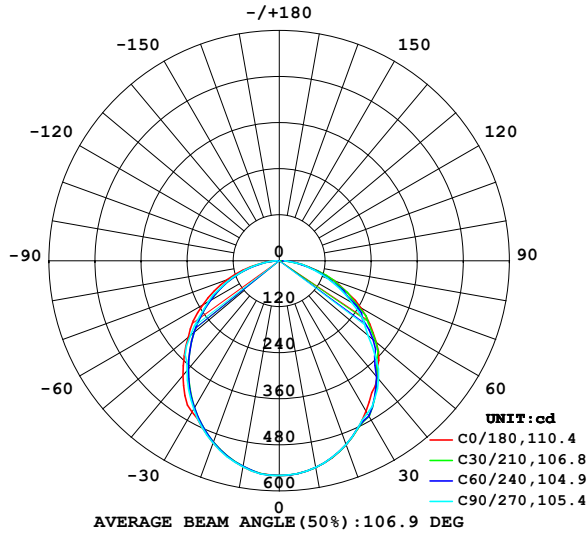


LUMINAIRE PHOTOMETRIC TEST REPORT

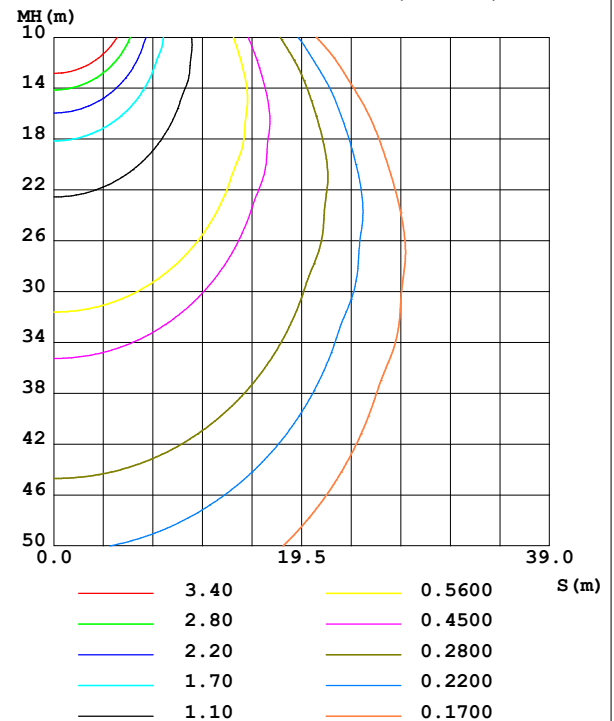
NAME: 99PFMT40/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99PFMT40/BL	I _{max} (cd)	559.4	S/MH (C0/180)	1.23
NOMINAL POWER (W)	15	LOR (%)	101.3	S/MH (C90/270)	1.19
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1519.8	η UP, DN (C0-180)	0.0, 51.6
NOMINAL FLUX (lm)	1500	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	101.3	CIBSE SHR MAX	1.35

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: 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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	547.3	547.1	547.0	546.3	545.3	543.7	545.7	546.7	0- 10	52.80	52.80	3.47,3.52
20	510.0	509.5	509.4	510.5	505.2	502.6	505.5	509.9	10- 20	149.3	202.1	13.3,13.5
30	452.6	469.1	459.9	471.5	455.0	441.9	446.2	453.7	20- 30	222.9	425.0	28,28.3
40	396.9	395.7	403.1	398.5	391.0	368.4	373.9	399.5	30- 40	265.9	690.9	45.5,46.1
50	329.7	322.9	302.4	323.6	309.5	288.7	302.0	318.0	40- 50	271.9	962.8	63.4,64.2
60	244.5	237.4	217.9	235.3	230.3	206.9	213.2	234.1	50- 60	242.4	1205	79.3,80.3
70	152.7	146.5	134.6	143.5	144.6	126.4	130.6	148.0	60- 70	181.3	1386	91.2,92.4
80	61.85	60.82	62.14	62.02	58.97	52.72	55.71	64.26	70- 80	103.6	1490	98,99.3
90	4.462	2.804	12.76	1.377	2.902	1.315	5.735	2.318	80- 90	29.78	1520	100,101
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): 828.27 lm

%lum = 54.5%

%lamp = 55.2%

Conical surface Flux(130deg): 1304.9 lm

%lum = 85.9%

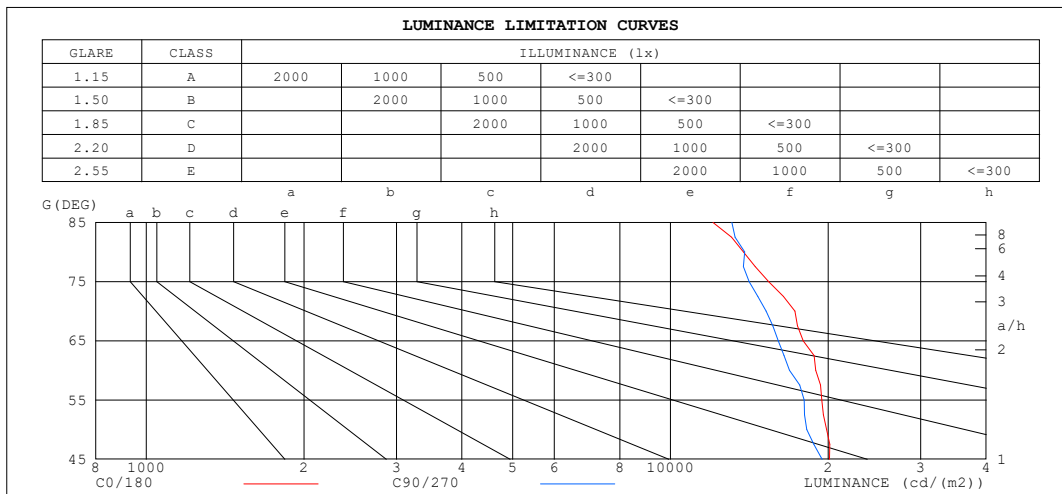
%lamp = 87.0%

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:

LUMINANCE LIMITATION CURVES

NAME: 99PFMT40/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	12046	13085
80	13776	13843
75	15392	14125
70	17273	15220
65	17911	16052
60	18913	16856
55	19434	17993
50	19840	18199
45	20111	19468

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: 99PFMT40/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	.312	.177	.056	.305	.174	.055	.291	.167	.053	.279	.161	.052	.268	.155	.050	
2.0	.293	.161	.049	.287	.158	.049	.275	.153	.048	.264	.148	.046	.254	.144	.045	
3.0	.272	.145	.043	.266	.142	.043	.256	.138	.042	.246	.135	.041	.237	.131	.041	
4.0	.251	.130	.038	.246	.129	.038	.237	.125	.037	.228	.122	.037	.220	.119	.036	
5.0	.232	.118	.034	.228	.117	.034	.219	.114	.034	.212	.112	.033	.204	.109	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.105	.030	.197	.102	.030	.191	.100	.030	
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.093	.027	
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.173	.087	.025	.168	.086	.025	
9.0	.175	.085	.024	.173	.084	.024	.167	.083	.023	.162	.081	.023	.158	.080	.023	
10.0	.165	.079	.022	.163	.078	.022	.158	.077	.022	.153	.076	.022	.149	.075	.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	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.183	.158	.136	.156	.136	.117	.107	.093	.081	.061	.054	.047	.020	.017	.015	
2.0	.174	.134	.100	.149	.115	.086	.102	.080	.060	.059	.046	.035	.019	.015	.011	
3.0	.166	.116	.076	.143	.100	.066	.098	.069	.046	.057	.041	.027	.018	.013	.009	
4.0	.158	.102	.059	.136	.088	.052	.094	.062	.036	.054	.036	.021	.017	.012	.007	
5.0	.151	.092	.048	.130	.079	.042	.089	.055	.029	.052	.033	.017	.017	.011	.006	
6.0	.144	.083	.040	.123	.072	.035	.085	.050	.025	.049	.030	.015	.016	.010	.005	
7.0	.137	.076	.034	.118	.066	.029	.081	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.029	.112	.061	.025	.078	.043	.018	.045	.025	.011	.015	.008	.004	
9.0	.124	.065	.026	.107	.057	.022	.074	.040	.016	.043	.024	.009	.014	.008	.003	
10.0	.118	.061	.023	.102	.053	.020	.071	.037	.014	.041	.022	.008	.013	.007	.003	

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: 99PFMT40/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	21.9	23.4	22.1	23.6	23.8	21.4	22.9	21.7	23.1	23.3
	3H	23.4	24.8	23.7	25.0	25.2	22.8	24.2	23.1	24.4	24.7
	4H	23.9	25.3	24.3	25.5	25.8	23.4	24.7	23.7	24.9	25.2
	6H	24.4	25.6	24.7	25.9	26.2	23.8	25.1	24.1	25.3	25.6
	8H	24.5	25.7	24.8	26.0	26.3	24.0	25.2	24.3	25.5	25.8
	12H	24.6	25.7	24.9	26.0	26.3	24.1	25.2	24.4	25.5	25.8
4H	2H	22.4	23.8	22.8	24.0	24.3	22.1	23.4	22.4	23.7	23.9
	3H	24.1	25.3	24.5	25.6	25.9	23.7	24.8	24.0	25.1	25.4
	4H	24.8	25.9	25.2	26.2	26.6	24.3	25.4	24.7	25.7	26.0
	6H	25.4	26.3	25.8	26.7	27.0	24.9	25.8	25.3	26.2	26.5
	8H	25.5	26.4	26.0	26.8	27.2	25.1	26.0	25.5	26.4	26.7
	12H	25.7	26.5	26.1	26.9	27.3	25.3	26.1	25.7	26.4	26.9
8H	4H	25.1	26.0	25.5	26.3	26.7	24.6	25.5	25.0	25.9	26.3
	6H	25.7	26.5	26.2	26.9	27.3	25.3	26.1	25.8	26.5	26.9
	8H	26.0	26.7	26.5	27.1	27.5	25.6	26.3	26.1	26.7	27.2
	12H	26.2	26.7	26.7	27.2	27.7	25.9	26.4	26.4	26.9	27.4
12H	4H	25.1	25.9	25.5	26.3	26.7	24.6	25.5	25.1	25.8	26.2
	6H	25.8	26.4	26.2	26.9	27.3	25.4	26.0	25.8	26.5	26.9
	8H	26.1	26.6	26.6	27.1	27.6	25.7	26.3	26.2	26.7	27.2
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, 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: 99PFMT40/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

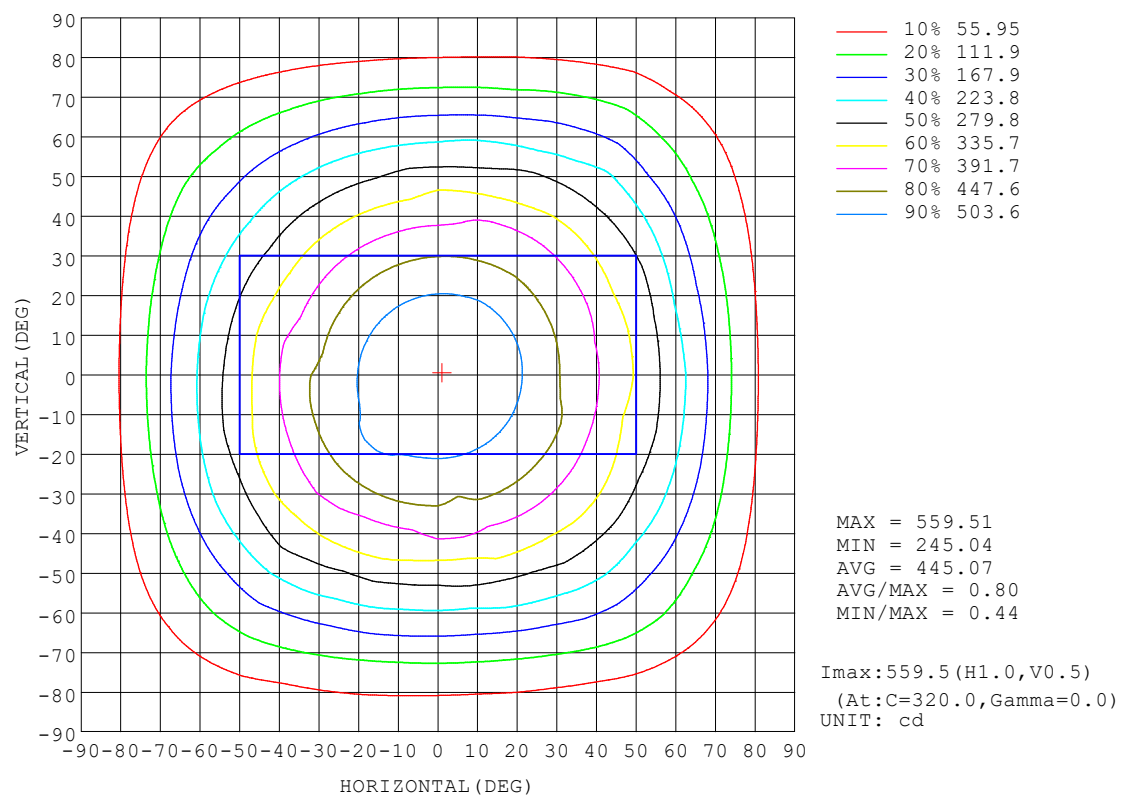
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	40	58	47	40	57	46	40	33
0.80	69	57	50	68	57	50	66	56	49	42
1.00	77	66	59	76	66	59	74	67	58	51
1.25	85	74	67	83	73	66	80	72	66	58
1.50	90	80	73	88	79	72	85	77	71	63
2.00	96	88	81	95	87	81	91	84	79	71
2.50	100	93	86	98	91	86	94	88	84	75
3.00	104	97	91	102	95	90	97	92	88	79
4.00	108	102	97	105	100	96	101	97	93	84
5.00	110	105	101	108	103	100	103	100	97	87
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: 99PFMT40/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

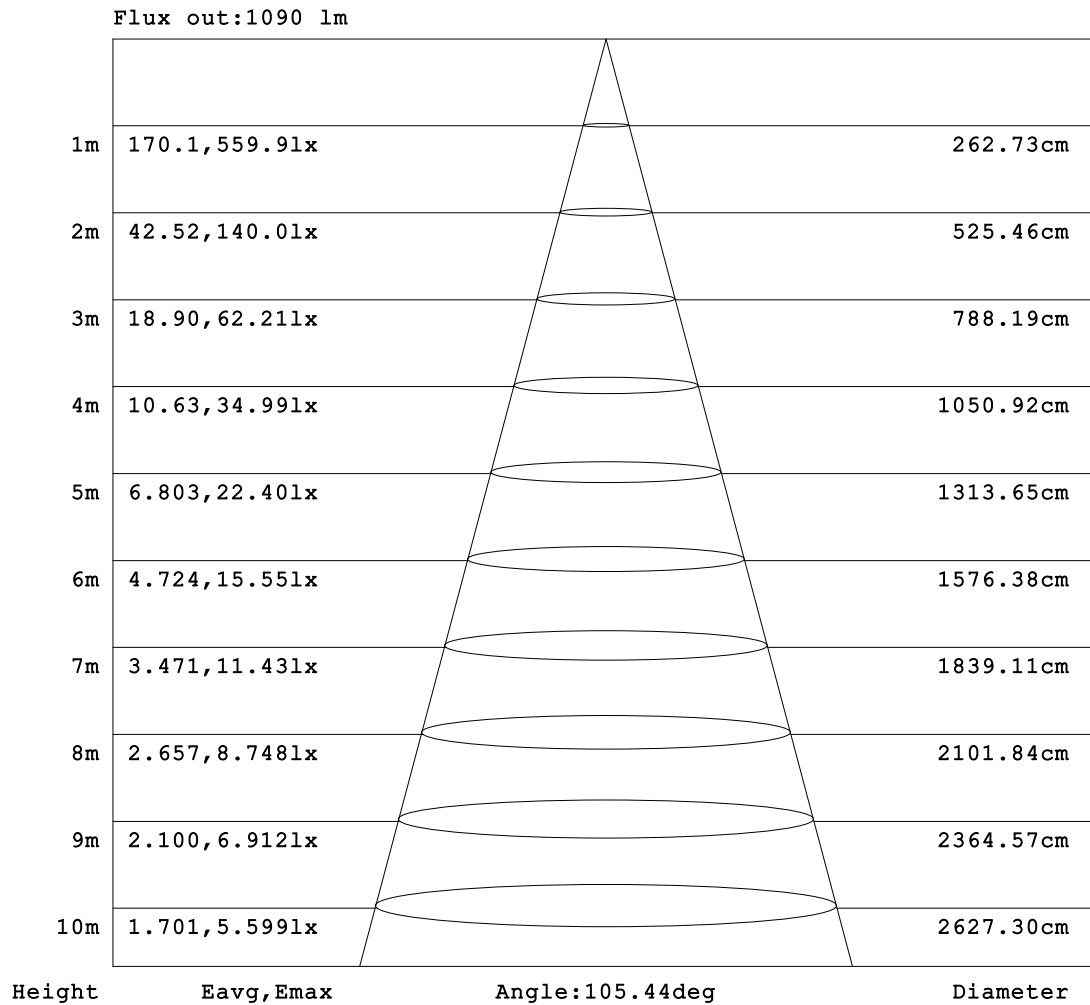


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 15 November 2022

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: 99PFMT40/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



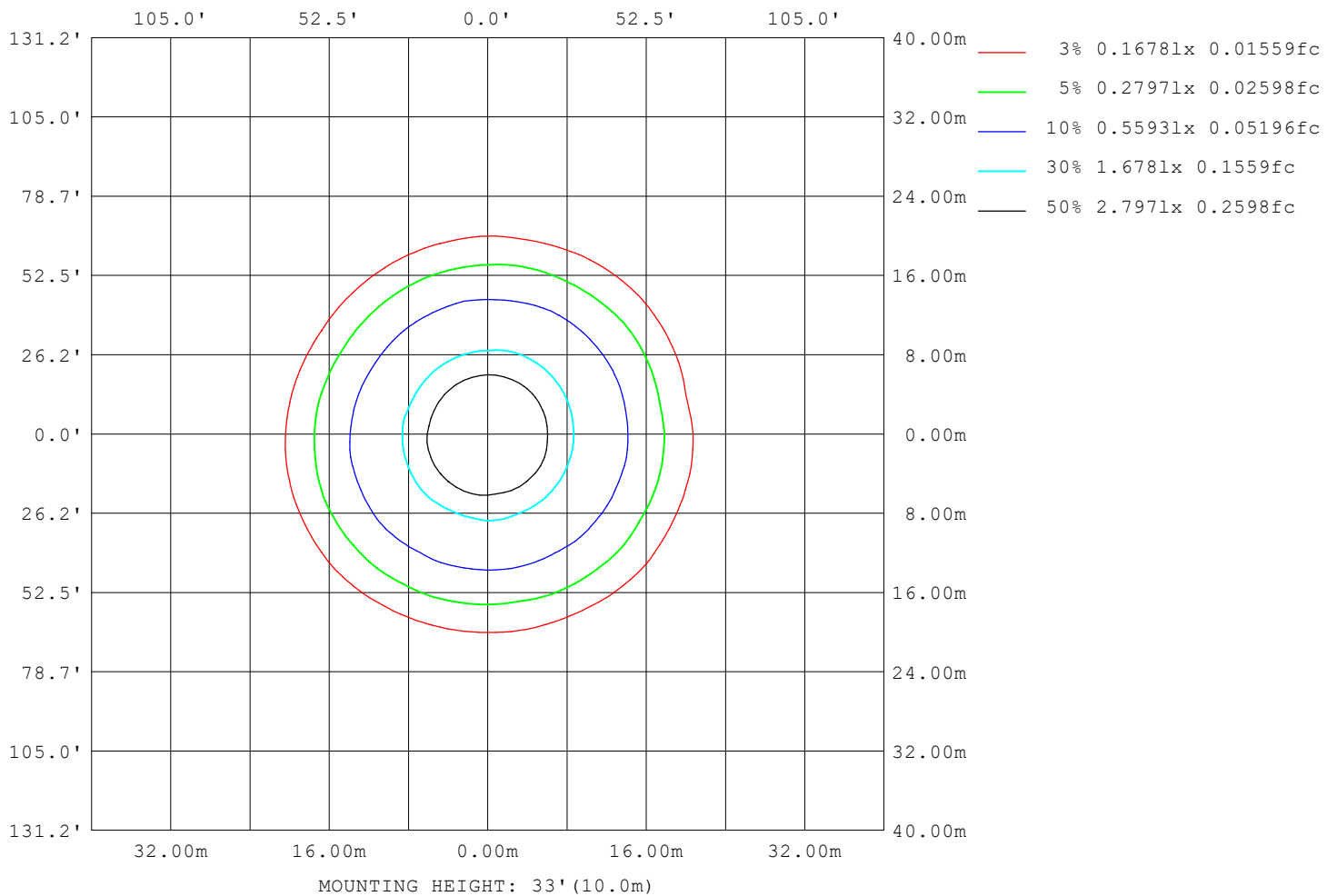
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 99PFMT40/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: 99PFMT40/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 334	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

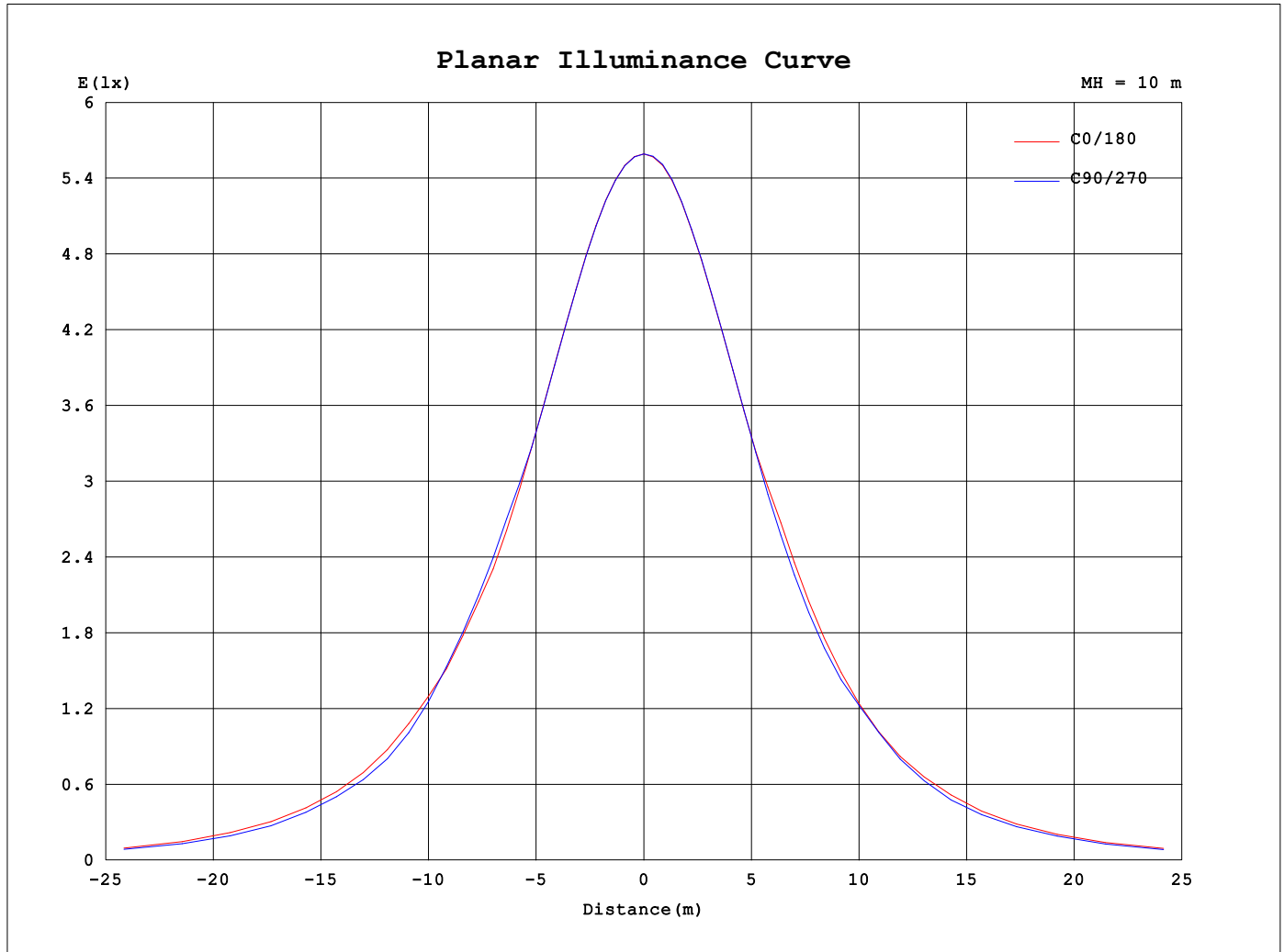
AvgL	cd/m2
L_0~180 (65) av	17523
L_0~180 (75) av	15117
L_0~180 (85) av	11552
L_90~270 (65) av	15853
L_90~270 (75) av	13919
L_90~270 (85) av	11954
L_45 (65) av	17012
L_45 (75) av	15048
L_45 (85) av	10326

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:

```