



UL LLC  
1075 W Lambert Rd Suite B  
Brea, CA 92821

## Photometric Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

Prepared For  
**Auroralight Inc**  
2742 Loker Ave. West  
Carlsbad, CA 92010

Catalog Number  
**LML350-S7-C-30-P (3000K)**  
Order Number  
11263738  
Test Number  
1258679

Test Date

2016-06-07

Prepared By

Khang Nguyen, Technician

Approved By

Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Spherical 7" copper shade with louvers, painted white underside and frosted glass lens  
**Lamp:** One (1) Cree XHP 3000K LED  
**Mounting:** Pendant

### Luminaire



### Luminaire Characteristics

Luminous Diameter: 7.00 in.  
Luminous Height: 3.000 in.

### Summary of Results

Roadway Classification: Type VS, Very Short  
Cutoff Classification: Semicutoff  
BUG Rating: B0 U2 G1

### Test Conditions

Test Temperature: 24.9 °C  
Voltage: 12.04 VAC  
Current: 1.669 A  
Power: 20.04 W  
Power Factor: 0.997  
Frequency: 60 Hz  
Current THD: 4.61 %

Tested in 30 planes left side, 30 planes right side, left and right averaged  
Vertical test increments are 2.5 degrees  
Test distance exceeds five times the greatest luminous opening of luminaire

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	12.04 VAC	1.669 A	20.04 W	0.997	60 Hz	4.61 %

### Summary of Results

#### Spacing Criteria

0-180: 0.98  
90-270: 0.98

#### Total Lumen Output:

501.1 Lumens

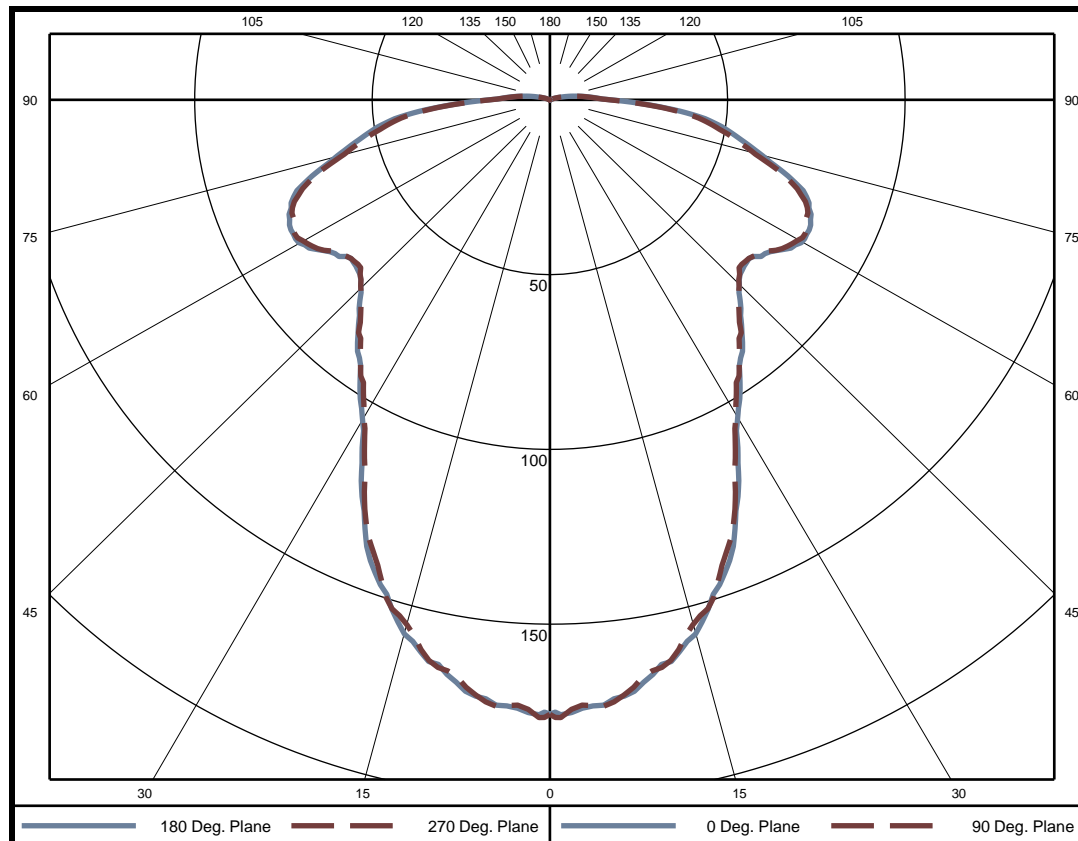
#### Luminaire Efficacy:

25.0 lm/w

#### Maximum Candela:

177 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	4.17	0.8%	60-65	39.37	7.9%	120-125	0.01	0.0%
5-10	12.18	2.4%	65-70	39.48	7.9%	125-130	0	0.0%
10-15	19.22	3.8%	70-75	35.66	7.1%	130-135	0	0.0%
15-20	24.76	4.9%	75-80	29.76	5.9%	135-140	0	0.0%
20-25	28.07	5.6%	80-85	23.94	4.8%	140-145	0	0.0%
25-30	28.77	5.7%	85-90	14.53	2.9%	145-150	0	0.0%
30-35	29.01	5.8%	90-95	7.29	1.5%	150-155	0	0.0%
35-40	29.42	5.9%	95-100	4.51	0.9%	155-160	0	0.0%
40-45	29.24	5.8%	100-105	2.43	0.5%	160-165	0	0.0%
45-50	29.43	5.9%	105-110	1.20	0.2%	165-170	0.00	0.0%
50-55	31.79	6.3%	110-115	0.52	0.1%	170-175	0.00	0.0%
55-60	36.15	7.2%	115-120	0.18	0.0%	175-180	0.00	0.0%

Zone	Lumens	% of Luminaire
0-40	176	35.0%
0-60	302	60.3%
0-90	485	96.8%
90-180	16	3.2%



**Candela Tabulation**

Horizontal Angle (Degrees)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8	175.8
5	173.9	174.0	173.7	173.2	174.1	173.2	173.7	174.0	173.9	174.0	173.7	173.2	174.1	173.2	173.7	174.0
10	167.0	167.6	167.5	166.8	165.9	166.8	167.5	167.6	167.0	167.6	167.5	166.8	165.9	166.8	167.5	167.6
15	158.3	157.1	156.6	156.7	155.5	156.7	156.6	157.1	158.3	157.1	156.6	156.7	155.5	156.7	156.6	157.1
20	144.0	143.1	143.0	143.4	141.7	143.4	143.0	143.1	144.0	143.1	143.0	143.4	141.7	143.4	143.0	143.1
25	125.3	124.9	124.1	124.0	123.7	124.0	124.1	124.9	125.3	124.9	124.1	124.0	123.7	124.0	124.1	124.9
30	105.6	104.9	104.7	104.7	104.8	104.7	104.7	104.9	105.6	104.9	104.7	104.7	104.8	104.7	104.7	104.9
35	93.0	93.4	93.2	92.7	93.0	92.7	93.2	93.4	93.0	93.4	93.2	92.7	93.0	92.7	93.2	93.4
40	83.9	84.2	83.6	83.0	83.1	83.0	83.6	84.2	83.9	84.2	83.6	83.0	83.1	83.0	83.6	84.2
45	75.4	75.6	75.3	74.4	75.4	74.4	75.3	75.6	75.4	75.6	75.3	74.4	75.4	74.4	75.3	75.6
50	72.3	72.3	71.7	70.5	71.9	70.5	71.7	72.3	72.3	72.3	71.7	70.5	71.9	70.5	71.7	72.3
55	75.7	76.0	75.6	73.3	75.3	73.3	75.6	76.0	75.7	76.0	75.6	73.3	75.3	73.3	75.6	76.0
60	81.7	82.6	81.0	77.6	80.5	77.6	81.0	82.6	81.7	82.6	81.0	77.6	80.5	77.6	81.0	82.6
65	80.9	82.1	81.0	77.2	79.7	77.2	81.0	82.1	80.9	82.1	81.0	77.2	79.7	77.2	81.0	82.1
70	75.9	76.7	76.0	72.4	74.1	72.4	76.0	76.7	75.9	76.7	76.0	72.4	74.1	72.4	76.0	76.7
75	62.1	62.3	61.9	59.6	60.0	59.6	61.9	62.3	62.1	62.3	61.9	59.6	60.0	59.6	61.9	62.3
80	51.0	51.6	50.9	48.6	48.6	48.6	50.9	51.6	51.0	51.6	50.9	48.6	48.6	48.6	50.9	51.6
85	36.8	37.1	36.6	35.2	35.7	35.2	36.6	37.1	36.8	37.1	36.6	35.2	35.7	35.2	36.6	37.1
90	17.5	17.5	17.4	17.5	17.3	17.5	17.4	17.5	17.5	17.5	17.4	17.5	17.3	17.5	17.4	17.5
95	10.6	10.6	10.5	10.5	10.4	10.5	10.5	10.6	10.6	10.6	10.5	10.5	10.4	10.5	10.5	10.6
100	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.2	6.3
105	3.2	3.2	3.2	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.2	3.2
110	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.6
115	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
120	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Average Luminance (cd/m<sup>2</sup>)**

Horizontal Angle (Degrees)

	0	45	90
0	7080	7080	7080
45	4179	4172	4176
55	4247	4241	4224
65	4742	4744	4671
75	3913	3895	3775
85	2560	2548	2486

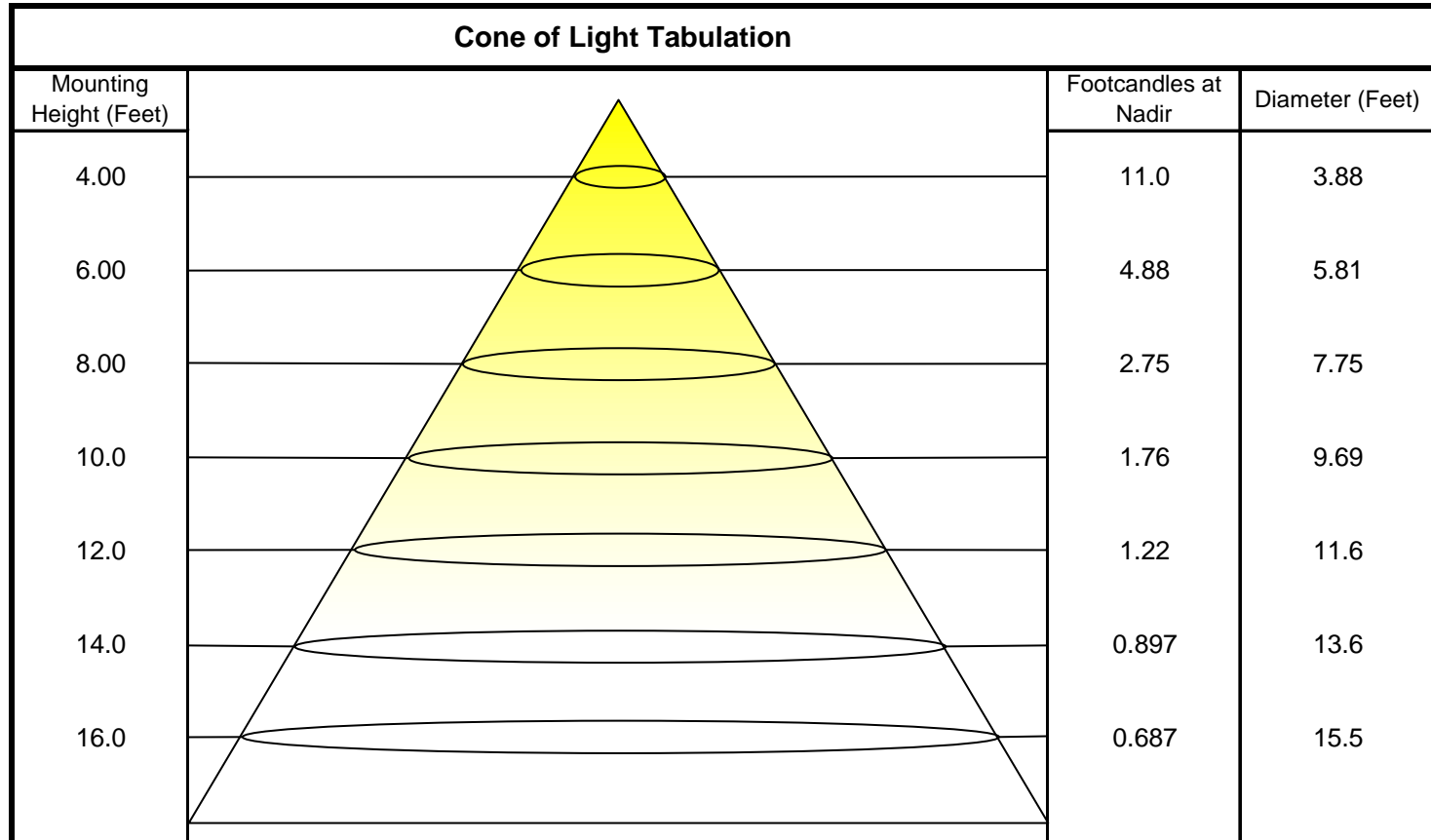


### Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	593	593	593	593	577	577	577	577	548	548	548	521	521	521	496	496	496	485
1	523	492	463	438	507	478	452	429	453	432	412	430	412	396	409	395	381	369
2	468	418	376	341	452	407	368	336	385	353	325	366	339	315	348	325	305	292
3	423	362	314	276	408	352	308	273	334	296	265	317	285	258	302	275	252	239
4	386	318	268	231	372	310	264	228	295	255	223	280	246	218	267	238	213	200
5	354	283	234	197	342	276	230	195	263	223	191	251	216	188	240	209	184	172
6	327	255	207	172	316	249	204	170	238	198	167	228	192	164	218	186	162	150
7	304	232	185	152	294	227	182	151	217	177	148	208	173	146	200	168	144	133
8	283	212	167	136	274	208	165	135	199	161	133	192	157	131	184	153	129	119
9	265	195	152	123	257	191	150	122	184	147	121	178	144	119	171	140	118	108
10	249	181	140	112	242	177	138	112	171	135	110	165	132	109	160	130	108	98

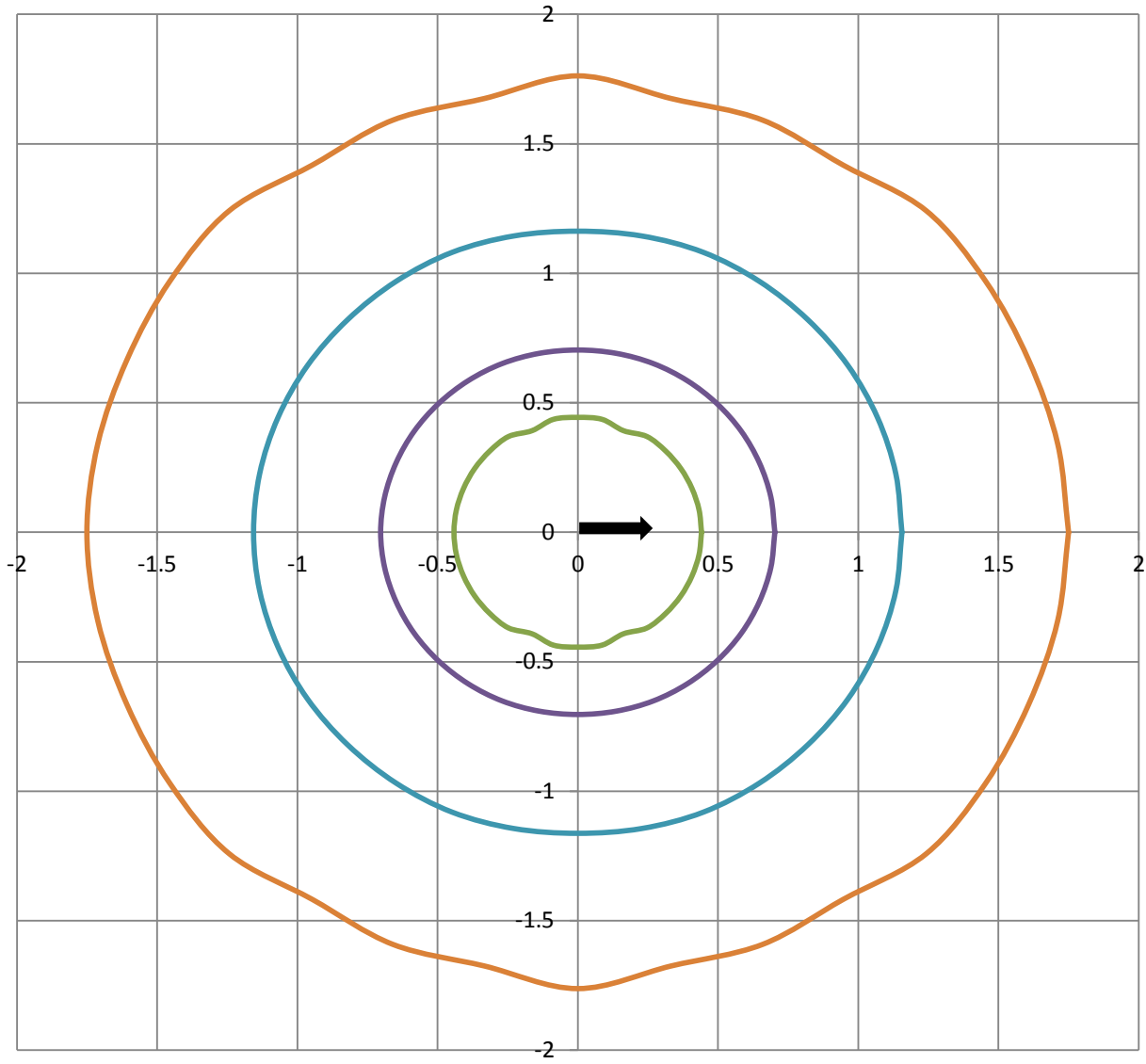
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	175.8 Candela
Central Cone Intensity:	175 Candela
Beam Flux:	161.7 Lumens
Beam Angle (0-180):	76.2 Degrees
Beam Angle (90-270):	74.7 Degrees
Field Angle (0-180):	180.0 Degrees
Field Angle (90-270):	179.8 Degrees





### ISOFootcandle Plot

Mounting Height - 10 Feet

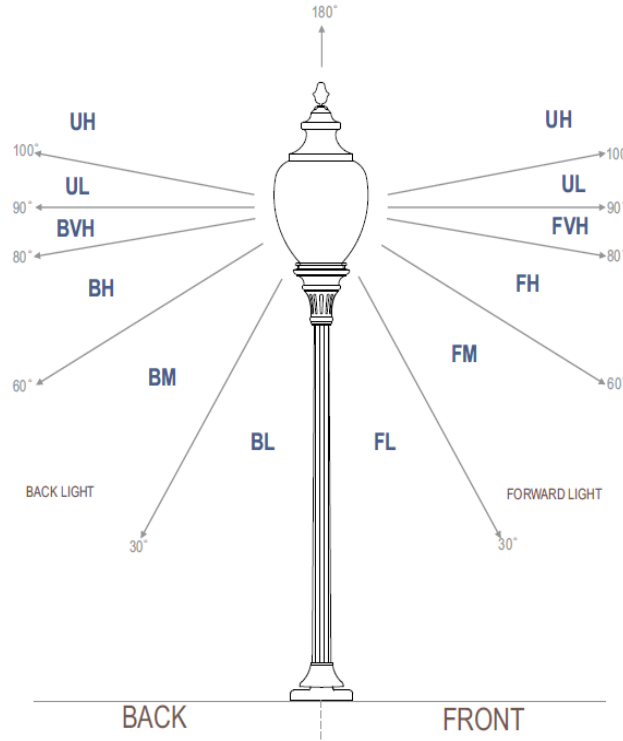


Grid Lines in Units of Mounting Height





**IES "BUG" Rating**  
 (Back Light, Uplight, Glare)  
 Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	58.6	11.7%
FM	(30-60)	92.6	18.5%
FH	(60-80)	72.2	14.4%
FVH	(80-90)	19.2	3.8%
BL	(0-30)	58.6	11.7%
BM	(30-60)	92.6	18.5%
BH	(60-80)	72.2	14.4%
BVH	(80-90)	19.2	3.8%
UL	(90-100)	11.9	2.4%
UH	(100-180)	4.4	0.9%
Total		501.5	100.0%
<b>BUG Rating</b>	<b>B0 U2 G1</b>		