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Nata

Client: NT

LumCAT: 1-1822-LM

Luminaire: 92.70.458.00

Report No: 20251224-B005

Ballast type: DC

Test No: 20251224-C005

Voltage(V): 33.920

LampCAT: PHILIPS SLM 1202

Current(A): 0.146

Lamp flux(lm): 856.3

Power (W): 4.952

Number of Lamps: 1

PF: 0.000

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 15

Photometric Results

Lumens(lm): 817.57, Efficiency(%): 95.47% , Luminous Efficacy(lm/W): 165.10

Central intensity(cd): 1724.671, Maximum intensity(cd): 1731.335

Angle of maximum intensity: C=0.0 γ =1.0

Beam Angle(50%Imax): [C0/180]Total=33.4

[C90/270]Total=33.4

Field angle(10%Imax): [C0/180]Total=78.0

[C90/270]Total=78.0

Maximum s/h(1/2): C0_180=0.54 C90_270=0.54

Maximum s/h(1/4): C0_180=0.57 C90_270=0.57

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 95.47%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.840%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1724.672	0.000	0	0.00%	0.00%
1.0	1731.335	1.654	1.654	0.19%	0.20%
2.0	1721.593	4.956	6.61	0.58%	0.81%
3.0	1689.697	8.159	14.768	0.95%	1.81%
4.0	1660.481	11.214	25.982	1.31%	3.18%
5.0	1621.287	14.118	40.1	1.65%	4.90%
6.0	1570.218	16.772	56.873	1.96%	6.96%
7.0	1513.908	19.143	76.016	2.24%	9.30%
8.0	1456.876	21.261	97.277	2.48%	11.90%
9.0	1393.256	23.099	120.376	2.70%	14.72%
10.0	1328.656	24.632	145.008	2.88%	17.74%
11.0	1253.507	25.801	170.809	3.01%	20.89%
12.0	1184.117	26.647	197.456	3.11%	24.15%
13.0	1114.792	27.282	224.738	3.19%	27.49%
14.0	1047.512	27.677	252.415	3.23%	30.87%
15.0	974.494	27.759	280.175	3.24%	34.27%
16.0	904.911	27.539	307.713	3.22%	37.64%
17.0	840.246	27.177	334.89	3.17%	40.96%
18.0	775.335	26.637	361.527	3.11%	44.22%
19.0	711.198	25.863	387.39	3.02%	47.38%
20.0	651.453	24.940	412.33	2.91%	50.43%
21.0	596.230	23.958	436.288	2.80%	53.36%
22.0	545.097	22.935	459.224	2.68%	56.17%
23.0	501.005	21.950	481.174	2.56%	58.85%
24.0	460.583	21.024	502.197	2.46%	61.43%
25.0	415.758	19.926	522.124	2.33%	63.86%
26.0	387.113	18.952	541.075	2.21%	66.18%
27.0	361.245	18.309	559.384	2.14%	68.42%
28.0	338.165	17.708	577.092	2.07%	70.59%
29.0	316.539	17.129	594.221	2.00%	72.68%
30.0	294.148	16.488	610.709	1.93%	74.70%
31.0	281.822	16.028	626.738	1.87%	76.66%
32.0	270.347	15.819	642.557	1.85%	78.59%
33.0	260.648	15.643	658.2	1.83%	80.51%
34.0	250.831	15.479	673.679	1.81%	82.40%
35.0	238.763	15.205	688.884	1.78%	84.26%
36.0	225.157	14.771	703.655	1.72%	86.07%
37.0	210.118	14.196	717.851	1.66%	87.80%

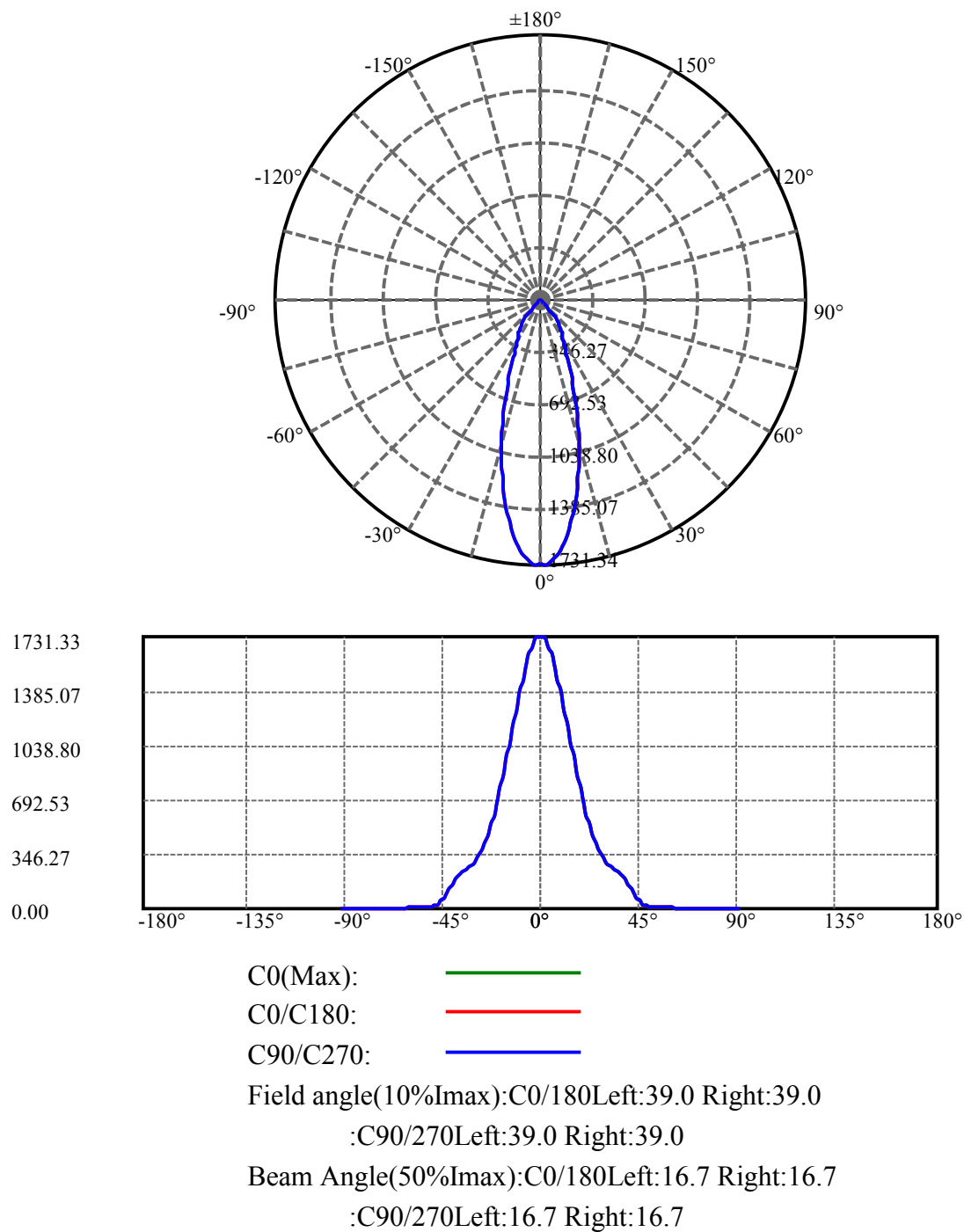
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	193.777	13.481	731.333	1.57%	89.45%
39.0	172.657	12.507	743.84	1.46%	90.98%
40.0	150.621	11.275	755.115	1.32%	92.36%
41.0	129.027	9.958	765.073	1.16%	93.58%
42.0	106.345	8.551	773.624	1.00%	94.62%
43.0	85.957	7.123	780.748	0.83%	95.50%
44.0	66.042	5.737	786.485	0.67%	96.20%
45.0	49.174	4.428	790.913	0.52%	96.74%
46.0	36.880	3.365	794.278	0.39%	97.15%
47.0	26.869	2.535	796.813	0.30%	97.46%
48.0	19.398	1.870	798.684	0.22%	97.69%
49.0	14.629	1.397	800.081	0.16%	97.86%
50.0	11.917	1.107	801.188	0.13%	98.00%
51.0	10.184	0.935	802.123	0.11%	98.11%
52.0	9.344	0.838	802.961	0.10%	98.21%
53.0	8.666	0.783	803.744	0.09%	98.31%
54.0	7.987	0.734	804.478	0.09%	98.40%
55.0	7.535	0.693	805.171	0.08%	98.48%
56.0	6.954	0.655	805.826	0.08%	98.56%
57.0	6.405	0.611	806.437	0.07%	98.64%
58.0	6.028	0.575	807.012	0.07%	98.71%
59.0	5.748	0.551	807.562	0.06%	98.78%
60.0	5.458	0.529	808.092	0.06%	98.84%
61.0	5.199	0.509	808.6	0.06%	98.90%
62.0	4.963	0.490	809.09	0.06%	98.96%
63.0	4.737	0.472	809.562	0.06%	99.02%
64.0	4.500	0.453	810.015	0.05%	99.08%
65.0	4.263	0.434	810.449	0.05%	99.13%
66.0	4.048	0.415	810.863	0.05%	99.18%
67.0	3.843	0.397	811.26	0.05%	99.23%
68.0	3.682	0.381	811.641	0.04%	99.27%
69.0	3.477	0.365	812.006	0.04%	99.32%
70.0	3.337	0.350	812.356	0.04%	99.36%
71.0	3.208	0.338	812.695	0.04%	99.40%
72.0	3.079	0.327	813.021	0.04%	99.44%
73.0	2.960	0.316	813.337	0.04%	99.48%
74.0	2.885	0.307	813.645	0.04%	99.52%
75.0	2.799	0.300	813.945	0.04%	99.56%

