FCC ID: A3LSMS911U

Power Density Simulation Report

Revision A

November 07, 2022

SAMSUNG ELECTRONICS

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 2022.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 2022.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 2022.R1 (HFSS) is used. ANSYS Electromagnetics suite version 2022.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 2022.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 2022.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).

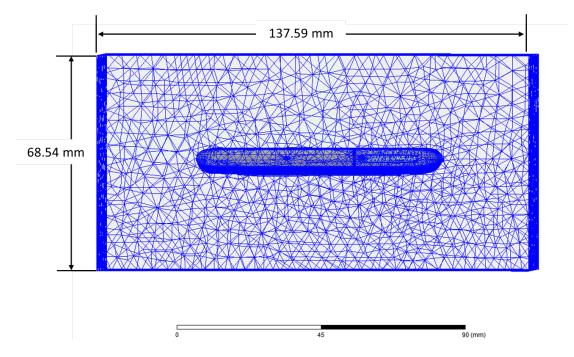


Figure 1 Example of the adaptive mesh technique (Top view)

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:

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

 $\langle \vec{S} \rangle$ 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 2022.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:

$$PD_{av} = \frac{1}{A} \int_{A} \langle \vec{S} \rangle \cdot ds = \frac{1}{2A_{av}} \iint_{A_{av}} ||Re\{ExH^*\}|| dA$$

, 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 4cm².

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

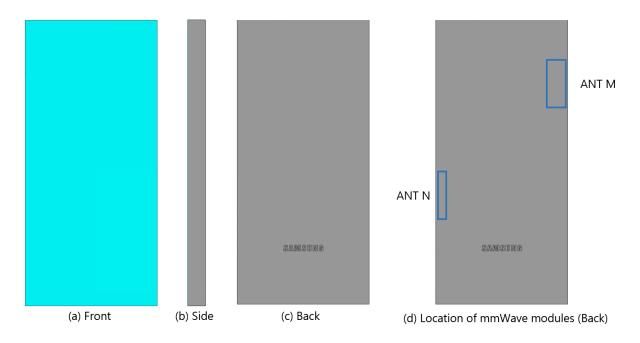


Figure 2 Simulation model which is mounted two mmWave antenna modules

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.

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.

Module	Front	Back	Left From Front View	Right From Front View	Тор	Bottom
	S1	S2	S3	S4	S5	S6
Ant M	0	0	О	0	0	0
Ant N	О	О	О	О	О	О

Table 1. PD evaluation planes

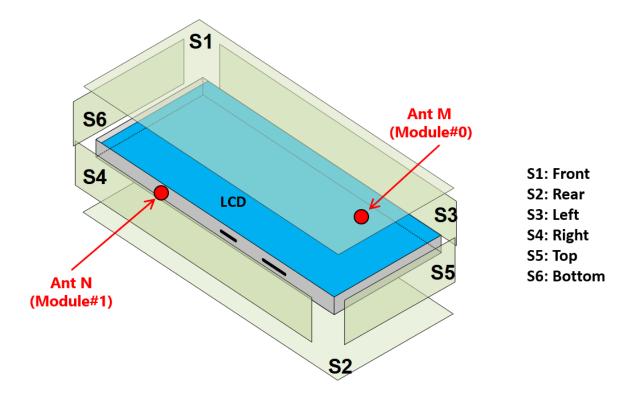


Figure 3. PD evaluation planes

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 2022.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 ANT M and ANT N for source excitation are the same. The antenna port of ANT M and N is divided into 10 ports for n261 and n258 1 x 5 patch array antennas, 10 ports for n260 1 x 5 patch array antennas. In the 10 ports included in each patch antenna, 5 ports are divided into vertical polarization feeding, and the other 5 ports are divided into horizontal polarization feeding.

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

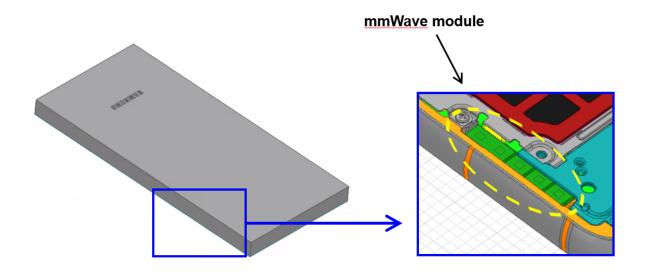


Figure 4. mmWave module (ANT M)

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.

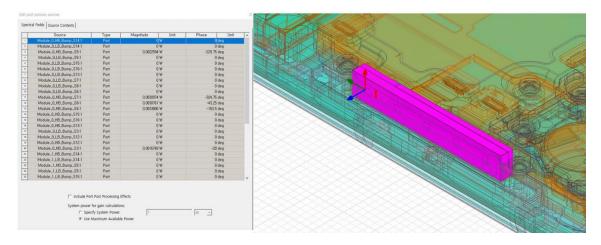


Figure 5. An example of port excitation (ANT N)

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.powerlimit

As mentioned in the previous chapter, the Poynting vector (\vec{S}) 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 4 cm² at 2.5 mm intervals of the point power density result. Figure 6 shows examples of the distribution plot of point power density and the averaged power density.

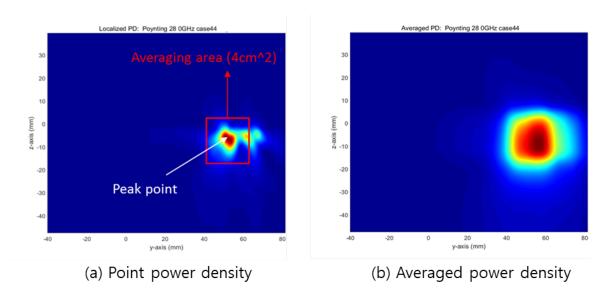


Figure 6. Power density distribution (Example)

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.powerlimit (backoff is already included) for all the beams for all three channels for the specified PD_design_target. This mode take the minimum sim.powerlimit out of all three channels (low, mid and high) and use the resulted sim.powerlimit.

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" 4cm² averaged power density and measured 4cm² 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.

Mada/Band	Antonna	Input Power (dBm)	Input Power (dBm)
Mode/Band	Antenna	SISO	MIMO
FC ND ~261	M Patch	6.0	6.0
5G NR n261	N Patch	6.0	6.0
EC ND ~360	M Patch	6.0	6.0
5G NR n260	N Patch	6.0	6.0
CC ND ~2E0	M Patch	6.0	6.0
5G NR n258	N Patch	6.0	6.0

^{*} The below simulation and measurement result were performed at 2mm evaluation distance and 28GHz / 38.5GHz / 24.8 GHz. The *input.power.limit* was determined based on below results.

Band	Channel	Module	Type(P or D)	Side	Beam ID	PLS (10 dBm)	Sim. PD (mW/cm2)	Meas. PD (mW/cm2) * Circle Avg
				Rear	26		1.437	0.62
		М	Patch	Left	25		0.761	0.353
		IVI	Pattii	Rear	156		2.492	1.26
	Mid			Left	164		1.124	0.663
n261	Ch. 2077891			Rear	31	60	0.710	0.367
	(27923.5 MHz)			Right	38		1.190	0.596
		N	Patch	Front	36		0.557	0.233
				Right	158		1.932	1.11
				Front	167		0.991	0.343
			Patch	Rear	24		1.113	0.468
		М		Left	36	60	0.693	0.374
				Rear	154		1.217	0.501
	Mid			Left	163		0.530	0.216
n260	Ch. 2253331			Right	29		2.075	0.931
	(38449.9 MHz)			Front	30		0.936	0.44
		N	Patch	Rear	158		0.857	0.229
				Right	167		1.538	0.543
				Front	158		0.826	0.216
				Rear	26		1.189	0.634
		M	Patch	Left			0.683	0.338
	Mid			Rear	156		1.835	0.908
n258	Ch. 2025833			Rear	39	60	1.022	0.521
	(24800.04 MHz)	N	Patch	Right			1.665	0.627
			1 00011	Rear	161		0.444	0.153
				Right	157		0.761	0.464

• Table 2-1, n261 ANT M-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
26	S2 (Rear)	ANT M			**
25	S3 (Left)	ANTM			

• Table 2-2, n261 ANT M-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
156	S2 (Rear)	ANT M			•
164	S3 (Left)	ANTM			

• Table 2-3, n261 ANT N-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
31	S2 (Rear)	ANTM			
20	S4 (Right)	ANTN			•
38	S1 (Front)	ANTM			

• Table 2-4, n261 ANT N-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
158	S4 (Right)	ANTN			
167	S1 (Front)	ANTM ANTN		8	

• Table 2-5, n260 ANT M-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
24	S2 (Rear)	ANT M			MA
36	S3 (Left)	ANTA			

• Table 2-6, n260 ANT M-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
154	S2 (Rear)	ANTN			•
163	S3 (Left)	MATIN			

• Table 2-7, n260 ANT N-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
29	S4 (Right)	ANTN	(TID)		
30	S1 (Front)	ANTM			

• Table 2-8, n260 ANT N-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
158	S2 (Rear)	ANTM			1
167	S4 (Right)	ANTN	X X		*
158	S1 (Front)	ANTM			

• Table 2-9, n258 ANT M-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
26	S2 (Rear)	ANTN			*
26	S3 (Left)	ANTM		S	

• Table 2-10, n258 ANT M-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
156	S2 (Rear)	ANTM		•	A

• Table 2-11, n258 ANT N-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
20	S2 (Rear)	ANTM			
39	S4 (Right)	NANA			

• Table 2-12, n258 ANT N-Patch

Beam ID	Surface	View	Simulated PD	Measured PD	Print out from Qualcomm MG Script
161	S2 (Rear)	ANTM			•
157	S4 (Right)	ANTN	Y (4

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 A3LSMS911U device with 2 QTMs. The printed contribution factor from Qualcomm MG Script was within 2% numerical tolerance of the simulated contribution factor. Additionally, the normalized combined PD is < 1.0.

[n261 band]

				Worst-case surface:	S4 (Right)	
		Wo	rst-case loc	ation (x,y,z) in meters:	Worst 4cm2 PD value location is 0.03788m, 0.04659m	, -0.00605m
			PD_	design_target (W/m ²)	6.31	
	Values	printed from Q	ualcomm N	IG Script	Values obtained by OEM using EM simulation	tool
QTM#	Beam ID	c(i,j) i = beam ID j = QTM #	Backoff factor b _j	verification.sim. power limit (before backoffs) [dBm]	simulated 4cm2 PD(i,j) at (0.03788m, 0.04659m, -0.00605m) at verification.sim.power timit on S4	C _{simulated} (i,j)= $4cm^{2}PD(i,j)/$ PD_design_target
0	24	0.0169	0.955	4.81	0.10675	0.0169
1	15	1.0000	0.9333	7.55	6.30855	0.9998
	Verify 1:	$C(i,j) = C_{simus}$	$l_{ated}(i,j), i =$	= 24, 15; j = 0, 1	·	
	Verify 2:	$b_0 * c(24,0) +$	$b_1 * c(15, 1)$	(1) = 0.955 *0.0169 +	$0.9333*1.0000 = 0.9494 \le 1$	

[n260 band]

				Worst-case surface:	S4 (Right)	
		Wo	rst-case loc	ation (x,y,z) in meters:	Worst 4cm2 PD value location is 0.03788m, 0.04559m	, -0.00205m
			PD_	design_target (W/m ²)	6.31	
	Values j	printed from Q	ualcomm M	IG Script	Values obtained by OEM using EM simulation	tool
QTM#	Beam ID	c(i,j) $i = beam ID$ $j = QTM #$	Backoff factor b _j	verification.sim. power limit (before backoffs) [dBm]	simulated 4cm2 PD(i,j) at (0.03788m, 0.04559m, -0.00205m) at verification.sim.power _{limit} on S4	C _{simulated} (i,j)= $4cm^{2}PD(i,j)/$ PD_design_target
0	152	0.0203	0.955	5.53	0.12810	0.0203
1	159	1.0000	0.9333	2.41	6.30928	0.9999
	Verify 1:	$C(i,j) = C_{simus}$	_{lated} (i,j), i =	= 152, 159; j = 0, 1		
	Verify 2:	$b_0 * c(152,0)$	+ b ₁ *c(15	9,1) = 0.955 * 0.0203	$+0.9333*1.000 = 0.9527 \le 1$	

[n258 band]

				Worst-case surface:	S4 (Right)	
		Wo	rst-case loc	ation (x,y,z) in meters:	Worst 4cm2 PD value location is 0.03788m, 0.03459m	, -0.00605m
			PD_	design_target (W/m ²)	6.31	
	Values	printed from Q	ualcomm M	IG Script	Values obtained by OEM using EM simulation	tool
QTM#	Beam ID	c(i,j) i = beam ID j = QTM #	Backoff factor b _j	verification.sim. power limit (before backoffs) [dBm]	simulated 4cm2 PD(i,j) at (0.03788m, 0.03459m, -0.00605m) at verification.sim.power _{limit} on S4	C _{simulated} (i,j)= $4cm^{2}PD(i,j)/$ PD_design_target
0	28	0.0258	0.955	4.51	0.16249	0.0258
1	142	1.0000	0.9333	9.82	6.31625	1.0010
	Verify 1:	$C(i,j) = C_{simu}$	$l_{ated}(i,j), i =$	= 28, 142; j = 0, 1		
	Verify 2:	b 0 *c(28,0) +	$b_1*c(142)$	(1) = 0.955*0.0258 + 0.0258	$+0.9333*1.000 = 0.9579 \le 1$	

VERIFICATION3: Measured 4cm² PD on worst surface and combined PD at worst-case location for A3LSMS911U device with 2 QTMS. The device should be measured at the reference power level and scaled to the input.power.limit. The combined PD should be less than or equal to the *PD_Design_Target* within the uncertainty at the reference power level.

[n261 band]

QTM#	Beam ID	c(i,j) i = beam ID j = QTM #	Dominant surface	4cm2 PD at input.power.limit on QTM dominant surface (W/m2)	input.power.limit (before permanent backoff)	Measured PD at reference power level on Beam Dominant Surface (mW/cm2)
0	24	0.0169	S2 (Back)	5.319	5.91	0.543
1	15	1.0000	S4 (Right)	6.126	8.93	0.312
comb	ined PD at the	worst-case k	ocation (x,y,z)	c(24,0)*meas.4cm ² PD(24,0) + c = 0.0169*5.319 +1.0000*6.126		PD(15,1)
PD_design		ertainty at refe f 0.63 dB	erence power level	= 6.310*10^(0.63/10) = 7.295 W	I/m^2	
			Verify	combined PD < PD_design_tar	get + uncertainty at	reference power level

[n260 band]

QTM#	Beam ID	c(i,j) i = beam ID j = QTM #	Dominant surface	4cm2 PD at input.power.limit on QTM dominant surface (W/m2)	input.power.limit (before permanent backoff)	Measured PD at reference power level on Beam Dominant Surface (mW/cm2)
0	152	0.0203	S2 (Back)	3.077	6.01	0.307
1	159	1.0000	S4 (Right)	3.747	4.17	0.571
comb	ined PD at the	worst-case k	ocation (x,y,z)	c(152,0)*meas.4cm ² PD(152,0) = 0.0203*3.077 + 1.0000*3.747		em ² PD(159,1)
PD_design		ertainty at refe f 0.63 dB	erence power level	= 6.310*10^(0.63/10) = 7.295 W	I/m ²	
			Ve rify	combined PD < PD_design_tar	get + uncertainty at	reference power level

[n258 band]

QTM#	Beam ID	c(i,j) i = beam ID j = QTM #	Dominant surface	4cm2 PD at input.power.limit on QTM dominant surface (W/m2)	input.power.limit (before permanent backoff)	Measured PD at reference power level on Beam Dominant Surface (mW/cm2)
0	28	0.0258	S2 (Back)	3.650	5.69	0.392
1	142	1.0000	S4 (Right)	4.298	10.84	0.141
combi	ined PD at the	worst-case k	ocation (x,y,z)	c(28,0)*meas.4cm ² PD(28,0) + c = 0.0258*3.650 + 1.0000*4.298		² PD(142,1)
PD_design		ertainty at refe f 0.63 dB	erence power level	$= 6.310*10^{(0.63/10)} = 7.295 \text{ W}$	I/m ²	
			Verify	combined PD < PD_design_tar	get + uncertainty a	reference power level

3 Simulation results

This section shows the PD simulation results of Ant M and Ant N at 28GHz, 39GHz and 24GHz 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 Low/Mid/High Channel at 28GHz / 39GHz / 24GHz

3.1.1 Ant M-Patch Antenna

Table 3 to 5 show the PD simulation evaluation of Ant M patch antenna at 28GHz / 39GHz / 24GHz for the all surfaces.

Table 3. PD of Ant M – patch antenna (28GHz – n261)

- M-patch Low CH

Г		_											max ratio ou	t of all beams											max ratio out of all b	нати		
П							4cm2 PD(m	(W/cm2)			6.1%	\$9.9%	18.5%	1.4%	19.2%	100.0%	4cm2 PD	i/mW/cm2	2) at 10mm e	rvaluation	distance	68.3%	47%	26.9%	12.7%	1.1%	8.0%	68.3%
No.	Module	Туре	Beam ID_1	Berra ID,2	Feed no.	\$4(Right) \$3(Left) 1	SS(Top) SS(Botto	om) S1(Fe	ont) S2(Res	per Beam 0 Back-off	ratio (Right 2mm)/(worst- surface 2mm)	ratio (Left 2mm)/(wont- surface 2mm)	ratio (Top 2mm)/(wonst- surface 2mm)	ratio (Sottom 2mm)/(wonst- surface 2mm)	natio (Fornt 2mm)/(worst- surface 2mm)	ratio (Rear 2mm)/(wonst- surface 2mm)	54(Right) 53(Le	nt) SS(To	op) SE(Botto	31/2 (mc	ront) \$2/Rea	ratio worst-surface (10mm/2mm)	ratio (Right 10mm)/(worst- surface 2mm)	ratio (Left 10mm)/(worst- surface 2mm)	ratio (Top 10mm)/(wont- surface 2mm)	ratio (Bottom 10mm)/(worst-	ratio (Front 10mm)/(wonst- surface 2mm)	ratio (Rear 10mm)/(worst- surface 2mm)
1		_	0		1	0.01 0.10	0.02 0.00	0.0	2 0.27	(49)	2.6%	36.1%	7.4%	0.4%	0.6%	100.0%	0.01 0.01	3 0.00	1 0.00	0	01 0.12	42.8%	2.2%	12.6%	4.5%	surface 2 mm) 0.4%	1.0%	42.8%
2			4		1	0.00 0.07 0.01 0.08	0.02 0.00	0.0	0.20		2.0%	35.0% 38.0%	7.9% 8.1%	0.5%	16.7%	100.0%	0.00 0.03			0	0.09	42.4% 35.7%	1.5% 2.7%	11.2% 14.0%	4.9% 5.4%	0.5%	6.4% 2.3%	42.4% 25.7%
4 5 6 7 8 9 10 11 12 13 14 15 16			6				0.01 0.00	0.0	0.22	-	2.1%	46.4% 47.6%	4.0%	0.9%	5.4% 12.7%	100.0%	0.01 0.04	5 0.00	0.00	0	01 0.10	46.0% 31.5%	2.2%	18.2% 21.2%	2.2% 1.9%	0.4%	2.2% 3.8%	46.0% 33.5%
6			10			0.01 0.15 0.01 0.24		- 0	5 0.44 4 0.61	=	1.2% 2.3%	14.8% 31.8%	14.5%	0.5%	11.8%		0.01 0.00				02 0.21	41.65 51.45	1.0%	13.2% 14.0%	7.3%	0.5%	4.1% 1.3%	40.6% 54.4%
8			12			0.02 0.15					4.5%	29.0% 27.1%	10.9%	0.8%	12.6%	100.0% 100.0%	0.01 0.00		2 0.00		01 0.15	29.5% 38.7%	1.7% 1.6%	15.1% 14.2%	6.1% 1.9%	0.5%	2.9% 4.3%	39.5% 38.7%
10			18		2	0.02 0.21	0.05 0.00	0.0			2.7%	37.4% 40.7%	9.7% 6.4%	0.2%	7.5%	100.0%	0.01 0.00	0.00		a	0.30	51.5% 51.2%	2.5%	13.6%	4.8% 3.6%	0.2%	3.4% 2.9%	53.5% 51.2%
12			20 24		2	0.01 0.20	0.03 0.00	- 0.0			1.8%	29.4% 40.5%	5.2% 18.5%	0.8%	10.3% 19.2%	100.0%	0.01 0.01	7 0.00	2 0.00	- 0	0.22	41.2%	1.4%	14.7%	3.2% 12.7%	0.6%	3.4% 7.6%	43.3% 47.0%
14			25		5	0.04 0.56	0.07 0.01				3.3%	52.1%	6.6%	0.5%	11.8% 4.8%	100.0%	0.03 0.25	5 0.00	0.00		0.54	53.85 50.15	2.7% 2.7%	23.2%	3.1%	0.4%	5.0%	53.8%
16			27			0.05 0.56		0.0	0 1.15 0 1.15		1.5% 4.3%	46.2% 48.6%	4.05	0.4%	7.1%	100.0%	0.04 0.25				0.57	49.5%	135	22.4%	2.7% 3.8%	0.2%	1.5%	50.1% 49.5%
			28 34		5 5	0.01 0.49	0.04 0.01	0.0	0.96 5 0.86		1.5%	50.9% 45.1%	3.9% 14.4%	1.1% 0.5%	9.6% 17.1%	100.0% 100.0%	0.01 0.19	5 0.00	7 0.00	9 0	04 0.46 07 0.45	48.2% 52.6%	0.9% 2.4%	19.8% 17.8%	2.4% 7.6%	0.8%	4.0% 8.0%	48.2% 52.6%
20			35 36		5	0.00 0.54				_	3.5% 6.1%	45.9% 42.1%	1.2% 6.7%	0.6%	5.9% 4.5%		0.03 0.25	0.00			04 0.65 03 0.55	53.8% 43.5%	2.2% 4.2%	21.0% 18.4%	2.0% 4.1%	0.5%	3.0% 2.4%	53.8% 43.5%
21			37 128			0.02 0.57		0.0	9 1.12	_	1.5%	50.1% 29.0%	6.2%	0.6%	8.2% 5.8%	100.0%	0.01 0.24		4 0.01	0 0	0.55	41.7%	1.2%	21.6%	1.9% 5.1%	0.4%	3.8% 2.4%	40.2% 41.7%
23			130		-	0.00 0.16	0.02 0.00		2 0.41	=	1.0%	37.5% 44.0%	5.8% 13%	0.2%	5.8% 2.6%	100.0%		5 0.00	2 0.00	0	0.19	4625	0.5%	11.6%	1.9% 2.7%	0.2%	1.9%	46.2% 48.4%
25			134		1	0.00 0.14	0.00	- 0.0	0.46	1	0.7%	30.6%	2.4%	0.4%	13%	100.0%	0.00 0.04	0.0	1 0.00	0	00 0.22	48.6%	0.4%	9.1% 7.4%	1.5%	0.2%	0.4%	40.6% 44.0%
27			138			0.01 0.38		- 0.0			0.8%	53.4% 52.1%	10.5%	0.4%	19%	100.0%	0.00 0.11				01 0.42	58.7%	0.6%	21.1%	6.3% 2.2%	0.3%	1.4%	58.7% 61.2%
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33			140		2	0.01 0.37	0.00 0.01		2 1.03		0.8%	35.6%	0.4%	0.5%	1.6%	100.0%	0.01 0.12	2 0.00	0.00	0	0.55	53.1%	0.6%	12.0%	0.2%	0.4%	0.6%	53.1%
30			141		2	0.01 0.24	0.00 0.00	0.0	7 0.67 2 0.74		1.2%	35.7% 46.2%	4.6% 10.1%	0.7%	10.3% 2.2%	100.0% 100.0%	0.01 0.03	2 0.00	5 0.00	9 0	03 0.25 01 0.43	37.4% 57.5%	0.9%	10.5%	11% 62%	0.7%	4.2% 0.8%	37.4% 57.5%
32	м	Patch	147 146		2	0.01 0.41	0.01 0.01				0.9% 1.2%	45.2% 11.8%	0.8%	0.3% 0.7%	12% 2.7%	100.0%	0.01 0.10		0.00		0.50	54.4% 50.6%	0.5%	16.8% 11.2%	0.5% 1.1%	0.3%	1.4% 0.8%	54.4% 50.6%
34			152 153		5	0.03 1.00	0.07 0.00	0.0		$\overline{}$	1.2%	44.1% 50.7%	13.9%	0.1%	1.9%	100.0%	0.02 0.42	0.00	0.00	0.	02 1.25	54.8% 65.2%	0.9%	18.6% 23.3%	7.9% 1.6%	0.1%	0.8%	54.8% 65.2%
26 27			154		5 5	0.02 0.99	0.04 0.00		7 2.25	-	1.0%	54.4% 43.8%	2.0%	0.2%	1.8%	100.0%	0.01 0.41		2 0.00		01 1.23 03 1.36	67.5%	0.7% 1.1%	25.9% 19.3%	1.4% 0.7%	0.2%	0.8% 1.5%	67.5% 60.5%
38			156 162		5 5	0.04 0.95	0.02 0.03	0.1	1 2.54		1.6%	37.3% 47.8%	0.8% 7.4%	1.0%	43% 14%	100.0%	0.02 0.30	5 0.00	2 0.02	0.	04 1.20 02 1.35	47.4% 62.8%	0.9%	14.2% 21.2%	0.6% 3.7%	0.8%	1.7% 0.8%	47.4% 62.8%
40			163			0.03 1.06		0.0		=	1.5%	51.1% 51.2%	1.4%	0.1%	1.0%	100.0%	0.02 0.50			0	01 1.34	67.4%	1.0%	24.8% 24.7%	1.1%	0.1%	0.5%	67.4% 66.6%
42			163	130		0.04 0.95		0.0		1	1.5%	38.3% 42.9%	9.8%	0.4%	17% 10.6%		0.02 0.41	0.0	0.01		3 135	54.4% 43.6%	1.0%	16.3%	0.4%	0.5%	1.8%	54.4% 41.6%
44			2	120	2	0.01 0.24	0.05 0.01	0.0	6 0.67		1.6% 1.5%	35.0% 41.6%	7.7% 6.8%	0.7%	9.5% 1.7%	100.0% 100.0%	0.01 0.03	7 0.0-	4 0.00	0	0.30	44.2% 43.9%	125	11.0% 14.2%	5.2% 4.6%	0.6%	17% 18%	44.2% 43.9%
46			6	124	2	0.01 0.27	0.03 0.01	0.0	2 0.73		1.5%	37.2%	3.4%	0.8%	1.0%	100.0%	0.01 0.09	0.00	2 0.01			46.5%	1.2%	12.5%	2.5%	0.7%	1.2%	46.5%
47			10	136	4	0.02 0.23	0.02 0.00	0.0	9 1,22		2.8%	35.3% 50.1%	2.9% 12.4%	0.6%	10.5% 7.6%	100.0% 100.0%	0.01 0.00	5 0.10	0.00	0 0	4 0.66	42.1% 54.0%	2.0%	13.5% 20.3%	2.2% 8.2%	0.5%	2.9% 2.9%	42.1% 54.0%
49			11	139	- 4	0.03 0.70	0.05 0.01	0.0	6 1.50 4 1.22	-	1.7%	46.5% 44.4%	6.7% 3.8%	0.1% 0.8%	18% 2.9%		0.02 0.26	0.00	0.01	0 0	03 0.85	56.8% 50.8%	1.3% 1.5%	17.4% 17.6%	1.9% 2.2%	0.1%	1.2% 1.2%	56.8% 50.8%
51			13	141	4	0.02 0.44	0.10 0.02	0.0	1.32	-	1.4%	33.1% 50.2%	7.7%	1.4%	11.5%	100.0% 100.0%	0.01 0.14		0.01	0	07 0.49	37.3% 57.6%	1.1%	10.4%	5.2% 7.2%	0.1%	5.3% 2.6%	37.3% 57.6%
27 38 39 40 41 41 42 43 44 45 46 47 48 49 50 50 51 51 52 53 54 55 56 55 56 56 56 56 56 56 56 56 56 56			19	147	4		0.05 0.01	0.0	9 1.54		1.0%	40.3% 31.7%	3.0% 5.1%	0.8%	5.8% 5.8%	100.0%	0.01 0.23		0.01	a	0.75	48.7% 44.2%	0.8%	14.7% 11.0%	1.8% 3.2%	0.6%	2.3%	48.7% 44.2%
55			24	152	10	0.07 1.85	0.60 0.01	0.1	2.62		2.0% 3.2%	51.2% 59.9%	16.6%	0.3%	5.0%	100.0%	0.06 0.77	7 0.36	6 0.01	a	9 2.01	55.7%	1.6%	21.4%	10.0%	0.2%	2.4% 2.7%	55.7% 68.2%
57			26	154 154	10	0.00 1.75	0.11 0.01	0.1	3 2.30	-	2.4%	51.8%	1.9%	0.1%	1.0%	100.0%	0.06 0.86	5 0.00	0.01	0	07 2.01	59.5% 60.2%	1.9%	25.4%	2.6%	0.3%	2.7% 2.2%	59.5%
58			28	155	10	0.06 2.04	0.07 0.05	0.0	2 2.91		2.4% 1.6%	52.5% 52.2%	2.7% 1.7%	0.2%	7.2% 8.1%	100.0%	0.04 0.72	0.0		0 0	1.96	50.2%	0.9%	24.1% 18.4%	1.1%	1.1%	15%	60.7% 50.2%
60			34 35	163		0.10 1.77 0.10 1.79	0.09 0.01			ŧΞ	1.0%	54.7% 55.1%	11.0% 2.6%	0.5%	5.8% 4.3%	100.0%	0.08 0.76	4 0.00	6 0.01		10 2.08 06 2.02	64.3%	2.4%	23.5% 25.9%	7.2% 1.9%	0.2%	2.0%	64.3% 62.2%
62			36	164		0.12 1.63				+	1.5%	49.6%	3.4%	0.5%	4.9%		0.09 0.70				08 1.85 16 2.11	56.4%	2.7%	23.3%	2.0%	0.4%	2.5%	56.4% 56.2%

- M-patch Mid CH

															max ratio ou	of all beams												max ratio out of all	beams		
\vdash	\neg	\neg			_			4cm2 PD	NmW/cm.	(2)									4	Icm2 PDim	W/cm2) a	t 10mm eval	lustion di	stance	-	I					
No.	Module 1	Noe Br	sam ID_1	Sema ID ₂ 2	Feed no.		$\overline{}$	Т	Ť			per	S7% ratio	62.3% ratio	17.9% ratio	1.6% ratio	11.6% ntio	100.0% ratio		т :			Т		67.8% ratio	47% ratio	29.3% ratio	11.4% ratio	1.4% ratio	19% ratio	67.8% ratio
		"				S4(Right) S3(Li	nt) SS(To	p) \$6(Bo	ottom) S	1(Front)	S2(Rear)	Beam Back-off	(Right 2mm)/(worst- surface 2mm)	(Left 2mm)/(wont- surface 2mm)	(Top 2mm)/(worst- surface 2mm)	(Bottom 2mm)/(wont- surface 2mm)	(Fornt 2mm)/(worst- surface 2mm)	(Rear 2mm)/(worst- surface 2mm)	S4(Right)	\$3(Left)	SS(Top)	SE(Bottom)	S1(Fron	nt) S2(Rear)	worst-surface (10mm/2mm)	(Right 10mm)/(wont- surface 2mm)	(Left 10mm)/(wonst- surface 2mm)	(Top 10mm)/(wonst- surface 2mm)	(Bottom 10mm)/(worst- surface 2mm)	(Front 10mm)/(wont- surface 2mm)	(Rear 10mm)/(wont- surface 2mm)
1			0		1		9 0.03			0.02	0.26	5460	2.7%	15.0%	0.1%	0.4%	7.7%			0.03		0.00	0.01		41.5%	2.3%	12.3%	3.8%	0.4%	2.7%	44.6% 41.5%
3			4			0.01 0.0	9 0.02	0.1	.00	0.01	0.21		4.7%	15.0% 44.3%	7.5% 7.1%	0.7%	6.5% 5.7%	100.0%	0.01	0.03	0.01	0.00	0.00	0.07	34.9%	3.3%	11.6%	4.8% 5.2%	0.3%	2.4% 1.9%	34.9%
5			6		- 1		0 0.01			0.03	0.25		2.8%	38.8% 41.2%	1.6% 2.6%	0.4%	11.6%	100.0% 100.0%	0.01	0.03	0.01	0.00	0.00		48.4% 35.2%	2.4%	13.6%	2.4%	0.4%	1.6%	48.4% 35.2%
6			10		2		0.00		.00	0.03	0.52		2.3%	42.6% 44.1%	11.8% 7.8%	0.4%	6.4% 4.2%	100.0%	0.01	0.09	0.03	0.00	0.01		46.8% 54.9%	1.9%	16.4%	6.4%	0.2%	1.9%	46.8% 54.9%
8			12		2	0.02 0.1	0.04	0.1	.00	0.02	0.48		2.2%	17.5%	8.1%	0.8%	4.4%	100.0%	0.01	0.08	0.03	0.00	0.01	0.10	38.1%	2.7%	16.5%	5.2%	0.8%	1.5%	28.1%
2 3 4 5 6 7 8 9		-	12 18		2 2	0.02 0.2	6 0.02	0.0	.00	0.05	0.54		2.0%	28.9% 44.9%	4.15 9.35	0.7% 0.3%	9.1% 4.3%	100.0%		0.11			0.02		45.3% 53.0%	1.5% 2.1%	10.2% 17.3%	2.8% 5.0%	0.7% 0.2%	15%	45.3% 53.0%
12		F	19 20		2	0.02 0.2	0.03	0.0	00	0.03	0.66		2.3%	19.0% 12.6%	475 125	0.1%	4.5% 7.1%	100.0%	0.01	0.10	0.02	0.00	0.01	0.36	51.9% 41.9%	1.8%	14.5%	2.4%	0.5%	1.7%	53.9% 48.9%
11		⊨	24		5	0.03 0.3		0.0	.01	0.08	0.83		3.3%	42.8%	17.7%	1.3%	9.5%	100.0%	0.02	0.15	0.10	0.01	0.03		46.1%	2.0%	18.1%	11.4%	0.8%	3.9%	46.1%
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		E	26		5	0.08 0.5		. 0.	.01	0.08	1.32		2.9%	57.7% 34.9%	5.4% 3.1%	0.4%	6.1% 5.8%	100.0% 100.0%	0.03	0.24	0.03	0.00	0.04	0.71	55.3% 49.5%	2.5% 4.1%	27.4% 16.5%	2.4% 2.1%	0.2%	3.0% 2.0%	55.3% 49.5%
16		F	27 28		5		1 0.04		00	30.0	1.34		1.6%	45.6% 47.3%	2.8%	0.2% 1.3%	425	100.0%	0.04	0.30	0.03	0.00	0.03		50.9% 46.3%	2.8%	22.3% 19.8%	1.9%	0.2%	2.2%	50.9% 46.3%
18		⊨	34		5	0.03 0.5	4 0.17	- 0	01	0.08			2.3%	50.1% 38.8%	15.5% 1.1%	0.7%	7.7% 8.6%	100.0% 100.0%	0.02	0.23	0.08	0.01	0.03		52.6% 53.6%	1.7% 1.3%	21.7%	7.6%	0.5%	1.0% 2.4%	52.6% 53.6%
20			36		- 5	0.06 0.5	0.07	0.0	.01	0.05	1.43		57%	37.6%	425	0.1%	145	100.0%	0.07	0.23	0.04	0.00	0.02	0.67	47.1%	425	16.0%	2.6%	0.3%	1.65	47.1%
21			37 128		5		2 0.05			0.06	0.30		1.9%	43.4% 41.2%	1.5%	0.6%	4.4%	100.0%		0.26		0.01	0.03		46.8%	1.4%	20.0%	2.1%	0.5%	2.0%	46.0% 40.5%
23			130			0.00 0.1	6 0.02 7 0.01	0.0	.00	0.02	0.40		0.8%	41.1%	5.3% 3.7%	0.5%	5.3% 2.1%	100.0%	0.00	0.05	0.01	0.00	0.01		47.4% 51.1%	0.5%	12.0%	3.3% 1.9%	0.5%	1.5%	47.4% 51.1%
25			124		1	0.00 0.1	3 0.01		00	0.01	0.46		0.7%	46.3% 29.2%	2.25	0.4%	1.2%	100.0%	0.00	0.04	0.01	0.00	0.00	0.19	41.45	0.4%	1.6%	1.5%	0.4%	0.4%	40.4%
26		F	136		1 2		0.01	9 9	00	10.0	0.40		1.5%	27.5% 55.9%	2.8% 9.5%	0.5%	2.5% 4.4%	100.0%	0.01	0.03	0.01	0.00	0.00	0.17	42.3% 60.4%	1.3%	8.5% 22.3%	1.8% 5.1%	0.5%	0.8%	42.3% 60.4%
28		⊨	139		2	0.00 0.4	0.04		.00	0.01	0.00		0.5%	52.7%	4.0%	0.1%	138	100.0%	0.00	0.17	0.02	0.00	0.01	0.55	62.9%	0.3%	19.4%	1.9%	0.0%	0.6%	62.9%
30		E	140		2	0.01 0.2	0.03			0.06	0.69		0.9%	41.0%	3.6%	1.3%	0.4%	100.0%	0.00	0.09	0.02	0.00	0.02		37.7%	0.6%	13.0%	2.5%	12%	3.3%	37.7%
31	M P	anch -	146		2 2		3 0.07		.00	0.03	0.69		1.7%	51.8% 48.2%	9.4%	0.1%	4.2% 2.5%	100.0%	0.01	0.13	0.03	0.00	0.01		55.6%	1.3%	19.2% 18.2%	4.9%	0.1%	1.2%	60.1% 55.6%
22		_ F	148 152		2		0.02		.01	0.02	0.90		0.9%	15.6% 44.9%	1.9%	0.7%	2.6%	100.0%	0.01	0.10	0.01	0.01	0.01		50.7% 56.1%	0.7%	11.4%	1.2%	0.6%	0.9%	50.7% 56.1%
35			153		5	0.02 1.0	2 0.06	. 0.		0.02	2.00		1.2%	51.0%	2.9%	0.2%	1.0%	100.0%	0.01	0.47	0.03	0.00	0.01	1.32	66.1%	0.7%	23.7%	1.4%	0.1%	0.5%	66.1%
37		-	154 155		5		2 0.03		.00	0.03	1.83 2.21		1.0%	55.9% 49.9%	1.7%	0.2%	1.5% 2.6%			0.49		0.00	0.01		67.8%	0.8%	27.1% 22.7%	1.3% 0.4%	0.2%	0.8% 1.2%	67.8% 63.3%
38			162		5		0.01			0.10	2.49		1.2%	29.8% 47.8%	7.0%	1.0%	4.1% 1.2%	100.0%	0.02	0.39	0.01	0.02	0.04		48.7% 64.1%	0.7%	15.6%	0.3%	0.8%	0.7%	48.7% 64.1%
40			163		ś	0.03 1.0	5 0.03	0.1	.00	0.02	1.99		1.4%	52.8%	1.4%	0.2%	0.9%	100.0%	0.02	0.49	0.02	0.00	0.01	1.22	66.9%	1.0%	24.0%	1.1%	0.1%	0.5%	66.9%
41			164 165		5		2 0.01 4 0.01		.01	900	2.29		1.2%	57.7% 43.3%	0.6%	0.3%	2.0%	100.0%	0.02	0.53	0.01	0.01	0.02	1.22	67.5% 55.7%	0.9%	27.3% 18.6%	0.4%	0.2%	1.0%	67.5% 55.7%
43		F	0	128	2	0.01 0.2	0.05	0.0	.01	0.05	0.62		1.6%	41.8% 35.7%	7.2%	1.0%	8.5% 5.1%	100.0%	0.01	0.08	0.03	0.01	0.02		41.3%	1.5%	13.2%	4.4%	0.8%	2.15	43.2% 41.5%
45		_ E	4	132	2	0.02 0.3	0 004	0.0	01	0.03	0.65		2.3%	46.5% 35.1%	6.8%	1.1%	4.1% 2.7%	100.0%	0.01	0.10	0.03	0.01	0.01	0.31	47.3% 47.0%	125	15.7% 11.0%	4.5% 2.4%	0.9%	1.7%	47.2% 47.0%
47		E	ů.	116	2	0.02 0.2	0.02	0.0	.01	0.06	0.73		3.2%	34.1%	2.9%	0.7%	8.4%	100.0%	0.02	0.08	0.01		0.02	0.28	38.8%	2.3%	11.5%	1.8%	0.5%	2.1%	18.8%
48		F	10	138	4	0.03 0.7	0.16	0.0	.00	0.07	1.34		2.1%	51.0% 48.8%	12.2% 6.8%	0.6%	5.2% 3.1%	100.0%	0.02	0.27	0.10	0.01	0.02	0.69	51.5% 59.1%	1.7% 1.5%	20.4%	7.5% 3.2%	0.4%	1.8%	51.5% 59.1%
50		- E	12	140	- 4	0.03 0.6	0.05	0.0	.01	0.03	1.25		1.9%	46.8% 32.4%	1.6%	1.0%	2.5%	100.0%	0.02	0.25	0.03	0.01	0.01		53.4% 37.9%	1.5%	18.6%	2.4% 3.5%	0.8%	1.0%	53.4% 37.9%
52		E	18	146	4	0.02 0.7		88	.01	0.00	1/1		1.0%	53.4%	10.9%	0.4%	5.4%	100.0%	0.02	0.28	0.09	0.00	0.03	0.02	58.2%	1.6%	20.2%	6.1%	0.2%	1.9%	58.2%
53		F	19 20	147	4		7 0.04		.01	0.06	1,50		1.3%	42.5% 31.4%	2.0%	0.7%	1.6%	100.0%	0.02	0.16	0.02		0.03		52.3% 44.7%	1.1%	15.5%	1.3%	0.6%	1.7%	52.3% 44.7%
32 33 34 35 36 37 38 39 40 40 41 42 43 44 45 46 48 49 50 51 51 52 53 53 53			24	152		0.06 2.0	0.69			0.17			1.7%	\$2.1% 62.3%	17.9%	0.5%	435 125					0.01		2.16	6535	1.0%	21.5%	105%	0.3%	1.6%	56.3% 65.5%
57 58			26	154	10	0.12 1.6	3 0.09	0.0	.01	0.16	1.16		3.6%	48.3%	2.8%	0.3%	4.6%	100.0%	0.09	0.77	0.06	0.01	0.06	2.03	60.3%	2.6%	23.0%	1.9%	0.2%	1.9%	60.2%
58		- 1-	27 28	155	10	0.07 1.9	9 0.00			0.19	2.70		2.0%	\$1.9% \$9.1%	2.1%	0.2%	5.1% 6.2%	100.0%	0.06	0.94	0.05	0.01	0.10	1.97	59.9% 51.6%	1.6%	25.5% 22.3%	1.5%	0.2%	2.6%	59.9% 51.6%
59 60 61 62		F	34	162	10	0.08 1.9	9 0.41		.01	0.16	2.54		2.3%	56.3% 50.7%	11.7%	0.3%	4.45	100.0%	0.05	0.85	0.21		0.06		62.1%	1.4%	24.0%	6.1%	0.2%	1.8%	62.1%
62		E	36	164	10	0.12 1.6	9 0.00	0.0	02	0.15	1.12		1.6%	50.3%	2.4%	0.5%	4.5%	100.0%	0.10	0.82	0.05	0.02	0.07	1.96	51.3%	1.0%	24.4%	1.6%	0.5%	2.1%	50.3%
63			37	165	10	0.07 2.5	0.07	0.1	.03	0.21	2.00		1.0%	56.9%	1.8%	0.7%	5.5%	100.0%	0.05	0.97	0.04	0.02	0.10	2.15	56.7%	1.35	25.4%	1.0%	0.6%	2.7%	56.7%

- M-patch High CH

																		max ratio ou	t of all beams												max ratio out of all b	eams.		
П						Г			-	4cm2 F	O(mW)	cm2)				62%	59.2%	17.4%	1.7%	11.5%	100.0%		lcm2 PD)	nW/cm2)	at 10mm ev	slustion d	istance	68.1%	5.4%	27.8%	10.6%	1.5%	4.9%	68.1%
No. N	fodule 1	lype Sea	im ID_1	Sema ID,2	Feed no.		ght) S3	(Left)	\$\$(Top	o 56(I	Eettorn)	S1(Fron	et) \$2)		per Bearn Back-off (dB)	ratio (Right 2mm)/(worst- surface 2mm)	ratio (Left 2mm)/(wont- surface 2mm)	ratio (Top 2mm)/(wonst- surface 2mm)	ratio (Bottom 2mm)/(worst- surface 2mm)	ratio (Fornt 2mm)/(worst- surface 2mm)	ratio (Rear 2mm)/(wonst- surface 2mm)	S4(Right	S3(Left	SS(Top) SE(Botton	n) S1(Fe	nt) S2(Rea	(10mm/2mm)	ratio (Right 10mm)/(wont- surface 2mm)	ratio (Left 10mm)/(worst- surface 2mm)	ratio (Top 10mm)/(wont- surface 2mm)	ratio (Bottom 10mm)/(wonst- surface 2mm)	ratio (Feant 10mm)/(wonst- surface 2mm)	ratio (Rear 10mm)/(worst- surface 2mm)
1		Т	٥		-	ö	27	108	0.02		0.00	0.03	0.	24		2.7%	21.5% 27.1%	7.8%	0.4%	10.5% 5.2%	100.0%	0.01	0.03	0.01	0.00	0.0	0.11	42.8%	2.3%	10.1%	1.9%	0.4%	19%	42.8% 41.8%
2		-	4		-	0.0	21 0	100	0.02	-	0.00	0.02	- 6	22		4.6%	41.6%	7.3%	0.7%	5.5%				0.02	0.00	0.0	0.12	37.2%	1.2%	16.1%	5.5%	0.5%	1.0%	41.8% 37.2%
4			6				21 0					0.01		22		2.6%	15.1%	4.1%	0.9%	5.9%					0.00	0.0	0.10	45.7%	2.7%	11.8%	2.7%	0.9%	2.3%	45.7%
5		-	10				01 0			-	0.00	0.02		53		5.1% 2.3%	34.6% 35.7%	3.1% 12.2%	0.8%	7.4%		0.01	0.04	0.00	0.00	0.0	0.09	35.8% 45.2%	2.1%	14.4%	1.6% 6.5%	0.4%	2.1%	35.8% 45.2%
7			11		2	0.0	12 0	123	0.04		0.00	0.04	0.	66		2.7%	34.8%	6.2%	0.2%	5.2%	100.0%	0.02	0.09	0.02	0.00		0.36	54.6%	2.4%	13.1%	3.2%	0.2%	1.5%	54.6%
8			12		2 2		2 0				0.01	0.02		50		1.6%	16.6% 21.8%	6.7% 4.9%	1.0%	4.2% 9.8%			0.03	0.02		0.0		42.0%	2.8% 1.5%	15.8%	4.2% 2.8%	0.8%	165	42.0% 46.5%
3 4 5 6 7 7 8 9 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27			10				12 0					0.03		62		2.6%	15.6%	8.7%	0.2%	5.25					0.00		0.32	51.8%	2.4%	12.0%	4.5%	0.2%	1.6%	51.0%
11		=	19		2		2 0				0.00	0.04	0.	.66		2.4%	21.7% 27.1%	1.2%	0.1%	5.3%				0.01		0.0	0.36	54.5%	2.3%	12.1%	1.8%	0.3%	2.0%	54.5%
12		-	24		- 2	0.0	21 0	132	0.02	-	0.00	0.05	- 0	90		1.9%		12% 17.0%	0.7%	7.7% 11.5%					0.00	0.0	0.29	45.0%	1.9%	10.1%	2.0% 10.6%	0.7%	2.9%	50.2%
14			25				S 6	160	0.06			0.07	- 1	28		2.8% 3.7%	35.4% 47.0%		0.4%	5.4%	100.0%	0.04	0.29	0.04	0.00	0.0	6.71	55.2%	2.2% 3.4%		3.3%	0.3%	2.4%	45.0% 55.2%
15		-	26		5		9 0				0.00	0.10	1	45	_	6.0% 3.1%	11.2% 42.3%	3.1%	0.3%	4.1%			0.22	0.03	0.00	0.0		50.6% 49.6%	4.8% 2.5%	14.9%	1.8% 1.3%	0.3%	2.5% 1.7%	50.6% 49.6%
17			28		5	0.0	12 0	47	0.05		0.01	0.11		.04		1.0%	44.6%	4.7%	1.1%	10.3%			0.19			0.0		50.1%	1.3%	18.3%	3.1%	1.0%	3.7%	50.1%
18			34		5	ö		144			0.01	0.12		.07		2.6% 4.8%	41.2% 34.0%	15.6%	0.5%	10.9%			0.20	0.08		0.0		52.9% 53.4%	2.1%	19.0%	7.4%	0.4%	1.6%	52.9%
20			35		5 5		08 0				0.01	0.09		32		6.2%	34.5%	3.8% 4.2%	0.5%	6.5%					0.01	0.0	0.72	50.8%	1.7% 5.4%	15.7% 15.1%	2.1%	0.5%	2.5%	53.4% 50.8%
21			27				2 0					0.05	1.	.22		1.6%	41.8%	1.0%	0.7%	1.7%					0.01	0.0	0.66	49.25	1.3%	19.0%	1.9%	0.5%	1.4%	49.3%
22		-	128 130				9					0.02	- 8	30		1.0%	43.5% 40.1%	6.0%	0.7%	5.45 4.95					0.00	9.0	0.13	42.5%	1.0%	12.7%	1.0%	0.7%	2.0%	42.5%
24			132		1	0.0	00 0	117	0.01		0.00	0.01		36		0.6%	48.1%	3.3%	0.6%	3.1%	100.0%	0.00	0.06	0.01	0.00	0.0		51.4%	0.6%	16.4%	1.9%	0.6%	0.8%	51.4%
25			134		-	ö	00 0	112			0.00	0.01		45		0.9%	28.9% 29.3%	2.2%	0.4%	1.3%		0.00		0.01	0.00	0.0		47.6%	0.4%	8.7% 9.3%	1.6%	0.4%	0.4%	47.6% 44.0%
27			136		2	0.0		136			0.00	0.01		65		0.9%	29.3% 55.4%	8.9%	0.5%	4.6%		0.00			0.00	0.0		59.25	0.6%	21.7%	5.0%	0.5%	125	59.2%
28			139		2	G.		45	0.03		0.00	0.01	0.	.05		0.5%	52.5%	1.9%	0.1%	0.9%		0.00	0.17	0.02	0.00	0.0	0.54	61.2%	0.4%	19.4%	1.9%	0.1%	0.4%	63.2%
28 29 30 31 32 33 34 35		-	140		2	0.0		130	0.00	-	0.00	0.01	- 1	02		0.8%	38.3% 43.6%	0.3%	0.4%	1.4%		0.01	0.13	0.00	0.00	0.0	0.57	36.1%	0.6%	12.9%	0.2%	0.4%	2.6%	56.1% 38.5%
21			146				21 0	135	0.06	_		0.03		65		12%	53.8%	9.3%	0.2%	4.6%	100.0%	0.01	0.13	0.03	0.00	0.0	0.41	62.9%	1.1%	19.9%	4.6%	0.2%	1.1%	62.9%
32	M P	atch	147		2	0.0	01 0	42	0.01	Н	0.00	0.02	0.	2 P		0.6%	41.6% 38.3%	1.2%	0.5%	2.4%	100.0%	0.00	0.16	0.01	0.00	0.0	0.49	56.2%	0.5%	18.3%	0.8% 1.4%	0.5%	12%	56.2% 51.0%
34			152		5	0.0	03 0	194	0.28		0.00	0.04	2.	.17		1.2%	43.3%	12.7%	0.1%	1.8%	100.0%	0.02	0.29	0.13	0.00	0.0	1.24	57.1%	0.8%	18.1%	6.1%	0.1%	0.7%	57.1%
35			153		5	ö	12 1	.02	0.05		0.00	0.02		.97		1.2%	51.7% 56.7%	2.6%	0.2%	1.0%			0.43	0.02	0.00	0.0		66.3%	0.8%	24.2% 27.8%	1.1%	0.2%	0.5%	66.3% 68.1%
37		-	155			0.0	23 1	10	0.02	-	0.00	0.02				1.0%	56.7% 60.6%	0.7%	0.2%	2.4%				0.02			1.22	64.2%	0.8%	27.8%	0.5%	0.2%	12%	64.2%
38			156		- 5	0.0	12 1	.03	0.02		0.03	0.10	2	20		1.0%	44.8%	0.7%	12%	4.5%	100.0%	0.02	0.41	0.01	0.02	0.0	1.15	50.0%	0.7%	17.0%	0.4%	1.0%	2.0%	50.0%
29		-	162				12 1				0.00	0.03	- 2	.11		1.1%	48.2% 54.1%	6.8% 1.3%	0.0%	1.2%				0.07	0.00	0.0	1.36	64.5%	0.8%	21.9%	1.2%	0.0%	0.6%	64.5%
41			163 164		- 5	- 0.0	2	33	0.01	_	0.01	0.03	- 1	94		1.2%	57.2%	0.7%	0.1%	1.6%	100.0%	0.02	0.53	0.01	0.00	0.0	1.30	67.1%	0.9%	27.4%	0.4%	0.2%	1.0%	67.1%
42			165	128			12 1				0.01	0.08		28		1.1%	46.3% 46.0%	0.4%	0.4%	1.6%		0.02		0.00	0.01		1,29	54.7% 41.5%	0.7% 1.3%	20.3%	0.2% 4.2%	0.3%	1.7%	56.7% 43.5%
44		-	2	120	2			126			0.00	0.05	- 6	80		1.2%	33.1%	7.4%	0.9%	5.7%	100.0%	0.01	0.09		0.00	0.0	0.34	42.5%	1.0%	11.4%	4.0%	0.8%	1.6%	42.5%
36 37 38 39 40 41 41 42 44 45 46 47 47 48 49 50 51 52 53 54 55 55 56 57 58 59 59 50 50 50 50 50 50 50 50 50 50 50 50 50			4	132	2	0.0	2 0		0.04		0.01	0.03	0.	.65		2.5%	46.4%	5.7%	0.8%	4.9%	100.0%	0.01	0.11	0.03	0.00	0.0	0.31	47.2%	2.0%	16.6%	3.0%	0.6%	1.7%	47.2%
46			6	134	2	0.0	01 0	124			0.01	0.02		70		1.9%	34.6% 37.2%	4.0%	0.9%	3.0% 6.2%		0.01	0.07		0.01	0.0	0.15	49.5%	1.4%	10.4%	2.6%	0.9%	1.1%	49.5% 41.4%
48			10	128	-4	0.0	2 0	65	0.16		0.01	0.09	- 1	.22		1.0%	49.1%	11.9%	0.8%	7.0%	100.0%			0.10		0.0	0.67	50.1%	1.7%	19.4%	7.4%	0.6%	2.0%	50.1%
49			12	119			23 0				0.00	0.06		<u> </u>		1.0%	45.4% 47.9%	6.2% 1.0%	0.1%	2.7% 2.3%					0.00	9.0	0.92	53.7%	1.6%	17.5%	2.0%	0.1%	145	60.5% 53.7%
51			13	141	4	0.0	12 0	146	0.09		0.02	0.09		36		1.5%	11.6%	6.3%	1.5%	6.8%			0.14		0.02	0.0		39.1%	1.2%	10.1%	1.9%	1.3%	2.7%	39.1%
52			18	146			12 0				0.00	0.10		29		1.9%	50.3% 40.6%	10.4%	0.3%	7.1% 4.0%		0.02				0.0	0.81	58.0% 54.2%	1.6%	19.2% 15.0%	5.3%	0.3%	2.0%	58.0% 54.2%
54			20	140	4		12 0				0.01	0.06		34		1.6%	40.6% 32.5%	43%	13%	4.5%			0.16		0.01	9.0	0.61	45.05	1.25	12.0%	2.9%	1.0%	1.05	45.0%
55		_ <u>_</u>	24	152	10	0.0	6 1	.05	0.68		0.01	0.19	1	.91		1.6%	47.2%	17.4%	0.4%	4.9%	100.0%	0.04	0.79	0.38	0.01	0.0	2.21	56.4%	0.9%	20.1%	9.6%	0.3%	1.9%	56.4%
56		-	25	153	10	9 0		58			0.01	0.10	1	27		1.0%	58.6% 46.9%	5.4% 2.4%	0.3%	2.8% 4.2%		0.07		0.08	0.01	0.0	2.24	65.2% 59.4%	2.1%	27.4%	2.4%	0.2%	135	65.2% 59.4%
58			27	155			7 2	103	0.07	_	0.01	0.16	1	.79		2.0%	53.5%	1.2%	0.3%	425	100.0%	0.06	0.96	0.04		0.0	2.19	57.8%	1.6%	25.2%	1.1%	0.2%	2.1%	57.0%
59			28 34	162			7 1				0.07	0.19	- 1	41 (1	I	1.0%	59.2% 51.7%	2.7%	1.7%	5.0% 4.2%				0.07	0.06		1.97	51.6% 62.7%	1.2%	22.2% 22.7%	1.7% 5.5%	15%	2.4% 1.5%	51.6% 62.7%
61			35	163	10	0.1	11 1	.74	0.08		0.01	0.12	1	40		3.1%	51.2%	2.4%	0.3%	3.4%	100.0%	0.08	0.83	0.06	0.01	0.0	2.05	60.3%	2.3%	24.3%	1.7%	0.3%	1.3%	60.3%
62			36	164	10	0.1	2 1	67	0.07	\mathbf{I}	0.01	0.17		22		1.6%	50.1%	2.0%	0.4%	5.1%				0.05		0.0	1.96	59.0%	1.1%	24.4%	1.4%	0.4%	2.2%	59.0%
63	_	_	37	165	10	0.0	ie :	20	0.06		0.02	0.16	1.	.84		1.4%	57.3%	1.5%	0.6%	4.1%	100.0%	0.04	0.99	0.04	0.02	0.0	2.19	56.9%	1.1%	25.8%	0.9%	0.5%	2.2%	56.9%

Table 4. PD of Ant M – patch antenna (39GHz – n260)

- M-patch Low CH

_																																
																max ratio ou	of all beams												max ratio out of all I	beams		
								4cm	2 PD(mW)	cm2)				7.0%	63.3%	24.4%	1.4%	16.0%	100.0%	4	cm2 PD(n	nW/cm2)	at 10mm eva	slustion o	listance	\$2.3%	6.2%	30.7%	17.0%	12%	9.6%	52.3%
No. 1	Andule Typ		(1 Berna ID	,2 Feed no	54(5	Right) S3(Lef	1		6(Eottorn)	S1/Fro	et) \$2 \$		per Beam ack-off (dB)	ratio (Right 2mm)/(worst- surface 2mm)	ratio (Left 2mm)/(wont- surface 2mm)	ratio (Top 2mm)/(worst- surface 2mm)	ratio (Bottom 2mm)/(wont- surface 2mm)	ratio (Fornt 2mm)/(worst- surface 2mm)	ratio (Rear 2mm)/(wont- surface 2mm)		S3(Left)	1		1		(10mm/2mm	(surface Zmm)	ratio (Left 10mm)/(worst- surface 2mm)	ratio (Top 10mm)/(wonst- surface 2mm)	ratio (Bottom 10mm)/(worst- surface 2mm)	ratio (Front 10mm)/(worst- surface 2mm)	ratio (Rear 10mm)/(worst- surface 2mm)
2		2	_	-	0	01 0.07	0.0	23	0.00	0.02	0.	17		1.5%	28.4% 40.4%	12.9% 15.2%	0.5%	8.5% 17.0%	100.0% 100.0%	0.00	0.02	0.01	0.00	0.0		29.8%	1.5%	10.0% 15.2%	5.0% 9.4%	0.5%	10%	16.1% 29.8%
3		4		1			0.0		0.00	0.01		24		2.0%	43.0%	6.1% 3.6%	0.8%	4.1%			0.04			0.0	0.0	32.0%	1.6%	16.8%	4.5%	0.8%	1.2%	32.0%
5		- 0			0	01 0.07	0.0	12	0.00	0.00	0.	22		2.2%	31.4%	7.2%	0.4%	1.3%	100.0%	0.00		0.01	0.00	0.0	0.0	30.9%	1.8%	10.0%	5.4%	0.4%	0.4%	30.9%
6		10		2	0		0.0		0.00	0.05	0.	17	-	1.9%	14.6% 12.4%	17.5% 15.3%	0.9%	11.2% 15.3%	100.0%	0.01	0.05	0.05	0.00	0.0		25.0%	1.4%	11.2% 13.6%	12.1% 7.6%	0.9%	17% 46%	25.0% 30.2%
8		12		2	0				0.00	0.03	0.0	17		3.3%	63.3%	3.8%	0.5%	7.2%	100.0%	0.01	0.11			0.0	0.1	41.9%	2.4%	20.7%	2.4%	0.5%	2.2%	40.9%
10		- 10			- 0	01 0.13	0.0	9	0.00			2	-	1.6%	46.2% 28.7%	12.4%	0.7% 0.4%	6.5% 7.0%	100.0%	0.01	0.04	0.04	0.00		8.1	21.6%	145	18.2% 9.3%	9.6%	0.7%	2.1% 2.2%	28.9%
11		19		2	0		0.0		0.00	0.00	0.	2 2		4.0%	44.0% 34.0%	11.2%	0.4%	21.7%	100.0% 100.0%	0.01	0.06	0.02	0.00	0.0		47.7% 38.1%	1.6%	20.9%	5.8%	0.4%	7.2% 2.5%	47.7% 18.1%
12		24		ŝ	0	02 0.41	0.2	10	0.01	0.07		Sa .		1.5%	38.1%	18.8%	12%	6.5%	100.0%	0.01	0.16	0.14	0.01	0.0	2 0.4	40.2%	1.3%	15.1%	13.1%	1.1%	2.0%	40.2%
15		25 26	+-	5	0	04 0.25 05 0.51	0.7	9 4	0.01	0.07	0.0	10	-	5.1%	12.9% 56.5%	24.4% 4.9%	0.8% 0.2%	9.2% 11.5%	100.0%	0.03	0.10	0.13	0.00	0.0	0.2	29.2% 47.2%	435 535	12.5% 29.4%	17.0% 2.6%	0.5%	2.8%	29.2% 47.2%
3 4 5 6 7 8 9 15 11 12 13 14 15 17 18 19 20 21 22 23 24 25 26 27 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20		27		- 5	0		0.0		0.00	0.04	0.1	17		1.9%	56.2% 44.7%	5.3% 17.6%	0.2%	425 425	100.0%	0.03	0.25	0.03	0.00	0.0	0.4	50.7% 50.2%	1.1%	28.6%	3.5% 10.1%	0.2%	1.6%	50.7% 50.2%
10		28		3	0	02 0.38	0.2	11	0.01	0.07	10	20		2.4%	18.0% 12.1%	20.6%	1.1%	7.2% 14.4%	100.0%		0.14	0.15	0.01	0.0	0.3	35.5%	2.1%	16.1% 16.2%	145%	0.9%	2.25 4.25	35.5%
19		35	_	- 5	0	05 023	0.0	10	0.00	0.10	6.	7		7.0%	34.1% 50.8%	12.3%	0.4%	14.4%	100.0%	0.04		0.04		0.0	0.2	37.3% 52.3%	19%	16.2%	6.4% 2.8%	0.3%	1.6%	37.3% 52.3%
21		128		- 5			0.0	75	0.01	0.03	0.1	5		5.0%	45.8%	6.1% 10.4%	0.6%	3.7% 14.1%	100.0%	0.03	0.20	0.04	0.00	0.0	0.3	44.4% 29.6%	1.6%	23.1%	4.1%	0.4%	1.5% 2.1%	44.4%
22		130		1	0	00 0.07	0.0	22	0.00	0.03	- 6			2.2%	37.5% 51.4%	5.5%	0.0%	15.8%	100.0% 100.0%	0.00	0.03	0.01	0.00	0.0	0.0	31.2%	1.1%	17.5%	5.7% 3.2%	0.5%	4.4%	39.6% 38.3%
24		132		-	0		0.0		0.00	0.04		8		1.5%	42.7% 30.5%	4.5% 6.3%	0.5%	17.6%	100.0%	0.00	0.03	0.01	0.00	0.0		35.5%	1.0%	17.1% 9.8%	1.0%	0.5%	3.5% 2.9%	38.7%
26		126		-	0	00 0.06	0.0	0	0.00	0.01	- 6	5		0.7%	41.5%	2.7%	0.7%	6.8%	100.0%	0.00	0.02	0.00	0.00	0.0	0.0	45.2%	0.7%	15.0%	2.7%	0.7%	2.0%	46.2%
27		138		2	- 0		0.0		0.00	0.05	- 8	2	-	1.5%	29.5% 49.7%	12.8% 8.0%	0.6%	14.6% 28.7%	100.0%	0.00	0.04	0.03	0.00	0.0	0.1	29.5% 41.0%	125	11.6% 21.6%	7.9%	0.3%	165	29.5% 41.0%
29		140		2	0		0.0	23	0.00	0.03	0.	12		2.5%	16.6% 42.4%	2.8%	0.6%	8.2%	100.0% 100.0%	0.01	0.05	0.01	0.00	0.0		51.1% 36.5%	1.9%	15.1% 16.6%	1.9%	0.3%	2.5% 6.2%	\$1.1% 16.5%
31		146		2	0	01 0.11	0.0	23	0.00	0.00		12		2.0%	33.1%	9.1%	0.6%	19.9%	100.0%	0.01	0.04	0.02	0.00	0.0	0.1	36.9%	2.5%	12.6%	6.6%	0.3%	4.4%	36.9%
32	M Pate	h 147	+	2	0		0.0		0.00	0.05	0.	19	-	2.0%	49.5% 48.2%	4.8%	0.5%	12.2% 12.9%	100.0% 100.0%	0.01	0.09	0.01	0.00	0.0		46.4%	1.5%	22.2% 20.7%	2.6%	0.3%	13%	46.4% 42.4%
24		152		5	0		0.0		0.00	0.17	0.1	13		1.9%	41.2%	11.5%	0.8%	22.4%	100.0%	0.01	0.09	0.05	0.00	0.0		42.2%	1.2%	17.1%	0.5%	0.8%	1.5%	40.3%
36		153			- 0	04 0.42	0.0	22	0.00	0.00	- 0.0	22		2.4%	48.2% 44.9%	10.4%	0.3%	26.4% 6.3%	100.0%	0.02	0.20	0.02	0.00	0.0	0.4	48.4% 47.8%	2.0%	22.0% 21.5%	6.0% 1.7%	0.2%	6.4% 2.6%	40.4% 47.8%
37		155		- 5			0.0		0.00	0.00	6.	12		3.3%	44.4% 42.2%	5.3% 21.0%	0.5%	9.6% 18.2%	100.0%	0.02	0.19	0.02		0.0		49.8%	2.1%	23.1%	2.3%	0.4%	2.8% 4.1%	49.8%
29		162		5	0		0.0		0.00	0.19	0.1	12		2.2%	42.5%	11.2%	0.7%	36.0%	100.0%	0.01	0.10	0.04	0.00	0.0		41.8%	1.7%	18.2%	8.2%	0.7%	9.6%	41.0%
41		163		5	0		0.0		0.00	0.10	0.1	11		2.8%	49.5% 45.4%	1.6%	0.5%	12.0%	100.0% 100.0%	0.02	0.20	0.02	0.00	0.0	0.4	41.9%	2.1% 2.5%	24.9% 23.2%	2.3%	0.4%	3.5% 2.5%	48.9% 49.0%
42		165	130	5	0	02 0.30		10	0.00	0.14	0.7			2.4%	17.9% 16.6%	12.9%	0.3% 0.7%	17.4% 12.2%	100.0%	0.01	0.14	0.05	0.00	0.0		47.6% 40.8%	1.8%	18.1%	6.9%	0.3%	4.9%	47.6% 40.8%
44		2	120	2	0	01 0.23	0.0		0.00	0.09	0.	ř		2.5%	56.5%	12.5%	0.2%	21.1%	100.0%	0.01	0.09	0.03	0.00	0.0	0.1	32.4%	1.7%	22.6%	7.6%	0.2%	6.6%	32.4%
45		4	132		- 0		0.0		0.00	0.05	- 8		-	1.9%	44.5% 15.0%	635	0.8% 0.7%	7.0%	100.0% 100.0%	0.01	0.09	0.02	0.00	90		31.0%	1.5% 2.4%	18.6%	4.6%	0.8% 0.5%	2.5% 2.4%	31.0% 34.5%
47		8			0		0.0		0.00	0.02		90		2.0%	36.8% \$1.0%	6.7% 19.5%	0.7%	1.7% 16.9%	100.0% 100.0%	0.01	0.06	0.02	0.00	0.0		43.0%	1.7%	13.7% 18.8%	5.2% 13.1%	0.5%	1.2% 5.3%	43.0% 29.8%
49		- 11	139	- 4	0	02 0.34	0.0	9	0.00	0.14	0.0	2		2.9%	52.2%	13.7%	0.5%	31.6%	100.0%	0.02	0.15	0.05	0.00	0.0	0.3	46.0%	2.6%	24.5%	7.7%	0.5%	0.6%	46.0%
50		12	140		0	02 0.38		23	0.01	0.05	0.	14		3.0% 2.7%	51.2% 60.5%	3.4% 10.5%	0.7% 0.8%	7.0% 18.1%	100.0%	0.02	0.18	0.02	0.00	0.0		45.9% 35.8%	2.2%	24.9% 24.5%	2.4% 7.4%	0.5%	2.3% 5.0%	45.9% 35.8%
52		10	146	4	0	02 024	0.1	11	0.00	0.14	0.0	20		3.1%	14.6%	15.5%	0.6%	20.3%	100.0%	0.02	0.10	0.06	0.00	0.0	0.2	21.7%	2.8%	14.4%	9.3%	0.6%	5.7%	31.7%
53		20	147	4	0	02 0.35	0.0	6 0	0.00	0.13	0.	12	\rightarrow	2.9%	47.9% 52.1%	8.2% 9.7%	0.4%	17.4% 10.6%	100.0%	0.02	0.17	0.03	0.00	0.0	0.3	41.4%	2.5%	22.6%	3.7% 5.7%	0.4%	5.2% 2.8%	40.4% 42.3%
55		24	152	10	0	04 090	0.3	5	0.02	0.34		17	=	2.1% 5.0%	48.1% 44.4%	18.6%	13%	19.1%	100.0% 100.0%	0.03	0.37	0.26	0.02	0.1	8.6	34.2% 41.1%	1.8%	20.0%	13.7%	12%	5.3% 5.6%	34.2% 41.1%
57		25							0.01	0.17		25		4.7%	55.8%	3.6%	0.4%	8.4%	100.0%	0.08		0.04	0.01	0.0	0.9	47.6%	4.0%	27.5%	2.0%	0.3%	2.7%	47.6%
58		27	155	10	0	07 1.16	0.0	12	0.01	0.14	21	00 T	\dashv	3.4% 1.5%	57.8% 51.7%	4.2% 21.5%	0.5% 1.0%	7.1% 10.6%	100.0%	0.05	0.60	0.06	0.01	0.0	0.9	49.5%	2.5% 1.2%	29.9%	2.7% 13.2%	0.4%	2.4% 1.5%	49.5% 46.9%
60		34	162	10	a	05 0.83	0.2	15	0.02	0.36	1	72		3.1%	47.7%	20.4%	1.4%	20.6%	100.0%	0.05	0.34	0.26	0.02	0.1	0.0	34.5%	2.6%	19.8%	15.0%	1.1%	5.8%	14.5%
31 32 33 34 35 36 37 38 39 30 40 41 42 44 44 45 46 47 48 55 55 55 55 55 55 55 55 55 5		35	163	10	0	07 1.15	0.0	17	0.01	0.31		34	\rightarrow	4.4%	41.6% 56.3%	9.2% 3.6%	0.6%	19.1%	100.0% 100.0%	0.06	0.62	0.07		0.0	0.9	41.1%	17% 10%	22.5% 30.1%	2.2%	0.6%	4.6%	43.1% 47.5%
63		37	163	10	ā	08 093	0.2	2	0.01	0.11	10	и		4.1%	50.5%	11.7%	0.5%	10.3%	100.0%	0.07	0.47	0.12	0.01	0.0	0.6	49.1%	15%	25.6%	6.6%	0.4%	2.9%	48.1%

- M-patch Mid CH

															max ratio ou	t of all beams											max ratio out of all b	eams		
							4	lom2 PD	(mW/cm	2)			45%	65.9%	23.0%	12%	28.6%	100.0%	4cm2 PD(r	nW/cm2	at 10mm eva	luation dis	tance	59.4%	4.1%	24.4%	16.9%	1.2%	5.7%	59.4%
No. Mo	dule Typ	e Seam ID_1	Berna ID,2	Feed no.				П	П			per Beam	ratio	ratio	nsio	ratio	ntio	ratio						ratio	ratio	nsio	ratio	ratio (Sottom	ratio	ratio
					S4(Right)	53(Left)	SS(Top)	\$6(Bo	etorn) S	3(Front)	S2(Rear)	Back-off	(Right 2mm)/(worst- surface 2mm)	(Left 2mm)/(wont- surface 2mm)	(Top 2mm)/(worst- surface 2mm)	(Bottom 2mm)/(worst- surface 2mm)	(Fornt 2mm)/(worst- surface 2mm)	(Rear 2mm)/(worst- surface 2mm)	S4(Right) S3(Left)	SS(To)) SE(Bottom)	\$1(From	t) S2/Rear	(10mm/2mm)	(Right 10mm)/(worst- surface 2mm)	(Left 10mm)/(worst- surface 2mm)	(Top 10mm)/(worst- surface 2mm)	10mm)/(worst- surface 2mm)	(Front 10mm)/(worst- surface 2mm)	(Rear 10mm)/(worst- surface 2mm)
1		. 0		1	0.00	0.08	0.04	0.1	00	0.02	0.26	(600)	1.6%	30.6%	14.9%	0.4%	7.8%	100.0%	0.00 0.02			0.01	0.10	22.6%	1.2%	9.4%	7.5%	0.0%	2.7%	19.6%
2 3 4 5 6 7		- 4				0.09			30	0.01	0.24		2.1%	16.0% 52.5%	8.4% 5.7%	0.4%	4.6%		0.00 0.06	0.01	0.00	0.00	0.09	38.5%	2.1%	13.0%	5.9% 3.3%	0.4%	1.5%	38.5% 38.1%
4		6				0.09				0.01	0.21		2.4%	42.9% 10.7%	5.9%	0.5%	19%		0.00 0.04			0.00	0.06	28.25	2.0%	20.0%	1.9%	0.5%	1.0%	28.3% 32.0%
6		10		2	0.01	0.17	0.05	0	21	0.02	0.47		1.5%	16.6%	11.5%	1.3%	4.5%	100.0%	0.01 0.07	0.04	0.01		0.11	24.3%	1.3%	14.3%	0.5%	1.3%	1.3%	24.3%
7		11		2 2	0.01	0.17	0.08	0.0		0.04	0.49	\vdash	2.0%	36.5% 58.1%	17.9% 5.4%	0.2%	9.4% 5.6%	100.0% 100.0%	0.01 0.08		0.00	0.02	0.19	40.4% 57.3%	1.7%	17.2% 28.2%	10.3% 2.5%	0.2%	35% 2.1%	40.4% 57.3%
9		13		2	0.01	0.26	0.04	0.1		0.02	0.51		1.4%	\$1.2% 30.0%	8.2% 17.1%	0.8%	4.1%	100.0%	0.01 0.11	0.03	0.00	0.01	0.23	44.5% 32.2%	12% 12%	20.8% 9.9%	5.9% 9.9%	0.8%	1.2%	44.5% 32.2%
		19		2	0.01	0.19	0.04	0.1	22	0.05	0.40		2.7%	47.1%	10.9%	0.2%	11.9%	100.0%	0.01 0.09	0.02	0.00	0.02	0.23	56.1%	2.2%	22.1%	5.7%	0.2%	4.0%	56.1%
12 13 14 15		20	_			0.17				0.02	1.11	-	1.8% 1.8%	33.3% 43.6%	14.5% 18.2%	0.6%	4.0%		0.01 0.07			0.01	0.22	41.8% 29.1%	1.2% 1.4%	13.5% 18.0%	5.9% 11.9%	0.4% 1.2%	1.0%	43.8% 39.1%
34		25 26				0.36	0.22	ä	50	0.05	0.92		1.6%	39.3% 57.8%	23.8% 4.8%	0.4%	5.2% 10.1%	100.0% 100.0%	0.03 0.14	0.16	0.00	0.02	0.29	31.5% 49.7%	11%	15.6%	16.9%	0.3%	2.0%	31.5% 49.7%
16		27			0.04	350	0.06	0.1	30	0.04	1.06		4.0%	61.9%	5.7%	0.4%	1.5%	100.0%	0.04 0.35	0.03	0.00	0.02	0.60	56.9%	3.3%	32.0%	2.8%	0.2%	1.5%	56.9%
17		28 34	-	5 5	0.02	0.49	0.22	0.1		0.05	1.00	 	1.8%	45.4% 44.8%	20.2%	12%	4.4%	100.0% 100.0%	0.01 0.23	0.09	0.01	0.02	0.54	50.2% 37.4%	1.3%	21.7% 18.2%	8.2% 13.1%	1.1% 0.7%	1.4%	50.2% 37.4%
19		35 16		5	0.03	0.32	0.10	0.0	00	0.05	0.73		4.4%	44.0%	13.2%	0.6%	7.2%		0.03 0.13		0.00	0.01	0.31	42.3%	4.1%	18.5%	6.6%	0.6%	1.8%	42.3% 50.4%
21		37		- 5	0.04	0.52	0.07	0.1	21	0.04	1.00		3.5%	\$1.9%	6.6%	0.5%	4.0%	100.0%	0.03 0.29	0.02	0.00	0.02	0.46	45.9%	2.9%	28.7%	2.3%	0.4%	1.7%	45.9%
22		128		-	0.01	0.10	0.02	8		0.05	0.25		2.4% 1.2%	17.9% 44.6%	7.9%	0.6%	19.4%		0.01 0.04			0.01	0.10	40.7%	2.0% 1.2%	14.6%	4.3%	0.8%	4.2%	40.7%
24		132		1	0.01	0.10	0.01	0.0	30	0.04	0.26		2.0% 2.2%	17.9% 17.8%	4.3%	0.4%	17.2%	100.0%	0.00 0.03	0.01	0.00	0.01	0.10	39.8% 29.1%	1.2%	12.5%	2.7%	0.4%	3.1% 1.2%	39.8% 39.1%
26		126		-	0.00	0.07	0.01	0.		0.01	0.10		1.1%	41.3%	2.8%	0.6%	5.6%	100.0%	0.00 0.03	0.00	0.00	0.00	0.09	49.2%	1.1%	16.2%	1.7%	0.6%	1.7%	49.2%
27		138		2	0.01	0.20	0.04	9	20	0.08	0.44		1.6%	44.9% 45.8%	9.3%	0.5%	17.8% 12.1%	100.0%	0.01 0.07	0.03	0.00	0.02	0.13	28.4%	1.1%	15.1% 21.5%	5.6%	0.5%	185 145	28.4% 39.7%
29		140		2	0.01	0.16		0.1		0.02	0.40		2.0%	41.0%	1.5%	0.5%	5.5%	100.0%	0.01 0.08	0.01	0.00	0.01	0.21	53.0%	1.3%	18.8%	1.3%	0.5%	2.0%	53.0%
30 31 32 33		141	_			0.17	0.02	0.1	50	0.13	0.46	-	1.8% 1.5%	38.3% 37.0%	8.1% 6.0%	0.2% 0.5%	28.6% 14.3%		0.01 0.07			0.03	0.15	22.6% 29.3%	1.3%	16.1% 15.5%	4.8% 4.3%	0.2% 0.3%	5.7% 1.0%	32.6% 39.3%
32	M Pate	h 147				0.19				0.07	0.52		2.1%	41.4%	42%	0.6%	12.7%		0.01 0.10			0.02		49.8%	1.7%	19.3%	2.5%	0.4%	3.4%	49.8% 45.3%
34		152		5	0.02	0.37	0.06	0.1	21	0.14	0.70		2.1%	52.1%	12.0%	0.7%	19.7%	100.0%	0.01 0.16	0.06	0.00	0.03	0.27	31.0%	1.4%	22.0%	8.0%	0.6%	4.3%	38.0%
35		153	_	5 5		0.46				0.16	1,22	\vdash	2.2% 3.5%	51.0% 43.1%	5.7% 2.5%	0.6%	17.5% 6.7%	100.0% 100.0%	0.02 0.23			0.04		46.3%	1.7% 2.7%	25.6% 22.1%	1.6%	0.3%	46%	46.3% 49.2%
37		155		5		0.40		9	20	0.15	1.04		2.9%	38.3% 41.0%	5.2% 15.8%	0.4%	14.8%		0.02 0.19			0.03	0.56	51.7% 17.2%	1.9%	18.2% 18.4%	2.2%	0.3%	2.8% 3.5%	53.7% 37.2%
29		162			0.02	0.37	0.08			0.14	0.70		2.1%	52.8%	11.7%	0.9%	19.3%	100.0%	0.01 0.17	0.05	0.00	0.03	0.29	40.9%	1.4%	24.9%	7.6%	0.6%	4.7%	40.9%
40 41 42 43		163	_			0.53	0.02	0.1	31	0.08	1.17	-	2.9% 4.2%	45.4% 15.1%	3.5% 2.0%	0.3%	8.2%	100.0%	0.03 0.18	0.01	0.01	0.03	0.57	48.8% 53.0%	2.1% 2.4%	21.5% 17.0%	2.1%	0.3%	2.7% 2.4%	48.8% 53.0%
42		165	128	5 2	0.02	0.43				0.19	0.97		2.3%	44.4%	13.2%	0.4%	19.1%		0.02 0.21			0.04		47.2%	1.5% 2.2%	21.2%	6.8% 7.6%	0.3%	3.7%	47.2% 41.6%
44		2	120	2	0.01	0.22	0.04	0.1	30	0.06	0.53		1.9%	41.3%	6.8%	0.6%	10.4%	100.0%	0.01 0.08	0.02	0.00	0.02	0.21	31.1%	1.5%	15.9%	4.2%	0.4%	2.8%	38.8%
44 45 46 47 48 49 50		- 4	132	2 2	0.02	0.31		0.0	00	0.06	0.53	\vdash	2.8%	58.1% 44.6%	4.9%	0.8%	11.3%	100.0%	0.01 0.13		0.00	0.02	0.21	38.7% 32.6%	2.1% 1.3%	25.0% 17.6%	1.0% 3.8%	0.6%	2.8%	38.7% 32.6%
47			126			0.19		0.0		0.02	0.40		2.1%	39.2% 48.1%	5.6% 12.7%	0.6%	4.0% 12.5%	100.0%	0.01 0.07		0.00	0.01	0.22	45.2% 20.4%	1.7%	14.4%	4.4% 7.7%	0.6%	1.35 2.55	45.3% 30.4%
49		11	139	4	0.02	0.51	0.11	0.1	55	0.12	0.07		2.3%	\$7.1%	12.0%	0.5%	16.1%		0.02 0.24	0.06	0.00	0.04	0.45	50.9%	1.9%	26.9%	6.4%	0.3%	42%	50.9%
50		12	140			0.48		9		0.06	0.96		2.4% 1.8%	49.6% 59.3%	10.3%	0.6%	5.8%	100.0%	0.02 0.23		0.01	0.02	0.51	40.5%	1.7%	24.1%	1.9%	0.5%	2.1%	52.6% 40.5%
52		18	146	4	0.02	0.33	0.13	0.0		0.11	0.77		2.2%	42.3%	16.7%	0.5%	14.1%		0.01 0.15	0.08	0.00	0.03		38.7%	1.7%	19.8%	9.7%	0.4%	3.2%	38.7%
54		19 20	147 140	4	0.02	0.48	0.13	0.1	21	0.14	1.04		2.7% 2.4%	46.1% 47.9%	13.1%	0.4% 0.8%	13.3%	100.0%	0.02 0.21	0.05	0.01	0.02	0.49	53.3% 49.0%	2.3%	22.4% 21.2%	4.5% 5.9%	0.3%	3.7% 2.0%	53.3% 49.0%
55 56 57 58 59		24	152			1.00				0.22	1,99		2.2% 1.5%	48.6% 51.3%	16.5%	1.3%	11.2%		0.03 0.41			0.07	0.72	36.6% 44.7%	1.7%	20.5%	11.3%	1.2%	15% 46%	16.6% 44.7%
57		26	154	10	0.11	1.41	0.09	0.0	22	0.18	2.45		4.5%	57.4%	3.8%	0.6%	7.5%	100.0%	0.09 0.73	0.05	0.01	0.06	1,29	52.8%	1.0%	29.9%	2.2%	0.4%	2.6%	52.8%
58		27	155			1.41				0.22	2.44	⊢	2.9% 1.5%	57.6% 56.9%	4.1%	0.1%	9.0% 7.9%	100.0%	0.06 0.74			0.06		51.8% 47.2%	2.3% 1.2%	30.1% 27.3%	2.9%	0.2%	2.6%	51.8% 47.2%
60		34	162	10	0.06		0.36	0.		0.23	1.07		1.0%	55.1%	19.0%	0.8%	12.4%	100.0%	0.04 0.47	0.24	0.01	0.08		35.8% 47.6%	2.4%	24.9%	12.9%	0.7%	4.2%	35.0%
62		35	163			1.34				0.14	2.40		2.9% 3.1%	45.2% 54.1%	2.9%	0.4%	6.6%		0.07 0.70			0.05		47.6% 50.8%	2.3%	21.7%	1.6%	0.4%	2.4% 2.6%	47.6% 50.8%
63		37	165	10	0.07	1.33	0.26	0.1	21	0.32	2.02		3.2%	65.9%	12.7%	0.5%	15.7%	100.0%	0.05 0.70	0.14	0.01	0.07	1.02	50.2%	2.6%	24.4%	6.0%	0.5%	1.6%	50.2%

- M-patch High CH

_													_				t of all beams			_						_			max ratio out of all			
Н		_	_	_	_				PD(mW/	_			+							_			at 10mm eval			 			1			
							_	4010	c PD(mwy)	cmz)		per	-	4.5%	62.2%	22.8%	14%	26.0%	100.0%	_	CRU PUIT	wycmz) i	at tomm eva	suston a	stance	\$8.5%	2.7%	32.1%	152%	1.2% ratio	8.7%	SASK
No.	Module 1	pe Bean	n ID_1 Be	ma D,2	Feed no.	S4Right S31	etci SS(T)		6(Tottom)	S1/Erret	52/Res	Dear	(Right 2)	ratio mm)/(worst-	ratio (Left 2mm)/(wont-	ratio (Top 2mm)/(wonst-	ratio (Bottom 2mm)/(wont-	ratio (Forst 2mm)/(worst-		54(Right)	53(Left)	SS(Top)	SE(Eottom)	\$1(Fro	nt) S2(Rear	ratio worst-surface	ratio (Right 10mm)/(worst-	ratio (Left 10mm)/(wont-	ratio (Top 10mm)/(wonst-	(Bottom 10mm)//wont-	ratio (Front 10mm)/(worst-	ratio (Rear 10mm)/(wont-
							1			STIPPOR	32000	(49)	ELP3	ce 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)							(10mm/2mm)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2 mm)	surface 2mm)	surface 2mm)
2			2		+		0 00		0.00	0.03	0.21	-		1.7%	11.8% 39.2%	14.1% 7.8%	0.4% 0.8%	12.4% 8.2%	100.0% 100.0%	0.00	0.02	0.02	0.00	0.01	0.09	34.9%	0.4%	10.3%	8.1% 5.5%	0.4%	3.4% 2.4%	38.9% 36.9%
2 3 4 5 6 7 8 9 10			4		1		1 00		0.00	0.01	0.25	_		2.4%	43.8% 46.7%	7.2%	0.4%	4.8%	100.0%	0.01	0.05	0.01	0.00	0.00		29.4%	2.0%	17.9%	4.0%	0.4%	1.2%	39.4%
5			8		-	0.00 0.0	9 0.0	22	0.00	0.00	0.20		•	1.0%	47.2%	45%	0.5%	2.0%	100.0%	0.00		0.01	0.00	0.00	0.07	36.7%	1.0%	16.1%	3.5%	0.5%	0.5%	16.7%
7			10		2		4 0.0 6 0.0		0.01	0.03	0.57	+		0.9%	41.8% 35.7%	10.3%	0.9%	5.1% 17.5%	100.0%	0.01	0.10	0.04	0.01	0.01		28.2% 40.4%	0.9%	17.1%	6.1%	0.9%	1.6%	28.2%
8			12		2		3 00			0.04	0.44	-		2.1%	52.2% 53.1%	6.8%	0.9%	8.4% 4.7%		0.01	0.10	0.01	0.00	0.01		57.4% 46.2%	1.6%	22.6% 22.2%	3.2% 6.9%	0.7%	2.5% 1.6%	57.4% 46.2%
10			18		- 2	0.01 0.2	3 0.0	20	0.00	0.03	0.55			1.3%	415%	14.6%	0.5%	45%	100.0%	0.01	0.09	0.05	0.00	0.01	0.19	33.6%	1.1%	17.0%	8.5%	0.5%	1.8%	33.6%
			20		2	0.01 0.2	7 00		0.00	0.09	0.49	+	•	1.6%	47.1% 46.4%	13.7%	0.6%	24.1% 5.3%	100.0%	0.01	0.07	0.03	0.00	0.01	0.23	58.5% 47.0%	1.4%	19.3% 19.3%	8.1% 5.3%	0.9%	7.6%	58.5% 47.0%
12			24		5	0.01 0.0	8 02	9	0.02	0.07	1.10			1.3%	55.2% 44.8%	18.0%	1.4%	5.3%	100.0% 100.0%	0.01	0.28	0.13	0.01	0.03		38.2%	1.1%	25.7% 19.2%	11.7% 15.2%	1.2%	2.9%	38.2% 33.7%
15			26		5		6 00		0.01	0.20	0.74		_	2.3%	62.2%	10.9%	0.8%	26.8%	100.0%	0.01	0.24	0.06	0.00	0.06	0.40	54.1%	1.9%	32.1%	7.6%	0.5%	8.7%	54.1%
16			27 28		5	0.03 0.5	9 02	11	0.00	0.05	1.12	+	_	1.6%	52.2% 60.9%	2.7% 18.2%	0.4%	5.2% 5.0%	100.0%	0.03	0.27	0.01	0.00	0.02		56.6% 51.1%	2.6% 1.2%	28.2% 31.1%	1.2% 10.2%	0.3%	1.5%	56.6% 53.1%
18			14		5	0.02 0.0	1 02			0.06		-		1.3%	\$3.3% \$0.1%	19.8%	0.6%	5.4% 4.6%		0.01	0.26			0.03		37.8% 46.3%	1.0%	23.1% 22.1%	12.5%	0.5%	2.4%	37.8% 46.7%
20			16		- 5	0.03 0.5	1 0.0	53	0.00	0.07	0.88	_	_	3.2%	58.0% 51.0%	2.8%	0.3%	8.2%	100.0%	0.02	0.28	0.01	0.00		0.50	56.9%	2.7%	31.3% 27.2%	1.5%	0.3%	2.4%	56.9%
21			28		5	0.03 0.5	7 0.0		0.01	0.05	0.26	+		2.8% 1.9%	\$3.0% 27.7%	6.0%	0.6%	47% 7.3%	100.0%	0.02	0.28	0.01	0.00	0.01		54.4% 41.5%	2.2% 1.5%	27.2% 10.4%	2.5% 4.6%	0.4%	0.8%	54.4% 43.5%
23			30		1	0.00 0.0	8 00	12	0.00	0.02	0.26			1.5%	30.9% 31.6%	5.8%	0.4%	8.5% 6.5%	100.0%	0.00	0.03	0.01	0.00	0.00		39.0% 40.1%	1.2%	10.8%	2.7%	0.4%	1.5%	39.0%
25			34		- 1		8 00		0.00	0.01	0.25			1.6%	30.5%	2.8%	0.0%	4.0%	100.0%	0.00	0.03	0.01	0.00	0.00	0.10	41.0%	1.2%	11.2%	2.0%	0.0%	1.2%	41.0%
26			36		2	0.00 0.0	7 0.0	14	0.00	0.01	0.18	+	+	1.1%	12.6% 12.7%	7.2%	0.5%	1.8%	100.0% 100.0%	0.00	0.02	0.00	0.00	0.00	0.09	30.5%	0.5%	11.4% 12.1%	1.1%	0.5%	1.1%	50.5% 30.6%
12 14 15 16 17 18 19 20 21 22 22 23 24 25 26 27 28 29			19		2	0.01 0.2	1 00	23	0.00	0.04	0.56	_		2.0%	37.2%	455	0.4%	4.9%	100.0%	0.01	0.10	0.02	0.00	0.01	0.24	42.7% 54.6%	1.4%	17.8%	2.9%	0.2%	2.3%	42.7% 54.6%
30			41		2		8 00		0.00	0.07	0.57			1.0%	31.3%	7.6%	0.4%	11.6%	100.0%	0.01	0.00	0.03	0.00	0.01		31.3%	1.2%	14.3%	4.0%	0.2%	1.9%	33.3%
31	M P	nch 1	46		2		7 0.0		0.00	0.03	0.54	+		1.3%	32.3% 28.8%	5.4% 4.1%	0.2%	6.3%	100.0% 100.0%	0.01	0.08	0.02	0.00	0.01		41.9%	0.9%	15.4% 11.2%	4.1% 2.1%	0.2%	1.5% 2.5%	43.9% 53.1%
22		_	48 52		2		5 0.0		0.00	0.05	0.49			2.0%	31.2% 36.2%	9.7%	0.2%	9.5%	100.0%	0.01	0.08	0.03	0.00	0.01		49.5%	0.8%	15.2% 17.1%	6.1% 5.6%	0.2%	2.0%	48.1% 49.6%
35			53		5	0.03 0.5	5 00	22	0.01	0.12	1,24			2.4%	44.1%	2.6%	0.4%	9.4%	100.0%	0.02		0.02	0.00	0.04	0.61	49.2%	1.8%	22.6%	1.7%	0.2%	1.0%	49.2%
36		\rightarrow	54 55		5		9 00		0.00	0.08	1.10	+		1.8% 1.7%	24.7% 31.2%	5.1% 5.7%	0.3%	9.0%		0.03	0.11	0.02	0.00	0.02		50.4% 51.6%	2.8% 2.4%	12.1% 16.1%	2.6%	0.2%	2.2% 1.6%	58.4% 51.6%
38			62		5		2 0.1	15	0.00	0.05	0.97	=		1.0%	31.3% 38.9%	15.7%	0.5%	5.2%	100.0%	0.02	0.15	0.11	0.00	0.02	0.41	41.9%	1.9%	15.3% 18.8%	11.6%	0.3%	2.4%	41.9% 52.0%
40		- 1	63		Ś	0.04 0.4	1 0.0		0.00	0.07	1.10			3.7%	37.1%	3.6%	0.3%	6.3%	100.0%	0.03	0.20	0.02	0.00	0.03		41.7%	2.5%	18.4%	1.7%	0.2%	2.3%	40.7%
41		-	64		5	0.04 0.4		15	0.00	0.10	1,24	-	,	4.5% 1.5%	25.3% 29.1%	11.0%	0.4%	9.8%	100.0%	0.04	0.12	0.02	0.00	0.02		57.7% 48.0%	3.7% 2.3%	12.1% 19.3%	1.7% 7.2%	0.3%	1.9% 2.8%	57.7% 48.0%
43		F	0	128	2	0.01 0.1	9 0.0	57	0.00	0.07	0.53	=		2.1%	15.8% 11.7%	12.5%	0.2%	11.2%	100.0%	0.01	0.07	0.04	0.00	0.02	0.24	45.8%	1.7%	12.5%	7.5%	0.2%	2.3%	45.8% 36.9%
22 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 50 50 51 52 53 54 55 55 55 55 55 55 55 55 55		=	4	132	2		4 00		0.00	0.04	0.56			2.5%	42.8% 45.4%	53% 63%	0.4%	6.6%	100.0%	0.01	0.09	0.02		0.01	0.23	40.7% 33.0%	225	16.0% 17.6%	1.8% 1.6%	0.4%	225 215	40.7% 38.0%
45			ů.	116	2 2	0.01 0.2	0.0	12	0.00	0.02	0.46		•	1.1%	43.0%	4.6%	0.7%	1.1%	100.0%	0.00	0.07	0.02	0.00	0.00	0.20	44.5%	0.9%	14.6%	3.3%	0.4%	0.9%	44.5%
40		=	10	138	4	0.02 0.1			0.01	0.09	1.22	₽		1.3%	41.6% 45.0%	11.4%	0.7%	7.6%	100.0%	0.01	0.21	0.07	0.01	0.03		26.6%	0.9%	16.8% 20.6%	5.3% 7.0%	0.7%	2.0%	26.6%
50				140	4	0.02 0.3	6 00 7 01	75	0.01	0.06	0.93			2.2%	38.9% 54.1%	5.1% 12.4%	0.9%	6.8%	100.0% 100.0%	0.02	0.15	0.03	0.01	0.02	0.40	51.7% 42.3%	1.7%	16.3% 25.2%	11%	0.6%	1.8%	51.7% 42.3%
52			18	146	4	0.02 0.4	0 0.1	2	0.01	0.13	0.94		•	1.7%	42.2%	13.3%	0.4%	9.8%	100.0%	0.02	0.31	0.08	0.00	0.03	0.38	42.4%	1.2%	19.2%	0.6%	0.4%	2.7%	42.3% 40.4%
53		=		147	4		6 QD		0.01	0.18	0.99	=		2.0%	16.9% 44.3%	7.9%	0.5%	18.2%	100.0% 100.0%	0.02	0.15	0.05		0.05		56.0% 47.9%	1.6%	15.6%	4.7% 5.4%	0.3%	5.1%	56.0% 47.9%
55			ŠŽ.	152	10	0.03 1.1	2 0.3	10	0.02	0.13	2.05	_		1.6%	33%	14.8% 13.7%	0.4% 0.9% 0.6%	9.2% 6.4%	100.0%	0.03	0.47	0.19	0.02	0.07	0.82	40.3%	1.3%	20.9% 22.9%	9.4%	0.8%	2.5% 3.2%	40.3%
57		\vdash	26	153	10	0.07 0.3	5 0.1	10	0.01	0.35	1.92	+	1	2.3% 3.5%	38.9%	9.4%	0.7%	18.0%	100.0%	0.05	0.66		0.01	0.06		44.3% 54.9%	2.6%	27.7%	5.8%	0.5%	5.8%	44.3% 54.9%
58			27	155	10		8 0.1		0.01	0.19	2.47	-		1.0% 2.7%	43.8% 60.9%	4.1%	0.4%	7.5%	100.0% 100.0%	0.06	0.56	0.06	0.01	0.05		52.8% 49.6%	2.4%	22.9% 30.7%	2.3%	0.3%	1.9%	52.8% 49.6%
60			14	162	10	0.03 1.2	1 0.1	12	0.01	0.12	2.11			1.4%	57.0%	15.2%	0.7%	5.9%	100.0%	0.02	0.55	0.20	0.01	0.07	0.93	44.0%	1.1%	25.8%	9.5%	0.5%	2.1%	44.0%
59 60 61 62			16	163	10	0.09 05	9 0.1	7	0.01	0.17	2.11			2.9% 4.0%	47.0% 42.0%	6.6% 3.2%	0.4%	10.0%	100.0%	0.04	0.45	0.09		0.04		45.5% 55.3%	2.1%	23.3%	1.0%	0.3%	1.8% 2.8%	45.5% 55.2%
63			37	165	10	0.09 1.3	6 02	E.	0.02	0.20	2.41			1.5%	\$6.6%	10.9%	0.6%	0.4%	100.0%	0.06	0.69	0.16	0.01	0.07	1.26	52.4%	2.3%	28.7%	6.5%	0.4%	2.9%	52.4%

Table 5. PD of Ant M- patch antenna (24GHz-n258)

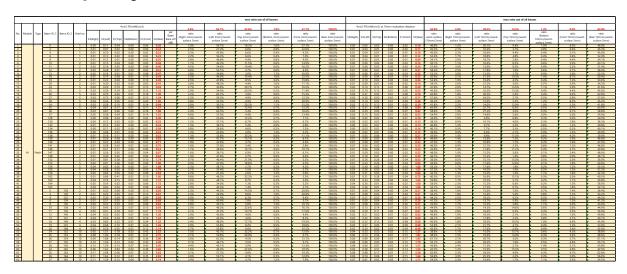
- M-patch Low CH

$\overline{}$												1		may ratio ou	t of all beams												max ratio out of all I	Name .		
Н		_	т —	_	_		4.	m2 PDimW	tow Ti								_		-2.00/-	Million Till	et 10mm eva	tuetas et		-						
I I	Module Typ	e Seam ID	1 Sema ID.	Feed no.	_		_	iiu. rojiini	(Cita)	1	per	SAS	61.1% ratio	22.2%	2.8%	49.4% mtio	100.0%	- "	Jan. Poja	MyCina) a		The same of	-	66.3%	41%	26.8%	119%	2.0% ratio	15.4%	66.2%
-	199			1	S4(Right)	\$3(Left) 1	SS(Top)	S6(Bottom)	S1(From	52/Res	Bears Back-of	(Works Toward Connect	(Left 2mm)/(wont- surface 2mm)	(Top 2mm)/(wonst- surface 2mm)	(Bottom 2mm)/(wont- surface 2mm)	(Fornt 2mm)/(wont- surface 2mm)		S4(Right)	S3(Left)	SS(Top)	SE(Bettom)	\$1(Fro	nt) S2/Rear	worst-surface (10mm/2mm)		(Left 10mm)/(worst- surface 2mm)	(Top 10mm(y(wonst- surface 2mm)	(Bottom 10mm)/(worst- surface 2mm)	(Front 10mm)/(worst- surface 2mm)	(Rear 10mm)/(worst- surface 2mm)
1		0			0.00	0.09		0.00	0.05			1.2%	51.5% 16.4%	13.6%	12%	31.4% 17.4%	100.0% 100.0%	0.00	0.04	0.01	0.00	0.02	0.00	44.4% 36.8%	1.2% 2.5%	21.3% 5.5%	7.7%	1.0%	9.5% 5.5%	44.4% 36.8%
3 4		4			0.00	0.05	0.01	0.00	0.04	0.16		2.6%	32.9%	9.0%	0.6%	22.6%	100.0%	0.00		0.01	0.00	0.01		41.9%	1.9%	12.3%	5.2%	0.6%	6.5%	43.9%
4		6		++	0.00	0.09	0.01	0.00	0.03	0.20	+	2.0%	44.2% 51.7%	1.5% 5.3%	15% 1.0%	15.6% 10.1%	100.0%	0.00	0.04	0.01	0.00	0.01		49.2%	1.5%	17.6% 19.2%	2.5% 4.2%	1.0%	5.5% 3.4%	49.2% 31.9%
6		10		2	0.01	0.10	0.03	0.00	0.13	0.26		2.1%	38.2%	11.6%	15%	49.4%	100.0%	0.01	0.04	0.02	0.00	0.04		44.0%	2.3%	15.4%	7.7%	1.2%	15.4%	44.0%
7		11		2 2	0.01	0.09	0.05	0.00	0.05	0.39	+	2.6%	24.0% 47.2%	12.5%	0.8% 1.0%	11.7% 3.6%		0.01		0.03		0.02		47.4% 59.8%	2.8%	8.2% 18.6%	7.9%	0.5%	4.1% 1.2%	47.4% 59.8%
5 7 8 9 10		12		- 2	0.01	0.09			0.08	0.30		4.6%	30.3% 42.0%	5.9% 18.4%	13%	25.7% 34.4%		0.01				0.03		49.7%	16%	14.1%	2.6%	1.0%	9.5% 13.4%	49.7% 41.6%
11		19		2	0.01	0.16	0.02	0.00	0.07	0.30		2.1%	41.2%	5.5%	0.5%	17.1%	100.0%	0.01		0.01	0.00	0.02	0.20	51.3%	1.8%	16.0%	3.4%	0.3%	6.1%	51.3%
12		20	_	2 5	0.01	0.25	0.02	0.01	0.04	0.41	+	2.5% 4.2%	61.1% 31.8%	17% 22.2%	15% 17%	9.4% 32.4%	100.0%	0.01	0.11	0.01	0.00	0.02		44.3% 29.4%	1.5% 2.8%	26.8%	2.7% 12.8%	1.0%	175 9.45	44.2% 29.4%
14		25		5		0.22	0.15		0.17	0.76		5.8%	28.7%	19.2%	13%	22.3%		0.03				0.06	0.28	35.2%	4.1%	12.5%	12.3%	0.9%	7.2%	16.2%
15		26 27		5	0.03	0.57			0.12	1.04	+	2.6%	54.9% 48.6%	1.2% 3.4%	0.5%	11.1% 11.6%	100.0%	0.02		0.02	0.00	0.06		61.0% 58.3%	1.6%	24.4%	2.1%	0.4%	5.3% 4.1%	61.0% 58.3%
17		28		5	0.04	0.28	0.05	0.02	0.11	0.70		4.9%	15.9%	6.8%	2.1%	13.8%	100.0%		0.11		0.01	0.04		40.2%	17%	13.0%	1.6%	1.7%	4.7%	40.2%
10		33	+-	3	0.04	0.20	0.13	0.01	0.19	0.66	-	4.5%	30.7% 40.5%	19.8% 13.7%	15% 0.8%	29.6% 20.4%	100.0%	0.03	0.18		0.01	0.05	0.40	30.4% 51.9%	2.6% 3.7%	10.1%	11.2%	1.1%	8.1% 9.4%	51.9%
20		16		5	0.02	0.39		0.00	0.11	0.85	-	2.7%	46.2% 55.5%	135	0.5% 0.8%	12.6% 18.1%	100.0% 100.0%		0.19	0.02	0.00	0.04		64.9% 57.3%	2.1%	22.1% 24.0%	1.0% 2.4%	0.4%	4.2% 5.9%	64.9% 57.3%
22		128		í	0.01	0.05	0.02	0.00	0.02	0.22		2.3%	21.8%	7.3%	0.5%	8.0%	100.0%	0.00	0.02	0.01	0.00	0.01	0.07	30.5%	1.4%	6.8%	4.1%	0.5%	3.2%	30.5%
22		130	+	-	0.00	0.08		0.00	0.02	0.24	+	1.3%	32.8% 30.8%	8.5% 4.5%	0.4%	6.8% 4.2%	100.0%	0.00	0.02	0.01	0.00	0.01		35.7% 35.6%	1.3%	8.1% 8.0%	4.2% 3.5%	0.4%	1.0%	35.7% 35.6%
25		134		1	0.00	0.08		0.00	0.01	0.27		0.8%	28.2%	5.6%	0.8%	2.3%	100.0%	0.00	0.02	0.01	0.00	0.00	0.09	35.2%	0.4%	7.9%	4.1%	0.8%	1.1%	15.2%
26		136		1 2	0.00	0.05		0.00	0.01	0.26	+	1.5%	20.6%	3.8% 16.7%	0.8%	5.0% 9.2%		0.00		0.01	0.00	0.01		40.1% 37.5%	1.15	6.5% 8.1%	2.7% 8.9%	0.8%	1.9%	40.1% 37.5%
28		139	_	2	0.01	016		0.00	0.05	0.47	=	1.7%	35.1% 30.5%	10.5%	0.2%	9.9% 6.6%	100.0% 100.0%	0.01	0.05	0.03	0.00	0.00		42.2%	1.3%	10.7%	1.5%	0.2%	4.9% 2.6%	42.2%
30		141		2	0.01	0.22	0.01	0.01	0.01	0.66		1.7%	11.9%	2.0%	1.4%	2.0%	100.0%	0.01		0.01	0.01	0.01	0.28	42.5%	0.9%	11.0%	1.4%	1.1%	0.8%	42.5%
31	M Date	146 h 147		2	0.01	013	0.06	0.00	0.04	0.29	+-	1.0%	31.2% 31.7%	15.5% 5.6%	0.8%	9.8%	100.0% 100.0%	0.01	0.04	0.03	0.00	0.02		41.0%	1.3%	9.0%	7.7% 3.3%	0.5%	4.6%	41.0% 40.9%
22		140		2	0.01	0.22	0.02	0.01	0.02	0.57		1.9%	29.4%	4.2%	12%	4.2%	100.0%	0.01	0.07	0.02	0.01	0.01	0.22	31.7%	1.6%	11.0%	2.7%	0.9%	1.8%	28.7%
35		152	+	5	0.01	050	0.27	0.01	0.11	1,29	+	1.1%	38.4% 41.5%	21.1%	0.4%	4.3% 6.5%	100.0% 100.0%	0.01	0.14	0.17	0.00	0.05	0.45	34.7%	0.8%	10.9%	13.1%	0.2%	1.7% 2.5%	34.7% 44.4%
36		154		- 5	0.03	0.42		0.00	0.06	1.14	_	2.9%	37.1% 32.9%	13% 27%	0.1%	7.0% 2.7%	100.0%	0.02		0.03	0.00	0.03	0.66	57.7% 53.8%	2.0%	16.4%	2.2%	0.2%	1.35	57.7% 53.8%
38		156		5	0.04	0.68	0.03	0.03	0.06	1.79		2.3%	38.0%	1.6%	1.5%	3.4%	100.0%	0.02	0.23	0.02	0.03	0.02	0.69	38.4%	1.2%	12.7%	1.1%	1.4%	1.3%	38.4%
39		162	_	5	0.02	0.55	0.30	0.00	0.10	1.35	+	1.1%	40.8% 44.7%	22.0%	0.3%	7.2%	100.0%	0.01	0.17	0.19	0.00	0.04		39.3%	0.8%	12.5%	13.9%	0.2%	2.9% 2.2%	39.3% 55.8%
41		164		5	0.04	0.41		0.00	0.06	1.19		3.3%	34.6%	1.2%	0.2%	5.0%	100.0%		0.20	0.01	0.00	0.02		57.8%	2.5%	16.5%	0.8%	0.2%	1.9%	57.8%
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		165	128	5 2	0.04	0.65		0.02	0.06		+	2.4%	37.3% 40.9%	0.8%	0.9%	1.2% 21.8%	100.0%		0.25	0.01	0.01	0.02		48.5% 34.5%	1.4%	14.4%	0.5% 6.6%	0.7%	1.3% 7.2%	48.5% 34.5%
44		2	130	2		0.14	0.05	0.01	0.08		-	3.4%	27.2% 39.8%	9.9% 8.0%	12%	16.0%	100.0%	0.01		0.03		0.03		40.2% 34.1%	2.8%	7.9% 11.7%	6.3% 5.6%	1.0%	5.9%	40.2% 34.1%
46		- 2	134	2	0.01	0.20	0.03	0.01	0.06	0.53		1.5%	17.9%	5.0%	15%	11.4%		0.01	0.07	0.02	0.01	0.62	0.23	44.6%	1.1%	13.2%	4.0%	1.1%	4.2% 3.6%	44.6%
47		8	136		0.02	0.21		0.01	0.04	0.59	-	2.9% 3.2%	36.2% 40.0%	4.4% 17.3%	12%	6.8% 27.9%	100.0% 100.0%	0.01	0.08	0.02	0.01	0.01		31.5% 45.1%	2.0%	13.4%	3.2% 10.7%	0.9%	2.0% 9.7%	23.5% 45.1%
49		11	139	- 4	0.03	0.34	0.12	0.01	0.15	1.02		2.9%	11.6%	11.4%	0.5%	14.4%	100.0%	0.02	0.12	0.08	0.00	0.00	0.46	45.3%	2.2%	11.9%	7.4%	0.3%	6.1%	45.3%
50		12	140		0.03	0.35		0.01	0.05	0.95	+-	2.7%	36.5% 40.3%	2.8% 3.5%	1.3%	5.6%	100.0%	0.02	0.15	0.01	0.01	0.02		50.6%	2.1%	16.0%	1.5%	0.7%	2.3% 4.2%	50.6%
52		18	146		0.02	0.33	0.15	0.01	0.20	0.90		2.7%	16.9%	16.5%	1.6%	21.9%	100.0%	0.02	0.12	0.08		0.09		29.4%	1.9%	13.3%	9.1%	1.2%	9.4%	19.4%
54		20	147	- 4	0.03	0.60	0.04	0.02	0.00	0.90	_	2.0%	39.7% 61.1%	5.2% 4.2%	0.5%	17.9% 7.8%		0.02		0.03	0.01	0.00	0.40	45.0% 40.9%	1.5%	15.7%	2.4%	0.5%	7.1%	45.0% 40.9%
55		24	152		0.04	0.78		0.03	0.54		=	1.8%	33.8% 36.6%	20.9%	1.1% 0.8%	23.5%	100.0%	0.04		0.27	0.02	0.16		32.0%	1.7%	9.3%	11.7%	0.8%	7.1%	32.0% 42.6%
57		26	154	10	0.08	1.29	0.09	0.01	0.29	2.34		3.2%	54.9%	1.9%	0.6%	12.3%	100.0%	0.05	0.57	0.06	0.01	0.12	1.40	63.1%	2.1%	24.1%	2.6%	0.4%	4.9%	63.1%
58		27	155	10	0.10	1.18	0.08	0.01	0.22	2.55	+=	3.8% 4.8%	46.1% 29.5%	1.3% 4.1%	0.5% 2.8%	8.5% 7.2%	100.0%	0.09	0.54	0.04	0.01	0.10		58.8% 41.1%	3.4% 2.4%	21.2%	1.7% 2.5%	0.5%	3.8% 2.7%	58.8% 41.1%
60		34	162	10	0.04	0.06	0.45	0.02	0.50			1.7%	16.2%	18.9%	1.0%	21.1%	100.0%	0.04	0.25	0.28	0.02	0.15	0.85	35.6%	1.5%	10.6%	11.6%	0.8%	6.2%	15.6%
62		35	163	10	0.09	1.22	0.05	0.01	0.46	2.66	+	4.1%	45.8% 49.7%	11.4% 2.4%	0.5%	17.2% 14.4%	100.0%	0.08	0.50	0.03	0.01	0.15	1.51	56.6% 66.3%	2.9% 1.5%	20.0%	6.8% 1.5%	0.4%	7.2% 5.1%	56.6% 66.3%
63		37	165	10	0.10	1.44	0.07	0.03	0.27	2.71		3.5%	\$3.1%	2.7%	1.0%	9.9%	100.0%	0.06	0.53	0.05	0.03	0.09	1.42	52.3%	2.2%	19.6%	1.7%	1.0%	14%	52.3%

- M-patch Mid CH

																	max ratio ou	t of all beams													max ratio out of all b	eams		
П								40	om2 PD)	(mW/cn	m2)				\$.0%	\$7.4%	22.4%	25%	28.2%	100.0%	40	om2 PD)	nW/cm2	at 10mm	evaluatio	on distan	DP .	62.8%	17%	26.2%	15.6%	1.0%	11.5%	62.8%
No. N	fodule 1	pe Seam IC	.1 Bena D,2	2 Feed no.		en 531		(Top)				ri 52/5		per Beam	ratio (Right 2mm)/(worst-	ratio (Left 2mml/lwont-	ratio (Top 2mm)//wont-	ratio (Bottom 2mml/Iwont-	ratio (Forst 2mm)/(worst-	ratio (Rear 2mm)//worst-	S4(Right)	F31 -0		o) SE(Bott		1 (Front)	S2/Read	ratio wont-surface	ratio (Right 10mm)//wont-	ratio (Left 10mm)/(wont-	ratio (Top 10mm)/(wont-	ratio (Bottom	ratio (Front 10mm)/(wont-	ratio (Rear 10mm)//wont-
				1	54(8)	(at) 230	.em 55	(top)	S6(Bot	esore	\$1(Front	1) 529	2000	ack-off (dB)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	24 (Augus)	33,280	33(10)	p) se(see		r)Promo	an person	(10mm/2mm)	surface 2mm)	surface 2mm)	surface 2mm)	10mm)/(worst- surface 2mm)	surface 2mm)	surface 2mm)
-		0				0 01					0.05		9		2.1%	51.7%	11.7%	1.1%	28.2% 21.5%					0.00		0.02	0.00	43.6%	1.6%	23.4%	6.4%	1.1%	8.0% 7.3%	43.6%
2		4	+	+ +	0.0		29 0		0.0		0.02	0.	20		3.1%	47.2%	7.2%	1.0%	10.3%		0.00					0.01	0.10	41.6%	2.1%	19.5%	4.0%	0.5%	3.15	43.6%
4		- 6			0.0		10 0		0.0		0.02	0.2	22		2.3%	42.8%	5.0%	1.4%	7.7%		0.00					0.01	0.11	50.5%	1.8%	14.4%	3.6%	0.9%	2.7%	50.5%
5		8	_	- 1	0.0	1 01	13 0	2.01	0.0	30	0.03	0.2	*	_	2.3%	48.8% 32.9%	4.2%	0.8% 1.0%	10.8% 20.8%		0.00					0.01	0.09	32.7%	1.5%	20.0%	3.5% 7.0%	0.8%	15% 6.7%	32.7% 38.2%
7		11	_	2	0.0	2 01		2.03	0.0	20	0.06	0.	2	_	1.0%	12.5%	7.9%	0.7%	11.5%	100.0%	0.01	0.05	0.02	0.00	5	0.02	0.21	49.8%	2.9%	11.0%	5.2%	0.7%	5.0%	49.8%
		12		2	Ö	2 02	24 0		0.0	2	0.02	0.	8		1.5%	49.7% 15.4%	2.3% 4.2%	15%	4.4% 21.8%		0.01			0.00		0.01	0.27	56.3%	2.5%	17.9%	1.7%	0.8%	1.9%	56.3% 52.5%
9		15		2	0.0	1 01	5 0	105	0.0	11	0.08		17	-	5.0%	39.6%	13.7%	25%	27.6%	100.0%	0.01	0.07	0.03	0.01	_	0.03	0.20	52.5% 42.6%	175	19.7%	7.1%	1.0%	11.5%	42.6%
11		19				0.2					0.09				2.7%	44.1%	5.8%	0.7%	19.4%					0.00		0.03	0.23	52.3%	2.2%	10.3%	3.1%	0.4%	6.9%	50.3%
12		20	+	2	0.0	1 02	21 0		0.0		0.05	0.	4	_	2.7% 3.2%	48.9% 29.5%	4.3% 18.7%	1.6%	12.1% 23.6%		0.01		0.01	0.01		0.02	0.16	36.1%	1.8%	22.1% 13.5%	3.2% 10.0%	1.1%	4.8% 8.4%	36.1% 32.7%
14		25	_	5	0.0	3 02	27 0	2.14	0.0	21	0.16	0.1	0		3.8%	30.3%	15.6%	1.1%	17.5%	100.0%	0.03	0.13		0.01		0.06	0.34	31.0%	3.1%	14.1%	10.2%	0.9%	6.9%	38.0%
15		26		5	0.0		58 C		0.0		0.15	- 1	9		4.0%	57.4%	2.1%	0.4%	12.9%	100.0%	0.04			0.00		0.07	0.69	53.4%	10%	26.3%	2.4%	0.3%	5.0%	50.4%
17		20	+	- 3		4 02			0.0		0.16	1.	10	_	2.5% 4.7%	55.5% 30.4%	3.7% 9.0%	24%	20.4%		0.02	0.27		0.00	-	0.00	0.71	41.5%	3.45	23.0%	2.5%	1.6%	5.2% 0.1%	60.1% 41.5%
18		34			0.0	2 02	21 0	2.12			0.16		14		3.0%	28.4%	16.9%	1.6%	21.5%	100.0%	0.02					0.06		33.0%	2.2%	12.6%	8.9%	1.4%	8.0%	11.0%
19		35	_	- 5	0.0	1 0	49 0	1.12	0.0		0.16			-	4.0%	41.9% 53.6%	10.1%	0.8%	13.1%					0.01		0.06		54.3% 60.0%	2.9%	18.7% 22.8%	2.5%	0.7%	6.5%	54.2% 60.0%
21		37		5	0.0	4 04	46 0	20	0.0	21	0.11	1,1	34		3.7%	44.5%	3.4%	0.8%	10.5%	100.0%	0.03	0.21	0.03	0.01		0.04		52.1%	2.6%	20.1%	2.7%	0.6%	4.2%	52.1%
22		128		-	0.0	0 00		2.02	0.0		0.02	0.	27		1.5%	22.8% 11.9%	11.6%	0.4%	7.8% 5.5%		0.00	0.02	0.02	0.00		0.01	0.08	31.0%	1.1%	6.3% 9.3%	6.2% 4.5%	0.4%	2.6%	31.0% 39.1%
24		132	+	++-	0.0	0 01		102	0.0		0.02	- 0.	0	_	1.0%	15.9%	4.7%	0.7%	17%	100.0%	0.00	0.01	0.01	0.00	-	0.01	0.11	41.6%	1.0%	9.4%	2.4%	0.3%	175	41.6%
25		124		-	0.0	0 0.1			0.0		0.01	0.	22		0.6%	29.0%	5.1%	0.6%	1.5%		0.00	0.03	0.01	0.00		0.00	0.12	33.0%	0.6%	7.8%	3.6%	0.6%	0.6%	28.0%
26		126	_	1	0.0	0 00	36 0		0.0	30	0.01	0.3	12	-	1.2%	18.4%	12%	1.3%	3.8% 9.1%		0.00				-	0.00	0.12	22.0%	1.0%	5.1% 7.6%	2.5%	1.0%	1.3%	19.0% 19.4%
28		139	_	2	0.0	1 02	21 0	1.07			0.05	0.7	4	$\overline{}$	1.0%	18.5%	13.4%	0.2%	8.2%	100.0%	0.01	0.07	0.04	0.00		0.02	0.25	45.2%	1.15	12.0%	7.2%	0.2%	19%	46.2%
30		140				1 0					0.03	0.0	22		1.6%	31.3%	2.7%	0.3%	2.0%		0.01			0.00		0.01	0.29	45.0%	1.1%	10.0%	1.3%	0.3%	1.9%	46.0% 47.6%
31		146		2	0.0	1 0.1	17 0	2.10	0.0	00	0.05	0.1	20		1.4%	15.2%	19.6%	0.6%	9.5%	100.0%				0.00		0.02	0.21	41.2%	1.0%	9.3%	10.7%	0.6%	1.6%	43.2%
32	M Pa	147		2	0.0	1 02			0.0	33	0.04		27		1.7%	35.5%	6.3%	0.2%	7.1%		0.01	0.07	0.02	0.00	2	0.02	0.27	47.2%	1.2%	12.0%	1.5%	0.2%	3.0%	47.2%
33		148	+	- 2	0.0	1 02		1.02	0.0	21	0.04	0.1	77	-	1.7%	43.7% 44.2%	22.9%	12%	6.0%	100.0% 100.0%	0.01	0.08	0.01	0.01	+	0.01	0.27	46.1% 36.6%	0.6%	13.8%	2.1% 15.3%	0.9%	2.1% 2.2%	46.1% 36.6%
34		153				2 07	76 0	12			0.06	10	26		0.9%	46.0%	20.2%	0.2%	4.9%	100.0%		0.28	0.22	0.00		0.03	0.75	45.2%	0.6%	16.0%	12.4%	0.2%	2.0%	45.3%
36		154				4 02					0.07	- 14	19	_	2.4%	37.9% 31.8%	2.7%	0.1%	5.0%					0.00		0.03	0.84	56.2%	1.9%	16.9%	1.7%	0.2%	1.8%	60.6%
38		156				5 03					0.06		a l	\rightarrow	2.2% 2.5%	29.0%	2.2%	0.2% 1.4%	2.7% 3.5%					0.0		0.02	0.75	40.7%	1.9%	14.5% 13.2%	1.0%	0.2% 1.2%	135	56.2% 40.7%
40		162		5	0.0	1 02	76 0		0.0		0.09	- 12	×		0.8%	46.0%	23.4%	0.5%	5.6% 4.2%		0.01					0.04	0.60	40.7%	0.6%	15.6% 19.6%	15.6%	0.4%	2.1%	40.7% 59.9%
41		164				4 04			0.0		0.05	1	ч		2.7%	11.0%	1.2%	0.1%	125		0.02					0.02	0.87	59.3%	2.4%	15.0%	0.6%	0.1%	1.25	59.9%
42		165		5	0.0		59 0	2.02	0.0	21	0.07	1,1	12		2.6%	17.5%	1.2%	0.7%	1.7%		0.03					0.03	0.93	50.7%	1.5%	15.4%	0.8%	0.6%	1.5%	50.7%
43		0	128	2	0.0	1 02		104	0.0	21	0.12	0.3	4	-	2.5%	37.1%	13.8%	0.9%	20.7%		0.01	0.07	0.04	0.00		0.04	0.19	33.6% 45.2%	1.6%	12.4%	7.9%	0.7%	6.5% 7.1%	33.6% 45.2%
45		- 4	132	2	0.0	2 02	27 0	2.04	0.0		0.05		4		2.9%	40.6%	6.8%	0.7%	0.0%					0.00		0.02		42.0%	2.2%	16.6%	4.5%	0.5%	2.7%	42.0%
46 47 48		6	124 136			1 02					0.03		8		1.5%	38.9% 31.8%	7.0%	13%	525 7.85					0.01		0.01		45.9% 31.2%	135	12.1%	5.5%	1.0%	22% 22%	45.9% 31.2%
40		10	120	4	0.0	2 0.2	22 0	3.16	0.0	21	0.13		8	_	2.4%	43.4%	21.9%	1.1%	17.0%	100.0%	0.01	0.09	0.10	0.01	-	0.05		41.7%	1.2%	12.4%	13.6%	0.0%	7.0%	41.7%
49		11	139	- 4		4 0.4			0.0		0.16	1,1	×		3.4%	40.7%	11.7%	0.6%	15.4%		0.02					0.07	0.55	51.9%	2.3%	14.4%	7.1%	0.5%	6.1%	51.9%
50		12				3 04			0.0		0.06	++	13	-	2.8%	41.5% 42.1%	12%	12%	5.3% 10.2%		0.03			0.01		0.02	0.59	52.0% 47.5%	2.2%	17.0% 16.2%	1.8% 2.3%	0.8%	2.1% 3.3%	52.0% 47.5%
52		18	146	4	0.0	3 04	46 0	2.18	0.0		0.12	Ť.	5		2.3%	40.0%	15.9%	1.6%	20.4%	100.0%	0.02	0.16		0.01		0.10	0.47	41.2%	1.6%	13.5%	0.5%	1.1%	1.9%	41.2%
53		19	147	4		3 05			0.0	21	0.23	1.	22		2.6%	44.2% 51.7%	5.6%	0.4%	18.7% 11.6%	100.0%	0.02	0.21	0.04	0.01	-	0.09	0.59	45.0%	1.8%	17.3% 19.5%	3.3%	0.4%	7.1% 4.6%	48.2% 46.0%
55		24				4 1.1					0.14		19	-	2.5%	41.0%	5.0% 20.5%	15%	11.6%					0.01		0.05	1.02	46.0% 35.1%	1.8%	19.5%	3.3% 13.5%	1.2%	4.65	46.0% 35.1%
32		25	153	10	0.6	1.4	42 0	2.62	0.0		0.35		0		2.7%	45.8% 56.8%	20.1%	0.7%	11.4%					0.02		0.14		45.6%	2.1%	17.0%	132%	0.6%	4.6%	45.6%
57		26	154			9 1.5			0.0		0.30		12	-	1.1%	56.8% 45.7%	18%	0.3%	11.0%		0.07					0.15		59.8%	2.4%	25.6%	2.7%	0.3%	53%	61.0% 50.8%
59		28	156	10	0.1	1 12	21 0	2.17	0.0	37	0.36	22	20		4.2%	40.5%	5.6%	2.5%	12.2%	100.0%	0.07	0.43	0.10	0.01		0.16	1.22	40.8%	2.2%	14.4%	3.3%	1.0%	5.2%	40.0%
60		34	162	10	0.0	5 12	27 0	164	0.0		0.36	21	21	-	1.6%	42.2% 51.9%	21.3%	0.9%	12.0% 12.5%	100.0%	0.03	0.43			-	0.13	1.17	38.9% 62.8%	1.1%	14.2% 22.1%	14.1%	0.7%	425 5.85	18.9% 62.8%
62		36	164		0.1			1.08	0.0		0.38	1 22	7		3.7%	50.6%	1.25	0.4%	12.5%		0.09			0.01	-	0.17	1.57	62.8%	2.15	22.1%	1.9%	0.3%	5.85	60.9%
63		37	165	10	0.1	0 13	54 0	2.10	0.0	23	0.23	11	21		2.4%	51.1%	125	1.0%	7.0%		0.06		0.05	0.03		0.11	1.50	49.9%	2.0%	20.7%	1.8%	0.9%	15%	49.9%

- M-patch High CH

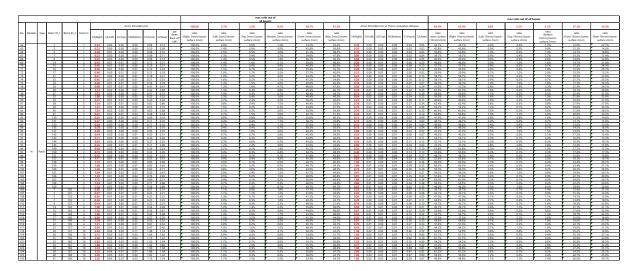


3.1.2 Ant N- Patch Antenna

Table 6 to Table 8 show the PD simulation evaluation of Ant N patch antenna at 28 GHz / 39 GHz / 24 GHz for the corresponding evaluation plane specified in Table 1.

Table 6. PD of Ant N- patch antenna (28GHz-n261)

- N-patch Low CH



- N-patch Mid CH

														max rat	io out of									1			max ratio out of all I	Deams		$\overline{}$
							40	cm2 PD(mN	N/cm2)			200.00	200					-	4cm2 PD/m	nW/cm2) i	t 10mm eval	luation dis	tance			100	2.49		27.00	22.00
No.	Module Ty	pe Beam I	D_1 Bema ID	,2 Feed no	S4(Right)	Saleto	\$5(Too)	S6/Settor	s) \$1/Em	nti S2/Rei	per Beam of Back-of	ratio (Right 2mm)/(worst-	ratio (Left 2mm)/(wont-	ratio (Top 2mm)/(wont-	ratio (Sottom 2mm)/(wonst-	ratio (Fornt 2mm)/(worst-	ratio (Rear 2mm)/(wont-	54(Right	53(Left)	SS(Top)	SE(Bottom)	\$1(From	16) S2/Rear	ratio worst-surface	ratio (Right 10mm)/(worst-	ratio (Left 10mm)/(wond-	ratio (Top 10mm)/(wont-	natio (Bottom 10mm)/worst-	ratio (Front 10mm)/(worst-	ratio (Rear 10mm)/(wont-
64	_			٠.	0.21		0.00			0.12	(49)	surface 2mm) 100.0%	surface 2mm) 0.9%	surface 2mm) 0.9%	surface 2mm)	surface 2mm) 11.2%	surface 2mm) 57.0%		0.00	0.00	0.00	0.00	0.05	(10mm/2mm) 41.6%	surface 2mm) 41.6%	surface 2mm) 0.5%	surface 2mm) 0.5%	surface 2 mm)	surface 2mm) 12.6%	surface 2mm) 23.4%
65		- 3		-	0.22	0.00	0.00	0.00	0.08	0.09		100.0%	0.9%	0.9%	1.4%	14.4%	40.8%	0.09	0.00	0.00	0.00	0.03	0.03	39.4%	39.4%	0.9%	0.5%	1.4%	11.9%	15.1%
67		5 7		-	0.19		0.00	0.00				100.0%	2.6%	1.1% 0.4%	2.1% 1.7%	14.4% 11.5%	46.0% 46.5%		0.00	0.00	0.00	0.03		46.0%	46.0% 40.0%	1.6%	0.5%	1.1%	11.0%	19.0% 18.2%
68		9		1	0.22		0.00	0.00	0.00			100.0%	0.9%	0.5%	1.4% 2.3%	37.1% 34.8%	51.6% 48.0%	0.10	0.00	0.00	0.00	0.03		44.8% 45.9%	44.8% 45.9%	0.9%	0.5%	0.9%	11.6% 11.6%	20.8% 21.3%
65 66 67 68 69 70 71 72 73 74 75		15		2	0.44	0.01	0.00	0.01	0.13			100.0%	1.1%	0.5%	1.1%	37.9%	61.5%	0.25	0.00	0.00	0.00	0.07	0.13	57.1%	57.1%	0.7%	0.9%	1.8%	15.2%	29.7%
71		16		2	0.46			0.01	0.17	0.23		100.0%	1.3%	0.4%	2.2% 2.4%	16.0% 14.7%		0.22		0.00		0.07		48.0%	48.0% 27.5%	0.9%	0.4%	1.5%	15.3% 14.3%	23.1%
72		21		2		000	0.00	0.01	0.18	623		100.0%	0.7%	0.5%	22% 17%	42.7% 41.9%	56.4%	0.21	0.00	0.00	0.01	0.08	0.11	55.7%	55.7% 56.4%	0.5% 0.7%	0.5%	17%	18.3%	26.5%
75		22		2	0.40	0.01	0.00	0.01	0.14	0.16		100.0%	1.4%	1.1%	2.5%	37.8%	56.9% 44.1%	0.13		0.00	0.01	0.07		36.2%	16.2%	0.8%	0.2%	1.9%	18.1%	27.2% 15.9%
7£		29		5	0.96		0.01	0.04	0.43			100.0%	1.0%	0.8%	4.6% 0.8%	44.6% 42.6%	51.2% 61.6%	0.56	0.01	0.01	0.03	0.19		58.5% 60.7%	58.5% 60.7%	0.5% 1.0%	0.6%	3.4%	20.0% 20.5%	25.8% 32.4%
78		21		5	1.15	0.02	0.00	0.01	0.47	0.71		100.0%	1.4%	0.2%	0.8%	41.0%	62.0%	0.70		0.00	0.01	0.24	0.39	61.2%	61.2%	1.0%	0.1%	0.4%	21.2%	13.6%
78 29 80 81 82 83		22		5	1.03	0.02	0.01	0.02	0.47	0.54	+	100.0%	1.9%	0.5% 3.0%	1.5% 8.1%	45.7% 46.9%	52.0% 52.3%	0.60	0.01	0.00	0.01	0.22		58.4% 42.8%	58.4% 42.8%	1.3%	0.3%	0.9% 4.8%	22.2% 20.0%	24.1%
81		28 29		- 3				0.02	0.56			100.0%	0.8%	0.3%	1.3%	46.8% 42.1%	55.9%	0.74	0.01	0.00		0.25		62.3%	62.3% 59.3%	0.7%	0.2%	0.8%	21.2%	29.0% 32.1%
82		40	_	- 5	1.14	0.02	0.00	0.01	0.51	0.67	-	100.0%	2.0%	0.3%	0.5%	44.4%	58.9%	0.69	0.02	0.00	0.00	0.27	0.15	60.5%	60.5%	1.5%	0.3%	0.3%	23.2%	10.9%
85		41 129		5	0.68		0.01	0.04	0.29	0.36		100.0%	1.8%	1.6%	6.0% 2.3%	42.6% 16.6%	52.8% 36.2%	0.34	0.01	0.01	0.02	0.13	0.15	52.4% 43.4%	52.4% 41.4%	12%	1.2%	3.4% 1.9%	19.0%	22.2%
85 86 87 88 89 90 91 92		131			0.31	0.00	0.00	0.00	0.12			100.0%	0.3%	0.7%	1.0%	19.2%	13.0%	0.15	0.00	0.00	0.00	0.04	0.04	41.0%	48.0%	0.3%	0.3%	0.7%	13.1%	13.4%
87		133		+ +	0.31		0.00		0.12		+	100.0%	0.7%	0.7%	1.3%	38.2% 29.1%	32.7% 31.6%	0.15	0.00	0.00	0.00	0.04	0.04	47.4%	47.4% 47.6%	0.1%	0.3%	1.0%	11.4% 11.4%	12.4% 13.0%
89		137		1	0.24	0.00	0.00	0.01	0.10	0.08		100.0%	0.4%	0.8%	2.1%	41.0%	33.9% 33.1%	0.11	0.00	0.00	0.00	0.03	0.03	46.9%	46.9%	0.4%	0.4%	1.3%	11.0%	12.1% 14.4%
91		143		2	0.76	000	0.00	0.01	0.33	0.15		100.0% 100.0%	0.7%	0.9%	2.8% 0.5%	45.1% 41.6%	35.9%	0.42	0.00	0.00	0.00	0.12		50.5% 53.3%	50.5% 55.3%	0.4%	0.7%	2.2% 0.4%	17.0% 16.2%	14.5%
92		145		2	0.32	000	0.00	0.00	0.30	0.12	_	100.0%	0.9%	2.5%	0.3% 1.2%	41.5% 41.3%	38.1%	0.37	0.00	0.00	0.00	0.12	0.12	37.5%	51.2% 17.5%	0.1%	0.4%	0.1% 2.2%	16.0%	17.0% 14.2%
94	N Pa	149		2	0.64		0.00	0.01	0.29			100.0%	0.6%	0.3%	1.6%	45.8%	37.7% 36.8%	0.36	0.00	0.00	0.01	0.11	0.10	54.7%	\$6.7%	0.3%	0.3%	1.1%	17.5% 17.4%	15.9%
96	N PS	151		2	0.60		0.00	0.00	0.25	0.10		100.0%	0.2%	0.2%	0.7%	45.3% 40.8%	19.0%	0.47		0.00	0.00	0.14		57.0% 49.1%	57.0% 49.1%	0.2%	0.1%	0.1%	15.3%	16.6%
97		157		5	1.25		0.01	0.05	0.56			100.0%	0.9%	0.6%	4.0% 0.4%	45.2% 49.7%	42.4%	0.67	0.01	0.01	0.04	0.24		51.9%	51.9% 61.9%	0.6%	0.5%	2.8%	19.3% 21.2%	18.5% 21.0%
95 96 97 98 99 100 101 102 103		159		- 5	1.86	0.01	0.00	0.01	0.93	0.75		100.0%	0.4%	0.2%	0.6%	50.0%	40.3%	1.15	0.01	0.00	0.01	0.44	0.19	61.8%	61.8%	0.3%	0.1%	0.4%	23.8%	20.7%
100		160		5				0.00				100.0%	0.6%	2.5%	0.2%	41.9% 45.5%	46.8%		0.01	0.01	0.00	0.34	0.41	52.1% 40.1%	52.1% 40.1%	0.4%	0.5% 2.1%	0.2% 1.2%	20.7% 1E.7%	25.0%
102		166		5	1.72		0.00	0.02	0.83	0.70		100.0%	0.4%	0.2%	1.3%	47.9% 51.3%	40.9%	1.02	0.00	0.00	0.01	0.38		59.0% 63.5%	59.0% 63.5%	0.2%	0.2%	0.8%	22.1% 24.1%	21.0% 21.2%
104		168		5	1.74	0.01	0.00	0.00	0.81			100.0%	0.5%	0.2%	0.2%	46.5%	41.6%	0.99		0.00	0.00	0.39	0.39	56.9%	56.9%	0.3%	0.1%	0.2%	22.3%	22.6%
105		169	129	5 2	0.57	0.01	0.02	0.02	0.63	0.73	+	100.0%	0.5%	1.45	1.0%	41.2% 15.4%	49.9% 52.7%	0.70	0.01	0.02	0.01	0.29	0.38	47.8% 40.5%	47.8% 40.5%	0.4%	1.1%	0.7%	19.4% 12.4%	25.7% 20.2%
106 107 108 109		- 3	131	2	0.60	0.01	0.01	0.01	0.22	0.21		100.0%	0.8%	0.8%	1.3%	16.0% 18.0%	34.9%	0.25	0.00	0.00	0.01	0.08		42.1%	42.1% 44.6%	0.5%	0.7%	1.0%	13.1%	13.2%
109		- 7	135		0.59	0.00	0.00	0.01	0.23	0.24	-	100.0%	0.7%	0.5%	15%	38.6%	40.6%	0.26	0.00	0.00	0.01	0.07	0.10	41.4%	41.4%	0.5%	0.5%	1.0%	12.3%	16.8%
110		9 14	137		103		0.00		0.52			100.0%	0.8%	1.8%	1.7% 2.4%	45.7% 50.4%	46.1%	0.24	0.00	0.00		0.08	0.10	46.3%	46.3%	0.6%	1.4%	12%	16.3%	19.2% 21.5%
112		15	143	- 4	1.20	0.01	0.00	0.01	0.54	0.61		100.0%	1.0%	0.2%	0.9%	42.4%	47.2%	0.70	0.01	0.00	0.01	0.21	0.29	54.4%	54.4%	0.6%	0.2%	0.7%	16.0%	22.2%
113		16				0.01	0.01		0.51			100.0%	1.0%	0.7%	1.2% 2.8%	44.9%	42.6% 46.2%	0.62	0.01	0.01		0.22	0.22	55.2% 25.9%	55.2% 15.9%	0.8%	2.2%	0.8% 2.2%	19.1% 16.3%	19.2% 19.0%
115		21	149 150	- 4		0.01	0.01	0.02	0.55	0.55		100.0%	0.7%	0.5%	2.1%	49.8% 49.0%	49.8% 44.2%		0.01	0.00	0.02	0.21	0.25	56.1% 57.5%	56.1% 57.5%	0.5%	0.4%	1.4%	19.3% 21.4%	22.2% 20.5%
116		22	150			0.01	0.01	0.02		0.42		100.0%	1.0%	1.5%	0.8% 1.6% 4.1%	44.2%	43.8%	0.71	0.01	0.01	0.01	0.18	0.19	41.9%	41.9%	0.5% 0.7% 0.6%	1.1%	0.5% 1.2% 2.7%	18.6%	19.5%
113 114 115 116 117 118 119		29	157	10	125	001	0.03	0.11	1.47	1.19	+	100.0%	1.7%	1.0%	0.6%	\$1.5% \$1.4%	43.2% 52.2%	2.01	0.02	0.02	0.08	0.64	0.56	62.1%	\$4.0% 62.1%	0.6%	0.8%	2.7%	21.2%	20.9%
120		31	159 160	10	2.45	0.01		0.02				100.0%	0.9%	0.2%	0.7%	50.1% 54.3%	45.9% 46.7%	2.15		0.01	0.02		0.84	62.5% 54.7%	62.5% 54.7%	0.7%	0.1%	0.5%	24.7%	24.4% 25.1%
122		32		10	2.14	0.04		0.02	1.65	0.88		100.0%	1.3%	2.3%	3.8%	54.3% 56.6%	40.9%	0.87	0.02	0.04	0.02	0.82		40.7%	40.7%	0.9%	2.1%	2.8%	25.7%	25.1% 19.4%
121 124 125		38					0.01	0.05	1.86			100.0%	0.7%	0.3%	1.5% 0.4%	57.7% 50.5%	51.7% 47.9%	1.92	0.02	0.01	0.03	0.86		59.7%	59.7% 63.2%	0.6%	0.3%	0.9%	26.6%	27.0% 25.6%
125		40	160	10	2.20	0.05	0.01	0.01	1.81			100.0%	1.5%	0.2%	0.4%	51.5%	42.3%	2.01	0.03	0.01	0.01	0.92	0.81	59.4%	59.4%	1.0%	0.2%	0.3%	27.3%	24.0%
126		- 41	169	10	2.52	0.03	0.04	0.07	1.22	1.22		100.0%	1.1%	1.6%	2.6%	54.5%	40.4%	1.22	0.02	0.03	0.05	0.65	0.65	41.25	48.3%	0.8%	1.2%	1.9%	25.8%	25.8%

- N-patch High CH

Г			_		-		_	_		_	-	-		-	max rat	io out of		-		-	_		-	-		-		max ratio out of all I	beams		
П								40	m2 PD(mV	(/cm2)			100.0%	2.3%	2.8%	7.9%	\$6.5%	59.3%		4cm2 PD/m	nW/cm2) a	t 10mm evak	uation dista	ance	64.4%	64.6%	1.7%	2.2%	1.9%	26.8%	31.0%
No.	Viodule Tys	ре Веат	10,1	Sema ID,2	Feed no.							per Beam	ratio	ratio	ratio	ratio	ntio	ratio							ratio	ratio	ratio	ratio	ratio (Sottom	ratio	ratio
11					l	S4(Right)	\$3(Left)	SS(Top)	S6(Botton	S1(From	(t) 52/Re	ar) Back-of	(Right 2mm)/(worst surface 2mm)	(Left 2mm)/(wont- surface 2mm)	(Top 2mm)/(wont- surface 2mm)	(Bottom 2mm)/(wont- surface 2mm)	(Fornt 2mm)/(worst- surface 2mm)	(Rear 2mm)/(worst- surface 2mm)	54/Righ	() S3(Left)	SS(Top)	S6(Bottom)	S1(Front)	S2(Rear)	(10mm/2mm)	(Right 10mm)/(worst- surface 2mm)	(Left 10mm)/(worst- surface 2mm)	(Top 10mm)/(wont- surface 2mm)	10mm)/(worst- surface 2mm)	(Front 10mm)/(worst- surface 2mm)	(Rear 10mm)/(worst- surface 2mm)
64	-				1	0.22	0.00	0.00	0.00	0.08	0.12	(34)	100.0%	0.9%	0.9%	1.3%	35.1%	53.1%	0.09	0.00	0.00	0.00	0.03	0.05	40.8%	40.8%	0.4%	0.4%	1.3%	11.8%	20.6%
66		\vdash	5		1	0.22	0.00	0.00	0.00	0.06	0.0		100.0%	1.4%	0.5%	1.4% 2.1%	15.1% 14.9%	38.6% 47.4%	0.09	0.00	0.00	0.00	0.02	0.03	40.9% 44.6%	40.9% 44.6%	0.9%	0.5%	0.9%	9.8%	14.4%
67		=	7		-	0.22	0.00	0.00	0.00	0.08	0.0		100.0%	0.9%	0.5% 0.5%	18%	15.2% 18.4%	41.1% 51.9%	0.09	0.00	0.00	0.00	0.02	0.04	40.2%	40.2% 44.4%	0.9%	0.5%	14%	10.5% 13.4%	16.0% 21.8%
69		- 1	14		2	0.45	0.01	0.00	0.01	0.16	0.2		100.0%	1.1%	0.9%	2.4%	15.6% 42.4%	46.5% 57.8%		0.00	0.00		0.06	0.09	45.4% 58.0%	45.4% 58.0%	0.7% 0.7%	0.7%	2.0%	13.3% 15.4%	20.1% 27.8%
71			6		2	0.45	0.01	0.00	0.01	0.18	0.21		100.0%	1.1%	0.4%	2.0%	29.8%	45.2%	0.22	0.00	0.00	0.01	0.07		41.3%	48.3%	0.7%	0.4%	1.1%	15.7%	20.7%
72			7		2		0.00	0.00	0.01	0.14	0.11		100.0%	0.7%	1.0%	2.5% 2.2%	34.5% 40.9%	40.2% 56.9%	0.12	0.00	0.00		0.05	0.05	28.5%	28.5% 54.6%	0.5% 0.2%	0.7%	2.0%	12.7% 17.2%	12.9% 27.2%
74			2		2	0.40		0.00	0.01	0.18			100.0% 100.0%	1.0% 0.8%	0.3%	15% 23%	45.8% 29.3%	53.8% 40.6%	0.23	0.00	0.00	0.00	0.07		58.5% 37.3%	58.5% 37.3%	0.8%	0.3%	0.8%	17.3% 15.4%	25.5% 15.7%
76			9		3		0.01	9	0.04	0.45	0.40		100.0%	0.9%	0.6%	4.4%	48.0%	48.2%		0.01	0.00		0.20	0.24	58.1%	58.1%	0.5%	0.4%	1.2%	21.1%	25.2%
78		- 3	11		5	1.04	0.02		0.01	0.50	0.6		100.0%	1.4%	0.2%	0.6% 0.8%	46.3% 45.3%	59.3% 58.4%	0.67	0.01	0.00	0.01	0.24	0.32	62.8%	61.8% 62.8%	1.0%	0.2%	0.5%	22.0% 19.9%	30.7%
64 65 65 66 67 68 68 68 68 68 68 68 68 68 68 68 68 68			12		5			0.00		0.45			100.0%	1.4%	0.4% 2.6%	1.6% 7.9%	45.6% 50.4%	53.2% 53.9%	0.59	0.01	0.00	0.01	0.20		60.1% 44.1%	60.1% 44.1%	0.9%	0.4%	12%	20.6% 23.4%	24.5% 20.9%
81			10		5	1.14	0.01		0.02	0.55			100.0%	0.7%	0.3%	1.5%	48.5% 45.4%	53.2% 58.0%	0.70		0.00	0.01	0.26	0.32	60.9%	60.9% 60.8%	0.4%	0.2%	0.7%	22.8% 21.5%	28.1% 30.2%
82		-	10		3	1.02	0.02	0.00	0.01	0.49	0.5		100.0%	1.5%	0.2%	0.5%	45.3%	57.0%	0.64	0.01	0.00	0.00	0.22	0.31	61.9%	61.9%	1.2%	0.2%	0.4%	20.8%	10.4%
84			11		5	0.70	0.01	0.01	0.04	0.31	0.3		100.0%	1.4%	1.4%	5.6% 2.1%	44.5% 17.2%	55.3% 11.1%	0.38		0.01	0.02	0.14		54.0%	54.0% 44.1%	0.9%	1.0%	2.7% 1.7%	19.9% 11.5%	23.9%
86		=	31			0.33		0.00	0.00	0.13	0.1		100.0%	0.3%	0.3%	0.9% 1.2%	39.1% 17.6%	30.9%	0.14		0.00	0.00	0.04		41.0%	48.0% 47.2%	0.3%	0.3%	0.6%	13.1%	12.8%
88		12	35		- 1	0.22	0.00	0.00	0.00	0.13	0.10		100.0%	0.3%	0.6%	12%	38.9%	30.7%	0.16	0.00	0.00	0.00	0.05	0.04	41.2%	48.2%	0.3%	0.3%	0.6%	13.6%	12.0%
90			17 42		1 2	0.25	0.00	0.00	0.01	0.10	0.0		100.0%	0.4%	0.8%	2.0% 2.8%	40.1% 46.0%	35.6% 33.5%	0.12	0.00	0.00	0.00	0.03	0.03	48.2% 51.2%	48.2% 51.2%	0.4%	0.4%	1.2%	13.8% 16.7%	13.8% 13.3%
91			43		2	0.83	0.00	0.00	0.00	0.36	0.31		100.0%	0.4%	0.2%	0.5%	43.8% 44.2%	36.0% 36.9%	0.46	0.00	0.00	0.00	0.13		56.0% 54.0%	\$6.0% \$4.0%	0.2% 0.3%	0.1%	0.4%	16.0%	14.2%
93		1.	45		2	0.35	0.00	0.01	0.01	0.14	0.1		100.0%	0.9%	2.0%	12%	40.5%	37.3%	0.12	0.00	0.01	0.01	0.05	0.05	31.25	38.2%	0.6%	1.4%	2.3%	11.6%	15.0%
94	N Pat	ith 13	49 50		2	0.69		0.00	0.01	0.32		_	100.0%	0.4%	0.3%	1.6% 0.1%	45.9% 45.6%	37.4% 37.3%		0.00	0.00	0.01	0.12		57.5% 58.0%	57.5% 58.0%	0.4% 0.1%	0.1%	1.0%	17.3% 17.4%	15.5% 15.9%
96			51		2 5	122	0.00	0.01	0.01	0.27			100.0%	0.6%	0.9%	0.8% 3.6%	41.0% 46.4%	38.1%	0.33	0.00	0.01	0.00	0.10	0.11	50.1% 54.8%	50.1% 54.8%	0.5%	0.8%	0.6% 2.5%	15.0% 20.4%	16.1%
98			58		- 5	2.09		0.00	0.01	1.04	0.0		100.0%	0.2%	0.1%	0.3%	49.9% 49.7%	41.7% 41.5%	1.31		0.00	0.01	0.48		62.7% 62.5%	62.7% 62.5%	0.2%	0.1%	0.2%	23.2% 23.3%	21.3% 21.4%
100		- 19	60		3	1.72	0.01	0.00	0.01	0.77	0.73		100.0%	0.5%	0.5%	0.3%	44.7%	43.5%	0.92	0.00	0.00	0.01	0.36	0.40	53.2%	51.2%	0.3%	0.4%	0.2%	20.9%	23.3%
101			61		5	1.24	0.01	0.00	0.01	0.55	0.6		100.0%	0.7% 0.2%	2.7%	1.0%	44.5% 47.8%	49.1%	0.50	0.01	0.03	0.01	0.23	0.26	40.3% 60.0%	40.3% 60.0%	0.6%	2.3%	0.7%	18.3% 22.1%	20.8% 20.6%
103			67		- 3	2.07			0.00		0.8		100.0%	0.3%	0.1%	0.1%	51.6% 26.7%	42.5%				0.00	0.50	0.45	64.4% 57.6%	644%	0.2%	0.0%	0.1%	24.2% 33.1%	21.7%
105			69		ś	1.54	0.01	0.02	0.01	0.67	0.7		100.0%	0.6%	1.4%	0.8%	41.6%	48.2%	0.75	0.01	0.02	0.01	0.30	0.38	40.6%	40.6%	0.5%	1.1%	0.6%	19.7%	24.6%
105		\vdash	-	129	2	0.62	0.01		0.01	0.22		_	100.0%	0.8% 0.7%	1.1%	1.6% 1.5%	35.7% 38.1%	47.6% 32.9%	0.25		0.01	0.01	0.07		41.0%	41.0% 42.8%	0.5%	0.8%	1.1%	12.0% 12.4%	18.0% 12.9%
108			5	133	2	0.56	0.01		0.01	0.21			100.0%	1.1% 0.7%	0.7%	1.4%	37.2% 17.4%	38.3% 36.3%	0.26		0.00	0.01	0.07		45.7% 44.1%	45.7% 44.1%	0.7% 0.5%	0.5%	0.9%	12.6% 12.3%	14.9% 14.2%
110			9	137	2	0.51	0.00	0.00	0.01	0.23	0.2		100.0%	0.8%	0.6%	1.6%	44.4%	48.7%	0.24	0.00	0.00	0.01	0.08	0.11	45.0%	46.0%	0.6%	0.6%	1.2%	15.2%	21.4%
1112			5	142	4			0.01	0.03	0.55			100.0%	0.9%	1.3%	2.4% 0.7%	51.0% 41.3%	42.6%	0.52	0.01	0.01	0.02	0.20		51.2% 51.0%	51.2% 51.0%	0.7%	1.1% 0.2%	1.7%	19.6% 15.3%	20.3% 20.3%
113			17	144	4			0.01	0.01		0.4		100.0%	0.8%	2.8%	1.1%	47.3% 42.4%	40.5% 43.7%		0.01	0.01	0.01	0.23	0.22	56.2% 17.1%	56.2% 37.3%	0.6%	0.6%	0.6% 2.2%	19.8%	18.5%
115			ń	149	4		0.01		0.03	0.57			100.0%	0.7%	0.3%	2.4%	47.9%	42.0%		0.01	0.00	0.02	0.23	0.23	53.2%	51.2%	0.5%	0.3%	1.6%	18.9%	19.5%
116			12	151	4	1.05	0.01	0.01	0.01	0.65	0.4		100.0%	0.5%	0.3% 1.2%	0.7% 1.3%	50.1% 42.2%	43.2% 42.1%	0.76	0.01	0.01	0.01	0.26	0.20	59.0% 41.7%	59.0% 43.7%	0.4%	0.2%	0.4%	20.3% 15.7%	20.2% 19.2%
117 118 119 120 121 122 123 124 125 126			10	157	10		0.03	0.02	0.11	1.61			100.0%	1.0% 0.7%	0.8%	3.8% 0.5%	55.0% 51.8%	38.0% 52.1%	1.60	0.02	0.02	0.07	0.71	0.52	54.9% 61.8%	54.9% 61.8%	0.5%	0.6%	2.5%	24.4% 25.4%	17.9% 26.9%
120			11	159	10	2.49	0.03	0.01	0.02	1.78	1.50		100.0%	0.8%	0.2%	0.6%	51.1%	44.0%	2.20	0.02	0.01	0.01	0.83	0.83	63.1%	63.1%	0.6%	0.1%	0.4%	23.9%	23.9%
121		\vdash	12	161	10 10		0.02	0.05		128	1.2 0.8		100.0% 100.0%	0.9%	0.7% 2.3%	0.8% 2.4%	54.0% 55.5%	43.8% 38.1%	0.93		0.04	0.03	0.83	0.42	55.9% 40.2%	55.9% 40.2%	0.7% 0.7%	0.6% 1.9%	0.5% 1.4%	26.3% 25.5%	24.4% 18.0%
121		-	18	166	10	1.12	0.02	0.01	0.05	1.88	1.52		100.0%	0.6%	0.3%	1.5% 0.3%	56.5% 51.4%	46.0% 49.4%	1.96 2.14	0.01	0.01	0.02	0.89		59.0% 64.3%	59.0% 64.3%	0.4% 0.7%	0.2%	0.7%	26.8% 24.0%	24.1% 25.7%
125			10	168	10	2.29	0.04	0.01	0.01	1.81	1.40		100.0%	1.1%	0.2%	0.3%	53.4%	42.2%	2.05	0.03	0.01	0.01	0.87	0.83	60.5%	60.5%	0.8%	0.1%	0.2%	25.7%	24.5%
1.26			-	169	10	2.69			0.06		1.11					2.0%	54.2%	43.7%		0.02		0.04	0.69			49.5%				25.6%	24.4%

Table 7. PD of Ant N – patch antenna (39GHz – n260)

- N-patch Low CH

						-										max rat													max ratio out of all I	Deams	•	•
П								4cm2	PD(mW/c	cm2)				100.0%	5.5%	47%	15.1%	83.3%	62.9%	4	lom2 PD)	(mW/cm2)	at 10mm ev	aluation	distance	68.8%	68.8%	17%	15%	11.4%	27.0%	33.2%
No. 1	Module Ty	e Seam IC	,1 Sena D,	2 Feed no	54/Rig	n) 53(L	eft) SS(To	op) 56	(Bottom)	\$1(From		145	m. (8)	ratio sight 2mm)/(worst- surface 2mm)	ratio (Left 2mm)/(wont- surface 2mm)	ratio (Top 2mm)/(wonst- surface 2mm)	ratio (Bottom 2mm)/(wonst- surface 2mm)	ratio (Fornt 2mm)/(worst- surface 2mm)	ratio (Rear 2mm)/(worst- surface 2mm)	S4(Right	S3(Lef			m) 51/F	ront) \$2(Rear)	ratio worst-surface (10mm/2mm)	ratio (Right 10mm)/(worst- surface 2mm)	ratio (Left 10mm)/(wond- surface 2mm)	ratio (Top 10mm)/(wonst- surface 2mm)	(Sottom (Sottom 10mm)/(worst- surface 2mm)	ratio (Front 10mm)/(worst- surface 2mm)	ratio (Rear 10mm)/(wont- surface 2mm)
65		1	_	-	0.14	0.0	0 0.00	-	0.01		0.12		+	100.0%	0.9%	0.3% 1.2%	2.3% 4.7%	37.2% 32.1%	35.5% 29.7%	0.17		0.00		0	05 0.05	50.4% 42.0%	50.4% 42.0%	0.3%	0.3%	2.1%	11.5%	15.0%
66		5		1	0.36	0.0	0 0.00	1	0.02	0.12		2		100.0%	0.5%	1.3%	5.5%	31.9%	31.4%	0.16		0.00		0.	04 0.05	42.4%	42.4%	0.5%	1.0%	4.2%	9.9%	12.0%
65		7 9		-	0.40	0.0	0 0.00		0.02	0.12			+	100.0%	0.8%	0.8%	3.8% 1.6%	31.0% 36.5%	31.0% 33.9%	0.17		0.00	0.01	0	05 0.05	41.6%	41.6% 48.7%	0.5%	0.5%	1.0%	8.8% 12.0%	10.8%
69 70		14		2	0.25	0.0			0.06					100.0%	0.6%	1.7%	6.5%	15.6%	34.2%	0.34		0.01			09 0.11	31.4%	38.4%	0.3%	1.5%	5.0%	10.4% 18.9%	12.0%
21		16		2	0.60	0.0	1 0.01	_	0.01	0.31	0.20		+	100.0%	0.8%	0.2%	2.0%	50.5% 28.5%	45.9% 26.8%	0.41		0.00			31 0.14 06 0.08	67.2% 30.0%	67.2% 30.0%	0.7%	0.2%	1.2%	8.2%	22.7%
72 73 74		17		2	0.75	0.0	0 000	2	0.05		0.25			100.0%	0.4%	2.0%	14%	36.5% 36.1%	31.9%	0.30	0.00	0.01	0.04	0	09 0.11	38.35 53.45	38.3% 53.4%	0.4%	1.6%	5.1% 1.1%	11.4%	13.5%
74		22		2			1 0.00		0.01	0.25	0.23		+	100.0%	0.7%	0.6%	42%	40.2%	40.5%	0.27			0.01		10 0.14	56.4%	56.4%	0.6%	0.5%	1.1%	15.1%	17.0%
75 76		23		2	0.66	0.0	0 0.00		0.04	0.17	0.17		_	100.0%	0.6%	1.2%	6.5% 5.6%	25.3% 29.2%	25.5% 17.4%	0.20		0.01	0.03		06 0.07 31 0.35	29.5% 45.1%	29.5% 45.1%	0.5%	0.9% 2.9%	5.1% 4.1%	8.3% 16.4%	10.4%
77		30		3	1.71	0.0			0.01	0.89			+	100.0%	1.1%	0.4%	0.6%	49.9%	45.0%	1.14		0.01			40 0.46	64.2%	64.2%	1.0%	0.2%	0.5%	22.7%	25.8%
78 79		31		5	1.42	0.0	2 0.00		0.05	0.74	0.72			100.0%	1.0%	0.3%	12% 12.5%	50.5%	49.5% 33.4%	1.00		0.00			33 0.39 23 0.29	68.1% 31.4%	68.1% 31.4%	0.7% 0.5%	0.2%	1.9%	22.1% 10.4%	26.6%
80		12	_	3	1.85	0.0	1 0.00		0.27	0.77			+	100.0%	0.7%	175	4.6%	15.3% 39.2%	16.9%	0.88		0.06			21 0.29	46.4%	46.4%	0.3%	2.1%	12%	16.4%	18.0%
80 81 82 83		28 29		5	1.66	0.0	2 0.00	_	0.02	0.79	0.75		_	100.0%	1.0%	0.7% 0.2%	0.9%	47.8% 52.7%	46.9% 47.4%	101		0.01	0.01		38 0.43 40 0.45	62.7%	62.7% 68.8%	0.7%	0.6%	0.7%	22.9% 23.8%	26.0%
83		40		5	1.36	0.0	2 0.00	2	0.21	0.52	0.43	2	+	100.0%	1.1%	1.1%	15.1%	38.2%	31.3%	0.59	0.01	0.01	0.16	0.	19 0.22	43.2%	43.2%	0.8%	0.9%	11.4%	13.9%	16.0%
14		129		5	1.99	0.0	1 0.00		0.12	0.77	0.72		_	100.0%	0.3%	1.0%	6.1%	39.7% 60.9%	37.0% 43.7%	0.86		0.05	0.09		30 0.34 04 0.04	44.1%	44.1% 41.4%	0.2%	2.6%	4.7%	15.5% 18.6%	17.2%
86		129		++	0.22	0.0	1 0.00		0.00	0.12	0.10		+	100.0%	2.2%	1.7%	2.6%	57.1%	44.6%	0.10		0.00	0.00		04 0.04	42.4%	42.4%	1.7%	1.2%	1.7%	15.6%	15.2%
87		133		1	0.30	0.0	1 0.00		0.01	0.18	0.14			100.0%	2.0%	1.0%	1.7% 4.8%	59.3%	47.8% 41.6%	0.12		0.00			05 0.05	42.0%	42.0%	1.4%	0.7%	1.4%	18.0% 14.8%	17.2%
89		137		-	0.23	0.0	0 0.00		0.01	0.15	0.12		+	100.0%	2.7%	0.7%	2.8%	56.0% 51.6%	40.1%	0.12		0.00			05 0.06	41.5%	29.5% 41.5%	1.7%	0.7%	1.1%	16.5%	14.8% 19.3%
90		142		- 2	0.57	0.0	2 0.00		0.02	0.31	0.15			100.0%	1.9% 2.6%	1.85	4.0%	55.0% 64.5%	32.7% 62.9%	0.18		0.01			07 0.07 13 0.15	30.6% 56.8%	30.6%	1.6%	1.2%	2.8%	11.6%	13.0%
88 89 90 91 92 93 94		143		2	0.56	0.0		1	0.02	0.29	0.22		+	100.0%	1.4%	0.2% 1.6%	1.6%	52.2%	38.7%	0.29	0.01	0.01	0.01		0.09	39.1%	56.8% 29.1%	1.1%	0.2% 1.1%	1.0%	25.2% 14.4%	29.6% 16.3%
93		145		2	0.47				0.02	0.28			_	100.0%	1.9% 2.7%	2.5%	3.4% 2.0%	59.1% 59.5%	35.0% 53.6%	0.15		0.01			06 0.07	32.6% 50.5%	12.6% 50.5%	1.5%	1.9%	2.3%	11.9% 20.8%	14.0% 24.0%
95	N Par	h 150		2	0.66	0.0	1 0.00	0	0.04	0.35	0.35		+	100.0%	2.1%	0.5%	5.7%	52.1%	53.2%	0.34	0.01	0.00	0.02	0	12 0.16	51.2%	51.2%	1.2%	0.3%	1.6%	20.0%	23.3%
95 96 97		151		2	0.46	0.0	1 0.01		0.02	0.28	0.16		_	100.0%	1.9%	2.4%	14% 5.1%	59.9% 55.5%	33.4% 36.2%	0.15		0.01			22 0.17	31.7% 42.4%	31.7% 40.4%	1.5%	1.9%	2.4%	11.6% 17.9%	12.5% 14.2%
98		158		5	1.00	0.0	4 0.00		0.01	0.62	0.65		_	100.0%	4.0%	0.8%	0.5%	58.0%	61.2%	0.59	0.03	0.01	0.00	0.	25 0.34	55.9%	55.9%	2.6%	0.6%	0.2%	23.7%	31.5%
99		159		- 5	1	90	2 00		0.04	9.21	0.63			100.0%	5.1% 1.2%	0.4%	12% 76%	02.4% 33.2%	50.5% 44.2%	0.64		0.00			21 0.35 23 0.25	56.35 48.45	56.3% 48.4%	1.4%	0.4%	18%	27.0% 17.9%	30.5% 19.2%
101		161		5	1.00	0.0	3 0.05	5	0.05	0.85	0.44		+	100.0%	3.2%	4.7%	4.9%	83.3%	42.6%	0.44	0.02	0.03	0.03	0.	21 0.20	42.7%	42.7%	2.2%	3.1%	2.9%	20.1%	19.7%
102		166	_	5	1.10	0.0			0.03	0.67			-	100.0%	5.5% 1.9%	1.5%	2.7% 2.6%	60.8% 55.3%	57.5% 61.6%	0.64	0.04	0.01	0.02		27 0.33	58.2% 54.5%	58.2% 54.5%	3.7% 2.7%	0.9%	1.7%	24.9% 23.5%	29.8% 32.0%
104		160		5	1.43	0.0	4 0.01		0.08	0.63	0.81		+	100.0%	2.8%	0.8%	5.5%	44.3%	56.7%	0.82	0.03	0.01	0.06	0.	28 0.40	57.5%	57.5%	1.8%	0.6%	4.0%	19.5%	27.7%
105		169	120	5	1.04	0.0			0.05	0.82	0.39		-	100.0%	2.8%	1.1%	5.0% 2.1%	78.2% 44.4%	37.5% 44.4%	0.40		0.03	0.03	0.	23 0.18	38.5% 47.6%	38.5% 47.6%	1.9%	2.7%	1.2%	22.0% 15.5%	17.4% 17.6%
107		- 3	121	2	0.63	0.0	1 0.01		0.03	0.24	0.24	_	_	100.0%	1.2%	1.25	4.6%	17.5%	28.2%	0.25	0.01	0.01	0.02	0	0.09	42.1%	40.1%	0.8%	1.0%	1.2%	11.0%	14.5%
107 108 109 110		- 5	133	2		90	1 00		0.04				_	100.0%	14%	125	5.7% 6.0%	44.6% 45.0%	43.9%	0.30			0.03		09 0.12 08 0.12	42.25 41.35	42.2% 41.3%	1.1%	1.1%	4.1% 1.9%	11.0%	17.7% 16.2%
110		9	137	2	0.79	0.0	1 0.00	1	0.03	0.33	0.32	2	•	100.0%	1.0%	0.8%	3.4%	42.1%	40.2%	0.38	0.01	0.01	0.02	0.	10 0.12	47.6%	47.6%	0.6%	0.8%	2.3%	13.0%	15.5%
111		14			1.54		4 0.00		0.10		0.61		-	100.0%	2.4%	2.0%	6.5%	47.5% 47.1%	39.8% 53.2%	0.58			0.08		22 0.27 26 0.34	37.5%	37.5% 58.1%	1.7%	1.6%	5.0%	14.2% 30.4%	17.5%
113		16	144	- 4	1.22	0.0	2 0.00	2	0.09	0.49	0.45	5	_	100.0%	1.2%	1.2%	7.0%	40.2%	37.0%	0.49	0.01	0.01	0.06	0	17 0.20	42.3%	40.3%	0.7%	0.9%	4.9%	11.9%	16.6%
114		21					2 0.00		0.08		0.48		-	100.0%	1.6%	2.1%	6.0% 1.7%	11.6% 41.5%	16.2% 53.4%	0.49		0.02	0.06		16 0.21 21 0.33	36.6%	16.6% 53.1%	1.0%	1.5%	4.6% 1.3%	12.0% 18.1%	15.8% 25.3%
116		22	150	- 4	1.60	0.0	3 0.00		0.12	0.67	0.74	_	_	100.0%	1.6%	0.4%	7.4%	41.0%	46.0%	0.90		0.02	0.07	0.	28 0.30	55.9%	55.9%	1.0%	0.3%	4.6%	17.5%	18.5%
117		21	151	4	133	90	2 0.00		0.07	951	0.42		_	100.0%	1.2%	14%	5.4% 6.5%	18.6% 47.4%	32.0% 42.4%	9.47	0.01	0.01	0.06		15 0.17 66 0.60	35.4% 40.2%	15.4% 40.2%	0.9%	1.1%	4.2% 4.7%	11.5% 20.1%	12.5%
119		30	158	10	120	0.0	7 0.00	1	0.03	1.57	1.72	2	_	100.0%	2.2%	0.4%	0.8%	48.1%	52.8%	1.88	0.05	0.01	0.01	0.	71 1.00	57.7%	57.7%	1.5%	0.3%	0.4%	21.6%	30.8%
120		21	159	10	2.11	0.0			0.16	1.58				100.0%	2.7%	0.4%	52% 123%	50.7% 51.8%	47.5% 38.5%	1.96		0.01			75 0.78 62 0.60	63.1% 42.3%	63.1% 42.3%	1.0%	0.3%	3.1% 9.2%	24.0% 16.4%	25.1% 16.0%
122		33	160	10	122	0.0			0.19	1.54			+	100.0%	1.4%	4.1%	6.0%	47.8%	40.4%	1.49		0.11			62 0.79	46.3%	46.3%	1.0%	1.5%	19%	19.1%	24.6%
123		38	166	10	2.18				0.06	1.67			-	100.0%	4.1% 2.4%	1.4%	1.9%	52.4% 49.8%	54.4% 57.8%	1.91		0.03			85 0.99 63 1.00	59.9%	59.9% 61.7%	2.8%	0.9%	1.1%	26.6%	31.1%
125		40	160	10	1.27	0.0	7 0.00	5	0.41	1.50	1.54		1	100.0%	2.1%	0.3%	2.8%	47.3%	47.2%	1.92	0.04	0.04	0.29	0	65 0.74	51.8%	58.8%	1.7%	0.2%	1.7%	21.0% 19.9%	33.2% 22.6%
126		41	169	10	1.10	0.0	4 0.12	2	0.22	1.61	1.52	2		100.0%	1.1%	16%	6.6%	48.8%	46.1%	1.29	0.03	0.10	0.16	0	63 0.74	42.3%	42.3%	0.8%	1.0%	4.9%	19.2%	22.5%

- N-patch Mid CH

																max ra	tio out of seams												max ratio out of all b	eams.		
П								4cr	n2 PD(m	W/cm2	0			100.0%	5.8%	40%	14.2%	70.1%	60.8%	4	om2 PD(n	W/cm2)	at 10mm eva	lustion dis	tance	68.9%	68.9%	2.8%	2.5%	11.1%	29.8%	25.2%
No. 9	Module Ty	pe Seam ID_1	Berna ID,2					_		Т.		C2/Dear	per Beam	ratio (Right 2mm)/(worst-	ratio (Left 2mm)//wont-	ratio (Top 2mm\//wont-	ratio (Sottom 2mm)//wont-	ratio (Fornt 2mm)//worst-	ratio (Rear 2mm)//worst-	S4(Right)	C21 -01	F F CT	S6/Eottom	S1(From	f) S2/Rear	ratio worst-surface	ratio (Right 10mm)//wont-	ratio (Left 10mm)/(wont-	ratio (Top 10mm)/(wont-	ratio (Bottom	ratio (Front 10mm)//worst-	ratio (Rear 10mm)//wont-
					S4(Rigi	(a) 53(L	et) SS((Iop)	SE(Botto	m(21	(Front)	5279000	Back-of (dB)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	surface 2mm)	24/49/4	33(281)	a a (top	36(800331)	217100	1) 11/44	(10mm/2mm)	surface 2mm)	surface 2mm)	surface 2mm)	10mm)/(worst- surface 2mm)	surface 2mm)	surface 2mm)
64		-							0.01		0.12	9.12		100.0%	0.6%	0.6%	1.8%	16.6%					0.00		0.05	49.7%	49.7%	0.6%	0.3%	12%	12.8%	15.2%
66		- 5	+		0.45		0 0		0.02		0.12	0.11	+	100.0%	0.5%	1.2%	3.0%	21.6%	10.2%	0.19				0.04		41.75	41.7%	0.6%	1.1%	2.9%	10.0%	11.9%
67		7			0.39		0		0.01		0.13	0.12		100.0%	1.0%	0.5%	3.3%	11.2%		0.17				0.04		41.2%	43.2%	0.8%	0.5%	2.3%	10.0%	10.5%
68		9	-	1	0.39	0.0	0 0		0.01	_	0.14	0.13	-	100.0%	0.5%	0.5%	2.1%	35.9% 38.9%	34.4% 33.9%	0.19			0.01	0.05	0.05	47.4%	47.4% 44.7%	0.5%	0.5%	15%	12.1% 13.2%	13.2%
70		15	_	2	0.66	0.0	1 0	00	0.01	_	0.33	0.31	_	100.0%	0.9%	0.4%	13%	41.2%	45.2%	0.44	0.01	0.00	0.01	0.14	0.16	64.6%	64.6%	0.7%	0.4%	1.0%	20.6%	22.7%
71		16		2	0.84	0.0		5	0.03		0.23	0.21		100.0%	0.7%	0.6%	18%	27.0%	25.3%	0.29			0.02	0.08	0.10	34.3%	34.3% 37.0%	0.4%	0.5%	2.8%	9.3%	11.4%
72		21	+	2 2					0.04			0.27	-	100.0%	0.9%	1.4%	14%	42.1%					0.04		0.12	37.0% 55.4%	17.0% 55.4%	0.6%	1.2% 0.5%	1.9%	10.6%	12.7%
74		22		2	0.71	0.0	0 0	-01		_	0.30	0.28		100.0%	0.6%	0.7%	2.9%	41.7%	10.0%				0.02	0.11	0.13	55.3%	55.3%	0.4%	0.4%	2.2%	15.6%	18.3%
75		21	-	2	2.00		2 0		0.04		0.18	0.19	-	100.0%	0.4%	0.7% 2.2%	52% 58%	25.6% 42.2%	27.5% 39.3%			0.01	0.03	0.06	0.08	31.0% 50.7%	31.0% 50.7%	0.3%	0.7% 1.9%	4.2% 4.2%	18.8%	11.0% 20.4%
77		30		5	1.74	0.0	3 0	00	0.01		0.94	0.78	_	100.0%	1.6%	0.1%	0.8%	53.9%	45.1%	1.17	0.02	0.00	0.01	0.44	0.43	67.2%	67.2%	1.2%	0.1%	0.5%	25.5%	24.7%
78		31			1.33		2 0		0.03		0.67	0.62		100.0% 100.0%	1.9%	0.6%	2.3% 10.4%	50.1% 16.2%	46.7%	0.86			0.02	0.30		65.0% 34.5%	65.0% 14.5%	1.6%	0.5%	1.4%	22.3% 12.2%	26.9%
20		12	_	3	1.95		3 0		0.20		0.85	0.60	_	100.0%	1.1%	2.7%	5.1%	41.0%	19.2%	1.05	0.01		0.16	0.24		50.85	34.5% 50.8%	0.9%	2.2%	2.4%	12.25	20.7%
81		38		5		0.0	2 0	02	0.02		0.77	0.77		100.0%	1.2%	1.2%	12%	45.3%	44.9%	1.06	0.02	0.02	0.01		0.44	61.9%	61.9%	0.9%	1.1%	0.7%	20.5%	25.9%
82		29 40	_	5					0.02		0.93	0.83	-	100.0%	1.0%	0.1%	12%	52.2% 15.1%					0.01		0.45		68.9%	0.9%	0.1%	0.8% 11.1%	24.2% 15.2%	25.6%
84		41	 	5	2.07	0.0	2 0	04	0.13		0.87	0.79	_	100.0%	0.8%	1.8%	6.2%	41.0%	38.1%	0.99	0.01	0.03	0.09	0.38	0.40	47.7%	47.7%	0.6%	1.6%	4.5%	18.2%	19.1%
85		129		1		0.0			0.00		0.15	0.10		100.0%	1.2%	2.0%	1.2%	60.6%		0.11				0.05	0.04	43.1%	43.1%	0.8%	1.6%	0.8%	21.5%	17.9%
86		131	+		0.29	0.0		00	0.00	-	0.16	0.12	+	100.0%	1.4%	1.7%	1.4%	54.7% 65.2%	41.9% 45.1%	0.11	0.00	0.00	0.00	0.05	0.05	38.1%	38.1%	0.7%	1.0%	1.0%	16.6% 20.7%	17.3% 19.8%
88		135		1	0.31	0.0			0.01		0.20	0.14		100.0%	1.6%	0.6%	2.9%	63.7%	44.4%	0.12			0.01	0.06		29.2%	39.2%	1.0%	0.6%	1.9%	18.6%	18.2%
89		137		-	0.36	0.0			0.01		0.17	0.17		100.0%	1.4%	0.6%	1.7% 2.7%	47.5% 20.1%		0.15			0.00	0.06	0.08	40.8% 29.5%	40.8% 29.5%	0.8%	0.6%	1.1%	17.6%	21.8% 16.4%
91		143	_	2		0.0	1 0	00	0.01			0.20	-	100.0%	1.0%	0.5%	1.4%	58.5%	55.2%	0.22	0.01	0.00	0.01		0.18	41.6%	40.6%	1.2%	0.2%	0.9%	28.9%	28.0%
93		144		2		0.0			0.02		0.36	0.20		100.0%	2.1%	2.3%	3.3% 2.0%	63.3% 58.8%					0.01		0.09	31.1%	31.1% 31.2%	1.6%	1.6%	2.3%	16.3% 11.2%	16.4%
94		149	+	2								0.17	-	100.0%	2.0%	3.0%	0.7%	57.1%	46.0%				0.01		9.13		46.1%	1.3%	2.0%	0.6%	24.5%	24.7%
95	N Pa	tch 150		2	0.72		1 0		0.03		0.37	0.38		100.0%	1.7%	0.6%	1.6%	\$1.7%	53.2%	0.35				0.16		41.1%	48.8%	1.1%	0.4%	2.4%	22.2%	26.1%
96		151	_	2	0.50	0.0			0.01		0.29	0.16	-	100.0%	1.8%	1.0%	2.2% 4.3%	58.8% 63.3%	12.4% 11.6%	0.15	0.01			0.08		30.4%	30.4% 36.7%	1.2% 1.2%	2.0%	1.6%	16.2% 17.7%	11.4% 13.4%
90		158		5		0.0	5 0	00	0.00		0.83	0.16		100.0%	2.1%	0.3%	0.2%	53.8%	55.8%	0.77	0.03	0.00	0.00	0.46	0.48	50.4%	50.4%	2.1%	0.2%	0.2%	29.8%	31.4%
99		159		5 5					0.04		0.79	0.80		100.0%	1.5%	0.6%	2.6%	55.0%					0.02		0.45		50.8%	2.4%	0.4%	1.5%	27.9%	31.4%
101		160	_	3						_	0.62	0.35	+	100.0%	2.7% 2.5%	3.7%	5.9% 4.0%	66.5% 58.2%	32.7%				0.04		0.17	44.2% 35.0%	44.3% 15.0%	1.9%	2.1%	4.3% 2.6%	20.7% 18.0%	18.2% 15.7%
102		166		5 5	1.15		7 0		0.03		0.64	0.70		100.0%	5.8%	2.8%	2.2%	55.5% 46.9%	60.5%	0.59			0.02	0.27		51.5%	\$1.5%	3.8%	1.9%	1.4%	23.4%	35.3%
104		160	_	3			5 0		0.02		0.63	0.83	_	100.0%	41%	0.1%	1.3% 7.3%	49.5% 54.0%	54.0%	0.68				0.44		50.9%	50.9% 58.6%	1.6%	0.1%	0.8% 4.8%	28.6%	30.4% 31.8%
105		169		5	1.09		2 0		0.05		0.63	0.35		100.0%	2.0%	2.9%	4.1%	58.0%	31.9%	0.40	0.02	0.02	0.03	0.21	0.16	36.7%	36.7%	1.6%	2.1%	2.8%	19.2%	14.4%
106		1	129	2	0.64	0.0	1 0	01	0.01	-	0.31	0.28	-	100.0%	1.4%	13%	1.6%	48.8% 41.5%	44.4%	0.30	0.01	0.01	0.01	0.11	0.12	46.6%	46.6%	0.9%	0.9%	13%	17.1%	18.9%
108		- 5	122	2	0.87	0.0	1 0	01	0.03		0.40	0.37	_	100.0%	1.4%	1.6%	1.9%	45.9%	42.2%	0.22	0.01	0.01	0.03		0.12	37.8%	27.8%	0.9%	1.4%	3.0%	11.5%	19.0%
109		7	135	2 2								0.32		100.0%	2.0%	0.9%	16%	47.2% 38.4%					0.02		0.13	29.8% 42.7%	29.8% 42.7%	1.4%	0.8%	2.3% 12%	12.0% 15.1%	16.2% 20.2%
111		14	142	4	1.81	0.0	5 0	04	0.01			0.74	+	100.0%	2.5%	2.1%	51%	47.6%	40.0%	0.77	0.03	0.03	0.01		0.16		42.5%	1.7%	1.0%	1.6%	17.4%	18.0%
112		15	143		1.56		3 0		0.03		0.72	0.80		100.0%	1.9%	0.8%	1.7%	46.0%		0.87			0.02	0.35		55.6%	55.6%	1.3%	0.6%	1.2%	22.4%	27.7%
113		16	144		1.22	0.0	2 0		0.08		0.56	0.43	-	100.0% 100.0%	2.0%	2.5%	6.4% 5.3%	46.1% 34.6%		0.49			0.06	0.16		40.4% 35.0%	40.4% 35.0%	1.4%	1.7% 1.8%	4.9%	13.1% 11.6%	15.8% 15.4%
115		21	149		1.52		3 0		0.03		0.68	0.78	_	100.0%	2.2%	1.25	1.6%	44.7%	51.2%	0.81	0.02		0.02	0.17	0.39	53.1%	53.1%	1.5%	0.9%	1.0%	20.1%	25.8%
116		22	150	4	1.65	0.0			0.07		33.0	0.79		100.0%	1.1%	0.9%	4.1%	40.1%	48.0%	0.91	0.01		0.04	0.31	0.35	55.1%	55.1%	0.7%	0.7%	2.6%	18.7%	21.3%
117		23	151	4 10					0.07		0.52	0.49	-	100.0%	1.2%	2.1%	5.3% 7.1%	29.3% 47.9%		0.49			0.06	0.20	0.21	37.3% 47.7%	37.3% 47.7%	0.8%	1.4%	4.3% 5.1%	15.2% 21.9%	15.8% 20.5%
119		30	158	10	1.86	0.1	3 0	61	0.02	_	130	2.02		100.0%	3.4%	0.3%	0.6%	46.6%	52.5%	2.23	0.09	0.01	0.01	0.91	120	57.7%	57.7%	2.4%	0.2%	0.3%	23.7%	31.1%
120		31	159	10					0.12		1.55	1.55	-	100.0%	2.6%	0.8%	3.8%	50.2% 45.4%	50.3% 17.2%	1.86			0.08	0.77	0.93	60.2%	60.2% 45.1%	1.8%	0.5%	2.5%	24.7%	29.9%
122		33	161		2.00		0 0		0.23		1.76	1.71	+	100.0%	2.6%	4.0%	5.9%	45.3%	44.1%		0.05		0.16	0.87		50.0%	50.0%	1.9%	1.5%	4.0%	22.4%	23.0%
123		38	166	10	1.70	0.1		05	0.08		1.63	2.00		100.0%	1.9%	1.4%	2.2%	41.9%	53.9%	2.03	0.09	0.05	0.05	0.78	1.19	54.9%	\$4.9% \$8.1%	2.5%	1.2%	1.4%	21.2%	32.1%
124		29	167		1.72		6 0 1 0		0.08		1.81	1.89	+	100.0%	1.7%	0.1%	2.1% 12.4%	48.5% 29.8%	50.7%	1.83			0.05	0.87	0.73	58.3% 59.6%	S8.3% 59.6%	1.1%	0.1%	1.3% 9.4%	23.4% 18.5%	10.3% 23.9%
126		41	169	10	1.89		8 0		0.28		1.85	1.66		100.0%	1.9%	1.0%	7.1%	47.5%		1,87			0.20	0.89	0.82	48.1%	48.1%	1.4%	2.6%	5.0%	22.9%	21.0%

- N-patch High CH

													max rat						_		_					max ratio out of all I	Deams		
П		Т	Т	Т			4cm2 PD/m	sW/cm2)					380	112%			-	4cm2 PD(n	nW/cm2)	at 10mm eval	luation dist	ance	l	T	179	T	MAS	1400	20.1%
No. I	fodule Typ	e Seam ID.	Sema D.	Feed no.		Т	T	\top	Т	per	ratio	ratio	ratio	ratio	ntio	ratio		Т			Т	1	ratio	ntio	ratio	ratio	natio (Sottom	ratio	ratio
					S4(Right) S3(Let	t) SS(To)) S6(Botto	om) S1(Fro	ont) \$2(R	ear) Back-o	(Right 2mm)/(worst- surface 2mm)	(Left 2mm)/(wont- surface 2mm)	(Top 2mm)/(wont- surface 2mm)	(Bottom 2mm)/(wont- surface 2mm)	(Famt 2mm)/(want- surface 2mm)	(Rear 2mm)/(worst- surface 2mm)	54/Right	() S3(Left)	SS(Top)	S6(Bottom)	\$1(Fron	t) S2(Rear)	worst-surface (10mm/2mm)	(Right 10mm)/(worst- surface 2mm)	(Left 10mm)/(worst- surface 2mm)	(Top 10mm)/(wonst- surface 2mm)	10mm)/(worst- surface 2mm)	(Front 10mm)/(wonst- surface 2mm)	(Rear 10mm)/(worst- surface 2mm)
64		-					0.00		1 0.0		100.0% 100.0%	1.1%	0.7%	1.4%	17.9% 14.6%	32.9% 31.7%				0.00		0.04	49.3%	49.3% 46.7%	0.7% 0.8%	0.7%	1.1%	12.5%	13.2% 13.9%
64 65 66 67 68 69 70 71 72 73		5 7		1	0.43 0.00	0.01		0.1	4 0.1	2	100.0%	0.9%	1.2%	2.6%	33.2% 34.0%	29.2%	0.18	0.00	0.00	0.01	0.04		42.6%	42.6% 45.1%	0.7%	0.9%	1.9%	10.1%	10.8%
68		9	_	+ +	0.35 0.00	0.00	0.01	0.1	4 0.1		100.0%	0.9%	1.1%	1.4%	18.9%	32.4%	0.18	0.00	0.00	0.00	0.04		50.6%	50.6%	0.6%	0.6%	1.1%	12.5%	12.5%
20		14		2		0.01				9	100.0%	2.1%	1.3%	3.1% 1.5%	34.9% 50.4%	32.4% 41.0%	0.38	0.01	0.01	0.02	0.11	0.13	43.1%	43.1% 65.1%	1.5%	1.2%	2.2% 1.2%	12.8% 19.7%	14.1% 21.0%
71		16		2		0.01	0.03		0.1	9	100.0% 100.0%	0.9%	0.7%	14% 15%	30.0% 31.6%	24.2%	0.27		0.00		0.08		34.9% 41.1%	34.9% 40.3%	0.7%	0.5%	2.5%	10.5%	9.8%
72		21		2	0.70 0.01	0.00	0.01	0.3	0 02		100.0%	1.7%	0.6%	1.3%	41.2%	19.1%	0.40	0.01	0.00	0.01	0.12	0.13	56.6%	56.6%	1.1%	0.6%	1.0%	16.0%	19.1%
75		22	+	2	0.52 0.01	0.00	0.02		7 0.1	5	100.0%	0.5%	1.0%	2.0% 4.5%	42.2% 27.8%	38.9% 24.6%	0.42	0.00	0.00	0.01	0.12		56.7% 29.9%	56.7% 29.9%	0.5% 1.0%	0.4%	1.5%	16.1%	17.8% 11.4%
76		29		5	1.74 0.05 1.57 0.03				0.0		100.0%	2.6%	2.1% 0.2%	5.7% 0.6%	41.1% 54.3%	39.6% 45.3%	1.09	0.03	0.03	0.07	0.34		51.3%	51.3% 69.3%	1.5%	1.9%	1.9% 0.4%	19.7% 25.0%	21.2% 24.2%
78		21		5	1.52 0.02	0.01	0.02	0.7	0.0	4	100.0%	1.4%	0.5%	1.6%	51.3%	42.4%	0.98		0.01	0.01	0.34	0.35	64.6%	64.6%	1.4%	0.4%	0.9%	22.1%	23.0%
79 80		22	_	5	1.73 0.05	0.01	0.08	0.7		a .	100.0%	1.4%	0.7% 2.5%	7.9% 4.7%	38.9% 40.5%	30.2% 39.4%	0.64		0.01		0.25	0.37	38.0% 52.0%	38.0% 52.0%	0.8% 2.1%	0.5% 2.3%	6.0% 3.0%	14.6%	14.1% 21.3%
75 76 77 78 79 80 81 82 83		38 29		5	1.60 0.04	0.02	0.02	0.7	9 0.7	2	100.0%	2.6%	1.1%	14%	49.4% 52.9%	45.6% 44.6%	1.05	0.03	0.02	0.02		0.40	65.7%	65.7% 69.0%	1.7% 1.7%	1.0%	1.1%	22.6% 24.4%	25.2% 24.7%
83		40		5		0.00	0.16	0.5			100.0%	1.4%	0.2%	11.2%	41.0%	41.8%		0.01		0.13		0.26	55.4% 47.9%	56.4% 47.9%	0.9%	0.2%	10.4%	18.2% 18.7%	20.6%
85		129		1	0.26 0.00	0.00	0.00	0.1	0.0	19	100.0%	1.6%	1.2%	1.2%	62.0%	36.0%	0.11	0.00	0.00	0.00	0.06	0.04	43.8%	43.8%	1.2%	0.8%	0.8%	23.6%	15.1%
85		131	+	+ +		0.00					100.0%	1.9%	0.6%	1.6%	57.2% 60.2%	31.9%	0.11	0.00	0.00	0.00	0.06	0.05	31.9%	11.9%	1.3%	0.6%	1.3%	18.2% 20.8%	14.4%
88		135			0.36 0.01	0.00	0.01	0.1		3	100.0%	1.7%	0.6%	2.0%	\$4.1% \$3.6%	37.0% 41.0%	0.12	0.00	0.00	0.01	0.07	0.05	35.0% 41.0%	35.0% 41.0%	1.1%	0.6%	1.4%	18.8%	15.1%
90		142		2	0.60 0.02	0.01	0.02	0.2	9 02	9	100.0%	2.5%	1.3%	2.9%	57.0%	29.2%		0.00	0.01	0.01	0.11	0.09	28.5%	28.5%	1.6%	1.0%	1.0%	16.7%	12.8%
85 86 87 88 89 90 91 92 93		143	_	2	0.67 0.02	0.01	0.02	0.4	0 0.1	6	100.0%	1.8%	0.7%	1.4% 2.5%	56.0% 63.0%	44.3% 24.6%	0.21	0.01	0.01	0.01	0.12	0.07	46.1% 30.8%	46.1% 30.8%	1.3%	0.6%	0.8%	30.5% 19.8%	24.4% 10.5%
93		145		2		0.01				7	100.0%	1.9%	1.6%	1.6% 1.2%	60.3% 56.4%	30.0% 39.2%		0.01		0.01	0.09		32.4%	12.4% 44.3%	14%	1.2%	1.0%	15.9% 27.6%	14.2%
95	N Pate	150 151		2		0.01		0.4	3 0.3		100.0%	1.0%	0.9%	1.8%	55.1%	44.5%	0.36	0.01	0.01	0.01	0.20		46.6%	46.6%	12%	0.6%	1.2%	26.3% 16.8%	22.7%
97		157		- 5		0.01				6	100.0%	2.3%	1.4% 3.1%	1.8% 4.2%	61.7% 63.7%	28.3%		0.01	0.01	0.01	0.23		34.5%	30.8% 34.5%	1.6%	1.1% 2.4%	1.4%	19.3%	11.0%
98		158		5		0.01					100.0%	2.6%	0.7%	0.5% 1.5%	51.9% 55.5%	47.6% 49.4%		0.03	0.01		0.53		46.3% 49.2%	46.3% 49.2%	1.7%	0.4%	0.2%	14.6% 11.0%	29.1%
100		160		- 3			0.07		0.1		100.0%	5.5%	23%	5.8% 5.8%	72.0%	33.9%		0.04		0.05		6.18	41.6%	41.6%	17%	2.2%	4.1%	24.8%	15.3%
102		166		- 5	1.45 0.07	0.01	0.03	0.8	5 0.0	.9	100.0%	4.5%	0.8%	2.1%	58.6%	47.9%	0.71	0.04	0.01	0.02	0.43	0.41	41.0%	48.8%	1.0%	0.7%	1.3%	29.5%	28.0%
103		167	_	5	1.35 0.07	0.01	0.05	0.8	9 0.0	2	100.0%	2.1%	0.4%	2.0% 3.4%	56.5% 65.5%	42.3% 46.1%	0.69	0.02		0.03		0.34	49.8% 51.2%	49.8% 51.2%	1.5%	0.3%	1.2%	31.5% 30.3%	24.7% 25.4%
95 96 97 98 99 100 101 102 103 104 105 106 107 108 109		169	129	5 2		0.03	0.06	0.7	1 0.4	2	100.0%	4.2%	2.9%	5.3% 1.5%	69.7% 54.9%	40.3%	0.44	0.03	0.02	0.03	0.27	0.21	42.3%	42.3% 47.4%	2.8% 1.3%	2.2%	1.2%	25.9% 19.0%	20.1% 17.2%
107		- 3	131	2	0.77 0.02	0.01	0.01	0.1	2 02	9	100.0% 100.0%	2.0%	0.8%	16%	41.7% 44.3%	37.8%	0.34	0.01	0.01	0.02	0.11	0.13	44.0%	44.0% 40.3%	1.3%	0.7% 1.2%	1.0%	11.7%	16.5% 15.6%
109		- 7	135			0.01					100.0%	1.0%	0.7%	2.6%	44.1%	38.1%		0.01	0.01		0.12	0.13	42.4%	42.4%	2.1%	0.6%	1.8%	14.2%	15.0%
110		14	137	- 2		0.01				3	100.0%	1.2%	1.1%	1.8%	45.2% 45.8%	37.9%		0.01	0.01		0.11	0.14	45.1%	46.9% 45.1%	0.9% 2.5%	0.9%	1.1%	16.4%	17.8% 17.0%
112		15	143	4	1.70 0.04	0.01	0.03	0.9	0.0		100.0%	2.2%	0.8%	1.5% 5.3%	54.0% 52.5%	40.6%	0.94	0.03	0.01	0.01	0.40	0.19	55.6% 29.5%	55.6% 39.5%	1.5% 1.7%	1.0%	0.8%	23.5% 16.2%	23.0%
113		17	145	4	1.50 0.04				7 0.5	2	100.0%	2.7%	1.2%	1.9%	42.5%	32.8%	0.62		0.02	0.05	0.23	0.25	22.1%	29.1%	1.8%	1.2%	1.0%	14.5%	15.8%
115		21	149	4	1.54 0.04	0.02	0.05	0.7	2 0.3	6	100.0%	2.9%	1.1%	1.8% 2.9%	47.5% 48.5%	46.5% 41.2%	0.82	0.03	0.01	0.02	0.31		51.2% 51.3%	51.2% 51.3%	1.9%	0.6%	1.0%	20.1%	23.8% 21.9%
115 116 117		23	151	4	130 003	0.02	0.06		7 0.4		100.0%	2.5%	135	4.5%	512% 522%	32.9% 41.8%	0.48		0.02	0.05	0.22	0.19	36.7%	36.7% 90.2%	1.6%	1.2%	15% 47%	16.9% 21.0%	14.5%
119		30	158	10	154 012	0.02		2.0	0 14	6	100.0%	3.1%	0.6%	0.5%	50.7% 67.0%	47.1% 43.0%	2.32		0.01	0.01	1.04		58.8% 57.5%	58.8% 57.9%	23%	0.4%	0.3%	26.4% 26.4%	27.9% 26.3%
121		32	160	10	2.61 0.15	0.07	0.31	1.6	7 12	9	100.0%	4.1%	2.0%	0.5%	46.2%	35.6%	1.74	0.09	0.05	0.23	0.74	0.53	49.1%	48.1%	2.5%	1.4%	6.5%	20.5%	14.7%
122		33	161	10		0.13					100.0%	5.1% 5.1%	1.15	5.9% 2.6%	55.4% 50.1%	43.8% 49.3%	2.06		0.11		0.97		53.4%	53.4% 58.5%	1.5% 1.3%	1.0%	1.6%	25.2% 24.5%	23.3% 28.5%
124		29	167	10	152 0.06	0.02	0.09	1.8	9 1.5		100.0%	1.7%	0.7%	2.6%	53.5%	43.6%	2.09	0.04	0.02	0.05	0.91	0.93	59.2% 57.2%	59.2%	1.2%	0.5%	1.5%	25.7%	26.5%
125		40	168	10	2.79 0.15	0.02				6	100.0%	4.0% 3.9%	0.7% 2.5%	10.2% 6.8%	52.7% 54.4%	41.4% 43.7%		0.09		0.27	0.87		51.5%	57.2% 51.5%	2.6%	0.5%	8.1% 4.7%	26.3% 25.9%	20.2% 22.5%

Table 8. PD of Ant N- patch antenna (24GHz - n258)

- N-patch Low CH

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	·																io out of eams												max ratio out of all	beams		
									4cm2 Pt	D(mW/cr	m2)			100.0%	5.0%	11.0%	10.5%	47.3%	100.0%	4	cm2 PD(m	nW/cm2) i	it 10mm eval	uation dist	ance	54.4%	\$4.4%	2.1%	8.2%	7.0%	22.6%	46.2%
П	Module 1y	pe Se	am ID_1	Berna ID,2	Feed no.	S4(Righ	S3(Left)	SS(Top	a) S6(B	lottom)	\$1(Front)	S2/Rear	Dearn Back-oft (dB)	ratio (Right 2mm)/(worst- surface 2mm)	ratio (Left 2mm)/(wont- surface 2mm)	ratio (Top 2mm)/(worst- surface 2mm)	ratio (Bottom 2mm)/(wonst- surface 2mm)	ratio (Fornt 2mm)/(worst- surface 2mm)	surface 2mm)		\$3(Left)	SS(Top)	S6(Bottom)	S1/Fron		ratio worst-surface (10mm/2mm)	ratio (Right 10mm)/(worst- surface 2mm)	ratio (Left 10mm)/(worst- surface 2mm)	ratio (Top 10mm)/(wont- surface 2mm)	natio (Bottom 10mm)/(worst- surface 2mm)	ratio (Front 10mm)/(worst- surface 2mm)	ratio (Rear 10mm)/(worst- surface 2mm)
65		-	1		-	0.28	0.00	0.00	- 0	0.01	0.09	0.16	-	100.0%	1.9%	0.4%	25% 28%	11.5% 24.5%	57.9% 73.6%	0.12	0.00	0.00	0.01	0.03	0.06	31.9%	44.6% 38.9%	0.4%	0.4%	1.0%	11.2% 7.4%	20.1%
65 66 67 68 69 70 71 72 73 75 76 77 78 80 81 81 83 84 85 86 87 87 89 90 90 90 90 90 90 90 90 90 90 90 90 90		F	5 7		1	0.17	0.01	0.00		0.01	0.04	0.12		100.0%	3.5% 2.8%	0.6%	2.9% 4.2%	24.0% 29.4%	70.2% 66.8%	0.07	0.00	0.00	0.00	0.01		39.2% 36.9%	39.2% 36.9%	1.8%	0.6%	2.3% 2.8%	8.2% 9.8%	30.4% 25.7%
60		-	9		1	0.16	0.00	0.00	0	0.00	0.05	0.12		100.0%	2.4%	1.8%	1.8%	29.3%	72.6%	0.07	0.00	0.00	0.00	0.01	0.05	22.6%	29.6%	1.8%	1.2%	1.2%	8.5%	29.9%
20		⊢	14 15		2	0.54	0.00	0.00		0.02	0.20	0.31	+	100.0%	0.7%	0.4%	1.0%	16.0% 26.2%	57.5% 73.6%	0.24	0.00	0.00	0.01	0.07		44.5%	44.5% 46.8%	0.6% 2.0%	0.2% 0.2%	2.4% 0.8%	13.3% 11.4%	23.1%
71			16		2	0.39	0.01	0.00	0	0.01	0.11	0.28		100.0%	2.8%	0.8%	1.0%	26.8%	70.7%				0.01	0.04	0.13	42.1%	42.1%	1.5%	0.8%	1.2%	9.9%	22.7%
72		_	21		2	0.45	0.01	0.00	- 0	5.02		0.10	_	100.0%	2.5%	1.5% 0.4%	7.1% 1.6%	24.3% 31.9%	67.0%	0.20	0.01	0.00	0.01		0.14		35.9% 43.8%	3.1% 1.6%	1.2% 0.2%	5.0% 2.7%	6.9% 12.1%	32.0% 31.0%
74			22 21		2	0.51		0.00		0.01	0.14	0.41	_	100.0%	1.4%	0.8%	2.5% 6.6%	26.8% 30.0%	79.1% 76.9%	0.28	0.00	0.00	0.01	0.05	0.19	54.3% 38.1%	\$4.3% 38.1%	0.8%	0.6%	1.2%	10.2% 7.7%	36.1%
76			29		5	1.12	0.01	0.00	0	0.07	0.40	0.63		100.0%	1.0%	0.4%	6.2%	35.6%	55.9%	0.43	0.01	0.00	0.05	0.17	0.31	31.4%	38.4%	0.6%	0.2%	4.7%	14.6%	27.7%
77		⊢	30		5	1,37		0.00		0.01	0.42	0.96	+	100.0%	2.1%	0.1%	1.0%	30.5% 22.4%	70.2% 80.7%	0.68	0.02	0.00	0.01	0.20		49.3%	49.3% 54.4%	1.6%	0.1%	0.6%	14.5% 9.4%	37.2% 46.3%
79		⊨	12		5	0.97	0.01	0.01		0.01	0.28	0.68		100.0%	1.3%	1.2%	1.4%	29.0%	70.0%	0.42	0.01	0.01	0.01	0.12	0.33	44.1%	44.1%	0.7%	0.9%	0.8%	11.8%	11.9%
80		-	22 28		5	1,22	0.02	0.02	0	0.02	0.21	0.55	_	100.0%	1.9%	2.1% 0.2%	24%	26.2% 34.4%	69.5% 62.8%		0.01	0.01	0.01	0.09	0.26	41.9%	41.9% 44.7%	1.0%	1.6%	0.9%	11.2% 14.7%	32.0% 33.1%
82		F	39 40		- 5	1.42		0.00		0.01	0.37	1.00	-	100.0%	12%	0.5%	3.4% 0.8% 1.5%	26.0% 28.1%	70.3% 76.9%		0.03	0.00	0.01	0.16		53.7% 48.8%	53.7% 48.8%	1.1%	0.3%	0.6%	11.2%	40.2% 40.9%
84			41		5	0.83		0.02		0.02	0.30	0.60	+	100.0%	1.6%	1.9%	1.8%	27.9%	71.5%		0.01	0.00	0.01	0.12		41.9%	41.9%	0.8%	1.4%	0.8%	11.4%	33.5%
55			129		-	0.16	0.00	0.00		0.00	0.05	0.09		100.0%	0.6%	0.6%	1.9% 4.2%	31.5% 28.8%	54.4% 57.6%	0.06	0.00	0.00	0.00	0.02		36.7%	36.7% 33.1%	0.6%	0.6% 2.5%	1.3%	10.8% 8.5%	24.1% 18.6%
87			123		-	0.12	0.00	0.00	0	0.01	0.04	0.05		100.0%	1.7%	2.4%	5.1%	36.4%	45.8%	0.05	0.00	0.00	0.01	0.01	0.02	29.8%	29.8%	1.7%	2.5%	4.2%	11.9%	15.2%
80			135		-	0.12		0.00		0.01	0.04	0.07	+-	100.0%	2.4%	1.2% 2.0%	4.8%	15.5% 17.8%	57.3% 92.9%	0.05		0.00	0.00	0.02		38.7%	38.7% 33.7%	1.6%	2.4%	3.2% 2.0%	12.7% 12.2%	17.7% 41.8%
8			142		2 2	0.26		0.01			0.10			100.0%	2.7%	235	7.2%	38.3% 43.1%	64.0%	9.11	0.00	0.00		0.04	0.07	40.9% 46.0%	40.9% 46.0%	1.5%	1.5%	1.0%	14.4%	26.1%
92			144		2	0.20		0.02		0.02	0.07	0.18	+	100.0%	2.0%	7.5%	2.9% 7.5%	16.5%	83.5%	0.00		0.01	0.01	0.03		31.5%	18.5%	0.7% 1.5%	5.5%	5.0%	17.2% 14.0%	33.2% 24.5%
2.55			145		2	0.20		0.01		0.01	0.06	0.15		100.0%	1.5%	5.1% 0.3%	5.6% 2.4%	29.4% 36.0%	77.2% 55.6%	0.05	0.00	0.01	0.01		0.05	26.4% 40.5%	26.4% 40.5%	1.5%	3.6% 0.3%	4.1% 1.8%	8.1% 12.6%	22.8%
95	N Pa	nch	150		2	0.28	0.00	0.00		0.00	0.11	0.17		100.0%	1.4%	0.7%	1.4%	40.6%	62.3%	0.12	0.00	0.00	0.00	0.04		43.8%	43.8%	1.1%	0.4%	0.7%	15.2%	13.0%
96			151		2 5	0.21		0.01		0.01	0.07	0.21	+	100.0%	2.8%	4.7%	5.7% 6.2%	31.1% 42.6%	97.2% 59.1%	0.06	0.00	0.01	0.01	0.02	0.07	31.6% 46.1%	27.4% 46.1%	1.4%	3.8% 0.2%	1.0% 4.5%	8.5% 18.7%	31,6%
98			158 159		5	0.66	0.01	0.00	0	0.00	0.31	0.33		100.0%	1.5%	0.6%	0.6%	47.3%	50.5%	0.25	0.01	0.00	0.00	0.15	0.19	52.7%	52.7%	1.1%	0.5%	0.5%	22.3%	28.2%
100			160		3	8.76	0.01	0.02	- 0		0.26		-	100.0%	0.8%	0.3% 2.1%	0.6% 2.5%	42.8% 33.7%			0.00	0.01		0.10	0.26	50.1% 38.5%	50.1% 38.5%	0.7% 0.5%	0.1%	0.4% 1.8%	19.8% 11.6%	30.1% 34.1%
101			161		5	0.50	0.01	0.06	0	0.04	0.15	0.48	_	100.0%	2.6%	11.0%	8.8% 2.4%	29.1% 46.7%	95.4% 51.5%	0.12	0.01	0.04	0.03	0.04	0.12	21.7%	23.3% 50.6%	1.6%	8.2% 0.1%	5.8% 1.3%	7.2% 22.0%	23.7%
103			167		5	0.65	0.01	0.00		0.01	0.31	0.34		100.0%	1.4%	0.3%	1.1%	47.2%	52.5%	0.25	0.01	0.00	0.00	0.15		53.7%	53.7%	1.1%	0.2%	0.6%	22.6%	10.2%
104		⊢	168		5	0.76	0.01	0.01		0.01	0.27	0.48	+	100.0%	0.8%	1.6%	1.6% 5.7%	35.3% 30.0%	63.4%	0.31	0.00	0.01	0.01	0.12	0.26	40.8% 30.8%	40.8% 30.8%	0.5%	1.2%	12% 19%	15.1% 10.4%	33.6%
106		┍	-	129	2	0.50	0.01	0.00		0.01	0.19	0.29		100.0%	1.0%	2.1%	2.6% 4.2%	38.1% 31.1%	58.1% 64.1%	0.22	0.00	0.00	0.01	0.07		43.1% 35.9%	43.1% 35.9%	1.3%	0.4%	1.8% 3.2%	12.9%	20.6% 26.6%
108		_ E	5	123	2	0.16	0.01	0.01	0	0.02	0.12	0.18	_	100.0%	1.7%	2.5%	5.8%	11.1%	49.9%	0.14	0.01	0.01	0.02	0.04	0.08	31.2%	18.2%	2.2%	1.4%	4.2%	10.9%	21.4%
109		F	7	135	2	0.41	0.01	0.01			0.14		_	100.0%	2.7%	1.5%	2.6%	33.7% 14.9%	56.6% 71.5%		0.01		0.02	0.05	0.09	36.1%	36.1%	1.7%	1.0%	1.5%	12.0%	21.5%
111			14	142	4	0.79	0.01	0.01	0	0.05	0.35	0.45		100.0%	1.0%	1.5%	6.1%	45.0%	57.7%	0.37	0.01	0.01	0.04	0.14	0.18	46.9%	46.9%	1.1%	1.0%	4.6%	17.8%	23.4%
112		⊢	15	143	4	0.88		0.00		0.02	0.36	0.53	+	100.0%	1.0%	0.3%	2.2% 6.4%	40.7% 29.0%	60.0%	0.41	0.02	0.00	0.01	0.16	0.28	46.9%	46.9% 40.6%	2.0%	0.2% 3.0%	1.4%	17.7% 10.6%	31.4% 33.7%
114			17	145	- 4		0.02	0.02	0	0.05	0.16	0.38		100.0%	4.1%	1.9%	10.5%	27.4%	86.1%	0.15	0.01	0.01	0.03	0.05	0.16	35.2%	22.1%	2.5%	2.7%	7.8%	11.4%	16.2%
115		⊢	22	149 150	4		0.02	0.01	0	0.04	0.25	0.52	-	100.0% 100.0%	2.4%	0.7%	4.8% 2.7%	21.3% 28.5%	64.3% 73.5%	0.31	0.01	0.00	0.01	0.11	0.25	41.8% 47.2%	41.8% 47.7%	1.5%	0.4%	3.7% 1.1%	14.1% 11.0%	32.9% 35.1%
117		⊨	22	151	4		0.01	0.02	0	2.04	9.16	0.49		99.6%	2.8%	12% 0.5%	85%	12.1% 45.7%	100.0%	0.19	0.01	0.01		0.05		41.25 41.15	38.5% 41.1%	2.0%	2.4%	4.5% 4.5%	9.1% 19.0%	41.2% 28.9%
119		E	30	158	10	2.31	0.07	0.01	0	0.02	0.99	1.45		100.0%	3.0%	0.2%	1.0%	42.9%	62.6%		0.05			0.49	0.77	49.9%	49.9%	2.2%	0.2%	0.6%	21.0%	33.4%
120		F	31	159 160	10	1.82		0.01		0.02	0.78	1.61	₽	100.0%	1.0%	0.3%	0.8% 1.9%	34.3% 31.0%	70.9% 83.6%		0.05	0.01	0.01	0.35		51.0% 42.9%	\$1.0% 42.9%	2.2% 1.0%	0.2% 1.5%	0.5%	15.5% 14.4%	42.6% 41.6%
122		E	22	161	10	1.52	0.04	0.09	0	0.06	0.40	1.33		100.0%	2.4%	5.9%	1.9%	26.4%	87.4%	0.55	0.02	0.07	0.04	0.15	0.49	35.9%	15.9%	1.6%	4.5%	2.6%	9.9%	32.3%
123		F	38	166	10			0.01		0.07	1.08	1.20	+=	100.0%	1.5%	0.3%	2.9%	45.6% 29.8%	50.7% 62.9%	1.12		0.01	0.04	0.49		47.2% 52.0%	47.2% 52.0%	1.0%	0.2%	1.7%	20.7% 18.2%	29.3% 36.7%
102 103 104 105 105 107 108 109 110 111 112 113 114 115 119 120 120 122 123 124 123			40	160	10	1.90	0.03	0.02	0	2.04	0.65	1.49	=	100.0%	1.6%	1.0%	2.0%	22.8%	75.2%	0.91	0.02	0.02	0.02	0.29	0.78	45.8%	45.8%	1.1%	0.9%	1.2%	14.7%	39.5%
126			4	169	10	1.69	001	0.06	_ 0	0.05	0.46	1.40	-	100.0%	1.7%	3.8%	2.9%	28.5%	87.8%	0.59	0.02	0.05	0.04	0.19	0.64	38.0%	35.0%	1.1%	3.0%	2.1%	11.4%	38.0%

- N-patch Mid CH

F	_																															
П																	tio out of												max ratio out of all I	eams.	-	
1 1								4cm	n2 PD/mW	(/cm2)				100.0%	2.0%	7.6%	72%	\$0.9%	85.9%	4	cm2 PD(n	nW/cm2) a	t 10mm eu	slustion dist	ance	\$5.4%	\$\$.4%	2.6%	6.0%	5.2%	24.0%	29.2%
No. Mo	odule Typ	e Beam I)_1 Sema ID_	2 Feed no.	54(8)	ght) \$3(L	ett) SS(1	Top) 1	\$6(Bettom	\$1(Fro	ont) Si	2(Rear)	per Beam Back-off (dB)	ratio (Right 2mm)/(worst- surface 2mm)	ratio (Left 2mm)/(wont- surface 2mm)	ratio (Top 2mm)/(wonst- surface 2mm)	ratio (Sottom 2mm)/(wont- surface 2mm)	ratio (Forst 2mm)/(worst- surface 2mm)	ratio (Rear 2mm)/(wonst- surface 2mm)	S4(Right)	S3(Left)	SS(Top)	S6(Bottom	S1(Fron	52(Rear)	ratio worst-surface (10mm/2mm)	ratio (Right 10mm)/(worst- surface 2mm)	ratio (Left 10mm)/(worst- surface 2mm)	ratio (Top 10mm(/(worst- surface 2mm)	ratio (Bottom 10mm)/(worst- surface 2mm)	ratio (Feant 10mm)/(wonst- surface 2mm)	ratio (Rear 10mm)/(wont- surface 2mm)
64		\exists	-		83		0 0		0.01	0.11		0.17 0.16		100.0% 100.0%	0.7%	0.3%	2.7% 2.5%	15.1% 11.5%		0.12					0.07	41.7%	43.7%	0.3% 0.7%	0.3%	2.3%	11.0%	22.3% 23.4%
66		5		1	0.2	5 0.0	11 0.0	00	0.01	0.07	σ .	0.16		100.0%	2.0%	0.4%	2.4%	26.9%	64.5%	0.09	0.00	0.00	0.00		0.07	36.3%	16.3%	1.6%	0.4%	1.6%	0.6%	26.5%
67		7 0	_	-	82		10 0.0		0.01	0.11		0.14	_	100.0% 100.0%	2.2% 1.5%	0.7%	3.3% 2.5%	40.9% 27.3%	51.1% 74.2%	0.11			0.01	0.04	0.05	40.1%	40.1% 37.9%	1.5% 1.0%	0.4%	2.6%	15.0%	17.9% 27.8%
69 70		14		2	0.0	0.0	0.0	00	0.02	0.23		0.34		100.0%	0.7% 1.9%	0.3%	1.0%	37.1% 38.9%	56.6% 64.0%	0.27	0.00	0.00	0.02	0.08	0.14	43.7% 47.0%	43.7% 47.0%	0.5% 1.3%	0.2%	2.5%	13.7% 15.5%	22.6%
21		16		2	9.4	9 00	1 0.0	91	0.01	0.16	6	0.31		100.0%	1.6%	1.0%	1.6%	22.2%	63.7%	0.20			0.01	0.10	0.19	41.9%	41.9%	1.0%	0.8%	1.2%	12.9%	26.3%
72 73 74 75 76		17		2	93	0.0	1 00	8 8	0.02	0.11	-	0.24		100.0%	2.1%	1.0%	4.4%	29.1% 18.5%	60.6% 50.8%	0.12			0.01	0.04	0.10	34.3%	34.3% 46.1%	1.8%	0.8%	2.1%	9.0%	25.3%
74		22		2	81	0.0	1 0	50	0.01	0.24		0.19		100.0%	1.1%	0.5%	1.6%	18.8%	62.9%	0.35					8.19	55.4%	55.4%	0.8%	0.5%	1.0%	13.5%	31.1%
75		21	_	5	1/4	0.0	12 0.0	00	0.02	0.10		0.24	_	100.0% 100.0%	1.0%	1.2%	5.4% 6.3%	30.7% 35.1%	71.3% 56.0%	0.15	0.00	0.00	0.01	0.04	0.10	45.4%	45.4% 40.6%	12%	1.2%	3.3% 5.0%	11.6% 14.5%	30.7% 27.4%
		30		- 5	14	7 0.0	13 0.0	00	0.01	0.63	2	1.01		100.0%	2.0%	0.1%	0.7%	37.2% 36.2%	60.7%	0.84	0.02	0.00		0.27	0.57	50.4% 51.7%	50.4% 51.7%	1.3%	0.1%	0.5%	16.4%	34.0% 19.1%
78 79		31	+-	5	14				0.02	0.53		0.88		100.0%	1.2%	0.9%	0.6%	30.8%	62.2%	0.79			0.01	0.21	0.58	45.4%	45.4%	0.8%	0.2%	0.4%	12.7%	39.1%
80		33				9 00			0.02	0.38	8 ·	0.71		100.0%	1.3%	1.5%	1.9%	31.7% 36.7%		0.52			0.02		0.32	43.2% 46.2%	41.2% 46.3%	0.8%	1.3%	1.2%	13.8% 15.7%	27.0%
82		39	_	5	1.6	7 0.0	3 0.0	00	0.01	0.65	5	1.02		100.0%	2.0%	0.1%	0.7%	18.7%	61.4%	0.86	0.02	0.00	0.01	0.27	0.59	51.7%	51.7%	1.2% 1.3%	0.1%	0.5%	16.5%	15.4%
82 83 84		40			12		2 0.0		0.01	0.44	4 0	0.97		100.0%	1.9%	0.4%	0.8% 1.2%	31.2% 31.0%	68.5%	0.72				0.18	0.51	50.6% 41.0%	50.6% 41.0%	13%	0.3%	0.6%	12.6%	35.8% 28.9%
85		129		1	0.1	6 00	0.0	00	0.00	0.05	5	0.08		100.0%	0.6%	1.3%	1.9%	34.4%	48.4%	0.06	0.00	0.00	0.00	0.02	0.03	31.9%	38.9%	0.6%	0.6%	1.3%	10.8%	21.0%
87		131		-	0.1	0.0			0.00	0.04		0.07	_	100.0% 100.0%	1.7% 1.6%	3.4% 2.4%	2.6% 1.2%	12.5% 34.1%	58.1% 42.1%	0.04			0.00	0.01	0.02	35.0%	15.0% 17.1%	0.9%	2.6%	1.7%	11.1% 11.9%	17.9% 15.1%
88		135		1	0.1				0.01	0.05		0.08		100.0%	1.5%	1.5%	1.0%	36.1%	56.4%			0.00	0.00	0.02		37.6%	37.6%	0.8%	1.5%	1.0%	12.8%	17.3%
90		137	_	2	0.1	9 00	10 0.0		0.00	0.04		0.09		100.0% 100.0%	1.8% 2.3%	0.9%	1.6% 5.7%	29.6% 40.5%	79.3% 63.0%	0.04			0.00	0.02	0.04	36.0% 41.6%	36.0% 41.6%	0.9%	0.9%	2.7% 4.2%	13.5% 15.3%	25.1% 22.9%
88 89 90 91 92 93 94 95		143				9 0.0			0.01	0.12		9.17		100.0% 100.0%	14%	0.3% 5.9%	2.7%	46.0% 17.0%		0.14					0.09		48.1% 36.1%	0.7% 14%	0.0% 4.6%	2.1%	18.6%	29.2% 22.4%
93		145		2			0.0	01	0.01	0.06	6	0.15		100.0%	2.0%	5.5%	4.0%	29.6%	76.9%	0.06	0.00	0.01	0.01	0.02	0.04	28.6%	28.6%	1.5%	4.0%	2.7%	8.5%	20.1%
94		149 h 150		2	83		0.0		0.01	0.13		0.17		100.0% 100.0%	0.6%	0.3%	1.0%	38.8% 44.3%	51.8% 56.0%	0.14			0.01	0.05	0.08	43.3%	43.3% 46.4%	0.6%	0.2%	1.5%	11.9% 17.5%	23.0% 30.2%
96	14	151		2	0.2	1 0.0	11 0.0	01	0.01	0.00	0	0.18		100.0%	2.3%	2.8%	52%	35.7%	85.9%	0.07	0.00	0.00	0.01	0.03	0.07	31.5%	31.0%	1.4%	1.9%	1.2%	11.7%	31.5%
97		157		5	93	0.0	1 0.0	80	0.04	0.33		0.41		100.0%	0.9%	0.3%	5.4%	41.9% 49.1%		0.36			0.03	0.15	0.22	47.8%	47.8% 54.0%	0.7% 1.4%	0.3%	1.9%	19.8% 23.1%	28.9% 27.6%
99		159		5	93	4 00	11 0.0	00	0.01	0.34	4	0.37		100.0%	1.4%	0.1%	0.7%	45.5%	49.5%	0.29	0.01	0.00	0.00	0.16	0.20	52.6%	52.6%	1.1%	0.1%	0.5%	21.2%	27.7%
100		160		- 5	83	9.0	2 01	91 54	0.02	0.27		0.40		100.0% 100.0%	0.9% 2.8%	1.3% 7.6%	2.1% 6.5%	18.6% 14.9%	57.7% 82.8%	0.28	0.00	0.01	0.01	0.11	0.22	20.5%	29.5% 24.1%	0.6% 1.3%	1.0%	14%	15.6%	20.8% 23.0%
102		166		5	0.0		1 0.0		0.01	0.36		0.35		100.0% 100.0%	1.9%	0.1%	1.8%	49.1% 49.2%	47.2% 51.4%	0.29			0.01	0.17	0.20	52.9% 55.3%	52.9% 55.3%	1.1%	0.1%	0.8%	23.1%	26.8% 30.3%
104		168		5	82	1 0.0	11 0.0	01	0.01	0.28	1	0.39		100.0%	0.7%	1.0%	1.4%	29.9%	54.9%	0.30	0.00	0.01	0.01	0.12		41.8%	41.8%	0.6%	0.7%	1.0%	16.7%	30.0%
105		169	129	5	9.0	0.0			0.03	0.22		0.41		100.0% 100.0%	1.5% 0.7%	1.6%	4.4% 2.1%	36.1% 37.3%	66.9% 53.9%	0.19			0.02	0.07	0.17	30.5% 43.0%	30.5% 41.0%	0.8%	3.0% 0.5%	3.1% 1.8%	12.2%	28.7%
107		- 1	121			4 0.0	11 0.0	01	0.01	0.17	7 .	0.26		100.0%	1.0%	1.6%	2.9%	18.5%	59.7%	0.18	0.01	0.01	0.01	0.06	0.10	22.8%	29.8%	1.1%	1.1%	2.3%	12.7%	23.1%
108		- 5	133			9 00			0.02	0.16		0.24		100.0%	2.7%	1.35	3.8%	15.2% 44.6%	52.3% 47.1%	0.17	0.01	0.00	0.01		0.10	37.0% 29.4%	37.0% 29.4%	1.8%	0.9%	2.9%	12.0% 15.8%	22.3% 18.4%
110		- 6		2	0.4	2 0.0	1 0.0	50	0.01	0.14	4 .			100.0%	1.4%	1.0%	3.1%	11.7%	66.6%	0.16	0.00	0.00	0.01	0.06	0.11	37.5%	37.5%	1.0%	0.7%	1.9%	11.2%	27.4%
111		14		4	1.0		1 0.0		0.04	0.38		0.51		100.0% 100.0%	1.2% 2.5%	1.2%	52% 1.9%	45.1% 50.9%	61.4% 53.8%	0.38			0.03	0.16	0.21	45.8%	45.0% 49.9%	0.8%	1.0%	4.1%	18.9% 21.2%	25.2% 28.2%
113		16	144	- 4	0.7	4 0.0	2 0.0	03	0.03	0.22	2	0.47		100.0%	2.3%	1.7%	3.4%	29.9%	63.5%	0.29	0.01	0.02	0.02	0.09	0.19	29.2%	39.2%	1.5%	2.0%	2.6%	11.6%	25.2%
114		21	145	4	0.5	6 00	2 0.0		0.03	0.20		0.16		100.0% 100.0%	3.8% 2.4%	1.6%	52% 41%	15.2% 29.7%	61.2% 56.3%	0.21	0.02		0.02	0.06		35.3% 43.4%	15.1% 41.4%	2.6% 1.5%	2.8%	4.0%	10.3% 16.0%	26.4%
116		22	150	4	8	2 0.0	11 0.0	00	0.02	0.32	2 .	0.48		100.0%	1.7%	0.5%	2.5%	29.5%	58.7%	0.40	0.01	0.00	0.01	0.12	0.25	49.1%	49.1%	1.2%	0.5%	1.5%	16.2%	31.2%
117		23				9 00			0.04	1.25		1.29	_	100.0% 100.0%	2.5% 1.3%	2.3%	7.2% 5.5%	41.0% 46.3%	83.1% 47.9%	1.12					0.19	47.2%	47.2% 41.4%	1.9%	1.9%	5.2% 4.2%	11.4%	19.2% 25.6%
118 119 120		30	158		2.7	0.0	8 00	61	0.02	1.33		155		100.0%	1.0%	0.2%	0.8%	49.7% 45.3%	57.4% 62.4%			0.00	0.01	0.63	0.87	51.8% 51.5%	\$1.8% \$1.9%	2.0%	0.1%	0.5%	23.2%	32.2% 37.8%
121		32	160	10		1 0.0	13 0.0	03	0.02	0.86	£ .	1.47		100.0%	1.3%	1.2%	1.3%	45.3% 38.9%	66.3%			0.01	0.02	0.51		41.7%	43.7%	0.8%	0.9%	0.9%	17.3%	37.8%
122		33		10	2.0		14 0.0		0.10	0.67		1.47		100.0% 100.0%	2.0%	3.1% 0.2%	4.6% 2.8%	32.7% 50.0%	71.9%	0.78			0.06	0.27	0.60	38.1% 48.9%	38.1% 48.9%	1.1%	2.4% 0.2%	2.9%	13.3% 22.7%	29.3% 27.0%
124		29	167	10		6 0.0	7 0.0	01	0.02	1.35		1.57		100.0%	2.6%	0.2%	0.7%	50.6%	59.1%	1.44	0.05	0.01	0.01		0.93	54.1%	46.9% 54.1%	1.8%	0.2%	0.5%	21.5%	27.0%
125		40	168	10		9 00	4 00		0.03	0.92	2	1.37		100.0%	1.9%	0.9%	13%	40.0% 35.0%	59.9% 70.7%	1.11			0.02	0.38	0.75	48.3% 37.2%	48.3%	1.3%	0.7%	0.8%	16.6%	32.6% 31.0%

- N-patch High CH

												max ratio out of							max ratio out of all beams											
\vdash		1	4cm2 PD(mW/cm2)						100.00		380	III DISTRE			4cm2 PD(mW/cm2) at 10mm evaluation distance					ance			200							
No.	fodule Type	e Beam ID_1	Sena D,2	Feed no.		$\overline{}$	$\overline{}$	т			per Beam	ratio	adio .	ratio	62% ratio	ntio	82.5% ratio		T	Г		т —	Т	57.3% ratio	S7.3% ratio	25% ratio	45% ratio	ratio	27.7% ratio	27.7% ratio
					S4(Right) S3(Le	n) SS(To	p) 56(Bo	ottom) S	1(Front)	S2(Rear)	Back-off (48)	(Right 2mm)/(worst- surface 2mm)	(Left 2mm)/(wont- surface 2mm)	(Top 2mm)/(wont- surface 2mm)	(Sottom 2mm)/(worst- surface 2mm)	(Fornt 2mm)/(worst- surface 2mm)	(Rear 2mm)/(worst- surface 2mm)	S4(Right	(fa.1,62	SS(Top)	SE(Bottom)	\$1(Front	S2(Rear)	worst-surface (10mm/2mm)	(Right 10mm)/(wont- surface 2mm)	(Left 10mm)/(wont- surface 2mm)	(Top 10mm)/(worst- surface 2mm)	(Bottom 10mm)/(worst- surface 2mm)	(Front 10mm)/(wonst- surface 2mm)	(Rear 10mm)/(worst- surface 2mm)
64		-		$\overline{}$		0.00			0.11			100.0% 100.0%	0.7%	0.3%	2.3% 2.4%	36.5% 34.1%			0.00		0.01	0.04	0.06	44.2%	44.2% 40.7%	0.3%	0.3%	2.0% 1.7%	12.3% 11.4%	18.9% 20.3%
66		5 7			0.28 0.01	0.00	0.0	01	0.10	0.16		100.0%	2.5% 1.7%	0.4%	32% 27%	35.1% 36.0%	56.4% 49.3%	0.11	0.00	0.00	0.01	0.04	0.06	38.3% 41.2%	38.3% 41.2%	14%	0.4%	2.5%	13.1%	21.6% 21.6%
68		9	<u> </u>	++	0.18 0.00	0.00	0.0	00	0.04	0.15		100.0%	2.2%	1.6%	2.2%	22.4%	82.5%	0.07	0.00	0.00	0.00	0.01		29.9%	29.9%	1.1%	1.1%	2.0%	7.7%	31.7%
69		14		2		0.00			0.25	0.34		100.0%	0.8%	0.2%	12% 0.9%	40.0% 41.9%	53.9% 57.5%	0.27	0.00	0.00	0.02	0.09	0.14	41.3%	41.1% 50.5%	0.6% 1.8%	0.2%	2.6%	14.9% 18.8%	22.2% 26.1%
64 65 66 67 68 69 20 20 21 77 74 75 77 78 79 81 82 83 85 85 85 85 85 85 85 85 85 85 85 85 85		16		2		0.00			0.15	0.33		100.0%	1.7%	0.8%	1.7%	31.2%	68.2%	0.22		0.00	0.01	0.06		44.7%	44.7%	1.0%	0.6%	1.0%	11.4%	28.2%
		21		2	0.62 0.0	0.00	0.0	02				100.0% 100.0%	2.3%	0.9%	5.0% 1.4%	29.9% 42.4%	55.1%	0.30	0.01		0.02	0.11	0.15	34.5% 48.1%	34.5% 48.1%	1.4%	0.7%	2.4%	11.1% 16.9%	24.0% 23.5%
		22		2	0.40 00	0.00	0.0		0.24	0.40		100.0%	1.5% 1.5%	0.3%	15%	29.1% 29.1%	64.9%	0.35	0.01	0.00	0.01	0.09		57.0% 45.1%	57.0% 46.1%	1.0%	0.3%	1.0%	14.5%	30.5% 29.1%
		29		5	1.46 0.0				0.53	0.82		100.0%	1.0%	0.3%	62%	15.8% 44.4%	55.5% 56.0%	0.59	0.01	0.00	0.07	0.22	0.42	39.6% 53.4%	29.6% 51.4%	0.5%	0.3%	5.0%	14.7% 20.1%	28.3% 29.7%
		21	_	3	1.59 0.04	0.00	0.	01	0.61	1.07		100.0%	2.6%	0.1%	0.9%	38.4%	67.6%	0.88		0.00	0.01	0.27	0.60	55.6%	55.6%	2.0%	0.1%	0.8%	16.8%	37.7%
		22		5	1.40 0.00	0.01	0.		0.42	0.89		100.0%	1.4%	0.9%	0.7% 2.1%	29.9% 29.7%	63.7%	0.67	0.01	0.01	0.01	0.17		47.7% 44.6%	47.7% 44.6%	0.8%	0.6%	0.6%	12.3% 12.2%	31.5% 29.8%
		38 29		- 3	1.63 0.03	0.00	0.0	06	0.61			100.0%	12%	0.2%	35% 05%	17.4% 46.9%	56.9%	0.76	0.01	0.00	0.04	0.27		46.85	46.0% 54.0%	0.6% 1.9%	0.1%	2.2%	16.5% 21.0%	31.1%
		40		- 5	1.46 00.	0.01	0.0	01	0.47	1.01		100.0%	1.6%	0.4%	0.6%	12.2%	68.6%	0.79	0.01	0.00	0.01	0.16	0.52	54.0%	54.0%	1.0%	0.1%	0.5%	12.1%	15.6%
		41 129	-	5		0.02			0.38	0.81		100.0%	1.8% 1.3%	1.45	1.5% 2.5%	30.0% 34.0%	61.4% 45.2%	0.57	0.01	0.01		0.15		45.2% 38.4%	45.2% 38.4%	1.0%	1.0%	1.1%	12.0%	31.1% 20.1%
		131		1		0.00			0.04	0.07		100.0%	0.8%	2.5%	1.6%	15.2% 18.0%	54.1% 19.4%	0.05	0.00	0.00	0.00	0.02	0.02	37.7% 38.7%	27.7% 38.7%	0.8% 0.7%	2.5% 1.5%	1.6%	12.3%	17.2% 13.9%
88		135				0.00	0	00	0.05	0.08		100.0%	1.4%	0.7%	2.8%	16.6%	53.1%	0.05	0.00	0.00	0.00	0.02	0.03	37.2%	17.2%	0.7%	0.7%	2.1%	12.1%	17.9%
89		137	-	1 2	0.13 0.01	0.00	0.00		0.05	0.09		100.0%	0.8%	0.8%	1.9%	18.6% 44.2%	69.3% 54.4%		0.00	0.00	0.00	0.02	0.04	37.8% 43.8%	37.8% 43.8%	0.8% 1.1%	0.8%	2.9%	12.6% 16.4%	29.9%
91		143		2	0.33 0.00	0.50	0.0	31	0.15	0.17		100.0%	12%	0.0%	2.4%	45.8% 19.9%	50.3% 63.9%	0.16	0.00	0.00	0.01	0.06	0.08	48.5% 38.2%	48.5% 38.2%	0.0%	0.0% 3.4%	1.8%	17.9%	24.5%
93		145		2		0.01			0.06	0.13		100.0%	2.1%	5.8%	3.7%	31.1%	70.0%		0.00	0.01	0.01	0.02		27.9%	27.9%	1.6%	4.2%	2.6%	10.0%	10.4%
94	N Patri	149 h 150	-	2 2	0.34 0.00	0.00			0.14	0.17		100.0%	0.9%	0.3%	1.8%	40.1% 44.1%	49.0% 50.3%	0.15	0.00	0.00	0.01	0.05		45.7%	45.7% 46.9%	0.6%	0.3%	1.5%	15.3% 17.6%	23.0%
96		151		2		0.00			0.08	0.16		100.0%	2.3%	1.4%	5.1% 5.4%	17.2% 44.6%	74.0% 53.6%	0.07	0.00	0.00	0.01	0.03		34.4% 41.2%	34.4% 48.3%	1.4% 0.6%	1.4%	17%	14.0%	32.6% 27.9%
98		158		3	0.77 0.01	0.00	0.0	01	0.29	0.35		100.0%	1.7%	0.4%	0.8%	50.3%	46.3%	0.42	0.01	0.00	0.00	0.19	0.20	55.0%	55.0%	1.3%	0.2%	0.5%	24.8%	26.3%
100		159	+	3		0.00			0.37	0.16		100.0%	1.5% 1.2%	0.3% 1.2%	0.8% 1.1%	46.7% 41.7%	47.8% 49.2%		0.01	0.00		0.18	0.19	53.9% 41.7%	53.9% 41.7%	1.3% 0.8%	0.1% 1.0%	0.6%	22.4% 17.2%	26.4% 26.3%
101		161		5		0.00			0.22	0.38		100.0%	1.8%	0.2%	21%	18.8% 50.6%	60.3%		0.01	0.03	0.01	0.06	0.12	26.5% 51.6%	26.5% 51.6%	1.1%	4.5%	1.6%	11.4% 24.1%	21.1%
103		167		5		0.00			0.36	0.16		100.0%	2.1%	0.4%	1.0%	49.7%	49.4%		0.01	0.00	0.01	0.18	0.21	54.5% 44.1%	56.5%	1.4%	0.3%	0.7%	25.3%	28.4%
105		160	t —	3 3		0.01			0.32	0.16		100.0%	1.4%	2.1%	0.9%	29.3%	54.2%	0.21		0.01	0.01	0.09		32.7%	44.1% 32.7%	0.9%	0.7% 2.3%	0.7%	18.4% 13.5%	23.5%
105		1	129	2	0.55 0.01	0.00	0.0	01	0.21	0.29	_	100.0%	0.9%	1.25	2.4%	17.6% 18.2%	53.4% 54.7%	0.23	0.00	0.00	0.01	0.07	0.11	42.1%	42.1% 29.5%	0.7% 1.3%	0.5%	1.8%	12.9%	20.1% 19.9%
95 N 96 99 99 100 100 100 100 100 100 100 100 1		- 1	123	2	0.52 0.01	0.01	0.	02	0.23	0.26		100.0%	2.5%	1.0%	3.1% 3.7%	41.6% 41.5%	49.4%	0.20	0.01	0.00	0.01	0.09		29.1% 38.0%	29.1% 38.0%	1.6%	0.6%	2.3%	16.5%	20.0%
		- 6	137	2	0.43 0.0	0.01	0.1	02	0.13	0.27		100.0%	1.6%	1.2%	1.5%	30.2%	63.6%	0.17	0.00	0.00	0.01	0.05	0.13	38.3%	34.1%	0.9%	0.9%	2.6%	11.1%	29.7%
		14	142	4	117 00	0.01	0.0	04	0.41	0.47		100.0%	1.2%	0.9%	4.6% 1.5%	47.7% 52.1%	55.7% 45.6%	0.40	0.01	0.01	0.03	0.18	0.19	46.4%	46.4% 50.4%	0.7% 1.5%	0.7%	1.6%	20.8% 22.5%	22.4% 22.6%
113		16	144	4	0.72 0.01	0.02	0.	02	0.23	0.46		100.0%	1.9%	2.9%	2.1%	21.8% 24.3%	64.2% 59.7%	0.21	0.01	0.02	0.01	0.08		42.9% 35.4%	42.9% 15.4%	1.4%	2.4%	1.5%	11.3%	25.7% 23.0%
115		21	145	4	0.62 0.03				0.21	0.46		100.0%	2.3%	0.4%	3.7%	45.3%	\$1.6%	0.42	0.01	0.01	0.03	0.18	0.21	45.2%	46.2%	1.2%	0.2%	2.9%	19.6%	23.8%
115 116 117 118		22	150	4	0.85 0.03	0.00	0.0	02	0.36	0.47	-	100.0%	2.0%	0.5%	2.1%	42.2% 18.8%	55.8%	0.43	0.01	0.00	0.01	0.16		50.4% 47.0%	50.4% 47.0%	1.4%	0.4%	1.2%	19.1%	27.0% 29.3%
118 119 120 121 122 123 124 125		29	157		231 004	0.01	0.	15	1.28	1.33		100.0%	1.6%	0.3%	56%	47.2% 55.8%	49.0%	1.12	0.02	0.01	0.11	0.54	0.70	41.45 55.35	41.4% 55.1%	0.7% 1.2%	0.2%	42% 0.6%	20.0%	25.9% 26.2%
		31	159	10	2.77 0.01	0.01	0.0	02	1.32	1.60		100.0%	1.2%	0.2%	0.6%	47.7%	57.9%	1.52	0.07	0.00	0.02	0.62	0.95	55.1%	55.1%	2.5%	0.1%	0.5%	22.2%	24.2%
		32 33	160	10		0.03			0.92	1.36	=	100.0%	1.6% 2.1%	1.2%	1.1%	41.7% 17.2%	61.7%	0.74	0.02	0.02		0.40		46.7% 29.2%	46.7% 39.2%	1.0%	1.0%	0.7%	18.1% 14.3%	32.5% 28.5%
		38	166	10	2.00 0.01	0.01	0.0	07	1.46	1.40		100.0%	2.2% 4.0%	0.3%	2.6%	52.0% 56.1%	53.0% 52.4%	1.29	0.03	0.01	0.05	0.69	0.80	49.7% 57.3%	49.7% 57.3%	1.1%	0.2% 0.2%	1.6%	24.6% 27.7%	28.5% 31.0%
		40	160	10	2.40 0.05	0.02		02	1.02	1.46		100.0%	2.0%	0.7%	0.8%	42.5%	60.7%	1.20	0.03	0.01	0.01	0.43	0.75	49.8%	49.8%	1.3%	0.5%	0.6%	17.7%	31.4%
126		41	169	10	1.56 0.04	0.04	0.	05	0.78	1.26		100.0%	1.8%	2.0%	2.5%	29.9%	64.2%	0.81	0.02	0.03	0.04	0.32	0.61	41.3%	41.3%	1.1%	1.4%	2.0%	16.1%	31.3%