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LumCAT: LL8R-30K

Luminaire:

Report No:

Voltage(V): 120.12

Test No:

Current(A): 0.3471

LampCAT:

Power (W): 39.8900

Lamp flux(lm): 4503.6

PF: 0.9567

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

Lumens(lm): 4503.61

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 112.90

Central intensity(cd): 6825.712

Maximum intensity(cd): 6825.712

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=46.9

[C90/270]Total=46.3

Field angle(10%Imax): [C0/180]Total=74.3

[C90/270]Total=73.8

Maximum s/h(1/2): C0\_180=0.78 C90\_270=0.76

Maximum s/h(1/4): C0\_180=1.12 C90\_270=0.74

Up flux rate of lamp(%): 0.21%

Down flux rate of lamp(%): 99.79%

Up flux rate of LUM(%): 0.21%

Down flux rate of LUM(%): 99.79%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 96.535%

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Equipment: GMS-3000  
Temperature(°C): 25

Date:  
Humidity(%): 58%

Operator: Zac

## Zonal flux distribution table

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$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6764.848	.000	.000	.000%	.000%
5.0	6605.938	159.844	159.844	3.549%	3.549%
10.0	6121.933	455.316	615.160	10.110%	13.659%
15.0	5390.237	682.894	1298.054	15.163%	28.823%
20.0	4257.470	795.107	2093.161	17.655%	46.477%
25.0	2915.858	752.350	2845.510	16.705%	63.183%
30.0	1559.414	566.349	3411.860	12.575%	75.758%
35.0	810.477	348.983	3760.843	7.749%	83.507%
40.0	472.295	214.021	3974.863	4.752%	88.259%
45.0	301.769	143.324	4118.188	3.182%	91.442%
50.0	199.688	101.327	4219.514	2.250%	93.692%
55.0	136.852	73.175	4292.689	1.625%	95.317%
60.0	100.612	54.889	4347.579	1.219%	96.535%
65.0	79.984	43.903	4391.482	.975%	97.510%
70.0	64.926	36.692	4428.174	.815%	98.325%
75.0	48.573	29.667	4457.841	.659%	98.984%
80.0	29.929	21.005	4478.846	.466%	99.450%
85.0	12.874	11.631	4490.477	.258%	99.708%
90.0	1.231	3.862	4494.339	.086%	99.794%
95.0	.582	.496	4494.835	.011%	99.805%
100.0	.556	.309	4495.144	.007%	99.812%
105.0	.609	.312	4495.456	.007%	99.819%
110.0	.648	.329	4495.784	.007%	99.826%
115.0	.688	.338	4496.123	.008%	99.834%
120.0	.728	.344	4496.467	.008%	99.841%
125.0	.874	.370	4496.837	.008%	99.850%
130.0	1.098	.429	4497.266	.010%	99.859%
135.0	1.389	.503	4497.769	.011%	99.870%
140.0	1.852	.600	4498.369	.013%	99.884%
145.0	2.487	.724	4499.093	.016%	99.900%
150.0	3.163	.832	4499.925	.018%	99.918%
155.0	3.811	.882	4500.807	.020%	99.938%
160.0	4.485	.870	4501.677	.019%	99.957%
165.0	5.054	.786	4502.463	.017%	99.975%
170.0	5.346	.617	4503.080	.014%	99.988%
175.0	5.676	.394	4503.475	.009%	99.997%
180.0	5.981	.139	4503.614	.003%	100.000%

Equipment: GMS-3000  
Temperature( $^{\circ}$ C): 25

Date:  
Humidity(%): 58%

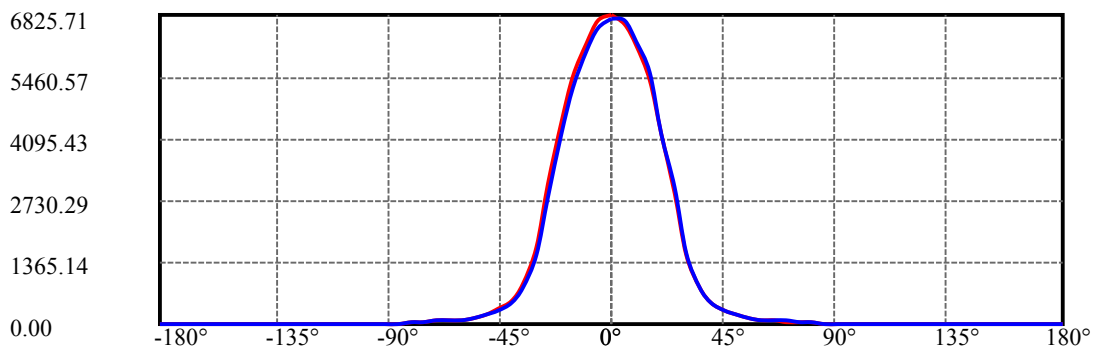
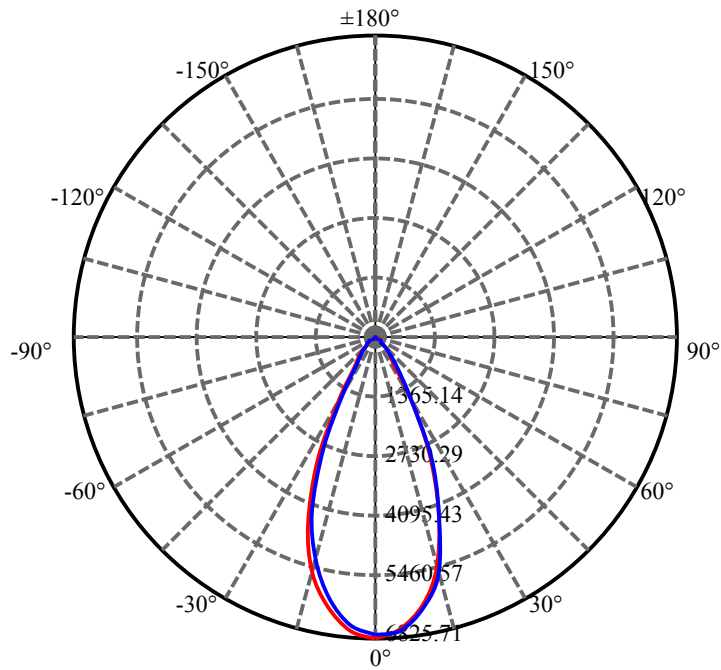
Operator: Zac

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3411.86	75.76%	75.76%
0-40	3974.86	88.26%	88.26%
0-60	4347.58	96.54%	96.54%
0-90	4494.34	99.79%	99.79%
0-120	4496.47	99.84%	99.84%
0-180	4503.61	100.00%	100.00%
60-90	201.65	4.48%	4.48%
90-120	5.99	0.13%	0.13%
90-130	6.79	0.15%	0.15%
90-150	9.45	0.21%	0.21%
90-180	13.00	0.29%	0.29%
0-32.74	3602.89	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	615.16
10-20	1478.00
20-30	1318.70
30-40	563.00
40-50	244.65
50-60	128.06
60-70	80.60
70-80	50.67
80-90	15.49
90-100	0.81
100-110	0.64
110-120	0.68
120-130	0.80
130-140	1.10
140-150	1.56
150-160	1.75
160-170	1.40
170-180	0.39

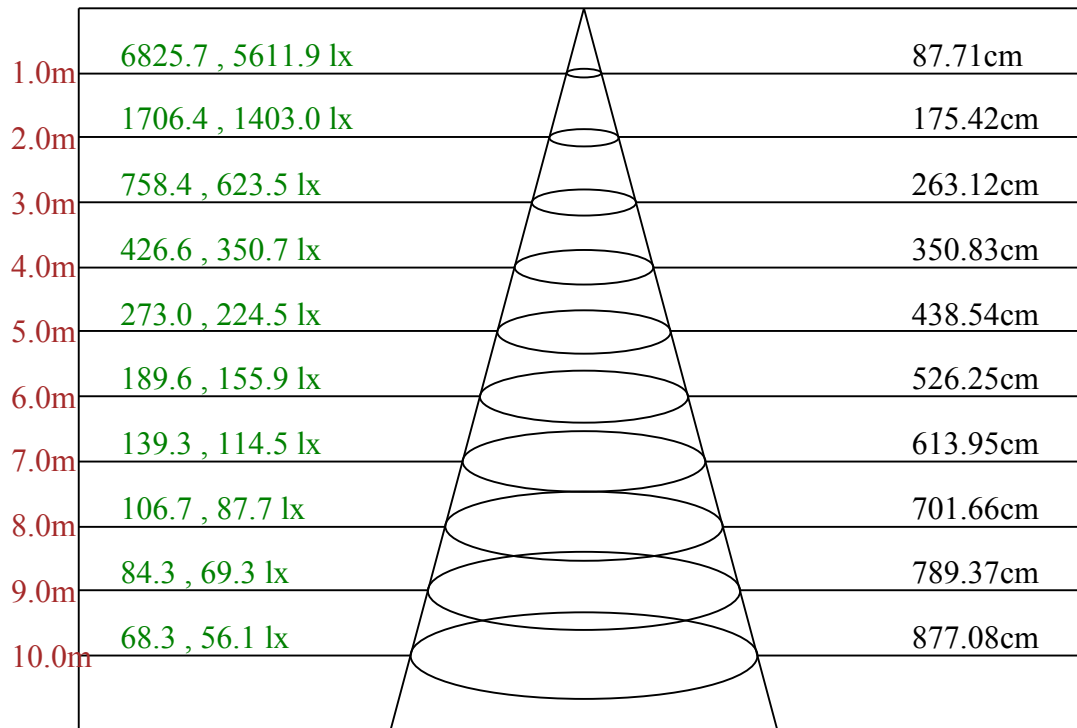


C0/C180: —

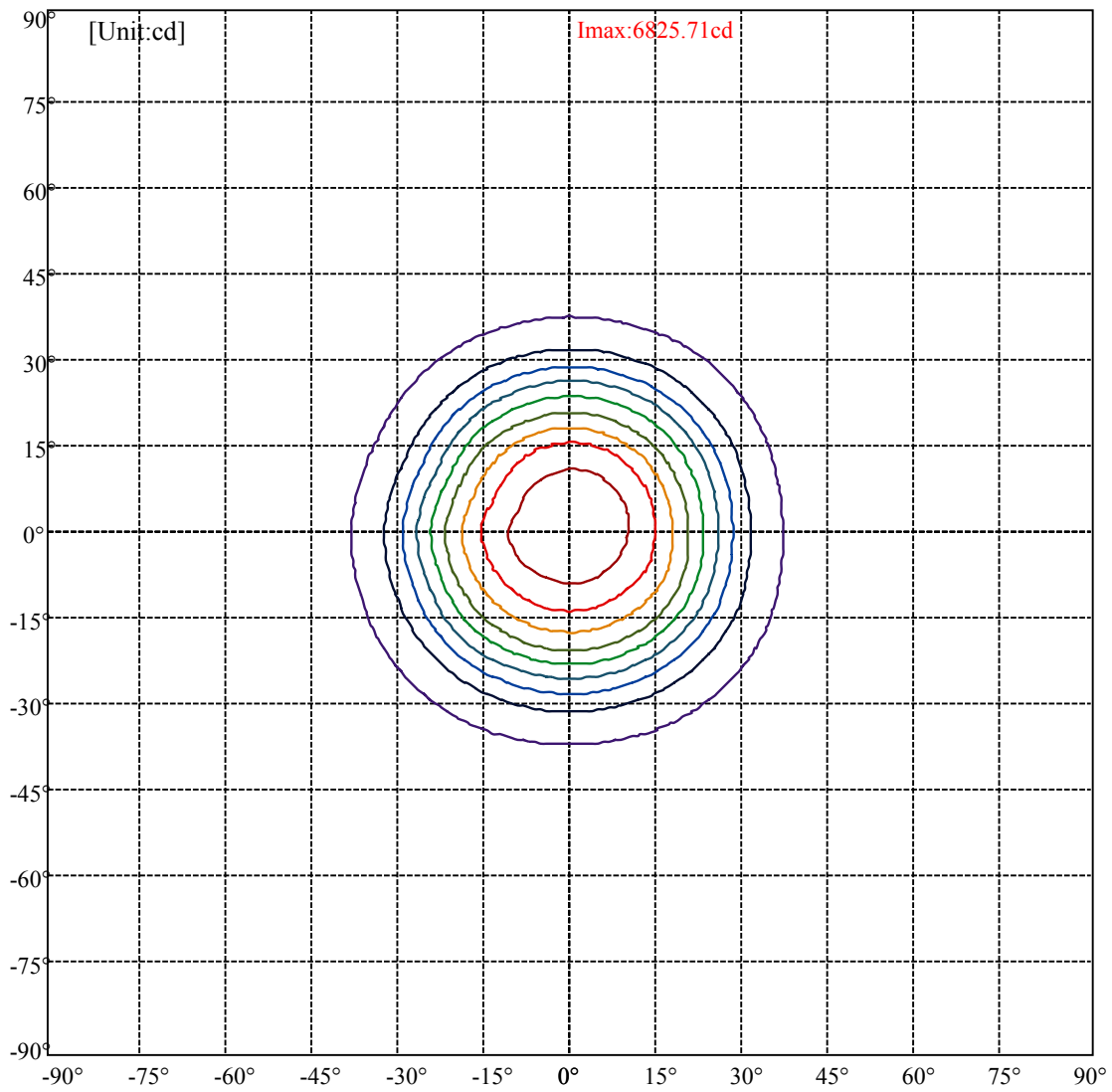
C90/C270: —

Field angle(10%Imax):C0/180Left:37.6 Right:36.7  
:C90/270Left:36.7 Right:37.1

Beam Angle(50%Imax):C0/180Left:23.8 Right:23.0  
:C90/270Left:22.9 Right:23.4



Max , Ave      Beam angle of C0plane47.36



(10%Imax) 679.946	—
(20%Imax) 1359.89	—
(30%Imax) 2039.84	—
(40%Imax) 2719.78	—
(50%Imax) 3399.73	—
(60%Imax) 4079.68	—
(70%Imax) 4759.62	—
(80%Imax) 5439.57	—
(90%Imax) 6119.51	—

## Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	6825.71	6624.60	6141.91	5390.37	4215.21	2894.61	1534.42	791.13	467.02
22.5	6781.26	6652.12	6207.54	5470.82	4208.01	2992.63	1591.37	813.36	469.98
45.0	6791.84	6694.46	6220.24	5525.86	4221.14	3020.36	1593.49	826.91	476.12
67.5	6757.97	6654.23	6256.23	5553.38	4201.66	3033.27	1605.55	817.60	473.16
90.0	6747.38	6683.87	6218.13	5536.44	4205.47	2993.69	1574.86	820.14	474.21
112.5	6757.97	6624.60	6169.43	5485.64	4185.78	2917.68	1551.78	797.91	465.32
135.0	6730.45	6584.37	6135.56	5371.32	4211.40	2839.99	1487.63	773.77	459.61
157.5	6726.21	6535.68	6053.00	5303.57	4210.76	2708.95	1441.48	755.99	437.59
180.0	6825.71	6694.46	6199.07	5489.87	4467.35	3091.28	1677.11	869.25	510.63
202.5	6781.26	6620.36	6133.45	5371.32	4374.20	2940.97	1592.43	838.98	491.15
225.0	6791.84	6548.38	6057.23	5303.57	4249.29	2934.62	1543.74	807.22	472.31
247.5	6757.97	6565.32	5978.90	5246.41	4219.65	2807.60	1501.39	798.33	467.65
270.0	6747.38	6525.10	6008.54	5231.59	4200.60	2777.96	1518.33	786.48	462.99
292.5	6757.97	6525.10	6042.41	5242.18	4240.82	2837.24	1522.56	801.93	469.98
315.0	6730.45	6571.67	6036.06	5292.99	4323.39	2894.40	1583.96	815.69	474.00
337.5	6726.21	6590.72	6093.22	5428.48	4384.78	2968.49	1630.53	852.95	485.01
360.0	6825.71	6624.60	6141.91	5390.37	4215.21	2894.61	1534.42	791.13	467.02
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	295.75	196.25	136.55	99.29	78.12	63.09	47.00	26.68	11.43
22.5	300.62	197.94	134.64	98.23	78.12	62.88	46.58	27.52	11.01
45.0	300.83	197.73	135.70	98.44	77.48	62.45	45.52	26.68	10.16
67.5	303.79	199.42	134.01	98.44	78.33	63.09	46.15	27.73	11.43
90.0	301.25	197.52	133.16	98.44	78.97	64.57	48.27	30.27	13.34
112.5	294.90	196.46	133.58	98.23	78.12	62.88	46.58	27.73	11.43
135.0	290.67	191.38	128.50	96.54	77.06	61.61	44.88	27.31	10.59
157.5	282.41	189.05	129.56	96.11	77.06	62.88	46.36	27.73	10.16
180.0	320.94	210.01	143.11	104.58	82.35	66.69	50.60	30.91	13.55
202.5	310.57	203.87	140.36	102.04	81.29	66.69	51.23	33.03	15.03
225.0	308.66	202.18	138.45	102.68	81.29	66.05	49.33	31.76	14.40
247.5	299.98	199.21	139.09	103.31	81.51	67.11	50.39	30.70	12.91
270.0	301.68	200.69	138.24	102.46	83.20	68.17	51.87	33.24	15.03
292.5	301.04	201.33	141.21	103.52	82.35	67.53	51.02	31.12	13.55
315.0	307.39	204.93	141.42	103.10	81.51	65.84	49.54	32.60	15.67
337.5	307.82	207.05	142.05	104.37	82.99	67.32	51.87	33.87	16.30
360.0	295.75	196.25	136.55	99.29	78.12	63.09	47.00	26.68	11.43
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.64	0.42	0.21	0.00	0.21	0.21	0.21	0.64	0.85
22.5	0.85	0.85	0.64	0.64	0.85	1.06	0.85	0.85	1.27
45.0	0.64	0.64	0.42	0.85	0.85	0.64	0.85	1.06	1.27
67.5	0.85	0.64	0.85	0.85	0.64	0.85	0.85	1.06	1.06
90.0	0.85	0.64	0.85	0.85	0.85	0.85	0.85	1.06	1.27
112.5	0.85	0.85	0.85	0.64	1.06	0.85	1.06	0.85	1.27
135.0	0.64	0.64	0.64	0.64	0.85	0.85	0.85	1.06	1.48
157.5	0.85	0.85	0.64	0.85	0.64	0.64	0.85	0.85	1.27
180.0	1.48	0.21	0.21	0.21	0.21	0.42	0.42	0.85	0.85
202.5	1.48	0.42	0.42	0.64	0.64	0.64	0.64	0.85	0.85
225.0	1.27	0.42	0.64	0.64	0.64	0.64	0.85	0.85	1.06
247.5	1.48	0.64	0.64	0.64	0.42	0.64	0.64	0.85	1.06
270.0	1.48	0.64	0.42	0.64	0.42	0.85	0.64	0.85	1.06
292.5	1.91	0.42	0.64	0.42	0.85	0.85	0.85	0.85	1.06
315.0	1.91	0.64	0.42	0.64	0.64	0.42	0.64	0.85	0.85
337.5	2.54	0.42	0.42	0.64	0.64	0.64	0.64	0.64	1.06
360.0	0.64	0.42	0.21	0.00	0.21	0.21	0.21	0.64	0.85

Equipment: GMS-3000  
Temperature(°C): 25Date:  
Humidity(%): 58%

Operator: Zac

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**Intensity data(cd)**

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<b>C/γ(°)</b>	<b>135.0</b>	<b>140.0</b>	<b>145.0</b>	<b>150.0</b>	<b>155.0</b>	<b>160.0</b>	<b>165.0</b>	<b>170.0</b>	<b>175.0</b>
<b>0.0</b>	<b>0.85</b>	<b>1.69</b>	<b>2.12</b>	<b>2.96</b>	<b>3.60</b>	<b>3.81</b>	<b>4.66</b>	<b>4.87</b>	<b>5.29</b>
<b>22.5</b>	<b>1.48</b>	<b>1.91</b>	<b>2.33</b>	<b>3.18</b>	<b>3.60</b>	<b>4.66</b>	<b>5.08</b>	<b>5.29</b>	<b>5.72</b>
<b>45.0</b>	<b>1.48</b>	<b>2.12</b>	<b>2.75</b>	<b>3.18</b>	<b>3.81</b>	<b>4.45</b>	<b>5.08</b>	<b>5.50</b>	<b>5.72</b>
<b>67.5</b>	<b>1.69</b>	<b>1.69</b>	<b>2.75</b>	<b>3.18</b>	<b>3.81</b>	<b>4.45</b>	<b>5.08</b>	<b>5.50</b>	<b>5.93</b>
<b>90.0</b>	<b>1.48</b>	<b>2.12</b>	<b>2.54</b>	<b>2.96</b>	<b>3.81</b>	<b>4.45</b>	<b>4.87</b>	<b>5.29</b>	<b>5.72</b>
<b>112.5</b>	<b>1.69</b>	<b>2.12</b>	<b>2.54</b>	<b>3.18</b>	<b>4.02</b>	<b>4.66</b>	<b>5.29</b>	<b>5.50</b>	<b>5.72</b>
<b>135.0</b>	<b>1.69</b>	<b>2.12</b>	<b>2.54</b>	<b>3.39</b>	<b>4.02</b>	<b>4.66</b>	<b>5.08</b>	<b>5.72</b>	<b>5.93</b>
<b>157.5</b>	<b>1.69</b>	<b>1.91</b>	<b>2.54</b>	<b>3.39</b>	<b>4.02</b>	<b>4.45</b>	<b>5.50</b>	<b>5.50</b>	<b>5.93</b>
<b>180.0</b>	<b>1.06</b>	<b>1.48</b>	<b>2.33</b>	<b>2.75</b>	<b>3.39</b>	<b>4.45</b>	<b>4.87</b>	<b>5.08</b>	<b>5.50</b>
<b>202.5</b>	<b>1.27</b>	<b>1.69</b>	<b>2.33</b>	<b>3.18</b>	<b>3.81</b>	<b>4.45</b>	<b>5.29</b>	<b>5.08</b>	<b>5.72</b>
<b>225.0</b>	<b>1.27</b>	<b>1.69</b>	<b>2.33</b>	<b>3.18</b>	<b>3.81</b>	<b>4.45</b>	<b>5.08</b>	<b>5.50</b>	<b>5.50</b>
<b>247.5</b>	<b>1.27</b>	<b>1.69</b>	<b>2.54</b>	<b>3.39</b>	<b>4.02</b>	<b>4.45</b>	<b>5.08</b>	<b>5.50</b>	<b>5.72</b>
<b>270.0</b>	<b>1.27</b>	<b>1.91</b>	<b>2.33</b>	<b>3.39</b>	<b>3.81</b>	<b>4.66</b>	<b>5.08</b>	<b>5.29</b>	<b>5.50</b>
<b>292.5</b>	<b>1.48</b>	<b>1.69</b>	<b>2.96</b>	<b>2.96</b>	<b>3.81</b>	<b>4.66</b>	<b>5.08</b>	<b>5.29</b>	<b>5.72</b>
<b>315.0</b>	<b>1.27</b>	<b>1.91</b>	<b>2.54</b>	<b>3.18</b>	<b>3.81</b>	<b>4.45</b>	<b>5.08</b>	<b>5.29</b>	<b>5.50</b>
<b>337.5</b>	<b>1.27</b>	<b>1.91</b>	<b>2.33</b>	<b>3.18</b>	<b>3.81</b>	<b>4.66</b>	<b>4.66</b>	<b>5.29</b>	<b>5.72</b>
<b>360.0</b>	<b>0.85</b>	<b>1.69</b>	<b>2.12</b>	<b>2.96</b>	<b>3.60</b>	<b>3.81</b>	<b>4.66</b>	<b>4.87</b>	<b>5.29</b>
<b>C/γ(°)</b>	<b>180.0</b>								
<b>0.0</b>	<b>5.50</b>								
<b>22.5</b>	<b>5.93</b>								
<b>45.0</b>	<b>6.14</b>								
<b>67.5</b>	<b>6.14</b>								
<b>90.0</b>	<b>5.93</b>								
<b>112.5</b>	<b>5.93</b>								
<b>135.0</b>	<b>6.14</b>								
<b>157.5</b>	<b>6.14</b>								
<b>180.0</b>	<b>5.50</b>								
<b>202.5</b>	<b>5.93</b>								
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<b>337.5</b>	<b>6.14</b>								
<b>360.0</b>	<b>5.50</b>								