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Nata

Client:

LumCAT: 1654-S

Luminaire: 92.70.044.00

Report No: NT2017080202

Test No: nata-0100

LampCAT: LUMILEDS 1202S

Lamp flux(lm): 1166.0

Number of Lamps: 1

Length(mm): 32

Phm Type: C

Voltage(V): 38.2000

Current(A): 0.3000

Power (W): 11.5000

PF: 0.0000

Ballast type: DC

Width(mm): 32

Height(mm): 0

Photometric Results

Lumens(lm): 988.10, Efficiency(%): 84.74% , Luminous Efficacy(lm/W): 85.92

Central intensity(cd): 4570.318, Maximum intensity(cd): 4570.318

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=20.4

[C90/270]Total=20.4

Field angle(10%Imax): [C0/180]Total=48.6

[C90/270]Total=48.6

Maximum s/h(1/2): C0_180=0.35 C90_270=0.35

Maximum s/h(1/4): C0_180=0.37 C90_270=0.37

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 84.83%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.283%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4570.318	1.093	1.093	.094%	.111%
1.0	4540.336	8.690	9.783	.745%	.990%
2.0	4456.371	17.055	26.838	1.463%	2.716%
3.0	4296.095	24.656	51.494	2.115%	5.211%
4.0	4102.775	31.384	82.879	2.692%	8.388%
5.0	3870.777	36.995	119.874	3.173%	12.132%
6.0	3610.328	41.384	161.258	3.549%	16.320%
7.0	3293.601	44.017	205.274	3.775%	20.775%
8.0	3005.465	45.869	251.143	3.934%	25.417%
9.0	2683.798	46.040	297.183	3.949%	30.076%
10.0	2349.958	44.749	341.932	3.838%	34.605%
11.0	2079.352	43.509	385.441	3.731%	39.008%
12.0	1827.529	41.667	427.108	3.574%	43.225%
13.0	1579.253	38.958	466.066	3.341%	47.168%
14.0	1375.151	36.482	502.548	3.129%	50.860%
15.0	1180.433	33.503	536.051	2.873%	54.251%
16.0	1043.224	31.533	567.584	2.704%	57.442%
17.0	917.806	29.426	597.011	2.524%	60.420%
18.0	800.305	27.120	624.131	2.326%	63.165%
19.0	702.497	25.081	649.211	2.151%	65.703%
20.0	630.289	23.640	672.851	2.027%	68.095%
21.0	574.352	22.571	695.423	1.936%	70.380%
22.0	527.195	21.657	717.08	1.857%	72.572%
23.0	494.444	21.186	738.266	1.817%	74.716%
24.0	465.693	20.771	759.037	1.781%	76.818%
25.0	438.618	20.328	779.364	1.743%	78.875%
26.0	420.183	20.199	799.564	1.732%	80.919%
27.0	403.314	20.079	819.643	1.722%	82.951%
28.0	385.193	19.831	839.473	1.701%	84.958%
29.0	362.341	19.264	858.737	1.652%	86.908%
30.0	333.764	18.300	877.037	1.570%	88.760%
31.0	297.479	16.801	893.839	1.441%	90.460%
32.0	255.976	14.875	908.714	1.276%	91.966%
33.0	220.297	13.157	921.871	1.128%	93.297%
34.0	170.572	10.460	932.331	.897%	94.356%
35.0	132.854	8.356	940.688	.717%	95.202%
36.0	96.222	6.202	946.89	.532%	95.829%
37.0	63.262	4.175	951.065	.358%	96.252%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	39.297	2.653	953.718	.228%	96.520%
39.0	25.725	1.775	955.493	.152%	96.700%
40.0	20.055	1.414	956.907	.121%	96.843%
41.0	17.864	1.285	958.192	.110%	96.973%
42.0	16.049	1.178	959.37	.101%	97.092%
43.0	14.087	1.054	960.423	.090%	97.199%
44.0	12.591	0.959	961.382	.082%	97.296%
45.0	11.283	0.875	962.257	.075%	97.385%
46.0	10.129	0.799	963.056	.069%	97.466%
47.0	9.391	0.753	963.809	.065%	97.542%
48.0	8.876	0.723	964.533	.062%	97.615%
49.0	8.389	0.694	965.227	.060%	97.685%
50.0	8.056	0.677	965.904	.058%	97.754%
51.0	7.777	0.663	966.567	.057%	97.821%
52.0	7.513	0.649	967.216	.056%	97.886%
53.0	7.325	0.642	967.857	.055%	97.951%
54.0	7.158	0.635	968.492	.054%	98.016%
55.0	6.943	0.624	969.116	.053%	98.079%
56.0	6.810	0.619	969.735	.053%	98.141%
57.0	6.741	0.620	970.355	.053%	98.204%
58.0	6.567	0.611	970.966	.052%	98.266%
59.0	6.421	0.604	971.569	.052%	98.327%
60.0	6.323	0.601	972.17	.052%	98.388%
61.0	6.261	0.600	972.77	.051%	98.449%
62.0	6.156	0.596	973.367	.051%	98.509%
63.0	6.045	0.591	973.957	.051%	98.569%
64.0	5.913	0.583	974.54	.050%	98.628%
65.0	5.878	0.584	975.124	.050%	98.687%
66.0	5.816	0.583	975.707	.050%	98.746%
67.0	5.732	0.579	976.285	.050%	98.804%
68.0	5.649	0.574	976.86	.049%	98.862%
69.0	5.579	0.571	977.431	.049%	98.920%
70.0	5.516	0.568	977.999	.049%	98.978%
71.0	5.419	0.562	978.561	.048%	99.035%
72.0	5.370	0.560	979.121	.048%	99.091%
73.0	5.294	0.555	979.677	.048%	99.148%
74.0	5.252	0.554	980.23	.047%	99.204%
75.0	5.176	0.548	980.778	.047%	99.259%

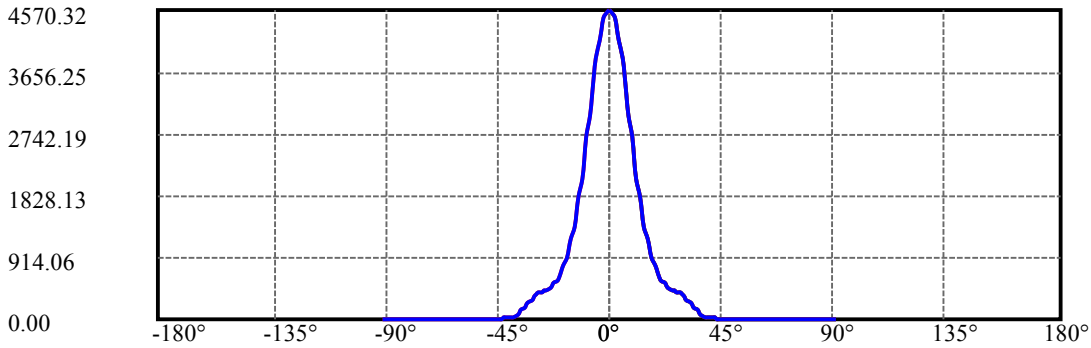
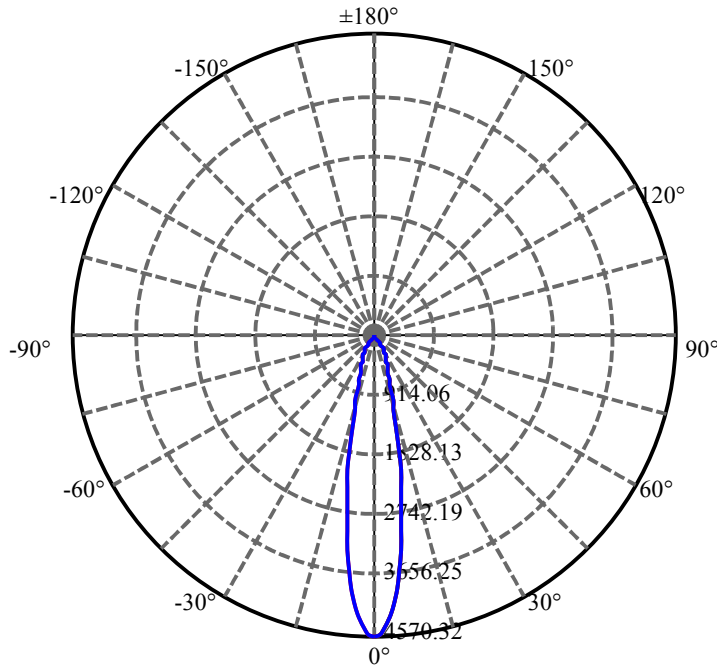
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.085	0.541	981.32	.046%	99.314%
77.0	5.030	0.537	981.857	.046%	99.368%
78.0	4.953	0.531	982.388	.046%	99.422%
79.0	4.897	0.527	982.915	.045%	99.475%
80.0	4.849	0.524	983.439	.045%	99.528%
81.0	4.786	0.518	983.957	.044%	99.581%
82.0	4.710	0.511	984.469	.044%	99.633%
83.0	4.647	0.506	984.975	.043%	99.684%
84.0	4.612	0.503	985.478	.043%	99.735%
85.0	4.529	0.495	985.972	.042%	99.785%
86.0	4.480	0.490	986.462	.042%	99.834%
87.0	4.390	0.481	986.943	.041%	99.883%
88.0	4.250	0.466	987.409	.040%	99.930%
89.0	4.223	0.463	987.872	.040%	99.977%
90.0	4.153	0.228	988.1	.020%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	877.04	75.22%	88.76%
0-40	956.91	82.07%	96.84%
0-60	972.17	83.38%	98.39%
0-90	987.87	84.72%	99.98%
0-120	987.87	84.72%	99.98%
0-180	988.10	84.74%	100.00%
60-90	16.30	1.40%	1.65%
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%
0-25.55	790.48	67.79%	80.00%

ZONAL LUMEN SUMMARY

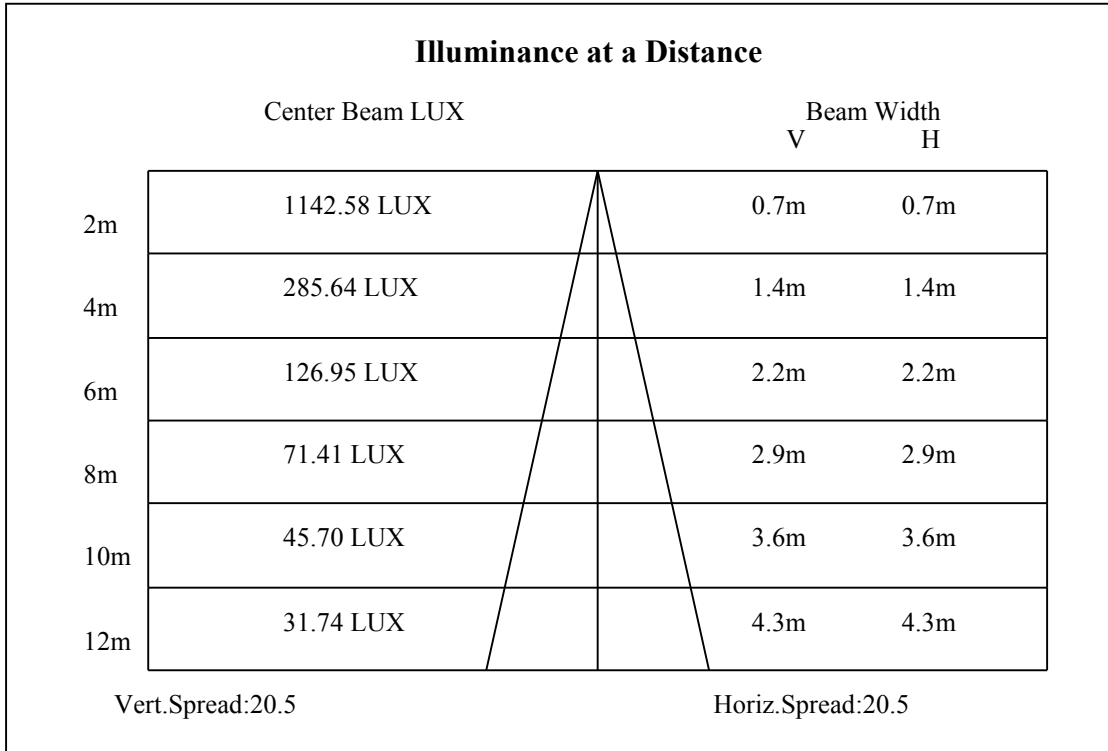
0-10	341.93
10-20	330.92
20-30	204.19
30-40	79.87
40-50	9.00
50-60	6.27
60-70	5.83
70-80	5.44
80-90	4.43
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

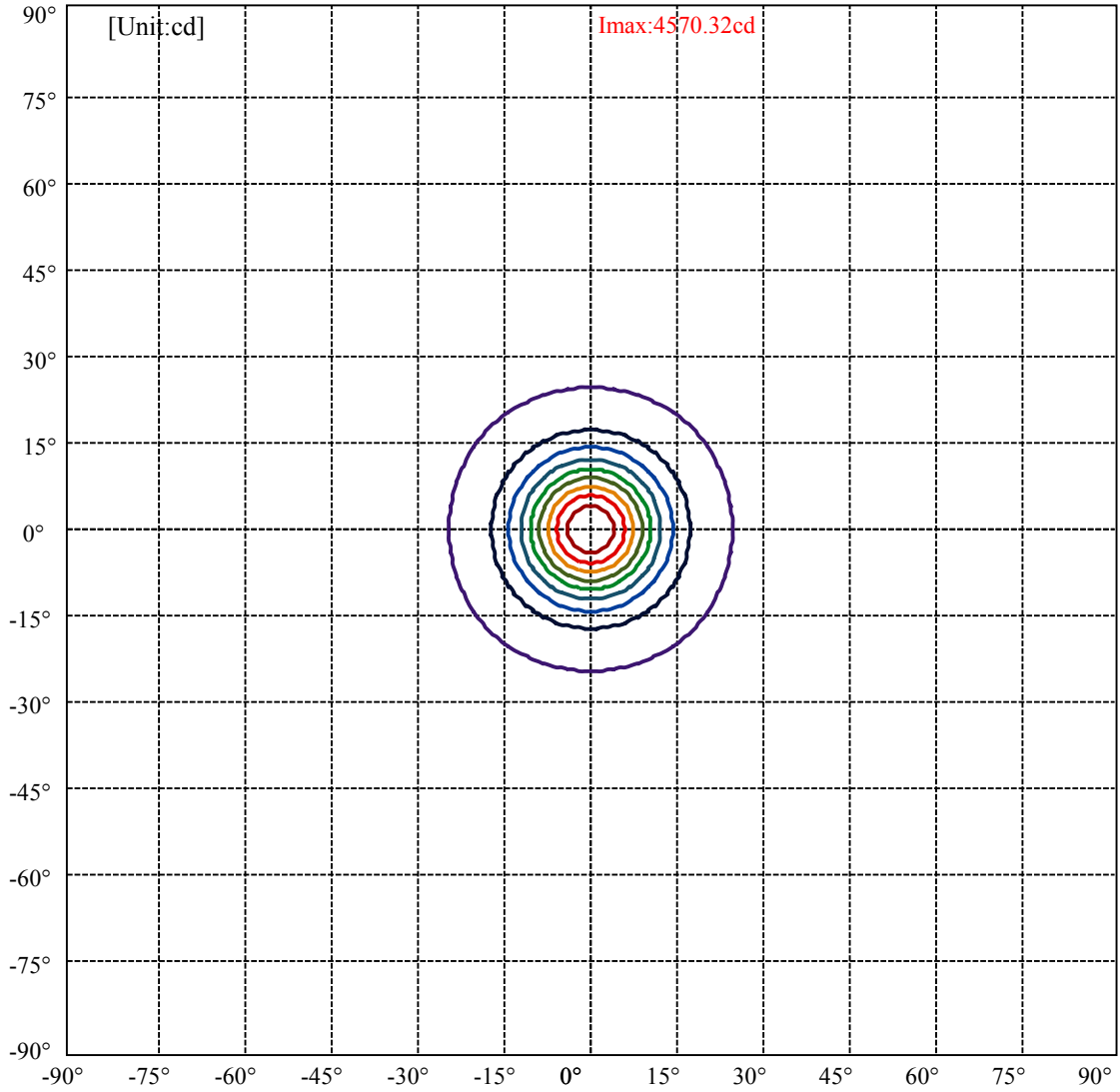


C0(Max): —————
C0/C180: —————
C90/C270: —————

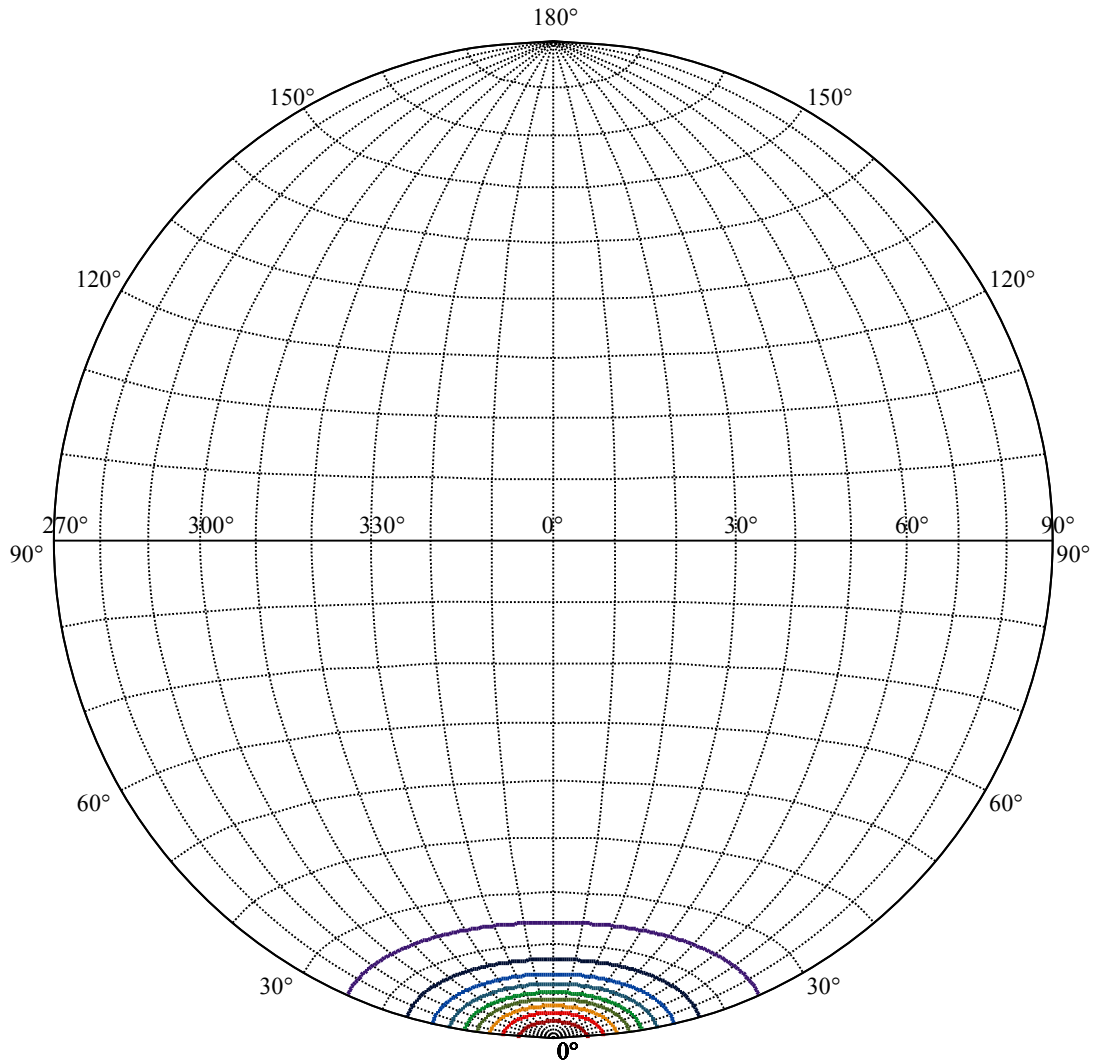
Field angle(10%Imax):C0/180Left:24.3 Right:24.3
:C90/270Left:24.3 Right:24.3

Beam Angle(50%Imax):C0/180Left:10.2 Right:10.2
:C90/270Left:10.2 Right:10.2





(10%Imax) 457.032	—
(20%Imax) 914.064	—
(30%Imax) 1371.1	—
(40%Imax) 1828.13	—
(50%Imax) 2285.16	—
(60%Imax) 2742.19	—
(70%Imax) 3199.22	—
(80%Imax) 3656.25	—
(90%Imax) 4113.29	—



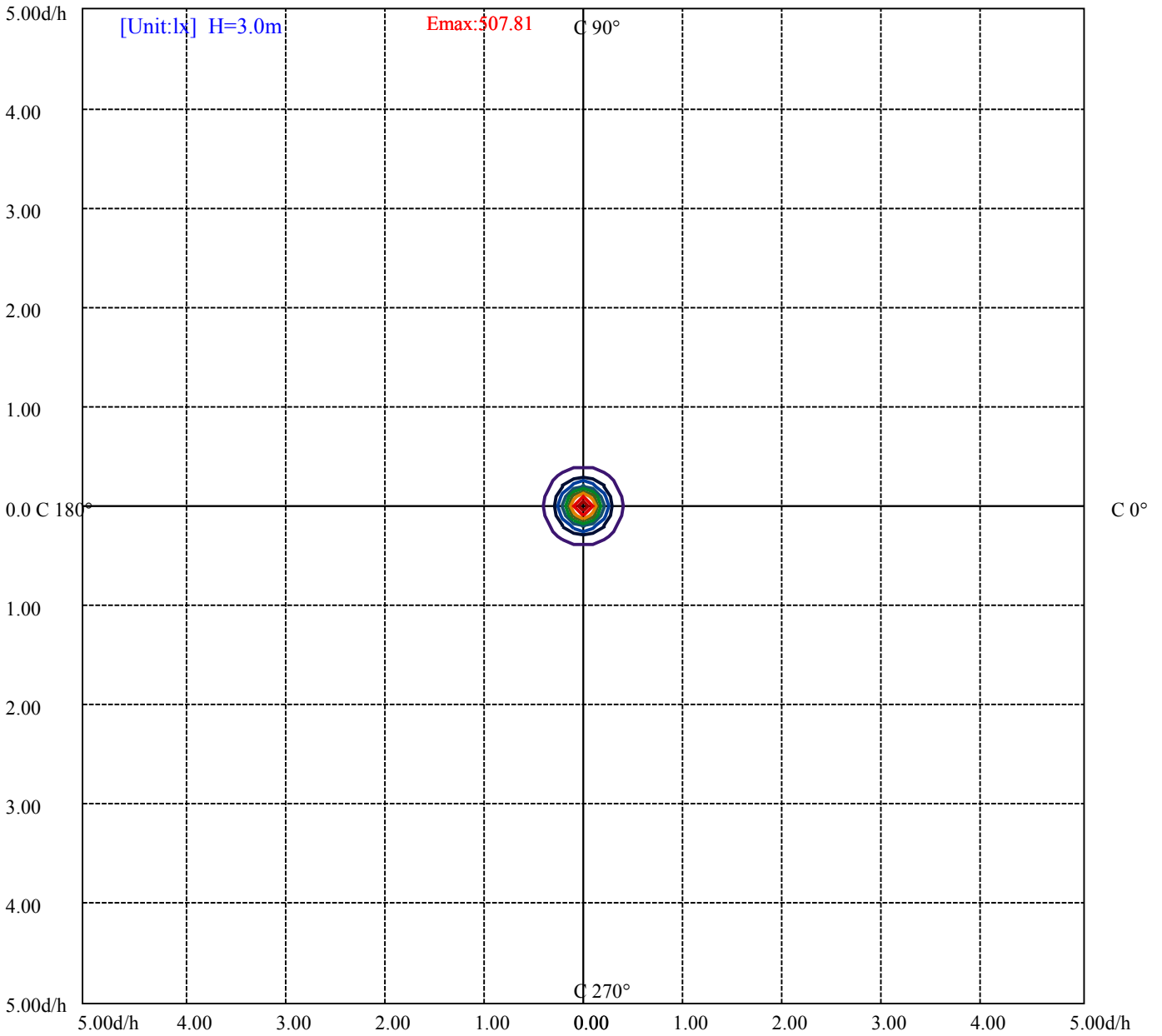
House

[Unit:cd]

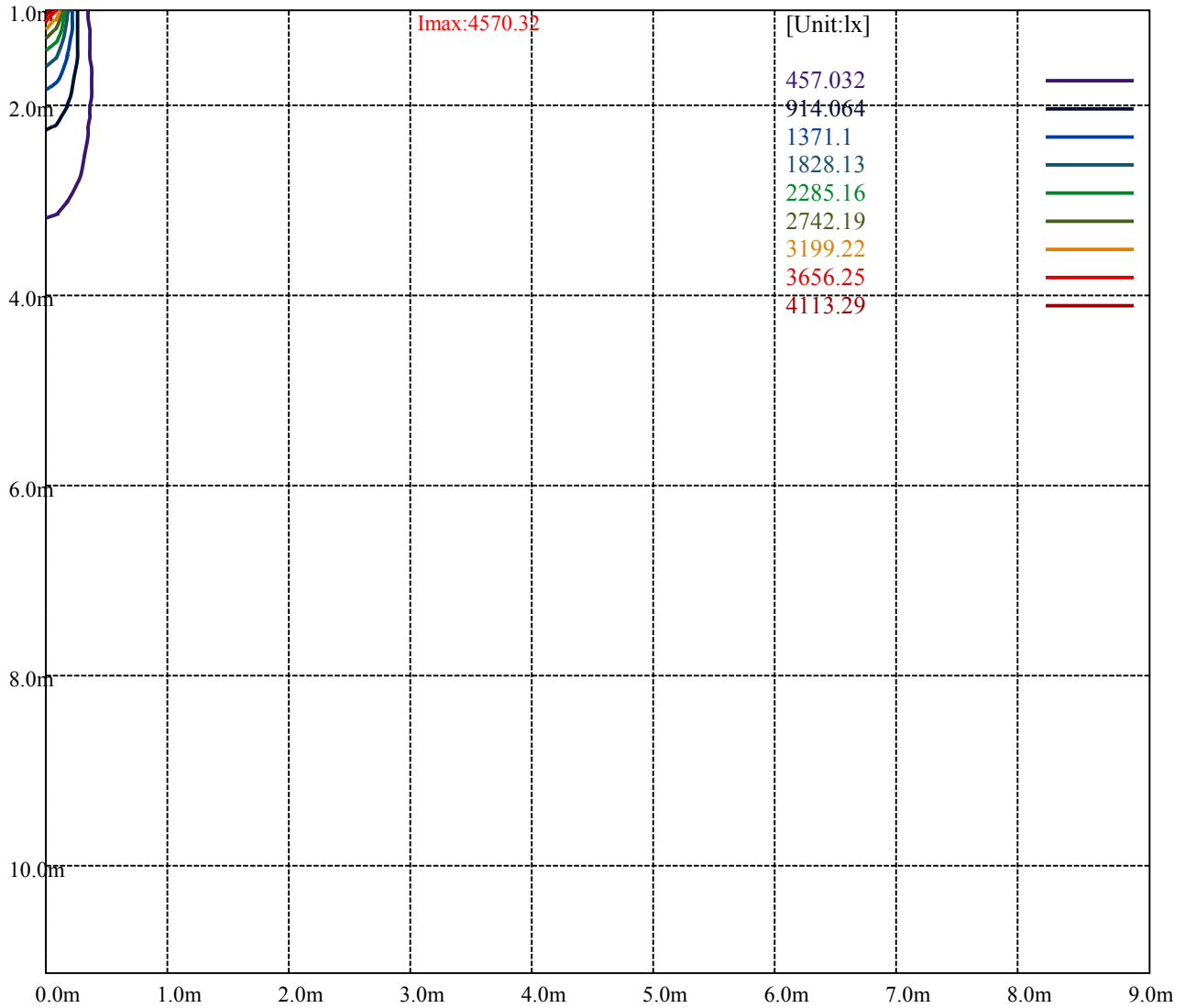
Road

Imax:4570.32

(10%Imax) 457.032	—
(20%Imax) 914.064	—
(30%Imax) 1371.1	—
(40%Imax) 1828.13	—
(50%Imax) 2285.16	—
(60%Imax) 2742.19	—
(70%Imax) 3199.22	—
(80%Imax) 3656.25	—
(90%Imax) 4113.29	—



(10%Emax) 50.78122	—
(20%Emax) 101.5626	—
(30%Emax) 152.3433	—
(40%Emax) 203.1255	—
(50%Emax) 253.9067	—
(60%Emax) 304.6878	—
(70%Emax) 355.4689	—
(80%Emax) 406.25	—
(90%Emax) 457.0311	—



Luminance Table

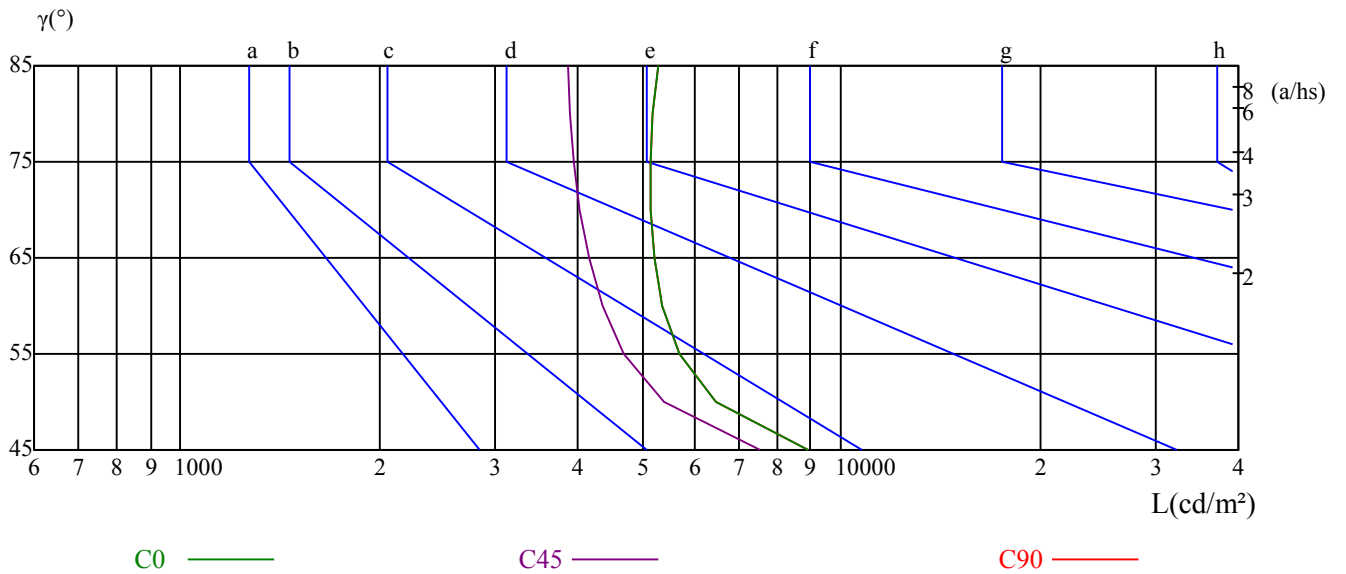
γ	45	50	55	60	65	70	75	80	85
C0	8905	6462	5707	5372	5207	5146	5140	5190	5301
C45	7562	5406	4700	4353	4148	4024	3938	3887	3867
C90	8905	6462	5707	5372	5207	5146	5140	5190	5301

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
13583	13583	13583	19528	19528	19528	50743	50743	50743

Glare Table

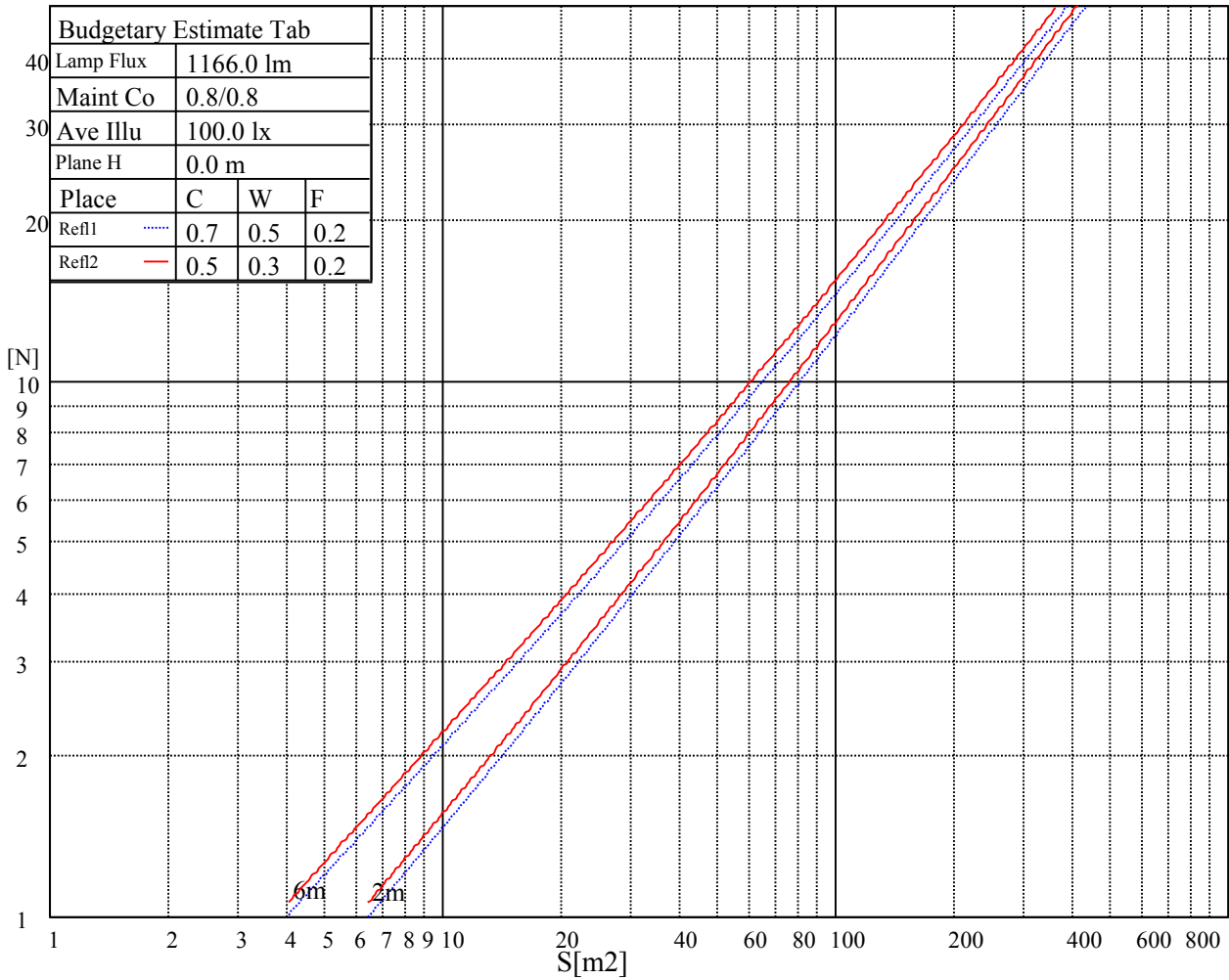
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

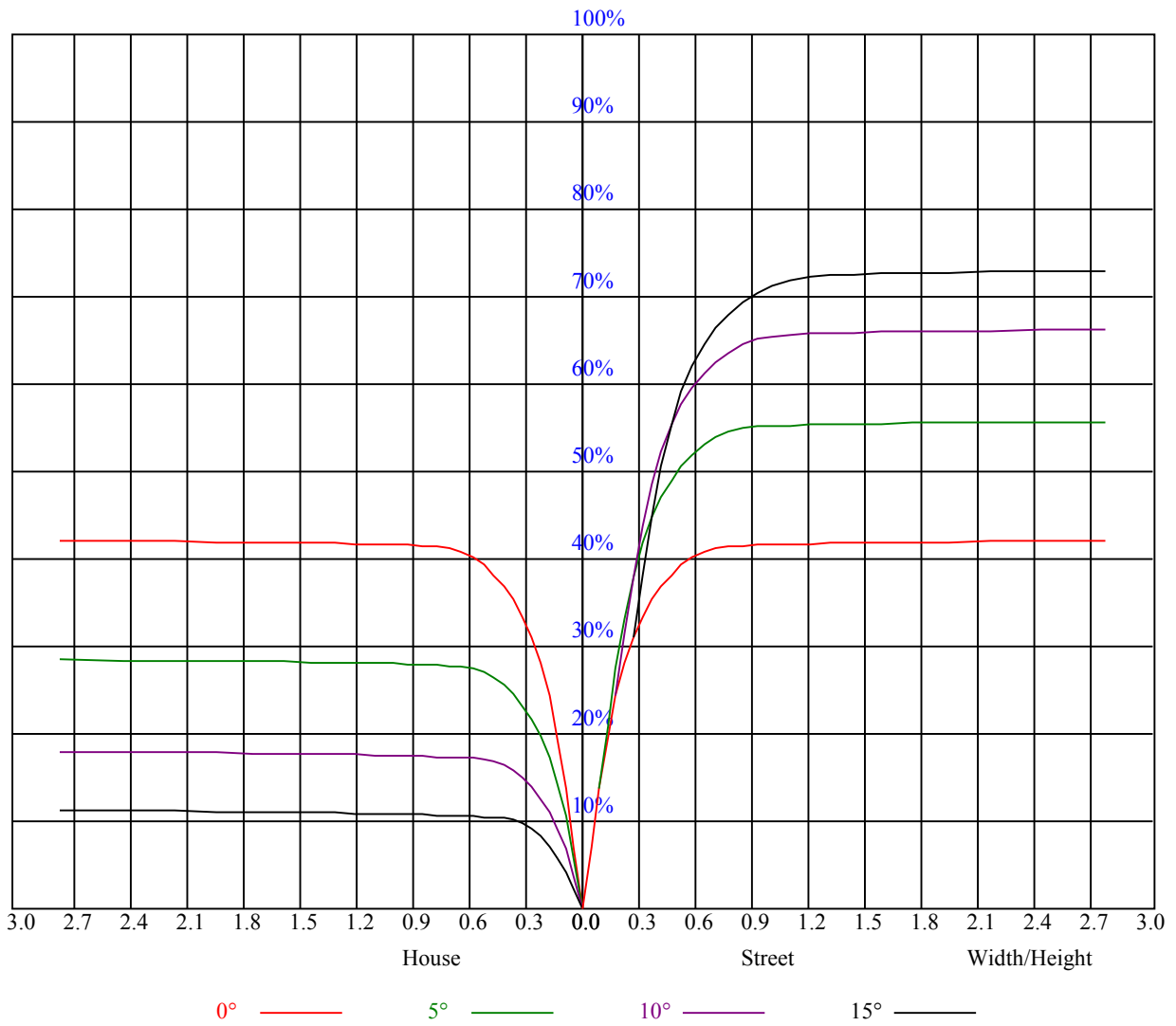


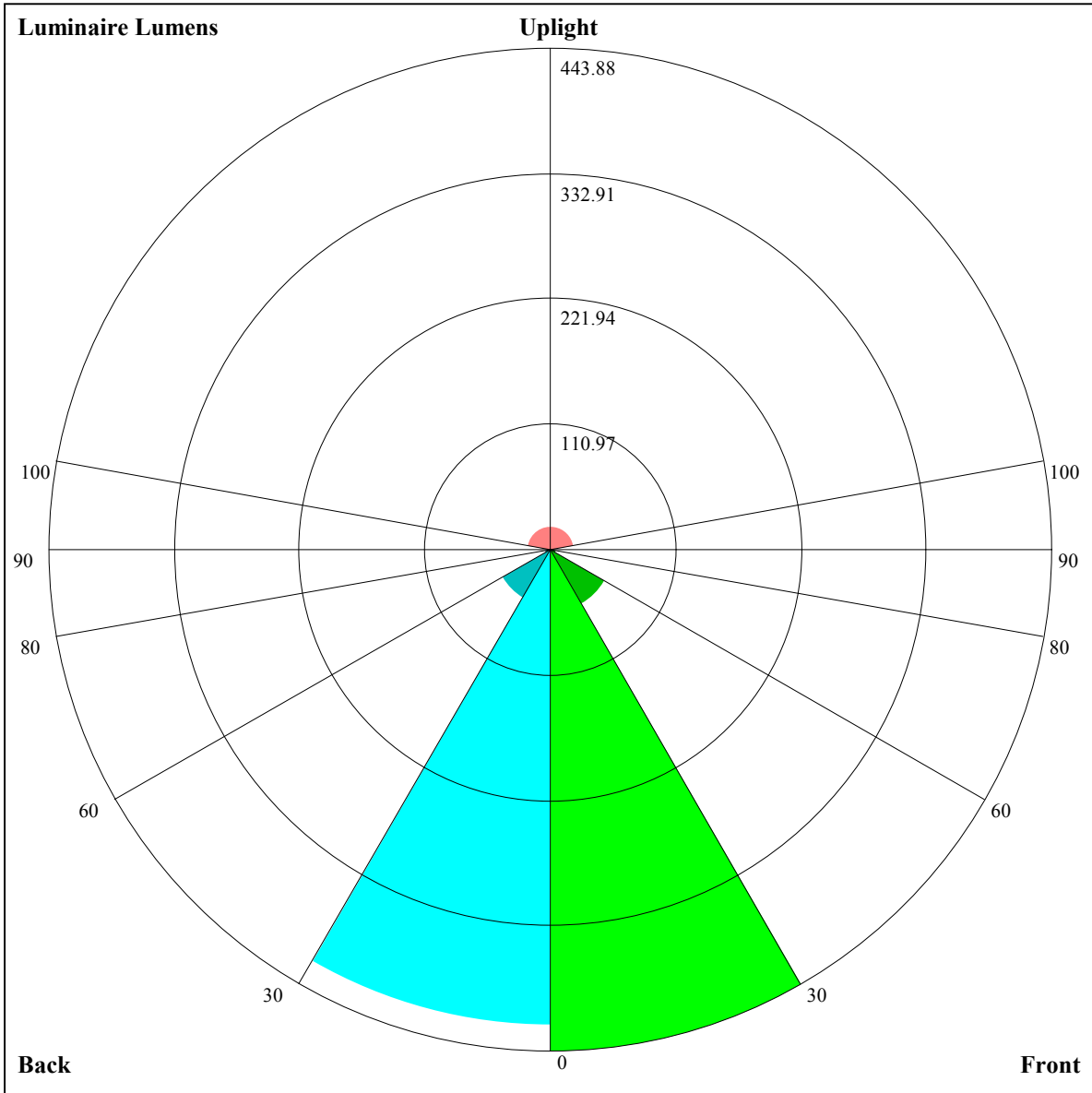
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	17.49	18.42	17.85	18.73	19.04	15.98	16.91	16.34	17.22	17.53
	3H	17.46	18.28	17.84	18.62	18.97	16.06	16.89	16.45	17.23	17.57
	4H	17.50	18.27	17.90	18.62	18.99	16.20	16.96	16.60	17.32	17.69
	6H	17.63	18.33	18.05	18.71	19.11	16.45	17.15	16.87	17.53	17.93
	8H	17.70	18.37	18.12	18.75	19.16	16.59	17.25	17.01	17.64	18.05
	12H	17.80	18.43	18.22	18.82	19.24	16.74	17.37	17.17	17.77	18.19
4H	2H	17.22	17.99	17.62	18.34	18.71	15.75	16.52	16.15	16.87	17.24
	3H	17.24	17.88	17.67	18.28	18.70	15.93	16.57	16.35	16.96	17.38
	4H	17.40	17.96	17.84	18.38	18.83	16.22	16.78	16.66	17.20	17.65
	6H	17.62	18.11	18.09	18.56	19.01	16.60	17.09	17.08	17.55	18.00
	8H	17.79	18.24	18.28	18.70	19.18	16.86	17.32	17.35	17.78	18.25
	12H	18.01	18.43	18.51	18.89	19.41	17.17	17.58	17.66	18.04	18.56
8H	4H	17.34	17.79	17.82	18.25	18.72	16.21	16.66	16.70	17.12	17.60
	6H	17.66	18.04	18.17	18.51	19.03	16.74	17.11	17.25	17.59	18.11
	8H	17.98	18.29	18.52	18.82	19.32	17.17	17.48	17.71	18.01	18.50
	12H	18.34	18.58	18.89	19.10	19.62	17.63	17.86	18.17	18.38	18.90
12H	4H	17.32	17.74	17.81	18.19	18.71	16.20	16.62	16.70	17.08	17.60
	6H	17.73	18.04	18.26	18.56	19.06	16.83	17.14	17.36	17.66	18.16
	8H	18.06	18.29	18.60	18.81	19.33	17.28	17.51	17.82	18.03	18.56
Variation with the observer position at spacings:											
S = 1.0H	5.7/-5.0					5.7/-5.0					
S = 1.5H	7.7/-3.8					7.7/-3.8					
S = 2.0H	9.2/-3.1					9.2/-3.1					
Standard tables:	BK2					BK2					
Uncorrected UGR	-1.0					-1.0					

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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	1.01	1.01	1.01	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.87	0.87	0.87	0.85
1	0.95	0.93	0.91	0.93	0.92	0.90	0.90	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81
2	0.90	0.87	0.85	0.89	0.86	0.84	0.86	0.84	0.82	0.83	0.82	0.80	0.81	0.80	0.79	0.77
3	0.86	0.82	0.80	0.85	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.79	0.77	0.75	0.74
4	0.82	0.78	0.75	0.81	0.78	0.75	0.79	0.76	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.71
5	0.79	0.75	0.72	0.78	0.74	0.72	0.76	0.73	0.71	0.75	0.72	0.70	0.74	0.72	0.70	0.69
6	0.75	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.66
7	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.70	0.67	0.65	0.64
8	0.70	0.66	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.68	0.65	0.63	0.62
9	0.68	0.64	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.60
10	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.58





Luminaire Lumens:

FL=443.88,FM=56.12,FH=5.64,FVH=2.49

BL=420.41,BM=49.4,BH=5.7,BVH=2.43

UL=4.53,UH=21.56

BUG Rating:B1-U2-G0

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	4557.87	4583.47	4539.50	4413.73	4256.79	4038.64	3778.19	3527.20	3246.16
45.0	4571.78	4567.33	4501.10	4387.57	4178.88	3958.50	3751.47	3424.80	3145.43
90.0	4575.12	4501.10	4405.94	4218.39	4024.17	3797.11	3535.55	3188.84	2891.10
135.0	4581.24	4537.83	4428.20	4257.35	4062.57	3823.82	3547.79	3263.41	2979.03
180.0	4557.87	4473.83	4354.18	4156.62	3923.44	3682.47	3408.66	3050.26	2754.75
225.0	4571.78	4536.72	4432.09	4209.49	4036.97	3804.90	3500.49	3192.18	2908.91
270.0	4565.66	4567.88	4504.44	4392.02	4198.91	3946.25	3695.82	3384.17	3093.67
315.0	4581.24	4554.53	4485.52	4333.59	4140.48	3914.53	3664.66	3317.95	3024.66
360.0	4557.87	4583.47	4539.50	4413.73	4256.79	4038.64	3778.19	3527.20	3246.16
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2884.98	2602.83	2323.45	2042.97	1784.75	1572.16	1364.02	1181.48	1041.24
45.0	2851.59	2477.05	2194.90	1938.90	1658.42	1464.19	1291.67	1108.02	977.80
90.0	2590.58	2222.17	1954.48	1719.63	1493.69	1288.89	1098.01	978.08	855.98
135.0	2612.84	2319.56	2053.54	1753.58	1548.23	1356.79	1169.24	1005.62	873.17
180.0	2462.03	2123.11	1877.68	1661.20	1419.12	1196.51	1094.33	940.29	819.25
225.0	2581.12	2271.70	2009.58	1753.03	1544.89	1347.33	1085.82	1040.35	916.75
270.0	2760.32	2424.18	2138.69	1904.95	1591.08	1390.18	1242.70	1041.80	914.91
315.0	2726.93	2359.07	2082.48	1845.96	1593.86	1385.17	1097.67	1050.15	943.35
360.0	2884.98	2602.83	2323.45	2042.97	1784.75	1572.16	1364.02	1181.48	1041.24
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	904.34	803.61	714.57	639.44	586.57	542.05	503.65	476.93	455.23
45.0	860.93	751.30	665.59	614.39	564.31	530.36	499.19	472.48	451.33
90.0	732.93	639.21	577.55	524.46	484.28	454.56	432.30	406.98	392.07
135.0	752.97	667.82	587.12	538.71	499.19	468.59	438.53	414.60	394.57
180.0	705.44	625.75	572.65	527.86	494.52	471.04	451.56	429.52	412.38
225.0	799.60	711.51	650.12	597.14	550.23	514.67	483.06	451.17	432.25
270.0	820.30	705.11	619.96	565.98	508.66	474.71	449.11	424.07	407.37
315.0	825.93	715.68	654.74	586.85	529.80	499.58	468.14	433.19	416.27
360.0	904.34	803.61	714.57	639.44	586.57	542.05	503.65	476.93	455.23
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	433.53	417.39	404.03	379.54	346.15	309.98	285.49	217.10	176.81
45.0	430.19	412.93	394.57	367.30	325.01	284.38	259.95	192.39	150.15
90.0	380.04	366.35	338.97	308.76	266.46	229.06	192.11	150.82	116.03
135.0	375.09	356.73	333.35	305.53	281.04	226.78	187.88	141.97	109.86
180.0	398.80	374.54	344.93	310.15	271.52	221.88	181.15	141.52	100.23
225.0	416.61	397.85	368.36	334.86	294.68	248.87	207.97	160.83	120.93
270.0	395.68	383.44	368.41	346.15	309.98	281.04	237.74	192.39	156.38
315.0	396.57	372.31	346.10	317.83	284.99	245.81	210.08	167.57	132.45
360.0	433.53	417.39	404.03	379.54	346.15	309.98	285.49	217.10	176.81
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	137.29	95.89	60.49	36.45	21.20	17.20	15.64	14.02	12.58
45.0	112.14	74.07	44.41	25.21	18.09	16.64	14.97	13.19	11.69
90.0	80.19	51.20	32.67	22.26	19.59	17.92	16.31	14.30	12.97
135.0	79.75	53.59	36.12	26.88	22.48	19.65	17.25	14.97	13.52
180.0	64.17	39.12	22.32	18.92	17.53	15.97	14.41	12.63	11.13
225.0	80.58	47.19	26.38	17.81	16.19	14.86	13.36	11.58	10.35
270.0	120.54	82.09	49.14	28.72	21.37	19.48	17.59	15.69	14.14
315.0	95.11	62.94	42.85	29.55	23.99	21.20	18.87	16.31	14.36
360.0	137.29	95.89	60.49	36.45	21.20	17.20	15.64	14.02	12.58

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	11.19	9.91	8.90	8.29	7.74	7.46	7.18	7.01	6.79
45.0	10.35	9.13	8.40	8.07	7.57	7.23	7.01	6.90	6.79
90.0	11.91	10.74	10.13	9.63	9.13	8.85	8.46	8.07	7.96
135.0	12.13	10.96	10.18	9.63	9.13	8.79	8.51	8.07	7.85
180.0	10.07	9.13	8.57	8.18	7.79	7.35	7.12	6.96	6.73
225.0	9.29	8.40	8.13	7.90	7.68	7.40	7.35	7.18	7.07
270.0	12.47	10.96	10.02	9.41	8.79	8.40	8.13	7.85	7.62
315.0	12.86	11.80	10.80	9.91	9.29	8.96	8.46	8.07	7.79
360.0	11.19	9.91	8.90	8.29	7.74	7.46	7.18	7.01	6.79
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	6.62	6.51	6.34	6.23	6.18	6.12	5.90	5.90	5.90
45.0	6.68	6.51	6.34	6.29	6.23	6.18	6.18	6.12	6.01
90.0	7.68	7.23	7.18	7.18	6.85	6.62	6.51	6.40	6.23
135.0	7.68	7.40	7.23	7.12	6.90	6.73	6.62	6.51	6.34
180.0	6.68	6.57	6.57	6.46	6.40	6.29	6.29	6.29	6.12
225.0	6.96	6.85	6.73	6.68	6.51	6.40	6.34	6.34	6.23
270.0	7.46	7.18	6.90	6.90	6.79	6.57	6.34	6.29	6.29
315.0	7.51	7.29	7.18	7.07	6.68	6.46	6.40	6.23	6.12
360.0	6.62	6.51	6.34	6.23	6.18	6.12	5.90	5.90	5.90
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	5.79	5.73	5.62	5.62	5.57	5.51	5.45	5.40	5.34
45.0	5.95	5.84	5.84	5.79	5.73	5.68	5.62	5.51	5.34
90.0	6.07	5.95	5.95	5.90	5.73	5.68	5.62	5.62	5.51
135.0	6.23	6.07	6.01	5.90	5.79	5.73	5.68	5.57	5.45
180.0	6.12	6.01	6.01	5.95	5.84	5.73	5.62	5.57	5.45
225.0	6.12	6.07	6.01	5.90	5.84	5.73	5.62	5.51	5.40
270.0	6.12	5.79	5.79	5.73	5.73	5.57	5.57	5.57	5.51
315.0	5.95	5.84	5.79	5.73	5.62	5.57	5.45	5.40	5.34
360.0	5.79	5.73	5.62	5.62	5.57	5.51	5.45	5.40	5.34
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	5.29	5.23	5.18	5.06	4.95	4.95	4.90	4.90	4.84
45.0	5.34	5.23	5.23	5.18	5.12	5.06	4.95	4.95	4.84
90.0	5.45	5.40	5.40	5.29	5.34	5.23	5.18	5.06	5.01
135.0	5.45	5.40	5.34	5.29	5.18	5.12	5.01	4.95	4.90
180.0	5.40	5.29	5.18	5.12	5.01	4.90	4.84	4.79	4.79
225.0	5.29	5.23	5.18	5.06	4.90	4.84	4.79	4.73	4.67
270.0	5.40	5.29	5.29	5.23	5.12	5.06	4.95	4.84	4.84
315.0	5.34	5.29	5.23	5.18	5.06	5.06	5.01	4.95	4.90
360.0	5.29	5.23	5.18	5.06	4.95	4.95	4.90	4.90	4.84
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.79	4.73	4.62	4.67	4.67	4.62	4.62	4.34	4.34
45.0	4.84	4.84	4.79	4.84	4.79	4.79	4.73	4.40	4.34
90.0	4.95	4.79	4.73	4.62	4.56	4.56	4.34	4.29	4.17
135.0	4.84	4.67	4.67	4.56	4.45	4.40	4.29	4.17	4.12
180.0	4.73	4.62	4.56	4.51	4.40	4.29	4.23	4.17	4.17
225.0	4.62	4.62	4.51	4.51	4.40	4.34	4.29	4.17	4.23
270.0	4.73	4.73	4.62	4.56	4.51	4.45	4.29	4.23	4.17
315.0	4.79	4.67	4.67	4.62	4.45	4.40	4.34	4.23	4.23
360.0	4.79	4.73	4.62	4.67	4.67	4.62	4.62	4.34	4.34

Intensity data(cd)

C/ γ ($^{\circ}$)	90.0
0.0	4.23
45.0	4.17
90.0	4.17
135.0	4.06
180.0	4.12
225.0	4.17
270.0	4.17
315.0	4.12
360.0	4.23