

Tab. 5.2: Comparison of various source types for the two NEEs, $\epsilon_{\text{th}} = 10^{-2}$, (a) NRE with $\epsilon_{\text{th}} = 10^{-4}$, (b) NRE with $\Delta\mu = 0.99$, (c) NEE with $\epsilon_{\text{th}} = 10^{-2}$, (d) NEE with $\Delta\mu = 0.99$.

(a)					
type	N_u	ϵ_{th}	$\epsilon_{\text{th}}/\epsilon_{\text{os}}$	$\epsilon_{\text{w,avg}}$	$\epsilon_{\text{r,max}}$
SH	5	$6.1 \cdot 10^{-3}$	0.64	—	-43.2 dB
DSH	24	$9.9 \cdot 10^{-5}$	0.77	—	-44.6 dB
J	41	$7.8 \cdot 10^{-5}$	0.92	8.5 dB	-48.4 dB
M	32	$9.8 \cdot 10^{-5}$	1.02	2.0 dB	-44.9 dB
JM	32	$8.2 \cdot 10^{-5}$	0.94	0.0 dB	-48.5 dB
CS	32	$9.2 \cdot 10^{-5}$	0.94	-5.8 dB	-48.2 dB
CP	31	$9.6 \cdot 10^{-5}$	0.99	-16.6 dB	-49.4 dB
WF-CP	32	$9.9 \cdot 10^{-5}$	0.98	-21.1 dB	-48.8 dB
(b)					
type	N_u	ϵ_{th}	$\epsilon_{\text{th}}/\epsilon_{\text{os}}$	$\epsilon_{\text{w,avg}}$	$\epsilon_{\text{r,max}}$
SH	16	$5.0 \cdot 10^{-4}$	0.64	—	-43.2 dB
DSH	208	$1.6 \cdot 10^{-7}$	0.12	—	-40.6 dB
J	134	$8.9 \cdot 10^{-5}$	0.62	30.4 dB	-43.6 dB
M	139	$4.4 \cdot 10^{-5}$	0.88	24.1 dB	-42.9 dB
JM	152	$3.8 \cdot 10^{-6}$	0.45	0.0 dB	-43.4 dB
CS	121	$1.9 \cdot 10^{-7}$	0.69	18.1 dB	-43.6 dB
CP	48	$3.2 \cdot 10^{-5}$	0.87	-11.8 dB	-43.0 dB
WF-CP	48	$4.9 \cdot 10^{-5}$	0.87	-11.8 dB	-46.7 dB
(c)					
type	N_u	ϵ_{th}	$\epsilon_{\text{th}}/\epsilon_{\text{os}}$	$\epsilon_{\text{w,avg}}$	$\epsilon_{\text{r,max}}$
SH	2	$6.5 \cdot 10^{-3}$	0.69	—	-45.3 dB
DSH	5	$9.7 \cdot 10^{-5}$	0.97	—	-40.4 dB
J	37	$9.9 \cdot 10^{-5}$	0.99	8.5 dB	-45.1 dB
M	32	$9.6 \cdot 10^{-5}$	0.96	2.0 dB	-45.0 dB
JM	26	$9.7 \cdot 10^{-5}$	0.97	0.0 dB	-48.0 dB
CS	28	$9.8 \cdot 10^{-5}$	0.98	-7.7 dB	-47.2 dB
CP	30	$9.9 \cdot 10^{-5}$	0.99	-21.2 dB	-47.5 dB
WF-CP	30	$9.9 \cdot 10^{-5}$	0.99	-21.6 dB	-47.7 dB
(d)					
type	N_u	ϵ_{th}	$\epsilon_{\text{th}}/\epsilon_{\text{os}}$	$\epsilon_{\text{w,avg}}$	$\epsilon_{\text{r,max}}$
SH	7	$6.4 \cdot 10^{-3}$	0.64	—	-43.3 dB
DSH	14	$8.0 \cdot 10^{-3}$	0.80	—	-45.3 dB
J	45	$8.7 \cdot 10^{-5}$	0.87	8.6 dB	-47.6 dB
M	38	$8.9 \cdot 10^{-5}$	0.89	2.1 dB	-48.3 dB
JM	33	$9.2 \cdot 10^{-5}$	0.92	5.2 dB	-47.6 dB
CS	34	$9.1 \cdot 10^{-5}$	0.91	-3.7 dB	-48.2 dB
CP	35	$9.5 \cdot 10^{-5}$	0.95	-21.3 dB	-47.9 dB
WF-CP	35	$9.5 \cdot 10^{-5}$	0.95	-21.7 dB	-47.7 dB

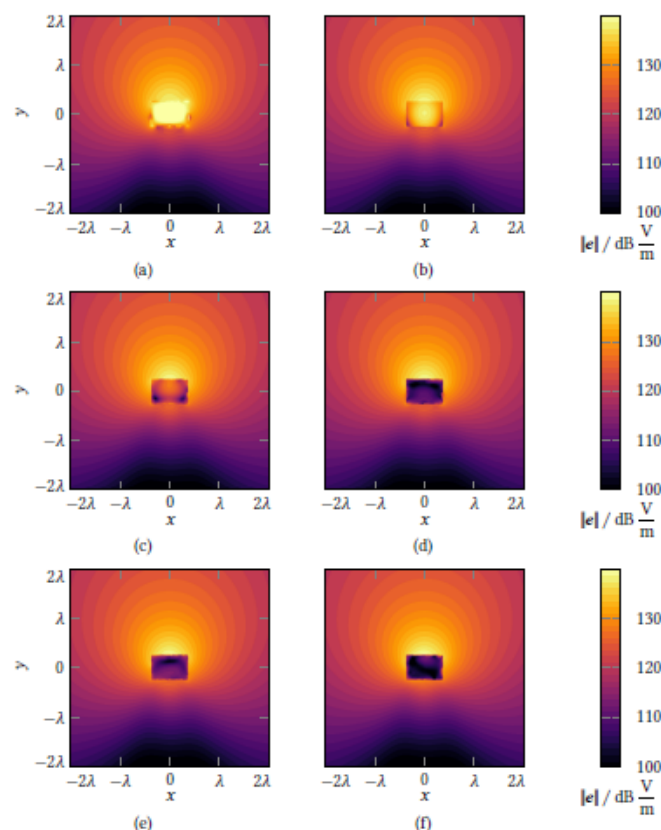


Fig. 5.6: Reconstructed electric field in a cut plane of the (a) J – NEE, (b) JM – NEE, (c) CS – NEE, and (d) CP – NEE solutions with $\epsilon_{\text{th}} = 10^{-2}$ termination criterion as well as (e) SC-MF – NRE ($\xi/\nu = 10^3$) and (f) SC-EF – NRE ($\xi/\nu = 10^3$) solutions with $\epsilon_{\text{th}} = 10^{-4}$ termination criterion. © 2021 IEEE [Kornprobst et al. 2021a].