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 follows:

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

Baseline ends here.



Annex A:

PSE Class	RCh unb min	RCh_unb_max	Rpd min	Rpd_max	Additional Information
F3E Class			Kpu_IIIIII		IIIOIIIIatioii
5	0.087	0.101	0.641	1.524	
6			0.541	1.187	Low channel
7			0.486	1.03	resistance conditions. All resistances within
8			0.441	0.896	1% range.
5	5.405	6.25	0.708	1.031	
6			0.567	0.826	High channel
7			0.494	0.72	resistance conditions. All resistances within
7			0.432	0.63	1% range.

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%	
6					0.54	0.19%	1.19	-0.25%	
7					0.49	- 0.82%	1.03	0.00%	Low channel resistance conditions.
8					0.44	0.23%	0.90	-0.44%	All resistances within 1% range.
5	5.41	0.09%	6.25	0.00%	0.71	- 0.28%	1.03	0.10%	
6					0.57	- 0.53%	0.83	-0.48%	IP-1 - I I I I
7					0.49	0.82%	0.72	0.00%	High channel resistance conditions. All resistances within 1% range.
7					0.43	0.47%	0.63	0.00%	

