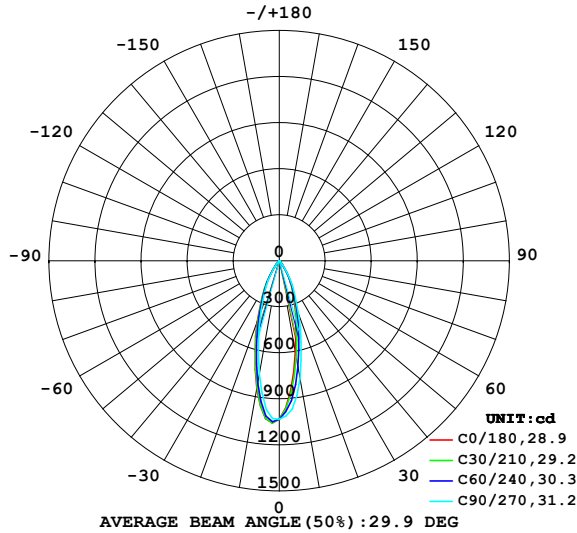


LUMINAIRE PHOTOMETRIC TEST REPORT

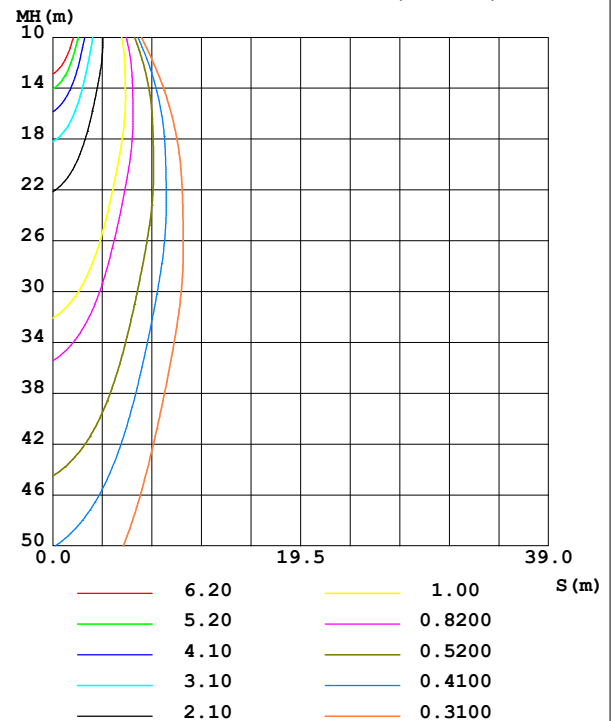
NAME: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	92EL05640/WHBK	I _{max} (cd)	1059	S/MH (C0/180)	0.57
NOMINAL POWER (W)	5	LOR (%)	133.0	S/MH (C90/270)	0.50
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	399.10	η UP, DN (C0-180)	0.0, 66.4
NOMINAL FLUX (lm)	300	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 66.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	230	η down (%)	133.0	CIBSE SHR MAX	0.55

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	607.4	668.1	779.9	857.3	846.8	830.5	753.1	658.8	0- 10	84.63	84.63	21.2,28.2
20	296.0	324.8	371.0	422.0	424.2	398.4	349.0	312.6	10- 20	147.6	232.2	58.2,77.4
30	126.3	134.8	149.1	164.7	165.1	163.5	148.3	135.3	20- 30	109.3	341.5	85.6,114
40	22.39	24.17	24.75	27.01	28.27	30.77	28.44	24.88	30- 40	45.88	387.4	97.1,129
50	5.188	5.323	5.364	5.253	5.264	5.198	4.800	4.767	40- 50	8.681	396.1	99.2,132
60	1.299	1.389	1.351	1.168	1.028	1.238	1.412	1.359	50- 60	2.711	398.8	99.9,133
70	0.0219	0.0068	0	0.0068	0	0.0000	0.0028	0.0014	60- 70	0.3017	399.1	100,133
80	0	0	0	0	0	0	0	0	70- 80	0.0007	399.1	100,133
90	0	0	0	0	0	0	0	0	80- 90	0	399.1	100,133
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): 393.25 lm

%lum = 98.5%

%lamp = 131.1%

Conical surface Flux(130deg): 399.09 lm

%lum = 100.0%

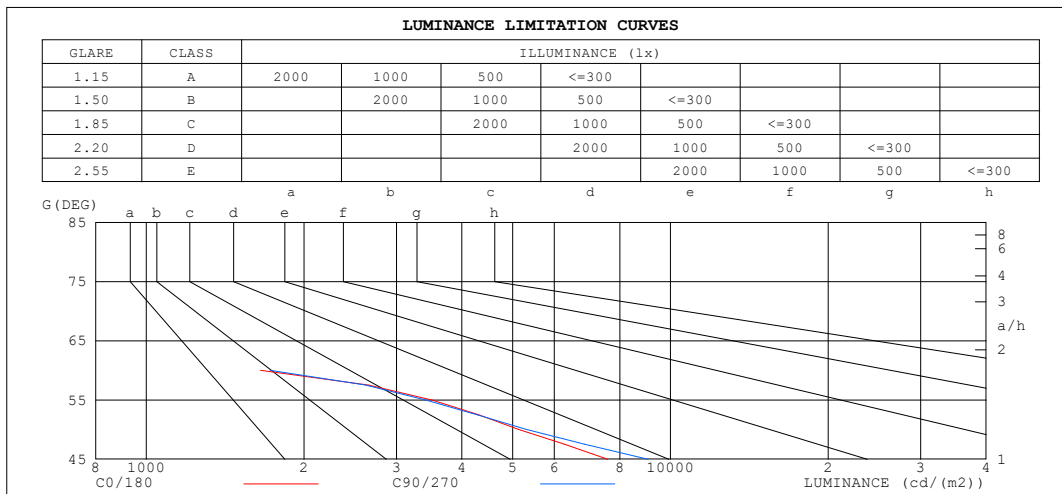
%lamp = 133.0%

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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 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	0	0
80	0	0
75	0	0
70	41	0
65	112	74
60	1651	1723
55	3510	3415
50	5133	5321
45	7592	9059

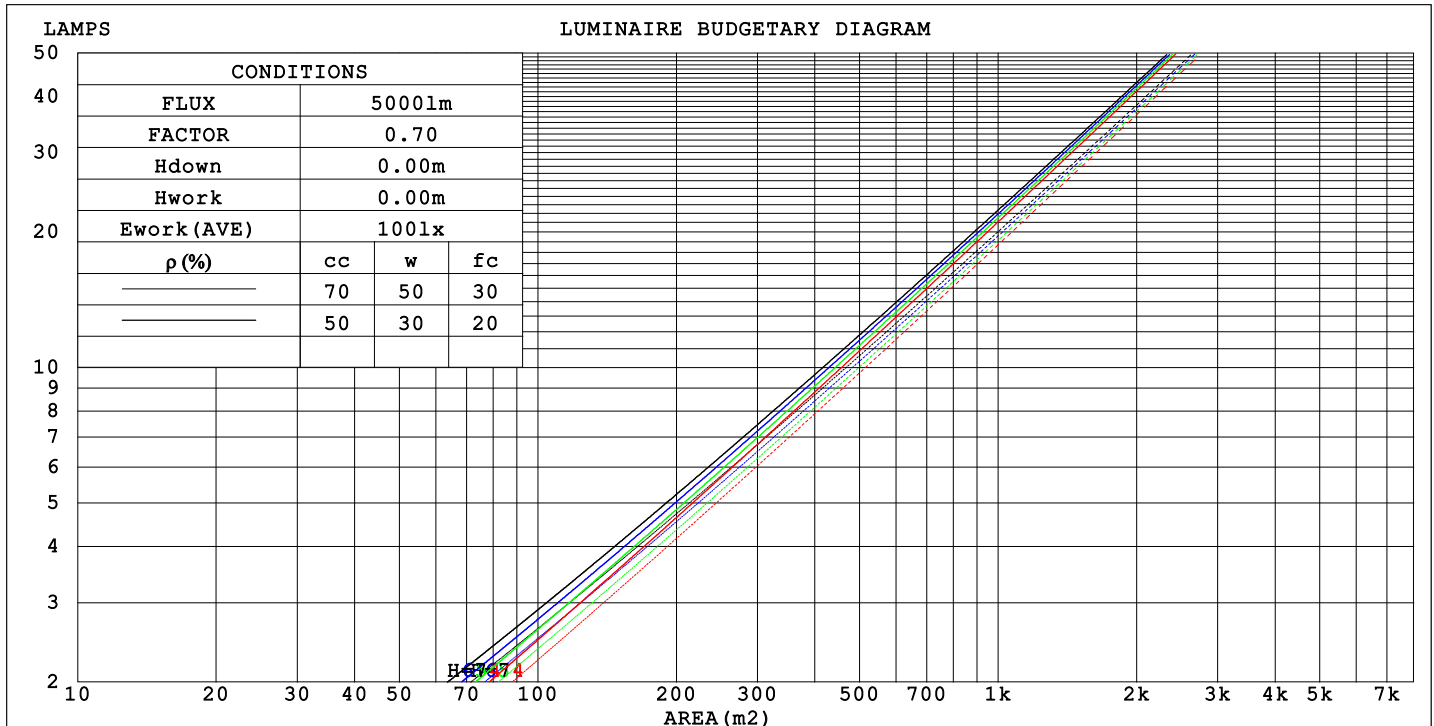
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 08 December 2022

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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 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	.208	.118	.037	.199	.113	.036	.182	.105	.033	.167	.096	.031	.153	.089	.029	
2.0	.196	.108	.033	.189	.104	.032	.175	.097	.030	.162	.091	.029	.151	.085	.027	
3.0	.186	.099	.030	.179	.096	.029	.168	.091	.028	.157	.086	.026	.147	.081	.025	
4.0	.176	.091	.027	.171	.089	.026	.161	.085	.025	.151	.081	.025	.143	.078	.024	
5.0	.167	.085	.025	.163	.083	.024	.154	.080	.024	.146	.077	.023	.139	.074	.022	
6.0	.159	.080	.023	.155	.078	.023	.148	.076	.022	.141	.073	.022	.134	.071	.021	
7.0	.152	.075	.021	.149	.074	.021	.142	.072	.021	.136	.070	.020	.130	.068	.020	
8.0	.146	.071	.020	.142	.070	.020	.137	.068	.019	.131	.066	.019	.126	.065	.019	
9.0	.140	.067	.019	.137	.067	.019	.132	.065	.018	.127	.064	.018	.122	.062	.018	
10.0	.134	.064	.018	.132	.064	.018	.127	.062	.018	.122	.061	.017	.118	.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	.253	.253	.253	.217	.217	.217	.148	.148	.148	.085	.085	.085	.027	.027	.027	
1.0	.226	.210	.195	.193	.180	.168	.132	.124	.116	.076	.072	.067	.024	.023	.022	
2.0	.204	.176	.154	.174	.152	.133	.119	.105	.093	.069	.061	.054	.022	.020	.018	
3.0	.185	.151	.123	.159	.130	.107	.109	.090	.075	.063	.053	.044	.020	.017	.014	
4.0	.170	.131	.101	.146	.113	.088	.101	.079	.062	.058	.046	.036	.019	.015	.012	
5.0	.158	.115	.083	.135	.099	.073	.093	.069	.051	.054	.041	.030	.017	.013	.010	
6.0	.147	.102	.070	.126	.088	.061	.087	.062	.043	.051	.036	.026	.016	.012	.008	
7.0	.138	.092	.060	.118	.080	.052	.082	.056	.037	.048	.033	.022	.015	.011	.007	
8.0	.130	.083	.051	.112	.072	.045	.077	.051	.032	.045	.030	.019	.015	.010	.006	
9.0	.123	.076	.044	.106	.066	.039	.073	.046	.027	.043	.027	.016	.014	.009	.005	
10.0	.116	.070	.039	.100	.061	.034	.070	.043	.024	.041	.025	.014	.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: 92EL05640/WHBK					TYPE:			WEIGHT: 1			
SPEC.:					DIM.: 146 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	17.6	18.4	17.9	18.6	18.8	18.4	19.2	18.6	19.3	19.5	
	3H	17.5	18.2	17.7	18.4	18.6	18.2	18.9	18.4	19.1	
	4H	17.4	18.1	17.7	18.3	18.5	18.1	18.8	18.4	19.0	
	6H	17.3	18.0	17.6	18.2	18.4	18.0	18.7	18.3	18.9	
	8H	17.3	17.9	17.6	18.1	18.4	18.0	18.6	18.3	18.9	
	12H	17.2	17.8	17.5	18.1	18.4	17.9	18.5	18.2	18.8	
4H 2H	17.4	18.1	17.7	18.3	18.5	18.1	18.8	18.4	19.0	19.3	
	3H	17.2	17.8	17.6	18.1	18.4	18.0	18.6	18.3	18.8	
	4H	17.1	17.7	17.5	18.0	18.3	17.9	18.4	18.2	18.7	
	6H	17.0	17.5	17.4	17.9	18.2	17.8	18.2	18.1	18.6	
	8H	17.0	17.4	17.4	17.8	18.2	17.7	18.2	18.1	18.5	
	12H	16.9	17.4	17.3	17.7	18.1	17.7	18.1	18.1	18.4	
8H 4H	17.0	17.4	17.4	17.8	18.2	17.7	18.2	18.1	18.5	18.9	
	6H	16.9	17.3	17.3	17.7	18.1	17.6	18.0	18.0	18.4	
	8H	16.8	17.2	17.3	17.6	18.0	17.5	17.9	18.0	18.3	
	12H	16.8	17.1	17.2	17.5	18.0	17.5	17.8	17.9	18.2	
12H 4H	16.9	17.4	17.3	17.7	18.1	17.7	18.1	18.1	18.4	18.8	
	6H	16.8	17.2	17.3	17.6	18.0	17.5	17.9	18.0	18.3	
	8H	16.8	17.1	17.2	17.5	18.0	17.5	17.8	17.9	18.2	
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 3.4 / - 9.1					+ 4.3 / - 9.6					
1.5H	+ 5.4 / - 5.5					+ 6.5 / - 6.0					
2.0H	+ 4.3 / -24.3					+ 5.2 / -21.6					

CIE Pub.117, 300.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -4.2)
Area: 0.00157 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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

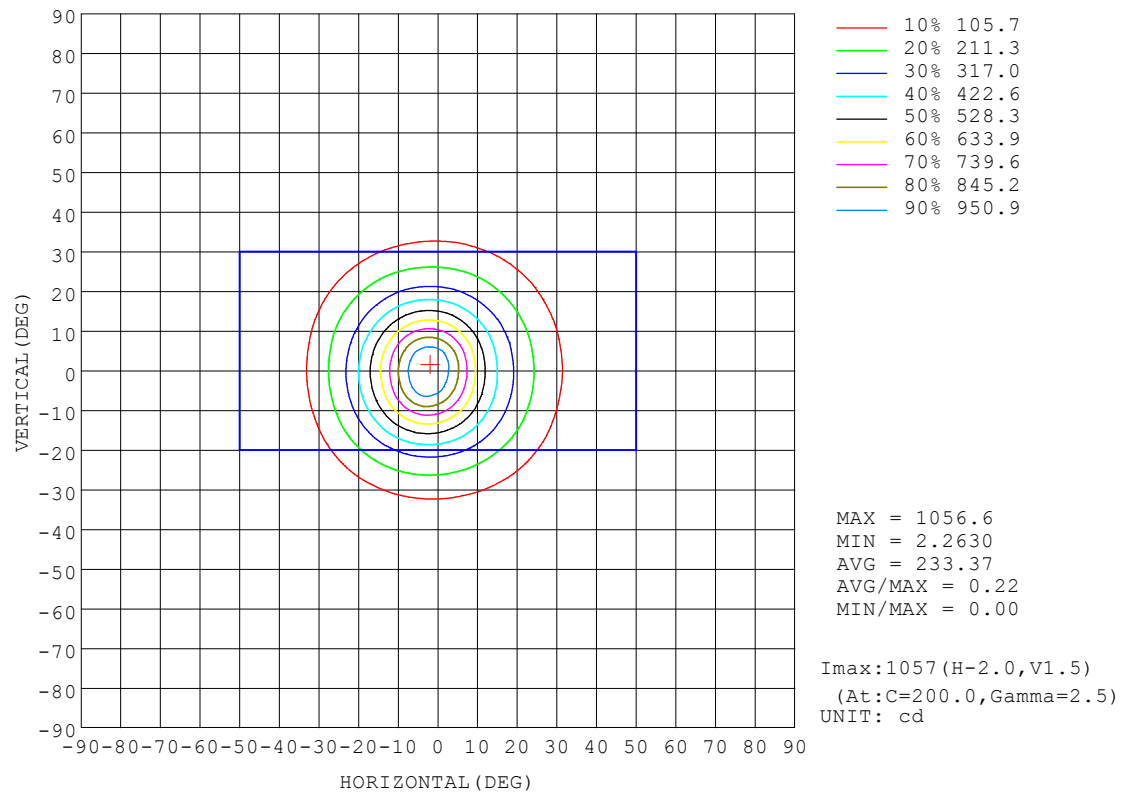
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	119	111	107	119	111	107	118	111	106	102
0.80	129	122	117	128	121	117	126	120	116	112
1.00	134	127	123	133	127	122	131	126	122	117
1.25	139	133	129	138	132	128	135	130	127	122
1.50	143	137	133	141	136	132	138	134	131	125
2.00	146	140	137	144	139	136	140	137	134	127
2.50	148	143	139	146	141	138	142	138	136	128
3.00	150	145	142	147	143	141	143	140	138	129
4.00	152	149	146	149	147	144	145	142	141	131
5.00	154	151	149	151	148	147	146	144	142	132
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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

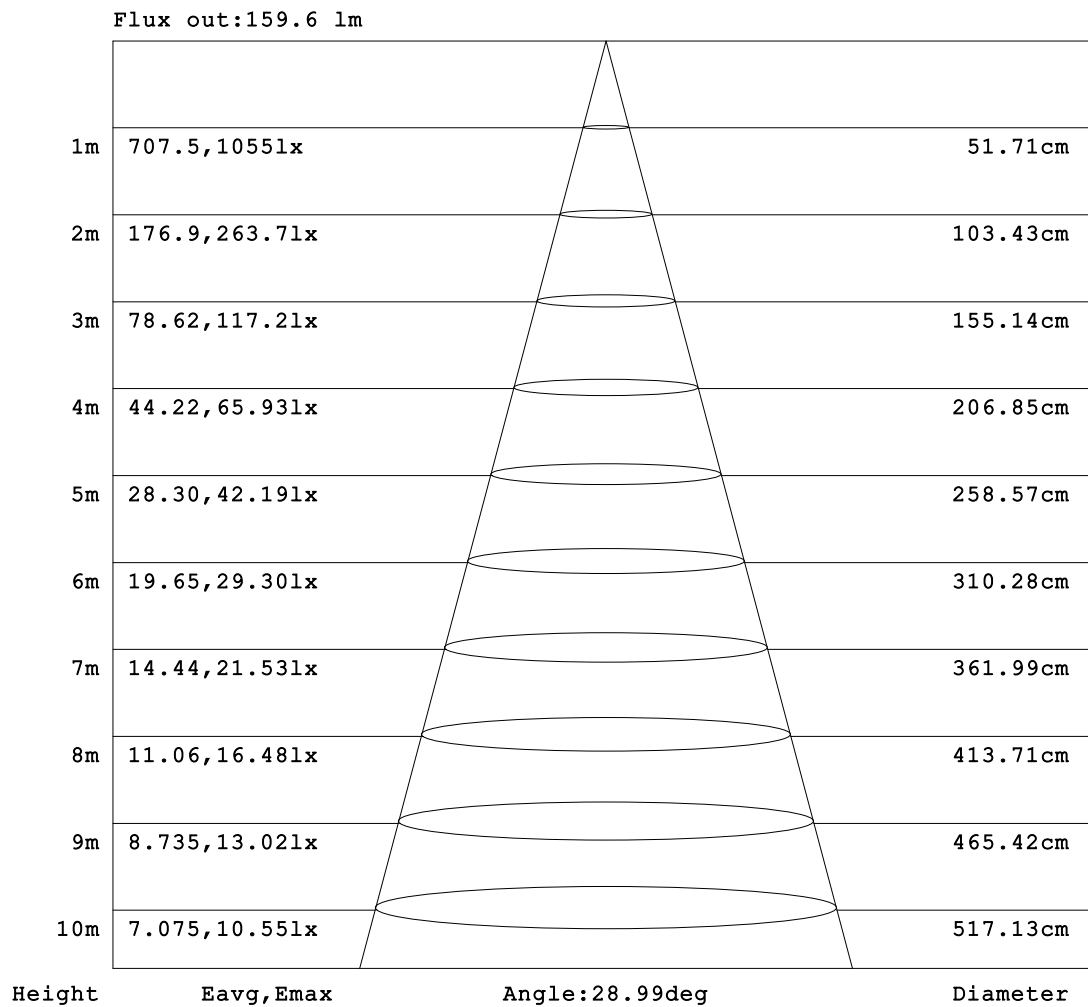


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 08 December 2022

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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:



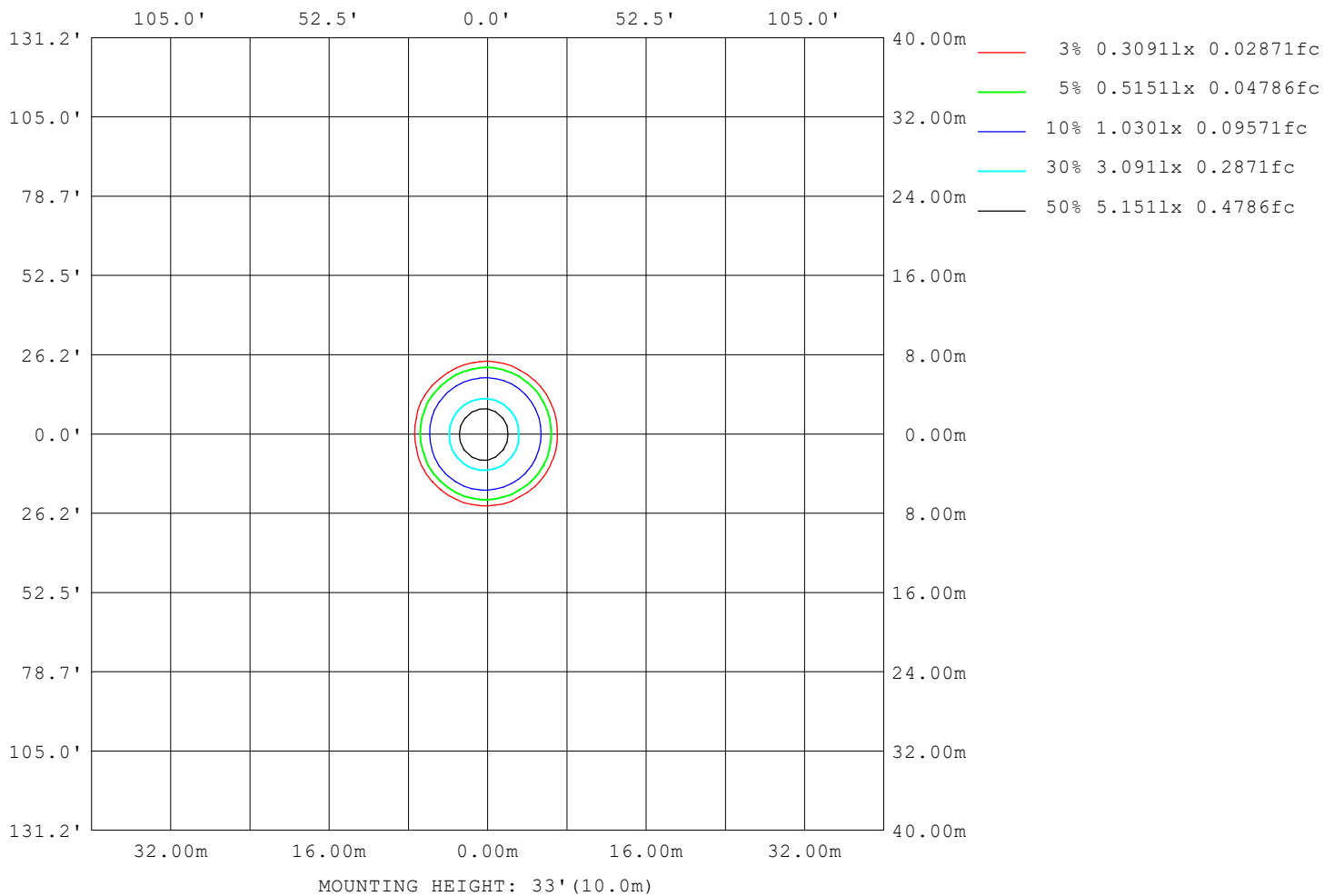
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 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: 92EL05640/WHBK	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 146 x 45 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

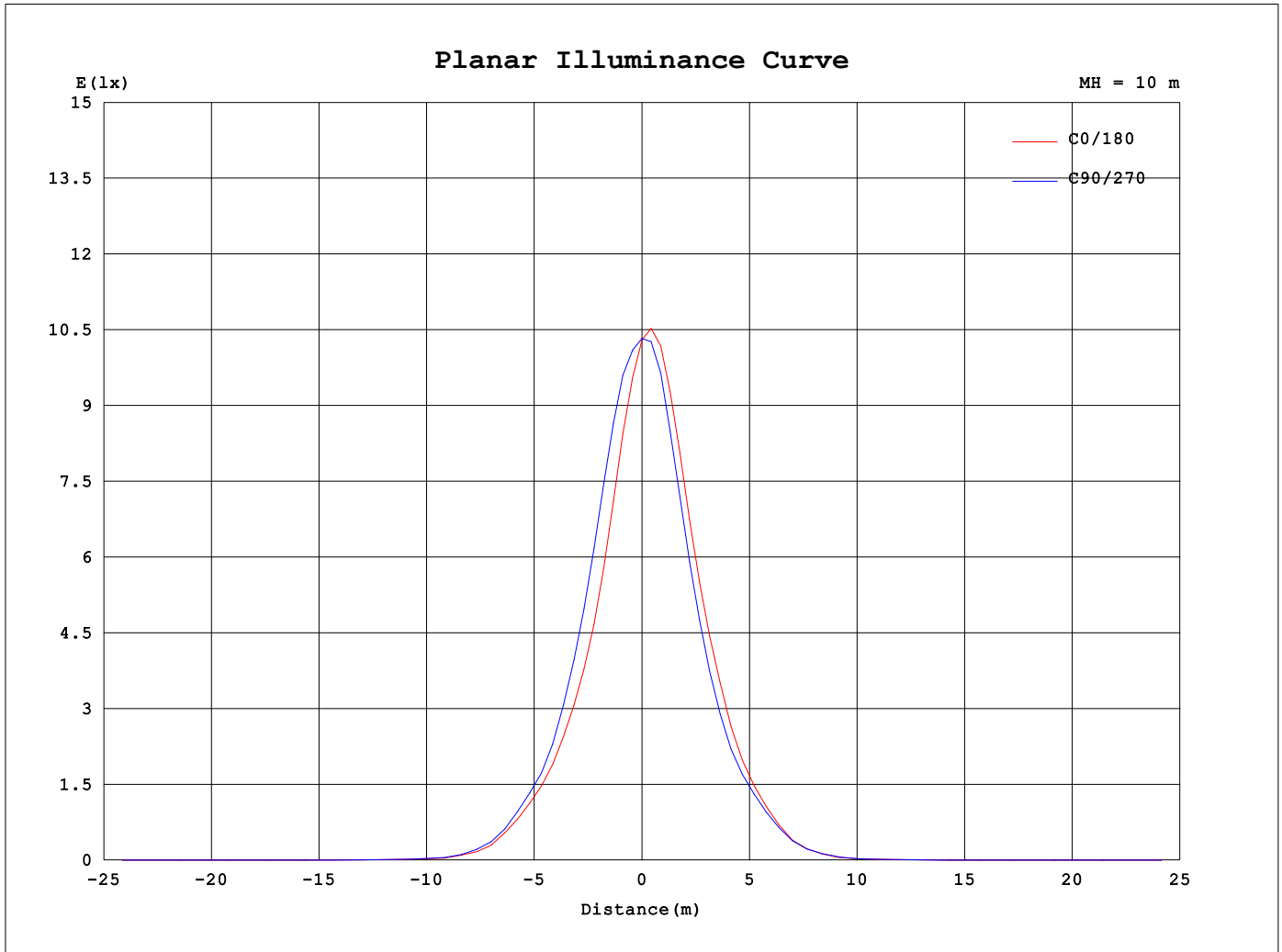
AvgL	cd/m2
L_0~180 (65) av	56
L_0~180 (75) av	0
L_0~180 (85) av	0
L_90~270 (65) av	85
L_90~270 (75) av	0
L_90~270 (85) av	0
L_45 (65) av	53
L_45 (75) av	0
L_45 (85) av	0

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:

```