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

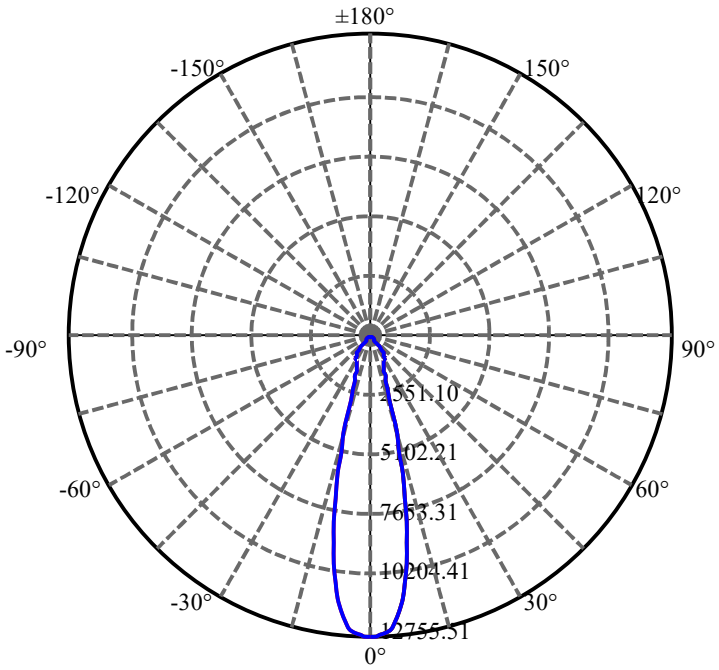
Client: NT
LumCAT: 3-2880-LM2
Luminaire: 92.70.121.00 LED HOLDER
Report No: 20260106-B006
Ballast type: DC

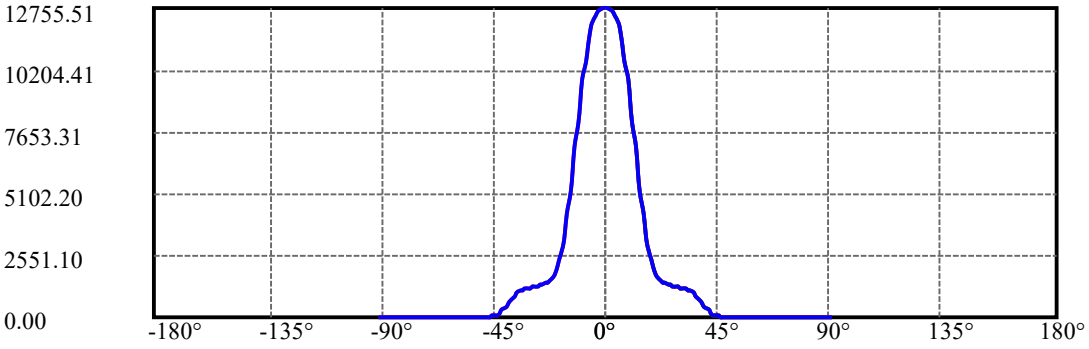
Test No: 20260106-C006	Voltage(V): 36.900
LampCAT: CITIZEN CLU038 LES14.5	Current(A): 0.720
Lamp flux(lm): 3692.9	Power (W): 26.500
Number of Lamps: 1	PF: 0.000
Length(mm): 92	Width(mm): 92
Phm Type: C	Height(mm): 49

Photometric Results

Lumens(lm): 3591.63, Efficiency(%): 97.26% , Luminous Efficacy(lm/W): 135.53
Central intensity(cd): 12755.510, Maximum intensity(cd): 12755.510
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=25.2
[C90/270]Total=25.2
Field angle(10%Imax): [C0/180]Total=55.0
[C90/270]Total=55.0
Maximum s/h(1/2): C0_180=0.43 C90_270=0.43
Maximum s/h(1/4): C0_180=0.40 C90_270=0.40
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 97.26%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.149%

Light Distribution Curve [Unit:cd]





C0(Max):

C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:27.5 Right:27.5
:C90/270Left:27.5 Right:27.5

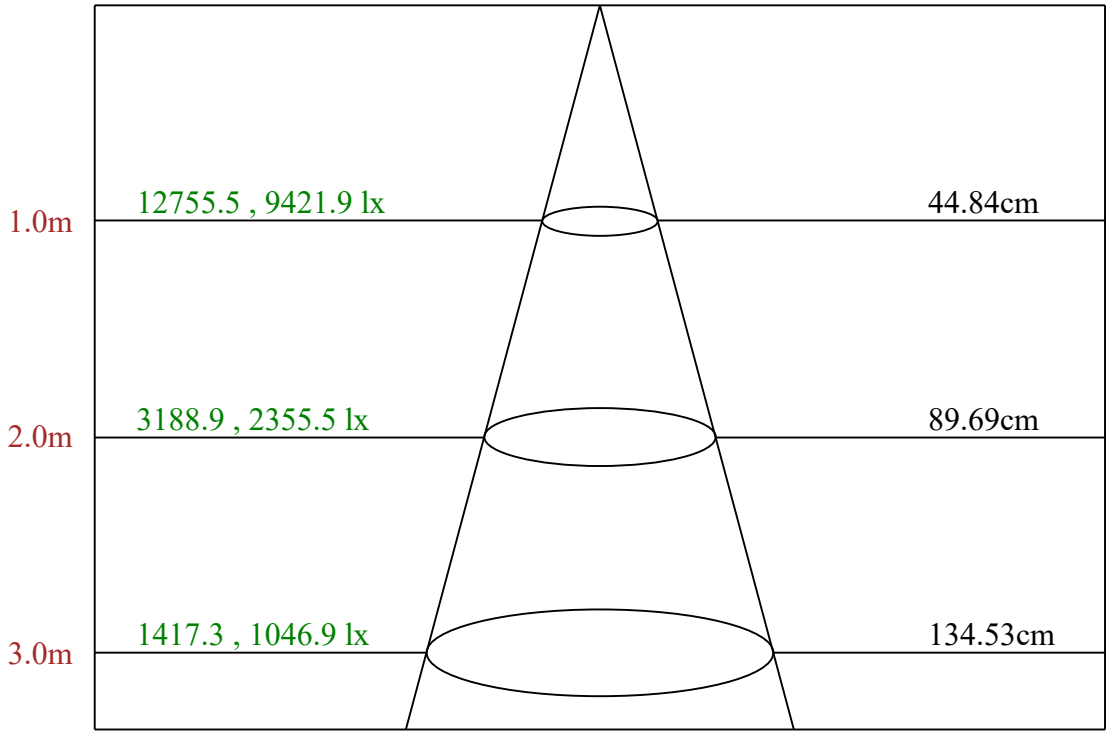
Beam Angle(50%Imax):C0/180Left:12.6 Right:12.6
:C90/270Left:12.6 Right:12.6

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: YZQ
Distance(m): 9.28

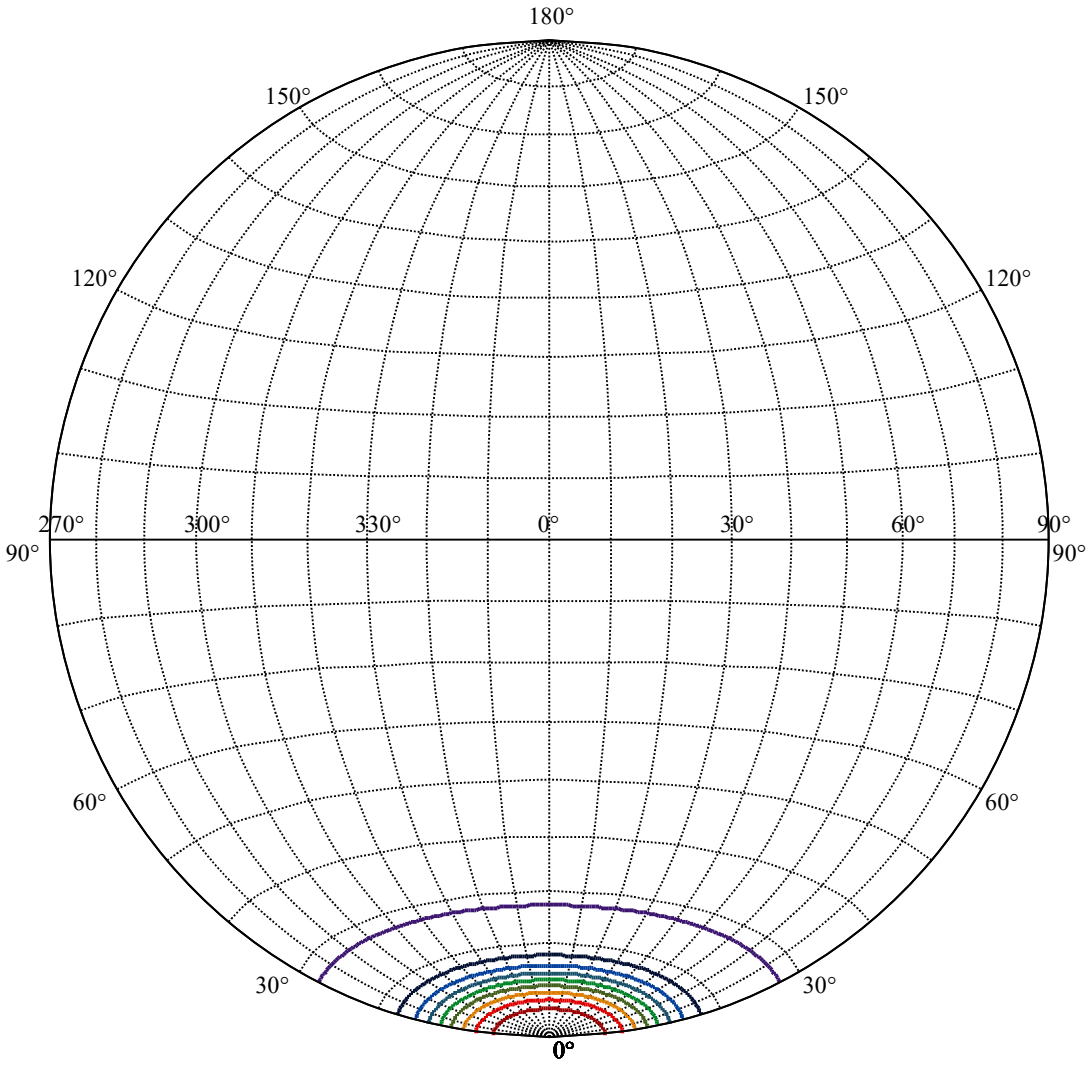
Lux distance Curve



Max , Ave

Beam angle of C0 plane 25.28

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:12755.51

(10%Imax) 1275.55
(20%Imax) 2551.1
(30%Imax) 3826.65
(40%Imax) 5102.2
(50%Imax) 6377.76
(60%Imax) 7653.31
(70%Imax) 8928.86
(80%Imax) 10204.4
(90%Imax) 11480

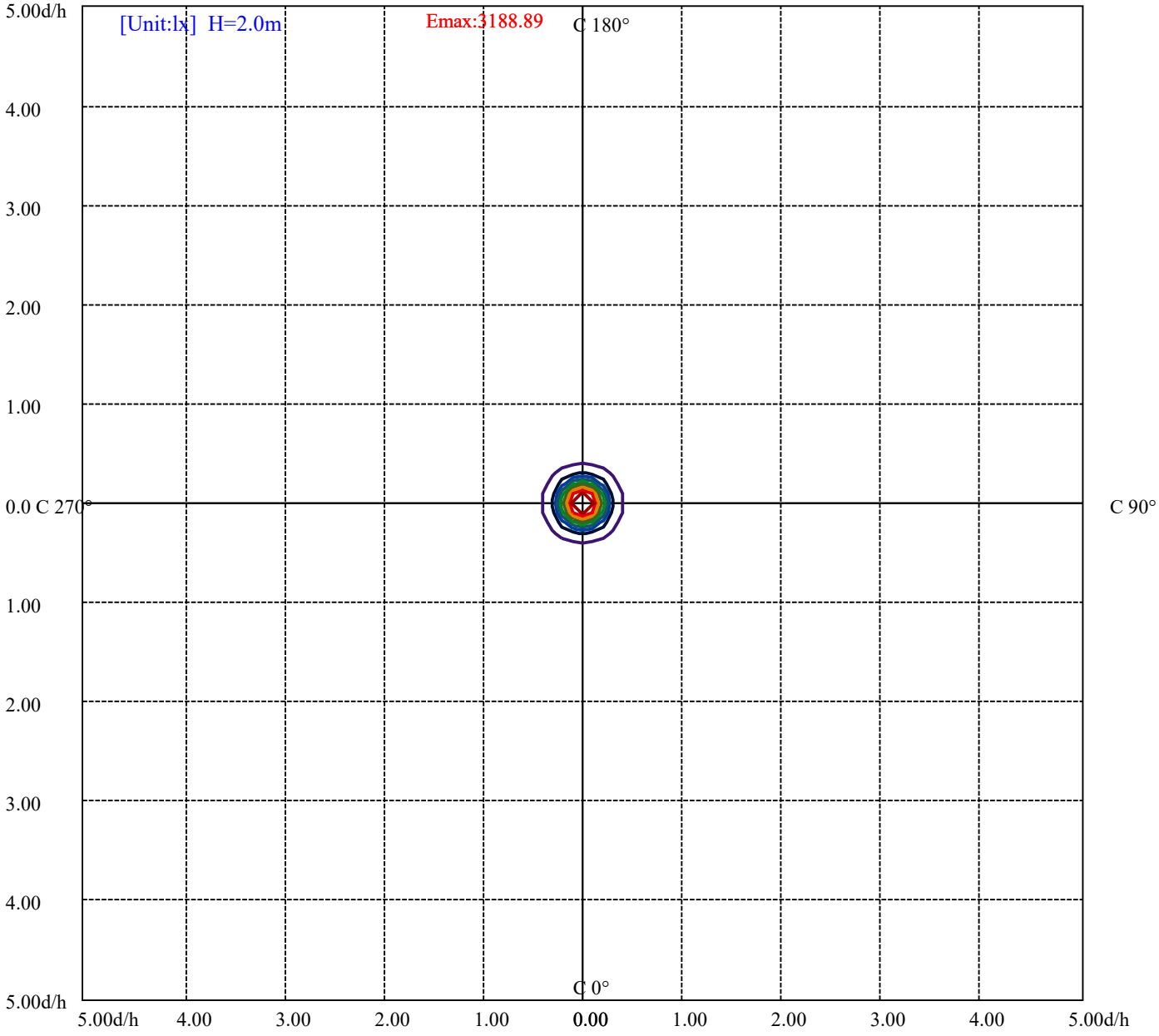
Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: YZQ
Distance(m): 9.28

NT Nata 3-2880-LM2

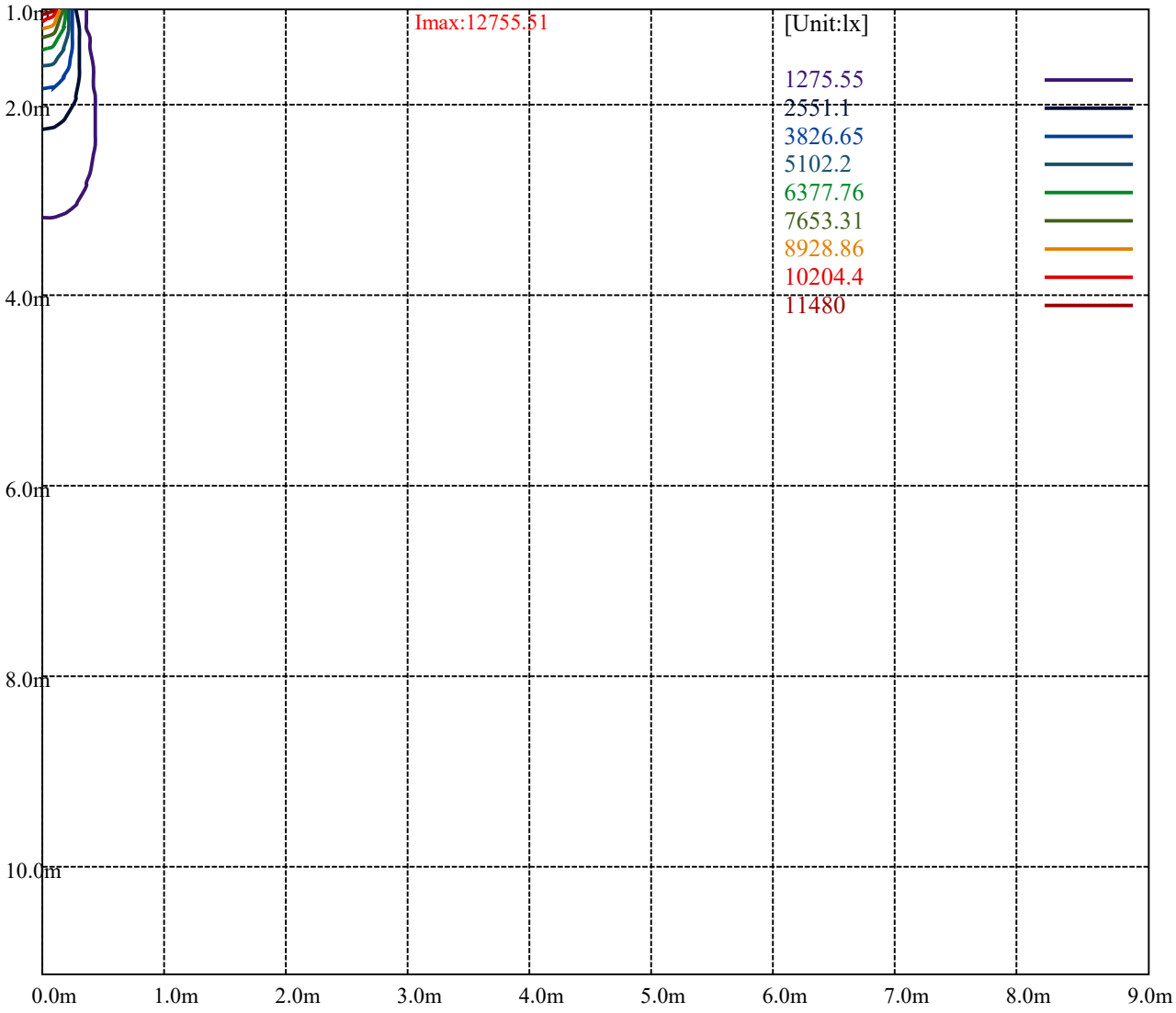
ISO illuminance diagram



(10%Emax) 318.8875
(20%Emax) 637.775
(30%Emax) 956.6625
(40%Emax) 1275.55
(50%Emax) 1594.438
(60%Emax) 1913.328
(70%Emax) 2232.215
(80%Emax) 2551.1
(90%Emax) 2870

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 3-2880-LM2

Luminance Limitting Curve(no luminous side)

Luminance Table

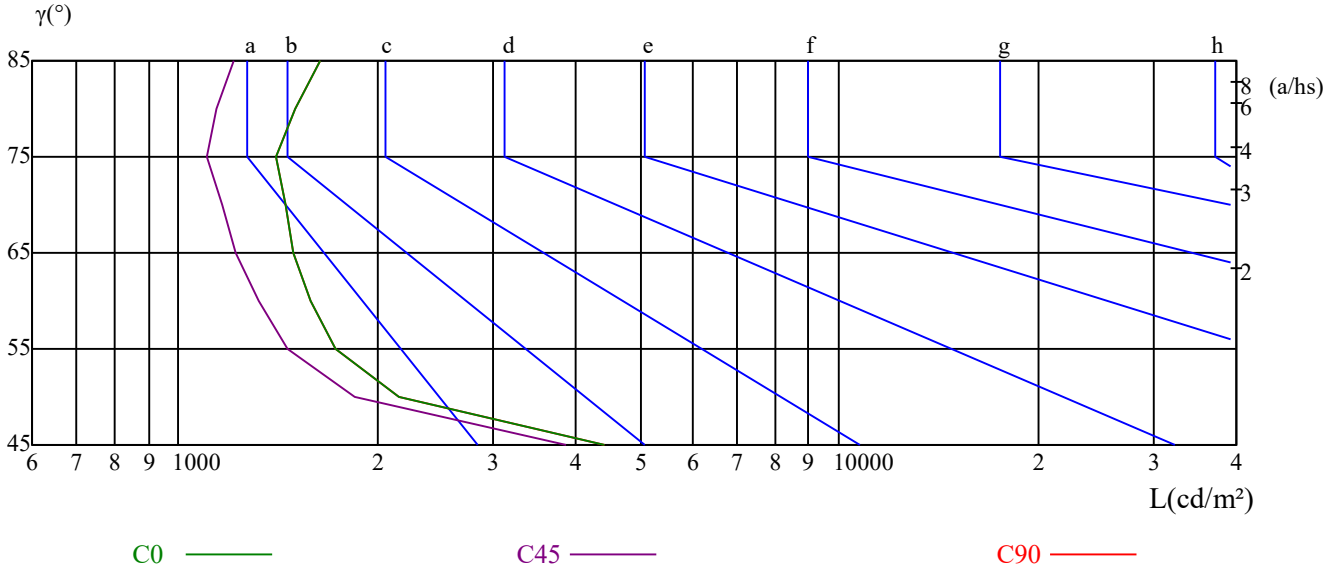
γ	45	50	55	60	65	70	75	80	85
C0	4419	2152	1729	1582	1493	1452	1408	1499	1641
C45	3863	1854	1467	1320	1223	1165	1104	1143	1210
C90	4419	2152	1729	1582	1493	1452	1408	1499	1641

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3199	3199	3199	4206	4206	4206	11630	11630	11630

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

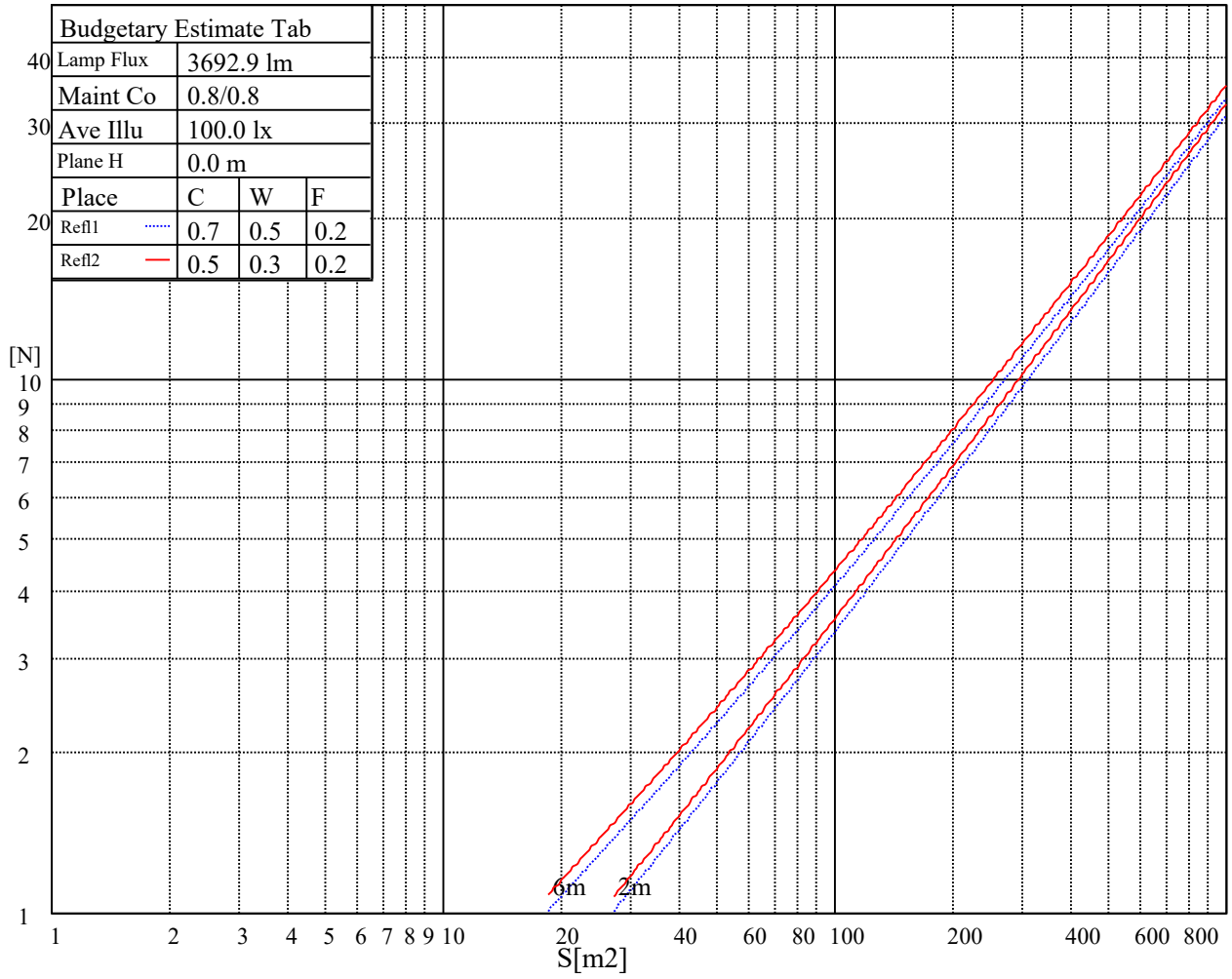
UGR Glare

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	17.45	18.37	17.81	18.68	19.00	17.59	18.51	17.95	18.82	19.14
	3H	17.26	18.08	17.65	18.42	18.77	17.40	18.22	17.79	18.56	18.90
	4H	17.18	17.94	17.58	18.29	18.66	17.31	18.07	17.72	18.43	18.80
	6H	17.12	17.81	17.54	18.19	18.59	17.26	17.95	17.67	18.33	18.73
	8H	17.07	17.73	17.49	18.11	18.52	17.20	17.86	17.63	18.25	18.66
	12H	17.03	17.65	17.45	18.05	18.46	17.16	17.78	17.59	18.18	18.60
4H	2H	17.13	17.89	17.53	18.25	18.61	17.27	18.03	17.67	18.38	18.75
	3H	16.92	17.56	17.35	17.95	18.37	17.06	17.69	17.48	18.09	18.51
	4H	16.88	17.42	17.32	17.85	18.30	17.01	17.56	17.45	17.98	18.43
	6H	16.79	17.27	17.26	17.73	18.18	16.92	17.41	17.40	17.86	18.32
	8H	16.77	17.22	17.26	17.68	18.16	16.91	17.35	17.39	17.81	18.29
	12H	16.78	17.19	17.27	17.64	18.16	16.91	17.32	17.40	17.77	18.30
8H	4H	16.69	17.14	17.18	17.60	18.07	16.82	17.27	17.31	17.73	18.20
	6H	16.62	16.98	17.12	17.46	17.97	16.75	17.11	17.26	17.59	18.11
	8H	16.67	16.97	17.20	17.49	17.99	16.80	17.10	17.33	17.63	18.12
	12H	16.71	16.94	17.25	17.45	17.98	16.83	17.06	17.38	17.58	18.11
12H	4H	16.64	17.05	17.13	17.50	18.03	16.77	17.18	17.26	17.64	18.16
	6H	16.61	16.92	17.15	17.44	17.94	16.74	17.05	17.28	17.57	18.07
	8H	16.64	16.87	17.18	17.39	17.91	16.77	17.00	17.31	17.52	18.04

Variation with the observer position at spacings:		
S = 1.0H	5.0/-11.5	5.0/-11.5
S = 1.5H	7.7/-10.0	7.7/-10.0
S = 2.0H	9.6/-8.9	9.6/-8.9
Standard tables:	BK0	BK0
Uncorrected UGR	-1.8	-1.8

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

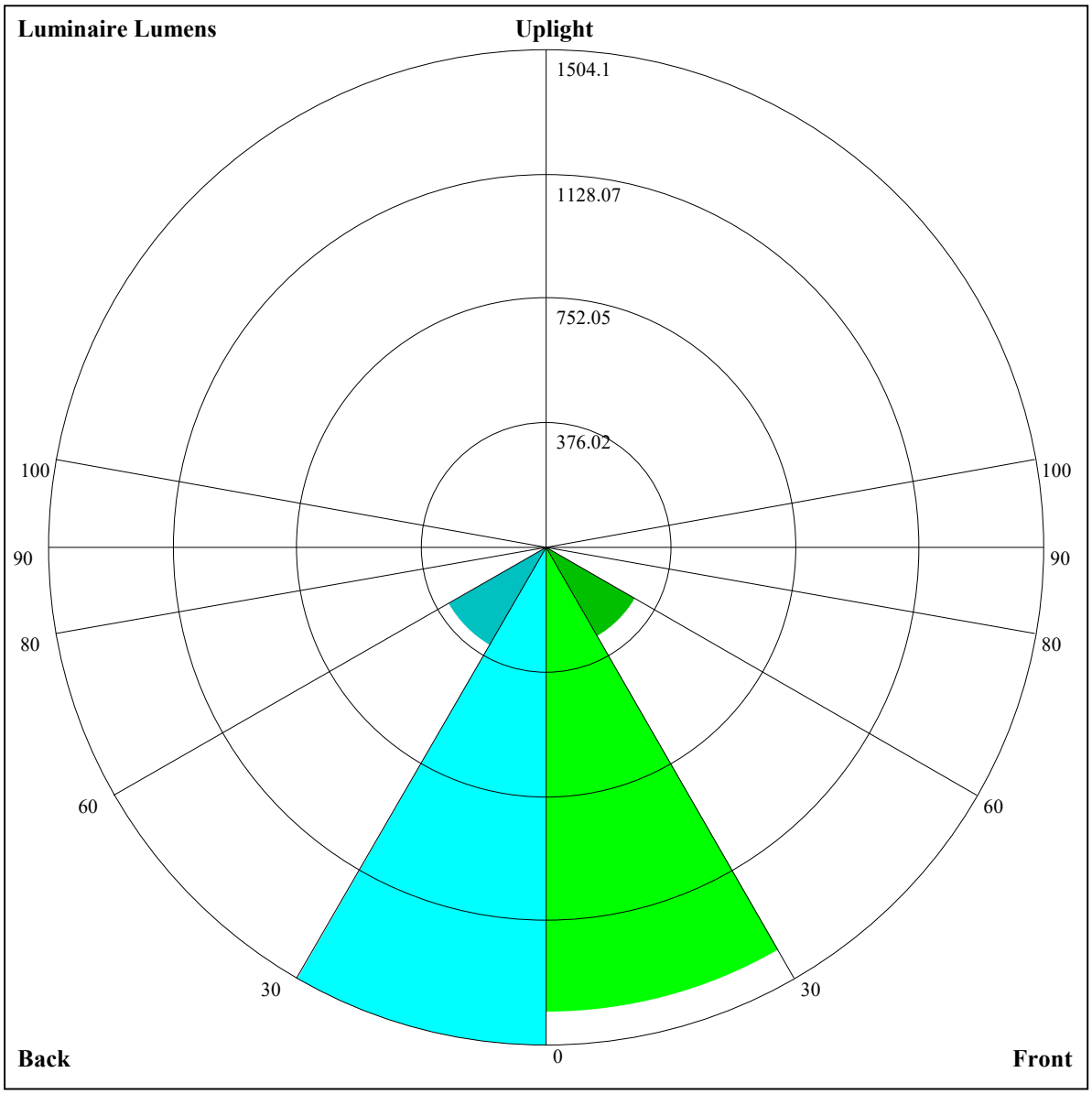
Budgetary Estimate Table



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	1.16	1.16	1.16	1.13	1.13	1.13	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.09	1.07	1.05	1.07	1.05	1.03	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93
2	1.03	0.99	0.97	1.01	0.98	0.96	0.98	0.96	0.93	0.95	0.93	0.91	0.93	0.91	0.90	0.88
3	0.97	0.93	0.90	0.96	0.92	0.89	0.94	0.91	0.88	0.91	0.89	0.87	0.89	0.87	0.85	0.84
4	0.93	0.88	0.85	0.92	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.84	0.81	0.80
5	0.88	0.84	0.80	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.79	0.83	0.80	0.78	0.77
6	0.84	0.80	0.76	0.84	0.79	0.76	0.82	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.73
7	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.72	0.71
8	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.75	0.71	0.69	0.68
9	0.75	0.70	0.67	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
10	0.72	0.68	0.65	0.72	0.67	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.63



Luminaire Lumens:
FL=1403.19,FM=310.81,FH=10.93,FVH=4.61
BL=1504.1,BM=342.74,BH=10.54,BVH=4.61
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	12723.22	12773.17	12722.36	12573.37	12360.66	11926.62	11457.28	10751.97	10065.60
45.0	12745.61	12735.28	12756.80	12778.33	12743.03	12637.10	12347.74	11998.96	11416.80
90.0	12756.80	12751.64	12785.22	12774.89	12696.52	12486.39	12200.48	11783.67	11276.43
135.0	12796.42	12787.81	12736.14	12721.50	12699.97	12623.32	12468.31	12246.98	11842.23
180.0	12723.22	12697.38	12676.71	12614.71	12457.11	12265.07	11976.57	11464.17	10945.73
225.0	12745.61	12705.13	12592.32	12461.42	12220.29	11844.81	11233.37	10649.49	9945.04
270.0	12756.80	12762.83	12746.47	12643.13	12397.69	12047.19	11580.43	11034.44	10212.87
315.0	12796.42	12709.44	12516.53	12247.84	11849.12	11203.23	10552.17	9589.37	8713.55
360.0	12723.22	12773.17	12722.36	12573.37	12360.66	11926.62	11457.28	10751.97	10065.60

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	9264.70	8133.11	7159.11	6179.08	5013.04	4192.33	3487.02	2891.08	2420.01
45.0	10828.61	10143.11	9337.04	8189.95	7204.75	6216.97	5262.78	4203.53	3485.30
90.0	10483.28	9746.11	8891.81	7959.15	6736.27	5760.55	4868.36	3884.89	3239.00
135.0	11366.85	10677.05	10007.91	9267.29	8202.86	7274.51	6316.87	5170.63	4355.95
180.0	10330.85	9429.19	8604.18	7469.13	6521.83	5600.37	4747.79	4002.87	3217.47
225.0	8890.09	7970.34	7011.85	5807.91	4926.06	4134.63	3308.76	2775.68	2352.84
270.0	9434.36	8546.48	7592.28	6601.06	5416.93	4549.72	3618.78	2998.73	2513.02
315.0	7750.74	6537.33	5606.39	4738.32	3960.67	3152.88	2632.73	2231.41	1701.79
360.0	9264.70	8133.11	7159.11	6179.08	5013.04	4192.33	3487.02	2891.08	2420.01

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1686.20	1686.20	1654.94	1551.51	1464.70	1414.67	1365.67	1333.80	1307.28
45.0	2898.83	2432.93	2026.45	1817.18	1638.92	1546.77	1476.16	1413.29	1371.95
90.0	2711.95	1954.97	1690.07	1690.07	1523.26	1435.85	1374.54	1325.97	1278.00
135.0	3651.51	3052.98	2463.07	2108.26	1855.94	1685.42	1550.22	1474.43	1421.04
180.0	2693.01	2292.56	1986.84	1735.37	1606.19	1516.63	1439.12	1396.07	1355.59
225.0	1680.77	1680.77	1618.51	1519.47	1449.29	1393.05	1359.12	1332.34	1299.96
270.0	2045.40	1805.13	1638.92	1496.82	1416.73	1362.48	1321.14	1282.39	1257.41
315.0	1701.79	1575.45	1490.88	1415.79	1373.76	1341.21	1308.05	1284.63	1261.89
360.0	1686.20	1686.20	1654.94	1551.51	1464.70	1414.67	1365.67	1333.80	1307.28

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1276.19	1252.59	1230.98	1204.37	1182.15	1152.87	1129.01	1075.62	990.28
45.0	1338.37	1299.61	1272.92	1249.66	1224.69	1196.27	1168.71	1143.74	1117.04
90.0	1250.53	1218.66	1186.88	1154.76	1128.32	1108.77	1073.47	1052.19	1016.54
135.0	1369.37	1335.78	1297.89	1269.47	1243.64	1218.66	1191.10	1166.99	1141.15
180.0	1327.17	1302.20	1271.19	1247.94	1225.55	1204.88	1173.02	1149.77	1114.46
225.0	1272.83	1248.80	1222.62	1202.56	1172.50	1148.65	1116.78	1045.65	917.51
270.0	1235.02	1210.91	1183.35	1165.27	1148.91	1118.76	1099.82	1027.48	933.61
315.0	1235.37	1215.30	1195.93	1171.12	1141.07	1110.93	1043.67	944.37	792.98
360.0	1276.19	1252.59	1230.98	1204.37	1182.15	1152.87	1129.01	1075.62	990.28

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	874.19	738.81	553.74	402.78	269.29	139.25	72.77	38.58	31.43
45.0	1042.12	937.92	815.63	639.95	501.30	466.85	308.56	120.22	62.87
90.0	917.94	818.90	674.22	545.99	420.52	306.58	206.68	113.68	74.49
135.0	1115.32	1054.18	959.45	833.71	696.78	520.24	447.90	447.90	127.89
180.0	1042.12	912.94	781.18	635.64	447.90	447.90	278.68	79.92	44.35
225.0	793.41	657.34	522.39	351.79	226.84	126.34	65.02	42.71	35.14
270.0	820.79	701.95	536.60	440.15	440.15	175.16	87.50	64.67	56.92
315.0	655.62	511.63	338.62	217.36	99.98	54.25	39.79	32.47	23.77
360.0	874.19	738.81	553.74	402.78	269.29	139.25	72.77	38.58	31.43

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	23.94	17.74	14.47	13.61	13.09	12.75	12.40	12.23	11.97
45.0	41.60	33.84	26.52	21.36	19.29	18.69	18.34	17.74	17.14
90.0	62.01	52.19	40.73	36.34	33.67	31.00	27.21	22.91	21.27
135.0	67.09	43.40	35.74	28.07	22.30	19.29	18.17	17.57	17.14
180.0	34.79	25.32	18.86	14.81	13.61	12.75	12.31	11.97	11.63
225.0	26.44	21.62	19.72	18.43	18.00	17.14	16.53	15.50	14.90
270.0	49.43	41.94	39.61	36.00	32.72	27.30	21.62	19.98	18.43
315.0	18.95	17.14	16.10	15.33	14.73	14.21	14.12	13.78	13.87
360.0	23.94	17.74	14.47	13.61	13.09	12.75	12.40	12.23	11.97

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	11.88	11.71	11.71	11.71	11.71	11.71	11.71	11.71	11.71
45.0	16.71	16.10	15.59	15.24	14.64	14.38	13.87	13.52	13.35
90.0	19.89	18.52	17.83	16.88	16.19	15.50	14.90	14.38	13.78
135.0	16.62	16.19	15.93	15.16	14.64	14.04	13.35	13.00	12.66
180.0	11.20	10.85	10.68	10.51	10.42	10.33	10.33	10.33	10.42
225.0	14.30	13.69	13.18	12.75	12.14	11.63	11.28	11.02	10.42
270.0	17.83	17.05	16.19	15.85	14.73	14.38	13.95	13.35	12.57
315.0	14.04	14.12	14.12	13.95	13.95	13.87	13.61	13.35	12.92
360.0	11.88	11.71	11.71	11.71	11.71	11.71	11.71	11.71	11.71

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.80	11.71	11.80	11.71	11.45	11.20	10.94	10.68	10.25
45.0	12.92	12.66	12.40	11.97	11.71	11.45	11.20	10.94	10.68
90.0	13.09	12.57	12.06	11.80	11.63	11.28	10.94	10.76	10.51
135.0	12.14	11.88	11.45	11.11	10.85	10.68	10.51	10.25	9.99
180.0	10.51	10.59	10.59	10.59	10.59	10.42	10.25	10.16	9.82
225.0	10.33	10.16	10.08	10.08	9.99	9.90	9.82	9.73	9.65
270.0	12.14	11.80	11.45	11.20	10.76	10.68	10.42	10.25	9.99
315.0	12.49	12.14	11.71	11.37	11.11	10.68	10.42	10.08	9.73
360.0	11.80	11.71	11.80	11.71	11.45	11.20	10.94	10.68	10.25

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.08	9.65	9.39	9.13	9.13	9.13	8.96	8.96	8.87
45.0	10.33	9.99	9.73	9.47	9.21	9.04	8.96	8.96	8.87
90.0	10.25	9.99	9.73	9.47	9.21	9.13	9.13	9.13	9.04
135.0	9.82	9.65	9.47	9.30	9.13	8.96	8.87	8.70	8.70
180.0	9.73	9.47	9.30	9.13	9.04	8.96	8.96	8.96	8.87
225.0	9.39	9.30	9.13	8.96	8.87	8.78	8.78	8.78	8.70
270.0	9.90	9.65	9.47	9.21	9.21	9.21	9.21	9.13	9.04
315.0	9.47	9.13	9.04	9.04	8.96	8.87	8.78	8.78	8.78
360.0	10.08	9.65	9.39	9.13	9.13	9.13	8.96	8.96	8.87

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	8.78	8.70	8.70	8.70	8.70	8.70	8.61	8.27	7.75
45.0	8.78	8.78	8.70	8.70	8.70	8.70	8.70	8.44	8.10
90.0	8.96	8.87	8.87	8.61	8.53	8.44	8.27	8.10	7.84
135.0	8.70	8.61	8.61	8.61	8.53	8.53	8.53	8.35	8.18
180.0	8.87	8.78	8.78	8.78	8.70	8.70	8.53	8.27	8.01
225.0	8.70	8.70	8.70	8.70	8.61	8.44	8.18	7.84	7.75
270.0	8.96	8.78	8.70	8.53	8.35	8.27	8.10	7.84	7.75
315.0	8.70	8.70	8.61	8.53	8.53	8.35	8.01	7.66	7.66
360.0	8.78	8.70	8.70	8.70	8.70	8.70	8.61	8.27	7.75

Intensity data(cd)

C/γ(°)	90.0
0.0	7.75
45.0	7.75
90.0	7.75
135.0	7.92
180.0	7.84
225.0	7.75
270.0	7.75
315.0	7.75
360.0	7.75