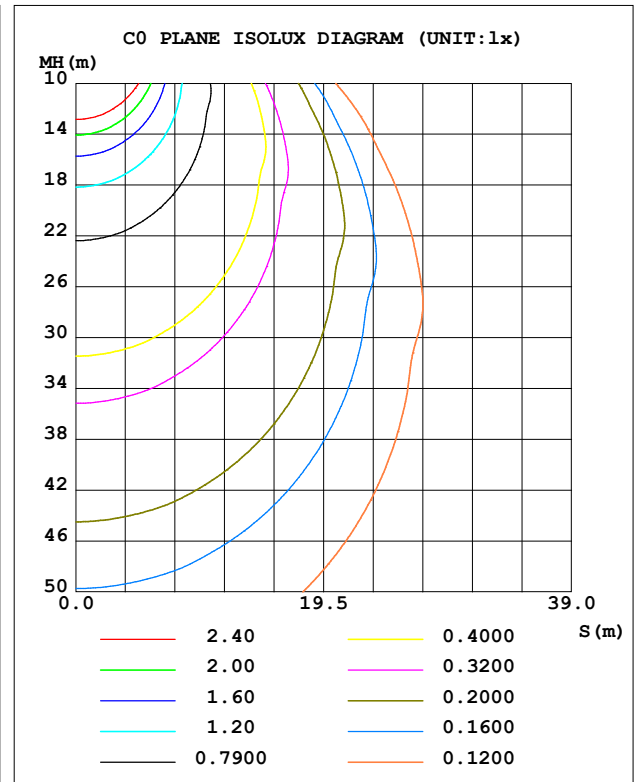
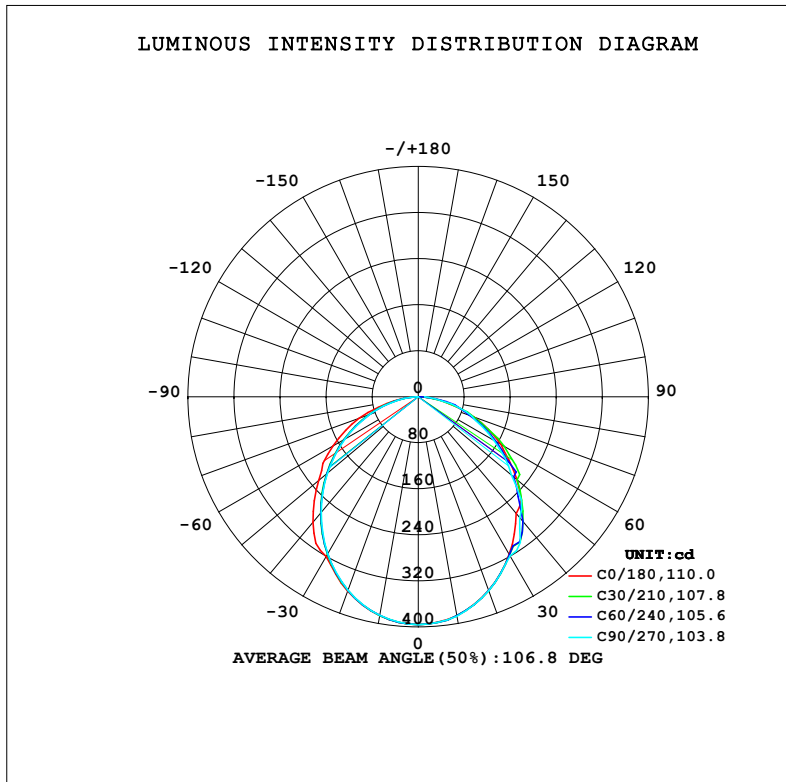


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 99PFML40/BL	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/BL	Imax (cd)	395.7	S/MH (C0/180)	1.22
NOMINAL POWER (W)	10	LOR (%)	106.3	S/MH (C90/270)	1.19
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	1062.7	η UP, DN (C0-180)	0.0, 54.6
NOMINAL FLUX (lm)	1000	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	106.3	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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	386.7	386.0	387.1	386.4	386.3	386.0	385.6	385.6	0- 10	37.32	37.32	3.51, 3.73
20	357.9	358.4	358.5	360.1	359.2	358.1	357.4	357.5	10- 20	105.5	142.8	13.4, 14.3
30	316.1	317.4	319.0	338.1	320.2	315.8	314.7	315.2	20- 30	157.0	299.8	28.2, 30
40	265.2	283.3	274.2	284.8	284.5	264.0	262.6	263.4	30- 40	186.6	486.4	45.8, 48.6
50	223.4	224.7	211.1	235.1	225.9	207.2	205.7	206.7	40- 50	189.9	676.3	63.6, 67.6
60	165.5	163.9	152.5	169.5	171.0	148.7	146.9	148.2	50- 60	168.3	844.7	79.5, 84.5
70	101.8	100.1	98.73	102.5	109.8	90.71	89.01	90.18	60- 70	126.0	970.7	91.3, 97.1
80	40.82	43.78	41.86	46.87	43.24	37.42	36.39	37.37	70- 80	72.80	1043	98.2, 104
90	2.248	0.9215	11.82	1.206	2.953	0.7690	0.5362	0.7200	80- 90	19.17	1063	100, 106
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): 582.55 lm

%lum = 54.8%

%lamp = 58.3%

Conical surface Flux(130deg): 913.94 lm

%lum = 86.0%

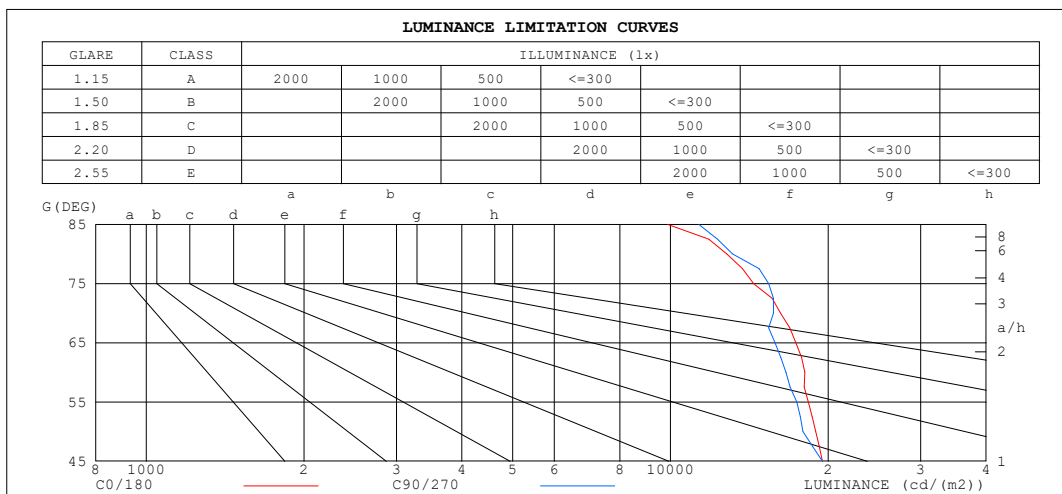
%lamp = 91.4%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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/BL	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	9880	11330
80	12799	13123
75	14405	15400
70	16212	15715
65	17353	15824
60	18028	16606
55	18314	17428
50	18925	17878
45	19492	19489

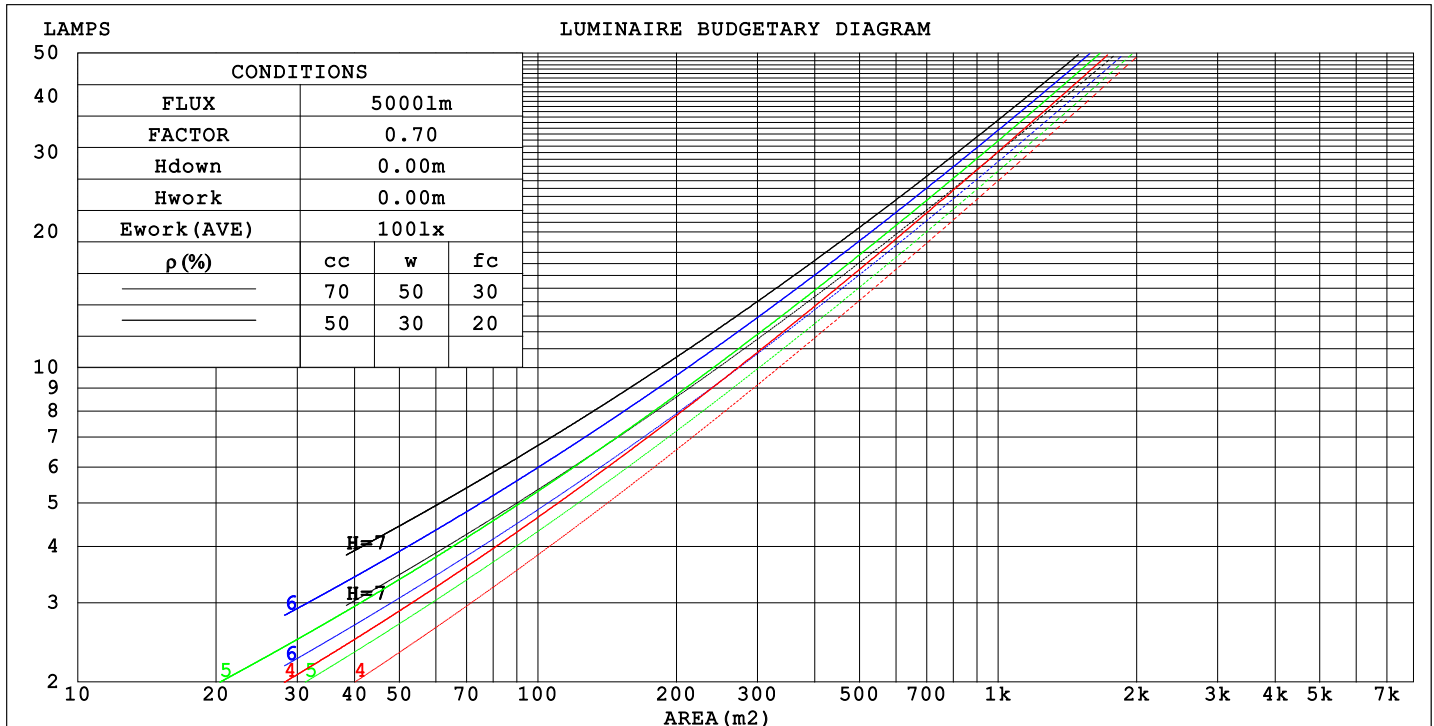
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 16 November 2022

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/BL	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: MEDIUM
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/BL	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	.325	.185	.059	.318	.181	.058	.304	.174	.056	.291	.168	.054	.279	.162	.052	
2.0	.306	.168	.052	.300	.165	.051	.287	.160	.050	.276	.155	.048	.265	.150	.047	
3.0	.284	.151	.045	.278	.149	.045	.267	.145	.044	.257	.141	.043	.248	.137	.042	
4.0	.262	.136	.040	.257	.135	.040	.247	.131	.039	.238	.128	.039	.230	.125	.038	
5.0	.243	.124	.036	.238	.122	.036	.229	.119	.035	.221	.117	.035	.214	.114	.034	
6.0	.225	.113	.032	.221	.112	.032	.213	.109	.032	.206	.107	.031	.199	.105	.031	
7.0	.210	.104	.029	.206	.103	.029	.199	.101	.029	.193	.099	.029	.187	.097	.029	
8.0	.196	.096	.027	.193	.095	.027	.187	.093	.027	.181	.092	.026	.175	.090	.026	
9.0	.184	.089	.025	.181	.088	.025	.175	.087	.025	.170	.085	.024	.165	.084	.024	
10.0	.173	.083	.023	.170	.082	.023	.165	.081	.023	.161	.080	.023	.156	.079	.023	

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	.202	.202	.202	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.191	.166	.143	.164	.142	.123	.112	.098	.085	.064	.057	.050	.021	.018	.016	
2.0	.183	.140	.105	.156	.121	.090	.107	.083	.063	.062	.049	.037	.020	.016	.012	
3.0	.174	.121	.079	.149	.105	.069	.103	.073	.048	.059	.043	.028	.019	.014	.009	
4.0	.166	.107	.062	.142	.093	.054	.098	.065	.038	.057	.038	.023	.018	.012	.007	
5.0	.158	.096	.050	.136	.083	.044	.094	.058	.031	.054	.034	.018	.017	.011	.006	
6.0	.151	.087	.042	.129	.076	.036	.089	.053	.026	.052	.031	.015	.017	.010	.005	
7.0	.143	.080	.036	.123	.069	.031	.085	.049	.022	.049	.029	.013	.016	.009	.004	
8.0	.136	.074	.031	.117	.064	.027	.081	.045	.019	.047	.026	.011	.015	.009	.004	
9.0	.130	.068	.027	.112	.059	.023	.078	.042	.017	.045	.025	.010	.015	.008	.003	
10.0	.124	.064	.024	.107	.056	.021	.074	.039	.015	.043	.023	.009	.014	.008	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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/BL					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	23.2	24.7	23.5	24.9	25.1	22.7	24.3	23.0	24.5	24.7	
	24.7	26.1	25.0	26.3	26.6	24.2	25.6	24.5	25.8	26.0	
	25.2	26.5	25.5	26.8	27.1	24.9	26.2	25.2	26.5	26.7	
	25.6	26.8	25.9	27.1	27.4	25.3	26.6	25.7	26.9	27.1	
	25.7	26.9	26.0	27.2	27.5	25.5	26.7	25.8	26.9	27.2	
	25.7	26.9	26.1	27.2	27.5	25.5	26.7	25.9	27.0	27.3	
4H 2H	23.8	25.1	24.1	25.4	25.6	23.4	24.7	23.7	25.0	25.3	
	25.4	26.6	25.8	26.9	27.2	25.0	26.2	25.4	26.5	26.8	
	26.1	27.2	26.5	27.5	27.8	25.9	26.9	26.3	27.3	27.6	
	26.6	27.5	27.0	27.9	28.2	26.5	27.4	26.9	27.8	28.1	
	26.7	27.6	27.1	28.0	28.4	26.6	27.5	27.0	27.9	28.3	
	26.8	27.6	27.2	28.0	28.4	26.7	27.5	27.1	27.9	28.3	
8H 4H	26.4	27.2	26.8	27.6	28.0	26.2	27.1	26.6	27.4	27.8	
	27.0	27.7	27.4	28.1	28.5	26.9	27.7	27.4	28.1	28.5	
	27.2	27.8	27.6	28.2	28.7	27.2	27.8	27.6	28.2	28.7	
	27.3	27.9	27.8	28.3	28.8	27.3	27.9	27.8	28.3	28.8	
12H 4H	26.4	27.2	26.8	27.6	28.0	26.2	27.0	26.6	27.4	27.8	
	27.0	27.7	27.5	28.1	28.5	27.0	27.6	27.5	28.1	28.5	
	27.3	27.8	27.7	28.3	28.7	27.3	27.8	27.7	28.3	28.7	
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					+ 0.2 / - 0.3					

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

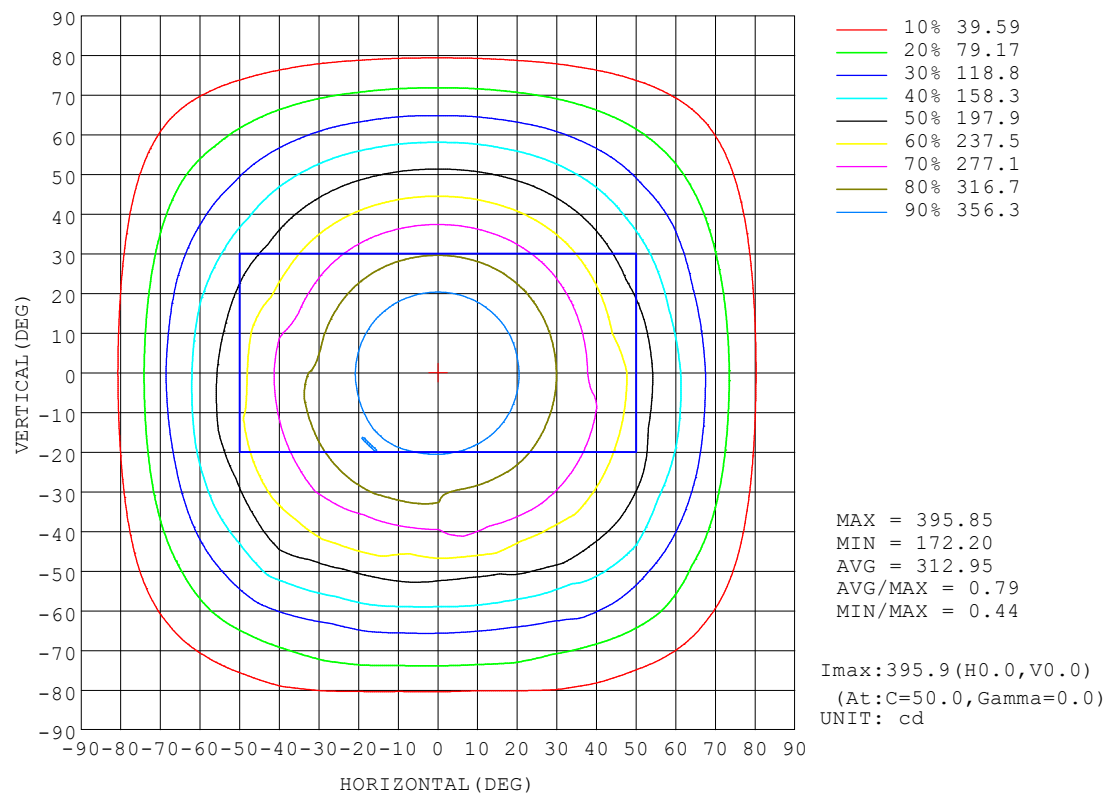
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	50	42	61	49	42	60	49	42	35
0.80	72	60	53	71	60	52	70	59	52	45
1.00	81	70	62	80	69	62	78	71	61	54
1.25	89	78	70	87	77	70	84	76	69	61
1.50	94	84	76	92	83	76	89	81	75	67
2.00	101	92	86	99	91	85	96	89	83	75
2.50	105	97	91	103	96	90	99	93	88	79
3.00	109	102	96	107	100	95	102	97	92	84
4.00	113	107	102	111	105	101	106	102	98	89
5.00	116	111	106	113	109	105	108	105	101	92
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: 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/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

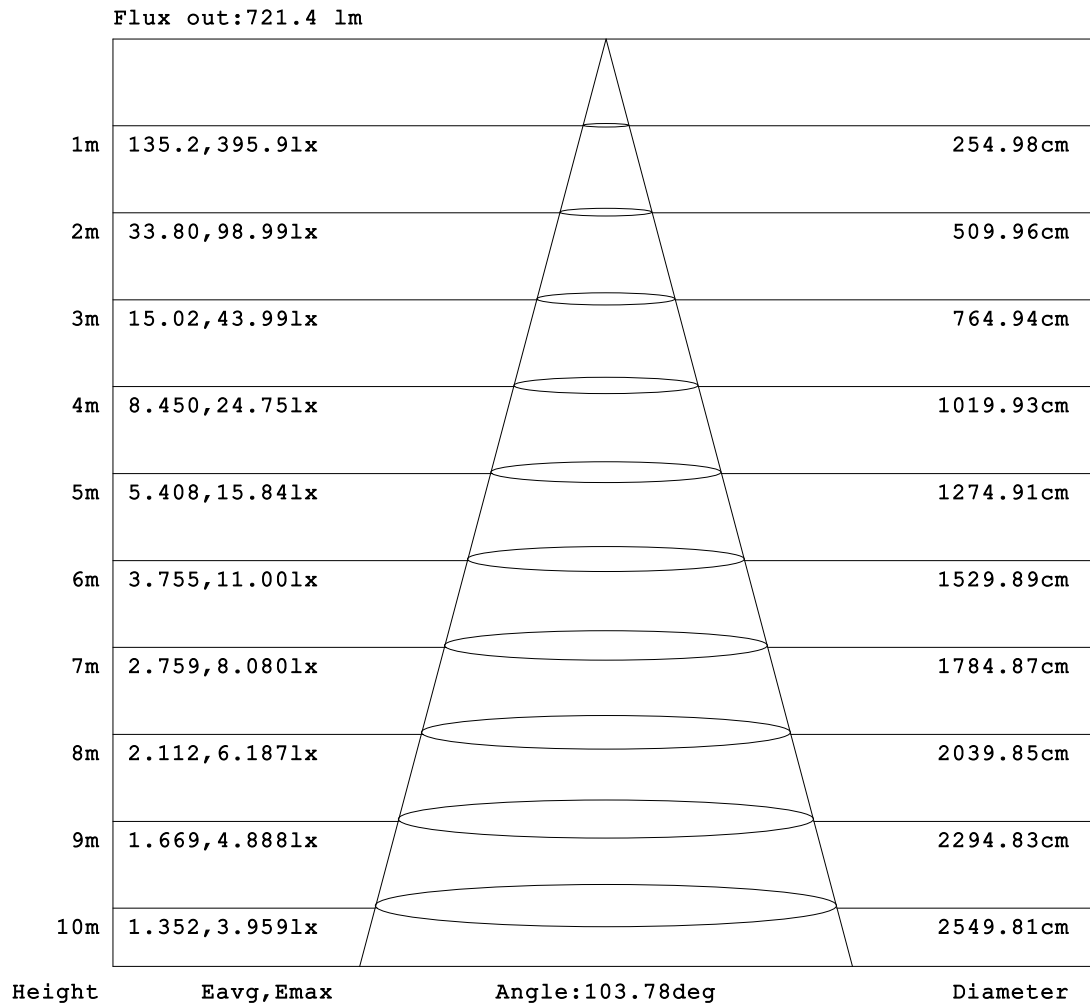


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 16 November 2022

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



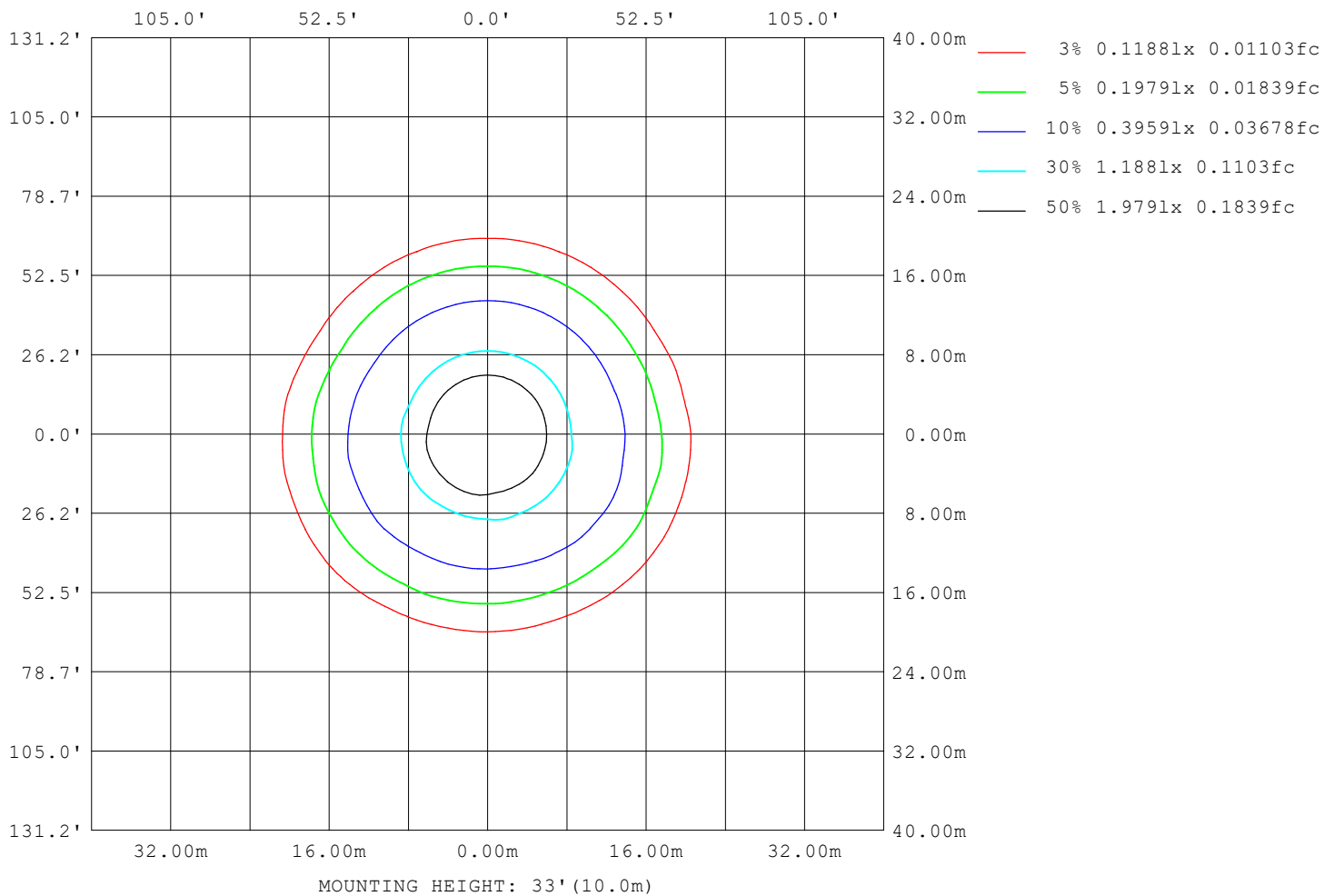
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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/BL	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: MEDIUM
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/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 35 x 75 x 204	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: L	Shielding Angle:

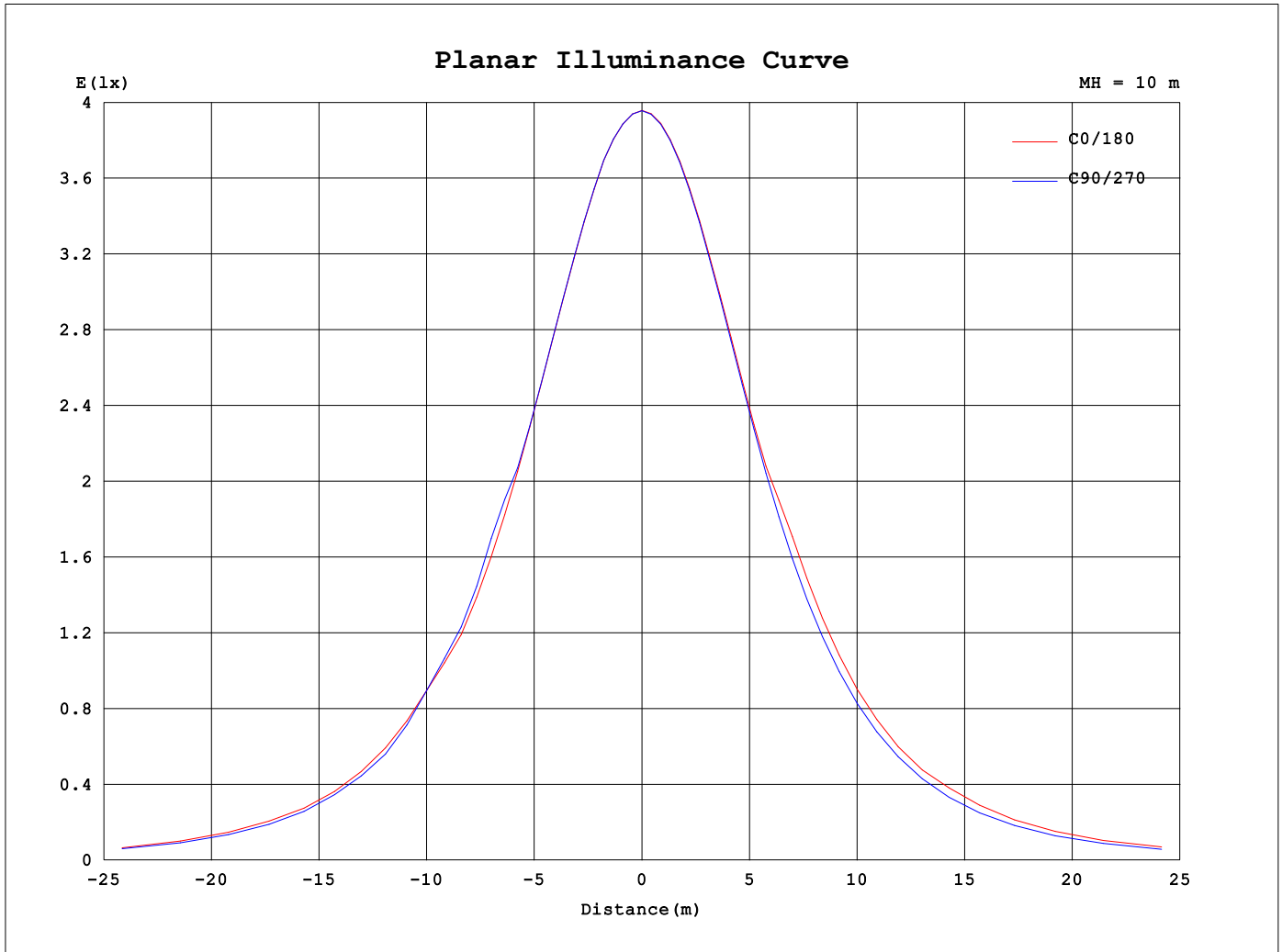
AvgL	cd/m2
L_0~180 (65) av	17647
L_0~180 (75) av	14809
L_0~180 (85) av	10446
L_90~270 (65) av	15489
L_90~270 (75) av	14213
L_90~270 (85) av	9903
L_45 (65) av	16368
L_45 (75) av	14311
L_45 (85) av	9551

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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: MEDIUM
 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:

```

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:

```