

ROUND 1

59.94 fps

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes		
5	SCIATK47	Wheel of death Stopped with SFR target	Sony F-5	59.9 FPS	SONY SCL-P11X15 (set for 11mm)	34	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:01:34	400 lux	Normal scan iso 800 75ine		
6	SCIATK48	Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		34	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:01:44	400	" " " "		
14	K57	SFR Chart Close Focus		59.9 FPS		18	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:04:00	560	" " " "		
13	Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		34	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:03:30	400	second run 00:03:44* 70ine		
45	K90	SFR Chart Far Focus		59.9 FPS		113	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:04:30	420 lux	800 ASA 70ine		
10	SCIATK16	Wheel of death Stopped with SFR target	Sony F-5	59.9 FPS	Arri Carl Zeiss Distagon 12mm T2.1 Standard Prime	34	31.5 (0.8) ✓	6.7 ✓	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:00:00	400	scan normal iso 800 60ine		
2A	Temporal Resolution	Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		34	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:00:30		" " " "		
2B				59.9 FPS		34	31.5 (0.8)	6.7	1920 x 1080 60P	SONY XAVC 60 P	00:00:30		" " " "		
3				120 FPS		34	31.5 (0.8)	6.7	? @ 120P	SONY XAVC 120 P	00:00:45		2k full iso 1600 120P		
4				180 FPS		34	31.5 (0.8)	6.7	? @ 180P	SONY XAVC 180 P	00:01:17		2k full " 320 180P		
	note 1														
10	SCIATK52	SFR Chart Close Focus		59.9 FPS		18 ✓	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:02:37	520	Normal 800 70ine		
11A	12A* Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		34 ✓	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:03:00	520	second run 00:03:15* 70ine		
11B	120* Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		34 ✓	31.5 (0.8)	6.7	1920 x 1080 60P	SONY XAVC 60 P	00:03:00	520	second run 00:03:15* 70ine		
44	K88	SFR Chart Far Focus	59.9 FPS	113 ✓	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:04:14	420 lux	Normal scan 800 ASA 70ine				
9	SCIATK51	SFR Chart Close Focus	Sony F-5	59.9 FPS	Optex/Zeiss 10.5mm Mk.2 Distagon Prime	18	31.5 (0.8)	4.8	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:02:29	560	" " " "		
8	Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		34	31.5 (0.8)	4.8	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:02:15	400	Normal scan 800 80ine		
46	K92	SFR Chart Far Focus		59.9 FPS		113	31.5 (0.8)	4.8	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:04:45	420 lux			

7 is optix still of target (NA)

SCIATK49

11A - SCIATK53

12A - SCIATK54

* Number appeared not to advance from #44 Timecode is correct

* did second run

* " " "

Tuesday Wednesday Thursday Friday
17 18 19 20

Note 1: ASA recording is 1920 x 1080 59.94 fps!
should have been 17 sec, shows 4 seconds, drop frame?

1920 x 1080 60i (29.9) 29.97 fps

2

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
19	Temporal Resolution K62	Wheel of death Stopped with SFR target	Sony HDCP1	59.9 FPS	Fujinon HAeF5 5mm	35 ✓	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	01:01:00	100 lux	1080i 90ine
20	K63	Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	01:01:16	100	1080i 90ine
15	SCIATK58	SFR Chart Close Focus		59.9 FPS		19.25	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	01:00:00	110 lux	1080i
16	Spatial Resolution K59	SFR Chart Nominal Distance		59.9 FPS		35 38"	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:00:18	90 lux	1080i 80ine
51	K99	SFR Chart Far Focus		59.9 FPS		113	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	01:07:29	140 lux	1080i 90ine
18	K61	SFR Chart Close Focus	Sony HDCP1	59.9 FPS	Zeiss Digi Prime T1,9/5 mm	19.25	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:00:46	110 lux	1080i
17	Spatial Resolution K60	SFR Chart Nominal Distance		59.9 FPS		35 38"-39"	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:00:29	90 lux	1080i
50	K98	SFR Chart Far Focus		59.9 FPS		113	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	01:07:17	140 lux	1080i

last time code 4:14:26
before rest

1280 X 720 P 59.94

3

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
22	Temporal Resolution	Wheel of death Stopped with SFR target	Sony HDCP1	59.9 FPS	Fujinon HAEF5 5mm	35	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:01:45	160 lux	720 P 90 line
21	SCIATK64	Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:01:30	100 lux	720 P. 90 line
	Spatial Resolution	SFR Chart Close Focus		59.9 FPS		19.25	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P			
		SFR Chart Nominal Distance		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P			
52		SFR Chart Far Focus		59.9 FPS		113	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	00:07:46	140 lux	720 P 90 line
	Spatial Resolution	SFR Chart Close Focus	Sony HDCP1	59.9 FPS	Zeiss Digi Prime T1,9/5 mm	19.25	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P			
		SFR Chart Nominal Distance		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P			
49		SFR Chart Far Focus		59.9 FPS		113	35.5 (0.9)	2.5	1920 x 720 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:06:59	140 lux	90 line

F-5 SXS Card
FJ-7w SD Card
Sony lens

Return
to
Michael Home
Address.

1920x1080 29.97fps

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
23	SCIA K66 Temporal Resolution	Wheel of death Stopped with SFR target	Ikegami HDL-50/HS	59.9 FPS	Fujinon HAeF5 5mm	35 ✓	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:01:58	150 lux	75 in
24	K67	Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:02:15	150 lux	75 in
26	K69	SFR Chart Close Focus		59.9 FPS		19.25	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:02:45	140 lux	75 in
25	Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		38 38"	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:02:30	140 lux	75 in
48	K96	SFR Chart Far Focus		59.9 FPS		113	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	0:06:36	140 lux	70 in
27	K70	SFR Chart Close Focus	Ikegami HDL-50/HS	59.9 FPS	Zeiss Digi Prime T1,9/5 mm	19.25	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:02:59	140	80 in
28	Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		38 39"	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	1:03:15	140 lux	80 in
47	K95	SFR Chart Far Focus		59.9 FPS		113	35.5 (0.9)	2.5	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	0:05:00	140 lux	8 in

Ikegami back focus was at end stop and
Picture was slightly tilted.

* Supposed to be 1920x1080 60P, but footage is obviously interlaced format.
- Also, it looks like detail was on, which was not the case w/ Sony.

1080 60P (SFR) - not true progressive? need to check
1920x1080 59.94 FPS

③

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
35	Temporal Resolution K79	Wheel of death Stopped with SFR target	Sony NEX-FS700U	59.9 FPS	SONY SCL-P11X15 (set for 11mm)	34	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:01:45	160 lux	150 2000
36		Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		34	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:02:00	160 lux	11
34	Spatial Resolution K79	SFR Chart Close Focus		59.9 FPS		18	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:01:30	150 lux	11
33		SFR Chart Nominal Distance		59.9 FPS		34	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:01:15	150 lux	11
42		SFR Chart Far Focus		59.9 FPS		113	31.5 (0.8)	5.6	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:05:30	210	11
38	Temporal Resolution K81	Wheel of death Stopped with SFR target	Sony NEX-FS700U	59.9 FPS	Arri Carl Zeiss Distagon 12mm T2.1 Standard Prime	34	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:02:30	150 lux	150 2000
37		Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		34	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:02:15	150 lux	11
39				120 FPS		34	31.5 (0.8)	6.7	? @ 120P	SONY XAVC 120 P	02:02:45	150 lux	150 2000
40				180 FPS		34	31.5 (0.8)	6.7	? @ 180P	SONY XAVC 180 P	02:03:54	150 lux	150 8000
30										240			
29	Spatial Resolution K73	SFR Chart Close Focus	Sony NEX-FS700U	59.9 FPS		18	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:00:30	140 lux	
41		SFR Chart Nominal Distance		59.9 FPS		34 ✓	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:00:13	150 lux	
		SFR Chart Far Focus		59.9 FPS		113 ✓	31.5 (0.8)	6.7	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:05:11	200 lux	
31	Spatial Resolution K76	SFR Chart Close Focus	Sony NEX-FS700U	59.9 FPS	Optex/Zeiss 10.5mm Mk.2 Distagon Prime	18	31.5 (0.8)	4.8	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:00:46	140 lux	
32		SFR Chart Nominal Distance		59.9 FPS		34	31.5 (0.8)	4.8	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:01:00	150 lux	
43		SFR Chart Far Focus		59.9 FPS		113	31.5 (0.8)	4.8	1920 x 1080 60P	AJA/ProRes 422 (HQ) 10 bit 60P	02:05:49	210	

Note 1: FCP shows 1920x1080 59.94 fps
A- but 120 & 180 fps.

Camera appears to just do burst @
high frame rates.

56A ↓ 56B	Temporal Resolution	Wheel of death Stopped with SFR target	Sony F-5 and AXS-R5	59.9 FPS	Arri Carl Zeiss Distagon 12mm T2.1 Standard Prime	34	31.5 (0.8)	6.7	1920 x 1080 60P 4K	SONY RAW (AXS card) and XAVC (internal SxS card)	00:05:45	640 lux	Scan normal 2000 EI 70 line
57A ↓ 57B		59.9 FPS		34		31.5 (0.8)	6.7	4K (4096 x 2160 60P)	SONY RAW (AXS card)	Same			
58A ↓ 58B		59.9 FPS		34		31.5 (0.8)	6.7	1920 x 1080 60P 4K	SONY RAW (AXS card) and XAVC (internal SxS card)	Same	700 lux	Scan normal 2000 EI 70 line	
59A ↓ 59B		59.9 FPS		34		31.5 (0.8)	6.7	4K (4096 x 2160 60P)	SONY RAW (AXS card)	00:06:00			
60A ↓ 60B		120 FPS 2K		34		31.5 (0.8)	6.7	1920 x 1080 @ 120P 2K	SONY RAW (AXS card) and XAVC (internal SxS card)	58:00:06:15 640 lux / 58 59:00:06:36 59 lux	Full scan 4000 EI 70 line 2000 EI		
61A ↓ 61B		180 FPS 2K		34		31.5 (0.8)	6.7	1920 x 1080 @ 180P 2K	SONY RAW (AXS card) XAVC	00:06:51 640 lux	2000 EI 60 line		
62A ↓ 62B	240 FPS 2K	34		31.5 (0.8)		6.7	1920 x 1080 @ 240P 2K	SONY RAW (AXS card) only	00:07:28 640 lux	2000 EI 60 line			
63A ↓ 63B													
55	Spatial Resolution	SFR Chart Close Focus		59.9 FPS		34 18	31.5 (0.8)	6.7	4K (4096 x 2160 60P) 1920P	SONY RAW (AXS card)	00:05:30	1000 lux	2000 EI 75 line
54		SFR Chart Nominal Distance		59.9 FPS		34	31.5 (0.8)	6.7	4K (4096 x 2160 60P) 1920P	SONY RAW (AXS card)	00:05:15	800 lux	2000 (EI) 75 line
53		SFR Chart Far Focus		59.9 FPS		34 13	31.5 (0.8)	6.7	4K (4096 x 2160 60P) 1920P	SONY RAW (AXS card)	00:05:00	500 lux	2000 (EI) 75 line

↑ Not mentioned in footage

Note: This test is to look at the advantages of 4K image recording. To get this capability with an external recorder (AJA) we would need to purchase the F-55 camera.

* EI = exposure index

Note 1: Bumped 150 from 2000 to 3200 in post

All in Sony RAW (4K 60P)
OV > 60p = RAW (2K 120, 180, 240)

53B } Re-converted into DPX from RAW for comparison to Sony Lens test series 4
54B }
55B }
9/24/14

- check Sony Back focus
- Restart?
FCP de-interlaced when making .tiff!

