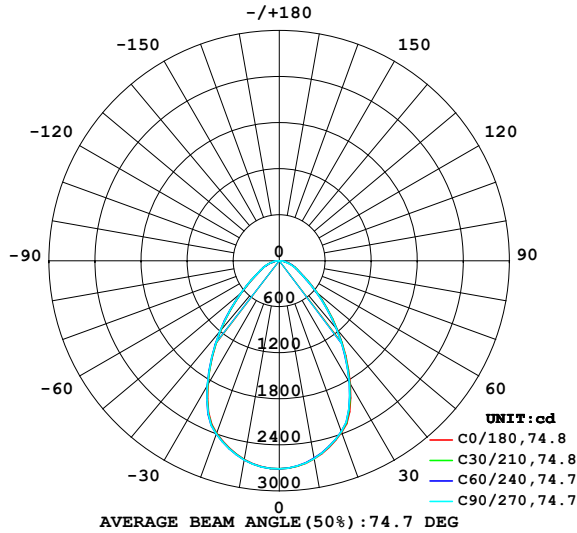


**LUMINAIRE PHOTOMETRIC TEST REPORT**

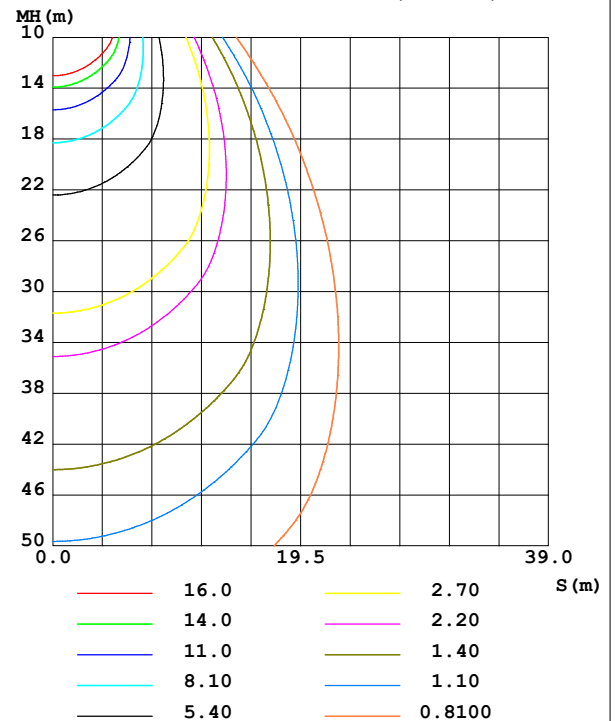
NAME: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL62284265/WH	Imax (cd)	2712	S/MH (C0/180)	1.07
NOMINAL POWER (W)	42	LOR (%)	115.9	S/MH (C90/270)	1.08
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4405.9	$\eta$ UP, DN (C0-180)	0.0, 57.5
NOMINAL FLUX (lm)	3800	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 58.5
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	$\eta$ down (%)	115.9	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 05 December 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	2623	2617	2616	2621	2629	2635	2637	2632	0- 10	254.8	254.8	5.78,6.7
20	2381	2370	2370	2376	2389	2400	2401	2393	10- 20	709.4	964.2	21.9,25.4
30	1852	1832	1826	1838	1859	1875	1878	1871	20- 30	989.3	1953	44.3,51.4
40	1185	1169	1164	1172	1193	1204	1206	1201	30- 40	944.6	2898	65.8,76.3
50	641.7	629.2	622.2	627.8	640.2	649.3	651.5	649.4	40- 50	690.1	3588	81.4,94.4
60	320.2	315.8	312.4	312.4	315.9	320.2	319.2	322.3	50- 60	408.0	3996	90.7,105
70	189.0	183.9	176.6	181.0	185.5	185.8	182.7	187.8	60- 70	246.0	4242	96.3,112
80	77.20	71.05	63.76	69.85	74.25	71.70	70.26	72.35	70- 80	132.0	4374	99.3,115
90	1.293	1.277	1.233	1.293	1.160	1.158	1.125	1.142	80- 90	31.72	4406	100,116
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): 3281 lm

%lum = 74.5%

%lamp = 86.3%

Conical surface Flux(130deg): 4132.5 lm

%lum = 93.8%

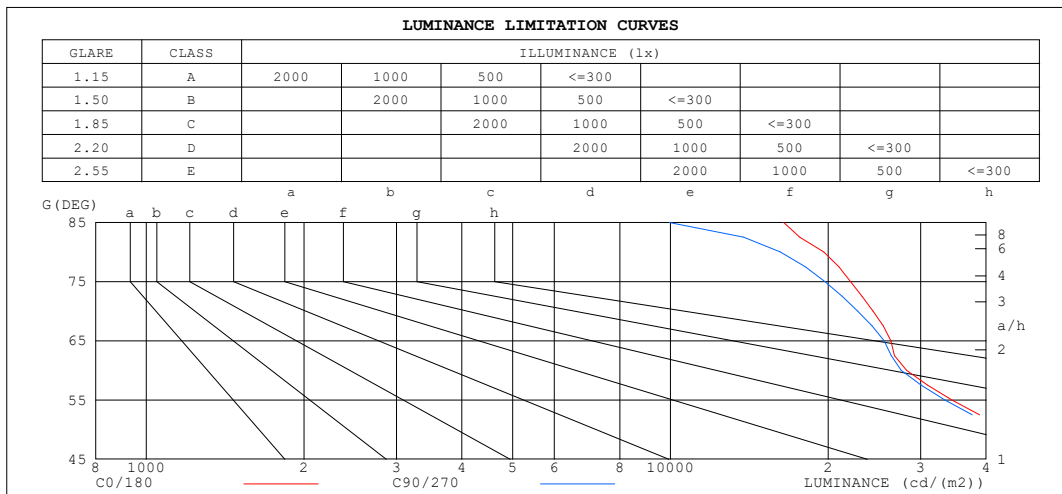
%lamp = 108.8%

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:05 December 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: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16445	9940
80	19595	16187
75	22057	19710
70	24351	22761
65	26326	25570
60	28221	27543
55	34446	33385
50	43996	42671
45	55456	54243

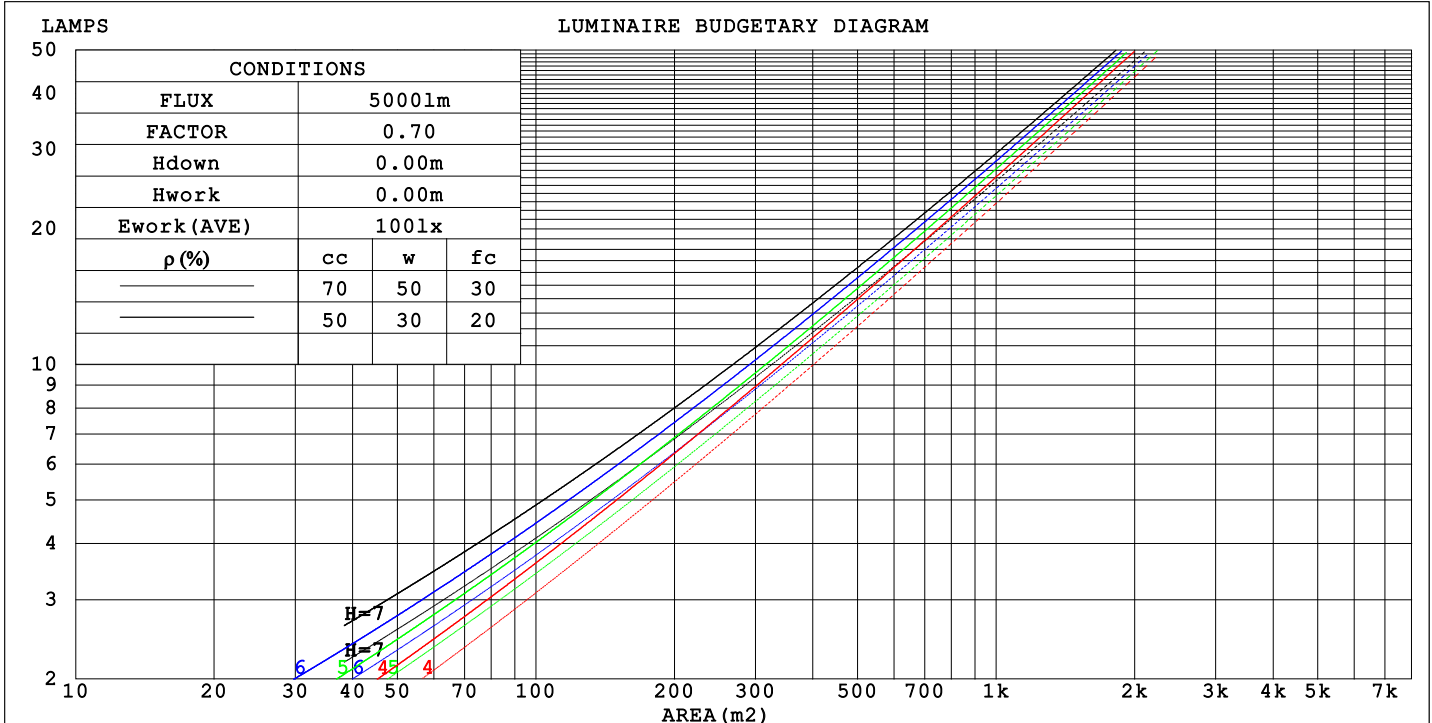
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 05 December 2022

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: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 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: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:05 December 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: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 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	.282	.160	.051	.273	.156	.050	.259	.148	.047	.245	.141	.045	.232	.134	.043	
2.0	.270	.148	.045	.263	.145	.045	.250	.139	.043	.238	.133	.042	.227	.128	.040	
3.0	.254	.135	.040	.248	.133	.040	.237	.128	.039	.226	.124	.038	.217	.120	.037	
4.0	.238	.124	.036	.233	.122	.036	.223	.118	.035	.214	.115	.035	.206	.112	.034	
5.0	.224	.114	.033	.219	.113	.033	.211	.110	.032	.202	.107	.032	.195	.104	.031	
6.0	.211	.106	.030	.207	.104	.030	.199	.102	.030	.192	.100	.029	.185	.097	.029	
7.0	.199	.098	.028	.195	.097	.028	.188	.095	.027	.182	.093	.027	.175	.091	.027	
8.0	.188	.092	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.178	.086	.024	.175	.085	.024	.169	.084	.024	.164	.082	.024	.159	.081	.023	
10.0	.168	.081	.022	.166	.080	.022	.161	.079	.022	.156	.077	.022	.152	.076	.022	

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	.221	.221	.221	.189	.189	.189	.129	.129	.129	.074	.074	.074	.024	.024	.024	
1.0	.204	.182	.162	.174	.156	.139	.119	.107	.096	.069	.062	.056	.022	.020	.018	
2.0	.191	.153	.122	.163	.132	.105	.112	.091	.074	.064	.053	.043	.021	.017	.014	
3.0	.179	.132	.094	.154	.114	.082	.106	.079	.057	.061	.046	.034	.020	.015	.011	
4.0	.169	.116	.075	.145	.100	.065	.100	.070	.046	.058	.041	.027	.019	.013	.009	
5.0	.161	.103	.061	.138	.089	.053	.095	.062	.038	.055	.037	.022	.018	.012	.007	
6.0	.152	.093	.051	.131	.081	.044	.090	.056	.031	.052	.033	.019	.017	.011	.006	
7.0	.145	.085	.043	.125	.074	.037	.086	.052	.026	.050	.030	.016	.016	.010	.005	
8.0	.138	.078	.037	.119	.068	.032	.082	.048	.023	.048	.028	.014	.015	.009	.004	
9.0	.132	.072	.032	.113	.063	.028	.079	.044	.020	.046	.026	.012	.015	.009	.004	
10.0	.126	.067	.028	.108	.058	.025	.075	.041	.018	.044	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:05 December 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: 92EL62284265/WH					TYPE:			WEIGHT: 1			
SPEC.:					DIM.: F 220 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	19.4	20.7	19.7	20.9	21.1	19.3	20.6	19.6	20.8	21.0
	3H	20.2	21.4	20.5	21.6	21.8	20.1	21.2	20.3	21.4	21.7
	4H	20.6	21.7	20.9	21.9	22.1	20.3	21.4	20.6	21.7	21.9
	6H	20.8	21.8	21.1	22.1	22.4	20.5	21.5	20.8	21.8	22.1
	8H	20.9	21.9	21.2	22.2	22.4	20.5	21.5	20.9	21.8	22.1
	12H	20.9	21.9	21.3	22.2	22.4	20.5	21.5	20.9	21.8	22.1
4H	2H	19.7	20.8	20.0	21.0	21.3	19.6	20.7	19.9	20.9	21.2
	3H	20.7	21.6	21.0	21.9	22.2	20.5	21.5	20.9	21.8	22.0
	4H	21.1	22.0	21.5	22.3	22.6	20.9	21.8	21.3	22.1	22.4
	6H	21.5	22.3	21.9	22.6	23.0	21.2	22.0	21.6	22.3	22.7
	8H	21.6	22.3	22.0	22.7	23.1	21.3	22.0	21.7	22.3	22.7
	12H	21.7	22.4	22.1	22.7	23.1	21.3	21.9	21.7	22.3	22.7
8H	4H	21.3	22.0	21.7	22.3	22.7	21.1	21.8	21.5	22.1	22.5
	6H	21.7	22.3	22.2	22.7	23.2	21.4	22.0	21.9	22.4	22.8
	8H	21.9	22.5	22.4	22.9	23.3	21.5	22.1	22.0	22.5	22.9
	12H	22.1	22.5	22.5	23.0	23.4	21.6	22.0	22.1	22.5	22.9
12H	4H	21.2	21.9	21.7	22.3	22.7	21.0	21.7	21.5	22.1	22.5
	6H	21.8	22.3	22.2	22.7	23.1	21.5	22.0	21.9	22.4	22.8
	8H	22.0	22.4	22.5	22.9	23.3	21.6	22.0	22.1	22.5	23.0
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.5 / - 0.7					+ 0.6 / - 0.7				
1.5H		+ 0.5 / - 0.5					+ 0.6 / - 0.5				
2.0H		+ 1.3 / - 0.9					+ 1.3 / - 0.9				

CIE Pub.117, 3800 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.6)  
Area: 0.0226865 m2

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:05 December 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: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

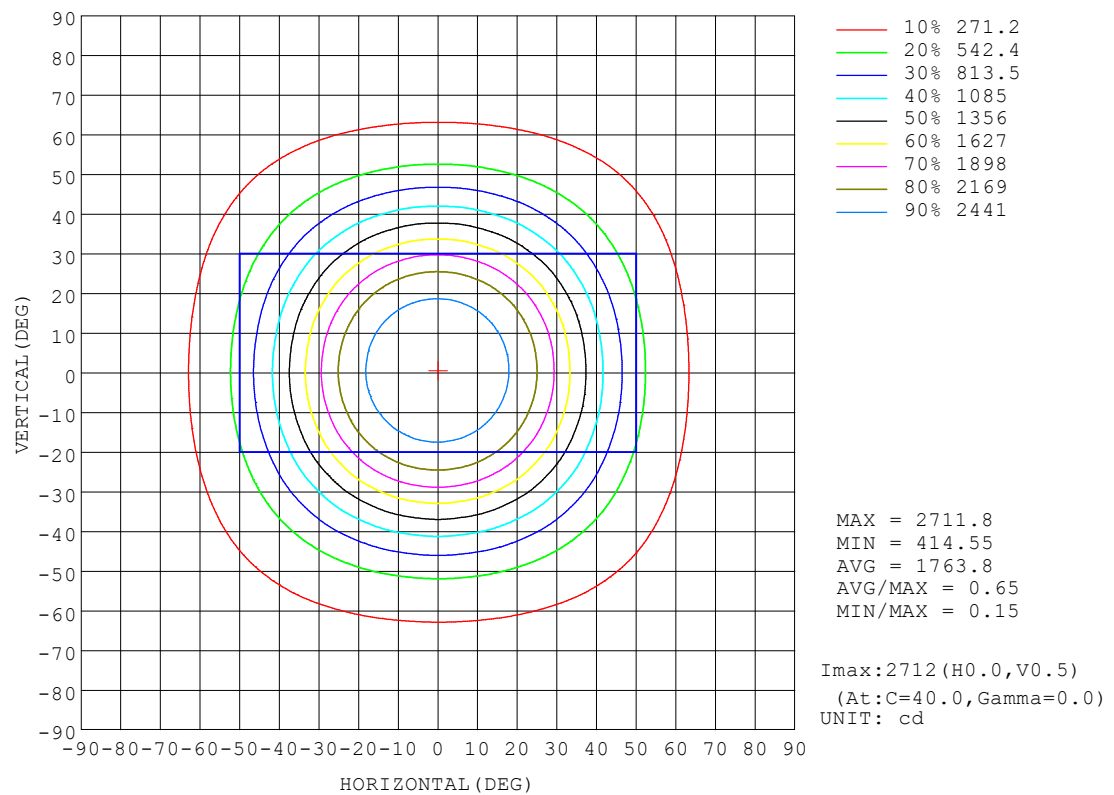
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	81	70	64	81	70	64	79	70	64	58
0.80	92	82	75	91	81	75	89	80	74	68
1.00	100	91	84	99	90	84	97	91	83	77
1.25	107	98	92	106	97	91	103	96	90	84
1.50	112	103	97	110	102	97	107	101	95	88
2.00	118	110	105	116	109	104	112	107	102	95
2.50	121	114	109	119	113	108	115	110	106	98
3.00	124	118	113	122	116	112	117	113	109	101
4.00	127	122	118	125	121	117	120	117	114	104
5.00	129	125	122	127	123	120	122	119	116	107
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: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 05 December 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:

# ISOCANDELA DIAGRAM

NAME: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

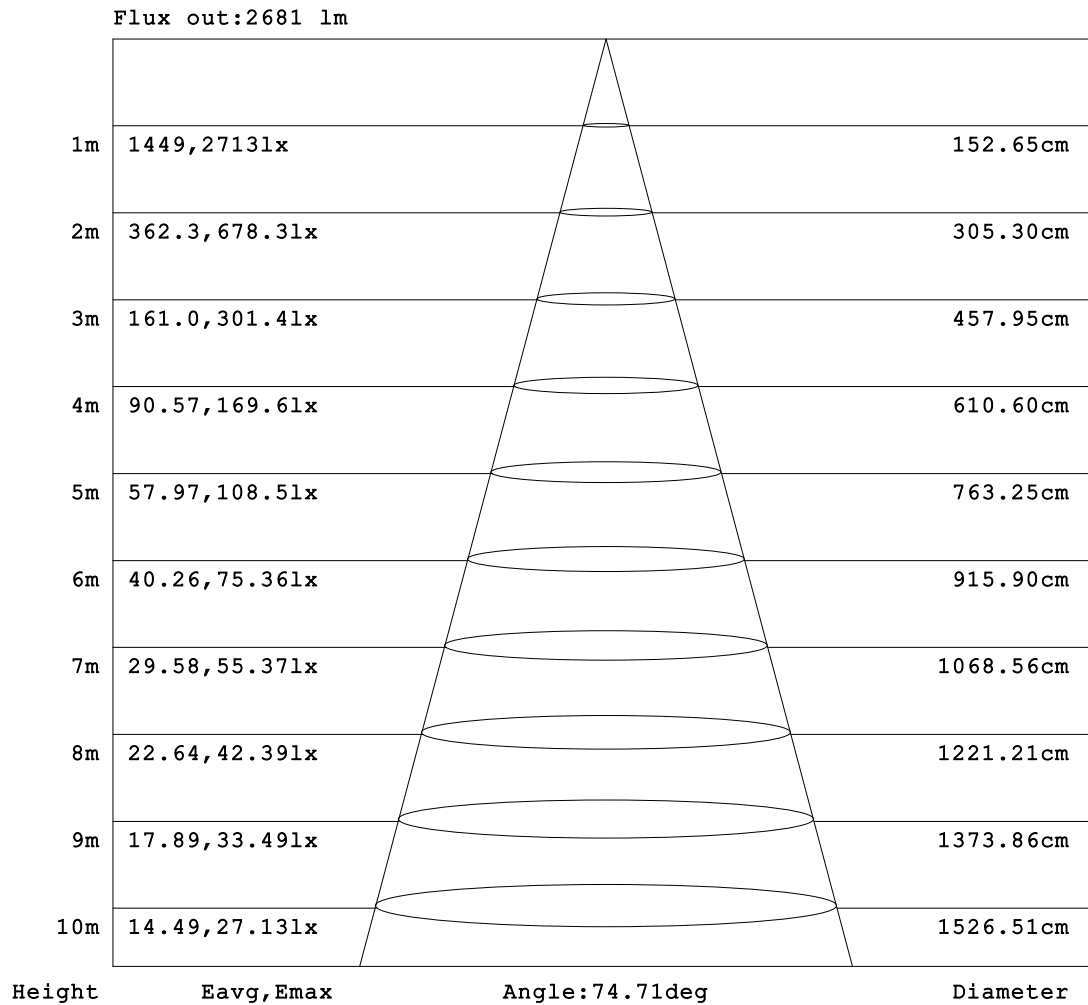


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 05 December 2022

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: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



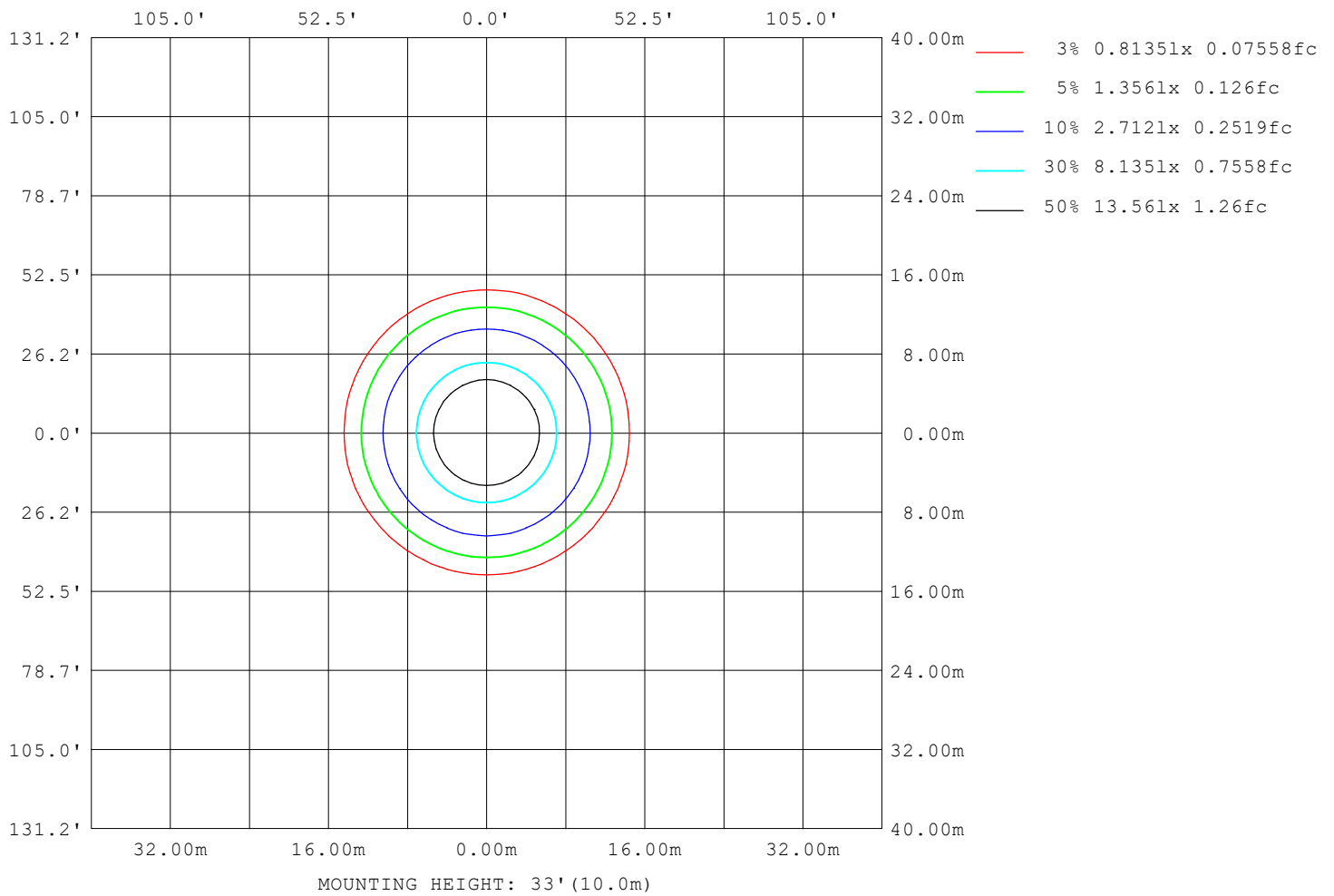
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:05 December 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: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 05 December 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: 92EL62284265/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

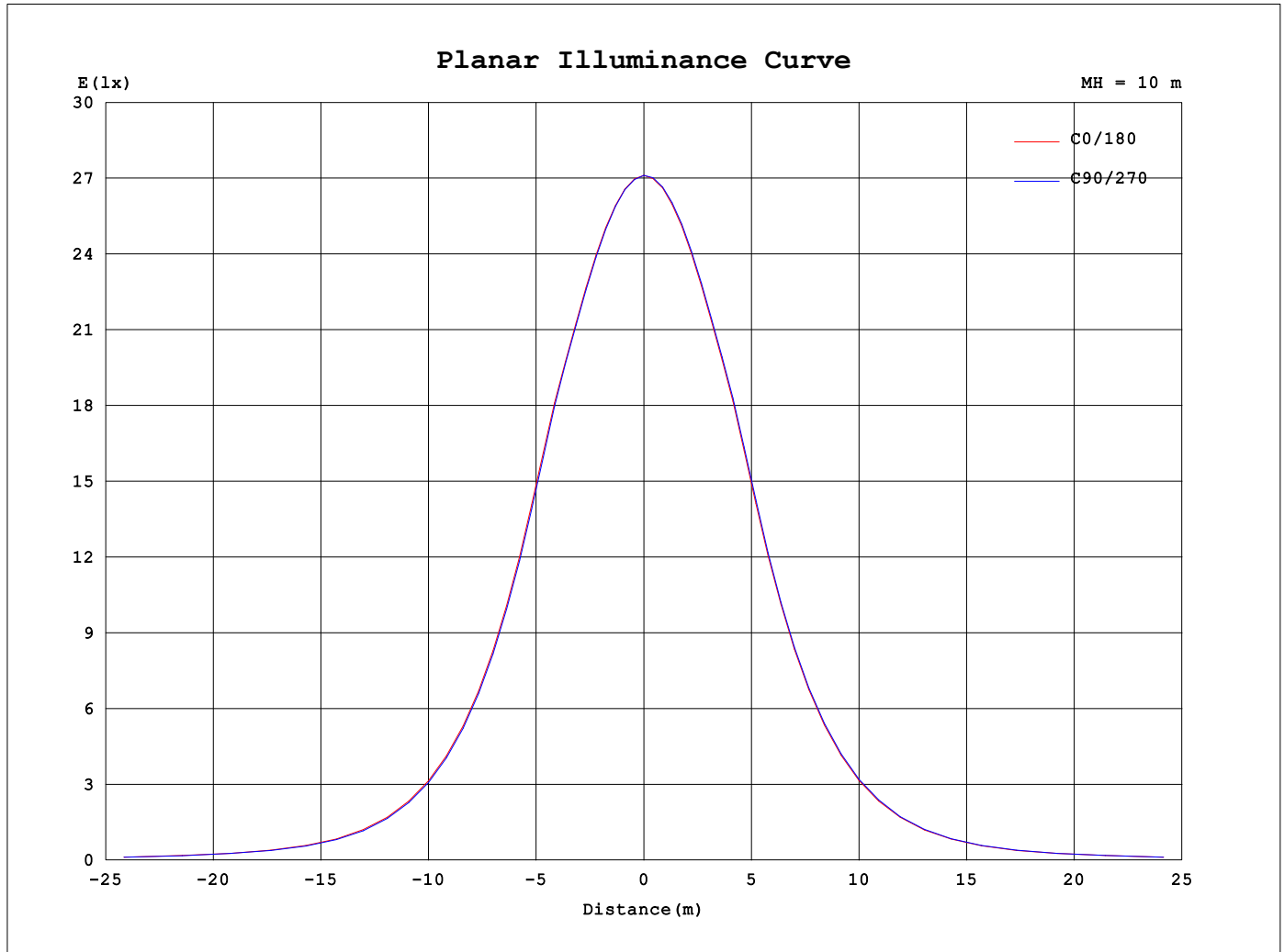
AvgL	cd/m2
L_0~180 (65) av	26093
L_0~180 (75) av	21865
L_0~180 (85) av	15987
L_90~270 (65) av	25783
L_90~270 (75) av	20223
L_90~270 (85) av	11584
L_45 (65) av	26034
L_45 (75) av	21104
L_45 (85) av	13216

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:05 December 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: MEDIUM  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 05 December 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:

```