

RS 04

Post-M265 Day 01

Page 1 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT post-L274 LOCATION f35 tent
 DATE 16 Oct 2018 OBSERVERS MF
 INSTRUMENT RS S/N 04 CONFIG 002
 COLLECTOR Δ DISTANCE Jig
 mux position fiber
 SOURCE LED FLites S/N CONFIG
 PWR SUPPLY batts S/N CONFIG
 MULTIMETER S/N SHUNT
 LAMP VOLTAGE CURRENT
 LAMP TIME ON WARMUP MEH OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

RS 04

trk # 2 = Es

6 = Lt

9 = Lm

13 = Lb

@ pwr on RS 4 default = -40°C cooler

ctrl/acq via 2sg - interactive
1 dk / 2 dk / 1 dk

PROCESSED DATE: 28 Nov 2018 BY: MF = chk OK

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
	s_d 20181016 001:002	4.5 sec					LuBot, max ADU=53k
04:19	003:004	5.5					LuMed 51.6k
4:27	005:006	22					LuTop 53k
4:38	007:008	2.0					Es 52k

RS04

Post-M265 Day 02

Page 2 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT Post-L274 LOCATION Tent P35
 DATE 29 Nov 2019 OBSERVERS MF
 INSTRUMENT RS S/N 04 CONFIG 002
 COLLECTOR ES DISTANCE 50cm
 SOURCE GS5000 S/N CONFIG F601(c3)
 PWR SUPPLY 6030A #1 S/N CONFIG
 MULTIMETER 34970A S/N SHUNT GS125
 LAMP VOLTAGE CURRENT 8.2
 LAMP TIME ON WARMUP 20 OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

Lamp time Awin ISET
 ON 05:11 8.179
 OFF 6:05 54

Scans sync w/ BS03-c005
 2dk/4et/2dk

PROCESSED DATE: 29 Nov 2018 BY: MF = chn OK

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks	FEL °C
0536	s,d 20181129 001004	2 sec	8.2023	107.01	49	26	Es @ same exp time as BS3	48.2
39	5: 8	2	12023	101	50	26		48.5
41	9: 12	2						
45	13: 16	2					@ time of 2 sec BS set	
48	17:20	2					200 sec BS set	
0550	21:24	2						
552	25:28	2	8.2023	107.00	50	25		48.0
54	29:32	2						
58	33:36	2						
600	37:40	2	8.2021	107.00	50	25		48.0
605	Lamp off							
06:07	41:44	2						

RS04
Post-M265

Mon

Day 04 Pg. 1 of 2 = Lu #1

Page 3 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT post-L274 LOCATION P35 Tent
DATE 04 Dec 2018 OBSERVERS MF, SM
INSTRUMENT RS S/N 04 CONFIG 002
COLLECTOR Lu mux position fiber DISTANCE 6in
SOURCE 0L425 S/N CONFIG (L10) W6D100
PWR SUPPLY 0L450 S/N CONFIG
MULTIMETER 34970A S/N SHUNT GS125
LAMP VOLTAGE CURRENT 6.6
LAMP TIME ON WARMUP 20 OFF TOTAL

SETUP SKETCH / REMARKS

Lamp time hrs

Frnt pnel

ON 05:03 466.1
OF 543 466.8

6.587

ON 0601
OF 0701 467.8

6.590

ON 714
OF 747 468.4

6.590

Sync scans
w/ BS03
... by hand...
asg-interactive

WHERE NODE :: DEV : [DIR]

PROCESSED DATE: 04 Dec 2018

BY: MF = chk only

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage PD & FL	Humidity % R.H.	Temp. °C	Remarks	Lamp Vdc
04:54	-600C TEC							
05:23	sd2081204 001:004	3sec w/ BS#		22.40	52	25	Lb@tblk #13 2dk/4dk/2dk	7.361
525	5 8	001:004	6.6006	22.39	51	25		
527	7 12	I		22.40				
30	13 16	w/ BS# 5:8	.6009	22.40	51	25		7.362
32	17 20	I		22.40				
34	21 24	I	6.6006	22.40	51	25		7.362
36	25:28	w/ BS# 9:12		22.40				
38	29:32	I	6.6006	22.40	51	25		7.364
05:40	33:36	I						
06:40	37:40	4.5 sec	6.5995	22.41	52	25	Lm@tblk #9	7.371
43	41:44			22.41				
45	45:48			22.40				

over = pg. 2

RS04 Day 04 pg. 2 of 2

Page 4 of

MLML RADIOMETRIC CALIBRATION LOG

SETUP SKETCH / REMARKS

EXPERIMENT pre-L274 LOCATION tent @ P35
DATE 04 Dec 2018 OBSERVERS MF, SM
INSTRUMENT RS S/N 04 CONFIG 002
COLLECTOR Lu mux position fiber DISTANCE 6m
SOURCE 0L425 S/N CONFIG (L10) W6D100
PWR SUPPLY 0L450 S/N CONFIG
MULTIMETER 34970A S/N SHUNT 65125
LAMP VOLTAGE CURRENT 6.6 A dc
LAMP TIME ON WARMUP 20 min OFF TOTAL

WHERE NODE :: DEV: [DIR]

PROCESSED DATE: 04 Dec 2018 BY: MF = chk only

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage PD V FL	Humidity % R.H.	Temp. °C	Remarks	Lamp Vdc
06:47	sd20181204049:052	4.5s w/BS	6.5992	22.40	53	25	Lm @ trk #9 ... cont...	7.371
49	53 56	17:20		22.40				
51	57 60	I						
54	61 64	w/BS 21:24		22.40				
0656	65:68	I	6.5992	22.41	54	25		7.372
58	69:72	I		22.40				
734	73:76	23 Dec	6.6008	22.47	56	24	Lt @ trk #6 sync w/BS	7.373
38	77:80		.6010	22.47				7.375
42	81:84		.6006	22.48				7.375

Tue
R504 Day 05

Page 5 of

MLML RADIOMETRIC CALIBRATION LOG				
EXPERIMENT	Post-L274		LOCATION Tent @ P35	
DATE	Dec 2018		OBSERVERS MF	
INSTRUMENT	RS	S/N 04	CONFIG	002
COLLECTOR	Es		DISTANCE	bare lamp + shield
SOURCE	Oriel 2 lamp	S/N	CONFIG	
PWR SUPPLY	Oriel 6060	S/N	CONFIG	
MULTIMETER	FLUKE	S/N	SHUNT	
LAMP VOLTAGE		CURRENT		
LAMP TIME	ON	WARMUP	OFF	TOTAL
WHERE NODE :: DEV : [DIR]				

SETUP SKETCH / REMARKS

PROCESSED DATE: 05 Dec 2018 BY: MF = chk only

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current mA	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
05:18	-60°C TEC						
05:32	s_d20181205 01:004	2.3 sec		-100 mV	50	26	RS Es @ trk #2 via HgA
5:41	05:008	0.05 = saturate !		-100			Es Ne
5:49	9:12	1.0 sec					Ne
	PAU				54	24	

Wed
RS Day 06

Page 6 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT Post-L274 LOCATION tent
DATE 06 Dec 2018 OBSERVERS MF
INSTRUMENT RS S/N 04 CONFIG
COLLECTOR Lu mux position fiber DISTANCE 12 in Spect. sphere
SOURCE Oriol 2 S/N CONFIG
PWR SUPPLY Oriol S/N CONFIG
MULTIMETER FLUKE S/N SHUNT
LAMP VOLTAGE CURRENT
LAMP TIME ON WARMUP OFF TOTAL

SETUP SKETCH / REMARKS

RS04 LuTe tube #6
LuB@ #13

WHERE NODE :: DEV : [DIR]

PROCESSED DATE: 05 Dec 2018 BY: MF = chle

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
			mA	V	% R.H.	°C	
03:58	sd 20181206 001:004	0.123 s		-100 mV	43	26	Ar LuTop
406	5: 8	2.5		-100			HgA
410	9: 12	0.05 = SATURA		-100			Ne
415	13 16	0.18		-120			Kr
427	17 20	1.0		-140	48	24	Xe
04:55	21:24	0.66		+100			HgA LuBot
501	25:28	0.05 = SATURA		+100	49	24	Ne "

RS

7 days

pg. 1 of 1

ge 7

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT	Post-4274	LOCATION	Int
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DATE 07 Dec 2018 OBSERVERS MF

INSTRUMENT	RS	S/N	04	CONFIG	002
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COLLECTOR LMT DISTANCE 41

	mux	position	fiber
1	0	0	0
2	0	0	1
3	0	1	0
4	0	1	1
5	1	0	0
6	1	0	1
7	1	1	0
8	1	1	1

SOURCE	S/N	CONFIG
AST 01455		

PWR SUPPLY	0L400-C	S/N	CONFIG
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MULTIMETER	NOPE	S/N	SHUNT
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[illegible]

LAMP TIME	ON	WARMUP	OFF	TOTAL
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WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

ON 03:45
OF

LnT@twk#6

PROCESSED DATE: 07 Dec 2018 BY: MF=chk

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
-60°C TEC = ON			PDA A	V	% R.H.	°C	
	lamp off		.0003e-10				2dk / 4et / 2dk
	s.d. 20181207 001.020	1 sec	SEE LOG SHEETS FOR BS03 ↓				36.9k ADV max
	021.024	.05 sec					7.4 k.
		.07/.1/.2					BRITE
		1					37.1 k
		13/.5/.7					
		1					MID

Thur
BS Day 07 pg. 1 of 2

Page 7 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT	Post-L274		LOCATION	tent
DATE	07 Dec 2018	OBSERVERS	MF	
INSTRUMENT	BS	S/N	03	CONFIG 005
COLLECTOR	LuT	mux	position	fiber
SOURCE	NIST OL455	S/N		CONFIG
PWR SUPPLY	OL400-C	S/N		CONFIG
MULTIMETER	NOPPE	S/N		SHUNT
LAMP VOLTAGE		CURRENT	6.000 A dc	
LAMP TIME	ON	WARMUP	20min	OFF TOTAL
WHERE NODE::DEV:[DIR]				

SETUP SKETCH / REMARKS

Lamp time Δmin

ON 03:45
OFF 6:51

LuT@trk#6

OL PD log = 2018120701_OL455log.txt

PROCESSED DATE: 07 Dec 2018 BY: MF = chh

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current	Lamp Voltage	Humidity	Temp.	Remarks
03:25	-60°C TEC = ON		PD mA A	V	% R.H.	°C	
	Lamp off		.0003e-10				2dk/4lt/2dk
04:21	5:20/8:20/11:02	1 sec	.4373e-5	15.47	47	26	~53.7k ADU max @ lt scans
429	21:24	0.05s	.4371				9.4k
430	25:28/29:32/33:36	0.7/.1/.2	.4370				BRITE
434	37:40	1	.4370				53.4k
436	41:44/45:48/49:52	.3/.5/.7	.4370e-5				
0440	53:56	1	.4371e-5	15.47	49	25	
444	57:60	1	.4683e-6	15.49			9.2k
446	61:64/65:68/69:72	2/3/1	.4685				MID 9.3k @ 1 sec
450	73:76/77:80/81:84	5/7/1	.4687e-6				9.3k @ 1 sec
04:56	85:88	10	.4687e-6	15.49			55. k

...cont... OVER...

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BS | Day 07 | pg. 2 of 2

Page 8 of

MLML RADIOMETRIC CALIBRATION LOG

EXPERIMENT Post-L274 LOCATION tent
 DATE 07 Dec 2018 OBSERVERS MF
 INSTRUMENT BS S/N 03 CONFIG 005
 COLLECTOR LuT mux position fiber DISTANCE Jiggly
 SOURCE OL455-18U S/N CONFIG
 PWR SUPPLY OL400-C S/N CONFIG
 MULTIMETER S/N SHUNT
 LAMP VOLTAGE CURRENT 6.000
 LAMP TIME ON WARMUP 20 min OFF TOTAL

WHERE NODE :: DEV : [DIR]

SETUP SKETCH / REMARKS

$.157e-7$ or $1.57e-8$
 $3) \begin{array}{r} 47 \\ 3 \\ \hline 17 \\ 15 \\ \hline 20 \end{array}$ $60) \begin{array}{r} 20 \\ 1200 \end{array}$ $60) \begin{array}{r} 6.66 \\ 400 \\ 36 \\ \hline 40 \end{array}$
 $\rightarrow$ ok on BS re-FTP
~~BS drk #101 = bogus fits~~
~~8102~~

PROCESSED DATE: 07 Dec 2018 BY: MF = chlx

A 7 min
A 23 min
A 21 min
Σ 51 min

Time	Filename	Int Time/Bin Fact or Gain	Shunt Current PD mA A	Lamp Voltage V	Humidity % R.H.	Temp. °C	Remarks
05:06	sd20181207 89:42	10 sec	.4746e-7	15.49	50	25	~9.2k ADU max 14.2/19.4/9.2k DIM 29.7/9.1/40.0k 1dk/2et/1dk 9.1/55.8k
508	93:96/97:100/101:104	20/30/10	.4746				
520	105:108/109:112/113:116	50/10/70	.4745	15.50	50	25	
541	117:120/121:122	10/100	.4740e-7	15.49			
600	123:124	100	1.5607e-7	15.49	52	25	MORE DIM 38.1/20.9k 55.3k
607	125:126/127:128	200/100	1.5601	15.49	53	25	
630	129:130	300	1.5528e-7	15.50	53	25	
651	TEC off		.0005e-10				