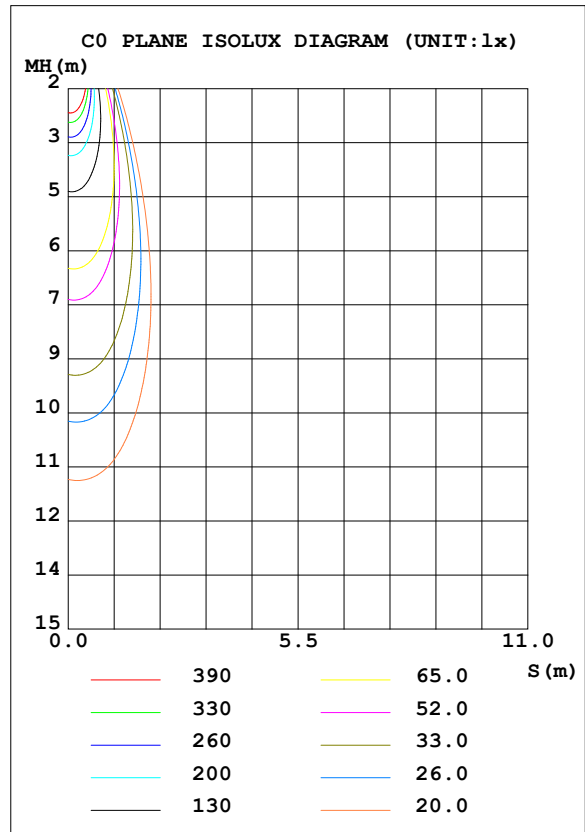
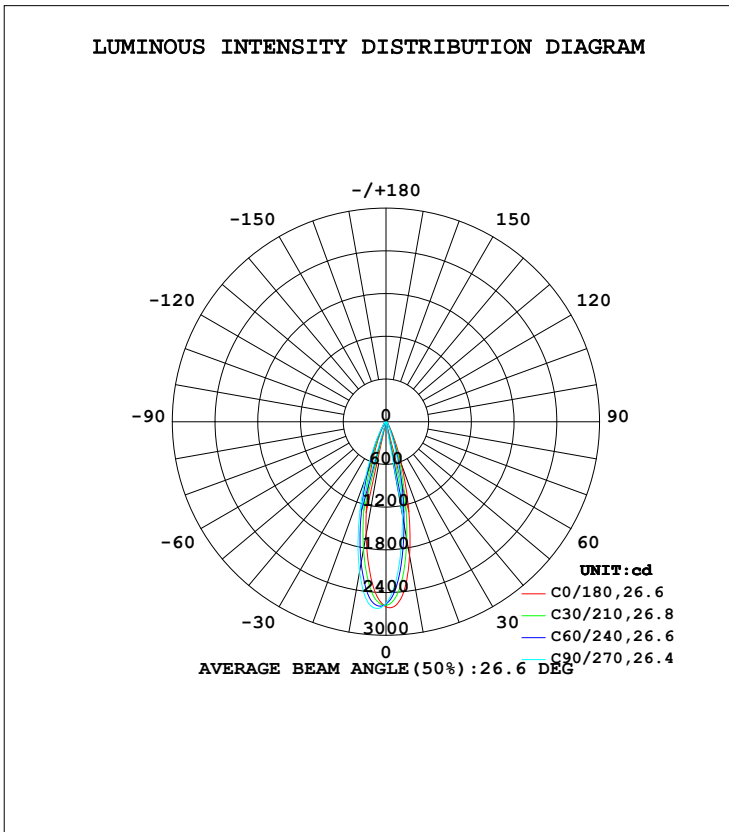


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 73.74 lm/W			
MODEL	CITIZEN-2700K	I <sub>max</sub> (cd)	2639	S/MH (C0/180)	0.42
NOMINAL POWER (W)	11	LOR (%)	100.0	S/MH (C90/270)	0.54
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	761.36	η UP, DN (C0-180)	0.0, 41.4
NOMINAL FLUX (lm)	761.364	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 58.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Jason  
 Test Date: 2021-11-09

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:

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1915	1578	1337	1356	1617	1911	2135	2147	0- 10	203.6	203.6	26.7,26.7
20	631.3	448.9	349.1	364.8	499.4	689.2	855.5	821.5	10- 20	299.3	502.9	66.1,66.1
30	141.0	106.2	85.76	89.96	115.1	154.3	192.0	184.6	20- 30	135.1	638.0	83.8,83.8
40	50.61	45.44	39.80	39.83	44.94	52.93	59.65	57.97	30- 40	48.96	687.0	90.2,90.2
50	28.68	27.06	25.69	25.72	27.85	29.73	31.59	31.59	40- 50	28.40	715.4	94,94
60	18.64	17.82	16.67	16.57	18.95	20.99	21.90	20.73	50- 60	21.15	736.5	96.7,96.7
70	11.26	10.33	9.373	9.448	10.81	12.63	13.07	12.88	60- 70	14.77	751.3	98.7,98.7
80	4.560	3.235	2.500	2.598	3.996	5.958	6.385	6.199	70- 80	8.249	759.5	99.8,99.8
90	0.0575	0.0575	0.0523	0.0418	0.0836	0.1882	0.3397	0.2613	80- 90	1.829	761.4	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): 702.46 lm

%lum = 92.3%  
%lamp = 92.3%

Conical surface Flux(120deg): 736.52 lm

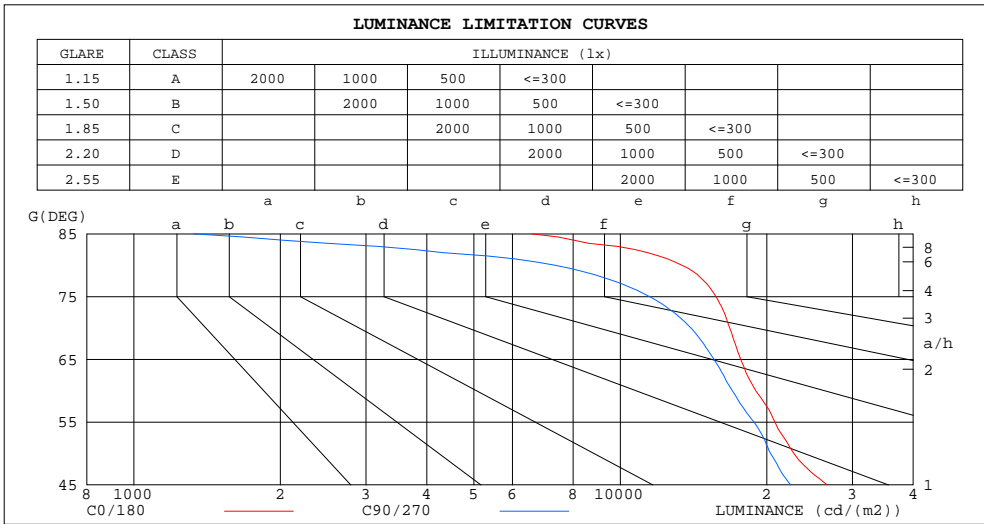
%lum = 96.7%  
%lamp = 96.7%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2021-11-09

$\gamma$  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:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	6579	1327
80	13382	7336
75	15718	11479
70	16783	13965
65	17686	15575
60	18993	16984
55	20787	18833
50	22738	20361
45	26625	22420

