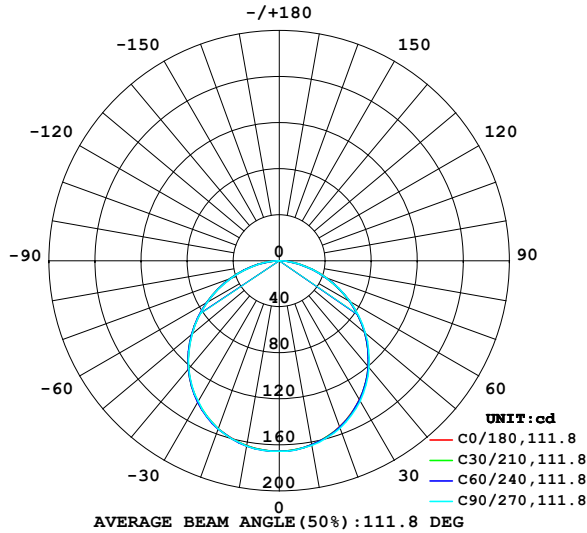


LUMINAIRE PHOTOMETRIC TEST REPORT

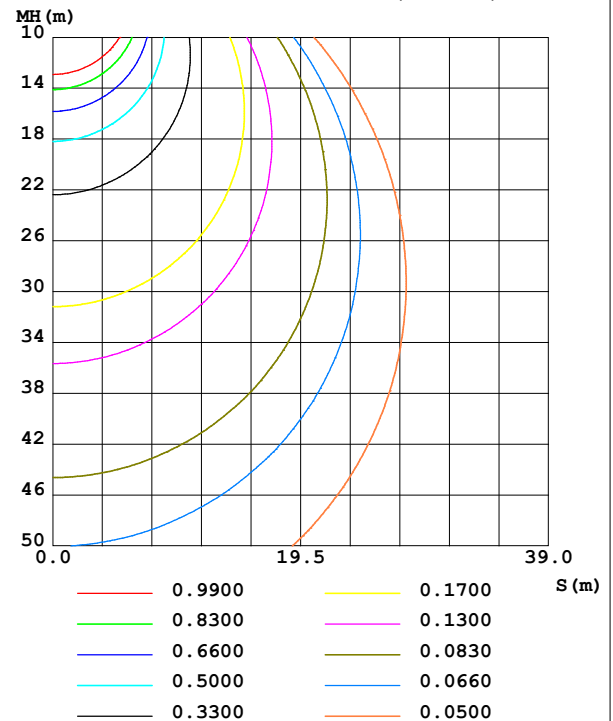
NAME: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99LED607IP65	Imax(cd)	165.8	S/MH(C0/180)	1.27
NOMINAL POWER(W)	7	LOR(%)	71.3	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	470.33	η UP,DN(C0-180)	0.0,35.4
NOMINAL FLUX(lm)	660	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,35.8
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down (%)	71.3	CIBSE SHR MAX	1.35

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:10 August 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	162.3	162.4	163.0	163.2	163.1	163.2	163.4	162.6	0- 10	15.67	15.67	3.33,2.37
20	153.4	153.7	154.7	155.0	155.4	155.2	155.3	154.6	10- 20	44.98	60.65	12.9,9.19
30	139.4	139.5	140.6	141.1	141.8	141.6	141.0	140.7	20- 30	68.33	129.0	27.4,19.5
40	120.2	120.3	121.3	122.0	122.7	122.8	122.4	121.3	30- 40	82.39	211.4	44.9,32
50	96.91	96.78	97.71	98.41	99.24	99.35	98.99	97.88	40- 50	85.06	296.4	63,44.9
60	70.91	70.47	71.00	71.78	72.69	72.84	72.35	71.68	50- 60	76.07	372.5	79.2,56.4
70	43.53	43.13	43.32	44.01	45.02	45.27	44.67	44.01	60- 70	57.30	429.8	91.4,65.1
80	17.58	17.26	17.31	17.88	18.70	18.92	18.39	17.86	70- 80	32.48	462.3	98.3,70
90	0.2316	0.2313	0.2317	0.2301	0.1935	0.2055	0.1990	0.1974	80- 90	8.032	470.3	100,71.3
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): 254.32 lm

%lum = 54.1%
%lamp = 38.5%

Conical surface Flux(130deg): 404.01 lm

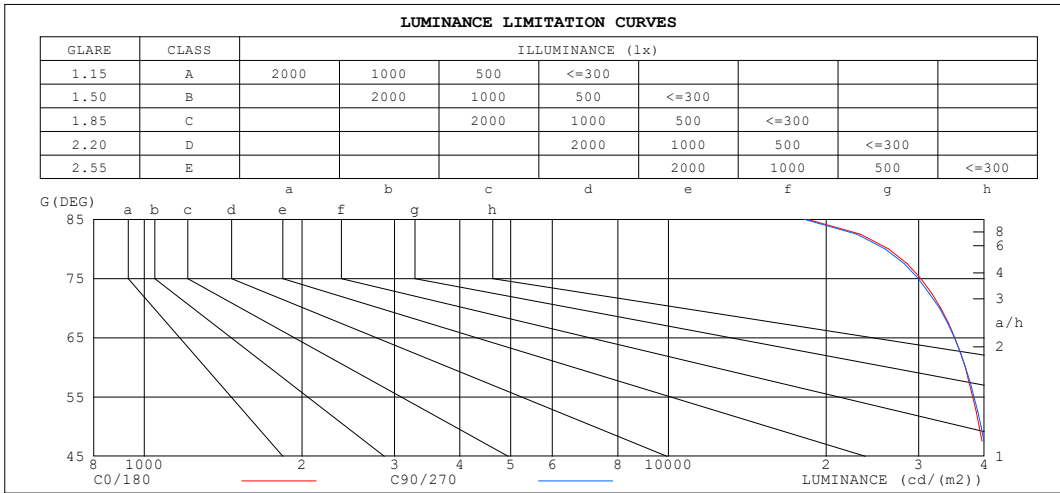
%lum = 85.9%
%lamp = 61.2%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:10 August 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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18443	18181
80	26289	25881
75	30300	29972
70	33052	32888
65	35160	35128
60	36826	36866
55	38048	38291
50	39150	39467
45	40061	40351

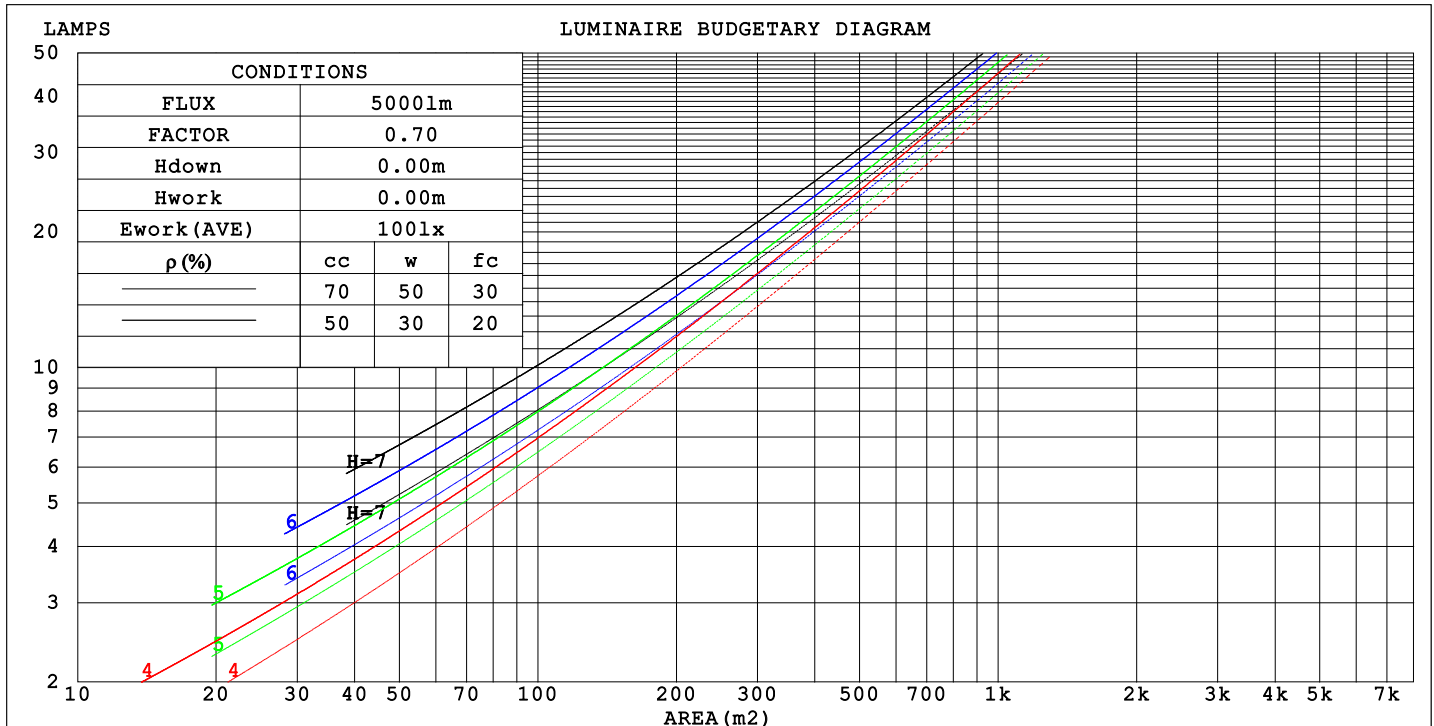
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 10 August 2022

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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	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:10 August 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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	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	.219	.124	.039	.214	.122	.039	.204	.117	.037	.196	.113	.036	.188	.109	.035	
2.0	.207	.113	.035	.202	.111	.034	.194	.108	.033	.186	.104	.033	.179	.101	.032	
3.0	.192	.102	.031	.188	.100	.030	.180	.098	.030	.173	.095	.029	.167	.093	.029	
4.0	.177	.092	.027	.173	.091	.027	.167	.089	.026	.161	.086	.026	.155	.084	.026	
5.0	.164	.083	.024	.161	.082	.024	.155	.081	.024	.149	.079	.023	.144	.077	.023	
6.0	.152	.076	.022	.149	.075	.022	.144	.074	.021	.139	.072	.021	.135	.071	.021	
7.0	.141	.070	.020	.139	.069	.020	.134	.068	.020	.130	.067	.019	.126	.065	.019	
8.0	.132	.065	.018	.130	.064	.018	.126	.063	.018	.122	.062	.018	.118	.061	.018	
9.0	.124	.060	.017	.122	.059	.017	.118	.058	.017	.115	.057	.016	.111	.057	.016	
10.0	.116	.056	.015	.115	.055	.015	.111	.055	.015	.108	.054	.015	.105	.053	.015	

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	.136	.136	.136	.116	.116	.116	.079	.079	.079	.045	.045	.045	.015	.015	.015	
1.0	.128	.111	.096	.110	.096	.083	.075	.066	.057	.043	.038	.033	.014	.012	.011	
2.0	.123	.094	.070	.105	.081	.061	.072	.056	.042	.041	.033	.025	.013	.011	.008	
3.0	.117	.081	.053	.100	.070	.046	.069	.049	.032	.040	.029	.019	.013	.009	.006	
4.0	.112	.072	.042	.096	.062	.036	.066	.043	.025	.038	.025	.015	.012	.008	.005	
5.0	.106	.065	.034	.091	.056	.029	.063	.039	.021	.036	.023	.012	.012	.007	.004	
6.0	.101	.059	.028	.087	.051	.024	.060	.036	.017	.035	.021	.010	.011	.007	.003	
7.0	.096	.054	.024	.083	.047	.021	.057	.033	.015	.033	.019	.009	.011	.006	.003	
8.0	.092	.050	.020	.079	.043	.018	.055	.030	.013	.032	.018	.008	.010	.006	.002	
9.0	.087	.046	.018	.075	.040	.016	.052	.028	.011	.030	.017	.007	.010	.005	.002	
10.0	.083	.043	.016	.072	.037	.014	.050	.026	.010	.029	.016	.006	.009	.005	.002	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:10 August 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: 99LED607IP65					TYPE: 99LED607IP65					WEIGHT: 1				
SPEC.:					DIM.: F115					SERIAL No.: 0				
MFR.: Elmark Industries JSC					SUR.: circular					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	26.9	28.4	27.2	28.6	28.8	26.9	28.4	27.2	28.6	28.8				
3H	28.4	29.8	28.7	30.0	30.3	28.4	29.8	28.7	30.0	30.2				
4H	29.0	30.3	29.3	30.5	30.8	28.9	30.3	29.2	30.5	30.8				
6H	29.3	30.6	29.7	30.9	31.2	29.3	30.6	29.6	30.8	31.1				
8H	29.4	30.7	29.8	30.9	31.2	29.4	30.6	29.7	30.9	31.2				
12H	29.5	30.6	29.8	30.9	31.2	29.4	30.6	29.8	30.9	31.2				
4H 2H	27.5	28.8	27.8	29.1	29.3	27.5	28.8	27.8	29.1	29.3				
3H	29.2	30.3	29.5	30.6	30.9	29.1	30.3	29.5	30.6	30.9				
4H	29.8	30.9	30.2	31.2	31.6	29.8	30.9	30.2	31.2	31.5				
6H	30.4	31.3	30.8	31.7	32.0	30.3	31.3	30.7	31.6	32.0				
8H	30.5	31.4	30.9	31.8	32.1	30.5	31.3	30.9	31.7	32.1				
12H	30.6	31.4	31.0	31.8	32.2	30.5	31.3	30.9	31.7	32.1				
8H 4H	30.1	31.0	30.5	31.3	31.7	30.1	30.9	30.5	31.3	31.7				
6H	30.7	31.5	31.2	31.9	32.3	30.7	31.4	31.1	31.8	32.3				
8H	31.0	31.6	31.4	32.0	32.5	30.9	31.6	31.4	32.0	32.4				
12H	31.1	31.6	31.5	32.1	32.5	31.0	31.6	31.5	32.0	32.5				
12H 4H	30.1	30.9	30.5	31.3	31.7	30.1	30.9	30.5	31.3	31.7				
6H	30.8	31.4	31.2	31.8	32.3	30.7	31.4	31.2	31.8	32.3				
8H	31.0	31.6	31.5	32.0	32.5	31.0	31.5	31.5	32.0	32.5				
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	+ 0.2 / - 0.2					+ 0.2 / - 0.2								

CIE Pub.117, 660.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.4)
Area: 0.0038465 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:10 August 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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

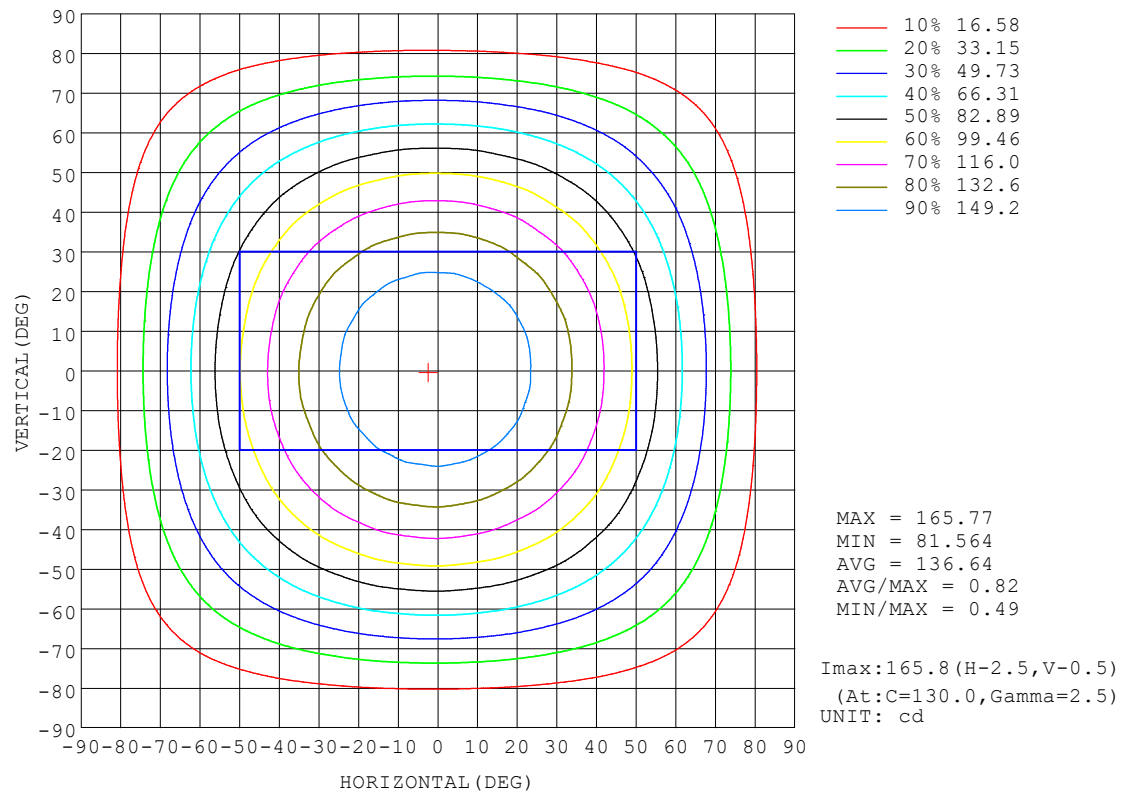
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	41	33	28	41	33	28	40	32	28	23
0.80	48	40	35	48	40	35	46	39	34	29
1.00	54	46	41	53	46	41	52	47	41	36
1.25	59	52	47	58	51	47	56	50	46	41
1.50	63	56	51	62	55	51	60	54	50	44
2.00	68	62	57	66	61	57	64	59	56	50
2.50	71	65	61	69	64	60	66	62	59	53
3.00	73	68	64	71	67	63	69	65	62	56
4.00	76	72	68	74	71	67	71	68	66	59
5.00	78	74	71	76	73	70	73	70	68	61
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: 10 August 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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

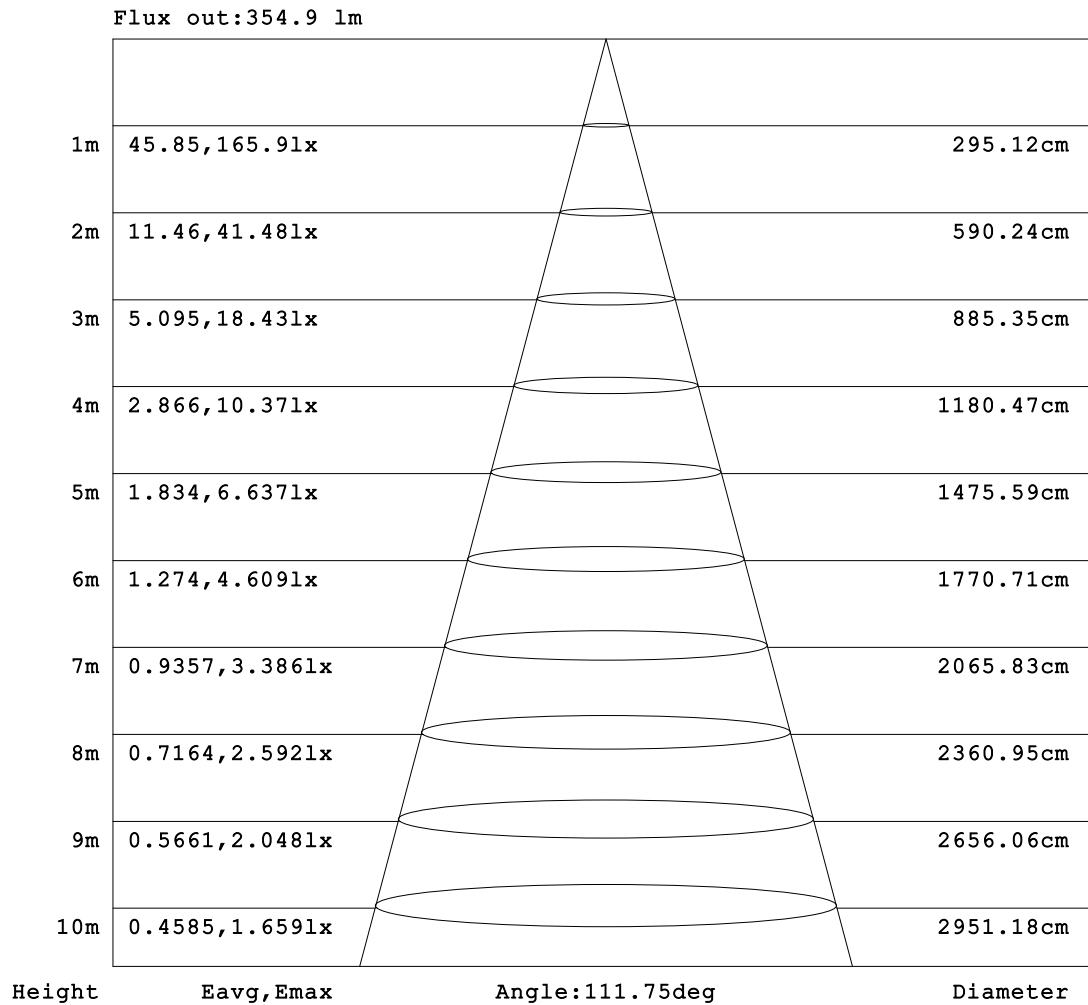


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 10 August 2022

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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:



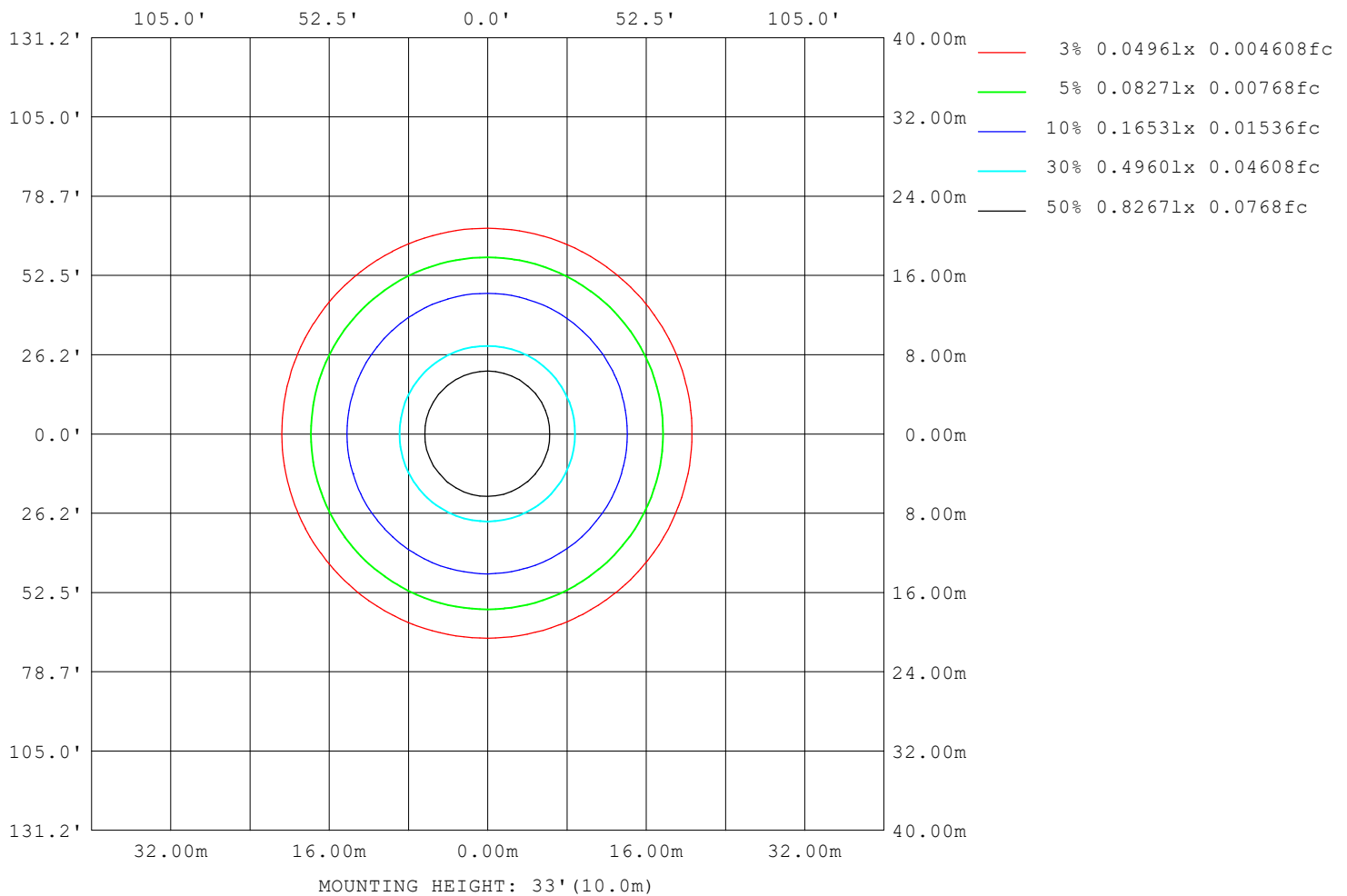
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 10 August 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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 10 August 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: 99LED607IP65	TYPE: 99LED607IP65	WEIGHT: 1
SPEC.:	DIM.: F115	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: circular	Shielding Angle:

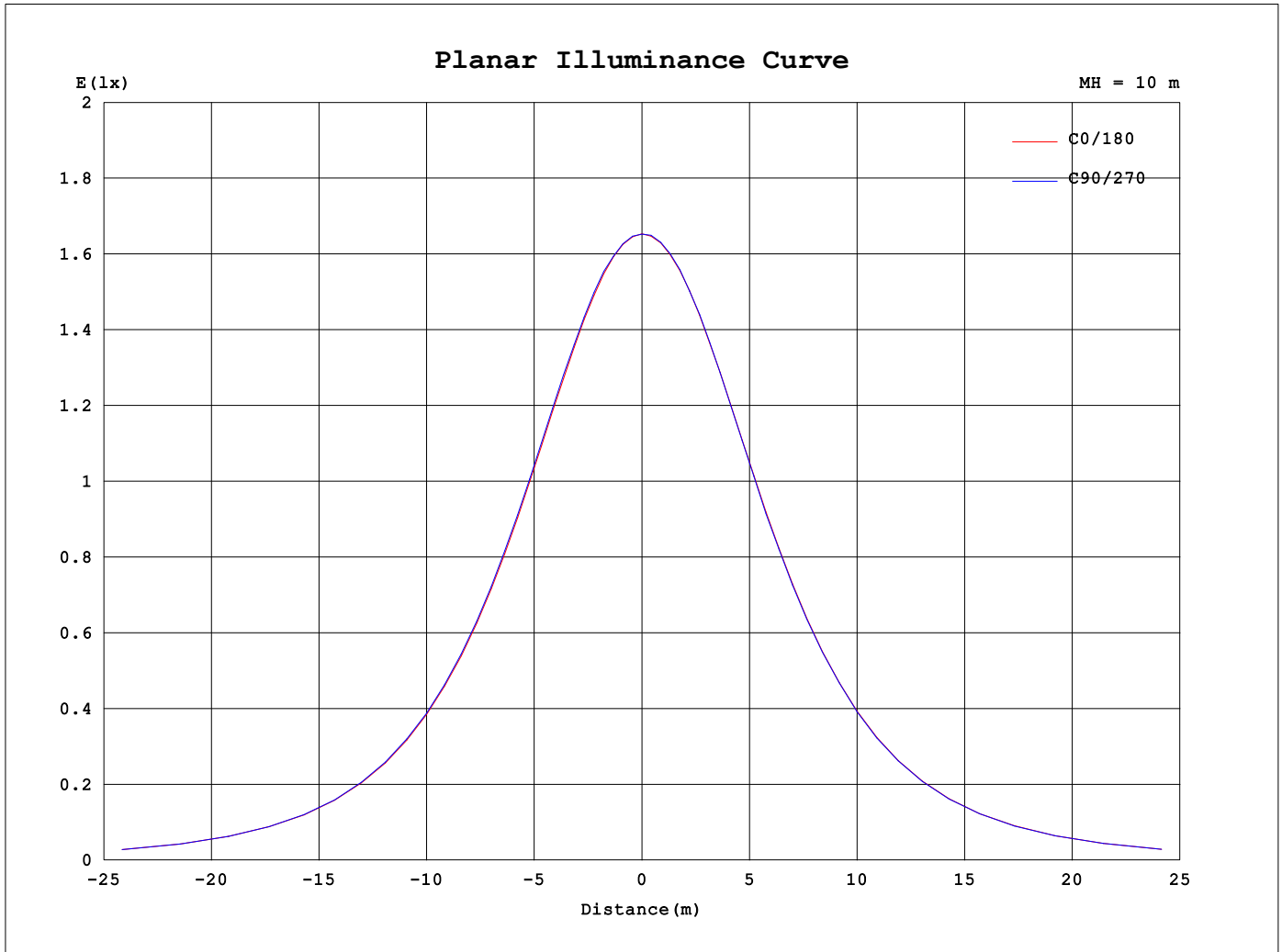
AvgL	cd/m2
L_0~180 (65) av	35703
L_0~180 (75) av	30999
L_0~180 (85) av	19759
L_90~270 (65) av	35625
L_90~270 (75) av	30663
L_90~270 (85) av	19528
L_45 (65) av	35608
L_45 (75) av	30785
L_45 (85) av	19629

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:10 August 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: 10 August 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:

```