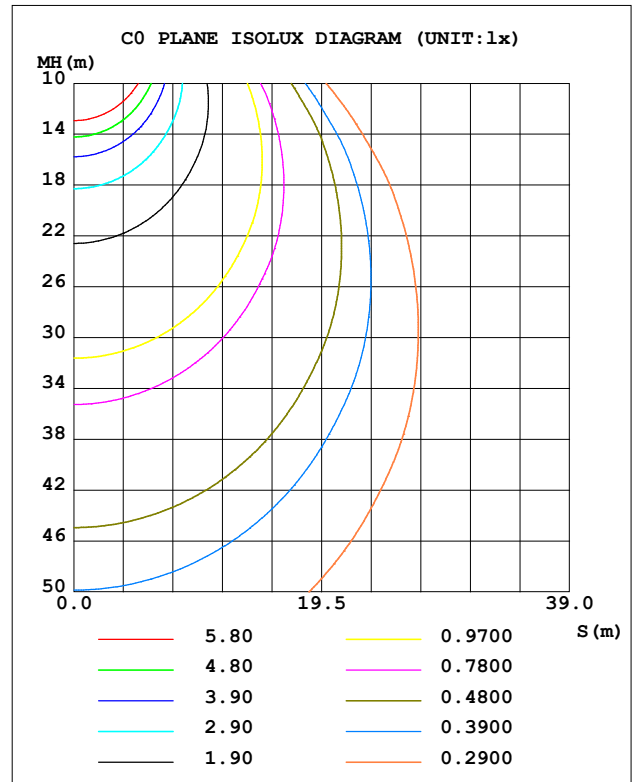
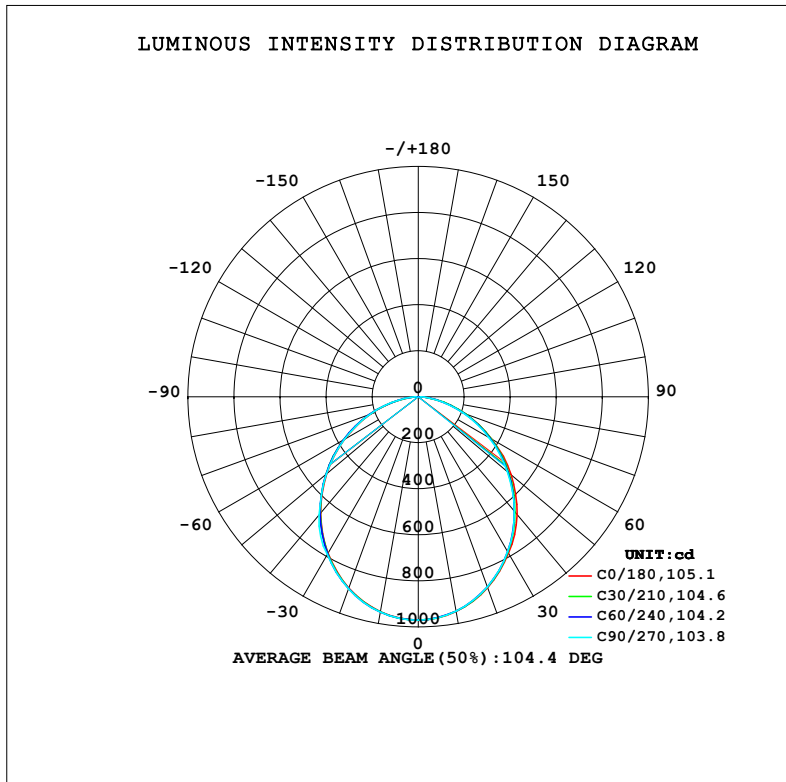


## LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99POMX40/WH	I <sub>max</sub> (cd)	970.2	S/MH (C0/180)	1.21
NOMINAL POWER (W)	20	LOR (%)	126.4	S/MH (C90/270)	1.22
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	2528.8	η UP, DN (C0-180)	0.0, 62.5
NOMINAL FLUX (lm)	2000	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 63.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	126.4	CIBSE SHR MAX	1.35



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:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	947.1	945.4	945.2	946.6	948.3	949.5	949.8	948.8	0- 10	91.52	91.52	3.62,4.58
20	882.2	879.0	878.4	880.8	884.2	886.2	887.0	885.4	10- 20	259.4	350.9	13.9,17.5
30	784.2	778.3	777.4	780.2	784.4	787.9	791.6	795.6	20- 30	385.8	736.6	29.1,36.8
40	667.8	651.9	649.9	653.6	660.1	663.1	670.6	672.3	30- 40	453.9	1191	47.1,59.5
50	526.5	511.0	505.5	512.5	519.0	523.7	521.1	526.5	40- 50	455.8	1646	65.1,82.3
60	368.8	363.2	356.0	364.1	369.1	375.8	371.7	374.3	50- 60	396.9	2043	80.8,102
70	217.5	216.4	209.1	215.8	221.6	227.7	224.0	228.3	60- 70	290.3	2334	92.3,117
80	82.55	82.11	76.74	80.94	83.08	90.92	88.17	90.22	70- 80	157.8	2491	98.5,125
90	2.800	1.963	9.587	1.922	3.298	1.848	8.686	1.811	80- 90	37.45	2529	100,126
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): 1422.3 lm

%lum = 56.2%

%lamp = 71.1%

Conical surface Flux(130deg): 2203.9 lm

%lum = 87.2%

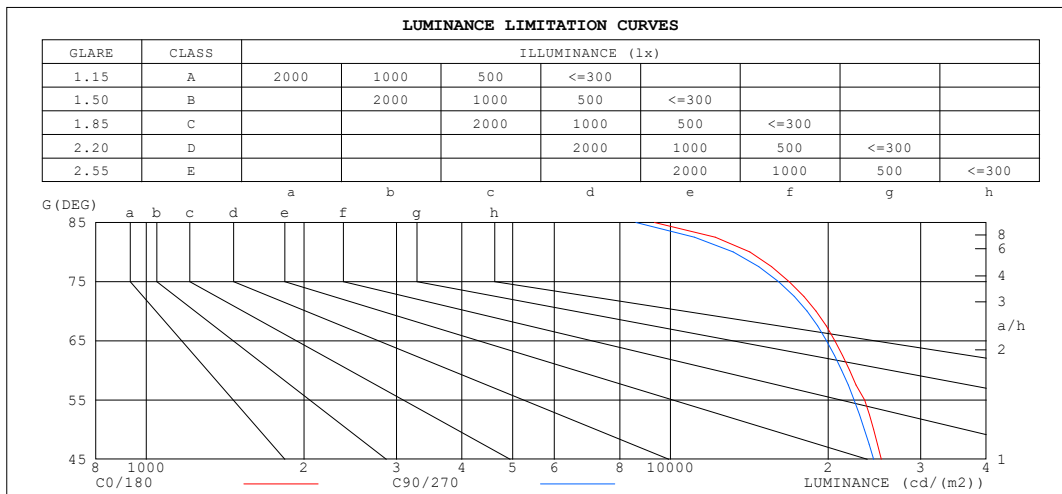
%lamp = 110.2%

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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9315	8588
80	14163	13169
75	16839	16082
70	18946	18216
65	20580	19846
60	21971	21214
55	23478	22403
50	24400	23436
45	25231	24396

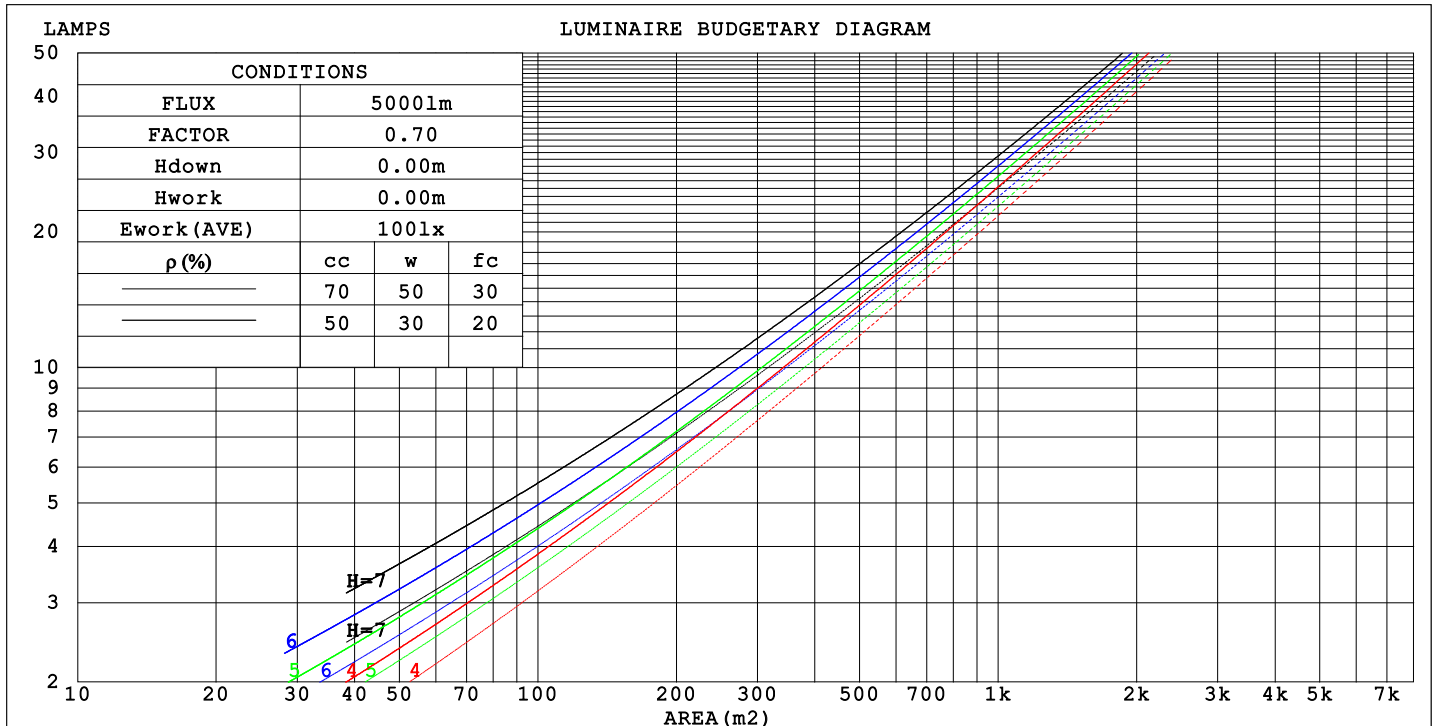
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 05 December 2022

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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	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															



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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	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	.377	.214	.068	.368	.210	.067	.351	.202	.064	.336	.194	.062	.322	.187	.060	
2.0	.357	.196	.060	.349	.192	.059	.335	.186	.058	.321	.180	.056	.309	.175	.055	
3.0	.332	.177	.053	.325	.174	.052	.312	.169	.051	.300	.165	.050	.289	.160	.050	
4.0	.308	.160	.047	.302	.158	.047	.290	.154	.046	.279	.150	.045	.269	.146	.045	
5.0	.285	.145	.042	.280	.144	.042	.270	.140	.041	.260	.137	.041	.251	.134	.040	
6.0	.265	.133	.038	.260	.131	.038	.251	.129	.037	.243	.126	.037	.235	.124	.037	
7.0	.247	.122	.035	.243	.121	.034	.235	.119	.034	.227	.116	.034	.220	.114	.034	
8.0	.231	.113	.032	.227	.112	.032	.220	.110	.031	.213	.108	.031	.207	.106	.031	
9.0	.217	.105	.029	.213	.104	.029	.207	.102	.029	.201	.101	.029	.195	.099	.029	
10.0	.204	.098	.027	.201	.097	.027	.195	.096	.027	.190	.094	.027	.184	.093	.027	

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	.241	.241	.241	.206	.206	.206	.140	.140	.140	.081	.081	.081	.026	.026	.026	
1.0	.227	.198	.171	.194	.170	.147	.133	.117	.102	.076	.067	.059	.024	.022	.019	
2.0	.216	.167	.125	.185	.144	.108	.127	.099	.076	.073	.058	.044	.023	.019	.014	
3.0	.206	.144	.095	.177	.125	.083	.121	.087	.058	.070	.051	.034	.023	.016	.011	
4.0	.196	.128	.075	.169	.110	.065	.116	.077	.046	.067	.045	.027	.022	.015	.009	
5.0	.187	.114	.061	.161	.099	.053	.111	.069	.037	.064	.041	.022	.021	.013	.007	
6.0	.178	.104	.050	.153	.090	.044	.106	.063	.031	.061	.037	.018	.020	.012	.006	
7.0	.170	.095	.043	.146	.082	.037	.101	.058	.026	.059	.034	.016	.019	.011	.005	
8.0	.162	.088	.037	.139	.076	.032	.096	.053	.023	.056	.031	.014	.018	.010	.004	
9.0	.154	.081	.032	.133	.071	.028	.092	.050	.020	.054	.029	.012	.017	.010	.004	
10.0	.147	.076	.029	.127	.066	.025	.088	.046	.018	.051	.027	.011	.017	.009	.004	

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: 99POMX40/WH					TYPE:			WEIGHT: 1			
SPEC.:					DIM.: 50 x 70 x 330			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	21.5	23.0	23.2	21.1	22.6	21.4	22.8	23.0
	3H	22.6	24.0	22.9	24.2	24.5	22.4	23.8	22.7	24.0	24.3
	4H	23.1	24.4	23.5	24.7	25.0	22.9	24.2	23.2	24.5	24.7
	6H	23.5	24.7	23.8	25.0	25.2	23.2	24.4	23.5	24.7	25.0
	8H	23.5	24.7	23.9	25.0	25.3	23.3	24.4	23.6	24.7	25.0
	12H	23.5	24.7	23.9	25.0	25.3	23.3	24.4	23.6	24.7	25.0
4H	2H	21.8	23.1	22.1	23.4	23.6	21.7	23.0	22.0	23.2	23.5
	3H	23.4	24.5	23.7	24.8	25.1	23.2	24.3	23.5	24.6	24.9
	4H	24.0	25.0	24.4	25.3	25.7	23.8	24.8	24.1	25.1	25.5
	6H	24.4	25.3	24.8	25.7	26.1	24.2	25.1	24.6	25.5	25.8
	8H	24.5	25.4	24.9	25.8	26.1	24.3	25.1	24.7	25.5	25.9
	12H	24.6	25.4	25.0	25.7	26.1	24.3	25.1	24.7	25.5	25.9
8H	4H	24.2	25.1	24.6	25.4	25.8	24.0	24.9	24.4	25.2	25.6
	6H	24.8	25.5	25.2	25.9	26.3	24.5	25.2	25.0	25.6	26.1
	8H	24.9	25.6	25.4	26.0	26.4	24.7	25.3	25.1	25.7	26.2
	12H	25.0	25.5	25.5	26.0	26.5	24.7	25.3	25.2	25.7	26.2
12H	4H	24.2	25.0	24.6	25.4	25.8	24.0	24.8	24.4	25.2	25.6
	6H	24.8	25.4	25.2	25.8	26.3	24.6	25.2	25.0	25.6	26.1
	8H	25.0	25.5	25.5	26.0	26.4	24.7	25.3	25.2	25.7	26.2
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 2000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.4)  
Area: 0.03355 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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

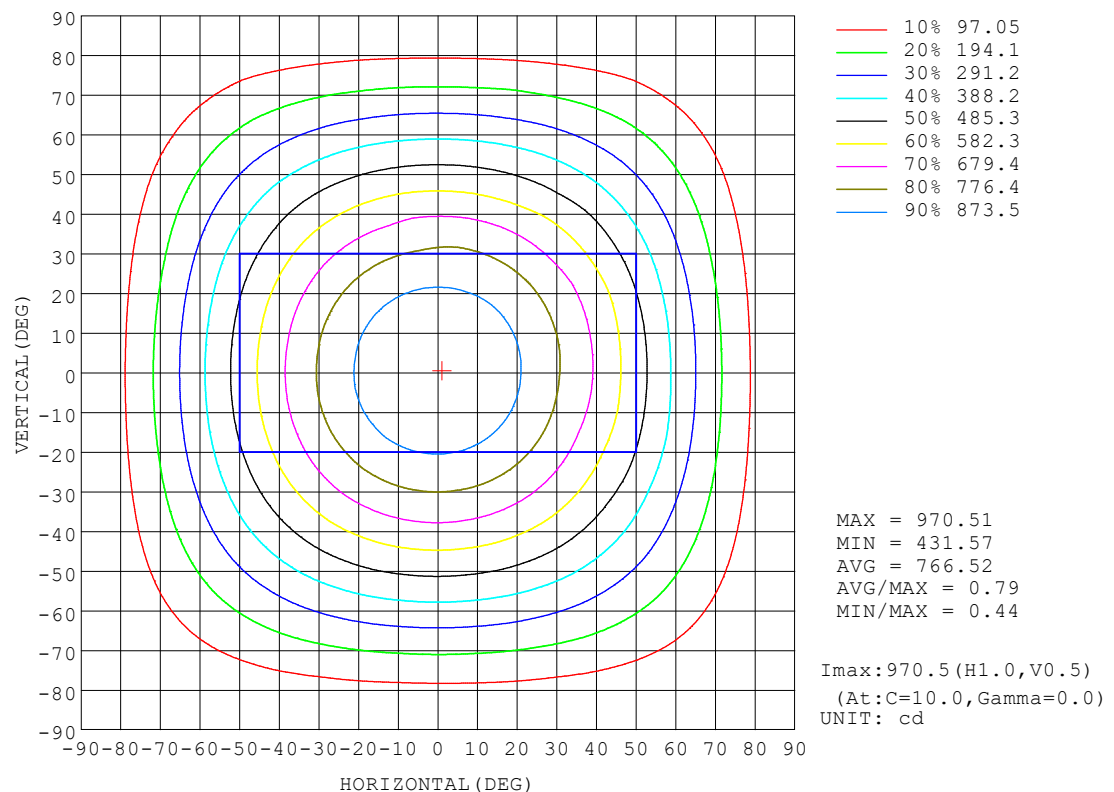
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	74	60	51	74	60	51	72	59	51	43
0.80	87	73	64	86	72	64	84	71	63	55
1.00	98	84	75	96	83	75	93	85	74	65
1.25	107	94	85	105	93	84	101	91	83	74
1.50	113	101	92	111	100	92	107	97	90	81
2.00	121	111	103	119	109	102	115	107	100	90
2.50	126	117	109	123	115	108	119	111	106	95
3.00	130	122	115	127	120	114	122	116	111	100
4.00	135	128	122	132	126	121	127	122	117	106
5.00	138	132	127	135	130	125	129	125	121	110
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

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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



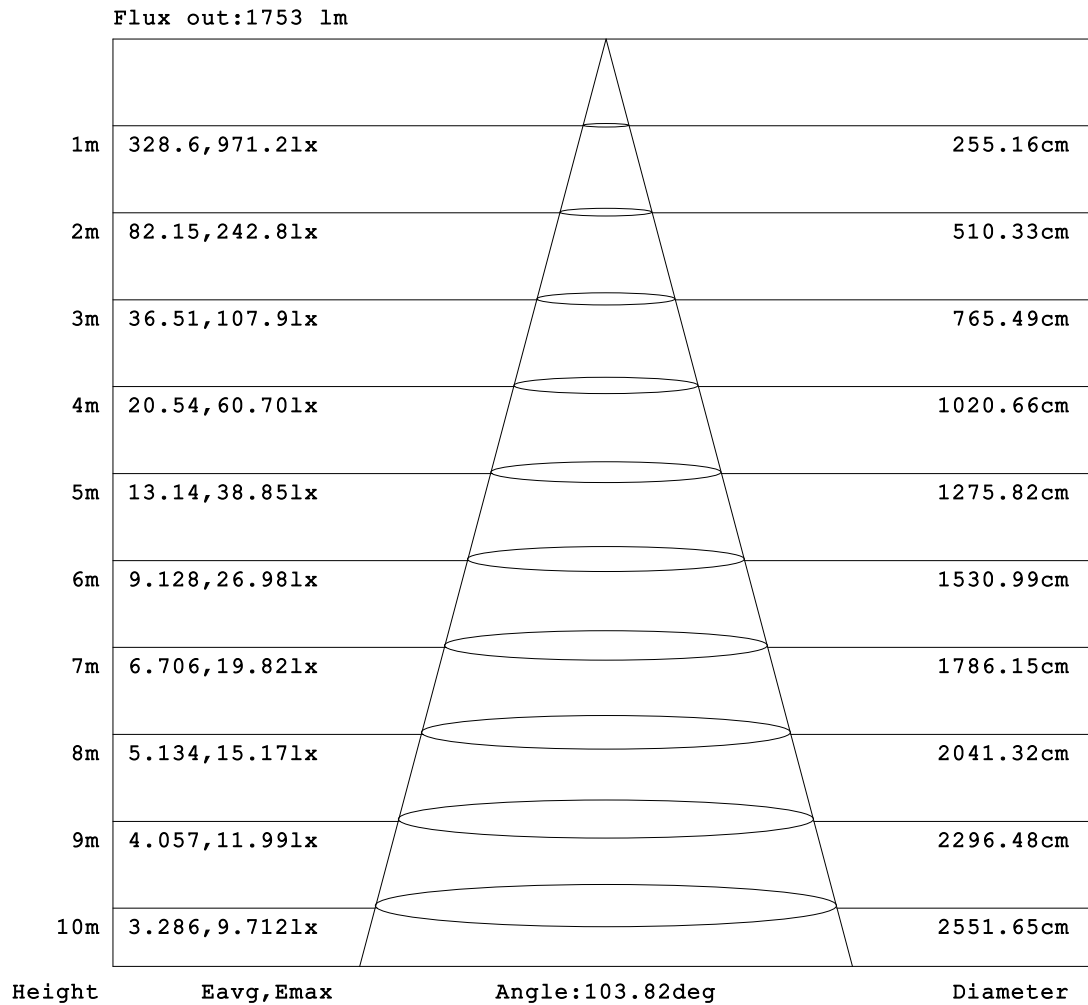
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 05 December 2022

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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:



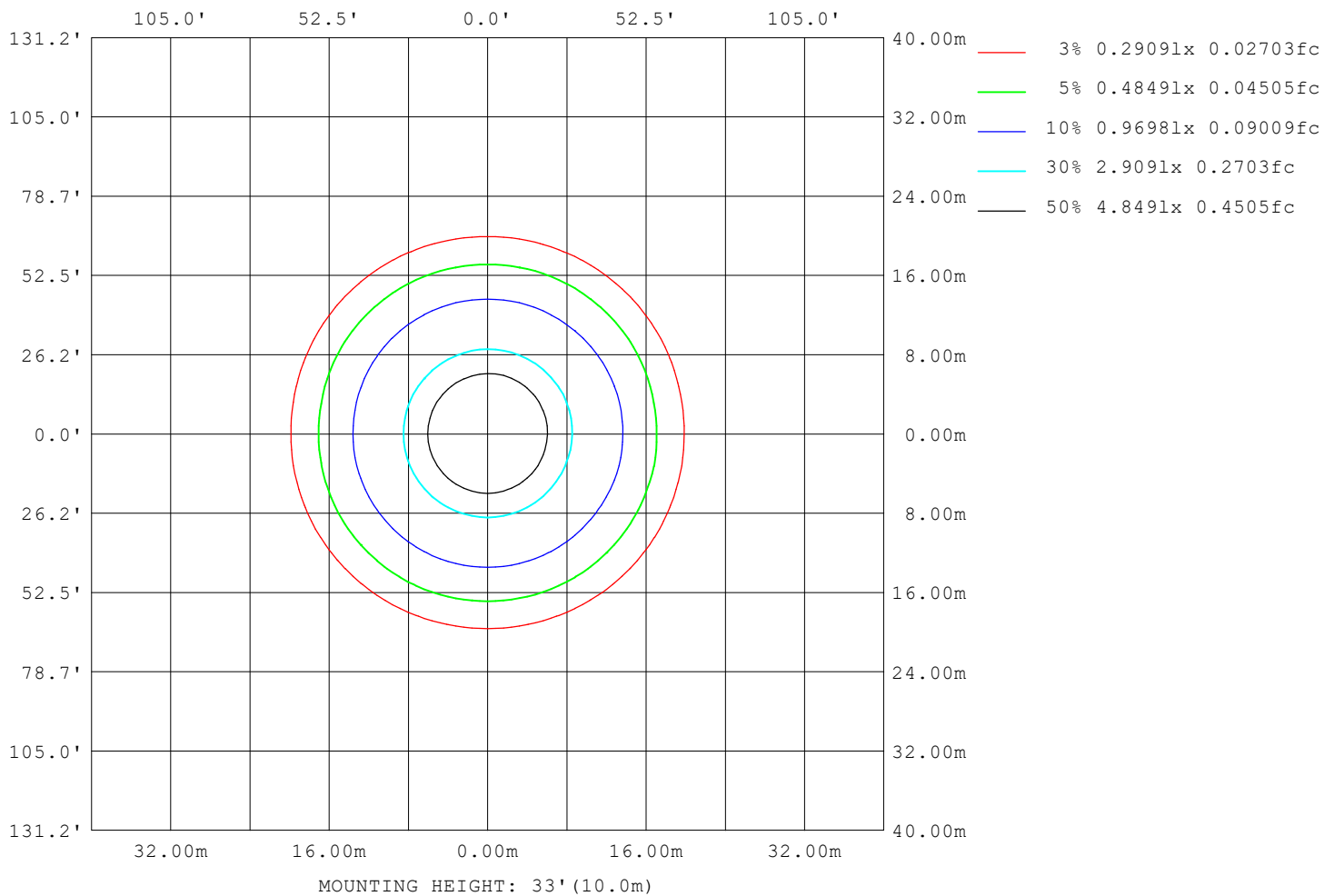
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3°C  
 Operators:  
 Test Date: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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	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: 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: 99POMX40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 50 x 70 x 330	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: cross	Shielding Angle:

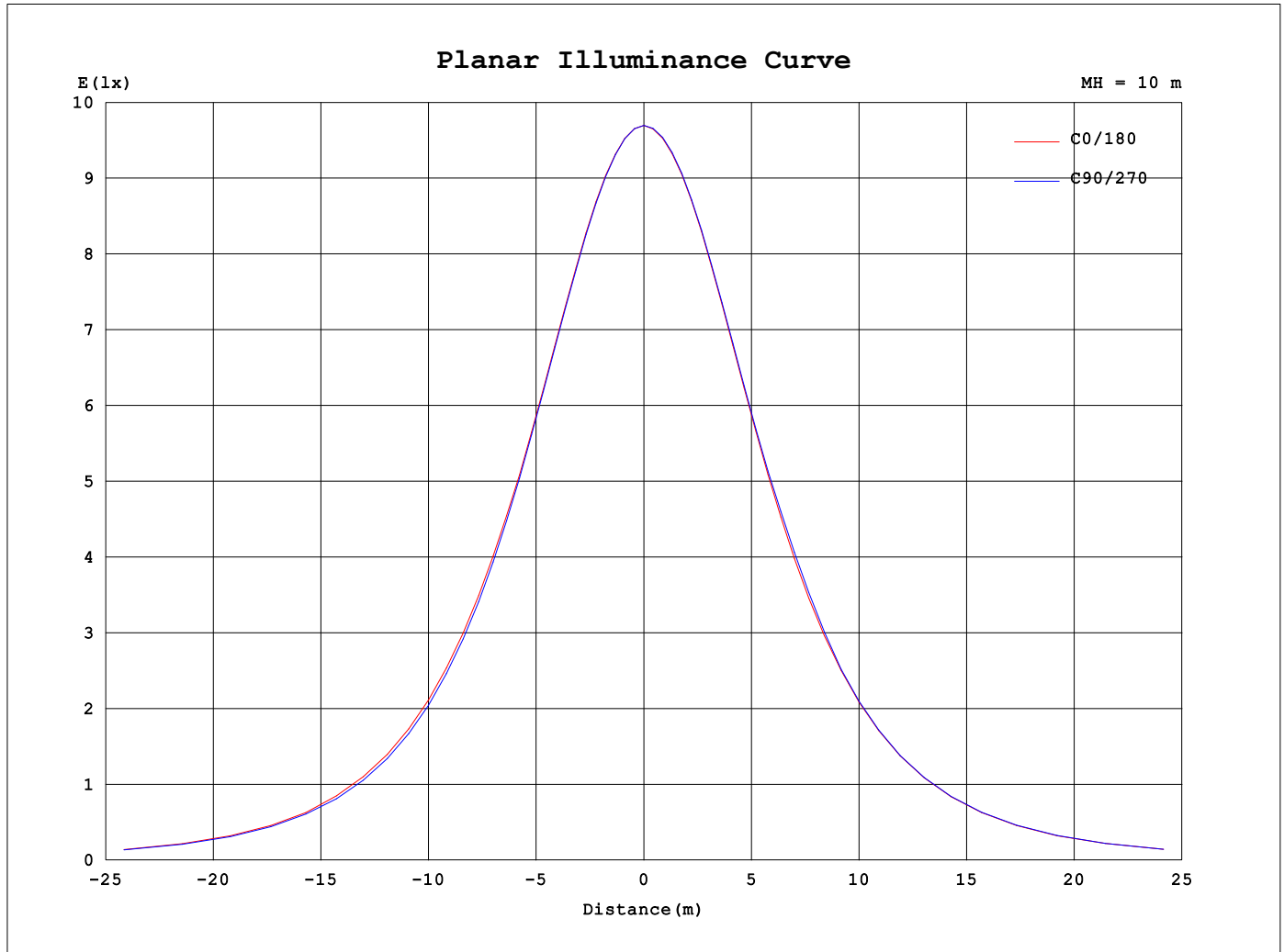
AvgL	cd/m2
L_0~180 (65) av	20635
L_0~180 (75) av	16937
L_0~180 (85) av	9330
L_90~270 (65) av	20400
L_90~270 (75) av	16862
L_90~270 (85) av	10060
L_45 (65) av	20795
L_45 (75) av	17464
L_45 (85) av	10184

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:

```