
Client:

LumCAT: 1652-S

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019122003

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 823.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.9300

Current(A): 0.1970

Power (W): 6.8800

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 752.08, Efficiency(%): 91.38% , Luminous Efficacy(lm/W): 109.31

Central intensity(cd): 1223.156, Maximum intensity(cd): 1223.156

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=42.2

[C90/270]Total=42.2

Field angle(10%Imax): [C0/180]Total=79.4

[C90/270]Total=79.4

Maximum s/h(1/2): C0_180=0.68 C90_270=0.68

Maximum s/h(1/4): C0_180=0.67 C90_270=0.67

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.38%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.296%

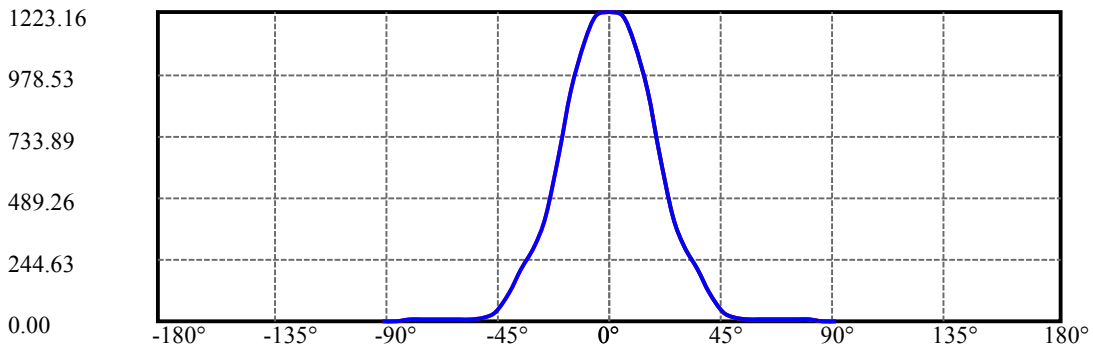
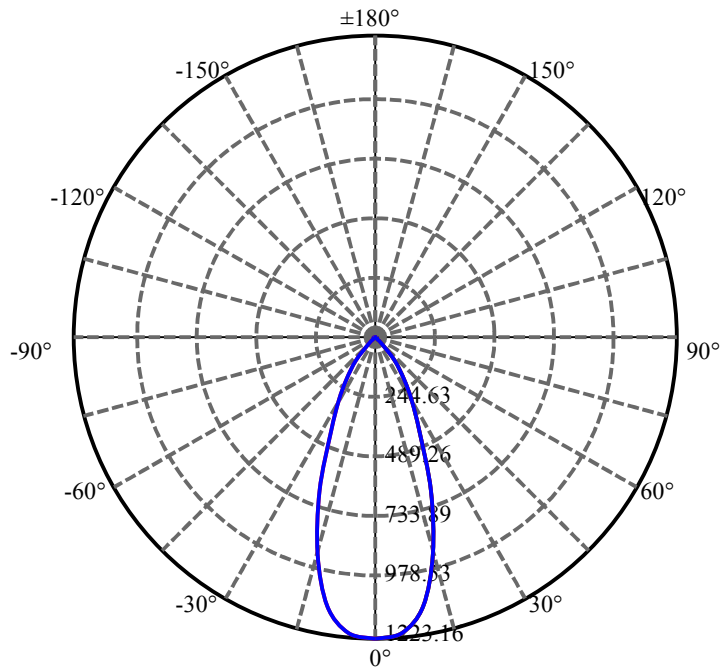
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1223.156	0.000	0	.000%	.000%
5.0	1207.969	29.063	29.063	3.531%	3.864%
10.0	1103.667	82.694	111.758	10.048%	14.860%
15.0	911.953	119.565	231.323	14.528%	30.758%
20.0	666.007	130.046	361.369	15.801%	48.049%
25.0	419.576	113.858	475.227	13.834%	63.188%
30.0	295.369	90.477	565.704	10.994%	75.218%
35.0	207.506	74.052	639.756	8.998%	85.064%
40.0	117.120	54.161	693.917	6.581%	92.266%
45.0	38.201	28.759	722.676	3.494%	96.090%
50.0	11.946	10.133	732.809	1.231%	97.437%
55.0	6.047	3.912	736.721	.475%	97.957%
60.0	4.964	2.545	739.266	.309%	98.296%
65.0	4.528	2.308	741.574	.280%	98.603%
70.0	4.310	2.238	743.811	.272%	98.900%
75.0	4.106	2.200	746.011	.267%	99.193%
80.0	3.874	2.135	748.147	.259%	99.477%
85.0	3.635	2.040	750.187	.248%	99.748%
90.0	3.291	1.896	752.084	.230%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	565.70	68.74%	75.22%
0-40	693.92	84.32%	92.27%
0-60	739.27	89.83%	98.30%
0-90	750.19	91.15%	99.75%
0-120	750.19	91.15%	99.75%
0-180	752.08	91.38%	100.00%
60-90	13.47	1.64%	1.79%
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%
0-32.43	601.67	73.11%	80.00%

ZONAL LUMEN SUMMARY

0-10	111.76
10-20	249.61
20-30	204.33
30-40	128.21
40-50	38.89
50-60	6.46
60-70	4.55
70-80	4.34
80-90	2.04
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: —————

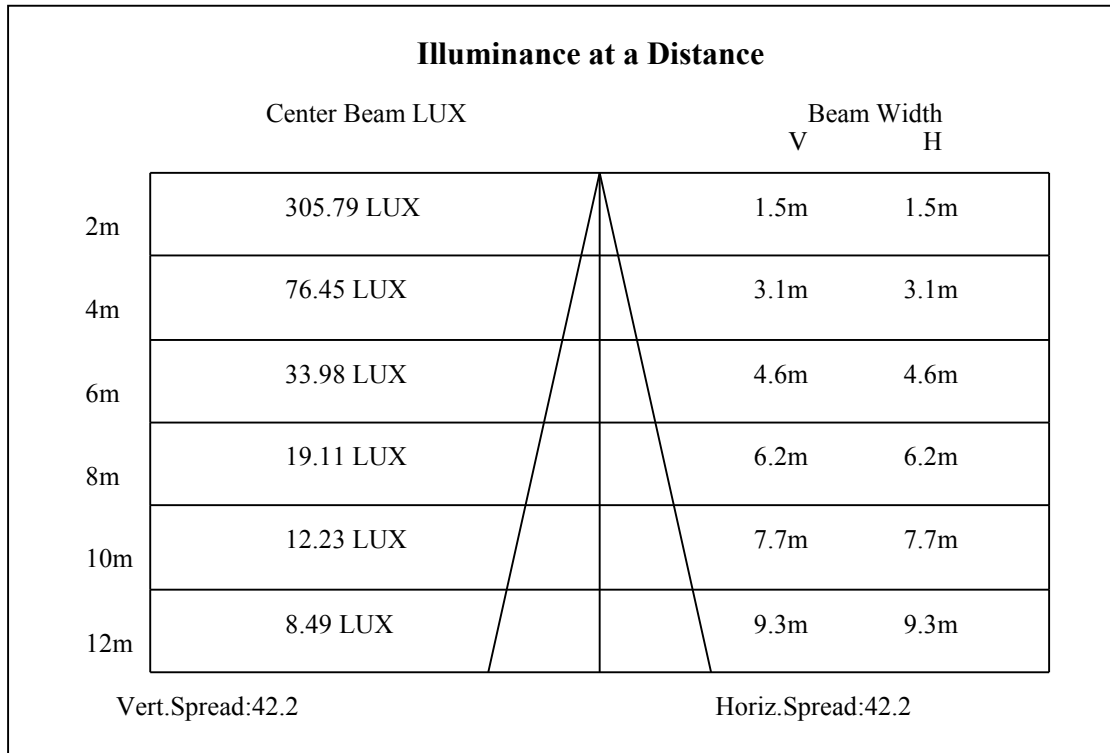
C90/C270: —————

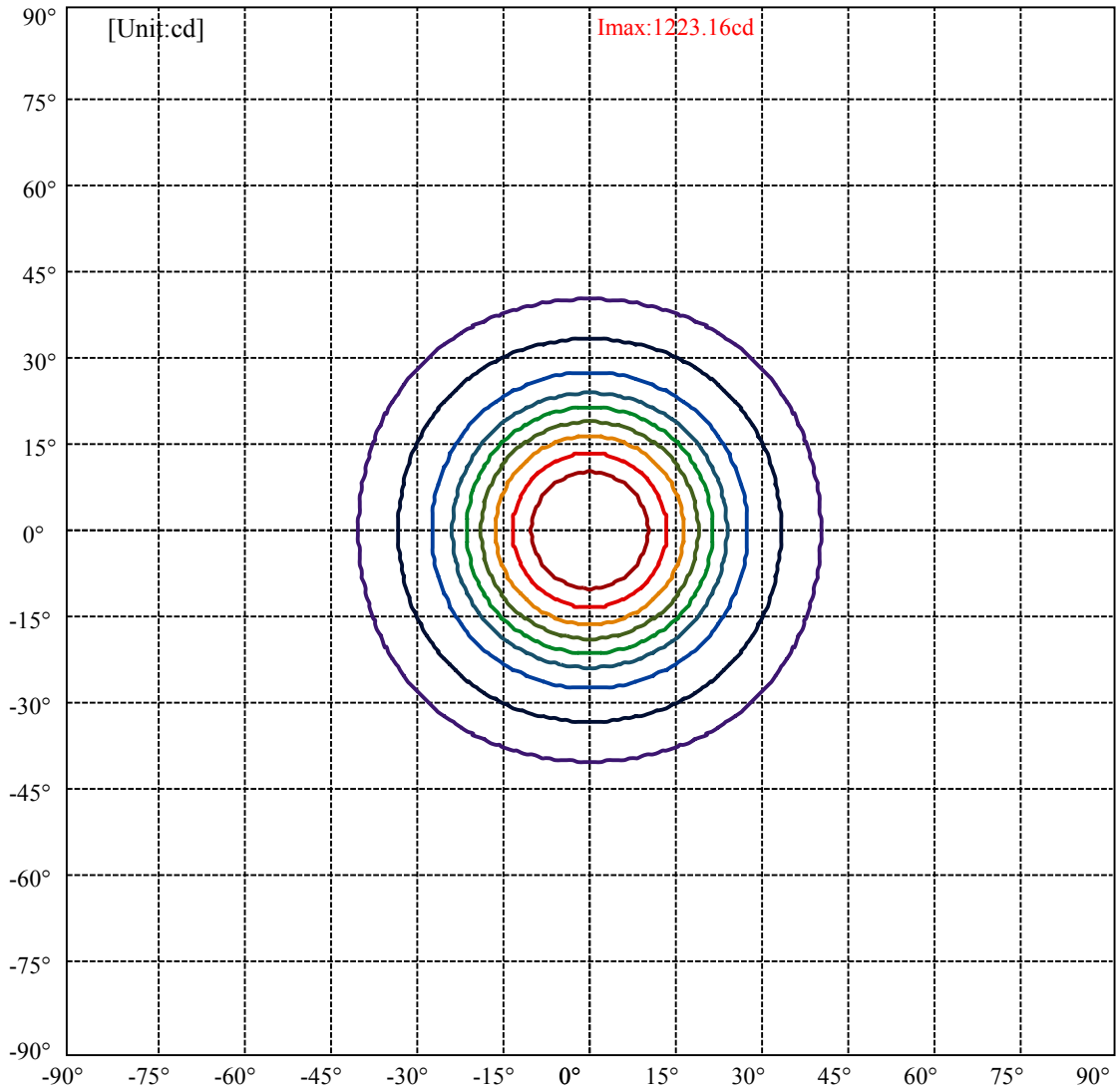
Field angle(10%Imax):C0/180Left:39.7 Right:39.7

:C90/270Left:39.7 Right:39.7

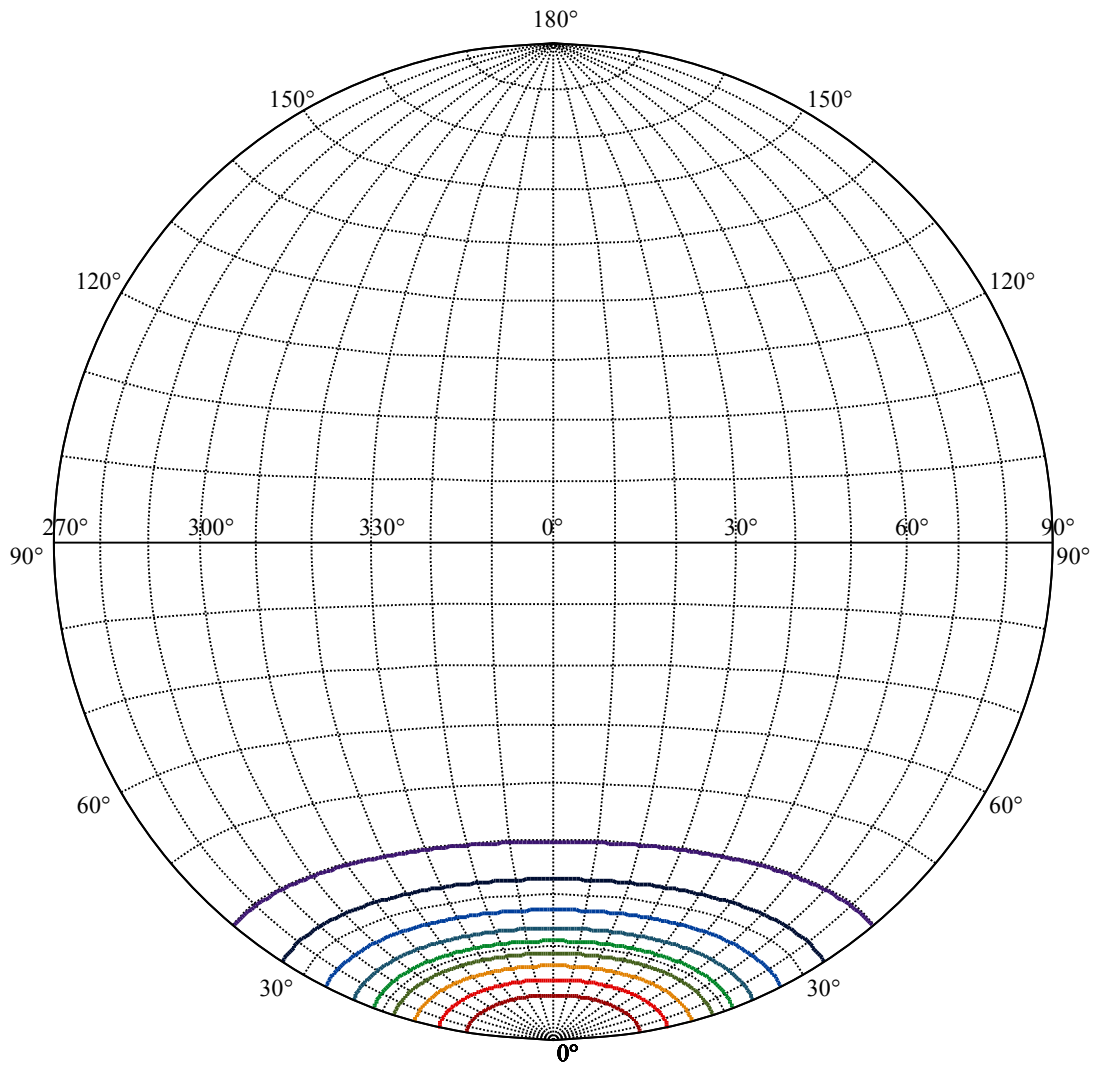
Beam Angle(50%Imax):C0/180Left:21.1 Right:21.1

:C90/270Left:21.1 Right:21.1





(10%Imax) 122.316	—
(20%Imax) 244.631	—
(30%Imax) 366.947	—
(40%Imax) 489.263	—
(50%Imax) 611.578	—
(60%Imax) 733.894	—
(70%Imax) 856.209	—
(80%Imax) 978.525	—
(90%Imax) 1100.84	—



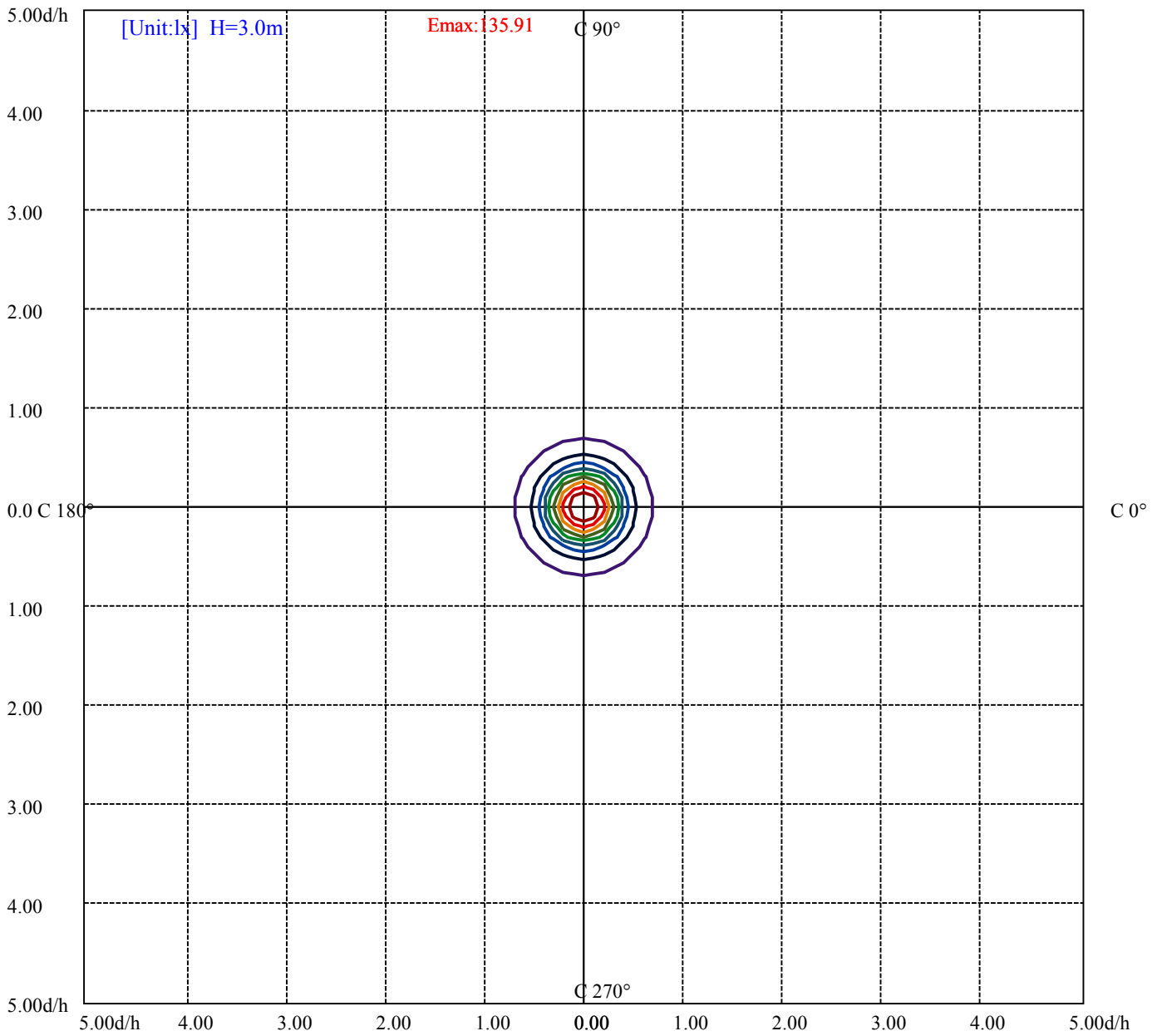
House

[Unit:cd]

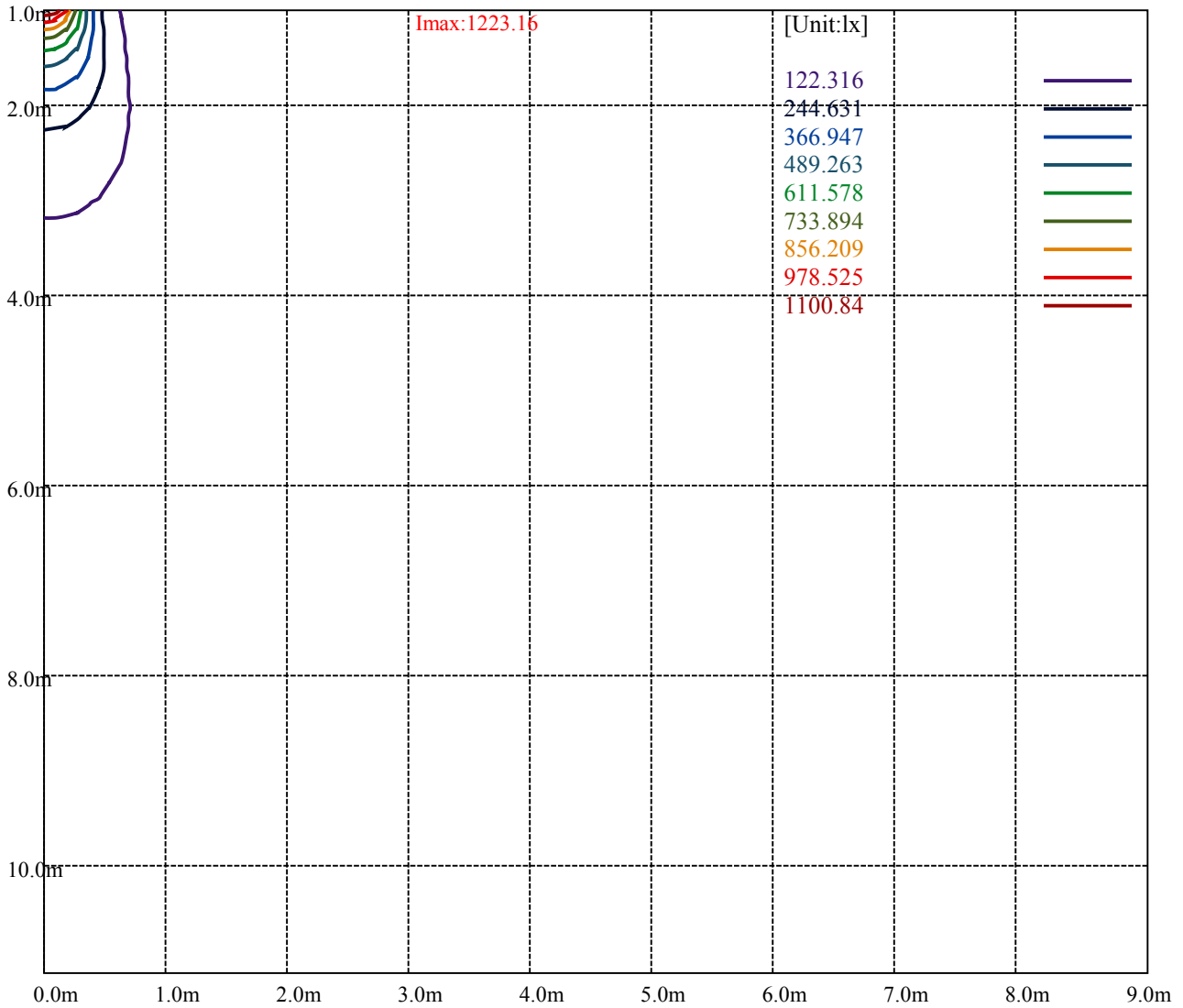
Road

Imax:1223.16

(10%Imax) 122.316	—
(20%Imax) 244.631	—
(30%Imax) 366.947	—
(40%Imax) 489.263	—
(50%Imax) 611.578	—
(60%Imax) 733.894	—
(70%Imax) 856.209	—
(80%Imax) 978.525	—
(90%Imax) 1100.84	—



(10%Emax) 13.59067	—
(20%Emax) 27.18122	—
(30%Emax) 40.77189	—
(40%Emax) 54.36244	—
(50%Emax) 67.95311	—
(60%Emax) 81.54367	—
(70%Emax) 95.13433	—
(80%Emax) 108.725	—
(90%Emax) 122.3156	—



Luminance Table

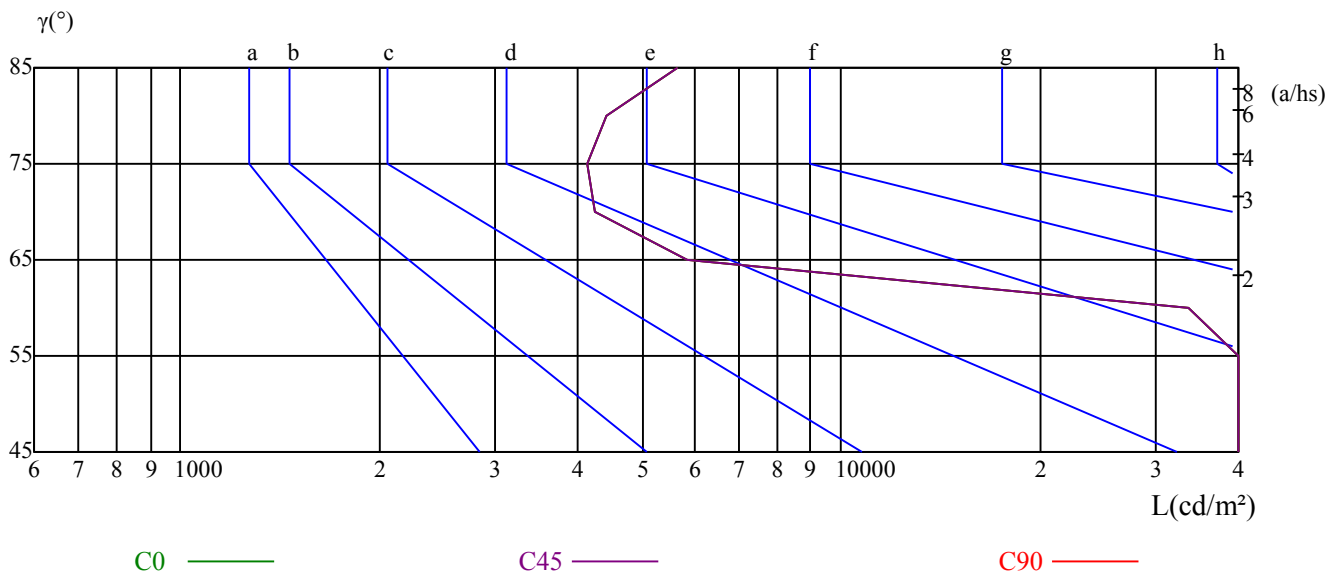
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

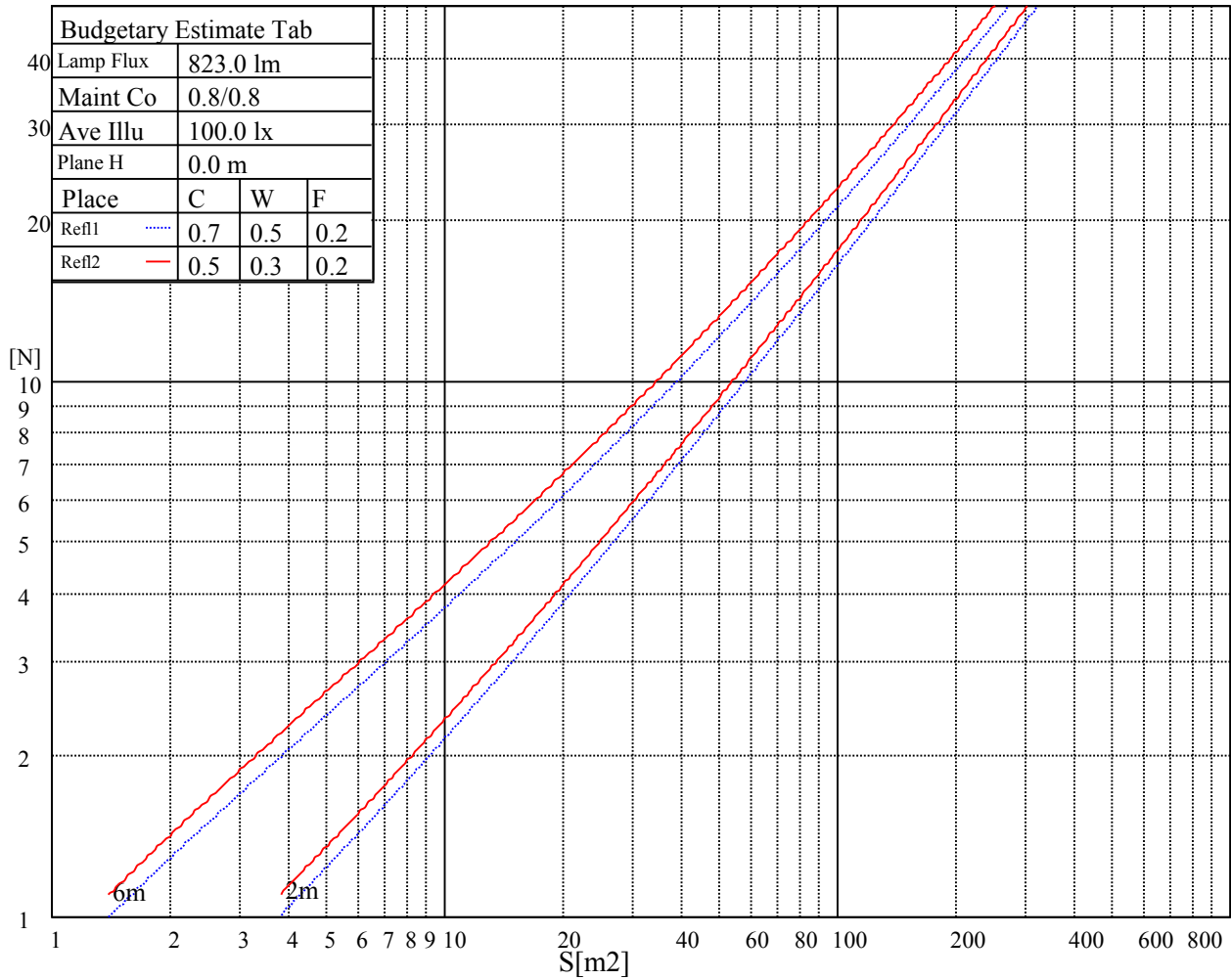
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

Glare Table

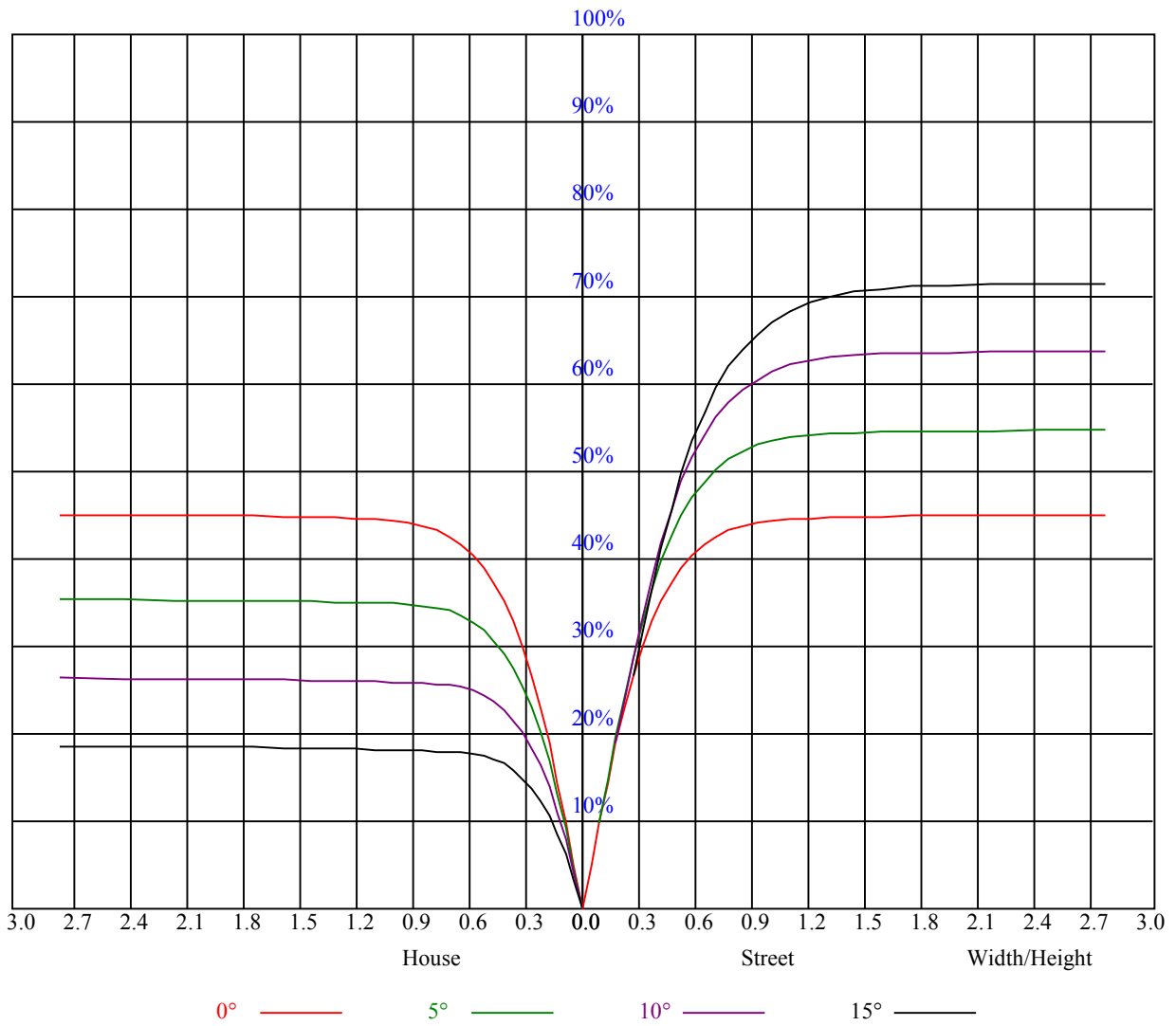
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

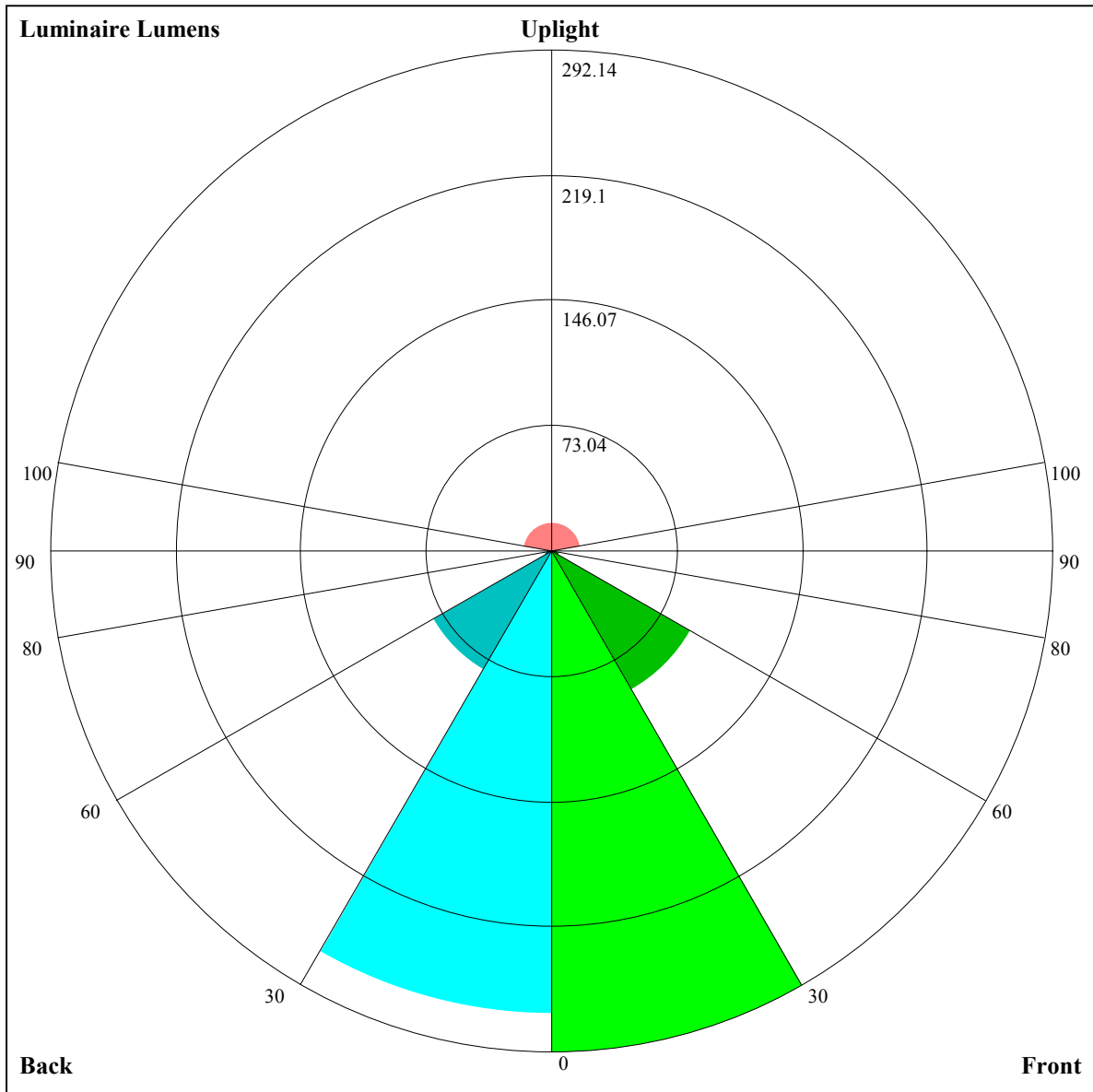
Luminance Limiting Curve





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	1.09	1.09	1.09	1.06	1.06	1.06	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.95	0.96	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.85
2	0.94	0.91	0.88	0.93	0.90	0.87	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.81	0.80
3	0.89	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.77	0.81	0.78	0.76	0.75
4	0.83	0.78	0.75	0.82	0.78	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.70
5	0.78	0.73	0.70	0.78	0.73	0.69	0.76	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.67	0.66
6	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.62
7	0.70	0.65	0.61	0.69	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
8	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.56
9	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.53
10	0.60	0.55	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.54	0.52	0.58	0.54	0.51	0.50





Luminaire Lumens:

FL=292.14,FM=93.41,FH=4.44,FVH=1.98

BL=270.26,BM=80.27,BH=4.44,BVH=1.95

UL=3.59,UH=17.09

BUG Rating:B1-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	1221.19	1215.00	1147.50	985.50	756.00	482.63	326.81	234.11	141.69
45.0	1224.56	1223.44	1148.63	987.19	733.50	478.69	319.50	225.96	139.11
90.0	1222.88	1215.00	1101.32	908.94	658.46	410.51	292.22	211.22	116.94
135.0	1224.00	1209.94	1100.25	910.69	667.13	420.19	303.75	214.99	118.63
180.0	1221.19	1185.75	1048.95	824.46	557.61	354.09	256.39	165.71	84.49
225.0	1224.56	1186.88	1066.56	843.81	576.11	341.94	254.42	165.09	87.98
270.0	1222.88	1212.19	1110.38	918.56	687.94	434.81	304.31	229.16	125.49
315.0	1224.00	1215.56	1105.76	916.48	691.31	433.74	305.55	213.81	122.63
360.0	1221.19	1215.00	1147.50	985.50	756.00	482.63	326.81	234.11	141.69
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	61.65	13.67	6.86	4.95	4.44	4.22	4.11	3.88	3.60
45.0	52.54	13.28	6.58	4.84	4.44	4.22	4.05	3.94	3.71
90.0	35.04	12.26	5.68	4.84	4.44	4.28	4.11	3.88	3.66
135.0	33.19	12.15	6.02	5.12	4.73	4.56	4.28	3.88	3.60
180.0	21.32	9.34	5.34	4.84	4.44	4.22	3.99	3.77	3.54
225.0	24.69	10.74	5.74	4.89	4.50	4.22	4.05	3.83	3.60
270.0	39.82	12.38	6.02	5.06	4.56	4.33	4.11	3.88	3.66
315.0	37.35	11.76	6.13	5.18	4.67	4.44	4.16	3.94	3.71
360.0	61.65	13.67	6.86	4.95	4.44	4.22	4.11	3.88	3.60
C/ γ (°)	90.0								
0.0	3.38								
45.0	3.32								
90.0	3.26								
135.0	3.21								
180.0	3.26								
225.0	3.26								
270.0	3.32								
315.0	3.32								
360.0	3.38								