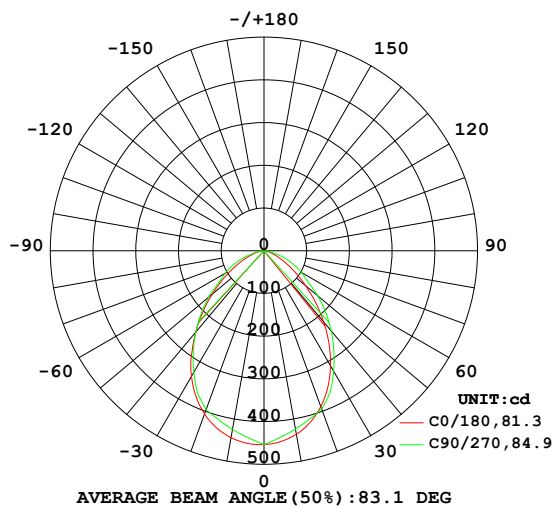


LUMINAIRE PHOTOMETRIC TEST REPORT

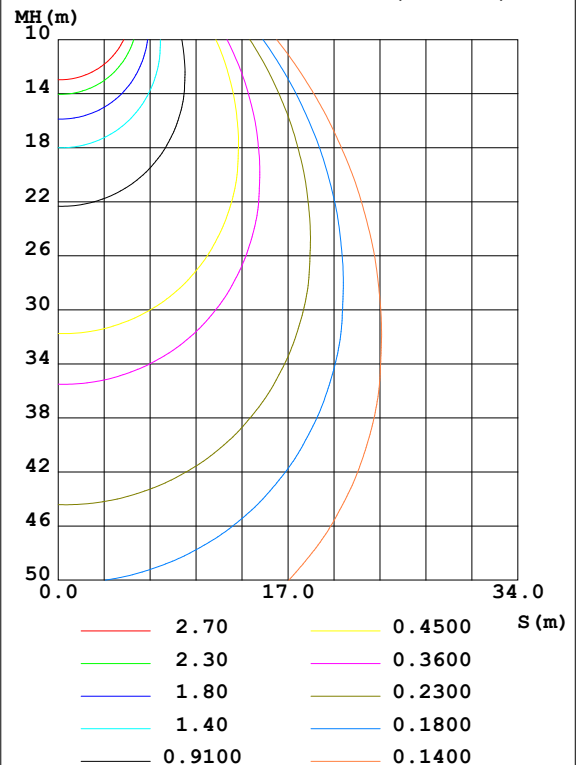
Test:U:120.80V I:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: $\phi 132 \times 44$ (MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: $\phi 90$ (MM)	Shielding Angle: 120°

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.46 lm/W			
MODEL	SMD 2835/LED	I _{max} (cd)	454.1	S/MH (C0/180)	1.06
NOMINAL POWER (W)	10.3	LOR (%)	100.0	S/MH (C90/270)	1.10
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	849.32	η UP, DN (C0-180)	0.0, 50.3
NOMINAL FLUX (lm)	849.318	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 49.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	120.8	η down (%)	100.0	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(β) Range: -90 - 90DEG
H(β) 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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	444.3	430.3	424.8	422.5	436.4	421.8	424.2	430.0	0- 10	41.79	41.79	4.92,4.92
20	406.6	395.0	395.9	376.8	388.6	375.4	394.6	394.5	10- 20	115.6	157.4	18.5,18.5
30	339.7	338.8	328.7	317.6	311.5	315.7	326.3	337.5	20- 30	165.2	322.6	38,38
40	248.4	253.0	248.6	230.7	217.7	229.0	245.0	251.1	30- 40	175.8	498.4	58.7,58.7
50	158.2	168.5	168.7	147.9	127.5	146.5	164.2	165.9	40- 50	151.0	649.4	76.5,76.5
60	85.00	97.07	104.3	78.65	61.82	77.40	100.3	94.46	50- 60	105.7	755.1	88.9,88.9
70	37.30	48.90	55.25	35.72	24.34	34.80	52.62	47.33	60- 70	61.96	817.1	96.2,96.2
80	10.59	15.26	15.04	9.060	4.776	8.565	13.54	14.65	70- 80	26.56	843.6	99.3,99.3
90	0.0423	1.003	1.200	1.294	0.1691	0.1618	0.1742	0.2190	80- 90	5.693	849.3	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): 578.7 lm

%lum = 68.1%

%lamp = 68.1%

Conical surface Flux(120deg): 755.11 lm

%lum = 88.9%

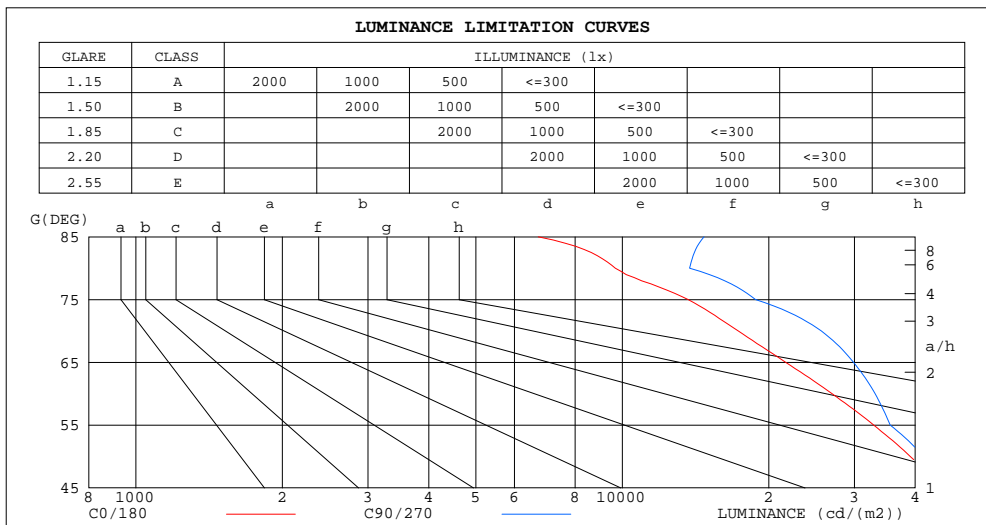
%lamp = 88.9%

H(β) Range:-90 - 90DEG
 H(β) 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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-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	6718	14720
80	9676	13749
75	13650	18786
70	17310	25643
65	21665	29870
60	26983	33097
55	32870	35540
50	39062	41650
45	45395	46725

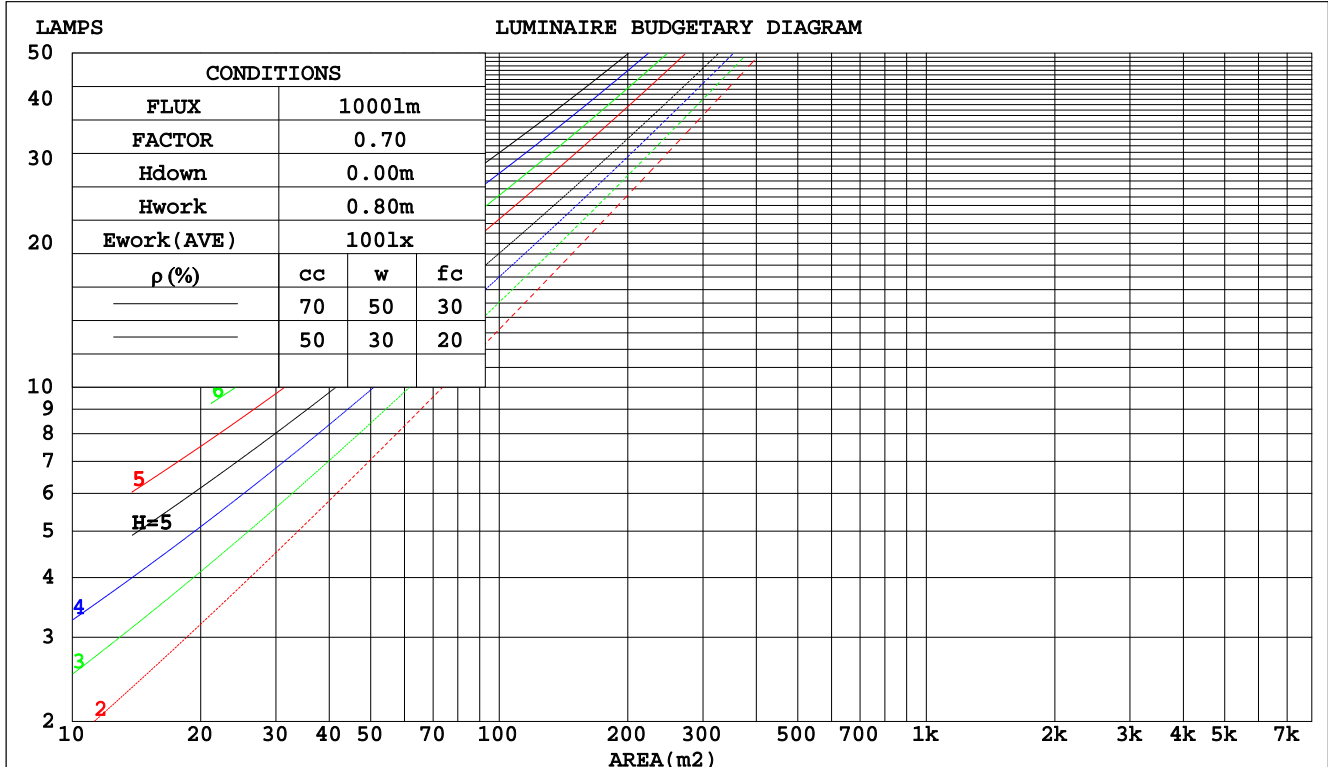
H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yang
Test Date:2024-07-26

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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-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°

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	1.07	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	.42	.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(β) Range:-90 - 90DEG
H(β) 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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-5CCT-WH	TYPE: Down light	WEIGHT: 0.3Kg
SPEC.: 10W	DIM.: ϕ 132*44(MM)	SERIAL No.: 01
MFR.: Signcomplex	SUR.: ϕ 90(MM)	Shielding Angle: 120°

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	.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	.208	.118	.037		
3.0	.232	.123	.037	.227	.121	.037	.217	.117	.036	.208	.114	.035	.199	.110	.034		
4.0	.218	.113	.033	.213	.111	.033	.204	.108	.032	.196	.105	.032	.189	.102	.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	.084	.025	.159	.083	.024		
8.0	.169	.083	.023	.167	.082	.023	.161	.080	.023	.156	.079	.023	.151	.078	.023		
9.0	.160	.077	.022	.157	.077	.022	.152	.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		

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	.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	.092	.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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm												
NAME: AVD4B-5CCT-WH					TYPE: Down light			WEIGHT: 0.3Kg				
SPEC.: 10W					DIM.: ϕ 132*44 (MM)			SERIAL No.: 01				
MFR.: Signcomplex					SUR.: ϕ 90 (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	23.2	24.7	23.6	25.0	25.3	23.5	24.9	23.8	25.2	25.5		
	3H	24.2	25.5	24.6	25.8	26.2	25.0	26.3	25.3	26.6	27.0	
	4H	24.4	25.6	24.8	26.0	26.4	25.3	26.6	25.7	26.9	27.3	
	6H	24.5	25.7	25.0	26.0	26.4	25.5	26.7	26.0	27.0	27.4	
	8H	24.6	25.6	25.0	26.0	26.4	25.6	26.7	26.0	27.0	27.4	
	12H	24.6	25.6	25.0	26.0	26.4	25.6	26.7	26.1	27.0	27.5	
	4H	2H	23.7	24.9	24.1	25.3	25.7	23.6	24.8	24.0	25.2	25.6
		3H	24.8	25.8	25.2	26.2	26.6	25.3	26.3	25.7	26.7	27.1
		4H	25.2	26.1	25.6	26.5	26.9	25.8	26.7	26.2	27.1	27.6
		6H	25.4	26.1	25.8	26.6	27.0	26.1	26.9	26.5	27.3	27.8
		8H	25.4	26.1	25.9	26.6	27.0	26.2	26.9	26.6	27.3	27.8
		12H	25.4	26.0	25.9	26.5	27.0	26.2	26.9	26.7	27.4	27.8
	8H	4H	25.4	26.1	25.9	26.6	27.0	25.8	26.5	26.3	27.0	27.4
		6H	25.7	26.3	26.2	26.7	27.2	26.1	26.7	26.6	27.2	27.7
		8H	25.7	26.3	26.2	26.8	27.3	26.2	26.8	26.8	27.3	27.8
		12H	25.8	26.3	26.3	26.7	27.3	26.4	26.8	26.9	27.3	27.9
	12H	4H	25.4	26.0	25.9	26.5	27.0	25.8	26.4	26.3	26.9	27.4
		6H	25.7	26.2	26.2	26.7	27.2	26.1	26.6	26.6	27.1	27.6
		8H	25.8	26.3	26.3	26.7	27.3	26.2	26.7	26.7	27.2	27.8
CIE190: 2010												

CIE190: 2010
Area: 0.0063 m2

H(β) Range:-90 - 90DEG
H(β) 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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-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°

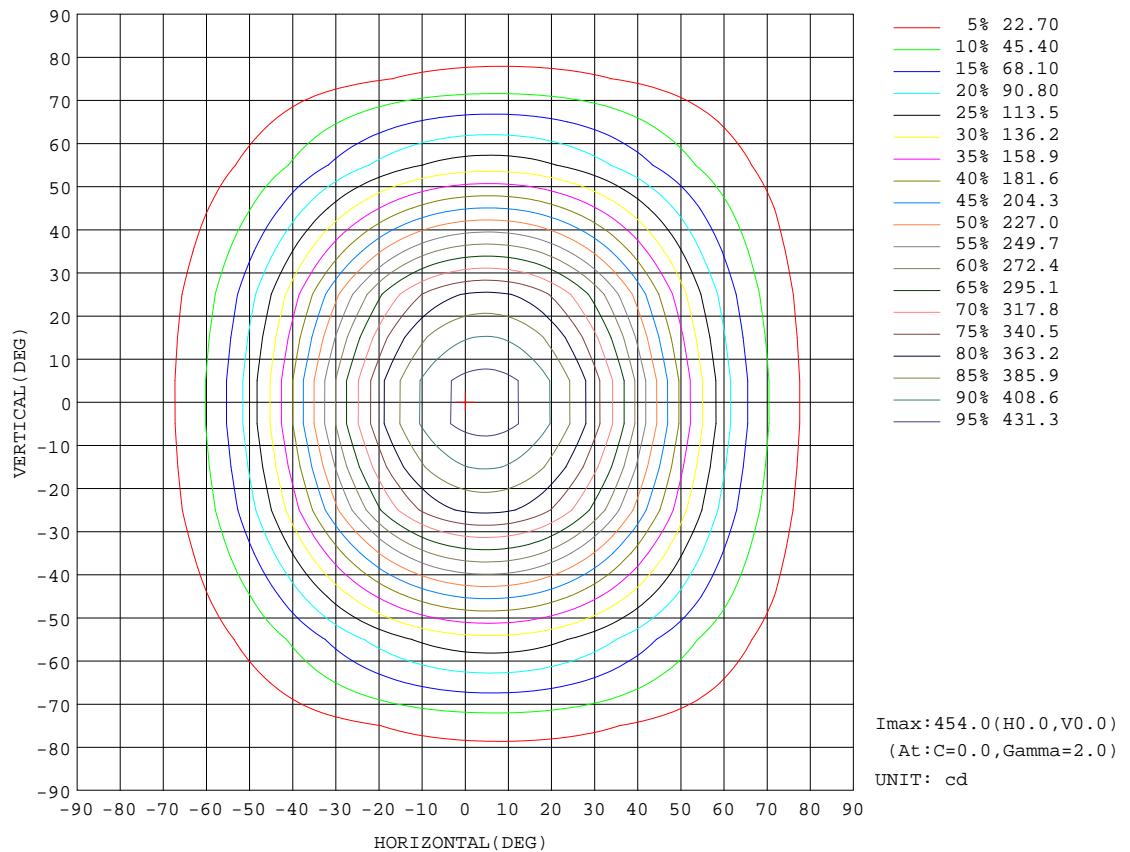
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	55	49	65	55	49	64	55	49	43
0.80	76	66	59	75	65	59	73	64	59	53
1.00	83	74	68	82	74	68	80	74	67	61
1.25	90	81	75	89	81	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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-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°

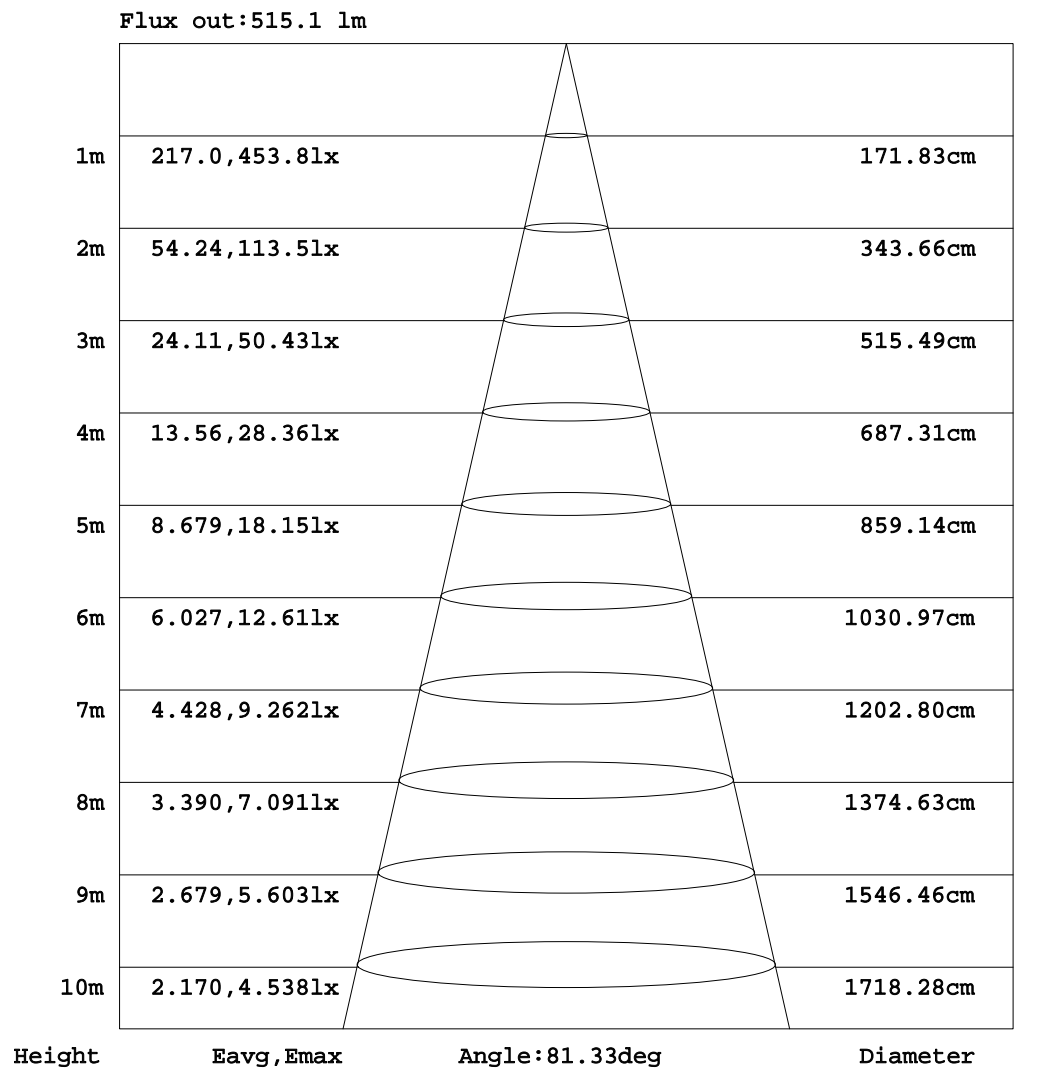


H(β) Range: -90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: yang
Test Date: 2024-07-26

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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-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°



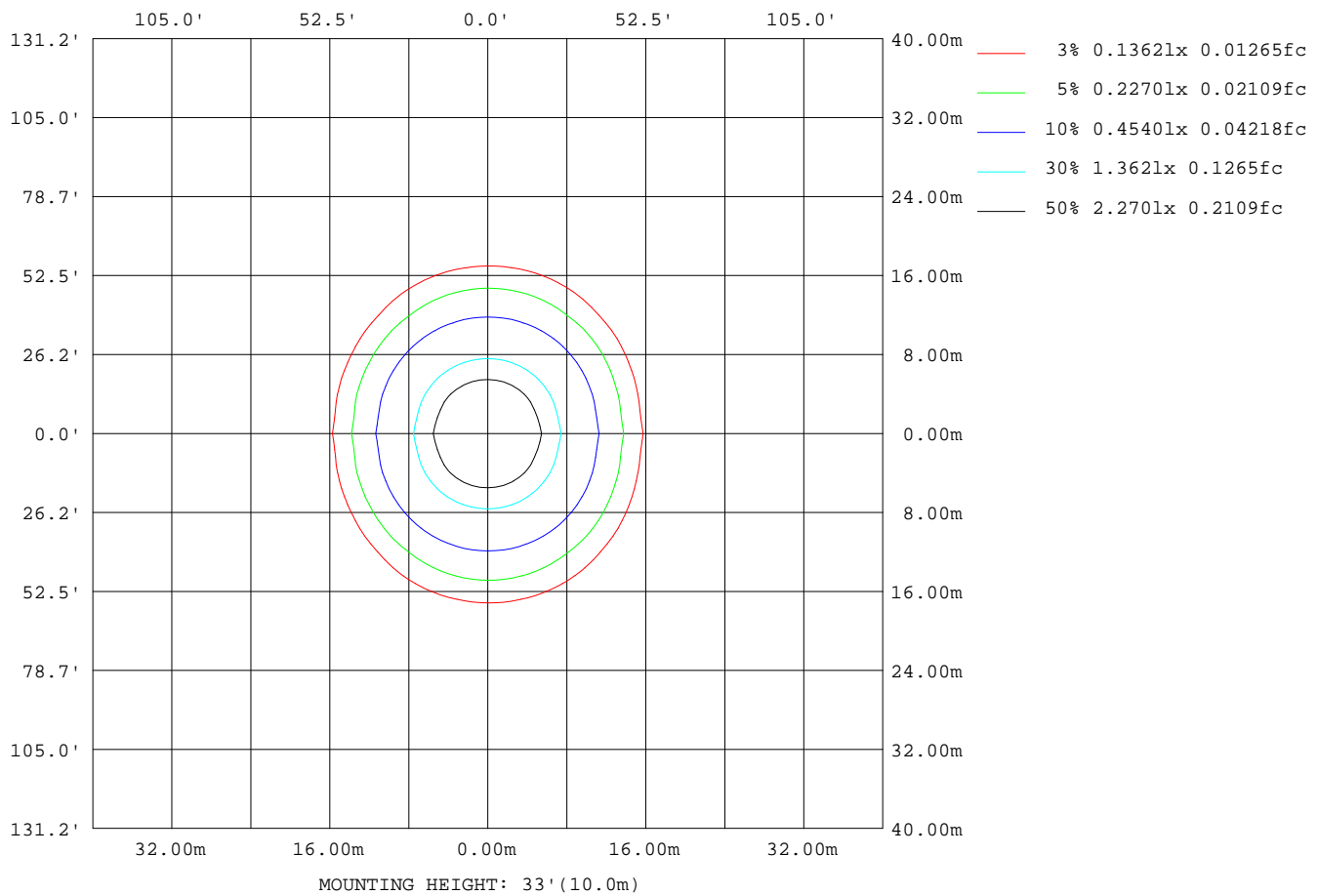
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range: -90 - 90DEG
H(β) 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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-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(β) Range:-90 - 90DEG
H(β) 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:0.0880A P:10.300W PF:0.9670 Freq:60.00Hz Lamp Flux:849.318x1 lm		
NAME: AVD4B-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°

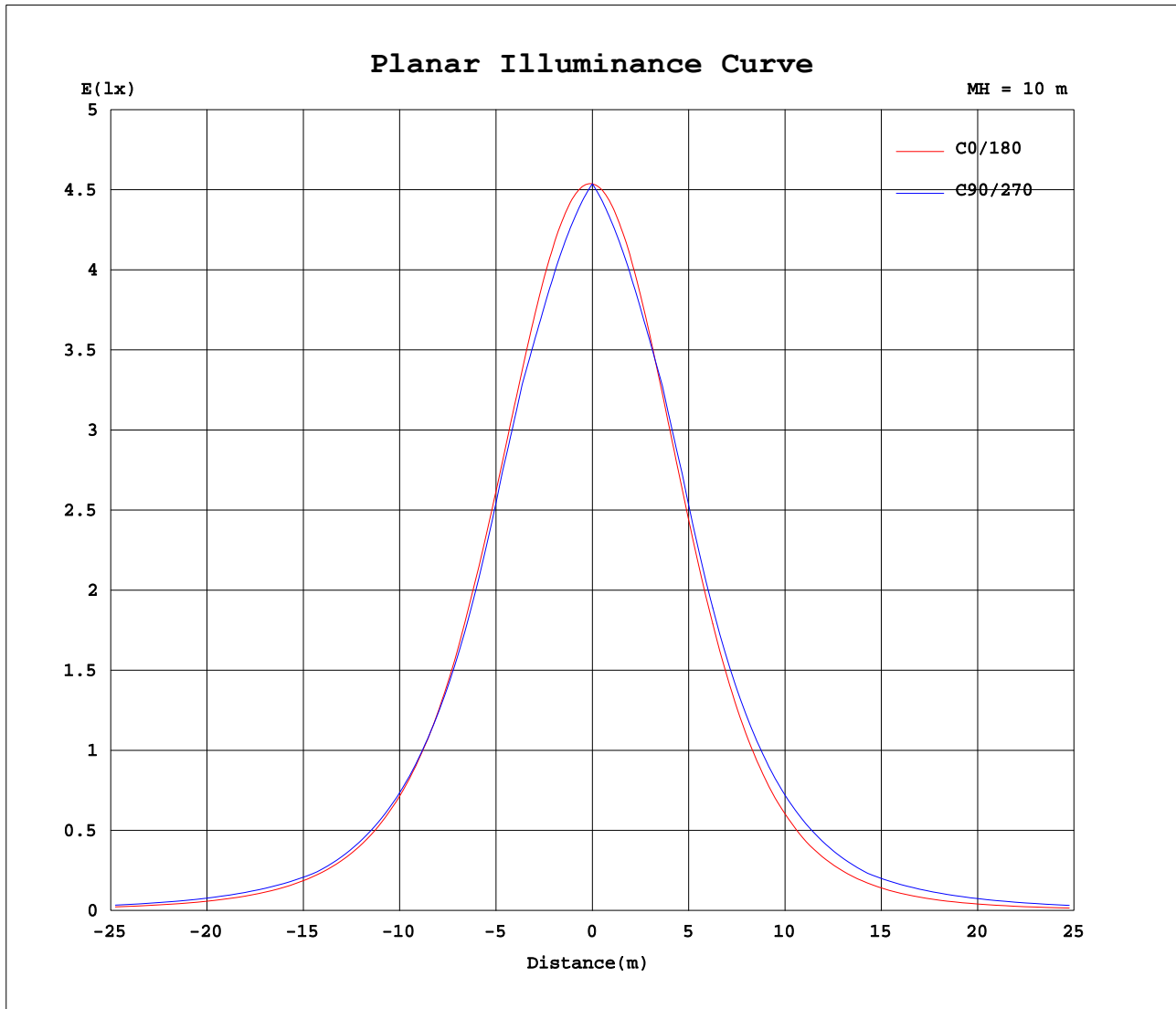
AvgL	cd/m2
L_0~180 (65) av	18336
L_0~180 (75) av	10416
L_0~180 (85) av	3571
L_90~270 (65) av	29252
L_90~270 (75) av	18185
L_90~270 (85) av	13568
L_45 (65) av	22357
L_45 (75) av	15786
L_45 (85) av	8754

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(β) Range:-90 - 90DEG
H(β) 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: