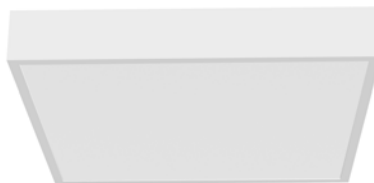


PEPPER400-30W-930



Light Output Ratio:	100.0%	
Luminaire Power:	29.98 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.30	fine grid method.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jasoan  
Test Date: 2022-08-01

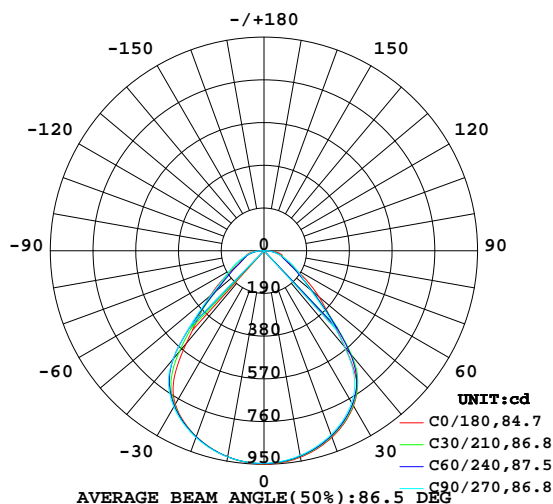
γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 8.967m [K=1.0000]  
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

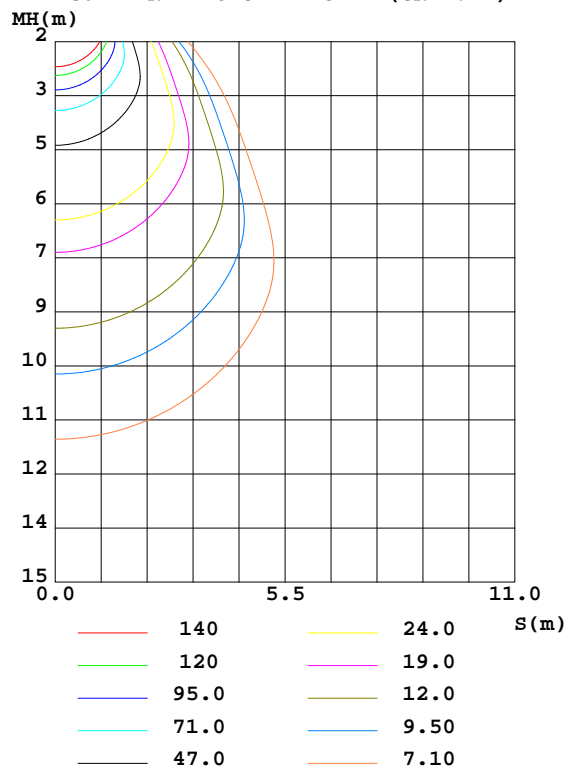
Test:U:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 64.32 lm/W			
MODEL	3000K	I <sub>max</sub> (cd)	949.1	S/MH(C0/180)	1.20
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH(C90/270)	1.26
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	1928.5	η UP,DN(C0-180)	0.0,49.3
NOMINAL FLUX(lm)	1928.49	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.30

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:2022-08-01

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	932.4	928.6	924.6	924.5	930.9	930.1	931.2	929.9	0- 10	89.46	89.46	4.64,4.64
20	883.0	877.2	871.1	871.7	880.0	880.7	883.8	882.2	10- 20	256.1	345.6	17.9,17.9
30	796.3	790.2	779.8	781.3	788.7	794.8	801.7	799.7	20- 30	386.9	732.5	38,38
40	561.2	617.6	558.1	564.4	537.4	614.7	628.5	624.2	30- 40	443.3	1176	61,61
50	320.1	266.8	269.3	270.1	312.4	282.6	305.7	303.3	40- 50	328.6	1504	78,78
60	154.3	131.9	166.9	166.4	148.4	140.4	174.6	171.1	50- 60	189.1	1693	87.8,87.8
70	96.77	83.65	96.44	96.64	96.47	85.14	106.6	102.7	60- 70	120.4	1814	94.1,94.1
80	70.81	52.25	49.78	50.14	66.95	53.53	59.73	57.89	70- 80	82.31	1896	98.3,98.3
90	0.6926	0.3595	0.3912	0.3701	0.6926	0.6450	2.009	1.650	80- 90	32.36	1928	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): 1362.3 lm

%lum = 70.6%

%lamp = 70.6%

Conical surface Flux(120deg): 1693.4 lm

%lum = 87.8%

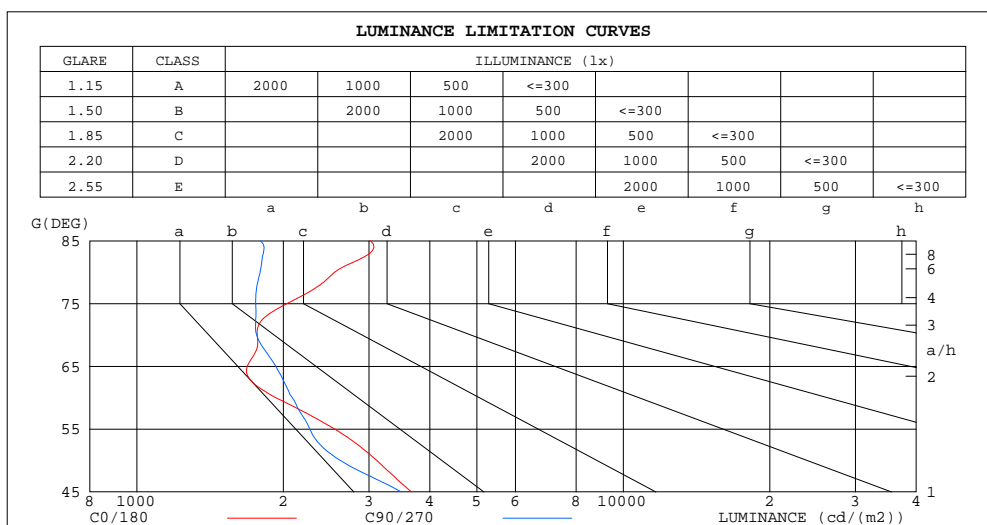
%lamp = 87.8%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

$\gamma$  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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3024	1795
80	2548	1792
75	2035	1754
70	1768	1762
65	1686	1930
60	1928	2087
55	2551	2267
50	3113	2619
45	3668	3496

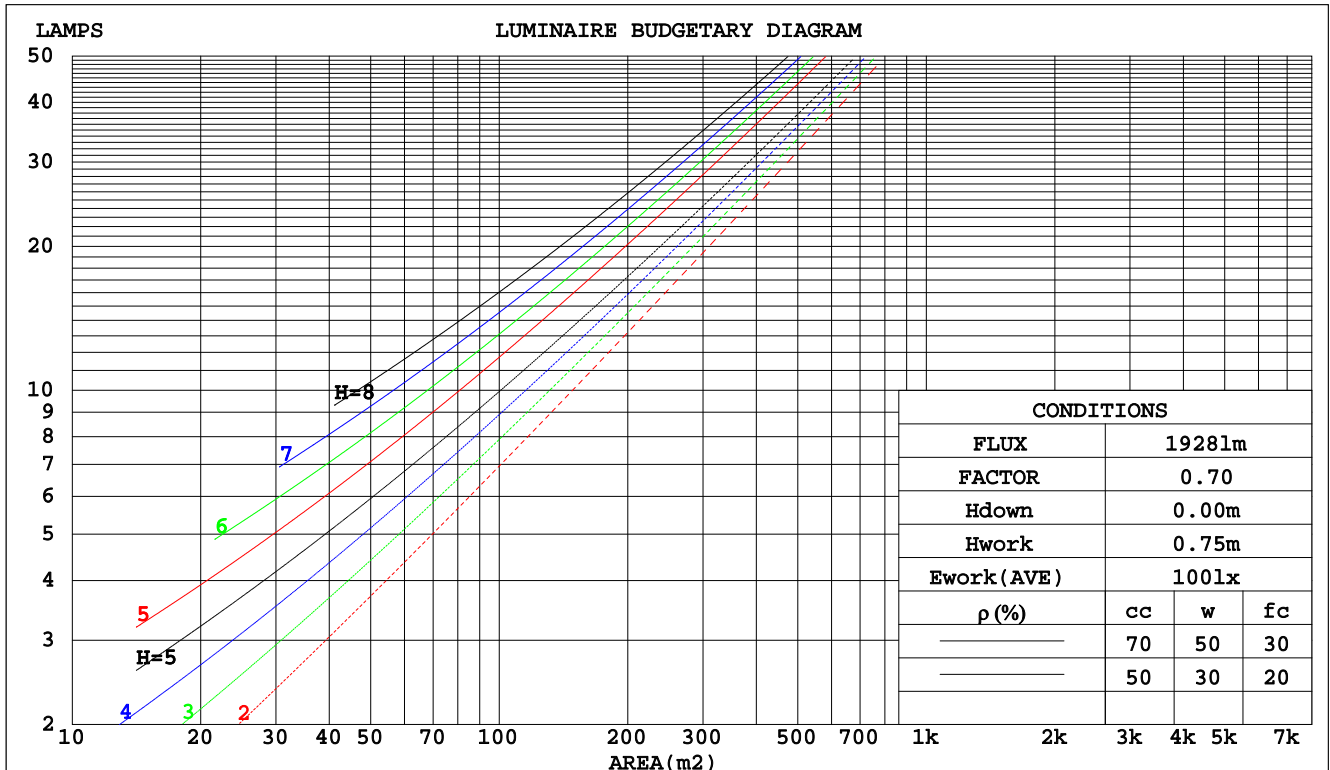
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
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	1.00
1.0	1.06	1.02	.99	1.04	1.01	.98	.90	.97	.94	.96	.94	.92	.92	.91	.89	.87
2.0	.95	.89	.84	.93	.87	.83	.89	.85	.81	.86	.83	.79	.83	.80	.77	.75
3.0	.85	.78	.72	.84	.77	.72	.81	.75	.70	.78	.73	.69	.76	.72	.68	.66
4.0	.77	.69	.63	.75	.68	.63	.73	.67	.62	.71	.65	.61	.69	.64	.60	.58
5.0	.70	.62	.56	.69	.61	.55	.67	.60	.55	.65	.59	.54	.63	.58	.54	.52
6.0	.64	.55	.50	.63	.55	.50	.61	.54	.49	.59	.53	.49	.58	.52	.48	.46
7.0	.58	.50	.45	.57	.50	.45	.56	.49	.44	.55	.49	.44	.53	.48	.44	.42
8.0	.54	.46	.40	.53	.46	.40	.52	.45	.40	.50	.44	.40	.49	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.41	.37	.47	.41	.36	.46	.40	.36	.35
10.0	.46	.39	.34	.45	.38	.34	.45	.38	.34	.44	.38	.33	.43	.37	.33	.32



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
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	.266	.151	.048	.259	.148	.047	.246	.141	.045	.234	.135	.043	.223	.129	.042		
2.0	.250	.137	.042	.244	.135	.041	.233	.130	.040	.223	.125	.039	.213	.120	.038		
3.0	.234	.124	.037	.228	.122	.037	.219	.118	.036	.209	.115	.035	.201	.111	.034		
4.0	.218	.113	.033	.213	.112	.033	.205	.109	.032	.197	.106	.032	.189	.103	.031		
5.0	.204	.104	.030	.200	.102	.030	.192	.100	.029	.185	.097	.029	.178	.095	.029		
6.0	.191	.096	.027	.187	.095	.027	.180	.092	.027	.174	.090	.027	.168	.088	.026		
7.0	.179	.089	.025	.176	.088	.025	.170	.086	.025	.164	.084	.025	.159	.083	.024		
8.0	.169	.083	.023	.166	.082	.023	.161	.080	.023	.155	.079	.023	.151	.077	.023		
9.0	.160	.077	.022	.157	.077	.021	.152	.075	.021	.147	.074	.021	.143	.073	.021		
10.0	.151	.072	.020	.149	.072	.020	.144	.071	.020	.140	.070	.020	.136	.068	.020		

