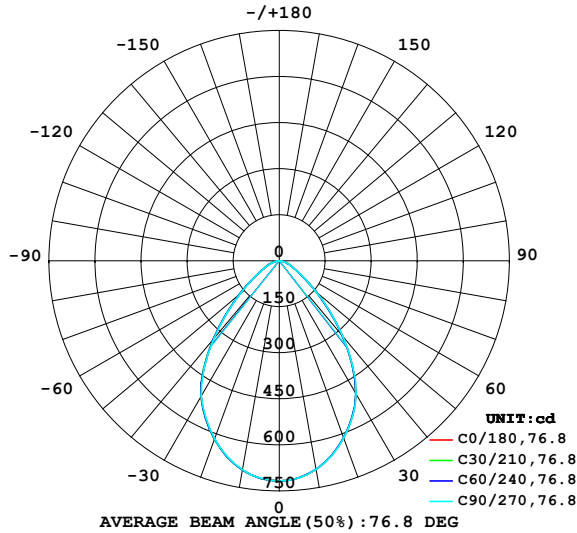


LUMINAIRE PHOTOMETRIC TEST REPORT

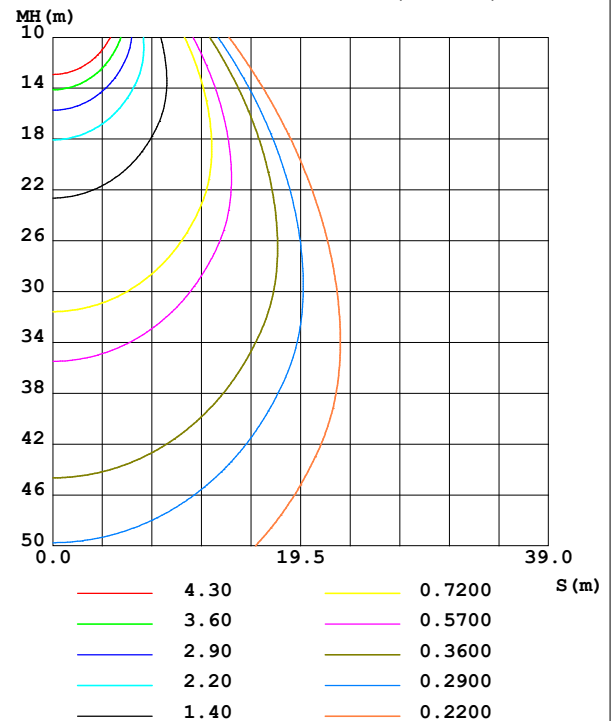
NAME: 92EL62281330/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL62281330/WHH	Imax (cd)	717.4	S/MH (C0/180)	1.09
NOMINAL POWER (W)	12	LOR (%)	113.1	S/MH (C90/270)	1.09
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1131.2	η UP, DN (C0-180)	0.0, 56.0
NOMINAL FLUX (lm)	1000	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 57.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	113.1	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	690.2	690.1	690.5	691.4	692.2	692.2	691.6	691.0	0- 10	67.23	67.23	5.94, 6.72
20	614.3	613.7	614.9	616.8	618.5	618.4	617.0	616.0	10- 20	185.2	252.4	22.3, 25.2
30	500.5	499.1	501.7	506.6	510.7	510.7	508.6	505.1	20- 30	259.3	511.7	45.2, 51.2
40	322.0	320.8	323.6	329.7	335.8	336.2	332.8	327.6	30- 40	262.0	773.7	68.4, 77.4
50	157.1	155.4	157.2	162.9	166.8	167.8	165.8	163.3	40- 50	184.7	958.4	84.7, 95.8
60	66.52	64.53	64.26	67.97	71.55	72.92	71.75	69.91	50- 60	97.35	1056	93.3, 106
70	34.88	32.17	30.20	33.62	36.32	35.83	33.88	35.37	60- 70	48.60	1104	97.6, 110
80	12.91	9.545	7.774	10.21	12.43	11.48	9.979	11.58	70- 80	22.99	1127	99.7, 113
90	0.2367	0.2341	0.2205	0.2218	0.2040	0.1960	0.1987	0.2001	80- 90	3.919	1131	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): 878.21 lm

%lum = 77.6%

%lamp = 87.8%

Conical surface Flux(130deg): 1083.5 lm

%lum = 95.8%

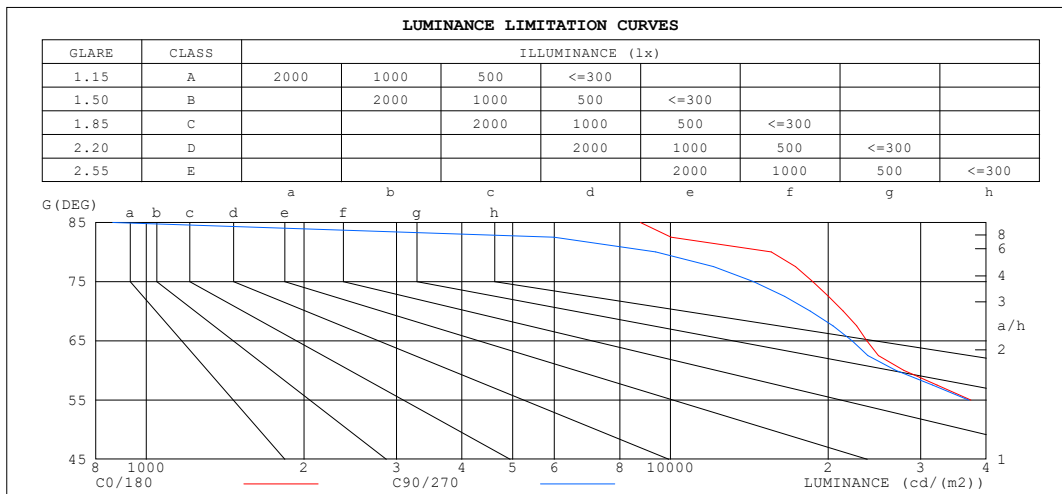
%lamp = 108.4%

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: 92EL62281330/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	8760	863
80	15570	9373
75	18676	14399
70	21362	18485
65	23692	22219
60	27871	26908
55	37415	37074
50	51198	51209
45	68845	69030

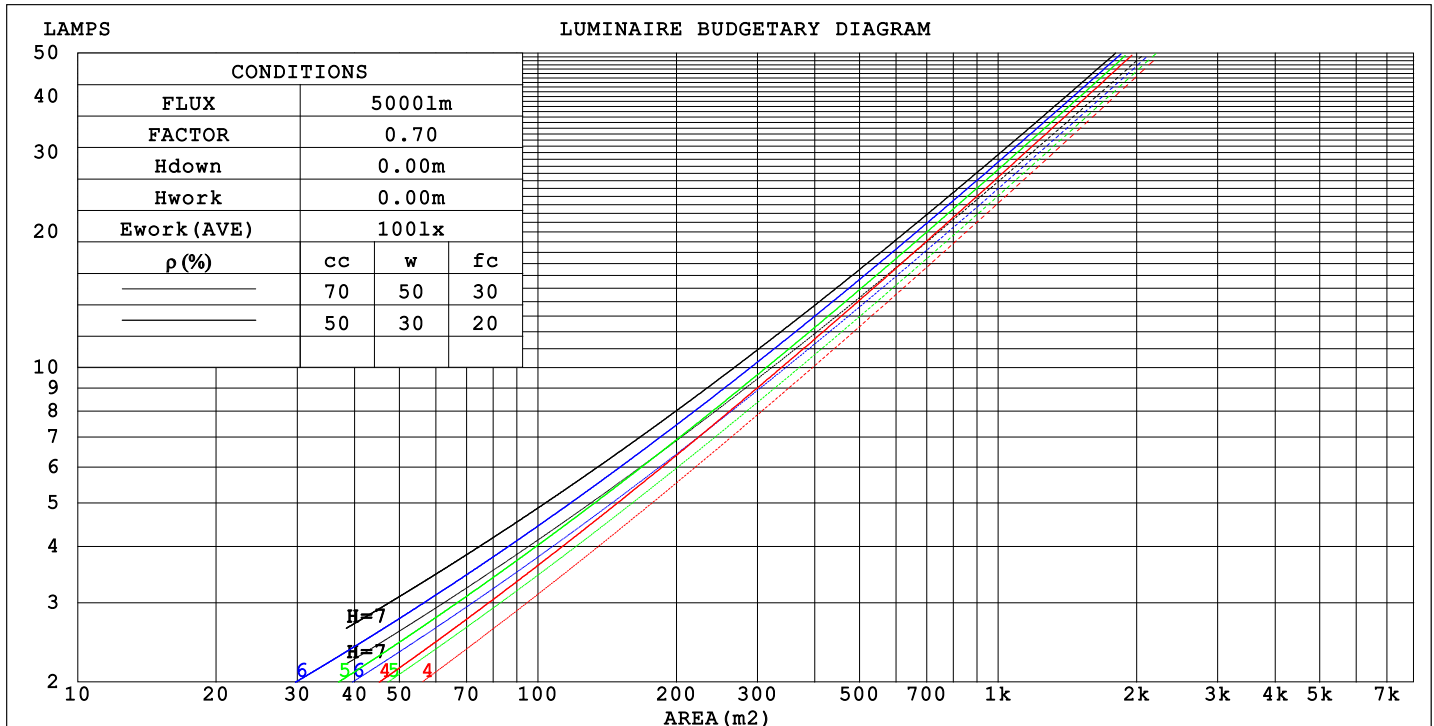
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 07 December 2022

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: 92EL62281330/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: 92EL62281330/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	.260	.148	.047	.253	.144	.046	.238	.137	.044	.225	.130	.042	.212	.123	.040	
2.0	.252	.138	.042	.245	.135	.042	.232	.129	.040	.221	.124	.039	.210	.119	.037	
3.0	.239	.127	.038	.233	.125	.038	.222	.120	.037	.212	.116	.036	.203	.112	.035	
4.0	.226	.117	.034	.221	.115	.034	.211	.112	.033	.202	.109	.033	.194	.105	.032	
5.0	.213	.109	.031	.209	.107	.031	.200	.104	.031	.192	.101	.030	.185	.099	.030	
6.0	.201	.101	.029	.197	.100	.029	.190	.097	.028	.183	.095	.028	.176	.093	.028	
7.0	.190	.094	.027	.187	.093	.026	.180	.091	.026	.174	.089	.026	.168	.087	.026	
8.0	.180	.088	.025	.177	.087	.025	.171	.085	.024	.165	.084	.024	.160	.082	.024	
9.0	.171	.083	.023	.168	.082	.023	.163	.080	.023	.158	.079	.023	.153	.078	.022	
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.150	.075	.021	.146	.073	.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	.198	.177	.159	.169	.152	.137	.116	.105	.095	.067	.061	.055	.021	.020	.018	
2.0	.184	.150	.120	.158	.129	.104	.108	.089	.073	.062	.052	.043	.020	.017	.014	
3.0	.173	.129	.093	.149	.111	.081	.102	.077	.057	.059	.045	.033	.019	.015	.011	
4.0	.164	.113	.074	.140	.098	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
5.0	.155	.101	.060	.133	.087	.053	.092	.061	.037	.053	.036	.022	.017	.012	.007	
6.0	.147	.091	.050	.127	.079	.044	.087	.055	.031	.051	.032	.018	.016	.011	.006	
7.0	.140	.083	.042	.120	.072	.037	.083	.050	.026	.048	.030	.016	.016	.010	.005	
8.0	.134	.076	.036	.115	.066	.032	.080	.046	.022	.046	.027	.013	.015	.009	.004	
9.0	.127	.070	.032	.110	.061	.028	.076	.043	.020	.044	.025	.012	.014	.008	.004	
10.0	.122	.065	.028	.105	.057	.024	.073	.040	.017	.043	.024	.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: 92EL62281330/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	24.4	25.6	24.6	25.8	26.0	24.3	25.6	24.6	25.8	26.0
	3H	24.8	25.9	25.1	26.1	26.4	24.7	25.8	24.9	26.0	26.2
	4H	25.0	26.0	25.3	26.3	26.5	24.7	25.8	25.0	26.0	26.3
	6H	25.1	26.1	25.4	26.3	26.6	24.7	25.7	25.0	26.0	26.3
	8H	25.1	26.0	25.4	26.3	26.6	24.7	25.7	25.0	25.9	26.2
	12H	25.0	26.0	25.4	26.2	26.5	24.7	25.6	25.0	25.9	26.1
4H	2H	24.4	25.5	24.7	25.8	26.0	24.4	25.5	24.7	25.7	26.0
	3H	25.0	25.9	25.3	26.2	26.5	24.9	25.8	25.2	26.1	26.3
	4H	25.3	26.1	25.6	26.4	26.7	25.0	25.8	25.4	26.2	26.5
	6H	25.5	26.2	25.8	26.5	26.9	25.1	25.8	25.4	26.1	26.5
	8H	25.5	26.2	25.9	26.5	26.9	25.0	25.7	25.4	26.1	26.4
	12H	25.5	26.1	25.9	26.5	26.9	25.0	25.6	25.4	26.0	26.4
8H	4H	25.3	26.0	25.7	26.3	26.7	25.0	25.7	25.4	26.1	26.4
	6H	25.5	26.1	26.0	26.5	26.9	25.1	25.7	25.6	26.1	26.5
	8H	25.6	26.1	26.0	26.5	26.9	25.1	25.6	25.6	26.0	26.5
	12H	25.6	26.0	26.1	26.5	26.9	25.1	25.5	25.5	25.9	26.4
12H	4H	25.2	25.9	25.7	26.2	26.6	25.0	25.6	25.4	26.0	26.4
	6H	25.5	26.0	26.0	26.4	26.9	25.1	25.6	25.6	26.0	26.5
	8H	25.6	26.0	26.0	26.4	26.9	25.1	25.5	25.6	26.0	26.4
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.9 / - 1.3					+ 1.1 / - 1.6				
1.5H		+ 1.1 / - 1.1					+ 1.2 / - 1.3				
2.0H		+ 2.2 / - 1.6					+ 2.5 / - 1.9				

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: 92EL62281330/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

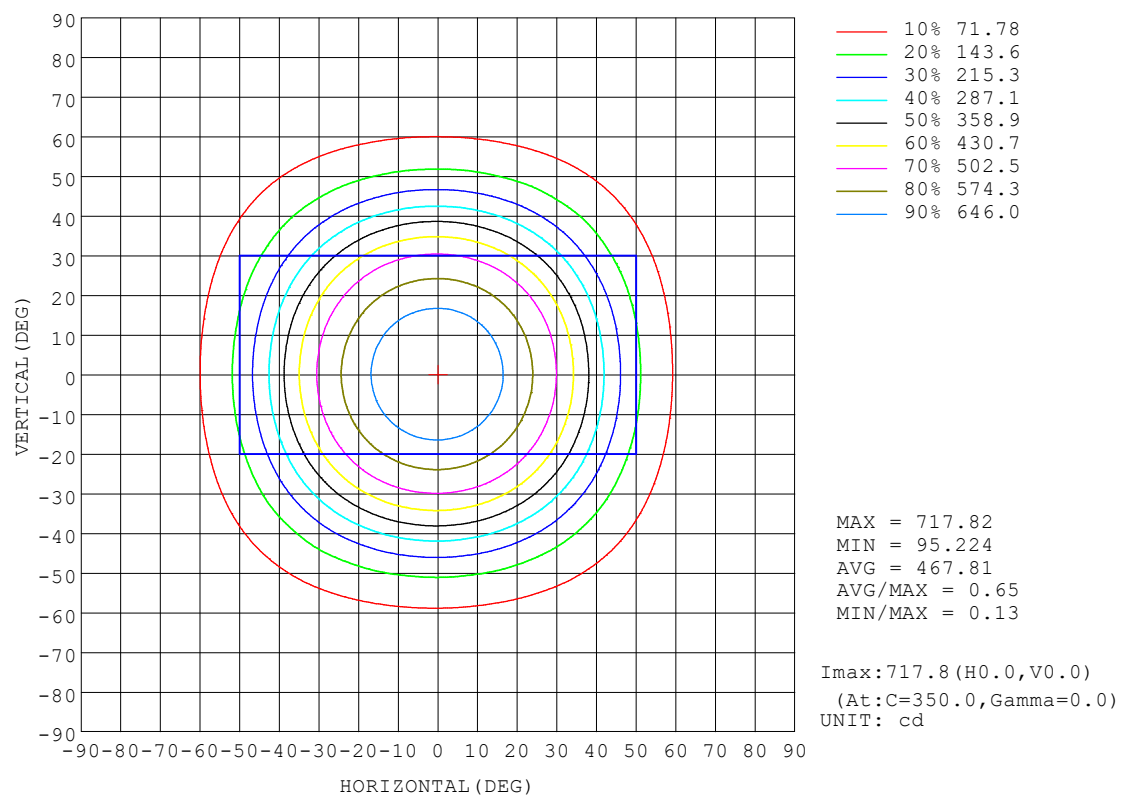
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	81	71	64	80	70	64	79	70	64	58
0.80	92	82	75	91	81	75	89	81	75	69
1.00	100	90	84	99	90	84	96	91	83	77
1.25	106	98	92	105	97	91	102	96	91	84
1.50	111	103	97	109	102	97	106	100	95	89
2.00	116	109	104	114	108	103	111	106	102	95
2.50	119	113	108	117	112	107	113	109	105	97
3.00	122	116	112	120	115	111	116	112	108	100
4.00	125	120	117	123	119	115	118	115	112	103
5.00	127	123	120	124	121	118	120	117	115	105
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: 92EL62281330/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

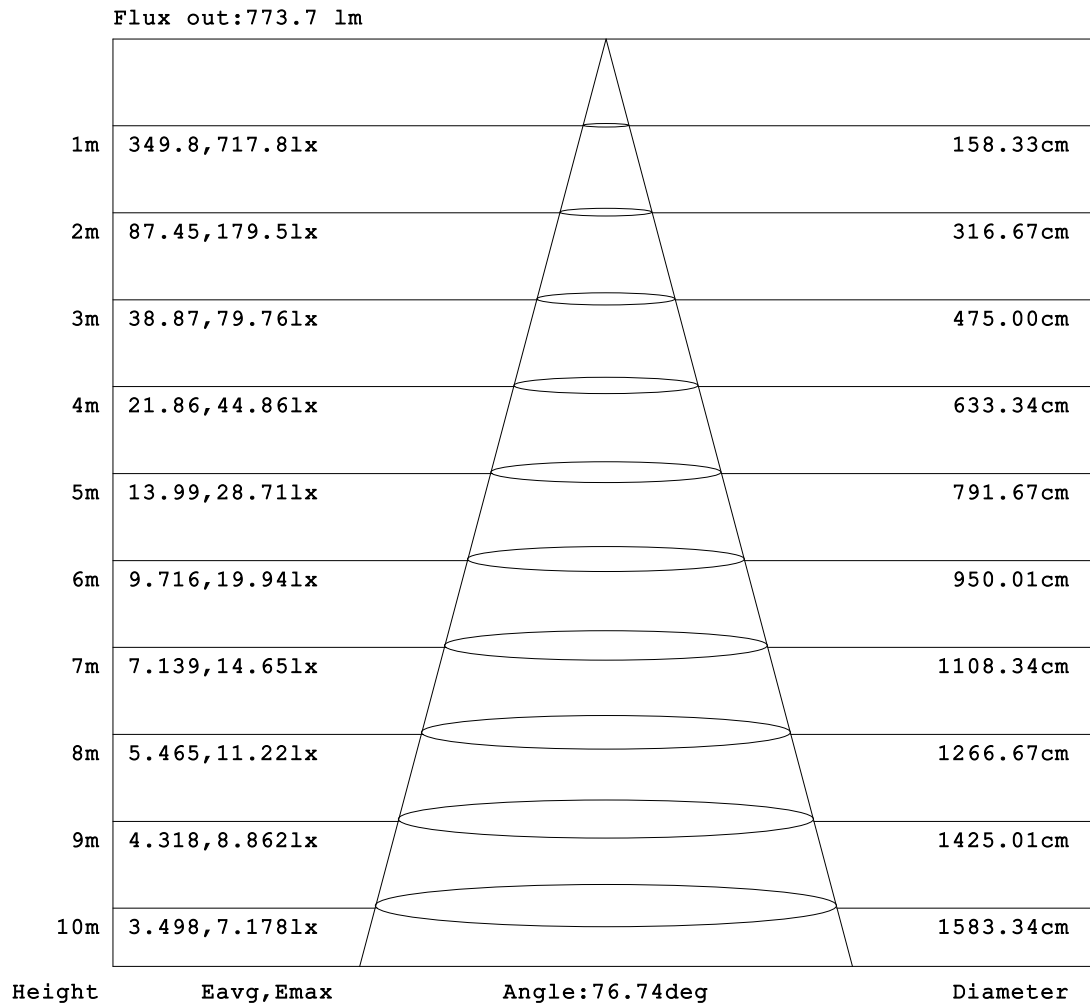


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 07 December 2022

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: 92EL62281330/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



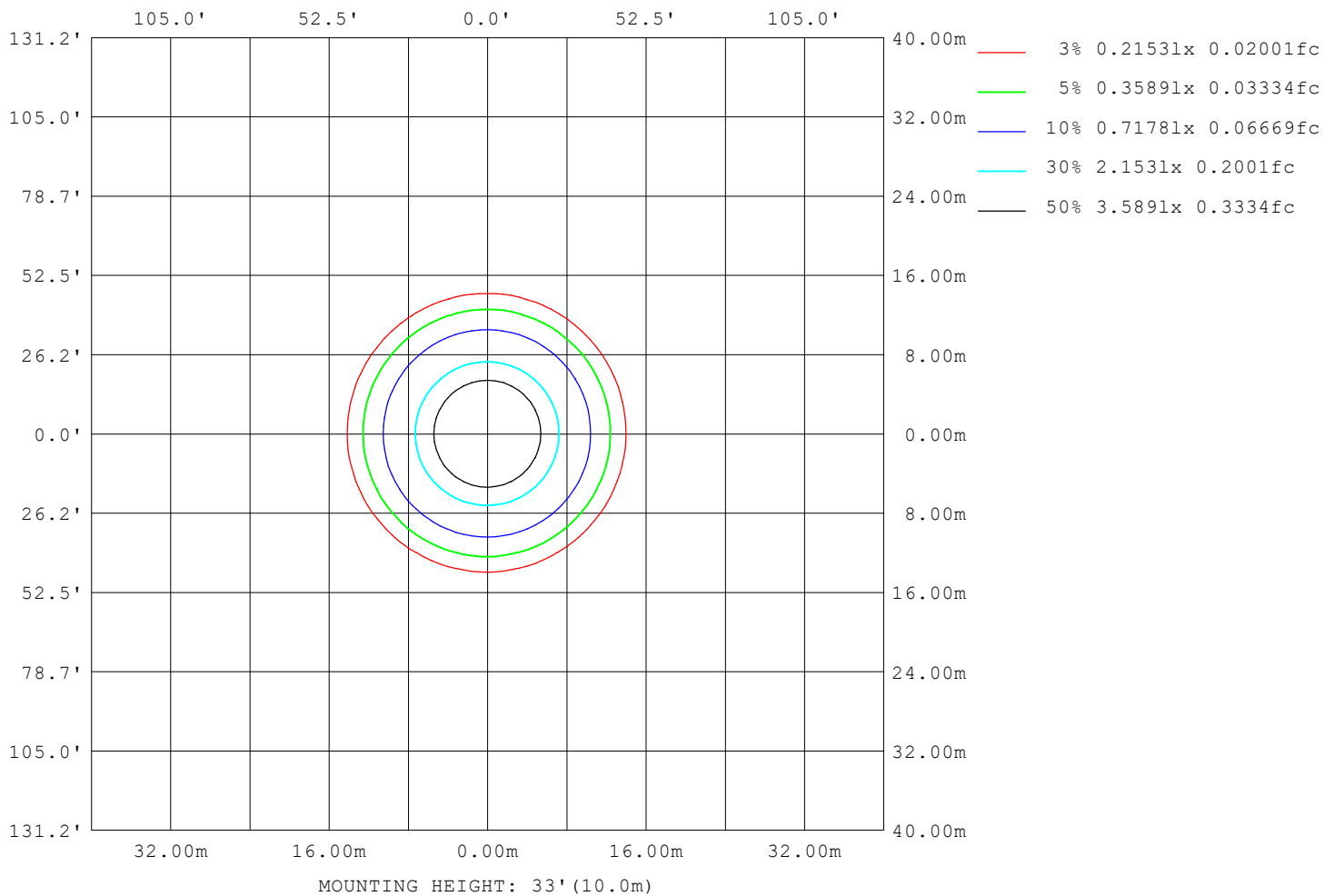
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 92EL62281330/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: 92EL62281330/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 120 x 60	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

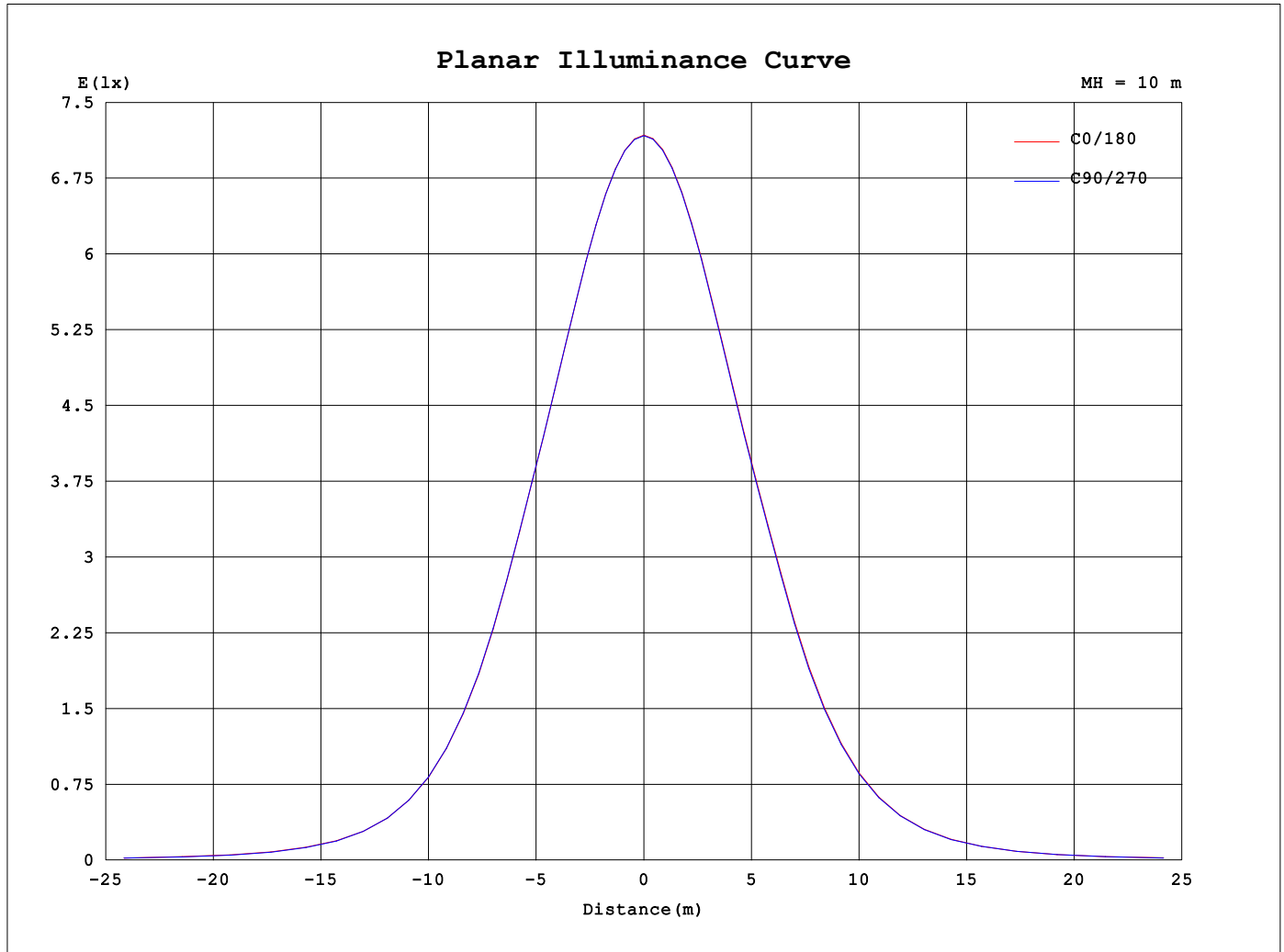
AvgL	cd/m2
L_0~180 (65) av	24230
L_0~180 (75) av	19042
L_0~180 (85) av	8804
L_90~270 (65) av	23248
L_90~270 (75) av	15572
L_90~270 (85) av	2631
L_45 (65) av	23996
L_45 (75) av	17325
L_45 (85) av	5413

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:

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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:

```