

Liang Chi LCTR R0

STD-201RS Table 3b - SI Units - Cooling Towers (CT)

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Condition Reference #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Wet Bulb °C	10	10	10	10	10	13	13	13	13	16	16	16	16	16	16	18	18	18	18	18	18	21	21	21	21	21	24	24
Range °C	6	6	6	8	8	6	6	6	8	8	6	6	6	8	8	6	6	6	8	8	8	6	6	6	8	8	6	6
Approach °C	4	6	7	4	7	4	6	7	4	7	4	6	7	4	7	4	6	7	4	7	4	6	7	4	7	4	6	6
Inlet Water Temperature °C	20	22	23	22	25	23	25	26	25	28	26	28	29	28	31	28	30	31	30	33	31	33	34	33	36	34	36	
Outlet Water Temperature °C	14	16	17	14	17	17	19	20	17	20	20	22	23	20	23	22	24	25	22	25	25	27	28	25	28	28	30	
	L/S										L/S										L/S							
LCTR-1011B	6.98	9.75	11.23	5.9	9.28	7.93	11.13	12.83	6.77	10.63	9.1	12.78	14.73	7.73	12.23	10	14.05	16.2	8.5	13.47	11.55	16.23	18.73	9.83	15.6	13.42	18.85	
LCTR-1011C	8.3	11.57	13.32	7	11.02	9.4	13.2	15.22	8.03	12.6	10.78	15.15	17.47	9.17	14.5	11.85	16.65	19.2	10.08	15.97	13.7	19.25	22.22	11.67	18.5	15.9	22.35	
LCTR-1011D	9.53	13.28	15.3	8.03	12.65	10.8	15.15	17.47	9.23	14.48	12.38	17.4	20.05	10.53	16.65	13.62	19.12	22.05	11.58	18.33	15.73	22.1	25.5	13.4	21.23	18.27	25.65	
LCTR-1012B	7.73	10.7	12.32	6.52	10.22	8.73	12.22	14.05	7.5	11.68	10.02	14	16.13	8.53	13.43	11	15.38	17.72	9.38	14.77	12.7	17.78	20.48	10.85	17.1	14.73	20.62	
LCTR-1012C	9.1	12.62	14.52	7.68	12.03	10.3	14.4	16.57	8.83	13.77	11.8	16.52	19.02	10.05	15.83	12.97	18.13	20.9	11.05	17.42	14.98	20.97	24.15	12.78	20.17	17.37	24.32	
LCTR-1012D	10.42	14.43	16.6	8.78	13.77	11.78	16.47	18.97	10.12	15.75	13.5	18.9	21.75	11.5	18.12	14.83	20.75	23.9	12.65	19.92	17.13	23.98	27.63	14.63	23.07	19.87	27.82	
LCTR-1016B	10.23	14.15	16.27	8.62	13.5	11.57	16.13	18.57	9.93	15.45	13.25	18.52	21.3	11.28	17.75	14.55	20.33	23.4	12.42	19.53	16.8	23.48	27.05	14.37	22.6	19.48	27.23	
LCTR-1016C	11.7	16.18	18.6	9.87	15.43	13.22	18.45	21.23	11.37	17.65	15.15	21.15	24.35	12.92	20.3	16.63	23.23	26.75	14.2	22.32	19.2	26.85	30.92	16.42	25.83	22.27	31.13	
LCTR-1016D	12.88	17.8	20.47	10.85	16.98	14.55	20.3	23.35	12.5	19.42	16.67	23.28	26.78	14.2	22.32	18.3	25.57	29.43	15.62	24.55	21.13	29.53	34	18.07	28.43	24.5	34.25	
LCTR-1018B	11.92	16.42	18.87	10.03	15.68	13.43	18.72	21.52	11.6	17.93	15.4	21.45	24.67	13.15	20.6	16.9	23.57	27.1	14.45	22.65	19.52	27.2	31.3	16.7	26.22	22.62	31.53	
LCTR-1018C	13.6	18.75	21.53	11.45	17.9	15.35	21.38	24.57	13.23	20.47	17.58	24.5	28.18	15.02	23.52	19.3	26.9	30.95	16.5	25.87	22.28	31.07	35.75	19.08	29.93	25.82	36.02	
LCTR-1018D	14.93	20.57	23.63	12.57	19.65	16.85	23.47	26.97	14.53	22.47	19.3	26.88	30.92	16.47	25.82	21.18	29.53	33.97	18.1	28.38	24.45	34.1	39.22	20.93	32.85	28.33	39.52	
LCTR-1021B	13.42	18.58	21.37	11.3	17.72	15.17	21.2	24.4	13.02	20.27	17.38	24.32	28	14.8	23.3	19.08	26.7	30.75	16.27	25.63	22.05	30.85	35.55	18.83	29.68	25.57	35.78	
LCTR-1021C	15.3	21.2	24.38	12.9	20.23	17.3	24.18	27.85	14.85	23.13	19.83	27.75	31.95	16.9	26.6	21.78	30.48	35.1	18.57	29.27	25.17	35.22	40.57	21.48	33.88	29.18	40.85	
LCTR-1021D	16.83	23.32	26.83	14.2	22.25	19.03	26.62	30.63	16.35	25.45	21.82	30.52	35.15	18.58	29.25	23.97	33.53	38.62	20.43	32.18	27.68	38.73	44.63	23.65	37.27	32.1	44.93	
LCTR-1022B	14.87	20.65	23.78	12.53	19.68	16.83	23.57	27.15	14.42	22.53	19.3	27.05	31.17	16.42	25.9	21.2	29.72	34.25	18.05	28.5	24.5	34.35	39.6	20.88	33.02	28.42	39.85	
LCTR-1022C	16.32	22.67	26.1	13.77	21.62	18.48	25.87	29.8	15.82	24.73	21.18	29.68	34.22	18.02	28.43	23.27	32.62	37.6	19.82	31.3	26.88	37.7	43.47	22.93	36.25	31.2	43.75	
LCTR-1022D	18.63	25.9	29.82	15.72	24.68	21.1	29.55	34.03	18.07	28.25	24.2	33.9	39.07	20.58	32.48	26.57	37.25	42.95	22.63	35.73	30.72	43.07	49.65	26.18	41.4	35.63	49.97	
LCTR-1025B	15.93	22.1	25.42	13.43	21.07	18.03	25.22	29.03	15.47	24.1	20.67	28.92	33.32	17.58	27.72	22.7	31.77	36.6	19.33	30.5	26.22	36.72	42.32	22.38	35.32	30.42	42.6	
LCTR-1025C	18.18	25.22	29.02	15.33	24.05	20.58	28.78	33.13	17.65	27.52	23.58	33.02	38.02	20.08	31.63	25.9	36.27	41.78	22.08	34.82	29.93	41.92	48.3	25.55	40.32	34.72	48.62	
LCTR-1025D	20	27.75	31.92	16.87	26.47	22.63	31.65	36.45	19.42	30.27	25.93	36.32	41.83	22.08	34.8	28.48	39.9	45.97	24.28	38.28	32.92	46.1	53.13	28.1	44.35	38.18	53.48	
LCTR-1030B	19.53	26.7	30.62	16.33	25.57	21.97	30.43	34.9	19.07	29.2	25.13	34.83	39.98	21.55	33.52	27.58	38.23	43.88	23.67	36.83	31.8	44.1	50.63	27.35	42.58	36.83	51.07	
LCTR-1030C	22.35	30.58	35.05	18.7	29.27	25.15	34.83	39.95	21.82	33.43	28.78	39.9	45.78	24.67	38.38	31.57	43.78	50.25	27.1	42.18	36.42	50.5	57.97	31.32	48.75	42.17	58.47	
LCTR-1030D	24.58	33.63	38.57	20.57	32.2	27.67	38.32	43.95	24	36.78	31.67	43.88	50.35	27.13	42.22	34.73	48.15	55.27	29.82	46.4	40.05	55.55	63.77	34.43	53.63	46.38	64.32	
LCTR-1036B	23.17	31.92	36.67	19.48	30.48	26.13	36.4	41.83	22.53	34.85	29.93	41.72	47.98	25.55	40.05	32.85	45.82	52.7	28.08	44.03	37.93	52.9	60.87	32.47	50.97	43.97	61.32	
LCTR-1036C	26.47	36.47	41.9	22.27	34.83	29.85	41.58	47.82	25.73	39.83	34.2	47.67	54.83	29.18	45.75	37.53	52.35	60.22	32.08	50.32	43.33	62.45	69.55	37.1	58.23	50.23	70.08	
LCTR-1036D	29.12	40.12	46.1	24.5	38.32	32.83	45.75	52.58	28.3	43.8	37.62	52.43	60.32	32.1	50.33	41.28	57.58	66.23	35.28	55.35	47.67	66.5	76.52	40.8	64.05	55.25	77.08	
LCTR-1040B	25.73	35.47	40.73	21.65	33.87	29.02	40.43	46.48	25.02	38.72	33.25	46.35	53.3	28.38	44.48	36.5	50.9	58.55	31.18	48.92	42.13	58.77	67.62	36.07	56.62	48.83	68.13	
LCTR-1040C	29.4	40.52	46.57	24.75	38.7	33.17	46.22	53.12	28.6	44.25	38	52.97	60.92	32.43	50.85	41.72	58.17	66.92	35.65	55.92	48.15	67.17	77.28	41.22	64.7	55.82	77.87	
LCTR-1040D	32.35	44.58	51.22	27.22	42.58	36.48	50.83	58.43	31.45	48.68	41.8	58.27	67.02	35.68	55.93	45.88	63.98	73.6	39.22	61.5	52.97	73.88	85.02	45.35	71.18	61.4	85.65	
LCTR-1047B	31.28	42.75	48.87	25.65	41.05	35.72	48.65	55.62	30.78	46.83	40.47	55.63	63.63	35.25	53.68	44.35	61	69.78	38.3	58.95	51.08	70.25	80.38	44.18	68.05	59.05	81.23	
LCTR-1047C	35.73	48.82	55.8	29.27	46.88	40.78	55.55	63.52	35.15	53.48	46.2	63.53	72.67	40.27	61.3	50.65	69.65	79.68	43.73	67.32	58.33	80.22	91.8	50.45	77.7	67.43	92.75	
LCTR-1047D	39.27	53.65	61.32	32.17	51.52	44.83	61.05	69.8	38.63	58.78	50.78	69.82	79.85	44.25	67.38	55.67	76.53	87.57	48.07	73.98	64.1	88.17	100.88	55.45	85.4	74.12	101.93	
LCTR-1052B	35.73	49.35	56.3	28.58	47.48	41.52	56.12	64.05	35.43	54.12	46.85	64.13	73.22	41.13	62	51.33	70.27	80.25	44.47	68.03	59.07	80.87	92.38	51.27	78.48	68.25	93.43	
LCTR-1052C	39.25	54.2	61.83	31.42	52.13	45.58	61.63	70.35	38.93	59.43	51.45	70.43	80.42	45.17	68.08	56.37	77.17	88.13	48.83	74.72	64.87	88.82	101.45	56.3	86.18	74.95	102.62	
LCTR-1052D	44.87	61.95	70.67	35.9	59.58	52.1	70.43	80.4	44.48	67.93	58.8	80.48	91.9	51.62	77.82	64.42	88.2	100.72	55.82	85.4	74.13	101.52	115.95	64.35	98.5	85.65	117.27	
LCTR-1060B	41.07	56.05	64.08	33.8	53.8	46.7	63.78	72.97	40.33	61.38	53	72.97	83.48	46.07	70.37	58.1	80	91.57	50.12	77.28	66.93	92.17	105.52	57.83	89.23	77.4	106.58	
LCTR-1060C	45.12	61.6	70.42	37.15	59.12	51.33	70.1	80.18	44.33	67.45	58.23	80.17	91.75	50.62	77.33	63.85	87.92	100.62	55.08	84.92	73.55	101.28	115.95	63.55	98.05	85.05	117.12	
LCTR-1060D	51.6	70.43	80.52	42.47																								

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Condition Reference #	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45		46	47	48	49
Wet Bulb °C	24	24	24	27	27	27	27	29	29	29	29	29	29	32.2	32.2	32.2	32.2	32.2		21	25.56	27	28
Range °C	6	8	8	6	6	6	8	8	6	6	8	8	8	6	6	6	8	8		5	5.56	5	5
Approach °C	7	4	7	4	6	7	4	7	4	6	7	4	7	4	6	7	4	7		6	3.89	5	4
Inlet Water Temperature °C	37	36	39	37	39	40	39	42	39	41	42	41	44	42.2	44.2	45.2	44.2	47.2		32	35.00	37	37
Outlet Water Temperature °C	31	28	31	31	33	34	31	34	33	35	36	33	36	36.2	38.2	39.2	36.2	39.2		27	29.44	32	32
	L/S																		L/S				
LCTR-1011B	21.75	11.43	18.15	15.62	21.97	25.35	13.35	21.18	17.33	24.37	28.12	14.82	23.52	20.52	28.83	33.3	17.58	27.92		18.35	14.82	21.02	18.35
LCTR-1011C	25.8	13.57	21.52	18.53	26.03	30.05	15.83	25.12	20.55	28.88	33.33	17.58	27.88	24.33	34.18	39.47	20.85	33.1		21.75	17.58	24.92	21.75
LCTR-1011D	29.6	15.58	24.7	21.27	29.88	34.48	18.18	28.83	23.6	33.15	38.25	20.2	32.02	27.93	39.23	45.3	23.95	37.98		24.97	20.18	28.6	24.98
LCTR-1012B	23.75	12.6	19.88	17.15	24	27.65	14.7	23.18	19.02	26.36	30.67	16.32	25.73	22.5	31.47	36.27	19.33	30.52		20.05	16.27	22.97	20.1
LCTR-1012C	28.02	14.87	23.43	20.22	28.3	32.62	17.33	27.33	22.42	31.38	36.17	19.23	30.35	26.52	37.12	42.78	22.8	35.98		23.65	19.18	27.08	23.7
LCTR-1012D	32.05	17	26.82	23.13	32.38	37.32	19.82	31.28	25.65	35.9	41.37	22	34.72	30.35	42.45	48.93	26.08	41.17		27.05	21.95	30.98	27.1
LCTR-1016B	31.37	16.68	26.27	22.67	31.7	36.52	19.45	30.63	25.13	35.13	40.48	21.58	34	29.73	41.55	47.87	25.58	40.3		26.48	21.5	30.33	26.55
LCTR-1016C	35.85	19.07	30.03	25.92	36.23	41.73	22.23	35.02	28.73	40.15	46.25	24.68	38.87	33.98	47.48	54.7	29.23	46.07		30.27	24.58	34.67	30.35
LCTR-1016D	39.43	20.98	33.03	28.52	39.85	45.9	24.47	38.52	31.6	44.17	50.88	27.15	42.75	37.38	52.23	60.17	32.17	50.67		33.28	27.05	38.13	33.38
LCTR-1018B	36.28	19.4	30.45	26.3	36.68	42.22	22.6	35.48	29.15	40.65	46.78	25.08	39.38	34.47	48.03	55.28	29.7	46.65		30.63	24.95	35.1	30.77
LCTR-1018C	41.43	22.15	34.77	30.03	41.88	48.2	25.82	40.52	33.28	46.42	53.42	28.63	44.97	39.35	54.87	63.15	33.92	53.27		34.98	28.48	40.08	35.13
LCTR-1018D	45.47	24.32	38.15	32.97	45.97	52.9	28.33	44.47	36.53	50.93	58.62	31.43	49.33	43.18	60.2	69.28	37.23	58.45		38.38	31.27	43.98	38.55
LCTR-1021B	41.23	21.88	34.5	29.77	41.67	48.02	25.52	40.25	33	46.18	53.23	28.32	44.68	39.05	54.63	62.97	33.57	52.97		34.8	28.23	39.87	34.88
LCTR-1021C	47.07	24.97	39.38	33.97	47.55	54.8	29.12	45.93	37.67	52.72	60.75	32.32	50.98	44.57	62.35	71.87	38.3	60.45		39.72	32.22	45.5	39.8
LCTR-1021D	51.77	27.47	43.32	37.37	52.3	60.27	32.03	50.53	41.43	57.98	66.82	35.55	56.08	49.02	68.58	79.05	42.13	66.5		43.7	35.45	50.05	43.78
LCTR-1022B	45.97	24.28	38.4	33.1	46.42	53.53	28.32	44.8	36.7	51.47	59.37	31.43	49.75	43.43	60.9	70.27	37.28	59		38.78	31.4	44.42	38.82
LCTR-1022C	50.45	26.65	42.15	36.33	50.93	58.75	31.08	49.17	40.28	56.48	65.15	34.52	54.6	47.68	66.85	77.1	40.93	64.77		42.57	34.47	48.75	42.62
LCTR-1022D	57.62	30.43	48.13	41.48	58.18	67.1	35.5	56.17	46.02	64.52	74.42	39.42	62.37	54.47	76.35	88.08	46.75	73.97		48.62	39.37	55.68	48.67
LCTR-1025B	49.08	26	41.05	35.4	49.58	57.15	30.33	47.88	39.25	54.97	63.37	33.67	53.17	46.45	65.03	74.98	39.9	63.03		41.42	33.58	47.45	41.5
LCTR-1025C	56.03	29.68	46.87	40.42	56.65	65.25	34.62	54.67	44.82	62.75	72.35	38.43	60.68	53.02	74.25	85.6	45.55	71.97		47.28	38.33	54.17	47.37
LCTR-1025D	61.65	32.65	51.55	44.45	62.27	71.77	38.07	60.13	49.28	69.03	79.58	42.27	66.75	58.32	81.67	94.17	50.1	79.15		52.02	42.17	59.58	52.12
LCTR-1030B	58.63	31.72	49.42	42.8	59.33	68.13	36.93	57.53	47.38	65.7	75.43	40.93	63.78	55.95	77.55	89.05	48.43	75.47		49.52	40.58	56.77	49.9
LCTR-1030C	67.13	36.32	56.57	49	67.93	78	42.28	65.87	54.27	75.23	86.38	46.87	73.03	64.07	88.8	101.98	55.47	86.42		56.7	46.47	65	57.13
LCTR-1030D	73.85	39.95	62.23	53.9	74.73	85.82	46.5	72.47	59.68	82.75	95.02	51.57	80.33	70.48	97.68	112.17	61	95.07		62.37	51.12	71.5	62.85
LCTR-1036B	70.57	37.7	59.2	51.13	71.33	82.08	43.93	69	56.67	79.03	90.97	48.75	76.57	67	93.42	107.52	57.75	90.7		59.57	48.5	68.25	59.82
LCTR-1036C	80.63	43.08	67.65	58.43	81.52	93.82	50.2	78.85	64.77	90.33	103.97	55.7	87.5	76.57	106.77	122.9	65.98	103.65		68.08	55.43	78	68.35
LCTR-1036D	88.7	47.38	74.4	64.28	89.67	103.2	55.22	86.73	71.23	99.37	114.37	61.27	96.23	84.22	117.45	135.18	72.58	114.02		74.88	60.97	85.8	75.18
LCTR-1040B	78.4	41.88	65.77	56.82	79.25	91.22	48.82	76.67	62.97	87.82	101.07	54.15	85.07	74.43	103.8	119.48	64.15	100.77		66.18	53.88	75.83	66.45
LCTR-1040C	89.6	47.87	75.17	64.93	90.57	104.23	55.78	87.62	71.97	100.37	115.52	61.83	97.22	85.08	118.63	136.55	73.32	115.17		75.63	61.58	86.67	75.95
LCTR-1040D	98.57	52.65	82.68	71.42	99.63	114.67	61.37	96.37	79.15	110.4	127.07	68.08	106.93	93.58	130.5	150.2	80.65	126.68		83.2	67.75	95.33	83.55
LCTR-1047B	92.95	51.18	78.85	68.53	94.23	107.85	59.48	91.67	75.8	104.23	119.3	65.9	101.53	89.37	122.83	140.6	77.83	119.93		78.58	64.97	90.13	79.55
LCTR-1047C	106.13	58.43	90.03	78.25	107.6	123.15	67.93	104.67	86.57	119.02	136.22	75.25	115.93	102.05	140.25	160.53	88.88	136.95		89.72	74.18	102.92	90.83
LCTR-1047D	116.63	64.23	98.95	86	118.25	135.33	74.67	115.03	95.13	130.78	149.68	82.7	127.42	112.15	154.13	176.42	97.68	150.5		98.6	81.53	113.1	99.82
LCTR-1052B	106.73	59.35	90.87	79.12	108.3	123.72	68.93	105.55	87.48	119.72	136.77	76.3	116.83	103.03	140.95	161.05	90.05	137.9		90.25	74.98	103.57	91.6
LCTR-1052C	117.22	65.17	99.78	86.88	118.95	135.88	75.7	115.92	96.07	131.48	150.23	83.8	128.33	113.15	154.82	176.9	98.9	151.45		99.12	82.35	113.75	100.62
LCTR-1052D	133.97	74.47	114.03	99.3	135.93	155.3	86.5	132.48	109.8	150.27	171.68	95.77	146.65	129.32	176.93	202.17	113.02	173.08		113.28	94.12	130	114.98
LCTR-1060B	122.03	67	103.42	89.83	123.68	141.62	77.92	120.25	99.38	136.82	156.67	86.32	133.22	117.18	161.28	184.7	101.98	157.4		103.13	85.17	118.3	104.33
LCTR-1060C	134.1	73.63	113.63	98.72	135.9	155.62	85.62	132.13	109.22	150.35	172.17	94.85	146.38	128.78	177.23	202.95	112.07	172.97		113.35	93.58	130	114.65
LCTR-1060D	153.32	84.2	129.93	112.87	155.38	177.92	97.9	151.08	124.88	171.9	196.83	108.45	167.37	147.25	202.63	232.03	128.13	197.77		129.58	107	148.63	131.1
LCTR-1077B	151.47	83.67	128.63	111.87	153.58	175.68	97.23	149.5	123.73	169.85	194.28	107.68	165.57	145.82	200.1	228.9	127.15	195.52		128.05	106.05	146.9	129.75
LCTR-1077C	173.13	95.63	147.03	127.87	175.57	200.82	111.15	170.88	141.43	194.15	222.08	123.08	189.25	166.67	228.73	261.65	145.35	223.48		146.37	121.22	167.	