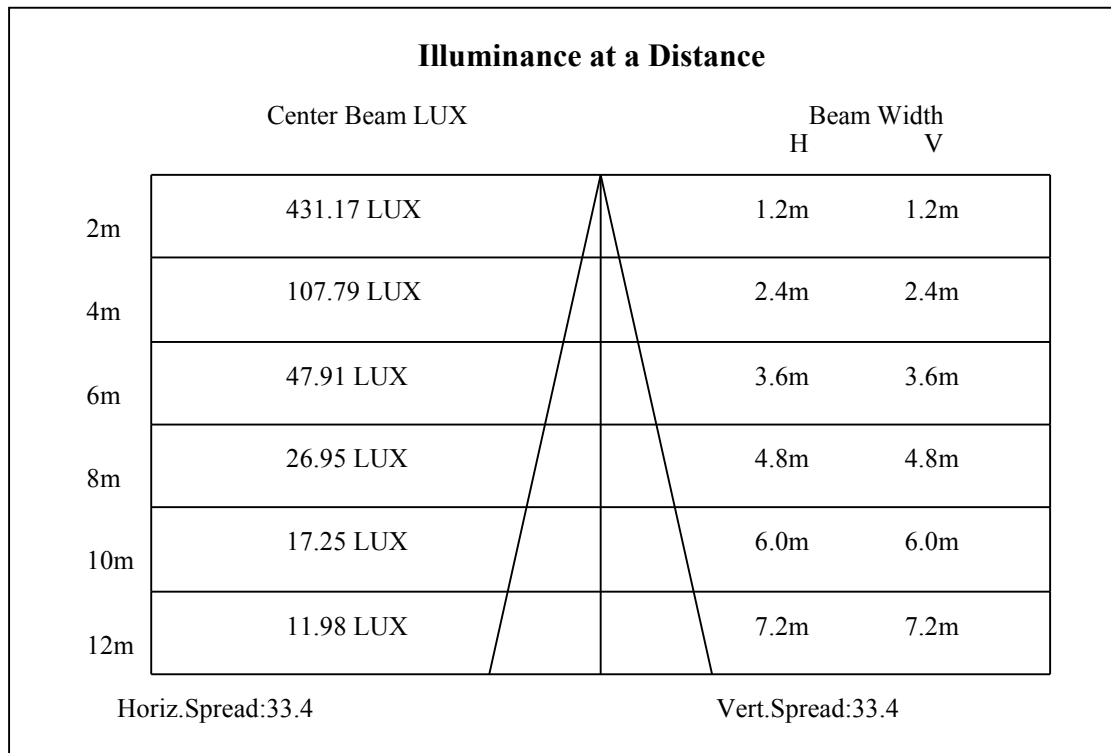
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.723	0.293	814.238	0.03%	99.59%
77.0	2.627	0.285	814.523	0.03%	99.63%
78.0	2.551	0.277	814.8	0.03%	99.66%
79.0	2.487	0.271	815.071	0.03%	99.69%
80.0	2.444	0.266	815.337	0.03%	99.73%
81.0	2.379	0.261	815.598	0.03%	99.76%
82.0	2.293	0.253	815.851	0.03%	99.79%
83.0	2.250	0.247	816.098	0.03%	99.82%
84.0	2.142	0.239	816.337	0.03%	99.85%
85.0	2.035	0.228	816.565	0.03%	99.88%
86.0	1.948	0.218	816.783	0.03%	99.90%
87.0	1.830	0.207	816.99	0.02%	99.93%
88.0	1.798	0.199	817.188	0.02%	99.95%
89.0	1.755	0.195	817.383	0.02%	99.98%
90.0	1.690	0.189	817.572	0.02%	100.00%

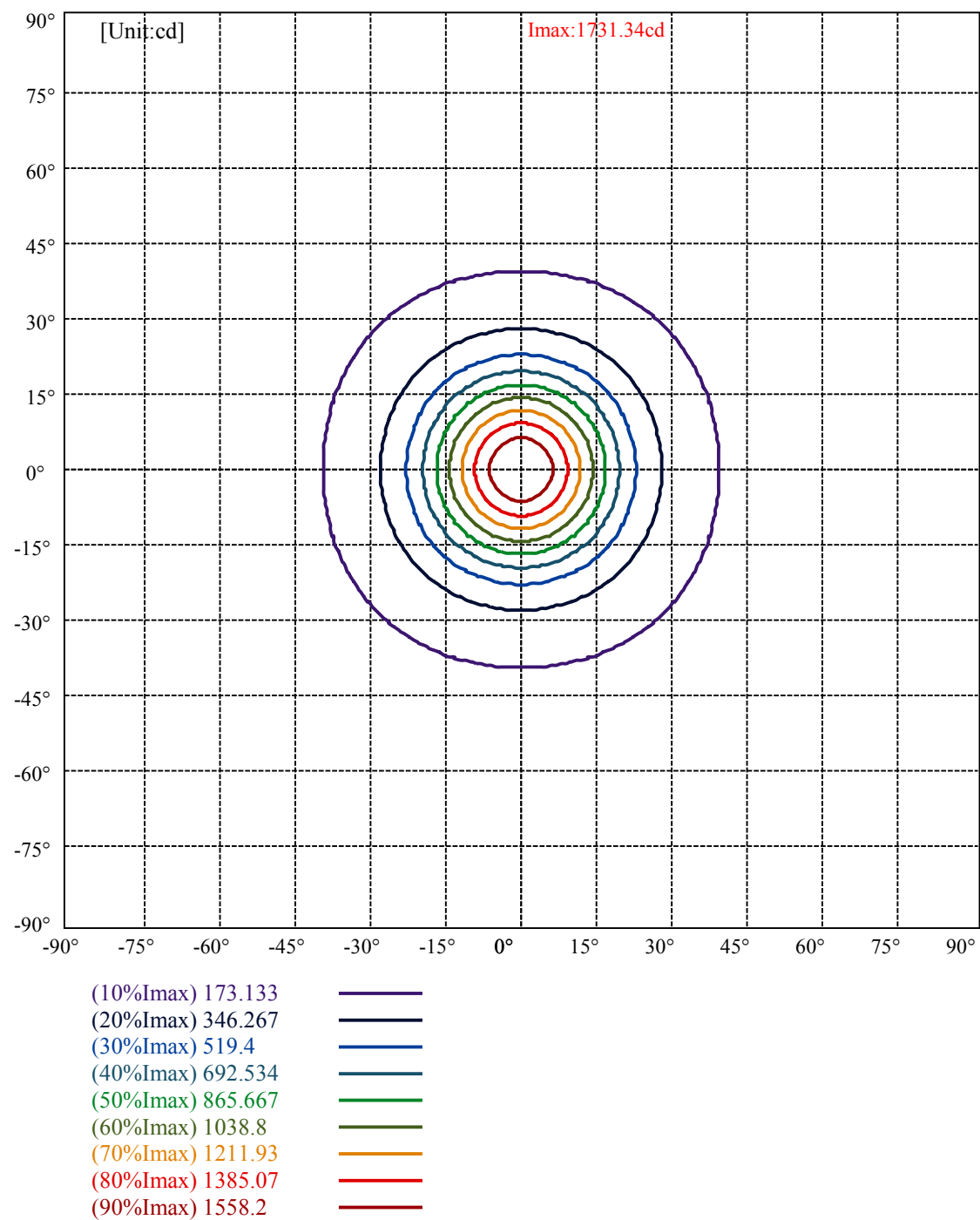
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	610.71	71.32%	74.70%
0-40	755.11	88.18%	92.36%
0-60	808.09	94.37%	98.84%
0-90	817.38	95.45%	99.98%
0-120	817.38	95.45%	99.98%
0-180	817.57	95.47%	100.00%
60-90	9.29	1.09%	1.14%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-32.74	654.06	76.38%	80.00%

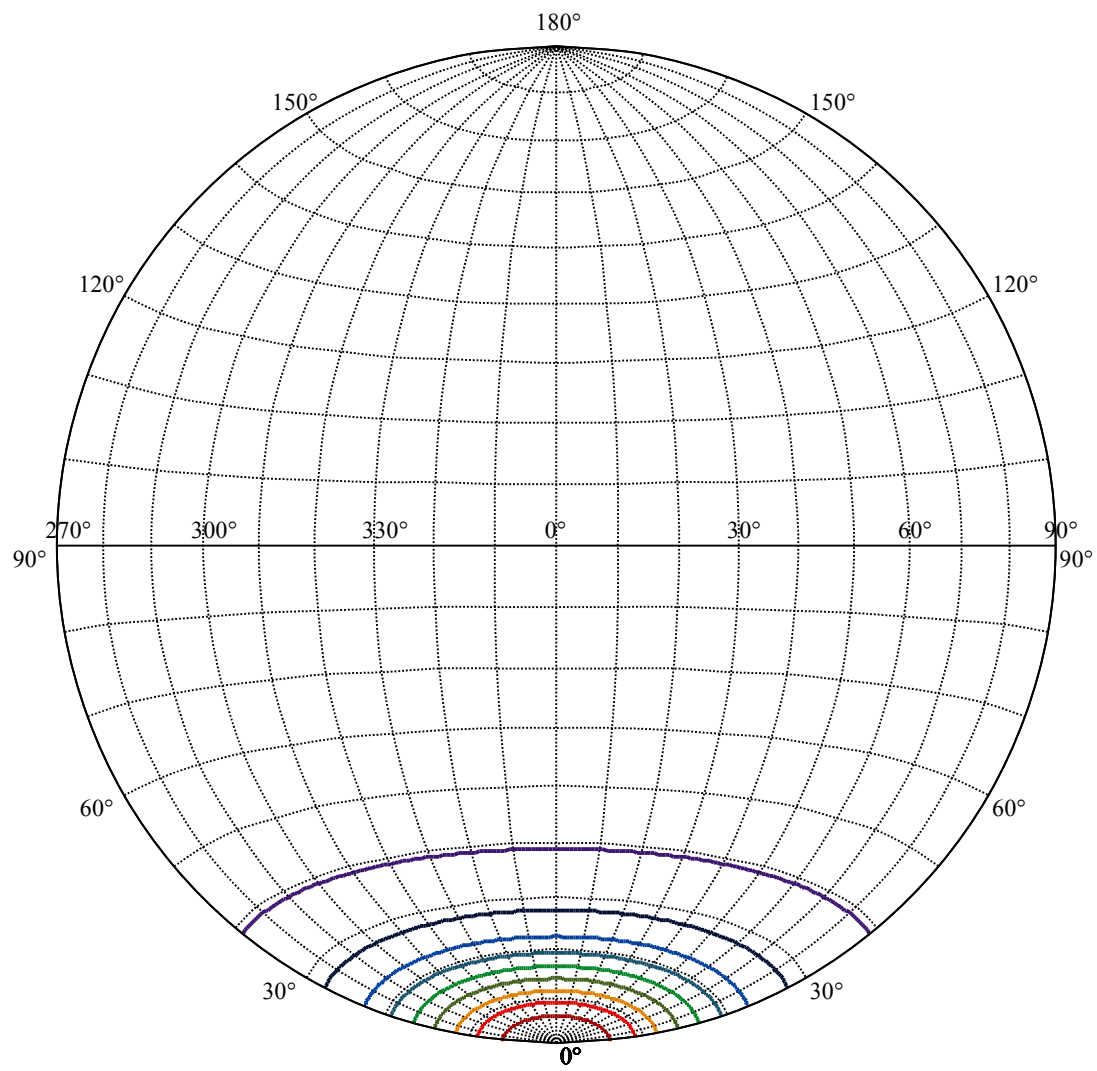
ZONAL LUMEN SUMMARY

0-10	145.01
10-20	267.32
20-30	198.38
30-40	144.41
40-50	46.07
50-60	6.90
60-70	4.26
70-80	2.98
80-90	2.05
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







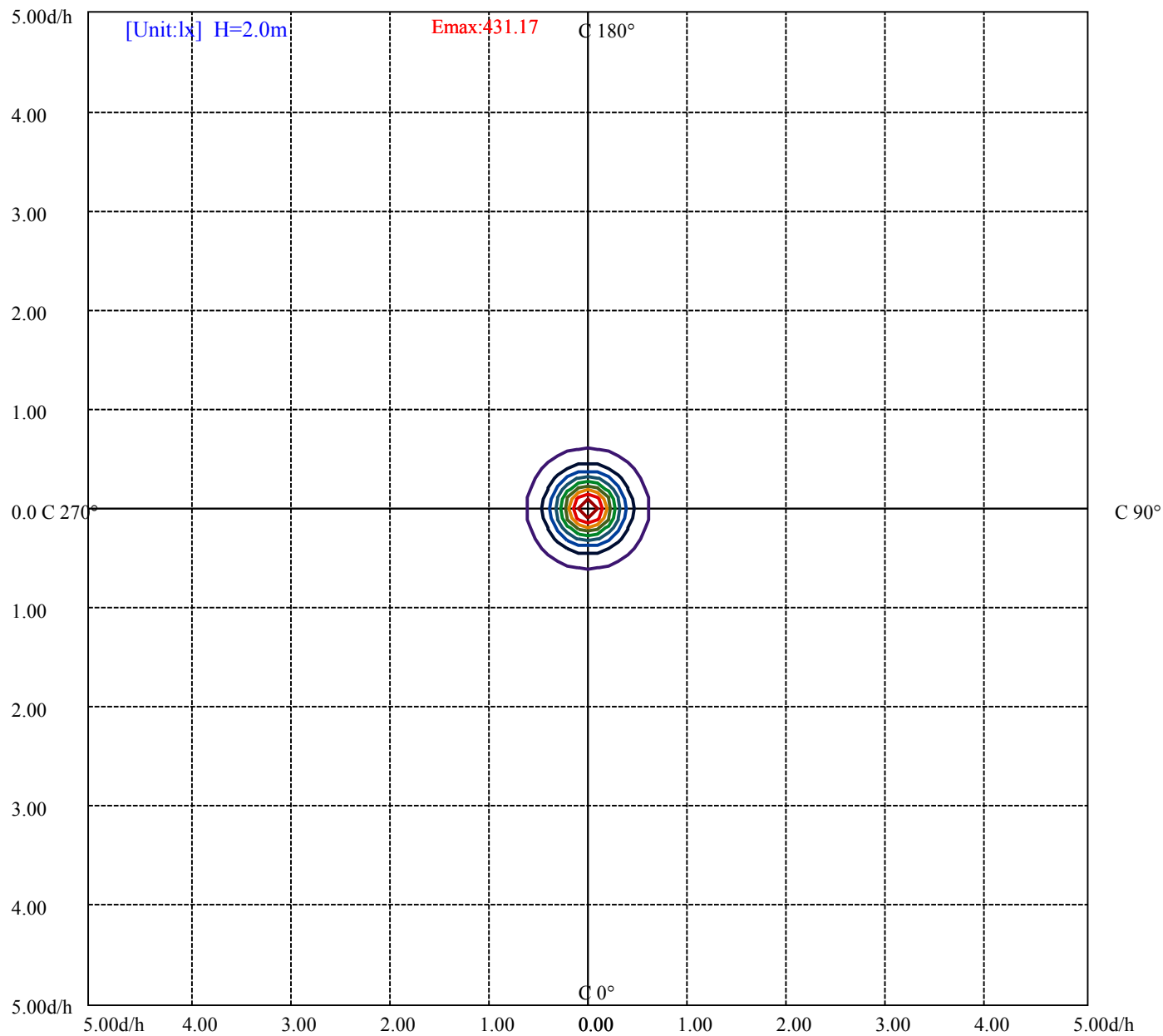


House

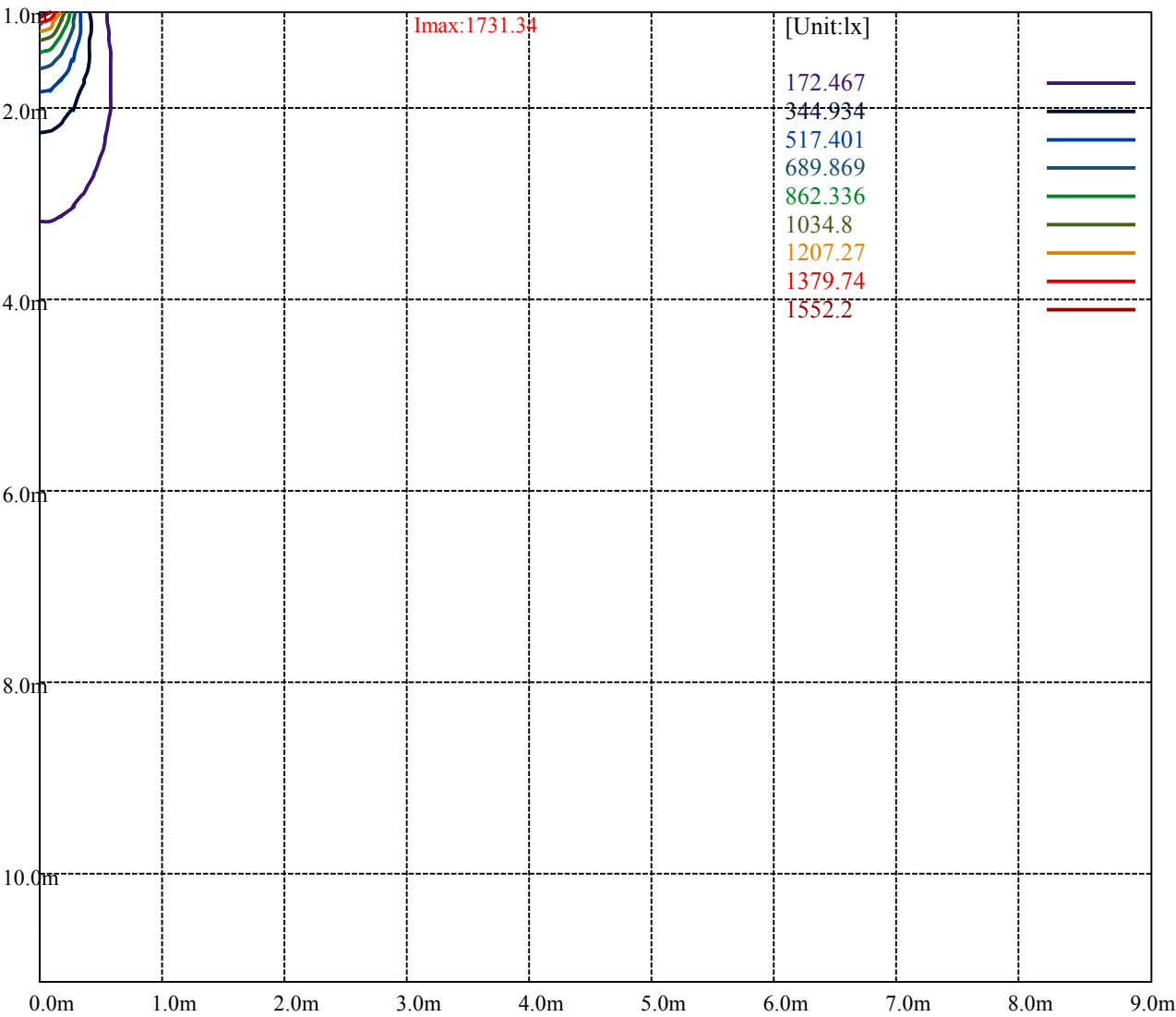
[Unit:cd]

Road

Imax:1731.34	
(10%Imax) 173.133	
(20%Imax) 346.267	
(30%Imax) 519.4	
(40%Imax) 692.534	
(50%Imax) 865.667	
(60%Imax) 1038.8	
(70%Imax) 1211.93	
(80%Imax) 1385.07	
(90%Imax) 1558.2	



(10%Emax) 43.11675	—
(20%Emax) 86.2335	—
(30%Emax) 129.3505	—
(40%Emax) 172.4673	—
(50%Emax) 215.584	—
(60%Emax) 258.7	—
(70%Emax) 301.8175	—
(80%Emax) 344.935	—
(90%Emax) 388.0525	—



Luminance Table

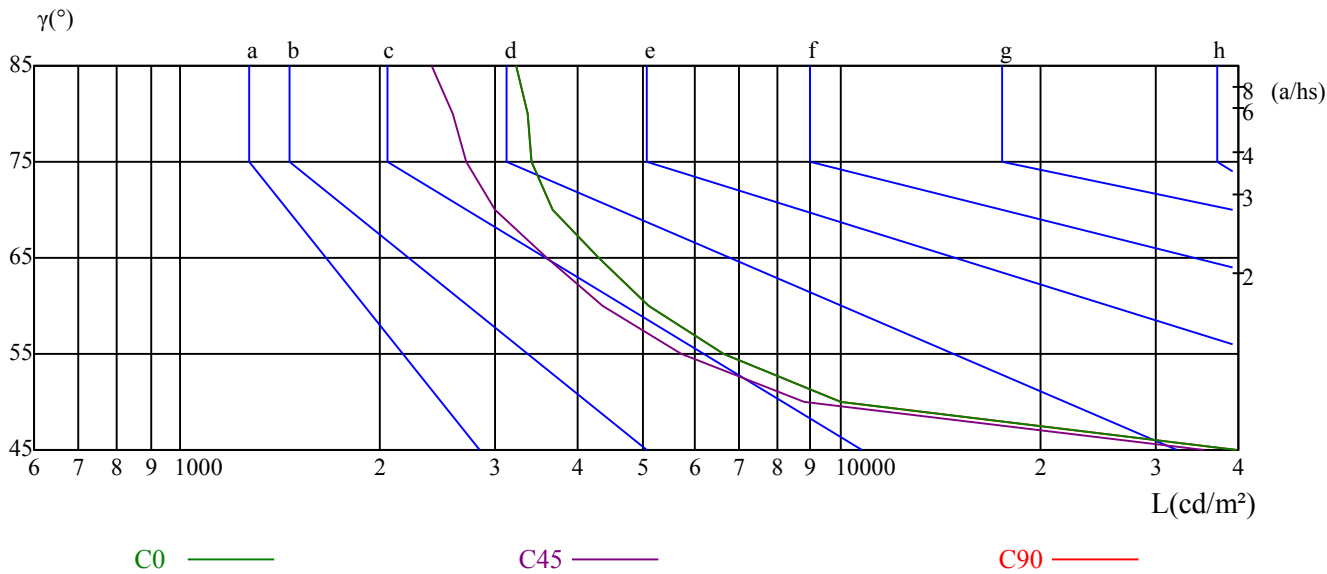
γ	45	50	55	60	65	70	75	80	85
C0	39738	10017	6653	5114	4291	3658	3396	3349	3231
C45	35346	8787	5749	4347	3580	2988	2706	2589	2404
C90	39738	10017	6653	5114	4291	3658	3396	3349	3231

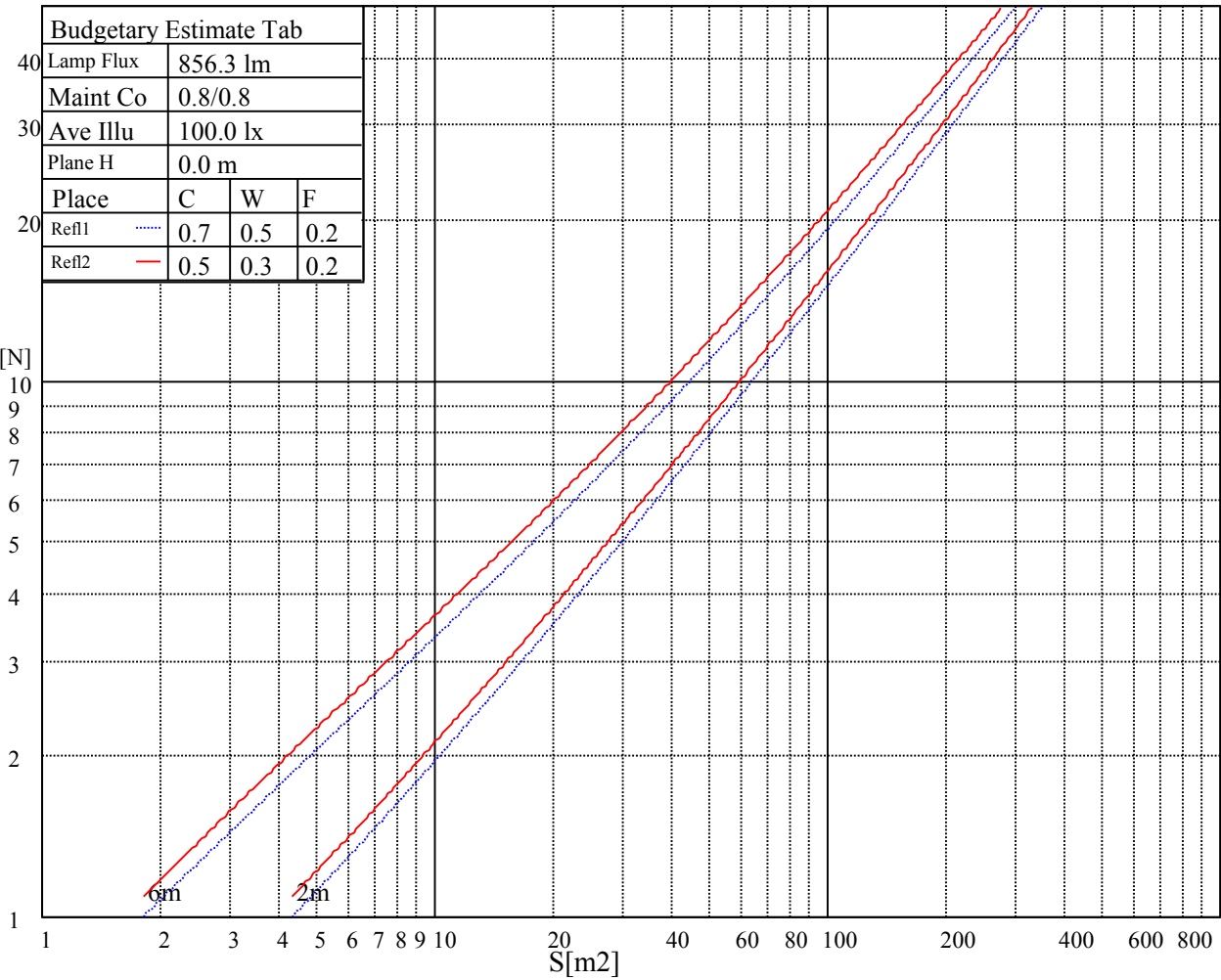
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
8234	8234	8234	8828	8828	8828	19056	19056	19056

Glare Table

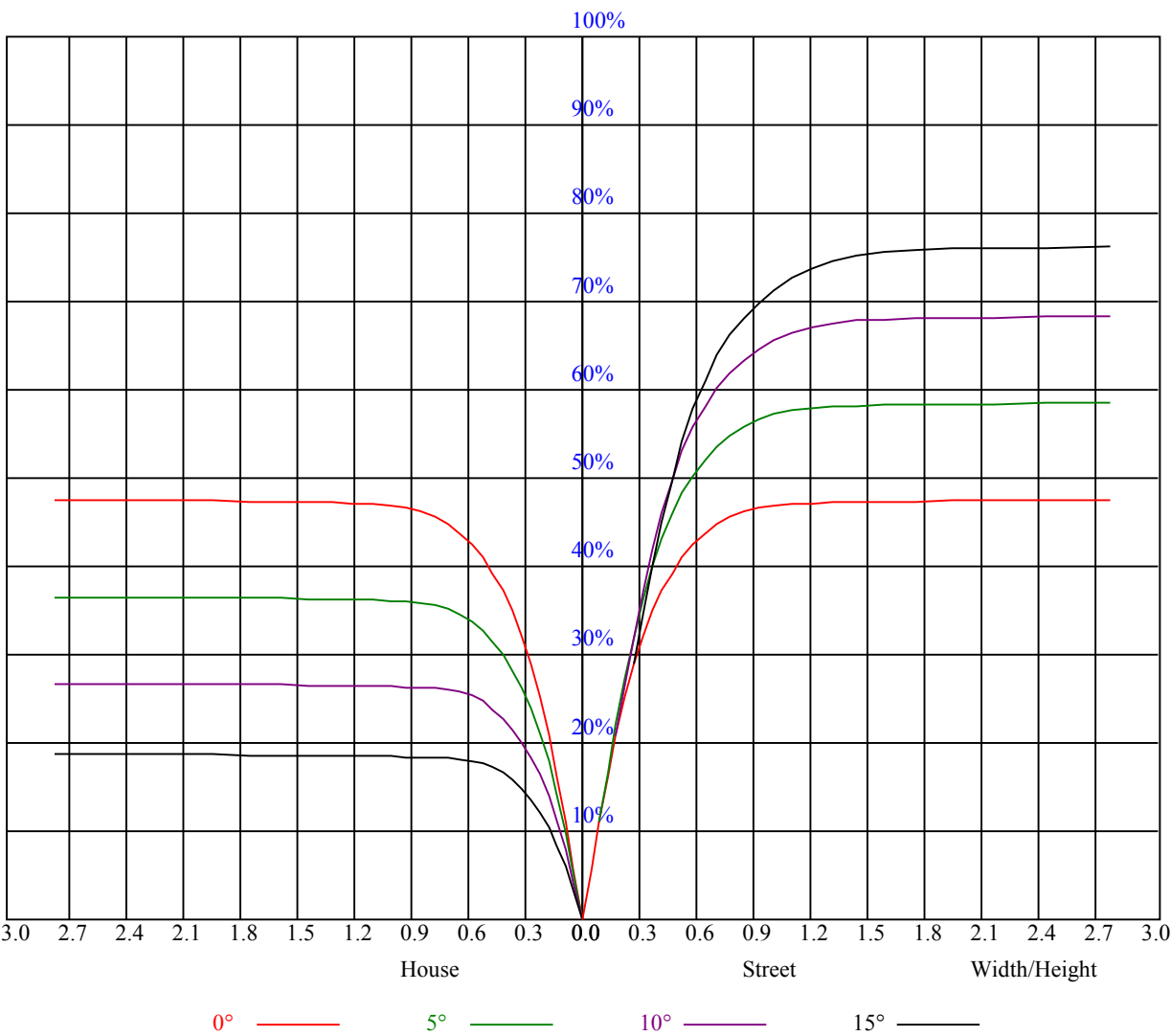
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

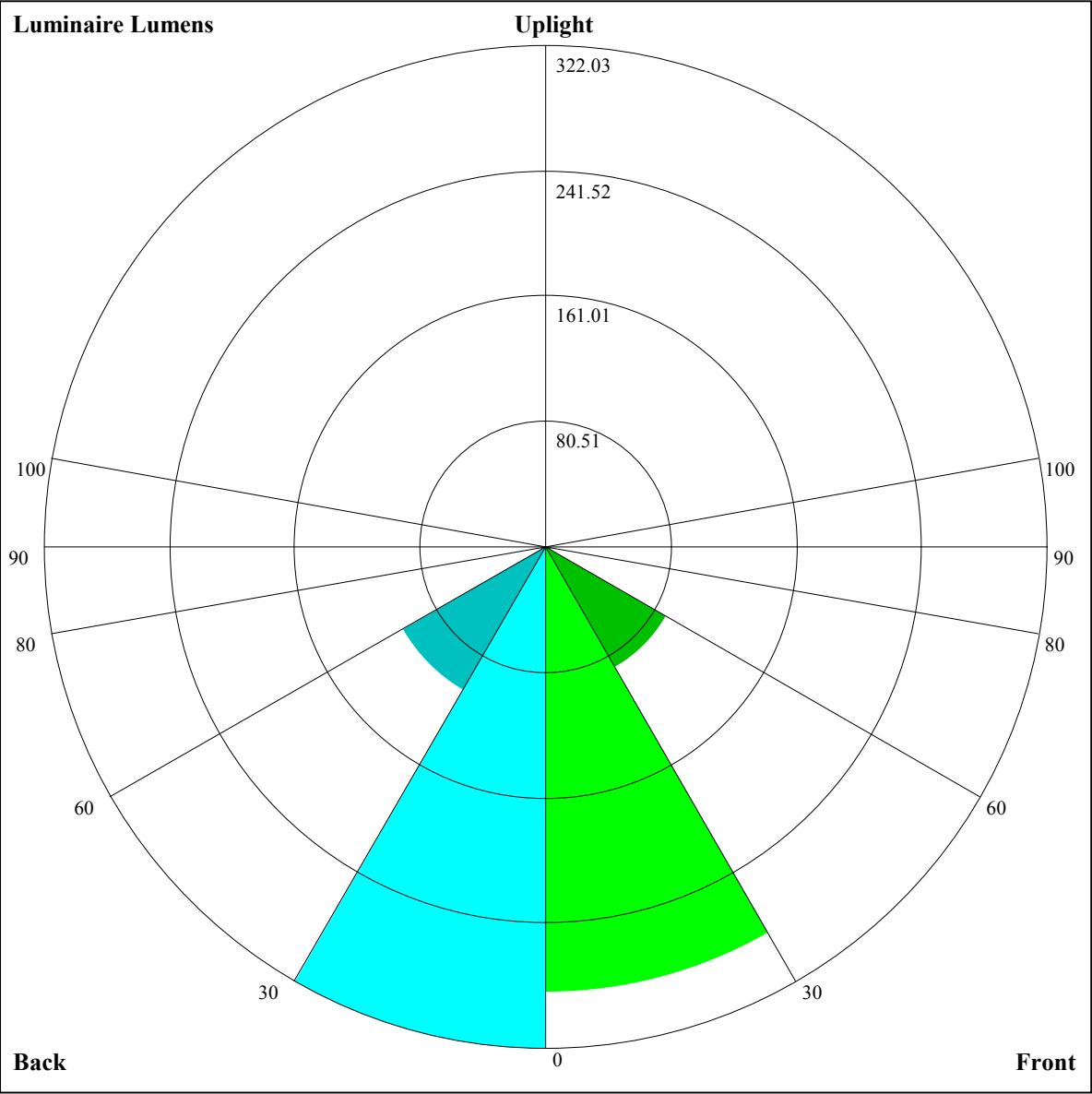
Luminance Limiting Curve





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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.14	1.14	1.14	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	0.97	0.97	0.97	0.95
1	1.06	1.04	1.02	1.04	1.02	1.00	1.00	0.98	0.97	0.97	0.95	0.94	0.93	0.92	0.91	0.90
2	0.99	0.96	0.92	0.98	0.94	0.91	0.94	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.86	0.84
3	0.93	0.89	0.85	0.92	0.88	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.82	0.80	0.79
4	0.88	0.83	0.79	0.87	0.82	0.78	0.84	0.81	0.77	0.83	0.79	0.77	0.81	0.78	0.76	0.74
5	0.83	0.77	0.74	0.82	0.77	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.70
6	0.78	0.73	0.69	0.77	0.72	0.69	0.76	0.72	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.66
7	0.74	0.69	0.65	0.74	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.63
8	0.70	0.65	0.62	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.59
9	0.67	0.62	0.58	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.57
10	0.64	0.59	0.56	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.62	0.58	0.55	0.54





Luminaire Lumens:

FL=286.23,FM=89.37,FH=3.65,FVH=1.08

BL=322.03,BM=106.47,BH=3.68,BVH=1.16

UL=0,UH=0

BUG Rating:B1-U0-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	1716.68	1716.68	1680.95	1645.81	1603.01	1551.68	1481.06	1420.52	1356.02
45.0	1716.77	1752.60	1746.57	1725.90	1699.20	1663.03	1619.97	1564.00	1508.88
90.0	1754.32	1760.35	1765.51	1712.64	1712.64	1686.20	1638.75	1594.14	1544.28
135.0	1710.91	1718.41	1776.71	1768.96	1762.93	1751.73	1731.07	1691.45	1654.42
180.0	1716.68	1770.68	1752.60	1746.57	1724.18	1700.06	1667.34	1632.89	1575.19
225.0	1716.77	1716.77	1702.91	1674.49	1637.46	1586.13	1529.46	1455.49	1393.48
270.0	1754.32	1737.96	1712.98	1670.78	1630.31	1580.36	1508.88	1447.74	1383.15
315.0	1710.91	1677.24	1634.53	1572.44	1514.13	1451.10	1385.21	1305.04	1239.59
360.0	1716.68	1716.68	1680.95	1645.81	1603.01	1551.68	1481.06	1420.52	1356.02
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1276.27	1213.75	1145.55	1078.46	996.56	932.49	868.68	789.96	730.54
45.0	1453.76	1391.76	1310.81	1247.08	1165.27	1098.10	1027.48	946.53	881.08
90.0	1485.97	1405.71	1339.14	1258.28	1191.53	1123.33	1040.74	978.91	915.01
135.0	1610.50	1559.69	1488.21	1425.35	1360.76	1297.03	1214.36	1148.91	1083.46
180.0	1520.94	1459.79	1396.93	1316.84	1254.83	1187.66	1120.49	1037.81	973.22
225.0	1327.52	1264.30	1180.60	1116.78	1052.28	990.96	911.91	846.89	782.73
270.0	1300.47	1229.86	1146.32	1078.29	1011.12	942.22	865.58	803.57	741.57
315.0	1170.61	1104.38	1020.50	951.87	885.99	808.31	746.73	686.71	614.37
360.0	1276.27	1213.75	1145.55	1078.46	996.56	932.49	868.68	789.96	730.54
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	673.70	605.84	557.36	510.85	459.70	423.53	389.08	360.15	335.60
45.0	820.79	760.51	685.59	630.47	581.39	534.02	478.04	436.71	436.71
90.0	848.87	773.95	717.19	660.61	607.31	546.08	500.86	458.49	412.42
135.0	997.34	933.61	856.10	795.82	736.40	677.84	608.08	558.13	509.91
180.0	892.27	832.85	772.57	696.78	639.08	589.14	540.91	485.79	447.04
225.0	724.26	653.64	600.16	538.07	493.63	451.86	406.48	374.44	347.92
270.0	682.14	627.03	565.02	518.52	461.68	441.87	441.87	352.57	323.29
315.0	563.30	502.16	457.63	418.71	381.59	343.70	319.33	299.78	284.02
360.0	673.70	605.84	557.36	510.85	459.70	423.53	389.08	360.15	335.60
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	319.24	305.72	297.37	287.72	280.66	271.70	263.69	251.04	231.31
45.0	392.36	331.13	313.47	294.87	284.36	274.98	268.86	265.50	259.56
90.0	377.54	342.67	323.29	305.20	285.40	274.63	264.56	255.69	247.59
135.0	465.13	435.85	435.85	353.09	331.73	310.54	297.28	283.42	274.20
180.0	438.43	438.43	345.25	323.55	307.61	292.37	280.92	272.31	263.26
225.0	323.12	306.41	293.15	282.73	273.25	266.19	260.68	254.57	241.13
270.0	305.12	285.74	272.74	260.85	253.62	245.27	238.46	229.25	215.47
315.0	269.03	259.39	251.21	245.18	237.95	227.09	210.73	194.89	177.58
360.0	319.24	305.72	297.37	287.72	280.66	271.70	263.69	251.04	231.31
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	211.42	190.49	167.33	138.39	115.92	93.52	72.86	49.60	34.28
45.0	250.00	237.77	223.13	203.15	174.91	151.31	126.42	102.65	74.84
90.0	240.61	230.54	216.50	193.68	175.16	154.67	127.89	106.61	86.20
135.0	267.14	260.77	254.39	242.42	227.52	205.74	185.50	164.40	138.05
180.0	256.81	244.15	229.42	211.42	192.39	170.60	144.08	122.72	100.33
225.0	225.03	202.89	182.48	159.84	130.73	107.22	85.26	64.67	42.89
270.0	194.20	176.11	157.94	132.45	112.47	91.63	68.55	50.81	36.43
315.0	156.05	138.22	119.02	99.90	75.87	57.53	40.22	26.18	15.33
360.0	211.42	190.49	167.33	138.39	115.92	93.52	72.86	49.60	34.28

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	23.51	15.07	13.09	12.57	11.97	11.28	10.59	9.90	9.13
45.0	55.03	38.67	23.51	16.28	12.23	11.45	10.85	10.16	9.39
90.0	62.61	45.64	31.52	19.89	14.12	11.37	10.59	9.65	8.96
135.0	115.92	93.78	72.08	47.80	31.78	20.67	11.71	9.90	9.04
180.0	73.55	55.46	39.27	27.30	17.74	13.35	12.31	11.80	11.28
225.0	28.68	19.38	12.75	10.16	9.47	8.87	8.01	7.32	6.80
270.0	22.39	16.19	12.83	11.97	11.37	10.59	10.08	9.82	8.87
315.0	11.71	10.85	9.90	9.21	8.35	7.75	7.32	6.20	5.86
360.0	23.51	15.07	13.09	12.57	11.97	11.28	10.59	9.90	9.13
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	8.44	8.01	7.49	7.06	6.72	6.46	6.03	5.68	5.34
45.0	8.87	8.35	7.49	6.98	6.72	6.46	6.11	5.86	5.51
90.0	8.53	8.10	7.23	6.46	6.03	5.77	5.60	5.34	5.25
135.0	8.35	7.75	7.06	6.46	5.86	5.25	4.99	4.74	4.48
180.0	10.42	9.90	9.13	7.92	7.32	6.98	6.46	6.29	5.94
225.0	5.77	5.34	5.08	4.82	4.65	4.48	4.22	4.05	3.96
270.0	7.92	7.49	6.98	6.72	6.37	6.11	5.86	5.51	5.25
315.0	5.60	5.34	5.17	4.82	4.56	4.48	4.39	4.13	3.96
360.0	8.44	8.01	7.49	7.06	6.72	6.46	6.03	5.68	5.34
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	4.99	4.65	4.31	4.05	3.88	3.70	3.44	3.27	3.10
45.0	5.17	4.91	4.56	4.39	4.13	3.96	3.70	3.53	3.36
90.0	4.99	4.91	4.65	4.39	4.13	4.05	3.79	3.62	3.44
135.0	4.39	4.22	4.05	3.88	3.70	3.62	3.44	3.27	3.27
180.0	5.68	5.34	4.99	4.65	4.31	4.05	3.79	3.62	3.44
225.0	3.79	3.62	3.53	3.36	3.27	3.19	3.01	3.01	2.93
270.0	4.99	4.65	4.39	4.22	3.96	3.70	3.53	3.44	3.27
315.0	3.88	3.70	3.62	3.44	3.36	3.19	3.10	2.93	2.84
360.0	4.99	4.65	4.31	4.05	3.88	3.70	3.44	3.27	3.10
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	2.93	2.84	2.76	2.67	2.58	2.50	2.41	2.41	2.33
45.0	3.27	3.01	2.93	2.84	2.76	2.67	2.50	2.41	2.33
90.0	3.27	3.19	3.10	3.01	2.93	2.84	2.76	2.67	2.67
135.0	3.19	3.10	2.93	2.93	2.84	2.76	2.67	2.58	2.58
180.0	3.27	3.19	3.10	2.93	2.84	2.76	2.67	2.58	2.50
225.0	2.84	2.67	2.67	2.58	2.58	2.50	2.41	2.41	2.41
270.0	3.10	3.01	3.01	2.93	2.84	2.67	2.67	2.58	2.58
315.0	2.76	2.67	2.58	2.50	2.41	2.33	2.33	2.24	2.15
360.0	2.93	2.84	2.76	2.67	2.58	2.50	2.41	2.41	2.33
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.33	2.15	2.15	2.07	1.98	1.89	1.72	1.64	1.64
45.0	2.24	2.24	2.15	2.15	2.07	1.98	1.89	1.81	1.81
90.0	2.58	2.41	2.41	2.24	2.15	2.07	1.89	1.81	1.72
135.0	2.50	2.41	2.41	2.33	2.24	2.15	2.07	1.98	1.89
180.0	2.41	2.33	2.33	2.24	2.15	2.07	1.98	2.07	1.98
225.0	2.41	2.41	2.33	2.07	1.98	1.89	1.81	1.81	1.72
270.0	2.50	2.33	2.24	2.15	1.98	1.89	1.72	1.64	1.64
315.0	2.07	2.07	1.98	1.89	1.72	1.64	1.55	1.64	1.64
360.0	2.33	2.15	2.15	2.07	1.98	1.89	1.72	1.64	1.64

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	1.64
45.0	1.72
90.0	1.72
135.0	1.81
180.0	1.89
225.0	1.64
270.0	1.55
315.0	1.55
360.0	1.64