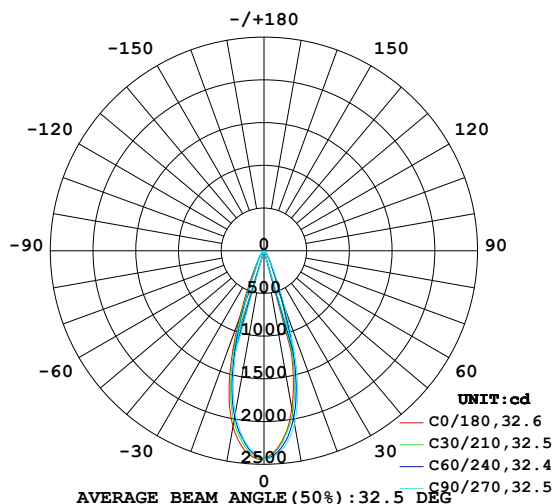


**LUMINAIRE PHOTOMETRIC TEST REPORT**

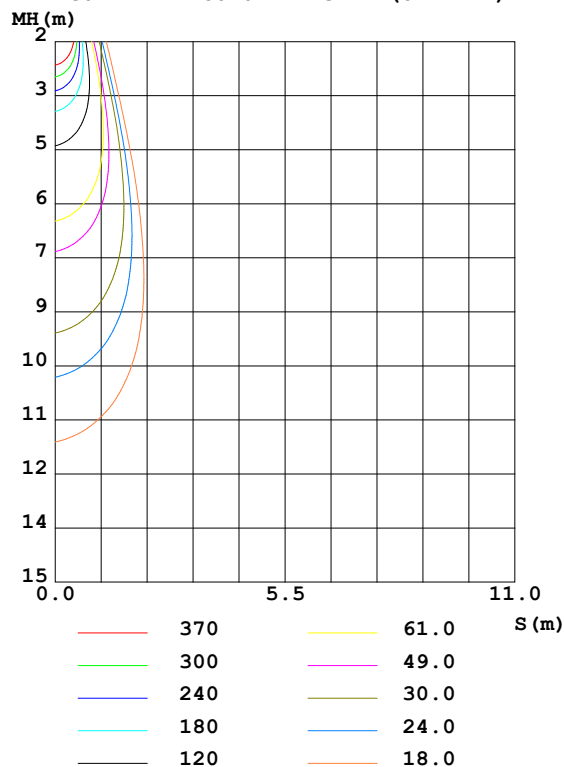
Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 77.78 lm/W			
MODEL	CITIZEN-3000K	I <sub>max</sub> (cd)	2442	S/MH (C0/180)	0.54
NOMINAL POWER (W)	10	LOR (%)	100.0	S/MH (C90/270)	0.49
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	815.81	$\eta$ UP, DN (C0-180)	0.0, 51.8
NOMINAL FLUX (lm)	815.806	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 48.2
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	24	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1879	1974	2059	2109	2089	1983	1939	1862	0- 10	210.1	210.1	25.7,25.7
20	592.6	628.7	745.8	900.2	841.6	660.5	607.6	614.3	10- 20	371.5	581.5	71.3,71.3
30	134.5	136.8	153.8	185.6	174.1	136.8	129.7	132.7	20- 30	146.2	727.7	89.2,89.2
40	43.30	46.49	48.86	56.27	55.98	47.54	41.39	42.87	30- 40	54.72	782.4	95.9,95.9
50	14.74	15.22	16.44	18.57	18.94	15.17	13.62	14.14	40- 50	22.00	804.4	98.6,98.6
60	4.278	4.495	5.051	5.617	5.513	4.417	4.105	4.282	50- 60	8.246	812.6	99.6,99.6
70	0.9639	1.050	1.251	1.432	1.338	1.060	0.9143	0.9722	60- 70	2.612	815.3	99.9,99.9
80	0.0680	0.0458	0.1011	0.1502	0.1130	0.0724	0.0436	0.0745	70- 80	0.5024	815.8	100,100
90	0.0350	0.0350	0.0350	0.0350	0.0284	0.0284	0.0284	0.0284	80- 90	0.0423	815.8	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): 795.88 lm

%lum = 97.6%

%lamp = 97.6%

Conical surface Flux(120deg): 812.65 lm

%lum = 99.6%

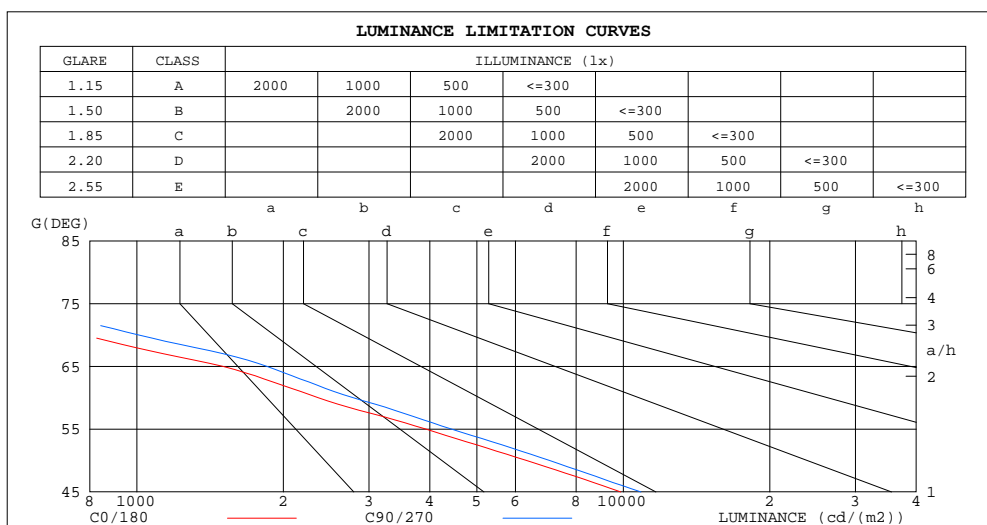
%lamp = 99.6%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	131	145
80	108	160
75	332	520
70	776	1008
65	1501	1848
60	2357	2783
55	3925	4433
50	6319	7045
45	9884	10872

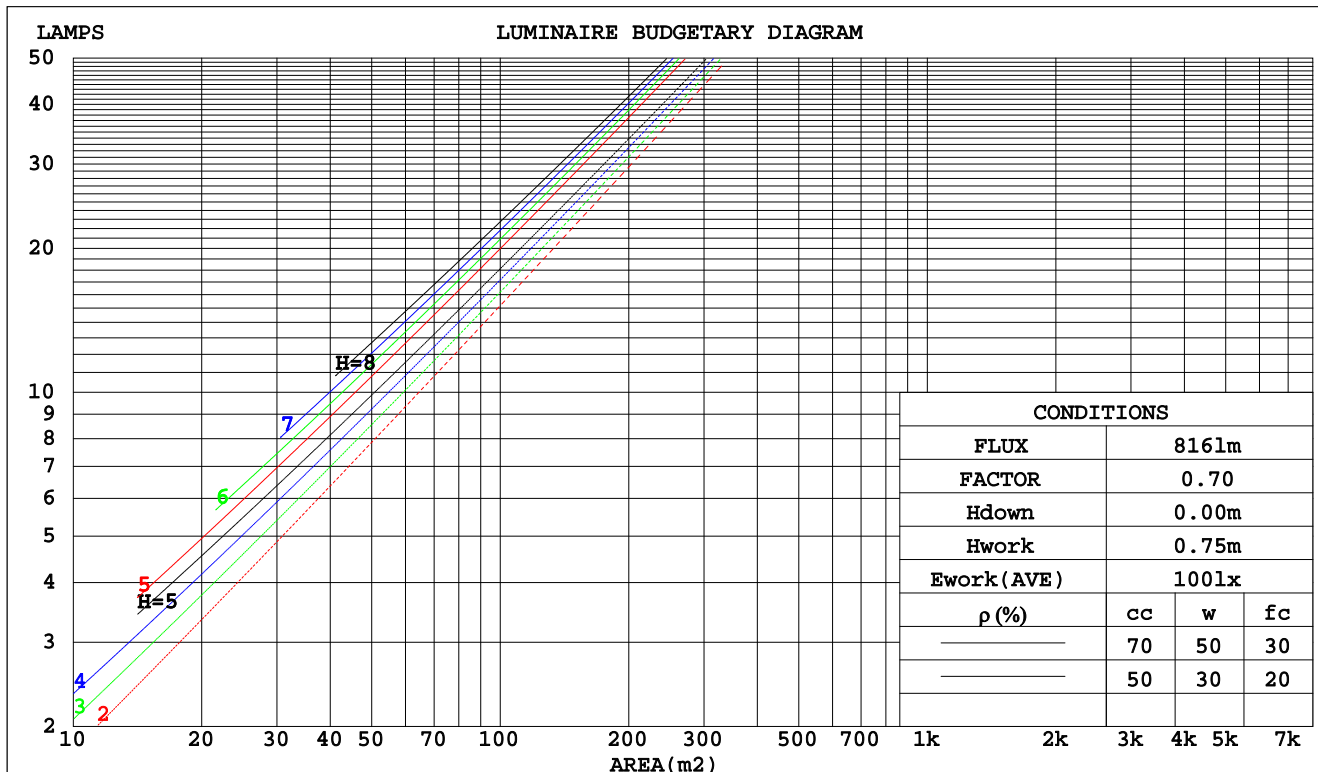
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		

$\rho_{cc}$	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	.149	.085	.027	.142	.081	.026	.130	.075	.024	.119	.068	.022	.108	.063	.020		
2.0	.140	.077	.024	.134	.074	.023	.124	.069	.021	.115	.064	.020	.106	.060	.019		
3.0	.131	.070	.021	.127	.068	.020	.118	.064	.019	.110	.060	.019	.103	.057	.018		
4.0	.124	.064	.019	.120	.063	.019	.113	.060	.018	.106	.057	.017	.099	.054	.016		
5.0	.117	.060	.017	.114	.058	.017	.108	.056	.016	.102	.054	.016	.096	.051	.015		
6.0	.111	.056	.016	.108	.055	.016	.103	.053	.015	.098	.051	.015	.093	.049	.015		
7.0	.106	.052	.015	.103	.052	.015	.099	.050	.014	.094	.048	.014	.090	.047	.014		
8.0	.101	.049	.014	.099	.049	.014	.095	.047	.014	.091	.046	.013	.087	.045	.013		
9.0	.097	.047	.013	.095	.046	.013	.091	.045	.013	.087	.044	.013	.084	.043	.012		
10.0	.093	.044	.012	.091	.044	.012	.088	.043	.012	.084	.042	.012	.081	.041	.012		

$\rho_{cc}$	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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.116	.130	.114	.101	.089	.079	.070	.051	.046	.041	.017	.015	.013	
3.0	.138	.113	.094	.118	.098	.081	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.126	.098	.077	.108	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.116	.086	.064	.100	.074	.056	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.108	.076	.054	.092	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.007	
7.0	.100	.068	.046	.086	.059	.040	.060	.042	.028	.035	.024	.017	.011	.008	.006	
8.0	.094	.062	.039	.081	.054	.034	.056	.038	.024	.033	.022	.015	.011	.007	.005	
9.0	.089	.056	.034	.076	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.084	.052	.030	.072	.045	.026	.050	.032	.019	.029	.019	.011	.009	.006	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm										
NAME: AFTER7 Maxi-3030					TYPE:Downlight			SERIAL No.:		
SPEC.:3000K					DIM.: $\phi$ 68mm*H124mm					
MFR.: NEKO LIGHTING AG										
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	13.0	13.7	13.2	13.8	14.0	13.4	14.1	13.6	14.3	14.4
3H	12.9	13.5	13.1	13.7	13.9	13.3	14.0	13.5	14.2	14.3
4H	12.8	13.4	13.0	13.6	13.9	13.2	13.9	13.5	14.1	14.3
6H	12.7	13.3	13.0	13.5	13.8	13.1	13.7	13.4	14.0	14.2
8H	12.6	13.2	12.9	13.5	13.7	13.1	13.7	13.4	13.9	14.2
12H	12.6	13.2	12.9	13.4	13.7	13.0	13.6	13.3	13.9	14.1
4H 2H	12.8	13.5	13.1	13.7	13.9	13.2	13.9	13.5	14.1	14.3
3H	12.7	13.3	13.0	13.5	13.8	13.1	13.7	13.4	14.0	14.2
4H	12.6	13.1	13.0	13.4	13.7	13.0	13.6	13.4	13.9	14.2
6H	12.5	13.0	12.9	13.3	13.6	12.9	13.4	13.3	13.7	14.1
8H	12.5	12.9	12.8	13.2	13.6	12.9	13.3	13.3	13.7	14.0
12H	12.4	12.8	12.8	13.2	13.6	12.8	13.2	13.2	13.6	14.0
8H 4H	12.5	12.9	12.9	13.2	13.6	12.9	13.3	13.3	13.7	14.0
6H	12.4	12.7	12.8	13.1	13.5	12.8	13.1	13.2	13.5	13.9
8H	12.3	12.6	12.7	13.0	13.5	12.7	13.0	13.2	13.5	13.9
12H	12.2	12.5	12.7	12.9	13.4	12.7	12.9	13.1	13.4	13.8
12H 4H	12.4	12.8	12.8	13.2	13.6	12.8	13.2	13.2	13.6	14.0
6H	12.3	12.6	12.7	13.0	13.5	12.7	13.0	13.2	13.5	13.9
8H	12.2	12.5	12.7	12.9	13.4	12.7	12.9	13.1	13.4	13.8
Variations with the observer position at spacings:										
S = 1.0H	+ 2.3 / - 5.7					+ 2.7 / - 5.4				
1.5H	+ 3.4 / - 3.8					+ 4.0 / - 4.3				
2.0H	+ 4.2 / - 5.3					+ 4.5 / - 5.1				

CIE Pub.117, 815.8 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = -0.7$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		

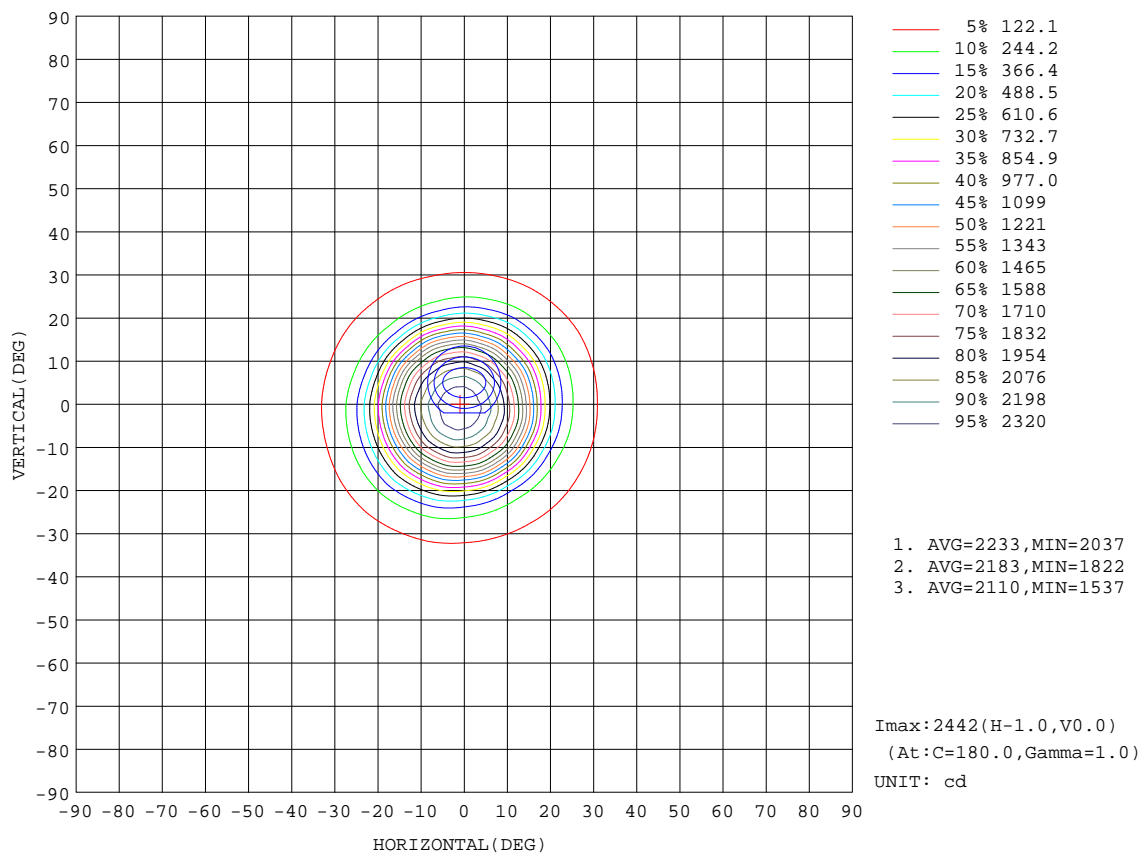
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	79	88	83	79	88	82	79	76
0.80	96	91	87	96	90	87	94	90	87	83
1.00	100	95	92	100	95	91	98	94	91	87
1.25	104	99	96	103	99	96	101	98	95	91
1.50	107	102	99	106	102	99	103	100	98	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	104	102	96
3.00	112	109	106	110	108	105	107	105	103	97
4.00	114	112	109	112	110	108	109	107	105	98
5.00	115	113	112	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

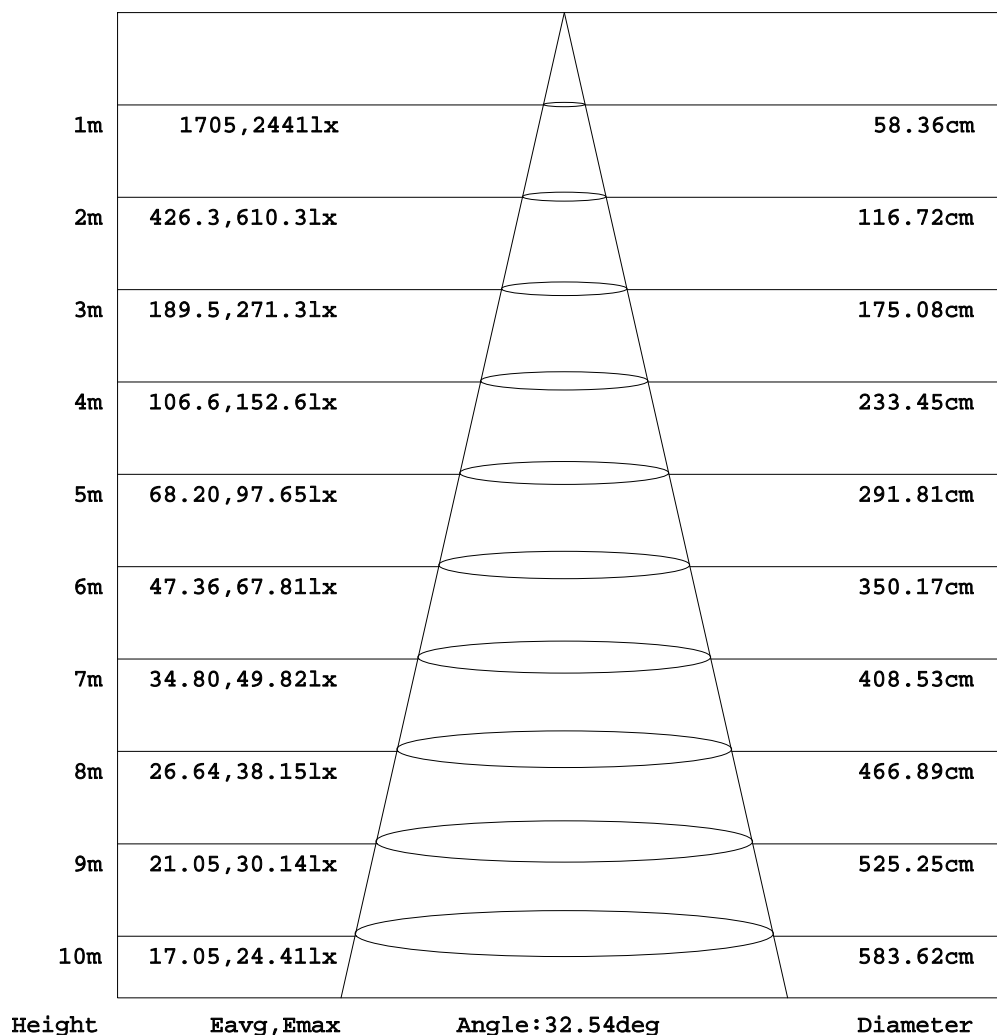
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		

Flux out:470.0 lm



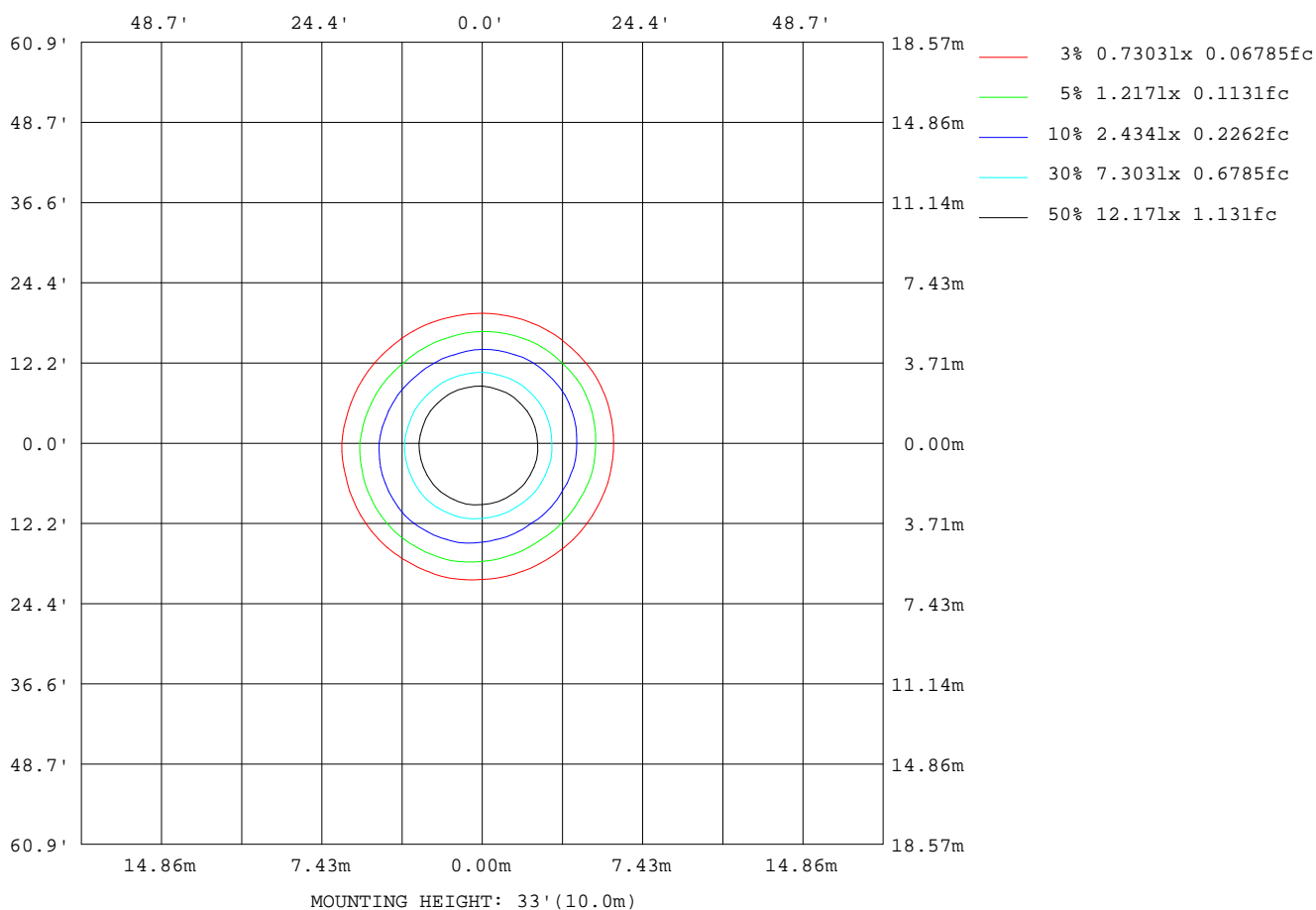
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:24.00V I:0.4370A P:10.49W PF:1.000 Freq:0Hz Lamp Flux:815.806x1 lm		
NAME: AFTER7 Maxi-3030	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\phi$ 68mm*H124mm	
MFR.: NEKO LIGHTING AG		

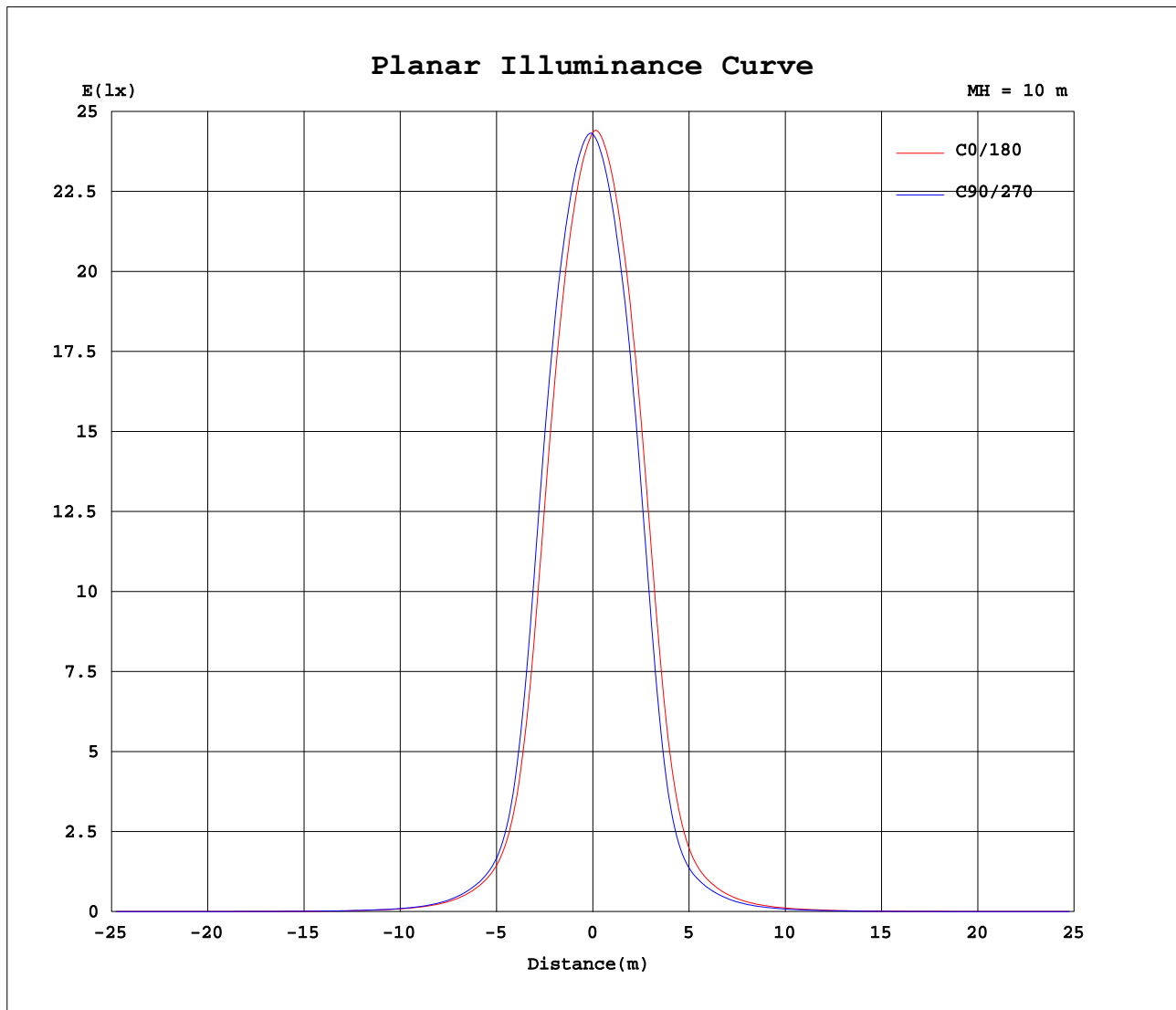
AvgL	cd/m2
L_0~180 (65) av	1711
L_0~180 (75) av	466
L_0~180 (85) av	107
L_90~270 (65) av	1664
L_90~270 (75) av	426
L_90~270 (85) av	117
L_45 (65) av	1682
L_45 (75) av	447
L_45 (85) av	112

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2020-10-28

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:5.850m [K=1.0000]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:5.850m [K=1.0000]
Remarks:

```