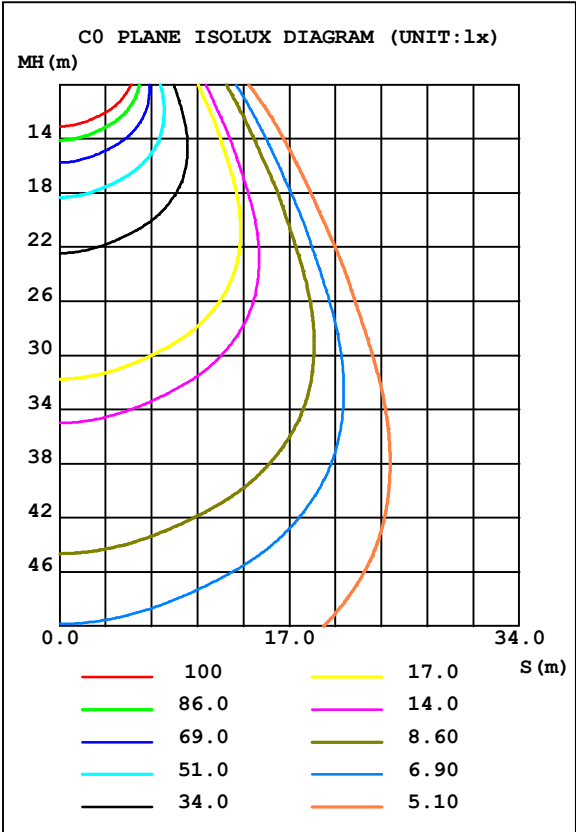
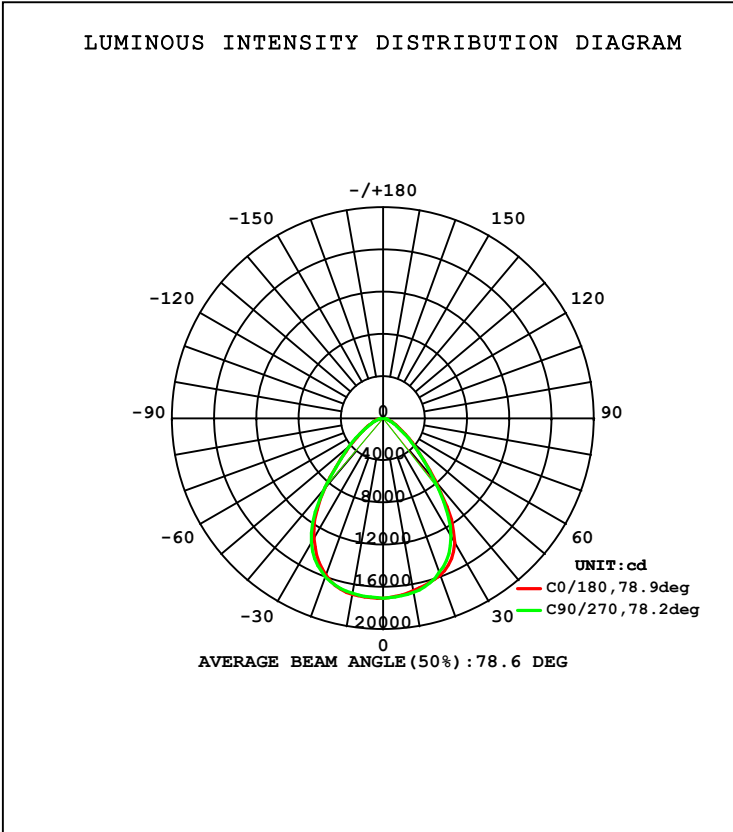


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 151.50 lm/W			
2512232波兰U11高棚灯200W-4000K		Imax(cd)	17044	S/MH(C0/180)	1.12
NOMINAL POWER(W)	192	LOR(%)	102.2	S/MH(C90/270)	1.10
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	28722	η UP,DN(C0-180)	0.2,49.0
NOMINAL FLUX(lm)	28092.6	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.2,52.9
LAMPS INSIDE	1	η up(%)	0.3	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	229.7	η down(%)	101.9	CIBSE SHR MAX	1.15

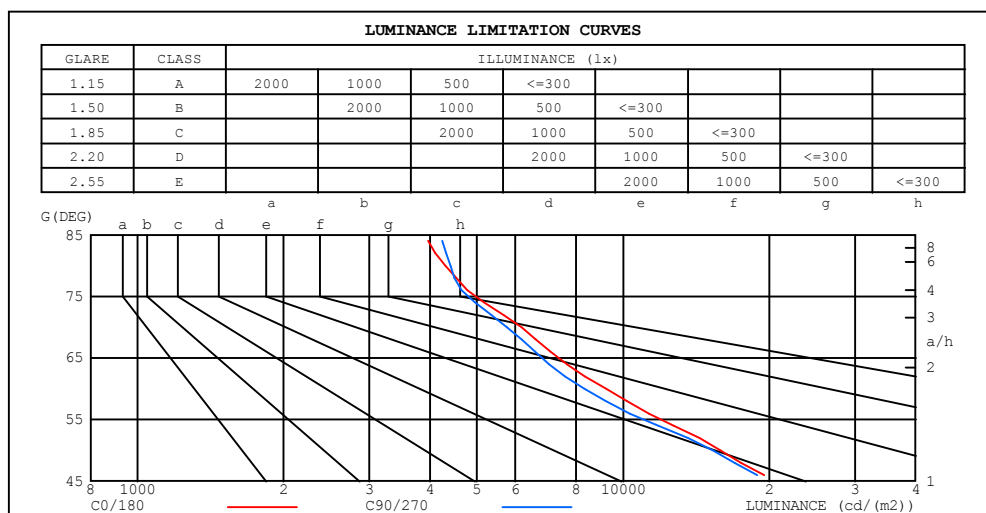


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-04-08
γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum, lamp
10	1658	1675	1698	1685					0- 10	1614	1614	5.62,5.74
20	1585	1558	1583	1600					10- 20	4633	6247	21.8,22.2
30	1358	1290	1314	1364					20- 30	6785	13033	45.4,46.4
40	765.9	739.4	867.0	859.2					30- 40	6779	19812	69,70.5
50	364.0	355.6	420.9	427.9					40- 50	4408	24219	84.3,86.2
60	164.6	150.8	193.0	197.2					50- 60	2428	26647	92.8,94.9
70	75.47	71.47	90.72	92.94					60- 70	1220	27868	97,99.2
80	26.73	27.78	36.30	37.23					70- 80	572.3	28440	99,101
90	0.3165	3.489	7.820	7.975					80- 90	189.0	28629	99.7,102
100	0.2203	0.2468	0.1677	0.1489					90-100	10.54	28639	99.7,102
110	0.4703	0.5075	0.2871	0.2581					100-110	2.939	28642	99.7,102
120	0.9663	1.012	0.5422	0.5023					110-120	5.405	28648	99.7,102
130	1.820	1.879	1.063	0.9884					120-130	9.570	28657	99.8,102
140	2.758	2.838	1.911	1.786					130-140	14.38	28672	99.8,102
150	3.586	3.686	2.865	2.721					140-150	17.34	28689	99.9,102
160	4.244	4.323	3.791	3.627					150-160	16.62	28706	99.9,102
170	4.573	4.611	4.328	4.216					160-170	11.94	28718	100,102
180	4.518	4.556	4.548	4.502					170-180	4.283	28722	100,102
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		



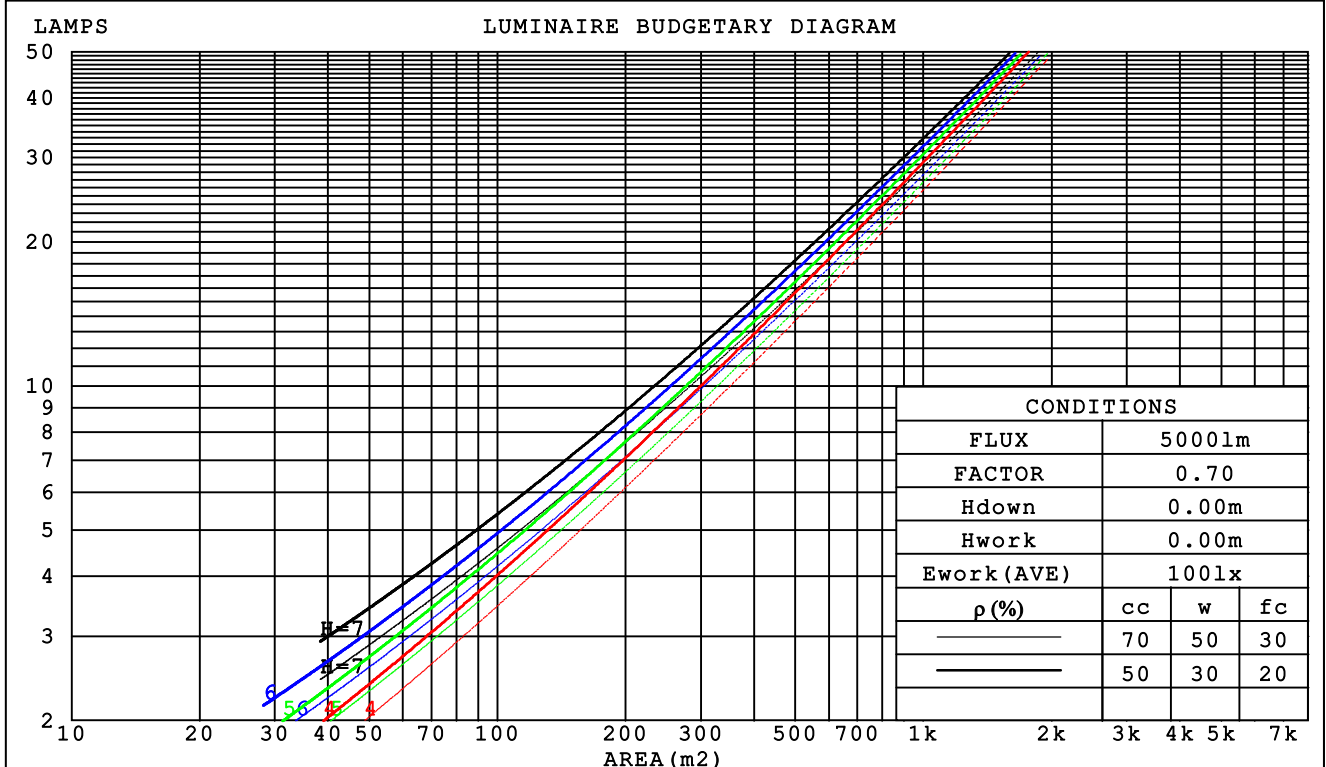
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-04-08

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-04-08

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)										
0.0																	
1.0	.238	.135	.043	.231	.132	.042	.218	.125	.040	.205	.118	.038	.194	.112	.036		
2.0	.229	.125	.038	.223	.123	.038	.211	.117	.036	.200	.112	.035	.191	.108	.034		
3.0	.217	.115	.035	.211	.113	.034	.201	.109	.033	.192	.105	.032	.183	.101	.031		
4.0	.204	.106	.031	.200	.104	.031	.191	.101	.030	.183	.098	.030	.175	.095	.029		
5.0	.193	.098	.028	.189	.097	.028	.181	.094	.028	.174	.092	.027	.167	.089	.027		
6.0	.182	.091	.026	.178	.090	.026	.171	.088	.026	.165	.086	.025	.159	.084	.025		
7.0	.172	.085	.024	.169	.084	.024	.163	.082	.024	.157	.080	.023	.151	.079	.023		
8.0	.163	.080	.022	.160	.079	.022	.154	.077	.022	.149	.076	.022	.144	.074	.022		
9.0	.154	.075	.021	.152	.074	.021	.147	.073	.021	.142	.071	.020	.138	.070	.020		
10.0	.147	.070	.020	.144	.070	.019	.140	.069	.019	.136	.067	.019	.132	.066	.019		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.197	.197	.197	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.181	.163	.146	.155	.140	.126	.106	.096	.087	.061	.056	.051	.020	.018	.016	
2.0	.169	.138	.111	.145	.119	.096	.099	.082	.067	.057	.048	.039	.018	.015	.013	
3.0	.159	.119	.087	.137	.103	.075	.094	.071	.053	.054	.042	.031	.017	.014	.010	
4.0	.151	.105	.070	.129	.090	.061	.089	.063	.043	.051	.037	.025	.017	.012	.008	
5.0	.143	.094	.057	.123	.081	.050	.084	.057	.035	.049	.033	.021	.016	.011	.007	
6.0	.136	.085	.048	.117	.073	.042	.080	.051	.029	.047	.030	.018	.015	.010	.006	
7.0	.129	.077	.041	.111	.067	.036	.077	.047	.025	.045	.028	.015	.014	.009	.005	
8.0	.123	.071	.035	.106	.062	.031	.073	.043	.022	.043	.026	.013	.014	.008	.004	
9.0	.118	.066	.031	.102	.057	.027	.070	.040	.019	.041	.024	.012	.013	.008	.004	
10.0	.113	.062	.028	.097	.054	.024	.067	.038	.017	.039	.022	.010	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2026-04-08

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 18.400m [K=1.0000]
 Remarks:

Uncorrected UGR Table

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm											
NAME: 2512232波兰U11高棚灯200W-4000K						TYPE:			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:036		
MFR.:						SUR.:			PROTECTION ANGLE:		
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	20.2	21.5	20.5	21.7	21.9	20.0	21.2	20.2	21.4	21.6	
	3H	20.6	21.7	20.9	21.9	22.1	20.3	21.4	20.6	21.7	21.9
	4H	20.7	21.7	21.0	22.0	22.2	20.4	21.5	20.7	21.7	22.0
	6H	20.7	21.7	21.0	22.0	22.3	20.5	21.5	20.8	21.7	22.0
	8H	20.7	21.7	21.1	22.0	22.2	20.5	21.5	20.8	21.7	22.0
	12H	20.7	21.7	21.1	21.9	22.2	20.5	21.4	20.8	21.7	22.0
4H	2H	20.3	21.4	20.6	21.6	21.8	20.1	21.1	20.4	21.4	21.6
	3H	20.8	21.7	21.1	22.0	22.3	20.5	21.4	20.9	21.7	22.0
	4H	20.9	21.8	21.3	22.1	22.4	20.7	21.5	21.1	21.8	22.2
	6H	21.1	21.8	21.4	22.1	22.5	20.8	21.6	21.2	21.9	22.3
	8H	21.1	21.8	21.5	22.1	22.5	20.9	21.6	21.3	21.9	22.3
	12H	21.1	21.8	21.6	22.1	22.5	20.9	21.6	21.4	21.9	22.3
8H	4H	20.9	21.6	21.3	22.0	22.4	20.7	21.4	21.1	21.8	22.1
	6H	21.1	21.7	21.6	22.1	22.5	20.9	21.5	21.4	21.9	22.3
	8H	21.2	21.7	21.7	22.1	22.6	21.0	21.5	21.5	22.0	22.4
	12H	21.3	21.7	21.8	22.2	22.7	21.1	21.5	21.6	22.0	22.5
12H	4H	20.9	21.5	21.3	21.9	22.3	20.7	21.3	21.1	21.7	22.1
	6H	21.1	21.6	21.6	22.1	22.5	20.9	21.4	21.4	21.9	22.3
	8H	21.2	21.7	21.7	22.1	22.6	21.1	21.5	21.5	21.9	22.4
Variations with the observer position at spacings:											
S = 1.0H	+ 1.0 / - 1.4					+ 1.0 / - 1.4					
1.5H	+ 1.4 / - 1.0					+ 1.2 / - 1.0					
2.0H	+ 2.0 / - 1.5					+ 2.0 / - 1.5					

CIE Pub.117 Corrected 28093 lm Total Lamp Luminous Flux. (8log(F/F0) = 11.6)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-04-08

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:

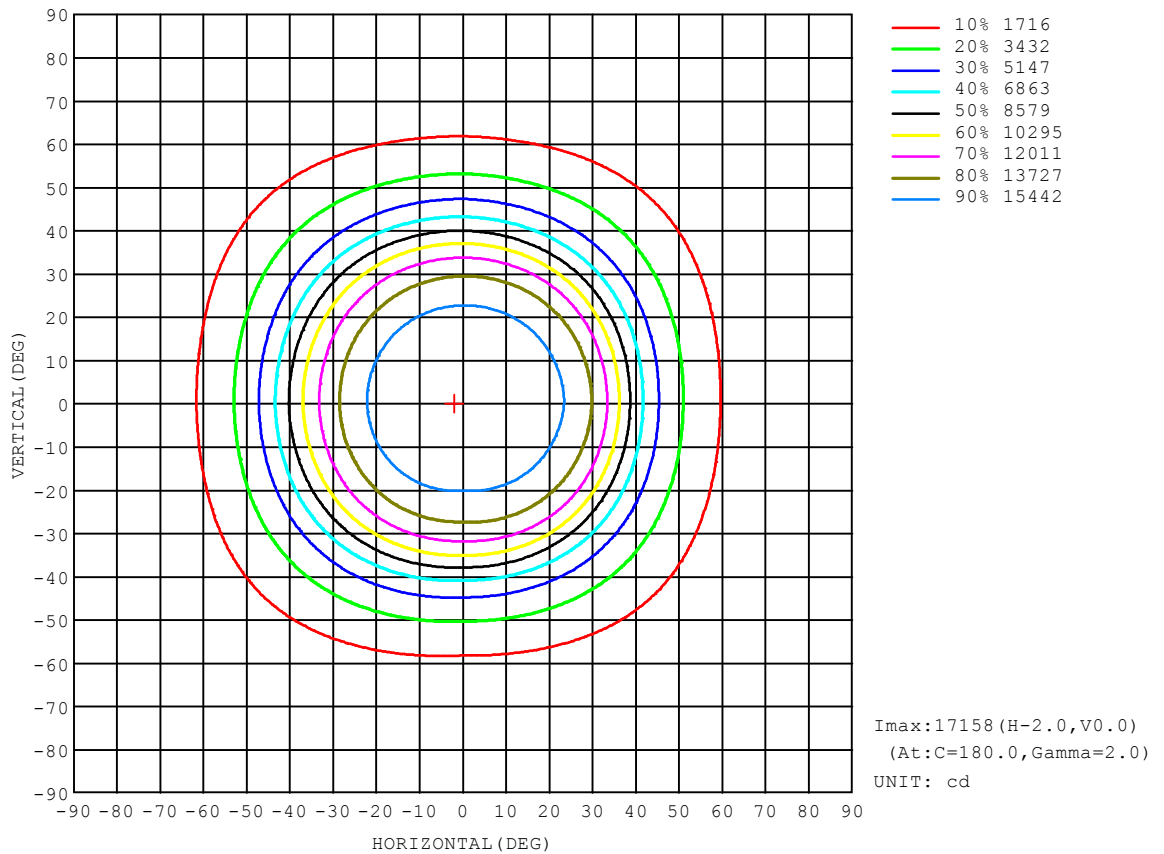
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	74	64	59	73	64	59	72	64	59	53
0.80	83	74	69	82	74	68	81	73	68	63
1.00	90	82	76	89	81	76	87	82	76	70
1.25	96	88	83	95	88	83	93	86	82	76
1.50	100	93	88	99	92	87	96	90	86	80
2.00	105	99	94	103	98	93	100	95	92	85
2.50	108	102	98	106	101	97	102	98	95	88
3.00	110	105	101	108	104	100	104	101	98	90
4.00	113	109	105	111	107	104	107	104	101	93
5.00	115	111	108	112	109	107	108	105	103	95
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2026-04-08

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
 Humidity: 65.0%
 Test Distance: 18.400m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:

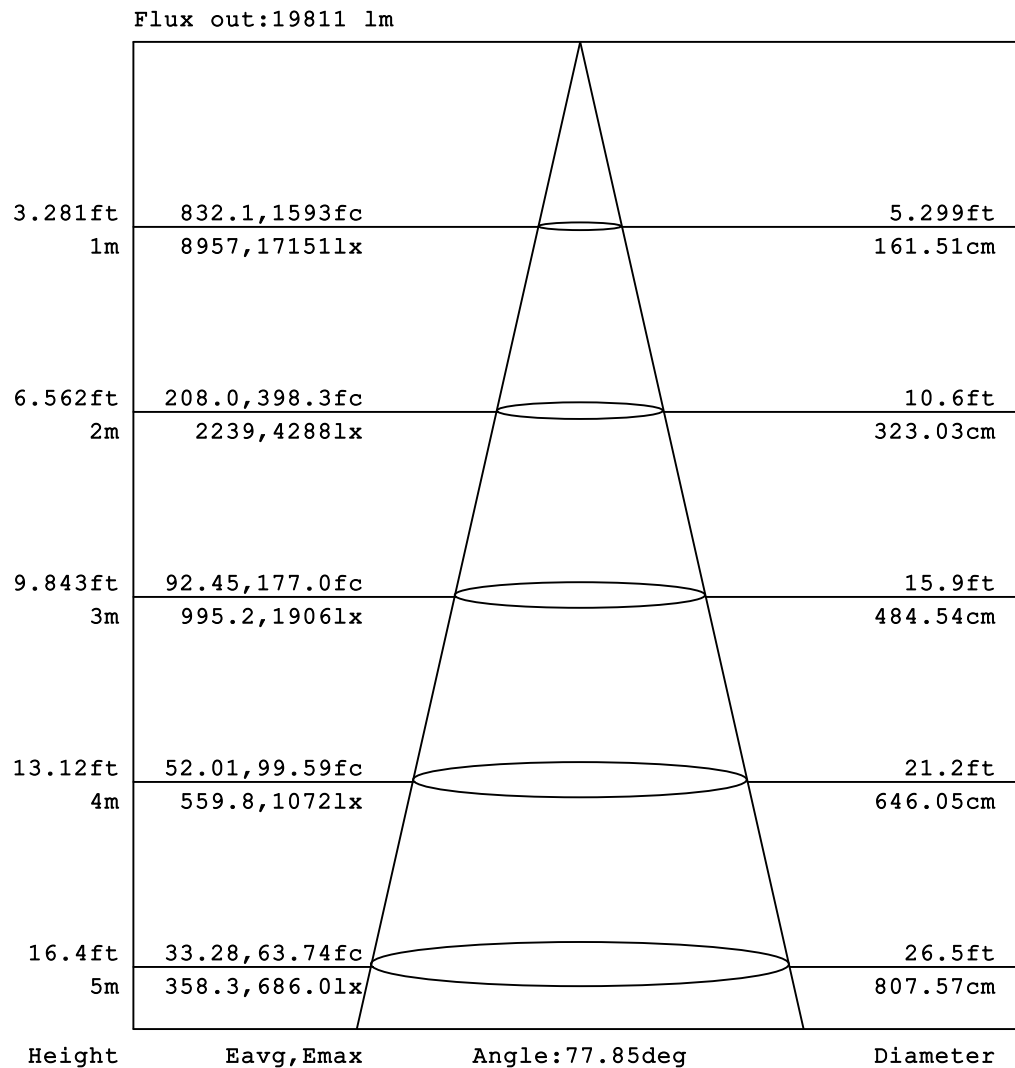


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-04-08

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

AAI Figure

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:



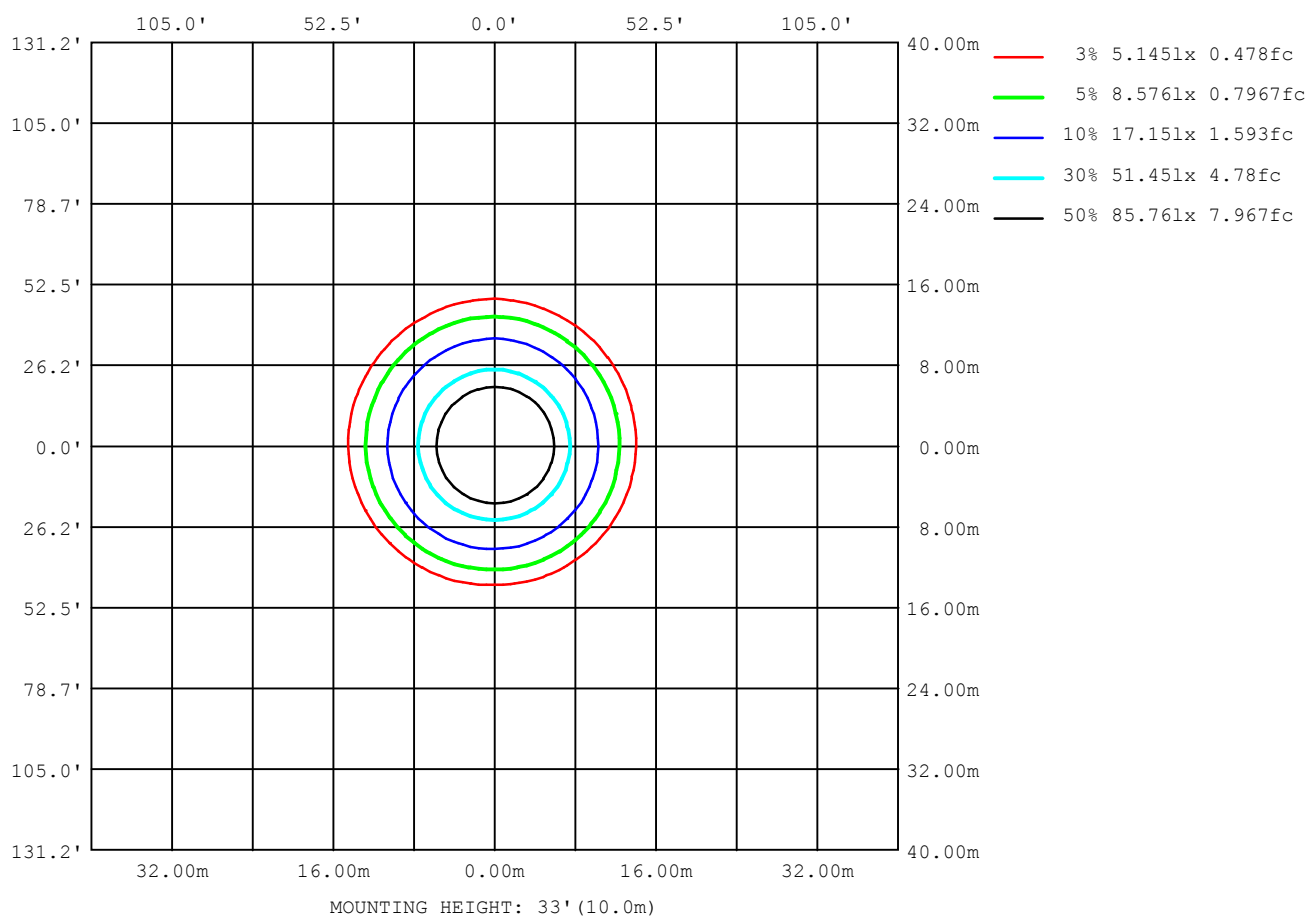
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2026-04-08

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity: 65.0%
Test Distance: 18.400m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

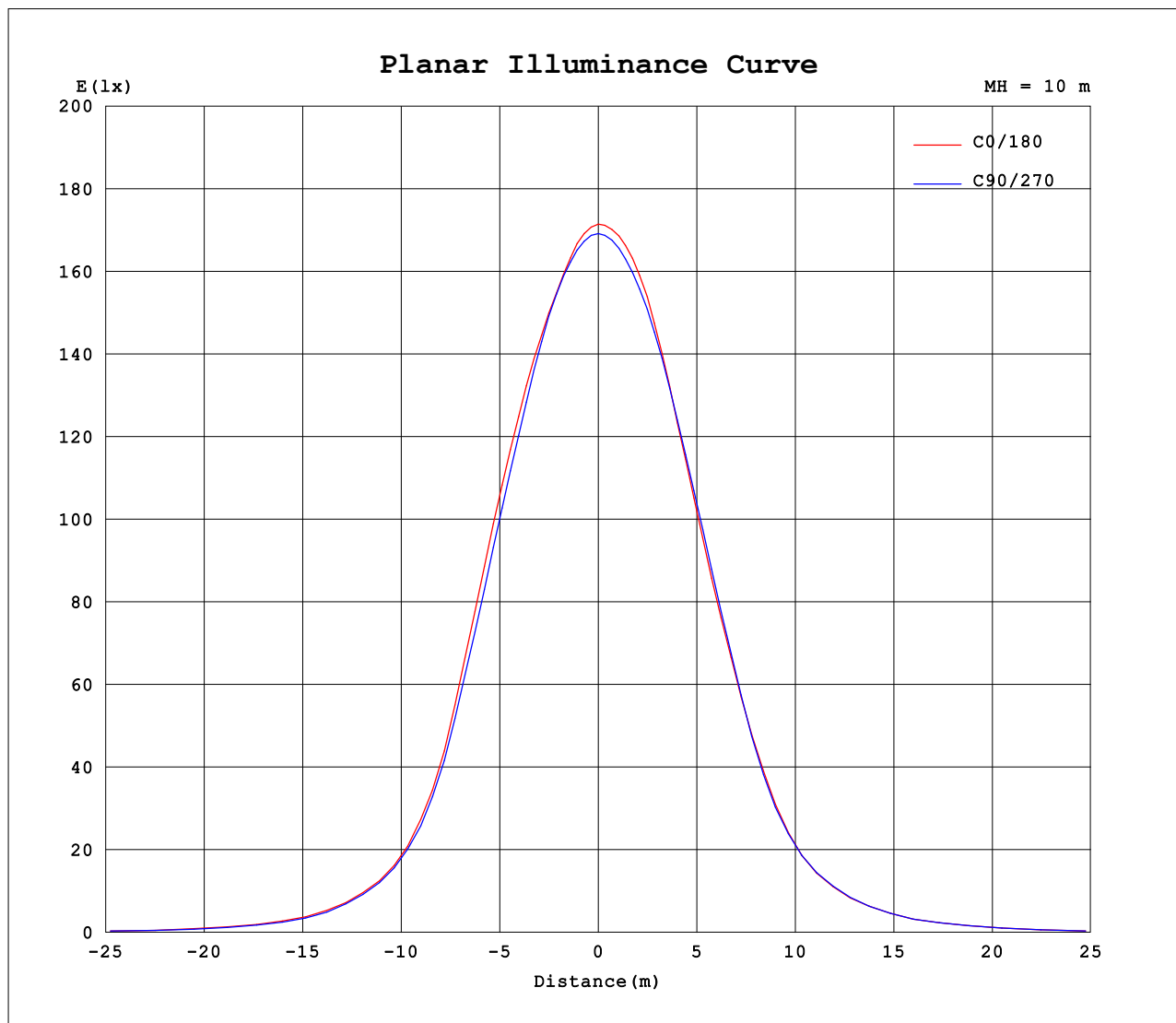
Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-04-08

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2026-04-08

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity: 65.0%
Test Distance: 18.400m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:229.7V I:0.8437A P:189.6W PF:0.9783 Lamp Flux:28092.6x1 lm		
NAME: 2512232波兰U11高棚灯200W-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:036
MFR.:	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: ×10cd

C (DEG) γ (DEG)	0	90	180	270															
0	1704	1704	1704	1704															
5	1694	1698	1704	1700															
10	1658	1675	1698	1685															
15	1630	1645	1674	1664															
20	1585	1558	1583	1600															
25	1524	1477	1493	1529															
30	1358	1290	1314	1364															
35	1162	1103	1163	1196															
40	766	739	867	859															
45	562	551	651	649															
50	364	356	421	428															
55	268	252	314	323															
60	165	151	193	197															
65	120	112	143	144															
70	75.5	71.5	90.7	92.9															
75	50.9	49.4	65.1	67.3															
80	26.7	27.8	36.3	37.2															
85	14.8	16.1	23.3	24.0															
90	0.32	3.49	7.82	7.97															
95	0.14	0.16	0.16	0.26															
100	0.22	0.25	0.17	0.15															
105	0.31	0.33	0.20	0.18															
110	0.47	0.51	0.29	0.26															
115	0.63	0.67	0.37	0.33															
120	0.97	1.01	0.54	0.50															
125	1.28	1.32	0.71	0.66															
130	1.82	1.88	1.06	0.99															
135	2.19	2.26	1.37	1.27															
140	2.76	2.84	1.91	1.79															
145	3.12	3.20	2.30	2.16															
150	3.59	3.69	2.87	2.72															
155	3.89	3.97	3.23	3.08															
160	4.24	4.32	3.79	3.63															
165	4.42	4.50	4.01	3.87															
170	4.57	4.61	4.33	4.22															
175	4.58	4.60	4.47	4.38															
180	4.52	4.56	4.55	4.50															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2026-04-08

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.281
Humidity:65.0%
Test Distance:18.400m [K=1.0000]
Remarks: