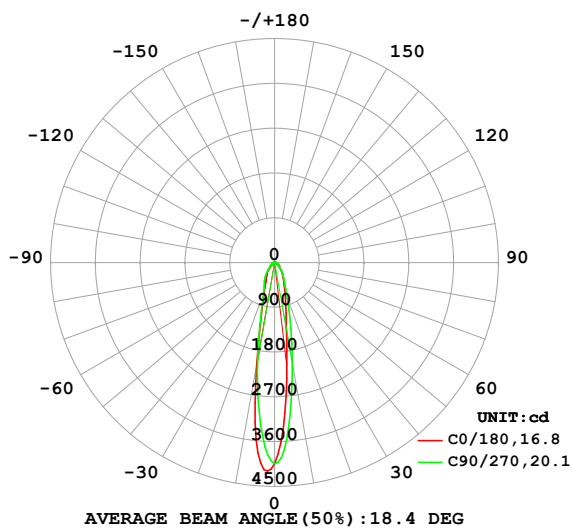


LUMINAIRE PHOTOMETRIC TEST REPORT

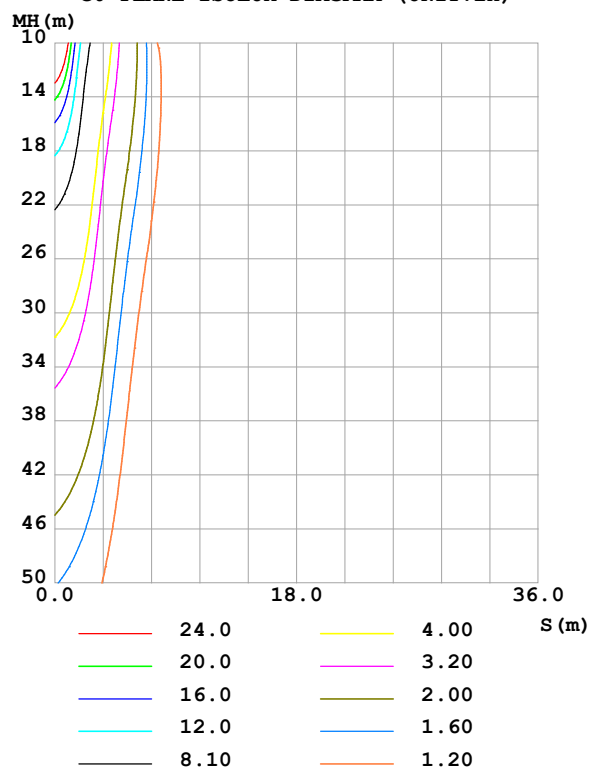
Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 68.15 lm/W			
MODEL		I _{max} (cd)	4194	S/MH(C0/180)	0.35
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.34
RATED VOLTAGE(V)		TOTAL FLUX(lm)	1256.3	η UP,DN(C0-180)	0.0,49.7
NOMINAL FLUX(lm)	1256.29	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)		η down (%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1387	1609	2060	2176	2093	2119	1991	1593	0- 10	264.8	264.8	21.1,21.1
20	614.4	616.3	750.3	671.0	605.3	635.7	658.3	627.1	10- 20	295.7	560.5	44.6,44.6
30	347.5	347.1	375.6	347.0	331.7	372.1	407.9	382.2	20- 30	217.3	777.9	61.9,61.9
40	199.8	201.5	212.1	202.4	188.6	209.5	229.4	223.0	30- 40	179.1	957.0	76.2,76.2
50	111.5	112.3	114.0	109.7	102.0	111.0	121.2	124.3	40- 50	116.3	1073	85.4,85.4
60	70.08	74.84	75.67	73.41	69.08	74.38	78.35	78.35	50- 60	82.74	1156	92,92
70	38.49	42.78	46.50	45.95	41.85	43.63	45.49	42.97	60- 70	57.66	1214	96.6,96.6
80	15.56	18.03	21.58	20.20	16.78	18.36	20.61	18.76	70- 80	32.30	1246	99.2,99.2
90	3.642	3.730	4.085	3.966	3.521	3.649	3.880	3.656	80- 90	10.31	1256	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1021.5 lm

%lum = 81.3%

%lamp = 81.3%

Conical surface Flux(130deg): 1188.1 lm

%lum = 94.6%

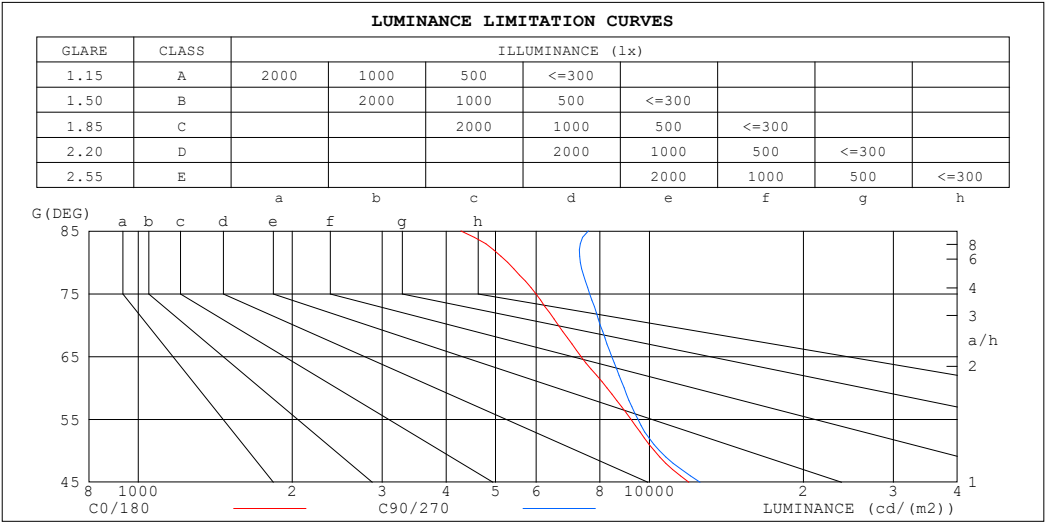
%lamp = 94.6%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:Cloud
 Test Date:2025-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
 Humidity:65.0%
 Test Distance:6.360m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



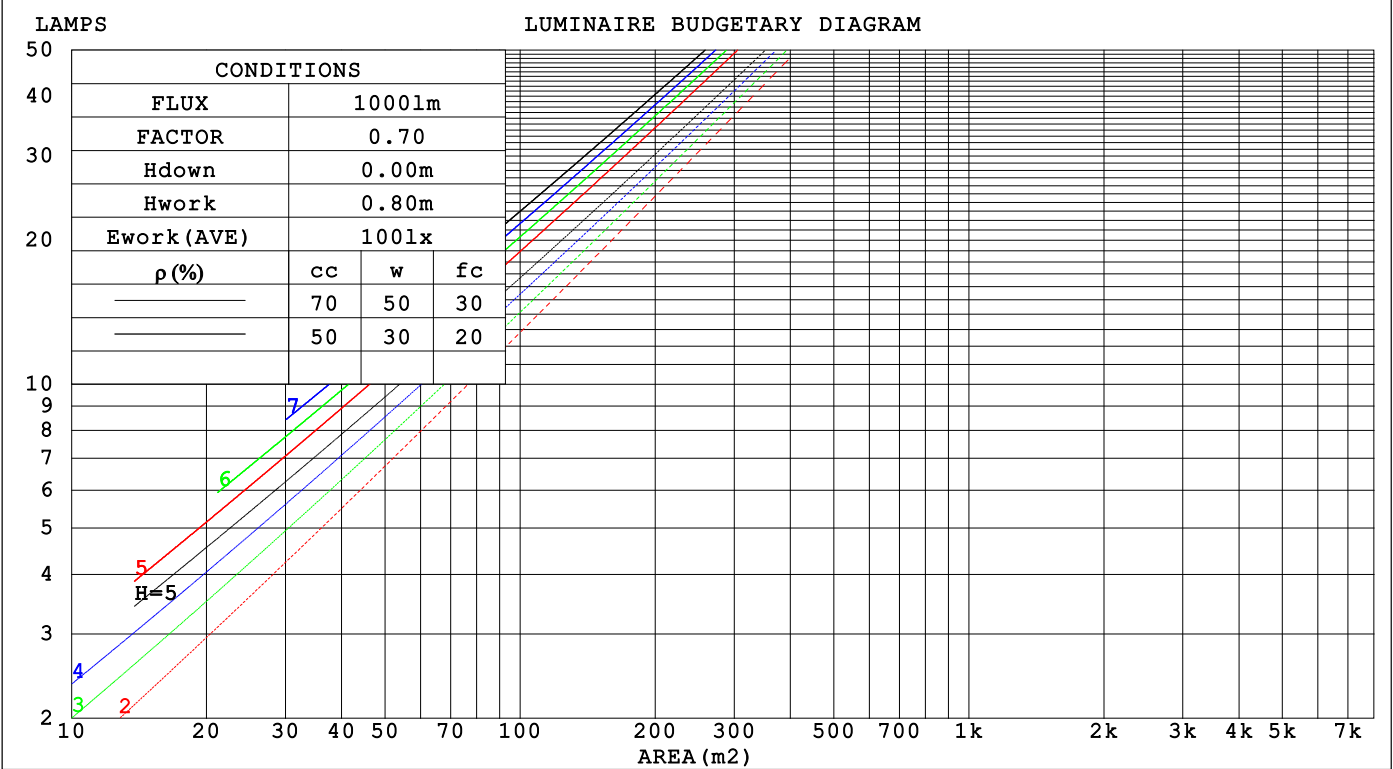
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4278	7595
80	5281	7324
75	5994	7638
70	6631	8013
65	7344	8436
60	8258	8920
55	9195	9492
50	10221	10455
45	11943	12556

