

**Errata to
Thermal Guidelines for Data Processing Environments, 4th Ed.
(2015)**

July 25, 2016

Shaded items have been modified since the previously published errata sheet dated May 19, 2016.

Reference Card and Page 14 Replace Table 2.1 with the following:

Table 2.1 2015 Thermal Guidelines—SI Version (I-P Version in Appendix B)

Equipment Environment Specifications for Air Cooling							
Class ^a	Product Operation ^{b,c}				Product Power Off ^{c,d}		
	Dry-Bulb Temperature ^{e,g} , °C	Humidity Range, Noncondensing ^{h,i,k}	Maximum Dew Point ^k , °C	Maximum Elevation ^{e,j,m} , m	Maximum Rate of Change ^f , °C/h	Dry-Bulb Temperature, °C	Relative Humidity ^k , %
Recommended (Suitable for all four classes; explore data center metrics in this book for conditions outside this range.)							
A1 to A4	18 to 27	−9°C DP to 15°C DP and 60% rh					
Allowable							
A1	15 to 32	−12°C DP and 8% rh to 17°C DP and 80% rh	17	3050	5/20	5 to 45	8 to 80
A2	10 to 35	−12°C DP and 8% rh to 21°C DP and 80% rh	21	3050	5/20	5 to 45	8 to 80
A3	5 to 40	−12°C DP and 8% rh to 24°C DP and 85% rh	24	3050	5/20	5 to 45	8 to 80
A4	5 to 45	−12°C DP and 8% rh to 24°C DP and 90% rh	24	3050	5/20	5 to 45	8 to 80
B	5 to 35	8% to 28°C DP and 80% rh	28	3050	N/A	5 to 45	8 to 80
C	5 to 40	8% to 28°C DP and 80% rh	28	3050	N/A	5 to 45	8 to 80

* For potentially greater energy savings, refer to the section “Detailed Flowchart for the Use and Application of the ASHRAE Data Center Classes” in Appendix C for the process needed to account for multiple server metrics that impact overall TCO.

Table Footnote for Reference Card, Table 2.1 (Page 14), and Table B.1 (Page 82) For footnote 1, “For the upper moisture limit, the limit is the minimum absolute moisture of the DP and RH stated. For the lower moisture limit, the limit is the maximum absolute moisture of the DP and RH stated” should be replaced with “For the upper moisture limit, the limit is the minimum absolute **humidity** of the DP and RH stated. For the lower moisture limit, the limit is the maximum absolute **humidity** of the DP and RH stated.”

Page 67 For the heading “Airflow, Maximum @ 35°C (95°F),” the units “(cfm) m³/h” should be replaced with “**m³/h (cfm).**”

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Replace Table B.1 with the following:

Table B.1 2015 Thermal Guidelines—I-P Version (SI Version in Table 2.1)

Equipment Environment Specifications for Air Cooling							
Class ^a	Product Operation ^{b,c}				Product Power Off ^{c,d}		
	Dry-Bulb Temperature ^{e,g} , °F	Humidity Range, Noncondensing ^{h,i,k,l}	Maximum Dew Point, ^k °F	Maximum Elevation ^{e,j} , m, ft	Maximum Rate of Change ^f , °F/h	Dry-Bulb Temperature, °F	Relative Humidity, ^k %
Recommended (Suitable for all four classes; explore data center metrics in this book for conditions outside this range.)							
A1 to A4	64.4 to 80.6	15.8°F DP to 59°F DP and 60% rh					
Allowable							
A1	59 to 89.6	10.4°F DP and 8% rh to 62.6°F DP and 80% rh	62.6	10,000	9/36	41 to 113	8 to 80
A2	50 to 95	10.4°F DP and 8% rh to 69.8°F DP and 80% rh	69.8	10,000	9/36	41 to 113	8 to 80
A3	41 to 104	10.4°F DP and 8% rh to 75.2°F DP and 85% rh	75.2	10,000	9/36	41 to 113	8 to 80
A4	41 to 113	10.4°F DP and 8% rh to 75.2°F DP and 90% rh	75.2	10,000	9/36	41 to 113	8 to 80
B	41 to 95	8% to 82.4°F DP and 80% rh	82.4	10,000	N/A	41 to 113	8 to 80
C	41 to 104	8% to 82.4°F DP and 80% rh	82.4	10,000	N/A	41 to 113	8 to 80

* For potentially greater energy savings, refer to the section “Detailed Flowchart for the Use and Application of the ASHRAE Data Center Classes” in Appendix C for the process needed to account for multiple server metrics that impact overall TCO.

Replace Figure L.2 with the following:

