

Comment (#52 Page 163, L6)

Part A of TDL #129 D2.3

Table 145-17 contain resistance values of actual test verification model. These values need to be rounded to 1% in order that Icon-2P_unb will be kept with accuracy of +/-5mA/TBD.

Analysis:

Rch_unb_min/max:

1) **Low channel resistance conditions:** Reducing Rch_unb_min/max to a number with 2 decimal digit (0.xy) accuracy will lead to 3.33% error so these numbers must stay with 3 decimal digits (0.xyz). The selected resistor will have to be 0.xyz +/-1%. In this way, we get what we want i.e. practical resistors with +/-1% and not losing accuracy of the entire system.

2) **High channel resistance conditions:** Reducing Rch_unb_min/max to a number with 2 decimal digits (0.xy) will generate accuracy of 0.09% which is <<1%. As a result, we can use 0.xy representation. The selected resistor will have to be 0.xy +/-1%.

Rpd_min/max:

1) Reducing Rpd_min/max to a number with 2 decimal digit (0.xy) accuracy will lead to 0.16% to 0.87% error which is close to our target of 1% so these numbers must stay with 3 decimal digits (0.xyz). The selected resistor will have to be 0.xyz +/-1%.

Suggested Remedy:

Baseline starts here:

Change Table 145-17 values as is.

PSE Class	RCh_unb_min	RCh_unb_max	Rpd_min	Rpd_max	Additional Information
5	0.087	0.101	0.641	1.524	Low channel resistance conditions. All resistances within 1% range.
6			0.541	1.187	
7			0.486	1.03	
8			0.441	0.896	
5	5.41	6.25	0.708	1.031	High channel resistance conditions. All resistances within 1% range.
6			0.567	0.826	
7			0.494	0.72	
7			0.432	0.63	

Baseline ends here.



Annex A:

PSE Class	RCh_unb_min		RCh_unb_max		Rpd_min		Rpd_max		Additional Information
5	0.087		0.101		0.641		1.524		Low channel resistance conditions. All resistances within 1% range.
6					0.541		1.187		
7					0.486		1.03		
8					0.441		0.896		
5	5.405		6.25		0.708		1.031		High channel resistance conditions. All resistances within 1% range.
6					0.567		0.826		
7					0.494		0.72		
7					0.432		0.63		

PSE Class	RCh_unb_min	%diff	RCh_unb_max	%diff	Rpd_min	%diff	Rpd_max	%diff	Additional Information
5	0.090	- 3.33%	0.100	1.00%	0.64	0.16%	1.52	0.26%	Low channel resistance conditions. All resistances within 1% range.
6					0.54	0.19%	1.19	-0.25%	
7					0.49	- 0.82%	1.03	0.00%	
8					0.44	0.23%	0.90	-0.44%	
5	5.41	- 0.09%	6.25	0.00%	0.71	0.28%	1.03	0.10%	High channel resistance conditions. All resistances within 1% range.
6					0.57	- 0.53%	0.83	-0.48%	
7					0.49	0.82%	0.72	0.00%	
7					0.43	0.47%	0.63	0.00%	