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Nata

LumCAT: 12-0080-M4	
Luminaire: LM17126080EM	
Report No: 220524-B007	Voltage(V): 12.4200
Test No: 220524-C007	Current(A): 1.1150
LampCAT: LUMILEDS 5050	Power (W): 13.8480
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): 885.56
Efficiency(%): 52.62%
Lumens(lm)/Power(W): 63.95
Central intensity(cd): 547.456
Maximum intensity(cd): 555.523
Angle of maximum intensity: C=90.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=79.9
 [C90/270]Total=83.6
Field angle(10%Imax): [C0/180]Total=95.0
 [C90/270]Total=98.4
Maximum s/h(1/2): C0_180=1.15 C90_270=1.18
Maximum s/h(1/4): C0_180=1.10 C90_270=1.18
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 52.62%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.588%

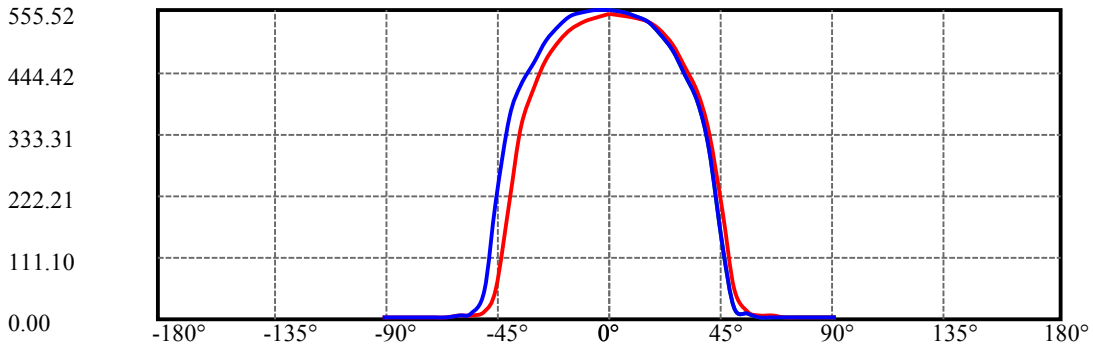
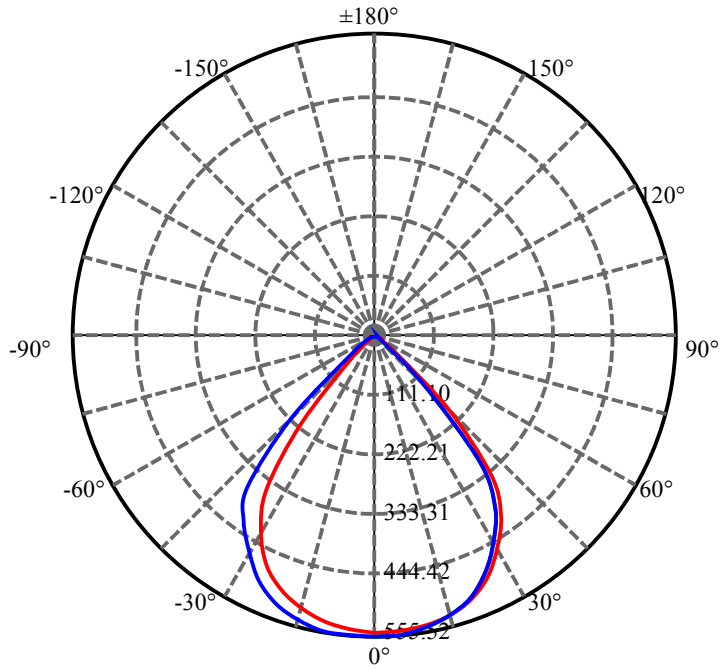
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	550.137	0.000	0	.000%	.000%
5.0	548.263	13.131	13.131	.780%	1.483%
10.0	543.072	39.040	52.172	2.320%	5.891%
15.0	532.417	63.797	115.969	3.791%	13.096%
20.0	515.847	86.392	202.36	5.134%	22.851%
25.0	488.443	105.331	307.692	6.259%	34.745%
30.0	451.956	119.008	426.7	7.072%	48.184%
35.0	402.223	125.784	552.484	7.474%	62.388%
40.0	334.874	122.979	675.463	7.308%	76.275%
45.0	218.572	102.475	777.938	6.089%	87.847%
50.0	92.371	62.831	840.769	3.734%	94.942%
55.0	23.434	25.180	865.948	1.496%	97.785%
60.0	7.312	7.107	873.055	.422%	98.588%
65.0	4.862	2.960	876.015	.176%	98.922%
70.0	4.171	2.287	878.303	.136%	99.180%
75.0	3.667	2.049	880.352	.122%	99.412%
80.0	3.268	1.856	882.207	.110%	99.621%
85.0	3.059	1.719	883.926	.102%	99.815%
90.0	2.913	1.635	885.561	.097%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	426.70	25.36%	48.18%
0-40	675.46	40.14%	76.28%
0-60	873.06	51.88%	98.59%
0-90	883.93	52.53%	99.82%
0-120	883.93	52.53%	99.82%
0-180	885.56	52.62%	100.00%
60-90	17.98	1.07%	2.03%
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%
0-41.61	708.45	42.10%	80.00%

ZONAL LUMEN SUMMARY

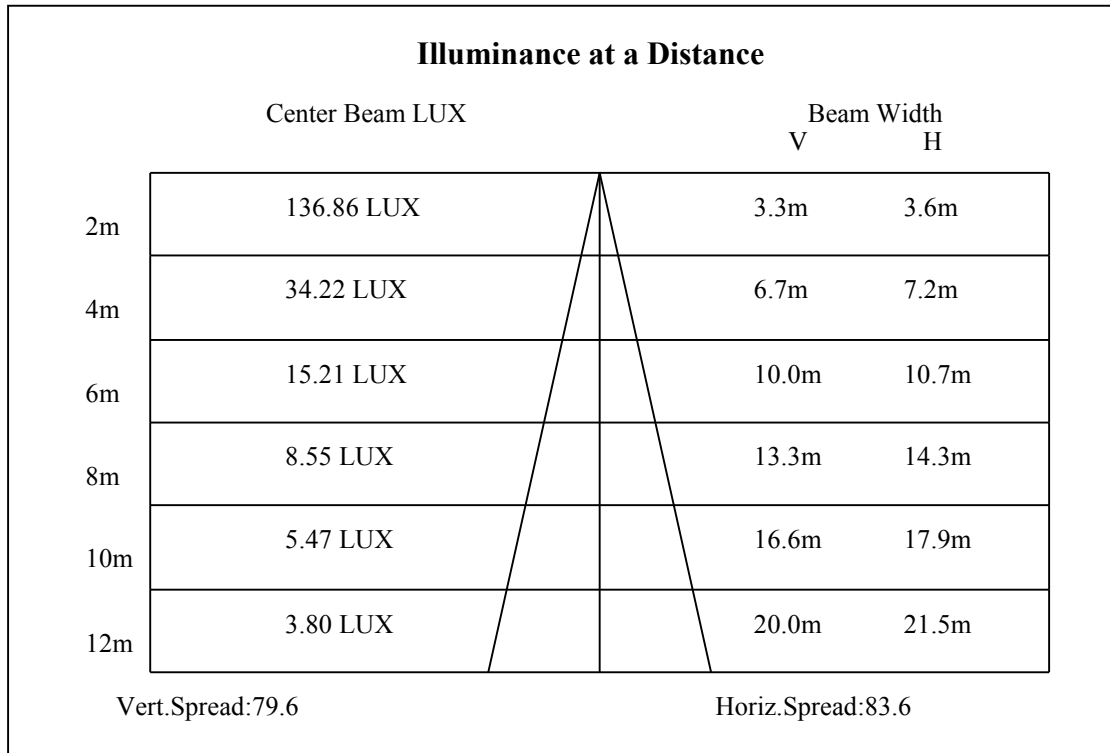
0-10	52.17
10-20	150.19
20-30	224.34
30-40	248.76
40-50	165.31
50-60	32.29
60-70	5.25
70-80	3.90
80-90	1.72
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

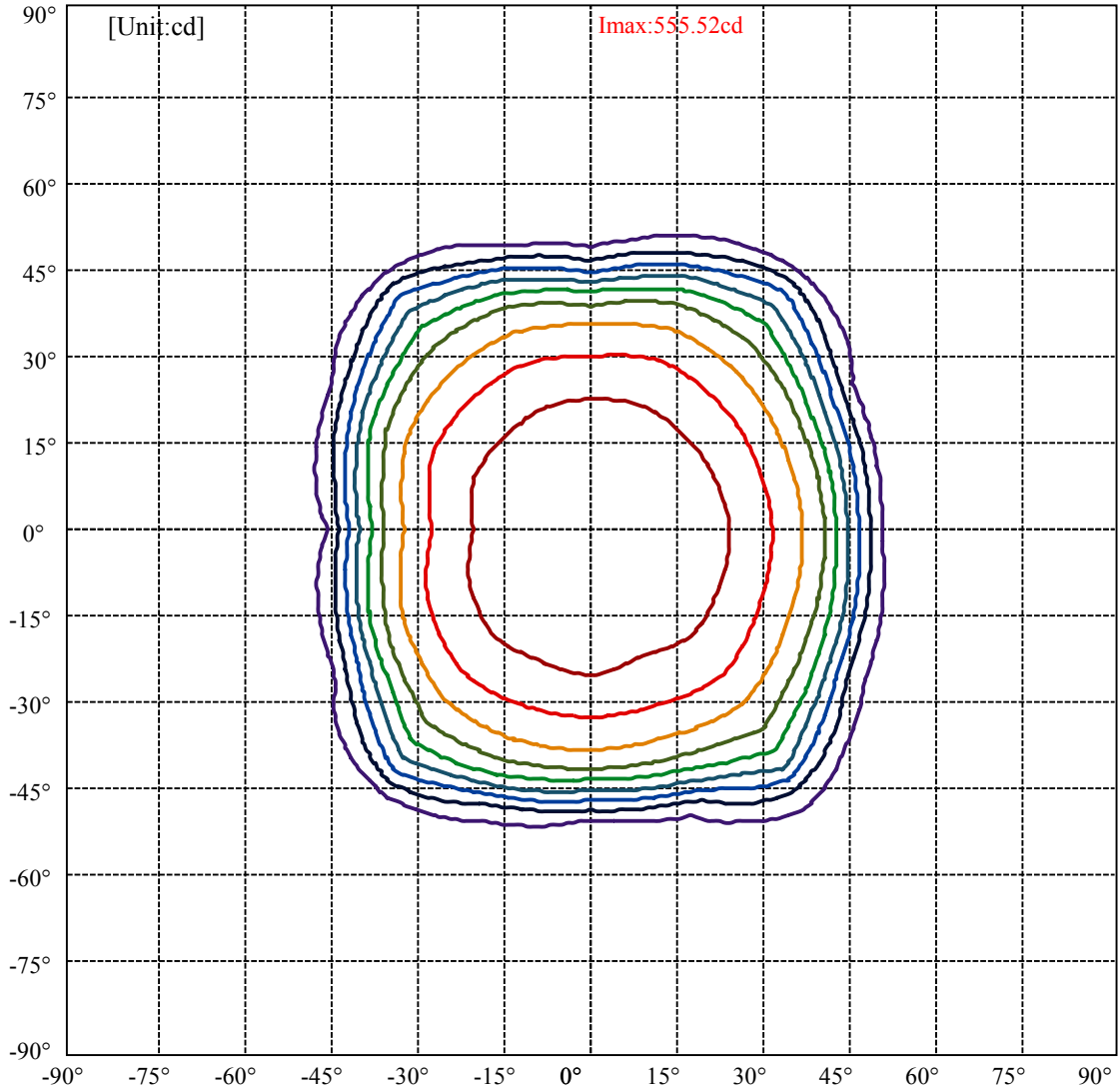


C90(Max): ———
C0/C180: ———
C90/C270: ———

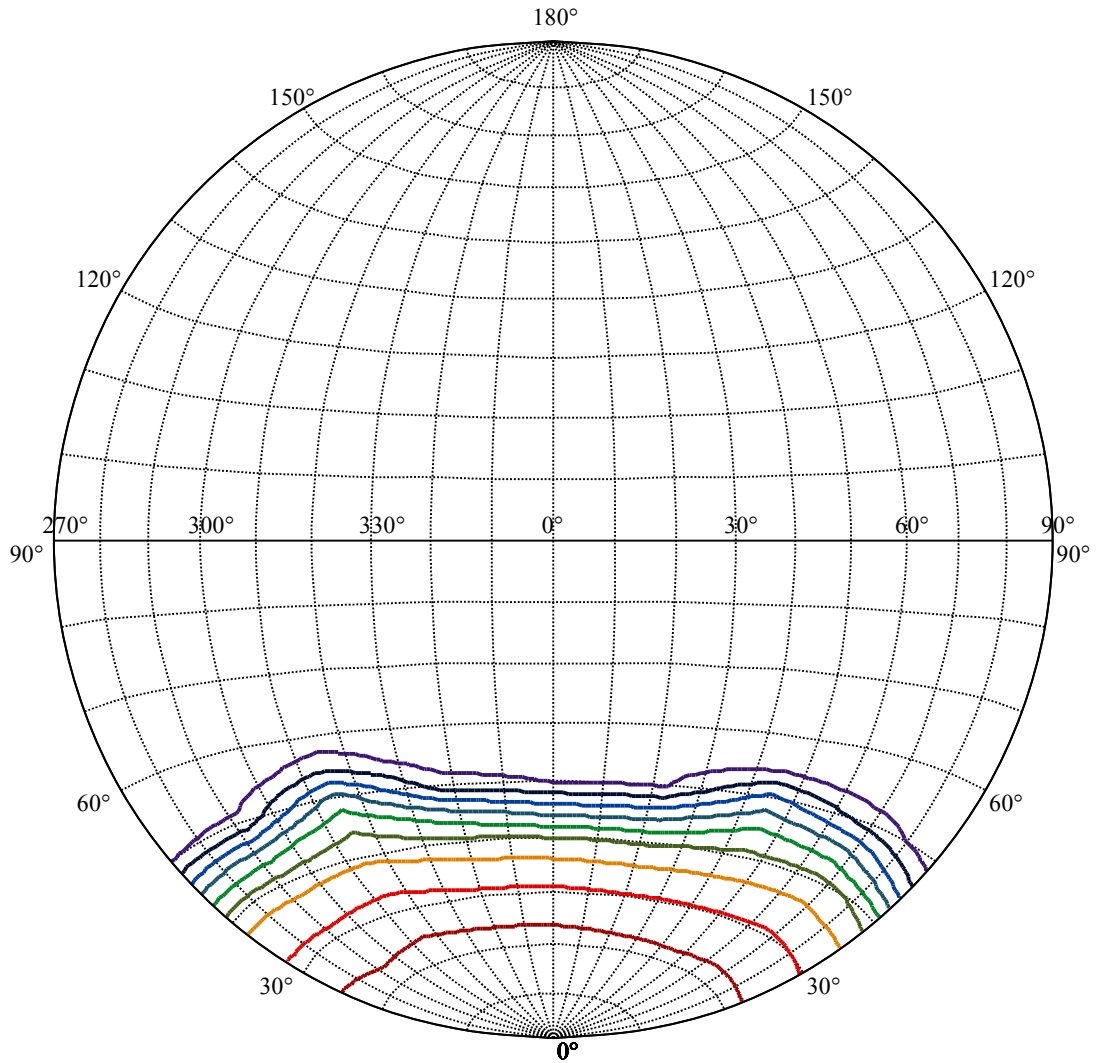
Field angle(10%Imax):C0/180Left:45.0 Right:50.0
:C90/270Left:49.9 Right:48.5

Beam Angle(50%Imax):C0/180Left:37.7 Right:42.2
:C90/270Left:42.9 Right:40.8





(10%Imax) 55.5523	—
(20%Imax) 111.105	—
(30%Imax) 166.657	—
(40%Imax) 222.209	—
(50%Imax) 277.761	—
(60%Imax) 333.314	—
(70%Imax) 388.866	—
(80%Imax) 444.418	—
(90%Imax) 499.97	—



House

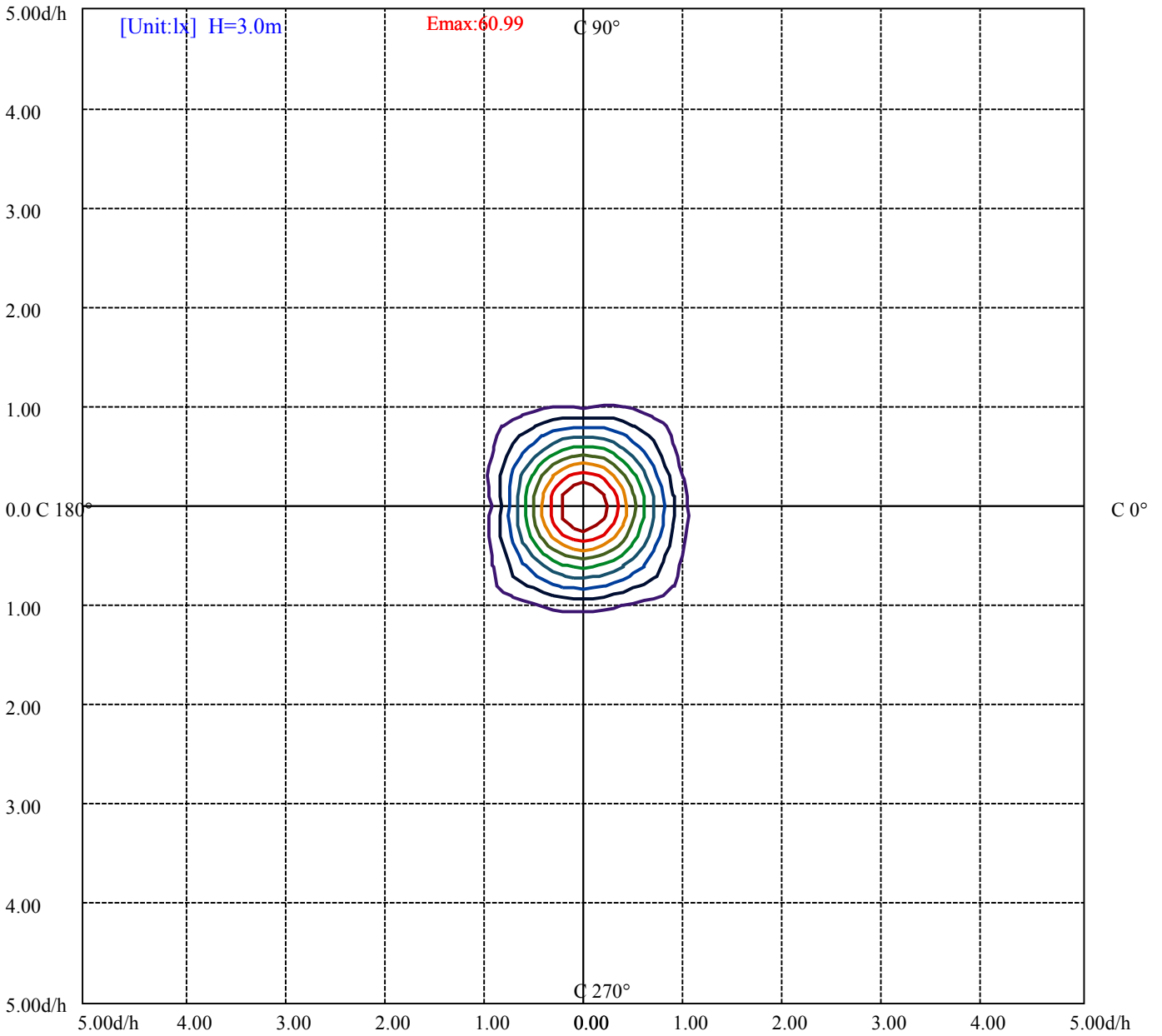
[Unit:cd]

Road

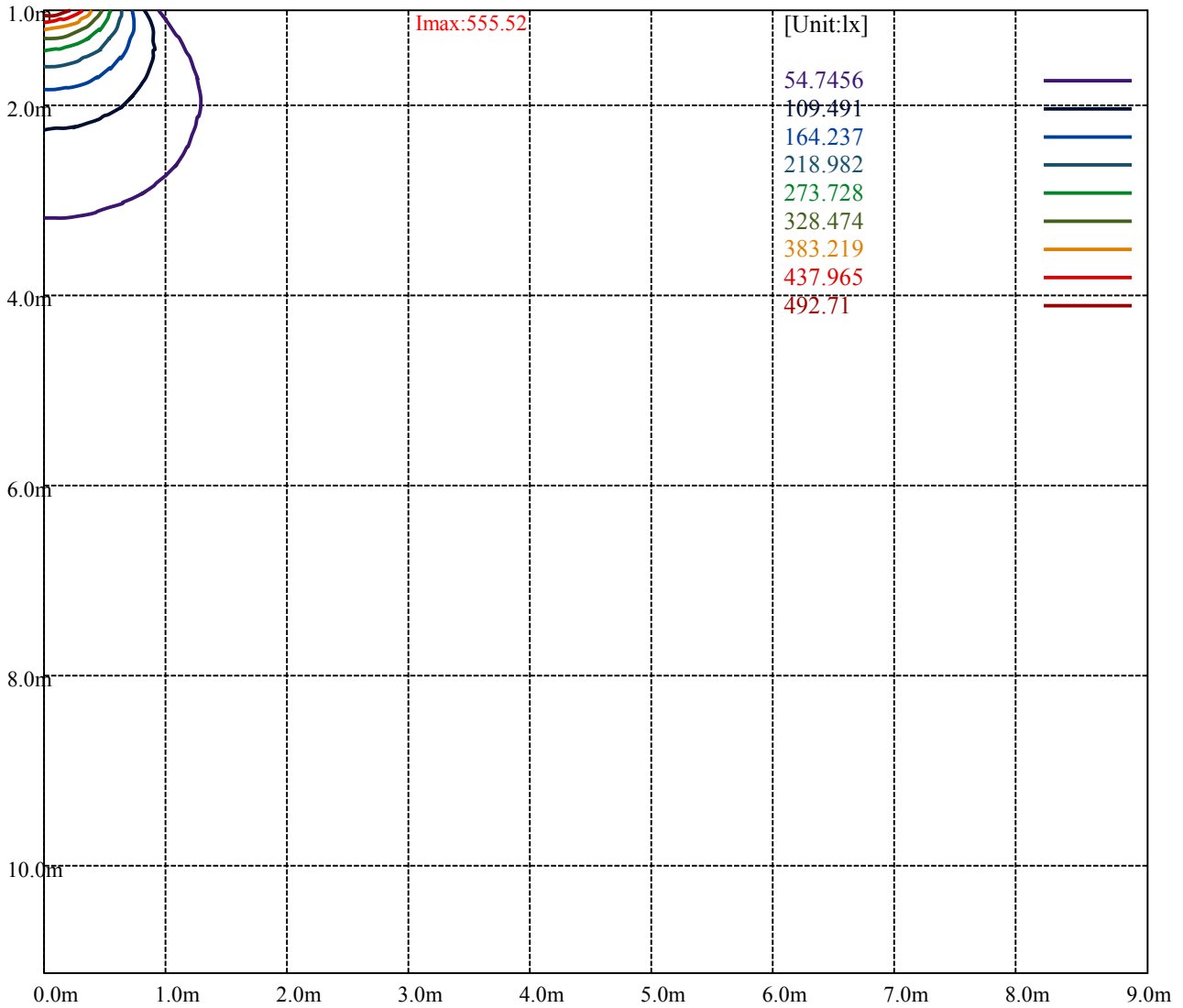
I_{max}:555.52

- (10%I_{max}) 55.5523
- (20%I_{max}) 111.105
- (30%I_{max}) 166.657
- (40%I_{max}) 222.209
- (50%I_{max}) 277.761
- (60%I_{max}) 333.314
- (70%I_{max}) 388.866
- (80%I_{max}) 444.418
- (90%I_{max}) 499.97





- (10%Emax) 6.099444
- (20%Emax) 12.19889
- (30%Emax) 18.29833
- (40%Emax) 24.39778
- (50%Emax) 30.49722
- (60%Emax) 36.59666
- (70%Emax) 42.69611
- (80%Emax) 48.79556
- (90%Emax) 54.895



Luminance Table

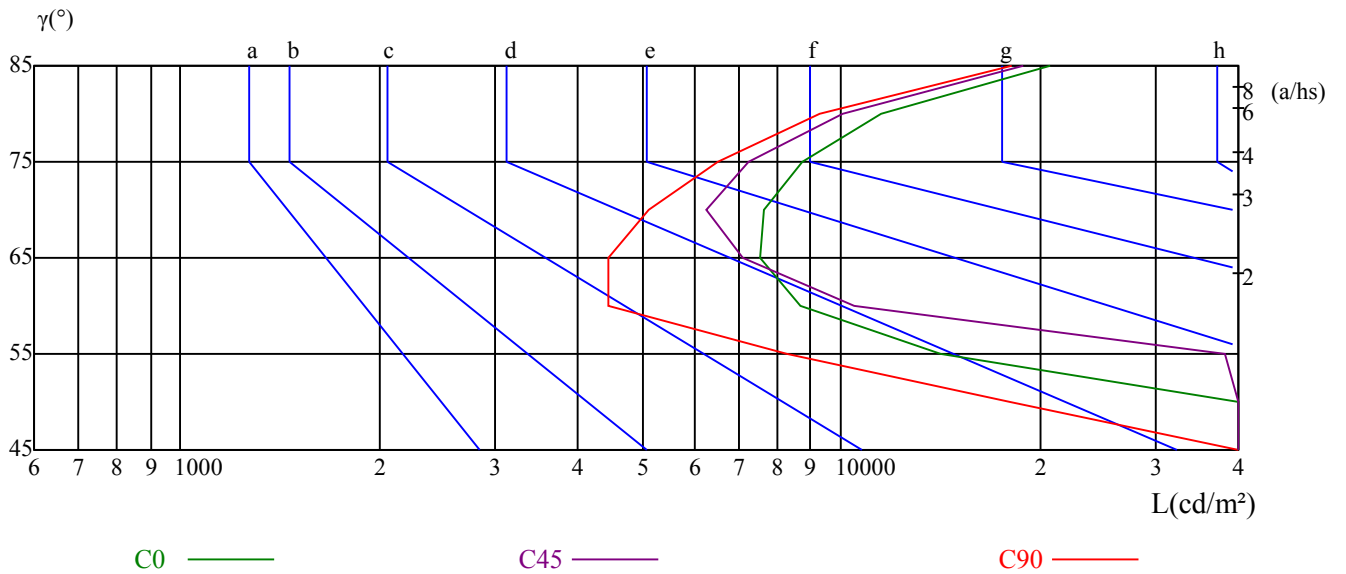
γ	45	50	55	60	65	70	75	80	85
C0	148167	45097	14198	8661	7570	7653	8740	11538	20764
C45	212698	155250	38087	10470	7111	6236	7242	10050	18910
C90	101413	18049	8282	4460	4435	5102	6493	9305	18169

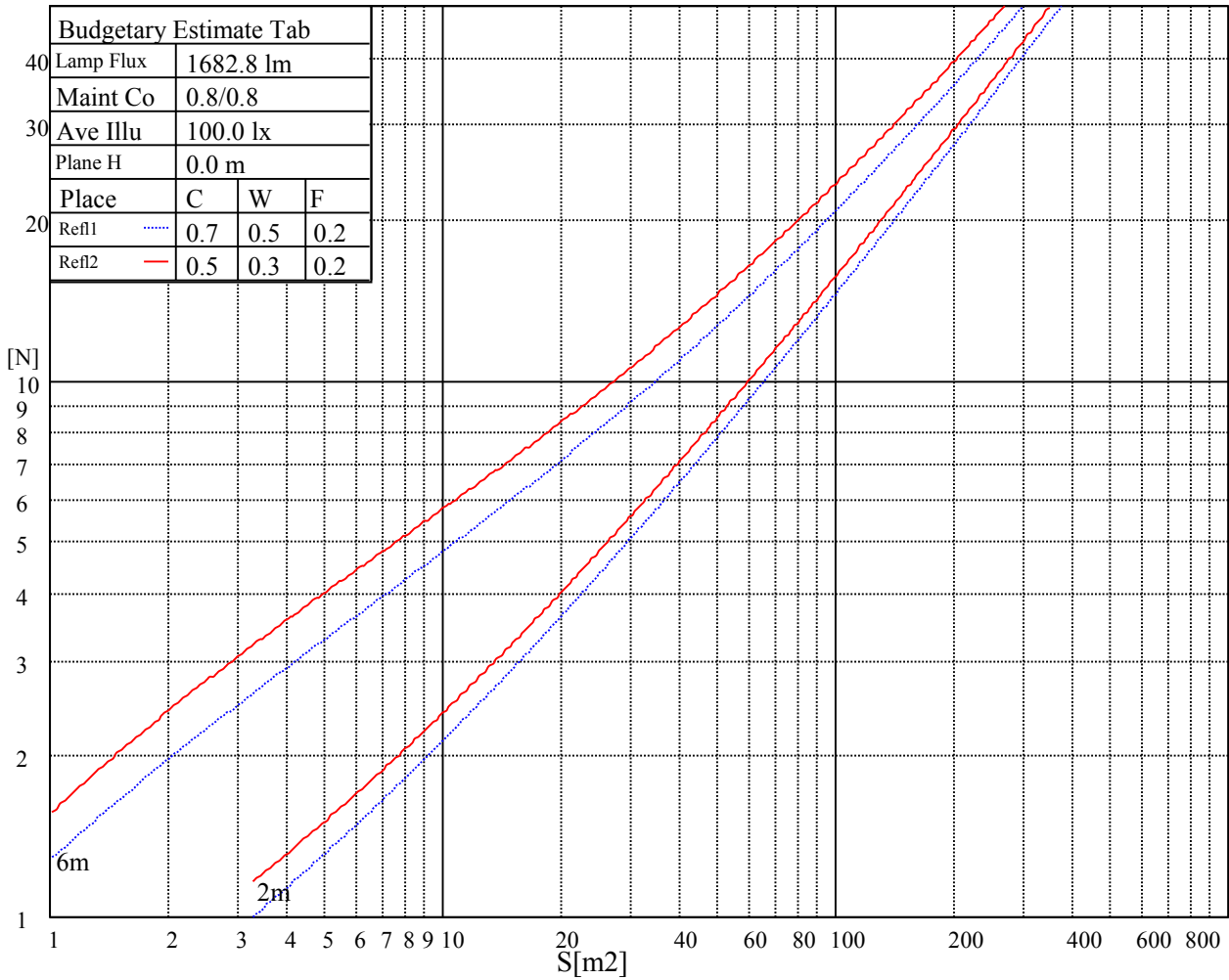
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6576	4473	7169	8116	6555	7304	20208	18169	18818

Glare Table

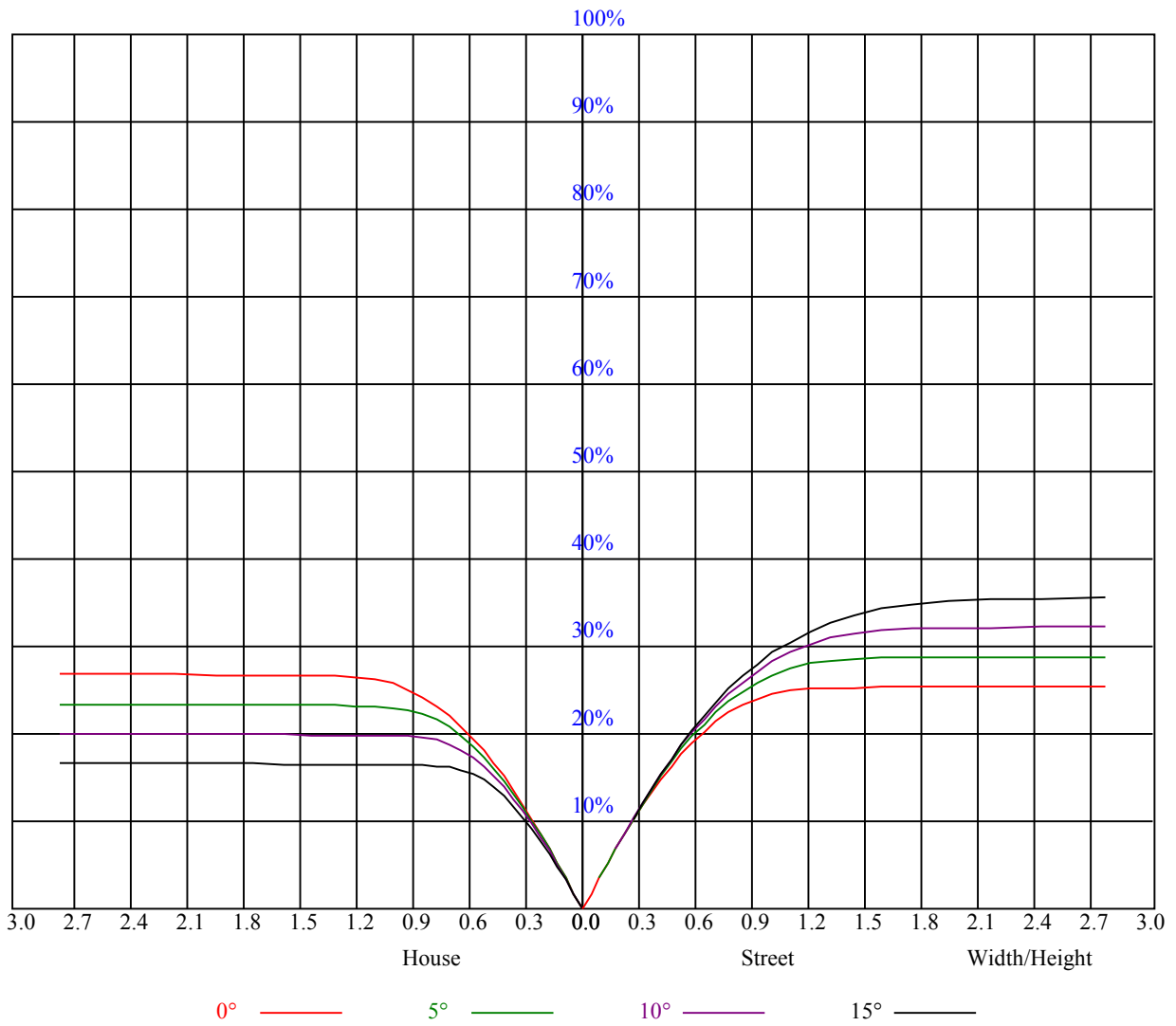
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.63	0.63	0.63	0.61	0.61	0.61	0.58	0.58	0.58	0.56	0.56	0.56	0.54	0.54	0.54	0.53
1	0.57	0.56	0.55	0.56	0.55	0.54	0.54	0.53	0.52	0.52	0.51	0.50	0.50	0.50	0.49	0.48
2	0.53	0.50	0.48	0.52	0.49	0.47	0.50	0.48	0.46	0.48	0.47	0.45	0.47	0.45	0.44	0.43
3	0.48	0.45	0.43	0.47	0.44	0.42	0.46	0.43	0.41	0.45	0.43	0.41	0.43	0.42	0.40	0.39
4	0.44	0.41	0.38	0.43	0.40	0.38	0.42	0.39	0.37	0.41	0.39	0.37	0.40	0.38	0.36	0.35
5	0.40	0.37	0.34	0.40	0.37	0.34	0.39	0.36	0.34	0.38	0.35	0.33	0.37	0.35	0.33	0.32
6	0.37	0.34	0.31	0.37	0.33	0.31	0.36	0.33	0.31	0.35	0.32	0.30	0.34	0.32	0.30	0.29
7	0.34	0.31	0.28	0.34	0.31	0.28	0.33	0.30	0.28	0.33	0.30	0.28	0.32	0.29	0.28	0.27
8	0.32	0.28	0.26	0.32	0.28	0.26	0.31	0.28	0.25	0.30	0.27	0.25	0.30	0.27	0.25	0.24
9	0.30	0.26	0.24	0.29	0.26	0.23	0.29	0.26	0.23	0.28	0.25	0.23	0.28	0.25	0.23	0.22
10	0.28	0.24	0.22	0.27	0.24	0.22	0.27	0.24	0.22	0.26	0.24	0.21	0.26	0.23	0.21	0.21



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	547.46	546.74	542.74	534.61	520.63	493.62	455.56	407.75	335.81
22.5	552.12	549.01	543.39	534.31	516.74	487.64	448.62	397.30	325.53
45.0	548.95	546.98	539.27	524.93	511.84	486.69	448.57	400.70	348.36
67.5	550.44	547.46	541.00	531.74	516.27	488.18	454.06	407.57	352.00
90.0	555.52	552.77	546.38	534.19	514.41	482.15	440.80	390.19	304.32
112.5	548.53	548.59	543.27	531.56	512.14	484.95	447.67	399.21	341.61
135.0	546.02	540.88	539.03	525.47	507.24	479.10	443.07	391.68	337.72
157.5	552.06	547.75	540.70	529.77	511.01	480.41	443.78	385.41	310.48
180.0	547.46	542.44	534.97	520.99	500.73	467.15	417.02	344.54	211.82
202.5	552.12	549.79	545.66	533.29	515.07	486.39	448.98	392.10	304.32
225.0	548.95	548.29	544.23	535.51	520.39	497.50	466.61	419.64	362.04
247.5	550.44	550.62	545.25	534.67	519.07	495.47	463.74	419.70	369.39
270.0	555.52	555.46	552.54	543.57	528.22	500.49	462.91	420.96	363.66
292.5	548.53	546.20	542.20	533.06	516.74	491.05	461.65	417.43	361.61
315.0	546.02	547.40	542.14	534.97	519.79	499.77	471.03	430.46	377.94
337.5	552.06	551.82	546.38	536.04	523.26	494.52	457.23	410.92	351.35
360.0	547.46	546.74	542.74	534.61	520.63	493.62	455.56	407.75	335.81
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	193.72	53.60	15.06	8.01	5.92	4.84	4.18	3.70	3.35
22.5	195.33	52.04	13.74	7.41	5.80	5.50	4.78	3.53	3.11
45.0	278.09	184.52	40.39	9.68	5.56	3.94	3.47	3.23	3.05
67.5	243.02	95.90	14.46	6.15	3.82	3.47	3.23	3.11	2.99
90.0	132.59	21.45	8.78	4.12	3.47	3.23	3.11	2.99	2.93
112.5	220.97	63.70	12.19	5.38	3.64	3.35	3.17	3.05	2.93
135.0	265.18	166.35	28.92	7.77	4.18	3.53	3.29	3.11	2.99
157.5	167.61	43.02	11.41	6.27	5.74	5.26	3.82	3.29	3.05
180.0	54.91	15.12	6.99	5.20	4.36	3.94	3.59	3.29	3.17
202.5	152.55	32.39	11.17	6.09	5.20	4.96	4.54	3.47	3.11
225.0	302.53	203.88	58.62	10.64	6.09	4.36	3.53	3.23	2.99
247.5	264.59	92.92	14.22	6.15	3.76	3.41	3.17	3.05	2.93
270.0	213.80	52.22	11.95	5.50	3.53	3.35	3.17	3.05	2.93
292.5	243.91	71.29	13.03	6.15	3.88	3.41	3.23	3.05	2.99
315.0	325.29	245.52	97.34	14.46	6.57	4.54	3.70	3.41	3.11
337.5	243.07	84.01	16.67	8.01	6.27	5.68	4.72	3.76	3.35
360.0	193.72	53.60	15.06	8.01	5.92	4.84	4.18	3.70	3.35
C/γ(°)	90.0								
0.0	3.05								
22.5	2.93								
45.0	2.87								
67.5	2.87								
90.0	2.87								
112.5	2.87								
135.0	2.87								
157.5	2.93								
180.0	2.93								
202.5	2.87								
225.0	2.87								
247.5	2.87								
270.0	2.87								
292.5	2.87								
315.0	2.99								
337.5	3.11								
360.0	3.05								