

# Charged Hadron $\Delta\phi$ and $p_{\text{out}}$ Per Trigger Yields in $p+p$ Collisions at $\sqrt{s} = 200$ GeV

(PHENIX Collaboration)

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TABLE I.  $\pi^0$ -h $^\pm$  Gaussian width values from fits to the  $p_{\text{out}}$  correlations as a function of  $x_E$ .

$\sqrt{s}$ [GeV]	$x_E$	Gaussian width [GeV/c]	Statistical error [GeV/c]	Systematic error [GeV/c]
200	0.12	0.404	0.005	+0.011 -0.027
200	0.19	0.517	0.007	+0.005 -0.020
200	0.34	0.725	0.008	+0.031 -0.011
200	0.66	1.10	0.02	+0.02 -0.08
510	0.12	0.384	0.001	+0.021 -0.017
510	0.19	0.500	0.001	+0.016 -0.013
510	0.29	0.706	0.001	+0.017 -0.012
510	0.41	0.865	0.002	+0.025 -0.019
510	0.59	1.04	0.01	+0.03 -0.04
510	0.84	1.35	0.01	+0.04 -0.05
510	1.12	1.61	0.03	+0.01 -0.03

TABLE II. Direct  $\gamma$ -h $^\pm$  Gaussian width values from fits to the  $p_{\text{out}}$  correlations as a function of  $x_E$ .

$\sqrt{s}$ [GeV]	$x_E$	Gaussian width [GeV/c]	Statistical error [GeV/c]	Systematic error [GeV/c]
200	0.12	0.40	0.01	+0.03 -0.08
200	0.19	0.59	0.03	+0.02 -0.02
200	0.34	0.78	0.04	+0.02 -0.03
200	0.64	1.07	0.10	+0.08 -0.16
510	0.12	0.4	0.01	+0.01 -0.04
510	0.19	0.49	0.01	+0.02 -0.03
510	0.29	0.78	0.04	+0.01 -0.08
510	0.40	0.95	0.08	+0.10 -0.01
510	0.59	1.36	0.14	+0.05 -0.38

TABLE III. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{\text{trig}} < 7$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-3.46e+00	2.19e-05	6.86e-06	2.70e-06
-2.33e+00	4.40e-04	1.27e-04	5.41e-05
-1.80e+00	1.81e-03	4.33e-04	2.23e-04
-1.51e+00	4.94e-03	8.89e-04	6.08e-04
-1.32e+00	6.62e-03	1.11e-03	8.15e-04
-1.11e+00	1.07e-02	1.47e-03	1.32e-03
-9.13e-01	2.25e-02	1.97e-03	2.77e-03
-7.30e-01	3.12e-02	2.49e-03	3.85e-03
-5.35e-01	4.99e-02	3.14e-03	6.14e-03
-3.37e-01	7.93e-02	3.87e-03	9.76e-03
-1.17e-01	9.93e-02	4.54e-03	1.22e-02
9.80e-02	8.85e-02	5.23e-03	1.09e-02
2.96e-01	7.18e-02	4.07e-03	8.84e-03
4.97e-01	4.87e-02	3.14e-03	5.99e-03
6.91e-01	2.97e-02	2.44e-03	3.66e-03
8.89e-01	1.49e-02	2.16e-03	1.84e-03
1.09e+00	9.18e-03	1.54e-03	1.13e-03
1.28e+00	6.98e-03	1.11e-03	8.59e-04
1.47e+00	2.58e-03	8.77e-04	3.18e-04
1.77e+00	1.78e-03	4.17e-04	2.19e-04
2.34e+00	2.00e-04	1.33e-04	2.48e-05
3.43e+00	-1.02e-06	6.81e-06	1.36e-07

TABLE IV. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{\text{trig}} < 9$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-3.59e+00	8.82e-05	2.28e-05	1.01e-05
-2.32e+00	1.22e-03	2.47e-04	1.41e-04
-1.82e+00	2.26e-03	7.29e-04	2.58e-04
-1.51e+00	6.49e-03	1.51e-03	7.41e-04
-1.32e+00	1.05e-02	1.87e-03	1.20e-03
-1.11e+00	1.39e-02	2.23e-03	1.58e-03
-9.16e-01	2.70e-02	2.82e-03	3.07e-03
-7.27e-01	4.38e-02	3.65e-03	5.00e-03
-5.38e-01	6.18e-02	4.49e-03	7.03e-03
-3.38e-01	7.99e-02	5.18e-03	9.10e-03
-1.20e-01	1.07e-01	5.82e-03	1.22e-02
9.91e-02	1.13e-01	5.86e-03	1.29e-02
2.96e-01	7.07e-02	5.23e-03	8.05e-03
4.93e-01	6.57e-02	4.43e-03	7.49e-03
6.85e-01	4.45e-02	3.56e-03	5.07e-03
8.86e-01	2.17e-02	2.74e-03	2.48e-03
1.09e+00	9.19e-03	2.17e-03	1.05e-03
1.27e+00	1.06e-02	1.84e-03	1.21e-03
1.46e+00	6.96e-03	1.42e-03	7.96e-04
1.77e+00	3.86e-03	7.08e-04	4.42e-04
2.37e+00	1.11e-03	2.47e-04	1.28e-04
3.52e+00	3.50e-05	1.64e-05	4.00e-06

TABLE V. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{\text{trig}} < 12$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-3.60e+00	1.01e-04	3.45e-05	1.19e-05
-2.30e+00	1.17e-03	4.25e-04	1.34e-04
-1.83e+00	4.83e-03	1.20e-03	5.45e-04
-1.49e+00	1.21e-02	2.44e-03	1.35e-03
-1.31e+00	1.49e-02	2.84e-03	1.68e-03
-1.11e+00	3.83e-02	3.89e-03	4.29e-03
-9.27e-01	2.51e-02	3.89e-03	2.81e-03
-7.29e-01	5.05e-02	5.25e-03	5.65e-03
-5.40e-01	5.77e-02	5.87e-03	6.43e-03
-3.38e-01	7.86e-02	6.90e-03	8.77e-03
-1.17e-01	8.40e-02	7.22e-03	9.37e-03
9.92e-02	9.84e-02	7.43e-03	1.10e-02
2.95e-01	8.92e-02	6.85e-03	9.96e-03
4.92e-01	6.04e-02	5.68e-03	6.75e-03
6.75e-01	4.79e-02	5.04e-03	5.36e-03
8.97e-01	3.63e-02	4.15e-03	4.06e-03
1.10e+00	2.75e-02	3.58e-03	3.08e-03
1.27e+00	1.93e-02	3.00e-03	2.16e-03
1.47e+00	1.86e-02	2.77e-03	2.10e-03
1.75e+00	7.33e-03	1.34e-03	8.25e-04
2.38e+00	2.96e-03	4.79e-04	3.37e-04
3.40e+00	2.08e-04	5.21e-05	2.32e-05

TABLE VI. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{\text{trig}} < 15$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-2.29e+00	2.27e-03	9.43e-04	3.08e-04
-1.80e+00	1.08e-02	3.53e-03	1.47e-03
-1.53e+00	1.73e-02	5.82e-03	2.46e-03
-1.33e+00	1.83e-02	6.04e-03	2.51e-03
-1.12e+00	1.80e-02	6.88e-03	2.45e-03
-9.15e-01	2.96e-02	7.68e-03	4.05e-03
-7.31e-01	3.87e-02	8.57e-03	5.26e-03
-5.25e-01	4.87e-02	1.11e-02	6.61e-03
-3.28e-01	4.22e-02	1.13e-02	5.72e-03
-1.14e-01	8.83e-02	1.41e-02	1.20e-02
8.95e-02	9.03e-02	1.35e-02	1.22e-02
2.92e-01	6.35e-02	1.21e-02	8.61e-03
4.83e-01	6.53e-02	1.10e-02	8.85e-03
7.09e-01	6.63e-02	1.08e-02	9.00e-03
8.94e-01	2.16e-02	7.34e-03	2.93e-03
1.09e+00	1.62e-02	5.32e-03	2.20e-03
1.24e+00	2.14e-03	3.07e-03	2.98e-04
1.54e+00	1.44e-02	4.56e-03	2.00e-03
1.71e+00	8.84e-03	3.13e-03	1.20e-03
2.44e+00	5.06e-03	1.22e-03	7.39e-04

TABLE VII. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.1 < x_E < 0.15$  and  $7 < p_T^{\text{trig}} < 12$  GeV/c.

$p_{\text{out}}$	Per-trigger yield [GeV/c] $^{-1}$	Statistical error [GeV/c] $^{-1}$	Systematic error [GeV/c] $^{-1}$
-2.33e+00	5.50e-05	3.59e-05	6.70e-06
-1.80e+00	2.93e-04	1.56e-04	3.47e-05
-1.51e+00	1.44e-03	4.68e-04	1.70e-04
-1.32e+00	2.45e-03	6.03e-04	2.89e-04
-1.11e+00	4.39e-03	7.92e-04	5.17e-04
-9.13e-01	6.19e-03	1.03e-03	7.29e-04
-7.30e-01	1.35e-02	1.49e-03	1.58e-03
-5.35e-01	2.24e-02	1.95e-03	2.63e-03
-3.37e-01	3.39e-02	2.36e-03	3.99e-03
-1.17e-01	5.17e-02	2.78e-03	6.07e-03
9.80e-02	5.37e-02	2.81e-03	6.31e-03
2.96e-01	3.31e-02	2.42e-03	3.89e-03
4.97e-01	2.64e-02	2.00e-03	3.11e-03
6.91e-01	1.43e-02	1.52e-03	1.69e-03
8.89e-01	8.57e-03	1.07e-03	1.01e-03
1.09e+00	3.44e-03	7.66e-04	4.05e-04
1.28e+00	2.29e-03	5.55e-04	2.71e-04
1.47e+00	1.59e-03	4.32e-04	1.89e-04
1.77e+00	4.94e-04	1.73e-04	5.89e-05
2.34e+00	1.68e-05	2.68e-05	2.04e-06

TABLE VIII. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.15 < x_E < 0.25$  and  $7 < p_T^{\text{trig}} < 12$  GeV/c.

$p_{\text{out}}$	Per-trigger yield [GeV/c] $^{-1}$	Statistical error [GeV/c] $^{-1}$	Systematic error [GeV/c] $^{-1}$
-3.59e+00	1.11e-05	6.02e-06	9.46e-07
-2.32e+00	2.73e-04	9.87e-05	2.14e-05
-1.82e+00	7.11e-04	2.89e-04	5.51e-05
-1.51e+00	2.81e-03	6.61e-04	2.16e-04
-1.32e+00	4.20e-03	8.38e-04	3.21e-04
-1.11e+00	8.32e-03	1.06e-03	6.35e-04
-9.16e-01	1.06e-02	1.25e-03	8.07e-04
-7.27e-01	1.96e-02	1.63e-03	1.49e-03
-5.38e-01	2.45e-02	1.92e-03	1.87e-03
-3.38e-01	2.92e-02	2.16e-03	2.22e-03
-1.20e-01	3.59e-02	2.32e-03	2.73e-03
9.91e-02	3.63e-02	2.32e-03	2.76e-03
2.96e-01	3.02e-02	2.12e-03	2.30e-03
4.93e-01	2.39e-02	1.83e-03	1.82e-03
6.85e-01	1.56e-02	1.48e-03	1.19e-03
8.86e-01	9.34e-03	1.19e-03	7.12e-04
1.09e+00	6.41e-03	9.98e-04	4.89e-04
1.27e+00	5.11e-03	8.47e-04	3.91e-04
1.46e+00	4.50e-03	7.18e-04	3.45e-04
1.77e+00	1.21e-03	2.92e-04	9.36e-05
2.37e+00	3.79e-04	9.18e-05	3.05e-05
3.52e+00	9.31e-06	5.95e-06	7.67e-07

TABLE IX. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.25 < x_E < 0.5$  and  $7 < p_T^{\text{trig}} < 12$  GeV/ $c$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-3.60e+00	7.33e-05	1.57e-05	5.60e-06
-2.30e+00	7.26e-04	1.53e-04	5.53e-05
-1.83e+00	1.88e-03	4.14e-04	1.42e-04
-1.49e+00	3.51e-03	7.31e-04	2.66e-04
-1.31e+00	4.71e-03	8.49e-04	3.57e-04
-1.11e+00	7.42e-03	9.50e-04	5.61e-04
-9.27e-01	8.95e-03	1.13e-03	6.77e-04
-7.29e-01	1.14e-02	1.34e-03	8.63e-04
-5.40e-01	1.38e-02	1.44e-03	1.04e-03
-3.38e-01	1.64e-02	1.60e-03	1.24e-03
-1.17e-01	1.36e-02	1.58e-03	1.03e-03
9.92e-02	1.92e-02	1.64e-03	1.45e-03
2.95e-01	1.41e-02	1.45e-03	1.07e-03
4.92e-01	1.38e-02	1.37e-03	1.04e-03
6.75e-01	1.40e-02	1.33e-03	1.06e-03
8.97e-01	7.43e-03	1.11e-03	5.62e-04
1.10e+00	4.39e-03	8.97e-04	3.32e-04
1.27e+00	5.06e-03	8.68e-04	3.83e-04
1.47e+00	3.30e-03	7.07e-04	2.50e-04
1.75e+00	2.61e-03	4.26e-04	1.98e-04
2.38e+00	1.10e-03	1.63e-04	8.39e-05
3.40e+00	5.76e-05	1.52e-05	4.35e-06

TABLE X. Direct  $\gamma$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.5 < x_E < 1$  and  $7 < p_T^{\text{trig}} < 12$  GeV/ $c$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-2.29e+00	4.94e-04	1.38e-04	3.73e-05
-1.80e+00	1.56e-03	3.09e-04	1.18e-04
-1.53e+00	1.22e-03	4.75e-04	9.22e-05
-1.33e+00	2.04e-03	5.61e-04	1.54e-04
-1.12e+00	2.13e-03	5.51e-04	1.61e-04
-9.15e-01	2.11e-03	5.37e-04	1.60e-04
-7.31e-01	1.67e-03	5.39e-04	1.26e-04
-5.25e-01	2.00e-03	6.00e-04	1.51e-04
-3.28e-01	4.23e-03	7.42e-04	3.19e-04
-1.14e-01	2.37e-03	7.18e-04	1.79e-04
8.95e-02	3.02e-03	6.45e-04	2.28e-04
2.92e-01	3.62e-03	6.23e-04	2.73e-04
4.83e-01	4.35e-03	6.99e-04	3.28e-04
7.09e-01	1.67e-03	5.82e-04	1.26e-04
8.94e-01	1.33e-03	4.68e-04	1.00e-04
1.09e+00	3.78e-04	4.82e-04	2.85e-05
1.24e+00	1.27e-03	4.71e-04	9.59e-05
1.54e+00	7.96e-04	3.47e-04	6.01e-05
1.71e+00	6.52e-04	2.53e-04	4.93e-05
2.44e+00	3.34e-04	1.09e-04	2.52e-05

TABLE XI.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $4 < p_T^{\text{trig}} < 5$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-3.35e+00	1.29e-05	1.89e-06	1.17e-06
-2.71e+00	1.12e-04	7.85e-06	1.01e-05
-2.22e+00	4.71e-04	1.61e-05	4.25e-05
-1.72e+00	1.64e-03	3.01e-05	1.48e-04
-1.39e+00	4.09e-03	6.72e-05	3.68e-04
-1.12e+00	9.14e-03	1.00e-04	8.23e-04
-8.66e-01	2.04e-02	1.50e-04	1.84e-03
-6.97e-01	3.61e-02	2.58e-04	3.54e-03
-5.56e-01	5.67e-02	3.24e-04	6.30e-03
-3.98e-01	8.56e-02	3.99e-04	1.05e-02
-2.39e-01	1.17e-01	4.68e-04	1.51e-02
-7.99e-02	1.31e-01	4.95e-04	1.69e-02
5.99e-02	1.28e-01	4.90e-04	1.65e-02
1.99e-01	1.15e-01	4.63e-04	1.48e-02
3.58e-01	8.40e-02	3.95e-04	1.03e-02
5.17e-01	5.56e-02	3.21e-04	6.17e-03
6.57e-01	3.51e-02	2.54e-04	3.45e-03
8.42e-01	1.89e-02	1.45e-04	1.71e-03
1.11e+00	8.30e-03	9.57e-05	7.47e-04
1.35e+00	4.06e-03	6.69e-05	3.66e-04
1.70e+00	1.65e-03	3.01e-05	1.48e-04
2.21e+00	3.73e-04	1.43e-05	3.37e-05
2.70e+00	1.20e-04	8.12e-06	1.08e-05
3.35e+00	1.57e-05	2.08e-06	1.42e-06

TABLE XII.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{\text{trig}} < 7$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-4.75e+00	9.25e-07	3.02e-07	8.40e-08
-3.37e+00	6.29e-05	6.10e-06	5.67e-06
-2.73e+00	2.91e-04	1.86e-05	2.62e-05
-2.22e+00	9.11e-04	3.28e-05	8.21e-05
-1.72e+00	3.14e-03	6.10e-05	2.83e-04
-1.39e+00	7.13e-03	1.30e-04	6.42e-04
-1.13e+00	1.45e-02	1.86e-04	1.31e-03
-8.68e-01	2.83e-02	2.59e-04	2.54e-03
-6.96e-01	4.73e-02	4.33e-04	4.41e-03
-5.56e-01	6.92e-02	5.25e-04	7.00e-03
-3.97e-01	9.98e-02	6.32e-04	1.09e-02
-2.39e-01	1.36e-01	7.39e-04	1.52e-02
-7.96e-02	1.60e-01	8.03e-04	1.83e-02
6.02e-02	1.60e-01	8.03e-04	1.83e-02
1.98e-01	1.34e-01	7.35e-04	1.51e-02
3.57e-01	9.64e-02	6.21e-04	1.04e-02
5.17e-01	6.75e-02	5.19e-04	6.78e-03
6.56e-01	4.49e-02	4.22e-04	4.20e-03
8.42e-01	2.78e-02	2.57e-04	2.50e-03
1.11e+00	1.37e-02	1.81e-04	1.24e-03
1.35e+00	6.83e-03	1.27e-04	6.14e-04
1.70e+00	2.88e-03	5.84e-05	2.60e-04
2.21e+00	8.99e-04	3.26e-05	8.10e-05
2.71e+00	2.79e-04	1.82e-05	2.52e-05
3.38e+00	6.21e-05	6.06e-06	5.60e-06
4.71e+00	1.34e-06	3.64e-07	1.24e-07



TABLE XIII.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{\text{trig}} < 9$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-4.63e+00	5.42e-06	1.91e-06	6.06e-07
-3.35e+00	9.70e-05	1.98e-05	9.28e-06
-2.73e+00	7.62e-04	7.85e-05	7.00e-05
-2.24e+00	1.60e-03	1.14e-04	1.46e-04
-1.72e+00	5.85e-03	2.18e-04	5.29e-04
-1.39e+00	1.37e-02	4.71e-04	1.24e-03
-1.12e+00	2.58e-02	6.48e-04	2.33e-03
-8.68e-01	4.17e-02	8.25e-04	3.75e-03
-6.97e-01	6.68e-02	1.35e-03	6.02e-03
-5.56e-01	8.91e-02	1.56e-03	8.15e-03
-3.98e-01	1.18e-01	1.80e-03	1.11e-02
-2.40e-01	1.47e-01	2.01e-03	1.42e-02
-7.94e-02	1.72e-01	2.18e-03	1.68e-02
5.98e-02	1.69e-01	2.16e-03	1.64e-02
1.99e-01	1.49e-01	2.03e-03	1.42e-02
3.57e-01	1.13e-01	1.76e-03	1.05e-02
5.16e-01	8.83e-02	1.55e-03	8.08e-03
6.56e-01	6.38e-02	1.32e-03	5.75e-03
8.42e-01	3.89e-02	7.98e-04	3.51e-03
1.11e+00	2.18e-02	5.96e-04	1.97e-03
1.35e+00	1.18e-02	4.37e-04	1.06e-03
1.69e+00	4.76e-03	1.96e-04	4.31e-04
2.22e+00	1.62e-03	1.14e-04	1.48e-04
2.75e+00	4.29e-04	5.89e-05	3.97e-05
3.35e+00	1.29e-04	2.28e-05	1.21e-05
4.43e+00	1.90e-06	1.13e-06	2.06e-07

TABLE XIV.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{\text{trig}} < 12$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-4.23e+00	1.66e-06	2.11e-06	3.28e-07
-3.41e+00	2.43e-04	6.27e-05	2.55e-05
-2.65e+00	9.29e-04	1.73e-04	8.83e-05
-2.22e+00	3.39e-03	3.32e-04	3.13e-04
-1.71e+00	7.90e-03	5.06e-04	7.17e-04
-1.39e+00	1.91e-02	1.12e-03	1.73e-03
-1.14e+00	2.27e-02	1.22e-03	2.05e-03
-8.65e-01	5.49e-02	1.90e-03	4.95e-03
-6.96e-01	7.83e-02	2.92e-03	7.05e-03
-5.55e-01	1.04e-01	3.37e-03	9.35e-03
-3.95e-01	1.43e-01	3.97e-03	1.29e-02
-2.36e-01	1.72e-01	4.36e-03	1.55e-02
-7.94e-02	1.62e-01	4.23e-03	1.46e-02
6.02e-02	1.82e-01	4.49e-03	1.64e-02
1.99e-01	1.71e-01	4.35e-03	1.54e-02
3.57e-01	1.25e-01	3.71e-03	1.13e-02
5.15e-01	9.50e-02	3.22e-03	8.55e-03
6.55e-01	7.12e-02	2.79e-03	6.41e-03
8.40e-01	4.45e-02	1.71e-03	4.00e-03
1.10e+00	2.50e-02	1.28e-03	2.25e-03
1.35e+00	1.45e-02	9.70e-04	1.31e-03
1.69e+00	7.40e-03	4.90e-04	6.71e-04
2.22e+00	1.54e-03	2.23e-04	1.41e-04
2.74e+00	1.11e-03	1.89e-04	1.07e-04
3.48e+00	3.31e-04	7.31e-05	3.43e-05
4.57e+00	1.67e-05	6.72e-06	2.28e-06

TABLE XV.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{\text{trig}} < 15$  GeV/ $c$  and  $0.1 < x_E < 0.5$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-3.19e+00	5.49e-06	2.51e-05	9.36e-07
-2.65e+00	1.04e-03	4.89e-04	2.66e-04
-2.29e+00	1.07e-03	4.96e-04	1.21e-04
-1.74e+00	1.14e-02	1.63e-03	1.18e-03
-1.40e+00	2.15e-02	3.15e-03	2.05e-03
-1.12e+00	2.84e-02	3.63e-03	2.60e-03
-8.78e-01	4.50e-02	4.57e-03	4.09e-03
-6.94e-01	7.80e-02	7.78e-03	7.06e-03
-5.45e-01	1.09e-01	9.23e-03	9.85e-03
-3.98e-01	1.36e-01	1.03e-02	1.23e-02
-2.37e-01	2.09e-01	1.29e-02	1.88e-02
-7.66e-02	2.17e-01	1.31e-02	1.96e-02
5.84e-02	1.80e-01	1.19e-02	1.62e-02
1.99e-01	1.46e-01	1.07e-02	1.32e-02
3.59e-01	1.48e-01	1.08e-02	1.34e-02
5.20e-01	9.28e-02	8.50e-03	8.38e-03
6.57e-01	5.67e-02	6.62e-03	5.13e-03
8.52e-01	5.50e-02	5.07e-03	5.00e-03
1.11e+00	2.53e-02	3.43e-03	2.31e-03
1.36e+00	1.04e-02	2.20e-03	1.00e-03
1.68e+00	1.25e-02	1.70e-03	1.24e-03
2.13e+00	1.74e-03	6.33e-04	2.46e-04
2.57e+00	8.20e-06	4.34e-05	1.39e-06
3.23e+00	6.92e-05	8.92e-05	5.63e-05
4.62e+00	4.78e-10	9.58e-08	8.08e-11

TABLE XVI.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.1 < x_E < 0.15$  and  $7 < p_T^{\text{trig}} < 12$  GeV/ $c$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-2.22e+00	1.94e-05	1.12e-05	1.76e-06
-1.72e+00	3.92e-04	5.04e-05	3.53e-05
-1.39e+00	1.79e-03	1.52e-04	1.61e-04
-1.12e+00	5.51e-03	2.67e-04	4.96e-04
-8.66e-01	1.15e-02	3.87e-04	1.04e-03
-6.97e-01	2.14e-02	6.80e-04	1.93e-03
-5.56e-01	3.40e-02	8.58e-04	3.20e-03
-3.98e-01	4.86e-02	1.03e-03	4.94e-03
-2.39e-01	7.03e-02	1.24e-03	7.50e-03
-7.99e-02	7.88e-02	1.31e-03	8.77e-03
5.99e-02	7.95e-02	1.32e-03	8.62e-03
1.99e-01	6.72e-02	1.21e-03	7.10e-03
3.58e-01	4.76e-02	1.02e-03	4.73e-03
5.17e-01	3.36e-02	8.54e-04	3.18e-03
6.57e-01	2.16e-02	6.83e-04	1.94e-03
8.42e-01	1.08e-02	3.74e-04	9.72e-04
1.11e+00	4.69e-03	2.47e-04	4.22e-04
1.35e+00	1.77e-03	1.52e-04	1.60e-04
1.70e+00	4.00e-04	5.09e-05	3.60e-05
2.21e+00	8.69e-06	7.50e-06	7.88e-07

TABLE XVII.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.15 < x_E < 0.25$  and  $7 < p_T^{\text{trig}} < 12$  GeV/ $c$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-3.37e+00	1.95e-06	2.51e-06	1.78e-07
-2.73e+00	6.69e-05	2.08e-05	6.03e-06
-2.22e+00	5.60e-04	6.02e-05	5.05e-05
-1.72e+00	2.18e-03	1.19e-04	1.96e-04
-1.39e+00	5.36e-03	2.64e-04	4.83e-04
-1.13e+00	9.43e-03	3.50e-04	8.48e-04
-8.68e-01	1.58e-02	4.53e-04	1.42e-03
-6.96e-01	2.71e-02	7.67e-04	2.44e-03
-5.56e-01	3.43e-02	8.62e-04	3.09e-03
-3.97e-01	4.61e-02	1.00e-03	4.15e-03
-2.39e-01	5.17e-02	1.06e-03	4.65e-03
-7.96e-02	6.02e-02	1.15e-03	5.42e-03
6.02e-02	6.06e-02	1.15e-03	5.45e-03
1.98e-01	5.42e-02	1.09e-03	4.87e-03
3.57e-01	4.18e-02	9.52e-04	3.76e-03
5.17e-01	3.28e-02	8.43e-04	2.95e-03
6.56e-01	2.47e-02	7.31e-04	2.22e-03
8.42e-01	1.52e-02	4.45e-04	1.37e-03
1.11e+00	8.49e-03	3.32e-04	7.64e-04
1.35e+00	4.34e-03	2.37e-04	3.91e-04
1.70e+00	1.84e-03	1.09e-04	1.66e-04
2.21e+00	3.98e-04	5.08e-05	3.59e-05
2.71e+00	5.62e-05	1.91e-05	5.08e-06
3.38e+00	1.15e-05	6.10e-06	1.04e-06

TABLE XVIII.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.25 < x_E < 0.5$  and  $7 < p_T^{\text{trig}} < 12$  GeV/ $c$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-4.63e+00	4.33e-06	1.53e-06	3.90e-07
-3.35e+00	1.19e-04	1.97e-05	1.08e-05
-2.73e+00	7.13e-04	6.80e-05	6.42e-05
-2.24e+00	1.35e-03	9.33e-05	1.21e-04
-1.72e+00	3.62e-03	1.53e-04	3.26e-04
-1.39e+00	7.54e-03	3.13e-04	6.78e-04
-1.12e+00	1.01e-02	3.63e-04	9.13e-04
-8.68e-01	1.69e-02	4.68e-04	1.52e-03
-6.97e-01	2.04e-02	6.64e-04	1.84e-03
-5.56e-01	2.35e-02	7.13e-04	2.11e-03
-3.98e-01	2.80e-02	7.78e-04	2.52e-03
-2.40e-01	2.93e-02	7.96e-04	2.63e-03
-7.94e-02	3.04e-02	8.12e-04	2.74e-03
5.98e-02	3.10e-02	8.19e-04	2.79e-03
1.99e-01	3.15e-02	8.26e-04	2.84e-03
3.57e-01	2.58e-02	7.47e-04	2.32e-03
5.16e-01	2.30e-02	7.05e-04	2.07e-03
6.56e-01	1.88e-02	6.38e-04	1.69e-03
8.42e-01	1.39e-02	4.25e-04	1.25e-03
1.11e+00	9.16e-03	3.45e-04	8.24e-04
1.35e+00	6.13e-03	2.82e-04	5.51e-04
1.69e+00	2.99e-03	1.39e-04	2.69e-04
2.22e+00	1.17e-03	8.71e-05	1.06e-04
2.75e+00	4.96e-04	5.66e-05	4.46e-05
3.35e+00	1.52e-04	2.22e-05	1.37e-05
4.43e+00	4.47e-06	1.55e-06	4.02e-07

TABLE XIX.  $\pi^0$ -h $^\pm$   $p_{\text{out}}$  distributions at  $\sqrt{s}=200$  GeV for  $0.5 < x_E < 1$  and  $7 < p_T^{\text{trig}} < 12$  GeV/ $c$ .

$p_{\text{out}}$	Per-trigger yield [GeV/ $c$ ] $^{-1}$	Statistical error [GeV/ $c$ ] $^{-1}$	Systematic error [GeV/ $c$ ] $^{-1}$
-4.23e+00	1.95e-05	3.24e-06	1.75e-06
-3.41e+00	3.31e-04	3.27e-05	2.98e-05
-2.65e+00	6.92e-04	6.69e-05	6.23e-05
-2.22e+00	1.44e-03	9.65e-05	1.29e-04
-1.71e+00	2.38e-03	1.24e-04	2.14e-04
-1.39e+00	4.23e-03	2.34e-04	3.81e-04
-1.14e+00	4.76e-03	2.48e-04	4.28e-04
-8.65e-01	5.45e-03	2.66e-04	4.90e-04
-6.96e-01	7.16e-03	3.93e-04	6.44e-04
-5.55e-01	7.59e-03	4.05e-04	6.83e-04
-3.95e-01	7.97e-03	4.15e-04	7.17e-04
-2.36e-01	7.76e-03	4.09e-04	6.98e-04
-7.94e-02	8.35e-03	4.25e-04	7.51e-04
6.02e-02	8.77e-03	4.35e-04	7.89e-04
1.99e-01	6.00e-03	3.60e-04	5.40e-04
3.57e-01	6.24e-03	3.67e-04	5.62e-04
5.15e-01	6.51e-03	3.75e-04	5.86e-04
6.55e-01	7.45e-03	4.01e-04	6.71e-04
8.40e-01	5.26e-03	2.61e-04	4.74e-04
1.10e+00	5.31e-03	2.62e-04	4.78e-04
1.35e+00	3.55e-03	2.15e-04	3.20e-04
1.69e+00	2.11e-03	1.17e-04	1.90e-04
2.22e+00	9.61e-04	7.89e-05	8.65e-05
2.74e+00	5.48e-04	5.96e-05	4.93e-05
3.48e+00	3.56e-04	3.39e-05	3.20e-05
4.57e+00	1.76e-05	3.08e-06	1.58e-06

TABLE XX.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $4 < p_T^{trig} < 5 \otimes 0.5 < p_T^{assoc} < 1$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	6.64e-02	3.21e-04	5.98e-03
-7.81e-01	7.40e-02	3.39e-04	6.66e-03
-6.01e-01	8.35e-02	3.60e-04	7.51e-03
-4.21e-01	1.09e-01	4.13e-04	9.81e-03
-2.42e-01	1.28e-01	4.48e-04	1.15e-02
-6.22e-02	1.31e-01	4.54e-04	1.18e-02
1.17e-01	1.31e-01	4.54e-04	1.18e-02
2.97e-01	1.26e-01	4.44e-04	1.13e-02
4.77e-01	9.90e-02	3.93e-04	8.91e-03
6.56e-01	8.06e-02	3.54e-04	7.25e-03
8.36e-01	7.14e-02	3.33e-04	6.42e-03
1.02e+00	6.78e-02	3.25e-04	6.10e-03
1.20e+00	6.45e-02	3.16e-04	5.80e-03
1.37e+00	6.53e-02	3.18e-04	5.87e-03
1.55e+00	6.67e-02	3.22e-04	6.00e-03
1.73e+00	6.89e-02	3.27e-04	6.20e-03
1.91e+00	7.51e-02	3.42e-04	6.76e-03
2.09e+00	8.28e-02	3.59e-04	7.45e-03
2.27e+00	8.89e-02	3.72e-04	8.00e-03
2.45e+00	9.82e-02	3.91e-04	8.84e-03
2.63e+00	1.06e-01	4.06e-04	9.51e-03
2.81e+00	1.17e-01	4.27e-04	1.05e-02
2.99e+00	1.23e-01	4.39e-04	1.11e-02
3.17e+00	1.27e-01	4.47e-04	1.15e-02
3.35e+00	1.23e-01	4.39e-04	1.10e-02
3.53e+00	1.17e-01	4.28e-04	1.05e-02
3.71e+00	1.06e-01	4.07e-04	9.55e-03
3.89e+00	9.62e-02	3.87e-04	8.66e-03
4.07e+00	8.89e-02	3.72e-04	8.00e-03
4.25e+00	8.14e-02	3.56e-04	7.33e-03
4.43e+00	7.62e-02	3.44e-04	6.85e-03
4.61e+00	7.30e-02	3.37e-04	6.57e-03
4.79e+00	7.02e-02	3.30e-04	6.32e-03
4.97e+00	6.37e-02	3.14e-04	5.73e-03
5.15e+00	6.34e-02	3.14e-04	5.71e-03

TABLE XXI.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $4 < p_T^{trig} < 5 \otimes 1 < p_T^{assoc} < 2$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	2.07e-02	1.78e-04	1.86e-03
-7.81e-01	2.46e-02	1.95e-04	2.21e-03
-6.01e-01	3.17e-02	2.21e-04	2.85e-03
-4.21e-01	4.92e-02	2.76e-04	4.43e-03
-2.42e-01	8.95e-02	3.74e-04	8.06e-03
-6.22e-02	1.07e-01	4.10e-04	9.65e-03
1.17e-01	1.03e-01	4.01e-04	9.24e-03
2.97e-01	7.80e-02	3.48e-04	7.02e-03
4.77e-01	4.17e-02	2.54e-04	3.76e-03
6.56e-01	2.99e-02	2.15e-04	2.69e-03
8.36e-01	2.31e-02	1.88e-04	2.07e-03
1.02e+00	2.01e-02	1.76e-04	1.81e-03
1.20e+00	1.98e-02	1.75e-04	1.78e-03
1.37e+00	2.08e-02	1.79e-04	1.87e-03
1.55e+00	2.07e-02	1.79e-04	1.87e-03
1.73e+00	2.30e-02	1.88e-04	2.07e-03
1.91e+00	2.49e-02	1.96e-04	2.24e-03
2.09e+00	2.85e-02	2.10e-04	2.56e-03
2.27e+00	3.43e-02	2.30e-04	3.09e-03
2.45e+00	3.96e-02	2.47e-04	3.56e-03
2.63e+00	4.94e-02	2.76e-04	4.44e-03
2.81e+00	5.87e-02	3.02e-04	5.29e-03
2.99e+00	6.57e-02	3.19e-04	5.91e-03
3.17e+00	6.83e-02	3.26e-04	6.15e-03
3.35e+00	6.54e-02	3.18e-04	5.88e-03
3.53e+00	5.61e-02	2.95e-04	5.05e-03
3.71e+00	4.87e-02	2.75e-04	4.39e-03
3.89e+00	4.01e-02	2.49e-04	3.61e-03
4.07e+00	3.32e-02	2.26e-04	2.99e-03
4.25e+00	2.93e-02	2.12e-04	2.63e-03
4.43e+00	2.40e-02	1.92e-04	2.16e-03
4.61e+00	2.33e-02	1.90e-04	2.10e-03
4.79e+00	2.14e-02	1.81e-04	1.92e-03
4.97e+00	1.90e-02	1.71e-04	1.71e-03
5.15e+00	1.84e-02	1.68e-04	1.65e-03



TABLE XXII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $4 < p_T^{trig} < 5 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	2.66e-03	6.39e-05	2.40e-04
-7.81e-01	3.35e-03	7.17e-05	3.02e-04
-6.01e-01	5.00e-03	8.76e-05	4.50e-04
-4.21e-01	1.03e-02	1.26e-04	9.25e-04
-2.42e-01	3.45e-02	2.31e-04	3.10e-03
-6.22e-02	6.80e-02	3.25e-04	6.12e-03
1.17e-01	5.91e-02	3.03e-04	5.32e-03
2.97e-01	2.24e-02	1.86e-04	2.02e-03
4.77e-01	7.77e-03	1.09e-04	6.99e-04
6.56e-01	3.80e-03	7.64e-05	3.42e-04
8.36e-01	2.89e-03	6.66e-05	2.60e-04
1.02e+00	2.80e-03	6.55e-05	2.52e-04
1.20e+00	2.44e-03	6.11e-05	2.19e-04
1.37e+00	2.60e-03	6.32e-05	2.34e-04
1.55e+00	2.65e-03	6.38e-05	2.39e-04
1.73e+00	2.78e-03	6.53e-05	2.50e-04
1.91e+00	3.67e-03	7.50e-05	3.30e-04
2.09e+00	4.83e-03	8.61e-05	4.34e-04
2.27e+00	6.86e-03	1.03e-04	6.18e-04
2.45e+00	8.75e-03	1.16e-04	7.88e-04
2.63e+00	1.27e-02	1.40e-04	1.14e-03
2.81e+00	1.88e-02	1.70e-04	1.69e-03
2.99e+00	2.46e-02	1.95e-04	2.21e-03
3.17e+00	2.78e-02	2.07e-04	2.50e-03
3.35e+00	2.30e-02	1.88e-04	2.07e-03
3.53e+00	1.67e-02	1.60e-04	1.51e-03
3.71e+00	1.25e-02	1.38e-04	1.12e-03
3.89e+00	8.64e-03	1.15e-04	7.78e-04
4.07e+00	6.39e-03	9.91e-05	5.75e-04
4.25e+00	5.07e-03	8.83e-05	4.57e-04
4.43e+00	3.82e-03	7.66e-05	3.44e-04
4.61e+00	3.43e-03	7.25e-05	3.08e-04
4.79e+00	3.17e-03	6.97e-05	2.85e-04
4.97e+00	2.31e-03	5.95e-05	2.08e-04
5.15e+00	2.22e-03	5.84e-05	2.00e-04

TABLE XXIII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $4 < p_T^{trig} < 5 \otimes 5 < p_T^{assoc} < 10$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	9.29e-05	1.19e-05	8.36e-06
-7.81e-01	1.33e-04	1.43e-05	1.20e-05
-6.01e-01	1.45e-04	1.49e-05	1.30e-05
-4.21e-01	3.63e-04	2.36e-05	3.27e-05
-2.42e-01	1.86e-03	5.35e-05	1.68e-04
-6.22e-02	9.08e-03	1.18e-04	8.17e-04
1.17e-01	6.68e-03	1.01e-04	6.01e-04
2.97e-01	1.09e-03	4.09e-05	9.82e-05
4.77e-01	3.41e-04	2.29e-05	3.07e-05
6.56e-01	9.02e-05	1.18e-05	8.11e-06
8.36e-01	1.05e-04	1.27e-05	9.41e-06
1.02e+00	8.57e-05	1.15e-05	7.72e-06
1.20e+00	1.48e-04	1.51e-05	1.33e-05
1.37e+00	2.07e-04	1.78e-05	1.86e-05
1.55e+00	1.55e-04	1.54e-05	1.40e-05
1.73e+00	8.19e-05	1.12e-05	7.37e-06
1.91e+00	1.56e-04	1.55e-05	1.40e-05
2.09e+00	2.62e-04	2.00e-05	2.36e-05
2.27e+00	3.11e-04	2.18e-05	2.80e-05
2.45e+00	4.31e-04	2.57e-05	3.88e-05
2.63e+00	8.35e-04	3.58e-05	7.51e-05
2.81e+00	1.64e-03	5.01e-05	1.47e-04
2.99e+00	3.15e-03	6.95e-05	2.84e-04
3.17e+00	4.43e-03	8.25e-05	3.99e-04
3.35e+00	2.74e-03	6.49e-05	2.47e-04
3.53e+00	1.37e-03	4.58e-05	1.23e-04
3.71e+00	7.97e-04	3.50e-05	7.18e-05
3.89e+00	5.28e-04	2.85e-05	4.75e-05
4.07e+00	2.43e-04	1.93e-05	2.18e-05
4.25e+00	1.37e-04	1.45e-05	1.23e-05
4.43e+00	9.72e-05	1.22e-05	8.75e-06
4.61e+00	7.76e-05	1.09e-05	6.98e-06
4.79e+00	6.73e-05	1.02e-05	6.06e-06
4.97e+00	1.02e-04	1.25e-05	9.20e-06
5.15e+00	7.48e-05	1.07e-05	6.73e-06

TABLE XXIV.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 0.5 < p_T^{assoc} < 1$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	6.74e-02	4.74e-04	6.06e-03
-7.81e-01	7.52e-02	5.01e-04	6.77e-03
-6.01e-01	8.80e-02	5.43e-04	7.92e-03
-4.21e-01	1.14e-01	6.19e-04	1.03e-02
-2.42e-01	1.45e-01	7.01e-04	1.31e-02
-6.22e-02	1.51e-01	7.16e-04	1.36e-02
1.17e-01	1.52e-01	7.17e-04	1.37e-02
2.97e-01	1.39e-01	6.85e-04	1.25e-02
4.77e-01	1.04e-01	5.90e-04	9.33e-03
6.56e-01	8.24e-02	5.25e-04	7.42e-03
8.36e-01	7.53e-02	5.01e-04	6.77e-03
1.02e+00	6.78e-02	4.75e-04	6.10e-03
1.20e+00	6.47e-02	4.64e-04	5.83e-03
1.37e+00	6.37e-02	4.61e-04	5.73e-03
1.55e+00	6.59e-02	4.68e-04	5.93e-03
1.73e+00	6.55e-02	4.67e-04	5.90e-03
1.91e+00	7.07e-02	4.86e-04	6.36e-03
2.09e+00	8.04e-02	5.18e-04	7.24e-03
2.27e+00	9.20e-02	5.55e-04	8.28e-03
2.45e+00	1.04e-01	5.91e-04	9.37e-03
2.63e+00	1.13e-01	6.16e-04	1.02e-02
2.81e+00	1.32e-01	6.68e-04	1.19e-02
2.99e+00	1.44e-01	6.98e-04	1.30e-02
3.17e+00	1.46e-01	7.03e-04	1.32e-02
3.35e+00	1.41e-01	6.90e-04	1.27e-02
3.53e+00	1.29e-01	6.58e-04	1.16e-02
3.71e+00	1.16e-01	6.25e-04	1.04e-02
3.89e+00	9.94e-02	5.77e-04	8.95e-03
4.07e+00	9.33e-02	5.59e-04	8.40e-03
4.25e+00	8.02e-02	5.17e-04	7.21e-03
4.43e+00	7.55e-02	5.02e-04	6.80e-03
4.61e+00	7.02e-02	4.84e-04	6.31e-03
4.79e+00	6.68e-02	4.72e-04	6.01e-03
4.97e+00	6.23e-02	4.55e-04	5.60e-03
5.15e+00	6.28e-02	4.57e-04	5.65e-03

TABLE XXV.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 1 < p_T^{assoc} < 2$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	2.10e-02	2.64e-04	1.89e-03
-7.81e-01	2.57e-02	2.92e-04	2.31e-03
-6.01e-01	3.48e-02	3.40e-04	3.13e-03
-4.21e-01	5.58e-02	4.31e-04	5.02e-03
-2.42e-01	1.09e-01	6.05e-04	9.80e-03
-6.22e-02	1.39e-01	6.84e-04	1.25e-02
1.17e-01	1.37e-01	6.80e-04	1.23e-02
2.97e-01	9.15e-02	5.54e-04	8.24e-03
4.77e-01	4.81e-02	4.00e-04	4.33e-03
6.56e-01	3.30e-02	3.31e-04	2.97e-03
8.36e-01	2.57e-02	2.92e-04	2.32e-03
1.02e+00	2.04e-02	2.60e-04	1.83e-03
1.20e+00	1.84e-02	2.47e-04	1.66e-03
1.37e+00	1.92e-02	2.52e-04	1.72e-03
1.55e+00	2.03e-02	2.59e-04	1.83e-03
1.73e+00	2.30e-02	2.76e-04	2.07e-03
1.91e+00	2.52e-02	2.89e-04	2.27e-03
2.09e+00	3.02e-02	3.16e-04	2.72e-03
2.27e+00	3.58e-02	3.44e-04	3.22e-03
2.45e+00	4.51e-02	3.87e-04	4.06e-03
2.63e+00	5.79e-02	4.39e-04	5.21e-03
2.81e+00	7.44e-02	4.98e-04	6.70e-03
2.99e+00	8.78e-02	5.42e-04	7.90e-03
3.17e+00	9.28e-02	5.57e-04	8.35e-03
3.35e+00	8.81e-02	5.43e-04	7.93e-03
3.53e+00	6.92e-02	4.80e-04	6.23e-03
3.71e+00	5.47e-02	4.26e-04	4.92e-03
3.89e+00	4.35e-02	3.80e-04	3.92e-03
4.07e+00	3.44e-02	3.38e-04	3.09e-03
4.25e+00	3.04e-02	3.17e-04	2.74e-03
4.43e+00	2.48e-02	2.86e-04	2.23e-03
4.61e+00	2.07e-02	2.62e-04	1.86e-03
4.79e+00	2.16e-02	2.68e-04	1.95e-03
4.97e+00	1.88e-02	2.50e-04	1.70e-03
5.15e+00	1.86e-02	2.48e-04	1.68e-03

TABLE XXVI.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	3.12e-03	1.01e-04	2.81e-04
-7.81e-01	3.72e-03	1.11e-04	3.35e-04
-6.01e-01	5.99e-03	1.40e-04	5.39e-04
-4.21e-01	1.31e-02	2.08e-04	1.18e-03
-2.42e-01	4.70e-02	3.95e-04	4.23e-03
-6.22e-02	1.11e-01	6.11e-04	1.00e-02
1.17e-01	9.67e-02	5.69e-04	8.70e-03
2.97e-01	2.81e-02	3.05e-04	2.53e-03
4.77e-01	9.49e-03	1.77e-04	8.55e-04
6.56e-01	4.60e-03	1.23e-04	4.14e-04
8.36e-01	3.50e-03	1.07e-04	3.15e-04
1.02e+00	2.52e-03	9.11e-05	2.27e-04
1.20e+00	2.64e-03	9.33e-05	2.38e-04
1.37e+00	2.56e-03	9.18e-05	2.30e-04
1.55e+00	2.54e-03	9.16e-05	2.29e-04
1.73e+00	3.25e-03	1.03e-04	2.92e-04
1.91e+00	4.12e-03	1.17e-04	3.71e-04
2.09e+00	6.05e-03	1.41e-04	5.45e-04
2.27e+00	8.02e-03	1.63e-04	7.22e-04
2.45e+00	1.16e-02	1.96e-04	1.05e-03
2.63e+00	1.83e-02	2.46e-04	1.65e-03
2.81e+00	2.93e-02	3.12e-04	2.64e-03
2.99e+00	4.32e-02	3.79e-04	3.89e-03
3.17e+00	4.83e-02	4.00e-04	4.35e-03
3.35e+00	3.80e-02	3.55e-04	3.42e-03
3.53e+00	2.71e-02	3.00e-04	2.44e-03
3.71e+00	1.67e-02	2.35e-04	1.51e-03
3.89e+00	1.12e-02	1.92e-04	1.01e-03
4.07e+00	7.13e-03	1.53e-04	6.41e-04
4.25e+00	5.43e-03	1.34e-04	4.89e-04
4.43e+00	4.19e-03	1.18e-04	3.77e-04
4.61e+00	3.99e-03	1.15e-04	3.59e-04
4.79e+00	3.30e-03	1.04e-04	2.97e-04
4.97e+00	2.49e-03	9.06e-05	2.24e-04
5.15e+00	2.42e-03	8.93e-05	2.18e-04

TABLE XXVII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 5 < p_T^{assoc} < 10$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	1.14e-04	1.94e-05	1.03e-05
-7.81e-01	1.01e-04	1.82e-05	9.08e-06
-6.01e-01	1.56e-04	2.27e-05	1.41e-05
-4.21e-01	4.79e-04	3.97e-05	4.31e-05
-2.42e-01	2.83e-03	9.66e-05	2.55e-04
-6.22e-02	1.90e-02	2.51e-04	1.71e-03
1.17e-01	1.32e-02	2.08e-04	1.18e-03
2.97e-01	1.35e-03	6.67e-05	1.22e-04
4.77e-01	3.45e-04	3.37e-05	3.10e-05
6.56e-01	1.61e-04	2.30e-05	1.45e-05
8.36e-01	1.47e-04	2.20e-05	1.32e-05
1.02e+00	2.12e-05	8.36e-06	1.91e-06
1.20e+00	3.36e-05	1.05e-05	3.03e-06
1.37e+00	5.04e-05	1.29e-05	4.54e-06
1.55e+00	1.64e-04	2.32e-05	1.47e-05
1.73e+00	1.67e-04	2.35e-05	1.50e-05
1.91e+00	1.85e-04	2.47e-05	1.67e-05
2.09e+00	3.57e-04	3.43e-05	3.22e-05
2.27e+00	3.66e-04	3.47e-05	3.30e-05
2.45e+00	7.36e-04	4.93e-05	6.63e-05
2.63e+00	1.66e-03	7.40e-05	1.50e-04
2.81e+00	3.93e-03	1.14e-04	3.54e-04
2.99e+00	6.17e-03	1.43e-04	5.56e-04
3.17e+00	9.19e-03	1.74e-04	8.27e-04
3.35e+00	6.53e-03	1.47e-04	5.88e-04
3.53e+00	2.95e-03	9.85e-05	2.65e-04
3.71e+00	1.27e-03	6.48e-05	1.15e-04
3.89e+00	8.22e-04	5.20e-05	7.40e-05
4.07e+00	2.31e-04	2.76e-05	2.08e-05
4.25e+00	2.59e-04	2.92e-05	2.33e-05
4.43e+00	2.05e-04	2.60e-05	1.85e-05
4.61e+00	5.59e-05	1.36e-05	5.03e-06
4.79e+00	1.23e-04	2.01e-05	1.11e-05
4.97e+00	2.14e-04	2.65e-05	1.92e-05
5.15e+00	7.57e-05	1.58e-05	6.81e-06

TABLE XXVIII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 0.5 < p_T^{assoc} < 1$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	6.65e-02	1.23e-03	5.98e-03
-7.81e-01	8.21e-02	1.37e-03	7.38e-03
-6.01e-01	9.63e-02	1.49e-03	8.66e-03
-4.21e-01	1.15e-01	1.63e-03	1.04e-02
-2.42e-01	1.76e-01	2.02e-03	1.58e-02
-6.22e-02	1.86e-01	2.08e-03	1.67e-02
1.17e-01	1.86e-01	2.08e-03	1.67e-02
2.97e-01	1.55e-01	1.90e-03	1.40e-02
4.77e-01	1.16e-01	1.63e-03	1.04e-02
6.56e-01	9.08e-02	1.44e-03	8.17e-03
8.36e-01	7.28e-02	1.29e-03	6.55e-03
1.02e+00	6.52e-02	1.22e-03	5.87e-03
1.20e+00	6.72e-02	1.24e-03	6.05e-03
1.37e+00	6.25e-02	1.19e-03	5.62e-03
1.55e+00	6.26e-02	1.19e-03	5.64e-03
1.73e+00	6.32e-02	1.20e-03	5.69e-03
1.91e+00	7.70e-02	1.33e-03	6.93e-03
2.09e+00	8.23e-02	1.37e-03	7.40e-03
2.27e+00	9.40e-02	1.47e-03	8.46e-03
2.45e+00	1.10e-01	1.59e-03	9.89e-03
2.63e+00	1.32e-01	1.74e-03	1.19e-02
2.81e+00	1.52e-01	1.87e-03	1.37e-02
2.99e+00	1.70e-01	1.98e-03	1.53e-02
3.17e+00	1.75e-01	2.02e-03	1.58e-02
3.35e+00	1.70e-01	1.99e-03	1.53e-02
3.53e+00	1.45e-01	1.83e-03	1.31e-02
3.71e+00	1.28e-01	1.72e-03	1.16e-02
3.89e+00	1.07e-01	1.57e-03	9.64e-03
4.07e+00	8.91e-02	1.43e-03	8.02e-03
4.25e+00	8.17e-02	1.37e-03	7.35e-03
4.43e+00	7.90e-02	1.34e-03	7.11e-03
4.61e+00	7.07e-02	1.27e-03	6.36e-03
4.79e+00	6.99e-02	1.26e-03	6.29e-03
4.97e+00	5.66e-02	1.13e-03	5.09e-03
5.15e+00	6.41e-02	1.21e-03	5.77e-03

TABLE XXIX.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 1 < p_T^{assoc} < 2$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	2.09e-02	6.87e-04	1.88e-03
-7.81e-01	3.09e-02	8.36e-04	2.78e-03
-6.01e-01	4.23e-02	9.79e-04	3.80e-03
-4.21e-01	6.86e-02	1.25e-03	6.17e-03
-2.42e-01	1.42e-01	1.81e-03	1.28e-02
-6.22e-02	2.02e-01	2.17e-03	1.82e-02
1.17e-01	1.88e-01	2.09e-03	1.69e-02
2.97e-01	1.10e-01	1.59e-03	9.89e-03
4.77e-01	5.80e-02	1.15e-03	5.22e-03
6.56e-01	3.86e-02	9.36e-04	3.48e-03
8.36e-01	2.80e-02	7.96e-04	2.52e-03
1.02e+00	2.36e-02	7.31e-04	2.13e-03
1.20e+00	1.54e-02	5.90e-04	1.39e-03
1.37e+00	1.76e-02	6.31e-04	1.59e-03
1.55e+00	1.61e-02	6.04e-04	1.45e-03
1.73e+00	1.90e-02	6.56e-04	1.71e-03
1.91e+00	2.19e-02	7.05e-04	1.98e-03
2.09e+00	2.96e-02	8.19e-04	2.66e-03
2.27e+00	3.83e-02	9.32e-04	3.44e-03
2.45e+00	5.46e-02	1.11e-03	4.91e-03
2.63e+00	7.45e-02	1.30e-03	6.71e-03
2.81e+00	9.84e-02	1.50e-03	8.86e-03
2.99e+00	1.30e-01	1.73e-03	1.17e-02
3.17e+00	1.40e-01	1.80e-03	1.26e-02
3.35e+00	1.20e-01	1.66e-03	1.08e-02
3.53e+00	9.45e-02	1.47e-03	8.50e-03
3.71e+00	6.86e-02	1.25e-03	6.18e-03
3.89e+00	5.11e-02	1.08e-03	4.60e-03
4.07e+00	3.73e-02	9.20e-04	3.36e-03
4.25e+00	2.96e-02	8.18e-04	2.66e-03
4.43e+00	2.55e-02	7.59e-04	2.29e-03
4.61e+00	1.93e-02	6.61e-04	1.74e-03
4.79e+00	2.17e-02	7.00e-04	1.95e-03
4.97e+00	1.68e-02	6.16e-04	1.51e-03
5.15e+00	1.72e-02	6.24e-04	1.55e-03



TABLE XXX.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	3.30e-03	2.73e-04	2.97e-04
-7.81e-01	4.09e-03	3.04e-04	3.69e-04
-6.01e-01	6.20e-03	3.74e-04	5.58e-04
-4.21e-01	1.75e-02	6.29e-04	1.58e-03
-2.42e-01	6.66e-02	1.23e-03	6.00e-03
-6.22e-02	1.88e-01	2.09e-03	1.69e-02
1.17e-01	1.56e-01	1.90e-03	1.41e-02
2.97e-01	3.94e-02	9.46e-04	3.55e-03
4.77e-01	1.35e-02	5.53e-04	1.22e-03
6.56e-01	4.35e-03	3.13e-04	3.91e-04
8.36e-01	3.25e-03	2.71e-04	2.93e-04
1.02e+00	2.72e-03	2.48e-04	2.45e-04
1.20e+00	3.09e-03	2.64e-04	2.78e-04
1.37e+00	2.82e-03	2.52e-04	2.54e-04
1.55e+00	3.40e-03	2.77e-04	3.06e-04
1.73e+00	3.54e-03	2.82e-04	3.18e-04
1.91e+00	3.51e-03	2.81e-04	3.16e-04
2.09e+00	5.35e-03	3.47e-04	4.81e-04
2.27e+00	1.07e-02	4.91e-04	9.60e-04
2.45e+00	1.42e-02	5.66e-04	1.28e-03
2.63e+00	2.74e-02	7.87e-04	2.46e-03
2.81e+00	4.64e-02	1.03e-03	4.17e-03
2.99e+00	8.47e-02	1.39e-03	7.62e-03
3.17e+00	9.69e-02	1.49e-03	8.73e-03
3.35e+00	7.53e-02	1.31e-03	6.78e-03
3.53e+00	4.42e-02	1.00e-03	3.98e-03
3.71e+00	2.58e-02	7.64e-04	2.32e-03
3.89e+00	1.38e-02	5.59e-04	1.24e-03
4.07e+00	1.03e-02	4.82e-04	9.26e-04
4.25e+00	7.79e-03	4.19e-04	7.01e-04
4.43e+00	5.71e-03	3.59e-04	5.14e-04
4.61e+00	4.40e-03	3.15e-04	3.96e-04
4.79e+00	3.29e-03	2.72e-04	2.96e-04
4.97e+00	2.02e-03	2.14e-04	1.82e-04
5.15e+00	2.63e-03	2.44e-04	2.37e-04

TABLE XXXI.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 5 < p_T^{assoc} < 10$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	2.59e-04	7.63e-05	2.33e-05
-7.81e-01	1.95e-04	6.63e-05	1.75e-05
-6.01e-01	2.10e-04	6.88e-05	1.89e-05
-4.21e-01	4.49e-04	1.01e-04	4.04e-05
-2.42e-01	6.39e-03	3.80e-04	5.75e-04
-6.22e-02	6.10e-02	1.18e-03	5.49e-03
1.17e-01	3.48e-02	8.88e-04	3.13e-03
2.97e-01	2.05e-03	2.15e-04	1.84e-04
4.77e-01	1.24e-03	1.67e-04	1.12e-04
6.56e-01	4.31e-04	9.85e-05	3.88e-05
8.36e-01	4.20e-04	9.73e-05	3.78e-05
1.73e+00	2.10e-04	6.88e-05	1.89e-05
2.09e+00	4.32e-04	9.87e-05	3.89e-05
2.27e+00	5.21e-04	1.08e-04	4.69e-05
2.45e+00	1.20e-03	1.64e-04	1.08e-04
2.63e+00	2.60e-03	2.42e-04	2.34e-04
2.81e+00	7.85e-03	4.21e-04	7.06e-04
2.99e+00	2.55e-02	7.60e-04	2.30e-03
3.17e+00	2.70e-02	7.82e-04	2.43e-03
3.35e+00	2.15e-02	6.97e-04	1.93e-03
3.53e+00	5.84e-03	3.63e-04	5.26e-04
3.71e+00	2.48e-03	2.36e-04	2.23e-04
3.89e+00	1.66e-03	1.93e-04	1.50e-04
4.07e+00	8.20e-04	1.36e-04	7.38e-05
4.25e+00	3.28e-04	8.60e-05	2.95e-05
4.61e+00	1.38e-03	1.76e-04	1.24e-04
4.97e+00	1.48e-04	5.77e-05	1.33e-05

TABLE XXXII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 0.5 < p_T^{assoc} < 1$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	5.85e-02	2.31e-03	5.27e-03
-7.81e-01	7.62e-02	2.64e-03	6.85e-03
-6.01e-01	1.05e-01	3.11e-03	9.49e-03
-4.21e-01	1.32e-01	3.49e-03	1.19e-02
-2.42e-01	1.90e-01	4.21e-03	1.71e-02
-6.22e-02	2.00e-01	4.33e-03	1.80e-02
1.17e-01	2.27e-01	4.62e-03	2.05e-02
2.97e-01	1.68e-01	3.95e-03	1.51e-02
4.77e-01	1.07e-01	3.13e-03	9.61e-03
6.56e-01	9.52e-02	2.95e-03	8.57e-03
8.36e-01	6.89e-02	2.51e-03	6.20e-03
1.02e+00	6.72e-02	2.48e-03	6.05e-03
1.20e+00	6.13e-02	2.36e-03	5.52e-03
1.37e+00	5.74e-02	2.29e-03	5.17e-03
1.55e+00	5.86e-02	2.31e-03	5.27e-03
1.73e+00	6.19e-02	2.38e-03	5.58e-03
1.91e+00	6.84e-02	2.50e-03	6.15e-03
2.09e+00	7.44e-02	2.61e-03	6.70e-03
2.27e+00	9.26e-02	2.91e-03	8.33e-03
2.45e+00	1.19e-01	3.30e-03	1.07e-02
2.63e+00	1.46e-01	3.67e-03	1.31e-02
2.81e+00	1.79e-01	4.08e-03	1.61e-02
2.99e+00	2.04e-01	4.36e-03	1.83e-02
3.17e+00	2.03e-01	4.35e-03	1.83e-02
3.35e+00	2.02e-01	4.35e-03	1.82e-02
3.53e+00	1.69e-01	3.96e-03	1.52e-02
3.71e+00	1.44e-01	3.66e-03	1.30e-02
3.89e+00	1.07e-01	3.14e-03	9.66e-03
4.07e+00	9.59e-02	2.97e-03	8.63e-03
4.25e+00	8.96e-02	2.86e-03	8.07e-03
4.43e+00	7.08e-02	2.54e-03	6.38e-03
4.61e+00	5.61e-02	2.26e-03	5.05e-03
4.79e+00	5.76e-02	2.29e-03	5.18e-03
4.97e+00	6.76e-02	2.48e-03	6.08e-03
5.15e+00	4.71e-02	2.07e-03	4.24e-03

TABLE XXXIII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 1 < p_T^{assoc} < 2$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	1.96e-02	1.33e-03	1.76e-03
-7.81e-01	2.79e-02	1.59e-03	2.51e-03
-6.01e-01	4.66e-02	2.06e-03	4.19e-03
-4.21e-01	8.05e-02	2.71e-03	7.25e-03
-2.42e-01	1.51e-01	3.74e-03	1.36e-02
-6.22e-02	2.57e-01	4.92e-03	2.31e-02
1.17e-01	2.42e-01	4.77e-03	2.18e-02
2.97e-01	1.22e-01	3.35e-03	1.10e-02
4.77e-01	5.88e-02	2.31e-03	5.29e-03
6.56e-01	3.80e-02	1.86e-03	3.42e-03
8.36e-01	2.32e-02	1.45e-03	2.09e-03
1.02e+00	1.63e-02	1.21e-03	1.47e-03
1.20e+00	1.46e-02	1.15e-03	1.32e-03
1.37e+00	2.24e-02	1.42e-03	2.02e-03
1.55e+00	1.50e-02	1.17e-03	1.35e-03
1.73e+00	2.11e-02	1.38e-03	1.90e-03
1.91e+00	2.24e-02	1.42e-03	2.01e-03
2.09e+00	3.27e-02	1.72e-03	2.94e-03
2.27e+00	2.98e-02	1.64e-03	2.68e-03
2.45e+00	4.75e-02	2.08e-03	4.28e-03
2.63e+00	7.94e-02	2.69e-03	7.15e-03
2.81e+00	1.32e-01	3.49e-03	1.19e-02
2.99e+00	1.85e-01	4.15e-03	1.66e-02
3.17e+00	1.83e-01	4.13e-03	1.65e-02
3.35e+00	1.73e-01	4.01e-03	1.56e-02
3.53e+00	1.19e-01	3.31e-03	1.07e-02
3.71e+00	7.87e-02	2.68e-03	7.09e-03
3.89e+00	4.75e-02	2.08e-03	4.28e-03
4.07e+00	3.97e-02	1.90e-03	3.57e-03
4.25e+00	2.90e-02	1.62e-03	2.61e-03
4.43e+00	1.64e-02	1.22e-03	1.48e-03
4.61e+00	3.26e-02	1.72e-03	2.94e-03
4.79e+00	1.47e-02	1.15e-03	1.32e-03
4.97e+00	1.74e-02	1.25e-03	1.57e-03
5.15e+00	1.62e-02	1.21e-03	1.46e-03

TABLE XXXIV.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	2.32e-03	4.57e-04	2.09e-04
-7.81e-01	2.83e-03	5.05e-04	2.55e-04
-6.01e-01	7.67e-03	8.32e-04	6.91e-04
-4.21e-01	2.43e-02	1.48e-03	2.19e-03
-2.42e-01	9.00e-02	2.87e-03	8.10e-03
-6.22e-02	2.76e-01	5.11e-03	2.48e-02
1.17e-01	2.14e-01	4.47e-03	1.92e-02
2.97e-01	4.94e-02	2.12e-03	4.45e-03
4.77e-01	1.73e-02	1.25e-03	1.56e-03
6.56e-01	4.90e-03	6.65e-04	4.41e-04
8.36e-01	3.17e-03	5.35e-04	2.85e-04
1.02e+00	7.67e-04	2.63e-04	6.90e-05
1.20e+00	4.30e-03	6.23e-04	3.87e-04
1.37e+00	2.26e-03	4.51e-04	2.03e-04
1.55e+00	4.78e-03	6.57e-04	4.30e-04
1.73e+00	5.34e-03	6.94e-04	4.80e-04
1.91e+00	6.11e-03	7.43e-04	5.50e-04
2.09e+00	6.42e-03	7.61e-04	5.78e-04
2.27e+00	8.61e-03	8.81e-04	7.75e-04
2.45e+00	1.34e-02	1.10e-03	1.20e-03
2.63e+00	3.66e-02	1.82e-03	3.29e-03
2.81e+00	7.69e-02	2.65e-03	6.92e-03
2.99e+00	1.24e-01	3.38e-03	1.11e-02
3.17e+00	1.68e-01	3.95e-03	1.51e-02
3.35e+00	1.26e-01	3.41e-03	1.13e-02
3.53e+00	6.33e-02	2.40e-03	5.70e-03
3.71e+00	3.33e-02	1.74e-03	3.00e-03
3.89e+00	1.54e-02	1.18e-03	1.39e-03
4.07e+00	1.09e-02	9.92e-04	9.81e-04
4.25e+00	8.37e-03	8.69e-04	7.54e-04
4.43e+00	4.43e-03	6.32e-04	3.99e-04
4.61e+00	4.43e-03	6.32e-04	3.99e-04
4.79e+00	7.65e-03	8.31e-04	6.89e-04
4.97e+00	5.13e-03	6.80e-04	4.61e-04
5.15e+00	2.63e-03	4.87e-04	2.37e-04

TABLE XXXV.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 5 < p_T^{assoc} < 10$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	6.81e-04	2.48e-04	6.12e-05
-6.01e-01	2.87e-04	1.61e-04	2.58e-05
-4.21e-01	4.62e-04	2.04e-04	4.16e-05
-2.42e-01	5.71e-03	7.17e-04	5.13e-04
-6.22e-02	7.86e-02	2.68e-03	7.08e-03
1.17e-01	4.26e-02	1.97e-03	3.83e-03
2.97e-01	3.08e-03	5.27e-04	2.77e-04
4.77e-01	1.47e-03	3.64e-04	1.32e-04
1.55e+00	4.95e-04	2.11e-04	4.45e-05
1.91e+00	3.63e-04	1.81e-04	3.27e-05
2.09e+00	6.41e-04	2.40e-04	5.77e-05
2.27e+00	5.93e-04	2.31e-04	5.33e-05
2.45e+00	2.47e-03	4.72e-04	2.22e-04
2.63e+00	7.44e-03	8.20e-04	6.70e-04
2.81e+00	1.35e-02	1.11e-03	1.22e-03
2.99e+00	3.94e-02	1.89e-03	3.54e-03
3.17e+00	5.37e-02	2.21e-03	4.83e-03
3.35e+00	2.73e-02	1.57e-03	2.46e-03
3.53e+00	1.13e-02	1.01e-03	1.02e-03
3.71e+00	6.09e-03	7.41e-04	5.48e-04
3.89e+00	9.61e-04	2.94e-04	8.65e-05
4.07e+00	6.05e-04	2.34e-04	5.45e-05
4.79e+00	1.09e-03	3.13e-04	9.80e-05

TABLE XXXVI.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 0.5 < p_T^{assoc} < 1$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	6.39e-02	6.43e-03	5.75e-03
-7.81e-01	5.31e-02	5.86e-03	4.78e-03
-6.01e-01	1.10e-01	8.47e-03	9.88e-03
-4.21e-01	1.64e-01	1.04e-02	1.47e-02
-2.42e-01	1.90e-01	1.12e-02	1.71e-02
-6.22e-02	2.47e-01	1.29e-02	2.23e-02
1.17e-01	2.60e-01	1.32e-02	2.34e-02
2.97e-01	1.48e-01	9.87e-03	1.33e-02
4.77e-01	1.00e-01	8.09e-03	9.03e-03
6.56e-01	7.07e-02	6.77e-03	6.36e-03
8.36e-01	6.47e-02	6.48e-03	5.82e-03
1.02e+00	4.41e-02	5.34e-03	3.97e-03
1.20e+00	5.78e-02	6.12e-03	5.20e-03
1.37e+00	3.65e-02	4.85e-03	3.28e-03
1.55e+00	2.44e-02	3.97e-03	2.20e-03
1.73e+00	4.05e-02	5.11e-03	3.64e-03
1.91e+00	1.07e-01	8.37e-03	9.66e-03
2.09e+00	1.19e-01	8.81e-03	1.07e-02
2.27e+00	9.70e-02	7.95e-03	8.73e-03
2.45e+00	1.42e-01	9.65e-03	1.27e-02
2.63e+00	1.68e-01	1.05e-02	1.51e-02
2.81e+00	1.99e-01	1.15e-02	1.80e-02
2.99e+00	2.32e-01	1.24e-02	2.09e-02
3.17e+00	2.34e-01	1.25e-02	2.10e-02
3.35e+00	2.52e-01	1.30e-02	2.27e-02
3.53e+00	1.58e-01	1.02e-02	1.43e-02
3.71e+00	1.59e-01	1.02e-02	1.43e-02
3.89e+00	1.20e-01	8.85e-03	1.08e-02
4.07e+00	1.08e-01	8.40e-03	9.73e-03
4.25e+00	7.54e-02	7.00e-03	6.79e-03
4.43e+00	9.36e-02	7.81e-03	8.42e-03
4.61e+00	2.87e-02	4.30e-03	2.58e-03
4.79e+00	4.04e-02	5.11e-03	3.64e-03
4.97e+00	3.48e-02	4.74e-03	3.13e-03
5.15e+00	4.82e-02	5.58e-03	4.34e-03

TABLE XXXVII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 1 < p_T^{assoc} < 2$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	1.76e-02	3.36e-03	1.58e-03
-7.81e-01	3.50e-02	4.75e-03	3.15e-03
-6.01e-01	4.70e-02	5.51e-03	4.23e-03
-4.21e-01	8.48e-02	7.43e-03	7.63e-03
-2.42e-01	1.69e-01	1.06e-02	1.52e-02
-6.22e-02	3.25e-01	1.48e-02	2.92e-02
1.17e-01	3.00e-01	1.42e-02	2.70e-02
2.97e-01	1.41e-01	9.63e-03	1.27e-02
4.77e-01	7.89e-02	7.16e-03	7.10e-03
6.56e-01	5.83e-02	6.14e-03	5.25e-03
8.36e-01	4.22e-02	5.22e-03	3.79e-03
1.02e+00	3.65e-02	4.86e-03	3.29e-03
1.20e+00	2.44e-02	3.96e-03	2.19e-03
1.37e+00	9.60e-03	2.48e-03	8.64e-04
1.55e+00	1.57e-02	3.17e-03	1.41e-03
1.91e+00	1.74e-02	3.35e-03	1.57e-03
2.09e+00	3.61e-02	4.83e-03	3.25e-03
2.27e+00	2.04e-02	3.62e-03	1.84e-03
2.45e+00	6.26e-02	6.37e-03	5.64e-03
2.63e+00	8.80e-02	7.57e-03	7.92e-03
2.81e+00	1.47e-01	9.84e-03	1.32e-02
2.99e+00	1.56e-01	1.01e-02	1.40e-02
3.17e+00	2.85e-01	1.39e-02	2.56e-02
3.35e+00	2.03e-01	1.16e-02	1.82e-02
3.53e+00	1.15e-01	8.69e-03	1.04e-02
3.71e+00	8.90e-02	7.61e-03	8.01e-03
3.89e+00	7.62e-02	7.04e-03	6.86e-03
4.07e+00	2.70e-02	4.17e-03	2.43e-03
4.25e+00	3.75e-02	4.92e-03	3.37e-03
4.43e+00	4.29e-02	5.26e-03	3.86e-03
4.61e+00	3.66e-02	4.86e-03	3.30e-03
4.79e+00	1.76e-02	3.36e-03	1.58e-03
4.97e+00	1.02e-02	2.56e-03	9.16e-04
5.15e+00	3.48e-03	1.49e-03	3.13e-04



TABLE XXXVIII.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	2.27e-03	1.21e-03	2.05e-04
-7.81e-01	1.62e-03	1.02e-03	1.45e-04
-6.01e-01	3.45e-03	1.49e-03	3.10e-04
-4.21e-01	2.53e-02	4.04e-03	2.28e-03
-2.42e-01	1.02e-01	8.17e-03	9.21e-03
-6.22e-02	3.14e-01	1.46e-02	2.83e-02
1.17e-01	2.60e-01	1.32e-02	2.34e-02
2.97e-01	7.41e-02	6.94e-03	6.67e-03
4.77e-01	1.31e-02	2.90e-03	1.18e-03
6.56e-01	3.42e-03	1.48e-03	3.08e-04
8.36e-01	3.49e-03	1.50e-03	3.14e-04
1.37e+00	1.04e-02	2.58e-03	9.35e-04
1.55e+00	9.06e-03	2.41e-03	8.16e-04
1.73e+00	5.29e-03	1.84e-03	4.76e-04
1.91e+00	5.13e-03	1.81e-03	4.61e-04
2.09e+00	1.61e-02	3.22e-03	1.45e-03
2.27e+00	1.59e-02	3.20e-03	1.43e-03
2.45e+00	1.18e-02	2.76e-03	1.07e-03
2.63e+00	4.66e-02	5.49e-03	4.19e-03
2.81e+00	1.02e-01	8.14e-03	9.14e-03
2.99e+00	1.61e-01	1.03e-02	1.45e-02
3.17e+00	2.64e-01	1.33e-02	2.38e-02
3.35e+00	1.64e-01	1.04e-02	1.47e-02
3.53e+00	8.71e-02	7.53e-03	7.84e-03
3.71e+00	4.62e-02	5.46e-03	4.16e-03
3.89e+00	1.15e-02	2.72e-03	1.04e-03
4.07e+00	1.80e-02	3.40e-03	1.62e-03
4.25e+00	7.45e-03	2.19e-03	6.71e-04
4.61e+00	1.09e-02	2.64e-03	9.79e-04
4.97e+00	3.87e-03	1.57e-03	3.48e-04

TABLE XXXIX.  $\pi^0$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 5 < p_T^{assoc} < 10$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
-9.60e-01	5.03e-03	1.80e-03	4.53e-04
-6.01e-01	1.26e-03	8.98e-04	1.13e-04
-2.42e-01	2.01e-02	3.60e-03	1.81e-03
-6.22e-02	1.93e-01	1.13e-02	1.73e-02
1.17e-01	5.03e-02	5.70e-03	4.53e-03
2.97e-01	2.01e-03	1.14e-03	1.81e-04
2.27e+00	3.35e-03	1.47e-03	3.02e-04
2.45e+00	3.45e-03	1.49e-03	3.10e-04
2.63e+00	1.18e-02	2.75e-03	1.06e-03
2.81e+00	1.21e-02	2.78e-03	1.09e-03
2.99e+00	7.21e-02	6.84e-03	6.49e-03
3.17e+00	1.49e-01	9.90e-03	1.34e-02
3.35e+00	2.77e-02	4.23e-03	2.50e-03
3.53e+00	1.34e-02	2.94e-03	1.21e-03
3.71e+00	3.02e-02	4.41e-03	2.72e-03
3.89e+00	1.01e-02	2.54e-03	9.05e-04

TABLE XL. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 0.5 < p_T^{assoc} < 1$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	5.72e-02	3.07e-03	7.05e-03
1.40e+00	5.72e-02	3.00e-03	7.04e-03
1.63e+00	5.52e-02	3.61e-03	6.80e-03
1.86e+00	5.85e-02	3.67e-03	7.20e-03
2.09e+00	6.53e-02	4.10e-03	8.04e-03
2.33e+00	6.67e-02	5.34e-03	8.21e-03
2.56e+00	8.80e-02	4.52e-03	1.08e-02
2.79e+00	1.10e-01	4.34e-03	1.35e-02
3.03e+00	9.25e-02	6.99e-03	1.14e-02
3.26e+00	1.01e-01	6.36e-03	1.24e-02
3.49e+00	1.07e-01	4.52e-03	1.32e-02
3.72e+00	7.99e-02	5.58e-03	9.83e-03
3.96e+00	6.99e-02	5.09e-03	8.61e-03
4.19e+00	7.77e-02	3.59e-03	9.57e-03
4.42e+00	5.89e-02	3.48e-03	7.26e-03
4.65e+00	5.91e-02	3.38e-03	7.27e-03
4.89e+00	5.37e-02	3.11e-03	6.61e-03
5.12e+00	4.41e-02	4.00e-03	5.43e-03

TABLE XLI. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 1 < p_T^{assoc} < 2$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	2.38e-02	2.13e-03	2.94e-03
1.40e+00	1.42e-02	1.61e-03	1.74e-03
1.63e+00	1.59e-02	1.89e-03	1.96e-03
1.86e+00	2.03e-02	1.95e-03	2.50e-03
2.09e+00	1.49e-02	2.94e-03	1.83e-03
2.33e+00	3.58e-02	2.34e-03	4.40e-03
2.56e+00	3.33e-02	3.27e-03	4.10e-03
2.79e+00	4.38e-02	3.87e-03	5.40e-03
3.03e+00	5.37e-02	4.08e-03	6.61e-03
3.26e+00	6.06e-02	3.58e-03	7.46e-03
3.49e+00	6.12e-02	3.10e-03	7.53e-03
3.72e+00	5.19e-02	3.00e-03	6.39e-03
3.96e+00	3.12e-02	2.34e-03	3.84e-03
4.19e+00	2.74e-02	2.05e-03	3.37e-03
4.42e+00	2.67e-02	2.14e-03	3.29e-03
4.65e+00	1.83e-02	1.70e-03	2.25e-03
4.89e+00	1.50e-02	1.68e-03	1.85e-03
5.12e+00	1.13e-02	1.87e-03	1.40e-03

TABLE XLII. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	3.30e-03	6.64e-04	4.06e-04
1.40e+00	1.99e-03	5.90e-04	2.45e-04
1.63e+00	2.98e-03	6.20e-04	3.67e-04
1.86e+00	2.85e-03	6.81e-04	3.51e-04
2.09e+00	2.91e-03	9.70e-04	3.58e-04
2.33e+00	6.93e-03	1.05e-03	8.53e-04
2.56e+00	1.04e-02	1.37e-03	1.28e-03
2.79e+00	1.91e-02	1.74e-03	2.35e-03
3.03e+00	2.06e-02	2.32e-03	2.53e-03
3.26e+00	2.10e-02	2.32e-03	2.59e-03
3.49e+00	1.51e-02	2.02e-03	1.86e-03
3.72e+00	1.48e-02	1.47e-03	1.82e-03
3.96e+00	6.76e-03	1.08e-03	8.32e-04
4.19e+00	7.04e-03	9.79e-04	8.66e-04
4.42e+00	2.58e-03	7.35e-04	3.18e-04
4.65e+00	3.33e-03	6.66e-04	4.10e-04
4.89e+00	3.07e-03	6.23e-04	3.78e-04
5.12e+00	-2.03e-04	6.92e-04	2.50e-05

TABLE XLIII. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $5 < p_T^{trig} < 7 \otimes 5 < p_T^{assoc} < 10$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.40e+00	3.56e-04	1.33e-04	4.39e-05
1.63e+00	4.73e-04	1.75e-04	5.82e-05
1.86e+00	-8.67e-05	1.41e-04	1.07e-05
2.09e+00	-6.70e-05	1.91e-04	8.25e-06
2.33e+00	7.17e-04	2.19e-04	8.83e-05
2.56e+00	3.23e-04	3.25e-04	3.98e-05
2.79e+00	1.70e-03	4.71e-04	2.10e-04
3.03e+00	1.46e-03	6.31e-04	1.80e-04
3.26e+00	2.05e-03	5.92e-04	2.52e-04
3.49e+00	8.47e-04	5.17e-04	1.04e-04
3.72e+00	9.81e-04	3.62e-04	1.21e-04
3.96e+00	8.55e-04	2.69e-04	1.05e-04
4.19e+00	9.61e-04	2.43e-04	1.18e-04
4.42e+00	3.10e-04	1.24e-04	3.82e-05
4.89e+00	-1.99e-04	1.28e-04	2.45e-05
5.12e+00	-1.15e-04	1.16e-04	1.42e-05

TABLE XLIV. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 0.5 < p_T^{assoc} < 1$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	6.49e-02	4.18e-03	7.39e-03
1.40e+00	7.01e-02	3.98e-03	6.88e-03
1.63e+00	6.81e-02	3.99e-03	7.75e-03
1.86e+00	7.38e-02	4.23e-03	8.40e-03
2.09e+00	7.22e-02	4.47e-03	8.21e-03
2.33e+00	9.28e-02	5.03e-03	1.06e-02
2.56e+00	9.38e-02	5.66e-03	1.07e-02
2.79e+00	1.11e-01	6.08e-03	1.26e-02
3.03e+00	1.27e-01	6.44e-03	1.45e-02
3.26e+00	1.48e-01	6.36e-03	1.69e-02
3.49e+00	1.22e-01	5.92e-03	1.39e-02
3.72e+00	1.07e-01	5.45e-03	1.22e-02
3.96e+00	1.04e-01	5.11e-03	1.18e-02
4.19e+00	7.55e-02	4.49e-03	8.59e-03
4.42e+00	6.51e-02	4.20e-03	7.41e-03
4.65e+00	6.10e-02	4.13e-03	6.94e-03
4.89e+00	5.67e-02	3.95e-03	6.45e-03
5.12e+00	4.44e-02	3.81e-03	5.06e-03

TABLE XLV. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 1 < p_T^{assoc} < 2$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	1.89e-02	2.02e-03	2.15e-03
1.40e+00	1.19e-02	1.82e-03	1.36e-03
1.63e+00	3.13e-02	2.46e-03	3.56e-03
1.86e+00	2.56e-02	2.32e-03	2.91e-03
2.09e+00	2.49e-02	2.55e-03	2.84e-03
2.33e+00	3.24e-02	2.98e-03	3.69e-03
2.56e+00	4.90e-02	3.59e-03	5.57e-03
2.79e+00	6.17e-02	4.47e-03	7.02e-03
3.03e+00	9.72e-02	5.14e-03	1.11e-02
3.26e+00	9.30e-02	5.00e-03	1.06e-02
3.49e+00	6.90e-02	4.49e-03	7.85e-03
3.72e+00	4.77e-02	3.70e-03	5.42e-03
3.96e+00	2.80e-02	3.07e-03	3.19e-03
4.19e+00	3.19e-02	2.74e-03	3.63e-03
4.42e+00	2.37e-02	2.42e-03	2.69e-03
4.65e+00	3.39e-02	2.55e-03	3.86e-03
4.89e+00	8.01e-03	1.87e-03	9.12e-04
5.12e+00	1.21e-02	1.95e-03	1.37e-03

TABLE XLVI. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	-1.25e-03	8.12e-04	1.42e-04
1.40e+00	7.30e-03	1.10e-03	8.31e-04
1.63e+00	4.60e-03	1.09e-03	5.24e-04
1.86e+00	5.31e-03	1.00e-03	6.04e-04
2.09e+00	4.89e-03	1.11e-03	5.56e-04
2.33e+00	1.08e-02	1.64e-03	1.23e-03
2.56e+00	1.69e-02	2.11e-03	1.93e-03
2.79e+00	2.82e-02	2.81e-03	3.21e-03
3.03e+00	5.07e-02	3.66e-03	5.77e-03
3.26e+00	4.59e-02	3.88e-03	5.22e-03
3.49e+00	3.73e-02	2.95e-03	4.24e-03
3.72e+00	1.08e-02	2.17e-03	1.23e-03
3.96e+00	1.02e-02	1.60e-03	1.16e-03
4.19e+00	9.27e-03	1.38e-03	1.06e-03
4.42e+00	-1.29e-03	8.45e-04	1.47e-04
4.65e+00	2.55e-03	9.30e-04	2.90e-04
4.89e+00	2.39e-03	8.67e-04	2.72e-04
5.12e+00	4.63e-03	8.54e-04	5.27e-04

TABLE XLVII. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $7 < p_T^{trig} < 9 \otimes 5 < p_T^{assoc} < 10$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	1.30e-03	1.30e-03	1.48e-04
1.40e+00	7.82e-04	3.54e-04	8.90e-05
2.33e+00	1.90e-03	4.67e-04	2.16e-04
2.56e+00	6.45e-04	5.39e-04	7.33e-05
2.79e+00	1.71e-03	8.44e-04	1.95e-04
3.03e+00	2.76e-03	1.33e-03	3.14e-04
3.26e+00	7.16e-03	1.44e-03	8.15e-04
3.49e+00	1.13e-03	1.00e-03	1.29e-04
3.72e+00	1.37e-03	6.78e-04	1.56e-04
3.96e+00	6.49e-04	4.70e-04	7.38e-05
4.19e+00	1.14e-03	4.21e-04	1.30e-04
4.42e+00	3.47e-04	2.73e-04	3.95e-05

TABLE XLVIII. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 0.5 < p_T^{assoc} < 1$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	6.24e-02	5.24e-03	6.94e-03
1.40e+00	7.44e-02	5.24e-03	8.28e-03
1.63e+00	6.82e-02	4.63e-03	6.48e-03
1.86e+00	8.83e-02	5.93e-03	9.83e-03
2.09e+00	8.64e-02	6.03e-03	9.62e-03
2.33e+00	1.03e-01	6.67e-03	1.15e-02
2.56e+00	1.47e-01	7.80e-03	1.64e-02
2.79e+00	1.46e-01	8.34e-03	1.63e-02
3.03e+00	1.59e-01	8.81e-03	1.77e-02
3.26e+00	1.85e-01	9.21e-03	2.06e-02
3.49e+00	1.31e-01	8.33e-03	1.45e-02
3.72e+00	1.34e-01	7.59e-03	1.49e-02
3.96e+00	1.20e-01	7.05e-03	1.34e-02
4.19e+00	9.99e-02	6.52e-03	1.11e-02
4.42e+00	4.93e-02	5.11e-03	5.49e-03
4.65e+00	6.35e-02	5.21e-03	7.07e-03
4.89e+00	5.39e-02	5.18e-03	6.00e-03
5.12e+00	6.07e-02	5.05e-03	6.76e-03

TABLE XLIX. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 1 < p_T^{assoc} < 2$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	1.64e-02	2.60e-03	1.83e-03
1.40e+00	2.28e-02	3.10e-03	2.54e-03
1.63e+00	2.62e-02	3.10e-03	2.92e-03
1.86e+00	2.46e-02	3.17e-03	2.74e-03
2.09e+00	1.90e-02	3.24e-03	2.11e-03
2.33e+00	3.57e-02	3.80e-03	3.98e-03
2.56e+00	6.76e-02	5.35e-03	7.53e-03
2.79e+00	9.94e-02	6.61e-03	1.11e-02
3.03e+00	1.22e-01	7.57e-03	1.35e-02
3.26e+00	1.10e-01	7.36e-03	1.23e-02
3.49e+00	8.20e-02	6.46e-03	9.13e-03
3.72e+00	6.30e-02	5.26e-03	7.02e-03
3.96e+00	3.51e-02	4.21e-03	3.91e-03
4.19e+00	3.26e-02	3.65e-03	3.62e-03
4.42e+00	2.57e-02	3.00e-03	2.86e-03
4.65e+00	2.10e-02	2.89e-03	2.34e-03
4.89e+00	9.01e-03	2.20e-03	1.00e-03
5.12e+00	2.16e-02	2.81e-03	2.40e-03

TABLE L. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 2 < p_T^{assoc} < 5$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.40e+00	1.83e-03	8.97e-04	2.04e-04
1.63e+00	6.14e-03	1.37e-03	6.83e-04
1.86e+00	1.33e-03	1.25e-03	1.48e-04
2.09e+00	8.78e-03	1.83e-03	9.77e-04
2.33e+00	1.58e-02	2.48e-03	1.76e-03
2.56e+00	3.04e-02	3.39e-03	3.38e-03
2.79e+00	5.73e-02	4.90e-03	6.38e-03
3.03e+00	6.60e-02	5.76e-03	7.35e-03
3.26e+00	5.54e-02	5.90e-03	6.17e-03
3.49e+00	4.86e-02	4.69e-03	5.42e-03
3.72e+00	2.25e-02	3.16e-03	2.51e-03
3.96e+00	9.01e-03	2.19e-03	1.00e-03
4.19e+00	9.79e-03	2.00e-03	1.09e-03
4.42e+00	3.35e-03	1.41e-03	3.73e-04
5.12e+00	3.07e-03	1.13e-03	3.42e-04

TABLE LI. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $9 < p_T^{trig} < 12 \otimes 5 < p_T^{assoc} < 10$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
2.09e+00	5.15e-04	5.71e-04	5.73e-05
2.33e+00	2.69e-03	9.06e-04	3.00e-04
2.56e+00	5.04e-03	1.38e-03	5.61e-04
2.79e+00	5.96e-03	1.77e-03	6.63e-04
3.03e+00	1.36e-02	2.45e-03	1.51e-03
3.26e+00	1.67e-02	2.94e-03	1.86e-03
3.49e+00	1.04e-02	2.15e-03	1.16e-03
3.72e+00	3.41e-04	7.46e-04	3.79e-05
3.96e+00	7.80e-04	5.17e-04	8.68e-05
4.19e+00	1.66e-03	7.25e-04	1.85e-04

TABLE LII. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 0.5 < p_T^{assoc} < 1$  GeV/ $c$ .

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.16e+00	5.42e-02	9.69e-03	7.33e-03
1.40e+00	2.30e-02	7.75e-03	3.11e-03
1.63e+00	6.56e-02	1.11e-02	1.15e-02
1.86e+00	9.52e-02	1.23e-02	1.29e-02
2.09e+00	6.62e-02	1.11e-02	8.95e-03
2.33e+00	9.41e-02	1.27e-02	1.27e-02
2.56e+00	1.33e-01	1.53e-02	1.80e-02
2.79e+00	1.58e-01	1.69e-02	2.13e-02
3.03e+00	1.77e-01	1.69e-02	2.40e-02
3.26e+00	1.68e-01	1.74e-02	2.27e-02
3.49e+00	1.80e-01	1.66e-02	2.43e-02
3.72e+00	1.45e-01	1.49e-02	1.96e-02
3.96e+00	1.07e-01	1.32e-02	1.45e-02
4.19e+00	3.72e-02	9.59e-03	5.02e-03
4.42e+00	8.57e-02	1.18e-02	1.16e-02
4.65e+00	6.18e-02	1.13e-02	1.08e-02
4.89e+00	6.18e-02	1.10e-02	1.06e-02
5.12e+00	4.43e-02	8.28e-03	5.98e-03



TABLE LIII. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 1 < p_T^{assoc} < 2$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.40e+00	4.25e-02	8.28e-03	5.74e-03
1.63e+00	4.77e-02	8.43e-03	6.45e-03
1.86e+00	5.14e-02	8.18e-03	6.94e-03
2.09e+00	4.60e-02	8.17e-03	6.22e-03
2.33e+00	3.92e-02	7.86e-03	5.30e-03
2.56e+00	7.13e-02	1.09e-02	9.63e-03
2.79e+00	1.38e-01	1.40e-02	1.86e-02
3.03e+00	1.76e-01	1.69e-02	2.38e-02
3.26e+00	1.26e-01	1.57e-02	1.71e-02
3.49e+00	1.17e-01	1.36e-02	1.58e-02
3.72e+00	8.86e-02	1.20e-02	1.20e-02
3.96e+00	4.21e-02	9.51e-03	5.69e-03
4.19e+00	4.33e-02	8.06e-03	5.85e-03
4.42e+00	2.80e-02	6.79e-03	3.78e-03
4.65e+00	2.82e-02	6.71e-03	3.81e-03
4.89e+00	2.76e-02	6.05e-03	3.73e-03
5.12e+00	2.23e-02	5.94e-03	3.02e-03

TABLE LIV. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 2 < p_T^{assoc} < 5$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.40e+00	6.19e-03	3.86e-03	8.36e-04
2.09e+00	4.44e-03	3.34e-03	6.00e-04
2.33e+00	2.15e-02	5.53e-03	2.91e-03
2.56e+00	8.02e-03	4.28e-03	1.08e-03
2.79e+00	4.61e-02	8.65e-03	6.22e-03
3.03e+00	1.07e-01	1.38e-02	1.44e-02
3.26e+00	5.93e-02	1.25e-02	8.00e-03
3.49e+00	4.94e-02	9.89e-03	6.68e-03
3.72e+00	2.13e-02	6.85e-03	2.88e-03
3.96e+00	1.25e-02	4.35e-03	1.68e-03
4.19e+00	1.16e-03	2.76e-03	1.56e-04
4.42e+00	6.60e-03	3.92e-03	8.91e-04
5.12e+00	2.03e-03	2.39e-03	2.75e-04

TABLE LV. Direct  $\gamma$ -h $^\pm$   $\Delta\phi$  distributions at  $\sqrt{s}=200$  GeV for  $12 < p_T^{trig} < 15 \otimes 5 < p_T^{assoc} < 10$  GeV/c.

$\Delta\phi$	Per-trigger yield [rad] $^{-1}$	Statistical error [rad] $^{-1}$	Systematic error [rad] $^{-1}$
1.86e+00	9.52e-03	3.24e-03	1.29e-03
2.79e+00	1.12e-02	4.31e-03	1.51e-03
3.03e+00	3.53e-02	7.42e-03	4.77e-03
3.26e+00	3.27e-02	7.29e-03	4.41e-03
3.49e+00	1.85e-02	5.49e-03	2.49e-03
3.72e+00	4.02e-03	2.80e-03	5.43e-04