

| Component   | Yields         |
|---|----------------|
| $B^+ \rightarrow (D\pi^0)_{D^*}\pi^+, D + \text{random } \pi^0$   | $637 \pm 41$   |
| $B^+ \rightarrow (D\gamma)_{D^*}\pi^+, D + \text{random } \pi^0$  | $295 \pm 39$   |
| $B^+ \rightarrow (D\pi^0)_{D^*}\pi^+, D + \text{random } \gamma$  | $2877 \pm 146$ |
| $B^+ \rightarrow (D\gamma)_{D^*}\pi^+, D + \text{random } \gamma$ | $2880 \pm 253$ |
| $B^+ \rightarrow (D\pi^0)_{D^*}\pi^+, D + \text{correct } \gamma$ | $4417 \pm 179$ |
| $B^- \rightarrow (D\pi^0)_{D^*}\pi^-, D + \text{random } \pi^0$   | $645 \pm 42$   |
| $B^- \rightarrow (D\gamma)_{D^*}\pi^-, D + \text{random } \pi^0$  | $295 \pm 39$   |
| $B^- \rightarrow (D\pi^0)_{D^*}\pi^-, D + \text{random } \gamma$  | $2915 \pm 149$ |
| $B^- \rightarrow (D\gamma)_{D^*}\pi^-, D + \text{random } \gamma$ | $2873 \pm 254$ |
| $B^- \rightarrow (D\pi^0)_{D^*}\pi^-, D + \text{correct } \gamma$ | $4476 \pm 182$ |
| $B^+ \rightarrow (D\pi^0)_{D^*}K^+, D + \text{random } \pi^0$     | $56 \pm 5$     |
| $B^+ \rightarrow (D\gamma)_{D^*}K^+, D + \text{random } \pi^0$    | $29 \pm 4$     |
| $B^+ \rightarrow (D\pi^0)_{D^*}K^+, D + \text{random } \gamma$    | $253 \pm 19$   |
| $B^+ \rightarrow (D\gamma)_{D^*}K^+, D + \text{random } \gamma$   | $279 \pm 34$   |
| $B^+ \rightarrow (D\pi^0)_{D^*}K^+, D + \text{correct } \gamma$   | $389 \pm 27$   |
| $B^- \rightarrow (D\pi^0)_{D^*}K^-, D + \text{random } \pi^0$     | $55 \pm 4$     |
| $B^- \rightarrow (D\gamma)_{D^*}K^-, D + \text{random } \pi^0$    | $34 \pm 5$     |
| $B^- \rightarrow (D\pi^0)_{D^*}K^-, D + \text{random } \gamma$    | $246 \pm 17$   |
| $B^- \rightarrow (D\gamma)_{D^*}K^-, D + \text{random } \gamma$   | $327 \pm 37$   |
| $B^- \rightarrow (D\pi^0)_{D^*}K^-, D + \text{correct } \gamma$   | $378 \pm 24$   |