NATA LIGHTING CO.,LTD
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Tel:+86 0750-377 0000(10 lines) Fax:+86 0750-377 1111
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

NT

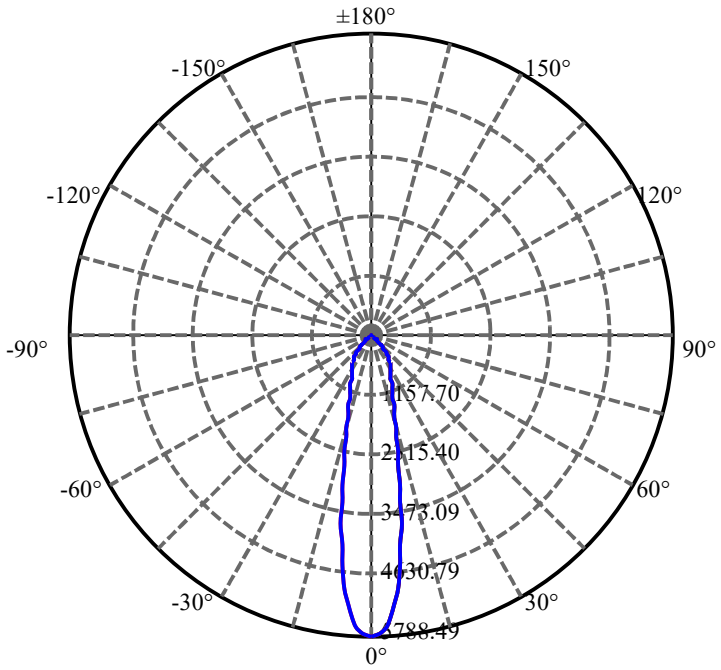
Client: NT
LumCAT: 1-1703-LM
Luminaire: 92.70.121.00
Report No: 20251217-B008
Ballast type: AC

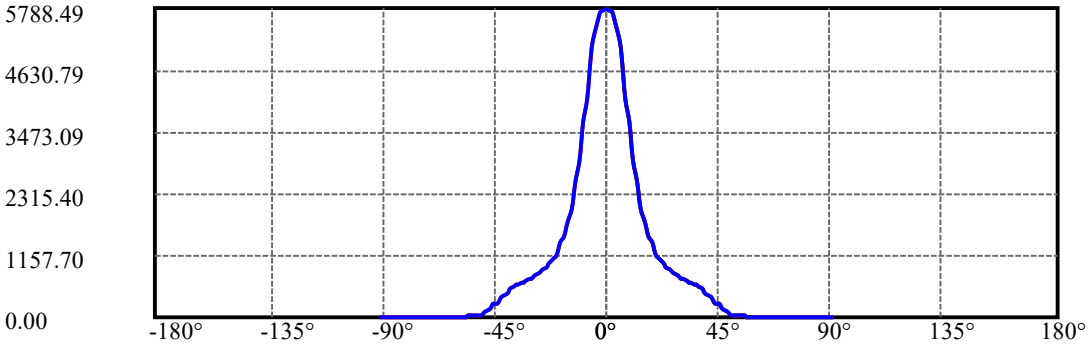
Test No: 20251217-C008	Voltage(V): 34.540
LampCAT: LUMINUS CXM-11(TC) LES11	Current(A): 0.451
Lamp flux(lm): 2013.0	Power (W): 15.577
Number of Lamps: 1	PF: 0.000
Length(mm): 50	Width(mm): 50
Phm Type: C	Height(mm): 22

Photometric Results

Lumens(lm): 1943.58, Efficiency(%): 96.55% , Luminous Efficacy(lm/W): 124.77
Central intensity(cd): 5788.490, Maximum intensity(cd): 5788.490
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=22.2
[C90/270]Total=22.2
Field angle(10%Imax): [C0/180]Total=73.0
[C90/270]Total=73.0
Maximum s/h(1/2): C0_180=0.37 C90_270=0.37
Maximum s/h(1/4): C0_180=0.41 C90_270=0.41
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.55%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.613%

Light Distribution Curve [Unit:cd]





C0(Max):

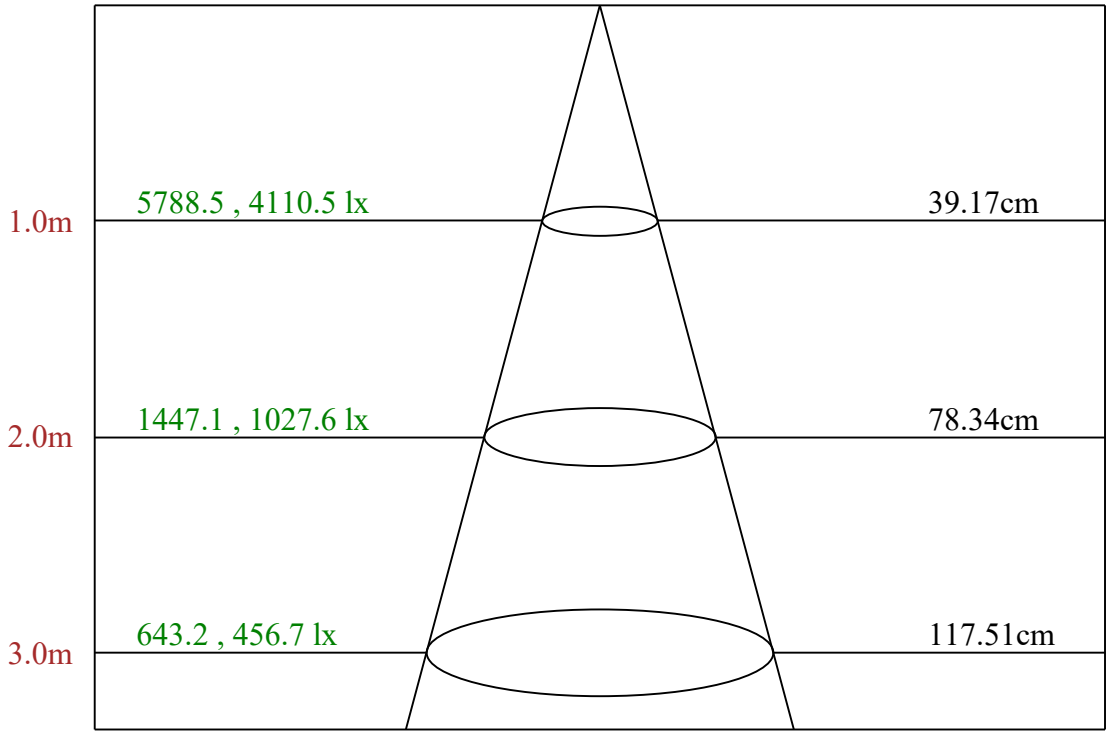
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:36.5 Right:36.5
:C90/270Left:36.5 Right:36.5

Beam Angle(50%Imax):C0/180Left:11.1 Right:11.1
:C90/270Left:11.1 Right:11.1

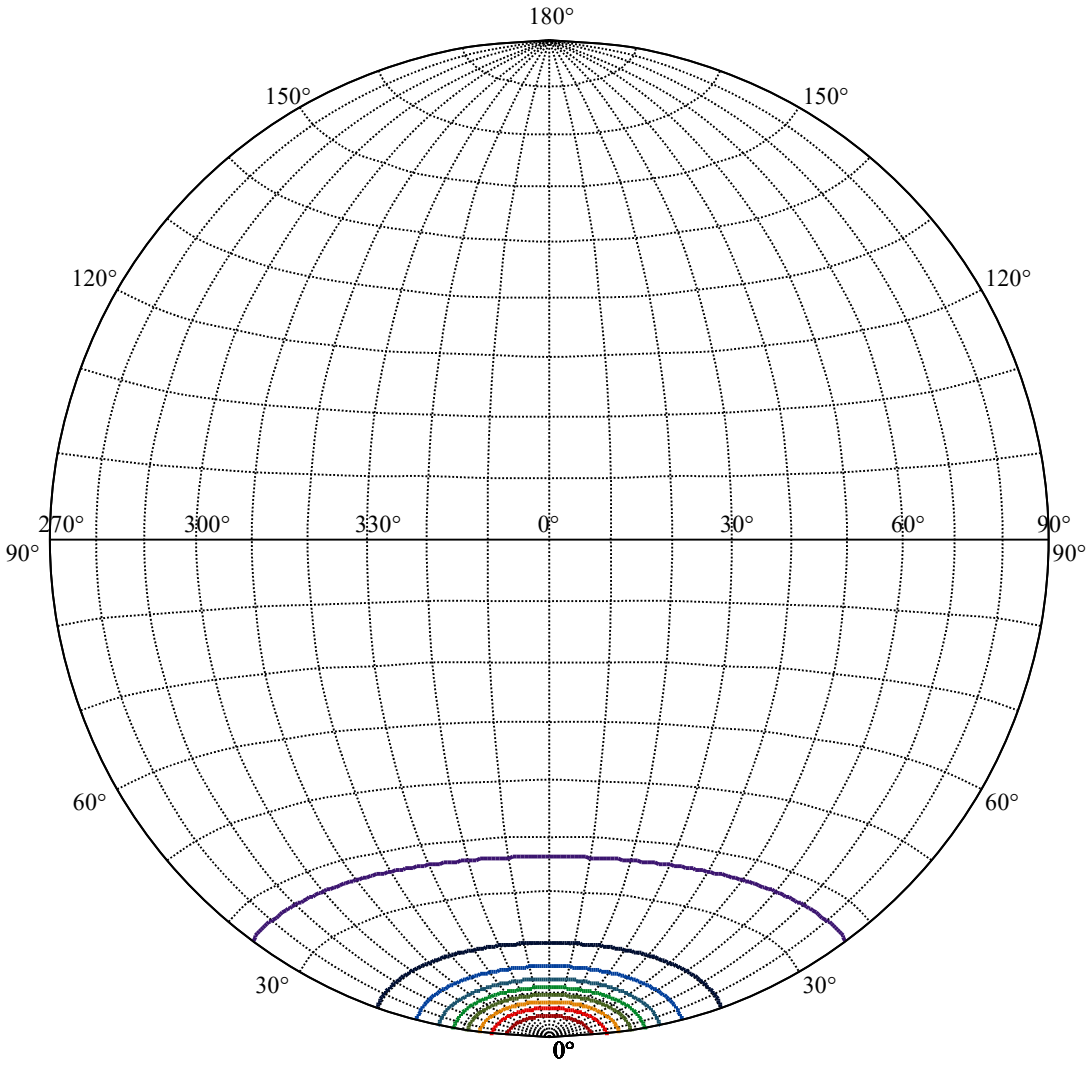
Lux distance Curve



Max , Ave

Beam angle of C0 plane 22.16

ISO candela diagram on circular web



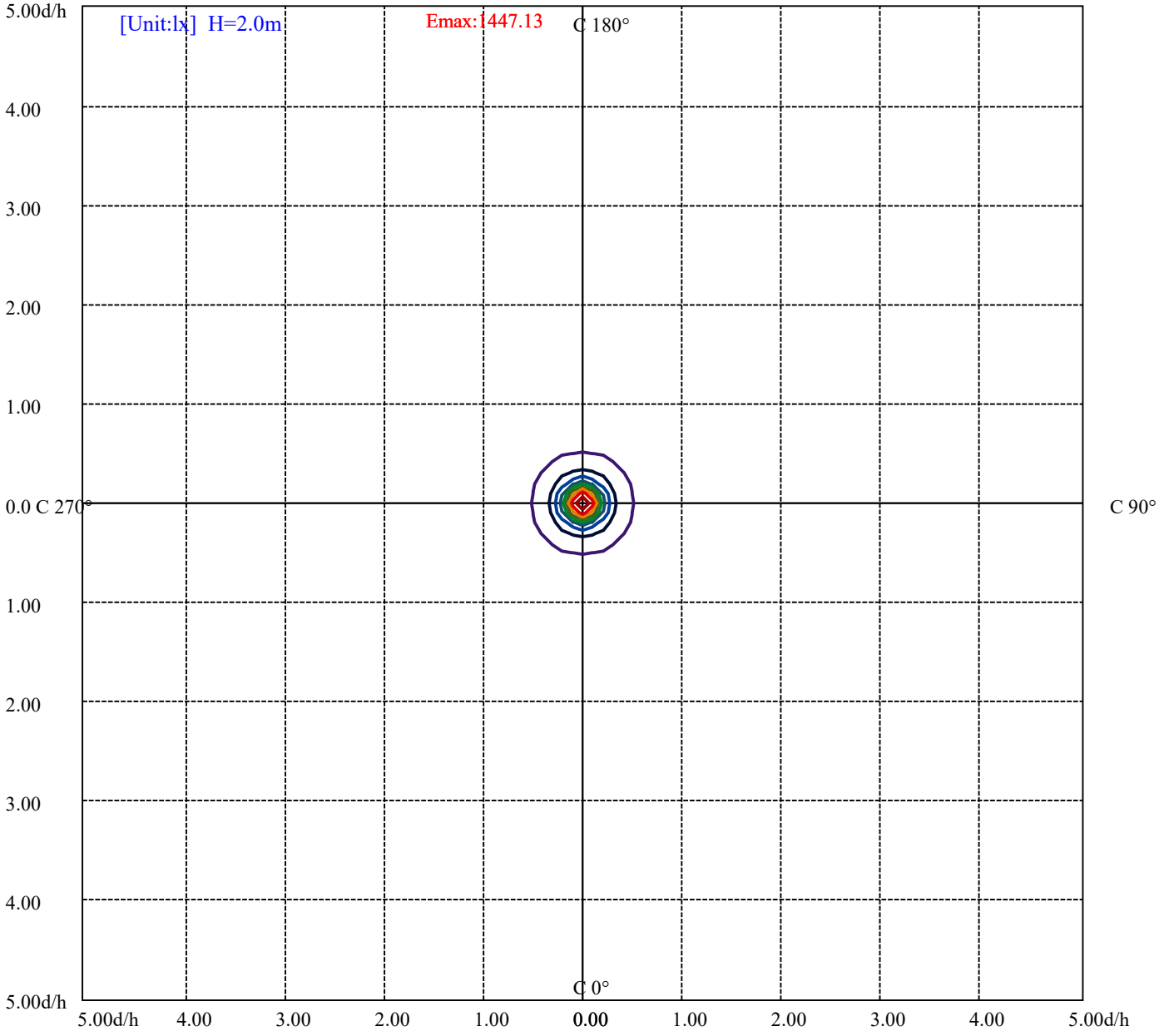
House [Unit:cd] Road

Imax:5788.49

(10%Imax) 578.849
(20%Imax) 1157.7
(30%Imax) 1736.55
(40%Imax) 2315.4
(50%Imax) 2894.25
(60%Imax) 3473.09
(70%Imax) 4051.94
(80%Imax) 4630.79
(90%Imax) 5209.64

NT NT 1-1703-LM

ISO illuminance diagram

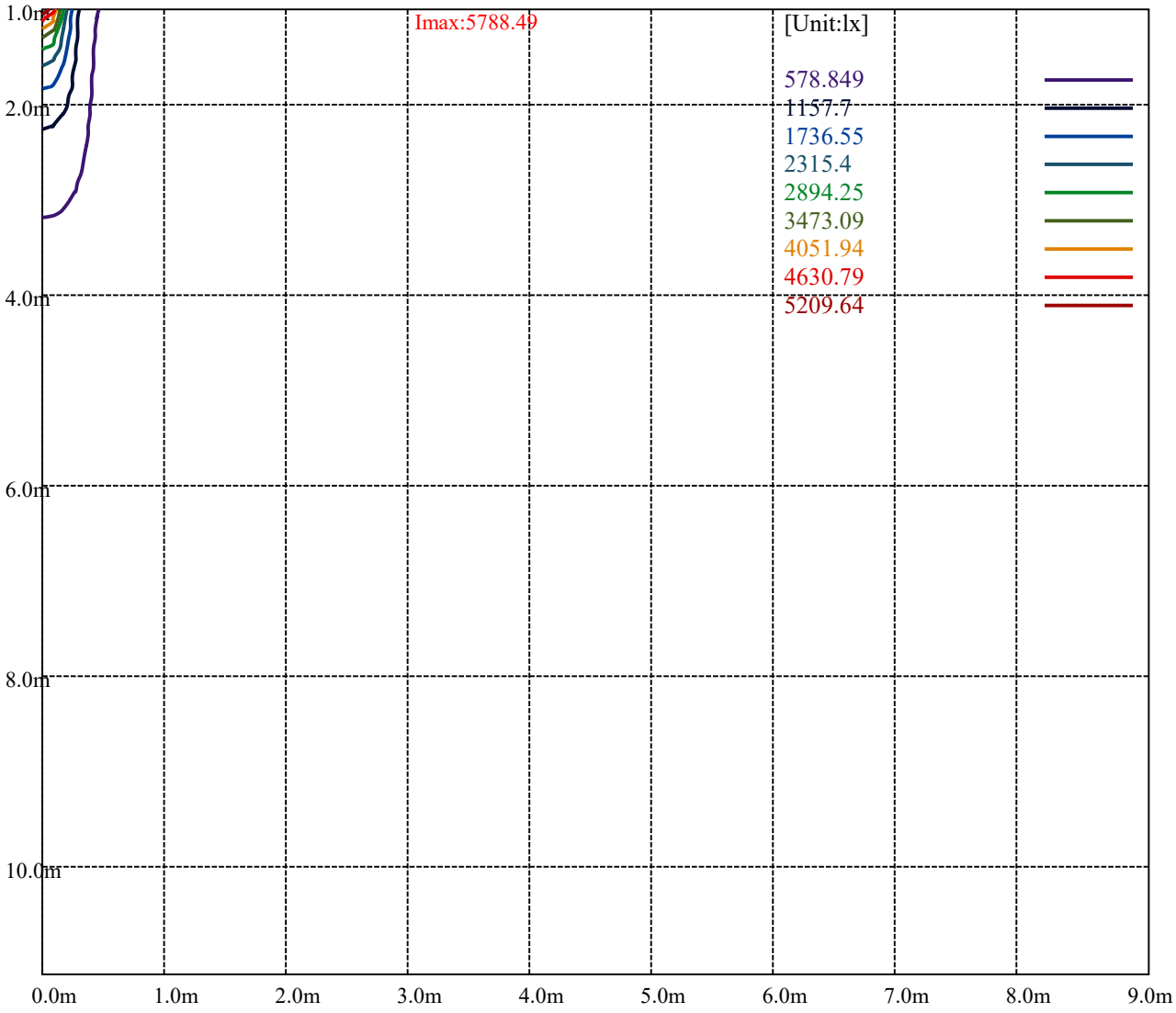


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/12/17
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/12/17
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 7.50

NT NT 1-1703-LM

Luminance Limitting Curve(no luminous side)

Luminance Table

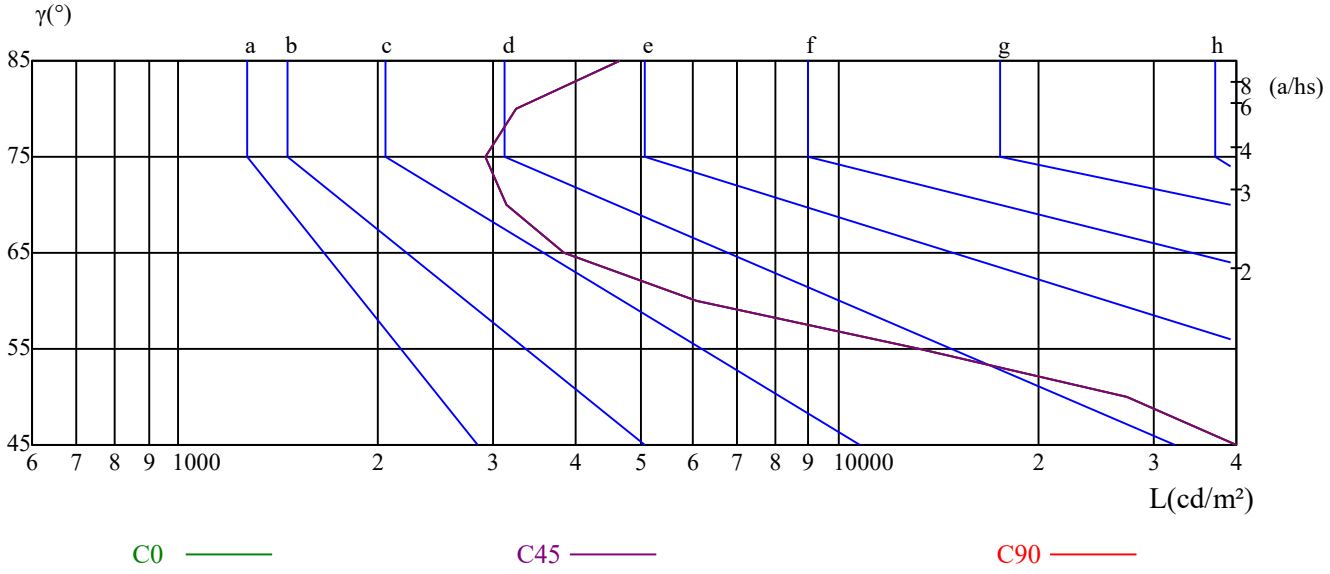
γ	45	50	55	60	65	70	75	80	85
C0	136992	27237	13229	6092	3847	3141	2912	3256	4647
C45	136992	27237	13229	6092	3847	3141	2912	3256	4647
C90	136992	27237	13229	6092	3847	3141	2912	3256	4647

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3847	3847	3847	2912	2912	2912	4647	4647	4647

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
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
		a	b	c	d	e	f	g	h

Luminance Limitting Curve



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/12/17
Humidity(%): 60.0%

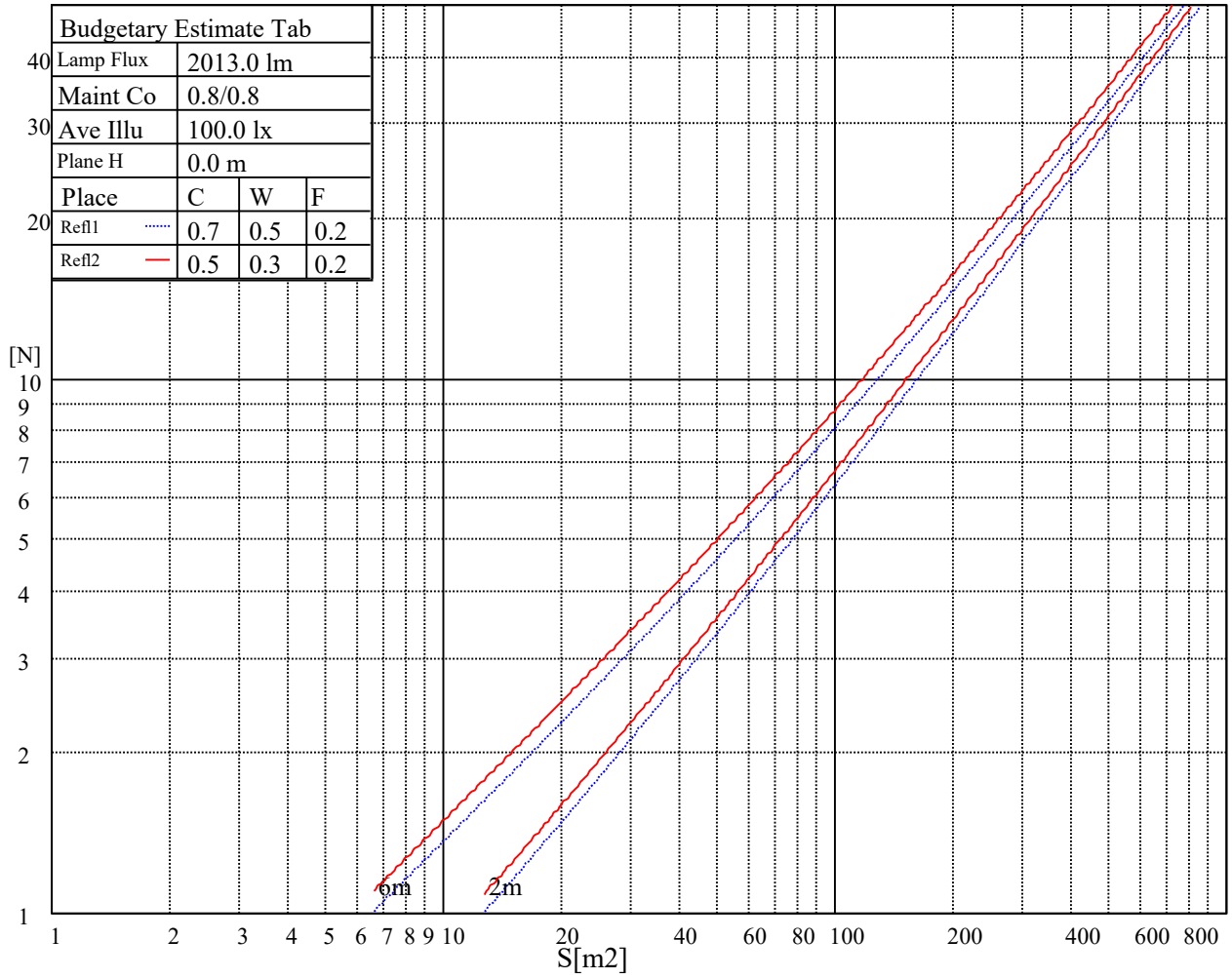
Operator: YZQ
Distance(m): 7.50

Illumination assessment according UGR											
Rf of Ceiling		70	70	50	50	30	70	70	50	50	30
Rf of Wall		50	30	50	30	30	50	30	50	30	30
Rf of Floor		20	20	20	20	20	20	20	20	20	20
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	24.53	25.54	24.89	25.85	26.16	24.53	25.54	24.89	25.85	26.17
	3H	24.33	25.23	24.72	25.56	25.91	24.34	25.23	24.72	25.57	25.91
	4H	24.23	25.06	24.63	25.41	25.78	24.24	25.06	24.64	25.42	25.78
	6H	24.15	24.90	24.57	25.28	25.68	24.15	24.90	24.57	25.28	25.68
	8H	24.08	24.80	24.50	25.18	25.59	24.08	24.80	24.50	25.18	25.59
	12H	24.01	24.69	24.43	25.08	25.50	24.01	24.69	24.43	25.08	25.50
4H	2H	24.23	25.06	24.63	25.41	25.78	24.24	25.06	24.64	25.42	25.78
	3H	24.00	24.69	24.43	25.08	25.50	24.01	24.69	24.43	25.09	25.50
	4H	23.93	24.52	24.37	24.95	25.40	23.94	24.53	24.37	24.95	25.40
	6H	23.80	24.32	24.27	24.77	25.22	23.80	24.32	24.27	24.77	25.22
	8H	23.74	24.22	24.23	24.68	25.16	23.74	24.22	24.23	24.68	25.15
	12H	23.70	24.14	24.19	24.59	25.11	23.69	24.13	24.18	24.59	25.11
8H	4H	23.74	24.22	24.22	24.68	25.15	23.74	24.22	24.22	24.68	25.15
	6H	23.59	23.98	24.09	24.46	24.97	23.59	23.98	24.09	24.46	24.97
	8H	23.58	23.91	24.11	24.43	24.93	23.57	23.91	24.11	24.43	24.93
	12H	23.53	23.79	24.07	24.31	24.83	23.52	23.78	24.07	24.30	24.82
12H	4H	23.68	24.13	24.17	24.58	25.10	23.68	24.13	24.17	24.58	25.10
	6H	23.57	23.91	24.11	24.43	24.93	23.57	23.90	24.10	24.43	24.92
	8H	23.53	23.79	24.07	24.30	24.83	23.52	23.78	24.06	24.30	24.82

Variation with the observer position at spacings:		
S = 1.0H	3.3/-12.9	3.3/-12.9
S = 1.5H	5.5/-16.2	5.5/-16.2
S = 2.0H	7.5/-16.3	7.5/-16.3
Standard tables:	BK0	BK0
Uncorrected UGR	5.3	5.3

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25

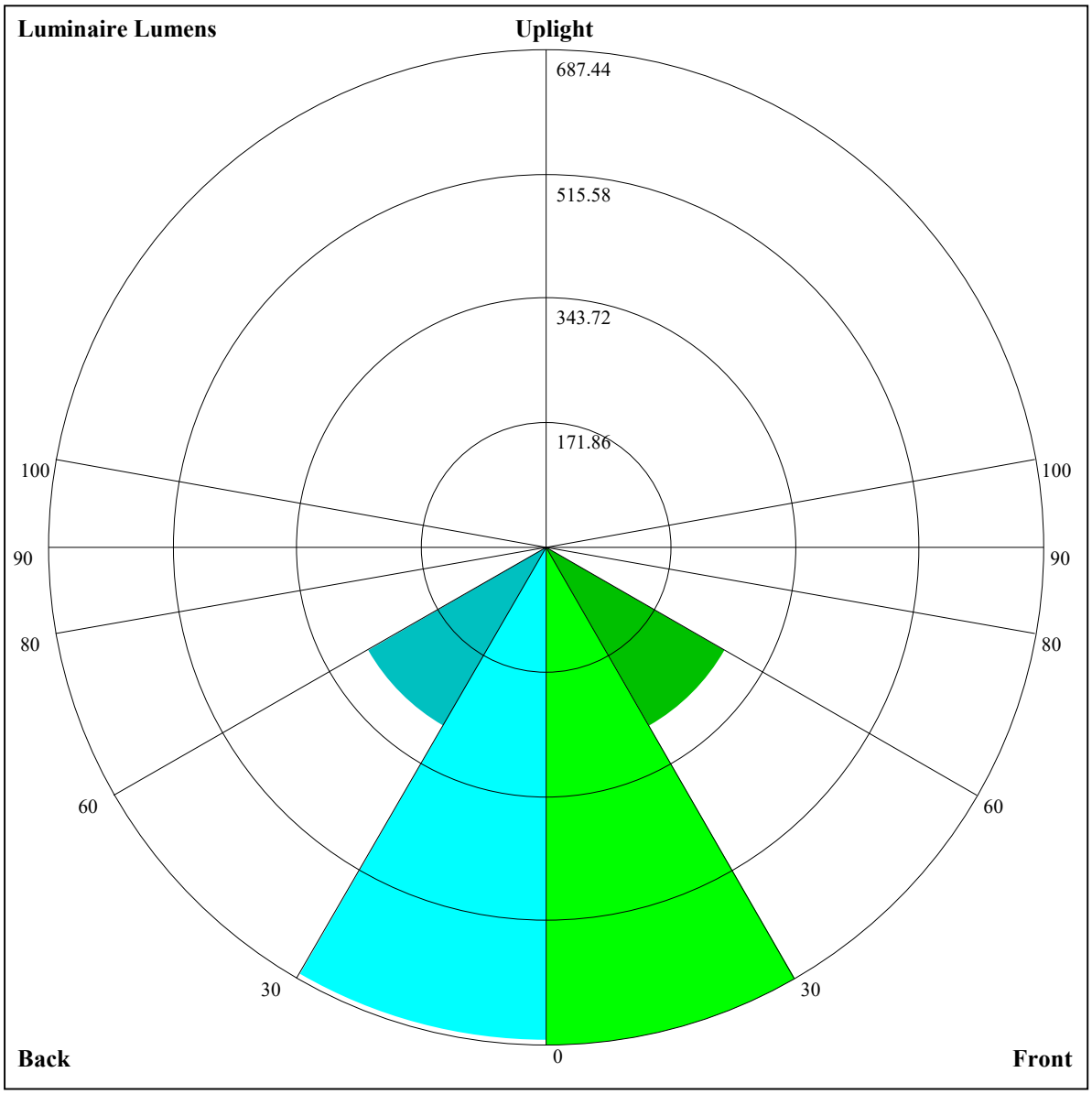
Budgetary Estimate Table



Equipment: GMS 1800 Date: 2025/12/17 Operator: YZQ
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.50

Utilization factor table for indoor luminaire

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.15	1.15	1.15	1.12	1.12	1.12	1.07	1.07	1.07	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.07	1.05	1.03	1.05	1.03	1.01	1.01	1.00	0.98	0.98	0.97	0.95	0.95	0.94	0.93	0.91
2	1.00	0.97	0.94	0.99	0.95	0.93	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.85
3	0.94	0.90	0.86	0.93	0.89	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.81	0.80
4	0.89	0.84	0.80	0.88	0.83	0.79	0.85	0.82	0.78	0.84	0.80	0.77	0.82	0.79	0.77	0.75
5	0.84	0.78	0.74	0.83	0.78	0.74	0.81	0.77	0.73	0.79	0.76	0.73	0.78	0.75	0.72	0.71
6	0.79	0.74	0.70	0.78	0.73	0.70	0.77	0.72	0.69	0.76	0.72	0.69	0.74	0.71	0.68	0.67
7	0.75	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.63
8	0.71	0.66	0.62	0.71	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.60
9	0.68	0.63	0.59	0.67	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.57
10	0.65	0.60	0.56	0.64	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.55



Luminaire Lumens:
FL=687.44,FM=284.89,FH=3.34,FVH=0.59
BL=682.48,BM=285.56,BH=3.09,BVH=0.5
UL=0,UH=0

BUG Rating:B2-U0-G0

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	5801.01	5763.32	5729.01	5624.38	5376.88	5070.32	4676.57	4149.51	3894.69
45.0	5769.51	5798.19	5794.82	5754.88	5678.38	5602.44	5350.44	5036.01	4644.51
90.0	5806.07	5789.76	5736.88	5644.63	5421.88	5257.63	4897.07	4465.07	4010.57
135.0	5777.38	5789.19	5773.44	5741.38	5630.01	5456.76	5167.63	4786.26	4518.51
180.0	5801.01	5799.88	5772.88	5689.63	5540.57	5308.26	5133.88	4678.26	4256.94
225.0	5769.51	5688.51	5546.19	5270.57	5088.32	4731.69	4327.26	3905.38	3424.44
270.0	5806.07	5785.82	5723.38	5604.13	5510.19	5226.13	4897.07	4492.63	4066.26
315.0	5777.38	5743.63	5636.19	5549.01	5341.44	4821.13	4572.51	4133.19	3698.94
360.0	5801.01	5763.32	5729.01	5624.38	5376.88	5070.32	4676.57	4149.51	3894.69

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3482.94	3104.38	2760.13	2377.63	2210.01	1971.51	1770.13	1578.88	1447.82
45.0	4211.94	3706.26	3469.44	2966.57	2761.26	2383.82	2101.44	1862.38	1666.63
90.0	3497.57	3255.69	2881.07	2548.63	2188.63	1934.94	1807.82	1571.01	1410.69
135.0	3961.63	3525.13	3125.19	2695.44	2369.76	2095.26	1874.19	1760.57	1568.19
180.0	3836.19	3428.38	2977.82	2632.44	2316.88	2155.44	1892.76	1715.01	1563.13
225.0	3192.69	2839.44	2507.57	2209.44	1917.51	1797.13	1569.32	1412.94	1346.01
270.0	3813.69	3326.01	2953.63	2603.19	2238.13	2001.32	1806.13	1645.26	1560.88
315.0	3289.44	2849.57	2642.57	2333.19	2082.32	1877.57	1685.19	1549.07	1428.69
360.0	3482.94	3104.38	2760.13	2377.63	2210.01	1971.51	1770.13	1578.88	1447.82

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1379.76	1241.38	1095.19	1095.19	1035.90	976.16	950.01	910.74	874.52
45.0	1567.63	1402.26	1285.26	1185.69	1099.63	1055.19	977.57	908.94	882.51
90.0	1340.94	1211.57	1095.30	1081.13	1013.51	956.53	907.82	855.45	831.77
135.0	1434.88	1320.69	1225.63	1173.88	1085.01	1020.88	969.13	915.13	875.76
180.0	1432.07	1362.88	1243.63	1130.57	1086.69	1023.13	957.32	906.69	863.38
225.0	1250.38	1094.85	1094.85	1028.64	968.91	917.83	864.84	840.71	805.05
270.0	1413.51	1308.88	1217.19	1137.32	1093.44	1018.63	948.32	920.76	880.26
315.0	1306.07	1252.07	1083.54	1083.54	1047.71	993.60	946.46	903.43	856.41
360.0	1379.76	1241.38	1095.19	1095.19	1035.90	976.16	950.01	910.74	874.52

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	837.45	794.87	775.01	745.54	717.75	694.63	670.16	658.13	637.14
45.0	836.94	804.32	773.94	743.01	722.19	684.51	656.38	631.63	610.26
90.0	795.71	762.08	734.96	705.88	693.84	677.76	660.49	638.16	615.38
135.0	843.13	810.51	790.82	755.94	732.32	709.26	688.44	676.07	641.19
180.0	840.32	798.69	767.19	736.82	711.51	696.88	669.88	644.01	633.88
225.0	771.58	740.81	704.03	685.97	658.86	636.24	610.03	588.83	574.71
270.0	839.76	810.51	784.63	768.32	731.76	705.88	682.82	663.69	651.32
315.0	834.47	800.44	768.04	739.86	709.59	695.59	664.93	652.67	629.94
360.0	837.45	794.87	775.01	745.54	717.75	694.63	670.16	658.13	637.14

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	607.05	563.46	522.73	478.24	429.24	369.39	339.58	290.48	243.00
45.0	597.88	569.19	537.69	497.76	449.94	408.32	367.26	325.63	300.88
90.0	583.71	550.24	500.63	472.78	429.53	384.92	339.53	280.35	251.83
135.0	617.57	598.44	560.76	509.01	462.32	413.38	382.44	325.07	305.38
180.0	609.69	579.32	546.13	509.01	482.57	425.76	376.82	326.19	296.38
225.0	528.53	477.28	452.03	412.59	371.31	330.36	281.36	256.95	216.00
270.0	624.88	592.26	554.01	502.26	482.57	408.88	361.63	332.38	281.76
315.0	591.02	551.36	507.99	451.29	421.82	372.43	323.72	275.57	219.04
360.0	607.05	563.46	522.73	478.24	429.24	369.39	339.58	290.48	243.00

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	197.44	145.41	121.78	73.35	42.64	33.69	27.73	25.99	24.08
45.0	300.88	205.76	182.53	138.43	103.05	71.27	47.98	39.43	30.88
90.0	187.65	138.49	124.09	81.90	55.97	39.60	33.41	31.61	28.41
135.0	305.38	183.77	141.53	101.93	68.23	51.64	31.44	26.27	24.69
180.0	296.38	181.97	140.74	117.79	78.24	51.64	35.38	29.64	28.74
225.0	176.79	138.43	95.51	64.80	42.58	30.71	28.01	24.08	20.59
270.0	281.76	188.78	139.33	102.04	68.68	43.48	34.65	27.62	24.92
315.0	191.08	146.64	82.35	62.38	36.51	28.13	21.83	20.42	19.63
360.0	197.44	145.41	121.78	73.35	42.64	33.69	27.73	25.99	24.08

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	20.64	18.62	15.30	12.49	10.24	8.04	7.43	6.19	5.29
45.0	26.27	22.39	18.90	15.08	12.21	9.90	8.72	7.20	6.47
90.0	24.36	20.14	15.53	13.56	9.90	7.93	7.43	6.58	5.68
135.0	23.29	21.99	18.62	14.34	12.77	10.35	8.94	7.65	6.36
180.0	25.76	20.31	17.72	12.99	9.96	7.76	6.53	6.02	5.12
225.0	17.21	13.89	12.38	10.35	8.83	7.48	6.81	6.19	5.68
270.0	22.28	18.96	17.72	14.18	10.52	9.23	7.54	6.47	5.40
315.0	17.72	15.47	13.16	10.58	9.51	8.27	7.54	6.58	5.85
360.0	20.64	18.62	15.30	12.49	10.24	8.04	7.43	6.19	5.29

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.95	4.39	4.05	3.66	3.32	3.21	2.98	2.76	2.59
45.0	5.85	5.23	5.01	4.56	4.22	4.05	3.83	3.71	3.43
90.0	5.01	4.33	4.05	3.77	3.43	3.09	2.81	2.64	2.36
135.0	5.57	4.28	3.38	2.76	2.31	2.14	1.91	1.69	1.58
180.0	4.39	3.77	3.38	3.04	2.76	2.59	2.48	2.31	2.08
225.0	5.06	4.89	4.56	4.44	4.16	3.94	3.77	3.43	3.26
270.0	4.73	4.44	4.11	3.71	3.43	3.26	2.98	2.70	2.53
315.0	5.12	4.56	3.99	3.77	3.38	2.87	2.53	2.25	2.14
360.0	4.95	4.39	4.05	3.66	3.32	3.21	2.98	2.76	2.59

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.42	2.31	2.14	2.03	1.97	1.86	1.74	1.63	1.58
45.0	3.26	3.09	2.93	2.76	2.59	2.48	2.48	2.36	2.25
90.0	1.91	1.80	1.63	1.52	1.41	1.35	1.29	1.24	1.13
135.0	1.46	1.41	1.29	1.24	1.24	1.13	1.13	1.01	0.96
180.0	1.86	1.69	1.63	1.58	1.35	1.35	1.24	1.18	1.01
225.0	2.98	2.76	2.64	2.53	2.31	2.25	2.03	1.97	1.86
270.0	2.42	2.19	2.08	1.91	1.91	1.80	1.74	1.52	1.52
315.0	1.97	1.80	1.69	1.52	1.35	1.29	1.13	1.13	1.01
360.0	2.42	2.31	2.14	2.03	1.97	1.86	1.74	1.63	1.58

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.52	1.29	1.24	1.13	1.01	1.01	0.90	0.84	0.73
45.0	2.14	2.03	1.91	1.74	1.69	1.58	1.41	1.29	1.01
90.0	1.07	1.01	1.01	0.90	0.90	0.84	0.79	0.73	0.68
135.0	0.96	0.90	0.90	0.84	0.84	0.84	0.84	0.73	0.73
180.0	0.96	0.90	0.90	0.84	0.79	0.73	0.68	0.68	0.56
225.0	1.69	1.58	1.35	1.24	1.07	0.96	0.73	0.62	0.51
270.0	1.41	1.24	1.18	1.07	0.96	0.84	0.79	0.68	0.68
315.0	0.90	0.90	0.84	0.84	0.84	0.79	0.73	0.62	0.62
360.0	1.52	1.29	1.24	1.13	1.01	1.01	0.90	0.84	0.73

Intensity data(cd)

C/γ(°)	90.0
0.0	0.73
45.0	0.96
90.0	0.68
135.0	0.68
180.0	0.51
225.0	0.45
270.0	0.56
315.0	0.62
360.0	0.73