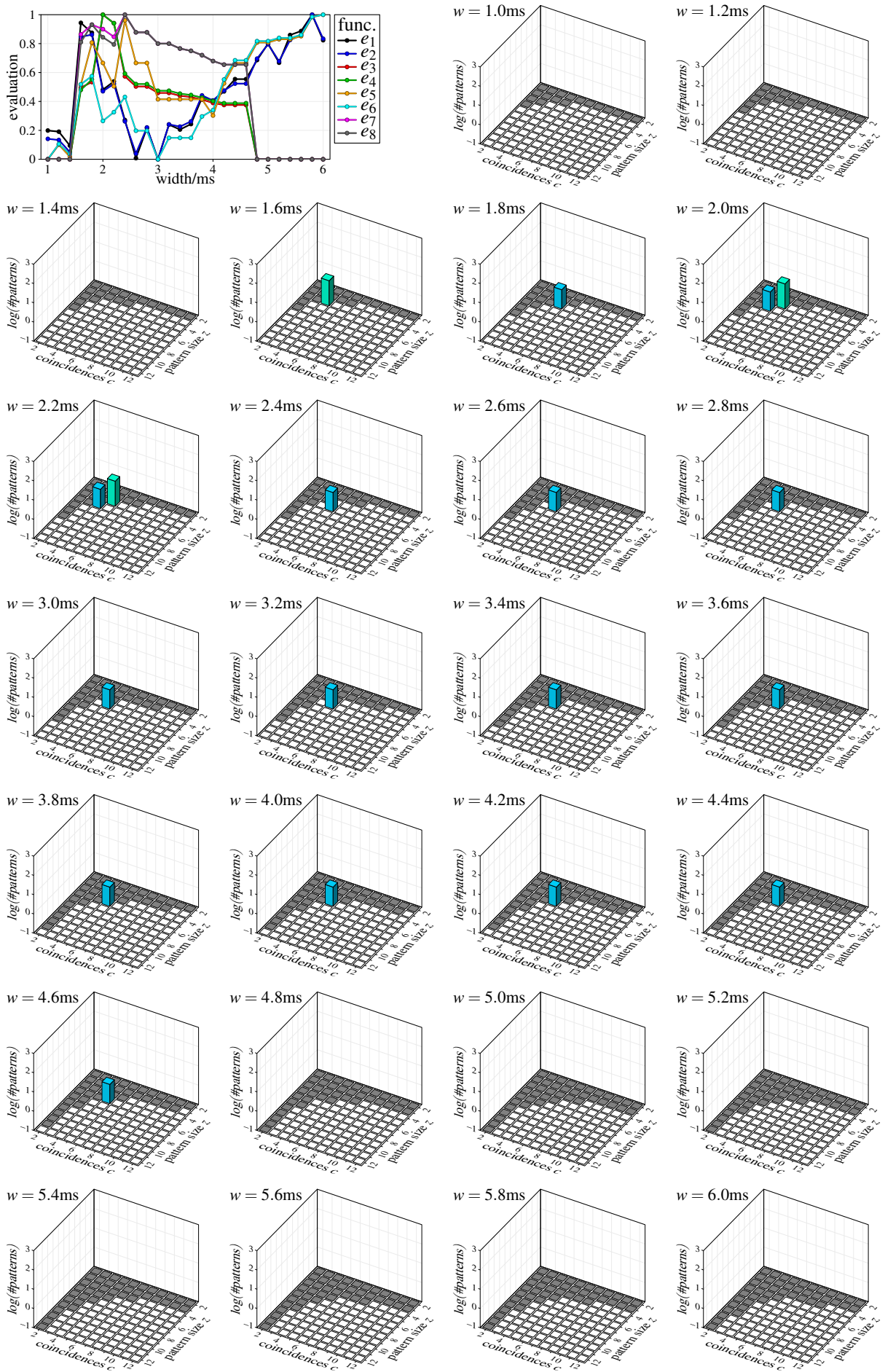
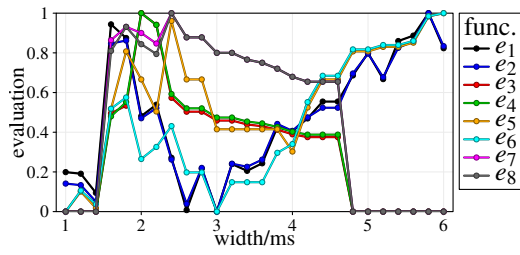


Evaluation Functions

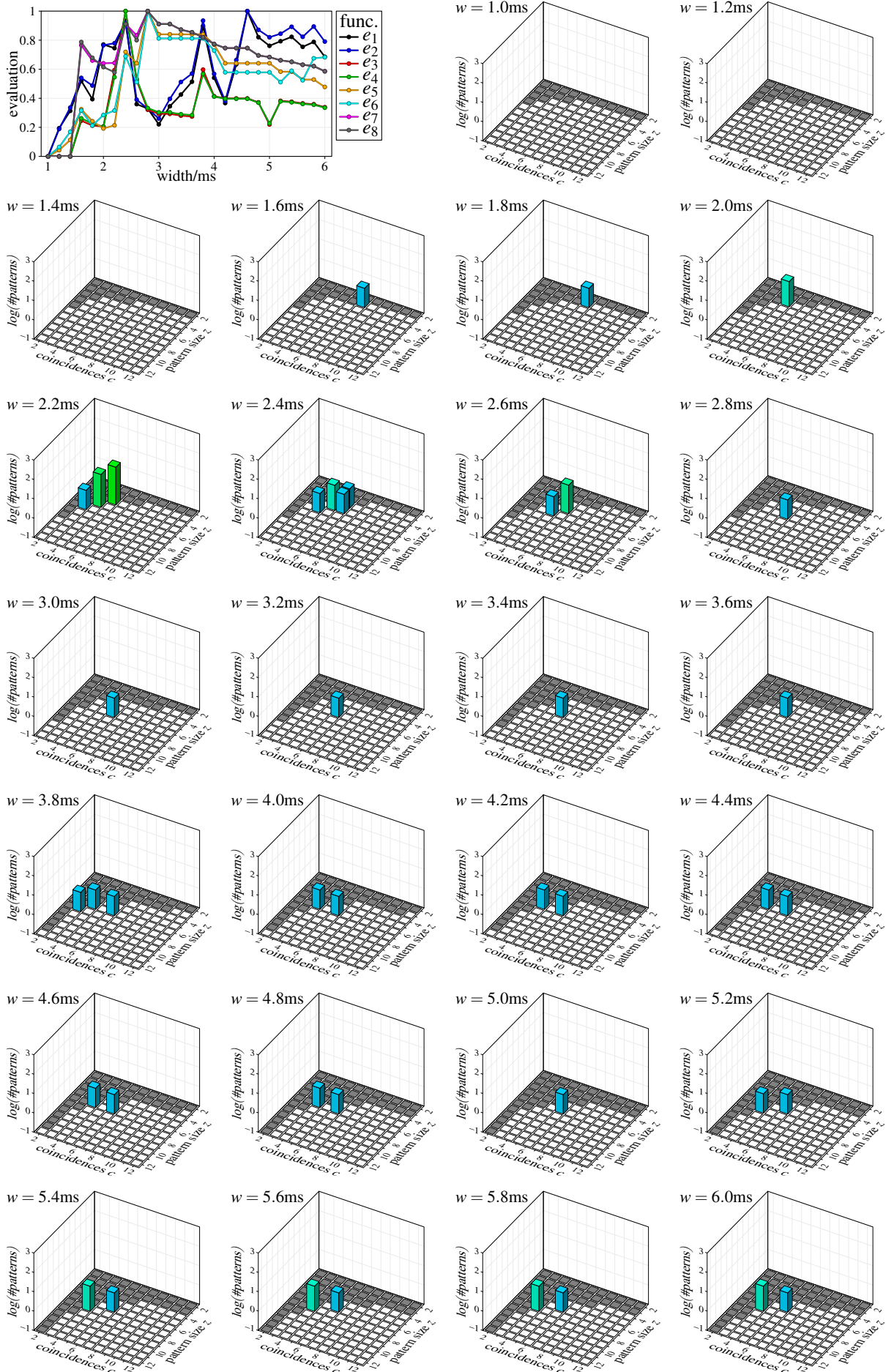
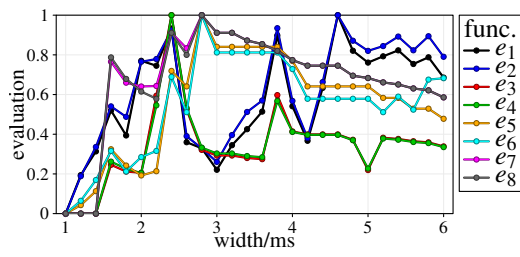
Let $\mathcal{S}_{\text{data}}$ be the set of all pattern signatures $\langle z, c \rangle$ that occur in the actual data and $\mathcal{S}_{\text{surr}}$ the set of all pattern signatures that occur in the surrogate data. (A pattern signature is included in $\mathcal{S}_{\text{surr}}$ if it occurs in at least one surrogate data set.)

$$\begin{aligned} e_1 &= \frac{\sum_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot c}{\sum_{\langle z, c \rangle \in \mathcal{S}_{\text{surr}}} (z-1) \cdot c} & e_5 &= \frac{\max_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot c}{\max_{\langle z, c \rangle \in \mathcal{S}_{\text{surr}}} (z-1) \cdot c} \\ e_2 &= \frac{\sum_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot (c-1)}{\sum_{\langle z, c \rangle \in \mathcal{S}_{\text{surr}}} (z-1) \cdot (c-1)} & e_6 &= \frac{\max_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot (c-1)}{\max_{\langle z, c \rangle \in \mathcal{S}_{\text{surr}}} (z-1) \cdot (c-1)} \\ e_3 &= \frac{\sum_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot c}{|\mathcal{S}_{\text{surr}}|} & e_7 &= \frac{\max_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot c}{|\mathcal{S}_{\text{surr}}|} \\ e_4 &= \frac{\sum_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot (c-1)}{|\mathcal{S}_{\text{surr}}|} & e_8 &= \frac{\max_{\langle z, c \rangle \in \mathcal{S}_{\text{data}}} (z-1) \cdot (c-1)}{|\mathcal{S}_{\text{surr}}|} \end{aligned}$$

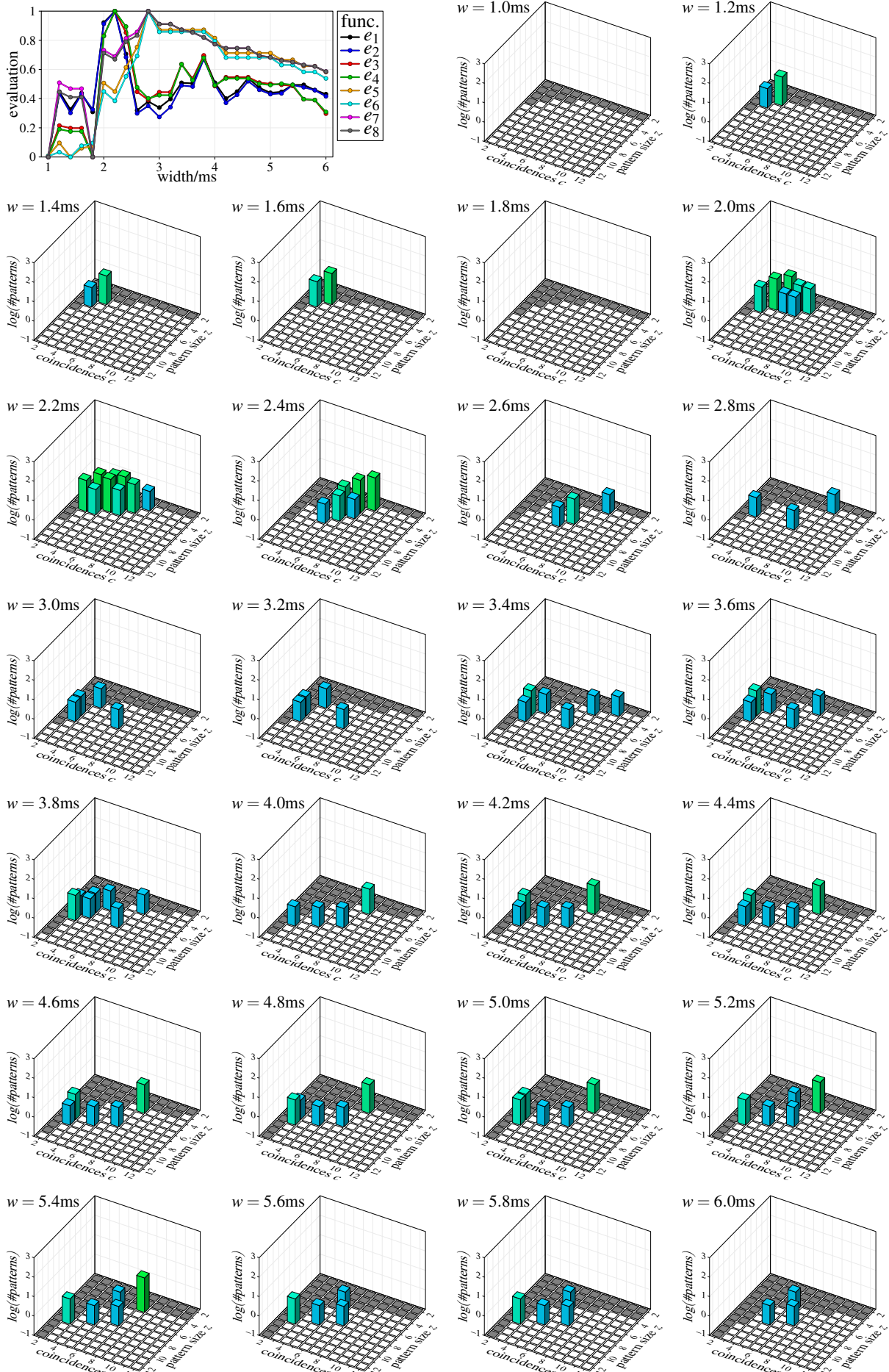
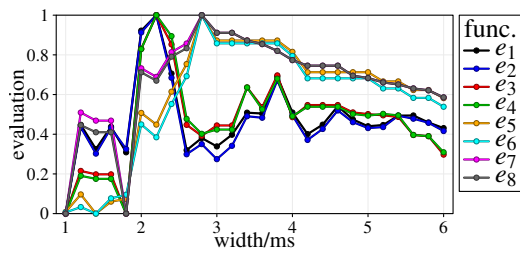
3ms jitter, $z = 5$ neurons, $c = 5$ coincidences, filtered



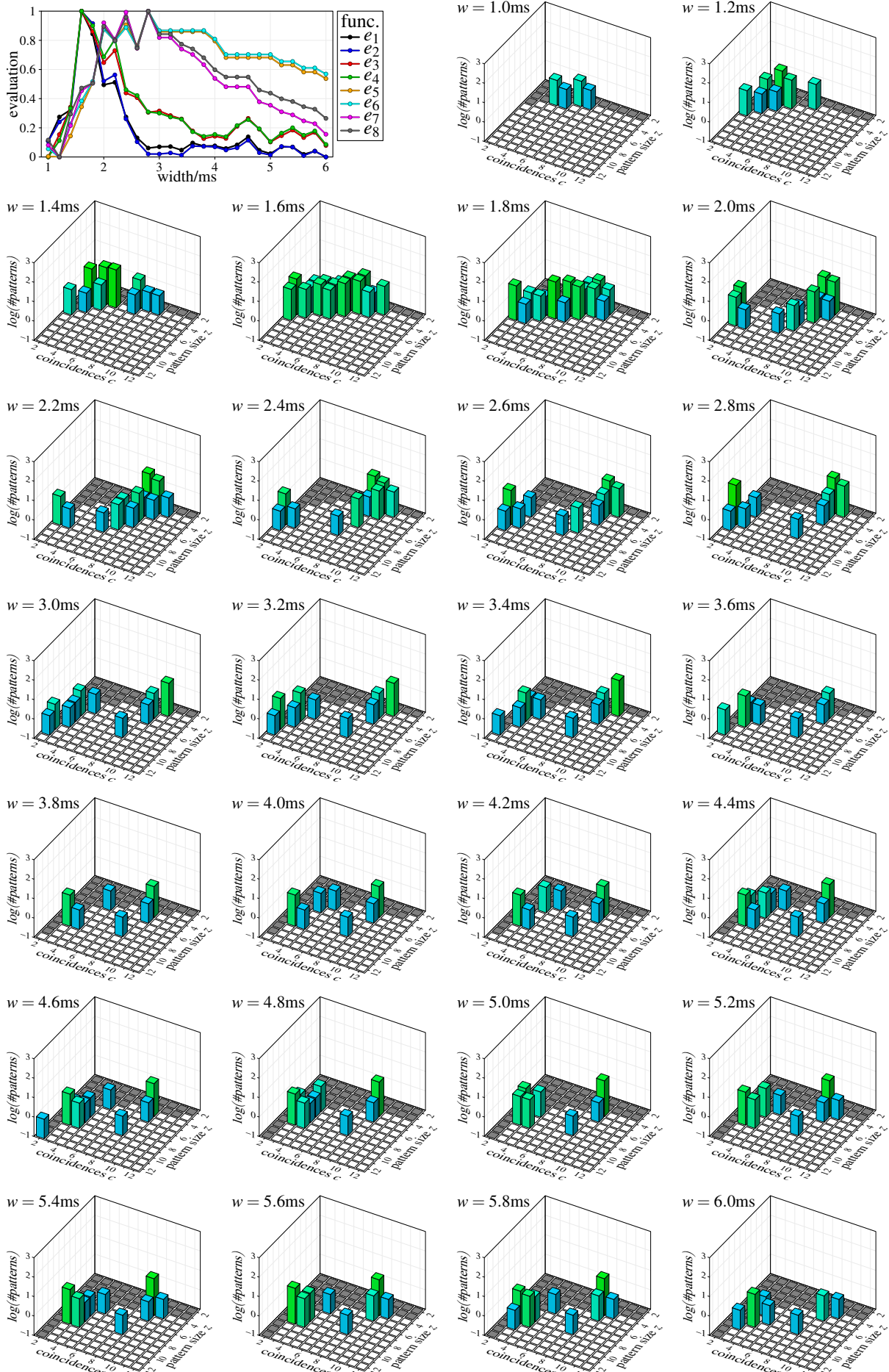
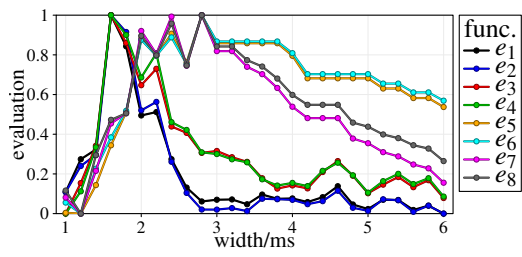
3ms jitter, $z = 6$ neurons, $c = 6$ coincidences, filtered



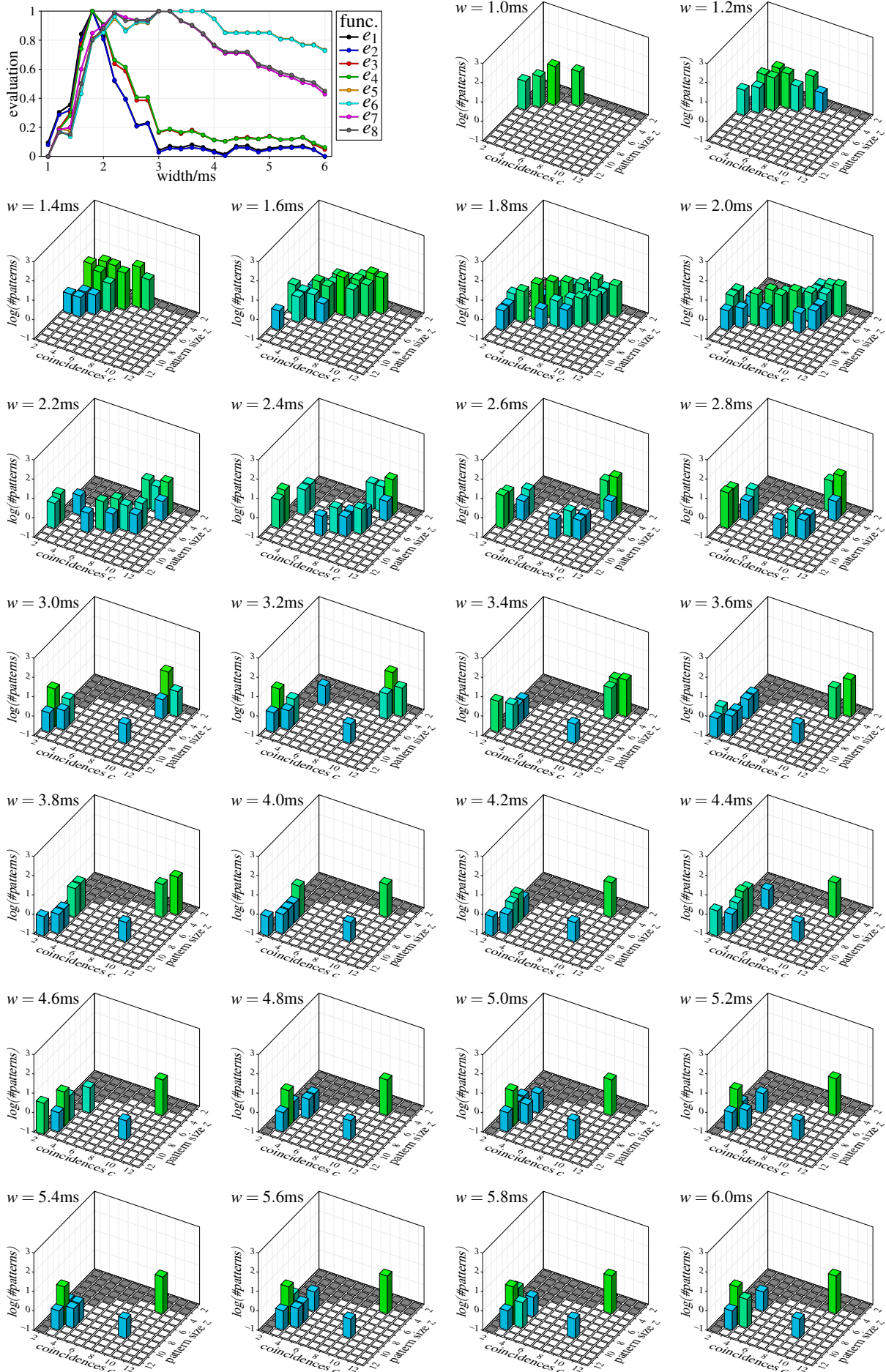
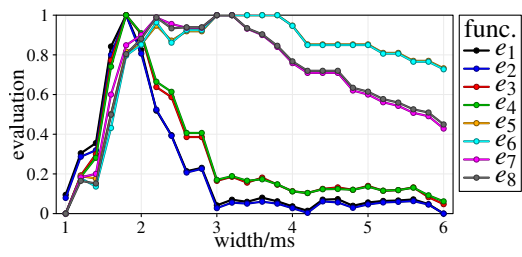
3ms jitter, $z = 7$ neurons, $c = 7$ coincidences, filtered



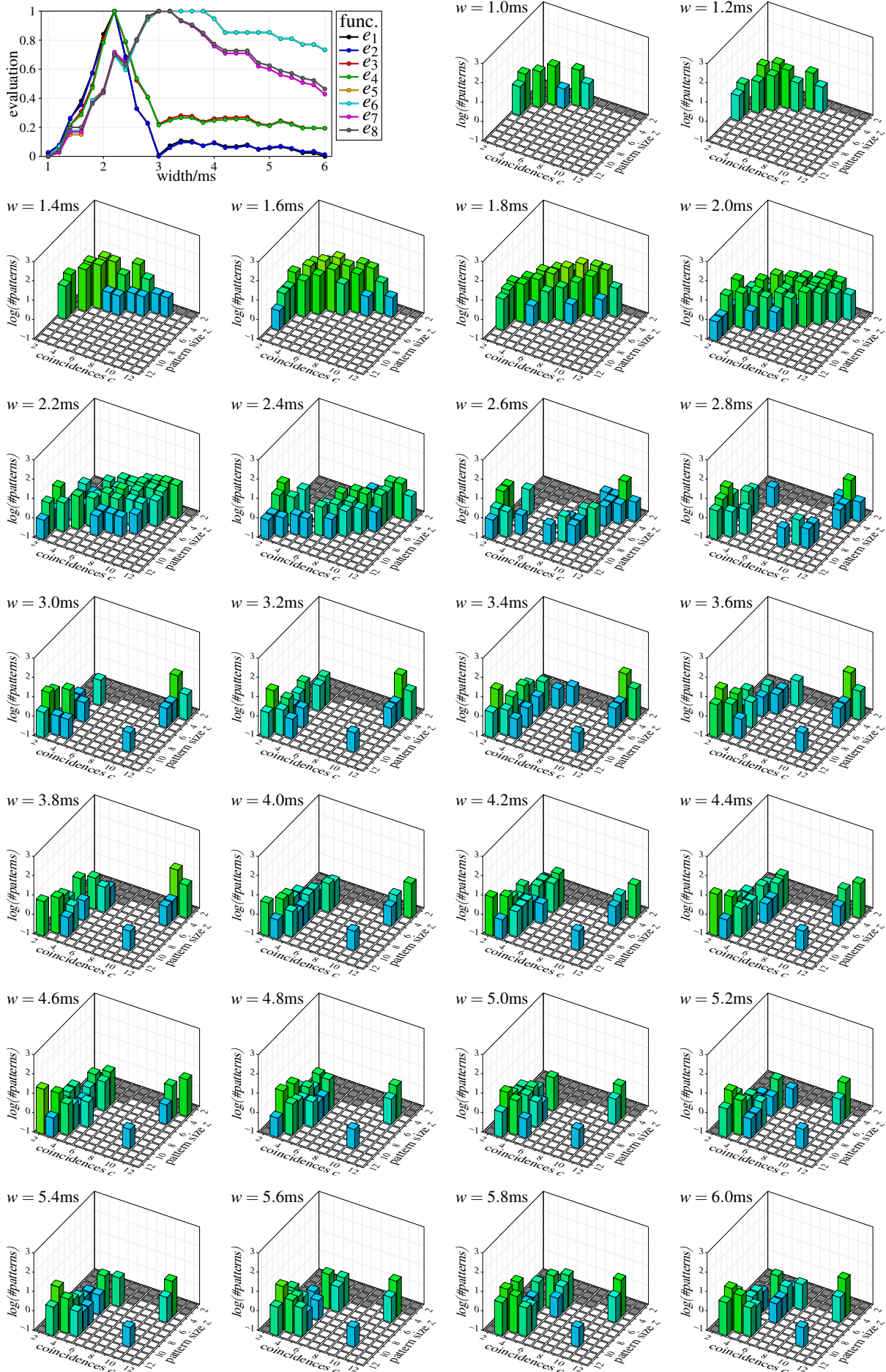
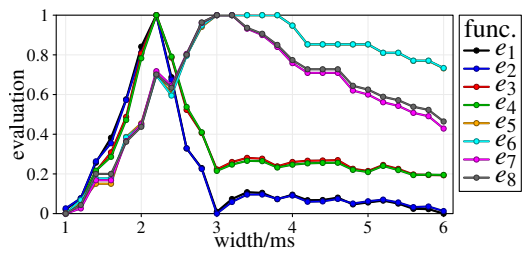
3ms jitter, $z = 8$ neurons, $c = 8$ coincidences, filtered



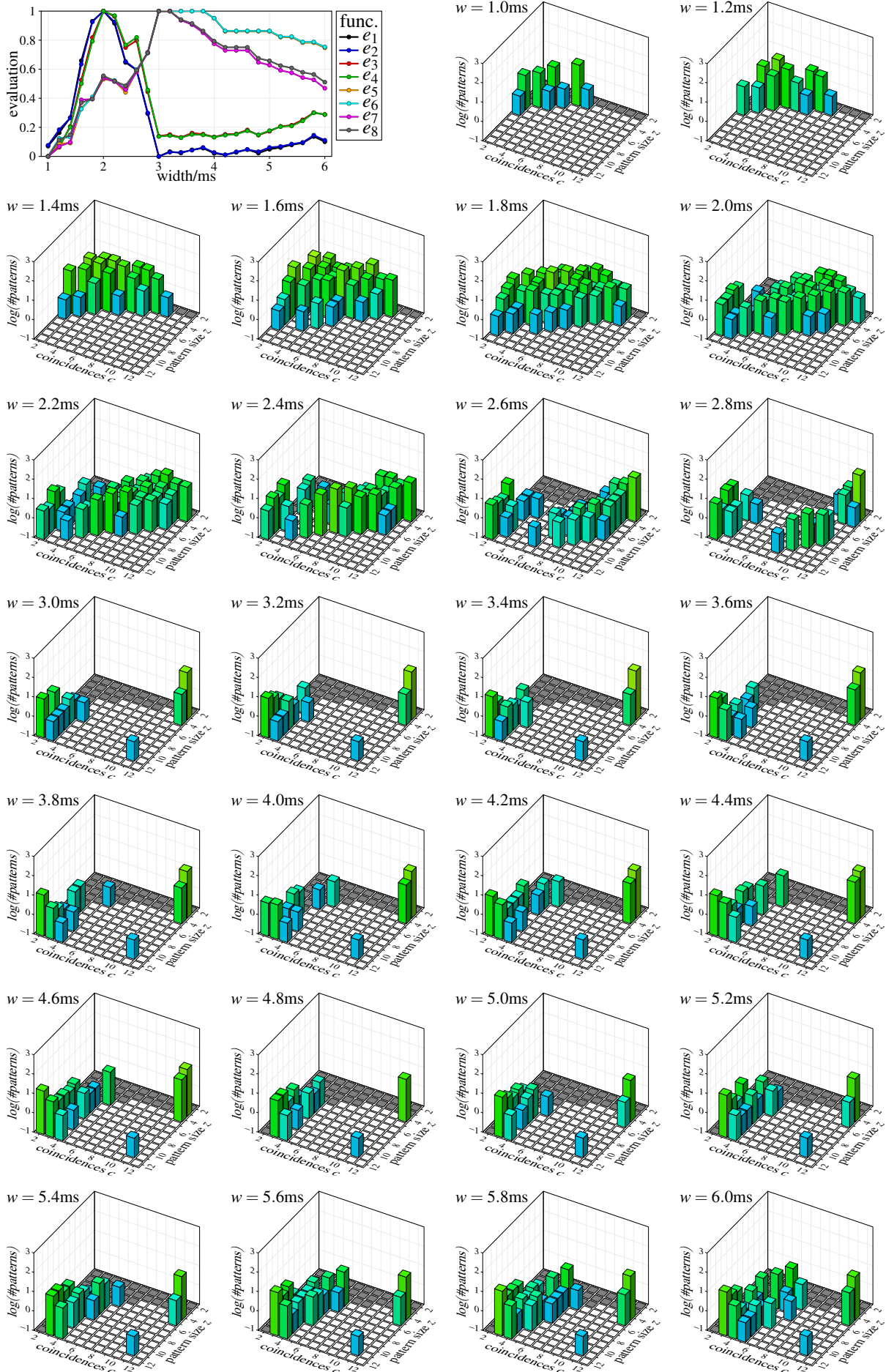
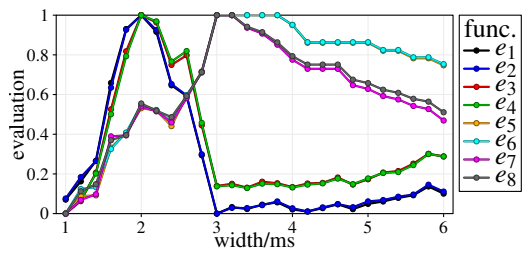
3ms jitter, $z = 9$ neurons, $c = 9$ coincidences, filtered



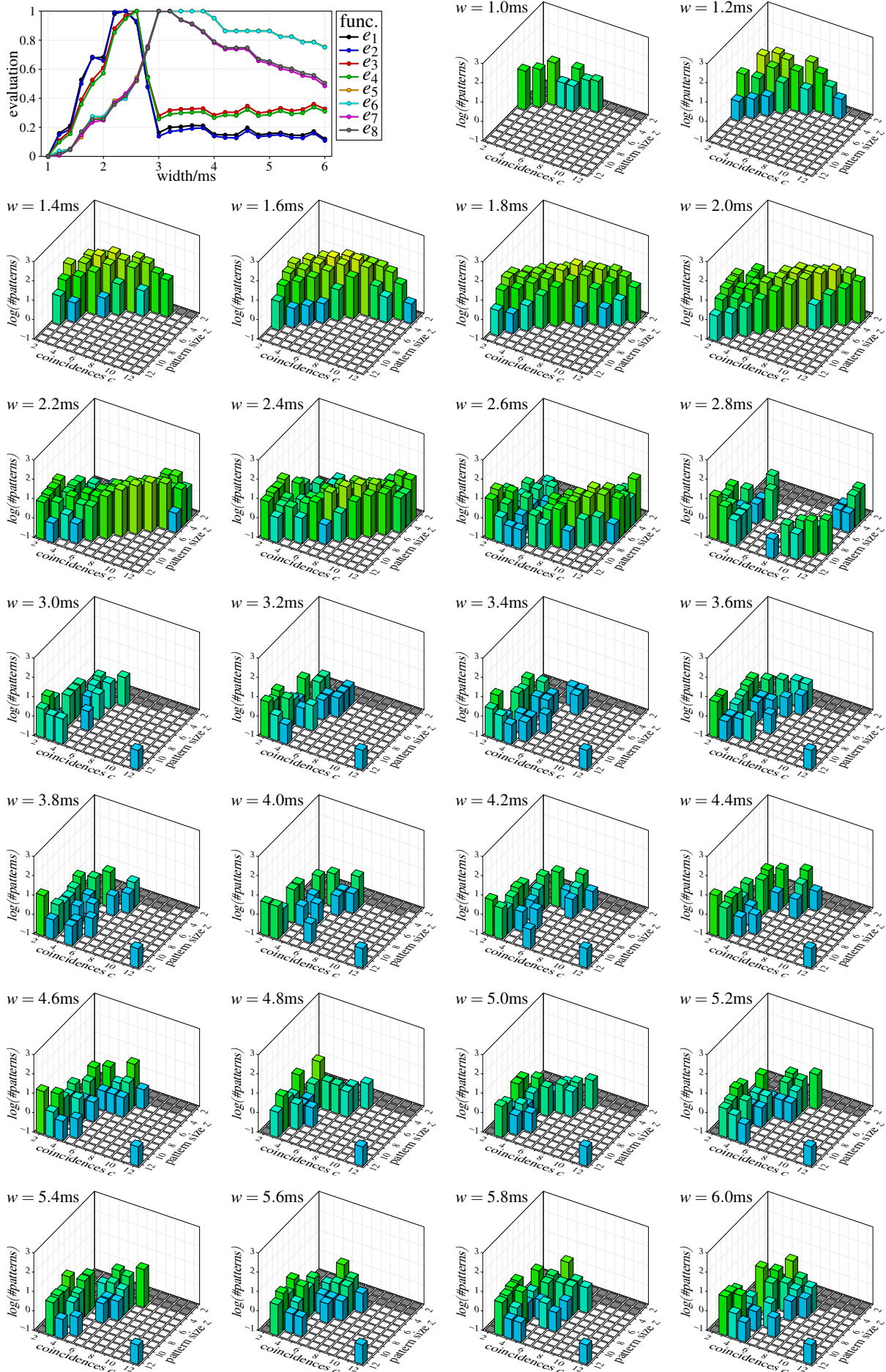
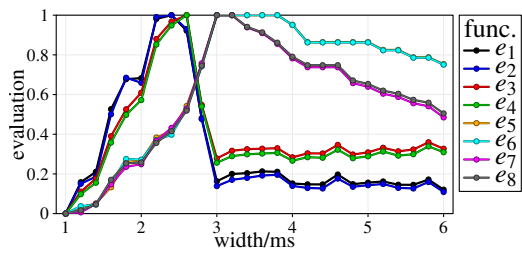
3ms jitter, $z = 10$ neurons, $c = 10$ coincidences, filtered



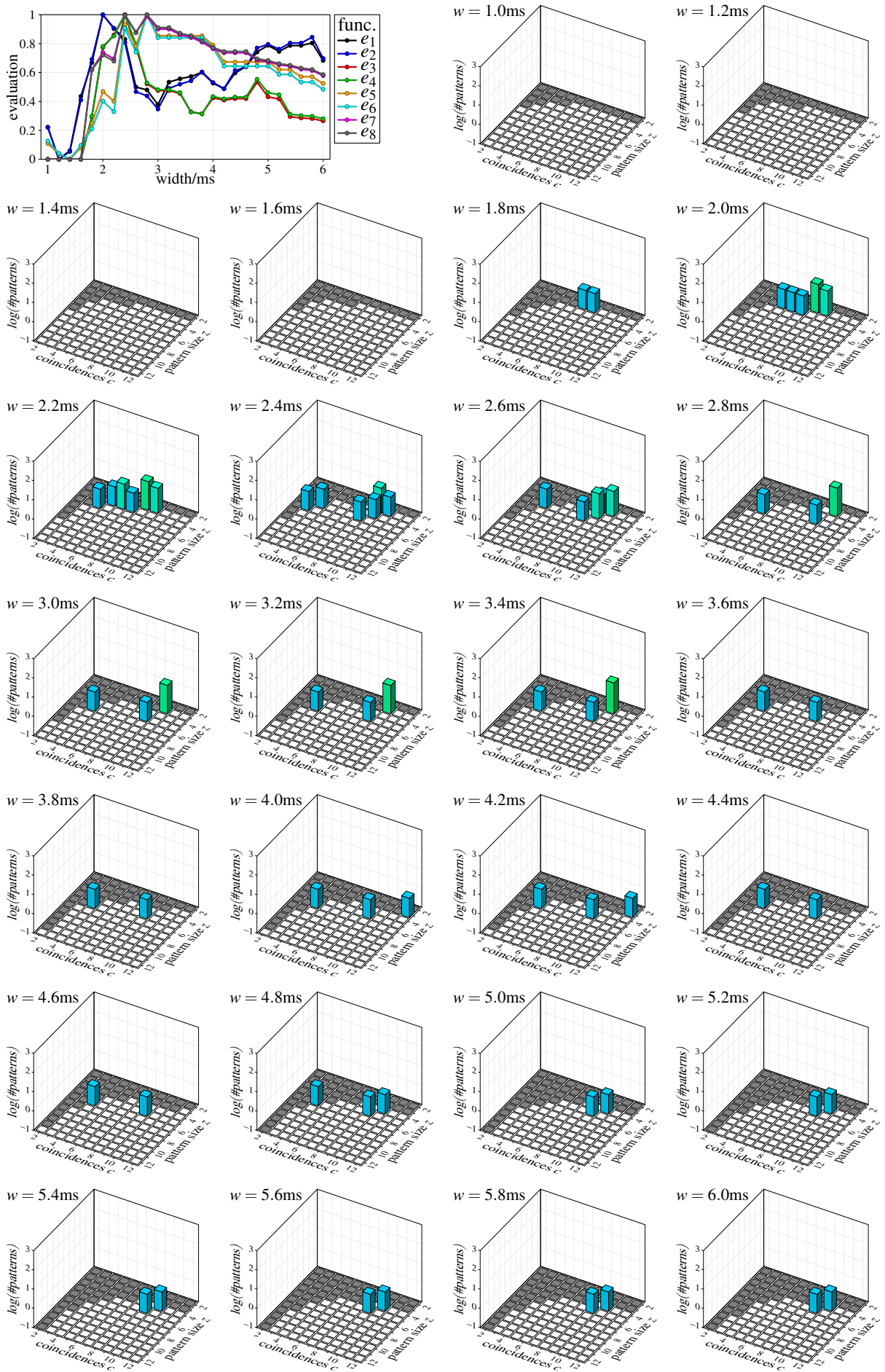
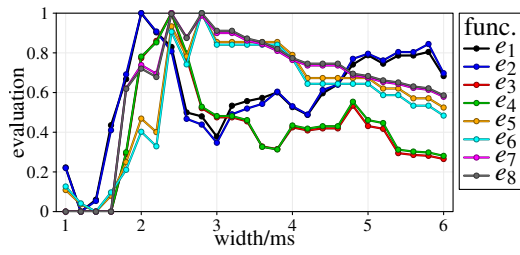
3ms jitter, $z = 11$ neurons, $c = 11$ coincidences, filtered



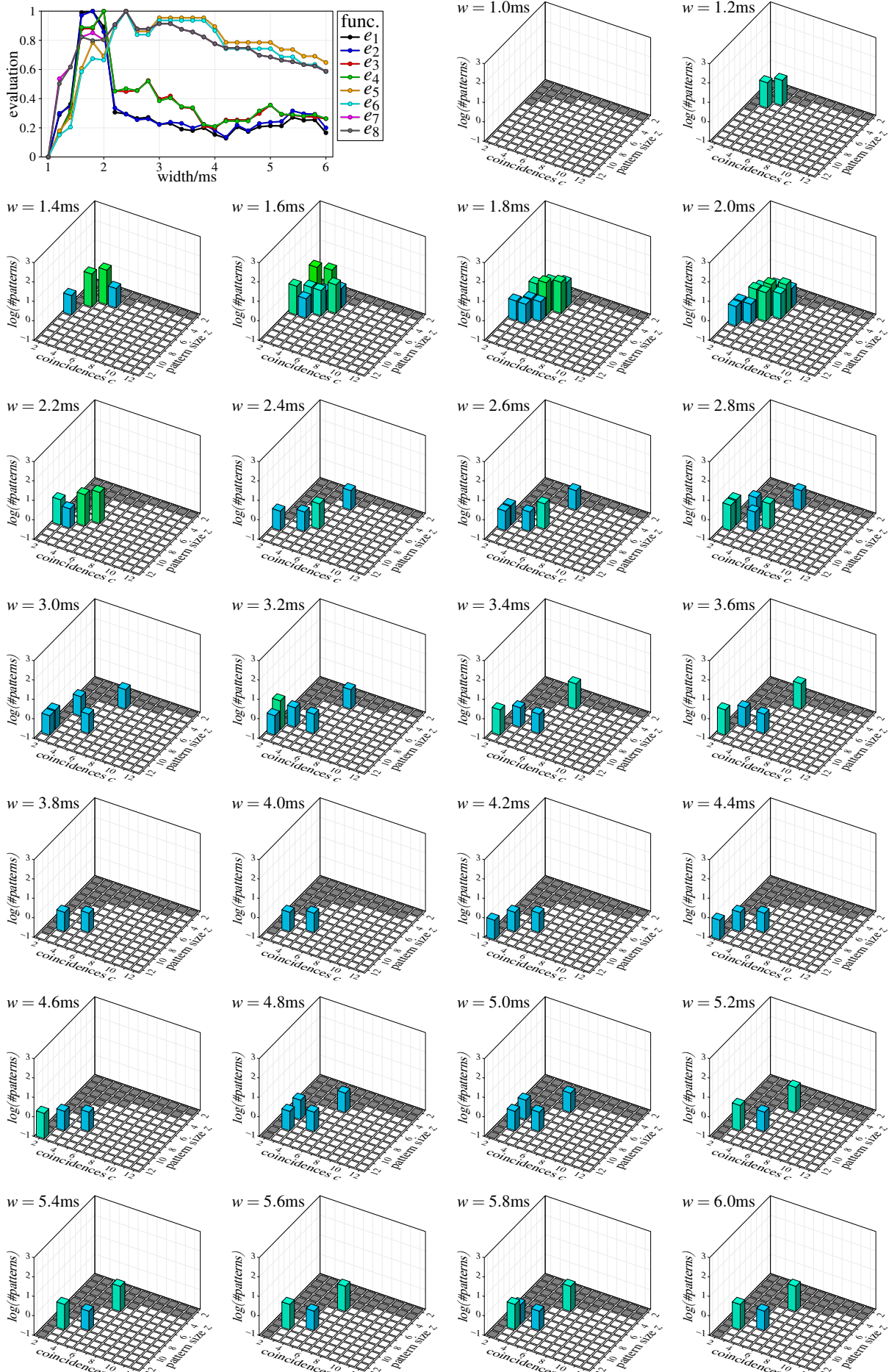
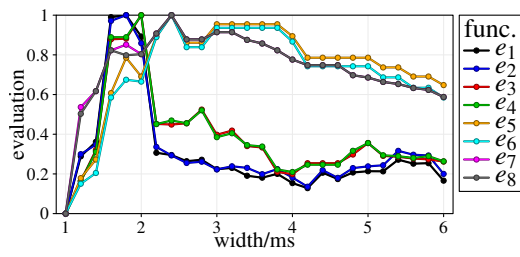
3ms jitter, $z = 12$ neurons, $c = 12$ coincidences, filtered



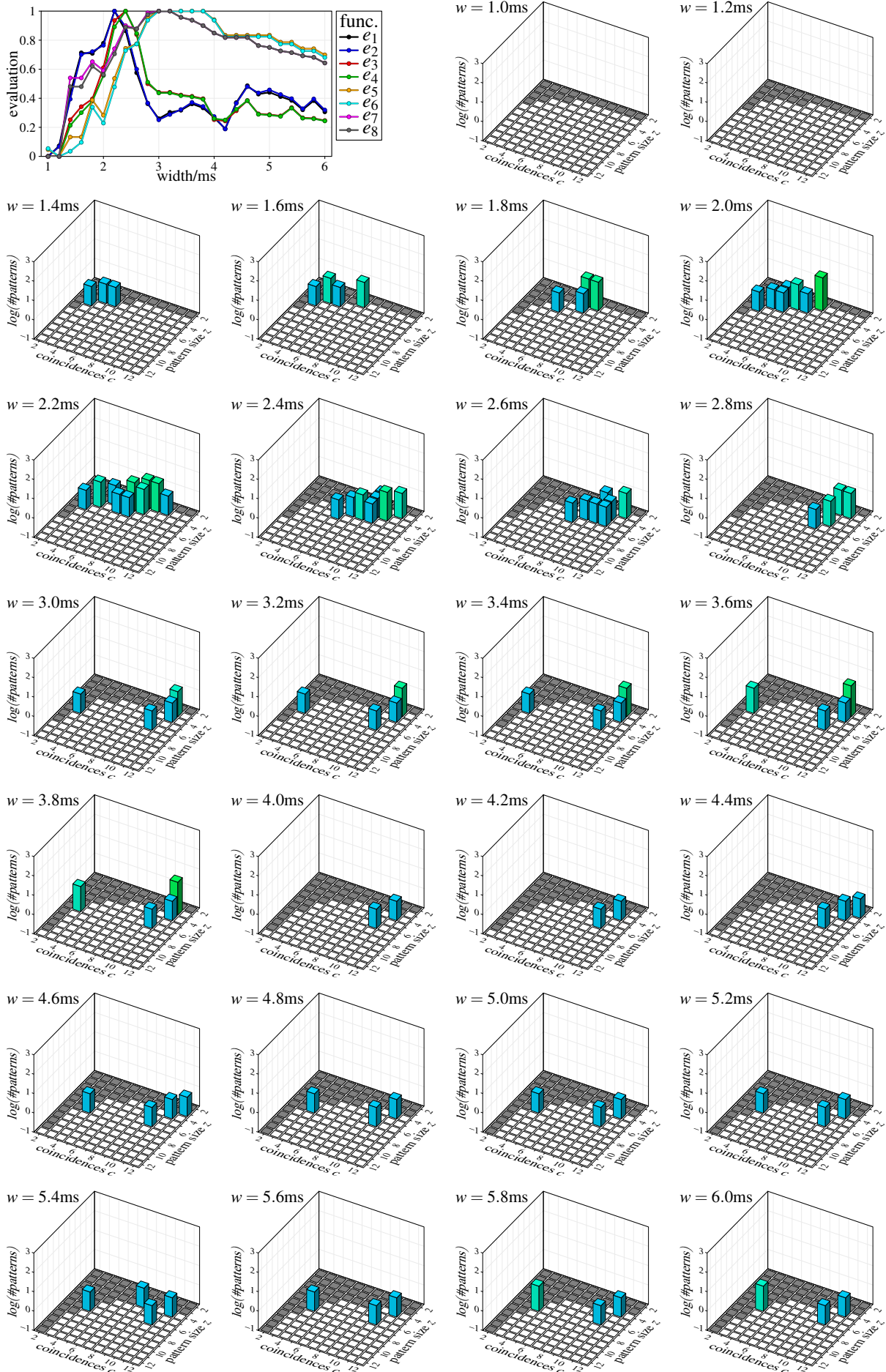
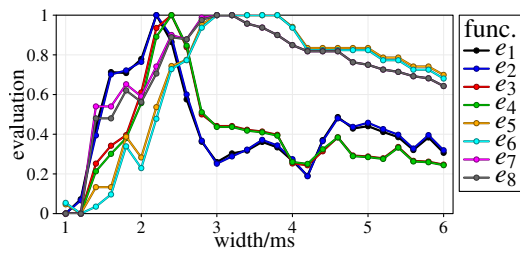
3ms jitter, $z = 5$ neurons, $c = 9$ coincidences, filtered



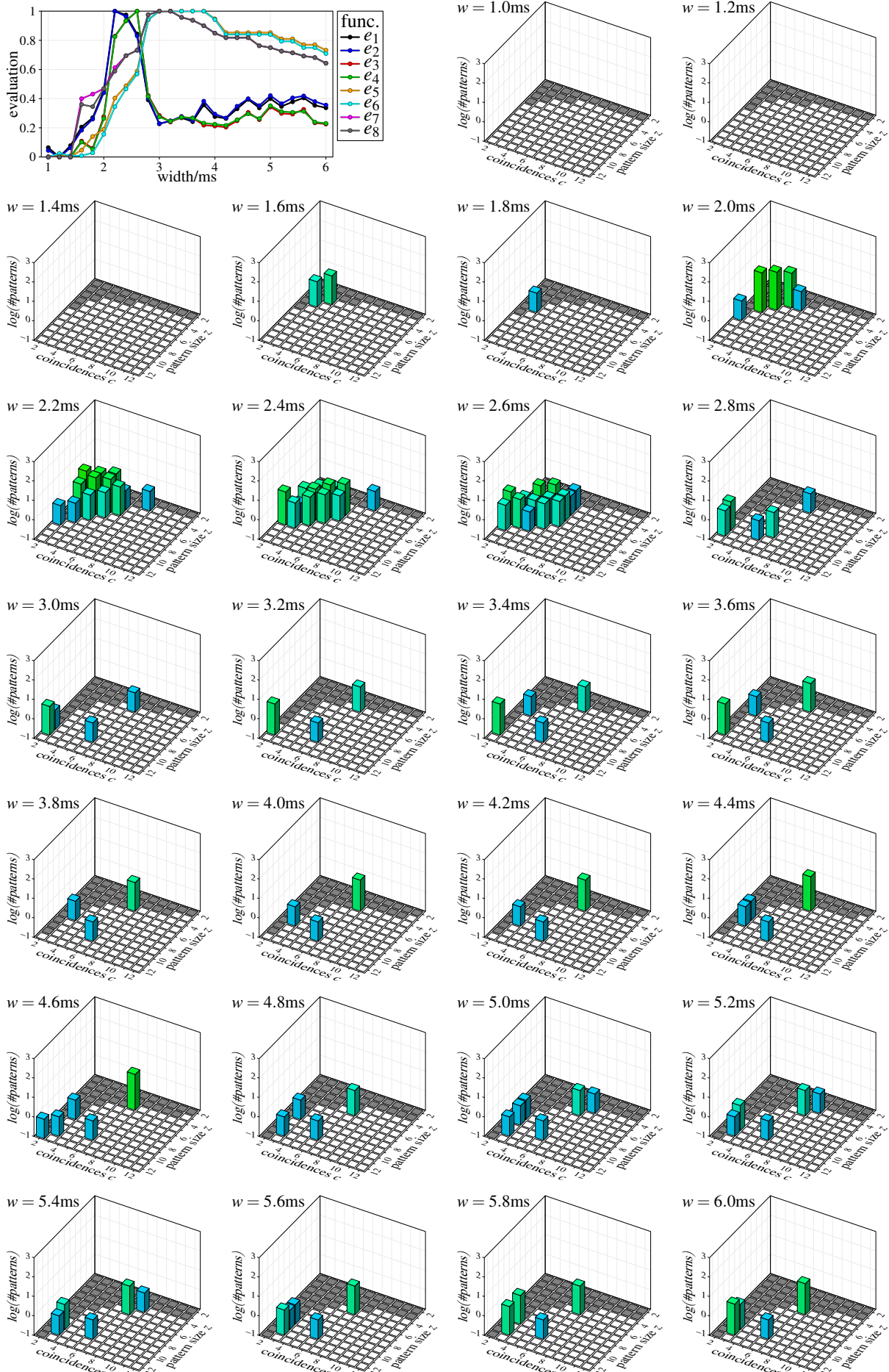
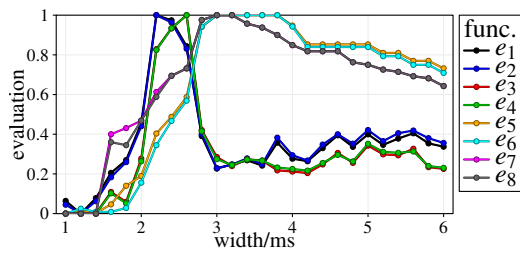
3ms jitter, $z = 9$ neurons, $c = 5$ coincidences, filtered



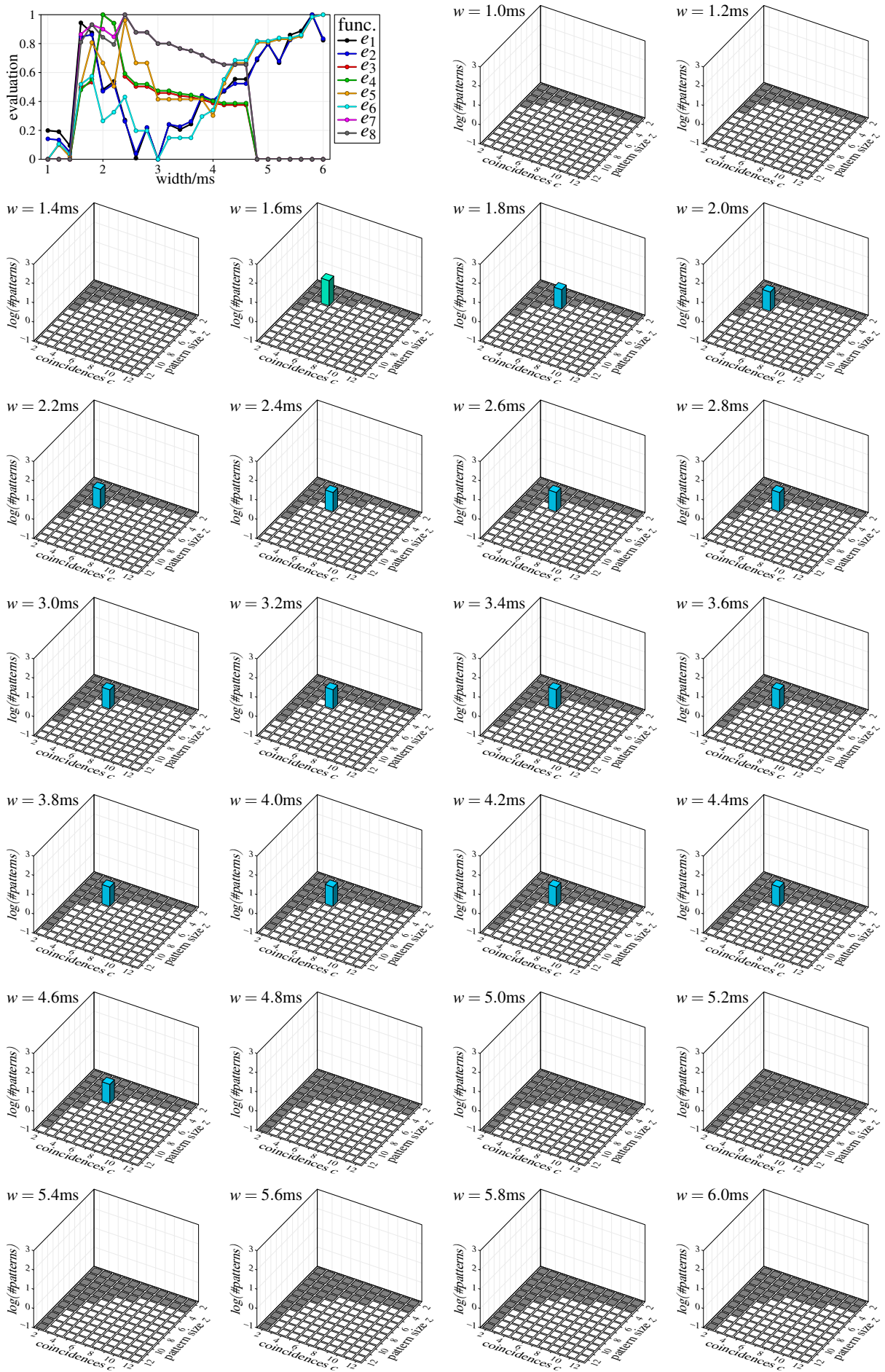
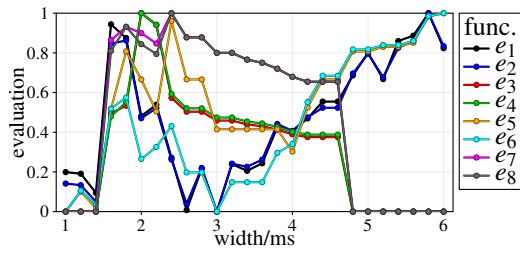
3ms jitter, $z = 6$ neurons, $c = 10$ coincidences, filtered



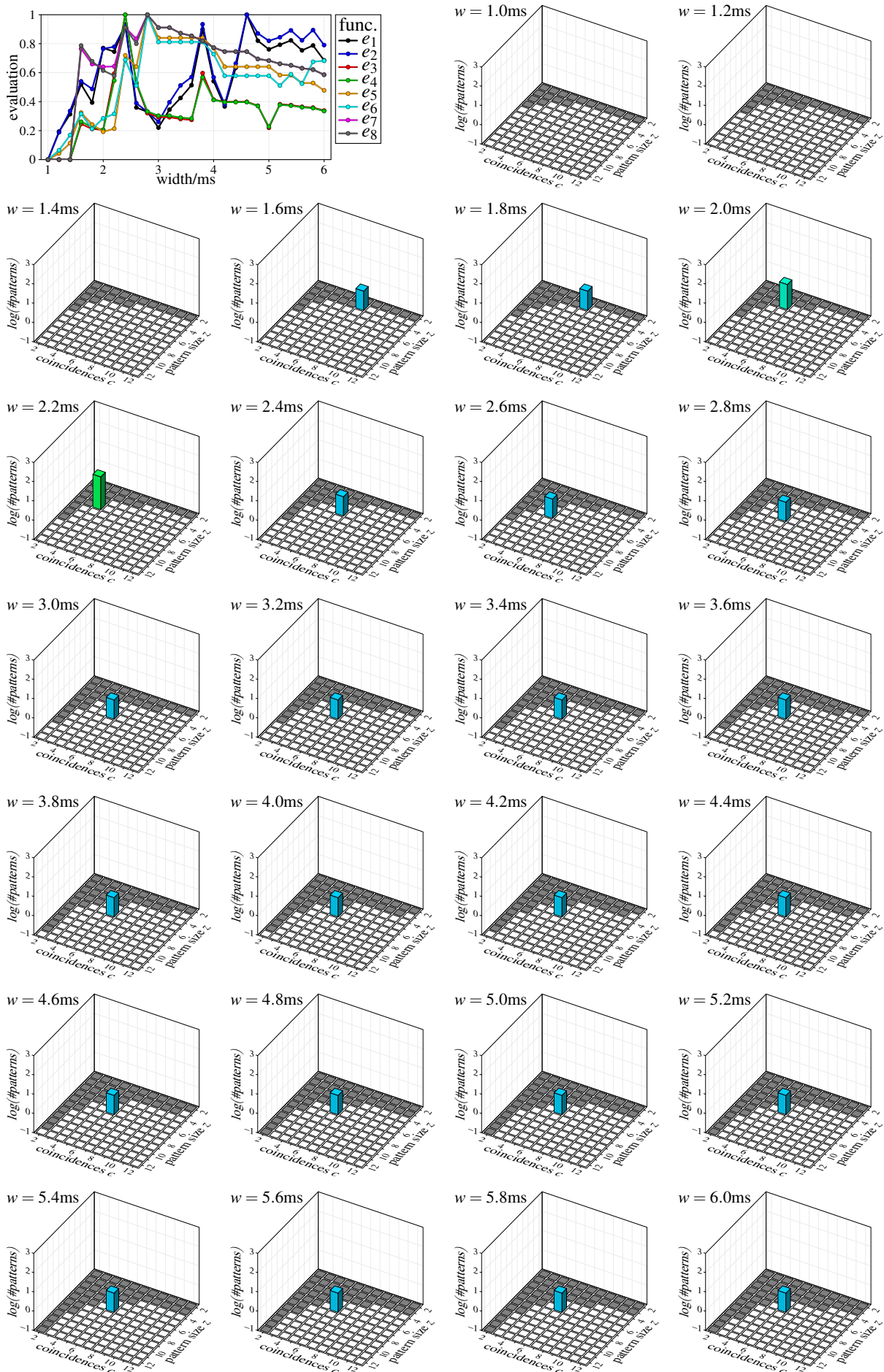
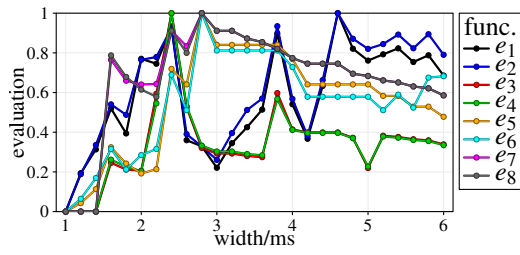
3ms jitter, $z = 10$ neurons, $c = 6$ coincidences, filtered



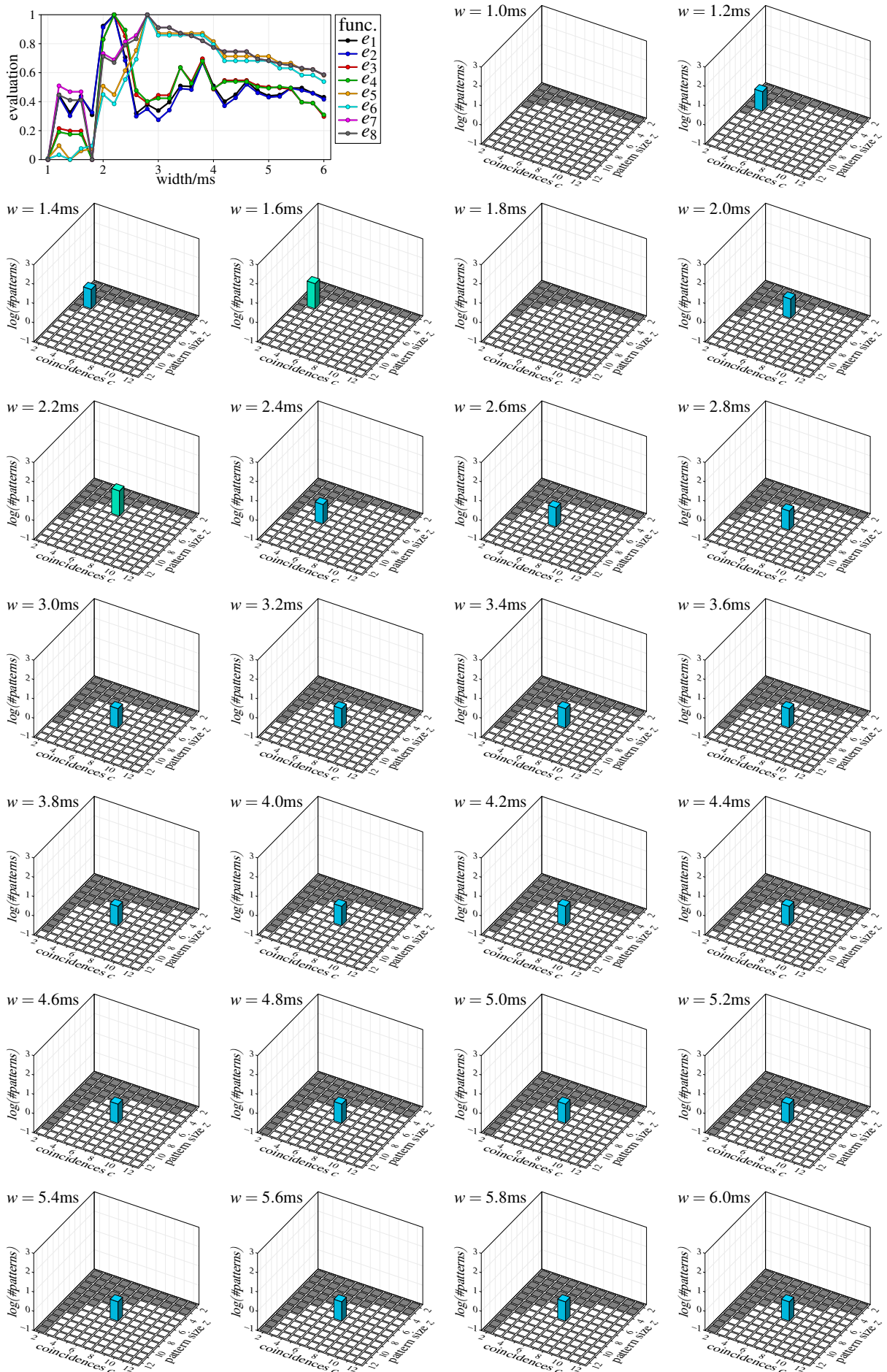
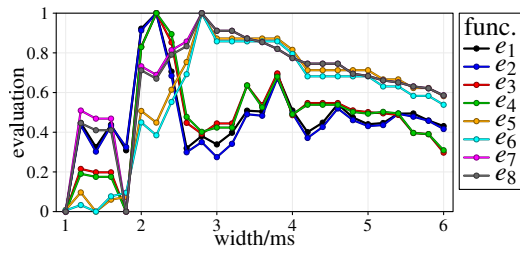
3ms jitter, $z = 5$ neurons, $c = 5$ coincidences, reduced



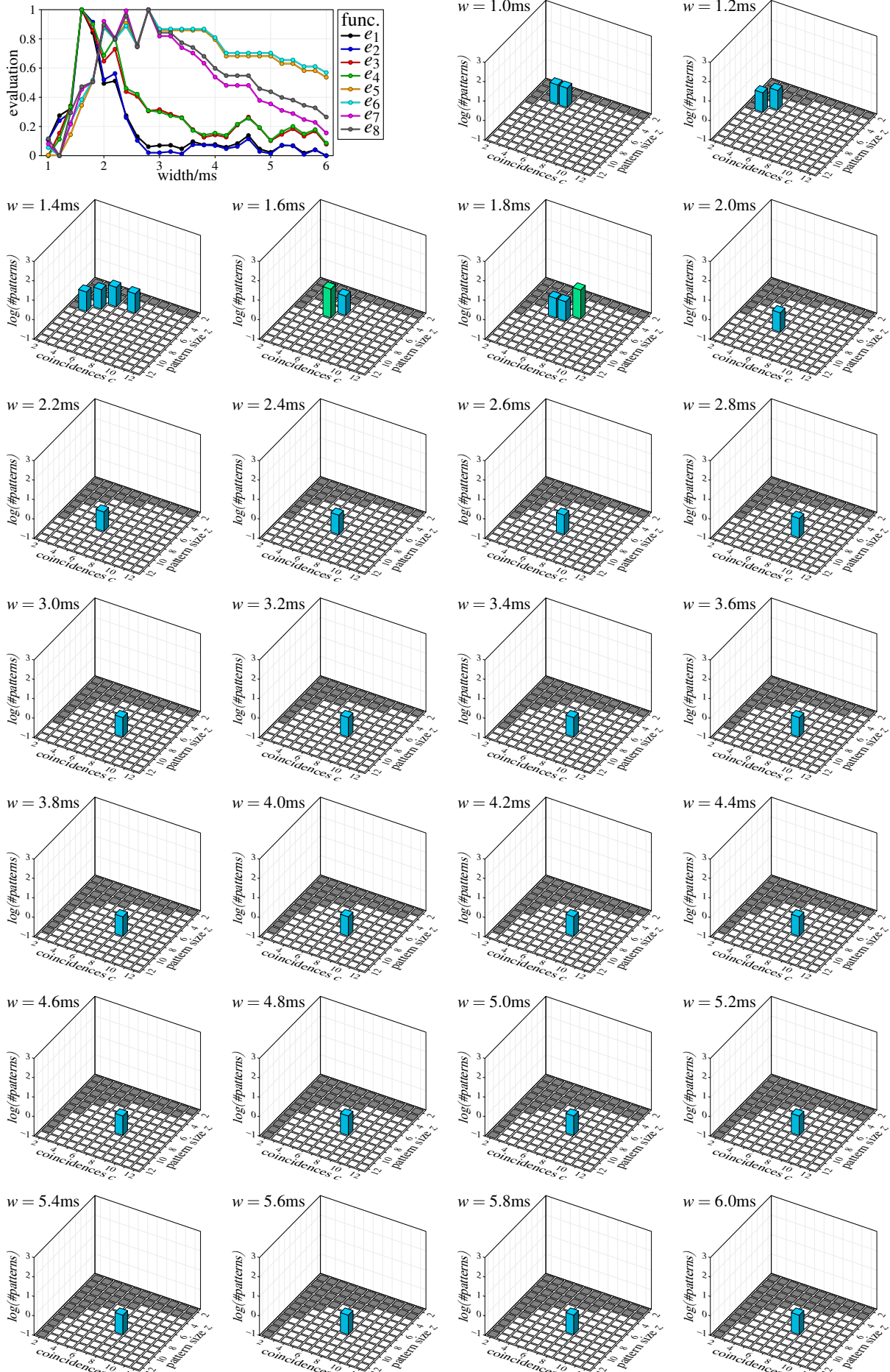
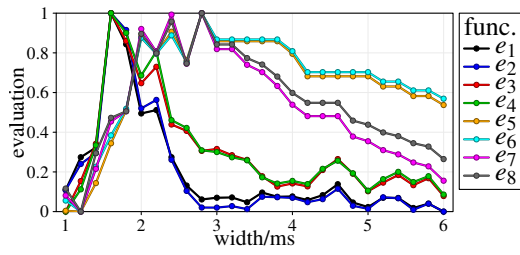
3ms jitter, $z = 6$ neurons, $c = 6$ coincidences, reduced



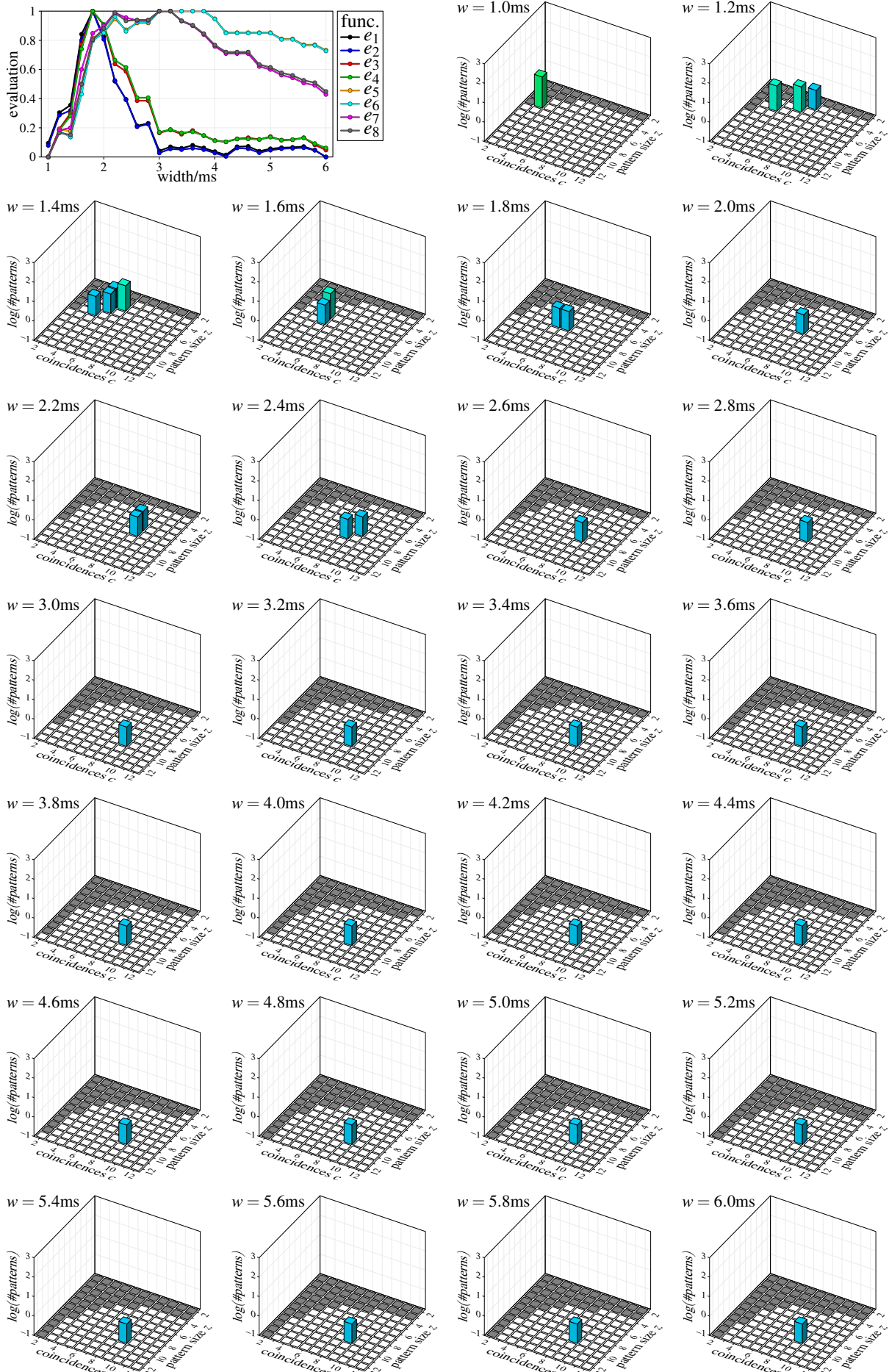
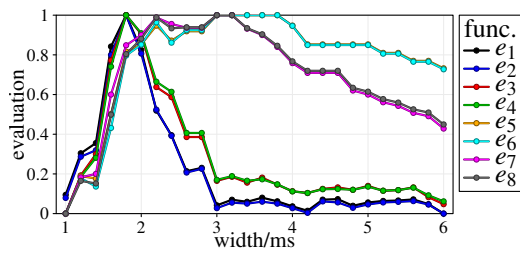
3ms jitter, $z = 7$ neurons, $c = 7$ coincidences, reduced



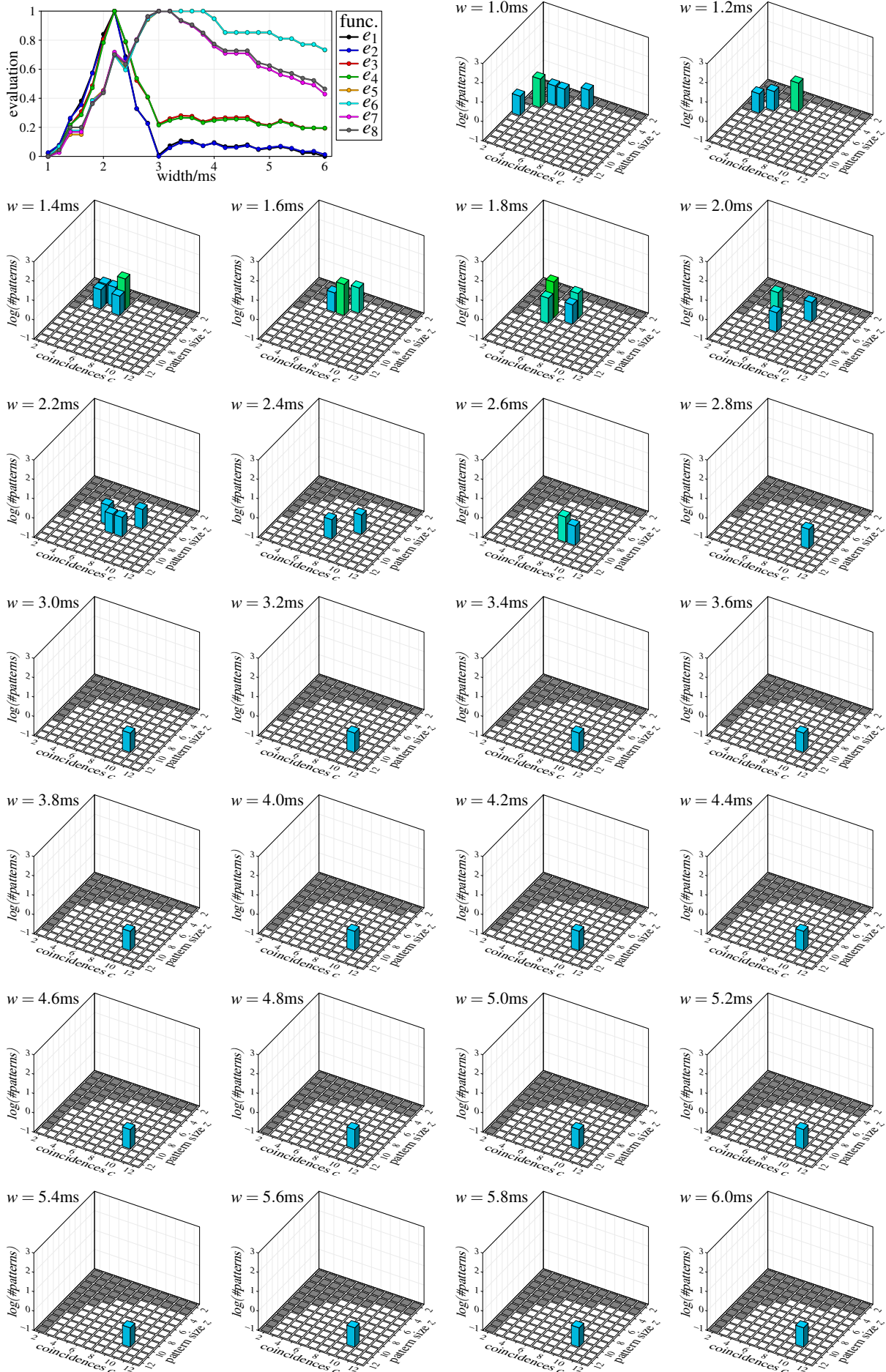
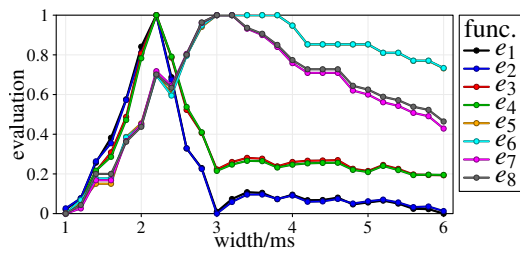
3ms jitter, $z = 8$ neurons, $c = 8$ coincidences, reduced



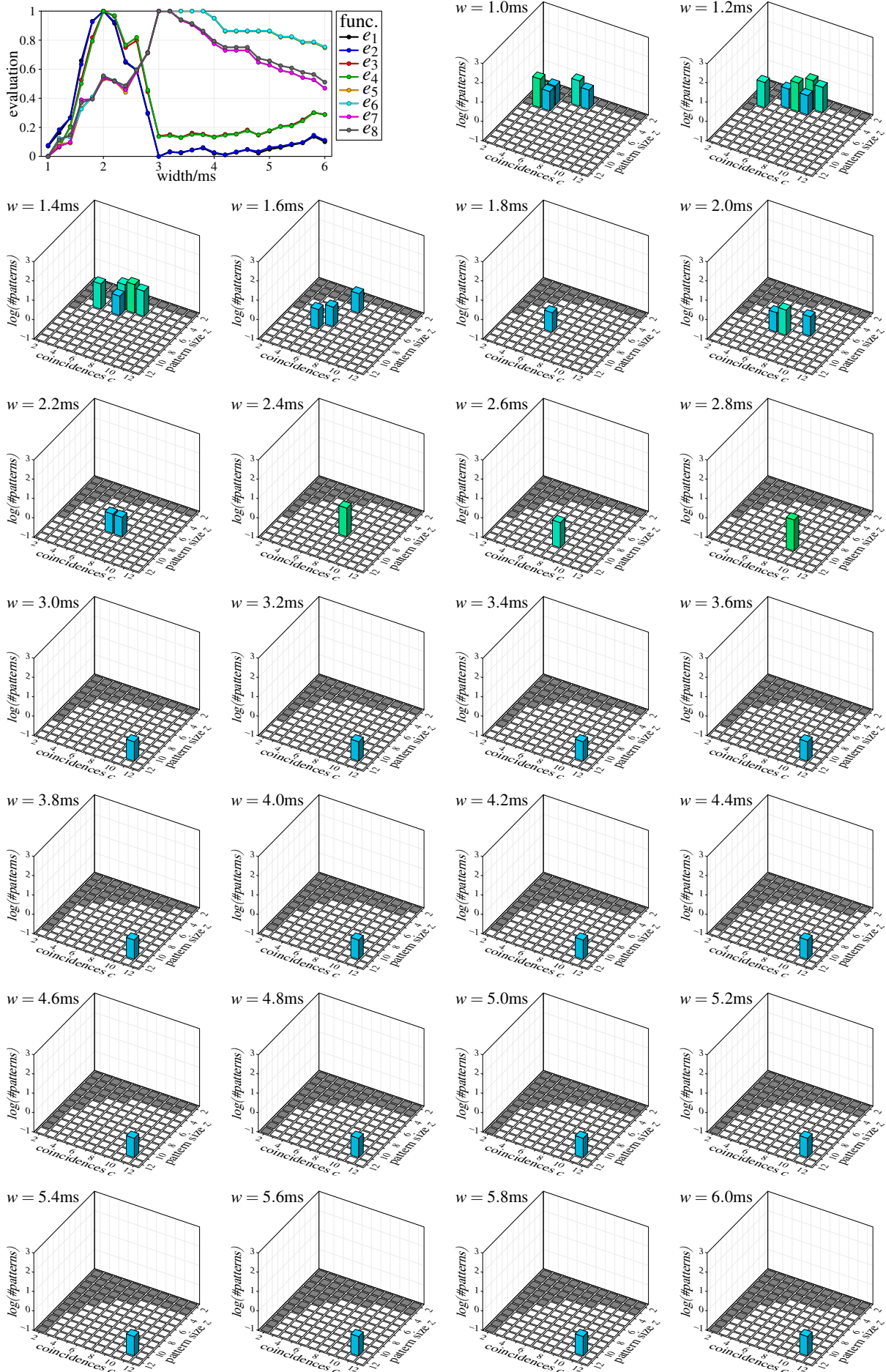
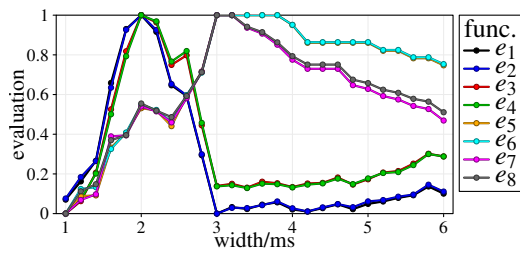
3ms jitter, $z = 9$ neurons, $c = 9$ coincidences, reduced



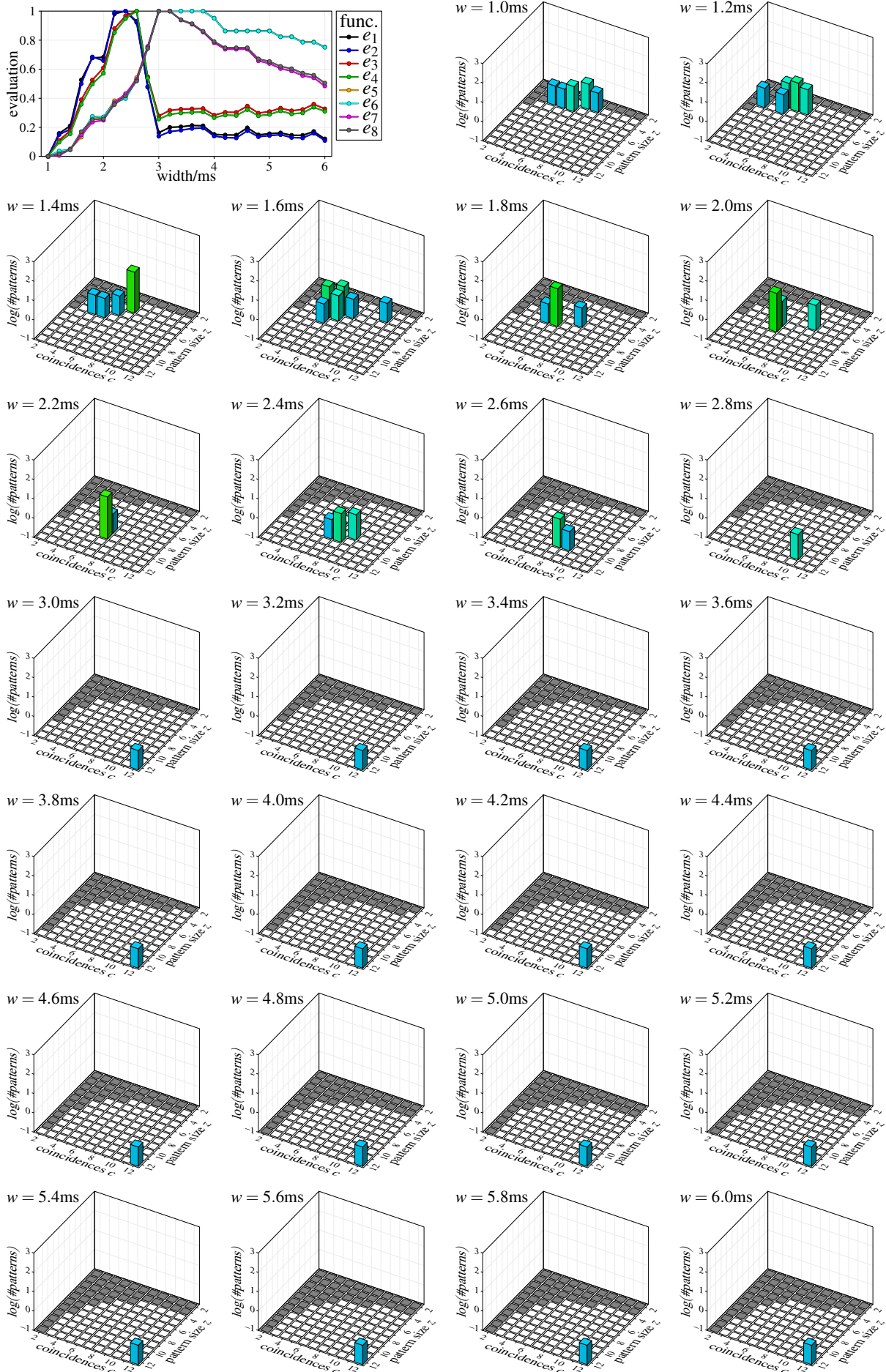
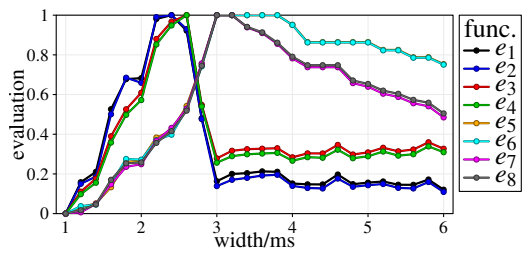
3ms jitter, $z = 10$ neurons, $c = 10$ coincidences, reduced



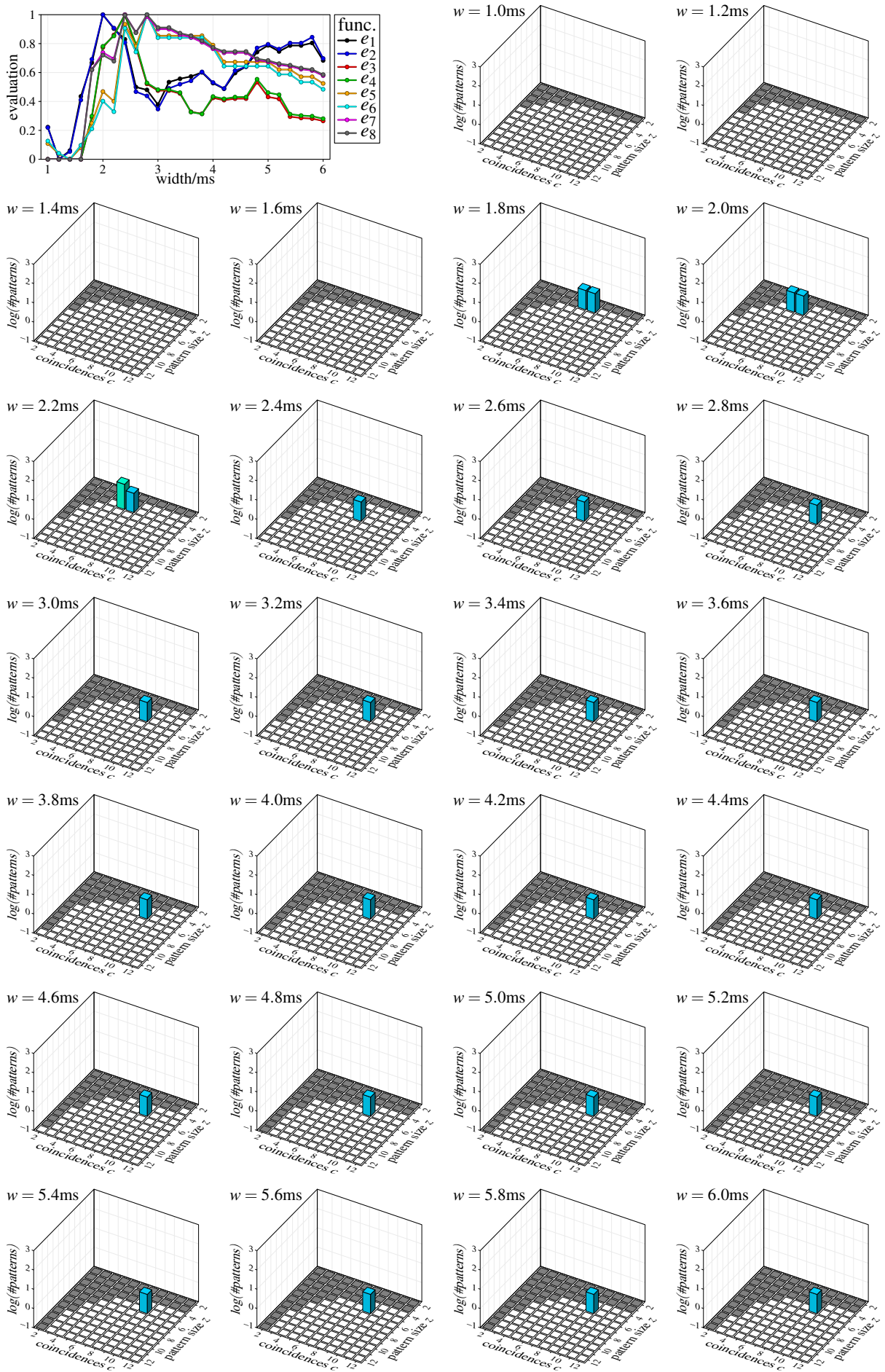
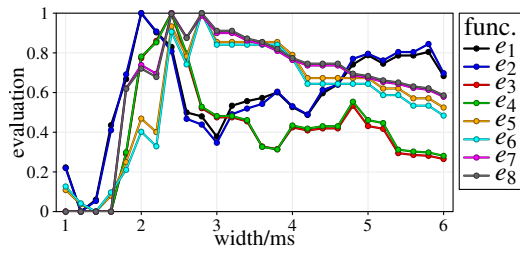
3ms jitter, $z = 11$ neurons, $c = 11$ coincidences, reduced



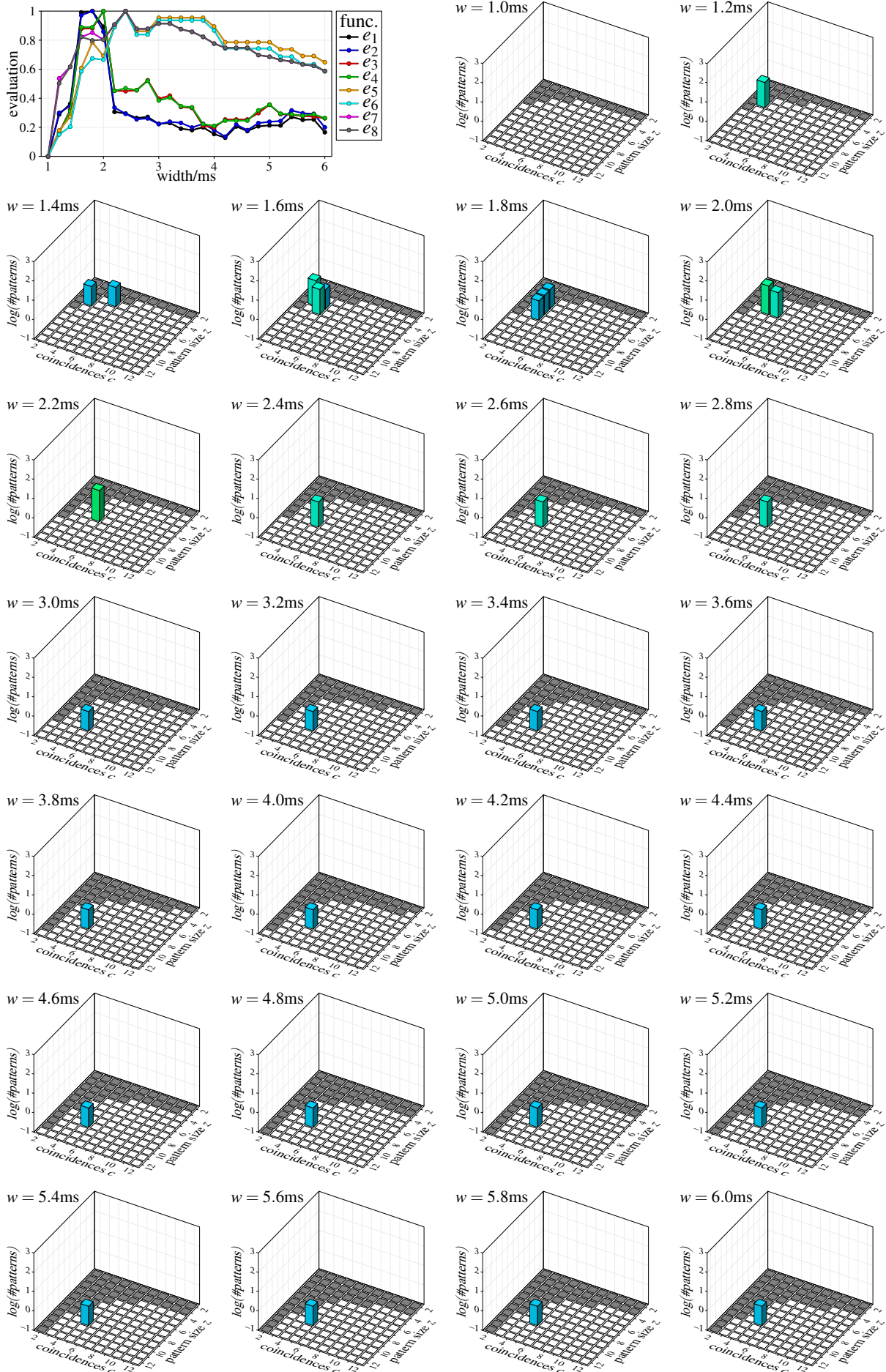
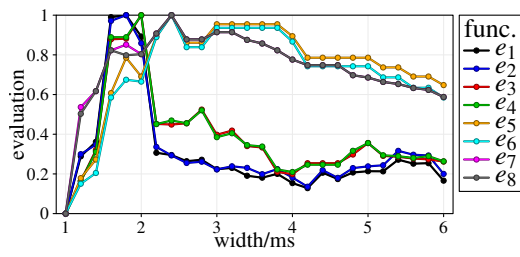
3ms jitter, $z = 12$ neurons, $c = 12$ coincidences, reduced



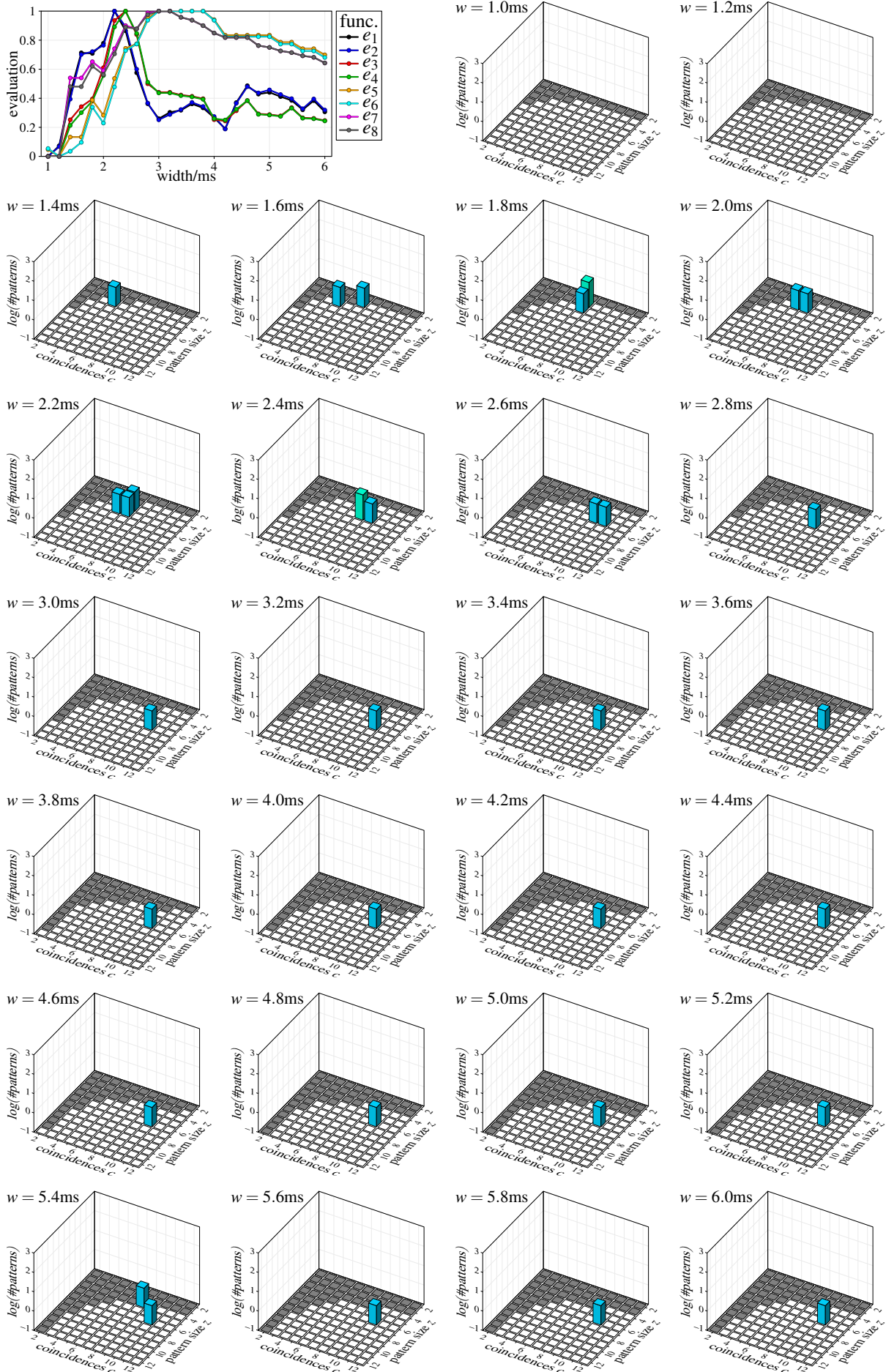
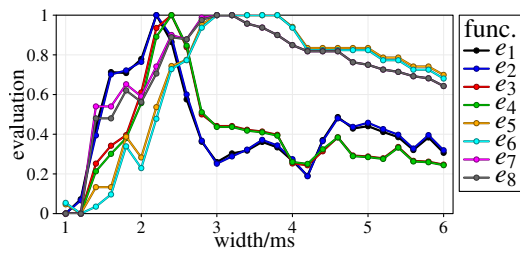
3ms jitter, $z = 5$ neurons, $c = 9$ coincidences, reduced



3ms jitter, $z = 9$ neurons, $c = 5$ coincidences, reduced



3ms jitter, $z = 6$ neurons, $c = 10$ coincidences, reduced



3ms jitter, $z = 10$ neurons, $c = 6$ coincidences, reduced

