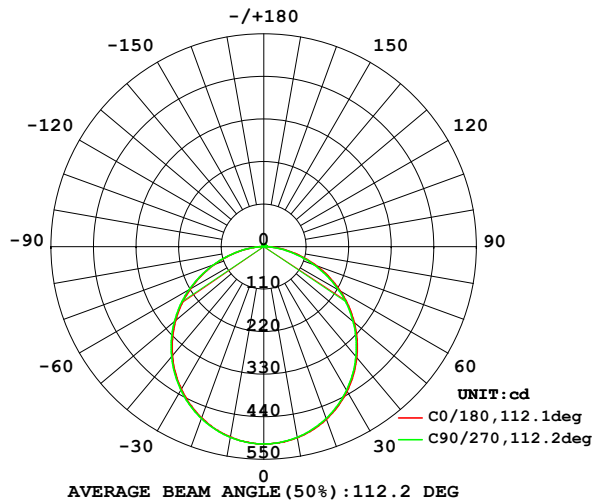


LUMINAIRE PHOTOMETRIC TEST REPORT

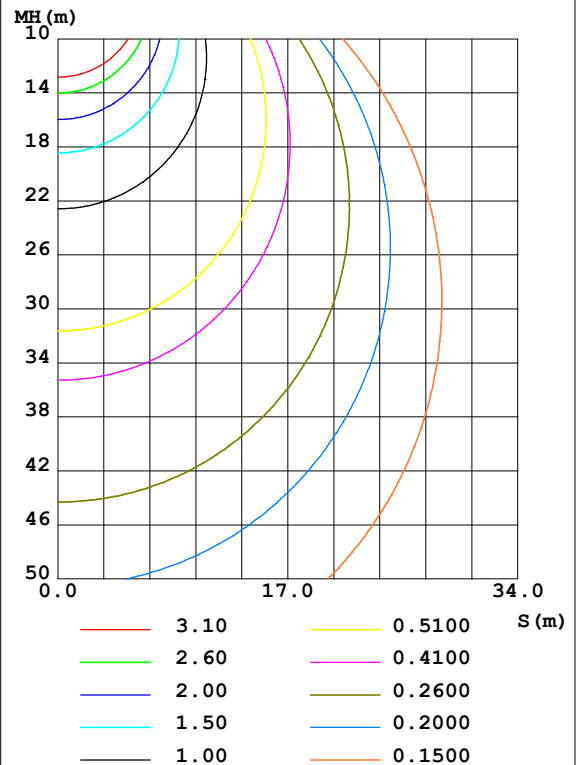
Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 101.21 lm/W			
MODEL	3000K	I _{max} (cd)	510.4	S/MH(C0/180)	1.24
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)		TOTAL FLUX(lm)	1486.5	□ UP,DN(C0-180)	1.1,49.3
NOMINAL FLUX(lm)	1486.55	CIE CLASS	DIRECT	□ UP,DN(C180-360)	1.1,48.6
LAMPS INSIDE	1	□ up(%)	2.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)		□ down(%)	97.9	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-13

□ Range: 0 - 180DEG
 □ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.480m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

mm	C0	C90	C180	C270					mm	□ zone	□ total	%lum, lamp
5	508.1	507.7	507.2	507.7					0- 5	12.17	12.17	0.82,0.82
10	501.5	500.6	499.6	500.6					5- 10	36.07	48.24	3.25,3.25
15	490.4	488.8	487.5	488.8					10- 15	58.69	106.9	7.19,7.19
20	474.9	472.5	470.9	472.5					15- 20	79.23	186.2	12.5,12.5
25	455.1	452.5	450.3	452.5					20- 25	97.03	283.2	19.1,19.1
30	431.4	428.8	425.9	428.8					25- 30	111.5	394.7	26.6,26.6
35	404.6	401.1	398.4	401.1					30- 35	122.2	516.9	34.8,34.8
40	374.4	370.7	367.6	370.7					35- 40	128.8	645.7	43.4,43.4
45	341.7	337.3	334.1	337.3					40- 45	131.1	776.9	52.3,52.3
50	305.8	302.0	297.8	302.0					45- 50	129.2	906.0	60.9,60.9
55	267.7	263.8	259.4	263.8					50- 55	122.9	1029	69.2,69.2
60	227.9	223.0	219.4	223.0					55- 60	112.6	1142	76.8,76.8
65	186.9	181.1	178.2	181.1					60- 65	98.39	1240	83.4,83.4
70	145.1	138.9	136.4	138.9					65- 70	81.37	1321	88.9,88.9
75	103.3	97.47	95.10	97.47					70- 75	62.17	1383	93.1,93.1
80	64.66	58.52	57.14	58.52					75- 80	42.13	1426	95.9,95.9
85	30.26	23.99	23.70	23.99					80- 85	22.92	1449	97.4,97.4
90	4.052	3.563	3.519	3.563					85- 90	6.568	1455	97.9,97.9
95	3.642	3.613	3.703	3.613					90- 95	1.953	1457	98,98
100	3.865	3.892	3.933	3.892					95-100	2.048	1459	98.2,98.2
105	4.171	4.149	4.246	4.149					100-105	2.161	1461	98.3,98.3
110	4.446	4.413	4.518	4.413					105-110	2.255	1464	98.4,98.4
115	4.722	4.685	4.797	4.685					110-115	2.322	1466	98.6,98.6
120	4.982	4.934	5.046	4.934					115-120	2.357	1468	98.8,98.8
125	5.228	5.168	5.280	5.168					120-125	2.353	1471	98.9,98.9
130	5.450	5.387	5.492	5.387					125-130	2.312	1473	99.1,99.1
135	5.666	5.602	5.715	5.602					130-135	2.236	1475	99.2,99.2
140	5.881	5.821	5.919	5.821					135-140	2.130	1477	99.4,99.4
145	6.047	6.017	6.081	6.017					140-145	1.987	1479	99.5,99.5
150	6.213	6.191	6.228	6.191					145-150	1.801	1481	99.6,99.6
155	6.417	6.418	6.424	6.418					150-155	1.598	1483	99.7,99.7
160	6.609	6.625	6.613	6.625					155-160	1.367	1484	99.8,99.8
165	6.806	6.799	6.802	6.799					160-165	1.106	1485	99.9,99.9
170	6.919	6.912	6.904	6.912					165-170	0.8134	1486	100,100
175	7.021	7.002	7.017	7.002					170-175	0.4978	1486	100,100
180	7.063	7.040	7.067	7.040					175-180	0.1681	1487	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

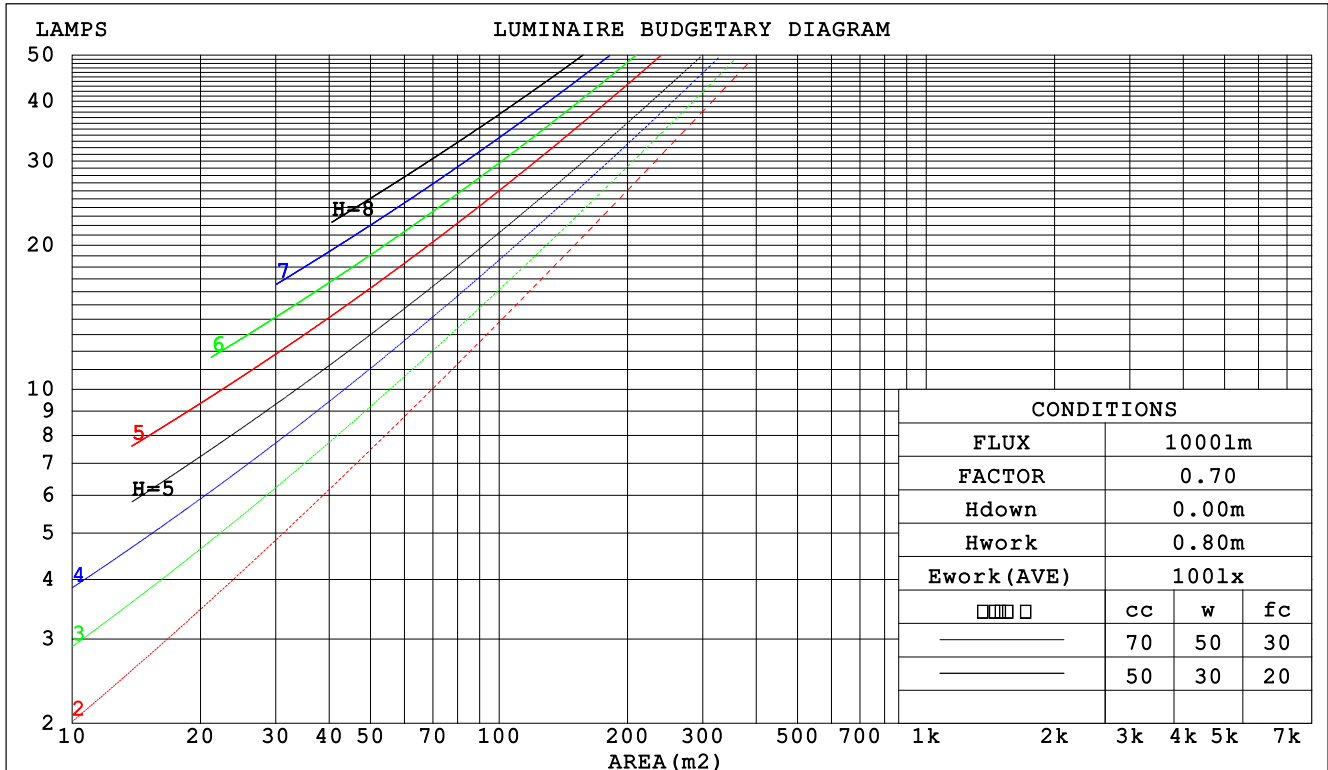
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-13

□ Range: 0 - 180DEG
□ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.480m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.03	.99	.95	1.01	.97	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.82
2.0	.90	.83	.77	.88	.82	.76	.84	.79	.74	.80	.76	.72	.77	.73	.70	.68
3.0	.79	.71	.64	.77	.69	.63	.74	.67	.62	.71	.65	.61	.68	.63	.59	.57
4.0	.70	.61	.54	.68	.60	.54	.66	.58	.53	.63	.57	.52	.61	.55	.51	.49
5.0	.62	.53	.47	.61	.53	.46	.59	.51	.46	.56	.50	.45	.54	.49	.44	.42
6.0	.56	.47	.41	.55	.47	.40	.53	.45	.40	.51	.44	.39	.49	.43	.39	.37
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.41	.35	.31	.29
9.0	.42	.34	.29	.42	.34	.29	.41	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.37	.30	.26	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-13

□ Range: 0 - 180DEG
 □ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.480m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm					
NAME: FM7-196-15W			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:1
MFR.: EVERFINE			SUR.:		PROTECTION ANGLE:

☐ cc	80%			70%			50%			30%			10%			0
☐ w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
☐ fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.311	.177	.056	.303	.173	.055	.289	.166	.053	.276	.159	.051	.263	.153	.049	
2.0	.292	.160	.049	.285	.157	.048	.272	.151	.047	.261	.146	.046	.250	.141	.045	
3.0	.270	.144	.043	.264	.141	.043	.253	.137	.042	.242	.133	.041	.232	.129	.040	
4.0	.249	.129	.038	.244	.127	.038	.233	.124	.037	.224	.120	.036	.215	.117	.036	
5.0	.230	.117	.034	.225	.116	.034	.216	.113	.033	.208	.110	.033	.200	.107	.032	
6.0	.213	.107	.031	.209	.106	.030	.201	.103	.030	.193	.100	.030	.186	.098	.029	
7.0	.198	.098	.028	.195	.097	.028	.187	.095	.027	.181	.093	.027	.174	.090	.027	
8.0	.185	.091	.025	.182	.090	.025	.175	.088	.025	.169	.086	.025	.163	.084	.024	
9.0	.174	.084	.023	.171	.083	.023	.165	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.163	.078	.022	.160	.077	.022	.155	.076	.021	.150	.074	.021	.145	.073	.021	

☐ cc	80%			70%			50%			30%			10%			0
☐ w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
☐ fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio			Ceiling Cavity Exitance Coefficients(CCEC)												
0.0	.207	.207	.207	.177	.177	.177	.121	.121	.121	.069	.069	.069	.022	.022	.022	
1.0	.197	.172	.151	.168	.148	.130	.115	.102	.090	.066	.059	.052	.021	.019	.017	
2.0	.189	.148	.114	.162	.128	.099	.111	.088	.069	.064	.051	.040	.020	.017	.013	
3.0	.181	.131	.091	.155	.113	.079	.106	.078	.055	.062	.046	.033	.020	.015	.011	
4.0	.173	.118	.075	.149	.102	.065	.102	.071	.046	.059	.041	.027	.019	.013	.009	
5.0	.166	.107	.064	.142	.093	.055	.098	.065	.039	.057	.038	.023	.018	.012	.008	
6.0	.159	.099	.056	.136	.086	.049	.094	.060	.034	.055	.035	.020	.018	.012	.007	
7.0	.152	.092	.050	.131	.080	.044	.090	.056	.031	.052	.033	.018	.017	.011	.006	
8.0	.146	.086	.045	.125	.075	.040	.087	.052	.028	.050	.031	.017	.016	.010	.006	
9.0	.139	.081	.042	.120	.071	.037	.083	.050	.026	.048	.029	.016	.016	.010	.005	
10.0	.134	.077	.039	.115	.067	.034	.080	.047	.024	.047	.028	.015	.015	.009	.005	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.480m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm										
NAME: FM7-196-15W					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: EVERFINE					SUR.:			PROTECTION 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	18.1	19.6	18.4	19.9	20.1	18.1	19.6	18.4	19.8	20.1
3H	19.7	21.1	20.0	21.4	21.6	19.6	21.0	19.9	21.2	21.5
4H	20.4	21.7	20.7	22.0	22.3	20.2	21.5	20.5	21.8	22.1
6H	20.8	22.1	21.2	22.4	22.7	20.6	21.9	21.0	22.2	22.5
8H	21.0	22.2	21.4	22.5	22.8	20.8	21.9	21.1	22.3	22.6
12H	21.1	22.3	21.5	22.6	22.9	20.8	22.0	21.2	22.3	22.7
4H 2H	18.7	20.1	19.1	20.3	20.7	18.7	20.0	19.0	20.3	20.6
3H	20.5	21.6	20.9	22.0	22.3	20.4	21.5	20.8	21.9	22.2
4H	21.3	22.3	21.7	22.7	23.0	21.1	22.2	21.5	22.5	22.9
6H	21.9	22.8	22.3	23.2	23.6	21.7	22.6	22.1	23.0	23.4
8H	22.1	23.0	22.5	23.4	23.8	21.9	22.7	22.3	23.1	23.6
12H	22.3	23.1	22.7	23.5	23.9	22.0	22.8	22.4	23.2	23.6
8H 4H	21.5	22.4	22.0	22.8	23.2	21.4	22.3	21.8	22.7	23.1
6H	22.3	23.0	22.8	23.4	23.9	22.1	22.8	22.6	23.3	23.7
8H	22.6	23.2	23.1	23.7	24.2	22.4	23.0	22.9	23.5	24.0
12H	22.9	23.4	23.4	23.9	24.4	22.6	23.1	23.1	23.6	24.1
12H 4H	21.5	22.3	22.0	22.8	23.2	21.4	22.2	21.9	22.6	23.1
6H	22.3	23.0	22.8	23.4	23.9	22.2	22.8	22.7	23.3	23.8
8H	22.7	23.3	23.2	23.7	24.3	22.5	23.0	23.0	23.5	24.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 1487 lm Total Lamp Luminous Flux. (8log(F/F0) = 1.4)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.480m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION 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) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	63	56	71	65	56	48
1.25	82	72	64	81	71	64	78	69	63	55
1.50	87	77	70	85	76	70	82	74	68	61
2.00	94	85	79	92	84	78	88	82	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	95	89	99	93	88	95	90	85	76
4.00	106	100	95	103	98	93	98	94	91	81
5.00	108	103	99	105	101	97	100	97	94	84
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.480m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

776.86 lm

%lum = 52.3%

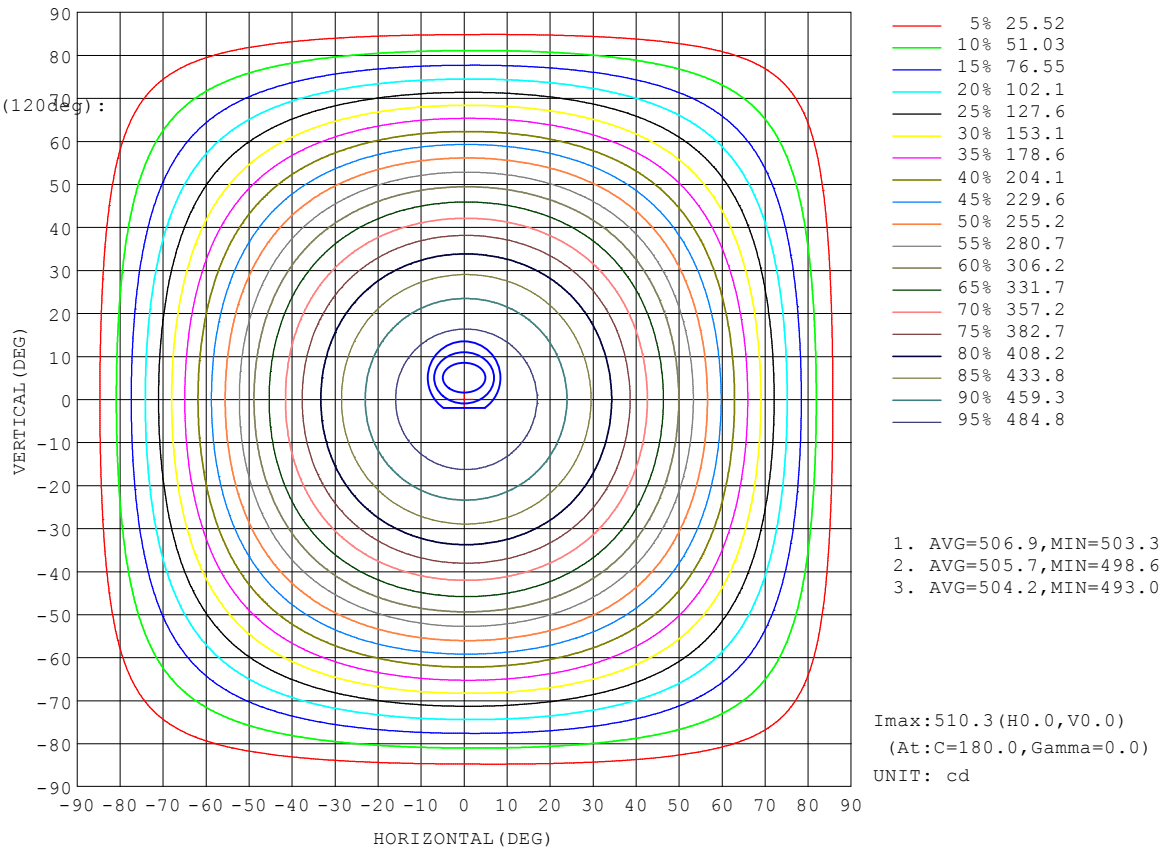
%lamp = 52.3%

Conical surface Flux(120deg):

1141.5 lm

%lum = 76.8%

%lamp = 76.8%

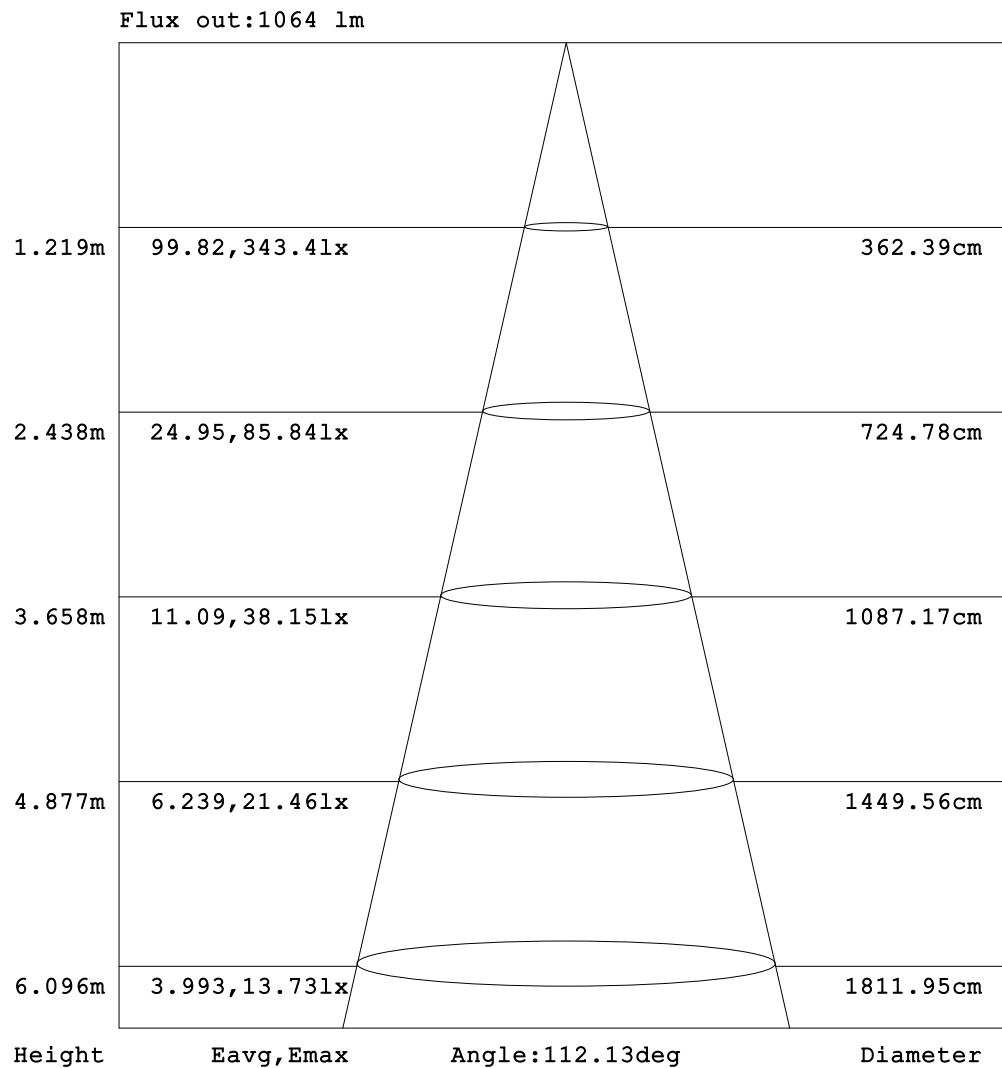


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.480m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



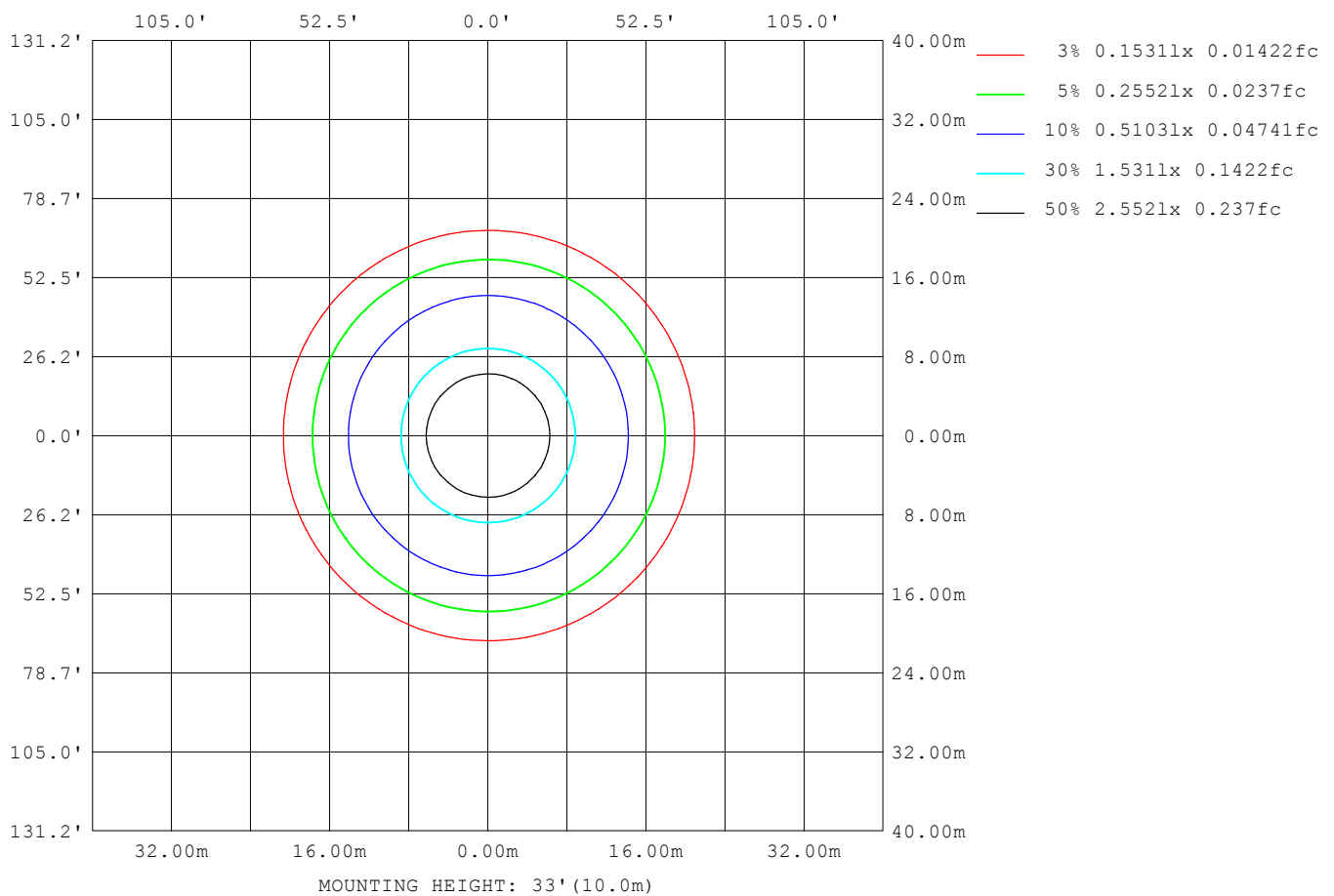
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity: 65.0%
 Test Distance: 7.480m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity: 65.0%
 Test Distance: 7.480m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

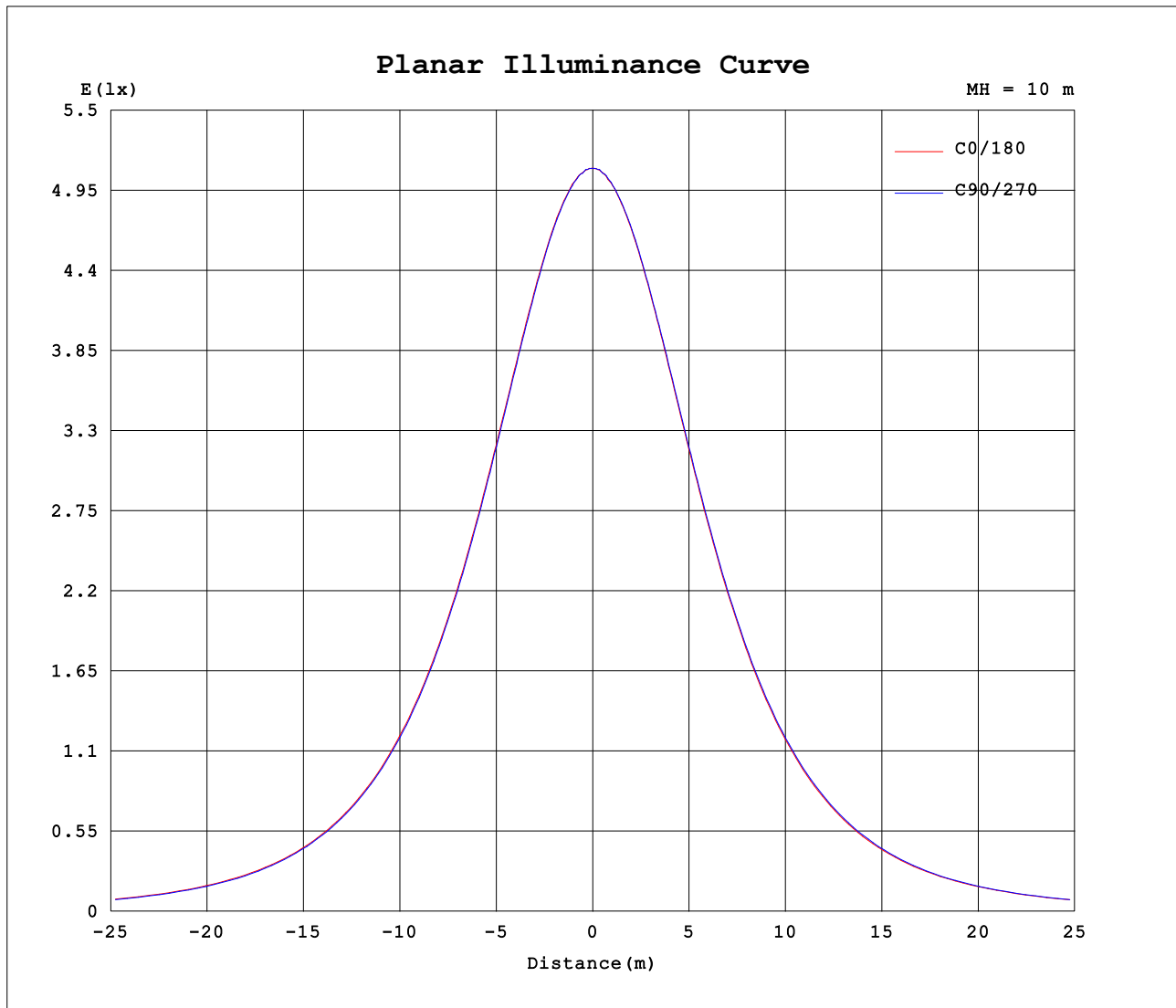
AvgL	cd/m2
L_0~180 (65) av	4319
L_0~180 (75) av	3833
L_0~180 (85) av	3096
L_90~270 (65) av	4286
L_90~270 (75) av	3766
L_90~270 (85) av	2753
L_45 (65) av	4292
L_45 (75) av	3781
L_45 (85) av	2858

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
 Humidity:65.0%
 Test Distance:7.480m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2022-04-13

☐ Range: 0 - 180DEG
☐ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity: 65.0%
Test Distance: 7.480m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.0V I:0.1228A P:14.69W PF:0.9965 Lamp Flux:1486.55x1 lm		
NAME: FM7-196-15W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	90	180	270															
0	510	510	510	510															
5	508	508	507	508															
10	502	501	500	501															
15	490	489	487	489															
20	475	472	471	472															
25	455	453	450	453															
30	431	429	426	429															
35	405	401	398	401															
40	374	371	368	371															
45	342	337	334	337															
50	306	302	298	302															
55	268	264	259	264															
60	228	223	219	223															
65	187	181	178	181															
70	145	139	136	139															
75	103	97.5	95.1	97.5															
80	64.7	58.5	57.1	58.5															
85	30.3	24.0	23.7	24.0															
90	4.05	3.56	3.52	3.56															
95	3.64	3.61	3.70	3.61															
100	3.86	3.89	3.93	3.89															
105	4.17	4.15	4.25	4.15															
110	4.45	4.41	4.52	4.41															
115	4.72	4.69	4.80	4.69															
120	4.98	4.93	5.05	4.93															
125	5.23	5.17	5.28	5.17															
130	5.45	5.39	5.49	5.39															
135	5.67	5.60	5.71	5.60															
140	5.88	5.82	5.92	5.82															
145	6.05	6.02	6.08	6.02															
150	6.21	6.19	6.23	6.19															
155	6.42	6.42	6.42	6.42															
160	6.61	6.63	6.61	6.63															
165	6.81	6.80	6.80	6.80															
170	6.92	6.91	6.90	6.91															
175	7.02	7.00	7.02	7.00															
180	7.06	7.04	7.07	7.04															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-13

□ Range: 0 - 180DEG
□ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:7.480m [K=1.0000]
Remarks: