



Shenzhen Belling Efficiency Testing Laboratory Co., Ltd.
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LumCAT:

Luminaire:

Report No:

Voltage(V): 120.17

Test No:

Current(A): 0.079

LampCAT:

Power (W): 9.2050

Lamp flux(lm): 1291.7

PF: 0.9697

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1291.71

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 140.33

Central intensity(cd): 449.552

Maximum intensity(cd): 449.552

Angle of maximum intensity: $C=0.0$ $\gamma=0.0$

Beam Angle(50%Imax): [C0/180]Total=112.9

[C90/270]Total=116.3

Field angle(10%Imax): [C0/180]Total=157.1

[C90/270]Total=160.4

Maximum s/h(1/2): C0_180=1.30 C90_270=1.28

Maximum s/h(1/4): C0_180=1.85 C90_270=1.40

Up flux rate of lamp(%): 0.14%

Down flux rate of lamp(%): 99.86%

Up flux rate of LUM(%): 0.14%

Down flux rate of LUM(%): 99.86%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 78.953%

Equipment: GMS-3000
Temperature(°C): 25

Date:
Humidity(%): 58%

Operator: Zac

Zonal flux distribution table

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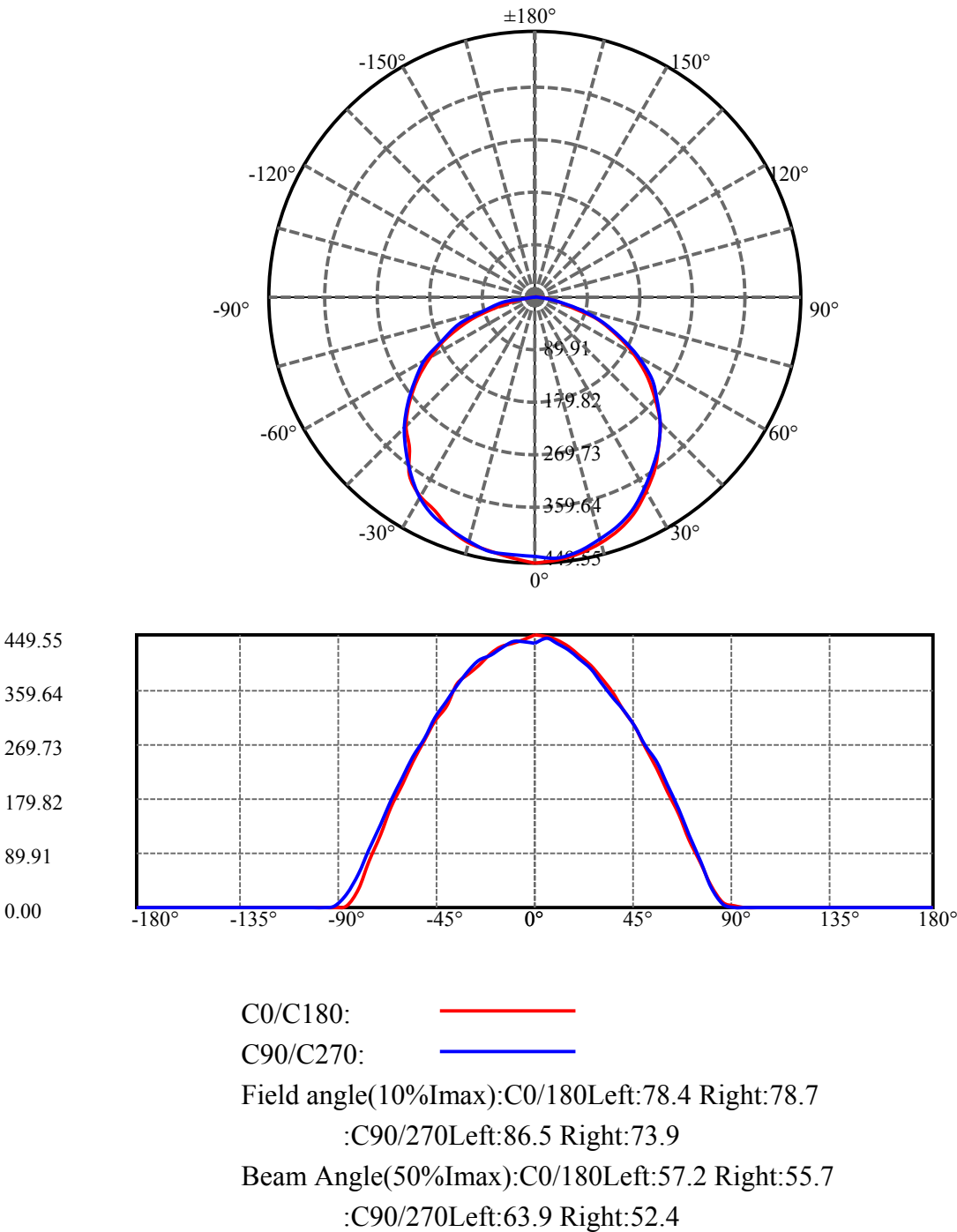
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	443.393	.000	.000	.000%	.000%
5.0	440.195	10.563	10.563	.818%	.818%
10.0	434.231	31.281	41.844	2.422%	3.239%
15.0	426.179	51.039	92.883	3.951%	7.191%
20.0	415.308	69.350	162.233	5.369%	12.560%
25.0	399.283	85.436	247.669	6.614%	19.174%
30.0	380.451	98.676	346.345	7.639%	26.813%
35.0	358.697	108.845	455.190	8.426%	35.239%
40.0	332.635	115.344	570.533	8.930%	44.169%
45.0	304.552	117.980	688.513	9.134%	53.302%
50.0	273.988	116.902	805.416	9.050%	62.353%
55.0	240.162	111.793	917.209	8.655%	71.007%
60.0	203.830	102.628	1019.837	7.945%	78.952%
65.0	164.771	89.608	1109.445	6.937%	85.890%
70.0	124.042	73.129	1182.574	5.661%	91.551%
75.0	82.333	53.943	1236.517	4.176%	95.727%
80.0	43.548	33.682	1270.199	2.608%	98.335%
85.0	13.598	15.528	1285.728	1.202%	99.537%
90.0	1.775	4.209	1289.937	.326%	99.863%
95.0	.091	.511	1290.448	.040%	99.902%
100.0	.078	.046	1290.494	.004%	99.906%
105.0	.065	.038	1290.532	.003%	99.909%
110.0	.078	.038	1290.570	.003%	99.912%
115.0	.078	.040	1290.610	.003%	99.915%
120.0	.144	.054	1290.664	.004%	99.919%
125.0	.170	.072	1290.736	.006%	99.925%
130.0	.300	.102	1290.838	.008%	99.933%
135.0	.248	.111	1290.949	.009%	99.941%
140.0	.326	.106	1291.055	.008%	99.949%
145.0	.379	.118	1291.173	.009%	99.958%
150.0	.470	.125	1291.298	.010%	99.968%
155.0	.457	.117	1291.415	.009%	99.977%
160.0	.483	.099	1291.514	.008%	99.985%
165.0	.509	.082	1291.595	.006%	99.991%
170.0	.535	.062	1291.657	.005%	99.996%
175.0	.509	.037	1291.694	.003%	99.999%
180.0	.574	.013	1291.707	.001%	100.000%

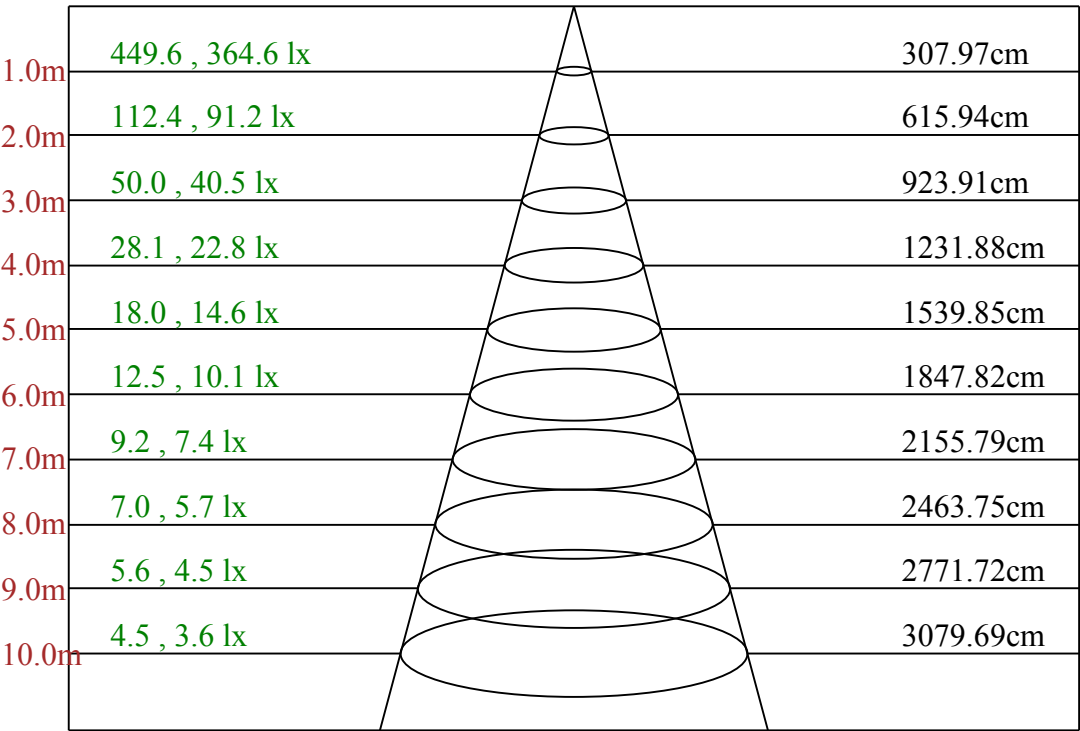
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	346.34	26.81%	26.81%
0-40	570.53	44.17%	44.17%
0-60	1019.84	78.95%	78.95%
0-90	1289.94	99.86%	99.86%
0-120	1290.66	99.92%	99.92%
0-180	1291.71	100.00%	100.00%
60-90	372.73	28.86%	28.86%
90-120	4.94	0.38%	0.38%
90-130	5.11	0.40%	0.40%
90-150	5.57	0.43%	0.43%
90-180	5.97	0.46%	0.46%
0-60.75	1033.37	80.00%	80.00%

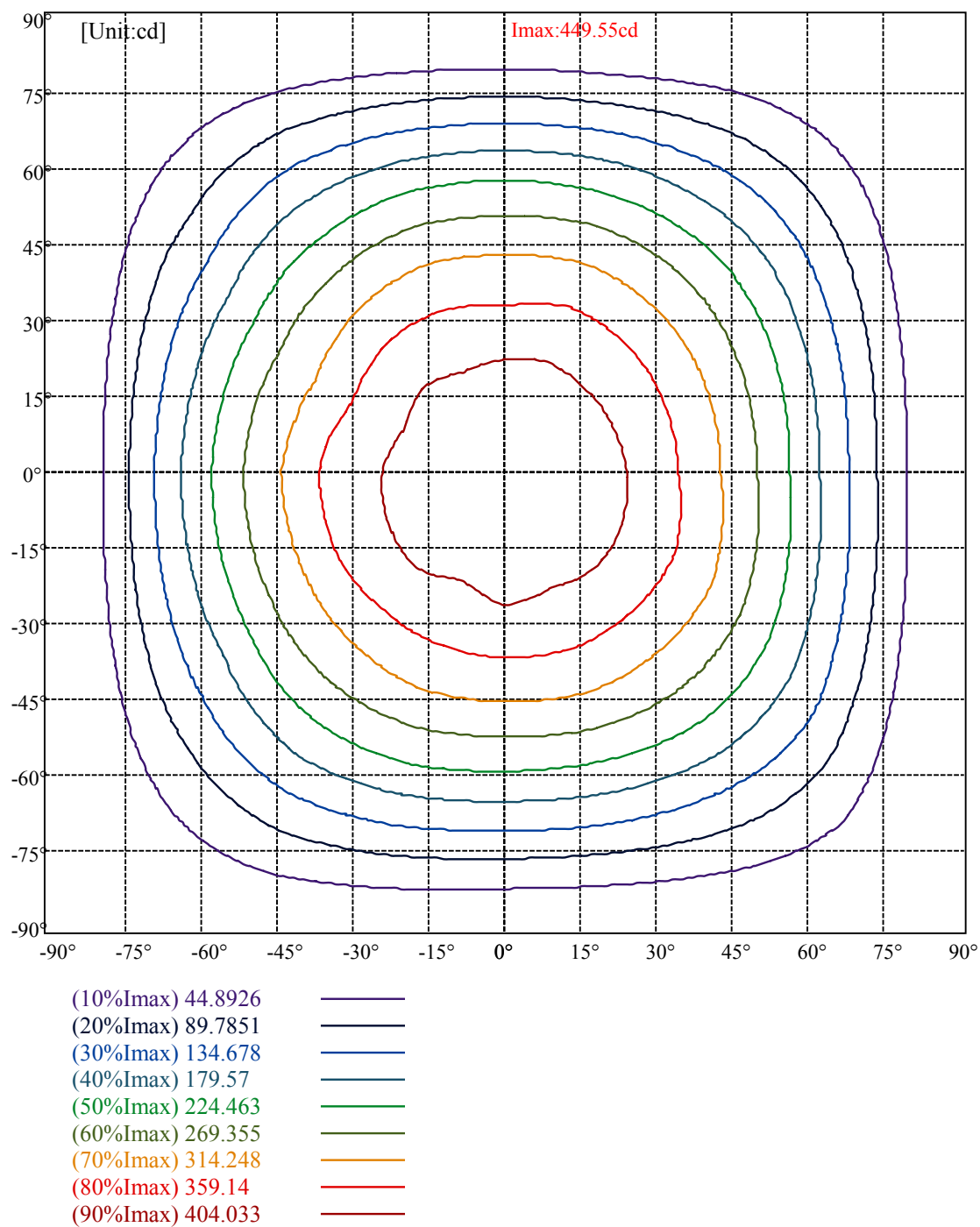
ZONAL LUMEN SUMMARY

0-10	41.84
10-20	120.39
20-30	184.11
30-40	224.19
40-50	234.88
50-60	214.42
60-70	162.74
70-80	87.63
80-90	19.74
90-100	0.56
100-110	0.08
110-120	0.09
120-130	0.17
130-140	0.22
140-150	0.24
150-160	0.22
160-170	0.14
170-180	0.04





Max , Ave Beam angle of C0plane113.97



Intensity data(cd)

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C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	449.55	446.42	439.95	430.34	416.77	400.48	378.56	354.13	327.40
22.5	447.67	444.33	437.86	428.25	414.06	396.93	375.43	353.50	327.40
45.0	443.50	442.04	435.14	426.17	411.13	396.31	375.85	354.34	328.45
67.5	443.29	440.16	433.89	426.17	413.22	398.60	380.02	356.43	333.04
90.0	436.82	443.08	435.14	423.45	410.51	394.22	370.42	347.45	327.19
112.5	439.32	434.52	428.05	418.23	407.17	392.34	373.76	353.71	330.12
135.0	445.59	436.82	432.64	420.53	412.59	396.52	374.80	352.46	324.27
157.5	441.41	433.06	426.79	423.03	408.21	389.83	370.00	347.03	316.96
180.0	449.55	441.83	434.73	430.76	418.86	399.44	386.70	367.49	331.58
202.5	447.67	440.36	433.68	429.72	426.79	402.57	384.61	365.40	335.13
225.0	443.50	438.07	429.51	420.32	419.90	405.08	382.53	359.98	334.92
247.5	443.29	440.36	429.92	421.36	413.01	396.10	385.03	362.90	338.47
270.0	436.82	437.44	437.02	428.05	416.14	407.79	390.46	365.82	340.56
292.5	439.32	438.69	435.56	426.58	415.94	402.15	385.45	367.08	342.65
315.0	445.59	443.91	437.86	434.31	421.57	405.91	387.33	364.78	342.23
337.5	441.41	442.04	439.95	431.60	419.07	404.24	386.29	366.66	341.81
360.0	449.55	446.42	439.95	430.34	416.77	400.48	378.56	354.13	327.40
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	298.59	265.39	230.31	191.68	153.89	112.55	72.45	35.29	8.98
22.5	298.17	266.22	232.61	195.65	155.14	115.89	74.54	37.38	7.93
45.0	299.84	269.15	234.69	196.27	157.02	116.93	75.38	36.96	8.14
67.5	302.76	273.11	238.24	201.08	162.87	116.72	73.92	32.99	6.26
90.0	299.63	269.15	239.50	202.54	162.24	119.02	76.63	34.66	6.47
112.5	302.35	271.44	237.62	202.12	160.15	117.97	74.96	35.50	7.93
135.0	294.83	264.34	228.64	194.60	156.81	117.77	74.13	36.54	8.35
157.5	289.61	261.63	225.09	187.09	146.16	105.86	68.07	34.66	8.56
180.0	307.78	276.46	240.33	205.04	166.00	120.27	74.33	31.32	2.51
202.5	301.09	273.74	237.41	196.48	158.69	121.31	80.39	45.52	20.67
225.0	305.90	277.50	245.76	212.14	175.19	136.14	96.47	58.26	25.27
247.5	313.41	280.63	252.03	217.36	177.90	139.27	98.14	59.09	24.22
270.0	313.62	280.42	248.06	213.81	174.56	135.72	94.38	54.50	21.51
292.5	316.34	285.64	250.98	213.81	176.23	136.14	93.75	54.08	20.46
315.0	314.25	285.43	251.61	216.95	177.27	135.10	95.01	55.12	20.05
337.5	314.67	283.55	249.73	214.65	176.23	138.02	94.80	54.92	20.25
360.0	298.59	265.39	230.31	191.68	153.89	112.55	72.45	35.29	8.98
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	2.09	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.63
45.0	1.25	0.00	0.00	0.21	0.00	0.21	0.21	0.42	0.63
67.5	0.63	0.21	0.21	0.21	0.00	0.21	0.21	0.42	0.63
90.0	0.42	0.21	0.00	0.21	0.21	0.21	0.21	0.42	0.21
112.5	0.42	0.21	0.21	0.00	0.42	0.21	0.42	0.63	0.42
135.0	0.42	0.21	0.21	0.00	0.42	0.00	0.63	0.63	0.63
157.5	0.21	0.00	0.21	0.21	0.21	0.21	0.42	0.00	0.42
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202.5	3.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225.0	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
247.5	3.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
270.0	1.67	0.00	0.21	0.21	0.00	0.00	0.00	0.21	0.42
292.5	2.30	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.21
315.0	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
337.5	3.55	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
360.0	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Intensity data(cd)									Page: 8 Total:8
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.21	0.00
22.5	0.42	0.00	0.21	0.63	0.84	0.21	0.63	0.63	0.42
45.0	0.42	0.63	0.63	0.63	0.63	0.63	0.84	0.63	0.42
67.5	0.42	0.63	0.63	0.63	0.63	0.63	0.42	0.63	0.63
90.0	0.42	0.42	0.21	0.63	0.84	0.63	0.63	0.63	0.63
112.5	0.21	0.42	0.63	0.63	0.63	0.63	0.63	0.63	0.63
135.0	0.42	0.63	0.84	0.63	0.63	0.63	0.63	0.63	0.63
157.5	0.42	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
180.0	0.00	0.00	0.00	0.21	0.00	0.42	0.42	0.21	0.42
202.5	0.00	0.00	0.00	0.42	0.00	0.21	0.21	0.63	0.42
225.0	0.21	0.21	0.00	0.42	0.21	0.63	0.42	0.63	0.63
247.5	0.00	0.42	0.42	0.42	0.63	0.42	0.42	0.63	0.63
270.0	0.42	0.21	0.42	0.42	0.42	0.63	0.42	0.21	0.42
292.5	0.42	0.42	0.42	0.42	0.42	0.42	0.63	0.63	0.42
315.0	0.00	0.42	0.42	0.42	0.42	0.63	0.63	0.63	0.63
337.5	0.00	0.21	0.42	0.42	0.42	0.42	0.63	0.42	0.63
360.0	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.21	0.00
C/γ(°)	180.0								
0.0	0.21								
22.5	0.63								
45.0	0.63								
67.5	0.63								
90.0	0.63								
112.5	0.63								
135.0	0.63								
157.5	0.63								
180.0	0.21								
202.5	0.63								
225.0	0.63								
247.5	0.63								
270.0	0.63								
292.5	0.63								
315.0	0.63								
337.5	0.63								
360.0	0.21								