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Nata

LumCAT: 12-0080-M3	
Luminaire: LM07126080EM	
Report No: 220524-B002	Voltage(V): 12.8100
Test No: 220524-C002	Current(A): 1.1140
LampCAT: LUMILEDS 5050	Power (W): 14.2700
Lamp flux(lm): 1682.8	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1407.52
Efficiency(%): 83.64%
Lumens(lm)/Power(W): 98.63
Central intensity(cd): 924.736
Maximum intensity(cd): 936.328
Angle of maximum intensity: C=90.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=75.1
 [C90/270]Total=81.8
Field angle(10%Imax): [C0/180]Total=97.6
 [C90/270]Total=102.1
Maximum s/h(1/2): C0_180=1.06 C90_270=1.12
Maximum s/h(1/4): C0_180=1.06 C90_270=1.10
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 83.64%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.191%

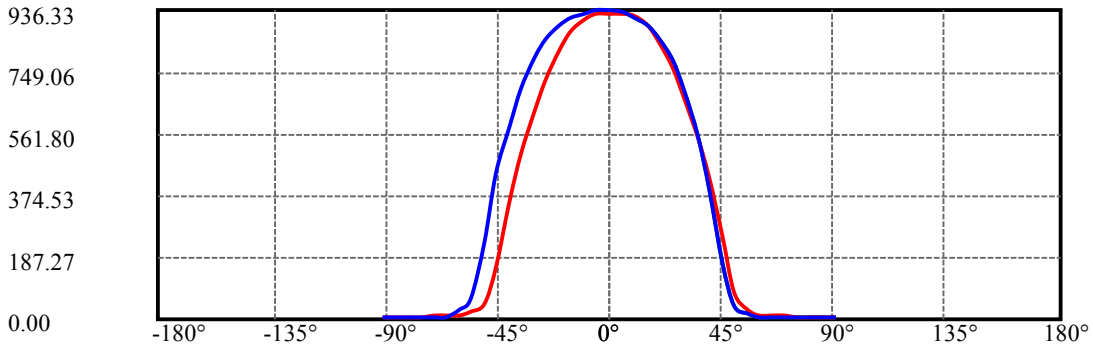
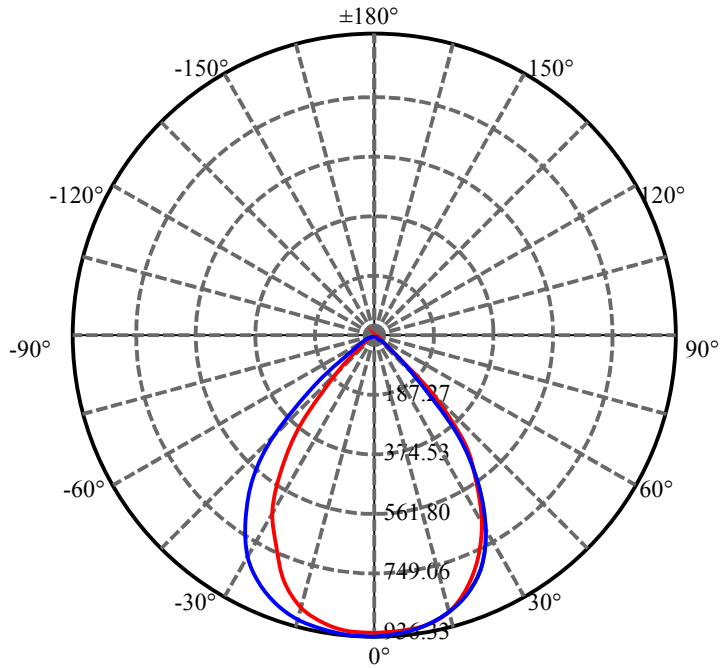
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	930.629	0.000	0	.000%	.000%
5.0	928.131	22.221	22.221	1.320%	1.579%
10.0	916.848	66.001	88.222	3.922%	6.268%
15.0	892.406	107.324	195.545	6.378%	13.893%
20.0	849.473	143.555	339.101	8.531%	24.092%
25.0	785.396	171.468	510.568	10.189%	36.274%
30.0	704.349	188.528	699.097	11.203%	49.669%
35.0	595.830	191.460	890.557	11.377%	63.271%
40.0	475.682	178.774	1069.331	10.623%	75.973%
45.0	319.413	147.218	1216.549	8.748%	86.432%
50.0	164.365	97.754	1314.303	5.809%	93.377%
55.0	60.563	48.907	1363.21	2.906%	96.852%
60.0	20.999	18.853	1382.063	1.120%	98.191%
65.0	9.351	7.378	1389.442	.438%	98.715%
70.0	7.809	4.345	1393.787	.258%	99.024%
75.0	7.047	3.883	1397.67	.231%	99.300%
80.0	6.420	3.603	1401.273	.214%	99.556%
85.0	5.680	3.288	1404.561	.195%	99.790%
90.0	5.131	2.960	1407.521	.176%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	699.10	41.54%	49.67%
0-40	1069.33	63.54%	75.97%
0-60	1382.06	82.13%	98.19%
0-90	1404.56	83.46%	99.79%
0-120	1404.56	83.46%	99.79%
0-180	1407.52	83.64%	100.00%
60-90	41.35	2.46%	2.94%
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%
0-41.93	1126.02	66.91%	80.00%

