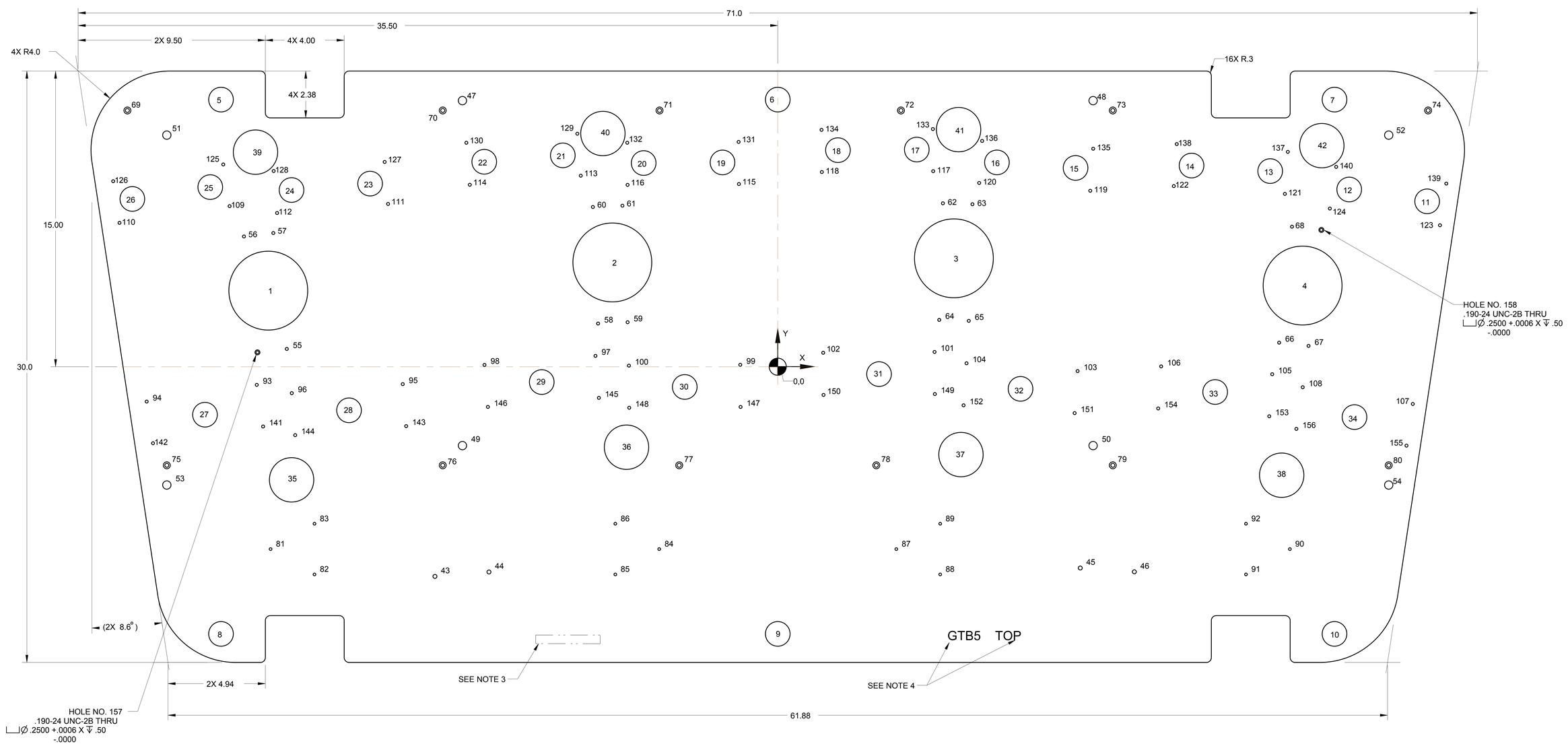
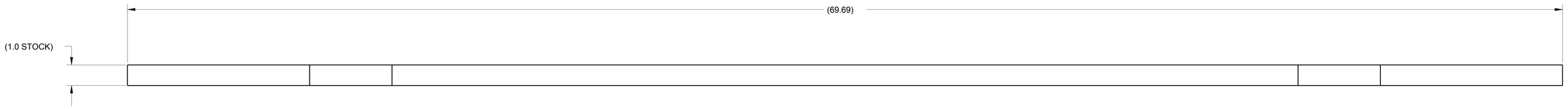
NOTES:

1. MATERIAL: PLATE ALUMINUM 1.0 THK TYPE 6061-T6 PER ASTM B209
2. MAKE FROM DXF FILE
3. VIBRO-ETCH PART WITH DRAWING NUMBER WITH MIN .25 HIGH CHARACTERS IN ACCORDANCE WITH MIL-STD-130, LOCATE APPROX AS SHOWN.
4. VIBRO-ETCH PLATE WITH PART NAME AND SIDE DESIGNATION WITH MIN .25 HIGH CHARACTERS. LOCATE APPROX AS SHOWN.

REVISION APPROVALS								
REV	ECN NO.	DESCRIPTION	DATE	BY	CHK	DES	ENG	SUPV
A	-	INITIAL RELEASE	-	-	-	-	-	-





A	A	REV	REVISION STATUS OF SHEETS
2	1	SHEET	

2570M0050	1
USED ON DRAWING NO.	QTY. PER ASS'Y.
APPLICATION	

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.5

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
XX ± .030
XXX ± .015
XXXX ± .005

ANGULAR TOLERANCE ± 1°

125 FINISH

BREAK SHARP EDGES MAX. .03 MIN. .015

C-AD

DRAWN BY	TRABOCCHI/GRAU	3/30/18
CHECKED BY	S. RESTMEYER	5/2/18
DESIGN SUPERVISOR APPROVAL	A. ARNO	5/8/18
ENG / PHY APPROVAL	S. TRABOCCHI	4/30/18
SUPERVISOR APPROVAL	G. MAHLER	5/3/18
CEE / CME	J. TUOZZOLO	5/2/18
DIVISION HEAD		
Q.A.		
SAFETY / RSC		
DEPARTMENT CHAIR		

COLLIDER-ACCELERATOR DEPARTMENT
BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

CBETA
TOP PLATE ASSEMBLY, GTB5
PLATE, GTB5

SIZE	DRAWING NUMBER:	REV.
E	2570M0049	A

Q.A. CATEGORY: A3 | SCALE: 1/2 | WEIGHT: 177.5 | SHEET OF 1 2

REV A | SHT 1 OF 2 | 2570M0049 | DWG NO

CREO

HOLE TABLE			
Hole No.	X	Y	NOTE
1	-25.85	3.86	Ø4.00 THRU
2	-8.39	5.29	Ø4.00 THRU
3	8.94	5.50	Ø4.00 THRU
4	26.63	4.12	Ø4.00 THRU
5	-28.25	13.55	Ø1.25 THRU
6	0.00	13.55	Ø1.25 THRU
7	28.25	13.55	Ø1.25 THRU
8	-28.25	-13.55	Ø1.25 THRU
9	0.00	-13.55	Ø1.25 THRU
10	28.25	-13.55	Ø1.25 THRU
11	32.95	8.39	Ø1.25 THRU
12	29.00	8.99	Ø1.25 THRU
13	24.99	9.93	Ø1.25 THRU
14	21.00	10.21	Ø1.25 THRU
15	15.11	10.09	Ø1.25 THRU
16	11.12	10.37	Ø1.25 THRU
17	7.05	11.02	Ø1.25 THRU
18	3.05	10.99	Ø1.25 THRU
19	-2.80	10.36	Ø1.25 THRU
20	-6.80	10.33	Ø1.25 THRU
21	-10.91	10.72	Ø1.25 THRU
22	-14.89	10.40	Ø1.25 THRU
23	-20.69	9.29	Ø1.25 THRU
24	-24.67	8.96	Ø1.25 THRU
25	-28.80	9.11	Ø1.25 THRU
26	-32.75	8.51	Ø1.25 THRU
27	-29.06	-2.43	Ø1.25 THRU
28	-21.75	-2.21	Ø1.25 THRU
29	-11.98	-0.78	Ø1.25 THRU
30	-4.72	-1.03	Ø1.25 THRU
31	5.14	-0.37	Ø1.25 THRU
32	12.32	-1.12	Ø1.25 THRU
33	22.19	-1.28	Ø1.25 THRU
34	29.26	-2.55	Ø1.25 THRU
35	-24.67	-5.74	Ø2.25 THRU
36	-7.68	-4.08	Ø2.25 THRU
37	9.30	-4.46	Ø2.25 THRU
38	25.57	-5.50	Ø2.25 THRU
39	-26.50	10.89	Ø2.25 THRU
40	-8.87	11.83	Ø2.25 THRU
41	9.18	12.03	Ø2.25 THRU
42	27.61	11.22	Ø2.25 THRU
43	-17.40	-10.64	.250-20 UNC-2B ↧.75
44	-14.65	-10.41	.250-20 UNC-2B ↧.75
45	15.35	-10.21	.250-20 UNC-2B ↧.75
46	18.09	-10.40	.250-20 UNC-2B ↧.75
47	-16.00	13.50	.500-13 UNC-2B THRU
48	16.00	13.50	.500-13 UNC-2B THRU
49	-16.00	-4.00	.500-13 UNC-2B THRU
50	16.00	-4.00	.500-13 UNC-2B THRU
51	-31.00	11.75	.500-13 UNC-2B THRU
52	31.00	11.75	.500-13 UNC-2B THRU
53	-31.00	-6.00	.500-13 UNC-2B THRU
54	31.00	-6.00	.500-13 UNC-2B THRU
55	-24.91	0.90	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
56	-27.09	6.61	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
57	-25.60	6.78	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
58	-9.12	2.19	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
59	-7.62	2.26	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
60	-9.38	8.10	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
61	-7.88	8.17	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
62	8.38	8.29	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
63	9.88	8.24	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
64	8.19	2.38	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
65	9.69	2.33	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
66	25.44	1.22	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
67	26.93	1.06	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
68	26.09	7.10	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
69	-33.00	13.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
70	-17.00	13.00	Ø.203 ↧.19, ⌵Ø.350 X 120°

HOLE TABLE			
Hole No.	X	Y	NOTE
71	-6.00	13.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
72	6.25	13.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
73	17.00	13.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
74	33.00	13.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
75	-31.00	-5.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
76	-17.00	-5.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
77	-5.00	-5.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
78	5.00	-5.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
79	17.00	-5.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
80	31.00	-5.00	Ø.203 ↧.19, ⌵Ø.350 X 120°
81	-25.74	-9.25	.164-32 UNC-2B ↧.50
82	-23.51	-10.54	.164-32 UNC-2B ↧.50
83	-23.51	-7.96	.164-32 UNC-2B ↧.50
84	-6.02	-9.25	.164-32 UNC-2B ↧.50
85	-8.24	-10.54	.164-32 UNC-2B ↧.50
86	-8.24	-7.96	.164-32 UNC-2B ↧.50
87	6.02	-9.25	.164-32 UNC-2B ↧.50
88	8.24	-10.54	.164-32 UNC-2B ↧.50
89	8.24	-7.96	.164-32 UNC-2B ↧.50
90	25.99	-9.25	.164-32 UNC-2B ↧.50
91	23.76	-10.54	.164-32 UNC-2B ↧.50
92	23.76	-7.96	.164-32 UNC-2B ↧.50
93	-26.44	-0.92	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
94	-32.02	-1.77	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
95	-19.03	-0.88	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
96	-24.66	-1.34	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
97	-9.25	0.55	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
98	-14.88	0.09	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
99	-1.90	0.10	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
100	-7.55	0.06	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
101	7.96	0.75	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
102	2.31	0.71	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
103	15.21	-0.22	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
104	9.58	0.18	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
105	25.09	-0.38	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
106	19.45	0.02	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
107	32.22	-1.89	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
108	26.64	-1.04	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
109	-27.81	8.15	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
110	-33.40	7.30	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
111	-19.77	8.26	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
112	-25.40	7.80	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
113	-10.00	9.69	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
114	-15.63	9.23	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
115	-1.97	9.27	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
116	-7.62	9.23	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
117	7.89	9.92	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
118	2.24	9.88	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
119	15.86	8.93	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
120	10.22	9.32	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
121	25.73	8.77	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
122	20.10	9.16	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
123	33.60	7.18	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
124	28.01	8.03	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
125	-28.14	10.26	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
126	-33.72	9.41	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
127	-19.95	10.39	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
128	-25.58	9.93	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
129	-10.17	11.82	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
130	-15.80	11.36	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
131	-1.99	11.41	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
132	-7.64	11.36	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
133	7.87	12.06	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
134	2.22	12.02	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
135	16.01	11.06	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
136	10.37	11.46	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
137	25.88	10.90	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
138	20.25	11.30	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
139	33.92	9.29	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
140	28.34	10.14	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN

HOLE TABLE			
Hole No.	X	Y	NOTE
141	-26.12	-3.03	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
142	-31.70	-3.88	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
143	-18.85	-3.01	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
144	-24.49	-3.47	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
145	-9.08	-1.58	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
146	-14.71	-2.04	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
147	-1.89	-2.04	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
148	-7.54	-2.08	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
149	7.97	-1.39	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
150	2.32	-1.43	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
151	15.06	-2.35	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
152	9.43	-1.96	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
153	24.94	-2.51	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
154	19.30	-2.12	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
155	31.90	-4.00	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
156	26.32	-3.15	Ø.149 THRU .190-24 UNC-2B X .75 FULL THD MIN
157	-26.401±.002	.730±.002	SEE F/D ZONE C8
158	27.584±.002	6.939±.002	SEE F/D ZONE E1

DWG NO 2570M0049 SHT 2 OF 2 REV A

COLLIDER-ACCELERATOR DEPARTMENT
BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

SIZE E | DRAWING NUMBER: 2570M0049 | REV. A
Q.A. CATEGORY: A3 | SCALE: - | WEIGHT: - | SHEET OF 2 2