

PKDB_A2435_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					S5 (top surface)	
Worst-case location (x,y,z) in meters					(-0.12582, -0.05626, -0.00195)	
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 (-0.12582, -0.05626, -0.00195) with $verification.sim.power_{limit}$ on S5 (W/m ²)	$c_{simulated}(i,j)$
0	14	1.0000	0.9772	4.20	4.4963	4.4963/4.5 = 0.9992
1	168	0.0002	0.9772	2.25	0.000785	0.000785/4.5 = 0.00017
2	24	0.0117	0.9772	4.33	0.0527	0.0527/4.5 = 0.0117
Verify 1	$c(i,j)=c_{simulated}(i,j)$, $i = 14, 168, 24 ; j = 0, 1, 2$					

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					S1 (front surface)	
Worst-case location (x,y,z) in meters					(-0.05882, 0.08174, 0.00200)	
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,	Backoff factor b_j	$verification.sim.power_{limit}$ (before backoffs) [dBm]	Simulated 4cm ² PD at (-0.05882, 0.08174, 0.00200) with	$c_{simulated}(i,j)$

		$j=\text{module \#}$			$verification.sim.power_{limit}$ on S1 (W/m ²)	
0	38	0.0062	0.9772	0.37	0.0281	$0.0281/4.5 = 0.0062$
1	55	0.0005	0.9772	-0.07	0.00205	$0.00205/4.5 = 0.00046$
2	24	1.000	0.9772	0.26	4.4998	$4.4998/4.5 = 0.9999$
Verify 1	$c(i,j)=c_{simulated}(i,j), i = 38, 55, 24; j = 0, 1, 2$					

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					S1 (front surface)	
Worst-case location (x,y,z) in meters					(-0.04982, 0.08074, 0.00200)	
PD_design_target (W/m ²)					4.5	
Value printed by MG Script					Value by EM tool	
Module #	Beam ID	$c(i,j),$ $i=\text{beam ID},$ $j=\text{module \#}$	Backoff factor b_j	$verification.sim.power_{limit}$ (before backoffs) [dBm]	Simulated 4cm ² PD at (-0.04982, 0.08074, 0.00200) with $verification.sim.power_{limit}$ on S1 (W/m ²)	$c_{simulated}(i,j)$
0	166	0.0051	0.9772	-0.07	0.0232	$0.0232/4.5 = 0.0051$
1	146	0.0161	0.9772	4.14	0.0723	$0.0723/4.5 = 0.0161$
2	133	1.0000	0.9772	6.46	4.4974	$4.4974/4.5 = 0.9994$
Verify 1	$c(i,j)=c_{simulated}(i,j), i = 166, 146, 133; j = 0, 1, 2$					