
Nata

LumCAT: 1407-N	
Luminaire: 92.70.046.00	
Report No: NT2018032902	Voltage(V): 26.4000
Test No: nata-0100	Current(A): 0.3500
LampCAT: BRIDGELUX V10	Power (W): 9.2400
Lamp flux(lm): 924.8	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 39	Width(mm): 39
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 763.37
Efficiency(%): 82.55%
Lumens(lm)/Power(W): 82.62
Central intensity(cd): 912.725
Maximum intensity(cd): 912.725
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=46.9
[C90/270]Total=46.9
Field angle(10%Imax): [C0/180]Total=92.8
[C90/270]Total=92.8
Maximum s/h(1/2): C0_180=0.71 C90_270=0.71
Maximum s/h(1/4): C0_180=0.79 C90_270=0.79
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 83.06%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 95.355%

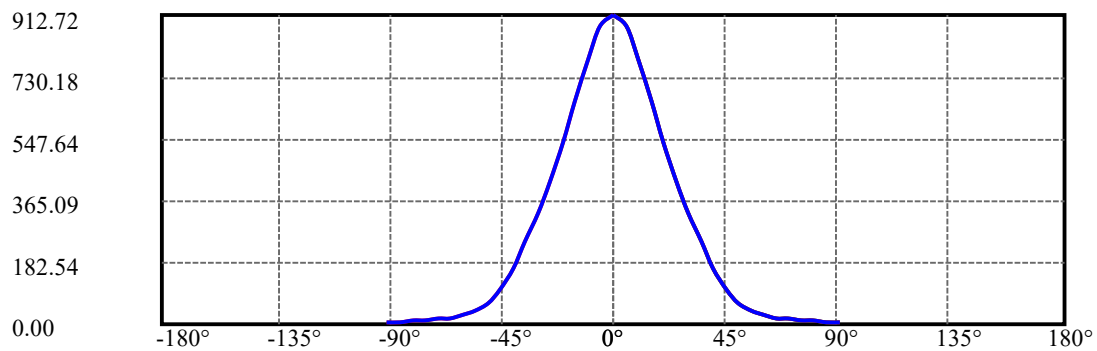
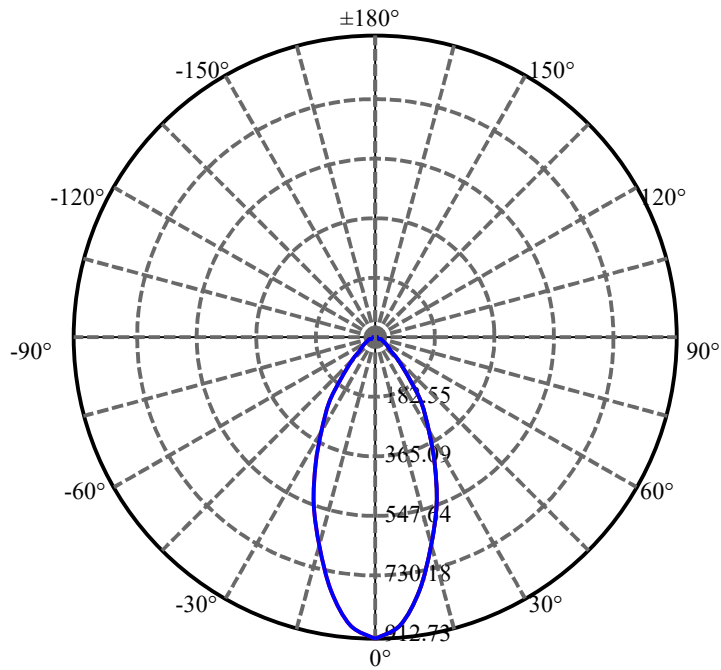
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	912.725	5.458	5.458	.590%	.715%
5.0	876.980	41.896	47.355	4.530%	6.203%
10.0	781.340	74.370	121.725	8.042%	15.946%
15.0	655.653	93.016	214.741	10.058%	28.131%
20.0	535.816	100.452	315.193	10.862%	41.290%
25.0	420.356	97.377	412.569	10.530%	54.046%
30.0	325.982	89.341	501.911	9.661%	65.749%
35.0	240.947	75.754	577.664	8.192%	75.673%
40.0	165.651	58.365	636.029	6.311%	83.318%
45.0	102.095	39.571	675.6	4.279%	88.502%
50.0	62.909	26.415	702.016	2.856%	91.963%
55.0	39.441	17.709	719.725	1.915%	94.282%
60.0	26.757	12.702	732.427	1.373%	95.946%
65.0	18.960	9.419	741.846	1.019%	97.180%
70.0	14.239	7.334	749.18	.793%	98.141%
75.0	10.832	5.735	754.915	.620%	98.892%
80.0	8.864	4.785	759.7	.517%	99.519%
85.0	5.230	2.856	762.556	.309%	99.893%
90.0	2.973	0.815	763.371	.088%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	501.91	54.27%	65.75%
0-40	636.03	68.78%	83.32%
0-60	732.43	79.20%	95.95%
0-90	762.56	82.46%	99.89%
0-120	762.56	82.46%	99.89%
0-180	763.37	82.55%	100.00%
60-90	42.83	4.63%	5.61%
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%
0-37.83	610.70	66.04%	80.00%

ZONAL LUMEN SUMMARY

0-10	121.72
10-20	193.47
20-30	186.72
30-40	134.12
40-50	65.99
50-60	30.41
60-70	16.75
70-80	10.52
80-90	2.86
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: —————

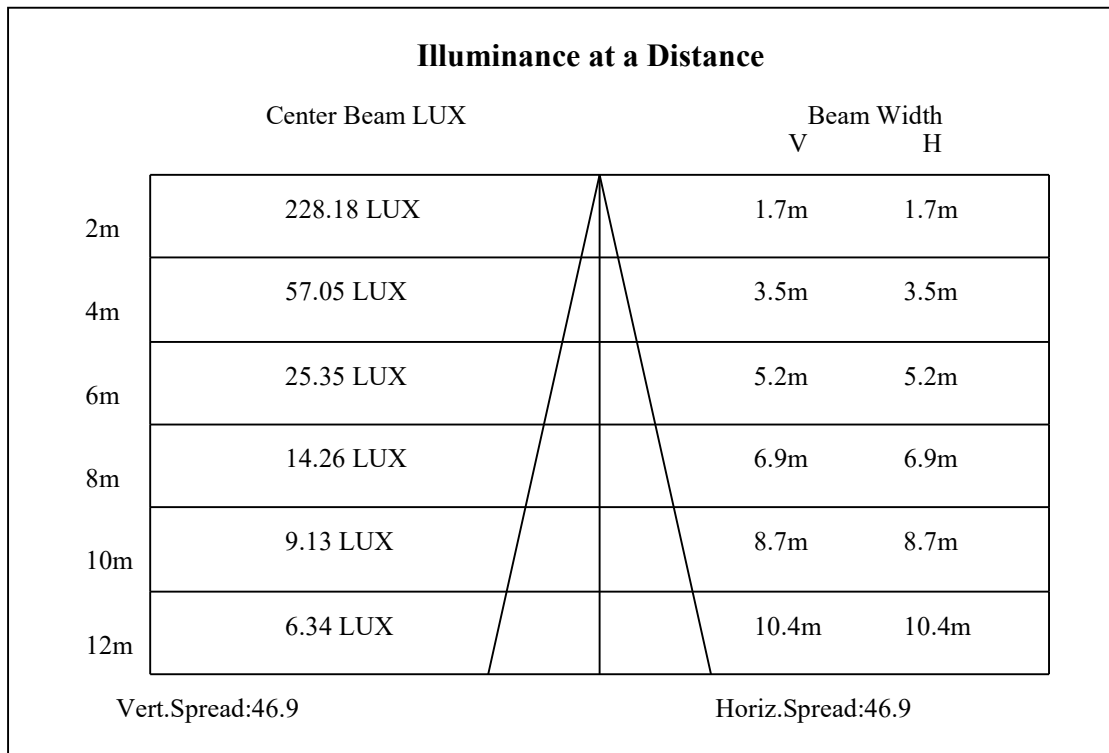
C90/C270: —————

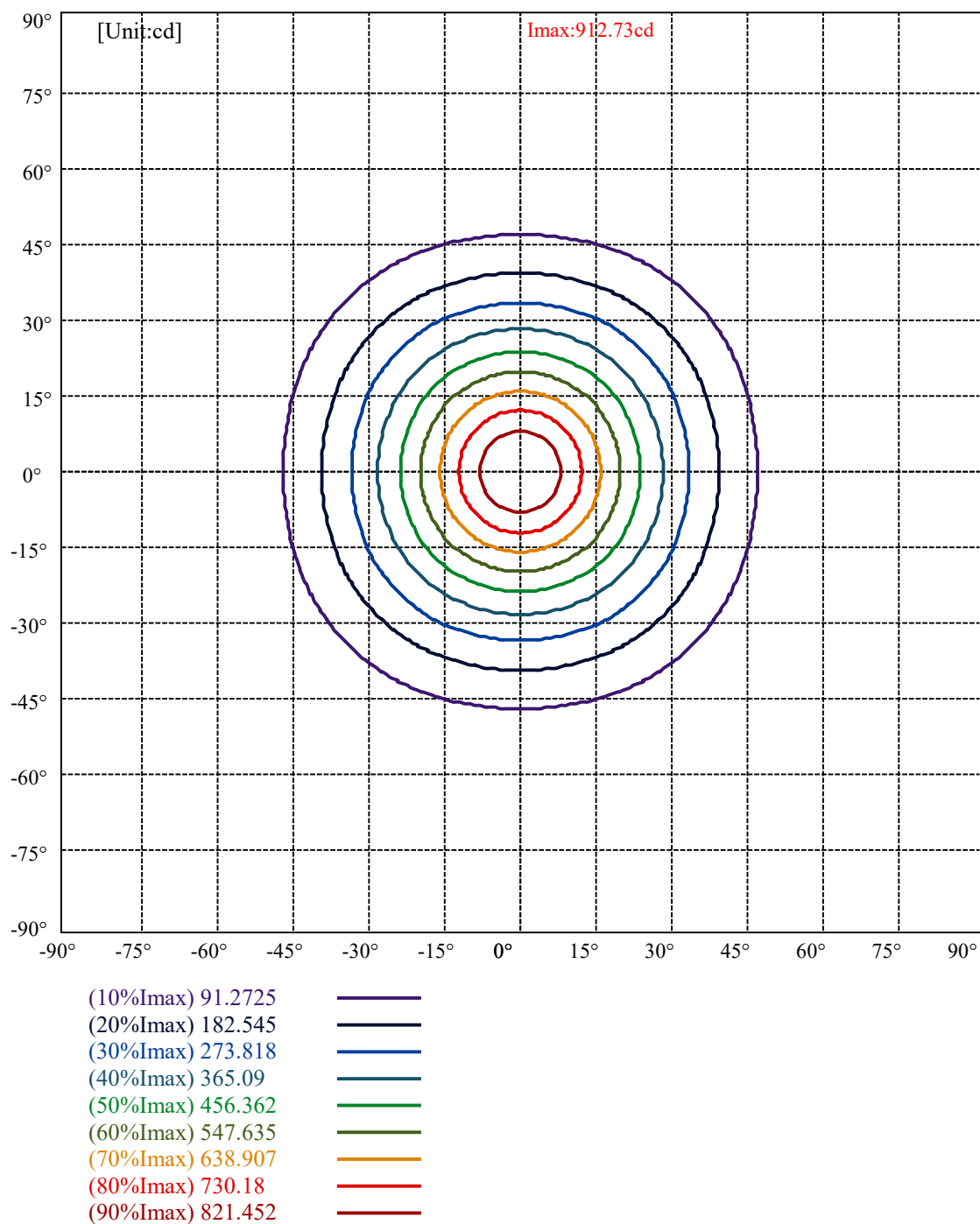
Field angle(10%Imax):C0/180Left:46.4 Right:46.4

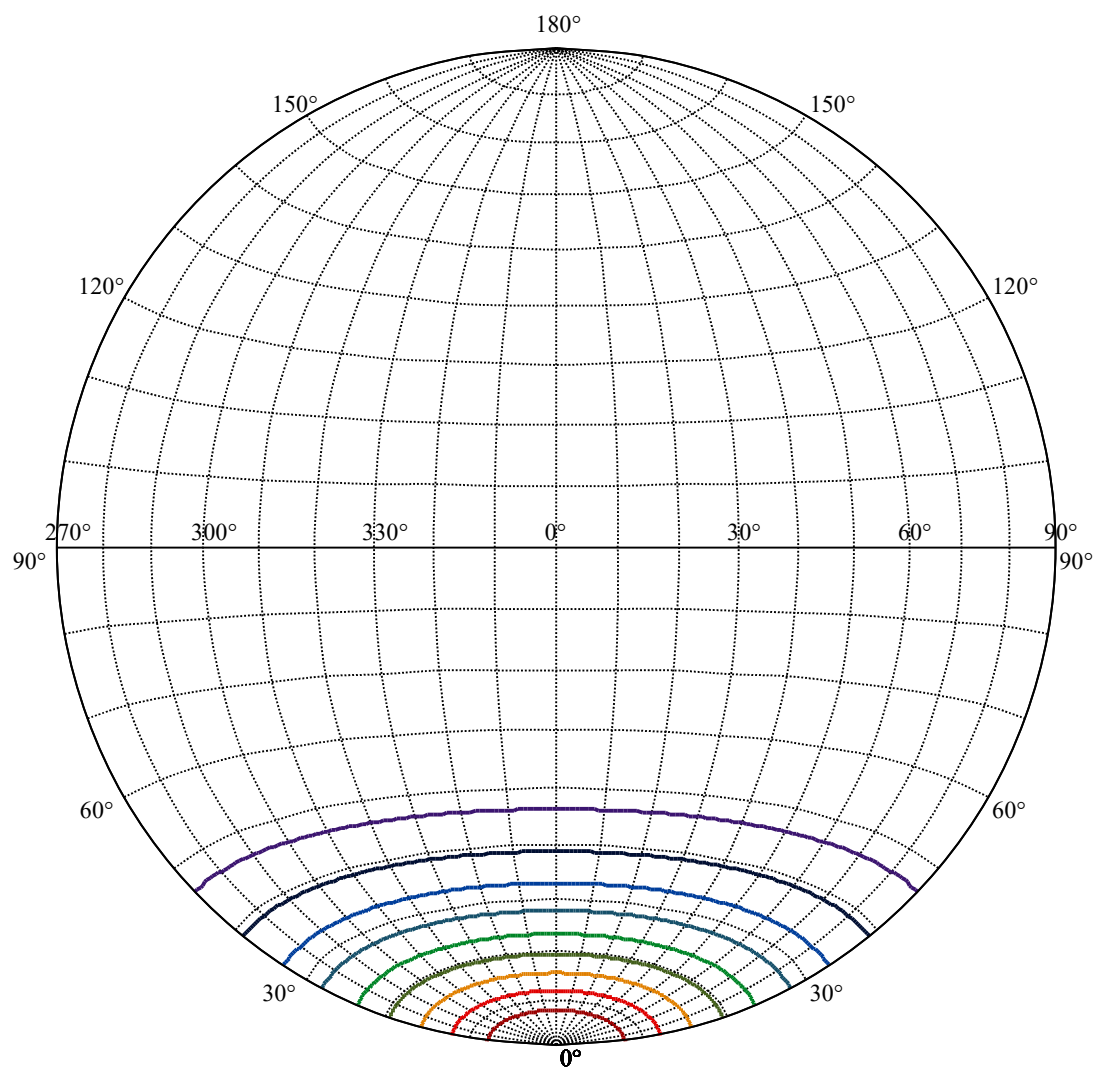
:C90/270Left:46.4 Right:46.4

Beam Angle(50%Imax):C0/180Left:23.4 Right:23.4

:C90/270Left:23.4 Right:23.4







House

[Unit:cd]

Road

Imax:912.73

(10%Imax) 91.2725

(20%Imax) 182.545

(30%Imax) 273.818

(40%Imax) 365.09

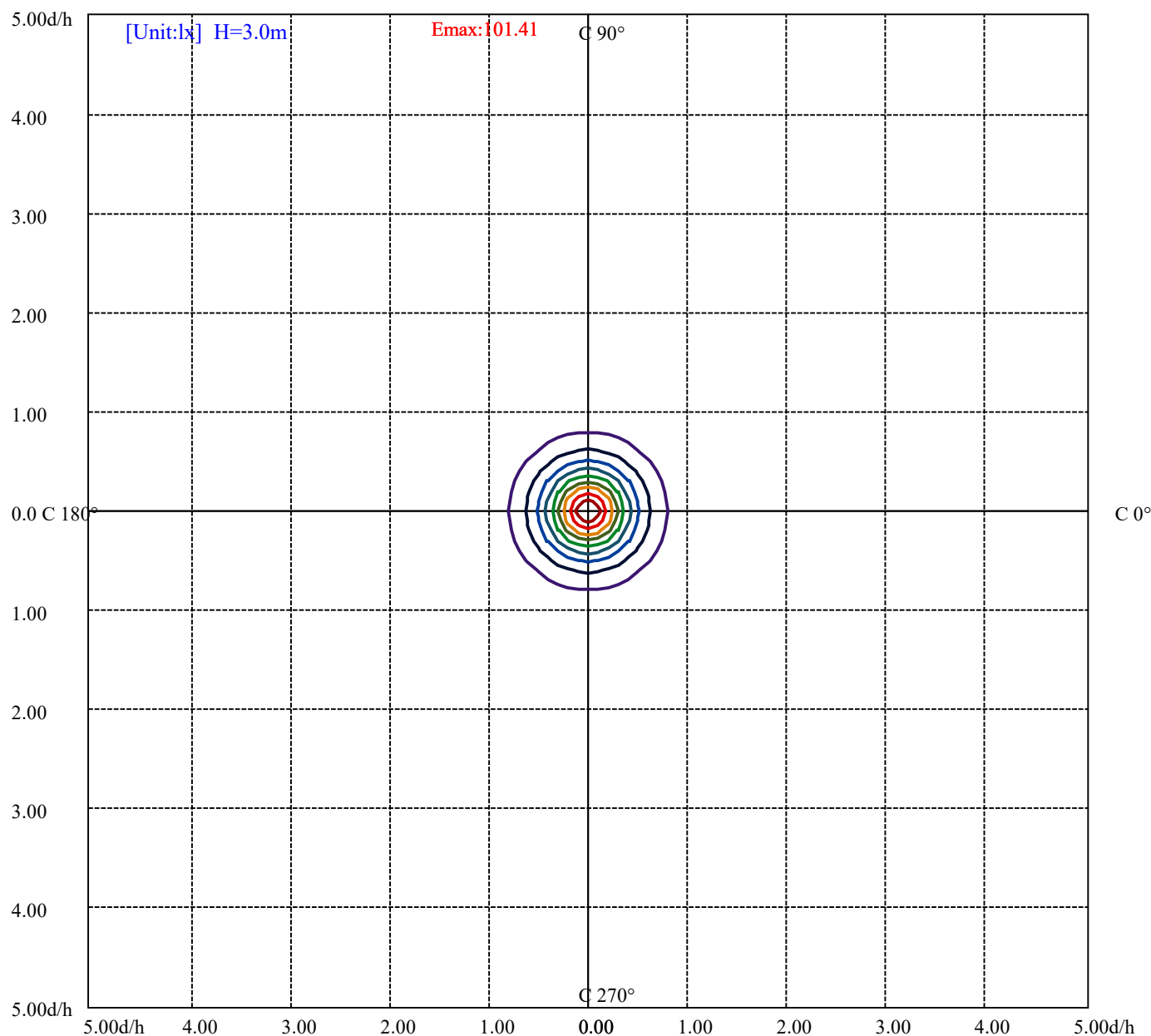
(50%Imax) 456.362

(60%Imax) 547.635

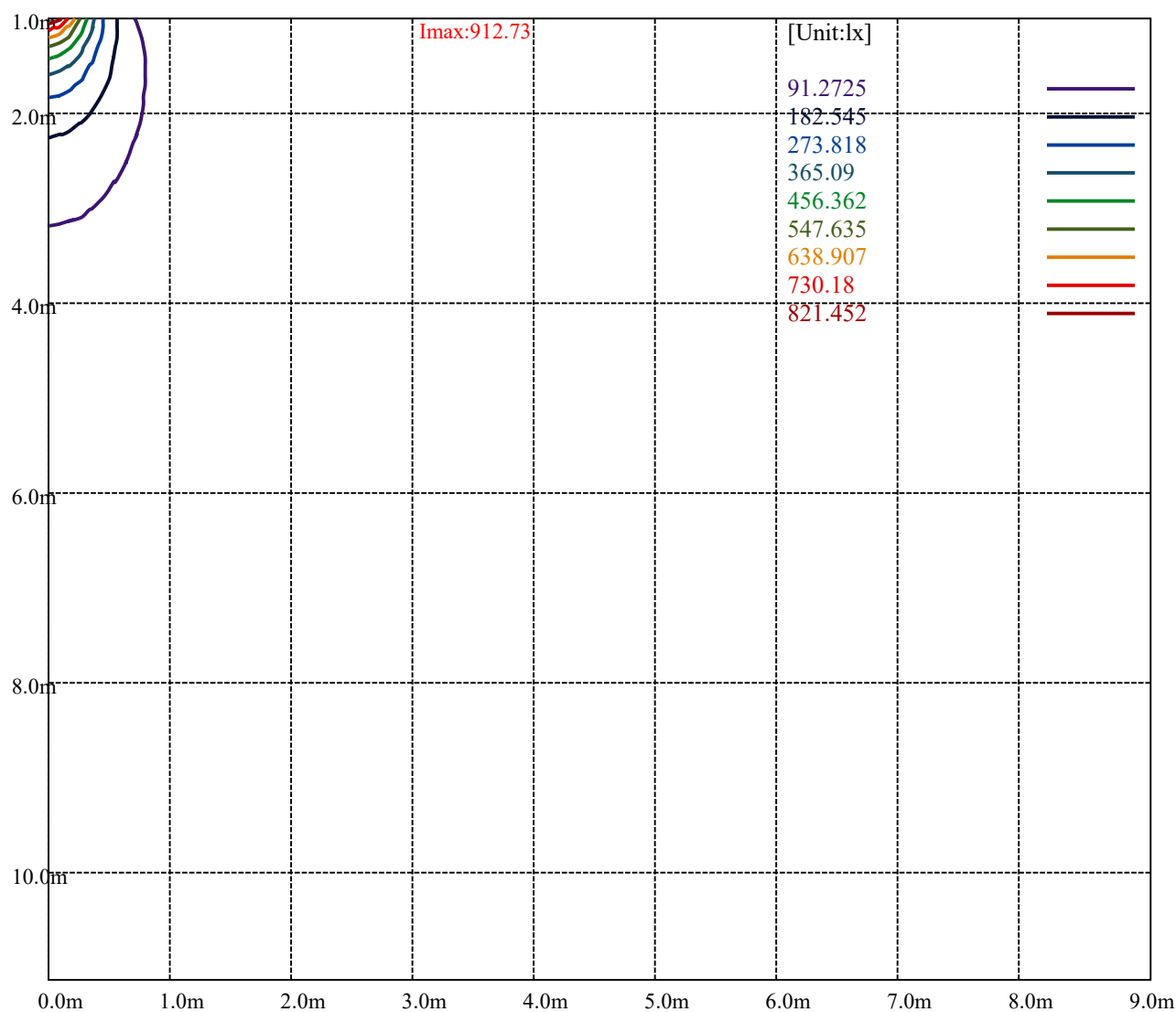
(70%Imax) 638.907

(80%Imax) 730.18

(90%Imax) 821.452



(10%E _{max}) 10.14138	—
(20%E _{max}) 20.28278	—
(30%E _{max}) 30.42411	—
(40%E _{max}) 40.56556	—
(50%E _{max}) 50.70689	—
(60%E _{max}) 60.84822	—
(70%E _{max}) 70.98966	—
(80%E _{max}) 81.131	—
(90%E _{max}) 91.27233	—



Luminance Table

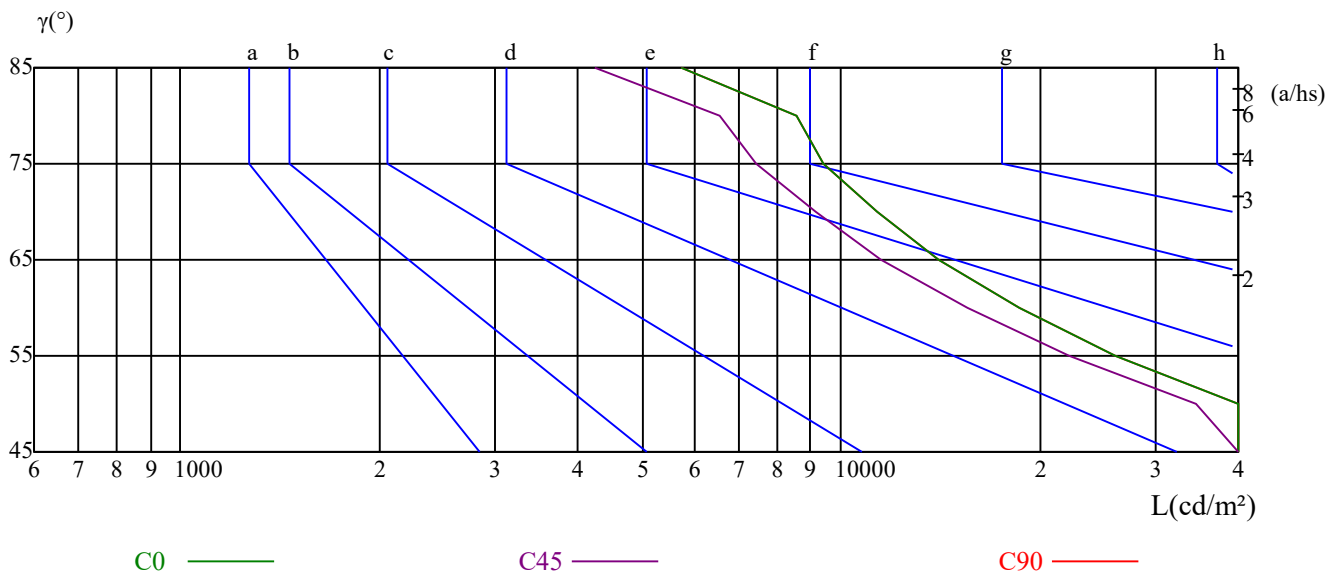
γ	45	50	55	60	65	70	75	80	85
C0	62749	39937	26097	18633	14047	11362	9443	8587	5750
C45	55023	34514	22208	15595	11543	9146	7424	6564	4247
C90	62749	39937	26097	18633	14047	11362	9443	8587	5750

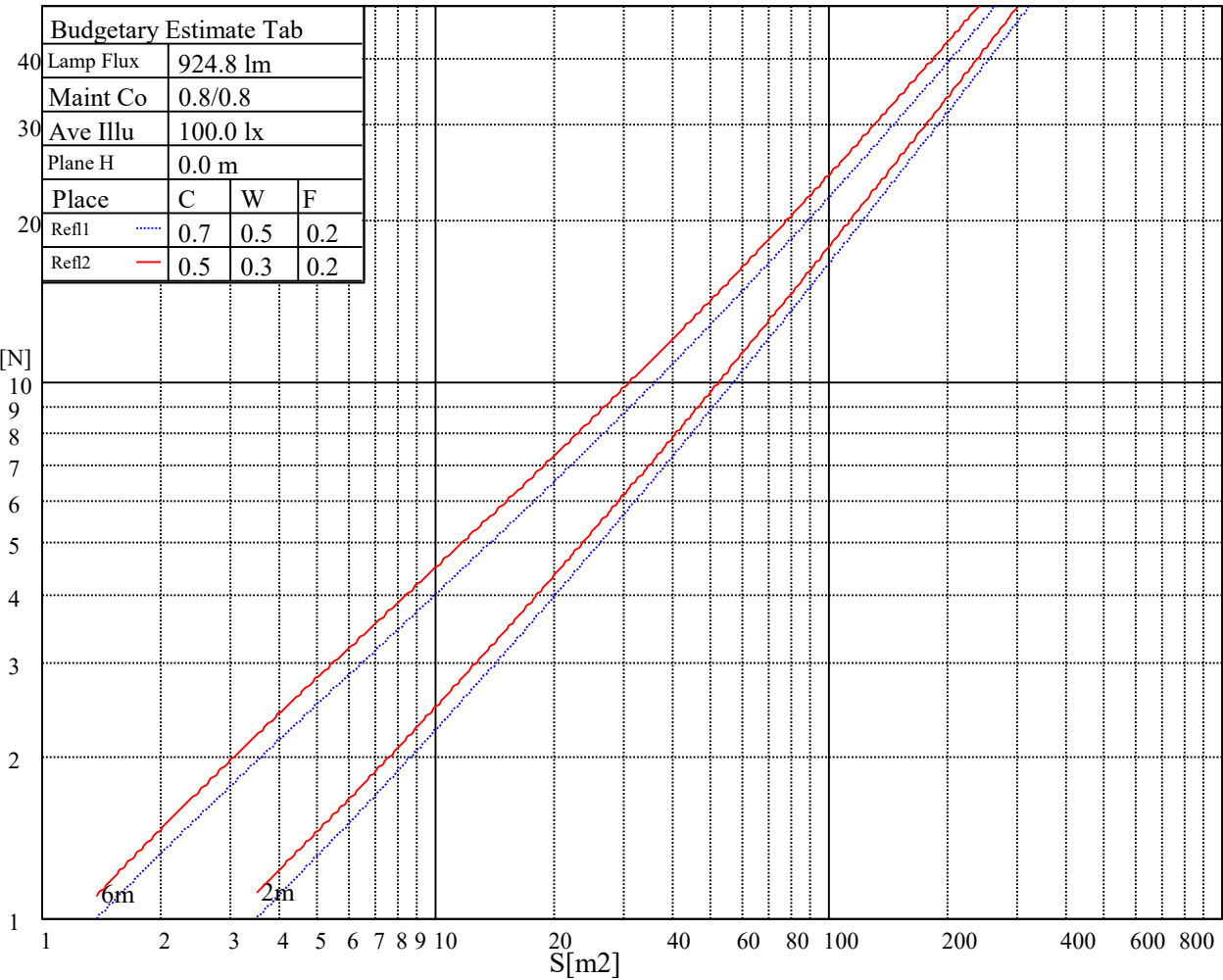
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
29496	29496	29496	27517	27517	27517	39455	39455	39455

Glare Table

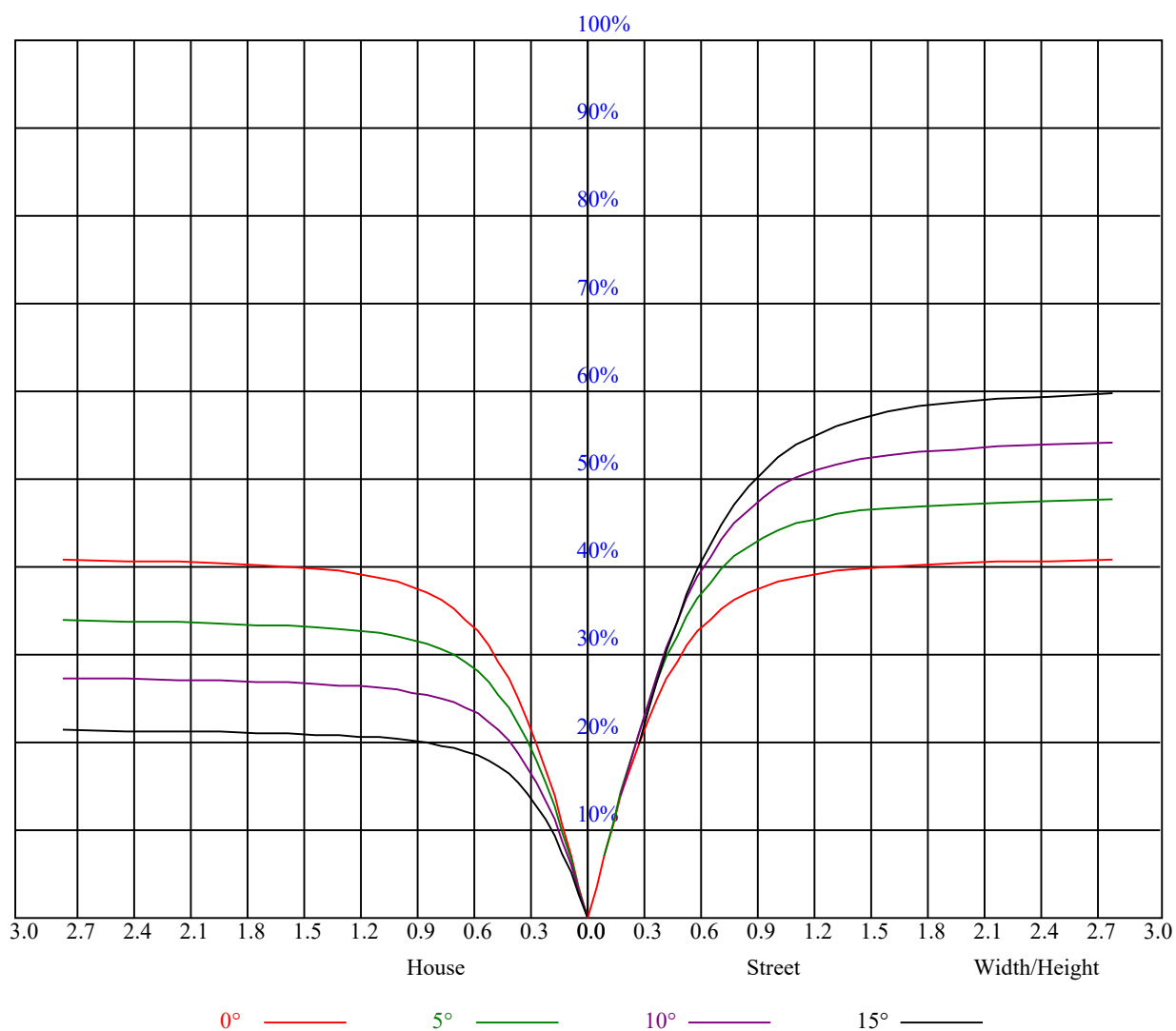
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





RHOC	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	0.99	0.99	0.99	0.97	0.97	0.97	0.92	0.92	0.92	0.88	0.88	0.88	0.85	0.85	0.85	0.83
1	0.90	0.88	0.86	0.89	0.86	0.84	0.85	0.83	0.82	0.82	0.81	0.79	0.79	0.78	0.77	0.76
2	0.84	0.80	0.77	0.82	0.79	0.76	0.79	0.77	0.74	0.77	0.75	0.72	0.75	0.73	0.71	0.69
3	0.78	0.73	0.69	0.76	0.72	0.69	0.74	0.71	0.68	0.72	0.69	0.67	0.70	0.68	0.66	0.64
4	0.72	0.67	0.63	0.71	0.67	0.63	0.69	0.65	0.62	0.68	0.64	0.62	0.66	0.63	0.61	0.59
5	0.68	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	0.55
6	0.63	0.58	0.54	0.63	0.58	0.54	0.61	0.57	0.54	0.60	0.56	0.53	0.59	0.56	0.53	0.52
7	0.60	0.54	0.51	0.59	0.54	0.51	0.58	0.54	0.50	0.57	0.53	0.50	0.56	0.52	0.50	0.49
8	0.56	0.51	0.48	0.56	0.51	0.48	0.55	0.50	0.47	0.54	0.50	0.47	0.53	0.50	0.47	0.46
9	0.53	0.48	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.51	0.47	0.44	0.51	0.47	0.44	0.43
10	0.51	0.46	0.42	0.50	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.48	0.45	0.42	0.41



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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	910.80	875.18	784.11	665.85	548.20	435.28	333.86	243.95	162.03
45.0	912.67	881.67	797.93	671.41	542.97	429.55	333.37	243.29	172.99
90.0	914.54	882.83	784.99	664.04	537.90	421.29	326.65	242.08	166.60
135.0	912.89	892.85	810.49	684.57	564.99	445.02	349.11	268.12	185.10
180.0	910.80	877.43	778.88	650.82	533.50	417.77	324.34	244.18	169.90
225.0	912.67	869.29	760.71	644.38	522.65	408.46	321.58	235.64	161.26
270.0	914.54	874.02	779.21	650.77	532.84	415.24	320.10	232.72	161.32
315.0	912.89	862.57	754.38	613.38	503.49	390.24	298.85	217.58	146.01
360.0	910.80	875.18	784.11	665.85	548.20	435.28	333.86	243.95	162.03
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	98.33	61.11	37.00	24.83	17.23	12.88	9.19	6.50	4.35
45.0	106.75	65.41	39.92	26.26	18.11	13.21	9.47	6.50	4.07
90.0	102.46	64.91	39.26	26.54	19.05	14.15	10.24	7.60	5.23
135.0	116.50	71.46	45.04	30.34	21.36	16.19	12.61	11.40	6.17
180.0	104.39	62.32	41.07	28.46	20.43	15.69	13.93	13.38	6.39
225.0	101.03	61.77	38.98	26.65	19.82	14.76	11.78	10.24	5.84
270.0	98.39	59.90	38.81	26.76	18.94	14.31	10.35	8.97	5.23
315.0	88.92	56.38	35.46	24.22	16.74	12.72	9.08	6.33	4.57
360.0	98.33	61.11	37.00	24.83	17.23	12.88	9.19	6.50	4.35
C/γ(°)	90.0								
0.0	2.97								
45.0	2.97								
90.0	2.86								
135.0	3.08								
180.0	2.92								
225.0	3.03								
270.0	3.03								
315.0	2.92								
360.0	2.97								