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

Nata

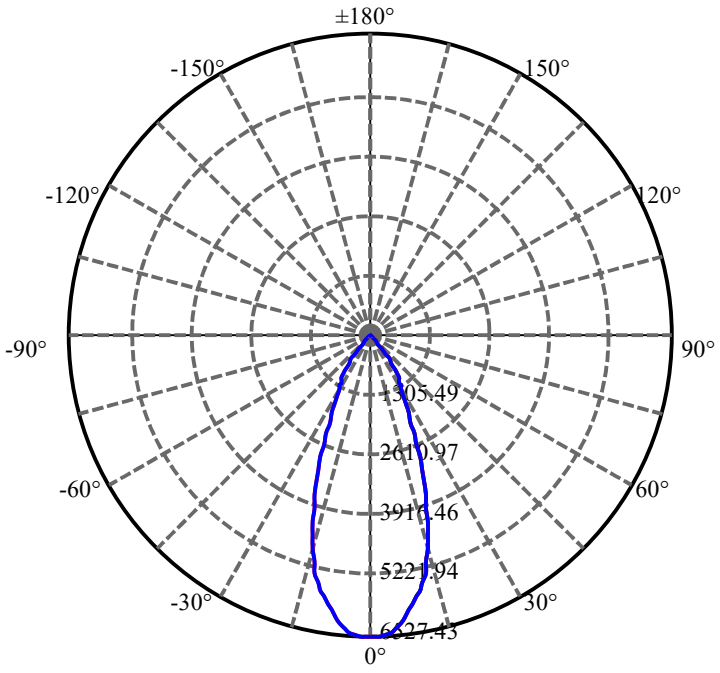
Client: NT
LumCAT: 3-2882-LM2
Luminaire: 92.70.121.00 LED HOLDER
Report No: 20260106-B005
Ballast type: DC

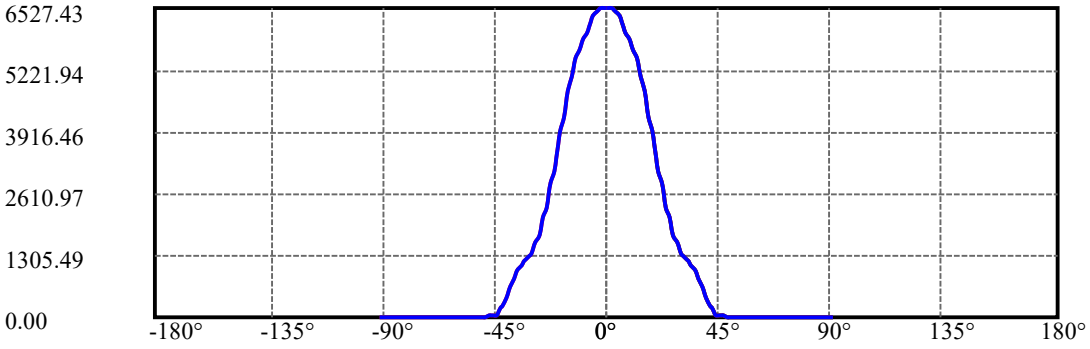
Test No: 20260106-C005	Voltage(V): 36.920
LampCAT: CITIZEN CLU038 LES14.5	Current(A): 0.718
Lamp flux(lm): 3692.9	Power (W): 26.500
Number of Lamps: 1	PF: 0.000
Length(mm): 92	Width(mm): 92
Phm Type: C	Height(mm): 49

Photometric Results

Lumens(lm): 3567.54, Efficiency(%): 96.61% , Luminous Efficacy(lm/W): 134.62
Central intensity(cd): 6527.430, Maximum intensity(cd): 6527.430
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=40.8
[C90/270]Total=40.8
Field angle(10%Imax): [C0/180]Total=76.0
[C90/270]Total=76.0
Maximum s/h(1/2): C0_180=0.66 C90_270=0.66
Maximum s/h(1/4): C0_180=0.65 C90_270=0.65
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.61%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.148%

Light Distribution Curve [Unit:cd]





C0(Max):

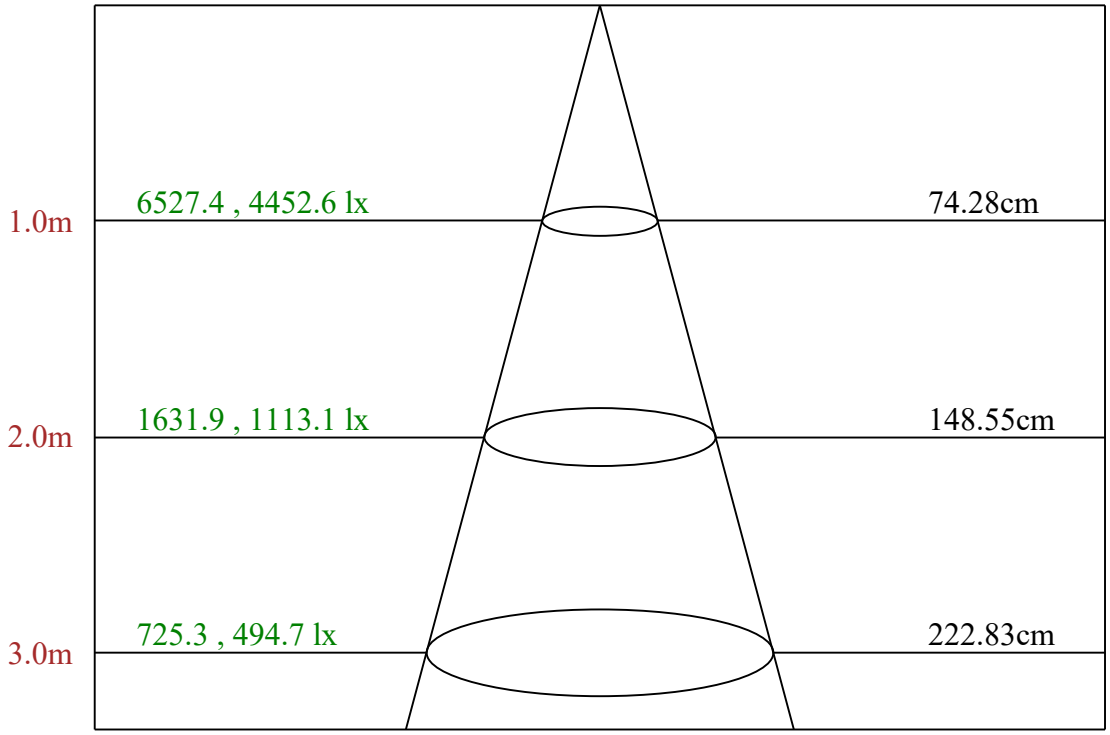
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:38.0 Right:38.0
:C90/270Left:38.0 Right:38.0

