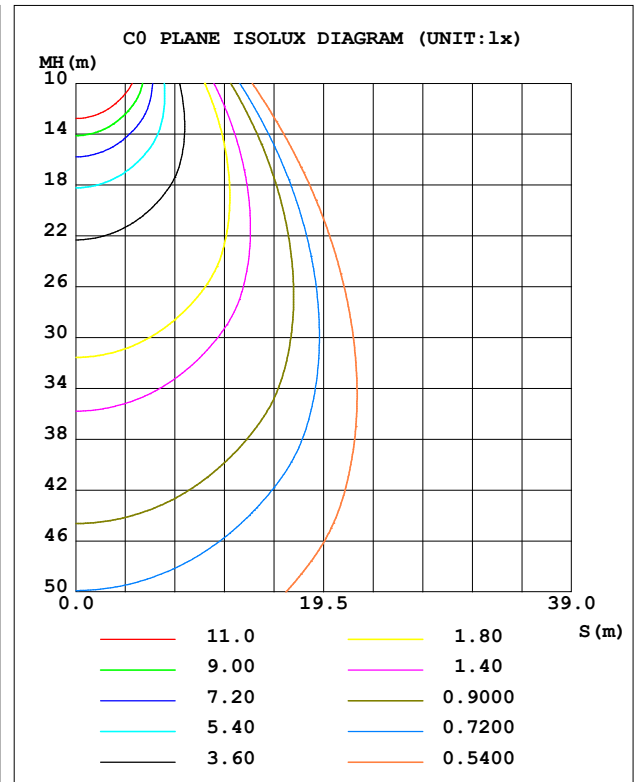
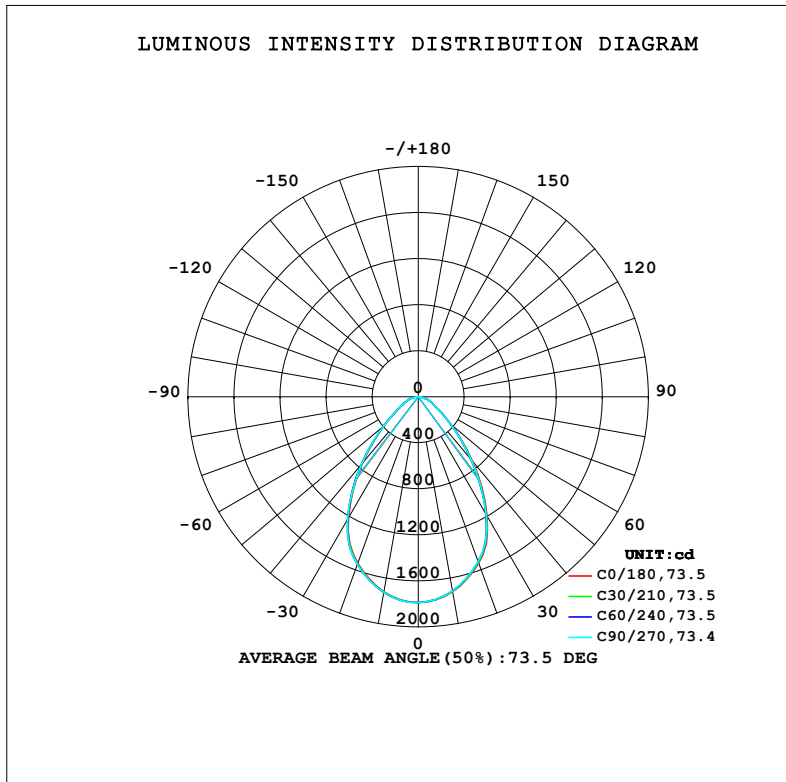


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL62283030/WH	Imax (cd)	1788	S/MH (C0/180)	1.06
NOMINAL POWER (W)	30	LOR (%)	106.2	S/MH (C90/270)	1.07
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	2761.9	η UP, DN (C0-180)	0.0, 52.3
NOMINAL FLUX (lm)	2600	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 53.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	106.2	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	1720	1715	1713	1715	1721	1726	1728	1725	0- 10	167.4	167.4	6.06, 6.44
20	1536	1526	1524	1529	1538	1548	1550	1545	10- 20	461.0	628.4	22.8, 24.2
30	1197	1181	1179	1191	1213	1229	1229	1218	20- 30	639.4	1268	45.9, 48.8
40	737.5	719.3	721.2	736.2	754.1	772.8	771.3	757.4	30- 40	607.0	1875	67.9, 72.1
50	369.2	362.6	360.6	368.0	382.8	390.1	392.3	385.3	40- 50	421.2	2296	83.1, 88.3
60	178.1	174.4	171.8	176.0	180.8	184.0	183.5	183.2	50- 60	236.5	2533	91.7, 97.4
70	106.4	102.1	98.57	103.5	107.7	106.6	104.0	107.1	60- 70	137.9	2670	96.7, 103
80	43.00	37.91	33.78	38.84	41.76	41.00	38.06	41.75	70- 80	74.81	2745	99.4, 106
90	0.7274	0.7115	0.6891	0.7232	0.6541	0.6367	0.6319	0.6361	80- 90	16.61	2762	100, 106
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): 2112 lm

%lum = 76.5%

%lamp = 81.2%

Conical surface Flux(130deg): 2608.6 lm

%lum = 94.5%

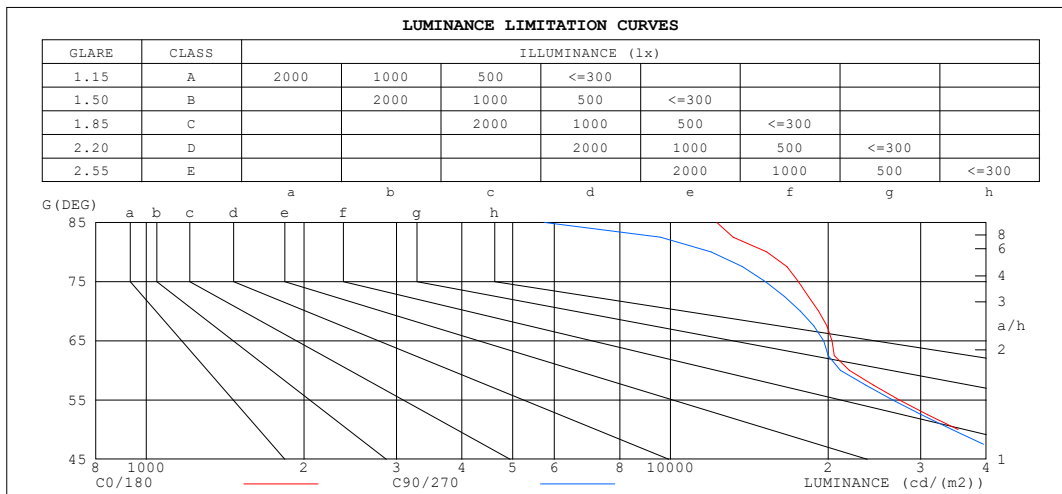
%lamp = 100.3%

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: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	12250	5753
80	15258	11943
75	17541	15181
70	19162	17695
65	20319	19587
60	21940	21099
55	27350	26559
50	35392	34445
45	46437	45194

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:

```

WEC AND CCEC

NAME: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	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	.252	.143	.045	.244	.139	.044	.231	.132	.042	.218	.126	.040	.206	.120	.039	
2.0	.241	.132	.041	.235	.129	.040	.223	.124	.039	.212	.119	.037	.202	.114	.036	
3.0	.228	.121	.036	.222	.119	.036	.212	.115	.035	.203	.111	.034	.194	.107	.033	
4.0	.214	.111	.033	.209	.110	.032	.200	.106	.032	.192	.103	.031	.184	.100	.031	
5.0	.202	.103	.030	.197	.101	.030	.189	.099	.029	.182	.096	.029	.175	.094	.028	
6.0	.190	.095	.027	.186	.094	.027	.179	.092	.027	.172	.090	.026	.166	.088	.026	
7.0	.179	.089	.025	.176	.088	.025	.170	.086	.025	.164	.084	.024	.158	.082	.024	
8.0	.169	.083	.023	.167	.082	.023	.161	.080	.023	.156	.079	.023	.151	.077	.023	
9.0	.161	.078	.022	.158	.077	.022	.153	.076	.021	.148	.074	.021	.144	.073	.021	
10.0	.152	.073	.020	.150	.072	.020	.146	.071	.020	.141	.070	.020	.137	.069	.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	.202	.202	.202	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.186	.167	.149	.159	.143	.128	.109	.098	.089	.063	.057	.052	.020	.018	.017	
2.0	.174	.140	.112	.149	.121	.097	.102	.084	.068	.059	.049	.040	.019	.016	.013	
3.0	.163	.121	.087	.140	.104	.076	.096	.073	.053	.056	.042	.031	.018	.014	.010	
4.0	.154	.106	.069	.132	.092	.060	.091	.064	.042	.053	.037	.025	.017	.012	.008	
5.0	.146	.095	.057	.125	.082	.049	.086	.057	.035	.050	.034	.021	.016	.011	.007	
6.0	.139	.085	.047	.119	.074	.041	.082	.052	.029	.048	.030	.017	.015	.010	.006	
7.0	.132	.078	.040	.113	.067	.035	.078	.047	.024	.045	.028	.015	.015	.009	.005	
8.0	.126	.071	.034	.108	.062	.030	.075	.043	.021	.043	.026	.013	.014	.008	.004	
9.0	.120	.066	.030	.103	.057	.026	.071	.040	.018	.042	.024	.011	.013	.008	.004	
10.0	.114	.061	.026	.099	.053	.023	.068	.038	.016	.040	.022	.010	.013	.007	.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: 92EL62283030/WH					TYPE:			WEIGHT: 1			
SPEC.:					DIM.: F 190 x 110			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	19.8	21.1	20.1	21.3	21.4	19.7	20.9	20.0	21.1	21.3
	3H	20.5	21.7	20.8	21.9	22.1	20.3	21.5	20.6	21.7	21.9
	4H	20.9	21.9	21.2	22.2	22.4	20.6	21.7	20.9	21.9	22.2
	6H	21.1	22.1	21.4	22.4	22.6	20.7	21.8	21.1	22.0	22.3
	8H	21.1	22.1	21.5	22.4	22.7	20.8	21.7	21.1	22.0	22.3
	12H	21.2	22.1	21.5	22.4	22.7	20.7	21.7	21.1	21.9	22.2
4H	2H	20.0	21.1	20.3	21.3	21.6	19.9	21.0	20.2	21.2	21.5
	3H	20.9	21.9	21.3	22.2	22.4	20.7	21.7	21.1	22.0	22.3
	4H	21.4	22.2	21.7	22.5	22.9	21.1	22.0	21.5	22.3	22.6
	6H	21.7	22.5	22.1	22.8	23.2	21.3	22.1	21.7	22.4	22.8
	8H	21.8	22.5	22.2	22.9	23.3	21.4	22.1	21.8	22.4	22.8
	12H	21.9	22.5	22.3	22.9	23.3	21.4	22.0	21.8	22.4	22.8
8H	4H	21.5	22.2	21.9	22.5	22.9	21.2	21.9	21.6	22.3	22.7
	6H	21.9	22.5	22.4	22.9	23.3	21.6	22.1	22.0	22.5	23.0
	8H	22.1	22.6	22.6	23.0	23.5	21.6	22.1	22.1	22.6	23.0
	12H	22.2	22.6	22.7	23.1	23.6	21.6	22.1	22.1	22.5	23.0
12H	4H	21.5	22.1	21.9	22.5	22.9	21.2	21.9	21.6	22.2	22.6
	6H	21.9	22.4	22.4	22.9	23.3	21.6	22.1	22.0	22.5	22.9
	8H	22.1	22.6	22.6	23.0	23.5	21.7	22.1	22.1	22.5	23.0
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.6 / - 0.8					+ 0.7 / - 0.9				
1.5H		+ 0.7 / - 0.6					+ 0.8 / - 0.7				
2.0H		+ 1.5 / - 1.0					+ 1.6 / - 1.1				

CIE Pub.117, 2600 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.3)
Area: 0.0162778 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: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

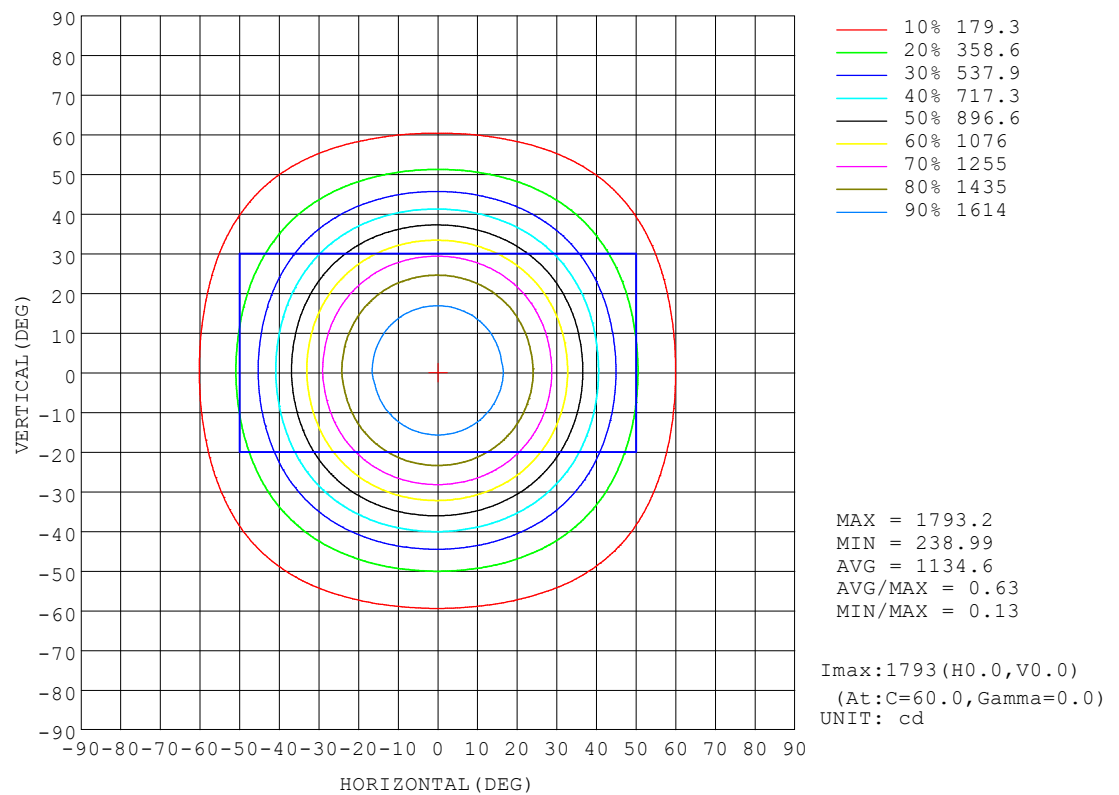
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	76	66	60	75	66	60	74	65	60	55
0.80	86	76	70	85	76	70	83	75	70	64
1.00	93	84	78	92	84	78	90	84	78	72
1.25	99	91	85	98	90	85	96	89	84	78
1.50	103	96	90	102	95	90	99	93	89	82
2.00	109	102	97	107	101	96	104	99	95	88
2.50	111	105	101	110	104	100	106	101	98	90
3.00	114	109	104	112	107	103	108	104	101	93
4.00	117	113	109	115	111	108	111	107	105	96
5.00	119	115	112	117	113	110	112	109	107	98
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: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

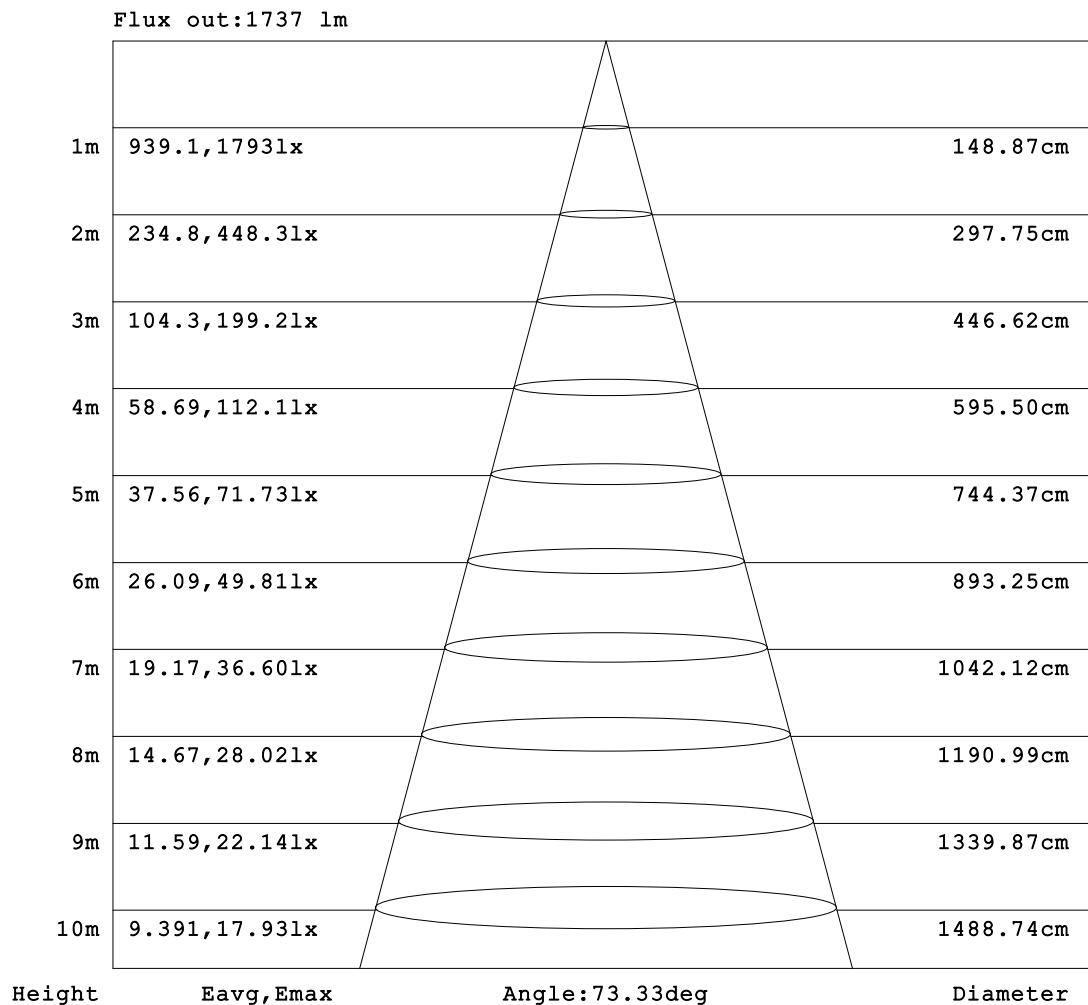


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:06 December 2022

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: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



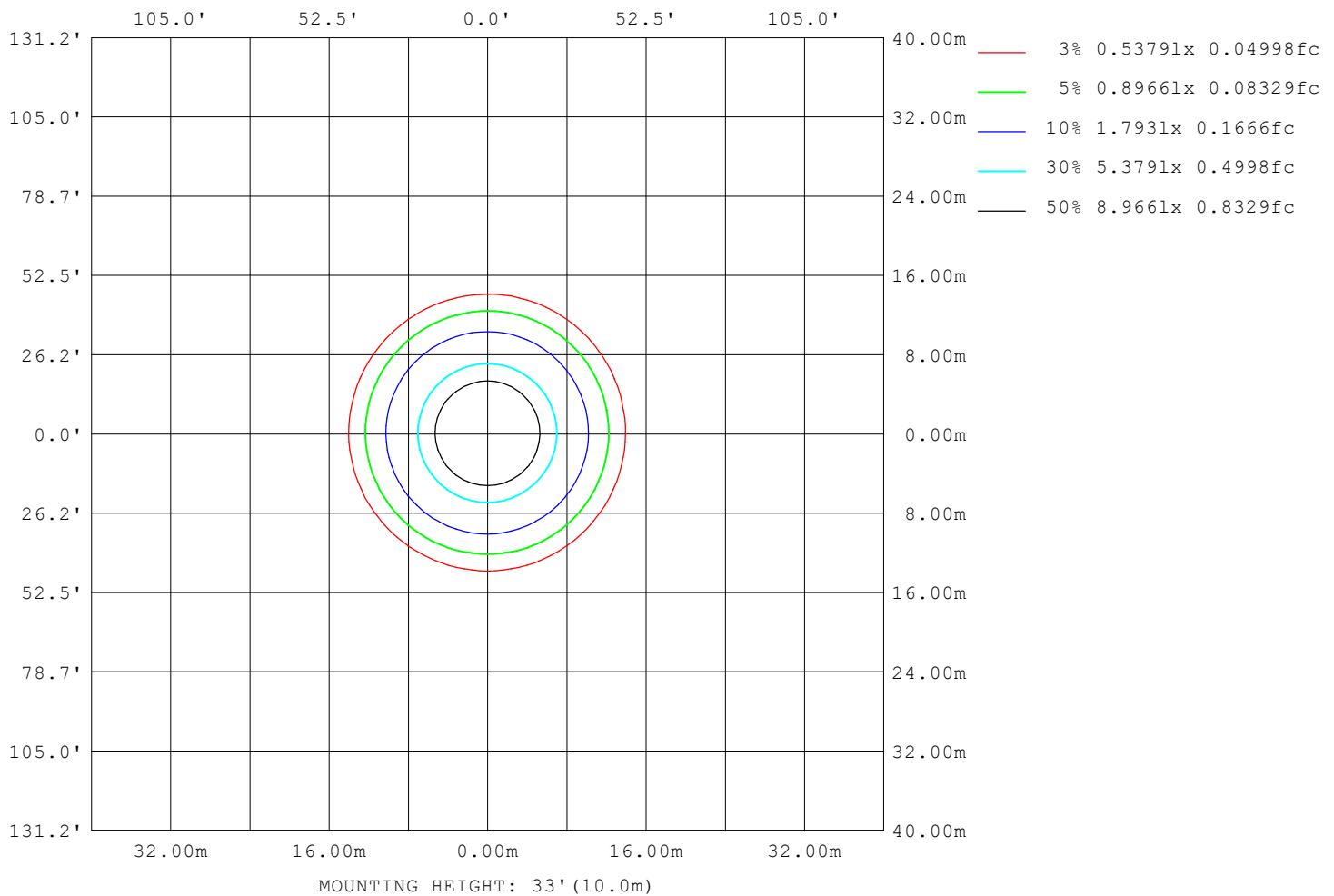
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	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: 92EL62283030/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

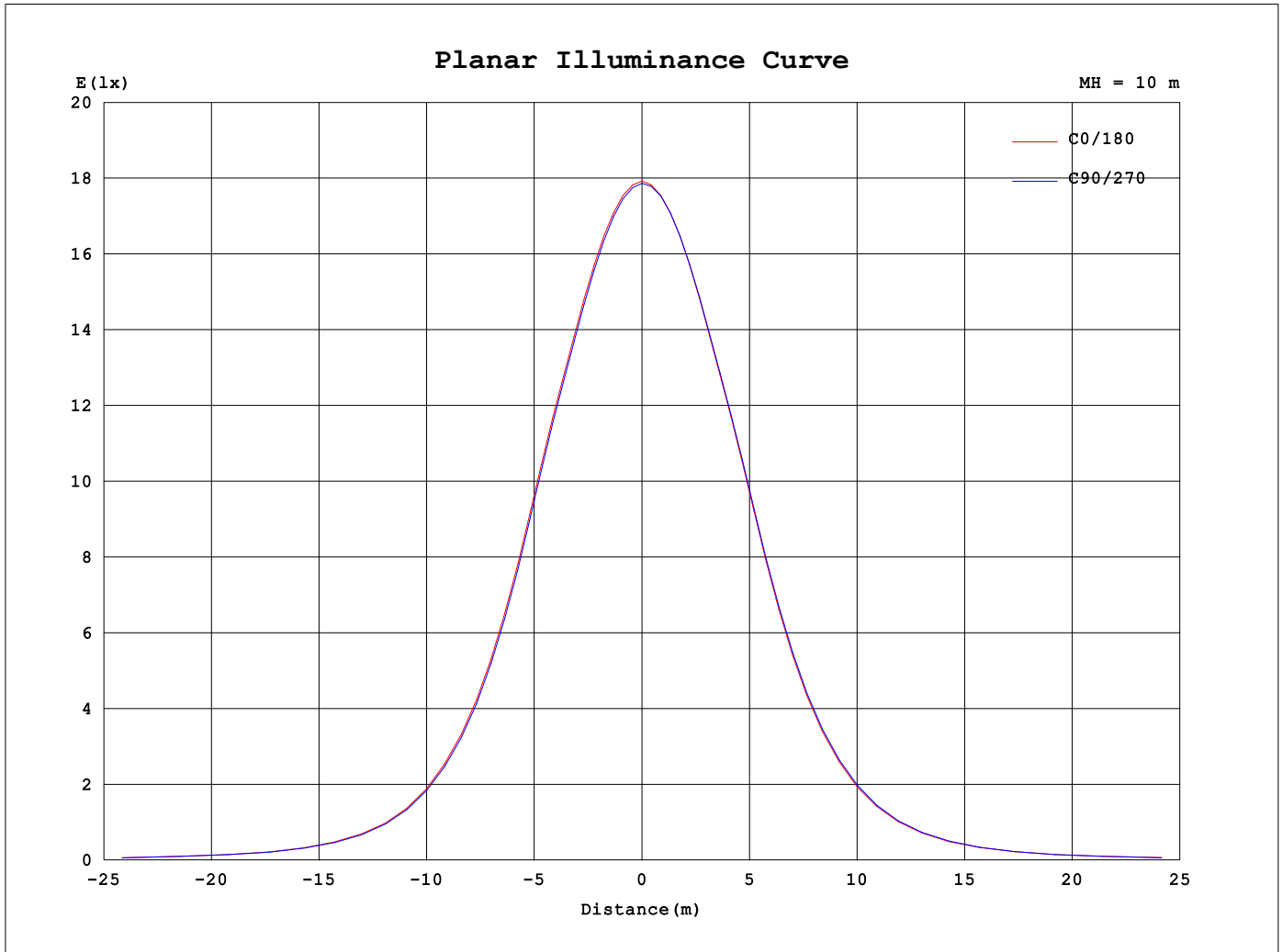
AvgL	cd/m2
L_0~180 (65) av	20370
L_0~180 (75) av	17553
L_0~180 (85) av	12106
L_90~270 (65) av	19973
L_90~270 (75) av	15792
L_90~270 (85) av	7045
L_45 (65) av	20227
L_45 (75) av	16714
L_45 (85) av	9445

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
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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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