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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.036	.018	.015	.012	
3.0	.157	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.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	.116	.063	.027	.100	.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	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm										
NAME: PEPPER400-30W-930					TYPE:Downlight			SERIAL No.:		
SPEC.:3000K					DIM.: L400mm*W400mm*H45mm					
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	12.9	14.2	13.1	14.4	14.6	12.6	13.9	12.8	14.1	14.3
3H	14.0	15.2	14.2	15.4	15.6	13.4	14.7	13.7	14.9	15.1
4H	14.5	15.7	14.8	15.9	16.2	13.9	15.1	14.2	15.3	15.6
6H	15.2	16.3	15.5	16.6	16.8	14.3	15.4	14.7	15.7	16.0
8H	15.6	16.6	15.9	16.9	17.2	14.5	15.6	14.9	15.9	16.1
12H	15.9	16.9	16.2	17.2	17.5	14.7	15.7	15.0	16.0	16.3
4H 2H	13.0	14.2	13.3	14.4	14.7	12.7	13.9	13.0	14.2	14.4
3H	14.4	15.4	14.7	15.7	16.0	13.8	14.9	14.2	15.1	15.4
4H	15.1	16.1	15.5	16.4	16.7	14.5	15.4	14.9	15.7	16.1
6H	16.0	16.9	16.4	17.2	17.6	15.1	16.0	15.5	16.3	16.7
8H	16.5	17.3	16.9	17.6	18.0	15.4	16.2	15.8	16.5	16.9
12H	16.9	17.6	17.3	18.0	18.4	15.6	16.3	16.1	16.7	17.1
8H 4H	15.3	16.1	15.7	16.5	16.8	14.8	15.5	15.2	15.9	16.3
6H	16.4	17.0	16.8	17.4	17.9	15.6	16.2	16.0	16.6	17.1
8H	17.0	17.6	17.4	18.0	18.4	16.0	16.5	16.4	17.0	17.4
12H	17.6	18.0	18.0	18.5	19.0	16.3	16.8	16.8	17.2	17.7
12H 4H	15.4	16.1	15.8	16.4	16.8	14.8	15.5	15.2	15.9	16.3
6H	16.5	17.0	16.9	17.4	17.9	15.7	16.3	16.2	16.7	17.1
8H	17.1	17.6	17.6	18.0	18.5	16.1	16.6	16.6	17.1	17.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.5 / - 0.5				
1.5H	+ 0.3 / - 0.3					+ 0.6 / - 0.4				
2.0H	+ 0.7 / - 0.5					+ 0.9 / - 0.5				

CIE Pub.117, 1928 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 2.3$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

$\gamma$  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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
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) $k(RI) \times RCR = 5$									
$k = 0.60$	67	57	52	67	57	51	66	57	51	46
0.80	77	67	61	76	67	61	74	66	60	55
1.00	84	75	69	83	75	69	81	75	68	62
1.25	90	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	85	79
2.50	103	97	92	101	95	91	97	93	89	81
3.00	106	100	95	104	98	94	100	96	92	84
4.00	109	104	100	107	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

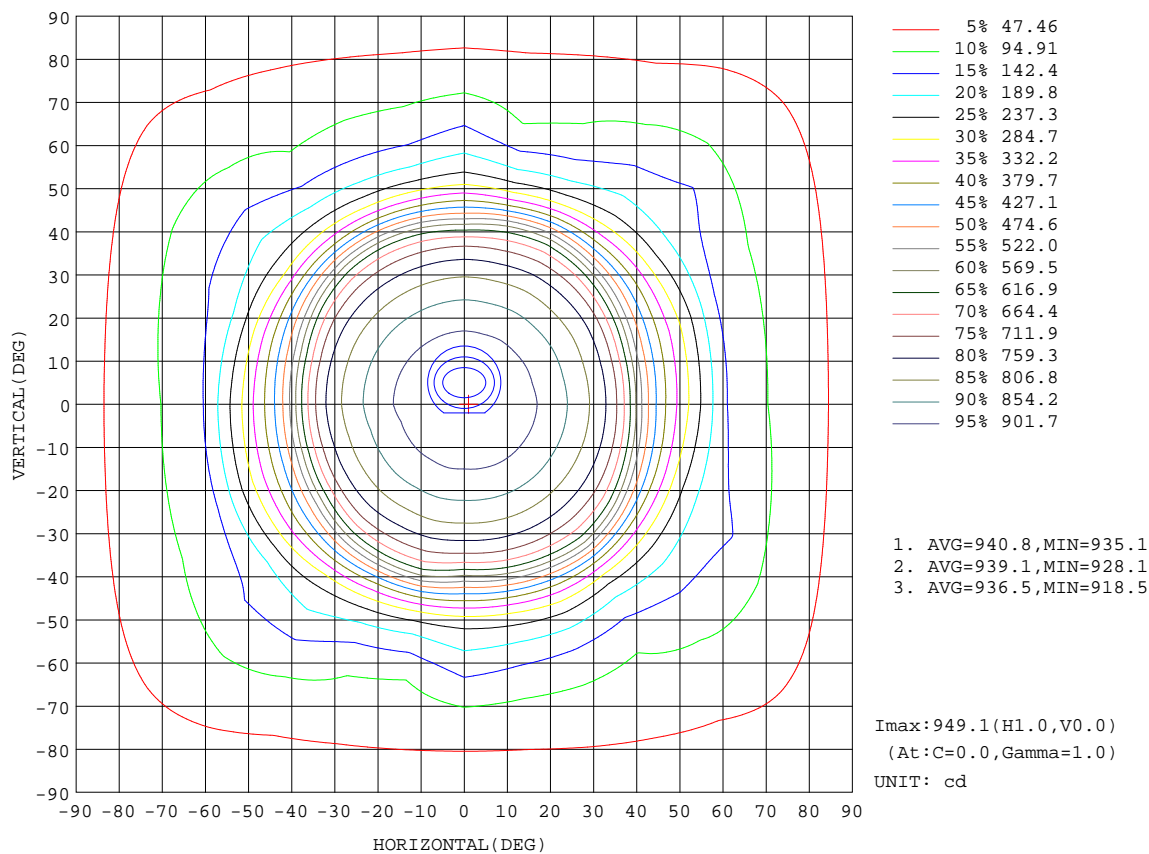
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jasoan  
 Test Date:2022-08-01

$\gamma$  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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		



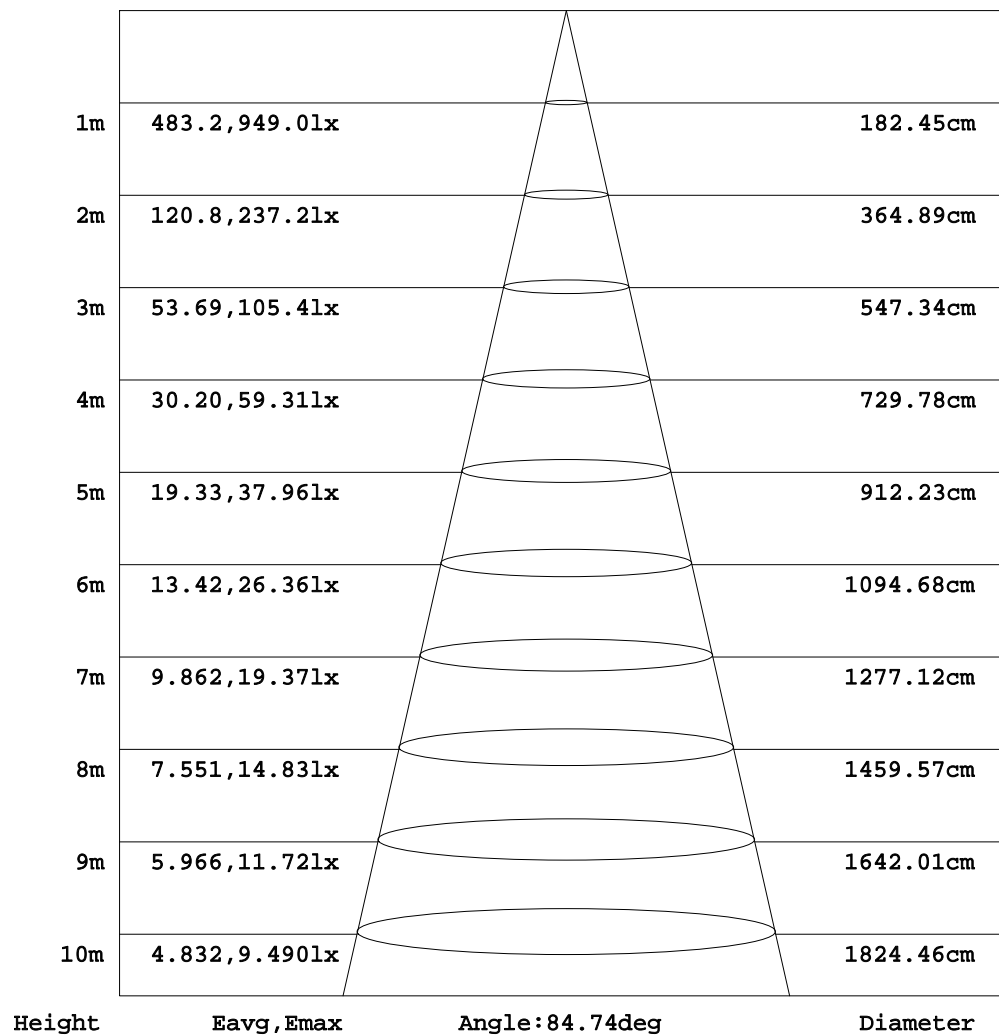
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		

Flux out:1275 lm



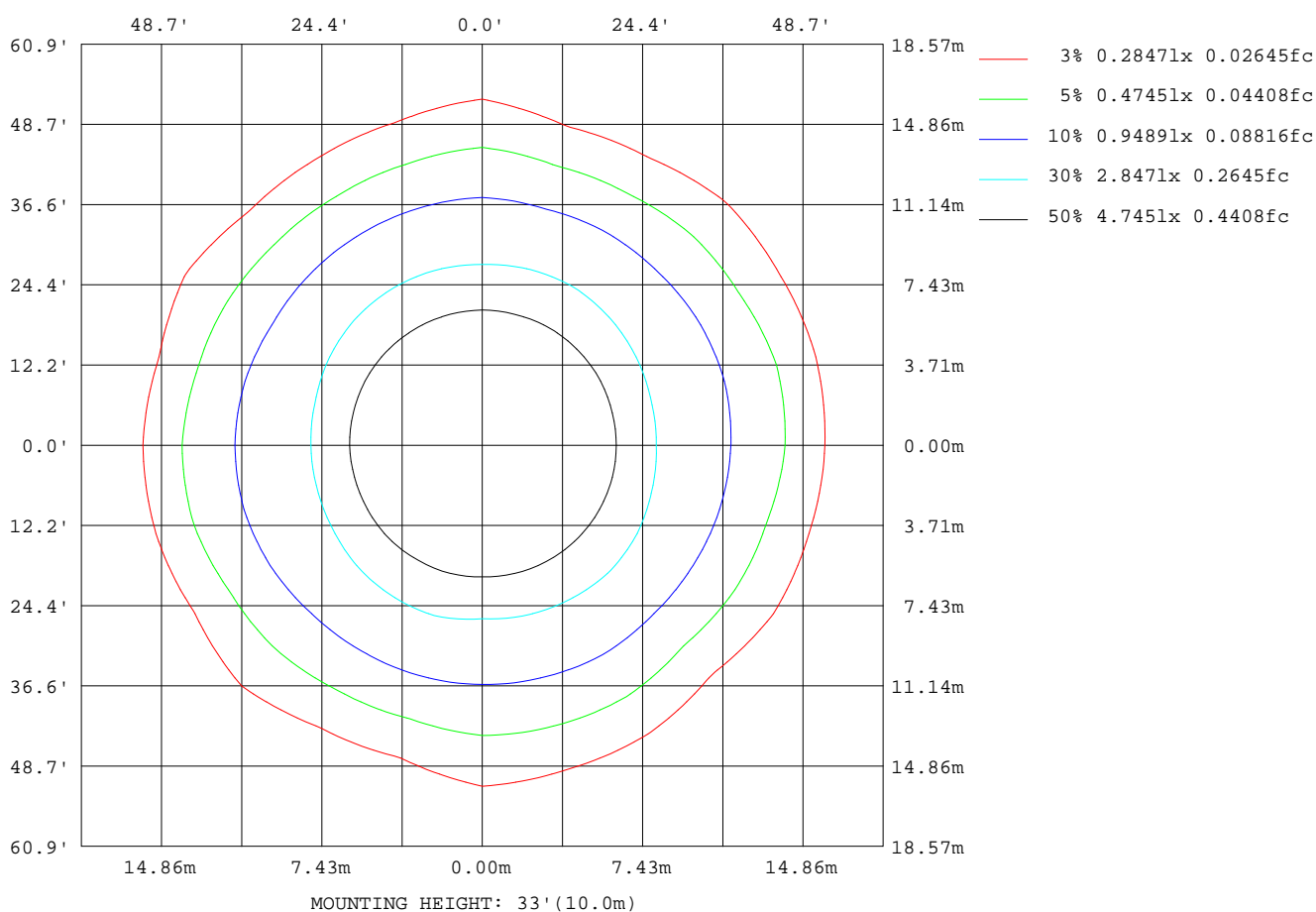
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jasoan  
Test Date: 2022-08-01

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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

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:221.0V I:0.1374A P:29.98W PF:0.9877 Freq:49.99Hz Lamp Flux:1928.49x1 lm		
NAME: PEPPER400-30W-930	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L400mm*W400mm*H45mm	
MFR.: NEKO LIGHTING AG		

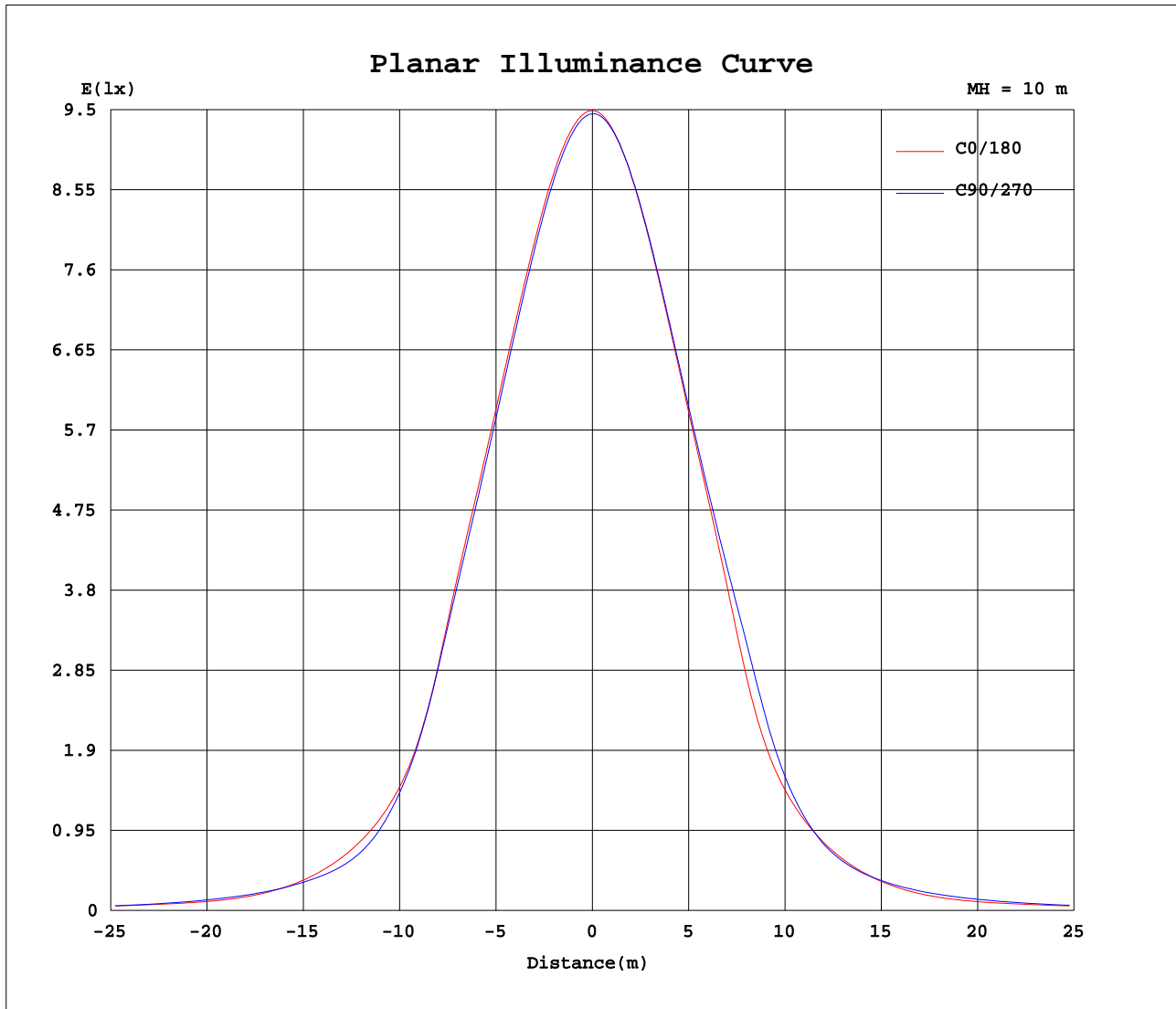
AvgL	cd/m2
L_0~180(65)av	1678
L_0~180(75)av	2014
L_0~180(85)av	2720
L_90~270(65)av	2000
L_90~270(75)av	1864
L_90~270(85)av	2168
L_45(65)av	1723
L_45(75)av	1812
L_45(85)av	2032

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jasoan  
Test Date:2022-08-01

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: 2022-08-01

$\gamma$  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:

```