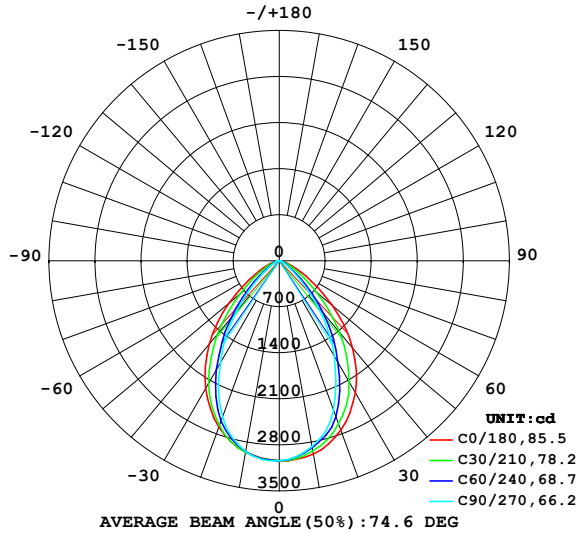


LUMINAIRE PHOTOMETRIC TEST REPORT

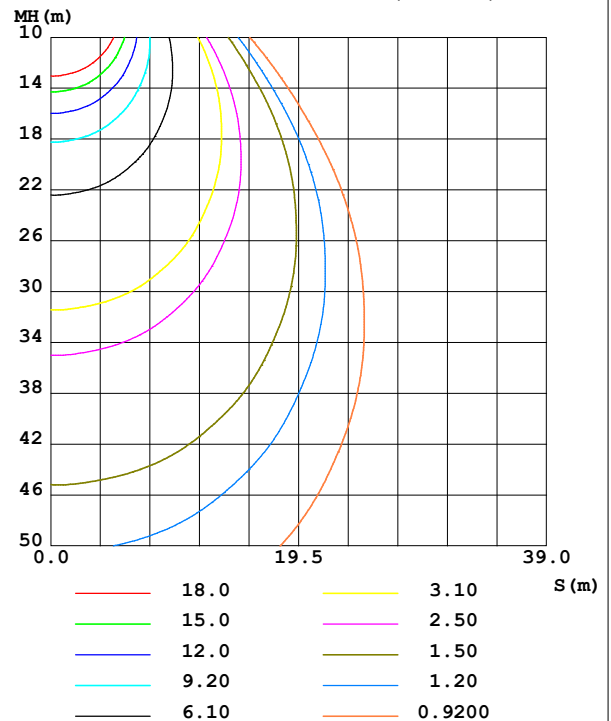
NAME: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL67054065/WH67054040/WH	Imax (cd)	3045	S/MH (C0/180)	1.12
NOMINAL POWER (W)	40	LOR (%)	119.1	S/MH (C90/270)	0.98
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4525.8	η UP, DN (C0-180)	0.0, 57.9
NOMINAL FLUX (lm)	3800	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 61.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	119.1	CIBSE SHR MAX	1.10

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: 08 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	2985	2904	2872	2891	2951	2951	2942	2973	0- 10	285.1	285.1	6.3,7.5
20	2742	2596	2414	2553	2688	2633	2522	2664	10- 20	785.8	1071	23.7,28.2
30	2314	1960	1681	1913	2242	2033	1787	2071	20- 30	1062	2133	47.1,56.1
40	1738	1224	927.4	1181	1657	1285	1042	1320	30- 40	1028	3162	69.9,83.2
50	1041	566.7	327.7	551.5	992.7	622.4	405.4	638.9	40- 50	733.3	3895	86.1,102
60	465.9	204.7	121.9	204.6	448.0	235.6	144.9	242.2	50- 60	377.2	4272	94.4,112
70	163.0	81.41	57.01	82.45	167.0	91.71	71.29	94.97	60- 70	164.7	4437	98,117
80	55.87	32.49	23.48	33.40	55.69	37.19	29.22	37.78	70- 80	68.37	4505	99.5,119
90	1.379	1.176	0.7777	1.157	1.223	2.627	8.296	2.349	80- 90	20.77	4526	100,119
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): 3575.9 lm

%lum = 79.0%

%lamp = 94.1%

Conical surface Flux(130deg): 4371.7 lm

%lum = 96.6%

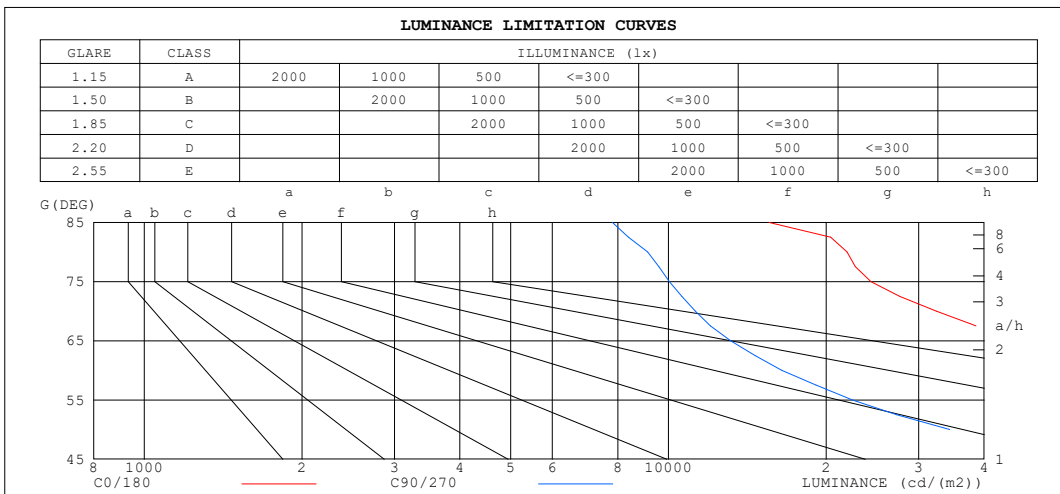
%lamp = 115.0%

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:
 Test Date:08 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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15562	7817
80	21893	9119
75	24320	10044
70	32439	11242
65	45679	13153
60	63406	16444
55	85442	22469
50	110205	34386
45	135247	55567

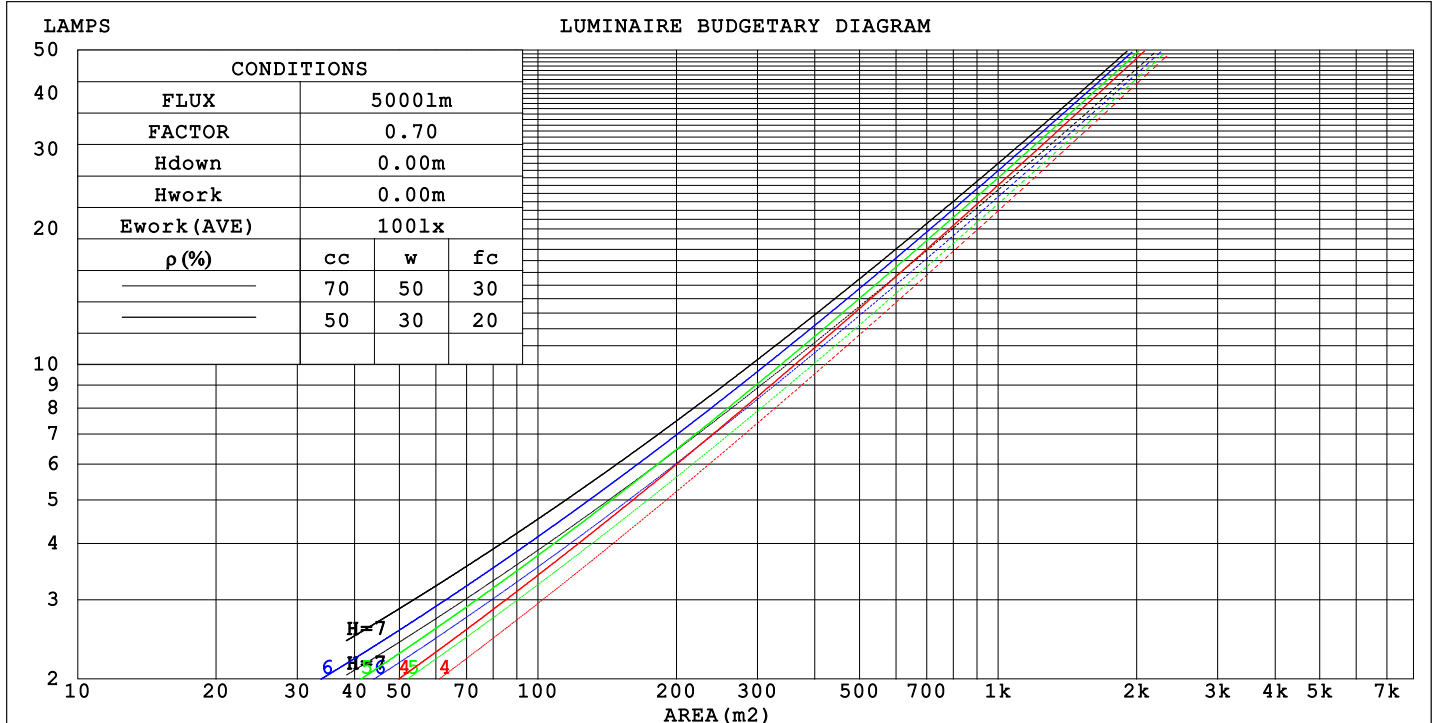
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 08 December 2022

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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	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:08 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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	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	.268	.153	.048	.260	.148	.047	.245	.141	.045	.231	.133	.043	.218	.126	.041	
2.0	.259	.142	.044	.252	.139	.043	.239	.133	.041	.227	.127	.040	.216	.122	.038	
3.0	.246	.131	.039	.240	.129	.039	.229	.124	.038	.218	.120	.037	.208	.115	.036	
4.0	.233	.121	.036	.228	.119	.035	.218	.115	.034	.208	.112	.034	.200	.109	.033	
5.0	.220	.112	.032	.216	.111	.032	.207	.108	.032	.198	.105	.031	.191	.102	.031	
6.0	.208	.104	.030	.204	.103	.030	.196	.101	.029	.189	.098	.029	.182	.096	.028	
7.0	.197	.097	.028	.193	.096	.027	.186	.094	.027	.180	.092	.027	.174	.090	.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	.169	.083	.024	.163	.082	.023	.158	.080	.023	
10.0	.169	.081	.022	.166	.080	.022	.161	.079	.022	.156	.078	.022	.152	.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	.227	.227	.227	.194	.194	.194	.132	.132	.132	.076	.076	.076	.024	.024	.024	
1.0	.208	.187	.168	.178	.160	.145	.122	.110	.100	.070	.064	.058	.022	.021	.019	
2.0	.193	.158	.127	.166	.136	.110	.113	.094	.077	.065	.055	.045	.021	.018	.015	
3.0	.181	.136	.099	.156	.117	.086	.107	.081	.060	.062	.047	.036	.020	.015	.012	
4.0	.171	.119	.079	.147	.103	.069	.101	.072	.048	.058	.042	.029	.019	.014	.009	
5.0	.162	.106	.064	.139	.091	.056	.096	.064	.039	.056	.038	.023	.018	.012	.008	
6.0	.154	.095	.053	.132	.082	.046	.091	.058	.033	.053	.034	.020	.017	.011	.006	
7.0	.146	.087	.045	.126	.075	.039	.087	.053	.028	.051	.031	.017	.016	.010	.005	
8.0	.139	.080	.039	.120	.069	.034	.083	.048	.024	.048	.029	.014	.016	.009	.005	
9.0	.133	.074	.034	.115	.064	.029	.079	.045	.021	.046	.027	.012	.015	.009	.004	
10.0	.127	.069	.030	.110	.060	.026	.076	.042	.018	.044	.025	.011	.014	.008	.004	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:08 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: 92EL67054065/WH						TYPE:			WEIGHT: 1		
SPEC.:						DIM.: 230 x 145 x 85			SERIAL No.: 0		
MFR.: Elmark Industries JSC						SUR.: rectangular			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	22.6	23.8	22.8	24.0	24.2	18.1	19.4	18.4	19.5	19.7
	3H	22.9	24.0	23.1	24.2	24.4	18.2	19.3	18.5	19.5	19.7
	4H	22.9	24.0	23.2	24.2	24.4	18.2	19.3	18.5	19.5	19.7
	6H	23.0	23.9	23.3	24.2	24.5	18.2	19.2	18.5	19.4	19.7
	8H	23.0	23.9	23.3	24.2	24.5	18.2	19.1	18.5	19.4	19.7
	12H	22.9	23.9	23.3	24.1	24.4	18.2	19.1	18.5	19.4	19.6
4H	2H	22.4	23.5	22.7	23.7	23.9	18.3	19.4	18.6	19.6	19.9
	3H	22.8	23.7	23.1	24.0	24.2	18.5	19.4	18.8	19.7	19.9
	4H	22.9	23.7	23.2	24.0	24.3	18.5	19.4	18.9	19.7	20.0
	6H	23.0	23.7	23.4	24.0	24.4	18.6	19.3	19.0	19.7	20.0
	8H	23.0	23.7	23.4	24.0	24.4	18.6	19.3	19.0	19.6	20.0
	12H	23.0	23.6	23.4	24.0	24.4	18.6	19.2	19.0	19.6	20.0
8H	4H	22.8	23.4	23.2	23.8	24.2	18.6	19.2	19.0	19.6	20.0
	6H	22.9	23.5	23.4	23.9	24.3	18.7	19.2	19.1	19.6	20.1
	8H	23.0	23.5	23.5	23.9	24.3	18.7	19.2	19.2	19.6	20.1
	12H	23.0	23.4	23.5	23.9	24.3	18.8	19.2	19.2	19.6	20.1
12H	4H	22.7	23.4	23.2	23.7	24.1	18.6	19.2	19.0	19.6	19.9
	6H	22.9	23.4	23.4	23.8	24.2	18.7	19.2	19.2	19.6	20.1
	8H	23.0	23.4	23.4	23.8	24.3	18.8	19.2	19.2	19.6	20.1
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.8 / - 1.1					+ 1.6 / - 2.7				
1.5H		+ 1.3 / - 1.8					+ 1.7 / - 2.3				
2.0H		+ 3.1 / - 3.3					+ 2.6 / - 2.3				

CIE Pub.117, 3800 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.6)
Area: 0.01479 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:08 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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

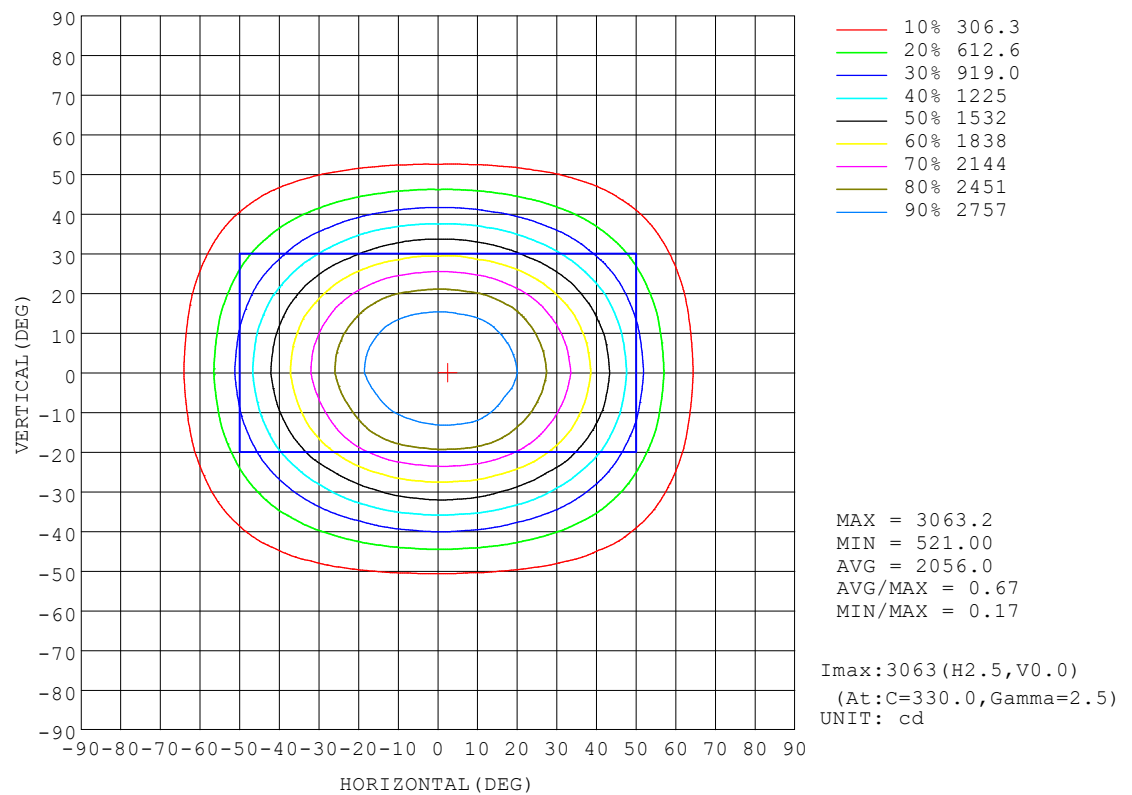
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	76	69	85	75	69	84	75	69	63
0.80	97	87	81	96	87	81	95	86	80	74
1.00	106	96	90	105	96	90	102	96	89	83
1.25	113	104	98	111	103	97	109	102	97	90
1.50	117	109	103	116	108	103	113	106	102	95
2.00	123	116	111	121	115	110	118	112	108	101
2.50	126	120	115	124	118	114	120	115	111	103
3.00	129	123	119	126	121	117	122	118	115	106
4.00	132	127	123	129	125	122	125	121	119	109
5.00	134	130	127	131	128	125	126	123	121	111
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: 08 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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

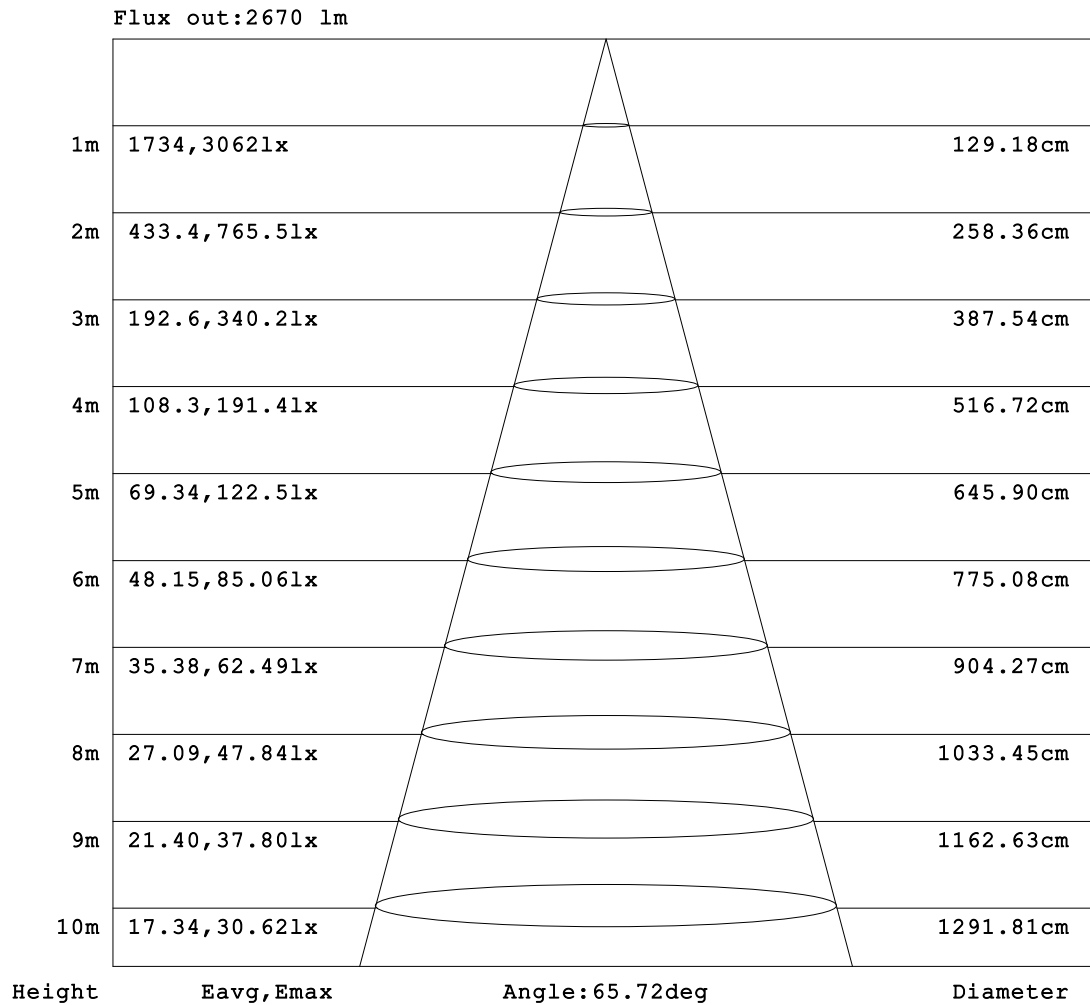


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:08 December 2022

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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



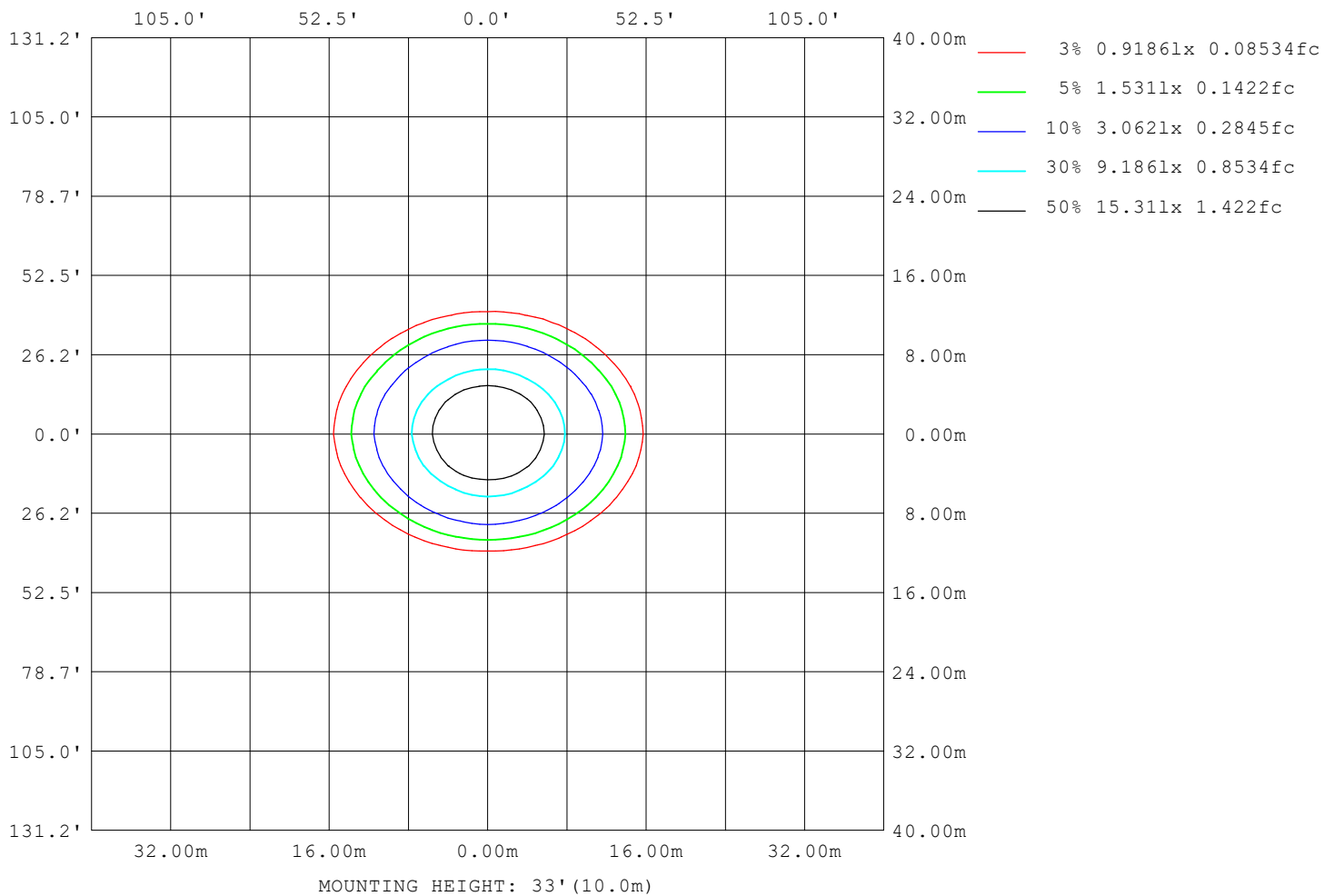
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 08 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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 08 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: 92EL67054065/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

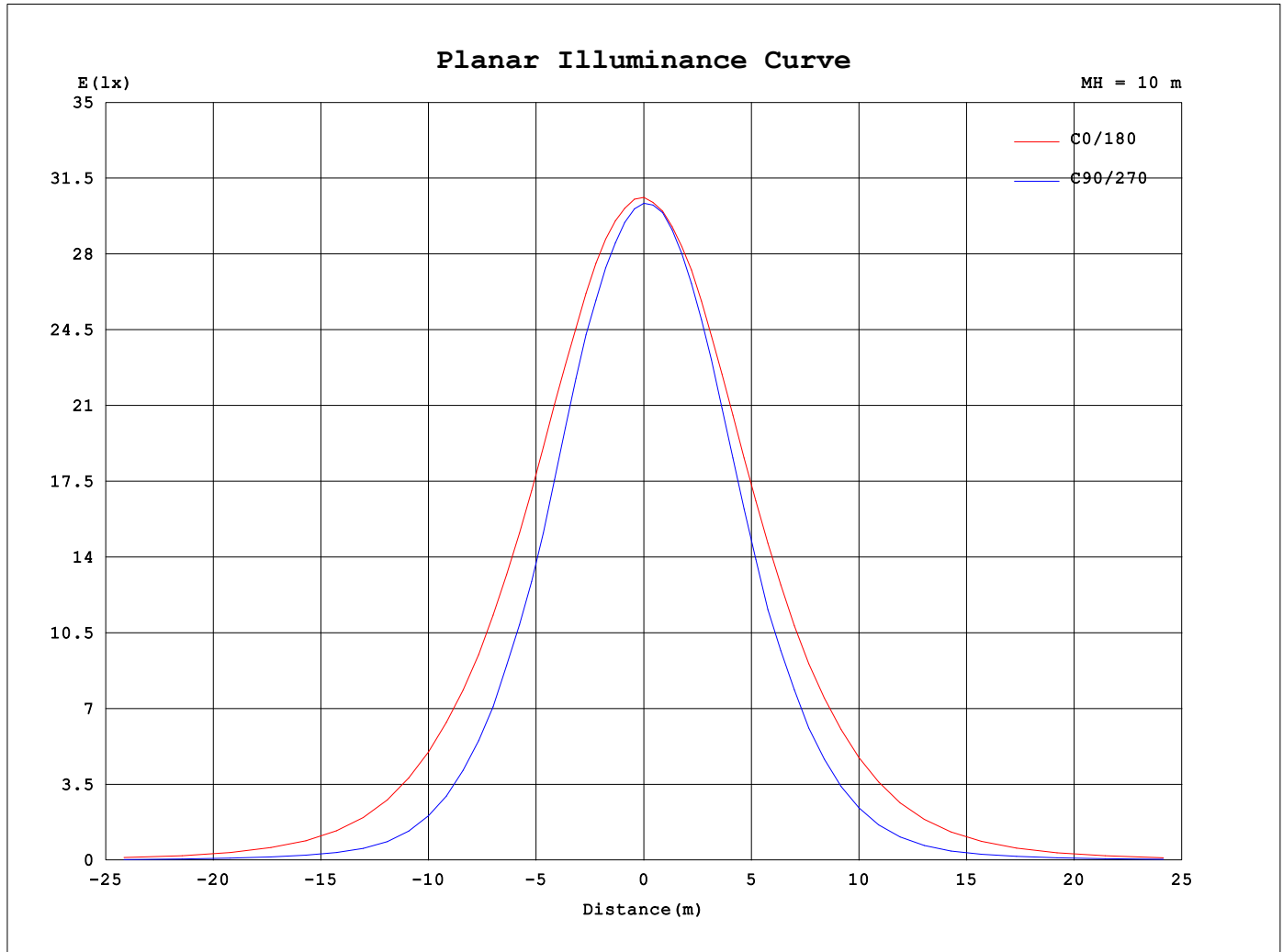
AvgL	cd/m2
L_0~180 (65) av	44728
L_0~180 (75) av	24099
L_0~180 (85) av	15894
L_90~270 (65) av	14359
L_90~270 (75) av	10911
L_90~270 (85) av	14468
L_45 (65) av	21736
L_45 (75) av	14757
L_45 (85) av	12107

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:08 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: 08 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:

```