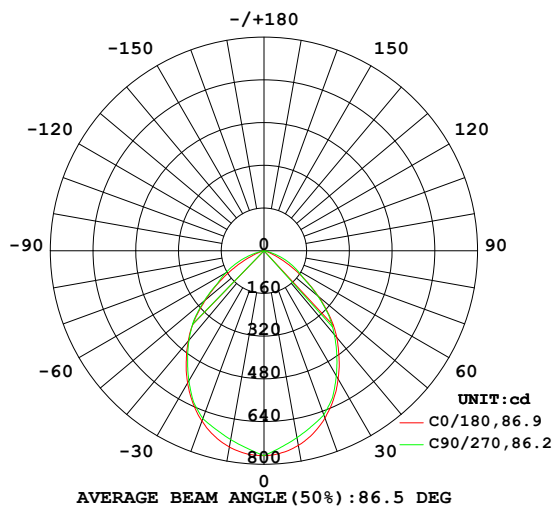


## LUMINAIRE PHOTOMETRIC TEST REPORT

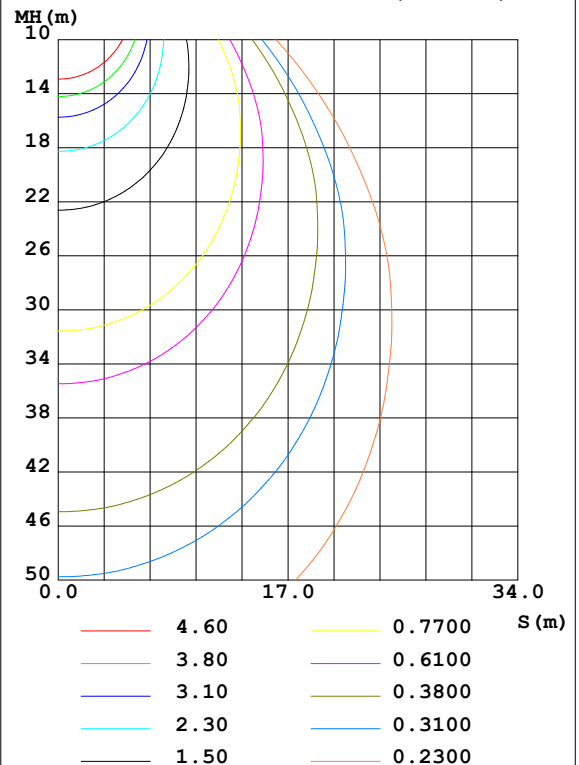
Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi 188 \times 70$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.95 lm/W			
MODEL	SMD 2835/LED	I <sub>max</sub> (cd)	767.4	S/MH (C0/180)	1.10
NOMINAL POWER (W)	15.5	LOR (%)	100.0	S/MH (C90/270)	1.08
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1394.3	$\eta$ UP, DN (C0-180)	0.0, 51.3
NOMINAL FLUX (lm)	1394.26	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 48.7
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	120.6	$\eta$ 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=1.0905]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	746.4	724.8	718.4	716.8	740.2	711.7	711.0	719.5	0- 10	70.53	70.53	5.06,5.06
20	678.8	662.9	669.4	643.7	667.3	634.1	654.7	651.8	10- 20	194.5	265.0	19,19
30	572.0	571.2	562.8	553.7	555.1	539.1	541.7	555.0	20- 30	279.3	544.3	39,39
40	441.3	433.3	437.0	417.9	424.4	400.4	409.8	413.0	30- 40	304.0	848.4	60.8,60.8
50	285.2	288.1	293.1	271.8	266.4	252.0	262.3	264.2	40- 50	267.7	1116	80.1,80.1
60	130.8	144.8	165.4	127.4	113.3	109.1	140.6	121.1	50- 60	175.5	1292	92.6,92.6
70	24.98	55.28	71.94	44.51	19.51	34.88	60.37	41.86	60- 70	81.33	1373	98.5,98.5
80	0.0915	7.779	1.811	6.423	0.1275	3.857	0.1871	5.133	70- 80	20.22	1393	99.9,99.9
90	0.0388	1.332	1.695	1.956	0.1885	0.1859	0.1803	0.1665	80- 90	1.141	1394	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): 990.65 lm

%lum = 71.1%

%lamp = 71.1%

Conical surface Flux(120deg): 1291.6 lm

%lum = 92.6%

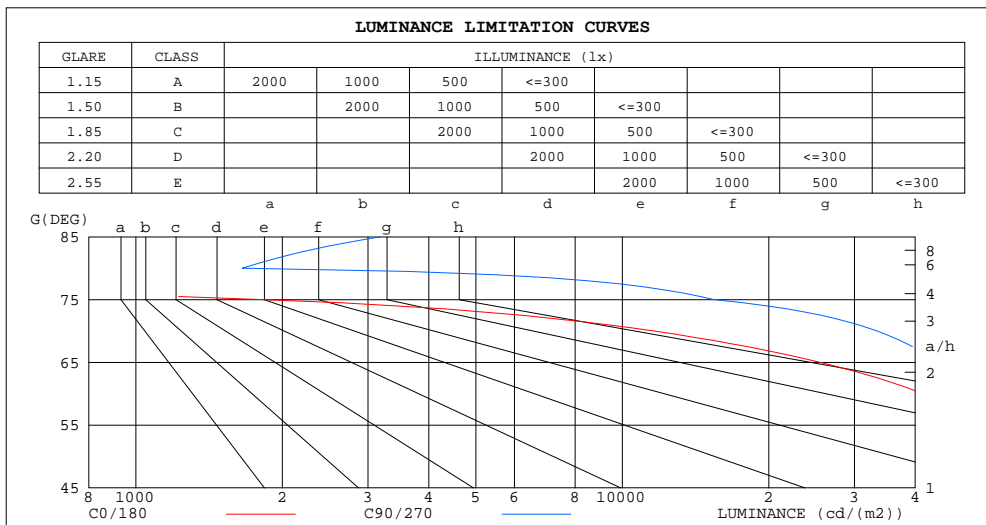
%lamp = 92.6%

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=1.0905]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi 188 \times 70$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°



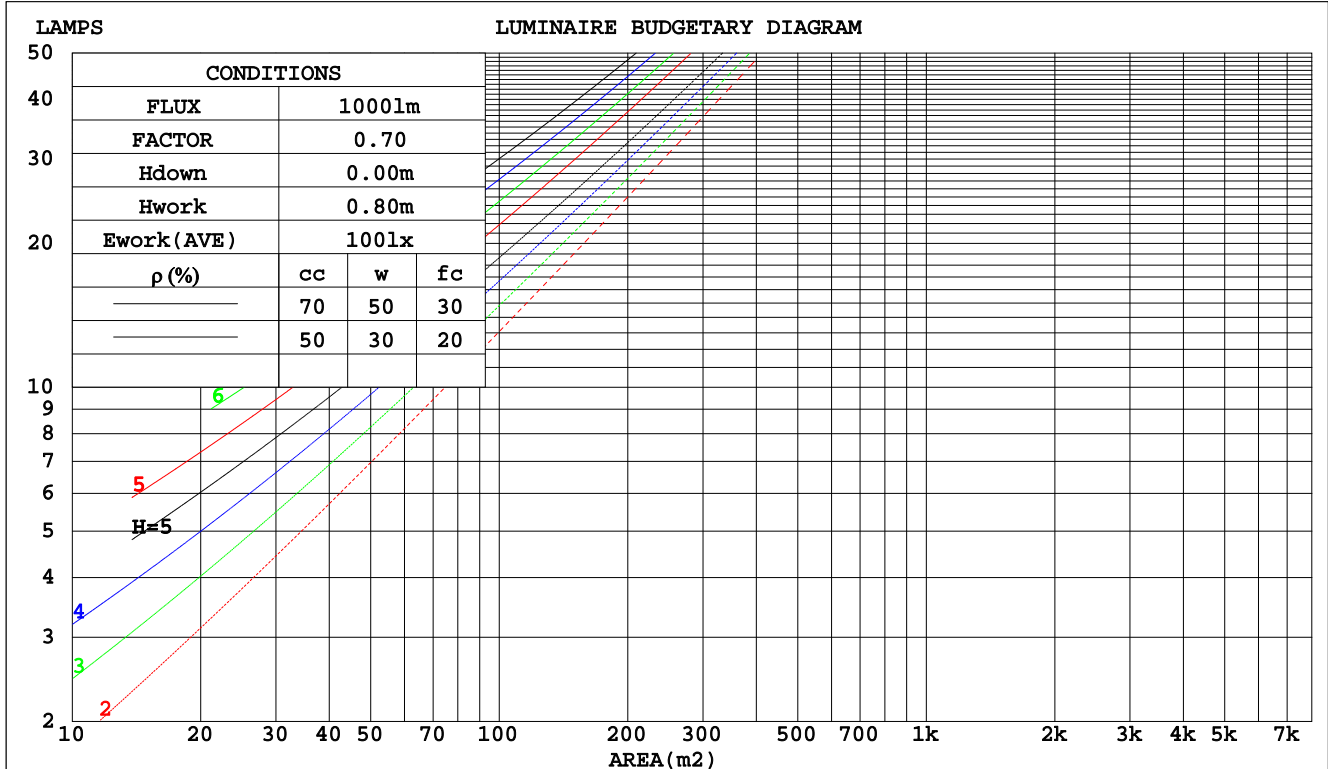
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:yang  
Test Date:2024-07-26

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=1.0905]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi 188 \times 70$ (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						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	1.08	1.04	1.01	1.05	1.02	.00	1.01	.99	.97	.97	.96	.94	.94	.92	.91	.89
2.0	.97	.91	.87	.95	.90	.86	.91	.87	.84	.88	.85	.82	.85	.83	.80	.78
3.0	.87	.80	.75	.85	.79	.74	.83	.77	.73	.80	.75	.72	.77	.74	.70	.69
4.0	.78	.71	.65	.77	.70	.65	.75	.69	.64	.73	.67	.63	.71	.66	.62	.60
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.61	.56	.64	.59	.56	.54
6.0	.65	.57	.51	.64	.56	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.48
7.0	.59	.51	.46	.59	.51	.46	.57	.50	.46	.56	.50	.45	.54	.49	.45	.43
8.0	.55	.47	.42	.54	.47	.41	.53	.46	.41	.51	.45	.41	.50	.45	.41	.39
9.0	.50	.43	.38	.50	.43	.38	.49	.42	.38	.48	.42	.37	.47	.41	.37	.36
10.0	.47	.40	.35	.46	.39	.35	.45	.39	.34	.44	.39	.34	.44	.38	.34	.33



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=1.0905]  
Remarks:

## WEC AND CCEC

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi$ 188*70 (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	.237	.135	.043	.230	.131	.042	.218	.125	.040	.206	.119	.038	.195	.113	.036	
2.0	.233	.127	.039	.227	.125	.038	.215	.120	.037	.205	.115	.036	.196	.111	.035	
3.0	.222	.118	.035	.217	.116	.035	.207	.112	.034	.198	.109	.033	.190	.105	.032	
4.0	.210	.109	.032	.206	.108	.032	.197	.104	.031	.189	.101	.031	.181	.099	.030	
5.0	.198	.101	.029	.194	.100	.029	.187	.097	.029	.179	.095	.028	.173	.092	.028	
6.0	.187	.094	.027	.183	.093	.027	.177	.090	.026	.170	.088	.026	.164	.086	.026	
7.0	.176	.087	.025	.173	.086	.025	.167	.084	.024	.161	.083	.024	.156	.081	.024	
8.0	.167	.081	.023	.164	.081	.023	.158	.079	.023	.153	.078	.022	.148	.076	.022	
9.0	.158	.076	.021	.155	.076	.021	.150	.074	.021	.146	.073	.021	.141	.072	.021	
10.0	.150	.072	.020	.147	.071	.020	.143	.070	.020	.139	.069	.020	.135	.068	.019	

$\rho_{cc}$	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	.175	.157	.140	.150	.135	.121	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.096	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.087	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.114	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.075	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.095	.051	.021	.066	.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=1.0905]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm												
NAME.: AVD56-5CCT-BK					TYPE.: Down light			WEIGHT.: 0.3Kg				
SPEC.: 15W					DIM.: φ188*70 (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	25.1	26.5	25.5	26.8	27.2	25.1	26.6	25.5	26.9	27.2		
	3H	25.4	26.6	25.8	27.0	27.3	26.3	27.5	26.7	27.9	28.2	
	4H	25.3	26.5	25.7	26.8	27.2	26.4	27.6	26.8	27.9	28.3	
	6H	25.3	26.3	25.7	26.7	27.1	26.4	27.4	26.8	27.8	28.2	
	8H	25.2	26.2	25.6	26.6	27.0	26.3	27.3	26.7	27.7	28.1	
	12H	25.2	26.1	25.6	26.5	27.0	26.3	27.3	26.7	27.6	28.1	
	4H	2H	25.3	26.5	25.7	26.9	27.2	25.2	26.4	25.6	26.7	27.1
		3H	25.6	26.6	26.1	27.0	27.4	26.5	27.5	26.9	27.9	28.3
		4H	25.6	26.4	26.0	26.9	27.3	26.7	27.5	27.1	27.9	28.4
		6H	25.5	26.2	26.0	26.7	27.2	26.7	27.4	27.1	27.8	28.3
		8H	25.5	26.1	25.9	26.6	27.1	26.6	27.3	27.1	27.7	28.2
		12H	25.4	26.0	25.9	26.5	27.0	26.6	27.2	27.0	27.6	28.1
	8H	4H	25.6	26.3	26.1	26.8	27.2	26.6	27.3	27.1	27.7	28.2
		6H	25.6	26.1	26.1	26.6	27.1	26.6	27.1	27.1	27.6	28.1
		8H	25.5	26.0	26.0	26.5	27.0	26.5	27.0	27.0	27.5	28.0
		12H	25.5	25.9	26.0	26.4	27.0	26.5	26.9	27.0	27.4	28.0
	12H	4H	25.6	26.2	26.1	26.7	27.2	26.6	27.2	27.1	27.7	28.1
		6H	25.5	26.0	26.0	26.5	27.0	26.5	27.0	27.0	27.5	28.0
		8H	25.5	25.9	26.0	26.4	27.0	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=1.0905]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi 188 \times 70$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°

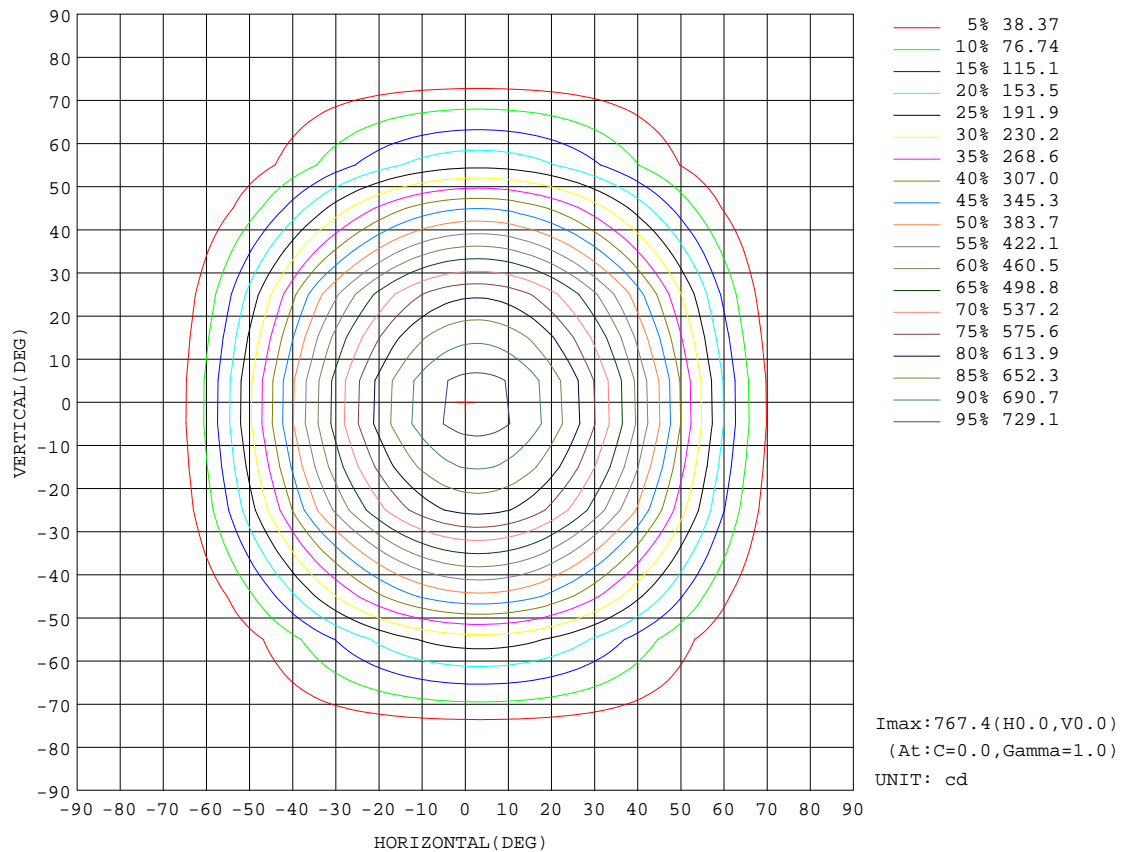
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	67	57	51	66	56	50	65	56	50	45
0.80	77	67	61	76	67	61	74	66	60	55
1.00	85	76	70	84	75	70	82	76	69	63
1.25	91	83	77	90	82	77	88	81	76	70
1.50	96	88	83	94	87	82	92	86	81	75
2.00	101	95	90	100	94	89	97	92	88	81
2.50	104	98	94	102	97	93	99	94	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
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=1.0905]  
 Remarks:

## ISOCANDELA DIAGRAM

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi$ 188*70 (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi$ 90 (MM)	Shielding Angle: 120°



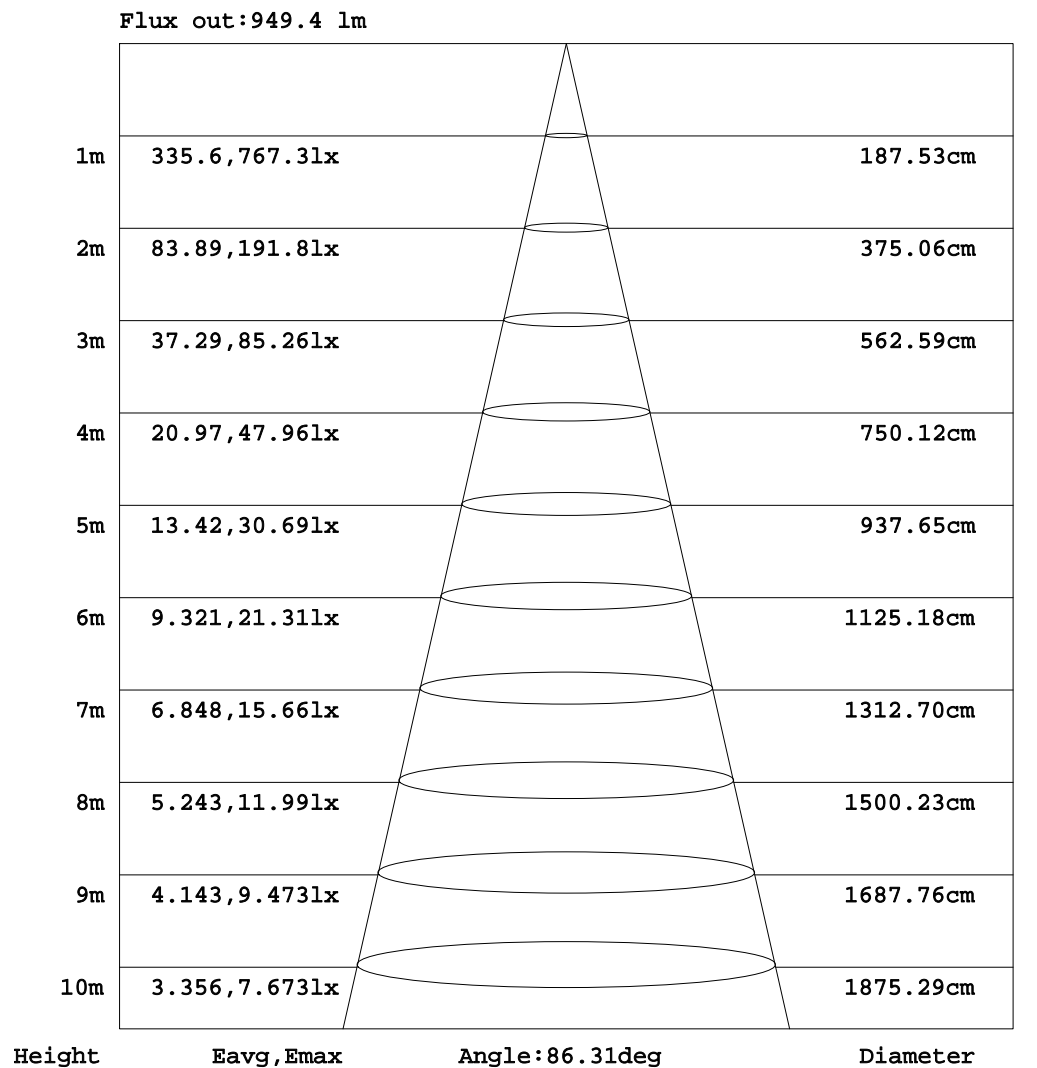
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:yang  
Test Date:2024-07-26

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=1.0905]  
Remarks:



### AAI Figure

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi 188 \times 70$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°



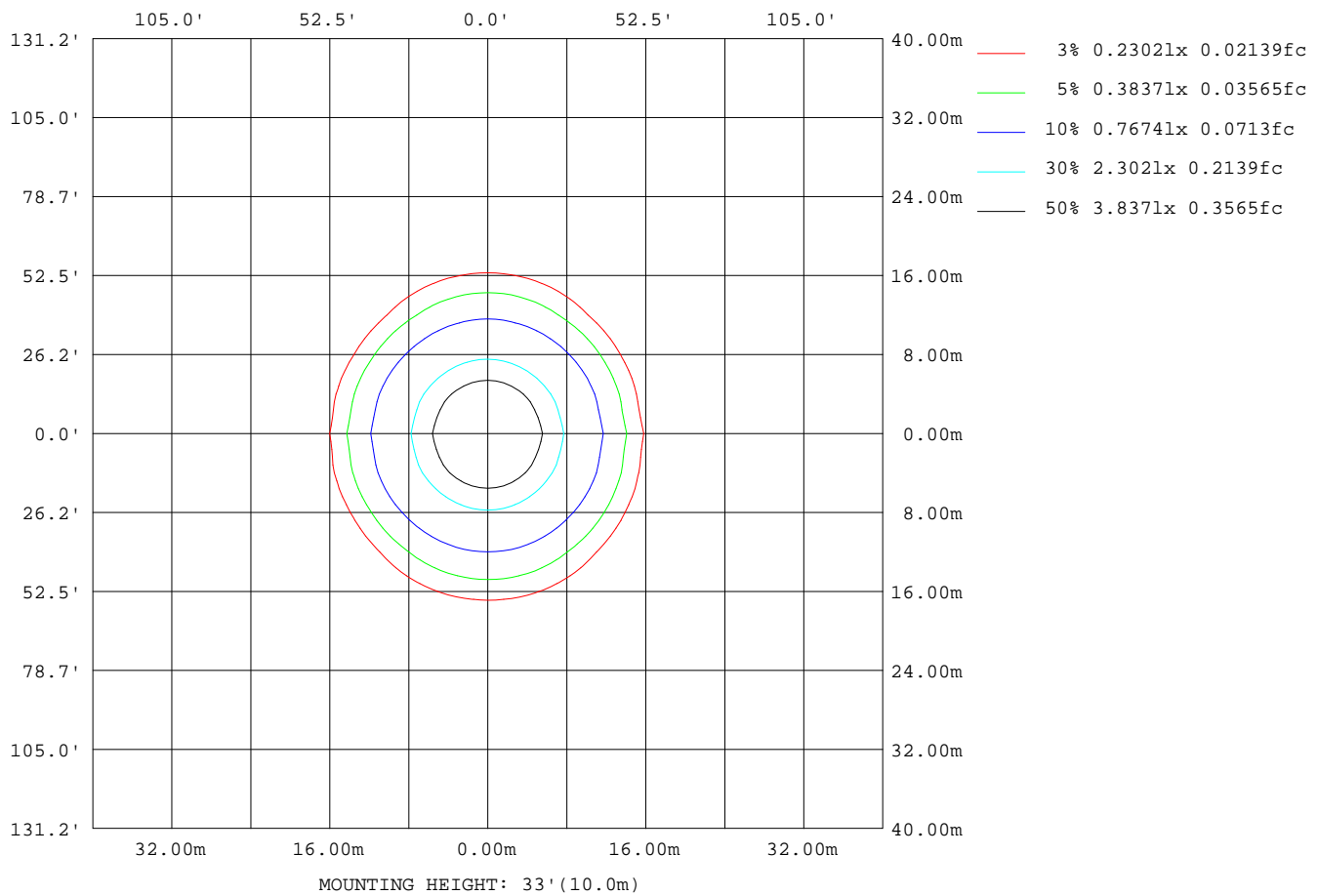
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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=1.0905]  
Remarks:

## ISOLUX DIAGRAM

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi 188 \times 70$ (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=1.0905]  
Remarks:

## LED Avg.L Report

Test:U:120.60V I:0.1370A P:15.500W PF:0.9350 Freq:60.00Hz Lamp Flux:1394.26x1 lm		
NAME: AVD56-5CCT-BK	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 15W	DIM.: $\phi$ 188*70 (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi$ 90 (MM)	Shielding Angle: 120°

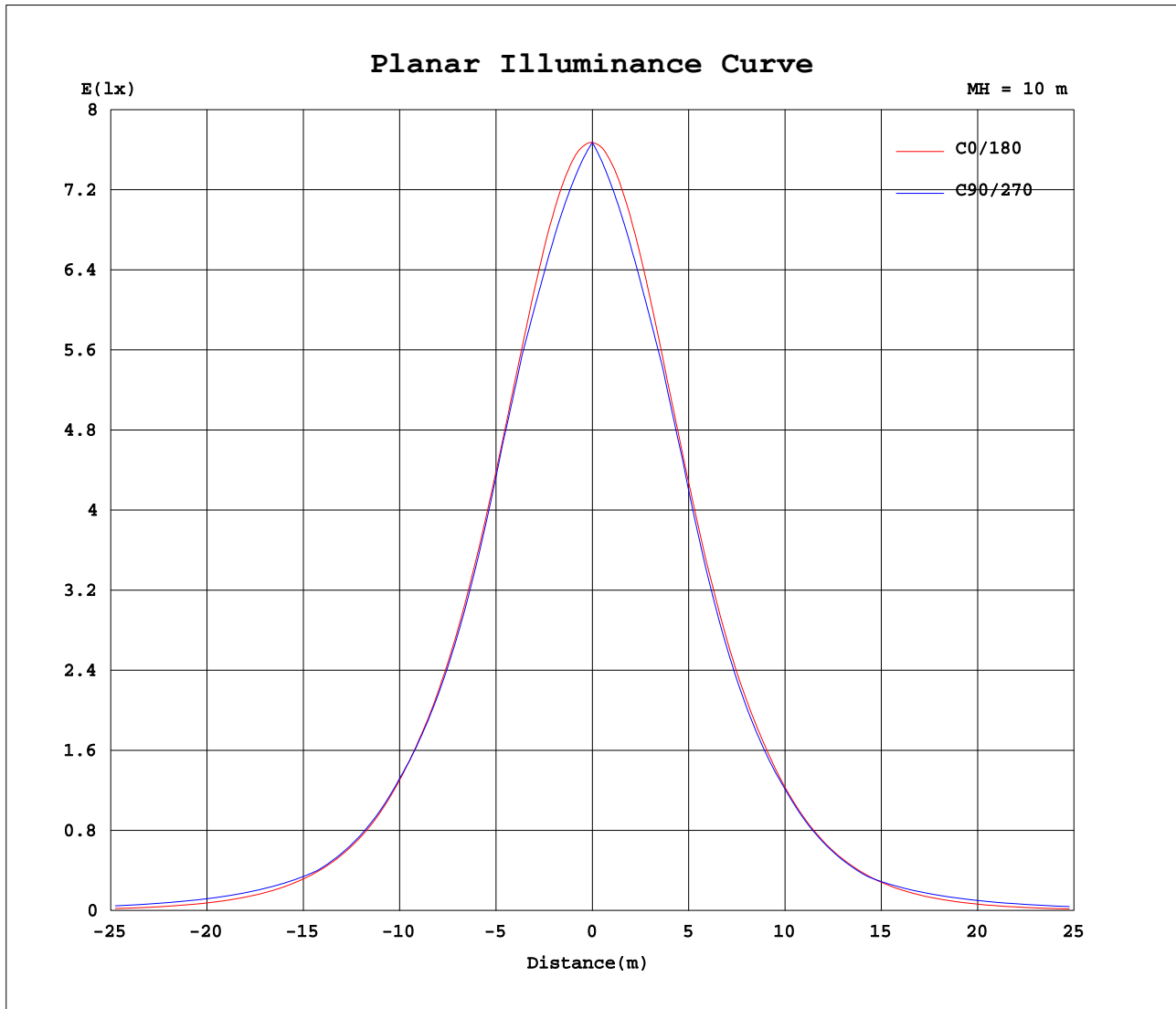
AvgL	cd/m2
L_0~180 (65) av	23224
L_0~180 (75) av	1491
L_0~180 (85) av	149
L_90~270 (65) av	41089
L_90~270 (75) av	13912
L_90~270 (85) av	1760
L_45 (65) av	26199
L_45 (75) av	14004
L_45 (85) av	1607

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=1.0905]  
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=1.0905]  
Remarks:

V(B) Range:-90 - 90DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.429  
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Test Distance:8.345m [K=1.0905]  
Remarks: