冠今

Client:
LumCAT: WAL-191
Luminaire: LED 灯具
Report No:
Ballast type:

Test No:	Voltage(V): 119.980
LampCAT:	Current(A): 0.397
Lamp flux(lm): 3423.6	Power (W): 47.510
Number of Lamps: 1	PF: 0.998
Length(mm): 870	Width(mm): 80
Phm Type: C	Height(mm): 50

Photometric Results

Lumens(lm): 3423.59, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 72.06
Central intensity(cd): 978.584, Maximum intensity(cd): 982.070
Angle of maximum intensity: C=0.0 γ=10.0
Beam Angle(50%Imax): [C0/180]Total=129.6
[C90/270]Total=95.8
Field angle(10%Imax): [C0/180]Total=209.4
[C90/270]Total=150.6
Maximum s/h(1/2): C0_180=1.41 C90_270=1.17
Maximum s/h(1/4): C0_180=1.49 C90_270=1.27
Up flux rate of lamp(%): 9.45%
Down flux rate of lamp(%): 90.55%
Up flux rate of LUM(%): 9.45%
Down flux rate of LUM(%): 90.55%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 66.488%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	978.584	0.000	0	0.00%	0.00%
5.0	975.950	23.366	23.366	0.68%	0.68%
10.0	967.348	69.518	92.884	2.03%	2.71%
15.0	951.976	113.853	206.737	3.33%	6.04%
20.0	929.797	155.085	361.821	4.53%	10.57%
25.0	899.539	191.864	553.685	5.60%	16.17%
30.0	860.225	222.700	776.384	6.50%	22.68%
35.0	808.795	245.775	1022.159	7.18%	29.86%
40.0	747.841	259.713	1281.872	7.59%	37.44%
45.0	679.531	264.289	1546.162	7.72%	45.16%
50.0	602.051	258.962	1805.124	7.56%	52.73%
55.0	525.590	245.187	2050.311	7.16%	59.89%
60.0	451.999	225.967	2276.278	6.60%	66.49%
65.0	380.486	202.379	2478.656	5.91%	72.40%
70.0	315.633	176.262	2654.918	5.15%	77.55%
75.0	257.571	149.826	2804.744	4.38%	81.92%
80.0	203.879	123.471	2928.215	3.61%	85.53%
85.0	154.260	97.315	3025.53	2.84%	88.37%
90.0	117.443	74.395	3099.925	2.17%	90.55%
95.0	95.071	58.188	3158.113	1.70%	92.25%
100.0	78.565	47.181	3205.294	1.38%	93.62%
105.0	56.950	36.260	3241.554	1.06%	94.68%
110.0	42.547	26.007	3267.561	0.76%	95.44%
115.0	38.307	20.473	3288.034	0.60%	96.04%
120.0	37.358	18.394	3306.428	0.54%	96.58%
125.0	37.547	17.314	3323.742	0.51%	97.08%
130.0	37.770	16.376	3340.119	0.48%	97.56%
135.0	37.662	15.242	3355.361	0.45%	98.01%
140.0	37.519	13.920	3369.281	0.41%	98.41%
145.0	37.527	12.521	3381.802	0.37%	98.78%
150.0	37.455	11.042	3392.844	0.32%	99.10%
155.0	37.380	9.470	3402.314	0.28%	99.38%
160.0	36.414	7.740	3410.054	0.23%	99.60%
165.0	35.639	5.938	3415.992	0.17%	99.78%
170.0	36.130	4.257	3420.249	0.12%	99.90%
175.0	38.103	2.656	3422.905	0.08%	99.98%
180.0	19.486	0.688	3423.593	0.02%	100.00%

Zonal flux distribution table

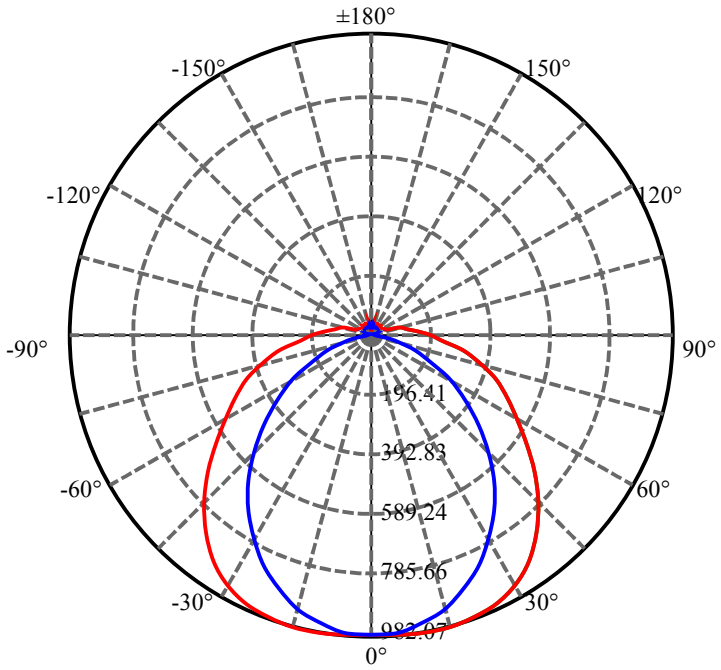
ZONAL LUMEN SUMMARY

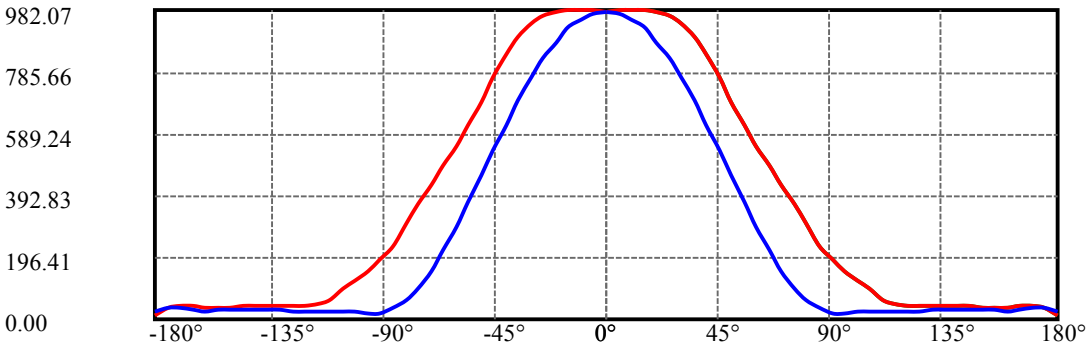
Zone	Lumens	%Lamp	%Fixt
0-30	776.38	22.68%	22.68%
0-40	1281.87	37.44%	37.44%
0-60	2276.28	66.49%	66.49%
0-90	3099.93	90.55%	90.55%
0-120	3306.43	96.58%	96.58%
0-180	3423.59	100.00%	100.00%
60-90	823.65	24.06%	24.06%
90-120	206.50	6.03%	6.03%
90-130	240.19	7.02%	7.02%
90-150	292.92	8.56%	8.56%
90-180	322.98	9.43%	9.43%
0-72.80	2738.88	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	92.88
10-20	268.94
20-30	414.56
30-40	505.49
40-50	523.25
50-60	471.15
60-70	378.64
70-80	273.30
80-90	171.71
90-100	105.37
100-110	62.27
110-120	38.87
120-130	33.69
130-140	29.16
140-150	23.56
150-160	17.21
160-170	10.20
170-180	2.66

Light Distribution Curve [Unit:cd]





C0(Max):

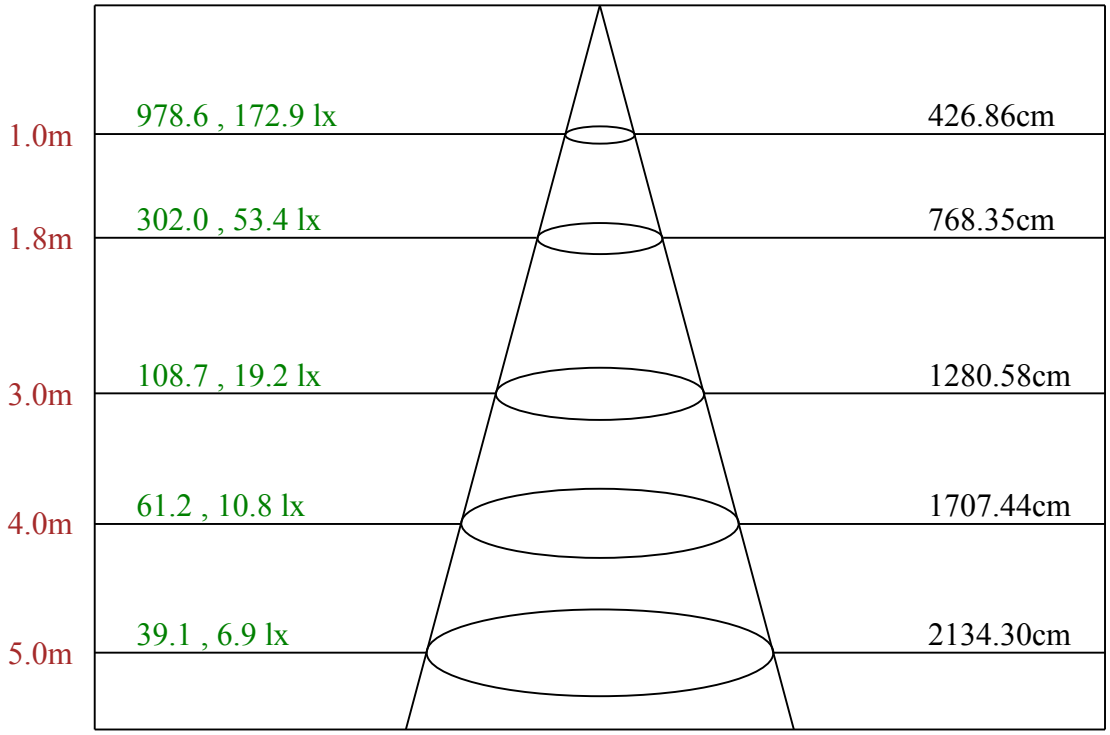
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:119.7 Right:89.7
:C90/270Left:75.3 Right:75.3

Beam Angle(50%Imax):C0/180Left:79.8 Right:49.8
:C90/270Left:47.9 Right:47.9

Lux distance Curve



Max , Ave

Beam angle of C0 plane 129.79

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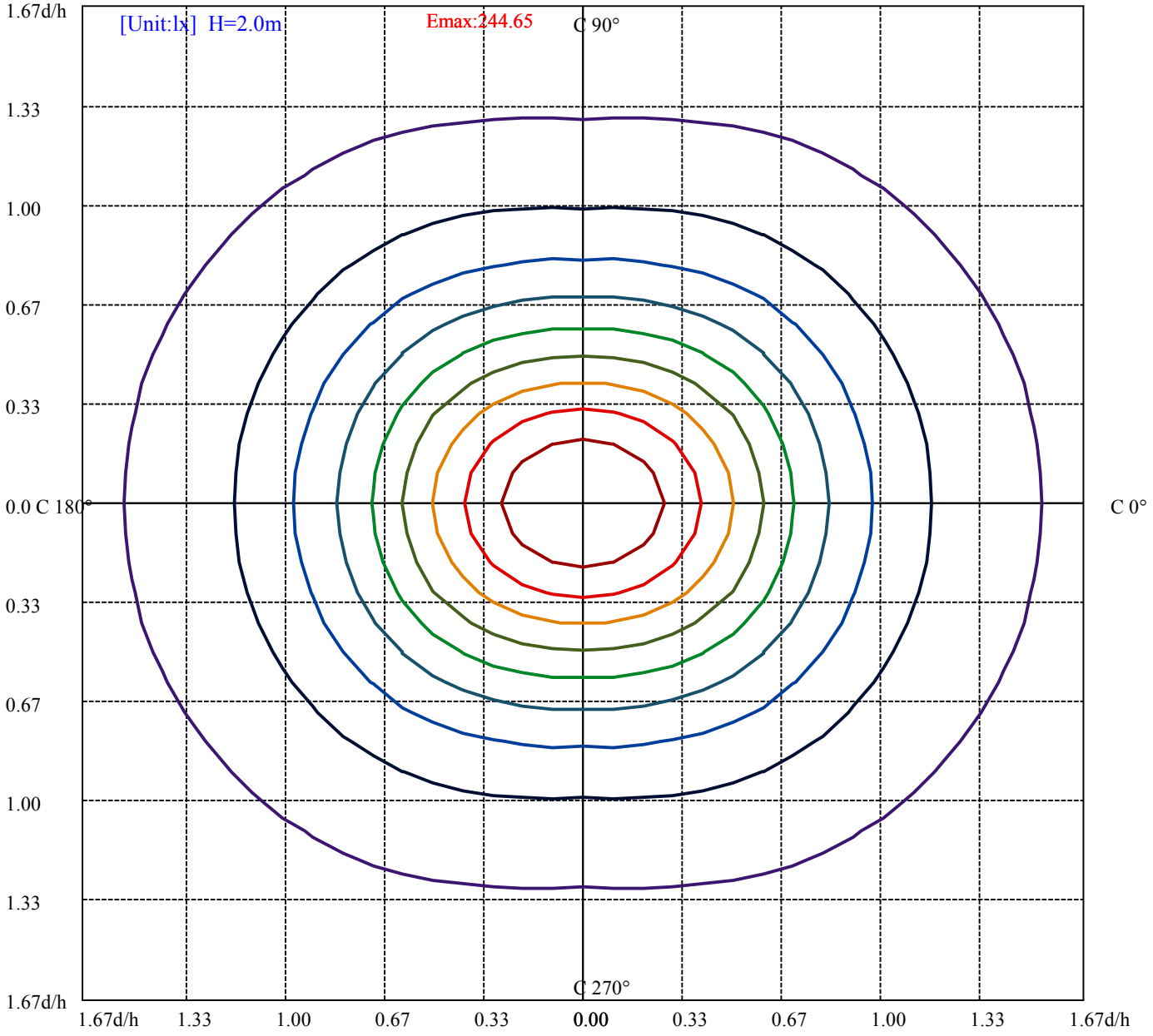
ISO illuminance diagram

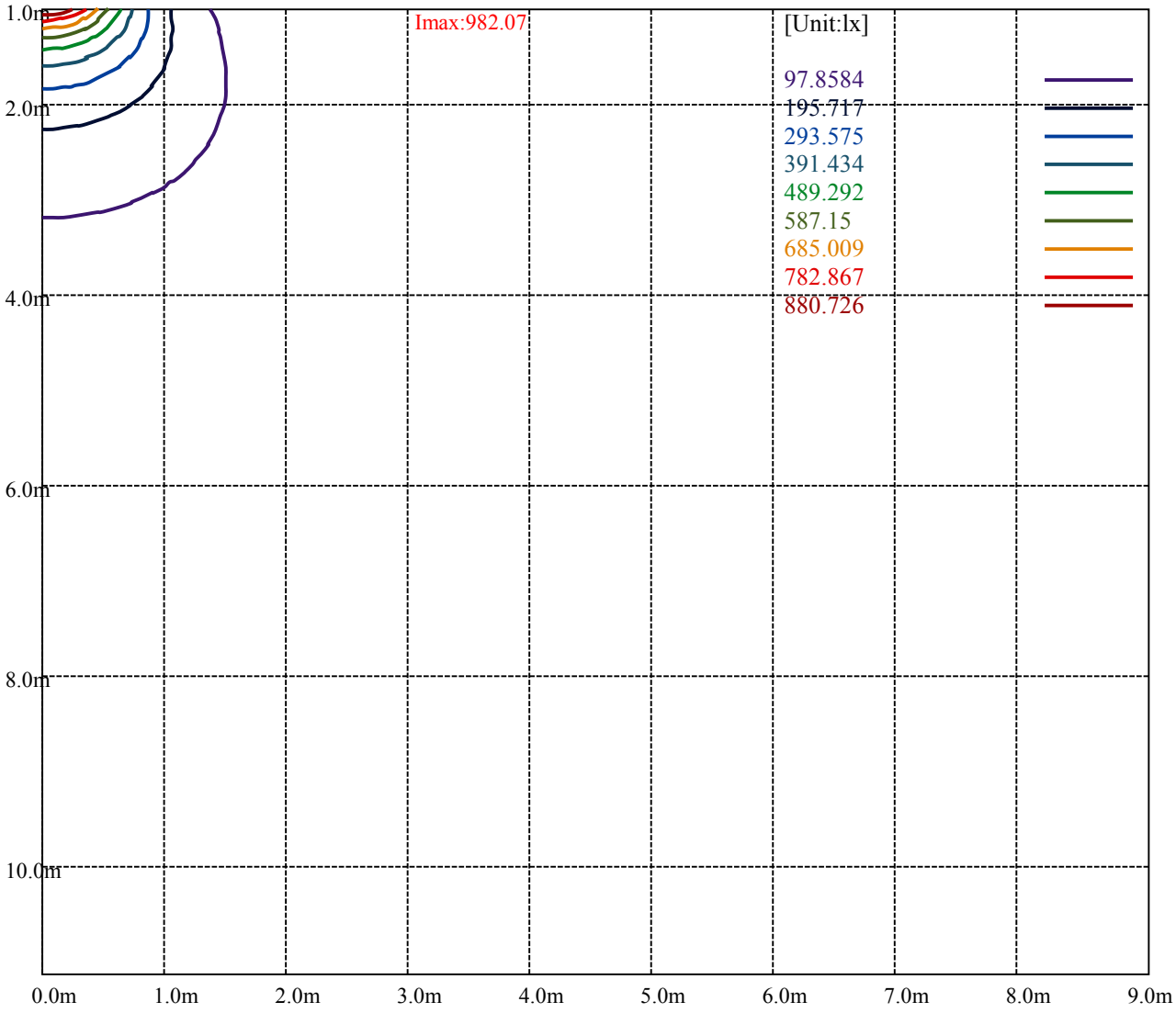


Equipment: LC-I-902 GMS-2000
Temperature(°C): 25.2

Date: 2022/8/29
Humidity(%): 62.1%

Operator: JUN WANG
Distance(m): 29.75

Space ISO Lux diagram



Equipment: LC-I-902 GMS-2000
Temperature(°C): 25.2

Date: 2022/8/29
Humidity(%): 62.1%

Operator: JUN WANG
Distance(m): 29.75

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Luminance Limitting Curve(no luminous side)

Luminance Table

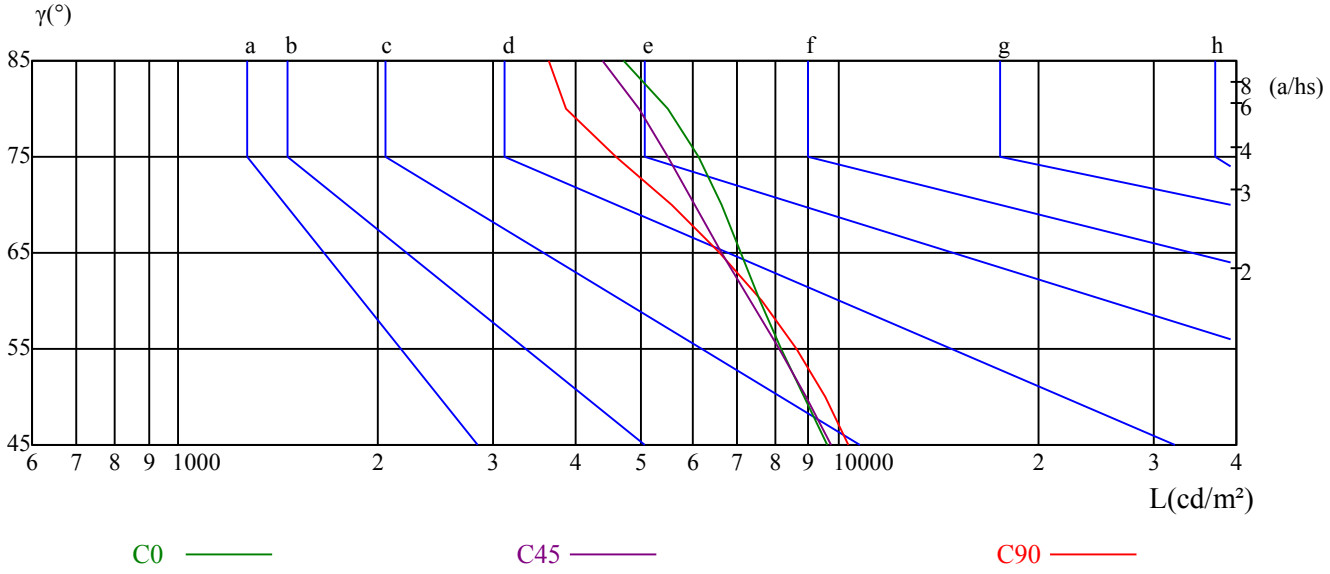
γ	45	50	55	60	65	70	75	80	85
C0	9610	8847	8160	7605	7101	6642	6118	5521	4727
C45	9720	8902	8140	7343	6657	6057	5505	4993	4393
C90	10310	9527	8653	7670	6615	5567	4587	3869	3639

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
16620	7430	13547	20390	5571	15420	38499	6029	28627

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 Limitting Curve



Utilization factor table for indoor luminaire

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	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	0.99	0.99	0.99	0.93	0.93	0.93	0.91
1	1.00	0.95	0.90	0.96	0.92	0.88	0.90	0.87	0.84	0.85	0.82	0.79	0.80	0.77	0.75	0.73
2	0.86	0.79	0.73	0.83	0.77	0.71	0.78	0.73	0.68	0.74	0.69	0.65	0.69	0.66	0.62	0.59
3	0.75	0.67	0.60	0.73	0.65	0.59	0.69	0.62	0.57	0.65	0.59	0.54	0.61	0.56	0.52	0.50
4	0.67	0.57	0.51	0.65	0.56	0.50	0.61	0.54	0.48	0.57	0.51	0.46	0.54	0.49	0.45	0.42
5	0.59	0.50	0.43	0.58	0.49	0.43	0.54	0.47	0.41	0.51	0.45	0.40	0.49	0.43	0.39	0.36
6	0.53	0.44	0.38	0.52	0.43	0.37	0.49	0.42	0.36	0.46	0.40	0.35	0.44	0.38	0.34	0.32
7	0.48	0.39	0.33	0.47	0.39	0.33	0.45	0.37	0.32	0.42	0.36	0.31	0.40	0.34	0.30	0.28
8	0.44	0.35	0.29	0.43	0.35	0.29	0.41	0.33	0.28	0.39	0.32	0.28	0.37	0.31	0.27	0.25
9	0.40	0.32	0.26	0.39	0.31	0.26	0.37	0.30	0.25	0.36	0.29	0.25	0.34	0.28	0.24	0.22
10	0.37	0.29	0.24	0.36	0.29	0.24	0.35	0.28	0.23	0.33	0.27	0.23	0.32	0.26	0.22	0.20

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	978.58	988.17	995.14	1002.11	1003.85	999.50	978.58	939.37	881.86
15.0	978.58	987.35	995.24	999.63	1000.51	993.49	970.69	935.62	878.62
30.0	978.58	985.63	990.92	990.92	985.63	974.18	950.40	913.40	860.56
45.0	978.58	985.68	987.46	980.36	966.16	944.87	917.37	876.56	826.87
60.0	978.58	982.13	978.58	964.41	942.27	909.51	869.66	820.06	762.50
75.0	978.58	980.37	971.45	952.74	920.65	880.55	826.18	768.25	701.41
90.0	978.58	977.69	965.20	942.01	907.22	858.16	801.96	734.16	661.90
105.0	978.58	976.80	962.51	935.73	901.80	857.15	801.80	741.08	670.54
120.0	978.58	975.91	963.43	939.37	909.96	871.63	825.29	776.27	718.34
135.0	978.58	972.39	961.77	945.85	924.61	895.41	861.79	819.32	771.54
150.0	978.58	971.49	963.52	951.11	936.04	919.20	894.38	862.47	814.60
165.0	978.58	971.54	962.73	953.92	947.76	934.54	914.28	882.58	835.01
180.0	978.58	972.48	969.00	962.03	952.44	934.14	902.77	856.59	797.33
195.0	978.58	969.82	963.68	955.79	945.26	926.85	895.28	848.81	791.81
210.0	978.58	968.01	958.33	945.11	928.38	905.48	872.89	824.44	769.83
225.0	978.58	967.94	951.08	929.79	903.17	870.35	830.42	784.29	726.62
240.0	978.58	963.53	943.16	912.16	873.20	828.92	779.32	723.53	658.88
255.0	978.58	965.22	940.26	906.39	860.05	805.68	744.19	674.67	600.70
270.0	978.58	966.10	941.12	906.33	855.48	796.60	730.59	656.55	575.38
285.0	978.58	970.55	949.12	916.98	871.44	818.76	758.05	686.62	610.72
300.0	978.58	975.02	959.87	935.80	901.94	860.05	809.25	746.86	684.47
315.0	978.58	978.58	970.62	954.69	932.57	899.84	858.25	810.47	747.65
330.0	978.58	983.02	982.13	975.04	962.63	940.47	923.63	852.72	791.55
345.0	978.58	987.39	990.03	989.15	982.11	963.61	928.38	876.41	809.47
360.0	978.58	988.17	995.14	1002.11	1003.85	999.50	978.58	939.37	881.86

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	807.79	728.49	657.91	600.40	542.01	476.66	403.46	337.23	277.11
15.0	808.47	727.80	657.65	592.76	537.52	474.39	402.48	332.33	273.58
30.0	793.61	712.58	634.19	561.96	502.06	442.17	376.99	310.93	248.39
45.0	759.45	684.92	604.18	519.01	444.49	383.27	324.72	263.50	205.83
60.0	698.74	627.00	549.07	464.94	382.58	305.53	245.31	193.06	142.58
75.0	629.22	550.79	474.14	393.04	315.50	238.85	170.23	114.97	73.97
90.0	580.73	500.44	418.37	334.52	255.13	184.66	124.00	76.72	45.49
105.0	595.54	516.97	440.18	361.61	286.61	215.18	153.57	100.00	61.61
120.0	656.85	584.65	512.46	437.60	360.95	286.09	221.03	164.88	123.88
135.0	713.15	645.02	573.35	493.72	418.51	345.07	282.25	230.93	189.35
150.0	755.21	686.96	611.62	534.50	459.15	389.13	332.40	282.76	229.58
165.0	777.76	706.41	629.78	554.03	479.16	415.74	360.25	310.93	246.63
180.0	729.36	652.68	575.13	501.93	435.70	382.55	331.13	269.26	189.97
195.0	724.29	646.25	570.84	495.43	429.67	377.05	326.19	263.94	186.77
210.0	702.01	628.02	547.87	470.35	402.53	347.04	297.72	243.99	169.12
225.0	658.30	585.55	508.37	430.29	357.54	295.44	245.76	205.83	139.29
240.0	593.35	521.62	448.11	370.18	296.67	230.26	174.46	138.15	94.76
255.0	528.51	451.86	372.54	296.78	226.38	163.10	107.84	68.63	44.56
270.0	492.41	410.35	329.17	252.45	181.98	122.21	76.72	47.28	27.65
285.0	534.83	455.36	375.00	298.22	223.22	159.82	128.57	67.86	38.39
300.0	614.07	536.53	454.53	409.97	296.78	233.51	184.49	135.47	98.93
315.0	706.07	593.70	509.64	433.55	373.38	317.64	258.36	201.73	160.15
330.0	714.44	633.78	561.98	499.04	444.09	380.27	312.90	252.62	205.64
345.0	734.60	661.49	598.07	541.70	480.04	409.58	340.87	280.10	229.01
360.0	807.79	728.49	657.91	600.40	542.01	476.66	403.46	337.23	277.11

Intensity data(cd)

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	225.69	159.47	129.84	120.25	74.07	49.67	44.44	42.70	42.70
15.0	220.97	156.08	129.78	115.75	70.15	48.23	43.84	42.09	42.09
30.0	199.94	139.17	127.72	100.41	56.37	44.92	40.52	39.64	40.52
45.0	161.47	110.01	117.11	70.09	44.36	39.04	38.15	39.04	39.04
60.0	101.84	68.19	68.19	37.20	32.77	33.65	35.42	35.42	35.42
75.0	42.78	37.43	22.28	24.06	27.63	27.63	27.63	29.41	31.19
90.0	25.87	10.70	23.19	24.09	24.09	24.98	25.87	27.65	28.55
105.0	35.71	32.14	17.86	23.21	25.00	27.68	28.57	30.36	31.25
120.0	86.45	75.76	53.47	32.08	30.30	32.08	33.87	33.87	35.65
135.0	130.95	113.25	100.87	56.63	39.82	36.28	36.28	38.05	38.05
150.0	162.21	138.28	124.10	84.21	50.52	42.55	39.89	39.89	40.77
165.0	174.40	149.74	135.65	98.65	61.66	45.80	42.28	42.28	42.28
180.0	157.72	142.91	114.15	73.20	50.54	45.31	43.57	43.57	44.44
195.0	156.96	141.18	106.98	68.40	49.98	45.60	43.84	42.97	43.84
210.0	147.10	132.12	91.60	55.49	45.80	43.16	42.28	43.16	43.16
225.0	127.76	108.24	65.65	44.36	40.81	40.81	42.59	42.59	39.92
240.0	91.22	61.99	38.08	36.31	38.08	38.97	38.08	38.08	37.20
255.0	42.78	24.95	29.41	31.19	30.30	30.30	31.19	32.08	32.08
270.0	5.35	25.87	24.98	24.98	24.98	25.87	25.87	25.87	28.55
285.0	35.71	23.21	25.89	28.57	29.46	30.36	31.25	31.25	32.14
300.0	66.84	62.39	37.43	35.65	36.54	37.43	35.65	35.65	35.65
315.0	107.06	114.14	69.01	45.12	39.82	39.82	39.82	39.82	38.05
330.0	144.48	126.76	104.60	60.28	46.98	43.43	42.55	42.55	40.77
345.0	167.35	127.72	127.72	76.63	51.09	45.80	43.16	43.16	43.16
360.0	225.69	159.47	129.84	120.25	74.07	49.67	44.44	42.70	42.70

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	42.70	42.70	40.08	39.21	39.21	39.21	40.08	40.08	41.83
15.0	42.09	42.09	39.46	39.46	39.46	39.46	40.34	40.34	42.09
30.0	40.52	39.64	38.76	38.76	38.76	39.64	40.52	40.52	42.28
45.0	38.15	37.26	38.15	37.26	38.15	39.92	39.92	40.81	42.59
60.0	35.42	35.42	36.31	37.20	38.97	38.97	39.85	39.85	39.85
75.0	32.08	33.87	35.65	35.65	37.43	36.54	35.65	36.54	39.21
90.0	28.55	30.33	32.11	33.01	33.01	30.33	28.55	31.22	37.47
105.0	32.14	33.04	33.93	33.93	35.71	31.25	28.57	30.36	37.50
120.0	35.65	35.65	36.54	37.43	38.32	36.54	30.30	29.41	35.65
135.0	38.05	38.05	38.05	38.05	38.93	39.82	35.39	29.20	32.74
150.0	40.77	39.89	39.89	39.89	39.89	40.77	39.89	32.80	29.25
165.0	43.16	42.28	40.52	40.52	40.52	40.52	40.52	40.52	31.71
180.0	43.57	41.83	41.83	40.08	40.08	40.08	40.08	41.83	32.24
195.0	42.97	42.09	40.34	39.46	39.46	40.34	40.34	31.57	25.43
210.0	40.52	39.64	39.64	38.76	39.64	39.64	31.71	24.66	36.11
225.0	39.04	39.04	38.15	39.04	39.04	33.71	25.73	31.05	39.92
240.0	37.20	37.20	37.20	38.08	35.42	28.34	27.45	33.65	40.74
255.0	32.98	33.87	35.65	36.54	30.30	24.95	28.52	35.65	41.00
270.0	30.33	32.11	33.01	31.22	27.65	24.09	29.44	36.57	41.03
285.0	33.04	33.93	35.71	33.93	33.04	32.14	33.93	38.39	41.07
300.0	35.65	35.65	36.54	37.43	38.32	39.21	39.21	40.11	41.00
315.0	37.16	37.16	36.28	37.16	38.05	38.93	39.82	40.70	40.70
330.0	39.89	38.12	38.12	38.12	39.00	39.89	39.89	40.77	42.55
345.0	42.28	39.64	38.76	38.76	38.76	39.64	39.64	40.52	40.52
360.0	42.70	42.70	40.08	39.21	39.21	39.21	40.08	40.08	41.83

Intensity data(cd)

C/γ(°)	180.0
0.0	24.40
15.0	39.46
30.0	42.28
45.0	42.59
60.0	42.51
75.0	42.78
90.0	42.82
105.0	41.07
120.0	41.00
135.0	39.82
150.0	38.12
165.0	30.83
180.0	0.00
195.0	0.00
210.0	0.00
225.0	0.00
240.0	0.00
255.0	0.00
270.0	0.00
285.0	0.00
300.0	0.00
315.0	0.00
330.0	0.00
345.0	0.00
360.0	24.40