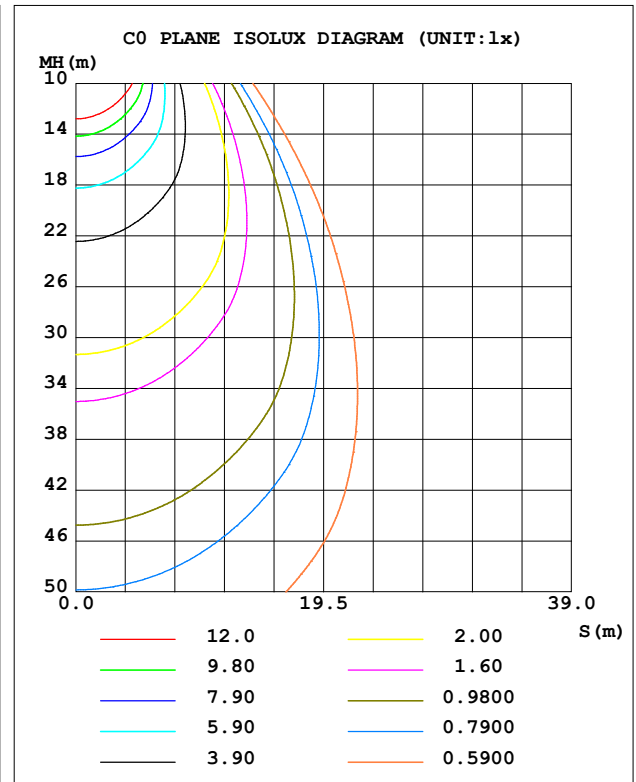
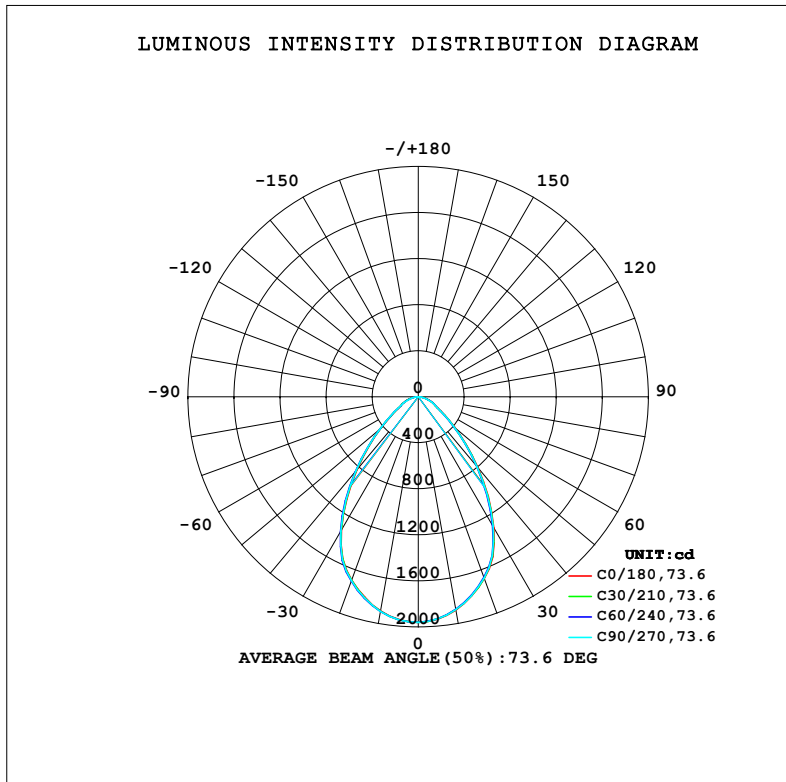


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 92EL62283065WH	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	92EL62283065WH	Imax (cd)	1959	S/MH (C0/180)	1.07
NOMINAL POWER (W)	30	LOR (%)	116.9	S/MH (C90/270)	1.07
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	3040.6	η UP, DN (C0-180)	0.0, 57.7
NOMINAL FLUX (lm)	2600	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 59.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	116.9	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	1882	1877	1878	1881	1888	1894	1893	1888	0- 10	183.5	183.5	6.03,7.06
20	1679	1672	1674	1680	1695	1702	1699	1692	10- 20	505.6	689.0	22.7,26.5
30	1312	1299	1300	1311	1336	1349	1347	1336	20- 30	702.1	1391	45.8,53.5
40	810.9	797.9	798.8	810.9	831.9	848.0	844.8	831.8	30- 40	667.5	2059	67.7,79.2
50	409.8	404.0	401.4	408.8	424.6	431.5	433.4	425.4	40- 50	465.6	2524	83,97.1
60	197.4	193.4	191.1	196.0	201.4	205.7	204.6	203.2	50- 60	262.8	2787	91.7,107
70	117.0	112.4	108.7	114.7	119.6	119.0	115.1	117.7	60- 70	153.0	2940	96.7,113
80	46.75	41.46	37.09	42.86	46.42	45.34	41.45	45.15	70- 80	82.34	3022	99.4,116
90	0.8093	0.7952	0.7681	0.8044	0.7278	0.7080	0.7027	0.7078	80- 90	18.23	3041	100,117
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): 2320.5 lm

%lum = 76.3%

%lamp = 89.3%

Conical surface Flux(130deg): 2871.6 lm

%lum = 94.4%

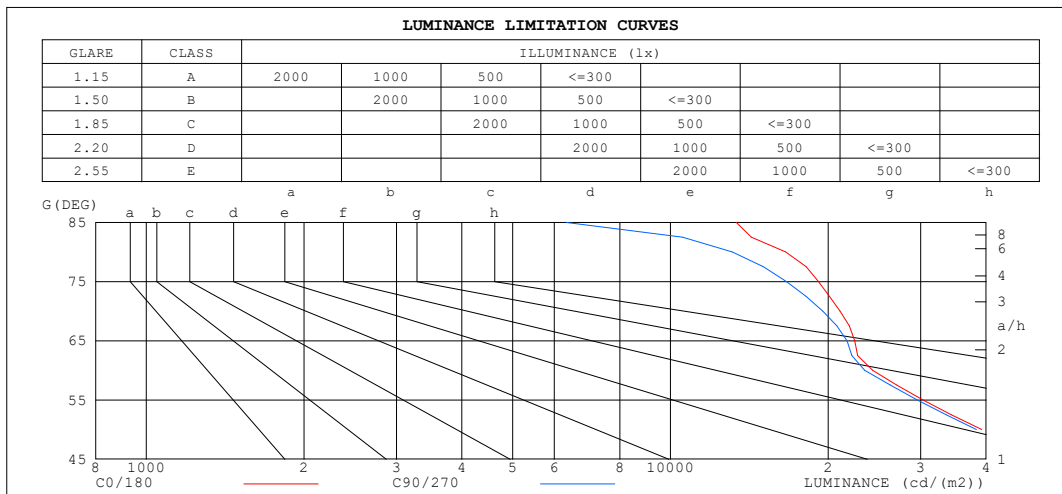
%lamp = 110.4%

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: 92EL62283065WH	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	13352	6327
80	16577	13112
75	19150	16661
70	21069	19518
65	22465	21720
60	24307	23470
55	30343	29598
50	39255	38341
45	51391	50173

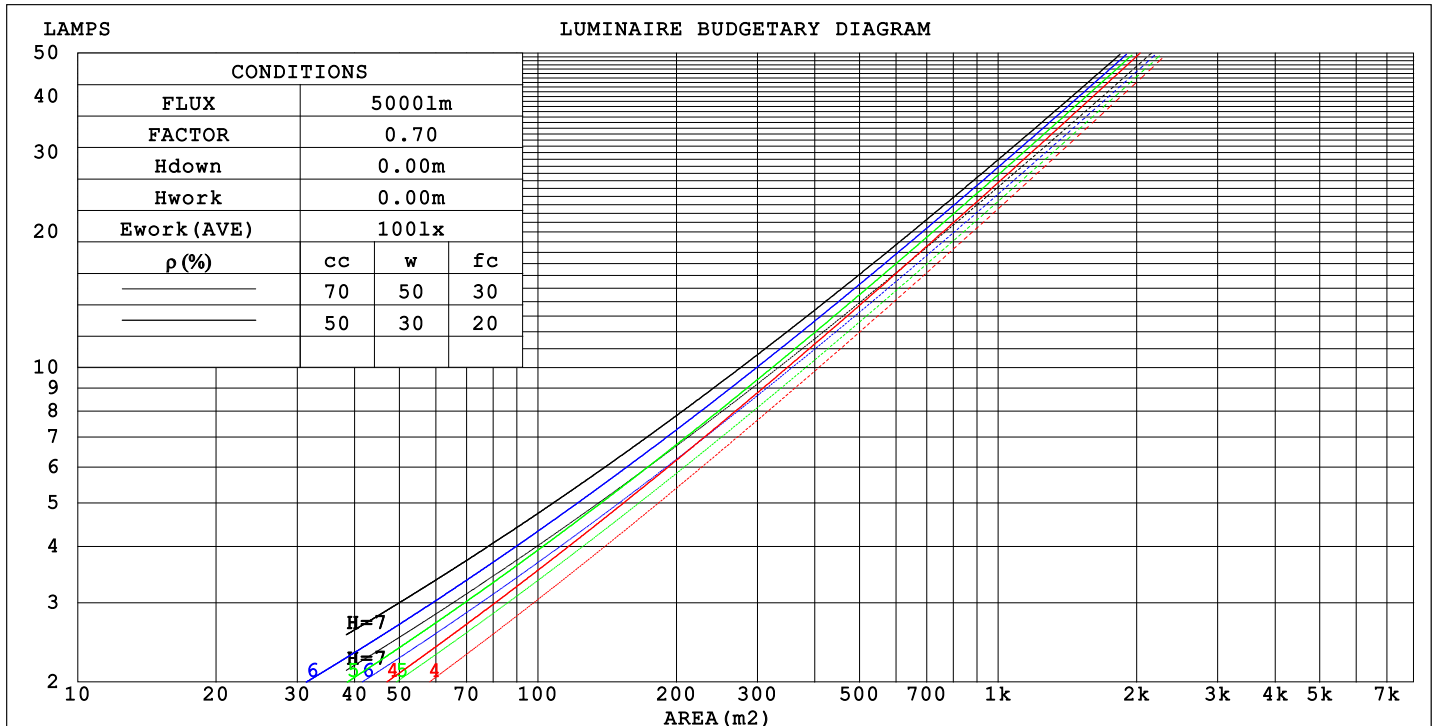
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 06 December 2022

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: 92EL62283065WH	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															



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: 92EL62283065WH	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	.277	.158	.050	.269	.154	.049	.254	.146	.047	.240	.139	.044	.227	.132	.043	
2.0	.266	.146	.045	.259	.143	.044	.246	.137	.042	.234	.131	.041	.223	.126	.040	
3.0	.251	.134	.040	.245	.131	.040	.234	.127	.039	.223	.122	.038	.214	.118	.037	
4.0	.236	.123	.036	.231	.121	.036	.221	.117	.035	.212	.114	.034	.203	.110	.034	
5.0	.222	.113	.033	.218	.112	.033	.209	.109	.032	.201	.106	.031	.193	.103	.031	
6.0	.209	.105	.030	.205	.104	.030	.197	.101	.029	.190	.099	.029	.183	.097	.029	
7.0	.198	.098	.028	.194	.097	.028	.187	.095	.027	.180	.093	.027	.174	.091	.027	
8.0	.187	.091	.026	.184	.090	.026	.177	.089	.025	.171	.087	.025	.166	.085	.025	
9.0	.177	.086	.024	.174	.085	.024	.168	.083	.024	.163	.082	.023	.158	.080	.023	
10.0	.168	.081	.022	.165	.080	.022	.160	.079	.022	.156	.077	.022	.151	.076	.022	

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	.223	.223	.223	.190	.190	.190	.130	.130	.130	.075	.075	.075	.024	.024	.024	
1.0	.205	.183	.164	.175	.157	.141	.120	.108	.098	.069	.063	.057	.022	.020	.018	
2.0	.191	.155	.124	.164	.133	.107	.112	.092	.075	.065	.054	.044	.021	.017	.014	
3.0	.180	.133	.096	.154	.115	.083	.106	.080	.058	.061	.047	.034	.020	.015	.011	
4.0	.170	.117	.076	.146	.101	.066	.100	.070	.047	.058	.041	.028	.019	.013	.009	
5.0	.161	.104	.062	.138	.090	.054	.095	.063	.038	.055	.037	.023	.018	.012	.007	
6.0	.153	.094	.052	.131	.081	.045	.091	.057	.032	.053	.033	.019	.017	.011	.006	
7.0	.145	.085	.044	.125	.074	.038	.086	.052	.027	.050	.031	.016	.016	.010	.005	
8.0	.138	.078	.037	.119	.068	.033	.082	.048	.023	.048	.028	.014	.016	.009	.005	
9.0	.132	.073	.033	.114	.063	.028	.079	.044	.020	.046	.026	.012	.015	.009	.004	
10.0	.126	.068	.029	.109	.059	.025	.075	.041	.018	.044	.024	.011	.014	.008	.004	

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: 92EL62283065WH					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	20.2	21.4	20.4	21.6	21.8	20.1	21.3	20.3	21.5	21.7				
3H	20.9	22.0	21.2	22.3	22.5	20.7	21.9	21.0	22.1	22.3				
4H	21.2	22.3	21.5	22.5	22.8	21.0	22.1	21.3	22.3	22.5				
6H	21.4	22.5	21.8	22.7	23.0	21.1	22.1	21.4	22.4	22.6				
8H	21.5	22.5	21.8	22.7	23.0	21.1	22.1	21.4	22.4	22.6				
12H	21.5	22.5	21.9	22.7	23.0	21.1	22.0	21.4	22.3	22.6				
4H 2H	20.4	21.5	20.7	21.7	21.9	20.3	21.4	20.6	21.6	21.8				
3H	21.3	22.2	21.6	22.5	22.8	21.1	22.1	21.5	22.3	22.6				
4H	21.7	22.6	22.1	22.9	23.2	21.5	22.3	21.8	22.6	23.0				
6H	22.1	22.8	22.5	23.2	23.5	21.7	22.5	22.1	22.8	23.2				
8H	22.2	22.9	22.6	23.2	23.6	21.7	22.4	22.1	22.8	23.2				
12H	22.2	22.9	22.6	23.2	23.6	21.7	22.4	22.1	22.7	23.1				
8H 4H	21.8	22.5	22.2	22.9	23.3	21.6	22.3	22.0	22.7	23.0				
6H	22.3	22.8	22.7	23.2	23.7	21.9	22.5	22.3	22.9	23.3				
8H	22.4	22.9	22.9	23.4	23.8	22.0	22.5	22.4	22.9	23.4				
12H	22.5	23.0	23.0	23.4	23.9	22.0	22.4	22.5	22.9	23.3				
12H 4H	21.8	22.4	22.2	22.8	23.2	21.6	22.2	22.0	22.6	23.0				
6H	22.3	22.8	22.7	23.2	23.6	21.9	22.4	22.4	22.9	23.3				
8H	22.5	22.9	22.9	23.3	23.8	22.0	22.5	22.5	22.9	23.4				
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: 92EL62283065WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

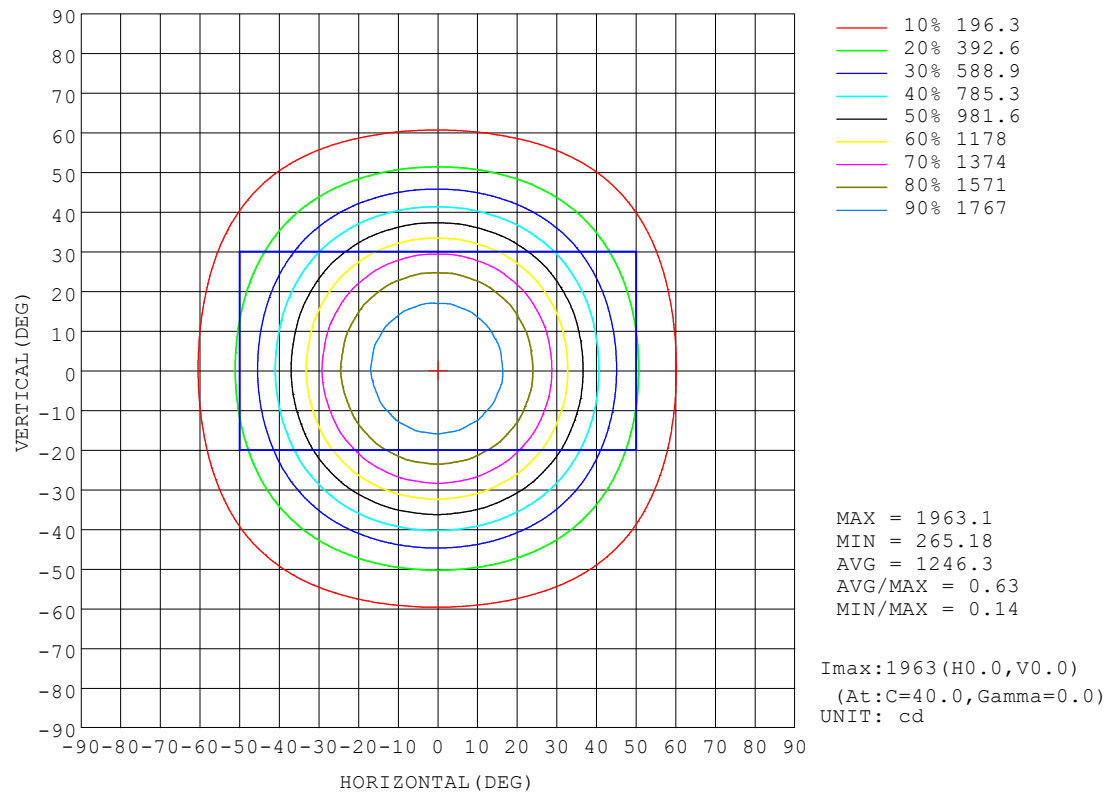
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	73	66	83	72	66	82	72	66	60
0.80	94	84	77	93	83	77	92	83	77	70
1.00	102	93	86	101	92	86	99	93	85	79
1.25	109	100	94	108	99	94	105	98	93	86
1.50	114	105	99	112	104	99	109	103	98	91
2.00	120	112	107	118	111	106	114	109	104	97
2.50	123	116	111	121	115	110	117	112	108	99
3.00	126	120	115	123	118	114	119	115	111	103
4.00	129	124	120	126	122	119	122	118	115	106
5.00	131	127	123	128	125	122	123	120	118	108
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: 92EL62283065WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

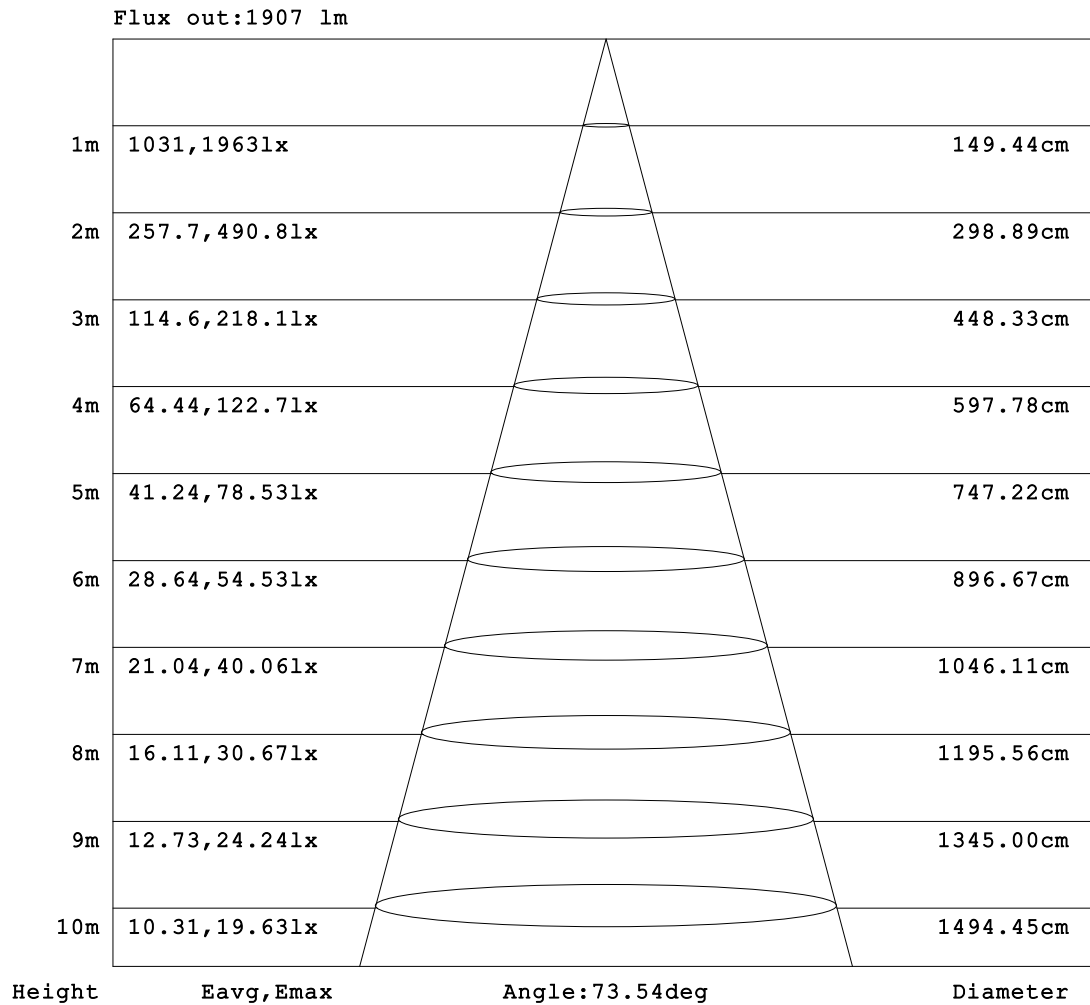


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:06 December 2022

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: 92EL62283065WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:



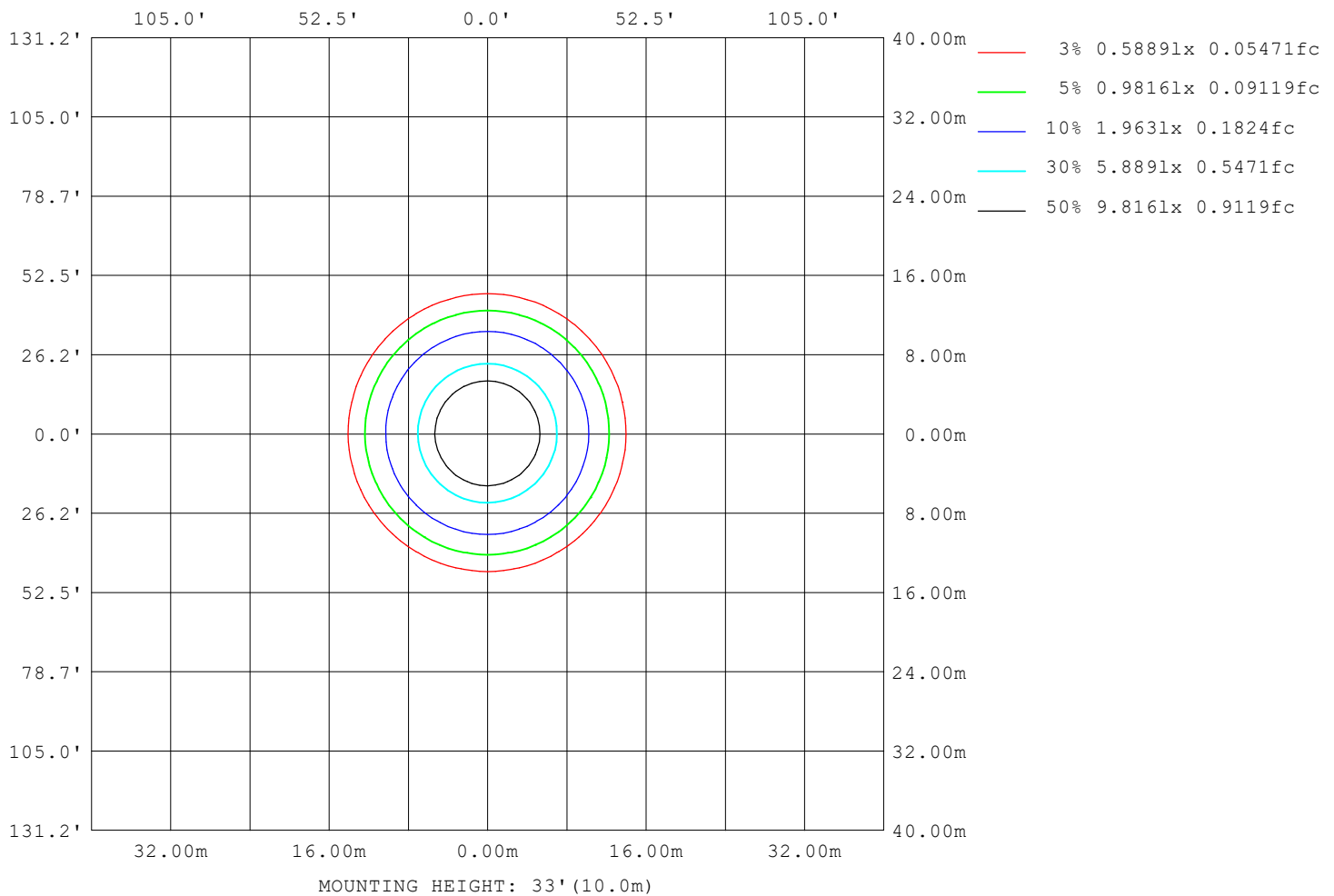
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 92EL62283065WH	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: 92EL62283065WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: F 190 x 110	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Round	Shielding Angle:

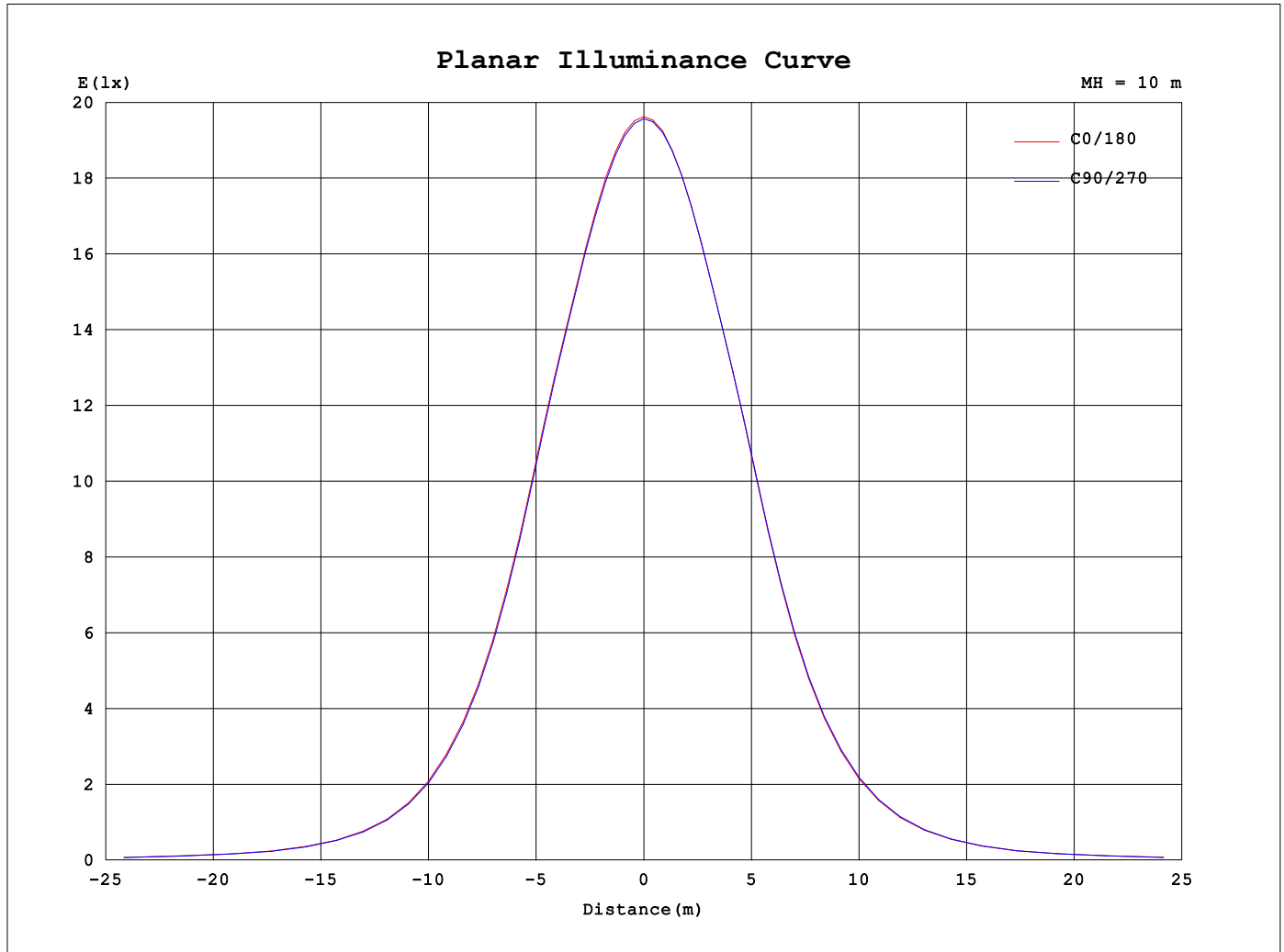
AvgL	cd/m2
L_0~180 (65) av	22578
L_0~180 (75) av	19320
L_0~180 (85) av	13333
L_90~270 (65) av	22198
L_90~270 (75) av	17328
L_90~270 (85) av	7614
L_45 (65) av	22469
L_45 (75) av	18397
L_45 (85) av	10346

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:

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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:

```

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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:

```