

LAGOON-830-100°



Light Output Ratio:	100.0%	
Luminaire Power:	10.69 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.30	fine grid method.

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2020-09-18

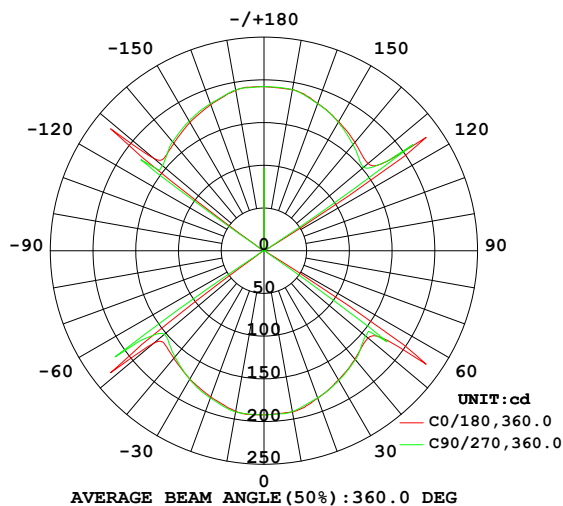
γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 5.850m [K=1.7094]  
Remarks:

**LUMINAIRE PHOTOMETRIC TEST REPORT**

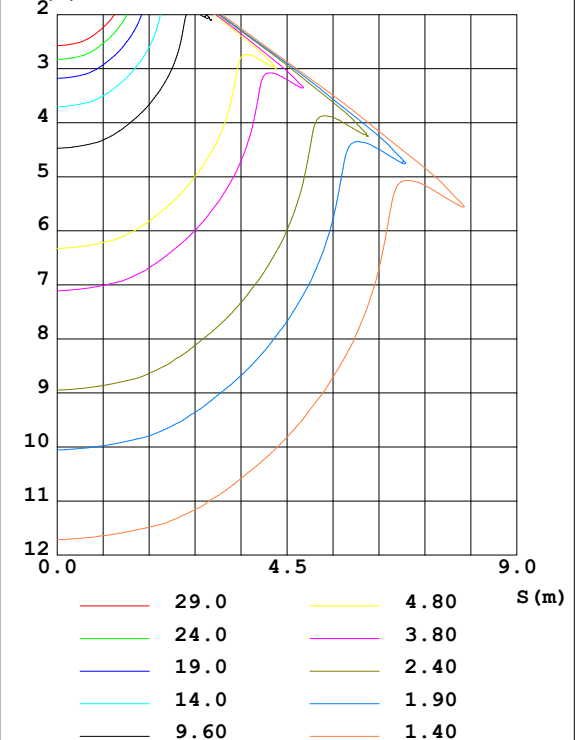
Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: $\phi$ 107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 107mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 88.89 lm/W			
MODEL	3000K	I <sub>max</sub> (cd)	231.9	S/MH (C0/180)	1.36
NOMINAL POWER (W)	12	LOR (%)	100.0	S/MH (C90/270)	1.35
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	950.30	$\eta$ UP,DN (C0-180)	25.3,24.7
NOMINAL FLUX (lm)	950.302	CIE CLASS	DIFFUSE	$\eta$ UP,DN (C180-360)	24.7,25.3
LAMPS INSIDE	1	$\eta$ up (%)	50.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220.0	$\eta$ down (%)	50.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

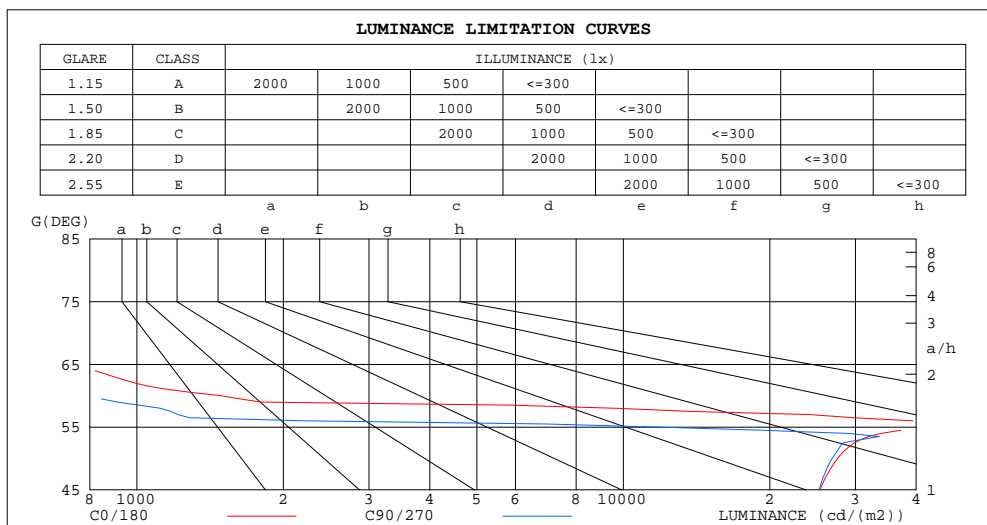
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
10	191.6	191.7	191.2	191.0	190.7	190.7	191.6	191.5	0- 10	18.31	18.31	1.93,1.93
20	183.6	183.3	183.2	183.0	182.2	181.9	183.3	184.3	10- 20	52.99	71.30	7.5,7.5
30	174.7	174.9	175.3	173.8	173.5	172.9	173.8	175.0	20- 30	82.62	153.9	16.2,16.2
40	165.5	166.1	166.4	163.8	164.3	162.2	162.3	162.6	30- 40	106.1	260.1	27.4,27.4
50	159.1	160.2	155.2	159.8	168.4	163.7	152.5	154.8	40- 50	124.3	384.4	40.4,40.4
60	6.683	5.590	3.567	3.687	4.236	4.668	6.627	7.550	50- 60	86.23	470.6	49.5,49.5
70	1.701	1.845	1.117	1.262	1.178	1.564	1.770	1.850	60- 70	3.049	473.6	49.8,49.8
80	0.6642	0.7347	0.4402	0.4733	0.4368	0.5809	0.6489	0.6804	70- 80	1.086	474.7	50,50
90	0.2284	0.2325	0.2078	0.1658	0.1240	0.1316	0.1816	0.6263	80- 90	0.4192	475.2	50,50
100	0.6642	0.6804	0.6489	0.5809	0.4368	0.4733	0.4402	0.7347	90-100	0.4192	475.6	50,50
110	1.701	1.850	1.770	1.564	1.178	1.262	1.117	1.845	100-110	1.086	476.7	50.2,50.2
120	6.683	7.550	6.627	4.668	4.236	3.687	3.567	5.590	110-120	3.049	479.7	50.5,50.5
130	159.1	154.8	152.5	163.7	168.4	159.8	155.2	160.2	120-130	86.23	565.9	59.6,59.6
140	165.5	162.6	162.3	162.2	164.3	163.8	166.4	166.1	130-140	124.3	690.2	72.6,72.6
150	174.7	175.0	173.8	172.9	173.5	173.8	175.3	174.9	140-150	106.1	796.4	83.8,83.8
160	183.6	184.3	183.3	181.9	182.2	183.0	183.2	183.3	150-160	82.62	879.0	92.5,92.5
170	191.6	191.5	191.6	190.7	190.7	191.0	191.2	191.7	160-170	52.99	932.0	98.1,98.1
180	192.2	192.2	192.2	192.2	192.2	192.2	192.2	192.2	170-180	18.31	950.3	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

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C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	509	355
80	426	282
75	466	302
70	554	364
65	754	491
60	1488	794
55	45001	11678
50	27559	26887
45	25345	25269

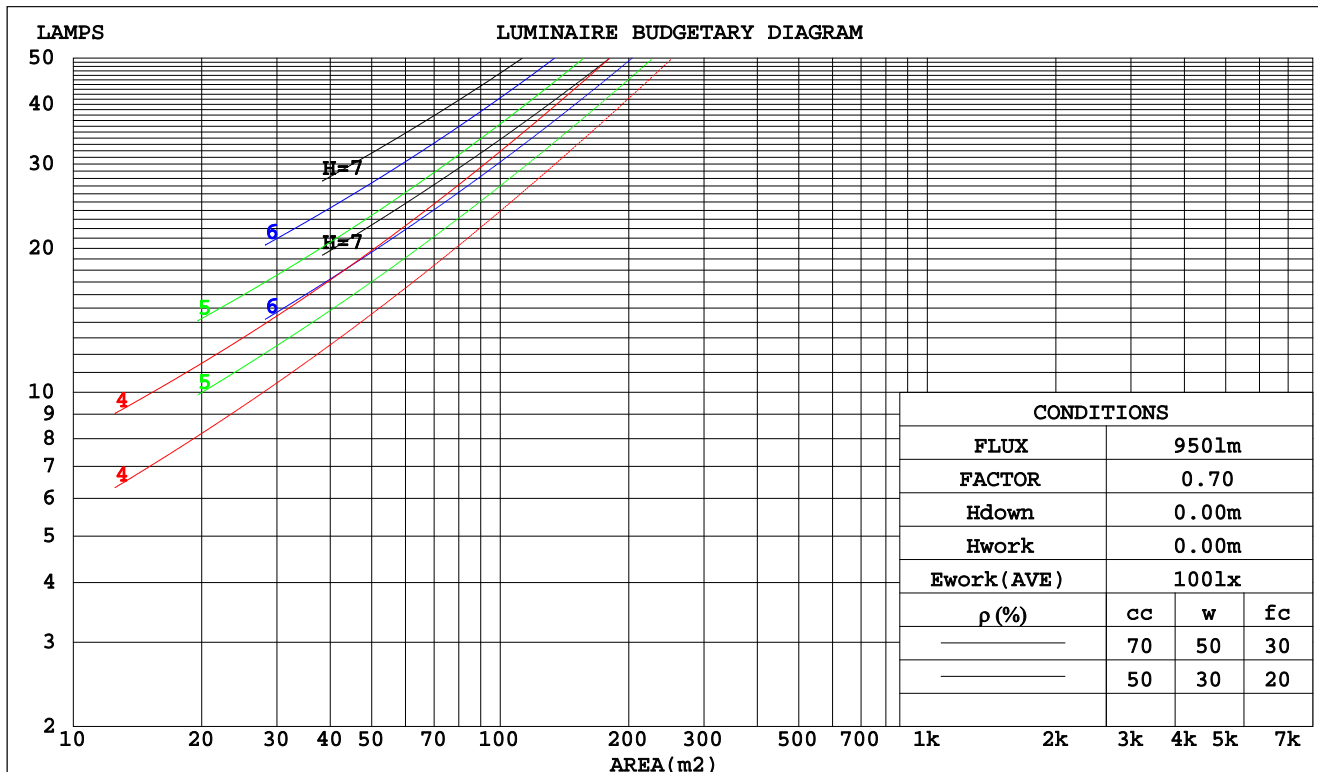
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Test Speed: MEDIUM  
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γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
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Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

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SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:

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	1.07	1.07	1.07	.99	.99	.99	.83	.83	.83	.69	.69	.69	.56	.56	.56	.50
1.0	.95	.92	.89	.88	.85	.83	.75	.73	.71	.63	.61	.60	.52	.51	.50	.45
2.0	.84	.79	.74	.78	.74	.70	.67	.64	.61	.56	.54	.52	.47	.45	.44	.39
3.0	.75	.68	.63	.70	.64	.59	.60	.55	.52	.51	.48	.45	.42	.40	.38	.34
4.0	.67	.59	.54	.62	.56	.51	.54	.49	.45	.45	.42	.39	.38	.35	.33	.30
5.0	.60	.52	.46	.56	.49	.44	.48	.43	.39	.41	.37	.34	.34	.32	.29	.26
6.0	.54	.46	.40	.50	.43	.38	.43	.38	.34	.37	.33	.30	.31	.28	.26	.23
7.0	.48	.41	.35	.45	.38	.34	.39	.34	.30	.34	.30	.26	.28	.25	.23	.20
8.0	.44	.36	.31	.41	.34	.30	.36	.30	.27	.31	.27	.24	.26	.23	.21	.18
9.0	.40	.33	.28	.37	.31	.26	.33	.27	.24	.28	.24	.21	.24	.21	.18	.16
10.0	.37	.30	.25	.34	.28	.24	.30	.25	.21	.26	.22	.19	.22	.19	.17	.15



C Range: 0 - 360DEG  
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Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