Beam Angle(50%Imax):C0/180Left:20.4 Right:20.4
:C90/270Left:20.4 Right:20.4

Lux distance Curve

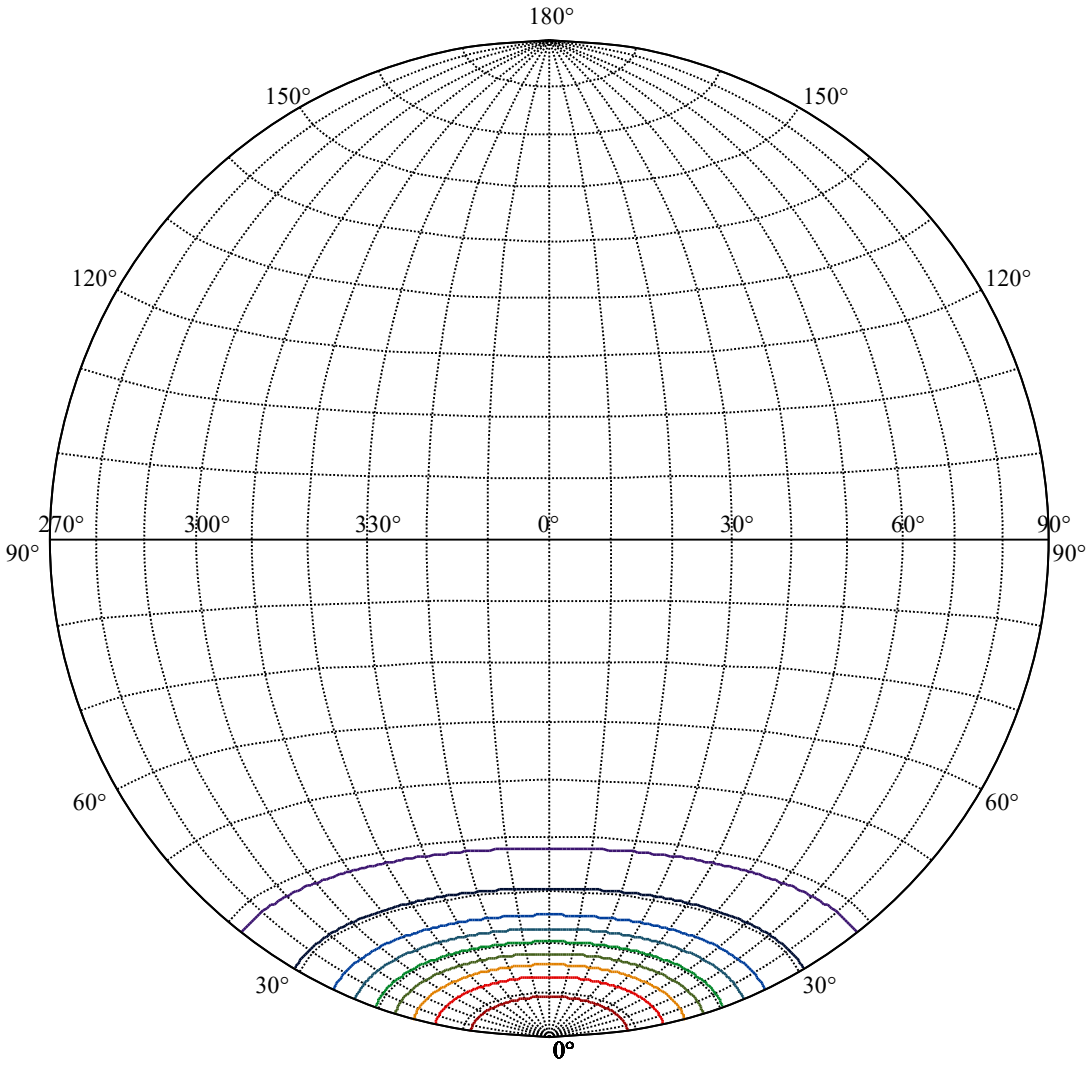


Max , Ave

Beam angle of C0 plane 40.75

Equipment: GMS1980	Date: 2026/1/6	Operator: YZQ
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 9.28

ISO candela diagram on circular web



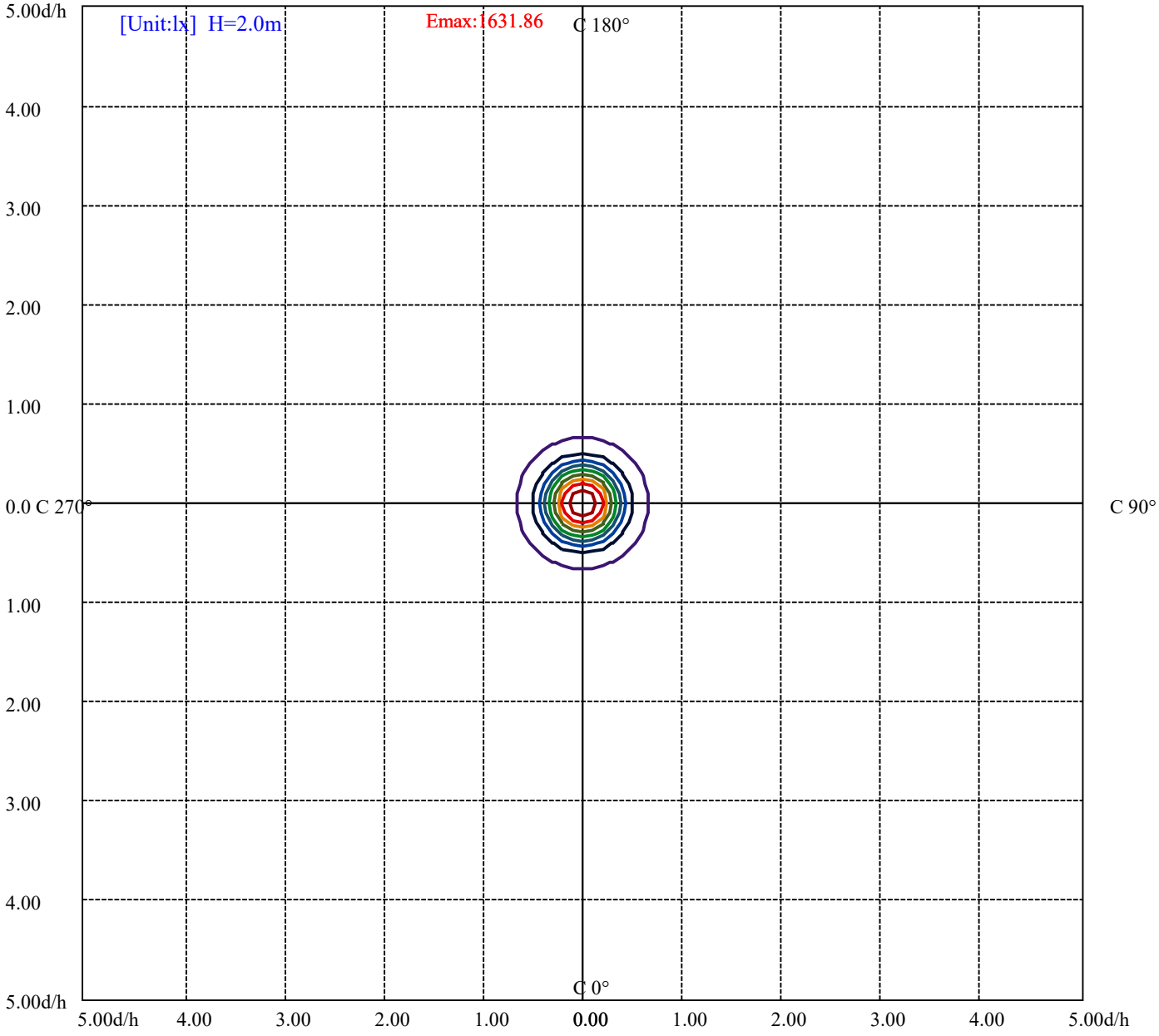
House [Unit:cd] Road

Imax:6527.43

(10%Imax) 652.743
(20%Imax) 1305.49
(30%Imax) 1958.23
(40%Imax) 2610.97
(50%Imax) 3263.71
(60%Imax) 3916.46
(70%Imax) 4569.2
(80%Imax) 5221.94
(90%Imax) 5874.69

NT Nata 3-2882-LM2

ISO illuminance diagram

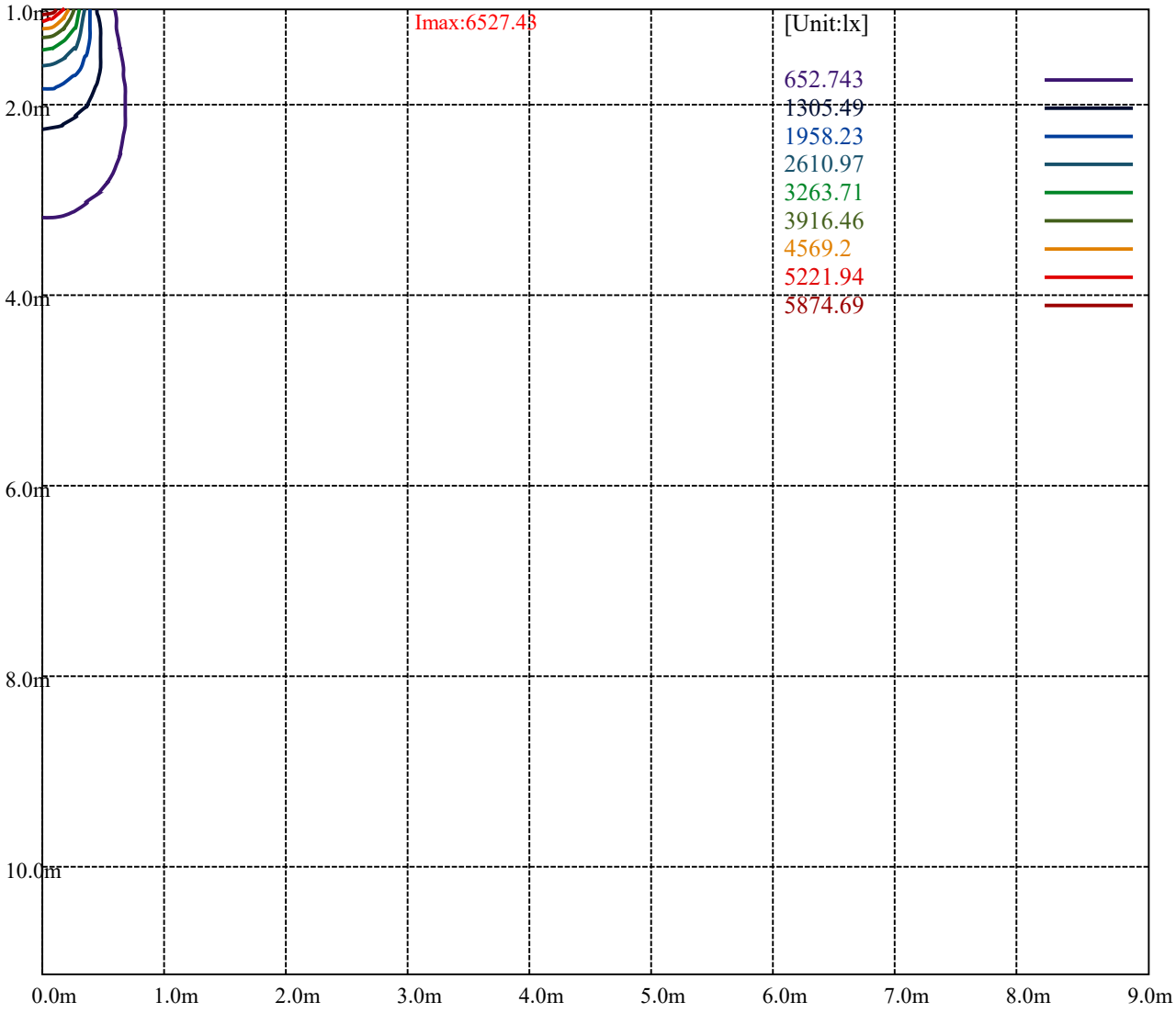


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/1/6
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/1/6
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

NT Nata 3-2882-LM2

Luminance Limitting Curve(no luminous side)

Luminance Table

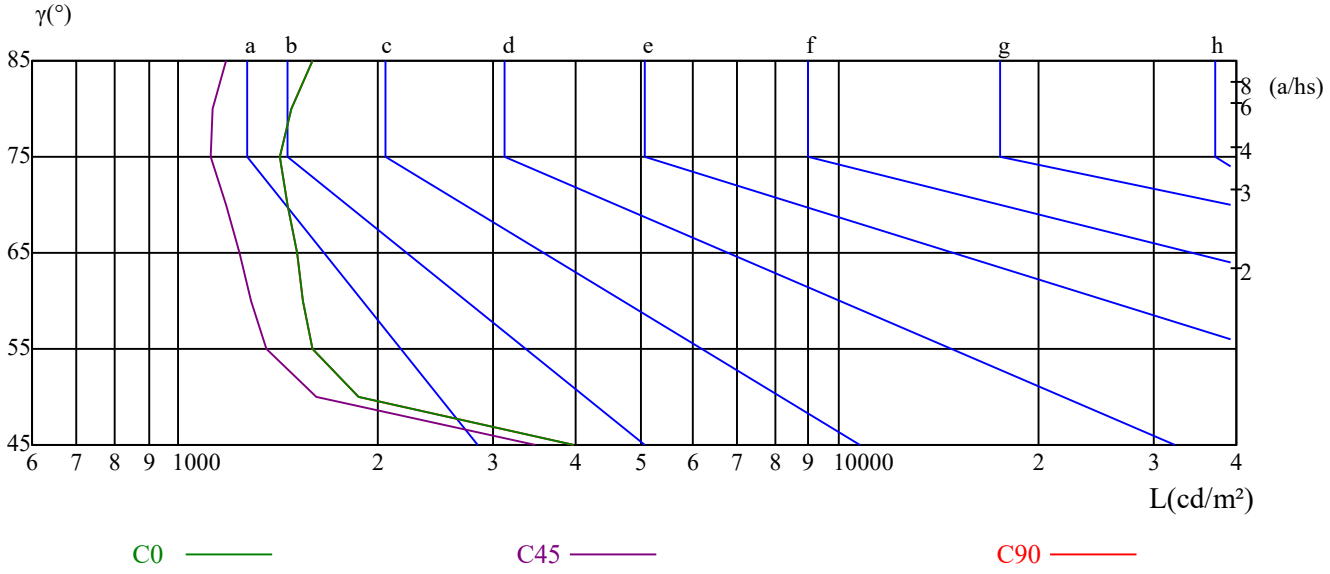
γ	45	50	55	60	65	70	75	80	85
C0	3974	1880	1599	1543	1509	1466	1428	1481	1600
C45	3474	1619	1357	1287	1236	1176	1119	1130	1180
C90	3974	1880	1599	1543	1509	1466	1428	1481	1600

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3232	3232	3232	4265	4265	4265	11338	11338	11338

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: GMS1980
Temperature(°C): 25.0

Date: 2026/1/6
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

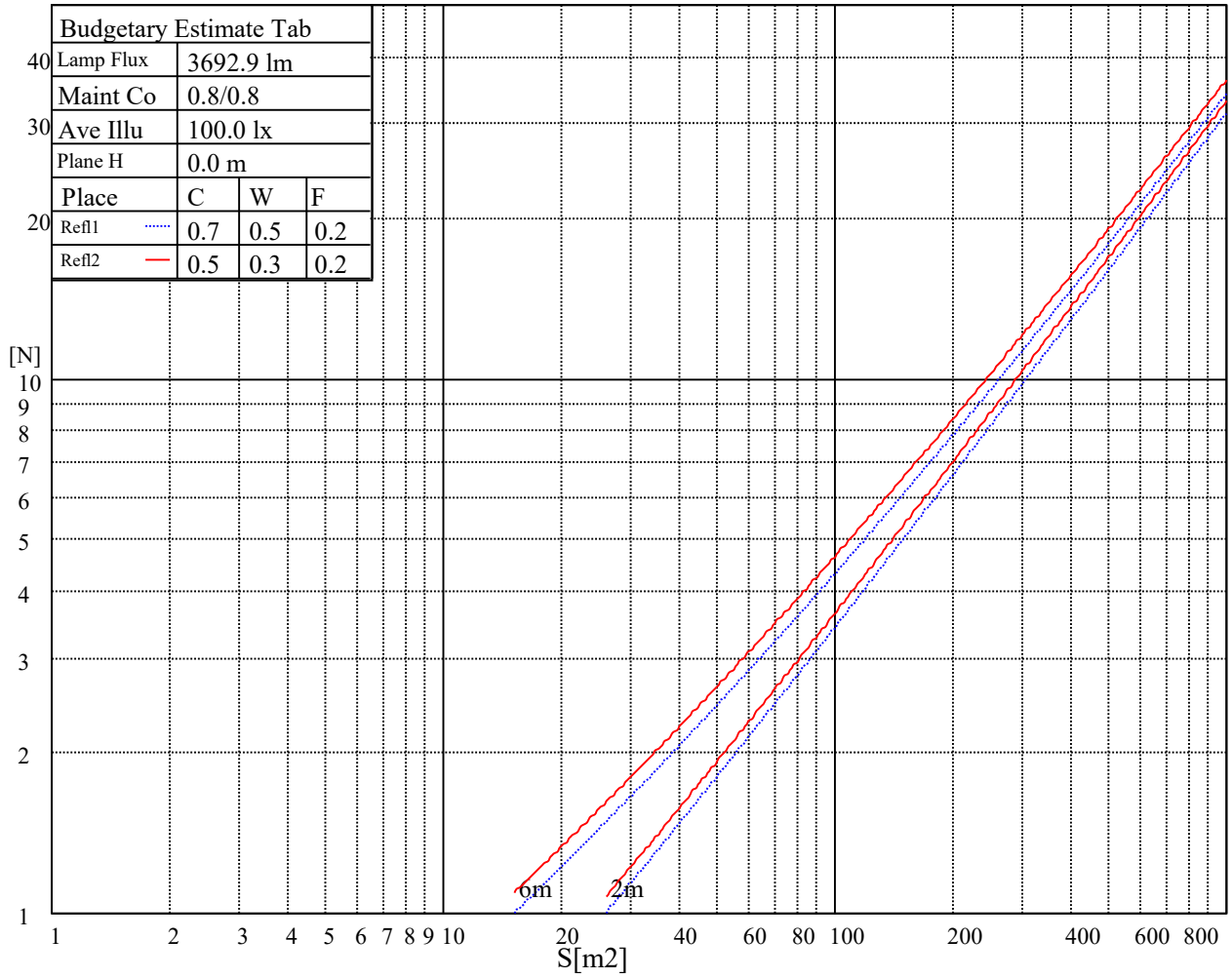
UGR Glare

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	18.41	19.33	18.77	19.64	19.96	18.13	19.05	18.49	19.36	19.68
	3H	18.21	19.03	18.60	19.37	19.71	17.94	18.76	18.33	19.10	19.44
	4H	18.12	18.88	18.52	19.23	19.60	17.85	18.61	18.25	18.96	19.33
	6H	18.05	18.75	18.47	19.12	19.52	17.79	18.48	18.20	18.85	19.25
	8H	18.00	18.66	18.42	19.04	19.45	17.73	18.39	18.15	18.77	19.18
	12H	17.95	18.57	18.37	18.97	19.38	17.68	18.30	18.11	18.70	19.12
4H	2H	18.09	18.84	18.49	19.20	19.57	17.81	18.57	18.21	18.92	19.29
	3H	17.86	18.50	18.29	18.89	19.31	17.59	18.23	18.02	18.62	19.04
	4H	17.81	18.36	18.25	18.78	19.23	17.54	18.09	17.98	18.52	18.97
	6H	17.71	18.19	18.18	18.65	19.10	17.45	17.93	17.92	18.38	18.84
	8H	17.68	18.13	18.17	18.59	19.06	17.42	17.87	17.91	18.33	18.80
	12H	17.67	18.08	18.16	18.54	19.06	17.41	17.82	17.90	18.28	18.80
8H	4H	17.62	18.06	18.10	18.52	19.00	17.35	17.80	17.84	18.26	18.73
	6H	17.52	17.89	18.03	18.37	18.88	17.26	17.63	17.77	18.11	18.62
	8H	17.56	17.86	18.10	18.39	18.89	17.30	17.60	17.84	18.13	18.63
	12H	17.58	17.81	18.12	18.33	18.85	17.32	17.55	17.87	18.07	18.59
12H	4H	17.57	17.98	18.06	18.43	18.95	17.30	17.71	17.79	18.17	18.69
	6H	17.52	17.82	18.05	18.34	18.84	17.26	17.56	17.79	18.08	18.58
	8H	17.52	17.75	18.07	18.27	18.80	17.27	17.50	17.81	18.01	18.54

Variation with the observer position at spacings:		
S = 1.0H	5.1/-11.8	5.1/-11.8
S = 1.5H	7.8/-10.2	7.8/-10.2
S = 2.0H	9.7/-9.0	9.7/-9.0
Standard tables:	BK0	BK0
Uncorrected UGR	-1.7	-1.7

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

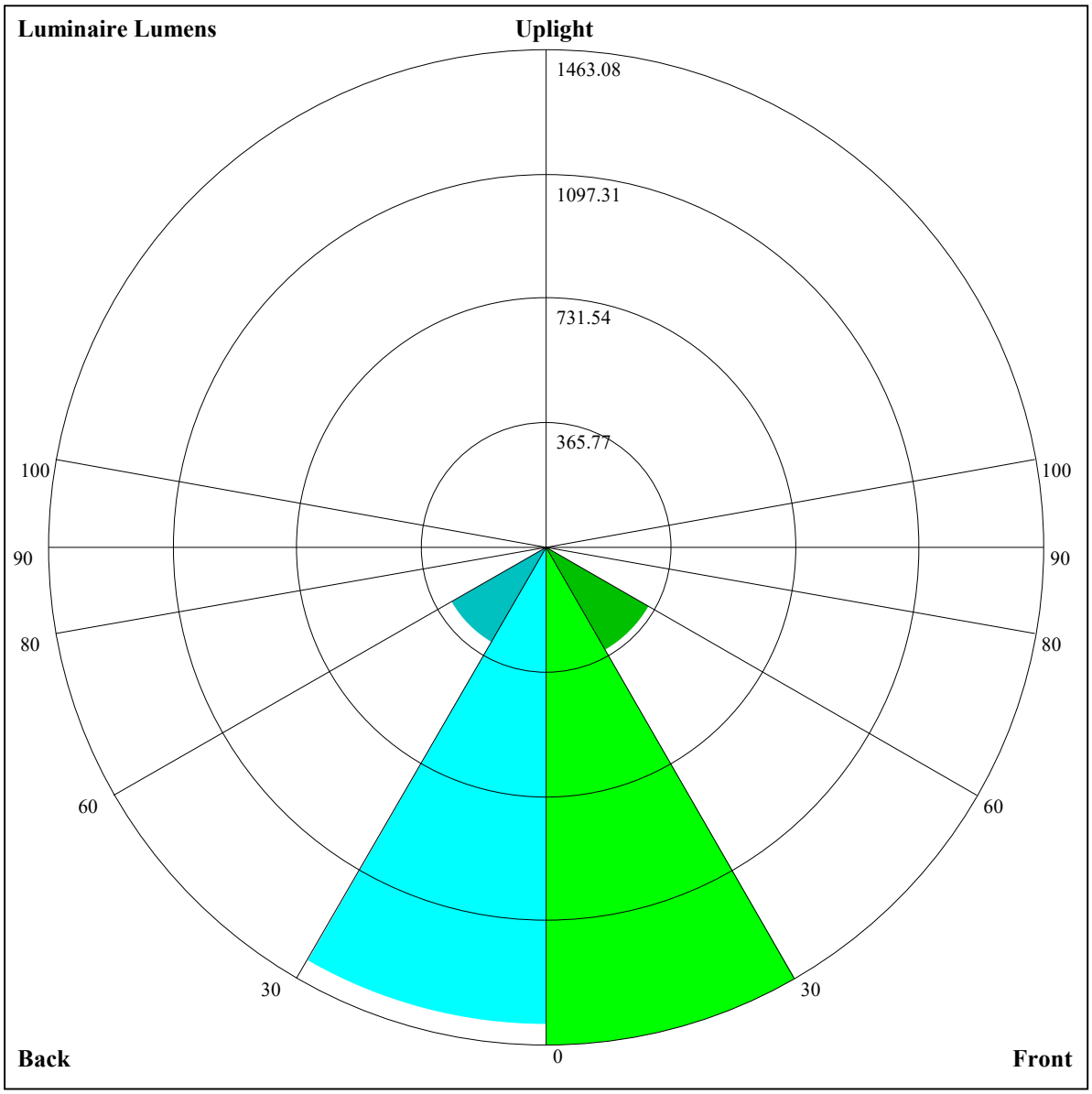
Budgetary Estimate Table



Equipment: GMS1980 Date: 2026/1/6 Operator: YZQ
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.28

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	1.08	1.05	1.03	1.05	1.03	1.02	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.91
2	1.01	0.97	0.94	0.99	0.96	0.93	0.96	0.94	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.86
3	0.95	0.91	0.87	0.94	0.90	0.86	0.91	0.88	0.85	0.89	0.86	0.84	0.87	0.84	0.83	0.81
4	0.90	0.85	0.81	0.89	0.84	0.81	0.87	0.83	0.80	0.85	0.81	0.79	0.83	0.80	0.78	0.77
5	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.74	0.72
6	0.80	0.75	0.72	0.80	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.73	0.70	0.69
7	0.76	0.71	0.68	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.65
8	0.73	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.62
9	0.69	0.64	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.67	0.63	0.60	0.59
10	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.64	0.60	0.57	0.56



Luminaire Lumens:
FL=1463.08,FM=348.66,FH=10.6,FVH=4.51
BL=1402.22,BM=321.91,BH=10.84,BVH=4.48
UL=0,UH=0

BUG Rating:B3-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	6514.08	6520.97	6539.92	6545.08	6546.81	6505.47	6420.21	6308.26	6173.91
45.0	6524.42	6521.83	6527.00	6566.61	6587.28	6599.34	6576.09	6498.58	6411.60
90.0	6525.28	6528.72	6563.17	6574.36	6552.84	6495.14	6396.96	6291.04	6169.61
135.0	6545.95	6526.14	6529.58	6527.86	6495.14	6438.30	6340.98	6191.14	6052.49
180.0	6514.08	6519.25	6496.86	6444.33	6330.65	6192.00	6047.32	5892.31	5717.49
225.0	6524.42	6499.44	6444.33	6361.65	6216.97	6067.99	5944.84	5801.02	5699.40
270.0	6525.28	6537.33	6533.89	6502.03	6437.44	6358.21	6219.56	6105.88	5989.62
315.0	6545.95	6545.95	6544.22	6496.86	6431.41	6332.37	6163.58	6030.10	5900.06
360.0	6514.08	6520.97	6539.92	6545.08	6546.81	6505.47	6420.21	6308.26	6173.91

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5979.29	5836.33	5713.18	5581.42	5387.65	5202.50	4976.01	4643.59	4365.43
45.0	6303.95	6193.72	6049.90	5942.26	5801.88	5660.65	5487.55	5202.50	4916.59
90.0	6040.43	5937.09	5792.41	5658.93	5486.69	5218.86	4957.06	4657.37	4352.51
135.0	5918.14	5794.99	5645.15	5524.58	5392.82	5236.08	4979.45	4740.04	4481.69
180.0	5583.14	5463.44	5331.68	5152.55	4965.67	4753.82	4447.24	4204.39	3966.70
225.0	5587.45	5472.91	5275.70	5075.90	4840.80	4586.75	4248.31	3990.81	3741.93
270.0	5869.92	5770.02	5652.04	5463.44	5267.95	5026.82	4738.32	4368.87	4088.99
315.0	5785.52	5632.23	5484.11	5310.15	5047.49	4802.05	4533.36	4188.02	3921.92
360.0	5979.29	5836.33	5713.18	5581.42	5387.65	5202.50	4976.01	4643.59	4365.43

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	4028.70	3762.60	3499.08	3245.89	2948.78	2717.98	2495.80	2283.08	1903.30
45.0	4613.45	4321.51	3951.20	3675.62	3405.21	3141.69	2829.94	2593.11	2367.48
90.0	3996.84	3722.12	3461.18	3195.94	2889.36	2646.50	2413.12	2146.16	1687.32
135.0	4158.74	3909.86	3666.15	3344.92	3098.63	2865.25	2585.36	2370.06	2160.80
180.0	3664.42	3421.57	3180.44	2891.08	2668.03	2453.60	2239.16	1990.28	1815.46
225.0	3412.10	3157.19	2856.63	2623.25	2402.79	2134.10	1709.62	1709.62	1597.41
270.0	3812.55	3542.14	3218.33	2966.00	2718.84	2423.46	2188.35	1923.11	1737.09
315.0	3644.62	3314.78	3065.90	2821.32	2593.11	2316.67	2109.99	1689.30	1689.30
360.0	4028.70	3762.60	3499.08	3245.89	2948.78	2717.98	2495.80	2283.08	1903.30

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1682.06	1682.06	1548.84	1417.85	1336.82	1275.93	1211.34	1170.52	1130.91
45.0	2096.21	1899.86	1728.48	1555.38	1446.01	1337.50	1272.92	1220.38	1174.74
90.0	1687.32	1571.75	1441.45	1338.71	1237.00	1176.03	1124.96	1082.25	1025.50
135.0	1966.17	1747.43	1593.28	1469.27	1371.95	1278.94	1222.11	1161.82	1124.79
180.0	1660.45	1531.27	1402.09	1319.42	1262.58	1202.30	1165.27	1091.21	994.75
225.0	1449.11	1359.03	1289.28	1232.35	1176.21	1136.42	1063.99	963.06	810.55
270.0	1574.33	1415.87	1325.45	1246.22	1181.63	1127.38	1091.21	1032.65	945.67
315.0	1549.27	1436.97	1348.36	1267.40	1214.01	1173.28	1123.67	1051.42	950.32
360.0	1682.06	1682.06	1548.84	1417.85	1336.82	1275.93	1211.34	1170.52	1130.91

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	1036.09	930.77	799.09	614.20	467.28	325.96	204.01	97.74	53.14
45.0	1125.65	1054.18	948.25	812.18	644.25	507.32	434.98	434.98	125.22
90.0	935.85	826.13	701.78	537.03	412.77	299.00	175.60	101.10	59.25
135.0	1061.93	937.05	814.77	670.09	516.80	444.46	444.46	134.34	70.53
180.0	878.49	707.98	555.55	439.29	439.29	155.62	65.36	40.99	33.84
225.0	672.41	537.12	367.47	241.65	115.23	57.44	41.25	33.33	23.85
270.0	843.19	688.17	558.99	434.12	434.12	163.54	74.15	50.55	42.37
315.0	798.66	660.18	516.88	372.63	213.06	114.62	57.96	39.87	30.31
360.0	1036.09	930.77	799.09	614.20	467.28	325.96	204.01	97.74	53.14

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	38.58	31.09	21.79	16.97	15.07	14.21	13.69	13.00	12.49
45.0	63.47	42.63	33.07	25.23	19.72	16.97	16.19	15.67	15.24
90.0	45.04	36.94	30.40	25.15	23.51	22.22	20.15	18.26	17.05
135.0	43.40	36.26	28.85	23.17	20.15	19.20	18.43	17.83	17.31
180.0	26.44	19.38	17.31	16.62	16.28	15.93	15.67	15.50	15.42
225.0	18.86	16.88	15.76	15.16	14.73	14.30	13.87	13.52	13.26
270.0	32.90	27.04	24.03	22.22	20.67	17.74	15.42	13.78	12.49
315.0	22.91	17.57	15.07	14.21	13.61	13.18	12.75	12.40	12.14
360.0	38.58	31.09	21.79	16.97	15.07	14.21	13.69	13.00	12.49

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	12.14	11.63	11.28	11.20	11.02	10.94	10.94	11.02	11.02
45.0	14.98	14.64	14.21	13.87	13.69	13.61	13.43	13.18	12.92
90.0	16.45	16.02	15.93	15.93	15.67	15.33	15.07	14.73	14.47
135.0	16.71	16.19	15.76	15.24	14.90	14.47	14.12	13.69	13.43
180.0	15.16	14.81	14.64	14.38	14.12	13.87	13.69	13.43	13.09
225.0	13.00	12.75	12.57	12.31	12.06	11.97	11.71	11.54	11.37
270.0	11.97	11.71	11.45	11.28	11.11	10.94	10.76	10.68	10.51
315.0	11.88	11.63	11.45	11.20	11.02	10.85	10.68	10.51	10.33
360.0	12.14	11.63	11.28	11.20	11.02	10.94	10.94	11.02	11.02

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.02	10.94	10.85	10.76	10.59	10.42	10.33	10.25	10.16
45.0	12.75	12.57	12.31	12.06	11.88	11.63	11.37	11.11	10.85
90.0	14.21	13.78	13.43	13.00	12.57	12.14	11.71	11.45	11.11
135.0	13.18	12.92	12.57	12.31	12.06	11.71	11.54	11.20	10.85
180.0	12.83	12.66	12.31	12.14	11.88	11.45	11.20	10.94	10.59
225.0	11.28	11.02	10.76	10.51	10.33	10.16	9.90	9.73	9.56
270.0	10.42	10.33	10.16	9.99	9.82	9.65	9.65	9.47	9.30
315.0	10.33	10.16	10.08	9.99	9.82	9.73	9.56	9.47	9.30
360.0	11.02	10.94	10.85	10.76	10.59	10.42	10.33	10.25	10.16

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.08	9.90	9.82	9.73	9.47	9.30	9.21	9.04	8.96
45.0	10.59	10.33	10.08	9.90	9.56	9.30	9.13	8.96	8.87
90.0	10.68	10.25	9.90	9.39	9.13	8.87	8.87	8.78	8.78
135.0	10.42	10.08	9.73	9.39	9.21	9.04	8.87	8.70	8.61
180.0	10.33	10.08	9.82	9.47	9.30	9.13	9.04	8.96	8.87
225.0	9.39	9.21	9.13	9.04	8.96	8.87	8.78	8.70	8.70
270.0	9.21	9.13	8.87	8.87	8.78	8.78	8.70	8.70	8.70
315.0	9.30	9.13	9.04	8.96	8.87	8.78	8.70	8.61	8.53
360.0	10.08	9.90	9.82	9.73	9.47	9.30	9.21	9.04	8.96

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.96	8.78	8.70	8.70	8.61	8.53	8.35	8.10	7.84
45.0	8.78	8.70	8.61	8.53	8.61	8.53	8.44	8.18	7.84
90.0	8.70	8.61	8.61	8.53	8.44	8.27	8.01	7.84	7.75
135.0	8.53	8.44	8.44	8.27	8.18	8.27	8.18	8.01	7.75
180.0	8.70	8.61	8.53	8.53	8.44	8.44	8.35	7.84	7.58
225.0	8.61	8.53	8.53	8.44	8.35	8.18	7.75	7.58	7.49
270.0	8.61	8.53	8.44	8.35	8.18	8.01	7.75	7.58	7.41
315.0	8.44	8.44	8.27	8.27	8.10	7.92	7.66	7.49	7.41
360.0	8.96	8.78	8.70	8.70	8.61	8.53	8.35	8.10	7.84

Intensity data(cd)

C/γ(°)	90.0
0.0	7.84
45.0	7.66
90.0	7.58
135.0	7.49
180.0	7.58
225.0	7.49
270.0	7.41
315.0	7.41
360.0	7.84