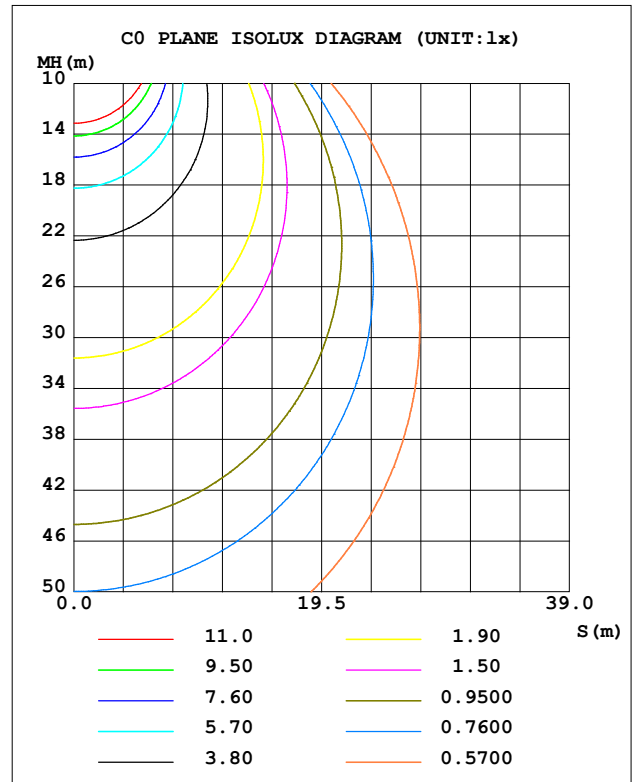
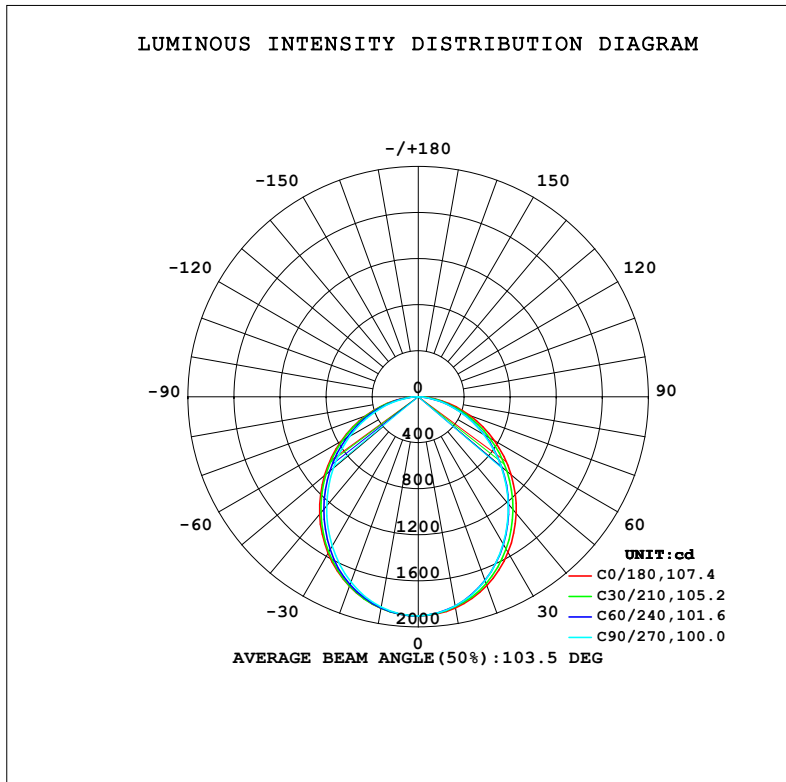


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	99PFM1505040/BL	I _{max} (cd)	1903	S/MH (C0/180)	1.23
NOMINAL POWER (W)	50	LOR (%)	109.9	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4944.7	η UP, DN (C0-180)	0.0, 54.4
NOMINAL FLUX (lm)	4500	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 55.5
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	109.9	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 02 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	1863	1848	1846	1857	1866	1865	1856	1856	0- 10	179.5	179.5	3.63,3.99
20	1745	1710	1698	1729	1752	1744	1713	1724	10- 20	507.9	687.4	13.9,15.3
30	1561	1502	1477	1525	1569	1545	1497	1521	20- 30	751.9	1439	29.1,32
40	1324	1249	1216	1276	1333	1298	1238	1270	30- 40	878.2	2318	46.9,51.5
50	1052	972.1	939.2	1001	1063	1025	963.1	993.4	40- 50	879.5	3197	64.7,71
60	766.4	689.4	660.2	717.8	774.8	741.9	687.0	710.7	50- 60	768.7	3966	80.2,88.1
70	477.4	411.7	390.4	437.8	485.4	460.7	416.3	431.7	60- 70	571.4	4537	91.8,101
80	210.6	158.6	146.0	181.0	217.3	200.6	168.0	175.4	70- 80	324.3	4861	98.3,108
90	3.358	2.856	2.360	2.708	3.011	2.763	2.080	2.431	80- 90	83.35	4945	100,110
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): 2764.6 lm

%lum = 55.9%

%lamp = 61.4%

Conical surface Flux(130deg): 4280.3 lm

%lum = 86.6%

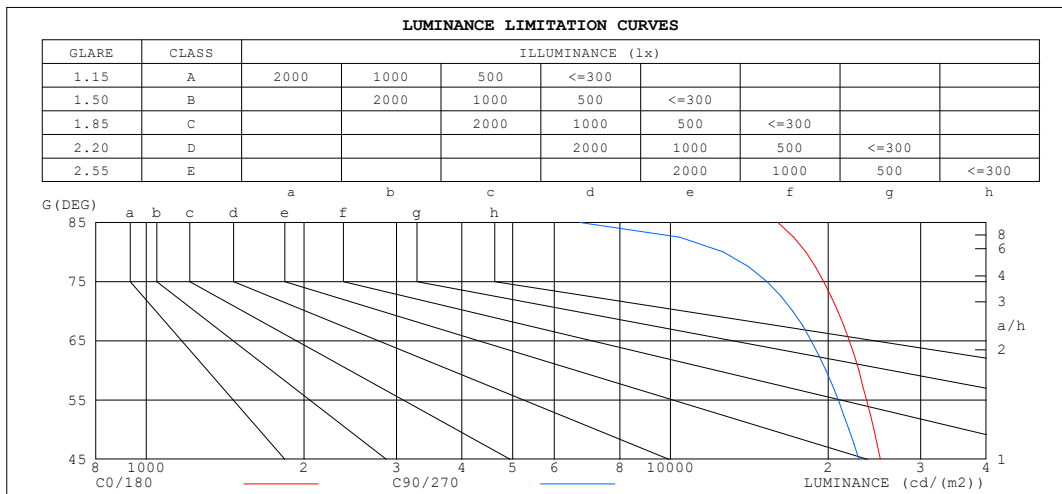
%lamp = 95.1%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:02 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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16034	6718
80	18106	12605
75	19589	15272
70	20842	17110
65	21936	18558
60	22886	19792
55	23660	20895
50	24443	21902
45	25151	22866

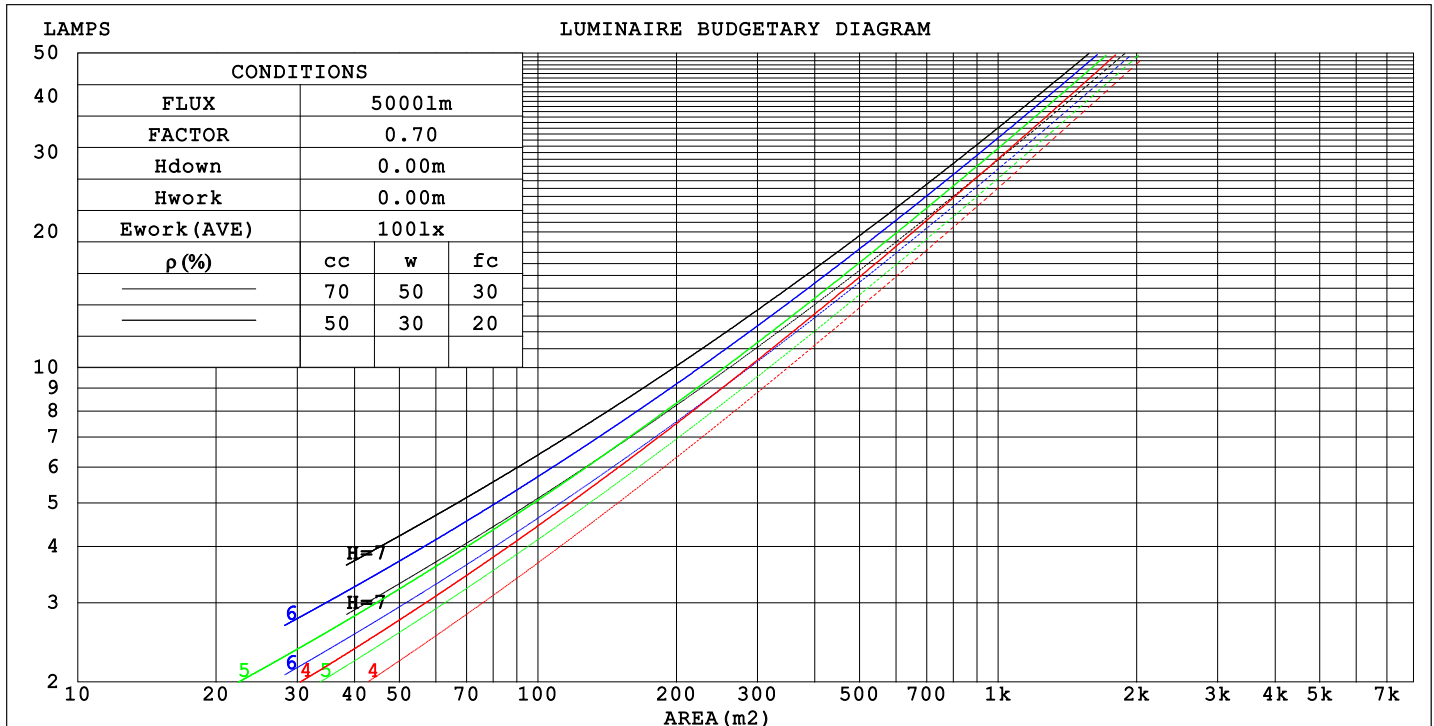
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 02 December 2022

