



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 3-2384-M	
Luminaire: 92.70.131.00	
Report No: NATA0100	Voltage(V): 33.8200
Test No: GC2019092326	Current(A): 0.5000
LampCAT: BRIDGELUX V13B	Power (W): 16.9100
Lamp flux(lm): 2398.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 74	Width(mm): 74
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2361.19
Efficiency(%): 98.46%
Lumens(lm)/Power(W): 139.63
Central intensity(cd): 5904.281
Maximum intensity(cd): 5904.281
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=33.7
 [C90/270]Total=33.7
Field angle(10%Imax): [C0/180]Total=65.3
 [C90/270]Total=65.3
Maximum s/h(1/2): C0_180=0.56 C90_270=0.56
Maximum s/h(1/4): C0_180=0.55 C90_270=0.55
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 98.46%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.380%

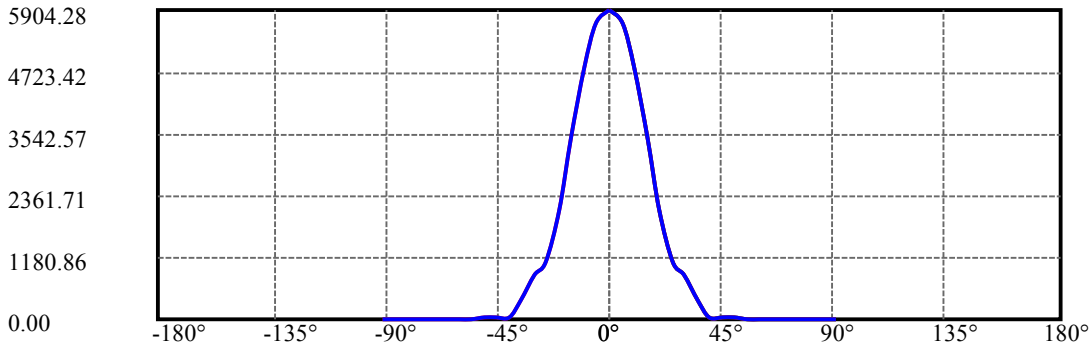
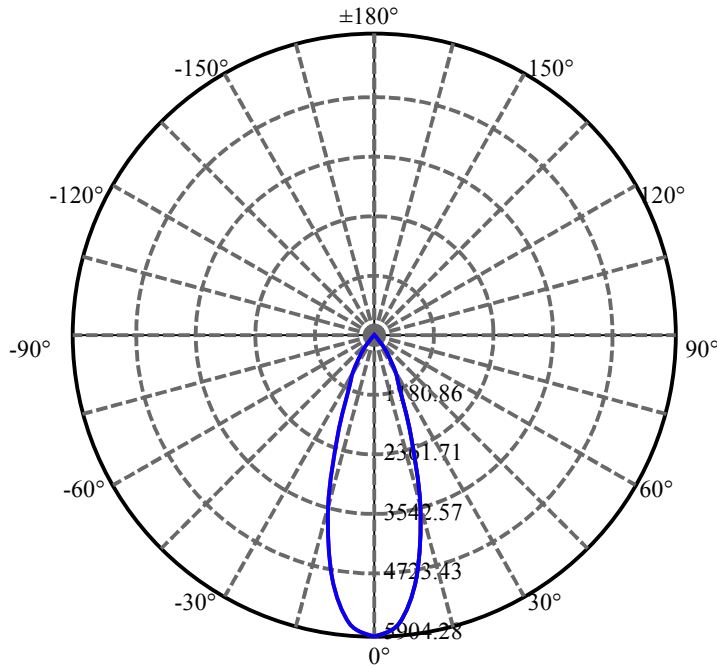
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5904.281	0.000	0	.000%	.000%
5.0	5645.250	138.071	138.071	5.758%	5.848%
10.0	4794.891	373.477	511.548	15.575%	21.665%
15.0	3453.961	489.316	1000.864	20.405%	42.388%
20.0	2081.180	456.173	1457.038	19.023%	61.708%
25.0	1118.363	335.573	1792.611	13.994%	75.920%
30.0	835.066	247.208	2039.819	10.309%	86.390%
35.0	373.556	177.978	2217.797	7.422%	93.927%
40.0	44.416	69.736	2287.532	2.908%	96.881%
45.0	24.124	12.691	2300.223	.529%	97.418%
50.0	18.338	8.580	2308.803	.358%	97.782%
55.0	15.384	7.332	2316.136	.306%	98.092%
60.0	14.006	6.794	2322.929	.283%	98.380%
65.0	13.352	6.651	2329.58	.277%	98.661%
70.0	12.867	6.639	2336.219	.277%	98.943%
75.0	12.066	6.517	2342.736	.272%	99.219%
80.0	11.517	6.310	2349.046	.263%	99.486%
85.0	11.123	6.152	2355.198	.257%	99.746%
90.0	10.744	5.987	2361.186	.250%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2039.82	85.06%	86.39%
0-40	2287.53	95.39%	96.88%
0-60	2322.93	96.87%	98.38%
0-90	2355.20	98.22%	99.75%
0-120	2355.20	98.22%	99.75%
0-180	2361.19	98.46%	100.00%
60-90	39.06	1.63%	1.65%
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%
0-26.95	1888.95	78.77%	80.00%

ZONAL LUMEN SUMMARY

0-10	511.55
10-20	945.49
20-30	582.78
30-40	247.71
40-50	21.27
50-60	14.13
60-70	13.29
70-80	12.83
80-90	6.15
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



C0(Max): —————

C0/C180: —————

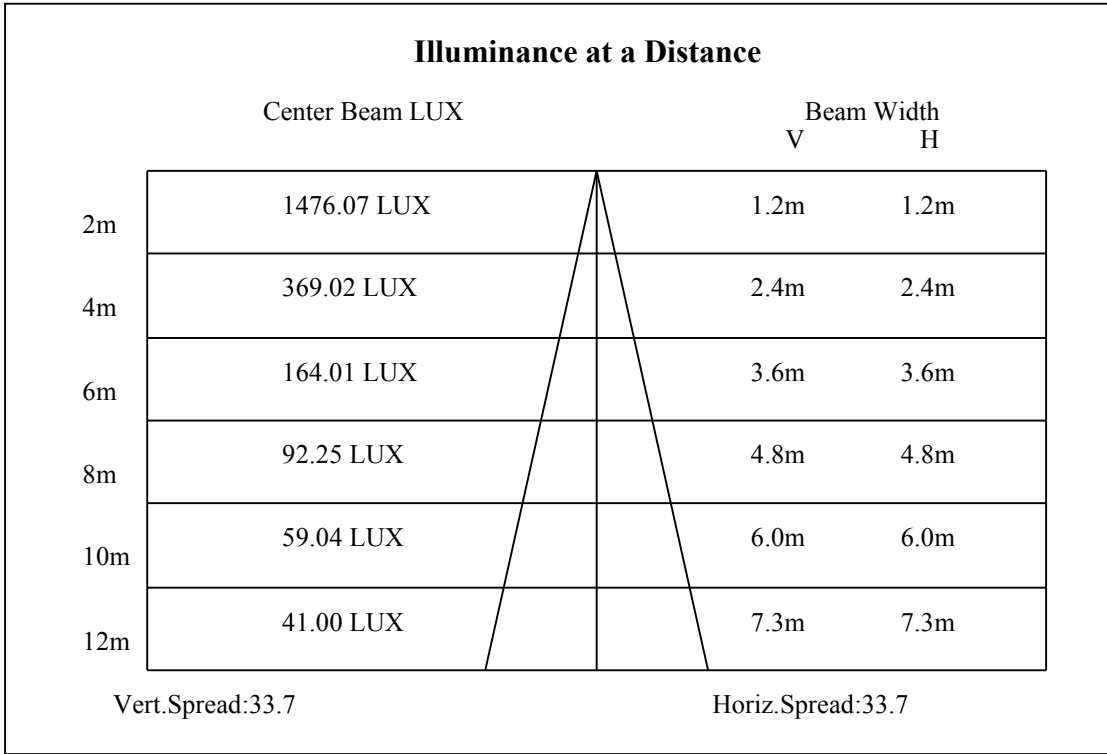
