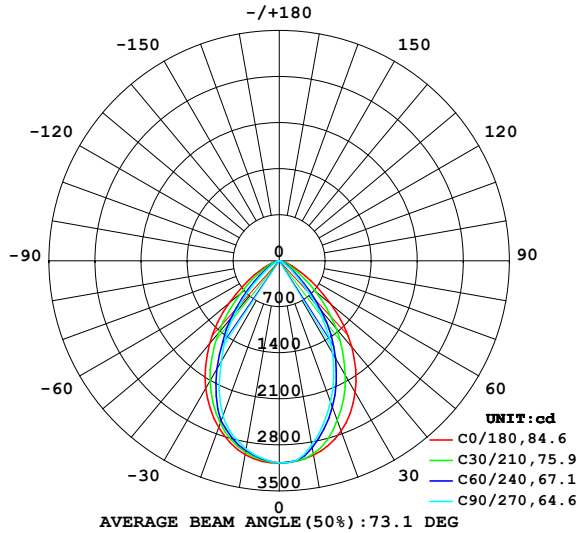


LUMINAIRE PHOTOMETRIC TEST REPORT

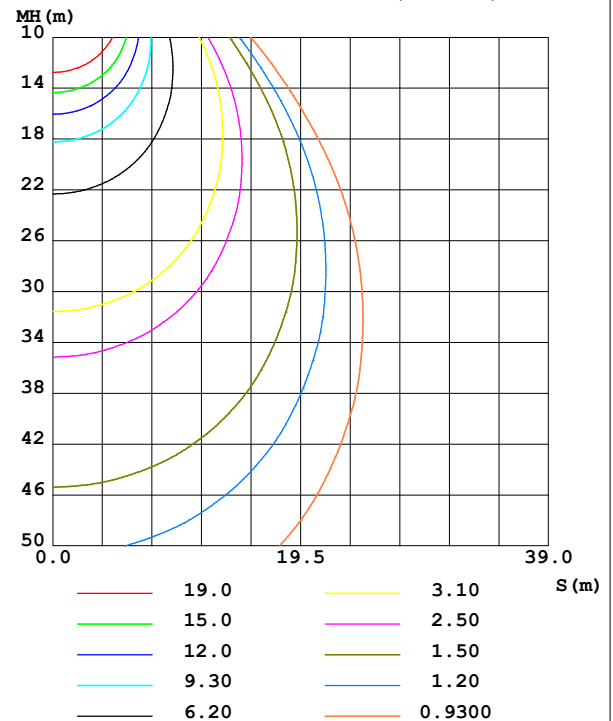
NAME: 92EL67054040/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL67054040/WH	Imax (cd)	3081	S/MH (C0/180)	1.11
NOMINAL POWER (W)	40	LOR (%)	116.3	S/MH (C90/270)	0.97
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4419.4	η UP, DN (C0-180)	0.0, 56.0
NOMINAL FLUX (lm)	3800	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 60.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	230	η down (%)	116.3	CIBSE SHR MAX	1.05

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	2999	2939	2839	2947	2993	2940	2910	2943	0- 10	287.3	287.3	6.5,7.56
20	2756	2467	2282	2446	2699	2606	2514	2615	10- 20	776.7	1064	24.1,28
30	2309	1846	1629	1808	2243	2004	1765	2045	20- 30	1039	2103	47.6,55.3
40	1717	1167	873.6	1128	1654	1263	1049	1304	30- 40	1003	3106	70.3,81.7
50	1024	527.8	296.0	517.4	989.9	615.6	402.0	637.0	40- 50	713.5	3819	86.4,101
60	458.1	190.5	109.9	188.7	443.7	228.4	131.1	235.1	50- 60	363.5	4183	94.6,110
70	159.9	72.44	50.92	74.76	158.7	84.74	59.15	84.84	60- 70	155.2	4338	98.2,114
80	52.50	29.22	21.15	30.78	53.46	33.59	25.67	33.49	70- 80	62.67	4401	99.6,116
90	1.292	1.136	0.7009	1.109	1.146	2.407	9.922	2.773	80- 90	18.60	4419	100,116
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): 3509.6 lm

%lum = 79.4%

%lamp = 92.4%

Conical surface Flux(130deg): 4277.5 lm

%lum = 96.8%

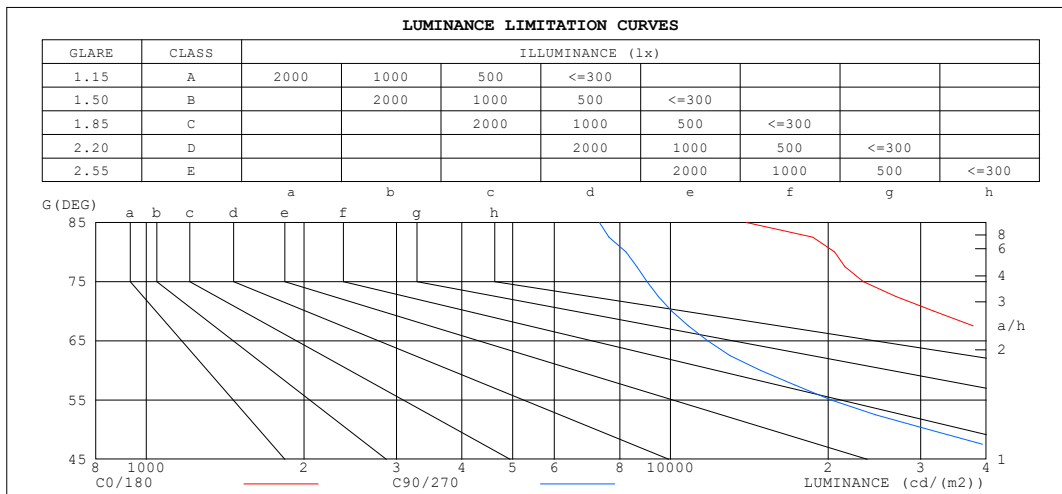
%lamp = 112.6%

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: 92EL67054040/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	13955	7315
80	20545	8219
75	23320	9024
70	31777	10048
65	44830	11777
60	62261	14831
55	84030	20261
50	108300	31081
45	132932	50618

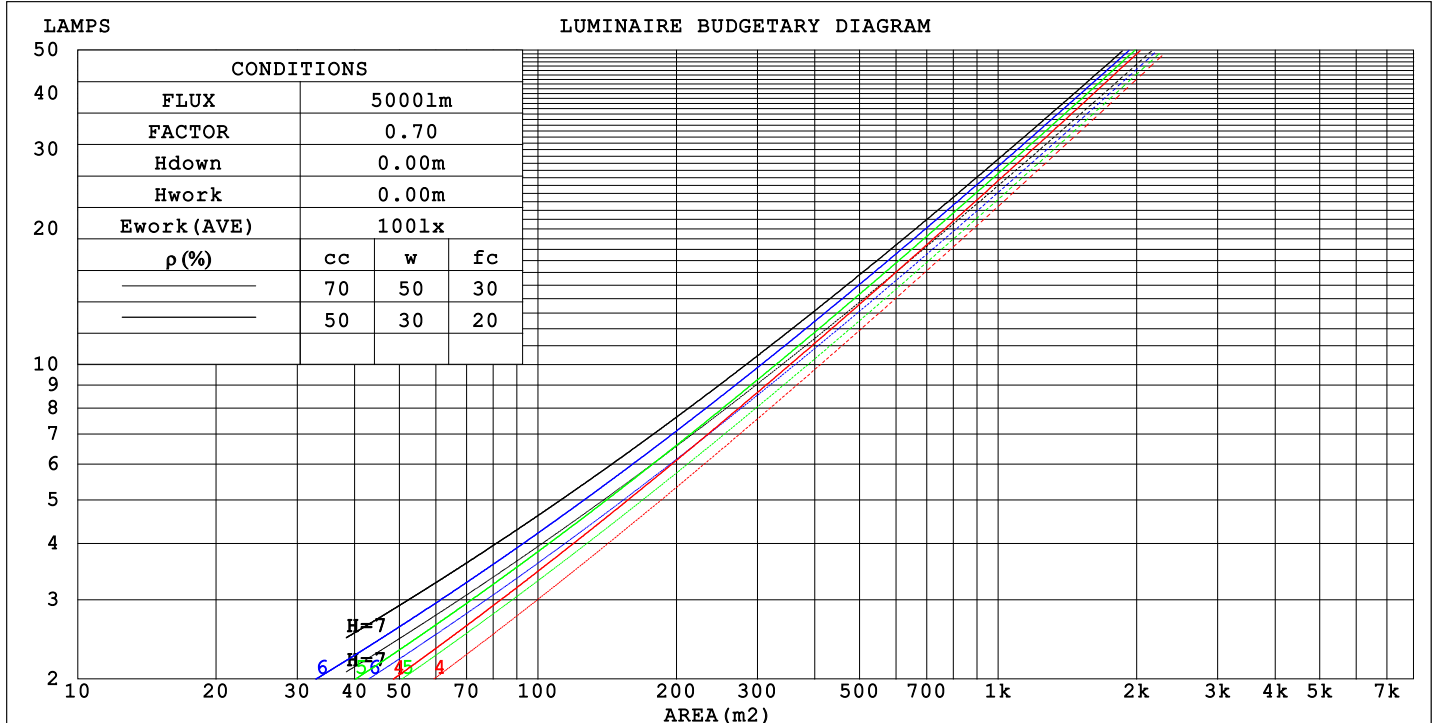
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 07 December 2022

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: 92EL67054040/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: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: 92EL67054040/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	.260	.148	.047	.252	.144	.046	.237	.136	.043	.224	.129	.041	.211	.122	.039	
2.0	.251	.138	.042	.244	.135	.041	.232	.129	.040	.220	.123	.039	.209	.118	.037	
3.0	.239	.127	.038	.233	.125	.038	.222	.120	.037	.212	.116	.036	.202	.112	.035	
4.0	.226	.118	.035	.221	.116	.034	.211	.112	.033	.202	.109	.033	.194	.105	.032	
5.0	.214	.109	.032	.209	.107	.031	.201	.104	.031	.193	.102	.030	.185	.099	.030	
6.0	.202	.101	.029	.198	.100	.029	.191	.098	.028	.183	.095	.028	.177	.093	.028	
7.0	.192	.095	.027	.188	.094	.027	.181	.092	.026	.175	.090	.026	.169	.088	.026	
8.0	.182	.089	.025	.178	.088	.025	.172	.086	.025	.167	.084	.024	.161	.083	.024	
9.0	.172	.083	.023	.170	.083	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.164	.079	.022	.161	.078	.022	.157	.077	.022	.152	.075	.021	.147	.074	.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	.222	.222	.222	.189	.189	.189	.129	.129	.129	.074	.074	.074	.024	.024	.024	
1.0	.203	.182	.164	.173	.157	.141	.119	.108	.098	.068	.062	.057	.022	.020	.018	
2.0	.189	.154	.125	.162	.132	.108	.111	.092	.075	.064	.053	.044	.020	.017	.014	
3.0	.177	.132	.097	.152	.114	.084	.104	.079	.059	.060	.046	.035	.019	.015	.011	
4.0	.167	.116	.077	.143	.100	.067	.098	.070	.047	.057	.041	.028	.018	.013	.009	
5.0	.158	.103	.063	.136	.089	.055	.093	.062	.039	.054	.037	.023	.017	.012	.008	
6.0	.150	.093	.052	.129	.081	.045	.089	.056	.032	.052	.033	.019	.017	.011	.006	
7.0	.143	.085	.044	.123	.073	.038	.085	.051	.027	.049	.030	.016	.016	.010	.005	
8.0	.136	.078	.038	.117	.067	.033	.081	.047	.023	.047	.028	.014	.015	.009	.005	
9.0	.130	.072	.033	.112	.062	.029	.077	.044	.020	.045	.026	.012	.015	.008	.004	
10.0	.124	.067	.029	.107	.058	.025	.074	.041	.018	.043	.024	.011	.014	.008	.004	

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: 92EL67054040/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	22.4	23.6	22.6	23.8	24.0	17.7	18.9	18.0	19.1	19.3
	3H	22.7	23.8	22.9	24.0	24.2	17.8	18.9	18.0	19.1	19.3
	4H	22.7	23.8	23.0	24.0	24.2	17.8	18.8	18.1	19.0	19.3
	6H	22.8	23.7	23.1	24.0	24.2	17.8	18.7	18.1	19.0	19.3
	8H	22.8	23.7	23.1	24.0	24.2	17.8	18.7	18.1	19.0	19.2
	12H	22.7	23.6	23.1	23.9	24.2	17.7	18.6	18.1	18.9	19.2
4H	2H	22.2	23.2	22.5	23.5	23.7	17.9	19.0	18.2	19.2	19.4
	3H	22.6	23.5	22.9	23.7	24.0	18.0	18.9	18.4	19.2	19.5
	4H	22.7	23.5	23.0	23.8	24.1	18.1	18.9	18.4	19.2	19.5
	6H	22.8	23.5	23.1	23.8	24.2	18.1	18.8	18.5	19.2	19.5
	8H	22.8	23.4	23.2	23.8	24.2	18.1	18.8	18.5	19.2	19.5
	12H	22.8	23.4	23.2	23.8	24.2	18.1	18.7	18.6	19.1	19.5
8H	4H	22.6	23.2	23.0	23.6	24.0	18.1	18.8	18.5	19.1	19.5
	6H	22.7	23.2	23.1	23.6	24.1	18.2	18.8	18.7	19.2	19.6
	8H	22.8	23.2	23.2	23.7	24.1	18.3	18.7	18.7	19.2	19.6
	12H	22.8	23.2	23.2	23.6	24.1	18.3	18.7	18.8	19.1	19.6
12H	4H	22.5	23.1	22.9	23.5	23.9	18.1	18.7	18.5	19.1	19.5
	6H	22.7	23.1	23.1	23.6	24.0	18.2	18.7	18.7	19.1	19.6
	8H	22.7	23.1	23.2	23.6	24.1	18.3	18.7	18.8	19.2	19.6
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.9 / - 1.1					+ 1.6 / - 2.9				
1.5H		+ 1.4 / - 1.9					+ 1.9 / - 2.4				
2.0H		+ 3.3 / - 3.3					+ 2.6 / - 2.4				

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: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: 92EL67054040/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

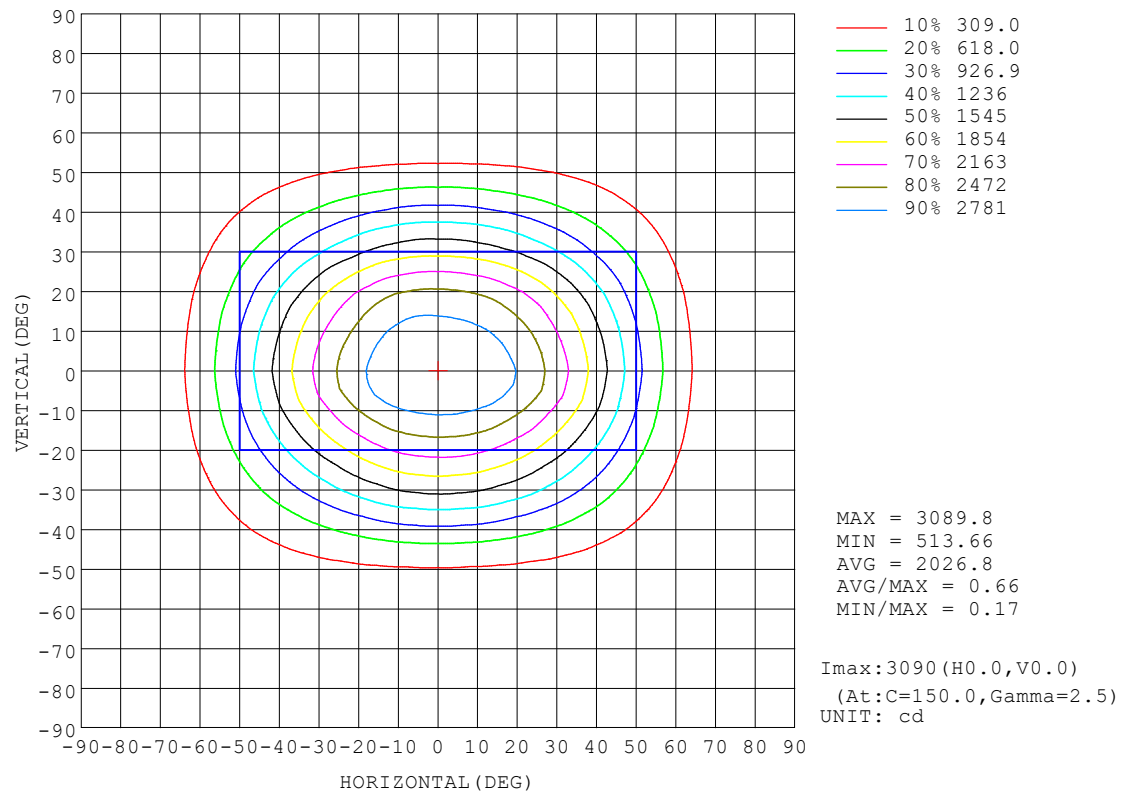
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	74	68	84	74	68	83	73	68	62
0.80	95	86	79	94	85	79	93	84	79	73
1.00	104	94	88	103	94	88	100	94	87	81
1.25	110	102	96	109	101	96	106	100	95	88
1.50	115	107	101	113	106	101	110	104	99	93
2.00	120	113	108	118	112	107	115	110	106	98
2.50	123	117	112	121	115	111	117	113	109	101
3.00	126	120	116	124	119	115	119	115	112	104
4.00	129	124	121	126	122	119	122	119	116	107
5.00	131	127	124	128	125	122	123	121	118	109
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: 92EL67054040/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

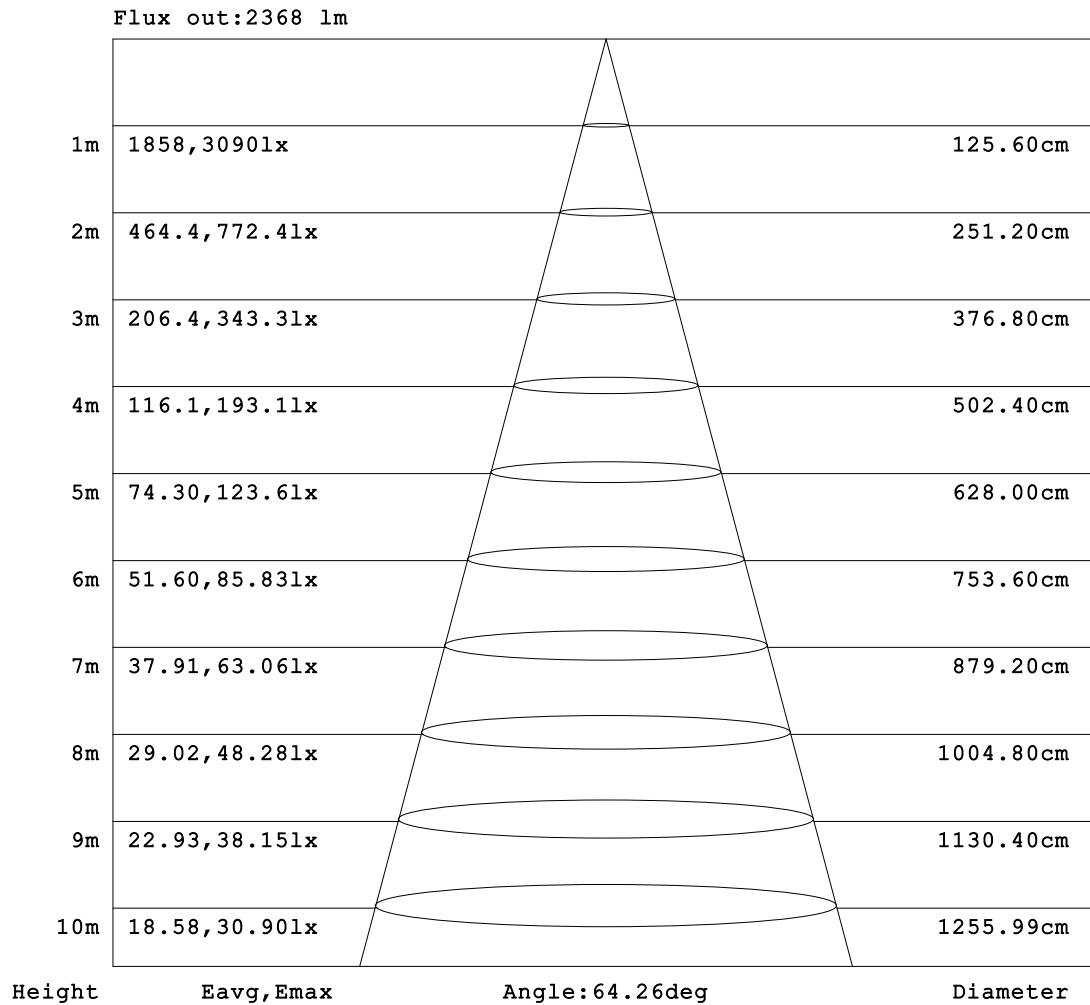


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:07 December 2022

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: 92EL67054040/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



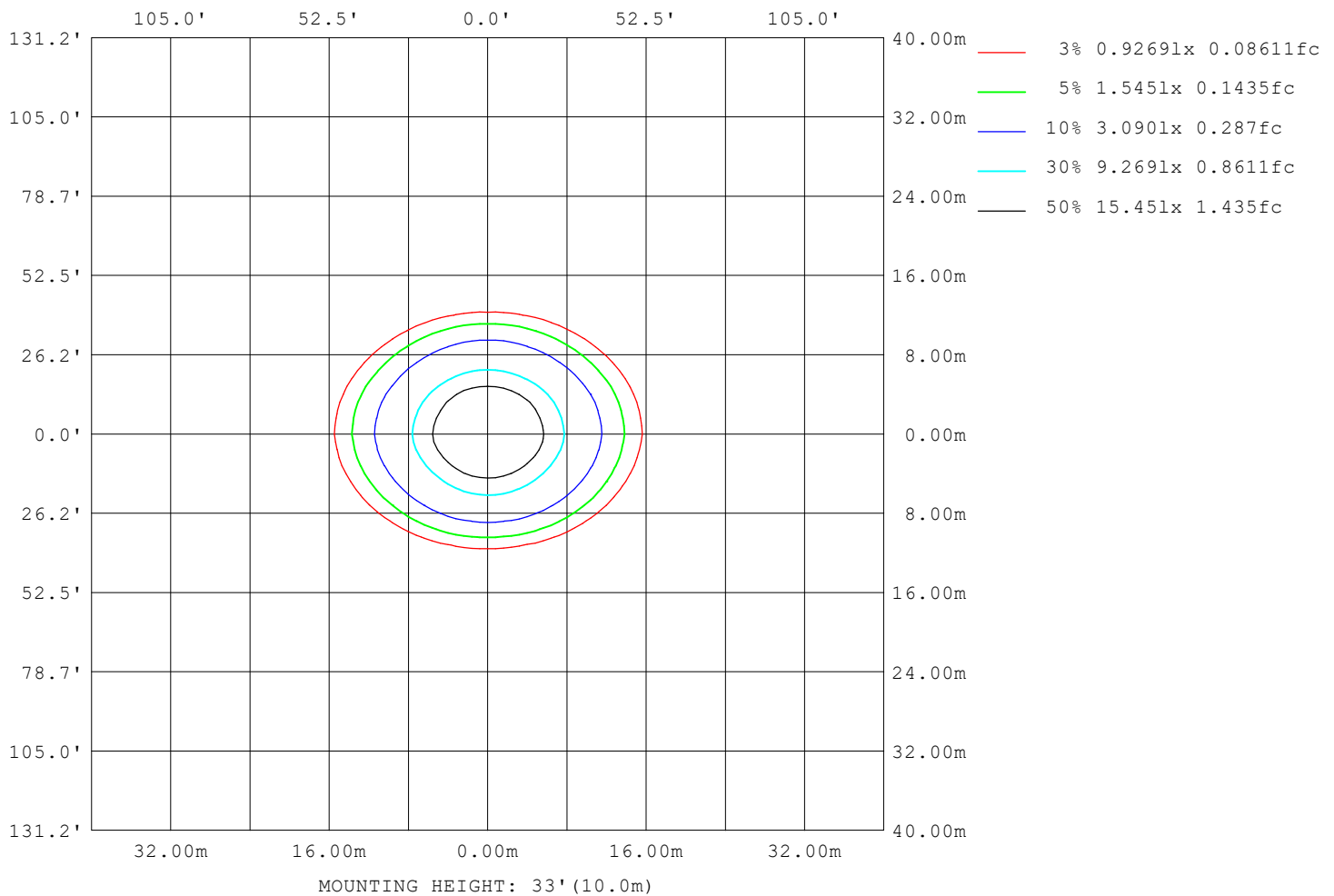
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date: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: 92EL67054040/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: 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: 92EL67054040/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 230 x 145 x 85	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

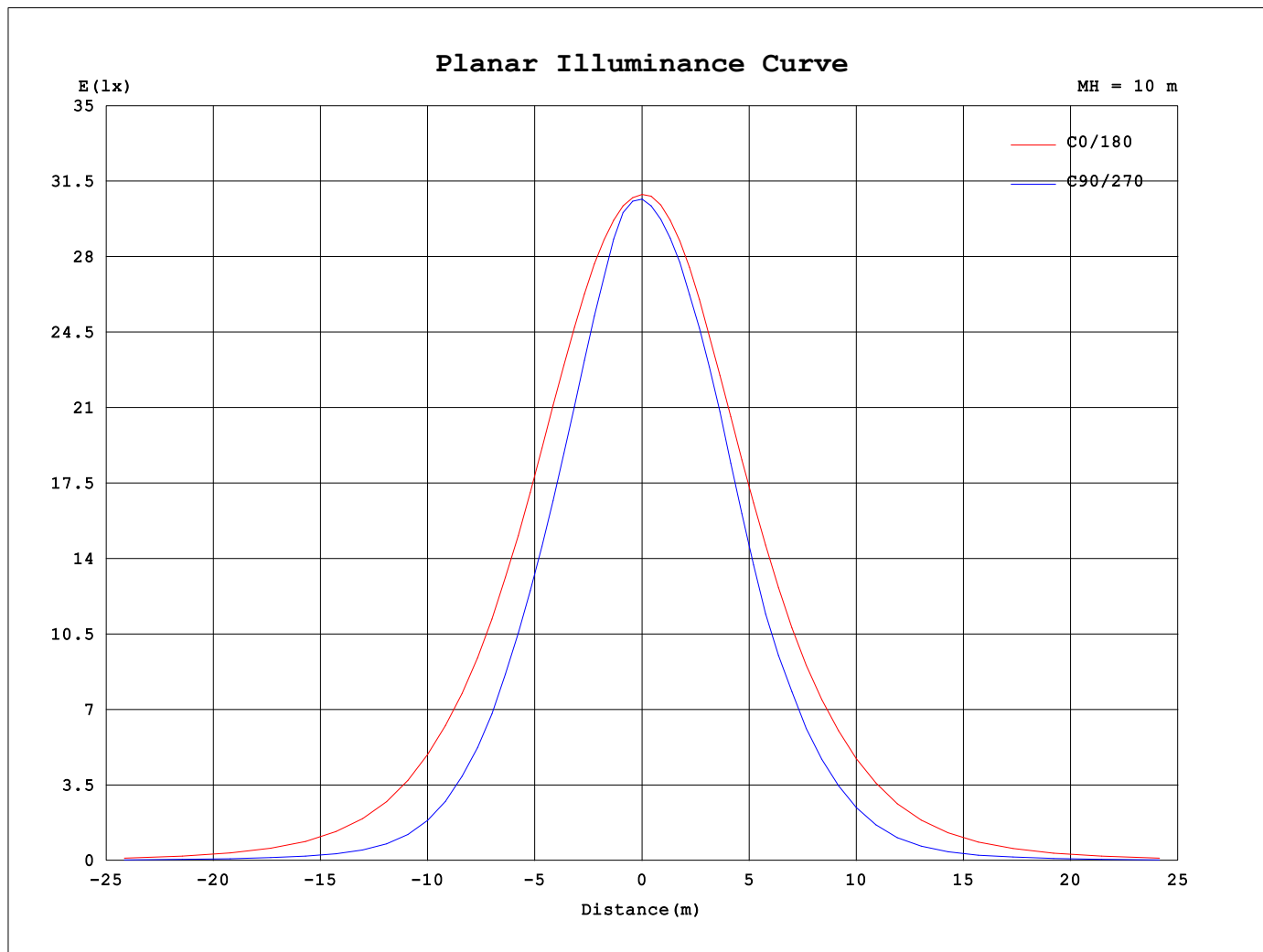
AvgL	cd/m2
L_0~180 (65) av	44037
L_0~180 (75) av	23323
L_0~180 (85) av	14521
L_90~270 (65) av	12685
L_90~270 (75) av	9682
L_90~270 (85) av	11587
L_45 (65) av	20046
L_45 (75) av	13072
L_45 (85) av	10302

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:

```