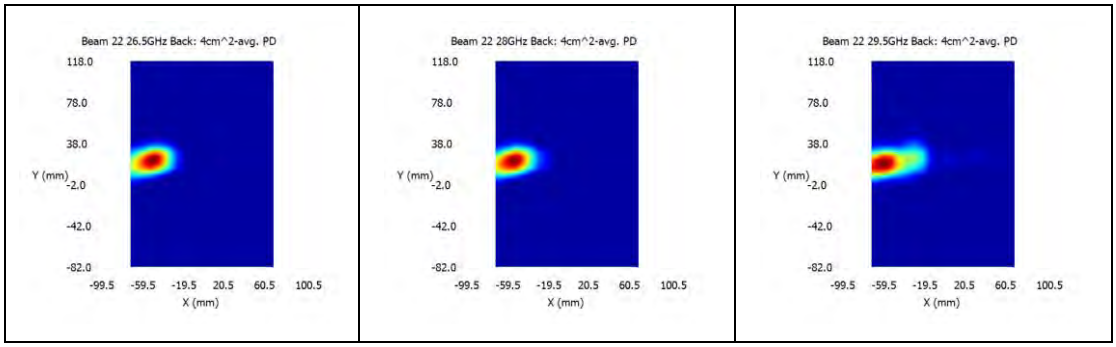
n257 / Beam ID: 21 / Back surface



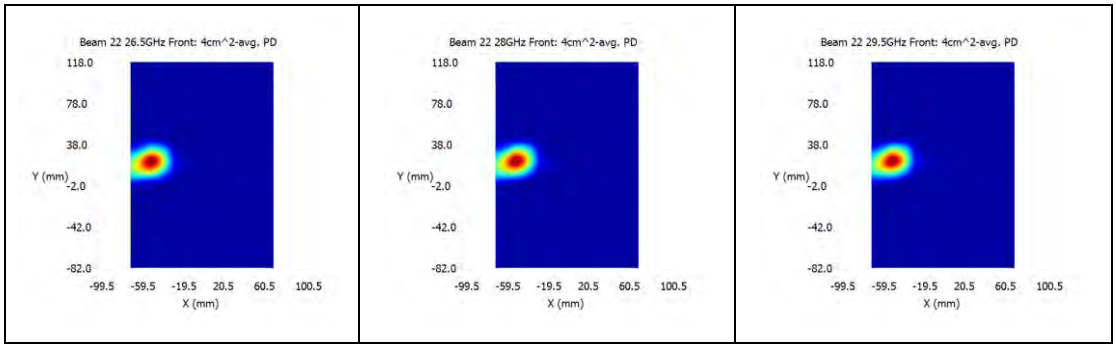
n257 / Beam ID: 21 / Front surface



n257 / Beam ID: 22 / Back surface



n257 / Beam ID: 22 / Front surface



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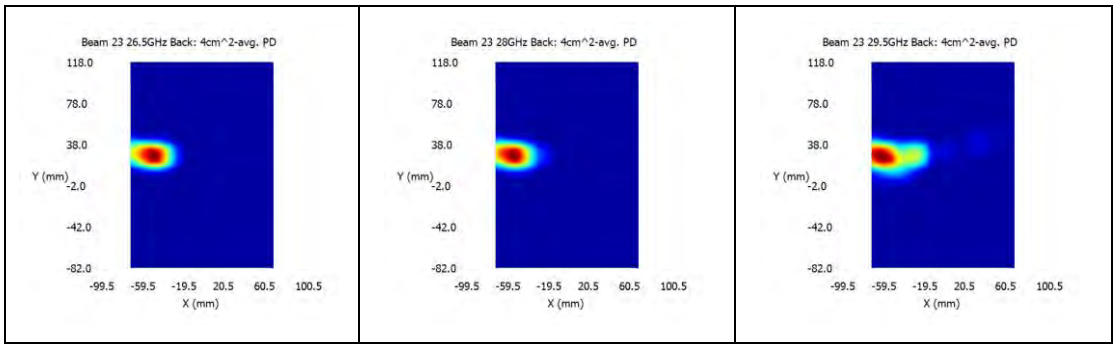

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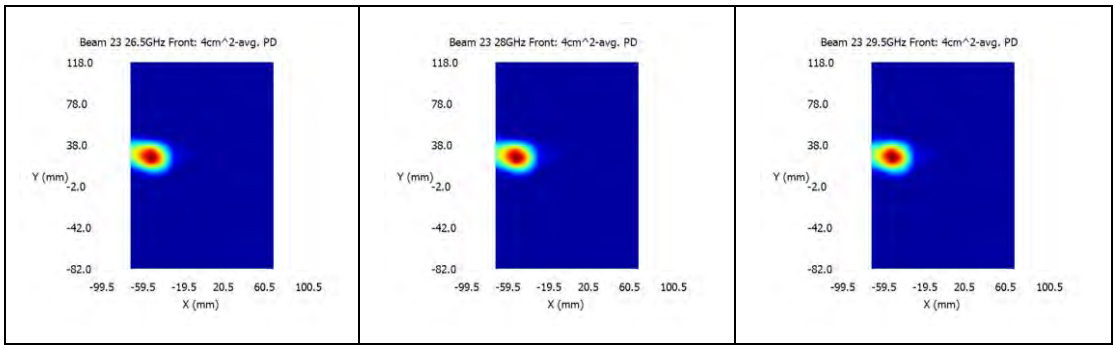
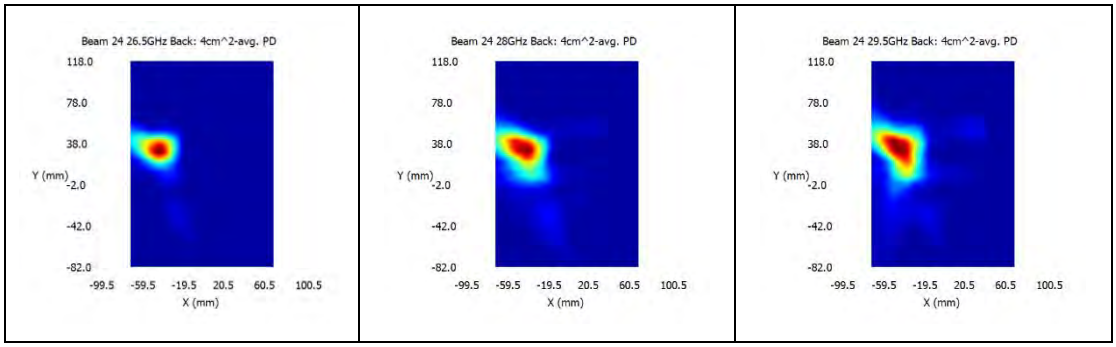


n257 / Beam ID: 24 / Back surface



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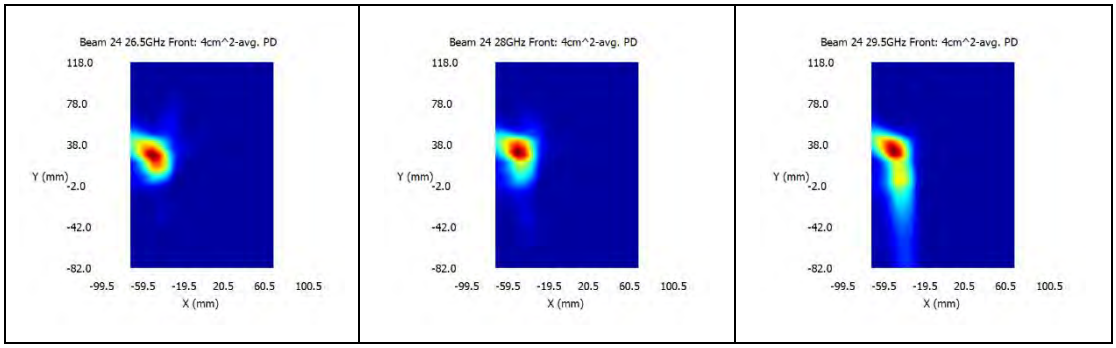
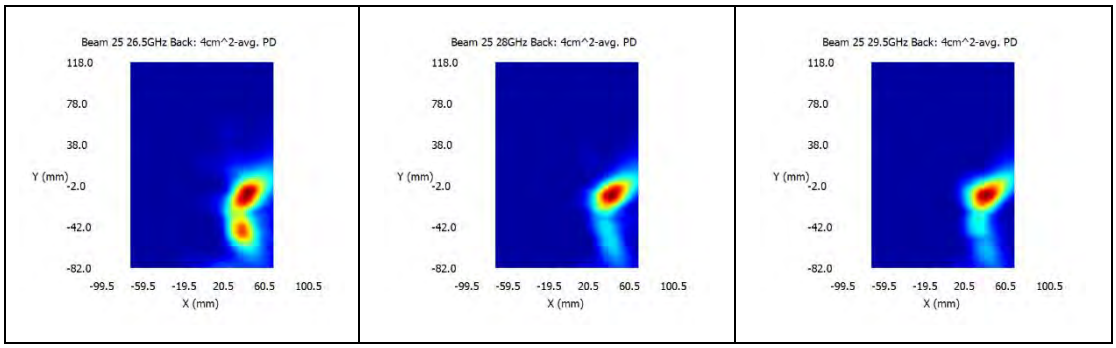
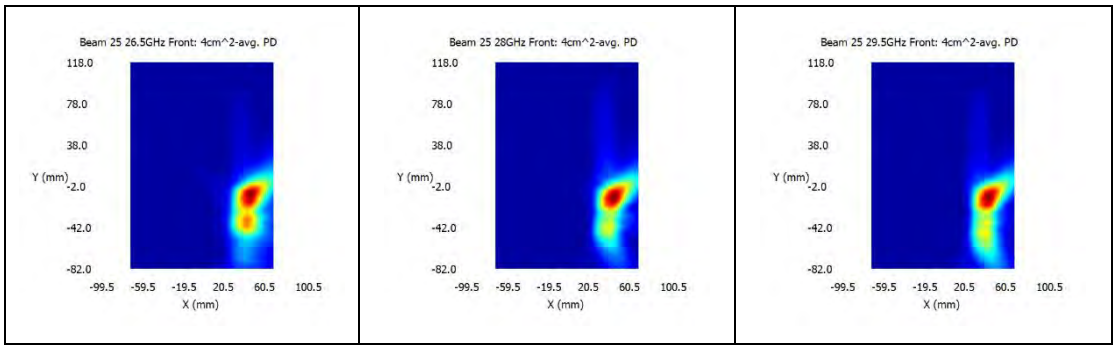


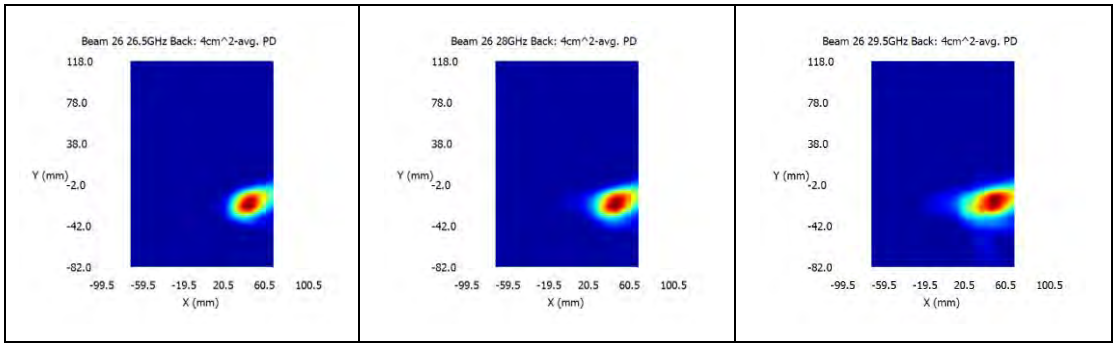
n257 / Beam ID: 25 / Back surface



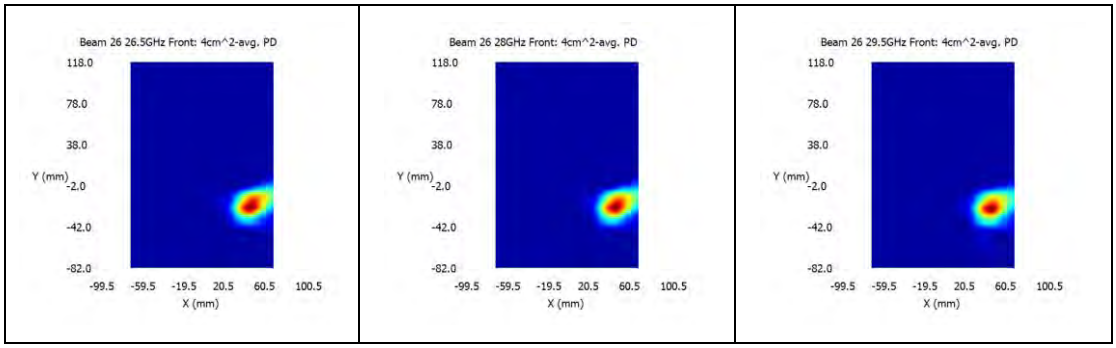
n257 / Beam ID: 25 / Front surface



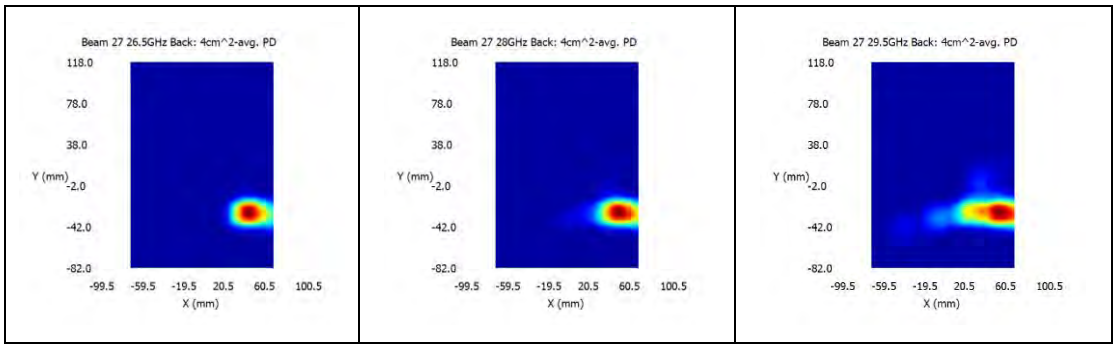
n257 / Beam ID: 26 / Back surface



n257 / Beam ID: 26 / Front surface



n257 / Beam ID: 27 / Back surface



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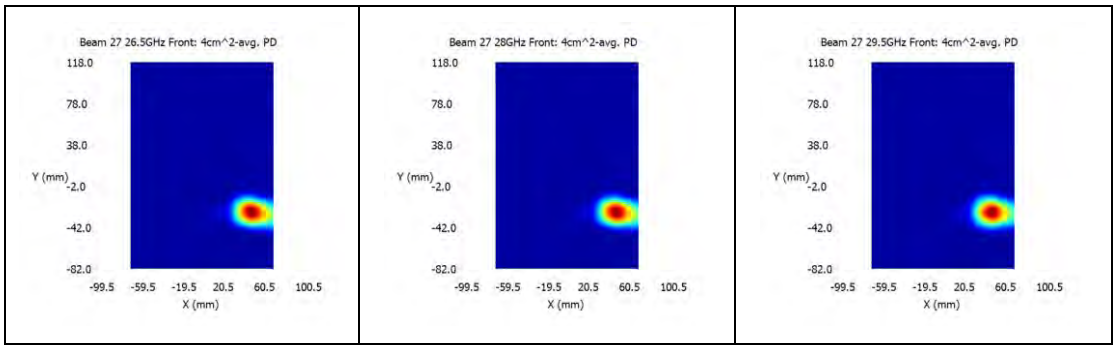
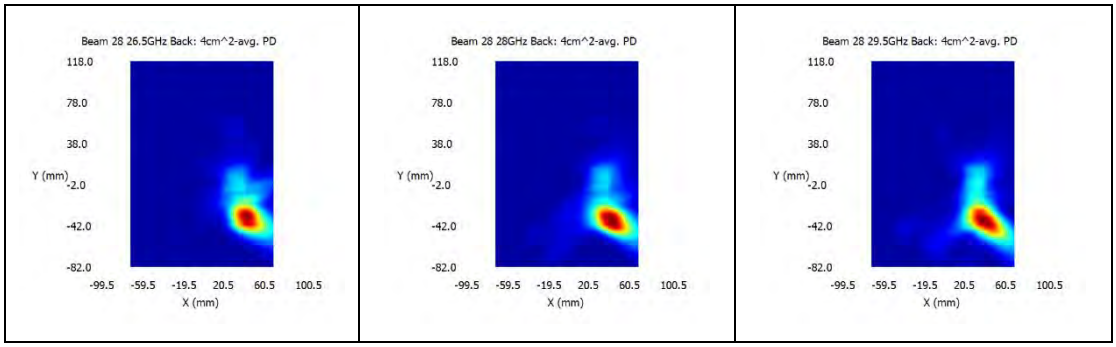
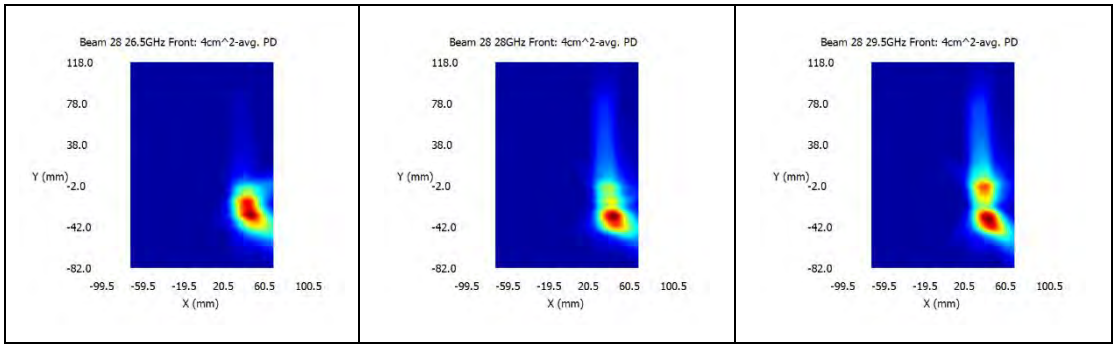


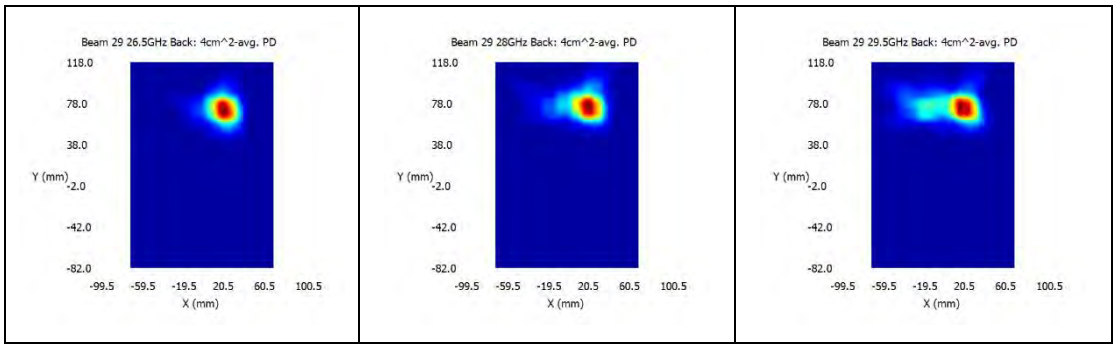
n257 / Beam ID: 28 / Back surface



n257 / Beam ID: 28 / Front surface



n257 / Beam ID: 29 / Back surface



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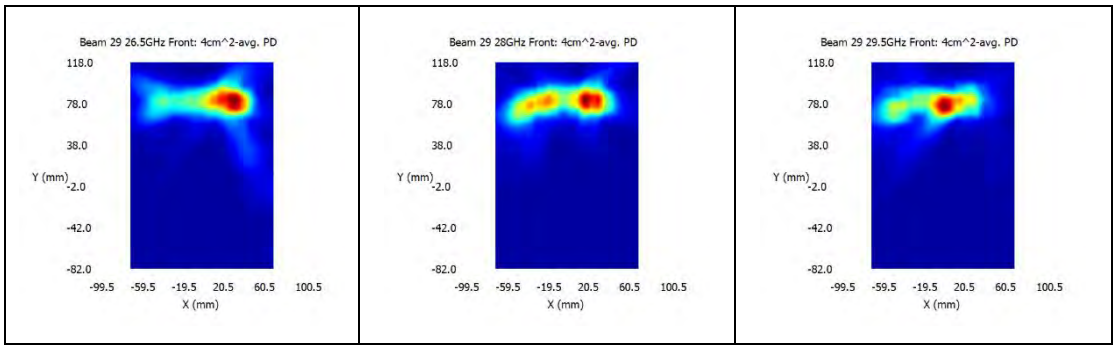
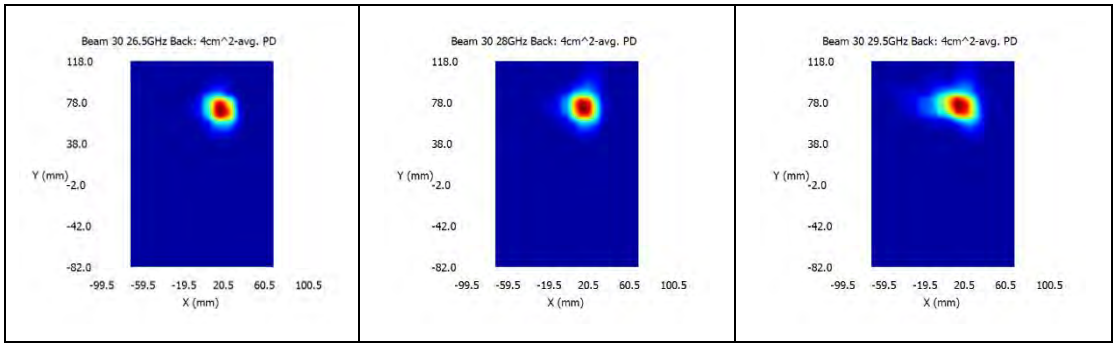


n257 / Beam ID: 30 / Back surface



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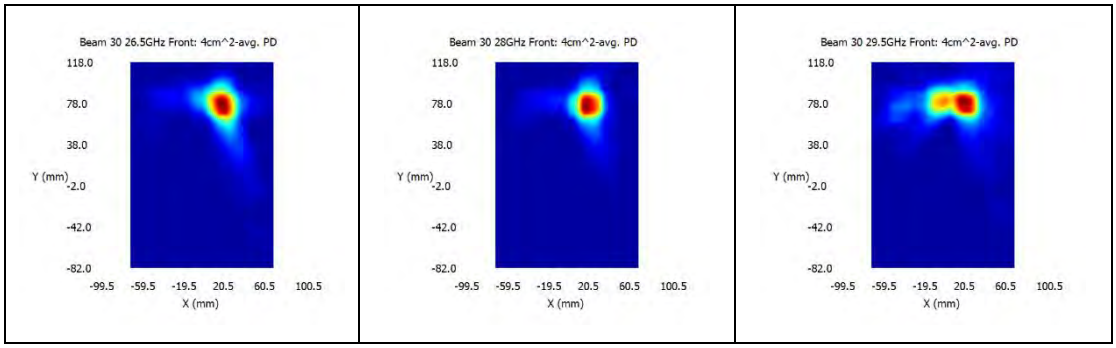
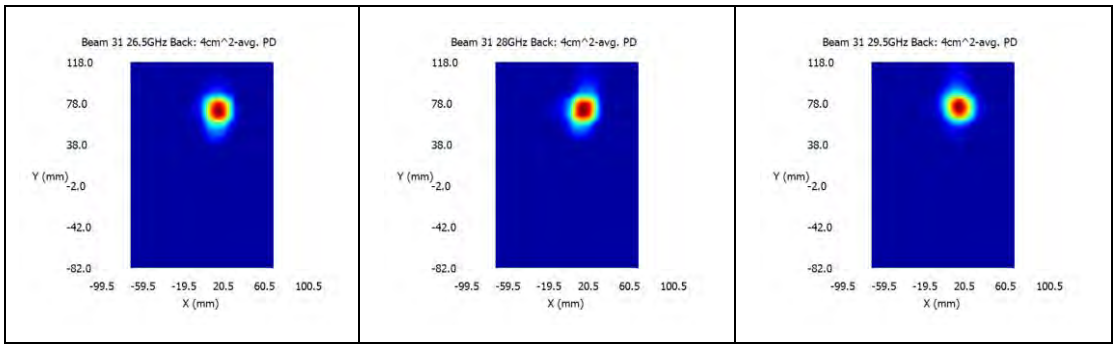
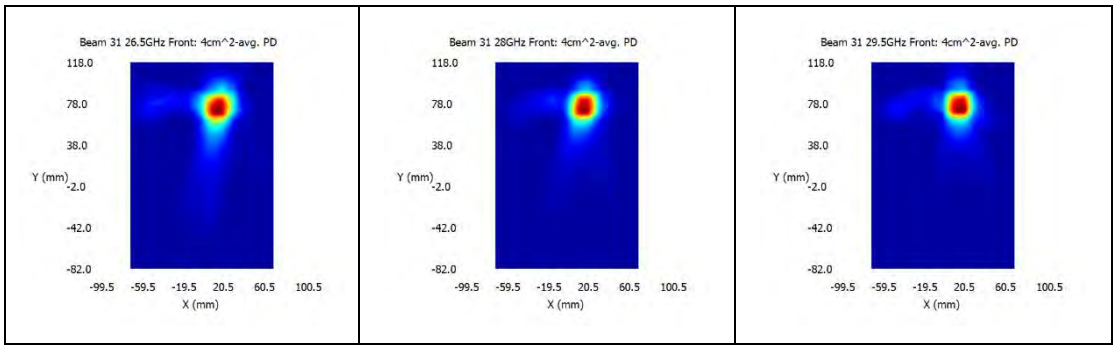


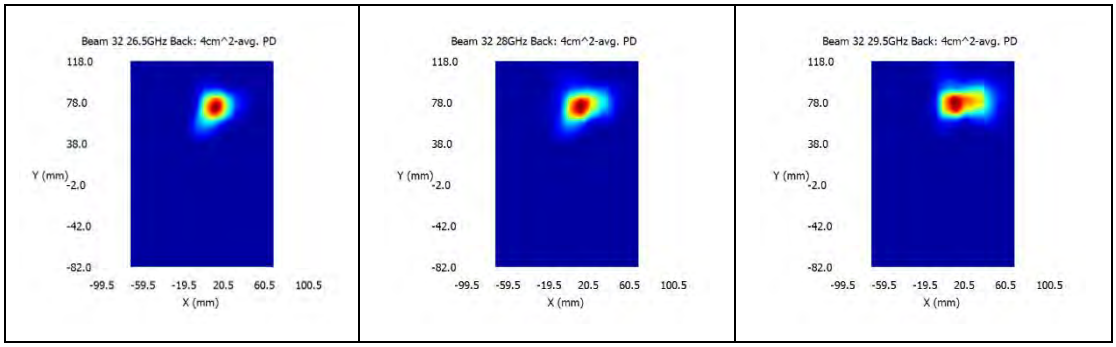
n257 / Beam ID: 31 / Back surface



n257 / Beam ID: 31 / Front surface



n257 / Beam ID: 32 / Back surface



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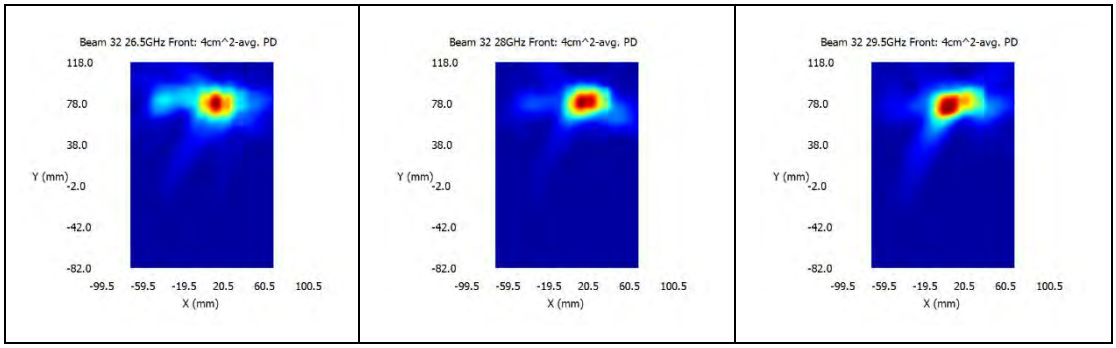
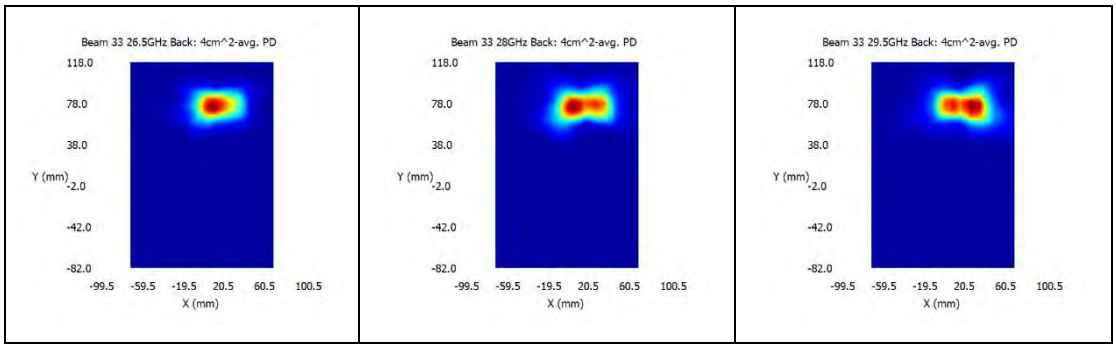


n257 / Beam ID: 33 / Back surface



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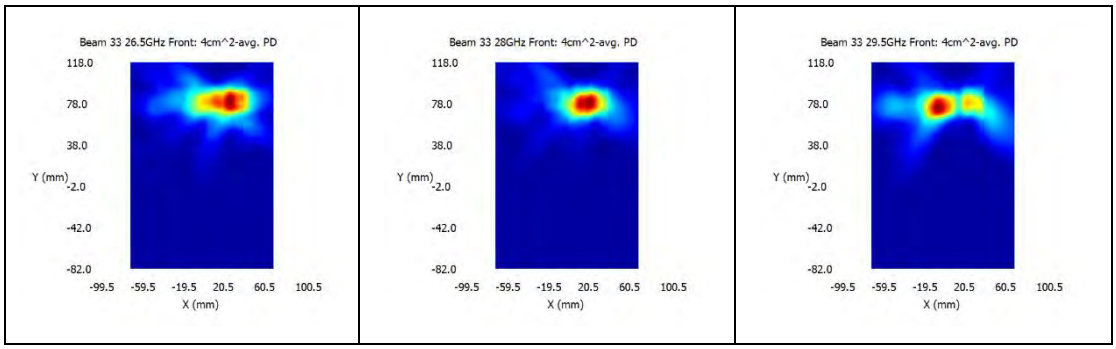

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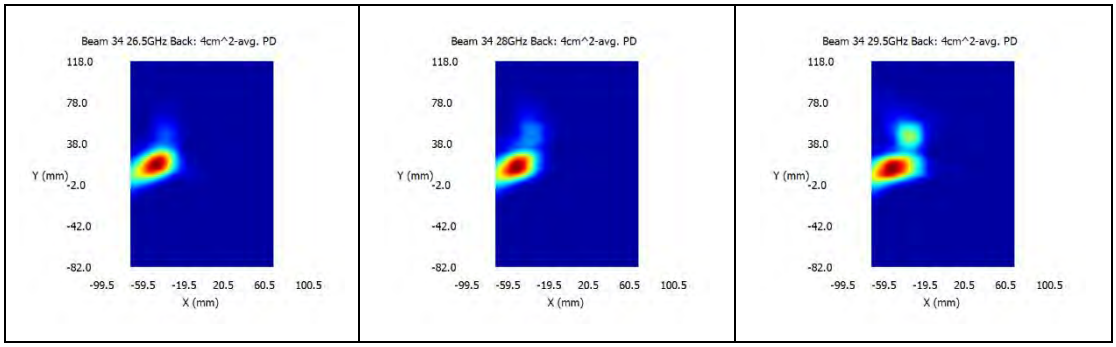

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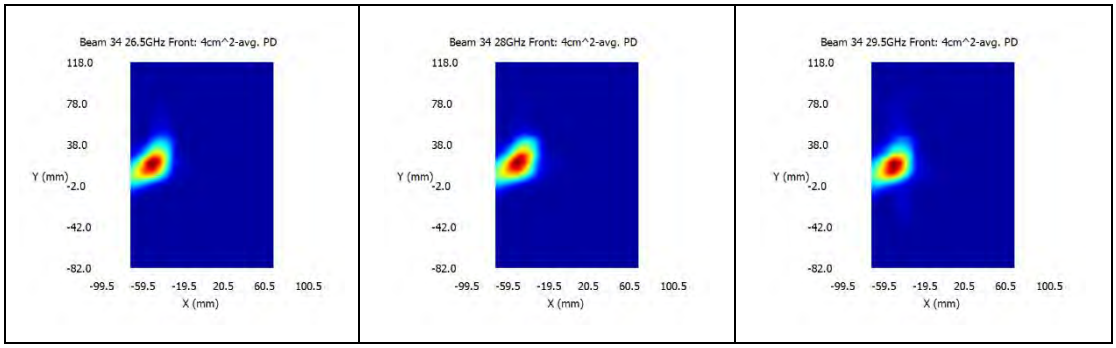
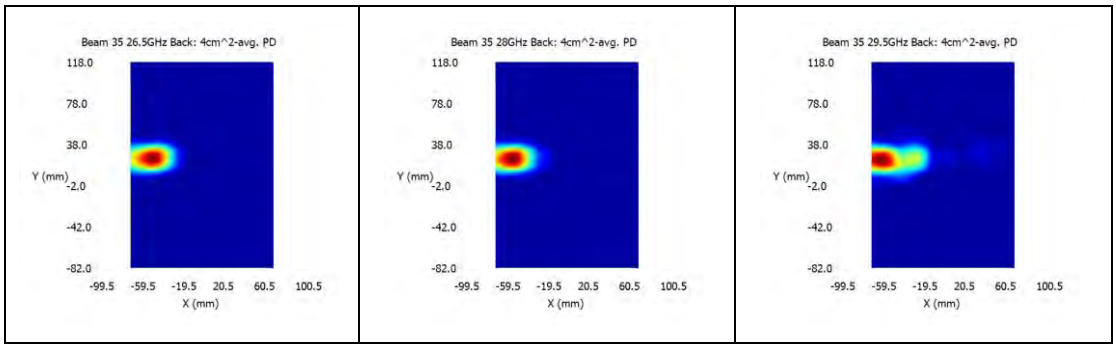


n257 / Beam ID: 35 / Back surface



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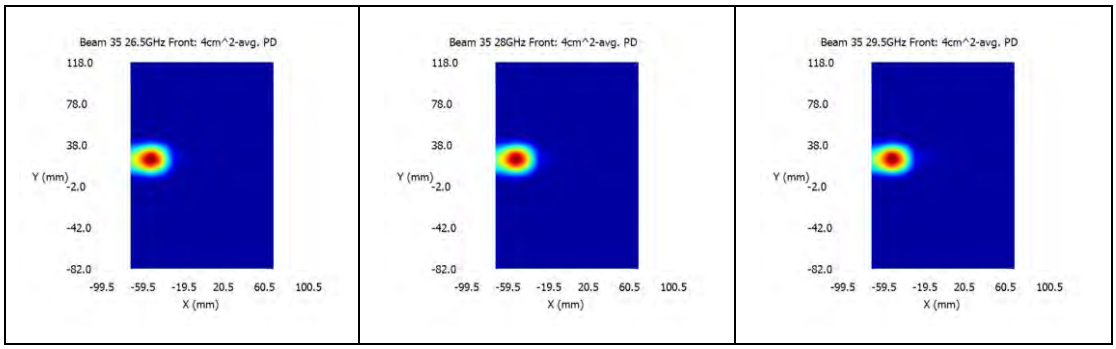

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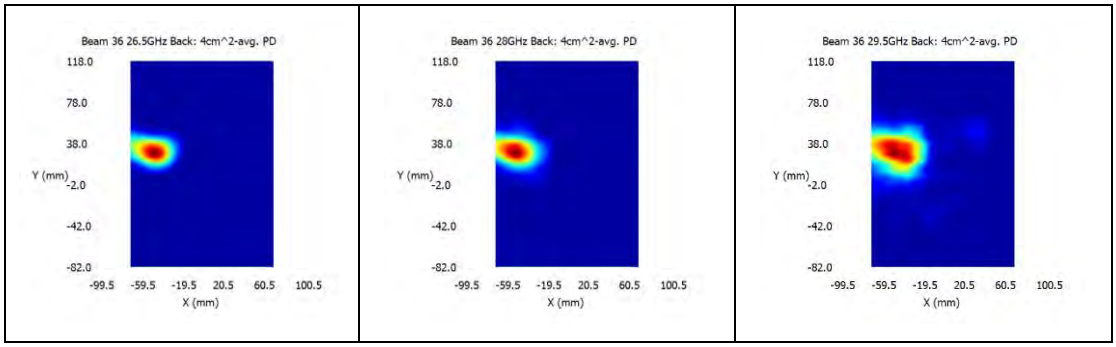

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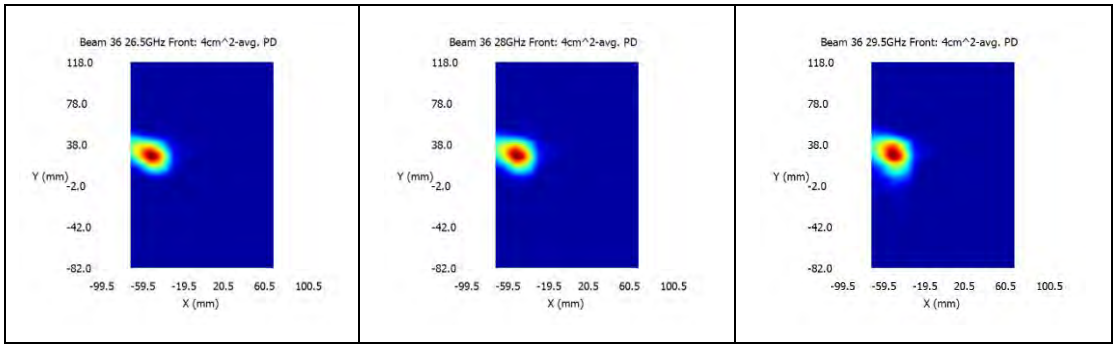

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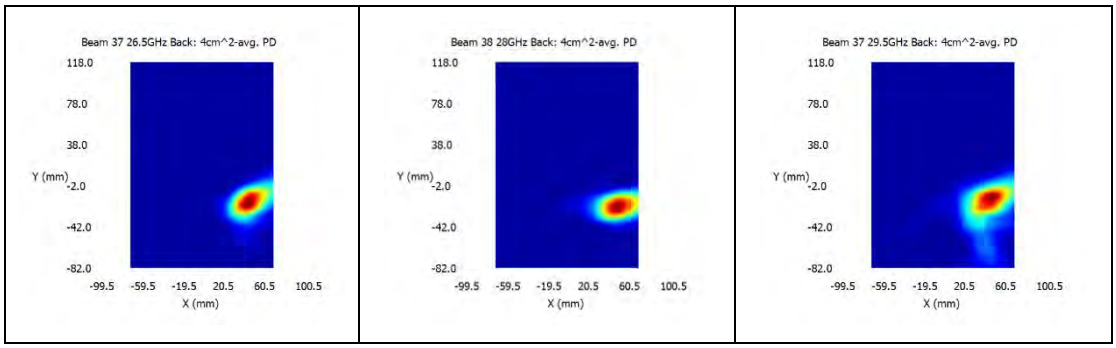

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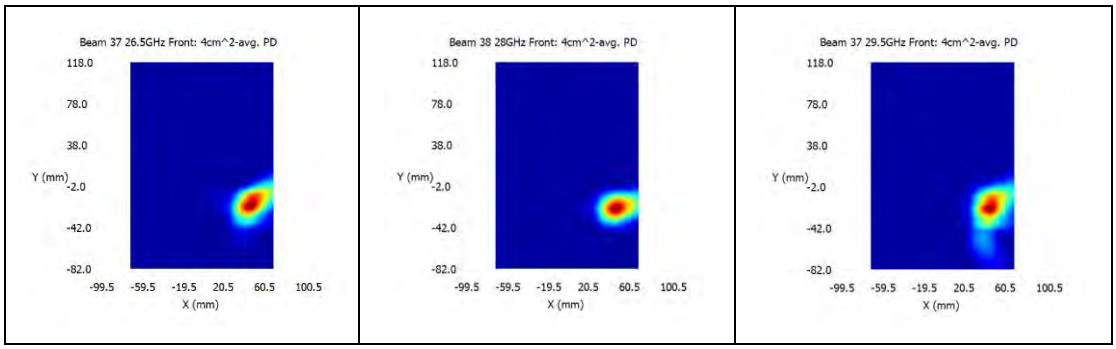
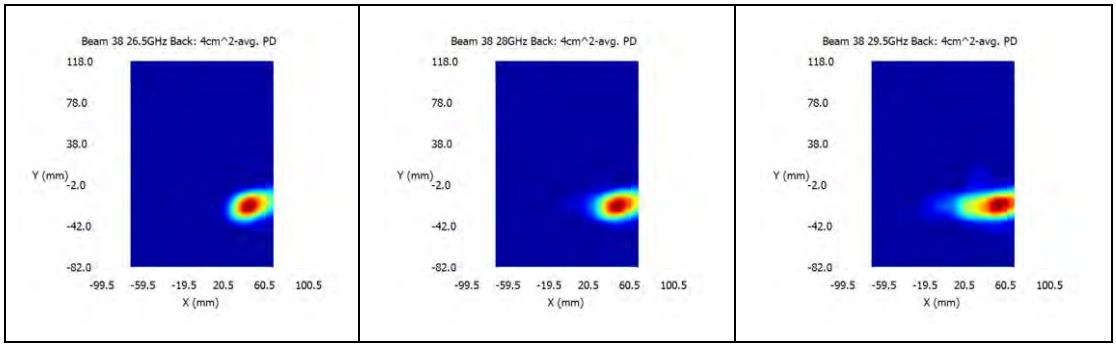


n257 / Beam ID: 38 / Back surface



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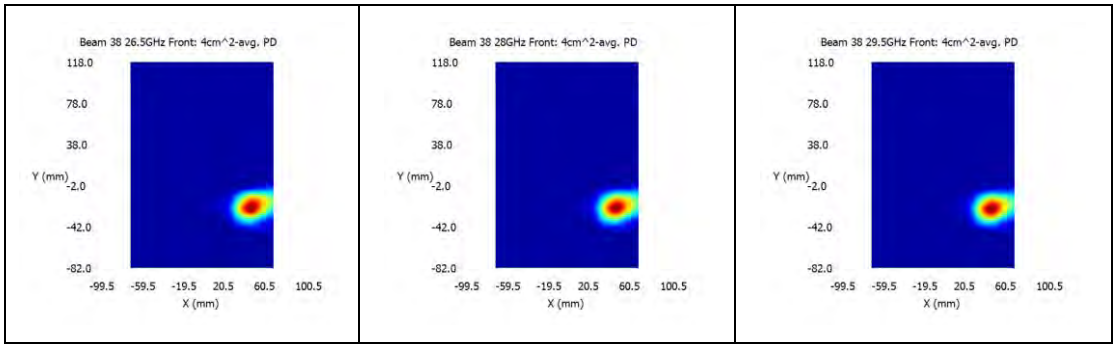

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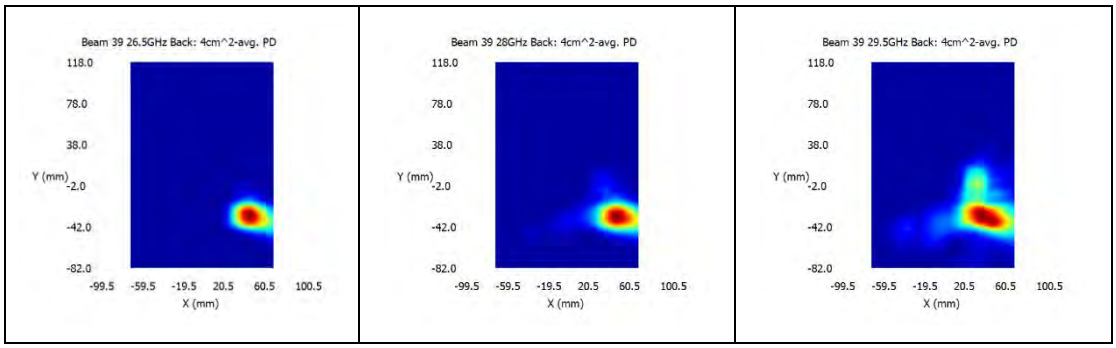

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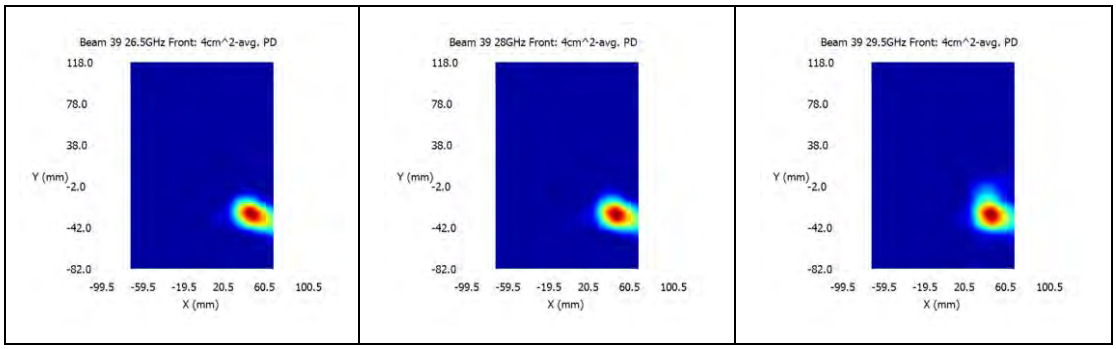

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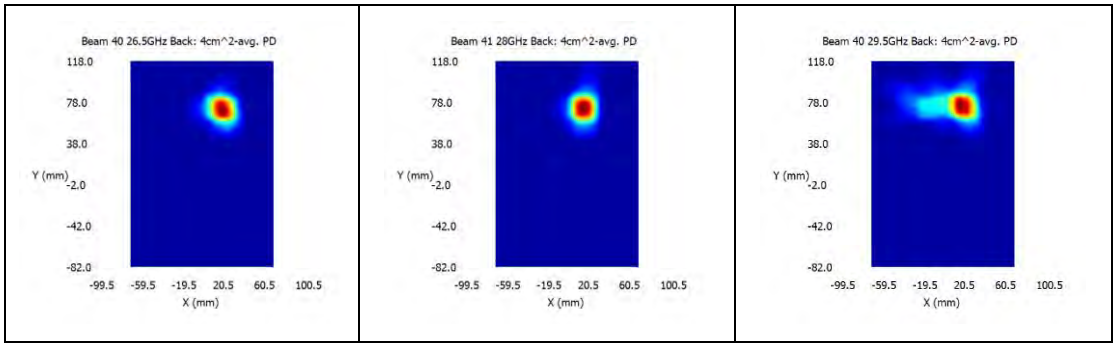

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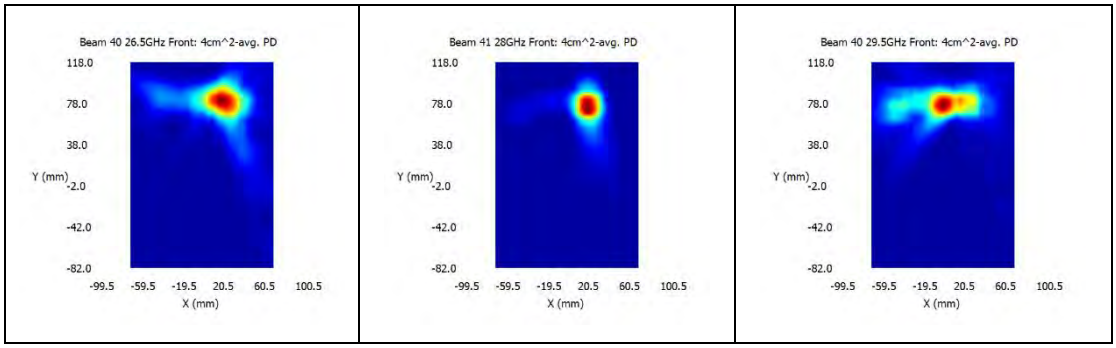
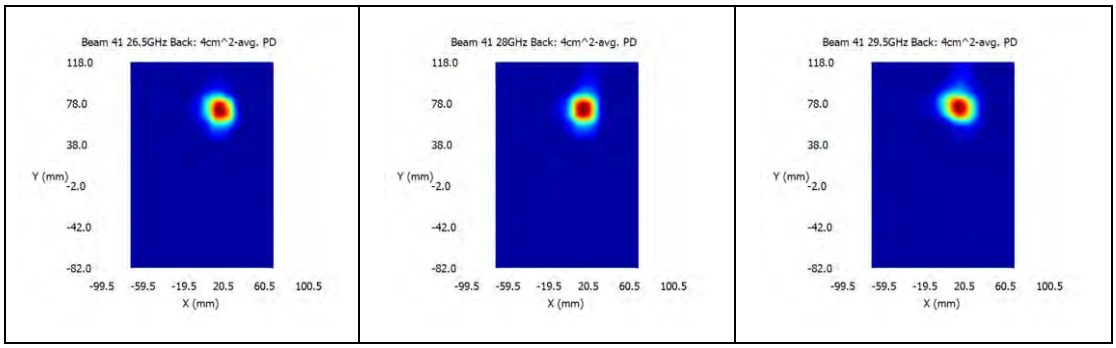


n257 / Beam ID: 41 / Back surface



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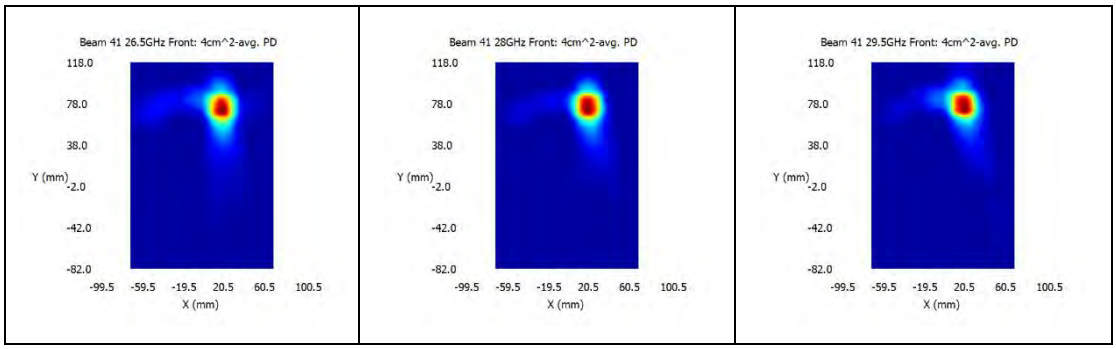
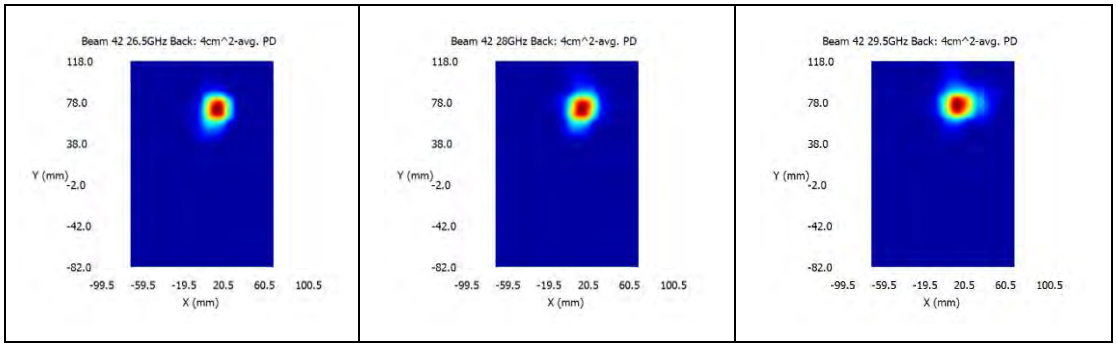


n257 / Beam ID: 42 / Back surface



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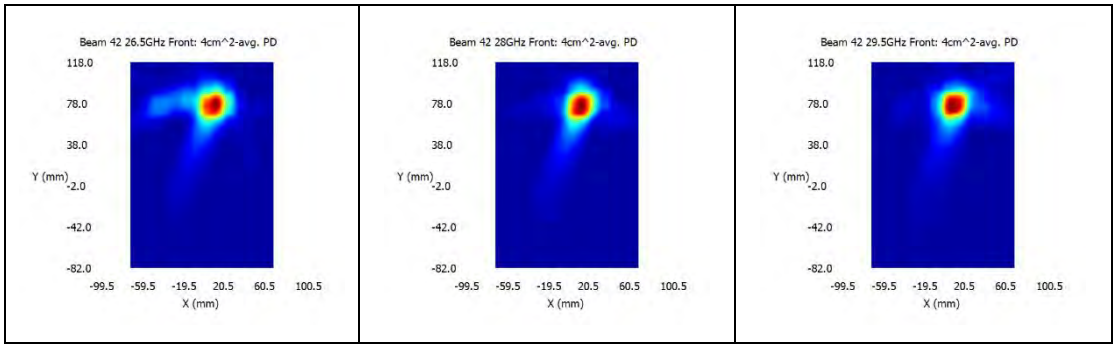

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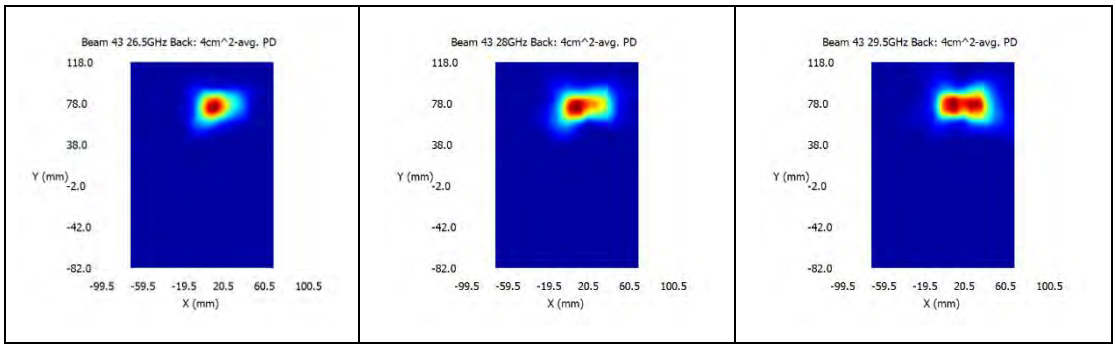

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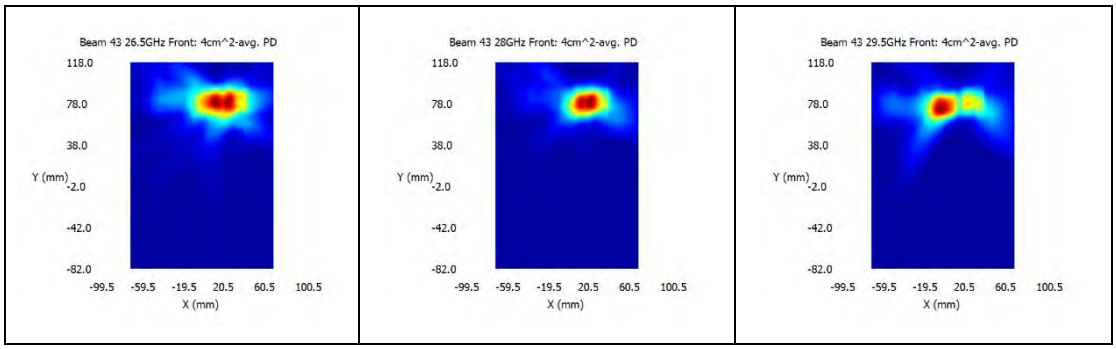
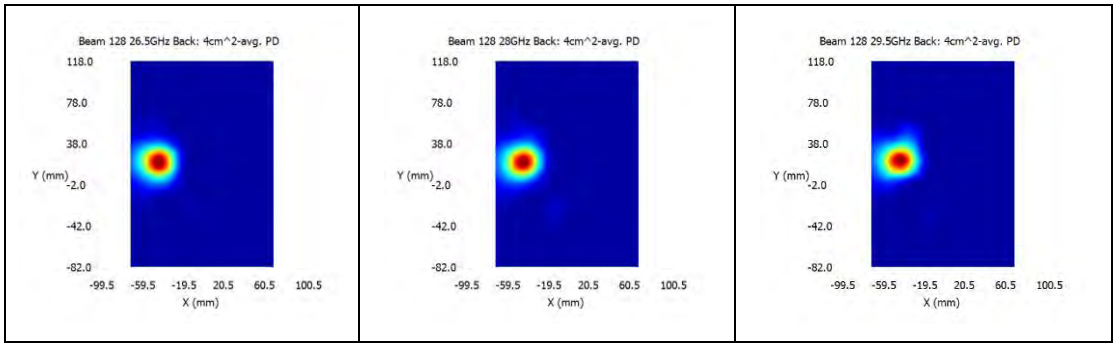


n257 / Beam ID: 128 / Back surface



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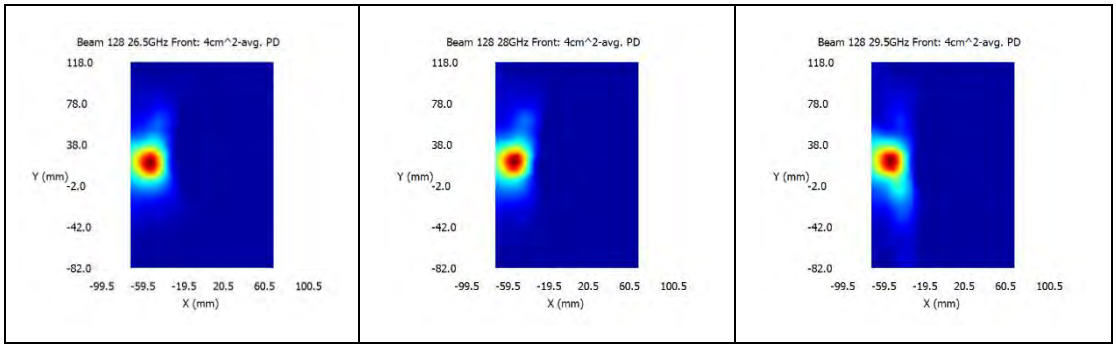

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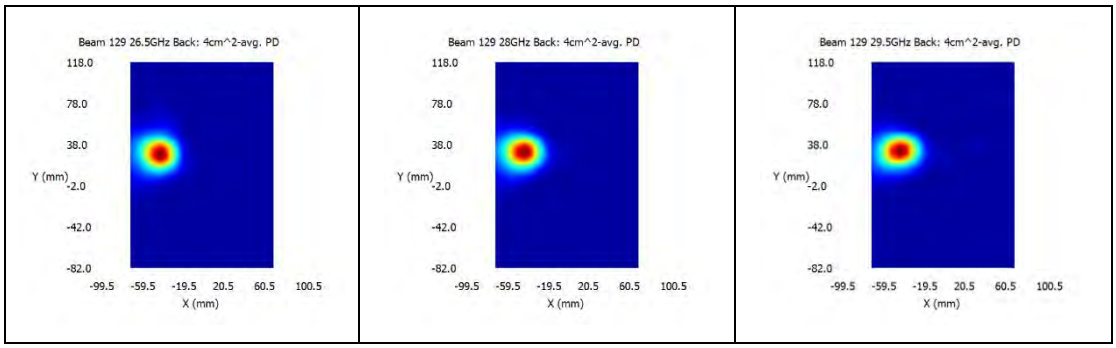

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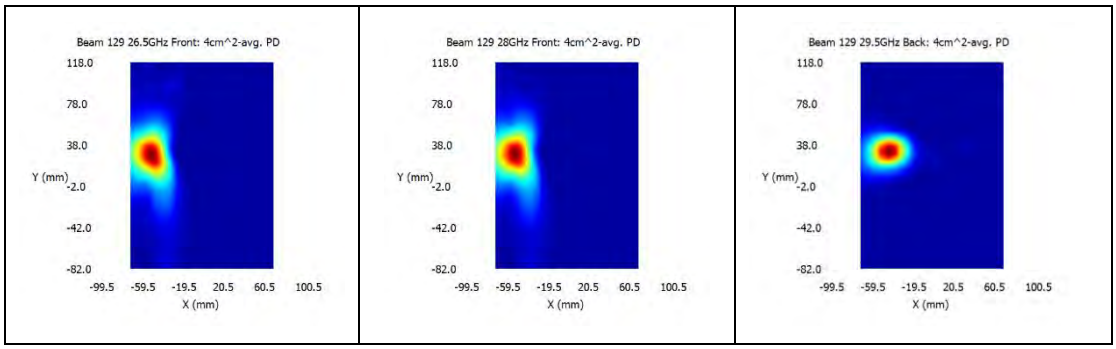
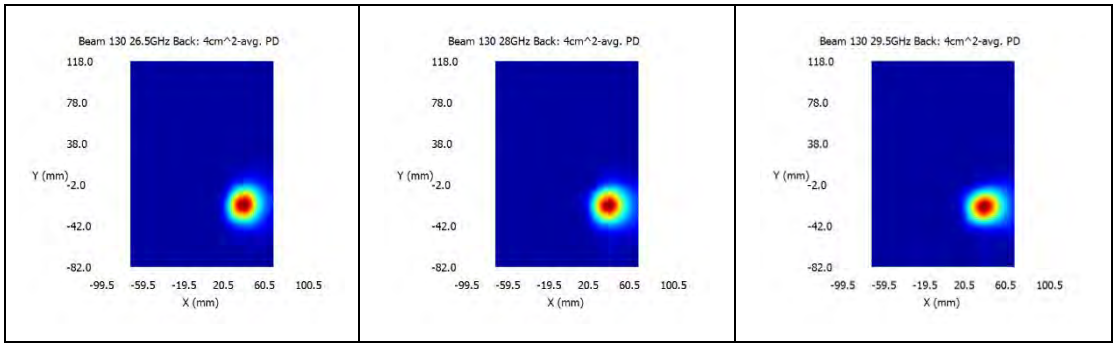
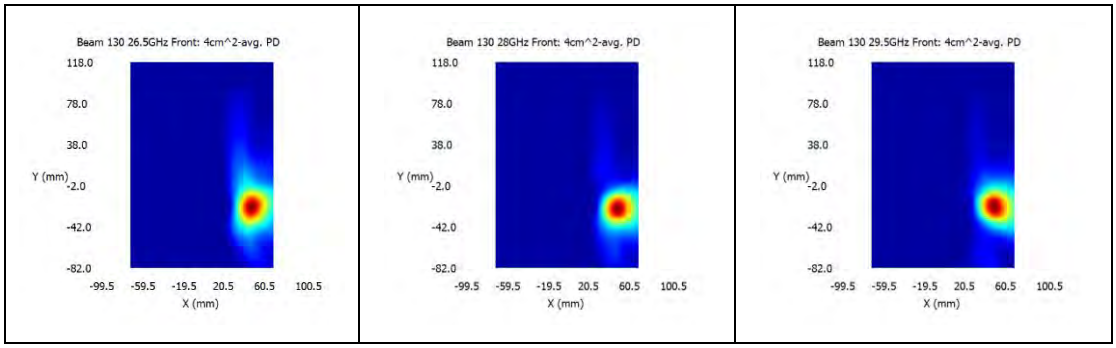


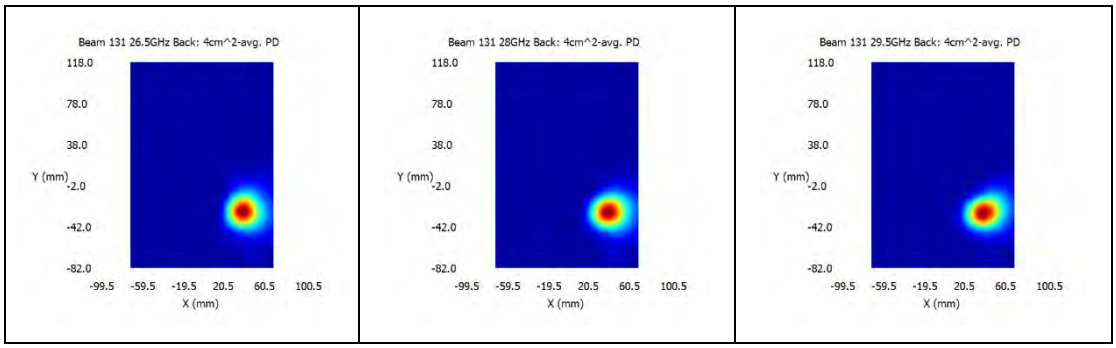
n257 / Beam ID: 130 / Back surface



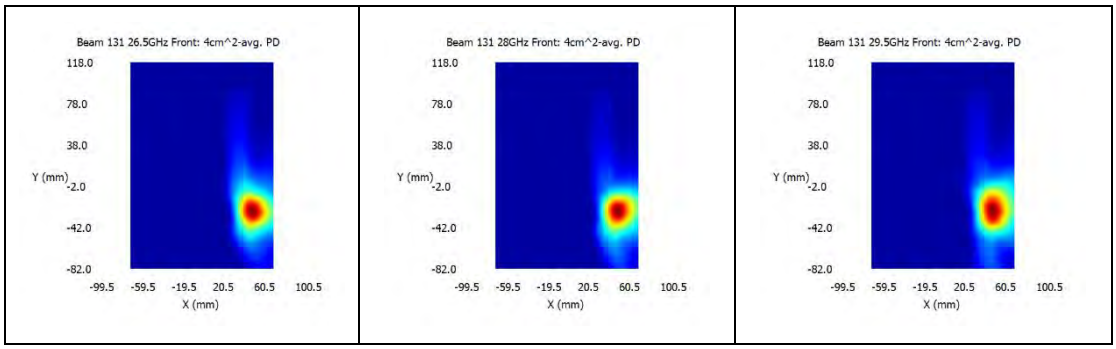
n257 / Beam ID: 130 / Front surface



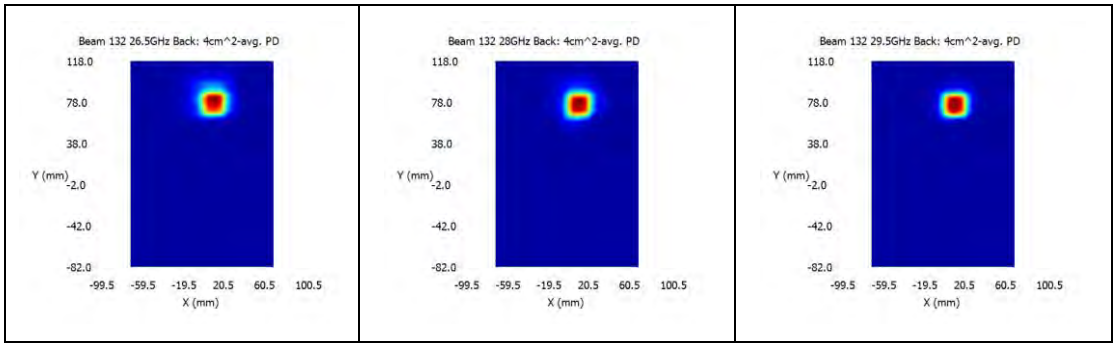
n257 / Beam ID: 131 / Back surface



n257 / Beam ID: 131 / Front surface



n257 / Beam ID: 132 / Back surface



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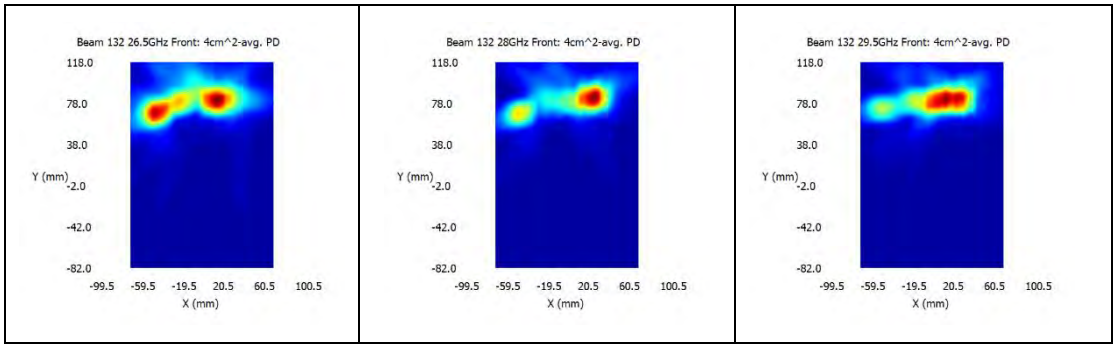

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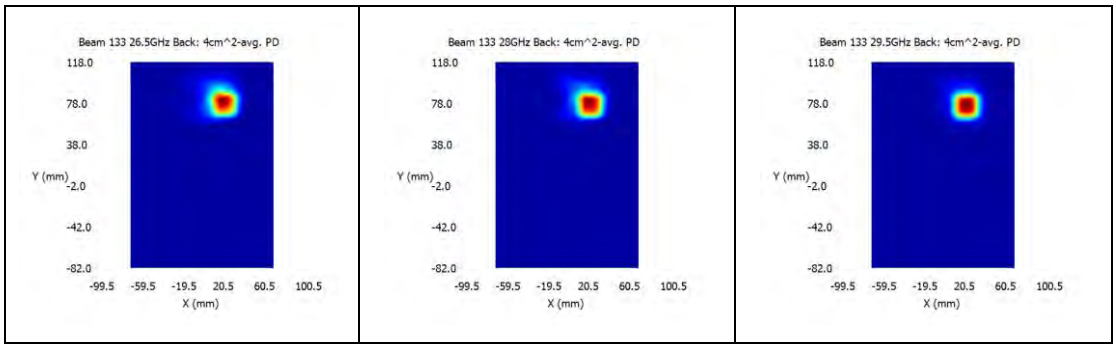
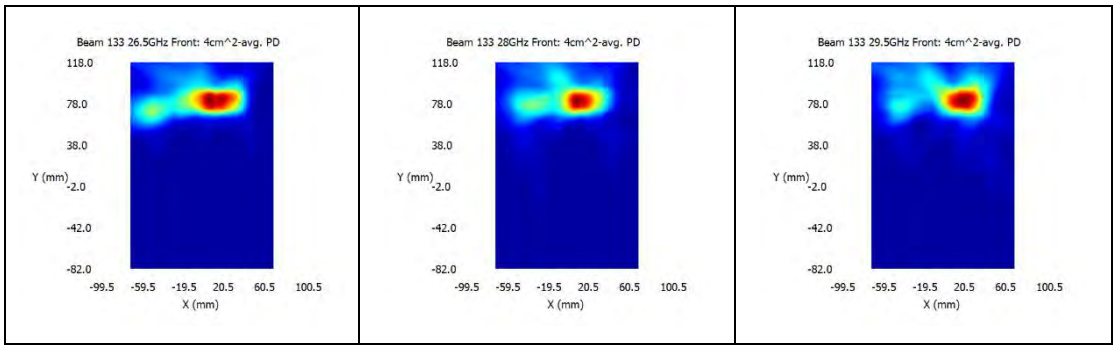


n257 / Beam ID: 133 / Front surface



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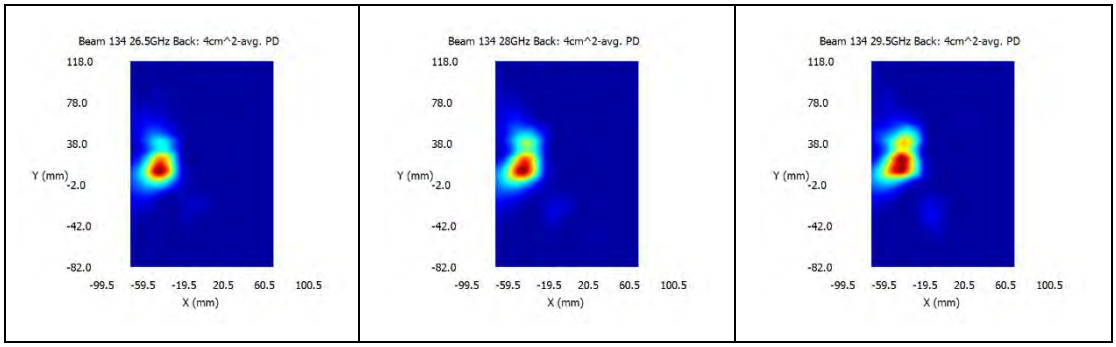

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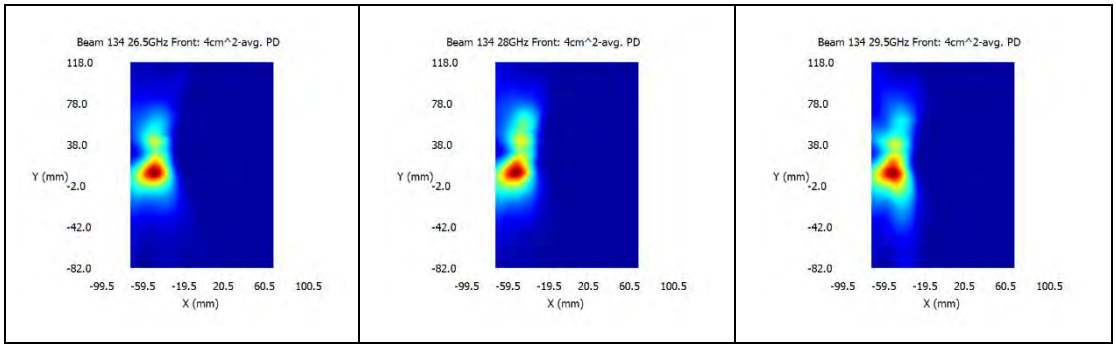

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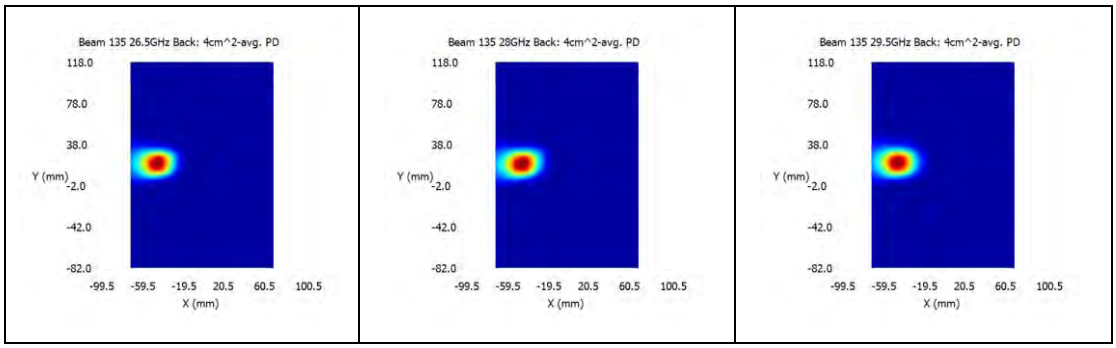
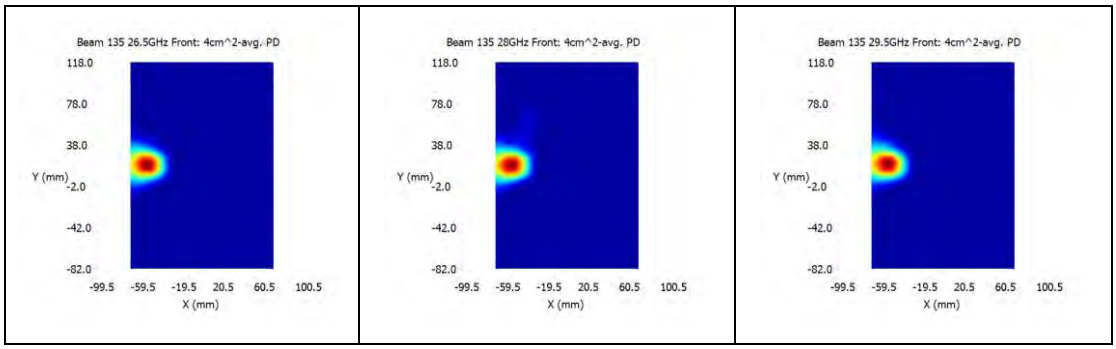
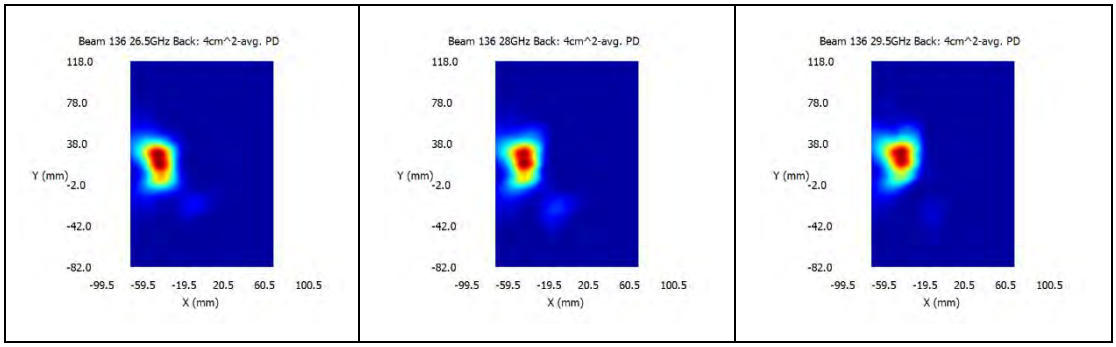


n257 / Beam ID: 135 / Front surface



n257 / Beam ID: 136 / Back surface



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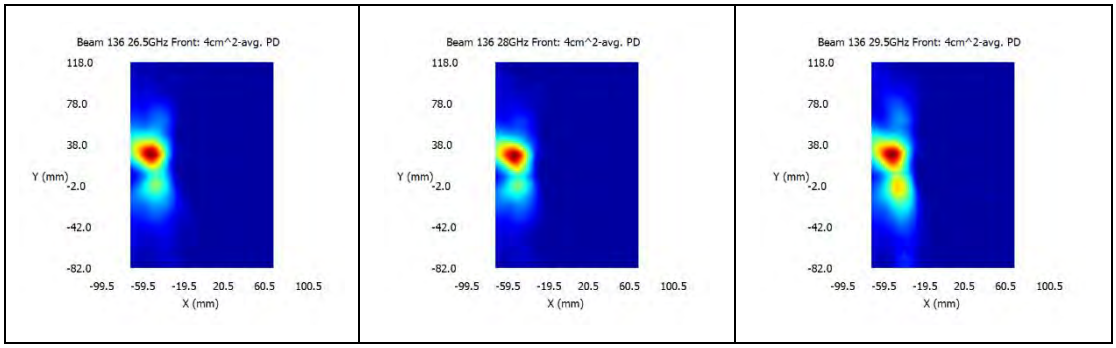

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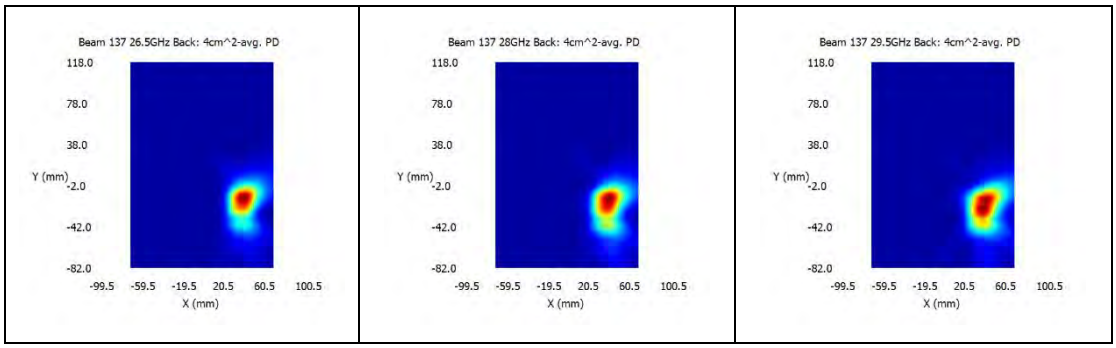
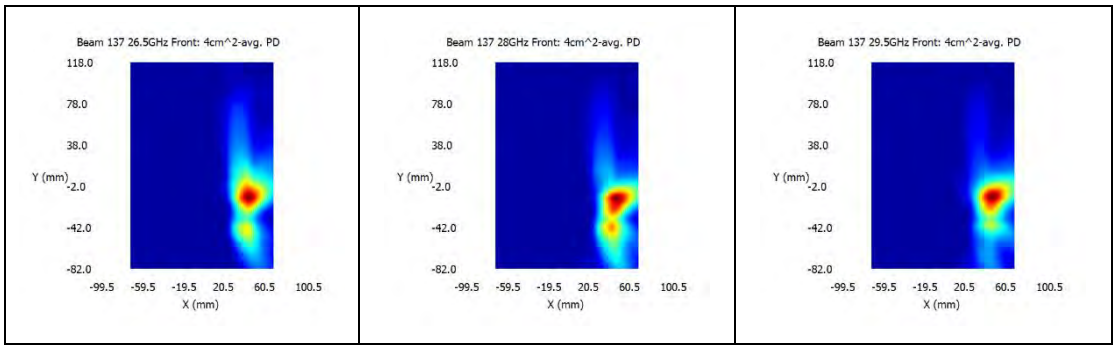
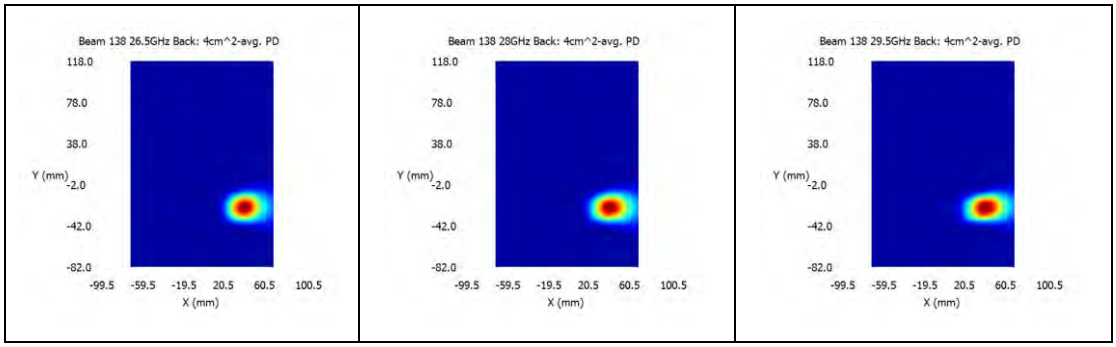


n257 / Beam ID: 137 / Front surface



n257 / Beam ID: 138 / Back surface



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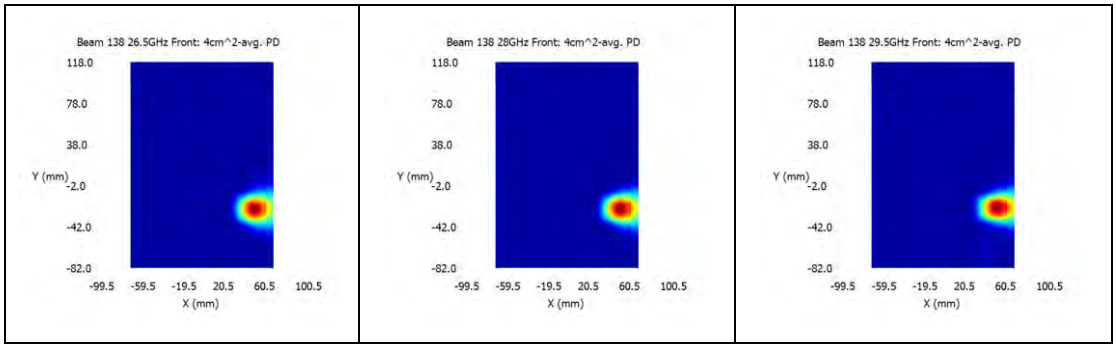

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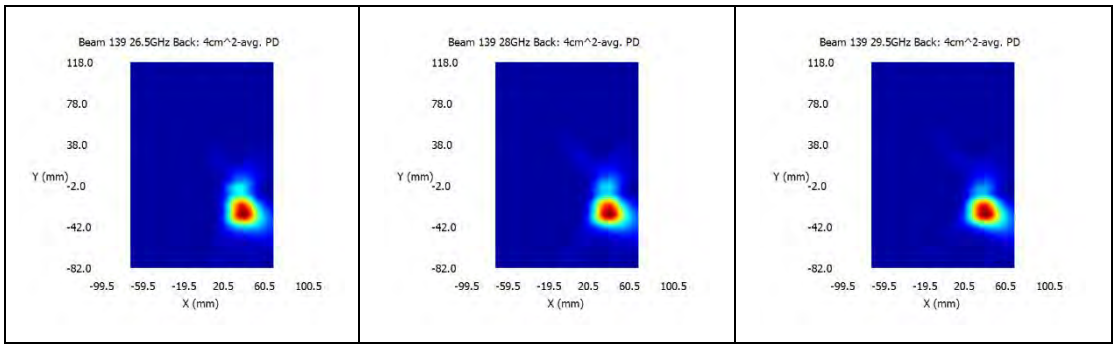

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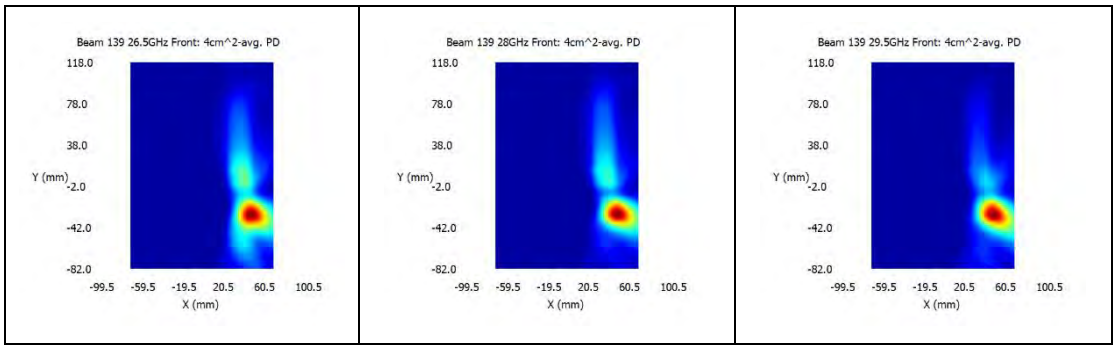

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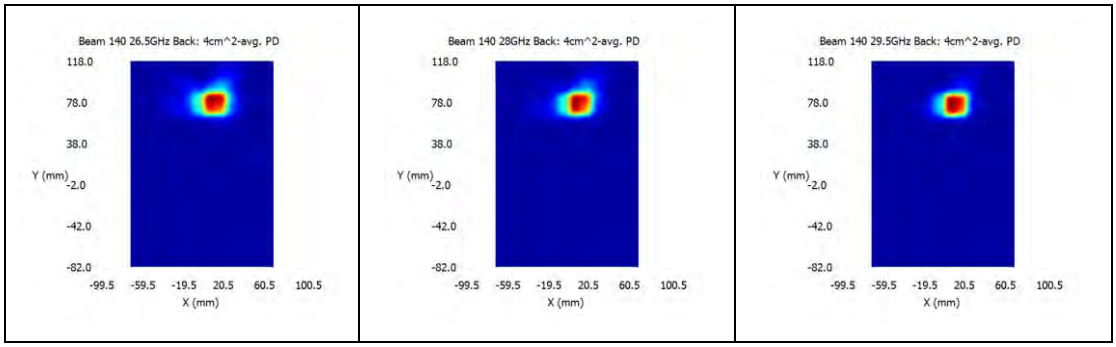

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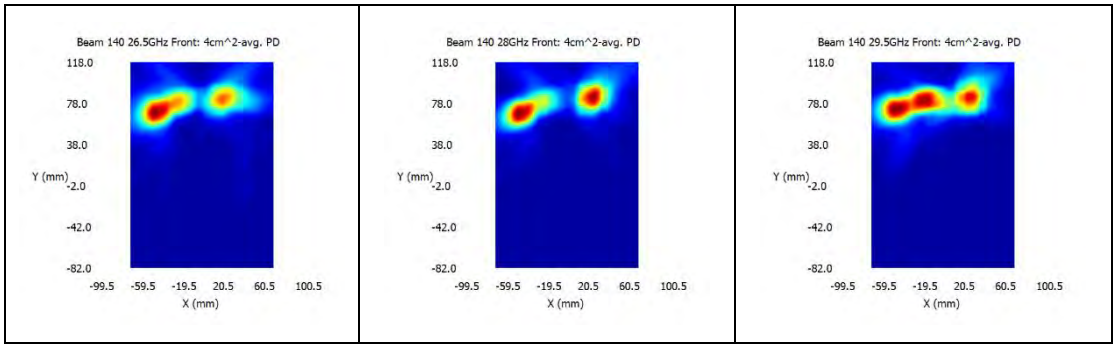
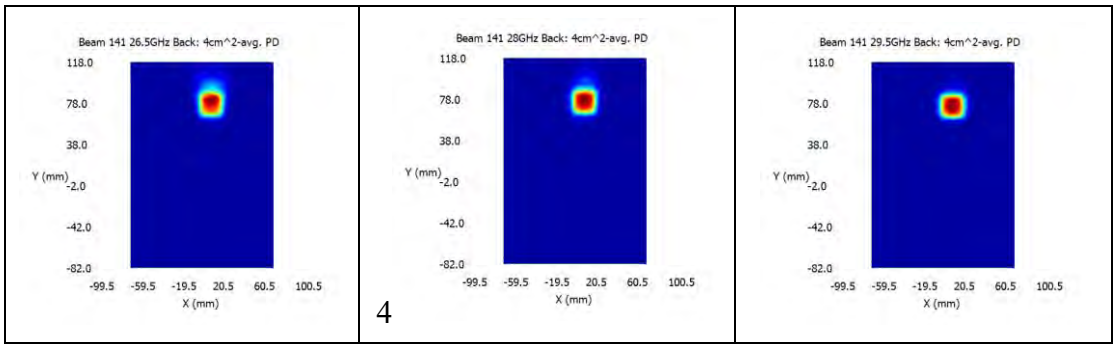


n257 / Beam ID: 141 / Back surface



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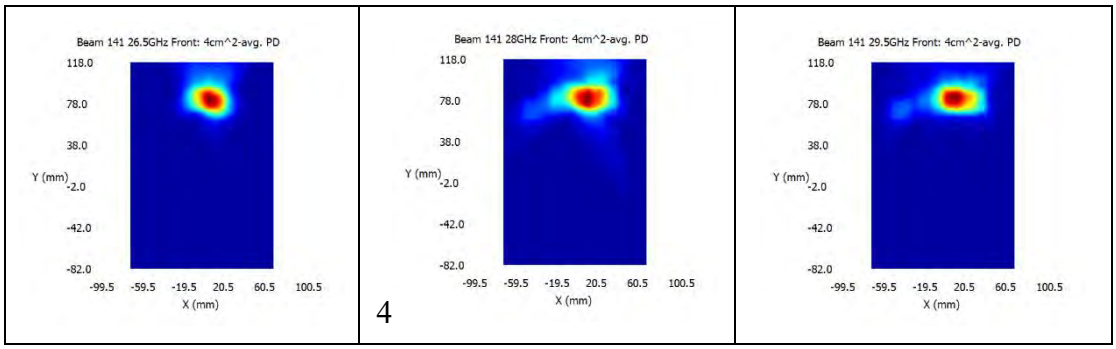
n257 / Beam ID: 141 / Front surface



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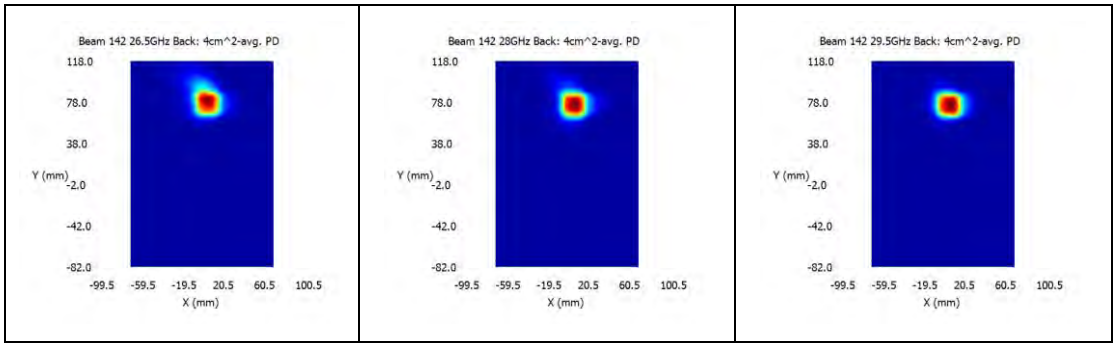
n257 / Beam ID: 142 / Back surface



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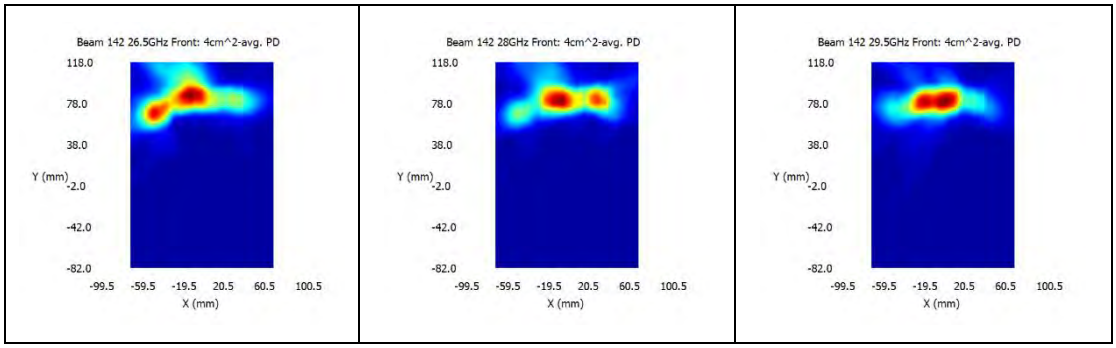

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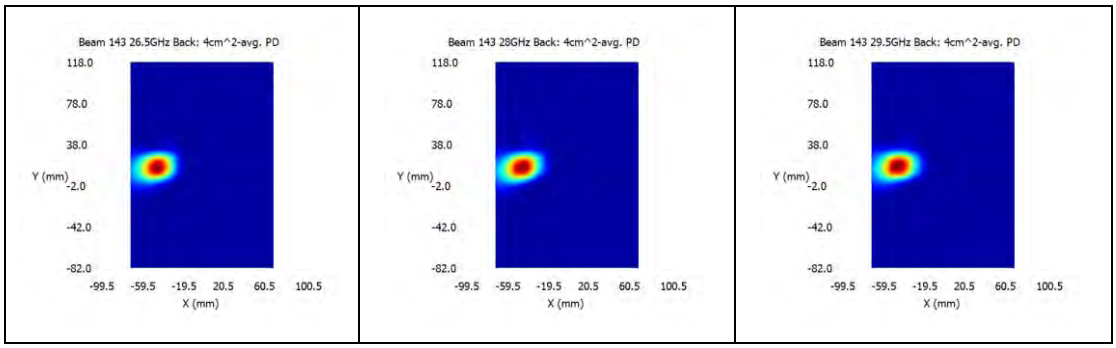

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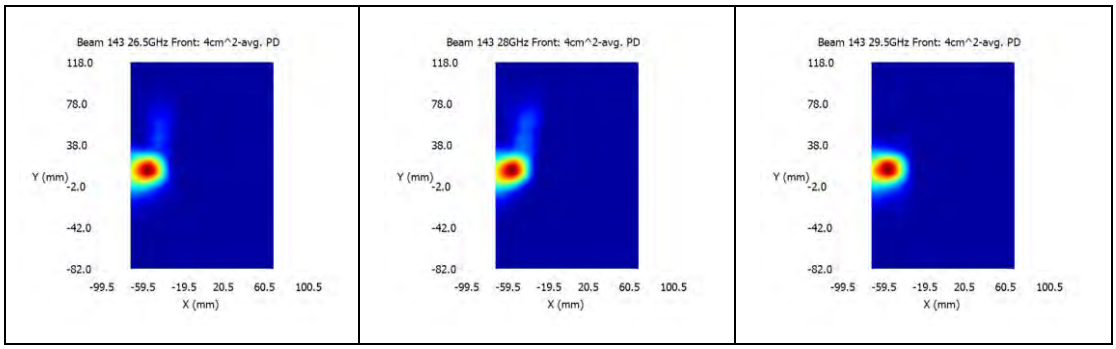

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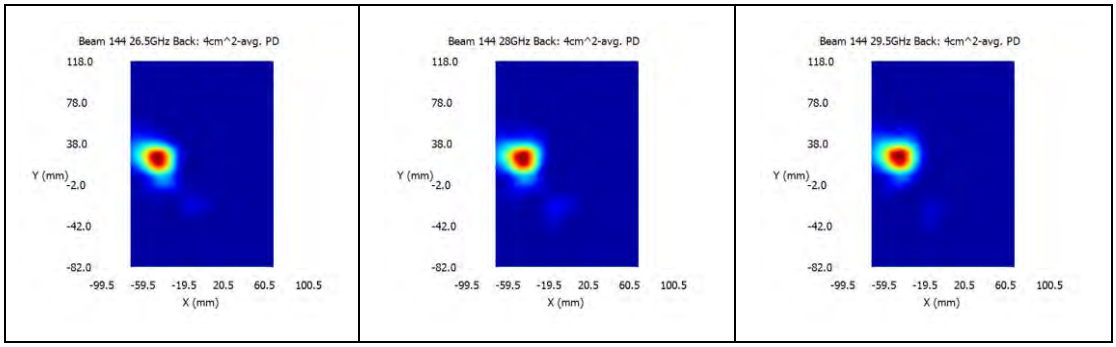

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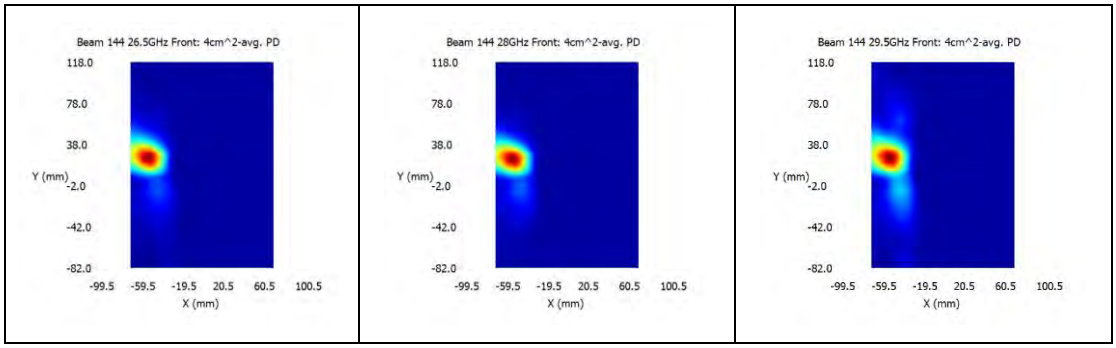

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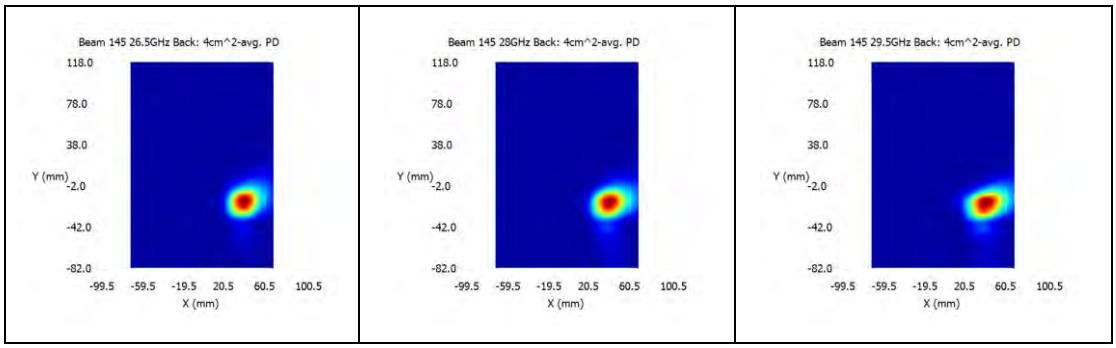

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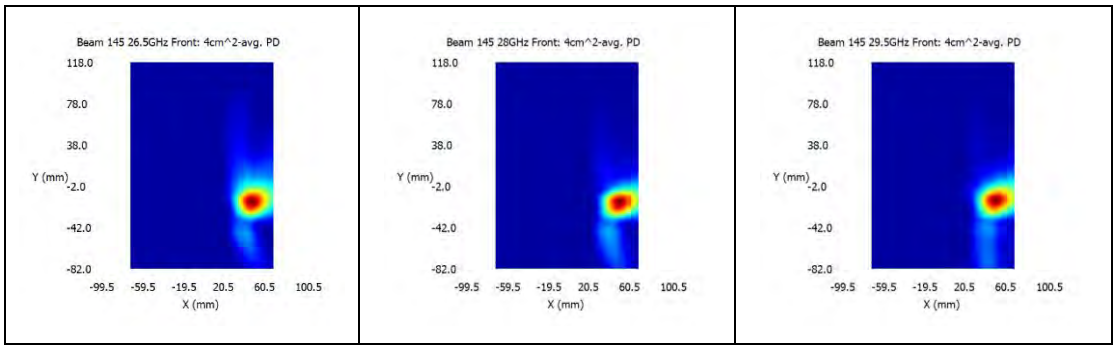

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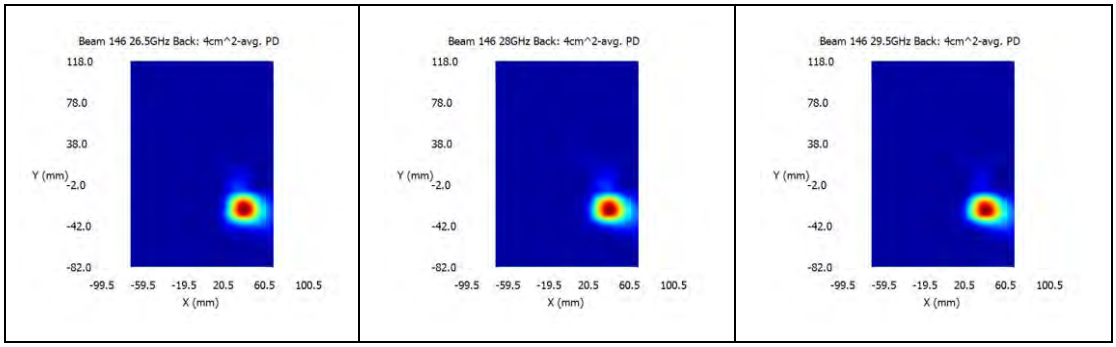

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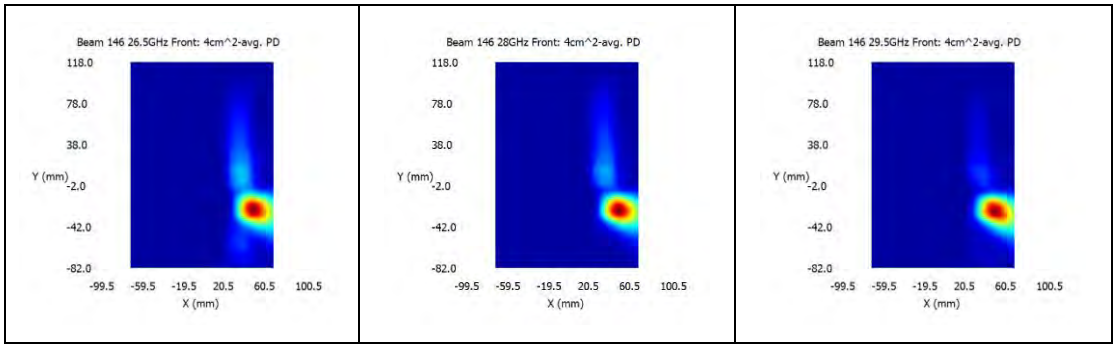
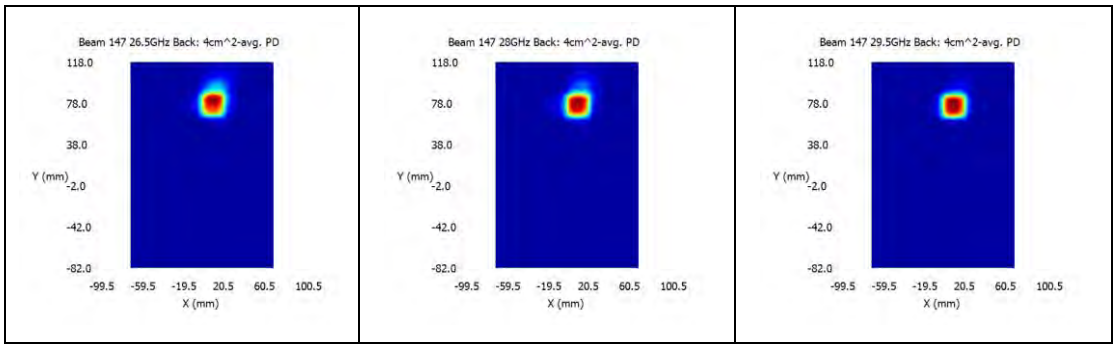


n257 / Beam ID: 147 / Back surface



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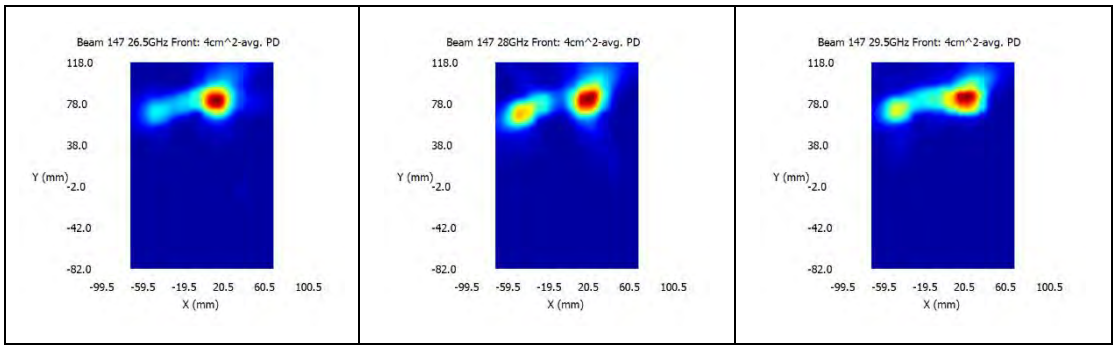

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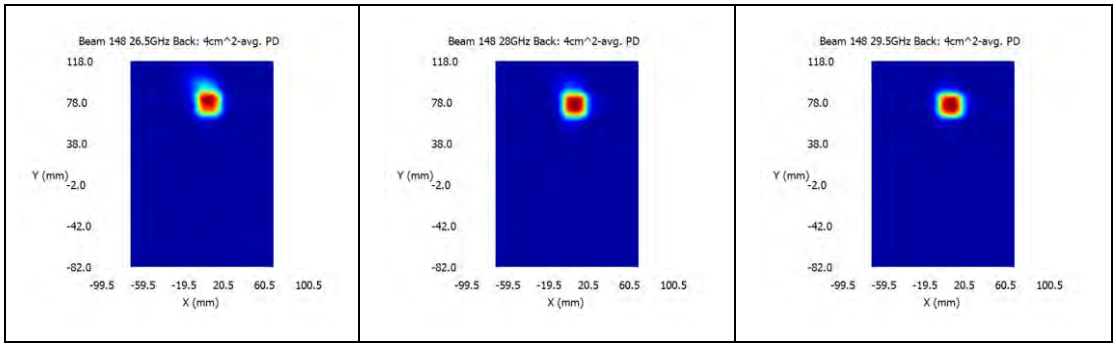

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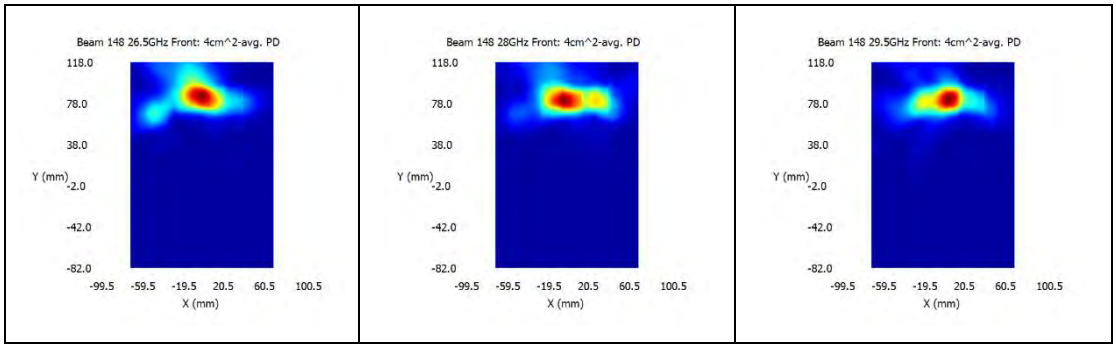

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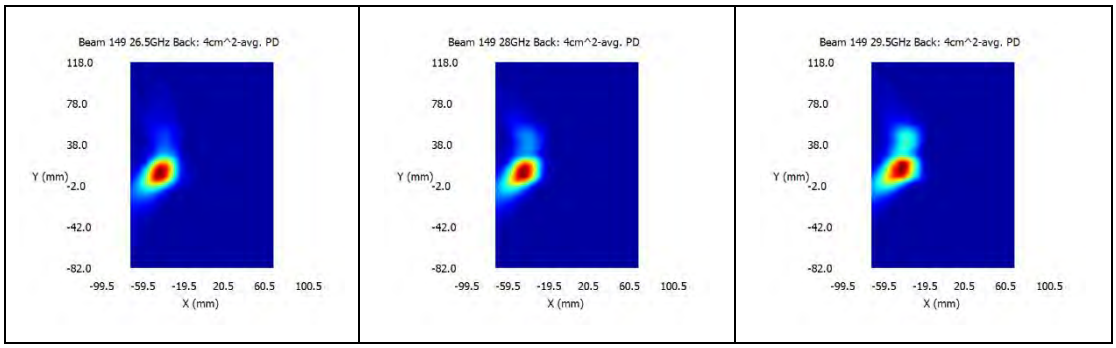

