



Grant 2002-DT-CX-K001  
 ID No. 065595  
 MJO 118

**Noise Flash Diversionary Device (NFDD)**

**CTS 7290**



**DESCRIPTION:**

Tactical Unit	Vents axially from both ends	Pull Ring Safety	
Disposable (1 use only)	10 venting ports on both ends	Avg. Assembly Wt	
Steel Case	Ports are rectangular in shape	Pre Test:	23.0 oz
2.0" dia. x 5.84" L	Ports: 0.131" W x 0.36" L	Post Test:	20.9 oz

**PACAKAGING:**

8.5" H    9.5" W    12.5" L    25.02 lbs  
 4G fiberboard box double wall POP  
 12 units/box  
 single unit per cardboard tube





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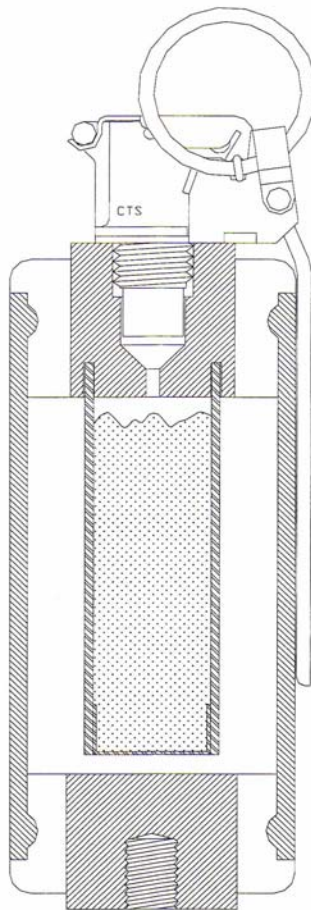


**COMBINED TACTICAL SYSTEMS, INC.**  
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**Product Specification Sheet**

Revision E 07/00

<b>MODEL No.</b> 7290	<b>DESCRIPTION</b>	Tactical Grenade, "Flash bang" U.S. Patent No. 5,654,523
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**PHYSICAL & OPERATIONAL**

◆ <b>Description</b>	Tactical Grenade, "Flash bang"
◆ <b>Model Number</b>	7290
◆ <b>Type</b>	Single use, Diversion Device
◆ <b>Output</b>	175db @ 5 Feet, 6-8 million candela 8.5millisec. 50% of energy from top, 50% of energy from bottom.
◆ <b>Emission Ports</b>	10 on top – 10 on bottom
◆ <b>Launchable</b>	No
◆ <b>Body Material</b>	Steel – Black oxide
◆ <b>Top/Bottom Material</b>	Aluminum – Black anodized
◆ <b>Overall Height</b>	6.0" (144.5 cm)
◆ <b>Diameter</b>	2.0" (50.8mm)
◆ <b>Overall Weight</b>	550 gm
◆ <b>Fuze Type</b>	Model 201, Pyrotechnic delay
◆ <b>Fuze Delay</b>	1.5 ±0.3 sec.

**SHIPPING INFORMATION**

◆ <b>UN Number</b>	0452
◆ <b>Proper Shipping Name</b>	Grenade, Practice
◆ <b>Hazard Class</b>	1.4G
◆ <b>Quantity Per Package</b>	12 Grenades
◆ <b>Total Package Weight</b>	24 lb. (10.90 kg)
◆ <b>Package Type</b>	4G Fiberboard Box Double wall POP
◆ <b>Package Dimensions</b>	12.75" X 9.75" X 9" Height (32.4 cm X 24.75 cm X 22.90 cm)

CTS 7290																				
TEST	PART S/N	GROSS WEIGHT		IGNITION DELAY sec.	BURN sec.	6 FEET				9 FEET					12 FEET					
		PRE-TEST* oz	POST TEST oz			PEAK		RADIANT FLUX J	PEAK		RADIANT FLUX J	PEAK		RADIANT FLUX J						
						ACOUSTIC NOISE psi	db		ILLUMINANCE			ACOUSTIC NOISE psi	db		ILLUMINANCE		ACOUSTIC NOISE psi	db	ILLUMINANCE	
									LUX	ft-candle					LUX	ft-candle			LUX	ft-candle
1	none	23.05	21.75	1.69	0.0116	1.10	172	517493391	48075136	48.5	0.56	166	250731554	23292961	24.4	0.42	163	145852191	13549669	14.2
2	none	23.10	21.70	1.89	0.0114	0.84	169	452780985	42063354	44.1	0.51	165	218650771	20312657	21.7	0.38	162	130221736	12097599	12.9
3	none	23.05	21.70	1.72	0.0135	1.01	171	507188833	47117843	57.1	0.63	167	244515912	22715528	28.7	0.46	164	142335356	13222955	16.7
4	none	22.98	21.50	1.87	0.0137	0.91	170	551704451	51253344	58.4	0.57	166	251533533	23367465	28.3	0.43	163	149369095	13876389	16.7
5	none	23.15	21.70	1.63	0.0139	0.83	169	473493097	43987509	53.9	0.56	166	234290105	21765551	27.1	0.40	163	138720783	12887161	15.9
6	none	20.95	21.30	1.55	0.0100	0.53	165	413108520	38377782	34.5	0.30	160	235192416	21849375	19.9	0.22	158	131882451	12251880	10.7
7	none	23.05	21.75	1.95	0.0098	0.59	166	506673647	47069982	41.5	0.37	162	269579007	25043890	23.0	0.27	159	154546713	14357390	13.0
8	none	22.99	21.70	1.80	0.0140	0.91	170	537896377	49970573	60.0	0.56	166	255944688	23777262	30.0	0.36	162	148196794	13767482	17.2
9	none	23.05	21.75	1.68	0.0120	0.81	169	547788744	50889574	53.4	0.58	166	246621192	22911109	25.6	0.39	163	149076020	13849162	15.2
10	none	23.05	21.70	1.88	0.0138	1.03	171	546036986	50726836	58.6	0.55	166	267674189	24866932	29.4	0.43	163	154058231	14312010	17.1
11	none	23.10	21.70	1.89	0.0118	0.87	170	529137517	49156875	50.0	0.56	166	260556304	24205681	26.2	0.40	163	143898401	13368161	14.5
12	none	23.05	21.70	1.57	0.0110	1.00	171	404555789	37583233	37.1	0.59	166	204314601	18980826	19.9	0.41	163	115079626	10690897	11.2
13	none	23.10	21.75	1.71	0.0108	1.23	173	465661614	43259964	39.9	0.61	166	246921917	22939046	21.8	0.42	163	135008542	12542294	12.1
14	none	22.93	21.50	1.64	0.0132	1.07	171	552322703	51310779	57.9	0.57	166	271283297	25202218	29.7	0.40	163	156500503	14538897	17.1
15	none	23.10	21.65	1.79	0.0104	0.69	168	516256888	47960265	44.7	0.45	164	270280790	25109085	23.8	0.32	161	152202111	14139576	13.3
16	none	23.05	21.75	1.69	0.0118	0.91	170	511516800	47519911	49.8	0.64	167	253538616	23553737	25.2	0.41	163	144973034	13467995	14.4
17	none	23.05	21.70	1.65	0.0119	1.02	171	504097507	46830658	48.3	0.64	167	246220202	22873857	24.9	0.38	162	140967648	13095895	14.1
18	none	23.05	21.70	1.64	0.0107	0.44	164	321913472	29905762	31.8	0.28	160	165416658	15367208	16.9	0.20	157	93587665	8694294	9.4
19	none	23.10	21.80	2.01	0.0125	0.73	168	467825563	43460995	48.7	0.55	166	246420663	22892480	26.6	0.30	160	139306934	12941614	15.0
20	none	23.10	21.75	1.66	0.0114	0.95	170	475141790	44140672	43.6	0.55	166	244315384	22696899	24.4	0.35	162	140381566	13041447	13.9

Min	20.95	21.30	1.55	0.0098	0.44	164	321913472	29905762	31.8	0.28	160	165416658	15367208	16.9	0.20	157	93587665	8694294	9.4
Max	23.15	21.80	2.01	0.0140	1.23	173	552322703	51310779	60.0	0.64	167	271283297	25202218	30.0	0.46	164	156500503	14538897	17.2
Range	2.20	0.50	0.46	0.0041	0.78	9	230409230	21405018	28.1	0.36	7	105866639	9835011	13.1	0.27	7	62912838	5844603	7.8
Std. Dev	0.5	0.1	0.1	0.0	0.2	2.2	58537374	5438122	8.4	0.1	2.0	24973802	2320066	3.6	0.1	2.0	14708076	1366380	2.2
Average	22.95	21.68	1.74	0.0120	0.87	169	490129734	45533052	48.1	0.53	165	244200090	22686188	24.9	0.37	162	140308270	13034638	14.2

\* includes safety lever and pull ring  
Units VERY HOT to touch after test  
Primer and striker assy gone

**FRAGMENTATION:**

TEST	PART S/N	PRE-TEST* oz	POST TEST oz	IMPACTS	
				hits	perforations
22	NONE	23.05	21.70	0	0
23	NONE	23.05	21.75	0	0
24	NONE	23.05	21.80	0	0

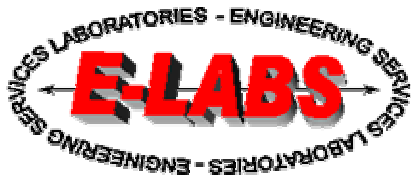
Std. Dev	0.0	0.1	0.0	0.0
Average	23.05	21.75	0	0



Functioned devices showing ports



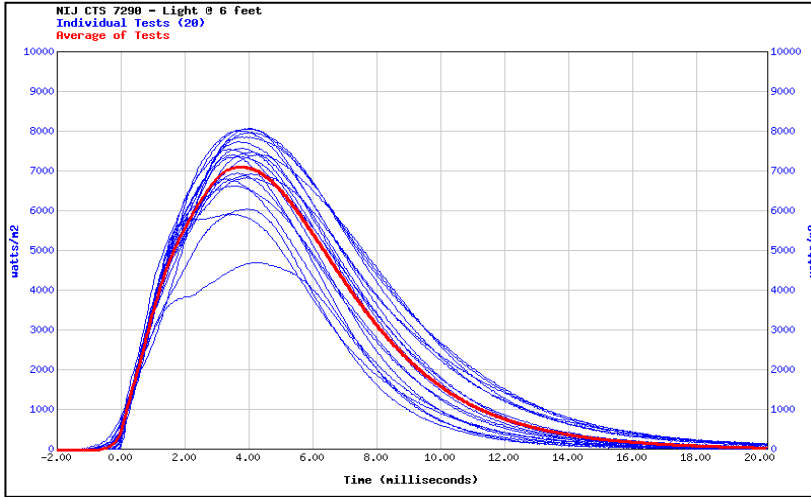
Fragmentation Test



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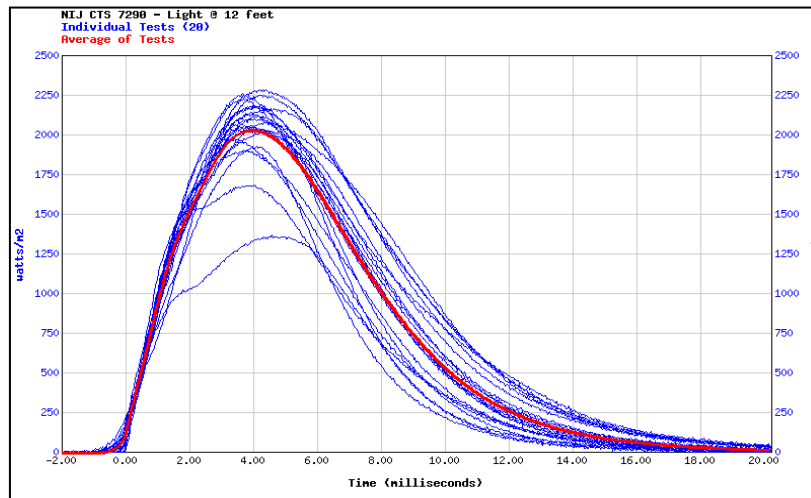
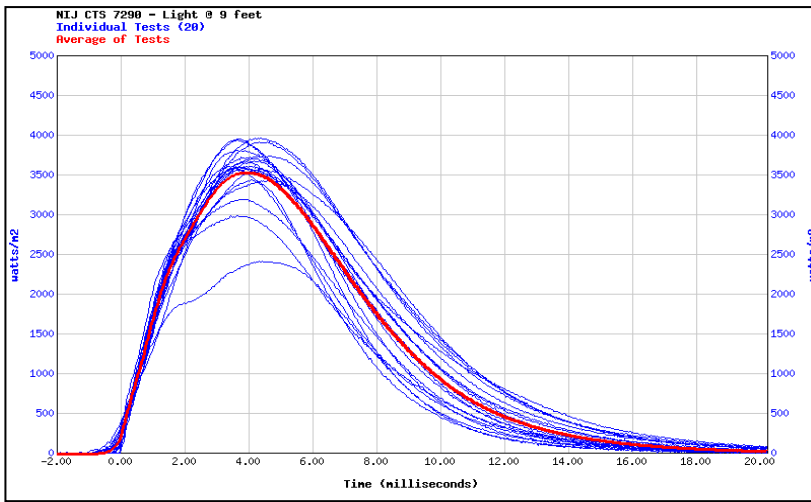
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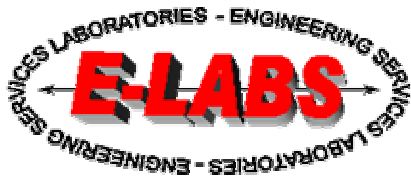
CTS 7290



**ILLUMINANCE  
MEASUREMENTS  
(W/m<sup>2</sup>)**

*Note Y-axis Scale Differences*

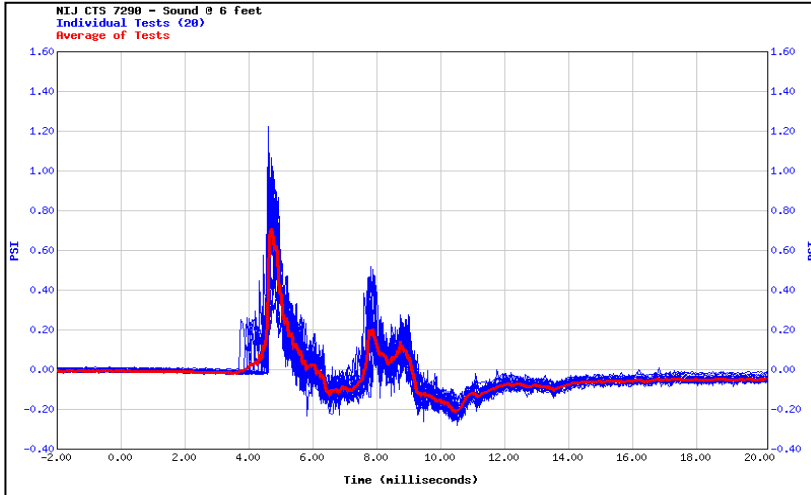




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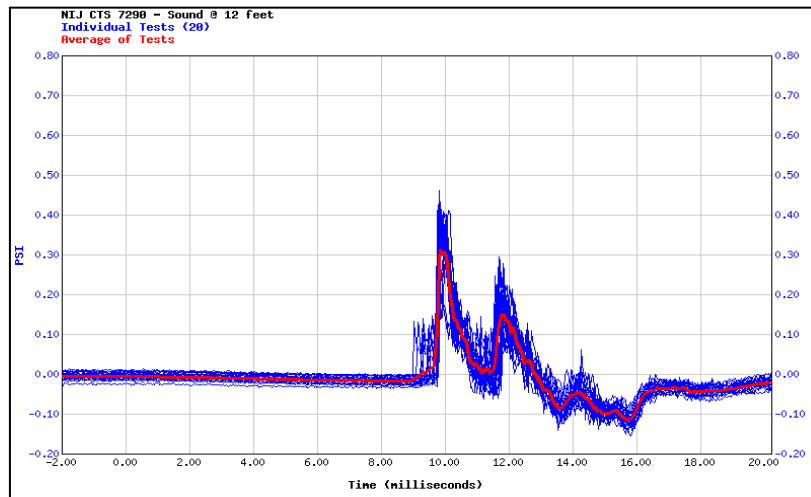
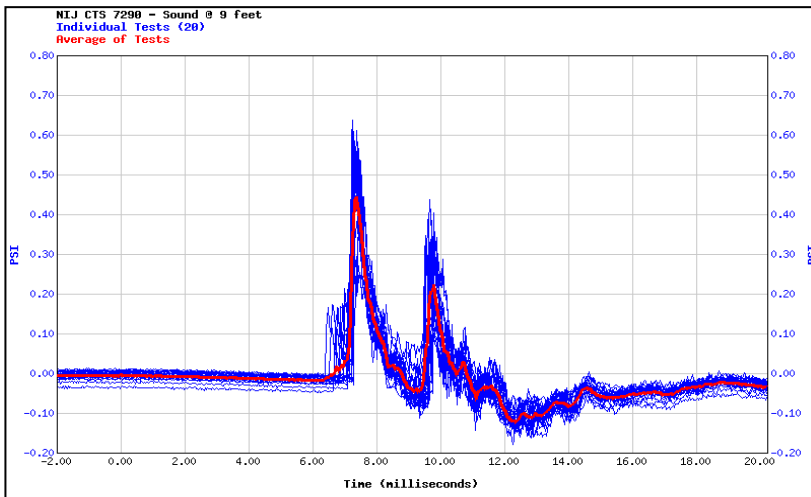
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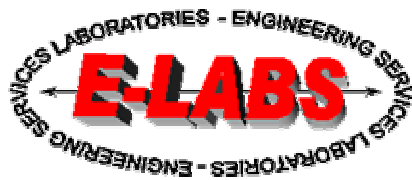
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**PRESSURE MEASUREMENTS  
(psi)**

*Secondary Peaks are Reflections  
and not Included in Data Analysis*





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**COLLATERAL EFFECTS:**

ITEM	FIRE START	PROPULSION	DISRUPTION OF ELEMENTS
Pillow	Pillow and Carpet Caught Fire in 1.5 min (extinguished)	> 12 in	No
Cushion	No Fire	< 12 in	No
Objects	Fire	No	Yes



PILLOW TEST



CUSHION TEST



CARPET TEST

