



# Power Density Simulation Report

**FCC ID: A4RG7SWN**

Report date: 4/8/2026  
Google LLC

## Table of Content

### [1. Numerical modeling for Power Density \(PD\) calculations](#)

#### [1.1 Full-wave numerical computation tool](#)

#### [1.2 Full-wave simulation setup](#)

##### [1.2.1 Simulation model](#)

##### [1.2.2 Mesh settings and solution setup](#)

##### [1.2.3 Time-averaged PD calculation](#)

### [2. Simulation and modeling validation](#)

#### [2.1 Comparison between simulation and measurement](#)

#### [2.2 Calculated PD per beam ID](#)

### [3. References](#)

# 1. Numerical modeling for Power Density (PD) calculations

## 1.1 Full-wave numerical computation tool

To calculate the Power Density (PD) of the phone at FR2 frequencies, a commercial software called HFSS [1], which is a part of ANSYS Electronics Desktop 2022 R2 package, is used. This software is a 3D full-wave electromagnetic (EM) computational solver based on Finite Element Method (FEM).

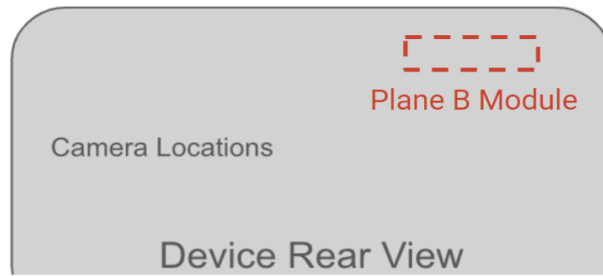
## 1.2 Full-wave simulation setup

### 1.2.1 Simulation model

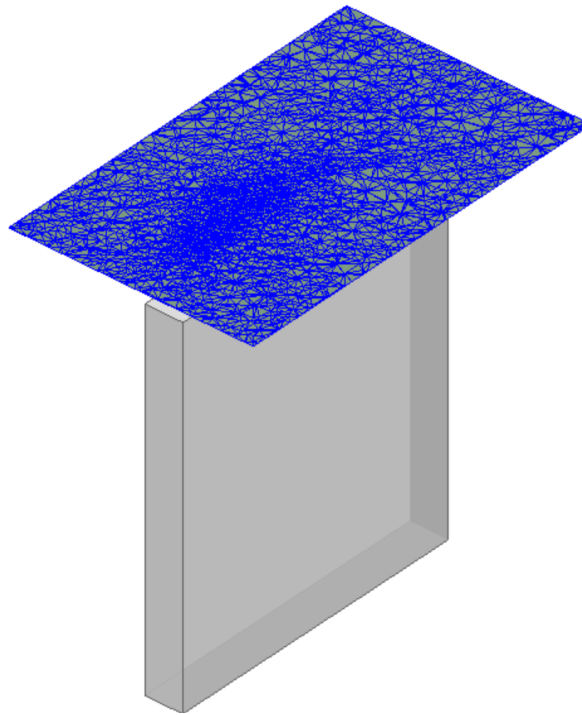
The device includes one flat type mmWave module that consists of one module (Plane B Module), located at the back side of the device, as shown in Figure 1-1. In order to obtain accurate PD calculations, it is necessary to have accurate modeling of the mmWave antenna, as well as all other components of the device in close proximity to the mmWave antenna. The simulation model therefore must include all components of the device located within a distance of at least one wavelength from the mmWave module. A list of the components included in the simulation model includes housing, mmWave antenna module, sub6 antennas, PCB, shield cans, Flexible Printed Circuits (FPCs), battery, all components having metallic parts, etc.

### 1.2.2 Mesh settings and solution setup

ANSYS HFSS features an automatic adaptive mesh refinement algorithm that refines the computational mesh iteratively in regions with strong EM fields and thereby generates very accurate high-frequency simulation results. The steps of adaptive mesh refinement algorithm execution are as follows. First, an initial computational mesh is created, based on the solution setup parameters entered by the user, and is then used to obtain the initial solution for the EM fields of the simulation model. The algorithm then adaptively refines the mesh in each subsequent iteration until a desired solution accuracy, specified by the user, is achieved. The solution accuracy is commonly defined by a convergence parameter called  $\Delta S$ , which is a variation in the magnitude of all S-parameters between the consecutive iterations of the algorithm [1]. The  $\Delta S$  parameter specified for all PD simulations presented in this report is 0.02. Figure 1-2 shows an example cut surface in the model showing a tetrahedral computational mesh created by the adaptive mesh refinement algorithm in one of the HFSS simulation models. A radiation boundary with Absorbing Boundary Condition (ABC) is assigned to the outer surface of an air-box surrounding the simulation model, which allows the EM waves to propagate outward from the boundary of the domain without generating any reflected EM waves.



**Figure 1-1** Placement of the flat type mmWave module, Plane-B module, at the back side of the device.



**Figure 1-2** An example cut surface in an HFSS simulation model showing the tetrahedral mesh created by the adaptive mesh refinement algorithm.

The FEM simulations are performed for the mmWave module as shown in Figure 1-1. In the simulation, 20 wave-ports are assigned to the feed points of the mmWave antenna arrays. Specifically, ten of them excite the vertical polarization on the antenna array, called V-pol, and the other ten wave-ports excite the horizontal polarization, called H-pol. After the FEM simulations are completed and full-wave EM solutions are obtained, the magnitude and phase values of the 20 wave-ports excitation signals are sequentially assigned for each of the beams

in the codebook. This is accomplished as a post-processing step by using the “Edit post process sources” tab in the HFSS environment, as shown in Figure 1-3 for one of the beams from the codebook.

|    | Source         | Type | Magnitude | Unit | Phase | Unit |
|----|----------------|------|-----------|------|-------|------|
| 1  | MT6108_1_V0H:1 | Port | 0 W       |      | 0 deg |      |
| 2  | MT6108_1_V0L:1 | Port | 0 W       |      | 0 deg |      |
| 3  | MT6108_1_H0H:1 | Port | 0 W       |      | 0 deg |      |
| 4  | MT6108_1_H0L:1 | Port | 0 W       |      | 0 deg |      |
| 5  | MT6108_1_V1H:1 | Port | 0 W       |      | 0 deg |      |
| 6  | MT6108_1_V1L:1 | Port | 0 W       |      | 0 deg |      |
| 7  | MT6108_1_H1H:1 | Port | 0 W       |      | 0 deg |      |
| 8  | MT6108_1_H1L:1 | Port | 0 W       |      | 0 deg |      |
| 9  | MT6108_1_V2H:1 | Port | 0 W       |      | 0 deg |      |
| 10 | MT6108_1_V2L:1 | Port | 0 W       |      | 0 deg |      |
| 11 | MT6108_1_H2H:1 | Port | 0 W       |      | 0 deg |      |
| 12 | MT6108_1_H2L:1 | Port | 0 W       |      | 0 deg |      |
| 13 | MT6108_1_V3H:1 | Port | 0 W       |      | 0 deg |      |
| 14 | MT6108_1_V3L:1 | Port | 0 W       |      | 0 deg |      |
| 15 | MT6108_1_H3H:1 | Port | 0 W       |      | 0 deg |      |
| 16 | MT6108_1_H3L:1 | Port | 0 W       |      | 0 deg |      |
| 17 | MT6108_1_V4H:1 | Port | 0 W       |      | 0 deg |      |
| 18 | MT6108_1_V4L:1 | Port | 0 W       |      | 0 deg |      |
| 19 | MT6108_1_H4H:1 | Port | 1 W       |      | 0 deg |      |
| 20 | MT6108_1_H4L:1 | Port | 0 W       |      | 0 deg |      |

**Figure 1-3** An example of magnitude and phase assignments to the wave-ports in the “Edit post process sources” tab in the HFSS environment.

### 1.2.3 Time-averaged PD calculation

After the convergence criterion is achieved in the last iterative pass, that is  $\text{Max}\{|\Delta S|\}$  is smaller than the specified value of the convergence parameter  $\Delta S$  (that being 0.02 in this report, as mentioned above), the values of the electric and magnetic field vectors  $\vec{E}$  and  $\vec{H}$  respectively, are calculated, and then used to calculate the  $PD$  by the following formula:

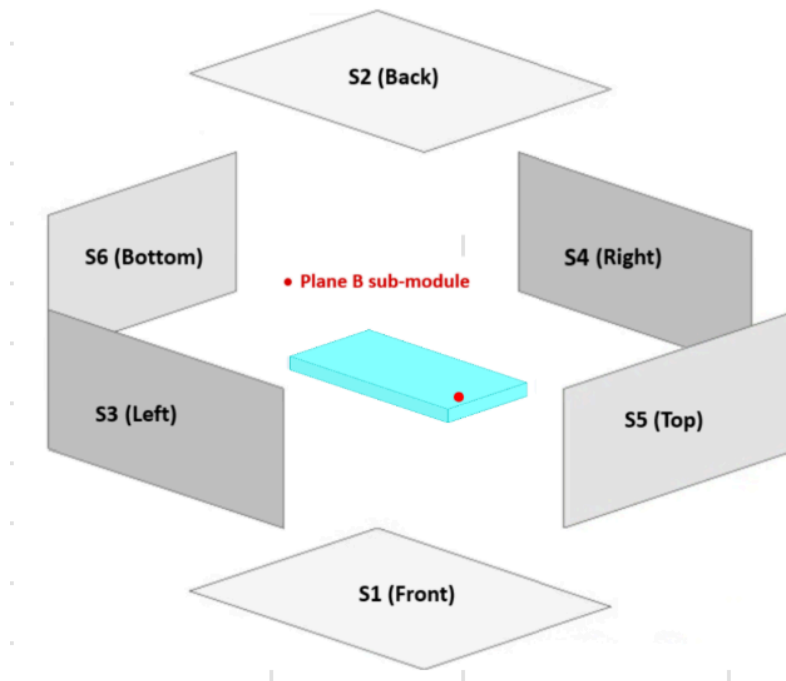
$$PD = \frac{1}{2} \left| \text{Re} \left\{ \vec{E} \times \vec{H}^* \right\} \right|$$

Based on the calculated  $PD$ , the time-averaged  $PD$  ( $PD_{ave}$ ) over a surface  $A$  can be obtained as:

$$PD_{ave} = \frac{1}{2A} \int_A \left| \text{Re} \left\{ \vec{E} \times \vec{H}^* \right\} \right| \cdot dS$$

In order to determine the RF exposure from the mmW antennas in the device, the values of the electric and magnetic field vectors at the six surfaces S1, S2, S3, S4, S5, and S6 shown in Figure 1-4 are needed. Depending on the simulation or measurement setting, the distance from these six surfaces to the device is set to be either 2 mm or 5 mm. If the distance between mmWave sub-module and any surface is greater than 25mm, the surface integration terms in the above formula for the  $PD_{ave}$  corresponding to these surfaces are negligible, and thus can be excluded from the  $PD_{ave}$  calculation. Using square markings, Table 1-1 specifies which one of the six surfaces needs to be used in the above formula for the  $PD_{ave}$  calculation. As seen, the surfaces S1, S2, S3, and S5 need to be used in the  $PD_{ave}$  calculations.

In the spatially averaged power density calculations, the surface A is a circle in the evaluation plane with an area of 4 cm<sup>2</sup>. Furthermore,  $PD_{ave}$  is calculated at the points of a grid with  $\lambda/4$  mm step size defined in the evaluation plane.



**Figure 1-4**  $PD$  evaluation surfaces. Averaged power densities ( $PD_{ave}$ ) are calculated and measured on the specified surfaces (S1, S2, S3, and S5) surrounding the phone.

**Table 1-1**  $PD$  evaluation surfaces considered for each mmWave module in the device.

|                | S1 (front) | S2 (back) | S3 (left) | S4 (right) | S5 (top) | S6 (bottom) |
|----------------|------------|-----------|-----------|------------|----------|-------------|
| Plane B Module | ☑          | ☑         | ☑         | ✗          | ☑        | ✗           |

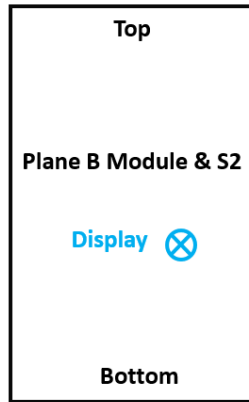
## 2. Simulation and modeling validation

### 2.1 Comparison between simulation and measurement

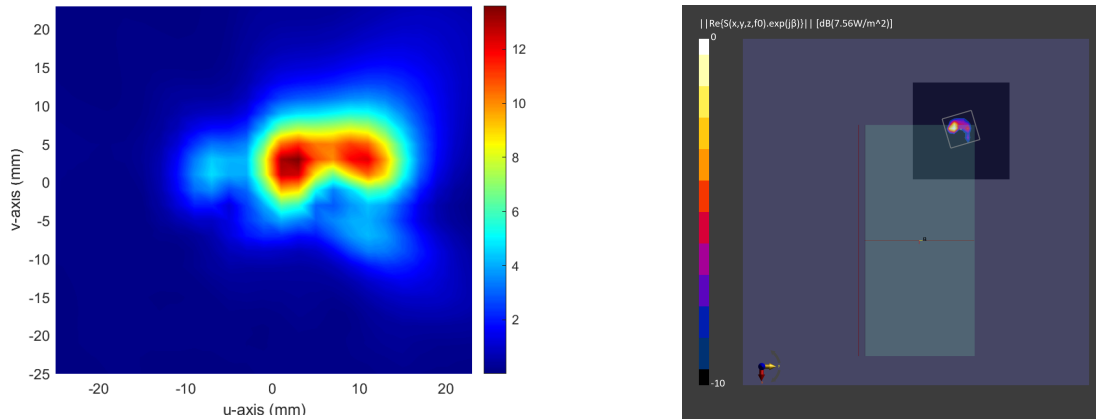
Following the time-average  $PD$  calculation procedure described in section 1.2.3, the distributions of  $PD$  and  $PD_{ave}$  are calculated in the evaluation plane and are compared with the measurements for a selected number of beams, with the highest  $PD_{ave}$  values compared to the other beams, whose IDs are listed in Table 2-1. Also shown in this table are simulated and measured results for the  $PD_{ave}$  for both n258, n260 and n261 frequency bands Horizontal and Vertical polarizations, denoted as H and V, respectively. For Plane B Module,  $PD_{ave}$  of 2mm from DUT is used for calculating minimum target power while  $PD_{ave}$  of 2mm from Camera Bump (CB) is used to derive the correction factor. Figure 2-1 shows orientation of the device for the  $PD$  and  $PD_{ave}$  distribution plots presented in Figures 2-2 to 2-37. The presented plots demonstrate a good agreement between simulated and measured results for both  $PD$  and  $PD_{ave}$ .

**Table 2-1** Simulated and measured  $PD_{ave}$  for selected beams with 0 dBm input power setting

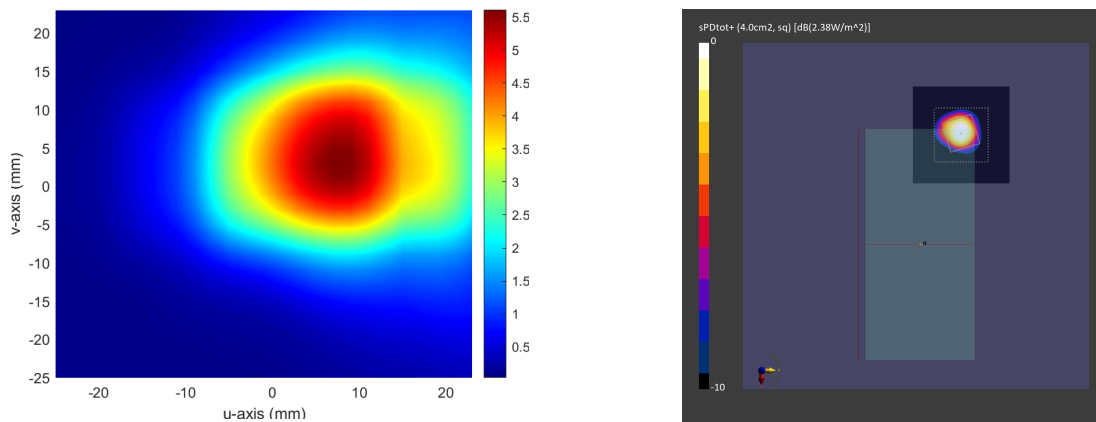
| Band | Module/<br>Plane | Polarity | Beam ID | Surface   | Channel | Freq<br>(GHz) | Test<br>Distance | Ref.<br>Plane | Sim<br>Plimits<br>(dBm) | 4cm2 avg. PD<br>(W/m2) |           | Delta |
|------|------------------|----------|---------|-----------|---------|---------------|------------------|---------------|-------------------------|------------------------|-----------|-------|
|      |                  |          |         |           |         |               |                  |               |                         | Measured               | Simulated |       |
| n258 | B-Plane          | V        | 7       | S2 (Back) | Mid     | 24.75         | 2 mm             | CB            | -2.27                   | 2.38                   | 5.61      | 3.72  |
|      |                  | H        | 25      | S2 (Back) | Mid     |               | 2 mm             | CB            | -5.75                   | 2.99                   | 6.40      | 3.31  |
| n261 | B-Plane          | V        | 1       | S2 (Back) | Mid     | 27.925        | 2 mm             | CB            | -3.27                   | 5.66                   | 5.64      | -0.02 |
|      |                  | H        | 28      | S2 (Back) | Mid     |               | 2 mm             | CB            | -3.69                   | 5.38                   | 5.80      | 0.33  |
| n260 | B-Plane          | V        | 1       | S2 (Back) | Mid     | 38.5          | 2 mm             | CB            | -7.68                   | 2.47                   | 4.31      | 2.42  |
|      |                  | H        | 16      | S2 (Back) | Mid     |               | 2 mm             | CB            | -2.39                   | 2.43                   | 4.57      | 2.74  |



**Figure 2-1** Orientation of the device for the *PD* distribution plots.

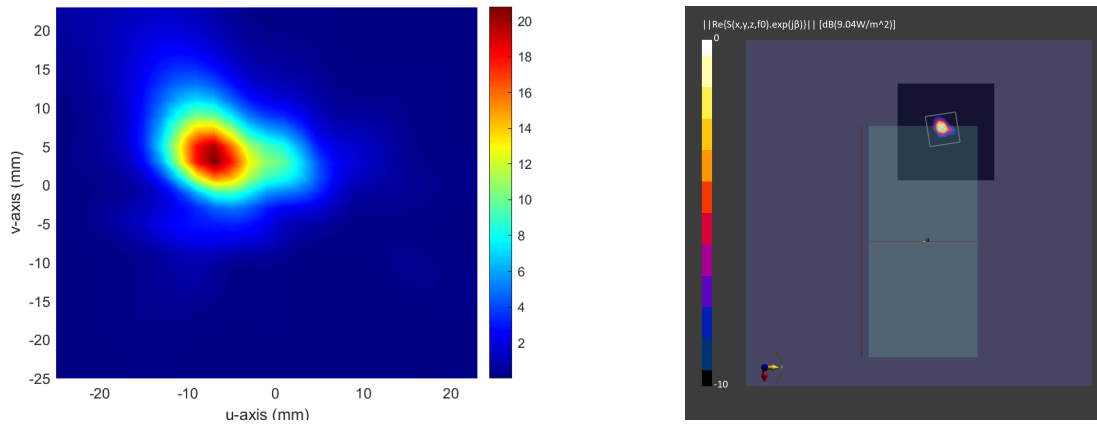


**Figure 2-2** Simulated (left) and measured (right) *PD* distribution for the following configuration: Band n258, MID Channel, Beam ID 7, V polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.

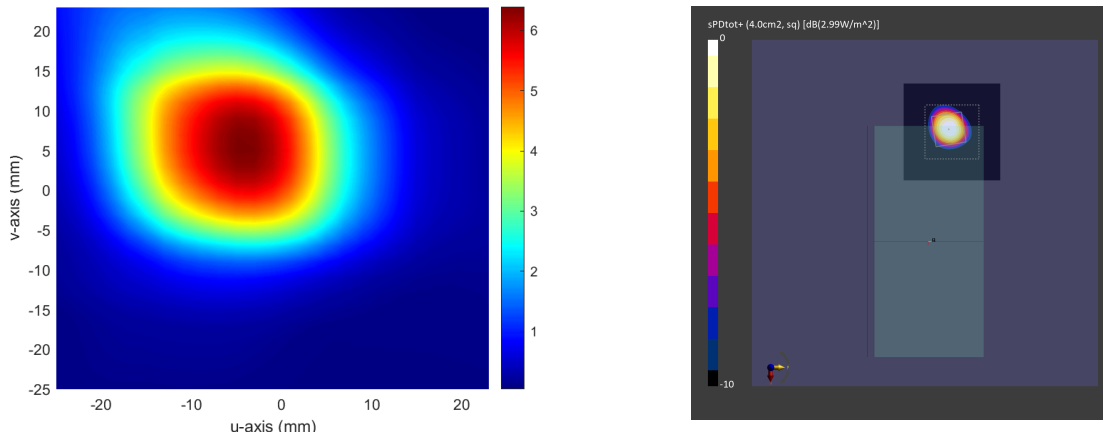


**Figure 2-3** Simulated (left) and measured (right) averaged *PD* distribution for the following configuration: Band n258, MID Channel, Beam ID 7, V polarization, Plane B Module, plotted on

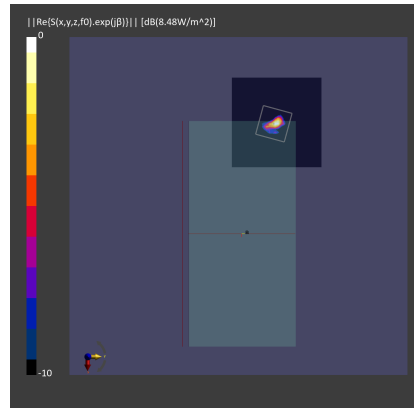
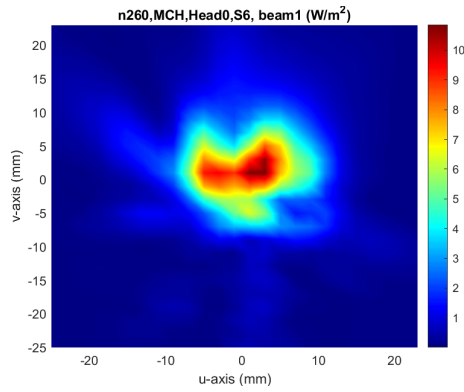
the surface S2 (back) with 2mm separation distance to the camera bump.



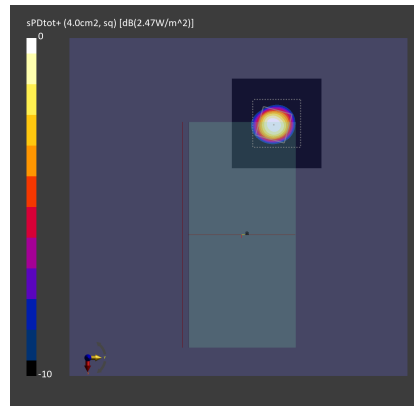
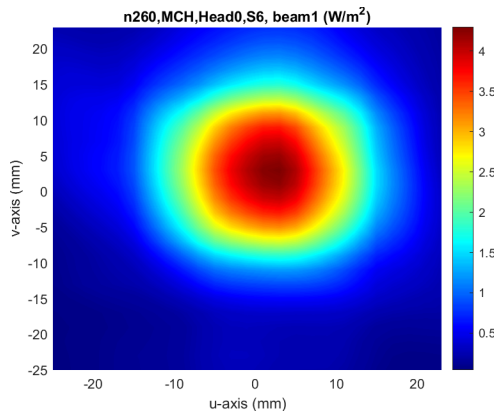
**Figure 2-4** Simulated (left) and measured (right) *PD* distribution for the following configuration: Band n258, MID Channel, Beam ID 25, H polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



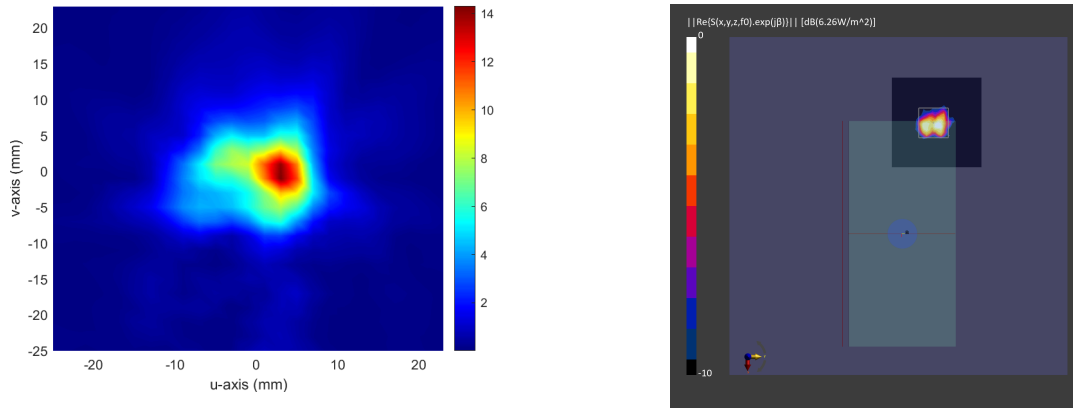
**Figure 2-5** Simulated (left) and measured (right) averaged *PD* distribution for the following configuration: Band n258, MID Channel, Beam ID 25, H polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



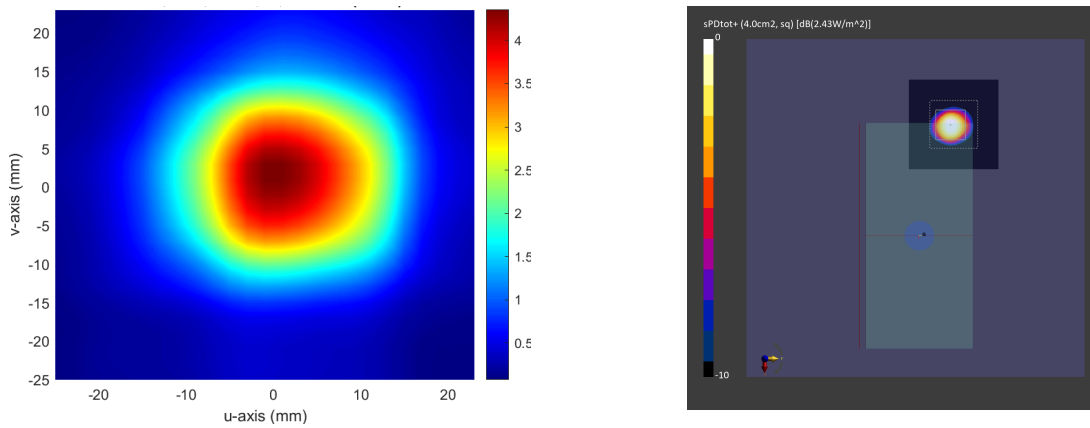
**Figure 2-6** Simulated (left) and measured (right) *PD* distribution for the following configuration: Band n260, MID Channel, Beam ID 1, V polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



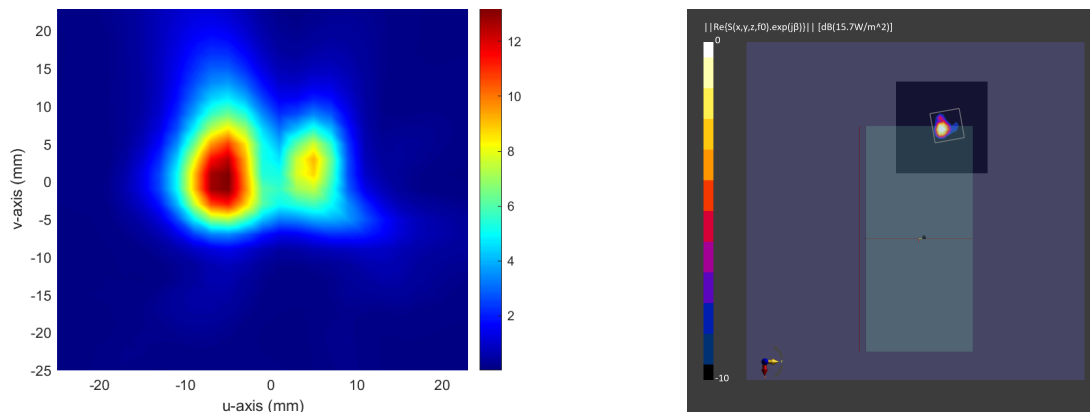
**Figure 2-7** Simulated (left) and measured (right) averaged *PD* distribution for the following configuration: Band n260, MID Channel, Beam ID 1, V polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



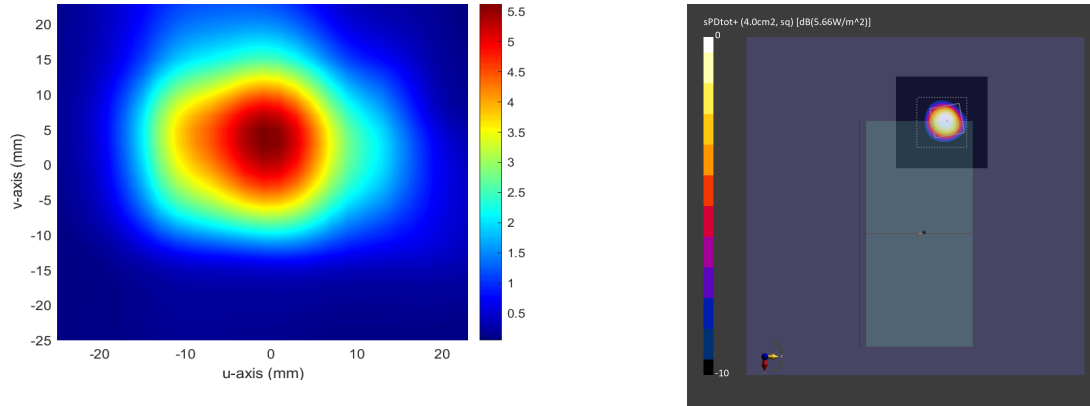
**Figure 2-8** Simulated (left) and measured (right) *PD* distribution for the following configuration: Band n260, MID Channel, Beam ID 16, H polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



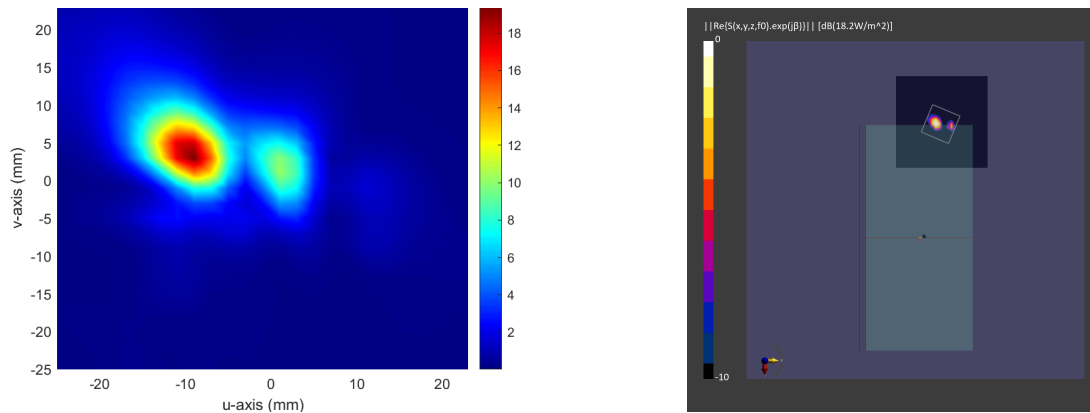
**Figure 2-9** Simulated (left) and measured (right) averaged *PD* distribution for the following configuration: Band n260, MID Channel, Beam ID 16, H polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



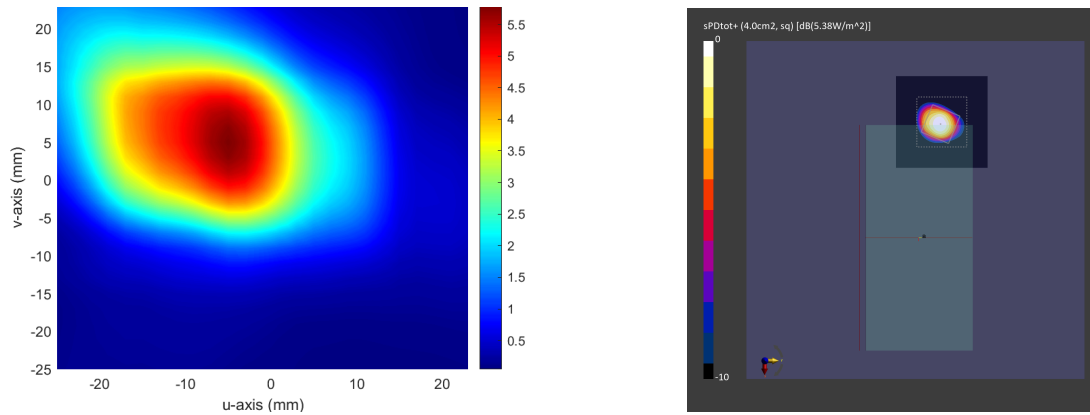
**Figure 2-10** Simulated (left) and measured (right) *PD* distribution for the following configuration: Band n261, MID Channel, Beam ID 1, V polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



**Figure 2-11** Simulated (left) and measured (right) averaged *PD* distribution for the following configuration: Band n261, MID Channel, Beam ID 1, V polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



**Figure 2-12** Simulated (left) and measured (right) *PD* distribution for the following configuration: Band n261, MID Channel, Beam ID 28, H polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.



**Figure 2-13** Simulated (left) and measured (right) averaged  $PD$  distribution for the following configuration: Band n261, MID Channel, Beam ID 28, H polarization, Plane B Module, plotted on the surface S2 (back) with 2mm separation distance to the camera bump.

## 2.2 Calculated PD per beam ID

The simulated time-average  $PD$  calculated for the selected evaluation planes for all beams in the codebook are presented in this section. The calculations are done for the LOW, MID, and HIGH channels of n260, n261 and n258 frequency band. The  $PD_{ave}$  values for every beam ID are reported in Table 2-2 to Table 2-10.