Test

ProRes: 422 HQ 10
1920 x 2K
4444 12
1920 x 2K

65 = SC 1A + K 24

ROUND 2 - Retest of Sony PI & Ikegami

7

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
65	Temporal Resolution 1/500 70-1000	Wheel of death Stopped with SFR target ✓	Sony HDCP1	59.9 FPS ✓	Sony Zeiss Digi Prime T1,9/5 mm BF = -0.1 ✓	35 ✓	35.5 (0.9) ✓	2.5	1920 x 1080 60P 59.9	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:00:15	260 150 120 75	White & Black Jet 80% ire
66				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:00:30	Same ↑	No shutter 80 ire
67		Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:00:45	500 400 340 230	Shutter 1/125 70-80 ire
68				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:01:00	1100 1000 800 480	Shutter 1/250 80-90 ire
69				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:01:15 02:01:30	13600 4800 70 4000 3600 3600 4800	69 ire 70 Shutter 1/500 70 1/1000 80 LED? ABB? AWD?
72	K31	Wheel of death at 6 RPM (10 sec per rev.)		29.9 FPS ✓		35	35.5 (0.9)	2.5 ✓	1920 x 1080 29.9i	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:02:00	210 120 75	80 ire
71	K30			59.9 FPS		35	35.5 (0.9)	2.5 ✓	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:01:45	210 120 75	80 ire Reg light AWD S ADD
79	K39	SFR Chart Close Focus		59.9 FPS		19.25 ✓	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:04:00	180 15	70-80 ire AWD ADD
80	Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		38	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:04:15	260 160 120	85 ire
82	K44	SFR Chart Far Focus		59.9 FPS		112	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	03:00:00	130	80 ire

All same / less CAMERA SHAKE													
Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
75	K35	Wheel of death Stopped with SFR target	Ikegami HDL-50/HS	59.9 FPS	Zeiss Digi Prime T1,9/5 mm B.F. = -1.6	35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:03:00	230 150 70	75-80 ire
76	K36	Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:03:15	Same ↑	80 ire
73	K32	Wheel of death at 6 RPM (10 sec per rev.) ✓		29.9 FPS ✓		35 ✓	35.5 (0.9) ✓	2.5 ✓	1920 x 1080 29.9i	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:02:15	140 130 70	80-90 ire
74	K33			59.9 FPS ✓		35 ✓	35.5 (0.9) ✓	2.5 ✓	1920 x 1080 60P 59.9	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:02:30 02:02:45	240 160 130 80	80 ire
78	K38	SFR Chart Close Focus		59.9 FPS		19.25 ✓	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:03:42	170	80 ire
77	Spatial Resolution	SFR Chart Nominal Distance		59.9 FPS		38	35.5 (0.9) ✓	2.5 ✓	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	02:03:30	140 200 130 110	80 ire
84	K46	SFR Chart Far Focus		59.9 FPS		112	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	03:03:30	140	80 ire

81 Chart test chart HOCPI 59.9
K41

* Duplicate of 81 that was mis-numbered

Ikegami will not come up properly without Full black (cover) - check Sony!! SONY is OK! Power up OK.

Round 3, 3rd Sony PI test

8

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
	Temporal Resolution	Wheel of death Stopped with SFR target	Sony HDCP1	59.9 FPS	Zeiss Digi Prime T1,9/5 mm <i>Back focus +0.1</i>	35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
		Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			No shutter
				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			Shutter 1/125
				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			Shutter 1/250
				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			Shutter 1/500
				29.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 29.9i	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
		Wheel of death at 6 RPM (10 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
	Spatial Resolution	SFR Chart Close Focus	59.9 FPS	19.25	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P					
90		SFR Chart Nominal Distance	59.9 FPS	39 34 ✓	35.5 (0.9) ✓	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	04:00:15	140 ²²⁰ 110 120	Detail 25% 80 RRE		
91		SFR Chart Far Focus	59.9 FPS	113	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	04:00:30	11	Detail 50%		

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
92	Temporal Resolution	Wheel of death Stopped with SFR target	Ikegami HDL-50/HS	59.9 FPS	Zeiss Digi Prime T1,9/5 mm	35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P	04:00:45		Detail 75%
		Wheel of death at 11 RPM (5.5 sec per rev.)		59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
		Wheel of death at 6 RPM (10 sec per rev.)		29.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 29.9i	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
				59.9 FPS		35	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
	Spatial Resolution	SFR Chart Close Focus		59.9 FPS		19.25	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
		SFR Chart Nominal Distance		59.9 FPS		34	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			
		SFR Chart Far Focus		59.9 FPS		113	35.5 (0.9)	2.5	1920 x 1080 60P	Dual Link AJA/ProRes 422 (HQ) 10 bit 60P			

Round 4

Zeiss Ultra-Prime & Sony 4k test

10

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
108 115	Temporal Resolution	Wheel of death Stopped with SFR target	Sony F-55 and AXS-R5	59.9 FPS	SONY SCL-P11X15 (set for 11mm)	34	2 3/4 ft 31.5 (0.8)	5.6 ✓	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:02:02	640 740 700	ire 75% 3200k
116		Wheel of death at 11 RPM (5.5 sec per rev.) ✓		59.9 FPS		34	31.5 (0.8)	5.6	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:02:16	560,640,560	No shutter EI 1250
117				59.9 FPS		34	31.5 (0.8)	5.6	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:02:30	560,600,560	Shutter 1/125 ✓ ire 55%
118				59.9 FPS		34	31.5 (0.8)	5.6	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:02:45	560,640,560	Shutter 1/250 ✓ ire 50%
119				59.9 FPS		34	31.5 (0.8)	5.6	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:03:00	560,640,560	Shutter 1/500 ✓ ire 45%
114	Spatial Resolution	SFR Chart Close Focus		59.9 FPS		18 ✓	31.5 (0.8) ✓	5.6 ✓	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:01:46	100, 1200, 1100	ire 75%
110		SFR Chart Nominal Distance		59.9 FPS		34 ✓	31.5 (0.8) ✓	5.6 ✓	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:00:30	640 900 800	ire 75%
109		SFR Chart Far Focus		59.9 FPS		113 ✓	31.5 (0.8) ✓	5.6 ✓	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:00:15	230 240 260	ire 50%

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
113 *	Spatial Resolution	SFR Chart Close Focus	Sony F-55 and AXS-R5	59.9 FPS	Arri/Zeiss 12mm T2 Ultra Prime	18 ✓	31.5 (0.8)	5.6	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:01:15	900 1100 1200	ire 80%
111		SFR Chart Nominal Distance		59.9 FPS		34 ✓	31.5 (0.8) ✓	5.6 ✓	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:00:45	600 840 700	ire 75%
108 shot 003		SFR Chart Far Focus		59.9 FPS		113 ✓	31.5 (0.8) 2 3/4'	5.6 ✓	4K (4096 x 2160 60P)	SONY RAW (AXS card)	1:00:00	210 240 260 lux	ire 50% ✓

Test Number	Test	Target	Camera	Frame Rate	Lens	Imager to Target Distance (Inches)	Focus Distance inches (meters)	T - Stop	Capture Format	Recording Format	Time Code Start	Light meter reading (center)	Notes
	Cold boot test	SFR Chart Nominal Distance	F-55 and AJA recorder	29.94 FPS	Any	34	31.5 (0.8)	5.6	4K (4096 x 2160 30P)	AJA/ProRes 422 (HQ) 10 bit 30P	1:00:00		Test is to make sure camera can cold start and produce video output without operator intervention. Step 1: set up camera and AJA recoder. Step 2: Power down both units. Step 3: Power up both units and when AJA booted, hit record.

112 Not label Same as 111 except 38" 1:01:00 520 740 140 lux Different Distance

* 113 rerun to label 1:01:31

120* Same as 118 except LUT enabled & Gain set to 90 ire 1:03:15

* 113 rerun to label 1:01:31

121 Same as 118 except 29.94 fps, 4k recording on AJA Start 1:00:00 520, 600, 560 lux

also 1:03:28
also 1:04:05 - 1:04:20
01:01:04 - 01:01:20

* 120 is suspect, shutter may have been on 125/L