### WEC AND CCEC

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:

pcc	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	.245	.139	.044	.223	.127	.040	.182	.104	.033	.144	.083	.027	.109	.063	.020	
2.0	.233	.128	.039	.214	.118	.036	.176	.098	.030	.142	.079	.025	.110	.062	.020	
3.0	.220	.117	.035	.202	.108	.033	.168	.091	.028	.136	.075	.023	.107	.059	.018	
4.0	.207	.108	.032	.191	.100	.030	.159	.085	.025	.130	.070	.021	.103	.056	.017	
5.0	.195	.099	.029	.180	.092	.027	.151	.079	.023	.124	.065	.019	.099	.053	.016	
6.0	.183	.092	.026	.169	.086	.025	.143	.073	.021	.117	.061	.018	.094	.050	.015	
7.0	.173	.085	.024	.160	.079	.023	.135	.068	.020	.111	.057	.017	.090	.047	.014	
8.0	.163	.080	.022	.151	.074	.021	.127	.064	.018	.106	.054	.015	.085	.044	.013	
9.0	.154	.074	.021	.142	.069	.019	.121	.060	.017	.100	.050	.014	.081	.041	.012	
10.0	.145	.070	.019	.135	.065	.018	.114	.056	.016	.095	.047	.013	.077	.039	.011	

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	.571	.571	.571	.488	.488	.488	.333	.333	.333	.191	.191	.191	.061	.061	.061	
1.0	.560	.541	.524	.479	.464	.451	.328	.319	.312	.189	.185	.181	.060	.059	.059	
2.0	.551	.519	.492	.472	.447	.425	.323	.309	.296	.187	.180	.174	.060	.058	.057	
3.0	.544	.503	.470	.466	.434	.408	.320	.301	.286	.185	.176	.168	.059	.057	.055	
4.0	.537	.491	.455	.461	.424	.395	.317	.295	.278	.183	.173	.165	.059	.056	.054	
5.0	.531	.481	.444	.456	.416	.386	.314	.291	.273	.182	.171	.162	.059	.056	.053	
6.0	.525	.473	.437	.451	.410	.380	.311	.287	.269	.181	.169	.160	.058	.055	.053	
7.0	.519	.467	.431	.447	.405	.375	.309	.284	.266	.179	.167	.158	.058	.055	.052	
8.0	.514	.462	.426	.443	.401	.372	.306	.281	.264	.178	.166	.157	.058	.054	.052	
9.0	.509	.458	.423	.439	.397	.369	.304	.279	.262	.177	.165	.156	.057	.054	.052	
10.0	.505	.454	.420	.435	.394	.367	.302	.277	.261	.176	.164	.156	.057	.054	.052	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
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Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm											
NAME: LAGOON-830-100°					TYPE:Outdoor Light			WEIGHT:			
SPEC.:3000K					DIM.: φ107mm*H121mm			SERIAL No.:			
MFR.: NEKO LIGHTING AG					SUR.:φ107mm			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	21.4	22.3	22.3	23.1	24.2	20.3	21.2	21.1	22.0	23.1	
	3H	21.1	21.9	22.0	22.7	23.9	19.9	20.7	20.8	21.6	22.7
	4H	20.9	21.6	21.8	22.5	23.7	19.8	20.5	20.7	21.4	22.5
	6H	20.7	21.4	21.7	22.3	23.5	19.6	20.3	20.5	21.2	22.3
	8H	20.7	21.3	21.6	22.2	23.4	19.5	20.2	20.4	21.1	22.2
	12H	20.6	21.2	21.5	22.1	23.3	19.4	20.0	20.4	21.0	22.1
4H	2H	21.1	21.8	22.0	22.7	23.8	20.1	20.8	21.0	21.7	22.8
	3H	20.7	21.3	21.7	22.3	23.4	19.7	20.3	20.7	21.2	22.4
	4H	20.6	21.1	21.5	22.0	23.2	19.5	20.1	20.5	21.0	22.2
	6H	20.4	20.8	21.3	21.8	23.0	19.4	19.8	20.3	20.8	22.0
	8H	20.3	20.7	21.3	21.7	22.9	19.3	19.7	20.3	20.7	21.9
	12H	20.2	20.6	21.2	21.6	22.8	19.2	19.6	20.2	20.5	21.8
8H	4H	20.3	20.7	21.3	21.7	22.9	19.3	19.7	20.3	20.7	21.9
	6H	20.1	20.4	21.1	21.4	22.7	19.1	19.4	20.1	20.4	21.7
	8H	20.0	20.3	21.0	21.3	22.6	19.0	19.3	20.0	20.3	21.6
	12H	19.9	20.2	20.9	21.2	22.5	18.9	19.1	19.9	20.2	21.5
12H	4H	20.2	20.6	21.2	21.6	22.8	19.2	19.6	20.2	20.5	21.8
	6H	20.0	20.3	21.0	21.3	22.6	19.0	19.3	20.0	20.3	21.6
	8H	19.9	20.2	20.9	21.2	22.5	18.9	19.1	19.9	20.2	21.5
Variations with the observer position at spacings:											
S = 1.0H	+ 1.7 / - 4.3					+ 2.8 / -14.6					
1.5H	+ 3.9 / - 4.1					+ 2.0 / - 3.6					
2.0H	+ 3.8 / -18.8					+ 5.3 / -19.4					

CIE Pub.117, 950.3 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = -0.2$ )

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$\gamma$  Range: 0 - 180DEG  
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Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
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### UTILIZATION FACTORS TABLE

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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) $k(RI) \times RCR = 5$									
$k = 0.60$	46	36	30	44	34	29	39	31	27	19
0.80	57	46	40	53	44	38	47	40	35	25
1.00	65	55	49	61	52	46	54	48	42	30
1.25	72	63	56	68	59	54	59	53	48	35
1.50	77	68	62	72	64	59	63	57	53	37
2.00	84	76	70	78	71	66	67	63	59	41
2.50	88	80	75	81	75	70	70	66	62	42
3.00	91	84	79	84	79	74	72	68	65	43
4.00	94	89	84	87	83	79	75	71	68	45
5.00	96	91	87	89	85	82	76	73	71	45
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

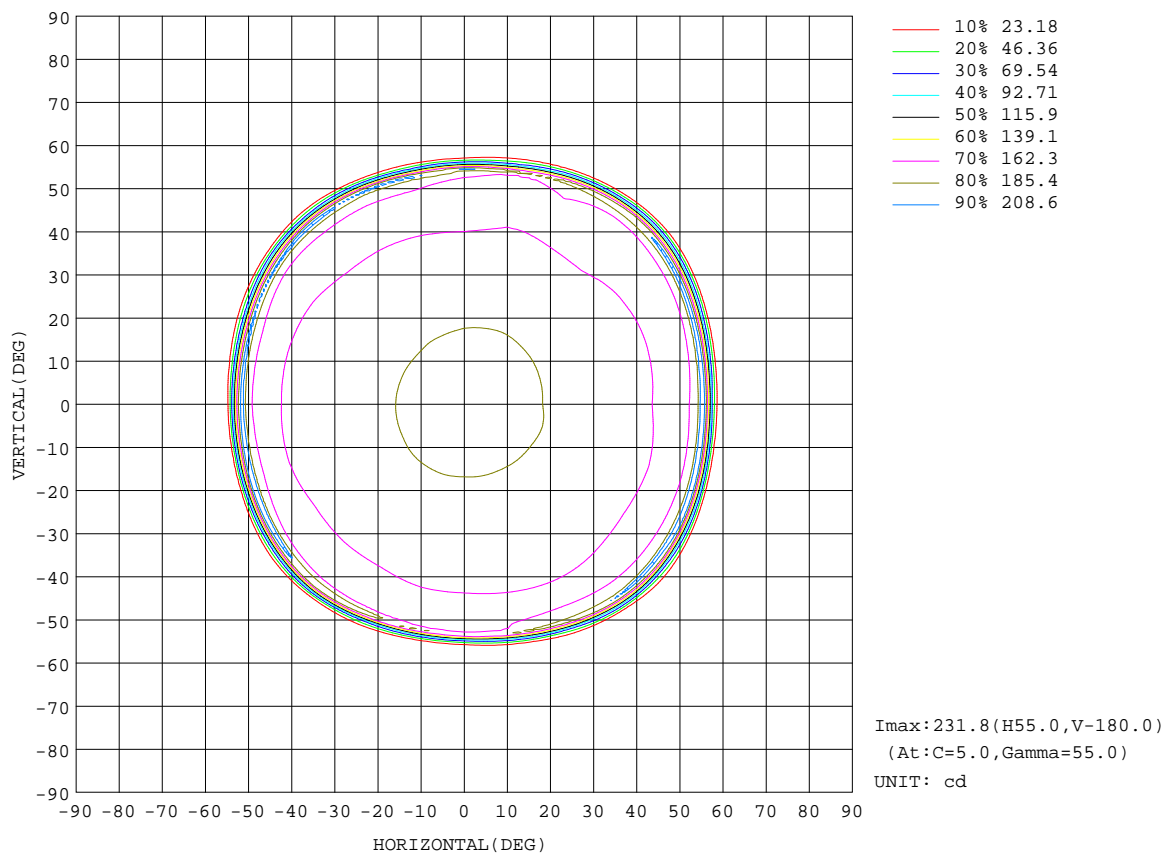
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**ISOCANDELA DIAGRAM**

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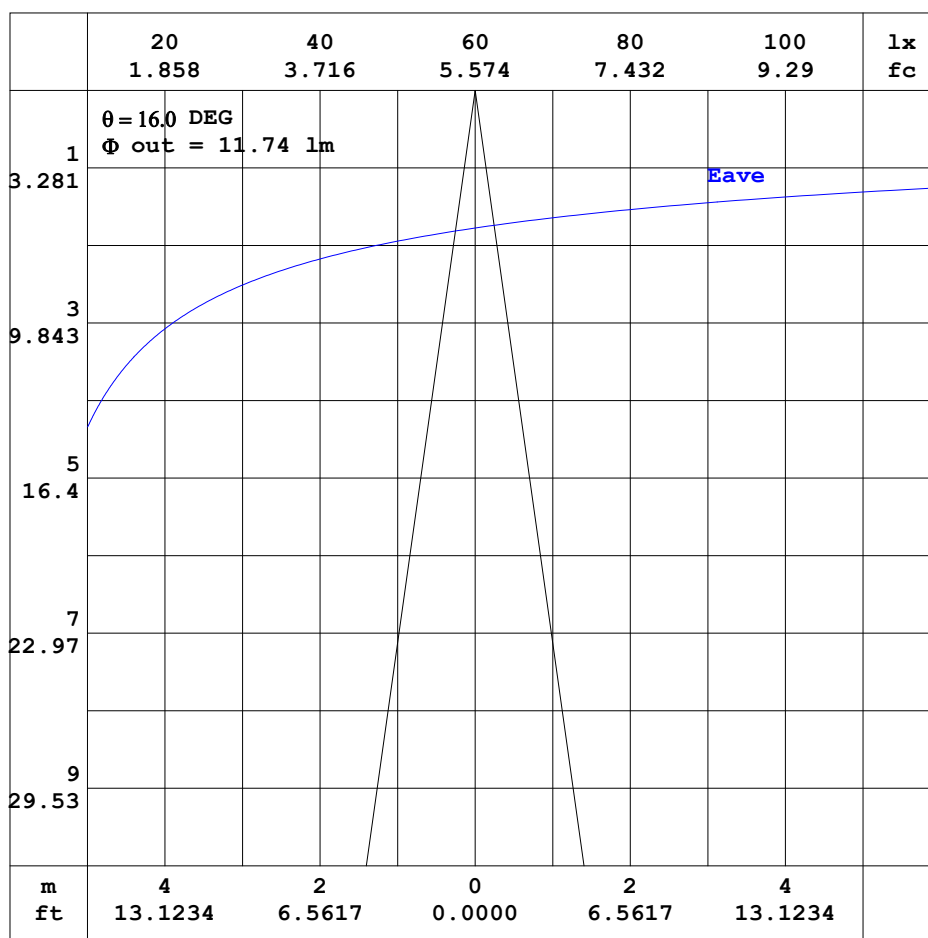


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AAI CURVES

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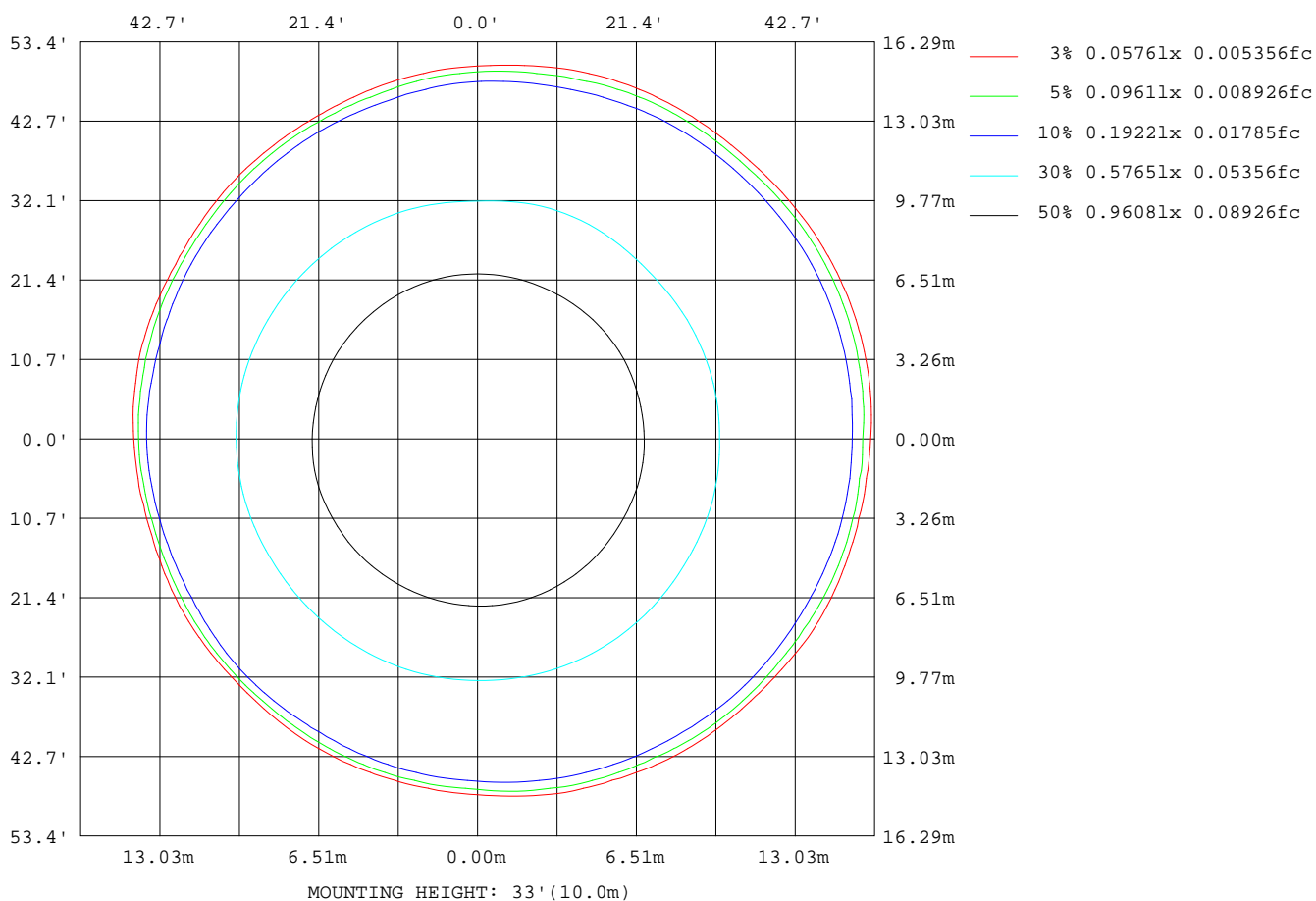
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: $\phi$ 107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.: $\phi$ 107mm	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

### LED Avg.L Report

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:

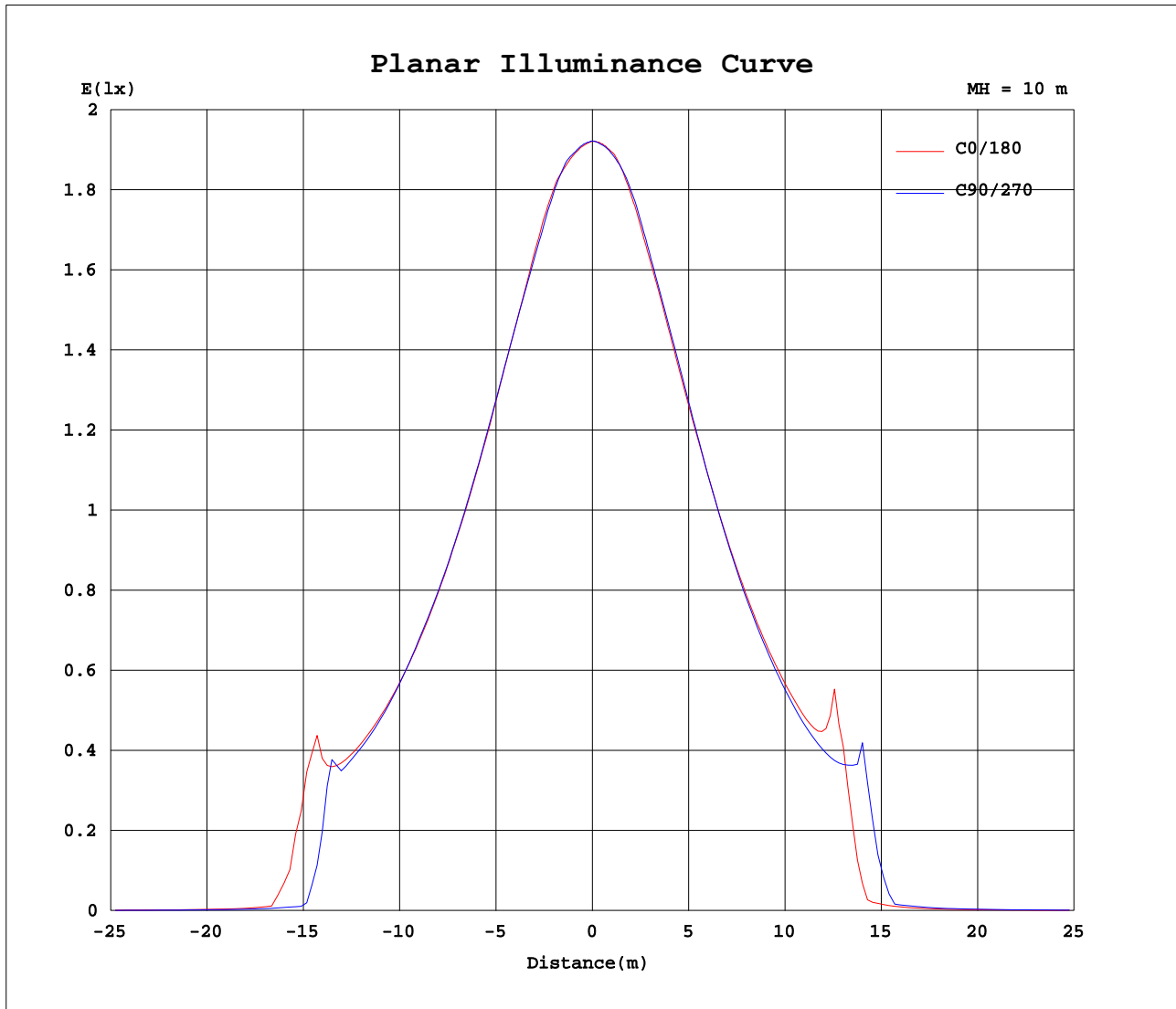
AvgL	cd/m2
L_0~180 (65) av	649
L_0~180 (75) av	387
L_0~180 (85) av	420
L_90~270 (65) av	659
L_90~270 (75) av	378
L_90~270 (85) av	430
L_45 (65) av	722
L_45 (75) av	434
L_45 (85) av	471

