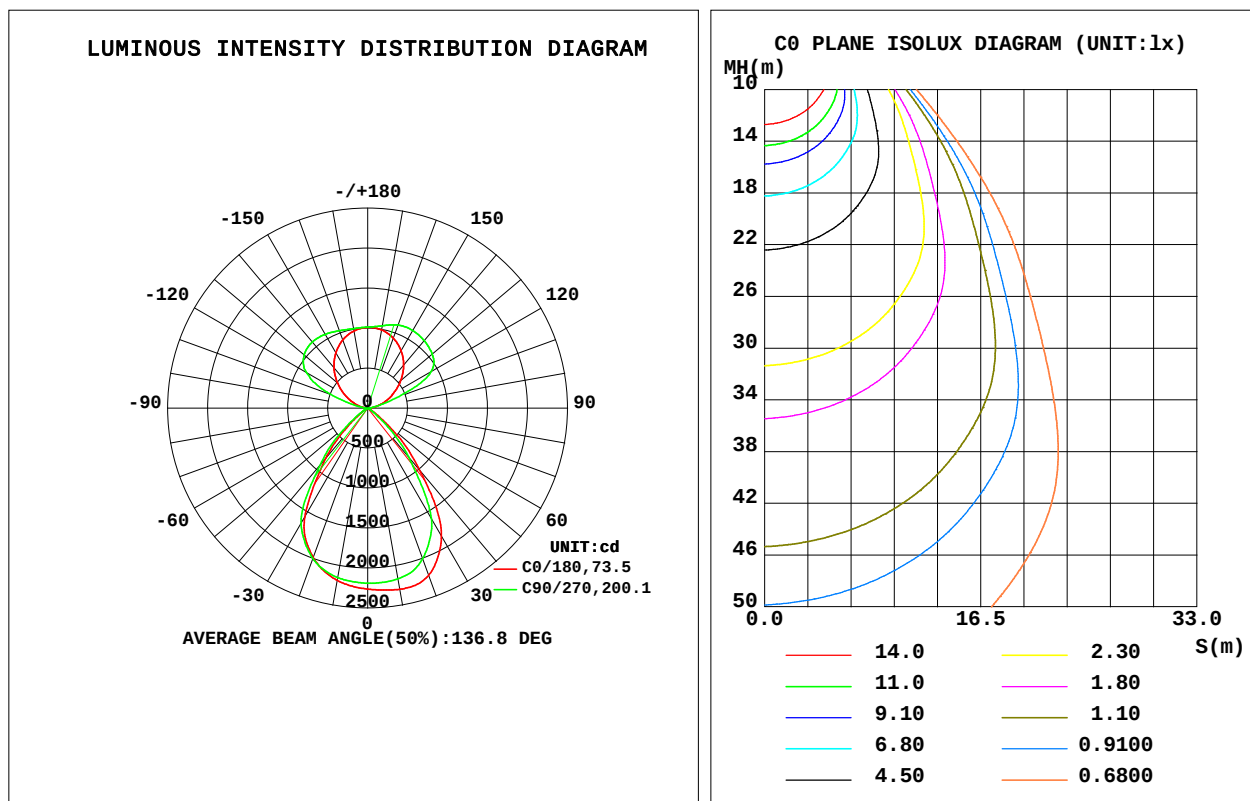


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NECO吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 138.76 lm/W			
MODEL		I _{max} (cd)	2302	S/MH(C0/180)	1.12
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.04
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	6771.3	η UP, DN(C0-180)	27.0, 23.3
NOMINAL FLUX(lm)	6771.34	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	27.9, 21.9
LAMPS INSIDE	1	η up(%)	54.9	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220.0	η down(%)	45.1	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date: 2023-02-14

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.460m [K=1.0571]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	%lum,lamp
5	2236	2199	2177	2171	2284	2236	2188	2142	0- 5	52.71	52.71	0.78,0.78
10	2189	2149	2153	2162	2301	2225	2168	2090	5- 10	156.7	209.4	3.09,3.09
15	2110	2098	2098	2130	2294	2197	2121	2045	10- 15	255.8	465.2	6.87,6.87
20	1989	2046	2004	2090	2227	2127	2007	1970	15- 20	346.1	811.3	12,12
25	1828	1937	1856	1990	2072	1981	1831	1834	20- 25	417.7	1229	18.1,18.1
30	1575	1716	1667	1798	1847	1730	1593	1564	25- 30	458.3	1687	24.9,24.9
35	1158	1368	1324	1459	1476	1360	1169	1195	30- 35	444.3	2132	31.5,31.5
40	813.2	948.7	918.3	1060	1013	932.7	796.7	766.6	35- 40	369.0	2501	36.9,36.9
45	494.8	561.6	623.0	633.3	671.4	533.0	478.3	435.2	40- 45	267.6	2768	40.9,40.9
50	289.3	307.6	303.6	350.7	330.8	270.6	195.3	214.8	45- 50	163.4	2932	43.3,43.3
55	79.31	136.9	122.8	157.4	110.9	114.8	67.31	90.76	50- 55	79.21	3011	44.5,44.5
60	20.29	50.98	33.55	58.28	29.12	37.10	15.60	29.78	55- 60	31.11	3042	44.9,44.9
65	5.757	13.87	7.319	16.21	6.722	9.462	4.943	7.479	60- 65	9.432	3051	45.1,45.1
70	2.554	3.982	2.347	4.183	2.569	3.313	1.052	2.962	65- 70	2.696	3054	45.1,45.1
75	1.671	1.290	0.5649	1.180	0.8004	0.9798	0.6552	1.199	70- 75	0.9342	3055	45.1,45.1
80	1.623	1.095	0.5244	0.6453	0.5935	0.7895	0.5950	1.066	75- 80	0.4853	3055	45.1,45.1
85	1.608	0.9911	0.5014	0.7316	0.5532	0.7147	0.5705	0.8764	80- 85	0.4491	3056	45.1,45.1
90	0.6569	0.7549	0.4956	0.5359	0.5244	0.5993	0.4840	0.5532	85- 90	0.3852	3056	45.1,45.1
95	20.07	58.81	25.26	95.17	36.90	51.04	7.300	21.06	90- 95	7.553	3064	45.2,45.2
100	62.85	196.0	86.63	254.2	88.24	219.8	63.64	178.9	95-100	49.57	3113	46,46
105	119.5	373.4	224.6	433.7	150.9	427.8	171.9	369.8	100-105	117.2	3231	47.7,47.7
110	182.0	519.8	466.7	575.2	221.7	607.7	389.7	535.0	105-110	193.8	3424	50.6,50.6
115	250.1	621.5	712.2	672.1	300.2	714.3	702.8	636.9	110-115	263.4	3688	54.5,54.5
120	327.8	693.2	877.6	743.8	373.0	785.6	918.4	710.2	115-120	311.5	3999	59.1,59.1
125	409.9	749.1	983.3	801.2	457.8	843.9	1011	773.1	120-125	336.1	4335	64,64
130	493.6	793.9	1038	847.1	542.4	897.5	1055	831.4	125-130	344.2	4680	69.1,69.1
135	577.6	828.0	1068	883.2	624.5	945.0	1081	882.9	130-135	341.1	5021	74.1,74.1
140	657.2	856.4	1080	912.1	701.8	985.5	1102	926.7	135-140	328.9	5350	79,79
145	731.5	880.2	1078	935.0	772.3	1017	1117	962.5	140-145	308.5	5658	83.6,83.6
150	799.5	897.9	1066	953.6	835.1	1040	1124	980.0	145-150	280.8	5939	87.7,87.7
155	859.9	914.4	1050	969.1	889.3	1050	1122	1003	150-155	246.8	6186	91.4,91.4
160	910.7	926.8	1032	982.8	934.1	1047	1107	1008	155-160	207.6	6393	94.4,94.4
165	952.0	934.1	1018	994.1	969.9	1036	1079	1009	160-165	164.2	6558	96.8,96.8
170	982.6	931.2	1011	1004	994.8	1029	1046	1011	165-170	118.6	6676	98.6,98.6
175	1002	909.6	1011	1011	1008	1008	1024	1012	170-175	71.48	6748	99.6,99.6
180	1010	1010	1010	1010	1010	1010	1010	1010	175-180	23.72	6771	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2768.2 lm

%lum = 40.9%

%lamp = 40.9%

Conical surface Flux(120deg): 3041.9 lm

%lum = 44.9%

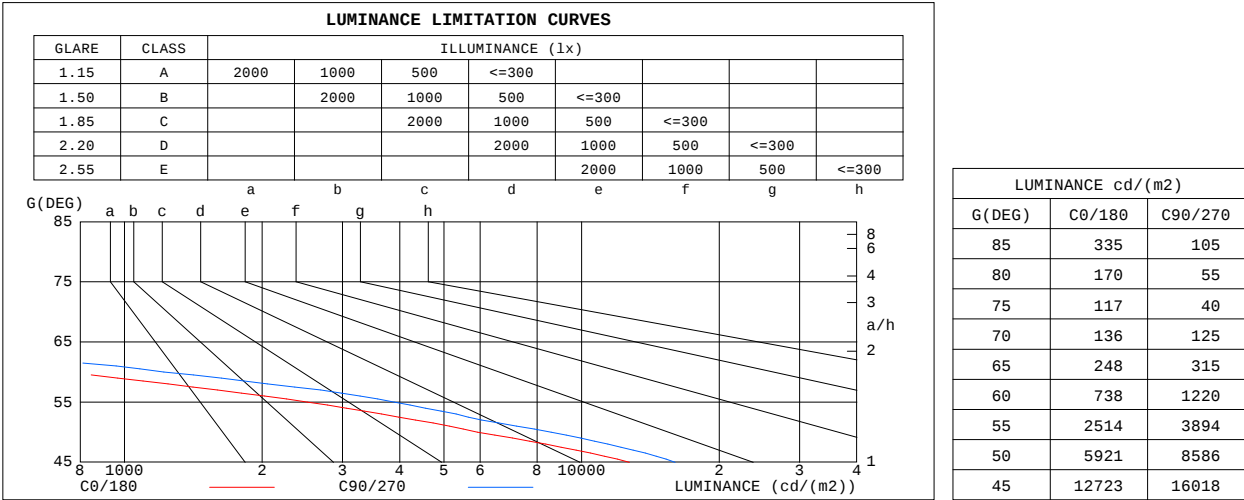
%lamp = 44.9%

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NEC0吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:



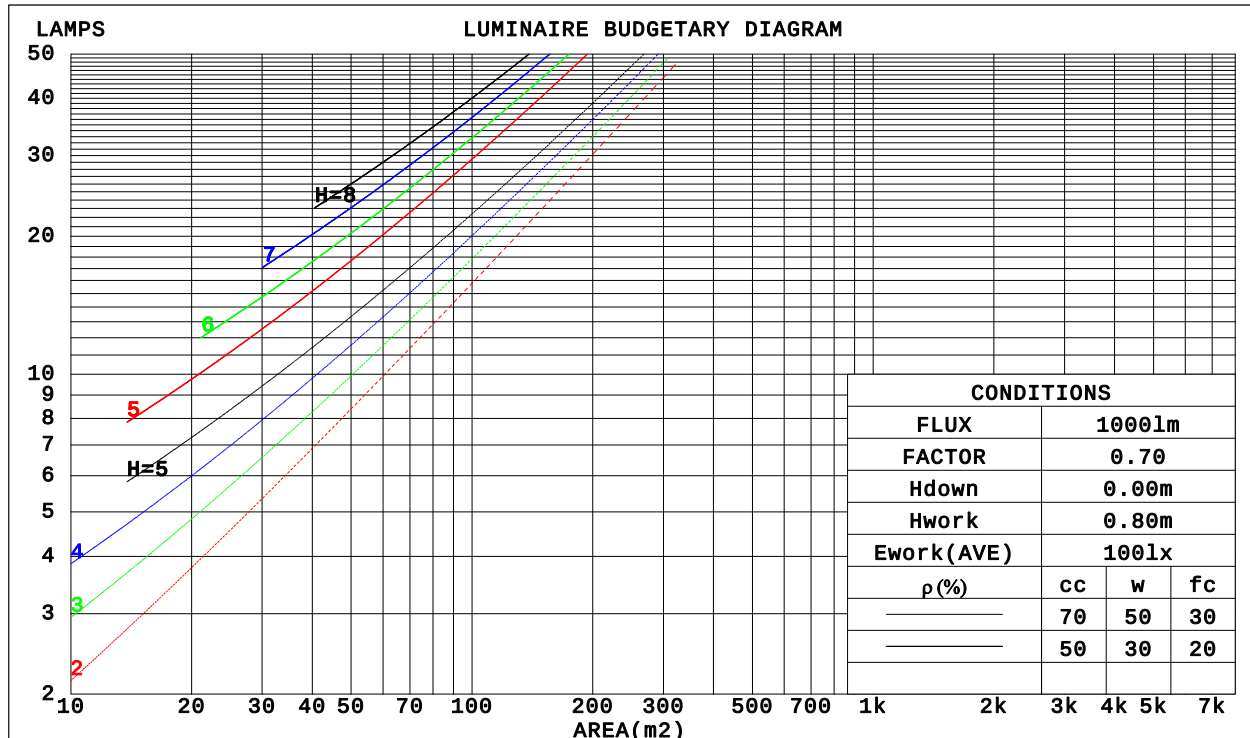
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-14

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NECO吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:

ρ_{CC}	80%			70%			50%			30%			10%			0
ρ_W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.06	1.06	1.06	.97	.97	.97	.81	.81	.81	.66	.66	.66	.52	.52	.52	.45
1.0	.95	.92	.89	.87	.85	.82	.73	.71	.70	.60	.59	.58	.48	.48	.47	.42
2.0	.85	.80	.76	.79	.74	.71	.67	.63	.61	.55	.53	.52	.45	.44	.43	.38
3.0	.77	.70	.65	.71	.66	.61	.60	.57	.54	.51	.48	.46	.42	.40	.39	.35
4.0	.69	.62	.57	.64	.58	.54	.55	.51	.48	.47	.44	.41	.39	.37	.35	.32
5.0	.63	.56	.51	.58	.52	.48	.50	.46	.42	.43	.40	.37	.36	.34	.32	.29
6.0	.57	.50	.45	.53	.47	.43	.46	.42	.38	.40	.36	.34	.33	.31	.29	.26
7.0	.52	.45	.40	.49	.43	.38	.43	.38	.34	.37	.33	.31	.31	.29	.27	.24
8.0	.48	.41	.36	.45	.39	.35	.39	.35	.31	.34	.30	.28	.29	.26	.25	.22
9.0	.44	.37	.33	.41	.35	.31	.36	.32	.28	.32	.28	.26	.27	.25	.23	.21
10.0	.41	.34	.30	.38	.33	.29	.34	.29	.26	.29	.26	.24	.25	.23	.21	.19



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks:

WEC AND CCEC

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm					
NAME: NECO吊灯 格栅罩 上下发光			TYPE:		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.:			SUR.:1.126*0.049		Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.230	.131	.041	.206	.118	.037	.162	.093	.030	.122	.070	.023	.085	.049	.016		
2.0	.216	.118	.036	.195	.107	.033	.155	.086	.027	.118	.066	.021	.084	.048	.015		
3.0	.202	.108	.032	.183	.098	.030	.147	.079	.024	.113	.062	.019	.082	.045	.014		
4.0	.190	.099	.029	.172	.090	.027	.139	.074	.022	.108	.058	.017	.079	.043	.013		
5.0	.179	.091	.026	.162	.083	.024	.132	.069	.020	.103	.054	.016	.076	.041	.012		
6.0	.168	.084	.024	.153	.077	.022	.125	.064	.019	.098	.051	.015	.073	.039	.011		
7.0	.159	.078	.022	.145	.072	.021	.118	.060	.017	.094	.048	.014	.070	.037	.011		
8.0	.150	.073	.021	.137	.067	.019	.112	.056	.016	.089	.045	.013	.068	.035	.010		
9.0	.142	.069	.019	.130	.063	.018	.107	.053	.015	.085	.043	.012	.065	.033	.010		
10.0	.135	.065	.018	.123	.060	.017	.102	.050	.014	.082	.041	.012	.062	.031	.009		

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	.608	.608	.608	.520	.520	.520	.355	.355	.355	.204	.204	.204	.065	.065	.065		
1.0	.596	.578	.562	.510	.496	.484	.349	.341	.335	.201	.198	.195	.064	.064	.063		
2.0	.586	.557	.531	.502	.479	.459	.344	.331	.320	.198	.193	.188	.064	.062	.061		
3.0	.578	.540	.510	.496	.466	.443	.340	.324	.310	.196	.189	.183	.063	.061	.060		
4.0	.571	.528	.496	.490	.456	.431	.337	.318	.303	.195	.186	.179	.063	.061	.059		
5.0	.564	.519	.485	.484	.449	.422	.334	.313	.298	.193	.184	.177	.062	.060	.058		
6.0	.558	.511	.477	.480	.442	.415	.331	.310	.294	.192	.182	.175	.062	.060	.058		
7.0	.553	.505	.471	.475	.437	.410	.328	.307	.291	.191	.181	.173	.062	.059	.057		
8.0	.547	.499	.466	.471	.433	.407	.326	.304	.288	.190	.179	.172	.061	.059	.057		
9.0	.543	.495	.463	.467	.430	.404	.324	.302	.287	.189	.178	.171	.061	.059	.057		
10.0	.538	.491	.460	.464	.427	.401	.322	.300	.285	.188	.177	.170	.061	.058	.056		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm											
NAME: NECO吊灯 格栅罩 上下发光					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					SUR.:1.126*0.049			Shielding Angle:			
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	14.0	14.8	14.9	15.7	16.8	14.5	15.3	15.4	16.2	17.3	
	3H	13.7	14.4	14.6	15.3	16.4	14.2	14.9	15.1	15.8	17.0
	4H	13.5	14.1	14.4	15.1	16.2	14.0	14.7	15.0	15.6	16.8
	6H	13.3	13.9	14.3	14.8	16.1	13.9	14.5	14.8	15.4	16.6
	8H	13.2	13.8	14.2	14.7	16.0	13.8	14.3	14.7	15.3	16.5
	12H	13.1	13.7	14.1	14.6	15.9	13.7	14.2	14.7	15.2	16.4
4H	2H	13.6	14.2	14.5	15.1	16.3	14.1	14.7	15.0	15.6	16.8
	3H	13.2	13.7	14.2	14.7	15.9	13.7	14.3	14.7	15.2	16.4
	4H	13.0	13.5	14.0	14.5	15.7	13.5	14.0	14.5	15.0	16.3
	6H	12.8	13.2	13.8	14.2	15.5	13.4	13.8	14.4	14.8	16.1
	8H	12.7	13.1	13.8	14.1	15.4	13.3	13.6	14.3	14.6	15.9
	12H	12.6	13.0	13.7	14.0	15.3	13.2	13.5	14.2	14.5	15.8
8H	4H	12.7	13.1	13.7	14.1	15.4	13.3	13.6	14.3	14.6	15.9
	6H	12.5	12.8	13.6	13.9	15.2	13.1	13.4	14.1	14.4	15.7
	8H	12.4	12.7	13.5	13.7	15.1	13.0	13.2	14.0	14.3	15.6
	12H	12.3	12.6	13.4	13.6	15.0	12.9	13.1	13.9	14.1	15.5
12H	4H	12.6	13.0	13.7	14.0	15.3	13.2	13.5	14.2	14.5	15.8
	6H	12.4	12.7	13.5	13.7	15.1	13.0	13.2	14.0	14.3	15.6
	8H	12.3	12.6	13.4	13.6	15.0	12.9	13.1	13.9	14.1	15.5
Variations with the observer position at spacings:											
S = 1.0H	+ 2.6 / -10.8					+ 2.4 / - 8.9					
1.5H	+ 3.3 / - 5.7					+ 3.0 / - 5.9					
2.0H	+ 5.5 / -12.9					+ 6.0 / -13.1					

CIE Pub.117 Corrected 6771 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.6)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NECO吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:

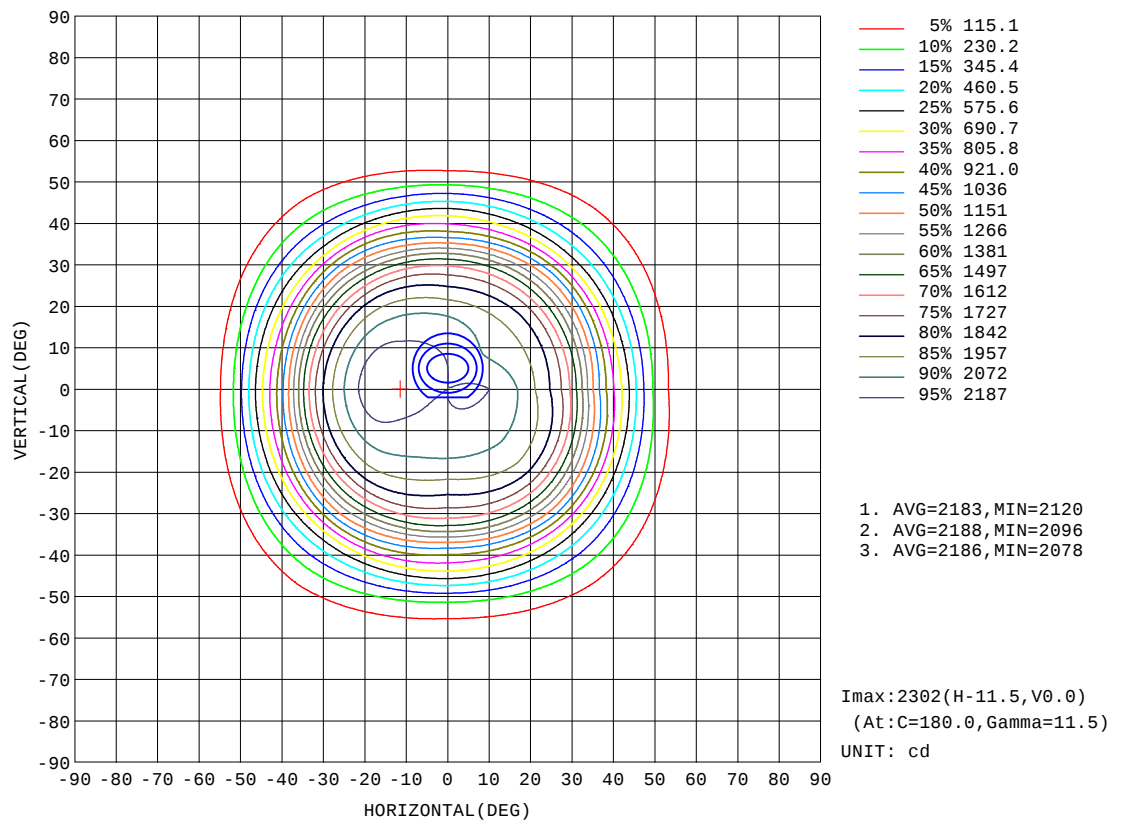
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	51	44	57	48	42	49	42	38	27
0.80	69	59	52	64	55	50	55	49	44	30
1.00	75	66	59	70	62	56	59	54	49	33
1.25	80	72	66	74	67	62	63	58	54	35
1.50	84	76	71	78	71	66	66	61	58	37
2.00	90	83	78	83	77	73	70	66	63	40
2.50	93	87	82	85	80	76	71	68	66	40
3.00	95	90	85	87	83	79	73	70	68	41
4.00	97	93	90	89	86	83	75	73	71	42
5.00	99	96	93	91	88	86	76	74	73	43
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Ceiling Mounted					SHRNOM = 1.00		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NECO吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:

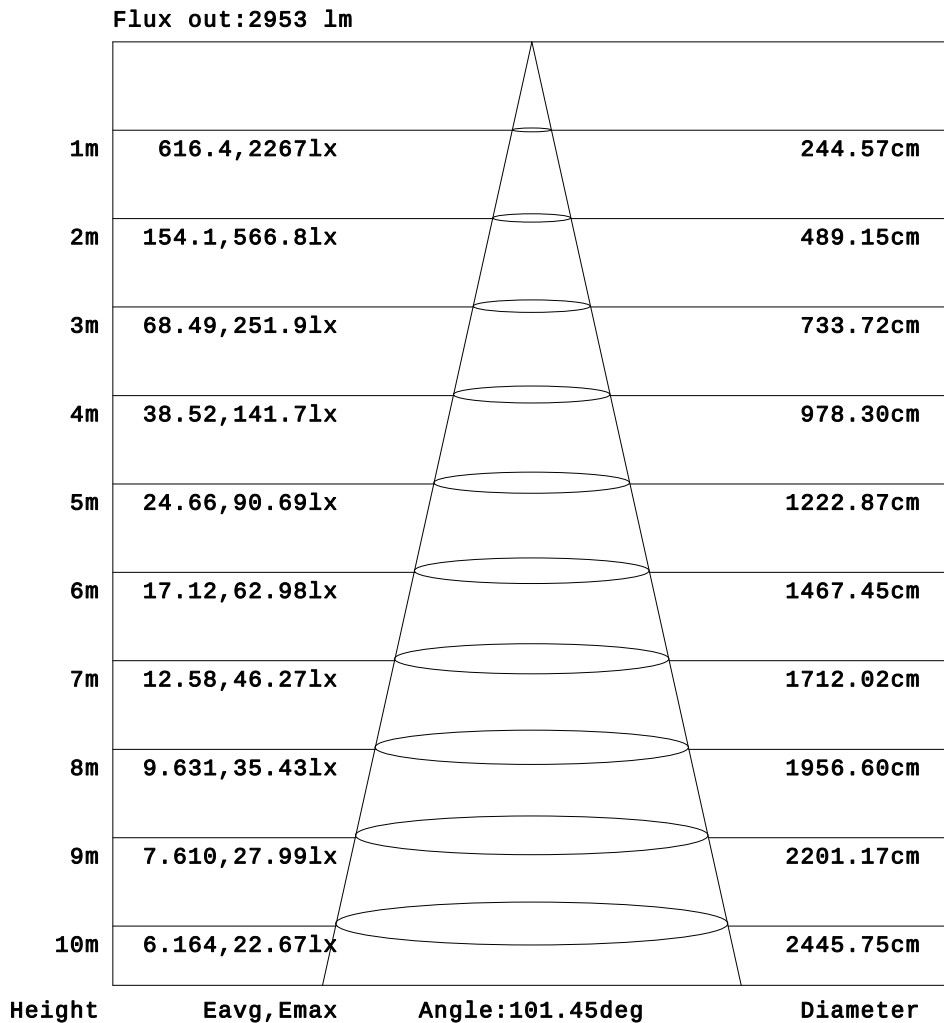


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date: 2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.460m [K=1.0571]
Remarks:

AAI Figure

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NEC0吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:



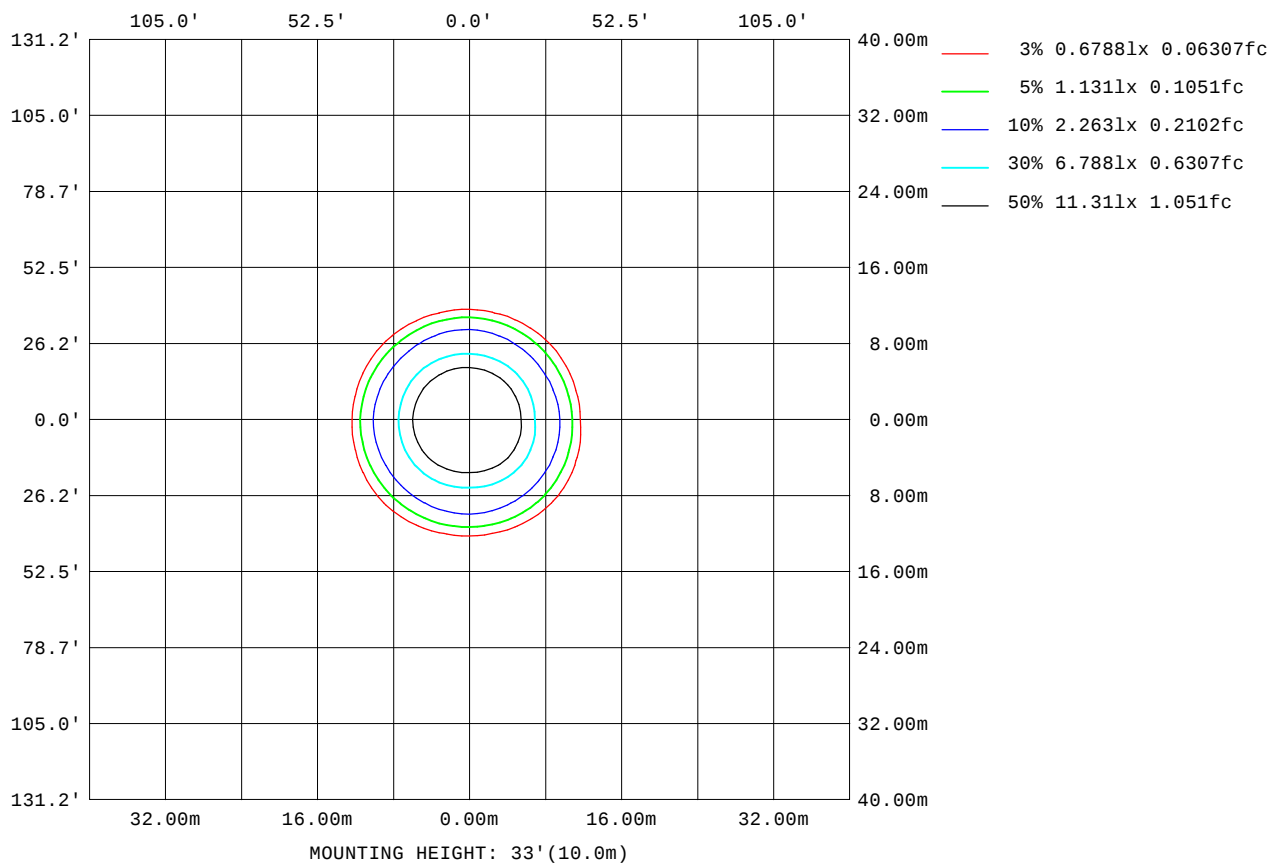
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:
 Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
 Humidity:65.0%
 Test Distance:9.460m [K=1.0571]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NEC0吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators:
Test Date: 2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity: 65.0%
Test Distance: 9.460m [K=1.0571]
Remarks:

LED Avg.L Report

Test:U:220.7V I:0.2280A P:48.80W PF:0.9670 Lamp Flux:6771.34x1 lm		
NAME: NECO吊灯 格栅罩 上下发光	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:1.126*0.049	Shielding Angle:

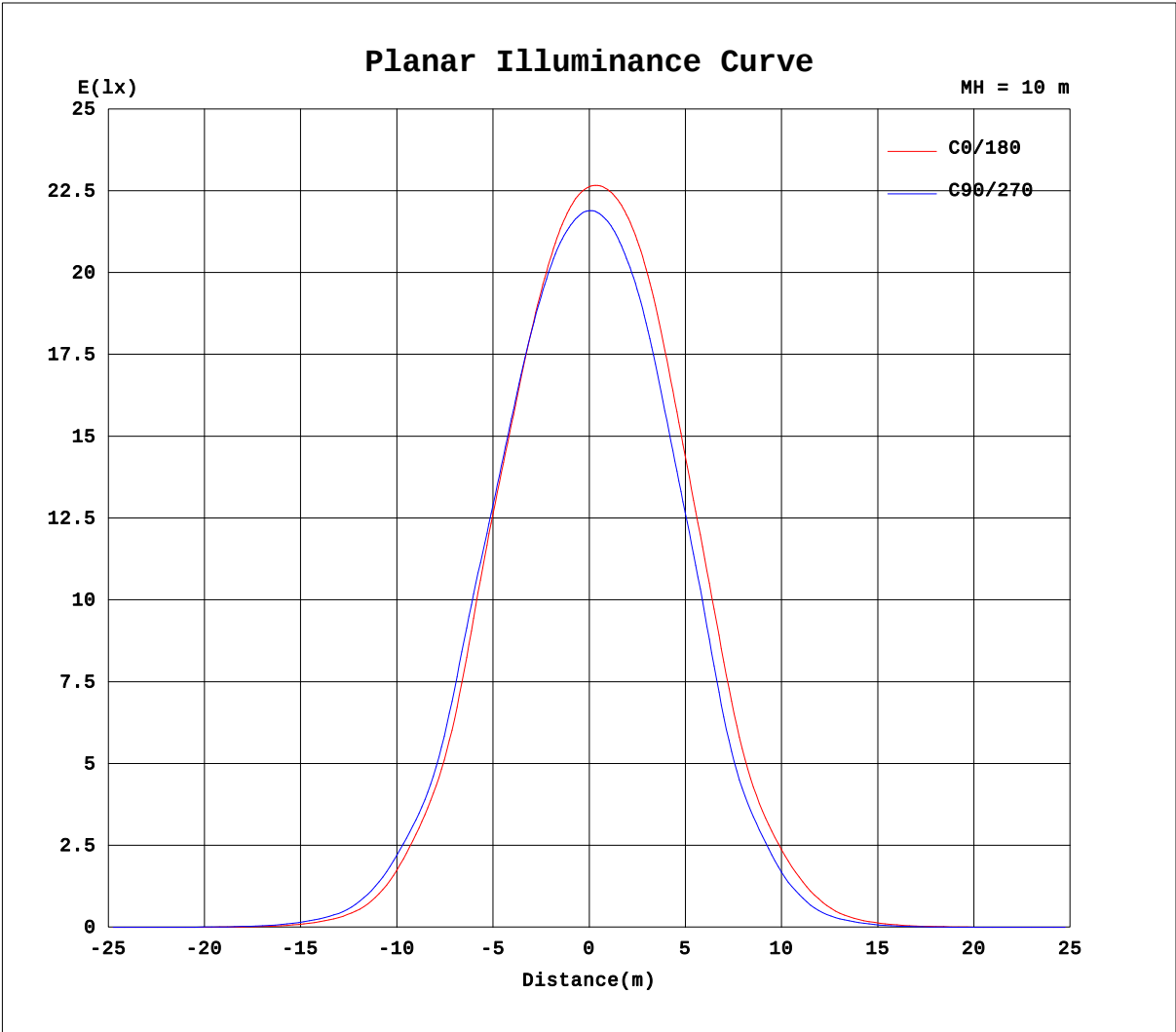
AvgL	cd/m2
L_0~180(65)av	268
L_0~180(75)av	87
L_0~180(85)av	225
L_90~270(65)av	264
L_90~270(75)av	43
L_90~270(85)av	112
L_45(65)av	506
L_45(75)av	82
L_45(85)av	173

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-14

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:
Test Date:2023-02-14

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000_V1 SYSTEM V2.0.295T
Humidity:65.0%
Test Distance:9.460m [K=1.0571]
Remarks: