

G4RC-30W-940-110°-White



Light Output Ratio:	100.0%	
Luminaire Power:	28.29 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	fine grid method.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jasoan  
Test Date: 2022-04-21

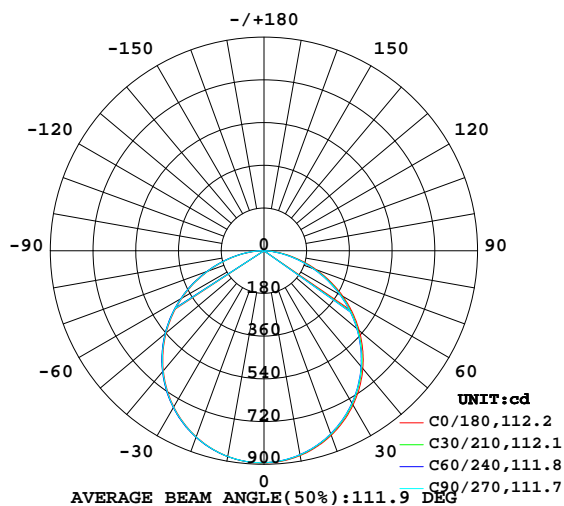
γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 8.967m [K=1.0000]  
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

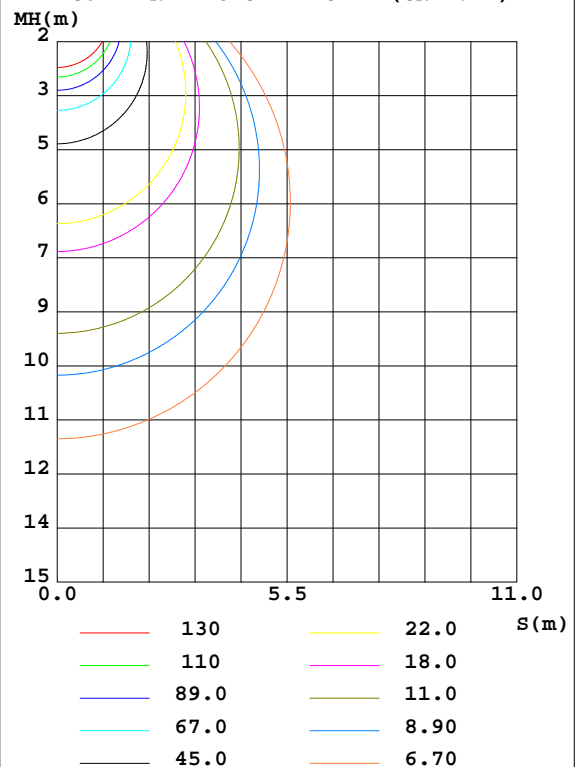
Test:U:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.75 lm/W			
MODEL	Bridgelux-4000K	I <sub>max</sub> (cd)	894.5	S/MH(C0/180)	1.26
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2538.7	η UP,DN(C0-180)	0.0,49.0
NOMINAL FLUX(lm)	2538.69	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,51.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.35

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:Jasoan  
Test Date:2022-04-21

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:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	876.5	873.5	873.2	875.9	879.9	880.2	879.8	876.1	0- 10	84.45	84.45	3.33,3.33
20	827.8	822.7	821.8	828.0	834.2	835.9	835.6	829.6	10- 20	241.8	326.2	12.8,12.8
30	750.5	743.7	741.9	752.0	759.8	762.6	761.8	753.9	20- 30	366.1	692.3	27.3,27.3
40	647.8	639.3	637.9	649.8	659.9	663.4	662.6	652.4	30- 40	441.1	1133	44.6,44.6
50	523.8	514.4	512.1	526.4	538.1	542.3	541.9	530.1	40- 50	456.8	1590	62.6,62.6
60	383.6	373.1	370.2	386.8	399.2	403.8	403.1	390.7	50- 60	411.3	2002	78.8,78.8
70	235.7	223.3	221.6	237.7	249.9	255.9	252.9	243.0	60- 70	311.2	2313	91.1,91.1
80	96.27	86.20	83.64	98.69	109.8	114.4	112.7	103.4	70- 80	177.8	2490	98.1,98.1
90	0.7003	0.7003	0.6951	0.6951	1.354	4.819	4.526	1.354	80- 90	48.19	2539	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): 1363.8 lm

