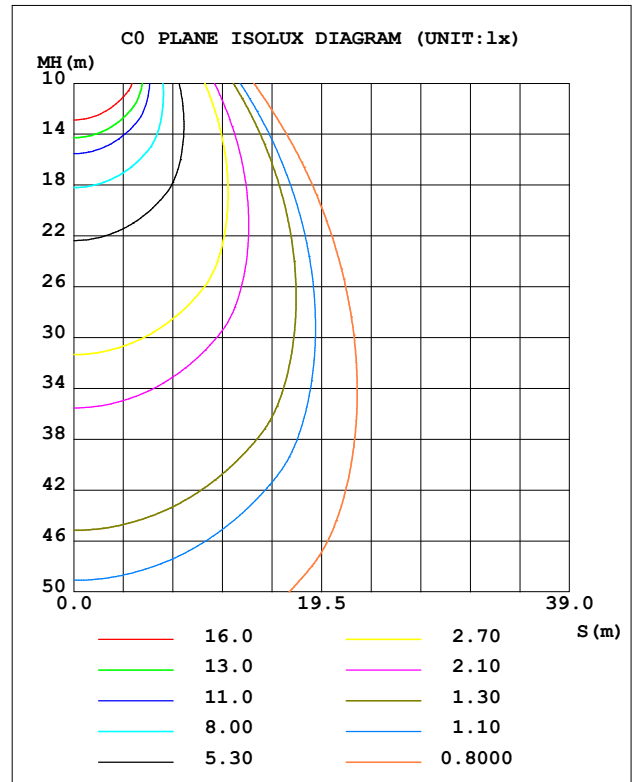
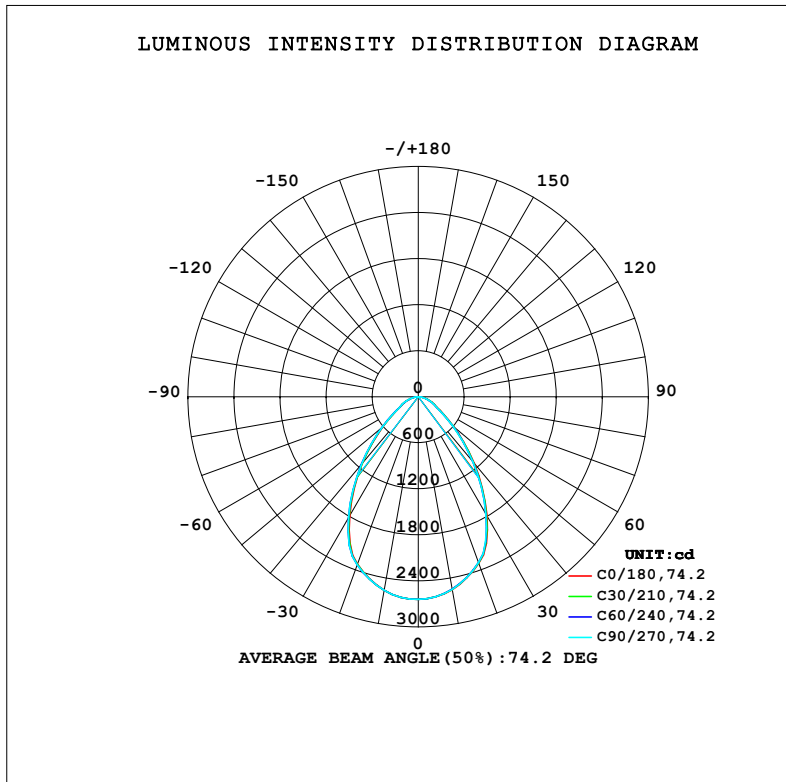


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 92EL62284240/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	92EL62284240/WH	Imax (cd)	2641	S/MH (C0/180)	1.07
NOMINAL POWER (W)	42	LOR (%)	110.5	S/MH (C90/270)	1.08
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4199.8	η UP, DN (C0-180)	0.0, 54.7
NOMINAL FLUX (lm)	3800	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 55.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	110.5	CIBSE SHR MAX	1.10



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 06 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	2552	2546	2547	2552	2561	2563	2563	2557	0- 10	248.0	248.0	5.91,6.53
20	2309	2301	2301	2308	2322	2328	2329	2321	10- 20	689.4	937.4	22.3,24.7
30	1794	1774	1766	1768	1791	1812	1822	1815	20- 30	958.6	1896	45.1,49.9
40	1135	1119	1111	1115	1135	1152	1160	1155	30- 40	909.7	2806	66.8,73.8
50	596.5	583.3	577.2	579.9	592.9	606.5	613.8	610.4	40- 50	653.3	3459	82.4,91
60	287.6	280.4	276.4	278.2	284.8	290.6	292.9	293.7	50- 60	374.1	3833	91.3,101
70	166.7	162.1	157.2	162.4	167.6	168.1	165.1	167.9	60- 70	220.0	4053	96.5,107
80	67.28	63.13	58.85	63.97	67.26	64.50	63.01	63.82	70- 80	118.1	4171	99.3,110
90	1.172	1.159	1.128	1.169	1.044	1.043	1.016	1.032	80- 90	28.75	4200	100,111
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): 3170.3 lm

%lum = 75.5%

%lamp = 83.4%

Conical surface Flux(130deg): 3955 lm

%lum = 94.2%

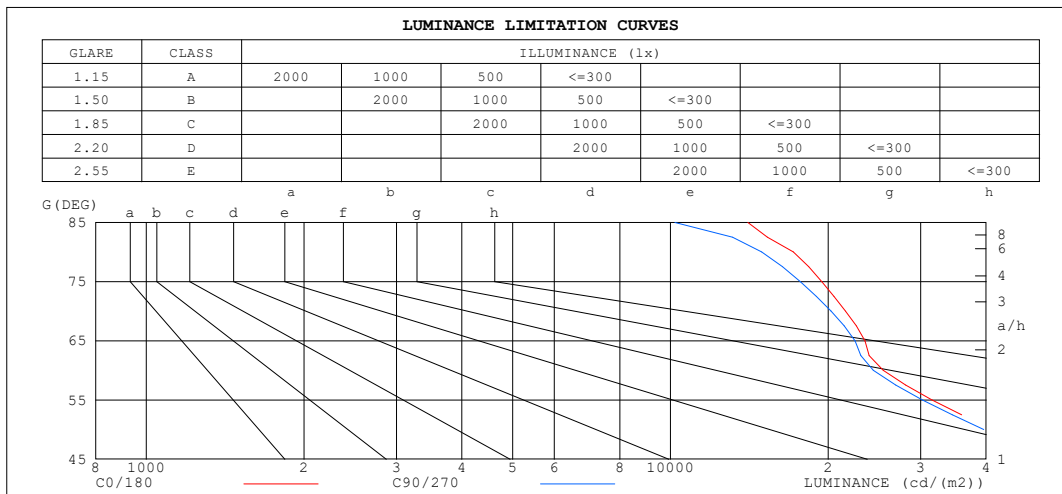
%lamp = 104.1%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:06 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: 92EL62284240/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	14055	10193
80	17142	14930
75	19423	17680
70	21565	20242
65	23483	22487
60	25446	24355
55	31555	30249
50	41055	39558
45	52679	51152

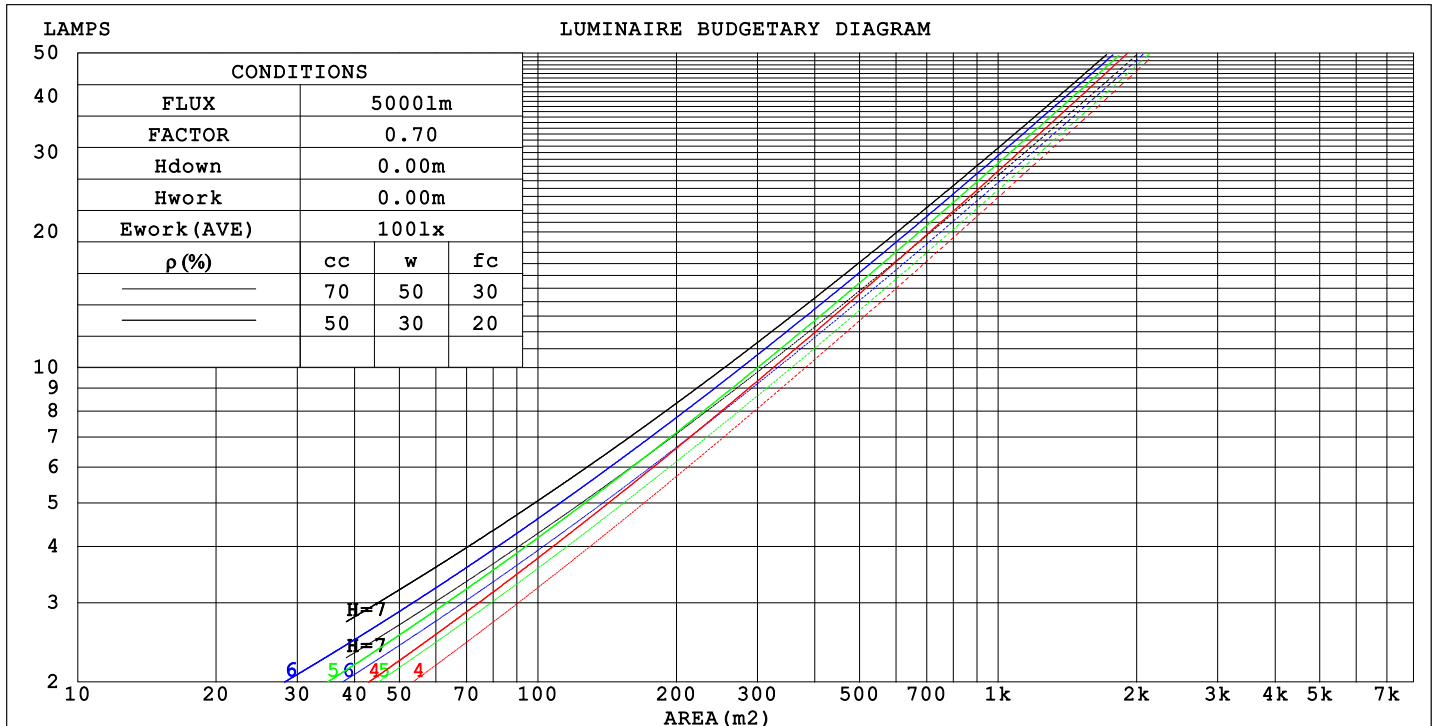
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 06 December 2022

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: 92EL62284240/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															



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:06 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: 92EL62284240/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	.265	.151	.048	.257	.147	.047	.243	.139	.045	.230	.133	.043	.218	.126	.041	
2.0	.254	.139	.043	.247	.136	.042	.235	.131	.041	.224	.125	.039	.213	.121	.038	
3.0	.239	.127	.038	.234	.125	.038	.223	.121	.037	.213	.117	.036	.204	.113	.035	
4.0	.225	.117	.034	.220	.115	.034	.211	.112	.033	.202	.108	.033	.194	.105	.032	
5.0	.212	.108	.031	.207	.106	.031	.199	.104	.030	.191	.101	.030	.184	.098	.030	
6.0	.199	.100	.029	.195	.099	.028	.188	.096	.028	.181	.094	.028	.175	.092	.027	
7.0	.188	.093	.026	.184	.092	.026	.178	.090	.026	.172	.088	.026	.166	.086	.025	
8.0	.178	.087	.024	.174	.086	.024	.169	.084	.024	.163	.083	.024	.158	.081	.024	
9.0	.168	.081	.023	.165	.081	.023	.160	.079	.022	.155	.078	.022	.150	.076	.022	
10.0	.160	.077	.021	.157	.076	.021	.152	.075	.021	.148	.073	.021	.144	.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	.211	.211	.211	.180	.180	.180	.123	.123	.123	.071	.071	.071	.023	.023	.023	
1.0	.194	.173	.155	.166	.149	.133	.113	.102	.092	.065	.059	.054	.021	.019	.017	
2.0	.181	.146	.117	.155	.126	.101	.106	.087	.070	.061	.051	.041	.020	.016	.013	
3.0	.170	.126	.090	.146	.109	.078	.100	.075	.055	.058	.044	.032	.019	.014	.011	
4.0	.161	.110	.072	.138	.095	.063	.095	.067	.044	.055	.039	.026	.018	.013	.009	
5.0	.152	.098	.059	.131	.085	.051	.090	.059	.036	.052	.035	.021	.017	.011	.007	
6.0	.145	.089	.049	.124	.077	.042	.086	.054	.030	.050	.032	.018	.016	.010	.006	
7.0	.138	.081	.041	.118	.070	.036	.082	.049	.025	.048	.029	.015	.015	.009	.005	
8.0	.131	.074	.035	.113	.064	.031	.078	.045	.022	.045	.027	.013	.015	.009	.004	
9.0	.125	.069	.031	.108	.060	.027	.075	.042	.019	.043	.025	.011	.014	.008	.004	
10.0	.120	.064	.027	.103	.056	.024	.071	.039	.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:06 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: 92EL62284240/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	19.1	20.4	19.4	20.5	20.7	19.0	20.2	19.2	20.4	20.6
	3H	19.8	21.0	20.1	21.2	21.4	19.6	20.8	19.9	21.0	21.2
	4H	20.1	21.2	20.4	21.4	21.7	19.9	21.0	20.2	21.2	21.4
	6H	20.3	21.4	20.7	21.6	21.9	20.0	21.1	20.4	21.3	21.6
	8H	20.4	21.4	20.7	21.7	21.9	20.1	21.1	20.4	21.3	21.6
	12H	20.4	21.4	20.8	21.7	21.9	20.1	21.0	20.4	21.3	21.6
4H	2H	19.3	20.4	19.6	20.6	20.9	19.2	20.3	19.5	20.5	20.7
	3H	20.2	21.2	20.5	21.4	21.7	20.0	21.0	20.4	21.3	21.5
	4H	20.6	21.5	21.0	21.8	22.1	20.4	21.3	20.8	21.6	21.9
	6H	21.0	21.7	21.4	22.1	22.4	20.7	21.4	21.1	21.8	22.1
	8H	21.1	21.8	21.5	22.1	22.5	20.8	21.5	21.2	21.8	22.2
	12H	21.1	21.8	21.6	22.2	22.6	20.8	21.4	21.2	21.8	22.2
8H	4H	20.7	21.4	21.1	21.8	22.2	20.5	21.2	20.9	21.6	22.0
	6H	21.2	21.8	21.6	22.2	22.6	20.9	21.5	21.3	21.9	22.3
	8H	21.4	21.9	21.8	22.3	22.8	21.0	21.6	21.5	22.0	22.4
	12H	21.5	21.9	22.0	22.4	22.8	21.1	21.5	21.6	22.0	22.5
12H	4H	20.7	21.4	21.1	21.7	22.1	20.5	21.2	20.9	21.5	21.9
	6H	21.2	21.7	21.7	22.1	22.6	20.9	21.4	21.4	21.9	22.3
	8H	21.4	21.9	21.9	22.3	22.8	21.1	21.5	21.6	22.0	22.4
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.6 / - 0.8					+ 0.6 / - 0.8				
1.5H		+ 0.6 / - 0.6					+ 0.7 / - 0.7				
2.0H		+ 1.4 / - 0.9					+ 1.5 / - 1.0				

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:06 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: 92EL62284240/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

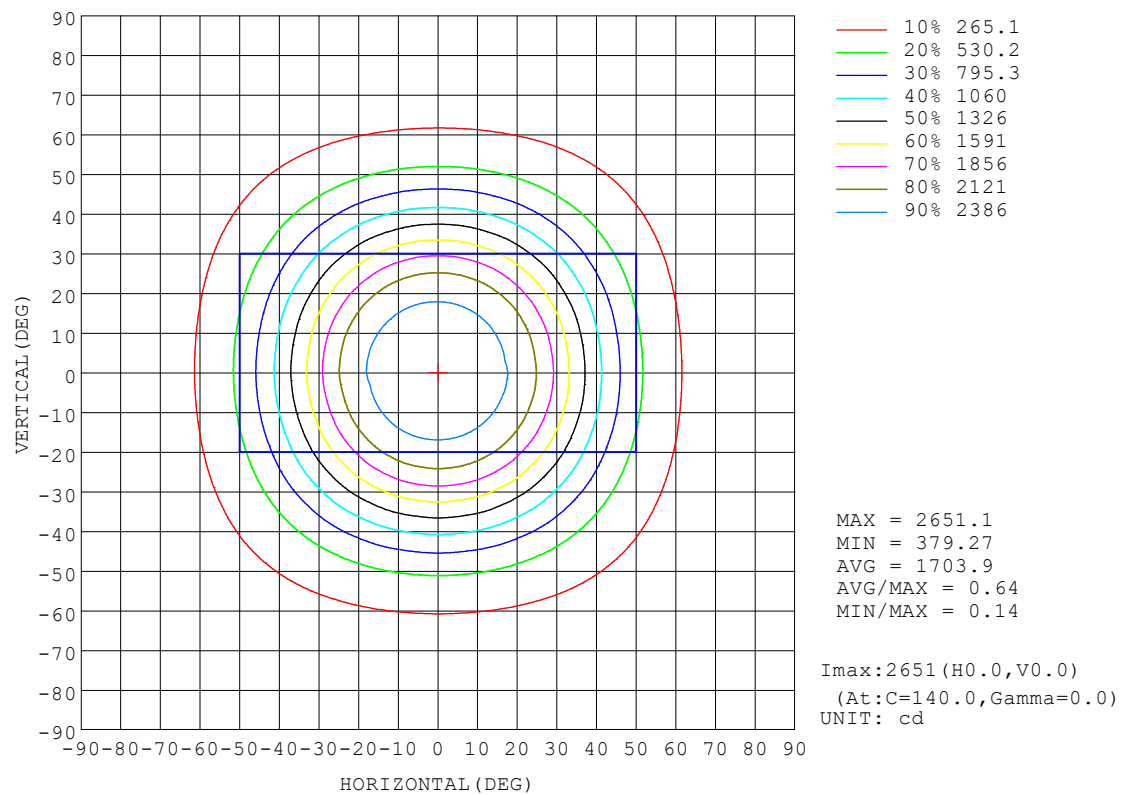
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	78	68	62	78	68	62	76	67	62	56
0.80	89	79	72	88	78	72	86	77	72	66
1.00	96	87	81	95	86	81	93	87	80	74
1.25	103	94	88	101	93	88	99	92	87	81
1.50	107	99	93	106	98	93	103	96	92	85
2.00	113	106	100	111	105	100	107	102	98	91
2.50	116	109	104	114	108	103	110	105	101	94
3.00	118	113	108	116	111	107	112	108	105	97
4.00	122	117	113	119	115	112	115	112	109	100
5.00	124	120	116	121	118	115	116	114	111	102
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: 06 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: 92EL62284240/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

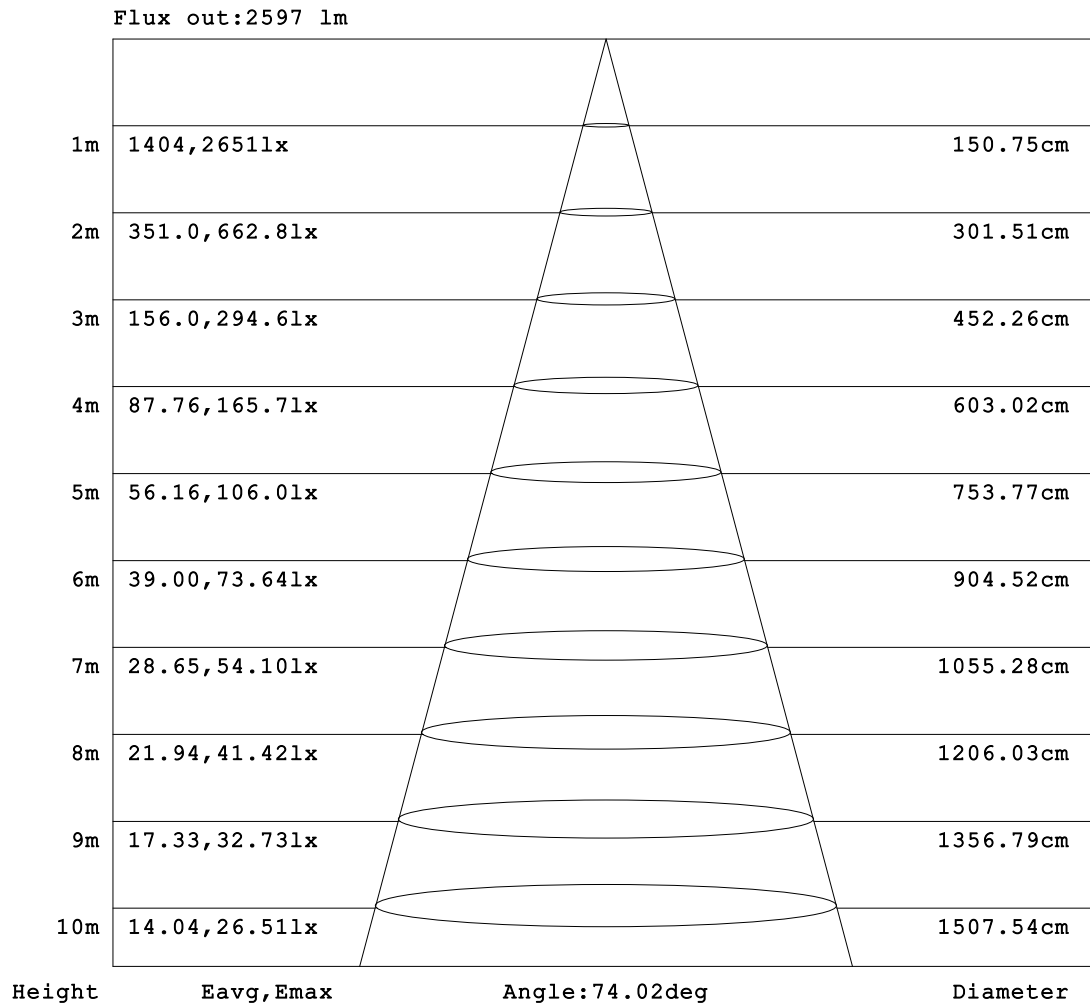


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:
 Test Date:06 December 2022

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: 92EL62284240/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



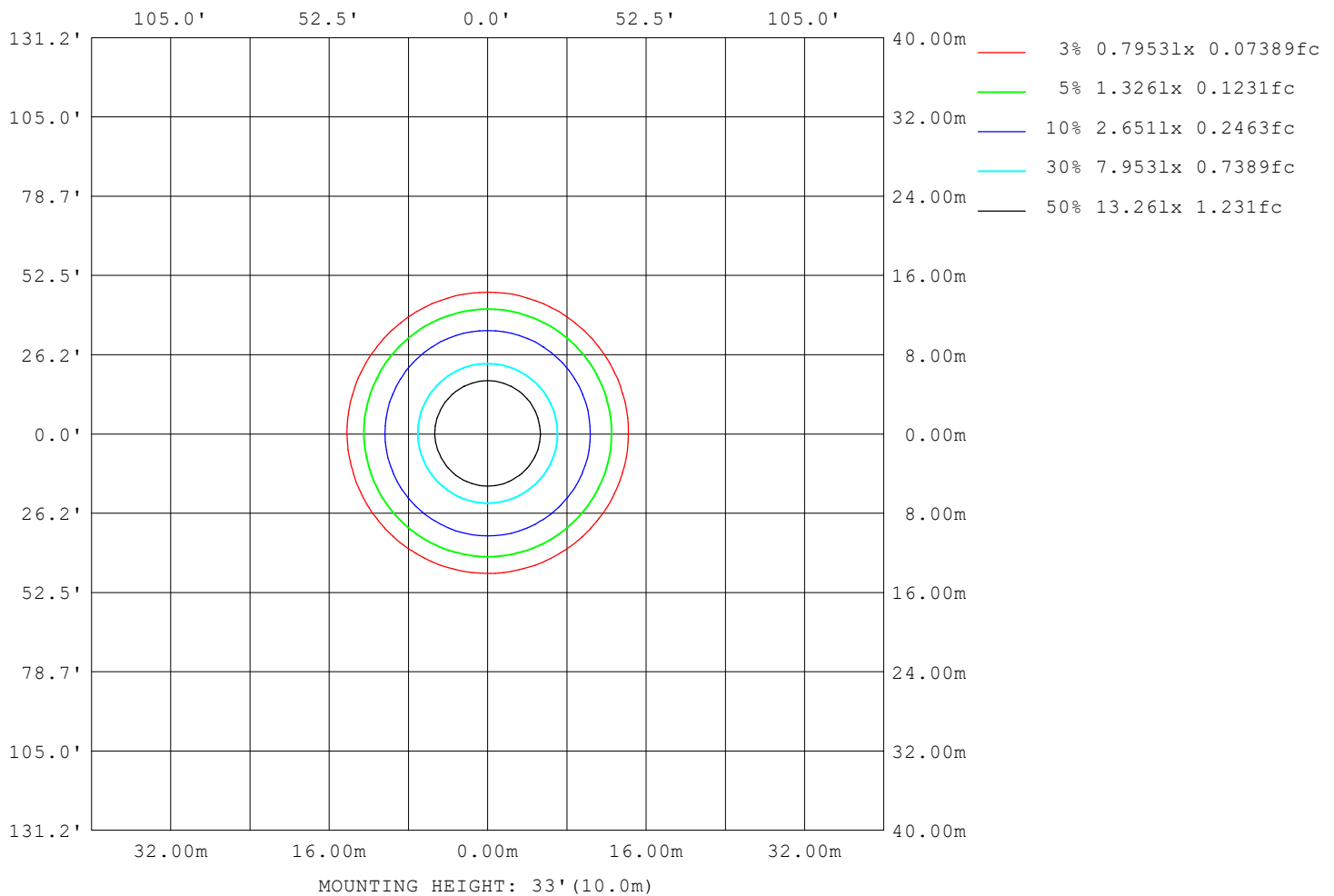
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:
 Test Date:06 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: 92EL62284240/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: 06 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: 92EL62284240/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 220 x 120	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

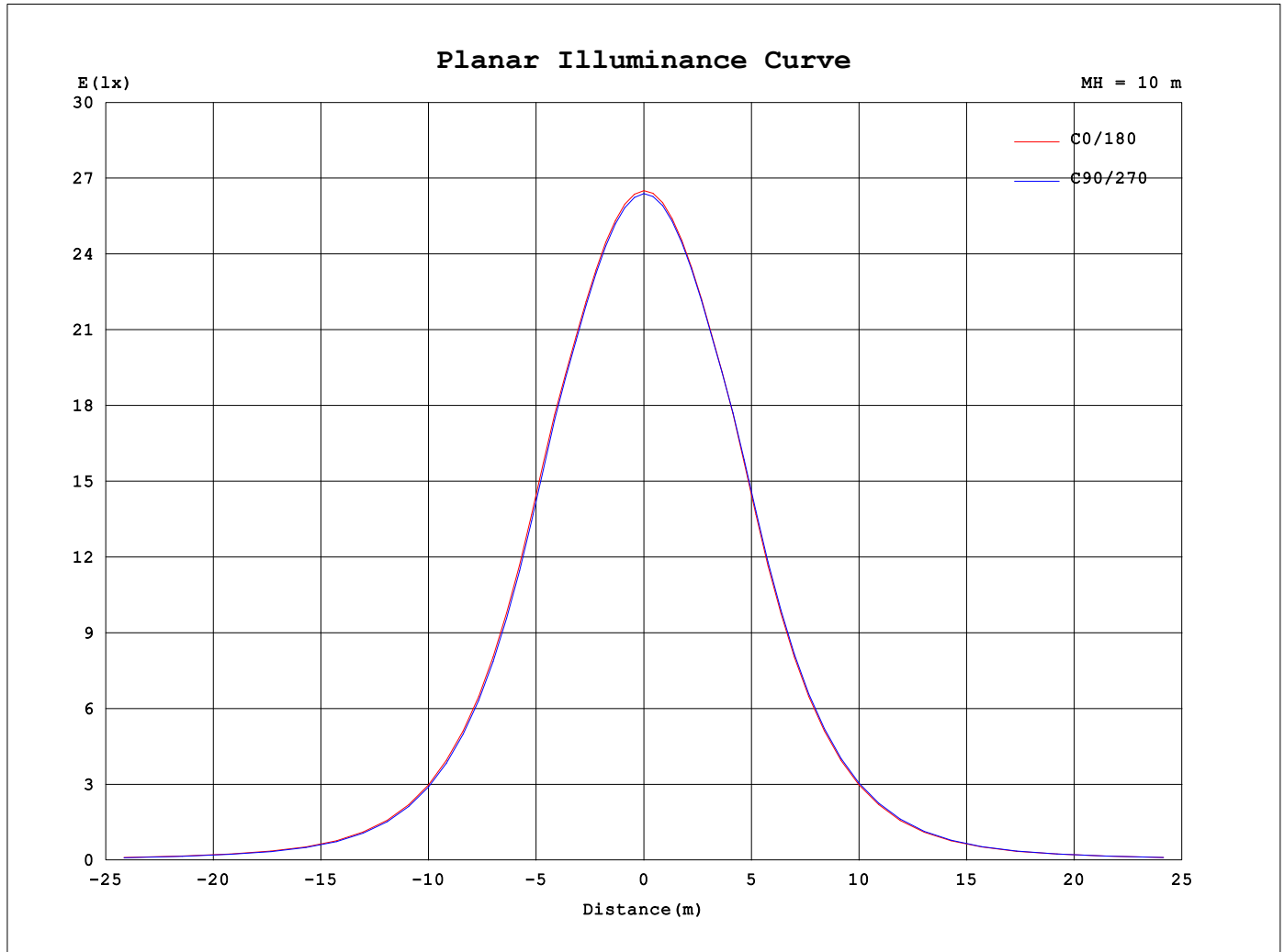
AvgL	cd/m2
L_0~180 (65) av	23340
L_0~180 (75) av	19434
L_0~180 (85) av	13899
L_90~270 (65) av	23008
L_90~270 (75) av	18196
L_90~270 (85) av	11004
L_45 (65) av	23230
L_45 (75) av	18851
L_45 (85) av	12144

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:06 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: 06 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:

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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:

```