

$p(e,e'K)\Lambda$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/kaon/

Date: 6/10/18

Initials: BA

Use a separate sheet for each configuration.

HMS

SHMS

Configuration Name: _____

$Q^2 = 5.5$, $W = 3.02$, $x = 0.40$
high e , SHMS ~~Left~~ Right

E_{beam} : 10.602 GeV

I_{beam} : _____ μA

Purpose:

- ☒ Production
☐ Test
☐ Optics
☐ Other: _____

Raster: ☒ On ☐ Off
Size: 2x2

Beam position and angle on target:

3H07A	X	Y
<u>0.003</u> mm	<u>-1.009</u> mm	
Nomin: <u>0</u>	Nomin: <u>-1</u>	
3H07C	X	Y
<u>0.036</u> mm	<u>-0.016</u> mm	
Nomin: <u>0</u>	Nomin: <u>0</u>	

Q1	I-SET <u>425.480</u> A	I-SET <u>2314.55</u> A	HB
	B-HALL <u>0.417</u> KG	B-HALL <u>-14.777</u> KG	
Q2	I-SET <u>338.40</u> A	I-SET <u>-1441.76</u> A	Q1
	B-HALL <u>-0.645</u> KG	B-HALL <u>10.224</u> KG	
Q3	I-SET <u>164.16</u> A	I-SET <u>2413.00</u> A	Q2
	B-HALL <u>0.330</u> KG	B-HALL <u>-22.70</u> KG	
D	I-READ <u>-999.54</u> A	I-SET <u>-1587.52</u> A	Q3
	B-NMR <u>0.89412</u> KG	B-HALL <u>-15.355</u> KG	
	<input checked="" type="checkbox"/> HMS cycled?	I-SET <u>2182.80</u> A	D
	<input checked="" type="checkbox"/> SHMS cycled?	B-NMR <u>15.632</u> KG	

Run Number:

5124

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 12
PS2: -1
PS3: 4
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

07:54

Stop time (from RC):

08:07

☒ Settings Verified?

☒ HV OK?

HMS pretrig:

245 k

SHMS pretrig:

38173 k

COIN pretrig:

11 k

$e-K\Lambda$ evts:

$\Sigma e-K\Lambda$ evts:

☒ Data ok

☒ Junk

Comments:

Junk! Beam quality

Run Number:

5125

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 12
PS2: -1
PS3: 4
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

08:14

Stop time (from RC):

09:23

☒ Settings Verified?

☒ HV OK?

HMS pretrig:

1621 k

SHMS pretrig:

255589 k

COIN pretrig:

59 k

$e-K\Lambda$ evts:

$\Sigma e-K\Lambda$ evts:

☒ Data ok

☐ Junk

Comments:

Dummy Target

Run Number:

5126

- ☐ LH2 10cm
☐ LD2 10cm
☒ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: 12
PS2: -1
PS3: 4
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

09:28

Stop time (from RC):

10:22

☒ Settings Verified?

☒ HV OK?

HMS pretrig:

1900 k

SHMS pretrig:

303942 k

COIN pretrig:

53 k

$e-K\Lambda$ evts:

$\Sigma e-K\Lambda$ evts:

☒ Data ok

☐ Junk

Comments:

Run Number:

5127

- ☐ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.
☐ _____

PS1: _____
PS2: _____
PS3: _____
PS4: _____
PS5: _____
PS6: _____

Start time (from RC):

Stop time (from RC):

☐ Settings Verified?

☐ HV OK?

HMS pretrig:

SHMS pretrig:

COIN pretrig:

$e-K\Lambda$ evts:

$\Sigma e-K\Lambda$ evts:

☐ Data ok

☒ Junk

Comments:

Junk, Prescalers needed adjusting

can be found at lichen.phys.uregina.ca/~huberg/kaon/

Initials: DA

$$Q^2 = 5.5, \quad W = 3.02$$

highly SHMS ~~very~~ Right

Run Number: 5133	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 14 PS2: 1 PS3: 6 PS4: 1 PS5: 0 PS6: 1	Start time (from RC): 17:59	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 8714 k	SHMS pretrig: 25768.36 k	COIN pretrig: 442 k
Comments:			Stop time (from RC): 20:00		e-KA evts: 118	Σ e-KA evts: 473	<input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk

1ms Q3 & Dipole. lose current at the end of the run round ~~the~~ M_2

$p(e,e'K)\Lambda$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/kaon/

Use a separate sheet for each configuration.

Date: 10/14/18

Initials: WL

HMS

SHMS

Configuration Name:

$Q^2=5.5$, $W=3.02$, $x=0.4$

high ε , SHMS right

E_{beam} : 10.602 GeV

I_{beam} : 35. μA

Purpose:

☒ Production

☐ Test

☐ Optics

☐ Other: _____

Raster: ☒ On ☐ Off

Size: 2x2

HMS

$p_{\text{HMS}} \pm \theta(\text{TV})$: -3.266 23.005

SHMS

$p_{\text{SHMS}} \pm \theta(\text{TV})$: +6.842 6.440

Collimator:

HMS: Large Sieve ☒

SHMS: Large Sieve ☒

Beam position and angle on target:

3H07A	X	Y
0.003 mm	-1.09 mm	
Nomin:		Nomin:
3H07C	X	Y
0.036 mm	-0.016 mm	
Nomin:		Nomin:

Q1	I-SET 425.60 A B-HALL 0.417 kg	I-SET 2314.50 A B-HALL -14.777 kg	HB
Q2	I-SET 338.44 A B-HALL -0.646 kg	I-SET 1441.72 A B-HALL 10.224 kg	Q1
Q3	I-SET 164.16 A B-HALL 0.330 kg	I-SET 1587.60 A B-HALL -22.700 kg	Q2
D	I-READ 999.54 A B-NMR 0.894 kg	I-SET 2182.76 A B-HALL -15.35 kg	Q3
	<input checked="" type="checkbox"/> HMS cycled? <input checked="" type="checkbox"/> SHMS cycled?	I-SET 2182.80 A B-NMR 15.638 kg	D

Run Number:

5134

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

21:07

Stop time (from RC):

21:55

☒ Settings Verified?

☒ HV OK?

HMS pretrig:

4015 k

SHMS pretrig:

1197631 k

COIN pretrig:

204 k

Comments:

shorter run after the magnet resets

☒ Data ok
☐ Junk

Run Number:

5135

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

21:56

Stop time (from RC):

23:10

☒ Settings Verified?

☒ HV OK?

HMS pretrig:

6002 k

SHMS pretrig:

1755915 k

COIN pretrig:

301 k

Comments:

☒ Data ok
☐ Junk

Run Number:

5136

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

23:10

Stop time (from RC):

00:09

☒ Settings Verified?

☒ HV OK?

HMS pretrig:

4185 k

SHMS pretrig:

1227210 k

COIN pretrig:

215 k

Comments:

☒ Data ok
☐ Junk

Run Number:

5137

☒ LH2 10cm
☐ LD2 10cm
☐ MT thick 10cm
☐ C 1.5% r.l.
☐ C 0.5% r.l.

PS1: 13
PS2: -1
PS3: 5
PS4: -1
PS5: 0
PS6: -1

Start time (from RC):

00:10:24

Stop time (from RC):

01:10:51

☒ Settings Verified?

☒ HV OK?

HMS pretrig:

5361 k

SHMS pretrig:

1571914 k

COIN pretrig:

268 k

Comments:

☒ Data ok
☐ Junk

$p(e,e'K)\Lambda$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/kaon/

Date: 10/15/18

Initials: BD

Continuation of Configuration:

$Q^2=55$, $W=302$, $X=0.40$

high E, SHMS right

This sheet is only to be used to continue a running configuration.

Run Number: 5138	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 01:11:38 Stop time (from RC): 02:13:00	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 5594 k e-K Λ evts: 69	SHMS pretrig: 1642858 k Σ e-K Λ evts: 815	COIN pretrig: 278 k <input checked="" type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments:							

Run Number: 5139	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 02:13:09 Stop time (from RC): 03:13:59	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 5148 k e-K Λ evts: 45	SHMS pretrig: 1510520 k Σ e-K Λ evts: 860	COIN pretrig: 257 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: 5140	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 03:14:17 Stop time (from RC): 04:15:38	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 5685 k e-K Λ evts: 68	SHMS pretrig: 1671392 k Σ e-K Λ evts: 928	COIN pretrig: 283 k <input type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: 5141	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 04:16:11 Stop time (from RC): 05:16:53	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 5301 k e-K Λ evts: 37	SHMS pretrig: 1556151 k Σ e-K Λ evts: 965	COIN pretrig: 265 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: 5142	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 05:17:25 Stop time (from RC): 06:19:22	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 5176 k e-K Λ evts: 64	SHMS pretrig: 1522516 k Σ e-K Λ evts: 1029	COIN pretrig: 261 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: 5143	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 06:20:03 Stop time (from RC): 07:20:29	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 4764 k e-K Λ evts: 49	SHMS pretrig: 1396353 k Σ e-K Λ evts: 1078	COIN pretrig: 240 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

$p(e,e'K)\Lambda$ Run Sheet

can be found at lichen.phys.uregina.ca/~huberg/kaon/

Date: 10/15/18

Initials: BD

Continuation of Configuration:

$Q^2=5.5$, $W=3.02$, $x=0.4$
high E, SHMS right

This sheet is only to be used to continue a running configuration.

Run Number: 5144	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 13 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): 07:21:00 Stop time (from RC): 8:21:24	<input checked="" type="checkbox"/> Settings Verified? <input checked="" type="checkbox"/> HV OK?	HMS pretrig: 332 k $e-K\Lambda$ evts: 61	SHMS pretrig: 405 k $\Sigma e-K\Lambda$ evts: 1132	COIN pretrig: 281 k <input checked="" type="checkbox"/> Data ok <input type="checkbox"/> Junk
Comments:							

Run Number: 5145	<input checked="" type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: 14 PS2: -1 PS3: 5 PS4: -1 PS5: 0 PS6: -1	Start time (from RC): Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK?	HMS pretrig: k $e-K\Lambda$ evts: 	SHMS pretrig: k $\Sigma e-K\Lambda$ evts: 	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments:							

started @ 30 μA (ended immediately because of poor beam quality).

Run Number: 5146	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK?	HMS pretrig: k $e-K\Lambda$ evts: 	SHMS pretrig: k $\Sigma e-K\Lambda$ evts: 	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments:							

Run Number: 5147	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK?	HMS pretrig: k $e-K\Lambda$ evts: 	SHMS pretrig: k $\Sigma e-K\Lambda$ evts: 	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments:							

Run Number: 5148	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK?	HMS pretrig: k $e-K\Lambda$ evts: 	SHMS pretrig: k $\Sigma e-K\Lambda$ evts: 	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments:							

Run Number: 5149	<input type="checkbox"/> LH2 10cm <input type="checkbox"/> LD2 10cm <input type="checkbox"/> MT thick 10cm <input type="checkbox"/> C 1.5% r.l. <input type="checkbox"/> C 0.5% r.l.	PS1: _____ PS2: _____ PS3: _____ PS4: _____ PS5: _____ PS6: _____	Start time (from RC): Stop time (from RC): 	<input type="checkbox"/> Settings Verified? <input type="checkbox"/> HV OK?	HMS pretrig: k $e-K\Lambda$ evts: 	SHMS pretrig: k $\Sigma e-K\Lambda$ evts: 	COIN pretrig: k <input type="checkbox"/> Data ok <input checked="" type="checkbox"/> Junk
Comments:							

Target (LH2) unstable, LC tripped off