%lum = 53.7%

%lamp = 53.7%

Conical surface Flux(120deg): 2001.5 lm

%lum = 78.8%

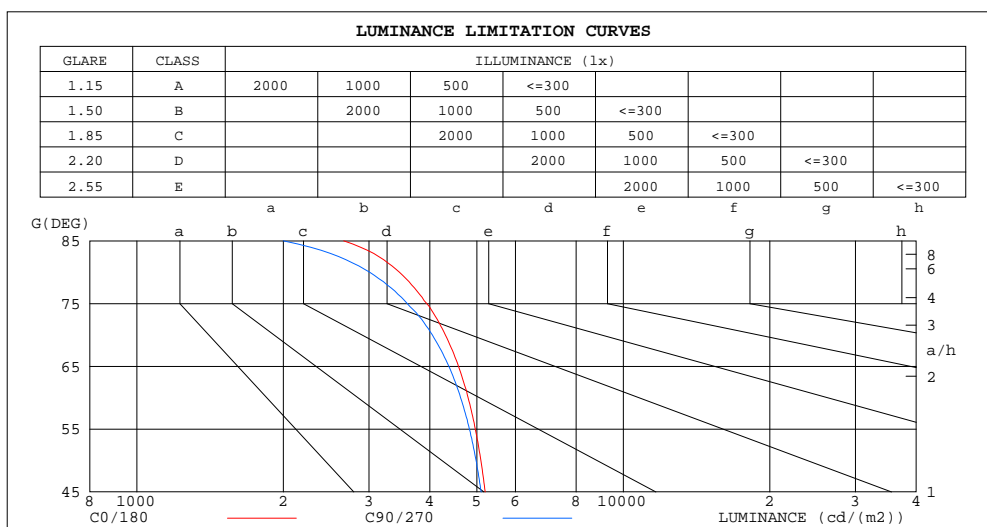
%lamp = 78.8%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

$\gamma$  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:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G( DEG)	C0/180	C90/270
85	2661	2000
80	3465	3010
75	3945	3597
70	4307	4050
65	4583	4378
60	4795	4628
55	4963	4824
50	5093	4979
45	5199	5103

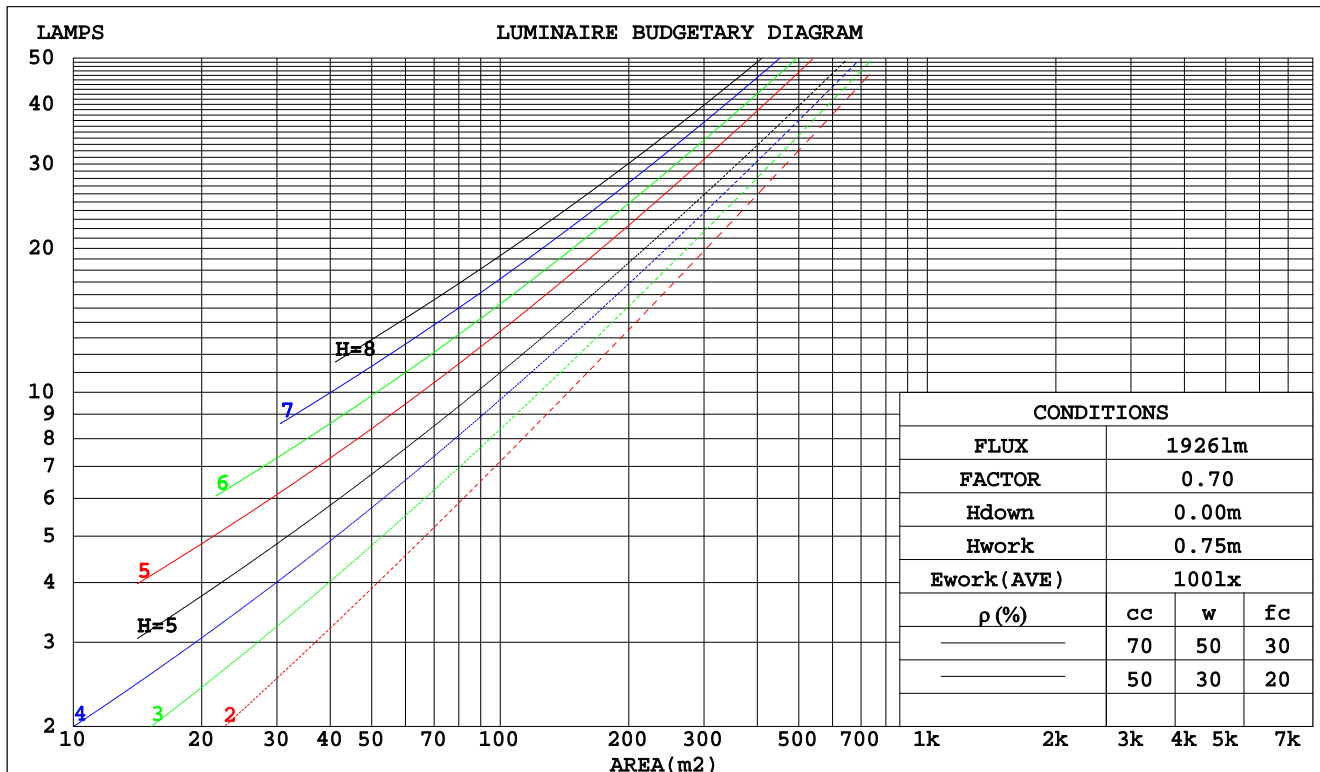
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

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:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
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	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	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.93	.91	.88	.90	.88	.86	.84
2.0	.90	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.73	.79	.75	.72	.70
3.0	.79	.71	.65	.78	.70	.64	.75	.68	.63	.72	.66	.62	.69	.65	.61	.58
4.0	.70	.61	.55	.69	.61	.54	.66	.59	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.59	.52	.46	.57	.51	.46	.56	.50	.45	.43
6.0	.56	.47	.41	.56	.47	.41	.54	.46	.40	.52	.45	.40	.50	.44	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

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:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
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	.310	.176	.056	.303	.173	.055	.289	.166	.053	.277	.160	.051	.266	.154	.050	
2.0	.292	.160	.049	.285	.157	.048	.274	.152	.047	.263	.147	.046	.253	.143	.045	
3.0	.270	.144	.043	.264	.142	.043	.254	.138	.042	.244	.134	.041	.236	.130	.040	
4.0	.249	.129	.038	.244	.128	.038	.235	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.109	.033	
6.0	.214	.107	.031	.210	.106	.030	.203	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.024	.171	.083	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.078	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.148	.074	.021	

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	.180	.156	.134	.154	.134	.116	.106	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.148	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.074	.141	.099	.064	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

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:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm										
NAME: G4RC-30W-940-110°-White					TYPE:Downlight			SERIAL No.:		
SPEC.:4000K					DIM.: L400mm*W400mm*H58mm					
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	15.1	16.6	15.4	16.8	17.0	15.0	16.5	15.2	16.7	16.9
3H	16.6	18.0	16.9	18.2	18.4	16.3	17.8	16.6	18.0	18.2
4H	17.1	18.5	17.5	18.7	19.0	16.9	18.2	17.2	18.5	18.7
6H	17.5	18.8	17.9	19.1	19.4	17.2	18.5	17.5	18.7	19.0
8H	17.7	18.9	18.0	19.2	19.4	17.3	18.5	17.6	18.8	19.1
12H	17.7	18.9	18.1	19.2	19.5	17.3	18.5	17.7	18.8	19.1
4H 2H	15.6	17.0	16.0	17.2	17.5	15.5	16.9	15.9	17.1	17.4
3H	17.3	18.5	17.6	18.8	19.1	17.1	18.3	17.5	18.6	18.9
4H	18.0	19.1	18.4	19.4	19.7	17.7	18.8	18.1	19.1	19.5
6H	18.5	19.5	18.9	19.8	20.2	18.2	19.1	18.6	19.5	19.9
8H	18.7	19.6	19.1	19.9	20.3	18.3	19.2	18.7	19.6	20.0
12H	18.8	19.6	19.2	20.0	20.4	18.4	19.2	18.8	19.6	20.0
8H 4H	18.2	19.1	18.6	19.5	19.8	18.0	18.9	18.4	19.2	19.6
6H	18.8	19.6	19.3	20.0	20.4	18.5	19.3	19.0	19.7	20.1
8H	19.1	19.7	19.5	20.2	20.6	18.7	19.4	19.2	19.8	20.3
12H	19.2	19.8	19.7	20.3	20.7	18.8	19.4	19.3	19.9	20.3
12H 4H	18.2	19.0	18.6	19.4	19.8	18.0	18.8	18.4	19.2	19.6
6H	18.9	19.5	19.3	20.0	20.4	18.6	19.2	19.1	19.7	20.1
8H	19.1	19.7	19.6	20.2	20.6	18.8	19.4	19.3	19.8	20.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2				

CIE Pub.117, 2539 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 3.2$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

$\gamma$  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:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
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) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	48	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	65	82	72	65	79	70	64	57
1.50	88	78	71	86	77	71	83	76	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	94	100	95	92	83
5.00	109	104	100	106	102	98	102	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

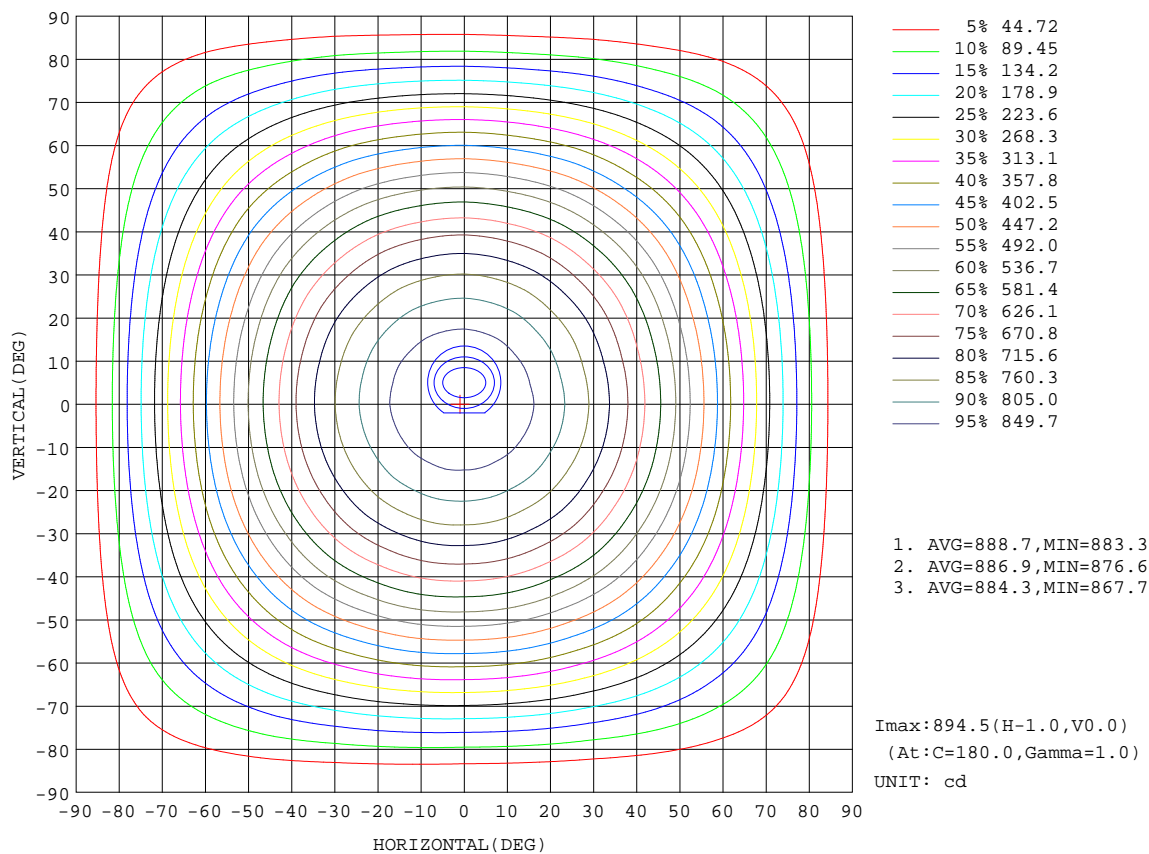
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

$\gamma$  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:



ISOCANDELA DIAGRAM

Test:U:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
MFR.: NEKO LIGHTING AG		



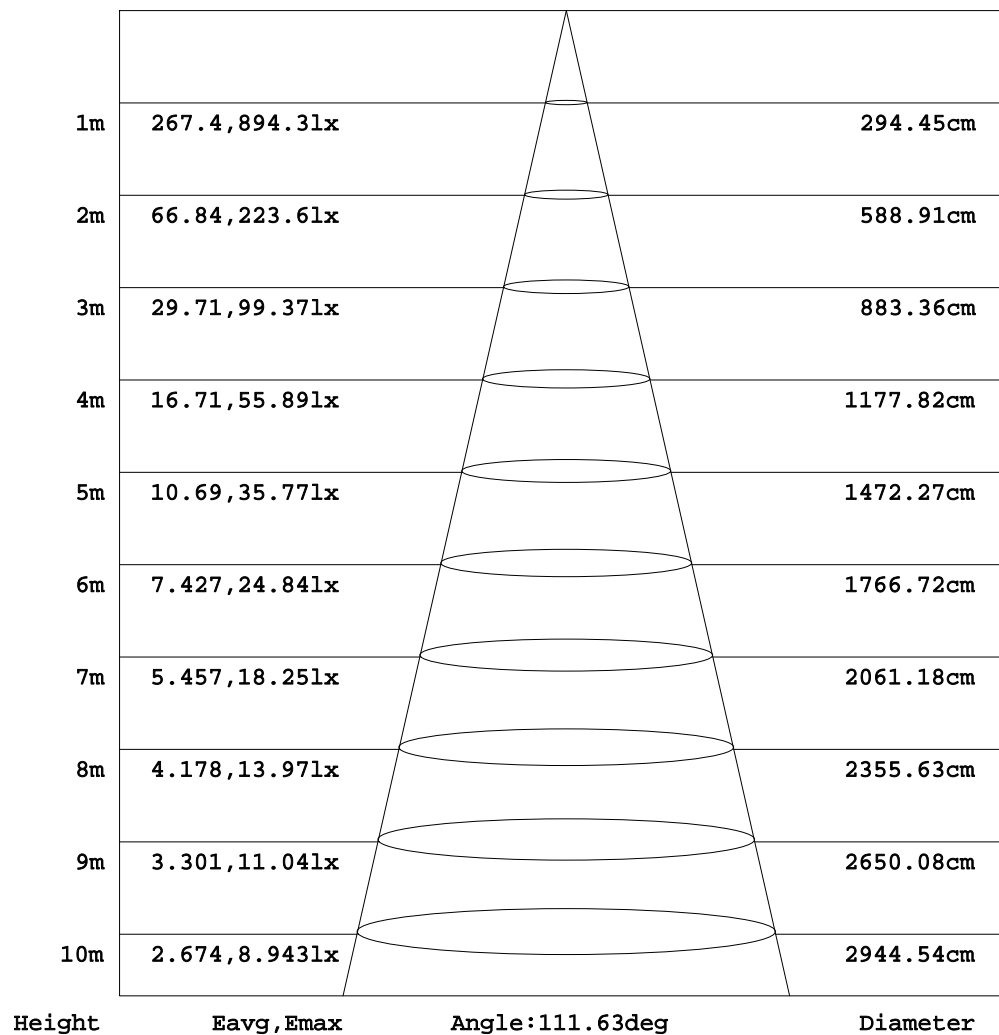
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

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:

AAI Figure

Test:U:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
MFR.: NEKO LIGHTING AG		

Flux out:1846 lm



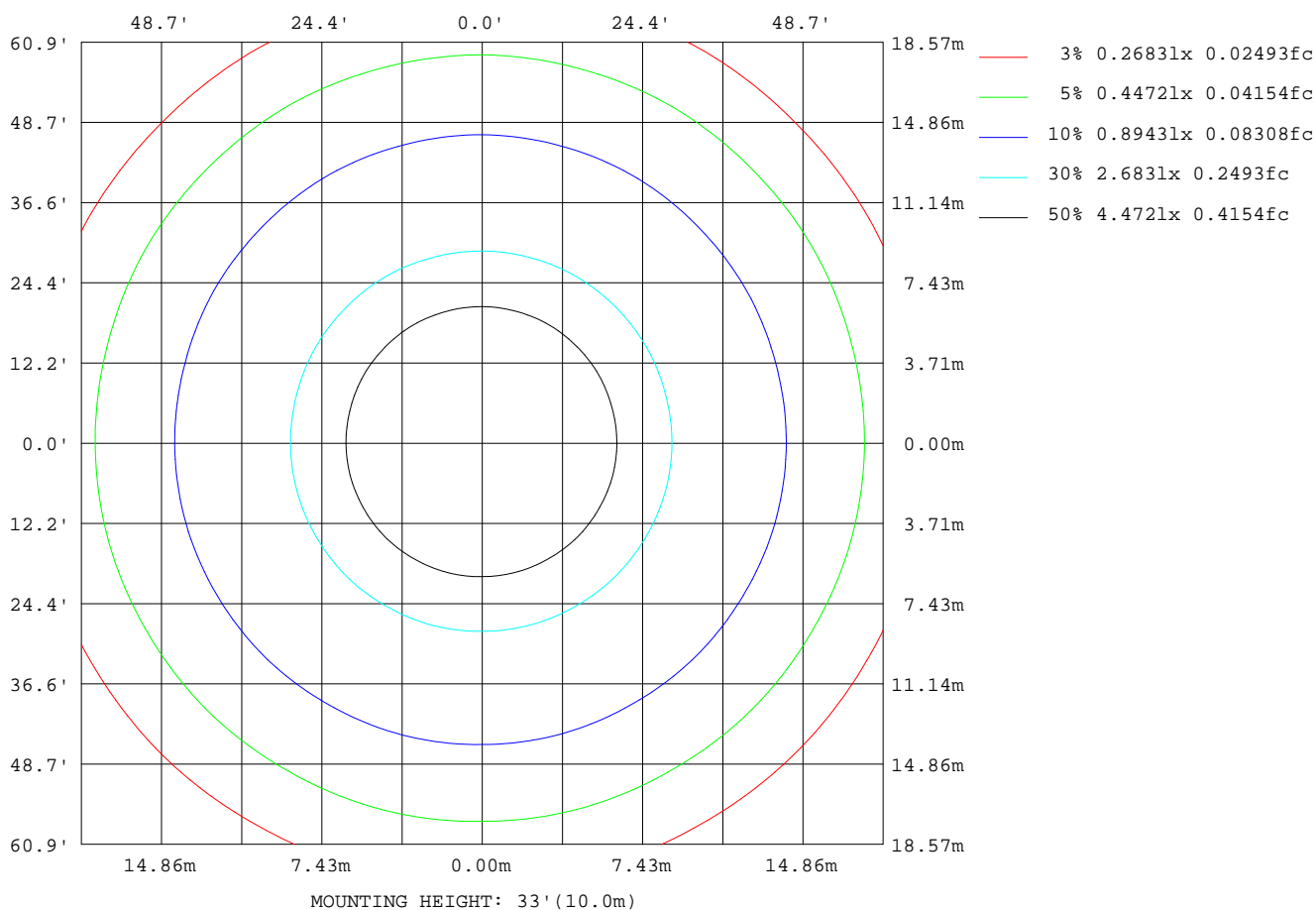
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

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:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jasoan  
Test Date: 2022-04-21

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:

### LED Avg.L Report

Test:U:220.8V I:0.1365A P:28.29W PF:0.9381 Freq:59.98Hz Lamp Flux:2538.69x1 lm		
NAME: G4RC-30W-940-110°-White	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L400mm*W400mm*H58mm	
MFR.: NEKO LIGHTING AG		