ZONAL LUMEN SUMMARY

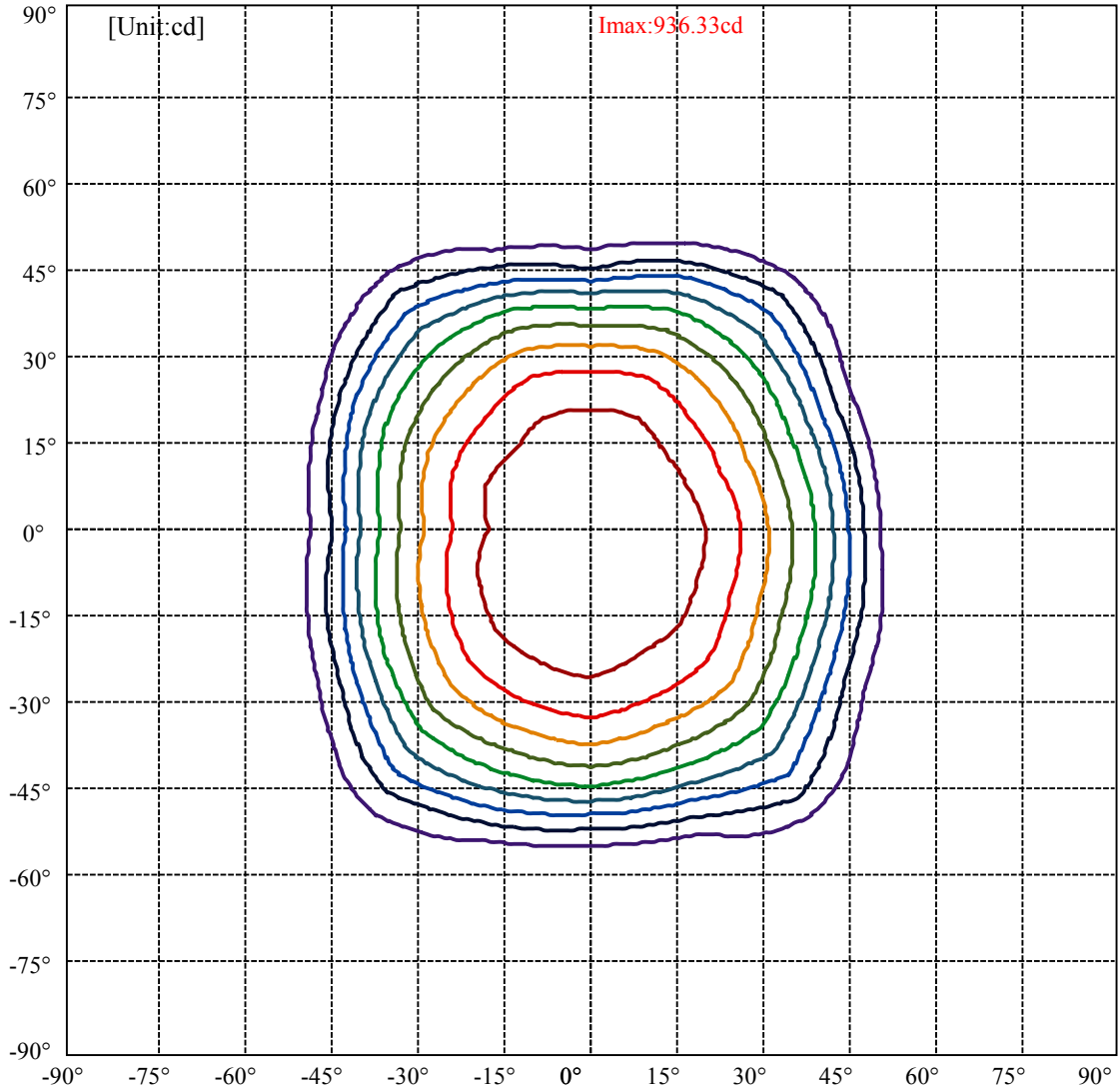
0-10	88.22
10-20	250.88
20-30	360.00
30-40	370.23
40-50	244.97
50-60	67.76
60-70	11.72
70-80	7.49
80-90	3.29
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



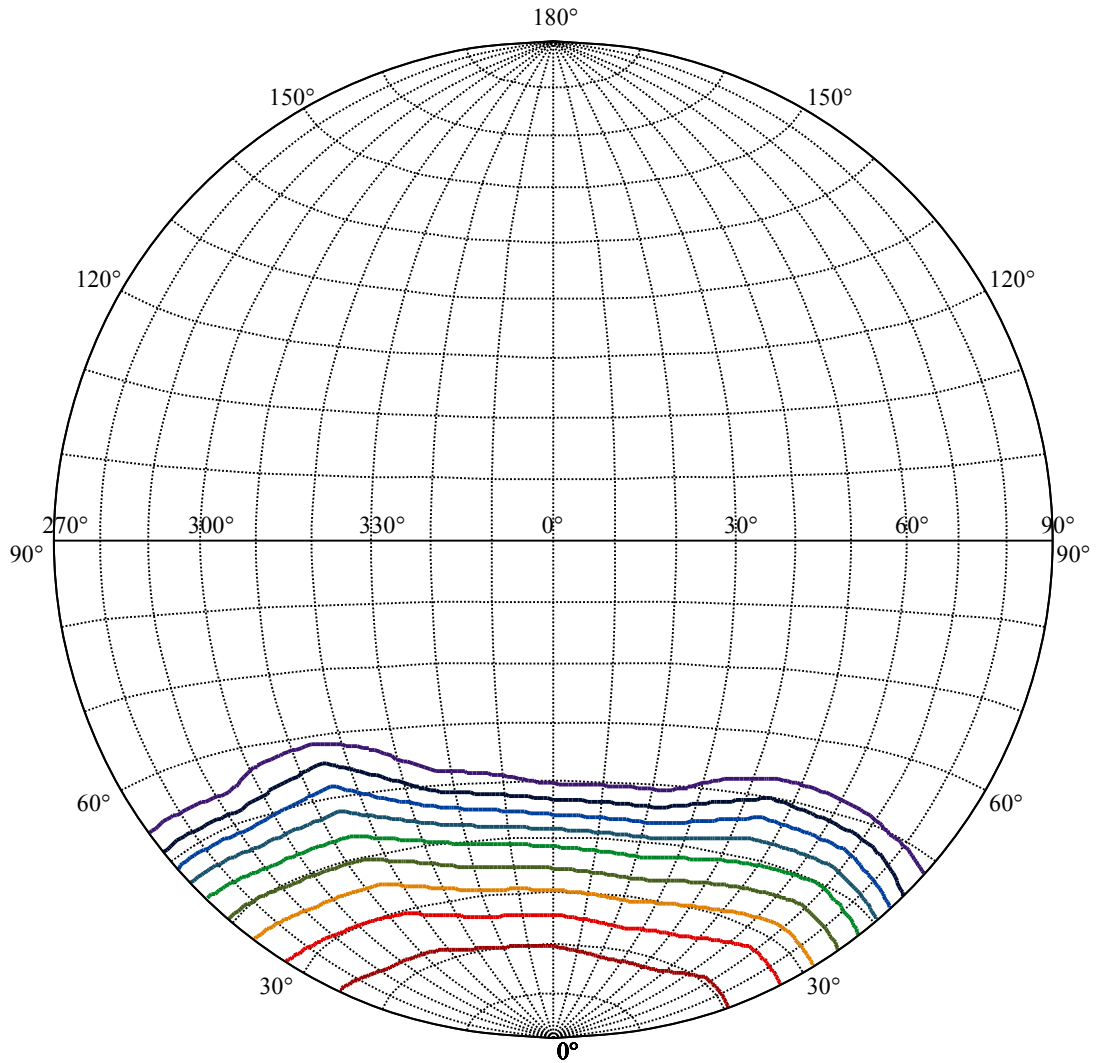
C90(Max): ———
 C0/C180: ———
 C90/C270: ———

Field angle(10%Imax):C0/180Left:48.0 Right:49.7
 :C90/270Left:54.2 Right:48.0

Beam Angle(50%Imax):C0/180Left:36.3 Right:38.7
 :C90/270Left:44.0 Right:37.8



(10%Imax) 93.6328	—
(20%Imax) 187.266	—
(30%Imax) 280.898	—
(40%Imax) 374.531	—
(50%Imax) 468.164	—
(60%Imax) 561.797	—
(70%Imax) 655.43	—
(80%Imax) 749.062	—
(90%Imax) 842.695	—



House

[Unit:cd]

Road

Imax:936.33

(10%Imax) 93.6328

(20%Imax) 187.266

(30%Imax) 280.898

(40%Imax) 374.531

(50%Imax) 468.164

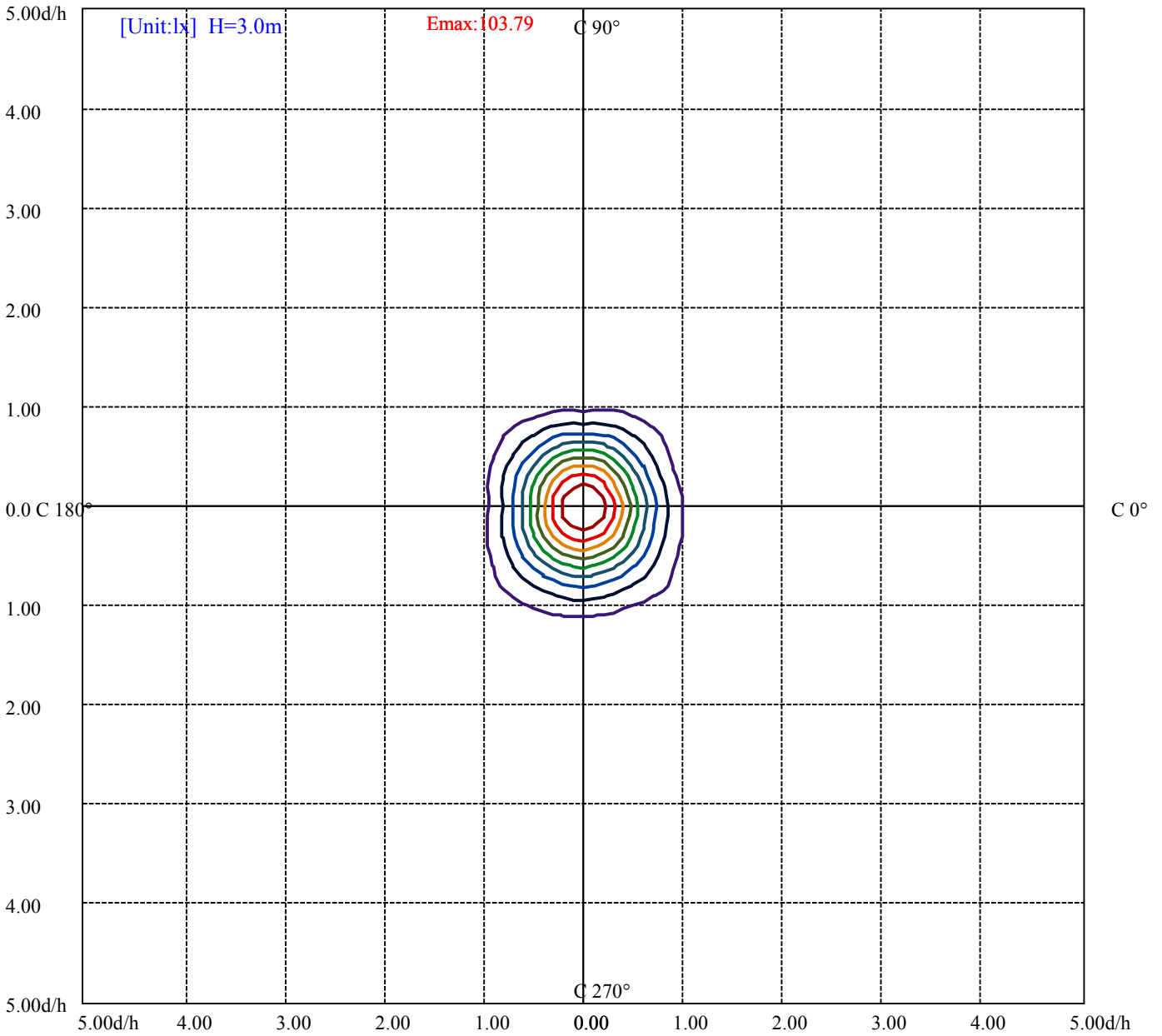
(60%Imax) 561.797

(70%Imax) 655.43

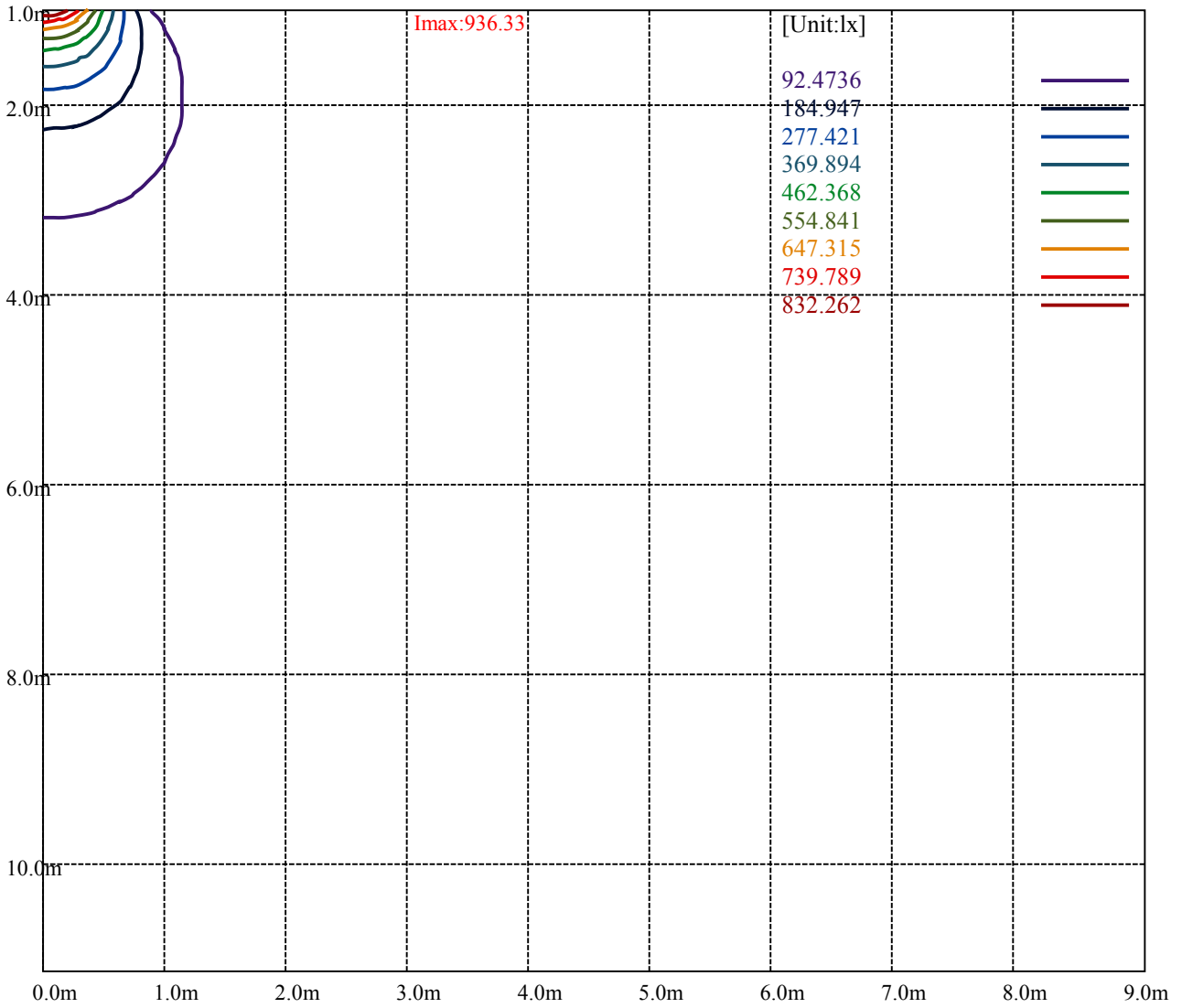
(80%Imax) 749.062

(90%Imax) 842.695





(10%Emax) 10.37908	—
(20%Emax) 20.75811	—
(30%Emax) 31.13722	—
(40%Emax) 41.51633	—
(50%Emax) 51.89534	—
(60%Emax) 62.27444	—
(70%Emax) 72.65356	—
(80%Emax) 83.03267	—
(90%Emax) 93.41167	—



Luminance Table

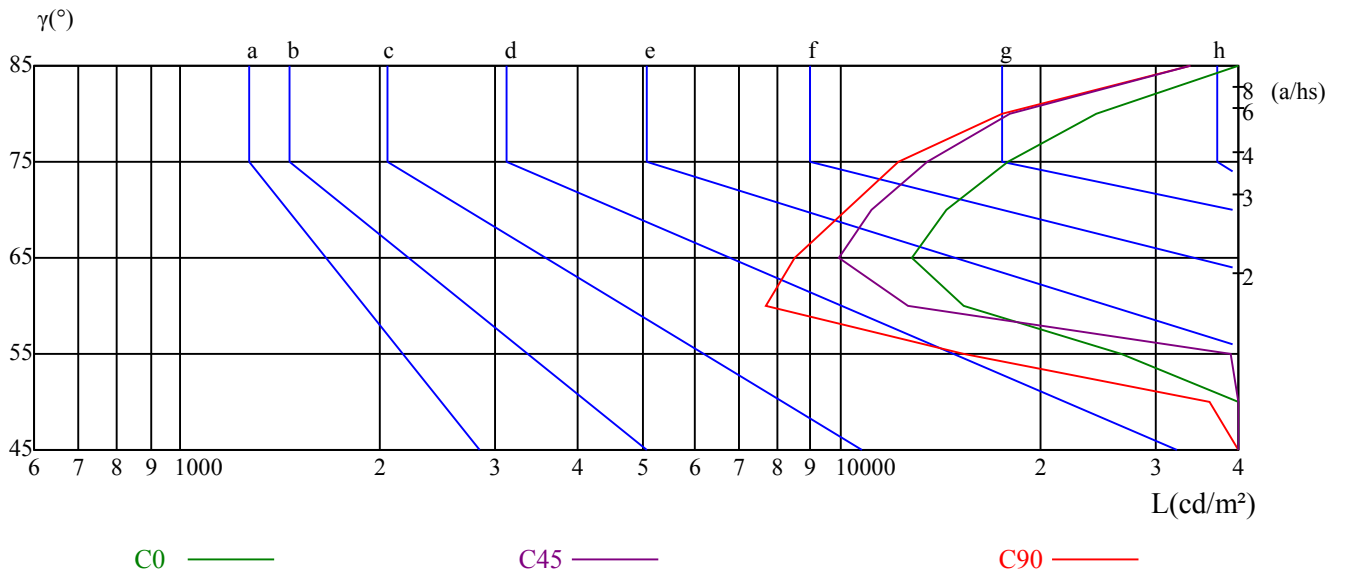
γ	45	50	55	60	65	70	75	80	85
C0	192543	68022	26650	15318	12846	14456	17855	24379	40045
C45	253510	158719	38876	12603	9941	11149	13485	18052	33742
C90	129611	36098	15381	7691	8488	10205	12236	17494	33742

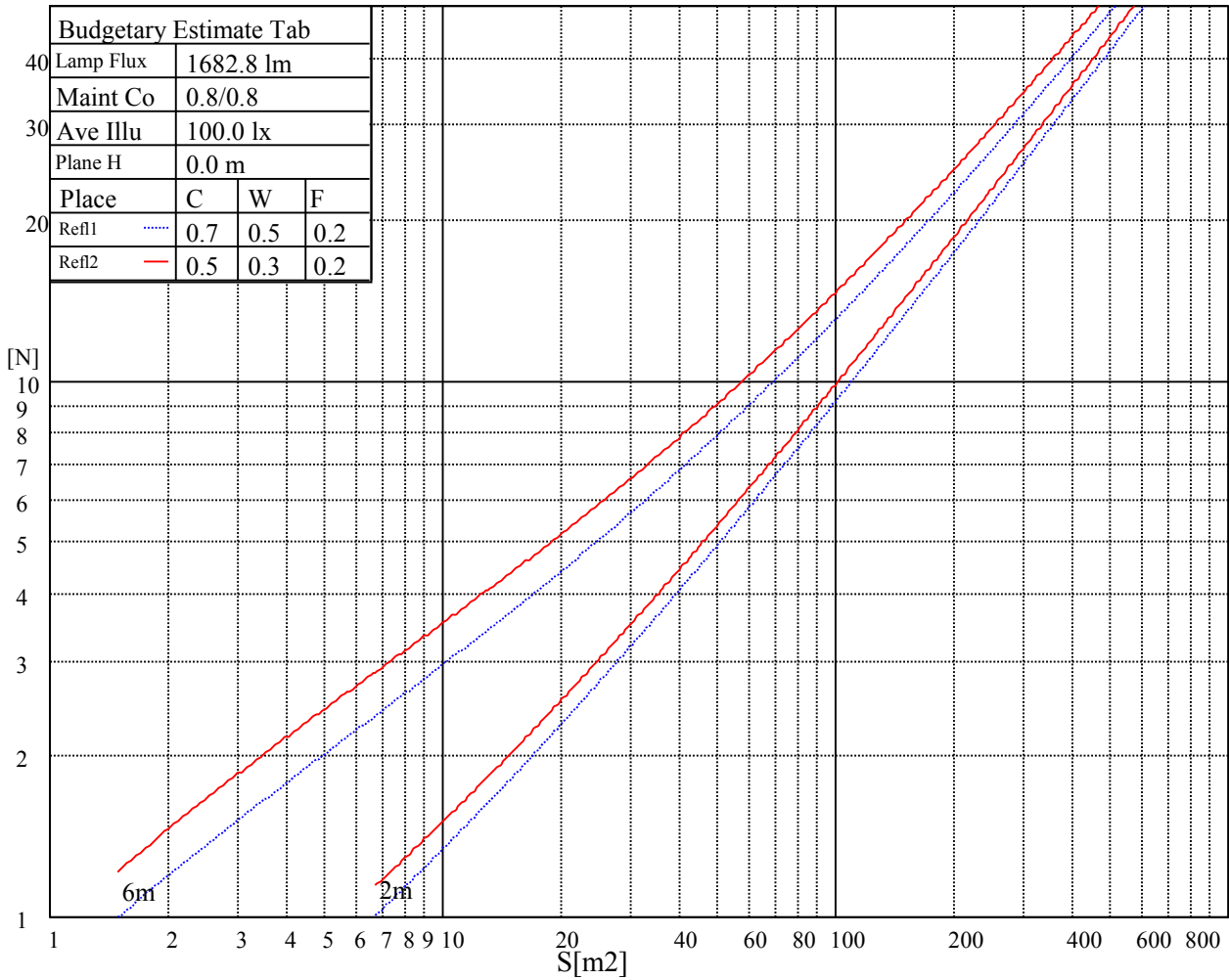
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12846	9597	12770	17293	12923	14140	38191	34113	34761

Glare Table

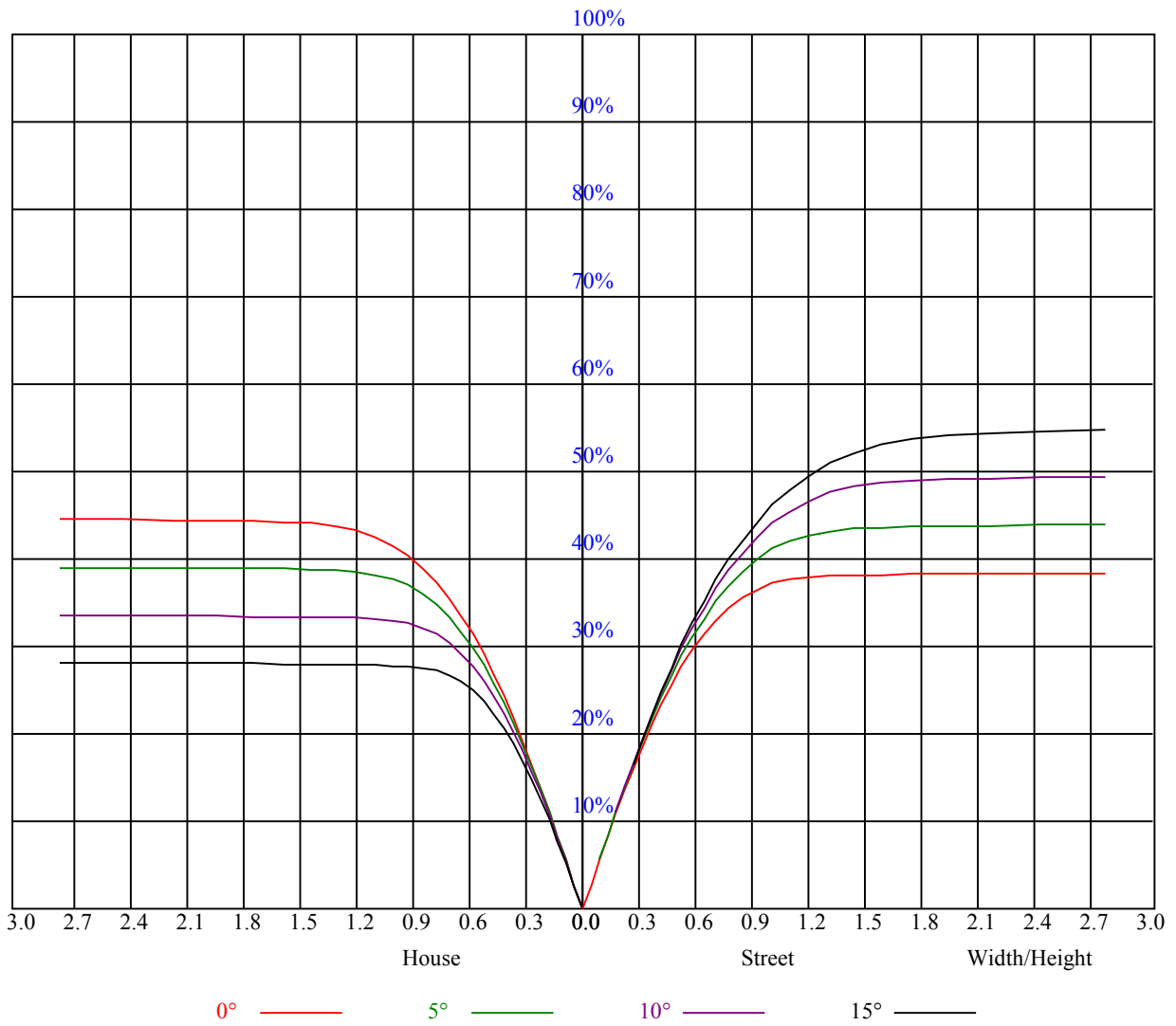
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.00	1.00	1.00	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.84
1	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.84	0.83	0.83	0.81	0.80	0.80	0.79	0.78	0.76
2	0.83	0.79	0.76	0.82	0.78	0.75	0.79	0.76	0.74	0.77	0.74	0.72	0.74	0.72	0.70	0.69
3	0.76	0.71	0.68	0.75	0.71	0.67	0.73	0.69	0.66	0.71	0.68	0.65	0.69	0.66	0.64	0.62
4	0.70	0.65	0.60	0.69	0.64	0.60	0.67	0.63	0.59	0.65	0.62	0.59	0.64	0.61	0.58	0.56
5	0.64	0.59	0.54	0.64	0.58	0.54	0.62	0.57	0.54	0.60	0.56	0.53	0.59	0.55	0.53	0.51
6	0.59	0.53	0.49	0.59	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.48	0.55	0.51	0.48	0.47
7	0.55	0.49	0.45	0.54	0.49	0.45	0.53	0.48	0.44	0.52	0.48	0.44	0.51	0.47	0.44	0.43
8	0.51	0.45	0.41	0.50	0.45	0.41	0.49	0.44	0.41	0.48	0.44	0.41	0.48	0.43	0.40	0.39
9	0.47	0.42	0.38	0.47	0.41	0.38	0.46	0.41	0.37	0.45	0.41	0.37	0.44	0.40	0.37	0.36
10	0.44	0.39	0.35	0.44	0.38	0.35	0.43	0.38	0.35	0.42	0.38	0.34	0.42	0.37	0.34	0.33



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	924.74	923.72	916.55	890.38	839.17	764.00	667.32	551.40	432.61
22.5	932.80	929.99	913.92	876.52	820.35	736.10	638.76	522.66	403.27
45.0	934.12	928.14	910.75	878.61	820.11	749.54	668.16	560.60	448.86
67.5	934.30	930.05	918.10	894.68	851.06	792.02	711.30	592.99	464.22
90.0	936.33	929.22	915.59	890.26	849.33	787.07	693.13	558.57	395.50
112.5	927.19	920.79	908.66	888.05	851.18	792.08	720.32	598.90	461.83
135.0	921.93	918.16	902.27	873.35	829.91	763.58	681.90	578.17	469.30
157.5	933.64	931.25	917.39	887.15	838.75	758.68	666.54	554.27	441.93
180.0	924.74	924.20	908.01	874.60	813.00	725.76	626.21	500.25	356.96
202.5	932.80	931.37	922.82	902.87	857.16	780.43	693.37	579.18	461.59
225.0	934.12	933.22	927.90	910.22	878.01	827.82	754.80	661.23	566.64
247.5	934.30	934.89	927.25	907.29	879.62	837.14	774.22	681.36	561.26
270.0	936.33	935.43	927.01	912.61	887.33	846.82	790.11	700.06	579.96
292.5	927.19	925.81	916.01	898.33	868.63	822.92	758.32	661.40	550.92
315.0	921.93	921.33	915.18	898.27	863.49	814.01	742.37	657.40	552.54
337.5	933.64	932.50	922.17	895.34	844.49	768.36	682.74	574.82	463.50
360.0	924.74	923.72	916.55	890.38	839.17	764.00	667.32	551.40	432.61
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	251.74	80.85	28.26	14.16	10.04	9.14	8.54	7.83	6.45
22.5	222.46	67.70	25.28	12.13	9.98	8.84	7.65	6.75	5.44
45.0	331.45	188.64	41.23	11.65	7.77	7.05	6.45	5.80	5.44
67.5	301.87	114.01	27.19	11.47	6.93	6.75	6.27	5.80	5.50
90.0	169.46	42.90	16.31	7.11	6.63	6.45	5.86	5.62	5.44
112.5	264.71	92.14	26.17	9.74	6.93	6.81	6.09	5.68	5.50
135.0	347.64	205.37	58.86	12.97	8.07	7.11	6.45	5.80	5.50
157.5	278.21	104.87	29.34	15.48	10.64	9.08	7.47	6.63	5.56
180.0	158.88	47.03	21.03	11.77	10.04	9.08	8.01	7.17	5.86
202.5	300.80	130.20	34.90	17.33	10.82	9.80	8.31	7.29	6.33
225.0	439.66	322.67	176.03	52.04	12.97	8.72	7.53	6.81	5.92
247.5	438.47	281.44	100.38	30.12	11.23	7.11	6.87	6.33	5.62
270.0	441.16	232.68	65.31	27.96	8.37	6.63	6.51	6.15	5.56
292.5	409.73	238.71	75.89	26.71	8.43	6.69	6.51	5.92	5.44
315.0	437.15	330.97	207.22	59.04	11.11	7.47	6.63	6.27	5.56
337.5	317.23	149.68	35.61	16.31	9.68	8.19	7.59	6.87	5.80
360.0	251.74	80.85	28.26	14.16	10.04	9.14	8.54	7.83	6.45
C/γ(°)	90.0								
0.0	4.72								
22.5	4.90								
45.0	5.20								
67.5	5.32								
90.0	5.38								
112.5	5.38								
135.0	5.26								
157.5	5.02								
180.0	4.54								
202.5	5.20								
225.0	5.32								
247.5	5.32								
270.0	5.26								
292.5	5.14								
315.0	5.20								
337.5	4.96								
360.0	4.72								