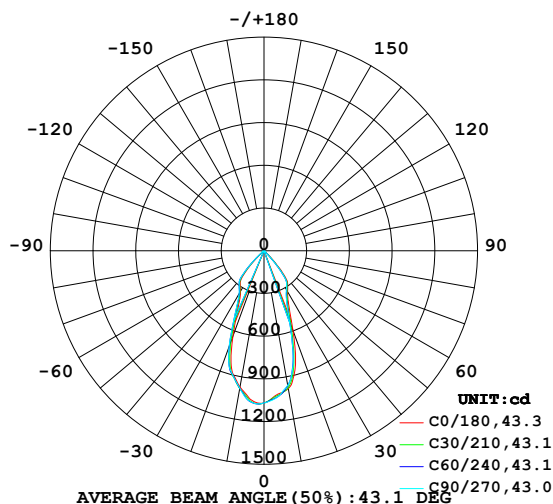


LUMINAIRE PHOTOMETRIC TEST REPORT

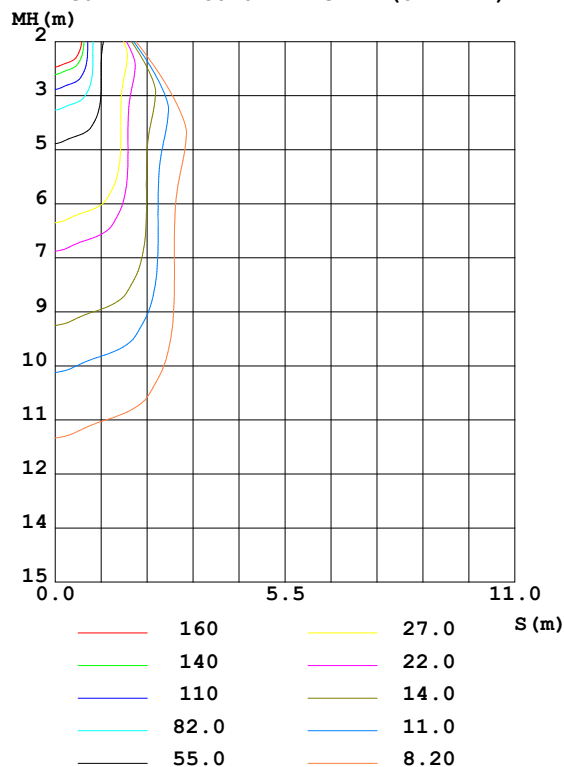
Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\Phi$ 79*46mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.09 lm/W			
MODEL	Bridgelux-3000K	I <sub>max</sub> (cd)	1078	S/MH(C0/180)	0.72
NOMINAL POWER(W)	11	LOR(%)	100.0	S/MH(C90/270)	0.75
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	812.25	$\eta$ UP,DN(C0-180)	0.0,47.0
NOMINAL FLUX(lm)	812.251	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,53.0
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	220	$\eta$ down(%)	100.0	CIBSE SHR MAX	0.65

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:2022-02-21

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:58%  
 Test Distance:8.967m [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	983.2	973.1	959.8	964.8	971.7	983.0	980.3	978.9	0- 10	97.31	97.31	12,12
20	595.1	541.5	522.2	578.6	637.5	693.6	717.7	657.6	10- 20	230.2	327.5	40.3,40.3
30	332.1	323.3	314.9	323.2	330.4	341.1	350.6	339.8	20- 30	199.0	526.5	64.8,64.8
40	209.5	178.5	172.4	203.6	230.8	257.0	261.5	236.2	30- 40	178.9	705.4	86.8,86.8
50	19.09	17.72	16.92	18.38	19.47	21.34	22.32	21.71	40- 50	68.71	774.1	95.3,95.3
60	12.22	11.75	11.18	11.76	12.38	13.10	13.38	13.14	50- 60	13.80	787.9	97,97
70	8.318	8.885	7.784	8.031	7.973	9.062	9.301	9.387	60- 70	10.18	798.1	98.3,98.3
80	7.113	7.362	6.505	7.191	6.599	7.722	8.045	8.218	70- 80	8.363	806.4	99.3,99.3
90	0.7378	0.9340	0.6976	1.125	1.563	4.623	5.193	2.809	80- 90	5.833	812.3	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): 759.28 lm

%lum = 93.5%

%lamp = 93.5%

Conical surface Flux(120deg): 787.88 lm

%lum = 97.0%

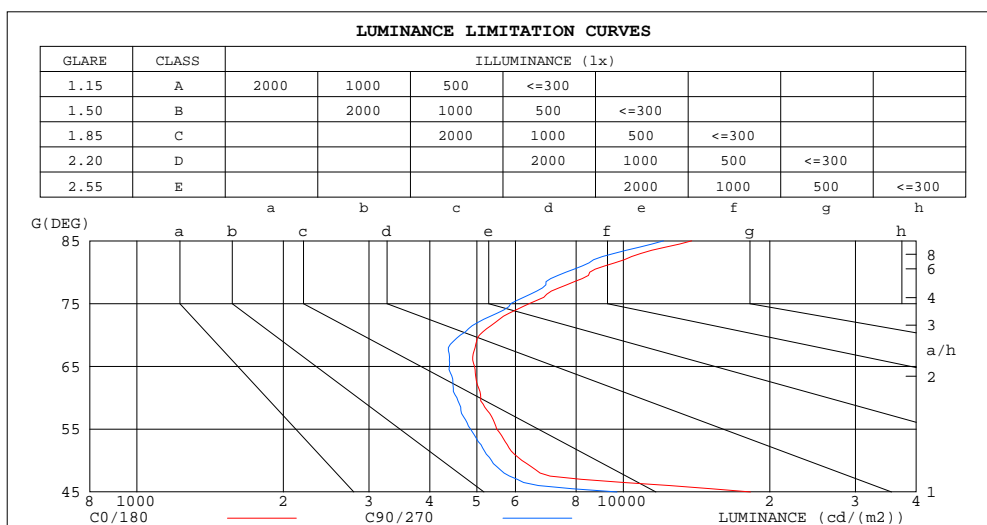
%lamp = 97.0%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: Φ79*46mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	13821	12094
80	8529	7620
75	6408	5869
70	5064	4629
65	4943	4389
60	5090	4549
55	5494	4851
50	6184	5355
45	18252	9701

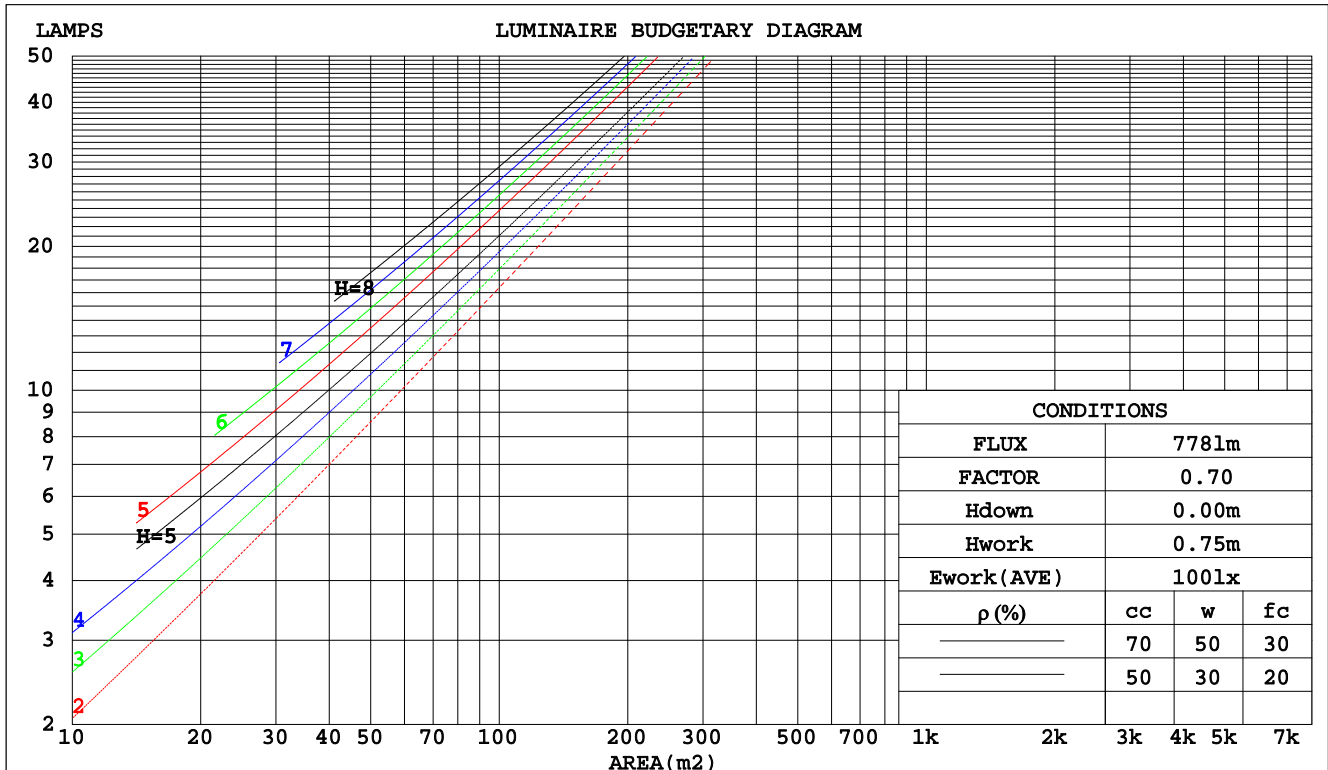
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: Φ79*46mm	
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						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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.02	.97	.94	1.00	.96	.93	.97	.94	.91	.94	.91	.89	.91	.89	.87	.85
3.0	.95	.89	.85	.93	.88	.84	.90	.86	.83	.88	.85	.82	.86	.83	.80	.79
4.0	.88	.82	.78	.87	.82	.77	.85	.80	.76	.83	.79	.76	.81	.77	.75	.73
5.0	.82	.76	.72	.81	.76	.71	.80	.75	.71	.78	.74	.70	.76	.73	.70	.68
6.0	.77	.71	.67	.76	.71	.66	.75	.70	.66	.73	.69	.65	.72	.68	.65	.63
7.0	.73	.66	.62	.72	.66	.62	.71	.65	.62	.69	.65	.61	.68	.64	.61	.59
8.0	.68	.62	.58	.68	.62	.58	.67	.61	.58	.66	.61	.57	.65	.60	.57	.56
9.0	.65	.59	.54	.64	.58	.54	.63	.58	.54	.62	.57	.54	.61	.57	.54	.52
10.0	.61	.55	.51	.61	.55	.51	.60	.55	.51	.59	.54	.51	.58	.54	.51	.49



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:

## WEC AND CCEC

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.251x1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: Φ79*46mm	
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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.194	.111	.035	.188	.107	.034	.175	.100	.032	.163	.094	.030	.153	.088	.028		
2.0	.183	.100	.031	.177	.098	.030	.167	.093	.029	.157	.088	.028	.148	.084	.026		
3.0	.173	.092	.028	.168	.090	.027	.159	.086	.026	.150	.082	.025	.142	.079	.024		
4.0	.163	.085	.025	.159	.083	.025	.151	.080	.024	.144	.077	.023	.137	.074	.023		
5.0	.155	.079	.023	.151	.078	.023	.144	.075	.022	.138	.073	.022	.132	.070	.021		
6.0	.147	.074	.021	.144	.073	.021	.138	.070	.021	.132	.069	.020	.127	.067	.020		
7.0	.140	.069	.020	.137	.068	.019	.131	.066	.019	.126	.065	.019	.122	.063	.019		
8.0	.133	.065	.018	.131	.064	.018	.126	.063	.018	.121	.061	.018	.117	.060	.018		
9.0	.127	.062	.017	.125	.061	.017	.121	.060	.017	.117	.058	.017	.113	.057	.017		
10.0	.122	.058	.016	.120	.058	.016	.116	.057	.016	.112	.056	.016	.109	.055	.016		

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.172	.157	.143	.147	.135	.124	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.135	.114	.096	.093	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.146	.114	.088	.125	.098	.076	.086	.068	.054	.050	.040	.032	.016	.013	.010	
4.0	.136	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008	
5.0	.127	.088	.058	.109	.076	.051	.075	.053	.036	.044	.031	.021	.014	.010	.007	
6.0	.120	.078	.049	.103	.068	.042	.071	.048	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.025	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.035	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.060	.031	.088	.052	.027	.061	.036	.019	.036	.021	.011	.012	.007	.004	
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\Phi$ 79*46mm	
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	19.8	20.8	20.0	20.9	21.1	19.1	20.1	19.3	20.3	20.4
3H	19.8	20.7	20.1	20.9	21.1	19.1	20.1	19.4	20.3	20.5
4H	19.9	20.8	20.2	21.0	21.2	19.3	20.1	19.6	20.4	20.6
6H	20.2	21.0	20.5	21.2	21.5	19.5	20.3	19.8	20.6	20.8
8H	20.4	21.1	20.7	21.4	21.7	19.7	20.5	20.0	20.7	21.0
12H	20.6	21.4	20.9	21.6	21.9	19.9	20.7	20.3	21.0	21.2
4H 2H	19.6	20.5	19.9	20.7	20.9	18.9	19.8	19.2	20.0	20.2
3H	19.7	20.5	20.1	20.8	21.0	19.1	19.9	19.4	20.1	20.4
4H	20.0	20.7	20.3	21.0	21.3	19.4	20.1	19.7	20.4	20.7
6H	20.4	21.0	20.8	21.4	21.7	19.8	20.4	20.2	20.8	21.1
8H	20.7	21.3	21.1	21.6	22.0	20.1	20.7	20.5	21.0	21.4
12H	21.1	21.6	21.5	22.0	22.4	20.5	21.0	20.9	21.4	21.8
8H 4H	20.1	20.6	20.5	21.0	21.3	19.5	20.1	19.9	20.4	20.8
6H	20.7	21.2	21.1	21.5	22.0	20.2	20.6	20.6	21.0	21.4
8H	21.1	21.6	21.6	22.0	22.4	20.6	21.0	21.1	21.4	21.9
12H	21.7	22.1	22.2	22.5	23.0	21.2	21.5	21.6	22.0	22.4
12H 4H	20.1	20.6	20.5	21.0	21.3	19.5	20.0	19.9	20.4	20.8
6H	20.8	21.2	21.2	21.6	22.0	20.3	20.7	20.7	21.1	21.5
8H	21.3	21.6	21.8	22.1	22.6	20.8	21.1	21.3	21.6	22.1
Variations with the observer position at spacings:										
S = 1.0H	+ 2.1 / - 2.8					+ 2.0 / - 2.6				
1.5H	+ 4.2 / - 2.8					+ 4.2 / - 2.5				
2.0H	+ 2.1 / - 0.4					+ 0.5 / - 0.2				

CIE Pub.117, 812.3 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:2022-02-21

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: Φ79*46mm	
MFR.: NEKO LIGHTING AG		

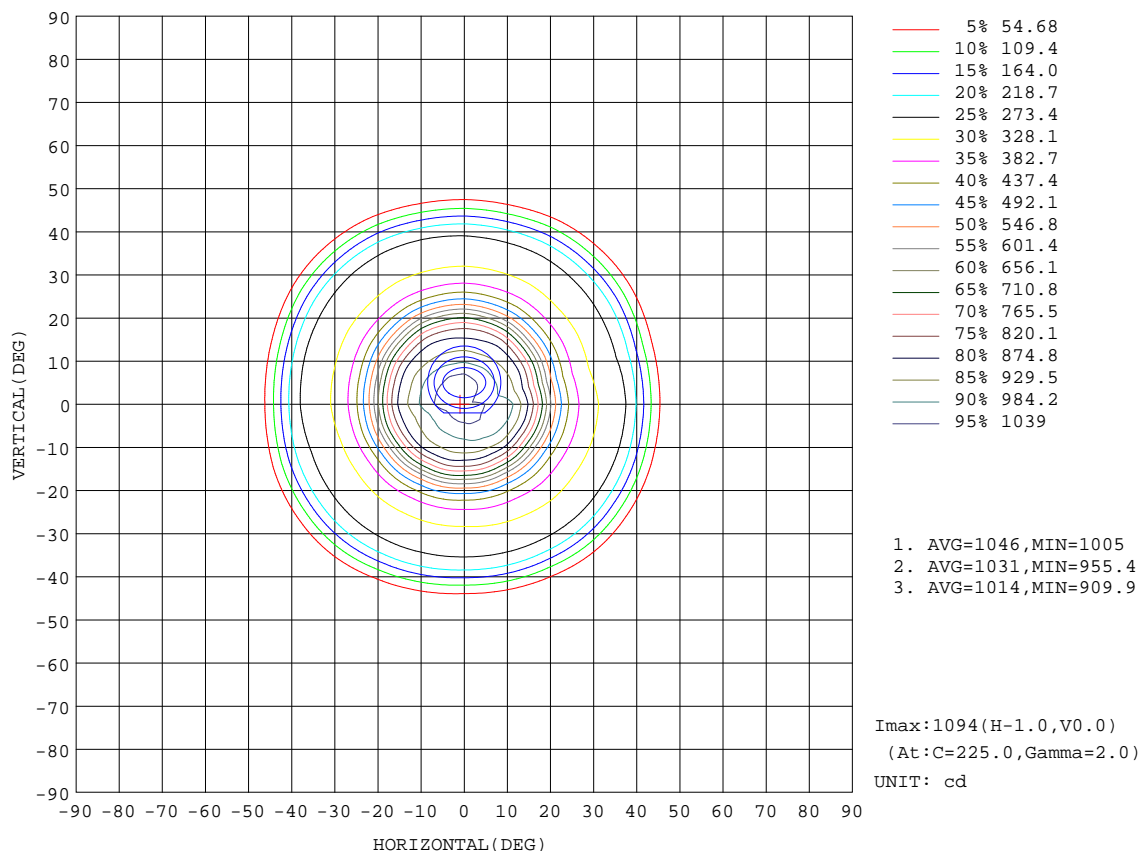
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	83	76	72	82	76	72	68
0.80	91	85	81	91	84	80	89	84	80	76
1.00	96	90	86	95	90	86	94	90	85	81
1.25	101	95	91	100	94	91	98	93	90	85
1.50	104	98	95	102	98	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	104	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	102	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	111	109	112	110	108	108	106	105	97
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:2022-02-21

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:58%  
 Test Distance:8.967m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\Phi$ 79*46mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

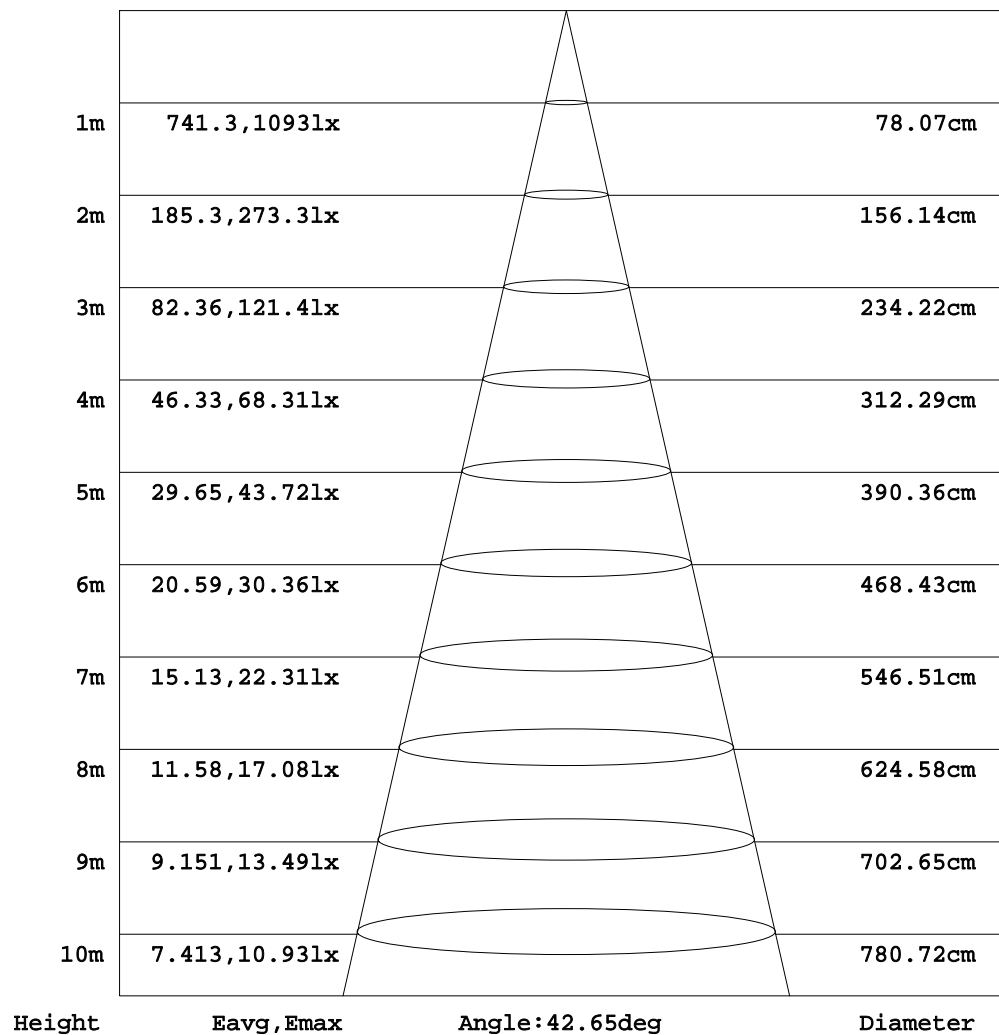
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx 1m		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: Φ79*46mm	
MFR.: NEKO LIGHTING AG		

Flux out:361.3 lm



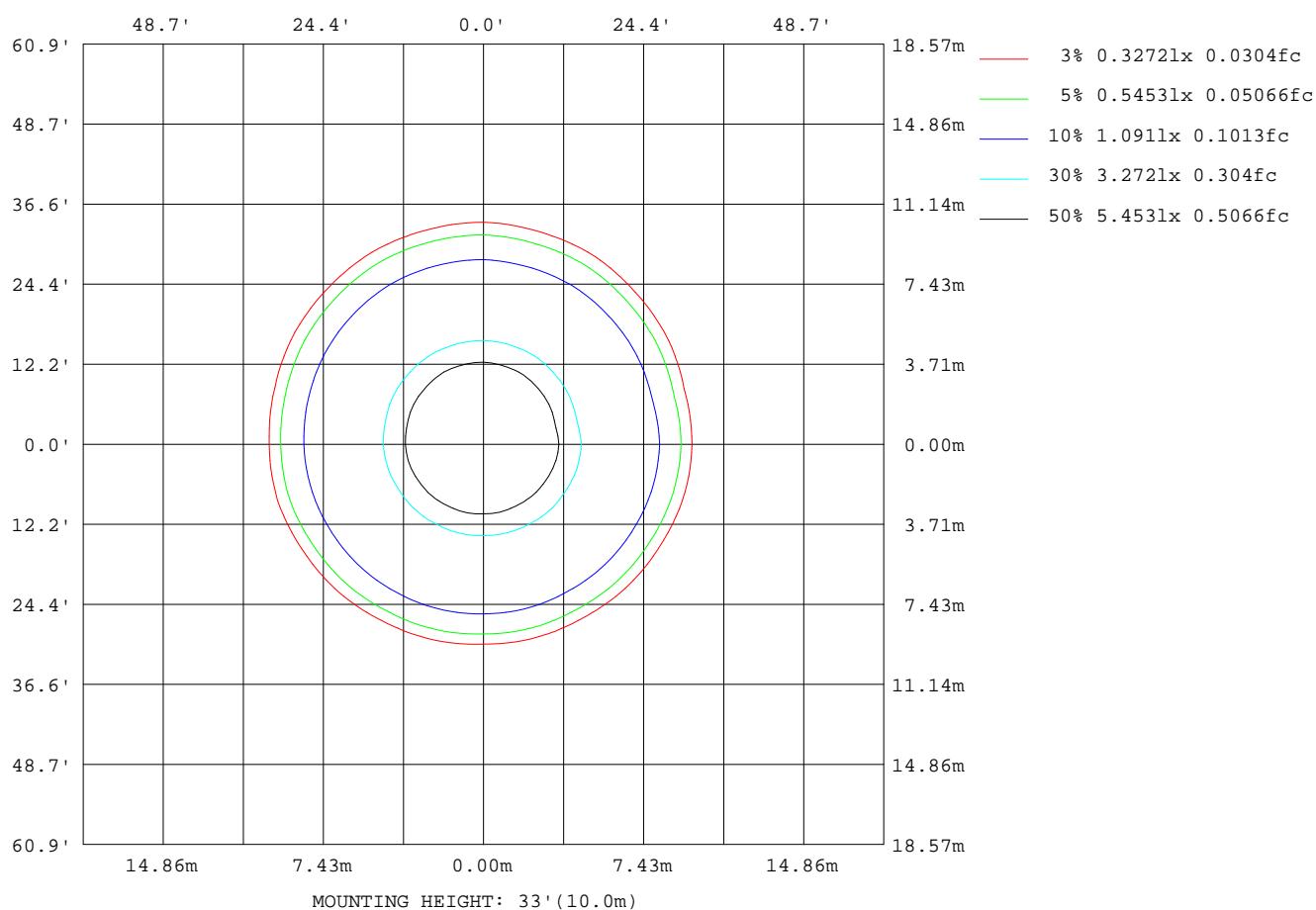
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.25lx 1m		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: $\Phi$ 79*46mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:220.6V I:0.0505A P:10.68W PF:0.9573 Freq:50.99Hz Lamp Flux:812.251x1 lm		
NAME: SJF-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: Φ79*46mm	
MFR.: NEKO LIGHTING AG		

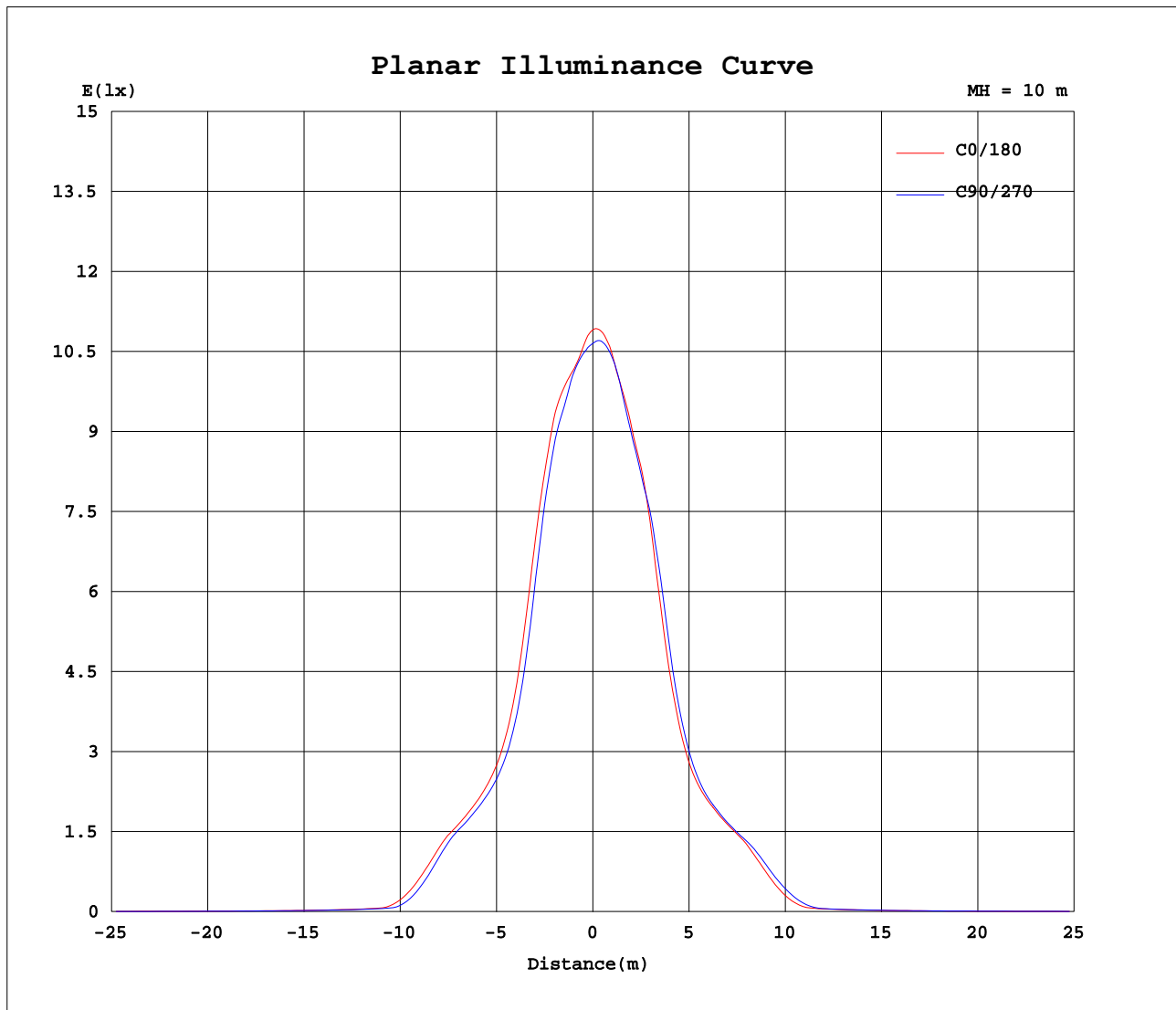
AvgL	cd/m2
L_0~180 (65) av	4871
L_0~180 (75) av	5987
L_0~180 (85) av	12986
L_90~270 (65) av	4912
L_90~270 (75) av	6264
L_90~270 (85) av	14288
L_45 (65) av	5043
L_45 (75) av	6609
L_45 (85) av	14700

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2022-02-21

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:8.967m [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: 2022-02-21

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 8.967m [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:8.967m [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:8.967m [K=1.0000]
Remarks:

```