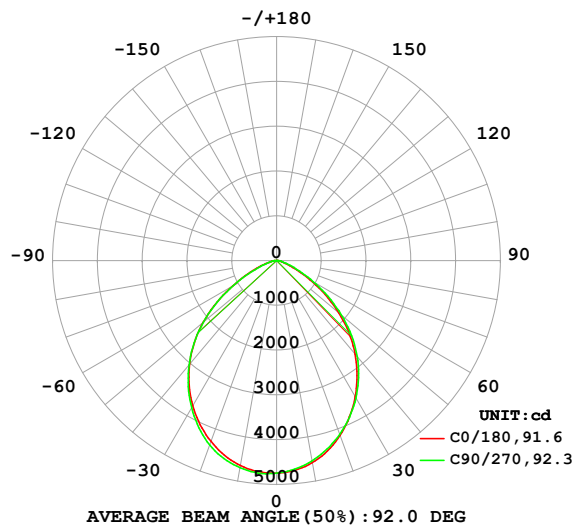


LUMINAIRE PHOTOMETRIC TEST REPORT

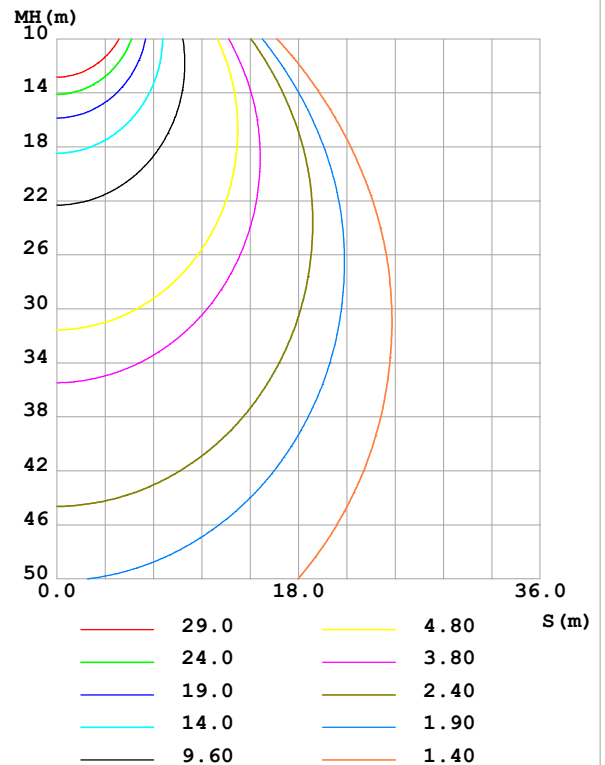
Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 139.45 lm/W			
MODEL	2835	I _{max} (cd)	4765	S/MH (C0/180)	1.18
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.19
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	9770.7	η UP, DN (C0-180)	0.0, 48.4
NOMINAL FLUX (lm)	9770.72	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	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: 22.5DEG
Test Speed: MEDIUM
Temperature: 28 °C
Operators: Li
Test Date: 2025-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 75%
Test Distance: 8.458m [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	4583	4549	4542	4578	4648	4706	4697	4637	0- 10	447.0	447.0	4.57,4.57
20	4153	4114	4129	4175	4293	4401	4380	4246	10- 20	1255	1702	17.4,17.4
30	3514	3500	3544	3605	3744	3840	3797	3623	20- 30	1822	3524	36.1,36.1
40	2730	2750	2802	2874	3024	3098	3044	2838	30- 40	2053	5577	57.1,57.1
50	1813	1836	1890	1992	2136	2211	2134	1916	40- 50	1898	7475	76.5,76.5
60	862.9	877.4	947.6	1075	1132	1181	1111	967.0	50- 60	1356	8831	90.4,90.4
70	279.5	307.5	332.5	444.1	418.2	431.2	369.8	344.6	60- 70	667.0	9498	97.2,97.2
80	87.35	90.02	101.2	122.6	115.9	116.0	107.5	103.8	70- 80	221.4	9719	99.5,99.5
90	6.561	6.616	6.235	6.240	6.369	5.757	5.170	5.596	80- 90	51.67	9771	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:cd									UNIT:lm		

Conical surface Flux(90deg): 6571.1 lm

%lum = 67.3%

%lamp = 67.3%

Conical surface Flux(130deg): 9239.3 lm

%lum = 94.6%

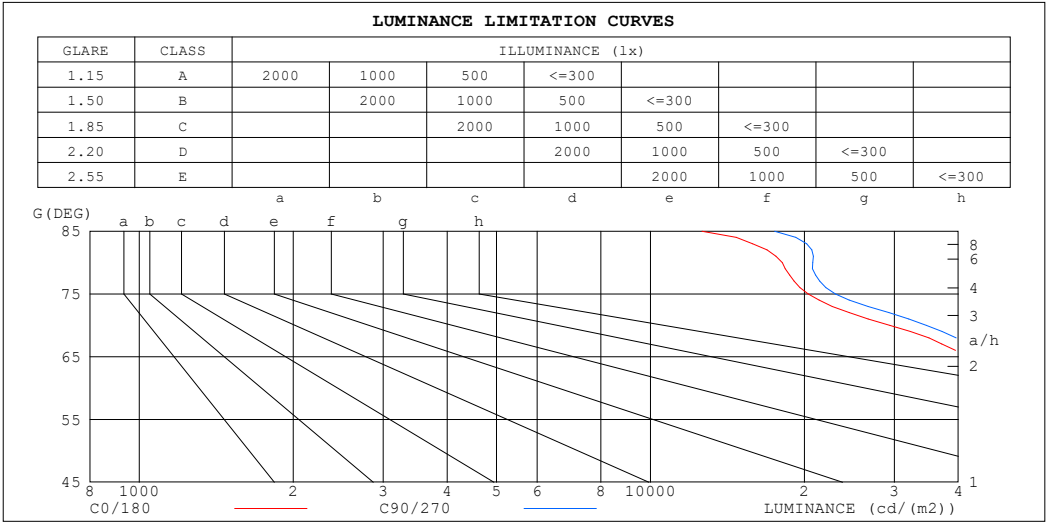
%lamp = 94.6%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28℃
 Operators:Li
 Test Date:2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	12603	17498
80	18104	20776
75	20352	23014
70	29414	34659
65	42608	48316
60	62110	67570
55	83214	87403
50	101482	104823
45	116717	119523

