

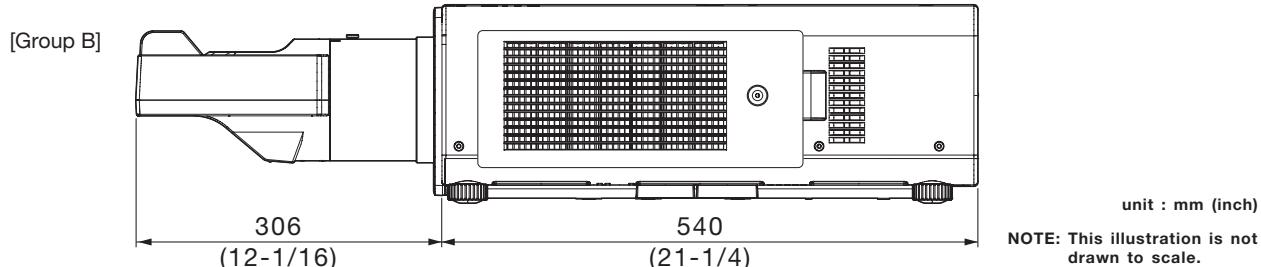
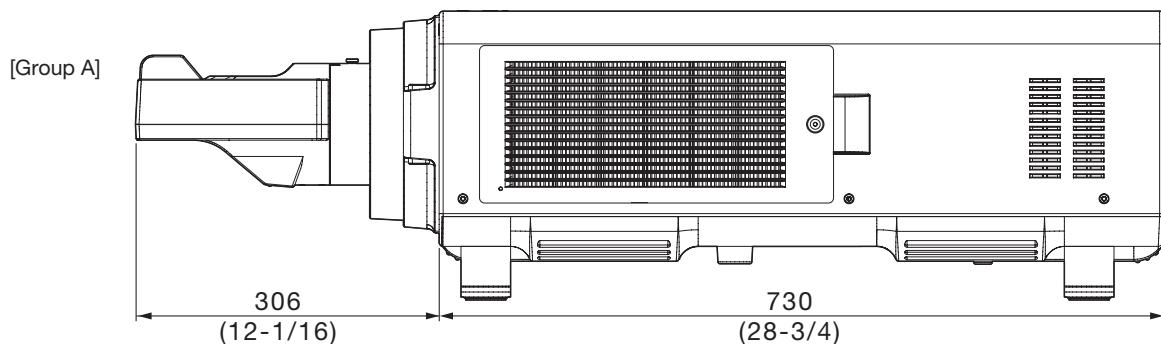
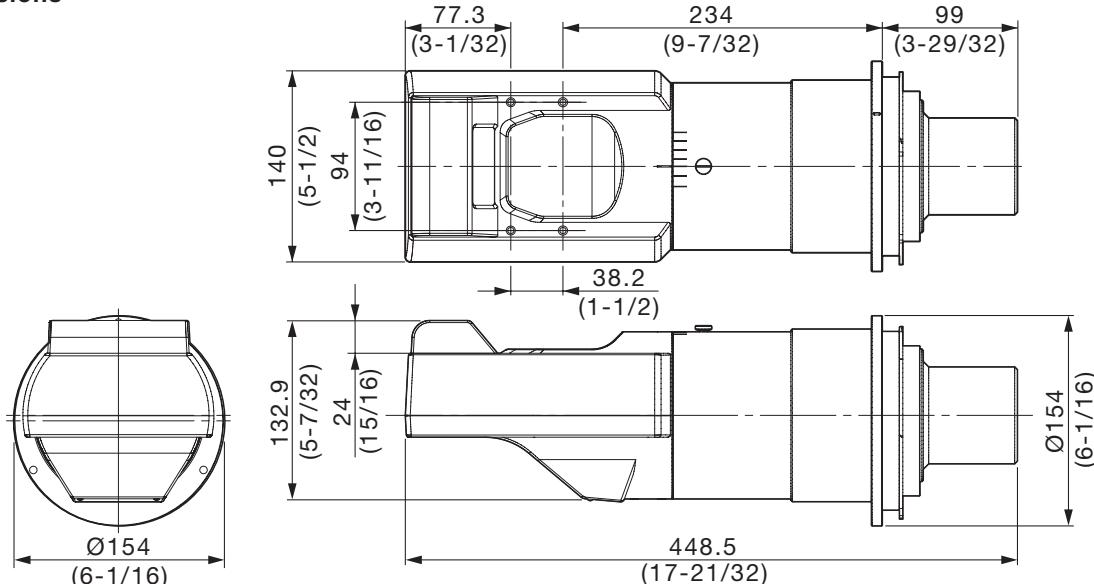
This fixed-focus lens is designed for use with Panasonic's applicable projectors.
This lens is an ultra-short focal length lens which uses a mirror.

NOTE: The lens cannot be used by itself. It must be mounted onto the specified Panasonic DLP™ projector.

Specifications

F value:	2.5	
Focal length (f):	7.5 mm	
Lens shift:	Capable (Adjustment range is limited. Lens shift is possible with models other than the PT-DS20K/DS12K.)	
	Vertical shift	Horizontal shift
PT-DZ21K/DZ13K/DZ10K	up: 5% down: 0%	left: 6%; right: 6%
PT-DZ16K	up: 13% down: 0%	left: 12%; right: 14%
PT-DW17K/DW11K	up: 18% down: 0%	left: 13%; right: 27%
Dimensions (W × H × D):	448.5mm × ø154 mm (17-21/32 × ø6-1/16 inches)	
Weight:	Approx 6.5 kg (14.3 lbs)	
Applicable projector:	[Group A] PT-DZ21K/DS20K/DW17K/DZ16K	
	[Group B] PT-DZ13K/DS12K/DW11K/DZ10K/DZ8700/DZ110K/DS8500/DS1100K/DW8300/DW90K	

Dimensions



unit : mm (inch)
NOTE: This illustration is not drawn to scale.

DLP is a trademark of Texas Instruments. Weights and dimensions shown are approximate. Specifications subject to change without notice.

ET-D75LE90 Projection Distance Table

DZ21K/DZ13K/DZ10K

16 : 10 (WUXGA ; 1920 × 1200)

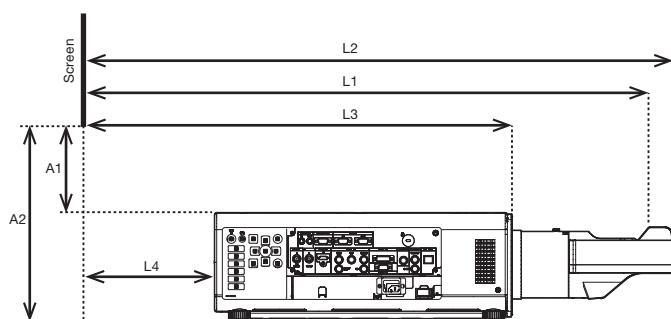
Unit : meters

Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	Ultra-short focal length lens ET-D75LE90 Close-up system dimensions					
							From rear of set to screen (L4)		From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
							DZ21K	DZ13K	DZ21K	DZ13K	DZ10K	DZ21K
120	3.05	1.62	2.59	0.94	0.97	0.67	-0.06	0.13	0.26	0.34	0.27	0.36
150	3.81	2.02	3.23	1.18	1.20	0.90	0.17	0.36	0.35	0.46	0.36	0.47
200	5.08	2.69	4.31	1.56	1.59	1.28	0.55	0.74	0.50	0.65	0.52	0.66
250	6.35	3.37	5.39	1.95	1.97	1.67	0.94	1.13	0.66	0.84	0.67	0.85
300	7.62	4.04	6.46	2.33	2.36	2.05	1.32	1.51	0.81	1.03	0.83	1.04
350	8.89	4.71	7.54	2.72	2.74	2.44	1.71	1.90	0.97	1.22	0.98	1.23
400	10.16	5.39	8.62	3.10	3.13	2.82	2.09	2.28	1.12	1.41	1.13	1.42
500	12.70	6.73	10.77	3.87	3.90	3.59	2.86	3.05	1.43	1.79	1.44	1.81
600	15.24	8.08	12.92	4.64	4.67	4.36	3.63	3.82	1.74	2.17	1.75	2.19

Unit : feet

Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	Ultra-short focal length lens ET-D75LE90 Close-up system dimensions					
							From rear of set to screen (L4)		From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
							DZ21K	DZ13K	DZ21K	DZ13K	DZ10K	DZ21K
120	3.05	5.3	8.5	3.1	3.2	2.2	-0.2	0.4	0.9	1.1	0.9	1.2
150	3.81	6.6	10.6	3.9	4.0	2.9	0.6	1.2	1.1	1.5	1.2	1.5
200	5.08	8.8	14.1	5.1	5.2	4.2	1.8	2.4	1.6	2.1	1.7	2.2
250	6.35	11.0	17.7	6.4	6.5	5.5	3.1	3.7	2.2	2.8	2.2	2.8
300	7.62	13.3	21.2	7.6	7.7	6.7	4.3	5.0	2.7	3.4	2.7	3.4
350	8.89	15.5	24.7	8.9	9.0	8.0	5.6	6.2	3.2	4.0	3.2	4.0
400	10.16	17.7	28.3	10.2	10.3	9.3	6.9	7.5	3.7	4.6	3.7	4.7
500	12.70	22.1	35.3	12.7	12.8	11.8	9.4	10.0	4.7	5.9	4.7	5.9
600	15.24	26.5	42.4	15.2	15.3	14.3	11.9	12.5	5.7	7.1	5.7	7.2

Unit : feet



L1: Projection distance (from screen to mirror reflective surface)
 L2: From screen to tip of lens
 L3: From screen to front of set
 L4: From screen to rear of set
 A1: From bottom edge of screen to top of set
 A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:10

Projection distance calculation formula

$$L1 \text{ (m)} = 0.0077 \times \text{Diagonal image size (inches)} + 0.02$$

Calculation formula for distance from top of set to bottom edge of screen

DZ21K	Min. A1 (m) = 0.000229 × SH - 0.114 Max. A1 (m) = 0.000283 × SH - 0.114
DZ13K/DZ10K	Min. A1 (m) = 0.000229 × SH - 0.100 Max. A1 (m) = 0.000283 × SH - 0.100

ET-D75LE90 Projection Distance Table

DZ16K

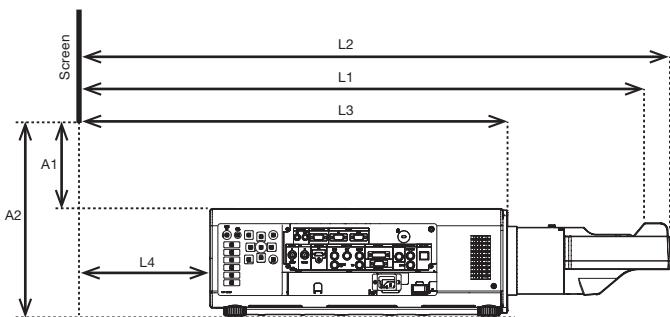
16 : 9 (WXGA ; 1920 × 1080)

Unit : meters

Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	Ultra-short focal length lens ET-D75LE90 Close-up system dimensions			
								Min	Max	Min	Max
120	3.05	1.49	2.66	0.97	1.00	0.69	-0.04	0.27	0.44	0.56	0.73
150	3.81	1.87	3.32	1.21	1.24	0.93	0.20	0.36	0.58	0.65	0.87
200	5.08	2.49	4.43	1.60	1.63	1.33	0.60	0.52	0.81	0.81	1.10
250	6.35	3.11	5.54	2.00	2.03	1.72	0.99	0.68	1.04	0.97	1.33
300	7.62	3.74	6.64	2.39	2.42	2.12	1.39	0.83	1.27	1.13	1.56
350	8.89	4.36	7.75	2.79	2.82	2.51	1.78	0.99	1.50	1.28	1.79
400	10.16	4.98	8.86	3.19	3.21	2.91	2.18	1.15	1.73	1.44	2.02
500	12.70	6.23	11.07	3.98	4.01	3.70	2.97	1.47	2.19	1.76	2.48
600	15.24	7.47	13.28	4.77	4.80	4.49	3.76	1.78	2.65	2.08	2.94

Unit : feet

Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	Ultra-short focal length lens ET-D75LE90 Close-up system dimensions			
								Min	Max	Min	Max
120	3.05	4.9	8.7	3.2	3.3	2.3	-0.1	0.9	1.4	1.8	2.4
150	3.81	6.1	10.9	4.0	4.1	3.1	0.7	1.2	1.9	2.1	2.8
200	5.08	8.2	14.5	5.3	5.4	4.3	2.0	1.7	2.6	2.7	3.6
250	6.35	10.2	18.2	6.6	6.7	5.6	3.3	2.2	3.4	3.2	4.4
300	7.62	12.3	21.8	7.9	7.9	6.9	4.6	2.7	4.2	3.7	5.1
350	8.89	14.3	25.4	9.2	9.2	8.2	5.8	3.3	4.9	4.2	5.9
400	10.16	16.3	29.1	10.5	10.5	9.5	7.1	3.8	5.7	4.7	6.6
500	12.70	20.4	36.3	13.0	13.1	12.1	9.7	4.8	7.2	5.8	8.1
600	15.24	24.5	43.6	15.6	15.7	14.7	12.3	5.9	8.7	6.8	9.7



L1: Projection distance (from screen to mirror reflective surface)
 L2: From screen to tip of lens
 L3: From screen to front of set
 L4: From screen to rear of set
 A1: From bottom edge of screen to top of set
 A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:9

Projection distance calculation formula

$$L1 \text{ (m)} = 0.007914 \times \text{Diagonal image size (inches)} + 0.02$$

Calculation formula for distance from top of set to bottom edge of screen

DZ16K

$$\begin{aligned} \text{Min. } A1 \text{ (m)} &= 0.000254 \times SH - 0.114 \\ \text{Max. } A1 \text{ (m)} &= 0.00037 \times SH - 0.114 \end{aligned}$$

ET-D75LE90 Projection Distance Table

DW17K/DW11K

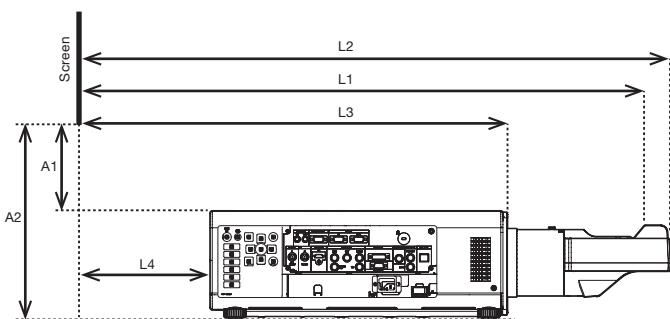
16 : 9 (WXGA ; 1366 × 768)

Unit : meters

Diagonal image size (Inches)	Diagonal image size (m)	Throw ratio		0.40:1		From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)		From top of set to bottom edge of screen (A1)				From bottom of set to bottom edge of screen (A2)			
								DW17K	DW11K	DW17K	DW11K	DW17K	DW11K	DW17K	DW11K		
		Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)													
120	3.05	1.49	2.66	1.07		1.10	0.80	0.07	0.26	0.31	0.58	0.32	0.60	0.60	0.87	0.52	0.80
150	3.81	1.87	3.32	1.34		1.37	1.06	0.33	0.52	0.41	0.76	0.43	0.77	0.70	1.05	0.63	0.97
200	5.08	2.49	4.43	1.78		1.81	1.50	0.77	0.96	0.59	1.05	0.60	1.06	0.88	1.34	0.80	1.26
250	6.35	3.11	5.54	2.22		2.24	1.94	1.21	1.40	0.76	1.34	0.78	1.35	1.06	1.63	0.98	1.55
300	7.62	3.74	6.64	2.66		2.68	2.38	1.65	1.84	0.94	1.63	0.95	1.64	1.23	1.92	1.15	1.84
350	8.89	4.36	7.75	3.09		3.12	2.82	2.09	2.28	1.12	1.92	1.13	1.93	1.41	2.21	1.33	2.13
400	10.16	4.98	8.86	3.53		3.56	3.26	2.53	2.72	1.29	2.21	1.31	2.22	1.58	2.50	1.51	2.42
500	12.70	6.23	11.07	4.41		4.44	4.13	3.40	3.59	1.64	2.79	1.66	2.80	1.93	3.08	1.86	3.00
600	15.24	7.47	13.28	5.29		5.32	5.01	4.28	4.47	1.99	3.37	2.01	3.38	2.28	3.66	2.21	3.58

Unit : feet

Diagonal image size (Inches)	Diagonal image size (m)	Throw ratio		0.40:1		From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)		From top of set to bottom edge of screen (A1)				From bottom of set to bottom edge of screen (A2)			
								DW17K	DW11K	DW17K	DW11K	DW17K	DW11K	DW17K	DW11K		
		Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)													
120	3.05	4.9	8.7	3.5		3.6	2.6	0.2	0.8	1.0	1.9	1.1	2.0	2.0	2.9	1.7	2.6
150	3.81	6.1	10.9	4.4		4.5	3.5	1.1	1.7	1.4	2.5	1.4	2.5	2.3	3.4	2.1	3.2
200	5.08	8.2	14.5	5.8		5.9	4.9	2.5	3.1	1.9	3.4	2.0	3.5	2.9	4.4	2.6	4.1
250	6.35	10.2	18.2	7.3		7.4	6.4	4.0	4.6	2.5	4.4	2.6	4.4	3.5	5.3	3.2	5.1
300	7.62	12.3	21.8	8.7		8.8	7.8	5.4	6.0	3.1	5.3	3.1	5.4	4.0	6.3	3.8	6.0
350	8.89	14.3	25.4	10.2		10.2	9.2	6.8	7.5	3.7	6.3	3.7	6.3	4.6	7.2	4.4	7.0
400	10.16	16.3	29.1	11.6		11.7	10.7	8.3	8.9	4.2	7.2	4.3	7.3	5.2	8.2	4.9	7.9
500	12.70	20.4	36.3	14.5		14.6	13.6	11.2	11.8	5.4	9.1	5.4	9.2	6.3	10.1	6.1	9.8
600	15.24	24.5	43.6	17.4		17.4	16.4	14.0	14.7	6.5	11.0	6.6	11.1	7.5	12.0	7.2	11.8



L1: Projection distance (from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:9

Projection distance calculation formula

$$L1 \text{ (m)} = 0.008783 \times \text{Diagonal image size (inches)} + 0.02$$

Calculation formula for distance from top of set to bottom edge of screen

DW17K	Min. A1 (m) = 0.000282 × SH - 0.114
DW11K	Min. A1 (m) = 0.000282 × SH - 0.100

ET-D75LE90 Projection Distance Table

DS20K/DS12K

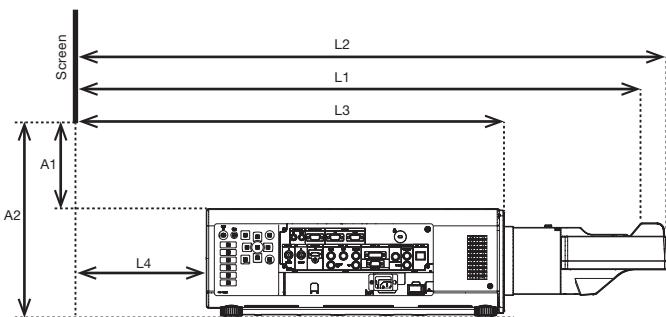
4 : 3 (SXGA ; 1400 × 1050)

Unit : meters

Diagonal image size (Inches)	Diagonal image size (m)	Throw ratio		0.39:1	Ultra-short focal length lens ET-D75LE90 Close-up system dimensions							
		Height (SH)	Width (SW)		Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)		
120	3.05	1.83	2.44	0.96	0.99	0.69	-0.04	0.15	0.26	0.28	0.55	0.48
150	3.81	2.29	3.05	1.20	1.23	0.92	0.19	0.38	0.36	0.37	0.65	0.57
200	5.08	3.05	4.06	1.59	1.62	1.32	0.59	0.78	0.51	0.53	0.81	0.73
250	6.35	3.81	5.08	1.99	2.02	1.71	0.98	1.17	0.67	0.69	0.96	0.89
300	7.62	4.57	6.10	2.38	2.41	2.10	1.37	1.56	0.83	0.84	1.12	1.04
350	8.89	5.33	7.11	2.77	2.80	2.50	1.77	1.96	0.99	1.00	1.28	1.20
400	10.16	6.10	8.13	3.17	3.20	2.89	2.16	2.35	1.14	1.16	1.43	1.36
500	12.70	7.62	10.16	3.95	3.98	3.68	2.95	3.14	1.46	1.47	1.75	1.67
600	15.24	9.14	12.19	4.74	4.77	4.46	3.73	3.92	1.77	1.78	2.06	1.98

Unit : feet

Diagonal image size (Inches)	Diagonal image size (m)	Throw ratio		0.39:1	Ultra-short focal length lens ET-D75LE90 Close-up system dimensions							
		Height (SH)	Width (SW)		Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)		
120	3.05	6.0	8.0	3.2	3.3	2.3	-0.1	0.5	0.9	0.9	1.8	1.6
150	3.81	7.5	10.0	3.9	4.0	3.0	0.6	1.3	1.2	1.2	2.1	1.9
200	5.08	10.0	13.3	5.2	5.3	4.3	1.9	2.5	1.7	1.7	2.6	2.4
250	6.35	12.5	16.7	6.5	6.6	5.6	3.2	3.8	2.2	2.2	3.2	2.9
300	7.62	15.0	20.0	7.8	7.9	6.9	4.5	5.1	2.7	2.8	3.7	3.4
350	8.89	17.5	23.3	9.1	9.2	8.2	5.8	6.4	3.2	3.3	4.2	3.9
400	10.16	20.0	26.7	10.4	10.5	9.5	7.1	7.7	3.7	3.8	4.7	4.4
500	12.70	25.0	33.3	13.0	13.1	12.1	9.7	10.3	4.8	4.8	5.7	5.5
600	15.24	30.0	40.0	15.5	15.6	14.6	12.2	12.9	5.8	5.9	6.8	6.5



L1: Projection distance (from screen to mirror reflective surface)
 L2: From screen to tip of lens
 L3: From screen to front of set
 L4: From screen to rear of set
 A1: From bottom edge of screen to top of set
 A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 4:3

Projection distance calculation formula

$$L1 \text{ (m)} = 0.007865 \times \text{Diagonal image size (inches)} + 0.02$$

Calculation formula for distance from top of set to bottom edge of screen

DS20K	A1 (m) = 0.000206 × SH - 0.114
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DS12K	A1 (m) = 0.000206 × SH - 0.100
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