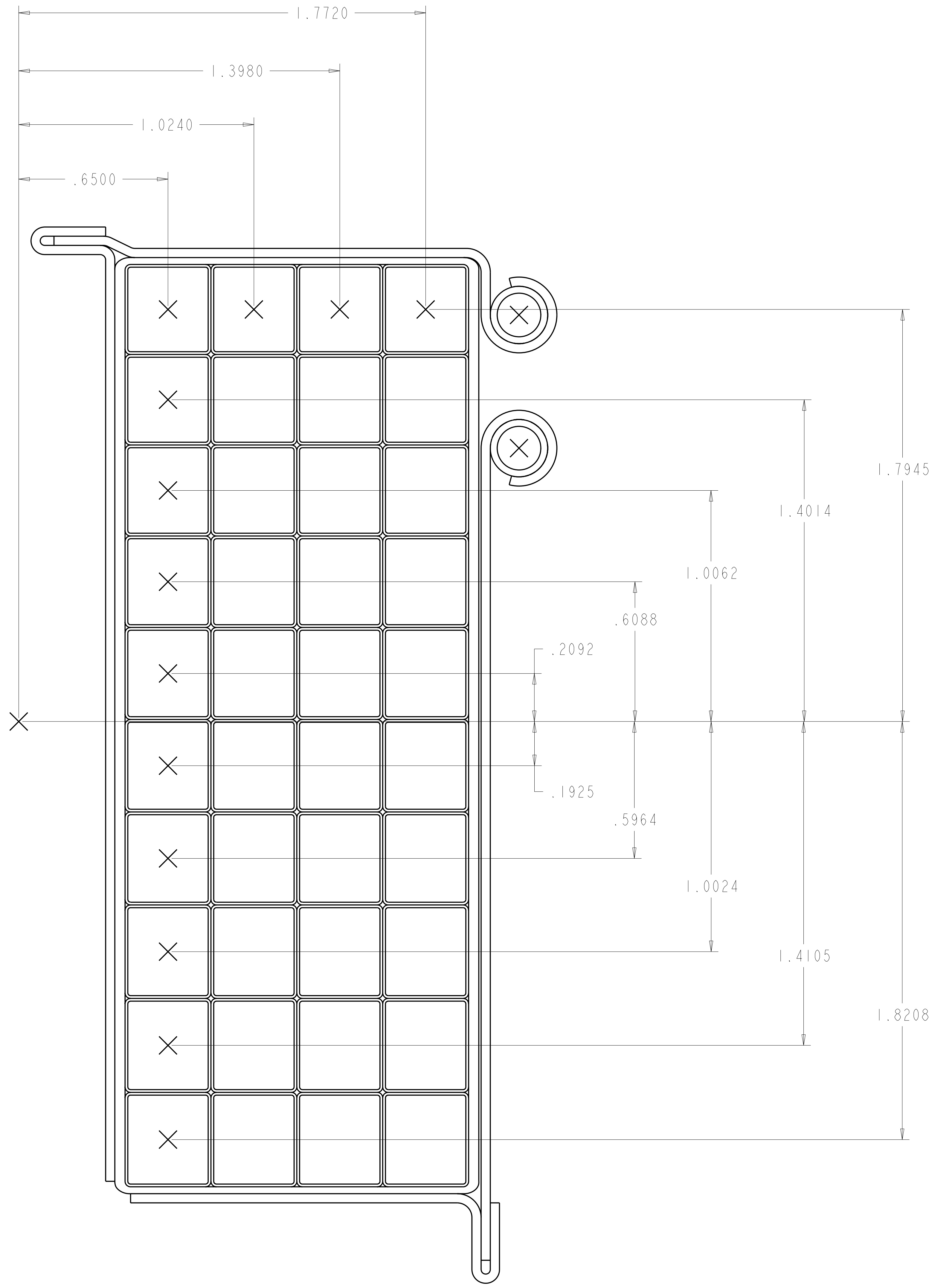


- NOTES:
1. DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.100-2000.
  2. INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994.
  3. DIMENSIONS ARE IN INCHES.
  4. DIMENSIONS APPLY AT ROOM TEMPERATURE. OPERATING TEMP 80K.



winding law from base = 2.1 in

layer	original baseline, no turn compression and .036 shim between turns		tune top boundary to achieve correct current center	
	assumed layer thicknesses (in)	dist of layer center from winding law (in)	assumed layer thicknesses (in)	dist of layer center from winding law (in)
outside of pack		-2.011		-1.9905
turn 10		-2.011	0.3920	-1.7945
shim		-2.011		-1.5985
turn 9	0.415	-1.8035	0.3942	-1.4014
shim	0.036	-1.578		-1.2043
turn 8	0.415	-1.3525	0.3963	-1.00615
shim	0.036	-1.127		-0.808
turn 7	0.415	-0.9015	0.3985	-0.60875
shim	0.036	-0.676		-0.4095
turn 6	0.415	-0.4505	0.4006	-0.2092
shim	0.036	-0.225		-0.0089
turn 5	0.415	0.0005	0.4028	0.1925
shim	0.036	0.226		0.3939
turn 4	0.415	0.4515	0.4049	0.59635
shim	0.036	0.677		0.7988
turn 3	0.415	0.9025	0.4071	1.00235
shim	0.036	1.128		1.2059
turn 2	0.415	1.3535	0.4092	1.4105
shim	0.036	1.579		1.6151
turn 1	0.415	1.8045	0.4114	1.8208
ground wrap	0.0445	2.03425	0.0300	2.0415
cladding	0.04	2.0765	0.0400	2.0765
kapton	0.0035	2.09825	0.0035	2.09825
current center		0.0005		0.0002

additional squish per turn 0.036 in

SCALE 4.0

**RELEASED FOR FABRICATION / INSTALLATION**  
 PPPL Drafting:

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**P** THIS DRAWING PRODUCED ON PRO-ENGINEER

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE

SCALE NOTED	DES B NELSON	10-05
TOLERANCES UNLESS OTHERWISE SPECIFIED	DRW D WILLIAMSON	10-05
FRACTIONS	CHK M COLE	10-05
XX DECIMALS ±.01	SECT :	:
XXX DECIMALS ±.005	DEPT :	:
ANGLES ±0°15'	PE D WILLIAMSON	10-05
BREAK SHARP EDGES .06 MAX	CR :	:
FINISH .125 UNLESS OTHERWISE SPECIFIED	PJ :	:
	RD :	:
	PPPL DRFT J SIEGEL	10-05

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NATIONAL COMPACT STELLARATOR EXPERIMENT			
MODULAR COIL TYPE-C WINDING PACK DIMENSIONS			
VERSION NO.	PLANT	BLDG	FL
5	X-10	5700	3
RELEASE LEVEL	ISHT OF	TYPE	CLASS
Fabrication	1	S	U
SEI42C-019			
			REV 0

SEI42C-019