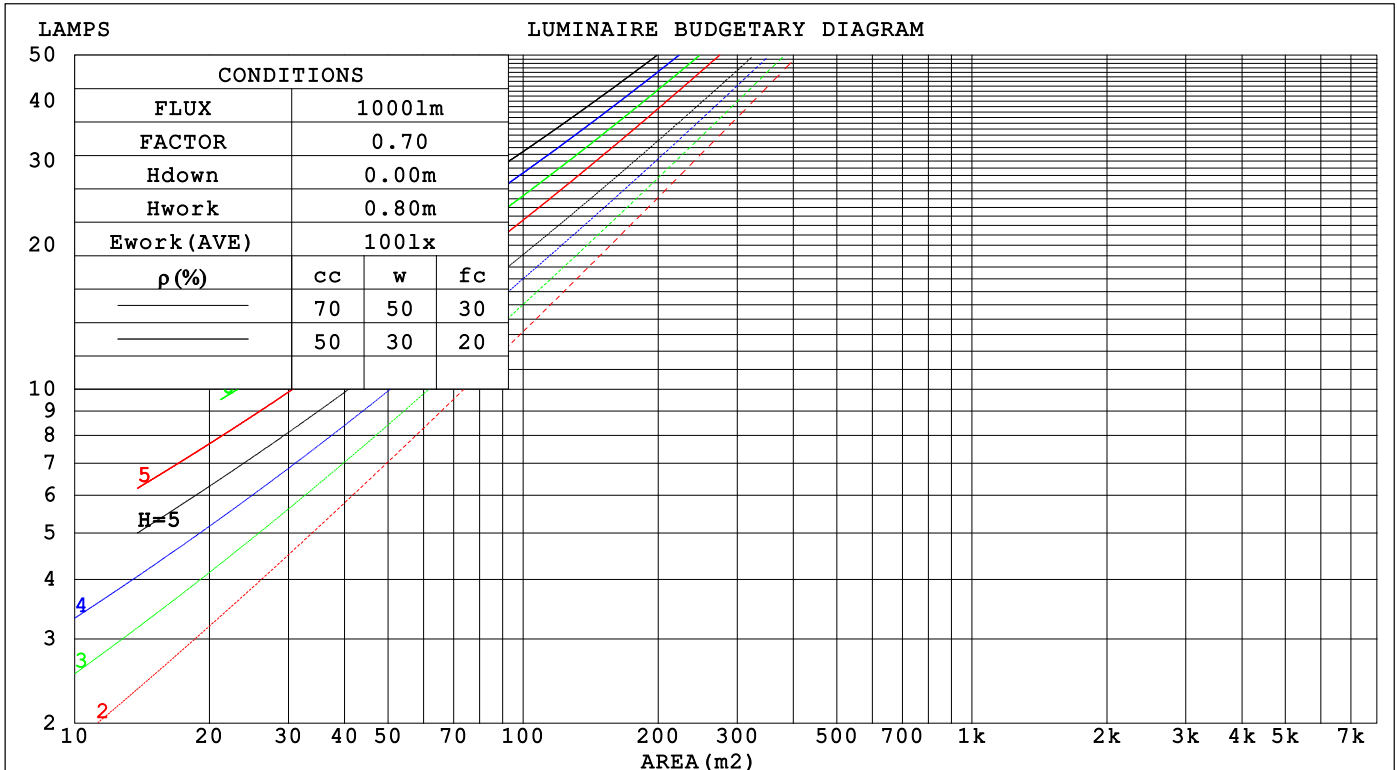
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:28℃
Operators:Li
Test Date:2025-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:75%
Test Distance:8.458m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		

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	1.03	1.00	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.91	.90	.88
2.0	.95	.90	.85	.94	.88	.84	.90	.86	.82	.87	.83	.80	.84	.81	.78	.76
3.0	.85	.78	.73	.84	.77	.72	.81	.75	.71	.78	.74	.70	.76	.72	.68	.66
4.0	.77	.69	.63	.75	.68	.63	.73	.67	.62	.71	.65	.61	.69	.64	.60	.58
5.0	.69	.61	.55	.68	.61	.55	.66	.60	.54	.64	.58	.54	.63	.57	.53	.51
6.0	.63	.55	.49	.62	.54	.49	.60	.53	.48	.59	.53	.48	.57	.52	.48	.46
7.0	.57	.49	.44	.57	.49	.44	.55	.48	.43	.54	.48	.43	.53	.47	.43	.41
8.0	.53	.45	.39	.52	.45	.39	.51	.44	.39	.50	.43	.39	.48	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.36	.46	.40	.35	.45	.39	.35	.34
10.0	.45	.38	.33	.45	.37	.33	.44	.37	.33	.43	.37	.32	.42	.36	.32	.31



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:28℃
Operators:Li
Test Date:2025-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:75%
Test Distance:8.458m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		

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	.252	.143	.045	.245	.140	.044	.232	.133	.042	.220	.127	.041	.209	.121	.039															
2.0	.244	.134	.041	.238	.131	.040	.227	.126	.039	.217	.122	.038	.207	.117	.037															
3.0	.232	.123	.037	.227	.121	.037	.217	.117	.036	.207	.114	.035	.199	.110	.034															
4.0	.218	.113	.033	.214	.112	.033	.205	.109	.032	.197	.106	.032	.189	.103	.031															
5.0	.205	.105	.030	.201	.103	.030	.193	.101	.030	.186	.098	.029	.179	.096	.029															
6.0	.193	.097	.028	.189	.096	.027	.182	.093	.027	.176	.091	.027	.170	.089	.027															
7.0	.181	.090	.025	.178	.089	.025	.172	.087	.025	.166	.085	.025	.161	.084	.025															
8.0	.171	.084	.023	.168	.083	.023	.163	.081	.023	.157	.080	.023	.153	.078	.023															
9.0	.162	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021															
10.0	.153	.073	.020	.151	.073	.020	.146	.072	.020	.142	.070	.020	.138	.069	.020															

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	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.166	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.080	.135	.098	.069	.092	.068	.048	.053	.040	.029	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.077	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28℃
 Operators:Li
 Test Date:2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm										
NAME: H1004P-90D										
SPEC.: PHILIPS/LOW										
MFR.: SOTEN										
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	27.3	28.7	27.6	28.8	29.0	27.7	29.0	27.9	29.2	29.4
3H	27.5	28.8	27.8	29.0	29.2	28.0	29.2	28.3	29.5	29.7
4H	27.5	28.7	27.8	29.0	29.2	28.0	29.2	28.3	29.4	29.7
6H	27.5	28.6	27.8	28.9	29.2	28.0	29.1	28.3	29.4	29.6
8H	27.5	28.6	27.8	28.8	29.1	28.0	29.1	28.3	29.3	29.6
12H	27.5	28.5	27.8	28.8	29.1	28.0	29.0	28.3	29.3	29.6
4H 2H	27.5	28.6	27.8	28.9	29.1	27.8	29.0	28.1	29.2	29.4
3H	27.8	28.8	28.1	29.1	29.4	28.2	29.2	28.5	29.5	29.8
4H	27.8	28.8	28.2	29.1	29.4	28.3	29.2	28.6	29.5	29.8
6H	27.9	28.7	28.3	29.0	29.4	28.3	29.1	28.7	29.5	29.8
8H	27.9	28.6	28.3	29.0	29.4	28.3	29.1	28.7	29.4	29.8
12H	27.8	28.5	28.3	28.9	29.3	28.3	29.0	28.8	29.4	29.8
8H 4H	27.8	28.5	28.2	28.9	29.3	28.2	29.0	28.6	29.3	29.7
6H	27.9	28.5	28.3	28.9	29.3	28.3	28.9	28.8	29.3	29.8
8H	27.9	28.4	28.4	28.9	29.3	28.4	28.9	28.8	29.3	29.8
12H	27.9	28.4	28.4	28.8	29.3	28.4	28.8	28.9	29.3	29.8
12H 4H	27.8	28.4	28.2	28.8	29.2	28.2	28.9	28.6	29.3	29.7
6H	27.9	28.4	28.3	28.8	29.3	28.3	28.8	28.7	29.3	29.7
8H	27.9	28.4	28.4	28.8	29.3	28.4	28.8	28.8	29.3	29.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 0.7 / - 0.9					+ 0.7 / - 0.8				
1.5H	+ 0.4 / - 0.4					+ 0.3 / - 0.4				
2.0H	+ 1.5 / - 2.0					+ 1.3 / - 1.8				

CIE Pub.117, 9771 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 7.9$)
 Area: 0.028 m²

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28℃
 Operators:Li
 Test Date:2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test: U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		

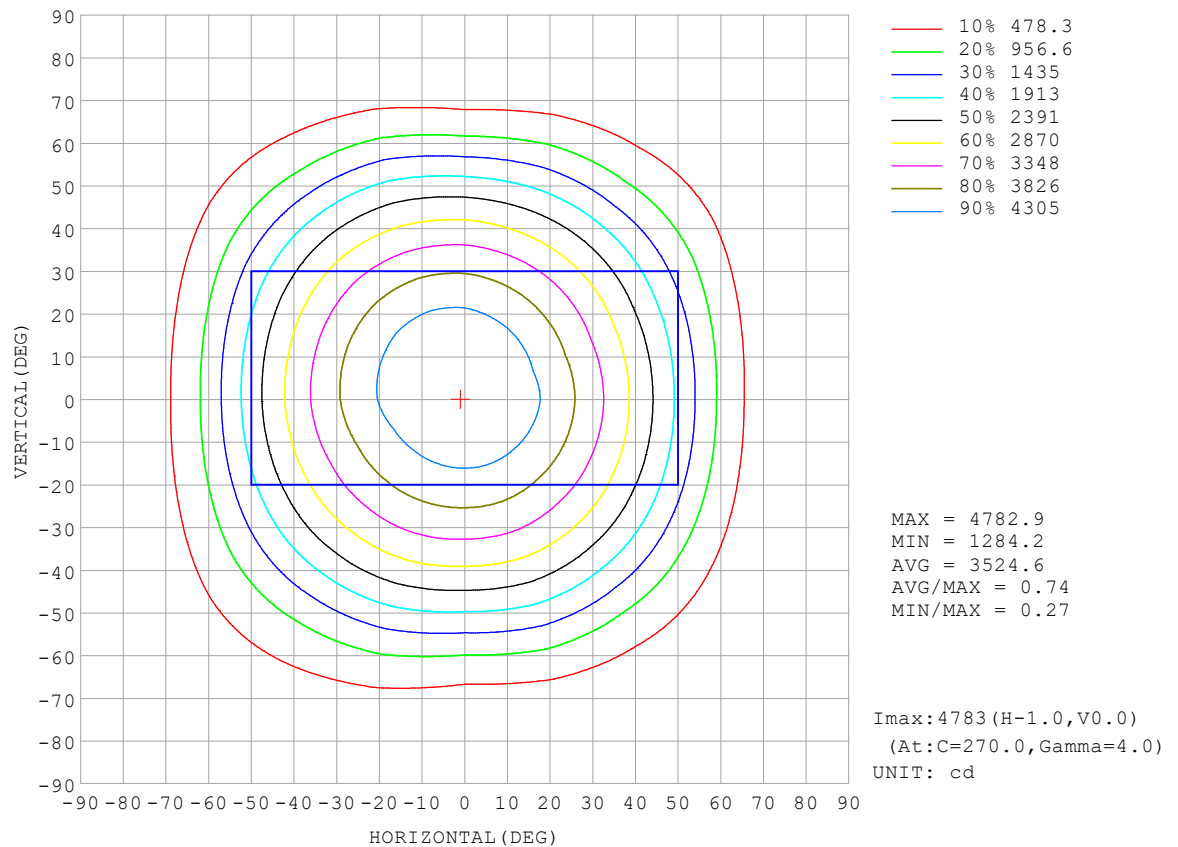
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	64	54	48	64	54	48	63	53	47	42
0.80	75	64	58	74	64	58	72	63	58	51
1.00	83	74	67	82	73	67	80	74	66	60
1.25	90	81	75	88	80	75	86	79	74	67
1.50	94	86	80	93	85	80	90	84	79	72
2.00	100	93	88	98	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	93	85
4.00	109	104	101	107	103	99	103	99	97	88
5.00	111	107	104	109	105	102	104	102	99	91
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 75%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		

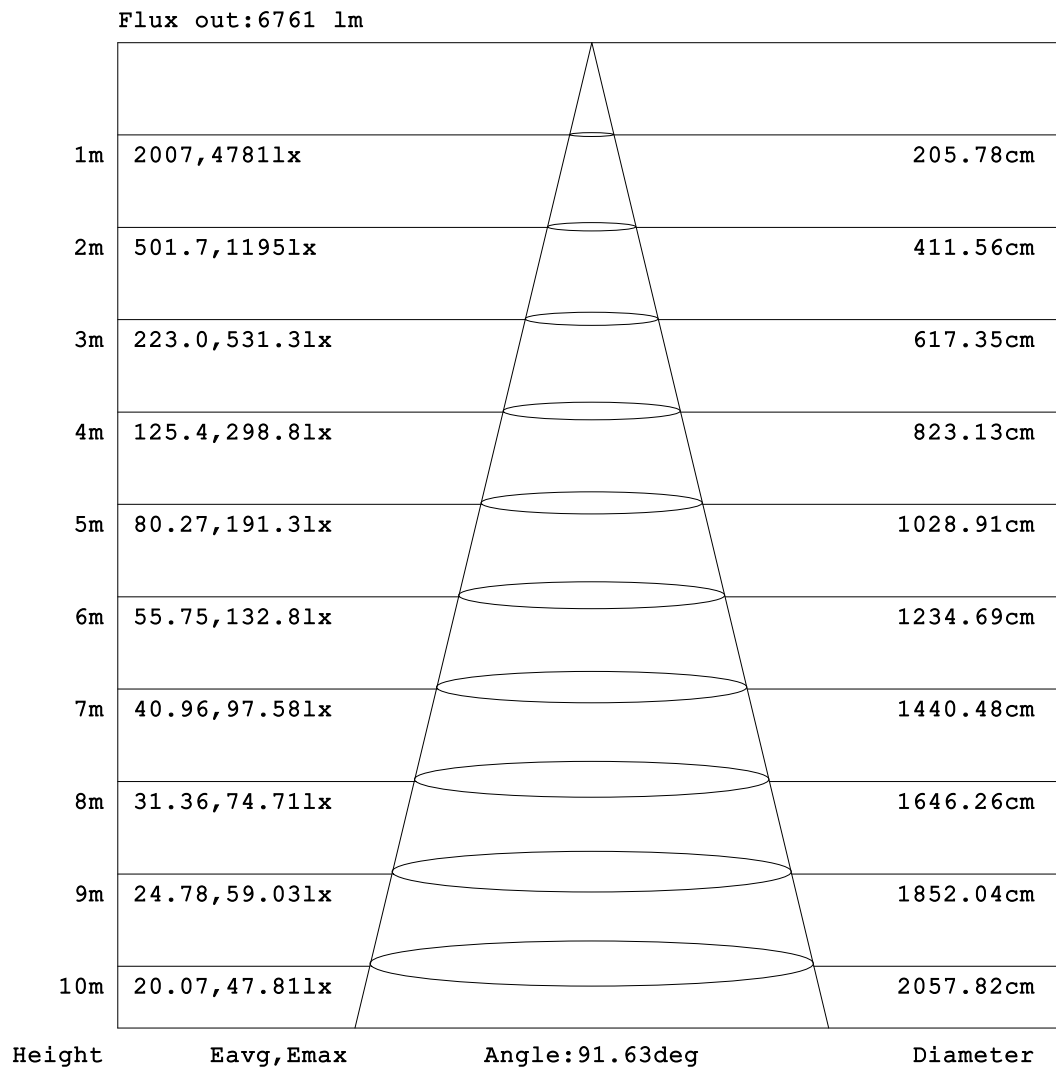


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:28℃
Operators:Li
Test Date:2025-12-20

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity:75%
Test Distance:8.458m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		



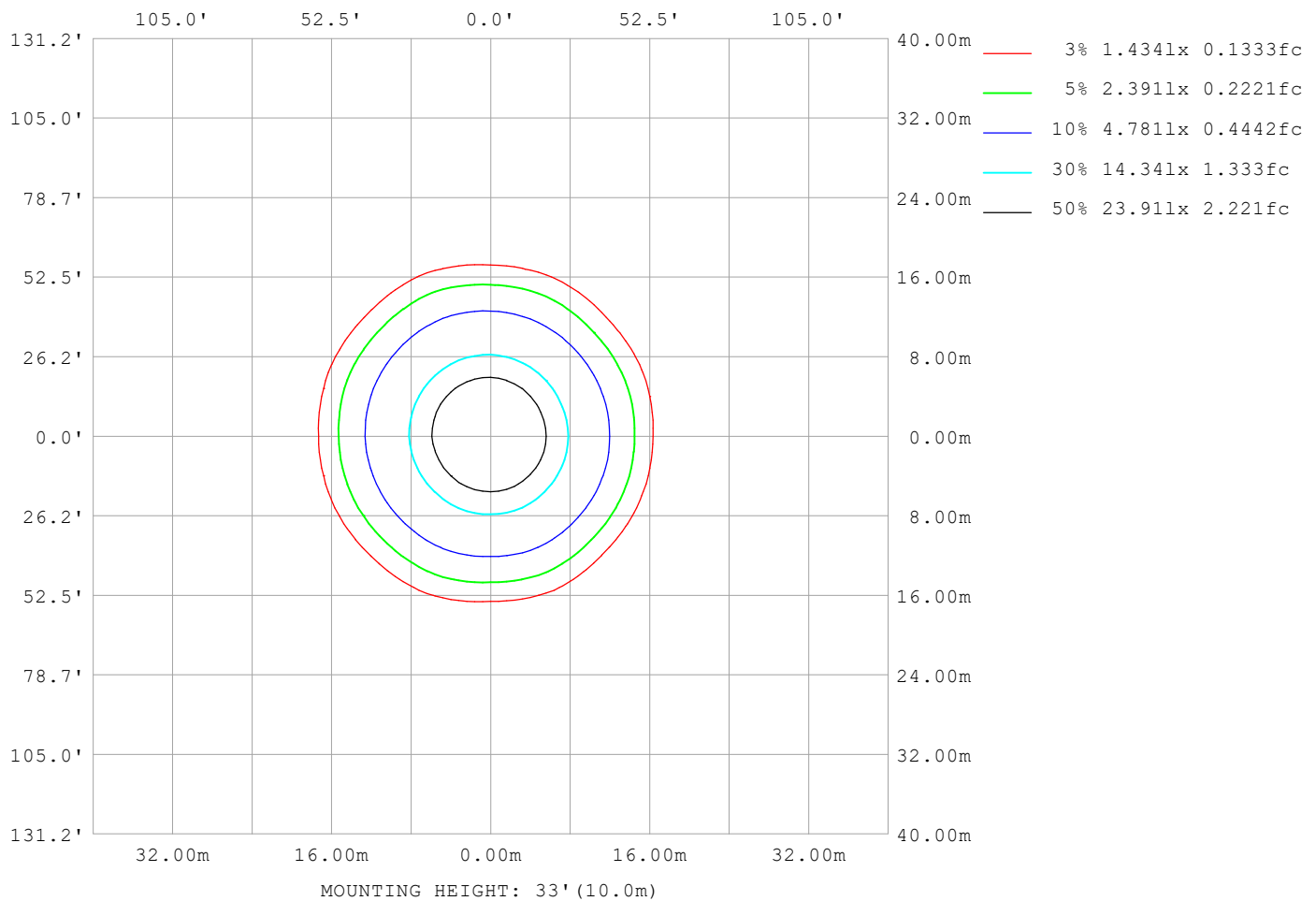
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 75%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28°C
 Operators: Li
 Test Date: 2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity: 75%
 Test Distance: 8.458m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.13V I:0.334A P:70.06W PF:0.911 Freq:49.99Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:9770.72x1 lm		
NAME: H1004P-90D		
SPEC.: PHILIPS/LOW		
MFR.: SOTEN		

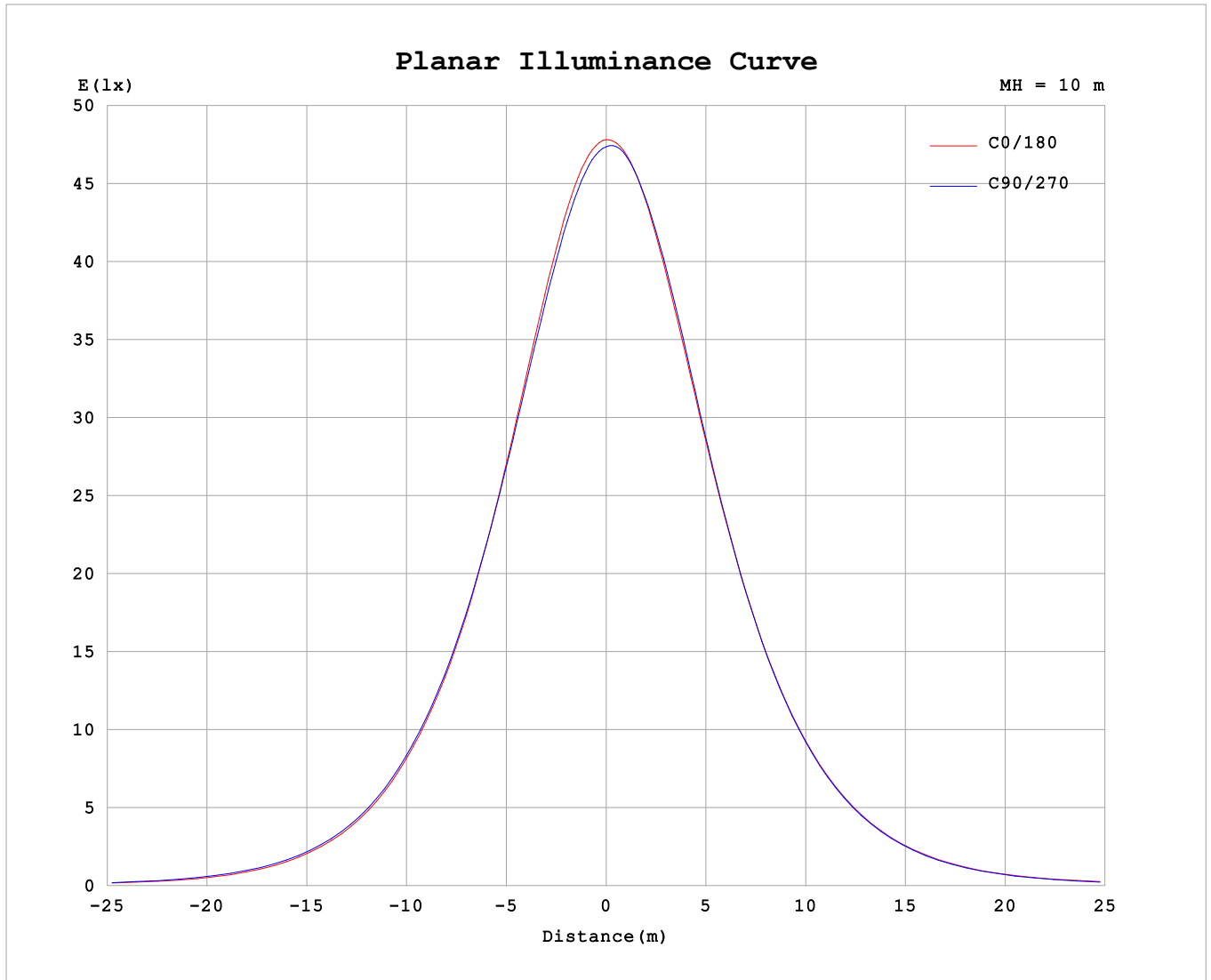
AvgL	cd/m2
L_0~180 (65) av	51082
L_0~180 (75) av	24686
L_0~180 (85) av	18626
L_90~270 (65) av	53028
L_90~270 (75) av	24623
L_90~270 (85) av	17974
L_45 (65) av	54904
L_45 (75) av	27146
L_45 (85) av	18714

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28℃
 Operators:Li
 Test Date:2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.485
 Humidity:75%
 Test Distance:8.458m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 28°C
Operators: Li
Test Date: 2025-12-20

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.485
Humidity: 75%
Test Distance: 8.458m [K=1.0000]
Remarks:

```

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