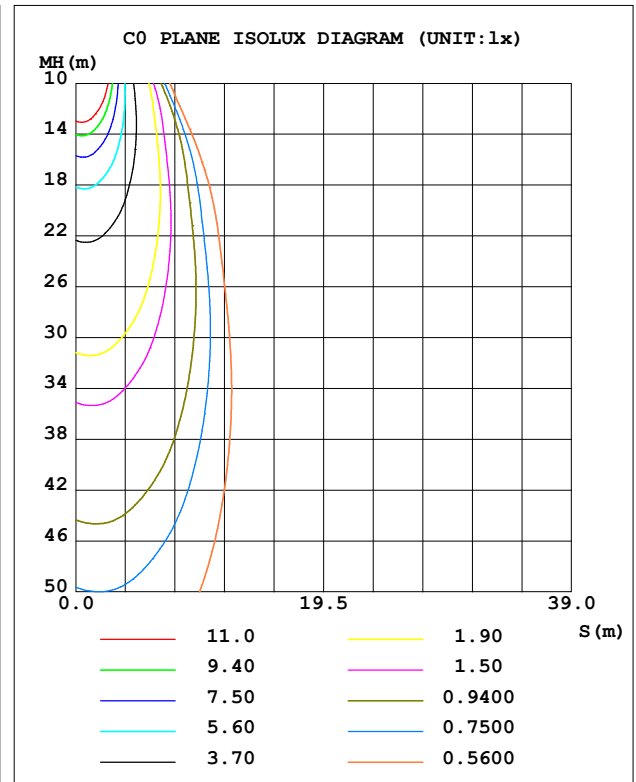
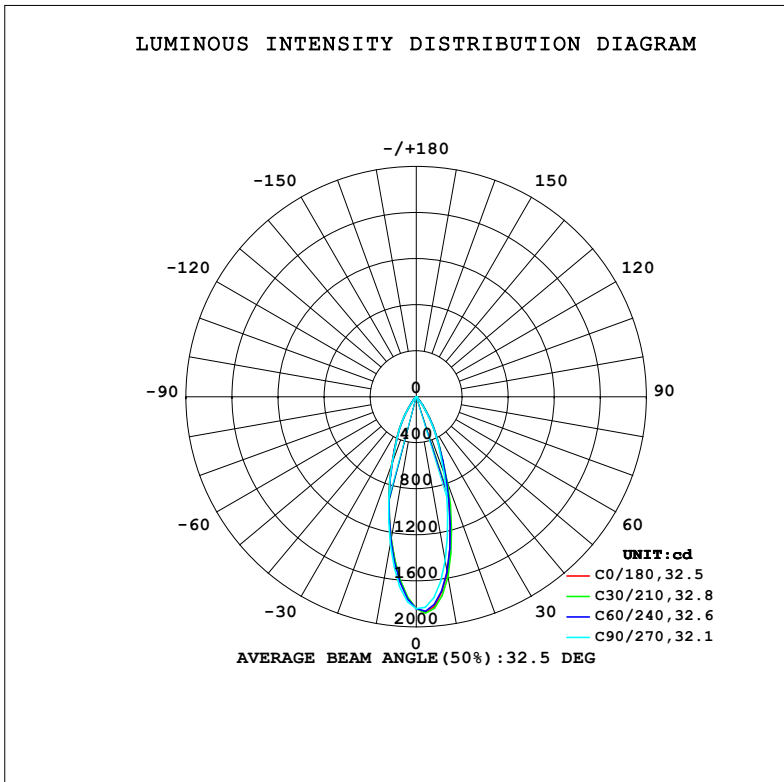


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL051230/WHBK	I _{max} (cd)	1881	S/MH (C0/180)	0.49
NOMINAL POWER (W)	10	LOR (%)	123.7	S/MH (C90/270)	0.49
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	742.49	η UP, DN (C0-180)	0.0, 64.1
NOMINAL FLUX (lm)	600	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 59.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	123.7	CIBSE SHR MAX	0.55



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	1552	1580	1449	1308	1262	1261	1297	1422	0- 10	152.8	152.8	20.6,25.5
20	763.3	791.1	711.7	643.3	627.9	621.2	618.7	701.9	10- 20	280.8	433.7	58.4,72.3
30	287.1	298.2	283.0	261.5	253.1	250.4	250.6	276.1	20- 30	202.9	636.6	85.7,106
40	49.86	52.08	47.15	45.73	46.35	45.47	40.92	45.66	30- 40	84.23	720.8	97.1,120
50	10.47	9.851	8.983	9.565	10.35	9.731	8.871	9.507	40- 50	15.78	736.6	99.2,123
60	2.817	2.817	2.535	2.705	2.753	2.884	2.659	2.786	50- 60	5.257	741.8	99.9,124
70	0.0869	0.0680	0.0572	0.0614	0.0325	0.0327	0.0572	0.0327	60- 70	0.6277	742.5	100,124
80	0.0163	0.0041	0	0.0068	0.0081	0.0136	0.0245	0.0109	70- 80	0.0269	742.5	100,124
90	0	0	0	0	0.0109	0.0068	0.0109	0.0082	80- 90	0.0065	742.5	100,124
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): 731.28 lm

%lum = 98.5%

%lamp = 121.9%

Conical surface Flux(130deg): 742.41 lm

%lum = 100.0%

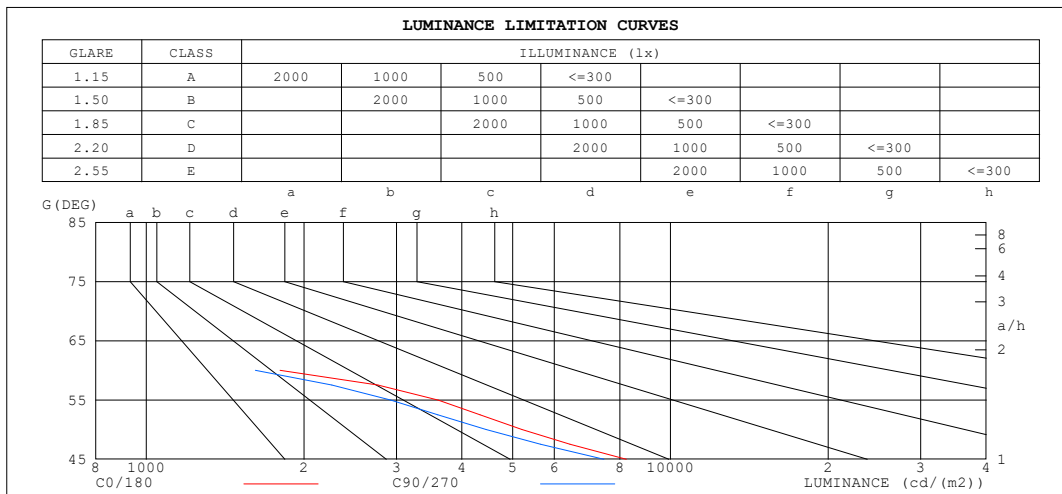
%lamp = 123.7%

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: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:



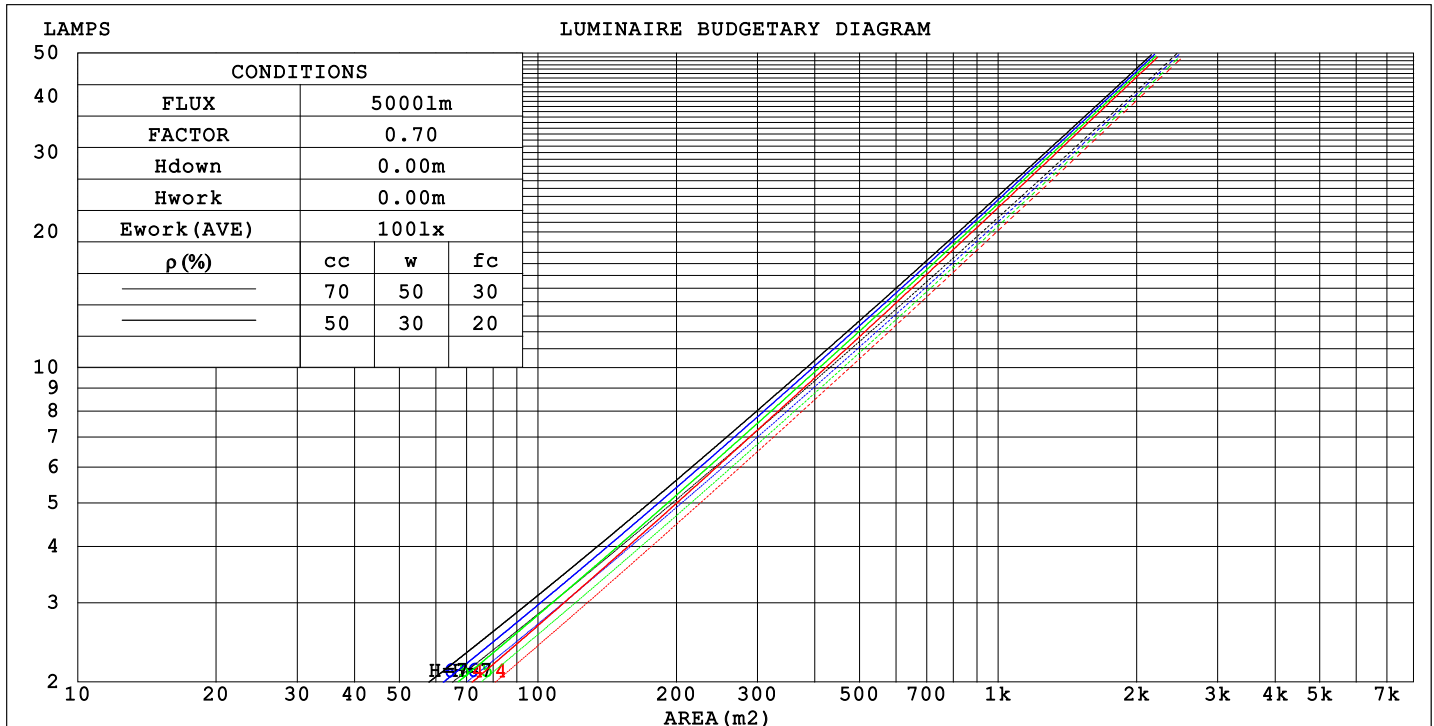
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 08 December 2022

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	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: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	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	.194	.110	.035	.185	.106	.034	.170	.097	.031	.156	.090	.029	.143	.083	.027	
2.0	.183	.100	.031	.176	.097	.030	.163	.091	.028	.151	.085	.027	.140	.079	.025	
3.0	.173	.092	.028	.167	.090	.027	.156	.085	.026	.146	.080	.025	.137	.076	.023	
4.0	.164	.085	.025	.159	.083	.025	.150	.079	.024	.141	.076	.023	.133	.072	.022	
5.0	.156	.079	.023	.152	.078	.023	.144	.075	.022	.136	.072	.021	.129	.069	.021	
6.0	.148	.074	.021	.145	.073	.021	.138	.071	.021	.131	.068	.020	.125	.066	.020	
7.0	.142	.070	.020	.139	.069	.020	.132	.067	.019	.127	.065	.019	.121	.063	.019	
8.0	.136	.066	.019	.133	.065	.018	.127	.064	.018	.122	.062	.018	.117	.060	.018	
9.0	.130	.063	.018	.128	.062	.017	.123	.061	.017	.118	.059	.017	.114	.058	.017	
10.0	.125	.060	.017	.123	.059	.017	.118	.058	.016	.114	.057	.016	.110	.055	.016	

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	.236	.236	.236	.201	.201	.201	.137	.137	.137	.079	.079	.079	.025	.025	.025	
1.0	.210	.195	.181	.180	.167	.156	.123	.115	.108	.071	.067	.063	.023	.021	.020	
2.0	.189	.164	.143	.162	.141	.123	.111	.098	.086	.064	.057	.050	.021	.018	.016	
3.0	.172	.140	.115	.148	.121	.099	.102	.084	.070	.059	.049	.041	.019	.016	.013	
4.0	.158	.122	.094	.136	.105	.081	.094	.073	.057	.054	.043	.034	.017	.014	.011	
5.0	.147	.107	.078	.126	.093	.068	.087	.065	.048	.050	.038	.028	.016	.012	.009	
6.0	.137	.095	.065	.118	.082	.057	.081	.058	.040	.047	.034	.024	.015	.011	.008	
7.0	.128	.085	.055	.110	.074	.048	.076	.052	.034	.044	.031	.020	.014	.010	.007	
8.0	.121	.077	.048	.104	.067	.041	.072	.047	.029	.042	.028	.018	.014	.009	.006	
9.0	.114	.071	.041	.098	.061	.036	.068	.043	.026	.040	.025	.015	.013	.008	.005	
10.0	.108	.065	.036	.094	.056	.032	.065	.040	.022	.038	.023	.013	.012	.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: 92EL051230/WHBK					TYPE:					WEIGHT: 1				
SPEC.:					DIM.: 282 x 45 x 35					SERIAL No.: 0				
MFR.: Elmark Industries JSC					SUR.: rectangle					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	16.7	17.5	17.0	17.7	17.9	16.6	17.4	16.8	17.6	17.7				
3H	16.6	17.3	16.8	17.5	17.7	16.5	17.2	16.7	17.4	17.6				
4H	16.5	17.2	16.8	17.4	17.6	16.4	17.1	16.7	17.3	17.5				
6H	16.4	17.1	16.7	17.3	17.6	16.3	17.0	16.6	17.2	17.4				
8H	16.4	17.0	16.7	17.3	17.5	16.3	16.9	16.6	17.1	17.4				
12H	16.3	16.9	16.6	17.2	17.5	16.2	16.8	16.5	17.1	17.4				
4H 2H	16.5	17.2	16.8	17.4	17.6	16.4	17.1	16.7	17.3	17.5				
3H	16.3	16.9	16.7	17.2	17.5	16.2	16.8	16.5	17.1	17.4				
4H	16.2	16.8	16.6	17.1	17.4	16.1	16.7	16.5	17.0	17.3				
6H	16.1	16.6	16.5	17.0	17.3	16.0	16.5	16.4	16.8	17.2				
8H	16.1	16.5	16.5	16.9	17.3	16.0	16.4	16.4	16.8	17.1				
12H	16.0	16.5	16.4	16.8	17.2	15.9	16.3	16.3	16.7	17.1				
8H 4H	16.1	16.5	16.5	16.9	17.3	16.0	16.4	16.4	16.8	17.1				
6H	16.0	16.4	16.4	16.8	17.2	15.9	16.2	16.3	16.6	17.0				
8H	15.9	16.3	16.4	16.7	17.1	15.8	16.1	16.3	16.6	17.0				
12H	15.9	16.2	16.3	16.6	17.1	15.8	16.0	16.2	16.5	16.9				
12H 4H	16.0	16.5	16.4	16.8	17.2	15.9	16.3	16.3	16.7	17.1				
6H	15.9	16.3	16.4	16.7	17.1	15.8	16.1	16.3	16.6	17.0				
8H	15.9	16.2	16.3	16.6	17.1	15.8	16.0	16.2	16.5	16.9				
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H	+ 4.3 / -10.0					+ 3.7 / -10.7								
1.5H	+ 6.6 / - 6.6					+ 6.0 / - 6.8								
2.0H	+ 4.8 / -20.3					+ 4.8 / -19.3								

CIE Pub.117, 600.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.8)
Area: 0.00314 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: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

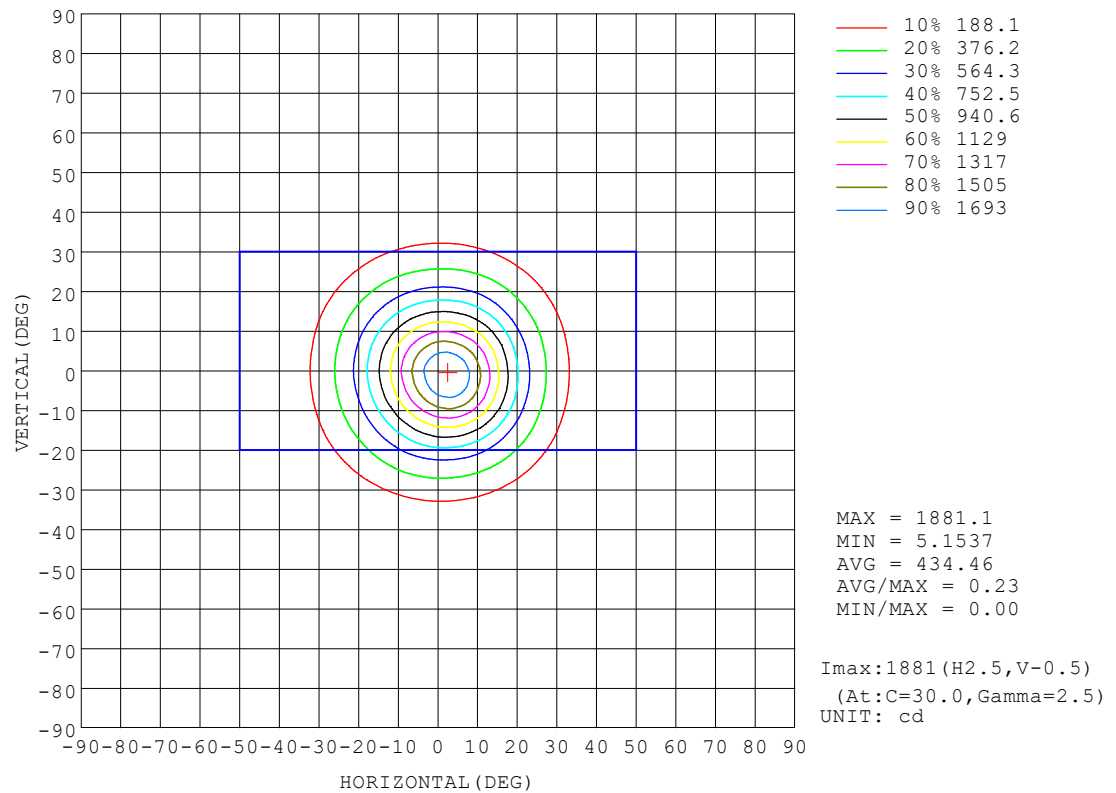
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	111	104	99	110	103	99	109	103	99	95
0.80	120	113	109	119	113	109	118	112	108	104
1.00	125	118	114	124	118	114	122	118	113	109
1.25	129	123	120	128	123	119	126	121	118	113
1.50	133	127	123	131	126	123	128	124	121	116
2.00	135	131	127	134	129	126	130	127	124	118
2.50	137	133	130	135	131	128	132	129	126	119
3.00	139	135	132	137	133	131	133	130	128	120
4.00	141	138	136	139	136	134	135	132	131	122
5.00	143	140	138	140	138	136	135	134	132	123
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: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

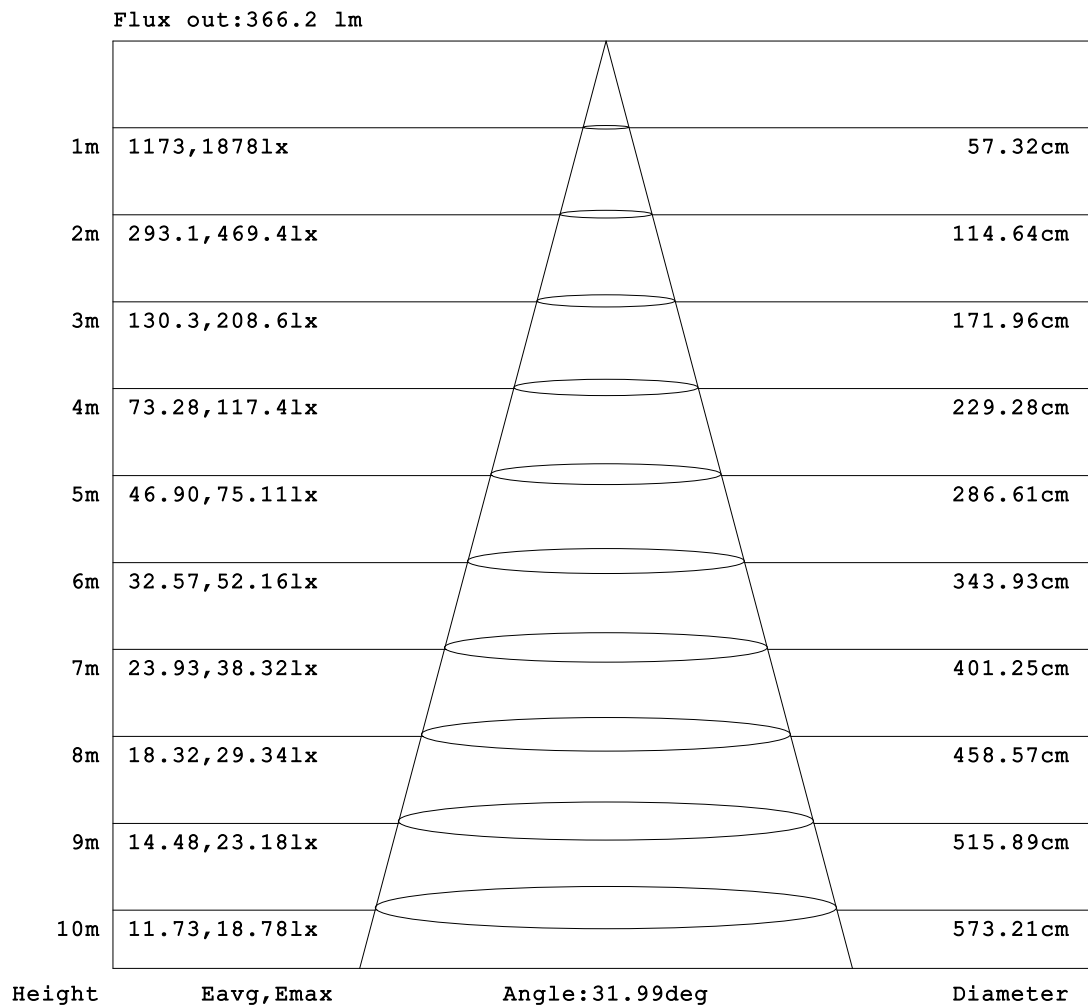


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:08 December 2022

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: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:



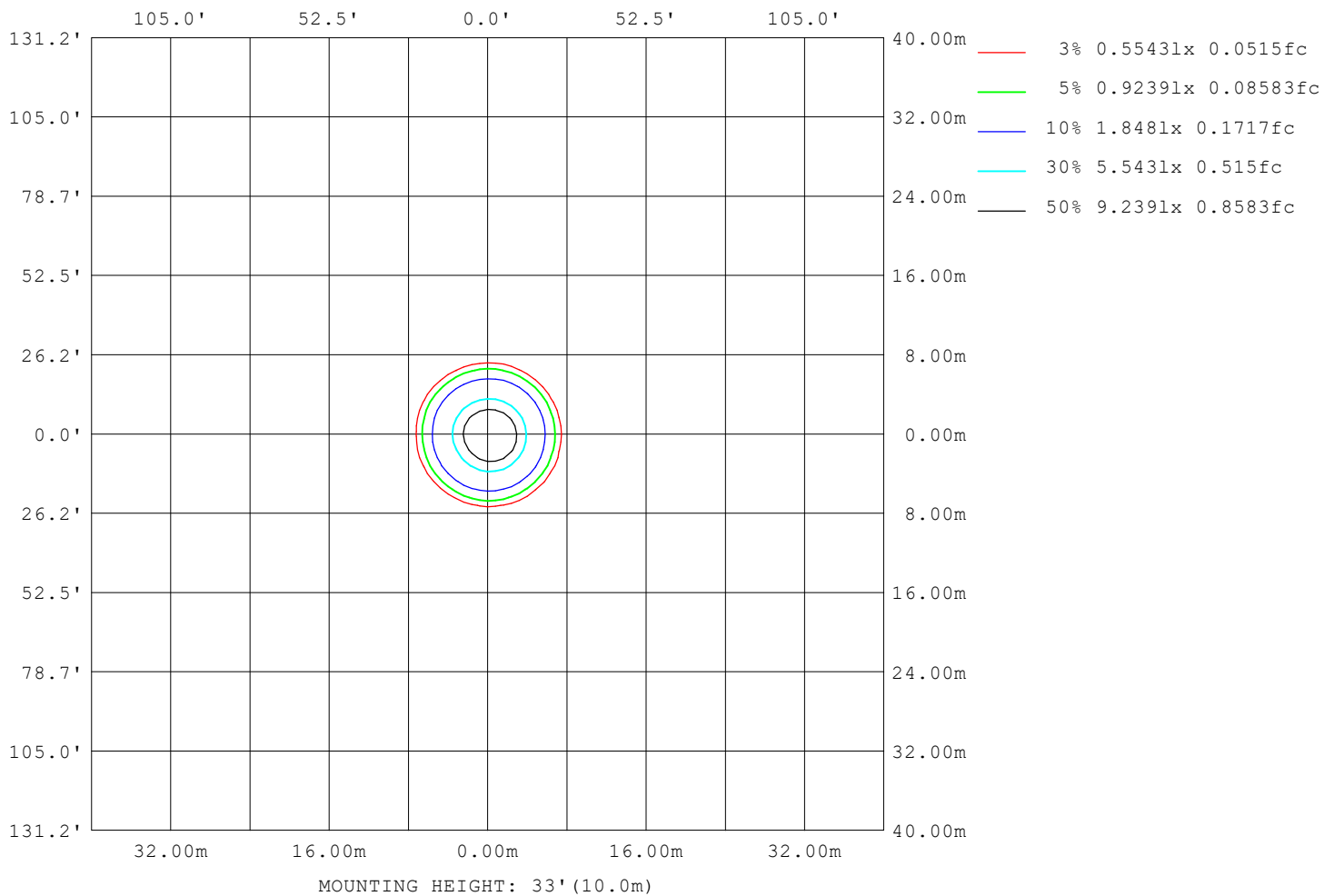
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	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: 92EL051230/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

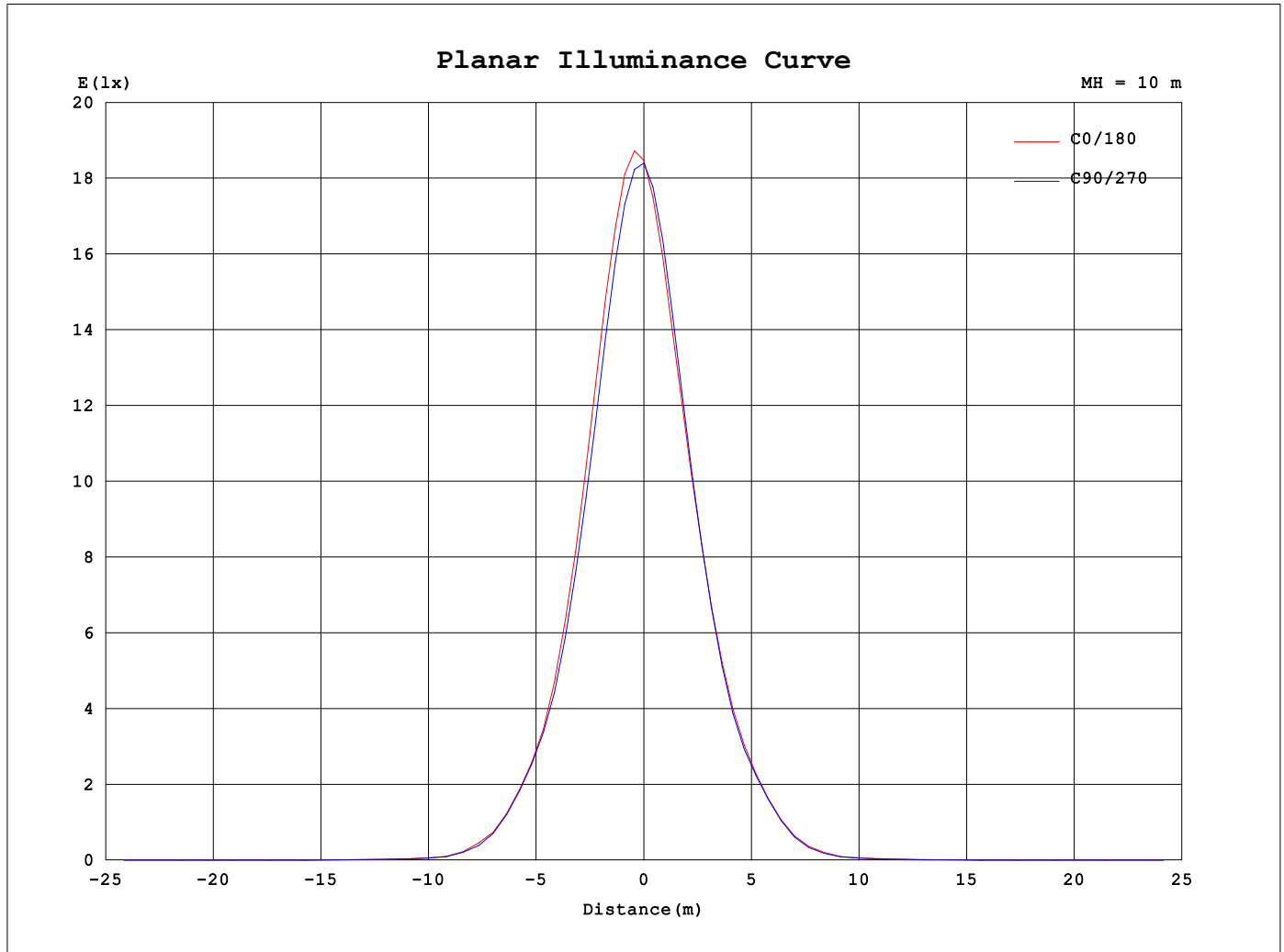
AvgL	cd/m2
L_0~180 (65) av	127
L_0~180 (75) av	33
L_0~180 (85) av	25
L_90~270 (65) av	119
L_90~270 (75) av	34
L_90~270 (85) av	20
L_45 (65) av	114
L_45 (75) av	26
L_45 (85) av	17

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:

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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:

```