

EAM4X

Product Specifications

EXPANSION VALVE COILS

- 1–1/2 thru 5 Tons
- Bolt–on TXV metering device factory installed on all models (equalizer tube brazed in)
- TXV and manifold positioned to the side for easier cleaning
- Innovative drain pan design for complete water removal
- Two condensate drain connections (Additional two for horizontal installation)
- 2–piece delta plate for easier removal and cleaning
- Cabinet widths match flush with ICP gas furnaces
- Removable front access panel
- Easy slide–out coil for inspection
- Hemmed flanges for safer handling
- Foil faced insulation
- Non–sweat cabinet, even at extreme conditions
- Cabinets meet or exceed 2% air leakage codes
- Sturdy, 22 gauge, pre–painted steel cabinet
- Multiposition installation – upflow, downflow, or horizontal
- Available for R–410A
- One or two UV light knock–outs provided on cabinet (depending on size)
- Aluminum hairpin/return–bend/fin “A” coil with the latest high–tech fin design



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

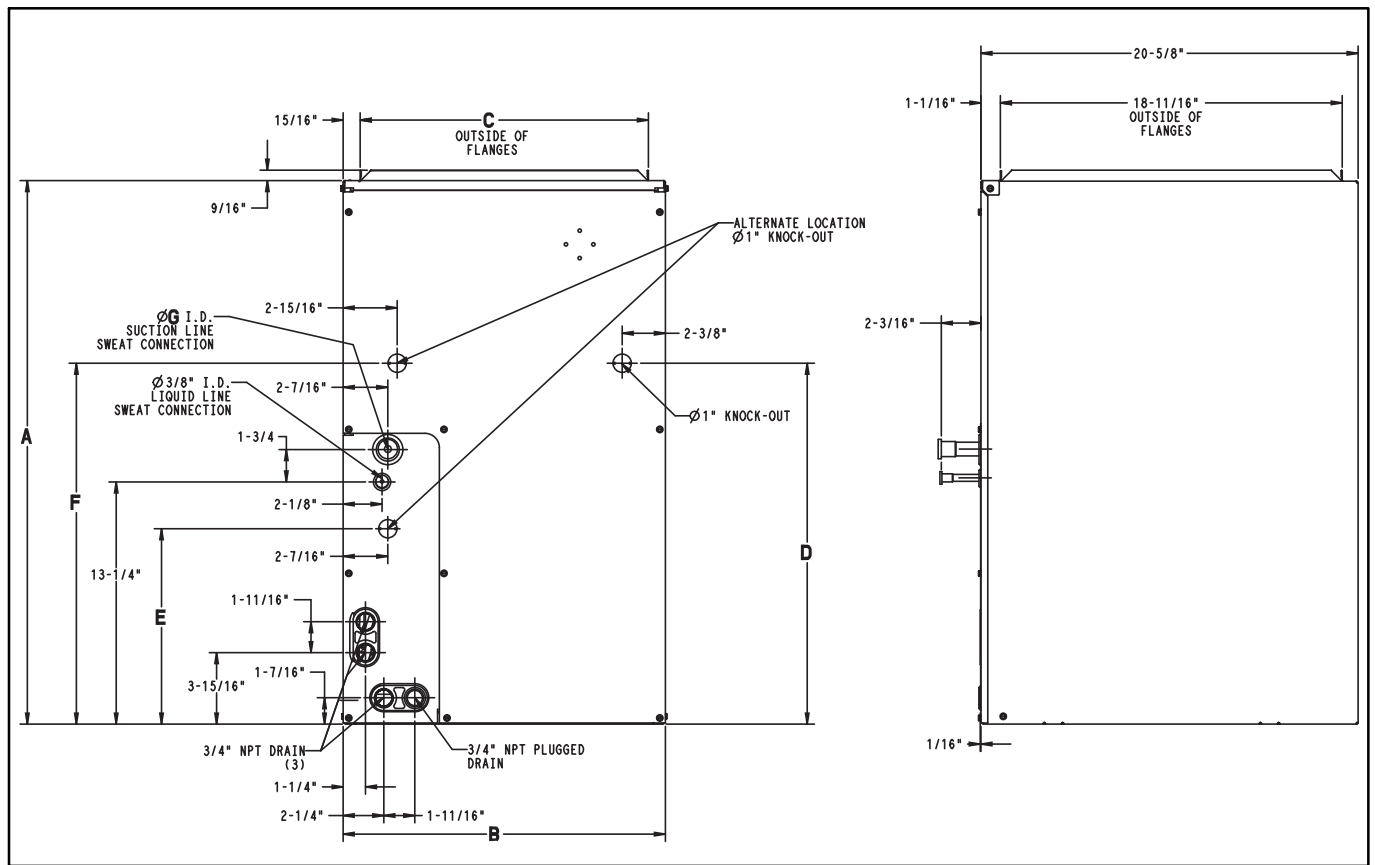


WARRANTY*

* Applies to original purchaser/homeowner, some limitations may apply. See Warranty certificate for complete details.

PRODUCT SPECIFICATONS				
MODEL NUMBER	TONS	FLUSH FIT TO FURNACE WIDTH inches (mm)	COIL CONNECTION TUBE SIZE inches (mm)	
			Liquid	Suction
EAM4X18L14A	1–1/2	14–3/16 (360)	3/8	5/8
EAM4X24L14A	2	14–3/16 (360)	3/8	5/8
EAM4X24L17A	2	17–1/2 (445)	3/8	5/8
EAM4X30L14A	2–1/2	14–3/16 (360)	3/8	3/4
EAM4X30L17A	2–1/2	17–1/2 (445)	3/8	3/4
EAM4X36L14A	3	14–3/16 (360)	3/8	3/4
EAM4X36L17A	3	17–1/2 (445)	3/8	3/4
EAM4X36L21A	3	21 (533)	3/8	3/4
EAM4X42L21A	3–1/2	21 (533)	3/8	7/8
EAM4X42L24A	3–1/2	24–1/2 (622)	3/8	7/8
EAM4X48L17A	4	17–1/2 (445)	3/8	7/8
EAM4X48L21A	4	21 (533)	3/8	7/8
EAM4X48L24A	4	24–1/2 (622)	3/8	7/8
EAM4X60L21A	5	21 (533)	3/8	7/8
EAM4X60L24A	5	24–1/2 (622)	3/8	7/8

COIL MODEL NUMBER IDENTIFICATION GUIDE										
DIGIT POSITION	1	2	3	4	5	6, 7	8	9, 10	11	12
	E	A	M	4	X	18	L	14	A	1
E = Evaporator										
A = A Coil		TYPE								
M = Cased, Multiposition (Upflow/Downflow/Horizontal)			INSTALLATION							
4 = Environmentally Sound R-410A			REFRIGERANT							
X = TXV				METERING DEVICE						
18 = 18,000 BTUH = 1-1/2 tons										
24 = 24,000 BTUH = 2 tons										
30 = 30,000 BTUH = 2-1/2 tons										
36 = 36,000 BTUH = 3 tons										
42 = 42,000 BTUH = 3-1/2 tons										
48 = 48,000 BTUH = 4 tons										
60 = 60,000 BTUH = 5 tons						NOMINAL CAPACITY				
L = Aluminum						HAIRPIN MATERIAL				
14 = 14-3/16"										
17 = 17-1/2"										
21 = 21"										
24 = 24-1/2"						WIDTH (matches furnace)				
Sales Digit (Major Revision)										
Engineering Digit (Minor Revision)										



DIMENSIONAL DATA

UNIT	A (IN.)	B (IN.)	C (IN.)	D (IN.)	E (IN.)	F (IN.)	G (IN.)	SHIPPING WT. (LBS.)
EAM4X18L14A1	25-13/16	14-3/16	12-7/16	17-3/16	10-11/16	-	5/8	50.5
EAM4X24L14A1	25-13/16	14-3/16	12-7/16	17-3/16	10-11/16	-	5/8	52.5
EAM4X24L17A1	25-13/16	17-1/2	15-3/4	10-11/16	10-11/16	-	5/8	56.5
EAM4X30L14A1	25-13/16	14-3/16	12-7/16	17-3/16	-	19-3/4	3/4	58.0
EAM4X30L17A1	25-13/16	17-1/2	15-3/4	17-3/16	-	19-3/4	3/4	64.5
EAM4X36L14A1	29-3/4	14-3/16	12-7/16	19-3/4	-	19-3/4	3/4	65.0
EAM4X36L17A1	29-3/4	17-1/2	15-3/4	19-3/4	-	19-3/4	3/4	71.0
EAM4X36L21A1	29-3/4	21	19-1/4	19-3/4	-	19-3/4	3/4	73.0
EAM4X42L21A1	29-3/4	21	19-1/4	19-3/4	-	19-3/4	7/8	78.0
EAM4X42L24A1	29-3/4	24-1/2	22-3/4	19-3/4	-	19-3/4	7/8	82.0
EAM4X48L17A1	35	17-1/2	15-3/4	19-3/4	-	19-3/4	7/8	91.0
EAM4X48L21A1	29-3/4	21	19-1/4	19-3/4	-	19-3/4	7/8	84.0
EAM4X48L24A1	29-3/4	24-1/2	22-3/4	19-3/4	-	19-3/4	7/8	88.5
EAM4X60L21A1	35	21	19-1/4	19-3/4	-	19-3/4	7/8	96.0
EAM4X60L24A1	35	24-1/2	22-3/4	19-3/4	-	19-3/4	7/8	101.0

Specifications subject to change without notice.

PERFORMANCE DATA

COOLING CAPACITIES (MBH) – R-410A REFRIGERANT

UNIT SIZE EAM4X	INDOOR COIL AIR		SATURATED TEMPERATURE LEAVING EVAPORATOR (°F)														
			30			35			40			45			50		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
18L14	450	72	32.00	15.70	0.00	29.30	14.30	0.00	26.40	12.80	0.00	23.10	11.30	0.00	19.50	9.70	0.01
		67	26.80	16.10	0.01	24.10	14.60	0.01	21.10	13.10	0.01	17.80	11.50	0.02	14.20	9.90	0.02
		62	22.10	16.50	0.02	19.30	14.90	0.02	16.40	13.40	0.02	13.20	11.80	0.02	10.30	10.30	0.05
	600	72	39.20	19.10	0.00	36.00	17.40	0.00	32.30	15.70	0.00	28.30	13.90	0.02	23.80	12.00	0.02
		67	32.90	19.90	0.03	29.60	18.20	0.03	25.90	16.30	0.03	21.90	14.40	0.03	17.40	12.50	0.03
		62	27.20	20.60	0.04	23.80	18.80	0.04	20.20	16.90	0.04	16.30	15.00	0.04	13.20	13.20	0.09
	750	72	45.10	21.90	0.00	41.40	20.10	0.00	37.20	18.20	0.02	32.60	16.10	0.04	27.40	14.00	0.04
		67	38.00	23.20	0.05	34.20	21.20	0.05	29.90	19.10	0.05	25.20	17.00	0.05	20.00	14.70	0.06
		62	31.50	24.20	0.06	27.60	22.10	0.06	23.40	20.00	0.06	19.10	17.90	0.06	15.70	15.70	0.13
24L14 24L17	600	72	39.40	19.20	0.00	36.30	17.60	0.00	32.80	15.90	0.00	28.90	14.10	0.00	24.50	12.20	0.01
		67	33.10	20.00	0.01	29.90	18.20	0.01	26.30	16.40	0.01	22.40	14.50	0.02	17.90	12.60	0.02
		62	27.40	20.50	0.02	24.10	18.70	0.02	20.50	16.90	0.02	16.60	15.00	0.02	13.10	13.10	0.05
	800	72	47.70	23.20	0.00	44.00	21.40	0.00	39.80	19.40	0.00	35.10	17.30	0.02	29.80	15.10	0.02
		67	40.30	24.50	0.03	36.40	22.50	0.03	32.10	20.40	0.03	27.30	18.10	0.03	21.80	15.80	0.03
		62	33.40	25.50	0.04	29.50	23.40	0.04	25.10	21.20	0.04	20.50	19.00	0.04	16.70	16.70	0.09
	1000	72	54.30	26.40	0.00	50.20	24.40	0.00	45.40	22.30	0.02	40.10	20.00	0.04	34.00	17.50	0.04
		67	46.00	28.20	0.05	41.70	26.10	0.05	36.80	23.70	0.05	31.20	21.20	0.05	25.00	18.60	0.05
		62	38.30	29.80	0.05	33.80	27.50	0.06	28.90	25.10	0.06	23.80	22.60	0.06	19.90	19.90	0.14
30L14 30L17	750	72	49.10	24.00	0.00	45.00	21.90	0.00	40.50	19.70	0.00	35.50	17.40	0.00	30.00	15.00	0.01
		67	41.20	24.80	0.01	37.00	22.50	0.02	32.40	20.20	0.02	27.40	17.80	0.02	21.90	15.30	0.02
		62	34.00	25.40	0.02	29.70	23.00	0.02	25.10	20.60	0.02	20.30	18.30	0.02	16.00	16.00	0.06
	1000	72	59.90	29.10	0.00	55.00	26.70	0.00	49.50	24.10	0.00	43.30	21.30	0.02	36.50	18.40	0.03
		67	50.40	30.50	0.03	45.30	27.90	0.04	39.70	25.10	0.04	33.50	22.20	0.04	26.70	19.20	0.04
		62	41.70	31.60	0.04	36.50	28.80	0.04	30.90	26.00	0.04	25.00	23.10	0.05	20.30	20.30	0.10
	1250	72	68.80	33.40	0.00	63.20	30.70	0.00	56.80	27.80	0.03	49.70	24.70	0.04	41.90	21.40	0.05
		67	58.00	35.40	0.06	52.20	32.40	0.06	45.70	29.30	0.06	38.50	26.00	0.06	30.60	22.60	0.07
		62	48.00	37.00	0.07	42.10	33.90	0.07	35.70	30.70	0.07	29.20	27.50	0.07	24.20	24.20	0.14
36L14 36L17 36L21	900	72	60.30	29.40	0.00	55.40	26.90	0.00	49.90	24.30	0.00	43.80	21.50	0.01	37.00	18.60	0.02
		67	50.70	30.60	0.02	45.70	27.90	0.03	40.10	25.10	0.03	33.90	22.20	0.03	27.00	19.20	0.03
		62	41.90	31.50	0.03	36.70	28.70	0.03	31.10	25.80	0.03	25.10	22.90	0.04	20.00	20.00	0.08
	1200	72	72.40	35.10	0.00	66.50	32.30	0.00	59.90	29.30	0.02	52.50	26.00	0.04	44.30	22.60	0.05
		67	61.00	37.10	0.05	55.00	34.00	0.06	48.20	30.70	0.06	40.70	27.30	0.06	32.40	23.70	0.06
		62	50.50	38.80	0.06	44.30	35.50	0.06	37.60	32.10	0.06	30.60	28.70	0.07	25.20	25.20	0.13
	1500	72	82.20	39.90	0.00	75.60	36.90	0.02	68.10	33.50	0.05	59.70	29.90	0.07	50.40	26.10	0.08
		67	69.40	42.70	0.08	62.60	39.30	0.08	55.00	35.70	0.08	46.40	31.80	0.09	37.00	27.80	0.09
		62	57.70	45.10	0.09	50.70	41.40	0.09	43.10	37.70	0.09	35.50	34.00	0.10	29.80	29.80	0.18
42L21 42L24	1050	72	75.00	36.40	0.00	69.30	33.70	0.00	62.60	30.60	0.01	55.10	27.40	0.02	46.90	24.00	0.03
		67	63.30	38.80	0.03	57.20	35.70	0.03	50.50	32.50	0.03	42.90	29.00	0.04	33.50	25.00	0.04
		62	52.60	40.80	0.04	46.40	37.60	0.04	39.50	34.10	0.04	32.00	30.40	0.05	26.40	26.40	0.14
	1400	72	87.10	42.50	0.00	80.60	39.50	0.03	73.00	36.20	0.04	64.20	32.50	0.05	54.40	28.60	0.06
		67	73.80	46.10	0.06	66.90	42.70	0.06	58.90	39.00	0.07	50.10	35.20	0.07	40.00	30.90	0.07
		62	61.40	49.30	0.07	54.40	45.70	0.07	46.90	42.10	0.07	39.00	38.10	0.09	33.00	33.00	0.19
	1750	72	96.50	47.40	0.05	89.50	44.30	0.07	81.30	40.80	0.07	71.70	36.90	0.08	60.50	32.60	0.09
		67	82.10	52.30	0.09	74.60	48.80	0.09	65.90	44.90	0.09	55.90	40.60	0.09	45.10	36.20	0.10
		62	68.60	56.80	0.10	61.00	53.10	0.10	52.90	49.10	0.10	44.90	44.90	0.12	38.70	38.70	0.24
48L17 48L21 48L24	1200	72	83.40	40.60	0.00	76.70	37.20	0.00	69.30	33.60	0.00	60.90	29.80	0.01	51.70	25.80	0.02
		67	70.10	42.30	0.02	63.20	38.60	0.03	55.60	34.80	0.03	47.20	30.80	0.04	37.80	26.60	0.04
		62	57.90	43.50	0.04	50.90	39.70	0.04	43.20	35.70	0.04	34.90	31.70	0.04	27.70	27.70	0.08
	1600	72	100.80	48.90	0.00	92.80	45.10	0.00	83.80	40.90	0.01	73.80	36.40	0.04	62.50	31.70	0.05
		67	84.90	51.70	0.05	76.70	47.40	0.06	67.50	42.90	0.06	57.30	38.10	0.06	45.90	33.20	0.06
		62	70.40	53.90	0.06	62.00	49.30	0.06	52.60	44.60	0.07	42.80	39.90	0.07	35.00	35.00	0.13
	2000	72	114.70	55.70	0.00	105.70	51.60	0.00	95.60	47.00	0.05	84.20	42.00	0.07	71.40	36.70	0.08
		67	97.00	59.50	0.08	87.70	54.90	0.08	77.30	49.90	0.09	65.60	44.60	0.09	52.50	39.00	0.09
		62	80.60	62.80	0.09	71.00	57.70	0.09	60.50	52.50	0.09	49.60	47.20	0.10	41.30	41.30	0.18
60L21 60L24	1600	72	109.20	53.40	0.00	100.00	48.60	0.00	89.90	43.60	0.00	78.60	38.50	0.00	66.40	33.10	0.02
		67	91.50	55.10	0.02	82.10	50.00	0.03	71.90	44.80	0.03	60.70	39.40	0.03	48.40	34.00	0.03
		62	75.40	56.30	0.03	65.90	51.00	0.03	55.60	45.70	0.04	44.80	40.40	0.04	35.30	35.30	0.07
	2000	72	128.00	62.20	0.00	117.20	56.90	0.00	105.20	51.20	0.00	92.00	45.20	0.02	77.50	39.10	0.04
		67	107.40	64.90	0.04	96.40	59.10	0.04	84.30	53.00	0.05	71.10	46.80	0.05	56.60	40.50	0.05
		62	88.60	66.90	0.05	77.50	60.80	0.05	65.30	54.60	0.05	52.70	48.50	0.06	42.40	42.40	0.11
	2400	72	144.20	70.00	0.00	132.10	64.20	0.00	118.50	57.90	0.01	103.60	51.20	0.04	87.20	44.30	0.06
		67	121.20	73.60	0.06	108.80	67.20	0.06	95.10	60.40	0.07	80.10	53.50	0.07	63.70	46.40	0.07
		62	100.10	76.40	0.07	87.50	69.60	0.07	73.80	62.70	0.07	59.80	56.00	0.08	48.90	48.90	0.14

See Legend and Notes on next page

Legend:

CFM – Cubic Ft. per Minute

EWB – Entering Wet Bulb (°F)

LWB – Leaving Wet Bulb (°F)

TC – Gross Cooling Capacity 1000 Btuh

SHC – Gross Sensible Capacity 1000 Btuh

BF – Bypass Factor

MBH – 1000 Btuh

NOTES:

1. Contact manufacturer for cooling capacities at conditions other than shown in table.
2. Formulas:

$$\text{Leaving db} = \text{entering db} - \frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$$

$$\text{Leaving wb} = \text{wb corresponding to enthalpy of air leaving coil (h}_{LWB})$$

$$h_{LWB} = h_{EWB} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$$
 Where h_{EWB} = enthalpy of air entering coil
3. SHC is based on 80°F db temperature of air entering the evaporator coil.
 Below 80°F db, subtract (Correction Factor x CFM) from SHC.
 Above 80°F db, add (Correction Factor x CFM) to SHC.
4. Direct interpolation is permissible. Do not extrapolate.
5. Fan motor heat has not been deducted.
6. All data points are based on 10°F superheat leaving coil and use of thermostatic expansion valve (TXV) device.
7. All units have sweat suction–tube connection and a liquid–tube connection. For 1–1/8 in. system suction tube, 3/4 x 1–1/8 in. suction tube connection adapter is available as accessory.
8. The EAM4X coils can be used in any properly designed system using Refrigerant R–410A.
9. Before using maximum cfm shown in table, check coil static pressure drop to ensure system blower can provide necessary static pressure needed for coil and duct systems.
10. Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

BYPASS FACTOR	ENTERING AIR DRY BULB TEMPERATURE (°F)					
	79	78	77	76	75	Under 75
	81	82	83	84	84	Above 85
	Correction Factor					
0.10	0.98	1.96	2.94	3.92	4.91	Use formula shown below
0.20	0.87	1.74	2.62	3.49	4.36	
0.30	0.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

$$\text{Correction Factor} = 1.09 \times (1 - \text{BF}) \times (\text{db} - 80)$$

PERFORMANCE DATA (CONT.)

COIL STATIC PRESSURE DROP (in. w.c.) R-410A

UNIT SIZE	STANDARD CFM																											
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200									
18L14	Dry																											
	0.079	0.111	0.145	0.186	0.232																							
	Wet																											
24L14	0.083	0.116	0.151	0.196	0.243																							
	Dry																											
	0.065	0.091	0.120	0.154	0.194	0.237	0.284																					
24L17	Wet																											
	0.066	0.094	0.124	0.161	0.203	0.250	0.301																					
	Dry																											
30L14	0.056	0.076	0.097	0.123	0.151	0.182	0.215																					
	Wet																											
	0.060	0.082	0.105	0.132	0.163	0.195	0.231																					
30L17	Dry																											
	0.054	0.077	0.102	0.133	0.167	0.206	0.248	0.296	0.347																			
	Wet																											
36L14	0.059	0.084	0.111	0.142	0.181	0.223	0.269	0.319	0.375																			
	Dry																											
	0.043	0.059	0.077	0.096	0.119	0.144	0.171	0.201	0.232																			
36L17	Wet																											
	0.046	0.063	0.083	0.105	0.130	0.157	0.186	0.219	0.252																			
	Dry																											
36L21	0.047	0.069	0.093	0.119	0.151	0.187	0.227	0.270	0.317	0.362	0.418																	
	Wet																											
	0.053	0.076	0.101	0.129	0.162	0.200	0.241	0.286	0.335	0.388	0.447																	
42L21	Dry																											
	0.023	0.036	0.052	0.069	0.089	0.110	0.135	0.160	0.189	0.219	0.251																	
	Wet																											
42L24	0.042	0.058	0.076	0.095	0.117	0.142	0.169	0.198	0.231	0.265	0.299																	
	Dry																											
	0.026	0.037	0.050	0.062	0.077	0.092	0.109	0.128	0.148	0.170	0.193																	
48L17	Wet																											
	0.029	0.040	0.053	0.065	0.082	0.099	0.119	0.138	0.160	0.185	0.209																	
	Dry																											
48L21			0.044	0.056	0.068	0.082	0.099	0.119	0.138	0.161	0.183	0.205	0.233															
	Wet																											
			0.058	0.073	0.089	0.106	0.125	0.143	0.165	0.189	0.213	0.239	0.268															
48L24	Dry																											
			0.039	0.049	0.060	0.072	0.085	0.099	0.114	0.130	0.146	0.164	0.182															
	Wet																											
60L21			0.054	0.066	0.079	0.092	0.103	0.125	0.142	0.161	0.182	0.202	0.222															
	Dry																											
			0.065	0.082	0.105	0.128	0.156	0.185	0.216	0.253	0.290	0.331	0.372	0.417	0.464													
60L24	Wet																											
			0.066	0.084	0.106	0.130	0.159	0.188	0.222	0.256	0.296	0.337	0.379	0.425	0.476													
	Dry																											
60L28			0.055	0.072	0.089	0.107	0.128	0.150	0.175	0.199	0.228	0.257	0.288	0.321	0.356													
	Wet																											
			0.058	0.075	0.094	0.115	0.136	0.161	0.188	0.217	0.247	0.279	0.313	0.347	0.386													
60L32	Dry																											
			0.044	0.056	0.069	0.084	0.100	0.118	0.137	0.159	0.180	0.198	0.222	0.247	0.275													
	Wet																											
60L36			0.052	0.065	0.080	0.095	0.112	0.131	0.150	0.171	0.193	0.214	0.241	0.270	0.296													
	Dry																											
					0.075	0.093	0.112	0.133	0.157	0.181	0.206	0.234	0.264	0.294	0.326	0.360	0.396	0.432	0.478									
60L40	Wet																											
					0.077	0.095	0.115	0.137	0.159	0.184	0.209	0.238	0.268	0.300	0.334	0.370	0.407	0.444	0.488									
	Dry																											
60L44					0.073	0.083	0.095	0.107	0.120	0.136	0.152	0.169	0.184	0.203	0.217	0.238	0.260	0.283	0.307									
	Wet																											
					0.076	0.086	0.098	0.110	0.124	0.140	0.157	0.175	0.193	0.215	0.238	0.261	0.286	0.314	0.342									