C90/C270: —————

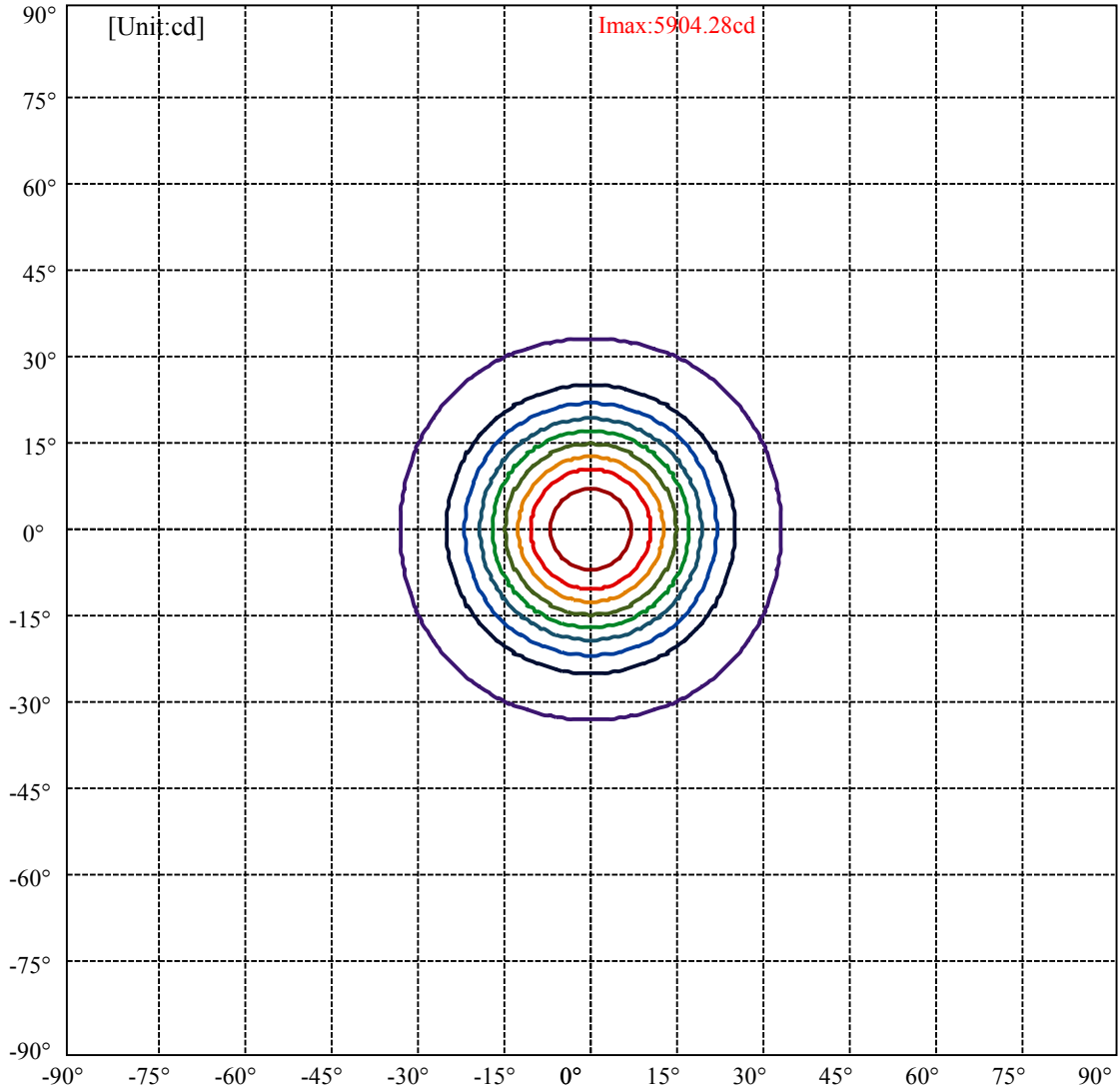
Field angle(10%Imax):C0/180Left:32.7 Right:32.7

:C90/270Left:32.7 Right:32.7

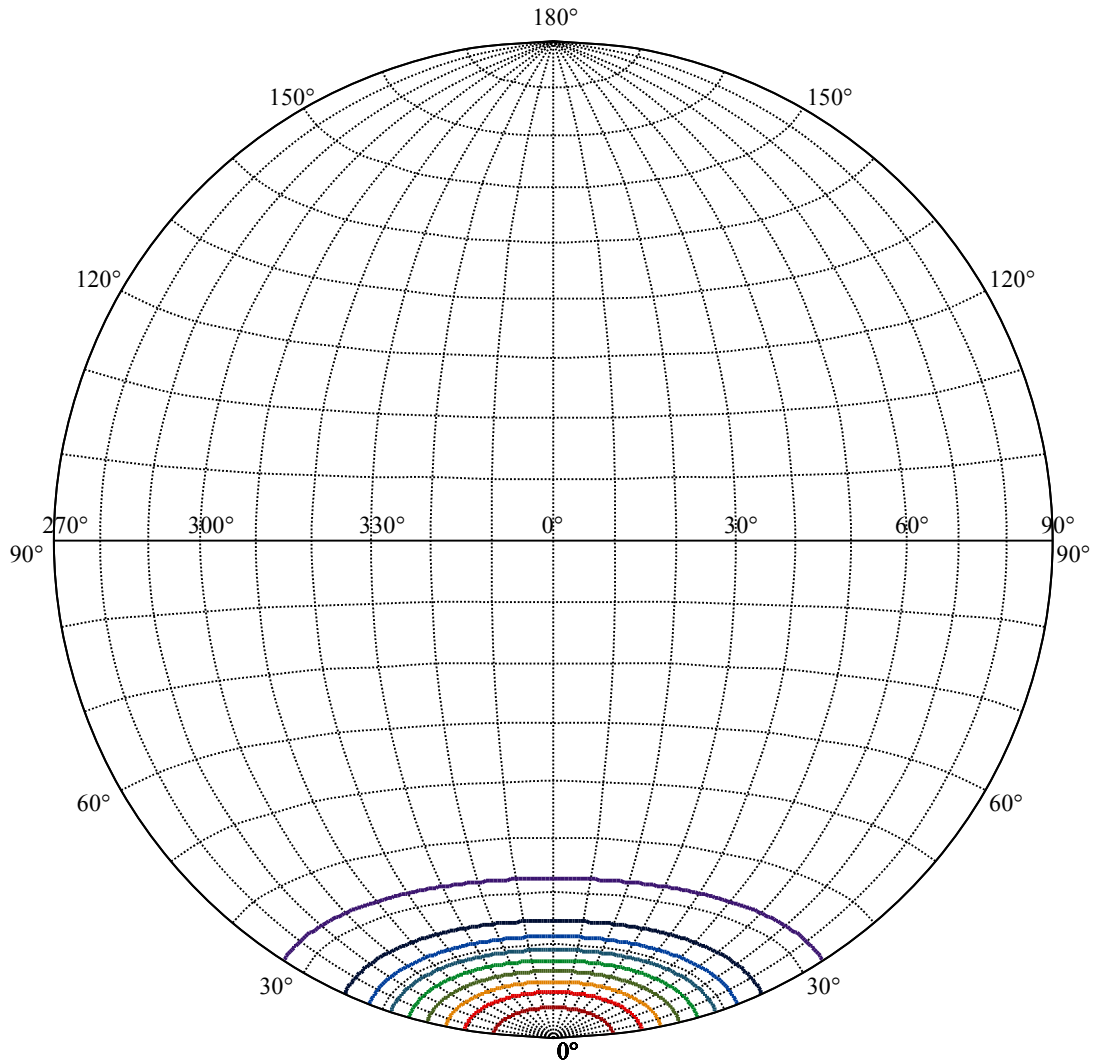
Beam Angle(50%Imax):C0/180Left:16.8 Right:16.8

