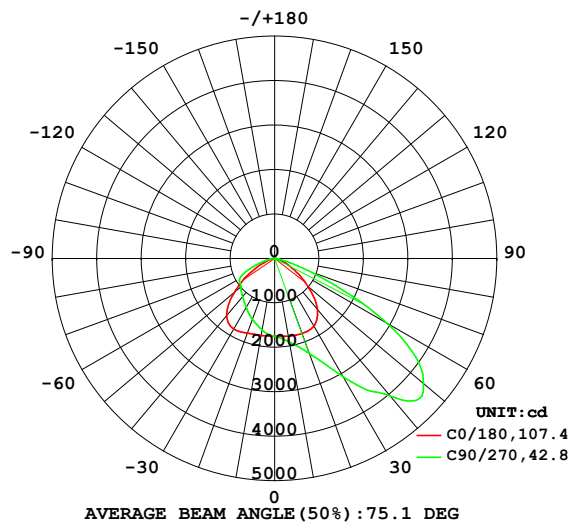


LUMINAIRE PHOTOMETRIC TEST REPORT

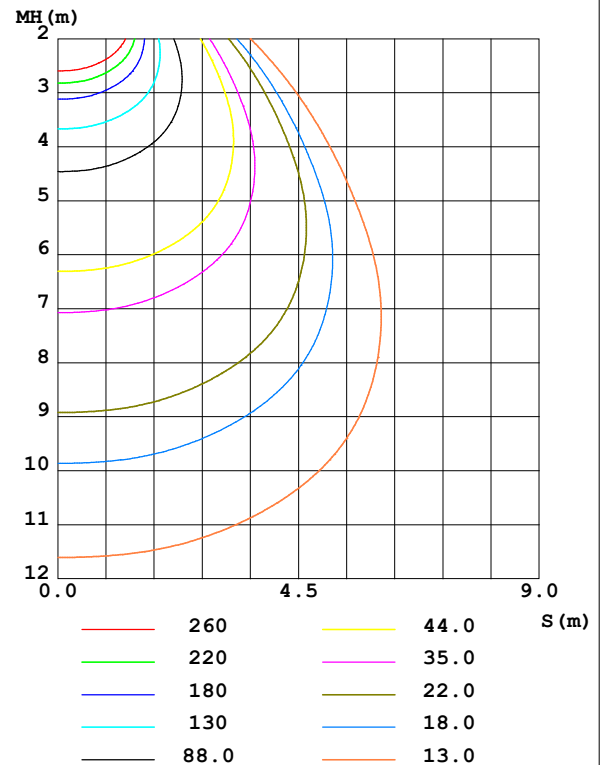
Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 136.63 lm/W
MODEL	ShineOn3030	I _{max} (cd)	4535	S/MH (C0/180)	1.51	
NOMINAL POWER(W)	100	LOR (%)	100.0	S/MH (C90/270)	1.10	
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	6794.3	η UP,DN (C0-180)	0.0,66.9	
NOMINAL FLUX(lm)	6794.26	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,33.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.50	
TEST VOLTAGE(V)	230	η down (%)	100.0	CIBSE SHR MAX	1.55	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.1℃
Operators:
Test Date: 2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity: 50.0%
Test Distance: 10.026m [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	1777	1850	1908	1835	1761	1700	1636	1674	0- 10	168.1	168.1	2.47, 2.47
20	1799	2055	2272	2068	1789	1572	1461	1501	10- 20	506.7	674.8	9.93, 9.93
30	1760	2440	3064	2540	1838	1325	1277	1281	20- 30	868.9	1544	22.7, 22.7
40	1502	2934	4033	3029	1681	1033	1126	1024	30- 40	1258	2802	41.2, 41.2
50	976.9	3096	4372	2931	1179	843.4	993.9	841.8	40- 50	1565	4367	64.3, 64.3
60	495.4	1718	2929	1688	619.6	599.7	906.8	624.9	50- 60	1435	5802	85.4, 85.4
70	189.3	405.2	795.7	399.5	221.3	325.8	454.3	359.3	60- 70	756.1	6558	96.5, 96.5
80	42.76	54.75	81.43	51.67	62.39	86.63	115.7	97.03	70- 80	210.8	6769	99.6, 99.6
90	1.109	1.193	1.688	1.285	0.7308	1.974	2.923	2.562	80- 90	25.58	6794	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): 3563.7 lm

%lum = 52.5%

%lamp = 52.5%

Conical surface Flux(120deg): 5801.8 lm

%lum = 85.4%

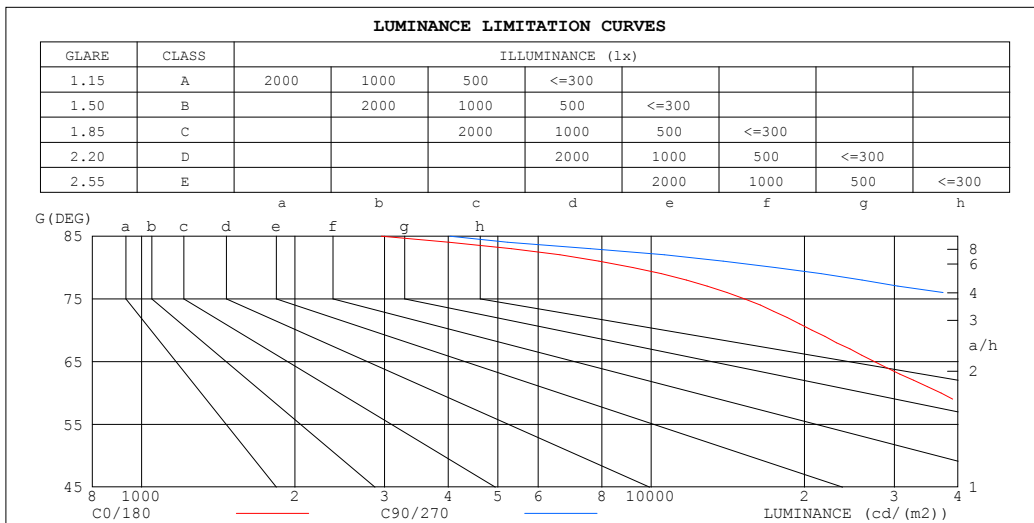
%lamp = 85.4%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.1℃
 Operators:
 Test Date: 2024-12-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.462
 Humidity: 50.0%
 Test Distance: 10.026m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:



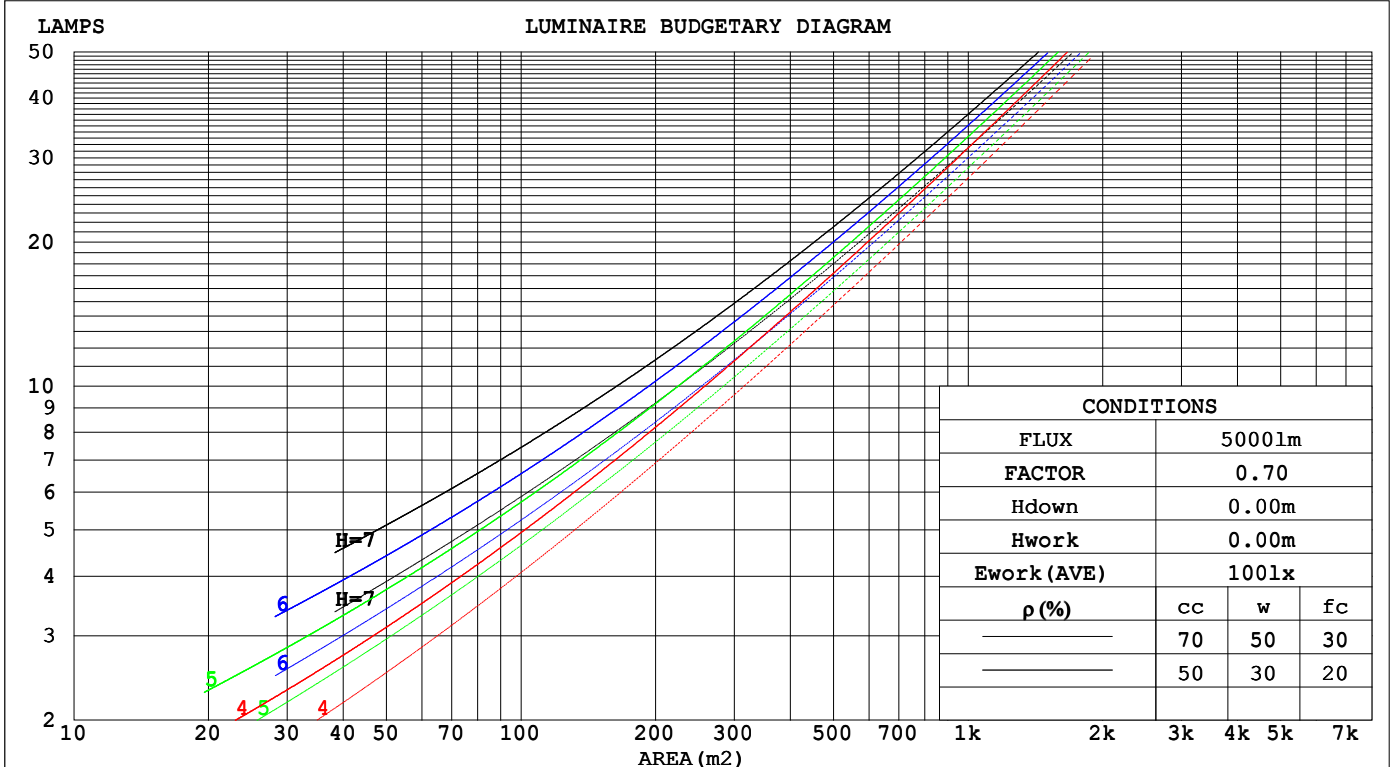
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.1℃
Operators:
Test Date: 2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity: 50.0%
Test Distance: 10.026m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1℃
Operators:
Test Date:2024-12-19

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity:50.0%
Test Distance:10.026m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm					
NAME: HLK-100W			TYPE: 50*100D		WEIGHT:
SPEC.: 3000K-RA80-170L			DIM.:		SERIAL No.:
MFR.:			SUR.: 0.221m*0.121m		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	.282	.160	.051	.275	.157	.050	.262	.150	.048	.250	.144	.046	.239	.138	.045	
2.0	.277	.152	.046	.270	.149	.046	.259	.144	.045	.248	.139	.044	.238	.135	.042	
3.0	.262	.140	.042	.257	.138	.041	.247	.134	.041	.237	.130	.040	.228	.126	.039	
4.0	.246	.128	.038	.241	.126	.037	.232	.123	.037	.224	.120	.036	.216	.117	.036	
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.215	.108	.031	.211	.107	.031	.204	.104	.030	.197	.102	.030	.191	.100	.030	
7.0	.201	.099	.028	.198	.098	.028	.191	.097	.028	.185	.095	.028	.179	.093	.027	
8.0	.188	.092	.026	.185	.091	.026	.180	.090	.026	.174	.088	.025	.169	.087	.025	
9.0	.177	.086	.024	.174	.085	.024	.169	.084	.024	.164	.082	.024	.159	.081	.023	
10.0	.167	.080	.022	.164	.079	.022	.159	.078	.022	.155	.077	.022	.151	.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	.178	.156	.137	.153	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.018	.015	.011	
3.0	.163	.114	.075	.140	.099	.065	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.028	.112	.061	.025	.077	.042	.018	.045	.025	.010	.015	.008	.003	
9.0	.124	.065	.025	.107	.056	.022	.074	.040	.015	.043	.023	.009	.014	.008	.003	
10.0	.119	.061	.022	.102	.053	.019	.071	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1℃
Operators:
Test Date:2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity:50.0%
Test Distance:10.026m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm											
NAME: HLK-100W					TYPE: 50*100D			WEIGHT:			
SPEC.: 3000K-RA80-170L					DIM.:			SERIAL No.:			
MFR.:					SUR.: 0.221m*0.121m			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		28.3	29.9	28.6	30.2	30.5	34.3	36.0	34.7	36.3	36.6
	3H	28.5	30.0	28.9	30.3	30.7	34.8	36.2	35.1	36.6	36.9
	4H	28.5	29.9	28.9	30.2	30.6	34.8	36.2	35.2	36.5	36.9
	6H	28.5	29.8	28.9	30.1	30.5	34.7	36.0	35.2	36.4	36.8
	8H	28.4	29.7	28.9	30.1	30.5	34.7	35.9	35.1	36.3	36.7
	12H	28.4	29.6	28.8	30.0	30.4	34.7	35.9	35.1	36.2	36.7
4H	2H	29.0	30.4	29.4	30.7	31.1	34.3	35.7	34.7	36.0	36.4
	3H	29.3	30.4	29.7	30.8	31.2	34.8	36.0	35.2	36.4	36.8
	4H	29.3	30.3	29.7	30.7	31.2	34.9	35.9	35.3	36.3	36.7
	6H	29.3	30.2	29.7	30.6	31.1	34.8	35.7	35.3	36.2	36.6
	8H	29.3	30.1	29.7	30.5	31.0	34.8	35.6	35.3	36.1	36.5
	12H	29.2	30.0	29.7	30.5	30.9	34.8	35.5	35.3	36.0	36.5
8H	4H	29.3	30.1	29.8	30.6	31.1	34.8	35.6	35.2	36.1	36.5
	6H	29.3	30.0	29.8	30.5	31.0	34.8	35.4	35.2	35.9	36.4
	8H	29.3	29.9	29.8	30.4	30.9	34.7	35.3	35.2	35.8	36.3
	12H	29.2	29.8	29.7	30.3	30.8	34.7	35.2	35.2	35.7	36.3
12H	4H	29.3	30.0	29.8	30.5	31.0	34.8	35.5	35.2	36.0	36.5
	6H	29.3	29.9	29.8	30.4	30.9	34.7	35.3	35.2	35.8	36.3
	8H	29.2	29.8	29.8	30.3	30.8	34.7	35.2	35.2	35.7	36.3
CIE190: 2010											

CIE190: 2010
Area: 0.026741 m2

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1℃
Operators:
Test Date:2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity:50.0%
Test Distance:10.026m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:

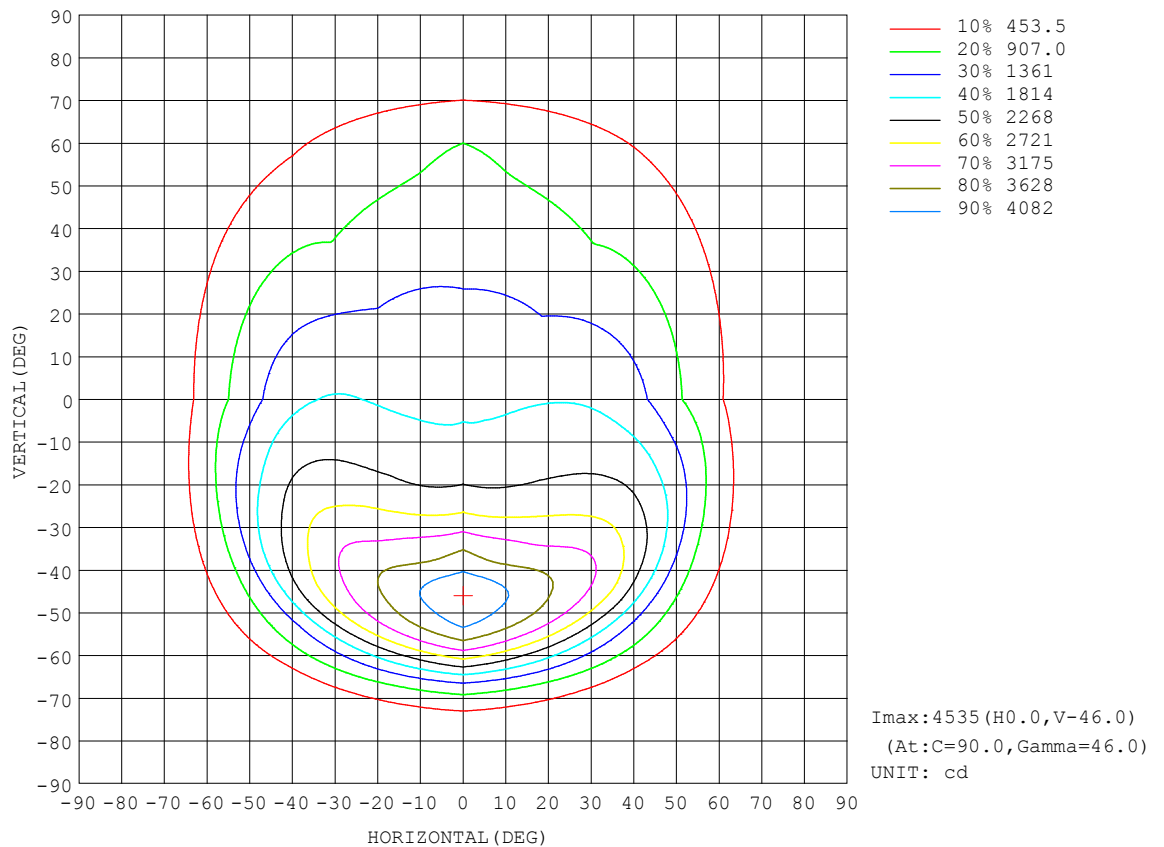
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	54	42	35	52	41	34	28
0.80	66	54	46	65	53	46	63	52	45	38
1.00	76	64	57	74	64	57	72	65	56	49
1.25	83	73	66	82	72	66	79	71	65	57
1.50	89	79	72	87	78	72	84	76	71	63
2.00	96	88	82	94	87	81	91	85	79	72
2.50	100	92	87	98	91	86	94	88	84	76
3.00	103	97	92	101	95	91	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	99	102	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.1°C
Operators:
Test Date: 2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity: 50.0%
Test Distance: 10.026m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:

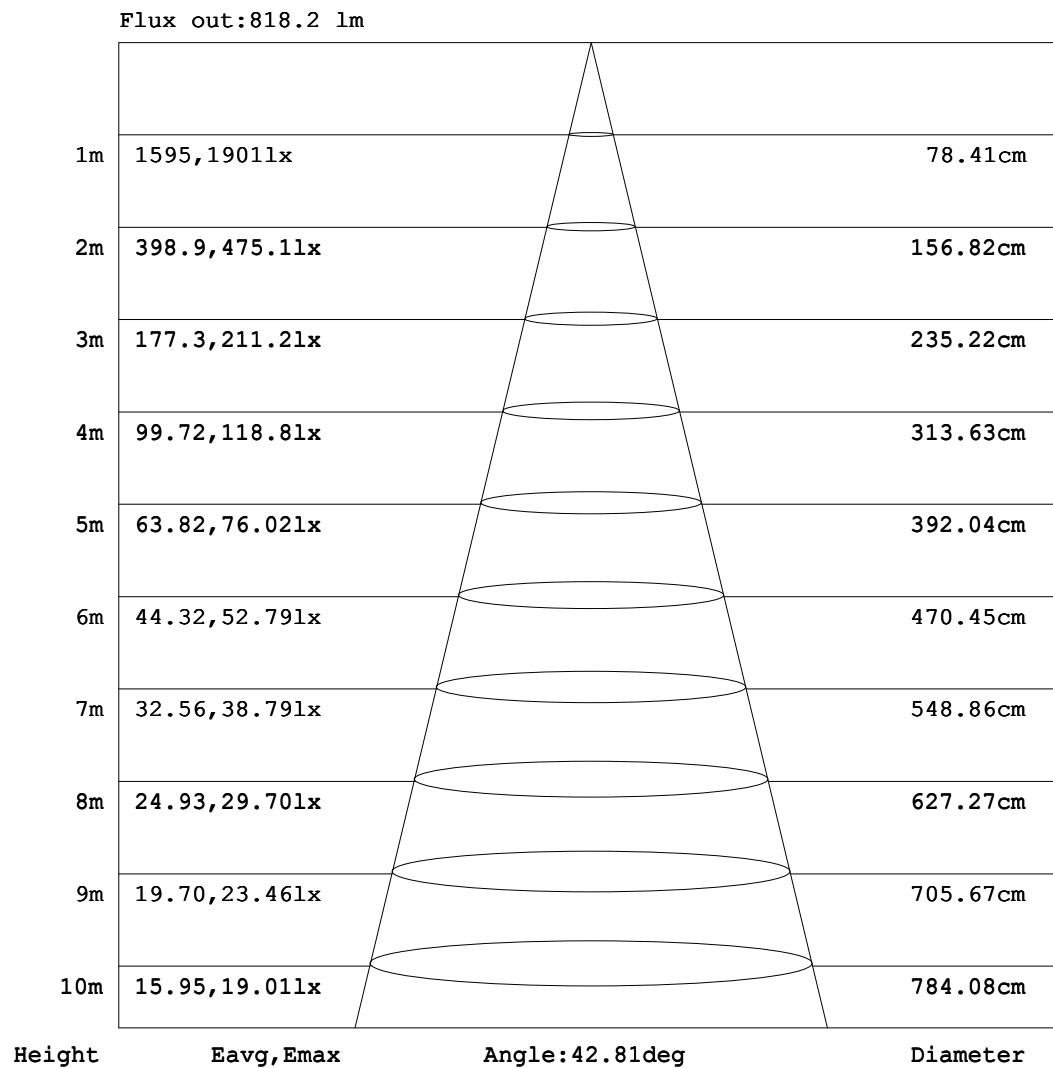


C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1℃
Operators:
Test Date:2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity:50.0%
Test Distance:10.026m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:



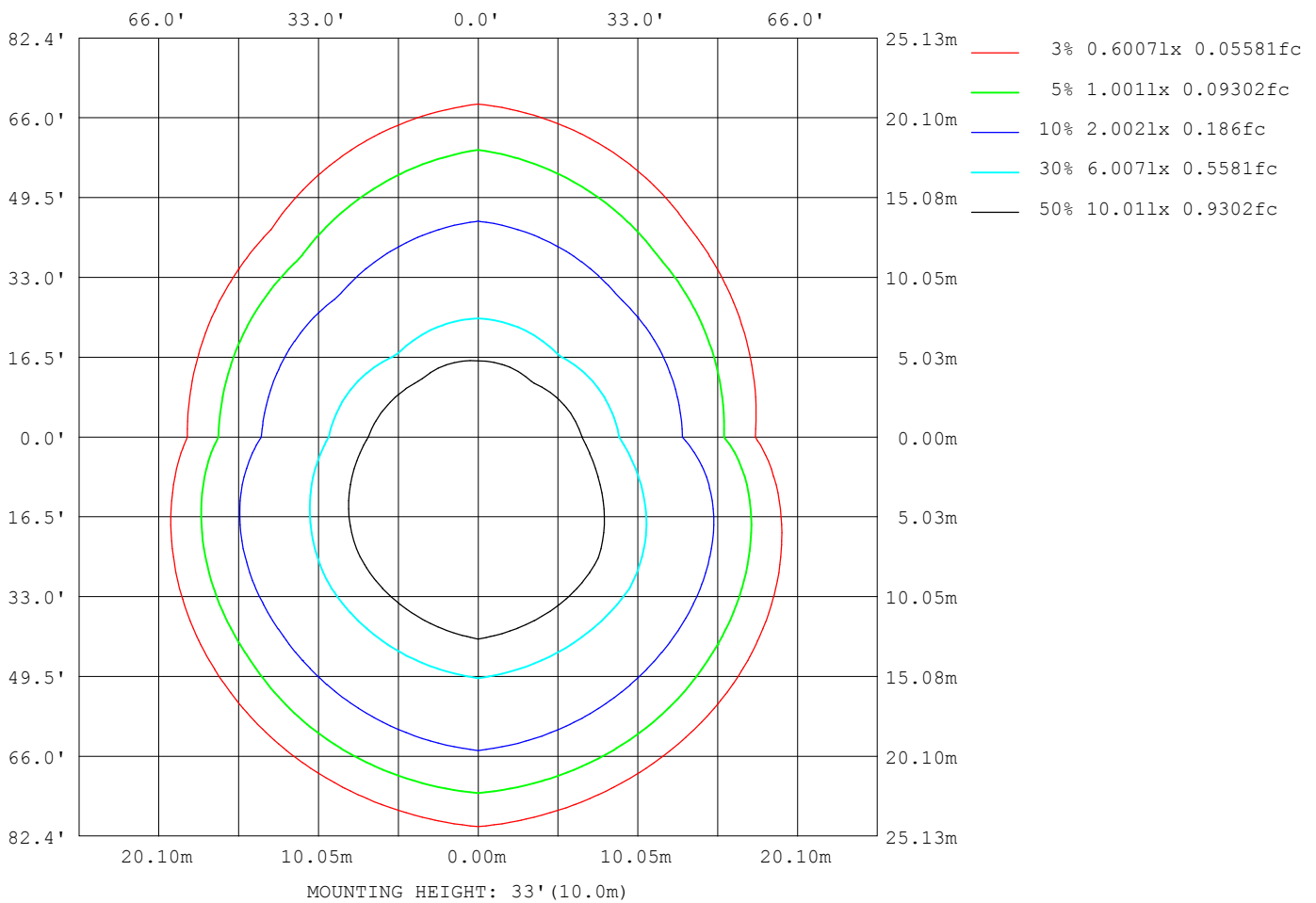
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1℃
Operators:
Test Date:2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity:50.0%
Test Distance:10.026m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.1°C
Operators:
Test Date: 2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity: 50.0%
Test Distance: 10.026m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:

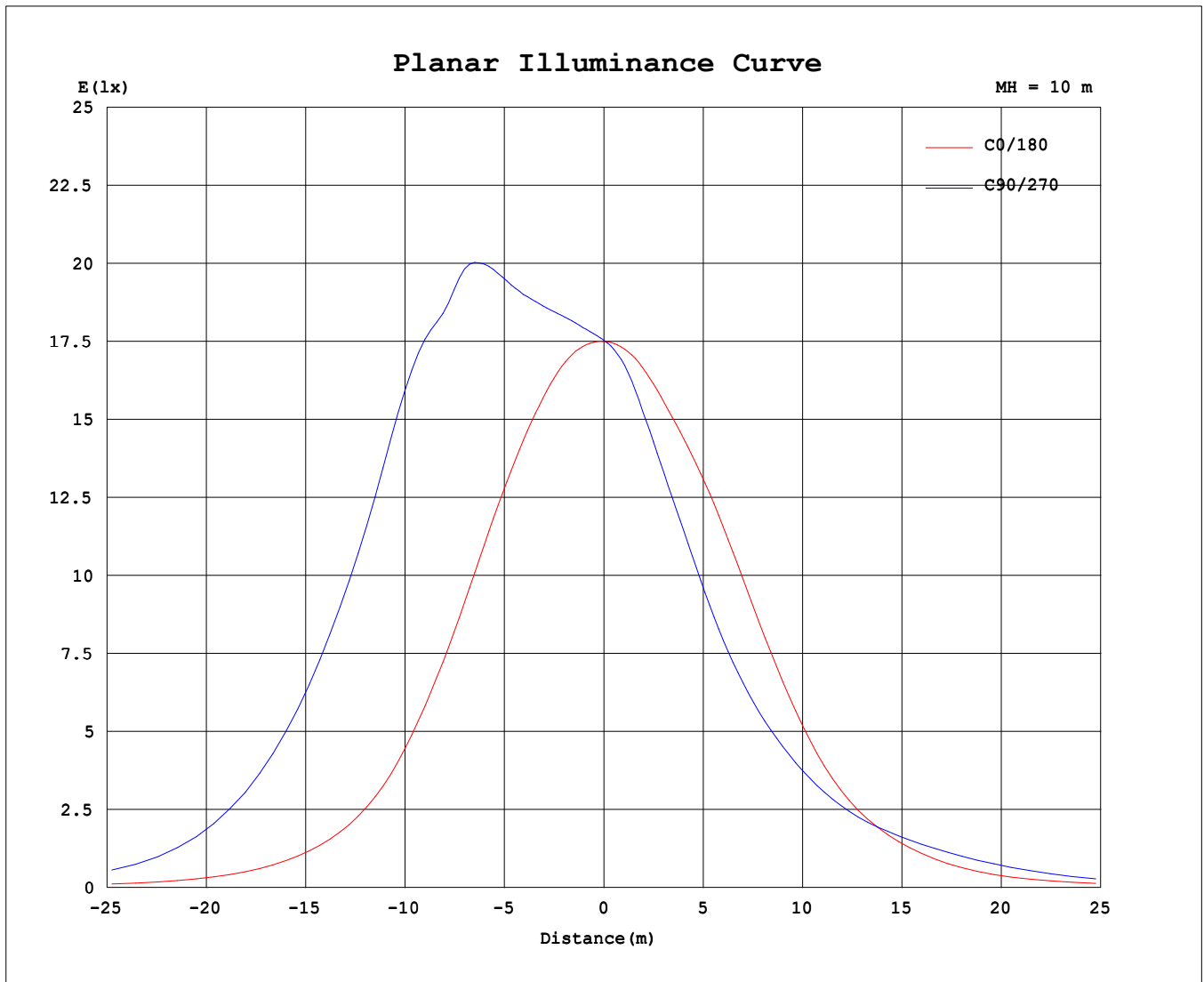
AvgL	cd/m2
L_0~180 (65) av	30027
L_0~180 (75) av	17033
L_0~180 (85) av	5059
L_90~270 (65) av	107651
L_90~270 (75) av	39964
L_90~270 (85) av	8394
L_45 (65) av	64772
L_45 (75) av	24715
L_45 (85) av	6829

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.1℃
Operators:
Test Date:2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity:50.0%
Test Distance:10.026m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.1°C
Operators:
Test Date: 2024-12-19

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity: 50.0%
Test Distance: 10.026m [K=1.0000]
Remarks:

Test:U:230.38V I:0.2361A P:49.729W PF:0.9143 Freq:50.01Hz Lamp Flux:6794.26x1 lm		
NAME: HLK-100W	TYPE: 50*100D	WEIGHT:
SPEC.: 3000K-RA80-170L	DIM.:	SERIAL No.:
MFR.:	SUR.: 0.221m*0.121m	Shielding Angle:

UNIT: cd

[illegible]

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.462
Humidity:50.0%
Test Distance:10.026m [K=1.0000]
Remarks:

```