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LumCAT: LL4RR-30K

Luminaire:

Report No:

Voltage(V): 120.01

Test No:

Current(A): 0.1217

LampCAT:

Power (W): 14.4180

Lamp flux(lm): 1003.3

PF: 0.9872

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): 1003.31

Efficiency(%): 100.00%

Lumens(lm)/Power(W): 69.59

Central intensity(cd): 417.682

Maximum intensity(cd): 417.915

Angle of maximum intensity: C=180.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=102.3

[C90/270]Total=102.1

Field angle(10%Imax): [C0/180]Total=148.8

[C90/270]Total=149.0

Maximum s/h(1/2): C0\_180=1.26 C90\_270=1.18

Maximum s/h(1/4): C0\_180=1.80 C90\_270=1.30

Up flux rate of lamp(%): 0.34%

Down flux rate of lamp(%): 99.66%

Up flux rate of LUM(%): 0.34%

Down flux rate of LUM(%): 99.66%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 84.331%

## 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	404.921	.000	.000	.000%	.000%
5.0	403.045	9.659	9.659	.963%	.963%
10.0	396.810	28.613	38.272	2.852%	3.815%
15.0	386.824	46.485	84.757	4.633%	8.448%
20.0	372.696	62.595	147.352	6.239%	14.687%
25.0	353.771	76.193	223.545	7.594%	22.281%
30.0	330.820	86.636	310.181	8.635%	30.916%
35.0	304.308	93.527	403.708	9.322%	40.238%
40.0	275.529	96.741	500.449	9.642%	49.880%
45.0	244.263	96.244	596.693	9.593%	59.473%
50.0	210.891	91.970	688.663	9.167%	68.639%
55.0	176.253	84.178	772.841	8.390%	77.029%
60.0	140.686	73.260	846.101	7.302%	84.331%
65.0	104.682	59.649	905.750	5.945%	90.277%
70.0	69.609	44.132	949.882	4.399%	94.675%
75.0	37.632	28.031	977.913	2.794%	97.469%
80.0	15.131	14.118	992.031	1.407%	98.876%
85.0	6.454	5.865	997.896	.585%	99.461%
90.0	.785	1.982	999.878	.198%	99.658%
95.0	.262	.287	1000.164	.029%	99.687%
100.0	.305	.154	1000.318	.015%	99.702%
105.0	.276	.156	1000.474	.016%	99.718%
110.0	.393	.175	1000.649	.017%	99.735%
115.0	.451	.214	1000.862	.021%	99.756%
120.0	.523	.237	1001.099	.024%	99.780%
125.0	.494	.235	1001.335	.023%	99.804%
130.0	.596	.237	1001.572	.024%	99.827%
135.0	.611	.244	1001.815	.024%	99.851%
140.0	.741	.250	1002.066	.025%	99.876%
145.0	.814	.260	1002.325	.026%	99.902%
150.0	.829	.242	1002.567	.024%	99.926%
155.0	.829	.210	1002.777	.021%	99.947%
160.0	.901	.181	1002.958	.018%	99.965%
165.0	.901	.149	1003.107	.015%	99.980%
170.0	.974	.111	1003.218	.011%	99.991%
175.0	.887	.067	1003.284	.007%	99.998%
180.0	.930	.022	1003.306	.002%	100.000%

