

PKDB_A2764_XXXXXX

Table C.2 - Contribution factors from Qualcomm MG script and from CST Studio Suite for selected beams, and normalized combined PD verification, for device with 3 antenna modules

Worse-case surface					S1 (front surface)	
Worst-case location (x,y,z) in meters					(-0.06233, 0.09850, 0.00200)	
<i>PD_design_target</i> (W/m ²)					4.5	
Value printed by MG Script					Value by EM tool	
Module #	Beam ID	<i>c(i,j)</i> , <i>i</i> =beam ID, <i>j</i> =module #	Backoff factor <i>b_j</i>	<i>verification.sim.power_{limit}</i> (before backoffs) [dBm]	Simulated 4cm ² PD at (-0.06233, 0.09850, 0.00200) with <i>verification.sim.power_{limit}</i> on S1 (W/m ²)	<i>c_{simulated}(i,j)</i>
0	134	0.0032	0.9772	8.59	0.0143	0.0143/4.5 = 0.0032
1	169	0.0031	0.9772	2.73	0.0140	0.0140/4.5 = 0.0031
2	46	1.0000	0.9772	-0.93	4.5020	4.5020/4.5 = 1.0004
Verify 1	<i>c(i,j)</i> = <i>c_{simulated}(i,j)</i> , <i>i</i> = 134, 169, 46 ; <i>j</i> = 0, 1, 2					

Table C.5 - Contribution factors from Qualcomm MG script and from HFSS for selected beams, and normalized combined PD verification, for device with 3 antenna modules

Worse-case surface					S5 (top surface)	
Worst-case location (x,y,z) in meters					(-0.14233, -0.07250, -0.00244)	
<i>PD_design_target</i> (W/m ²)					4.5	
Value printed by MG Script					Value by EM tool	
Module #	Beam ID	<i>c(i,j)</i> , <i>i</i> =beam ID, <i>j</i> =module #	Backoff factor <i>b_j</i>	<i>verification.sim.power_{limit}</i> (before backoffs) [dBm]	Simulated 4cm ² PD at (-0.14233, -0.07250, -0.00244) with <i>verification.sim.power_{limit}</i> on S5 (W/m ²)	<i>c_{simulated}(i,j)</i>

0	9	1.0000	0.9772	5.98	4.5016	$4.5016/4.5 = 1.0003$
1	145	0.0003	0.9772	2.74	0.0014	$0.0014/4.5 = 0.0003$
2	44	0.0063	0.9772	-1.65	0.0282	$0.0282/4.5 = 0.0063$
Verify 1	$c(i,j)=c_{simulated}(i,j), i = 9, 145, 44; j = 0, 1, 2$					

Table C.8 - Contribution factors from Qualcomm MG script and from CST Studio Suite for selected beams, and normalized combined PD verification, for device with 3 antenna modules

Worse-case surface					S5 (top surface)	
Worst-case location (x,y,z) in meters					(-0.14233, -0.08550, -0.00144)	
PD_design_target (W/m ²)					4.5	
Value printed by MG Script					Value by EM tool	
Module #	Beam ID	$c(i,j)$, i =beam ID, j =module #	Backoff factor b_j	$verification.sim.power^{limit}$ (before backoffs) [dBm]	Simulated 4cm ² PD at (-0.14233, -0.08550, -0.00144) with $verification.sim.power^{limit}$ on S5 (W/m ²)	$c_{simulated}(i,j)$
0	0	1.0000	0.9772	4.54	4.4987	$4.4987/4.5 = 0.9997$
1	181	0.0005	0.9772	0.79	0.0021	$0.0021/4.5 = 0.00047$
2	187	0.0090	0.9772	1.51	0.0407	$0.0407/4.5 = 0.0090$
Verify 1	$c(i,j)=c_{simulated}(i,j), i = 0, 181, 187; j = 0, 1, 2$					