



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

LumCAT: 3-1944-M	
Luminaire: BJB 47.319.2021	
Report No: GC2017070608	Voltage(V): 34.5600
Test No: NT-0010	Current(A): 0.5000
LampCAT: SEOUL SAWx15	Power (W): 17.2800
Lamp flux(lm): 2402.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 86	Width(mm): 86
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2163.63
Efficiency(%): 90.08%
Lumens(lm)/Power(W): 125.21
Central intensity(cd): 4535.606
Maximum intensity(cd): 4535.606
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=38.7
 [C90/270]Total=38.7
Field angle(10%Imax): [C0/180]Total=68.3
 [C90/270]Total=68.3
Maximum s/h(1/2): C0_180=0.65 C90_270=0.65
Maximum s/h(1/4): C0_180=0.60 C90_270=0.60
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.08%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.693%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/7/5
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.46

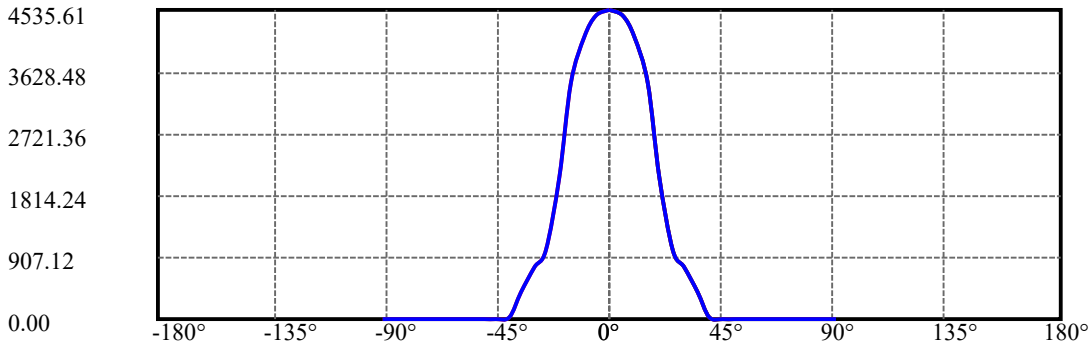
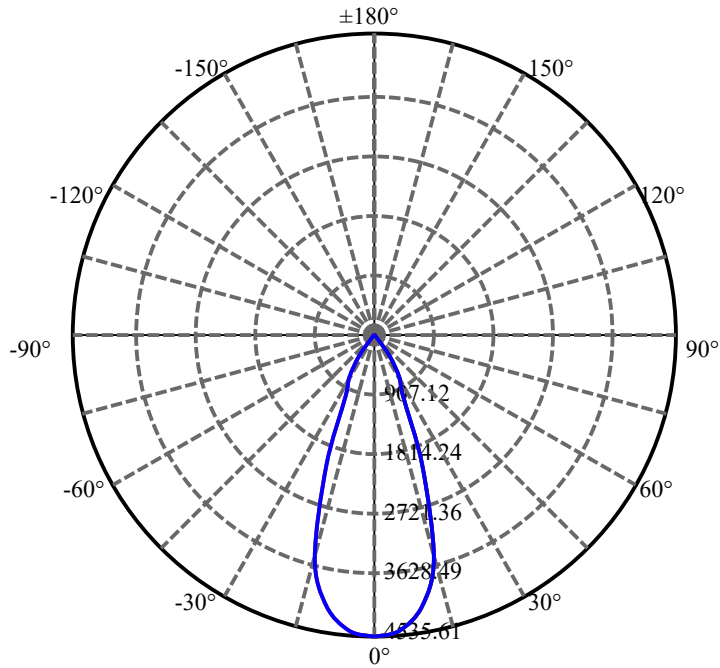
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4535.605	0.000	0	.000%	.000%
5.0	4453.589	107.463	107.463	4.474%	4.967%
10.0	4139.992	307.419	414.883	12.798%	19.175%
15.0	3459.443	450.793	865.676	18.767%	40.010%
20.0	2087.770	457.168	1322.844	19.033%	61.140%
25.0	1021.499	326.105	1648.949	13.576%	76.212%
30.0	750.051	224.191	1873.14	9.334%	86.574%
35.0	392.490	168.247	2041.388	7.004%	94.350%
40.0	36.215	71.526	2112.914	2.978%	97.656%
45.0	12.452	9.011	2121.925	.375%	98.073%
50.0	10.351	4.608	2126.533	.192%	98.286%
55.0	9.767	4.374	2130.907	.182%	98.488%
60.0	9.426	4.436	2135.343	.185%	98.693%
65.0	9.210	4.531	2139.874	.189%	98.902%
70.0	9.078	4.631	2144.505	.193%	99.116%
75.0	8.946	4.711	2149.216	.196%	99.334%
80.0	8.869	4.767	2153.983	.198%	99.554%
85.0	8.849	4.814	2158.797	.200%	99.777%
90.0	8.786	4.828	2163.626	.201%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1873.14	77.98%	86.57%
0-40	2112.91	87.96%	97.66%
0-60	2135.34	88.90%	98.69%
0-90	2158.80	89.87%	99.78%
0-120	2158.80	89.87%	99.78%
0-180	2163.63	90.08%	100.00%
60-90	27.89	1.16%	1.29%
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%
0-26.83	1730.90	72.06%	80.00%

ZONAL LUMEN SUMMARY

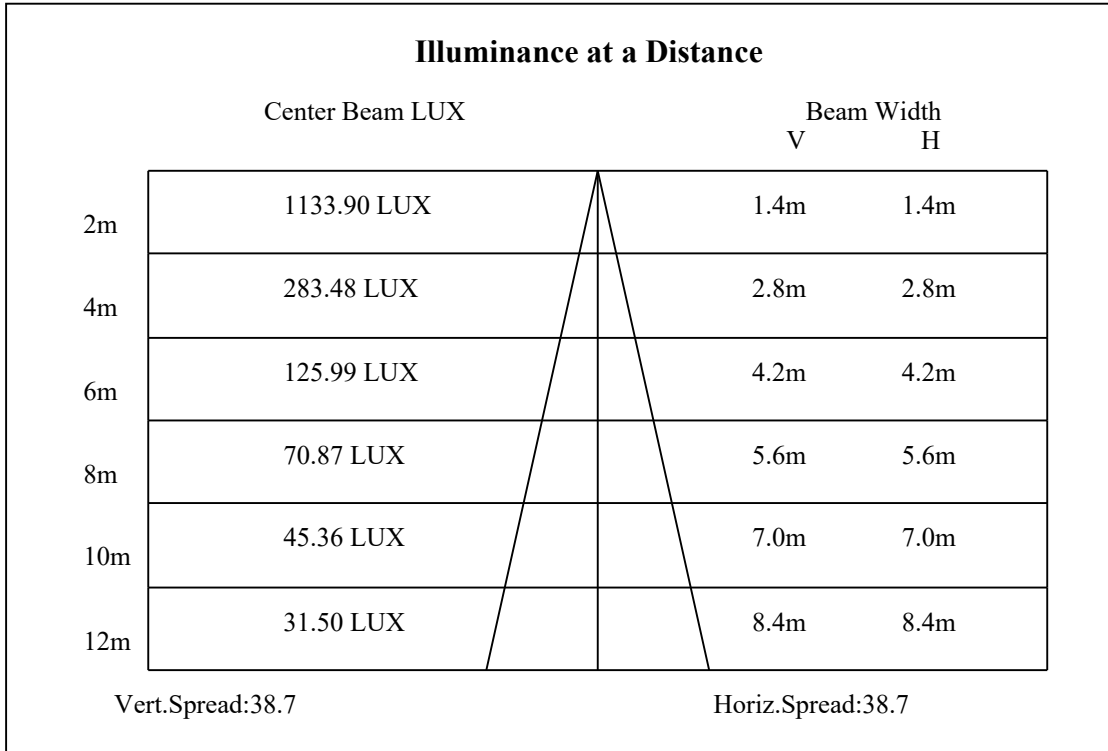
0-10	414.88
10-20	907.96
20-30	550.30
30-40	239.77
40-50	13.62
50-60	8.81
60-70	9.16
70-80	9.48
80-90	4.81
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

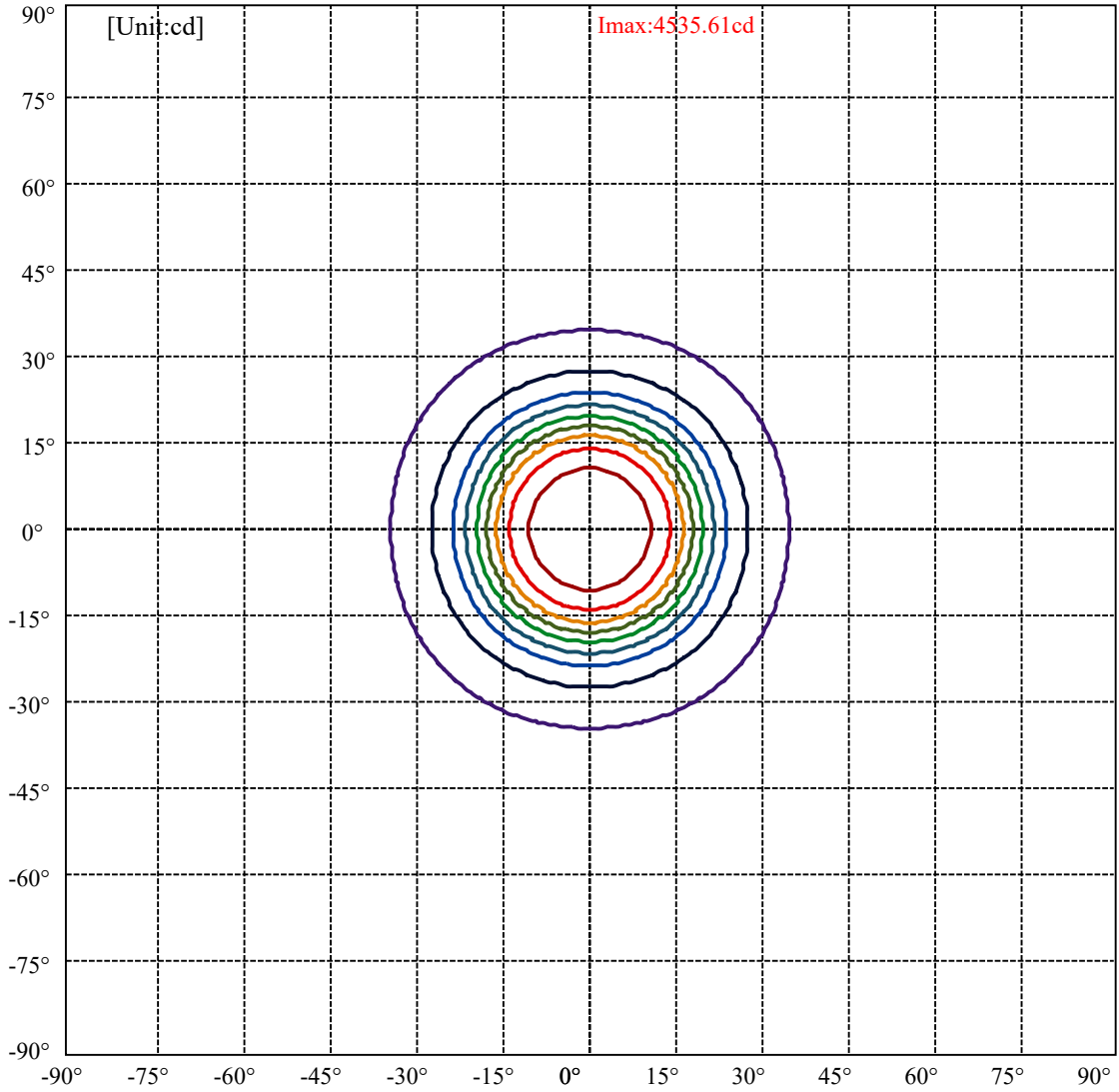


C0(Max): —————
C0/C180: —————
C90/C270: —————

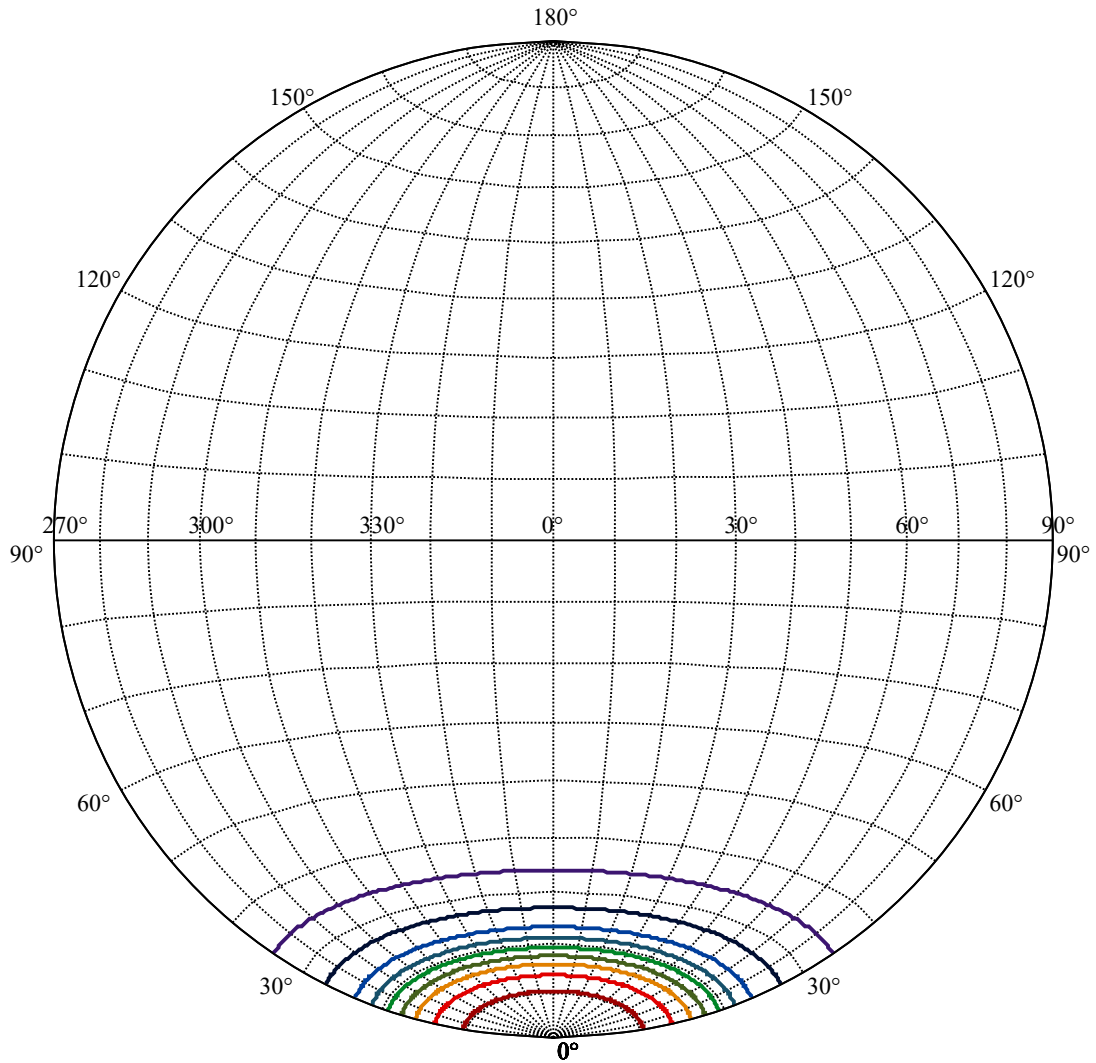
Field angle(10%Imax):C0/180Left:34.1 Right:34.1
:C90/270Left:34.1 Right:34.1

Beam Angle(50%Imax):C0/180Left:19.3 Right:19.3
:C90/270Left:19.3 Right:19.3





(10%Imax) 453.561	—
(20%Imax) 907.121	—
(30%Imax) 1360.68	—
(40%Imax) 1814.24	—
(50%Imax) 2267.8	—
(60%Imax) 2721.36	—
(70%Imax) 3174.92	—
(80%Imax) 3628.48	—
(90%Imax) 4082.05	—



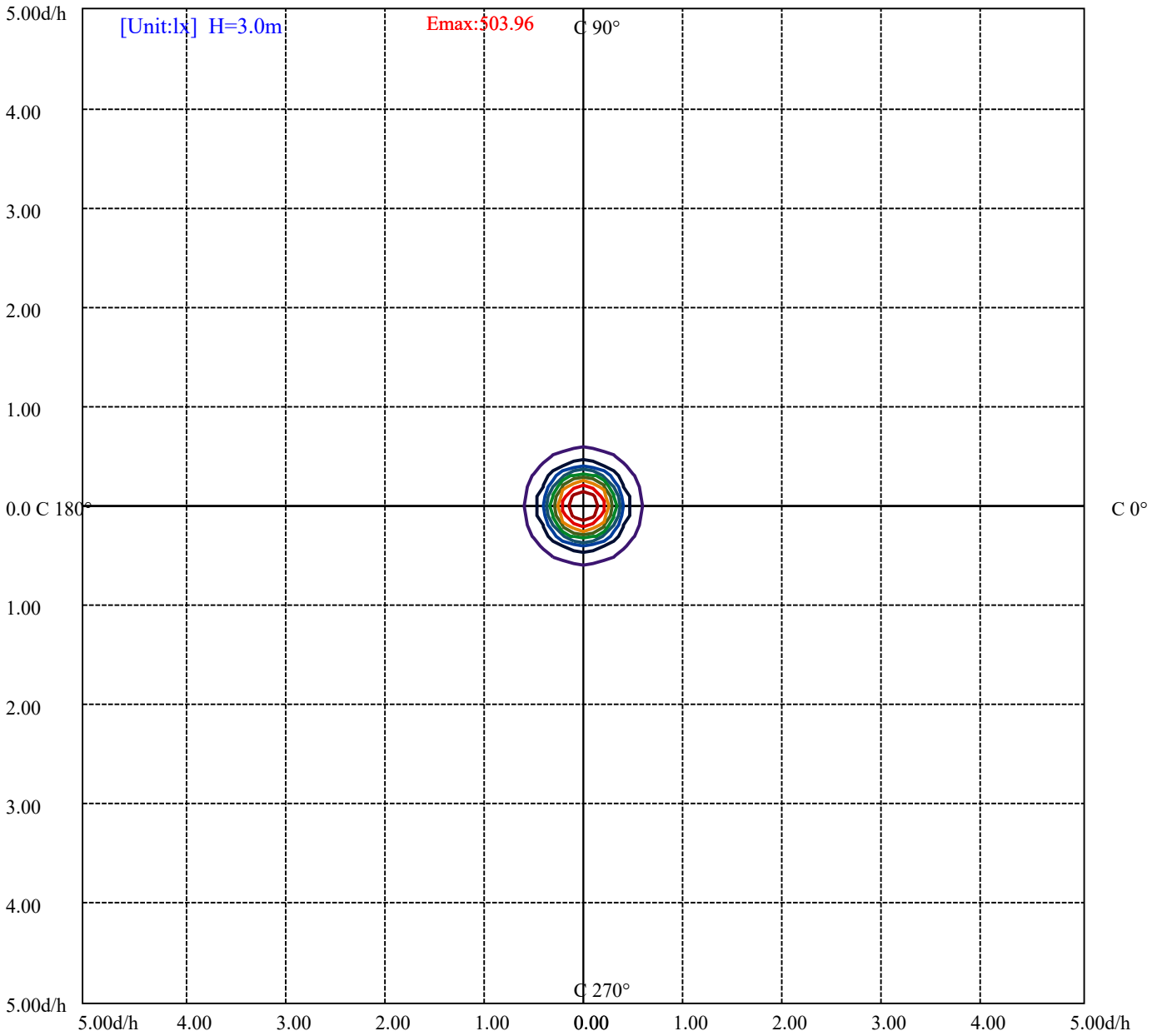
House

[Unit:cd]

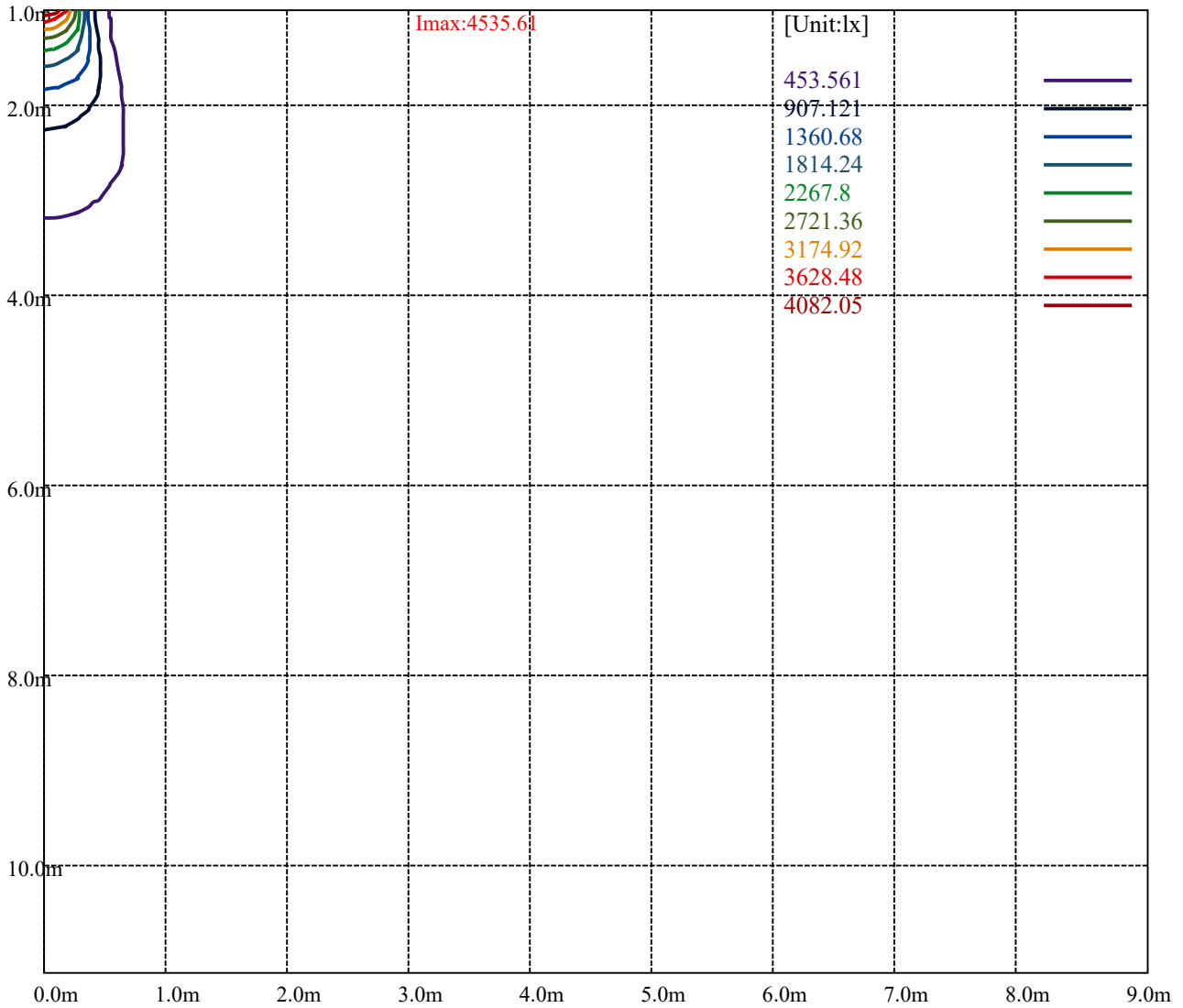
Road

Imax:4535.61

(10%Imax)	453.561	—
(20%Imax)	907.121	—
(30%Imax)	1360.68	—
(40%Imax)	1814.24	—
(50%Imax)	2267.8	—
(60%Imax)	2721.36	—
(70%Imax)	3174.92	—
(80%Imax)	3628.48	—
(90%Imax)	4082.05	—



(10%Emax) 50.39555	—
(20%Emax) 100.7912	—
(30%Emax) 151.1867	—
(40%Emax) 201.5822	—
(50%Emax) 251.9778	—
(60%Emax) 302.3734	—
(70%Emax) 352.7689	—
(80%Emax) 403.1644	—
(90%Emax) 453.56	—



Luminance Table

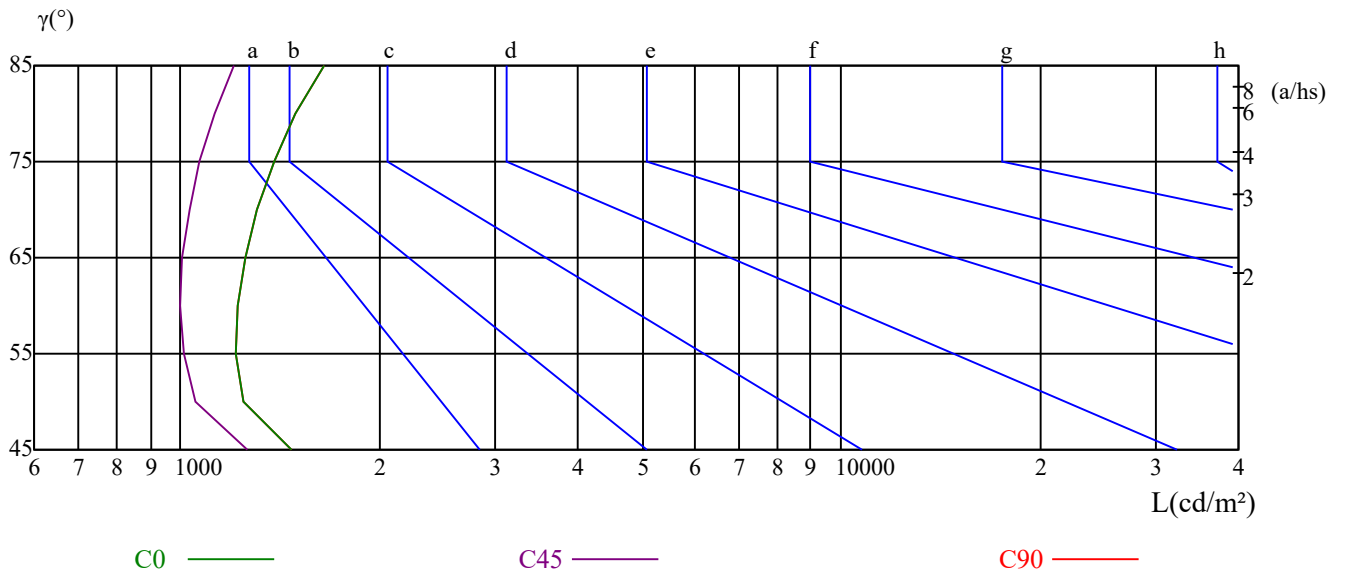
γ	45	50	55	60	65	70	75	80	85
C0	1469	1249	1214	1219	1250	1307	1383	1493	1647
C45	1262	1056	1011	998	1006	1032	1069	1125	1206
C90	1469	1249	1214	1219	1250	1307	1383	1493	1647

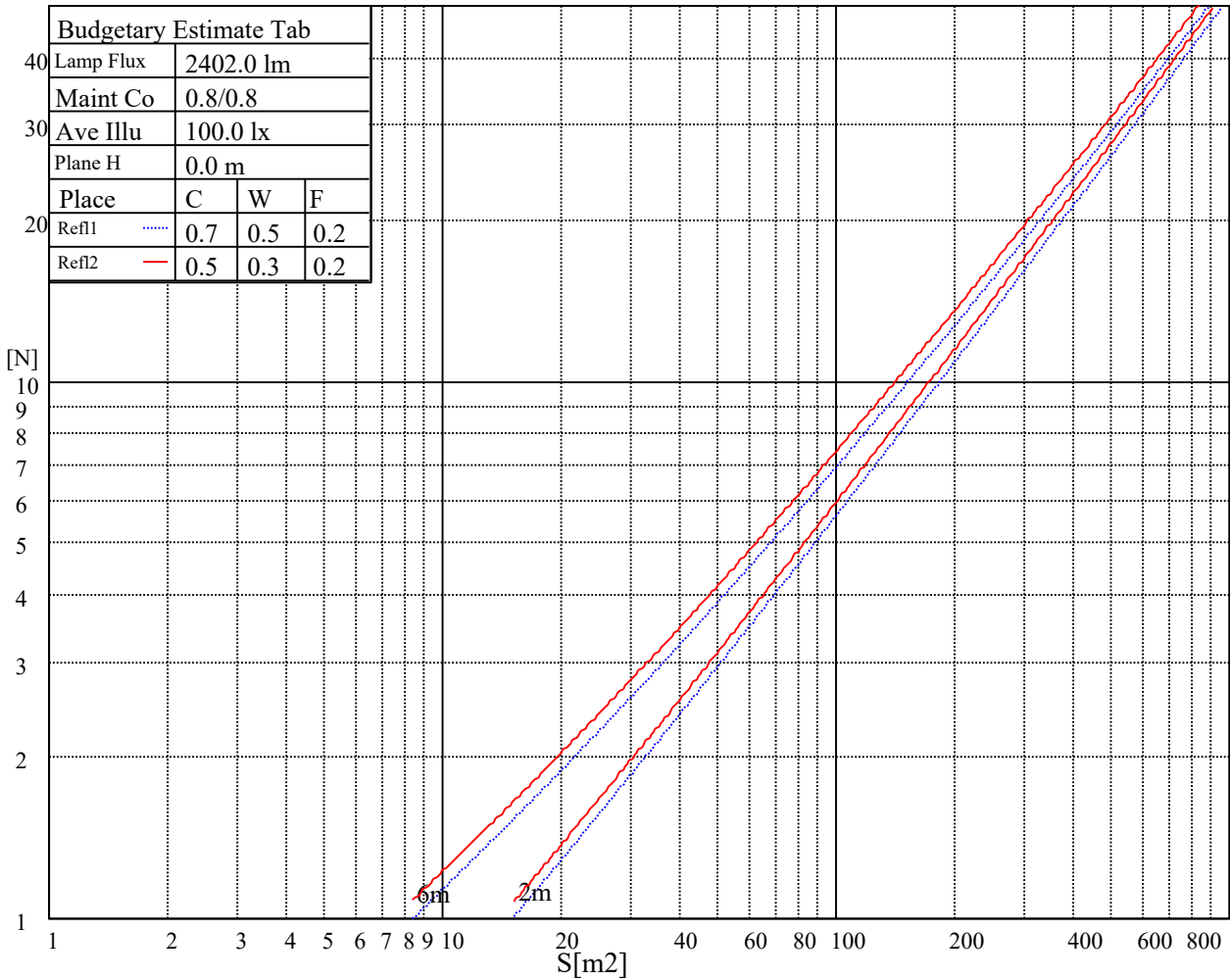
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3016	3016	3016	4784	4784	4784	14052	14052	14052

Glare Table

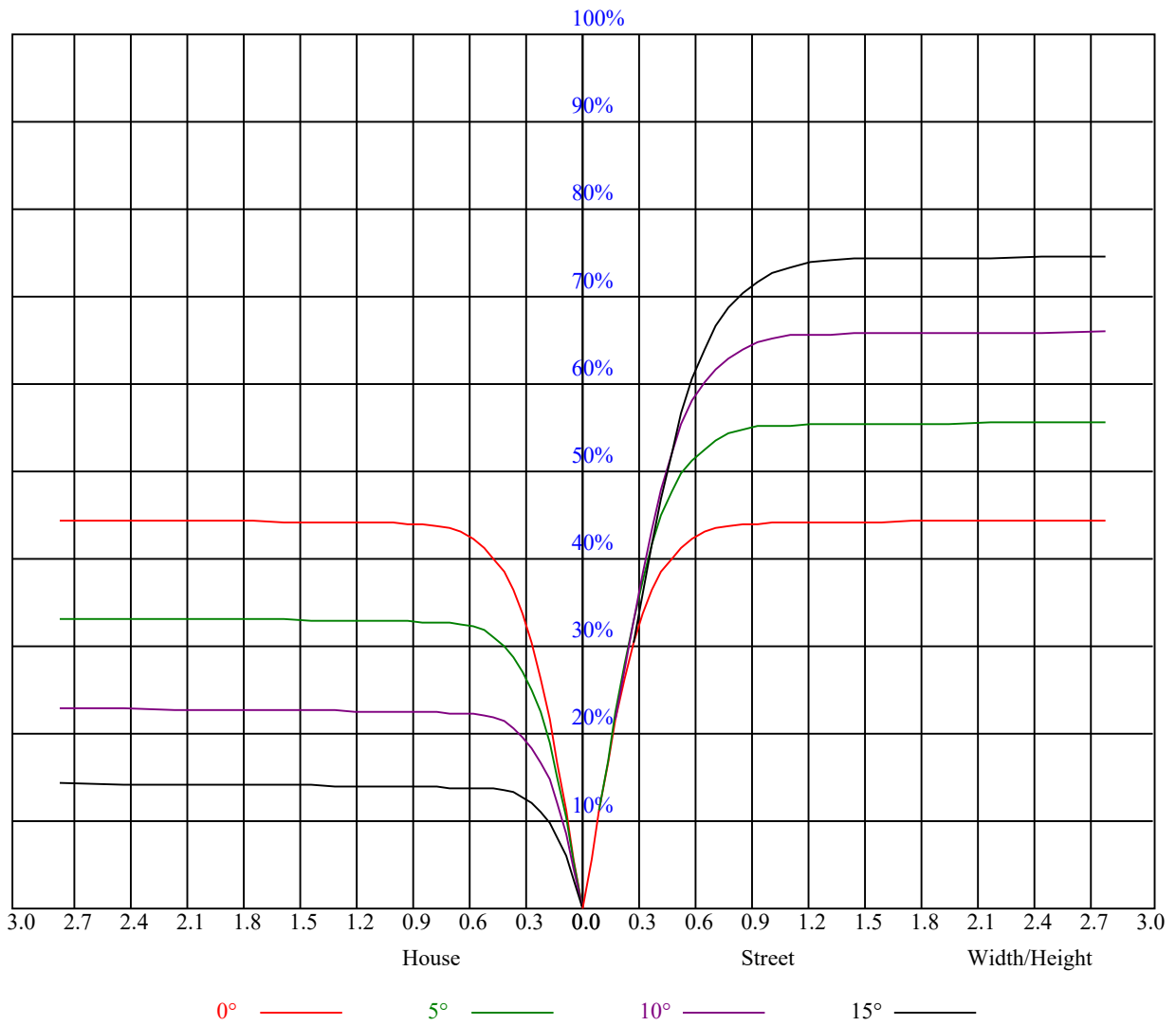
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.97	0.99	0.97	0.95	0.95	0.93	0.92	0.92	0.90	0.89	0.89	0.88	0.87	0.85
2	0.95	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.75	0.79	0.76	0.74	0.73
5	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.70
6	0.77	0.73	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
7	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.64
8	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.61
9	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
10	0.65	0.60	0.58	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.57	0.56



Nata 3-1944-M

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	4526.14	4417.07	4080.38	3483.79	2051.32	996.16	758.53	383.44	24.26
45.0	4539.50	4468.82	4149.94	3522.19	2170.97	1027.33	756.31	424.07	32.50
90.0	4550.63	4497.21	4200.03	3508.28	2109.75	995.38	742.39	389.23	27.10
135.0	4526.14	4535.05	4309.10	3744.80	2596.15	1182.60	789.70	534.81	95.11
180.0	4526.14	4485.52	4179.99	3511.06	2114.76	1029.55	749.40	402.08	39.07
225.0	4539.50	4443.78	4092.62	3364.70	1878.80	998.06	747.79	358.17	24.88
270.0	4550.63	4420.41	4121.56	3425.36	2049.09	1037.90	758.53	383.44	26.55
315.0	4526.14	4360.86	3986.32	3115.38	1731.32	905.01	697.76	264.68	20.26
360.0	4526.14	4417.07	4080.38	3483.79	2051.32	996.16	758.53	383.44	24.26

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	12.02	10.13	9.63	9.24	9.13	8.90	8.90	8.79	8.74
45.0	12.58	10.52	9.91	9.57	9.35	9.18	9.07	8.96	8.90
90.0	13.02	10.41	9.85	9.46	9.29	9.13	8.96	8.85	8.90
135.0	13.52	10.69	9.91	9.57	9.29	9.18	8.96	8.90	8.90
180.0	12.47	10.30	9.68	9.41	9.13	9.02	8.85	8.79	8.79
225.0	12.19	10.35	9.85	9.41	9.24	9.13	9.02	8.90	8.90
270.0	12.30	10.35	9.79	9.46	9.18	9.07	8.96	8.90	8.85
315.0	11.52	10.07	9.52	9.29	9.07	9.02	8.85	8.85	8.79
360.0	12.02	10.13	9.63	9.24	9.13	8.90	8.90	8.79	8.74

C/γ(°)	90.0
0.0	8.68
45.0	8.85
90.0	8.79
135.0	8.74
180.0	8.68
225.0	8.90
270.0	8.85
315.0	8.79
360.0	8.68