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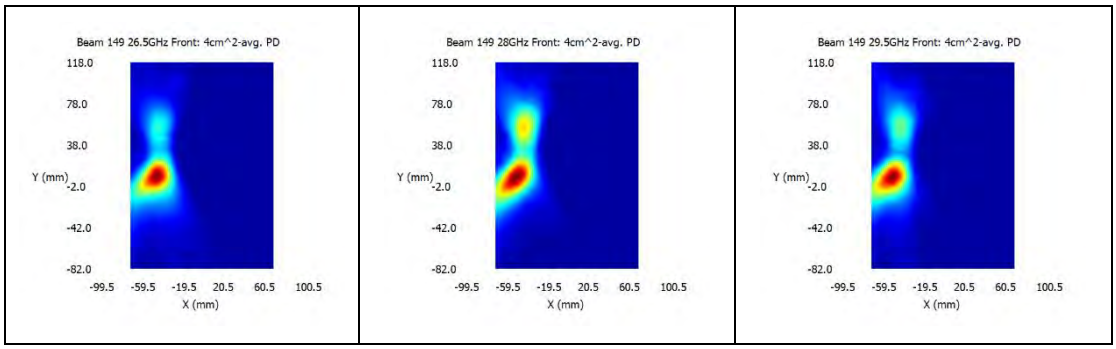

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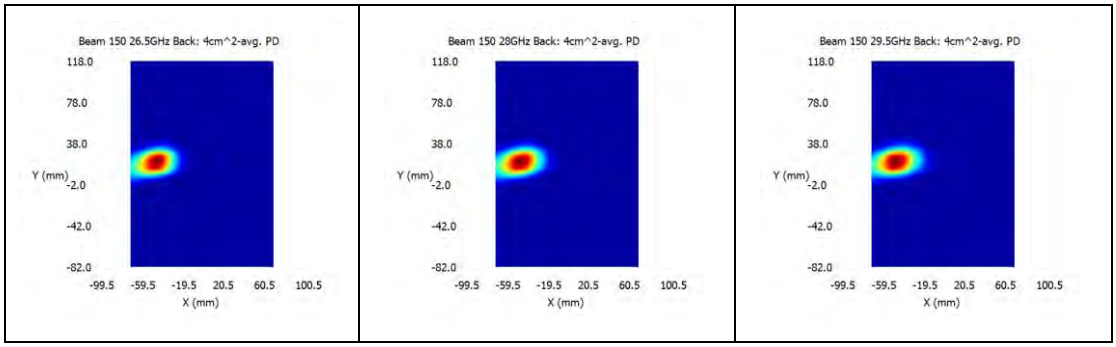

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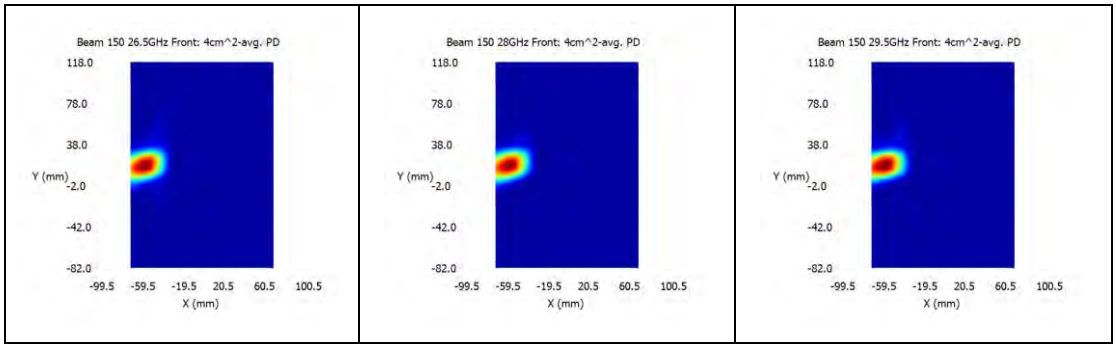

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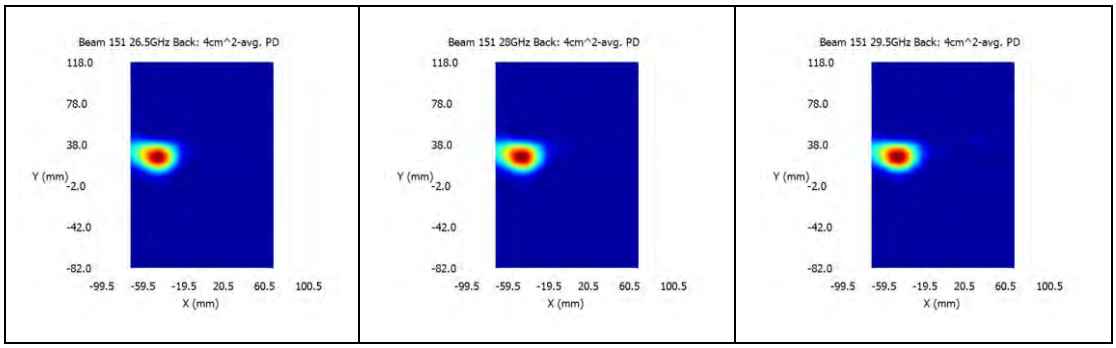

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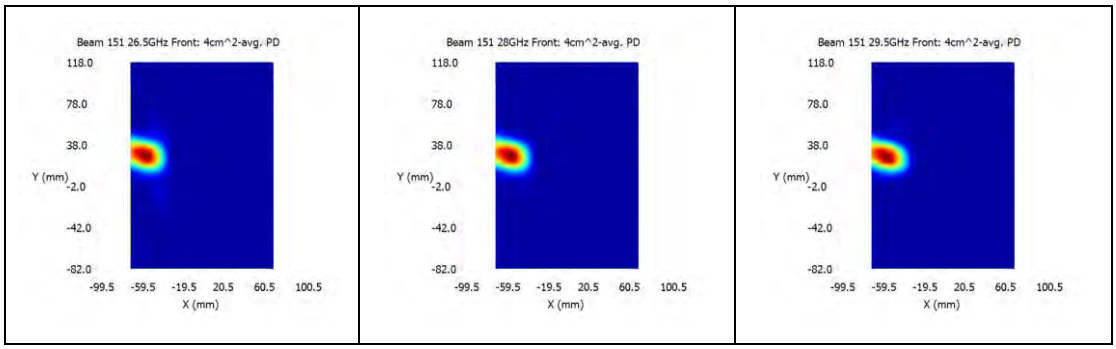

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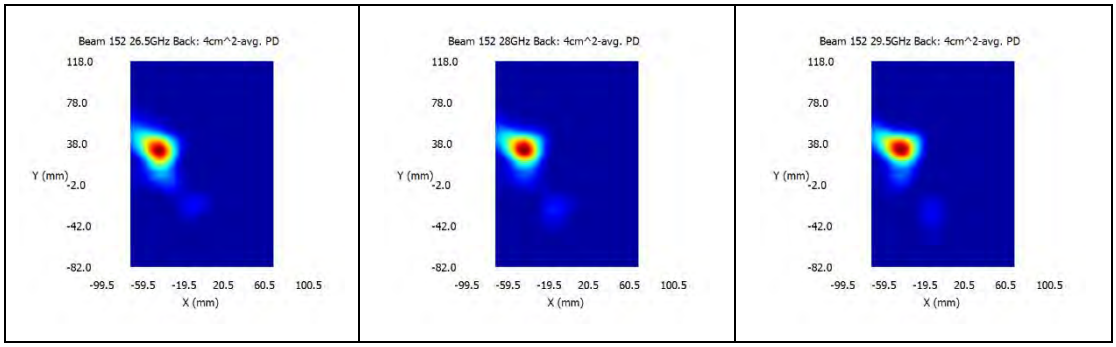

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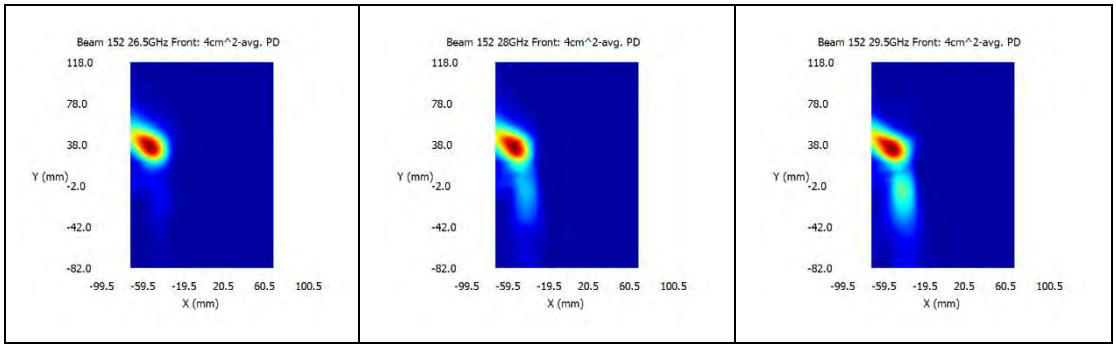

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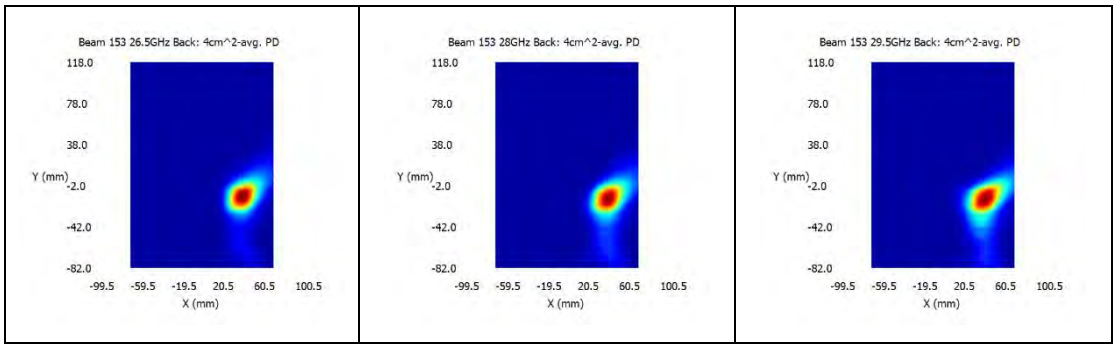

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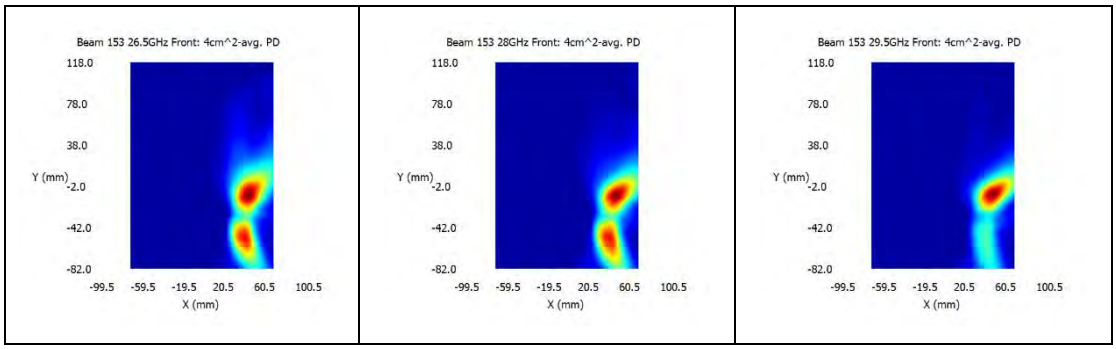

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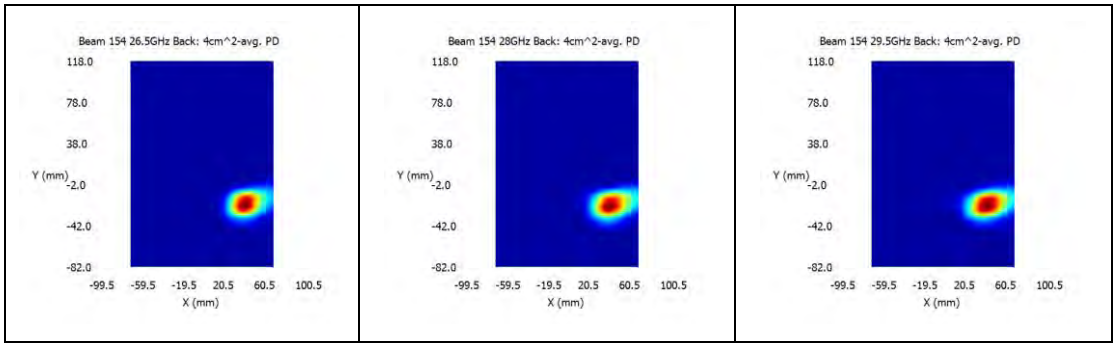

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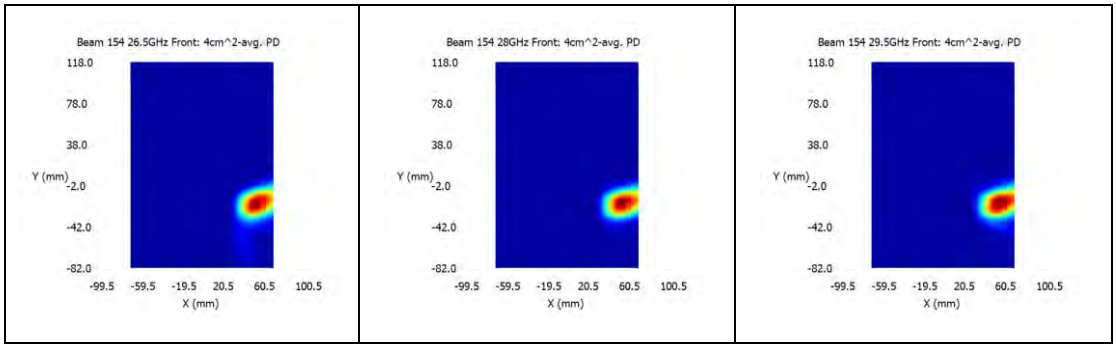

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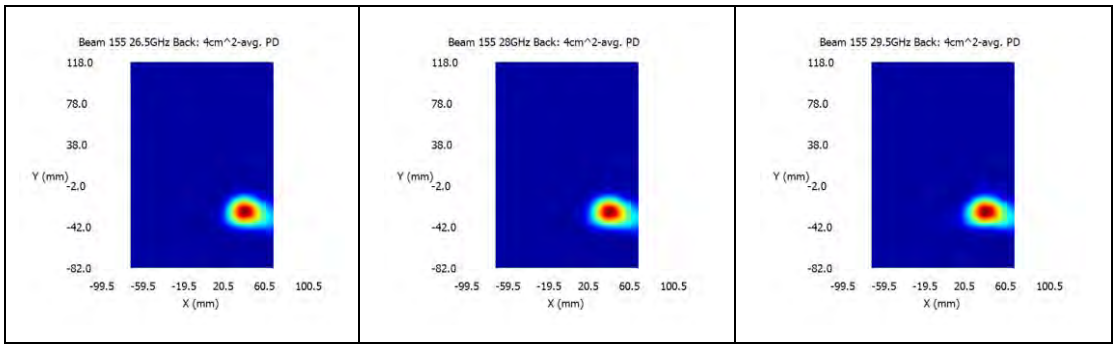

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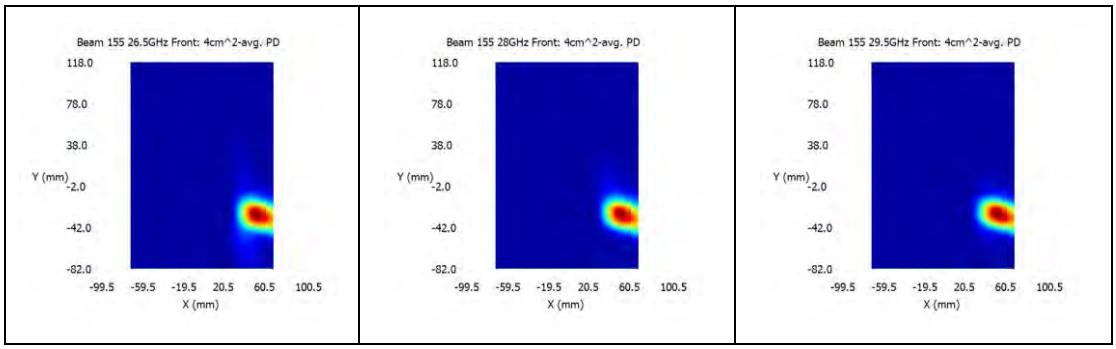

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