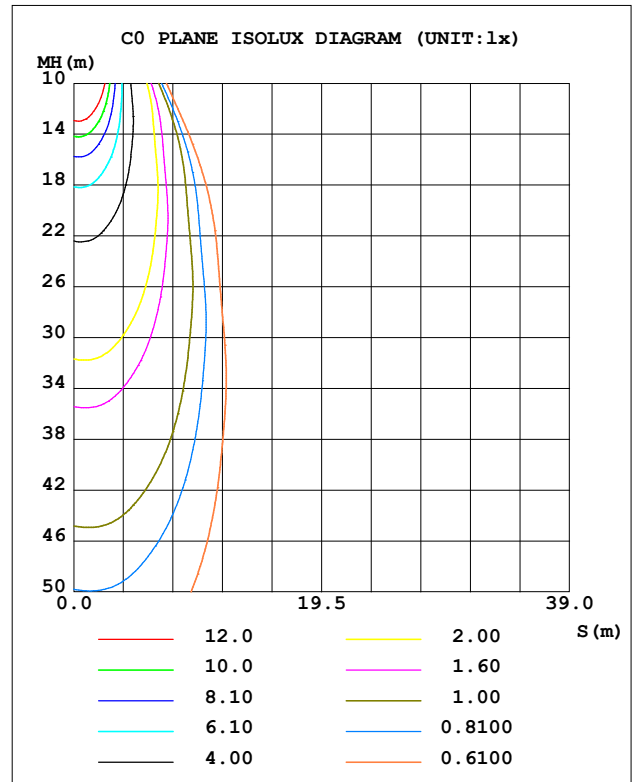
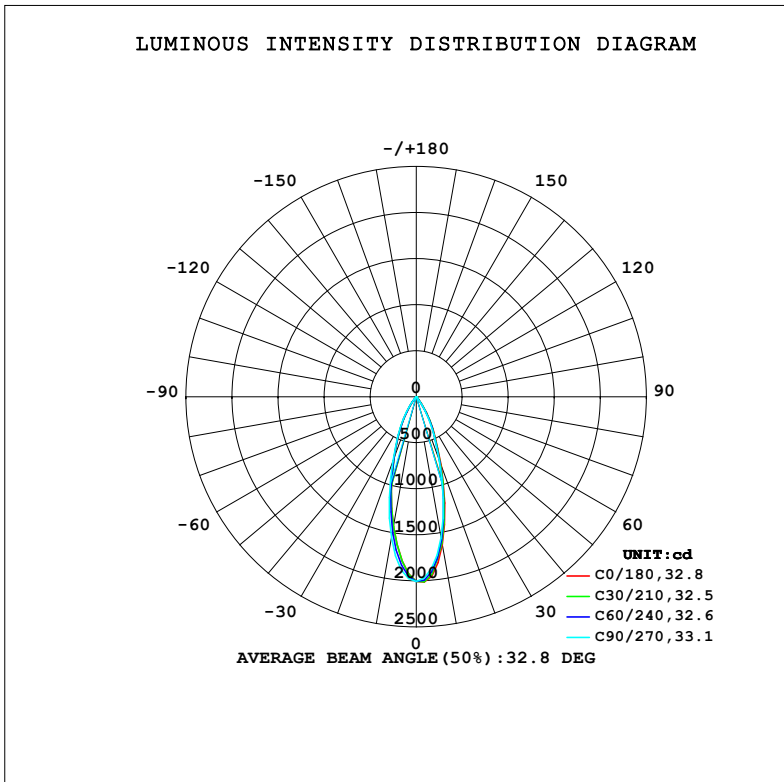


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 92EL051240/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	92EL051240/WHBK	Imax (cd)	2016	S/MH (C0/180)	0.51
NOMINAL POWER (W)	10	LOR (%)	134.9	S/MH (C90/270)	0.55
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	809.42	η UP, DN (C0-180)	0.0, 66.9
NOMINAL FLUX (lm)	600	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 68.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	134.9	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	1637	1599	1559	1496	1434	1455	1557	1664	0- 10	168.6	168.6	20.8,28.1
20	797.7	758.8	739.2	740.4	711.8	708.5	747.2	811.6	10- 20	311.5	480.1	59.3,80
30	305.1	291.8	269.0	273.7	272.3	281.5	294.8	315.5	20- 30	220.7	700.8	86.6,117
40	51.06	46.91	36.85	38.57	42.22	46.71	48.44	53.36	30- 40	87.14	788.0	97.3,131
50	10.77	9.986	8.666	9.263	9.840	9.366	9.257	10.08	40- 50	15.78	803.7	99.3,134
60	2.710	2.501	2.179	2.286	2.486	2.282	2.320	2.797	50- 60	5.106	808.8	99.9,135
70	0.0870	0.0681	0.0544	0.0640	0.0299	0.0354	0.0599	0.0354	60- 70	0.5455	809.4	100,135
80	0.0190	0.0068	0	0.0068	0.0109	0.0163	0.0218	0.0150	70- 80	0.0272	809.4	100,135
90	0	0	0	0	0.0109	0.0109	0.0109	0.0082	80- 90	0.0075	809.4	100,135
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): 798.43 lm

%lum = 98.6%

%lamp = 133.1%

Conical surface Flux(130deg): 809.34 lm

%lum = 100.0%

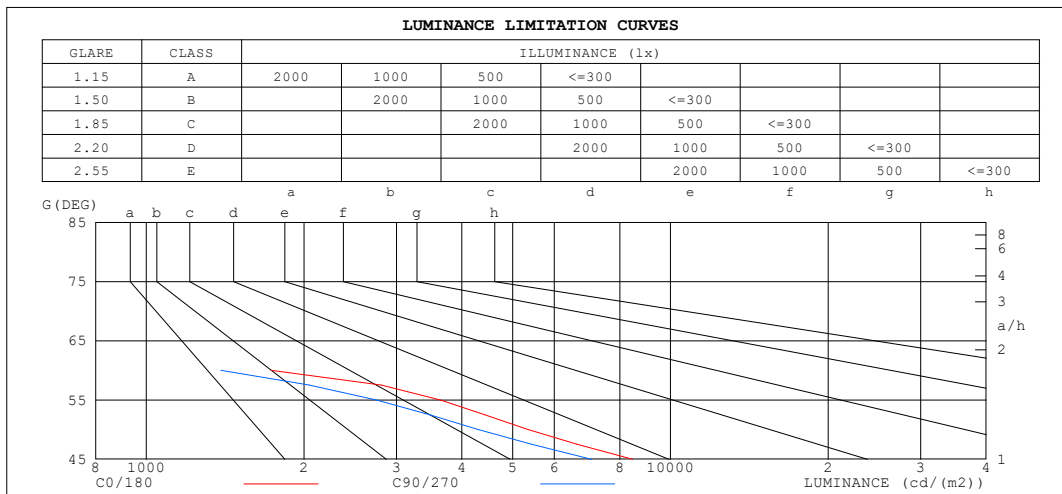
%lamp = 134.9%

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: 92EL051240/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	10	0
80	35	0
75	54	20
70	81	51
65	153	105
60	1730	1388
55	3644	2751
50	5345	4294
45	8474	7067

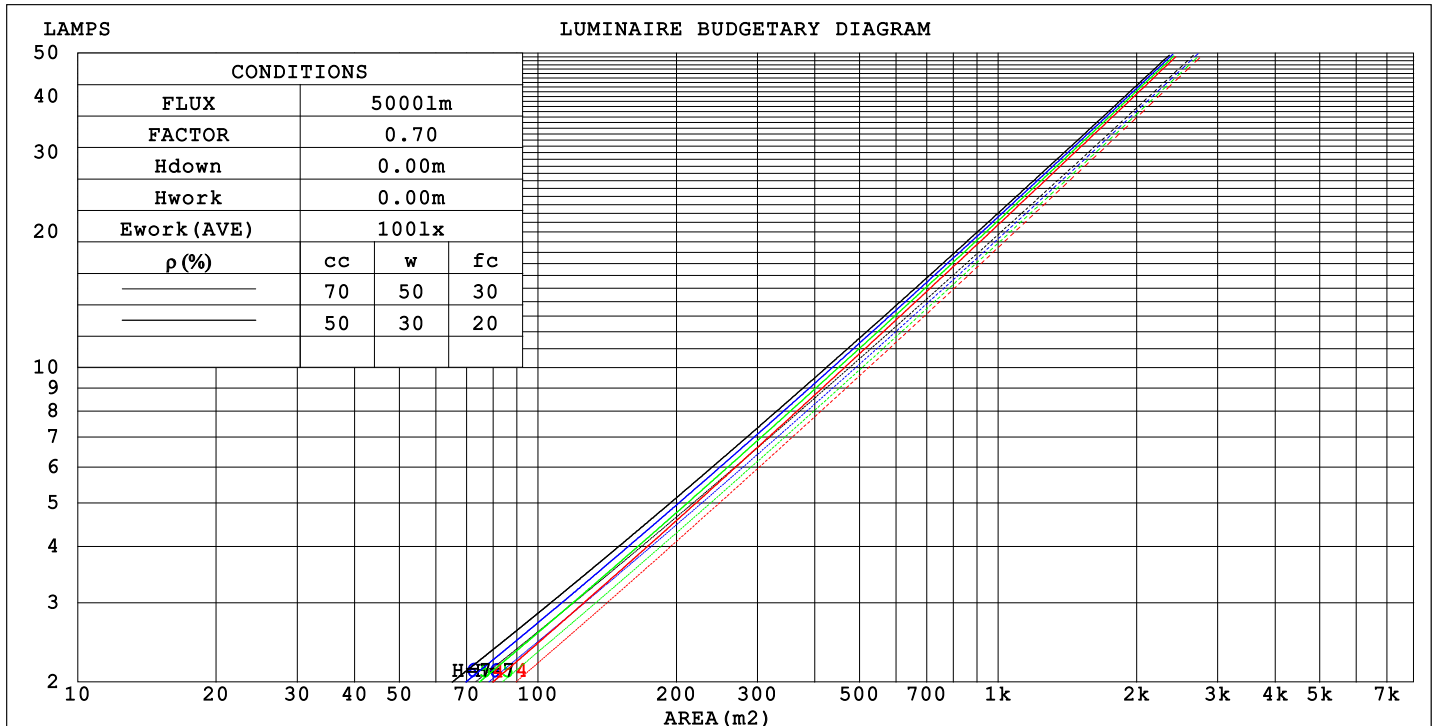
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 08 December 2022

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: 92EL051240/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 Coefficients of Utilization(CU)															
0.0	1.61	1.61	1.61	1.57	1.57	1.57	1.50	1.50	1.50	1.44	1.44	1.44	1.38	1.38	1.38	1.35
1.0	1.51	1.48	1.45	1.48	1.46	1.43	1.43	1.41	1.39	1.38	1.36	1.35	1.33	1.32	1.31	1.28
2.0	1.42	1.38	1.34	1.40	1.36	1.32	1.36	1.32	1.29	1.32	1.29	1.27	1.28	1.26	1.24	1.22
3.0	1.35	1.29	1.24	1.33	1.28	1.23	1.29	1.25	1.22	1.26	1.23	1.20	1.23	1.20	1.18	1.16
4.0	1.28	1.21	1.17	1.26	1.21	1.16	1.24	1.19	1.15	1.21	1.17	1.13	1.19	1.15	1.12	1.10
5.0	1.22	1.15	1.10	1.20	1.14	1.10	1.18	1.13	1.09	1.16	1.11	1.08	1.14	1.10	1.07	1.05
6.0	1.16	1.09	1.04	1.15	1.09	1.04	1.13	1.07	1.03	1.11	1.06	1.03	1.10	1.05	1.02	1.00
7.0	1.11	1.04	.99	1.10	1.03	.99	1.08	1.02	.98	1.07	1.02	.98	1.05	1.01	.97	.96
8.0	1.06	.99	.94	1.05	.99	.94	1.04	.98	.94	1.03	.97	.94	1.01	.97	.93	.92
9.0	1.01	.95	.90	1.01	.94	.90	.00	.94	.90	.99	.93	.90	.98	.93	.89	.88
10.0	.97	.91	.86	.97	.91	.86	.96	.90	.86	.95	.90	.86	.94	.89	.86	.84



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: 92EL051240/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	.210	.119	.038	.201	.114	.036	.184	.105	.034	.168	.097	.031	.154	.089	.029	
2.0	.198	.109	.033	.191	.105	.032	.177	.098	.030	.164	.092	.029	.152	.086	.027	
3.0	.187	.100	.030	.181	.097	.029	.169	.092	.028	.158	.087	.027	.148	.082	.025	
4.0	.177	.092	.027	.172	.090	.027	.162	.086	.026	.152	.082	.025	.144	.078	.024	
5.0	.168	.086	.025	.164	.084	.024	.155	.081	.024	.147	.078	.023	.139	.075	.022	
6.0	.160	.080	.023	.156	.079	.023	.149	.076	.022	.142	.074	.022	.135	.071	.021	
7.0	.153	.076	.021	.150	.075	.021	.143	.072	.021	.137	.070	.020	.131	.068	.020	
8.0	.147	.072	.020	.144	.071	.020	.138	.069	.020	.132	.067	.019	.127	.065	.019	
9.0	.141	.068	.019	.138	.067	.019	.133	.066	.019	.128	.064	.018	.123	.062	.018	
10.0	.135	.065	.018	.133	.064	.018	.128	.063	.018	.123	.061	.017	.119	.060	.017	

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	.257	.257	.257	.220	.220	.220	.150	.150	.150	.086	.086	.086	.028	.028	.028	
1.0	.229	.212	.198	.196	.182	.170	.134	.125	.118	.077	.073	.068	.025	.023	.022	
2.0	.206	.179	.156	.177	.154	.135	.121	.107	.094	.070	.062	.055	.022	.020	.018	
3.0	.188	.153	.125	.161	.132	.109	.111	.092	.076	.064	.054	.045	.021	.017	.015	
4.0	.172	.133	.102	.148	.115	.089	.102	.080	.063	.059	.047	.037	.019	.015	.012	
5.0	.160	.117	.085	.137	.101	.074	.094	.070	.052	.055	.041	.031	.018	.013	.010	
6.0	.149	.104	.071	.128	.090	.062	.088	.063	.044	.051	.037	.026	.016	.012	.009	
7.0	.139	.093	.060	.120	.081	.053	.083	.056	.037	.048	.033	.022	.016	.011	.007	
8.0	.131	.084	.052	.113	.073	.045	.078	.051	.032	.045	.030	.019	.015	.010	.006	
9.0	.124	.077	.045	.107	.067	.039	.074	.047	.028	.043	.028	.017	.014	.009	.006	
10.0	.118	.071	.040	.102	.061	.034	.070	.043	.025	.041	.026	.015	.013	.008	.005	

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: 92EL051240/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	16.4	17.2	16.6	17.4	17.5	15.3	16.1	15.5	16.3	16.4				
3H	16.3	17.0	16.5	17.2	17.4	15.2	15.9	15.4	16.1	16.3				
4H	16.2	16.9	16.4	17.1	17.3	15.1	15.8	15.3	16.0	16.2				
6H	16.1	16.7	16.4	17.0	17.2	15.0	15.6	15.3	15.9	16.1				
8H	16.0	16.7	16.3	16.9	17.2	14.9	15.6	15.2	15.8	16.1				
12H	16.0	16.6	16.3	16.9	17.1	14.9	15.5	15.2	15.8	16.0				
4H 2H	16.2	16.9	16.5	17.1	17.3	15.1	15.8	15.4	16.0	16.2				
3H	16.0	16.6	16.3	16.9	17.1	14.9	15.5	15.2	15.8	16.0				
4H	15.9	16.5	16.3	16.8	17.1	14.8	15.4	15.2	15.7	16.0				
6H	15.8	16.3	16.2	16.6	17.0	14.7	15.2	15.1	15.5	15.9				
8H	15.8	16.2	16.2	16.6	16.9	14.7	15.1	15.1	15.5	15.8				
12H	15.7	16.1	16.1	16.5	16.9	14.6	15.0	15.0	15.4	15.8				
8H 4H	15.8	16.2	16.2	16.6	16.9	14.7	15.1	15.1	15.5	15.8				
6H	15.7	16.0	16.1	16.4	16.8	14.6	14.9	15.0	15.3	15.7				
8H	15.6	15.9	16.0	16.3	16.8	14.5	14.8	14.9	15.2	15.7				
12H	15.5	15.8	16.0	16.3	16.7	14.4	14.7	14.9	15.2	15.6				
12H 4H	15.7	16.1	16.1	16.5	16.9	14.6	15.0	15.0	15.4	15.8				
6H	15.6	15.9	16.0	16.3	16.8	14.5	14.8	14.9	15.2	15.7				
8H	15.5	15.8	16.0	16.3	16.7	14.4	14.7	14.9	15.2	15.6				
Variations with the observer position at spacings(CIE Pub.117):														
S = 1.0H	+ 4.5 / - 9.9					+ 4.1 / -10.4								
1.5H	+ 6.7 / - 6.7					+ 6.1 / - 5.9								
2.0H	+ 4.9 / -20.7					+ 4.7 / -20.0								

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: 92EL051240/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

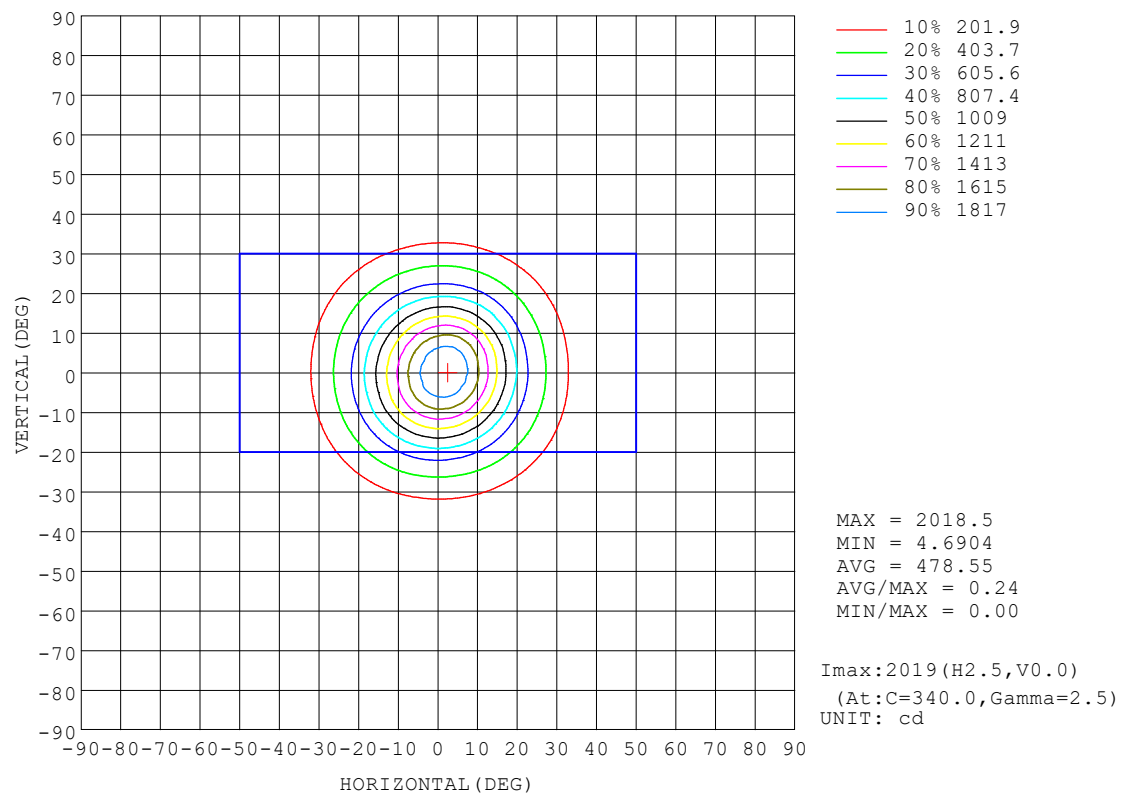
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	121	113	109	121	113	108	120	113	108	104
0.80	131	124	119	130	123	119	128	122	118	114
1.00	136	129	125	135	129	124	133	128	124	119
1.25	141	135	131	140	134	130	137	132	129	124
1.50	145	139	135	143	138	134	140	136	133	127
2.00	148	143	139	146	141	138	142	139	135	129
2.50	150	145	141	148	143	140	144	140	138	130
3.00	152	147	144	149	146	143	145	142	140	131
4.00	154	151	148	152	149	146	147	144	143	133
5.00	156	153	151	153	151	149	148	146	144	134
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: 92EL051240/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

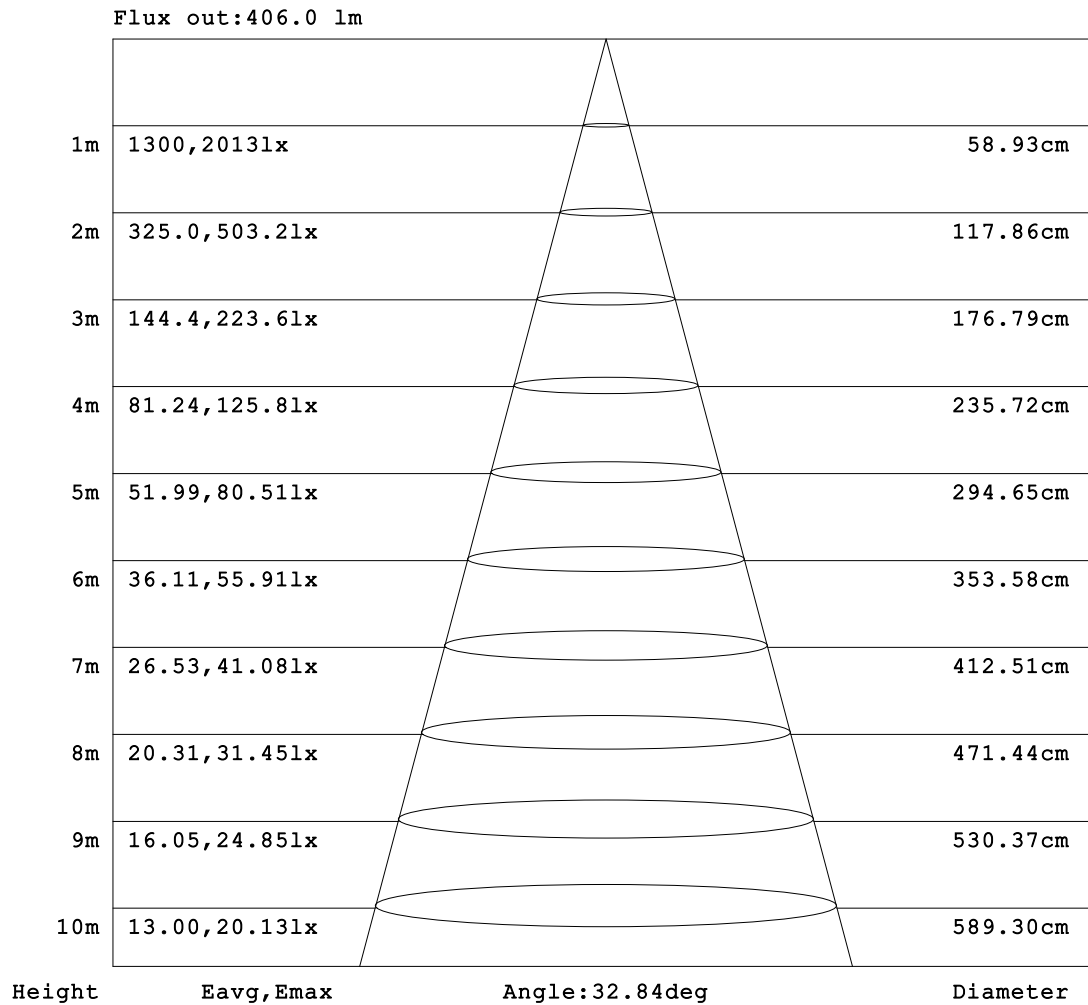


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:08 December 2022

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: 92EL051240/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:



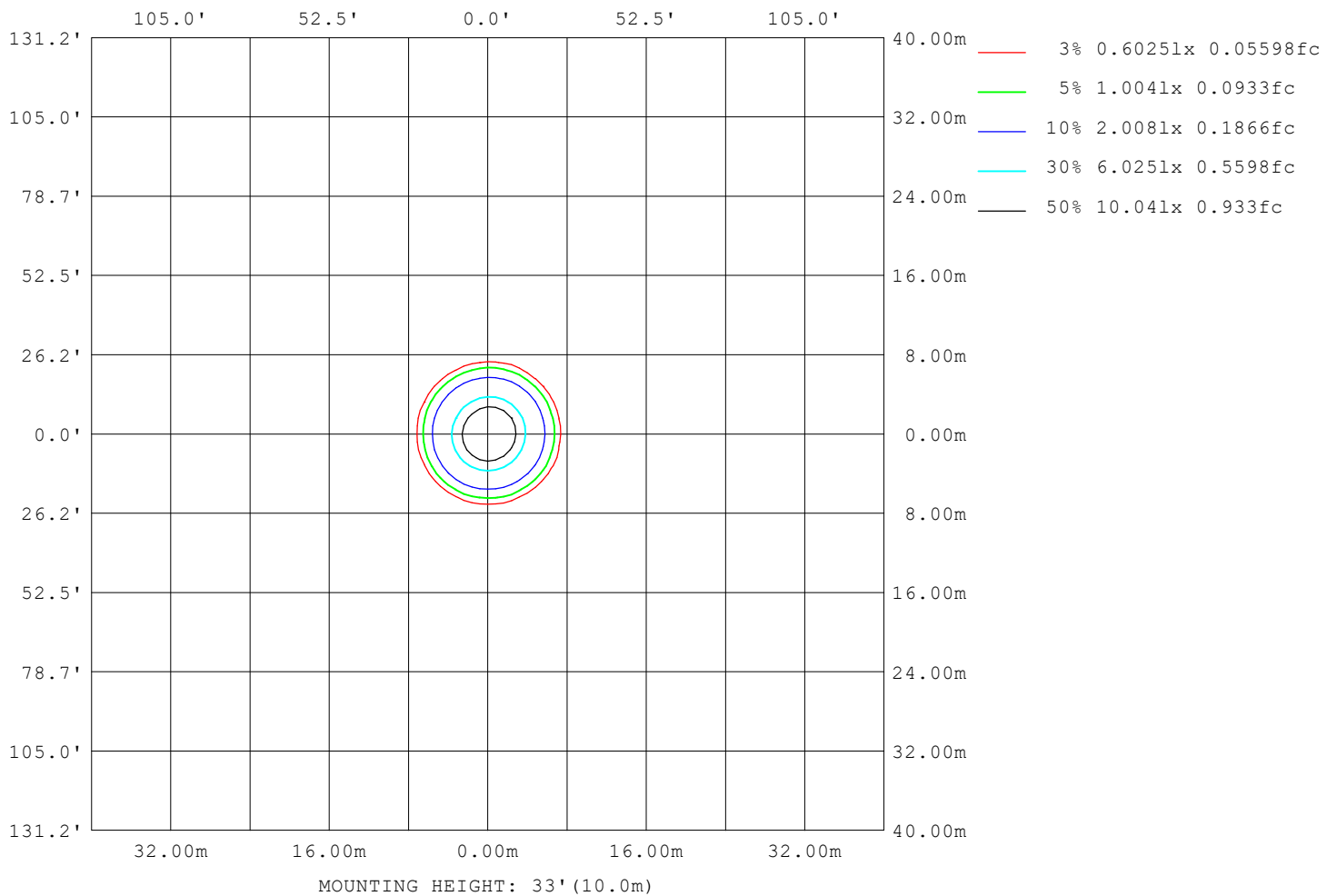
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 92EL051240/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: 92EL051240/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 282 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

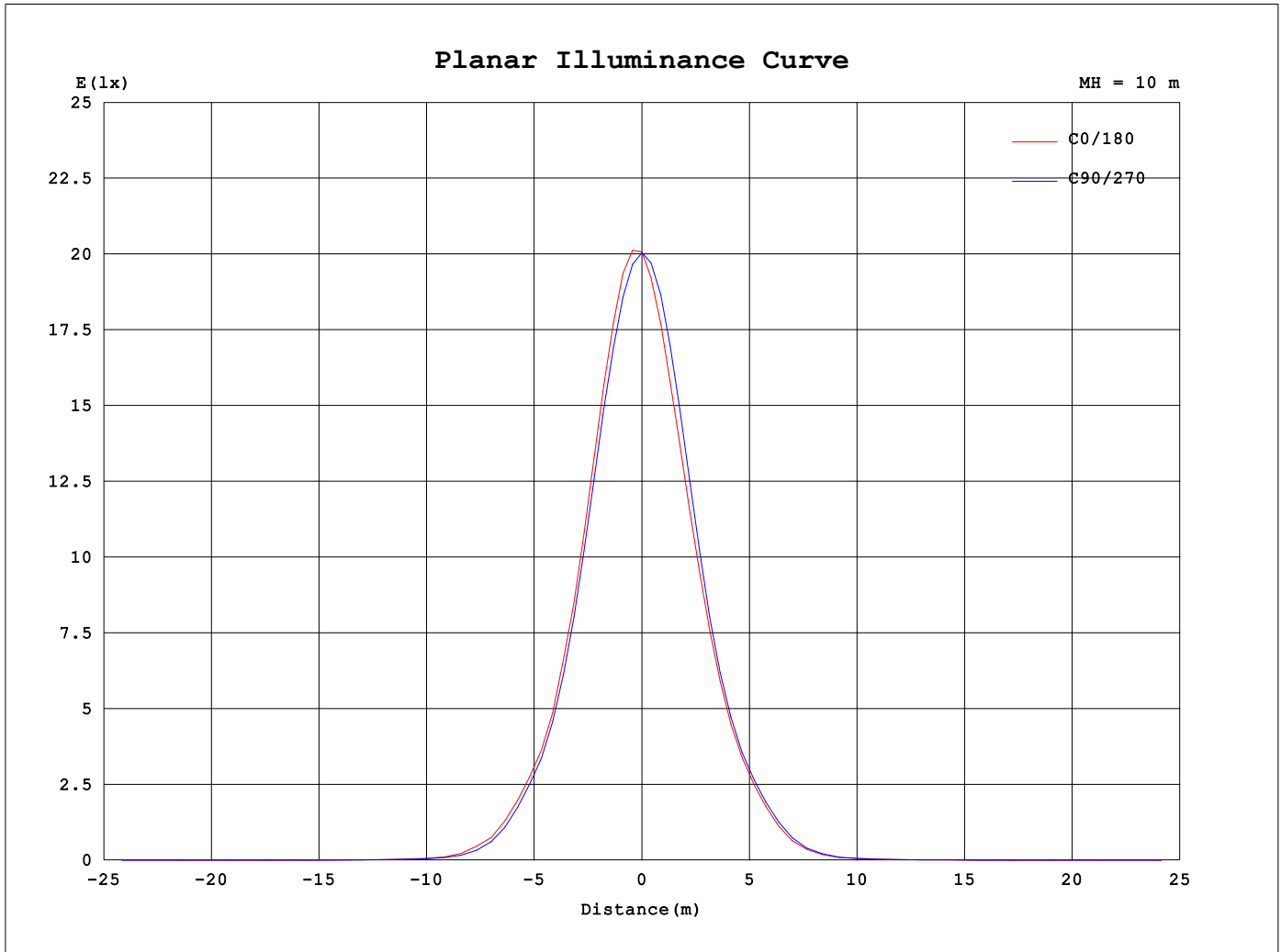
AvgL	cd/m2
L_0~180 (65) av	117
L_0~180 (75) av	33
L_0~180 (85) av	25
L_90~270 (65) av	115
L_90~270 (75) av	34
L_90~270 (85) av	30
L_45 (65) av	105
L_45 (75) av	27
L_45 (85) av	21

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:

```

```

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:

```