:C90/270Left:16.8 Right:16.8





(10%Imax) 590.428	—
(20%Imax) 1180.86	—
(30%Imax) 1771.28	—
(40%Imax) 2361.71	—
(50%Imax) 2952.14	—
(60%Imax) 3542.57	—
(70%Imax) 4133	—
(80%Imax) 4723.42	—
(90%Imax) 5313.85	—



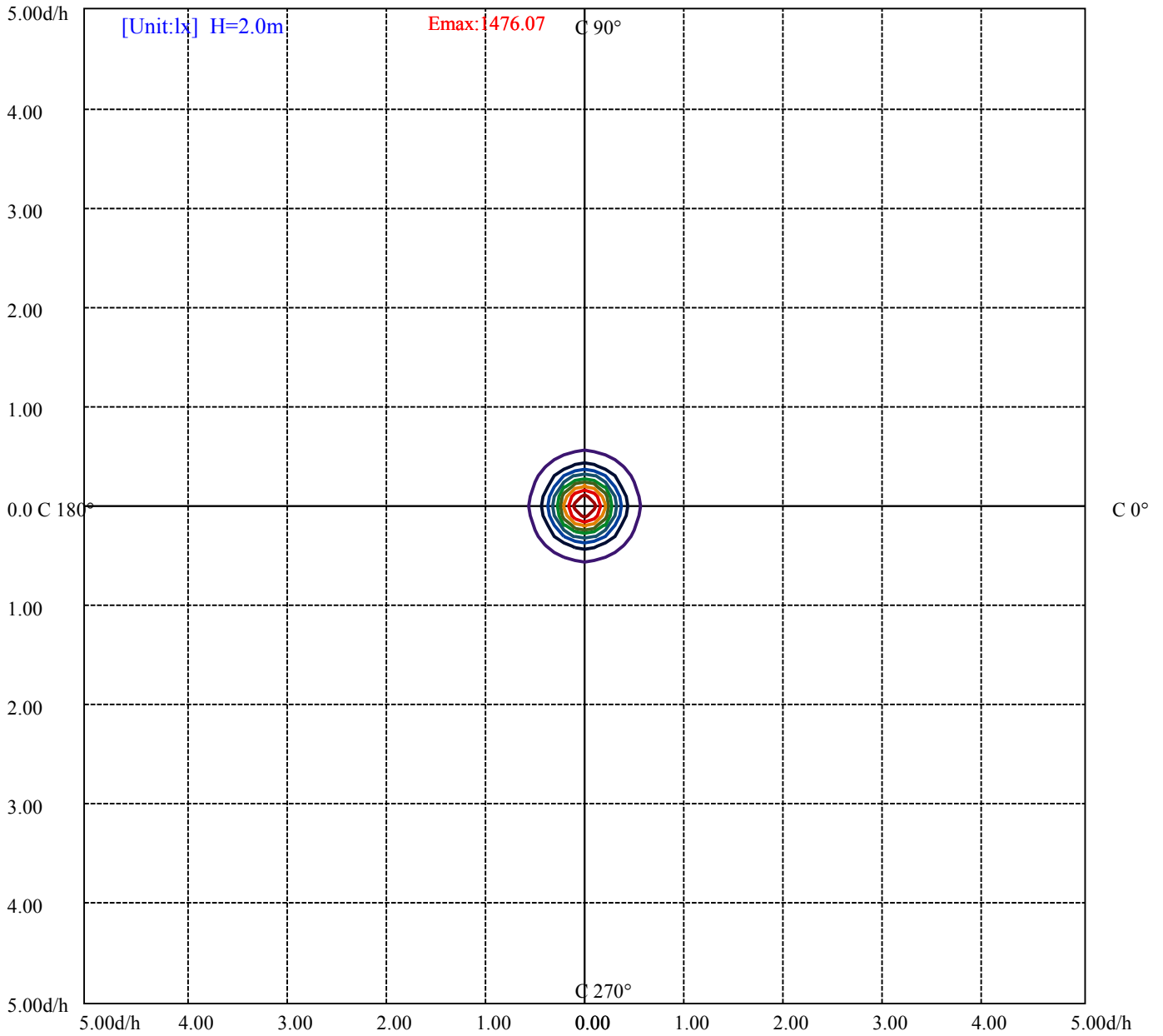
House

[Unit:cd]

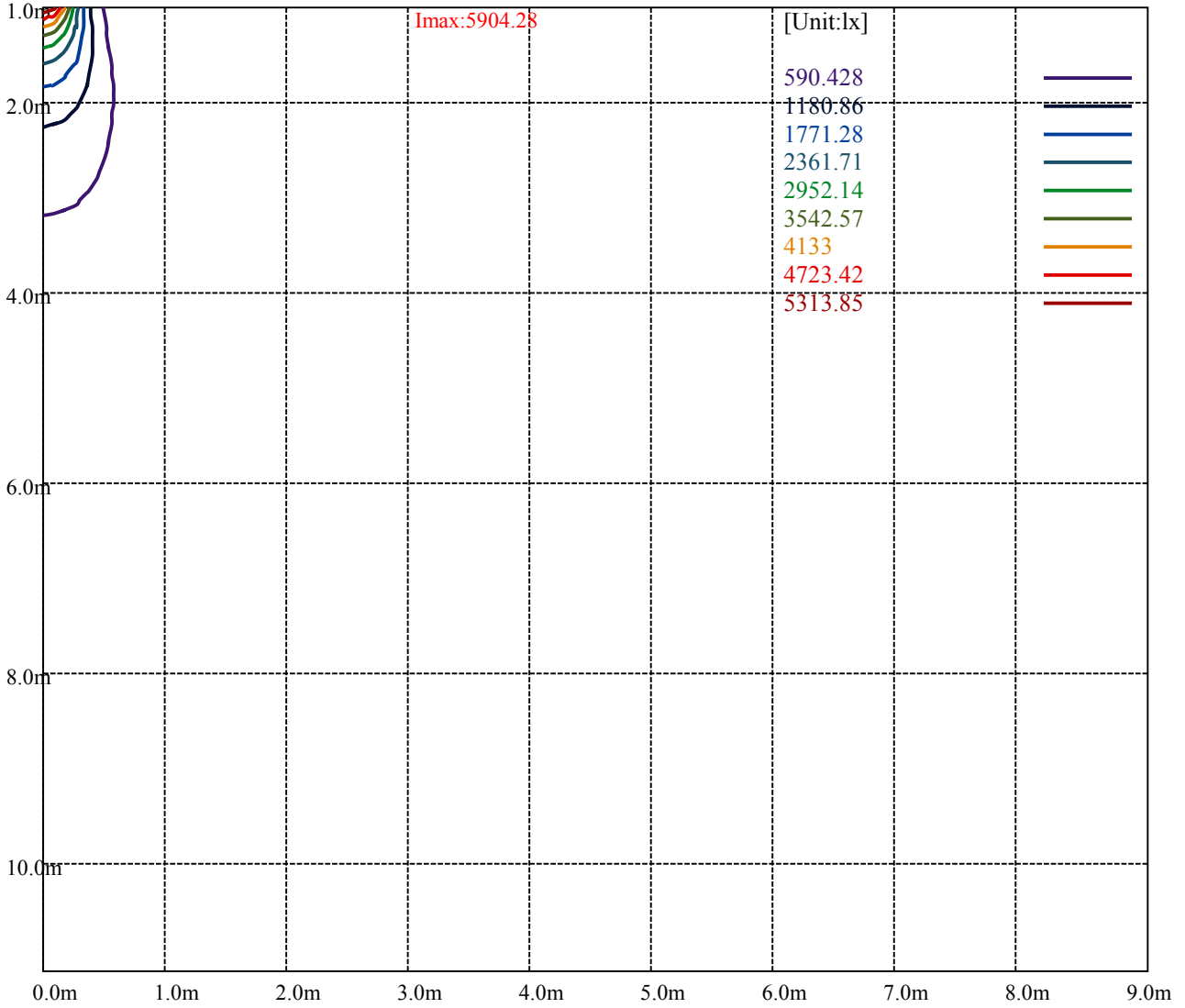
Road

I_{max}:5904.28

(10%I _{max}) 590.428	—
(20%I _{max}) 1180.86	—
(30%I _{max}) 1771.28	—
(40%I _{max}) 2361.71	—
(50%I _{max}) 2952.14	—
(60%I _{max}) 3542.57	—
(70%I _{max}) 4133	—
(80%I _{max}) 4723.42	—
(90%I _{max}) 5313.85	—



(10%Emax) 147.6068	—
(20%Emax) 295.2125	—
(30%Emax) 442.82	—
(40%Emax) 590.4275	—
(50%Emax) 738.035	—
(60%Emax) 885.64	—
(70%Emax) 1033.248	—
(80%Emax) 1180.855	—
(90%Emax) 1328.463	—



Luminance Table

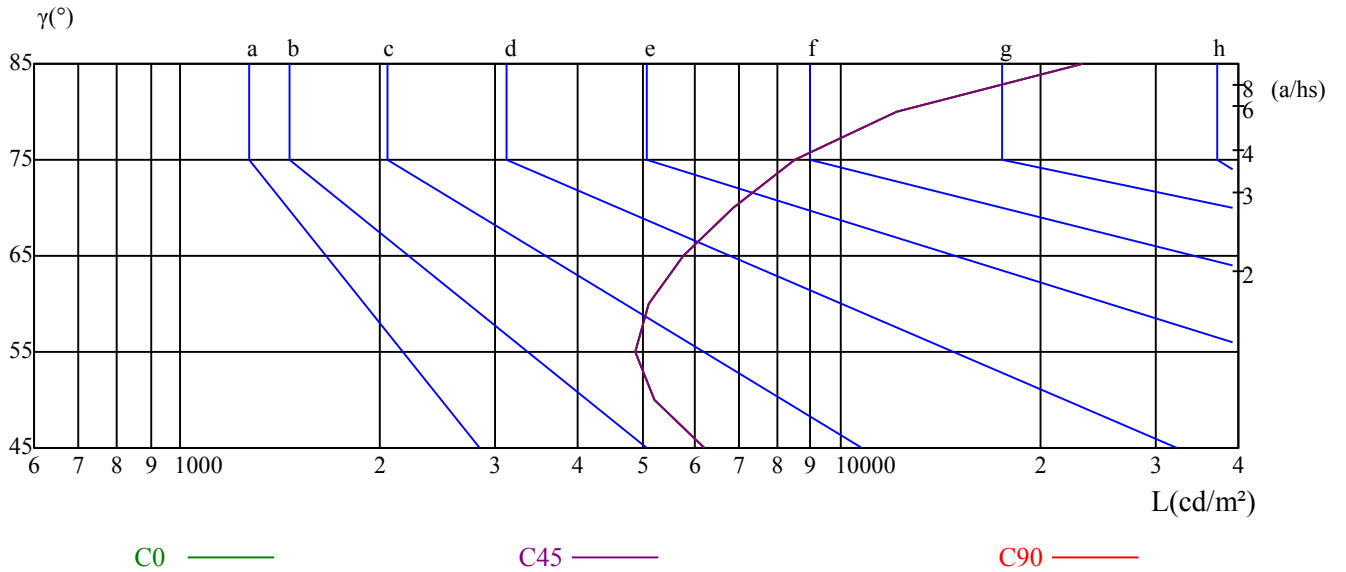
γ	45	50	55	60	65	70	75	80	85
C0	6230	5210	4898	5116	5770	6870	8513	12112	23307
C45	6230	5210	4898	5116	5770	6870	8513	12112	23307
C90	6230	5210	4898	5116	5770	6870	8513	12112	23307

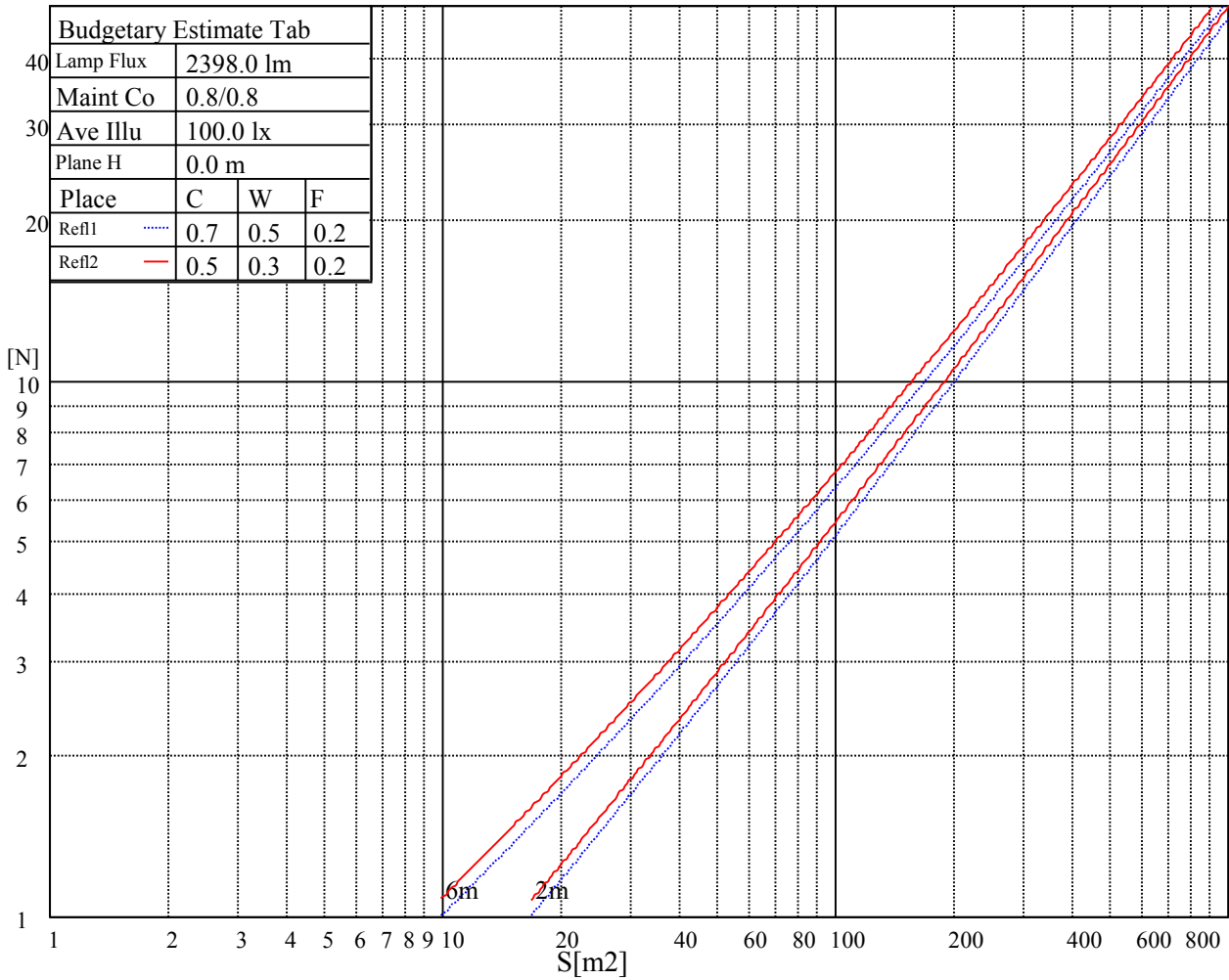
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5770	5770	5770	8513	8513	8513	23307	23307	23307

Glare Table

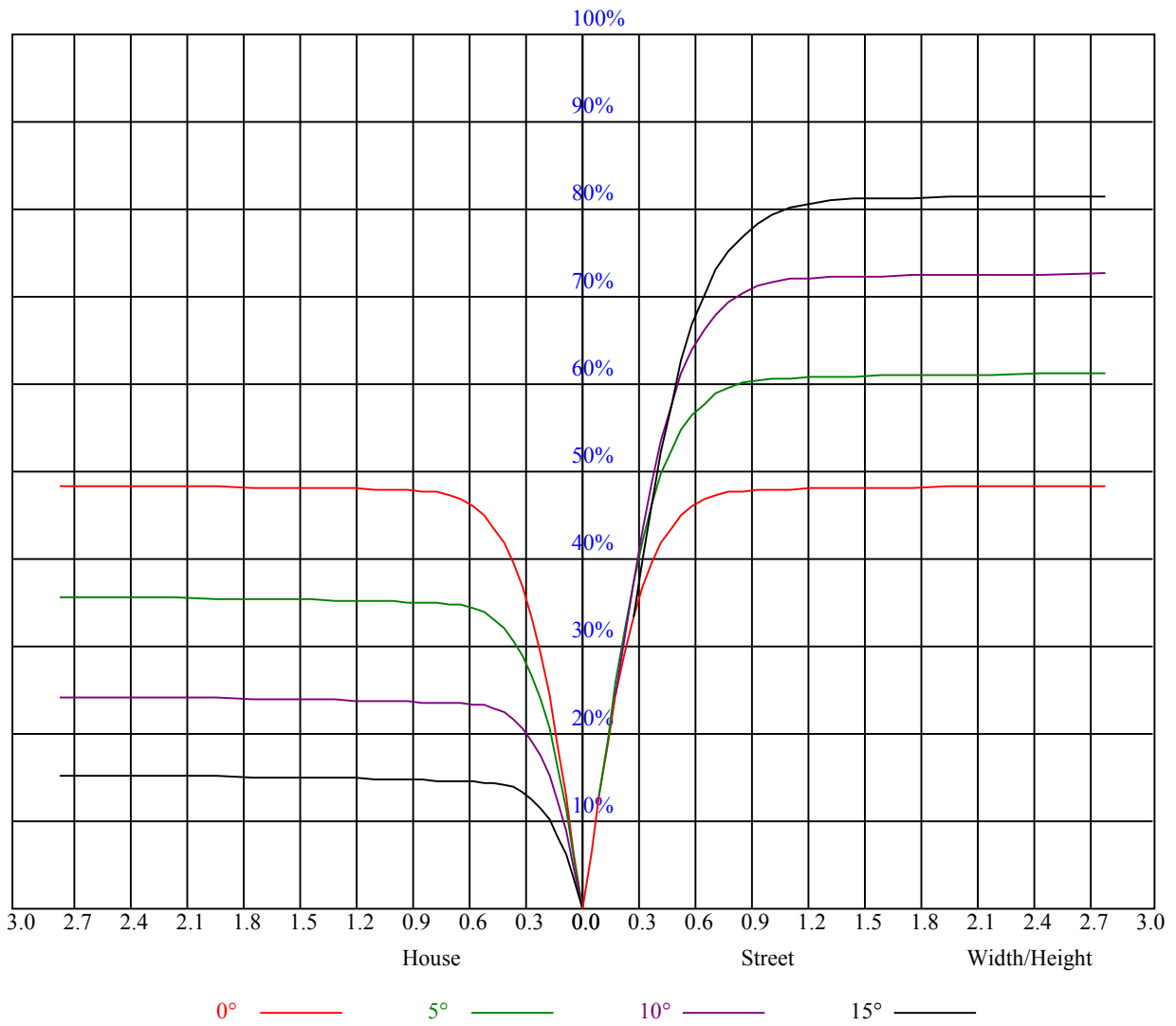
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.17	1.17	1.17	1.14	1.14	1.14	1.09	1.09	1.09	1.05	1.05	1.05	1.00	1.00	1.00	0.98
1	1.10	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.93
2	1.03	1.00	0.97	1.02	0.99	0.96	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.91	0.90	0.88
3	0.98	0.94	0.90	0.97	0.93	0.90	0.94	0.91	0.88	0.92	0.89	0.87	0.90	0.87	0.86	0.84
4	0.93	0.88	0.85	0.92	0.88	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.84	0.81	0.80
5	0.89	0.84	0.80	0.88	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.83	0.80	0.78	0.76
6	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.81	0.78	0.75	0.80	0.77	0.74	0.73
7	0.81	0.76	0.72	0.80	0.76	0.72	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.70
8	0.77	0.73	0.69	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.67
9	0.74	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.72	0.68	0.66	0.64
10	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.62



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	5884.88	5665.50	4944.94	3709.69	2465.44	1328.63	929.25	509.06	52.37
45.0	5916.94	5620.50	4732.31	3577.50	2318.06	1136.25	830.25	447.19	44.21
90.0	5899.50	5465.81	4421.25	3345.19	2049.19	1045.24	782.33	331.31	34.99
135.0	5915.81	5658.75	4754.81	3546.00	2244.38	1333.13	951.75	463.50	67.33
180.0	5884.88	5601.38	4659.75	3275.44	2001.94	1111.28	839.08	327.49	44.66
225.0	5916.94	5704.31	4848.75	3135.94	1573.88	916.26	720.00	233.21	27.56
270.0	5899.50	5806.13	5198.63	3583.69	1910.81	973.69	738.56	330.19	34.65
315.0	5915.81	5639.63	4798.69	3458.25	2085.75	1102.44	889.31	346.50	49.56
360.0	5884.88	5665.50	4944.94	3709.69	2465.44	1328.63	929.25	509.06	52.37
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	25.54	18.73	15.24	14.01	13.61	13.33	12.32	11.59	11.14
45.0	20.87	16.88	14.63	13.50	12.88	12.66	12.15	11.42	11.03
90.0	21.43	17.04	15.08	13.95	13.44	13.16	12.26	11.76	11.25
135.0	34.99	23.68	18.17	15.69	14.40	13.50	12.21	11.48	11.08
180.0	23.34	17.38	14.63	13.56	13.22	12.77	11.93	11.42	11.08
225.0	17.66	15.13	13.33	12.54	12.21	12.04	11.70	11.36	11.08
270.0	19.91	16.14	14.34	13.33	12.77	12.38	11.98	11.70	11.25
315.0	29.25	21.71	17.66	15.47	14.29	13.11	11.98	11.42	11.08
360.0	25.54	18.73	15.24	14.01	13.61	13.33	12.32	11.59	11.14
C/ γ (°)	90.0								
0.0	10.86								
45.0	10.80								
90.0	10.69								
135.0	10.74								
180.0	10.69								
225.0	10.74								
270.0	10.74								
315.0	10.69								
360.0	10.86								