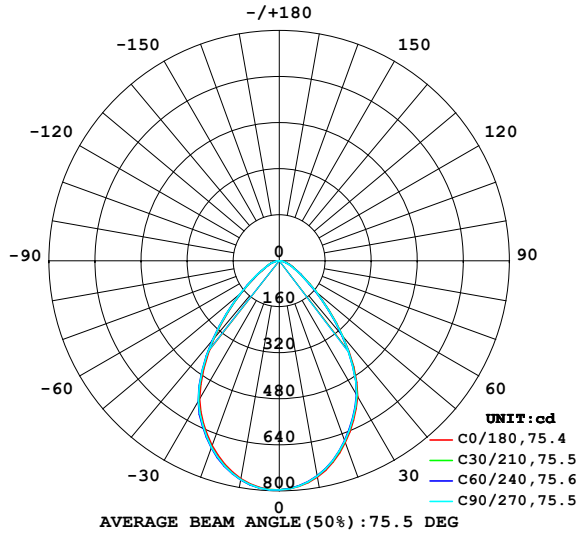


LUMINAIRE PHOTOMETRIC TEST REPORT

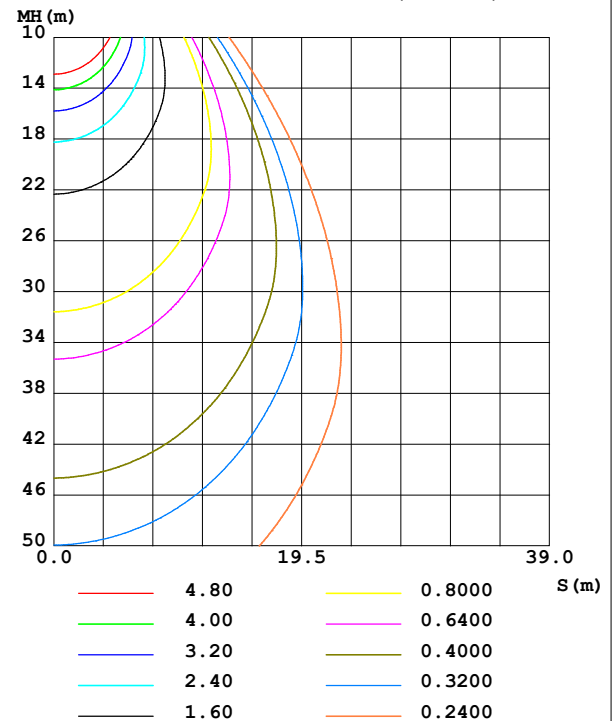
NAME: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL62281340/WH	Imax (cd)	796.8	S/MH (C0/180)	1.07
NOMINAL POWER (W)	12	LOR (%)	122.1	S/MH (C90/270)	1.09
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1221.1	η UP, DN (C0-180)	0.0, 60.1
NOMINAL FLUX (lm)	1000	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 62.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	122.1	CIBSE SHR MAX	1.15

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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	763.2	759.4	759.5	762.9	768.7	772.8	772.4	767.9	0- 10	74.57	74.57	6.11,7.46
20	672.3	666.1	666.2	672.0	683.0	691.2	689.8	681.4	10- 20	204.4	279.0	22.8,27.9
30	544.8	538.0	538.0	543.1	553.7	562.9	562.6	554.4	20- 30	283.6	562.6	46.1,56.3
40	345.7	340.9	340.8	344.8	353.7	361.6	360.9	353.5	30- 40	282.6	845.2	69.2,84.5
50	165.9	164.8	165.7	165.7	169.3	174.3	174.4	170.3	40- 50	194.5	1040	85.1,104
60	73.12	71.82	70.24	70.08	71.27	73.84	74.73	73.93	50- 60	101.4	1141	93.4,114
70	37.96	35.15	32.64	35.53	37.30	36.99	35.70	37.83	60- 70	51.47	1193	97.7,119
80	14.10	10.20	8.171	10.70	12.87	12.10	10.59	12.46	70- 80	24.42	1217	99.7,122
90	0.2499	0.2449	0.2369	0.2451	0.2254	0.2123	0.2069	0.2124	80- 90	4.157	1221	100,122
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): 955.8 lm

%lum = 78.3%

%lamp = 95.6%

Conical surface Flux(130deg): 1170.5 lm

%lum = 95.9%

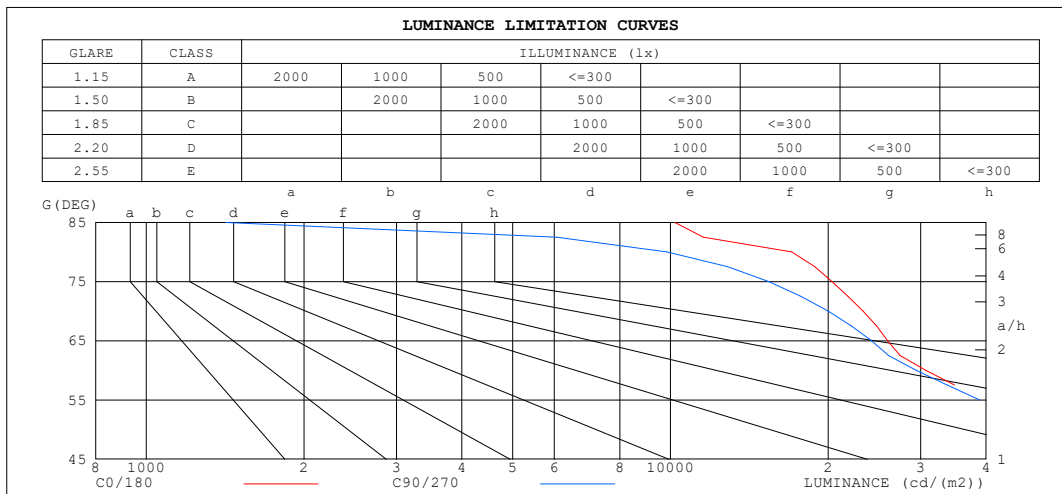
%lamp = 117.0%

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:

LUMINANCE LIMITATION CURVES

NAME: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	10199	1419
80	17035	9849
75	20333	15409
70	23292	19976
65	25975	24217
60	30686	29403
55	40056	38929
50	54145	53941
45	73180	71787

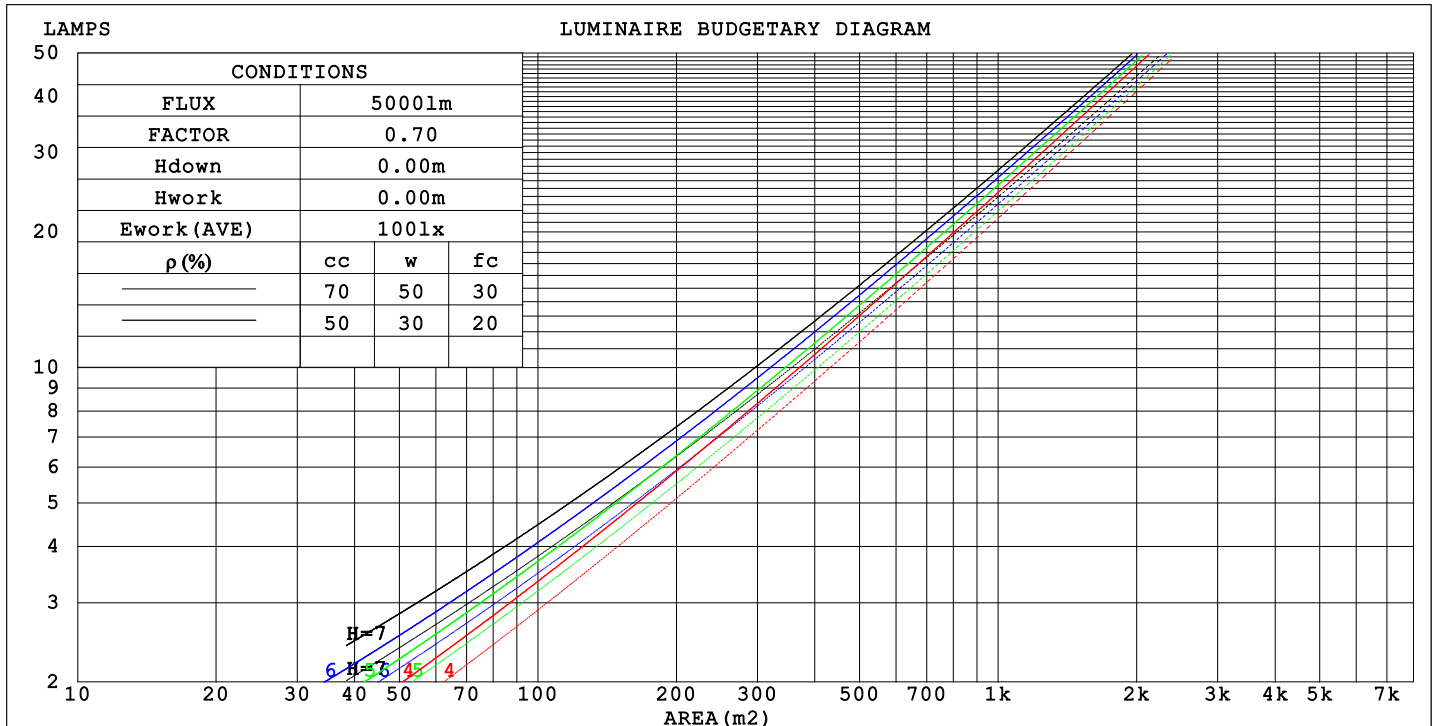
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 07 December 2022

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	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: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:

WEC AND CCEC

NAME: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	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	.279	.159	.050	.271	.154	.049	.255	.146	.047	.241	.139	.045	.227	.132	.042	
2.0	.270	.148	.045	.263	.145	.045	.249	.139	.043	.237	.133	.042	.225	.127	.040	
3.0	.256	.136	.041	.250	.134	.040	.238	.129	.039	.227	.125	.038	.217	.120	.037	
4.0	.242	.126	.037	.236	.124	.037	.226	.120	.036	.217	.116	.035	.208	.113	.034	
5.0	.228	.116	.034	.224	.115	.033	.214	.112	.033	.206	.109	.032	.198	.106	.032	
6.0	.216	.108	.031	.211	.107	.031	.203	.104	.030	.196	.102	.030	.189	.099	.030	
7.0	.204	.101	.029	.200	.100	.028	.193	.098	.028	.186	.095	.028	.180	.093	.027	
8.0	.193	.094	.027	.190	.093	.026	.183	.092	.026	.177	.090	.026	.172	.088	.026	
9.0	.183	.089	.025	.180	.088	.025	.174	.086	.024	.169	.085	.024	.164	.083	.024	
10.0	.174	.084	.023	.172	.083	.023	.166	.081	.023	.161	.080	.023	.157	.079	.023	

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	.233	.233	.233	.199	.199	.199	.136	.136	.136	.078	.078	.078	.025	.025	.025	
1.0	.213	.192	.172	.183	.164	.148	.125	.113	.102	.072	.065	.060	.023	.021	.019	
2.0	.199	.161	.130	.170	.139	.113	.117	.096	.078	.067	.056	.046	.022	.018	.015	
3.0	.187	.139	.101	.160	.120	.088	.110	.083	.062	.063	.049	.036	.020	.016	.012	
4.0	.176	.122	.080	.151	.105	.070	.104	.073	.049	.060	.043	.029	.019	.014	.010	
5.0	.167	.109	.065	.143	.094	.057	.099	.066	.040	.057	.039	.024	.018	.013	.008	
6.0	.158	.098	.054	.136	.085	.047	.094	.059	.033	.054	.035	.020	.018	.011	.007	
7.0	.151	.089	.046	.130	.077	.040	.090	.054	.028	.052	.032	.017	.017	.010	.006	
8.0	.144	.082	.039	.124	.071	.034	.086	.050	.024	.050	.029	.014	.016	.010	.005	
9.0	.137	.076	.034	.118	.066	.030	.082	.046	.021	.048	.027	.013	.015	.009	.004	
10.0	.131	.070	.030	.113	.061	.026	.078	.043	.019	.046	.025	.011	.015	.008	.004	

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: 92EL62281340/WH					TYPE:					WEIGHT: 1				
SPEC.:					DIM.: F 120 x 60					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	24.6	25.9	24.9	26.0	26.2	24.5	25.7	24.8	25.9	26.1				
3H	25.1	26.2	25.3	26.4	26.6	24.8	26.0	25.1	26.2	26.4				
4H	25.2	26.3	25.5	26.5	26.8	24.9	26.0	25.2	26.2	26.5				
6H	25.3	26.3	25.7	26.6	26.9	24.9	25.9	25.2	26.2	26.4				
8H	25.3	26.3	25.7	26.6	26.8	24.9	25.9	25.2	26.1	26.4				
12H	25.3	26.2	25.7	26.5	26.8	24.8	25.8	25.2	26.0	26.3				
4H 2H	24.7	25.8	25.0	26.0	26.2	24.6	25.7	24.9	25.9	26.1				
3H	25.3	26.2	25.6	26.5	26.8	25.1	26.0	25.4	26.3	26.6				
4H	25.6	26.4	25.9	26.7	27.0	25.2	26.1	25.6	26.4	26.7				
6H	25.7	26.5	26.1	26.8	27.2	25.3	26.0	25.7	26.3	26.7				
8H	25.8	26.5	26.2	26.8	27.2	25.2	25.9	25.6	26.3	26.7				
12H	25.8	26.4	26.2	26.8	27.2	25.2	25.8	25.6	26.2	26.6				
8H 4H	25.6	26.2	26.0	26.6	27.0	25.2	25.9	25.7	26.3	26.7				
6H	25.8	26.4	26.2	26.8	27.2	25.3	25.9	25.8	26.3	26.7				
8H	25.9	26.4	26.3	26.8	27.2	25.3	25.8	25.8	26.2	26.7				
12H	25.9	26.3	26.4	26.8	27.2	25.3	25.7	25.7	26.1	26.6				
12H 4H	25.5	26.1	25.9	26.5	26.9	25.2	25.8	25.6	26.2	26.6				
6H	25.8	26.3	26.2	26.7	27.1	25.3	25.8	25.8	26.2	26.7				
8H	25.9	26.3	26.3	26.7	27.2	25.3	25.7	25.8	26.2	26.6				
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H	+ 0.9 / - 1.3					+ 1.0 / - 1.5								
1.5H	+ 1.1 / - 1.1					+ 1.2 / - 1.1								
2.0H	+ 2.1 / - 1.5					+ 2.3 / - 1.7								

CIE Pub.117, 1000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.0)
Area: 0.00477594 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: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

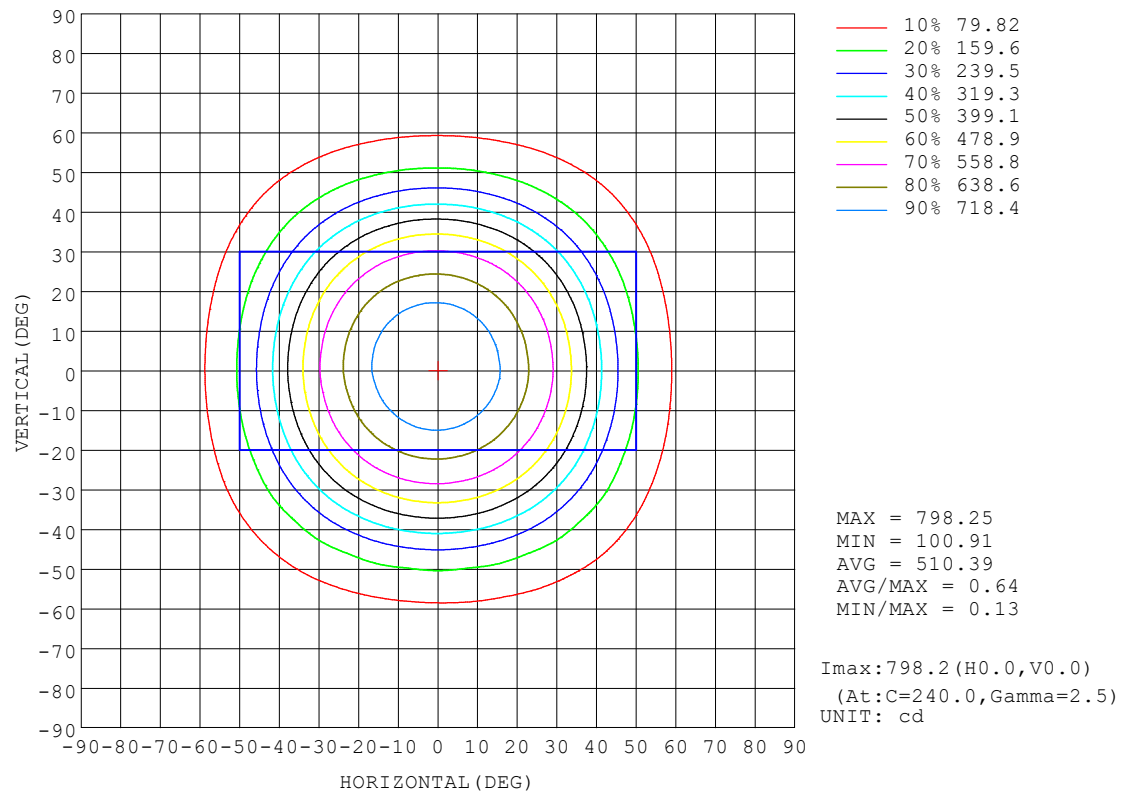
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	88	77	70	87	77	70	86	76	70	64
0.80	100	89	82	98	88	82	97	88	82	75
1.00	108	98	92	107	98	91	105	98	91	84
1.25	115	106	100	114	105	99	111	104	98	91
1.50	120	111	105	118	110	105	115	108	103	96
2.00	126	118	113	124	117	112	120	115	110	102
2.50	129	122	117	127	121	116	123	118	114	105
3.00	132	126	121	129	124	120	125	121	117	108
4.00	135	130	126	132	128	125	128	124	121	112
5.00	137	133	130	134	131	128	129	126	124	114
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: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

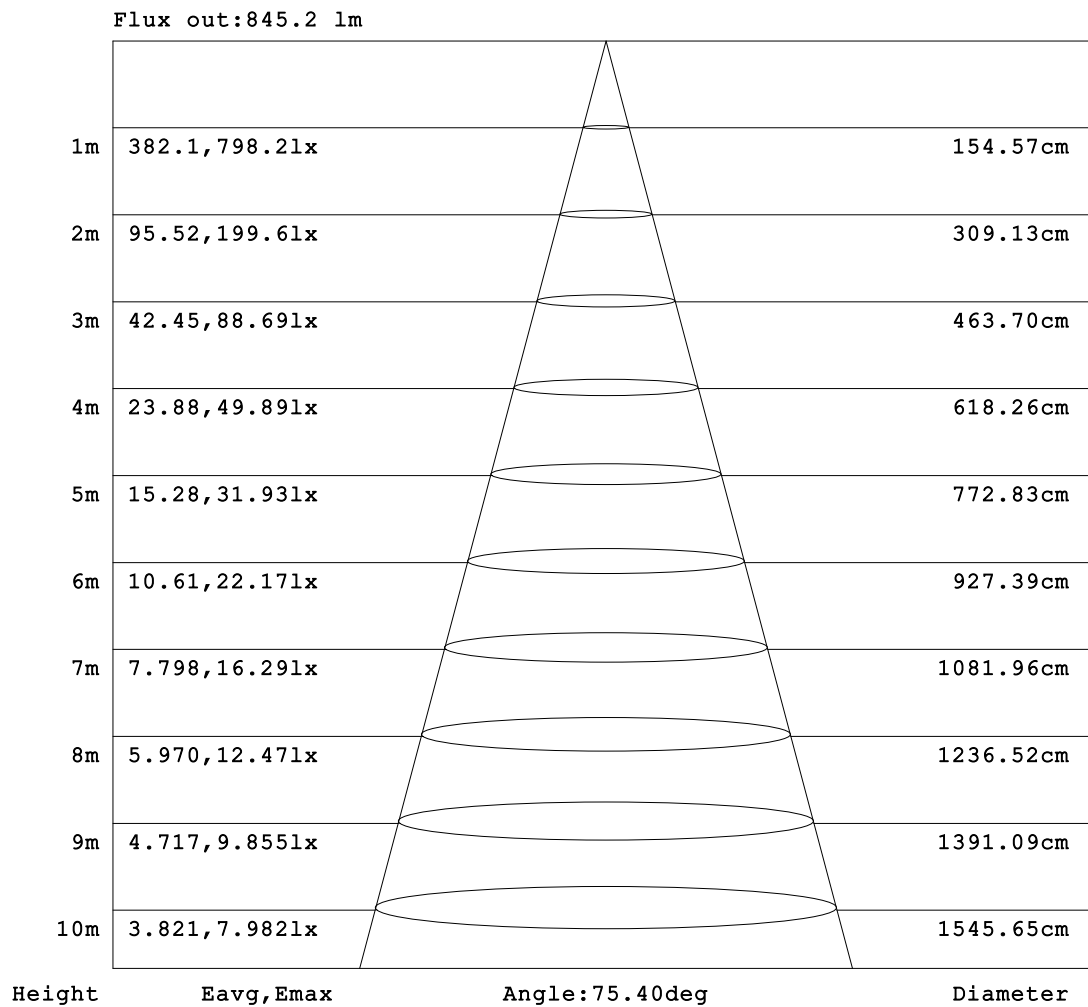


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 07 December 2022

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: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



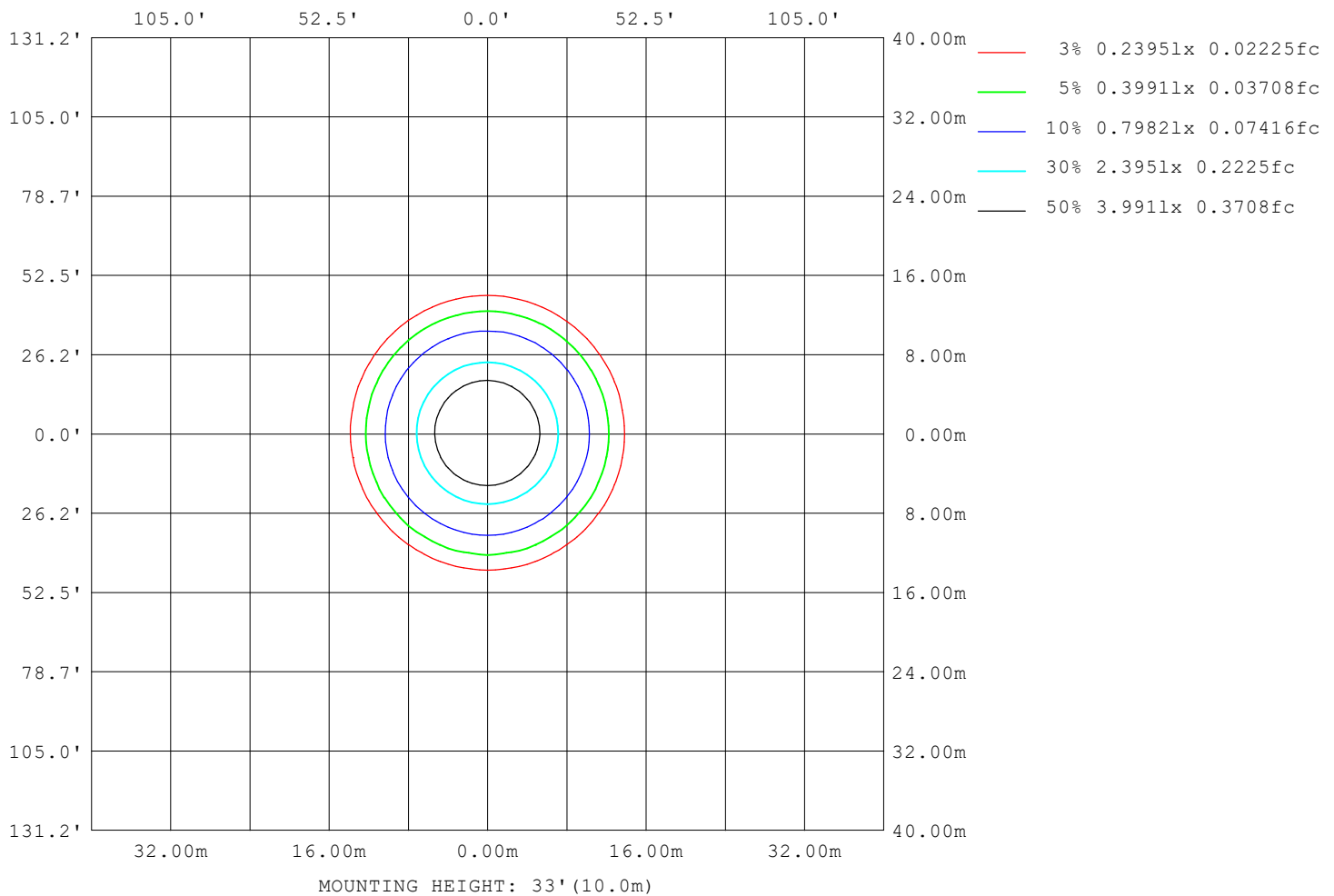
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 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: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	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: 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: 92EL62281340/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

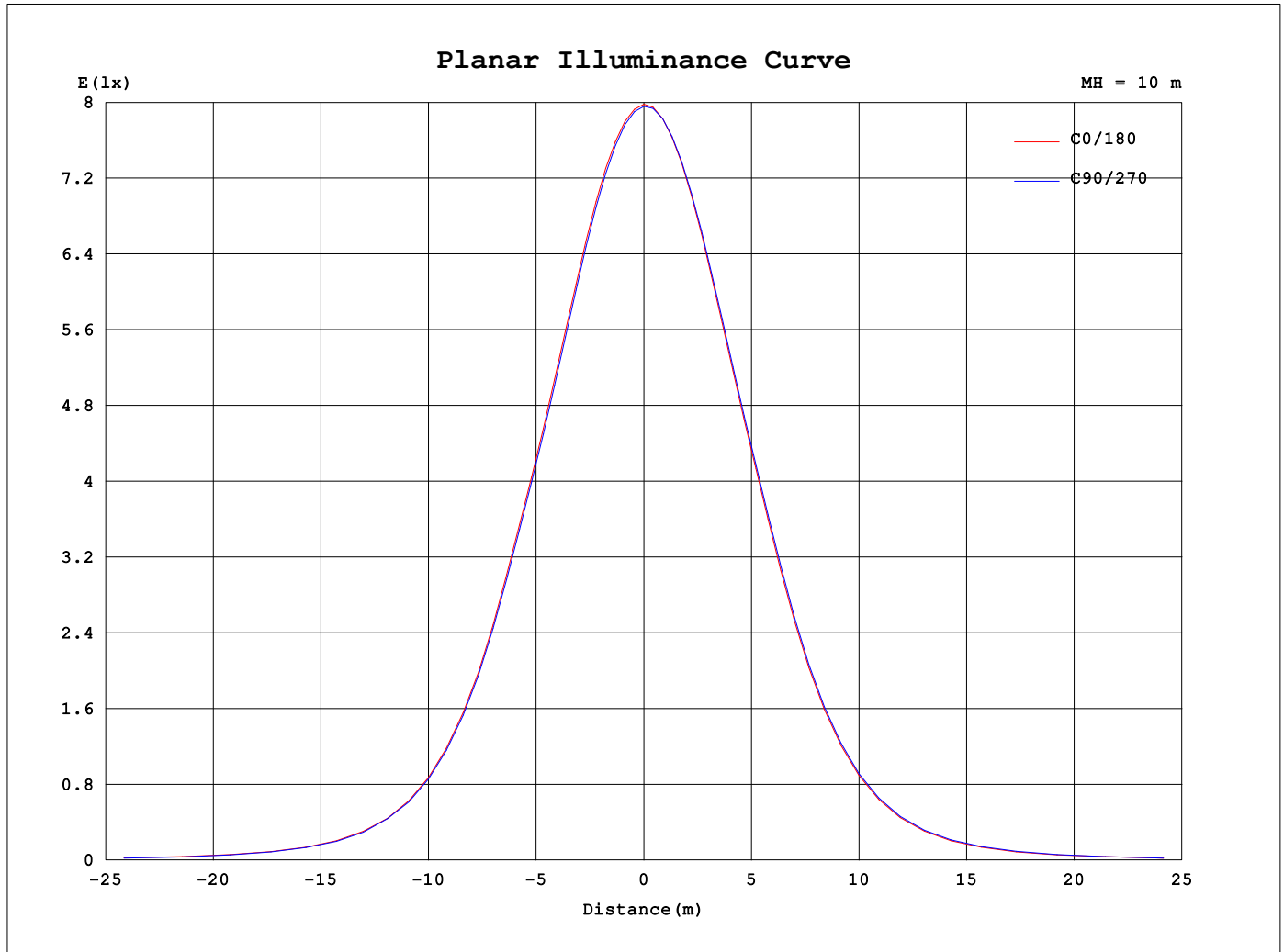
AvgL	cd/m2
L_0~180 (65) av	25583
L_0~180 (75) av	20162
L_0~180 (85) av	9732
L_90~270 (65) av	24724
L_90~270 (75) av	16566
L_90~270 (85) av	2812
L_45 (65) av	25479
L_45 (75) av	18420
L_45 (85) av	5651

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:

```