

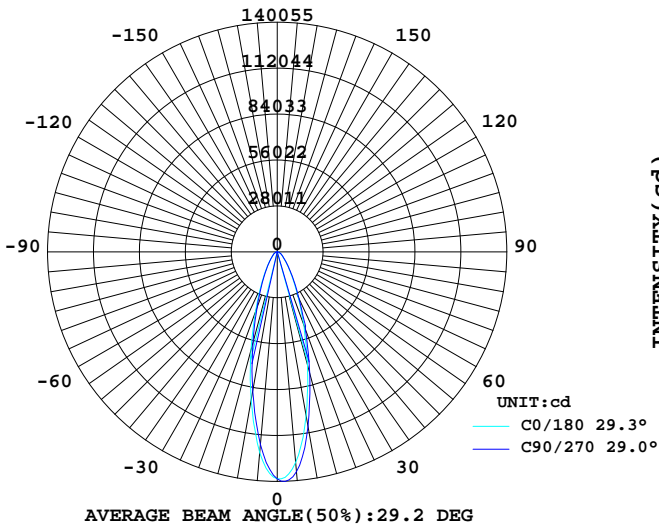
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

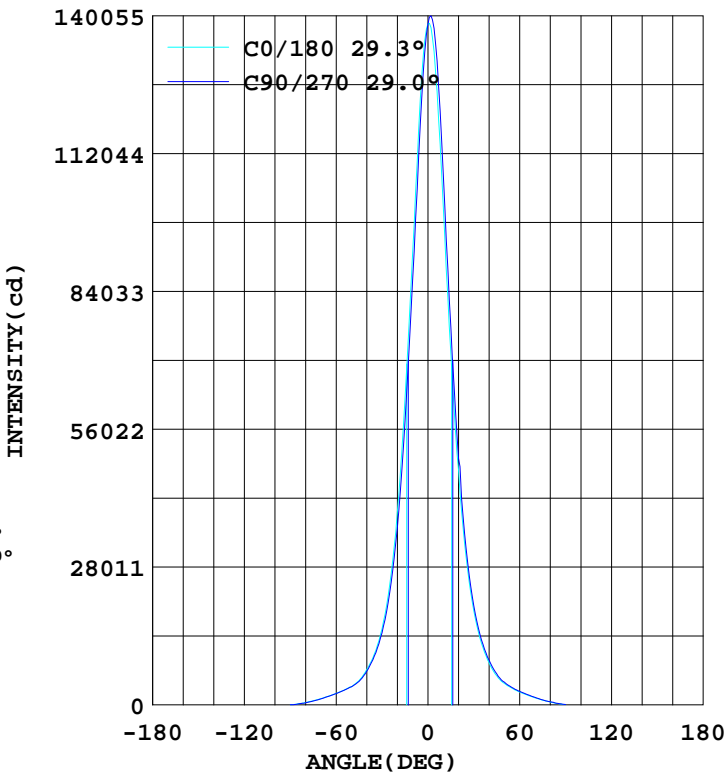
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N40040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	140182	S/MH(C0/180)	0.45
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.43
NOMINAL POWER(W)	400	TOTAL FLUX(lm)	60000	Voltage(V)	231.1
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	150.0	Current(A)	1.731
NOMINAL FLUX(lm)	60000.0	η up(%)	0.0	Power(W)	400.0
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	0.999
TEST VOLTAGE(V)	231.1	Effective Flux(lm)	0.0	EEI	0.000

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



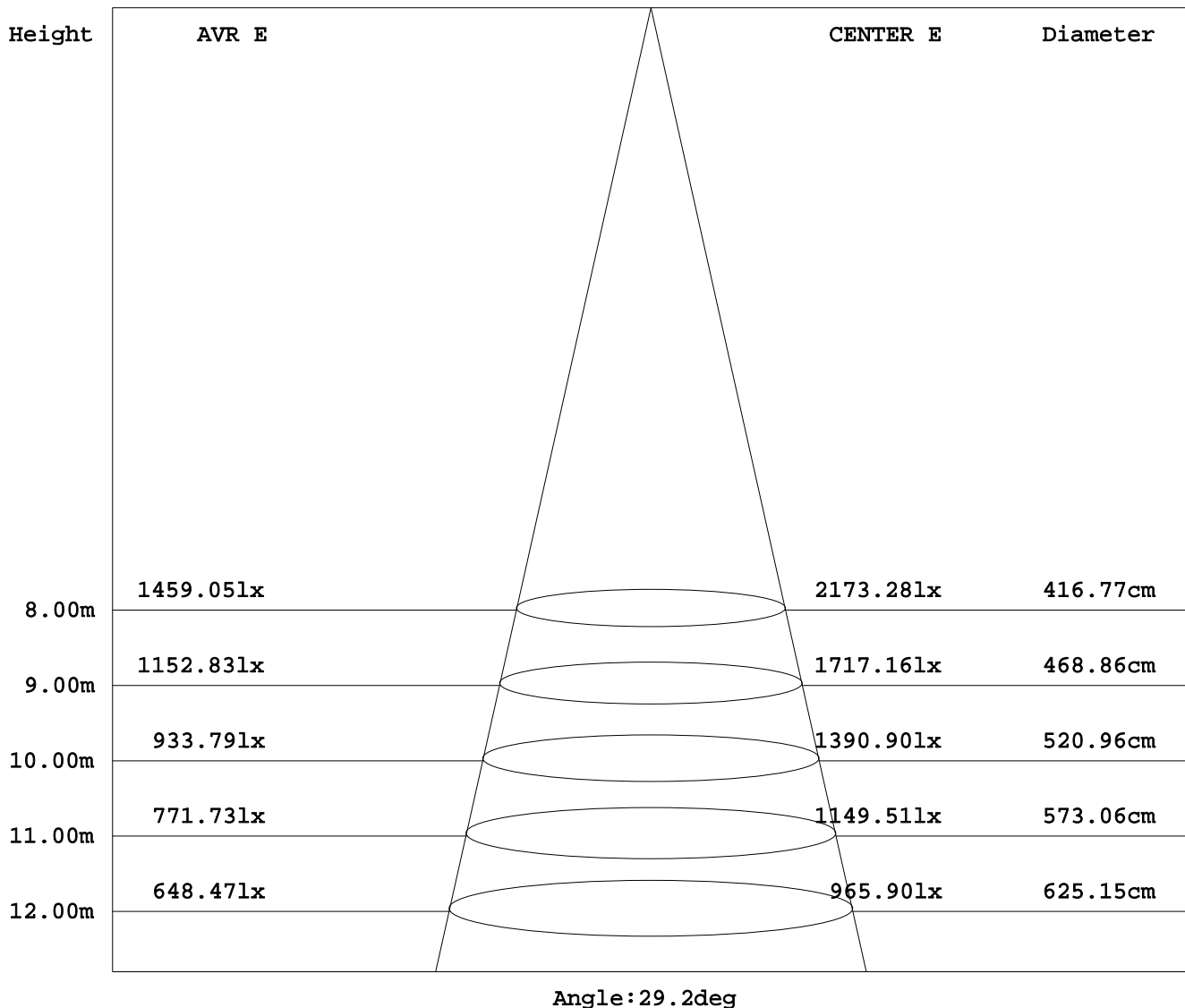
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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-N40040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:



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

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Humidity:65.0%
Test Distance:10.000 m
Remarks:

ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N40040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	1231	1197	1180	1181	1289	1326	1345	1347	0- 5	3161	3161
10.0	917.3	880.7	863.1	867.1	1017	1053	1082	1075	5- 10	7913	11074
15.0	618.9	590.1	573.0	581.2	714.8	750.3	767.3	763.2	10- 15	9567	20641
20.0	390.3	375.9	357.1	373.4	477.1	491.2	500.2	492.1	15- 20	8920	29560
25.0	244.0	234.4	228.1	233.2	300.9	313.2	318.3	306.4	20- 25	7199	36760
30.0	154.7	150.0	146.6	149.1	191.8	201.9	201.9	194.4	25- 30	5506	42265
35.0	103.5	101.0	99.35	100.0	125.3	132.2	132.2	126.2	30- 35	4165	46431
40.0	71.76	68.86	68.28	68.68	85.55	90.67	90.91	86.01	35- 40	3181	49611
45.0	49.58	47.72	48.00	48.44	58.97	62.43	62.90	60.17	40- 45	2433	52045
50.0	36.60	36.99	36.88	37.57	43.79	45.20	46.41	43.27	45- 50	1904	53948
55.0	29.91	29.15	29.56	29.43	33.92	35.58	35.43	34.42	50- 55	1575	55523
60.0	23.35	22.76	23.05	22.84	26.26	27.78	27.48	27.18	55- 60	1315	56839
65.0	17.81	17.31	17.49	17.27	19.95	21.30	21.01	21.07	60- 65	1072	57910
70.0	12.77	12.41	12.19	12.22	14.59	15.73	15.29	15.77	65- 70	832.5	58743
75.0	8.397	7.908	7.836	7.793	9.629	10.71	10.08	10.87	70- 75	597.9	59341
80.0	4.841	4.224	4.421	4.129	5.856	6.331	6.217	6.505	75- 80	384.4	59725
85.0	2.085	1.558	1.765	1.486	2.685	3.191	2.934	3.305	80- 85	203.9	59929
90.0	0.359	0.208	0.368	0.204	0.453	0.701	0.661	0.860	85- 90	70.79	60000
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

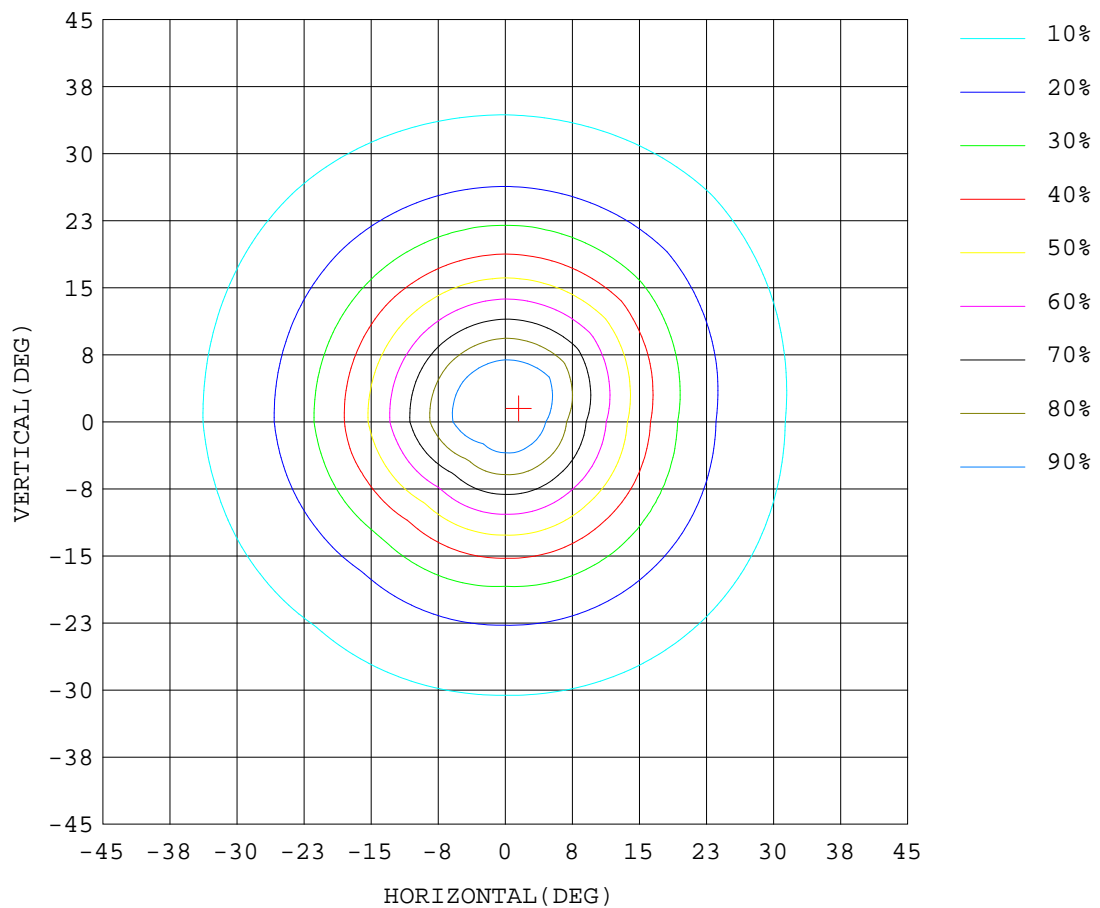
Test Set: 5.0deg/s C-Gamma (TYPE C)
 Humidity:65.0%
 Test Distance:10.000 m
 Remarks:

ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N40040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

UNIT: cd



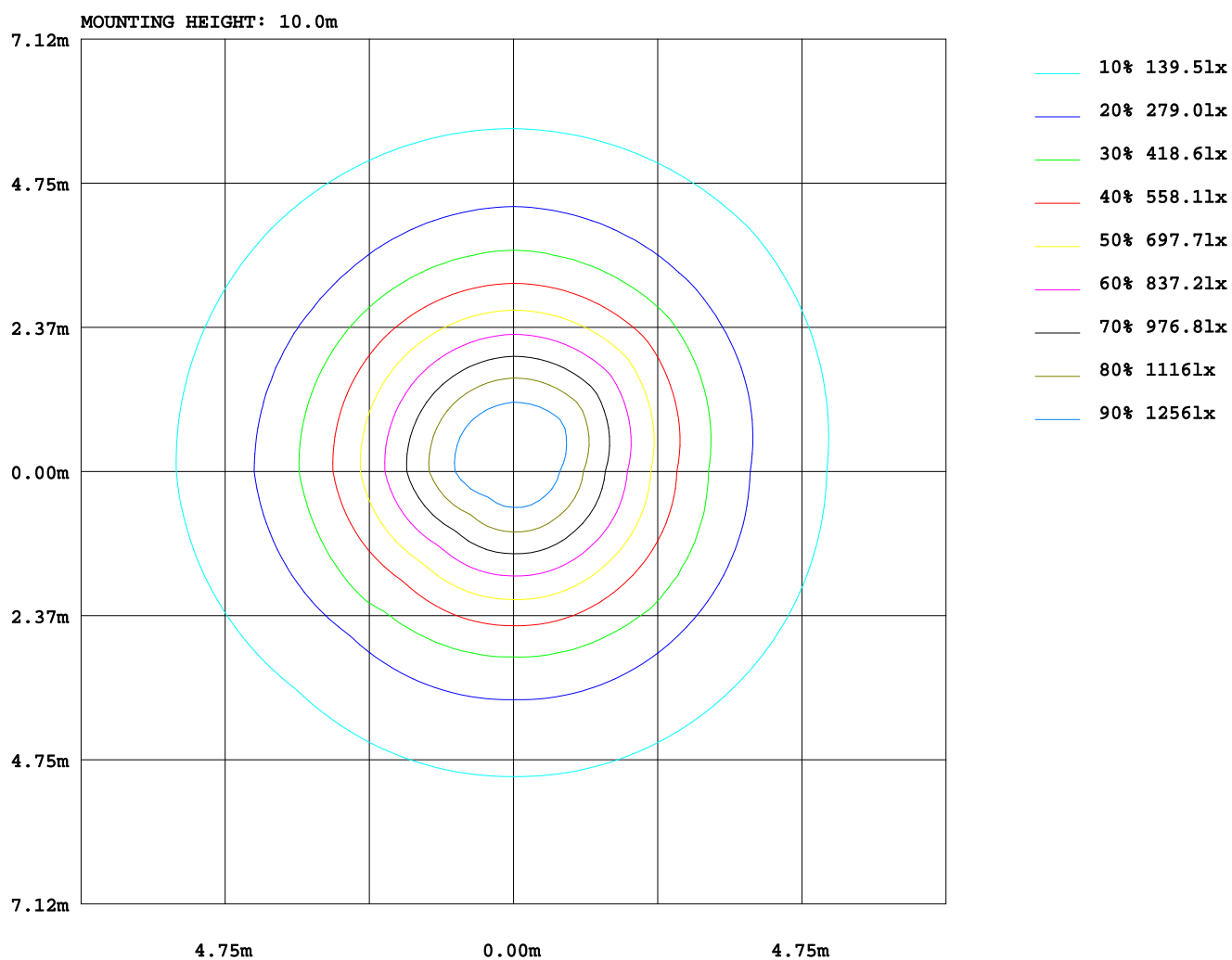
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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-N40040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:



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:

Uncorrected UGR Table

Report number:

MANUFACTURER: ILUMEN GMBH	Address:			
NAME: Kroos	TYPE:IL-SL13-N40040-030		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	23.2	24.1	23.4	24.3	24.5	23.1	24.0	23.3	24.2	24.4
3H	24.1	25.0	24.3	25.2	25.4	23.9	24.8	24.2	25.0	25.2
4H	24.4	25.3	24.7	25.5	25.7	24.2	25.1	24.5	25.3	25.5
6H	24.6	25.4	24.9	25.7	25.9	24.4	25.2	24.7	25.5	25.7
8H	24.7	25.5	25.0	25.7	26.0	24.5	25.2	24.8	25.5	25.8
12H	24.7	25.5	25.1	25.7	26.0	24.5	25.2	24.8	25.5	25.8
4H 2H	23.5	24.4	23.8	24.6	24.8	23.4	24.3	23.7	24.5	24.7
3H	24.6	25.3	24.9	25.6	25.9	24.5	25.2	24.8	25.5	25.8
4H	25.0	25.7	25.4	26.0	26.3	24.9	25.6	25.2	25.9	26.2
6H	25.4	26.0	25.7	26.3	26.6	25.1	25.7	25.5	26.1	26.4
8H	25.4	26.0	25.8	26.4	26.7	25.2	25.8	25.6	26.1	26.5
12H	25.5	26.0	25.9	26.4	26.8	25.3	25.8	25.7	26.1	26.5
8H 4H	25.1	25.7	25.5	26.1	26.4	25.0	25.6	25.4	25.9	26.3
6H	25.6	26.0	26.0	26.4	26.8	25.4	25.8	25.8	26.2	26.6
8H	25.7	26.1	26.1	26.5	27.0	25.5	25.9	25.9	26.3	26.7
12H	25.8	26.1	26.3	26.6	27.1	25.6	25.9	26.0	26.4	26.8
12H 4H	25.1	25.6	25.5	26.0	26.4	25.0	25.5	25.4	25.9	26.3
6H	25.6	26.0	26.0	26.4	26.8	25.4	25.8	25.8	26.2	26.6
8H	25.7	26.1	26.2	26.5	27.0	25.5	25.9	26.0	26.3	26.8

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 60000 lm Total Lamp Luminous Flux.(8log(F/F0) = 14.2)

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Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE: IL-SL13-N40040-030	WEIGHT:
SPECIFICATION: 5050LED 4000K 30°	DIMENSION:	SERIAL No.:

UNIT: ×100cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315
0.0	1384	1384	1384	1384	1384	1384	1384	1384
5.0	1231	1197	1180	1181	1289	1326	1345	1347
10.0	917	881	863	867	1017	1053	1082	1075
15.0	619	590	573	581	715	750	767	763
20.0	390	376	357	373	477	491	500	492
25.0	244	234	228	233	301	313	318	306
30.0	155	150	147	149	192	202	202	194
35.0	104	101	99.3	100	125	132	132	126
40.0	71.7	68.8	68.2	68.6	85.5	90.6	90.9	86.0
45.0	49.5	47.7	48.0	48.4	58.9	62.4	62.9	60.1
50.0	36.6	36.9	36.8	37.5	43.7	45.2	46.4	43.2
55.0	29.9	29.1	29.5	29.4	33.9	35.5	35.4	34.4
60.0	23.3	22.7	23.0	22.8	26.2	27.7	27.4	27.1
65.0	17.8	17.3	17.4	17.2	19.9	21.3	21.0	21.0
70.0	12.7	12.4	12.1	12.2	14.5	15.7	15.2	15.7
75.0	8.39	7.90	7.83	7.79	9.62	10.7	10.0	10.8
80.0	4.84	4.22	4.42	4.12	5.85	6.33	6.21	6.50
85.0	2.08	1.55	1.76	1.48	2.68	3.19	2.93	3.30
90.0	0.36	0.21	0.37	0.20	0.45	0.70	0.66	0.86

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