

LED Ceiling Light GAME-600-36W-940



Light Output Ratio:	100.0%	
Luminaire Power:	39.9 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.35	fine grid method.

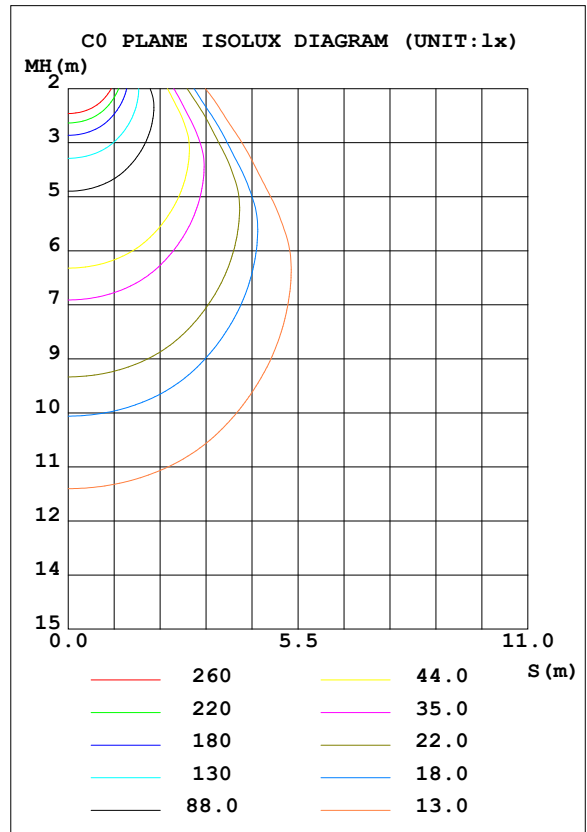
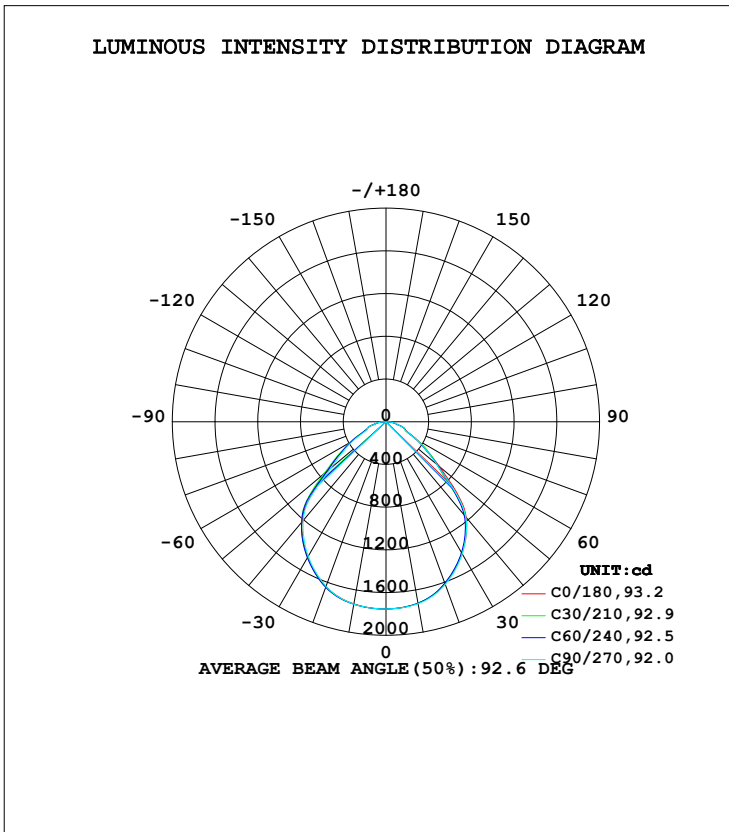
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2020-06-17

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 58%  
Test Distance: 5.850m [K=1.0000]  
Remarks:

**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 94.21 lm/W			
MODEL	OSRAM-4000K	I <sub>max</sub> (cd)	1753	S/MH (C0/180)	1.24
NOMINAL POWER (W)	40	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	3759.4	η UP, DN (C0-180)	0.0, 48.9
NOMINAL FLUX (lm)	3759.36	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 51.1
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



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Jason  
 Test Date: 2020-06-17

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 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	1725	1725	1730	1731	1732	1734	1735	1732	0- 10	166.3	166.3	4.42,4.42
20	1616	1612	1622	1629	1641	1649	1642	1630	10- 20	477.4	643.7	17.1,17.1
30	1425	1425	1429	1438	1463	1475	1456	1438	20- 30	710.9	1355	36,36
40	1168	1138	1161	1169	1222	1231	1205	1173	30- 40	826.9	2181	58,58
50	655.4	567.3	622.7	632.6	710.7	667.4	673.0	649.0	40- 50	717.7	2899	77.1,77.1
60	333.5	350.2	322.1	278.7	383.4	406.9	356.1	279.1	50- 60	419.0	3318	88.3,88.3
70	187.3	194.1	179.4	172.5	183.3	214.8	186.5	171.0	60- 70	246.4	3565	94.8,94.8
80	88.23	90.93	91.56	81.44	95.73	110.3	97.12	86.16	70- 80	145.6	3710	98.7,98.7
90	0.6003	0.6076	0.5883	0.5777	3.274	8.165	2.637	0.5142	80- 90	49.26	3759	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): 2580.4 lm

%lum = 68.6%

%lamp = 68.6%

Conical surface Flux(120deg): 3318.1 lm

%lum = 88.3%

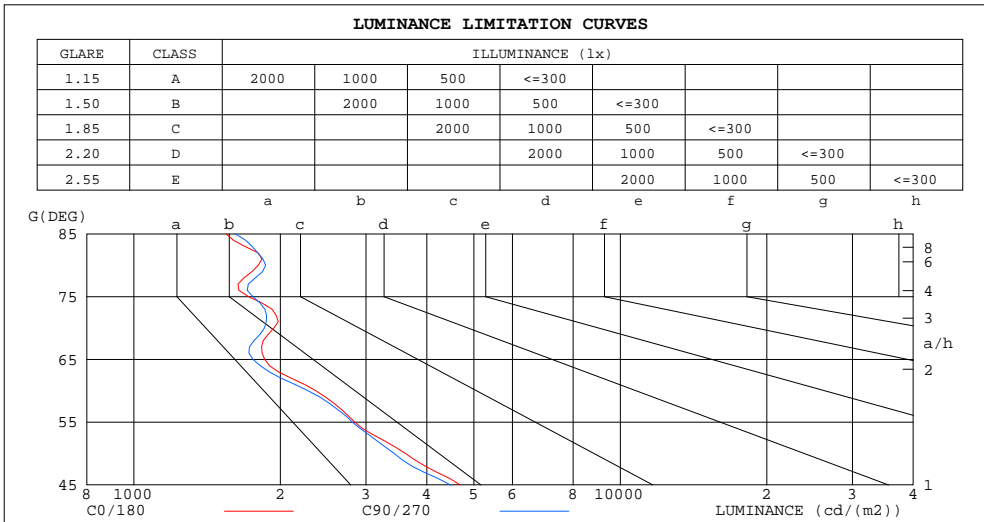
%lamp = 88.3%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-06-17

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
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:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G( DEG)	C0/180	C90/270
85	1547	1616
80	1801	1865
75	1720	1756
70	1941	1856
65	1858	1758
60	2364	2279
55	2846	2812
50	3614	3427
45	4684	4476

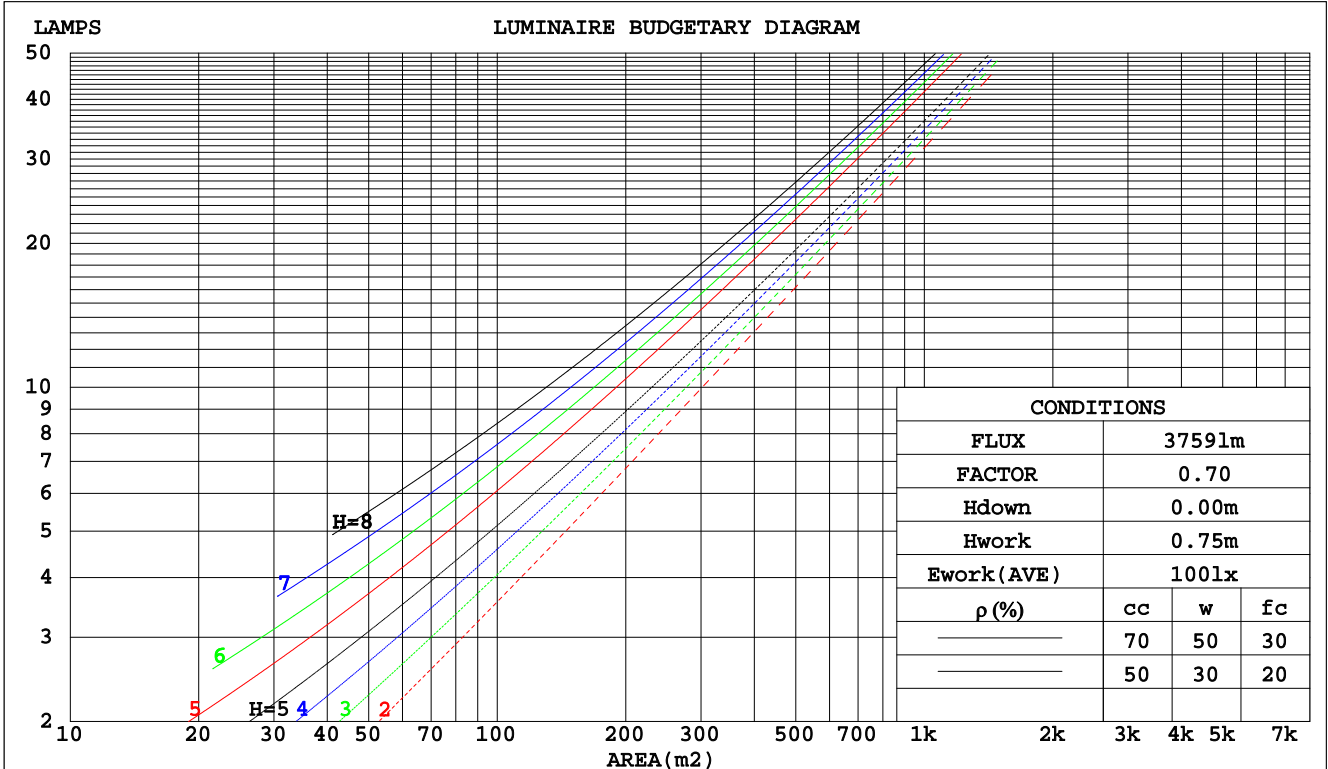
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2020-06-17

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 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:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
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	.00
1.0	1.06	1.03	.99	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.95	.89	.84	.93	.87	.83	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.85	.78	.72	.83	.77	.71	.80	.75	.70	.78	.73	.69	.75	.71	.68	.66
4.0	.76	.68	.62	.75	.68	.62	.73	.66	.61	.70	.65	.60	.68	.64	.60	.58
5.0	.69	.61	.55	.68	.60	.55	.66	.59	.54	.64	.58	.54	.62	.57	.53	.51
6.0	.63	.55	.49	.62	.54	.49	.60	.53	.48	.59	.52	.48	.57	.52	.47	.45
7.0	.57	.49	.44	.57	.49	.44	.55	.48	.43	.54	.48	.43	.52	.47	.43	.41
8.0	.53	.45	.39	.52	.45	.39	.51	.44	.39	.50	.43	.39	.48	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.36	.46	.40	.35	.45	.39	.35	.33
10.0	.45	.38	.33	.45	.37	.33	.44	.37	.32	.43	.37	.32	.42	.36	.32	.31



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2020-06-17

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 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:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
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	.265	.150	.048	.258	.147	.047	.245	.140	.045	.233	.134	.043	.221	.128	.041	
2.0	.251	.138	.042	.245	.135	.042	.234	.130	.040	.223	.125	.039	.214	.121	.038	
3.0	.236	.125	.038	.230	.123	.037	.220	.119	.036	.211	.116	.036	.203	.112	.035	
4.0	.220	.115	.034	.216	.113	.033	.207	.110	.033	.199	.107	.032	.191	.104	.032	
5.0	.206	.105	.030	.202	.104	.030	.194	.101	.030	.187	.099	.029	.180	.096	.029	
6.0	.193	.097	.028	.190	.096	.028	.183	.094	.027	.176	.092	.027	.170	.090	.027	
7.0	.182	.090	.025	.178	.089	.025	.172	.087	.025	.166	.085	.025	.161	.084	.025	
8.0	.171	.084	.024	.168	.083	.023	.163	.081	.023	.157	.080	.023	.153	.078	.023	
9.0	.162	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021	
10.0	.153	.073	.020	.151	.073	.020	.146	.072	.020	.142	.070	.020	.138	.069	.020	

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	.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	.158	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.150	.100	.063	.128	.087	.054	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.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:Jason  
 Test Date:2020-06-17

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 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:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
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	11.1	12.4	11.3	12.6	12.8	10.8	12.2	11.1	12.4	12.6
3H	11.7	13.0	12.0	13.2	13.4	11.5	12.7	11.8	13.0	13.2
4H	12.1	13.3	12.4	13.6	13.8	11.9	13.1	12.2	13.3	13.6
6H	12.4	13.5	12.7	13.8	14.1	12.2	13.3	12.6	13.6	13.9
8H	12.5	13.6	12.9	13.9	14.2	12.4	13.5	12.7	13.7	14.0
12H	12.6	13.6	13.0	13.9	14.2	12.5	13.5	12.8	13.8	14.1
4H 2H	11.3	12.5	11.6	12.7	13.0	11.1	12.3	11.4	12.5	12.8
3H	12.2	13.3	12.6	13.5	13.8	12.0	13.0	12.4	13.3	13.6
4H	12.7	13.7	13.1	14.0	14.3	12.5	13.5	12.9	13.8	14.1
6H	13.1	14.0	13.5	14.3	14.7	13.0	13.8	13.4	14.2	14.5
8H	13.3	14.1	13.7	14.5	14.8	13.2	14.0	13.6	14.3	14.7
12H	13.4	14.1	13.9	14.5	14.9	13.4	14.1	13.8	14.4	14.8
8H 4H	12.9	13.7	13.3	14.0	14.4	12.7	13.5	13.1	13.9	14.2
6H	13.5	14.1	13.9	14.5	14.9	13.4	14.0	13.8	14.4	14.8
8H	13.7	14.3	14.2	14.7	15.2	13.6	14.2	14.1	14.6	15.1
12H	13.9	14.4	14.4	14.8	15.3	13.8	14.3	14.3	14.8	15.2
12H 4H	12.9	13.6	13.3	14.0	14.4	12.7	13.4	13.2	13.8	14.2
6H	13.5	14.1	14.0	14.5	15.0	13.4	14.0	13.9	14.4	14.8
8H	13.8	14.3	14.3	14.7	15.2	13.7	14.2	14.2	14.7	15.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.5					+ 0.6 / - 0.6				
1.5H	+ 0.5 / - 0.5					+ 0.4 / - 0.4				
2.0H	+ 1.4 / - 1.0					+ 1.4 / - 0.8				

CIE Pub.117, 3759 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.6)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2020-06-17

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 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:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
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	65	55	49	65	55	49	64	54	49	43
0.80	75	65	59	74	65	59	73	64	58	52
1.00	83	74	67	82	73	67	80	74	67	61
1.25	90	81	75	88	80	74	86	79	74	67
1.50	94	86	80	92	85	79	90	83	78	72
2.00	100	93	87	98	91	86	95	89	85	78
2.50	103	96	91	101	95	90	97	92	88	81
3.00	105	100	95	103	98	94	100	95	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	98	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

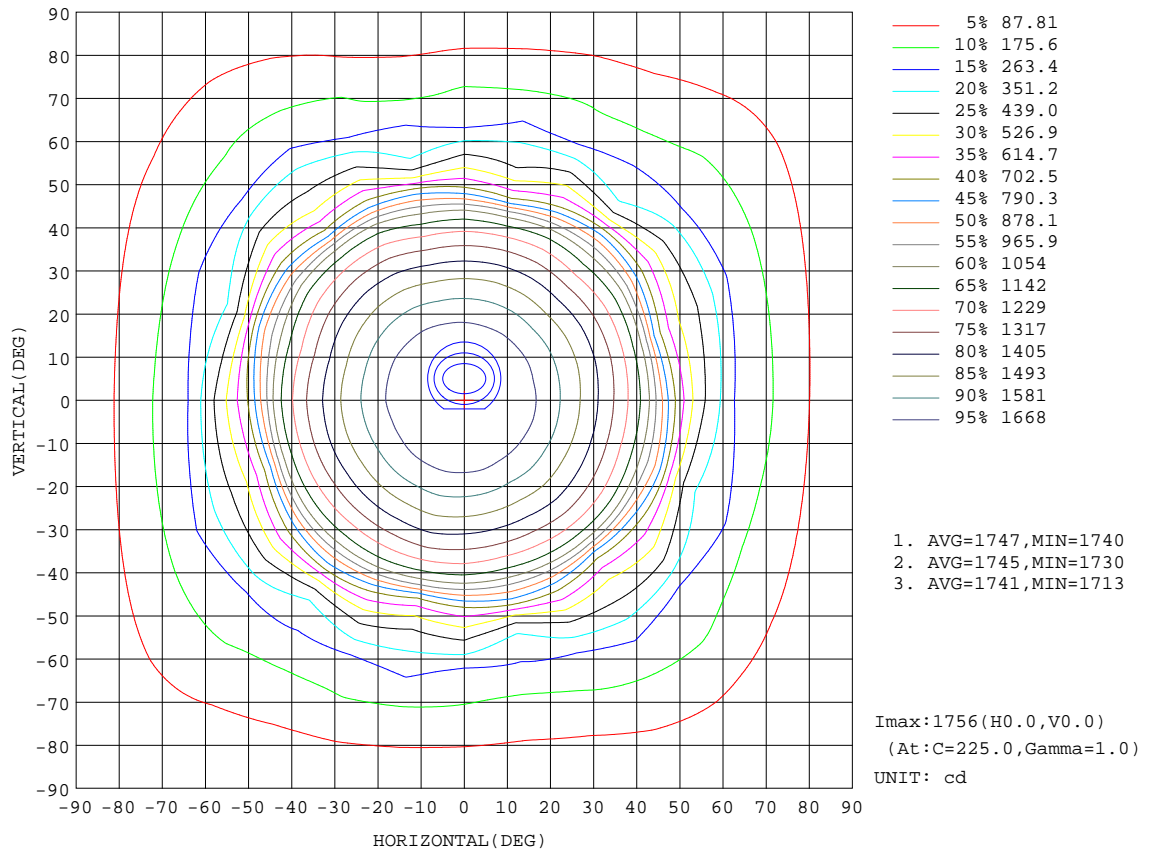
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2020-06-17

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:58%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:



**ISOCANDELA DIAGRAM**

Test:U:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



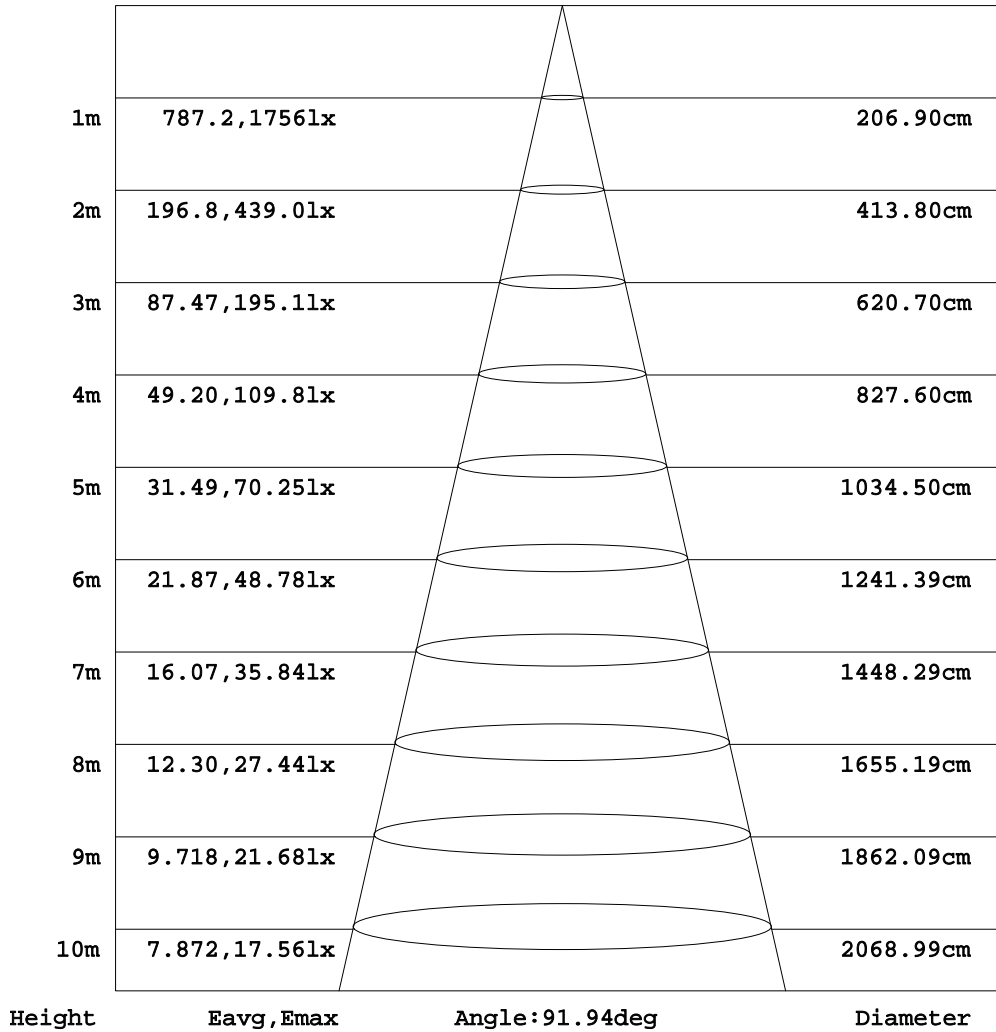
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-06-17

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

**AAI Figure**

Test:U:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

Flux out:2652 lm



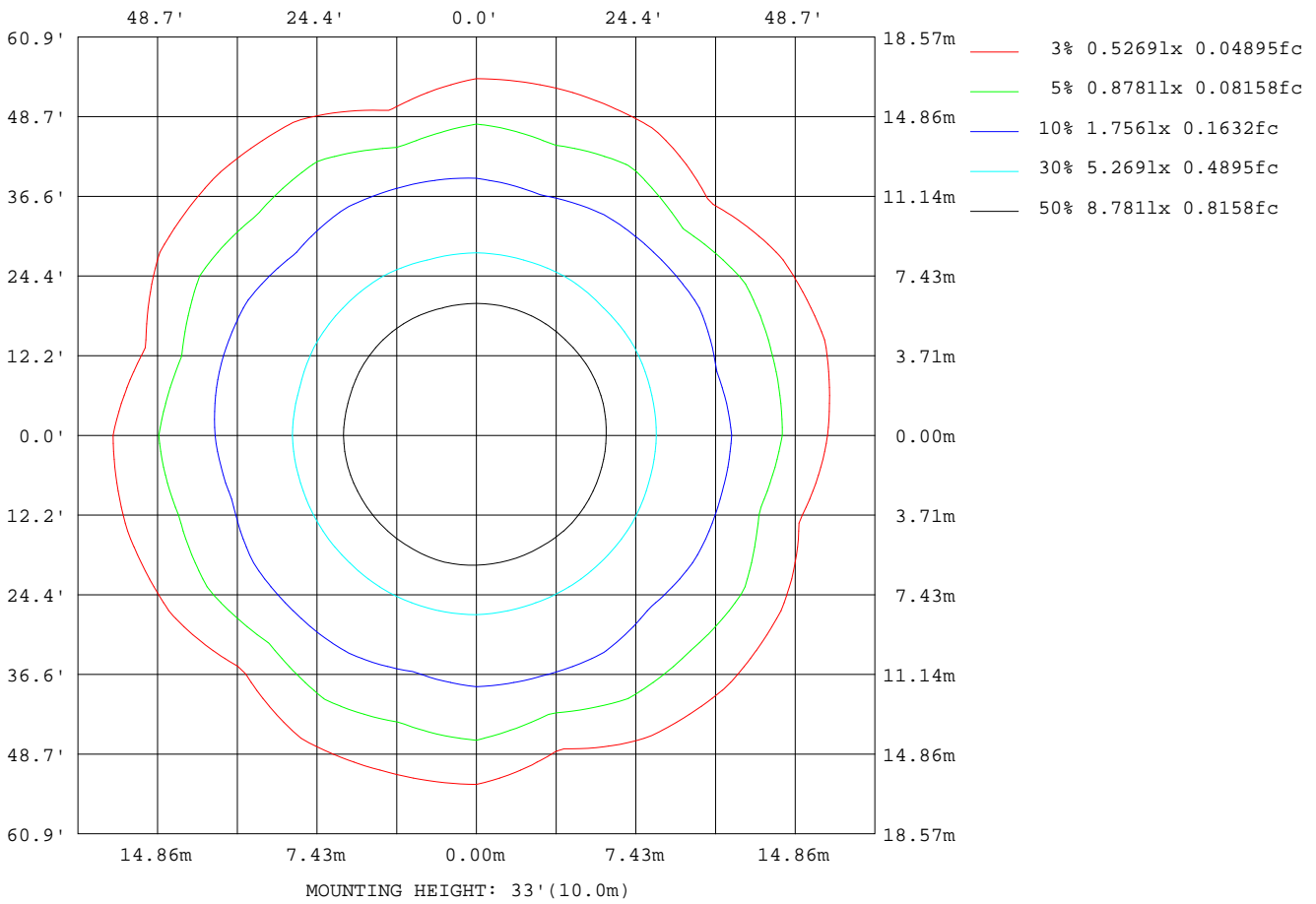
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-06-17

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:58%  
Test Distance:5.850m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Jason  
 Test Date:2020-06-17

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 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:220.8V I:0.1853A P:39.90W PF:0.9852 Freq:49.90Hz Lamp Flux:3759.36x1 lm		
NAME: GAME-600-36W-940	TYPE:Ceiling light	SERIAL No.:
SPEC.:4000K	DIM.: φ600mm*H78mm	
MFR.: NEKO LIGHTING AG		

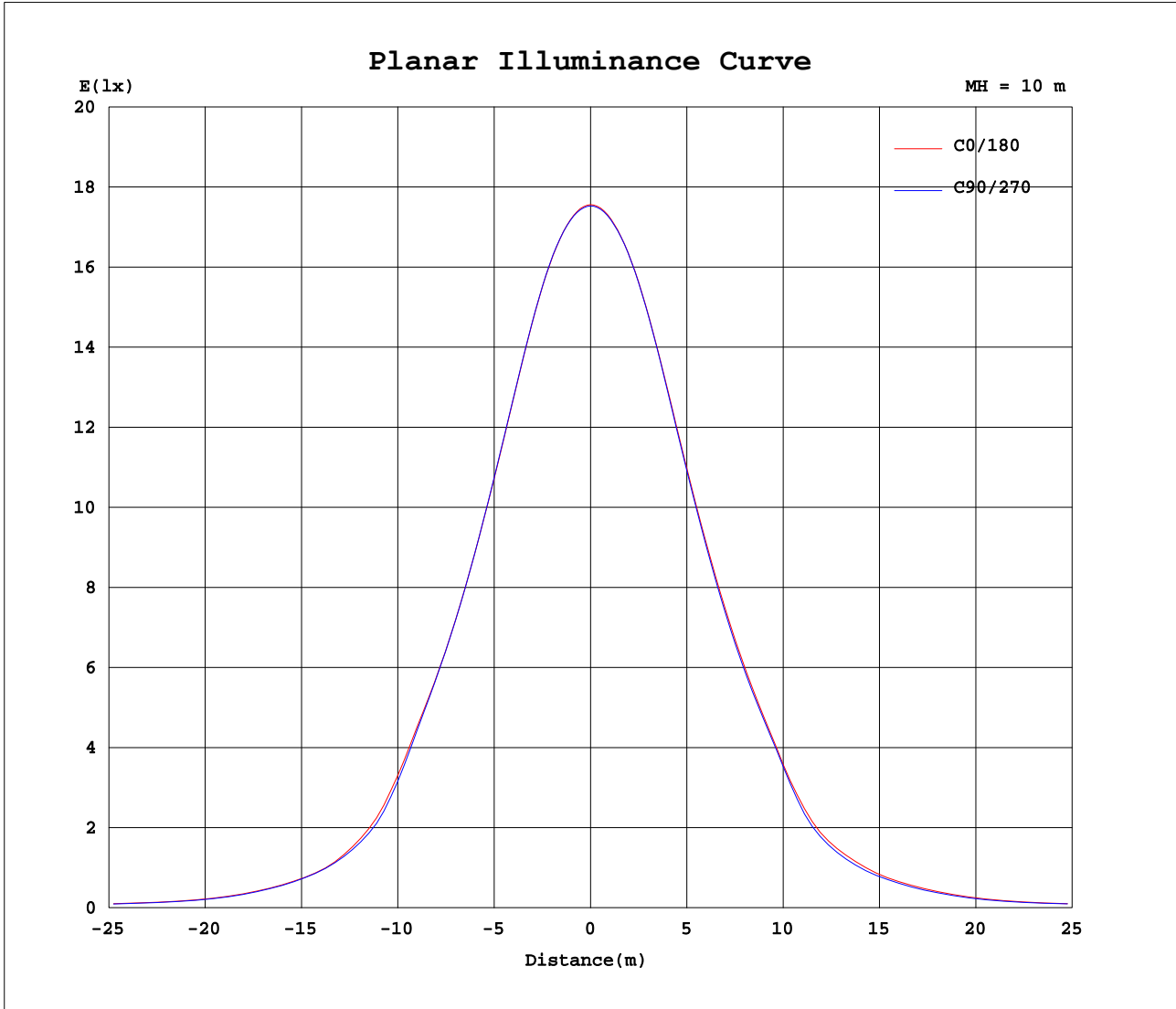
AvgL	cd/m2
L_0~180 (65) av	1930
L_0~180 (75) av	1851
L_0~180 (85) av	1804
L_90~270 (65) av	1802
L_90~270 (75) av	1884
L_90~270 (85) av	1822
L_45 (65) av	2159
L_45 (75) av	1869
L_45 (85) av	1801

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-06-17

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
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: 2020-06-17

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 58%  
 Test Distance: 5.850m [K=1.0000]  
 Remarks:



