
PQL 55176 LED 2 X 2 PANEL- 40W/50K- 120-277V/DIMMABLE/V4- SUPERIOR LIFE®

LumCAT: 55176

Report No: SENSING20100322s001

Test No:

LampCAT: 5000K

Lamp flux(lm): 3893.0

Number of Lamps:1

Length(mm): 600

Phm Type:C

Voltage(V): 0.000

Current(A): 0.000

Power (W): 39.900

PF:0.000

Ballast type:

Width(mm): 600

Height(mm): 10

Photometric Results

Lumens(lm): 3892.80

Efficiency(%): 99.99%

Lumens(lm)/Power(W): 97.56

Central intensity(cd): 1317.212

Maximum intensity(cd): 1321.696

Angle of maximum intensity: C=30.0 γ =0.0

Beam Angle(50%lmax): [V]Left=58.5 Right=55.2

[H]Left=59.1 Right=55.1

Field angle(10%lmax): [V]Left=83.9 Right=80.9

[H]Left=84.4 Right=80.4

Maximum s/h: C0_180=0.64 C90_270=0.64

Up flux rate of lamp(%): 0.57%

Down flux rate of lamp(%): 99.43%

Up flux rate of luminaire(%):0.57%

Down flux rate of luminaire(%):99.43%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 76.953%

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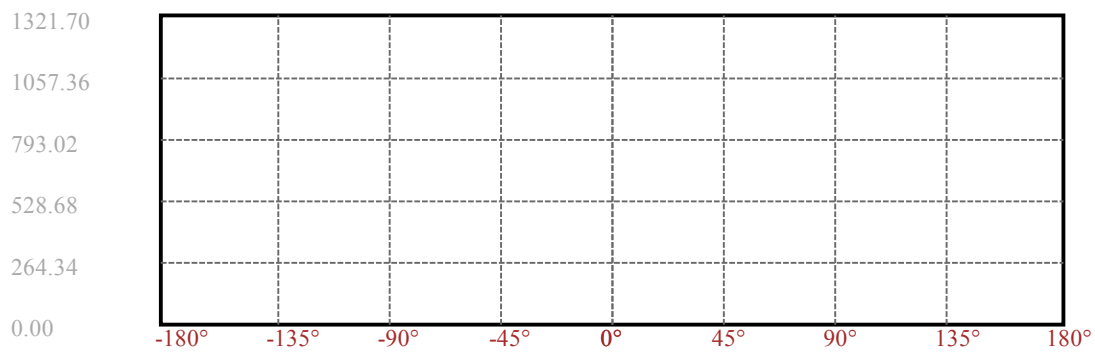
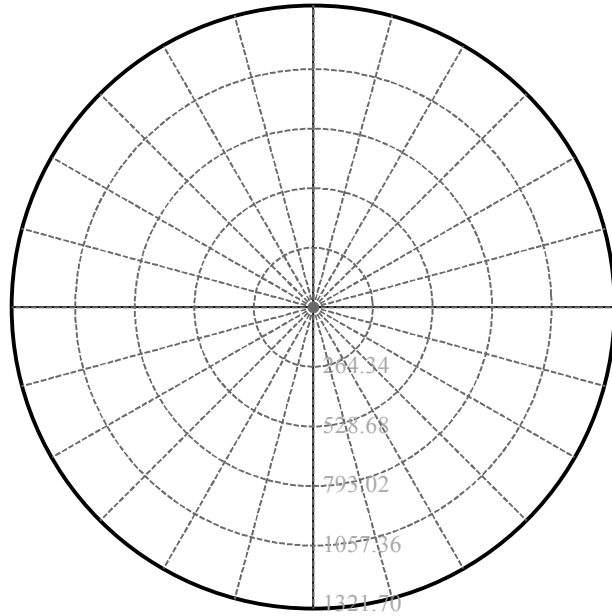
Zonal flux distribution table

