



FORMAL DRAWING TREE REFERENCE DOCUMENT

TITLE: **aLIGO TCS Hartmann Sensor**
for Final Design Review

DOCUMENT CONTROL NO.: **E1100148 -v2**
 RELATED DOC. CHANGE NO.: E1100490 -v1

CONTAINING ASSEMBLY: D1000657 -v3

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PURPOSE: This document is the formal reference for necessary revisions of each child of the stated assemblies, and the total necessary quantities for all items.

DCN	NOTES	Level	INDENTURE CHART	QUANTITY				DWG TREE REF. NO.	MATERIAL	DCC No.	NAME	TYPE	SOURCE	REV.	
				REQ'd	SPARE	TOT.	UNITS								
EXTERNAL TO VACUUM															
E1100490		0			1		1	EA	E1100148	D1000657	aLIGO TCS HARTMANN SENSOR	TopAssy	MTS	v3	
	DALSA	1			1		1	EA		multi	D1000709	CAMERA, DALSA PANTERA 1M60, DS-22-01M60-12E	PRT	OTS	N/A
		1			1		1	EA		Invar 36	D1000708	aLIGO HARTMANN SENSOR CAMERA SPACER PLATE	PRT	MTS	v4
		2			4	1	5	EA		18-8		FH M4 x 6 MM LONG	HW	OTS	N/A
		1			1		1	EA		Invar 36	D1000658	aLIGO HARTMANN SENSOR PLATE CLAMP	PRT	MTS	v3
		1			4	1	5	EA		18-8		SS SHCS M3 X 6 MM LONG	HW	OTS	N/A
		1			4	1	5	EA		18-8		FLAT WASHER, M3	HW	OTS	N/A
	THORLABS	1			1		1	EA		Al	SM1L05	THORLABS 1 IN LENS TUBE, .5 IN LONG	PRT	OTS	N/A
	THORLABS	1			1		1	EA			FB840-10	THORLABS 840 nm BP FILTER, 10 nm FWHM	PRT	OTS	N/A
		1			1		1	EA		Invar, HV 213	D1000669	HARTMANN PLATE	HW	MTS	v2
		1			2		2	EA		Cu, Alloy 110	D1000729	HEAT SPREADER	PRT	MTS	v3
		2			2	2	4	EA		Al 6063-T5	D1000736	HEAT SINK	PRT	MTS	v2
		2			4	1	5	EA		18-8		SS SHCS M4 X 25 MM LONG	HW	OTS	N/A
	Omega	1			1	1	2	EA		Pt, multi		Pt RTD, PN F3141	PRT	OTS	N/A
		1			4	1	5	EA		18-8		SS SHCS 1/4-20 UNC-2A X .75 LONG	HW	OTS	N/A
		1			4	1	5	EA		18-8		FLAT WASHER, .296 ID, .438 OD	HW	OTS	N/A
		1			1		1	EA		Al 6061	D1000715	HARTMANN SENSOR CAMERA MOUNT	PRT	MTS	v4