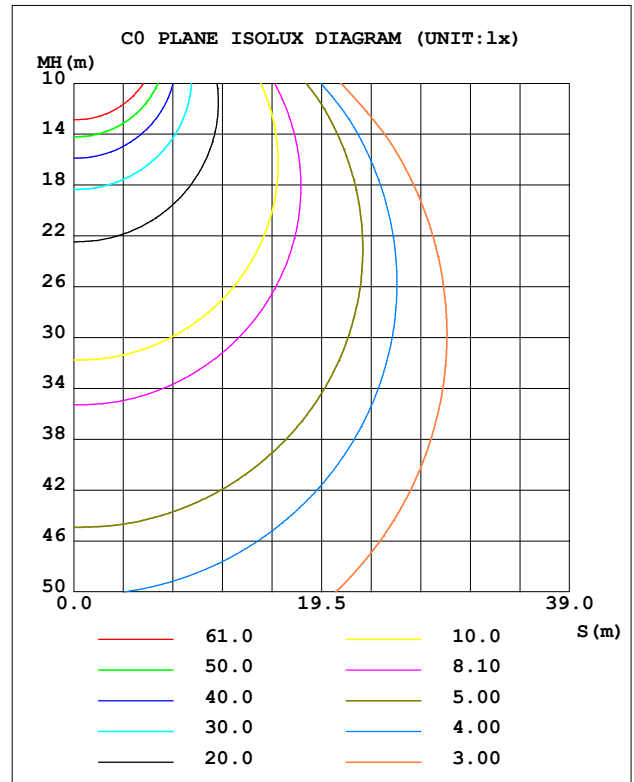
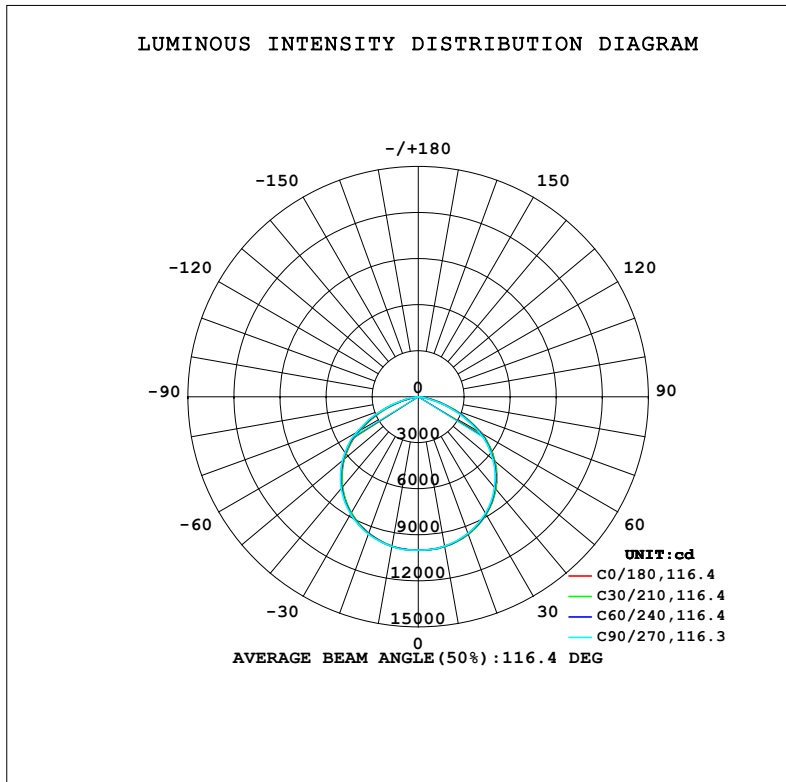


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99GENEVA200SMD	Imax (cd)	10004	S/MH (C0/180)	1.30
NOMINAL POWER (W)	200	LOR (%)	133.0	S/MH (C90/270)	1.31
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	28590	$\eta$ UP, DN (C0-180)	0.0, 66.2
NOMINAL FLUX (lm)	21500	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 66.7
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	$\eta$ down (%)	133.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 13 October 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	991.8	990.6	989.1	987.7	988.4	989.3	991.0	991.9	0- 10	950.6	950.6	3.32,4.42
20	953.5	950.6	947.2	945.0	945.4	947.8	951.2	953.6	10- 20	2749	3700	12.9,17.2
30	885.7	881.7	876.2	872.8	873.4	877.1	882.3	886.0	20- 30	4234	7934	27.8,36.9
40	786.8	781.3	773.7	768.5	768.8	774.0	781.2	786.4	30- 40	5208	13142	46,61.1
50	652.7	645.6	635.5	628.3	628.4	635.6	645.5	652.4	40- 50	5499	18640	65.2,86.7
60	479.1	470.7	457.0	442.3	439.7	450.3	465.3	477.8	50- 60	4969	23609	82.6,110
70	253.2	243.8	229.9	218.7	216.6	225.9	239.0	251.9	60- 70	3441	27050	94.6,126
80	54.76	49.78	41.99	36.28	34.99	39.47	46.06	53.77	70- 80	1399	28449	99.5,132
90	1.352	1.375	1.420	1.454	1.262	1.224	1.173	1.149	80- 90	141.2	28590	100,133
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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 15903 lm

%lum = 55.6%

%lamp = 74.0%

Conical surface Flux(130deg): 25568 lm

%lum = 89.4%

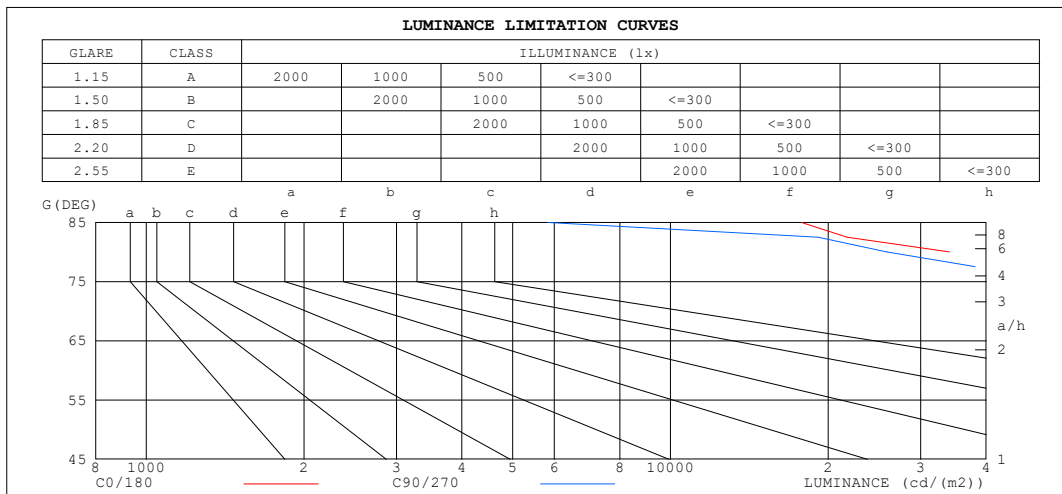
%lamp = 118.9%

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:13 October 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

### LUMINANCE LIMITATION CURVES

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17787	5832
80	34076	25843
75	60483	51325
70	80005	71839
65	93398	86522
60	103531	97673
55	107661	102947
50	109717	105665
45	110666	107189

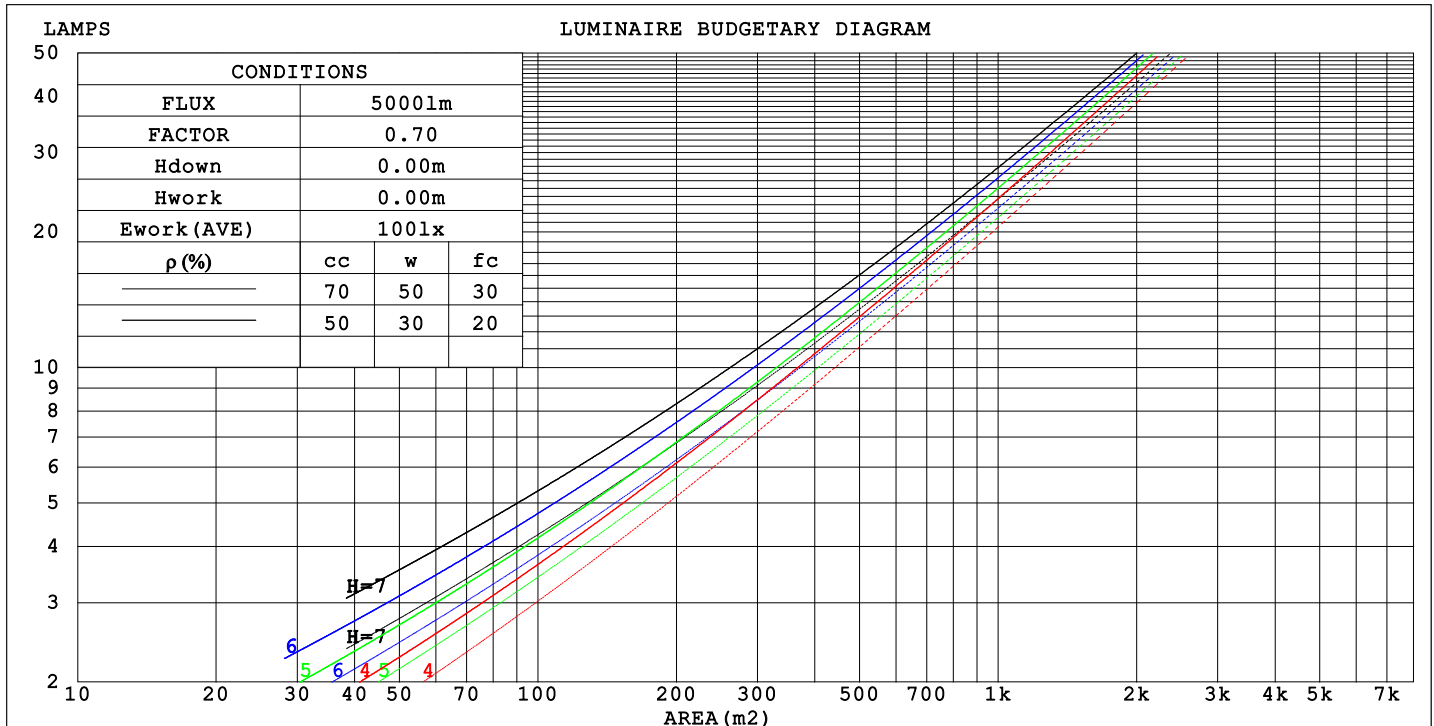
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 13 October 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	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															



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:13 October 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

## WEC AND CCEC

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	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	.380	.216	.068	.370	.211	.067	.353	.202	.065	.337	.194	.062	.322	.187	.060	
2.0	.368	.202	.062	.360	.198	.061	.344	.191	.059	.330	.185	.058	.317	.179	.057	
3.0	.346	.184	.055	.339	.181	.055	.325	.176	.054	.312	.171	.053	.301	.167	.052	
4.0	.322	.168	.049	.316	.165	.049	.304	.161	.048	.293	.157	.047	.282	.153	.047	
5.0	.300	.153	.044	.294	.151	.044	.284	.148	.043	.274	.144	.043	.264	.141	.042	
6.0	.280	.140	.040	.274	.139	.040	.265	.136	.040	.256	.133	.039	.248	.130	.039	
7.0	.261	.129	.037	.257	.128	.036	.248	.125	.036	.240	.123	.036	.232	.121	.035	
8.0	.244	.119	.034	.240	.118	.033	.233	.116	.033	.226	.114	.033	.219	.112	.033	
9.0	.230	.111	.031	.226	.110	.031	.219	.108	.031	.213	.107	.030	.206	.105	.030	
10.0	.216	.104	.029	.213	.103	.029	.207	.101	.029	.201	.100	.028	.195	.098	.028	

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	.253	.253	.253	.216	.216	.216	.148	.148	.148	.085	.085	.085	.027	.027	.027	
1.0	.238	.208	.181	.203	.178	.156	.139	.123	.108	.080	.071	.063	.026	.023	.020	
2.0	.226	.176	.133	.194	.151	.115	.133	.105	.080	.077	.061	.047	.025	.020	.015	
3.0	.216	.152	.101	.185	.131	.087	.127	.091	.061	.073	.053	.036	.024	.017	.012	
4.0	.206	.134	.079	.177	.116	.069	.122	.081	.048	.070	.047	.029	.023	.015	.009	
5.0	.197	.120	.064	.169	.104	.055	.116	.073	.039	.067	.043	.023	.022	.014	.008	
6.0	.188	.109	.053	.161	.094	.046	.111	.066	.032	.065	.039	.019	.021	.013	.006	
7.0	.179	.100	.045	.154	.087	.039	.106	.061	.028	.062	.036	.016	.020	.012	.005	
8.0	.170	.092	.038	.147	.080	.034	.102	.056	.024	.059	.033	.014	.019	.011	.005	
9.0	.163	.086	.034	.140	.074	.029	.097	.052	.021	.057	.031	.012	.018	.010	.004	
10.0	.155	.080	.030	.134	.069	.026	.093	.049	.019	.054	.029	.011	.018	.009	.004	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:13 October 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

NAME: 99GENEVA200SMD						TYPE:			WEIGHT: 1		
SPEC.:						DIM.: F365 x 120			SERIAL No.: 0		
MFR.: Elmark Industries JSC						SUR.: round			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	18.7	20.2	19.0	20.4	20.6	18.5	20.0	18.7	20.2	20.4
	3H	19.9	21.3	20.2	21.5	21.8	19.6	21.0	19.9	21.2	21.4
	4H	20.2	21.6	20.6	21.8	22.1	19.9	21.2	20.2	21.4	21.7
	6H	20.3	21.5	20.7	21.8	22.1	19.9	21.1	20.2	21.4	21.6
	8H	20.3	21.5	20.6	21.8	22.0	19.8	21.0	20.2	21.3	21.6
	12H	20.2	21.4	20.6	21.7	22.0	19.8	20.9	20.1	21.2	21.5
4H	2H	19.2	20.5	19.5	20.8	21.0	19.0	20.3	19.4	20.6	20.9
	3H	20.6	21.7	20.9	22.0	22.3	20.3	21.4	20.6	21.7	22.0
	4H	21.0	22.0	21.3	22.3	22.6	20.6	21.7	21.0	22.0	22.3
	6H	21.1	22.0	21.5	22.3	22.7	20.7	21.6	21.1	21.9	22.3
	8H	21.1	21.9	21.5	22.3	22.7	20.7	21.5	21.1	21.9	22.3
	12H	21.0	21.8	21.5	22.2	22.6	20.6	21.4	21.0	21.8	22.2
8H	4H	21.0	21.9	21.5	22.3	22.6	20.7	21.6	21.1	21.9	22.3
	6H	21.2	21.9	21.6	22.3	22.7	20.8	21.5	21.3	21.9	22.3
	8H	21.2	21.8	21.7	22.2	22.7	20.8	21.4	21.3	21.9	22.3
	12H	21.2	21.7	21.7	22.2	22.6	20.8	21.3	21.3	21.8	22.2
12H	4H	21.0	21.8	21.4	22.2	22.6	20.7	21.5	21.1	21.8	22.2
	6H	21.2	21.8	21.6	22.2	22.7	20.8	21.4	21.3	21.8	22.3
	8H	21.2	21.7	21.7	22.2	22.6	20.8	21.3	21.3	21.8	22.2
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H		+ 0.3 / - 0.4					+ 0.3 / - 0.5				
2.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117, 21500 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.7)  
Area: 0.09344 m2

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:13 October 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:

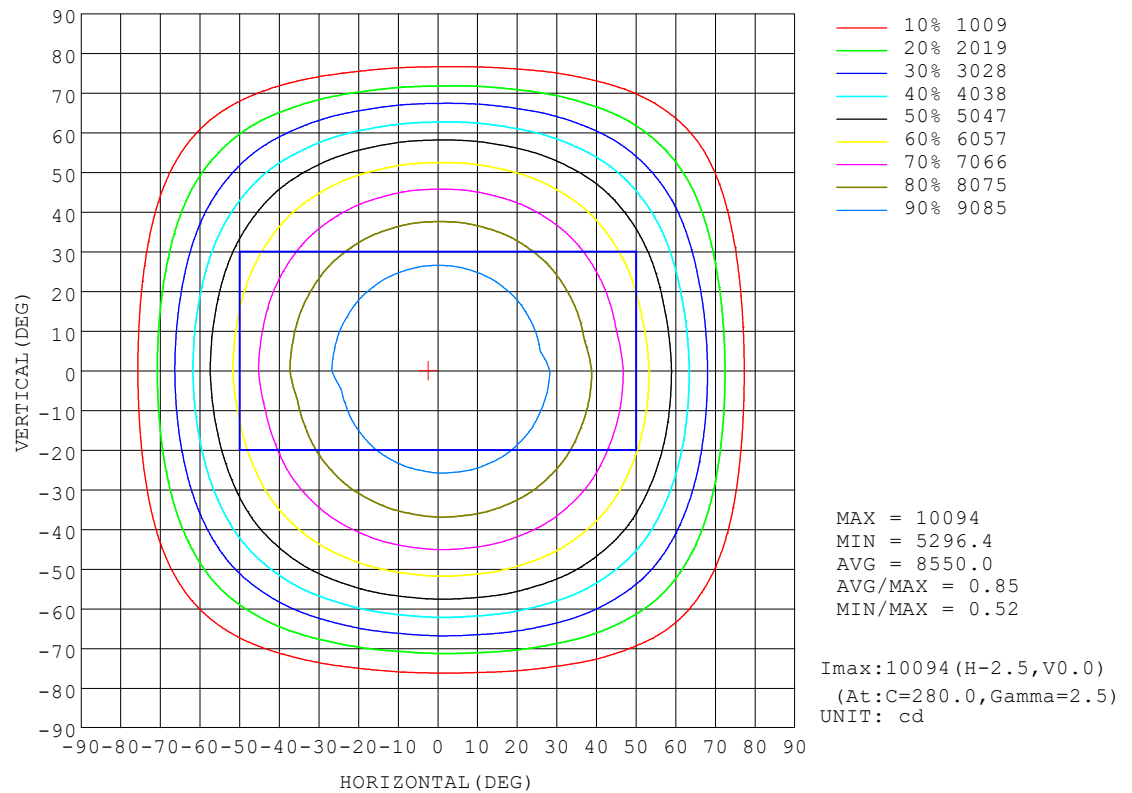
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	62	52	76	61	52	75	61	52	44
0.80	91	76	66	90	75	66	87	74	65	56
1.00	103	88	79	101	87	78	98	89	78	68
1.25	112	99	90	110	98	89	107	96	88	78
1.50	119	106	97	117	105	97	113	103	95	86
2.00	128	117	109	126	116	108	121	113	106	96
2.50	133	123	116	130	122	115	125	118	112	101
3.00	138	129	122	135	127	121	129	123	118	107
4.00	143	136	130	140	133	128	134	129	124	113
5.00	146	140	135	142	137	133	137	132	129	117
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 13 October 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:



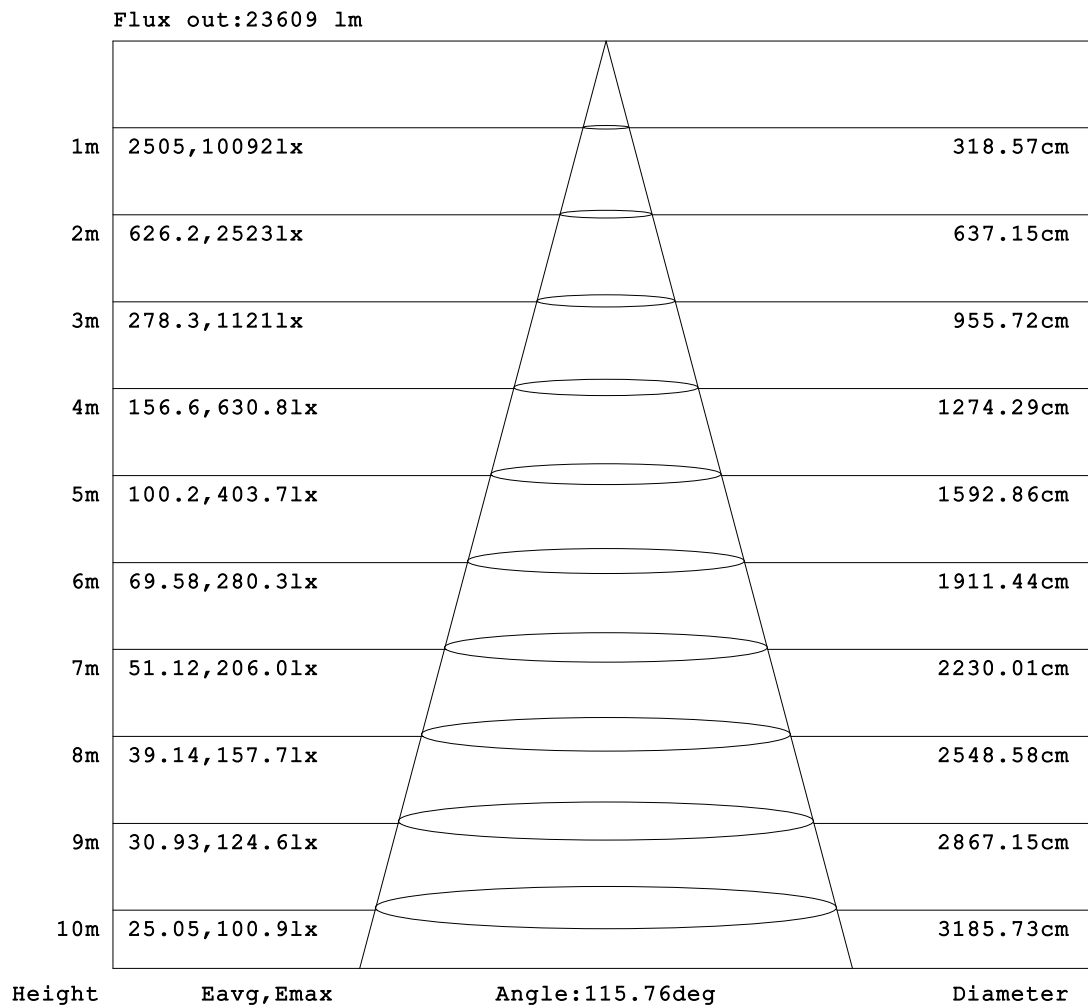
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:  
 Test Date:13 October 2022

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity:65.0%  
 Test Distance:6.265m [K=1.0000]  
 Remarks:



**AAI Figure**

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:



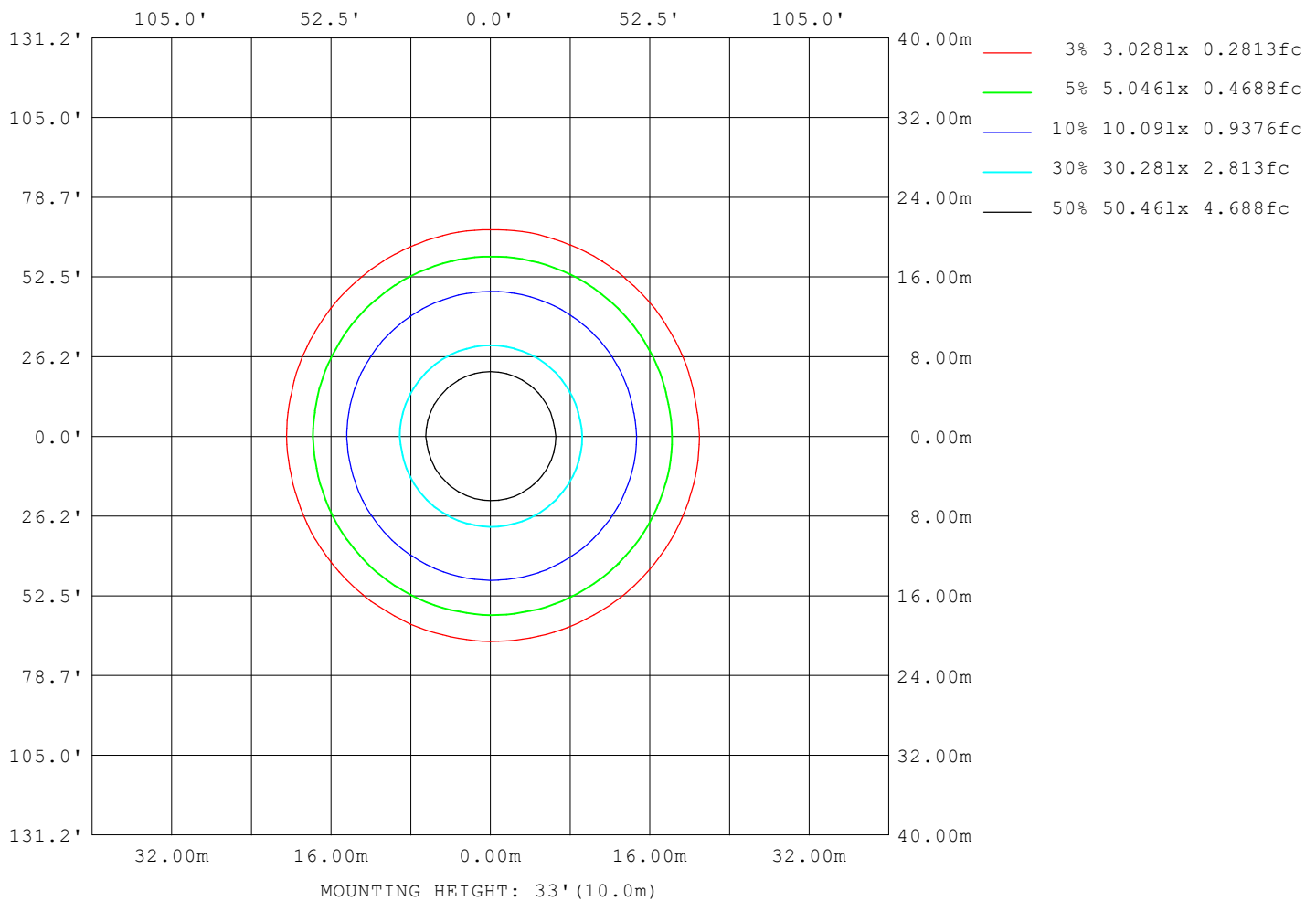
**Note:** The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 13 October 2022

γ Range: 0 - 90DEG  
 γ Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators:  
Test Date: 13 October 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity: 65.0%  
Test Distance: 6.265m [K=1.0000]  
Remarks:

### LED Avg.L Report

NAME: 99GENEVA200SMD	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F365 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: round	Shielding Angle:

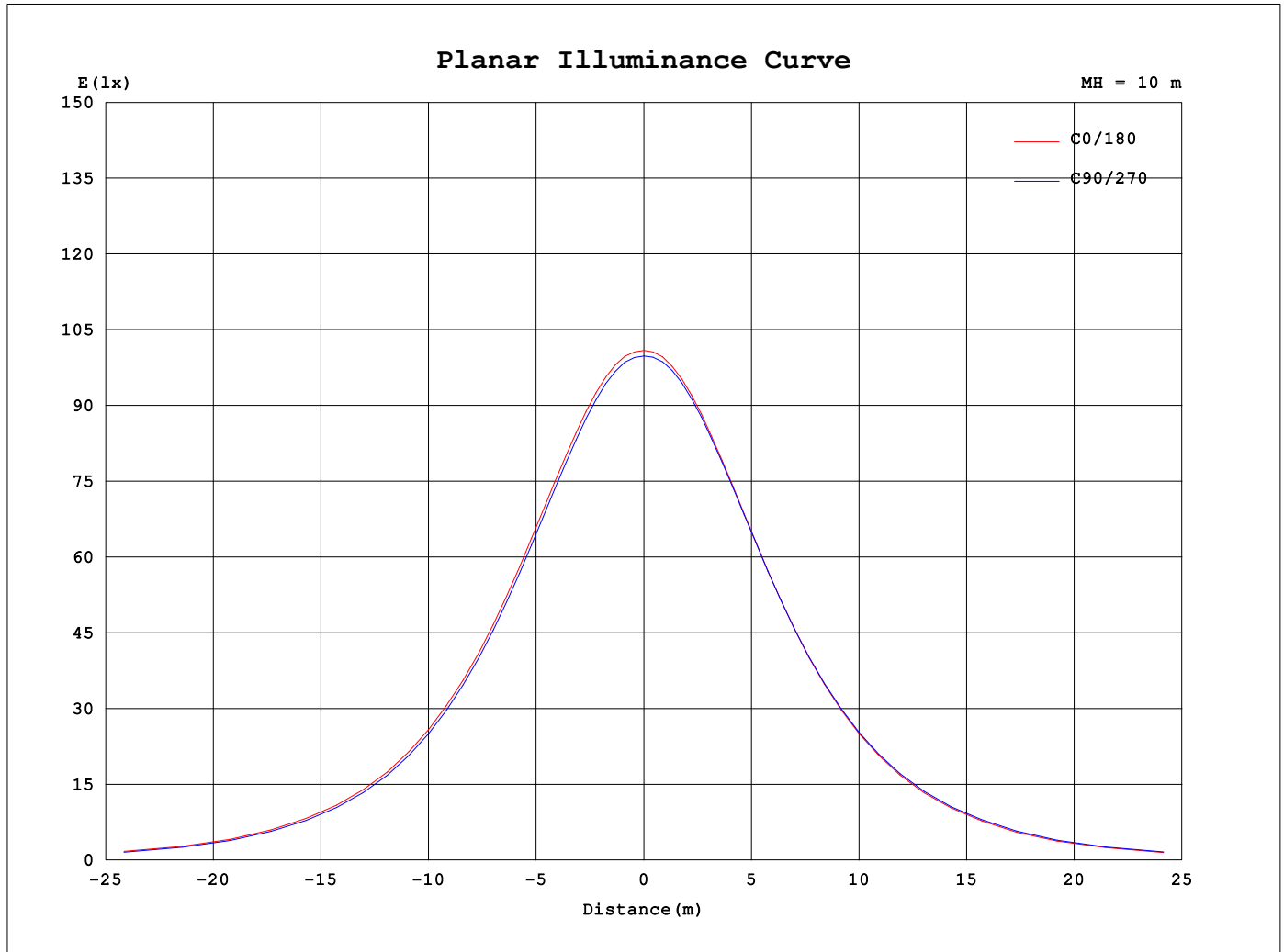
AvgL	cd/m2
L_0~180 (65) av	88134
L_0~180 (75) av	53071
L_0~180 (85) av	10968
L_90~270 (65) av	88148
L_90~270 (75) av	53194
L_90~270 (85) av	6088
L_45 (65) av	88158
L_45 (75) av	52972
L_45 (85) av	8609

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:  
Test Date:13 October 2022

γ Range: 0 - 90DEG  
γ Interval: 2.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
Humidity:65.0%  
Test Distance:6.265m [K=1.0000]  
Remarks:

# Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 13 October 2022

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 2.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.456  
 Humidity: 65.0%  
 Test Distance: 6.265m [K=1.0000]  
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 2.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 2.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

```