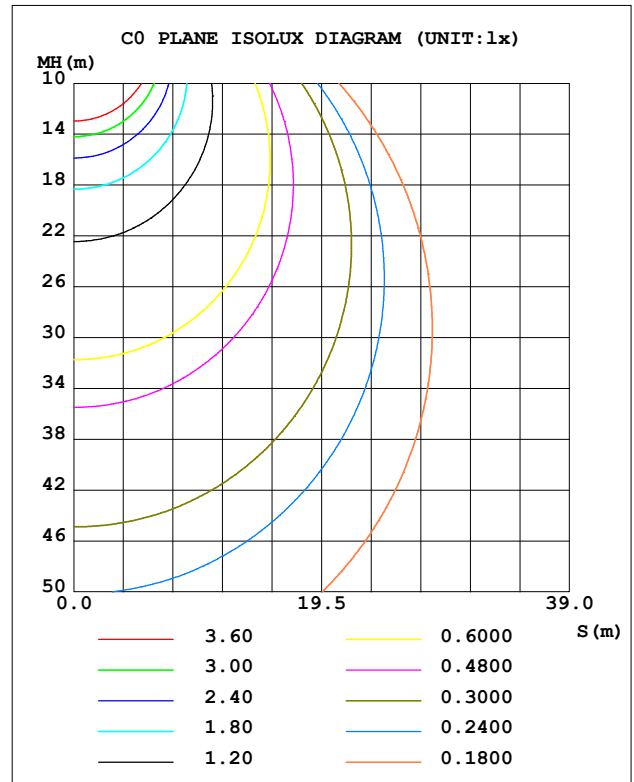
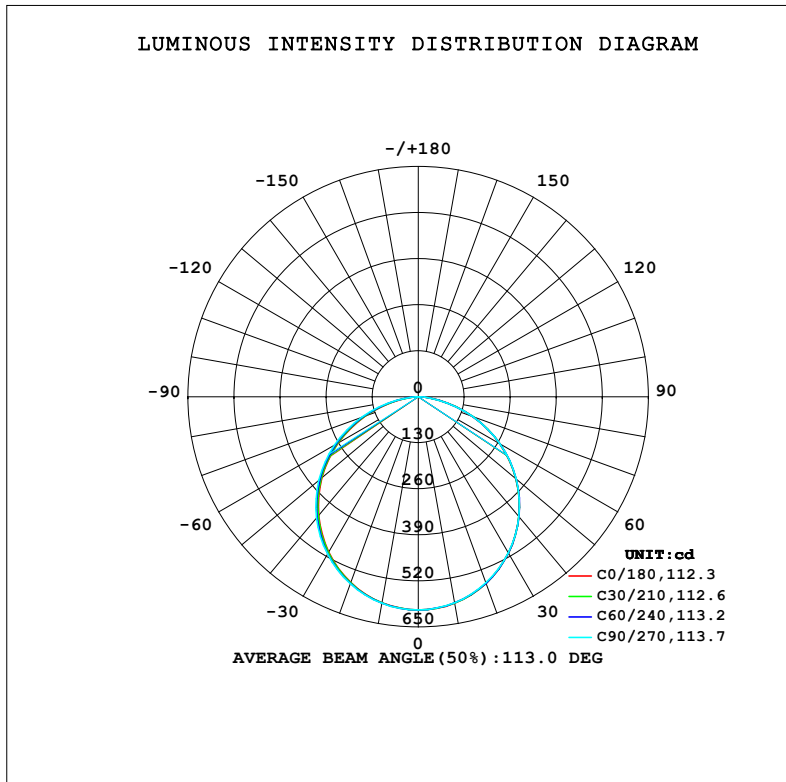


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	93FGNL3040/BL	I _{max} (cd)	601.7	S/MH (C0/180)	1.25
NOMINAL POWER (W)	30	LOR (%)	122.4	S/MH (C90/270)	1.27
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1713.5	η UP, DN (C0-180)	0.0, 60.8
NOMINAL FLUX (lm)	1400	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 61.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	122.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 29 August 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	592.2	591.5	590.5	590.1	590.9	591.4	592.1	592.7	0- 10	56.95	56.95	3.32,4.07
20	560.3	560.4	559.0	557.7	558.1	560.1	561.9	562.7	10- 20	163.2	220.2	12.8,15.7
30	509.4	509.6	508.8	506.0	506.1	509.2	512.8	513.0	20- 30	247.5	467.6	27.3,33.4
40	441.9	442.4	442.1	437.6	437.7	441.7	447.0	446.6	30- 40	298.9	766.5	44.7,54.8
50	360.2	360.7	360.8	355.0	355.1	359.9	366.7	365.7	40- 50	310.8	1077	62.9,77
60	266.5	266.6	266.8	260.3	260.8	265.7	273.4	272.3	50- 60	281.3	1359	79.3,97
70	163.7	163.2	163.2	156.6	157.6	162.2	170.1	169.2	60- 70	213.2	1572	91.7,112
80	60.89	60.24	59.55	54.13	54.95	59.06	65.75	65.48	70- 80	116.8	1689	98.6,121
90	0.9187	0.9356	0.9725	0.9623	0.8049	0.8159	0.8826	0.8314	80- 90	24.84	1713	100,122
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): 923.02 lm

%lum = 53.9%

%lamp = 65.9%

Conical surface Flux(130deg): 1475.9 lm

%lum = 86.1%

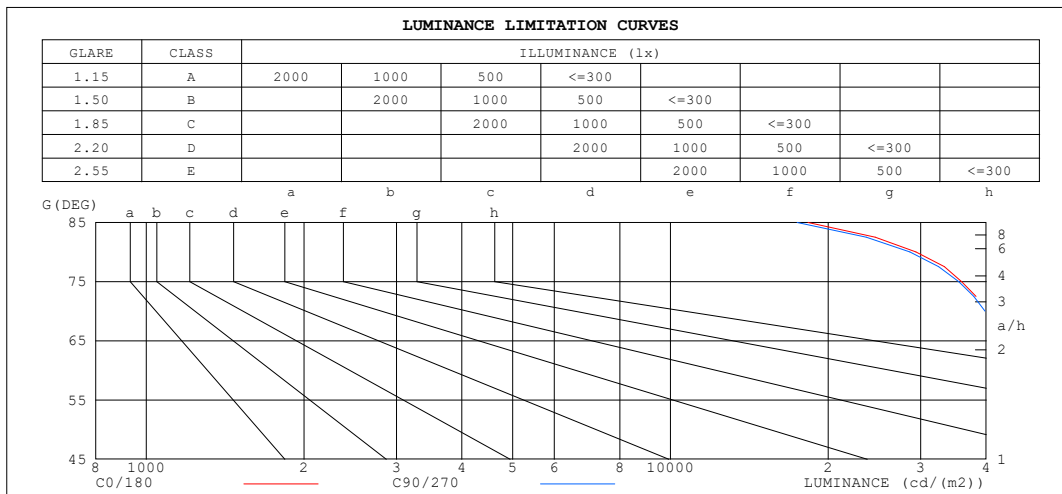
%lamp = 105.4%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:29 August 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: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	18286	17436
80	29397	28604
75	35935	35480
70	40122	39795
65	42833	42602
60	44680	44505
55	46014	45849
50	46988	46821
45	47757	47553

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 29 August 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:

```

WEC AND CCEC

NAME: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	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	.373	.212	.067	.364	.208	.066	.348	.200	.064	.333	.192	.062	.320	.185	.060	
2.0	.354	.194	.060	.346	.191	.059	.332	.185	.057	.319	.179	.056	.307	.173	.055	
3.0	.329	.175	.052	.322	.172	.052	.309	.168	.051	.298	.163	.050	.287	.159	.049	
4.0	.304	.158	.046	.298	.156	.046	.287	.152	.045	.276	.148	.045	.267	.145	.044	
5.0	.281	.143	.042	.276	.142	.041	.266	.138	.041	.257	.135	.040	.248	.133	.040	
6.0	.261	.131	.037	.256	.129	.037	.247	.127	.037	.239	.124	.037	.231	.122	.036	
7.0	.243	.120	.034	.239	.119	.034	.231	.117	.034	.224	.115	.033	.217	.113	.033	
8.0	.227	.111	.031	.223	.110	.031	.216	.108	.031	.210	.106	.031	.203	.104	.030	
9.0	.213	.103	.029	.210	.102	.029	.203	.100	.028	.197	.099	.028	.191	.097	.028	
10.0	.200	.096	.027	.197	.095	.027	.191	.094	.026	.186	.092	.026	.181	.091	.026	

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	.233	.233	.233	.199	.199	.199	.136	.136	.136	.078	.078	.078	.025	.025	.025	
1.0	.220	.191	.165	.188	.164	.142	.129	.113	.098	.074	.065	.057	.024	.021	.018	
2.0	.210	.161	.120	.180	.139	.104	.123	.096	.073	.071	.056	.043	.023	.018	.014	
3.0	.201	.140	.091	.172	.121	.079	.118	.084	.055	.068	.049	.033	.022	.016	.011	
4.0	.192	.124	.072	.164	.107	.062	.113	.074	.044	.065	.044	.026	.021	.014	.009	
5.0	.183	.111	.058	.157	.096	.050	.108	.067	.036	.063	.039	.021	.020	.013	.007	
6.0	.174	.101	.048	.150	.087	.042	.103	.061	.030	.060	.036	.018	.019	.012	.006	
7.0	.166	.092	.041	.142	.080	.035	.098	.056	.025	.057	.033	.015	.018	.011	.005	
8.0	.158	.085	.035	.136	.074	.031	.094	.052	.022	.055	.031	.013	.018	.010	.004	
9.0	.150	.079	.031	.129	.069	.027	.090	.048	.019	.052	.028	.011	.017	.009	.004	
10.0	.143	.074	.027	.124	.064	.024	.086	.045	.017	.050	.027	.010	.016	.009	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:29 August 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: 93FGNL3040/BL						TYPE: 93FGNL3040/BL			WEIGHT: 1		
SPEC.:						DIM.: 477 x 34 x 34			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	25.1	26.6	25.3	26.8	27.0	25.1	26.6	25.3	26.8	27.0
	3H	26.5	27.9	26.8	28.2	28.4	26.5	27.9	26.8	28.2	28.4
	4H	27.1	28.4	27.4	28.7	28.9	27.1	28.4	27.4	28.7	28.9
	6H	27.4	28.7	27.8	29.0	29.3	27.4	28.7	27.7	28.9	29.2
	8H	27.5	28.7	27.9	29.0	29.3	27.5	28.7	27.8	29.0	29.3
	12H	27.5	28.7	27.9	29.0	29.3	27.5	28.6	27.8	28.9	29.2
4H	2H	25.7	27.0	26.0	27.2	27.5	25.7	27.0	26.0	27.2	27.5
	3H	27.3	28.5	27.7	28.8	29.1	27.3	28.5	27.7	28.8	29.1
	4H	28.0	29.1	28.4	29.4	29.7	28.0	29.0	28.4	29.4	29.7
	6H	28.4	29.4	28.8	29.7	30.1	28.4	29.4	28.8	29.7	30.1
	8H	28.5	29.4	29.0	29.8	30.2	28.5	29.4	28.9	29.8	30.1
	12H	28.6	29.4	29.0	29.8	30.2	28.5	29.3	29.0	29.7	30.1
8H	4H	28.2	29.1	28.6	29.5	29.9	28.2	29.1	28.6	29.5	29.8
	6H	28.8	29.5	29.2	29.9	30.3	28.8	29.5	29.2	29.9	30.3
	8H	28.9	29.6	29.4	30.0	30.5	28.9	29.6	29.4	30.0	30.4
	12H	29.0	29.6	29.5	30.0	30.5	29.0	29.5	29.4	30.0	30.5
12H	4H	28.2	29.0	28.6	29.4	29.8	28.2	29.0	28.6	29.4	29.8
	6H	28.8	29.5	29.3	29.9	30.3	28.8	29.4	29.2	29.9	30.3
	8H	29.0	29.6	29.5	30.0	30.5	29.0	29.5	29.4	30.0	30.4
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1400 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.2)
Area: 0.01198 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:29 August 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: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

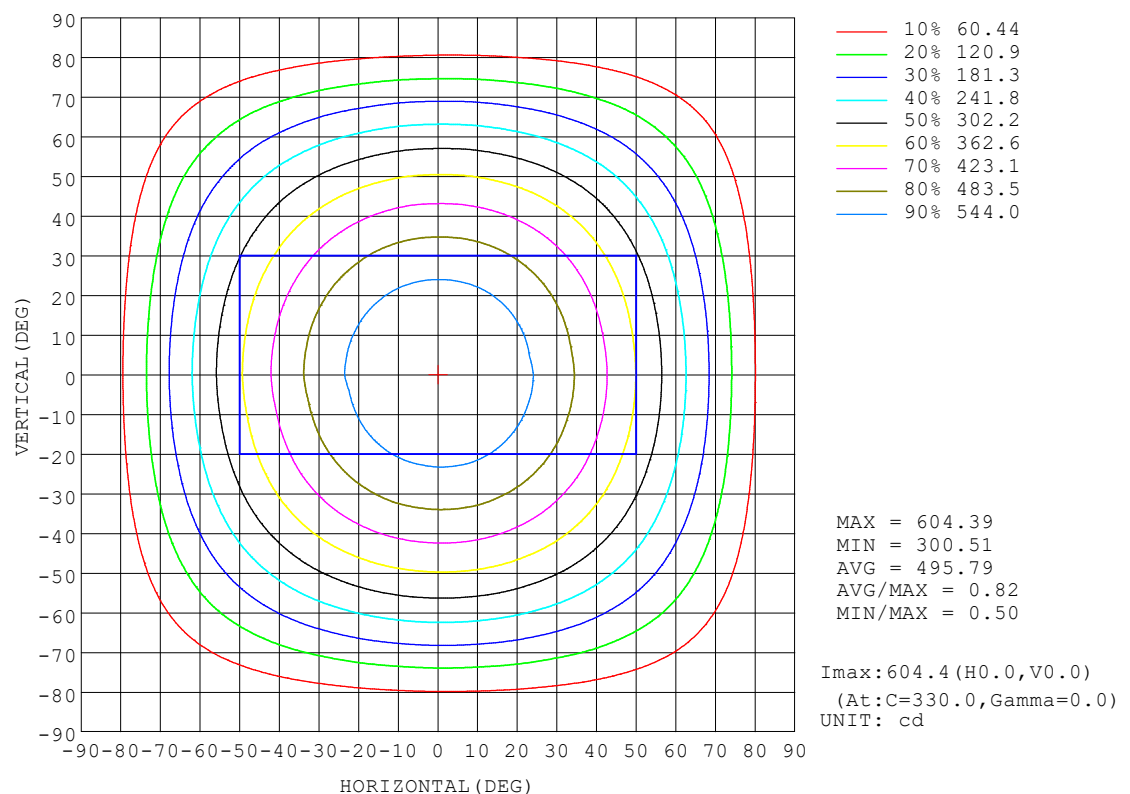
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	70	56	48	70	56	48	68	55	47	39
0.80	83	69	60	82	68	59	79	67	59	50
1.00	93	80	71	92	79	70	89	81	70	61
1.25	102	89	80	100	88	80	97	86	79	70
1.50	108	96	87	106	95	87	102	93	86	76
2.00	116	106	98	114	105	97	110	102	95	86
2.50	121	112	104	119	110	103	114	107	101	91
3.00	125	117	110	123	115	109	118	112	106	96
4.00	130	123	118	127	121	116	122	117	113	102
5.00	133	127	123	130	125	121	125	121	117	106
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: 29 August 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: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

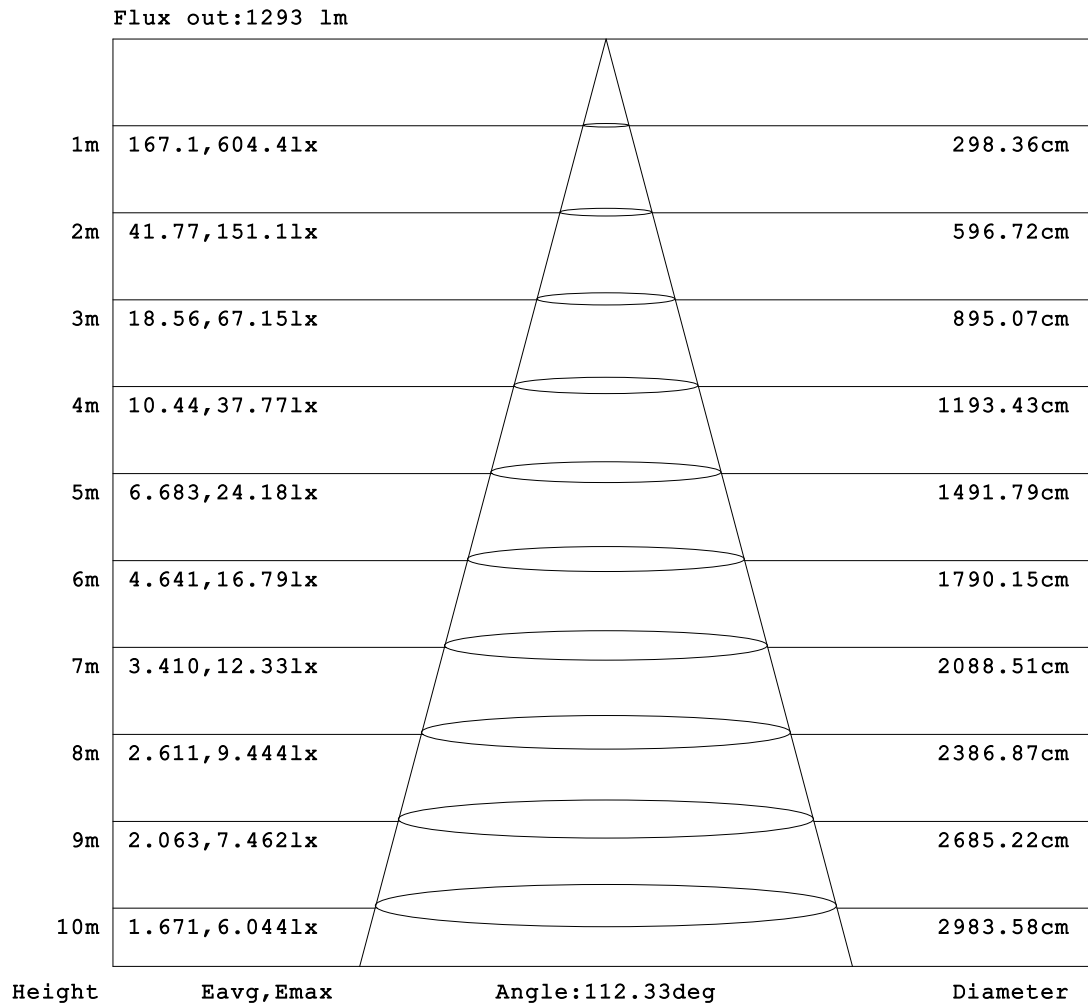


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:
 Test Date:29 August 2022

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: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:



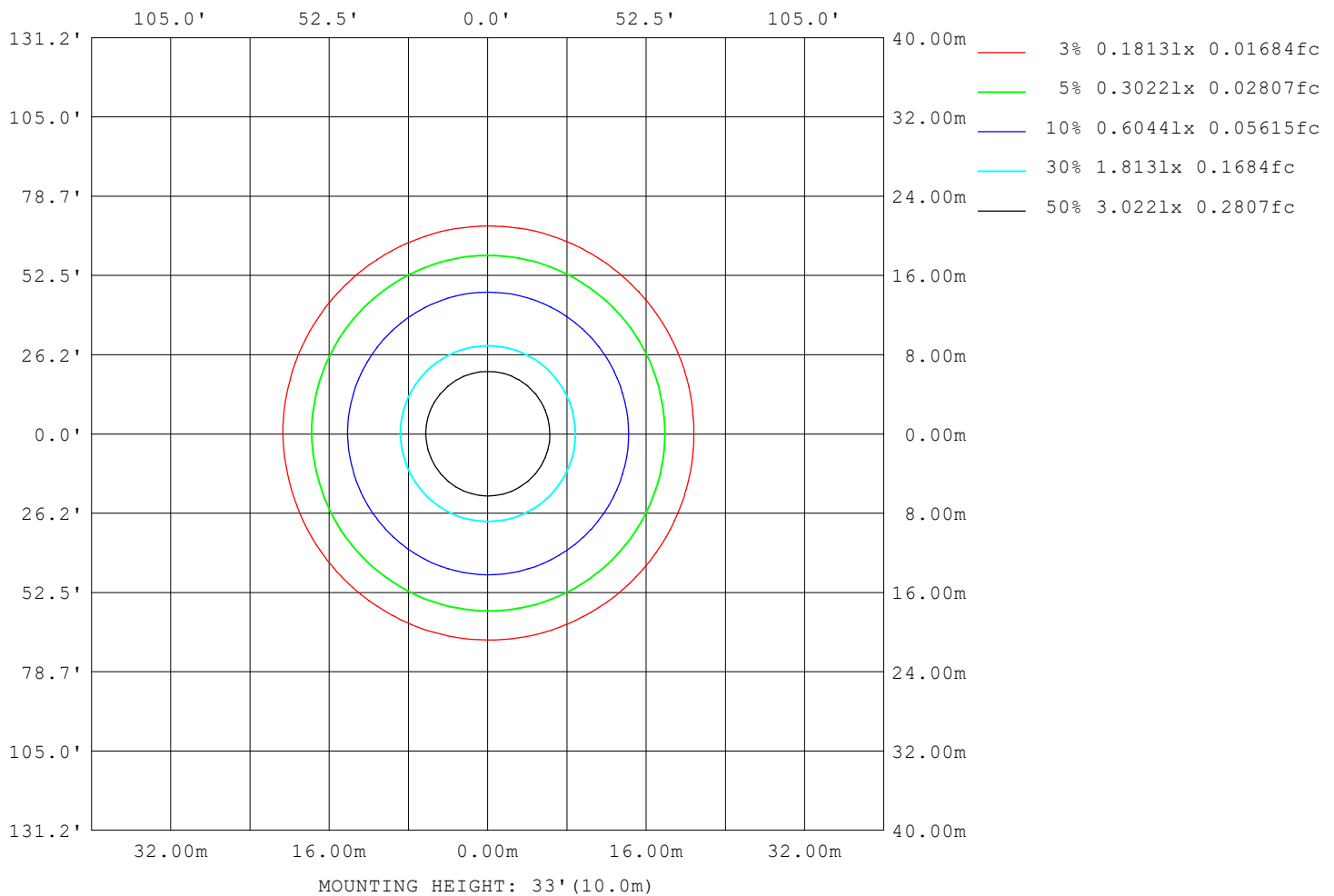
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 29 August 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: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	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: 29 August 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: 93FGNL3040/BL	TYPE: 93FGNL3040/BL	WEIGHT: 1
SPEC.:	DIM.: 477 x 34 x 34	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangle	Shielding Angle:

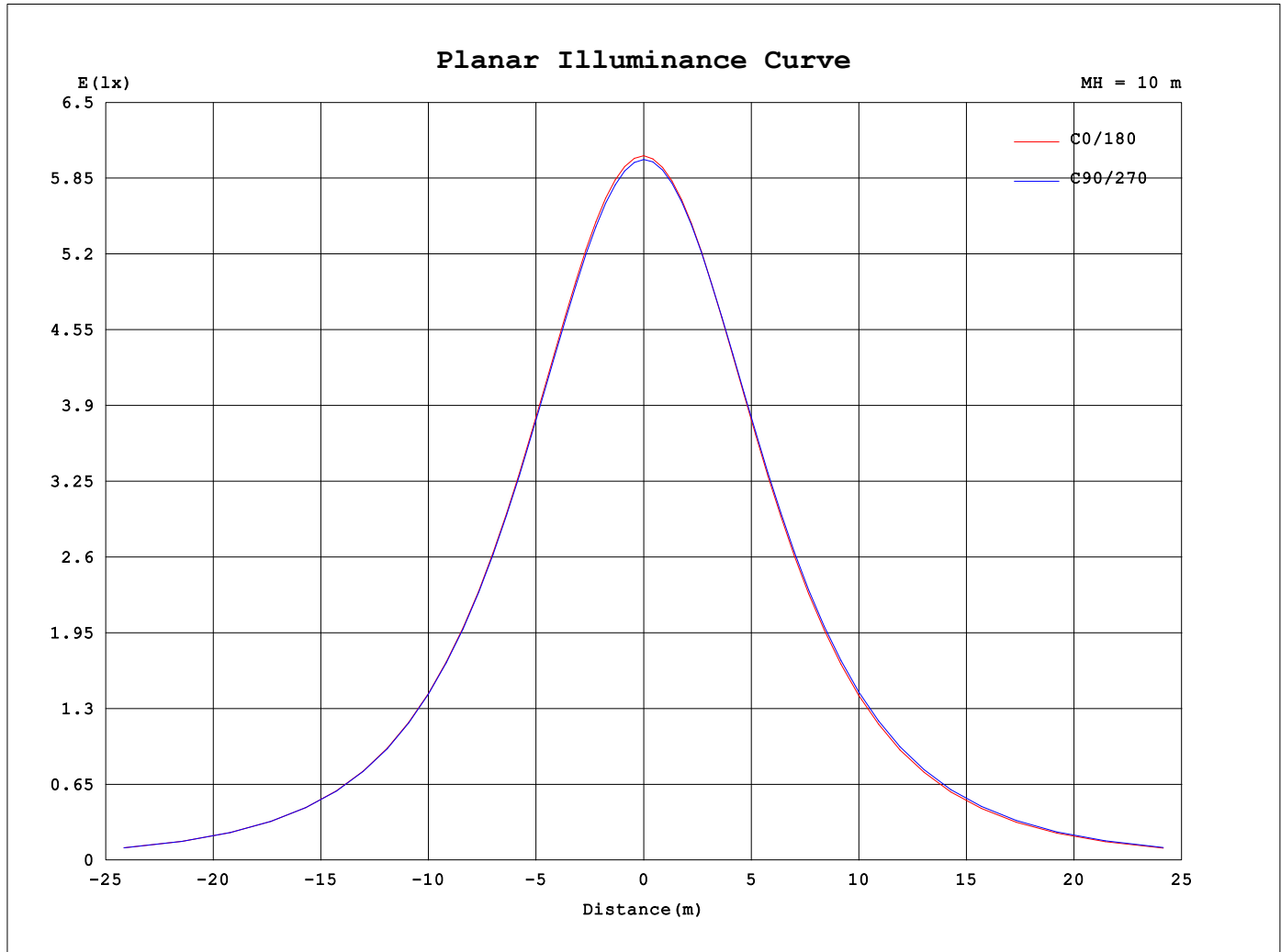
AvgL	cd/m2
L_0~180 (65) av	42050
L_0~180 (75) av	34810
L_0~180 (85) av	16237
L_90~270 (65) av	43318
L_90~270 (75) av	36600
L_90~270 (85) av	19566
L_45 (65) av	42531
L_45 (75) av	35465
L_45 (85) av	17529

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:29 August 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: 29 August 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:

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