

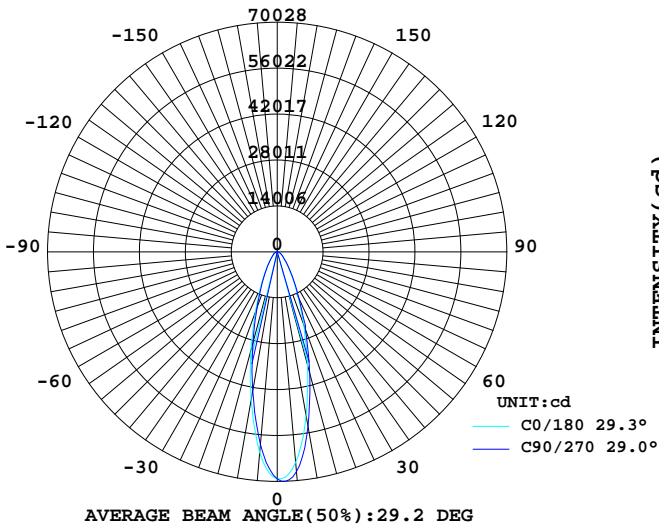
LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

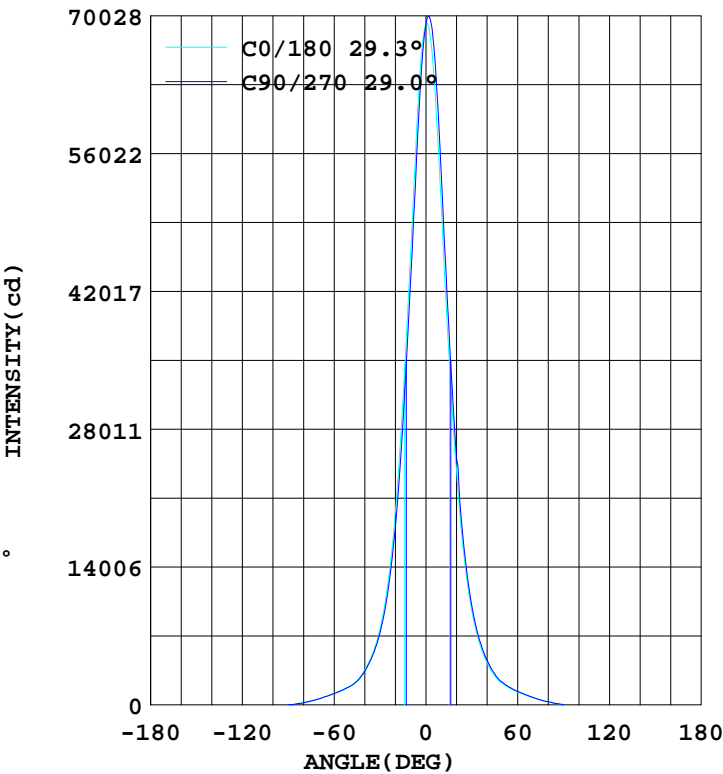
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N20040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	70091	S/MH(C0/180)	0.45
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	0.43
NOMINAL POWER(W)	200	TOTAL FLUX(lm)	30000	Voltage(V)	230.1
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	150.0	Current(A)	0.869
NOMINAL FLUX(lm)	30000.0	η up(%)	0.0	Power(W)	200.0
LAMPS QUANTITY	1	η down(%)	100.0	Power Factor(PF)	0.999
TEST VOLTAGE(V)	230.2	Effective Flux(lm)	0.0	EEI	0.000

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



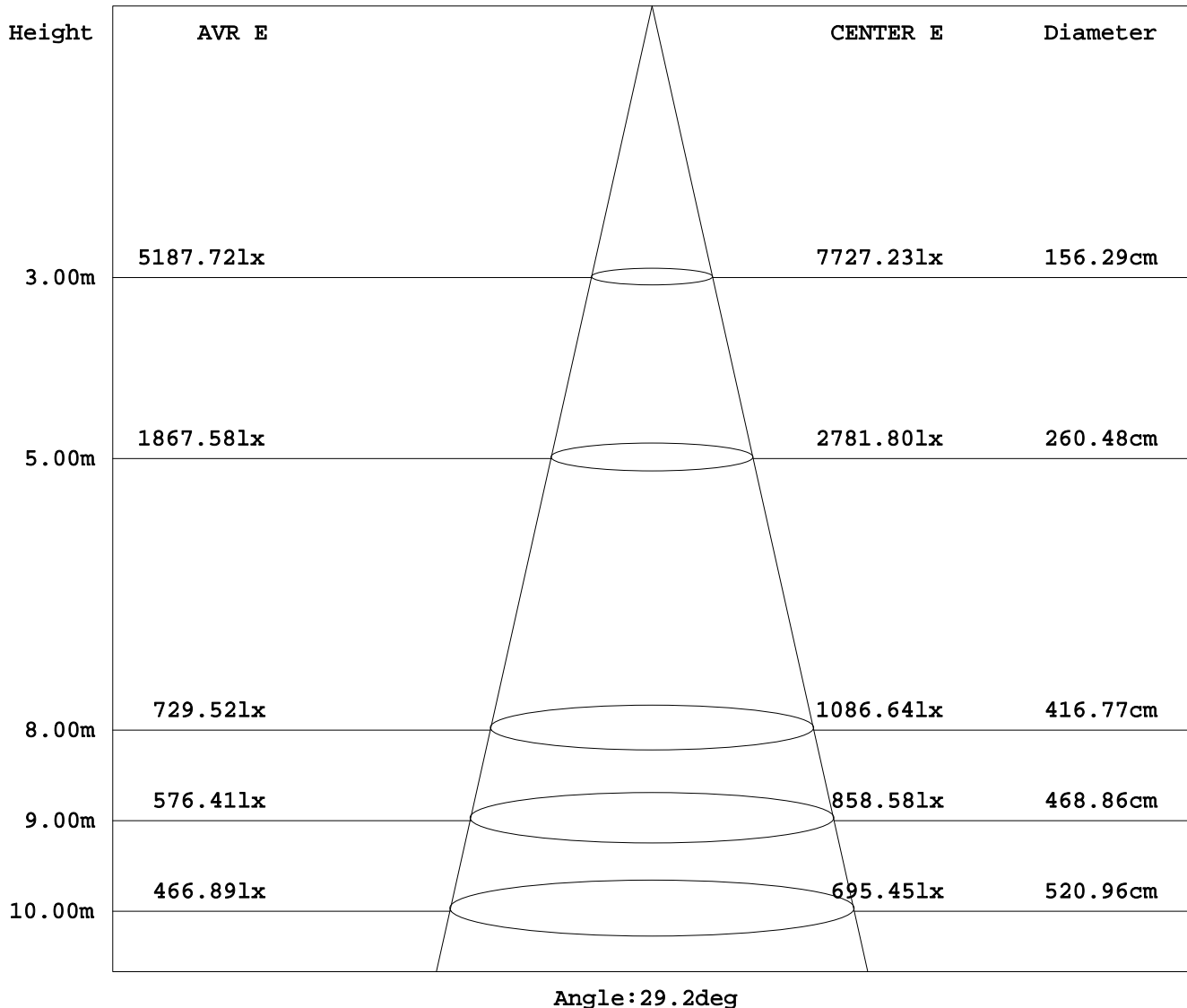
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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-N20040-030	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-N20040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	6154	5984	5902	5903	6444	6628	6727	6737	0- 5	1581	1581
10.0	4587	4404	4316	4336	5084	5264	5412	5375	5- 10	3957	5537
15.0	3095	2951	2865	2906	3574	3752	3837	3816	10- 15	4783	10320
20.0	1952	1880	1786	1867	2386	2456	2501	2461	15- 20	4460	14780
25.0	1220	1172	1141	1166	1505	1566	1592	1532	20- 25	3600	18380
30.0	773.6	750.0	733.0	745.9	959.3	1010	1010	972.4	25- 30	2753	21133
35.0	517.9	505.2	496.7	500.3	626.7	661.4	661.3	631.2	30- 35	2083	23215
40.0	358.8	344.3	341.4	343.4	427.7	453.3	454.5	430.0	35- 40	1590	24806
45.0	247.9	238.6	240.0	242.2	294.8	312.1	314.5	300.8	40- 45	1217	26022
50.0	183.0	184.9	184.4	187.8	218.9	226.0	232.0	216.3	45- 50	951.8	26974
55.0	149.5	145.7	147.8	147.1	169.6	177.9	177.1	172.1	50- 55	787.5	27762
60.0	116.7	113.8	115.2	114.2	131.3	138.9	137.4	135.9	55- 60	657.7	28419
65.0	89.07	86.59	87.46	86.38	99.78	106.5	105.0	105.3	60- 65	535.7	28955
70.0	63.85	62.08	60.98	61.13	72.96	78.66	76.46	78.89	65- 70	416.2	29371
75.0	41.98	39.54	39.18	38.96	48.14	53.59	50.44	54.37	70- 75	298.9	29670
80.0	24.20	21.12	22.10	20.64	29.28	31.65	31.08	32.52	75- 80	192.2	29863
85.0	10.42	7.790	8.826	7.430	13.42	15.95	14.67	16.52	80- 85	101.9	29965
90.0	1.794	1.042	1.840	1.021	2.264	3.502	3.304	4.301	85- 90	35.39	30000
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:×10cd									UNIT:lm	

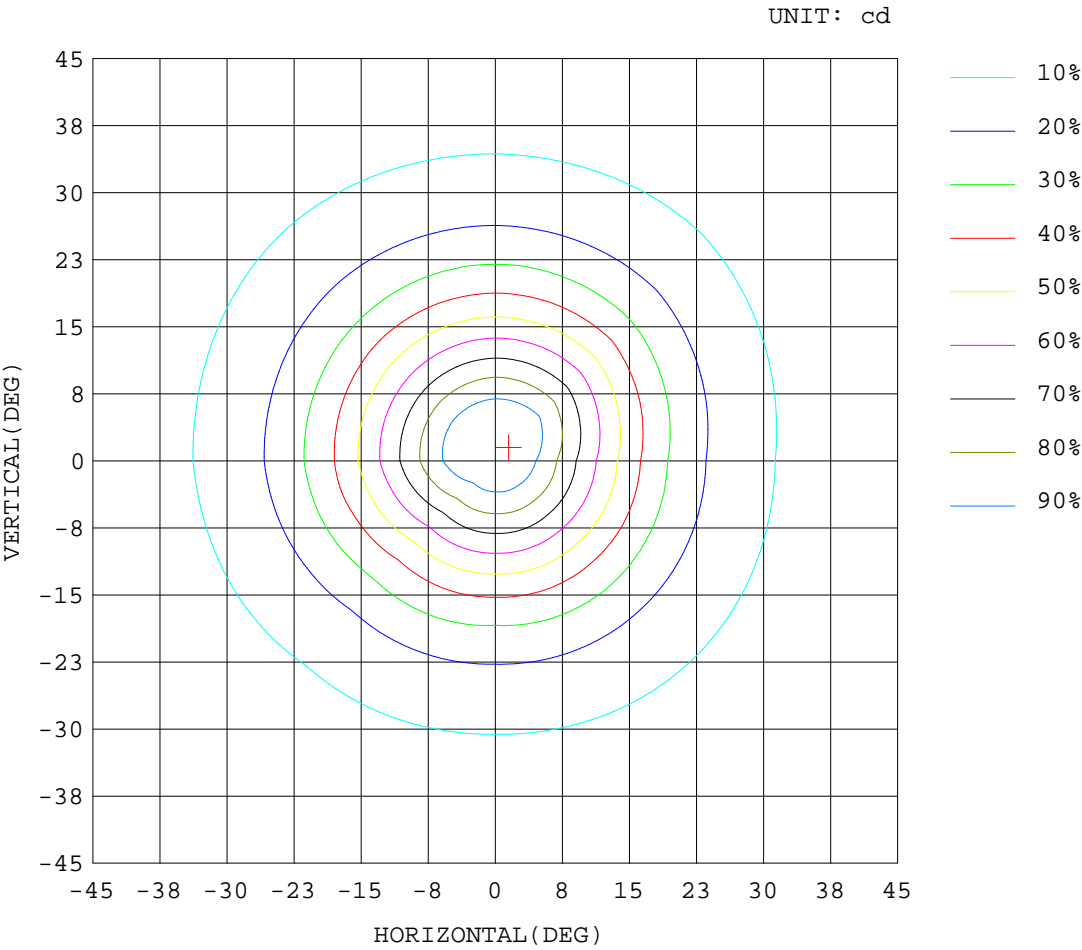
Test System:
 Temperature:25.3DEG
 Operators:
 Test Date:2025.02.20

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

ISOCANDELA DIAGRAM

Report number:

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NAME: Kroos	TYPE:IL-SL13-N20040-030	WEIGHT:
SPECIFICATION:5050LED 4000K 30°	DIMENSION:	SERIAL No.:



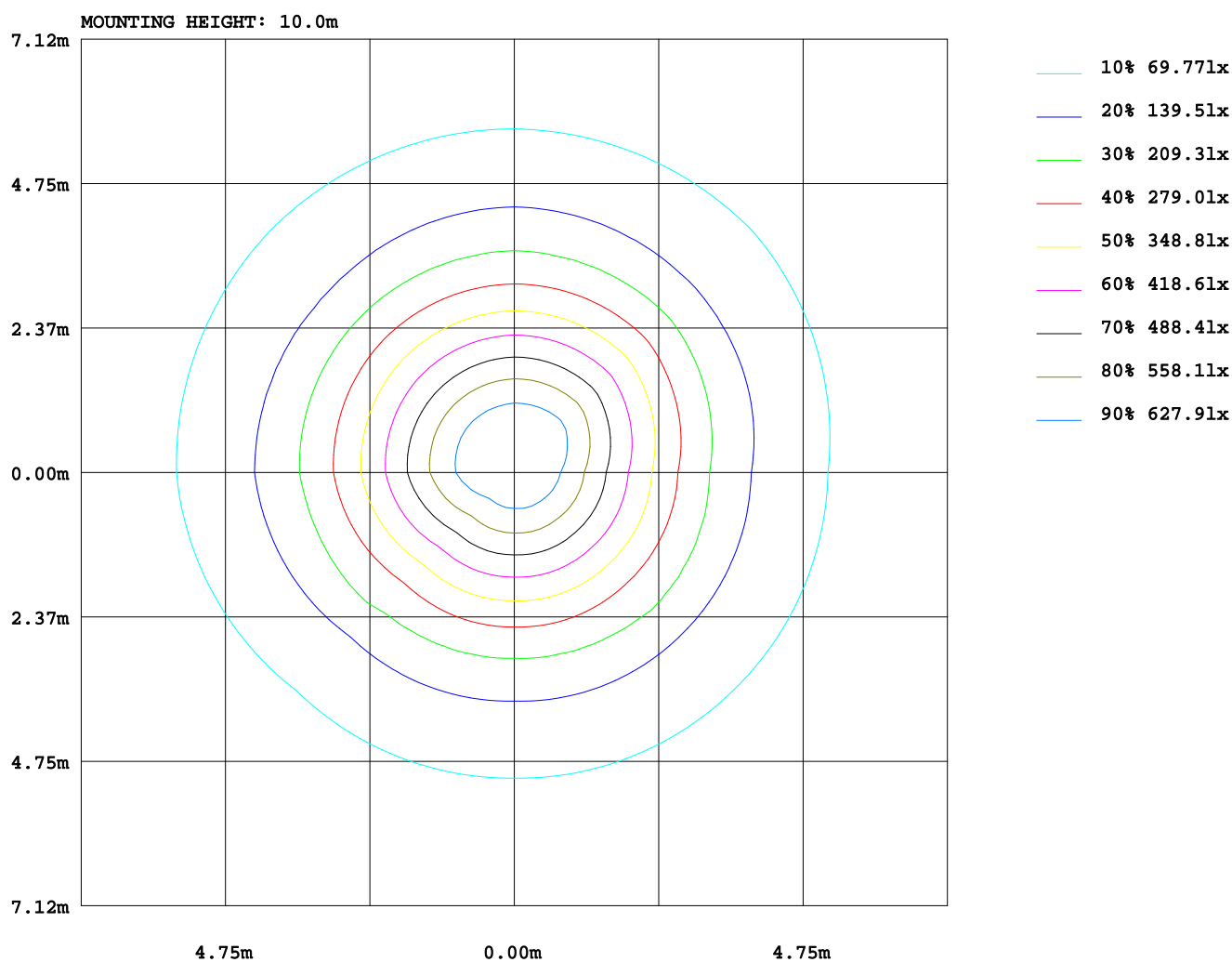
Test System:
Temperature:25.3DEG
Operators:
Test Date:2025.02.20

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

ISOLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE: IL-SL13-N20040-030	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-N20040-030		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	23.5	24.5	23.7	24.6	24.8	23.4	24.3	23.6	24.5	24.7
3H	24.4	25.3	24.6	25.5	25.7	24.2	25.1	24.5	25.3	25.5
4H	24.7	25.6	25.0	25.8	26.0	24.5	25.4	24.8	25.6	25.8
6H	25.0	25.8	25.3	26.0	26.2	24.7	25.5	25.0	25.8	26.0
8H	25.0	25.8	25.3	26.0	26.3	24.8	25.6	25.1	25.8	26.1
12H	25.0	25.8	25.4	26.1	26.3	24.8	25.5	25.1	25.8	26.1
4H 2H	23.8	24.7	24.1	24.9	25.1	23.7	24.6	24.0	24.8	25.0
3H	24.9	25.6	25.2	25.9	26.2	24.8	25.5	25.1	25.8	26.1
4H	25.3	26.0	25.7	26.3	26.6	25.2	25.9	25.5	26.2	26.5
6H	25.7	26.3	26.0	26.6	26.9	25.5	26.1	25.8	26.4	26.7
8H	25.7	26.3	26.1	26.7	27.0	25.5	26.1	25.9	26.4	26.8
12H	25.8	26.3	26.2	26.7	27.1	25.6	26.1	26.0	26.5	26.8
8H 4H	25.5	26.0	25.8	26.4	26.7	25.3	25.9	25.7	26.2	26.6
6H	25.9	26.3	26.3	26.7	27.1	25.7	26.1	26.1	26.5	26.9
8H	26.0	26.4	26.4	26.8	27.3	25.8	26.2	26.2	26.6	27.1
12H	26.1	26.5	26.6	26.9	27.4	25.9	26.2	26.3	26.7	27.1
12H 4H	25.4	25.9	25.8	26.3	26.7	25.3	25.8	25.7	26.2	26.6
6H	25.9	26.3	26.3	26.7	27.1	25.7	26.1	26.1	26.5	26.9
8H	26.0	26.4	26.5	26.8	27.3	25.8	26.2	26.3	26.6	27.1

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 30000 lm Total Lamp Luminous Flux.(8log(F/F0) = 11.8)

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LUMINOUS DISTRIBUTION INTENSITY DATA

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NAME: Kroos	TYPE: IL-SL13-N20040-030	WEIGHT:
SPECIFICATION: 5050LED 4000K 30°	DIMENSION:	SERIAL No.:

UNIT: ×10cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315
0.0	6920	6920	6920	6920	6920	6920	6920	6920
5.0	6154	5984	5902	5903	6444	6628	6727	6737
10.0	4587	4404	4316	4336	5084	5264	5412	5375
15.0	3095	2951	2865	2906	3574	3752	3837	3816
20.0	1952	1880	1786	1867	2386	2456	2501	2461
25.0	1220	1172	1141	1166	1505	1566	1592	1532
30.0	774	750	733	746	959	1010	1010	972
35.0	518	505	497	500	627	661	661	631
40.0	359	344	341	343	428	453	455	430
45.0	248	239	240	242	295	312	315	301
50.0	183	185	184	188	219	226	232	216
55.0	150	146	148	147	170	178	177	172
60.0	117	114	115	114	131	139	137	136
65.0	89.0	86.5	87.4	86.3	99.7	107	105	105
70.0	63.8	62.0	60.9	61.1	72.9	78.6	76.4	78.8
75.0	41.9	39.5	39.1	38.9	48.1	53.5	50.4	54.3
80.0	24.2	21.1	22.1	20.6	29.2	31.6	31.0	32.5
85.0	10.4	7.79	8.82	7.43	13.4	15.9	14.6	16.5
90.0	1.79	1.04	1.84	1.02	2.26	3.50	3.30	4.30

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