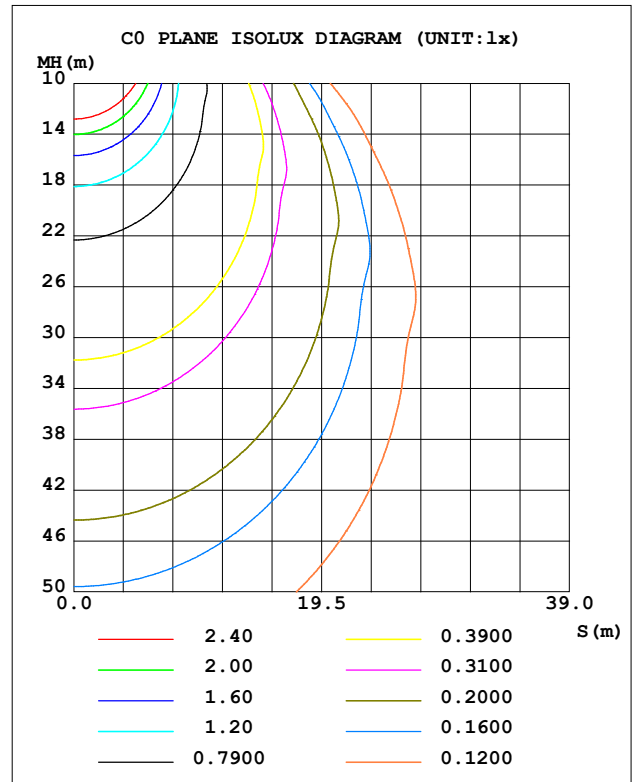
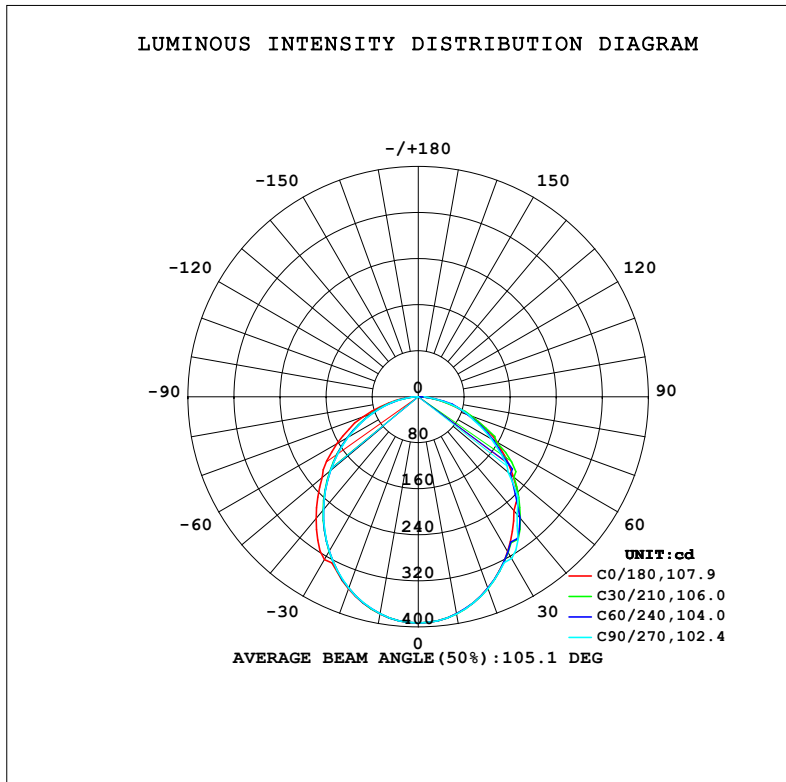


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99PFML30/BL	I _{max} (cd)	393.2	S/MH (C0/180)	1.24
NOMINAL POWER (W)	10	LOR (%)	103.4	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1034.4	η UP, DN (C0-180)	0.0, 53.2
NOMINAL FLUX (lm)	1000	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	103.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 16 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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	382.9	382.9	383.0	383.4	383.3	382.9	382.9	383.0	0- 10	37.05	37.05	3.58,3.7
20	354.1	354.2	354.3	357.0	355.1	353.8	353.6	354.1	10- 20	104.5	141.5	13.7,14.2
30	310.8	311.8	324.6	331.4	326.6	309.8	309.9	310.7	20- 30	155.3	296.8	28.7,29.7
40	258.6	275.7	267.3	276.8	276.6	256.8	256.3	257.9	30- 40	182.8	479.6	46.4,48
50	216.0	214.7	204.2	226.6	217.7	199.7	198.9	200.7	40- 50	184.8	664.4	64.2,66.4
60	158.9	156.5	146.4	161.7	163.2	142.0	140.8	142.9	50- 60	162.3	826.7	79.9,82.7
70	95.31	95.78	93.83	97.85	102.6	86.13	85.00	86.70	60- 70	120.5	947.3	91.6,94.7
80	39.41	41.60	40.48	44.34	40.82	35.15	34.22	35.71	70- 80	69.03	1016	98.3,102
90	1.999	0.8465	10.35	1.123	2.698	0.7199	0.5037	0.6522	80- 90	18.10	1034	100,103
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): 573.41 lm

%lum = 55.4%

%lamp = 57.3%

Conical surface Flux(130deg): 893.1 lm

%lum = 86.3%

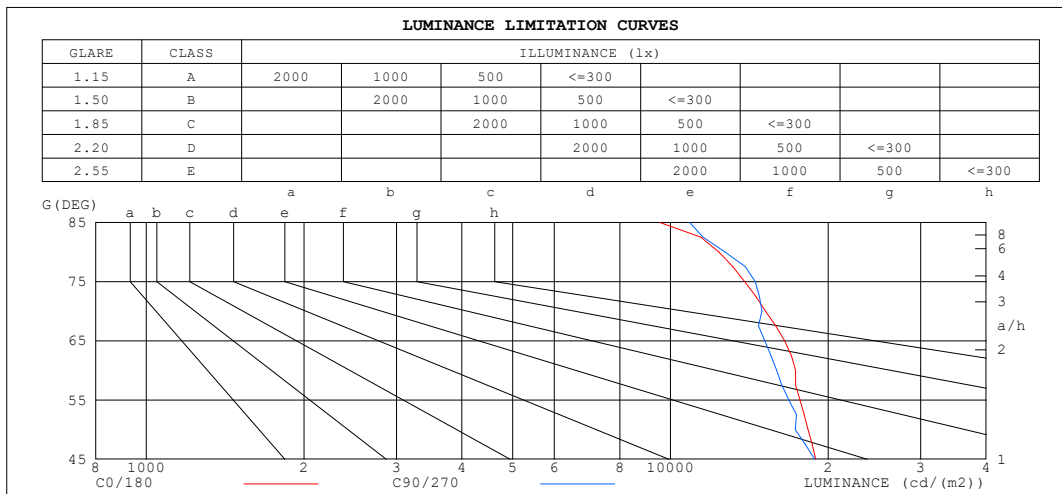
%lamp = 89.3%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:16 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:

LUMINANCE LIMITATION CURVES

NAME: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9540	10878
80	12365	12689
75	13844	14516
70	15182	14932
65	16513	15134
60	17313	15938
55	17656	16812
50	18307	17292
45	18928	18842

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 16 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: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	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	.314	.179	.057	.307	.175	.056	.293	.168	.054	.280	.162	.052	.269	.156	.050	
2.0	.296	.162	.050	.290	.160	.049	.278	.154	.048	.267	.150	.047	.256	.145	.046	
3.0	.275	.146	.044	.269	.144	.043	.258	.140	.043	.248	.136	.042	.239	.132	.041	
4.0	.254	.132	.039	.249	.130	.038	.239	.127	.038	.231	.124	.037	.222	.121	.037	
5.0	.235	.120	.035	.231	.118	.034	.222	.116	.034	.214	.113	.034	.207	.111	.033	
6.0	.218	.109	.031	.214	.108	.031	.207	.106	.031	.200	.104	.031	.193	.102	.030	
7.0	.203	.100	.028	.200	.099	.028	.193	.098	.028	.187	.096	.028	.181	.094	.028	
8.0	.190	.093	.026	.187	.092	.026	.181	.090	.026	.175	.089	.026	.170	.087	.025	
9.0	.178	.086	.024	.175	.085	.024	.170	.084	.024	.165	.083	.024	.160	.081	.024	
10.0	.168	.080	.022	.165	.080	.022	.160	.079	.022	.156	.077	.022	.151	.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	.197	.197	.197	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.186	.162	.139	.159	.139	.120	.109	.095	.083	.063	.055	.048	.020	.018	.016	
2.0	.177	.136	.102	.152	.117	.088	.104	.081	.062	.060	.047	.036	.019	.015	.012	
3.0	.169	.118	.078	.145	.102	.067	.100	.071	.047	.058	.041	.028	.018	.013	.009	
4.0	.161	.104	.061	.138	.090	.053	.095	.063	.037	.055	.037	.022	.018	.012	.007	
5.0	.154	.094	.049	.132	.081	.043	.091	.057	.030	.053	.033	.018	.017	.011	.006	
6.0	.146	.085	.041	.126	.074	.036	.087	.051	.025	.050	.030	.015	.016	.010	.005	
7.0	.139	.078	.035	.120	.067	.030	.083	.047	.021	.048	.028	.013	.016	.009	.004	
8.0	.133	.072	.030	.114	.062	.026	.079	.044	.019	.046	.026	.011	.015	.008	.004	
9.0	.126	.067	.026	.109	.058	.023	.075	.041	.016	.044	.024	.010	.014	.008	.003	
10.0	.120	.062	.023	.104	.054	.020	.072	.038	.014	.042	.022	.009	.014	.007	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:16 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: 99PFML30/BL					TYPE:		WEIGHT: 1				
SPEC.:					DIM.: 35 x 75 x 204		SERIAL No.: 0				
MFR.: Elmark Industries JSC					SUR.: L		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	23.0	24.5	23.3	24.7	24.9	22.6	24.1	22.9	24.3	24.5
	3H	24.5	25.9	24.8	26.1	26.3	24.0	25.4	24.3	25.6	25.8
	4H	25.0	26.3	25.3	26.6	26.8	24.7	26.0	25.0	26.2	26.5
	6H	25.4	26.6	25.7	26.9	27.2	25.1	26.4	25.4	26.6	26.9
	8H	25.5	26.7	25.8	27.0	27.3	25.2	26.4	25.6	26.7	27.0
	12H	25.5	26.7	25.9	27.0	27.3	25.3	26.4	25.6	26.7	27.0
4H	2H	23.6	24.9	23.9	25.2	25.4	23.2	24.6	23.6	24.8	25.1
	3H	25.2	26.4	25.6	26.7	27.0	24.8	26.0	25.2	26.3	26.6
	4H	25.9	26.9	26.3	27.3	27.6	25.6	26.7	26.0	27.0	27.3
	6H	26.4	27.3	26.8	27.7	28.0	26.2	27.2	26.6	27.5	27.9
	8H	26.5	27.4	26.9	27.8	28.2	26.4	27.3	26.8	27.6	28.0
	12H	26.6	27.4	27.0	27.8	28.2	26.5	27.3	26.9	27.7	28.1
8H	4H	26.1	27.0	26.6	27.4	27.8	25.9	26.8	26.4	27.2	27.6
	6H	26.8	27.5	27.2	27.9	28.3	26.7	27.4	27.1	27.8	28.2
	8H	27.0	27.6	27.4	28.0	28.5	26.9	27.6	27.4	28.0	28.4
	12H	27.1	27.7	27.6	28.1	28.6	27.1	27.6	27.6	28.1	28.6
12H	4H	26.2	27.0	26.6	27.3	27.7	26.0	26.8	26.4	27.1	27.5
	6H	26.8	27.5	27.3	27.9	28.3	26.7	27.4	27.2	27.8	28.3
	8H	27.1	27.6	27.5	28.1	28.5	27.0	27.6	27.5	28.0	28.5
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.2 / - 0.2					+ 0.1 / - 0.2				
1.5H		+ 0.3 / - 0.4					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.0)
Area: 0.01837 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:16 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: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

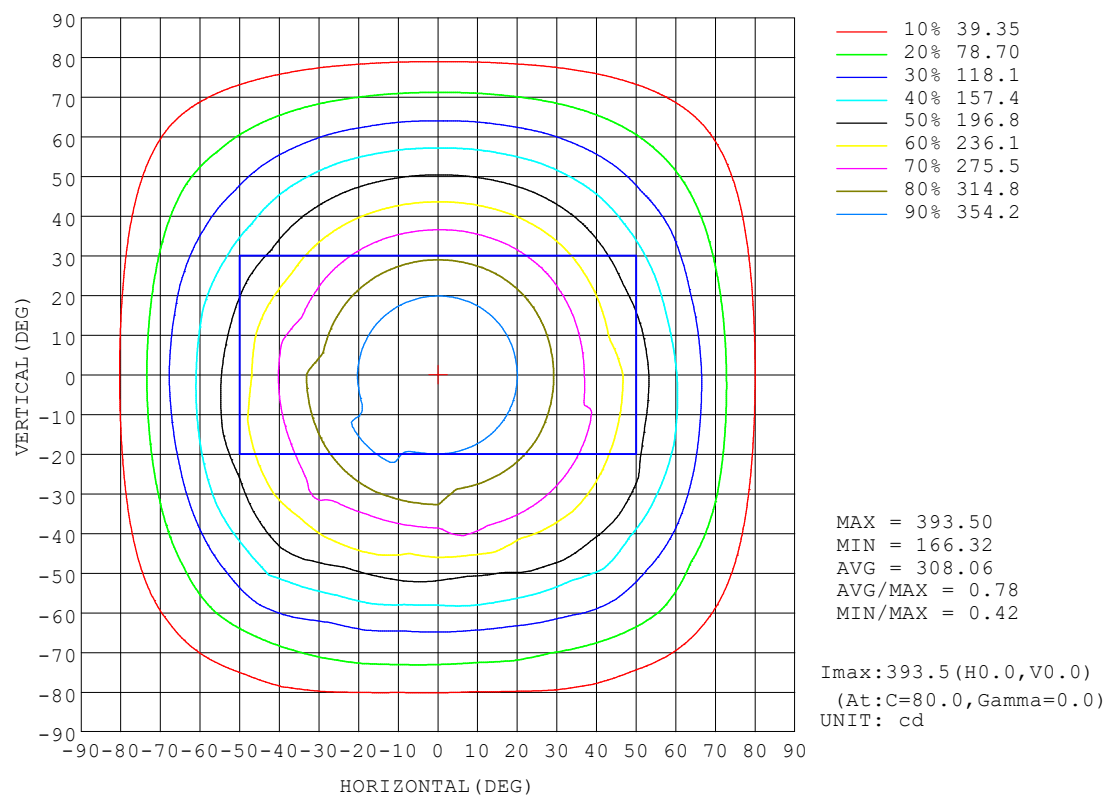
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	49	42	60	48	42	59	48	41	35
0.80	71	59	52	70	59	51	68	58	51	44
1.00	80	68	61	78	68	61	76	69	60	53
1.25	87	76	69	85	75	68	83	74	68	60
1.50	92	82	75	90	81	74	87	79	73	65
2.00	99	90	84	97	89	83	93	87	81	73
2.50	103	95	89	101	93	88	97	91	86	77
3.00	106	99	94	104	98	93	100	95	90	82
4.00	110	104	100	108	103	98	103	99	96	86
5.00	113	108	104	110	106	102	106	102	99	89
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: 16 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: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

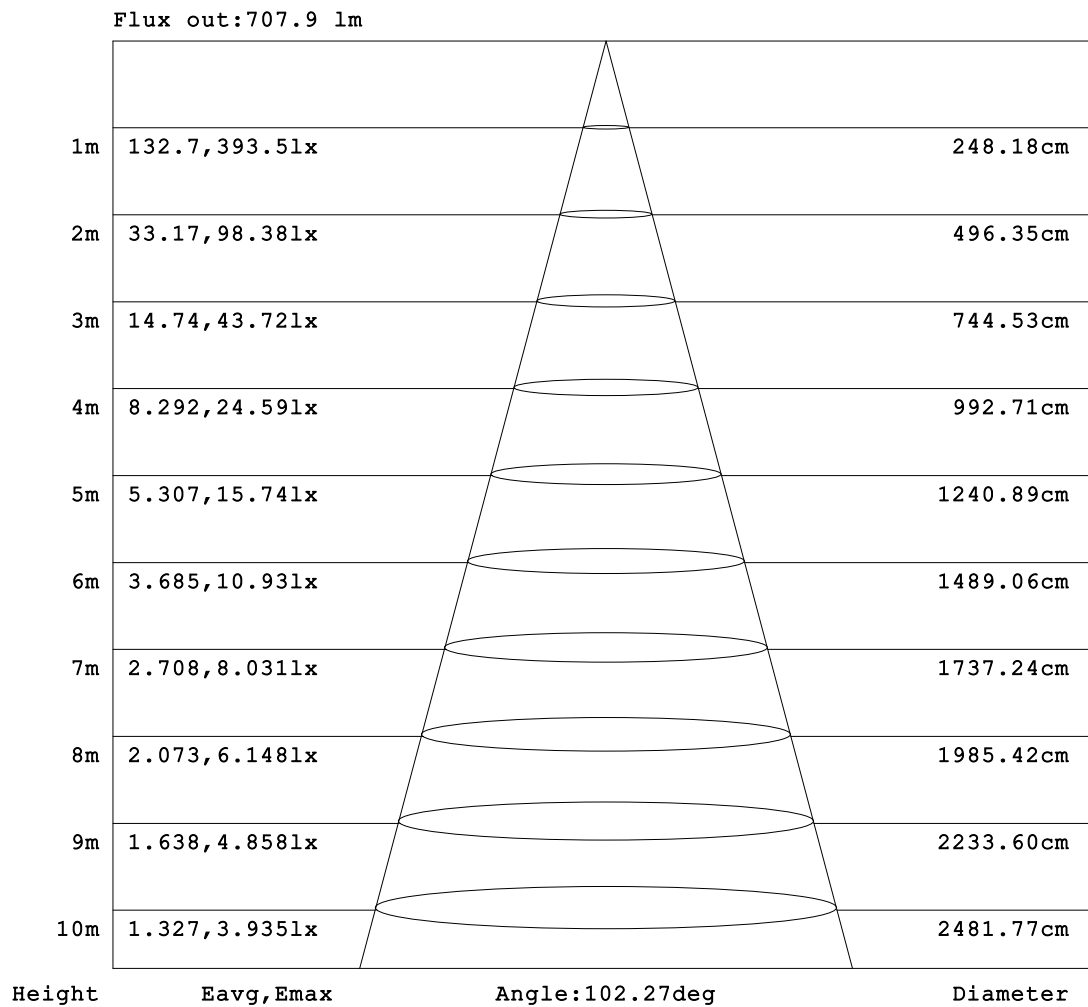


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 16 November 2022

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: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:



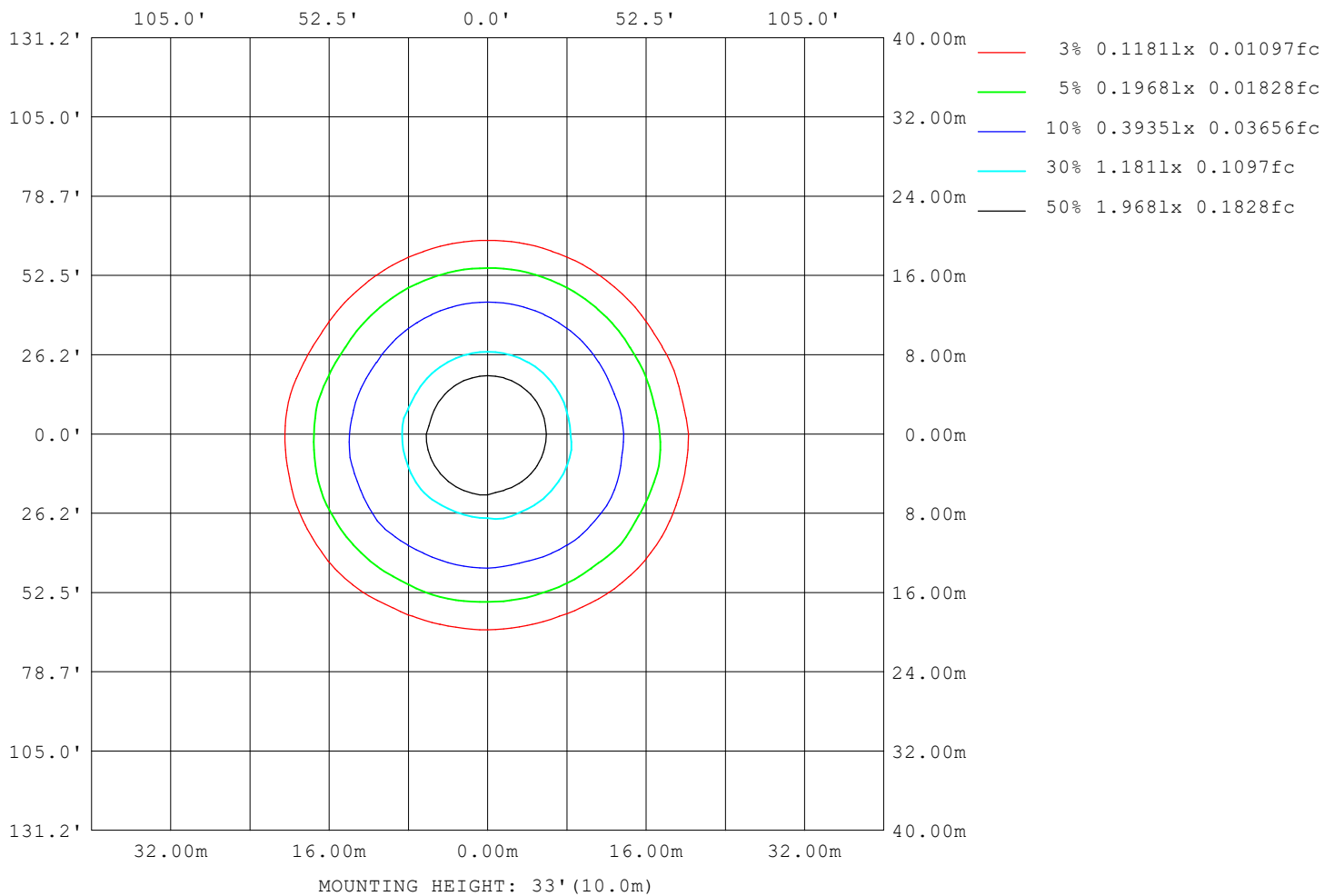
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 16 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: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 16 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: 99PFML30/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

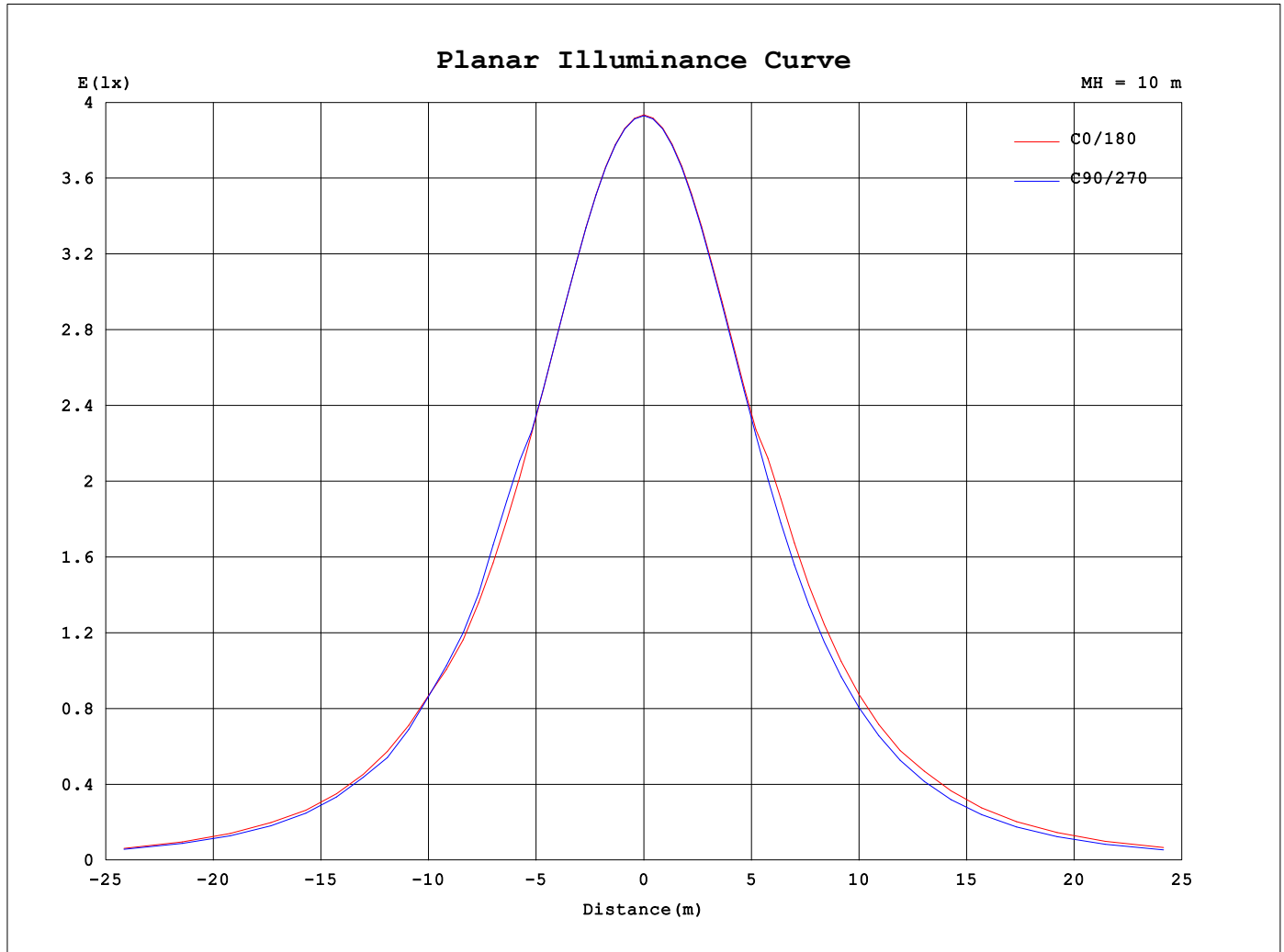
AvgL	cd/m2
L_0~180 (65) av	16803
L_0~180 (75) av	14113
L_0~180 (85) av	9907
L_90~270 (65) av	14802
L_90~270 (75) av	13430
L_90~270 (85) av	9270
L_45 (65) av	15635
L_45 (75) av	13632
L_45 (85) av	9058

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:16 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: 16 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:

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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:

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