

Report No	:		Voltage	:	V
Test No	:	A2404485A001	Current	:	A
LumCAT	:	LIT by CARDI	Power	:	150.000 W
Luminaire	:	0017160049 150W 4000K 24000lm	PF	:	
LampCAT	:		Ballast type	:	
Lamp flux	:	24000.0 lm	Width	:	-280 mm
Number of Lamps	:	1	Length	:	-280 mm
Phm Type	:	C	Height	:	0 mm

Photometric Results

Lumens(lm)	:	24000.00	Central intensity(cd)	:	9361.474
Efficiency(%)	:	100.00%	Maximum intensity(cd)	:	9361.487
Luminous Efficacy(lm/W)	:	160.00	Angle of maximum intensity	:	C=0.0 γ =1.0
Beam Angle(50%Imax)	:	[C0/180]Total=108.8 [C90/270]Total=109.6			
Field angle(10%Imax)	:	[C0/180]Total=143.0 [C90/270]Total=143.0			
Maximum s/h(1/2)	:	C0_180=1.29 C90_270=1.29			
Maximum s/h(1/4)	:	C0_180=1.40 C90_270=1.40			
Up flux rate of lamp(%)	:	0.05%			
Down flux rate of lamp(%)	:	99.95%			
Up flux rate of LUM(%)	:	0.05%			
Down flux rate of LUM(%)	:	99.95%			
CIE Type	:	Direct lighting			
Output flux ratio in π solid angle :	:	88.223%			

Zonal flux distribution table

Appendix Page: 2 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9361.474	0.000	0	0.00%	0.00%
0.5	9360.170	2.240	2.24	0.01%	0.01%
1.0	9357.690	6.717	8.957	0.03%	0.04%
1.5	9356.014	11.192	20.149	0.05%	0.08%
2.0	9353.641	15.664	35.813	0.07%	0.15%
2.5	9350.464	20.132	55.945	0.08%	0.23%
3.0	9347.136	24.594	80.538	0.10%	0.34%
3.5	9343.394	29.050	109.588	0.12%	0.46%
4.0	9338.665	33.498	143.086	0.14%	0.60%
4.5	9333.128	37.936	181.022	0.16%	0.75%
5.0	9327.105	42.363	223.385	0.18%	0.93%
5.5	9321.021	46.780	270.165	0.19%	1.13%
6.0	9313.452	51.183	321.349	0.21%	1.34%
6.5	9304.640	55.568	376.917	0.23%	1.57%
7.0	9297.039	59.941	436.858	0.25%	1.82%
7.5	9287.507	64.299	501.157	0.27%	2.09%
8.0	9277.050	68.633	569.79	0.29%	2.37%
8.5	9266.633	72.949	642.739	0.30%	2.68%
9.0	9256.587	77.252	719.991	0.32%	3.00%
9.5	9241.402	81.518	801.509	0.34%	3.34%
10.0	9230.614	85.762	887.271	0.36%	3.70%
10.5	9217.569	89.998	977.268	0.37%	4.07%
11.0	9204.788	94.205	1071.474	0.39%	4.46%
11.5	9189.082	98.380	1169.853	0.41%	4.87%
12.0	9173.139	102.515	1272.368	0.43%	5.30%
12.5	9158.564	106.635	1379.003	0.44%	5.75%
13.0	9142.160	110.729	1489.732	0.46%	6.21%
13.5	9124.881	114.783	1604.516	0.48%	6.69%
14.0	9105.898	118.797	1723.312	0.49%	7.18%
14.5	9088.357	122.782	1846.095	0.51%	7.69%
15.0	9066.818	126.724	1972.818	0.53%	8.22%
15.5	9047.810	130.627	2103.445	0.54%	8.76%
16.0	9027.502	134.511	2237.956	0.56%	9.32%
16.5	9007.598	138.359	2376.315	0.58%	9.90%
17.0	8983.511	142.148	2518.463	0.59%	10.49%
17.5	8958.821	145.868	2664.331	0.61%	11.10%
18.0	8934.665	149.554	2813.885	0.62%	11.72%
18.5	8911.786	153.221	2967.106	0.64%	12.36%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 3 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
19.0	8890.182	156.878	3123.985	0.65%	13.02%
19.5	8862.373	160.459	3284.443	0.67%	13.69%
20.0	8832.672	163.930	3448.373	0.68%	14.37%
20.5	8804.656	167.360	3615.733	0.70%	15.07%
21.0	8777.456	170.776	3786.509	0.71%	15.78%
21.5	8748.559	174.146	3960.655	0.73%	16.50%
22.0	8716.247	177.425	4138.08	0.74%	17.24%
22.5	8689.017	180.681	4318.761	0.75%	17.99%
23.0	8656.776	183.898	4502.659	0.77%	18.76%
23.5	8623.269	187.006	4689.665	0.78%	19.54%
24.0	8590.131	190.062	4879.727	0.79%	20.33%
24.5	8560.102	193.113	5072.839	0.80%	21.14%
25.0	8520.938	196.052	5268.891	0.82%	21.95%
25.5	8486.033	198.890	5467.781	0.83%	22.78%
26.0	8451.161	201.731	5669.512	0.84%	23.62%
26.5	8416.761	204.533	5874.045	0.85%	24.48%
27.0	8376.527	207.224	6081.268	0.86%	25.34%
27.5	8336.648	209.798	6291.066	0.87%	26.21%
28.0	8301.118	212.382	6503.448	0.88%	27.10%
28.5	8261.656	214.923	6718.371	0.90%	27.99%
29.0	8220.763	217.346	6935.717	0.91%	28.90%
29.5	8176.906	219.660	7155.377	0.92%	29.81%
30.0	8138.432	221.954	7377.331	0.92%	30.74%
30.5	8094.657	224.199	7601.529	0.93%	31.67%
31.0	8048.899	226.290	7827.819	0.94%	32.62%
31.5	8002.718	228.293	8056.112	0.95%	33.57%
32.0	7951.073	230.156	8286.268	0.96%	34.53%
32.5	7909.775	232.033	8518.301	0.97%	35.49%
33.0	7861.007	233.898	8752.199	0.97%	36.47%
33.5	7810.565	235.571	8987.769	0.98%	37.45%
34.0	7760.662	237.169	9224.938	0.99%	38.44%
34.5	7717.278	238.818	9463.756	1.00%	39.43%
35.0	7666.423	240.397	9704.153	1.00%	40.43%
35.5	7611.302	241.735	9945.888	1.01%	41.44%
36.0	7558.384	242.980	10188.868	1.01%	42.45%
36.5	7506.793	244.222	10433.09	1.02%	43.47%
37.0	7453.091	245.392	10678.483	1.02%	44.49%
37.5	7393.262	246.367	10924.849	1.03%	45.52%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 4 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	7343.738	247.349	11172.199	1.03%	46.55%
38.5	7285.219	248.294	11420.492	1.03%	47.59%
39.0	7224.600	248.988	11669.481	1.04%	48.62%
39.5	7164.821	249.598	11919.079	1.04%	49.66%
40.0	7111.488	250.271	12169.35	1.04%	50.71%
40.5	7042.223	250.716	12420.066	1.04%	51.75%
41.0	6980.540	250.947	12671.013	1.05%	52.80%
41.5	6919.386	251.259	12922.272	1.05%	53.84%
42.0	6848.755	251.344	13173.616	1.05%	54.89%
42.5	6788.736	251.383	13424.999	1.05%	55.94%
43.0	6719.186	251.378	13676.377	1.05%	56.98%
43.5	6656.386	251.255	13927.632	1.05%	58.03%
44.0	6582.566	250.986	14178.618	1.05%	59.08%
44.5	6516.970	250.598	14429.216	1.04%	60.12%
45.0	6442.060	250.121	14679.337	1.04%	61.16%
45.5	6373.226	249.515	14928.851	1.04%	62.20%
46.0	6290.214	248.682	15177.533	1.04%	63.24%
46.5	6216.437	247.681	15425.214	1.03%	64.27%
47.0	6136.427	246.670	15671.884	1.03%	65.30%
47.5	6044.351	245.221	15917.105	1.02%	66.32%
48.0	5970.244	243.817	16160.922	1.02%	67.34%
48.5	5881.510	242.410	16403.332	1.01%	68.35%
49.0	5789.314	240.560	16643.892	1.00%	69.35%
49.5	5698.264	238.586	16882.478	0.99%	70.34%
50.0	5617.546	236.776	17119.254	0.99%	71.33%
50.5	5520.701	234.774	17354.028	0.98%	72.31%
51.0	5415.870	232.187	17586.215	0.97%	73.28%
51.5	5322.628	229.599	17815.814	0.96%	74.23%
52.0	5219.155	226.963	18042.777	0.95%	75.18%
52.5	5122.885	224.186	18266.963	0.93%	76.11%
53.0	5002.932	220.973	18487.936	0.92%	77.03%
53.5	4913.738	217.837	18705.773	0.91%	77.94%
54.0	4793.256	214.613	18920.386	0.89%	78.83%
54.5	4677.167	210.714	19131.1	0.88%	79.71%
55.0	4571.917	207.074	19338.174	0.86%	80.58%
55.5	4463.738	203.536	19541.71	0.85%	81.42%
56.0	4339.197	199.486	19741.196	0.83%	82.25%
56.5	4215.579	195.007	19936.203	0.81%	83.07%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 5 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
57.0	4107.804	190.832	20127.035	0.80%	83.86%
57.5	3968.802	186.226	20313.261	0.78%	84.64%
58.0	3864.088	181.614	20494.875	0.76%	85.40%
58.5	3726.520	176.958	20671.833	0.74%	86.13%
59.0	3611.986	171.999	20843.832	0.72%	86.85%
59.5	3489.121	167.309	21011.141	0.70%	87.55%
60.0	3366.314	162.354	21173.495	0.68%	88.22%
60.5	3241.344	157.276	21330.771	0.66%	88.88%
61.0	3096.701	151.605	21482.376	0.63%	89.51%
61.5	2981.634	146.098	21628.475	0.61%	90.12%
62.0	2851.801	140.878	21769.352	0.59%	90.71%
62.5	2730.409	135.438	21904.79	0.56%	91.27%
63.0	2577.782	129.376	22034.166	0.54%	91.81%
63.5	2472.855	123.647	22157.812	0.52%	92.32%
64.0	2340.153	118.343	22276.156	0.49%	92.82%
64.5	2221.973	112.653	22388.809	0.47%	93.29%
65.0	2089.615	106.910	22495.719	0.45%	93.73%
65.5	1990.605	101.586	22597.305	0.42%	94.16%
66.0	1884.178	96.856	22694.161	0.40%	94.56%
66.5	1782.342	92.007	22786.167	0.38%	94.94%
67.0	1679.876	87.210	22873.377	0.36%	95.31%
67.5	1583.452	82.505	22955.883	0.34%	95.65%
68.0	1492.163	78.041	23033.924	0.33%	95.97%
68.5	1387.992	73.340	23107.263	0.31%	96.28%
69.0	1324.351	69.304	23176.568	0.29%	96.57%
69.5	1233.304	65.571	23242.139	0.27%	96.84%
70.0	1161.184	61.589	23303.727	0.26%	97.10%
70.5	1084.321	57.940	23361.667	0.24%	97.34%
71.0	1021.282	54.499	23416.166	0.23%	97.57%
71.5	947.250	51.104	23467.27	0.21%	97.78%
72.0	884.356	47.689	23514.959	0.20%	97.98%
72.5	826.196	44.663	23559.622	0.19%	98.17%
73.0	762.843	41.605	23601.227	0.17%	98.34%
73.5	713.757	38.764	23639.991	0.16%	98.50%
74.0	648.417	35.853	23675.843	0.15%	98.65%
74.5	605.872	33.096	23708.939	0.14%	98.79%
75.0	553.773	30.673	23739.612	0.13%	98.92%
75.5	510.468	28.215	23767.827	0.12%	99.03%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 6 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	464.525	25.907	23793.735	0.11%	99.14%
76.5	420.051	23.556	23817.291	0.10%	99.24%
77.0	383.551	21.445	23838.735	0.09%	99.33%
77.5	346.194	19.513	23858.248	0.08%	99.41%
78.0	311.049	17.608	23875.857	0.07%	99.48%
78.5	271.698	15.642	23891.498	0.07%	99.55%
79.0	249.067	14.003	23905.501	0.06%	99.61%
79.5	217.192	12.558	23918.059	0.05%	99.66%
80.0	195.718	11.139	23929.199	0.05%	99.70%
80.5	166.407	9.784	23938.983	0.04%	99.75%
81.0	145.426	8.438	23947.421	0.04%	99.78%
81.5	122.942	7.272	23954.693	0.03%	99.81%
82.0	103.516	6.144	23960.837	0.03%	99.84%
82.5	88.655	5.220	23966.057	0.02%	99.86%
83.0	73.471	4.409	23970.467	0.02%	99.88%
83.5	61.124	3.664	23974.131	0.02%	99.89%
84.0	47.226	2.953	23977.084	0.01%	99.90%
84.5	40.088	2.382	23979.465	0.01%	99.91%
85.0	30.975	1.940	23981.405	0.01%	99.92%
85.5	24.545	1.517	23982.922	0.01%	99.93%
86.0	18.343	1.173	23984.095	0.00%	99.93%
86.5	14.453	0.897	23984.992	0.00%	99.94%
87.0	10.490	0.683	23985.675	0.00%	99.94%
87.5	7.225	0.485	23986.16	0.00%	99.94%
88.0	5.707	0.354	23986.514	0.00%	99.94%
88.5	4.016	0.266	23986.781	0.00%	99.94%
89.0	2.941	0.191	23986.971	0.00%	99.95%
89.5	1.812	0.130	23987.102	0.00%	99.95%
90.0	1.322	0.086	23987.188	0.00%	99.95%
90.5	0.872	0.060	23987.248	0.00%	99.95%
91.0	0.649	0.042	23987.289	0.00%	99.95%
91.5	0.553	0.033	23987.322	0.00%	99.95%
92.0	0.514	0.029	23987.352	0.00%	99.95%
92.5	0.477	0.027	23987.379	0.00%	99.95%
93.0	0.381	0.023	23987.402	0.00%	99.95%
93.5	0.346	0.020	23987.422	0.00%	99.95%
94.0	0.263	0.017	23987.439	0.00%	99.95%
94.5	0.209	0.013	23987.452	0.00%	99.95%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 7 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
95.0	0.172	0.010	23987.462	0.00%	99.95%
95.5	0.132	0.008	23987.47	0.00%	99.95%
96.0	0.096	0.006	23987.477	0.00%	99.95%
96.5	0.096	0.005	23987.482	0.00%	99.95%
97.0	0.132	0.006	23987.488	0.00%	99.95%
97.5	0.122	0.007	23987.495	0.00%	99.95%
98.0	0.031	0.004	23987.499	0.00%	99.95%
98.5	0.000	0.001	23987.5	0.00%	99.95%
99.0	0.011	0.000	23987.5	0.00%	99.95%
99.5	0.065	0.002	23987.502	0.00%	99.95%
100.0	0.065	0.004	23987.506	0.00%	99.95%
100.5	0.011	0.002	23987.508	0.00%	99.95%
101.0	0.000	0.000	23987.508	0.00%	99.95%
101.5	0.000	0.000	23987.508	0.00%	99.95%
102.0	0.034	0.001	23987.509	0.00%	99.95%
102.5	0.119	0.004	23987.513	0.00%	99.95%
103.0	0.152	0.007	23987.52	0.00%	99.95%
103.5	0.192	0.009	23987.53	0.00%	99.95%
104.0	0.265	0.012	23987.542	0.00%	99.95%
104.5	0.317	0.015	23987.557	0.00%	99.95%
105.0	0.445	0.020	23987.577	0.00%	99.95%
105.5	0.457	0.024	23987.601	0.00%	99.95%
106.0	0.381	0.022	23987.623	0.00%	99.95%
106.5	0.401	0.021	23987.644	0.00%	99.95%
107.0	0.534	0.025	23987.668	0.00%	99.95%
107.5	0.590	0.029	23987.698	0.00%	99.95%
108.0	0.611	0.031	23987.729	0.00%	99.95%
108.5	0.697	0.034	23987.763	0.00%	99.95%
109.0	0.829	0.040	23987.803	0.00%	99.95%
109.5	1.068	0.049	23987.852	0.00%	99.95%
110.0	1.167	0.058	23987.91	0.00%	99.95%
110.5	1.198	0.061	23987.97	0.00%	99.95%
111.0	1.222	0.062	23988.032	0.00%	99.95%
111.5	1.297	0.064	23988.097	0.00%	99.95%
112.0	1.297	0.066	23988.163	0.00%	99.95%
112.5	1.317	0.066	23988.229	0.00%	99.95%
113.0	1.392	0.068	23988.298	0.00%	99.95%
113.5	1.509	0.073	23988.371	0.00%	99.95%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 8 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
114.0	1.579	0.077	23988.448	0.00%	99.95%
114.5	1.603	0.080	23988.528	0.00%	99.95%
115.0	1.678	0.082	23988.609	0.00%	99.95%
115.5	1.656	0.083	23988.692	0.00%	99.95%
116.0	1.625	0.081	23988.773	0.00%	99.95%
116.5	1.602	0.079	23988.852	0.00%	99.95%
117.0	1.526	0.077	23988.929	0.00%	99.95%
117.5	1.526	0.074	23989.003	0.00%	99.95%
118.0	1.602	0.076	23989.079	0.00%	99.95%
118.5	1.602	0.077	23989.157	0.00%	99.95%
119.0	1.602	0.077	23989.234	0.00%	99.96%
119.5	1.582	0.076	23989.31	0.00%	99.96%
120.0	1.546	0.074	23989.384	0.00%	99.96%
120.5	1.526	0.073	23989.457	0.00%	99.96%
121.0	1.546	0.072	23989.529	0.00%	99.96%
121.5	1.582	0.073	23989.603	0.00%	99.96%
122.0	1.602	0.074	23989.677	0.00%	99.96%
122.5	1.613	0.075	23989.751	0.00%	99.96%
123.0	1.701	0.076	23989.828	0.00%	99.96%
123.5	1.839	0.081	23989.909	0.00%	99.96%
124.0	1.941	0.086	23989.995	0.00%	99.96%
124.5	1.972	0.089	23990.084	0.00%	99.96%
125.0	1.995	0.089	23990.173	0.00%	99.96%
125.5	2.038	0.090	23990.263	0.00%	99.96%
126.0	2.157	0.093	23990.357	0.00%	99.96%
126.5	2.213	0.097	23990.453	0.00%	99.96%
127.0	2.288	0.099	23990.552	0.00%	99.96%
127.5	2.288	0.100	23990.652	0.00%	99.96%
128.0	2.288	0.099	23990.751	0.00%	99.96%
128.5	2.288	0.099	23990.85	0.00%	99.96%
129.0	2.288	0.098	23990.948	0.00%	99.96%
129.5	2.288	0.097	23991.045	0.00%	99.96%
130.0	2.288	0.096	23991.141	0.00%	99.96%
130.5	2.288	0.096	23991.237	0.00%	99.96%
131.0	2.299	0.095	23991.332	0.00%	99.96%
131.5	2.373	0.096	23991.429	0.00%	99.96%
132.0	2.465	0.099	23991.528	0.00%	99.96%
132.5	2.638	0.104	23991.631	0.00%	99.97%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 9 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
133.0	2.797	0.109	23991.74	0.00%	99.97%
133.5	2.916	0.114	23991.855	0.00%	99.97%
134.0	3.048	0.118	23991.973	0.00%	99.97%
134.5	3.052	0.120	23992.092	0.00%	99.97%
135.0	3.147	0.121	23992.213	0.00%	99.97%
135.5	3.184	0.122	23992.335	0.00%	99.97%
136.0	3.204	0.122	23992.458	0.00%	99.97%
136.5	3.204	0.121	23992.579	0.00%	99.97%
137.0	3.204	0.120	23992.699	0.00%	99.97%
137.5	3.204	0.119	23992.819	0.00%	99.97%
138.0	3.204	0.118	23992.937	0.00%	99.97%
138.5	3.204	0.117	23993.054	0.00%	99.97%
139.0	3.204	0.116	23993.17	0.00%	99.97%
139.5	3.204	0.115	23993.284	0.00%	99.97%
140.0	3.236	0.114	23993.398	0.00%	99.97%
140.5	3.431	0.117	23993.515	0.00%	99.97%
141.0	3.556	0.121	23993.636	0.00%	99.97%
141.5	3.506	0.121	23993.758	0.00%	99.97%
142.0	3.552	0.120	23993.877	0.00%	99.97%
142.5	3.694	0.122	23993.999	0.00%	99.97%
143.0	3.769	0.124	23994.123	0.00%	99.98%
143.5	3.891	0.126	23994.249	0.00%	99.98%
144.0	4.012	0.128	23994.377	0.00%	99.98%
144.5	4.043	0.129	23994.506	0.00%	99.98%
145.0	4.044	0.128	23994.634	0.00%	99.98%
145.5	4.119	0.128	23994.761	0.00%	99.98%
146.0	4.119	0.127	23994.888	0.00%	99.98%
146.5	4.119	0.125	23995.014	0.00%	99.98%
147.0	4.119	0.124	23995.138	0.00%	99.98%
147.5	4.119	0.122	23995.26	0.00%	99.98%
148.0	4.119	0.121	23995.38	0.00%	99.98%
148.5	4.119	0.119	23995.499	0.00%	99.98%
149.0	4.119	0.117	23995.616	0.00%	99.98%
149.5	4.142	0.116	23995.732	0.00%	99.98%
150.0	4.173	0.115	23995.847	0.00%	99.98%
150.5	4.207	0.114	23995.961	0.00%	99.98%
151.0	4.273	0.114	23996.074	0.00%	99.98%
151.5	4.337	0.114	23996.188	0.00%	99.98%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 10 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
152.0	4.368	0.113	23996.301	0.00%	99.98%
152.5	4.405	0.112	23996.413	0.00%	99.99%
153.0	4.445	0.111	23996.524	0.00%	99.99%
153.5	4.557	0.111	23996.635	0.00%	99.99%
154.0	4.588	0.111	23996.746	0.00%	99.99%
154.5	4.684	0.110	23996.856	0.00%	99.99%
155.0	4.753	0.110	23996.967	0.00%	99.99%
155.5	4.745	0.109	23997.076	0.00%	99.99%
156.0	4.823	0.108	23997.184	0.00%	99.99%
156.5	4.848	0.107	23997.29	0.00%	99.99%
157.0	4.813	0.105	23997.395	0.00%	99.99%
157.5	4.837	0.102	23997.497	0.00%	99.99%
158.0	4.935	0.101	23997.599	0.00%	99.99%
158.5	4.948	0.100	23997.699	0.00%	99.99%
159.0	4.905	0.098	23997.797	0.00%	99.99%
159.5	4.948	0.096	23997.893	0.00%	99.99%
160.0	4.978	0.094	23997.987	0.00%	99.99%
160.5	5.015	0.093	23998.079	0.00%	99.99%
161.0	5.016	0.091	23998.17	0.00%	99.99%
161.5	5.054	0.089	23998.259	0.00%	99.99%
162.0	5.053	0.087	23998.346	0.00%	99.99%
162.5	5.027	0.084	23998.43	0.00%	99.99%
163.0	5.120	0.082	23998.512	0.00%	99.99%
163.5	5.180	0.081	23998.594	0.00%	99.99%
164.0	5.307	0.080	23998.674	0.00%	99.99%
164.5	5.282	0.079	23998.753	0.00%	99.99%
165.0	5.249	0.076	23998.829	0.00%	100.00%
165.5	5.353	0.074	23998.903	0.00%	100.00%
166.0	5.416	0.073	23998.975	0.00%	100.00%
166.5	5.417	0.071	23999.046	0.00%	100.00%
167.0	5.491	0.069	23999.115	0.00%	100.00%
167.5	5.492	0.066	23999.181	0.00%	100.00%
168.0	5.492	0.064	23999.245	0.00%	100.00%
168.5	5.492	0.061	23999.306	0.00%	100.00%
169.0	5.492	0.059	23999.365	0.00%	100.00%
169.5	5.492	0.056	23999.421	0.00%	100.00%
170.0	5.492	0.054	23999.475	0.00%	100.00%
170.5	5.492	0.051	23999.526	0.00%	100.00%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

Zonal flux distribution table

Appendix Page: 11 Total:33

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
171.0	5.492	0.048	23999.574	0.00%	100.00%
171.5	5.492	0.046	23999.62	0.00%	100.00%
172.0	5.492	0.043	23999.663	0.00%	100.00%
172.5	5.492	0.041	23999.704	0.00%	100.00%
173.0	5.492	0.038	23999.742	0.00%	100.00%
173.5	5.492	0.035	23999.777	0.00%	100.00%
174.0	5.492	0.033	23999.81	0.00%	100.00%
174.5	5.492	0.030	23999.84	0.00%	100.00%
175.0	5.492	0.028	23999.868	0.00%	100.00%
175.5	5.492	0.025	23999.893	0.00%	100.00%
176.0	5.492	0.022	23999.915	0.00%	100.00%
176.5	5.492	0.020	23999.935	0.00%	100.00%
177.0	5.492	0.017	23999.952	0.00%	100.00%
177.5	5.492	0.014	23999.966	0.00%	100.00%
178.0	5.492	0.012	23999.978	0.00%	100.00%
178.5	5.492	0.009	23999.987	0.00%	100.00%
179.0	5.492	0.007	23999.994	0.00%	100.00%
179.5	5.492	0.004	23999.998	0.00%	100.00%
180.0	5.492	0.001	23999.999	0.00%	100.00%

Equipment:
Temperature($^{\circ}\text{C}$): 25.0

Date:
Humidity(%): 55.3%

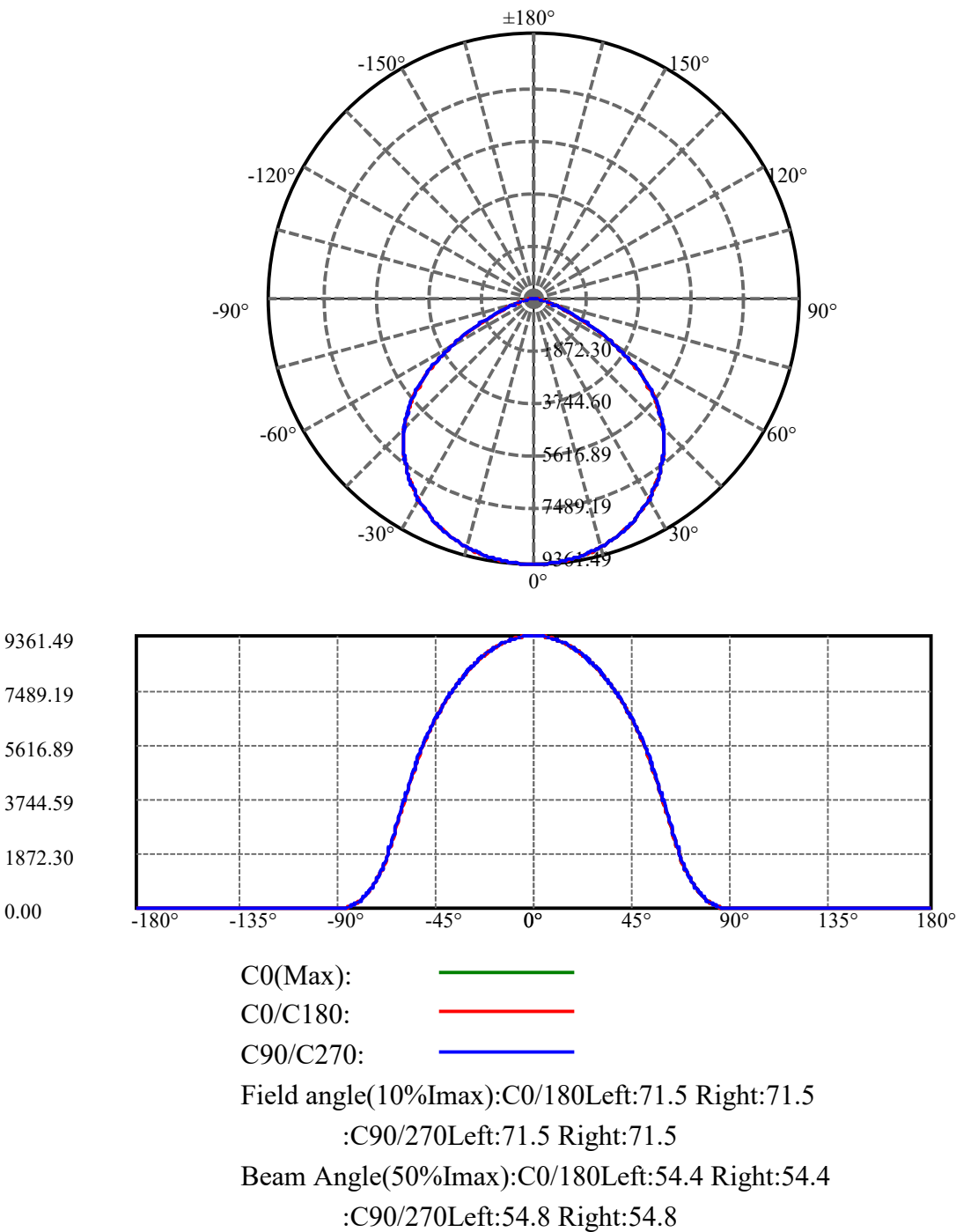
Operator: LDS

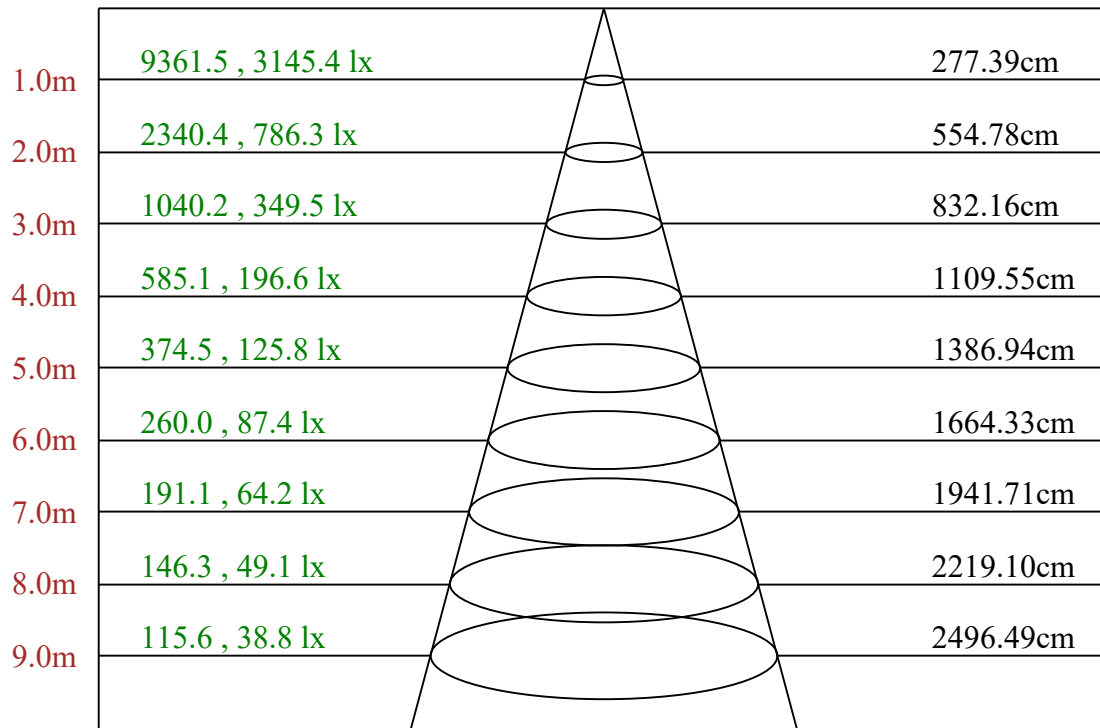
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	7377.33	30.74%	30.74%
0-40	12169.35	50.71%	50.71%
0-60	21173.49	88.22%	88.22%
0-90	23987.19	99.95%	99.95%
0-120	23989.38	99.96%	99.96%
0-180	24000.00	100.00%	100.00%
60-90	2813.69	11.72%	11.72%
90-120	2.20	0.01%	0.01%
90-130	3.95	0.02%	0.02%
90-150	8.66	0.04%	0.04%
90-180	12.81	0.05%	0.05%
0-54.67	19200.00	80.00%	80.00%

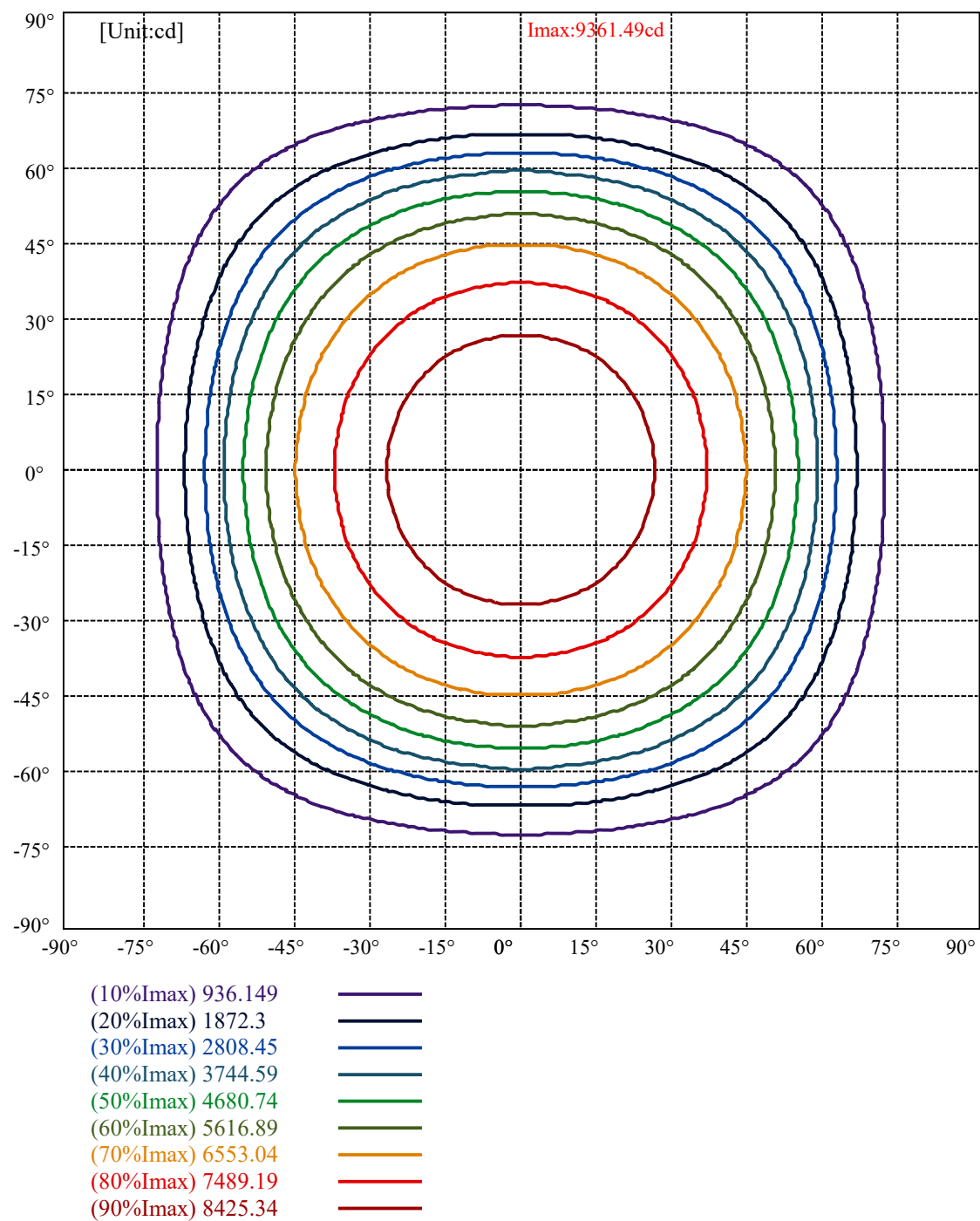
ZONAL LUMEN SUMMARY

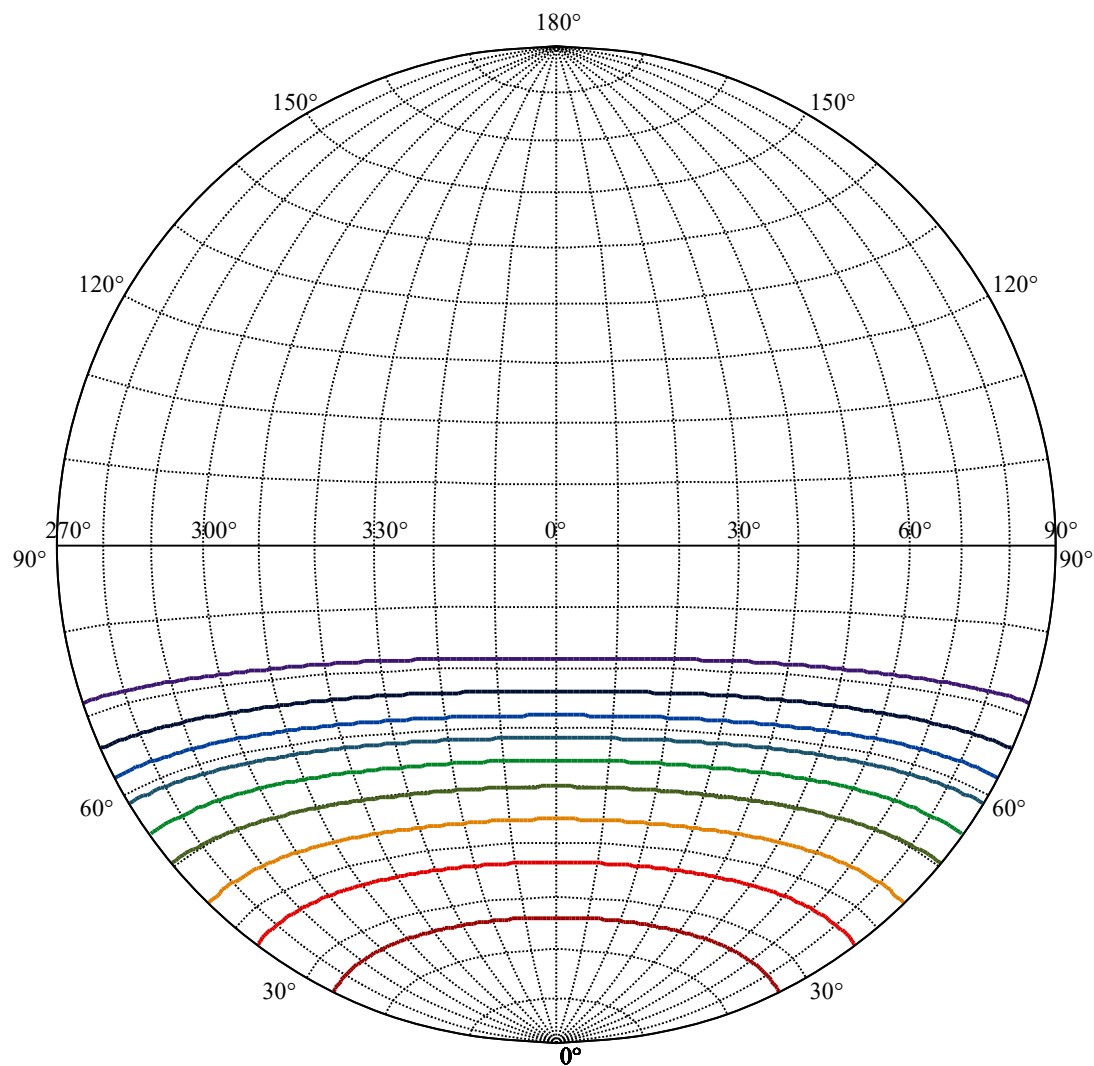
0-10	887.27
10-20	2561.10
20-30	3928.96
30-40	4792.02
40-50	4949.90
50-60	4054.24
60-70	2130.23
70-80	625.47
80-90	57.99
90-100	0.32
100-110	0.40
110-120	1.47
120-130	1.76
130-140	2.26
140-150	2.45
150-160	2.14
160-170	1.49
170-180	0.52





Max , Ave Beam angle of C0 plane 108.42



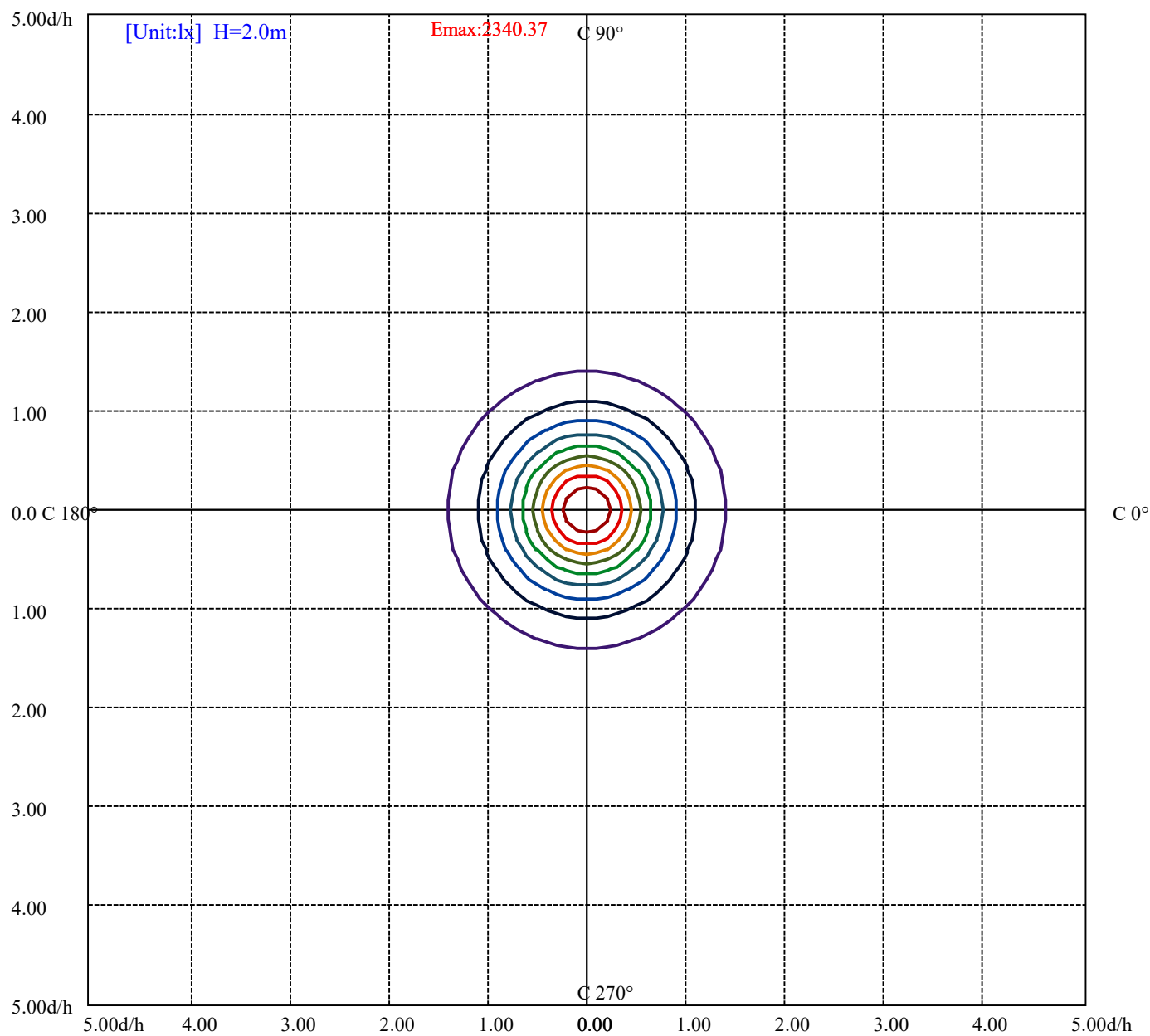


House

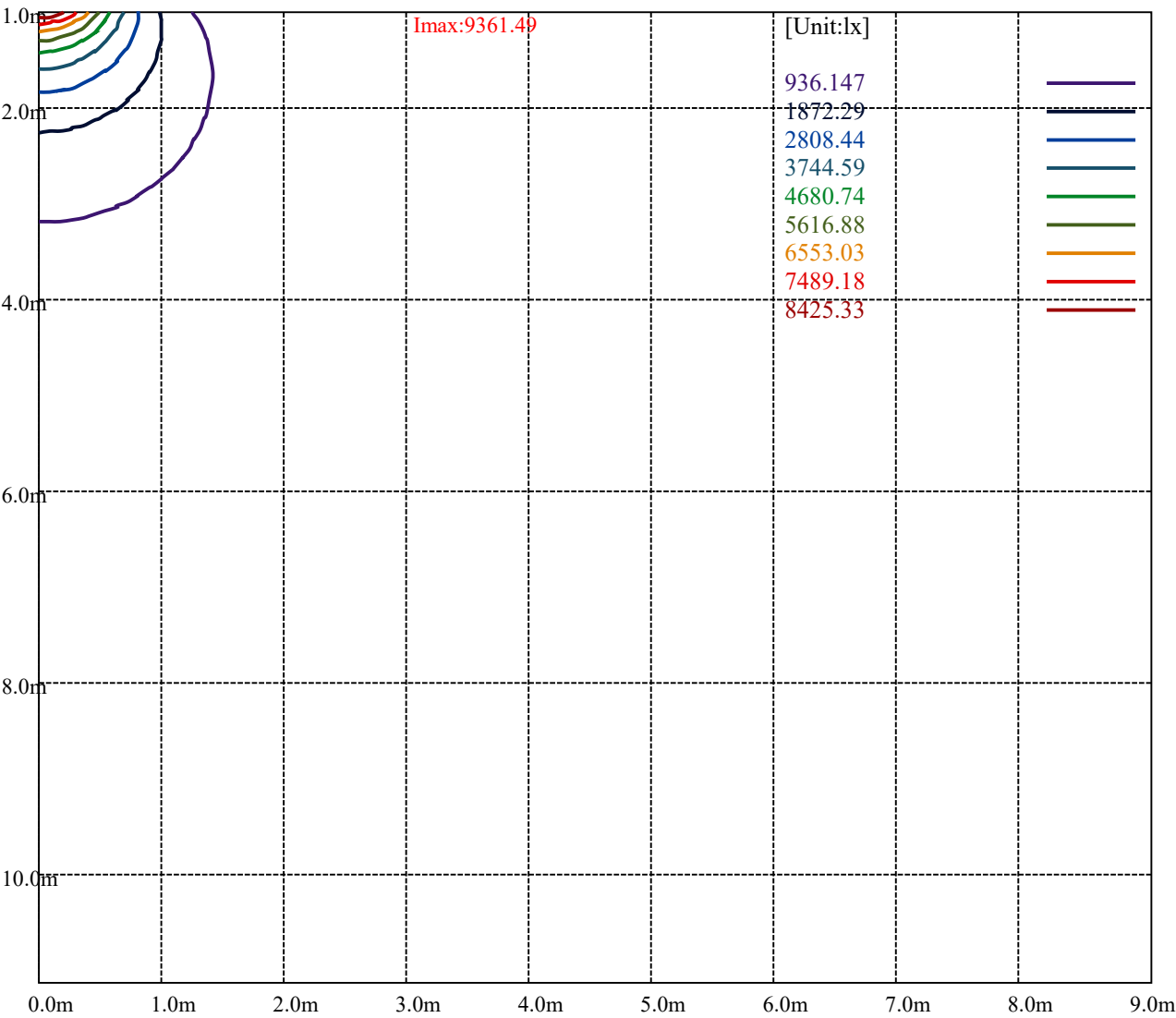
[Unit:cd]

Road

Imax:9361.49	
(10%Imax) 936.149	
(20%Imax) 1872.3	
(30%Imax) 2808.45	
(40%Imax) 3744.59	
(50%Imax) 4680.74	
(60%Imax) 5616.89	
(70%Imax) 6553.04	
(80%Imax) 7489.19	
(90%Imax) 8425.34	



(10%Emax) 234.0367	—
(20%Emax) 468.0725	—
(30%Emax) 702.11	—
(40%Emax) 936.1475	—
(50%Emax) 1170.185	—
(60%Emax) 1404.22	—
(70%Emax) 1638.257	—
(80%Emax) 1872.295	—
(90%Emax) 2106.333	—

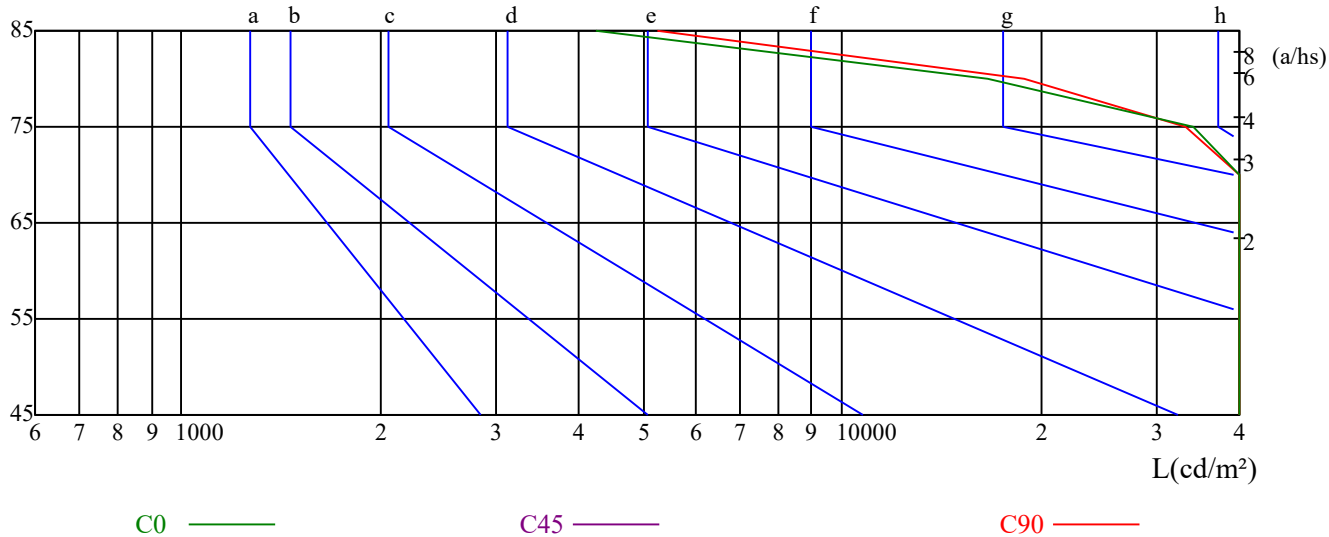


Appendix Page: 19 Total:33

γ	45	50	55	60	65	70	75	80	85
C0	148411	141829	129599	108504	79898	53843	34099	16620	4235
C45	0	0	0	0	0	0	0	0	0
C90	148001	143973	129789	112899	79902	56509	33181	18930	5241

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
79898	79902	0	34099	33181	0	4235	5241	0

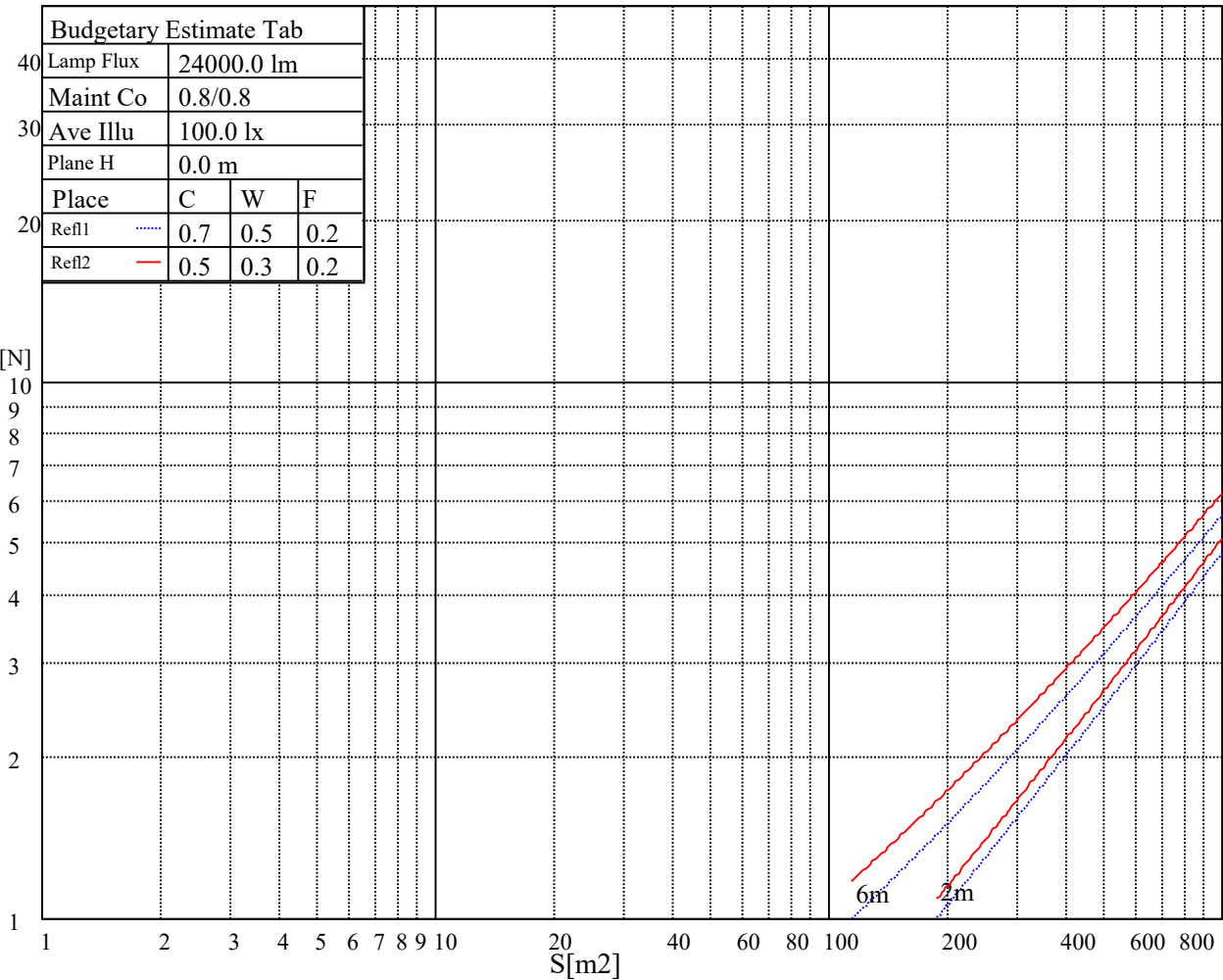
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

 $\gamma(^{\circ})$ 

Operator: LDS

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	29.29	30.84	29.65	31.15	31.47	29.36	30.90	29.72	31.22	31.53
	3H	29.91	31.29	30.29	31.63	31.97	29.97	31.35	30.35	31.69	32.03
	4H	29.99	31.28	30.38	31.63	31.99	30.05	31.34	30.44	31.69	32.05
	6H	29.99	31.19	30.40	31.56	31.95	30.05	31.25	30.46	31.61	32.01
	8H	29.94	31.09	30.35	31.47	31.87	30.00	31.15	30.41	31.53	31.93
	12H	29.89	30.99	30.30	31.37	31.78	29.95	31.05	30.36	31.43	31.84
4H	2H	29.72	31.01	30.11	31.36	31.72	29.76	31.06	30.16	31.41	31.77
	3H	30.39	31.47	30.81	31.86	32.27	30.43	31.51	30.85	31.90	32.31
	4H	30.55	31.50	30.99	31.91	32.35	30.59	31.53	31.02	31.95	32.39
	6H	30.54	31.37	31.00	31.81	32.26	30.57	31.40	31.03	31.85	32.29
	8H	30.51	31.29	30.98	31.74	32.20	30.54	31.32	31.02	31.77	32.23
	12H	30.48	31.20	30.96	31.64	32.15	30.51	31.24	30.99	31.68	32.18
8H	4H	30.52	31.30	31.00	31.75	32.22	30.56	31.34	31.03	31.78	32.25
	6H	30.51	31.16	31.00	31.63	32.13	30.54	31.19	31.03	31.66	32.16
	8H	30.53	31.10	31.05	31.61	32.10	30.56	31.12	31.08	31.63	32.12
	12H	30.50	30.97	31.02	31.48	31.99	30.52	31.00	31.05	31.51	32.02
12H	4H	30.50	31.22	30.98	31.66	32.17	30.53	31.25	31.01	31.70	32.20
	6H	30.52	31.09	31.04	31.60	32.09	30.55	31.11	31.07	31.63	32.12
	8H	30.50	30.98	31.03	31.49	32.00	30.53	31.00	31.05	31.51	32.02
Variation with the observer position at spacings:											
S = 1.0H		0.5/-0.4					0.5/-0.5				
S = 1.5H		0.7/-1.5					0.7/-1.5				
S = 2.0H		2.5/-2.9					2.5/-2.9				
Standard tables:		BK2					BK2				
Uncorrected UGR		12.9					12.8				

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



RHOC	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	1.00
1	1.06	1.03	0.99	1.04	1.01	0.98	1.00	0.97	0.95	0.96	0.94	0.92	0.92	0.91	0.89	0.87
2	0.94	0.88	0.83	0.92	0.87	0.82	0.89	0.84	0.80	0.86	0.82	0.78	0.83	0.79	0.77	0.75
3	0.83	0.76	0.70	0.82	0.75	0.69	0.79	0.73	0.68	0.76	0.71	0.67	0.74	0.70	0.66	0.64
4	0.74	0.66	0.60	0.73	0.65	0.60	0.71	0.64	0.59	0.68	0.63	0.58	0.66	0.61	0.57	0.55
5	0.67	0.58	0.52	0.66	0.58	0.52	0.63	0.56	0.51	0.62	0.55	0.51	0.60	0.54	0.50	0.48
6	0.60	0.52	0.46	0.59	0.51	0.45	0.57	0.50	0.45	0.56	0.49	0.45	0.54	0.49	0.44	0.42
7	0.55	0.46	0.40	0.54	0.46	0.40	0.52	0.45	0.40	0.51	0.44	0.40	0.50	0.44	0.39	0.37
8	0.50	0.42	0.36	0.49	0.41	0.36	0.48	0.41	0.36	0.47	0.40	0.35	0.45	0.40	0.35	0.33
9	0.46	0.38	0.32	0.45	0.38	0.32	0.44	0.37	0.32	0.43	0.37	0.32	0.42	0.36	0.32	0.30
10	0.42	0.34	0.29	0.42	0.34	0.29	0.41	0.34	0.29	0.40	0.33	0.29	0.39	0.33	0.29	0.27

C/γ(°)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
0.0	9361.47	9361.47	9361.49	9360.28	9358.65	9355.36	9352.62	9347.97	9344.41
30.0	9361.47	9359.45	9355.44	9351.99	9349.20	9345.48	9341.96	9337.97	9332.68
60.0	9361.47	9359.71	9357.50	9357.18	9355.18	9351.83	9349.11	9344.90	9341.43
90.0	9361.47	9361.23	9358.79	9357.48	9354.45	9352.80	9348.04	9346.65	9339.36
120.0	9361.47	9359.71	9357.50	9357.18	9355.18	9351.83	9349.11	9344.90	9341.43
150.0	9361.47	9359.45	9355.44	9351.99	9349.20	9345.48	9341.96	9337.97	9332.68
180.0	9361.47	9361.47	9361.49	9360.28	9358.65	9355.36	9352.62	9347.97	9344.41
210.0	9361.47	9359.45	9355.44	9351.99	9349.20	9345.48	9341.96	9337.97	9332.68
240.0	9361.47	9359.71	9357.50	9357.18	9355.18	9351.83	9349.11	9344.90	9341.43
270.0	9361.47	9361.23	9358.79	9357.48	9354.45	9352.80	9348.04	9346.65	9339.36
300.0	9361.47	9359.71	9357.50	9357.18	9355.18	9351.83	9349.11	9344.90	9341.43
330.0	9361.47	9359.45	9355.44	9351.99	9349.20	9345.48	9341.96	9337.97	9332.68
360.0	9361.47	9361.47	9361.49	9360.28	9358.65	9355.36	9352.62	9347.97	9344.41
C/γ(°)	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5
0.0	9338.63	9332.62	9325.23	9316.48	9308.72	9299.36	9292.77	9282.18	9274.67
30.0	9326.94	9321.14	9315.12	9307.49	9299.69	9291.46	9281.67	9270.21	9259.86
60.0	9335.28	9329.54	9323.40	9316.77	9308.80	9299.71	9291.65	9278.06	9269.62
90.0	9335.69	9328.67	9323.85	9315.70	9302.14	9300.55	9285.64	9283.59	9266.15
120.0	9335.28	9329.54	9323.40	9316.77	9308.80	9299.71	9291.65	9278.06	9269.62
150.0	9326.94	9321.14	9315.12	9307.49	9299.69	9291.46	9281.67	9270.21	9259.86
180.0	9338.63	9332.62	9325.23	9316.48	9308.72	9299.36	9292.77	9282.18	9274.67
210.0	9326.94	9321.14	9315.12	9307.49	9299.69	9291.46	9281.67	9270.21	9259.86
240.0	9335.28	9329.54	9323.40	9316.77	9308.80	9299.71	9291.65	9278.06	9269.62
270.0	9335.69	9328.67	9323.85	9315.70	9302.14	9300.55	9285.64	9283.59	9266.15
300.0	9335.28	9329.54	9323.40	9316.77	9308.80	9299.71	9291.65	9278.06	9269.62
330.0	9326.94	9321.14	9315.12	9307.49	9299.69	9291.46	9281.67	9270.21	9259.86
360.0	9338.63	9332.62	9325.23	9316.48	9308.72	9299.36	9292.77	9282.18	9274.67
C/γ(°)	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
0.0	9262.71	9250.67	9236.01	9220.10	9206.34	9190.10	9178.66	9161.08	9148.98
30.0	9249.41	9236.54	9223.29	9210.81	9198.06	9183.28	9166.28	9149.32	9133.95
60.0	9256.85	9244.70	9233.46	9221.56	9208.19	9191.86	9179.90	9162.97	9149.23
90.0	9264.28	9235.25	9234.16	9220.57	9209.89	9194.13	9167.82	9165.72	9137.62
120.0	9256.85	9244.70	9233.46	9221.56	9208.19	9191.86	9179.90	9162.97	9149.23
150.0	9249.41	9236.54	9223.29	9210.81	9198.06	9183.28	9166.28	9149.32	9133.95
180.0	9262.71	9250.67	9236.01	9220.10	9206.34	9190.10	9178.66	9161.08	9148.98
210.0	9249.41	9236.54	9223.29	9210.81	9198.06	9183.28	9166.28	9149.32	9133.95
240.0	9256.85	9244.70	9233.46	9221.56	9208.19	9191.86	9179.90	9162.97	9149.23
270.0	9264.28	9235.25	9234.16	9220.57	9209.89	9194.13	9167.82	9165.72	9137.62
300.0	9256.85	9244.70	9233.46	9221.56	9208.19	9191.86	9179.90	9162.97	9149.23
330.0	9249.41	9236.54	9223.29	9210.81	9198.06	9183.28	9166.28	9149.32	9133.95
360.0	9262.71	9250.67	9236.01	9220.10	9206.34	9190.10	9178.66	9161.08	9148.98
C/γ(°)	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5
0.0	9130.16	9116.94	9096.54	9076.72	9053.05	9028.15	9006.85	8982.35	8965.34
30.0	9116.43	9095.94	9076.15	9057.85	9039.64	9020.52	9000.94	8978.15	8952.22
60.0	9125.58	9111.08	9089.58	9070.15	9051.47	9032.38	9011.44	8986.11	8966.48
90.0	9135.12	9104.42	9102.14	9068.19	9051.60	9031.08	9013.98	8990.21	8950.19
120.0	9125.58	9111.08	9089.58	9070.15	9051.47	9032.38	9011.44	8986.11	8966.48
150.0	9116.43	9095.94	9076.15	9057.85	9039.64	9020.52	9000.94	8978.15	8952.22
180.0	9130.16	9116.94	9096.54	9076.72	9053.05	9028.15	9006.85	8982.35	8965.34
210.0	9116.43	9095.94	9076.15	9057.85	9039.64	9020.52	9000.94	8978.15	8952.22
240.0	9125.58	9111.08	9089.58	9070.15	9051.47	9032.38	9011.44	8986.11	8966.48
270.0	9135.12	9104.42	9102.14	9068.19	9051.60	9031.08	9013.98	8990.21	8950.19
300.0	9125.58	9111.08	9089.58	9070.15	9051.47	9032.38	9011.44	8986.11	8966.48
330.0	9116.43	9095.94	9076.15	9057.85	9039.64	9020.52	9000.94	8978.15	8952.22
360.0	9130.16	9116.94	9096.54	9076.72	9053.05	9028.15	9006.85	8982.35	8965.34

Intensity data(cd)

Appendix Page: 24 Total:33

C/γ(°)	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0
0.0	8939.38	8921.61	8893.89	8874.39	8845.06	8809.82	8774.31	8741.83	8719.46
30.0	8927.18	8908.10	8885.52	8853.47	8822.28	8796.41	8770.41	8740.60	8710.93
60.0	8933.49	8913.91	8886.88	8867.29	8835.89	8808.79	8782.91	8756.46	8726.93
90.0	8947.27	8905.08	8902.41	8858.32	8834.63	8807.70	8783.80	8755.41	8702.32
120.0	8933.49	8913.91	8886.88	8867.29	8835.89	8808.79	8782.91	8756.46	8726.93
150.0	8927.18	8908.10	8885.52	8853.47	8822.28	8796.41	8770.41	8740.60	8710.93
180.0	8939.38	8921.61	8893.89	8874.39	8845.06	8809.82	8774.31	8741.83	8719.46
210.0	8927.18	8908.10	8885.52	8853.47	8822.28	8796.41	8770.41	8740.60	8710.93
240.0	8933.49	8913.91	8886.88	8867.29	8835.89	8808.79	8782.91	8756.46	8726.93
270.0	8947.27	8905.08	8902.41	8858.32	8834.63	8807.70	8783.80	8755.41	8702.32
300.0	8933.49	8913.91	8886.88	8867.29	8835.89	8808.79	8782.91	8756.46	8726.93
330.0	8927.18	8908.10	8885.52	8853.47	8822.28	8796.41	8770.41	8740.60	8710.93
360.0	8939.38	8921.61	8893.89	8874.39	8845.06	8809.82	8774.31	8741.83	8719.46
C/γ(°)	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5
0.0	8685.66	8662.77	8627.48	8603.33	8566.40	8531.54	8489.84	8447.17	8410.69
30.0	8682.11	8649.76	8612.88	8580.13	8548.88	8513.13	8476.46	8443.23	8409.86
60.0	8692.46	8666.41	8622.10	8595.70	8556.94	8522.88	8490.82	8458.11	8422.14
90.0	8699.30	8645.56	8642.16	8585.80	8582.58	8522.07	8491.81	8457.11	8425.89
120.0	8692.46	8666.41	8622.10	8595.70	8556.94	8522.88	8490.82	8458.11	8422.14
150.0	8682.11	8649.76	8612.88	8580.13	8548.88	8513.13	8476.46	8443.23	8409.86
180.0	8685.66	8662.77	8627.48	8603.33	8566.40	8531.54	8489.84	8447.17	8410.69
210.0	8682.11	8649.76	8612.88	8580.13	8548.88	8513.13	8476.46	8443.23	8409.86
240.0	8692.46	8666.41	8622.10	8595.70	8556.94	8522.88	8490.82	8458.11	8422.14
270.0	8699.30	8645.56	8642.16	8585.80	8582.58	8522.07	8491.81	8457.11	8425.89
300.0	8692.46	8666.41	8622.10	8595.70	8556.94	8522.88	8490.82	8458.11	8422.14
330.0	8682.11	8649.76	8612.88	8580.13	8548.88	8513.13	8476.46	8443.23	8409.86
360.0	8685.66	8662.77	8627.48	8603.33	8566.40	8531.54	8489.84	8447.17	8410.69
C/γ(°)	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0
0.0	8369.26	8340.60	8297.36	8268.07	8223.05	8191.90	8145.10	8101.63	8049.58
30.0	8371.59	8328.52	8287.64	8250.83	8209.11	8162.38	8118.59	8078.62	8038.32
60.0	8379.21	8350.04	8307.74	8275.18	8218.70	8185.15	8138.80	8106.70	8055.61
90.0	8388.29	8322.17	8318.61	8249.83	8245.90	8174.49	8170.72	8095.68	8055.96
120.0	8379.21	8350.04	8307.74	8275.18	8218.70	8185.15	8138.80	8106.70	8055.61
150.0	8371.59	8328.52	8287.64	8250.83	8209.11	8162.38	8118.59	8078.62	8038.32
180.0	8369.26	8340.60	8297.36	8268.07	8223.05	8191.90	8145.10	8101.63	8049.58
210.0	8371.59	8328.52	8287.64	8250.83	8209.11	8162.38	8118.59	8078.62	8038.32
240.0	8379.21	8350.04	8307.74	8275.18	8218.70	8185.15	8138.80	8106.70	8055.61
270.0	8388.29	8322.17	8318.61	8249.83	8245.90	8174.49	8170.72	8095.68	8055.96
300.0	8379.21	8350.04	8307.74	8275.18	8218.70	8185.15	8138.80	8106.70	8055.61
330.0	8371.59	8328.52	8287.64	8250.83	8209.11	8162.38	8118.59	8078.62	8038.32
360.0	8369.26	8340.60	8297.36	8268.07	8223.05	8191.90	8145.10	8101.63	8049.58
C/γ(°)	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5
0.0	7995.38	7949.17	7897.95	7863.17	7810.05	7774.00	7719.22	7681.72	7625.11
30.0	7992.07	7946.36	7902.90	7854.33	7798.90	7749.82	7703.40	7651.22	7597.66
60.0	8011.72	7966.13	7913.30	7874.21	7807.07	7767.47	7713.21	7675.53	7615.46
90.0	8013.35	7932.29	7928.30	7845.80	7841.40	7755.40	7751.22	7663.34	7616.47
120.0	8011.72	7966.13	7913.30	7874.21	7807.07	7767.47	7713.21	7675.53	7615.46
150.0	7992.07	7946.36	7902.90	7854.33	7798.90	7749.82	7703.40	7651.22	7597.66
180.0	7995.38	7949.17	7897.95	7863.17	7810.05	7774.00	7719.22	7681.72	7625.11
210.0	7992.07	7946.36	7902.90	7854.33	7798.90	7749.82	7703.40	7651.22	7597.66
240.0	8011.72	7966.13	7913.30	7874.21	7807.07	7767.47	7713.21	7675.53	7615.46
270.0	8013.35	7932.29	7928.30	7845.80	7841.40	7755.40	7751.22	7663.34	7616.47
300.0	8011.72	7966.13	7913.30	7874.21	7807.07	7767.47	7713.21	7675.53	7615.46
330.0	7992.07	7946.36	7902.90	7854.33	7798.90	7749.82	7703.40	7651.22	7597.66
360.0	7995.38	7949.17	7897.95	7863.17	7810.05	7774.00	7719.22	7681.72	7625.11

Intensity data(cd)

Appendix Page: 25 Total:33

C/γ(°)	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0
0.0	7558.08	7490.86	7430.97	7390.05	7328.40	7286.67	7223.10	7180.09	7114.46
30.0	7548.74	7499.52	7443.54	7388.15	7335.75	7277.42	7210.64	7151.28	7095.33
60.0	7564.26	7515.48	7466.16	7411.80	7348.70	7301.80	7220.97	7173.70	7104.81
90.0	7566.22	7519.92	7468.19	7369.62	7365.12	7266.22	7261.29	7158.88	7154.18
120.0	7564.26	7515.48	7466.16	7411.80	7348.70	7301.80	7220.97	7173.70	7104.81
150.0	7548.74	7499.52	7443.54	7388.15	7335.75	7277.42	7210.64	7151.28	7095.33
180.0	7558.08	7490.86	7430.97	7390.05	7328.40	7286.67	7223.10	7180.09	7114.46
210.0	7548.74	7499.52	7443.54	7388.15	7335.75	7277.42	7210.64	7151.28	7095.33
240.0	7564.26	7515.48	7466.16	7411.80	7348.70	7301.80	7220.97	7173.70	7104.81
270.0	7566.22	7519.92	7468.19	7369.62	7365.12	7266.22	7261.29	7158.88	7154.18
300.0	7564.26	7515.48	7466.16	7411.80	7348.70	7301.80	7220.97	7173.70	7104.81
330.0	7548.74	7499.52	7443.54	7388.15	7335.75	7277.42	7210.64	7151.28	7095.33
360.0	7558.08	7490.86	7430.97	7390.05	7328.40	7286.67	7223.10	7180.09	7114.46

C/γ(°)	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5
0.0	7053.16	6979.86	6904.80	6840.23	6767.83	6718.22	6643.38	6592.66	6515.19
30.0	7032.28	6967.64	6908.96	6849.94	6782.57	6706.93	6635.39	6570.77	6497.28
60.0	7044.62	6987.69	6930.41	6866.76	6792.81	6742.47	6665.61	6593.90	6511.99
90.0	7046.37	6992.73	6932.78	6818.88	6813.82	6698.11	6692.95	6573.40	6568.07
120.0	7044.62	6987.69	6930.41	6866.76	6792.81	6742.47	6665.61	6593.90	6511.99
150.0	7032.28	6967.64	6908.96	6849.94	6782.57	6706.93	6635.39	6570.77	6497.28
180.0	7053.16	6979.86	6904.80	6840.23	6767.83	6718.22	6643.38	6592.66	6515.19
210.0	7032.28	6967.64	6908.96	6849.94	6782.57	6706.93	6635.39	6570.77	6497.28
240.0	7044.62	6987.69	6930.41	6866.76	6792.81	6742.47	6665.61	6593.90	6511.99
270.0	7046.37	6992.73	6932.78	6818.88	6813.82	6698.11	6692.95	6573.40	6568.07
300.0	7044.62	6987.69	6930.41	6866.76	6792.81	6742.47	6665.61	6593.90	6511.99
330.0	7032.28	6967.64	6908.96	6849.94	6782.57	6706.93	6635.39	6570.77	6497.28
360.0	7053.16	6979.86	6904.80	6840.23	6767.83	6718.22	6643.38	6592.66	6515.19

C/γ(°)	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0
0.0	6461.86	6380.97	6305.18	6214.46	6118.40	6035.68	5942.62	5879.11	5781.78
30.0	6414.26	6336.17	6264.74	6192.65	6110.05	6028.08	5949.21	5859.92	5757.57
60.0	6459.00	6373.80	6299.72	6228.62	6156.77	6076.08	5982.27	5911.09	5788.94
90.0	6443.99	6438.45	6307.18	6241.63	6166.53	6022.11	6015.89	5867.92	5861.10
120.0	6459.00	6373.80	6299.72	6228.62	6156.77	6076.08	5982.27	5911.09	5788.94
150.0	6414.26	6336.17	6264.74	6192.65	6110.05	6028.08	5949.21	5859.92	5757.57
180.0	6461.86	6380.97	6305.18	6214.46	6118.40	6035.68	5942.62	5879.11	5781.78
210.0	6414.26	6336.17	6264.74	6192.65	6110.05	6028.08	5949.21	5859.92	5757.57
240.0	6459.00	6373.80	6299.72	6228.62	6156.77	6076.08	5982.27	5911.09	5788.94
270.0	6443.99	6438.45	6307.18	6241.63	6166.53	6022.11	6015.89	5867.92	5861.10
300.0	6459.00	6373.80	6299.72	6228.62	6156.77	6076.08	5982.27	5911.09	5788.94
330.0	6414.26	6336.17	6264.74	6192.65	6110.05	6028.08	5949.21	5859.92	5757.57
360.0	6461.86	6380.97	6305.18	6214.46	6118.40	6035.68	5942.62	5879.11	5781.78

C/γ(°)	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5
0.0	5715.52	5613.54	5542.85	5435.63	5307.06	5177.79	5061.84	4982.69	4863.45
30.0	5666.54	5580.38	5483.03	5382.38	5290.27	5197.85	5092.45	4987.87	4888.05
60.0	5717.87	5616.27	5541.03	5422.76	5345.95	5236.09	5159.07	5037.54	4933.16
90.0	5705.25	5698.44	5533.24	5449.33	5356.29	5269.25	5172.45	4984.09	4976.56
120.0	5717.87	5616.27	5541.03	5422.76	5345.95	5236.09	5159.07	5037.54	4933.16
150.0	5666.54	5580.38	5483.03	5382.38	5290.27	5197.85	5092.45	4987.87	4888.05
180.0	5715.52	5613.54	5542.85	5435.63	5307.06	5177.79	5061.84	4982.69	4863.45
210.0	5666.54	5580.38	5483.03	5382.38	5290.27	5197.85	5092.45	4987.87	4888.05
240.0	5717.87	5616.27	5541.03	5422.76	5345.95	5236.09	5159.07	5037.54	4933.16
270.0	5705.25	5698.44	5533.24	5449.33	5356.29	5269.25	5172.45	4984.09	4976.56
300.0	5717.87	5616.27	5541.03	5422.76	5345.95	5236.09	5159.07	5037.54	4933.16
330.0	5666.54	5580.38	5483.03	5382.38	5290.27	5197.85	5092.45	4987.87	4888.05
360.0	5715.52	5613.54	5542.85	5435.63	5307.06	5177.79	5061.84	4982.69	4863.45

Equipment:
Temperature(°C): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

Intensity data(cd)

Appendix Page: 26 Total:33

C/γ(°)	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0
0.0	4782.76	4660.09	4577.20	4451.23	4334.10	4194.28	4052.33	3930.62	3796.26
30.0	4776.49	4649.23	4536.87	4431.29	4313.44	4192.66	4083.45	3973.78	3848.98
60.0	4818.30	4662.84	4598.33	4446.66	4351.58	4224.02	4135.92	3996.95	3878.94
90.0	4787.19	4778.78	4583.91	4575.32	4371.05	4265.83	4155.76	3940.74	3932.43
120.0	4818.30	4662.84	4598.33	4446.66	4351.58	4224.02	4135.92	3996.95	3878.94
150.0	4776.49	4649.23	4536.87	4431.29	4313.44	4192.66	4083.45	3973.78	3848.98
180.0	4782.76	4660.09	4577.20	4451.23	4334.10	4194.28	4052.33	3930.62	3796.26
210.0	4776.49	4649.23	4536.87	4431.29	4313.44	4192.66	4083.45	3973.78	3848.98
240.0	4818.30	4662.84	4598.33	4446.66	4351.58	4224.02	4135.92	3996.95	3878.94
270.0	4787.19	4778.78	4583.91	4575.32	4371.05	4265.83	4155.76	3940.74	3932.43
300.0	4818.30	4662.84	4598.33	4446.66	4351.58	4224.02	4135.92	3996.95	3878.94
330.0	4776.49	4649.23	4536.87	4431.29	4313.44	4192.66	4083.45	3973.78	3848.98
360.0	4782.76	4660.09	4577.20	4451.23	4334.10	4194.28	4052.33	3930.62	3796.26

C/γ(°)	58.5	59.0	59.5	60.0	60.5	61.0	61.5	62.0	62.5
0.0	3705.29	3569.60	3478.60	3340.59	3246.31	3104.83	2974.90	2822.43	2668.18
30.0	3710.72	3582.67	3468.83	3340.07	3197.12	3064.37	2947.75	2833.53	2706.73
60.0	3758.39	3615.06	3516.70	3350.63	3278.17	3107.95	3004.34	2864.53	2767.04
90.0	3715.61	3706.85	3485.06	3475.90	3251.18	3130.74	3010.71	2892.26	2766.73
120.0	3758.39	3615.06	3516.70	3350.63	3278.17	3107.95	3004.34	2864.53	2767.04
150.0	3710.72	3582.67	3468.83	3340.07	3197.12	3064.37	2947.75	2833.53	2706.73
180.0	3705.29	3569.60	3478.60	3340.59	3246.31	3104.83	2974.90	2822.43	2668.18
210.0	3710.72	3582.67	3468.83	3340.07	3197.12	3064.37	2947.75	2833.53	2706.73
240.0	3758.39	3615.06	3516.70	3350.63	3278.17	3107.95	3004.34	2864.53	2767.04
270.0	3715.61	3706.85	3485.06	3475.90	3251.18	3130.74	3010.71	2892.26	2766.73
300.0	3758.39	3615.06	3516.70	3350.63	3278.17	3107.95	3004.34	2864.53	2767.04
330.0	3710.72	3582.67	3468.83	3340.07	3197.12	3064.37	2947.75	2833.53	2706.73
360.0	3705.29	3569.60	3478.60	3340.59	3246.31	3104.83	2974.90	2822.43	2668.18

C/γ(°)	63.0	63.5	64.0	64.5	65.0	65.5	66.0	66.5	67.0
0.0	2537.09	2394.30	2299.61	2164.56	2079.18	1955.88	1876.13	1762.29	1641.25
30.0	2584.32	2474.35	2358.90	2228.62	2114.77	2013.61	1911.03	1806.63	1713.51
60.0	2613.50	2484.56	2359.29	2206.98	2074.85	1942.73	1870.14	1778.13	1669.47
90.0	2533.96	2525.02	2304.92	2296.07	2079.27	2075.06	1866.61	1762.24	1672.06
120.0	2613.50	2484.56	2359.29	2206.98	2074.85	1942.73	1870.14	1778.13	1669.47
150.0	2584.32	2474.35	2358.90	2228.62	2114.77	2013.61	1911.03	1806.63	1713.51
180.0	2537.09	2394.30	2299.61	2164.56	2079.18	1955.88	1876.13	1762.29	1641.25
210.0	2584.32	2474.35	2358.90	2228.62	2114.77	2013.61	1911.03	1806.63	1713.51
240.0	2613.50	2484.56	2359.29	2206.98	2074.85	1942.73	1870.14	1778.13	1669.47
270.0	2533.96	2525.02	2304.92	2296.07	2079.27	2075.06	1866.61	1762.24	1672.06
300.0	2613.50	2484.56	2359.29	2206.98	2074.85	1942.73	1870.14	1778.13	1669.47
330.0	2584.32	2474.35	2358.90	2228.62	2114.77	2013.61	1911.03	1806.63	1713.51
360.0	2537.09	2394.30	2299.61	2164.56	2079.18	1955.88	1876.13	1762.29	1641.25

C/γ(°)	67.5	68.0	68.5	69.0	69.5	70.0	70.5	71.0	71.5
0.0	1521.41	1425.30	1363.13	1274.30	1216.94	1133.93	1080.13	1002.91	935.53
30.0	1622.15	1524.14	1422.91	1337.42	1262.72	1180.64	1097.39	1026.45	966.14
60.0	1579.01	1490.68	1388.88	1329.14	1232.39	1140.91	1086.86	1008.49	942.46
90.0	1576.98	1498.05	1341.23	1338.69	1192.67	1190.07	1057.29	1054.92	930.78
120.0	1579.01	1490.68	1388.88	1329.14	1232.39	1140.91	1086.86	1008.49	942.46
150.0	1622.15	1524.14	1422.91	1337.42	1262.72	1180.64	1097.39	1026.45	966.14
180.0	1521.41	1425.30	1363.13	1274.30	1216.94	1133.93	1080.13	1002.91	935.53
210.0	1622.15	1524.14	1422.91	1337.42	1262.72	1180.64	1097.39	1026.45	966.14
240.0	1579.01	1490.68	1388.88	1329.14	1232.39	1140.91	1086.86	1008.49	942.46
270.0	1576.98	1498.05	1341.23	1338.69	1192.67	1190.07	1057.29	1054.92	930.78
300.0	1579.01	1490.68	1388.88	1329.14	1232.39	1140.91	1086.86	1008.49	942.46
330.0	1622.15	1524.14	1422.91	1337.42	1262.72	1180.64	1097.39	1026.45	966.14
360.0	1521.41	1425.30	1363.13	1274.30	1216.94	1133.93	1080.13	1002.91	935.53

Equipment:
Temperature(°C): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

C/γ(°)	72.0	72.5	73.0	73.5	74.0	74.5	75.0	75.5	76.0
0.0	858.33	787.70	729.85	670.13	631.73	577.71	543.44	493.44	460.77
30.0	907.24	851.27	796.04	736.20	674.62	622.87	577.99	528.28	478.19
60.0	882.68	825.70	769.93	714.18	645.98	597.88	547.21	492.75	459.36
90.0	867.97	815.51	715.27	711.64	617.57	616.03	528.80	527.31	451.29
120.0	882.68	825.70	769.93	714.18	645.98	597.88	547.21	492.75	459.36
150.0	907.24	851.27	796.04	736.20	674.62	622.87	577.99	528.28	478.19
180.0	858.33	787.70	729.85	670.13	631.73	577.71	543.44	493.44	460.77
210.0	907.24	851.27	796.04	736.20	674.62	622.87	577.99	528.28	478.19
240.0	882.68	825.70	769.93	714.18	645.98	597.88	547.21	492.75	459.36
270.0	867.97	815.51	715.27	711.64	617.57	616.03	528.80	527.31	451.29
300.0	882.68	825.70	769.93	714.18	645.98	597.88	547.21	492.75	459.36
330.0	907.24	851.27	796.04	736.20	674.62	622.87	577.99	528.28	478.19
360.0	858.33	787.70	729.85	670.13	631.73	577.71	543.44	493.44	460.77

C/γ(°)	76.5	77.0	77.5	78.0	78.5	79.0	79.5	80.0	80.5
0.0	414.41	374.99	331.04	292.90	262.37	229.51	207.58	177.71	159.82
30.0	435.61	399.16	363.65	325.81	289.79	260.93	233.68	204.33	179.51
60.0	412.20	373.55	338.42	304.44	266.43	244.29	212.52	192.76	159.59
90.0	410.29	380.90	341.98	312.90	255.39	254.46	203.18	202.41	160.43
120.0	412.20	373.55	338.42	304.44	266.43	244.29	212.52	192.76	159.59
150.0	435.61	399.16	363.65	325.81	289.79	260.93	233.68	204.33	179.51
180.0	414.41	374.99	331.04	292.90	262.37	229.51	207.58	177.71	159.82
210.0	435.61	399.16	363.65	325.81	289.79	260.93	233.68	204.33	179.51
240.0	412.20	373.55	338.42	304.44	266.43	244.29	212.52	192.76	159.59
270.0	410.29	380.90	341.98	312.90	255.39	254.46	203.18	202.41	160.43
300.0	412.20	373.55	338.42	304.44	266.43	244.29	212.52	192.76	159.59
330.0	435.61	399.16	363.65	325.81	289.79	260.93	233.68	204.33	179.51
360.0	414.41	374.99	331.04	292.90	262.37	229.51	207.58	177.71	159.82

C/γ(°)	81.0	81.5	82.0	82.5	83.0	83.5	84.0	84.5	85.0
0.0	134.12	112.90	89.52	71.68	57.72	44.92	37.12	27.71	22.73
30.0	159.79	142.31	124.31	108.40	93.21	77.74	63.03	52.69	44.33
60.0	129.59	109.39	92.29	77.45	64.02	51.88	38.94	32.66	23.17
90.0	159.69	121.35	98.36	88.54	68.65	62.60	42.32	42.11	28.13
120.0	129.59	109.39	92.29	77.45	64.02	51.88	38.94	32.66	23.17
150.0	159.79	142.31	124.31	108.40	93.21	77.74	63.03	52.69	44.33
180.0	134.12	112.90	89.52	71.68	57.72	44.92	37.12	27.71	22.73
210.0	159.79	142.31	124.31	108.40	93.21	77.74	63.03	52.69	44.33
240.0	129.59	109.39	92.29	77.45	64.02	51.88	38.94	32.66	23.17
270.0	159.69	121.35	98.36	88.54	68.65	62.60	42.32	42.11	28.13
300.0	129.59	109.39	92.29	77.45	64.02	51.88	38.94	32.66	23.17
330.0	159.79	142.31	124.31	108.40	93.21	77.74	63.03	52.69	44.33
360.0	134.12	112.90	89.52	71.68	57.72	44.92	37.12	27.71	22.73

C/γ(°)	85.5	86.0	86.5	87.0	87.5	88.0	88.5	89.0	89.5
0.0	15.96	11.91	7.33	4.86	2.44	1.60	1.21	0.97	0.70
30.0	35.81	28.44	23.09	18.65	14.68	11.78	8.95	6.20	3.84
60.0	15.86	11.82	7.83	5.02	3.28	2.09	1.37	1.02	0.79
90.0	27.98	17.62	17.54	10.74	4.99	4.91	2.26	2.24	0.90
120.0	15.86	11.82	7.83	5.02	3.28	2.09	1.37	1.02	0.79
150.0	35.81	28.44	23.09	18.65	14.68	11.78	8.95	6.20	3.84
180.0	15.96	11.91	7.33	4.86	2.44	1.60	1.21	0.97	0.70
210.0	35.81	28.44	23.09	18.65	14.68	11.78	8.95	6.20	3.84
240.0	15.86	11.82	7.83	5.02	3.28	2.09	1.37	1.02	0.79
270.0	27.98	17.62	17.54	10.74	4.99	4.91	2.26	2.24	0.90
300.0	15.86	11.82	7.83	5.02	3.28	2.09	1.37	1.02	0.79
330.0	35.81	28.44	23.09	18.65	14.68	11.78	8.95	6.20	3.84
360.0	15.96	11.91	7.33	4.86	2.44	1.60	1.21	0.97	0.70

C/ γ (°)	90.0	90.5	91.0	91.5	92.0	92.5	93.0	93.5	94.0
0.0	0.52	0.49	0.47	0.47	0.47	0.46	0.46	0.32	0.15
30.0	2.57	1.62	1.02	0.74	0.62	0.52	0.46	0.45	0.45
60.0	0.69	0.52	0.47	0.46	0.46	0.46	0.45	0.42	0.26
90.0	0.90	0.46	0.46	0.46	0.46	0.46	0.02	0.02	0.02
120.0	0.69	0.52	0.47	0.46	0.46	0.46	0.45	0.42	0.26
150.0	2.57	1.62	1.02	0.74	0.62	0.52	0.46	0.45	0.45
180.0	0.52	0.49	0.47	0.47	0.47	0.46	0.46	0.32	0.15
210.0	2.57	1.62	1.02	0.74	0.62	0.52	0.46	0.45	0.45
240.0	0.69	0.52	0.47	0.46	0.46	0.46	0.45	0.42	0.26
270.0	0.90	0.46	0.46	0.46	0.46	0.46	0.02	0.02	0.02
300.0	0.69	0.52	0.47	0.46	0.46	0.46	0.45	0.42	0.26
330.0	2.57	1.62	1.02	0.74	0.62	0.52	0.46	0.45	0.45
360.0	0.52	0.49	0.47	0.47	0.47	0.46	0.46	0.32	0.15
C/ γ (°)	94.5	95.0	95.5	96.0	96.5	97.0	97.5	98.0	98.5
0.0	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00
30.0	0.39	0.28	0.17	0.06	0.06	0.16	0.16	0.06	0.00
60.0	0.23	0.23	0.23	0.22	0.22	0.22	0.19	0.03	0.00
90.0	0.02	0.00	0.00	0.02	0.02	0.02	0.02	0.00	0.00
120.0	0.23	0.23	0.23	0.22	0.22	0.22	0.19	0.03	0.00
150.0	0.39	0.28	0.17	0.06	0.06	0.16	0.16	0.06	0.00
180.0	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00
210.0	0.39	0.28	0.17	0.06	0.06	0.16	0.16	0.06	0.00
240.0	0.23	0.23	0.23	0.22	0.22	0.22	0.19	0.03	0.00
270.0	0.02	0.00	0.00	0.02	0.02	0.02	0.02	0.00	0.00
300.0	0.23	0.23	0.23	0.22	0.22	0.22	0.19	0.03	0.00
330.0	0.39	0.28	0.17	0.06	0.06	0.16	0.16	0.06	0.00
360.0	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00
C/ γ (°)	99.0	99.5	100.0	100.5	101.0	101.5	102.0	102.5	103.0
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.31	0.44
30.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
60.0	0.03	0.19	0.19	0.03	0.00	0.00	0.03	0.19	0.22
90.0	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.02	0.02
120.0	0.03	0.19	0.19	0.03	0.00	0.00	0.03	0.19	0.22
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.31	0.44
210.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
240.0	0.03	0.19	0.19	0.03	0.00	0.00	0.03	0.19	0.22
270.0	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.02	0.02
300.0	0.03	0.19	0.19	0.03	0.00	0.00	0.03	0.19	0.22
330.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
360.0	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.31	0.44
C/ γ (°)	103.5	104.0	104.5	105.0	105.5	106.0	106.5	107.0	107.5
0.0	0.45	0.45	0.46	0.46	0.46	0.46	0.46	0.46	0.47
30.0	0.12	0.34	0.45	0.46	0.46	0.46	0.52	0.68	0.84
60.0	0.22	0.23	0.26	0.42	0.46	0.45	0.45	0.46	0.47
90.0	0.02	0.02	0.02	0.46	0.46	0.02	0.02	0.46	0.46
120.0	0.22	0.23	0.26	0.42	0.46	0.45	0.45	0.46	0.47
150.0	0.12	0.34	0.45	0.46	0.46	0.46	0.52	0.68	0.84
180.0	0.45	0.45	0.46	0.46	0.46	0.46	0.46	0.46	0.47
210.0	0.12	0.34	0.45	0.46	0.46	0.46	0.52	0.68	0.84
240.0	0.22	0.23	0.26	0.42	0.46	0.45	0.45	0.46	0.47
270.0	0.02	0.02	0.02	0.46	0.46	0.02	0.02	0.46	0.46
300.0	0.22	0.23	0.26	0.42	0.46	0.45	0.45	0.46	0.47
330.0	0.12	0.34	0.45	0.46	0.46	0.46	0.52	0.68	0.84
360.0	0.45	0.45	0.46	0.46	0.46	0.46	0.46	0.46	0.47

C/γ(°)	108.0	108.5	109.0	109.5	110.0	110.5	111.0	111.5	112.0
0.0	0.47	0.47	0.61	0.78	1.05	1.23	1.36	1.36	1.36
30.0	0.90	0.90	0.96	1.08	1.15	1.15	1.15	1.15	1.15
60.0	0.47	0.51	0.76	1.26	1.36	1.36	1.37	1.37	1.37
90.0	0.46	0.90	0.92	0.93	0.93	0.93	0.93	1.37	1.37
120.0	0.47	0.51	0.76	1.26	1.36	1.36	1.37	1.37	1.37
150.0	0.90	0.90	0.96	1.08	1.15	1.15	1.15	1.15	1.15
180.0	0.47	0.47	0.61	0.78	1.05	1.23	1.36	1.36	1.36
210.0	0.90	0.90	0.96	1.08	1.15	1.15	1.15	1.15	1.15
240.0	0.47	0.51	0.76	1.26	1.36	1.36	1.37	1.37	1.37
270.0	0.46	0.90	0.92	0.93	0.93	0.93	0.93	1.37	1.37
300.0	0.47	0.51	0.76	1.26	1.36	1.36	1.37	1.37	1.37
330.0	0.90	0.90	0.96	1.08	1.15	1.15	1.15	1.15	1.15
360.0	0.47	0.47	0.61	0.78	1.05	1.23	1.36	1.36	1.36
C/γ(°)	112.5	113.0	113.5	114.0	114.5	115.0	115.5	116.0	116.5
0.0	1.36	1.37	1.52	1.70	1.83	1.83	1.70	1.52	1.39
30.0	1.21	1.43	1.70	1.82	1.82	1.82	1.82	1.82	1.82
60.0	1.37	1.37	1.38	1.38	1.38	1.39	1.39	1.39	1.39
90.0	1.37	1.37	1.37	1.37	1.37	1.81	1.81	1.81	1.81
120.0	1.37	1.37	1.38	1.38	1.38	1.39	1.39	1.39	1.39
150.0	1.21	1.43	1.70	1.82	1.82	1.82	1.82	1.82	1.82
180.0	1.36	1.37	1.52	1.70	1.83	1.83	1.70	1.52	1.39
210.0	1.21	1.43	1.70	1.82	1.82	1.82	1.82	1.82	1.82
240.0	1.37	1.37	1.38	1.38	1.38	1.39	1.39	1.39	1.39
270.0	1.37	1.37	1.37	1.37	1.37	1.81	1.81	1.81	1.81
300.0	1.37	1.37	1.38	1.38	1.38	1.39	1.39	1.39	1.39
330.0	1.21	1.43	1.70	1.82	1.82	1.82	1.82	1.82	1.82
360.0	1.36	1.37	1.52	1.70	1.83	1.83	1.70	1.52	1.39
C/γ(°)	117.0	117.5	118.0	118.5	119.0	119.5	120.0	120.5	121.0
0.0	1.39	1.39	1.39	1.39	1.39	1.38	1.38	1.37	1.38
30.0	1.82	1.82	1.82	1.82	1.82	1.76	1.65	1.59	1.65
60.0	1.38	1.38	1.39	1.39	1.39	1.39	1.39	1.39	1.39
90.0	1.37	1.37	1.81	1.81	1.81	1.81	1.81	1.81	1.81
120.0	1.38	1.38	1.39	1.39	1.39	1.39	1.39	1.39	1.39
150.0	1.82	1.82	1.82	1.82	1.82	1.76	1.65	1.59	1.65
180.0	1.39	1.39	1.39	1.39	1.39	1.38	1.38	1.37	1.38
210.0	1.82	1.82	1.82	1.82	1.82	1.76	1.65	1.59	1.65
240.0	1.38	1.38	1.39	1.39	1.39	1.39	1.39	1.39	1.39
270.0	1.37	1.37	1.81	1.81	1.81	1.81	1.81	1.81	1.81
300.0	1.38	1.38	1.39	1.39	1.39	1.39	1.39	1.39	1.39
330.0	1.82	1.82	1.82	1.82	1.82	1.76	1.65	1.59	1.65
360.0	1.39	1.39	1.39	1.39	1.39	1.38	1.38	1.37	1.38
C/γ(°)	121.5	122.0	122.5	123.0	123.5	124.0	124.5	125.0	125.5
0.0	1.38	1.39	1.39	1.52	1.84	2.15	2.15	1.97	1.97
30.0	1.76	1.81	1.82	1.82	1.88	1.99	2.05	2.05	2.11
60.0	1.39	1.39	1.42	1.61	1.80	1.83	1.87	2.03	2.09
90.0	1.81	1.81	1.81	1.83	1.85	1.85	1.85	1.85	1.85
120.0	1.39	1.39	1.42	1.61	1.80	1.83	1.87	2.03	2.09
150.0	1.76	1.81	1.82	1.82	1.88	1.99	2.05	2.05	2.11
180.0	1.38	1.39	1.39	1.52	1.84	2.15	2.15	1.97	1.97
210.0	1.76	1.81	1.82	1.82	1.88	1.99	2.05	2.05	2.11
240.0	1.39	1.39	1.42	1.61	1.80	1.83	1.87	2.03	2.09
270.0	1.81	1.81	1.81	1.83	1.85	1.85	1.85	1.85	1.85
300.0	1.39	1.39	1.42	1.61	1.80	1.83	1.87	2.03	2.09
330.0	1.76	1.81	1.82	1.82	1.88	1.99	2.05	2.05	2.11
360.0	1.38	1.39	1.39	1.52	1.84	2.15	2.15	1.97	1.97

C/γ(°)	126.0	126.5	127.0	127.5	128.0	128.5	129.0	129.5	130.0
0.0	2.15	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
30.0	2.23	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
60.0	2.25	2.28	2.29	2.29	2.29	2.29	2.29	2.29	2.29
90.0	1.85	1.85	2.29	2.29	2.29	2.29	2.29	2.29	2.29
120.0	2.25	2.28	2.29	2.29	2.29	2.29	2.29	2.29	2.29
150.0	2.23	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
180.0	2.15	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
210.0	2.23	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
240.0	2.25	2.28	2.29	2.29	2.29	2.29	2.29	2.29	2.29
270.0	1.85	1.85	2.29	2.29	2.29	2.29	2.29	2.29	2.29
300.0	2.25	2.28	2.29	2.29	2.29	2.29	2.29	2.29	2.29
330.0	2.23	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
360.0	2.15	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
C/γ(°)	130.5	131.0	131.5	132.0	132.5	133.0	133.5	134.0	134.5
0.0	2.29	2.29	2.29	2.43	2.61	2.88	3.06	3.19	3.19
30.0	2.29	2.29	2.35	2.51	2.68	2.86	3.02	3.04	2.98
60.0	2.29	2.32	2.48	2.52	2.56	2.71	2.82	3.13	3.20
90.0	2.29	2.29	2.31	2.31	2.74	2.76	2.76	2.77	2.77
120.0	2.29	2.32	2.48	2.52	2.56	2.71	2.82	3.13	3.20
150.0	2.29	2.29	2.35	2.51	2.68	2.86	3.02	3.04	2.98
180.0	2.29	2.29	2.29	2.43	2.61	2.88	3.06	3.19	3.19
210.0	2.29	2.29	2.35	2.51	2.68	2.86	3.02	3.04	2.98
240.0	2.29	2.32	2.48	2.52	2.56	2.71	2.82	3.13	3.20
270.0	2.29	2.29	2.31	2.31	2.74	2.76	2.76	2.77	2.77
300.0	2.29	2.32	2.48	2.52	2.56	2.71	2.82	3.13	3.20
330.0	2.29	2.29	2.35	2.51	2.68	2.86	3.02	3.04	2.98
360.0	2.29	2.29	2.29	2.43	2.61	2.88	3.06	3.19	3.19
C/γ(°)	135.0	135.5	136.0	136.5	137.0	137.5	138.0	138.5	139.0
0.0	3.19	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
30.0	3.04	3.15	3.20	3.20	3.20	3.20	3.20	3.20	3.20
60.0	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
90.0	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
120.0	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
150.0	3.04	3.15	3.20	3.20	3.20	3.20	3.20	3.20	3.20
180.0	3.19	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
210.0	3.04	3.15	3.20	3.20	3.20	3.20	3.20	3.20	3.20
240.0	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
270.0	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
300.0	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
330.0	3.04	3.15	3.20	3.20	3.20	3.20	3.20	3.20	3.20
360.0	3.19	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
C/γ(°)	139.5	140.0	140.5	141.0	141.5	142.0	142.5	143.0	143.5
0.0	3.20	3.21	3.22	3.35	3.52	3.78	3.97	4.11	4.11
30.0	3.20	3.26	3.43	3.54	3.50	3.50	3.61	3.73	3.89
60.0	3.20	3.24	3.43	3.63	3.65	3.65	3.66	3.69	3.88
90.0	3.20	3.20	3.64	3.66	3.23	3.23	3.66	3.66	3.68
120.0	3.20	3.24	3.43	3.63	3.65	3.65	3.66	3.69	3.88
150.0	3.20	3.26	3.43	3.54	3.50	3.50	3.61	3.73	3.89
180.0	3.20	3.21	3.22	3.35	3.52	3.78	3.97	4.11	4.11
210.0	3.20	3.26	3.43	3.54	3.50	3.50	3.61	3.73	3.89
240.0	3.20	3.24	3.43	3.63	3.65	3.65	3.66	3.69	3.88
270.0	3.20	3.20	3.64	3.66	3.23	3.23	3.66	3.66	3.68
300.0	3.20	3.24	3.43	3.63	3.65	3.65	3.66	3.69	3.88
330.0	3.20	3.26	3.43	3.54	3.50	3.50	3.61	3.73	3.89
360.0	3.20	3.21	3.22	3.35	3.52	3.78	3.97	4.11	4.11

C/ γ (°)	144.0	144.5	145.0	145.5	146.0	146.5	147.0	147.5	148.0
0.0	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
30.0	4.06	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
60.0	4.07	4.11	4.11	4.12	4.12	4.12	4.12	4.12	4.12
90.0	3.68	3.68	3.68	4.12	4.12	4.12	4.12	4.12	4.12
120.0	4.07	4.11	4.11	4.12	4.12	4.12	4.12	4.12	4.12
150.0	4.06	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
180.0	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
210.0	4.06	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
240.0	4.07	4.11	4.11	4.12	4.12	4.12	4.12	4.12	4.12
270.0	3.68	3.68	3.68	4.12	4.12	4.12	4.12	4.12	4.12
300.0	4.07	4.11	4.11	4.12	4.12	4.12	4.12	4.12	4.12
330.0	4.06	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
360.0	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12	4.12
C/ γ (°)	148.5	149.0	149.5	150.0	150.5	151.0	151.5	152.0	152.5
0.0	4.12	4.12	4.25	4.43	4.56	4.56	4.56	4.57	4.57
30.0	4.12	4.12	4.12	4.13	4.13	4.13	4.14	4.20	4.30
60.0	4.12	4.12	4.12	4.12	4.15	4.34	4.52	4.56	4.56
90.0	4.12	4.12	4.12	4.12	4.12	4.14	4.14	4.14	4.14
120.0	4.12	4.12	4.12	4.12	4.15	4.34	4.52	4.56	4.56
150.0	4.12	4.12	4.12	4.13	4.13	4.13	4.14	4.20	4.30
180.0	4.12	4.12	4.25	4.43	4.56	4.56	4.56	4.57	4.57
210.0	4.12	4.12	4.12	4.13	4.13	4.13	4.14	4.20	4.30
240.0	4.12	4.12	4.12	4.12	4.15	4.34	4.52	4.56	4.56
270.0	4.12	4.12	4.12	4.12	4.12	4.14	4.14	4.14	4.14
300.0	4.12	4.12	4.12	4.12	4.15	4.34	4.52	4.56	4.56
330.0	4.12	4.12	4.12	4.13	4.13	4.13	4.14	4.20	4.30
360.0	4.12	4.12	4.25	4.43	4.56	4.56	4.56	4.57	4.57
C/ γ (°)	153.0	153.5	154.0	154.5	155.0	155.5	156.0	156.5	157.0
0.0	4.58	4.58	4.58	4.71	4.89	5.02	5.02	4.89	4.72
30.0	4.42	4.52	4.58	4.64	4.75	4.75	4.71	4.81	4.91
60.0	4.56	4.57	4.61	4.76	4.77	4.68	4.95	4.99	4.87
90.0	4.14	4.58	4.58	4.60	4.60	4.58	4.60	4.60	4.60
120.0	4.56	4.57	4.61	4.76	4.77	4.68	4.95	4.99	4.87
150.0	4.42	4.52	4.58	4.64	4.75	4.75	4.71	4.81	4.91
180.0	4.58	4.58	4.58	4.71	4.89	5.02	5.02	4.89	4.72
210.0	4.42	4.52	4.58	4.64	4.75	4.75	4.71	4.81	4.91
240.0	4.56	4.57	4.61	4.76	4.77	4.68	4.95	4.99	4.87
270.0	4.14	4.58	4.58	4.60	4.60	4.58	4.60	4.60	4.60
300.0	4.56	4.57	4.61	4.76	4.77	4.68	4.95	4.99	4.87
330.0	4.42	4.52	4.58	4.64	4.75	4.75	4.71	4.81	4.91
360.0	4.58	4.58	4.58	4.71	4.89	5.02	5.02	4.89	4.72
C/ γ (°)	157.5	158.0	158.5	159.0	159.5	160.0	160.5	161.0	161.5
0.0	4.73	4.90	5.02	5.02	5.02	5.02	5.03	5.03	5.02
30.0	4.86	4.81	4.82	4.82	4.82	4.87	4.98	4.98	4.87
60.0	4.98	5.03	5.00	4.88	5.00	5.03	5.03	5.04	5.05
90.0	4.60	5.03	5.04	5.01	5.04	5.04	5.04	5.04	5.46
120.0	4.98	5.03	5.00	4.88	5.00	5.03	5.03	5.04	5.05
150.0	4.86	4.81	4.82	4.82	4.82	4.87	4.98	4.98	4.87
180.0	4.73	4.90	5.02	5.02	5.02	5.02	5.03	5.03	5.02
210.0	4.86	4.81	4.82	4.82	4.82	4.87	4.98	4.98	4.87
240.0	4.98	5.03	5.00	4.88	5.00	5.03	5.03	5.04	5.05
270.0	4.60	5.03	5.04	5.01	5.04	5.04	5.04	5.04	5.46
300.0	4.98	5.03	5.00	4.88	5.00	5.03	5.03	5.04	5.05
330.0	4.86	4.81	4.82	4.82	4.82	4.87	4.98	4.98	4.87
360.0	4.73	4.90	5.02	5.02	5.02	5.02	5.03	5.03	5.02

Intensity data(cd)

Appendix Page: 32 Total:33

C/ γ (°)	162.0	162.5	163.0	163.5	164.0	164.5	165.0	165.5	166.0
0.0	5.02	5.03	5.04	5.05	5.05	5.04	5.17	5.36	5.49
30.0	4.87	4.98	5.09	5.20	5.21	5.10	5.16	5.38	5.49
60.0	5.04	5.07	5.22	5.29	5.45	5.48	5.47	5.47	5.48
90.0	5.46	5.04	5.06	5.06	5.49	5.49	5.07	5.07	5.07
120.0	5.04	5.07	5.22	5.29	5.45	5.48	5.47	5.47	5.48
150.0	4.87	4.98	5.09	5.20	5.21	5.10	5.16	5.38	5.49
180.0	5.02	5.03	5.04	5.05	5.05	5.04	5.17	5.36	5.49
210.0	4.87	4.98	5.09	5.20	5.21	5.10	5.16	5.38	5.49
240.0	5.04	5.07	5.22	5.29	5.45	5.48	5.47	5.47	5.48
270.0	5.46	5.04	5.06	5.06	5.49	5.49	5.07	5.07	5.07
300.0	5.04	5.07	5.22	5.29	5.45	5.48	5.47	5.47	5.48
330.0	4.87	4.98	5.09	5.20	5.21	5.10	5.16	5.38	5.49
360.0	5.02	5.03	5.04	5.05	5.05	5.04	5.17	5.36	5.49
C/ γ (°)	166.5	167.0	167.5	168.0	168.5	169.0	169.5	170.0	170.5
0.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
30.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
60.0	5.48	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
90.0	5.07	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
120.0	5.48	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
150.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
180.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
210.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
240.0	5.48	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
270.0	5.07	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
300.0	5.48	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
330.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
360.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
C/ γ (°)	171.0	171.5	172.0	172.5	173.0	173.5	174.0	174.5	175.0
0.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
30.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
60.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
90.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
120.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
150.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
180.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
210.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
240.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
270.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
300.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
330.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
360.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
C/ γ (°)	175.5	176.0	176.5	177.0	177.5	178.0	178.5	179.0	179.5
0.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
30.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
60.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
90.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
120.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
150.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
180.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
210.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
240.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
270.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
300.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
330.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
360.0	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49

Equipment:
Temperature(°C): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS

Intensity data(cd)

Appendix Page: 33 Total:33

C/γ(°)	180.0
0.0	5.49
30.0	5.49
60.0	5.49
90.0	5.49
120.0	5.49
150.0	5.49
180.0	5.49
210.0	5.49
240.0	5.49
270.0	5.49
300.0	5.49
330.0	5.49
360.0	5.49

Equipment:
Temperature(°C): 25.0

Date:
Humidity(%): 55.3%

Operator: LDS