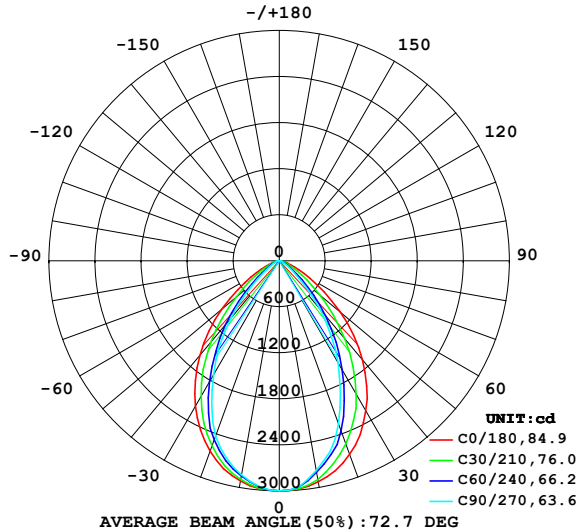


LUMINAIRE PHOTOMETRIC TEST REPORT

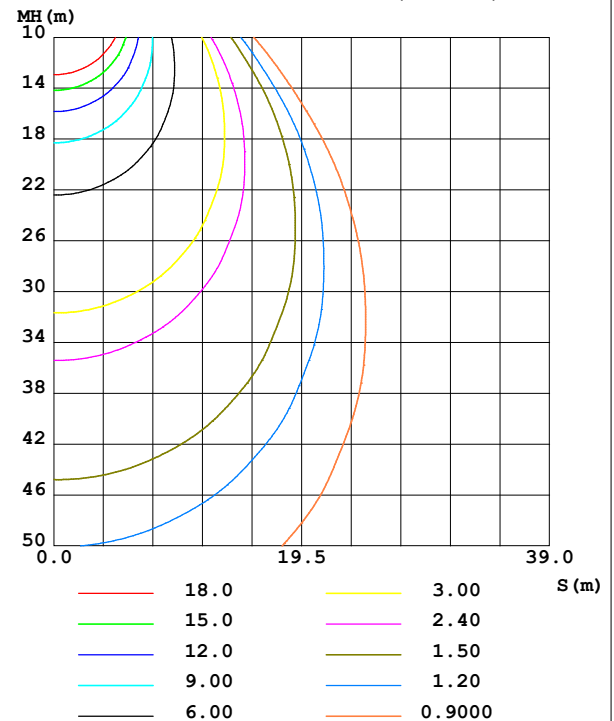
NAME: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL67054030/WH	I <sub>max</sub> (cd)	2998	S/MH (C0/180)	1.11
NOMINAL POWER (W)	40	LOR (%)	113.1	S/MH (C90/270)	0.96
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4297.2	η UP, DN (C0-180)	0.0, 54.5
NOMINAL FLUX (lm)	3800	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 58.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	113.1	CIBSE SHR MAX	1.05

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: 07 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	2925	2837	2780	2846	2914	2872	2833	2877	0- 10	279.9	279.9	6.51,7.37
20	2682	2449	2261	2439	2639	2532	2434	2545	10- 20	759.3	1039	24.2,27.3
30	2257	1813	1538	1778	2189	1939	1714	1987	20- 30	1013	2052	47.8,54
40	1688	1113	829.9	1075	1614	1215	991.4	1264	30- 40	970.8	3023	70.3,79.6
50	1036	511.4	292.9	492.7	971.8	587.1	370.2	619.2	40- 50	691.0	3714	86.4,97.7
60	465.0	189.7	103.3	180.5	428.2	214.2	126.9	223.4	50- 60	353.4	4067	94.7,107
70	159.9	70.74	46.58	69.67	149.4	82.91	59.50	84.64	60- 70	150.8	4218	98.2,111
80	50.25	27.46	19.89	27.85	49.05	32.47	25.02	32.00	70- 80	60.43	4279	99.6,113
90	1.264	0.9992	0.6736	0.9857	1.147	2.582	10.66	2.245	80- 90	18.57	4297	100,113
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): 3413.2 lm

%lum = 79.4%

%lamp = 89.8%

Conical surface Flux(130deg): 4159.3 lm

%lum = 96.8%

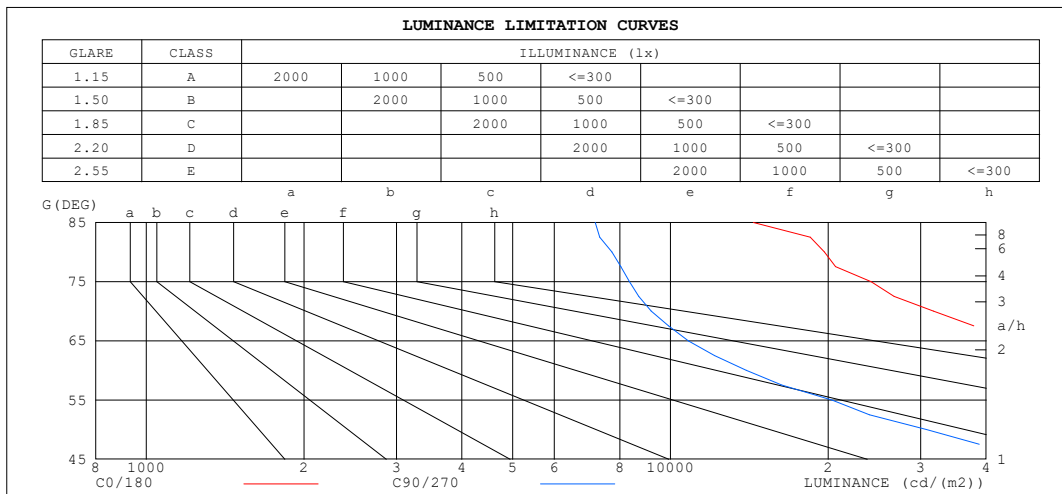
%lamp = 109.5%

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:07 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: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	14380	7186
80	19641	7728
75	24134	8354
70	31742	9191
65	45447	10822
60	63121	13949
55	85049	20340
50	109375	30756
45	131497	48941

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3°C  
Operators:  
Test Date: 07 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:

```

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: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	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	.253	.144	.046	.245	.140	.044	.231	.132	.042	.217	.125	.040	.205	.119	.038	
2.0	.244	.134	.041	.238	.131	.040	.225	.125	.039	.214	.120	.038	.203	.115	.036	
3.0	.232	.124	.037	.226	.121	.037	.216	.117	.036	.206	.113	.035	.196	.109	.034	
4.0	.220	.114	.034	.215	.112	.033	.205	.109	.033	.196	.105	.032	.188	.102	.031	
5.0	.208	.106	.031	.203	.104	.030	.195	.102	.030	.187	.099	.029	.180	.096	.029	
6.0	.197	.099	.028	.193	.097	.028	.185	.095	.028	.178	.093	.027	.172	.090	.027	
7.0	.186	.092	.026	.183	.091	.026	.176	.089	.026	.170	.087	.025	.164	.085	.025	
8.0	.176	.086	.024	.173	.085	.024	.167	.084	.024	.162	.082	.024	.157	.080	.023	
9.0	.168	.081	.023	.165	.080	.023	.159	.079	.022	.154	.077	.022	.150	.076	.022	
10.0	.159	.076	.021	.157	.076	.021	.152	.074	.021	.147	.073	.021	.143	.072	.021	

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	.215	.215	.215	.184	.184	.184	.126	.126	.126	.072	.072	.072	.023	.023	.023	
1.0	.197	.177	.160	.169	.152	.137	.115	.105	.095	.066	.061	.055	.021	.020	.018	
2.0	.183	.150	.121	.157	.129	.105	.108	.089	.073	.062	.052	.043	.020	.017	.014	
3.0	.172	.129	.094	.147	.111	.082	.101	.077	.057	.058	.045	.034	.019	.015	.011	
4.0	.162	.113	.075	.139	.097	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
5.0	.153	.100	.061	.132	.087	.053	.091	.061	.038	.053	.036	.022	.017	.012	.007	
6.0	.146	.090	.051	.125	.078	.044	.086	.055	.031	.050	.032	.019	.016	.011	.006	
7.0	.138	.082	.043	.119	.071	.037	.082	.050	.026	.048	.029	.016	.015	.010	.005	
8.0	.132	.076	.037	.114	.066	.032	.079	.046	.023	.046	.027	.014	.015	.009	.004	
9.0	.126	.070	.032	.109	.061	.028	.075	.043	.020	.044	.025	.012	.014	.008	.004	
10.0	.120	.065	.028	.104	.056	.025	.072	.040	.017	.042	.023	.010	.014	.008	.003	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:07 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: 92EL67054030/WH					TYPE:			WEIGHT: 1			
SPEC.:					DIM.: 230 x 145 x 85			SERIAL No.: 0			
MFR.: Elmark Industries JSC					SUR.: rectangular			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		22.5	23.7	22.7	23.9	24.0	17.6	18.8	17.8	19.0	19.1
	3H	22.8	23.9	23.0	24.1	24.3	17.6	18.7	17.9	18.9	19.1
	4H	22.8	23.9	23.1	24.1	24.3	17.6	18.6	17.9	18.8	19.1
	6H	22.8	23.8	23.1	24.1	24.3	17.6	18.5	17.9	18.8	19.1
	8H	22.8	23.8	23.2	24.0	24.3	17.5	18.5	17.9	18.8	19.0
	12H	22.8	23.7	23.1	24.0	24.3	17.5	18.4	17.9	18.7	19.0
4H	2H	22.3	23.3	22.6	23.6	23.8	17.8	18.8	18.1	19.1	19.3
	3H	22.6	23.5	23.0	23.8	24.1	17.9	18.8	18.2	19.0	19.3
	4H	22.7	23.6	23.1	23.9	24.2	17.9	18.7	18.3	19.0	19.3
	6H	22.8	23.5	23.2	23.9	24.2	17.9	18.7	18.3	19.0	19.4
	8H	22.8	23.5	23.2	23.9	24.2	18.0	18.6	18.4	19.0	19.3
	12H	22.8	23.4	23.3	23.8	24.2	18.0	18.6	18.4	18.9	19.3
8H	4H	22.6	23.3	23.0	23.7	24.0	17.9	18.6	18.3	19.0	19.3
	6H	22.8	23.3	23.2	23.7	24.1	18.0	18.6	18.5	19.0	19.4
	8H	22.8	23.3	23.3	23.7	24.2	18.1	18.6	18.5	19.0	19.4
	12H	22.8	23.2	23.3	23.7	24.2	18.1	18.5	18.6	19.0	19.4
12H	4H	22.6	23.2	23.0	23.6	24.0	17.9	18.5	18.3	18.9	19.3
	6H	22.7	23.2	23.2	23.6	24.1	18.0	18.5	18.5	18.9	19.4
	8H	22.8	23.2	23.3	23.6	24.1	18.1	18.5	18.6	19.0	19.4
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.9 / - 1.1					+ 1.6 / - 2.9					
1.5H	+ 1.4 / - 2.0					+ 1.8 / - 2.4					
2.0H	+ 3.2 / - 3.4					+ 2.7 / - 2.6					

CIE Pub.117, 3800 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.6)  
Area: 0.01479 m2

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:07 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: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

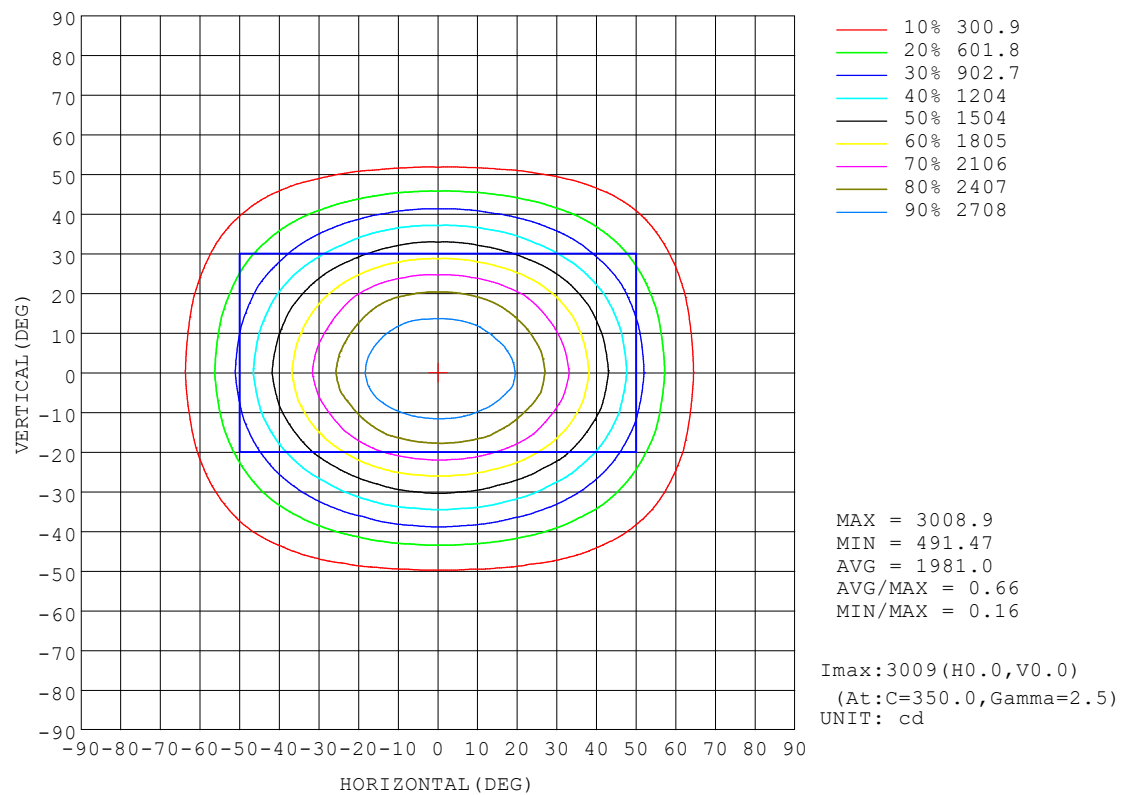
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	82	72	66	82	72	66	80	71	66	60
0.80	93	83	77	92	83	77	90	82	76	71
1.00	101	92	86	100	91	86	98	92	85	79
1.25	107	99	93	106	98	93	103	97	92	86
1.50	112	104	99	110	103	98	107	101	97	90
2.00	117	110	105	115	109	104	112	107	103	96
2.50	120	114	109	118	112	108	114	109	106	98
3.00	122	117	113	120	115	112	116	112	109	101
4.00	125	121	117	123	119	116	119	115	113	104
5.00	127	123	120	125	121	118	120	117	115	106
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: 07 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: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



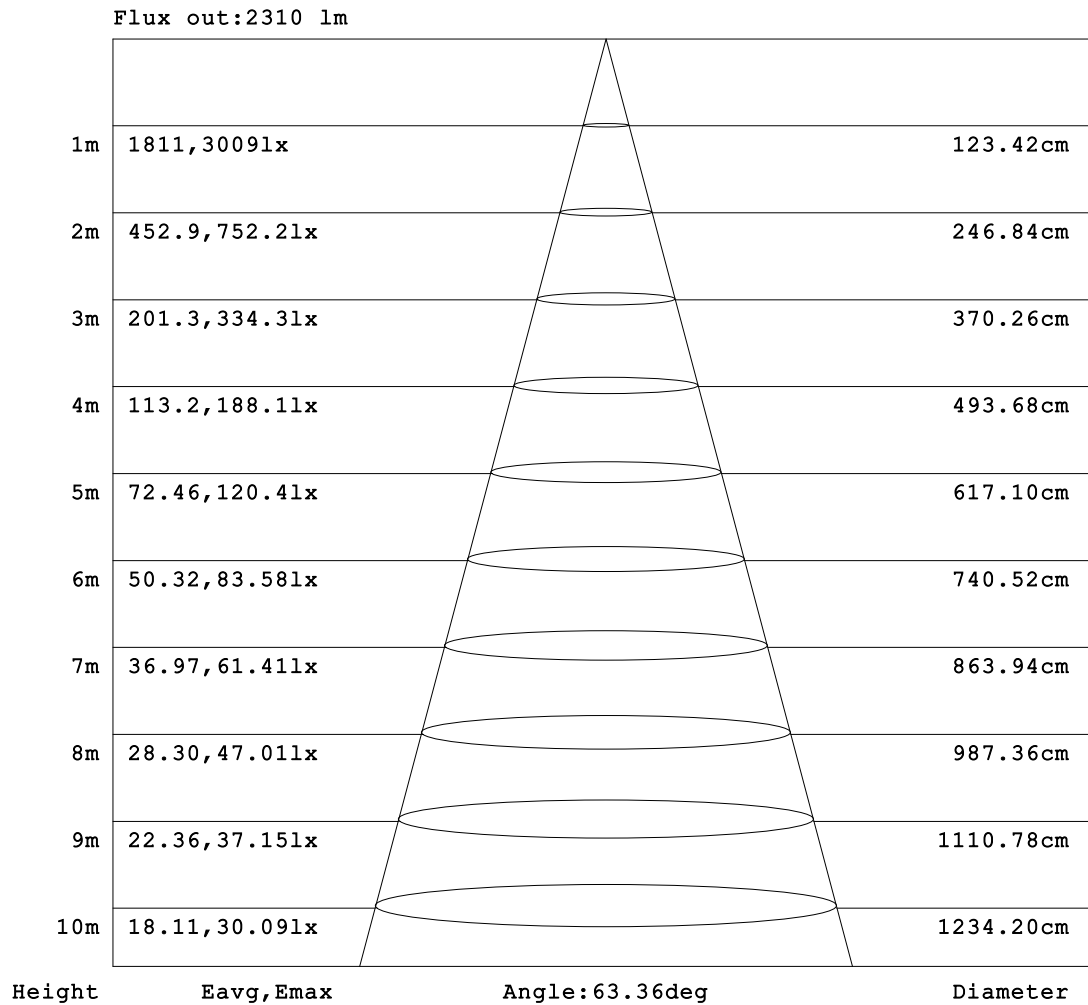
C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3°C  
 Operators:  
 Test Date:07 December 2022

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: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



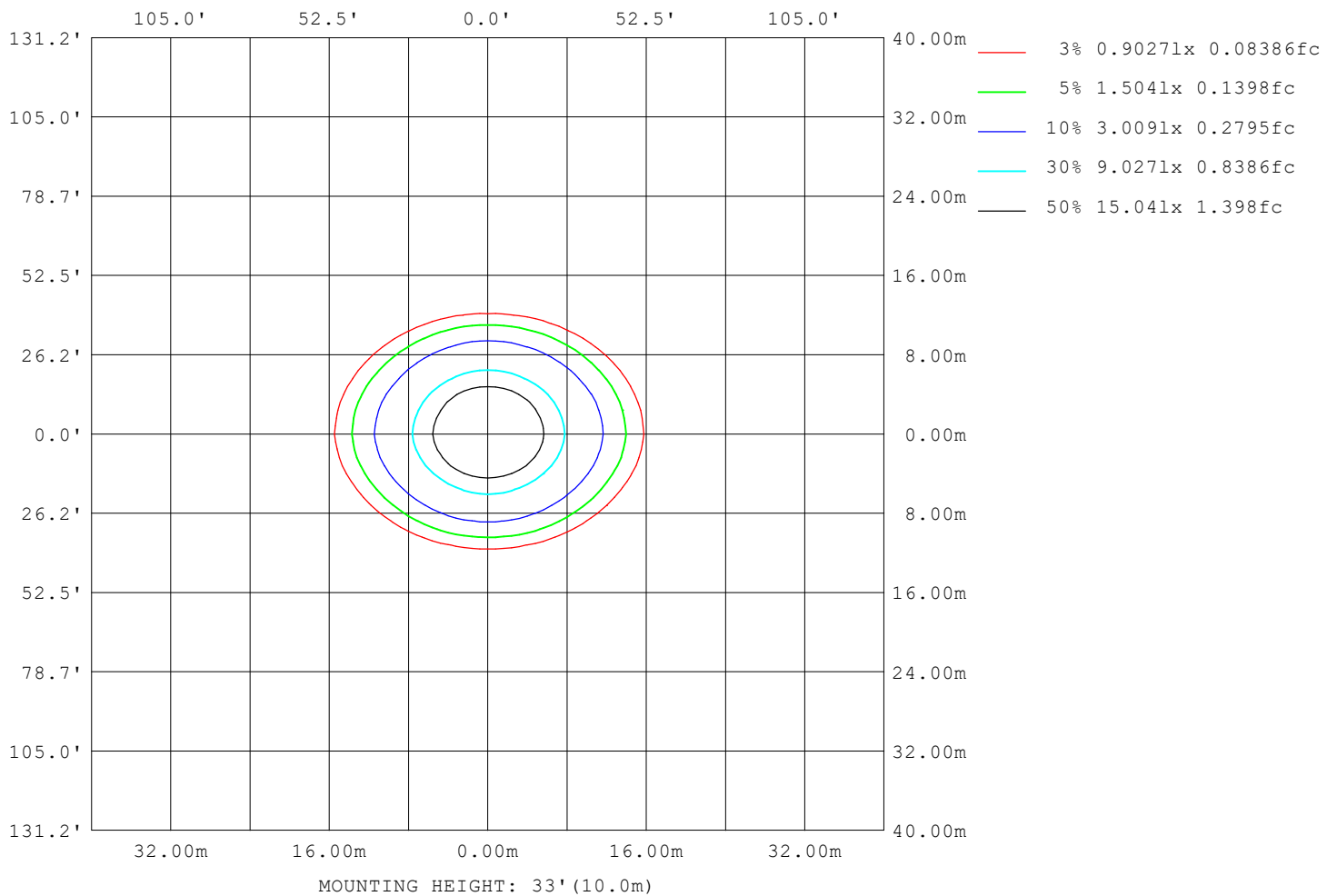
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3°C  
 Operators:  
 Test Date:07 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: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3°C  
 Operators:  
 Test Date: 07 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: 92EL67054030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

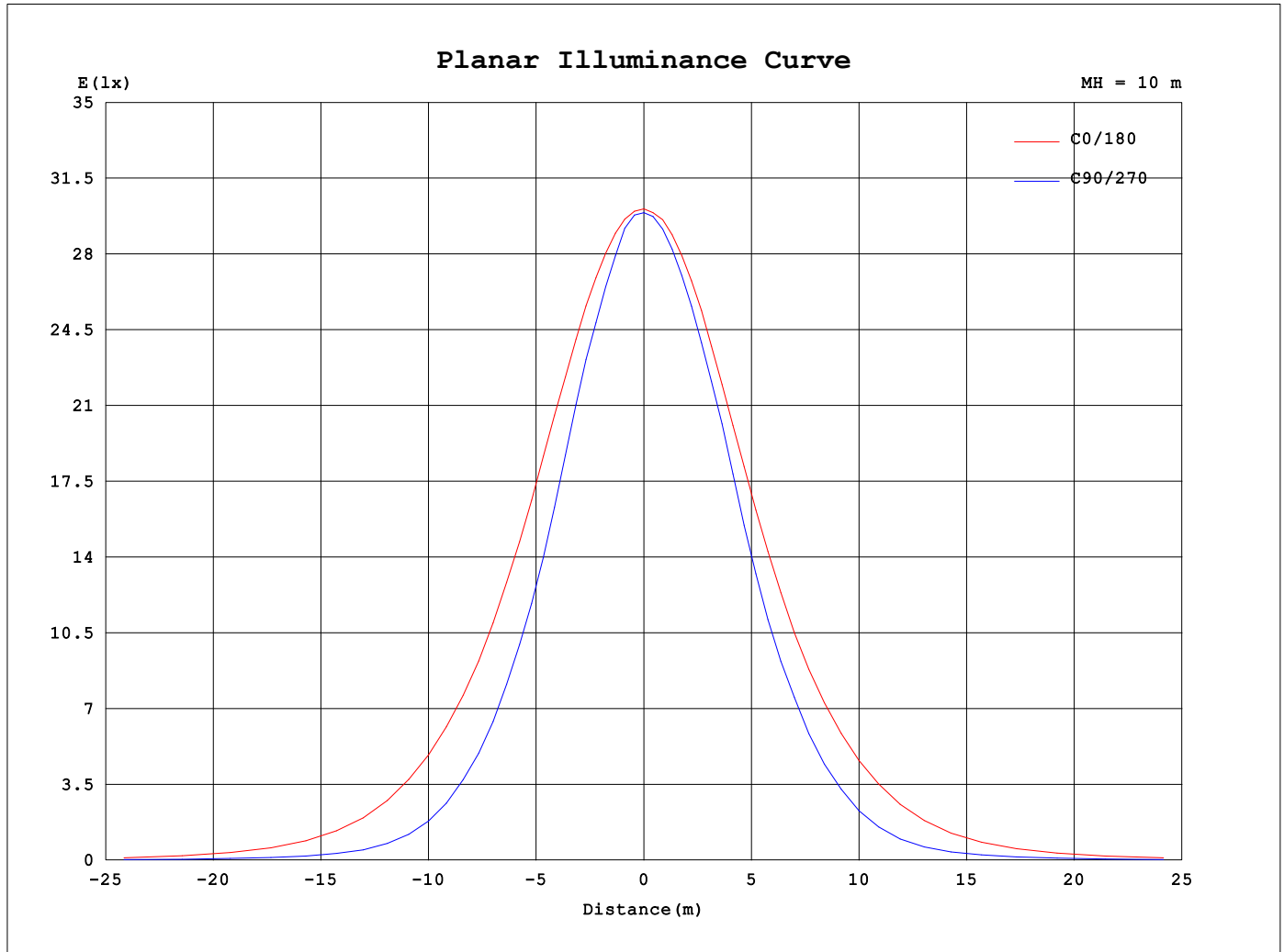
AvgL	cd/m2
L_0~180 (65) av	43466
L_0~180 (75) av	22959
L_0~180 (85) av	14463
L_90~270 (65) av	12145
L_90~270 (75) av	9257
L_90~270 (85) av	14903
L_45 (65) av	19279
L_45 (75) av	12797
L_45 (85) av	10367

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: MEDIUM  
Temperature:25.3°C  
Operators:  
Test Date:07 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: 07 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:

```

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:

```