**Table 2-2** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n261 Low Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | Low channel |      |           |      |      |       |        |        |       |      |      |      |          |
|--------------------------------------|---------|-------------|------|-----------|------|------|-------|--------|--------|-------|------|------|------|----------|
|                                      |         | 2mm         |      |           |      |      | 3.25% | 30.86% | 45.24% | 5mm   |      |      |      | 68.04%   |
|                                      |         | S1          | S2   | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2   | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front       | Back | Back (CB) | Left | Top  |       |        |        | Front | Back | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.09        | 8.99 | 5.44      | 0.33 | 3.88 | 0.01  | 0.04   | 0.43   | 0.06  | 5.84 | 0.23 | 2.82 | 0.65     |
| V                                    | 1       | 0.19        | 9.33 | 5.58      | 0.23 | 3.29 | 0.02  | 0.02   | 0.35   | 0.14  | 5.96 | 0.18 | 2.37 | 0.64     |
| V                                    | 2       | 0.09        | 8.63 | 5.14      | 0.27 | 3.43 | 0.01  | 0.03   | 0.40   | 0.06  | 5.53 | 0.17 | 2.47 | 0.64     |
| V                                    | 3       | 0.09        | 8.73 | 5.26      | 0.32 | 3.81 | 0.01  | 0.04   | 0.44   | 0.06  | 5.62 | 0.22 | 2.77 | 0.64     |
| V                                    | 4       | 0.17        | 6.61 | 2.15      | 2.04 | 0.96 | 0.03  | 0.31   | 0.15   | 0.10  | 2.64 | 1.67 | 0.50 | 0.40     |
| V                                    | 5       | 0.11        | 9.22 | 4.72      | 0.98 | 1.70 | 0.01  | 0.11   | 0.18   | 0.06  | 5.16 | 0.70 | 1.03 | 0.56     |
| V                                    | 6       | 0.14        | 9.48 | 4.72      | 2.42 | 3.18 | 0.01  | 0.26   | 0.34   | 0.06  | 5.26 | 1.83 | 2.01 | 0.55     |
| V                                    | 7       | 0.11        | 8.77 | 4.19      | 0.19 | 1.69 | 0.01  | 0.02   | 0.19   | 0.07  | 4.58 | 0.13 | 1.15 | 0.52     |
| V                                    | 8       | 0.08        | 8.76 | 4.94      | 1.64 | 3.49 | 0.01  | 0.19   | 0.40   | 0.04  | 5.31 | 1.12 | 2.43 | 0.61     |
| V                                    | 9       | 0.08        | 9.05 | 3.13      | 0.99 | 1.17 | 0.01  | 0.11   | 0.13   | 0.05  | 3.72 | 0.78 | 0.56 | 0.41     |
| V                                    | 10      | 0.11        | 8.36 | 4.28      | 1.42 | 1.92 | 0.01  | 0.17   | 0.23   | 0.07  | 4.58 | 1.13 | 1.22 | 0.55     |
| V                                    | 11      | 0.18        | 7.96 | 3.15      | 2.07 | 1.96 | 0.02  | 0.26   | 0.25   | 0.09  | 3.70 | 1.68 | 1.17 | 0.46     |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| V   | 12 | 0.19 | 8.66  | 5.02  | 0.24 | 2.31 | 0.02 | 0.03 | 0.27 | 0.15 | 5.37  | 0.16 | 1.62 | 0.62 |
| V   | 13 | 0.14 | 7.36  | 2.91  | 1.68 | 2.06 | 0.02 | 0.23 | 0.28 | 0.07 | 3.39  | 1.35 | 1.39 | 0.46 |
| V   | 14 | 0.13 | 8.50  | 4.59  | 1.18 | 1.92 | 0.02 | 0.14 | 0.23 | 0.09 | 4.92  | 0.92 | 1.26 | 0.58 |
| V   | 15 | 0.18 | 7.25  | 2.54  | 2.01 | 1.21 | 0.02 | 0.28 | 0.17 | 0.09 | 3.09  | 1.66 | 0.64 | 0.43 |
| H   | 16 | 0.11 | 8.50  | 4.92  | 0.25 | 3.01 | 0.01 | 0.03 | 0.35 | 0.07 | 5.30  | 0.19 | 2.20 | 0.62 |
| H   | 17 | 0.07 | 9.85  | 5.94  | 0.26 | 4.19 | 0.01 | 0.03 | 0.43 | 0.04 | 6.44  | 0.22 | 3.15 | 0.65 |
| H   | 18 | 0.11 | 8.50  | 4.92  | 0.25 | 3.01 | 0.01 | 0.03 | 0.35 | 0.07 | 5.30  | 0.19 | 2.20 | 0.62 |
| H   | 19 | 0.12 | 8.88  | 5.46  | 0.15 | 3.56 | 0.01 | 0.02 | 0.40 | 0.08 | 5.79  | 0.11 | 2.66 | 0.65 |
| H   | 20 | 0.13 | 5.63  | 1.60  | 1.10 | 1.15 | 0.02 | 0.20 | 0.20 | 0.07 | 2.12  | 0.88 | 0.62 | 0.38 |
| H   | 21 | 0.08 | 9.44  | 4.98  | 0.94 | 3.44 | 0.01 | 0.10 | 0.36 | 0.05 | 5.62  | 0.71 | 2.33 | 0.60 |
| H   | 22 | 0.15 | 10.42 | 4.54  | 2.27 | 1.83 | 0.01 | 0.22 | 0.18 | 0.07 | 5.19  | 1.79 | 1.15 | 0.50 |
| H   | 23 | 0.11 | 9.97  | 5.29  | 0.22 | 4.51 | 0.01 | 0.02 | 0.45 | 0.04 | 5.85  | 0.14 | 3.14 | 0.59 |
| H   | 24 | 0.15 | 8.53  | 4.80  | 1.17 | 2.59 | 0.02 | 0.14 | 0.30 | 0.09 | 5.18  | 0.84 | 1.83 | 0.61 |
| H   | 25 | 0.07 | 8.51  | 3.50  | 0.57 | 2.91 | 0.01 | 0.07 | 0.34 | 0.05 | 4.24  | 0.38 | 1.66 | 0.50 |
| H   | 26 | 0.08 | 8.52  | 4.31  | 0.95 | 2.25 | 0.01 | 0.11 | 0.26 | 0.05 | 4.78  | 0.75 | 1.61 | 0.56 |
| H   | 27 | 0.14 | 7.89  | 2.87  | 1.75 | 0.96 | 0.02 | 0.22 | 0.12 | 0.08 | 3.39  | 1.43 | 0.52 | 0.43 |
| H   | 28 | 0.09 | 10.01 | 5.70  | 0.24 | 4.26 | 0.01 | 0.02 | 0.43 | 0.04 | 6.22  | 0.16 | 3.23 | 0.62 |
| H   | 29 | 0.10 | 7.80  | 3.51  | 1.07 | 1.51 | 0.01 | 0.14 | 0.19 | 0.06 | 3.84  | 0.85 | 1.12 | 0.49 |
| H   | 30 | 0.08 | 8.34  | 4.27  | 0.86 | 2.46 | 0.01 | 0.10 | 0.29 | 0.05 | 4.71  | 0.66 | 1.73 | 0.56 |
| H   | 31 | 0.14 | 6.06  | 1.87  | 1.38 | 0.84 | 0.02 | 0.23 | 0.14 | 0.08 | 2.34  | 1.13 | 0.48 | 0.39 |
| H+V | 32 | 0.34 | 20.69 | 12.72 | 0.98 | 7.83 | 0.02 | 0.05 | 0.38 | 0.22 | 13.34 | 0.71 | 5.19 | 0.64 |
| H+V | 33 | 0.39 | 21.34 | 13.92 | 0.56 | 9.05 | 0.02 | 0.03 | 0.42 | 0.27 | 14.52 | 0.46 | 6.32 | 0.68 |
| H+V | 34 | 0.34 | 20.41 | 12.66 | 0.84 | 7.42 | 0.02 | 0.04 | 0.36 | 0.21 | 13.23 | 0.59 | 4.91 | 0.65 |
| H+V | 35 | 0.36 | 20.28 | 13.23 | 0.58 | 8.63 | 0.02 | 0.03 | 0.43 | 0.24 | 13.58 | 0.40 | 5.71 | 0.67 |
| H+V | 36 | 0.52 | 16.01 | 5.00  | 4.61 | 2.69 | 0.03 | 0.29 | 0.17 | 0.29 | 6.16  | 3.80 | 1.35 | 0.38 |
| H+V | 37 | 0.25 | 24.54 | 12.94 | 2.27 | 7.57 | 0.01 | 0.09 | 0.31 | 0.13 | 14.22 | 1.75 | 4.97 | 0.58 |
| H+V | 38 | 0.51 | 26.43 | 12.97 | 7.10 | 8.32 | 0.02 | 0.27 | 0.31 | 0.24 | 14.30 | 5.54 | 5.12 | 0.54 |
| H+V | 39 | 0.34 | 25.66 | 13.28 | 0.49 | 9.90 | 0.01 | 0.02 | 0.39 | 0.18 | 14.60 | 0.37 | 6.79 | 0.57 |
| H+V | 40 | 0.32 | 20.26 | 12.19 | 3.43 | 8.19 | 0.02 | 0.17 | 0.40 | 0.19 | 12.78 | 2.33 | 5.64 | 0.63 |
| H+V | 41 | 0.19 | 23.33 | 8.72  | 1.74 | 6.96 | 0.01 | 0.07 | 0.30 | 0.12 | 10.48 | 1.30 | 3.69 | 0.45 |
| H+V | 42 | 0.26 | 19.59 | 11.25 | 3.12 | 4.90 | 0.01 | 0.16 | 0.25 | 0.14 | 11.95 | 2.52 | 3.40 | 0.61 |
| H+V | 43 | 0.55 | 20.94 | 8.28  | 5.94 | 4.92 | 0.03 | 0.28 | 0.23 | 0.27 | 9.67  | 4.94 | 2.70 | 0.46 |
| H+V | 44 | 0.41 | 23.47 | 14.26 | 0.51 | 9.65 | 0.02 | 0.02 | 0.41 | 0.25 | 15.17 | 0.33 | 7.29 | 0.65 |
| H+V | 45 | 0.34 | 17.23 | 8.81  | 3.73 | 4.72 | 0.02 | 0.22 | 0.27 | 0.17 | 9.69  | 3.06 | 3.26 | 0.56 |
| H+V | 46 | 0.30 | 19.12 | 11.17 | 2.66 | 5.43 | 0.02 | 0.14 | 0.28 | 0.18 | 11.81 | 2.12 | 3.62 | 0.62 |
| H+V | 47 | 0.56 | 18.80 | 6.30  | 5.27 | 2.74 | 0.03 | 0.28 | 0.15 | 0.31 | 7.71  | 4.41 | 1.22 | 0.41 |
| V   | 48 | 0.08 | 7.81  | 4.49  | 0.34 | 3.02 | 0.01 | 0.04 | 0.39 | 0.06 | 4.85  | 0.25 | 2.20 | 0.62 |
| V   | 49 | 0.16 | 7.69  | 4.44  | 0.16 | 2.57 | 0.02 | 0.02 | 0.33 | 0.11 | 4.78  | 0.12 | 1.84 | 0.62 |
| V   | 50 | 0.08 | 7.81  | 4.49  | 0.34 | 3.02 | 0.01 | 0.04 | 0.39 | 0.06 | 4.85  | 0.25 | 2.20 | 0.62 |
| V   | 51 | 0.09 | 8.13  | 4.73  | 0.43 | 3.32 | 0.01 | 0.05 | 0.41 | 0.06 | 5.09  | 0.35 | 2.40 | 0.63 |
| V   | 52 | 0.14 | 6.26  | 2.12  | 1.85 | 1.03 | 0.02 | 0.30 | 0.16 | 0.07 | 2.57  | 1.51 | 0.54 | 0.41 |
| V   | 53 | 0.14 | 7.85  | 4.12  | 0.90 | 1.90 | 0.02 | 0.11 | 0.24 | 0.08 | 4.42  | 0.66 | 1.27 | 0.56 |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| V   | 54 | 0.10 | 8.25  | 3.84  | 2.18 | 2.28 | 0.01 | 0.26 | 0.28 | 0.05 | 4.33  | 1.66 | 1.38 | 0.52 |
| V   | 55 | 0.12 | 7.16  | 3.33  | 0.22 | 1.34 | 0.02 | 0.03 | 0.19 | 0.07 | 3.69  | 0.15 | 0.93 | 0.52 |
| V   | 56 | 0.06 | 7.83  | 4.19  | 1.62 | 2.56 | 0.01 | 0.21 | 0.33 | 0.03 | 4.55  | 1.14 | 1.71 | 0.58 |
| V   | 57 | 0.10 | 6.42  | 2.09  | 1.17 | 0.80 | 0.02 | 0.18 | 0.12 | 0.05 | 2.45  | 0.94 | 0.41 | 0.38 |
| V   | 58 | 0.11 | 7.92  | 3.85  | 1.18 | 2.02 | 0.01 | 0.15 | 0.26 | 0.07 | 4.07  | 0.92 | 1.41 | 0.51 |
| V   | 59 | 0.14 | 6.85  | 2.50  | 1.80 | 1.22 | 0.02 | 0.26 | 0.18 | 0.07 | 2.99  | 1.46 | 0.66 | 0.44 |
| V   | 60 | 0.16 | 7.46  | 4.08  | 0.25 | 1.87 | 0.02 | 0.03 | 0.25 | 0.11 | 4.43  | 0.19 | 1.24 | 0.59 |
| V   | 61 | 0.13 | 6.44  | 2.09  | 1.61 | 1.16 | 0.02 | 0.25 | 0.18 | 0.07 | 2.53  | 1.31 | 0.73 | 0.39 |
| V   | 62 | 0.14 | 8.23  | 4.18  | 1.00 | 2.07 | 0.02 | 0.12 | 0.25 | 0.10 | 4.42  | 0.74 | 1.44 | 0.54 |
| V   | 63 | 0.14 | 6.85  | 2.50  | 1.80 | 1.22 | 0.02 | 0.26 | 0.18 | 0.07 | 2.99  | 1.46 | 0.66 | 0.44 |
| H   | 64 | 0.09 | 7.58  | 4.28  | 0.18 | 2.60 | 0.01 | 0.02 | 0.34 | 0.06 | 4.66  | 0.13 | 1.94 | 0.61 |
| H   | 65 | 0.05 | 7.94  | 4.44  | 0.19 | 3.20 | 0.01 | 0.02 | 0.40 | 0.03 | 4.87  | 0.16 | 2.43 | 0.61 |
| H   | 66 | 0.09 | 7.58  | 4.28  | 0.18 | 2.60 | 0.01 | 0.02 | 0.34 | 0.06 | 4.66  | 0.13 | 1.94 | 0.61 |
| H   | 67 | 0.10 | 8.06  | 4.81  | 0.19 | 3.06 | 0.01 | 0.02 | 0.38 | 0.07 | 5.15  | 0.15 | 2.29 | 0.64 |
| H   | 68 | 0.11 | 5.88  | 1.66  | 1.10 | 1.06 | 0.02 | 0.19 | 0.18 | 0.06 | 2.06  | 0.86 | 0.57 | 0.35 |
| H   | 69 | 0.07 | 8.25  | 4.32  | 0.66 | 3.13 | 0.01 | 0.08 | 0.38 | 0.04 | 4.74  | 0.48 | 2.12 | 0.57 |
| H   | 70 | 0.12 | 8.24  | 3.25  | 1.74 | 1.21 | 0.01 | 0.21 | 0.15 | 0.06 | 3.72  | 1.39 | 0.76 | 0.45 |
| H   | 71 | 0.09 | 8.30  | 3.95  | 0.28 | 3.50 | 0.01 | 0.03 | 0.42 | 0.03 | 4.56  | 0.17 | 2.42 | 0.55 |
| H   | 72 | 0.12 | 7.81  | 3.59  | 1.31 | 1.74 | 0.02 | 0.17 | 0.22 | 0.08 | 4.02  | 0.98 | 1.15 | 0.51 |
| H   | 73 | 0.07 | 6.40  | 2.50  | 0.62 | 2.05 | 0.01 | 0.10 | 0.32 | 0.05 | 2.98  | 0.45 | 1.21 | 0.47 |
| H   | 74 | 0.06 | 7.83  | 3.69  | 0.71 | 2.28 | 0.01 | 0.09 | 0.29 | 0.04 | 4.02  | 0.54 | 1.54 | 0.51 |
| H   | 75 | 0.12 | 6.09  | 1.96  | 1.32 | 0.83 | 0.02 | 0.22 | 0.14 | 0.06 | 2.40  | 1.06 | 0.46 | 0.39 |
| H   | 76 | 0.08 | 8.38  | 4.34  | 0.37 | 3.46 | 0.01 | 0.04 | 0.41 | 0.03 | 4.88  | 0.27 | 2.51 | 0.58 |
| H   | 77 | 0.09 | 6.42  | 2.21  | 0.84 | 0.91 | 0.01 | 0.13 | 0.14 | 0.05 | 2.59  | 0.65 | 0.64 | 0.40 |
| H   | 78 | 0.06 | 7.89  | 3.61  | 0.74 | 2.41 | 0.01 | 0.09 | 0.31 | 0.04 | 3.95  | 0.55 | 1.69 | 0.50 |
| H   | 79 | 0.12 | 6.09  | 1.96  | 1.32 | 0.83 | 0.02 | 0.22 | 0.14 | 0.06 | 2.40  | 1.06 | 0.46 | 0.39 |
| H+V | 80 | 0.28 | 18.06 | 10.60 | 0.84 | 6.51 | 0.02 | 0.05 | 0.36 | 0.18 | 11.15 | 0.62 | 4.44 | 0.62 |
| H+V | 81 | 0.31 | 17.71 | 10.59 | 0.47 | 7.19 | 0.02 | 0.03 | 0.41 | 0.21 | 11.21 | 0.37 | 5.08 | 0.63 |
| H+V | 82 | 0.28 | 18.06 | 10.60 | 0.84 | 6.51 | 0.02 | 0.05 | 0.36 | 0.18 | 11.15 | 0.62 | 4.44 | 0.62 |
| H+V | 83 | 0.30 | 18.23 | 11.22 | 0.72 | 7.32 | 0.02 | 0.04 | 0.40 | 0.20 | 11.60 | 0.53 | 4.88 | 0.64 |
| H+V | 84 | 0.41 | 14.93 | 4.81  | 4.21 | 2.34 | 0.03 | 0.28 | 0.16 | 0.22 | 5.88  | 3.44 | 1.20 | 0.39 |
| H+V | 85 | 0.29 | 20.33 | 10.96 | 1.72 | 6.74 | 0.01 | 0.08 | 0.33 | 0.15 | 11.69 | 1.25 | 4.44 | 0.58 |
| H+V | 86 | 0.40 | 21.53 | 9.86  | 5.72 | 5.42 | 0.02 | 0.27 | 0.25 | 0.19 | 10.96 | 4.45 | 3.20 | 0.51 |
| H+V | 87 | 0.28 | 20.40 | 9.94  | 0.62 | 7.39 | 0.01 | 0.03 | 0.36 | 0.16 | 11.16 | 0.43 | 5.00 | 0.55 |
| H+V | 88 | 0.25 | 18.17 | 9.95  | 3.87 | 5.75 | 0.01 | 0.21 | 0.32 | 0.15 | 10.65 | 2.76 | 3.84 | 0.59 |
| H+V | 89 | 0.24 | 17.41 | 6.37  | 2.24 | 4.66 | 0.01 | 0.13 | 0.27 | 0.14 | 7.47  | 1.82 | 2.53 | 0.43 |
| H+V | 90 | 0.26 | 18.05 | 9.49  | 2.30 | 4.93 | 0.01 | 0.13 | 0.27 | 0.14 | 9.81  | 1.79 | 3.10 | 0.54 |
| H+V | 91 | 0.43 | 16.84 | 6.03  | 4.65 | 2.82 | 0.03 | 0.28 | 0.17 | 0.23 | 7.26  | 3.81 | 1.44 | 0.43 |
| H+V | 92 | 0.35 | 19.26 | 10.86 | 0.83 | 7.44 | 0.02 | 0.04 | 0.39 | 0.20 | 11.86 | 0.59 | 5.34 | 0.62 |
| H+V | 93 | 0.33 | 15.18 | 4.86  | 3.26 | 2.43 | 0.02 | 0.21 | 0.16 | 0.18 | 5.86  | 2.65 | 1.60 | 0.39 |
| H+V | 94 | 0.31 | 18.19 | 9.51  | 2.10 | 5.24 | 0.02 | 0.12 | 0.29 | 0.19 | 9.81  | 1.61 | 3.44 | 0.54 |
| H+V | 95 | 0.43 | 16.84 | 6.03  | 4.65 | 2.82 | 0.03 | 0.28 | 0.17 | 0.23 | 7.26  | 3.81 | 1.44 | 0.43 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| V   | 96  | 0.05 | 3.39  | 2.00 | 0.33 | 1.17 | 0.01 | 0.10 | 0.35 | 0.03 | 2.13 | 0.22 | 0.79 | 0.63 |
| V   | 97  | 0.07 | 3.36  | 1.98 | 0.13 | 1.08 | 0.02 | 0.04 | 0.32 | 0.05 | 2.10 | 0.08 | 0.73 | 0.63 |
| V   | 98  | 0.05 | 3.39  | 2.00 | 0.33 | 1.17 | 0.01 | 0.10 | 0.35 | 0.03 | 2.13 | 0.22 | 0.79 | 0.63 |
| V   | 99  | 0.05 | 3.39  | 2.00 | 0.33 | 1.17 | 0.01 | 0.10 | 0.35 | 0.03 | 2.13 | 0.22 | 0.79 | 0.63 |
| V   | 100 | 0.05 | 4.51  | 1.72 | 1.15 | 0.64 | 0.01 | 0.25 | 0.14 | 0.03 | 1.98 | 0.87 | 0.36 | 0.44 |
| V   | 101 | 0.07 | 4.49  | 1.56 | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.84 | 0.71 | 0.20 | 0.41 |
| V   | 102 | 0.05 | 4.51  | 1.72 | 1.15 | 0.64 | 0.01 | 0.25 | 0.14 | 0.03 | 1.98 | 0.87 | 0.36 | 0.44 |
| V   | 103 | 0.09 | 3.64  | 1.88 | 0.22 | 0.84 | 0.02 | 0.06 | 0.23 | 0.06 | 2.01 | 0.15 | 0.57 | 0.55 |
| V   | 104 | 0.05 | 4.51  | 1.72 | 1.15 | 0.64 | 0.01 | 0.25 | 0.14 | 0.03 | 1.98 | 0.87 | 0.36 | 0.44 |
| V   | 105 | 0.07 | 4.49  | 1.56 | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.84 | 0.71 | 0.20 | 0.41 |
| V   | 106 | 0.05 | 4.51  | 1.72 | 1.15 | 0.64 | 0.01 | 0.25 | 0.14 | 0.03 | 1.98 | 0.87 | 0.36 | 0.44 |
| V   | 107 | 0.07 | 4.49  | 1.56 | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.84 | 0.71 | 0.20 | 0.41 |
| V   | 108 | 0.09 | 3.64  | 1.88 | 0.22 | 0.84 | 0.02 | 0.06 | 0.23 | 0.06 | 2.01 | 0.15 | 0.57 | 0.55 |
| V   | 109 | 0.05 | 4.51  | 1.72 | 1.15 | 0.64 | 0.01 | 0.25 | 0.14 | 0.03 | 1.98 | 0.87 | 0.36 | 0.44 |
| V   | 110 | 0.05 | 4.51  | 1.72 | 1.15 | 0.64 | 0.01 | 0.25 | 0.14 | 0.03 | 1.98 | 0.87 | 0.36 | 0.44 |
| V   | 111 | 0.07 | 4.49  | 1.56 | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.84 | 0.71 | 0.20 | 0.41 |
| V   | 112 | 0.07 | 4.49  | 1.56 | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.84 | 0.71 | 0.20 | 0.41 |
| V   | 113 | 0.05 | 3.39  | 2.00 | 0.33 | 1.17 | 0.01 | 0.10 | 0.35 | 0.03 | 2.13 | 0.22 | 0.79 | 0.63 |
| H   | 114 | 0.03 | 3.85  | 2.05 | 0.20 | 1.20 | 0.01 | 0.05 | 0.31 | 0.02 | 2.27 | 0.15 | 0.84 | 0.59 |
| H   | 115 | 0.03 | 4.04  | 2.09 | 0.12 | 1.37 | 0.01 | 0.03 | 0.34 | 0.01 | 2.32 | 0.09 | 0.93 | 0.57 |
| H   | 116 | 0.03 | 3.85  | 2.05 | 0.20 | 1.20 | 0.01 | 0.05 | 0.31 | 0.02 | 2.27 | 0.15 | 0.84 | 0.59 |
| H   | 117 | 0.03 | 3.85  | 2.05 | 0.20 | 1.20 | 0.01 | 0.05 | 0.31 | 0.02 | 2.27 | 0.15 | 0.84 | 0.59 |
| H   | 118 | 0.06 | 4.26  | 1.47 | 0.76 | 0.61 | 0.01 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 119 | 0.06 | 4.25  | 1.17 | 0.68 | 0.70 | 0.01 | 0.16 | 0.16 | 0.04 | 1.49 | 0.51 | 0.45 | 0.35 |
| H   | 120 | 0.06 | 4.26  | 1.47 | 0.76 | 0.61 | 0.01 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 121 | 0.03 | 4.21  | 1.95 | 0.22 | 1.37 | 0.01 | 0.05 | 0.33 | 0.02 | 2.20 | 0.17 | 0.87 | 0.52 |
| H   | 122 | 0.06 | 4.26  | 1.47 | 0.76 | 0.61 | 0.01 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 123 | 0.06 | 4.25  | 1.17 | 0.68 | 0.70 | 0.01 | 0.16 | 0.16 | 0.04 | 1.49 | 0.51 | 0.45 | 0.35 |
| H   | 124 | 0.06 | 4.26  | 1.47 | 0.76 | 0.61 | 0.01 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 125 | 0.06 | 4.25  | 1.17 | 0.68 | 0.70 | 0.01 | 0.16 | 0.16 | 0.04 | 1.49 | 0.51 | 0.45 | 0.35 |
| H   | 126 | 0.03 | 4.21  | 1.95 | 0.22 | 1.37 | 0.01 | 0.05 | 0.33 | 0.02 | 2.20 | 0.17 | 0.87 | 0.52 |
| H   | 127 | 0.06 | 4.26  | 1.47 | 0.76 | 0.61 | 0.01 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 128 | 0.06 | 4.26  | 1.47 | 0.76 | 0.61 | 0.01 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 129 | 0.06 | 4.25  | 1.17 | 0.68 | 0.70 | 0.01 | 0.16 | 0.16 | 0.04 | 1.49 | 0.51 | 0.45 | 0.35 |
| H   | 130 | 0.06 | 4.25  | 1.17 | 0.68 | 0.70 | 0.01 | 0.16 | 0.16 | 0.04 | 1.49 | 0.51 | 0.45 | 0.35 |
| H   | 131 | 0.03 | 3.85  | 2.05 | 0.20 | 1.20 | 0.01 | 0.05 | 0.31 | 0.02 | 2.27 | 0.15 | 0.84 | 0.59 |
| H+V | 132 | 0.09 | 9.62  | 5.46 | 0.80 | 3.11 | 0.01 | 0.08 | 0.32 | 0.05 | 5.86 | 0.58 | 2.03 | 0.61 |
| H+V | 133 | 0.12 | 9.71  | 5.48 | 0.38 | 3.22 | 0.01 | 0.04 | 0.33 | 0.08 | 5.89 | 0.26 | 2.10 | 0.61 |
| H+V | 134 | 0.09 | 9.62  | 5.46 | 0.80 | 3.11 | 0.01 | 0.08 | 0.32 | 0.05 | 5.86 | 0.58 | 2.03 | 0.61 |
| H+V | 135 | 0.09 | 9.62  | 5.46 | 0.80 | 3.11 | 0.01 | 0.08 | 0.32 | 0.05 | 5.86 | 0.58 | 2.03 | 0.61 |
| H+V | 136 | 0.17 | 10.14 | 3.92 | 2.37 | 1.64 | 0.02 | 0.23 | 0.16 | 0.09 | 4.51 | 1.82 | 1.02 | 0.44 |
| H+V | 137 | 0.15 | 10.13 | 3.38 | 1.98 | 1.37 | 0.01 | 0.20 | 0.14 | 0.08 | 4.10 | 1.51 | 0.84 | 0.40 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H+V | 138 | 0.17 | 10.14 | 3.92 | 2.37 | 1.64 | 0.02 | 0.23 | 0.16 | 0.09 | 4.51 | 1.82 | 1.02 | 0.44 |
| H+V | 139 | 0.15 | 9.81  | 5.13 | 0.54 | 2.94 | 0.02 | 0.06 | 0.30 | 0.09 | 5.58 | 0.41 | 1.87 | 0.57 |
| H+V | 140 | 0.17 | 10.14 | 3.92 | 2.37 | 1.64 | 0.02 | 0.23 | 0.16 | 0.09 | 4.51 | 1.82 | 1.02 | 0.44 |
| H+V | 141 | 0.15 | 10.13 | 3.38 | 1.98 | 1.37 | 0.01 | 0.20 | 0.14 | 0.08 | 4.10 | 1.51 | 0.84 | 0.40 |
| H+V | 142 | 0.17 | 10.14 | 3.92 | 2.37 | 1.64 | 0.02 | 0.23 | 0.16 | 0.09 | 4.51 | 1.82 | 1.02 | 0.44 |
| H+V | 143 | 0.15 | 10.13 | 3.38 | 1.98 | 1.37 | 0.01 | 0.20 | 0.14 | 0.08 | 4.10 | 1.51 | 0.84 | 0.40 |
| H+V | 144 | 0.15 | 9.81  | 5.13 | 0.54 | 2.94 | 0.02 | 0.06 | 0.30 | 0.09 | 5.58 | 0.41 | 1.87 | 0.57 |
| H+V | 145 | 0.17 | 10.14 | 3.92 | 2.37 | 1.64 | 0.02 | 0.23 | 0.16 | 0.09 | 4.51 | 1.82 | 1.02 | 0.44 |
| H+V | 146 | 0.17 | 10.14 | 3.92 | 2.37 | 1.64 | 0.02 | 0.23 | 0.16 | 0.09 | 4.51 | 1.82 | 1.02 | 0.44 |
| H+V | 147 | 0.15 | 10.13 | 3.38 | 1.98 | 1.37 | 0.01 | 0.20 | 0.14 | 0.08 | 4.10 | 1.51 | 0.84 | 0.40 |
| H+V | 148 | 0.15 | 10.13 | 3.38 | 1.98 | 1.37 | 0.01 | 0.20 | 0.14 | 0.08 | 4.10 | 1.51 | 0.84 | 0.40 |
| H+V | 149 | 0.11 | 8.91  | 3.76 | 1.32 | 1.72 | 0.01 | 0.15 | 0.19 | 0.06 | 4.30 | 1.07 | 1.15 | 0.48 |
| V   | 150 | 0.02 | 1.94  | 0.85 | 0.34 | 0.32 | 0.01 | 0.18 | 0.16 | 0.02 | 0.96 | 0.24 | 0.20 | 0.49 |
| V   | 151 | 0.03 | 2.17  | 0.97 | 0.31 | 0.45 | 0.01 | 0.14 | 0.21 | 0.02 | 1.09 | 0.24 | 0.28 | 0.50 |
| H   | 152 | 0.02 | 2.21  | 0.81 | 0.25 | 0.40 | 0.01 | 0.11 | 0.18 | 0.02 | 0.97 | 0.17 | 0.26 | 0.44 |
| H   | 153 | 0.02 | 2.10  | 0.85 | 0.20 | 0.45 | 0.01 | 0.10 | 0.21 | 0.01 | 0.98 | 0.16 | 0.27 | 0.47 |
| H+V | 154 | 0.05 | 5.04  | 2.08 | 0.72 | 0.93 | 0.01 | 0.14 | 0.18 | 0.03 | 2.40 | 0.51 | 0.58 | 0.48 |
| H+V | 155 | 0.06 | 5.44  | 2.45 | 0.67 | 1.09 | 0.01 | 0.12 | 0.20 | 0.03 | 2.72 | 0.55 | 0.67 | 0.50 |

**Table 2-3** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n261 Mid Channel

| PD Simulation<br>(W/m <sup>2</sup> ) |         | Mid channel |      |           |      |      |       |        |        |       |      |      |      |          |
|--------------------------------------|---------|-------------|------|-----------|------|------|-------|--------|--------|-------|------|------|------|----------|
|                                      |         | 2mm         |      |           |      |      | 2.75% | 29.04% | 44.51% | 5mm   |      |      |      | 67.67%   |
|                                      |         | S1          | S2   | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2   | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front       | Back | Back (CB) | Left | Top  |       |        |        | Front | Back | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.08        | 8.93 | 5.46      | 0.32 | 3.68 | 0.01  | 0.04   | 0.41   | 0.06  | 5.84 | 0.22 | 2.63 | 0.65     |
| V                                    | 1       | 0.18        | 9.38 | 5.64      | 0.18 | 3.34 | 0.02  | 0.02   | 0.36   | 0.13  | 6.03 | 0.14 | 2.42 | 0.64     |
| V                                    | 2       | 0.09        | 8.60 | 5.15      | 0.31 | 3.22 | 0.01  | 0.04   | 0.37   | 0.06  | 5.52 | 0.20 | 2.30 | 0.64     |
| V                                    | 3       | 0.08        | 8.64 | 5.24      | 0.34 | 3.54 | 0.01  | 0.04   | 0.41   | 0.06  | 5.58 | 0.24 | 2.54 | 0.65     |
| V                                    | 4       | 0.16        | 6.37 | 2.12      | 1.85 | 0.93 | 0.03  | 0.29   | 0.15   | 0.09  | 2.58 | 1.52 | 0.50 | 0.41     |
| V                                    | 5       | 0.11        | 9.20 | 4.68      | 0.94 | 1.48 | 0.01  | 0.10   | 0.16   | 0.06  | 5.09 | 0.68 | 0.88 | 0.55     |
| V                                    | 6       | 0.14        | 9.37 | 4.84      | 2.52 | 3.37 | 0.01  | 0.27   | 0.36   | 0.07  | 5.33 | 1.90 | 2.14 | 0.57     |
| V                                    | 7       | 0.12        | 8.53 | 4.09      | 0.23 | 1.45 | 0.01  | 0.03   | 0.17   | 0.06  | 4.42 | 0.15 | 0.93 | 0.52     |
| V                                    | 8       | 0.09        | 8.72 | 4.89      | 1.62 | 3.51 | 0.01  | 0.19   | 0.40   | 0.06  | 5.27 | 1.10 | 2.45 | 0.60     |
| V                                    | 9       | 0.09        | 8.92 | 3.09      | 0.88 | 0.88 | 0.01  | 0.10   | 0.10   | 0.06  | 3.62 | 0.69 | 0.38 | 0.41     |
| V                                    | 10      | 0.10        | 8.32 | 4.30      | 1.31 | 1.81 | 0.01  | 0.16   | 0.22   | 0.06  | 4.59 | 1.04 | 1.13 | 0.55     |
| V                                    | 11      | 0.15        | 7.90 | 3.16      | 1.91 | 1.98 | 0.02  | 0.24   | 0.25   | 0.08  | 3.68 | 1.54 | 1.20 | 0.47     |
| V                                    | 12      | 0.16        | 8.60 | 4.94      | 0.29 | 2.14 | 0.02  | 0.03   | 0.25   | 0.12  | 5.30 | 0.19 | 1.50 | 0.62     |
| V                                    | 13      | 0.12        | 7.11 | 2.83      | 1.50 | 1.97 | 0.02  | 0.21   | 0.28   | 0.07  | 3.30 | 1.19 | 1.34 | 0.46     |
| V                                    | 14      | 0.10        | 8.49 | 4.62      | 1.12 | 1.83 | 0.01  | 0.13   | 0.22   | 0.07  | 4.94 | 0.87 | 1.18 | 0.58     |
| V                                    | 15      | 0.15        | 7.11 | 2.53      | 1.84 | 1.18 | 0.02  | 0.26   | 0.17   | 0.09  | 3.05 | 1.52 | 0.64 | 0.43     |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| H   | 16 | 0.10 | 8.59  | 5.06  | 0.22 | 3.12 | 0.01 | 0.03 | 0.36 | 0.06 | 5.44  | 0.16 | 2.26 | 0.63 |
| H   | 17 | 0.07 | 9.56  | 5.78  | 0.25 | 3.96 | 0.01 | 0.03 | 0.41 | 0.04 | 6.26  | 0.21 | 2.99 | 0.65 |
| H   | 18 | 0.10 | 8.59  | 5.06  | 0.22 | 3.12 | 0.01 | 0.03 | 0.36 | 0.06 | 5.44  | 0.16 | 2.26 | 0.63 |
| H   | 19 | 0.11 | 8.89  | 5.47  | 0.14 | 3.54 | 0.01 | 0.02 | 0.40 | 0.07 | 5.81  | 0.10 | 2.61 | 0.65 |
| H   | 20 | 0.12 | 5.91  | 1.75  | 1.10 | 1.06 | 0.02 | 0.19 | 0.18 | 0.05 | 2.19  | 0.87 | 0.56 | 0.37 |
| H   | 21 | 0.07 | 9.35  | 4.93  | 0.97 | 3.33 | 0.01 | 0.10 | 0.36 | 0.05 | 5.51  | 0.73 | 2.30 | 0.59 |
| H   | 22 | 0.13 | 10.33 | 4.60  | 2.15 | 1.74 | 0.01 | 0.21 | 0.17 | 0.06 | 5.21  | 1.67 | 1.08 | 0.50 |
| H   | 23 | 0.09 | 10.11 | 5.31  | 0.28 | 4.50 | 0.01 | 0.03 | 0.45 | 0.03 | 5.85  | 0.17 | 3.20 | 0.58 |
| H   | 24 | 0.14 | 8.60  | 4.90  | 1.09 | 2.57 | 0.02 | 0.13 | 0.30 | 0.09 | 5.26  | 0.78 | 1.85 | 0.61 |
| H   | 25 | 0.06 | 8.48  | 3.44  | 0.57 | 2.69 | 0.01 | 0.07 | 0.32 | 0.04 | 4.13  | 0.39 | 1.54 | 0.49 |
| H   | 26 | 0.07 | 8.46  | 4.30  | 1.00 | 2.19 | 0.01 | 0.12 | 0.26 | 0.04 | 4.73  | 0.80 | 1.59 | 0.56 |
| H   | 27 | 0.14 | 8.21  | 2.98  | 1.77 | 0.98 | 0.02 | 0.22 | 0.12 | 0.06 | 3.54  | 1.43 | 0.53 | 0.43 |
| H   | 28 | 0.08 | 10.05 | 5.80  | 0.25 | 4.37 | 0.01 | 0.02 | 0.43 | 0.04 | 6.31  | 0.17 | 3.35 | 0.63 |
| H   | 29 | 0.10 | 7.73  | 3.48  | 1.10 | 1.41 | 0.01 | 0.14 | 0.18 | 0.06 | 3.81  | 0.88 | 1.01 | 0.49 |
| H   | 30 | 0.07 | 8.30  | 4.26  | 0.87 | 2.44 | 0.01 | 0.10 | 0.29 | 0.04 | 4.66  | 0.68 | 1.72 | 0.56 |
| H   | 31 | 0.13 | 6.48  | 2.06  | 1.40 | 0.84 | 0.02 | 0.22 | 0.13 | 0.06 | 2.56  | 1.12 | 0.48 | 0.40 |
| H+V | 32 | 0.33 | 20.08 | 12.52 | 0.92 | 7.38 | 0.02 | 0.05 | 0.37 | 0.21 | 13.02 | 0.66 | 5.26 | 0.65 |
| H+V | 33 | 0.40 | 20.91 | 13.63 | 0.52 | 8.49 | 0.02 | 0.02 | 0.41 | 0.27 | 14.15 | 0.42 | 5.85 | 0.68 |
| H+V | 34 | 0.33 | 19.91 | 12.35 | 0.86 | 6.97 | 0.02 | 0.04 | 0.35 | 0.21 | 12.86 | 0.60 | 5.06 | 0.65 |
| H+V | 35 | 0.32 | 19.74 | 12.77 | 0.57 | 7.79 | 0.02 | 0.03 | 0.39 | 0.21 | 13.09 | 0.39 | 5.33 | 0.66 |
| H+V | 36 | 0.44 | 15.98 | 5.19  | 4.24 | 2.50 | 0.03 | 0.27 | 0.16 | 0.24 | 6.31  | 3.49 | 1.33 | 0.39 |
| H+V | 37 | 0.22 | 23.88 | 12.81 | 2.24 | 6.81 | 0.01 | 0.09 | 0.29 | 0.12 | 14.00 | 1.70 | 4.41 | 0.59 |
| H+V | 38 | 0.47 | 25.90 | 13.17 | 6.95 | 8.56 | 0.02 | 0.27 | 0.33 | 0.23 | 14.47 | 5.31 | 5.28 | 0.56 |
| H+V | 39 | 0.27 | 25.33 | 13.16 | 0.70 | 9.17 | 0.01 | 0.03 | 0.36 | 0.15 | 14.42 | 0.43 | 6.21 | 0.57 |
| H+V | 40 | 0.38 | 20.38 | 12.16 | 3.14 | 7.97 | 0.02 | 0.15 | 0.39 | 0.24 | 12.80 | 2.06 | 5.43 | 0.63 |
| H+V | 41 | 0.18 | 23.14 | 8.66  | 1.65 | 5.75 | 0.01 | 0.07 | 0.25 | 0.12 | 10.31 | 1.22 | 2.93 | 0.45 |
| H+V | 42 | 0.22 | 19.49 | 11.12 | 2.95 | 4.68 | 0.01 | 0.15 | 0.24 | 0.12 | 11.74 | 2.35 | 3.12 | 0.60 |
| H+V | 43 | 0.46 | 20.70 | 8.29  | 5.48 | 4.94 | 0.02 | 0.26 | 0.24 | 0.23 | 9.57  | 4.54 | 2.67 | 0.46 |
| H+V | 44 | 0.35 | 23.36 | 14.06 | 0.61 | 9.27 | 0.01 | 0.03 | 0.40 | 0.21 | 14.96 | 0.41 | 6.93 | 0.64 |
| H+V | 45 | 0.30 | 16.60 | 8.61  | 3.34 | 4.31 | 0.02 | 0.20 | 0.26 | 0.15 | 9.39  | 2.72 | 2.88 | 0.57 |
| H+V | 46 | 0.23 | 19.12 | 11.09 | 2.54 | 5.06 | 0.01 | 0.13 | 0.26 | 0.14 | 11.67 | 1.97 | 3.38 | 0.61 |
| H+V | 47 | 0.48 | 18.83 | 6.47  | 4.89 | 2.88 | 0.03 | 0.26 | 0.15 | 0.26 | 7.82  | 4.05 | 1.31 | 0.42 |
| V   | 48 | 0.08 | 7.76  | 4.51  | 0.38 | 2.87 | 0.01 | 0.05 | 0.37 | 0.06 | 4.85  | 0.28 | 2.06 | 0.63 |
| V   | 49 | 0.14 | 7.70  | 4.45  | 0.14 | 2.56 | 0.02 | 0.02 | 0.33 | 0.10 | 4.79  | 0.10 | 1.85 | 0.62 |
| V   | 50 | 0.08 | 7.76  | 4.51  | 0.38 | 2.87 | 0.01 | 0.05 | 0.37 | 0.06 | 4.85  | 0.28 | 2.06 | 0.63 |
| V   | 51 | 0.08 | 8.08  | 4.72  | 0.43 | 3.11 | 0.01 | 0.05 | 0.38 | 0.05 | 5.06  | 0.35 | 2.22 | 0.63 |
| V   | 52 | 0.13 | 6.02  | 2.11  | 1.69 | 1.01 | 0.02 | 0.28 | 0.17 | 0.07 | 2.54  | 1.37 | 0.56 | 0.42 |
| V   | 53 | 0.12 | 7.82  | 4.02  | 0.83 | 1.70 | 0.02 | 0.11 | 0.22 | 0.08 | 4.31  | 0.62 | 1.12 | 0.55 |
| V   | 54 | 0.10 | 8.14  | 3.91  | 2.20 | 2.40 | 0.01 | 0.27 | 0.29 | 0.05 | 4.37  | 1.67 | 1.48 | 0.54 |
| V   | 55 | 0.11 | 6.75  | 3.14  | 0.24 | 1.14 | 0.02 | 0.04 | 0.17 | 0.07 | 3.47  | 0.17 | 0.77 | 0.51 |
| V   | 56 | 0.06 | 7.69  | 4.18  | 1.61 | 2.62 | 0.01 | 0.21 | 0.34 | 0.04 | 4.53  | 1.13 | 1.76 | 0.59 |
| V   | 57 | 0.09 | 6.15  | 1.99  | 1.00 | 0.55 | 0.01 | 0.16 | 0.09 | 0.05 | 2.32  | 0.80 | 0.31 | 0.38 |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| V   | 58 | 0.10 | 7.76  | 3.77  | 1.12 | 1.87 | 0.01 | 0.14 | 0.24 | 0.07 | 3.99  | 0.88 | 1.28 | 0.51 |
| V   | 59 | 0.12 | 6.74  | 2.51  | 1.68 | 1.20 | 0.02 | 0.25 | 0.18 | 0.07 | 2.99  | 1.36 | 0.67 | 0.44 |
| V   | 60 | 0.14 | 7.17  | 3.93  | 0.28 | 1.73 | 0.02 | 0.04 | 0.24 | 0.10 | 4.26  | 0.21 | 1.17 | 0.59 |
| V   | 61 | 0.12 | 6.12  | 2.02  | 1.45 | 1.12 | 0.02 | 0.24 | 0.18 | 0.07 | 2.45  | 1.18 | 0.71 | 0.40 |
| V   | 62 | 0.12 | 8.11  | 4.13  | 0.99 | 1.96 | 0.01 | 0.12 | 0.24 | 0.08 | 4.39  | 0.74 | 1.35 | 0.54 |
| V   | 63 | 0.12 | 6.74  | 2.51  | 1.68 | 1.20 | 0.02 | 0.25 | 0.18 | 0.07 | 2.99  | 1.36 | 0.67 | 0.44 |
| H   | 64 | 0.07 | 7.58  | 4.39  | 0.17 | 2.62 | 0.01 | 0.02 | 0.35 | 0.05 | 4.75  | 0.12 | 1.93 | 0.63 |
| H   | 65 | 0.05 | 7.81  | 4.40  | 0.20 | 3.08 | 0.01 | 0.03 | 0.39 | 0.03 | 4.81  | 0.16 | 2.33 | 0.62 |
| H   | 66 | 0.07 | 7.58  | 4.39  | 0.17 | 2.62 | 0.01 | 0.02 | 0.35 | 0.05 | 4.75  | 0.12 | 1.93 | 0.63 |
| H   | 67 | 0.08 | 7.97  | 4.81  | 0.20 | 2.98 | 0.01 | 0.03 | 0.37 | 0.05 | 5.14  | 0.16 | 2.20 | 0.64 |
| H   | 68 | 0.10 | 5.99  | 1.72  | 1.10 | 0.96 | 0.02 | 0.18 | 0.16 | 0.05 | 2.14  | 0.86 | 0.51 | 0.36 |
| H   | 69 | 0.06 | 8.04  | 4.25  | 0.65 | 3.07 | 0.01 | 0.08 | 0.38 | 0.03 | 4.62  | 0.47 | 2.10 | 0.57 |
| H   | 70 | 0.10 | 8.29  | 3.36  | 1.67 | 1.13 | 0.01 | 0.20 | 0.14 | 0.05 | 3.81  | 1.30 | 0.71 | 0.46 |
| H   | 71 | 0.07 | 8.23  | 3.99  | 0.30 | 3.53 | 0.01 | 0.04 | 0.43 | 0.03 | 4.55  | 0.17 | 2.47 | 0.55 |
| H   | 72 | 0.09 | 7.80  | 3.65  | 1.25 | 1.68 | 0.01 | 0.16 | 0.22 | 0.06 | 4.05  | 0.93 | 1.13 | 0.52 |
| H   | 73 | 0.07 | 6.32  | 2.54  | 0.66 | 1.99 | 0.01 | 0.10 | 0.31 | 0.04 | 2.99  | 0.49 | 1.17 | 0.47 |
| H   | 74 | 0.04 | 7.68  | 3.60  | 0.69 | 2.14 | 0.01 | 0.09 | 0.28 | 0.03 | 3.90  | 0.52 | 1.44 | 0.51 |
| H   | 75 | 0.11 | 6.27  | 2.06  | 1.31 | 0.74 | 0.02 | 0.21 | 0.12 | 0.05 | 2.52  | 1.04 | 0.40 | 0.40 |
| H   | 76 | 0.07 | 8.34  | 4.34  | 0.37 | 3.46 | 0.01 | 0.04 | 0.41 | 0.03 | 4.87  | 0.25 | 2.55 | 0.58 |
| H   | 77 | 0.08 | 6.41  | 2.15  | 0.86 | 0.82 | 0.01 | 0.13 | 0.13 | 0.04 | 2.54  | 0.67 | 0.56 | 0.40 |
| H   | 78 | 0.05 | 7.66  | 3.55  | 0.68 | 2.33 | 0.01 | 0.09 | 0.30 | 0.03 | 3.86  | 0.50 | 1.63 | 0.50 |
| H   | 79 | 0.11 | 6.27  | 2.06  | 1.31 | 0.74 | 0.02 | 0.21 | 0.12 | 0.05 | 2.52  | 1.04 | 0.40 | 0.40 |
| H+V | 80 | 0.26 | 17.66 | 10.39 | 0.84 | 6.02 | 0.01 | 0.05 | 0.34 | 0.17 | 10.89 | 0.62 | 4.24 | 0.62 |
| H+V | 81 | 0.28 | 17.40 | 10.36 | 0.45 | 6.72 | 0.02 | 0.03 | 0.39 | 0.18 | 10.93 | 0.35 | 4.69 | 0.63 |
| H+V | 82 | 0.26 | 17.66 | 10.39 | 0.84 | 6.02 | 0.01 | 0.05 | 0.34 | 0.17 | 10.89 | 0.62 | 4.24 | 0.62 |
| H+V | 83 | 0.26 | 17.90 | 10.91 | 0.69 | 6.68 | 0.01 | 0.04 | 0.37 | 0.17 | 11.28 | 0.51 | 4.55 | 0.63 |
| H+V | 84 | 0.35 | 14.80 | 4.96  | 3.85 | 2.31 | 0.02 | 0.26 | 0.16 | 0.19 | 5.98  | 3.10 | 1.18 | 0.40 |
| H+V | 85 | 0.25 | 19.68 | 10.63 | 1.74 | 6.01 | 0.01 | 0.09 | 0.31 | 0.14 | 11.30 | 1.20 | 4.00 | 0.57 |
| H+V | 86 | 0.34 | 21.17 | 10.04 | 5.58 | 5.60 | 0.02 | 0.26 | 0.26 | 0.17 | 11.02 | 4.21 | 3.32 | 0.52 |
| H+V | 87 | 0.26 | 20.04 | 9.75  | 0.70 | 6.75 | 0.01 | 0.03 | 0.34 | 0.13 | 10.94 | 0.48 | 4.58 | 0.55 |
| H+V | 88 | 0.24 | 18.34 | 10.16 | 3.67 | 5.79 | 0.01 | 0.20 | 0.32 | 0.15 | 10.81 | 2.52 | 3.86 | 0.59 |
| H+V | 89 | 0.22 | 17.20 | 6.36  | 2.01 | 3.81 | 0.01 | 0.12 | 0.22 | 0.12 | 7.42  | 1.61 | 1.97 | 0.43 |
| H+V | 90 | 0.21 | 17.78 | 9.17  | 2.22 | 4.56 | 0.01 | 0.12 | 0.26 | 0.12 | 9.44  | 1.69 | 2.76 | 0.53 |
| H+V | 91 | 0.37 | 16.82 | 6.14  | 4.30 | 2.73 | 0.02 | 0.26 | 0.16 | 0.20 | 7.28  | 3.50 | 1.37 | 0.43 |
| H+V | 92 | 0.29 | 19.18 | 10.62 | 0.88 | 6.98 | 0.02 | 0.05 | 0.36 | 0.16 | 11.63 | 0.65 | 5.00 | 0.61 |
| H+V | 93 | 0.29 | 14.90 | 4.81  | 2.99 | 2.27 | 0.02 | 0.20 | 0.15 | 0.16 | 5.86  | 2.41 | 1.41 | 0.39 |
| H+V | 94 | 0.25 | 17.94 | 9.24  | 2.02 | 4.90 | 0.01 | 0.11 | 0.27 | 0.15 | 9.53  | 1.48 | 3.07 | 0.53 |
| H+V | 95 | 0.37 | 16.82 | 6.14  | 4.30 | 2.73 | 0.02 | 0.26 | 0.16 | 0.20 | 7.28  | 3.50 | 1.37 | 0.43 |
| V   | 96 | 0.05 | 3.48  | 2.02  | 0.34 | 1.15 | 0.01 | 0.10 | 0.33 | 0.03 | 2.16  | 0.23 | 0.77 | 0.62 |
| V   | 97 | 0.07 | 3.42  | 1.96  | 0.15 | 1.04 | 0.02 | 0.04 | 0.30 | 0.05 | 2.08  | 0.09 | 0.70 | 0.61 |
| V   | 98 | 0.05 | 3.48  | 2.02  | 0.34 | 1.15 | 0.01 | 0.10 | 0.33 | 0.03 | 2.16  | 0.23 | 0.77 | 0.62 |
| V   | 99 | 0.05 | 3.48  | 2.02  | 0.34 | 1.15 | 0.01 | 0.10 | 0.33 | 0.03 | 2.16  | 0.23 | 0.77 | 0.62 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| V   | 100 | 0.04 | 4.38 | 1.66 | 1.09 | 0.66 | 0.01 | 0.25 | 0.15 | 0.02 | 1.92 | 0.82 | 0.39 | 0.44 |
| V   | 101 | 0.07 | 4.39 | 1.49 | 0.87 | 0.42 | 0.02 | 0.20 | 0.10 | 0.04 | 1.77 | 0.67 | 0.22 | 0.40 |
| V   | 102 | 0.04 | 4.38 | 1.66 | 1.09 | 0.66 | 0.01 | 0.25 | 0.15 | 0.02 | 1.92 | 0.82 | 0.39 | 0.44 |
| V   | 103 | 0.09 | 3.65 | 1.83 | 0.22 | 0.82 | 0.02 | 0.06 | 0.22 | 0.06 | 1.97 | 0.15 | 0.56 | 0.54 |
| V   | 104 | 0.04 | 4.38 | 1.66 | 1.09 | 0.66 | 0.01 | 0.25 | 0.15 | 0.02 | 1.92 | 0.82 | 0.39 | 0.44 |
| V   | 105 | 0.07 | 4.39 | 1.49 | 0.87 | 0.42 | 0.02 | 0.20 | 0.10 | 0.04 | 1.77 | 0.67 | 0.22 | 0.40 |
| V   | 106 | 0.04 | 4.38 | 1.66 | 1.09 | 0.66 | 0.01 | 0.25 | 0.15 | 0.02 | 1.92 | 0.82 | 0.39 | 0.44 |
| V   | 107 | 0.07 | 4.39 | 1.49 | 0.87 | 0.42 | 0.02 | 0.20 | 0.10 | 0.04 | 1.77 | 0.67 | 0.22 | 0.40 |
| V   | 108 | 0.09 | 3.65 | 1.83 | 0.22 | 0.82 | 0.02 | 0.06 | 0.22 | 0.06 | 1.97 | 0.15 | 0.56 | 0.54 |
| V   | 109 | 0.04 | 4.38 | 1.66 | 1.09 | 0.66 | 0.01 | 0.25 | 0.15 | 0.02 | 1.92 | 0.82 | 0.39 | 0.44 |
| V   | 110 | 0.04 | 4.38 | 1.66 | 1.09 | 0.66 | 0.01 | 0.25 | 0.15 | 0.02 | 1.92 | 0.82 | 0.39 | 0.44 |
| V   | 111 | 0.07 | 4.39 | 1.49 | 0.87 | 0.42 | 0.02 | 0.20 | 0.10 | 0.04 | 1.77 | 0.67 | 0.22 | 0.40 |
| V   | 112 | 0.07 | 4.39 | 1.49 | 0.87 | 0.42 | 0.02 | 0.20 | 0.10 | 0.04 | 1.77 | 0.67 | 0.22 | 0.40 |
| V   | 113 | 0.05 | 3.48 | 2.02 | 0.34 | 1.15 | 0.01 | 0.10 | 0.33 | 0.03 | 2.16 | 0.23 | 0.77 | 0.62 |
| H   | 114 | 0.02 | 3.86 | 2.13 | 0.20 | 1.17 | 0.01 | 0.05 | 0.30 | 0.01 | 2.33 | 0.14 | 0.82 | 0.60 |
| H   | 115 | 0.02 | 4.04 | 2.14 | 0.13 | 1.35 | 0.00 | 0.03 | 0.33 | 0.01 | 2.36 | 0.09 | 0.91 | 0.58 |
| H   | 116 | 0.02 | 3.86 | 2.13 | 0.20 | 1.17 | 0.01 | 0.05 | 0.30 | 0.01 | 2.33 | 0.14 | 0.82 | 0.60 |
| H   | 117 | 0.02 | 3.86 | 2.13 | 0.20 | 1.17 | 0.01 | 0.05 | 0.30 | 0.01 | 2.33 | 0.14 | 0.82 | 0.60 |
| H   | 118 | 0.05 | 4.25 | 1.50 | 0.74 | 0.56 | 0.01 | 0.17 | 0.13 | 0.03 | 1.78 | 0.55 | 0.39 | 0.42 |
| H   | 119 | 0.04 | 4.28 | 1.20 | 0.68 | 0.69 | 0.01 | 0.16 | 0.16 | 0.03 | 1.53 | 0.51 | 0.44 | 0.36 |
| H   | 120 | 0.05 | 4.25 | 1.50 | 0.74 | 0.56 | 0.01 | 0.17 | 0.13 | 0.03 | 1.78 | 0.55 | 0.39 | 0.42 |
| H   | 121 | 0.03 | 4.25 | 1.95 | 0.25 | 1.35 | 0.01 | 0.06 | 0.32 | 0.02 | 2.20 | 0.18 | 0.87 | 0.52 |
| H   | 122 | 0.05 | 4.25 | 1.50 | 0.74 | 0.56 | 0.01 | 0.17 | 0.13 | 0.03 | 1.78 | 0.55 | 0.39 | 0.42 |
| H   | 123 | 0.04 | 4.28 | 1.20 | 0.68 | 0.69 | 0.01 | 0.16 | 0.16 | 0.03 | 1.53 | 0.51 | 0.44 | 0.36 |
| H   | 124 | 0.05 | 4.25 | 1.50 | 0.74 | 0.56 | 0.01 | 0.17 | 0.13 | 0.03 | 1.78 | 0.55 | 0.39 | 0.42 |
| H   | 125 | 0.04 | 4.28 | 1.20 | 0.68 | 0.69 | 0.01 | 0.16 | 0.16 | 0.03 | 1.53 | 0.51 | 0.44 | 0.36 |
| H   | 126 | 0.03 | 4.25 | 1.95 | 0.25 | 1.35 | 0.01 | 0.06 | 0.32 | 0.02 | 2.20 | 0.18 | 0.87 | 0.52 |
| H   | 127 | 0.05 | 4.25 | 1.50 | 0.74 | 0.56 | 0.01 | 0.17 | 0.13 | 0.03 | 1.78 | 0.55 | 0.39 | 0.42 |
| H   | 128 | 0.05 | 4.25 | 1.50 | 0.74 | 0.56 | 0.01 | 0.17 | 0.13 | 0.03 | 1.78 | 0.55 | 0.39 | 0.42 |
| H   | 129 | 0.04 | 4.28 | 1.20 | 0.68 | 0.69 | 0.01 | 0.16 | 0.16 | 0.03 | 1.53 | 0.51 | 0.44 | 0.36 |
| H   | 130 | 0.04 | 4.28 | 1.20 | 0.68 | 0.69 | 0.01 | 0.16 | 0.16 | 0.03 | 1.53 | 0.51 | 0.44 | 0.36 |
| H   | 131 | 0.02 | 3.86 | 2.13 | 0.20 | 1.17 | 0.01 | 0.05 | 0.30 | 0.01 | 2.33 | 0.14 | 0.82 | 0.60 |
| H+V | 132 | 0.10 | 9.50 | 5.39 | 0.77 | 2.89 | 0.01 | 0.08 | 0.30 | 0.06 | 5.78 | 0.56 | 1.87 | 0.61 |
| H+V | 133 | 0.12 | 9.42 | 5.29 | 0.40 | 2.94 | 0.01 | 0.04 | 0.31 | 0.08 | 5.68 | 0.28 | 1.91 | 0.60 |
| H+V | 134 | 0.10 | 9.50 | 5.39 | 0.77 | 2.89 | 0.01 | 0.08 | 0.30 | 0.06 | 5.78 | 0.56 | 1.87 | 0.61 |
| H+V | 135 | 0.10 | 9.50 | 5.39 | 0.77 | 2.89 | 0.01 | 0.08 | 0.30 | 0.06 | 5.78 | 0.56 | 1.87 | 0.61 |
| H+V | 136 | 0.14 | 9.84 | 4.02 | 2.25 | 1.72 | 0.01 | 0.23 | 0.17 | 0.08 | 4.56 | 1.65 | 1.09 | 0.46 |
| H+V | 137 | 0.13 | 9.76 | 3.39 | 1.90 | 1.25 | 0.01 | 0.19 | 0.13 | 0.07 | 4.03 | 1.42 | 0.76 | 0.41 |
| H+V | 138 | 0.14 | 9.84 | 4.02 | 2.25 | 1.72 | 0.01 | 0.23 | 0.17 | 0.08 | 4.56 | 1.65 | 1.09 | 0.46 |
| H+V | 139 | 0.14 | 9.44 | 4.88 | 0.54 | 2.68 | 0.01 | 0.06 | 0.28 | 0.09 | 5.30 | 0.39 | 1.71 | 0.56 |
| H+V | 140 | 0.14 | 9.84 | 4.02 | 2.25 | 1.72 | 0.01 | 0.23 | 0.17 | 0.08 | 4.56 | 1.65 | 1.09 | 0.46 |
| H+V | 141 | 0.13 | 9.76 | 3.39 | 1.90 | 1.25 | 0.01 | 0.19 | 0.13 | 0.07 | 4.03 | 1.42 | 0.76 | 0.41 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| H+V | 142 | 0.14 | 9.84 | 4.02 | 2.25 | 1.72 | 0.01 | 0.23 | 0.17 | 0.08 | 4.56 | 1.65 | 1.09 | 0.46 |
| H+V | 143 | 0.13 | 9.76 | 3.39 | 1.90 | 1.25 | 0.01 | 0.19 | 0.13 | 0.07 | 4.03 | 1.42 | 0.76 | 0.41 |
| H+V | 144 | 0.14 | 9.44 | 4.88 | 0.54 | 2.68 | 0.01 | 0.06 | 0.28 | 0.09 | 5.30 | 0.39 | 1.71 | 0.56 |
| H+V | 145 | 0.14 | 9.84 | 4.02 | 2.25 | 1.72 | 0.01 | 0.23 | 0.17 | 0.08 | 4.56 | 1.65 | 1.09 | 0.46 |
| H+V | 146 | 0.14 | 9.84 | 4.02 | 2.25 | 1.72 | 0.01 | 0.23 | 0.17 | 0.08 | 4.56 | 1.65 | 1.09 | 0.46 |
| H+V | 147 | 0.13 | 9.76 | 3.39 | 1.90 | 1.25 | 0.01 | 0.19 | 0.13 | 0.07 | 4.03 | 1.42 | 0.76 | 0.41 |
| H+V | 148 | 0.13 | 9.76 | 3.39 | 1.90 | 1.25 | 0.01 | 0.19 | 0.13 | 0.07 | 4.03 | 1.42 | 0.76 | 0.41 |
| H+V | 149 | 0.09 | 8.76 | 3.85 | 1.14 | 1.77 | 0.01 | 0.13 | 0.20 | 0.06 | 4.33 | 0.92 | 1.19 | 0.49 |
| V   | 150 | 0.02 | 1.89 | 0.85 | 0.33 | 0.33 | 0.01 | 0.17 | 0.17 | 0.02 | 0.95 | 0.23 | 0.21 | 0.50 |
| V   | 151 | 0.04 | 2.18 | 0.97 | 0.29 | 0.44 | 0.02 | 0.13 | 0.20 | 0.02 | 1.09 | 0.23 | 0.28 | 0.50 |
| H   | 152 | 0.02 | 2.15 | 0.82 | 0.25 | 0.38 | 0.01 | 0.12 | 0.18 | 0.01 | 0.98 | 0.17 | 0.24 | 0.46 |
| H   | 153 | 0.02 | 2.16 | 0.89 | 0.19 | 0.46 | 0.01 | 0.09 | 0.21 | 0.01 | 1.01 | 0.15 | 0.28 | 0.47 |
| H+V | 154 | 0.04 | 4.82 | 2.05 | 0.71 | 0.91 | 0.01 | 0.15 | 0.19 | 0.03 | 2.35 | 0.49 | 0.56 | 0.49 |
| H+V | 155 | 0.07 | 5.35 | 2.46 | 0.61 | 1.02 | 0.01 | 0.11 | 0.19 | 0.04 | 2.71 | 0.49 | 0.63 | 0.51 |

**Table 2-4** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n261 High Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | High channel |      |           |      |      |       |        |        |       |      |      |      |          |
|--------------------------------------|---------|--------------|------|-----------|------|------|-------|--------|--------|-------|------|------|------|----------|
|                                      |         | 2mm          |      |           |      |      | 2.65% | 28.03% | 42.22% | 5mm   |      |      |      | 67.63%   |
|                                      |         | S1           | S2   | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2   | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front        | Back | Back (CB) | Left | Top  |       |        |        | Front | Back | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.08         | 8.96 | 5.46      | 0.37 | 3.48 | 0.01  | 0.04   | 0.39   | 0.05  | 5.84 | 0.25 | 2.49 | 0.65     |
| V                                    | 1       | 0.17         | 9.38 | 5.71      | 0.17 | 3.30 | 0.02  | 0.02   | 0.35   | 0.12  | 6.09 | 0.13 | 2.40 | 0.65     |
| V                                    | 2       | 0.08         | 8.65 | 5.13      | 0.38 | 3.05 | 0.01  | 0.04   | 0.35   | 0.06  | 5.50 | 0.24 | 2.17 | 0.64     |
| V                                    | 3       | 0.08         | 8.56 | 5.19      | 0.38 | 3.31 | 0.01  | 0.04   | 0.39   | 0.05  | 5.51 | 0.26 | 2.36 | 0.64     |
| V                                    | 4       | 0.17         | 6.41 | 2.16      | 1.76 | 0.92 | 0.03  | 0.27   | 0.14   | 0.10  | 2.62 | 1.46 | 0.47 | 0.41     |
| V                                    | 5       | 0.12         | 9.15 | 4.76      | 0.92 | 1.47 | 0.01  | 0.10   | 0.16   | 0.07  | 5.16 | 0.68 | 0.84 | 0.56     |
| V                                    | 6       | 0.15         | 9.49 | 4.95      | 2.66 | 3.46 | 0.02  | 0.28   | 0.36   | 0.08  | 5.45 | 2.00 | 2.22 | 0.57     |
| V                                    | 7       | 0.12         | 8.61 | 4.25      | 0.26 | 1.50 | 0.01  | 0.03   | 0.17   | 0.07  | 4.58 | 0.17 | 0.91 | 0.53     |
| V                                    | 8       | 0.09         | 8.89 | 4.96      | 1.57 | 3.54 | 0.01  | 0.18   | 0.40   | 0.06  | 5.36 | 1.04 | 2.48 | 0.60     |
| V                                    | 9       | 0.11         | 8.36 | 2.97      | 0.83 | 0.65 | 0.01  | 0.10   | 0.08   | 0.07  | 3.42 | 0.66 | 0.24 | 0.41     |
| V                                    | 10      | 0.10         | 8.28 | 4.38      | 1.24 | 1.76 | 0.01  | 0.15   | 0.21   | 0.05  | 4.69 | 0.98 | 1.10 | 0.57     |
| V                                    | 11      | 0.14         | 7.91 | 3.21      | 1.93 | 1.97 | 0.02  | 0.24   | 0.25   | 0.08  | 3.76 | 1.57 | 1.16 | 0.48     |
| V                                    | 12      | 0.15         | 8.90 | 5.09      | 0.33 | 2.22 | 0.02  | 0.04   | 0.25   | 0.11  | 5.47 | 0.22 | 1.57 | 0.61     |
| V                                    | 13      | 0.12         | 7.02 | 2.90      | 1.48 | 1.89 | 0.02  | 0.21   | 0.27   | 0.07  | 3.35 | 1.18 | 1.30 | 0.48     |
| V                                    | 14      | 0.10         | 8.47 | 4.67      | 1.04 | 1.80 | 0.01  | 0.12   | 0.21   | 0.06  | 4.99 | 0.80 | 1.15 | 0.59     |
| V                                    | 15      | 0.15         | 7.16 | 2.57      | 1.78 | 1.16 | 0.02  | 0.25   | 0.16   | 0.09  | 3.10 | 1.47 | 0.58 | 0.43     |
| H                                    | 16      | 0.09         | 8.67 | 5.17      | 0.21 | 3.08 | 0.01  | 0.02   | 0.36   | 0.05  | 5.55 | 0.14 | 2.19 | 0.64     |
| H                                    | 17      | 0.08         | 9.50 | 5.74      | 0.25 | 3.79 | 0.01  | 0.03   | 0.40   | 0.05  | 6.21 | 0.20 | 2.88 | 0.65     |
| H                                    | 18      | 0.09         | 8.67 | 5.17      | 0.21 | 3.08 | 0.01  | 0.02   | 0.36   | 0.05  | 5.55 | 0.14 | 2.19 | 0.64     |
| H                                    | 19      | 0.09         | 8.86 | 5.50      | 0.13 | 3.43 | 0.01  | 0.01   | 0.39   | 0.06  | 5.82 | 0.09 | 2.47 | 0.66     |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| H   | 20 | 0.11 | 6.15  | 1.98  | 1.09 | 0.88 | 0.02 | 0.18 | 0.14 | 0.05 | 2.46  | 0.85 | 0.51 | 0.40 |
| H   | 21 | 0.07 | 8.97  | 4.69  | 0.86 | 3.03 | 0.01 | 0.10 | 0.34 | 0.03 | 5.22  | 0.64 | 2.10 | 0.58 |
| H   | 22 | 0.10 | 9.88  | 4.62  | 1.93 | 1.62 | 0.01 | 0.20 | 0.16 | 0.05 | 5.19  | 1.48 | 1.02 | 0.53 |
| H   | 23 | 0.08 | 9.77  | 5.01  | 0.38 | 4.11 | 0.01 | 0.04 | 0.42 | 0.04 | 5.51  | 0.22 | 2.93 | 0.56 |
| H   | 24 | 0.13 | 8.55  | 4.95  | 1.02 | 2.47 | 0.02 | 0.12 | 0.29 | 0.09 | 5.29  | 0.73 | 1.75 | 0.62 |
| H   | 25 | 0.09 | 8.19  | 3.40  | 0.53 | 2.39 | 0.01 | 0.06 | 0.29 | 0.04 | 4.01  | 0.36 | 1.33 | 0.49 |
| H   | 26 | 0.06 | 8.17  | 4.20  | 0.94 | 2.04 | 0.01 | 0.12 | 0.25 | 0.03 | 4.59  | 0.76 | 1.46 | 0.56 |
| H   | 27 | 0.12 | 8.08  | 3.01  | 1.66 | 1.02 | 0.01 | 0.21 | 0.13 | 0.06 | 3.54  | 1.33 | 0.65 | 0.44 |
| H   | 28 | 0.07 | 9.83  | 5.62  | 0.33 | 4.15 | 0.01 | 0.03 | 0.42 | 0.04 | 6.11  | 0.22 | 3.20 | 0.62 |
| H   | 29 | 0.08 | 7.31  | 3.42  | 0.99 | 1.44 | 0.01 | 0.14 | 0.20 | 0.04 | 3.74  | 0.77 | 1.02 | 0.51 |
| H   | 30 | 0.06 | 8.07  | 4.16  | 0.86 | 2.31 | 0.01 | 0.11 | 0.29 | 0.04 | 4.53  | 0.68 | 1.59 | 0.56 |
| H   | 31 | 0.12 | 6.71  | 2.26  | 1.38 | 0.82 | 0.02 | 0.21 | 0.12 | 0.05 | 2.78  | 1.10 | 0.48 | 0.41 |
| H+V | 32 | 0.29 | 19.61 | 12.23 | 0.91 | 7.01 | 0.01 | 0.05 | 0.36 | 0.19 | 12.70 | 0.65 | 5.38 | 0.65 |
| H+V | 33 | 0.41 | 20.45 | 13.36 | 0.49 | 8.05 | 0.02 | 0.02 | 0.39 | 0.27 | 13.83 | 0.40 | 5.77 | 0.68 |
| H+V | 34 | 0.29 | 19.62 | 12.06 | 0.87 | 6.69 | 0.01 | 0.04 | 0.34 | 0.19 | 12.56 | 0.62 | 5.16 | 0.64 |
| H+V | 35 | 0.28 | 19.32 | 12.35 | 0.56 | 7.05 | 0.01 | 0.03 | 0.36 | 0.19 | 12.66 | 0.39 | 5.34 | 0.66 |
| H+V | 36 | 0.39 | 16.18 | 5.45  | 4.11 | 2.72 | 0.02 | 0.25 | 0.17 | 0.23 | 6.56  | 3.34 | 1.43 | 0.41 |
| H+V | 37 | 0.29 | 22.86 | 12.61 | 2.15 | 6.34 | 0.01 | 0.09 | 0.28 | 0.12 | 13.72 | 1.65 | 3.96 | 0.60 |
| H+V | 38 | 0.39 | 25.29 | 13.12 | 6.71 | 8.28 | 0.02 | 0.27 | 0.33 | 0.19 | 14.34 | 5.05 | 5.13 | 0.57 |
| H+V | 39 | 0.28 | 24.63 | 13.01 | 0.96 | 8.66 | 0.01 | 0.04 | 0.35 | 0.15 | 14.16 | 0.60 | 5.75 | 0.57 |
| H+V | 40 | 0.37 | 20.48 | 12.26 | 2.79 | 7.64 | 0.02 | 0.14 | 0.37 | 0.26 | 12.88 | 1.72 | 5.14 | 0.63 |
| H+V | 41 | 0.26 | 21.25 | 8.30  | 1.64 | 4.64 | 0.01 | 0.08 | 0.22 | 0.14 | 9.70  | 1.24 | 2.18 | 0.46 |
| H+V | 42 | 0.19 | 19.20 | 10.94 | 2.80 | 4.46 | 0.01 | 0.15 | 0.23 | 0.10 | 11.54 | 2.22 | 2.90 | 0.60 |
| H+V | 43 | 0.41 | 20.28 | 8.28  | 5.25 | 4.80 | 0.02 | 0.26 | 0.24 | 0.21 | 9.49  | 4.35 | 2.57 | 0.47 |
| H+V | 44 | 0.28 | 23.20 | 13.98 | 0.80 | 9.14 | 0.01 | 0.03 | 0.39 | 0.18 | 14.85 | 0.53 | 6.65 | 0.64 |
| H+V | 45 | 0.27 | 16.16 | 8.12  | 3.21 | 3.96 | 0.02 | 0.20 | 0.25 | 0.15 | 8.84  | 2.57 | 2.60 | 0.55 |
| H+V | 46 | 0.21 | 19.06 | 10.99 | 2.41 | 4.82 | 0.01 | 0.13 | 0.25 | 0.11 | 11.54 | 1.82 | 3.19 | 0.61 |
| H+V | 47 | 0.43 | 18.76 | 6.57  | 4.68 | 3.08 | 0.02 | 0.25 | 0.16 | 0.24 | 7.89  | 3.89 | 1.43 | 0.42 |
| V   | 48 | 0.08 | 7.79  | 4.51  | 0.41 | 2.75 | 0.01 | 0.05 | 0.35 | 0.06 | 4.85  | 0.30 | 1.96 | 0.62 |
| V   | 49 | 0.13 | 7.69  | 4.45  | 0.16 | 2.51 | 0.02 | 0.02 | 0.33 | 0.09 | 4.78  | 0.11 | 1.82 | 0.62 |
| V   | 50 | 0.08 | 7.79  | 4.51  | 0.41 | 2.75 | 0.01 | 0.05 | 0.35 | 0.06 | 4.85  | 0.30 | 1.96 | 0.62 |
| V   | 51 | 0.08 | 8.00  | 4.68  | 0.43 | 2.94 | 0.01 | 0.05 | 0.37 | 0.05 | 5.01  | 0.33 | 2.08 | 0.63 |
| V   | 52 | 0.14 | 6.07  | 2.18  | 1.66 | 0.99 | 0.02 | 0.27 | 0.16 | 0.08 | 2.60  | 1.34 | 0.54 | 0.43 |
| V   | 53 | 0.10 | 7.85  | 4.08  | 0.76 | 1.66 | 0.01 | 0.10 | 0.21 | 0.07 | 4.37  | 0.57 | 1.08 | 0.56 |
| V   | 54 | 0.10 | 8.24  | 3.99  | 2.24 | 2.44 | 0.01 | 0.27 | 0.30 | 0.05 | 4.45  | 1.69 | 1.52 | 0.54 |
| V   | 55 | 0.11 | 6.66  | 3.14  | 0.27 | 1.12 | 0.02 | 0.04 | 0.17 | 0.08 | 3.47  | 0.18 | 0.75 | 0.52 |
| V   | 56 | 0.06 | 7.73  | 4.23  | 1.58 | 2.62 | 0.01 | 0.20 | 0.34 | 0.04 | 4.57  | 1.09 | 1.76 | 0.59 |
| V   | 57 | 0.10 | 5.94  | 2.00  | 0.93 | 0.56 | 0.02 | 0.16 | 0.09 | 0.06 | 2.28  | 0.75 | 0.36 | 0.38 |
| V   | 58 | 0.08 | 7.65  | 3.76  | 1.05 | 1.79 | 0.01 | 0.14 | 0.23 | 0.06 | 4.00  | 0.82 | 1.20 | 0.52 |
| V   | 59 | 0.12 | 6.78  | 2.58  | 1.66 | 1.19 | 0.02 | 0.24 | 0.18 | 0.08 | 3.06  | 1.35 | 0.65 | 0.45 |
| V   | 60 | 0.14 | 7.09  | 3.89  | 0.30 | 1.64 | 0.02 | 0.04 | 0.23 | 0.10 | 4.18  | 0.22 | 1.11 | 0.59 |
| V   | 61 | 0.13 | 6.02  | 2.04  | 1.39 | 1.09 | 0.02 | 0.23 | 0.18 | 0.08 | 2.47  | 1.13 | 0.69 | 0.41 |

|     |     |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|-----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| V   | 62  | 0.10 | 7.97  | 4.13  | 0.92 | 1.90 | 0.01 | 0.12 | 0.24 | 0.07 | 4.41  | 0.69 | 1.29 | 0.55 |
| V   | 63  | 0.12 | 6.78  | 2.58  | 1.66 | 1.19 | 0.02 | 0.24 | 0.18 | 0.08 | 3.06  | 1.35 | 0.65 | 0.45 |
| H   | 64  | 0.07 | 7.48  | 4.40  | 0.17 | 2.55 | 0.01 | 0.02 | 0.34 | 0.04 | 4.73  | 0.11 | 1.84 | 0.63 |
| H   | 65  | 0.04 | 7.72  | 4.36  | 0.22 | 2.96 | 0.01 | 0.03 | 0.38 | 0.02 | 4.76  | 0.18 | 2.23 | 0.62 |
| H   | 66  | 0.07 | 7.48  | 4.40  | 0.17 | 2.55 | 0.01 | 0.02 | 0.34 | 0.04 | 4.73  | 0.11 | 1.84 | 0.63 |
| H   | 67  | 0.07 | 7.84  | 4.77  | 0.20 | 2.86 | 0.01 | 0.03 | 0.36 | 0.05 | 5.07  | 0.16 | 2.08 | 0.65 |
| H   | 68  | 0.09 | 5.84  | 1.83  | 1.02 | 0.79 | 0.02 | 0.17 | 0.14 | 0.04 | 2.26  | 0.80 | 0.42 | 0.39 |
| H   | 69  | 0.06 | 7.58  | 4.03  | 0.61 | 2.82 | 0.01 | 0.08 | 0.37 | 0.02 | 4.39  | 0.43 | 1.94 | 0.58 |
| H   | 70  | 0.08 | 8.05  | 3.40  | 1.54 | 1.05 | 0.01 | 0.19 | 0.13 | 0.04 | 3.87  | 1.19 | 0.64 | 0.48 |
| H   | 71  | 0.06 | 7.78  | 3.79  | 0.38 | 3.22 | 0.01 | 0.05 | 0.41 | 0.04 | 4.30  | 0.22 | 2.29 | 0.55 |
| H   | 72  | 0.08 | 7.57  | 3.67  | 1.14 | 1.60 | 0.01 | 0.15 | 0.21 | 0.05 | 4.06  | 0.84 | 1.07 | 0.54 |
| H   | 73  | 0.06 | 5.93  | 2.46  | 0.65 | 1.78 | 0.01 | 0.11 | 0.30 | 0.04 | 2.86  | 0.48 | 1.04 | 0.48 |
| H   | 74  | 0.04 | 7.38  | 3.51  | 0.63 | 1.98 | 0.01 | 0.09 | 0.27 | 0.02 | 3.82  | 0.47 | 1.32 | 0.52 |
| H   | 75  | 0.09 | 6.07  | 2.11  | 1.22 | 0.62 | 0.01 | 0.20 | 0.10 | 0.05 | 2.57  | 0.97 | 0.34 | 0.42 |
| H   | 76  | 0.06 | 8.02  | 4.18  | 0.44 | 3.23 | 0.01 | 0.05 | 0.40 | 0.03 | 4.68  | 0.29 | 2.39 | 0.58 |
| H   | 77  | 0.07 | 6.18  | 2.19  | 0.81 | 0.83 | 0.01 | 0.13 | 0.13 | 0.04 | 2.57  | 0.62 | 0.58 | 0.42 |
| H   | 78  | 0.05 | 7.41  | 3.49  | 0.62 | 2.22 | 0.01 | 0.08 | 0.30 | 0.02 | 3.91  | 0.44 | 1.54 | 0.53 |
| H   | 79  | 0.09 | 6.07  | 2.11  | 1.22 | 0.62 | 0.01 | 0.20 | 0.10 | 0.05 | 2.57  | 0.97 | 0.34 | 0.42 |
| H+V | 80  | 0.26 | 17.36 | 10.18 | 0.81 | 5.66 | 0.01 | 0.05 | 0.33 | 0.17 | 10.65 | 0.60 | 4.23 | 0.61 |
| H+V | 81  | 0.27 | 17.15 | 10.27 | 0.47 | 6.37 | 0.02 | 0.03 | 0.37 | 0.17 | 10.82 | 0.36 | 4.45 | 0.63 |
| H+V | 82  | 0.26 | 17.36 | 10.18 | 0.81 | 5.66 | 0.01 | 0.05 | 0.33 | 0.17 | 10.65 | 0.60 | 4.23 | 0.61 |
| H+V | 83  | 0.25 | 17.64 | 10.63 | 0.68 | 6.14 | 0.01 | 0.04 | 0.35 | 0.16 | 11.00 | 0.52 | 4.48 | 0.62 |
| H+V | 84  | 0.31 | 14.73 | 5.14  | 3.74 | 2.31 | 0.02 | 0.25 | 0.16 | 0.18 | 6.12  | 2.96 | 1.18 | 0.42 |
| H+V | 85  | 0.22 | 18.75 | 10.42 | 1.62 | 5.66 | 0.01 | 0.09 | 0.30 | 0.13 | 11.03 | 1.13 | 3.69 | 0.59 |
| H+V | 86  | 0.28 | 20.57 | 9.97  | 5.37 | 5.42 | 0.01 | 0.26 | 0.26 | 0.14 | 10.87 | 3.96 | 3.21 | 0.53 |
| H+V | 87  | 0.25 | 19.37 | 9.61  | 0.86 | 6.33 | 0.01 | 0.04 | 0.33 | 0.13 | 10.73 | 0.58 | 4.27 | 0.55 |
| H+V | 88  | 0.22 | 18.32 | 10.24 | 3.41 | 5.71 | 0.01 | 0.19 | 0.31 | 0.15 | 10.80 | 2.24 | 3.74 | 0.59 |
| H+V | 89  | 0.22 | 15.63 | 6.12  | 1.96 | 3.13 | 0.01 | 0.13 | 0.20 | 0.13 | 7.00  | 1.56 | 1.54 | 0.45 |
| H+V | 90  | 0.18 | 17.38 | 8.90  | 2.16 | 4.23 | 0.01 | 0.12 | 0.24 | 0.11 | 9.16  | 1.61 | 2.59 | 0.53 |
| H+V | 91  | 0.33 | 16.62 | 6.16  | 4.13 | 2.59 | 0.02 | 0.25 | 0.16 | 0.19 | 7.28  | 3.34 | 1.24 | 0.44 |
| H+V | 92  | 0.28 | 19.07 | 10.52 | 0.97 | 6.71 | 0.01 | 0.05 | 0.35 | 0.16 | 11.51 | 0.70 | 4.77 | 0.60 |
| H+V | 93  | 0.27 | 14.82 | 4.94  | 2.93 | 2.31 | 0.02 | 0.20 | 0.16 | 0.16 | 6.02  | 2.35 | 1.46 | 0.41 |
| H+V | 94  | 0.21 | 17.70 | 9.09  | 1.92 | 4.67 | 0.01 | 0.11 | 0.26 | 0.13 | 9.41  | 1.36 | 2.92 | 0.53 |
| H+V | 95  | 0.33 | 16.62 | 6.16  | 4.13 | 2.59 | 0.02 | 0.25 | 0.16 | 0.19 | 7.28  | 3.34 | 1.24 | 0.44 |
| V   | 96  | 0.06 | 3.73  | 2.07  | 0.36 | 1.15 | 0.02 | 0.10 | 0.31 | 0.04 | 2.23  | 0.25 | 0.77 | 0.60 |
| V   | 97  | 0.08 | 3.62  | 1.97  | 0.18 | 1.03 | 0.02 | 0.05 | 0.28 | 0.05 | 2.12  | 0.11 | 0.70 | 0.59 |
| V   | 98  | 0.06 | 3.73  | 2.07  | 0.36 | 1.15 | 0.02 | 0.10 | 0.31 | 0.04 | 2.23  | 0.25 | 0.77 | 0.60 |
| V   | 99  | 0.06 | 3.73  | 2.07  | 0.36 | 1.15 | 0.02 | 0.10 | 0.31 | 0.04 | 2.23  | 0.25 | 0.77 | 0.60 |
| V   | 100 | 0.04 | 4.34  | 1.65  | 1.03 | 0.67 | 0.01 | 0.24 | 0.15 | 0.02 | 1.91  | 0.77 | 0.40 | 0.44 |
| V   | 101 | 0.05 | 4.31  | 1.47  | 0.81 | 0.41 | 0.01 | 0.19 | 0.10 | 0.04 | 1.75  | 0.62 | 0.26 | 0.41 |
| V   | 102 | 0.04 | 4.34  | 1.65  | 1.03 | 0.67 | 0.01 | 0.24 | 0.15 | 0.02 | 1.91  | 0.77 | 0.40 | 0.44 |
| V   | 103 | 0.08 | 3.75  | 1.82  | 0.21 | 0.85 | 0.02 | 0.06 | 0.23 | 0.06 | 1.98  | 0.14 | 0.57 | 0.53 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| V   | 104 | 0.04 | 4.34 | 1.65 | 1.03 | 0.67 | 0.01 | 0.24 | 0.15 | 0.02 | 1.91 | 0.77 | 0.40 | 0.44 |
| V   | 105 | 0.05 | 4.31 | 1.47 | 0.81 | 0.41 | 0.01 | 0.19 | 0.10 | 0.04 | 1.75 | 0.62 | 0.26 | 0.41 |
| V   | 106 | 0.04 | 4.34 | 1.65 | 1.03 | 0.67 | 0.01 | 0.24 | 0.15 | 0.02 | 1.91 | 0.77 | 0.40 | 0.44 |
| V   | 107 | 0.05 | 4.31 | 1.47 | 0.81 | 0.41 | 0.01 | 0.19 | 0.10 | 0.04 | 1.75 | 0.62 | 0.26 | 0.41 |
| V   | 108 | 0.08 | 3.75 | 1.82 | 0.21 | 0.85 | 0.02 | 0.06 | 0.23 | 0.06 | 1.98 | 0.14 | 0.57 | 0.53 |
| V   | 109 | 0.04 | 4.34 | 1.65 | 1.03 | 0.67 | 0.01 | 0.24 | 0.15 | 0.02 | 1.91 | 0.77 | 0.40 | 0.44 |
| V   | 110 | 0.04 | 4.34 | 1.65 | 1.03 | 0.67 | 0.01 | 0.24 | 0.15 | 0.02 | 1.91 | 0.77 | 0.40 | 0.44 |
| V   | 111 | 0.05 | 4.31 | 1.47 | 0.81 | 0.41 | 0.01 | 0.19 | 0.10 | 0.04 | 1.75 | 0.62 | 0.26 | 0.41 |
| V   | 112 | 0.05 | 4.31 | 1.47 | 0.81 | 0.41 | 0.01 | 0.19 | 0.10 | 0.04 | 1.75 | 0.62 | 0.26 | 0.41 |
| V   | 113 | 0.06 | 3.73 | 2.07 | 0.36 | 1.15 | 0.02 | 0.10 | 0.31 | 0.04 | 2.23 | 0.25 | 0.77 | 0.60 |
| H   | 114 | 0.02 | 3.80 | 2.14 | 0.23 | 1.10 | 0.01 | 0.06 | 0.29 | 0.01 | 2.32 | 0.15 | 0.75 | 0.61 |
| H   | 115 | 0.02 | 3.91 | 2.04 | 0.17 | 1.23 | 0.01 | 0.04 | 0.31 | 0.01 | 2.24 | 0.11 | 0.83 | 0.57 |
| H   | 116 | 0.02 | 3.80 | 2.14 | 0.23 | 1.10 | 0.01 | 0.06 | 0.29 | 0.01 | 2.32 | 0.15 | 0.75 | 0.61 |
| H   | 117 | 0.02 | 3.80 | 2.14 | 0.23 | 1.10 | 0.01 | 0.06 | 0.29 | 0.01 | 2.32 | 0.15 | 0.75 | 0.61 |
| H   | 118 | 0.04 | 4.04 | 1.50 | 0.67 | 0.53 | 0.01 | 0.17 | 0.13 | 0.02 | 1.77 | 0.50 | 0.38 | 0.44 |
| H   | 119 | 0.03 | 4.06 | 1.18 | 0.62 | 0.64 | 0.01 | 0.15 | 0.16 | 0.02 | 1.49 | 0.47 | 0.41 | 0.37 |
| H   | 120 | 0.04 | 4.04 | 1.50 | 0.67 | 0.53 | 0.01 | 0.17 | 0.13 | 0.02 | 1.77 | 0.50 | 0.38 | 0.44 |
| H   | 121 | 0.02 | 4.05 | 1.83 | 0.27 | 1.24 | 0.00 | 0.07 | 0.31 | 0.02 | 2.07 | 0.20 | 0.80 | 0.51 |
| H   | 122 | 0.04 | 4.04 | 1.50 | 0.67 | 0.53 | 0.01 | 0.17 | 0.13 | 0.02 | 1.77 | 0.50 | 0.38 | 0.44 |
| H   | 123 | 0.03 | 4.06 | 1.18 | 0.62 | 0.64 | 0.01 | 0.15 | 0.16 | 0.02 | 1.49 | 0.47 | 0.41 | 0.37 |
| H   | 124 | 0.04 | 4.04 | 1.50 | 0.67 | 0.53 | 0.01 | 0.17 | 0.13 | 0.02 | 1.77 | 0.50 | 0.38 | 0.44 |
| H   | 125 | 0.03 | 4.06 | 1.18 | 0.62 | 0.64 | 0.01 | 0.15 | 0.16 | 0.02 | 1.49 | 0.47 | 0.41 | 0.37 |
| H   | 126 | 0.02 | 4.05 | 1.83 | 0.27 | 1.24 | 0.00 | 0.07 | 0.31 | 0.02 | 2.07 | 0.20 | 0.80 | 0.51 |
| H   | 127 | 0.04 | 4.04 | 1.50 | 0.67 | 0.53 | 0.01 | 0.17 | 0.13 | 0.02 | 1.77 | 0.50 | 0.38 | 0.44 |
| H   | 128 | 0.04 | 4.04 | 1.50 | 0.67 | 0.53 | 0.01 | 0.17 | 0.13 | 0.02 | 1.77 | 0.50 | 0.38 | 0.44 |
| H   | 129 | 0.03 | 4.06 | 1.18 | 0.62 | 0.64 | 0.01 | 0.15 | 0.16 | 0.02 | 1.49 | 0.47 | 0.41 | 0.37 |
| H   | 130 | 0.03 | 4.06 | 1.18 | 0.62 | 0.64 | 0.01 | 0.15 | 0.16 | 0.02 | 1.49 | 0.47 | 0.41 | 0.37 |
| H   | 131 | 0.02 | 3.80 | 2.14 | 0.23 | 1.10 | 0.01 | 0.06 | 0.29 | 0.01 | 2.32 | 0.15 | 0.75 | 0.61 |
| H+V | 132 | 0.12 | 9.40 | 5.29 | 0.79 | 2.65 | 0.01 | 0.08 | 0.28 | 0.07 | 5.66 | 0.58 | 1.70 | 0.60 |
| H+V | 133 | 0.14 | 9.19 | 5.06 | 0.47 | 2.62 | 0.02 | 0.05 | 0.29 | 0.09 | 5.45 | 0.33 | 1.67 | 0.59 |
| H+V | 134 | 0.12 | 9.40 | 5.29 | 0.79 | 2.65 | 0.01 | 0.08 | 0.28 | 0.07 | 5.66 | 0.58 | 1.70 | 0.60 |
| H+V | 135 | 0.12 | 9.40 | 5.29 | 0.79 | 2.65 | 0.01 | 0.08 | 0.28 | 0.07 | 5.66 | 0.58 | 1.70 | 0.60 |
| H+V | 136 | 0.11 | 9.50 | 3.99 | 2.10 | 1.75 | 0.01 | 0.22 | 0.18 | 0.06 | 4.46 | 1.49 | 1.12 | 0.47 |
| H+V | 137 | 0.12 | 9.18 | 3.24 | 1.79 | 1.34 | 0.01 | 0.19 | 0.15 | 0.07 | 3.83 | 1.30 | 0.82 | 0.42 |
| H+V | 138 | 0.11 | 9.50 | 3.99 | 2.10 | 1.75 | 0.01 | 0.22 | 0.18 | 0.06 | 4.46 | 1.49 | 1.12 | 0.47 |
| H+V | 139 | 0.14 | 9.04 | 4.65 | 0.58 | 2.51 | 0.02 | 0.06 | 0.28 | 0.10 | 5.07 | 0.38 | 1.58 | 0.56 |
| H+V | 140 | 0.11 | 9.50 | 3.99 | 2.10 | 1.75 | 0.01 | 0.22 | 0.18 | 0.06 | 4.46 | 1.49 | 1.12 | 0.47 |
| H+V | 141 | 0.12 | 9.18 | 3.24 | 1.79 | 1.34 | 0.01 | 0.19 | 0.15 | 0.07 | 3.83 | 1.30 | 0.82 | 0.42 |
| H+V | 142 | 0.11 | 9.50 | 3.99 | 2.10 | 1.75 | 0.01 | 0.22 | 0.18 | 0.06 | 4.46 | 1.49 | 1.12 | 0.47 |
| H+V | 143 | 0.12 | 9.18 | 3.24 | 1.79 | 1.34 | 0.01 | 0.19 | 0.15 | 0.07 | 3.83 | 1.30 | 0.82 | 0.42 |
| H+V | 144 | 0.14 | 9.04 | 4.65 | 0.58 | 2.51 | 0.02 | 0.06 | 0.28 | 0.10 | 5.07 | 0.38 | 1.58 | 0.56 |
| H+V | 145 | 0.11 | 9.50 | 3.99 | 2.10 | 1.75 | 0.01 | 0.22 | 0.18 | 0.06 | 4.46 | 1.49 | 1.12 | 0.47 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| H+V | 146 | 0.11 | 9.50 | 3.99 | 2.10 | 1.75 | 0.01 | 0.22 | 0.18 | 0.06 | 4.46 | 1.49 | 1.12 | 0.47 |
| H+V | 147 | 0.12 | 9.18 | 3.24 | 1.79 | 1.34 | 0.01 | 0.19 | 0.15 | 0.07 | 3.83 | 1.30 | 0.82 | 0.42 |
| H+V | 148 | 0.12 | 9.18 | 3.24 | 1.79 | 1.34 | 0.01 | 0.19 | 0.15 | 0.07 | 3.83 | 1.30 | 0.82 | 0.42 |
| H+V | 149 | 0.09 | 8.49 | 3.79 | 1.04 | 1.78 | 0.01 | 0.12 | 0.21 | 0.06 | 4.24 | 0.77 | 1.18 | 0.50 |
| V   | 150 | 0.02 | 1.87 | 0.86 | 0.32 | 0.37 | 0.01 | 0.17 | 0.20 | 0.01 | 0.96 | 0.23 | 0.23 | 0.51 |
| V   | 151 | 0.03 | 2.26 | 0.99 | 0.27 | 0.41 | 0.01 | 0.12 | 0.18 | 0.02 | 1.10 | 0.21 | 0.26 | 0.49 |
| H   | 152 | 0.01 | 2.05 | 0.83 | 0.26 | 0.35 | 0.00 | 0.13 | 0.17 | 0.01 | 0.98 | 0.18 | 0.22 | 0.48 |
| H   | 153 | 0.01 | 2.11 | 0.89 | 0.16 | 0.43 | 0.00 | 0.08 | 0.20 | 0.01 | 1.00 | 0.13 | 0.27 | 0.47 |
| H+V | 154 | 0.04 | 4.62 | 2.01 | 0.71 | 0.91 | 0.01 | 0.15 | 0.20 | 0.02 | 2.30 | 0.47 | 0.56 | 0.50 |
| H+V | 155 | 0.08 | 5.23 | 2.41 | 0.53 | 0.89 | 0.02 | 0.10 | 0.17 | 0.05 | 2.65 | 0.41 | 0.56 | 0.51 |

**Table 2-5** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n260 Low Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | Low channel |      |           |      |      |       |        |        |       |      |      |      |          |
|--------------------------------------|---------|-------------|------|-----------|------|------|-------|--------|--------|-------|------|------|------|----------|
|                                      |         | 2mm         |      |           |      |      | 3.54% | 24.29% | 44.16% | 5mm   |      |      |      | 66.49%   |
|                                      |         | S1          | S2   | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2   | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front       | Back | Back (CB) | Left | Top  |       |        |        | Front | Back | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.06        | 5.84 | 3.64      | 0.18 | 2.20 | 0.01  | 0.03   | 0.38   | 0.04  | 3.84 | 0.13 | 1.76 | 0.66     |
| V                                    | 1       | 0.07        | 5.76 | 3.63      | 0.22 | 2.27 | 0.01  | 0.04   | 0.39   | 0.04  | 3.83 | 0.15 | 1.84 | 0.66     |
| V                                    | 2       | 0.06        | 5.90 | 3.48      | 0.23 | 2.12 | 0.01  | 0.04   | 0.36   | 0.04  | 3.69 | 0.17 | 1.71 | 0.63     |
| V                                    | 3       | 0.11        | 5.55 | 2.68      | 0.60 | 1.64 | 0.02  | 0.11   | 0.30   | 0.06  | 2.94 | 0.47 | 1.12 | 0.53     |
| V                                    | 4       | 0.05        | 5.50 | 2.02      | 0.44 | 0.90 | 0.01  | 0.08   | 0.16   | 0.03  | 2.23 | 0.30 | 0.60 | 0.41     |
| V                                    | 5       | 0.17        | 5.88 | 3.00      | 0.35 | 2.16 | 0.03  | 0.06   | 0.37   | 0.11  | 3.37 | 0.26 | 1.69 | 0.57     |
| V                                    | 6       | 0.04        | 5.78 | 2.17      | 0.72 | 0.87 | 0.01  | 0.12   | 0.15   | 0.02  | 2.52 | 0.55 | 0.45 | 0.44     |
| V                                    | 7       | 0.05        | 5.74 | 3.38      | 0.17 | 1.84 | 0.01  | 0.03   | 0.32   | 0.03  | 3.60 | 0.13 | 1.39 | 0.63     |
| V                                    | 8       | 0.12        | 5.57 | 2.82      | 0.58 | 1.58 | 0.02  | 0.10   | 0.28   | 0.07  | 3.14 | 0.47 | 1.09 | 0.56     |
| V                                    | 9       | 0.04        | 5.58 | 2.94      | 0.20 | 1.50 | 0.01  | 0.04   | 0.27   | 0.02  | 3.18 | 0.11 | 1.18 | 0.57     |
| V                                    | 10      | 0.12        | 5.62 | 3.03      | 0.34 | 2.34 | 0.02  | 0.06   | 0.42   | 0.08  | 3.37 | 0.22 | 1.81 | 0.60     |
| V                                    | 11      | 0.06        | 5.93 | 2.60      | 0.76 | 1.18 | 0.01  | 0.13   | 0.20   | 0.03  | 2.94 | 0.60 | 0.74 | 0.50     |
| V                                    | 12      | 0.03        | 5.32 | 1.76      | 0.51 | 0.90 | 0.01  | 0.10   | 0.17   | 0.01  | 1.95 | 0.34 | 0.66 | 0.37     |
| V                                    | 13      | 0.11        | 5.69 | 3.00      | 0.31 | 2.22 | 0.02  | 0.05   | 0.39   | 0.06  | 3.30 | 0.23 | 1.63 | 0.58     |
| V                                    | 14      | 0.03        | 5.02 | 2.44      | 0.25 | 1.27 | 0.01  | 0.05   | 0.25   | 0.02  | 2.66 | 0.14 | 0.98 | 0.53     |
| V                                    | 15      | 0.17        | 5.80 | 2.96      | 0.37 | 2.16 | 0.03  | 0.06   | 0.37   | 0.11  | 3.30 | 0.28 | 1.70 | 0.57     |
| H                                    | 16      | 0.07        | 5.73 | 3.60      | 0.14 | 2.03 | 0.01  | 0.02   | 0.35   | 0.04  | 3.78 | 0.11 | 1.61 | 0.66     |
| H                                    | 17      | 0.06        | 5.85 | 3.69      | 0.13 | 2.02 | 0.01  | 0.02   | 0.35   | 0.04  | 3.88 | 0.10 | 1.56 | 0.66     |
| H                                    | 18      | 0.06        | 5.82 | 3.60      | 0.15 | 1.97 | 0.01  | 0.03   | 0.34   | 0.04  | 3.81 | 0.10 | 1.52 | 0.65     |
| H                                    | 19      | 0.06        | 4.82 | 2.14      | 0.90 | 1.11 | 0.01  | 0.19   | 0.23   | 0.03  | 2.39 | 0.75 | 0.77 | 0.50     |
| H                                    | 20      | 0.19        | 5.37 | 2.74      | 0.64 | 1.86 | 0.04  | 0.12   | 0.35   | 0.13  | 3.09 | 0.41 | 1.44 | 0.58     |
| H                                    | 21      | 0.06        | 4.84 | 2.20      | 0.57 | 0.88 | 0.01  | 0.12   | 0.18   | 0.03  | 2.43 | 0.49 | 0.69 | 0.50     |
| H                                    | 22      | 0.17        | 5.73 | 2.79      | 1.07 | 1.54 | 0.03  | 0.19   | 0.27   | 0.11  | 3.10 | 0.78 | 1.11 | 0.54     |
| H                                    | 23      | 0.14        | 5.82 | 3.30      | 0.16 | 2.57 | 0.02  | 0.03   | 0.44   | 0.10  | 3.63 | 0.10 | 2.04 | 0.62     |

|     |    |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 24 | 0.07 | 5.33  | 2.00 | 0.95 | 1.08 | 0.01 | 0.18 | 0.20 | 0.05 | 2.39 | 0.83 | 0.72 | 0.45 |
| H   | 25 | 0.17 | 5.86  | 3.19 | 0.26 | 2.49 | 0.03 | 0.04 | 0.42 | 0.12 | 3.52 | 0.16 | 1.98 | 0.60 |
| H   | 26 | 0.07 | 5.36  | 2.81 | 0.46 | 1.17 | 0.01 | 0.09 | 0.22 | 0.04 | 3.03 | 0.36 | 0.88 | 0.57 |
| H   | 27 | 0.13 | 6.20  | 2.51 | 1.46 | 1.07 | 0.02 | 0.24 | 0.17 | 0.07 | 2.90 | 1.19 | 0.69 | 0.47 |
| H   | 28 | 0.17 | 5.25  | 2.81 | 0.71 | 1.76 | 0.03 | 0.14 | 0.34 | 0.11 | 3.09 | 0.47 | 1.35 | 0.59 |
| H   | 29 | 0.09 | 5.52  | 2.99 | 0.38 | 1.67 | 0.02 | 0.07 | 0.30 | 0.06 | 3.25 | 0.29 | 1.25 | 0.59 |
| H   | 30 | 0.18 | 5.47  | 2.92 | 0.47 | 2.16 | 0.03 | 0.09 | 0.39 | 0.13 | 3.23 | 0.26 | 1.70 | 0.59 |
| H   | 31 | 0.09 | 5.22  | 2.15 | 0.50 | 1.03 | 0.02 | 0.10 | 0.20 | 0.06 | 2.46 | 0.36 | 0.67 | 0.47 |
| H+V | 32 | 0.20 | 12.81 | 7.81 | 0.41 | 4.66 | 0.02 | 0.03 | 0.36 | 0.13 | 8.28 | 0.32 | 3.69 | 0.65 |
| H+V | 33 | 0.20 | 13.18 | 7.95 | 0.50 | 4.66 | 0.02 | 0.04 | 0.35 | 0.13 | 8.45 | 0.37 | 3.71 | 0.64 |
| H+V | 34 | 0.19 | 13.10 | 7.51 | 0.60 | 4.51 | 0.01 | 0.05 | 0.34 | 0.12 | 8.03 | 0.45 | 3.59 | 0.61 |
| H+V | 35 | 0.13 | 12.25 | 5.71 | 2.45 | 3.18 | 0.01 | 0.20 | 0.26 | 0.08 | 6.23 | 2.02 | 2.17 | 0.51 |
| H+V | 36 | 0.28 | 12.80 | 4.97 | 1.29 | 2.98 | 0.02 | 0.10 | 0.23 | 0.18 | 5.54 | 0.87 | 2.23 | 0.43 |
| H+V | 37 | 0.25 | 12.20 | 5.71 | 1.43 | 3.61 | 0.02 | 0.12 | 0.30 | 0.17 | 6.28 | 1.23 | 2.93 | 0.51 |
| H+V | 38 | 0.21 | 12.41 | 4.96 | 2.67 | 2.24 | 0.02 | 0.22 | 0.18 | 0.14 | 5.57 | 2.10 | 1.57 | 0.45 |
| H+V | 39 | 0.20 | 13.79 | 7.62 | 0.49 | 5.11 | 0.01 | 0.04 | 0.37 | 0.15 | 8.38 | 0.40 | 4.15 | 0.61 |
| H+V | 40 | 0.16 | 12.78 | 5.68 | 2.50 | 2.46 | 0.01 | 0.20 | 0.19 | 0.09 | 6.36 | 2.15 | 1.69 | 0.50 |
| H+V | 41 | 0.28 | 14.01 | 6.74 | 0.52 | 4.67 | 0.02 | 0.04 | 0.33 | 0.20 | 7.52 | 0.27 | 3.79 | 0.54 |
| H+V | 42 | 0.22 | 13.48 | 6.61 | 1.11 | 4.17 | 0.02 | 0.08 | 0.31 | 0.15 | 7.42 | 0.82 | 3.37 | 0.55 |
| H+V | 43 | 0.18 | 13.79 | 5.04 | 3.35 | 2.20 | 0.01 | 0.24 | 0.16 | 0.11 | 5.75 | 2.76 | 1.42 | 0.42 |
| H+V | 44 | 0.26 | 11.72 | 5.22 | 1.82 | 2.76 | 0.02 | 0.16 | 0.24 | 0.16 | 5.66 | 1.29 | 2.11 | 0.48 |
| H+V | 45 | 0.16 | 13.38 | 6.78 | 0.83 | 4.58 | 0.01 | 0.06 | 0.34 | 0.10 | 7.48 | 0.60 | 3.45 | 0.56 |
| H+V | 46 | 0.30 | 12.86 | 5.75 | 0.84 | 3.86 | 0.02 | 0.07 | 0.30 | 0.20 | 6.38 | 0.51 | 3.10 | 0.50 |
| H+V | 47 | 0.27 | 12.93 | 5.70 | 1.19 | 3.38 | 0.02 | 0.09 | 0.26 | 0.18 | 6.27 | 1.03 | 2.67 | 0.48 |
| V   | 48 | 0.05 | 5.31  | 3.36 | 0.14 | 2.00 | 0.01 | 0.03 | 0.38 | 0.03 | 3.52 | 0.09 | 1.62 | 0.66 |
| V   | 49 | 0.06 | 5.20  | 3.25 | 0.19 | 2.04 | 0.01 | 0.04 | 0.39 | 0.04 | 3.43 | 0.12 | 1.65 | 0.66 |
| V   | 50 | 0.05 | 5.26  | 3.12 | 0.20 | 1.89 | 0.01 | 0.04 | 0.36 | 0.03 | 3.31 | 0.14 | 1.51 | 0.63 |
| V   | 51 | 0.08 | 5.04  | 2.11 | 0.64 | 1.09 | 0.02 | 0.13 | 0.22 | 0.04 | 2.40 | 0.49 | 0.69 | 0.48 |
| V   | 52 | 0.05 | 4.72  | 1.72 | 0.45 | 0.87 | 0.01 | 0.10 | 0.18 | 0.03 | 1.92 | 0.33 | 0.64 | 0.41 |
| V   | 53 | 0.13 | 5.29  | 2.66 | 0.33 | 1.68 | 0.02 | 0.06 | 0.32 | 0.08 | 2.99 | 0.27 | 1.24 | 0.57 |
| V   | 54 | 0.05 | 5.03  | 1.86 | 0.67 | 0.93 | 0.01 | 0.13 | 0.18 | 0.02 | 2.08 | 0.51 | 0.53 | 0.41 |
| V   | 55 | 0.04 | 5.16  | 2.86 | 0.19 | 1.56 | 0.01 | 0.04 | 0.30 | 0.02 | 3.07 | 0.14 | 1.20 | 0.59 |
| V   | 56 | 0.11 | 5.07  | 2.37 | 0.52 | 1.29 | 0.02 | 0.10 | 0.25 | 0.07 | 2.64 | 0.41 | 0.90 | 0.52 |
| V   | 57 | 0.03 | 4.79  | 2.47 | 0.19 | 1.41 | 0.01 | 0.04 | 0.29 | 0.02 | 2.63 | 0.10 | 1.09 | 0.55 |
| V   | 58 | 0.10 | 5.20  | 2.65 | 0.35 | 1.82 | 0.02 | 0.07 | 0.35 | 0.06 | 2.97 | 0.24 | 1.35 | 0.57 |
| V   | 59 | 0.06 | 5.16  | 2.11 | 0.65 | 1.13 | 0.01 | 0.13 | 0.22 | 0.03 | 2.34 | 0.50 | 0.69 | 0.45 |
| V   | 60 | 0.03 | 4.59  | 1.60 | 0.54 | 0.78 | 0.01 | 0.12 | 0.17 | 0.01 | 1.80 | 0.38 | 0.56 | 0.39 |
| V   | 61 | 0.08 | 5.25  | 2.49 | 0.34 | 1.68 | 0.02 | 0.06 | 0.32 | 0.05 | 2.80 | 0.27 | 1.18 | 0.53 |
| V   | 62 | 0.02 | 4.54  | 2.15 | 0.28 | 1.18 | 0.00 | 0.06 | 0.26 | 0.01 | 2.32 | 0.17 | 0.91 | 0.51 |
| V   | 63 | 0.14 | 5.06  | 2.63 | 0.34 | 1.81 | 0.03 | 0.07 | 0.36 | 0.10 | 2.90 | 0.26 | 1.44 | 0.57 |
| H   | 64 | 0.05 | 4.97  | 2.85 | 0.24 | 1.51 | 0.01 | 0.05 | 0.30 | 0.03 | 3.04 | 0.19 | 1.19 | 0.61 |
| H   | 65 | 0.05 | 4.98  | 2.90 | 0.24 | 1.47 | 0.01 | 0.05 | 0.30 | 0.03 | 3.09 | 0.19 | 1.13 | 0.62 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 66  | 0.05 | 4.92  | 2.89 | 0.23 | 1.50 | 0.01 | 0.05 | 0.30 | 0.04 | 3.08 | 0.17 | 1.14 | 0.63 |
| H   | 67  | 0.07 | 4.65  | 1.94 | 0.94 | 0.89 | 0.02 | 0.20 | 0.19 | 0.04 | 2.27 | 0.75 | 0.60 | 0.49 |
| H   | 68  | 0.13 | 4.58  | 2.20 | 0.58 | 1.40 | 0.03 | 0.13 | 0.31 | 0.09 | 2.47 | 0.37 | 1.04 | 0.54 |
| H   | 69  | 0.05 | 4.42  | 1.93 | 0.55 | 0.72 | 0.01 | 0.12 | 0.16 | 0.03 | 2.19 | 0.48 | 0.55 | 0.50 |
| H   | 70  | 0.10 | 4.73  | 2.09 | 0.98 | 0.96 | 0.02 | 0.21 | 0.20 | 0.06 | 2.42 | 0.73 | 0.65 | 0.51 |
| H   | 71  | 0.12 | 4.82  | 2.64 | 0.15 | 2.01 | 0.02 | 0.03 | 0.42 | 0.08 | 2.88 | 0.11 | 1.58 | 0.60 |
| H   | 72  | 0.06 | 4.54  | 1.85 | 0.71 | 1.02 | 0.01 | 0.16 | 0.22 | 0.04 | 2.15 | 0.60 | 0.72 | 0.47 |
| H   | 73  | 0.13 | 4.76  | 2.54 | 0.34 | 1.85 | 0.03 | 0.07 | 0.39 | 0.09 | 2.79 | 0.21 | 1.40 | 0.59 |
| H   | 74  | 0.07 | 4.78  | 2.09 | 0.47 | 0.90 | 0.01 | 0.10 | 0.19 | 0.05 | 2.36 | 0.39 | 0.68 | 0.49 |
| H   | 75  | 0.09 | 4.75  | 1.79 | 1.12 | 0.70 | 0.02 | 0.24 | 0.15 | 0.05 | 2.09 | 0.90 | 0.45 | 0.44 |
| H   | 76  | 0.11 | 4.60  | 2.28 | 0.72 | 1.23 | 0.02 | 0.16 | 0.27 | 0.08 | 2.58 | 0.48 | 0.88 | 0.56 |
| H   | 77  | 0.08 | 4.75  | 2.07 | 0.44 | 1.23 | 0.02 | 0.09 | 0.26 | 0.06 | 2.33 | 0.37 | 0.93 | 0.49 |
| H   | 78  | 0.13 | 4.59  | 2.39 | 0.50 | 1.68 | 0.03 | 0.11 | 0.37 | 0.10 | 2.65 | 0.29 | 1.26 | 0.58 |
| H   | 79  | 0.07 | 4.46  | 2.04 | 0.31 | 0.93 | 0.02 | 0.07 | 0.21 | 0.05 | 2.27 | 0.24 | 0.66 | 0.51 |
| H+V | 80  | 0.17 | 11.24 | 6.78 | 0.50 | 3.80 | 0.02 | 0.04 | 0.34 | 0.11 | 7.22 | 0.39 | 2.95 | 0.64 |
| H+V | 81  | 0.16 | 11.12 | 6.65 | 0.62 | 3.82 | 0.01 | 0.06 | 0.34 | 0.11 | 7.08 | 0.46 | 2.96 | 0.64 |
| H+V | 82  | 0.16 | 10.99 | 6.31 | 0.67 | 3.71 | 0.01 | 0.06 | 0.34 | 0.11 | 6.75 | 0.50 | 2.88 | 0.61 |
| H+V | 83  | 0.11 | 10.85 | 4.09 | 2.49 | 1.88 | 0.01 | 0.23 | 0.17 | 0.06 | 4.58 | 2.02 | 1.16 | 0.42 |
| H+V | 84  | 0.16 | 10.67 | 4.11 | 1.28 | 2.22 | 0.01 | 0.12 | 0.21 | 0.10 | 4.65 | 0.91 | 1.48 | 0.44 |
| H+V | 85  | 0.20 | 10.96 | 5.03 | 1.34 | 2.62 | 0.02 | 0.12 | 0.24 | 0.14 | 5.60 | 1.19 | 2.02 | 0.51 |
| H+V | 86  | 0.13 | 10.72 | 3.89 | 2.50 | 1.66 | 0.01 | 0.23 | 0.15 | 0.08 | 4.39 | 1.96 | 1.15 | 0.41 |
| H+V | 87  | 0.17 | 11.25 | 6.06 | 0.47 | 4.03 | 0.02 | 0.04 | 0.36 | 0.13 | 6.62 | 0.35 | 3.26 | 0.59 |
| H+V | 88  | 0.14 | 10.90 | 4.90 | 1.99 | 2.25 | 0.01 | 0.18 | 0.21 | 0.08 | 5.46 | 1.66 | 1.45 | 0.50 |
| H+V | 89  | 0.18 | 10.81 | 5.53 | 0.62 | 3.58 | 0.02 | 0.06 | 0.33 | 0.13 | 6.05 | 0.38 | 2.83 | 0.56 |
| H+V | 90  | 0.17 | 11.98 | 5.38 | 0.97 | 3.06 | 0.01 | 0.08 | 0.26 | 0.12 | 6.14 | 0.73 | 2.42 | 0.51 |
| H+V | 91  | 0.11 | 11.56 | 3.78 | 2.71 | 1.72 | 0.01 | 0.23 | 0.15 | 0.06 | 4.37 | 2.19 | 1.17 | 0.38 |
| H+V | 92  | 0.16 | 9.89  | 4.38 | 1.84 | 2.22 | 0.02 | 0.19 | 0.22 | 0.10 | 4.88 | 1.38 | 1.65 | 0.49 |
| H+V | 93  | 0.14 | 11.82 | 4.87 | 0.94 | 2.97 | 0.01 | 0.08 | 0.25 | 0.10 | 5.58 | 0.72 | 2.22 | 0.47 |
| H+V | 94  | 0.19 | 10.29 | 4.95 | 0.93 | 3.03 | 0.02 | 0.09 | 0.29 | 0.13 | 5.44 | 0.62 | 2.33 | 0.53 |
| H+V | 95  | 0.24 | 11.14 | 5.21 | 0.92 | 2.94 | 0.02 | 0.08 | 0.26 | 0.16 | 5.73 | 0.78 | 2.29 | 0.51 |
| V   | 96  | 0.04 | 2.89  | 1.70 | 0.18 | 1.14 | 0.01 | 0.06 | 0.39 | 0.02 | 1.80 | 0.12 | 0.88 | 0.62 |
| V   | 97  | 0.04 | 2.89  | 1.70 | 0.18 | 1.14 | 0.01 | 0.06 | 0.39 | 0.02 | 1.80 | 0.12 | 0.88 | 0.62 |
| V   | 98  | 0.03 | 2.93  | 1.61 | 0.21 | 1.04 | 0.01 | 0.07 | 0.35 | 0.02 | 1.72 | 0.15 | 0.80 | 0.59 |
| V   | 99  | 0.04 | 3.06  | 0.96 | 0.40 | 0.39 | 0.01 | 0.13 | 0.13 | 0.03 | 1.15 | 0.31 | 0.28 | 0.38 |
| V   | 100 | 0.04 | 3.06  | 0.96 | 0.40 | 0.39 | 0.01 | 0.13 | 0.13 | 0.03 | 1.15 | 0.31 | 0.28 | 0.38 |
| V   | 101 | 0.05 | 2.97  | 1.34 | 0.32 | 0.80 | 0.02 | 0.11 | 0.27 | 0.03 | 1.47 | 0.25 | 0.60 | 0.49 |
| V   | 102 | 0.04 | 3.06  | 0.96 | 0.40 | 0.39 | 0.01 | 0.13 | 0.13 | 0.03 | 1.15 | 0.31 | 0.28 | 0.38 |
| V   | 103 | 0.03 | 2.93  | 1.61 | 0.21 | 1.04 | 0.01 | 0.07 | 0.35 | 0.02 | 1.72 | 0.15 | 0.80 | 0.59 |
| V   | 104 | 0.04 | 3.06  | 0.96 | 0.40 | 0.39 | 0.01 | 0.13 | 0.13 | 0.03 | 1.15 | 0.31 | 0.28 | 0.38 |
| V   | 105 | 0.03 | 2.93  | 1.61 | 0.21 | 1.04 | 0.01 | 0.07 | 0.35 | 0.02 | 1.72 | 0.15 | 0.80 | 0.59 |
| V   | 106 | 0.04 | 2.89  | 1.70 | 0.18 | 1.14 | 0.01 | 0.06 | 0.39 | 0.02 | 1.80 | 0.12 | 0.88 | 0.62 |
| V   | 107 | 0.04 | 3.06  | 0.96 | 0.40 | 0.39 | 0.01 | 0.13 | 0.13 | 0.03 | 1.15 | 0.31 | 0.28 | 0.38 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| V   | 108 | 0.03 | 3.04 | 1.08 | 0.34 | 0.49 | 0.01 | 0.11 | 0.16 | 0.02 | 1.27 | 0.26 | 0.35 | 0.42 |
| V   | 109 | 0.03 | 2.93 | 1.61 | 0.21 | 1.04 | 0.01 | 0.07 | 0.35 | 0.02 | 1.72 | 0.15 | 0.80 | 0.59 |
| V   | 110 | 0.02 | 2.98 | 1.35 | 0.27 | 0.78 | 0.01 | 0.09 | 0.26 | 0.01 | 1.49 | 0.19 | 0.59 | 0.50 |
| V   | 111 | 0.05 | 3.03 | 1.07 | 0.39 | 0.56 | 0.02 | 0.13 | 0.18 | 0.03 | 1.24 | 0.31 | 0.42 | 0.41 |
| V   | 112 | 0.04 | 2.89 | 1.70 | 0.18 | 1.14 | 0.01 | 0.06 | 0.39 | 0.02 | 1.80 | 0.12 | 0.88 | 0.62 |
| V   | 113 | 0.04 | 3.06 | 0.96 | 0.40 | 0.39 | 0.01 | 0.13 | 0.13 | 0.03 | 1.15 | 0.31 | 0.28 | 0.38 |
| H   | 114 | 0.04 | 2.69 | 1.30 | 0.18 | 0.64 | 0.01 | 0.07 | 0.24 | 0.02 | 1.43 | 0.13 | 0.47 | 0.53 |
| H   | 115 | 0.04 | 2.62 | 1.38 | 0.17 | 0.77 | 0.02 | 0.06 | 0.29 | 0.03 | 1.50 | 0.12 | 0.57 | 0.57 |
| H   | 116 | 0.05 | 2.53 | 1.35 | 0.21 | 0.81 | 0.02 | 0.08 | 0.32 | 0.04 | 1.45 | 0.15 | 0.61 | 0.57 |
| H   | 117 | 0.04 | 2.54 | 0.90 | 0.40 | 0.32 | 0.02 | 0.16 | 0.13 | 0.02 | 1.08 | 0.28 | 0.20 | 0.43 |
| H   | 118 | 0.04 | 2.54 | 0.90 | 0.40 | 0.32 | 0.02 | 0.16 | 0.13 | 0.02 | 1.08 | 0.28 | 0.20 | 0.43 |
| H   | 119 | 0.03 | 2.67 | 1.14 | 0.23 | 0.47 | 0.01 | 0.09 | 0.18 | 0.02 | 1.29 | 0.19 | 0.34 | 0.48 |
| H   | 120 | 0.04 | 2.54 | 0.90 | 0.40 | 0.32 | 0.02 | 0.16 | 0.13 | 0.02 | 1.08 | 0.28 | 0.20 | 0.43 |
| H   | 121 | 0.05 | 2.53 | 1.35 | 0.21 | 0.81 | 0.02 | 0.08 | 0.32 | 0.04 | 1.45 | 0.15 | 0.61 | 0.57 |
| H   | 122 | 0.04 | 2.54 | 0.90 | 0.40 | 0.32 | 0.02 | 0.16 | 0.13 | 0.02 | 1.08 | 0.28 | 0.20 | 0.43 |
| H   | 123 | 0.05 | 2.53 | 1.35 | 0.21 | 0.81 | 0.02 | 0.08 | 0.32 | 0.04 | 1.45 | 0.15 | 0.61 | 0.57 |
| H   | 124 | 0.04 | 2.62 | 1.38 | 0.17 | 0.77 | 0.02 | 0.06 | 0.29 | 0.03 | 1.50 | 0.12 | 0.57 | 0.57 |
| H   | 125 | 0.04 | 2.54 | 0.90 | 0.40 | 0.32 | 0.02 | 0.16 | 0.13 | 0.02 | 1.08 | 0.28 | 0.20 | 0.43 |
| H   | 126 | 0.05 | 2.48 | 1.00 | 0.39 | 0.52 | 0.02 | 0.16 | 0.21 | 0.03 | 1.15 | 0.26 | 0.36 | 0.46 |
| H   | 127 | 0.05 | 2.53 | 1.35 | 0.21 | 0.81 | 0.02 | 0.08 | 0.32 | 0.04 | 1.45 | 0.15 | 0.61 | 0.57 |
| H   | 128 | 0.05 | 2.48 | 1.20 | 0.31 | 0.73 | 0.02 | 0.13 | 0.29 | 0.04 | 1.31 | 0.19 | 0.53 | 0.53 |
| H   | 129 | 0.03 | 2.60 | 0.97 | 0.33 | 0.33 | 0.01 | 0.13 | 0.13 | 0.02 | 1.14 | 0.25 | 0.24 | 0.44 |
| H   | 130 | 0.04 | 2.62 | 1.38 | 0.17 | 0.77 | 0.02 | 0.06 | 0.29 | 0.03 | 1.50 | 0.12 | 0.57 | 0.57 |
| H   | 131 | 0.04 | 2.54 | 0.90 | 0.40 | 0.32 | 0.02 | 0.16 | 0.13 | 0.02 | 1.08 | 0.28 | 0.20 | 0.43 |
| H+V | 132 | 0.10 | 6.17 | 3.42 | 0.41 | 2.04 | 0.02 | 0.07 | 0.33 | 0.07 | 3.71 | 0.31 | 1.61 | 0.60 |
| H+V | 133 | 0.10 | 6.26 | 3.53 | 0.41 | 2.14 | 0.02 | 0.07 | 0.34 | 0.08 | 3.81 | 0.31 | 1.68 | 0.61 |
| H+V | 134 | 0.10 | 6.40 | 3.37 | 0.61 | 2.07 | 0.02 | 0.10 | 0.32 | 0.08 | 3.64 | 0.45 | 1.59 | 0.57 |
| H+V | 135 | 0.07 | 6.61 | 2.10 | 1.16 | 0.77 | 0.01 | 0.18 | 0.12 | 0.05 | 2.51 | 0.88 | 0.55 | 0.38 |
| H+V | 136 | 0.07 | 6.61 | 2.10 | 1.16 | 0.77 | 0.01 | 0.18 | 0.12 | 0.05 | 2.51 | 0.88 | 0.55 | 0.38 |
| H+V | 137 | 0.09 | 6.37 | 2.84 | 0.70 | 1.55 | 0.01 | 0.11 | 0.24 | 0.06 | 3.16 | 0.57 | 1.19 | 0.50 |
| H+V | 138 | 0.07 | 6.61 | 2.10 | 1.16 | 0.77 | 0.01 | 0.18 | 0.12 | 0.05 | 2.51 | 0.88 | 0.55 | 0.38 |
| H+V | 139 | 0.10 | 6.40 | 3.37 | 0.61 | 2.07 | 0.02 | 0.10 | 0.32 | 0.08 | 3.64 | 0.45 | 1.59 | 0.57 |
| H+V | 140 | 0.07 | 6.61 | 2.10 | 1.16 | 0.77 | 0.01 | 0.18 | 0.12 | 0.05 | 2.51 | 0.88 | 0.55 | 0.38 |
| H+V | 141 | 0.10 | 6.40 | 3.37 | 0.61 | 2.07 | 0.02 | 0.10 | 0.32 | 0.08 | 3.64 | 0.45 | 1.59 | 0.57 |
| H+V | 142 | 0.10 | 6.26 | 3.53 | 0.41 | 2.14 | 0.02 | 0.07 | 0.34 | 0.08 | 3.81 | 0.31 | 1.68 | 0.61 |
| H+V | 143 | 0.07 | 6.61 | 2.10 | 1.16 | 0.77 | 0.01 | 0.18 | 0.12 | 0.05 | 2.51 | 0.88 | 0.55 | 0.38 |
| H+V | 144 | 0.06 | 6.68 | 2.33 | 1.08 | 1.15 | 0.01 | 0.16 | 0.17 | 0.05 | 2.65 | 0.80 | 0.81 | 0.40 |
| H+V | 145 | 0.10 | 6.40 | 3.37 | 0.61 | 2.07 | 0.02 | 0.10 | 0.32 | 0.08 | 3.64 | 0.45 | 1.59 | 0.57 |
| H+V | 146 | 0.09 | 6.55 | 2.95 | 0.85 | 1.71 | 0.01 | 0.13 | 0.26 | 0.07 | 3.21 | 0.65 | 1.28 | 0.49 |
| H+V | 147 | 0.08 | 6.50 | 2.36 | 0.99 | 1.13 | 0.01 | 0.15 | 0.17 | 0.06 | 2.74 | 0.79 | 0.86 | 0.42 |
| H+V | 148 | 0.09 | 6.03 | 2.77 | 0.80 | 1.40 | 0.01 | 0.13 | 0.23 | 0.06 | 3.09 | 0.67 | 0.97 | 0.51 |
| H+V | 149 | 0.07 | 6.37 | 2.20 | 1.11 | 0.99 | 0.01 | 0.17 | 0.16 | 0.05 | 2.57 | 0.86 | 0.75 | 0.40 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| V   | 150 | 0.01 | 1.52 | 0.66 | 0.20 | 0.37 | 0.01 | 0.13 | 0.24 | 0.01 | 0.74 | 0.15 | 0.25 | 0.49 |
| V   | 151 | 0.02 | 1.59 | 0.72 | 0.08 | 0.40 | 0.01 | 0.05 | 0.25 | 0.01 | 0.80 | 0.06 | 0.30 | 0.50 |
| H   | 152 | 0.02 | 1.37 | 0.54 | 0.13 | 0.28 | 0.01 | 0.09 | 0.20 | 0.02 | 0.62 | 0.08 | 0.21 | 0.45 |
| H   | 153 | 0.02 | 1.37 | 0.63 | 0.15 | 0.27 | 0.01 | 0.11 | 0.20 | 0.01 | 0.70 | 0.12 | 0.18 | 0.51 |
| H+V | 154 | 0.05 | 3.12 | 1.30 | 0.34 | 0.75 | 0.02 | 0.11 | 0.24 | 0.03 | 1.46 | 0.26 | 0.51 | 0.47 |
| H+V | 155 | 0.03 | 3.50 | 1.52 | 0.35 | 0.73 | 0.01 | 0.10 | 0.21 | 0.02 | 1.72 | 0.28 | 0.55 | 0.49 |

**Table 2-6** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n260 Mid Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | Mid channel |      |           |      |      |       |        |        |       |      |      |      |          |
|--------------------------------------|---------|-------------|------|-----------|------|------|-------|--------|--------|-------|------|------|------|----------|
|                                      |         | 2mm         |      |           |      |      | 3.21% | 18.00% | 40.03% | 5mm   |      |      |      | 64.78%   |
|                                      |         | S1          | S2   | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2   | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front       | Back | Back (CB) | Left | Top  |       |        |        | Front | Back | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.07        | 7.13 | 4.21      | 0.18 | 2.57 | 0.01  | 0.03   | 0.36   | 0.04  | 4.44 | 0.13 | 1.94 | 0.62     |
| V                                    | 1       | 0.09        | 7.22 | 4.31      | 0.20 | 2.87 | 0.01  | 0.03   | 0.40   | 0.05  | 4.52 | 0.14 | 2.21 | 0.63     |
| V                                    | 2       | 0.07        | 7.13 | 4.11      | 0.25 | 2.53 | 0.01  | 0.04   | 0.35   | 0.04  | 4.35 | 0.16 | 1.89 | 0.61     |
| V                                    | 3       | 0.16        | 7.07 | 3.09      | 0.58 | 2.29 | 0.02  | 0.08   | 0.32   | 0.10  | 3.47 | 0.45 | 1.66 | 0.49     |
| V                                    | 4       | 0.05        | 6.83 | 2.79      | 0.47 | 1.35 | 0.01  | 0.07   | 0.20   | 0.03  | 3.03 | 0.27 | 0.92 | 0.44     |
| V                                    | 5       | 0.18        | 7.21 | 3.95      | 0.29 | 2.60 | 0.02  | 0.04   | 0.36   | 0.12  | 4.36 | 0.22 | 2.03 | 0.60     |
| V                                    | 6       | 0.08        | 7.30 | 2.75      | 0.60 | 1.88 | 0.01  | 0.08   | 0.26   | 0.04  | 3.23 | 0.42 | 1.21 | 0.44     |
| V                                    | 7       | 0.07        | 6.49 | 3.56      | 0.26 | 1.92 | 0.01  | 0.04   | 0.30   | 0.04  | 3.89 | 0.17 | 1.37 | 0.60     |
| V                                    | 8       | 0.17        | 7.31 | 3.32      | 0.54 | 2.57 | 0.02  | 0.07   | 0.35   | 0.09  | 3.77 | 0.45 | 1.94 | 0.52     |
| V                                    | 9       | 0.06        | 5.99 | 3.11      | 0.29 | 1.63 | 0.01  | 0.05   | 0.27   | 0.03  | 3.38 | 0.18 | 1.15 | 0.56     |
| V                                    | 10      | 0.15        | 7.01 | 3.72      | 0.30 | 2.69 | 0.02  | 0.04   | 0.38   | 0.09  | 4.11 | 0.20 | 2.12 | 0.59     |
| V                                    | 11      | 0.10        | 7.36 | 3.04      | 0.63 | 2.18 | 0.01  | 0.09   | 0.30   | 0.05  | 3.52 | 0.50 | 1.54 | 0.48     |
| V                                    | 12      | 0.05        | 6.60 | 2.35      | 0.57 | 1.25 | 0.01  | 0.09   | 0.19   | 0.02  | 2.55 | 0.33 | 0.82 | 0.39     |
| V                                    | 13      | 0.14        | 7.01 | 3.49      | 0.28 | 2.52 | 0.02  | 0.04   | 0.36   | 0.08  | 3.88 | 0.19 | 1.81 | 0.55     |
| V                                    | 14      | 0.04        | 5.67 | 2.79      | 0.40 | 1.37 | 0.01  | 0.07   | 0.24   | 0.02  | 3.01 | 0.23 | 0.97 | 0.53     |
| V                                    | 15      | 0.17        | 7.53 | 3.82      | 0.36 | 2.75 | 0.02  | 0.05   | 0.37   | 0.11  | 4.25 | 0.26 | 2.24 | 0.56     |
| H                                    | 16      | 0.05        | 7.58 | 4.57      | 0.17 | 2.45 | 0.01  | 0.02   | 0.32   | 0.03  | 4.81 | 0.12 | 1.88 | 0.63     |
| H                                    | 17      | 0.06        | 7.53 | 4.57      | 0.20 | 2.36 | 0.01  | 0.03   | 0.31   | 0.04  | 4.83 | 0.16 | 1.77 | 0.64     |
| H                                    | 18      | 0.06        | 7.27 | 4.37      | 0.19 | 2.30 | 0.01  | 0.03   | 0.32   | 0.05  | 4.60 | 0.14 | 1.70 | 0.63     |
| H                                    | 19      | 0.08        | 6.11 | 2.58      | 1.02 | 1.22 | 0.01  | 0.17   | 0.20   | 0.05  | 2.87 | 0.83 | 0.84 | 0.47     |
| H                                    | 20      | 0.22        | 6.96 | 3.50      | 0.69 | 2.37 | 0.03  | 0.10   | 0.34   | 0.16  | 3.90 | 0.44 | 1.87 | 0.56     |
| H                                    | 21      | 0.09        | 5.67 | 2.54      | 0.94 | 1.10 | 0.02  | 0.17   | 0.19   | 0.05  | 2.75 | 0.79 | 0.81 | 0.49     |
| H                                    | 22      | 0.20        | 6.23 | 2.70      | 0.77 | 1.69 | 0.03  | 0.12   | 0.27   | 0.14  | 3.08 | 0.51 | 1.27 | 0.49     |
| H                                    | 23      | 0.12        | 7.27 | 4.38      | 0.25 | 2.91 | 0.02  | 0.03   | 0.40   | 0.08  | 4.69 | 0.18 | 2.33 | 0.65     |
| H                                    | 24      | 0.10        | 6.13 | 2.56      | 0.89 | 1.14 | 0.02  | 0.15   | 0.19   | 0.07  | 2.90 | 0.77 | 0.80 | 0.47     |
| H                                    | 25      | 0.18        | 7.74 | 4.32      | 0.38 | 2.98 | 0.02  | 0.05   | 0.39   | 0.12  | 4.74 | 0.27 | 2.41 | 0.61     |
| H                                    | 26      | 0.06        | 6.62 | 3.15      | 0.56 | 1.30 | 0.01  | 0.08   | 0.20   | 0.03  | 3.42 | 0.43 | 0.86 | 0.52     |
| H                                    | 27      | 0.18        | 6.09 | 2.30      | 1.08 | 1.30 | 0.03  | 0.18   | 0.21   | 0.12  | 2.68 | 0.80 | 0.88 | 0.44     |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| H   | 28 | 0.19 | 6.62  | 3.29  | 0.69 | 2.11 | 0.03 | 0.10 | 0.32 | 0.14 | 3.63  | 0.43 | 1.64 | 0.55 |
| H   | 29 | 0.07 | 6.93  | 3.59  | 0.49 | 1.74 | 0.01 | 0.07 | 0.25 | 0.05 | 3.92  | 0.39 | 1.27 | 0.57 |
| H   | 30 | 0.21 | 7.39  | 3.93  | 0.57 | 2.76 | 0.03 | 0.08 | 0.37 | 0.15 | 4.38  | 0.31 | 2.25 | 0.59 |
| H   | 31 | 0.09 | 6.24  | 2.94  | 0.71 | 1.24 | 0.01 | 0.11 | 0.20 | 0.06 | 3.26  | 0.62 | 0.84 | 0.52 |
| H+V | 32 | 0.18 | 17.59 | 10.72 | 0.43 | 6.49 | 0.01 | 0.02 | 0.37 | 0.13 | 11.23 | 0.33 | 5.14 | 0.64 |
| H+V | 33 | 0.20 | 17.74 | 10.73 | 0.55 | 6.69 | 0.01 | 0.03 | 0.38 | 0.13 | 11.27 | 0.43 | 5.29 | 0.64 |
| H+V | 34 | 0.19 | 17.02 | 9.99  | 0.59 | 6.24 | 0.01 | 0.03 | 0.37 | 0.13 | 10.61 | 0.44 | 4.84 | 0.62 |
| H+V | 35 | 0.21 | 14.46 | 5.86  | 1.92 | 3.68 | 0.01 | 0.13 | 0.25 | 0.14 | 6.50  | 1.61 | 2.59 | 0.45 |
| H+V | 36 | 0.32 | 14.91 | 6.74  | 1.11 | 3.89 | 0.02 | 0.07 | 0.26 | 0.21 | 7.25  | 0.75 | 2.70 | 0.49 |
| H+V | 37 | 0.25 | 14.46 | 6.91  | 1.88 | 4.06 | 0.02 | 0.13 | 0.28 | 0.17 | 7.64  | 1.57 | 3.07 | 0.53 |
| H+V | 38 | 0.25 | 15.08 | 5.19  | 1.54 | 3.26 | 0.02 | 0.10 | 0.22 | 0.19 | 5.86  | 1.08 | 2.19 | 0.39 |
| H+V | 39 | 0.27 | 17.39 | 9.67  | 0.60 | 5.99 | 0.02 | 0.03 | 0.34 | 0.17 | 10.56 | 0.41 | 4.74 | 0.61 |
| H+V | 40 | 0.21 | 14.55 | 6.27  | 1.85 | 3.78 | 0.01 | 0.13 | 0.26 | 0.13 | 7.09  | 1.58 | 2.70 | 0.49 |
| H+V | 41 | 0.37 | 15.80 | 7.57  | 1.03 | 4.75 | 0.02 | 0.07 | 0.30 | 0.24 | 8.13  | 0.71 | 3.72 | 0.51 |
| H+V | 42 | 0.25 | 16.07 | 7.89  | 1.12 | 4.34 | 0.02 | 0.07 | 0.27 | 0.17 | 8.68  | 0.83 | 3.39 | 0.54 |
| H+V | 43 | 0.32 | 15.06 | 5.35  | 2.05 | 3.40 | 0.02 | 0.14 | 0.23 | 0.22 | 6.12  | 1.59 | 2.32 | 0.41 |
| H+V | 44 | 0.28 | 14.00 | 6.73  | 1.37 | 3.74 | 0.02 | 0.10 | 0.27 | 0.18 | 7.19  | 0.90 | 2.77 | 0.51 |
| H+V | 45 | 0.21 | 17.07 | 8.49  | 1.01 | 5.13 | 0.01 | 0.06 | 0.30 | 0.13 | 9.41  | 0.76 | 3.62 | 0.55 |
| H+V | 46 | 0.37 | 14.93 | 7.49  | 1.13 | 4.50 | 0.02 | 0.08 | 0.30 | 0.25 | 8.08  | 0.74 | 3.43 | 0.54 |
| H+V | 47 | 0.25 | 15.90 | 7.13  | 1.67 | 4.30 | 0.02 | 0.11 | 0.27 | 0.18 | 7.93  | 1.44 | 3.12 | 0.50 |
| V   | 48 | 0.05 | 6.49  | 3.88  | 0.16 | 2.27 | 0.01 | 0.02 | 0.35 | 0.04 | 4.11  | 0.11 | 1.72 | 0.63 |
| V   | 49 | 0.07 | 6.30  | 3.81  | 0.18 | 2.41 | 0.01 | 0.03 | 0.38 | 0.04 | 4.03  | 0.12 | 1.85 | 0.64 |
| V   | 50 | 0.05 | 6.41  | 3.70  | 0.24 | 2.11 | 0.01 | 0.04 | 0.33 | 0.03 | 3.95  | 0.15 | 1.55 | 0.62 |
| V   | 51 | 0.12 | 6.37  | 2.50  | 0.56 | 2.03 | 0.02 | 0.09 | 0.32 | 0.07 | 2.90  | 0.43 | 1.44 | 0.46 |
| V   | 52 | 0.05 | 5.72  | 2.35  | 0.51 | 1.20 | 0.01 | 0.09 | 0.21 | 0.03 | 2.58  | 0.31 | 0.88 | 0.45 |
| V   | 53 | 0.15 | 6.53  | 3.47  | 0.28 | 2.29 | 0.02 | 0.04 | 0.35 | 0.09 | 3.82  | 0.23 | 1.70 | 0.58 |
| V   | 54 | 0.08 | 6.20  | 2.17  | 0.60 | 1.66 | 0.01 | 0.10 | 0.27 | 0.04 | 2.48  | 0.43 | 1.11 | 0.40 |
| V   | 55 | 0.05 | 5.88  | 2.95  | 0.22 | 1.67 | 0.01 | 0.04 | 0.28 | 0.03 | 3.25  | 0.15 | 1.22 | 0.55 |
| V   | 56 | 0.16 | 6.52  | 2.80  | 0.46 | 2.19 | 0.02 | 0.07 | 0.34 | 0.09 | 3.15  | 0.36 | 1.64 | 0.48 |
| V   | 57 | 0.04 | 5.59  | 2.72  | 0.32 | 1.48 | 0.01 | 0.06 | 0.26 | 0.02 | 2.91  | 0.20 | 1.03 | 0.52 |
| V   | 58 | 0.11 | 6.36  | 3.25  | 0.29 | 2.29 | 0.02 | 0.05 | 0.36 | 0.07 | 3.61  | 0.20 | 1.71 | 0.57 |
| V   | 59 | 0.10 | 6.27  | 2.42  | 0.53 | 1.85 | 0.02 | 0.08 | 0.30 | 0.06 | 2.80  | 0.39 | 1.26 | 0.45 |
| V   | 60 | 0.04 | 5.72  | 2.05  | 0.61 | 1.14 | 0.01 | 0.11 | 0.20 | 0.02 | 2.31  | 0.37 | 0.73 | 0.40 |
| V   | 61 | 0.11 | 6.47  | 2.93  | 0.28 | 2.05 | 0.02 | 0.04 | 0.32 | 0.06 | 3.28  | 0.20 | 1.39 | 0.51 |
| V   | 62 | 0.03 | 5.42  | 2.54  | 0.45 | 1.30 | 0.01 | 0.08 | 0.24 | 0.02 | 2.72  | 0.27 | 0.90 | 0.50 |
| V   | 63 | 0.15 | 6.53  | 3.38  | 0.31 | 2.50 | 0.02 | 0.05 | 0.38 | 0.10 | 3.71  | 0.24 | 2.01 | 0.57 |
| H   | 64 | 0.05 | 6.49  | 3.82  | 0.18 | 2.02 | 0.01 | 0.03 | 0.31 | 0.03 | 4.03  | 0.13 | 1.56 | 0.62 |
| H   | 65 | 0.05 | 6.52  | 3.82  | 0.23 | 1.95 | 0.01 | 0.04 | 0.30 | 0.04 | 4.01  | 0.18 | 1.45 | 0.62 |
| H   | 66 | 0.06 | 6.21  | 3.66  | 0.22 | 1.92 | 0.01 | 0.04 | 0.31 | 0.04 | 3.84  | 0.17 | 1.41 | 0.62 |
| H   | 67 | 0.10 | 5.32  | 2.08  | 0.85 | 0.94 | 0.02 | 0.16 | 0.18 | 0.07 | 2.43  | 0.66 | 0.61 | 0.46 |
| H   | 68 | 0.15 | 5.64  | 2.79  | 0.70 | 1.82 | 0.03 | 0.12 | 0.32 | 0.11 | 3.11  | 0.47 | 1.38 | 0.55 |
| H   | 69 | 0.07 | 5.29  | 2.30  | 0.70 | 0.90 | 0.01 | 0.13 | 0.17 | 0.04 | 2.59  | 0.58 | 0.64 | 0.49 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 70  | 0.14 | 5.42  | 2.22 | 0.84 | 1.21 | 0.03 | 0.15 | 0.22 | 0.10 | 2.57 | 0.59 | 0.86 | 0.47 |
| H   | 71  | 0.12 | 6.43  | 3.64 | 0.27 | 2.50 | 0.02 | 0.04 | 0.39 | 0.08 | 3.93 | 0.19 | 1.98 | 0.61 |
| H   | 72  | 0.07 | 5.38  | 2.22 | 0.72 | 1.01 | 0.01 | 0.13 | 0.19 | 0.05 | 2.48 | 0.60 | 0.74 | 0.46 |
| H   | 73  | 0.14 | 6.05  | 3.25 | 0.37 | 2.22 | 0.02 | 0.06 | 0.37 | 0.10 | 3.61 | 0.26 | 1.73 | 0.60 |
| H   | 74  | 0.06 | 6.13  | 2.75 | 0.53 | 1.15 | 0.01 | 0.09 | 0.19 | 0.04 | 3.13 | 0.41 | 0.78 | 0.51 |
| H   | 75  | 0.12 | 5.50  | 1.90 | 0.99 | 1.01 | 0.02 | 0.18 | 0.18 | 0.08 | 2.26 | 0.74 | 0.64 | 0.41 |
| H   | 76  | 0.13 | 5.54  | 2.63 | 0.71 | 1.48 | 0.02 | 0.13 | 0.27 | 0.10 | 2.97 | 0.47 | 1.11 | 0.54 |
| H   | 77  | 0.09 | 6.29  | 2.91 | 0.54 | 1.54 | 0.01 | 0.09 | 0.24 | 0.06 | 3.31 | 0.43 | 1.15 | 0.53 |
| H   | 78  | 0.15 | 5.83  | 3.03 | 0.57 | 2.05 | 0.03 | 0.10 | 0.35 | 0.11 | 3.37 | 0.31 | 1.59 | 0.58 |
| H   | 79  | 0.07 | 5.52  | 2.66 | 0.48 | 1.12 | 0.01 | 0.09 | 0.20 | 0.05 | 2.89 | 0.42 | 0.80 | 0.52 |
| H+V | 80  | 0.16 | 15.05 | 9.30 | 0.43 | 5.55 | 0.01 | 0.03 | 0.37 | 0.11 | 9.75 | 0.31 | 4.42 | 0.65 |
| H+V | 81  | 0.17 | 14.59 | 8.94 | 0.54 | 5.57 | 0.01 | 0.04 | 0.38 | 0.12 | 9.39 | 0.43 | 4.41 | 0.64 |
| H+V | 82  | 0.16 | 14.25 | 8.48 | 0.58 | 5.19 | 0.01 | 0.04 | 0.36 | 0.12 | 8.94 | 0.43 | 3.99 | 0.63 |
| H+V | 83  | 0.19 | 13.01 | 4.61 | 1.60 | 2.88 | 0.01 | 0.12 | 0.22 | 0.10 | 5.24 | 1.29 | 2.09 | 0.40 |
| H+V | 84  | 0.21 | 12.53 | 5.47 | 1.29 | 3.21 | 0.02 | 0.10 | 0.26 | 0.14 | 5.96 | 0.87 | 2.17 | 0.48 |
| H+V | 85  | 0.20 | 12.55 | 6.02 | 1.50 | 3.30 | 0.02 | 0.12 | 0.26 | 0.12 | 6.60 | 1.27 | 2.38 | 0.53 |
| H+V | 86  | 0.19 | 12.99 | 4.51 | 1.70 | 2.61 | 0.01 | 0.13 | 0.20 | 0.13 | 5.02 | 1.22 | 1.74 | 0.39 |
| H+V | 87  | 0.24 | 14.49 | 7.72 | 0.58 | 5.03 | 0.02 | 0.04 | 0.35 | 0.17 | 8.47 | 0.40 | 4.03 | 0.58 |
| H+V | 88  | 0.19 | 13.02 | 5.33 | 1.51 | 3.08 | 0.01 | 0.12 | 0.24 | 0.10 | 5.98 | 1.25 | 2.26 | 0.46 |
| H+V | 89  | 0.26 | 12.60 | 6.21 | 1.01 | 3.65 | 0.02 | 0.08 | 0.29 | 0.18 | 6.66 | 0.70 | 2.84 | 0.53 |
| H+V | 90  | 0.19 | 14.61 | 6.71 | 0.98 | 3.77 | 0.01 | 0.07 | 0.26 | 0.12 | 7.55 | 0.74 | 2.84 | 0.52 |
| H+V | 91  | 0.18 | 13.45 | 4.22 | 1.75 | 2.78 | 0.01 | 0.13 | 0.21 | 0.12 | 4.92 | 1.36 | 1.98 | 0.37 |
| H+V | 92  | 0.18 | 12.55 | 5.75 | 1.55 | 3.09 | 0.01 | 0.12 | 0.25 | 0.12 | 6.22 | 1.05 | 2.20 | 0.50 |
| H+V | 93  | 0.17 | 15.15 | 6.65 | 0.99 | 4.12 | 0.01 | 0.07 | 0.27 | 0.11 | 7.50 | 0.77 | 2.98 | 0.50 |
| H+V | 94  | 0.25 | 12.47 | 6.15 | 1.14 | 3.51 | 0.02 | 0.09 | 0.28 | 0.17 | 6.58 | 0.73 | 2.54 | 0.53 |
| H+V | 95  | 0.21 | 13.35 | 6.31 | 1.27 | 3.73 | 0.02 | 0.10 | 0.28 | 0.15 | 7.01 | 1.08 | 2.73 | 0.53 |
| V   | 96  | 0.05 | 3.38  | 1.88 | 0.17 | 1.31 | 0.01 | 0.05 | 0.39 | 0.03 | 2.02 | 0.12 | 0.97 | 0.60 |
| V   | 97  | 0.05 | 3.38  | 1.88 | 0.17 | 1.31 | 0.01 | 0.05 | 0.39 | 0.03 | 2.02 | 0.12 | 0.97 | 0.60 |
| V   | 98  | 0.04 | 3.42  | 1.77 | 0.24 | 1.15 | 0.01 | 0.07 | 0.34 | 0.02 | 1.91 | 0.16 | 0.84 | 0.56 |
| V   | 99  | 0.05 | 3.67  | 1.40 | 0.38 | 0.79 | 0.01 | 0.10 | 0.22 | 0.03 | 1.65 | 0.26 | 0.58 | 0.45 |
| V   | 100 | 0.05 | 3.67  | 1.40 | 0.38 | 0.79 | 0.01 | 0.10 | 0.22 | 0.03 | 1.65 | 0.26 | 0.58 | 0.45 |
| V   | 101 | 0.06 | 3.48  | 1.77 | 0.23 | 1.29 | 0.02 | 0.07 | 0.37 | 0.04 | 1.95 | 0.18 | 0.98 | 0.56 |
| V   | 102 | 0.05 | 3.67  | 1.40 | 0.38 | 0.79 | 0.01 | 0.10 | 0.22 | 0.03 | 1.65 | 0.26 | 0.58 | 0.45 |
| V   | 103 | 0.04 | 3.42  | 1.77 | 0.24 | 1.15 | 0.01 | 0.07 | 0.34 | 0.02 | 1.91 | 0.16 | 0.84 | 0.56 |
| V   | 104 | 0.05 | 3.67  | 1.40 | 0.38 | 0.79 | 0.01 | 0.10 | 0.22 | 0.03 | 1.65 | 0.26 | 0.58 | 0.45 |
| V   | 105 | 0.04 | 3.42  | 1.77 | 0.24 | 1.15 | 0.01 | 0.07 | 0.34 | 0.02 | 1.91 | 0.16 | 0.84 | 0.56 |
| V   | 106 | 0.05 | 3.38  | 1.88 | 0.17 | 1.31 | 0.01 | 0.05 | 0.39 | 0.03 | 2.02 | 0.12 | 0.97 | 0.60 |
| V   | 107 | 0.05 | 3.67  | 1.40 | 0.38 | 0.79 | 0.01 | 0.10 | 0.22 | 0.03 | 1.65 | 0.26 | 0.58 | 0.45 |
| V   | 108 | 0.03 | 3.57  | 1.40 | 0.37 | 0.66 | 0.01 | 0.10 | 0.18 | 0.02 | 1.62 | 0.23 | 0.45 | 0.45 |
| V   | 109 | 0.04 | 3.42  | 1.77 | 0.24 | 1.15 | 0.01 | 0.07 | 0.34 | 0.02 | 1.91 | 0.16 | 0.84 | 0.56 |
| V   | 110 | 0.03 | 3.47  | 1.55 | 0.31 | 0.93 | 0.01 | 0.09 | 0.27 | 0.01 | 1.73 | 0.19 | 0.67 | 0.50 |
| V   | 111 | 0.05 | 3.60  | 1.56 | 0.33 | 1.07 | 0.01 | 0.09 | 0.30 | 0.04 | 1.79 | 0.24 | 0.82 | 0.50 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| V   | 112 | 0.05 | 3.38 | 1.88 | 0.17 | 1.31 | 0.01 | 0.05 | 0.39 | 0.03 | 2.02 | 0.12 | 0.97 | 0.60 |
| V   | 113 | 0.05 | 3.67 | 1.40 | 0.38 | 0.79 | 0.01 | 0.10 | 0.22 | 0.03 | 1.65 | 0.26 | 0.58 | 0.45 |
| H   | 114 | 0.03 | 3.35 | 1.69 | 0.20 | 0.84 | 0.01 | 0.06 | 0.25 | 0.02 | 1.85 | 0.14 | 0.63 | 0.55 |
| H   | 115 | 0.04 | 3.30 | 1.74 | 0.19 | 0.97 | 0.01 | 0.06 | 0.29 | 0.03 | 1.88 | 0.13 | 0.74 | 0.57 |
| H   | 116 | 0.05 | 3.20 | 1.65 | 0.21 | 0.97 | 0.02 | 0.07 | 0.30 | 0.04 | 1.78 | 0.13 | 0.73 | 0.56 |
| H   | 117 | 0.04 | 3.15 | 1.14 | 0.43 | 0.43 | 0.01 | 0.14 | 0.14 | 0.03 | 1.34 | 0.30 | 0.28 | 0.43 |
| H   | 118 | 0.04 | 3.15 | 1.14 | 0.43 | 0.43 | 0.01 | 0.14 | 0.14 | 0.03 | 1.34 | 0.30 | 0.28 | 0.43 |
| H   | 119 | 0.03 | 3.33 | 1.49 | 0.26 | 0.63 | 0.01 | 0.08 | 0.19 | 0.02 | 1.68 | 0.20 | 0.47 | 0.50 |
| H   | 120 | 0.04 | 3.15 | 1.14 | 0.43 | 0.43 | 0.01 | 0.14 | 0.14 | 0.03 | 1.34 | 0.30 | 0.28 | 0.43 |
| H   | 121 | 0.05 | 3.20 | 1.65 | 0.21 | 0.97 | 0.02 | 0.07 | 0.30 | 0.04 | 1.78 | 0.13 | 0.73 | 0.56 |
| H   | 122 | 0.04 | 3.15 | 1.14 | 0.43 | 0.43 | 0.01 | 0.14 | 0.14 | 0.03 | 1.34 | 0.30 | 0.28 | 0.43 |
| H   | 123 | 0.05 | 3.20 | 1.65 | 0.21 | 0.97 | 0.02 | 0.07 | 0.30 | 0.04 | 1.78 | 0.13 | 0.73 | 0.56 |
| H   | 124 | 0.04 | 3.30 | 1.74 | 0.19 | 0.97 | 0.01 | 0.06 | 0.29 | 0.03 | 1.88 | 0.13 | 0.74 | 0.57 |
| H   | 125 | 0.04 | 3.15 | 1.14 | 0.43 | 0.43 | 0.01 | 0.14 | 0.14 | 0.03 | 1.34 | 0.30 | 0.28 | 0.43 |
| H   | 126 | 0.05 | 3.08 | 1.21 | 0.42 | 0.61 | 0.02 | 0.14 | 0.20 | 0.04 | 1.39 | 0.27 | 0.42 | 0.45 |
| H   | 127 | 0.05 | 3.20 | 1.65 | 0.21 | 0.97 | 0.02 | 0.07 | 0.30 | 0.04 | 1.78 | 0.13 | 0.73 | 0.56 |
| H   | 128 | 0.05 | 3.09 | 1.42 | 0.32 | 0.83 | 0.02 | 0.10 | 0.27 | 0.04 | 1.57 | 0.19 | 0.61 | 0.51 |
| H   | 129 | 0.03 | 3.26 | 1.26 | 0.36 | 0.41 | 0.01 | 0.11 | 0.13 | 0.02 | 1.47 | 0.27 | 0.30 | 0.45 |
| H   | 130 | 0.04 | 3.30 | 1.74 | 0.19 | 0.97 | 0.01 | 0.06 | 0.29 | 0.03 | 1.88 | 0.13 | 0.74 | 0.57 |
| H   | 131 | 0.04 | 3.15 | 1.14 | 0.43 | 0.43 | 0.01 | 0.14 | 0.14 | 0.03 | 1.34 | 0.30 | 0.28 | 0.43 |
| H+V | 132 | 0.12 | 7.43 | 4.01 | 0.55 | 2.60 | 0.02 | 0.07 | 0.35 | 0.08 | 4.33 | 0.40 | 2.03 | 0.58 |
| H+V | 133 | 0.13 | 7.31 | 4.04 | 0.50 | 2.83 | 0.02 | 0.07 | 0.39 | 0.09 | 4.36 | 0.36 | 2.20 | 0.60 |
| H+V | 134 | 0.12 | 7.53 | 3.71 | 0.54 | 2.65 | 0.02 | 0.07 | 0.35 | 0.09 | 4.06 | 0.41 | 2.02 | 0.54 |
| H+V | 135 | 0.07 | 7.92 | 2.74 | 1.04 | 1.07 | 0.01 | 0.13 | 0.14 | 0.05 | 3.30 | 0.76 | 0.79 | 0.42 |
| H+V | 136 | 0.07 | 7.92 | 2.74 | 1.04 | 1.07 | 0.01 | 0.13 | 0.14 | 0.05 | 3.30 | 0.76 | 0.79 | 0.42 |
| H+V | 137 | 0.10 | 7.53 | 3.53 | 0.65 | 2.16 | 0.01 | 0.09 | 0.29 | 0.07 | 3.92 | 0.52 | 1.66 | 0.52 |
| H+V | 138 | 0.07 | 7.92 | 2.74 | 1.04 | 1.07 | 0.01 | 0.13 | 0.14 | 0.05 | 3.30 | 0.76 | 0.79 | 0.42 |
| H+V | 139 | 0.12 | 7.53 | 3.71 | 0.54 | 2.65 | 0.02 | 0.07 | 0.35 | 0.09 | 4.06 | 0.41 | 2.02 | 0.54 |
| H+V | 140 | 0.07 | 7.92 | 2.74 | 1.04 | 1.07 | 0.01 | 0.13 | 0.14 | 0.05 | 3.30 | 0.76 | 0.79 | 0.42 |
| H+V | 141 | 0.12 | 7.53 | 3.71 | 0.54 | 2.65 | 0.02 | 0.07 | 0.35 | 0.09 | 4.06 | 0.41 | 2.02 | 0.54 |
| H+V | 142 | 0.13 | 7.31 | 4.04 | 0.50 | 2.83 | 0.02 | 0.07 | 0.39 | 0.09 | 4.36 | 0.36 | 2.20 | 0.60 |
| H+V | 143 | 0.07 | 7.92 | 2.74 | 1.04 | 1.07 | 0.01 | 0.13 | 0.14 | 0.05 | 3.30 | 0.76 | 0.79 | 0.42 |
| H+V | 144 | 0.08 | 7.93 | 2.84 | 0.96 | 1.42 | 0.01 | 0.12 | 0.18 | 0.06 | 3.37 | 0.65 | 1.01 | 0.42 |
| H+V | 145 | 0.12 | 7.53 | 3.71 | 0.54 | 2.65 | 0.02 | 0.07 | 0.35 | 0.09 | 4.06 | 0.41 | 2.02 | 0.54 |
| H+V | 146 | 0.10 | 7.75 | 3.18 | 0.72 | 2.11 | 0.01 | 0.09 | 0.27 | 0.08 | 3.64 | 0.47 | 1.56 | 0.47 |
| H+V | 147 | 0.08 | 7.75 | 2.98 | 0.90 | 1.59 | 0.01 | 0.12 | 0.21 | 0.06 | 3.49 | 0.70 | 1.20 | 0.45 |
| H+V | 148 | 0.09 | 7.53 | 3.64 | 0.60 | 2.20 | 0.01 | 0.08 | 0.29 | 0.06 | 4.07 | 0.44 | 1.56 | 0.54 |
| H+V | 149 | 0.08 | 7.54 | 2.74 | 0.94 | 1.35 | 0.01 | 0.12 | 0.18 | 0.05 | 3.24 | 0.72 | 1.03 | 0.43 |
| V   | 150 | 0.02 | 1.78 | 0.82 | 0.19 | 0.55 | 0.01 | 0.11 | 0.31 | 0.01 | 0.92 | 0.12 | 0.37 | 0.52 |
| V   | 151 | 0.02 | 1.91 | 0.88 | 0.09 | 0.48 | 0.01 | 0.05 | 0.25 | 0.01 | 0.98 | 0.06 | 0.34 | 0.51 |
| H   | 152 | 0.02 | 1.62 | 0.69 | 0.14 | 0.33 | 0.01 | 0.09 | 0.20 | 0.01 | 0.77 | 0.09 | 0.24 | 0.48 |
| H   | 153 | 0.02 | 1.76 | 0.79 | 0.14 | 0.36 | 0.01 | 0.08 | 0.20 | 0.02 | 0.89 | 0.10 | 0.25 | 0.51 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| H+V | 154 | 0.05 | 3.62 | 1.61 | 0.41 | 1.04 | 0.01 | 0.11 | 0.29 | 0.04 | 1.86 | 0.26 | 0.74 | 0.51 |
| H+V | 155 | 0.04 | 4.47 | 1.93 | 0.31 | 0.95 | 0.01 | 0.07 | 0.21 | 0.03 | 2.19 | 0.23 | 0.69 | 0.49 |

**Table 2-7** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n260 High Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | High channel |      |           |      |      |       |        |        |       |      |      |      |          |
|--------------------------------------|---------|--------------|------|-----------|------|------|-------|--------|--------|-------|------|------|------|----------|
|                                      |         | 2mm          |      |           |      |      | 2.23% | 16.54% | 40.85% | 5mm   |      |      |      | 64.39%   |
|                                      |         | S1           | S2   | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2   | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front        | Back | Back (CB) | Left | Top  |       |        |        | Front | Back | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.07         | 6.79 | 3.79      | 0.23 | 2.52 | 0.01  | 0.03   | 0.37   | 0.05  | 4.11 | 0.14 | 1.90 | 0.61     |
| V                                    | 1       | 0.09         | 6.98 | 4.06      | 0.24 | 2.84 | 0.01  | 0.03   | 0.41   | 0.06  | 4.35 | 0.14 | 2.20 | 0.62     |
| V                                    | 2       | 0.07         | 6.55 | 3.77      | 0.30 | 2.37 | 0.01  | 0.05   | 0.36   | 0.05  | 4.04 | 0.19 | 1.77 | 0.62     |
| V                                    | 3       | 0.15         | 7.23 | 3.29      | 0.92 | 2.21 | 0.02  | 0.13   | 0.31   | 0.09  | 3.68 | 0.70 | 1.71 | 0.51     |
| V                                    | 4       | 0.06         | 6.93 | 3.24      | 0.58 | 1.62 | 0.01  | 0.08   | 0.23   | 0.04  | 3.56 | 0.31 | 1.13 | 0.51     |
| V                                    | 5       | 0.15         | 7.60 | 3.79      | 0.38 | 2.54 | 0.02  | 0.05   | 0.33   | 0.10  | 4.19 | 0.29 | 2.10 | 0.55     |
| V                                    | 6       | 0.06         | 6.93 | 2.77      | 1.05 | 1.50 | 0.01  | 0.15   | 0.22   | 0.03  | 3.23 | 0.71 | 0.89 | 0.47     |
| V                                    | 7       | 0.06         | 6.44 | 3.48      | 0.33 | 1.75 | 0.01  | 0.05   | 0.27   | 0.04  | 3.79 | 0.23 | 1.22 | 0.59     |
| V                                    | 8       | 0.15         | 7.57 | 3.33      | 0.72 | 2.35 | 0.02  | 0.10   | 0.31   | 0.08  | 3.87 | 0.56 | 1.86 | 0.51     |
| V                                    | 9       | 0.04         | 6.26 | 3.22      | 0.28 | 1.84 | 0.01  | 0.04   | 0.29   | 0.03  | 3.50 | 0.16 | 1.27 | 0.56     |
| V                                    | 10      | 0.12         | 7.18 | 3.71      | 0.23 | 2.44 | 0.02  | 0.03   | 0.34   | 0.08  | 4.00 | 0.14 | 1.97 | 0.56     |
| V                                    | 11      | 0.08         | 6.53 | 2.78      | 1.04 | 1.64 | 0.01  | 0.16   | 0.25   | 0.04  | 3.14 | 0.75 | 1.12 | 0.48     |
| V                                    | 12      | 0.03         | 6.61 | 2.97      | 0.84 | 1.45 | 0.00  | 0.13   | 0.22   | 0.02  | 3.25 | 0.49 | 1.05 | 0.49     |
| V                                    | 13      | 0.08         | 7.05 | 3.67      | 0.39 | 2.23 | 0.01  | 0.06   | 0.32   | 0.05  | 3.93 | 0.25 | 1.65 | 0.56     |
| V                                    | 14      | 0.03         | 6.06 | 3.18      | 0.39 | 1.65 | 0.00  | 0.06   | 0.27   | 0.02  | 3.39 | 0.17 | 1.11 | 0.56     |
| V                                    | 15      | 0.14         | 8.32 | 4.21      | 0.31 | 2.92 | 0.02  | 0.04   | 0.35   | 0.09  | 4.70 | 0.21 | 2.40 | 0.56     |
| H                                    | 16      | 0.07         | 7.22 | 4.18      | 0.23 | 2.43 | 0.01  | 0.03   | 0.34   | 0.05  | 4.45 | 0.15 | 1.75 | 0.62     |
| H                                    | 17      | 0.06         | 7.20 | 3.96      | 0.25 | 2.03 | 0.01  | 0.03   | 0.28   | 0.04  | 4.28 | 0.19 | 1.40 | 0.59     |
| H                                    | 18      | 0.06         | 6.81 | 3.68      | 0.30 | 1.83 | 0.01  | 0.04   | 0.27   | 0.04  | 4.02 | 0.21 | 1.24 | 0.59     |
| H                                    | 19      | 0.08         | 7.02 | 2.85      | 1.07 | 1.40 | 0.01  | 0.15   | 0.20   | 0.05  | 3.18 | 0.84 | 0.99 | 0.45     |
| H                                    | 20      | 0.16         | 8.58 | 4.33      | 1.07 | 2.83 | 0.02  | 0.12   | 0.33   | 0.12  | 4.79 | 0.71 | 2.26 | 0.56     |
| H                                    | 21      | 0.07         | 6.46 | 2.61      | 1.00 | 1.26 | 0.01  | 0.15   | 0.20   | 0.05  | 2.87 | 0.81 | 0.89 | 0.44     |
| H                                    | 22      | 0.18         | 8.25 | 3.58      | 1.08 | 2.17 | 0.02  | 0.13   | 0.26   | 0.14  | 4.03 | 0.83 | 1.59 | 0.49     |
| H                                    | 23      | 0.12         | 7.65 | 4.46      | 0.28 | 2.40 | 0.02  | 0.04   | 0.31   | 0.07  | 4.78 | 0.20 | 1.89 | 0.62     |
| H                                    | 24      | 0.11         | 7.14 | 3.11      | 0.96 | 1.55 | 0.02  | 0.13   | 0.22   | 0.08  | 3.48 | 0.78 | 1.06 | 0.49     |
| H                                    | 25      | 0.10         | 7.74 | 4.34      | 0.50 | 2.43 | 0.01  | 0.06   | 0.31   | 0.07  | 4.65 | 0.37 | 1.93 | 0.60     |
| H                                    | 26      | 0.06         | 6.26 | 2.83      | 0.52 | 1.27 | 0.01  | 0.08   | 0.20   | 0.03  | 3.16 | 0.35 | 0.84 | 0.50     |
| H                                    | 27      | 0.18         | 8.06 | 3.14      | 1.16 | 1.78 | 0.02  | 0.14   | 0.22   | 0.13  | 3.69 | 0.86 | 1.22 | 0.46     |
| H                                    | 28      | 0.14         | 8.15 | 4.10      | 1.06 | 2.28 | 0.02  | 0.13   | 0.28   | 0.11  | 4.54 | 0.70 | 1.78 | 0.56     |
| H                                    | 29      | 0.09         | 6.95 | 3.54      | 0.43 | 1.67 | 0.01  | 0.06   | 0.24   | 0.05  | 3.91 | 0.33 | 1.17 | 0.56     |
| H                                    | 30      | 0.13         | 8.03 | 4.43      | 0.67 | 2.60 | 0.02  | 0.08   | 0.32   | 0.09  | 4.80 | 0.36 | 2.09 | 0.60     |
| H                                    | 31      | 0.09         | 7.39 | 3.18      | 0.78 | 1.83 | 0.01  | 0.11   | 0.25   | 0.07  | 3.53 | 0.66 | 1.32 | 0.48     |

|     |    |      |       |      |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|------|------|------|------|------|------|------|-------|------|------|------|
| H+V | 32 | 0.25 | 15.73 | 9.60 | 0.69 | 6.24 | 0.02 | 0.04 | 0.40 | 0.16 | 10.12 | 0.47 | 4.72 | 0.64 |
| H+V | 33 | 0.25 | 15.69 | 9.51 | 0.68 | 6.17 | 0.02 | 0.04 | 0.39 | 0.17 | 10.05 | 0.46 | 4.75 | 0.64 |
| H+V | 34 | 0.22 | 14.93 | 8.74 | 0.74 | 5.31 | 0.01 | 0.05 | 0.36 | 0.14 | 9.30  | 0.45 | 4.05 | 0.62 |
| H+V | 35 | 0.25 | 16.08 | 6.59 | 2.66 | 3.74 | 0.02 | 0.17 | 0.23 | 0.14 | 7.27  | 2.20 | 2.83 | 0.45 |
| H+V | 36 | 0.23 | 16.95 | 8.20 | 1.67 | 4.36 | 0.01 | 0.10 | 0.26 | 0.16 | 9.05  | 1.11 | 3.10 | 0.53 |
| H+V | 37 | 0.22 | 15.44 | 6.80 | 2.06 | 4.40 | 0.01 | 0.13 | 0.28 | 0.14 | 7.41  | 1.75 | 3.43 | 0.48 |
| H+V | 38 | 0.24 | 17.59 | 6.72 | 2.22 | 3.94 | 0.01 | 0.13 | 0.22 | 0.19 | 7.58  | 1.54 | 2.84 | 0.43 |
| H+V | 39 | 0.27 | 16.27 | 9.09 | 0.56 | 4.68 | 0.02 | 0.03 | 0.29 | 0.19 | 9.89  | 0.41 | 3.66 | 0.61 |
| H+V | 40 | 0.20 | 16.15 | 6.67 | 2.29 | 3.92 | 0.01 | 0.14 | 0.24 | 0.14 | 7.66  | 1.92 | 2.75 | 0.47 |
| H+V | 41 | 0.23 | 15.74 | 8.20 | 0.98 | 4.52 | 0.01 | 0.06 | 0.29 | 0.16 | 8.87  | 0.67 | 3.47 | 0.56 |
| H+V | 42 | 0.25 | 14.08 | 6.81 | 1.03 | 4.38 | 0.02 | 0.07 | 0.31 | 0.16 | 7.50  | 0.64 | 3.35 | 0.53 |
| H+V | 43 | 0.28 | 17.23 | 6.10 | 2.67 | 3.39 | 0.02 | 0.15 | 0.20 | 0.21 | 7.15  | 1.99 | 2.32 | 0.41 |
| H+V | 44 | 0.17 | 16.83 | 7.64 | 1.87 | 3.88 | 0.01 | 0.11 | 0.23 | 0.14 | 8.28  | 1.25 | 2.91 | 0.49 |
| H+V | 45 | 0.22 | 15.77 | 7.93 | 0.99 | 4.35 | 0.01 | 0.06 | 0.28 | 0.14 | 8.62  | 0.68 | 3.28 | 0.55 |
| H+V | 46 | 0.23 | 15.72 | 8.19 | 1.36 | 4.46 | 0.01 | 0.09 | 0.28 | 0.15 | 8.80  | 0.79 | 3.36 | 0.56 |
| H+V | 47 | 0.21 | 17.10 | 7.50 | 1.65 | 4.71 | 0.01 | 0.10 | 0.28 | 0.13 | 8.42  | 1.38 | 3.34 | 0.49 |
| V   | 48 | 0.07 | 6.32  | 3.76 | 0.18 | 2.30 | 0.01 | 0.03 | 0.36 | 0.05 | 4.02  | 0.10 | 1.71 | 0.64 |
| V   | 49 | 0.08 | 6.29  | 3.79 | 0.18 | 2.43 | 0.01 | 0.03 | 0.39 | 0.05 | 4.05  | 0.10 | 1.84 | 0.64 |
| V   | 50 | 0.06 | 6.16  | 3.61 | 0.28 | 2.07 | 0.01 | 0.05 | 0.34 | 0.04 | 3.86  | 0.16 | 1.51 | 0.63 |
| V   | 51 | 0.10 | 6.62  | 2.35 | 0.94 | 1.61 | 0.02 | 0.14 | 0.24 | 0.06 | 2.76  | 0.69 | 1.20 | 0.42 |
| V   | 52 | 0.05 | 5.86  | 2.54 | 0.60 | 1.13 | 0.01 | 0.10 | 0.19 | 0.03 | 2.83  | 0.34 | 0.81 | 0.48 |
| V   | 53 | 0.12 | 6.55  | 3.22 | 0.34 | 1.98 | 0.02 | 0.05 | 0.30 | 0.08 | 3.61  | 0.27 | 1.45 | 0.55 |
| V   | 54 | 0.07 | 6.47  | 2.10 | 1.01 | 1.24 | 0.01 | 0.16 | 0.19 | 0.04 | 2.49  | 0.70 | 0.83 | 0.38 |
| V   | 55 | 0.05 | 5.87  | 2.86 | 0.28 | 1.58 | 0.01 | 0.05 | 0.27 | 0.03 | 3.15  | 0.20 | 1.13 | 0.54 |
| V   | 56 | 0.12 | 6.50  | 2.74 | 0.69 | 1.87 | 0.02 | 0.11 | 0.29 | 0.07 | 3.11  | 0.53 | 1.46 | 0.48 |
| V   | 57 | 0.04 | 5.96  | 2.87 | 0.31 | 1.65 | 0.01 | 0.05 | 0.28 | 0.02 | 3.05  | 0.16 | 1.11 | 0.51 |
| V   | 58 | 0.11 | 6.59  | 3.23 | 0.28 | 2.14 | 0.02 | 0.04 | 0.32 | 0.07 | 3.60  | 0.16 | 1.62 | 0.55 |
| V   | 59 | 0.08 | 6.43  | 2.27 | 0.96 | 1.42 | 0.01 | 0.15 | 0.22 | 0.05 | 2.63  | 0.69 | 0.95 | 0.41 |
| V   | 60 | 0.03 | 6.15  | 2.52 | 0.88 | 1.20 | 0.00 | 0.14 | 0.20 | 0.02 | 2.74  | 0.52 | 0.84 | 0.45 |
| V   | 61 | 0.06 | 6.53  | 3.02 | 0.40 | 1.81 | 0.01 | 0.06 | 0.28 | 0.04 | 3.31  | 0.27 | 1.31 | 0.51 |
| V   | 62 | 0.03 | 5.77  | 2.74 | 0.45 | 1.46 | 0.01 | 0.08 | 0.25 | 0.02 | 2.92  | 0.21 | 0.98 | 0.51 |
| V   | 63 | 0.11 | 6.51  | 3.46 | 0.25 | 2.25 | 0.02 | 0.04 | 0.35 | 0.08 | 3.77  | 0.18 | 1.81 | 0.58 |
| H   | 64 | 0.07 | 6.31  | 3.47 | 0.22 | 2.02 | 0.01 | 0.03 | 0.32 | 0.04 | 3.71  | 0.15 | 1.48 | 0.59 |
| H   | 65 | 0.06 | 6.41  | 3.38 | 0.26 | 1.69 | 0.01 | 0.04 | 0.26 | 0.04 | 3.64  | 0.21 | 1.18 | 0.57 |
| H   | 66 | 0.06 | 6.21  | 3.25 | 0.30 | 1.54 | 0.01 | 0.05 | 0.25 | 0.04 | 3.51  | 0.22 | 1.04 | 0.57 |
| H   | 67 | 0.10 | 6.56  | 2.66 | 0.93 | 1.15 | 0.02 | 0.14 | 0.18 | 0.07 | 3.09  | 0.69 | 0.76 | 0.47 |
| H   | 68 | 0.12 | 7.14  | 3.53 | 1.08 | 2.27 | 0.02 | 0.15 | 0.32 | 0.09 | 3.97  | 0.76 | 1.70 | 0.56 |
| H   | 69 | 0.06 | 6.02  | 2.42 | 0.80 | 1.10 | 0.01 | 0.13 | 0.18 | 0.04 | 2.69  | 0.65 | 0.78 | 0.45 |
| H   | 70 | 0.13 | 7.06  | 2.90 | 1.02 | 1.55 | 0.02 | 0.14 | 0.22 | 0.09 | 3.38  | 0.79 | 1.06 | 0.48 |
| H   | 71 | 0.09 | 6.67  | 3.88 | 0.24 | 2.07 | 0.01 | 0.04 | 0.31 | 0.06 | 4.15  | 0.16 | 1.61 | 0.62 |
| H   | 72 | 0.07 | 6.18  | 2.70 | 0.80 | 1.34 | 0.01 | 0.13 | 0.22 | 0.05 | 3.03  | 0.65 | 0.96 | 0.49 |
| H   | 73 | 0.09 | 6.87  | 3.68 | 0.50 | 1.97 | 0.01 | 0.07 | 0.29 | 0.07 | 4.05  | 0.36 | 1.49 | 0.59 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 74  | 0.05 | 5.92  | 2.66 | 0.48 | 1.09 | 0.01 | 0.08 | 0.18 | 0.03 | 3.02 | 0.33 | 0.73 | 0.51 |
| H   | 75  | 0.11 | 7.04  | 2.56 | 1.03 | 1.22 | 0.02 | 0.15 | 0.17 | 0.08 | 3.01 | 0.72 | 0.77 | 0.43 |
| H   | 76  | 0.11 | 7.04  | 3.28 | 1.07 | 1.77 | 0.02 | 0.15 | 0.25 | 0.09 | 3.76 | 0.76 | 1.29 | 0.53 |
| H   | 77  | 0.07 | 6.26  | 3.12 | 0.46 | 1.41 | 0.01 | 0.07 | 0.23 | 0.05 | 3.50 | 0.35 | 1.03 | 0.56 |
| H   | 78  | 0.10 | 6.90  | 3.65 | 0.74 | 2.03 | 0.01 | 0.11 | 0.29 | 0.07 | 4.05 | 0.43 | 1.53 | 0.59 |
| H   | 79  | 0.07 | 6.17  | 2.76 | 0.64 | 1.54 | 0.01 | 0.10 | 0.25 | 0.05 | 3.04 | 0.53 | 1.16 | 0.49 |
| H+V | 80  | 0.23 | 13.77 | 8.33 | 0.62 | 5.37 | 0.02 | 0.05 | 0.39 | 0.15 | 8.74 | 0.38 | 4.09 | 0.63 |
| H+V | 81  | 0.22 | 13.26 | 8.09 | 0.64 | 5.10 | 0.02 | 0.05 | 0.38 | 0.15 | 8.50 | 0.41 | 3.92 | 0.64 |
| H+V | 82  | 0.19 | 13.11 | 7.62 | 0.69 | 4.49 | 0.01 | 0.05 | 0.34 | 0.13 | 8.03 | 0.41 | 3.38 | 0.61 |
| H+V | 83  | 0.16 | 15.14 | 4.99 | 2.37 | 2.90 | 0.01 | 0.16 | 0.19 | 0.11 | 5.82 | 1.89 | 1.98 | 0.38 |
| H+V | 84  | 0.18 | 14.56 | 6.68 | 1.94 | 3.44 | 0.01 | 0.13 | 0.24 | 0.12 | 7.48 | 1.32 | 2.50 | 0.51 |
| H+V | 85  | 0.16 | 14.11 | 6.14 | 1.70 | 3.18 | 0.01 | 0.12 | 0.23 | 0.10 | 6.84 | 1.44 | 2.32 | 0.48 |
| H+V | 86  | 0.19 | 15.62 | 5.52 | 2.40 | 2.85 | 0.01 | 0.15 | 0.18 | 0.14 | 6.46 | 1.76 | 1.99 | 0.41 |
| H+V | 87  | 0.23 | 13.56 | 7.46 | 0.53 | 4.01 | 0.02 | 0.04 | 0.30 | 0.16 | 8.09 | 0.37 | 3.17 | 0.60 |
| H+V | 88  | 0.15 | 14.41 | 5.59 | 2.04 | 3.42 | 0.01 | 0.14 | 0.24 | 0.08 | 6.31 | 1.70 | 2.42 | 0.44 |
| H+V | 89  | 0.19 | 13.80 | 7.12 | 1.16 | 3.73 | 0.01 | 0.08 | 0.27 | 0.13 | 7.78 | 0.76 | 2.79 | 0.56 |
| H+V | 90  | 0.19 | 13.85 | 6.20 | 0.91 | 3.33 | 0.01 | 0.07 | 0.24 | 0.12 | 6.96 | 0.61 | 2.50 | 0.50 |
| H+V | 91  | 0.17 | 15.70 | 4.88 | 2.43 | 2.64 | 0.01 | 0.15 | 0.17 | 0.12 | 5.75 | 1.87 | 1.77 | 0.37 |
| H+V | 92  | 0.16 | 14.90 | 6.07 | 2.16 | 3.25 | 0.01 | 0.14 | 0.22 | 0.12 | 6.88 | 1.51 | 2.41 | 0.46 |
| H+V | 93  | 0.16 | 14.42 | 6.58 | 1.03 | 3.38 | 0.01 | 0.07 | 0.23 | 0.11 | 7.30 | 0.73 | 2.33 | 0.51 |
| H+V | 94  | 0.17 | 14.00 | 6.81 | 1.64 | 3.59 | 0.01 | 0.12 | 0.26 | 0.12 | 7.51 | 1.00 | 2.67 | 0.54 |
| H+V | 95  | 0.21 | 13.68 | 6.51 | 1.33 | 4.00 | 0.02 | 0.10 | 0.29 | 0.13 | 7.18 | 1.13 | 2.88 | 0.52 |
| V   | 96  | 0.05 | 3.55  | 2.02 | 0.15 | 1.45 | 0.01 | 0.04 | 0.41 | 0.03 | 2.17 | 0.09 | 1.05 | 0.61 |
| V   | 97  | 0.05 | 3.55  | 2.02 | 0.15 | 1.45 | 0.01 | 0.04 | 0.41 | 0.03 | 2.17 | 0.09 | 1.05 | 0.61 |
| V   | 98  | 0.03 | 3.43  | 1.86 | 0.26 | 1.25 | 0.01 | 0.08 | 0.36 | 0.02 | 2.00 | 0.14 | 0.88 | 0.58 |
| V   | 99  | 0.04 | 3.37  | 1.27 | 0.43 | 0.70 | 0.01 | 0.13 | 0.21 | 0.03 | 1.49 | 0.30 | 0.53 | 0.44 |
| V   | 100 | 0.04 | 3.37  | 1.27 | 0.43 | 0.70 | 0.01 | 0.13 | 0.21 | 0.03 | 1.49 | 0.30 | 0.53 | 0.44 |
| V   | 101 | 0.07 | 3.54  | 1.78 | 0.23 | 1.37 | 0.02 | 0.06 | 0.39 | 0.04 | 1.97 | 0.17 | 1.03 | 0.56 |
| V   | 102 | 0.04 | 3.37  | 1.27 | 0.43 | 0.70 | 0.01 | 0.13 | 0.21 | 0.03 | 1.49 | 0.30 | 0.53 | 0.44 |
| V   | 103 | 0.03 | 3.43  | 1.86 | 0.26 | 1.25 | 0.01 | 0.08 | 0.36 | 0.02 | 2.00 | 0.14 | 0.88 | 0.58 |
| V   | 104 | 0.04 | 3.37  | 1.27 | 0.43 | 0.70 | 0.01 | 0.13 | 0.21 | 0.03 | 1.49 | 0.30 | 0.53 | 0.44 |
| V   | 105 | 0.03 | 3.43  | 1.86 | 0.26 | 1.25 | 0.01 | 0.08 | 0.36 | 0.02 | 2.00 | 0.14 | 0.88 | 0.58 |
| V   | 106 | 0.05 | 3.55  | 2.02 | 0.15 | 1.45 | 0.01 | 0.04 | 0.41 | 0.03 | 2.17 | 0.09 | 1.05 | 0.61 |
| V   | 107 | 0.04 | 3.37  | 1.27 | 0.43 | 0.70 | 0.01 | 0.13 | 0.21 | 0.03 | 1.49 | 0.30 | 0.53 | 0.44 |
| V   | 108 | 0.03 | 3.28  | 1.30 | 0.44 | 0.68 | 0.01 | 0.13 | 0.21 | 0.02 | 1.50 | 0.27 | 0.46 | 0.46 |
| V   | 109 | 0.03 | 3.43  | 1.86 | 0.26 | 1.25 | 0.01 | 0.08 | 0.36 | 0.02 | 2.00 | 0.14 | 0.88 | 0.58 |
| V   | 110 | 0.02 | 3.31  | 1.56 | 0.37 | 0.99 | 0.01 | 0.11 | 0.30 | 0.01 | 1.71 | 0.21 | 0.68 | 0.52 |
| V   | 111 | 0.06 | 3.47  | 1.47 | 0.35 | 1.07 | 0.02 | 0.10 | 0.31 | 0.04 | 1.68 | 0.25 | 0.81 | 0.48 |
| V   | 112 | 0.05 | 3.55  | 2.02 | 0.15 | 1.45 | 0.01 | 0.04 | 0.41 | 0.03 | 2.17 | 0.09 | 1.05 | 0.61 |
| V   | 113 | 0.04 | 3.37  | 1.27 | 0.43 | 0.70 | 0.01 | 0.13 | 0.21 | 0.03 | 1.49 | 0.30 | 0.53 | 0.44 |
| H   | 114 | 0.03 | 3.39  | 1.66 | 0.22 | 0.82 | 0.01 | 0.06 | 0.24 | 0.02 | 1.84 | 0.17 | 0.60 | 0.54 |
| H   | 115 | 0.03 | 3.33  | 1.73 | 0.22 | 0.81 | 0.01 | 0.07 | 0.24 | 0.02 | 1.88 | 0.16 | 0.58 | 0.56 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 116 | 0.04 | 3.36 | 1.73 | 0.24 | 0.76 | 0.01 | 0.07 | 0.23 | 0.03 | 1.89 | 0.16 | 0.54 | 0.56 |
| H   | 117 | 0.04 | 3.63 | 1.54 | 0.57 | 0.61 | 0.01 | 0.16 | 0.17 | 0.03 | 1.78 | 0.43 | 0.37 | 0.49 |
| H   | 118 | 0.04 | 3.63 | 1.54 | 0.57 | 0.61 | 0.01 | 0.16 | 0.17 | 0.03 | 1.78 | 0.43 | 0.37 | 0.49 |
| H   | 119 | 0.03 | 3.54 | 1.58 | 0.35 | 0.78 | 0.01 | 0.10 | 0.22 | 0.02 | 1.79 | 0.27 | 0.58 | 0.51 |
| H   | 120 | 0.04 | 3.63 | 1.54 | 0.57 | 0.61 | 0.01 | 0.16 | 0.17 | 0.03 | 1.78 | 0.43 | 0.37 | 0.49 |
| H   | 121 | 0.04 | 3.36 | 1.73 | 0.24 | 0.76 | 0.01 | 0.07 | 0.23 | 0.03 | 1.89 | 0.16 | 0.54 | 0.56 |
| H   | 122 | 0.04 | 3.63 | 1.54 | 0.57 | 0.61 | 0.01 | 0.16 | 0.17 | 0.03 | 1.78 | 0.43 | 0.37 | 0.49 |
| H   | 123 | 0.04 | 3.36 | 1.73 | 0.24 | 0.76 | 0.01 | 0.07 | 0.23 | 0.03 | 1.89 | 0.16 | 0.54 | 0.56 |
| H   | 124 | 0.03 | 3.33 | 1.73 | 0.22 | 0.81 | 0.01 | 0.07 | 0.24 | 0.02 | 1.88 | 0.16 | 0.58 | 0.56 |
| H   | 125 | 0.04 | 3.63 | 1.54 | 0.57 | 0.61 | 0.01 | 0.16 | 0.17 | 0.03 | 1.78 | 0.43 | 0.37 | 0.49 |
| H   | 126 | 0.04 | 3.53 | 1.60 | 0.53 | 0.65 | 0.01 | 0.15 | 0.18 | 0.03 | 1.82 | 0.36 | 0.42 | 0.52 |
| H   | 127 | 0.04 | 3.36 | 1.73 | 0.24 | 0.76 | 0.01 | 0.07 | 0.23 | 0.03 | 1.89 | 0.16 | 0.54 | 0.56 |
| H   | 128 | 0.04 | 3.43 | 1.68 | 0.37 | 0.70 | 0.01 | 0.11 | 0.20 | 0.03 | 1.87 | 0.23 | 0.49 | 0.55 |
| H   | 129 | 0.04 | 3.64 | 1.53 | 0.49 | 0.67 | 0.01 | 0.13 | 0.18 | 0.03 | 1.77 | 0.38 | 0.49 | 0.49 |
| H   | 130 | 0.03 | 3.33 | 1.73 | 0.22 | 0.81 | 0.01 | 0.07 | 0.24 | 0.02 | 1.88 | 0.16 | 0.58 | 0.56 |
| H   | 131 | 0.04 | 3.63 | 1.54 | 0.57 | 0.61 | 0.01 | 0.16 | 0.17 | 0.03 | 1.78 | 0.43 | 0.37 | 0.49 |
| H+V | 132 | 0.12 | 7.33 | 3.78 | 0.42 | 2.43 | 0.02 | 0.06 | 0.33 | 0.08 | 4.07 | 0.28 | 1.80 | 0.56 |
| H+V | 133 | 0.12 | 7.07 | 3.87 | 0.42 | 2.43 | 0.02 | 0.06 | 0.34 | 0.08 | 4.14 | 0.28 | 1.82 | 0.59 |
| H+V | 134 | 0.10 | 7.09 | 3.67 | 0.66 | 2.17 | 0.01 | 0.09 | 0.31 | 0.08 | 4.02 | 0.37 | 1.58 | 0.57 |
| H+V | 135 | 0.07 | 8.22 | 3.00 | 1.28 | 1.48 | 0.01 | 0.16 | 0.18 | 0.04 | 3.54 | 0.95 | 1.06 | 0.43 |
| H+V | 136 | 0.07 | 8.22 | 3.00 | 1.28 | 1.48 | 0.01 | 0.16 | 0.18 | 0.04 | 3.54 | 0.95 | 1.06 | 0.43 |
| H+V | 137 | 0.13 | 7.78 | 3.69 | 0.79 | 2.29 | 0.02 | 0.10 | 0.29 | 0.08 | 4.10 | 0.64 | 1.76 | 0.53 |
| H+V | 138 | 0.07 | 8.22 | 3.00 | 1.28 | 1.48 | 0.01 | 0.16 | 0.18 | 0.04 | 3.54 | 0.95 | 1.06 | 0.43 |
| H+V | 139 | 0.10 | 7.09 | 3.67 | 0.66 | 2.17 | 0.01 | 0.09 | 0.31 | 0.08 | 4.02 | 0.37 | 1.58 | 0.57 |
| H+V | 140 | 0.07 | 8.22 | 3.00 | 1.28 | 1.48 | 0.01 | 0.16 | 0.18 | 0.04 | 3.54 | 0.95 | 1.06 | 0.43 |
| H+V | 141 | 0.10 | 7.09 | 3.67 | 0.66 | 2.17 | 0.01 | 0.09 | 0.31 | 0.08 | 4.02 | 0.37 | 1.58 | 0.57 |
| H+V | 142 | 0.12 | 7.07 | 3.87 | 0.42 | 2.43 | 0.02 | 0.06 | 0.34 | 0.08 | 4.14 | 0.28 | 1.82 | 0.59 |
| H+V | 143 | 0.07 | 8.22 | 3.00 | 1.28 | 1.48 | 0.01 | 0.16 | 0.18 | 0.04 | 3.54 | 0.95 | 1.06 | 0.43 |
| H+V | 144 | 0.07 | 7.89 | 3.03 | 1.23 | 1.50 | 0.01 | 0.16 | 0.19 | 0.05 | 3.47 | 0.86 | 0.99 | 0.44 |
| H+V | 145 | 0.10 | 7.09 | 3.67 | 0.66 | 2.17 | 0.01 | 0.09 | 0.31 | 0.08 | 4.02 | 0.37 | 1.58 | 0.57 |
| H+V | 146 | 0.09 | 7.32 | 3.35 | 1.00 | 1.84 | 0.01 | 0.14 | 0.25 | 0.07 | 3.71 | 0.63 | 1.30 | 0.51 |
| H+V | 147 | 0.10 | 8.22 | 3.29 | 1.13 | 1.94 | 0.01 | 0.14 | 0.24 | 0.06 | 3.80 | 0.88 | 1.47 | 0.46 |
| H+V | 148 | 0.09 | 7.70 | 3.59 | 0.71 | 1.90 | 0.01 | 0.09 | 0.25 | 0.06 | 4.00 | 0.54 | 1.30 | 0.52 |
| H+V | 149 | 0.10 | 8.11 | 3.16 | 1.13 | 1.90 | 0.01 | 0.14 | 0.23 | 0.06 | 3.67 | 0.87 | 1.45 | 0.45 |
| V   | 150 | 0.02 | 1.85 | 0.92 | 0.20 | 0.61 | 0.01 | 0.11 | 0.33 | 0.02 | 1.02 | 0.12 | 0.42 | 0.55 |
| V   | 151 | 0.02 | 1.85 | 0.80 | 0.09 | 0.45 | 0.01 | 0.05 | 0.24 | 0.01 | 0.89 | 0.06 | 0.31 | 0.48 |
| H   | 152 | 0.02 | 1.78 | 0.83 | 0.20 | 0.36 | 0.01 | 0.11 | 0.20 | 0.02 | 0.93 | 0.14 | 0.24 | 0.52 |
| H   | 153 | 0.01 | 1.87 | 0.87 | 0.17 | 0.35 | 0.01 | 0.09 | 0.19 | 0.01 | 0.98 | 0.12 | 0.24 | 0.52 |
| H+V | 154 | 0.05 | 3.88 | 1.93 | 0.51 | 1.13 | 0.01 | 0.13 | 0.29 | 0.03 | 2.17 | 0.34 | 0.78 | 0.56 |
| H+V | 155 | 0.05 | 4.28 | 1.79 | 0.39 | 0.84 | 0.01 | 0.09 | 0.20 | 0.03 | 2.03 | 0.30 | 0.55 | 0.47 |

**Table 2-8** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n258 Low Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | Low channel |       |           |      |      |       |        |        |       |       |      |      |          |
|--------------------------------------|---------|-------------|-------|-----------|------|------|-------|--------|--------|-------|-------|------|------|----------|
|                                      |         | 2mm         |       |           |      |      | 3.68% | 29.08% | 46.73% | 5mm   |       |      |      | 66.57%   |
|                                      |         | S1          | S2    | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2    | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front       | Back  | Back (CB) | Left | Top  |       |        |        | Front | Back  | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.04        | 5.57  | 3.47      | 0.29 | 2.51 | 0.01  | 0.05   | 0.45   | 0.02  | 3.68  | 0.23 | 1.79 | 0.66     |
| V                                    | 1       | 0.07        | 6.27  | 2.64      | 1.24 | 1.24 | 0.01  | 0.20   | 0.20   | 0.04  | 3.01  | 0.95 | 0.78 | 0.48     |
| V                                    | 2       | 0.08        | 5.89  | 3.40      | 0.14 | 2.15 | 0.01  | 0.02   | 0.37   | 0.04  | 3.64  | 0.08 | 1.60 | 0.62     |
| V                                    | 3       | 0.03        | 5.85  | 3.29      | 0.50 | 1.82 | 0.01  | 0.09   | 0.31   | 0.02  | 3.51  | 0.30 | 1.28 | 0.60     |
| V                                    | 4       | 0.11        | 7.02  | 3.27      | 1.83 | 1.62 | 0.02  | 0.26   | 0.23   | 0.06  | 3.66  | 1.43 | 0.90 | 0.52     |
| V                                    | 5       | 0.10        | 7.36  | 3.35      | 0.24 | 1.95 | 0.01  | 0.03   | 0.26   | 0.05  | 3.83  | 0.17 | 1.07 | 0.52     |
| V                                    | 6       | 0.14        | 6.75  | 2.92      | 1.91 | 1.41 | 0.02  | 0.28   | 0.21   | 0.07  | 3.36  | 1.55 | 0.70 | 0.50     |
| V                                    | 7       | 0.05        | 7.42  | 4.10      | 1.11 | 2.09 | 0.01  | 0.15   | 0.28   | 0.03  | 4.44  | 0.75 | 1.41 | 0.60     |
| V                                    | 8       | 0.09        | 6.43  | 3.03      | 1.55 | 1.50 | 0.01  | 0.24   | 0.23   | 0.04  | 3.39  | 1.17 | 0.84 | 0.53     |
| V                                    | 9       | 0.08        | 6.13  | 3.37      | 0.45 | 1.99 | 0.01  | 0.07   | 0.32   | 0.04  | 3.58  | 0.32 | 1.32 | 0.58     |
| V                                    | 10      | 0.07        | 5.59  | 2.74      | 1.02 | 1.22 | 0.01  | 0.18   | 0.22   | 0.03  | 3.02  | 0.69 | 0.87 | 0.54     |
| V                                    | 11      | 0.09        | 5.17  | 1.98      | 0.36 | 1.14 | 0.02  | 0.07   | 0.22   | 0.03  | 2.19  | 0.23 | 0.78 | 0.42     |
| V                                    | 12      | 0.10        | 6.79  | 4.27      | 0.08 | 2.85 | 0.01  | 0.01   | 0.42   | 0.04  | 4.49  | 0.05 | 2.10 | 0.66     |
| V                                    | 13      | 0.10        | 5.22  | 2.16      | 0.51 | 1.32 | 0.02  | 0.10   | 0.25   | 0.04  | 2.45  | 0.42 | 0.84 | 0.47     |
| V                                    | 14      | 0.07        | 6.91  | 3.37      | 1.67 | 1.63 | 0.01  | 0.24   | 0.24   | 0.04  | 3.74  | 1.21 | 0.95 | 0.54     |
| V                                    | 15      | 0.11        | 6.81  | 3.21      | 1.82 | 1.56 | 0.02  | 0.27   | 0.23   | 0.05  | 3.60  | 1.42 | 0.81 | 0.53     |
| H                                    | 16      | 0.04        | 5.02  | 3.03      | 0.19 | 2.16 | 0.01  | 0.04   | 0.43   | 0.02  | 3.25  | 0.13 | 1.55 | 0.65     |
| H                                    | 17      | 0.08        | 5.05  | 2.45      | 0.79 | 1.38 | 0.02  | 0.16   | 0.27   | 0.05  | 2.78  | 0.62 | 0.86 | 0.55     |
| H                                    | 18      | 0.06        | 5.09  | 3.07      | 0.48 | 1.45 | 0.01  | 0.09   | 0.28   | 0.04  | 3.29  | 0.39 | 0.90 | 0.65     |
| H                                    | 19      | 0.09        | 6.29  | 3.92      | 0.84 | 2.70 | 0.01  | 0.13   | 0.43   | 0.05  | 4.15  | 0.56 | 2.00 | 0.66     |
| H                                    | 20      | 0.15        | 5.78  | 2.22      | 1.52 | 1.02 | 0.03  | 0.26   | 0.18   | 0.08  | 2.59  | 1.23 | 0.54 | 0.45     |
| H                                    | 21      | 0.07        | 5.96  | 2.63      | 0.23 | 1.35 | 0.01  | 0.04   | 0.23   | 0.04  | 3.04  | 0.15 | 0.79 | 0.51     |
| H                                    | 22      | 0.14        | 5.52  | 1.86      | 1.38 | 0.71 | 0.03  | 0.25   | 0.13   | 0.07  | 2.24  | 1.06 | 0.36 | 0.41     |
| H                                    | 23      | 0.13        | 5.98  | 3.06      | 1.54 | 1.92 | 0.02  | 0.26   | 0.32   | 0.08  | 3.36  | 1.14 | 1.23 | 0.56     |
| H                                    | 24      | 0.18        | 7.09  | 3.05      | 2.02 | 1.58 | 0.03  | 0.28   | 0.22   | 0.10  | 3.52  | 1.64 | 0.89 | 0.50     |
| H                                    | 25      | 0.06        | 6.14  | 3.70      | 0.13 | 1.89 | 0.01  | 0.02   | 0.31   | 0.03  | 3.93  | 0.08 | 1.30 | 0.64     |
| H                                    | 26      | 0.06        | 5.30  | 2.92      | 0.52 | 1.61 | 0.01  | 0.10   | 0.30   | 0.03  | 3.14  | 0.39 | 1.12 | 0.59     |
| H                                    | 27      | 0.10        | 5.29  | 2.19      | 0.61 | 1.14 | 0.02  | 0.12   | 0.22   | 0.05  | 2.64  | 0.42 | 0.54 | 0.50     |
| H                                    | 28      | 0.07        | 5.09  | 3.01      | 0.65 | 1.58 | 0.01  | 0.13   | 0.31   | 0.04  | 3.25  | 0.51 | 1.12 | 0.64     |
| H                                    | 29      | 0.19        | 5.17  | 1.78      | 0.20 | 1.06 | 0.04  | 0.04   | 0.21   | 0.09  | 2.18  | 0.15 | 0.53 | 0.42     |
| H                                    | 30      | 0.18        | 7.35  | 3.38      | 2.12 | 1.89 | 0.02  | 0.29   | 0.26   | 0.10  | 3.81  | 1.68 | 1.12 | 0.52     |
| H                                    | 31      | 0.16        | 6.31  | 2.50      | 1.77 | 1.15 | 0.03  | 0.28   | 0.18   | 0.09  | 2.95  | 1.42 | 0.61 | 0.47     |
| H+V                                  | 32      | 0.13        | 16.84 | 10.50     | 0.83 | 7.87 | 0.01  | 0.05   | 0.47   | 0.06  | 11.16 | 0.63 | 5.62 | 0.66     |
| H+V                                  | 33      | 0.20        | 14.58 | 5.87      | 2.63 | 3.17 | 0.01  | 0.18   | 0.22   | 0.10  | 6.86  | 2.06 | 1.69 | 0.47     |
| H+V                                  | 34      | 0.22        | 16.40 | 9.89      | 0.87 | 5.70 | 0.01  | 0.05   | 0.35   | 0.12  | 10.53 | 0.64 | 3.93 | 0.64     |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| H+V | 35 | 0.21 | 17.23 | 10.89 | 1.85 | 7.53 | 0.01 | 0.11 | 0.44 | 0.14 | 11.47 | 1.19 | 5.55 | 0.67 |
| H+V | 36 | 0.42 | 17.34 | 7.77  | 4.68 | 4.46 | 0.02 | 0.27 | 0.26 | 0.19 | 8.71  | 3.79 | 2.43 | 0.50 |
| H+V | 37 | 0.30 | 20.73 | 9.20  | 0.61 | 5.65 | 0.01 | 0.03 | 0.27 | 0.14 | 10.47 | 0.47 | 3.17 | 0.51 |
| H+V | 38 | 0.43 | 16.25 | 6.53  | 4.41 | 3.60 | 0.03 | 0.27 | 0.22 | 0.19 | 7.61  | 3.61 | 1.79 | 0.47 |
| H+V | 39 | 0.29 | 17.48 | 9.85  | 3.67 | 6.43 | 0.02 | 0.21 | 0.37 | 0.17 | 10.66 | 2.61 | 4.41 | 0.61 |
| H+V | 40 | 0.45 | 18.16 | 8.80  | 5.17 | 5.40 | 0.02 | 0.28 | 0.30 | 0.22 | 9.81  | 4.09 | 3.05 | 0.54 |
| H+V | 41 | 0.25 | 17.31 | 10.47 | 0.76 | 6.09 | 0.01 | 0.04 | 0.35 | 0.13 | 11.02 | 0.54 | 4.08 | 0.64 |
| H+V | 42 | 0.17 | 12.20 | 6.84  | 2.09 | 4.46 | 0.01 | 0.17 | 0.37 | 0.09 | 7.27  | 1.54 | 3.14 | 0.60 |
| H+V | 43 | 0.31 | 14.77 | 5.63  | 1.54 | 2.86 | 0.02 | 0.10 | 0.19 | 0.12 | 6.98  | 1.07 | 1.28 | 0.47 |
| H+V | 44 | 0.23 | 17.60 | 11.09 | 0.96 | 7.23 | 0.01 | 0.05 | 0.41 | 0.12 | 11.71 | 0.73 | 5.24 | 0.67 |
| H+V | 45 | 0.44 | 14.37 | 5.05  | 1.19 | 3.46 | 0.03 | 0.08 | 0.24 | 0.19 | 6.09  | 0.99 | 1.85 | 0.42 |
| H+V | 46 | 0.45 | 19.67 | 9.93  | 5.72 | 6.24 | 0.02 | 0.29 | 0.32 | 0.22 | 10.95 | 4.37 | 3.65 | 0.56 |
| H+V | 47 | 0.45 | 18.24 | 8.34  | 5.28 | 4.80 | 0.02 | 0.29 | 0.26 | 0.21 | 9.50  | 4.25 | 2.52 | 0.52 |
| V   | 48 | 0.03 | 4.28  | 2.57  | 0.16 | 1.74 | 0.01 | 0.04 | 0.41 | 0.02 | 2.70  | 0.12 | 1.20 | 0.63 |
| V   | 49 | 0.06 | 5.47  | 2.03  | 0.95 | 0.90 | 0.01 | 0.17 | 0.16 | 0.03 | 2.30  | 0.71 | 0.51 | 0.42 |
| V   | 50 | 0.05 | 4.78  | 2.70  | 0.14 | 1.57 | 0.01 | 0.03 | 0.33 | 0.03 | 2.91  | 0.10 | 1.10 | 0.61 |
| V   | 51 | 0.05 | 5.72  | 3.10  | 0.70 | 1.50 | 0.01 | 0.12 | 0.26 | 0.03 | 3.37  | 0.45 | 1.03 | 0.59 |
| V   | 52 | 0.09 | 5.99  | 2.58  | 1.48 | 1.20 | 0.02 | 0.25 | 0.20 | 0.05 | 2.93  | 1.15 | 0.61 | 0.49 |
| V   | 53 | 0.07 | 6.60  | 3.14  | 0.13 | 1.95 | 0.01 | 0.02 | 0.30 | 0.04 | 3.53  | 0.09 | 1.24 | 0.53 |
| V   | 54 | 0.11 | 5.77  | 2.29  | 1.47 | 1.03 | 0.02 | 0.25 | 0.18 | 0.05 | 2.67  | 1.16 | 0.47 | 0.46 |
| V   | 55 | 0.03 | 6.36  | 3.31  | 1.12 | 1.53 | 0.00 | 0.18 | 0.24 | 0.02 | 3.66  | 0.77 | 0.96 | 0.58 |
| V   | 56 | 0.09 | 5.86  | 2.54  | 1.41 | 1.19 | 0.02 | 0.24 | 0.20 | 0.04 | 2.93  | 1.07 | 0.58 | 0.50 |
| V   | 57 | 0.05 | 5.45  | 3.10  | 0.24 | 1.90 | 0.01 | 0.04 | 0.35 | 0.03 | 3.37  | 0.16 | 1.32 | 0.62 |
| V   | 58 | 0.03 | 5.24  | 2.52  | 0.76 | 1.05 | 0.01 | 0.15 | 0.20 | 0.02 | 2.80  | 0.49 | 0.66 | 0.53 |
| V   | 59 | 0.05 | 4.41  | 1.79  | 0.38 | 1.04 | 0.01 | 0.09 | 0.24 | 0.02 | 2.02  | 0.27 | 0.71 | 0.46 |
| V   | 60 | 0.06 | 5.76  | 3.42  | 0.07 | 2.15 | 0.01 | 0.01 | 0.37 | 0.03 | 3.65  | 0.05 | 1.49 | 0.63 |
| V   | 61 | 0.06 | 5.19  | 1.98  | 0.31 | 1.19 | 0.01 | 0.06 | 0.23 | 0.03 | 2.31  | 0.26 | 0.71 | 0.45 |
| V   | 62 | 0.08 | 6.17  | 2.85  | 1.58 | 1.32 | 0.01 | 0.26 | 0.21 | 0.04 | 3.23  | 1.16 | 0.67 | 0.52 |
| V   | 63 | 0.09 | 5.86  | 2.54  | 1.41 | 1.19 | 0.02 | 0.24 | 0.20 | 0.04 | 2.93  | 1.07 | 0.58 | 0.50 |
| H   | 64 | 0.04 | 4.26  | 2.57  | 0.09 | 1.96 | 0.01 | 0.02 | 0.46 | 0.02 | 2.73  | 0.06 | 1.43 | 0.64 |
| H   | 65 | 0.06 | 3.93  | 1.82  | 0.61 | 1.18 | 0.02 | 0.16 | 0.30 | 0.03 | 2.06  | 0.44 | 0.74 | 0.52 |
| H   | 66 | 0.06 | 4.27  | 2.40  | 0.36 | 1.18 | 0.01 | 0.08 | 0.28 | 0.04 | 2.62  | 0.29 | 0.74 | 0.61 |
| H   | 67 | 0.07 | 4.92  | 2.89  | 0.76 | 2.02 | 0.01 | 0.15 | 0.41 | 0.04 | 3.11  | 0.51 | 1.47 | 0.63 |
| H   | 68 | 0.11 | 4.90  | 1.91  | 1.23 | 0.88 | 0.02 | 0.25 | 0.18 | 0.06 | 2.19  | 0.95 | 0.50 | 0.45 |
| H   | 69 | 0.08 | 4.42  | 1.75  | 0.39 | 1.03 | 0.02 | 0.09 | 0.23 | 0.04 | 2.04  | 0.27 | 0.60 | 0.46 |
| H   | 70 | 0.11 | 5.06  | 1.86  | 1.26 | 0.78 | 0.02 | 0.25 | 0.15 | 0.06 | 2.18  | 0.97 | 0.43 | 0.43 |
| H   | 71 | 0.09 | 4.89  | 2.41  | 1.12 | 1.47 | 0.02 | 0.23 | 0.30 | 0.05 | 2.66  | 0.79 | 1.01 | 0.54 |
| H   | 72 | 0.13 | 5.59  | 2.40  | 1.54 | 1.19 | 0.02 | 0.28 | 0.21 | 0.07 | 2.75  | 1.19 | 0.69 | 0.49 |
| H   | 73 | 0.06 | 5.35  | 3.12  | 0.09 | 1.75 | 0.01 | 0.02 | 0.33 | 0.03 | 3.37  | 0.06 | 1.22 | 0.63 |
| H   | 74 | 0.06 | 4.69  | 2.24  | 0.35 | 1.25 | 0.01 | 0.07 | 0.27 | 0.03 | 2.52  | 0.23 | 0.84 | 0.54 |
| H   | 75 | 0.12 | 3.93  | 1.37  | 0.51 | 0.83 | 0.03 | 0.13 | 0.21 | 0.06 | 1.69  | 0.34 | 0.39 | 0.43 |
| H   | 76 | 0.06 | 4.56  | 2.50  | 0.44 | 1.29 | 0.01 | 0.10 | 0.28 | 0.03 | 2.73  | 0.33 | 0.88 | 0.60 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 77  | 0.11 | 4.41  | 1.59 | 0.20 | 1.00 | 0.02 | 0.05 | 0.23 | 0.05 | 1.91 | 0.14 | 0.52 | 0.43 |
| H   | 78  | 0.13 | 5.77  | 2.66 | 1.59 | 1.47 | 0.02 | 0.28 | 0.25 | 0.07 | 2.99 | 1.21 | 0.91 | 0.52 |
| H   | 79  | 0.13 | 5.59  | 2.40 | 1.54 | 1.19 | 0.02 | 0.28 | 0.21 | 0.07 | 2.75 | 1.19 | 0.69 | 0.49 |
| H+V | 80  | 0.12 | 13.18 | 8.18 | 0.39 | 6.11 | 0.01 | 0.03 | 0.46 | 0.06 | 8.59 | 0.26 | 4.31 | 0.65 |
| H+V | 81  | 0.15 | 11.97 | 5.32 | 1.89 | 3.29 | 0.01 | 0.16 | 0.27 | 0.08 | 6.08 | 1.41 | 1.95 | 0.51 |
| H+V | 82  | 0.19 | 14.01 | 8.23 | 0.68 | 4.59 | 0.01 | 0.05 | 0.33 | 0.11 | 8.88 | 0.55 | 3.11 | 0.63 |
| H+V | 83  | 0.18 | 15.17 | 9.06 | 2.21 | 6.10 | 0.01 | 0.15 | 0.40 | 0.11 | 9.70 | 1.46 | 4.30 | 0.64 |
| H+V | 84  | 0.32 | 13.71 | 6.06 | 3.69 | 3.52 | 0.02 | 0.27 | 0.26 | 0.15 | 6.80 | 2.91 | 1.85 | 0.50 |
| H+V | 85  | 0.25 | 16.96 | 7.59 | 0.69 | 5.30 | 0.01 | 0.04 | 0.31 | 0.12 | 8.54 | 0.51 | 3.23 | 0.50 |
| H+V | 86  | 0.35 | 13.12 | 5.36 | 3.61 | 3.08 | 0.03 | 0.28 | 0.23 | 0.17 | 6.19 | 2.91 | 1.50 | 0.47 |
| H+V | 87  | 0.20 | 14.70 | 8.03 | 3.11 | 5.04 | 0.01 | 0.21 | 0.34 | 0.11 | 8.72 | 2.18 | 3.38 | 0.59 |
| H+V | 88  | 0.36 | 15.14 | 7.01 | 4.22 | 4.14 | 0.02 | 0.28 | 0.27 | 0.18 | 7.91 | 3.31 | 2.20 | 0.52 |
| H+V | 89  | 0.19 | 15.67 | 9.24 | 0.45 | 6.00 | 0.01 | 0.03 | 0.38 | 0.11 | 9.87 | 0.30 | 4.17 | 0.63 |
| H+V | 90  | 0.14 | 11.39 | 5.62 | 1.42 | 3.17 | 0.01 | 0.12 | 0.28 | 0.08 | 6.25 | 0.95 | 2.15 | 0.55 |
| H+V | 91  | 0.21 | 11.36 | 3.90 | 1.29 | 2.29 | 0.02 | 0.11 | 0.20 | 0.09 | 4.89 | 0.88 | 1.25 | 0.43 |
| H+V | 92  | 0.20 | 15.75 | 9.35 | 0.68 | 5.73 | 0.01 | 0.04 | 0.36 | 0.11 | 9.94 | 0.55 | 3.92 | 0.63 |
| H+V | 93  | 0.26 | 13.70 | 5.19 | 0.82 | 3.68 | 0.02 | 0.06 | 0.27 | 0.12 | 6.19 | 0.65 | 2.07 | 0.45 |
| H+V | 94  | 0.35 | 16.53 | 8.12 | 4.75 | 4.92 | 0.02 | 0.29 | 0.30 | 0.17 | 9.06 | 3.57 | 2.76 | 0.55 |
| H+V | 95  | 0.36 | 15.14 | 7.01 | 4.22 | 4.14 | 0.02 | 0.28 | 0.27 | 0.18 | 7.91 | 3.31 | 2.20 | 0.52 |
| V   | 96  | 0.02 | 2.75  | 1.59 | 0.08 | 0.71 | 0.01 | 0.03 | 0.26 | 0.01 | 1.71 | 0.04 | 0.44 | 0.62 |
| V   | 97  | 0.02 | 3.65  | 1.22 | 0.42 | 0.45 | 0.01 | 0.12 | 0.12 | 0.01 | 1.45 | 0.28 | 0.28 | 0.40 |
| V   | 98  | 0.02 | 2.75  | 1.59 | 0.08 | 0.71 | 0.01 | 0.03 | 0.26 | 0.01 | 1.71 | 0.04 | 0.44 | 0.62 |
| V   | 99  | 0.02 | 3.19  | 1.56 | 0.63 | 0.60 | 0.01 | 0.20 | 0.19 | 0.01 | 1.71 | 0.42 | 0.39 | 0.54 |
| V   | 100 | 0.02 | 3.65  | 1.22 | 0.42 | 0.45 | 0.01 | 0.12 | 0.12 | 0.01 | 1.45 | 0.28 | 0.28 | 0.40 |
| V   | 101 | 0.03 | 3.49  | 1.45 | 0.19 | 0.62 | 0.01 | 0.05 | 0.18 | 0.01 | 1.60 | 0.13 | 0.38 | 0.46 |
| V   | 102 | 0.02 | 3.65  | 1.22 | 0.42 | 0.45 | 0.01 | 0.12 | 0.12 | 0.01 | 1.45 | 0.28 | 0.28 | 0.40 |
| V   | 103 | 0.02 | 3.50  | 1.31 | 0.60 | 0.45 | 0.01 | 0.17 | 0.13 | 0.01 | 1.51 | 0.40 | 0.28 | 0.43 |
| V   | 104 | 0.02 | 3.65  | 1.22 | 0.42 | 0.45 | 0.01 | 0.12 | 0.12 | 0.01 | 1.45 | 0.28 | 0.28 | 0.40 |
| V   | 105 | 0.02 | 2.75  | 1.59 | 0.08 | 0.71 | 0.01 | 0.03 | 0.26 | 0.01 | 1.71 | 0.04 | 0.44 | 0.62 |
| V   | 106 | 0.01 | 2.86  | 1.64 | 0.49 | 0.70 | 0.00 | 0.17 | 0.24 | 0.01 | 1.77 | 0.32 | 0.45 | 0.62 |
| V   | 107 | 0.03 | 3.49  | 1.45 | 0.19 | 0.62 | 0.01 | 0.05 | 0.18 | 0.01 | 1.60 | 0.13 | 0.38 | 0.46 |
| V   | 108 | 0.03 | 3.15  | 1.60 | 0.06 | 0.69 | 0.01 | 0.02 | 0.22 | 0.01 | 1.74 | 0.04 | 0.42 | 0.55 |
| V   | 109 | 0.03 | 3.15  | 1.60 | 0.06 | 0.69 | 0.01 | 0.02 | 0.22 | 0.01 | 1.74 | 0.04 | 0.42 | 0.55 |
| V   | 110 | 0.02 | 3.50  | 1.31 | 0.60 | 0.45 | 0.01 | 0.17 | 0.13 | 0.01 | 1.51 | 0.40 | 0.28 | 0.43 |
| V   | 111 | 0.02 | 3.65  | 1.22 | 0.42 | 0.45 | 0.01 | 0.12 | 0.12 | 0.01 | 1.45 | 0.28 | 0.28 | 0.40 |
| V   | 112 | 0.02 | 3.65  | 1.22 | 0.42 | 0.45 | 0.01 | 0.12 | 0.12 | 0.01 | 1.45 | 0.28 | 0.28 | 0.40 |
| V   | 113 | 0.01 | 2.60  | 1.58 | 0.27 | 0.71 | 0.00 | 0.10 | 0.27 | 0.01 | 1.69 | 0.17 | 0.45 | 0.65 |
| H   | 114 | 0.02 | 2.31  | 1.33 | 0.22 | 0.84 | 0.01 | 0.10 | 0.36 | 0.01 | 1.45 | 0.14 | 0.56 | 0.63 |
| H   | 115 | 0.04 | 2.38  | 0.94 | 0.52 | 0.46 | 0.02 | 0.22 | 0.19 | 0.03 | 1.07 | 0.36 | 0.29 | 0.45 |
| H   | 116 | 0.03 | 2.57  | 1.22 | 0.09 | 0.73 | 0.01 | 0.04 | 0.28 | 0.02 | 1.37 | 0.06 | 0.45 | 0.53 |
| H   | 117 | 0.03 | 2.35  | 1.29 | 0.41 | 0.77 | 0.01 | 0.17 | 0.33 | 0.02 | 1.40 | 0.28 | 0.51 | 0.60 |
| H   | 118 | 0.04 | 2.38  | 0.94 | 0.52 | 0.46 | 0.02 | 0.22 | 0.19 | 0.03 | 1.07 | 0.36 | 0.29 | 0.45 |

|     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 119 | 0.04 | 2.41 | 0.71 | 0.38 | 0.37 | 0.02 | 0.16 | 0.15 | 0.02 | 0.88 | 0.26 | 0.19 | 0.37 |
| H   | 120 | 0.04 | 2.38 | 0.94 | 0.52 | 0.46 | 0.02 | 0.22 | 0.19 | 0.03 | 1.07 | 0.36 | 0.29 | 0.45 |
| H   | 121 | 0.04 | 2.41 | 1.18 | 0.53 | 0.65 | 0.02 | 0.22 | 0.27 | 0.02 | 1.30 | 0.37 | 0.43 | 0.54 |
| H   | 122 | 0.04 | 2.38 | 0.94 | 0.52 | 0.46 | 0.02 | 0.22 | 0.19 | 0.03 | 1.07 | 0.36 | 0.29 | 0.45 |
| H   | 123 | 0.03 | 2.57 | 1.22 | 0.09 | 0.73 | 0.01 | 0.04 | 0.28 | 0.02 | 1.37 | 0.06 | 0.45 | 0.53 |
| H   | 124 | 0.02 | 2.31 | 1.33 | 0.22 | 0.84 | 0.01 | 0.10 | 0.36 | 0.01 | 1.45 | 0.14 | 0.56 | 0.63 |
| H   | 125 | 0.04 | 2.41 | 0.71 | 0.38 | 0.37 | 0.02 | 0.16 | 0.15 | 0.02 | 0.88 | 0.26 | 0.19 | 0.37 |
| H   | 126 | 0.04 | 2.49 | 0.97 | 0.21 | 0.57 | 0.02 | 0.08 | 0.23 | 0.02 | 1.10 | 0.13 | 0.33 | 0.44 |
| H   | 127 | 0.04 | 2.49 | 0.97 | 0.21 | 0.57 | 0.02 | 0.08 | 0.23 | 0.02 | 1.10 | 0.13 | 0.33 | 0.44 |
| H   | 128 | 0.04 | 2.41 | 1.18 | 0.53 | 0.65 | 0.02 | 0.22 | 0.27 | 0.02 | 1.30 | 0.37 | 0.43 | 0.54 |
| H   | 129 | 0.04 | 2.38 | 0.94 | 0.52 | 0.46 | 0.02 | 0.22 | 0.19 | 0.03 | 1.07 | 0.36 | 0.29 | 0.45 |
| H   | 130 | 0.04 | 2.41 | 0.71 | 0.38 | 0.37 | 0.02 | 0.16 | 0.15 | 0.02 | 0.88 | 0.26 | 0.19 | 0.37 |
| H   | 131 | 0.02 | 2.31 | 1.33 | 0.22 | 0.84 | 0.01 | 0.10 | 0.36 | 0.01 | 1.45 | 0.14 | 0.56 | 0.63 |
| H+V | 132 | 0.06 | 7.72 | 4.47 | 0.46 | 2.46 | 0.01 | 0.06 | 0.32 | 0.04 | 4.83 | 0.29 | 1.59 | 0.63 |
| H+V | 133 | 0.08 | 7.12 | 2.36 | 1.14 | 1.12 | 0.01 | 0.16 | 0.16 | 0.04 | 2.82 | 0.78 | 0.69 | 0.40 |
| H+V | 134 | 0.10 | 7.85 | 4.14 | 0.26 | 2.25 | 0.01 | 0.03 | 0.29 | 0.05 | 4.52 | 0.17 | 1.37 | 0.58 |
| H+V | 135 | 0.07 | 7.07 | 3.87 | 1.25 | 2.11 | 0.01 | 0.18 | 0.30 | 0.03 | 4.18 | 0.85 | 1.41 | 0.59 |
| H+V | 136 | 0.08 | 7.12 | 2.36 | 1.14 | 1.12 | 0.01 | 0.16 | 0.16 | 0.04 | 2.82 | 0.78 | 0.69 | 0.40 |
| H+V | 137 | 0.10 | 7.64 | 3.14 | 0.72 | 1.65 | 0.01 | 0.09 | 0.22 | 0.05 | 3.52 | 0.50 | 0.94 | 0.46 |
| H+V | 138 | 0.08 | 7.12 | 2.36 | 1.14 | 1.12 | 0.01 | 0.16 | 0.16 | 0.04 | 2.82 | 0.78 | 0.69 | 0.40 |
| H+V | 139 | 0.08 | 6.99 | 3.06 | 1.35 | 1.70 | 0.01 | 0.19 | 0.24 | 0.04 | 3.39 | 0.93 | 1.12 | 0.48 |
| H+V | 140 | 0.08 | 7.12 | 2.36 | 1.14 | 1.12 | 0.01 | 0.16 | 0.16 | 0.04 | 2.82 | 0.78 | 0.69 | 0.40 |
| H+V | 141 | 0.10 | 7.85 | 4.14 | 0.26 | 2.25 | 0.01 | 0.03 | 0.29 | 0.05 | 4.52 | 0.17 | 1.37 | 0.58 |
| H+V | 142 | 0.04 | 7.09 | 4.18 | 0.93 | 2.23 | 0.01 | 0.13 | 0.31 | 0.02 | 4.50 | 0.61 | 1.47 | 0.63 |
| H+V | 143 | 0.10 | 7.64 | 3.14 | 0.72 | 1.65 | 0.01 | 0.09 | 0.22 | 0.05 | 3.52 | 0.50 | 0.94 | 0.46 |
| H+V | 144 | 0.11 | 8.20 | 3.90 | 0.36 | 2.09 | 0.01 | 0.04 | 0.25 | 0.06 | 4.31 | 0.24 | 1.22 | 0.53 |
| H+V | 145 | 0.11 | 8.20 | 3.90 | 0.36 | 2.09 | 0.01 | 0.04 | 0.25 | 0.06 | 4.31 | 0.24 | 1.22 | 0.53 |
| H+V | 146 | 0.08 | 6.99 | 3.06 | 1.35 | 1.70 | 0.01 | 0.19 | 0.24 | 0.04 | 3.39 | 0.93 | 1.12 | 0.48 |
| H+V | 147 | 0.08 | 7.12 | 2.36 | 1.14 | 1.12 | 0.01 | 0.16 | 0.16 | 0.04 | 2.82 | 0.78 | 0.69 | 0.40 |
| H+V | 148 | 0.09 | 7.83 | 2.71 | 1.06 | 1.44 | 0.01 | 0.14 | 0.18 | 0.04 | 3.08 | 0.72 | 0.81 | 0.39 |
| H+V | 149 | 0.06 | 7.12 | 2.85 | 0.76 | 1.70 | 0.01 | 0.11 | 0.24 | 0.03 | 3.25 | 0.51 | 1.04 | 0.46 |
| V   | 150 | 0.01 | 1.80 | 0.81 | 0.17 | 0.21 | 0.01 | 0.09 | 0.12 | 0.00 | 0.91 | 0.11 | 0.12 | 0.51 |
| V   | 151 | 0.01 | 1.45 | 0.60 | 0.18 | 0.30 | 0.01 | 0.12 | 0.21 | 0.00 | 0.68 | 0.13 | 0.19 | 0.47 |
| H   | 152 | 0.01 | 1.24 | 0.53 | 0.15 | 0.28 | 0.01 | 0.12 | 0.23 | 0.01 | 0.61 | 0.09 | 0.18 | 0.49 |
| H   | 153 | 0.01 | 1.25 | 0.49 | 0.15 | 0.31 | 0.01 | 0.12 | 0.25 | 0.01 | 0.57 | 0.11 | 0.19 | 0.46 |
| H+V | 154 | 0.04 | 4.28 | 1.88 | 0.38 | 0.73 | 0.01 | 0.09 | 0.17 | 0.02 | 2.12 | 0.24 | 0.43 | 0.50 |
| H+V | 155 | 0.03 | 3.77 | 1.64 | 0.44 | 0.92 | 0.01 | 0.12 | 0.24 | 0.02 | 1.84 | 0.31 | 0.58 | 0.49 |

**Table 2-9** Simulated averaged PD over 4 [cm<sup>2</sup>] area on Plane B Module - n258 Mid Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | Mid channel |       |           |      |       |       |        |        |       |       |      |      |          |
|--------------------------------------|---------|-------------|-------|-----------|------|-------|-------|--------|--------|-------|-------|------|------|----------|
|                                      |         | 2mm         |       |           |      |       | 2.80% | 30.61% | 49.64% | 5mm   |       |      |      | 67.89%   |
|                                      |         | S1          | S2    | S2        | S3   | S5    | S1/S2 | S3/S2  | S5/S2  | S1    | S2    | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front       | Back  | Back (CB) | Left | Top   |       |        |        | Front | Back  | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.15        | 8.89  | 5.46      | 0.22 | 4.06  | 0.02  | 0.02   | 0.46   | 0.10  | 5.82  | 0.13 | 3.04 | 0.65     |
| V                                    | 1       | 0.10        | 9.32  | 3.99      | 1.78 | 2.31  | 0.01  | 0.19   | 0.25   | 0.04  | 4.61  | 1.32 | 1.60 | 0.49     |
| V                                    | 2       | 0.19        | 8.31  | 4.52      | 0.28 | 2.20  | 0.02  | 0.03   | 0.26   | 0.09  | 4.88  | 0.15 | 1.56 | 0.59     |
| V                                    | 3       | 0.11        | 8.76  | 4.81      | 0.82 | 3.62  | 0.01  | 0.09   | 0.41   | 0.05  | 5.17  | 0.48 | 2.71 | 0.59     |
| V                                    | 4       | 0.13        | 9.76  | 4.33      | 2.30 | 2.46  | 0.01  | 0.24   | 0.25   | 0.07  | 4.97  | 1.74 | 1.54 | 0.51     |
| V                                    | 5       | 0.17        | 9.97  | 4.70      | 0.45 | 2.35  | 0.02  | 0.05   | 0.24   | 0.07  | 5.26  | 0.33 | 1.39 | 0.53     |
| V                                    | 6       | 0.17        | 8.91  | 3.73      | 2.55 | 1.70  | 0.02  | 0.29   | 0.19   | 0.09  | 4.38  | 2.01 | 0.90 | 0.49     |
| V                                    | 7       | 0.09        | 10.05 | 5.61      | 1.34 | 3.77  | 0.01  | 0.13   | 0.38   | 0.05  | 6.11  | 0.87 | 2.70 | 0.61     |
| V                                    | 8       | 0.17        | 8.73  | 3.90      | 1.78 | 2.13  | 0.02  | 0.20   | 0.24   | 0.08  | 4.47  | 1.27 | 1.33 | 0.51     |
| V                                    | 9       | 0.13        | 8.38  | 4.70      | 0.40 | 2.42  | 0.02  | 0.05   | 0.29   | 0.06  | 5.14  | 0.24 | 1.55 | 0.61     |
| V                                    | 10      | 0.08        | 8.18  | 4.33      | 1.12 | 2.62  | 0.01  | 0.14   | 0.32   | 0.05  | 4.76  | 0.70 | 1.80 | 0.58     |
| V                                    | 11      | 0.13        | 6.96  | 2.91      | 0.66 | 1.89  | 0.02  | 0.09   | 0.27   | 0.06  | 3.23  | 0.44 | 1.37 | 0.46     |
| V                                    | 12      | 0.21        | 8.88  | 5.40      | 0.27 | 2.92  | 0.02  | 0.03   | 0.33   | 0.11  | 5.68  | 0.17 | 2.08 | 0.64     |
| V                                    | 13      | 0.12        | 6.80  | 2.83      | 0.40 | 1.56  | 0.02  | 0.06   | 0.23   | 0.05  | 3.23  | 0.32 | 1.00 | 0.48     |
| V                                    | 14      | 0.15        | 8.94  | 4.18      | 1.72 | 2.43  | 0.02  | 0.19   | 0.27   | 0.08  | 4.69  | 1.18 | 1.55 | 0.52     |
| V                                    | 15      | 0.14        | 9.05  | 4.06      | 2.05 | 2.07  | 0.02  | 0.23   | 0.23   | 0.08  | 4.69  | 1.51 | 1.23 | 0.52     |
| H                                    | 16      | 0.12        | 9.46  | 5.34      | 0.20 | 4.10  | 0.01  | 0.02   | 0.43   | 0.07  | 5.80  | 0.12 | 3.08 | 0.61     |
| H                                    | 17      | 0.13        | 7.46  | 3.52      | 1.62 | 2.45  | 0.02  | 0.22   | 0.33   | 0.07  | 4.04  | 1.32 | 1.72 | 0.54     |
| H                                    | 18      | 0.10        | 10.17 | 6.07      | 0.55 | 3.98  | 0.01  | 0.05   | 0.39   | 0.05  | 6.54  | 0.45 | 2.72 | 0.64     |
| H                                    | 19      | 0.18        | 9.38  | 5.88      | 1.00 | 3.09  | 0.02  | 0.11   | 0.33   | 0.12  | 6.23  | 0.61 | 2.26 | 0.66     |
| H                                    | 20      | 0.21        | 9.30  | 3.64      | 2.45 | 1.37  | 0.02  | 0.26   | 0.15   | 0.10  | 4.20  | 2.06 | 0.78 | 0.45     |
| H                                    | 21      | 0.11        | 10.11 | 4.54      | 0.59 | 2.99  | 0.01  | 0.06   | 0.30   | 0.04  | 5.25  | 0.41 | 2.06 | 0.52     |
| H                                    | 22      | 0.22        | 8.43  | 2.80      | 2.22 | 0.99  | 0.03  | 0.26   | 0.12   | 0.10  | 3.43  | 1.84 | 0.54 | 0.41     |
| H                                    | 23      | 0.16        | 9.15  | 5.02      | 2.12 | 2.15  | 0.02  | 0.23   | 0.23   | 0.11  | 5.48  | 1.53 | 1.40 | 0.60     |
| H                                    | 24      | 0.23        | 10.68 | 4.86      | 2.89 | 1.97  | 0.02  | 0.27   | 0.18   | 0.11  | 5.44  | 2.38 | 1.17 | 0.51     |
| H                                    | 25      | 0.10        | 10.72 | 6.40      | 0.11 | 4.82  | 0.01  | 0.01   | 0.45   | 0.04  | 6.87  | 0.07 | 3.64 | 0.64     |
| H                                    | 26      | 0.08        | 9.48  | 5.12      | 0.52 | 3.78  | 0.01  | 0.05   | 0.40   | 0.05  | 5.52  | 0.41 | 2.89 | 0.58     |
| H                                    | 27      | 0.18        | 7.96  | 3.49      | 1.13 | 2.49  | 0.02  | 0.14   | 0.31   | 0.08  | 4.09  | 0.85 | 1.56 | 0.51     |
| H                                    | 28      | 0.12        | 10.09 | 5.92      | 0.79 | 4.31  | 0.01  | 0.08   | 0.43   | 0.06  | 6.40  | 0.64 | 3.26 | 0.63     |
| H                                    | 29      | 0.15        | 8.65  | 3.16      | 0.41 | 2.34  | 0.02  | 0.05   | 0.27   | 0.07  | 3.86  | 0.28 | 1.32 | 0.45     |
| H                                    | 30      | 0.21        | 11.10 | 5.41      | 2.82 | 2.39  | 0.02  | 0.25   | 0.22   | 0.11  | 6.01  | 2.24 | 1.48 | 0.54     |
| H                                    | 31      | 0.23        | 9.74  | 4.09      | 2.61 | 1.57  | 0.02  | 0.27   | 0.16   | 0.11  | 4.72  | 2.19 | 0.88 | 0.48     |
| H+V                                  | 32      | 0.44        | 22.20 | 13.91     | 0.53 | 11.02 | 0.02  | 0.02   | 0.50   | 0.28  | 14.64 | 0.34 | 7.87 | 0.66     |
| H+V                                  | 33      | 0.31        | 19.49 | 7.55      | 4.60 | 4.78  | 0.02  | 0.24   | 0.25   | 0.14  | 8.76  | 3.63 | 3.21 | 0.45     |
| H+V                                  | 34      | 0.38        | 21.59 | 13.53     | 0.87 | 8.80  | 0.02  | 0.04   | 0.41   | 0.16  | 14.32 | 0.70 | 6.47 | 0.66     |

|     |    |      |       |       |      |       |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|-------|------|------|------|------|-------|------|------|------|
| H+V | 35 | 0.34 | 21.31 | 13.63 | 2.34 | 9.69  | 0.02 | 0.11 | 0.45 | 0.21 | 14.16 | 1.41 | 7.10 | 0.66 |
| H+V | 36 | 0.53 | 24.91 | 10.95 | 6.90 | 5.96  | 0.02 | 0.28 | 0.24 | 0.24 | 12.42 | 5.63 | 3.49 | 0.50 |
| H+V | 37 | 0.45 | 26.85 | 12.24 | 1.40 | 8.56  | 0.02 | 0.05 | 0.32 | 0.19 | 13.68 | 1.02 | 5.51 | 0.51 |
| H+V | 38 | 0.58 | 23.69 | 9.13  | 7.06 | 4.41  | 0.02 | 0.30 | 0.19 | 0.28 | 10.89 | 5.78 | 2.31 | 0.46 |
| H+V | 39 | 0.33 | 22.82 | 13.42 | 4.60 | 8.49  | 0.01 | 0.20 | 0.37 | 0.18 | 14.26 | 3.16 | 5.87 | 0.62 |
| H+V | 40 | 0.53 | 24.24 | 11.85 | 6.97 | 6.78  | 0.02 | 0.29 | 0.28 | 0.24 | 13.21 | 5.54 | 4.08 | 0.54 |
| H+V | 41 | 0.33 | 21.82 | 13.75 | 0.72 | 10.18 | 0.02 | 0.03 | 0.47 | 0.14 | 14.39 | 0.46 | 7.26 | 0.66 |
| H+V | 42 | 0.22 | 18.00 | 9.39  | 2.05 | 7.11  | 0.01 | 0.11 | 0.40 | 0.13 | 9.96  | 1.37 | 5.26 | 0.55 |
| H+V | 43 | 0.52 | 18.56 | 7.01  | 2.08 | 5.43  | 0.03 | 0.11 | 0.29 | 0.22 | 8.50  | 1.48 | 3.00 | 0.46 |
| H+V | 44 | 0.45 | 22.33 | 14.43 | 1.14 | 10.61 | 0.02 | 0.05 | 0.48 | 0.21 | 15.16 | 0.91 | 7.88 | 0.68 |
| H+V | 45 | 0.42 | 21.88 | 7.31  | 1.17 | 5.27  | 0.02 | 0.05 | 0.24 | 0.19 | 8.85  | 0.86 | 2.95 | 0.40 |
| H+V | 46 | 0.50 | 24.58 | 12.94 | 6.94 | 7.94  | 0.02 | 0.28 | 0.32 | 0.24 | 14.17 | 5.25 | 4.94 | 0.58 |
| H+V | 47 | 0.55 | 24.65 | 11.18 | 6.99 | 6.07  | 0.02 | 0.28 | 0.25 | 0.25 | 12.78 | 5.64 | 3.46 | 0.52 |
| V   | 48 | 0.13 | 7.34  | 4.27  | 0.20 | 2.99  | 0.02 | 0.03 | 0.41 | 0.08 | 4.57  | 0.11 | 2.20 | 0.62 |
| V   | 49 | 0.09 | 8.54  | 3.15  | 1.70 | 1.70  | 0.01 | 0.20 | 0.20 | 0.05 | 3.68  | 1.26 | 1.10 | 0.43 |
| V   | 50 | 0.16 | 7.46  | 4.27  | 0.27 | 2.18  | 0.02 | 0.04 | 0.29 | 0.08 | 4.62  | 0.17 | 1.50 | 0.62 |
| V   | 51 | 0.07 | 8.36  | 4.72  | 0.94 | 3.30  | 0.01 | 0.11 | 0.39 | 0.04 | 5.13  | 0.55 | 2.44 | 0.61 |
| V   | 52 | 0.14 | 9.05  | 3.82  | 2.20 | 1.89  | 0.02 | 0.24 | 0.21 | 0.07 | 4.41  | 1.68 | 1.08 | 0.49 |
| V   | 53 | 0.16 | 8.85  | 4.34  | 0.37 | 2.19  | 0.02 | 0.04 | 0.25 | 0.07 | 4.77  | 0.24 | 1.44 | 0.54 |
| V   | 54 | 0.15 | 8.29  | 3.21  | 2.28 | 1.33  | 0.02 | 0.28 | 0.16 | 0.08 | 3.83  | 1.76 | 0.64 | 0.46 |
| V   | 55 | 0.08 | 9.15  | 4.98  | 1.33 | 3.01  | 0.01 | 0.15 | 0.33 | 0.05 | 5.44  | 0.89 | 2.07 | 0.59 |
| V   | 56 | 0.11 | 8.30  | 3.55  | 1.90 | 1.64  | 0.01 | 0.23 | 0.20 | 0.06 | 4.17  | 1.40 | 0.90 | 0.50 |
| V   | 57 | 0.14 | 8.01  | 4.69  | 0.27 | 2.48  | 0.02 | 0.03 | 0.31 | 0.07 | 5.09  | 0.15 | 1.80 | 0.64 |
| V   | 58 | 0.05 | 8.06  | 4.18  | 1.01 | 2.48  | 0.01 | 0.13 | 0.31 | 0.03 | 4.63  | 0.63 | 1.78 | 0.57 |
| V   | 59 | 0.10 | 6.48  | 2.89  | 0.76 | 1.77  | 0.02 | 0.12 | 0.27 | 0.05 | 3.27  | 0.54 | 1.22 | 0.50 |
| V   | 60 | 0.18 | 8.08  | 4.86  | 0.28 | 2.74  | 0.02 | 0.03 | 0.34 | 0.09 | 5.20  | 0.19 | 1.98 | 0.64 |
| V   | 61 | 0.15 | 7.16  | 2.75  | 0.29 | 1.45  | 0.02 | 0.04 | 0.20 | 0.06 | 3.16  | 0.23 | 0.85 | 0.44 |
| V   | 62 | 0.10 | 8.27  | 3.84  | 1.88 | 1.95  | 0.01 | 0.23 | 0.24 | 0.05 | 4.40  | 1.33 | 1.12 | 0.53 |
| V   | 63 | 0.11 | 8.30  | 3.55  | 1.90 | 1.64  | 0.01 | 0.23 | 0.20 | 0.06 | 4.17  | 1.40 | 0.90 | 0.50 |
| H   | 64 | 0.10 | 8.01  | 4.59  | 0.13 | 3.51  | 0.01 | 0.02 | 0.44 | 0.07 | 4.94  | 0.08 | 2.67 | 0.62 |
| H   | 65 | 0.09 | 6.74  | 2.87  | 1.43 | 2.03  | 0.01 | 0.21 | 0.30 | 0.05 | 3.25  | 1.09 | 1.36 | 0.48 |
| H   | 66 | 0.08 | 7.81  | 4.33  | 0.46 | 2.77  | 0.01 | 0.06 | 0.35 | 0.04 | 4.78  | 0.38 | 1.92 | 0.61 |
| H   | 67 | 0.15 | 8.07  | 4.85  | 0.95 | 2.71  | 0.02 | 0.12 | 0.34 | 0.11 | 5.22  | 0.63 | 1.96 | 0.65 |
| H   | 68 | 0.16 | 7.78  | 3.02  | 2.11 | 1.23  | 0.02 | 0.27 | 0.16 | 0.08 | 3.47  | 1.72 | 0.77 | 0.45 |
| H   | 69 | 0.07 | 8.14  | 3.38  | 0.73 | 2.29  | 0.01 | 0.09 | 0.28 | 0.03 | 4.02  | 0.49 | 1.50 | 0.49 |
| H   | 70 | 0.17 | 7.56  | 2.70  | 2.05 | 1.06  | 0.02 | 0.27 | 0.14 | 0.08 | 3.22  | 1.68 | 0.65 | 0.43 |
| H   | 71 | 0.14 | 7.59  | 3.92  | 1.64 | 1.74  | 0.02 | 0.22 | 0.23 | 0.09 | 4.34  | 1.19 | 1.21 | 0.57 |
| H   | 72 | 0.17 | 8.28  | 3.68  | 2.31 | 1.41  | 0.02 | 0.28 | 0.17 | 0.08 | 4.16  | 1.88 | 0.86 | 0.50 |
| H   | 73 | 0.09 | 8.77  | 5.13  | 0.14 | 3.91  | 0.01 | 0.02 | 0.45 | 0.04 | 5.54  | 0.09 | 2.91 | 0.63 |
| H   | 74 | 0.07 | 7.39  | 3.67  | 0.42 | 2.57  | 0.01 | 0.06 | 0.35 | 0.05 | 4.13  | 0.29 | 1.91 | 0.56 |
| H   | 75 | 0.10 | 5.60  | 1.97  | 1.00 | 1.51  | 0.02 | 0.18 | 0.27 | 0.06 | 2.41  | 0.73 | 0.88 | 0.43 |
| H   | 76 | 0.08 | 7.91  | 4.36  | 0.63 | 3.12  | 0.01 | 0.08 | 0.39 | 0.04 | 4.78  | 0.50 | 2.30 | 0.60 |

|     |     |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|-----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| H   | 77  | 0.09 | 7.38  | 2.98  | 0.34 | 2.05 | 0.01 | 0.05 | 0.28 | 0.05 | 3.52  | 0.21 | 1.16 | 0.48 |
| H   | 78  | 0.16 | 8.37  | 4.08  | 2.19 | 1.80 | 0.02 | 0.26 | 0.22 | 0.08 | 4.53  | 1.73 | 1.14 | 0.54 |
| H   | 79  | 0.17 | 8.28  | 3.68  | 2.31 | 1.41 | 0.02 | 0.28 | 0.17 | 0.08 | 4.16  | 1.88 | 0.86 | 0.50 |
| H+V | 80  | 0.37 | 18.44 | 11.10 | 0.43 | 8.64 | 0.02 | 0.02 | 0.47 | 0.24 | 11.66 | 0.26 | 6.14 | 0.63 |
| H+V | 81  | 0.24 | 17.21 | 7.11  | 4.09 | 4.33 | 0.01 | 0.24 | 0.25 | 0.13 | 7.95  | 3.13 | 2.73 | 0.46 |
| H+V | 82  | 0.30 | 17.91 | 11.06 | 0.94 | 7.28 | 0.02 | 0.05 | 0.41 | 0.14 | 11.86 | 0.75 | 5.31 | 0.66 |
| H+V | 83  | 0.29 | 18.97 | 11.82 | 2.28 | 8.46 | 0.02 | 0.12 | 0.45 | 0.18 | 12.43 | 1.40 | 6.11 | 0.66 |
| H+V | 84  | 0.43 | 21.04 | 9.17  | 6.13 | 4.73 | 0.02 | 0.29 | 0.22 | 0.20 | 10.48 | 4.93 | 2.72 | 0.50 |
| H+V | 85  | 0.40 | 22.98 | 10.48 | 1.39 | 7.47 | 0.02 | 0.06 | 0.33 | 0.17 | 11.77 | 0.87 | 4.85 | 0.51 |
| H+V | 86  | 0.48 | 20.42 | 8.02  | 6.25 | 3.83 | 0.02 | 0.31 | 0.19 | 0.23 | 9.51  | 5.06 | 2.02 | 0.47 |
| H+V | 87  | 0.27 | 19.59 | 11.00 | 3.96 | 6.93 | 0.01 | 0.20 | 0.35 | 0.14 | 11.81 | 2.71 | 4.77 | 0.60 |
| H+V | 88  | 0.44 | 21.72 | 9.80  | 6.24 | 5.12 | 0.02 | 0.29 | 0.24 | 0.21 | 11.17 | 4.96 | 2.93 | 0.51 |
| H+V | 89  | 0.33 | 19.97 | 12.33 | 0.43 | 9.55 | 0.02 | 0.02 | 0.48 | 0.17 | 13.19 | 0.28 | 6.93 | 0.66 |
| H+V | 90  | 0.19 | 16.59 | 8.49  | 1.74 | 5.32 | 0.01 | 0.10 | 0.32 | 0.11 | 9.40  | 1.12 | 3.79 | 0.57 |
| H+V | 91  | 0.29 | 14.90 | 5.67  | 2.09 | 3.82 | 0.02 | 0.14 | 0.26 | 0.14 | 6.50  | 1.46 | 2.08 | 0.44 |
| H+V | 92  | 0.35 | 19.19 | 12.01 | 1.16 | 8.91 | 0.02 | 0.06 | 0.46 | 0.16 | 12.74 | 0.90 | 6.44 | 0.66 |
| H+V | 93  | 0.41 | 20.50 | 8.07  | 0.88 | 5.47 | 0.02 | 0.04 | 0.27 | 0.19 | 9.34  | 0.60 | 3.32 | 0.46 |
| H+V | 94  | 0.40 | 21.73 | 10.85 | 6.19 | 6.25 | 0.02 | 0.28 | 0.29 | 0.19 | 12.04 | 4.70 | 3.76 | 0.55 |
| H+V | 95  | 0.44 | 21.72 | 9.80  | 6.24 | 5.12 | 0.02 | 0.29 | 0.24 | 0.21 | 11.17 | 4.96 | 2.93 | 0.51 |
| V   | 96  | 0.07 | 3.78  | 2.27  | 0.16 | 1.35 | 0.02 | 0.04 | 0.36 | 0.04 | 2.42  | 0.08 | 0.92 | 0.64 |
| V   | 97  | 0.05 | 4.84  | 1.66  | 0.98 | 0.50 | 0.01 | 0.20 | 0.10 | 0.03 | 1.98  | 0.69 | 0.32 | 0.41 |
| V   | 98  | 0.07 | 3.78  | 2.27  | 0.16 | 1.35 | 0.02 | 0.04 | 0.36 | 0.04 | 2.42  | 0.08 | 0.92 | 0.64 |
| V   | 99  | 0.03 | 4.76  | 2.40  | 1.10 | 1.25 | 0.01 | 0.23 | 0.26 | 0.02 | 2.64  | 0.75 | 0.82 | 0.55 |
| V   | 100 | 0.05 | 4.84  | 1.66  | 0.98 | 0.50 | 0.01 | 0.20 | 0.10 | 0.03 | 1.98  | 0.69 | 0.32 | 0.41 |
| V   | 101 | 0.06 | 4.43  | 1.65  | 0.61 | 0.74 | 0.01 | 0.14 | 0.17 | 0.03 | 1.91  | 0.44 | 0.47 | 0.43 |
| V   | 102 | 0.05 | 4.84  | 1.66  | 0.98 | 0.50 | 0.01 | 0.20 | 0.10 | 0.03 | 1.98  | 0.69 | 0.32 | 0.41 |
| V   | 103 | 0.04 | 4.93  | 2.03  | 1.17 | 0.80 | 0.01 | 0.24 | 0.16 | 0.02 | 2.32  | 0.83 | 0.49 | 0.47 |
| V   | 104 | 0.05 | 4.84  | 1.66  | 0.98 | 0.50 | 0.01 | 0.20 | 0.10 | 0.03 | 1.98  | 0.69 | 0.32 | 0.41 |
| V   | 105 | 0.07 | 3.78  | 2.27  | 0.16 | 1.35 | 0.02 | 0.04 | 0.36 | 0.04 | 2.42  | 0.08 | 0.92 | 0.64 |
| V   | 106 | 0.04 | 4.38  | 2.57  | 0.77 | 1.53 | 0.01 | 0.18 | 0.35 | 0.02 | 2.75  | 0.50 | 1.03 | 0.63 |
| V   | 107 | 0.06 | 4.43  | 1.65  | 0.61 | 0.74 | 0.01 | 0.14 | 0.17 | 0.03 | 1.91  | 0.44 | 0.47 | 0.43 |
| V   | 108 | 0.07 | 3.99  | 2.00  | 0.27 | 1.05 | 0.02 | 0.07 | 0.26 | 0.04 | 2.17  | 0.19 | 0.70 | 0.54 |
| V   | 109 | 0.07 | 3.99  | 2.00  | 0.27 | 1.05 | 0.02 | 0.07 | 0.26 | 0.04 | 2.17  | 0.19 | 0.70 | 0.54 |
| V   | 110 | 0.04 | 4.93  | 2.03  | 1.17 | 0.80 | 0.01 | 0.24 | 0.16 | 0.02 | 2.32  | 0.83 | 0.49 | 0.47 |
| V   | 111 | 0.05 | 4.84  | 1.66  | 0.98 | 0.50 | 0.01 | 0.20 | 0.10 | 0.03 | 1.98  | 0.69 | 0.32 | 0.41 |
| V   | 112 | 0.05 | 4.84  | 1.66  | 0.98 | 0.50 | 0.01 | 0.20 | 0.10 | 0.03 | 1.98  | 0.69 | 0.32 | 0.41 |
| V   | 113 | 0.05 | 3.95  | 2.48  | 0.38 | 1.54 | 0.01 | 0.10 | 0.39 | 0.03 | 2.63  | 0.22 | 1.05 | 0.67 |
| H   | 114 | 0.05 | 3.77  | 2.11  | 0.27 | 1.53 | 0.01 | 0.07 | 0.41 | 0.04 | 2.31  | 0.19 | 1.06 | 0.61 |
| H   | 115 | 0.07 | 3.99  | 1.55  | 1.06 | 0.62 | 0.02 | 0.27 | 0.16 | 0.04 | 1.82  | 0.77 | 0.39 | 0.46 |
| H   | 116 | 0.06 | 3.83  | 1.93  | 0.17 | 1.41 | 0.02 | 0.04 | 0.37 | 0.03 | 2.14  | 0.12 | 0.91 | 0.56 |
| H   | 117 | 0.08 | 3.93  | 2.01  | 0.64 | 1.29 | 0.02 | 0.16 | 0.33 | 0.05 | 2.25  | 0.46 | 0.89 | 0.57 |
| H   | 118 | 0.07 | 3.99  | 1.55  | 1.06 | 0.62 | 0.02 | 0.27 | 0.16 | 0.04 | 1.82  | 0.77 | 0.39 | 0.46 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 119 | 0.06 | 3.87  | 1.18 | 0.86 | 0.65 | 0.02 | 0.22 | 0.17 | 0.03 | 1.44 | 0.63 | 0.39 | 0.37 |
| H   | 120 | 0.07 | 3.99  | 1.55 | 1.06 | 0.62 | 0.02 | 0.27 | 0.16 | 0.04 | 1.82 | 0.77 | 0.39 | 0.46 |
| H   | 121 | 0.08 | 4.10  | 1.86 | 0.97 | 0.97 | 0.02 | 0.24 | 0.24 | 0.05 | 2.12 | 0.70 | 0.64 | 0.52 |
| H   | 122 | 0.07 | 3.99  | 1.55 | 1.06 | 0.62 | 0.02 | 0.27 | 0.16 | 0.04 | 1.82 | 0.77 | 0.39 | 0.46 |
| H   | 123 | 0.06 | 3.83  | 1.93 | 0.17 | 1.41 | 0.02 | 0.04 | 0.37 | 0.03 | 2.14 | 0.12 | 0.91 | 0.56 |
| H   | 124 | 0.05 | 3.77  | 2.11 | 0.27 | 1.53 | 0.01 | 0.07 | 0.41 | 0.04 | 2.31 | 0.19 | 1.06 | 0.61 |
| H   | 125 | 0.06 | 3.87  | 1.18 | 0.86 | 0.65 | 0.02 | 0.22 | 0.17 | 0.03 | 1.44 | 0.63 | 0.39 | 0.37 |
| H   | 126 | 0.05 | 3.85  | 1.47 | 0.49 | 1.06 | 0.01 | 0.13 | 0.28 | 0.03 | 1.67 | 0.36 | 0.66 | 0.43 |
| H   | 127 | 0.05 | 3.85  | 1.47 | 0.49 | 1.06 | 0.01 | 0.13 | 0.28 | 0.03 | 1.67 | 0.36 | 0.66 | 0.43 |
| H   | 128 | 0.08 | 4.10  | 1.86 | 0.97 | 0.97 | 0.02 | 0.24 | 0.24 | 0.05 | 2.12 | 0.70 | 0.64 | 0.52 |
| H   | 129 | 0.07 | 3.99  | 1.55 | 1.06 | 0.62 | 0.02 | 0.27 | 0.16 | 0.04 | 1.82 | 0.77 | 0.39 | 0.46 |
| H   | 130 | 0.06 | 3.87  | 1.18 | 0.86 | 0.65 | 0.02 | 0.22 | 0.17 | 0.03 | 1.44 | 0.63 | 0.39 | 0.37 |
| H   | 131 | 0.05 | 3.77  | 2.11 | 0.27 | 1.53 | 0.01 | 0.07 | 0.41 | 0.04 | 2.31 | 0.19 | 1.06 | 0.61 |
| H+V | 132 | 0.16 | 10.06 | 5.91 | 0.55 | 3.79 | 0.02 | 0.05 | 0.38 | 0.10 | 6.33 | 0.35 | 2.53 | 0.63 |
| H+V | 133 | 0.15 | 9.82  | 3.71 | 2.44 | 1.43 | 0.02 | 0.25 | 0.15 | 0.08 | 4.35 | 1.83 | 0.83 | 0.44 |
| H+V | 134 | 0.13 | 10.11 | 5.79 | 0.36 | 3.80 | 0.01 | 0.04 | 0.38 | 0.07 | 6.28 | 0.23 | 2.42 | 0.62 |
| H+V | 135 | 0.15 | 9.97  | 5.30 | 2.31 | 3.08 | 0.02 | 0.23 | 0.31 | 0.10 | 5.75 | 1.66 | 1.99 | 0.58 |
| H+V | 136 | 0.15 | 9.82  | 3.71 | 2.44 | 1.43 | 0.02 | 0.25 | 0.15 | 0.08 | 4.35 | 1.83 | 0.83 | 0.44 |
| H+V | 137 | 0.14 | 9.67  | 3.66 | 1.82 | 2.38 | 0.01 | 0.19 | 0.25 | 0.07 | 4.11 | 1.32 | 1.45 | 0.43 |
| H+V | 138 | 0.15 | 9.82  | 3.71 | 2.44 | 1.43 | 0.02 | 0.25 | 0.15 | 0.08 | 4.35 | 1.83 | 0.83 | 0.44 |
| H+V | 139 | 0.15 | 9.89  | 4.48 | 2.70 | 2.38 | 0.02 | 0.27 | 0.24 | 0.08 | 5.05 | 2.01 | 1.49 | 0.51 |
| H+V | 140 | 0.15 | 9.82  | 3.71 | 2.44 | 1.43 | 0.02 | 0.25 | 0.15 | 0.08 | 4.35 | 1.83 | 0.83 | 0.44 |
| H+V | 141 | 0.13 | 10.11 | 5.79 | 0.36 | 3.80 | 0.01 | 0.04 | 0.38 | 0.07 | 6.28 | 0.23 | 2.42 | 0.62 |
| H+V | 142 | 0.15 | 9.82  | 5.77 | 1.45 | 3.56 | 0.02 | 0.15 | 0.36 | 0.10 | 6.18 | 0.99 | 2.33 | 0.63 |
| H+V | 143 | 0.14 | 9.67  | 3.66 | 1.82 | 2.38 | 0.01 | 0.19 | 0.25 | 0.07 | 4.11 | 1.32 | 1.45 | 0.43 |
| H+V | 144 | 0.15 | 9.88  | 4.95 | 0.98 | 3.26 | 0.02 | 0.10 | 0.33 | 0.08 | 5.46 | 0.69 | 2.02 | 0.55 |
| H+V | 145 | 0.15 | 9.88  | 4.95 | 0.98 | 3.26 | 0.02 | 0.10 | 0.33 | 0.08 | 5.46 | 0.69 | 2.02 | 0.55 |
| H+V | 146 | 0.15 | 9.89  | 4.48 | 2.70 | 2.38 | 0.02 | 0.27 | 0.24 | 0.08 | 5.05 | 2.01 | 1.49 | 0.51 |
| H+V | 147 | 0.15 | 9.82  | 3.71 | 2.44 | 1.43 | 0.02 | 0.25 | 0.15 | 0.08 | 4.35 | 1.83 | 0.83 | 0.44 |
| H+V | 148 | 0.13 | 10.03 | 3.31 | 2.21 | 2.05 | 0.01 | 0.22 | 0.20 | 0.07 | 4.00 | 1.62 | 1.27 | 0.40 |
| H+V | 149 | 0.10 | 9.41  | 3.93 | 1.62 | 2.50 | 0.01 | 0.17 | 0.27 | 0.06 | 4.55 | 1.19 | 1.60 | 0.48 |
| V   | 150 | 0.02 | 2.29  | 1.08 | 0.38 | 0.41 | 0.01 | 0.17 | 0.18 | 0.01 | 1.20 | 0.25 | 0.27 | 0.52 |
| V   | 151 | 0.02 | 2.27  | 1.02 | 0.32 | 0.58 | 0.01 | 0.14 | 0.26 | 0.01 | 1.14 | 0.24 | 0.37 | 0.50 |
| H   | 152 | 0.03 | 1.90  | 0.70 | 0.27 | 0.48 | 0.02 | 0.14 | 0.25 | 0.02 | 0.82 | 0.18 | 0.29 | 0.43 |
| H   | 153 | 0.03 | 2.11  | 0.88 | 0.30 | 0.54 | 0.01 | 0.14 | 0.26 | 0.01 | 1.02 | 0.23 | 0.36 | 0.48 |
| H+V | 154 | 0.06 | 5.30  | 2.30 | 0.76 | 1.12 | 0.01 | 0.14 | 0.21 | 0.04 | 2.62 | 0.54 | 0.70 | 0.49 |
| H+V | 155 | 0.05 | 5.42  | 2.38 | 0.75 | 1.35 | 0.01 | 0.14 | 0.25 | 0.03 | 2.68 | 0.58 | 0.85 | 0.49 |

**Table 2-10** Simulated averaged *PD* over 4 [cm<sup>2</sup>] area on Plane B Module - n258 High Channel.

| PD Simulation<br>(W/m <sup>2</sup> ) |         | High channel |       |           |      |      |       |        |        |       |       |      |      |          |
|--------------------------------------|---------|--------------|-------|-----------|------|------|-------|--------|--------|-------|-------|------|------|----------|
|                                      |         | 2mm          |       |           |      |      | 2.69% | 27.15% | 46.28% | 5mm   |       |      |      | 68.19%   |
|                                      |         | S1           | S2    | S2        | S3   | S5   | S1/S2 | S3/S2  | S5/S2  | S1    | S2    | S3   | S5   | S2/S2    |
| Pol                                  | Beam ID | Front        | Back  | Back (CB) | Left | Top  |       |        |        | Front | Back  | Left | Top  | 5mm/2 mm |
| V                                    | 0       | 0.13         | 8.87  | 5.48      | 0.18 | 3.60 | 0.01  | 0.02   | 0.41   | 0.09  | 5.85  | 0.12 | 2.63 | 0.66     |
| V                                    | 1       | 0.11         | 8.96  | 4.29      | 1.77 | 2.87 | 0.01  | 0.20   | 0.32   | 0.06  | 4.87  | 1.34 | 1.91 | 0.54     |
| V                                    | 2       | 0.19         | 8.14  | 4.65      | 0.10 | 2.53 | 0.02  | 0.01   | 0.31   | 0.15  | 4.99  | 0.06 | 1.83 | 0.61     |
| V                                    | 3       | 0.06         | 8.46  | 4.40      | 0.92 | 3.27 | 0.01  | 0.11   | 0.39   | 0.04  | 4.69  | 0.57 | 2.39 | 0.55     |
| V                                    | 4       | 0.12         | 9.61  | 4.85      | 2.15 | 3.18 | 0.01  | 0.22   | 0.33   | 0.07  | 5.39  | 1.65 | 2.04 | 0.56     |
| V                                    | 5       | 0.12         | 9.73  | 4.65      | 0.44 | 1.72 | 0.01  | 0.05   | 0.18   | 0.07  | 5.14  | 0.28 | 1.03 | 0.53     |
| V                                    | 6       | 0.15         | 8.88  | 4.01      | 2.12 | 2.41 | 0.02  | 0.24   | 0.27   | 0.07  | 4.62  | 1.67 | 1.44 | 0.52     |
| V                                    | 7       | 0.08         | 9.05  | 5.48      | 1.61 | 3.91 | 0.01  | 0.18   | 0.43   | 0.05  | 5.80  | 1.05 | 2.79 | 0.64     |
| V                                    | 8       | 0.15         | 8.92  | 4.36      | 1.82 | 2.65 | 0.02  | 0.20   | 0.30   | 0.11  | 4.92  | 1.35 | 1.71 | 0.55     |
| V                                    | 9       | 0.13         | 7.01  | 4.10      | 0.48 | 2.36 | 0.02  | 0.07   | 0.34   | 0.09  | 4.43  | 0.31 | 1.52 | 0.63     |
| V                                    | 10      | 0.07         | 6.73  | 3.54      | 1.08 | 2.36 | 0.01  | 0.16   | 0.35   | 0.04  | 3.86  | 0.72 | 1.61 | 0.57     |
| V                                    | 11      | 0.10         | 7.80  | 3.15      | 0.66 | 1.97 | 0.01  | 0.08   | 0.25   | 0.07  | 3.57  | 0.50 | 1.42 | 0.46     |
| V                                    | 12      | 0.23         | 8.54  | 5.22      | 0.14 | 2.95 | 0.03  | 0.02   | 0.35   | 0.18  | 5.49  | 0.11 | 2.17 | 0.64     |
| V                                    | 13      | 0.09         | 7.42  | 2.70      | 0.40 | 1.34 | 0.01  | 0.05   | 0.18   | 0.06  | 3.17  | 0.30 | 0.87 | 0.43     |
| V                                    | 14      | 0.13         | 8.75  | 4.48      | 1.96 | 2.91 | 0.01  | 0.22   | 0.33   | 0.10  | 4.89  | 1.38 | 1.93 | 0.56     |
| V                                    | 15      | 0.13         | 9.38  | 4.48      | 1.93 | 2.67 | 0.01  | 0.21   | 0.28   | 0.09  | 5.07  | 1.45 | 1.67 | 0.54     |
| H                                    | 16      | 0.08         | 8.66  | 5.14      | 0.18 | 3.34 | 0.01  | 0.02   | 0.39   | 0.05  | 5.56  | 0.13 | 2.45 | 0.64     |
| H                                    | 17      | 0.10         | 7.59  | 3.71      | 1.43 | 2.50 | 0.01  | 0.19   | 0.33   | 0.06  | 4.19  | 1.11 | 1.73 | 0.55     |
| H                                    | 18      | 0.09         | 9.71  | 5.77      | 0.50 | 3.91 | 0.01  | 0.05   | 0.40   | 0.04  | 6.25  | 0.38 | 2.87 | 0.64     |
| H                                    | 19      | 0.14         | 10.27 | 6.13      | 0.63 | 3.18 | 0.01  | 0.06   | 0.31   | 0.09  | 6.56  | 0.42 | 2.41 | 0.64     |
| H                                    | 20      | 0.15         | 10.15 | 4.22      | 2.27 | 1.59 | 0.01  | 0.22   | 0.16   | 0.08  | 4.81  | 1.81 | 0.93 | 0.47     |
| H                                    | 21      | 0.09         | 10.07 | 5.18      | 0.62 | 4.06 | 0.01  | 0.06   | 0.40   | 0.06  | 5.77  | 0.42 | 2.81 | 0.57     |
| H                                    | 22      | 0.17         | 9.56  | 3.63      | 2.12 | 1.23 | 0.02  | 0.22   | 0.13   | 0.08  | 4.30  | 1.73 | 0.66 | 0.45     |
| H                                    | 23      | 0.13         | 8.78  | 4.69      | 1.40 | 2.10 | 0.01  | 0.16   | 0.24   | 0.08  | 5.14  | 1.00 | 1.49 | 0.59     |
| H                                    | 24      | 0.16         | 11.00 | 5.10      | 2.50 | 1.96 | 0.01  | 0.23   | 0.18   | 0.08  | 5.70  | 1.96 | 1.18 | 0.52     |
| H                                    | 25      | 0.08         | 10.07 | 5.83      | 0.16 | 4.63 | 0.01  | 0.02   | 0.46   | 0.04  | 6.30  | 0.11 | 3.56 | 0.63     |
| H                                    | 26      | 0.07         | 8.19  | 4.51      | 0.38 | 3.78 | 0.01  | 0.05   | 0.46   | 0.03  | 4.85  | 0.29 | 2.88 | 0.59     |
| H                                    | 27      | 0.08         | 7.97  | 3.69      | 0.85 | 2.88 | 0.01  | 0.11   | 0.36   | 0.05  | 4.17  | 0.64 | 1.76 | 0.52     |
| H                                    | 28      | 0.08         | 9.59  | 5.62      | 0.68 | 4.19 | 0.01  | 0.07   | 0.44   | 0.04  | 6.11  | 0.52 | 3.20 | 0.64     |
| H                                    | 29      | 0.09         | 9.37  | 3.75      | 0.44 | 3.35 | 0.01  | 0.05   | 0.36   | 0.05  | 4.51  | 0.25 | 2.05 | 0.48     |
| H                                    | 30      | 0.14         | 10.83 | 5.30      | 2.26 | 2.09 | 0.01  | 0.21   | 0.19   | 0.07  | 5.88  | 1.72 | 1.29 | 0.54     |
| H                                    | 31      | 0.17         | 10.48 | 4.68      | 2.39 | 1.69 | 0.02  | 0.23   | 0.16   | 0.08  | 5.33  | 1.91 | 0.95 | 0.51     |
| H+V                                  | 32      | 0.35         | 20.20 | 12.90     | 0.52 | 7.78 | 0.02  | 0.03   | 0.39   | 0.22  | 13.42 | 0.34 | 5.13 | 0.66     |
| H+V                                  | 33      | 0.32         | 19.77 | 8.85      | 4.61 | 5.78 | 0.02  | 0.23   | 0.29   | 0.17  | 10.01 | 3.54 | 3.64 | 0.51     |
| H+V                                  | 34      | 0.37         | 21.06 | 13.14     | 0.82 | 8.81 | 0.02  | 0.04   | 0.42   | 0.25  | 13.92 | 0.62 | 6.41 | 0.66     |

|     |    |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| H+V | 35 | 0.25 | 20.57 | 12.23 | 2.17 | 8.28 | 0.01 | 0.11 | 0.40 | 0.16 | 12.81 | 1.54 | 5.84 | 0.62 |
| H+V | 36 | 0.48 | 25.57 | 12.72 | 6.78 | 7.66 | 0.02 | 0.27 | 0.30 | 0.23 | 13.98 | 5.33 | 4.58 | 0.55 |
| H+V | 37 | 0.29 | 26.20 | 13.03 | 1.23 | 8.56 | 0.01 | 0.05 | 0.33 | 0.16 | 14.37 | 0.76 | 5.62 | 0.55 |
| H+V | 38 | 0.56 | 24.68 | 10.91 | 6.70 | 6.03 | 0.02 | 0.27 | 0.24 | 0.27 | 12.50 | 5.48 | 3.27 | 0.51 |
| H+V | 39 | 0.30 | 21.10 | 13.30 | 3.83 | 8.88 | 0.01 | 0.18 | 0.42 | 0.17 | 13.92 | 2.53 | 6.30 | 0.66 |
| H+V | 40 | 0.42 | 24.81 | 12.87 | 6.34 | 7.41 | 0.02 | 0.26 | 0.30 | 0.20 | 14.03 | 4.83 | 4.50 | 0.57 |
| H+V | 41 | 0.30 | 20.05 | 12.19 | 0.78 | 9.14 | 0.01 | 0.04 | 0.46 | 0.18 | 12.77 | 0.51 | 6.51 | 0.64 |
| H+V | 42 | 0.16 | 18.10 | 8.99  | 2.02 | 6.84 | 0.01 | 0.11 | 0.38 | 0.09 | 9.62  | 1.38 | 5.09 | 0.53 |
| H+V | 43 | 0.17 | 19.54 | 7.62  | 1.72 | 5.77 | 0.01 | 0.09 | 0.30 | 0.12 | 8.78  | 1.30 | 3.11 | 0.45 |
| H+V | 44 | 0.44 | 20.72 | 13.51 | 0.92 | 9.59 | 0.02 | 0.04 | 0.46 | 0.31 | 14.13 | 0.69 | 6.83 | 0.68 |
| H+V | 45 | 0.24 | 21.80 | 7.86  | 1.14 | 6.57 | 0.01 | 0.05 | 0.30 | 0.14 | 9.55  | 0.81 | 3.72 | 0.44 |
| H+V | 46 | 0.39 | 24.53 | 13.36 | 5.97 | 8.06 | 0.02 | 0.24 | 0.33 | 0.19 | 14.45 | 4.34 | 5.10 | 0.59 |
| H+V | 47 | 0.45 | 25.34 | 12.71 | 6.55 | 7.00 | 0.02 | 0.26 | 0.28 | 0.21 | 14.09 | 5.06 | 4.05 | 0.56 |
| V   | 48 | 0.12 | 7.78  | 4.40  | 0.17 | 2.77 | 0.02 | 0.02 | 0.36 | 0.09 | 4.76  | 0.10 | 2.00 | 0.61 |
| V   | 49 | 0.10 | 7.93  | 3.36  | 1.63 | 1.97 | 0.01 | 0.21 | 0.25 | 0.06 | 3.84  | 1.25 | 1.27 | 0.48 |
| V   | 50 | 0.16 | 7.37  | 4.29  | 0.15 | 2.41 | 0.02 | 0.02 | 0.33 | 0.12 | 4.61  | 0.11 | 1.74 | 0.63 |
| V   | 51 | 0.05 | 7.38  | 4.10  | 0.95 | 2.92 | 0.01 | 0.13 | 0.40 | 0.03 | 4.41  | 0.56 | 2.08 | 0.60 |
| V   | 52 | 0.10 | 8.51  | 4.04  | 1.96 | 2.25 | 0.01 | 0.23 | 0.26 | 0.07 | 4.58  | 1.53 | 1.35 | 0.54 |
| V   | 53 | 0.14 | 8.06  | 4.03  | 0.41 | 1.81 | 0.02 | 0.05 | 0.22 | 0.09 | 4.38  | 0.27 | 1.23 | 0.54 |
| V   | 54 | 0.12 | 7.81  | 3.33  | 1.88 | 1.65 | 0.02 | 0.24 | 0.21 | 0.07 | 3.86  | 1.51 | 0.91 | 0.49 |
| V   | 55 | 0.06 | 7.99  | 4.67  | 1.50 | 2.93 | 0.01 | 0.19 | 0.37 | 0.03 | 5.04  | 1.00 | 2.02 | 0.63 |
| V   | 56 | 0.13 | 8.00  | 3.83  | 1.70 | 1.90 | 0.02 | 0.21 | 0.24 | 0.09 | 4.34  | 1.29 | 1.11 | 0.54 |
| V   | 57 | 0.13 | 7.14  | 4.24  | 0.25 | 2.33 | 0.02 | 0.04 | 0.33 | 0.09 | 4.56  | 0.16 | 1.71 | 0.64 |
| V   | 58 | 0.05 | 6.98  | 3.63  | 0.94 | 2.21 | 0.01 | 0.13 | 0.32 | 0.03 | 4.01  | 0.63 | 1.55 | 0.57 |
| V   | 59 | 0.10 | 6.79  | 3.20  | 0.70 | 1.74 | 0.01 | 0.10 | 0.26 | 0.07 | 3.57  | 0.54 | 1.25 | 0.53 |
| V   | 60 | 0.18 | 7.85  | 4.78  | 0.14 | 2.66 | 0.02 | 0.02 | 0.34 | 0.14 | 5.07  | 0.11 | 1.96 | 0.65 |
| V   | 61 | 0.09 | 6.84  | 2.54  | 0.29 | 1.05 | 0.01 | 0.04 | 0.15 | 0.05 | 2.89  | 0.21 | 0.61 | 0.42 |
| V   | 62 | 0.10 | 7.96  | 3.93  | 1.83 | 2.20 | 0.01 | 0.23 | 0.28 | 0.07 | 4.40  | 1.32 | 1.34 | 0.55 |
| V   | 63 | 0.13 | 8.00  | 3.83  | 1.70 | 1.90 | 0.02 | 0.21 | 0.24 | 0.09 | 4.34  | 1.29 | 1.11 | 0.54 |
| H   | 64 | 0.07 | 7.92  | 4.55  | 0.16 | 2.98 | 0.01 | 0.02 | 0.38 | 0.05 | 4.93  | 0.11 | 2.21 | 0.62 |
| H   | 65 | 0.08 | 7.06  | 3.03  | 1.07 | 1.90 | 0.01 | 0.15 | 0.27 | 0.05 | 3.39  | 0.82 | 1.20 | 0.48 |
| H   | 66 | 0.07 | 7.93  | 4.30  | 0.54 | 3.04 | 0.01 | 0.07 | 0.38 | 0.03 | 4.75  | 0.44 | 2.25 | 0.60 |
| H   | 67 | 0.12 | 8.35  | 4.75  | 0.67 | 2.42 | 0.01 | 0.08 | 0.29 | 0.07 | 5.11  | 0.45 | 1.82 | 0.61 |
| H   | 68 | 0.12 | 8.25  | 3.25  | 1.75 | 1.21 | 0.01 | 0.21 | 0.15 | 0.06 | 3.73  | 1.40 | 0.76 | 0.45 |
| H   | 69 | 0.07 | 8.41  | 3.74  | 0.63 | 3.02 | 0.01 | 0.07 | 0.36 | 0.05 | 4.34  | 0.40 | 2.07 | 0.52 |
| H   | 70 | 0.14 | 8.08  | 3.07  | 1.77 | 1.03 | 0.02 | 0.22 | 0.13 | 0.07 | 3.60  | 1.45 | 0.61 | 0.45 |
| H   | 71 | 0.11 | 7.90  | 3.95  | 1.08 | 1.85 | 0.01 | 0.14 | 0.23 | 0.07 | 4.37  | 0.80 | 1.30 | 0.55 |
| H   | 72 | 0.13 | 8.70  | 3.91  | 1.91 | 1.43 | 0.01 | 0.22 | 0.16 | 0.07 | 4.41  | 1.51 | 0.90 | 0.51 |
| H   | 73 | 0.07 | 8.59  | 4.89  | 0.20 | 3.91 | 0.01 | 0.02 | 0.46 | 0.03 | 5.32  | 0.15 | 2.93 | 0.62 |
| H   | 74 | 0.05 | 6.99  | 3.36  | 0.25 | 2.86 | 0.01 | 0.04 | 0.41 | 0.03 | 3.75  | 0.19 | 2.11 | 0.54 |
| H   | 75 | 0.08 | 5.86  | 2.27  | 0.74 | 1.70 | 0.01 | 0.13 | 0.29 | 0.05 | 2.67  | 0.56 | 0.97 | 0.46 |
| H   | 76 | 0.07 | 7.86  | 4.35  | 0.65 | 3.37 | 0.01 | 0.08 | 0.43 | 0.03 | 4.80  | 0.52 | 2.52 | 0.61 |

|     |     |      |       |       |      |      |      |      |      |      |       |      |      |      |
|-----|-----|------|-------|-------|------|------|------|------|------|------|-------|------|------|------|
| H   | 77  | 0.07 | 7.63  | 3.21  | 0.40 | 2.62 | 0.01 | 0.05 | 0.34 | 0.04 | 3.81  | 0.23 | 1.65 | 0.50 |
| H   | 78  | 0.12 | 8.65  | 4.23  | 1.71 | 1.64 | 0.01 | 0.20 | 0.19 | 0.06 | 4.69  | 1.32 | 1.08 | 0.54 |
| H   | 79  | 0.13 | 8.70  | 3.91  | 1.91 | 1.43 | 0.01 | 0.22 | 0.16 | 0.07 | 4.41  | 1.51 | 0.90 | 0.51 |
| H+V | 80  | 0.30 | 17.66 | 10.48 | 0.43 | 6.27 | 0.02 | 0.02 | 0.36 | 0.19 | 10.96 | 0.28 | 4.35 | 0.62 |
| H+V | 81  | 0.25 | 17.26 | 6.99  | 3.58 | 3.77 | 0.01 | 0.21 | 0.22 | 0.15 | 7.89  | 2.74 | 2.32 | 0.46 |
| H+V | 82  | 0.33 | 17.36 | 10.67 | 0.97 | 7.40 | 0.02 | 0.06 | 0.43 | 0.20 | 11.41 | 0.79 | 5.39 | 0.66 |
| H+V | 83  | 0.20 | 17.59 | 10.56 | 1.97 | 6.91 | 0.01 | 0.11 | 0.39 | 0.12 | 10.99 | 1.36 | 4.79 | 0.62 |
| H+V | 84  | 0.39 | 21.03 | 9.92  | 5.47 | 5.25 | 0.02 | 0.26 | 0.25 | 0.19 | 11.08 | 4.29 | 3.07 | 0.53 |
| H+V | 85  | 0.32 | 21.57 | 10.43 | 1.22 | 7.07 | 0.01 | 0.06 | 0.33 | 0.17 | 11.61 | 0.83 | 4.68 | 0.54 |
| H+V | 86  | 0.45 | 20.74 | 8.81  | 5.52 | 4.33 | 0.02 | 0.27 | 0.21 | 0.23 | 10.20 | 4.45 | 2.36 | 0.49 |
| H+V | 87  | 0.22 | 18.12 | 10.74 | 3.17 | 6.57 | 0.01 | 0.17 | 0.36 | 0.12 | 11.39 | 2.14 | 4.53 | 0.63 |
| H+V | 88  | 0.36 | 21.20 | 10.26 | 5.26 | 4.98 | 0.02 | 0.25 | 0.23 | 0.18 | 11.47 | 4.04 | 2.87 | 0.54 |
| H+V | 89  | 0.28 | 18.53 | 11.21 | 0.46 | 8.36 | 0.02 | 0.02 | 0.45 | 0.18 | 11.97 | 0.35 | 5.93 | 0.65 |
| H+V | 90  | 0.14 | 16.87 | 8.35  | 1.43 | 5.33 | 0.01 | 0.08 | 0.32 | 0.08 | 9.25  | 0.99 | 3.85 | 0.55 |
| H+V | 91  | 0.19 | 15.80 | 6.13  | 1.86 | 3.49 | 0.01 | 0.12 | 0.22 | 0.13 | 7.09  | 1.46 | 2.13 | 0.45 |
| H+V | 92  | 0.37 | 17.79 | 11.25 | 0.98 | 8.08 | 0.02 | 0.06 | 0.45 | 0.24 | 11.86 | 0.77 | 5.71 | 0.67 |
| H+V | 93  | 0.22 | 19.51 | 8.13  | 0.82 | 5.91 | 0.01 | 0.04 | 0.30 | 0.12 | 9.37  | 0.53 | 3.64 | 0.48 |
| H+V | 94  | 0.31 | 20.60 | 10.89 | 4.97 | 5.74 | 0.02 | 0.24 | 0.28 | 0.15 | 11.90 | 3.65 | 3.50 | 0.58 |
| H+V | 95  | 0.36 | 21.20 | 10.26 | 5.26 | 4.98 | 0.02 | 0.25 | 0.23 | 0.18 | 11.47 | 4.04 | 2.87 | 0.54 |
| V   | 96  | 0.07 | 3.38  | 1.99  | 0.13 | 1.08 | 0.02 | 0.04 | 0.32 | 0.05 | 2.11  | 0.08 | 0.73 | 0.62 |
| V   | 97  | 0.07 | 4.52  | 1.56  | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.85  | 0.71 | 0.20 | 0.41 |
| V   | 98  | 0.07 | 3.38  | 1.99  | 0.13 | 1.08 | 0.02 | 0.04 | 0.32 | 0.05 | 2.11  | 0.08 | 0.73 | 0.62 |
| V   | 99  | 0.04 | 4.22  | 1.96  | 1.08 | 0.95 | 0.01 | 0.26 | 0.23 | 0.02 | 2.17  | 0.79 | 0.58 | 0.51 |
| V   | 100 | 0.07 | 4.52  | 1.56  | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.85  | 0.71 | 0.20 | 0.41 |
| V   | 101 | 0.09 | 4.11  | 1.62  | 0.54 | 0.57 | 0.02 | 0.13 | 0.14 | 0.06 | 1.84  | 0.41 | 0.37 | 0.45 |
| V   | 102 | 0.07 | 4.52  | 1.56  | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.85  | 0.71 | 0.20 | 0.41 |
| V   | 103 | 0.05 | 4.54  | 1.72  | 1.16 | 0.64 | 0.01 | 0.26 | 0.14 | 0.03 | 1.99  | 0.87 | 0.36 | 0.44 |
| V   | 104 | 0.07 | 4.52  | 1.56  | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.85  | 0.71 | 0.20 | 0.41 |
| V   | 105 | 0.07 | 3.38  | 1.99  | 0.13 | 1.08 | 0.02 | 0.04 | 0.32 | 0.05 | 2.11  | 0.08 | 0.73 | 0.62 |
| V   | 106 | 0.03 | 3.78  | 2.05  | 0.74 | 1.13 | 0.01 | 0.20 | 0.30 | 0.02 | 2.22  | 0.52 | 0.73 | 0.59 |
| V   | 107 | 0.09 | 4.11  | 1.62  | 0.54 | 0.57 | 0.02 | 0.13 | 0.14 | 0.06 | 1.84  | 0.41 | 0.37 | 0.45 |
| V   | 108 | 0.09 | 3.66  | 1.89  | 0.22 | 0.85 | 0.02 | 0.06 | 0.23 | 0.06 | 2.02  | 0.16 | 0.57 | 0.55 |
| V   | 109 | 0.09 | 3.66  | 1.89  | 0.22 | 0.85 | 0.02 | 0.06 | 0.23 | 0.06 | 2.02  | 0.16 | 0.57 | 0.55 |
| V   | 110 | 0.05 | 4.54  | 1.72  | 1.16 | 0.64 | 0.01 | 0.26 | 0.14 | 0.03 | 1.99  | 0.87 | 0.36 | 0.44 |
| V   | 111 | 0.07 | 4.52  | 1.56  | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.85  | 0.71 | 0.20 | 0.41 |
| V   | 112 | 0.07 | 4.52  | 1.56  | 0.92 | 0.41 | 0.02 | 0.20 | 0.09 | 0.05 | 1.85  | 0.71 | 0.20 | 0.41 |
| V   | 113 | 0.05 | 3.41  | 2.01  | 0.34 | 1.18 | 0.01 | 0.10 | 0.35 | 0.03 | 2.14  | 0.22 | 0.79 | 0.63 |
| H   | 114 | 0.03 | 3.86  | 2.05  | 0.20 | 1.21 | 0.01 | 0.05 | 0.31 | 0.02 | 2.27  | 0.15 | 0.84 | 0.59 |
| H   | 115 | 0.07 | 4.28  | 1.47  | 0.77 | 0.62 | 0.02 | 0.18 | 0.14 | 0.04 | 1.76  | 0.58 | 0.42 | 0.41 |
| H   | 116 | 0.03 | 4.22  | 1.95  | 0.22 | 1.37 | 0.01 | 0.05 | 0.32 | 0.02 | 2.20  | 0.17 | 0.88 | 0.52 |
| H   | 117 | 0.04 | 3.96  | 1.98  | 0.43 | 1.01 | 0.01 | 0.11 | 0.26 | 0.03 | 2.23  | 0.32 | 0.73 | 0.56 |
| H   | 118 | 0.07 | 4.28  | 1.47  | 0.77 | 0.62 | 0.02 | 0.18 | 0.14 | 0.04 | 1.76  | 0.58 | 0.42 | 0.41 |

|     |     |      |       |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| H   | 119 | 0.06 | 4.26  | 1.17 | 0.69 | 0.71 | 0.01 | 0.16 | 0.17 | 0.04 | 1.50 | 0.52 | 0.45 | 0.35 |
| H   | 120 | 0.07 | 4.28  | 1.47 | 0.77 | 0.62 | 0.02 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 121 | 0.06 | 4.19  | 1.82 | 0.66 | 0.85 | 0.01 | 0.16 | 0.20 | 0.04 | 2.10 | 0.50 | 0.60 | 0.50 |
| H   | 122 | 0.07 | 4.28  | 1.47 | 0.77 | 0.62 | 0.02 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 123 | 0.03 | 4.22  | 1.95 | 0.22 | 1.37 | 0.01 | 0.05 | 0.32 | 0.02 | 2.20 | 0.17 | 0.88 | 0.52 |
| H   | 124 | 0.03 | 3.86  | 2.05 | 0.20 | 1.21 | 0.01 | 0.05 | 0.31 | 0.02 | 2.27 | 0.15 | 0.84 | 0.59 |
| H   | 125 | 0.06 | 4.26  | 1.17 | 0.69 | 0.71 | 0.01 | 0.16 | 0.17 | 0.04 | 1.50 | 0.52 | 0.45 | 0.35 |
| H   | 126 | 0.04 | 4.29  | 1.61 | 0.46 | 1.11 | 0.01 | 0.11 | 0.26 | 0.03 | 1.84 | 0.35 | 0.70 | 0.43 |
| H   | 127 | 0.04 | 4.29  | 1.61 | 0.46 | 1.11 | 0.01 | 0.11 | 0.26 | 0.03 | 1.84 | 0.35 | 0.70 | 0.43 |
| H   | 128 | 0.06 | 4.19  | 1.82 | 0.66 | 0.85 | 0.01 | 0.16 | 0.20 | 0.04 | 2.10 | 0.50 | 0.60 | 0.50 |
| H   | 129 | 0.07 | 4.28  | 1.47 | 0.77 | 0.62 | 0.02 | 0.18 | 0.14 | 0.04 | 1.76 | 0.58 | 0.42 | 0.41 |
| H   | 130 | 0.06 | 4.26  | 1.17 | 0.69 | 0.71 | 0.01 | 0.16 | 0.17 | 0.04 | 1.50 | 0.52 | 0.45 | 0.35 |
| H   | 131 | 0.03 | 3.86  | 2.05 | 0.20 | 1.21 | 0.01 | 0.05 | 0.31 | 0.02 | 2.27 | 0.15 | 0.84 | 0.59 |
| H+V | 132 | 0.11 | 9.69  | 5.41 | 0.58 | 3.00 | 0.01 | 0.06 | 0.31 | 0.07 | 5.81 | 0.40 | 1.97 | 0.60 |
| H+V | 133 | 0.16 | 9.74  | 3.53 | 2.07 | 1.26 | 0.02 | 0.21 | 0.13 | 0.08 | 4.18 | 1.60 | 0.78 | 0.43 |
| H+V | 134 | 0.13 | 9.48  | 5.16 | 0.37 | 3.11 | 0.01 | 0.04 | 0.33 | 0.08 | 5.60 | 0.27 | 2.00 | 0.59 |
| H+V | 135 | 0.12 | 9.88  | 4.89 | 1.91 | 2.53 | 0.01 | 0.19 | 0.26 | 0.06 | 5.38 | 1.45 | 1.65 | 0.54 |
| H+V | 136 | 0.16 | 9.74  | 3.53 | 2.07 | 1.26 | 0.02 | 0.21 | 0.13 | 0.08 | 4.18 | 1.60 | 0.78 | 0.43 |
| H+V | 137 | 0.15 | 9.54  | 3.62 | 1.47 | 1.69 | 0.02 | 0.15 | 0.18 | 0.09 | 4.06 | 1.13 | 1.01 | 0.43 |
| H+V | 138 | 0.16 | 9.74  | 3.53 | 2.07 | 1.26 | 0.02 | 0.21 | 0.13 | 0.08 | 4.18 | 1.60 | 0.78 | 0.43 |
| H+V | 139 | 0.16 | 9.89  | 4.20 | 2.25 | 1.97 | 0.02 | 0.23 | 0.20 | 0.08 | 4.76 | 1.74 | 1.27 | 0.48 |
| H+V | 140 | 0.16 | 9.74  | 3.53 | 2.07 | 1.26 | 0.02 | 0.21 | 0.13 | 0.08 | 4.18 | 1.60 | 0.78 | 0.43 |
| H+V | 141 | 0.13 | 9.48  | 5.16 | 0.37 | 3.11 | 0.01 | 0.04 | 0.33 | 0.08 | 5.60 | 0.27 | 2.00 | 0.59 |
| H+V | 142 | 0.07 | 9.63  | 5.23 | 1.23 | 2.93 | 0.01 | 0.13 | 0.30 | 0.04 | 5.67 | 0.92 | 1.90 | 0.59 |
| H+V | 143 | 0.15 | 9.54  | 3.62 | 1.47 | 1.69 | 0.02 | 0.15 | 0.18 | 0.09 | 4.06 | 1.13 | 1.01 | 0.43 |
| H+V | 144 | 0.15 | 9.44  | 4.58 | 0.79 | 2.58 | 0.02 | 0.08 | 0.27 | 0.10 | 5.05 | 0.59 | 1.58 | 0.53 |
| H+V | 145 | 0.15 | 9.44  | 4.58 | 0.79 | 2.58 | 0.02 | 0.08 | 0.27 | 0.10 | 5.05 | 0.59 | 1.58 | 0.53 |
| H+V | 146 | 0.16 | 9.89  | 4.20 | 2.25 | 1.97 | 0.02 | 0.23 | 0.20 | 0.08 | 4.76 | 1.74 | 1.27 | 0.48 |
| H+V | 147 | 0.16 | 9.74  | 3.53 | 2.07 | 1.26 | 0.02 | 0.21 | 0.13 | 0.08 | 4.18 | 1.60 | 0.78 | 0.43 |
| H+V | 148 | 0.15 | 10.16 | 3.38 | 1.99 | 1.39 | 0.01 | 0.20 | 0.14 | 0.08 | 4.12 | 1.53 | 0.85 | 0.41 |
| H+V | 149 | 0.11 | 8.93  | 3.76 | 1.32 | 1.72 | 0.01 | 0.15 | 0.19 | 0.07 | 4.31 | 1.07 | 1.15 | 0.48 |
| V   | 150 | 0.02 | 1.96  | 0.86 | 0.35 | 0.33 | 0.01 | 0.18 | 0.17 | 0.02 | 0.97 | 0.24 | 0.20 | 0.49 |
| V   | 151 | 0.03 | 2.18  | 0.97 | 0.31 | 0.45 | 0.01 | 0.14 | 0.21 | 0.02 | 1.10 | 0.24 | 0.28 | 0.50 |
| H   | 152 | 0.02 | 2.21  | 0.81 | 0.25 | 0.41 | 0.01 | 0.11 | 0.19 | 0.02 | 0.97 | 0.18 | 0.26 | 0.44 |
| H   | 153 | 0.02 | 2.11  | 0.85 | 0.20 | 0.45 | 0.01 | 0.09 | 0.21 | 0.01 | 0.98 | 0.16 | 0.27 | 0.46 |
| H+V | 154 | 0.05 | 5.07  | 2.08 | 0.72 | 0.94 | 0.01 | 0.14 | 0.19 | 0.03 | 2.41 | 0.51 | 0.58 | 0.48 |
| H+V | 155 | 0.06 | 5.46  | 2.44 | 0.68 | 1.09 | 0.01 | 0.12 | 0.20 | 0.03 | 2.72 | 0.55 | 0.67 | 0.50 |

### 3. References

[1] [ANSYS HFSS for Antenna Simulation](#)