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature: 25.3DEG  
Operators: Jason  
Test Date: 2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 5.850m [K=1.7094]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
5	191	192	192	192	192	192	191	191	191	191	191	191	192	192	192	192	192	192	192
10	192	192	192	192	192	192	192	192	192	192	192	192	191	191	191	191	191	191	191
15	189	189	189	189	189	189	188	188	188	188	188	188	188	187	187	187	187	187	187
20	184	184	184	184	184	184	184	184	183	183	183	183	183	183	183	183	183	183	183
25	179	180	180	180	180	180	180	179	179	179	179	179	179	179	179	180	180	180	180
30	175	175	175	175	175	175	174	175	175	175	175	175	175	175	175	175	175	175	175
35	170	170	170	170	170	170	169	170	170	170	171	171	171	171	171	171	171	171	171
40	165	166	166	166	165	165	165	165	166	166	166	167	167	167	167	167	167	167	166
45	161	162	162	162	162	162	161	161	162	162	162	162	162	162	162	162	161	161	160
50	159	160	160	160	160	160	160	160	160	160	161	161	161	161	160	160	158	156	155
55	232	232	230	227	221	214	208	206	204	200	186	170	153	139	125	111	92.8	75.4	60.1
60	6.68	8.03	8.84	9.12	8.57	7.71	6.76	6.28	5.90	5.59	5.27	4.98	4.71	4.44	4.20	3.98	3.83	3.70	3.57
65	2.86	3.31	3.62	3.78	3.74	3.61	3.42	3.29	3.15	3.01	2.91	2.81	2.70	2.56	2.42	2.27	2.12	1.99	1.86
70	1.70	1.81	1.90	1.97	2.02	2.05	2.06	2.00	1.93	1.84	1.79	1.74	1.68	1.60	1.50	1.40	1.30	1.20	1.12
75	1.08	1.09	1.11	1.14	1.20	1.25	1.29	1.27	1.23	1.18	1.15	1.12	1.08	1.02	0.95	0.88	0.82	0.76	0.70
80	0.66	0.66	0.67	0.69	0.72	0.76	0.79	0.78	0.76	0.73	0.72	0.70	0.67	0.63	0.59	0.55	0.51	0.47	0.44
85	0.40	0.41	0.42	0.44	0.49	0.53	0.55	0.52	0.48	0.44	0.42	0.41	0.40	0.38	0.36	0.33	0.31	0.29	0.28
90	0.23	0.23	0.23	0.24	0.24	0.25	0.25	0.25	0.24	0.23	0.23	0.23	0.23	0.24	0.00	0.00	0.23	0.22	0.21
95	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.46	0.43	0.41	0.41	0.41	0.42	0.44	0.45	0.45	0.44	0.41	0.40
100	0.66	0.68	0.71	0.73	0.77	0.80	0.81	0.77	0.73	0.68	0.67	0.68	0.70	0.73	0.77	0.78	0.74	0.69	0.65
105	1.08	1.12	1.16	1.21	1.29	1.36	1.39	1.32	1.22	1.13	1.11	1.12	1.15	1.23	1.31	1.35	1.26	1.15	1.06
110	1.70	1.81	1.92	2.04	2.21	2.36	2.43	2.26	2.05	1.85	1.81	1.84	1.92	2.12	2.30	2.42	2.24	2.00	1.77
115	2.86	3.16	3.46	3.76	4.19	4.52	4.69	4.27	3.75	3.26	3.19	3.28	3.50	3.94	4.35	4.60	4.20	3.67	3.14
120	6.68	7.44	8.24	9.09	10.3	11.3	11.8	10.5	8.94	7.55	7.90	8.66	9.56	10.1	10.3	10.2	9.15	7.88	6.63
125	232	220	210	203	199	197	197	199	201	202	199	195	191	191	190	189	185	179	169
130	159	158	157	157	157	157	157	156	155	155	157	159	161	160	158	156	154	153	153
135	161	161	161	161	161	160	160	159	158	158	159	160	161	161	161	160	159	157	156
140	165	166	166	166	166	166	165	164	163	163	163	163	163	163	164	164	163	163	162
145	170	170	170	170	170	170	170	170	169	169	169	168	168	168	168	168	168	168	168
150	175	175	175	175	175	175	175	175	175	175	175	175	174	174	174	174	174	174	174
155	179	179	179	179	179	179	180	180	180	180	180	180	179	179	179	179	179	179	179
160	184	183	183	183	184	184	184	184	184	184	184	184	184	184	184	184	184	183	183
165	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	188	188	188
170	192	192	192	192	192	191	191	191	191	191	192	192	192	192	192	192	192	192	192
175	191	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
180	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
5	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
10	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191
15	187	187	187	187	187	187	187	187	187	187	187	186	186	186	186	186	186	186	186
20	183	183	183	183	183	183	183	183	183	183	183	182	182	182	182	182	182	182	182
25	179	179	179	179	179	179	179	179	178	178	178	178	178	178	178	178	178	178	178
30	175	175	174	174	174	174	174	174	174	174	173	173	174	174	174	174	174	174	173
35	171	170	170	169	169	169	169	169	169	169	168	168	169	169	170	169	169	169	168
40	166	166	166	165	165	164	164	164	164	164	164	164	164	164	164	164	164	164	164
45	160	160	160	160	159	159	159	158	158	158	158	158	158	159	159	160	160	160	161
50	155	155	156	156	157	158	159	159	160	162	164	167	170	173	174	173	171	168	168
55	52.0	46.3	42.1	37.2	32.3	27.4	20.6	14.3	9.06	7.59	7.42	7.96	7.52	7.39	7.79	9.07	11.2	14.3	19.9
60	3.35	3.14	2.97	2.92	2.94	3.02	3.25	3.49	3.69	3.68	3.62	3.54	3.45	3.40	3.43	3.66	3.95	4.24	4.43
65	1.77	1.69	1.64	1.61	1.62	1.66	1.80	1.95	2.08	2.08	2.05	2.00	1.97	1.95	1.94	1.97	2.01	2.06	2.12
70	1.06	1.03	1.01	1.00	1.00	1.03	1.11	1.19	1.26	1.26	1.24	1.21	1.20	1.19	1.19	1.18	1.17	1.18	1.20
75	0.67	0.65	0.64	0.63	0.64	0.65	0.69	0.74	0.77	0.77	0.76	0.75	0.74	0.74	0.73	0.72	0.72	0.72	0.73
80	0.42	0.41	0.41	0.40	0.40	0.41	0.43	0.45	0.47	0.47	0.47	0.46	0.46	0.46	0.45	0.45	0.44	0.44	0.44
85	0.26	0.25	0.25	0.25	0.25	0.25	0.26	0.27	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.26	0.26	0.27
90	0.21	0.21	0.00	0.00	0.19	0.18	0.17	0.17	0.17	0.16	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.12	0.13
95	0.40	0.42	0.43	0.42	0.41	0.40	0.38	0.37	0.35	0.33	0.31	0.30	0.29	0.29	0.28	0.27	0.27	0.26	0.26
100	0.67	0.70	0.72	0.72	0.71	0.68	0.65	0.62	0.58	0.55	0.52	0.50	0.48	0.47	0.46	0.45	0.44	0.44	0.44
105	1.07	1.12	1.16	1.16	1.15	1.12	1.07	1.01	0.96	0.91	0.87	0.83	0.81	0.78	0.76	0.74	0.73	0.72	0.72
110	1.76	1.81	1.88	1.89	1.89	1.86	1.77	1.67	1.56	1.49	1.43	1.37	1.33	1.30	1.27	1.23	1.20	1.18	1.17
115	3.01	3.00	3.04	3.08	3.12	3.12	2.96	2.78	2.60	2.51	2.45	2.40	2.35	2.29	2.24	2.18	2.12	2.06	2.01
120	5.96	5.52	5.29	5.34	5.47	5.57	5.30	4.97	4.67	4.63	4.66	4.71	4.73	4.72	4.68	4.57	4.43	4.24	3.95
125	153	134	116	101	87.8	76.2	67.1	59.2	52.0	43.6	36.2	30.5	30.0	30.4	30.5	25.6	19.9	14.3	11.2
130	155	158	161	161	162	162	162	163	164	163	163	163	164	166	167	167	168	168	171
135	156	157	158	158	159	159	159	159	159	160	160	160	160	161	161	161	161	160	160
140	162	162	162	162	162	162	162	162	162	163	163	163	163	163	164	164	164	164	164
145	168	168	168	168	168	168	167	167	167	167	168	168	168	168	168	168	168	169	169
150	174	174	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173	174	174
155	179	179	179	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178
160	183	183	183	183	182	182	182	182	182	182	182	182	182	182	182	182	182	182	182
165	188	187	187	187	187	187	187	186	186	186	186	186	186	186	186	186	186	186	186
170	192	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191
175	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
180	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:

Table--3

UNIT: cd

C (DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
5	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
10	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	192	192	192	192
15	186	186	186	186	186	186	186	186	186	187	187	187	187	187	187	188	188	188	188
20	182	182	182	182	182	182	182	182	182	182	182	182	183	183	183	183	183	183	184
25	178	178	178	178	178	178	178	178	178	178	178	178	178	179	179	179	179	179	179
30	173	173	173	173	173	173	173	173	173	173	173	173	173	173	174	174	174	174	174
35	168	168	168	168	168	168	167	167	167	167	168	168	168	168	168	168	168	168	168
40	164	164	163	163	163	163	163	162	162	162	162	162	162	162	162	162	162	163	163
45	161	161	161	160	160	160	160	159	159	159	159	159	158	158	157	156	156	157	159
50	167	167	166	164	163	163	163	164	163	162	162	162	161	161	158	155	153	153	154
55	25.6	30.5	30.4	30.0	30.5	36.2	43.6	52.0	59.2	67.1	76.2	87.8	101	116	134	153	169	179	185
60	4.57	4.68	4.72	4.73	4.71	4.66	4.63	4.67	4.97	5.30	5.57	5.47	5.34	5.29	5.52	5.96	6.63	7.88	9.15
65	2.18	2.24	2.29	2.35	2.40	2.45	2.51	2.60	2.78	2.96	3.12	3.12	3.08	3.04	3.00	3.01	3.14	3.67	4.20
70	1.23	1.27	1.30	1.33	1.37	1.43	1.49	1.56	1.67	1.77	1.86	1.89	1.89	1.88	1.81	1.76	1.77	2.00	2.24
75	0.74	0.76	0.78	0.81	0.83	0.87	0.91	0.96	1.01	1.07	1.12	1.15	1.16	1.16	1.12	1.07	1.06	1.15	1.26
80	0.45	0.46	0.47	0.48	0.50	0.52	0.55	0.58	0.62	0.65	0.68	0.71	0.72	0.72	0.70	0.67	0.65	0.69	0.74
85	0.27	0.28	0.29	0.29	0.30	0.31	0.33	0.35	0.37	0.38	0.40	0.41	0.42	0.43	0.42	0.40	0.40	0.41	0.44
90	0.13	0.13	0.13	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.15	0.17	0.18	0.18	0.20
95	0.27	0.27	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.26	0.25	0.25	0.25	0.25	0.25	0.26	0.28	0.29	0.31
100	0.45	0.45	0.46	0.46	0.46	0.47	0.47	0.47	0.45	0.43	0.41	0.40	0.40	0.41	0.41	0.42	0.44	0.47	0.51
105	0.72	0.73	0.74	0.74	0.75	0.76	0.77	0.77	0.74	0.69	0.65	0.64	0.63	0.64	0.65	0.67	0.70	0.76	0.82
110	1.18	1.19	1.19	1.20	1.21	1.24	1.26	1.26	1.19	1.11	1.03	1.00	1.00	1.01	1.03	1.06	1.12	1.20	1.30
115	1.97	1.94	1.95	1.97	2.00	2.05	2.08	2.08	1.95	1.80	1.66	1.62	1.61	1.64	1.69	1.77	1.86	1.99	2.12
120	3.66	3.43	3.40	3.45	3.54	3.62	3.68	3.69	3.49	3.25	3.02	2.94	2.92	2.97	3.14	3.35	3.57	3.70	3.83
125	9.07	7.79	7.39	7.52	7.96	7.42	7.59	9.06	14.3	20.6	27.4	32.3	37.2	42.1	46.3	52.0	60.1	75.4	92.8
130	173	174	173	170	167	164	162	160	159	159	158	157	156	156	155	155	155	156	158
135	160	159	159	158	158	158	158	158	158	159	159	159	160	160	160	160	160	161	161
140	164	164	164	164	164	164	164	164	164	164	164	165	165	166	166	166	166	167	167
145	169	170	169	169	168	168	169	169	169	169	169	169	169	170	170	171	171	171	171
150	174	174	174	174	173	173	174	174	174	174	174	174	174	174	175	175	175	175	175
155	178	178	178	178	178	178	178	178	179	179	179	179	179	179	179	179	180	180	180
160	182	182	182	182	182	183	183	183	183	183	183	183	183	183	183	183	183	183	183
165	186	186	186	186	186	187	187	187	187	187	187	187	187	187	187	187	187	187	187
170	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191
175	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192
180	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks:



## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.0531A P:10.69W PF:0.9100 Freq:49.90Hz Lamp Flux:950.302x1 lm		
NAME: LAGOON-830-100°	TYPE:Outdoor Light	WEIGHT:
SPEC.:3000K	DIM.: φ107mm*H121mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:φ107mm	Shielding Angle:

Table--4

UNIT: cd

C (DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192				
5	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192				
10	192	192	192	192	192	192	191	191	191	191	191	192	192	192	192				
15	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189				
20	184	184	184	184	184	184	184	184	184	184	184	184	183	183	183				
25	179	179	179	179	180	180	180	180	180	180	179	179	179	179	179				
30	174	174	174	174	175	175	175	175	175	175	175	175	175	175	175				
35	168	168	168	168	168	169	169	169	170	170	170	170	170	170	170				
40	164	164	163	163	163	163	163	163	164	165	166	166	166	166	166				
45	160	161	161	161	160	159	158	158	159	160	160	161	161	161	161				
50	156	158	160	161	159	157	155	155	156	157	157	157	157	157	158				
55	189	190	191	191	195	199	202	201	199	197	197	199	203	210	220				
60	10.2	10.3	10.1	9.56	8.66	7.90	7.55	8.94	10.5	11.8	11.3	10.3	9.09	8.24	7.44				
65	4.60	4.35	3.94	3.50	3.28	3.19	3.26	3.75	4.27	4.69	4.52	4.19	3.76	3.46	3.16				
70	2.42	2.30	2.12	1.92	1.84	1.81	1.85	2.05	2.26	2.43	2.36	2.21	2.04	1.92	1.81				
75	1.35	1.31	1.23	1.15	1.12	1.11	1.13	1.22	1.32	1.39	1.36	1.29	1.21	1.16	1.12				
80	0.78	0.77	0.73	0.70	0.68	0.67	0.68	0.73	0.77	0.81	0.80	0.77	0.73	0.71	0.68				
85	0.45	0.45	0.44	0.42	0.41	0.41	0.41	0.43	0.46	0.47	0.46	0.45	0.43	0.42	0.41				
90	0.24	0.35	0.47	0.58	0.63	0.65	0.63	0.54	0.44	0.34	0.28	0.25	0.22	0.21	0.21				
95	0.33	0.36	0.38	0.40	0.41	0.42	0.44	0.48	0.52	0.55	0.53	0.49	0.44	0.42	0.41				
100	0.55	0.59	0.63	0.67	0.70	0.72	0.73	0.76	0.78	0.79	0.76	0.72	0.69	0.67	0.66				
105	0.88	0.95	1.02	1.08	1.12	1.15	1.18	1.23	1.27	1.29	1.25	1.20	1.14	1.11	1.09				
110	1.40	1.50	1.60	1.68	1.74	1.79	1.84	1.93	2.00	2.06	2.05	2.02	1.97	1.90	1.81				
115	2.27	2.42	2.56	2.70	2.81	2.91	3.01	3.15	3.29	3.42	3.61	3.74	3.78	3.62	3.31				
120	3.98	4.20	4.44	4.71	4.98	5.27	5.59	5.90	6.28	6.76	7.71	8.57	9.12	8.84	8.03				
125	111	125	139	153	170	186	200	204	206	208	214	221	227	230	232				
130	160	160	161	161	161	161	160	160	160	160	160	160	160	160	160				
135	162	162	162	162	162	162	162	162	161	161	162	162	162	162	162				
140	167	167	167	167	167	166	166	166	165	165	165	165	166	166	166				
145	171	171	171	171	171	171	170	170	170	169	170	170	170	170	170				
150	175	175	175	175	175	175	175	175	175	174	175	175	175	175	175				
155	180	179	179	179	179	179	179	179	179	180	180	180	180	180	180				
160	183	183	183	183	183	183	183	183	184	184	184	184	184	184	184				
165	187	187	187	188	188	188	188	188	188	188	189	189	189	189	189				
170	191	191	191	191	192	192	192	192	192	192	192	192	192	192	192				
175	192	192	192	192	191	191	191	191	191	191	192	192	192	192	192				
180	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192				

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:Jason  
Test Date:2020-09-18

γ Range: 0 - 180DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:5.850m [K=1.7094]  
Remarks: