



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86 571 85021543 Fax:+86 571 87977635
Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client: NT

LumCAT: 11-0161-S4

Luminaire: 69-0030-1

Report No: 20260803-B008

Ballast type: DC

Test No: 20260803-C008

LampCAT: LUXEON 2835*2

Lamp flux(lm): 1126.0

Number of Lamps: 1

Length(mm): 280

Phm Type: C

Voltage(V): 22.100

Current(A): 0.454

Power (W): 10.033

PF: 0.000

Width(mm): 40

Height(mm): 20

Photometric Results

Lumens(lm): 923.07, Efficiency(%): 81.98% , Luminous Efficacy(lm/W): 92.00

Central intensity(cd): 925.877, Maximum intensity(cd): 927.993

Angle of maximum intensity: C=22.5 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=61.5

[C90/270]Total=61.6

Field angle(10%Imax): [C0/180]Total=88.2

[C90/270]Total=89.2

Maximum s/h(1/2): C0_180=0.96 C90_270=0.95

Maximum s/h(1/4): C0_180=0.96 C90_270=0.93

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 81.96%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.716%

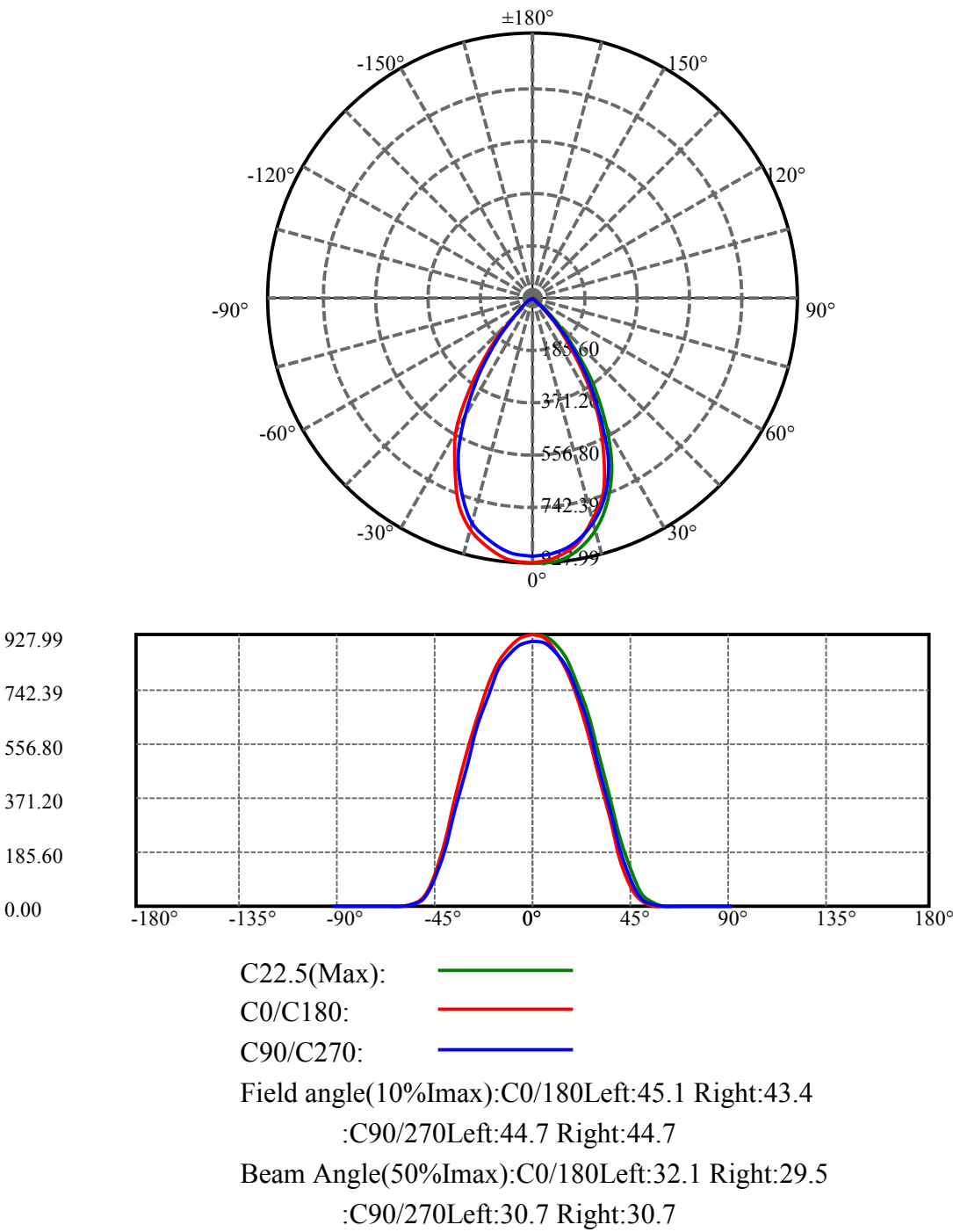
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	919.349	0.000	0	0.00%	0.00%
5.0	909.430	21.863	21.863	1.94%	2.37%
10.0	878.934	63.975	85.838	5.68%	9.30%
15.0	820.982	100.838	186.676	8.96%	20.22%
20.0	736.373	128.348	315.024	11.40%	34.13%
25.0	623.241	142.598	457.622	12.66%	49.58%
30.0	488.838	140.735	598.357	12.50%	64.82%
35.0	345.194	122.817	721.174	10.91%	78.13%
40.0	215.568	93.559	814.733	8.31%	88.26%
45.0	107.979	59.907	874.64	5.32%	94.75%
50.0	41.854	30.276	904.916	2.69%	98.03%
55.0	12.410	11.799	916.715	1.05%	99.31%
60.0	2.645	3.480	920.195	0.31%	99.69%
65.0	0.857	0.851	921.046	0.08%	99.78%
70.0	0.767	0.411	921.458	0.04%	99.83%
75.0	0.751	0.397	921.854	0.04%	99.87%
80.0	0.746	0.401	922.255	0.04%	99.91%
85.0	0.751	0.407	922.662	0.04%	99.96%
90.0	0.741	0.408	923.07	0.04%	100.00%

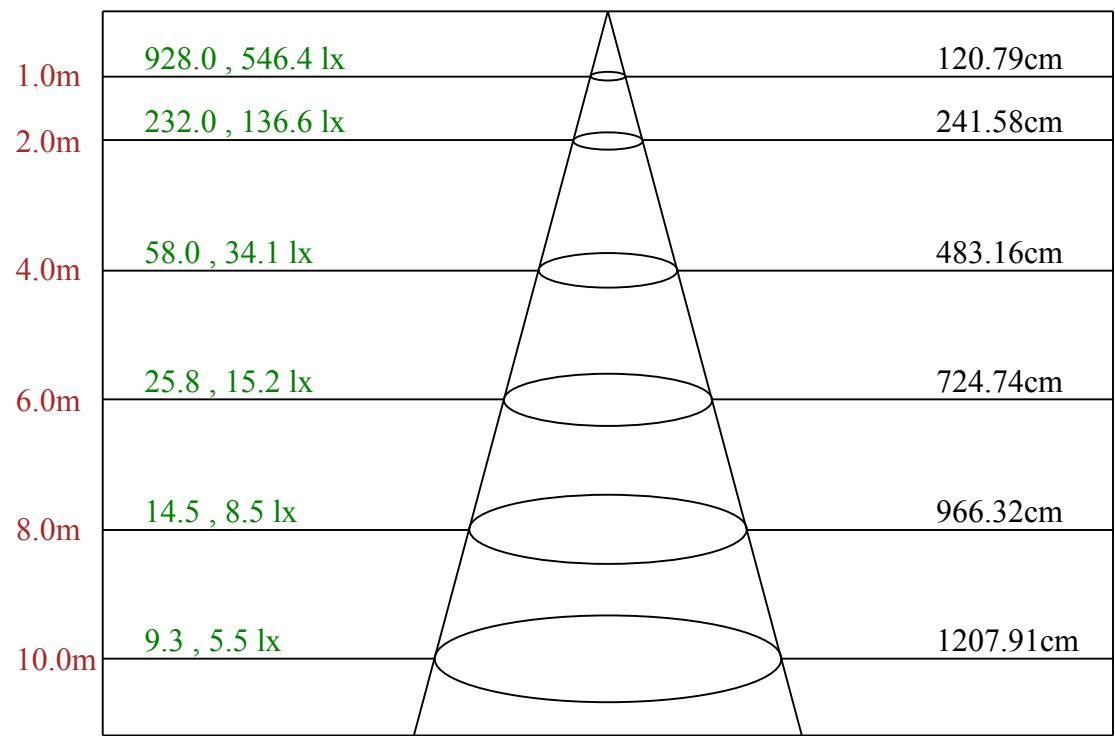
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	598.36	53.14%	64.82%
0-40	814.73	72.36%	88.26%
0-60	920.20	81.72%	99.69%
0-90	922.66	81.94%	99.96%
0-120	922.66	81.94%	99.96%
0-180	923.07	81.98%	100.00%
60-90	2.47	0.22%	0.27%
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%
0-35.92	738.46	65.58%	80.00%

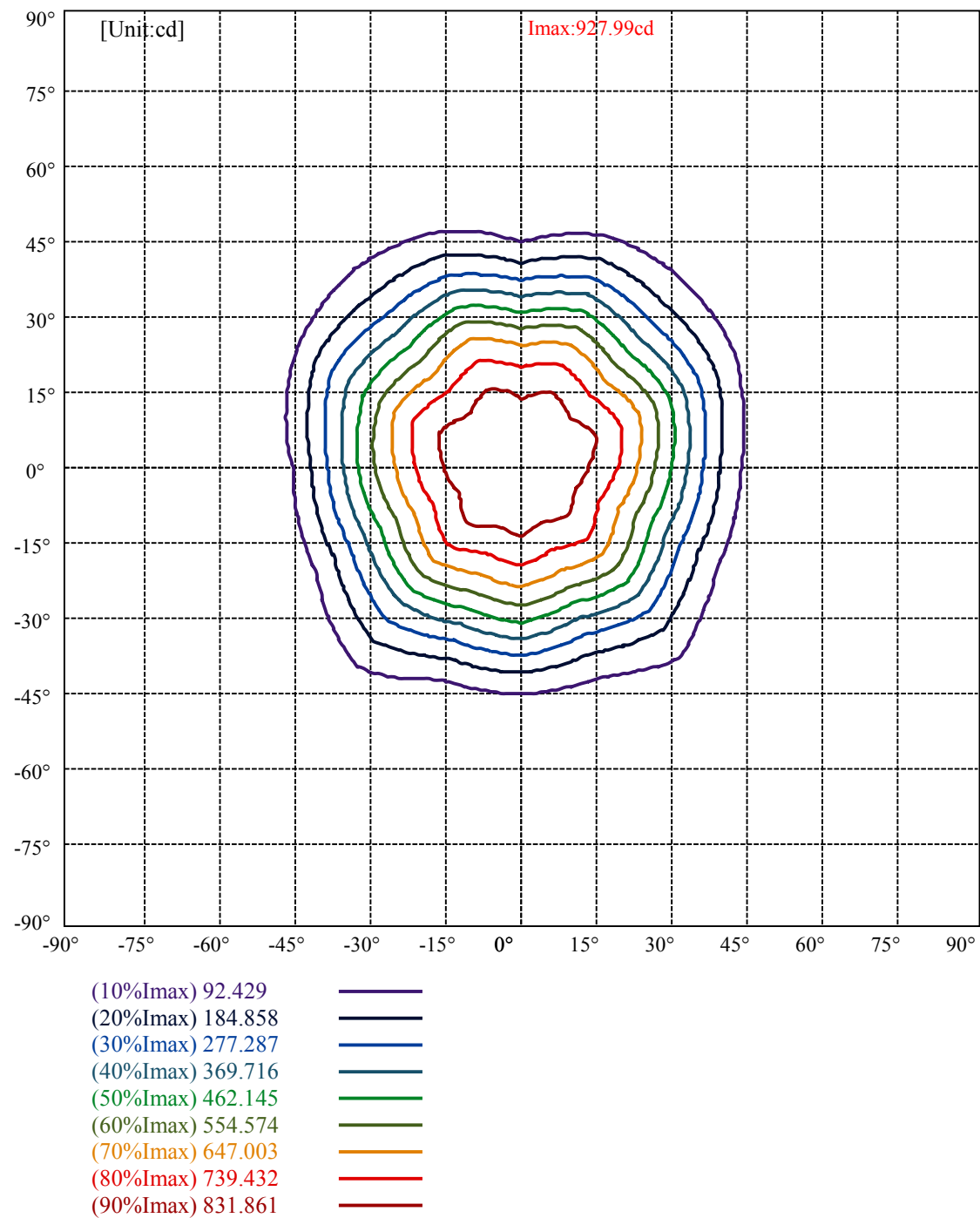
ZONAL LUMEN SUMMARY

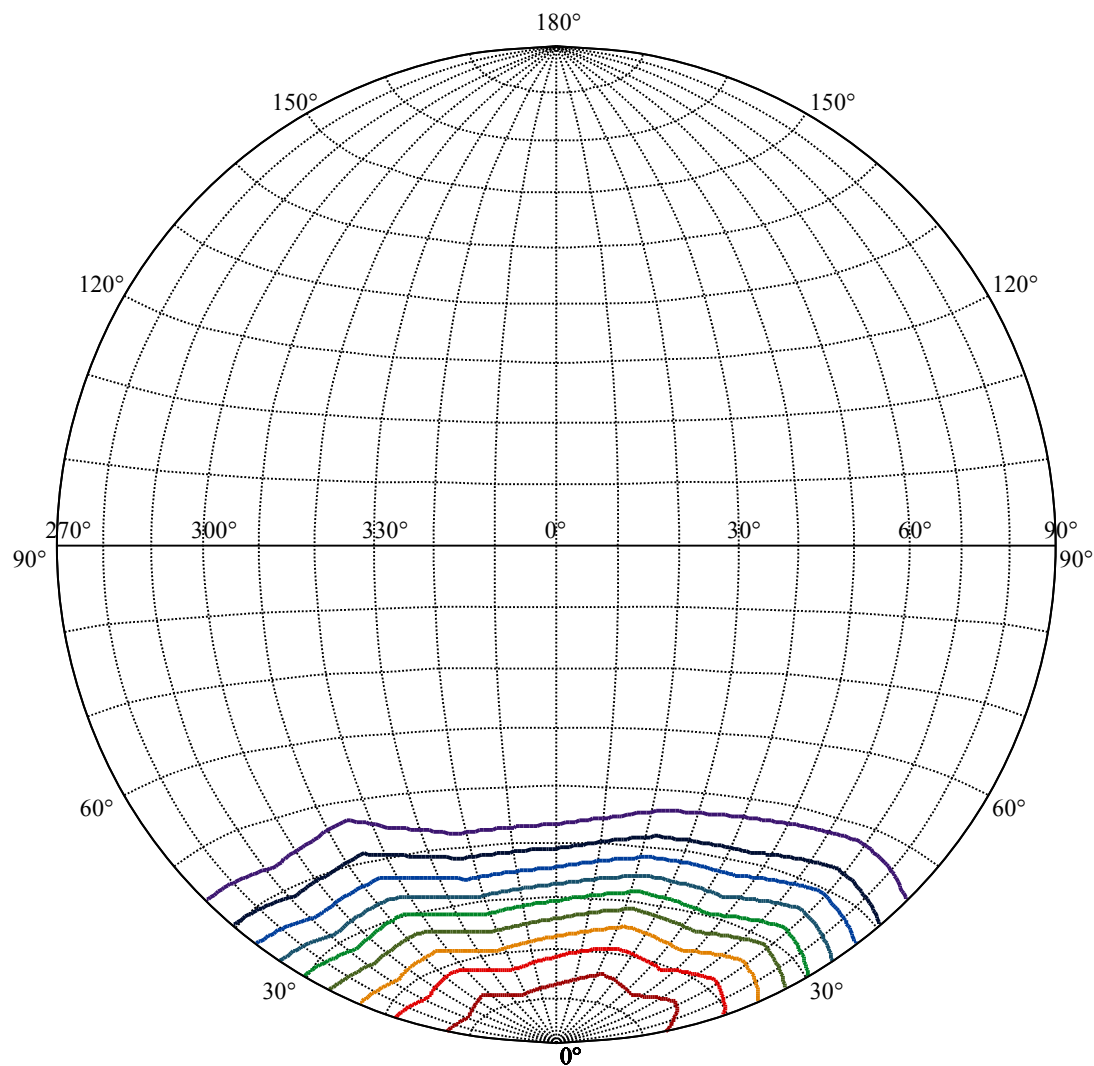
0-10	85.84
10-20	229.19
20-30	283.33
30-40	216.38
40-50	90.18
50-60	15.28
60-70	1.26
70-80	0.80
80-90	0.41
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00





Max , Ave Beam angle of C22.5 plane 62.26



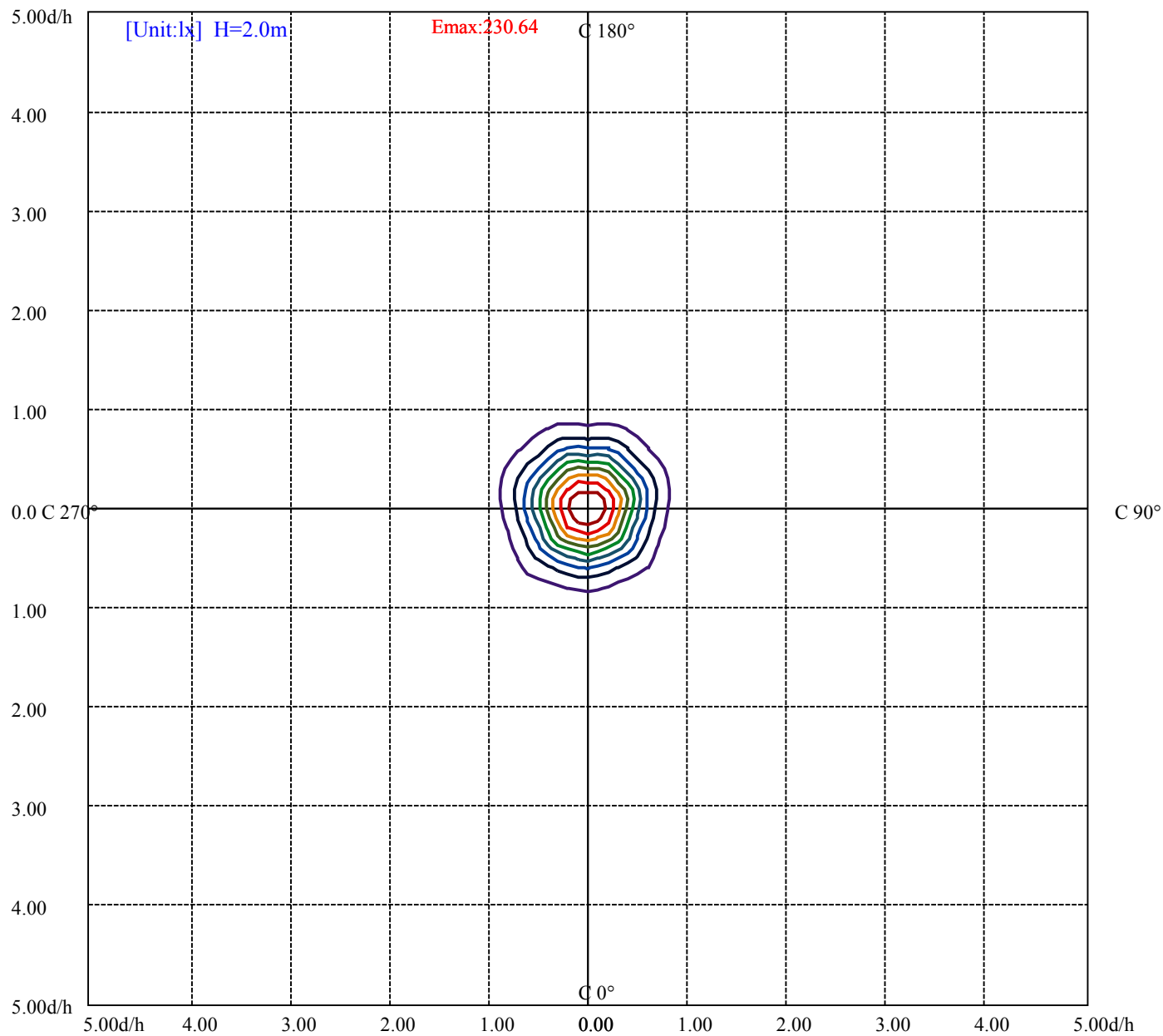


House

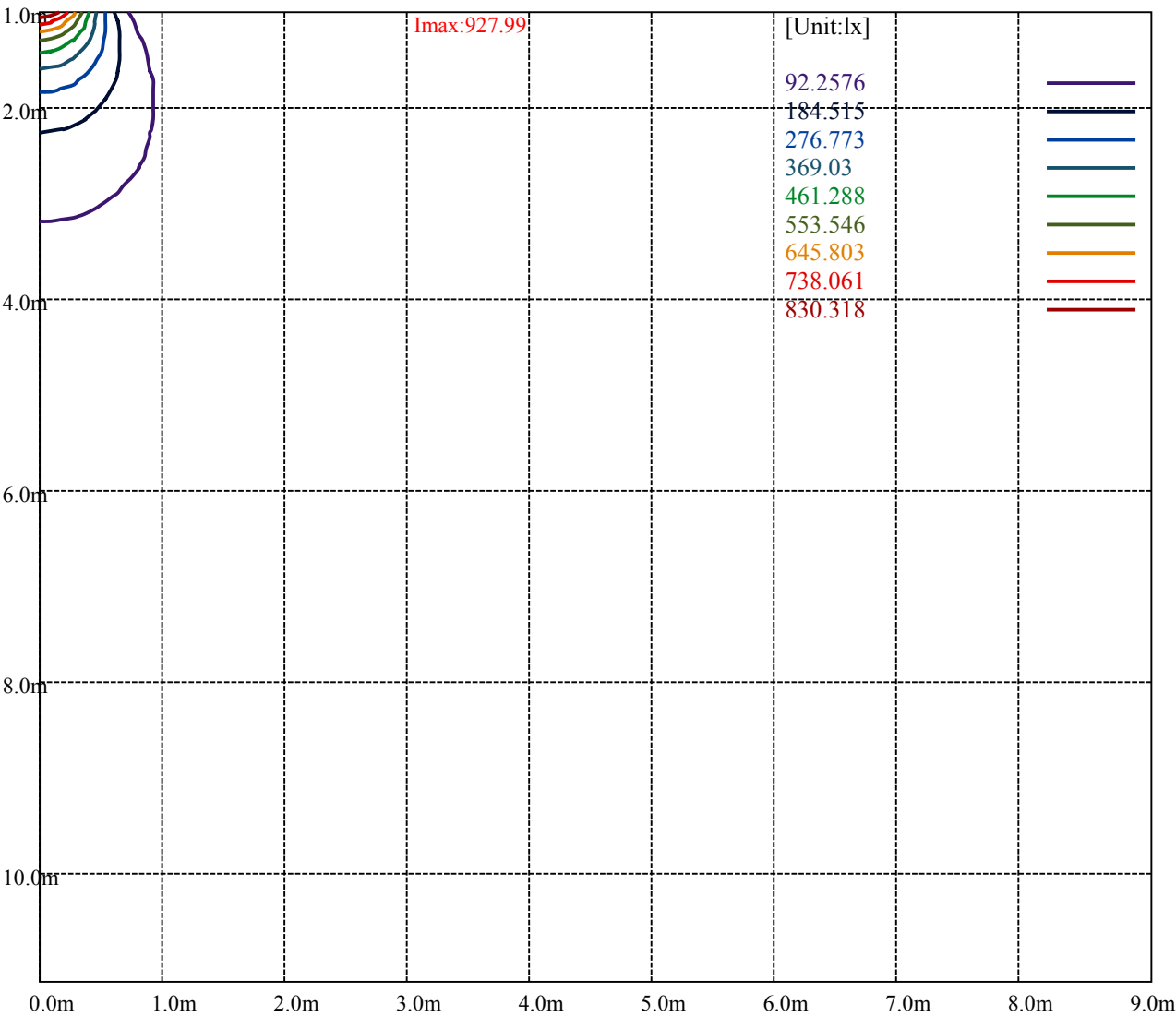
[Unit:cd]

Road

Imax:927.99	
(10%Imax) 92.7873	
(20%Imax) 185.575	
(30%Imax) 278.362	
(40%Imax) 371.149	
(50%Imax) 463.936	
(60%Imax) 556.724	
(70%Imax) 649.511	
(80%Imax) 742.298	
(90%Imax) 835.085	



(10%Emax) 23.06435	—
(20%Emax) 46.12875	—
(30%Emax) 69.193	—
(40%Emax) 92.2575	—
(50%Emax) 115.3217	—
(60%Emax) 138.3862	—
(70%Emax) 161.4505	—
(80%Emax) 184.5148	—
(90%Emax) 207.5793	—



Luminance Table

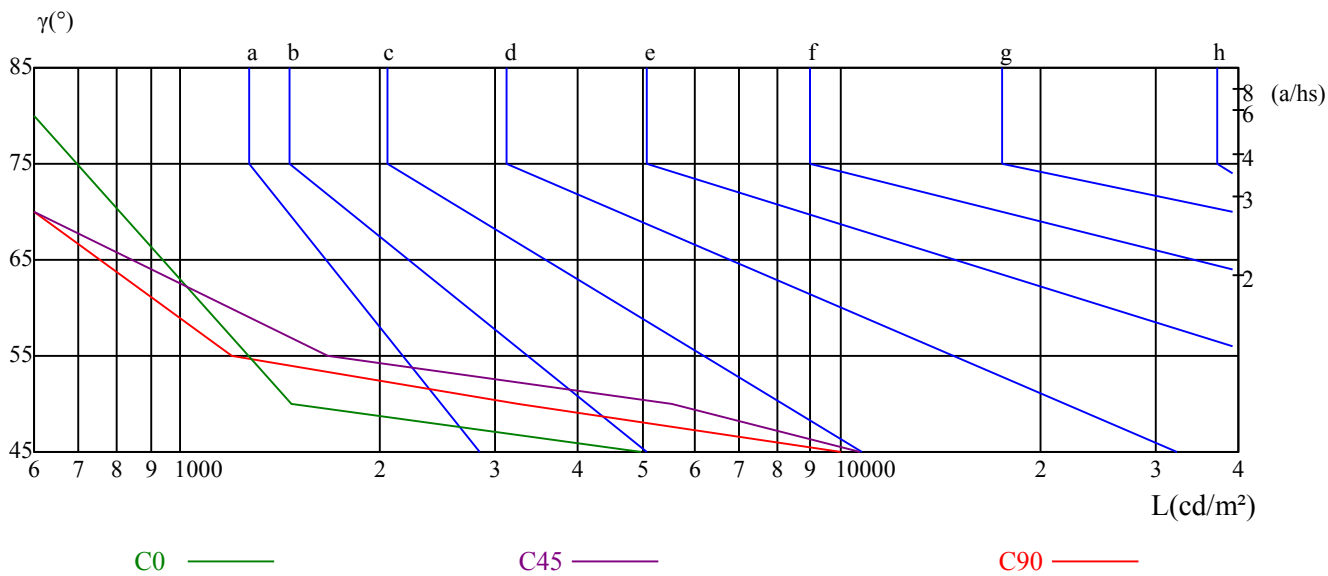
γ	45	50	55	60	65	70	75	80	85
C0	4987	1473	0	0	0	0	0	102	116
C45	10657	5555	1671	0	0	94	105	119	139
C90	9975	3250	1196	0	0	166	207	279	430

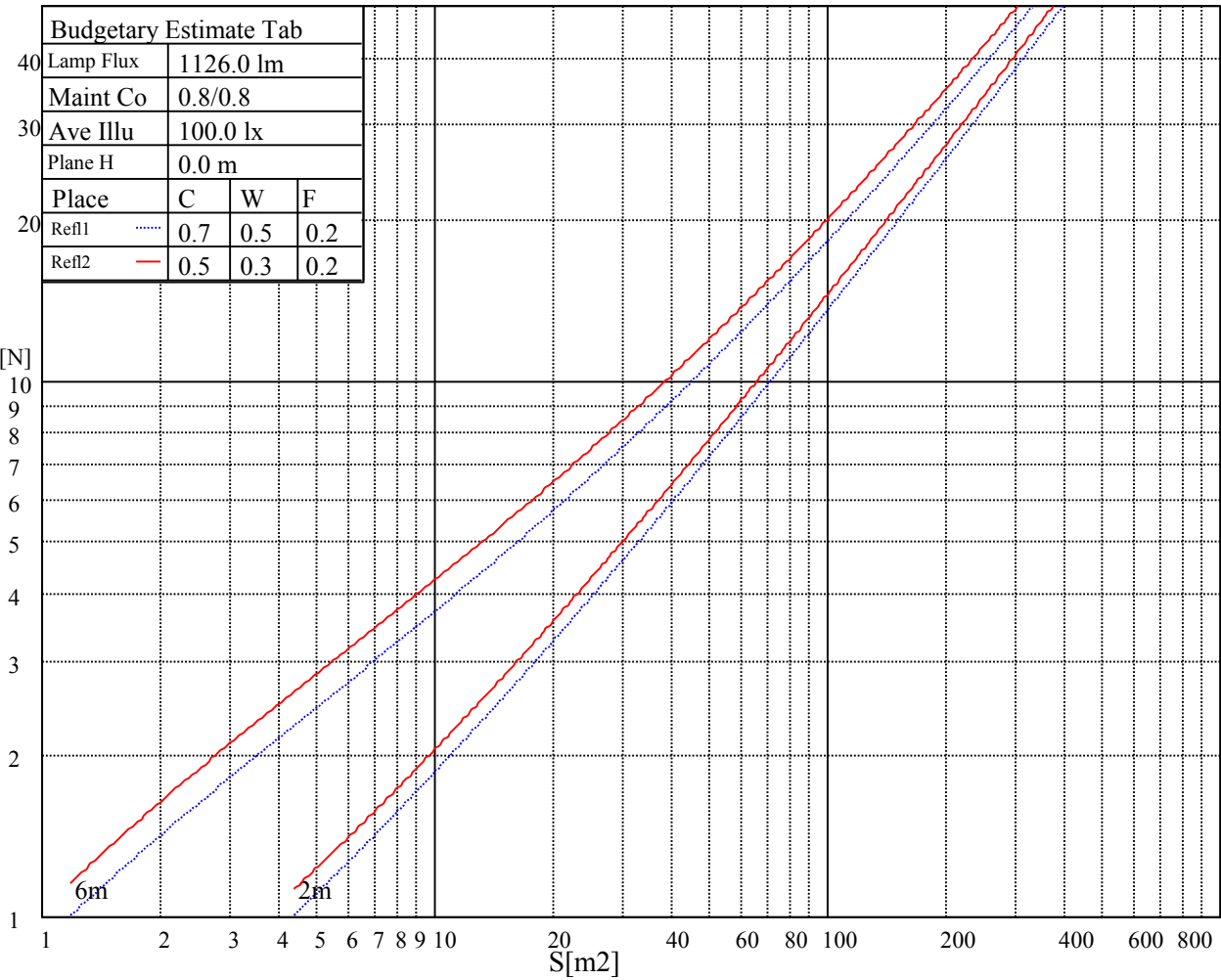
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	263	263	390	780	585

Glare Table

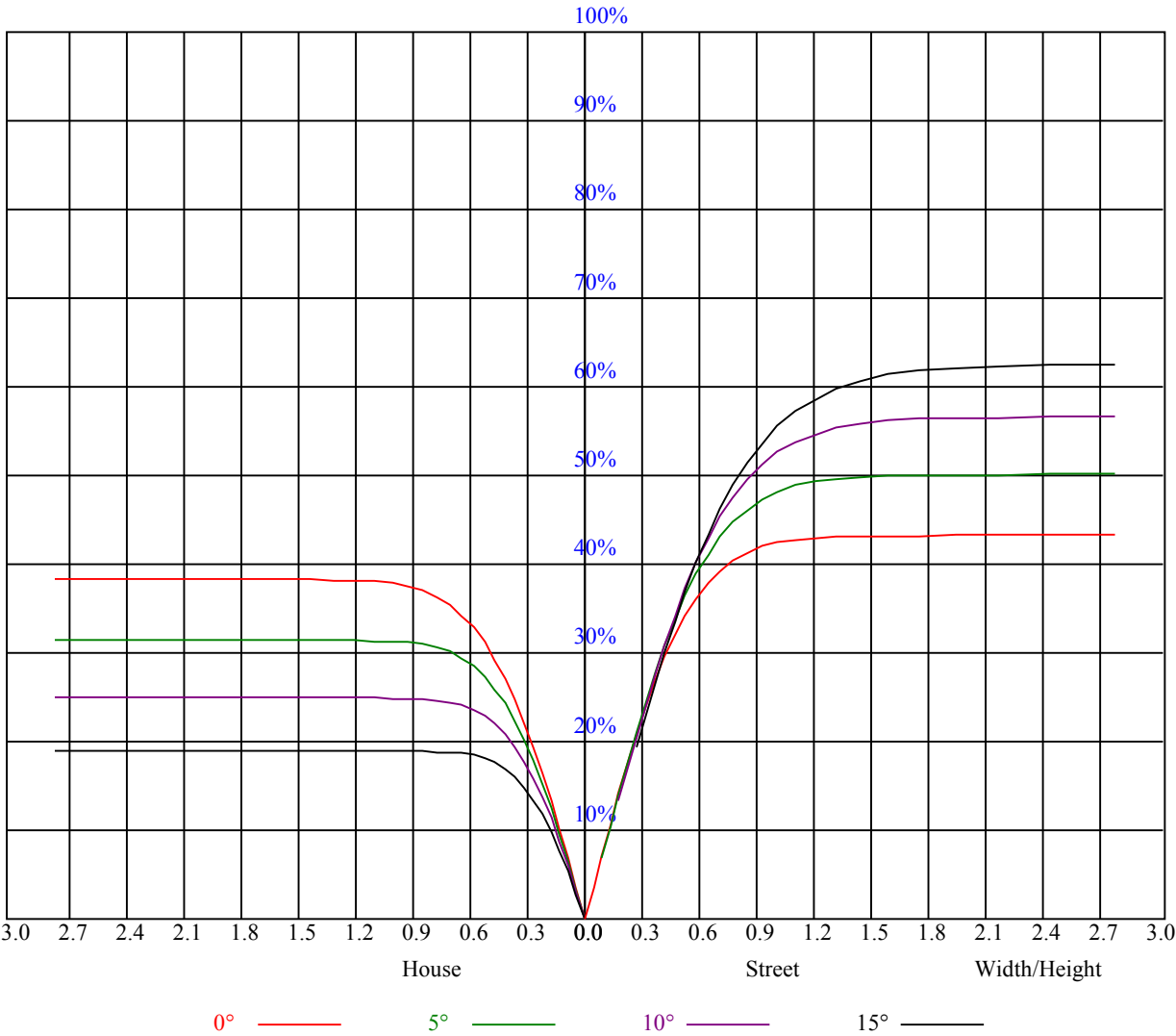
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

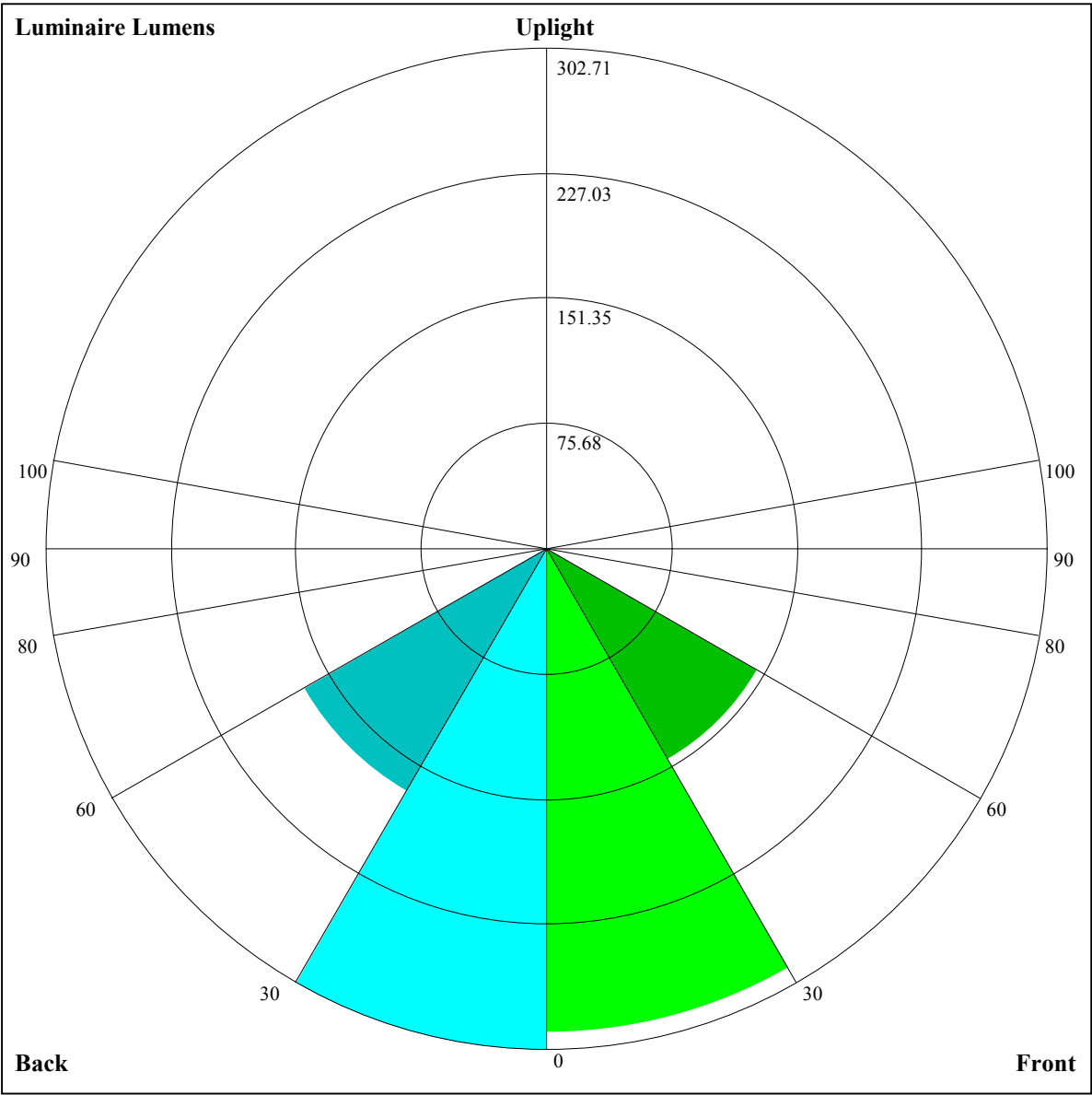
Luminance Limiting Curve





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	0.87	0.89	0.87	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.80	0.79	0.78	0.76
2	0.84	0.80	0.78	0.82	0.79	0.77	0.80	0.77	0.75	0.77	0.75	0.73	0.75	0.73	0.72	0.70
3	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.71	0.69	0.73	0.70	0.67	0.71	0.68	0.66	0.65
4	0.72	0.68	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.68	0.65	0.62	0.66	0.64	0.61	0.60
5	0.67	0.62	0.59	0.67	0.62	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.62	0.59	0.57	0.56
6	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.53	0.59	0.55	0.53	0.52
7	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.49	0.55	0.52	0.49	0.48
8	0.55	0.50	0.47	0.55	0.50	0.47	0.54	0.49	0.46	0.53	0.49	0.46	0.52	0.49	0.46	0.45
9	0.52	0.47	0.43	0.52	0.47	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.49	0.46	0.43	0.42
10	0.49	0.44	0.41	0.49	0.44	0.41	0.48	0.44	0.41	0.47	0.43	0.40	0.47	0.43	0.40	0.39





Luminaire Lumens:

FL=293.04,FM=146.62,FH=0.93,FVH=0.41

BL=302.71,BM=169.51,BH=1.08,BVH=0.41

UL=0,UH=0

BUG Rating:B1-U0-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	925.88	913.77	878.22	806.62	723.16	588.25	449.86	299.54	157.94
22.5	927.99	923.42	897.44	846.91	766.67	659.09	524.18	370.64	232.84
45.0	922.91	909.12	879.92	816.27	727.57	609.07	473.39	338.14	220.23
67.5	914.45	912.25	890.07	846.32	773.69	672.55	541.95	402.80	263.48
90.0	906.49	897.10	867.56	815.76	735.44	624.22	475.85	331.11	190.52
112.5	917.92	918.51	898.96	858.93	783.60	700.31	575.98	420.91	278.55
135.0	916.40	908.61	882.12	826.68	747.46	640.47	512.16	379.27	257.14
157.5	922.75	924.78	905.06	864.43	798.41	705.14	567.68	431.83	308.77
180.0	925.88	917.33	888.13	836.41	758.21	639.88	526.63	368.27	218.71
202.5	927.99	912.59	876.02	805.94	712.58	593.92	457.65	320.62	189.51
225.0	922.91	916.06	888.21	837.26	755.84	644.28	515.03	367.59	259.84
247.5	914.45	897.18	859.69	797.39	703.27	584.10	448.85	306.99	179.52
270.0	906.49	894.73	867.05	814.32	723.33	609.15	475.25	329.93	191.29
292.5	917.92	898.20	856.39	778.43	686.35	561.67	411.10	273.22	152.86
315.0	916.40	904.46	871.11	811.02	721.64	604.58	470.85	322.82	209.91
337.5	922.75	902.77	856.98	773.02	664.76	535.18	395.01	259.42	137.96
360.0	925.88	913.77	878.22	806.62	723.16	588.25	449.86	299.54	157.94

C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	58.06	16.93	2.79	0.85	0.68	0.68	0.68	0.76	0.76
22.5	115.87	40.54	11.43	2.20	0.76	0.76	0.76	0.76	0.76
45.0	120.19	55.61	19.72	4.06	0.85	0.76	0.76	0.76	0.76
67.5	145.67	52.98	15.15	2.88	0.85	0.76	0.76	0.76	0.76
90.0	81.68	24.97	5.50	0.93	0.76	0.76	0.76	0.76	0.76
112.5	157.26	65.77	20.06	4.15	0.85	0.85	0.76	0.76	0.76
135.0	156.67	80.49	29.12	6.35	1.27	0.76	0.76	0.76	0.76
157.5	177.66	65.09	19.98	4.74	0.93	0.76	0.76	0.76	0.76
180.0	89.89	28.35	7.11	1.18	0.76	0.68	0.68	0.68	0.68
202.5	81.25	25.73	6.52	0.93	0.76	0.76	0.76	0.68	0.76
225.0	157.68	75.16	25.73	6.43	1.27	0.85	0.76	0.76	0.76
247.5	71.10	22.68	4.91	0.93	0.85	0.76	0.76	0.76	0.76
270.0	81.85	22.68	5.67	0.93	0.76	0.85	0.76	0.76	0.76
292.5	65.51	20.57	4.40	0.85	0.76	0.76	0.76	0.76	0.76
315.0	121.37	56.88	17.35	4.15	0.85	0.76	0.76	0.76	0.68
337.5	45.96	15.24	3.13	0.76	0.76	0.76	0.76	0.68	0.76
360.0	58.06	16.93	2.79	0.85	0.68	0.68	0.68	0.76	0.76

C/ γ (°)	90.0
0.0	0.76
22.5	0.76
45.0	0.76
67.5	0.76
90.0	0.76
112.5	0.76
135.0	0.68
157.5	0.76
180.0	0.76
202.5	0.68
225.0	0.76
247.5	0.76
270.0	0.68
292.5	0.68
315.0	0.76
337.5	0.76
360.0	0.76