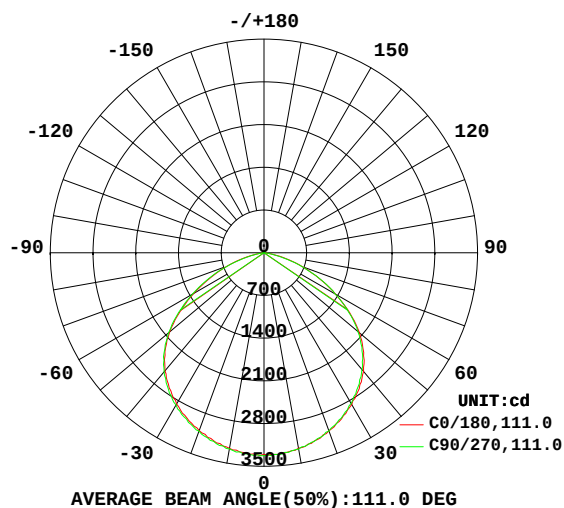


LUMINAIRE PHOTOMETRIC TEST REPORT

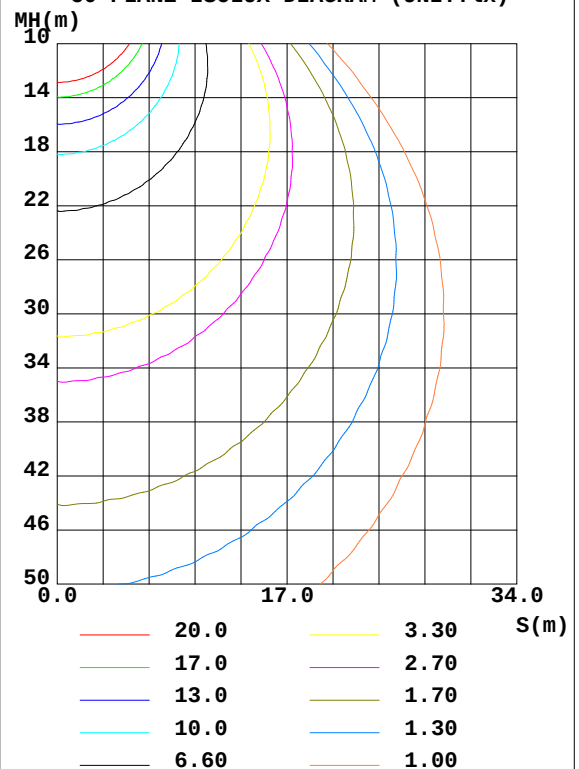
Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.52 lm/W			
MODEL	2835 3000K	I _{max} (cd)	3332	S/MH(C0/180)	1.29
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	8973.2	η UP, DN(C0-180)	0.0, 50.0
NOMINAL FLUX(lm)	8973.21	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	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: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-04-10

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

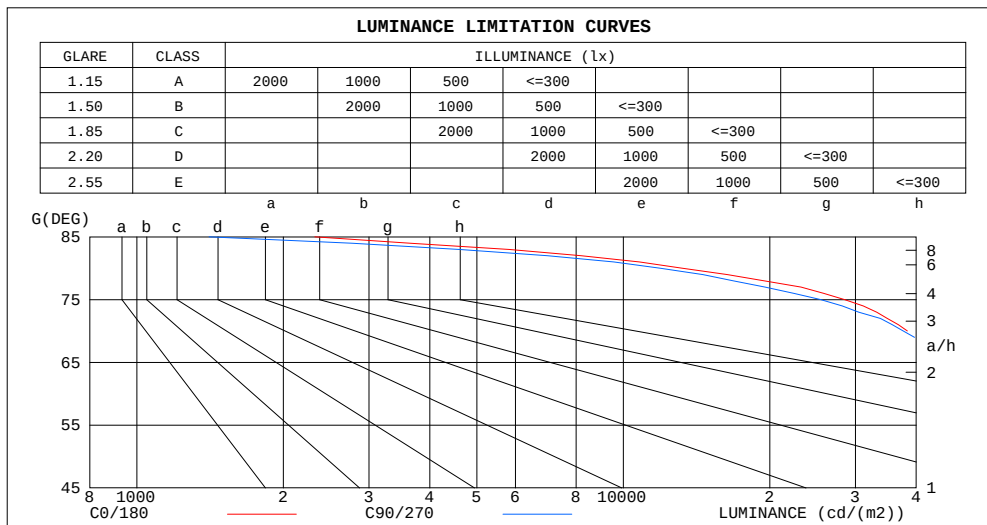
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3252	3268	3268	3267	3254	3262	3265	3283	0- 10	314.2	314.2	3.5,3.5
20	3107	3112	3109	3104	3103	3102	3112	3126	10- 20	903.4	1218	13.6,13.6
30	2874	2860	2852	2843	2864	2862	2882	2893	20- 30	1384	2602	29,29
40	2540	2520	2499	2484	2525	2537	2546	2548	30- 40	1696	4298	47.9,47.9
50	2044	2024	2006	2003	2018	2042	2040	2039	40- 50	1769	6067	67.6,67.6
60	1345	1363	1344	1344	1320	1336	1354	1369	50- 60	1516	7583	84.5,84.5
70	669.9	680.2	656.9	644.1	645.1	645.2	636.5	692.8	60- 70	987.0	8570	95.5,95.5
80	117.1	109.6	105.5	97.73	101.1	83.27	98.94	106.9	70- 80	376.9	8947	99.7,99.7
90	2.958	2.968	2.940	3.133	3.528	3.500	3.390	3.367	80- 90	25.80	8973	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		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.880m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2322	1407
80	13209	11898
75	28476	25430
70	38353	37610
65	46341	46714
60	52686	52617
55	58465	57767
50	62253	61117
45	64017	62931

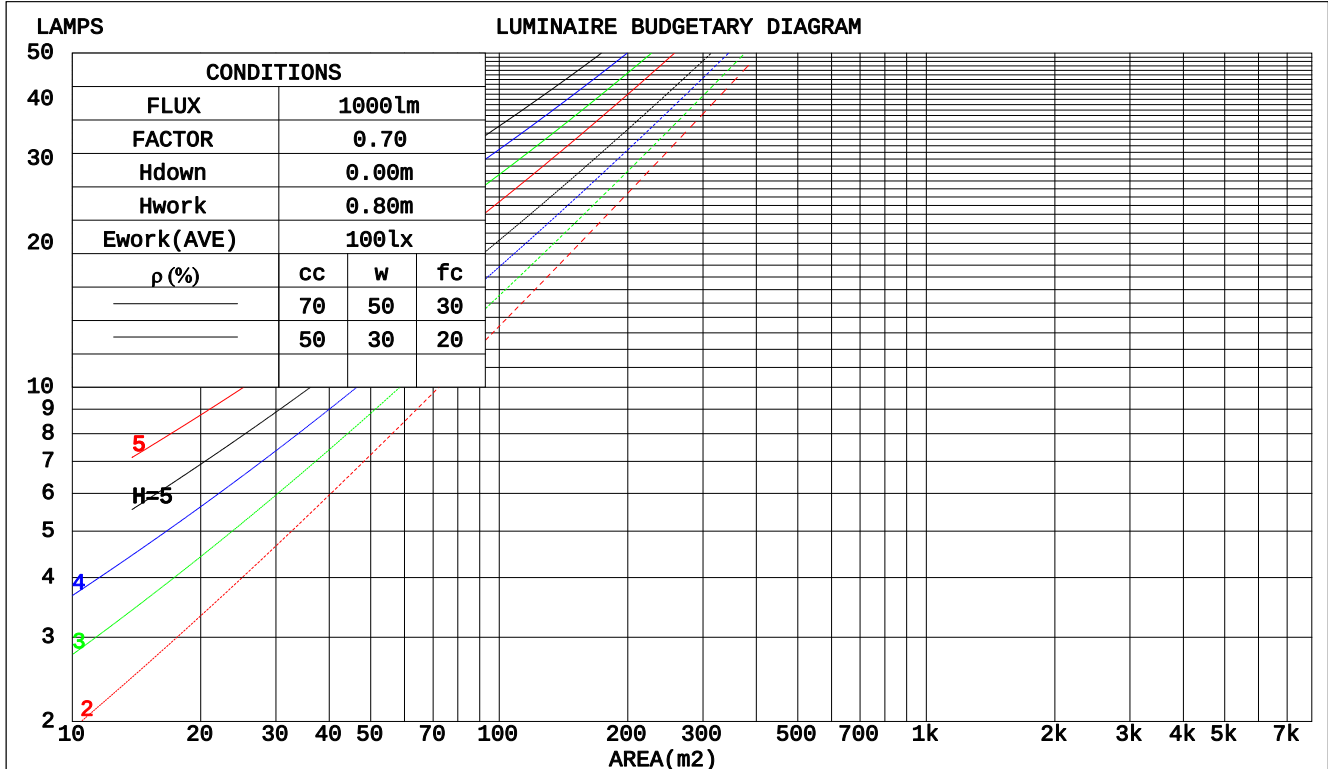
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-04-10

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	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			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	1.06	1.02	.98	1.03	.99	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.83	.78	.84	.80	.77	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.75	.69	.65	.72	.68	.64	.62
4.0	.73	.64	.58	.71	.64	.57	.69	.62	.57	.67	.61	.56	.64	.59	.55	.53
5.0	.65	.56	.50	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.52	.48	.46
6.0	.59	.50	.44	.58	.49	.43	.56	.48	.43	.54	.48	.43	.53	.47	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.51	.43	.38	.49	.43	.38	.48	.42	.38	.36
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.39	.34	.44	.38	.34	.32
9.0	.44	.36	.31	.44	.36	.31	.43	.36	.31	.42	.35	.30	.41	.35	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.33	.28	.39	.32	.28	.38	.32	.28	.26



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm					
NAME: KD008-BKTCTP100-60			TYPE:		WEIGHT:
SPEC.: black RA80 3000K+6000K			DIM.:		SERIAL No.:
MFR.:			SUR.: 255mm		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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.276	.157	.050	.269	.154	.049	.256	.147	.047	.244	.141	.045	.233	.135	.044		
2.0	.269	.148	.045	.263	.145	.045	.252	.140	.043	.241	.135	.042	.231	.131	.041		
3.0	.254	.135	.040	.249	.133	.040	.238	.129	.039	.229	.125	.038	.220	.122	.038		
4.0	.237	.123	.036	.233	.122	.036	.224	.119	.035	.215	.116	.035	.208	.113	.034		
5.0	.222	.113	.033	.217	.112	.033	.209	.109	.032	.202	.107	.032	.195	.104	.031		
6.0	.207	.104	.030	.203	.103	.030	.196	.100	.029	.189	.098	.029	.183	.096	.029		
7.0	.194	.096	.027	.190	.095	.027	.184	.093	.027	.178	.091	.027	.172	.089	.026		
8.0	.182	.089	.025	.179	.088	.025	.173	.086	.025	.167	.085	.024	.162	.083	.024		
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.153	.078	.023		
10.0	.161	.077	.021	.158	.077	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021		

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						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	.152	.134	.118	.104	.092	.082	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.099	.066	.095	.068	.047	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.133	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.127	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.105	.056	.022	.072	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm											
NAME: KD008-BKTCTP100-60					TYPE:			WEIGHT:			
SPEC.: black RA80 3000K+6000K					DIM.:			SERIAL No.:			
MFR.:					SUR.: 255mm			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	2H	19.4	20.9	19.7	21.1	21.3	19.4	20.9	19.7	21.1	21.3
	3H	20.4	21.8	20.7	22.0	22.3	20.4	21.8	20.7	22.0	22.2
	4H	20.7	22.0	21.0	22.2	22.5	20.6	21.9	20.9	22.1	22.4
	6H	20.7	21.9	21.1	22.2	22.5	20.6	21.8	20.9	22.1	22.4
	8H	20.7	21.9	21.0	22.1	22.4	20.6	21.7	20.9	22.0	22.3
	12H	20.6	21.8	21.0	22.0	22.3	20.5	21.6	20.9	21.9	22.2
4H	2H	19.9	21.2	20.2	21.4	21.7	19.9	21.2	20.2	21.4	21.7
	3H	21.1	22.2	21.4	22.5	22.8	21.0	22.1	21.4	22.4	22.7
	4H	21.4	22.4	21.8	22.7	23.0	21.3	22.3	21.7	22.6	23.0
	6H	21.5	22.4	21.9	22.7	23.1	21.3	22.2	21.7	22.6	22.9
	8H	21.4	22.3	21.8	22.6	23.0	21.3	22.1	21.7	22.5	22.9
	12H	21.4	22.2	21.8	22.5	22.9	21.3	22.0	21.7	22.4	22.8
8H	4H	21.5	22.3	21.9	22.6	23.0	21.4	22.2	21.8	22.6	22.9
	6H	21.6	22.2	22.0	22.6	23.1	21.4	22.1	21.9	22.5	22.9
	8H	21.5	22.1	22.0	22.6	23.0	21.4	22.0	21.9	22.4	22.9
	12H	21.5	22.0	22.0	22.5	22.9	21.4	21.9	21.9	22.3	22.8
12H	4H	21.4	22.2	21.8	22.6	23.0	21.3	22.1	21.8	22.5	22.9
	6H	21.5	22.1	22.0	22.6	23.0	21.4	22.0	21.9	22.4	22.9
	8H	21.5	22.0	22.0	22.5	23.0	21.4	21.9	21.9	22.3	22.8
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					
1.5H	+ 0.3 / - 0.6					+ 0.3 / - 0.6					
2.0H	+ 0.5 / - 0.4					+ 0.5 / - 0.4					

CIE Pub.117, 8973 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 7.6)
Area: 0.05107 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-04-10

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

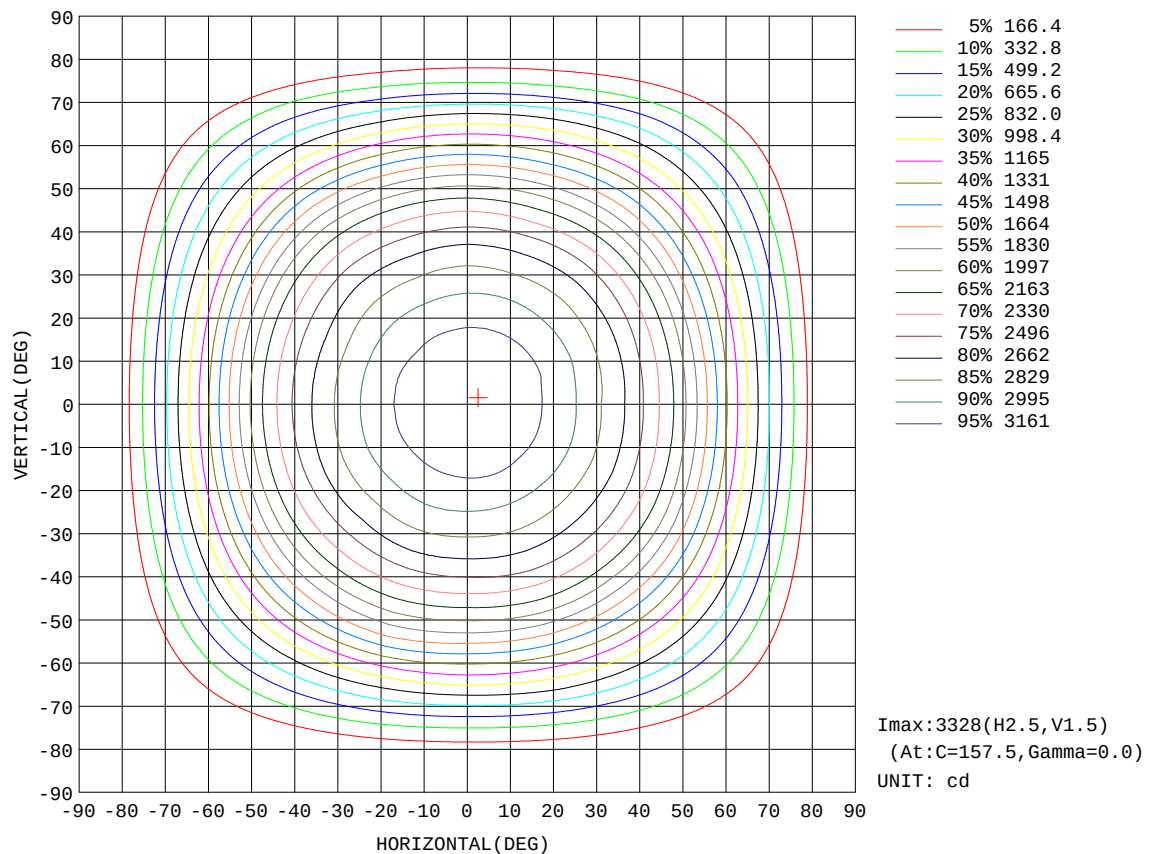
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	58	47	41	57	47	41	34
0.80	69	58	51	68	58	51	67	57	51	44
1.00	78	68	61	77	67	60	75	68	60	53
1.25	85	76	69	84	75	68	81	73	68	61
1.50	90	81	75	89	80	74	86	79	73	66
2.00	97	89	83	95	88	83	92	86	81	74
2.50	101	94	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	103	98	105	101	97	101	97	94	86
5.00	110	106	102	108	104	100	103	100	97	88
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: HIGH
Temperature:25DEG
Operators:
Test Date:2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

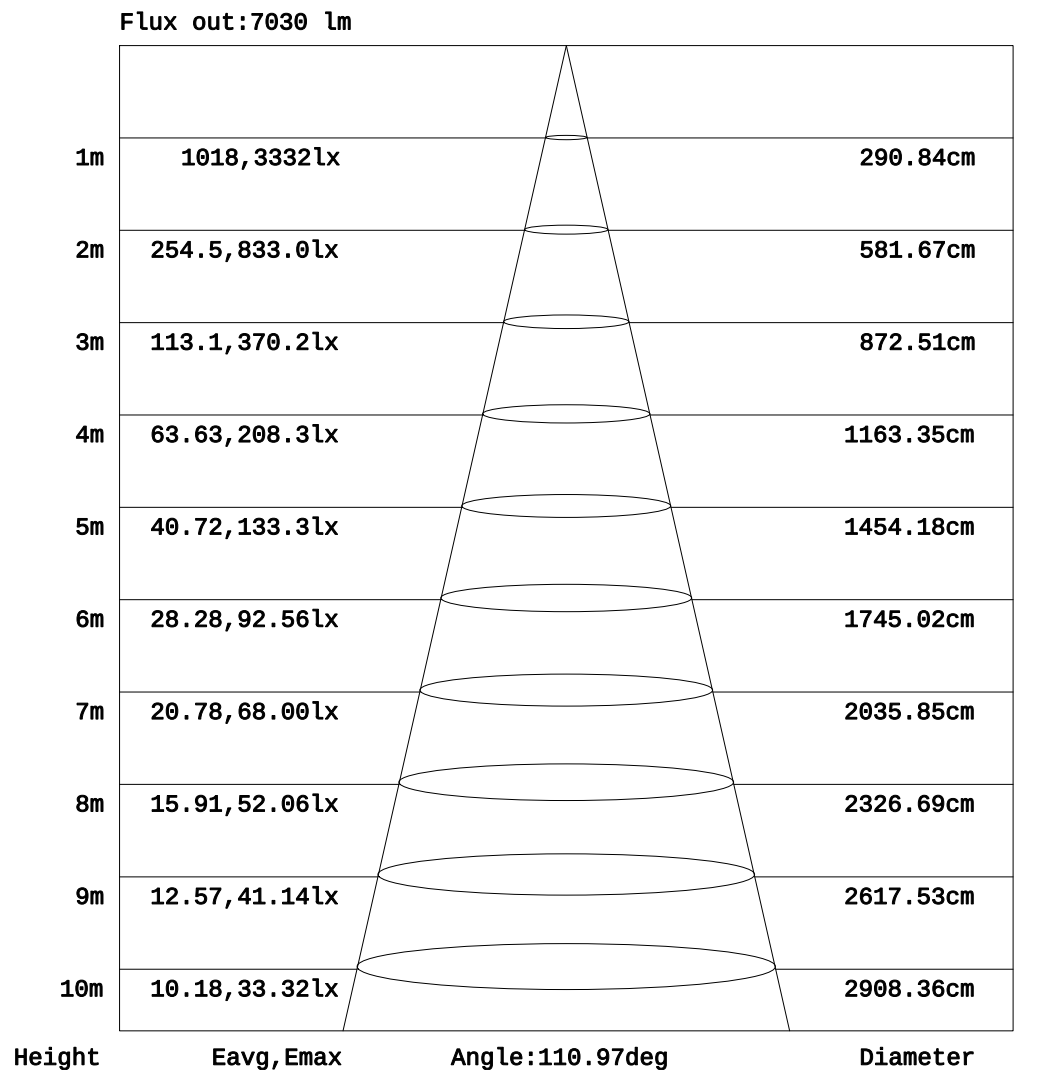


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:



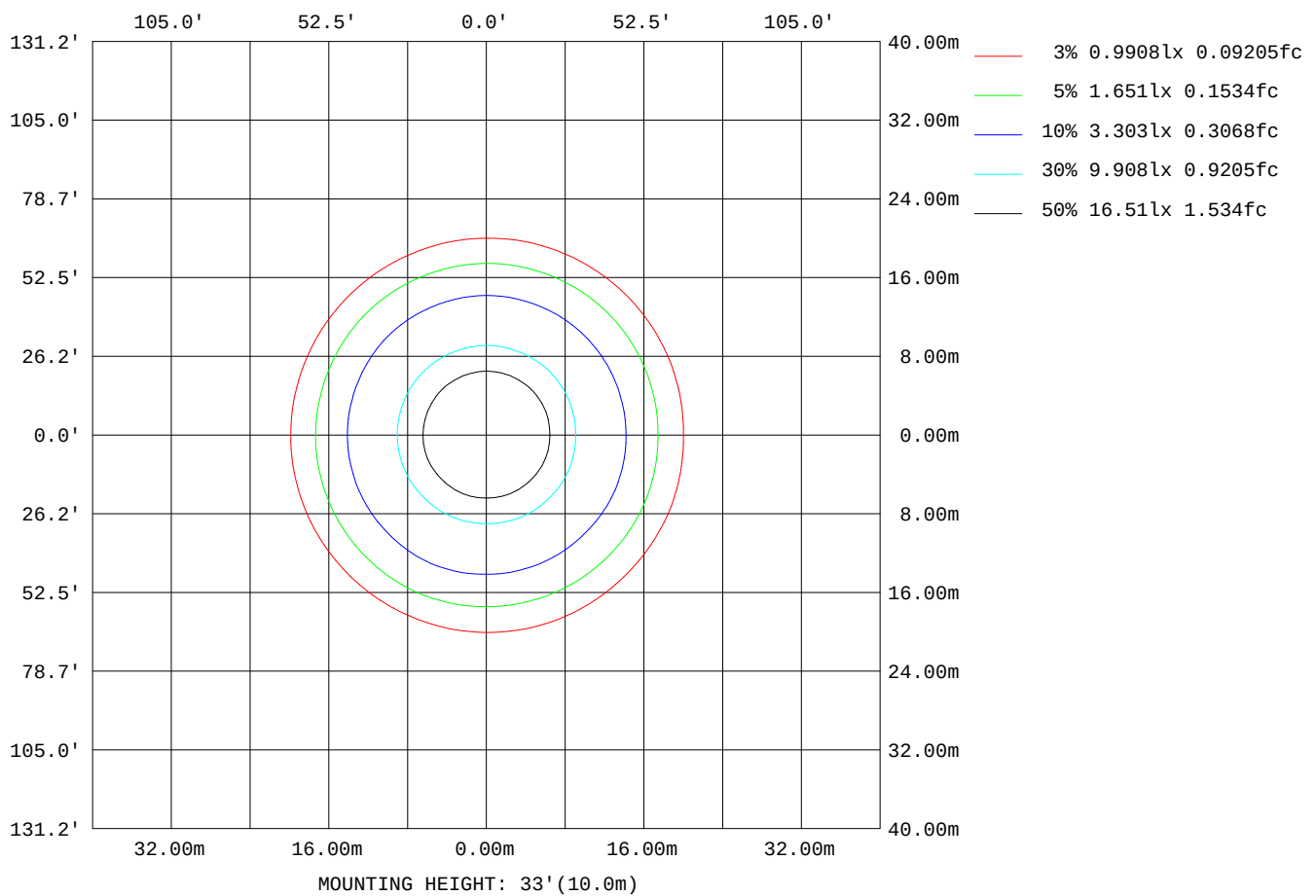
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.880m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-04-10

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.43V I:0.2777A P:59.617W PF:0.9318 Freq:49.99Hz Lamp Flux:8973.21x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

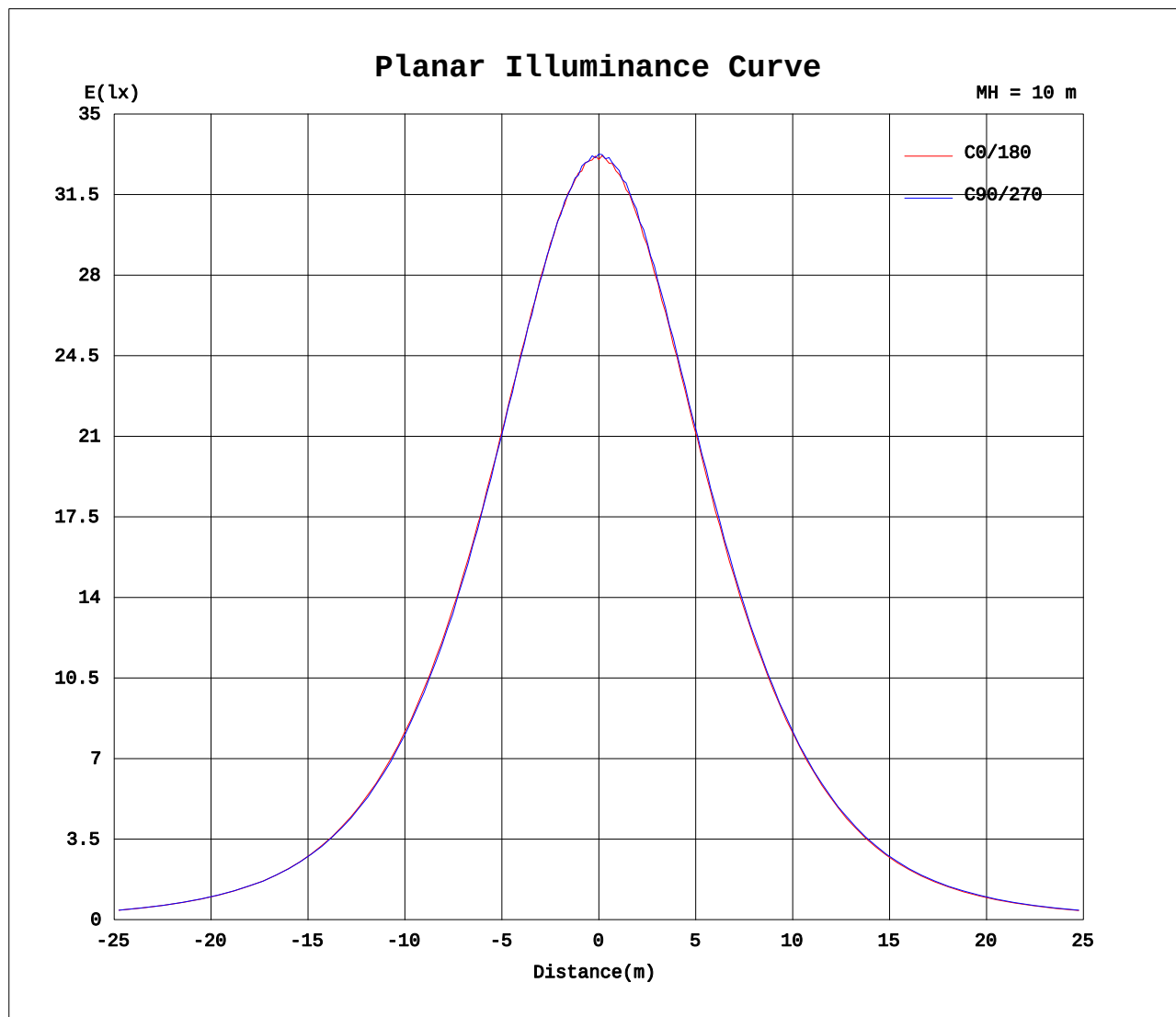
AvgL	cd/m2
L_0~180(65)av	45548
L_0~180(75)av	27445
L_0~180(85)av	2041
L_90~270(65)av	46504
L_90~270(75)av	24365
L_90~270(85)av	1271
L_45(65)av	46197
L_45(75)av	26529
L_45(85)av	1645

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.428
 Humidity:65.0%
 Test Distance:7.880m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-04-10

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.428
Humidity: 65.0%
Test Distance: 7.880m [K=1.0000]
Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.880m [K=1.0000]
Remarks:

```