NATA LIGHTING CO.,LTD
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Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

Nata

Client: NT
LumCAT: 3-3012-LM
Luminaire: BJB 47.360.2050
Report No: 20251118-B010
Ballast type: DC

Test No: 20251118-C010	Voltage(V): 37.690
LampCAT: CREE CXA2540 LES19	Current(A): 1.096
Lamp flux(lm): 5903.0	Power (W): 41.300
Number of Lamps: 1	PF: 0.000
Length(mm): 85	Width(mm): 85
Phm Type: C	Height(mm): 51

Photometric Results

Lumens(lm): 5524.28, Efficiency(%): 93.58% , Luminous Efficacy(lm/W): 133.76
Central intensity(cd): 27524.300, Maximum intensity(cd): 27524.300
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=20.4
[C90/270]Total=20.4
Field angle(10%Imax): [C0/180]Total=45.6
[C90/270]Total=45.6
Maximum s/h(1/2): C0_180=0.35 C90_270=0.35
Maximum s/h(1/4): C0_180=0.35 C90_270=0.35
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.58%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.342%

NT Nata 3-3012-LM

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	27524.303	0.000	0	0.00%	0.00%
1.0	27371.441	26.267	26.267	0.44%	0.48%
2.0	26954.844	77.974	104.241	1.32%	1.89%
3.0	26231.449	127.204	231.445	2.15%	4.19%
4.0	25256.158	172.345	403.79	2.92%	7.31%
5.0	24023.590	211.999	615.789	3.59%	11.15%
6.0	21666.766	240.115	855.904	4.07%	15.49%
7.0	20433.119	261.313	1117.217	4.43%	20.22%
8.0	18149.926	276.131	1393.349	4.68%	25.22%
9.0	16592.045	281.565	1674.914	4.77%	30.32%
10.0	14248.332	279.094	1954.008	4.73%	35.37%
11.0	12161.576	263.889	2217.897	4.47%	40.15%
12.0	10213.255	244.589	2462.486	4.14%	44.58%
13.0	8589.815	223.145	2685.631	3.78%	48.62%
14.0	7304.068	203.440	2889.071	3.45%	52.30%
15.0	6356.442	187.538	3076.609	3.18%	55.69%
16.0	5529.383	174.161	3250.769	2.95%	58.85%
17.0	4920.956	162.740	3413.509	2.76%	61.79%
18.0	4408.982	153.830	3567.34	2.61%	64.58%
19.0	4085.608	147.788	3715.128	2.50%	67.25%
20.0	3634.153	141.293	3856.421	2.39%	69.81%
21.0	3310.359	133.349	3989.77	2.26%	72.22%
22.0	2939.307	125.590	4115.359	2.13%	74.50%
23.0	2707.756	118.491	4233.85	2.01%	76.64%
24.0	2517.650	114.246	4348.096	1.94%	78.71%
25.0	2357.254	110.845	4458.941	1.88%	80.72%
26.0	2229.046	108.260	4567.201	1.83%	82.68%
27.0	2049.510	104.676	4671.877	1.77%	84.57%
28.0	1963.177	101.593	4773.469	1.72%	86.41%
29.0	1787.947	98.140	4871.609	1.66%	88.19%
30.0	1661.881	93.145	4964.754	1.58%	89.87%
31.0	1494.380	87.834	5052.588	1.49%	91.46%
32.0	1317.429	80.555	5133.143	1.36%	92.92%
33.0	1116.353	71.700	5204.843	1.21%	94.22%
34.0	943.481	62.337	5267.18	1.06%	95.35%
35.0	753.945	52.716	5319.896	0.89%	96.30%
36.0	583.345	42.580	5362.475	0.72%	97.07%
37.0	436.739	33.269	5395.745	0.56%	97.67%

NT Nata 3-3012-LM

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	338.940	25.891	5421.636	0.44%	98.14%
39.0	203.175	18.504	5440.14	0.31%	98.48%
40.0	124.990	11.445	5451.585	0.19%	98.68%
41.0	52.618	6.325	5457.909	0.11%	98.80%
42.0	38.796	3.321	5461.231	0.06%	98.86%
43.0	33.511	2.678	5463.909	0.05%	98.91%
44.0	29.506	2.378	5466.288	0.04%	98.95%
45.0	25.470	2.113	5468.4	0.04%	98.99%
46.0	21.433	1.834	5470.235	0.03%	99.02%
47.0	17.934	1.566	5471.8	0.03%	99.05%
48.0	16.825	1.405	5473.206	0.02%	99.08%
49.0	15.921	1.345	5474.55	0.02%	99.10%
50.0	15.297	1.302	5475.852	0.02%	99.12%
51.0	14.780	1.273	5477.124	0.02%	99.15%
52.0	14.317	1.249	5478.373	0.02%	99.17%
53.0	13.962	1.230	5479.603	0.02%	99.19%
54.0	13.585	1.214	5480.817	0.02%	99.21%
55.0	13.316	1.201	5482.018	0.02%	99.24%
56.0	13.079	1.193	5483.211	0.02%	99.26%
57.0	12.853	1.186	5484.397	0.02%	99.28%
58.0	12.659	1.180	5485.576	0.02%	99.30%
59.0	12.487	1.176	5486.752	0.02%	99.32%
60.0	12.358	1.174	5487.926	0.02%	99.34%
61.0	12.197	1.172	5489.097	0.02%	99.36%
62.0	12.100	1.171	5490.268	0.02%	99.38%
63.0	12.003	1.172	5491.44	0.02%	99.41%
64.0	11.938	1.175	5492.615	0.02%	99.43%
65.0	11.863	1.178	5493.793	0.02%	99.45%
66.0	11.798	1.181	5494.974	0.02%	99.47%
67.0	11.744	1.184	5496.157	0.02%	99.49%
68.0	11.701	1.188	5497.345	0.02%	99.51%
69.0	11.658	1.192	5498.537	0.02%	99.53%
70.0	11.594	1.194	5499.731	0.02%	99.56%
71.0	11.572	1.197	5500.928	0.02%	99.58%
72.0	11.540	1.202	5502.13	0.02%	99.60%
73.0	11.508	1.205	5503.335	0.02%	99.62%
74.0	11.497	1.209	5504.545	0.02%	99.64%
75.0	11.497	1.215	5505.76	0.02%	99.66%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.465	1.219	5506.978	0.02%	99.69%
77.0	11.465	1.222	5508.201	0.02%	99.71%
78.0	11.411	1.225	5509.425	0.02%	99.73%
79.0	11.432	1.227	5510.653	0.02%	99.75%
80.0	11.400	1.231	5511.884	0.02%	99.78%
81.0	11.400	1.233	5513.117	0.02%	99.80%
82.0	11.389	1.236	5514.353	0.02%	99.82%
83.0	11.389	1.238	5515.591	0.02%	99.84%
84.0	11.357	1.239	5516.83	0.02%	99.87%
85.0	11.378	1.241	5518.071	0.02%	99.89%
86.0	11.357	1.243	5519.314	0.02%	99.91%
87.0	11.325	1.241	5520.555	0.02%	99.93%
88.0	11.335	1.241	5521.796	0.02%	99.96%
89.0	11.303	1.241	5523.037	0.02%	99.98%
90.0	11.325	1.241	5524.278	0.02%	100.00%

Zonal flux distribution table

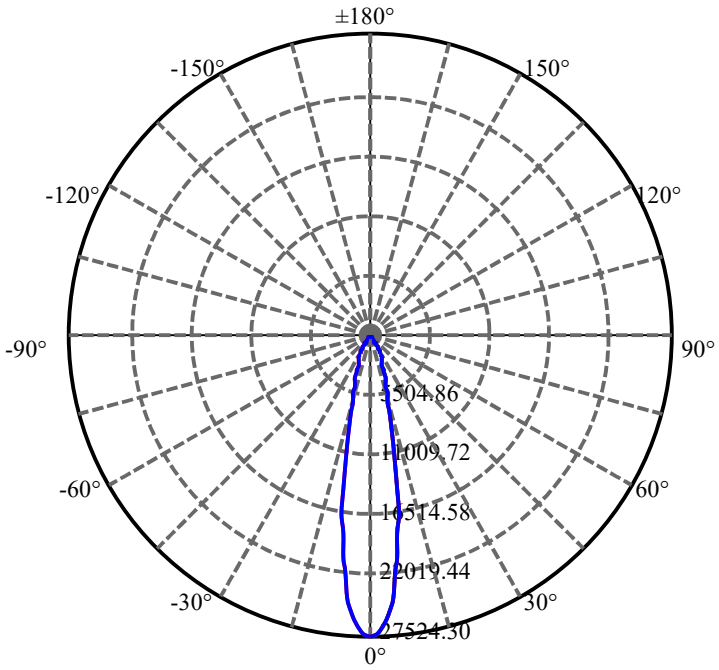
ZONAL LUMEN SUMMARY

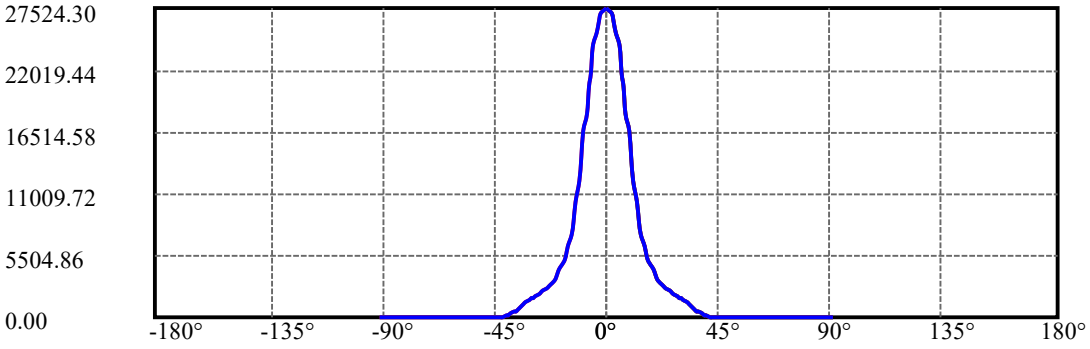
Zone	Lumens	%Lamp	%Fixt
0-30	4964.75	84.11%	89.87%
0-40	5451.58	92.35%	98.68%
0-60	5487.93	92.97%	99.34%
0-90	5523.04	93.56%	99.98%
0-120	5523.04	93.56%	99.98%
0-180	5524.28	93.58%	100.00%
60-90	35.11	0.59%	0.64%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.64	4419.42	74.87%	80.00%

ZONAL LUMEN SUMMARY

0-10	1954.01
10-20	1902.41
20-30	1108.33
30-40	486.83
40-50	24.27
50-60	12.07
60-70	11.81
70-80	12.15
80-90	11.15
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

Light Distribution Curve [Unit:cd]





C0(Max):

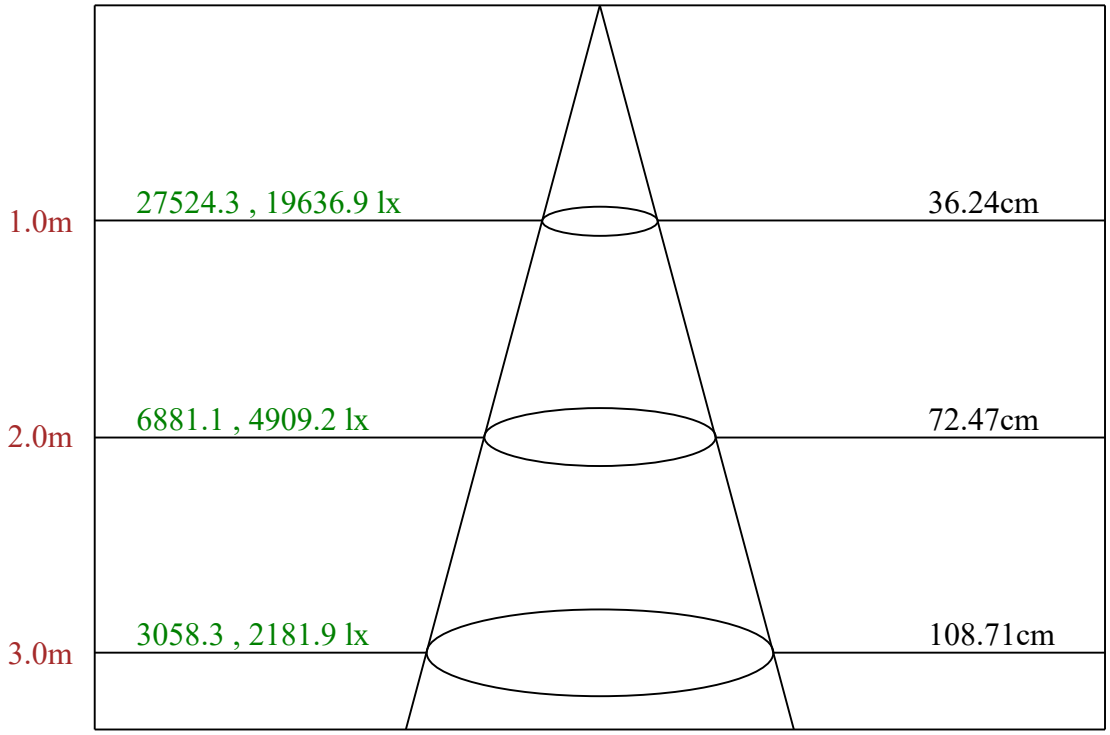
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:22.8 Right:22.8
:C90/270Left:22.8 Right:22.8

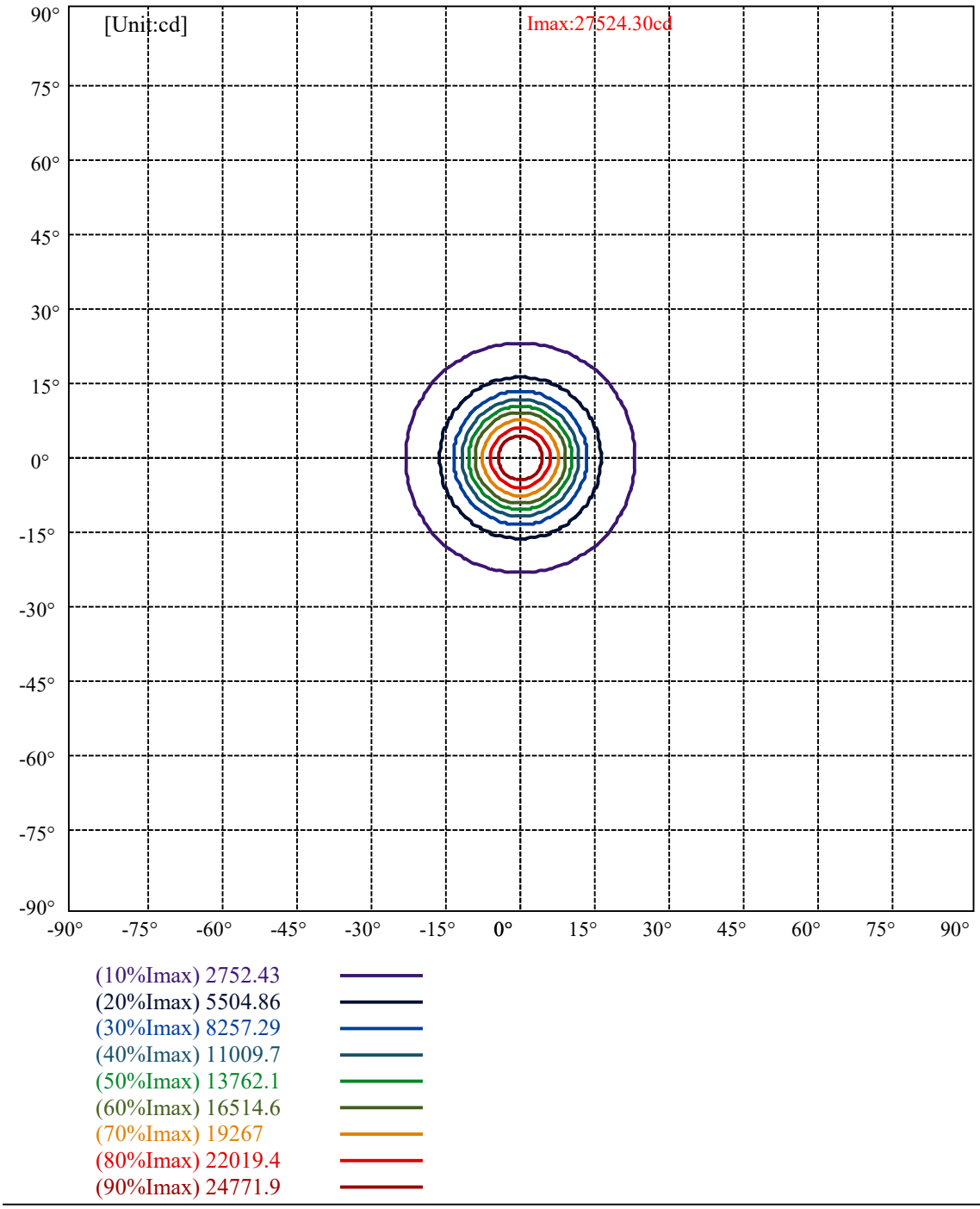
Beam Angle(50%Imax):C0/180Left:10.2 Right:10.2
:C90/270Left:10.2 Right:10.2

Lux distance Curve



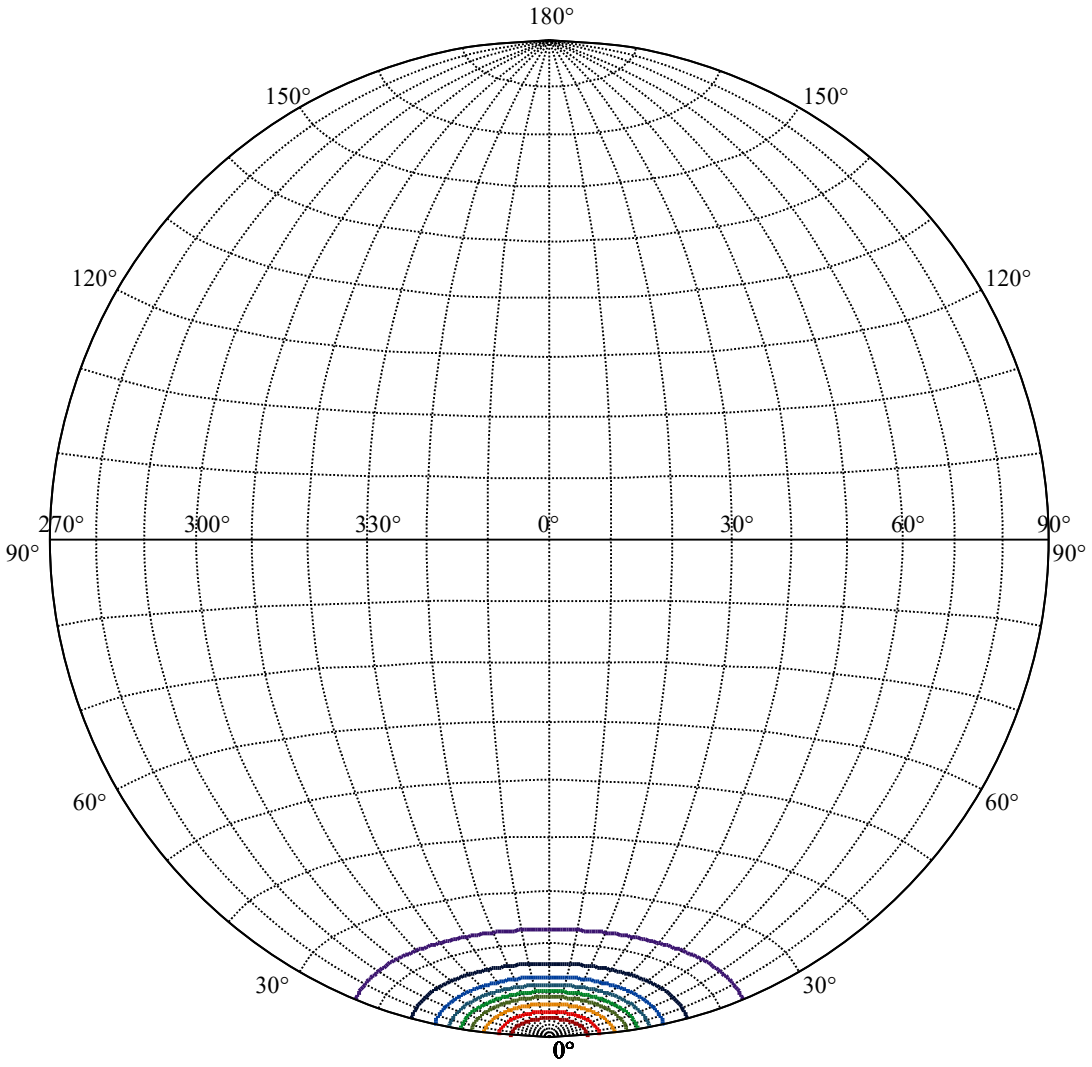
Max , Ave

Beam angle of C0 plane 20.54



Equipment: GMS1980
Temperature(°C): 25.0
Date: 2025/11/18
Humidity(%): 60.0%
Operator: YZQ
Distance(m): 9.28

ISO candela diagram on circular web



House [Unit:cd] Road

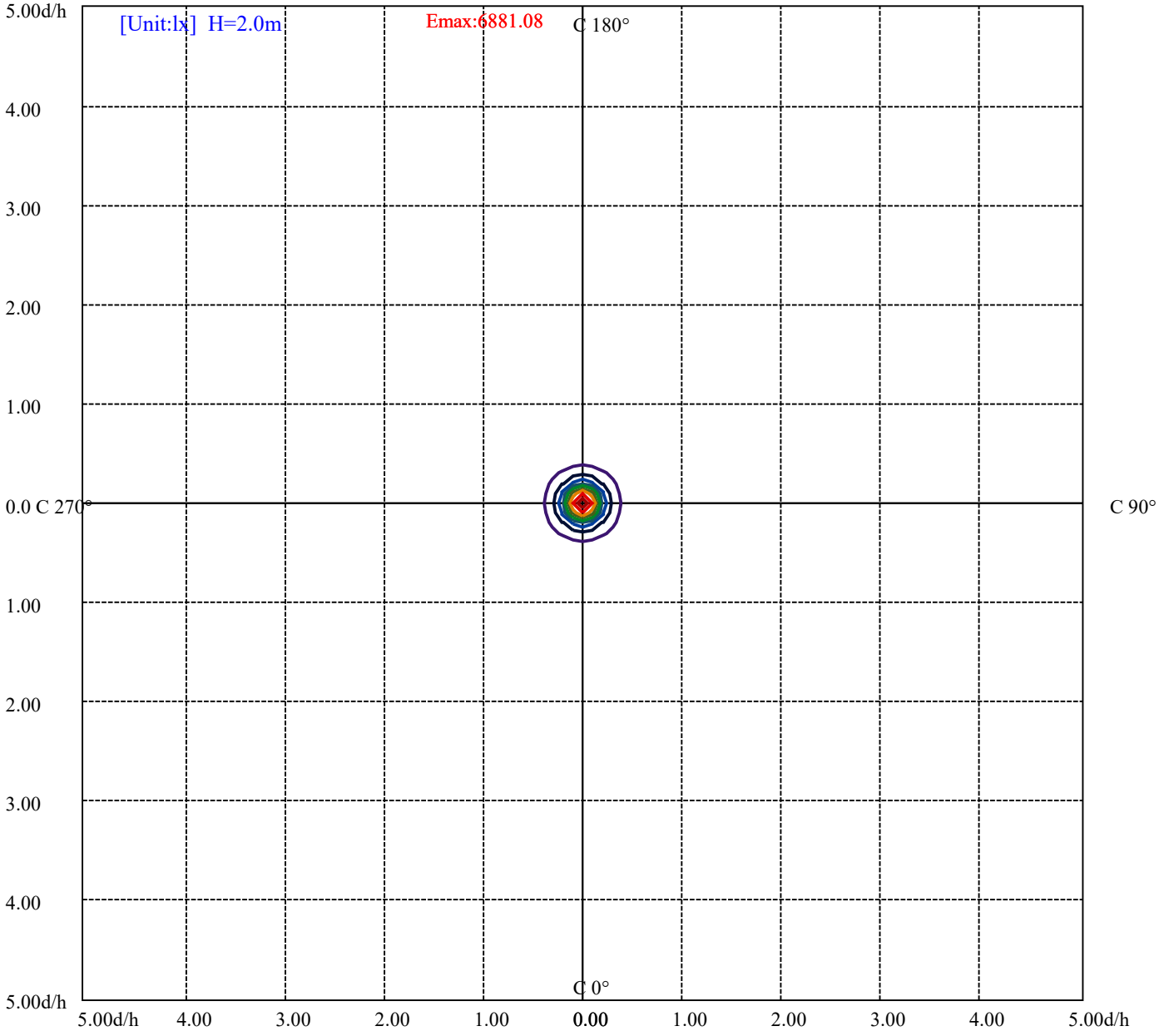
Imax:27524.30

(10%Imax) 2752.43
(20%Imax) 5504.86
(30%Imax) 8257.29
(40%Imax) 11009.7
(50%Imax) 13762.1
(60%Imax) 16514.6
(70%Imax) 19267
(80%Imax) 22019.4
(90%Imax) 24771.9

Equipment: GMS1980 Date: 2025/11/18 Operator: YZQ
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.28

NT Nata 3-3012-LM

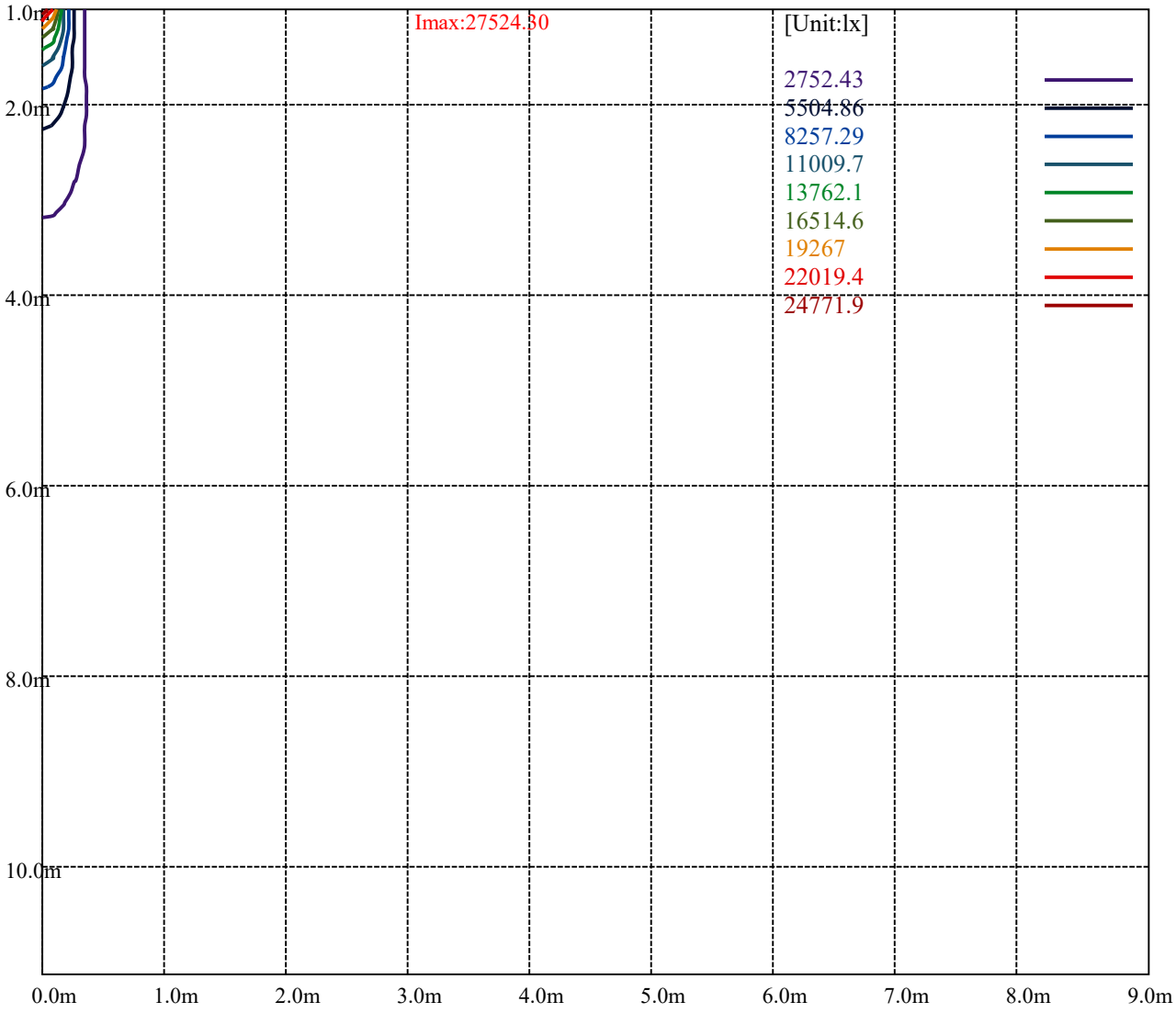
ISO illuminance diagram



(10%Emax) 688.1075
(20%Emax) 1376.213
(30%Emax) 2064.32
(40%Emax) 2752.425
(50%Emax) 3440.525
(60%Emax) 4128.65
(70%Emax) 4816.75
(80%Emax) 5504.85
(90%Emax) 6192.95

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2025/11/18
Humidity(%): 60.0%
Operator: YZQ
Distance(m): 9.28

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/11/18
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

NT Nata 3-3012-LM

Luminance Limitting Curve(no luminous side)

Luminance Table

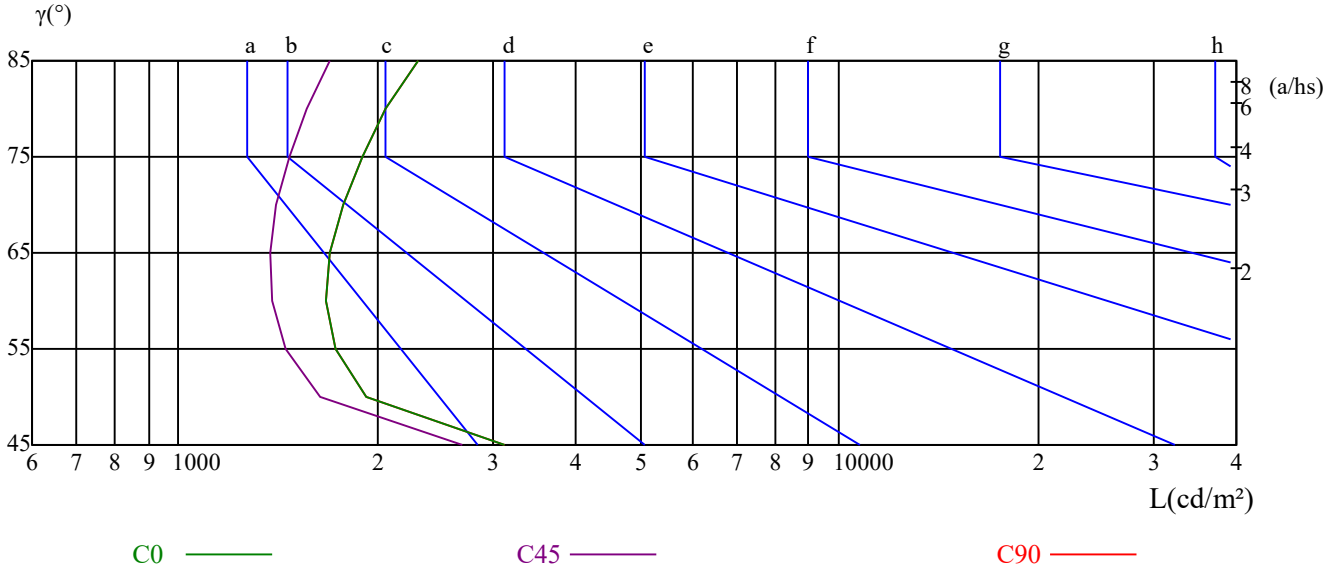
γ	45	50	55	60	65	70	75	80	85
C0	3116	1921	1730	1678	1699	1771	1898	2064	2299
C45	2697	1638	1453	1385	1378	1408	1476	1563	1689
C90	3116	1921	1730	1678	1699	1771	1898	2064	2299

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3885	3885	3885	6148	6148	6148	18070	18070	18070

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

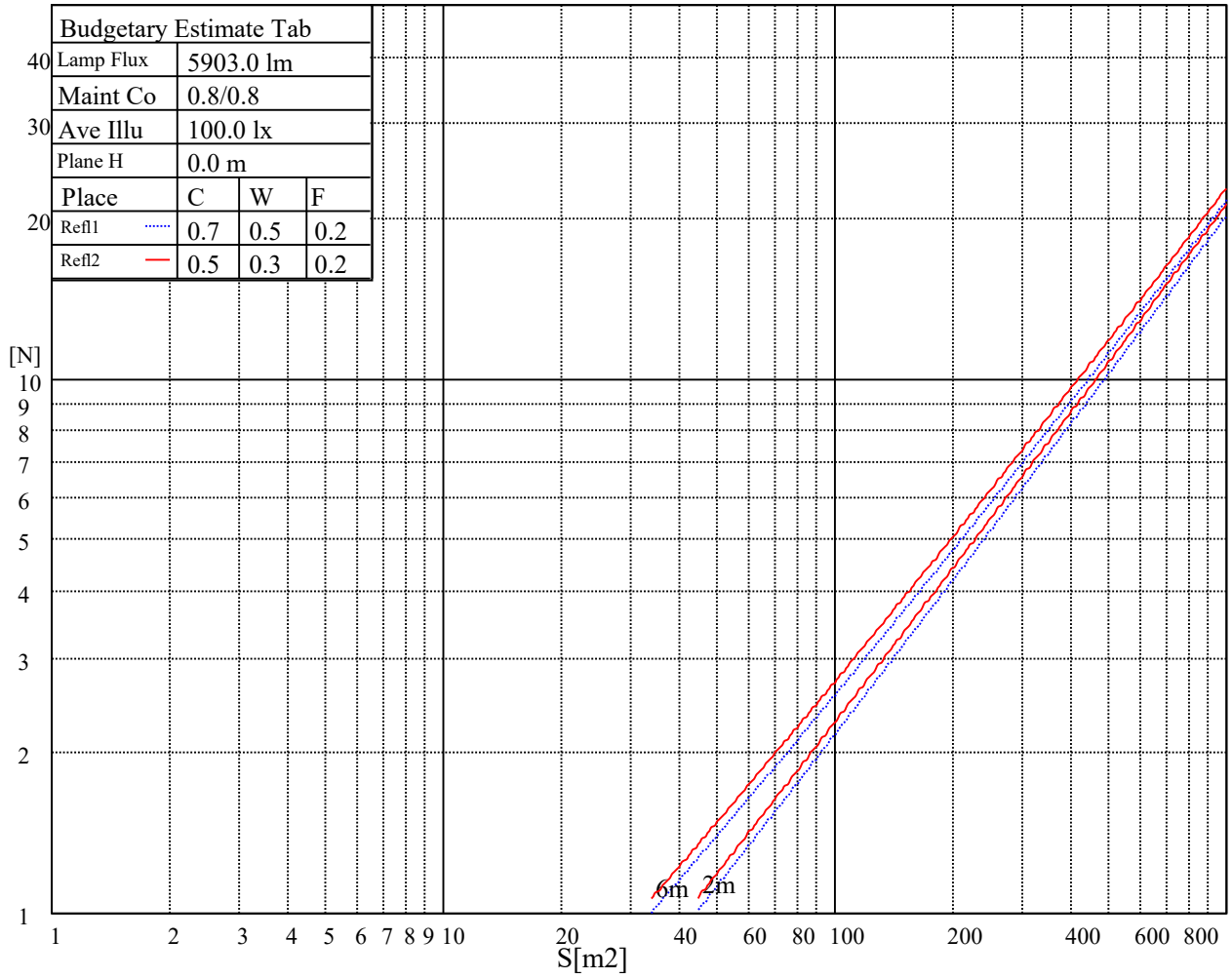
Date: 2025/11/18
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

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	16.03	16.92	16.39	17.23	17.55	15.81	16.70	16.17	17.01	17.33
	3H	15.84	16.64	16.23	16.97	17.32	15.62	16.42	16.01	16.76	17.10
	4H	15.77	16.50	16.17	16.86	17.23	15.55	16.29	15.95	16.64	17.01
	6H	15.73	16.40	16.15	16.78	17.18	15.52	16.19	15.94	16.57	16.97
	8H	15.70	16.34	16.12	16.73	17.13	15.49	16.13	15.91	16.51	16.92
	12H	15.68	16.29	16.11	16.68	17.10	15.47	16.08	15.90	16.48	16.89
4H	2H	15.70	16.44	16.10	16.79	17.16	15.48	16.22	15.88	16.57	16.94
	3H	15.49	16.11	15.92	16.51	16.93	15.28	15.90	15.71	16.29	16.71
	4H	15.47	16.00	15.91	16.43	16.88	15.26	15.79	15.70	16.22	16.67
	6H	15.43	15.90	15.90	16.35	16.80	15.22	15.69	15.70	16.14	16.60
	8H	15.44	15.88	15.93	16.34	16.81	15.24	15.68	15.73	16.14	16.61
	12H	15.49	15.89	15.98	16.35	16.87	15.30	15.69	15.79	16.15	16.67
8H	4H	15.29	15.73	15.78	16.19	16.66	15.08	15.52	15.57	15.98	16.45
	6H	15.28	15.64	15.79	16.12	16.63	15.08	15.43	15.59	15.92	16.43
	8H	15.39	15.68	15.92	16.20	16.70	15.19	15.48	15.73	16.01	16.51
	12H	15.50	15.72	16.04	16.23	16.76	15.31	15.53	15.86	16.05	16.57
12H	4H	15.25	15.65	15.74	16.10	16.62	15.04	15.44	15.53	15.89	16.41
	6H	15.29	15.58	15.83	16.11	16.61	15.09	15.38	15.63	15.91	16.41
	8H	15.38	15.60	15.92	16.11	16.64	15.18	15.40	15.73	15.92	16.45
Variation with the observer position at spacings:											
S = 1.0H		6.3/-10.4					6.3/-10.4				
S = 1.5H		8.9/-8.5					8.9/-8.5				
S = 2.0H		10.7/-7.1					10.7/-7.1				
Standard tables:		BK1					BK1				
Uncorrected UGR		-3.5					-3.5				

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

Budgetary Estimate Table



Equipment: GMS1980
Temperature(°C): 25.0
Date: 2025/11/18
Humidity(%): 60.0%
Operator: YZQ
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	1.11	1.11	1.11	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.94
1	1.05	1.03	1.02	1.03	1.02	1.00	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90
2	1.00	0.97	0.94	0.98	0.96	0.93	0.95	0.93	0.91	0.93	0.91	0.90	0.90	0.89	0.88	0.86
3	0.95	0.92	0.89	0.94	0.91	0.88	0.92	0.89	0.87	0.90	0.87	0.86	0.88	0.86	0.84	0.83
4	0.91	0.87	0.84	0.90	0.87	0.84	0.88	0.85	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.80
5	0.88	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.80	0.84	0.81	0.79	0.83	0.80	0.78	0.77
6	0.84	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.76	0.80	0.78	0.76	0.74
7	0.81	0.77	0.74	0.81	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
8	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.76	0.73	0.71	0.70
9	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.69	0.74	0.71	0.69	0.68
10	0.74	0.70	0.67	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.72	0.69	0.67	0.66

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	27554.44	27563.06	27270.25	26667.42	25892.36	24824.49	23231.30	21793.12	16990.39
45.0	27502.77	27700.84	27580.28	27166.91	26391.84	25453.15	24307.78	22981.56	20975.00
90.0	27700.84	27537.22	27141.07	26314.34	25349.81	24178.60	22482.07	19795.18	17010.19
135.0	27339.15	27623.34	27597.50	27313.31	26701.87	25918.19	24893.38	23696.34	22025.64
180.0	27554.44	27339.15	26848.27	25944.03	24970.89	23437.98	21956.75	20225.77	17831.68
225.0	27502.77	26994.67	26159.33	25177.58	23920.25	22611.25	16909.43	16909.43	16347.08
270.0	27700.84	27528.61	27158.30	26452.13	25229.25	24040.81	22688.75	21198.91	18856.48
315.0	27339.15	26684.65	25883.75	24815.88	23593.00	21724.23	16864.65	16864.65	15162.95
360.0	27554.44	27563.06	27270.25	26667.42	25892.36	24824.49	23231.30	21793.12	16990.39

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	16990.39	15260.27	13058.22	11010.32	8912.48	7607.79	6416.77	5695.96	5111.21
45.0	19097.62	17073.83	14895.04	12216.76	10356.60	8815.08	7609.42	6429.60	5680.37
90.0	17010.19	14152.78	12003.27	10119.86	8667.90	7206.47	6278.12	5572.81	4984.62
135.0	20354.95	17917.79	15764.83	13474.08	10959.43	9219.84	7910.84	6584.61	5792.32
180.0	15635.66	13327.68	11269.45	9090.66	7798.88	6756.85	5964.56	5172.27	4664.17
225.0	14009.83	11417.66	9662.57	8247.65	7131.55	6050.76	5380.76	4684.93	4217.30
270.0	16677.69	14378.33	11725.88	9908.78	8461.99	7066.88	6179.86	5490.91	4767.51
315.0	12960.04	10458.30	8913.34	7637.93	6429.69	5708.87	5111.21	4603.98	4150.13
360.0	16990.39	15260.27	13058.22	11010.32	8912.48	7607.79	6416.77	5695.96	5111.21

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	4505.80	4086.40	3704.04	3369.90	3008.20	2763.63	2584.50	2427.76	2269.31
45.0	4931.14	4448.88	4448.88	3592.95	3266.56	3000.45	2714.54	2531.11	2382.12
90.0	4378.35	3971.01	3523.19	3214.89	2953.09	2681.81	2501.83	2359.73	2212.47
135.0	5155.05	4646.95	4423.04	4423.04	3407.79	3112.41	2864.38	2612.92	2450.15
180.0	4431.65	4431.65	3406.07	3109.82	2806.68	2607.75	2446.71	2279.64	2171.13
225.0	3809.96	3380.23	3083.12	2839.41	2634.45	2421.74	2288.25	2182.33	2089.32
270.0	4397.21	4397.21	3451.71	3140.82	2881.61	2668.90	2492.35	2318.39	2205.58
315.0	3662.70	3322.53	3033.18	2792.04	2556.08	2405.37	2248.64	2146.16	2052.29
360.0	4505.80	4086.40	3704.04	3369.90	3008.20	2763.63	2584.50	2427.76	2269.31

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	2161.66	2062.62	1682.84	1682.84	1593.97	1421.21	1198.94	1021.88	794.53
45.0	2261.56	2130.66	2030.76	1899.00	1748.29	1536.44	1359.90	1179.91	958.58
90.0	2117.74	2008.37	1680.77	1680.77	1509.05	1332.34	1155.11	977.79	761.63
135.0	2284.81	2172.85	2078.98	1934.31	1784.46	1620.83	1402.95	1227.27	1051.59
180.0	2072.09	1961.86	1774.99	1601.03	1425.35	1250.53	1032.65	862.99	700.23
225.0	1699.03	1699.03	1658.64	1480.12	1267.15	1092.41	881.85	714.27	555.12
270.0	2109.13	1979.95	1836.99	1679.39	1466.68	1294.45	1071.40	895.72	733.81
315.0	1690.07	1690.07	1559.60	1337.59	1160.10	991.22	828.03	668.02	476.06
360.0	2161.66	2062.62	1682.84	1682.84	1593.97	1421.21	1198.94	1021.88	794.53

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	628.58	472.19	296.33	180.76	95.16	52.27	39.61	35.74	31.78
45.0	785.49	574.50	456.51	456.51	160.96	73.72	46.68	42.28	38.49
90.0	594.73	407.60	278.51	167.33	76.04	46.68	42.89	38.32	34.28
135.0	875.91	664.92	506.46	468.57	468.57	105.75	56.06	42.71	37.89
180.0	500.43	460.82	460.82	103.34	54.51	41.42	36.08	31.78	27.64
225.0	369.71	241.48	136.24	57.44	37.46	33.24	29.11	24.54	21.19
270.0	578.80	460.82	460.82	142.87	71.48	37.03	32.72	28.94	25.40
315.0	333.11	211.59	115.83	48.57	35.74	30.83	27.21	23.77	19.38
360.0	628.58	472.19	296.33	180.76	95.16	52.27	39.61	35.74	31.78

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	27.73	22.65	17.83	16.53	15.33	14.81	14.38	13.95	13.61
45.0	33.33	27.99	18.60	17.22	15.85	15.16	14.64	14.12	13.78
90.0	28.51	19.20	18.17	16.79	16.02	15.50	14.90	14.38	14.12
135.0	34.02	28.51	20.84	19.29	17.91	16.79	16.10	15.50	15.07
180.0	22.56	20.50	19.12	18.00	17.22	16.53	15.93	15.42	14.81
225.0	18.60	17.48	16.19	15.50	14.98	14.47	14.04	13.61	13.35
270.0	21.44	18.86	17.48	16.53	15.76	15.16	14.73	14.30	13.95
315.0	17.57	16.28	15.24	14.73	14.30	13.95	13.52	13.26	13.00
360.0	27.73	22.65	17.83	16.53	15.33	14.81	14.38	13.95	13.61

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.26	13.00	12.83	12.66	12.49	12.31	12.23	12.14	12.06
45.0	13.35	13.09	12.92	12.75	12.49	12.40	12.31	12.14	12.06
90.0	13.61	13.35	13.09	12.83	12.66	12.49	12.31	12.14	12.06
135.0	14.55	14.12	13.78	13.43	13.18	12.92	12.75	12.49	12.40
180.0	14.47	14.12	13.78	13.43	13.18	12.92	12.75	12.57	12.40
225.0	13.09	12.92	12.75	12.57	12.49	12.31	12.23	12.06	11.97
270.0	13.52	13.35	13.00	12.83	12.66	12.49	12.31	12.14	12.06
315.0	12.83	12.57	12.49	12.31	12.14	12.06	11.97	11.88	11.80
360.0	13.26	13.00	12.83	12.66	12.49	12.31	12.23	12.14	12.06

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.97	11.88	11.88	11.80	11.71	11.71	11.71	11.63	11.63
45.0	11.97	11.97	11.88	11.80	11.80	11.71	11.71	11.63	11.63
90.0	11.97	11.88	11.80	11.80	11.71	11.71	11.63	11.63	11.54
135.0	12.23	12.14	12.06	11.97	11.88	11.80	11.71	11.63	11.63
180.0	12.23	12.14	12.06	11.97	11.88	11.88	11.80	11.71	11.71
225.0	11.88	11.88	11.80	11.71	11.71	11.63	11.54	11.54	11.54
270.0	11.97	11.88	11.80	11.71	11.71	11.63	11.63	11.54	11.45
315.0	11.80	11.71	11.63	11.63	11.54	11.54	11.54	11.45	11.45
360.0	11.97	11.88	11.88	11.80	11.71	11.71	11.71	11.63	11.63

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.63	11.54	11.54	11.54	11.54	11.54	11.45	11.45	11.45
45.0	11.63	11.54	11.54	11.54	11.54	11.54	11.45	11.45	11.45
90.0	11.45	11.45	11.45	11.45	11.45	11.45	11.37	11.45	11.37
135.0	11.54	11.54	11.54	11.54	11.45	11.45	11.45	11.45	11.37
180.0	11.63	11.63	11.63	11.54	11.54	11.54	11.45	11.45	11.45
225.0	11.54	11.45	11.45	11.45	11.45	11.37	11.37	11.45	11.37
270.0	11.45	11.45	11.45	11.45	11.37	11.45	11.37	11.37	11.37
315.0	11.45	11.45	11.37	11.45	11.37	11.37	11.37	11.37	11.37
360.0	11.63	11.54	11.54	11.54	11.54	11.54	11.45	11.45	11.45

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.37
45.0	11.45	11.45	11.45	11.37	11.45	11.37	11.37	11.37	11.28
90.0	11.37	11.37	11.37	11.45	11.37	11.28	11.28	11.28	11.28
135.0	11.37	11.37	11.37	11.37	11.45	11.45	11.28	11.28	11.28
180.0	11.45	11.45	11.45	11.37	11.37	11.37	11.37	11.37	11.37
225.0	11.37	11.37	11.37	11.28	11.37	11.28	11.28	11.37	11.28
270.0	11.37	11.37	11.37	11.28	11.28	11.37	11.28	11.28	11.28
315.0	11.37	11.28	11.28	11.28	11.28	11.28	11.28	11.28	11.28
360.0	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.37

Intensity data(cd)

C/γ(°)	90.0
0.0	11.37
45.0	11.28
90.0	11.28
135.0	11.37
180.0	11.37
225.0	11.37
270.0	11.28
315.0	11.28
360.0	11.37