

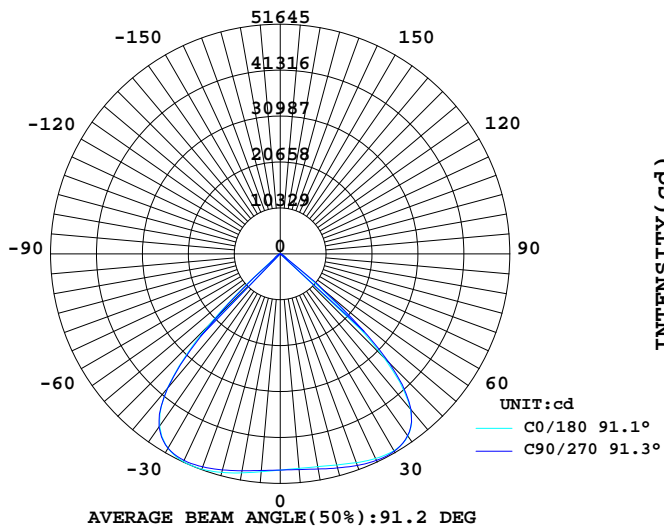
# LUMINAIRE PHOTOMETRIC TEST REPORT

Report number:

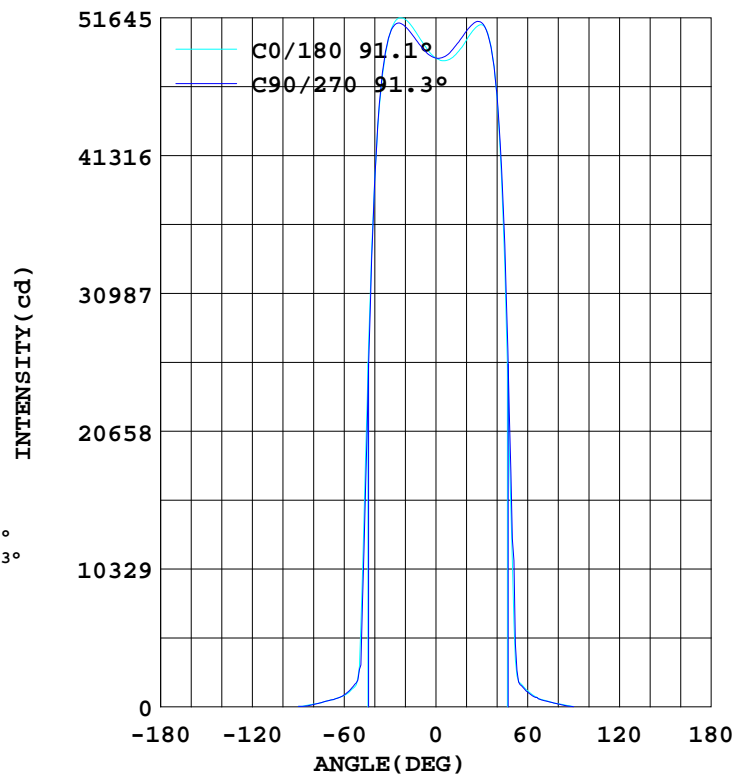
MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N60040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:

DATA OF LAMP		Imax(cd)	51733	S/MH(C0/180)	1.32
MODEL		EFFICIENCY(%)	100.0	S/MH(C90/270)	1.31
NOMINAL POWER(W)	600	TOTAL FLUX(lm)	96000	Voltage(V)	231.0
RATED VOLTAGE(V)	230	EFFICIENCY(lm/W)	160.0	Current(A)	2.597
NOMINAL FLUX(lm)	96000.0	$\eta$ up(%)	0.0	Power(W)	600.0
LAMPS QUANTITY	1	$\eta$ down(%)	100.0	Power Factor(PF)	1.000
TEST VOLTAGE(V)	231.0	Effective Flux(lm)	95999.9	EEI	0.094

LUMINOUS INTENSITY DISTRIBUTION



LUMINOUS INTENSITY DISTRIBUTION



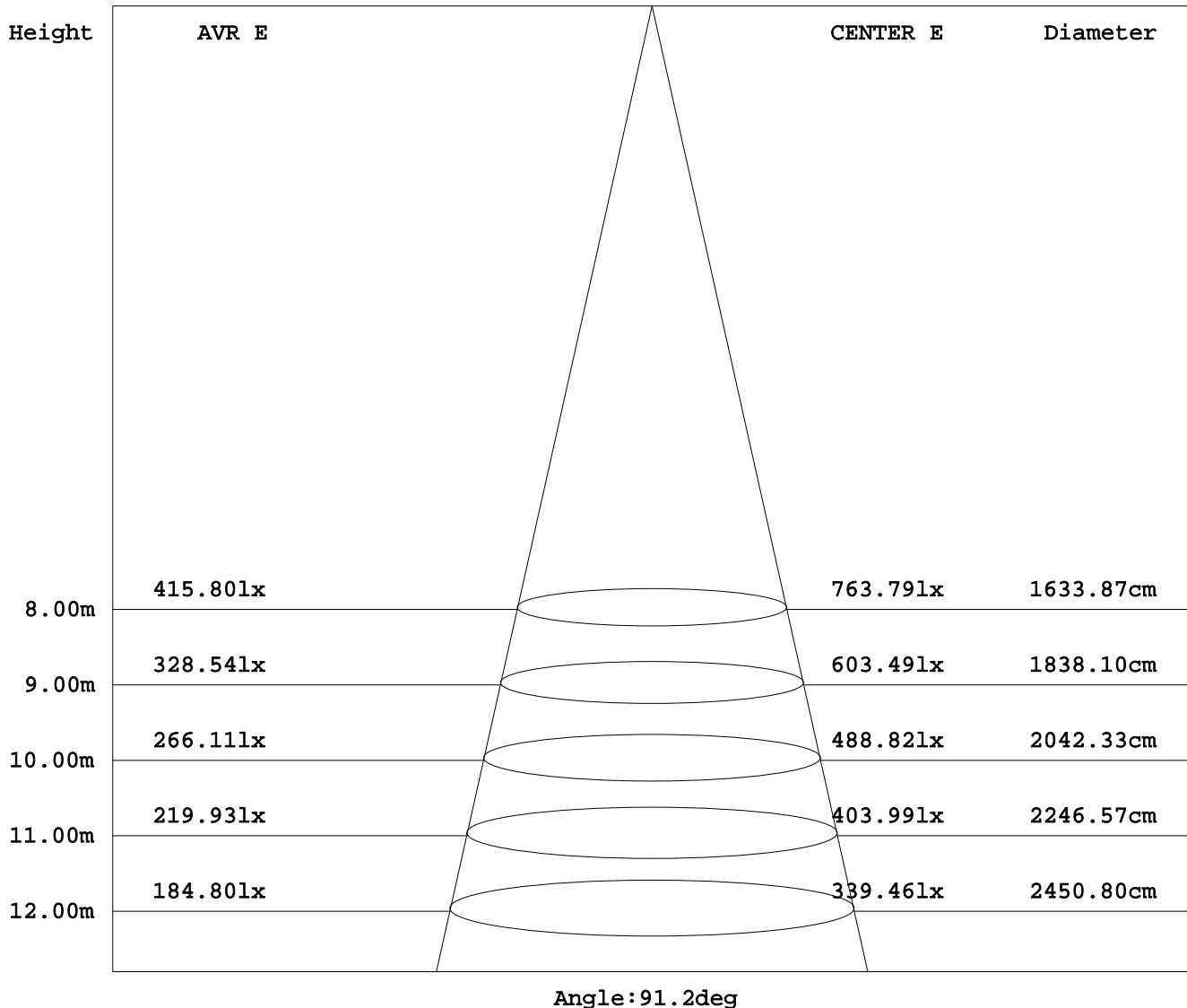
Test System:  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025.02.20

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-N60040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:



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## ZONAL FLUX DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N60040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	zone	total
5.0	4919	4912	4890	4869	4842	4846	4870	4894	0- 5	1165	1165
10.0	5001	4989	4954	4912	4860	4869	4914	4961	5- 10	3511	4675
15.0	5089	5073	5031	4985	4916	4931	4984	5046	10- 15	5898	10573
20.0	5152	5133	5097	5062	4998	5012	5066	5125	15- 20	8317	18890
25.0	5158	5140	5125	5112	5078	5085	5126	5171	20- 25	10713	29603
30.0	5046	5026	5046	5071	5112	5114	5127	5144	25- 30	12944	42547
35.0	4728	4694	4751	4820	5002	5008	4994	4959	30- 35	14711	57258
40.0	3949	3849	3938	4053	4563	4612	4576	4481	35- 40	15351	72609
45.0	2279	2054	2075	2200	3308	3479	3466	3305	40- 45	13274	85883
50.0	306.0	287.0	281.0	320.0	1098	1226	1260	1164	45- 50	6919	92802
55.0	131.5	128.9	141.6	157.8	179.1	194.5	167.8	175.4	50- 55	1407	94209
60.0	85.55	82.25	89.38	99.27	120.6	132.0	110.6	113.2	55- 60	601.3	94810
65.0	64.21	58.48	63.23	62.94	75.90	83.48	71.54	78.08	60- 65	416.4	95227
70.0	48.07	41.00	47.77	43.47	52.35	53.42	49.61	54.37	65- 70	297.3	95524
75.0	31.01	28.16	32.12	30.18	36.66	38.72	35.64	38.91	70- 75	216.4	95741
80.0	20.77	16.24	17.99	17.05	23.20	26.20	21.58	26.73	75- 80	146.7	95887
85.0	10.05	5.310	6.094	5.672	12.89	12.23	9.110	12.84	80- 85	82.19	95970
90.0	3.877	2.339	3.840	2.358	3.467	4.109	2.348	4.111	85- 90	30.32	96000
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	

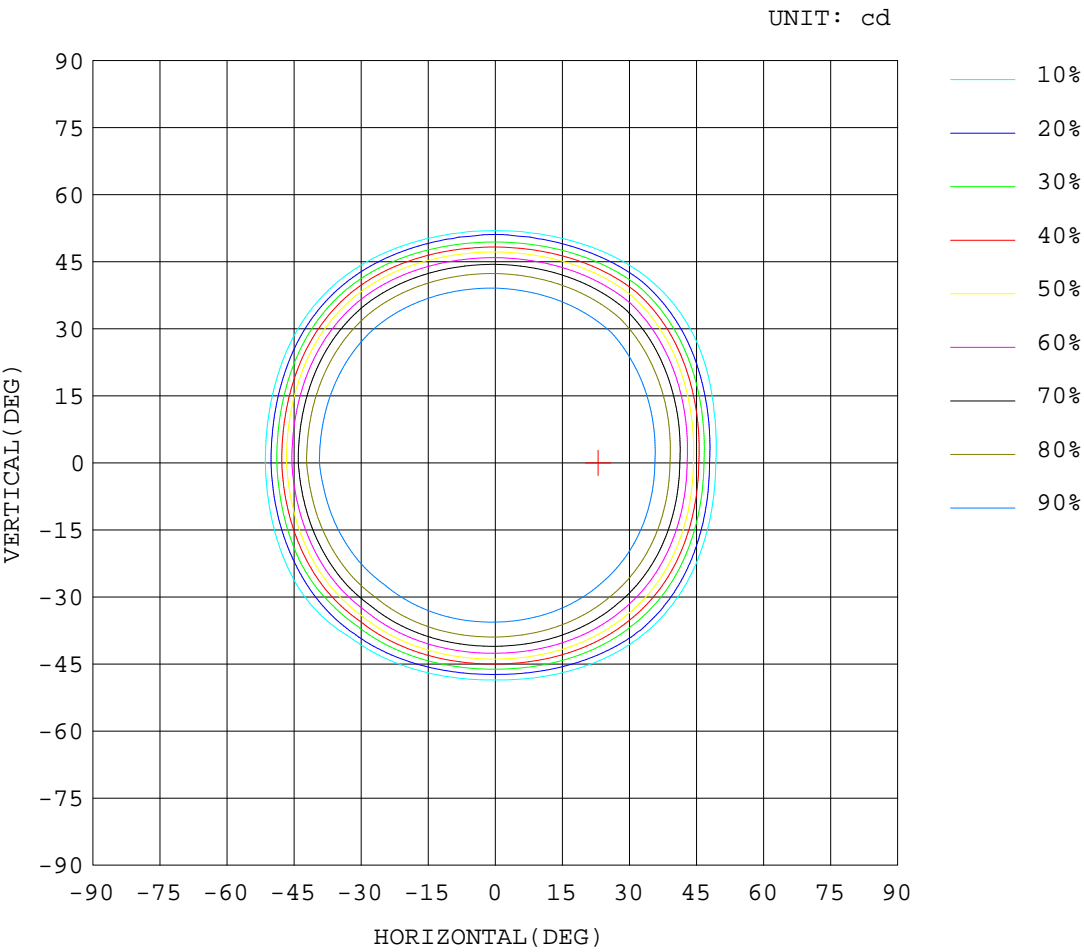
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ISOCANDELA DIAGRAM

Report number:

MANUFACTURER: ILUMEN GMBH	Address:	
NAME: Kroos	TYPE:IL-SL13-N60040-090	WEIGHT:
SPECIFICATION:5050LED 4000K 90°	DIMENSION:	SERIAL No.:



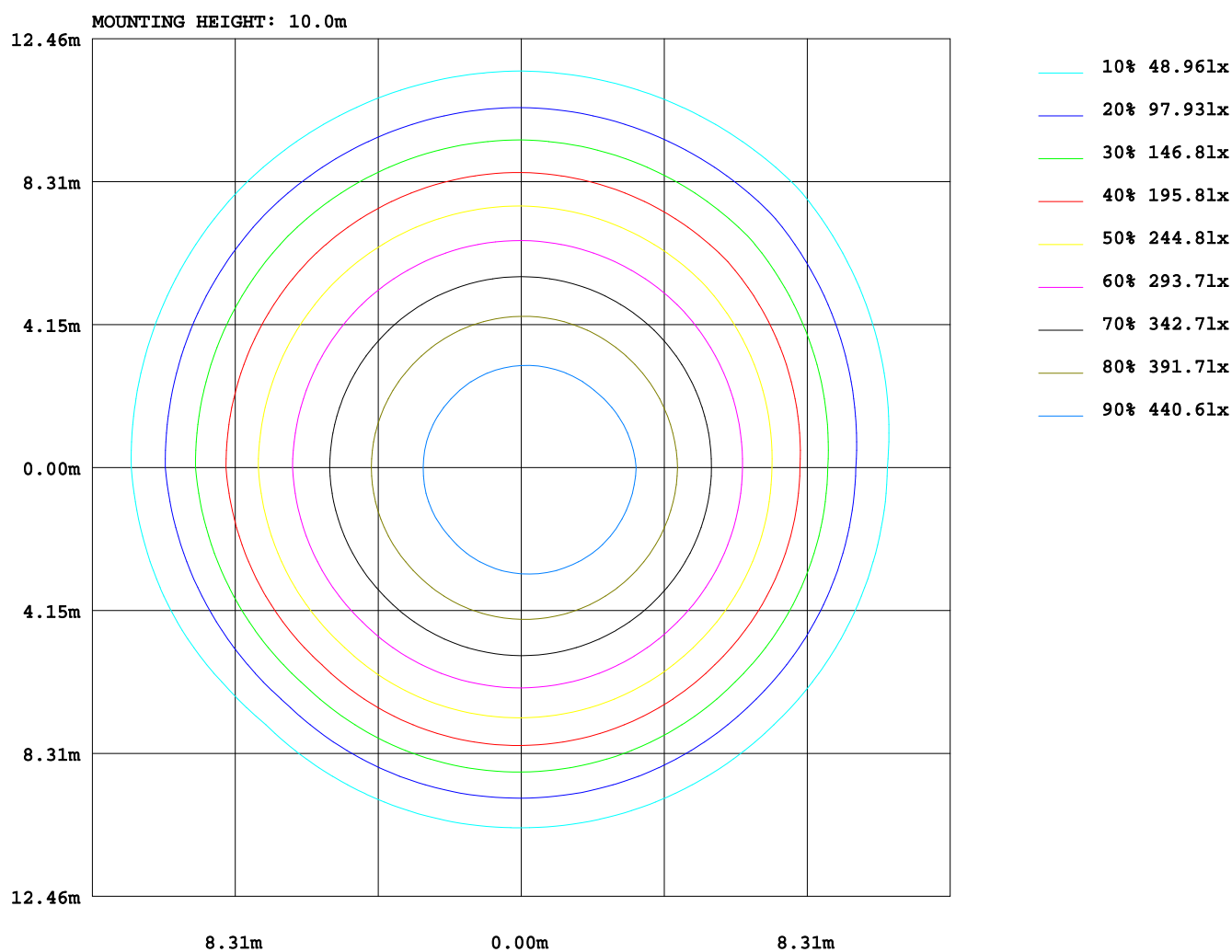
Test System:  
Temperature:25.3DEG  
Operators:  
Test Date:2025.02.20

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-N60040-090	WEIGHT:
SPECIFICATION: 5050LED 4000K 90°	DIMENSION:	SERIAL No.:



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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-N60040-090		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					Viewed endwise				
x = 2H y = 2H	27.5	28.7	27.8	28.9	29.1	27.4	28.6	27.7	28.8	28.9
3H	27.4	28.4	27.6	28.6	28.9	27.2	28.3	27.5	28.5	28.7
4H	27.3	28.3	27.6	28.5	28.7	27.2	28.2	27.4	28.4	28.6
6H	27.2	28.1	27.5	28.4	28.6	27.1	28.0	27.4	28.3	28.5
8H	27.2	28.1	27.5	28.3	28.6	27.0	27.9	27.3	28.2	28.5
12H	27.1	28.0	27.4	28.2	28.5	27.0	27.8	27.3	28.1	28.4
4H 2H	27.3	28.3	27.5	28.5	28.7	27.1	28.1	27.4	28.4	28.6
3H	27.1	28.0	27.4	28.2	28.5	27.0	27.8	27.3	28.1	28.4
4H	27.0	27.8	27.4	28.1	28.4	26.9	27.7	27.3	28.0	28.3
6H	26.9	27.6	27.3	28.0	28.3	26.8	27.5	27.2	27.8	28.2
8H	26.9	27.5	27.3	27.9	28.3	26.8	27.4	27.2	27.8	28.1
12H	26.9	27.4	27.3	27.8	28.2	26.7	27.3	27.1	27.7	28.1
8H 4H	26.9	27.5	27.3	27.9	28.2	26.8	27.4	27.2	27.7	28.1
6H	26.8	27.3	27.2	27.7	28.1	26.7	27.2	27.1	27.6	28.0
8H	26.8	27.2	27.2	27.6	28.1	26.7	27.1	27.1	27.5	28.0
12H	26.7	27.1	27.2	27.6	28.0	26.6	27.0	27.1	27.4	27.9
12H 4H	26.8	27.4	27.3	27.8	28.2	26.7	27.3	27.1	27.7	28.1
6H	26.8	27.2	27.2	27.6	28.1	26.6	27.1	27.1	27.5	28.0
8H	26.7	27.1	27.2	27.6	28.0	26.6	27.0	27.1	27.4	27.9

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 96000 lm Total Lamp Luminous Flux.(8log(F/F0) = 15.9)

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Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

<b>MANUFACTURER:</b> ILUMEN GMBH	<b>Address:</b>	
<b>NAME:</b> Kroos	<b>TYPE:</b> IL-SL13-N60040-090	<b>WEIGHT:</b>
<b>SPECIFICATION:</b> 5050LED 4000K 90°	<b>DIMENSION:</b>	<b>SERIAL No.:</b>

UNIT: ×10cd

C (DEG) γ (DEG)	0	45	90	135	180	225	270	315
0.0	4863	4863	4863	4863	4863	4863	4863	4863
5.0	4919	4912	4890	4869	4842	4846	4870	4894
10.0	5001	4989	4954	4912	4860	4869	4914	4961
15.0	5089	5073	5031	4985	4916	4931	4984	5046
20.0	5152	5133	5097	5062	4998	5012	5066	5125
25.0	5158	5140	5125	5112	5078	5085	5126	5171
30.0	5046	5026	5046	5071	5112	5114	5127	5144
35.0	4728	4694	4751	4820	5002	5008	4994	4959
40.0	3949	3849	3938	4053	4563	4612	4576	4481
45.0	2279	2054	2075	2200	3308	3479	3466	3305
50.0	306	287	281	320	1098	1226	1260	1164
55.0	132	129	142	158	179	195	168	175
60.0	85.5	82.2	89.3	99.2	121	132	111	113
65.0	64.2	58.4	63.2	62.9	75.9	83.4	71.5	78.0
70.0	48.0	41.0	47.7	43.4	52.3	53.4	49.6	54.3
75.0	31.0	28.1	32.1	30.1	36.6	38.7	35.6	38.9
80.0	20.7	16.2	17.9	17.0	23.2	26.2	21.5	26.7
85.0	10.0	5.31	6.09	5.67	12.8	12.2	9.11	12.8
90.0	3.87	2.33	3.84	2.35	3.46	4.10	2.34	4.11

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**Operators:**  
**Test Date:**2025.02.20

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**Remarks:**