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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	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: 02 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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	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	.332	.189	.060	.324	.185	.059	.309	.177	.057	.296	.171	.055	.284	.164	.053	
2.0	.313	.172	.053	.306	.169	.052	.293	.163	.051	.282	.158	.049	.271	.153	.048	
3.0	.290	.155	.046	.284	.152	.046	.273	.148	.045	.263	.144	.044	.253	.140	.043	
4.0	.268	.140	.041	.263	.138	.041	.253	.134	.040	.244	.131	.040	.235	.128	.039	
5.0	.249	.127	.037	.244	.125	.036	.235	.122	.036	.227	.120	.036	.219	.117	.035	
6.0	.231	.116	.033	.227	.115	.033	.219	.112	.033	.211	.110	.032	.205	.108	.032	
7.0	.215	.106	.030	.211	.105	.030	.204	.103	.030	.198	.101	.030	.192	.100	.029	
8.0	.201	.098	.028	.198	.097	.028	.192	.096	.027	.186	.094	.027	.180	.092	.027	
9.0	.189	.091	.025	.186	.091	.025	.180	.089	.025	.175	.088	.025	.170	.086	.025	
10.0	.178	.085	.024	.175	.084	.024	.170	.083	.023	.165	.082	.023	.160	.081	.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	.209	.209	.209	.179	.179	.179	.122	.122	.122	.070	.070	.070	.022	.022	.022	
1.0	.198	.172	.148	.169	.147	.128	.116	.101	.088	.067	.059	.051	.021	.019	.017	
2.0	.188	.145	.109	.161	.125	.094	.110	.086	.065	.064	.050	.038	.020	.016	.013	
3.0	.180	.126	.083	.154	.108	.072	.106	.075	.050	.061	.044	.030	.020	.014	.010	
4.0	.171	.111	.065	.147	.096	.056	.101	.067	.040	.058	.039	.023	.019	.013	.008	
5.0	.163	.099	.052	.140	.086	.046	.096	.060	.032	.056	.035	.019	.018	.012	.006	
6.0	.155	.090	.044	.133	.078	.038	.092	.055	.027	.053	.032	.016	.017	.011	.005	
7.0	.148	.083	.037	.127	.072	.032	.088	.050	.023	.051	.030	.014	.016	.010	.004	
8.0	.141	.076	.032	.121	.066	.028	.084	.046	.020	.049	.027	.012	.016	.009	.004	
9.0	.134	.071	.028	.115	.061	.024	.080	.043	.017	.047	.025	.010	.015	.008	.003	
10.0	.128	.066	.025	.110	.057	.022	.076	.040	.015	.045	.024	.009	.014	.008	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:02 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: 99PFM1505040/BL						TYPE:			WEIGHT: 1		
SPEC.:						DIM.: 1500 x 50 x 35			SERIAL No.: 0		
MFR.: Elmark Industries JSC						SUR.:			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	18.5	20.0	18.8	20.2	20.4	17.8	19.3	18.1	19.5	19.7
	3H	20.0	21.4	20.3	21.6	21.8	19.2	20.5	19.5	20.8	21.0
	4H	20.6	21.9	20.9	22.2	22.4	19.6	21.0	20.0	21.2	21.5
	6H	21.1	22.3	21.4	22.6	22.9	20.0	21.2	20.3	21.5	21.7
	8H	21.2	22.4	21.6	22.7	23.0	20.0	21.2	20.4	21.5	21.8
	12H	21.3	22.5	21.7	22.8	23.1	20.0	21.2	20.4	21.5	21.8
4H	2H	19.0	20.3	19.3	20.5	20.8	18.5	19.8	18.8	20.0	20.3
	3H	20.7	21.8	21.0	22.1	22.4	19.9	21.1	20.3	21.4	21.7
	4H	21.4	22.4	21.8	22.8	23.1	20.5	21.6	20.9	21.9	22.2
	6H	22.0	22.9	22.4	23.3	23.6	20.9	21.9	21.3	22.2	22.6
	8H	22.2	23.1	22.6	23.4	23.8	21.0	21.9	21.5	22.3	22.7
	12H	22.3	23.1	22.8	23.5	23.9	21.0	21.8	21.5	22.2	22.6
8H	4H	21.6	22.4	22.0	22.8	23.2	20.8	21.7	21.2	22.0	22.4
	6H	22.3	23.0	22.7	23.4	23.8	21.3	22.0	21.8	22.4	22.9
	8H	22.6	23.2	23.0	23.6	24.1	21.5	22.1	21.9	22.5	23.0
	12H	22.8	23.3	23.3	23.8	24.2	21.5	22.0	22.0	22.5	23.0
12H	4H	21.6	22.4	22.0	22.7	23.1	20.8	21.6	21.2	22.0	22.4
	6H	22.3	22.9	22.8	23.4	23.8	21.4	22.0	21.8	22.4	22.9
	8H	22.6	23.2	23.1	23.6	24.1	21.5	22.1	22.0	22.5	23.0
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H		+ 0.1 / - 0.3					+ 0.1 / - 0.3				
2.0H		+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 4500 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.2)
Area: 0.06678 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:02 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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	Shielding Angle:

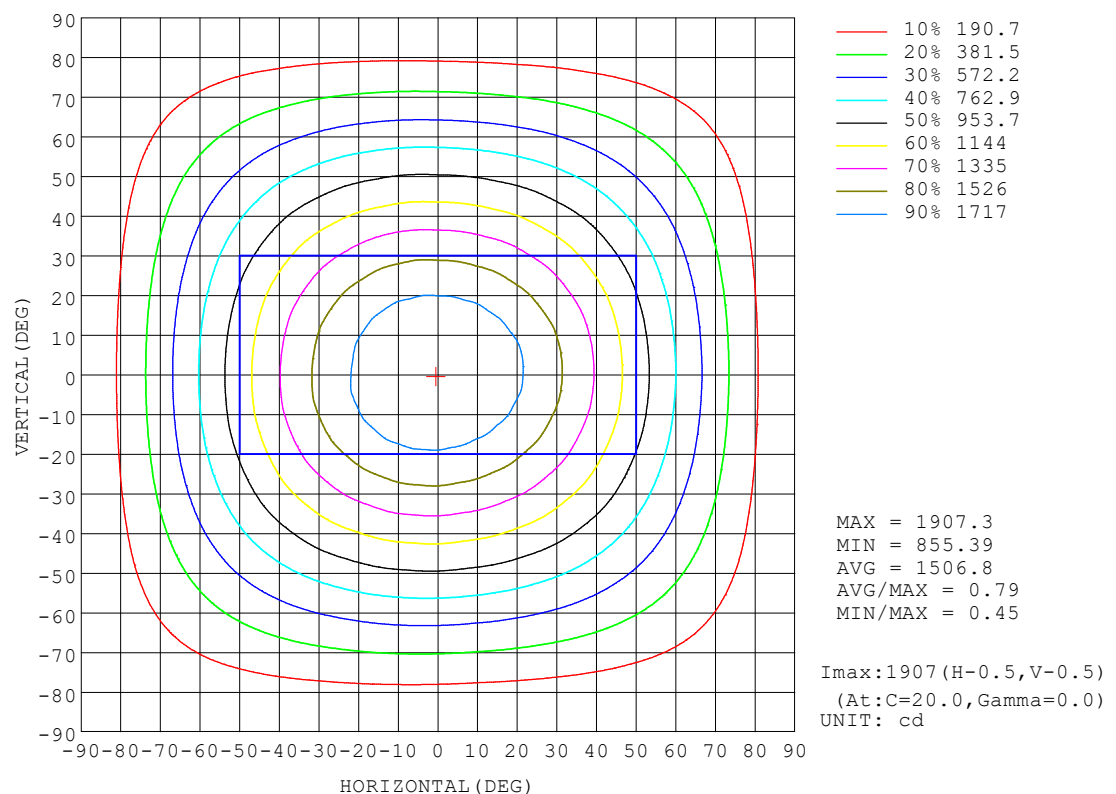
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	52	45	64	52	45	63	51	44	37
0.80	76	63	55	75	63	55	73	62	55	47
1.00	85	73	65	83	72	65	81	74	64	56
1.25	92	81	74	91	80	73	88	79	72	64
1.50	98	87	80	96	86	79	93	84	78	70
2.00	105	96	89	103	95	88	99	92	87	78
2.50	109	101	95	107	100	94	103	97	92	83
3.00	113	106	100	111	104	99	106	101	96	87
4.00	117	111	106	115	109	105	110	105	102	92
5.00	120	115	110	117	113	109	112	109	105	95
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: 02 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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	Shielding Angle:

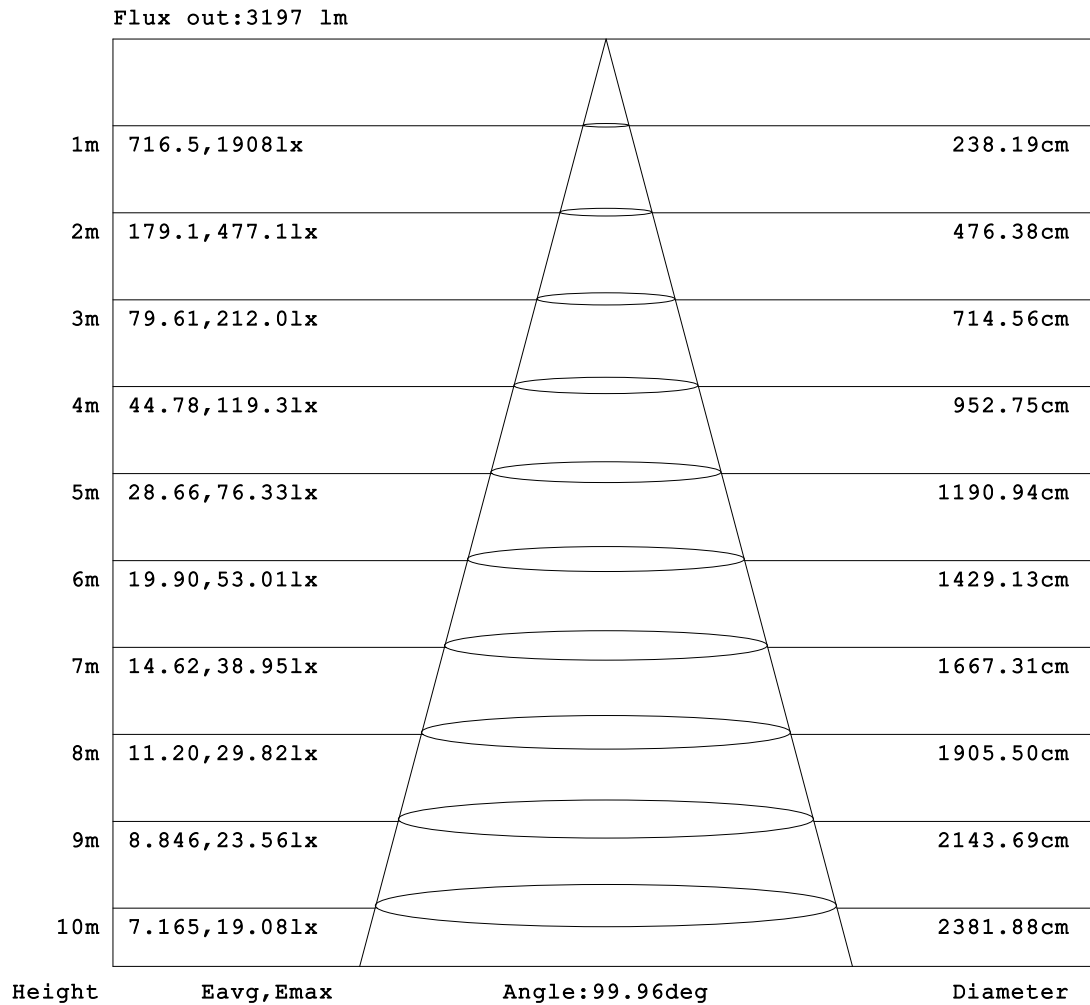


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature:25.3°C
 Operators:
 Test Date:02 December 2022

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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	Shielding Angle:



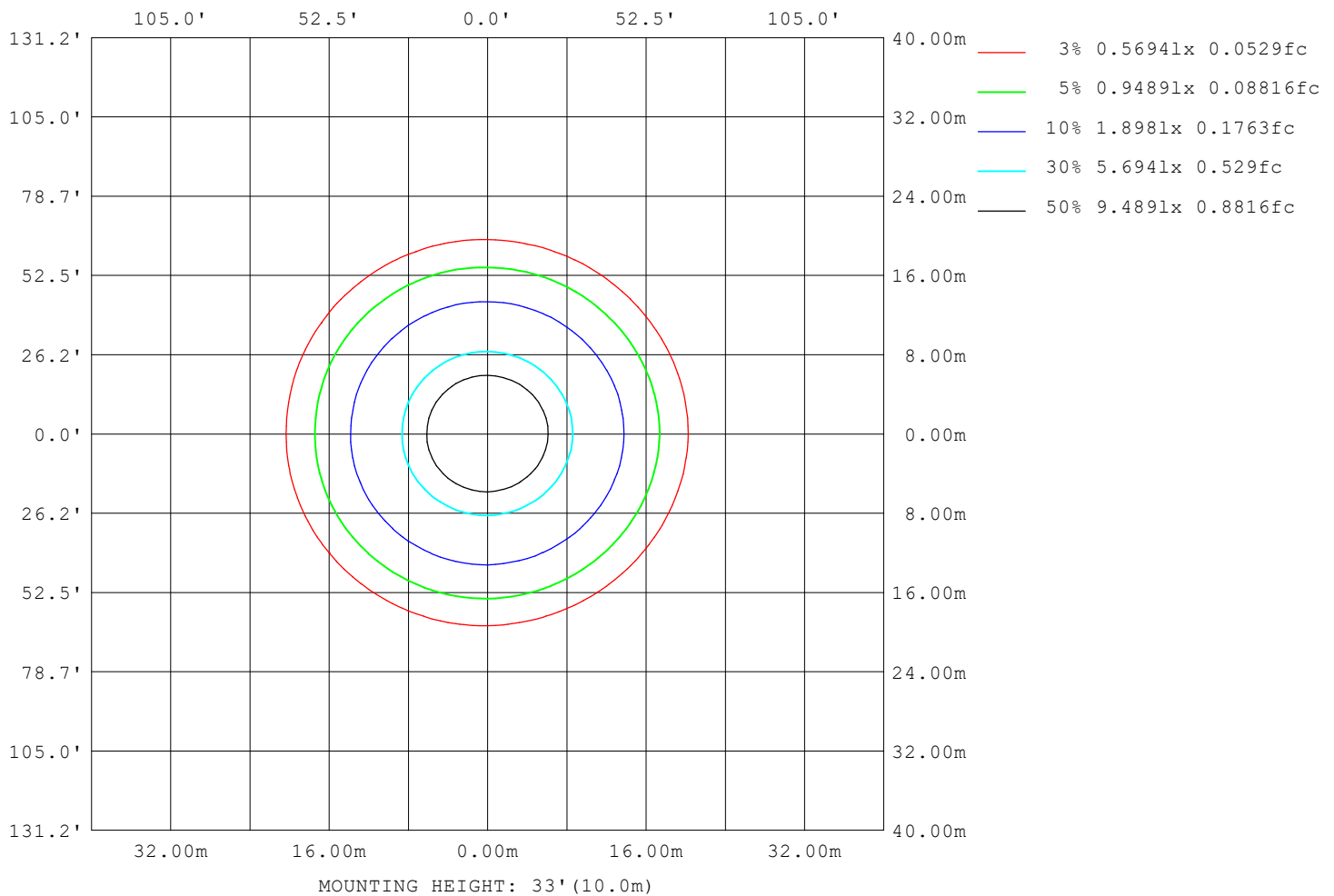
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 02 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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 02 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: 99PFM1505040/BL	TYPE:	WEIGHT: 1
SPEC.:	DIM.: 1500 x 50 x 35	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.:	Shielding Angle:

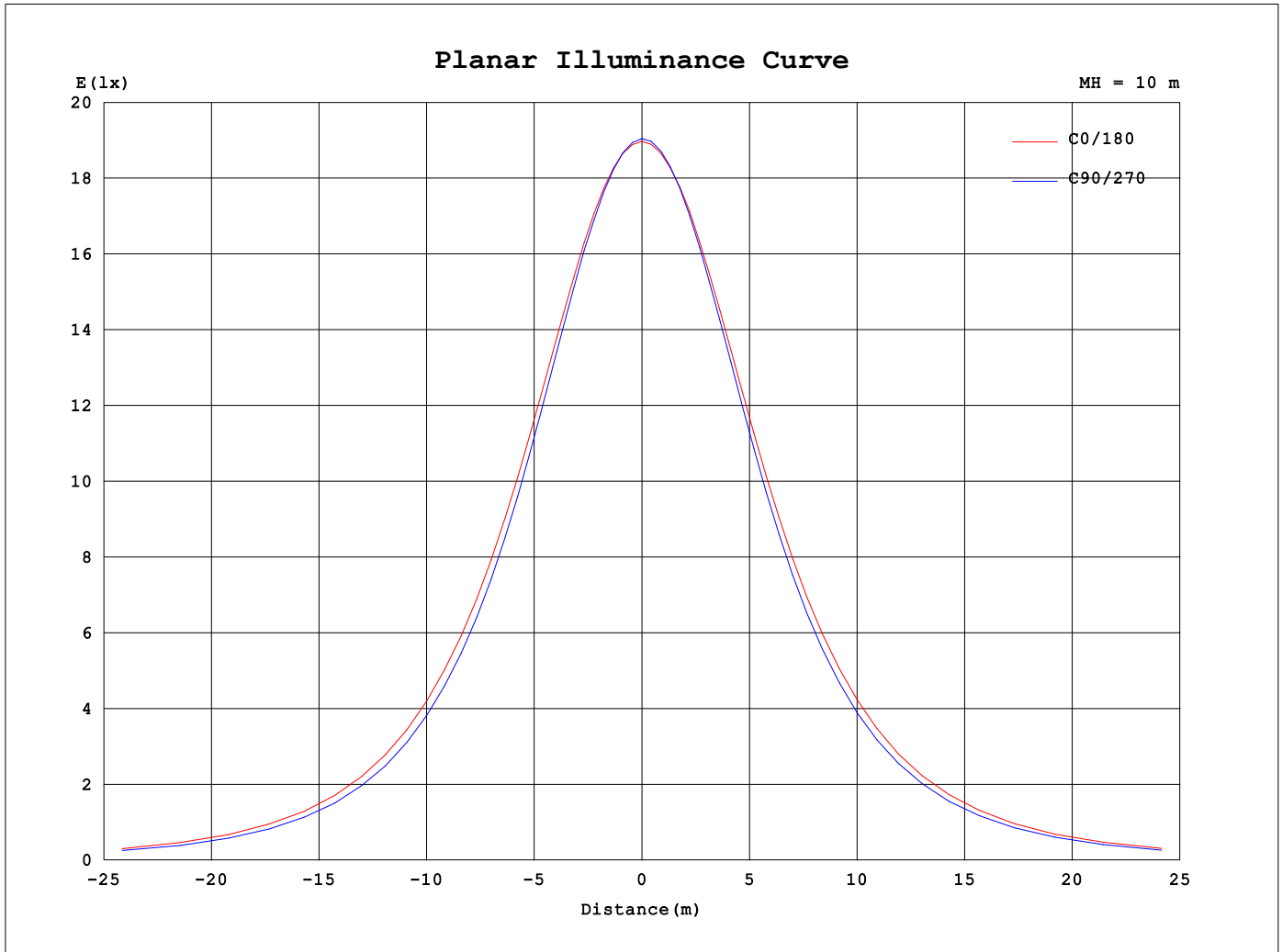
AvgL	cd/m2
L_0~180 (65) av	22143
L_0~180 (75) av	19864
L_0~180 (85) av	16619
L_90~270 (65) av	19013
L_90~270 (75) av	15968
L_90~270 (85) av	8421
L_45 (65) av	20322
L_45 (75) av	17521
L_45 (85) av	11410

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:02 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: 02 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:

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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:

```