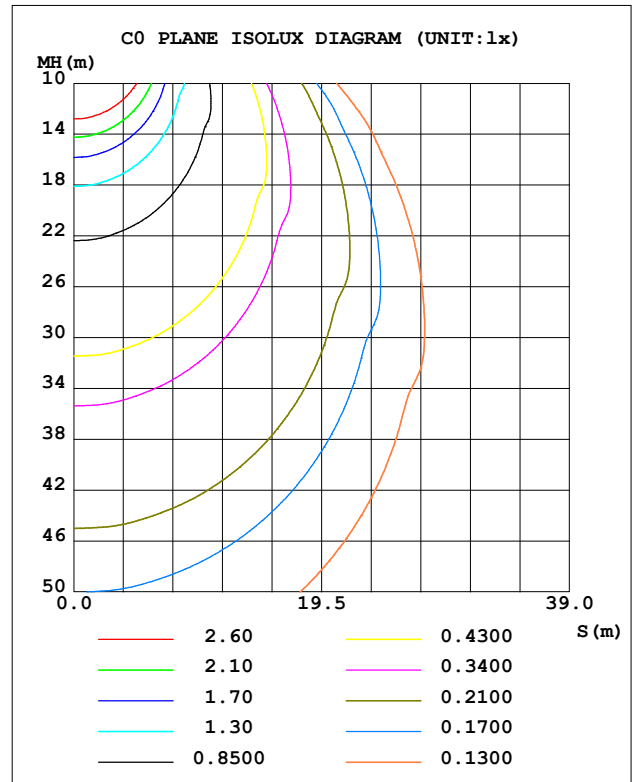
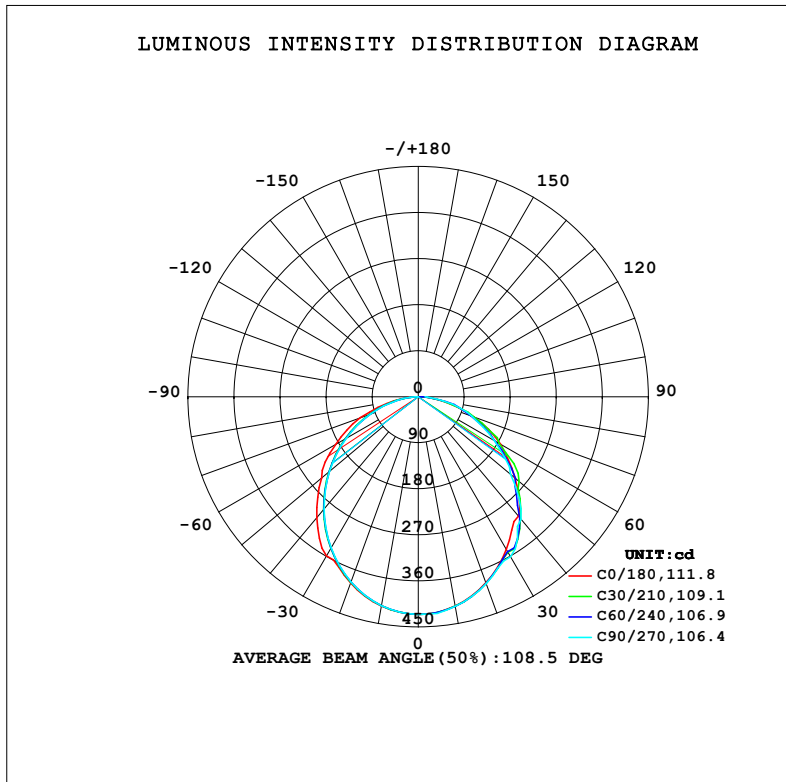


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99PFML40/WH	I _{max} (cd)	425.3	S/MH (C0/180)	1.26
NOMINAL POWER (W)	10	LOR (%)	117.1	S/MH (C90/270)	1.20
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1171.2	η UP, DN (C0-180)	0.0, 60.4
NOMINAL FLUX (lm)	1000	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 56.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	117.1	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 16 November 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	415.2	415.8	416.1	416.2	415.5	414.8	414.6	415.0	0- 10	40.13	40.13	3.43,4.01
20	387.1	388.3	388.5	392.4	387.3	385.6	385.2	386.0	10- 20	113.7	153.9	13.1,15.4
30	344.3	355.2	361.2	366.8	358.8	341.6	340.9	342.3	20- 30	170.7	324.5	27.7,32.5
40	305.1	310.8	312.8	310.6	308.7	287.4	286.5	288.1	30- 40	204.4	528.9	45.2,52.9
50	247.1	254.7	235.3	257.8	247.1	227.3	226.2	227.9	40- 50	209.3	738.2	63,73.8
60	186.7	184.4	172.0	186.6	186.7	164.3	163.0	164.7	50- 60	186.9	925.0	79,92.5
70	115.0	113.6	112.0	114.7	120.5	100.8	99.56	101.2	60- 70	140.9	1066	91,107
80	47.90	50.26	50.07	52.56	48.95	41.28	41.30	42.64	70- 80	82.02	1148	98,115
90	3.584	1.249	13.66	1.656	4.534	0.9907	0.6890	0.9316	80- 90	23.27	1171	100,117
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): 634.64 lm

%lum = 54.2%

%lamp = 63.5%

Conical surface Flux(130deg): 1002.3 lm

%lum = 85.6%

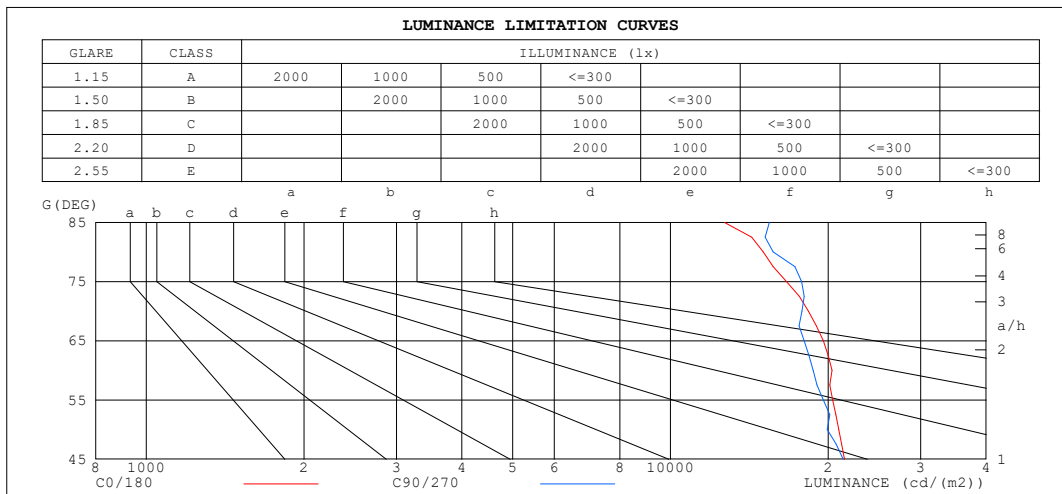
%lamp = 100.2%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:16 November 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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	12682	15435
80	15030	15690
75	16648	17786
70	18319	17809
65	19561	17992
60	20340	18714
55	20389	19568
50	20946	19917
45	21471	21367

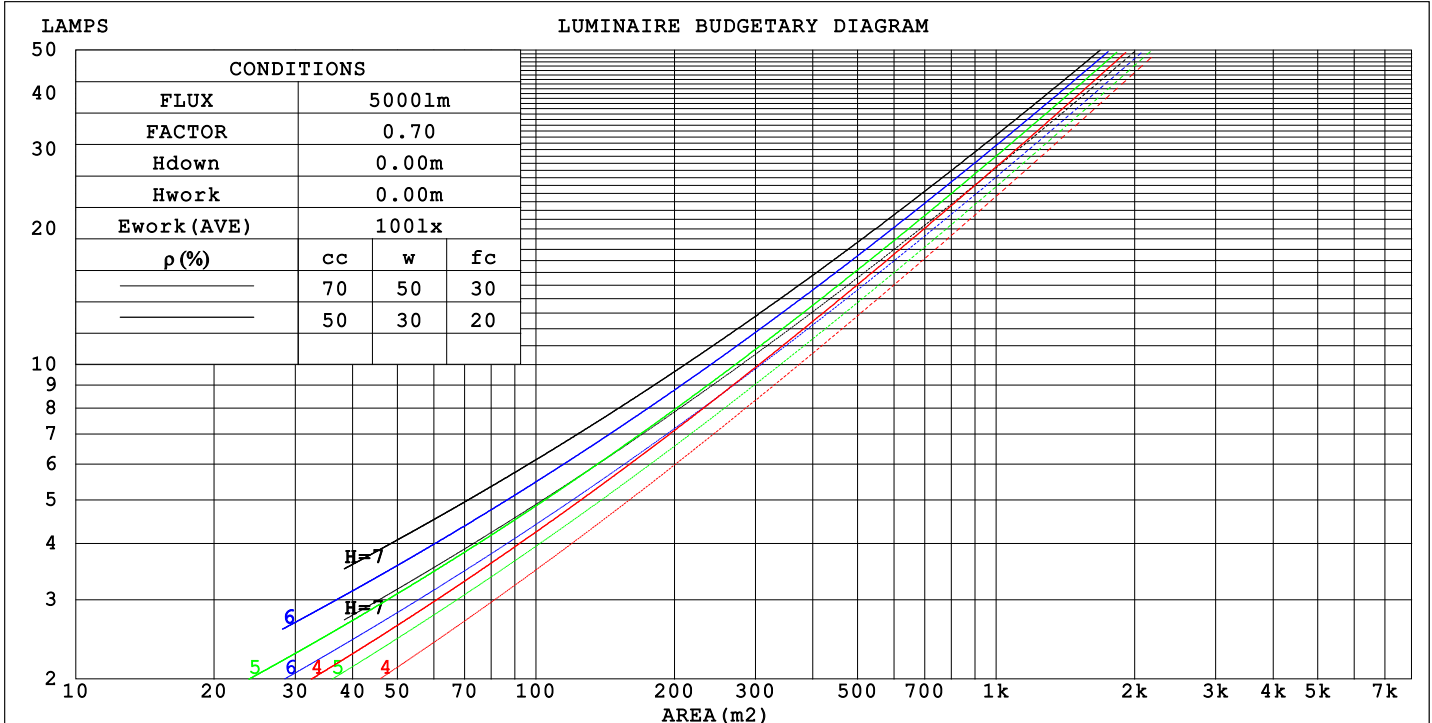
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 16 November 2022

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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	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: HIGH
Temperature:25.3°C
Operators:
Test Date:16 November 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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	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	.363	.206	.065	.354	.202	.064	.339	.194	.062	.324	.187	.060	.311	.180	.058	
2.0	.341	.187	.057	.333	.184	.057	.320	.178	.055	.307	.172	.054	.295	.167	.053	
3.0	.315	.168	.050	.309	.165	.050	.297	.161	.049	.285	.156	.048	.275	.152	.047	
4.0	.291	.151	.044	.285	.149	.044	.274	.146	.043	.264	.142	.043	.255	.139	.042	
5.0	.269	.137	.040	.264	.135	.039	.254	.132	.039	.245	.129	.039	.237	.127	.038	
6.0	.249	.125	.036	.245	.124	.036	.236	.121	.035	.228	.119	.035	.221	.116	.035	
7.0	.232	.115	.033	.228	.114	.032	.221	.111	.032	.213	.109	.032	.207	.107	.032	
8.0	.217	.106	.030	.213	.105	.030	.206	.103	.029	.200	.101	.029	.194	.100	.029	
9.0	.203	.098	.027	.200	.097	.027	.194	.096	.027	.188	.094	.027	.183	.093	.027	
10.0	.191	.092	.025	.188	.091	.025	.183	.090	.025	.178	.088	.025	.173	.087	.025	

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	.223	.223	.223	.191	.191	.191	.130	.130	.130	.075	.075	.075	.024	.024	.024	
1.0	.211	.183	.157	.181	.157	.135	.124	.108	.094	.071	.062	.054	.023	.020	.018	
2.0	.202	.155	.115	.173	.133	.099	.118	.092	.069	.068	.054	.041	.022	.017	.013	
3.0	.192	.134	.087	.165	.115	.076	.113	.080	.053	.065	.047	.031	.021	.015	.010	
4.0	.183	.118	.068	.157	.102	.059	.108	.071	.042	.063	.042	.025	.020	.014	.008	
5.0	.175	.106	.055	.150	.092	.048	.103	.064	.034	.060	.038	.020	.019	.012	.007	
6.0	.166	.096	.046	.143	.083	.040	.099	.058	.028	.057	.034	.017	.018	.011	.006	
7.0	.158	.088	.039	.136	.076	.034	.094	.054	.024	.055	.032	.014	.018	.010	.005	
8.0	.151	.081	.034	.130	.071	.029	.090	.050	.021	.052	.029	.012	.017	.010	.004	
9.0	.144	.076	.030	.124	.066	.026	.086	.046	.018	.050	.027	.011	.016	.009	.004	
10.0	.137	.071	.026	.118	.061	.023	.082	.043	.016	.048	.025	.010	.015	.008	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:16 November 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: 99PFML40/WH					TYPE:			WEIGHT: 1			
SPEC.:					DIM.: 35 x 75 x 204			SERIAL No.: 0			
MFR.: Elmark Industries JSC					SUR.: L			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	23.6	25.1	23.9	25.3	25.6	23.2	24.7	23.5	24.9	25.1
	3H	25.1	26.5	25.4	26.8	27.0	24.7	26.1	25.0	26.3	26.6
	4H	25.7	27.0	26.0	27.3	27.5	25.4	26.7	25.7	27.0	27.2
	6H	26.1	27.3	26.4	27.6	27.9	25.9	27.1	26.2	27.4	27.7
	8H	26.2	27.4	26.5	27.7	28.0	26.0	27.2	26.4	27.5	27.8
	12H	26.3	27.4	26.6	27.7	28.0	26.1	27.3	26.5	27.6	27.9
4H	2H	24.2	25.5	24.5	25.8	26.0	23.9	25.2	24.2	25.4	25.7
	3H	25.9	27.1	26.3	27.4	27.7	25.5	26.7	25.9	27.0	27.3
	4H	26.6	27.6	27.0	28.0	28.3	26.4	27.4	26.8	27.8	28.1
	6H	27.1	28.0	27.5	28.4	28.7	27.0	28.0	27.4	28.3	28.7
	8H	27.3	28.1	27.7	28.5	28.9	27.2	28.1	27.6	28.5	28.8
	12H	27.4	28.2	27.8	28.6	29.0	27.3	28.2	27.8	28.5	29.0
8H	4H	26.8	27.7	27.3	28.1	28.5	26.7	27.6	27.1	27.9	28.3
	6H	27.5	28.2	27.9	28.6	29.0	27.5	28.2	27.9	28.6	29.1
	8H	27.7	28.4	28.2	28.8	29.3	27.8	28.4	28.2	28.8	29.3
	12H	27.9	28.5	28.4	28.9	29.4	28.0	28.5	28.5	29.0	29.5
12H	4H	26.9	27.7	27.3	28.1	28.5	26.7	27.5	27.1	27.9	28.3
	6H	27.5	28.2	28.0	28.6	29.1	27.5	28.2	28.0	28.6	29.1
	8H	27.8	28.4	28.3	28.8	29.3	27.8	28.4	28.3	28.9	29.3
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 / - 0.4					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.1 / - 0.2				

CIE Pub.117, 1000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.0)
Area: 0.01837 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:16 November 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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

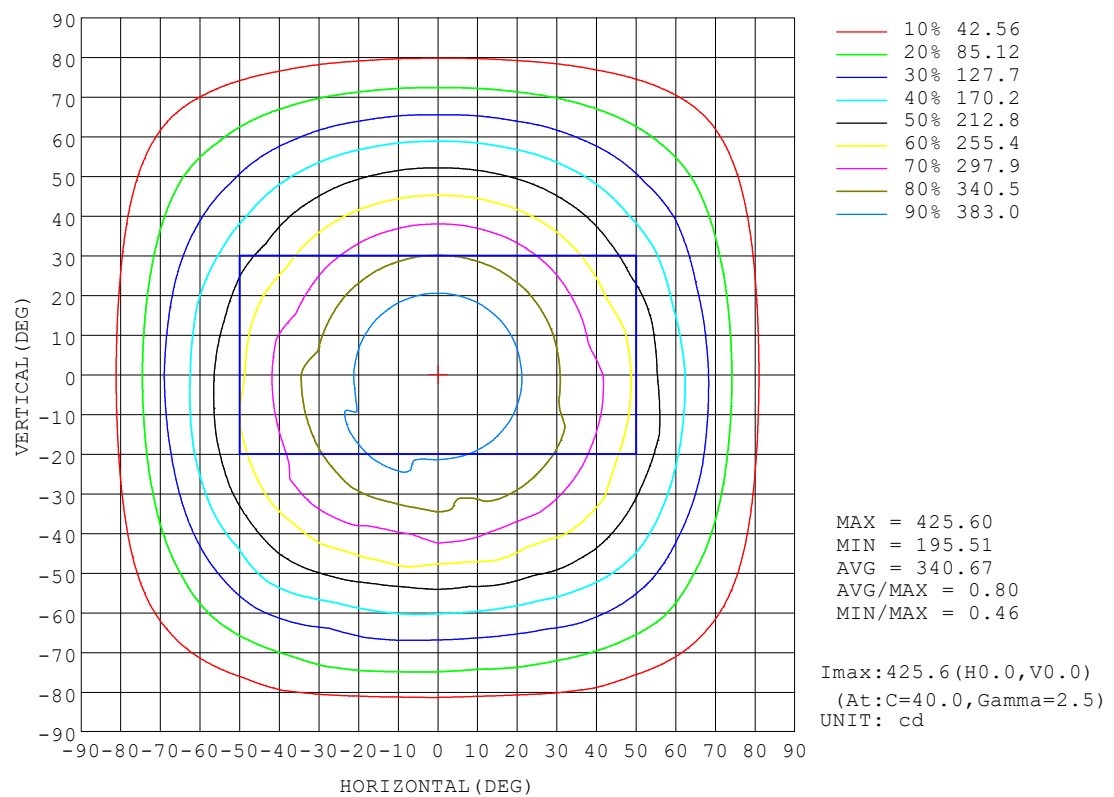
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	54	46	67	54	46	65	53	46	38
0.80	79	66	57	78	65	57	76	64	57	49
1.00	89	76	68	88	76	67	85	77	67	59
1.25	98	85	77	96	84	77	93	83	76	67
1.50	103	92	84	101	91	83	98	89	82	73
2.00	111	101	94	109	100	93	105	97	91	82
2.50	116	107	100	113	105	99	109	102	97	87
3.00	120	112	105	117	110	104	113	107	102	92
4.00	124	118	112	122	116	111	117	112	108	97
5.00	127	122	117	124	119	115	119	115	111	101
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: HIGH
Temperature: 25.3°C
Operators:
Test Date: 16 November 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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

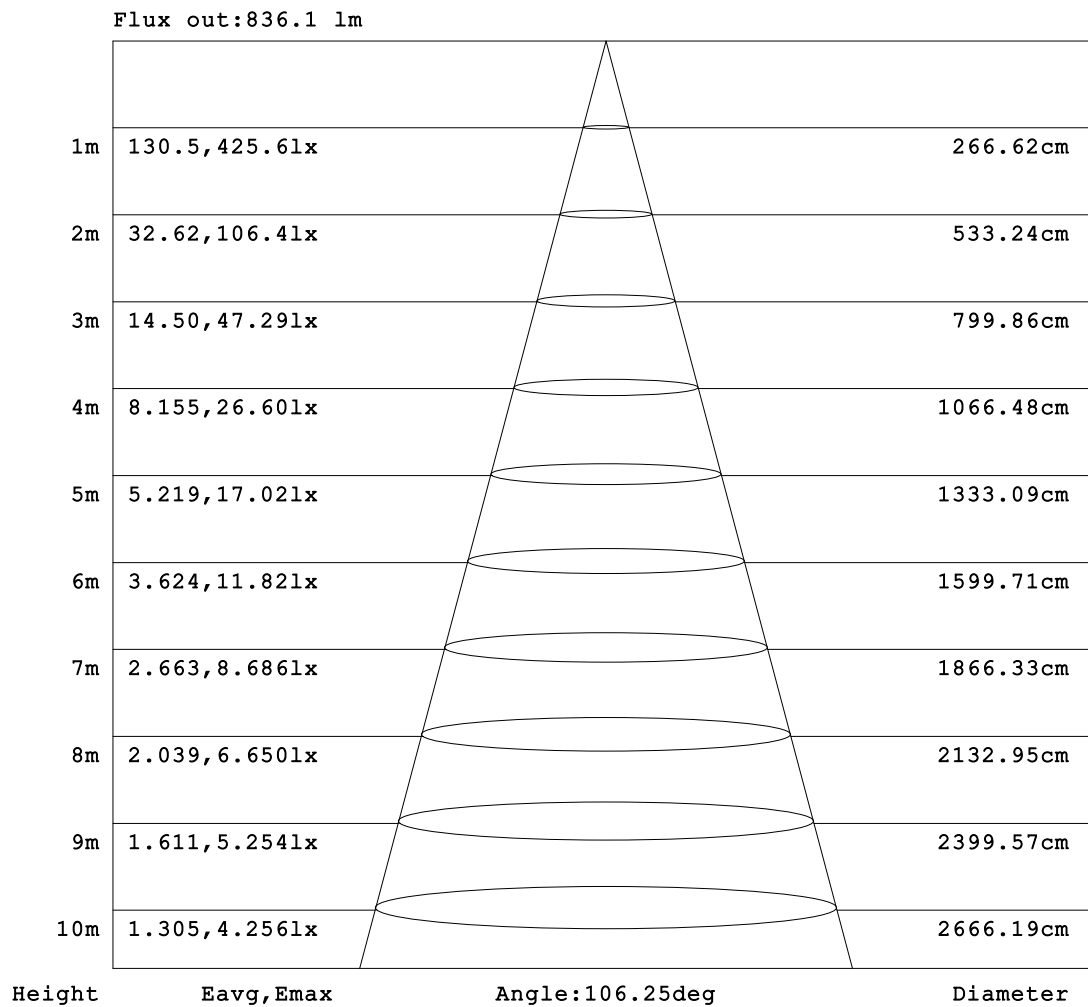


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:16 November 2022

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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:



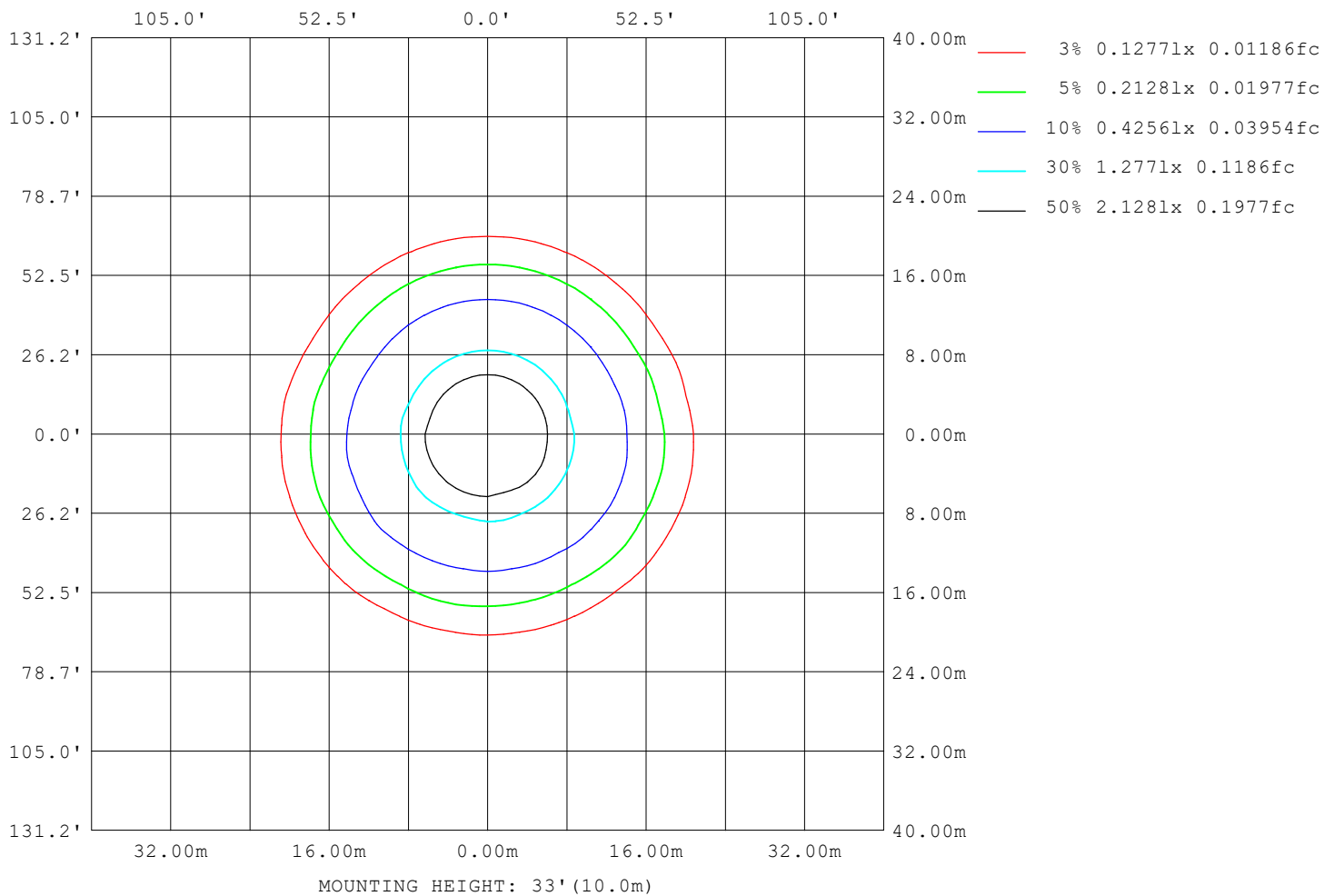
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:16 November 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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 16 November 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: 99PFML40/WH	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

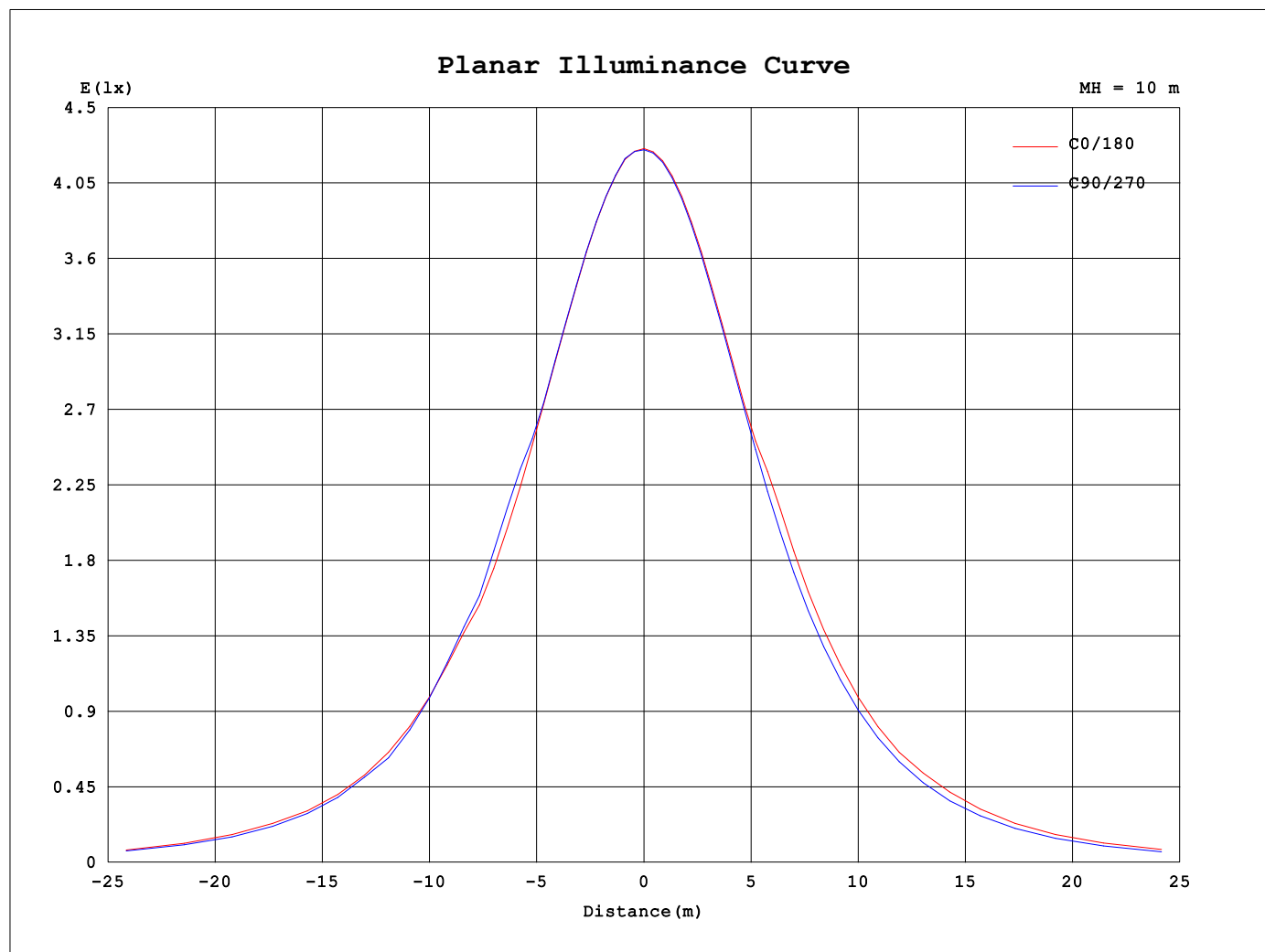
AvgL	cd/m2
L_0~180 (65) av	19668
L_0~180 (75) av	16920
L_0~180 (85) av	12988
L_90~270 (65) av	17441
L_90~270 (75) av	16207
L_90~270 (85) av	13015
L_45 (65) av	18210
L_45 (75) av	16127
L_45 (85) av	11306

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:16 November 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: HIGH
Temperature: 25.3°C
Operators:
Test Date: 16 November 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:

```