



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
LBD250-S7-NL-12-30-25 (NO LOUVERS, 3000K)
Order Number
11263738
Test Number
1254205

Test Date

2016-07-18

Prepared By

Tony Rubio, 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 no louvers and cylindrical 25" copper stem with brass base
Lamp: Six (6) Cree XPL-L 3000K LEDs
Mounting: Path/Area
Ballast/Driver: L.T.F. DL112W480C24LP6?-0000

Luminaire



Luminaire Characteristics

Luminous Diameter: 7.00 in.
Luminous Height: 1.500 in.

Summary of Results

Roadway Classification: Type V, Very Short
Cutoff Classification: Cutoff
BUG Rating: B0 U1 G1

Test Conditions

Test Temperature: 24.1 °C
Voltage: 12.04 VAC
Current: 1.647 A
Power: 11.65 W
Power Factor: 0.587
Frequency: 60 Hz
Current THD: 106 %

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
24.1 °C	12.04 VAC	1.647 A	11.65 W	0.587	60 Hz	106 %

Summary of Results

Spacing Criteria

0-180: 1.57
90-270: 1.57

Total Lumen Output:

427.1 Lumens

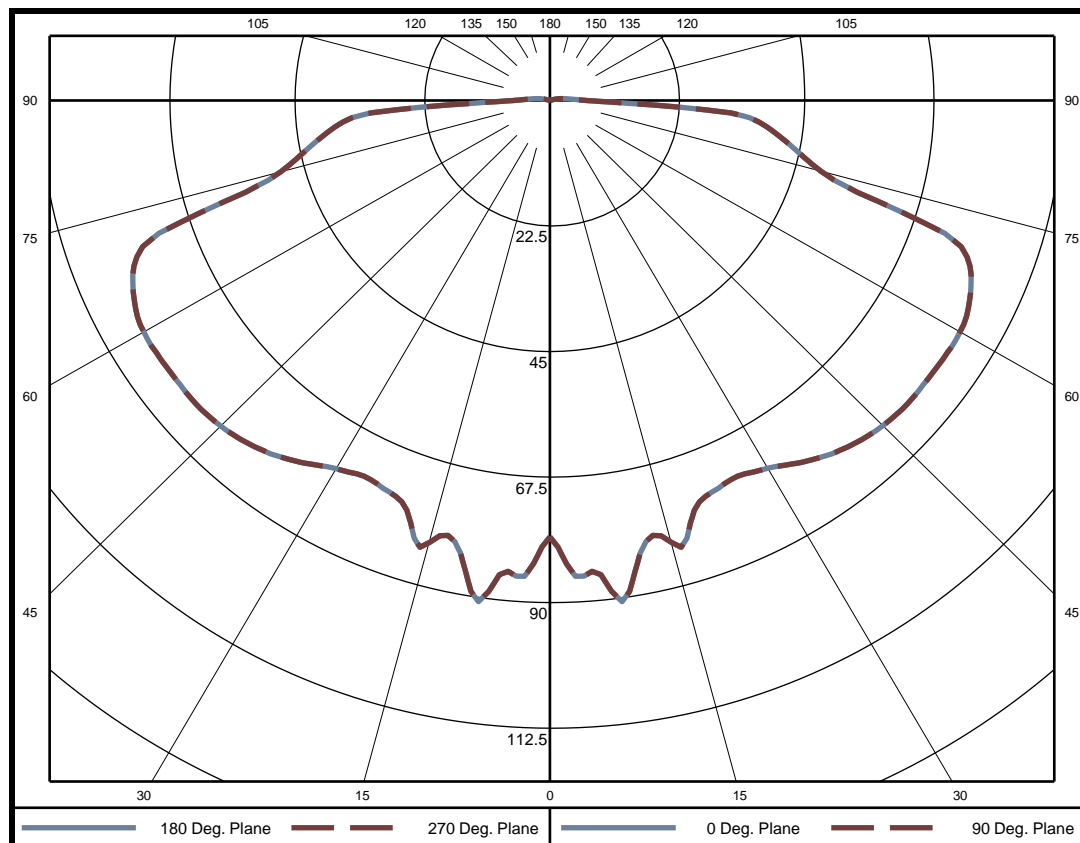
Luminaire Efficacy:

36.7 lm/w

Maximum Candela:

91 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	2.02	0.5%	60-65	39.99	9.4%	120-125	0	0.0%
5-10	6.30	1.5%	65-70	40.21	9.4%	125-130	0	0.0%
10-15	9.66	2.3%	70-75	32.25	7.6%	130-135	0	0.0%
15-20	13.22	3.1%	75-80	24.20	5.7%	135-140	0	0.0%
20-25	15.86	3.7%	80-85	21.01	4.9%	140-145	0	0.0%
25-30	19.08	4.5%	85-90	10.67	2.5%	145-150	0	0.0%
30-35	22.81	5.3%	90-95	2.53	0.6%	150-155	0	0.0%
35-40	26.70	6.3%	95-100	1.44	0.3%	155-160	0	0.0%
40-45	30.29	7.1%	100-105	0.79	0.2%	160-165	0	0.0%
45-50	33.43	7.8%	105-110	0.26	0.1%	165-170	0	0.0%
50-55	36.03	8.4%	110-115	0.00	0.0%	170-175	0	0.0%
55-60	38.34	9.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	116	27.1%
0-60	254	59.4%
0-90	422	98.8%
90-180	5	1.2%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical 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	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20	78.20
	5	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70	84.70
	10	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74	85.74
	15	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95	81.95
	20	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53	76.53
	25	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96	74.96
	30	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10	76.10
	35	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80	78.80
	40	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05	81.05
	45	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39	82.39
	50	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89	82.89
	55	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88	82.88
	60	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86	82.86
	65	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24
	70	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58	76.58
	75	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17	49.17
	80	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87	41.87
	85	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03	35.03
	90	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56
	95	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
	100	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	105	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
	110	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

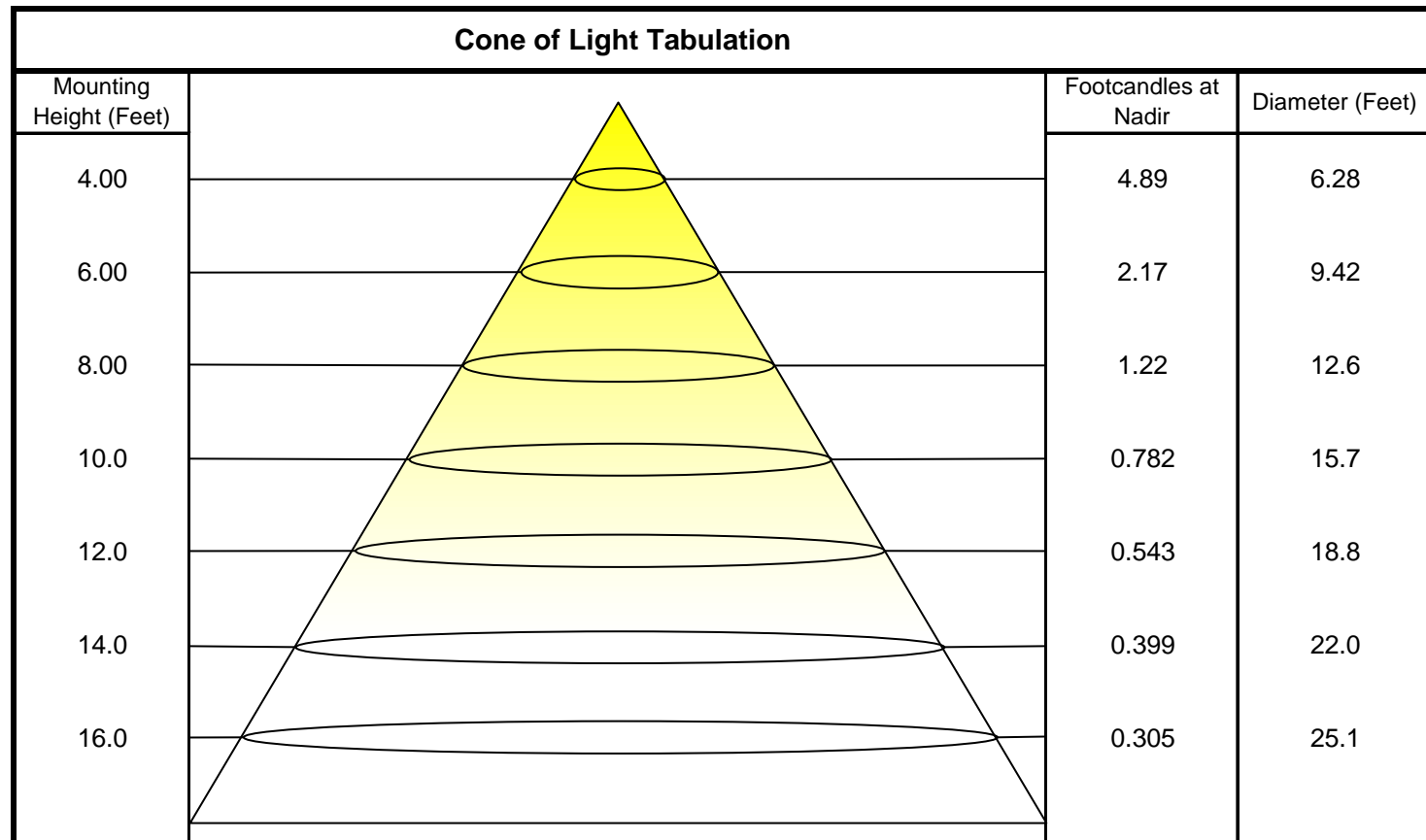
Vertical Angle (Degrees)	Horizontal Angle (deg/sec)			
	0	45	90	
	0	3150	3150	3150
	45	6025	6025	6025
	55	5566	5566	5566
	65	5076	5076	5076
	75	2973	2973	2973
	85	2134	2134	2134



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	507	507	507	507	495	495	495	495	472	472	472	451	451	451	431	431	431	422
1	446	418	393	370	432	407	384	363	387	368	351	369	353	339	352	339	327	317
2	395	350	313	282	382	341	307	278	324	295	270	309	284	263	294	274	256	245
3	354	299	256	222	342	291	251	219	277	243	214	263	234	210	251	226	205	194
4	320	259	214	180	308	252	210	178	240	204	175	229	197	171	218	191	168	157
5	291	227	182	149	281	222	180	148	211	174	146	202	169	143	193	164	141	130
6	267	202	158	127	257	197	156	126	188	151	124	180	147	122	172	143	120	110
7	246	181	139	109	237	177	137	108	169	133	107	162	130	106	156	126	104	95
8	228	163	123	95	220	160	122	95	154	119	94	148	116	93	142	113	92	82
9	212	149	110	84	205	146	109	84	140	107	83	135	104	82	130	102	81	73
10	198	137	100	75	192	134	99	75	129	97	74	125	95	74	120	93	73	65

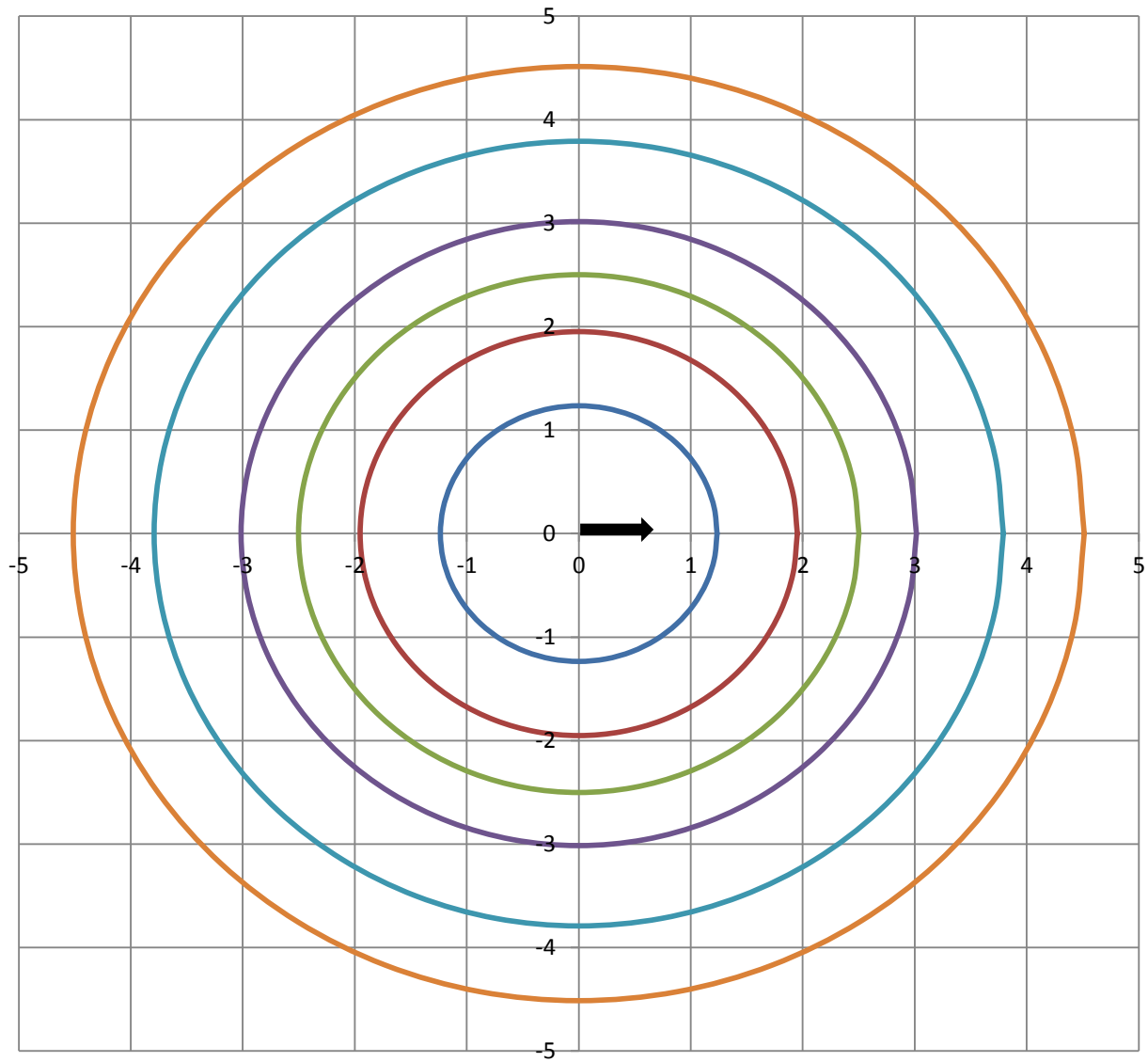
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	78.20 Candela
Central Cone Intensity:	83 Candela
Beam Flux:	400.2 Lumens
Beam Angle (0-180):	164.5 Degrees
Beam Angle (90-270):	164.5 Degrees
Field Angle (0-180):	178.9 Degrees
Field Angle (90-270):	178.9 Degrees





ISOFootcandle Plot

Mounting Height - 2 Feet

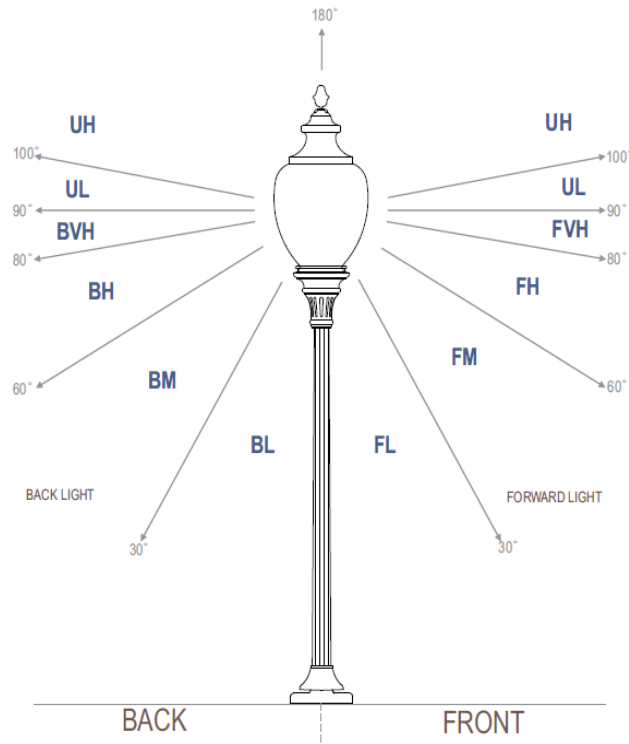


Grid Lines in Units of Mounting Height

5 fc 2 fc 1 fc 0.5 fc 0.2 fc 0.1 fc



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



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	33.3	7.7%
FM	(30-60)	94.2	22.0%
FH	(60-80)	68.7	16.0%
FVH	(80-90)	15.8	3.7%
BL	(0-30)	33.3	7.7%
BM	(30-60)	94.2	22.0%
BH	(60-80)	68.7	16.0%
BVH	(80-90)	15.8	3.7%
UL	(90-100)	4.0	0.9%
UH	(100-180)	1.1	0.2%
Total		429.2	100.0%
BUG Rating	B0 U1 G1		