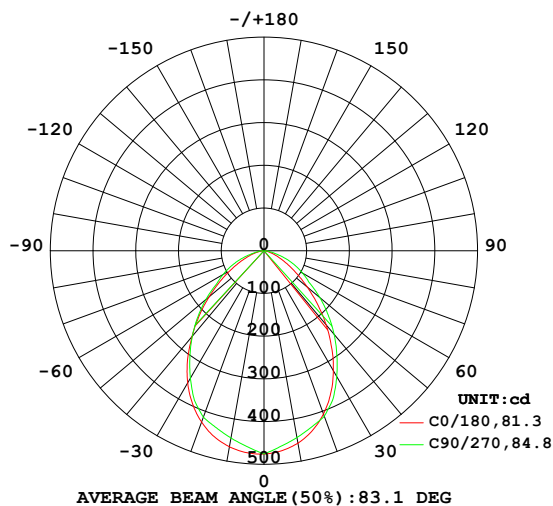


## LUMINAIRE PHOTOMETRIC TEST REPORT

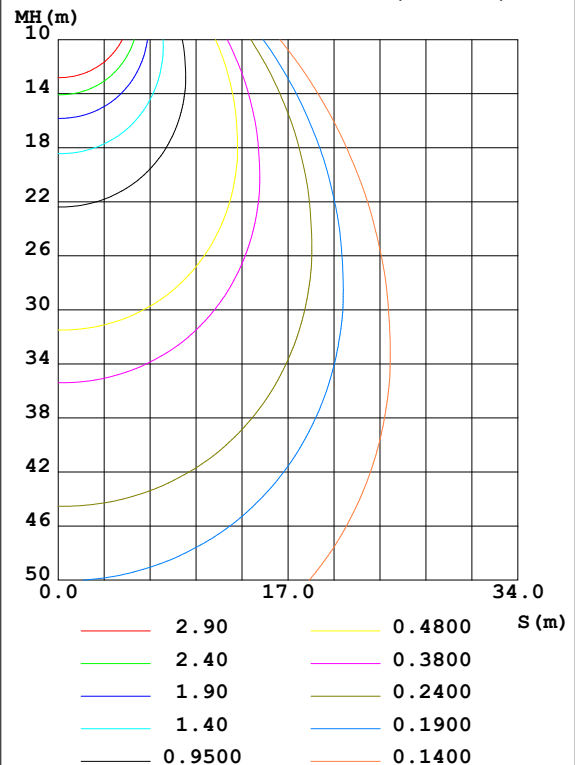
Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.57 lm/W			
MODEL	SMD 2835/LED	I <sub>max</sub> (cd)	476.1	S/MH (C0/180)	1.06
NOMINAL POWER (W)	10.4	LOR (%)	100.0	S/MH (C90/270)	1.09
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	889.93	$\eta$ UP, DN (C0-180)	0.0, 50.5
NOMINAL FLUX (lm)	889.928	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 49.5
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	120.8	$\eta$ down (%)	100.0	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H( $\beta$ ) Range: -90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: yang  
Test Date: 2024-07-26

V(B) Range: -90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity: 65.0%  
Test Distance: 8.345m [K=1.0330]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	466.1	451.2	445.3	442.8	457.3	441.9	444.2	450.3	0- 10	43.79	43.79	4.92,4.92
20	427.0	414.8	414.8	394.1	406.7	392.4	412.6	413.1	10- 20	121.1	164.9	18.5,18.5
30	357.2	356.6	344.7	331.3	324.7	329.0	340.8	353.5	20- 30	173.0	337.9	38,38
40	262.2	266.9	261.3	240.9	226.3	238.6	255.6	263.0	30- 40	184.1	522.0	58.7,58.7
50	167.6	178.6	177.8	154.4	132.5	152.0	171.0	174.2	40- 50	158.3	680.3	76.4,76.4
60	90.04	103.1	110.2	82.25	64.12	79.89	104.2	99.18	50- 60	110.8	791.1	88.9,88.9
70	39.41	52.12	58.60	37.42	25.36	35.84	54.48	49.58	60- 70	64.99	856.1	96.2,96.2
80	11.12	16.33	16.17	9.584	5.003	8.775	13.79	15.21	70- 80	27.87	884.0	99.3,99.3
90	0.0473	1.041	1.250	1.367	0.1791	0.1668	0.1668	0.2364	80- 90	5.970	889.9	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): 606.13 lm

%lum = 68.1%

%lamp = 68.1%

Conical surface Flux(120deg): 791.1 lm

%lum = 88.9%

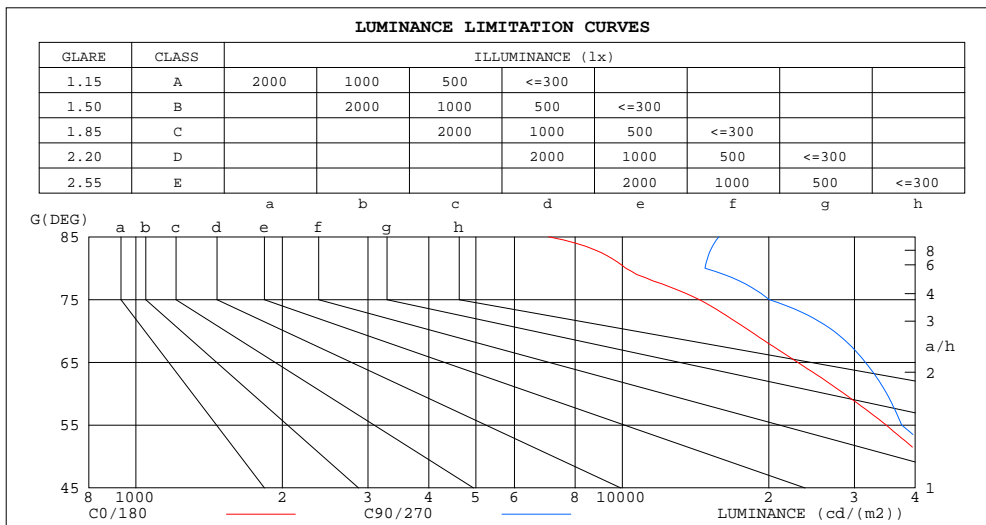
%lamp = 88.9%

H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:yang  
 Test Date:2024-07-26

V(B) Range:-90 - 90DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:8.345m [K=1.0330]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	7056	15794
80	10165	14785
75	14387	20034
70	18292	27194
65	22925	31601
60	28583	34978
55	34862	37528
50	41397	43909
45	48038	49203

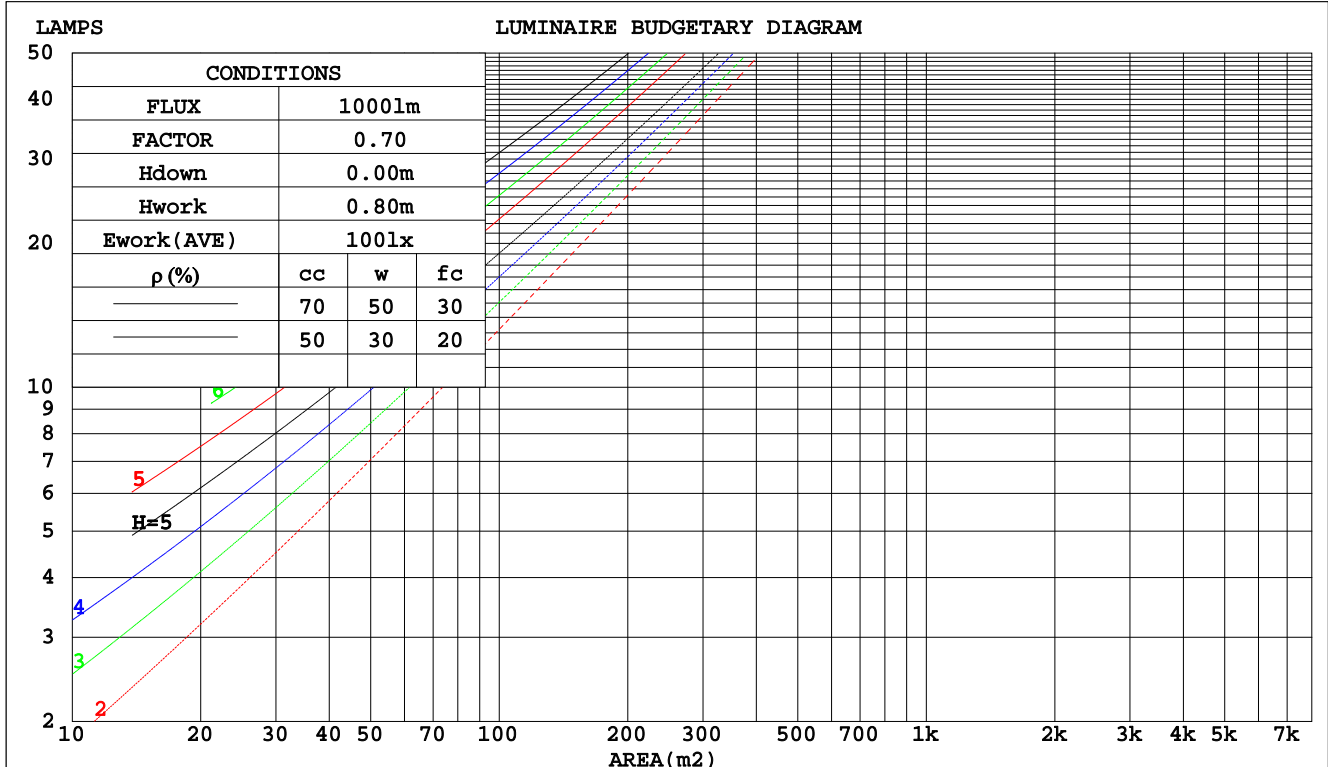
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:yang  
Test Date:2024-07-26

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	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	.00	1.04	1.01	.98	1.00	.98	.95	.96	.94	.92	.93	.91	.90	.88
2.0	.95	.89	.85	.93	.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	.76	.68	.63	.73	.67	.62	.71	.66	.61	.69	.64	.60	.58
5.0	.70	.62	.56	.69	.61	.55	.66	.60	.55	.65	.59	.54	.63	.58	.54	.52
6.0	.63	.55	.50	.62	.55	.49	.61	.54	.49	.59	.53	.49	.58	.52	.48	.46
7.0	.58	.50	.44	.57	.50	.44	.56	.49	.44	.54	.48	.44	.53	.48	.43	.42
8.0	.53	.46	.40	.53	.45	.40	.51	.45	.40	.50	.44	.40	.49	.44	.39	.38
9.0	.49	.42	.37	.49	.41	.37	.48	.41	.36	.47	.41	.36	.46	.40	.36	.34
10.0	.46	.38	.34	.45	.38	.33	.44	.38	.33	.43	.37	.33	.43	.37	.33	.31



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:yang  
Test Date:2024-07-26

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

## WEC AND CCEC

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi$ 132*44(MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi$ 90(MM)	Shielding Angle: 120°

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.255	.145	.046	.248	.142	.045	.235	.135	.043	.223	.129	.041	.212	.123	.040	
2.0	.246	.135	.041	.240	.132	.041	.229	.127	.039	.218	.122	.038	.209	.118	.037	
3.0	.232	.123	.037	.227	.121	.037	.217	.118	.036	.208	.114	.035	.199	.110	.034	
4.0	.218	.113	.033	.213	.111	.033	.204	.108	.032	.196	.105	.032	.189	.103	.031	
5.0	.204	.104	.030	.200	.103	.030	.192	.100	.029	.185	.098	.029	.178	.095	.029	
6.0	.191	.096	.027	.188	.095	.027	.181	.093	.027	.174	.091	.027	.168	.089	.026	
7.0	.180	.089	.025	.177	.088	.025	.171	.086	.025	.165	.085	.025	.159	.083	.024	
8.0	.170	.083	.023	.167	.082	.023	.161	.080	.023	.156	.079	.023	.151	.078	.023	
9.0	.160	.077	.022	.157	.077	.022	.153	.075	.021	.148	.074	.021	.143	.073	.021	
10.0	.151	.073	.020	.149	.072	.020	.145	.071	.020	.140	.070	.020	.136	.069	.020	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	.177	.157	.139	.151	.134	.119	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.166	.132	.104	.142	.114	.090	.098	.079	.062	.056	.046	.037	.018	.015	.012	
3.0	.157	.114	.080	.135	.098	.069	.093	.068	.048	.053	.040	.029	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.077	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.038	.017	.041	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

$H(\beta)$  Range:-90 - 90DEG  
 $H(\beta)$  Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:yang  
 Test Date:2024-07-26

$V(B)$  Range:-90 - 90DEG  
 $V(B)$  Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:8.345m [K=1.0330]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm												
NAME: AVD4-5CCT-WH					TYPE: Down light			WEIGHT: 0.3Kg				
SPEC.: 10W					DIM.: φ132*44 (MM)			SERIAL No.: 01				
MFR.: Signcomplex					SUR.: φ90 (MM)			Shielding Angle: 120°				
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	23.5	25.0	23.9	25.3	25.6	23.7	25.1	24.0	25.4	25.7		
	3H	24.4	25.7	24.8	26.1	26.4	25.2	26.5	25.6	26.8	27.2	
	4H	24.7	25.9	25.1	26.2	26.6	25.6	26.8	26.0	27.1	27.5	
	6H	24.8	25.9	25.2	26.3	26.7	25.8	26.9	26.2	27.2	27.6	
	8H	24.8	25.9	25.2	26.3	26.7	25.8	26.9	26.2	27.3	27.7	
	12H	24.8	25.8	25.2	26.2	26.6	25.9	26.9	26.3	27.3	27.7	
	4H	2H	24.0	25.2	24.4	25.6	25.9	23.8	25.0	24.2	25.8	
		3H	25.1	26.1	25.5	26.5	26.9	25.5	26.5	25.9	26.9	27.3
		4H	25.4	26.3	25.9	26.7	27.2	26.0	26.9	26.4	27.3	27.8
		6H	25.6	26.4	26.1	26.8	27.3	26.3	27.1	26.8	27.5	28.0
		8H	25.6	26.4	26.1	26.8	27.3	26.4	27.1	26.9	27.6	28.0
	12H	25.7	26.3	26.1	26.8	27.3	26.5	27.1	27.0	27.6	28.1	
8H	4H	25.6	26.4	26.1	26.8	27.3	26.0	26.7	26.5	27.2	27.7	
	6H	25.9	26.5	26.4	27.0	27.5	26.3	26.9	26.8	27.4	27.9	
	8H	26.0	26.5	26.5	27.0	27.5	26.5	27.0	27.0	27.5	28.0	
	12H	26.0	26.5	26.6	27.0	27.6	26.6	27.1	27.1	27.6	28.1	
12H	4H	25.7	26.3	26.1	26.8	27.2	26.0	26.6	26.5	27.1	27.6	
	6H	25.9	26.5	26.5	26.9	27.5	26.3	26.8	26.8	27.3	27.9	
	8H	26.0	26.5	26.6	27.0	27.6	26.5	26.9	27.0	27.4	28.0	
CIE190: 2010												

CIE190: 2010  
Area: 0.0063 m2

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:yang  
Test Date:2024-07-26

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°

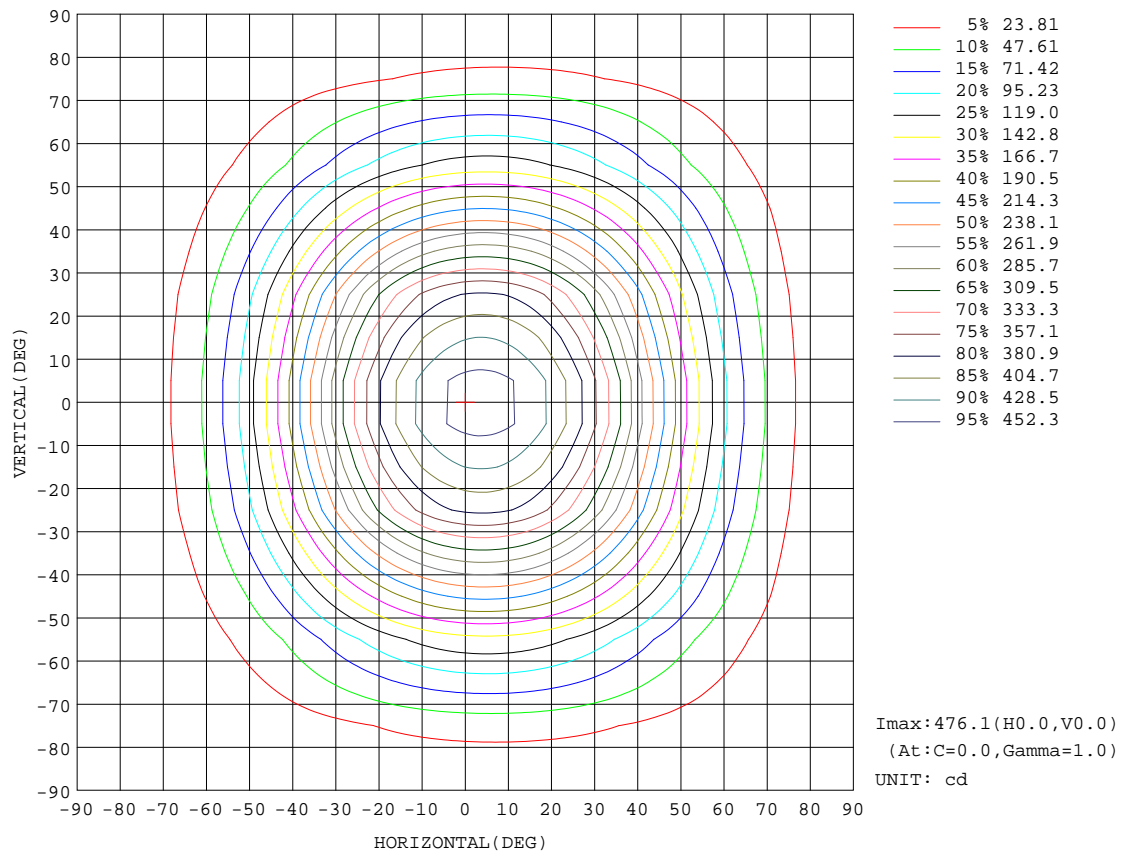
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	55	49	65	55	49	64	55	49	43
0.80	76	66	59	75	65	59	73	64	59	53
1.00	83	74	68	82	74	68	80	74	67	61
1.25	90	81	75	89	80	75	86	79	74	68
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	95	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		

$H(\beta)$  Range:-90 - 90DEG  
 $H(\beta)$  Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:yang  
 Test Date:2024-07-26

$V(B)$  Range:-90 - 90DEG  
 $V(B)$  Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:8.345m [K=1.0330]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°



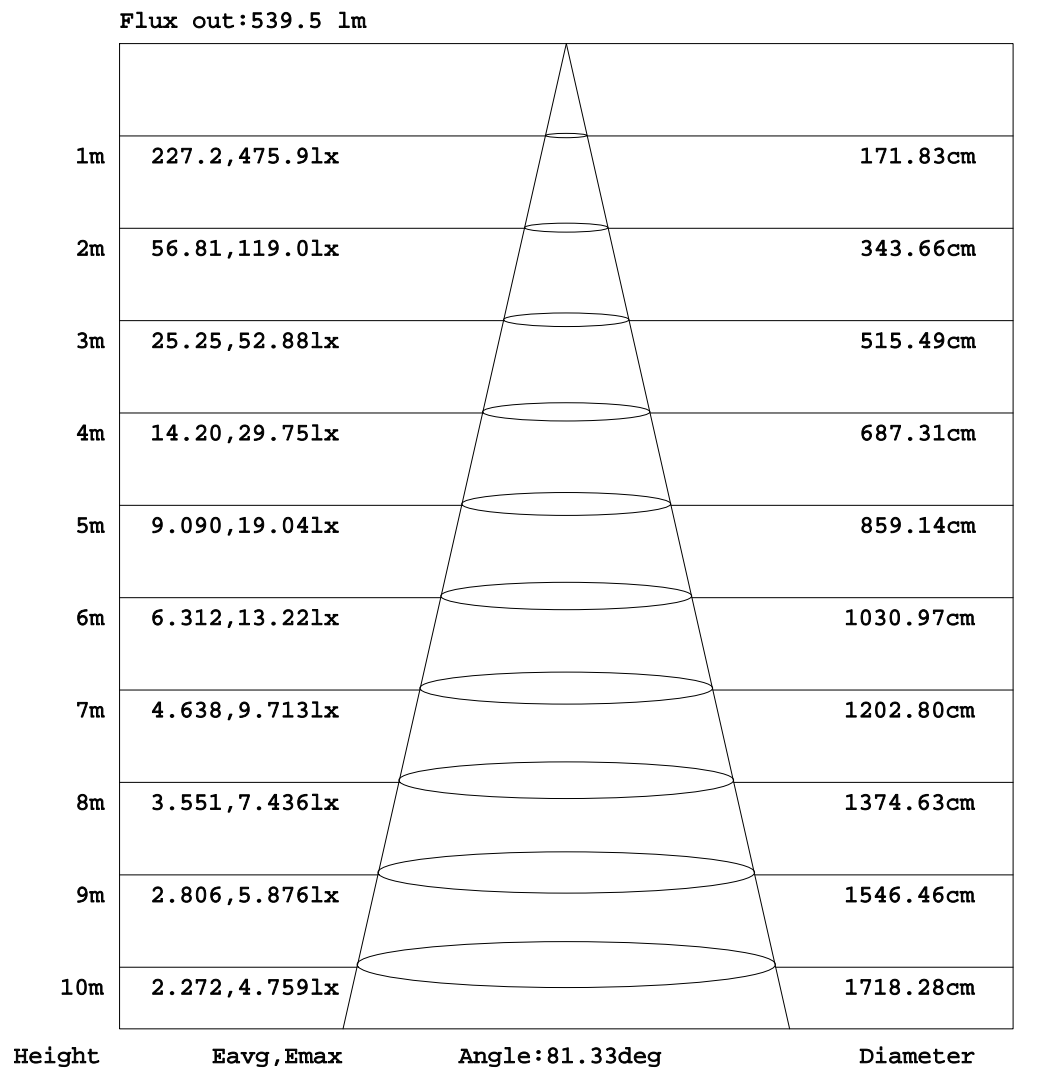
H( $\beta$ ) Range: -90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: yang  
Test Date: 2024-07-26

V(B) Range: -90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity: 65.0%  
Test Distance: 8.345m [K=1.0330]  
Remarks:



AAI Figure

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°



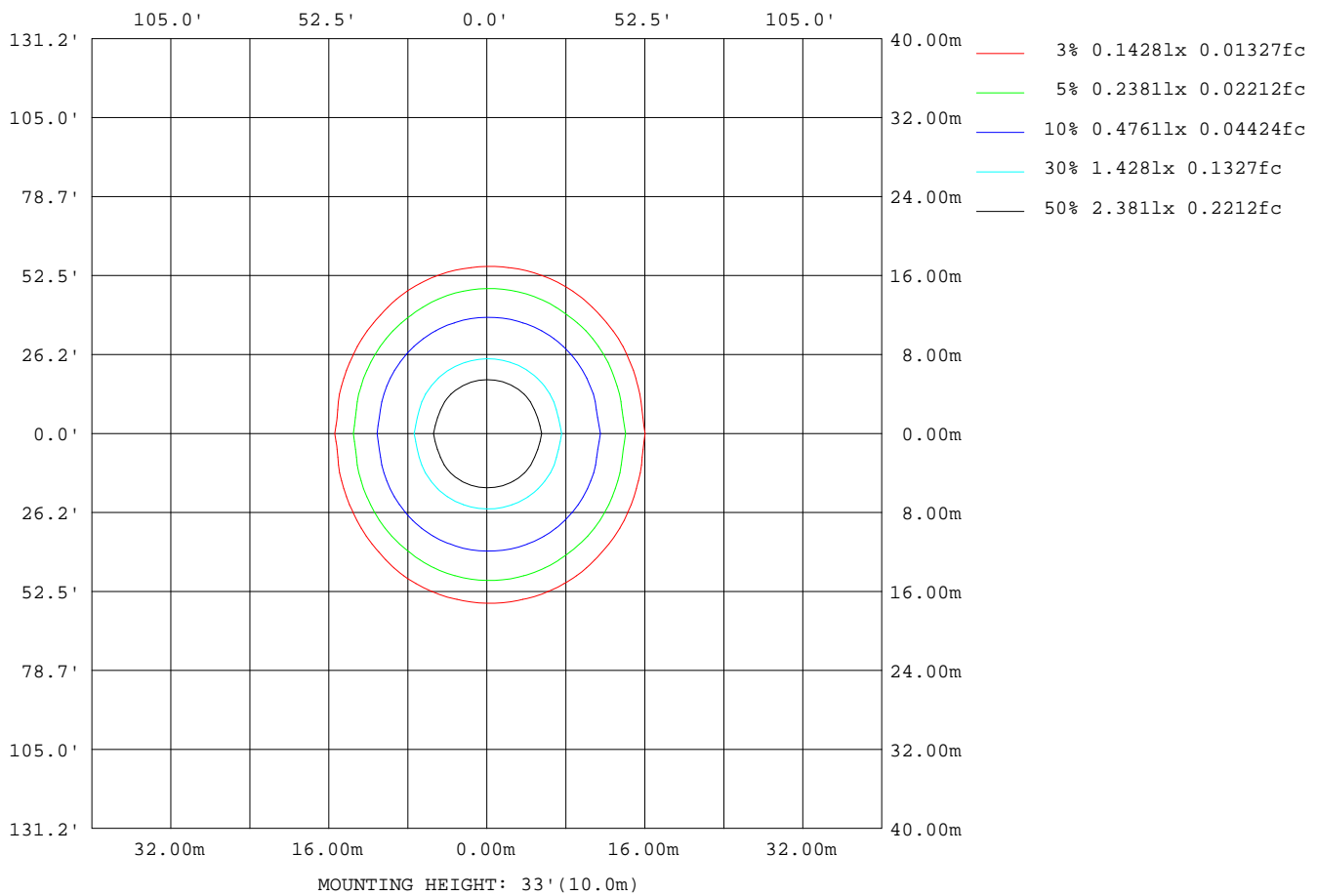
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H( $\beta$ ) Range: -90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: yang  
Test Date: 2024-07-26

V(B) Range: -90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity: 65.0%  
Test Distance: 8.345m [K=1.0330]  
Remarks:

## ISOLUX DIAGRAM

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:yang  
Test Date:2024-07-26

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

## LED Avg.L Report

Test:U:120.80V I:0.0890A P:10.400W PF:0.9690 Freq:60.00Hz Lamp Flux:889.928x1 lm		
NAME: AVD4-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°

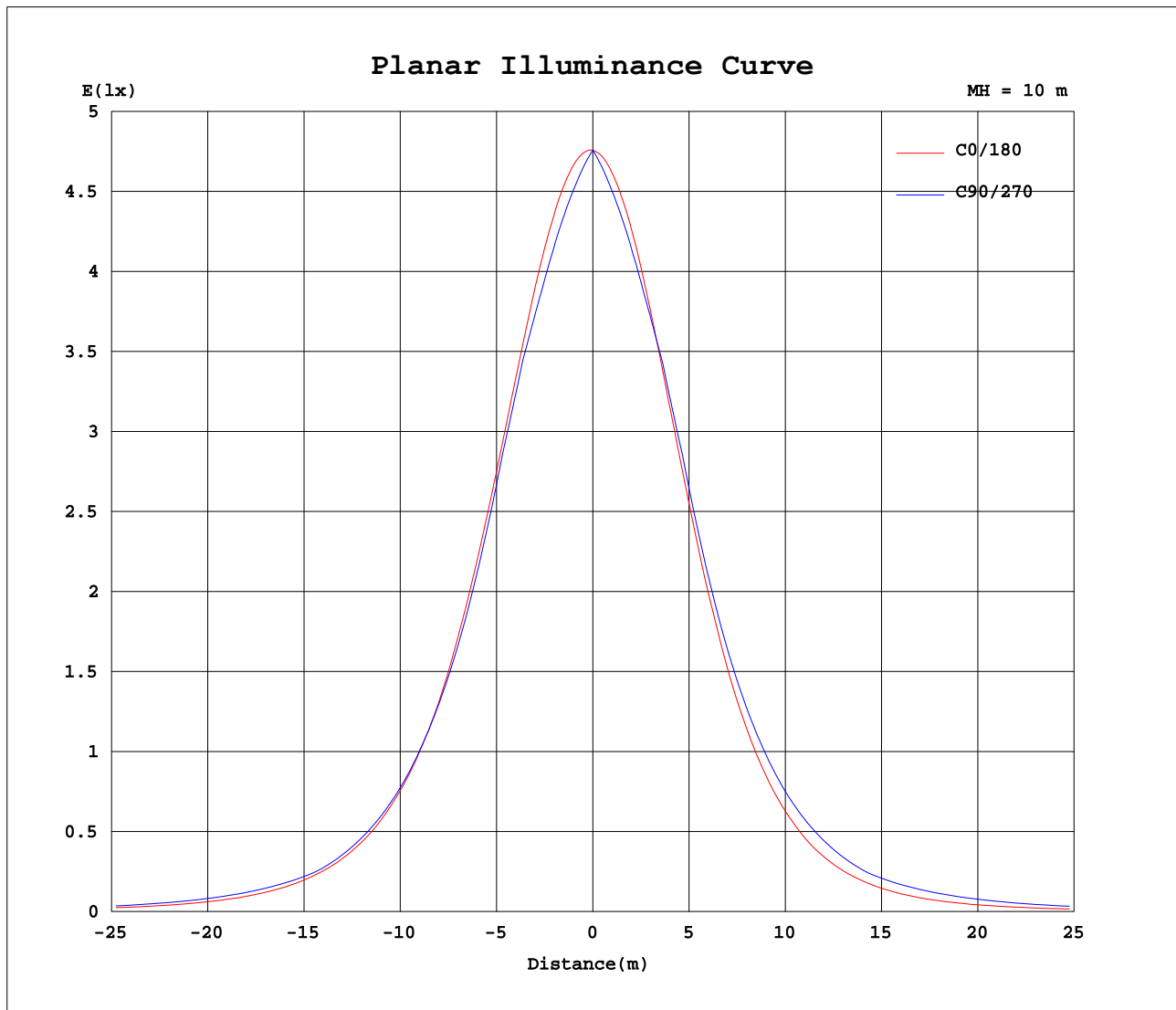
AvgL	cd/m2
L_0~180 (65) av	19287
L_0~180 (75) av	10937
L_0~180 (85) av	3759
L_90~270 (65) av	30660
L_90~270 (75) av	19063
L_90~270 (85) av	14214
L_45 (65) av	23461
L_45 (75) av	16568
L_45 (85) av	9179

Standard: GB/T 29293-2012

$H(\beta)$  Range:-90 - 90DEG  
 $H(\beta)$  Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:yang  
 Test Date:2024-07-26

$V(B)$  Range:-90 - 90DEG  
 $V(B)$  Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
 Humidity:65.0%  
 Test Distance:8.345m [K=1.0330]  
 Remarks:

### Planar Illuminance Curve



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:yang  
Test Date:2024-07-26

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks:

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
Humidity:65.0%  
Test Distance:8.345m [K=1.0330]  
Remarks: