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Nata

LumCAT: 1437-N
Luminaire: 92.70.043.00+92.70.147.00
Report No: NATA0100
Test No: GC2018080605
LampCAT: LUMINUS CXM-6-AC30
Lamp flux(lm): 983.0
Number of Lamps: 1
Length(mm): 46
Phm Type: C

Voltage(V): 34.8000
Current(A): 0.2000
Power (W): 6.9600
PF: 0.0000
Ballast type: DC
Width(mm): 46
Height(mm):0

Photometric Results

Lumens(lm): 797.56
Efficiency(%): 81.14%
Lumens(lm)/Power(W): 115.80
Central intensity(cd): 1527.540
Maximum intensity(cd): 1527.540
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=67.0
 [C90/270]Total=67.0
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(%): 81.99%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.029%

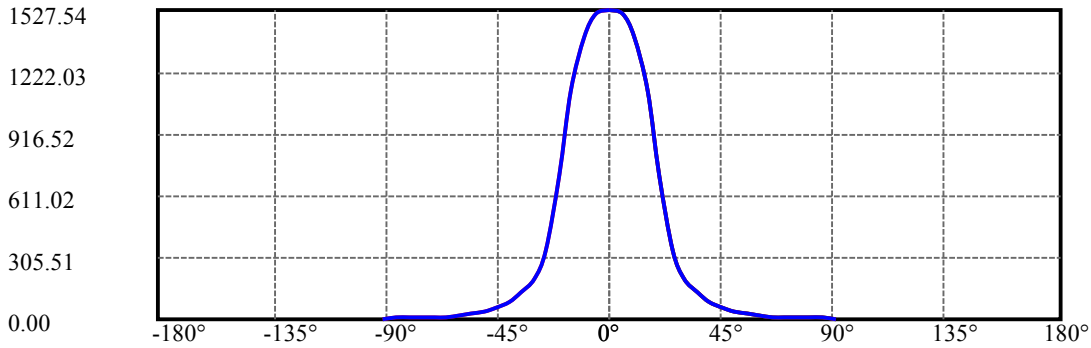
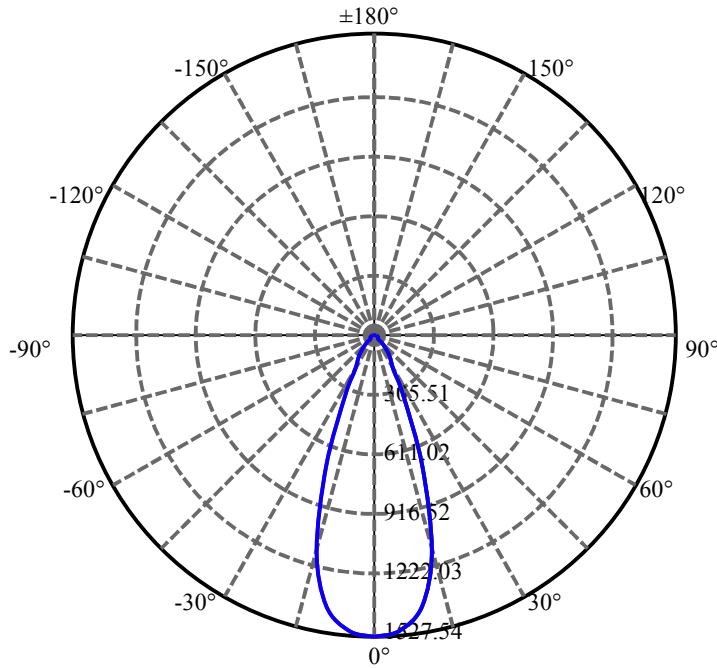
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1527.540	9.135	9.135	.929%	1.145%
5.0	1504.829	71.891	81.026	7.313%	10.159%
10.0	1395.955	132.871	213.897	13.517%	26.819%
15.0	1130.852	160.432	374.329	16.321%	46.934%
20.0	707.014	132.547	506.876	13.484%	63.553%
25.0	337.606	78.207	585.083	7.956%	73.359%
30.0	203.392	55.743	640.827	5.671%	80.348%
35.0	130.862	41.143	681.969	4.185%	85.507%
40.0	89.948	31.692	713.661	3.224%	89.480%
45.0	59.585	23.095	736.756	2.349%	92.376%
50.0	40.893	17.171	753.927	1.747%	94.529%
55.0	26.523	11.909	765.836	1.212%	96.022%
60.0	17.061	8.099	773.935	.824%	97.038%
65.0	11.225	5.576	779.511	.567%	97.737%
70.0	9.360	4.821	784.332	.490%	98.341%
75.0	8.231	4.358	788.69	.443%	98.888%
80.0	7.419	4.005	792.695	.407%	99.390%
85.0	7.068	3.859	796.554	.393%	99.874%
90.0	3.675	1.007	797.561	.102%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	640.83	65.19%	80.35%
0-40	713.66	72.60%	89.48%
0-60	773.93	78.73%	97.04%
0-90	796.55	81.03%	99.87%
0-120	796.55	81.03%	99.87%
0-180	797.56	81.14%	100.00%
60-90	30.72	3.12%	3.85%
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%
0-29.75	638.05	64.91%	80.00%

ZONAL LUMEN SUMMARY

0-10	213.90
10-20	292.98
20-30	133.95
30-40	72.83
40-50	40.27
50-60	20.01
60-70	10.40
70-80	8.36
80-90	3.86
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: —————

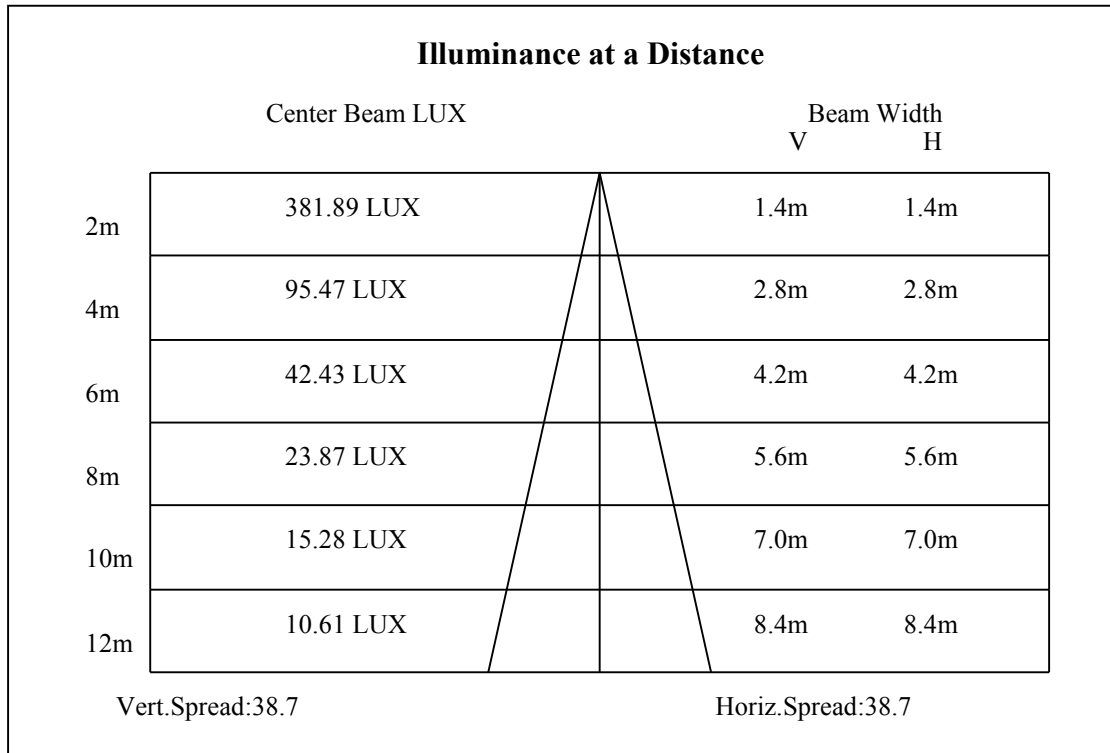
C90/C270: —————

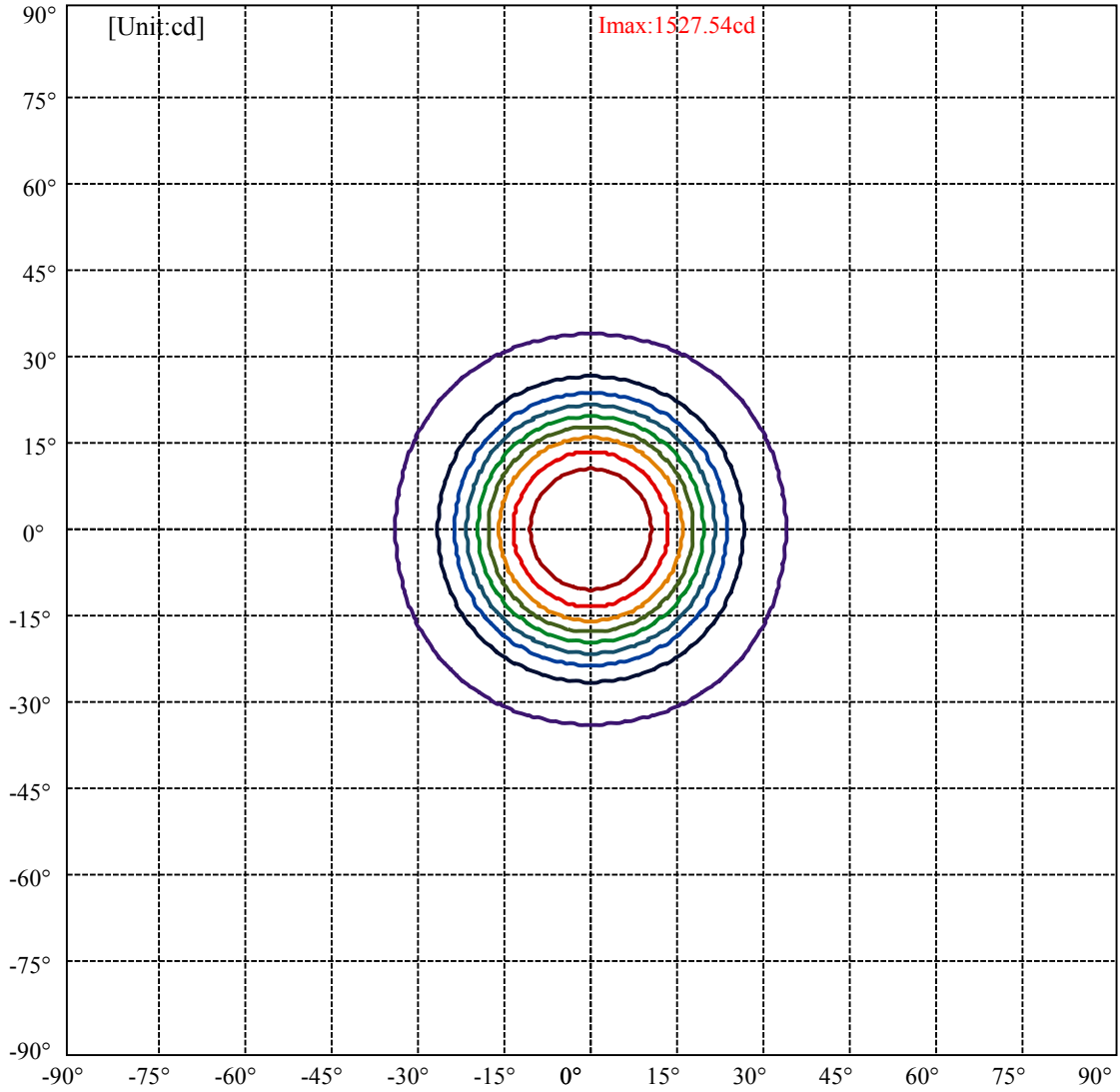
Field angle(10%Imax):C0/180Left:33.5 Right:33.5

:C90/270Left:33.5 Right:33.5

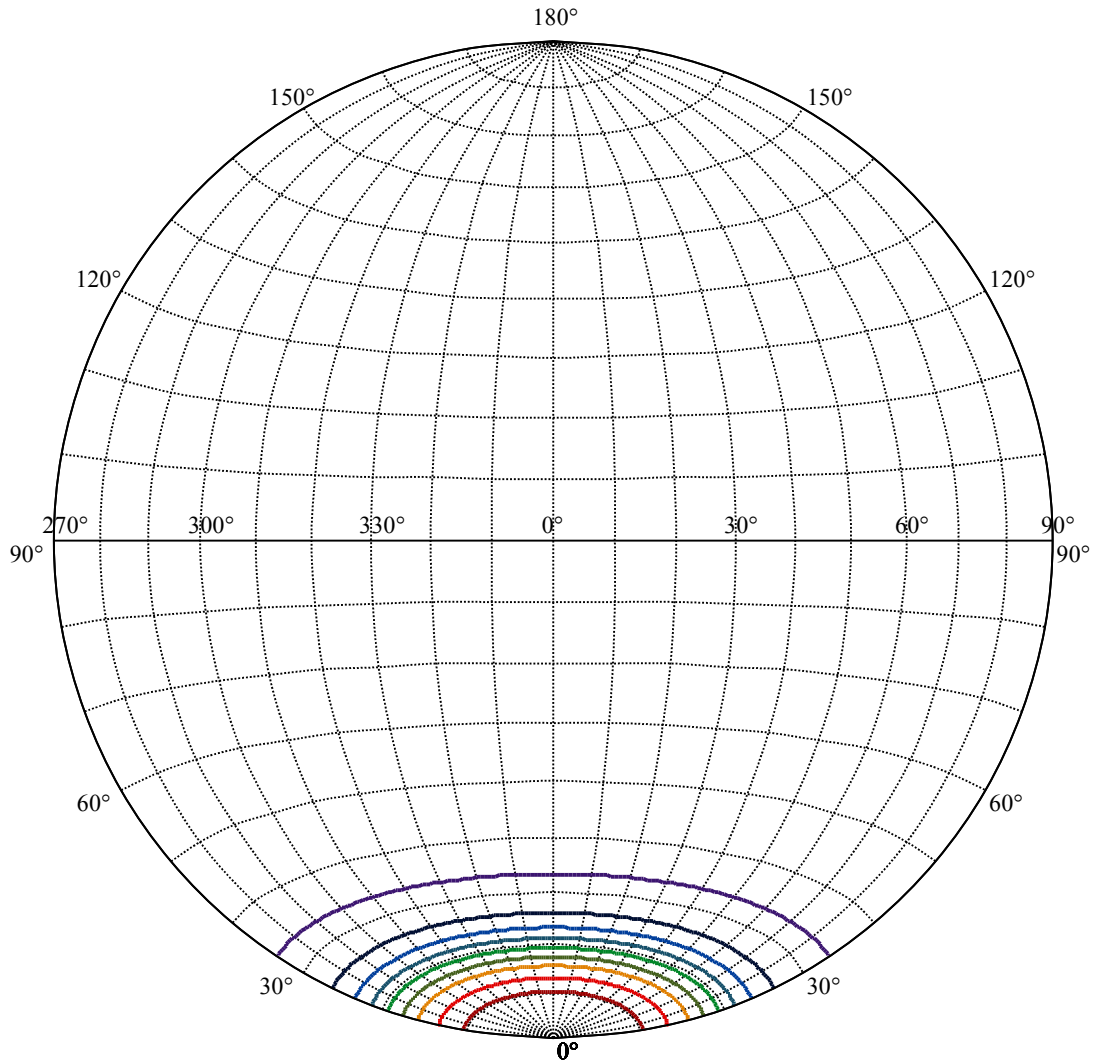
Beam Angle(50%Imax):C0/180Left:19.3 Right:19.3

:C90/270Left:19.3 Right:19.3





(10%Imax)	152.754	—
(20%Imax)	305.508	—
(30%Imax)	458.262	—
(40%Imax)	611.016	—
(50%Imax)	763.77	—
(60%Imax)	916.524	—
(70%Imax)	1069.28	—
(80%Imax)	1222.03	—
(90%Imax)	1374.79	—



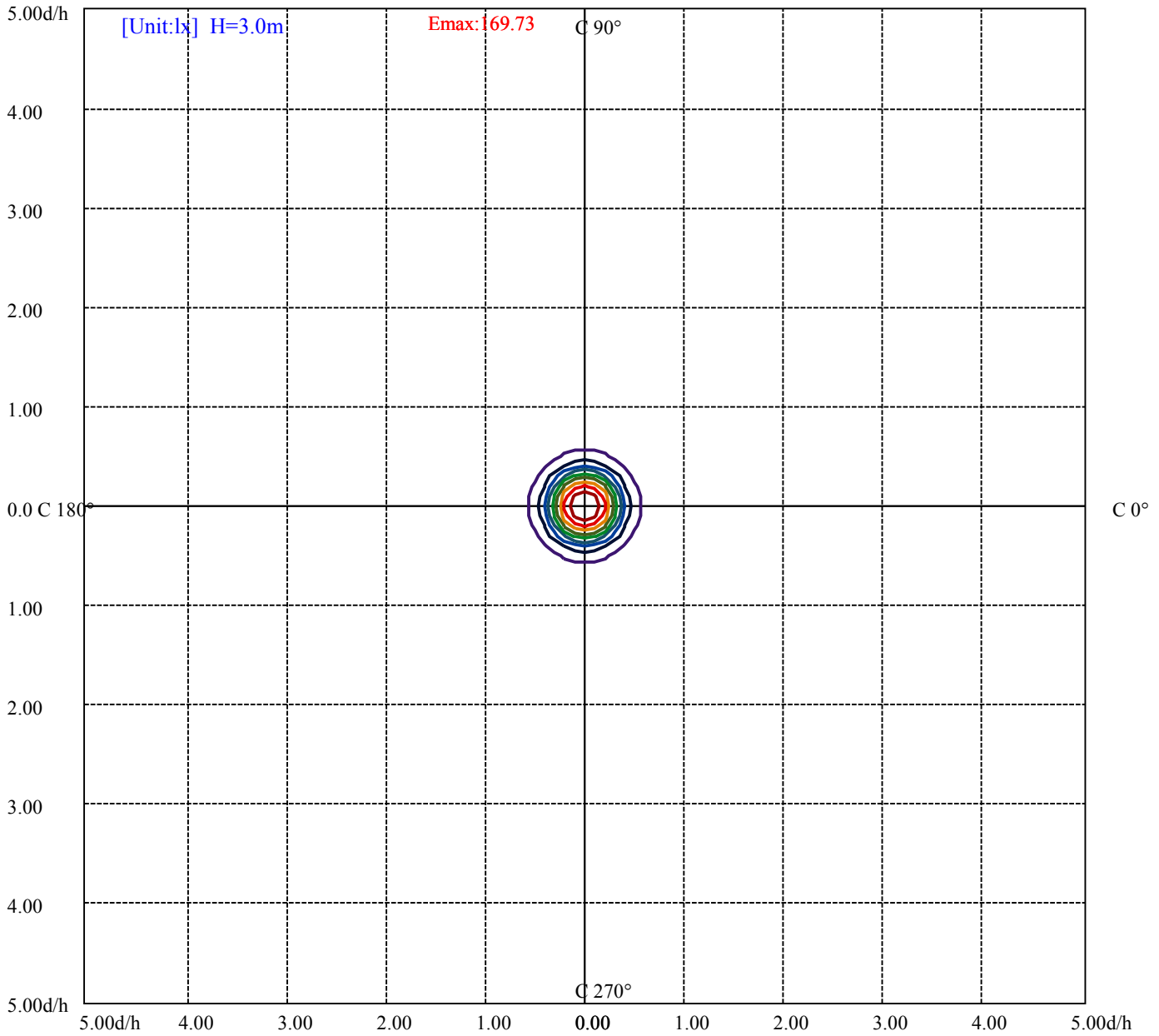
House

[Unit:cd]

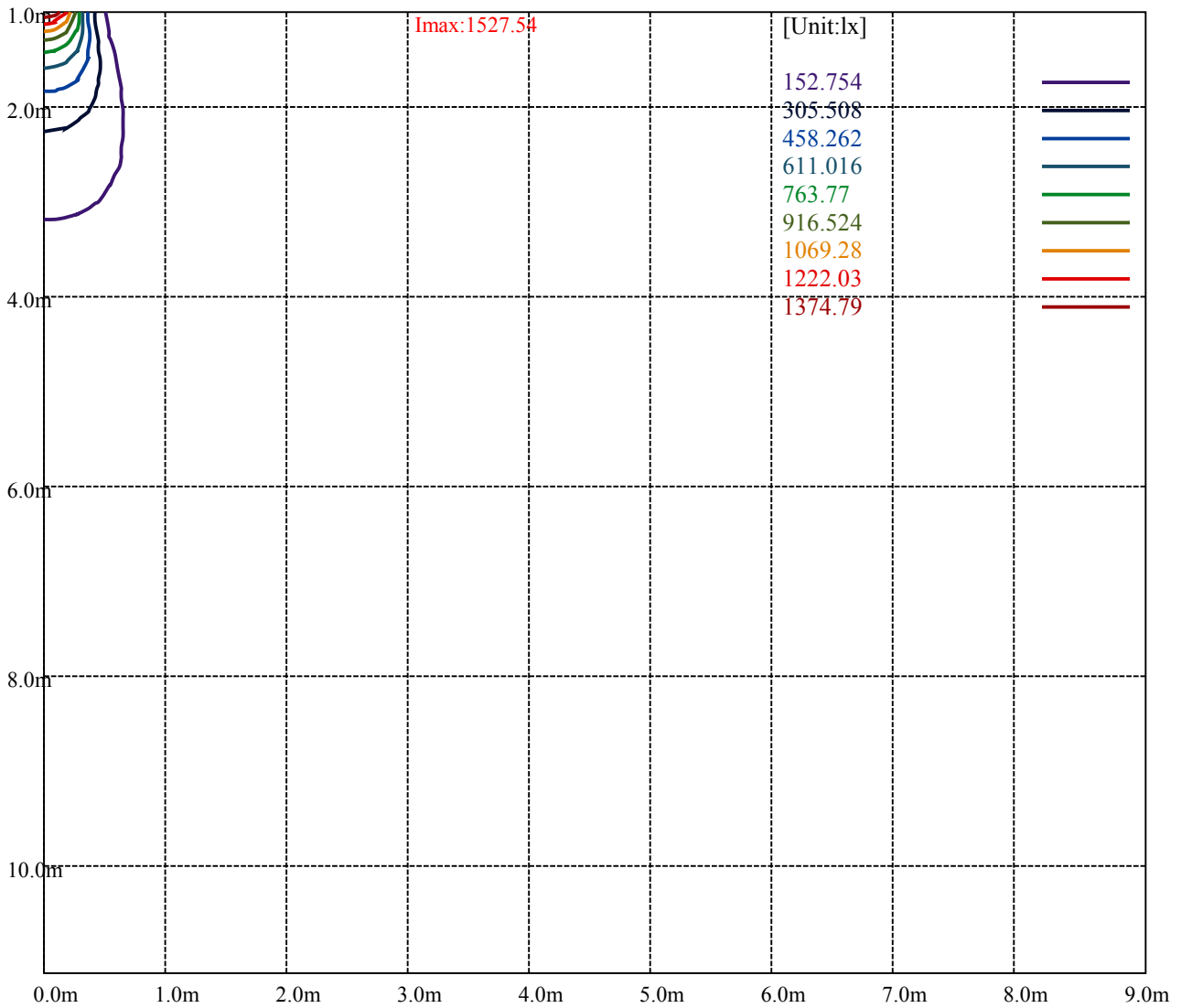
Road

Imax:1527.54

(10%Imax)	152.754	—
(20%Imax)	305.508	—
(30%Imax)	458.262	—
(40%Imax)	611.016	—
(50%Imax)	763.77	—
(60%Imax)	916.524	—
(70%Imax)	1069.28	—
(80%Imax)	1222.03	—
(90%Imax)	1374.79	—



- (10%Emax) 16.97267
- (20%Emax) 33.94533
- (30%Emax) 50.918
- (40%Emax) 67.89066
- (50%Emax) 84.86333
- (60%Emax) 101.8359
- (70%Emax) 118.8089
- (80%Emax) 135.7811
- (90%Emax) 152.7545



Luminance Table

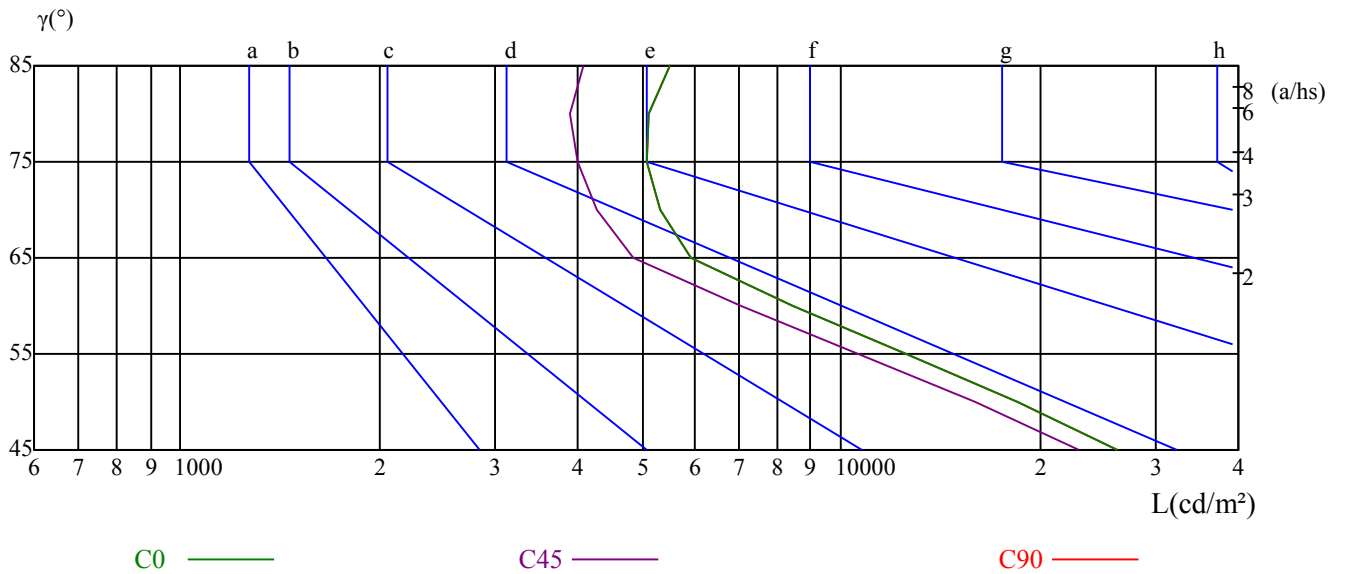
γ	45	50	55	60	65	70	75	80	85
C0	26169	18538	12523	8471	5924	5315	5100	5100	5504
C45	22915	15998	10641	7079	4861	4272	4004	3894	4063
C90	26169	18538	12523	8471	5924	5315	5100	5100	5504

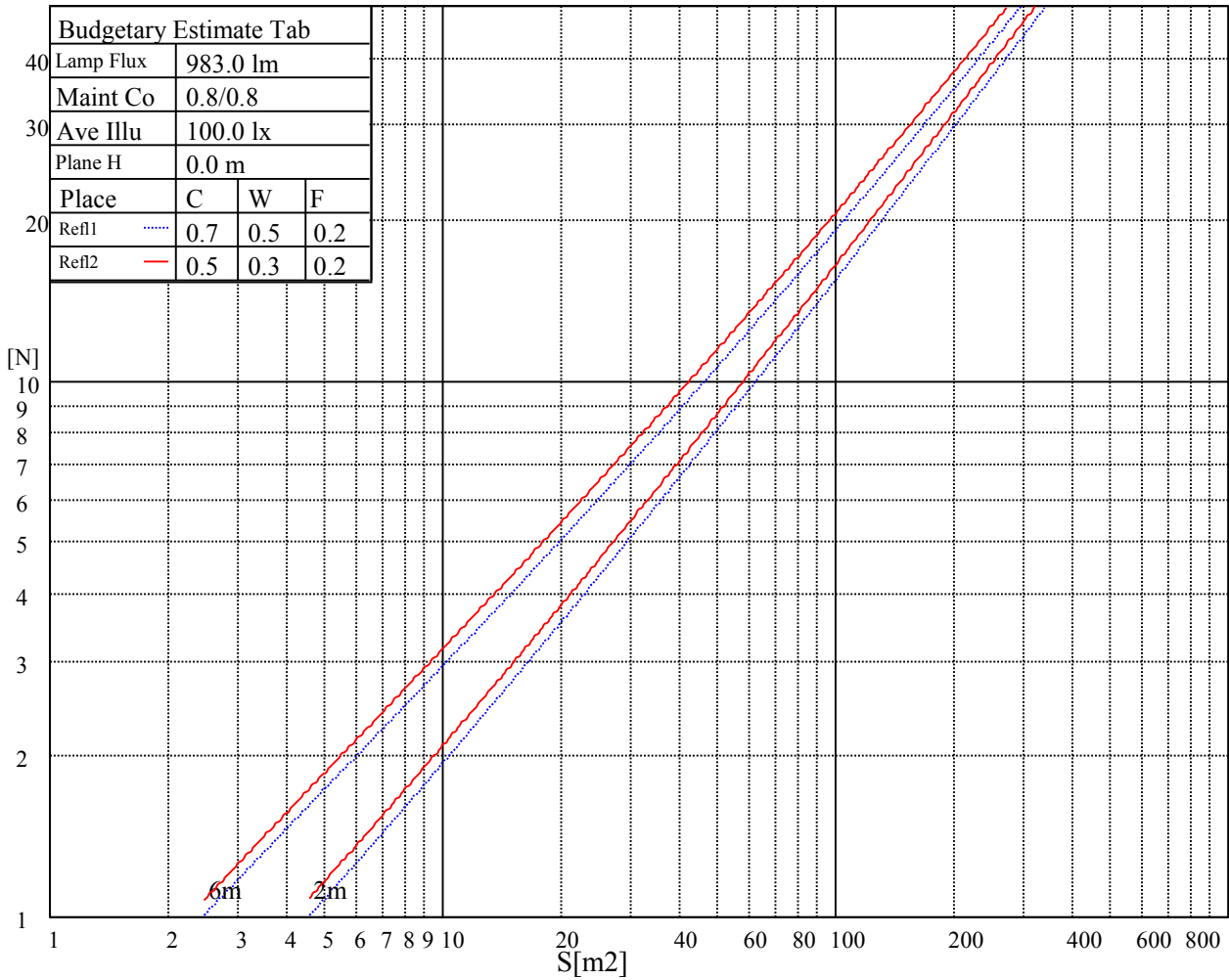
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12552	12552	12552	15029	15029	15029	38325	38325	38325

Glare Table

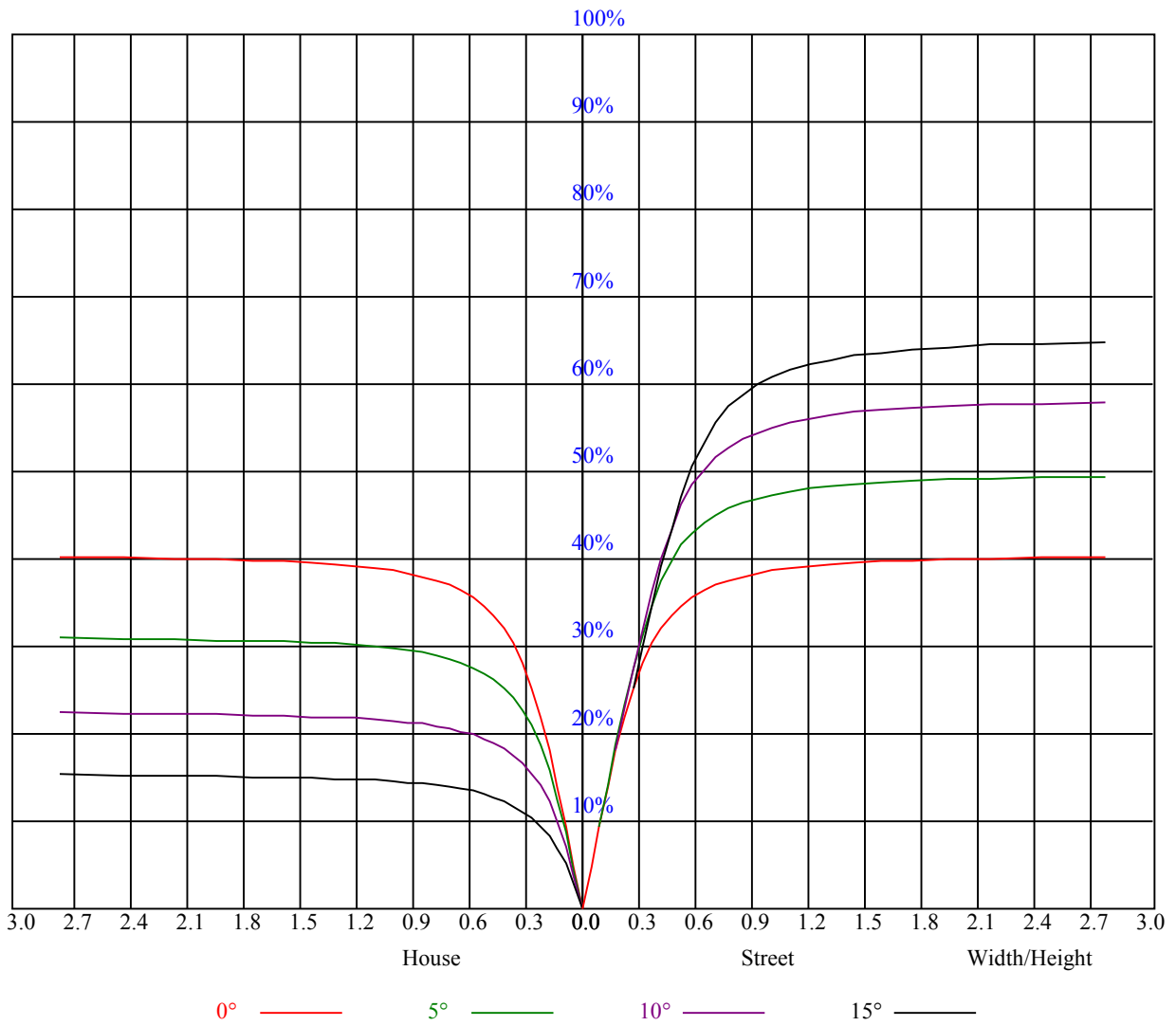
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.98	0.98	0.98	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.84	0.84	0.84	0.82
1	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.83	0.82	0.82	0.80	0.79	0.79	0.78	0.77	0.75
2	0.84	0.81	0.78	0.83	0.80	0.77	0.80	0.78	0.76	0.78	0.76	0.74	0.76	0.74	0.72	0.71
3	0.79	0.76	0.72	0.78	0.75	0.72	0.76	0.73	0.71	0.74	0.72	0.70	0.72	0.70	0.69	0.67
4	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.71	0.68	0.66	0.70	0.67	0.65	0.64
5	0.72	0.67	0.64	0.71	0.67	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.64	0.62	0.61
6	0.68	0.64	0.61	0.68	0.64	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.64	0.62	0.59	0.58
7	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.62	0.59	0.57	0.56
8	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.55	0.54
9	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.53	0.58	0.55	0.53	0.52
10	0.58	0.54	0.51	0.58	0.54	0.51	0.57	0.53	0.51	0.56	0.53	0.51	0.56	0.53	0.51	0.50



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	1523.96	1494.23	1385.77	1166.65	700.32	334.19	203.49	129.16	88.37
45.0	1525.06	1510.20	1408.89	1166.09	727.30	339.70	199.03	127.84	87.98
90.0	1533.87	1532.22	1421.56	1083.23	690.19	317.84	194.90	126.41	86.93
135.0	1527.26	1538.28	1470.56	1255.84	856.13	401.91	246.32	148.27	102.13
180.0	1523.96	1503.59	1381.37	1088.80	733.85	350.21	206.85	135.11	94.86
225.0	1525.06	1470.56	1340.07	1071.18	652.42	325.55	194.13	125.86	87.26
270.0	1533.87	1493.13	1402.29	1147.93	698.67	341.35	201.51	132.25	89.58
315.0	1527.26	1496.43	1357.14	1067.10	597.25	290.09	180.92	122.00	82.47
360.0	1523.96	1494.23	1385.77	1166.65	700.32	334.19	203.49	129.16	88.37
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	60.84	42.06	26.70	16.46	11.07	9.19	7.82	6.99	6.44
45.0	59.63	40.63	26.21	17.40	11.34	9.47	8.31	7.76	7.32
90.0	57.92	39.53	25.49	16.57	10.85	9.14	7.76	6.66	6.28
135.0	65.13	45.26	29.68	19.21	12.00	9.63	8.42	7.65	7.27
180.0	62.54	43.16	28.52	18.28	12.11	10.19	8.81	7.93	7.71
225.0	57.15	38.87	24.94	16.79	11.29	9.47	8.59	8.37	8.20
270.0	58.80	39.81	26.43	16.74	10.90	9.08	8.37	6.99	6.44
315.0	54.67	37.82	24.22	15.03	10.24	8.70	7.76	6.99	6.88
360.0	60.84	42.06	26.70	16.46	11.07	9.19	7.82	6.99	6.44
C/ γ (°)	90.0								
0.0	3.52								
45.0	3.52								
90.0	3.47								
135.0	3.91								
180.0	4.24								
225.0	3.80								
270.0	3.47								
315.0	3.47								
360.0	3.52								