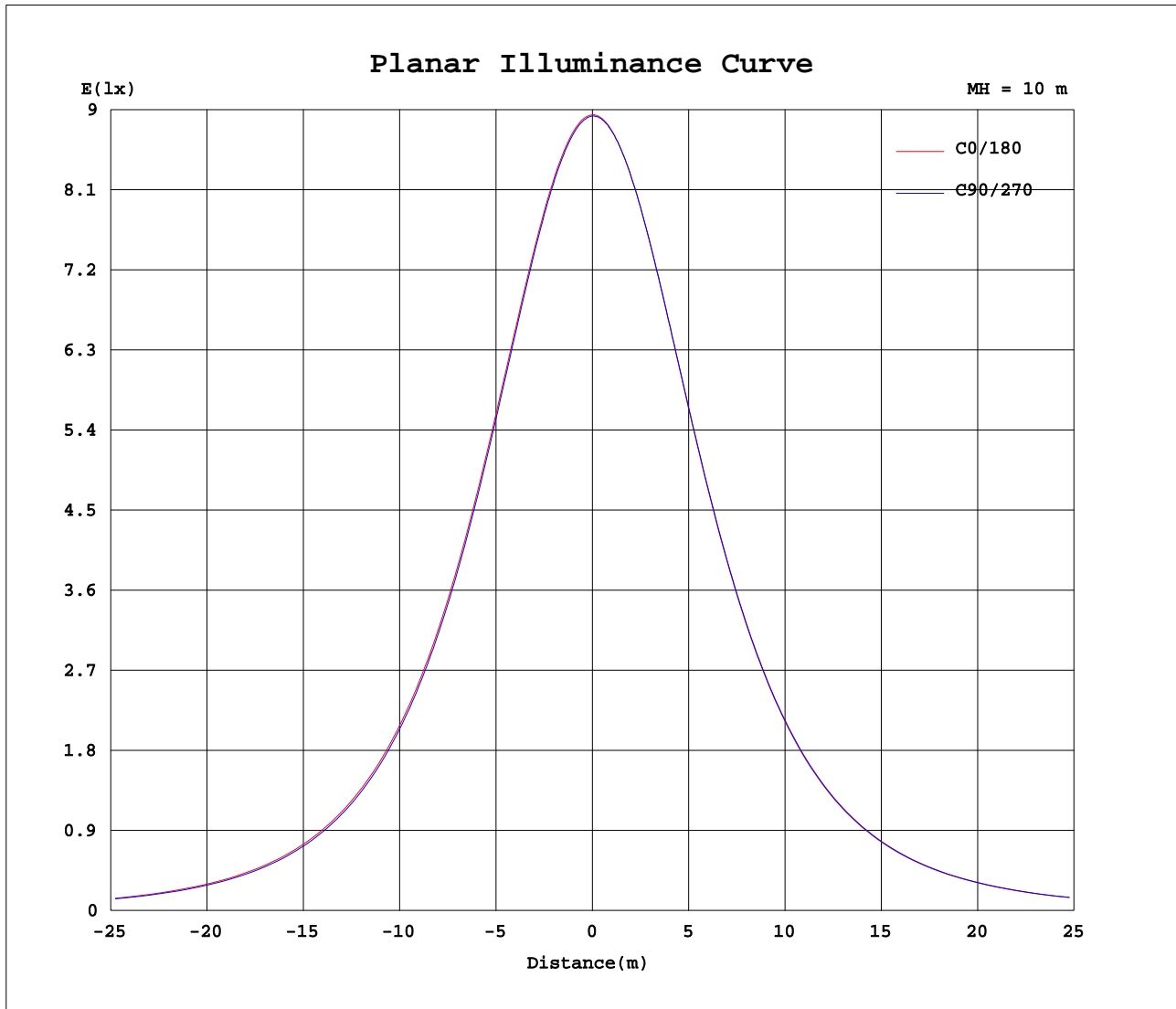
AvgL	cd/m2
L_0~180(65)av	4703
L_0~180(75)av	4119
L_0~180(85)av	3080
L_90~270(65)av	4625
L_90~270(75)av	3978
L_90~270(85)av	2895
L_45(65)av	4648
L_45(75)av	4054
L_45(85)av	2980

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-04-21

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: Jasoan  
Test Date: 2022-04-21

$\gamma$  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:

```