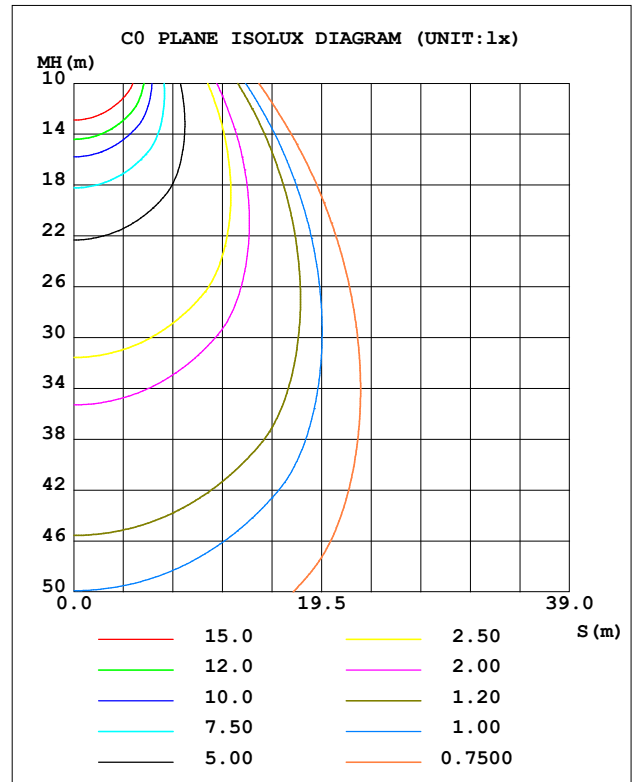
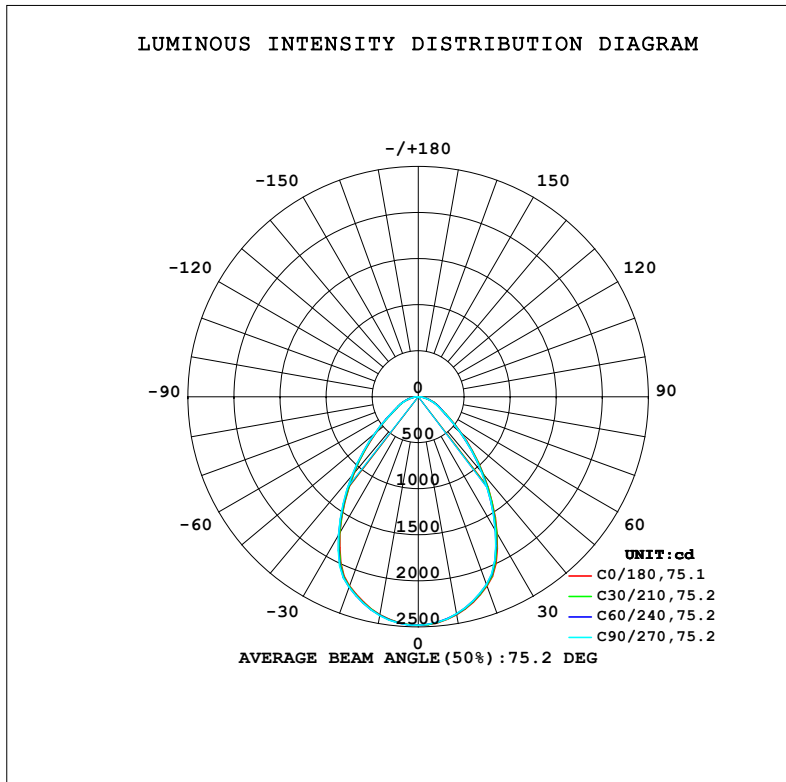


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL62284230/WH	I _{max} (cd)	2481	S/MH (C0/180)	1.07
NOMINAL POWER (W)	42	LOR (%)	107.4	S/MH (C90/270)	1.09
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4082.8	η UP, DN (C0-180)	0.0, 53.2
NOMINAL FLUX (lm)	3800	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 54.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	107.4	CIBSE SHR MAX	1.15



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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2404	2397	2394	2396	2402	2409	2413	2410	0- 10	233.1	233.1	5.71,6.13
20	2186	2175	2169	2172	2184	2196	2200	2198	10- 20	649.5	882.6	21.6,23.2
30	1712	1691	1677	1678	1702	1721	1733	1733	20- 30	907.7	1790	43.8,47.1
40	1107	1088	1074	1073	1091	1111	1125	1125	30- 40	871.4	2662	65.2,70
50	605.9	591.2	581.2	580.3	591.1	605.3	616.4	617.3	40- 50	642.3	3304	80.9,86.9
60	306.4	300.8	296.2	295.5	299.8	305.0	306.6	310.4	50- 60	385.2	3689	90.4,97.1
70	181.9	176.5	169.9	173.4	177.5	178.1	176.1	181.5	60- 70	235.3	3924	96.1,103
80	75.11	69.59	63.03	67.66	70.93	69.07	68.41	70.74	70- 80	127.3	4052	99.2,107
90	1.258	1.215	1.180	1.237	1.093	1.100	1.071	1.085	80- 90	30.97	4083	100,107
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): 3017.1 lm

%lum = 73.9%

%lamp = 79.4%

Conical surface Flux(130deg): 3819.3 lm

%lum = 93.5%

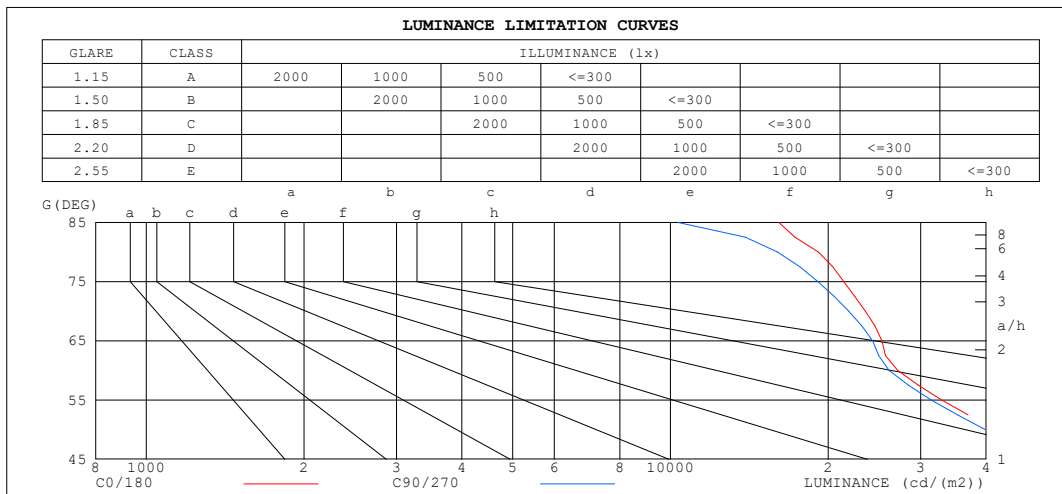
%lamp = 100.5%

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:

LUMINANCE LIMITATION CURVES

NAME: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16106	10336
80	19145	15986
75	21425	19096
70	23534	21875
65	25316	24310
60	27123	26094
55	32908	31427
50	41717	39826
45	52243	50239

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:

```

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: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	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	.263	.150	.047	.256	.146	.046	.242	.139	.044	.229	.132	.042	.217	.126	.041	
2.0	.252	.138	.042	.245	.135	.042	.233	.130	.040	.222	.125	.039	.212	.120	.038	
3.0	.237	.126	.038	.231	.124	.037	.221	.120	.036	.211	.116	.035	.202	.112	.035	
4.0	.222	.116	.034	.217	.114	.034	.208	.110	.033	.200	.107	.032	.192	.104	.032	
5.0	.209	.106	.031	.204	.105	.031	.196	.102	.030	.189	.100	.030	.182	.097	.029	
6.0	.196	.098	.028	.192	.097	.028	.185	.095	.028	.178	.093	.027	.172	.091	.027	
7.0	.185	.091	.026	.181	.090	.026	.175	.088	.025	.169	.087	.025	.163	.085	.025	
8.0	.175	.085	.024	.172	.084	.024	.166	.083	.024	.160	.081	.023	.155	.080	.023	
9.0	.165	.080	.022	.162	.079	.022	.157	.078	.022	.152	.076	.022	.148	.075	.022	
10.0	.157	.075	.021	.154	.074	.021	.150	.073	.021	.145	.072	.020	.141	.071	.020	

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	.205	.205	.205	.175	.175	.175	.119	.119	.119	.069	.069	.069	.022	.022	.022	
1.0	.189	.168	.150	.162	.145	.129	.111	.099	.089	.064	.058	.052	.020	.019	.017	
2.0	.177	.142	.113	.151	.122	.098	.104	.085	.068	.060	.049	.040	.019	.016	.013	
3.0	.166	.122	.087	.143	.106	.076	.098	.073	.053	.057	.043	.031	.018	.014	.010	
4.0	.157	.107	.069	.135	.093	.060	.093	.065	.042	.054	.038	.025	.017	.012	.008	
5.0	.149	.096	.056	.128	.083	.049	.088	.058	.035	.051	.034	.021	.016	.011	.007	
6.0	.142	.086	.047	.122	.075	.041	.084	.052	.029	.049	.031	.017	.016	.010	.006	
7.0	.135	.079	.040	.116	.068	.035	.080	.048	.024	.046	.028	.015	.015	.009	.005	
8.0	.128	.072	.034	.110	.063	.030	.076	.044	.021	.044	.026	.013	.014	.009	.004	
9.0	.122	.067	.030	.105	.058	.026	.073	.041	.018	.043	.024	.011	.014	.008	.004	
10.0	.117	.062	.026	.101	.054	.023	.070	.038	.016	.041	.023	.010	.013	.007	.003	

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: 92EL62284230/WH					TYPE:					WEIGHT: 1				
SPEC.:					DIM.: F 220 x 120					SERIAL No.: 0				
MFR.: Elmark Industries JSC					SUR.: Round					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	19.3	20.6	19.6	20.8	21.0	19.1	20.4	19.4	20.6	20.8				
3H	20.1	21.3	20.4	21.5	21.7	19.9	21.1	20.2	21.3	21.5				
4H	20.5	21.6	20.8	21.8	22.1	20.2	21.3	20.5	21.6	21.8				
6H	20.7	21.8	21.1	22.0	22.3	20.4	21.4	20.7	21.7	22.0				
8H	20.8	21.8	21.2	22.1	22.4	20.4	21.4	20.8	21.7	22.0				
12H	20.9	21.8	21.2	22.1	22.4	20.4	21.4	20.8	21.7	22.0				
4H 2H	19.6	20.7	19.9	20.9	21.1	19.4	20.5	19.7	20.8	21.0				
3H	20.6	21.6	20.9	21.8	22.1	20.4	21.3	20.7	21.6	21.9				
4H	21.1	21.9	21.4	22.3	22.6	20.8	21.7	21.2	22.0	22.3				
6H	21.5	22.2	21.8	22.6	22.9	21.1	21.9	21.5	22.2	22.6				
8H	21.6	22.3	22.0	22.7	23.0	21.2	21.9	21.6	22.3	22.6				
12H	21.7	22.3	22.1	22.7	23.1	21.2	21.9	21.6	22.2	22.6				
8H 4H	21.2	21.9	21.6	22.3	22.7	21.0	21.7	21.4	22.0	22.4				
6H	21.7	22.3	22.1	22.7	23.1	21.4	22.0	21.8	22.4	22.8				
8H	21.9	22.4	22.4	22.9	23.3	21.5	22.0	22.0	22.4	22.9				
12H	22.1	22.5	22.5	23.0	23.4	21.6	22.0	22.0	22.4	22.9				
12H 4H	21.2	21.8	21.6	22.2	22.6	20.9	21.6	21.4	22.0	22.4				
6H	21.7	22.3	22.2	22.7	23.1	21.4	21.9	21.8	22.3	22.8				
8H	22.0	22.4	22.4	22.9	23.3	21.6	22.0	22.0	22.4	22.9				
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H	+ 0.5 / - 0.6					+ 0.5 / - 0.7								
1.5H	+ 0.5 / - 0.5					+ 0.5 / - 0.5								
2.0H	+ 1.2 / - 0.8					+ 1.2 / - 0.8								

CIE Pub.117, 3800 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.6)
Area: 0.0226865 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: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

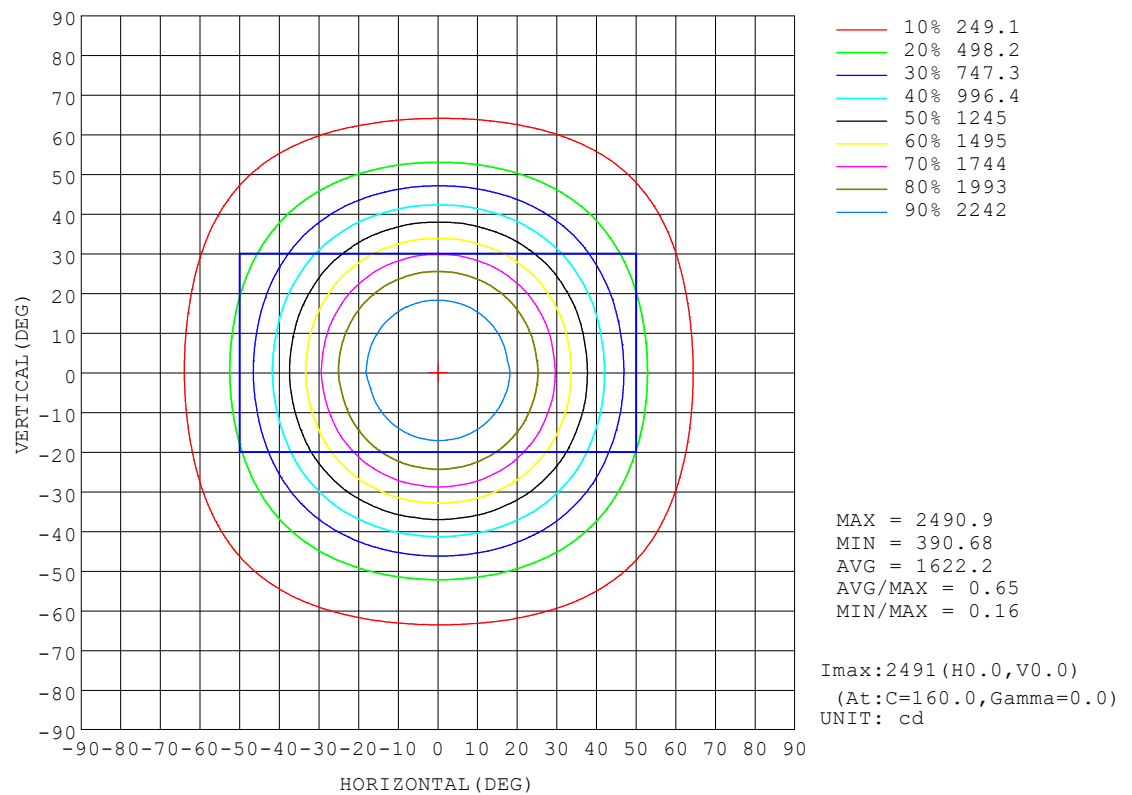
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	75	65	59	74	65	59	73	64	59	53
0.80	85	75	69	84	75	69	83	74	68	62
1.00	93	84	77	92	83	77	90	84	77	70
1.25	99	91	85	98	90	84	95	88	83	77
1.50	104	95	90	102	95	89	99	93	88	82
2.00	109	102	97	107	101	96	104	99	94	87
2.50	112	106	101	110	104	100	106	102	98	90
3.00	115	109	105	113	108	104	109	105	101	93
4.00	118	113	110	116	112	108	111	108	105	97
5.00	120	116	113	117	114	111	113	110	108	99
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: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

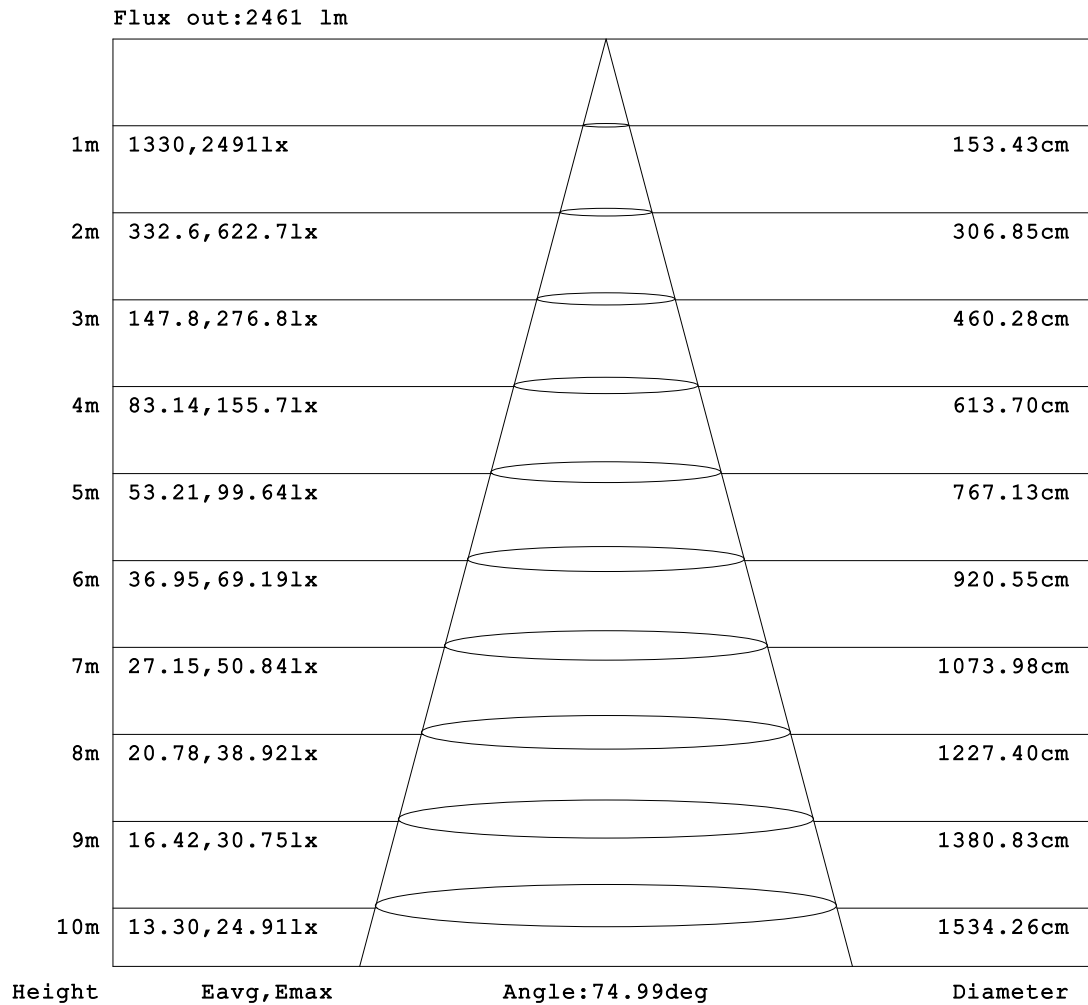


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:
 Test Date:05 December 2022

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: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



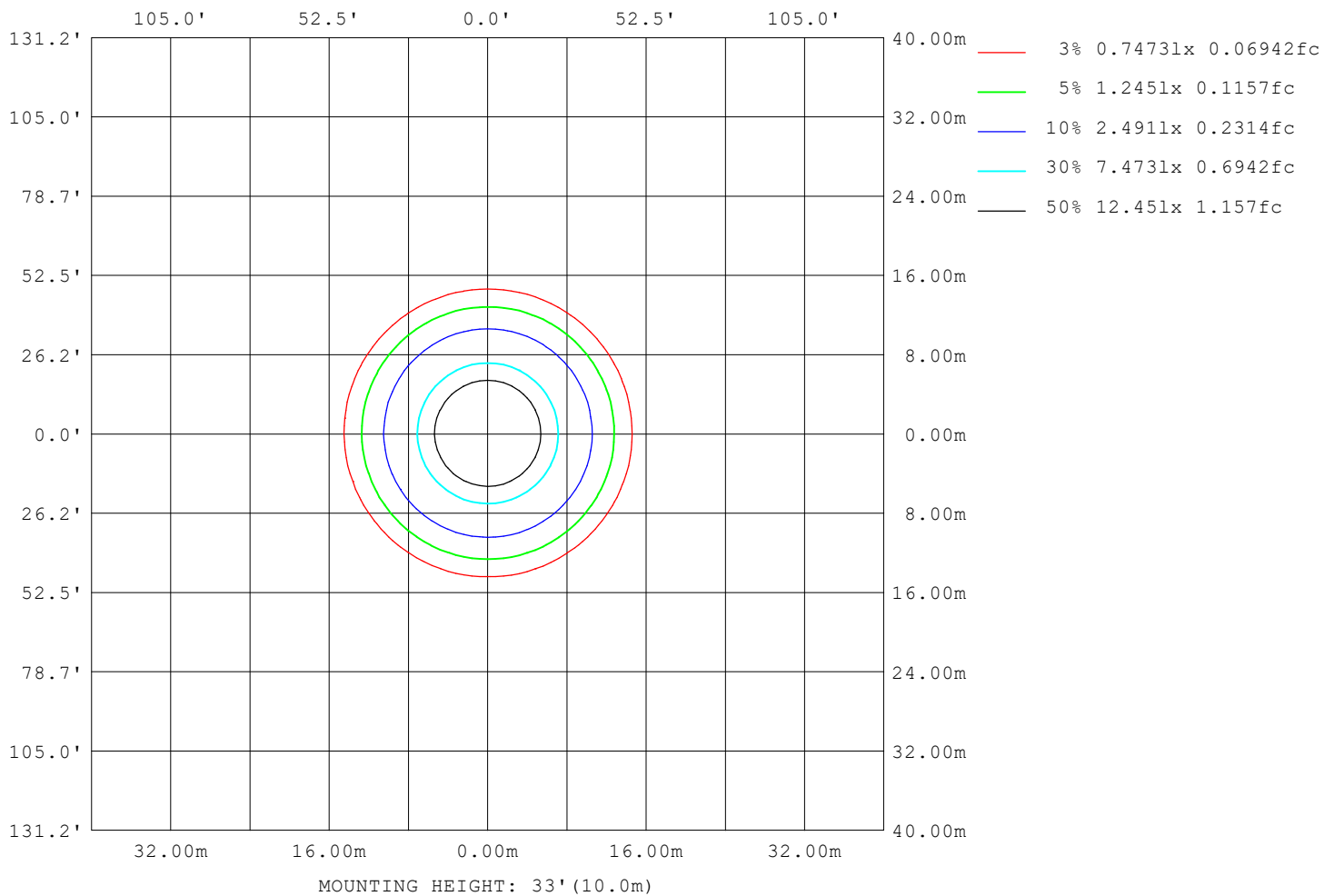
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	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: 92EL62284230/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

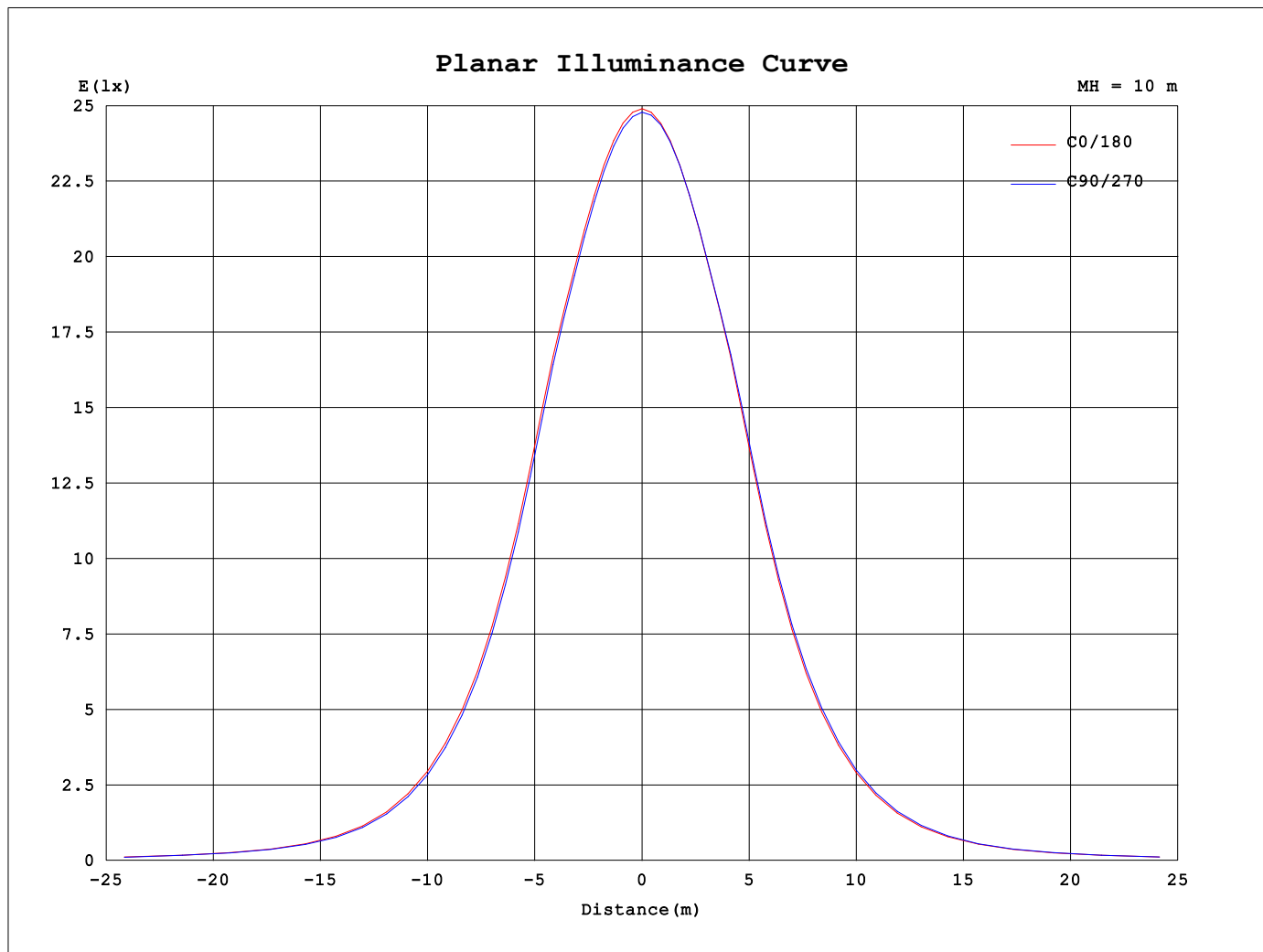
AvgL	cd/m2
L_0~180 (65) av	24978
L_0~180 (75) av	21014
L_0~180 (85) av	15214
L_90~270 (65) av	24647
L_90~270 (75) av	19586
L_90~270 (85) av	11680
L_45 (65) av	24910
L_45 (75) av	20356
L_45 (85) av	13069

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

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:

```