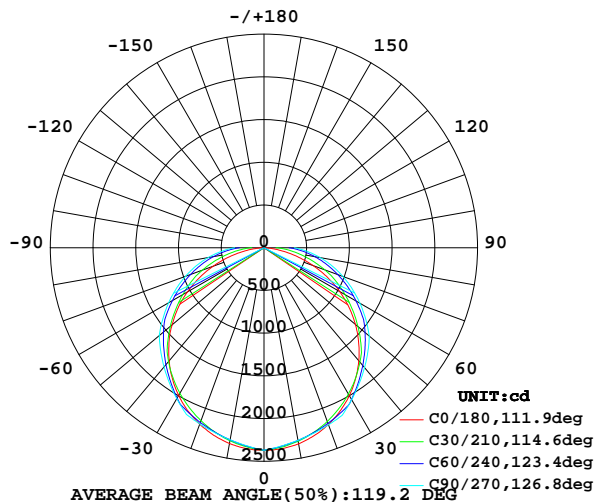


## LUMINAIRE PHOTOMETRIC TEST REPORT

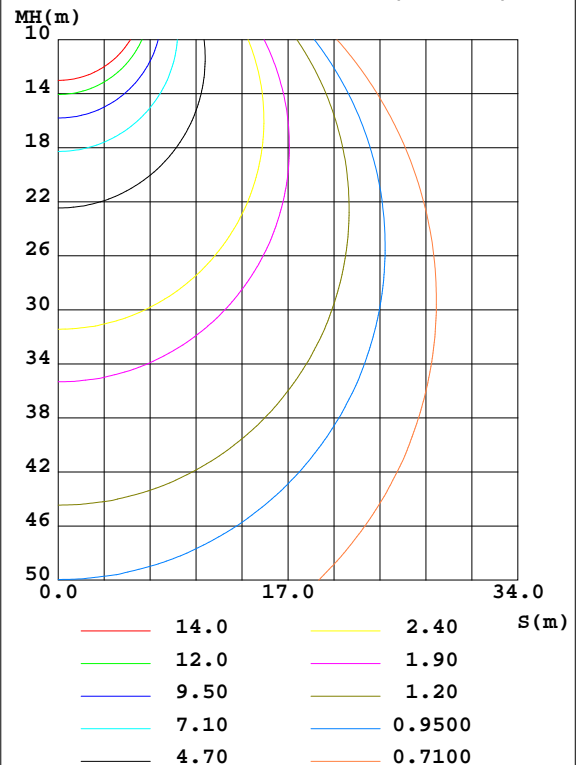
Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm		
NAME: MSS8-40/60/80/D10/U/35-40-50	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:2438*52	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.42 lm/W			
MODEL	3500K	I <sub>max</sub> (cd)	2371	S/MH(C0/180)	1.25
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	7514.0	η UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	3756.98	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.9
LAMPS INSIDE	2	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-08-19

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
Humidity:65.0%  
Test Distance:8.600m [K=1.0314]  
Remarks:

## ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
5	2363	2336	2329	2335	2360	2333	2327	2334	0- 5	56.19	56.19	0.75,0.75
10	2330	2292	2288	2291	2327	2287	2283	2288	5- 10	165.7	221.8	2.95,2.95
15	2275	2237	2247	2234	2272	2229	2239	2233	10- 15	269.0	490.9	6.53,6.53
20	2202	2173	2206	2168	2198	2162	2195	2166	15- 20	364.2	855.0	11.4,11.4
25	2108	2100	2165	2095	2108	2086	2151	2093	20- 25	449.3	1304	17.4,17.4
30	1997	2019	2053	2015	1996	2005	2041	2012	25- 30	521.1	1825	24.3,24.3
35	1869	1917	1942	1914	1871	1903	1931	1910	30- 35	574.5	2400	31.9,31.9
40	1726	1774	1831	1772	1727	1762	1821	1768	35- 40	610.1	3010	40.1,40.1
45	1568	1629	1720	1627	1575	1620	1710	1625	40- 45	628.3	3638	48.4,48.4
50	1398	1482	1609	1481	1404	1477	1600	1481	45- 50	629.9	4268	56.8,56.8
55	1215	1337	1452	1338	1227	1334	1445	1338	50- 55	613.7	4882	65,65
60	1021	1191	1296	1193	1036	1189	1289	1191	55- 60	577.8	5460	72.7,72.7
65	819.6	1015	1139	1016	836.0	1015	1133	1016	60- 65	525.8	5985	79.7,79.7
70	612.6	845.8	982.8	845.0	633.1	846.6	977.8	846.5	65- 70	461.0	6446	85.8,85.8
75	407.2	683.3	826.3	680.2	434.3	683.5	822.2	683.1	70- 75	386.8	6833	90.9,90.9
80	215.9	526.3	669.2	522.1	241.0	526.5	662.5	524.0	75- 80	306.9	7140	95,95
85	63.92	375.0	512.0	374.2	85.00	374.0	502.7	369.1	80- 85	225.6	7366	98,98
90	1.268	227.8	354.8	230.2	1.202	225.3	343.0	218.3	85- 90	148.3	7514	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

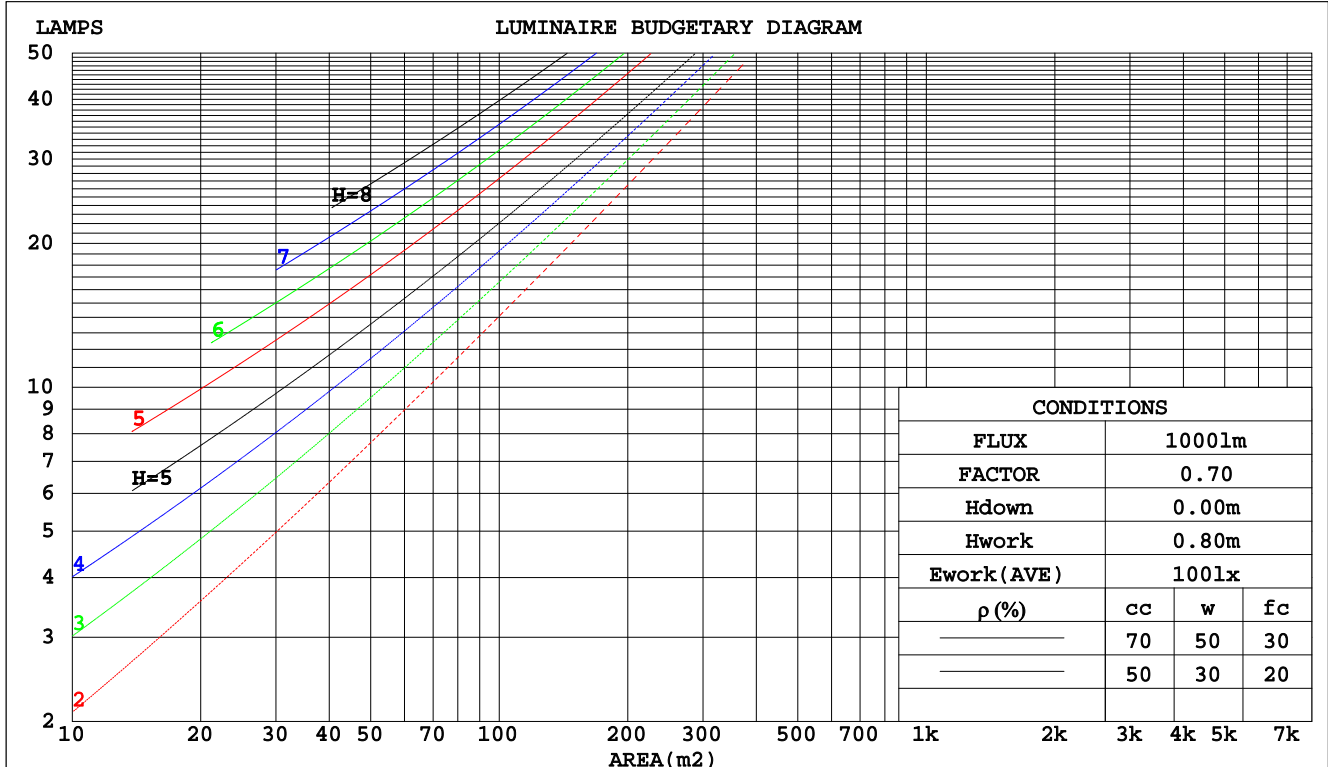
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-08-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 $\gamma$  Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:8.600m [K=1.0314]  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm		
NAME: MSS8-40/60/80/D10/U/35-40-50	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:2438*52	PROTECTION 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						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.01	.97	.92	.99	.95	.91	.95	.91	.88	.91	.88	.85	.87	.85	.82	.80
2.0	.87	.80	.74	.86	.79	.73	.82	.76	.71	.79	.74	.69	.75	.71	.68	.65
3.0	.76	.67	.60	.75	.66	.60	.72	.65	.59	.69	.63	.58	.66	.61	.57	.54
4.0	.67	.58	.51	.66	.57	.50	.63	.56	.50	.61	.54	.49	.59	.53	.48	.46
5.0	.60	.50	.43	.59	.50	.43	.57	.49	.43	.54	.48	.42	.53	.47	.42	.39
6.0	.54	.44	.38	.53	.44	.37	.51	.43	.37	.49	.42	.37	.48	.41	.36	.34
7.0	.49	.40	.33	.48	.39	.33	.46	.38	.33	.45	.38	.32	.43	.37	.32	.30
8.0	.44	.36	.29	.44	.35	.29	.42	.35	.29	.41	.34	.29	.40	.33	.29	.27
9.0	.41	.32	.26	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.30	.26	.24
10.0	.37	.29	.24	.37	.29	.24	.36	.29	.24	.35	.28	.24	.34	.28	.23	.22



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-08-19

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
Humidity:65.0%  
Test Distance:8.600m [K=1.0314]  
Remarks:

## WEC AND CCEC

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm								
NAME: MSS8-40/60/80/D10/U/35-40-50				TYPE:LED			WEIGHT:	
SPEC.:				DIM.:			SERIAL No.:1	
MFR.: EVERFINE				SUR.:2438*52			PROTECTION 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	.356	.202	.064	.349	.199	.063	.335	.192	.061	.323	.186	.060	.311	.181	.058	
2.0	.320	.176	.054	.314	.173	.053	.302	.168	.052	.291	.163	.051	.281	.159	.050	
3.0	.290	.154	.046	.284	.152	.046	.274	.148	.045	.264	.145	.044	.255	.141	.044	
4.0	.264	.137	.040	.259	.135	.040	.249	.132	.040	.241	.129	.039	.233	.126	.038	
5.0	.241	.123	.036	.237	.122	.035	.229	.119	.035	.221	.117	.035	.214	.114	.034	
6.0	.222	.111	.032	.218	.110	.032	.211	.108	.031	.204	.106	.031	.198	.104	.031	
7.0	.206	.102	.029	.202	.101	.029	.196	.099	.029	.190	.097	.028	.184	.095	.028	
8.0	.191	.094	.026	.188	.093	.026	.182	.091	.026	.177	.090	.026	.172	.088	.026	
9.0	.179	.086	.024	.176	.086	.024	.171	.084	.024	.166	.083	.024	.161	.082	.024	
10.0	.168	.080	.022	.165	.080	.022	.160	.079	.022	.156	.077	.022	.152	.076	.022	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.183	.156	.131	.157	.134	.112	.107	.092	.078	.062	.053	.045	.020	.017	.015	
2.0	.176	.132	.095	.151	.113	.082	.103	.078	.057	.060	.046	.033	.019	.015	.011	
3.0	.168	.114	.071	.144	.099	.062	.099	.069	.043	.057	.040	.026	.018	.013	.008	
4.0	.160	.101	.056	.138	.088	.049	.095	.061	.034	.055	.036	.020	.018	.012	.007	
5.0	.153	.091	.046	.131	.079	.040	.090	.055	.028	.052	.032	.017	.017	.011	.005	
6.0	.145	.083	.038	.125	.072	.033	.086	.050	.023	.050	.029	.014	.016	.010	.005	
7.0	.138	.076	.032	.119	.066	.028	.082	.046	.020	.048	.027	.012	.015	.009	.004	
8.0	.131	.070	.028	.113	.061	.024	.078	.043	.017	.046	.025	.010	.015	.008	.003	
9.0	.125	.065	.025	.108	.056	.021	.075	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.119	.061	.022	.103	.053	.019	.071	.037	.014	.042	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-08-19

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:8.600m [K=1.0314]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm										
NAME: MSS8-40/60/80/D10/U/35-40-50					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: EVERFINE					SUR.:2438*52			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	22.4	24.0	22.6	24.2	24.4	23.5	25.1	23.7	25.3	25.5
3H	23.8	25.3	24.1	25.5	25.8	25.6	27.1	25.9	27.3	27.6
4H	24.4	25.8	24.7	26.0	26.3	26.7	28.1	27.0	28.3	28.6
6H	24.7	26.0	25.0	26.3	26.6	27.8	29.1	28.1	29.4	29.7
8H	24.8	26.1	25.1	26.4	26.6	28.3	29.6	28.7	29.9	30.2
12H	24.8	26.0	25.1	26.3	26.6	29.0	30.2	29.3	30.5	30.8
4H 2H	23.3	24.7	23.6	24.9	25.2	24.1	25.5	24.4	25.7	26.0
3H	25.0	26.2	25.3	26.5	26.8	26.4	27.7	26.8	28.0	28.3
4H	25.7	26.8	26.1	27.2	27.5	27.7	28.9	28.1	29.2	29.5
6H	26.2	27.2	26.6	27.6	27.9	29.0	30.0	29.4	30.4	30.8
8H	26.3	27.3	26.7	27.6	28.0	29.7	30.7	30.1	31.0	31.4
12H	26.4	27.3	26.8	27.6	28.1	30.4	31.3	30.9	31.7	32.1
8H 4H	26.3	27.3	26.8	27.7	28.1	28.0	29.0	28.5	29.4	29.8
6H	27.1	27.9	27.6	28.3	28.8	29.6	30.4	30.1	30.8	31.3
8H	27.4	28.1	27.9	28.6	29.0	30.5	31.2	30.9	31.6	32.1
12H	27.6	28.2	28.1	28.7	29.2	31.4	32.1	31.9	32.5	33.0
12H 4H	26.5	27.4	26.9	27.8	28.2	28.1	29.0	28.5	29.3	29.8
6H	27.4	28.2	27.9	28.6	29.0	29.7	30.4	30.2	30.9	31.3
8H	27.9	28.5	28.3	28.9	29.4	30.7	31.3	31.2	31.8	32.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 7514 lm Total Lamp Luminous Flux.(8log(F/F0) = 7.0)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-08-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:8.600m [K=1.0314]  
 Remarks:

## UTILIZATION FACTORS TABLE

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm		
NAME: MSS8-40/60/80/D10/U/35-40-50	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:2438*52	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	55	43	36	54	43	36	53	42	36	29
0.80	65	53	45	64	52	45	62	51	44	37
1.00	73	61	53	72	61	53	69	62	53	45
1.25	80	69	61	79	68	61	76	67	60	52
1.50	85	74	67	83	74	66	80	72	65	57
2.00	92	83	76	90	82	75	87	79	73	65
2.50	96	88	81	94	86	80	90	84	78	69
3.00	100	92	86	98	91	85	93	88	83	74
4.00	104	98	92	102	96	91	97	92	88	79
5.00	107	101	97	104	99	95	100	96	92	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-08-19

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:8.600m [K=1.0314]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm		
NAME: MSS8-40/60/80/D10/U/35-40-50	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:2438*52	PROTECTION ANGLE:

Conical surface Flux(90deg):

3638.3 lm

%lum = 48.4%

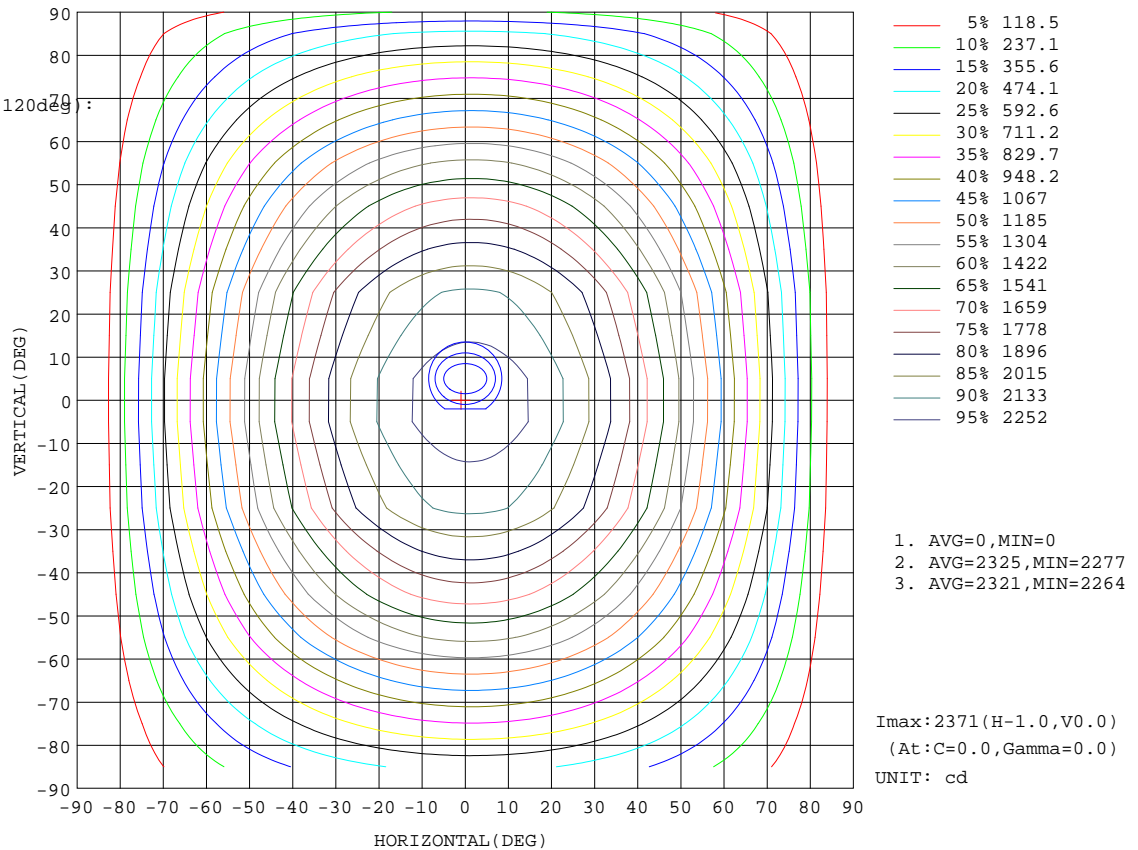
%lamp = 48.4%

Conical surface Flux(120deg):

5459.7 lm

%lum = 72.7%

%lamp = 72.7%

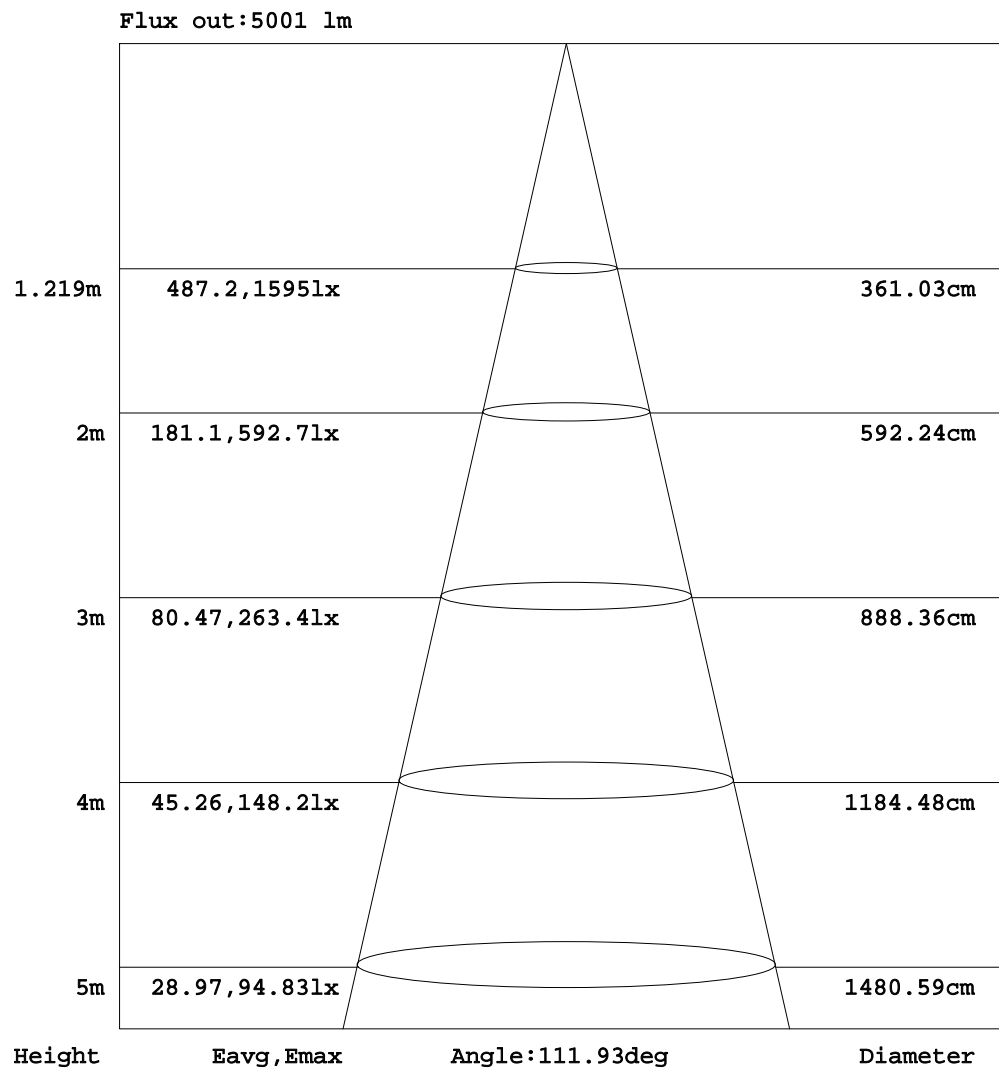


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-08-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
Humidity:65.0%  
Test Distance:8.600m [K=1.0314]  
Remarks:

## AAI Figure

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm		
NAME: MSS8-40/60/80/D10/U/35-40-50	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:2438*52	PROTECTION ANGLE:



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

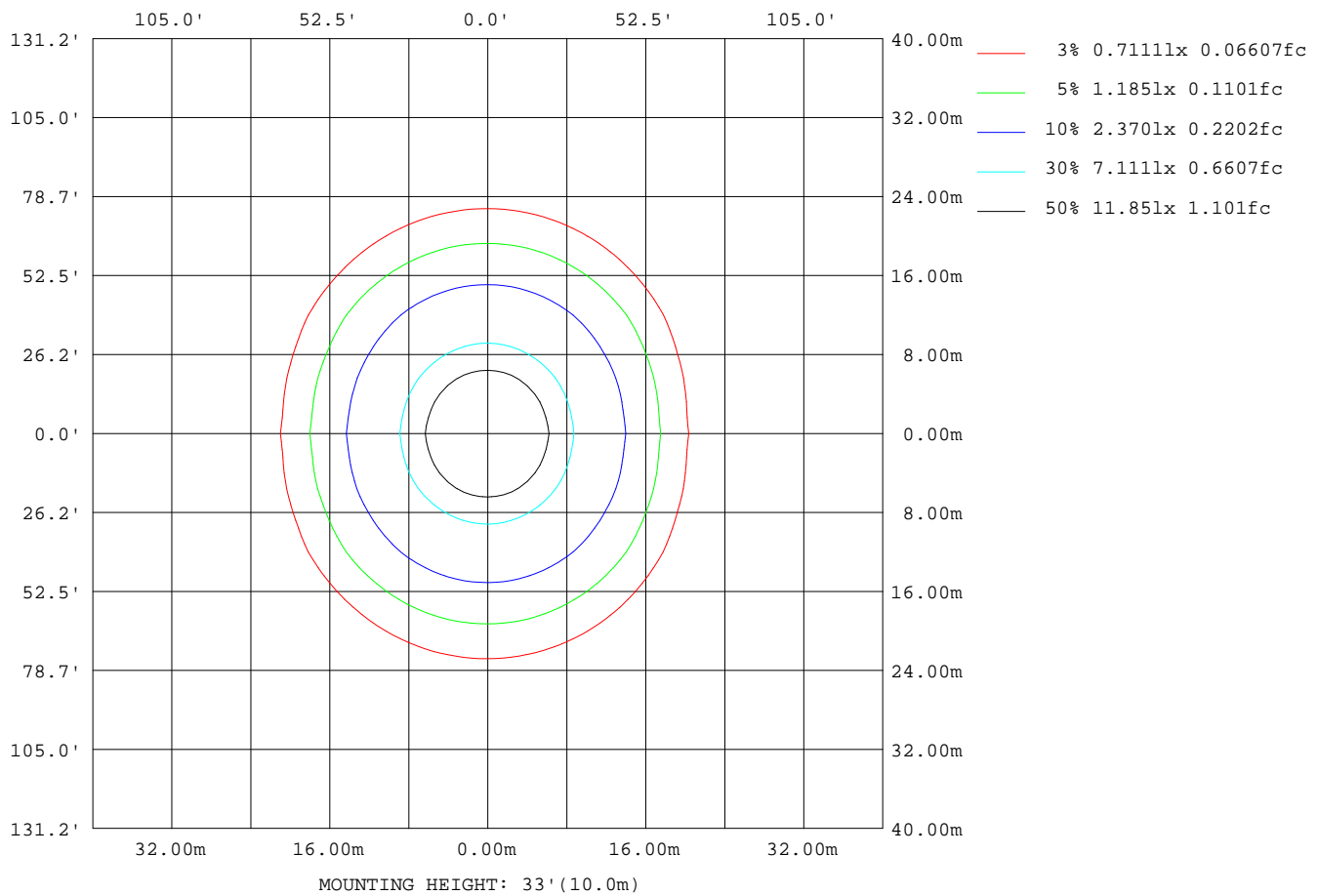
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-08-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:8.600m [K=1.0314]  
 Remarks:



## ISOLUX DIAGRAM

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm		
NAME: MSS8-40/60/80/D10/U/35-40-50	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:2438*52	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2022-08-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
Humidity:65.0%  
Test Distance:8.600m [K=1.0314]  
Remarks:

## LED Avg.L Report

Test:U:120.1V I:0.5248A P:62.40W PF:0.9905 Lamp Flux:3756.98x2 lm		
NAME: MSS8-40/60/80/D10/U/35-40-50	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:2438*52	PROTECTION ANGLE:

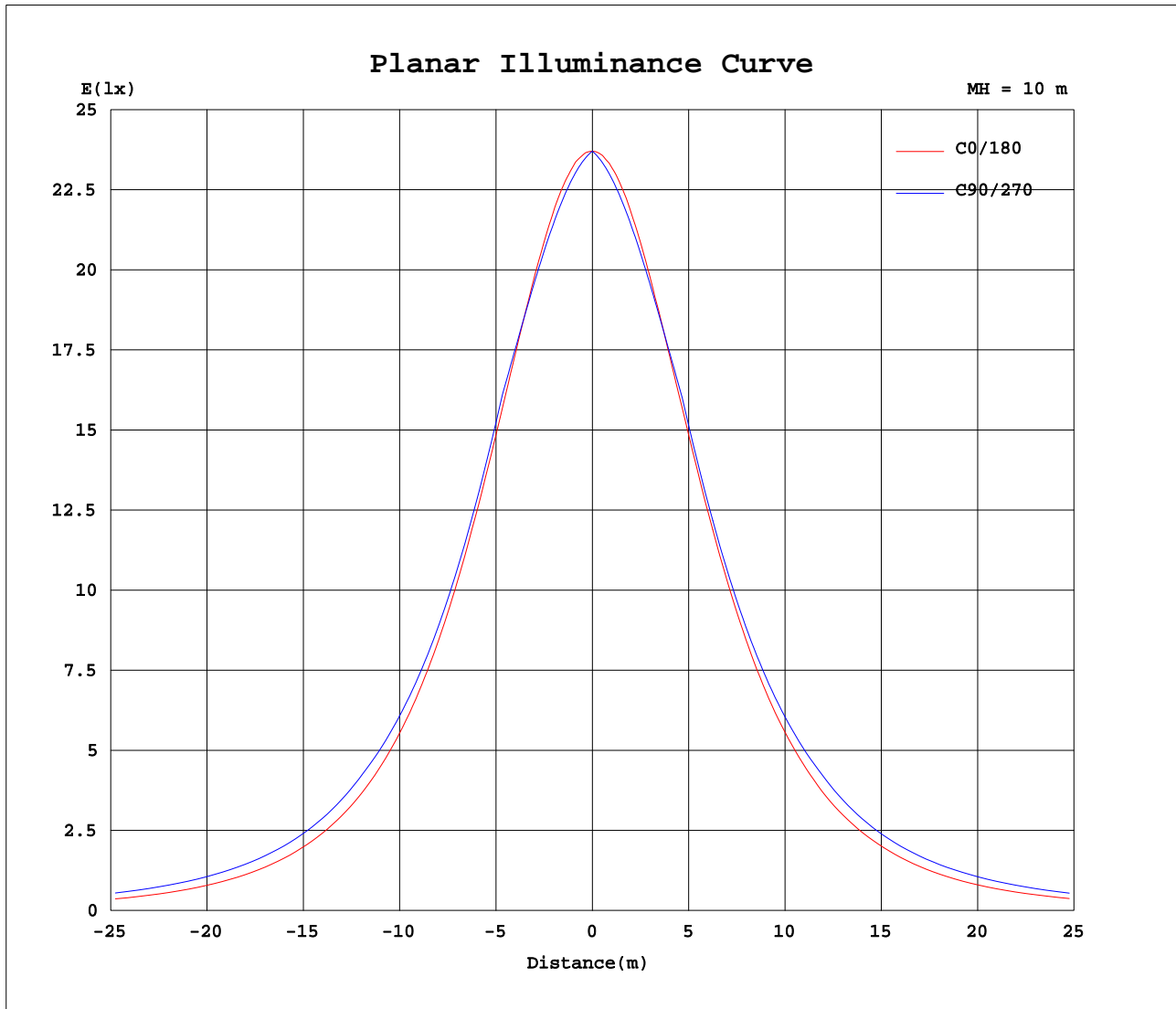
AvgL	cd/m2
L_0~180(65)av	15451
L_0~180(75)av	12823
L_0~180(85)av	6739
L_90~270(65)av	21210
L_90~270(75)av	25121
L_90~270(85)av	45919
L_45(65)av	18960
L_45(75)av	20801
L_45(85)av	33766

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2022-08-19

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
 Humidity:65.0%  
 Test Distance:8.600m [K=1.0314]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2022-08-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.290  
Humidity: 65.0%  
Test Distance: 8.600m [K=1.0314]  
Remarks:







