

深圳万景华分布光度计测试报告

灯具名称: 工矿灯GT-240  
灯具描述: 反光杯110度加PC罩  
报告编号: WJH-GM-06  
测试编号: 09  
光源规格型号: CLU046-1818C1  
每个光源光通量(lm): 20077.4  
光源数量: 1  
发光面长度(mm): 500  
测试模式: C  
电压(V): 220.1000  
电流(A): 1.0950  
功率(W): 238.0000  
功率因数: 0.9880  
镇流器型号:  
发光面宽度(mm): 500  
发光面高度(mm): 170

光度结果

灯具光通量(lm): 20077.46  
灯具效率(%): 100.00%  
灯具效能(lm/w): 84.36  
中心光强(cd): 6216.071  
最大光强(cd): 8765.282  
最大光强角度:  $C=90.0 \gamma=25.0$   
半峰边角(50%Imax): [C0/180]Total=96.0  
                                  [C90/270]Total=95.2  
光束扩散角(10%Imax): [C0/180]Total=138.7  
                                  [C90/270]Total=139.0  
最大允许距高比(1/2): C0\_180=1.60 C90\_270=1.60  
最大允许距高比(1/4): C0\_180=2.28 C90\_270=1.48  
上射光通比(%): 0.00%  
下射光通比(%): 100.00%  
上射光通比(占灯具): --  
下射光通比(占灯具): 100.00%  
CIE Type: 直接型  
 $\pi$ 立体角内输出光通量比: 89.200%

## 深圳万景华分布光度计测试报告 工矿灯GT-240

## 环带光通分布数据表

第 2 页 共 15 页

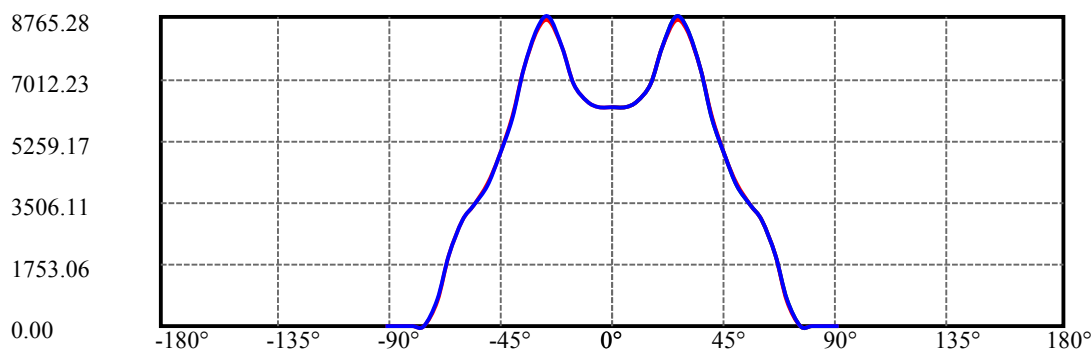
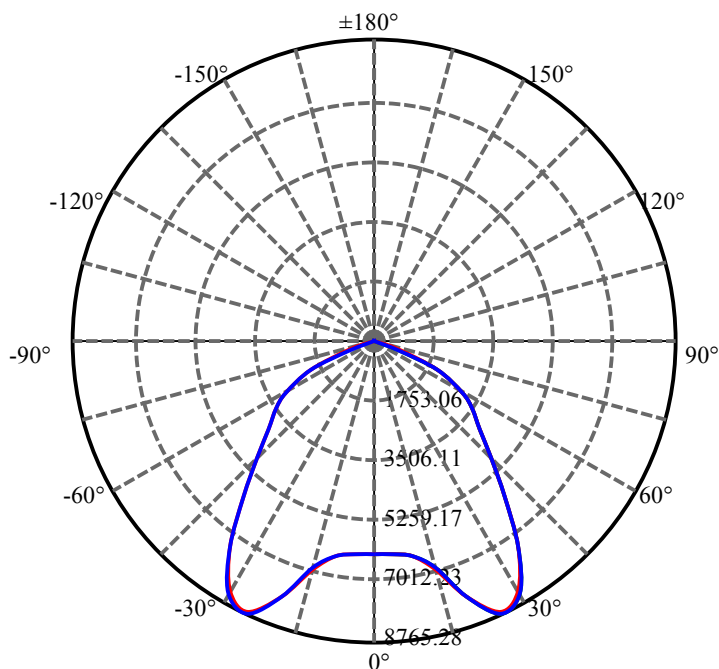
$\gamma(^{\circ})$	平均光强(cd)	环带光通(lm)	累积光通(lm)	有效光通(%)	有效累计(%)
0.0	6224.453	.000	.000	.000%	.000%
5.0	6231.899	148.912	148.912	.742%	.742%
10.0	6372.012	450.882	599.794	2.246%	2.987%
15.0	6900.858	787.338	1387.131	3.922%	6.909%
20.0	7905.407	1220.244	2607.375	6.078%	12.987%
25.0	8695.186	1741.096	4348.471	8.672%	21.659%
30.0	8402.403	2163.714	6512.186	10.777%	32.435%
35.0	7288.799	2310.639	8822.824	11.509%	43.944%
40.0	5922.805	2204.256	11027.080	10.979%	54.923%
45.0	4796.324	1984.734	13011.810	9.885%	64.808%
50.0	4027.354	1782.953	14794.770	8.880%	73.689%
55.0	3458.085	1627.584	16422.350	8.107%	81.795%
60.0	2974.063	1486.773	17909.120	7.405%	89.200%
65.0	2070.041	1226.231	19135.350	6.108%	95.308%
70.0	745.938	713.024	19848.380	3.551%	98.859%
75.0	31.365	203.175	20051.550	1.012%	99.871%
80.0	11.669	11.515	20063.070	.057%	99.929%
85.0	12.137	6.469	20069.540	.032%	99.961%
90.0	16.811	7.926	20077.460	.039%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	6512.19	32.44%	32.44%
0-40	11027.08	54.92%	54.92%
0-60	17909.12	89.20%	89.20%
0-90	20069.54	99.96%	99.96%
0-120	20069.54	99.96%	99.96%
0-180	20077.46	100.00%	100.00%
60-90	3647.19	18.17%	18.17%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-53.89	16061.97	80.00%	80.00%

## ZONAL LUMEN SUMMARY

0-10	599.79
10-20	2007.58
20-30	3904.81
30-40	4514.90
40-50	3767.69
50-60	3114.36
60-70	1939.26
70-80	214.69
80-90	6.47
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



C90(Max): ——

C0/C180: ——

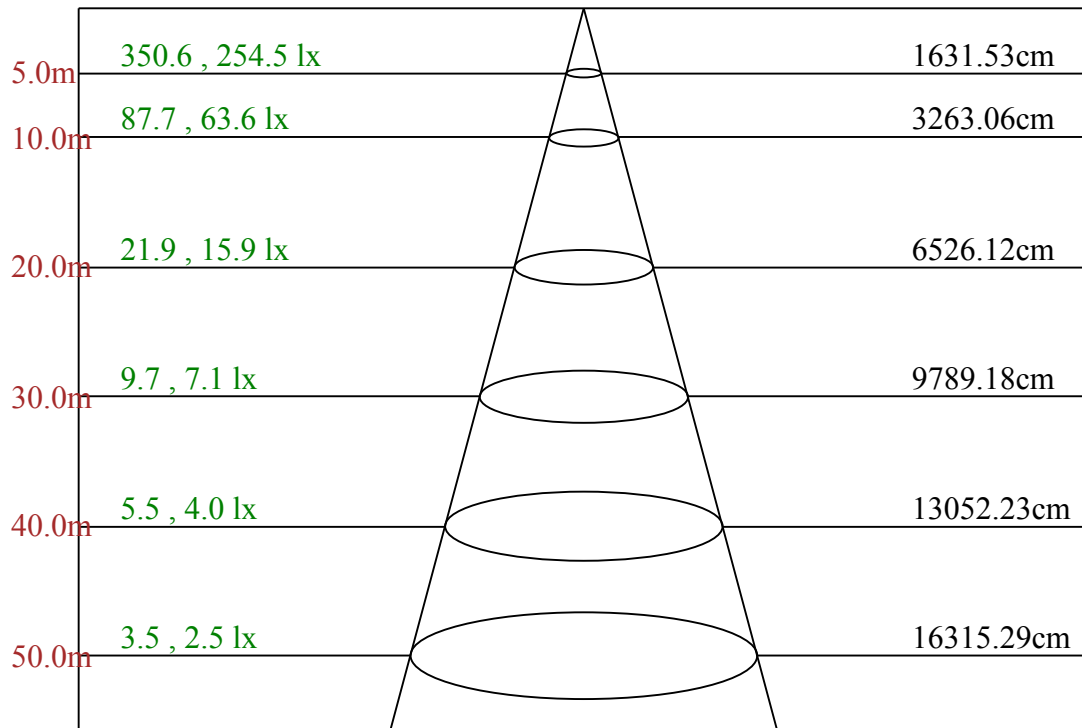
C90/C270: ——

光束扩散角(10%Imax):C0/180Left:94.4 Right:44.4

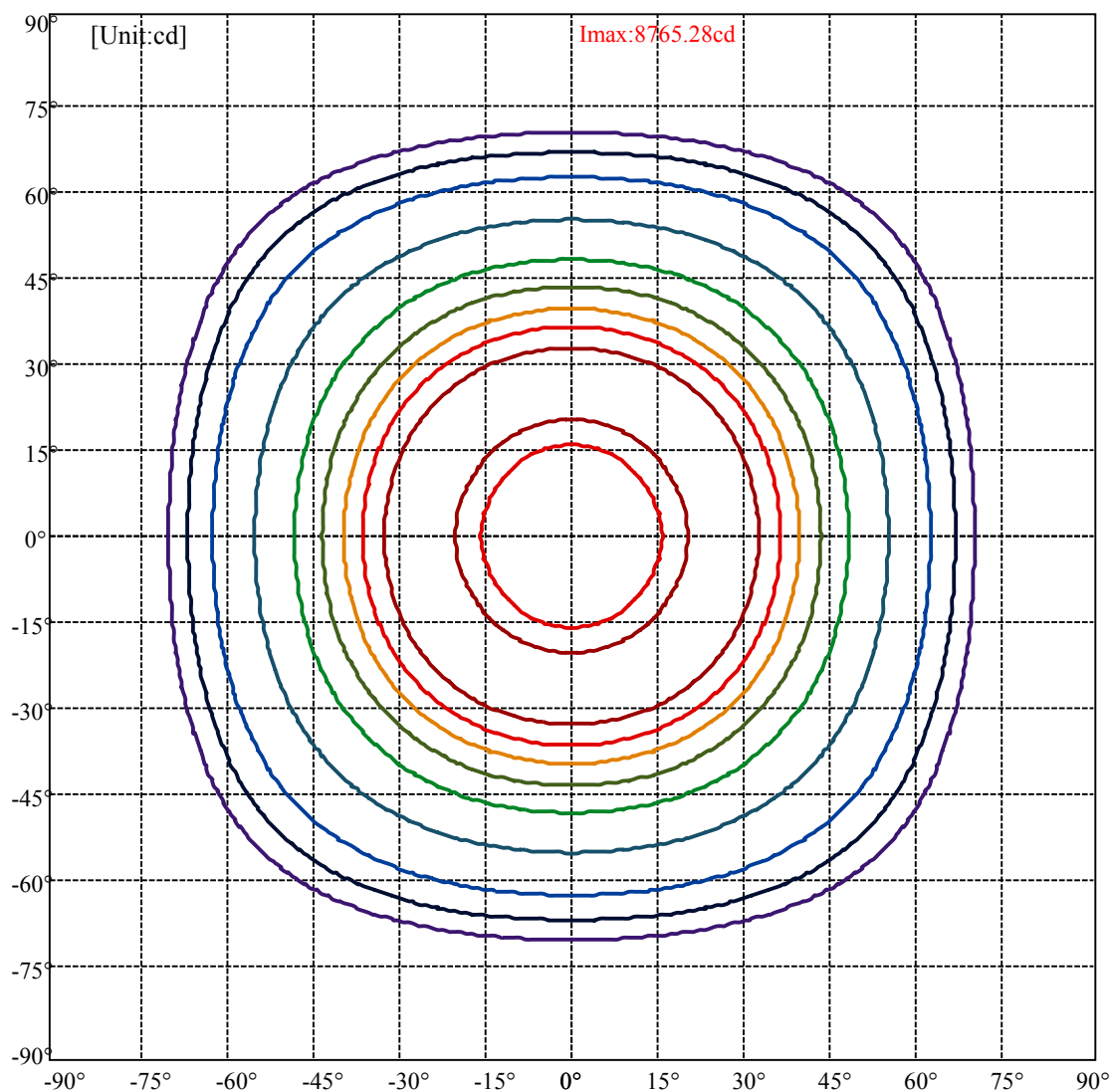
:C90/270Left:94.5 Right:44.5

半峰边角(50%Imax):C0/180Left:73.0 Right:23.0

:C90/270Left:72.6 Right:22.6



Max , Ave      C90面光束角116.99



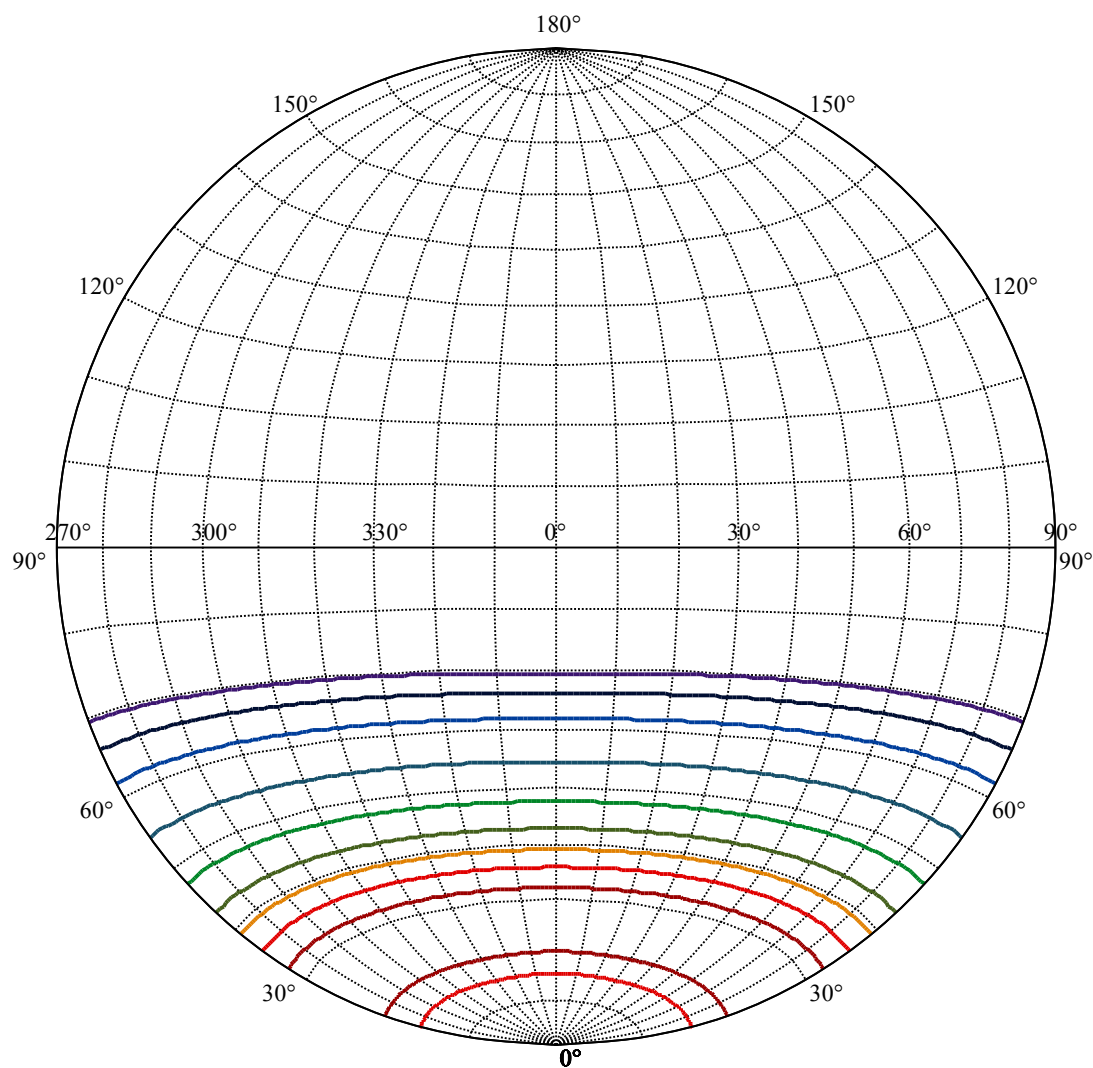
(10%Imax)	876.528	—
(20%Imax)	1753.06	—
(30%Imax)	2629.58	—
(40%Imax)	3506.11	—
(50%Imax)	4382.64	—
(60%Imax)	5259.17	—
(70%Imax)	6135.7	—
(80%Imax)	7012.23	—
(90%Imax)	7888.75	—

测试设备: 浙大三色GMS-1800  
环境温度(°C): 25.0

测试日期: 2015/12/4  
环境湿度(%): 65.0%

测试人员: 高敏  
测试距离(m): 9.83

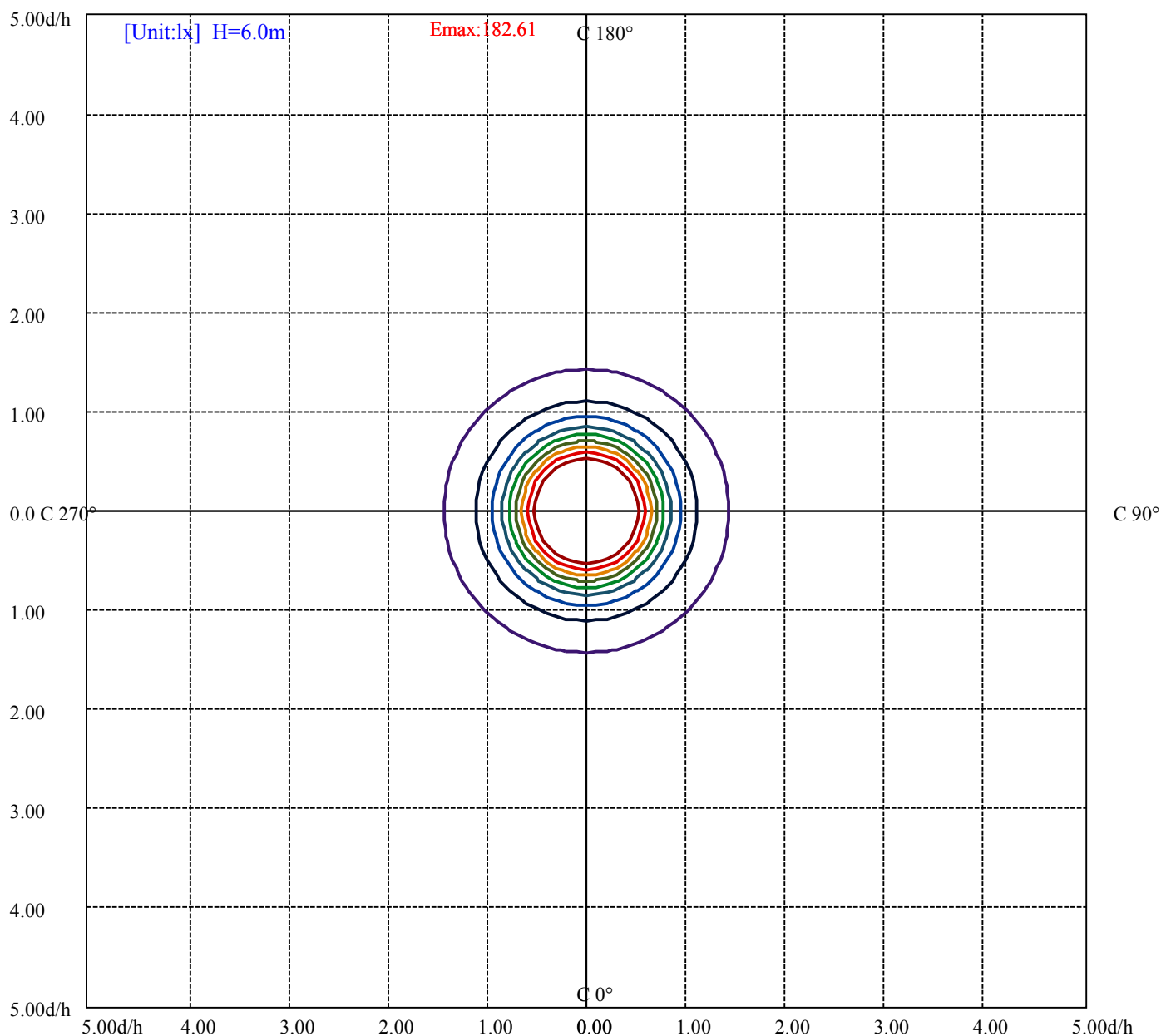
圆形等光强曲线



[单位: cd]

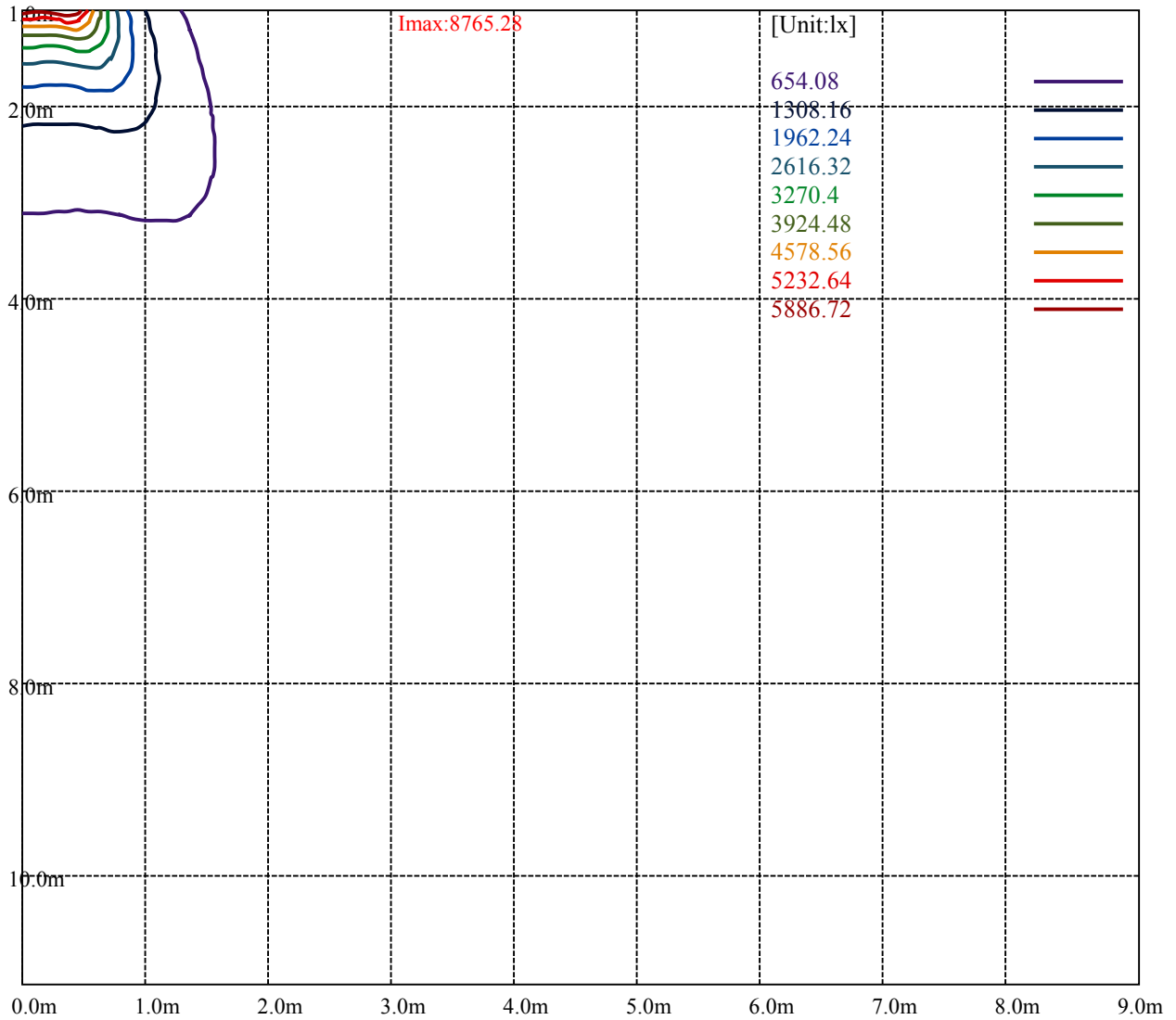
**Imax:8765.28**

(10%Imax) 876.528	—
(20%Imax) 1753.06	—
(30%Imax) 2629.58	—
(40%Imax) 3506.11	—
(50%Imax) 4382.64	—
(60%Imax) 5259.17	—
(70%Imax) 6135.7	—
(80%Imax) 7012.23	—
(90%Imax) 7888.75	—



(10%Emax) 18.26122	——
(20%Emax) 36.5225	——
(30%Emax) 54.78361	——
(40%Emax) 73.04501	——
(50%Emax) 91.30611	——
(60%Emax) 109.5672	——
(70%Emax) 127.8286	——
(80%Emax) 146.0897	——
(90%Emax) 164.3508	——





亮度值表

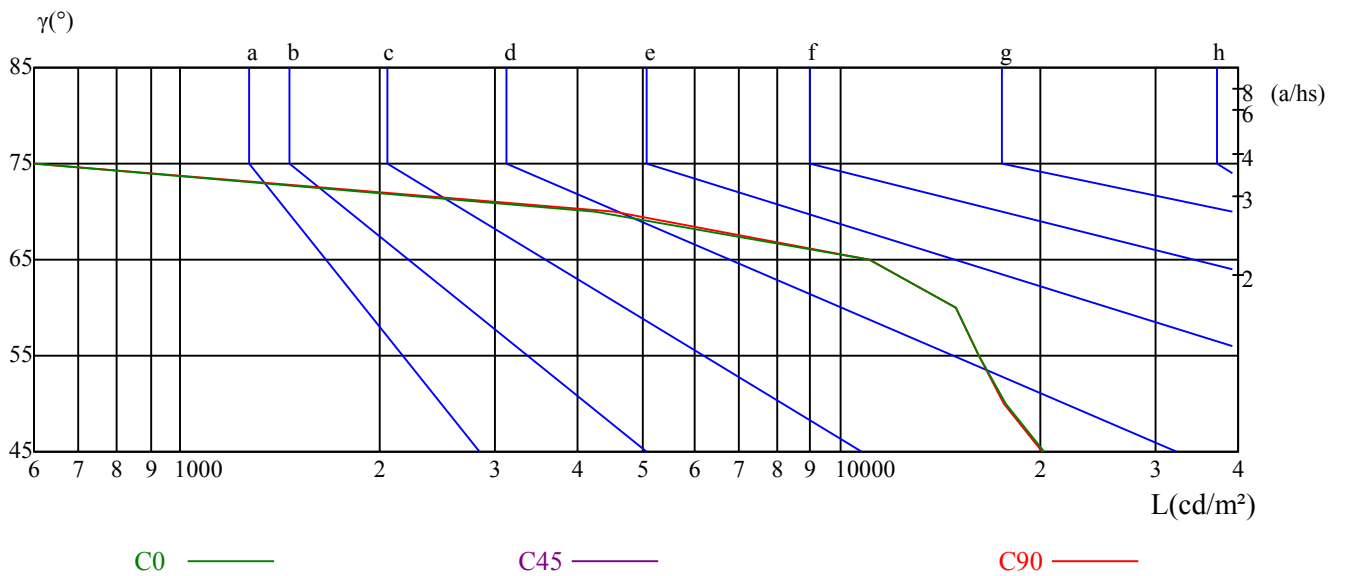
$\gamma$	45	50	55	60	65	70	75	80	85
C0	20289	17834	16192	14949	11080	4249	109	92	114
C45	0	0	0	0	0	0	0	0	0
C90	20258	17693	16185	14947	11023	4534	125	91	114

L横(65)	L纵(65)	L45(65)	L横(75)	L纵(75)	L45(75)	L横(85)	L纵(85)	L45(85)
19159	19061	0	247	282	0	559	555	0

眩光等级表

眩光等级	质量等级	使用照度(lx)							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

亮度限制曲线



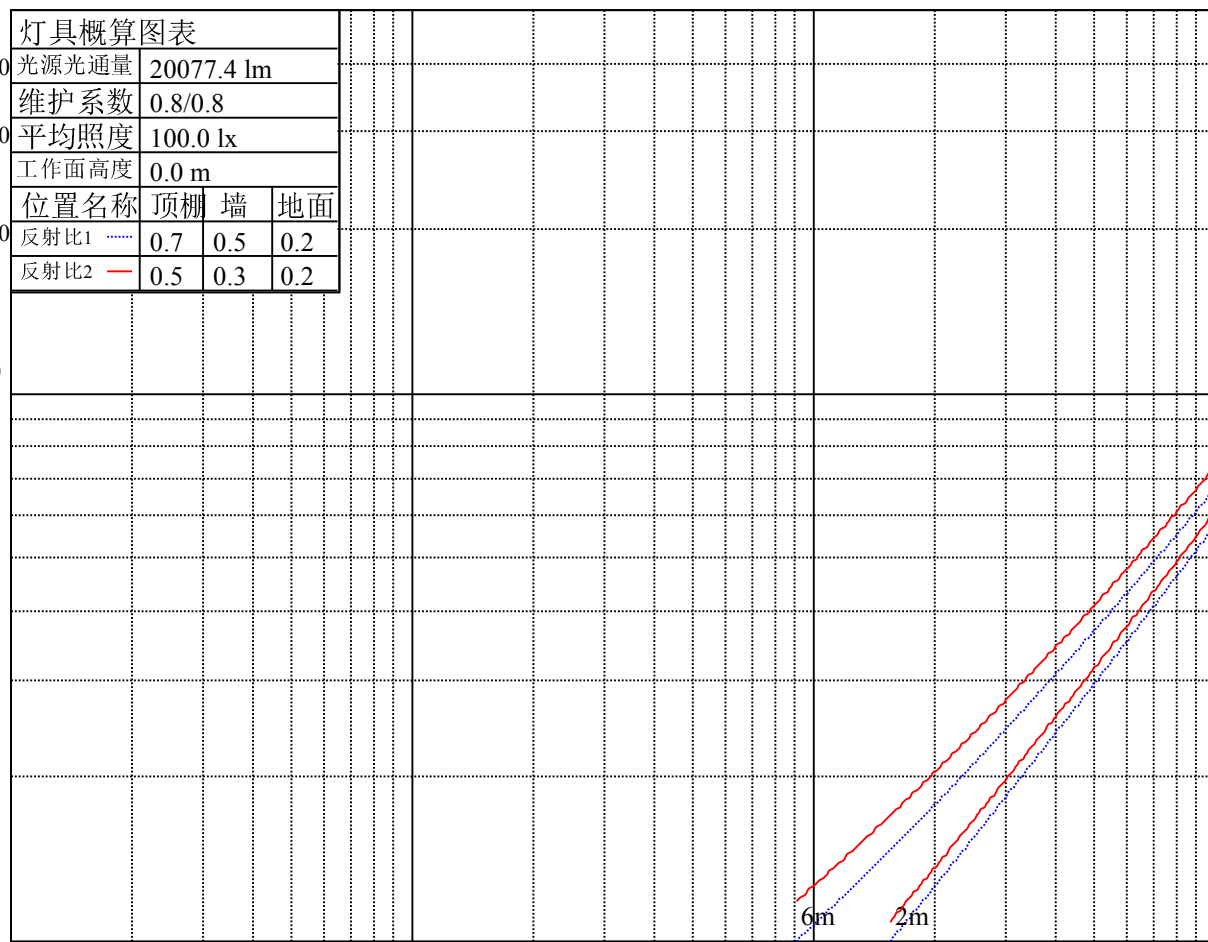
参照UGR的照射评估											
天花板反射率	70	70	50	50	30	70	70	50	50	30	
墙壁反射率	50	30	50	30	30	50	30	50	30	30	
地板反射率	20	20	20	20	20	20	20	20	20	20	
空间尺寸		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	16.2	17.5	16.5	17.7	17.9	16.2	17.5	16.5	17.7	18.0
	3H	16.8	17.9	17.1	18.1	18.4	16.8	17.9	17.1	18.2	18.4
	4H	16.6	17.5	17.0	17.8	18.2	16.6	17.5	17.0	17.8	18.2
	6H	16.6	17.5	17.0	17.8	18.2	16.6	17.5	17.0	17.8	18.2
	8H	16.6	17.5	17.0	17.8	18.2	16.6	17.5	17.0	17.8	18.2
	12H	16.4	17.1	16.8	17.5	17.9	16.4	17.1	16.8	17.5	17.9
4H	2H	16.5	17.4	16.9	17.7	18.1	16.5	17.4	16.9	17.8	18.1
	3H	17.0	17.7	17.5	18.1	18.5	17.1	17.7	17.5	18.1	18.5
	4H	17.1	17.8	17.5	18.1	18.5	17.1	17.8	17.5	18.1	18.6
	6H	17.1	17.8	17.5	18.1	18.5	17.1	17.8	17.5	18.1	18.6
	8H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
	12H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
8H	4H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
	6H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
	8H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
	12H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
12H	4H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
	6H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
	8H	16.9	17.3	17.4	17.8	18.3	16.9	17.3	17.4	17.8	18.3
对应照射距离，改变观察者位置S											
S = 1.0H	0.5/-0.7					0.5/-0.7					
S = 1.5H	1.2/-1.3					1.2/-1.2					
S = 2.0H	2.7/-3.8					2.7/-3.7					
标准表格	BK1					BK1					
更正系数	4.6					4.6					

灯具的概算曲线

灯具概算图表			
光源光通量	20077.4 lm		
维护系数	0.8/0.8		
平均照度	100.0 lx		
工作面高度	0.0 m		
位置名称	顶棚	墙	地面
反射比1	0.7	0.5	0.2
反射比2	0.5	0.3	0.2

灯数(个)

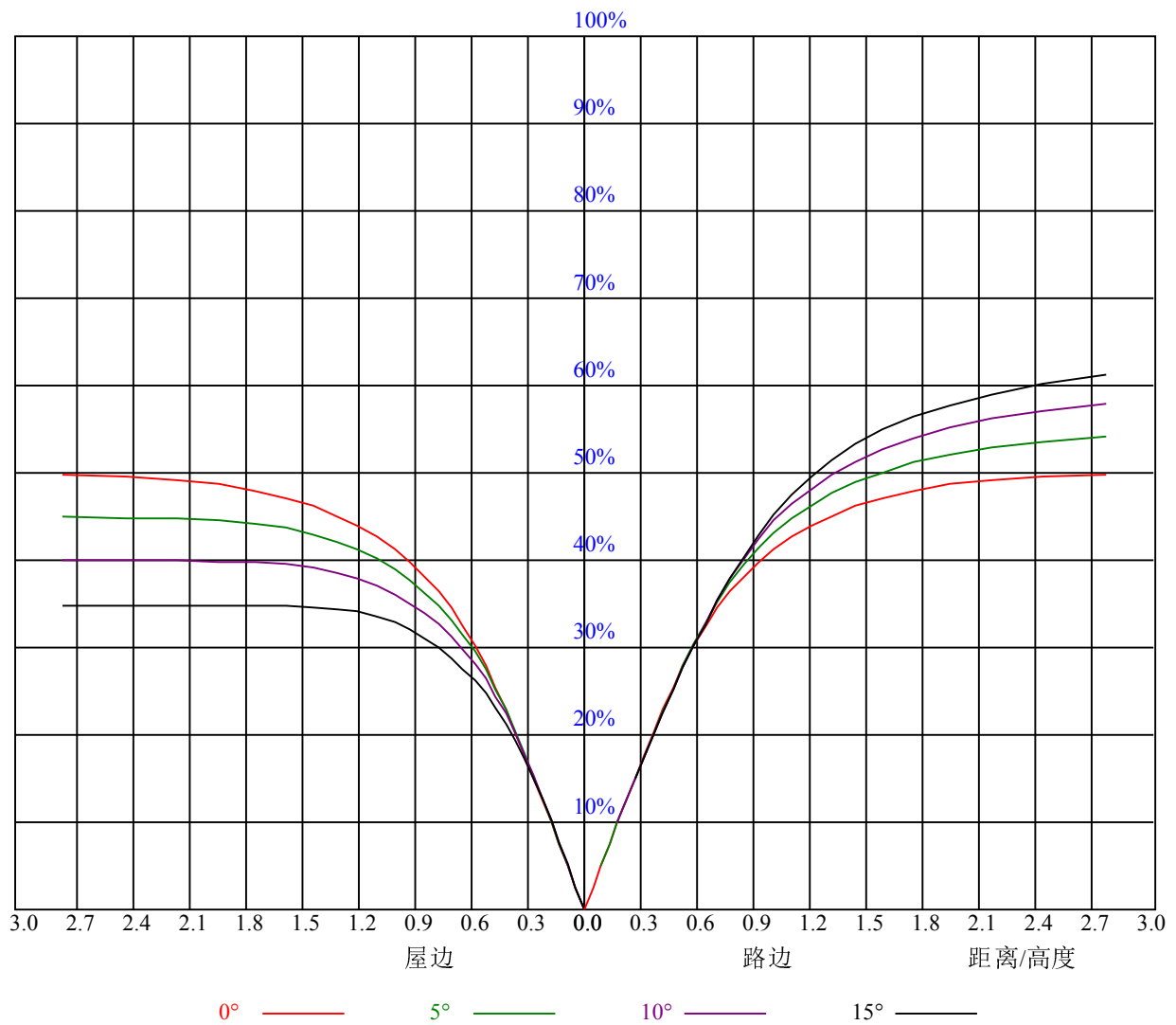
10  
9  
8  
7  
6  
5  
4  
3  
2  
1



面积[m²]

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.07	1.03	1.00	1.05	1.01	0.99	1.00	0.98	0.95	0.97	0.95	0.93	0.93	0.91	0.90	0.88
2	0.95	0.89	0.84	0.93	0.88	0.83	0.90	0.85	0.81	0.86	0.83	0.79	0.83	0.80	0.78	0.76
3	0.84	0.77	0.71	0.83	0.76	0.71	0.80	0.74	0.69	0.77	0.72	0.68	0.75	0.71	0.67	0.65
4	0.75	0.67	0.61	0.74	0.67	0.61	0.72	0.65	0.60	0.69	0.64	0.59	0.67	0.62	0.58	0.56
5	0.68	0.59	0.53	0.66	0.59	0.53	0.64	0.58	0.52	0.63	0.56	0.52	0.61	0.55	0.51	0.49
6	0.61	0.53	0.47	0.60	0.52	0.46	0.58	0.51	0.46	0.57	0.50	0.46	0.55	0.50	0.45	0.43
7	0.55	0.47	0.41	0.55	0.47	0.41	0.53	0.46	0.41	0.52	0.45	0.41	0.50	0.45	0.40	0.38
8	0.51	0.42	0.37	0.50	0.42	0.37	0.49	0.42	0.36	0.47	0.41	0.36	0.46	0.40	0.36	0.34
9	0.46	0.38	0.33	0.46	0.38	0.33	0.45	0.38	0.33	0.44	0.37	0.33	0.43	0.37	0.33	0.31
10	0.43	0.35	0.30	0.42	0.35	0.30	0.41	0.34	0.30	0.40	0.34	0.30	0.39	0.34	0.30	0.28

路灯利用系数曲线



深圳万景华分布光度计测试报告 工矿灯GT-240

光强数据表(cd)

第 15页 共15页

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	6216.07	6222.84	6365.00	6882.87	7885.24	8680.66	8373.13	7283.24	5912.89
30.0	6248.95	6238.60	6379.02	6945.25	7935.82	8664.51	8384.74	7286.62	5930.30
60.0	6231.54	6232.80	6376.12	6891.86	7896.85	8698.07	8417.91	7293.88	5929.33
90.0	6221.87	6225.74	6356.78	6848.06	7881.86	8765.28	8435.99	7288.56	5904.67
120.0	6216.07	6232.80	6376.12	6891.86	7896.85	8698.07	8417.91	7293.88	5929.33
150.0	6212.20	6238.60	6379.02	6945.25	7935.82	8664.51	8384.74	7286.62	5930.30
180.0	6216.07	6222.84	6365.00	6882.87	7885.24	8680.66	8373.13	7283.24	5912.89
210.0	6248.95	6238.60	6379.02	6945.25	7935.82	8664.51	8384.74	7286.62	5930.30
240.0	6231.54	6232.80	6376.12	6891.86	7896.85	8698.07	8417.91	7293.88	5929.33
270.0	6221.87	6225.74	6356.78	6848.06	7881.86	8765.28	8435.99	7288.56	5904.67
300.0	6216.07	6232.80	6376.12	6891.86	7896.85	8698.07	8417.91	7293.88	5929.33
330.0	6212.20	6238.60	6379.02	6945.25	7935.82	8664.51	8384.74	7286.62	5930.30
360.0	6216.07	6222.84	6365.00	6882.87	7885.24	8680.66	8373.13	7283.24	5912.89

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	4806.08	4027.10	3449.27	2969.12	2024.19	702.68	15.96	11.70	12.19
30.0	4788.67	4038.99	3468.90	2979.56	2102.81	771.82	46.90	11.90	12.19
60.0	4797.86	4031.93	3456.81	2973.76	2088.30	739.72	30.08	11.51	12.09
90.0	4798.82	3995.18	3447.82	2968.63	2013.84	749.87	18.28	11.51	12.09
120.0	4797.86	4031.93	3456.81	2973.76	2088.30	739.72	30.08	11.51	12.09
150.0	4788.67	4038.99	3468.90	2979.56	2102.81	771.82	46.90	11.90	12.19
180.0	4806.08	4027.10	3449.27	2969.12	2024.19	702.68	15.96	11.70	12.19
210.0	4788.67	4038.99	3468.90	2979.56	2102.81	771.82	46.90	11.90	12.19
240.0	4797.86	4031.93	3456.81	2973.76	2088.30	739.72	30.08	11.51	12.09
270.0	4798.82	3995.18	3447.82	2968.63	2013.84	749.87	18.28	11.51	12.09
300.0	4797.86	4031.93	3456.81	2973.76	2088.30	739.72	30.08	11.51	12.09
330.0	4788.67	4038.99	3468.90	2979.56	2102.81	771.82	46.90	11.90	12.19
360.0	4806.08	4027.10	3449.27	2969.12	2024.19	702.68	15.96	11.70	12.19

C/γ(°)	90.0
0.0	16.73
30.0	16.83
60.0	16.83
90.0	16.83
120.0	16.83
150.0	16.83
180.0	16.73
210.0	16.83
240.0	16.83
270.0	16.83
300.0	16.83
330.0	16.83
360.0	16.73