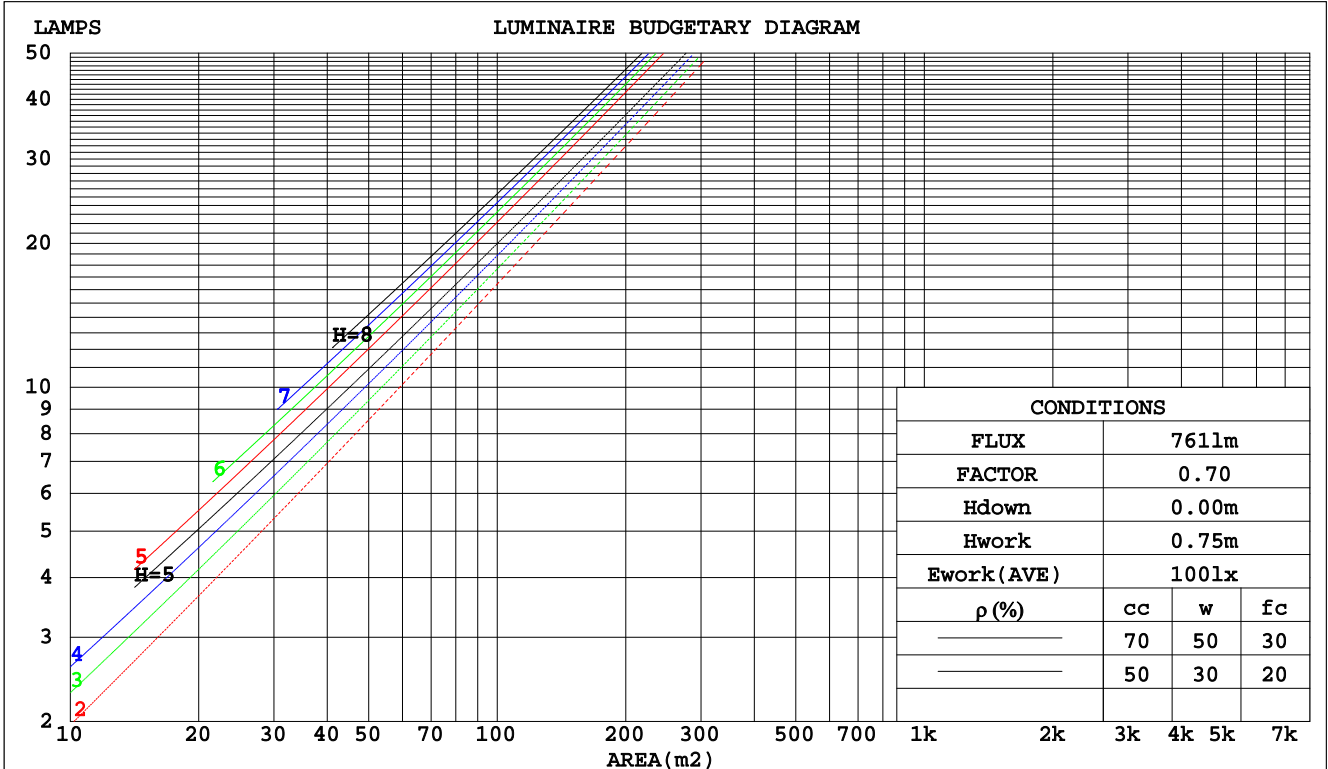
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2021-11-09

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:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.04	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.05	1.01	.98	1.03	.90	.97	.90	.97	.95	.97	.95	.93	.94	.92	.91	.89
3.0	.99	.94	.91	.98	.93	.90	.95	.92	.89	.93	.90	.87	.90	.88	.86	.85
4.0	.94	.89	.85	.93	.88	.85	.91	.87	.84	.89	.86	.83	.87	.84	.82	.81
5.0	.89	.84	.81	.89	.84	.80	.87	.83	.80	.85	.82	.79	.84	.81	.78	.77
6.0	.86	.80	.77	.85	.80	.77	.83	.79	.76	.82	.78	.76	.81	.78	.75	.74
7.0	.82	.77	.73	.81	.77	.73	.80	.76	.73	.79	.75	.73	.78	.75	.72	.71
8.0	.79	.74	.70	.78	.74	.70	.77	.73	.70	.76	.73	.70	.75	.72	.69	.68
9.0	.76	.71	.68	.76	.71	.68	.75	.70	.67	.74	.70	.67	.73	.70	.67	.66
10.0	.73	.69	.65	.73	.68	.65	.72	.68	.65	.71	.68	.65	.71	.67	.65	.64



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Jason  
 Test Date: 2021-11-09

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:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.166	.094	.030	.159	.091	.029	.147	.084	.027	.135	.078	.025	.125	.072	.023	
2.0	.155	.085	.026	.150	.083	.025	.139	.077	.024	.130	.073	.023	.121	.068	.022	
3.0	.145	.077	.023	.140	.075	.023	.131	.071	.022	.123	.068	.021	.116	.064	.020	
4.0	.136	.070	.021	.132	.069	.020	.124	.066	.020	.117	.063	.019	.111	.060	.018	
5.0	.127	.065	.019	.124	.064	.019	.117	.061	.018	.111	.059	.017	.106	.057	.017	
6.0	.120	.060	.017	.117	.059	.017	.111	.057	.017	.106	.055	.016	.101	.053	.016	
7.0	.114	.056	.016	.111	.055	.016	.106	.054	.015	.101	.052	.015	.097	.050	.015	
8.0	.108	.053	.015	.106	.052	.015	.101	.051	.014	.097	.049	.014	.093	.048	.014	
9.0	.103	.050	.014	.101	.049	.014	.097	.048	.014	.093	.047	.013	.090	.046	.013	
10.0	.098	.047	.013	.096	.046	.013	.093	.045	.013	.089	.044	.013	.086	.043	.012	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.170	.157	.146	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.140	.113	.092	.120	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.098	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.119	.086	.062	.102	.075	.054	.070	.052	.038	.041	.031	.023	.013	.010	.008	
6.0	.111	.077	.053	.095	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.103	.069	.045	.089	.060	.039	.061	.042	.028	.036	.025	.016	.012	.008	.005	
8.0	.097	.062	.039	.083	.054	.034	.058	.038	.024	.034	.022	.014	.011	.007	.005	
9.0	.091	.057	.034	.079	.049	.029	.054	.035	.021	.032	.020	.012	.010	.007	.004	
10.0	.086	.052	.030	.074	.045	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2021-11-09

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:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
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	18.8	19.6	19.0	19.8	19.9	18.1	18.9	18.3	19.1	19.2
3H	20.0	20.7	20.2	20.9	21.1	19.2	19.9	19.4	20.1	20.3
4H	20.5	21.2	20.8	21.4	21.6	19.5	20.2	19.8	20.5	20.7
6H	20.8	21.5	21.1	21.7	22.0	19.7	20.4	20.0	20.6	20.8
8H	20.9	21.6	21.2	21.8	22.1	19.7	20.3	20.0	20.6	20.8
12H	20.9	21.5	21.2	21.8	22.1	19.6	20.3	19.9	20.5	20.8
4H 2H	19.2	20.0	19.5	20.2	20.4	18.6	19.4	18.9	19.6	19.8
3H	20.6	21.2	20.9	21.5	21.8	19.9	20.5	20.2	20.7	21.0
4H	21.2	21.8	21.5	22.1	22.4	20.3	20.9	20.6	21.2	21.5
6H	21.6	22.2	22.0	22.5	22.8	20.5	21.0	20.9	21.4	21.7
8H	21.7	22.2	22.1	22.6	22.9	20.5	21.0	20.9	21.3	21.7
12H	21.7	22.2	22.2	22.5	22.9	20.5	20.9	20.9	21.3	21.7
8H 4H	21.3	21.8	21.7	22.1	22.5	20.5	21.0	20.9	21.3	21.7
6H	21.8	22.2	22.3	22.6	23.0	20.8	21.2	21.2	21.6	22.0
8H	22.0	22.3	22.4	22.7	23.2	20.8	21.1	21.2	21.5	22.0
12H	22.0	22.3	22.4	22.7	23.2	20.7	21.0	21.2	21.5	21.9
12H 4H	21.3	21.7	21.7	22.1	22.5	20.5	20.9	20.9	21.3	21.7
6H	21.8	22.2	22.3	22.6	23.0	20.8	21.1	21.2	21.5	22.0
8H	21.9	22.2	22.4	22.7	23.1	20.8	21.1	21.2	21.5	22.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.5				
1.5H	+ 0.4 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.5 / - 0.4					+ 0.4 / - 0.5				

CIE Pub.117, 761.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.9)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2021-11-09

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:

UTILIZATION FACTORS TABLE

Test:U:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		

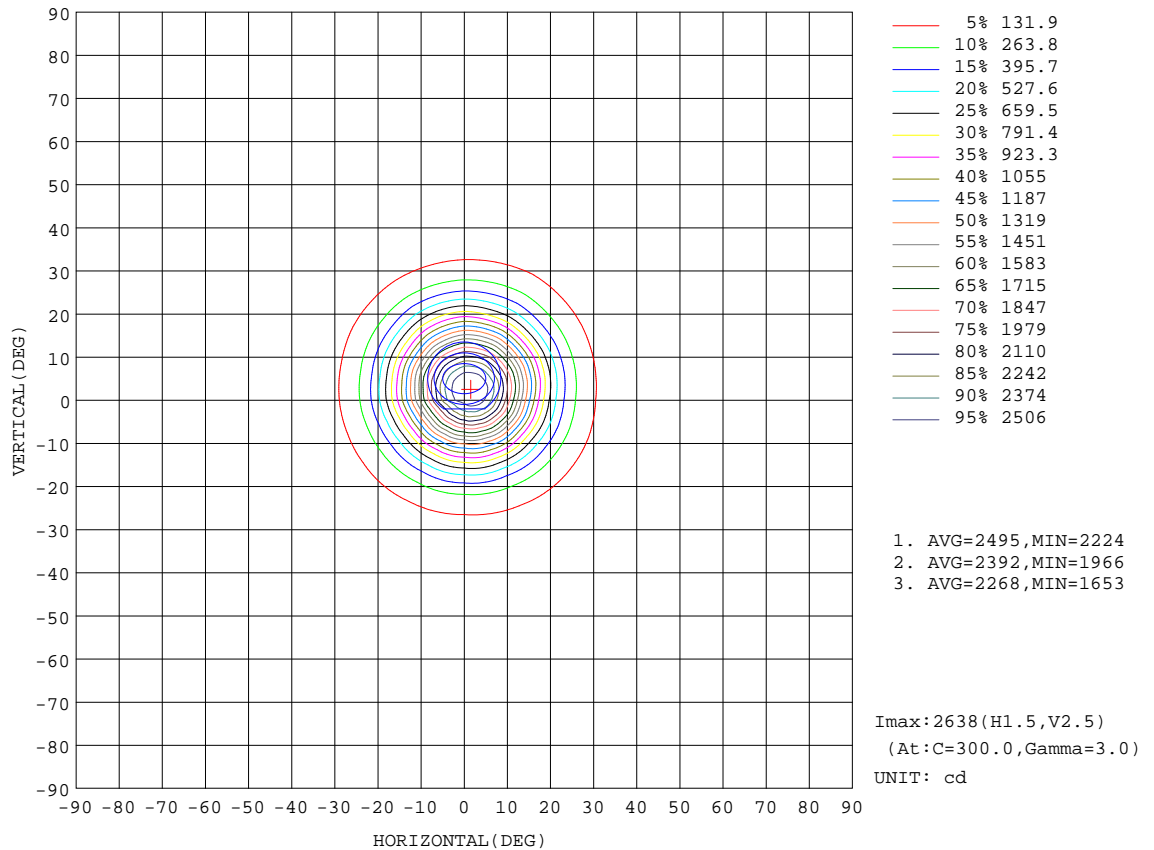
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	86	79	75	85	79	75	84	78	75	71
0.80	93	87	83	92	86	83	91	86	82	78
1.00	98	92	88	97	91	87	95	91	87	83
1.25	102	96	92	101	96	92	99	94	91	87
1.50	105	99	96	103	99	95	101	97	94	90
2.00	107	103	100	106	102	99	103	100	97	92
2.50	109	105	102	108	104	101	105	102	99	93
3.00	111	107	104	109	106	103	106	103	101	95
4.00	113	110	108	111	109	106	107	105	104	97
5.00	115	112	110	112	110	109	108	107	105	98
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:2021-11-09

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:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2021-11-09

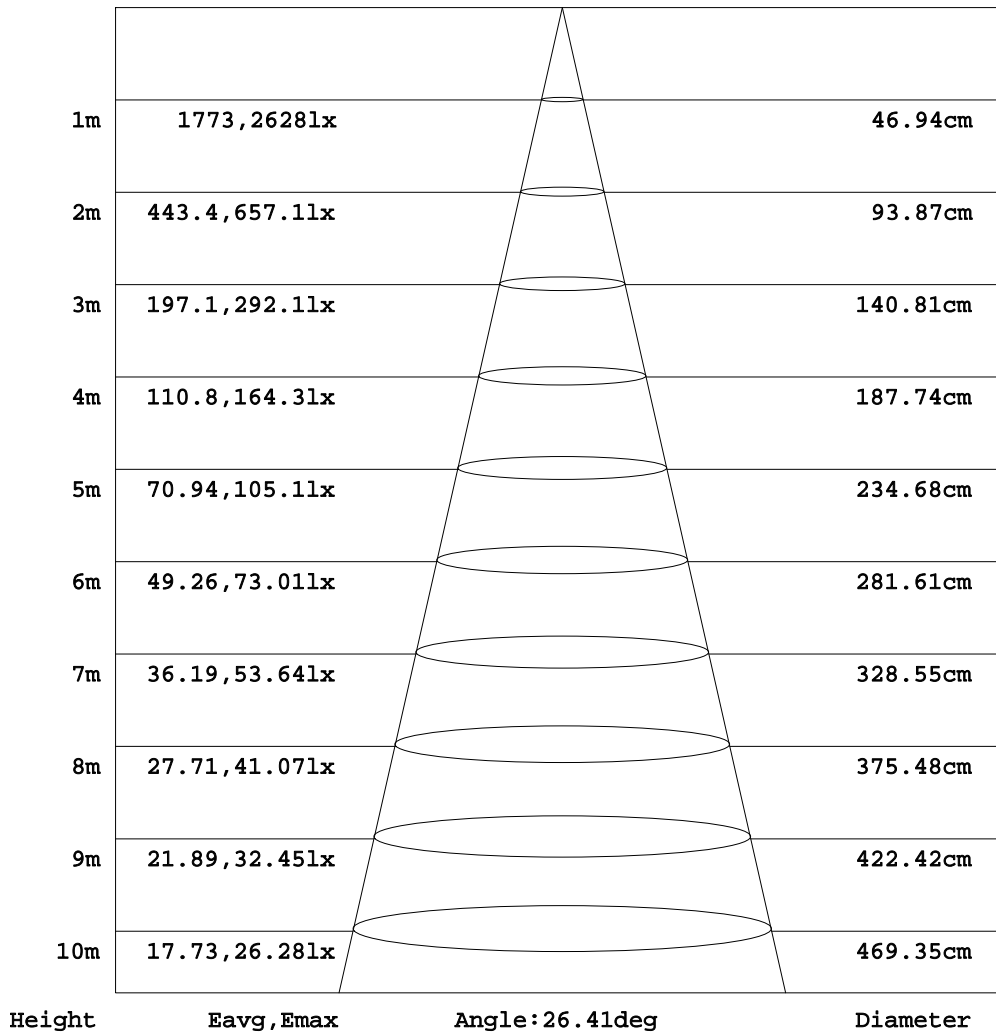
γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 8.967m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		

Flux out:321.1 lm



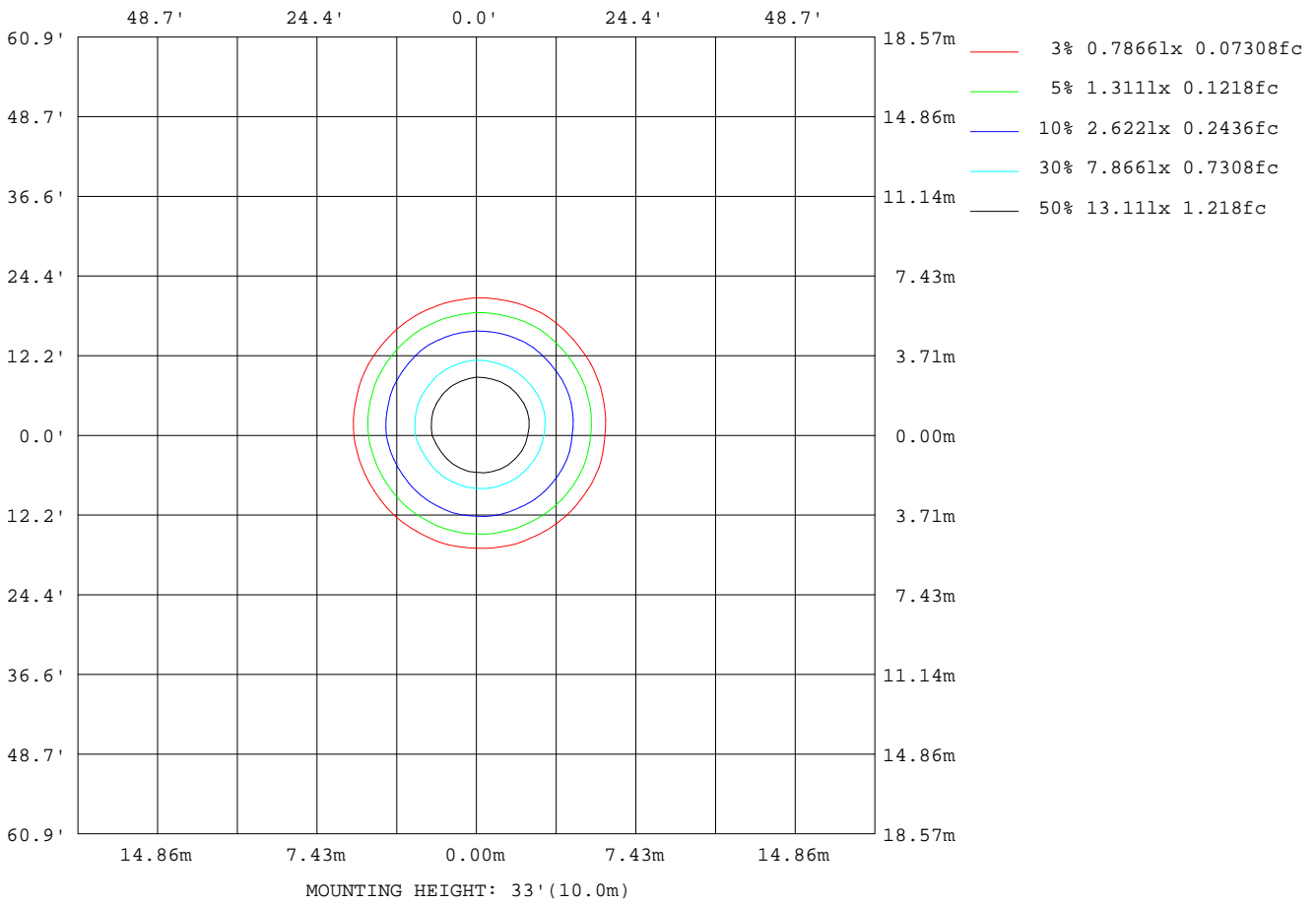
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2021-11-09

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:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2021-11-09

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:

LED Avg.L Report

Test:U:29.50V I:0.3500A P:10.32W PF:1.000 Freq:0Hz Lamp Flux:761.364x1 lm		
NAME: M3-11W-927-25	TYPE:Downlight	SERIAL No.:
SPEC.:2700K	DIM.: φ50mm*H40mm	
MFR.: NEKO LIGHTING AG		

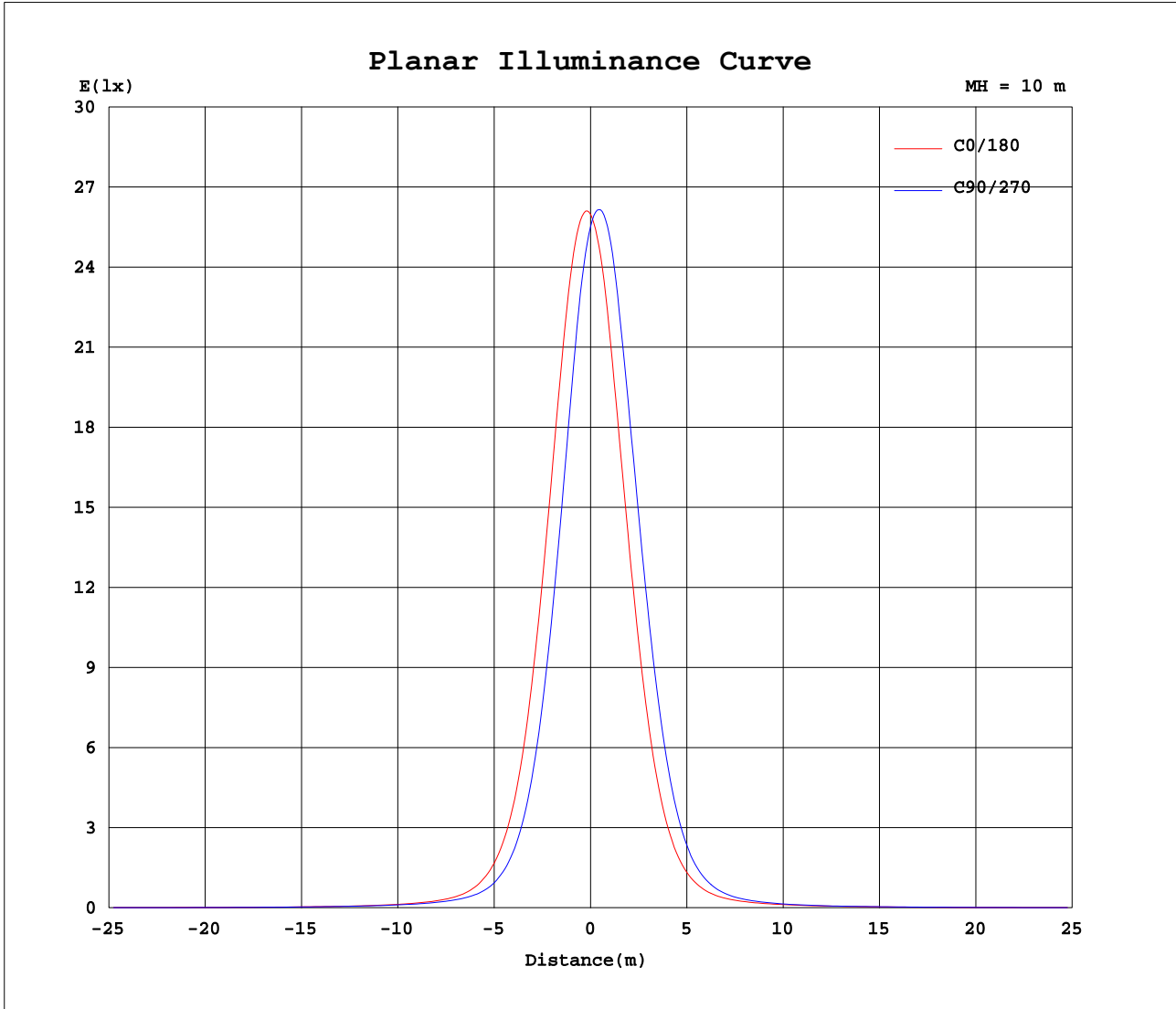
AvgL	cd/m2
L_0~180 (65) av	17591
L_0~180 (75) av	15050
L_0~180 (85) av	6071
L_90~270 (65) av	17940
L_90~270 (75) av	15303
L_90~270 (85) av	9101
L_45 (65) av	17998
L_45 (75) av	15538
L_45 (85) av	7854

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2021-11-09

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: 2021-11-09

$\gamma$  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:



