

03 Aug 21 04:44 05:43 19:22 20:20 00:39 14:49		-35	-36	-37	-37	-37	-37	-36	-36	-36	-34	-32	-31	-29	-27	-25	-23	-21	-19	-17	-14	-12	-9	-6	-4	-1	2	5	8	11	14	16	19	23	26	29	32	35	38	41	44	47	50	53	57								
LUNAR ILLUMINATION % OVER TIME		28	28	28	27	27	27	27	27	27	27	27	27	27	26	26	26	26	26	26	26	26	26	26	26	26	25	25	25	25	25	25	25	25	25	25	25	25	25	24	24	24	24	24	24	24							
LUNAR PERIOD: 4:36 DARKNESS PERIOD: 0:07 / 3:38																																																					
03 Aug 21 04:45 05:43 19:21 20:19 01:16 15:45		-29	-31	-32	-33	-34	-34	-35	-35	-35	-34	-34	-33	-33	-32	-30	-29	-27	-26	-24	-22	-20	-18	-15	-13	-11	-8	-6	-3	0	3	5	8	11	14	17	20	23	26	29	32	35	38	41	44	47							
LUNAR ILLUMINATION % OVER TIME		20	20	19	19	19	19	19	19	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	16							
LUNAR PERIOD: 4:05 DARKNESS PERIOD: 0:39 / 3:39																																																					
04 Aug 21 04:46 05:44 19:20 20:18 01:57 16:40		-22	-24	-26	-27	-29	-30	-31	-32	-33	-33	-33	-33	-33	-32	-32	-31	-30	-28	-27	-25	-24	-22	-20	-18	-15	-13	-11	-8	-6	-3	0	2	5	8	10	13	16	19	22	25	28	31	34	37								
LUNAR ILLUMINATION % OVER TIME		13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10	10	10	10	10							
LUNAR PERIOD: 3:29 DARKNESS PERIOD: 1:16 / 3:40																																																					
05 Aug 21 04:47 05:45 19:19 20:17 02:16 17:33		-15	-17	-19	-21	-23	-25	-27	-28	-29	-30	-31	-32	-33	-33	-33	-33	-33	-32	-31	-30	-29	-28	-26	-24	-23	-21	-19	-17	-14	-12	-10	-7	-5	-2	1	3	6	9	12	14	17	20	23	26								
LUNAR ILLUMINATION % OVER TIME		7	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5							
LUNAR PERIOD: 2:49 DARKNESS PERIOD: 1:57 / 3:41																																																					
06 Aug 21 04:48 05:45 19:18 20:16 03:18 18:23		-7	-10	-12	-15	-17	-19	-21	-23	-25	-27	-28	-30	-31	-32	-33	-34	-34	-35	-35	-34	-34	-33	-32	-31	-30	-28	-27	-25	-23	-21	-19	-17	-14	-12	-10	-7	-4	-2	1	4	7	9	12	15								
LUNAR ILLUMINATION % OVER TIME		3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1							
LUNAR PERIOD: 2:02 DARKNESS PERIOD: 2:45 / 3:42																																																					
07 Aug 21 04:48 05:46 19:18 20:15 04:36 19:08		1	-2	-5	-8	-10	-13	-15	-18	-20	-22	-24	-26	-28	-30	-31	-33	-34	-35	-36	-37	-37	-37	-37	-37	-37	-36	-35	-34	-33	-31	-30	-28	-26	-24	-22	-20	-18	-15	-13	-10	-7	-5	-2	1	4							
LUNAR ILLUMINATION % OVER TIME		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
LUNAR PERIOD: 1:10 DARKNESS PERIOD: 3:38 / 3:43																																																					
08 Aug 21 04:49 05:47 19:17 20:14 05:37 19:48		9	6	3	0	-3	-6	-9	-11	-14	-17	-19	-22	-24	-26	-28	-30	-32	-34	-36	-37	-38	-39	-40	-41	-41	-41	-41	-41	-40	-39	-38	-37	-35	-34	-32	-30	-28	-26	-24	-21	-19	-16	-14	-11	-8							
LUNAR ILLUMINATION % OVER TIME		0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
LUNAR PERIOD: 0:12 DARKNESS PERIOD: 4:36 / 3:44																																																					
09 Aug 21 04:50 05:47 19:16 20:13 06:40 20:25		16	13	10	7	4	1	-2	-5	-8	-11	-13	-16	-19	-22	-24	-27	-29	-31	-34	-36	-38	-39	-41	-42	-44	-45	-45	-46	-46	-46	-45	-45	-44	-43	-42	-40	-38	-37	-35	-32	-30	-28	-25	-23	-20							
LUNAR ILLUMINATION % OVER TIME		2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4							
LUNAR PERIOD: 0:00 DARKNESS PERIOD: 4:49 / 3:45																																																					
10 Aug 21 04:51 05:48 19:15 20:12 07:43 20:58		24	21	17	14	11	8	5	2	-1	-4	-7	-10	-13	-16	-19	-22	-25	-27	-30	-33	-35	-38	-40	-42	-44	-46	-47	-49	-50	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51	-51								
LUNAR ILLUMINATION % OVER TIME		7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9							
LUNAR PERIOD: 0:12 DARKNESS PERIOD: 4:50 / 3:34																																																					
11 Aug 21 04:52 05:49 19:14 20:11 08:46 21:30		30	27	24	21	18	15	12	9	6	3	-1	-4	-7	-10	-13	-16	-19	-22	-25	-28	-31	-34	-36	-39	-42	-44	-46	-49	-51	-52	-54	-55	-56	-57	-57	-57	-57	-56	-55	-54	-53	-51	-49	-47	-44							
LUNAR ILLUMINATION % OVER TIME		13	14	14	14	14	14	14	14	14	14	14	14	14	15	15	15	15	15	15	15	15	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	16	16	17	17	17	17	17	17							
LUNAR PERIOD: 0:46 DARKNESS PERIOD: 4:51 / 3:01																																																					
12 Aug 21 04:52 05:49 19:13 20:09 09:49 22:02		35	32	30	27	24	21	18	15	12	9	6	3	0	-4	-7	-10	-13	-16	-19	-22	-25	-28	-31	-34	-37	-40	-43	-46	-48	-51	-53	-55	-57	-59	-61	-62	-63	-63	-64	-63	-62	-61	-60	-58	-56							
LUNAR ILLUMINATION % OVER TIME		22	22	22	22	22	22	22	23	23	23	23	23	23	23	23	23	23	23	24	24	24	24	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	26	26	26	26	26	26						
LUNAR PERIOD: 1:19 DARKNESS PERIOD: 4:52 / 2:29																																																					
13 Aug 21 04:53 05:50 19:12 20:08 10:53 22:34		39	36	34	31	29	26	24	21	18	15	12	9	6	3	1	-3	-6	-9	-12	-15	-18	-21	-25	-28	-31	-34	-37	-40	-43	-46	-49	-51	-54	-57	-59	-62	-64	-66	-67	-68	-69	-69	-69	-68	-67							
LUNAR ILLUMINATION % OVER TIME		32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	35	35	35	35	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36						
LUNAR PERIOD: 1:53 DARKNESS PERIOD: 4:52 / 1:57																																																					
14 Aug 21 04:54 05:51 19:11 20:07 11:59 23:10		39	38	36	34	32	30	28	26	23	21	18	15	13	10	7	4	1	-2	-5	-8	-11	-14	-17	-20	-23	-26	-29	-32	-35	-38	-41	-44	-47	-50	-53	-56	-59	-62	-65	-67	-69	-71	-73	-74	-75							
LUNAR ILLUMINATION % OVER TIME		43	43	43	43	43	43	44	44	44	44	44	44	44	44	44	45	45	45	45	45	45	45	46	46	46	46	46	46	46	46	46	46	47	47	47	47	47	47	47	47	47	48	48	48	48	48						
LUNAR PERIOD: 2:26 DARKNESS PERIOD: 4:53 / 1:25																																																					
15 Aug 21 04:55 05:51 19:10 20:06 13:06 23:50		38	37	37	35	34	33	31	29	28	25	23	21	19	16	14	11	9	6	3	1	-3	-6	-8	-11	-14	-17	-20	-23	-26	-29	-32	-35	-38	-42	-45	-48	-51	-54	-57	-60	-63	-65	-68	-71	-73							
LUNAR ILLUMINATION % OVER TIME		54	54	54	55	55	55	55	55	55	55	55	56	56	56	56	56	56	56	57	57	57	57	57	57	57	57	57	58	58	58	58	58	58	58	58	58	58	59	59	59	59	59	59	59	59							
LUNAR PERIOD: 3:03 DARKNESS PERIOD: 4:54 / 0:49																																																					
16 Aug 21 04:56 05:52 19:09 20:05 14:15 **		34	35	35	34	34	33	33	32	30	29	28	26	24	22	20	18	16	13	11	8	6	3	1	-2	-5	-8	-11	-14	-16	-19	-22	-25	-28	-31	-34	-37	-40	-43	-46	-49	-52	-55	-58	-61	-64							
LUNAR ILLUMINATION % OVER TIME		66	66	66	66	66	66	66	66	66	67	67	67	67	67	67	67	67	67	67	68	68	68	68	68	68	68	68	68	68	68	68	69	69	69	69	69	69	69	69	69	69	69	69	69	69							
LUNAR PERIOD: 3:44 DARKNESS PERIOD: 4:55 / 0:09																																																					
17 Aug 21 04:56 05:52 19:07 20:03 15:23 00:37		29	30	31	31	32	32	32	32	31	30	29	28	27	26	24	22	20	18	16	14	12	9	7	5	2	0	-3	-6	-9	-12	-14	-17	-20	-23	-26	-29	-32	-35	-38	-41	-44	-47	-50	-53								
LUNAR ILLUMINATION % OVER TIME		76	76	76	76	76	76	77	77	77	77	77	77	77	77	77	78	78	78	78	78	78	78	78	78	78	78	78	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79							
LUNAR PERIOD: 3:54 DARKNESS PERIOD: 4:56																																																					
18 Aug 21 04:57 05:53 19:06 20:02 16:28 01:31		22	24	25	27	28	29	30	31	31	31	32	31	31	30	29	28	27	25	24	22	20	18	16	14	12	10	7	5	2	0	-3	-6	-9	-11	-14	-17	-20	-23	-26	-29	-31	-34	-37	-40								
LUNAR ILLUMINATION % OVER TIME		85	85	85	85	85	85	86	86	86	86	86	86	86	86	86	86	86	86	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87</													