



UNIVERSITY OF
LIVERPOOL

School of Engineering

BOM and 2D Technical Drawings

MNFG601

FLEXI-LIT

Group 01

Authors:

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Academic Guide: Prof. Dan Hibbert



BILL OF MATERIALS (BOM):

The BOM below lists all the components in the product. The table below also shows the quantity and materials used to manufacture the specific parts.

Part Number	Description	Quantity	Material (prototype)	Material (expected)
1	PCB Chip with USB	1	Silicon	Silicone
2	Base holder	1	Acrylonitrile Butadiene Styrene (ABS)	High Density Poly Ethylene (HDPE)
3	Base Connector	1	Acrylonitrile Butadiene Styrene (ABS)	High Density Poly Ethylene (HDPE)
4	Support Wire	2	Aluminium-2mm dia	Aluminium <2mm dia
5	Wire Holder top	5	Acrylonitrile Butadiene Styrene (ABS)	High Density Poly Ethylene (HDPE)
6	Wire Holder bottom	5	Acrylonitrile Butadiene Styrene (ABS)	High Density Poly Ethylene (HDPE)
7	Light casing top	1	-----	High Density Poly Ethylene (HDPE)
8	Light casing bottom	1	-----	Polycarbonate (PC)

Table: Bill of materials.

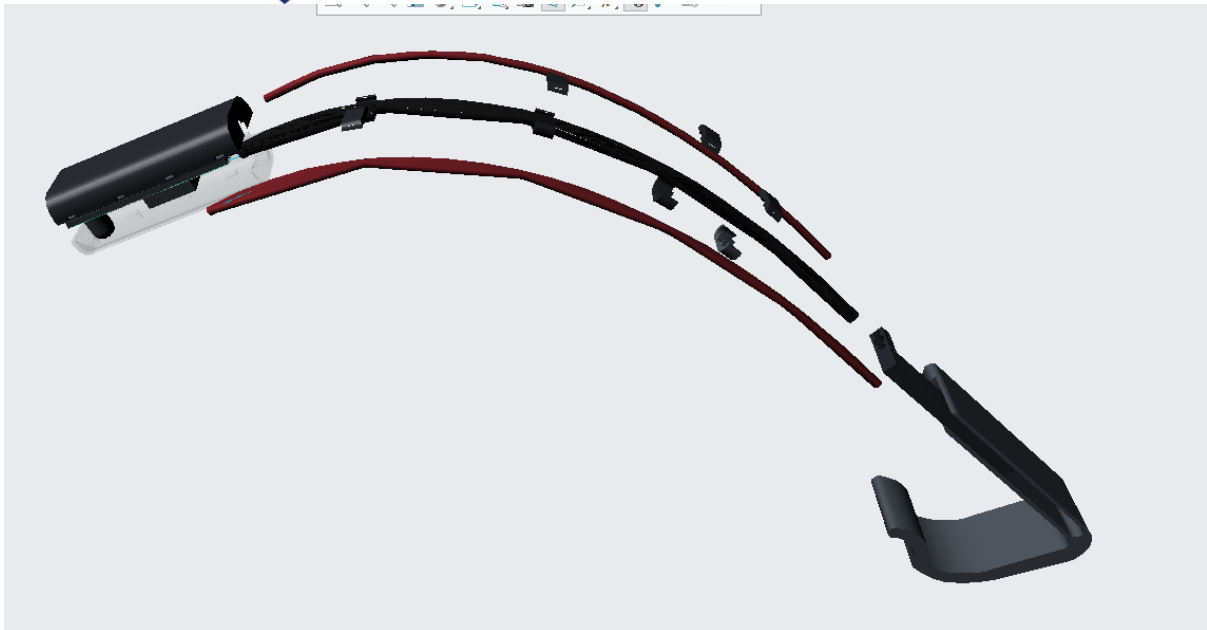
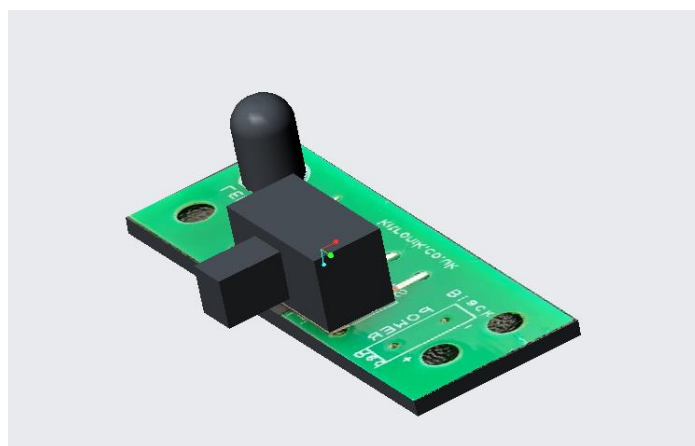


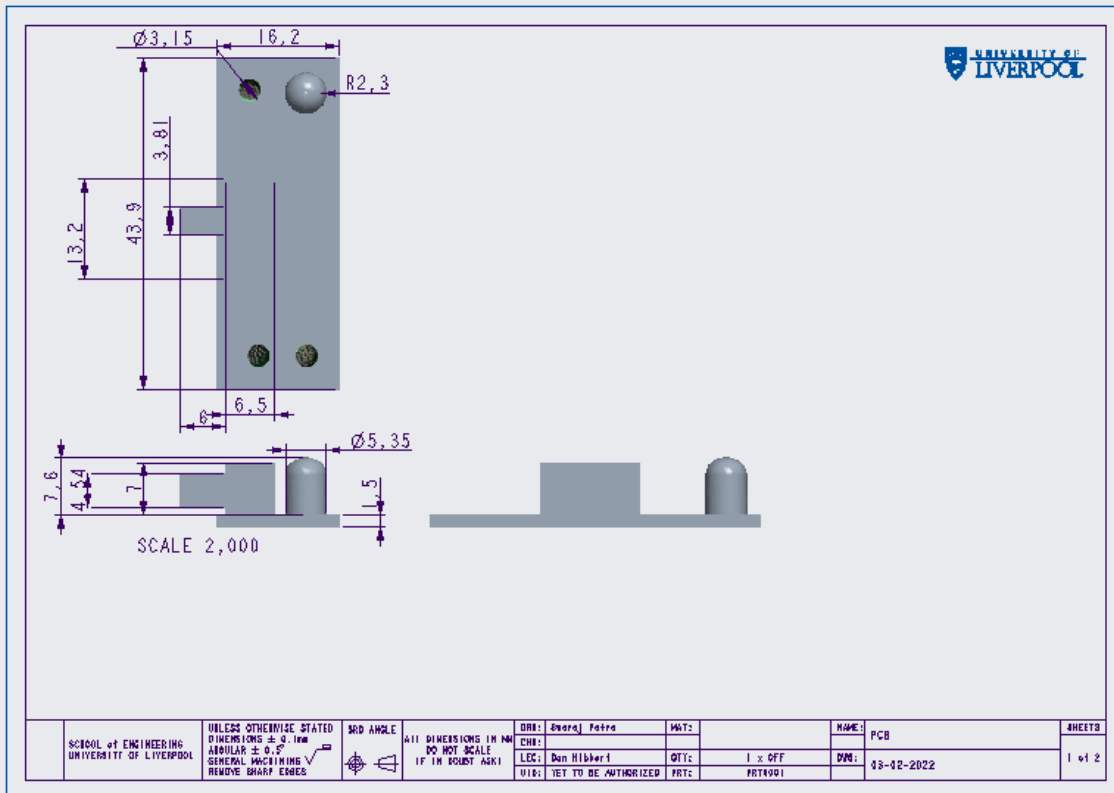
Figure: Exploded View

2D TECHNICAL DRAWINGS:

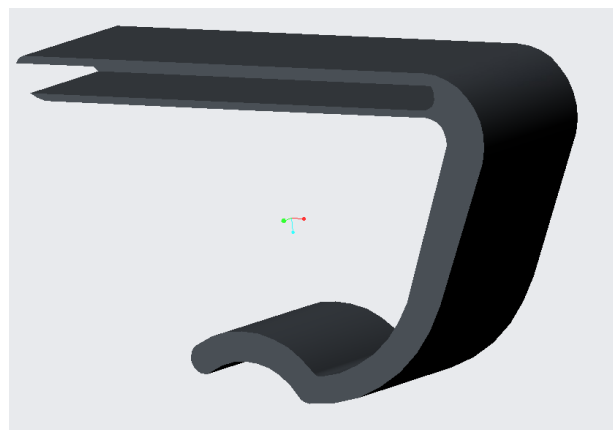
The below 2D drawings illustrates PTC Creo Parametric models in 2D drawing format along with an isometric view of the part on the side. They are created with the help of a specific drawing template.

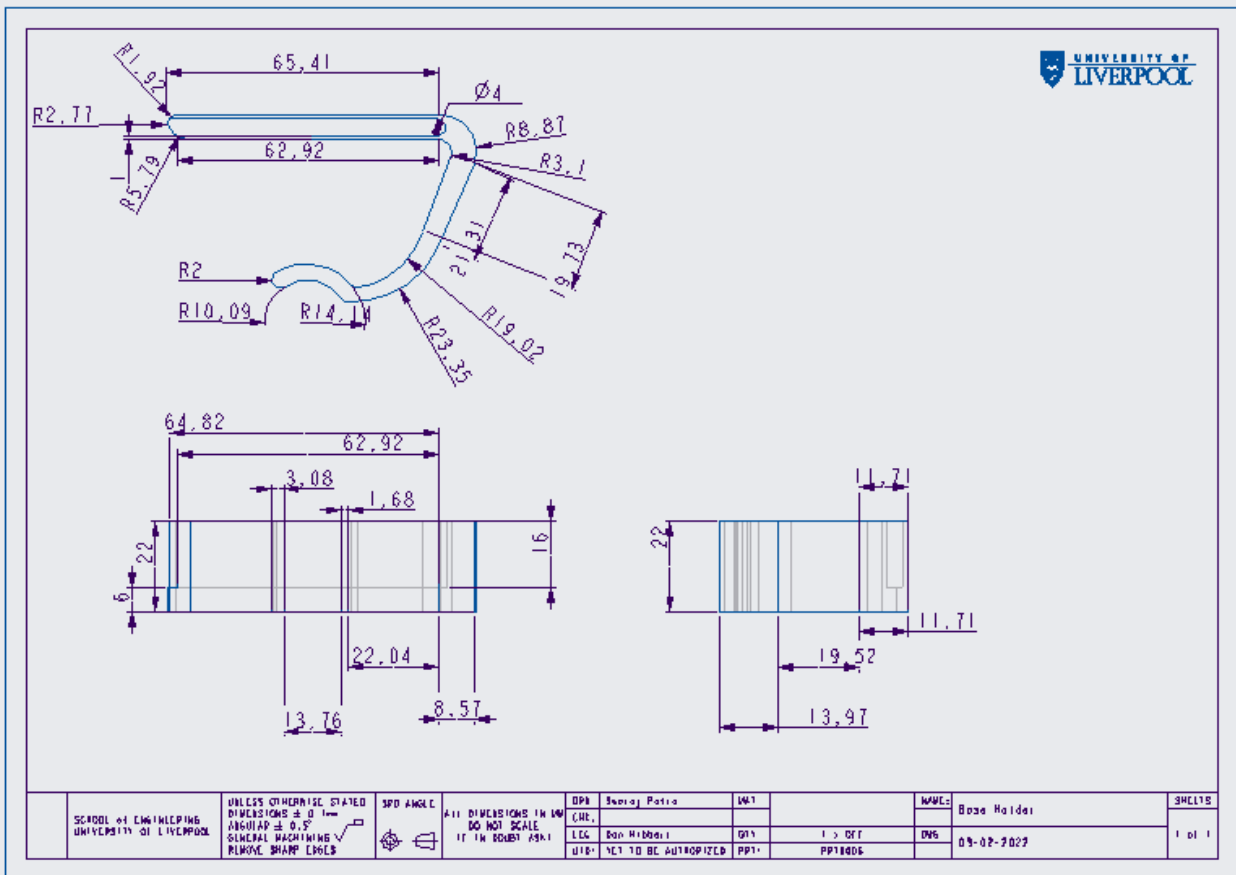
1. PCB Chip



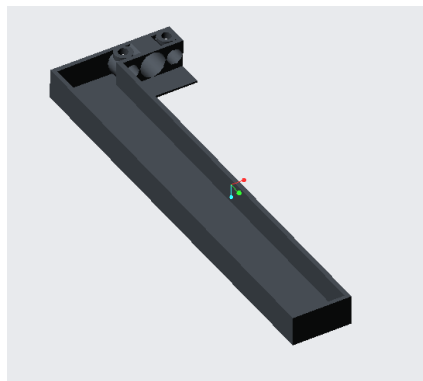


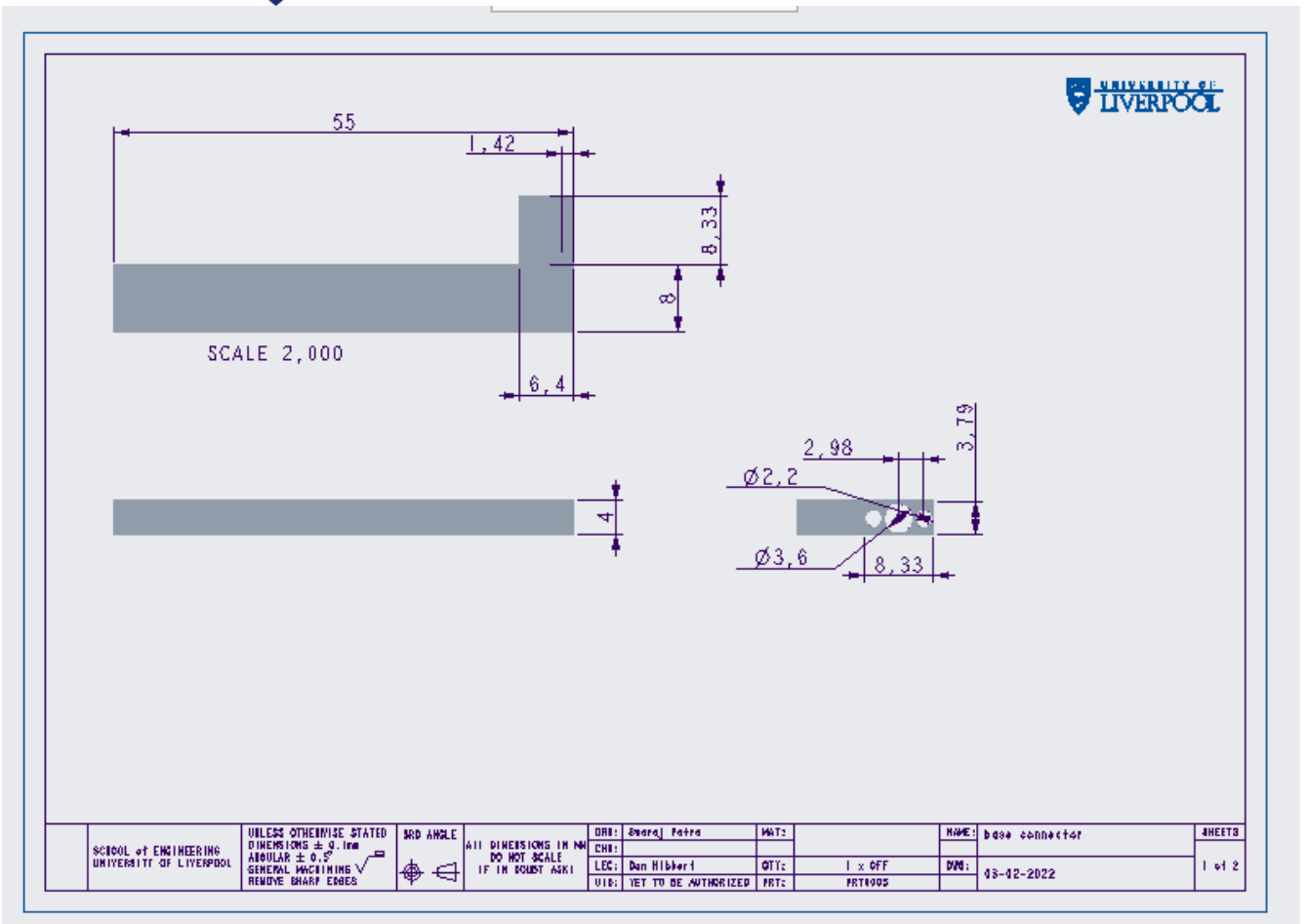
2. Base Holder



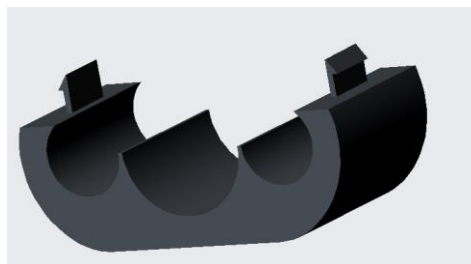


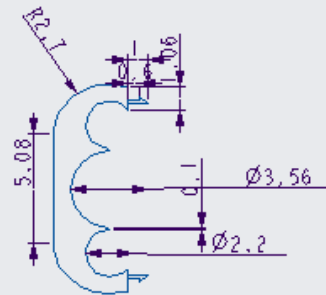
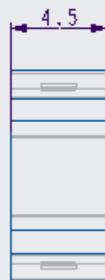
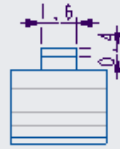
3. Base Connector





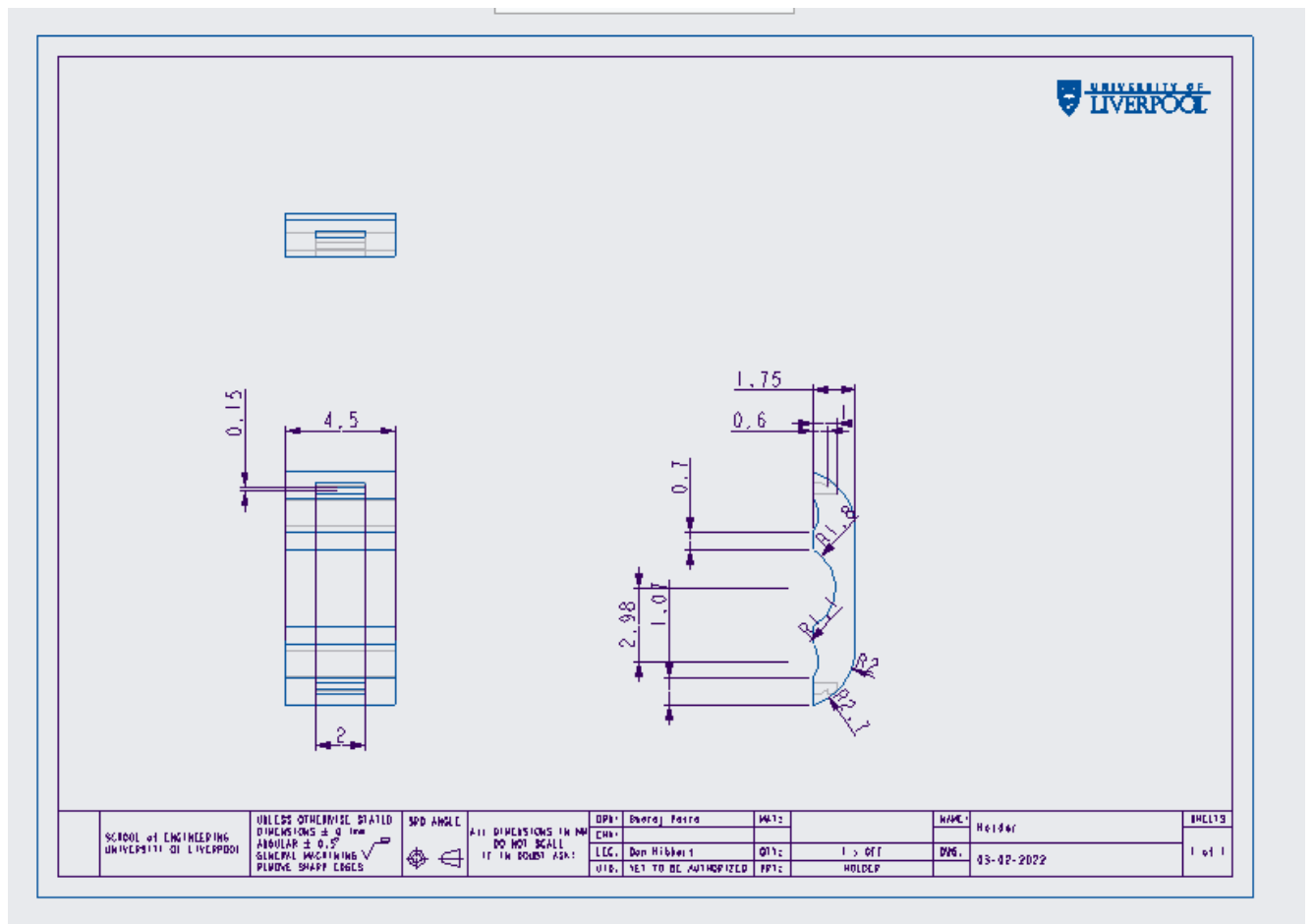
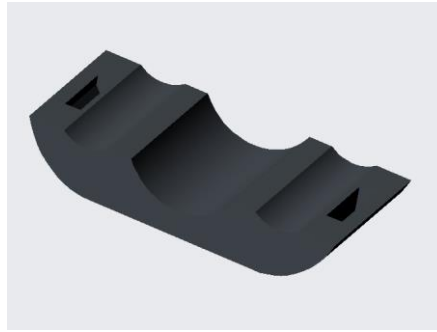
4. Wire holder top



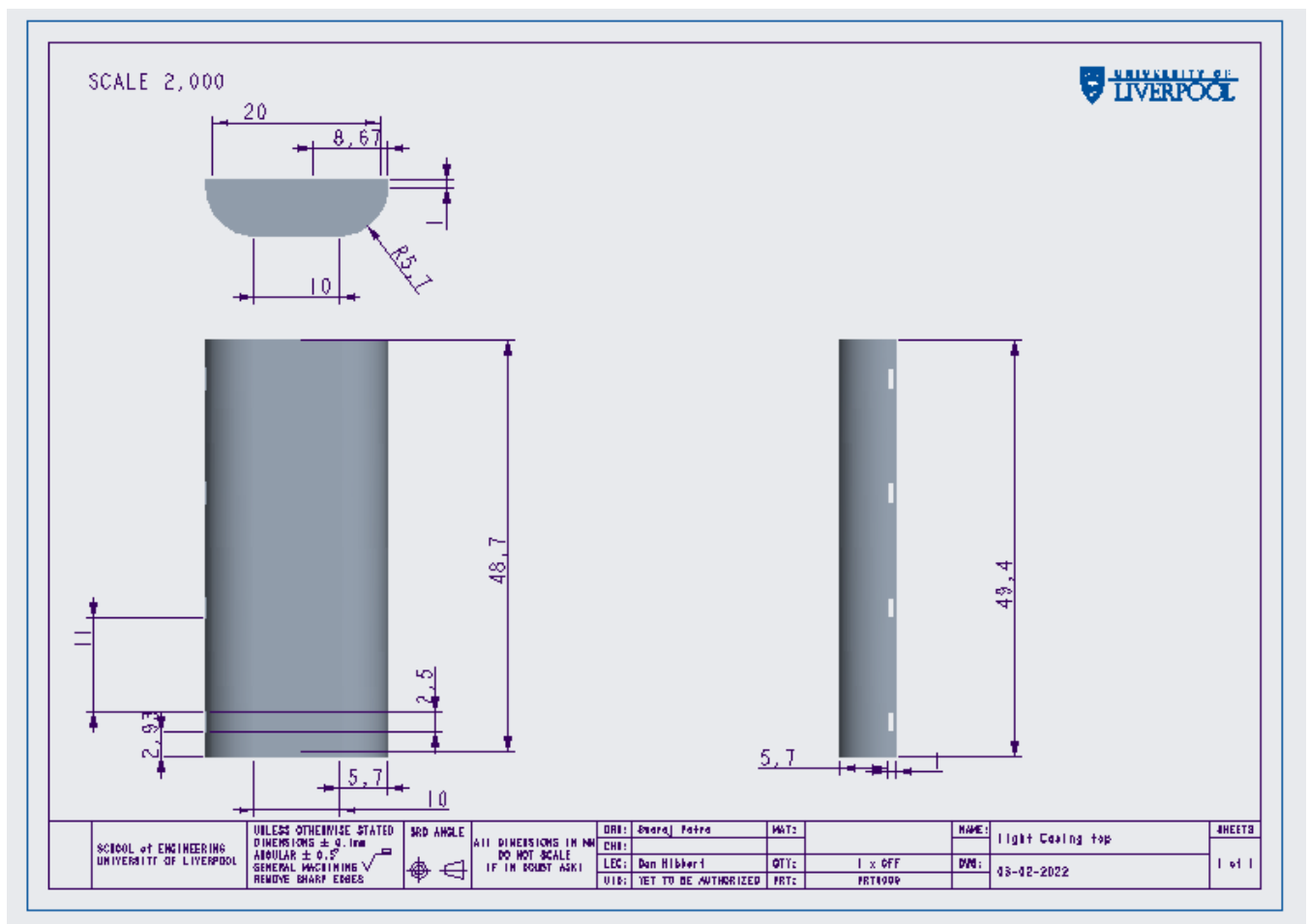


SCHOOL of ENGINEERING UNIVERSITY of LIVERPOOL	UNLESS OTHERWISE STATED DIMENSIONS $\pm 0.1 \text{ mm}$ ANGULAR $\pm 0.5^\circ$ GENERAL SURFACING PLUNGE SHARP EDGES	SPD ANGLE 	ALL DIMENSIONS IN MM DO NOT SCALE IF IN DOUBT ASK:	DPN: Sheng Pasra	INT:	NAME:	VIN Holder	DWG: 43-02-2022	SHEET: 1 of 1
				ENR:	LEG: Don Higgins	OTH: 1 x GT			

5. Wire holder bottom



6. Light casing Top



7. Light Casing Bottom



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