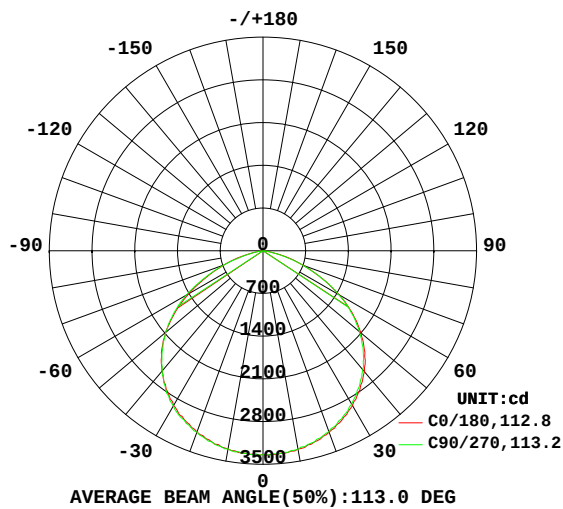


LUMINAIRE PHOTOMETRIC TEST REPORT

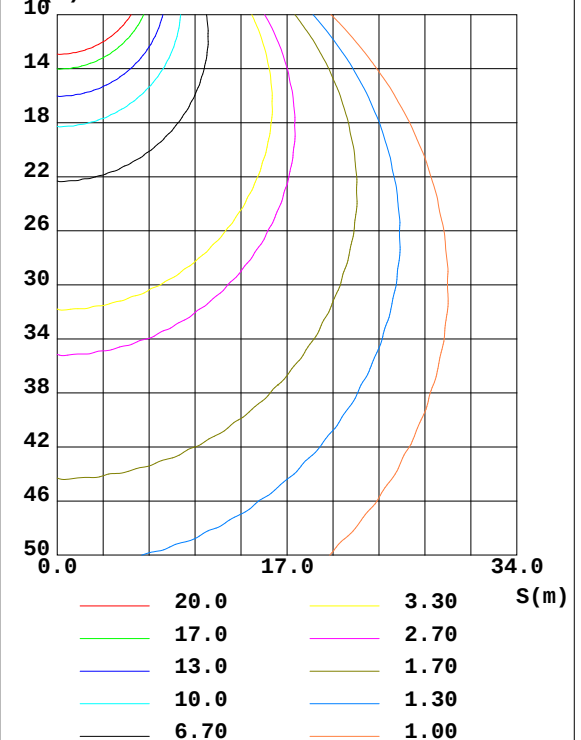
Test:U:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 154.36 lm/W			
MODEL	2835 6000K	I _{max} (cd)	3353	S/MH(C0/180)	1.30
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	9213.2	η UP, DN(C0-180)	0.0, 50.0
NOMINAL FLUX(lm)	9213.23	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:

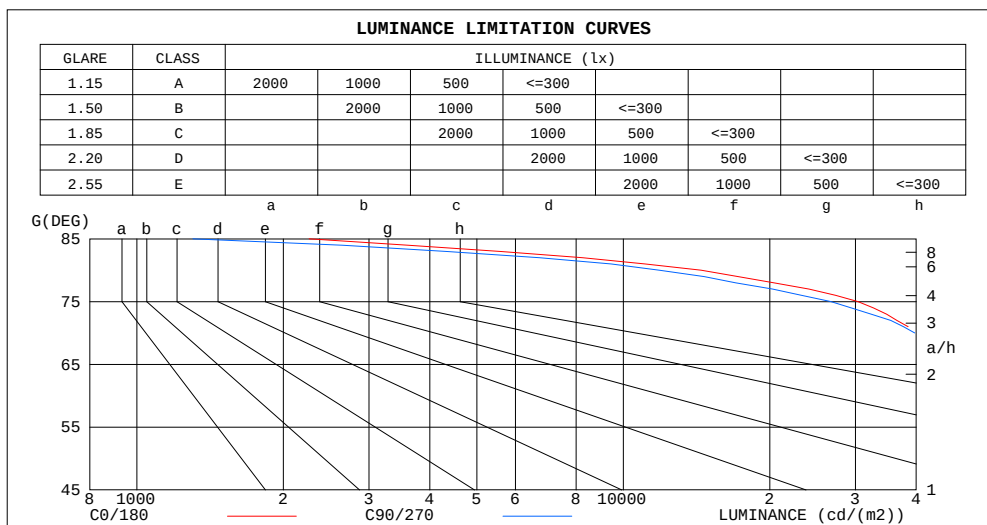
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	3299	3306	3304	3286	3300	3311	3298	3307	0- 10	317.3	317.3	3.44, 3.44
20	3164	3156	3156	3141	3161	3169	3162	3178	10- 20	916.2	1234	13.4, 13.4
30	2933	2903	2906	2901	2927	2926	2938	2952	20- 30	1408	2642	28.7, 28.7
40	2586	2558	2548	2546	2577	2576	2571	2577	30- 40	1725	4367	47.4, 47.4
50	2096	2085	2062	2059	2086	2086	2082	2091	40- 50	1803	6170	67, 67
60	1435	1458	1432	1400	1399	1418	1450	1459	50- 60	1581	7751	84.1, 84.1
70	702.5	708.2	693.6	681.9	679.6	669.3	670.8	713.1	60- 70	1042	8793	95.4, 95.4
80	128.2	110.0	105.1	97.47	102.8	85.97	98.01	106.9	70- 80	394.1	9188	99.7, 99.7
90	3.138	3.142	3.101	3.289	3.689	3.675	3.551	3.523	80- 90	25.67	9213	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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 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	2260	1303
80	14452	11848
75	30344	26696
70	40217	39710
65	48847	48890
60	56200	56061
55	61152	60297
50	63842	62828
45	65437	64361

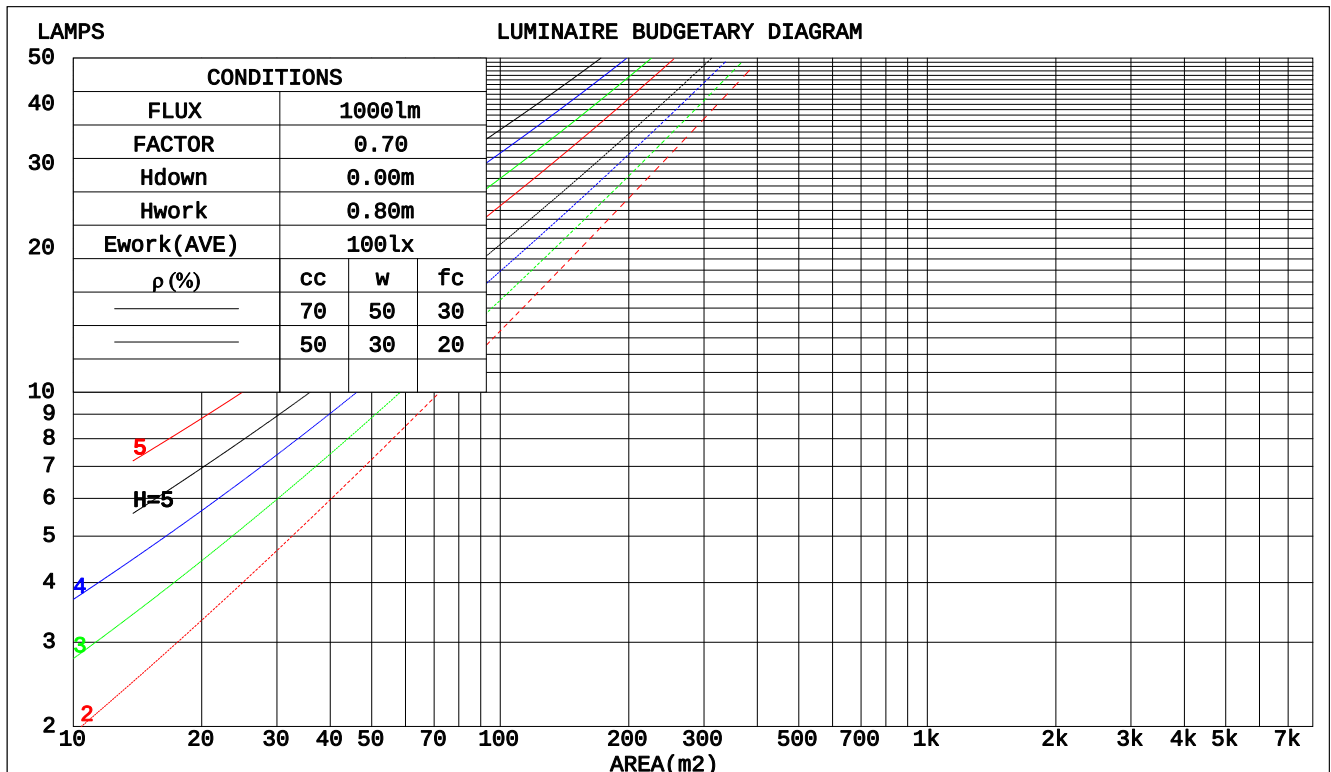
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2025-04-10

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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 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	.00
1.0	1.06	1.02	.98	1.03	.90	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.74	.69	.65	.72	.67	.64	.62
4.0	.72	.64	.58	.71	.63	.57	.69	.62	.56	.66	.60	.56	.64	.59	.55	.53
5.0	.65	.56	.50	.64	.55	.49	.62	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.58	.50	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 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	.278	.158	.050	.271	.155	.049	.258	.148	.047	.246	.142	.045	.235	.136	.044	
2.0	.271	.148	.046	.265	.146	.045	.253	.141	.044	.242	.136	.043	.233	.132	.041	
3.0	.255	.136	.041	.250	.134	.040	.240	.130	.039	.230	.126	.039	.222	.123	.038	
4.0	.239	.124	.036	.234	.122	.036	.225	.119	.036	.216	.116	.035	.209	.113	.035	
5.0	.223	.113	.033	.218	.112	.033	.210	.109	.032	.203	.107	.032	.196	.105	.031	
6.0	.208	.104	.030	.204	.103	.030	.197	.101	.029	.190	.099	.029	.184	.097	.029	
7.0	.194	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.173	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.154	.078	.023	
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.073	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.081	.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	.162	.114	.076	.139	.099	.066	.095	.068	.046	.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	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.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	.122	.064	.026	.105	.056	.022	.073	.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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 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	19.6	21.1	19.8	21.3	21.5	19.5	21.0	19.8	21.2	21.4
	3H	20.6	21.9	20.9	22.2	22.4	20.5	21.9	20.8	22.1	22.4
	4H	20.9	22.1	21.2	22.4	22.6	20.7	22.0	21.1	22.3	22.5
	6H	20.9	22.1	21.2	22.4	22.6	20.7	22.0	21.1	22.2	22.5
	8H	20.8	22.0	21.2	22.3	22.6	20.7	21.9	21.0	22.1	22.4
	12H	20.8	21.9	21.1	22.2	22.5	20.7	21.8	21.0	22.1	22.4
4H	2H	20.1	21.3	20.4	21.6	21.8	20.0	21.3	20.3	21.6	21.8
	3H	21.2	22.3	21.6	22.6	22.9	21.2	22.3	21.5	22.6	22.9
	4H	21.5	22.6	21.9	22.9	23.2	21.4	22.4	21.8	22.8	23.1
	6H	21.6	22.5	22.0	22.9	23.2	21.5	22.4	21.9	22.7	23.1
	8H	21.6	22.4	22.0	22.8	23.2	21.4	22.3	21.8	22.6	23.0
	12H	21.5	22.3	22.0	22.7	23.1	21.4	22.2	21.8	22.5	22.9
8H	4H	21.6	22.4	22.0	22.8	23.2	21.5	22.3	21.9	22.7	23.1
	6H	21.7	22.4	22.2	22.8	23.2	21.6	22.2	22.0	22.6	23.1
	8H	21.7	22.3	22.1	22.7	23.2	21.5	22.1	22.0	22.6	23.0
	12H	21.7	22.2	22.1	22.6	23.1	21.5	22.0	22.0	22.5	22.9
12H	4H	21.6	22.3	22.0	22.7	23.1	21.5	22.2	21.9	22.6	23.0
	6H	21.7	22.3	22.1	22.7	23.2	21.5	22.1	22.0	22.6	23.0
	8H	21.7	22.2	22.1	22.6	23.1	21.5	22.0	22.0	22.5	23.0
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4					
1.5H	+ 0.3 / - 0.5					+ 0.3 / - 0.6					
2.0H	+ 0.5 / - 0.5					+ 0.4 / - 0.4					

CIE Pub.117, 9213 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 7.7)
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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

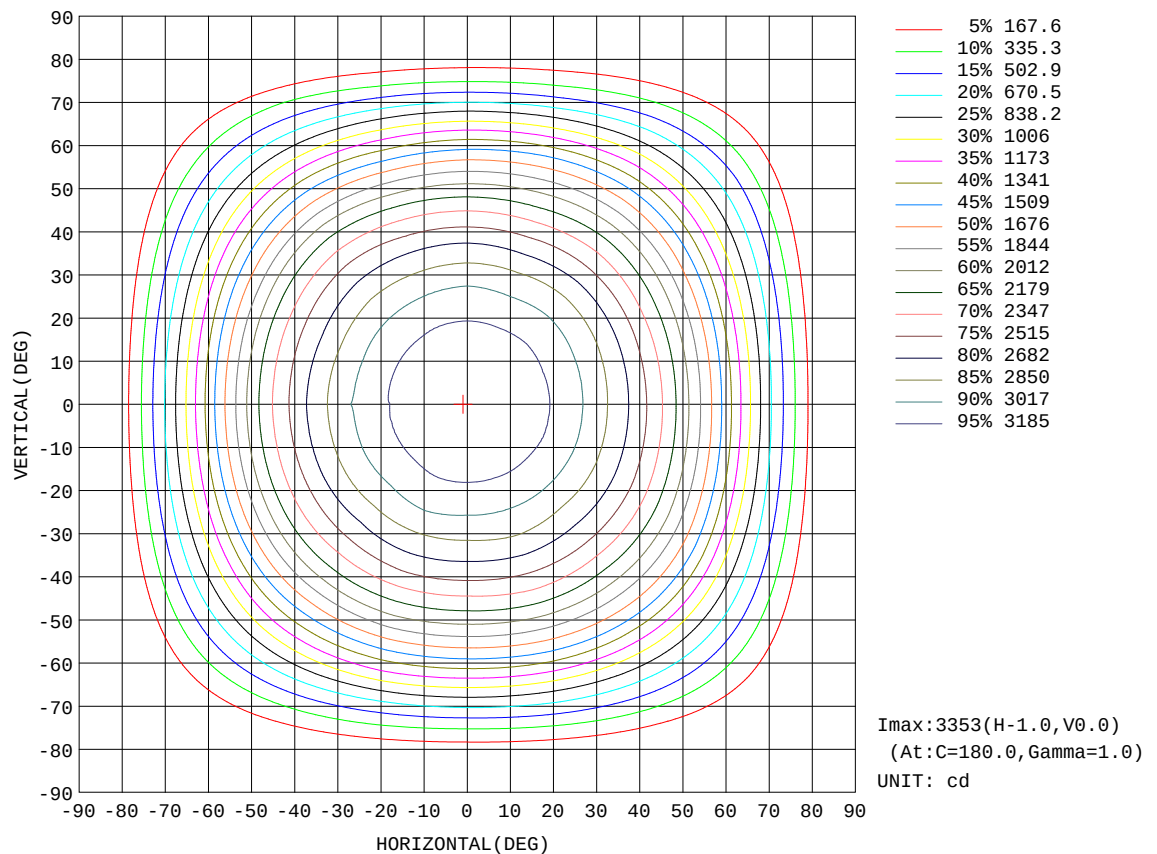
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	47	40	58	47	40	57	47	40	34
0.80	69	58	51	68	57	51	66	57	50	43
1.00	78	67	60	77	67	60	75	68	60	53
1.25	85	75	68	84	75	68	81	73	67	60
1.50	90	81	74	89	80	74	86	78	73	66
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	93	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	105	102	107	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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:



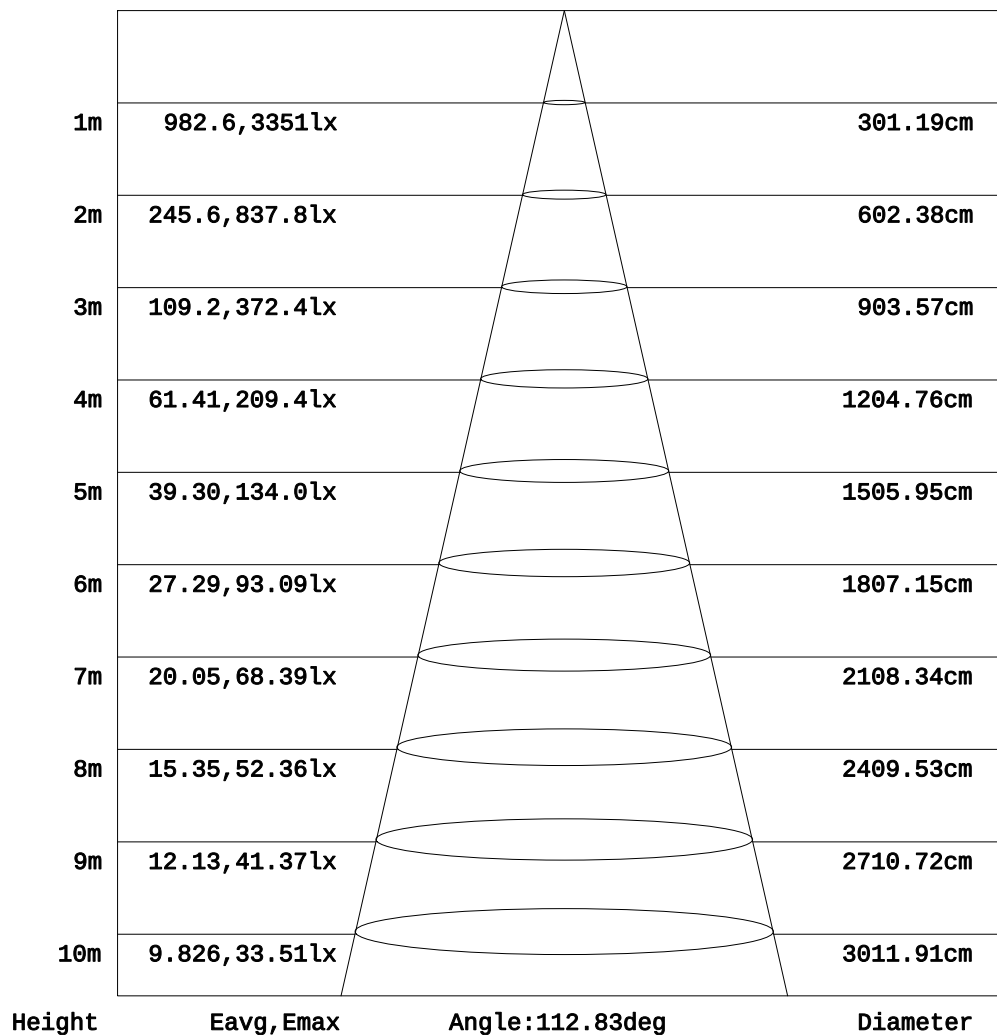
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2025-04-10

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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

Flux out:7320 lm



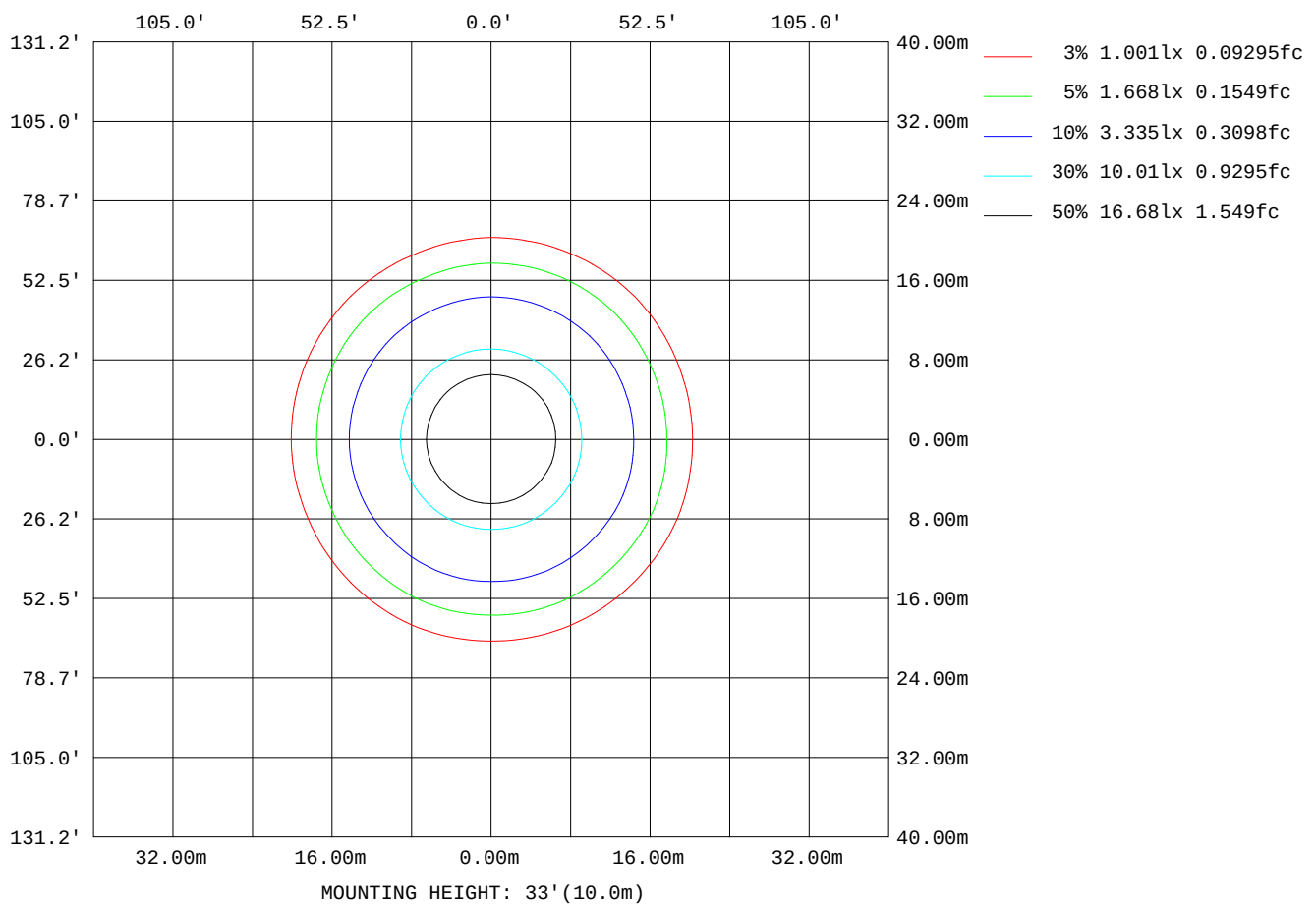
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 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:230.42V I:0.2779A P:59.687W PF:0.9321 Freq:49.99Hz Lamp Flux:9213.23x1 lm		
NAME: KD008-BKTCTP100-60	TYPE:	WEIGHT:
SPEC.: black RA80 3000K+6000K	DIM.:	SERIAL No.:
MFR.:	SUR.: 255mm	Shielding Angle:

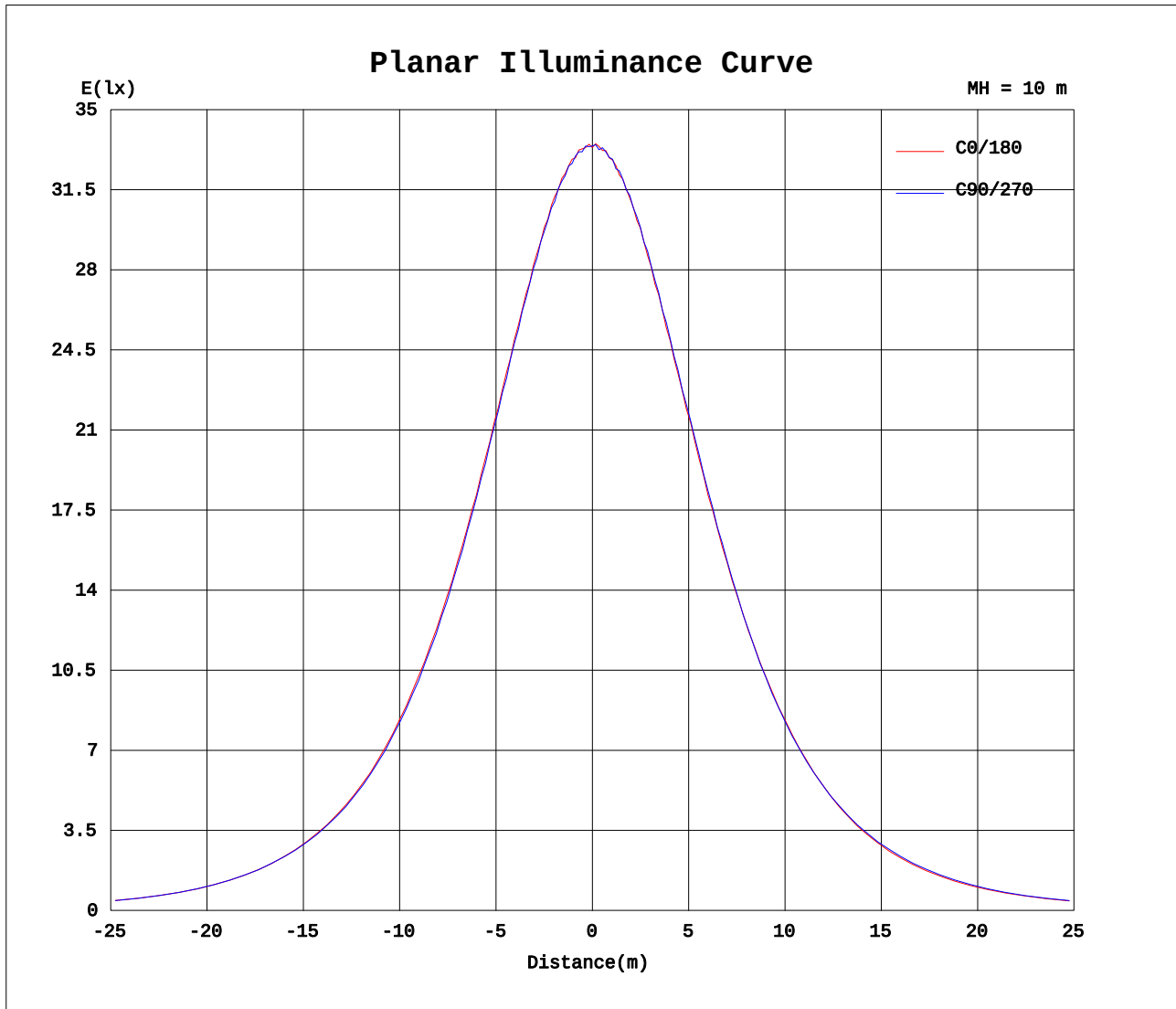
AvgL	cd/m2
L_0~180(65)av	48052
L_0~180(75)av	29128
L_0~180(85)av	1989
L_90~270(65)av	48856
L_90~270(75)av	25561
L_90~270(85)av	1223
L_45(65)av	48873
L_45(75)av	28155
L_45(85)av	1582

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:

```

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

```