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

Date:  
Humidity(%): 58%

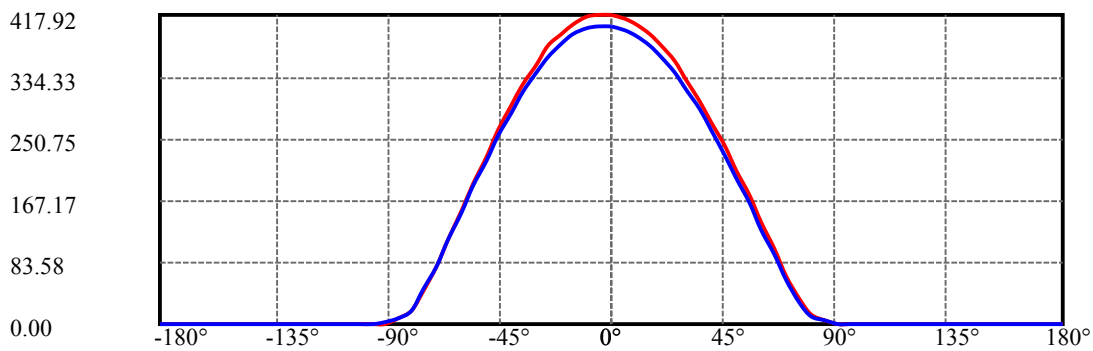
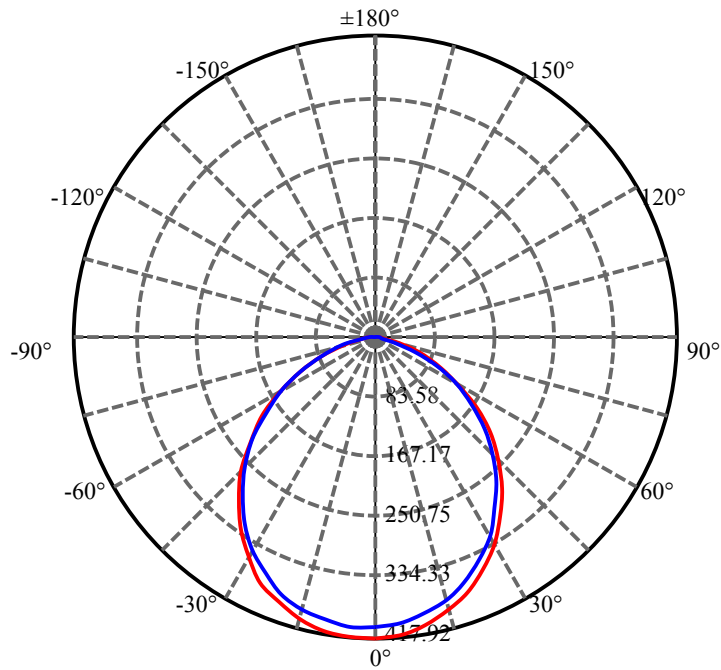
Operator: Zac

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	310.18	30.92%	30.92%
0-40	500.45	49.88%	49.88%
0-60	846.10	84.33%	84.33%
0-90	999.88	99.66%	99.66%
0-120	1001.10	99.78%	99.78%
0-180	1003.31	100.00%	100.00%
60-90	227.04	22.63%	22.63%
90-120	3.20	0.32%	0.32%
90-130	3.68	0.37%	0.37%
90-150	4.67	0.47%	0.47%
90-180	5.39	0.54%	0.54%
0-57.03	802.65	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	38.27
10-20	109.08
20-30	162.83
30-40	190.27
40-50	188.21
50-60	157.44
60-70	103.78
70-80	42.15
80-90	7.85
90-100	0.44
100-110	0.33
110-120	0.45
120-130	0.47
130-140	0.49
140-150	0.50
150-160	0.39
160-170	0.26
170-180	0.07

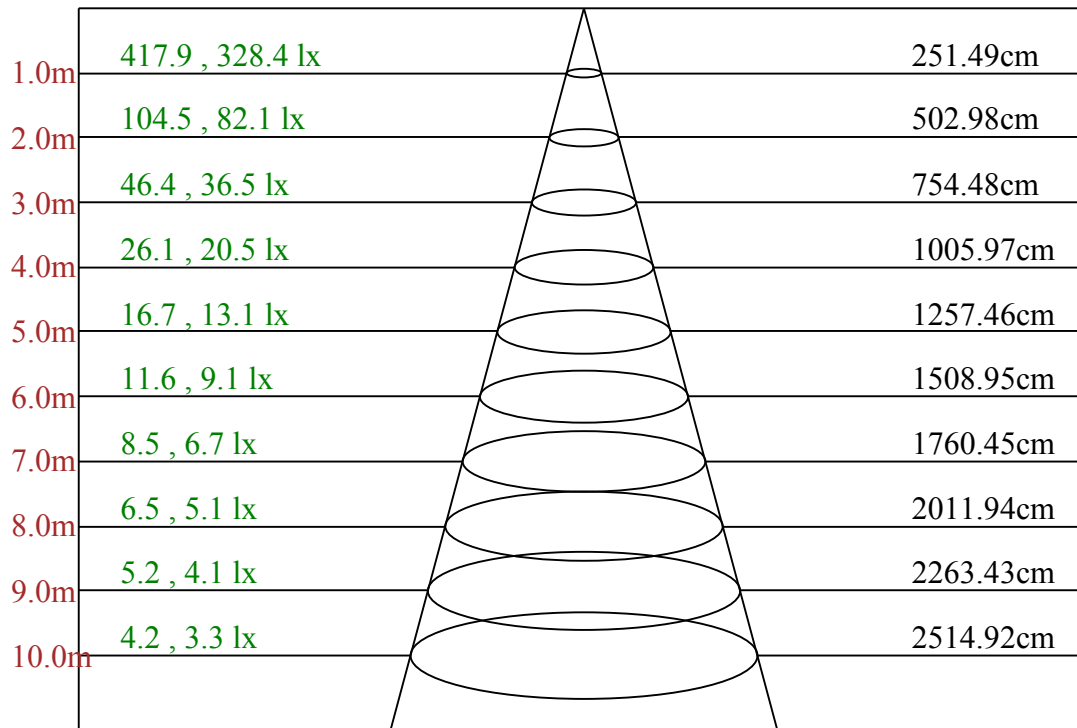


C0/C180: —

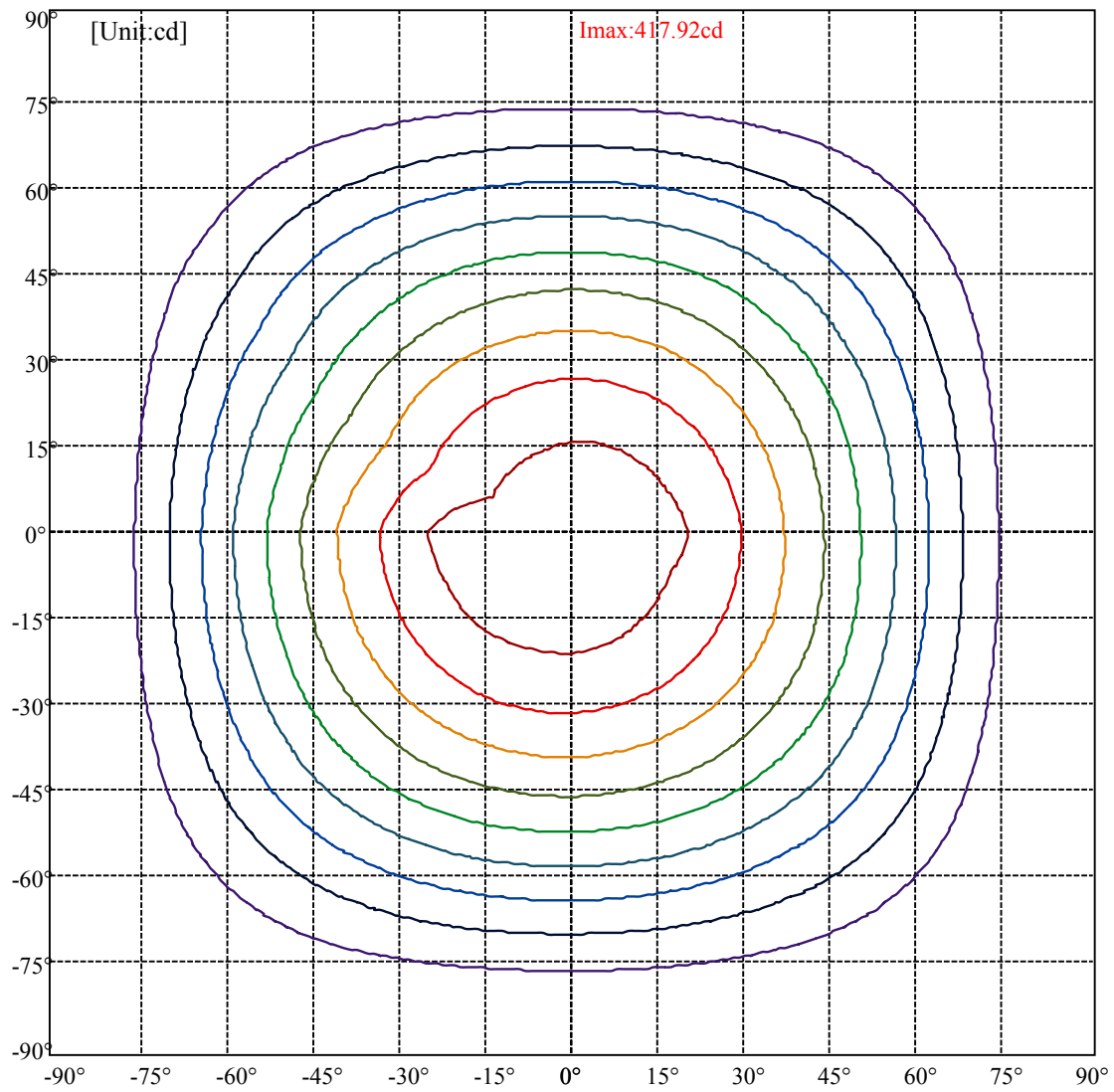
C90/C270: —

Field angle(10%Imax):C0/180Left:70.2 Right:78.6  
:C90/270Left:70.9 Right:78.1

Beam Angle(50%Imax):C0/180Left:47.5 Right:54.8  
:C90/270Left:47.8 Right:54.4



Max , Ave      Beam angle of C180plane102.94



(10%Imax) 41.7915	—
(20%Imax) 83.583	—
(30%Imax) 125.375	—
(40%Imax) 167.166	—
(50%Imax) 208.958	—
(60%Imax) 250.749	—
(70%Imax) 292.54	—
(80%Imax) 334.332	—
(90%Imax) 376.124	—

## 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	417.68	413.50	405.12	392.57	376.52	355.36	330.70	302.33	273.26
22.5	411.40	406.52	398.38	385.36	369.54	349.31	323.96	296.98	268.15
45.0	407.68	402.33	393.73	381.64	365.59	344.66	320.24	292.80	263.73
67.5	404.19	399.78	390.94	379.54	363.26	341.87	317.68	291.87	261.63
90.0	402.57	398.15	389.08	377.22	361.64	340.70	316.98	290.01	261.40
112.5	399.78	396.29	387.91	375.12	360.01	339.31	316.52	290.01	260.01
135.0	398.38	394.19	386.98	375.82	359.54	340.01	316.98	291.40	261.17
157.5	397.68	395.12	387.45	375.59	360.70	340.94	317.91	291.63	264.89
180.0	417.68	417.92	414.19	405.82	392.10	375.12	350.70	323.96	294.66
202.5	411.40	412.80	408.38	399.78	387.45	369.54	347.91	320.94	292.33
225.0	407.68	408.38	404.19	396.75	384.43	367.45	344.43	319.08	289.54
247.5	404.19	405.36	400.71	393.73	380.71	364.43	343.03	316.29	287.22
270.0	402.57	402.80	398.61	390.71	379.31	361.87	340.70	313.96	286.52
292.5	399.78	400.47	396.05	388.61	376.52	359.31	337.68	311.87	283.96
315.0	398.38	398.61	394.66	386.29	373.73	356.29	335.12	309.31	280.94
337.5	397.68	396.52	392.57	384.66	372.10	354.19	332.56	306.52	279.08
360.0	417.68	413.50	405.12	392.57	376.52	355.36	330.70	302.33	273.26
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	241.63	207.91	173.26	136.51	100.47	64.89	32.79	13.26	5.81
22.5	236.05	203.03	167.68	133.26	97.21	62.56	31.63	12.56	4.88
45.0	233.26	199.54	165.59	130.00	94.19	60.93	30.70	12.09	5.35
67.5	230.70	198.14	163.72	128.84	93.49	59.07	29.77	11.40	4.65
90.0	229.54	197.21	162.56	127.91	93.26	59.30	28.61	10.93	4.42
112.5	229.54	198.14	163.96	128.61	93.49	60.47	30.00	11.40	4.42
135.0	231.40	198.61	165.82	130.70	95.35	61.16	31.40	12.33	5.12
157.5	233.73	200.70	166.28	132.79	97.21	63.02	31.86	12.56	5.58
180.0	262.10	226.98	190.47	154.19	115.35	77.91	43.02	18.14	7.44
202.5	260.94	225.59	190.00	153.03	115.58	78.61	45.35	18.84	8.14
225.0	257.91	224.19	189.31	152.10	115.58	80.00	46.75	18.84	8.14
247.5	255.82	223.03	187.21	151.40	116.05	79.54	45.58	18.84	8.14
270.0	254.89	220.93	185.82	151.17	114.65	78.61	45.58	17.68	7.68
292.5	252.33	219.07	184.66	148.84	113.03	77.44	44.89	18.14	7.68
315.0	250.24	216.52	182.79	146.75	110.47	76.51	43.26	17.91	8.14
337.5	248.14	214.66	180.93	144.89	109.54	73.72	40.93	17.21	7.68
360.0	241.63	207.91	173.26	136.51	100.47	64.89	32.79	13.26	5.81
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.47	0.47	0.47	0.23	0.23	0.47	0.47	0.70	0.47
22.5	0.70	0.47	0.47	0.47	0.70	0.70	0.93	0.93	0.93
45.0	0.47	0.47	0.47	0.23	0.70	0.70	0.93	0.47	0.93
67.5	0.47	0.47	0.70	0.47	0.70	0.70	0.70	0.70	0.93
90.0	0.23	0.47	0.47	0.70	0.70	0.70	0.70	0.70	0.70
112.5	0.47	0.47	0.47	0.47	0.70	0.47	0.70	0.70	0.93
135.0	0.47	0.47	0.47	0.70	0.47	0.23	0.70	0.47	0.70
157.5	0.47	0.47	0.47	0.47	0.70	0.47	0.70	0.70	0.70
180.0	0.47	0.00	0.00	0.00	0.23	0.47	0.23	0.00	0.47
202.5	1.16	0.23	0.00	0.00	0.00	0.23	0.23	0.47	0.23
225.0	1.63	0.00	0.23	0.23	0.23	0.47	0.47	0.47	0.70
247.5	1.16	0.00	0.00	0.00	0.23	0.23	0.47	0.23	0.23
270.0	1.40	0.23	0.23	0.23	0.23	0.23	0.00	0.23	0.47
292.5	1.16	0.00	0.00	0.00	0.00	0.47	0.47	0.47	0.23
315.0	1.16	0.00	0.47	0.23	0.23	0.23	0.23	0.47	0.47
337.5	0.70	0.00	0.00	0.00	0.23	0.47	0.47	0.23	0.47
360.0	0.47	0.47	0.47	0.23	0.23	0.47	0.47	0.70	0.47

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**Intensity data(cd)**

<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>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.47</b>	<b>0.47</b>
<b>22.5</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>1.16</b>
<b>45.0</b>	<b>0.70</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>	<b>1.16</b>	<b>0.70</b>
<b>67.5</b>	<b>0.93</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>
<b>90.0</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>1.16</b>	<b>1.16</b>
<b>112.5</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>	<b>0.93</b>	<b>0.70</b>	<b>0.93</b>	<b>1.16</b>	<b>1.40</b>	<b>0.93</b>
<b>135.0</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>	<b>0.70</b>	<b>1.16</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>
<b>157.5</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>1.16</b>	<b>1.16</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>	<b>0.93</b>
<b>180.0</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>
<b>202.5</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>	<b>0.70</b>	<b>0.93</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>
<b>225.0</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.47</b>	<b>0.93</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>
<b>247.5</b>	<b>0.47</b>	<b>0.47</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>	<b>0.70</b>	<b>0.93</b>	<b>1.16</b>	<b>0.93</b>
<b>270.0</b>	<b>0.23</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>
<b>292.5</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>	<b>0.70</b>
<b>315.0</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.70</b>
<b>337.5</b>	<b>0.47</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>	<b>0.93</b>
<b>360.0</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.47</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.47</b>	<b>0.47</b>
<b>C/γ(°)</b>	<b>180.0</b>								
<b>0.0</b>	<b>0.70</b>								
<b>22.5</b>	<b>0.93</b>								
<b>45.0</b>	<b>0.93</b>								
<b>67.5</b>	<b>0.93</b>								
<b>90.0</b>	<b>0.93</b>								
<b>112.5</b>	<b>0.93</b>								
<b>135.0</b>	<b>1.16</b>								
<b>157.5</b>	<b>0.93</b>								
<b>180.0</b>	<b>0.70</b>								
<b>202.5</b>	<b>0.93</b>								
<b>225.0</b>	<b>0.93</b>								
<b>247.5</b>	<b>0.93</b>								
<b>270.0</b>	<b>0.93</b>								
<b>292.5</b>	<b>0.93</b>								
<b>315.0</b>	<b>1.16</b>								
<b>337.5</b>	<b>0.93</b>								
<b>360.0</b>	<b>0.70</b>								