

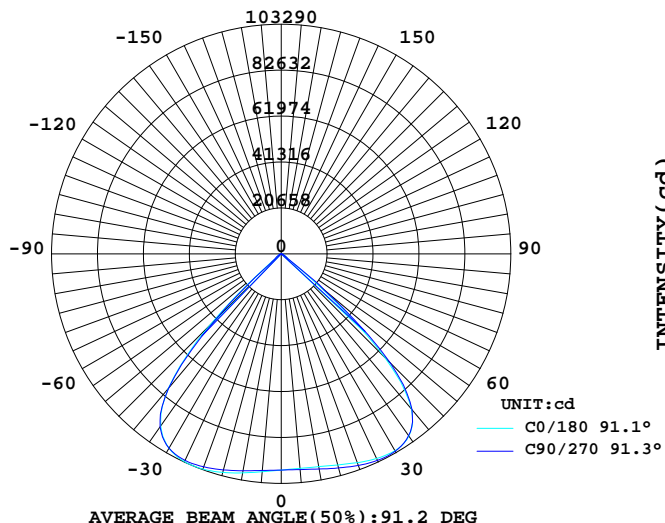
# LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

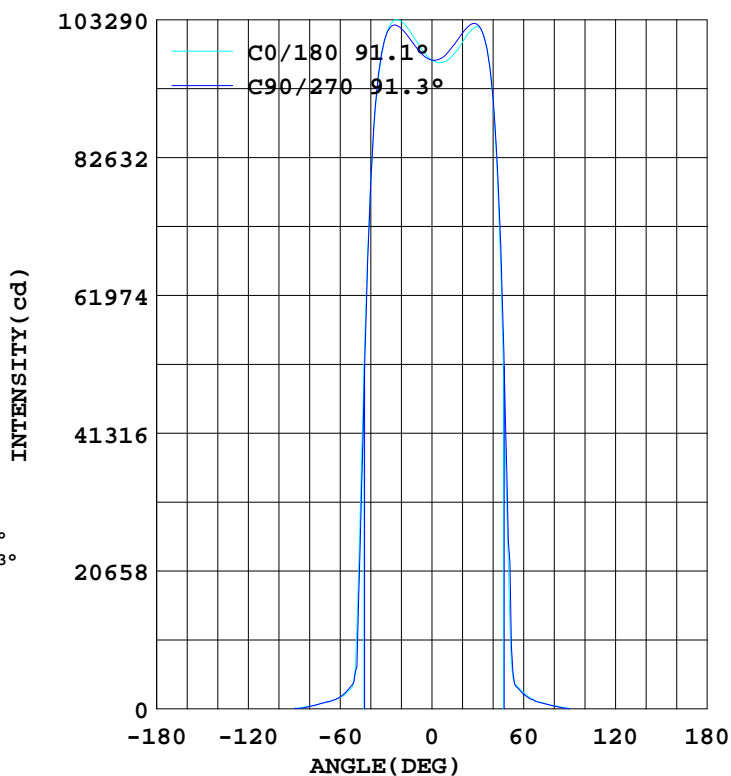
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N120040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	103466	S/MH(C0/180)	1.32
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.31
NOMINAL POWER(W)	1200	TOTAL FLUX(lm)	192000	Voltage(V)	231.0
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	160.0	Current(A)	5.203
NOMINAL FLUX(lm)	192000.0	$\eta$ up(%)	0.0	Power(W)	1200
LAMPS QUANTITY	1	$\eta$ down(%)	100.0	Power Factor(PF)	1.000
TEST VOLTAGE(V)	231.0	Effective Flux(lm)	191999.9	EEI	0.094

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



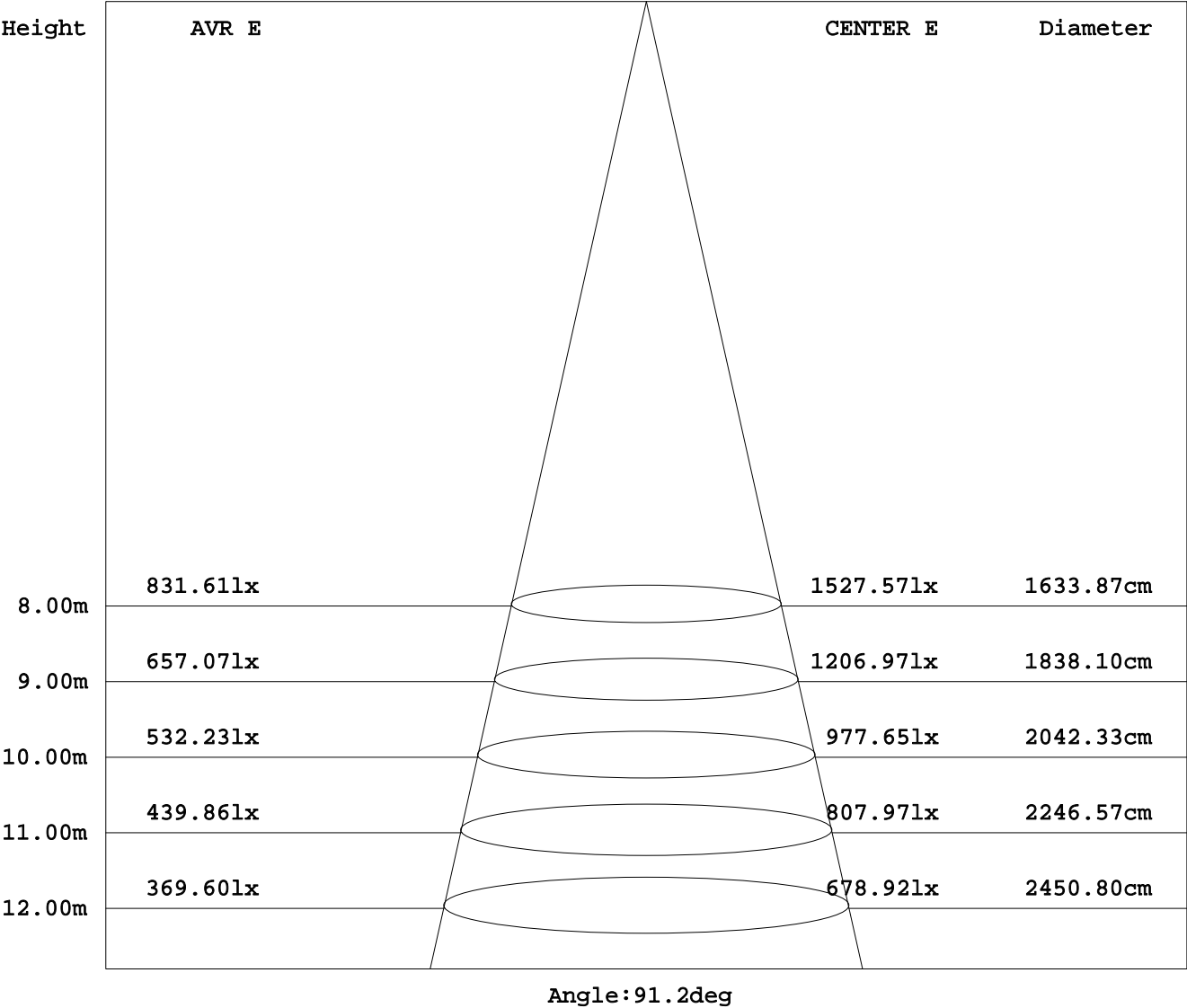
Test System:  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2024.01.20

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

AVERAGE AND CENTER E Figure

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MANUFACTURER: ILUMEN GMBH	Address:	
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SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:



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Operators:  
Test Date:2024.01.20

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ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N120040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	983.8	982.3	978.0	973.7	968.4	969.1	974.0	978.8	0- 5	2329	2329
10.0	1000	997.7	990.7	982.3	972.0	973.7	982.8	992.1	5- 10	7021	9351
15.0	1018	1015	1006	996.9	983.2	986.1	996.8	1009	10- 15	11795	21146
20.0	1030	1027	1019	1012	999.6	1002	1013	1025	15- 20	16635	37781
25.0	1032	1028	1025	1022	1016	1017	1025	1034	20- 25	21426	59206
30.0	1009	1005	1009	1014	1022	1023	1025	1029	25- 30	25888	85095
35.0	945.5	938.8	950.1	964.0	1000	1002	998.7	991.7	30- 35	29421	114516
40.0	789.8	769.7	787.6	810.6	912.5	922.4	915.1	896.2	35- 40	30702	145218
45.0	455.8	410.8	414.9	440.0	661.5	695.8	693.2	660.9	40- 45	26548	171766
50.0	61.21	57.41	56.20	64.00	219.5	245.1	251.9	232.8	45- 50	13837	185603
55.0	26.31	25.79	28.32	31.57	35.82	38.91	33.57	35.09	50- 55	2815	188418
60.0	17.11	16.45	17.87	19.85	24.12	26.40	22.13	22.64	55- 60	1203	189621
65.0	12.84	11.69	12.64	12.58	15.18	16.69	14.30	15.61	60- 65	832.8	190454
70.0	9.614	8.200	9.554	8.694	10.47	10.68	9.922	10.87	65- 70	594.6	191048
75.0	6.203	5.633	6.424	6.036	7.332	7.745	7.129	7.782	70- 75	432.9	191481
80.0	4.154	3.249	3.599	3.410	4.640	5.241	4.316	5.347	75- 80	293.4	191775
85.0	2.011	1.062	1.218	1.134	2.578	2.446	1.822	2.568	80- 85	164.3	191939
90.0	0.775	0.468	0.768	0.472	0.693	0.822	0.470	0.822	85- 90	60.64	192000
95.0									90- 95		
100.0									95-100		
105.0									100-105		
110.0									105-110		
115.0									110-115		
120.0									115-120		
125.0									120-125		
130.0									125-130		
135.0									130-135		
140.0									135-140		
145.0									140-145		
150.0									145-150		
155.0									150-155		
160.0									155-160		
165.0									160-165		
170.0									165-170		
175.0									170-175		
180.0									175-180		
DEG	LUMINOUS INTENSITY:×100cd									UNIT:lm	

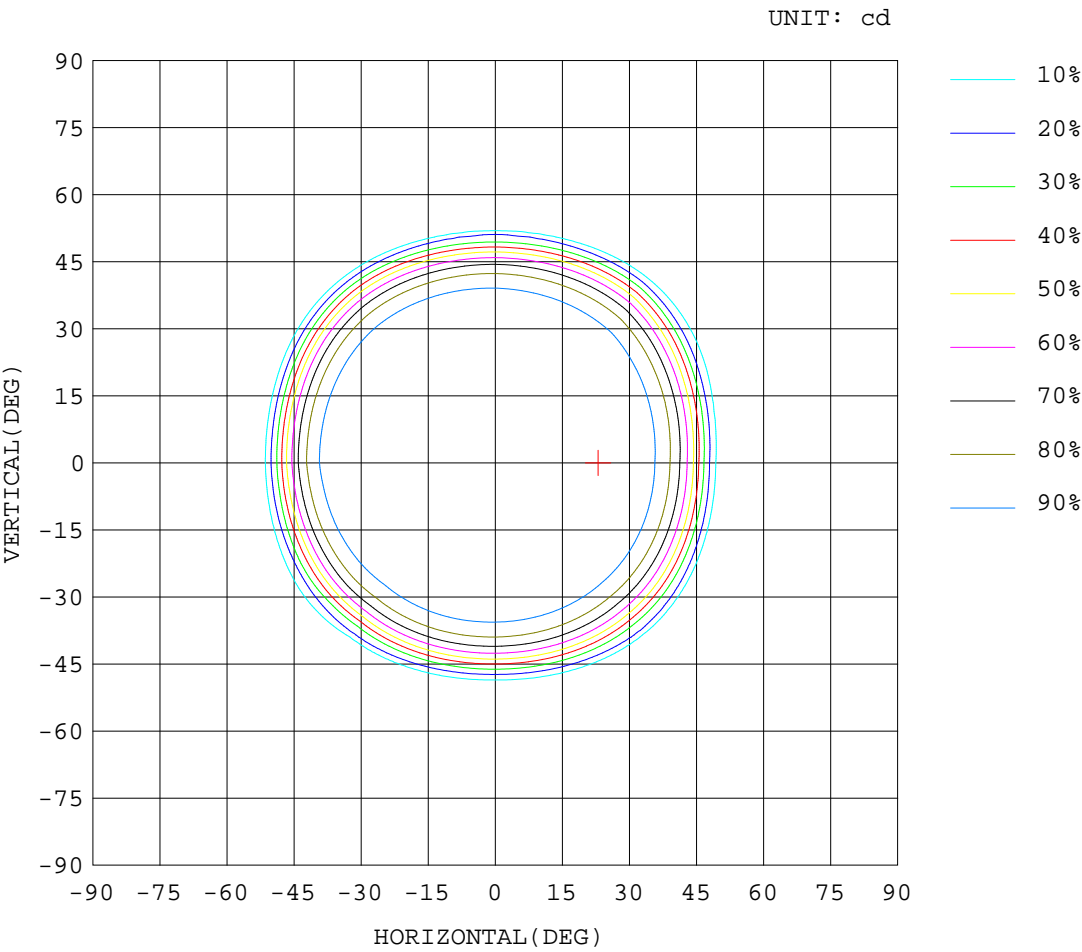
Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2024.01.20

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Humidity:65.0%  
Test Distance:10.000 m  
Remarks:

ISOCANDELA DIAGRAM

Report number:

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NAME: Kroos	TYPE:IL-SL13-N120040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:



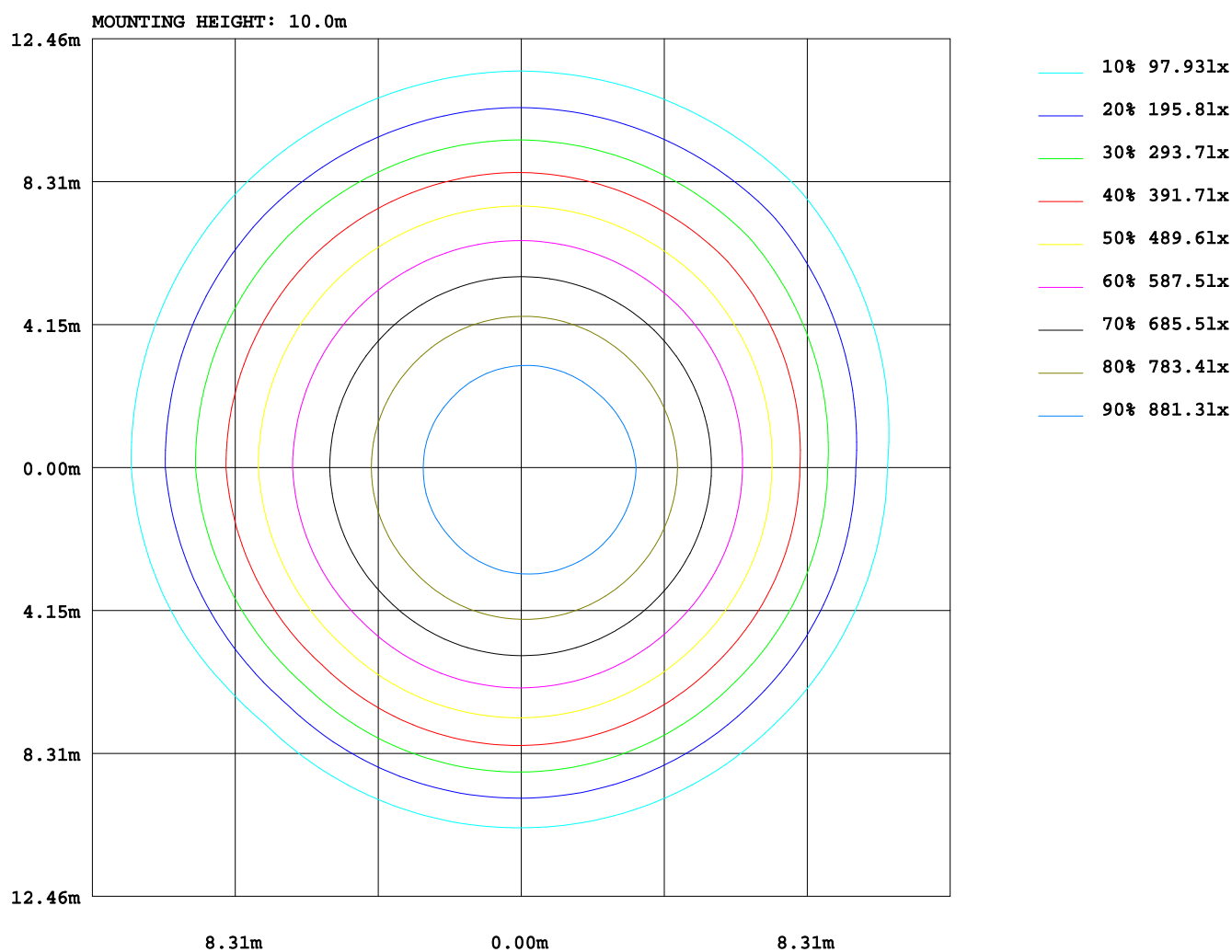
Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2024.01.20

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

## ISOLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N120040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:



Test System:  
Temperature:25.3DEG  
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Test Date:2024.01.20

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Remarks:

## Uncorrected UGR Table

Report number:

MANUFACTURER: ILUMEN GMBH						Address:				
NAME: Kroos						TYPE:IL-SL13-N120040-090 WEIGHT:				
SPECIFICATION:5050LED 4000K 90°						DIMENSION:		SERIAL No.:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions						Viewed crosswise				
x = 2H y = 2H						Viewed endwise				
3H						27.4	28.6	27.7	28.8	29.0
4H						27.3	28.3	27.5	28.6	28.8
6H						27.2	28.2	27.5	28.4	28.7
8H						27.1	28.0	27.4	28.3	28.5
12H						27.1	28.0	27.4	28.2	28.5
27.1						26.9	27.8	27.3	28.1	28.4
27.0						26.9	27.7	27.2	28.0	28.3
4H 2H						27.0	28.1	27.3	28.3	28.5
3H						26.9	27.7	27.2	28.0	28.3
4H						26.9	27.7	27.3	28.0	28.3
6H						26.8	27.6	27.2	27.9	28.2
8H						26.9	27.5	27.2	27.9	28.2
12H						26.7	27.4	27.1	27.7	28.1
26.8						26.7	27.3	27.1	27.7	28.0
26.8						26.6	27.2	27.1	27.6	28.0
8H 4H						26.7	27.3	27.1	27.7	28.0
6H						26.6	27.1	27.0	27.5	27.9
8H						26.6	27.0	27.0	27.4	27.9
12H						26.6	27.0	27.0	27.3	27.8
26.5						26.5	26.9	27.0	27.3	27.8
12H 4H						26.6	27.2	27.0	27.6	28.0
6H						26.6	27.0	27.0	27.4	27.9
8H						26.6	27.0	27.0	27.3	27.8
Variations with the observer position at spacings:										
S = 1.0H		+ 2.6 / -12.0				+ 2.6 / -12.1				
1.5H		+ 3.9 / -12.0				+ 4.1 / -11.9				
2.0H		+ 8.1 / - 8.3				+ 8.1 / - 7.9				

CIE Pub.117 Corrected 192000 lm Total Lamp Luminous Flux.(8log(F/F0) = 18.3)

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LUMINOUS DISTRIBUTION INTENSITY DATA

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NAME: Kroos	TYPE:IL-SL13-N120040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:

UNIT: ×100cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315
0.0	973	973	973	973	973	973	973	973
5.0	984	982	978	974	968	969	974	979
10.0	1000	998	991	982	972	974	983	992
15.0	1018	1015	1006	997	983	986	997	1009
20.0	1030	1027	1019	1012	1000	1002	1013	1025
25.0	1032	1028	1025	1022	1016	1017	1025	1034
30.0	1009	1005	1009	1014	1022	1023	1025	1029
35.0	946	939	950	964	1000	1002	999	992
40.0	790	770	788	811	913	922	915	896
45.0	456	411	415	440	662	696	693	661
50.0	61.2	57.4	56.2	64.0	220	245	252	233
55.0	26.3	25.7	28.3	31.5	35.8	38.9	33.5	35.0
60.0	17.1	16.4	17.8	19.8	24.1	26.4	22.1	22.6
65.0	12.8	11.6	12.6	12.5	15.1	16.6	14.3	15.6
70.0	9.61	8.20	9.55	8.69	10.4	10.6	9.92	10.8
75.0	6.20	5.63	6.42	6.03	7.33	7.74	7.12	7.78
80.0	4.15	3.24	3.59	3.41	4.64	5.24	4.31	5.34
85.0	2.01	1.06	1.21	1.13	2.57	2.44	1.82	2.56
90.0	0.78	0.47	0.77	0.47	0.69	0.82	0.47	0.82

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