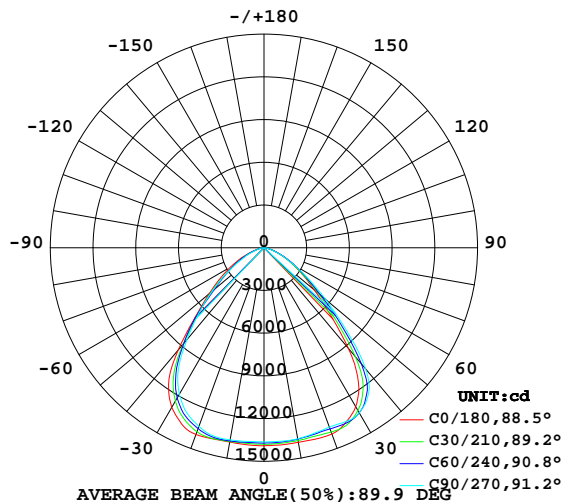


LUMINAIRE PHOTOMETRIC TEST REPORT

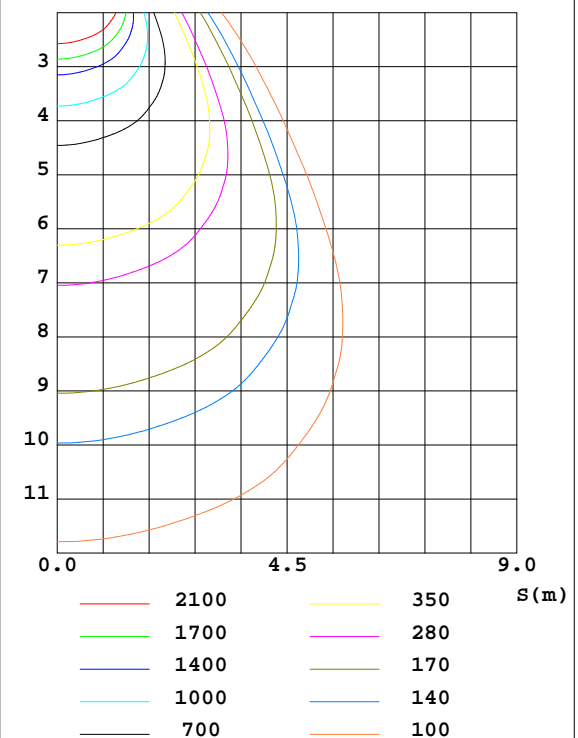
Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm		
NAME: 270855	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:0.191	PROTECTION ANGLE:0.14

DATA OF LAMP		PHOTOMETRIC DATA Eff: 149.52 lm/W			
MODEL	270855	I _{max} (cd)	13957	S/MH(C0/180)	1.26
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	232	TOTAL FLUX(lm)	29218	η UP,DN(C0-180)	0.0,51.7
NOMINAL FLUX(lm)	29218.2	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	231.5	η down(%)	100.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-03-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:6.730m [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	1388	1370	1362	1347	1386	1380	1370	1357	0- 10	1306	1306	4.47,4.47
20	1392	1365	1341	1338	1396	1363	1335	1348	10- 20	3869	5174	17.7,17.7
30	1289	1329	1339	1318	1295	1232	1189	1197	20- 30	6128	11302	38.7,38.7
40	922.5	1031	1109	1054	937.9	880.4	841.4	818.8	30- 40	7132	18435	63.1,63.1
50	460.2	511.4	568.1	502.0	503.9	467.2	475.2	445.2	40- 50	5373	23807	81.5,81.5
60	237.1	243.8	245.7	238.1	272.9	236.5	224.4	235.4	50- 60	3133	26940	92.2,92.2
70	94.08	94.44	90.80	96.06	110.1	95.51	86.92	92.32	60- 70	1605	28545	97.7,97.7
80	23.22	22.11	21.76	25.24	28.48	27.31	25.53	24.61	70- 80	567.6	29113	99.6,99.6
90	1.885	1.817	1.804	1.833	2.452	2.524	2.565	2.465	80- 90	105.4	29218	100,100
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:×10cd									UNIT:lm		

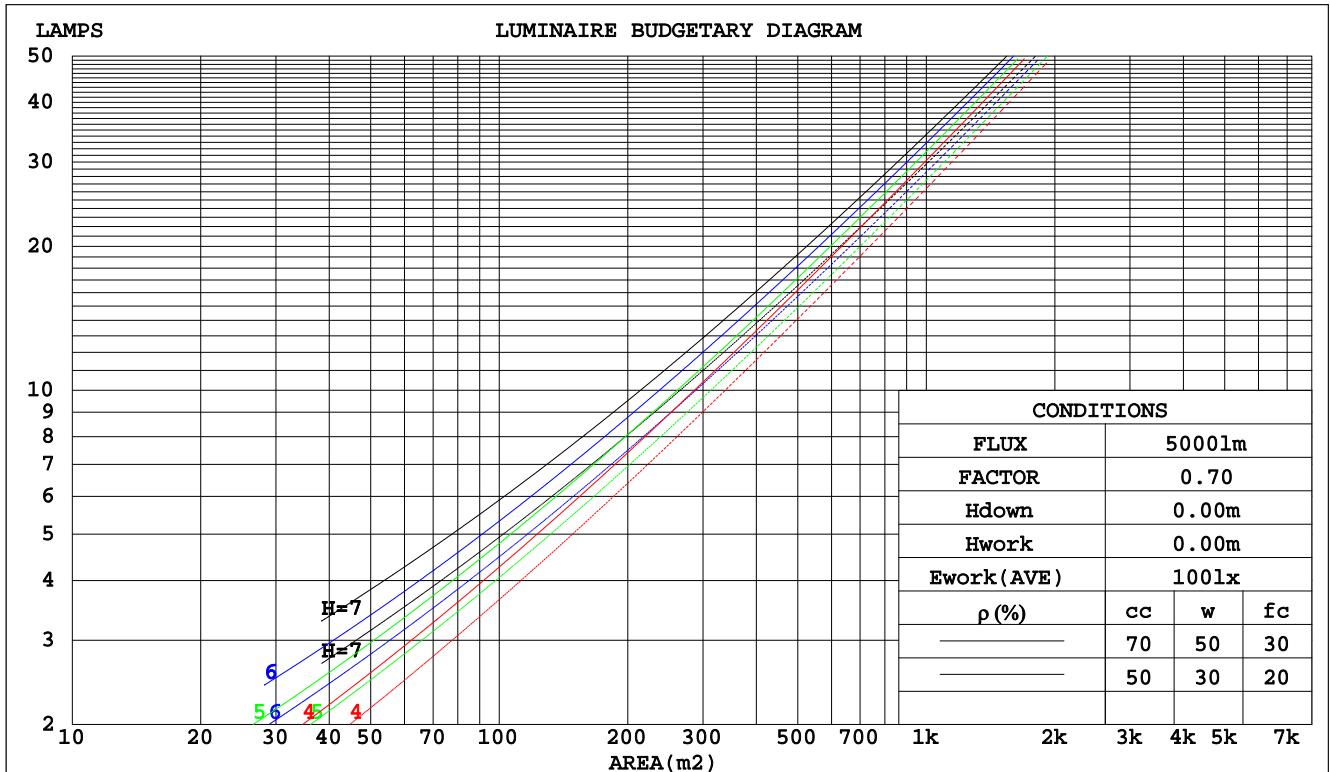
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-03-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
 Humidity:65.0%
 Test Distance:6.730m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm		
NAME: 270855	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:0.191	PROTECTION ANGLE:0.14

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	1.07	1.04	1.01	1.05	1.02	.00	1.01	.99	.96	.97	.95	.93	.94	.92	.91	.89
2.0	.96	.91	.86	.95	.90	.85	.91	.87	.83	.88	.85	.82	.85	.82	.80	.78
3.0	.87	.80	.75	.85	.79	.74	.82	.77	.73	.80	.75	.72	.77	.74	.70	.68
4.0	.78	.71	.65	.77	.70	.65	.75	.69	.64	.73	.67	.63	.71	.66	.62	.60
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.61	.56	.64	.60	.56	.54
6.0	.65	.57	.51	.64	.56	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.48
7.0	.59	.52	.46	.59	.51	.46	.57	.50	.46	.56	.50	.45	.54	.49	.45	.43
8.0	.55	.47	.42	.54	.47	.41	.53	.46	.41	.51	.45	.41	.50	.45	.41	.39
9.0	.50	.43	.38	.50	.43	.38	.49	.42	.38	.48	.42	.37	.47	.41	.37	.36
10.0	.47	.39	.35	.46	.39	.34	.45	.39	.34	.44	.38	.34	.43	.38	.34	.32



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-03-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
 Humidity:65.0%
 Test Distance:6.730m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm								
NAME: 270855			TYPE:			WEIGHT:		
DIM.:			SPEC.:			SERIAL No.:		
MFR.:			SUR.:0.191			PROTECTION ANGLE:0.14		

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	.241	.137	.043	.234	.133	.042	.221	.127	.040	.209	.120	.039	.198	.115	.037	
2.0	.234	.128	.039	.228	.125	.039	.217	.120	.037	.206	.116	.036	.197	.111	.035	
3.0	.222	.118	.035	.217	.116	.035	.207	.112	.034	.198	.109	.033	.190	.105	.033	
4.0	.210	.109	.032	.205	.108	.032	.197	.104	.031	.189	.101	.031	.181	.099	.030	
5.0	.198	.101	.029	.194	.100	.029	.186	.097	.029	.179	.095	.028	.173	.092	.028	
6.0	.187	.094	.027	.183	.093	.027	.176	.090	.026	.170	.088	.026	.164	.086	.026	
7.0	.176	.087	.025	.173	.086	.025	.167	.084	.024	.161	.083	.024	.156	.081	.024	
8.0	.167	.081	.023	.164	.081	.023	.158	.079	.023	.153	.078	.022	.148	.076	.022	
9.0	.158	.076	.021	.155	.076	.021	.150	.074	.021	.146	.073	.021	.141	.072	.021	
10.0	.150	.072	.020	.147	.071	.020	.143	.070	.020	.139	.069	.020	.135	.068	.019	

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	.176	.157	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.087	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.114	.070	.037	.079	.049	.027	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.075	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.095	.051	.021	.066	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-03-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:6.730m [K=1.0000]
Remarks:

Uncorrected UGR Table

Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm											
NAME: 270855					TYPE:			WEIGHT:			
DIM.:					SPEC.:			SERIAL No.:			
MFR.:					SUR.:0.191			PROTECTION ANGLE:0.14			
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		31.2	32.5	31.5	32.7	32.9	31.8	33.1	32.0	33.3	33.5
3H		31.5	32.7	31.8	33.0	33.2	32.1	33.3	32.3	33.5	33.7
4H		31.6	32.7	31.9	32.9	33.2	32.1	33.2	32.4	33.4	33.7
6H		31.6	32.6	31.9	32.9	33.1	32.0	33.1	32.4	33.4	33.6
8H		31.5	32.6	31.9	32.8	33.1	32.0	33.0	32.3	33.3	33.6
12H		31.5	32.5	31.8	32.8	33.0	32.0	32.9	32.3	33.2	33.5
4H	2H	31.4	32.5	31.7	32.7	33.0	31.9	33.0	32.2	33.2	33.5
	3H	31.8	32.7	32.1	33.0	33.3	32.2	33.2	32.6	33.5	33.8
	4H	31.9	32.7	32.2	33.1	33.4	32.3	33.2	32.7	33.5	33.8
	6H	31.9	32.7	32.3	33.0	33.4	32.3	33.1	32.7	33.4	33.8
	8H	31.9	32.6	32.3	33.0	33.3	32.3	33.0	32.7	33.4	33.8
	12H	31.8	32.5	32.3	32.9	33.3	32.3	32.9	32.7	33.3	33.7
8H	4H	31.8	32.6	32.2	32.9	33.3	32.3	33.0	32.7	33.4	33.7
	6H	31.9	32.5	32.3	32.9	33.3	32.3	32.9	32.7	33.3	33.7
	8H	31.9	32.4	32.3	32.8	33.3	32.3	32.8	32.8	33.2	33.7
	12H	31.9	32.3	32.3	32.8	33.2	32.3	32.7	32.8	33.2	33.6
12H	4H	31.8	32.5	32.2	32.8	33.2	32.2	32.9	32.7	33.3	33.7
	6H	31.9	32.4	32.3	32.8	33.2	32.3	32.8	32.7	33.2	33.7
	8H	31.9	32.3	32.3	32.8	33.2	32.3	32.7	32.7	33.2	33.6
Variations with the observer position at spacings:											
S = 1.0H		+ 1.0 / - 1.4					+ 1.0 / - 1.4				
1.5H		+ 1.1 / - 1.0					+ 1.1 / - 1.1				
2.0H		+ 1.8 / - 1.6					+ 2.4 / - 1.7				

CIE Pub.117 Corrected 29218 lm Total Lamp Luminous Flux.(8log(F/F0) = 11.7)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-03-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:6.730m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm		
NAME: 270855	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:0.191	PROTECTION ANGLE:0.14

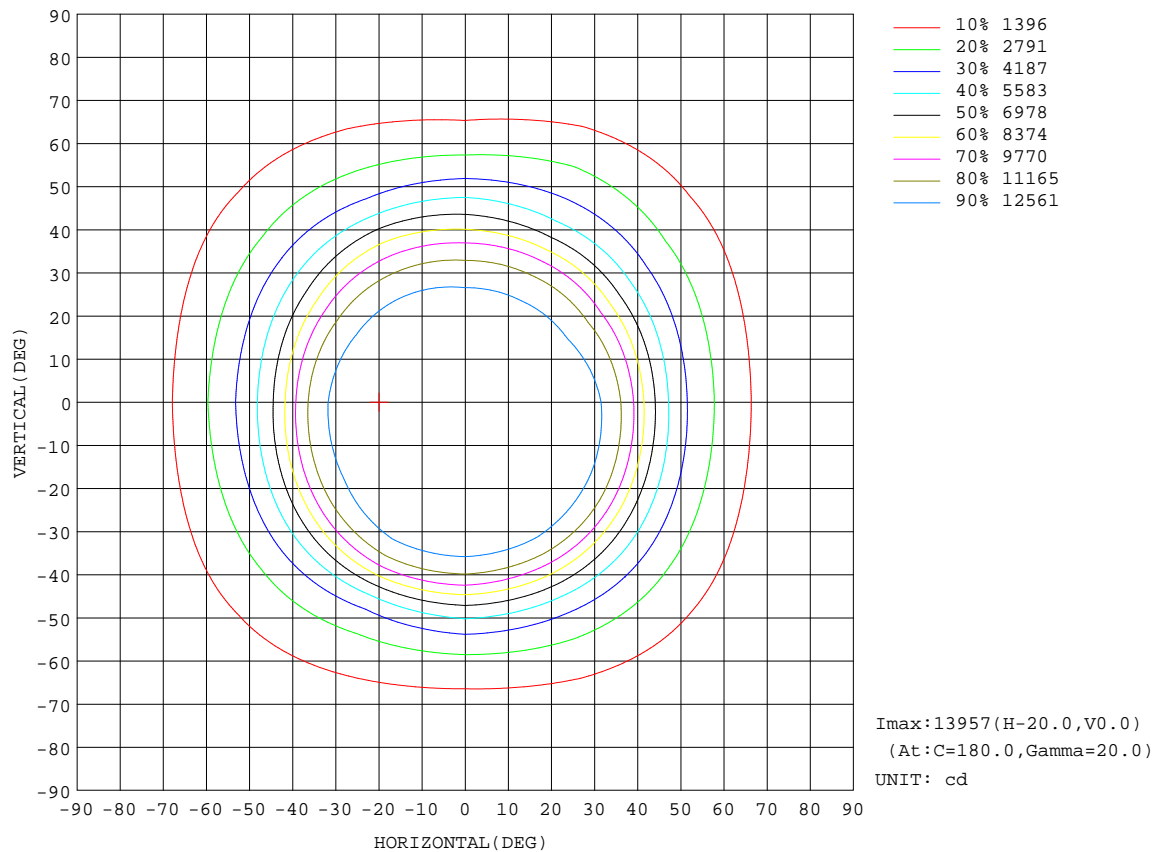
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	68	58	53	68	58	53	67	58	52	47
0.80	78	69	63	77	68	63	76	68	62	56
1.00	86	77	71	85	76	71	83	77	70	65
1.25	92	84	78	91	83	78	88	82	77	71
1.50	96	89	83	95	88	83	92	86	82	76
2.00	102	95	90	100	94	90	97	92	88	81
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	98	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	103	100	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHR _{NOM} = 1.25										

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-03-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:6.730m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm		
NAME: 270855	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:0.191	PROTECTION ANGLE:0.14



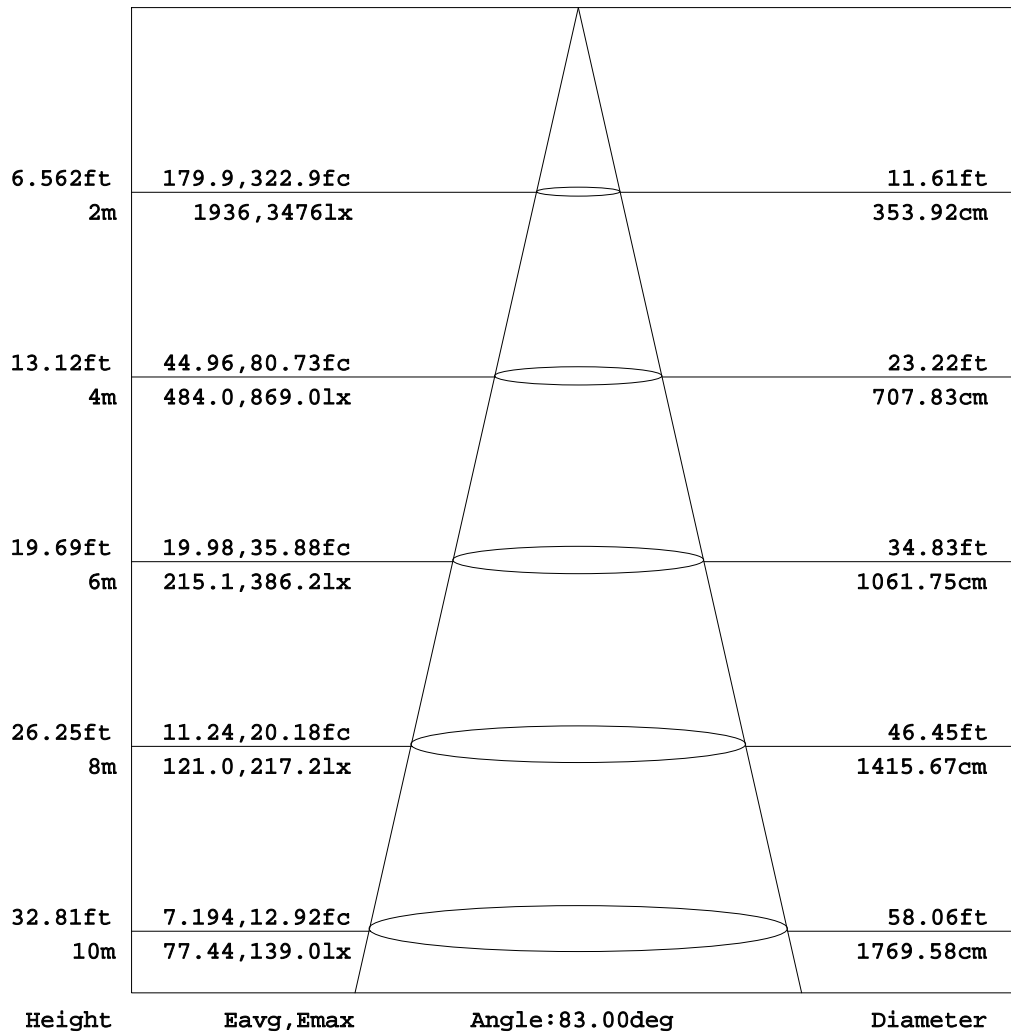
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-03-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:6.730m [K=1.0000]
Remarks:

AAI Figure

Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm		
NAME: 270855	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:0.191	PROTECTION ANGLE:0.14

Flux out:19723 lm



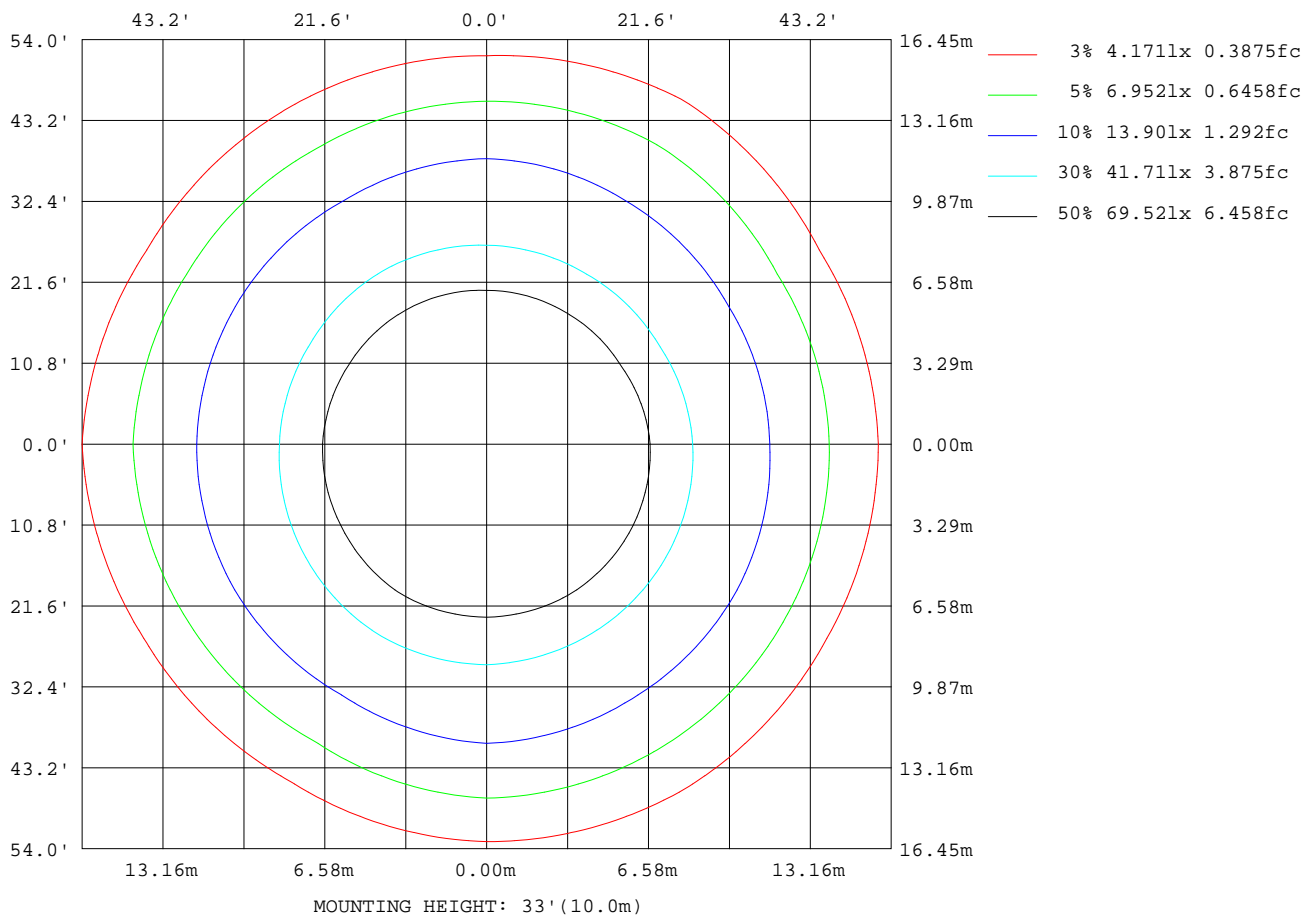
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-03-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:6.730m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

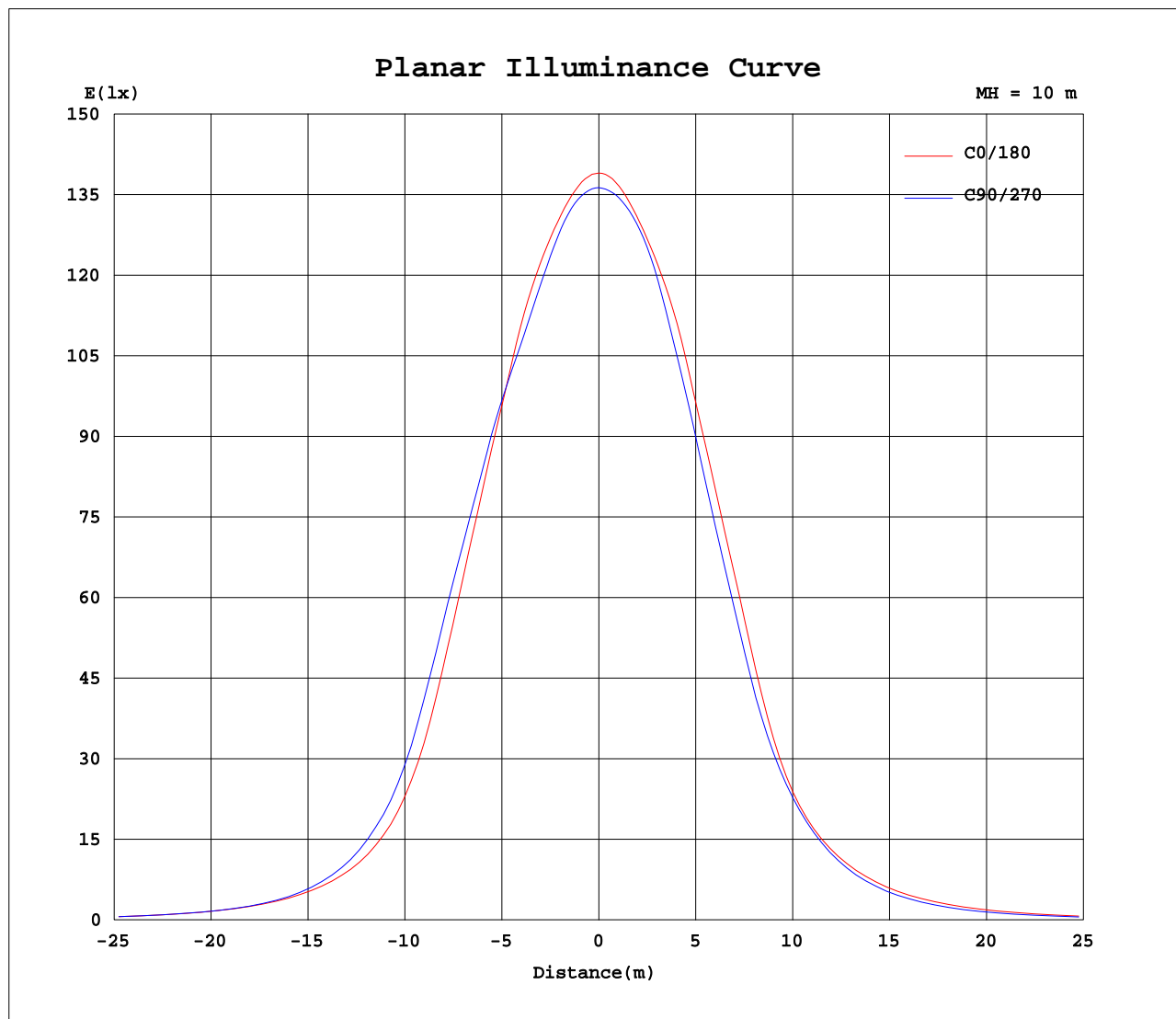
Test:U:231.5V I:0.8494A P:195.4W PF:0.9938 Lamp Flux:29218.2x1 lm		
NAME: 270855	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:0.191	PROTECTION ANGLE:0.14



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-03-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
 Humidity: 65.0%
 Test Distance: 6.730m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2022-03-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 6.730m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:6.730m [K=1.0000]
Remarks:

```