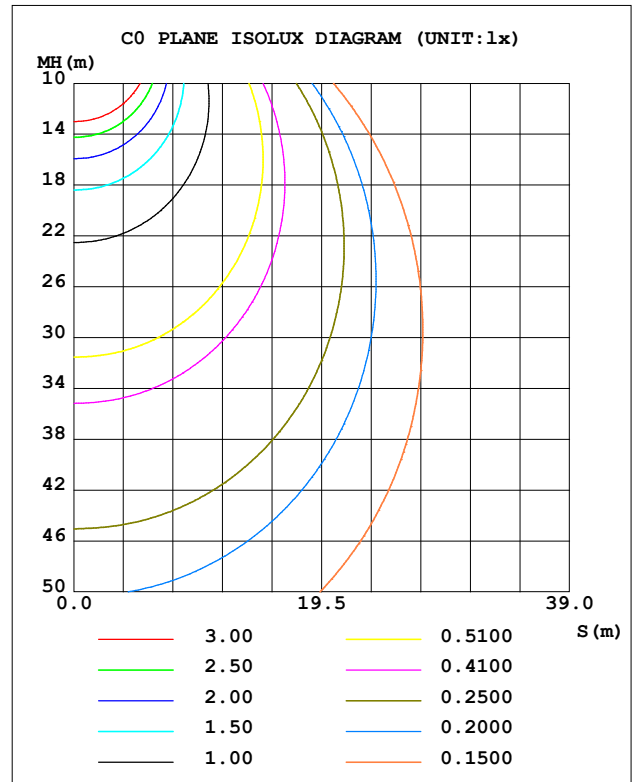
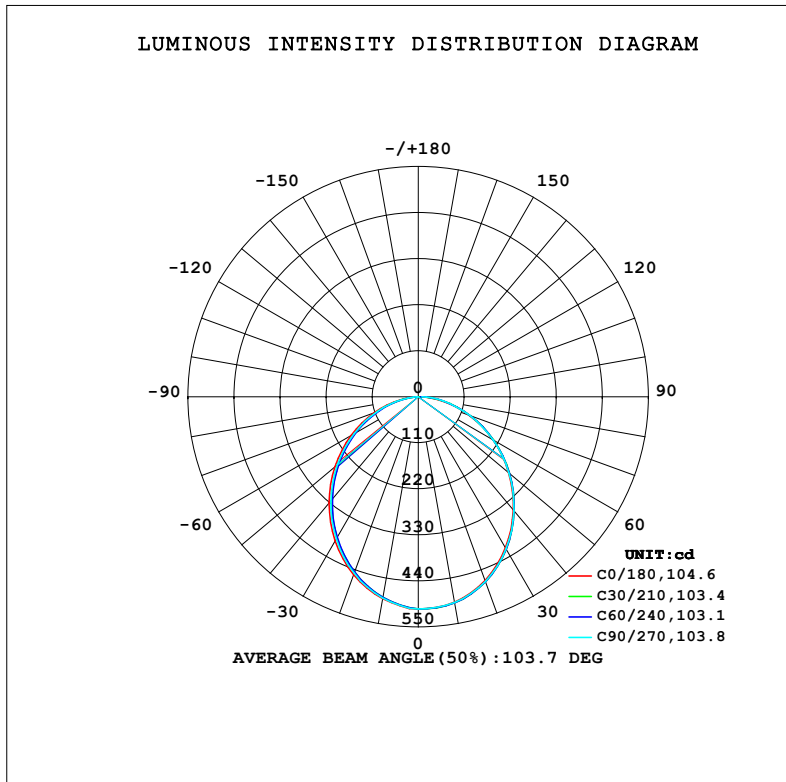


## LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99PFMT30/BL	I <sub>max</sub> (cd)	507.4	S/MH (C0/180)	1.17
NOMINAL POWER (W)	15	LOR (%)	88.7	S/MH (C90/270)	1.16
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1330.5	η UP, DN (C0-180)	0.0, 46.1
NOMINAL FLUX (lm)	1500	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 42.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	88.7	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 15 November 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:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	498.3	500.3	499.0	497.3	489.7	486.6	488.4	494.5	0- 10	47.74	47.74	3.59,3.18
20	467.4	470.4	469.4	464.3	452.2	445.1	448.7	458.9	10- 20	135.1	182.8	13.7,12.2
30	416.9	420.4	419.5	412.5	397.5	387.0	392.4	405.8	20- 30	200.2	383.1	28.8,25.5
40	353.1	356.5	355.6	348.4	331.6	318.9	325.1	341.1	30- 40	234.5	617.6	46.4,41.2
50	281.7	284.5	283.1	277.1	259.7	246.1	252.5	269.4	40- 50	236.0	853.6	64.2,56.9
60	206.5	208.2	206.7	201.4	185.5	172.1	177.8	194.7	50- 60	207.3	1061	79.7,70.7
70	129.7	131.9	131.0	125.6	112.5	100.3	105.0	120.1	60- 70	155.0	1216	91.4,81.1
80	58.12	60.39	61.19	55.36	44.94	35.94	39.62	51.30	70- 80	89.05	1305	98.1,87
90	3.787	3.363	8.893	2.776	2.307	0.9558	3.760	3.532	80- 90	25.54	1330	100,88.7
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): 737.39 lm

%lum = 55.4%

%lamp = 49.2%

Conical surface Flux(130deg): 1146.1 lm

%lum = 86.1%

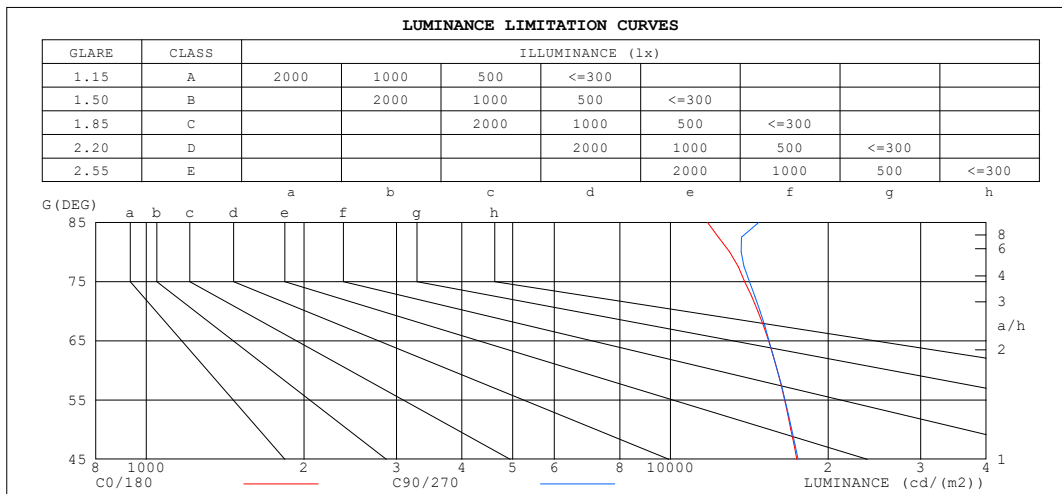
%lamp = 76.4%

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:15 November 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: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	11773	14726
80	12957	13629
75	13857	14140
70	14677	14818
65	15390	15410
60	15987	15991
55	16503	16538
50	16964	17034
45	17415	17507

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 15 November 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:

```

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: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	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	.271	.154	.049	.264	.151	.048	.253	.145	.046	.242	.140	.045	.232	.134	.043	
2.0	.255	.140	.043	.249	.137	.042	.239	.133	.041	.229	.129	.040	.220	.125	.039	
3.0	.236	.125	.038	.231	.124	.037	.222	.120	.037	.213	.117	.036	.206	.114	.035	
4.0	.218	.113	.033	.214	.112	.033	.205	.109	.033	.198	.106	.032	.191	.104	.032	
5.0	.202	.103	.030	.198	.102	.030	.191	.099	.029	.184	.097	.029	.178	.095	.029	
6.0	.187	.094	.027	.184	.093	.027	.177	.091	.026	.171	.089	.026	.166	.087	.026	
7.0	.174	.086	.024	.171	.085	.024	.166	.084	.024	.160	.082	.024	.155	.081	.024	
8.0	.163	.080	.022	.160	.079	.022	.155	.077	.022	.150	.076	.022	.146	.075	.022	
9.0	.153	.074	.021	.150	.073	.021	.146	.072	.020	.141	.071	.020	.137	.070	.020	
10.0	.144	.069	.019	.142	.068	.019	.137	.067	.019	.133	.066	.019	.130	.065	.019	

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	.169	.169	.169	.144	.144	.144	.099	.099	.099	.057	.057	.057	.018	.018	.018	
1.0	.160	.139	.119	.137	.119	.103	.093	.082	.071	.054	.047	.041	.017	.015	.013	
2.0	.152	.117	.087	.130	.101	.076	.089	.070	.053	.052	.041	.031	.017	.013	.010	
3.0	.145	.101	.066	.124	.087	.058	.085	.061	.040	.049	.035	.024	.016	.012	.008	
4.0	.138	.090	.052	.119	.077	.045	.082	.054	.032	.047	.032	.019	.015	.010	.006	
5.0	.132	.080	.042	.113	.069	.037	.078	.048	.026	.045	.028	.015	.015	.009	.005	
6.0	.125	.073	.035	.108	.063	.031	.074	.044	.022	.043	.026	.013	.014	.008	.004	
7.0	.119	.067	.030	.103	.058	.026	.071	.041	.018	.041	.024	.011	.013	.008	.004	
8.0	.114	.061	.026	.098	.053	.022	.068	.037	.016	.039	.022	.009	.013	.007	.003	
9.0	.108	.057	.023	.093	.050	.020	.065	.035	.014	.038	.021	.008	.012	.007	.003	
10.0	.103	.053	.020	.089	.046	.017	.062	.033	.012	.036	.019	.007	.012	.006	.002	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:15 November 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: 99PFMT30/BL					TYPE:		WEIGHT: 1				
SPEC.:					DIM.: 35 x 75 x 334		SERIAL No.: 0				
MFR.: Elmark Industries JSC					SUR.: cross		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	21.3	22.8	21.6	23.0	23.2	21.3	22.8	21.6	23.0	23.2
	3H	22.9	24.2	23.1	24.5	24.7	22.8	24.2	23.1	24.5	24.7
	4H	23.5	24.8	23.8	25.0	25.3	23.5	24.8	23.8	25.0	25.3
	6H	24.0	25.2	24.3	25.5	25.8	24.0	25.2	24.3	25.5	25.8
	8H	24.1	25.3	24.5	25.6	25.9	24.2	25.4	24.5	25.7	26.0
	12H	24.2	25.4	24.6	25.7	26.0	24.3	25.5	24.7	25.8	26.1
4H	2H	21.9	23.3	22.2	23.5	23.8	21.9	23.2	22.2	23.5	23.8
	3H	23.7	24.8	24.0	25.1	25.4	23.7	24.8	24.0	25.1	25.4
	4H	24.4	25.5	24.8	25.8	26.1	24.4	25.5	24.8	25.8	26.1
	6H	25.0	26.0	25.4	26.3	26.7	25.1	26.0	25.5	26.4	26.7
	8H	25.3	26.1	25.7	26.5	26.9	25.3	26.2	25.7	26.6	27.0
	12H	25.4	26.2	25.9	26.6	27.0	25.6	26.4	26.0	26.7	27.1
8H	4H	24.7	25.6	25.1	26.0	26.3	24.7	25.6	25.1	26.0	26.3
	6H	25.5	26.2	25.9	26.6	27.1	25.5	26.3	26.0	26.7	27.1
	8H	25.8	26.5	26.3	26.9	27.3	25.9	26.6	26.4	27.0	27.4
	12H	26.1	26.6	26.6	27.1	27.6	26.2	26.8	26.7	27.2	27.7
12H	4H	24.7	25.5	25.2	25.9	26.3	24.7	25.5	25.2	25.9	26.3
	6H	25.6	26.2	26.0	26.7	27.1	25.6	26.3	26.1	26.7	27.1
	8H	26.0	26.5	26.4	27.0	27.4	26.0	26.6	26.5	27.0	27.5
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.1 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 1500 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.4)  
Area: 0.02585 m2

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:15 November 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: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

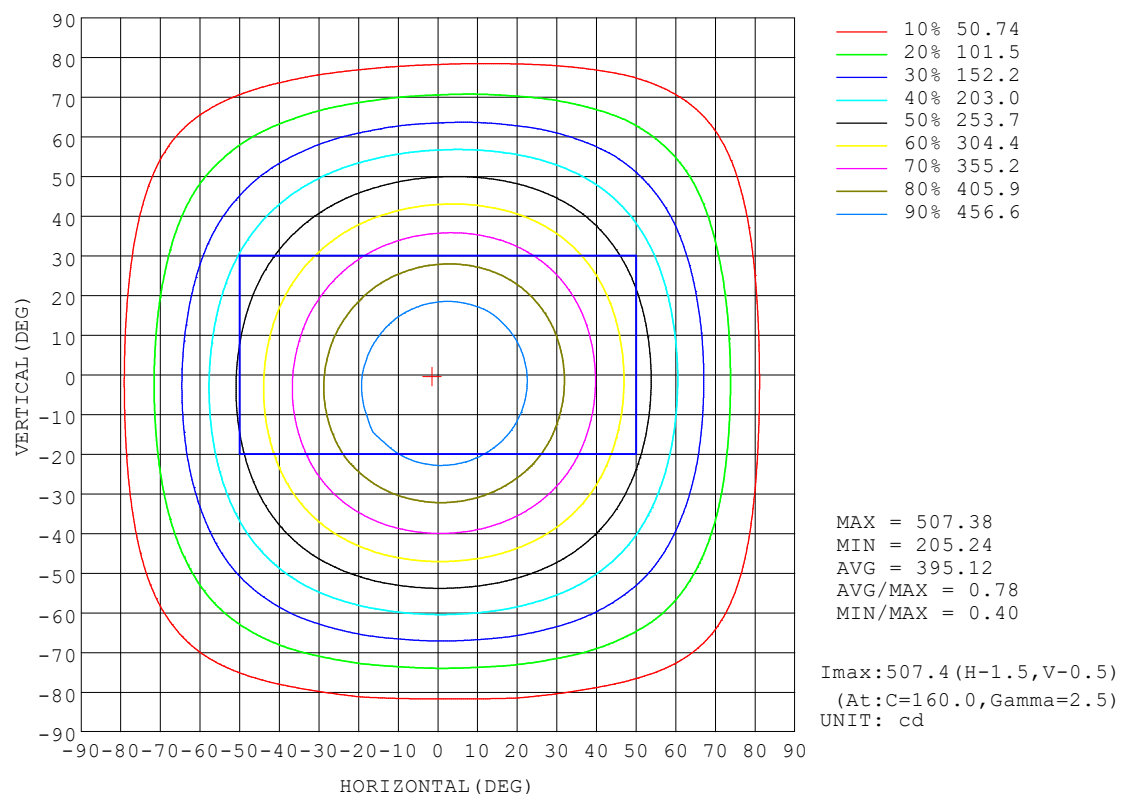
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	52	42	36	51	42	36	50	41	35	30
0.80	61	51	44	60	50	44	58	50	44	38
1.00	68	59	52	67	58	52	65	59	51	45
1.25	74	65	59	73	65	59	71	63	58	52
1.50	79	70	64	77	69	64	75	68	63	56
2.00	85	77	72	83	76	71	80	74	70	63
2.50	88	81	76	86	80	75	83	78	74	66
3.00	91	85	80	89	84	79	86	81	77	70
4.00	94	89	85	92	88	84	89	85	82	74
5.00	97	92	89	94	91	87	90	87	85	77
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: 15 November 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: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



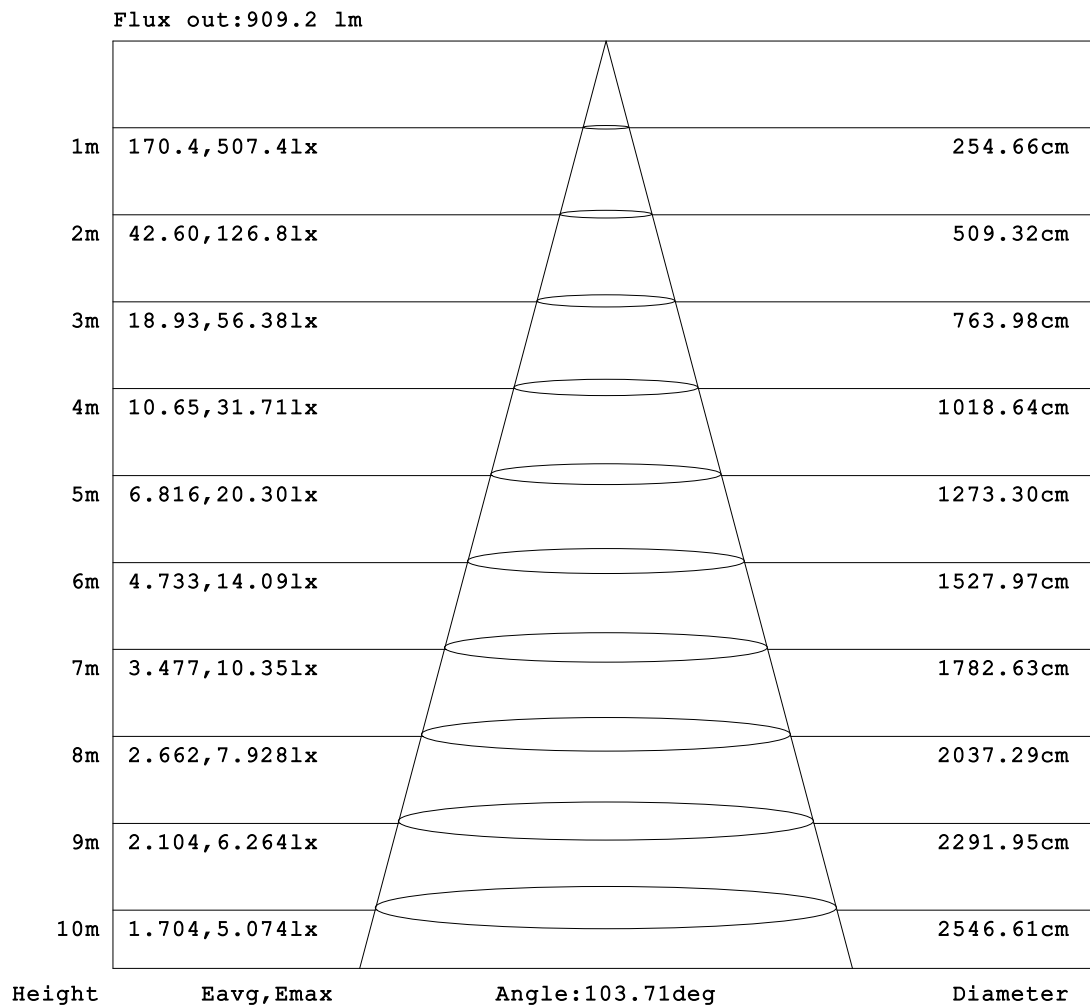
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 15 November 2022

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: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



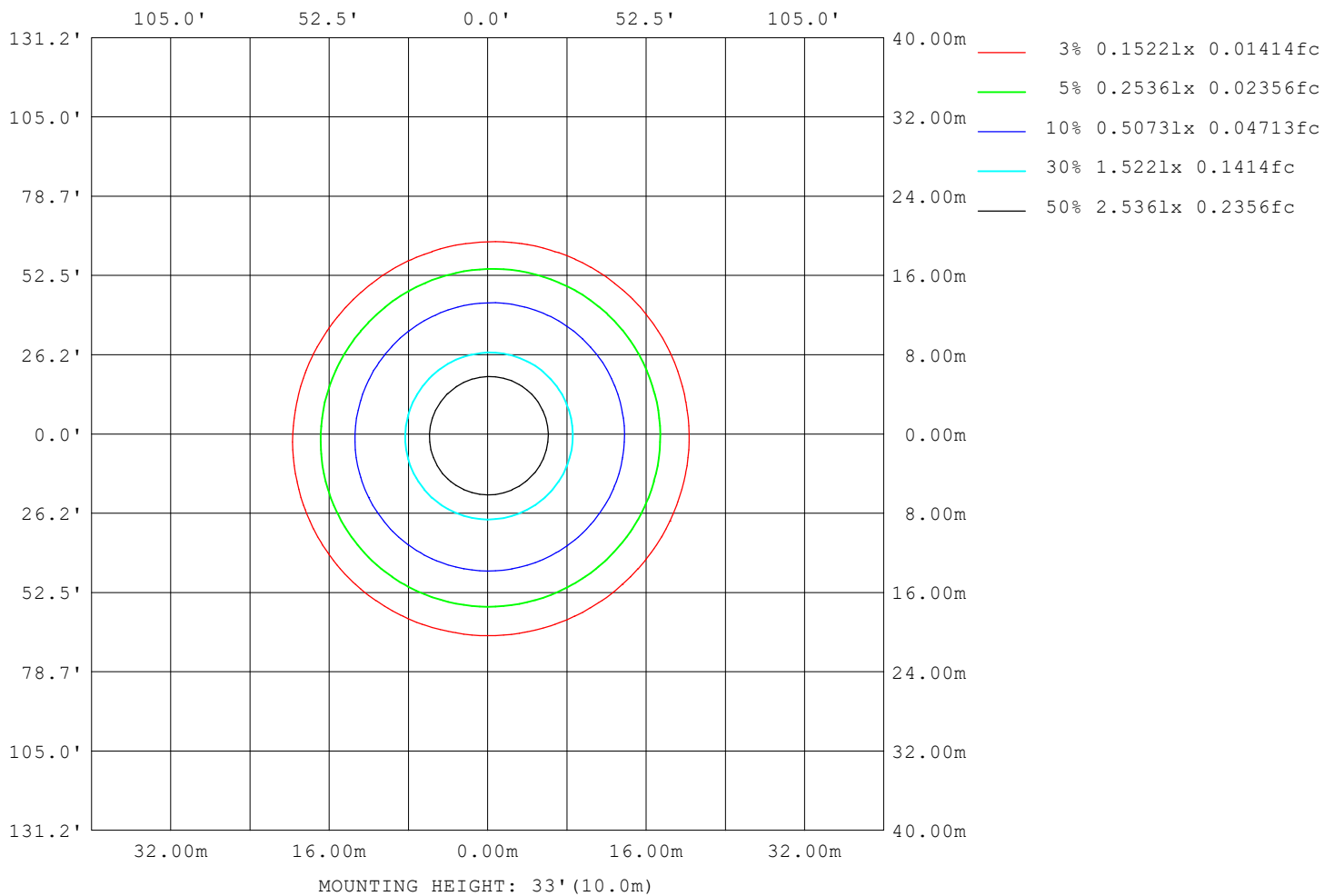
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3°C  
 Operators:  
 Test Date:15 November 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: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 15 November 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: 99PFMT30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

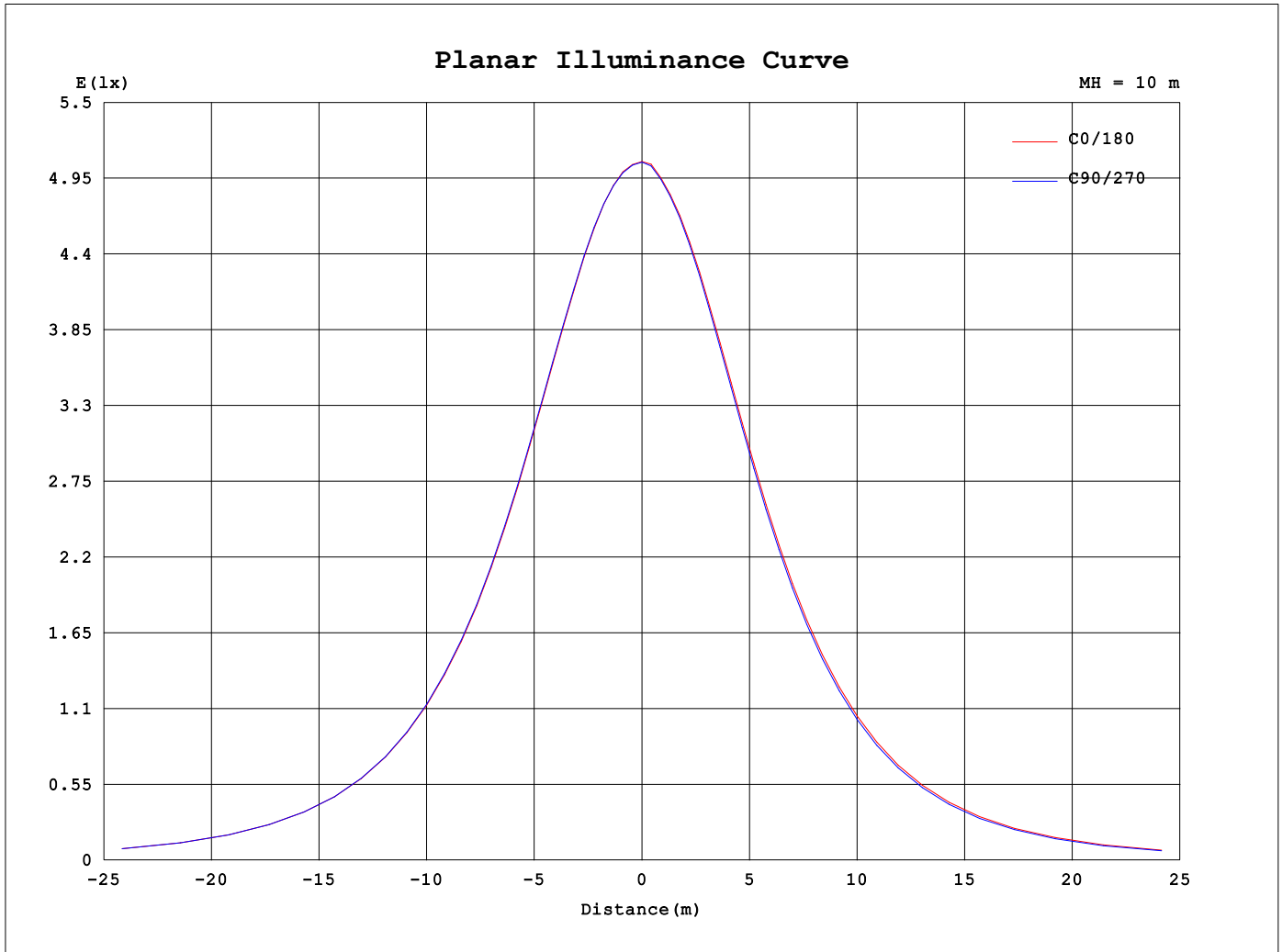
AvgL	cd/m2
L_0~180 (65) av	14501
L_0~180 (75) av	12722
L_0~180 (85) av	9390
L_90~270 (65) av	14152
L_90~270 (75) av	12399
L_90~270 (85) av	10005
L_45 (65) av	14322
L_45 (75) av	12557
L_45 (85) av	9221

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:15 November 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: 15 November 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:

```

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:

```