

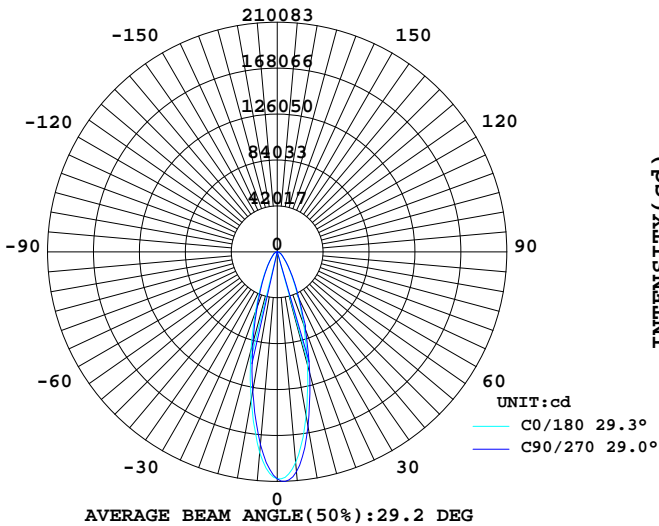
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

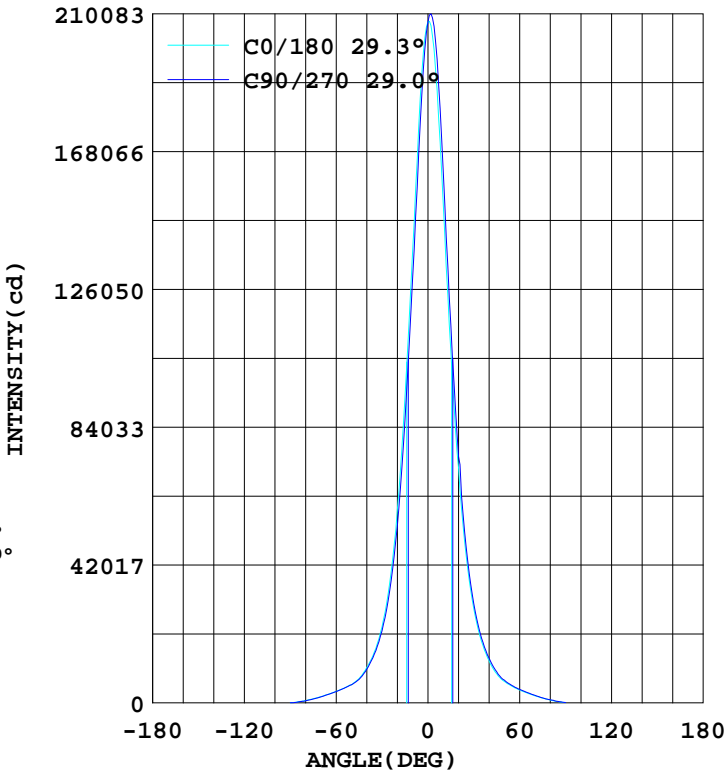
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N60040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	210273	S/MH(C0/180)	0.45
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.43
NOMINAL POWER(W)	600	TOTAL FLUX(lm)	90000	Voltage(V)	231.1
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	150.0	Current(A)	2.596
NOMINAL FLUX(lm)	90000.0	η up(%)	0.0	Power(W)	600.0
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	1.000
TEST VOLTAGE(V)	231.1	Effective Flux(lm)	90000.1	EEI	0.100

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



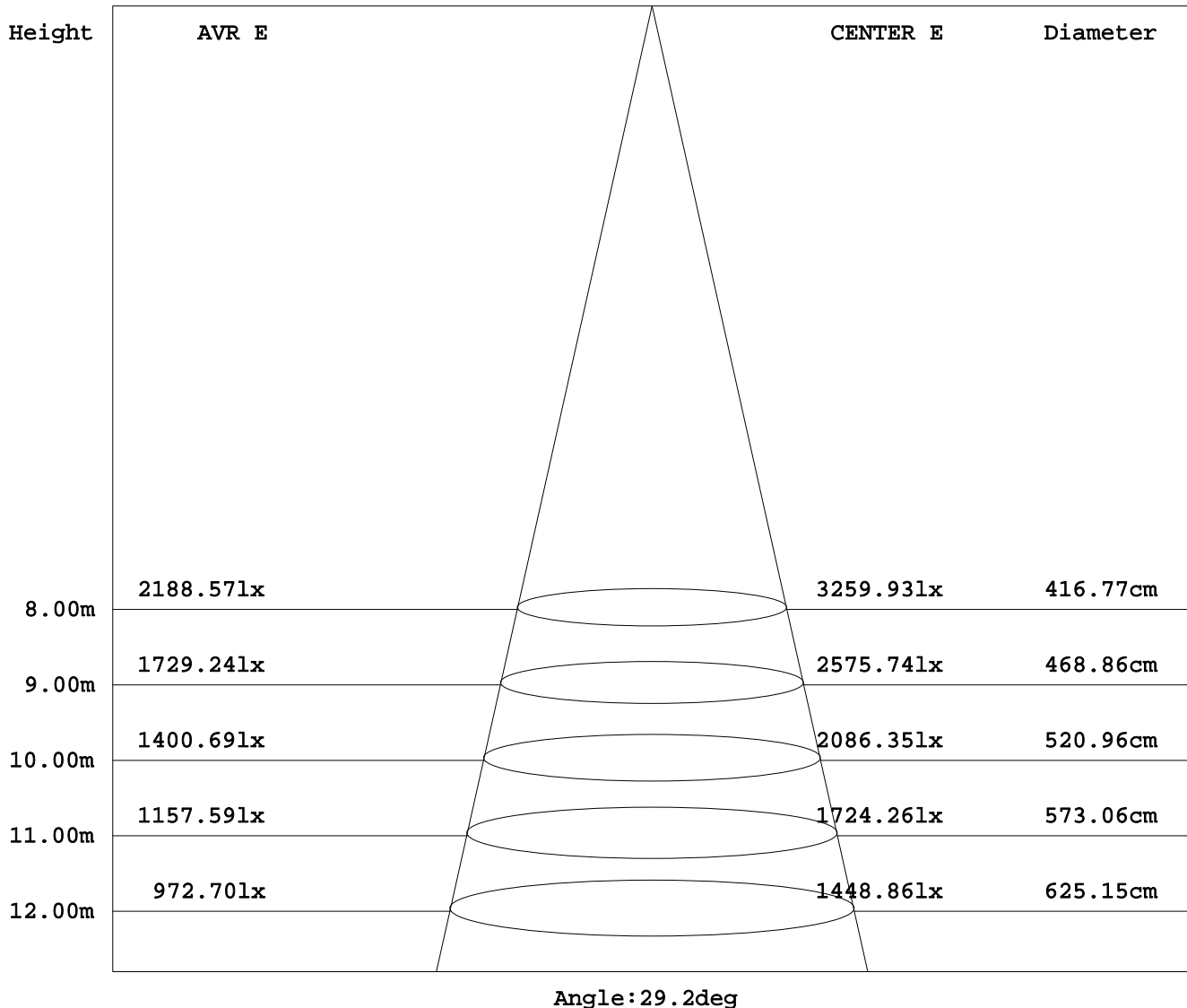
Test System:
 Temperature:25.3DEG
 Operators:
 Test Date:2025.02.20

Test Set: 5.0deg/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: Kroos	TYPE:IL-SL13-N60040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:



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ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE: IL-SL13-N60040-030	WEIGHT:
SPECIFICATION: 5050LED 4000K 30°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	1846	1795	1771	1771	1933	1988	2018	2021	0- 5	4742	4742
10.0	1376	1321	1295	1301	1525	1579	1623	1612	5- 10	11870	16611
15.0	928.4	885.1	859.5	871.9	1072	1125	1151	1145	10- 15	14350	30961
20.0	585.5	563.9	535.7	560.1	715.7	736.8	750.4	738.2	15- 20	13379	44341
25.0	366.0	351.6	342.2	349.9	451.3	469.8	477.5	459.7	20- 25	10799	55140
30.0	232.0	225.0	219.9	223.7	287.7	302.9	302.9	291.7	25- 30	8258	63398
35.0	155.3	151.5	149.0	150.1	188.0	198.4	198.4	189.3	30- 35	6248	69646
40.0	107.6	103.2	102.4	103.0	128.3	136.0	136.3	129.0	35- 40	4771	74417
45.0	74.37	71.58	72.01	72.66	88.46	93.65	94.35	90.26	40- 45	3650	78067
50.0	54.90	55.49	55.32	56.36	65.69	67.81	69.62	64.91	45- 50	2855	80922
55.0	44.87	43.73	44.34	44.15	50.89	53.38	53.14	51.63	50- 55	2363	83285
60.0	35.03	34.14	34.58	34.26	39.39	41.68	41.22	40.77	55- 60	1973	85258
65.0	26.72	25.97	26.23	25.91	29.93	31.95	31.51	31.61	60- 65	1607	86866
70.0	19.15	18.62	18.29	18.33	21.89	23.59	22.93	23.66	65- 70	1249	88114
75.0	12.59	11.86	11.75	11.69	14.44	16.07	15.13	16.31	70- 75	896.9	89011
80.0	7.262	6.337	6.632	6.193	8.784	9.496	9.325	9.758	75- 80	576.6	89588
85.0	3.128	2.337	2.647	2.229	4.028	4.786	4.401	4.958	80- 85	305.8	89894
90.0	0.538	0.313	0.552	0.306	0.679	1.050	0.991	1.290	85- 90	106.1	90000
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: 2025.02.20

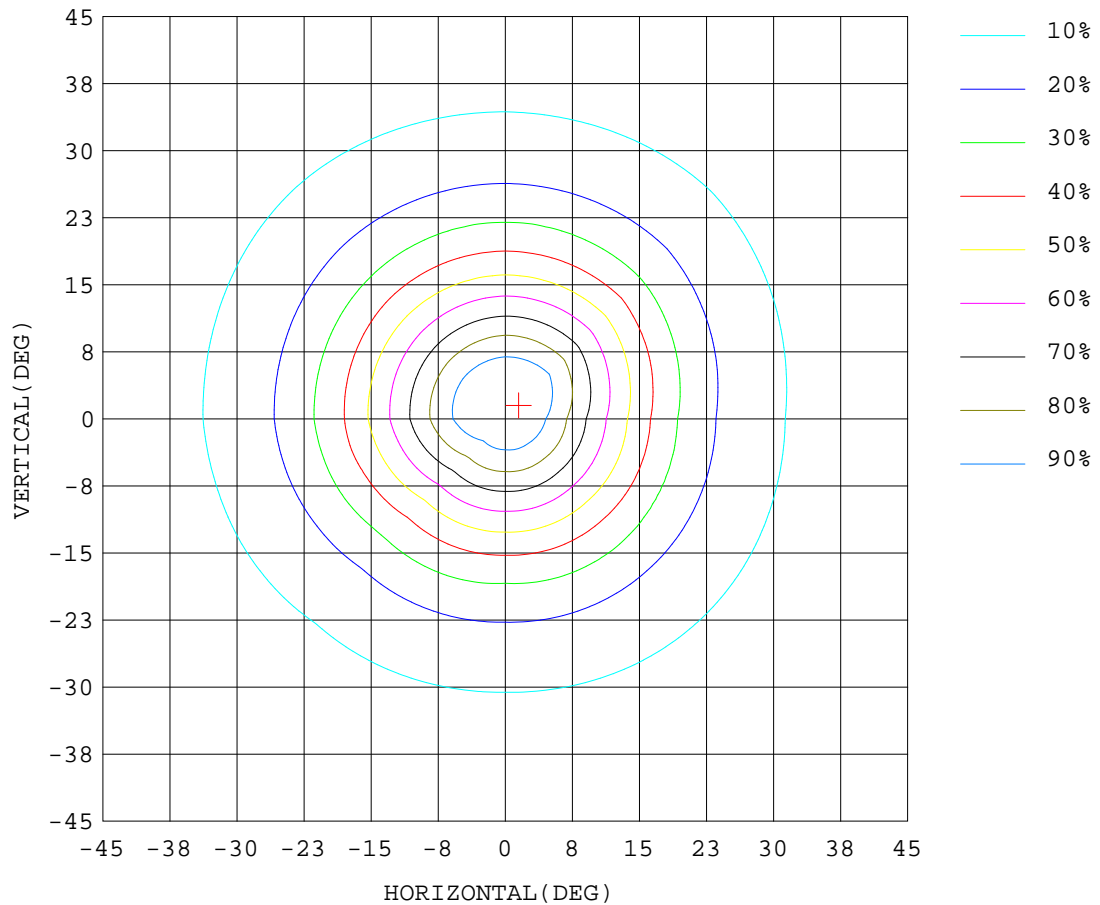
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity: 65.0%
 Test Distance: 10.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N60040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

UNIT: cd



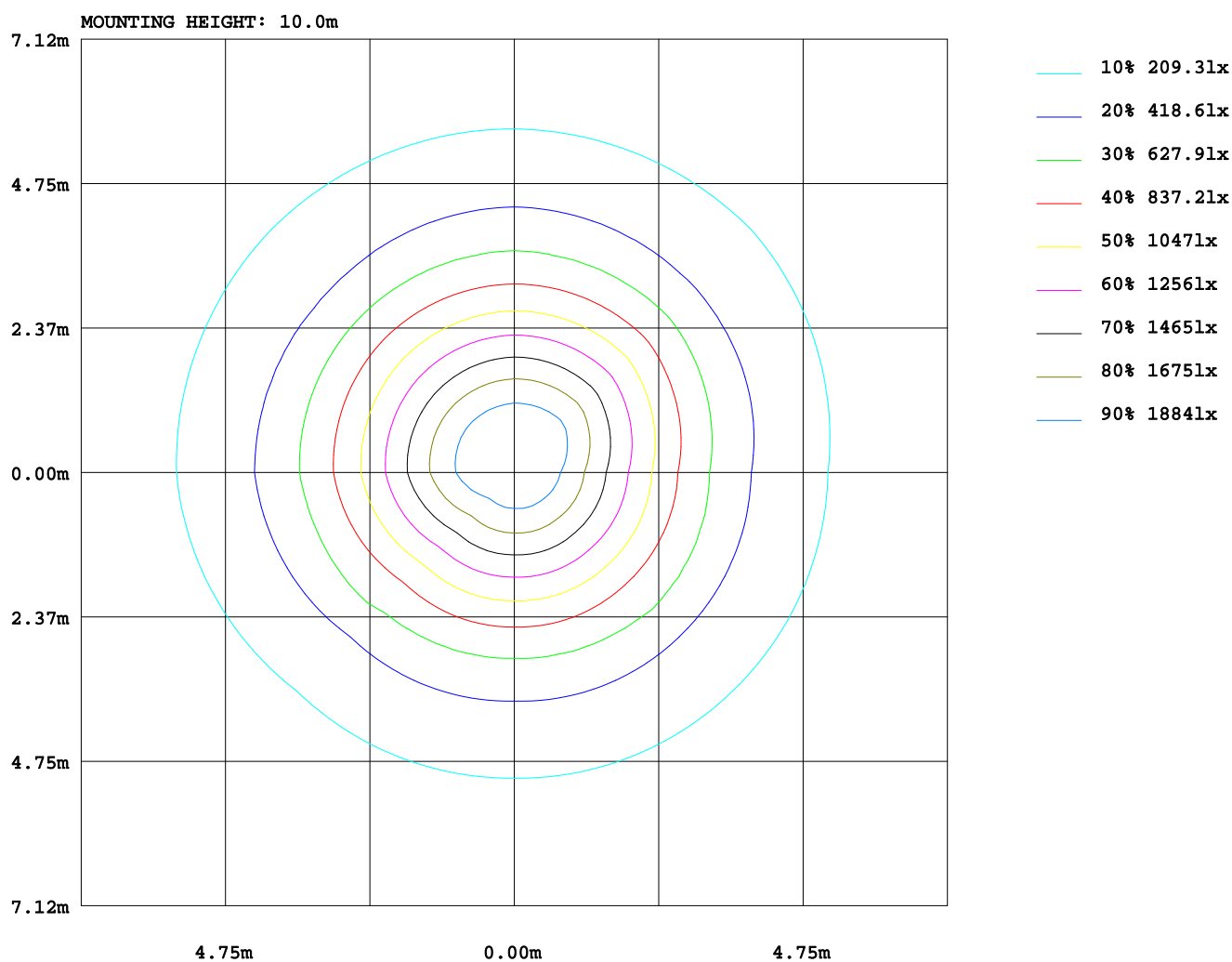
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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-N60040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:



Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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Remarks:

Uncorrected UGR Table

Report number:

MANUFACTURER: ILUMEN GMBH	Address:			
NAME: Kroos	TYPE:IL-SL13-N60040-030		WEIGHT:	
SPECIFICATION:5050LED 4000K 30°	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					Viewed endwise				
x = 2H y = 2H	23.1	24.1	23.3	24.2	24.4	23.0	23.9	23.2	24.1	24.3
3H	24.0	24.9	24.2	25.1	25.3	23.8	24.7	24.1	24.9	25.1
4H	24.3	25.2	24.6	25.4	25.6	24.1	25.0	24.4	25.2	25.4
6H	24.5	25.3	24.8	25.6	25.8	24.3	25.1	24.6	25.4	25.6
8H	24.6	25.4	24.9	25.6	25.9	24.4	25.2	24.7	25.4	25.7
12H	24.6	25.4	25.0	25.6	25.9	24.4	25.1	24.7	25.4	25.7
4H 2H	23.4	24.3	23.7	24.5	24.7	23.3	24.2	23.6	24.4	24.6
3H	24.5	25.2	24.8	25.5	25.8	24.4	25.1	24.7	25.4	25.7
4H	24.9	25.6	25.3	25.9	26.2	24.8	25.5	25.1	25.8	26.1
6H	25.3	25.9	25.6	26.2	26.5	25.0	25.6	25.4	26.0	26.3
8H	25.3	25.9	25.7	26.3	26.6	25.1	25.7	25.5	26.0	26.4
12H	25.4	25.9	25.8	26.3	26.7	25.2	25.7	25.6	26.1	26.4
8H 4H	25.0	25.6	25.4	26.0	26.3	24.9	25.5	25.3	25.8	26.2
6H	25.5	25.9	25.9	26.3	26.7	25.3	25.7	25.7	26.1	26.5
8H	25.6	26.0	26.0	26.4	26.9	25.4	25.8	25.8	26.2	26.7
12H	25.7	26.0	26.2	26.5	27.0	25.5	25.8	25.9	26.3	26.7
12H 4H	25.0	25.5	25.4	25.9	26.3	24.9	25.4	25.3	25.8	26.2
6H	25.5	25.9	25.9	26.3	26.7	25.3	25.7	25.7	26.1	26.5
8H	25.6	26.0	26.1	26.4	26.9	25.4	25.8	25.9	26.2	26.7

Variations with the observer position at spacings:

S = 1.0H	+ 0.5 / - 0.6	+ 0.5 / - 0.6
1.5H	+ 0.6 / - 0.4	+ 0.6 / - 0.4
2.0H	+ 0.7 / - 0.4	+ 0.6 / - 0.5

CIE Pub.117 Corrected 90000 lm Total Lamp Luminous Flux.(8log(F/F0) = 15.6)

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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE: IL-SL13-N60040-030	WEIGHT:
SPECIFICATION: 5050LED 4000K 30°	DIMENSION:	SERIAL No.:

UNIT: ×100cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315
0.0	2076	2076	2076	2076	2076	2076	2076	2076
5.0	1846	1795	1771	1771	1933	1988	2018	2021
10.0	1376	1321	1295	1301	1525	1579	1623	1612
15.0	928	885	860	872	1072	1125	1151	1145
20.0	586	564	536	560	716	737	750	738
25.0	366	352	342	350	451	470	478	460
30.0	232	225	220	224	288	303	303	292
35.0	155	152	149	150	188	198	198	189
40.0	108	103	102	103	128	136	136	129
45.0	74.3	71.5	72.0	72.6	88.4	93.6	94.3	90.2
50.0	54.9	55.4	55.3	56.3	65.6	67.8	69.6	64.9
55.0	44.8	43.7	44.3	44.1	50.8	53.3	53.1	51.6
60.0	35.0	34.1	34.5	34.2	39.3	41.6	41.2	40.7
65.0	26.7	25.9	26.2	25.9	29.9	31.9	31.5	31.6
70.0	19.1	18.6	18.2	18.3	21.8	23.5	22.9	23.6
75.0	12.5	11.8	11.7	11.6	14.4	16.0	15.1	16.3
80.0	7.26	6.33	6.63	6.19	8.78	9.49	9.32	9.75
85.0	3.12	2.33	2.64	2.22	4.02	4.78	4.40	4.95
90.0	0.54	0.31	0.55	0.31	0.68	1.05	0.99	1.29

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Operators:
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