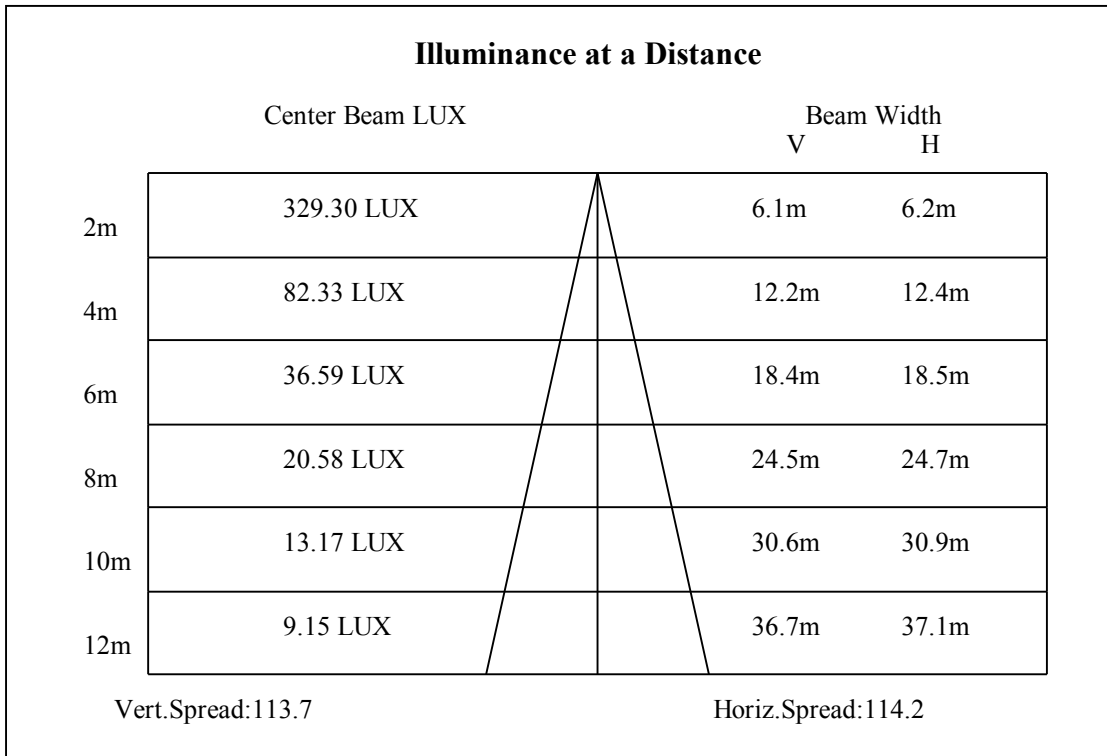
γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(lm)	Eff Sum(lm)
0.0	1318.917	.000	.000	.000%	.000%
5.0	1313.556	31.470	31.470	.808%	.808%
10.0	1295.413	93.331	124.802	2.397%	3.206%
15.0	1267.594	152.036	276.837	3.905%	7.111%
20.0	1228.685	205.729	482.566	5.285%	12.396%
25.0	1179.802	252.606	735.172	6.489%	18.884%
30.0	1120.379	291.090	1026.261	7.477%	26.362%
35.0	1052.509	319.973	1346.234	8.219%	34.581%
40.0	974.597	338.207	1684.442	8.688%	43.268%
45.0	888.640	344.993	2029.435	8.862%	52.130%
50.0	798.360	340.883	2370.318	8.756%	60.887%
55.0	699.981	325.789	2696.107	8.369%	69.255%
60.0	595.874	299.533	2995.641	7.694%	76.949%
65.0	491.936	264.449	3260.089	6.793%	83.742%
70.0	383.337	221.625	3481.714	5.693%	89.435%
75.0	277.959	172.852	3654.567	4.440%	93.875%
80.0	177.501	121.869	3776.435	3.130%	97.006%
85.0	81.595	70.403	3846.838	1.808%	98.814%
90.0	5.246	23.778	3870.615	.611%	99.425%
95.0	1.454	1.834	3872.450	.047%	99.472%
100.0	1.678	.851	3873.301	.022%	99.494%
105.0	1.971	.976	3874.278	.025%	99.519%
110.0	2.331	1.124	3875.402	.029%	99.548%
115.0	2.711	1.277	3876.678	.033%	99.581%
120.0	3.119	1.417	3878.096	.036%	99.617%
125.0	3.540	1.539	3879.635	.040%	99.657%
130.0	3.955	1.630	3881.265	.042%	99.699%
135.0	4.356	1.679	3882.944	.043%	99.742%
140.0	4.729	1.682	3884.626	.043%	99.785%
145.0	5.090	1.638	3886.264	.042%	99.827%
150.0	5.423	1.548	3887.813	.040%	99.867%
155.0	5.742	1.413	3889.225	.036%	99.903%
160.0	5.986	1.230	3890.455	.032%	99.935%
165.0	6.190	1.004	3891.459	.026%	99.960%
170.0	6.286	.740	3892.199	.019%	99.979%
175.0	6.347	.452	3892.651	.012%	99.991%
180.0	6.367	.152	3892.803	.004%	99.995%

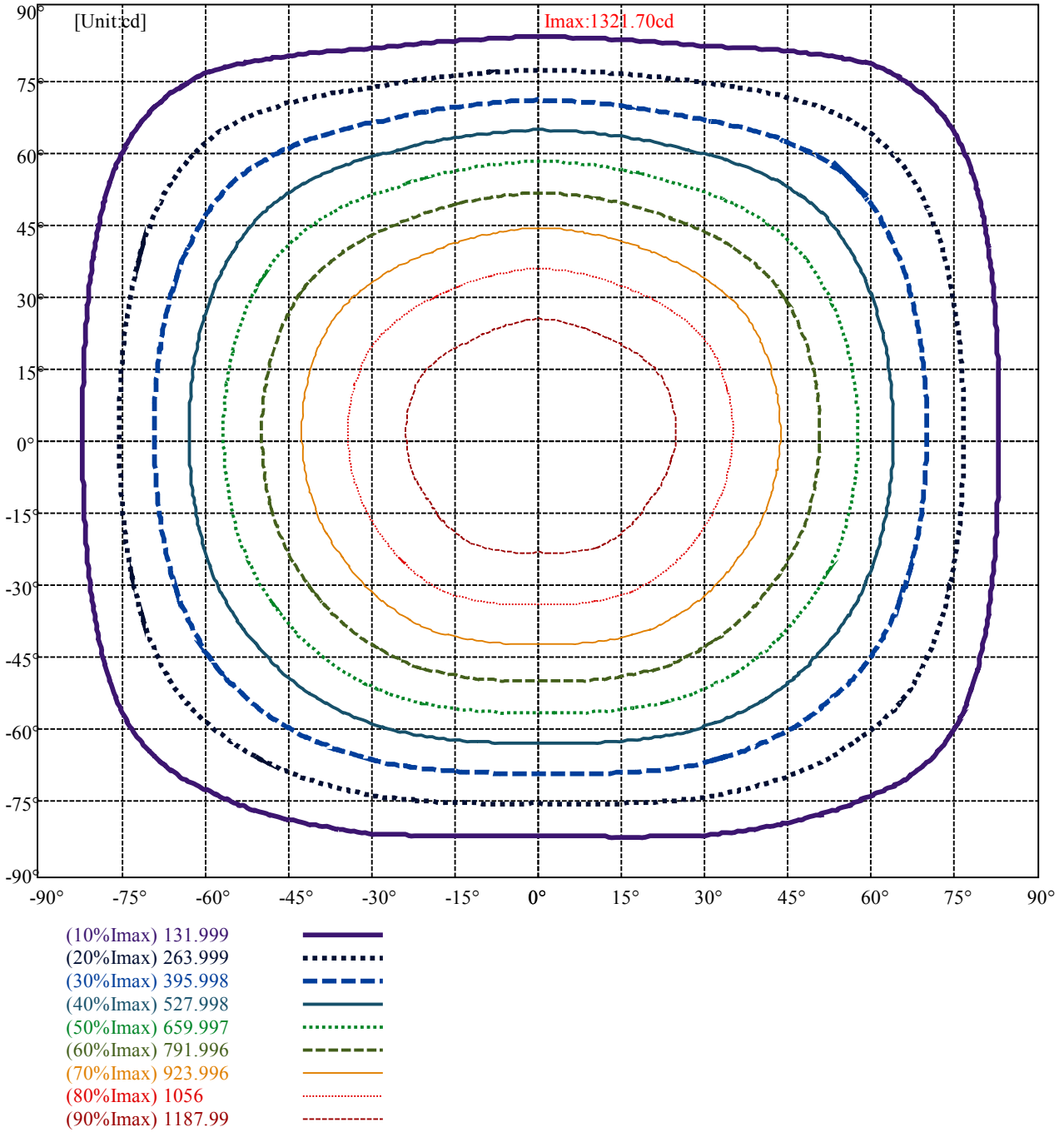
ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	1026.261	26.362%	26.363%
0-40	1684.442	43.268%	43.271%
0-60	2995.641	76.949%	76.953%
0-90	3870.615	99.425%	99.430%
90-120	7.480	.192%	.192%
90-130	10.649	.274%	.274%
90-150	17.197	.442%	.442%
90-180	22.035	.566%	.566%
0-180	3892.803	99.995%	100.000%

ZONAL LUMEN SUMMARY

0-10	124.802
10-20	357.764
20-30	543.696
30-40	658.180
40-50	685.876
50-60	625.323
60-70	486.074
70-80	294.721
80-90	94.180
90-100	2.686
100-110	2.101
110-120	2.694
120-130	3.169
130-140	3.361
140-150	3.186
150-160	2.643
160-170	1.744
170-180	.452



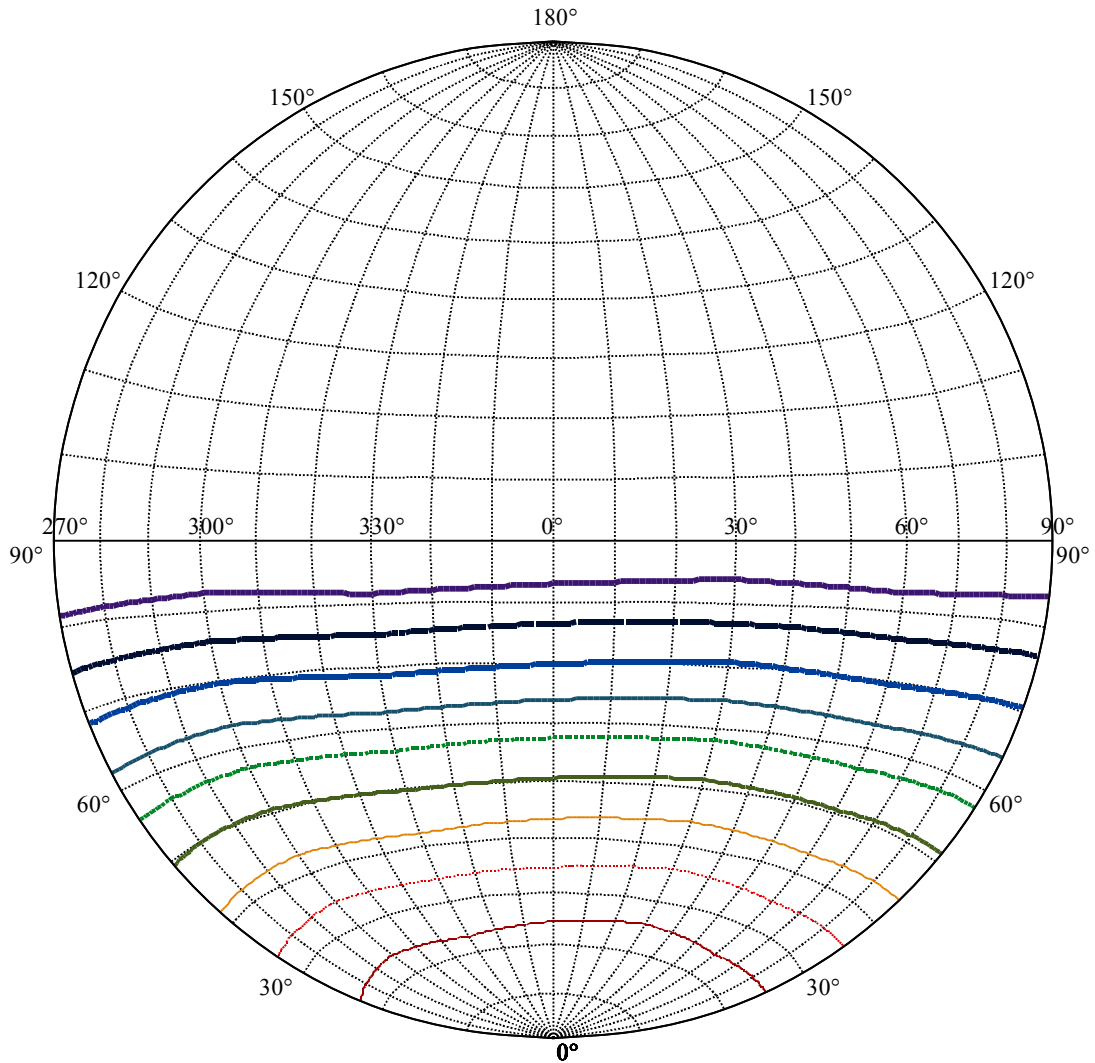




Equipment: GMS2200
 Temperature(°C): 25

Date:
 Humidity(%): 60%

Operator:
 Distance(m): 13.72

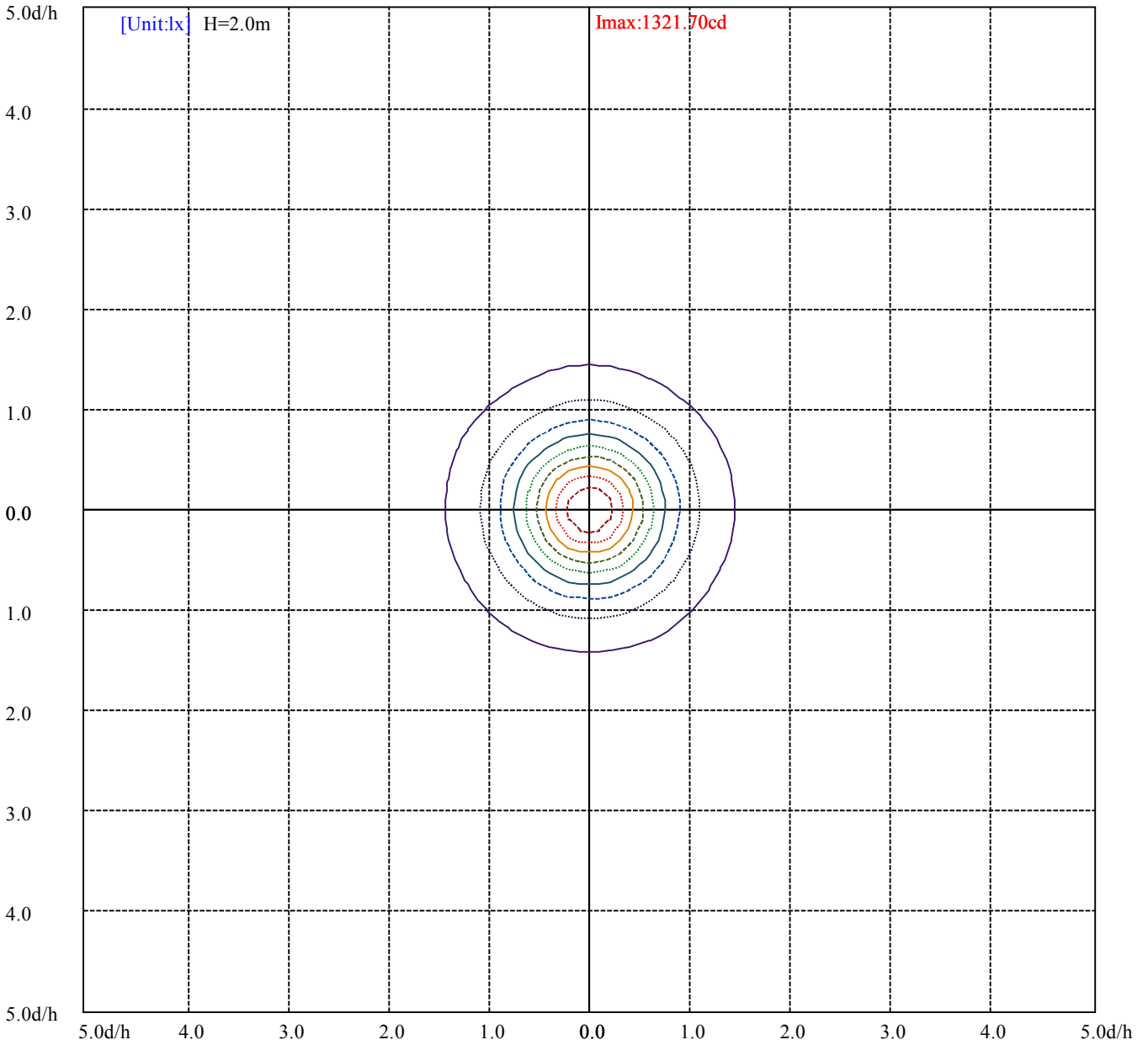


House

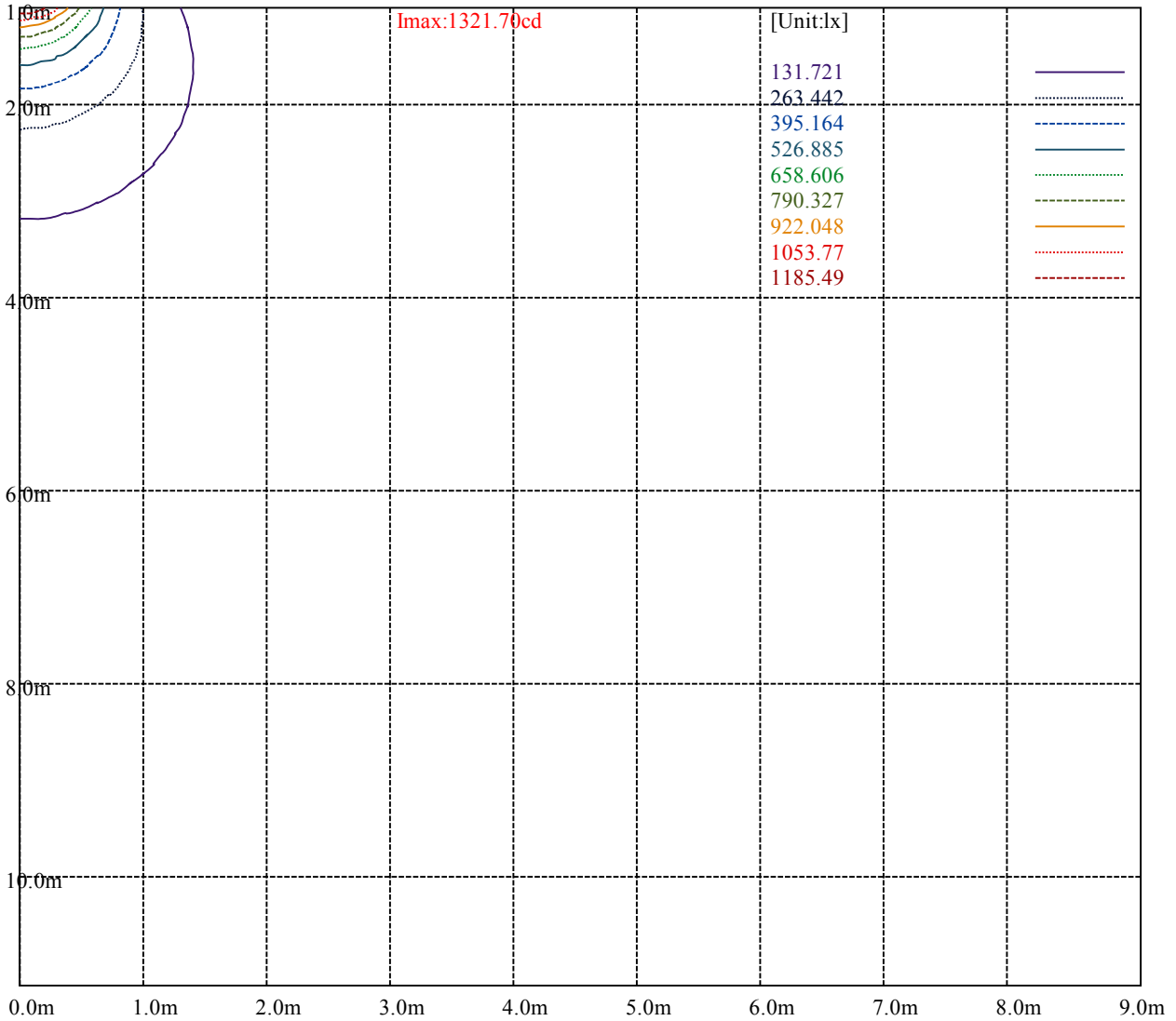
Road

I_{max}:1321.70cd

(10%I _{max}) 132.17	
(20%I _{max}) 264.339	
(30%I _{max}) 396.509	
(40%I _{max}) 528.678	
(50%I _{max}) 660.848	
(60%I _{max}) 793.018	
(70%I _{max}) 925.187	
(80%I _{max}) 1057.36	
(90%I _{max}) 1189.53	



(10%Emax) 33.01375	———
(20%Emax) 66.02775
(30%Emax) 99.0415	- - - - -
(40%Emax) 132.0555	———
(50%Emax) 165.0692
(60%Emax) 198.083	- - - - -
(70%Emax) 231.097	———
(80%Emax) 264.11
(90%Emax) 297.125	- - - - -

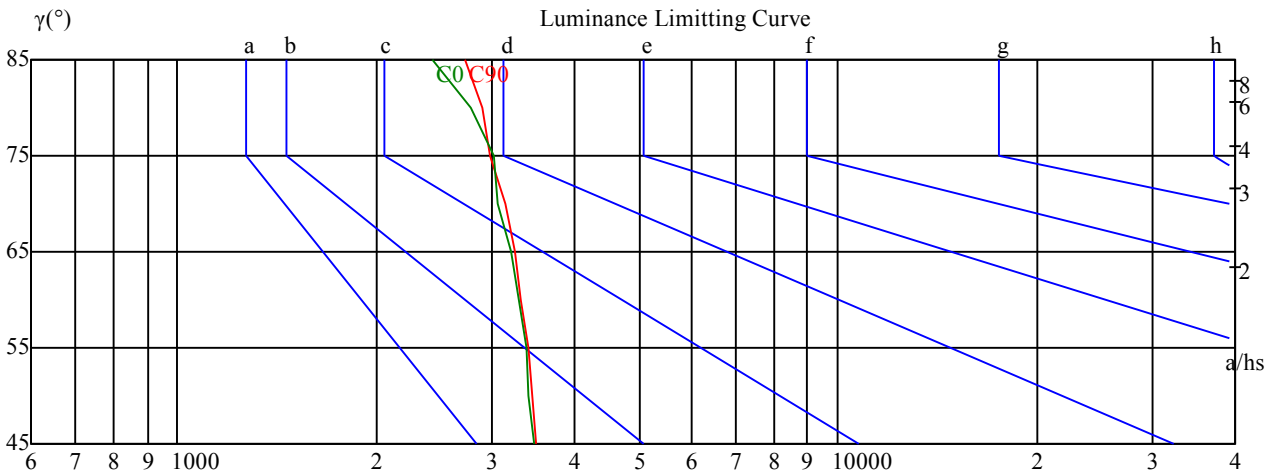


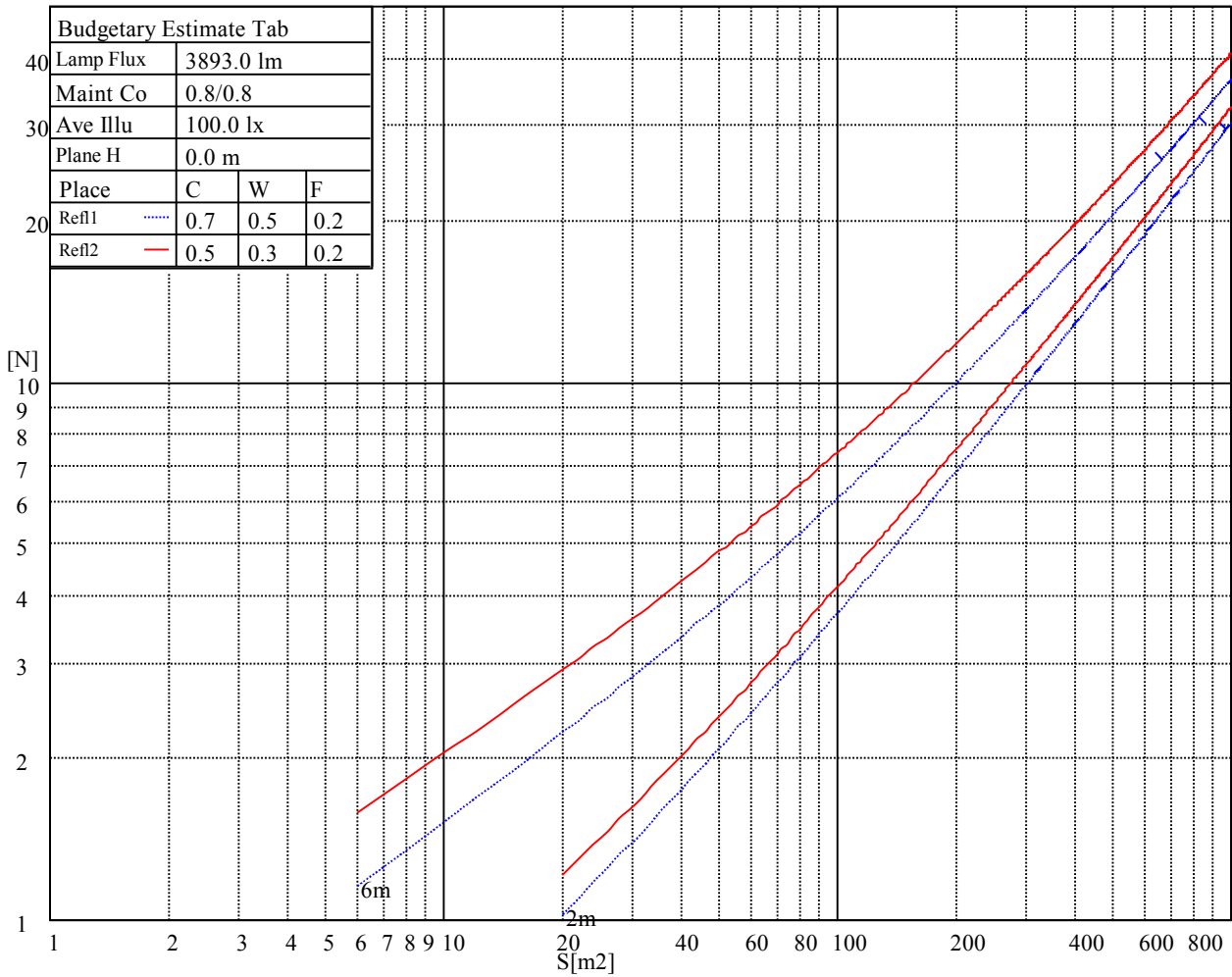
Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	3478	3406	3370	3296	3205	3050	3018	2785	2425
C45	0	0	0	0	0	0	0	0	0
C90	3500	3453	3398	3301	3247	3147	2975	2894	2735

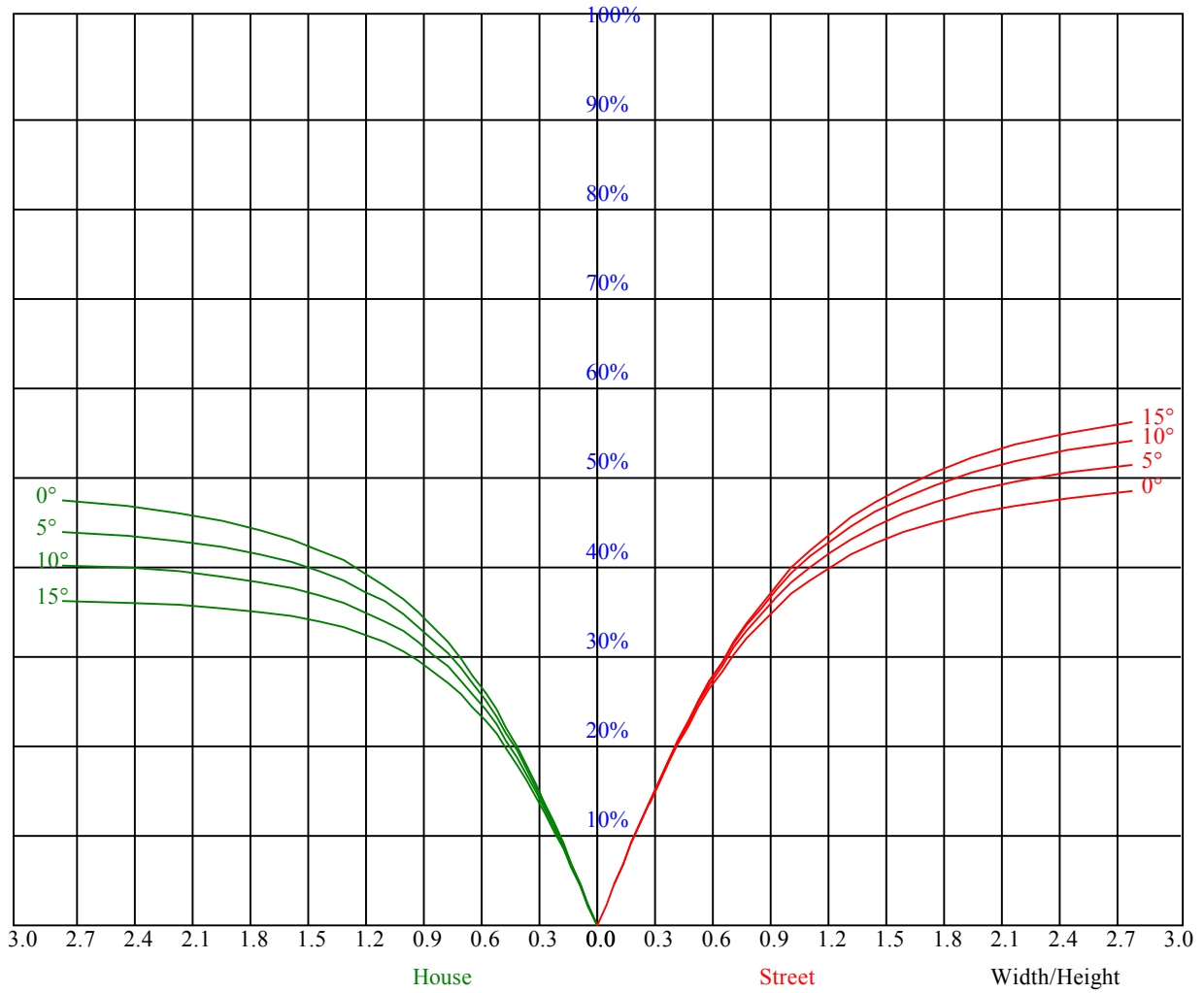
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
		a	b	c	d	e	f	g	h
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





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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	0.99
1	1.03	0.99	0.95	1.01	0.97	0.93	0.97	0.93	0.90	0.93	0.90	0.87	0.89	0.87	0.85	0.82
2	0.90	0.83	0.77	0.88	0.81	0.76	0.84	0.79	0.74	0.81	0.76	0.72	0.78	0.74	0.70	0.68
3	0.79	0.70	0.64	0.77	0.69	0.63	0.74	0.67	0.62	0.71	0.65	0.61	0.68	0.64	0.59	0.57
4	0.69	0.61	0.54	0.68	0.60	0.53	0.65	0.58	0.52	0.63	0.57	0.52	0.61	0.55	0.51	0.49
5	0.62	0.53	0.46	0.61	0.52	0.46	0.59	0.51	0.45	0.57	0.50	0.45	0.55	0.49	0.44	0.42
6	0.56	0.47	0.40	0.55	0.46	0.40	0.53	0.45	0.40	0.51	0.44	0.39	0.49	0.43	0.39	0.37
7	0.50	0.42	0.35	0.50	0.41	0.35	0.48	0.40	0.35	0.47	0.40	0.35	0.45	0.39	0.34	0.32
8	0.46	0.37	0.32	0.45	0.37	0.31	0.44	0.36	0.31	0.43	0.36	0.31	0.41	0.35	0.31	0.29
9	0.42	0.34	0.28	0.42	0.34	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28	0.26
10	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.30	0.25	0.36	0.30	0.25	0.35	0.29	0.25	0.23



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Intensity data(cd)										Page: 14 Total:15
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	
0.0	1317.21	1312.32	1297.64	1271.39	1233.80	1185.44	1127.30	1054.81	983.87	
30.0	1321.70	1319.33	1305.14	1279.30	1242.60	1195.72	1138.88	1072.51	993.33	
60.0	1319.41	1315.66	1296.42	1269.10	1230.78	1181.77	1123.31	1055.38	978.57	
90.0	1317.54	1314.44	1300.09	1274.40	1237.55	1191.31	1132.11	1065.25	993.82	
120.0	1319.09	1311.42	1293.16	1264.62	1224.50	1176.47	1117.60	1049.11	966.02	
150.0	1318.03	1315.09	1296.50	1269.84	1232.57	1186.34	1126.32	1059.22	985.91	
180.0	1317.21	1310.85	1293.48	1260.70	1224.83	1174.60	1110.42	1045.27	967.56	
210.0	1321.70	1312.48	1292.02	1261.36	1220.42	1168.73	1107.49	1036.79	952.40	
240.0	1320.47	1314.93	1294.95	1267.80	1228.33	1178.92	1117.60	1056.53	973.84	
270.0	1317.54	1310.12	1289.16	1262.82	1217.73	1166.20	1110.26	1035.08	957.05	
300.0	1319.09	1314.20	1295.20	1268.45	1229.72	1181.20	1122.41	1054.65	978.65	
330.0	1318.03	1311.83	1291.20	1261.36	1221.40	1170.93	1110.83	1045.52	964.14	
360.0	1317.21	1312.32	1297.64	1271.39	1233.80	1185.44	1127.30	1054.81	983.87	
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	
0.0	900.21	803.83	712.50	610.42	505.06	392.70	298.68	190.56	90.59	
30.0	914.40	824.22	723.27	621.83	521.78	415.21	304.07	206.87	110.24	
60.0	893.93	802.44	698.15	602.51	497.24	384.14	285.48	184.12	83.34	
90.0	905.84	815.00	718.29	611.39	511.67	405.26	294.44	197.98	102.17	
120.0	886.92	794.70	689.75	593.46	487.53	374.03	269.09	174.42	75.92	
150.0	898.83	807.58	714.79	607.64	501.97	394.98	289.06	187.46	92.88	
180.0	877.38	784.99	691.88	589.13	477.75	376.23	270.80	169.93	71.59	
210.0	865.31	778.23	679.07	563.61	468.86	361.47	249.84	149.63	57.41	
240.0	885.45	797.31	699.78	591.82	485.74	378.59	272.67	171.07	81.70	
270.0	865.64	782.71	678.67	575.35	469.19	361.88	256.53	155.91	63.28	
300.0	890.83	803.02	705.66	598.43	497.73	390.50	278.87	176.94	87.49	
330.0	878.93	786.30	687.96	584.89	478.73	365.06	265.99	165.12	62.54	
360.0	900.21	803.83	712.50	610.42	505.06	392.70	298.68	190.56	90.59	
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0	
0.0	10.76	1.47	1.71	1.96	2.28	2.69	3.10	3.51	4.00	
30.0	18.43	1.39	1.63	1.88	2.20	2.61	3.02	3.43	3.83	
60.0	2.85	1.47	1.63	1.96	2.37	2.69	3.10	3.51	3.91	
90.0	9.62	1.39	1.55	1.88	2.28	2.61	3.02	3.43	3.91	
120.0	1.55	1.47	1.63	1.96	2.28	2.69	3.10	3.59	4.00	
150.0	7.67	1.39	1.63	1.88	2.28	2.69	3.02	3.43	3.83	
180.0	1.31	1.47	1.71	1.96	2.28	2.69	3.10	3.51	3.91	
210.0	1.39	1.55	1.79	2.12	2.45	2.77	3.26	3.59	4.08	
240.0	2.77	1.47	1.71	2.04	2.37	2.77	3.18	3.59	4.00	
270.0	1.39	1.47	1.79	2.04	2.45	2.85	3.26	3.67	4.00	
300.0	3.83	1.47	1.63	1.96	2.37	2.69	3.10	3.59	3.91	
330.0	1.39	1.47	1.71	2.04	2.37	2.77	3.18	3.67	4.08	
360.0	10.76	1.47	1.71	1.96	2.28	2.69	3.10	3.51	4.00	
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0	
0.0	4.32	4.73	5.14	5.46	5.79	6.03	6.20	6.28	6.36	
30.0	4.32	4.65	5.06	5.38	5.71	5.95	6.20	6.28	6.36	
60.0	4.32	4.73	5.06	5.38	5.71	6.03	6.20	6.28	6.36	
90.0	4.32	4.73	5.06	5.38	5.71	5.95	6.12	6.28	6.28	
120.0	4.40	4.73	5.06	5.38	5.71	5.95	6.20	6.28	6.36	
150.0	4.24	4.65	4.97	5.30	5.63	5.87	6.12	6.28	6.36	
180.0	4.32	4.73	5.06	5.30	5.71	5.95	6.20	6.28	6.36	
210.0	4.49	4.81	5.14	5.55	5.79	6.03	6.28	6.36	6.36	
240.0	4.32	4.73	5.14	5.38	5.79	5.95	6.20	6.28	6.36	
270.0	4.49	4.81	5.14	5.55	5.79	6.03	6.20	6.28	6.36	
300.0	4.32	4.65	5.14	5.46	5.79	6.03	6.20	6.28	6.36	
330.0	4.40	4.81	5.14	5.55	5.79	6.03	6.20	6.28	6.28	
360.0	4.32	4.73	5.14	5.46	5.79	6.03	6.20	6.28	6.36	

Equipment: GMS2200
Temperature(°C): 25

Date:
Humidity(%): 60%

Operator:
Distance(m): 13.72

Intensity data(cd)

Page: 15 Total:15

C/γ(°)	180.0
0.0	6.36
30.0	6.36
60.0	6.36
90.0	6.36
120.0	6.36
150.0	6.36
180.0	6.36
210.0	6.36
240.0	6.44
270.0	6.36
300.0	6.36
330.0	6.36
360.0	6.36