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Temperature:25.3℃	Humidity:65.0%
Operators:Cloud	Test Distance:6.360m [K=1.0000]
Test Date:2025-01-15	Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz		
Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.01	.99	.99	.97	.96	.96	.94	.93	.91
2.0	1.00	.96	.92	.98	.94	.91	.95	.92	.89	.92	.89	.87	.89	.87	.85	.83
3.0	.93	.87	.83	.91	.86	.82	.89	.84	.80	.86	.82	.79	.84	.81	.78	.76
4.0	.86	.80	.75	.85	.79	.75	.83	.78	.74	.81	.77	.73	.79	.75	.72	.71
5.0	.81	.74	.70	.80	.74	.69	.78	.73	.69	.76	.72	.68	.75	.71	.67	.66
6.0	.76	.69	.65	.75	.69	.65	.74	.68	.64	.72	.67	.64	.71	.67	.63	.62
7.0	.72	.65	.61	.71	.65	.61	.70	.64	.60	.68	.64	.60	.67	.63	.60	.58
8.0	.68	.62	.58	.67	.62	.57	.66	.61	.57	.65	.60	.57	.64	.60	.57	.55
9.0	.65	.59	.55	.64	.58	.55	.63	.58	.54	.62	.58	.54	.62	.57	.54	.53
10.0	.62	.56	.52	.61	.56	.52	.61	.55	.52	.60	.55	.52	.59	.55	.52	.50



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding 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															Wall Exitance Coefficients(WEC)														
0.0																														
1.0	.211	.120	.038	.204	.116	.037	.191	.110	.035	.180	.104	.033	.169	.098	.032															
2.0	.198	.109	.033	.193	.106	.033	.182	.101	.031	.172	.096	.030	.162	.092	.029															
3.0	.185	.098	.029	.180	.096	.029	.171	.092	.028	.162	.089	.027	.154	.085	.026															
4.0	.172	.090	.026	.168	.088	.026	.160	.085	.025	.153	.082	.025	.146	.079	.024															
5.0	.161	.082	.024	.157	.081	.024	.150	.078	.023	.144	.076	.023	.138	.074	.022															
6.0	.151	.076	.022	.148	.075	.022	.142	.073	.021	.136	.071	.021	.131	.069	.020															
7.0	.142	.070	.020	.139	.069	.020	.134	.068	.019	.129	.066	.019	.124	.064	.019															
8.0	.134	.066	.018	.132	.065	.018	.127	.063	.018	.122	.062	.018	.118	.061	.018															
9.0	.127	.061	.017	.125	.061	.017	.120	.059	.017	.116	.058	.017	.112	.057	.016															
10.0	.120	.058	.016	.118	.057	.016	.114	.056	.016	.111	.055	.016	.107	.054	.015															

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						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.157	.142	.148	.135	.122	.102	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.095	.094	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.086	.127	.098	.075	.087	.068	.052	.050	.040	.031	.016	.013	.010	
4.0	.138	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.057	.111	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006	
7.0	.114	.071	.041	.098	.062	.036	.068	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.108	.065	.035	.093	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm										
NAME: SFW20-24V-3535-24-CC-3000-80-15					TYPE:			WEIGHT:		
SPEC.:					DIM.: Length=1m			SERIAL No.:		
MFR.:					SUR.:			Shielding 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	17.3	18.3	17.5	18.5	18.7	17.5	18.5	17.7	18.7	18.9
3H	18.2	19.2	18.5	19.4	19.6	18.7	19.6	18.9	19.8	20.0
4H	18.6	19.5	18.9	19.8	20.0	19.2	20.1	19.5	20.3	20.6
6H	18.9	19.8	19.2	20.0	20.3	19.6	20.5	19.9	20.7	21.0
8H	19.0	19.8	19.3	20.1	20.3	19.8	20.6	20.1	20.9	21.1
12H	19.0	19.8	19.3	20.1	20.4	19.9	20.7	20.2	21.0	21.3
4H 2H	17.8	18.7	18.0	18.9	19.1	17.9	18.8	18.2	19.1	19.3
3H	18.9	19.7	19.2	20.0	20.3	19.3	20.1	19.6	20.4	20.7
4H	19.4	20.1	19.8	20.4	20.7	19.9	20.7	20.3	21.0	21.3
6H	19.8	20.4	20.2	20.8	21.1	20.5	21.2	20.9	21.5	21.8
8H	19.9	20.5	20.3	20.9	21.2	20.7	21.3	21.1	21.7	22.1
12H	20.0	20.5	20.4	20.9	21.3	20.9	21.5	21.3	21.8	22.2
8H 4H	19.6	20.2	20.0	20.6	20.9	20.1	20.7	20.5	21.1	21.4
6H	20.1	20.6	20.5	21.0	21.4	20.8	21.3	21.2	21.7	22.1
8H	20.3	20.8	20.8	21.2	21.6	21.1	21.6	21.6	22.0	22.4
12H	20.4	20.8	20.9	21.3	21.7	21.4	21.8	21.9	22.2	22.7
12H 4H	19.6	20.2	20.0	20.6	21.0	20.1	20.7	20.5	21.0	21.4
6H	20.2	20.6	20.6	21.0	21.5	20.8	21.3	21.3	21.7	22.1
8H	20.4	20.8	20.9	21.2	21.7	21.2	21.6	21.6	22.0	22.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.4 / - 0.5					+ 0.3 / - 0.4				
1.5H	+ 0.4 / - 0.3					+ 0.4 / - 0.3				
2.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.3				

CIE Pub.117, 1256 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.8$)
Area: 0.017 m²

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

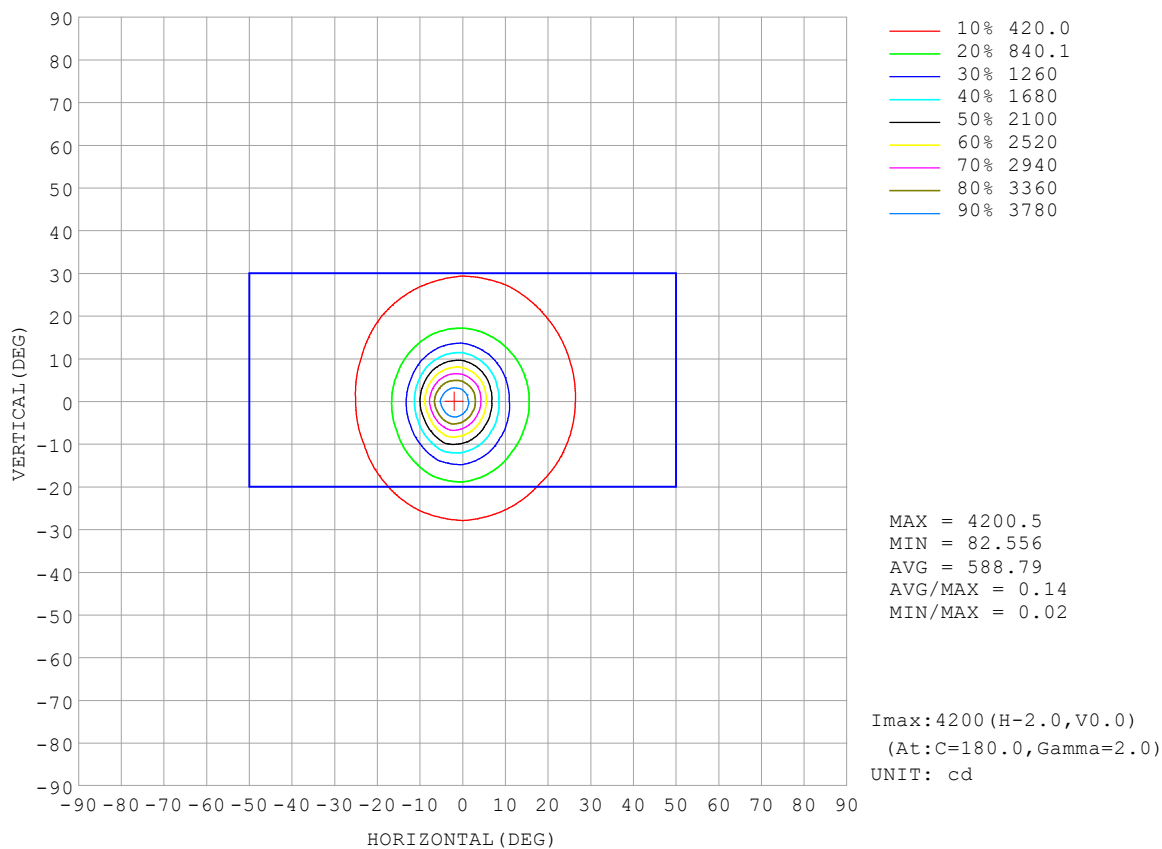
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	69	64	76	68	64	75	68	63	59
0.80	85	77	72	84	77	72	83	76	72	67
1.00	91	84	79	90	83	78	88	83	78	73
1.25	96	89	84	95	88	84	93	87	83	78
1.50	100	93	89	98	92	88	96	91	87	81
2.00	104	98	94	102	97	93	99	95	91	85
2.50	106	101	97	104	100	96	101	97	94	87
3.00	108	104	100	106	102	99	103	100	97	90
4.00	111	107	104	109	106	103	105	102	100	92
5.00	113	110	107	111	108	105	106	104	102	94
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: Cloud
 Test Date: 2025-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.488
 Humidity: 65.0%
 Test Distance: 6.360m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

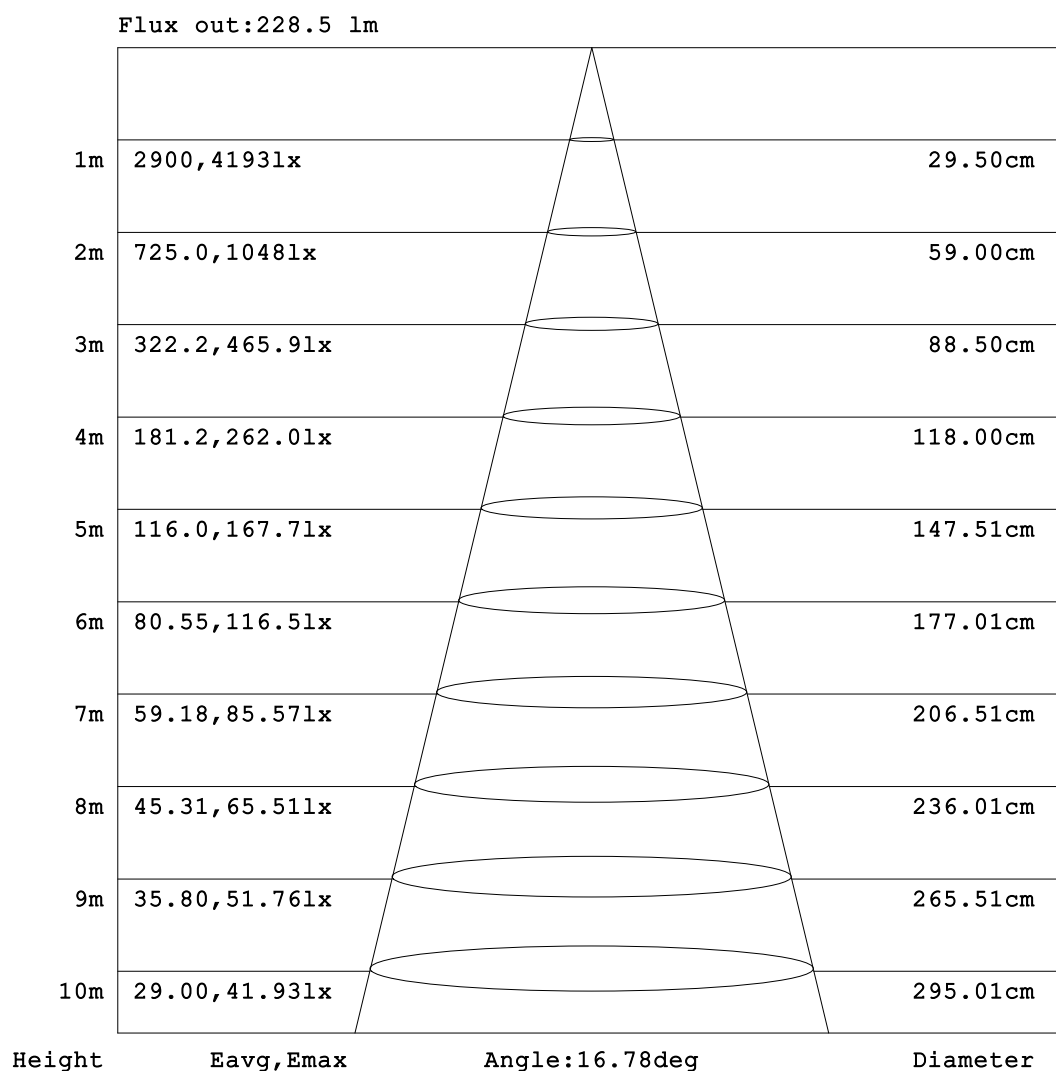


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



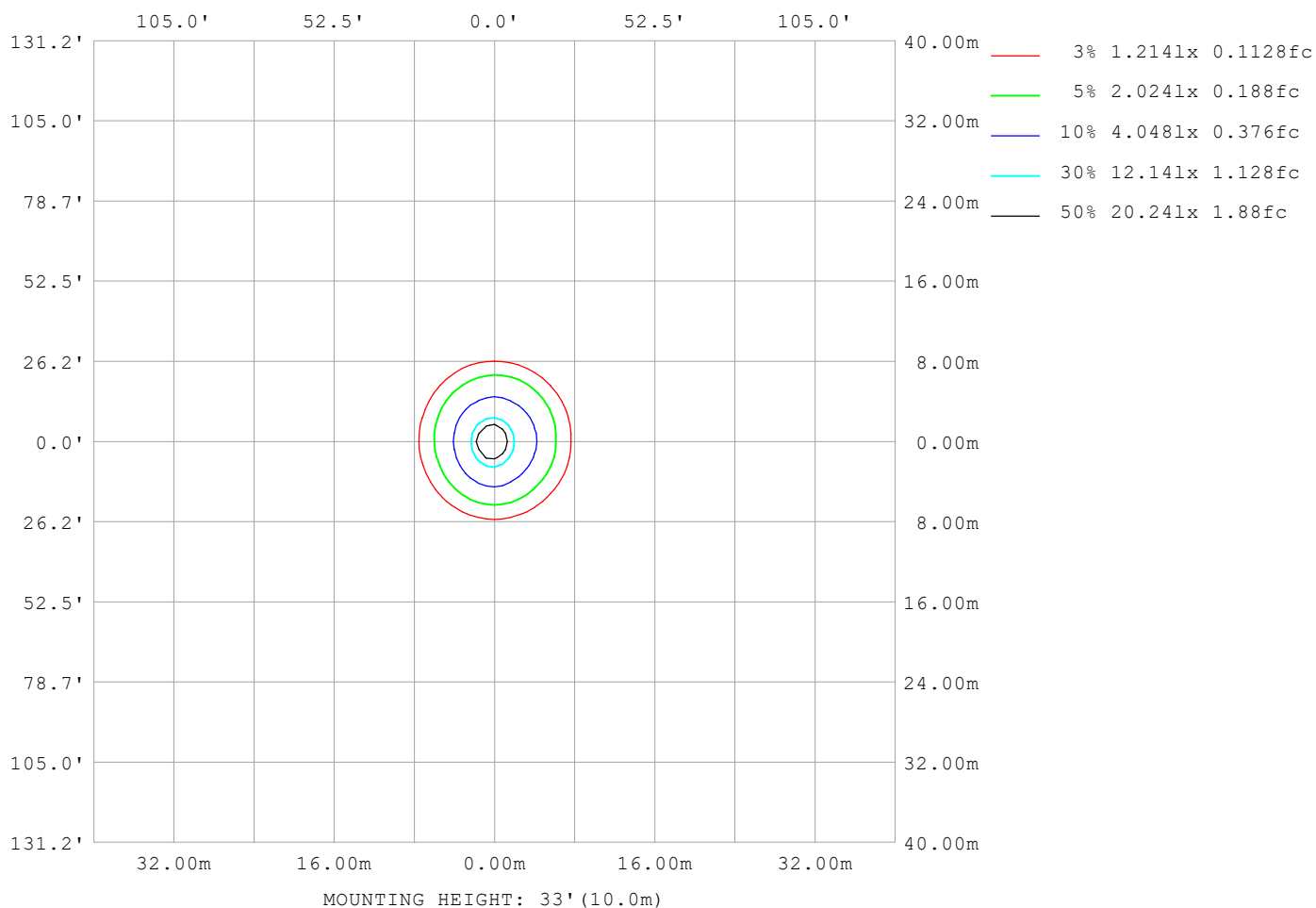
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

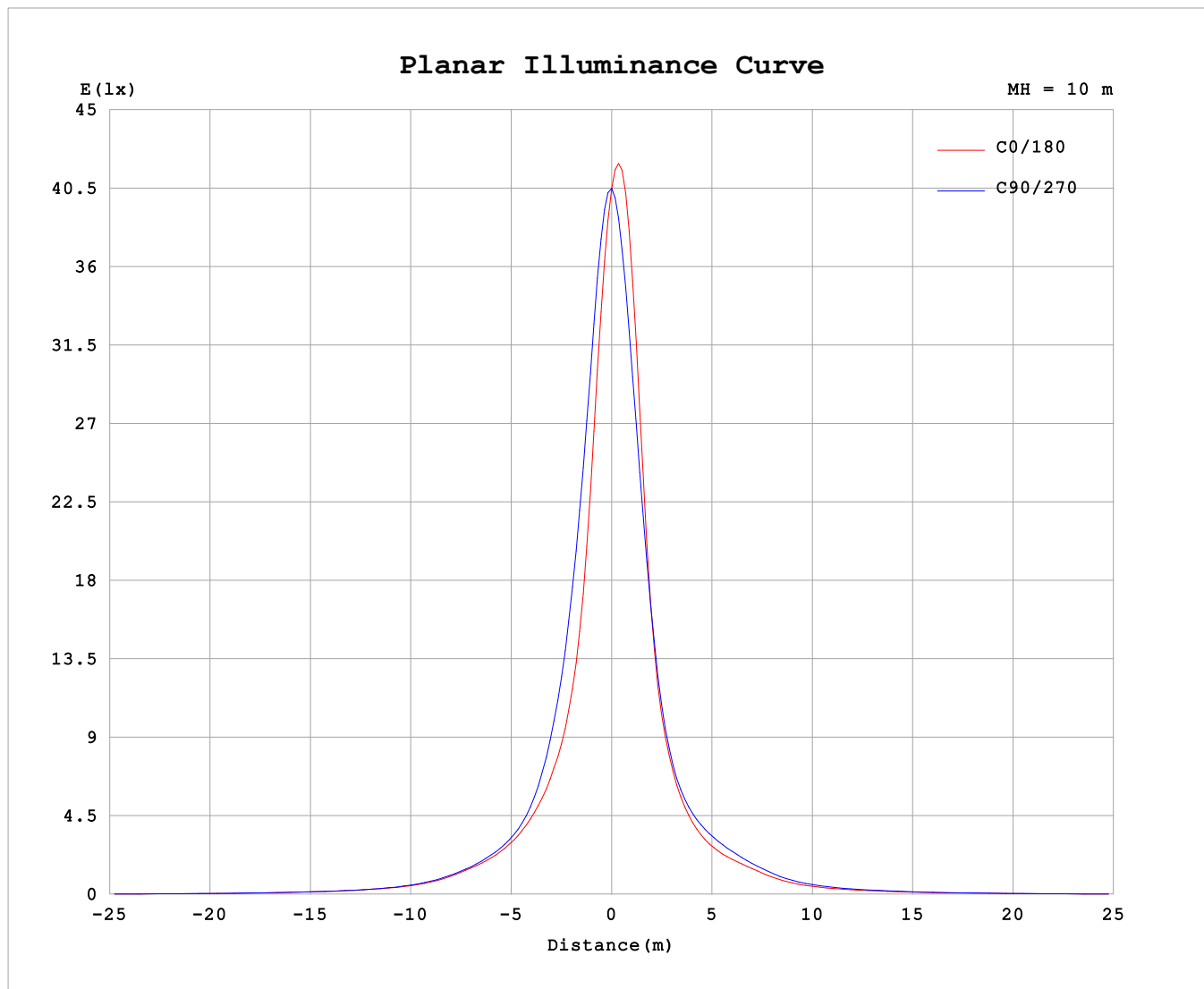
AvgL	cd/m2
L_0~180 (65) av	7510
L_0~180 (75) av	6275
L_0~180 (85) av	4392
L_90~270 (65) av	8461
L_90~270 (75) av	7451
L_90~270 (85) av	7466
L_45 (65) av	8162
L_45 (75) av	6964
L_45 (85) av	5598

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3 °C
Operators: Cloud
Test Date: 2025-01-15

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity: 65.0%
Test Distance: 6.360m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.7681A P:18.43W PF:1.000 Freq:0Hz Lamp Flux:1256.29x1 lm		
NAME: SFW20-24V-3535-24-CC-3000-80-15	TYPE:	WEIGHT:
SPEC.:	DIM.: Length=1m	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

[illegible]

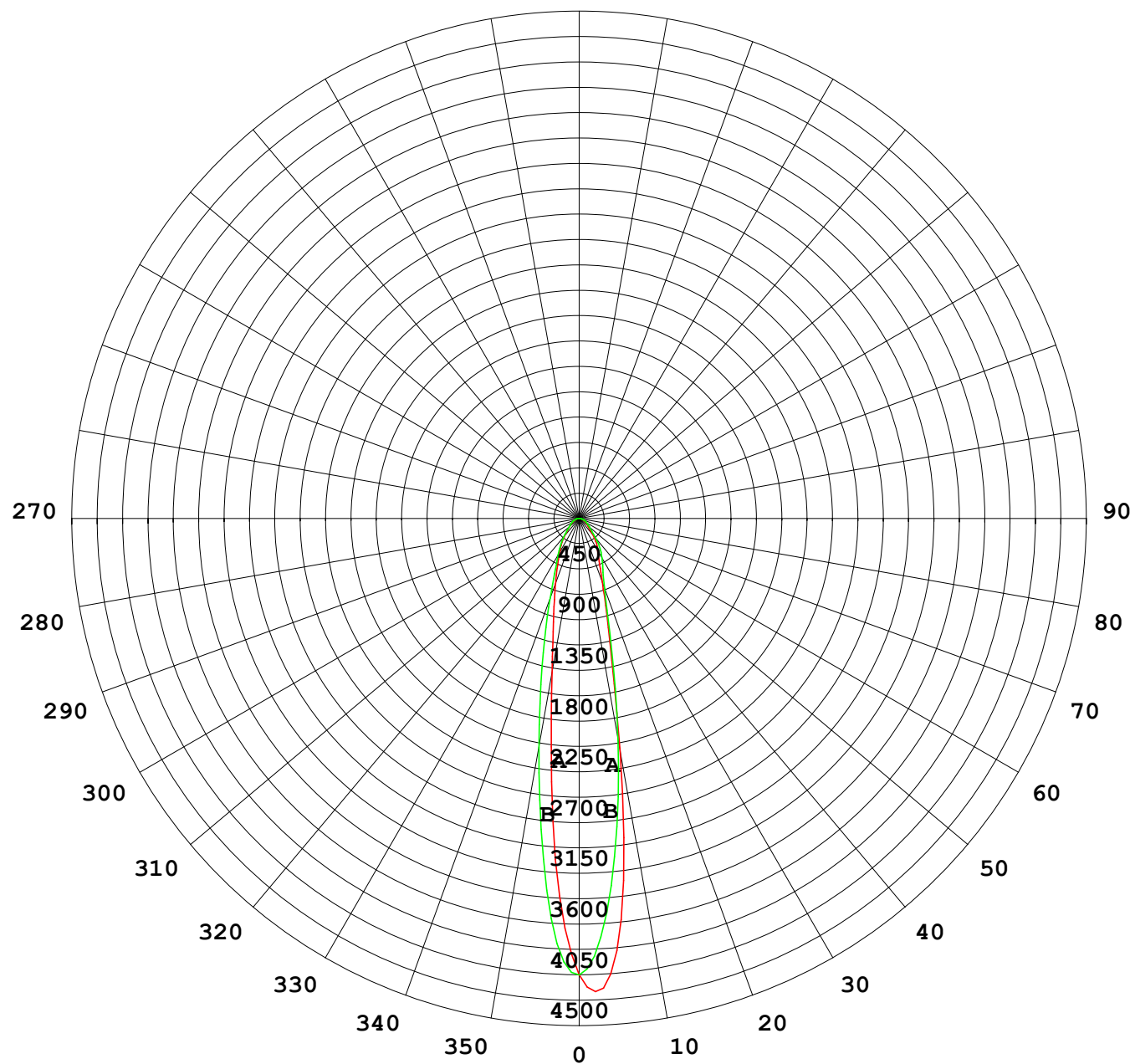
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:Cloud
Test Date:2025-01-15

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.488
Humidity:65.0%
Test Distance:6.360m [K=1.0000]
Remarks:

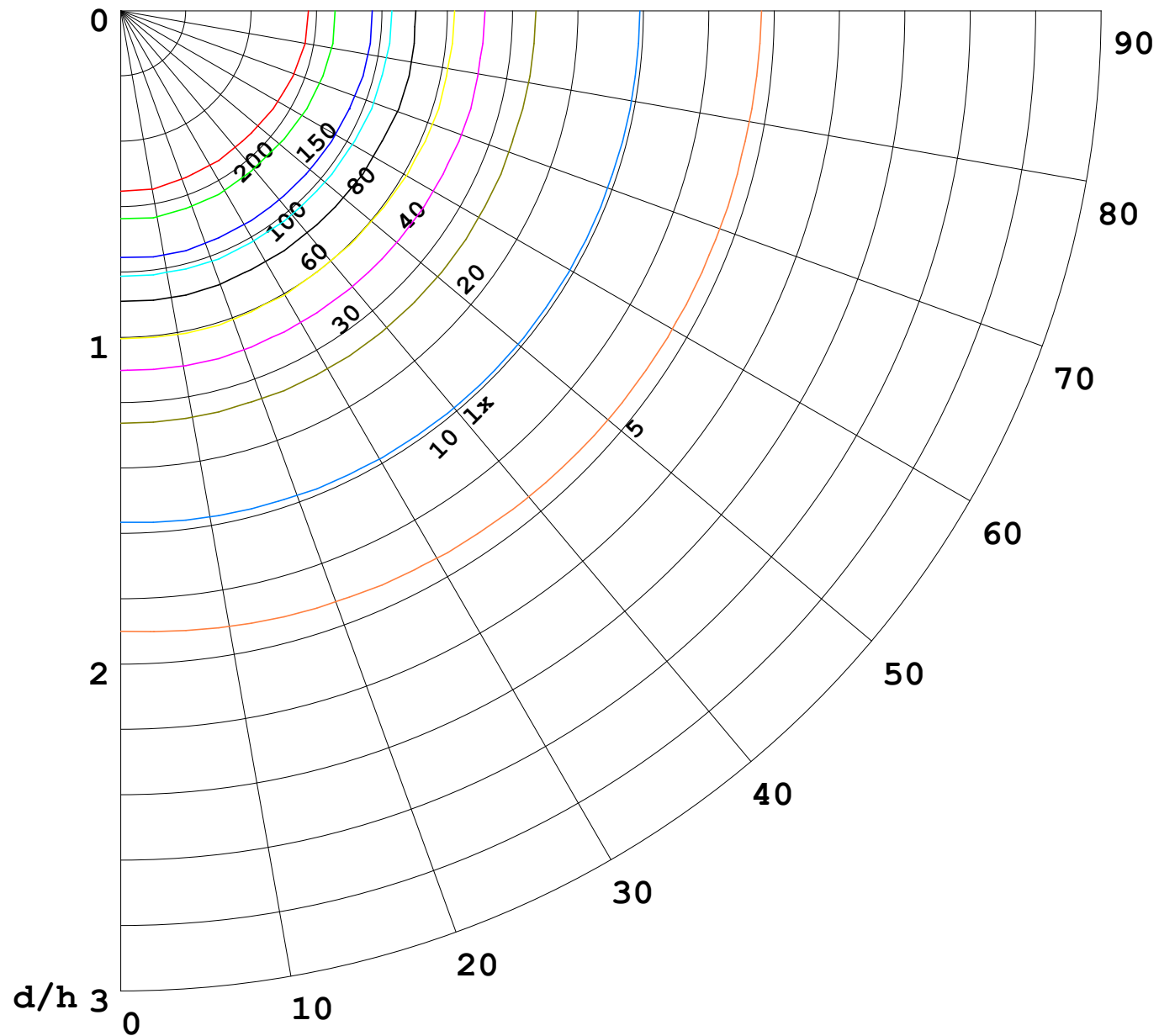
```

I (cd)



1000 lm

$\kappa = 1$



F = 1000 lm
 K = 0.7
 Hcc = 0.8 m
 Hfc = 0.0 m
 Eave = 100 lx

	Pcc	Pw	Pfc
—————	70	50	30
—————	50	30	20

