
Nata

Client:

LumCAT: 2-1779-L

Luminaire: 92.70.135.00

Report No: NT2018010903

Test No: GC2018010903

LampCAT: LUMILEDS 1208

Lamp flux(lm): 2981.0

Number of Lamps: 1

Length(mm): 64

Phm Type: C

Voltage(V): 35.0000

Current(A): 0.6400

Power (W): 22.4000

PF: 0.0000

Ballast type: DC

Width(mm): 64

Height(mm):0

Photometric Results

Lumens(lm): 2896.57, Efficiency(%): 97.17% , Luminous Efficacy(lm/W): 129.31

Central intensity(cd): 5605.567, Maximum intensity(cd): 5605.567

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=40.6

[C90/270]Total=40.6

Field angle(10%Imax): [C0/180]Total=68.8

[C90/270]Total=68.8

Maximum s/h(1/2): C0_180=0.67 C90_270=0.67

Maximum s/h(1/4): C0_180=0.64 C90_270=0.64

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 98.20%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.440%

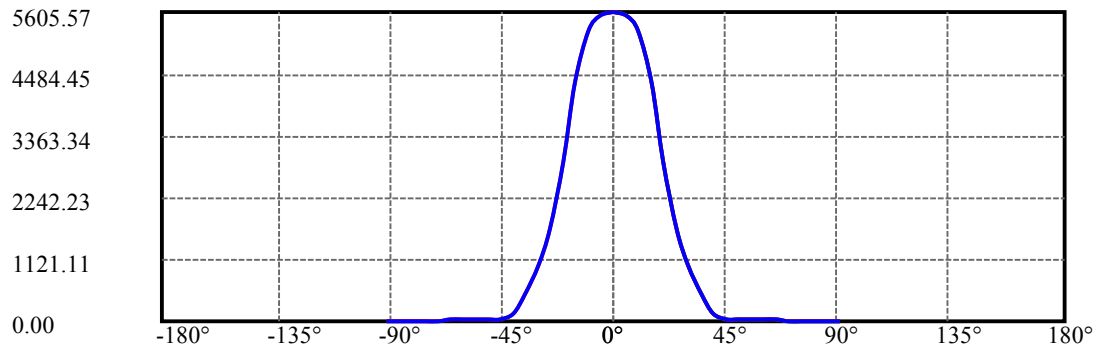
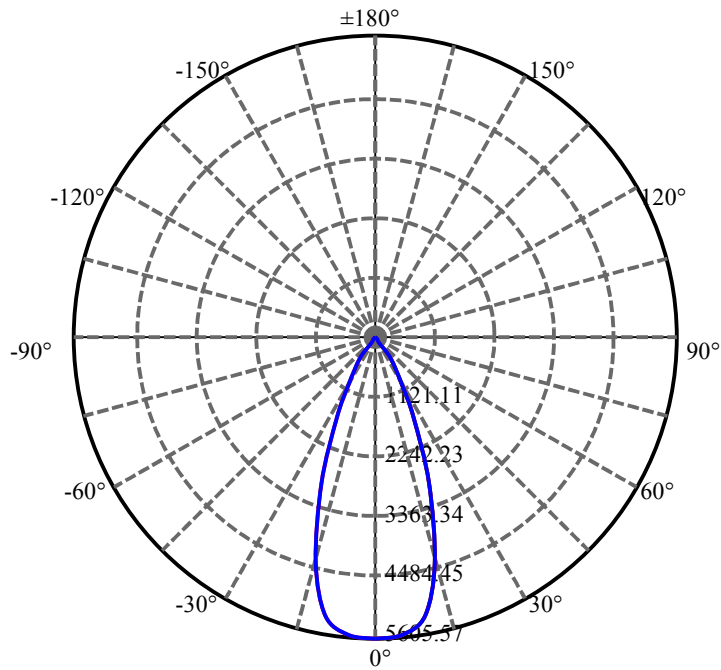
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5605.567	33.522	33.522	1.125%	1.157%
5.0	5537.986	264.568	298.09	8.875%	10.291%
10.0	5244.260	499.165	797.255	16.745%	27.524%
15.0	4321.239	613.047	1410.302	20.565%	48.689%
20.0	2883.097	540.506	1950.808	18.132%	67.349%
25.0	1655.133	383.416	2334.224	12.862%	80.586%
30.0	1022.012	280.101	2614.326	9.396%	90.256%
35.0	496.161	155.992	2770.318	5.233%	95.641%
40.0	131.069	46.180	2816.499	1.549%	97.236%
45.0	25.443	9.861	2826.36	.331%	97.576%
50.0	20.522	8.617	2834.977	.289%	97.874%
55.0	19.208	8.624	2843.602	.289%	98.171%
60.0	18.499	8.781	2852.383	.295%	98.474%
65.0	17.508	8.698	2861.081	.292%	98.775%
70.0	16.386	8.440	2869.521	.283%	99.066%
75.0	15.044	7.965	2877.486	.267%	99.341%
80.0	14.328	7.735	2885.221	.259%	99.608%
85.0	14.005	7.647	2892.868	.257%	99.872%
90.0	13.509	3.703	2896.571	.124%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2614.33	87.70%	90.26%
0-40	2816.50	94.48%	97.24%
0-60	2852.38	95.69%	98.47%
0-90	2892.87	97.04%	99.87%
0-120	2892.87	97.04%	99.87%
0-180	2896.57	97.17%	100.00%
60-90	49.27	1.65%	1.70%
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%
0-24.78	2317.26	77.73%	80.00%

ZONAL LUMEN SUMMARY

0-10	797.26
10-20	1153.55
20-30	663.52
30-40	202.17
40-50	18.48
50-60	17.41
60-70	17.14
70-80	15.70
80-90	7.65
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: —————

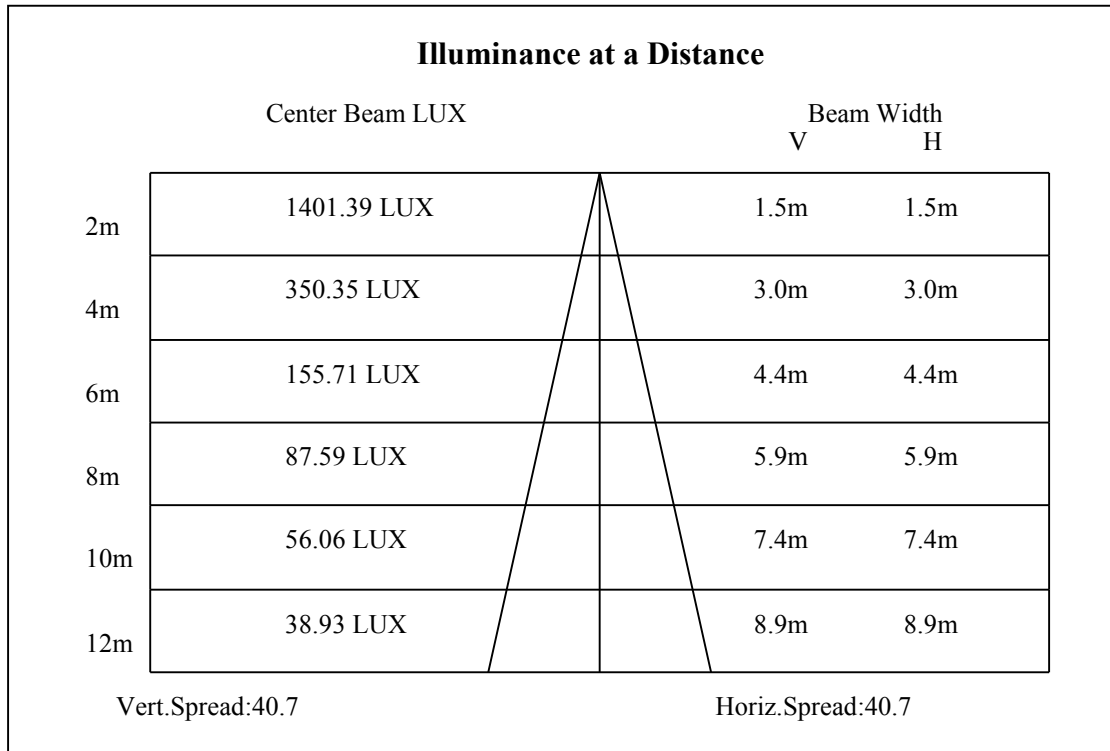
C90/C270: —————

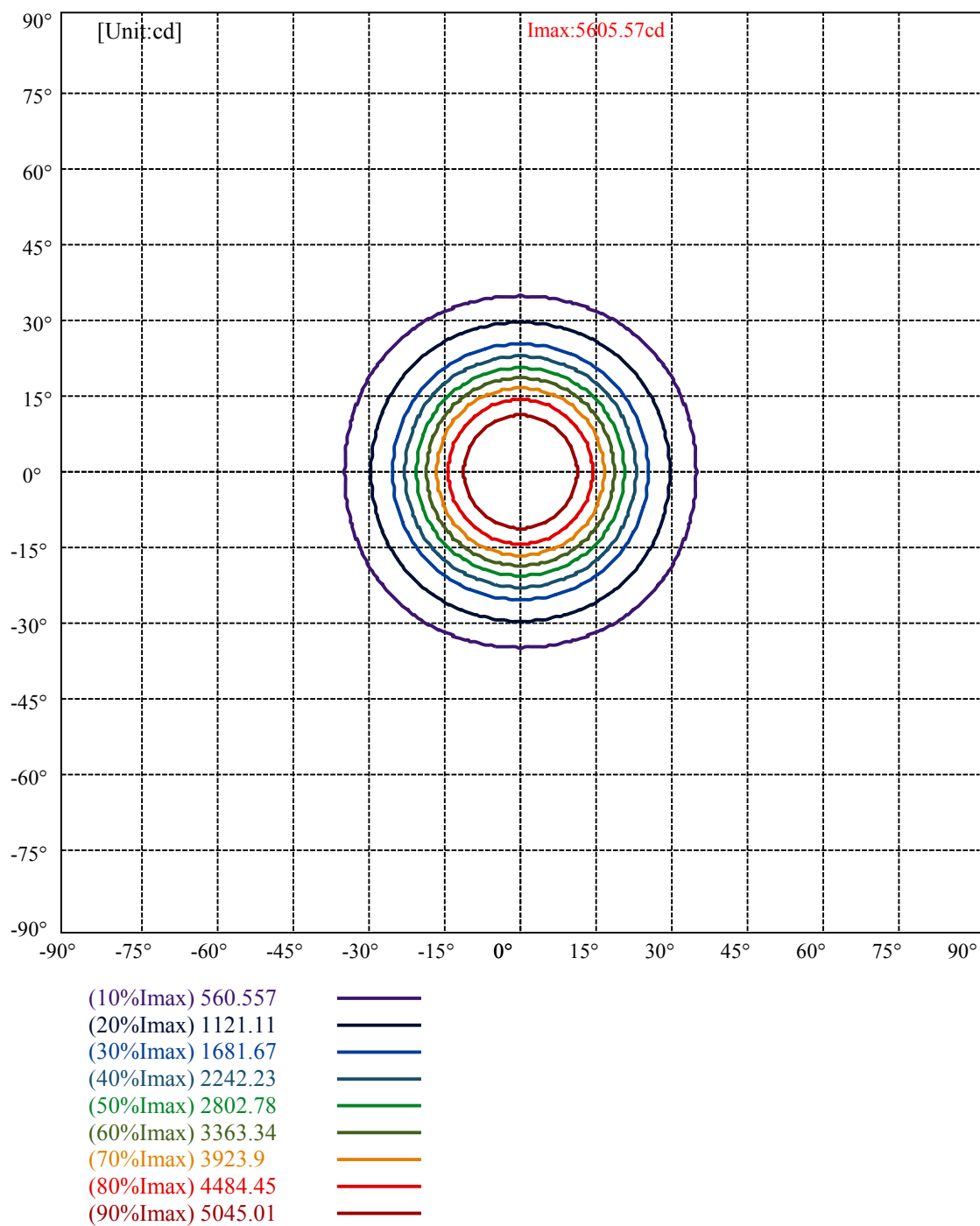
Field angle(10%Imax):C0/180Left:34.4 Right:34.4

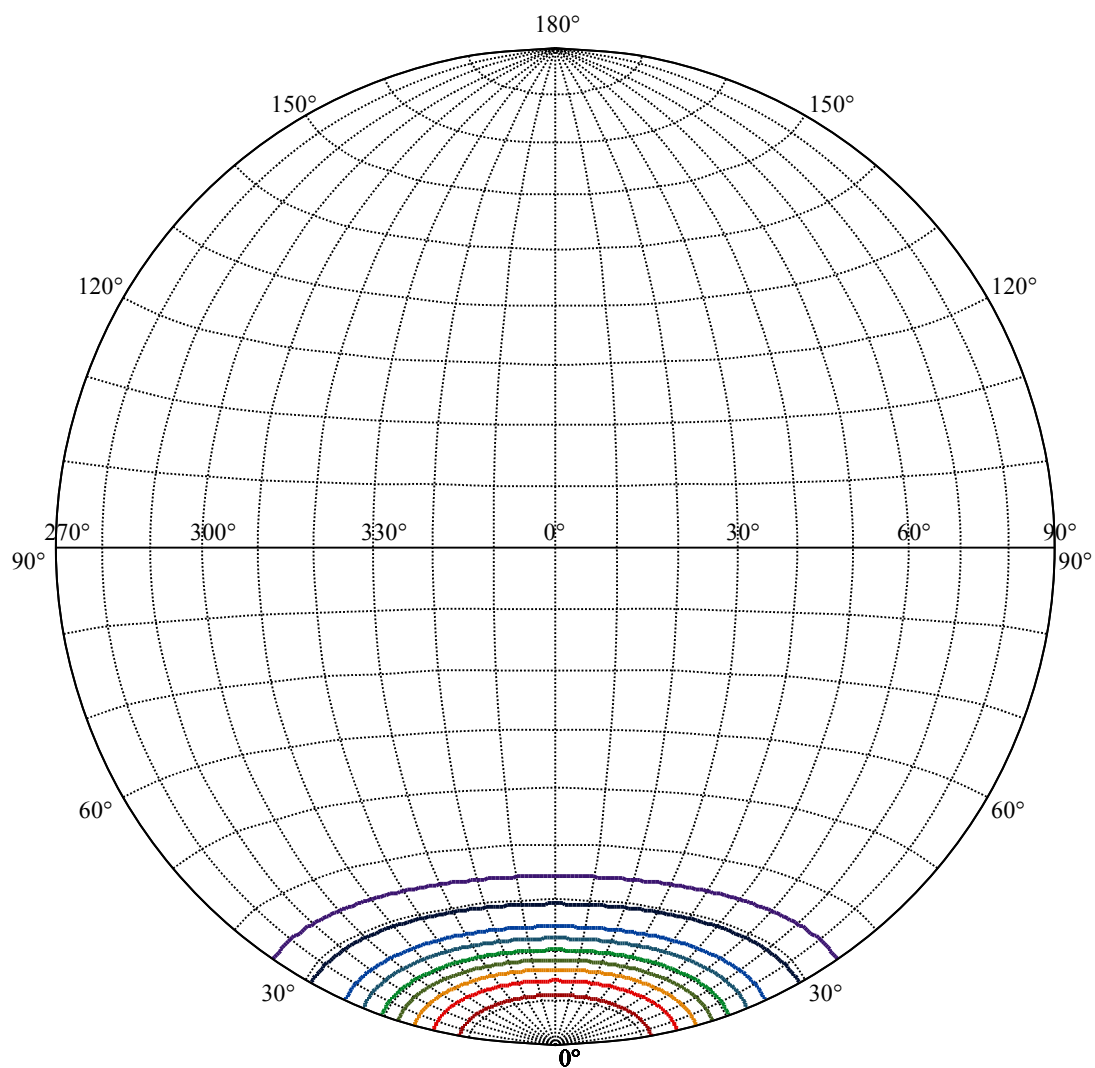
:C90/270Left:34.4 Right:34.4

Beam Angle(50%Imax):C0/180Left:20.3 Right:20.3

:C90/270Left:20.3 Right:20.3







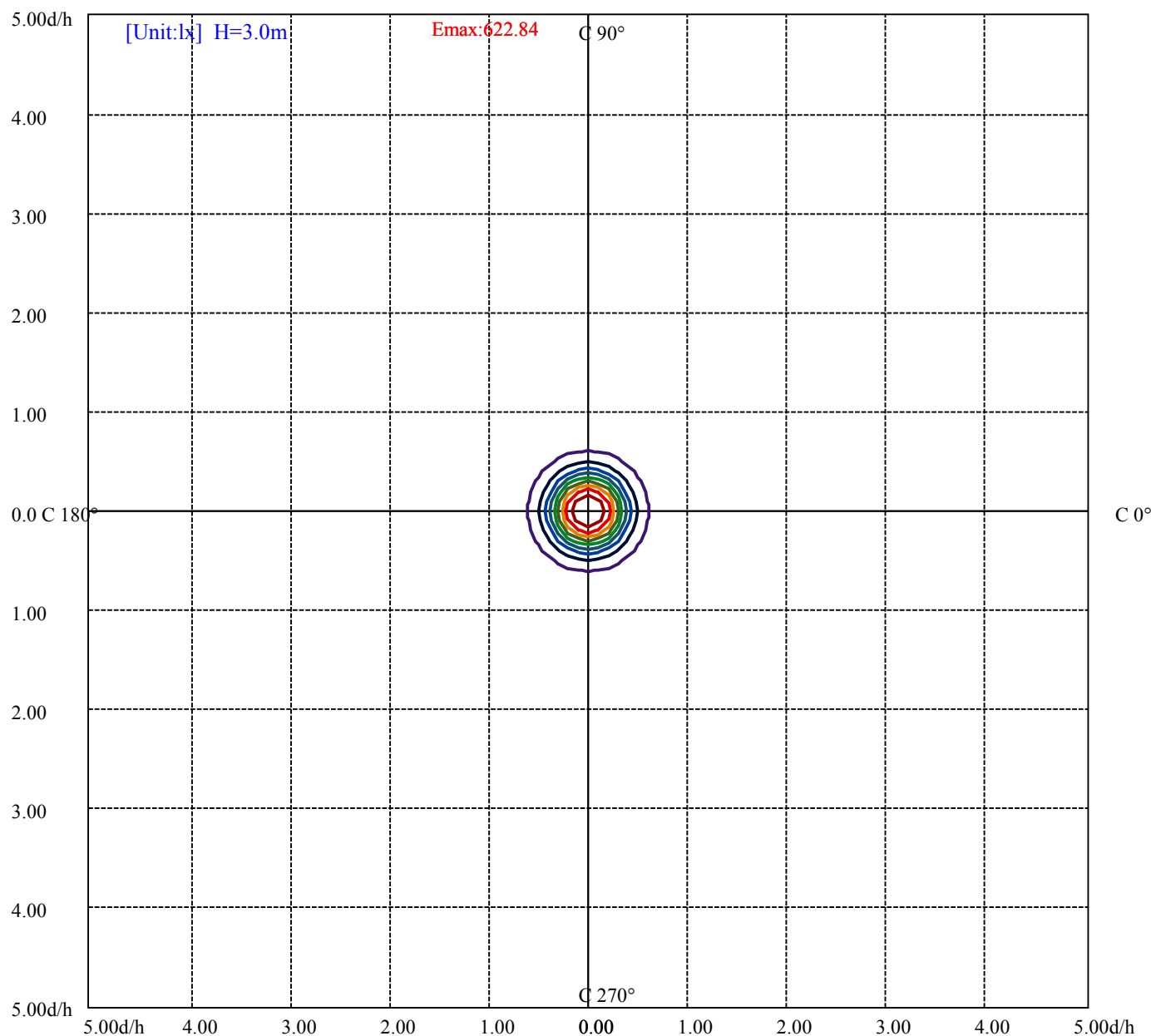
House

[Unit:cd]

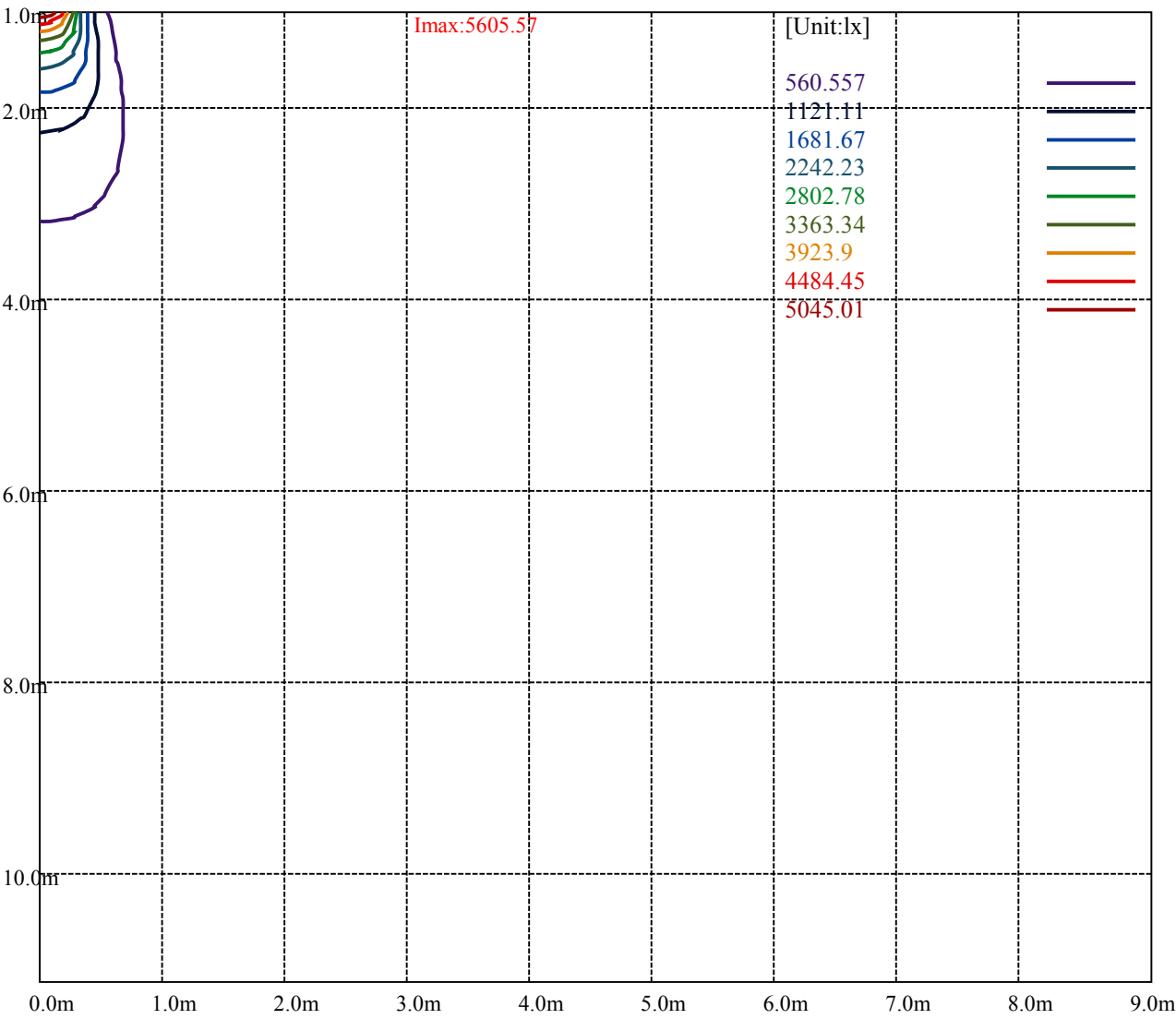
Road

Imax:5605.57

(10%Imax)	560.557	—
(20%Imax)	1121.11	—
(30%Imax)	1681.67	—
(40%Imax)	2242.23	—
(50%Imax)	2802.78	—
(60%Imax)	3363.34	—
(70%Imax)	3923.9	—
(80%Imax)	4484.45	—
(90%Imax)	5045.01	—



(10%Emax) 62.28411	—
(20%Emax) 124.5678	—
(30%Emax) 186.8522	—
(40%Emax) 249.1367	—
(50%Emax) 311.42	—
(60%Emax) 373.7045	—
(70%Emax) 435.9889	—
(80%Emax) 498.2722	—
(90%Emax) 560.5566	—



Luminance Table

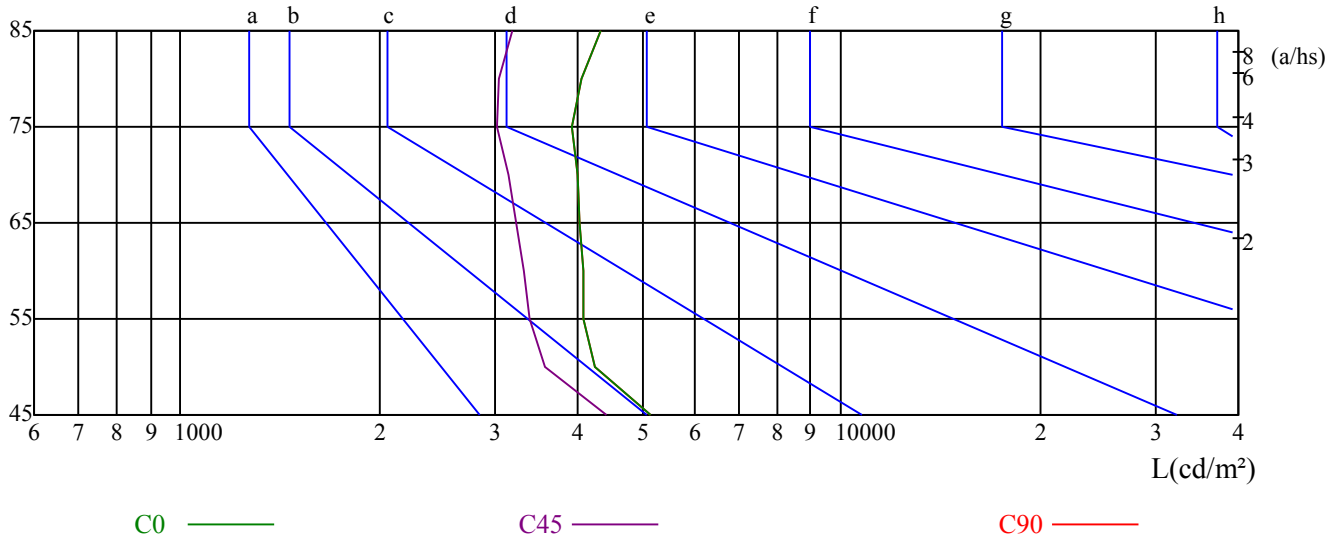
γ	45	50	55	60	65	70	75	80	85
C0	5158	4241	4079	4073	4033	3990	3916	4039	4341
C45	4405	3567	3378	3318	3229	3134	3012	3034	3173
C90	5158	4241	4079	4073	4033	3990	3916	4039	4341

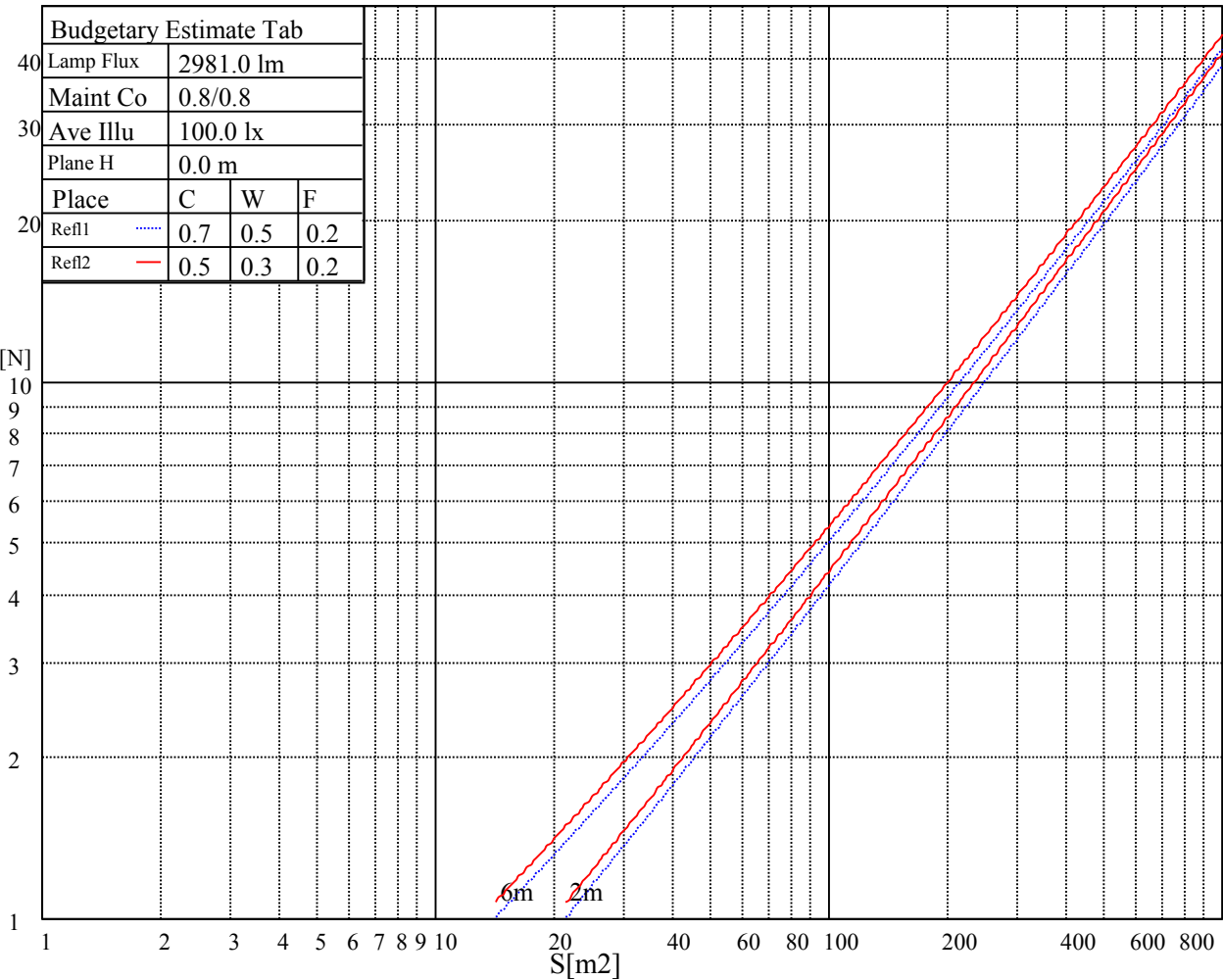
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10114	10114	10114	14191	14191	14191	39231	39231	39231

Glare Table

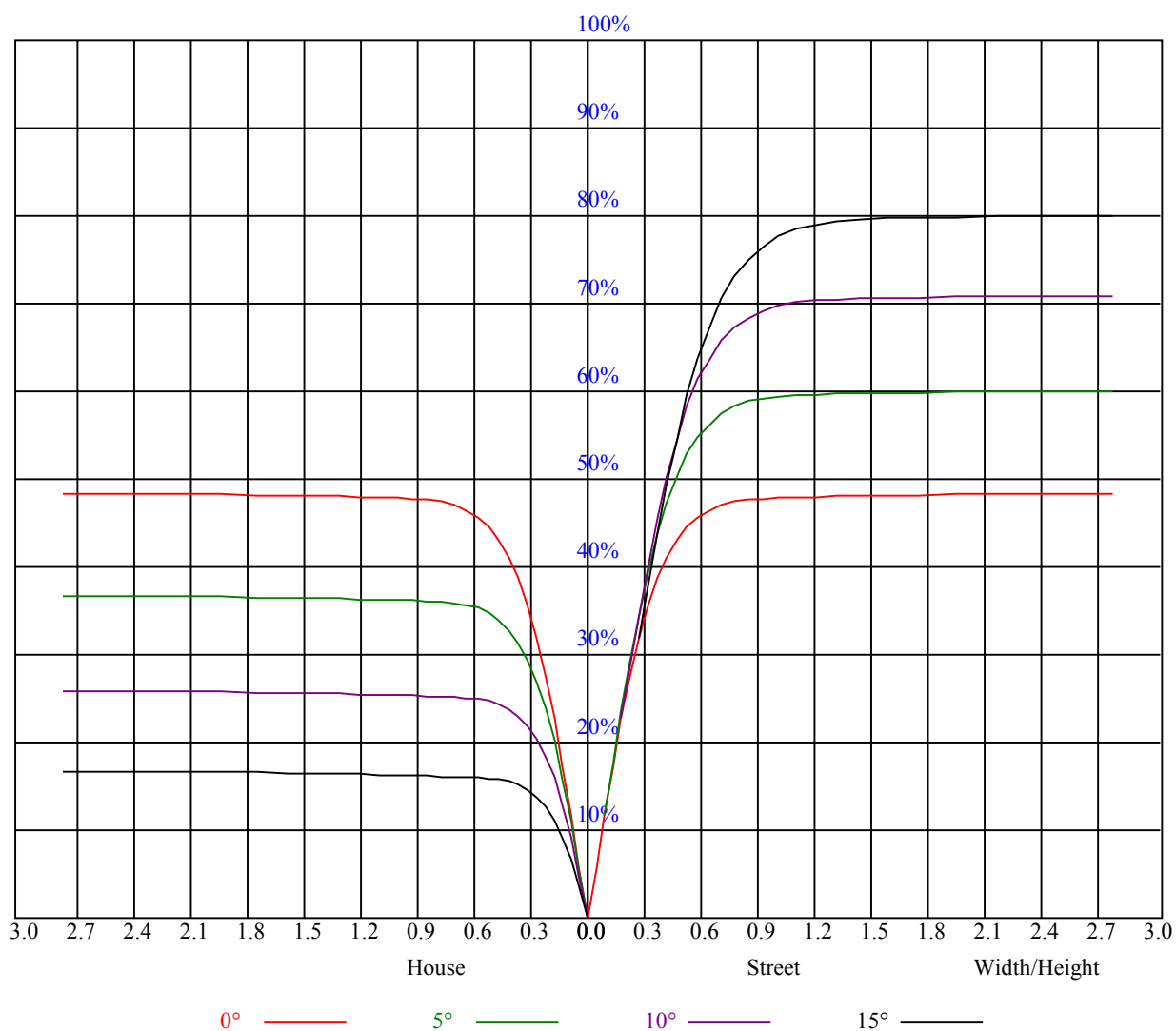
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

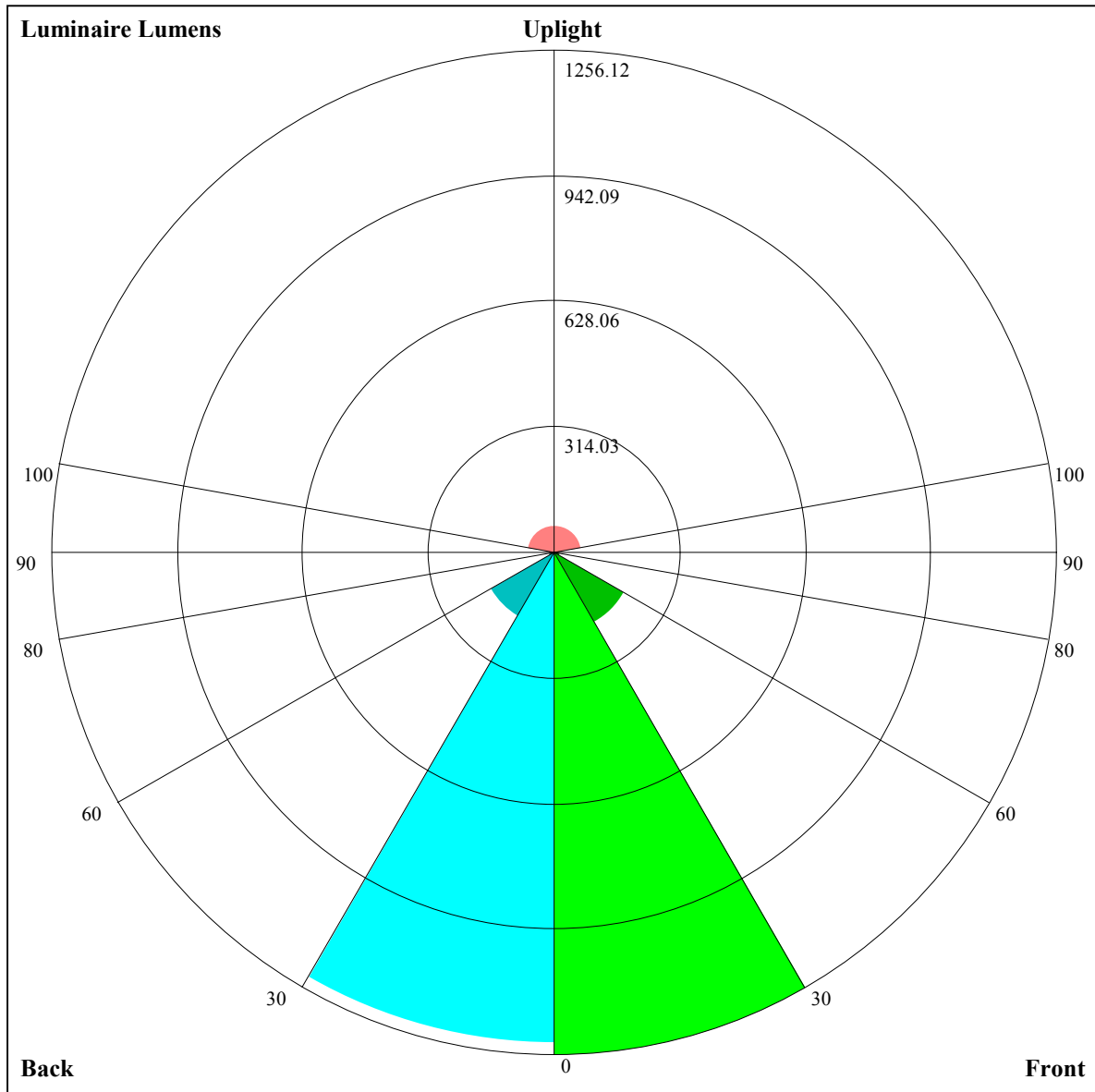
Luminance Limiting Curve

 $\gamma(^{\circ})$ 



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	1.04	1.04	1.04	1.00	1.00	1.00	0.98
1	1.08	1.06	1.04	1.06	1.04	1.02	1.02	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.91
2	1.03	0.99	0.96	1.01	0.98	0.95	0.98	0.95	0.93	0.95	0.93	0.91	0.92	0.90	0.89	0.87
3	0.97	0.93	0.90	0.96	0.92	0.89	0.94	0.90	0.88	0.91	0.88	0.86	0.89	0.87	0.85	0.83
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	0.83	0.81	0.80
5	0.89	0.84	0.80	0.88	0.83	0.80	0.86	0.82	0.79	0.85	0.81	0.79	0.83	0.80	0.78	0.77
6	0.85	0.80	0.77	0.84	0.80	0.76	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.75	0.74
7	0.82	0.77	0.73	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.72	0.71
8	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.68
9	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.66
10	0.73	0.68	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.64





Luminaire Lumens:

FL=1256.12,FM=202.85,FH=16.6,FVH=7.61

BL=1228.27,BM=185.74,BH=16.89,BVH=7.62

UL=14.74,UH=70.14

BUG Rating:B3-U2-G0

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	5609.70	5608.60	5483.07	4699.61	3116.74	1620.31	1064.24	576.44	285.74
45.0	5605.84	5480.86	5015.64	3926.07	2484.14	1494.23	975.05	382.09	49.44
90.0	5593.73	5333.86	4721.09	3514.80	2193.45	1387.42	834.49	257.72	40.91
135.0	5613.00	5459.94	5033.81	3950.30	2589.30	1441.38	897.42	334.74	37.77
180.0	5609.70	5523.81	5197.32	4085.18	2574.99	1374.76	880.13	377.14	38.70
225.0	5605.84	5595.93	5388.92	4581.24	3235.66	1943.49	1073.82	638.27	169.30
270.0	5593.73	5646.58	5527.11	4980.95	3659.60	2355.31	1373.11	829.70	290.70
315.0	5613.00	5654.29	5587.12	4831.75	3210.89	1624.16	1077.84	573.19	135.99
360.0	5609.70	5608.60	5483.07	4699.61	3116.74	1620.31	1064.24	576.44	285.74
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	22.90	19.38	18.06	17.40	16.85	15.97	15.14	14.42	13.98
45.0	25.49	20.43	18.77	18.06	17.01	16.08	14.59	14.09	13.87
90.0	23.62	19.49	18.11	17.45	16.52	15.58	14.53	14.04	14.09
135.0	21.64	20.37	19.66	18.83	17.34	16.30	14.76	14.26	14.15
180.0	20.37	19.27	19.16	18.77	17.62	16.46	14.87	14.31	13.98
225.0	28.90	21.58	19.99	19.38	18.44	16.90	15.36	14.48	13.98
270.0	38.10	24.45	21.80	20.54	19.21	17.56	15.86	14.53	13.93
315.0	22.52	19.21	18.11	17.56	17.07	16.24	15.25	14.48	14.04
360.0	22.90	19.38	18.06	17.40	16.85	15.97	15.14	14.42	13.98
C/ γ (°)	90.0								
0.0	13.54								
45.0	13.32								
90.0	13.43								
135.0	13.54								
180.0	13.54								
225.0	13.43								
270.0	13.60								
315.0	13.65								
360.0	13.54								