

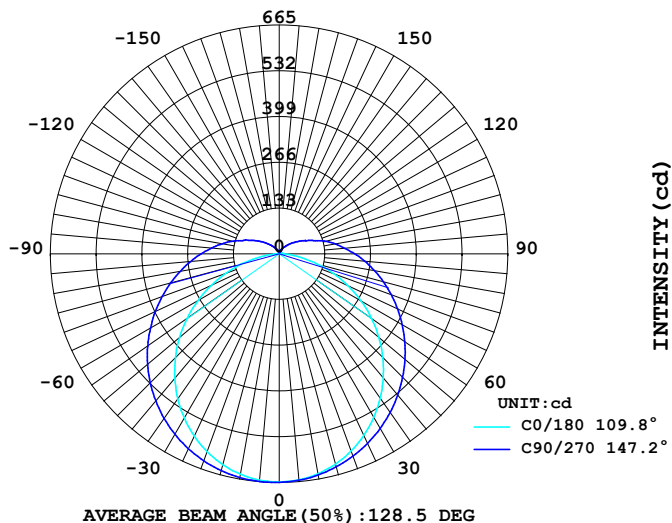
## LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

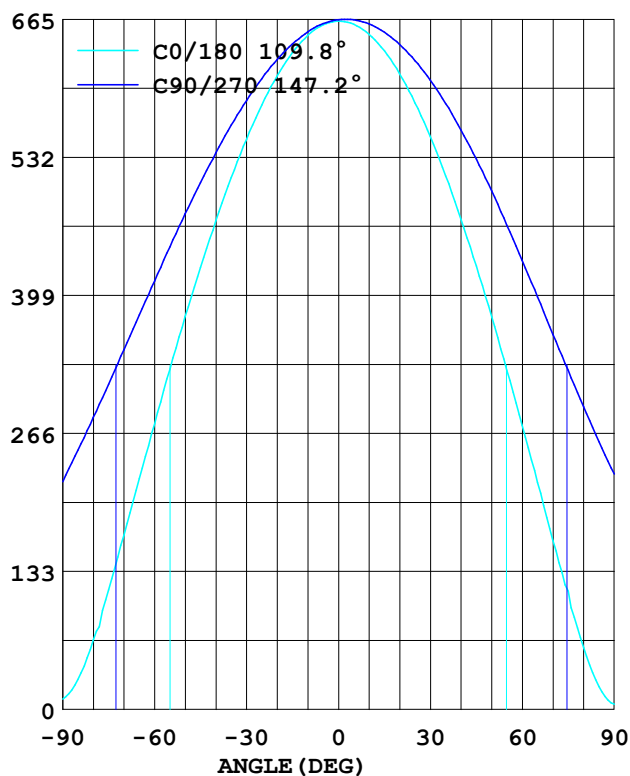
MANUFACTURER: ILUMEN GMBH			
Address:			
NAME: Ava		TYPE: IL-TL27-N02040-120	WEIGHT:
SPECIFICATION: 2835LED 120deg	CCT (K) : 4000	DIMENSION:	SERIAL No. :

DATA OF LAMP		Imax (cd)	664.7	S/MH (C0/180)	1.24
MODEL		EFFICIENCY (%)	100.0	S/MH (C90/270)	1.32
NOMINAL POWER (W)	20	TOTAL FLUX (lm)	2613.2	Voltage (V)	231.0
RATED VOLTAGE (V)	232	EFFICIENCY (lm/W)	130.3	Current (A)	0.088
NOMINAL FLUX (lm)	2613.2	$\eta$ up (%)	11.8	Power (W)	20.04
LAMPS QUANTITY	1	$\eta$ down (%)	88.2	Power Factor (PF)	0.985
TEST VOLTAGE (V)	231.0	Effective Flux (lm)	2513.6	EEL	0.109

### LUMINOUS INTENSITY DISTRIBUTION



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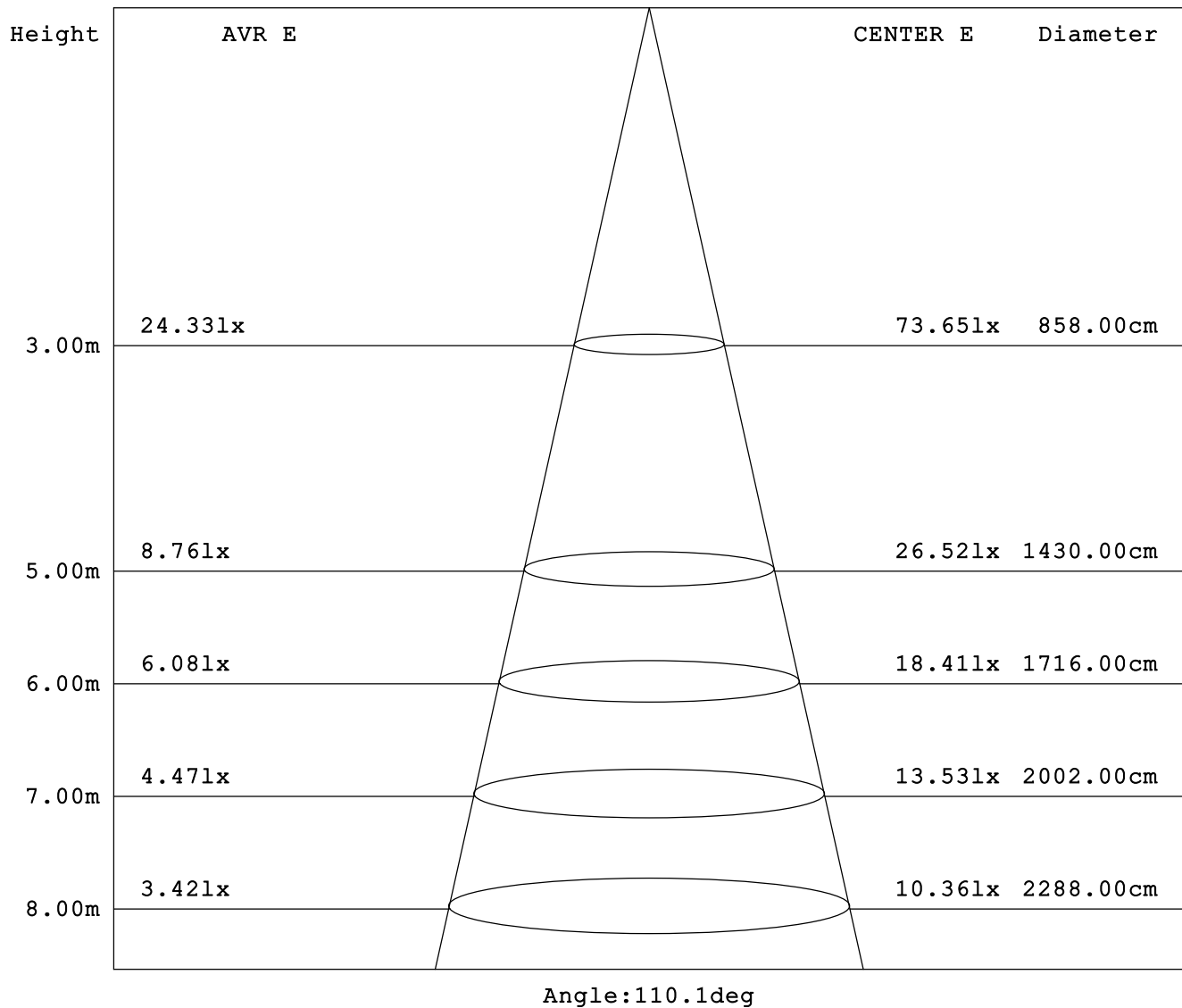
Test System: HOPOO  
 Temperature: 25.3 DEG  
 Operators:  
 Test Date: 2022.05.31

Test Set: 5.0 deg/s C-Gamma (TYPE C)  
 Humidity: 65.0%  
 Test Distance: 10.000 m  
 Remarks:

## AVERAGE AND CENTER E Figure

Report number:

MANUFACTURER: ILUMEN GMBH			
Address:			
NAME: Ava		TYPE: IL-TL27-N02040-120	WEIGHT:
SPECIFICATION: 2835LED 120deg	CCT (K) : 4000	DIMENSION:	SERIAL No. :



Test System:HOPOO  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022.05.31

Test Set: 5.0deg/s C-Gamma (TYPE C)  
 Humidity:65.0%  
 Test Distance:10.000 m  
 Remarks:

## ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH			
Address:			
NAME: Ava		TYPE: IL-TL27-N02040-120	WEIGHT:
SPECIFICATION: 2835LED 120deg	CCT (K) : 4000	DIMENSION:	SERIAL No. :

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Zone	total
5.0	659.3	658.9	660.5	658.2	659.8	662.3	664.2	662.4	0- 5	15.82	15.82
10.0	649.0	649.7	652.5	648.5	650.0	656.5	660.1	656.4	5- 10	46.99	62.82
15.0	632.4	635.5	640.8	633.5	634.3	645.5	652.2	645.1	10- 15	76.68	139.5
20.0	610.3	616.6	626.0	613.7	612.1	629.4	640.4	628.6	15- 20	104.0	243.5
25.0	582.2	593.9	607.6	589.9	584.2	609.0	624.9	607.7	20- 25	128.1	371.6
30.0	549.0	566.8	586.2	561.5	551.7	583.7	606.0	581.8	25- 30	148.4	520.1
35.0	512.2	536.1	562.6	529.4	513.8	555.2	583.5	552.5	30- 35	164.4	684.5
40.0	470.5	503.3	536.0	495.0	471.7	522.4	557.8	519.0	35- 40	175.6	860.1
45.0	425.5	467.6	507.3	457.5	427.1	486.8	530.1	482.5	40- 45	181.9	1042
50.0	378.5	430.2	477.5	418.3	378.2	450.0	499.2	444.8	45- 50	183.3	1225
55.0	327.8	392.6	445.6	379.0	326.5	410.9	466.2	404.8	50- 55	180.1	1406
60.0	275.1	353.8	412.6	338.6	273.6	371.2	432.4	364.3	55- 60	172.6	1578
65.0	222.3	315.6	379.8	298.8	218.4	332.4	397.1	324.9	60- 65	161.3	1740
70.0	167.9	279.2	346.3	261.3	162.7	293.5	361.1	285.4	65- 70	147.0	1887
75.0	115.1	243.7	313.0	224.8	113.9	256.3	326.5	247.6	70- 75	130.4	2017
80.0	66.84	210.0	281.2	190.9	59.58	222.0	291.3	213.0	75- 80	112.5	2130
85.0	28.68	179.3	249.7	160.2	22.06	189.4	257.8	180.4	80- 85	94.95	2225
90.0	10.07	151.0	219.4	132.4	5.085	160.0	226.9	151.3	85- 90	79.21	2304
95.0	6.714	126.3	191.9	109.1	3.505	134.4	197.1	126.3	90- 95	66.65	2370
100.0	6.072	106.8	166.1	87.33	3.554	111.2	169.3	103.5	95-100	55.95	2426
105.0	5.776	78.54	141.3	63.68	3.702	82.79	143.3	76.07	100-105	44.97	2471
110.0	5.677	58.00	112.5	47.88	3.949	63.63	114.1	57.66	105-110	34.56	2506
115.0	5.677	47.34	94.34	37.56	4.097	51.29	94.29	46.50	110-115	26.70	2533
120.0	5.677	37.71	76.62	29.76	4.344	41.27	76.91	37.52	115-120	20.88	2554
125.0	5.726	30.06	62.25	23.49	4.541	33.47	61.61	30.51	120-125	16.20	2570
130.0	5.825	24.09	49.61	19.15	4.739	27.10	48.92	25.12	125-130	12.36	2582
135.0	5.924	19.30	38.85	15.45	4.986	21.91	37.02	20.48	130-135	9.309	2591
140.0	5.973	15.05	30.01	12.34	5.134	17.62	28.78	15.89	135-140	6.819	2598
145.0	6.072	11.45	22.75	10.02	5.331	14.02	21.57	12.49	140-145	4.873	2603
150.0	6.121	9.133	17.08	8.294	5.529	11.30	15.89	10.41	145-150	3.437	2607
155.0	6.171	7.602	12.93	7.109	5.677	9.380	11.65	8.935	150-155	2.418	2609
160.0	6.220	6.615	10.02	6.368	5.825	7.997	8.837	7.849	155-160	1.689	2611
165.0	6.269	6.072	8.244	5.973	5.973	7.158	7.010	7.109	160-165	1.167	2612
170.0	6.269	5.825	7.306	5.874	6.072	6.763	6.121	6.763	165-170	0.775	2613
175.0	6.269	5.776	6.911	5.874	6.121	6.615	5.874	6.566	170-175	0.451	2613
180.0	6.269	5.825	6.763	5.973	6.269	6.516	5.973	6.516	175-180	0.149	2613
DEG	LUMINOUS INTENSITY:cd									UNIT:lm	

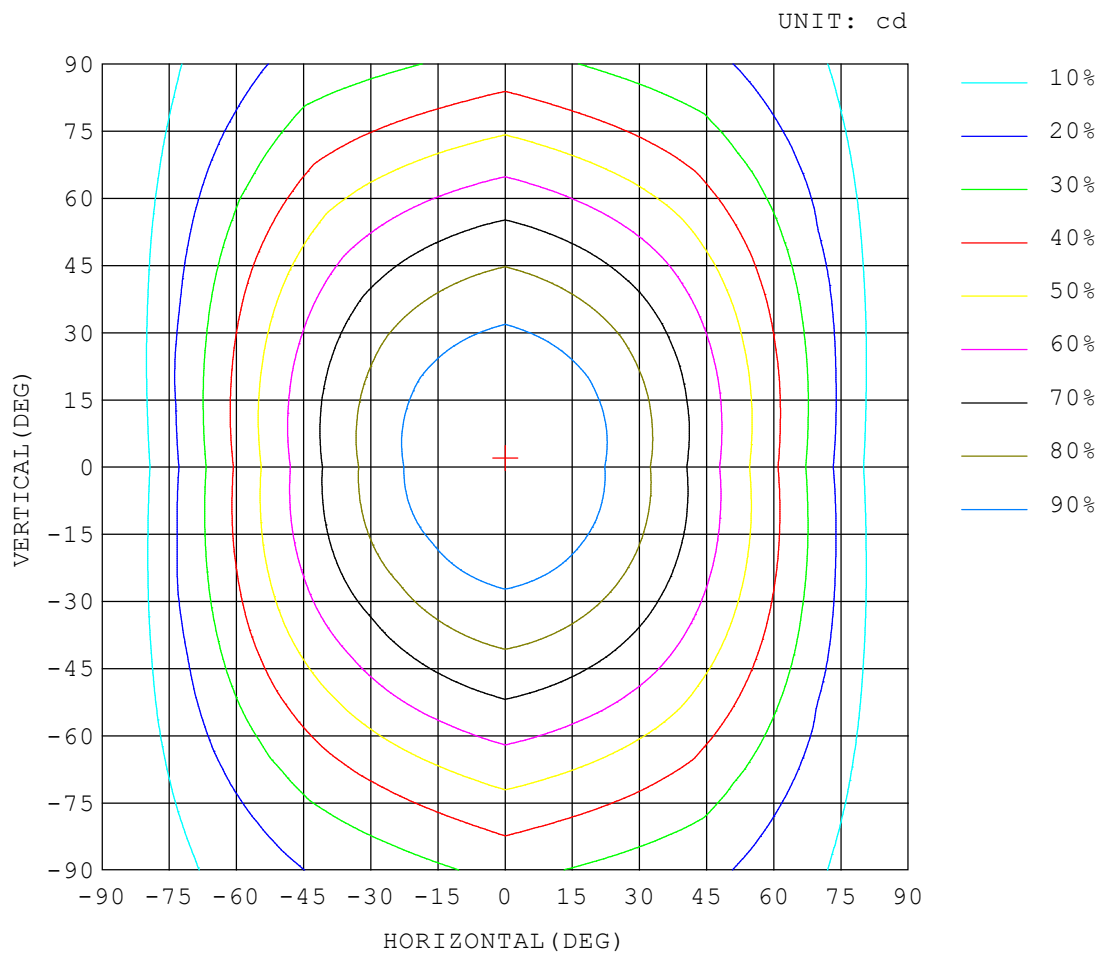
Test System:HOPOO  
Temperature:25.3DEG  
Operators:  
Test Date:2022.05.31

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH			
Address:			
NAME: Ava		TYPE: IL-TL27-N02040-120	WEIGHT:
SPECIFICATION: 2835LED 120deg	CCT (K) : 4000	DIMENSION:	SERIAL No. :



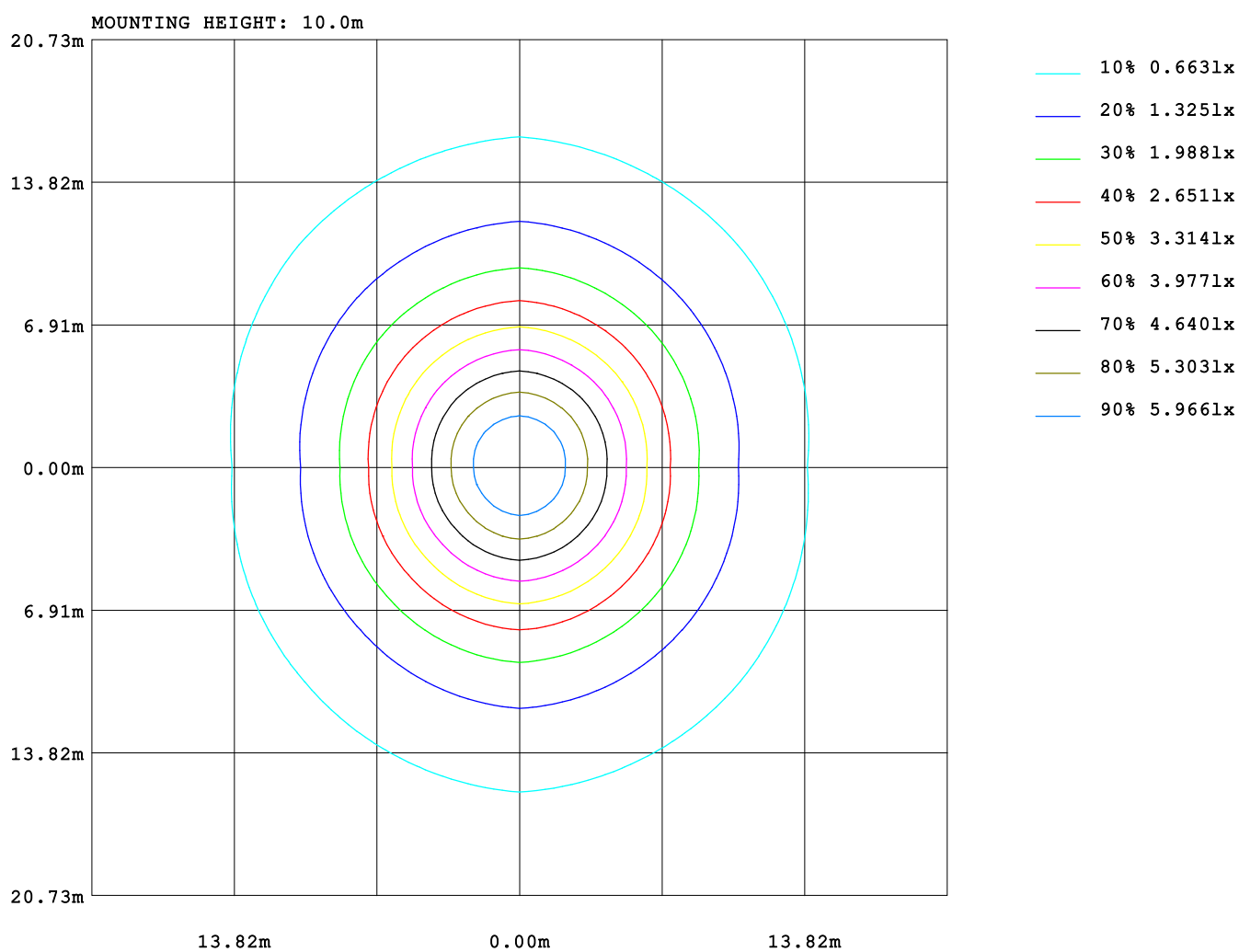
Test System:HOPOO  
Temperature:25.3DEG  
Operators:  
Test Date:2022.05.31

Test Set: 5.0deg/s C-Gamma (TYPE C)  
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Remarks:

## ISOLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH			
Address:			
NAME: Ava		TYPE: IL-TL27-N02040-120	WEIGHT:
SPECIFICATION: 2835LED 120deg	CCT (K) : 4000	DIMENSION:	SERIAL No. :



Test System:HOPOO  
Temperature:25.3DEG  
Operators:  
Test Date:2022.05.31

Test Set: 5.0deg/s C-Gamma (TYPE C)  
Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH			
Address:			
NAME: Ava		TYPE: IL-TL27-N02040-120	WEIGHT:
SPECIFICATION: 2835LED 120deg	CCT (K) : 4000	DIMENSION:	SERIAL No. :

UNIT: cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315
0.0	663	663	664	663	663	663	664	663
5.0	659	659	661	658	660	662	664	662
10.0	649	650	653	649	650	657	660	656
15.0	632	636	641	634	634	646	652	645
20.0	610	617	626	614	612	629	640	629
25.0	582	594	608	590	584	609	625	608
30.0	549	567	586	562	552	584	606	582
35.0	512	536	563	529	514	555	584	553
40.0	471	503	536	495	472	522	558	519
45.0	426	468	507	458	427	487	530	483
50.0	379	430	478	418	378	450	499	445
55.0	328	393	446	379	327	411	466	405
60.0	275	354	413	339	274	371	432	364
65.0	222	316	380	299	218	332	397	325
70.0	168	279	346	261	163	294	361	285
75.0	115	244	313	225	114	256	327	248
80.0	66.8	210	281	191	59.5	222	291	213
85.0	28.6	179	250	160	22.0	189	258	180
90.0	10.0	151	219	132	5.08	160	227	151
95.0	6.71	126	192	109	3.50	134	197	126
100.0	6.07	107	166	87.3	3.55	111	169	104
105.0	5.77	78.5	141	63.6	3.70	82.7	143	76.0
110.0	5.67	58.0	113	47.8	3.94	63.6	114	57.6
115.0	5.67	47.3	94.3	37.5	4.09	51.2	94.2	46.5
120.0	5.67	37.7	76.6	29.7	4.34	41.2	76.9	37.5
125.0	5.72	30.0	62.2	23.4	4.54	33.4	61.6	30.5
130.0	5.82	24.0	49.6	19.1	4.73	27.1	48.9	25.1
135.0	5.92	19.3	38.8	15.4	4.98	21.9	37.0	20.4
140.0	5.97	15.0	30.0	12.3	5.13	17.6	28.7	15.8
145.0	6.07	11.4	22.7	10.0	5.33	14.0	21.5	12.4
150.0	6.12	9.13	17.0	8.29	5.52	11.3	15.8	10.4
155.0	6.17	7.60	12.9	7.10	5.67	9.38	11.6	8.93
160.0	6.22	6.61	10.0	6.36	5.82	7.99	8.83	7.84
165.0	6.26	6.07	8.24	5.97	5.97	7.15	7.01	7.10
170.0	6.26	5.82	7.30	5.87	6.07	6.76	6.12	6.76
175.0	6.26	5.77	6.91	5.87	6.12	6.61	5.87	6.56
180.0	6.26	5.82	6.76	5.97	6.26	6.51	5.97	6.51

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