

LKOI-18W-930-White



Light Output Ratio:	100.0%	
Luminaire Power:	20.1 W	
SHR Nominal:	0.75	Calculated using the TM5
SHR Maximum:	0.80	fine grid method.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Jason
Test Date: 2022-03-09

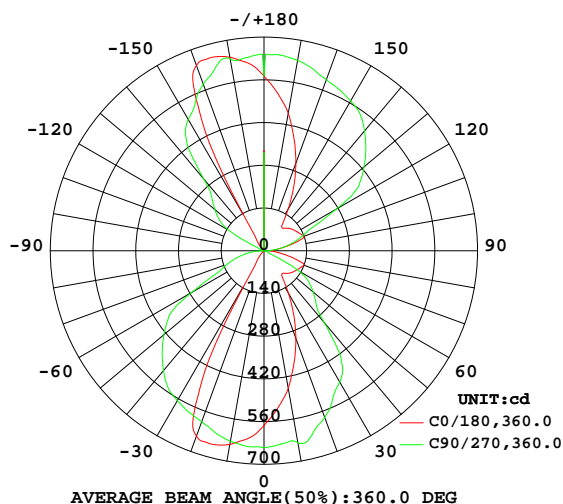
γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 8.967m [K=1.1152]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

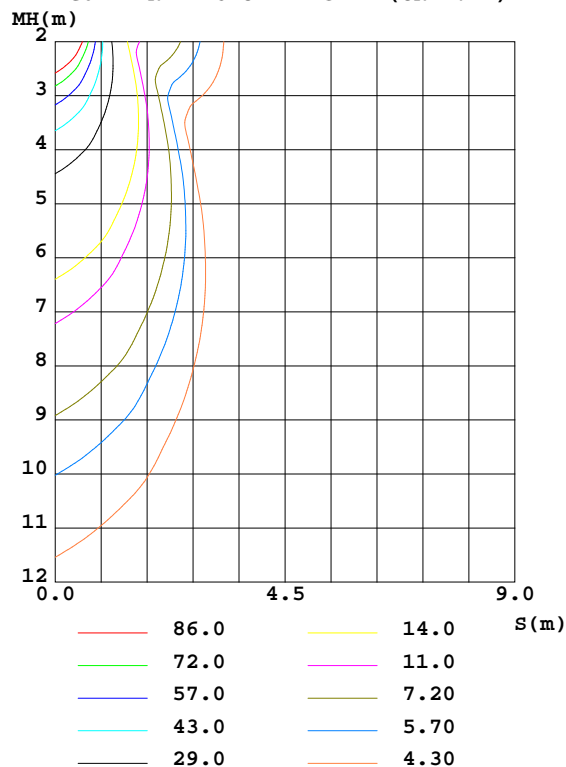
Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 91.32 lm/W
MODEL	Zigen-3000K	Imax(cd)	680.1	S/MH(C0/180)	0.78	
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.32	
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	1835.6	η UP,DN(C0-180)	31.4,18.8	
NOMINAL FLUX(lm)	1835.57	CIE CLASS	DIFFUSE	η UP,DN(C180-360)	18.6,31.2	
LAMPS INSIDE	1	η up(%)	50.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	220.0	η down(%)	50.0	CIBSE SHR MAX	0.80	

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:2022-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

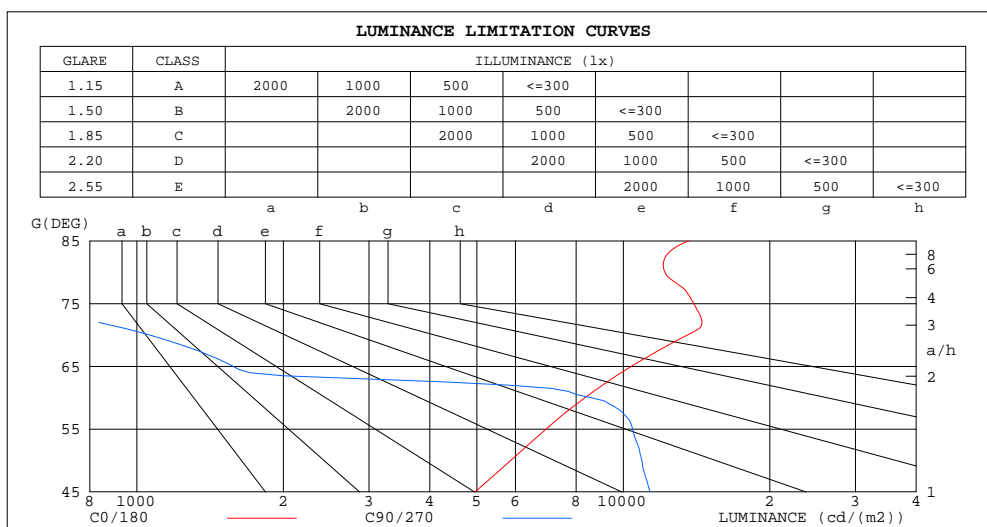
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum, lamp
10	458.8	542.4	638.6	611.0	644.3	648.2	633.8	610.9	0- 10	58.51	58.51	3.19,3.19
20	305.7	458.6	581.5	170.9	646.9	652.5	596.6	528.3	10- 20	155.8	214.3	11.7,11.7
30	159.2	328.5	497.4	25.85	121.2	492.2	567.7	420.0	20- 30	188.7	403.0	22,22
40	96.27	183.5	306.8	3.498	22.07	51.30	512.4	290.7	30- 40	161.9	565.0	30.8,30.8
50	113.1	81.55	210.6	0.7418	0.8593	18.54	428.2	162.2	40- 50	124.2	689.2	37.5,37.5
60	125.0	79.34	128.7	0.6100	0.5541	1.368	273.3	89.84	50- 60	88.96	778.1	42.4,42.4
70	139.0	83.82	10.89	0.7199	0.5753	1.756	126.8	99.22	60- 70	62.26	840.4	45.8,45.8
80	63.42	57.97	0.9911	0.7683	0.8419	1.887	62.57	104.3	70- 80	47.21	887.6	48.4,48.4
90	19.50	100.4	11.95	1.239	1.014	0.7892	0.5854	11.56	80- 90	30.18	917.8	50,50
100	63.42	104.3	62.57	1.887	0.8419	0.7683	0.9911	57.97	90-100	30.18	948.0	51.6,51.6
110	139.0	99.22	126.8	1.756	0.5753	0.7199	10.89	83.82	100-110	47.21	995.2	54.2,54.2
120	125.0	89.84	273.3	1.368	0.5541	0.6100	128.7	79.34	110-120	62.26	1057	57.6,57.6
130	113.1	162.2	428.2	18.54	0.8593	0.7418	210.6	81.55	120-130	88.96	1146	62.5,62.5
140	96.27	290.7	512.4	51.30	22.07	3.498	306.8	183.5	130-140	124.2	1271	69.2,69.2
150	159.2	420.0	567.7	492.2	121.2	25.85	497.4	328.5	140-150	161.9	1433	78,78
160	305.7	528.3	596.6	652.5	646.9	170.9	581.5	458.6	150-160	188.7	1621	88.3,88.3
170	458.8	610.9	633.8	648.2	644.3	611.0	638.6	542.4	160-170	155.8	1777	96.8,96.8
180	572.6	572.6	572.6	572.6	572.6	572.6	572.6	572.6	170-180	58.50	1836	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	13613	274
80	12175	190
75	13956	456
70	13551	1062
65	10389	1576
60	8336	8582
55	6939	10451
50	5867	10919
45	4956	11353

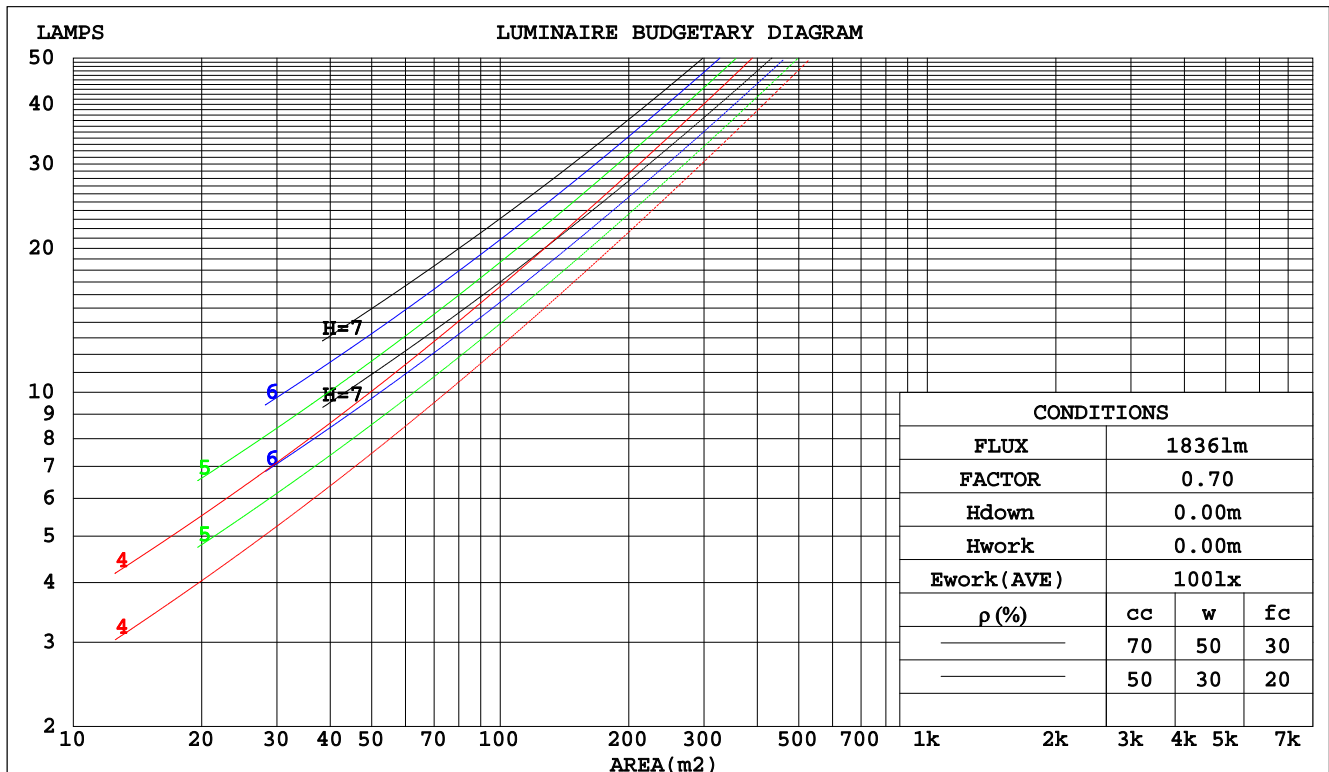
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	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	.94	.90	.87	.87	.84	.81	.74	.71	.69	.61	.60	.58	.50	.49	.48	.43
2.0	.83	.77	.72	.77	.72	.68	.66	.62	.59	.55	.52	.50	.45	.43	.42	.37
3.0	.74	.67	.62	.69	.63	.58	.59	.54	.51	.50	.46	.44	.41	.39	.37	.33
4.0	.66	.59	.53	.62	.55	.50	.53	.48	.44	.45	.41	.38	.38	.35	.33	.29
5.0	.60	.52	.46	.56	.49	.44	.48	.43	.39	.41	.37	.34	.34	.32	.29	.26
6.0	.54	.47	.41	.51	.44	.39	.44	.39	.35	.38	.34	.31	.32	.29	.27	.24
7.0	.49	.42	.37	.46	.40	.35	.40	.35	.31	.35	.31	.28	.30	.27	.24	.22
8.0	.45	.38	.33	.43	.36	.31	.37	.32	.28	.32	.28	.25	.28	.25	.22	.20
9.0	.42	.35	.30	.39	.33	.28	.34	.29	.26	.30	.26	.23	.26	.23	.21	.18
10.0	.39	.32	.27	.36	.30	.26	.32	.27	.24	.28	.24	.21	.24	.21	.19	.17



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

WEC AND CCEC

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.270	.153	.049	.248	.141	.045	.206	.118	.038	.168	.097	.031	.133	.077	.025		
2.0	.247	.135	.041	.227	.125	.038	.189	.105	.033	.154	.087	.027	.122	.069	.022		
3.0	.227	.121	.036	.209	.112	.034	.174	.094	.029	.143	.078	.024	.113	.063	.019		
4.0	.210	.109	.032	.193	.101	.030	.162	.086	.026	.132	.071	.021	.105	.057	.017		
5.0	.195	.099	.029	.179	.092	.027	.150	.078	.023	.123	.065	.019	.098	.053	.016		
6.0	.181	.091	.026	.167	.085	.024	.141	.072	.021	.116	.060	.018	.092	.049	.014		
7.0	.170	.084	.024	.157	.078	.022	.132	.067	.019	.109	.056	.016	.087	.045	.013		
8.0	.159	.078	.022	.147	.072	.020	.124	.062	.018	.102	.052	.015	.082	.042	.012		
9.0	.150	.072	.020	.139	.068	.019	.117	.058	.016	.097	.049	.014	.078	.039	.011		
10.0	.141	.068	.019	.131	.063	.018	.111	.054	.015	.092	.046	.013	.074	.037	.011		

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	.571	.571	.571	.488	.488	.488	.333	.333	.333	.191	.191	.191	.061	.061	.061	
1.0	.562	.541	.522	.481	.464	.449	.329	.319	.310	.189	.185	.181	.061	.059	.058	
2.0	.553	.519	.490	.474	.447	.424	.325	.309	.296	.187	.180	.173	.060	.058	.056	
3.0	.545	.503	.469	.467	.434	.407	.321	.301	.285	.185	.176	.168	.060	.057	.055	
4.0	.538	.491	.455	.461	.424	.395	.317	.295	.278	.183	.173	.165	.059	.056	.054	
5.0	.531	.481	.444	.456	.416	.387	.314	.291	.273	.182	.171	.162	.059	.056	.053	
6.0	.524	.473	.437	.451	.410	.380	.311	.287	.269	.180	.169	.160	.058	.055	.053	
7.0	.518	.467	.431	.446	.405	.376	.308	.284	.266	.179	.167	.158	.058	.055	.052	
8.0	.513	.462	.427	.441	.401	.372	.305	.281	.264	.178	.166	.157	.057	.054	.052	
9.0	.508	.457	.423	.437	.397	.369	.303	.279	.262	.176	.165	.156	.057	.054	.052	
10.0	.503	.454	.421	.433	.394	.367	.301	.277	.261	.175	.164	.156	.057	.054	.052	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm											
NAME: LKOI-18W-930-White						TYPE:Downlight		WEIGHT:			
SPEC.:3000K						DIM.: L300*W100*H70mm		SERIAL No.:			
MFR.: NEKO LIGHTING AG						SUR.:L300*W100		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	13.2	14.0	14.0	14.9	15.9	15.1	16.0	16.0	16.9	17.9	
	3H	17.0	17.8	17.9	18.7	19.8	15.2	16.0	16.1	16.9	
	4H	18.5	19.3	19.4	20.1	21.3	15.1	15.8	16.0	16.7	
	6H	19.3	20.0	20.3	20.9	22.1	15.0	15.6	15.9	16.5	
	8H	19.6	20.2	20.5	21.2	22.3	14.9	15.5	15.8	16.4	
	12H	19.8	20.4	20.7	21.4	22.5	14.8	15.4	15.7	16.3	
4H	2H	13.6	14.3	14.5	15.2	16.4	15.1	15.8	16.0	16.7	
	3H	17.7	18.4	18.7	19.3	20.5	15.5	16.1	16.4	17.0	
	4H	19.4	19.9	20.3	20.9	22.1	15.5	16.1	16.5	17.0	
	6H	20.3	20.8	21.3	21.7	23.0	15.5	16.0	16.5	17.0	
	8H	20.6	21.0	21.6	22.0	23.3	15.5	15.9	16.5	16.9	
	12H	20.8	21.3	21.8	22.2	23.5	15.4	15.8	16.4	16.8	
8H	4H	19.6	20.0	20.6	21.0	22.3	16.6	17.0	17.6	18.0	
	6H	20.6	21.0	21.6	22.0	23.3	17.0	17.3	18.0	18.3	
	8H	21.0	21.3	22.0	22.4	23.7	17.1	17.4	18.1	18.4	
	12H	21.4	21.7	22.4	22.7	24.0	17.1	17.4	18.1	18.4	
12H	4H	19.6	20.0	20.5	20.9	22.2	16.7	17.1	17.7	18.1	
	6H	20.7	21.0	21.7	22.0	23.3	17.2	17.6	18.3	18.6	
	8H	21.1	21.4	22.1	22.4	23.7	17.5	17.7	18.5	18.8	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.4 / - 0.3					
1.5H	+ 0.2 / - 0.2					+ 0.9 / - 1.0					
2.0H	+ 0.1 / - 0.1					+ 1.8 / - 1.5					

CIE Pub.117, 1836 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 2.1$)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

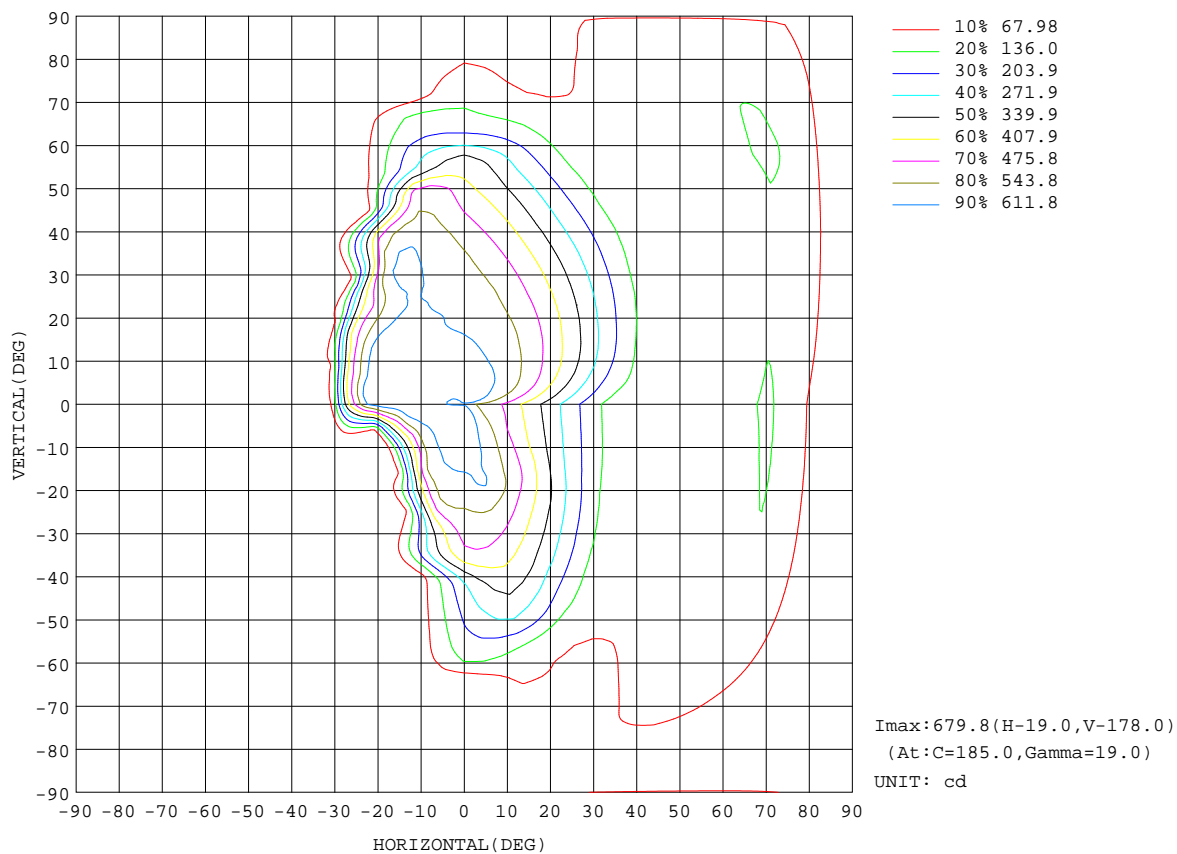
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	39	34	47	38	33	42	35	31	23
0.80	58	48	41	55	46	40	49	42	37	27
1.00	65	55	48	61	52	46	54	48	42	31
1.25	72	61	55	67	58	52	59	52	47	34
1.50	76	67	60	71	63	57	62	56	51	36
2.00	83	74	67	77	69	64	66	61	57	39
2.50	86	79	72	80	74	68	69	64	60	40
3.00	90	83	77	83	77	72	71	67	63	41
4.00	94	88	83	87	82	77	74	70	67	43
5.00	96	91	87	89	85	81	76	73	70	44
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

ISOCANDELA DIAGRAM

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LK0I-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

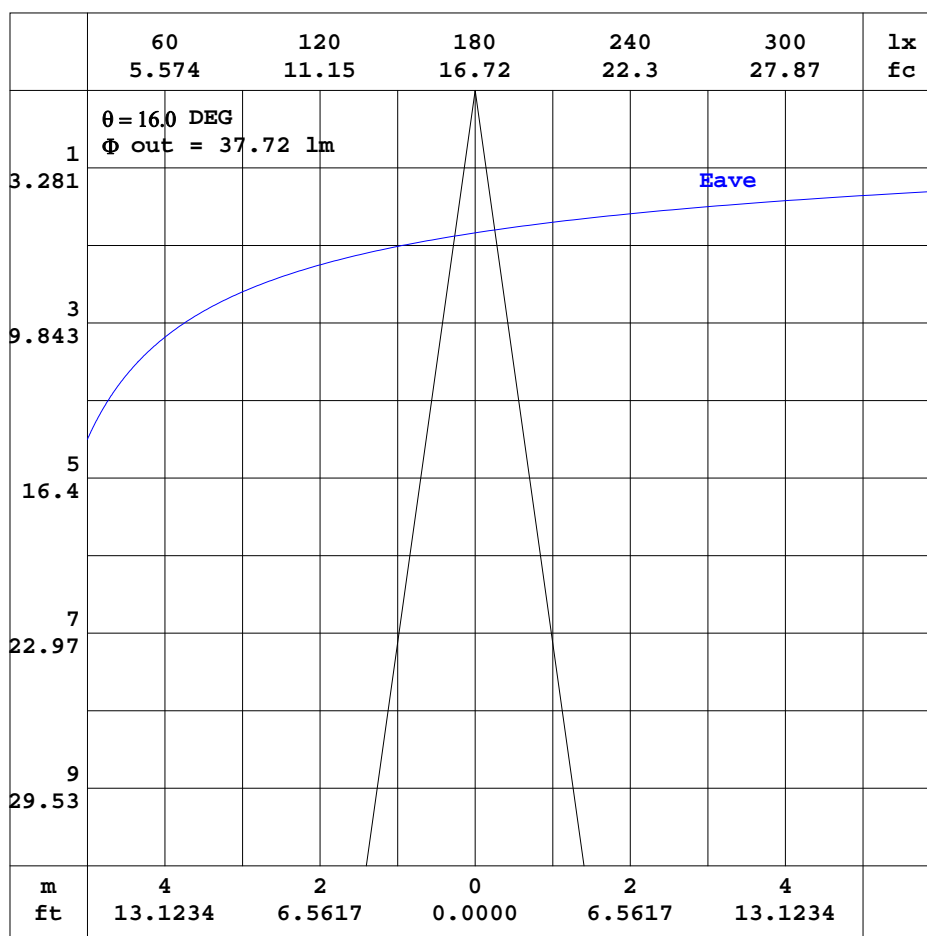


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

AAI CURVES

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LK0I-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:



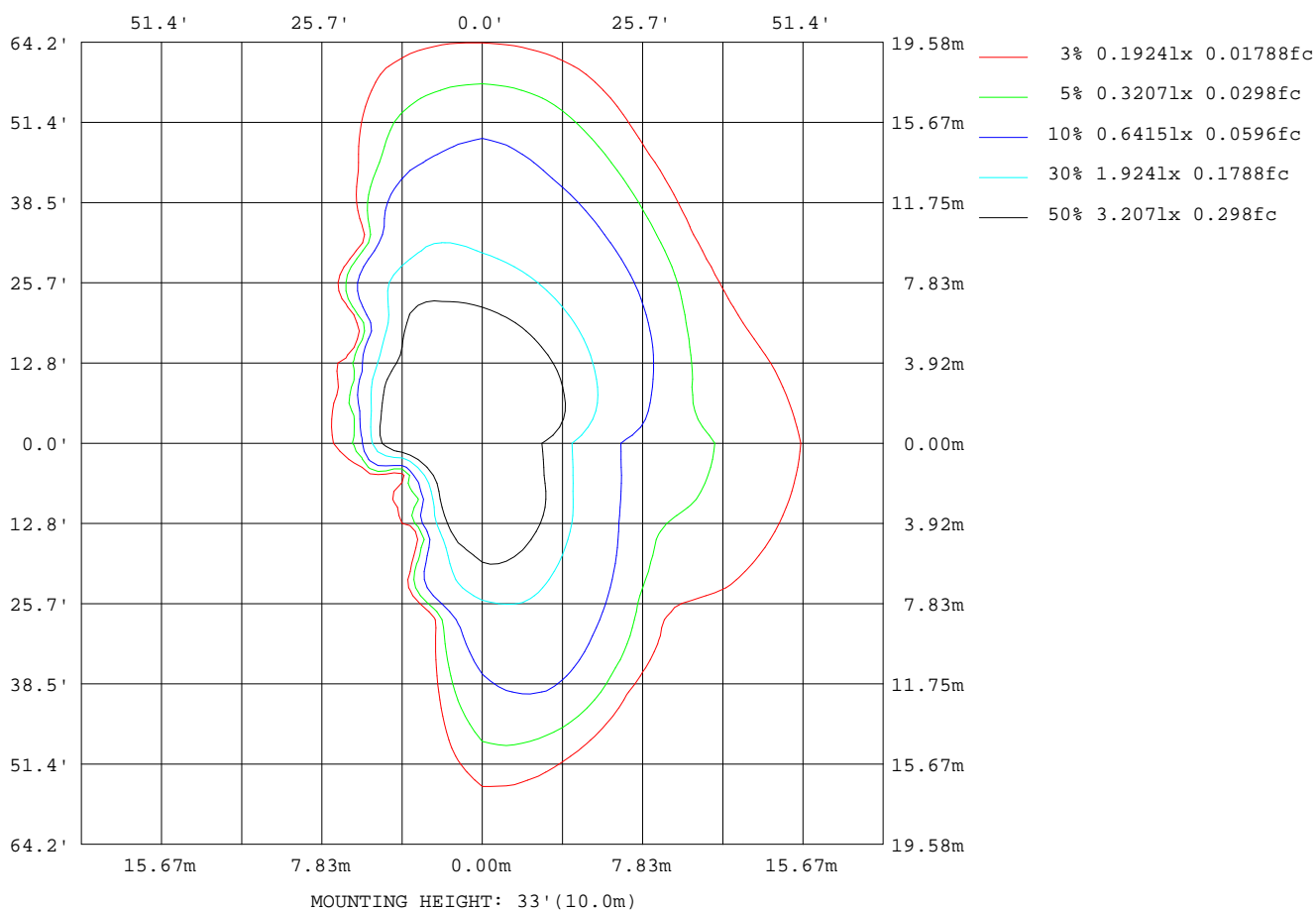
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

ISOLUX DIAGRAM

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

LED Avg.L Report

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LK0I-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

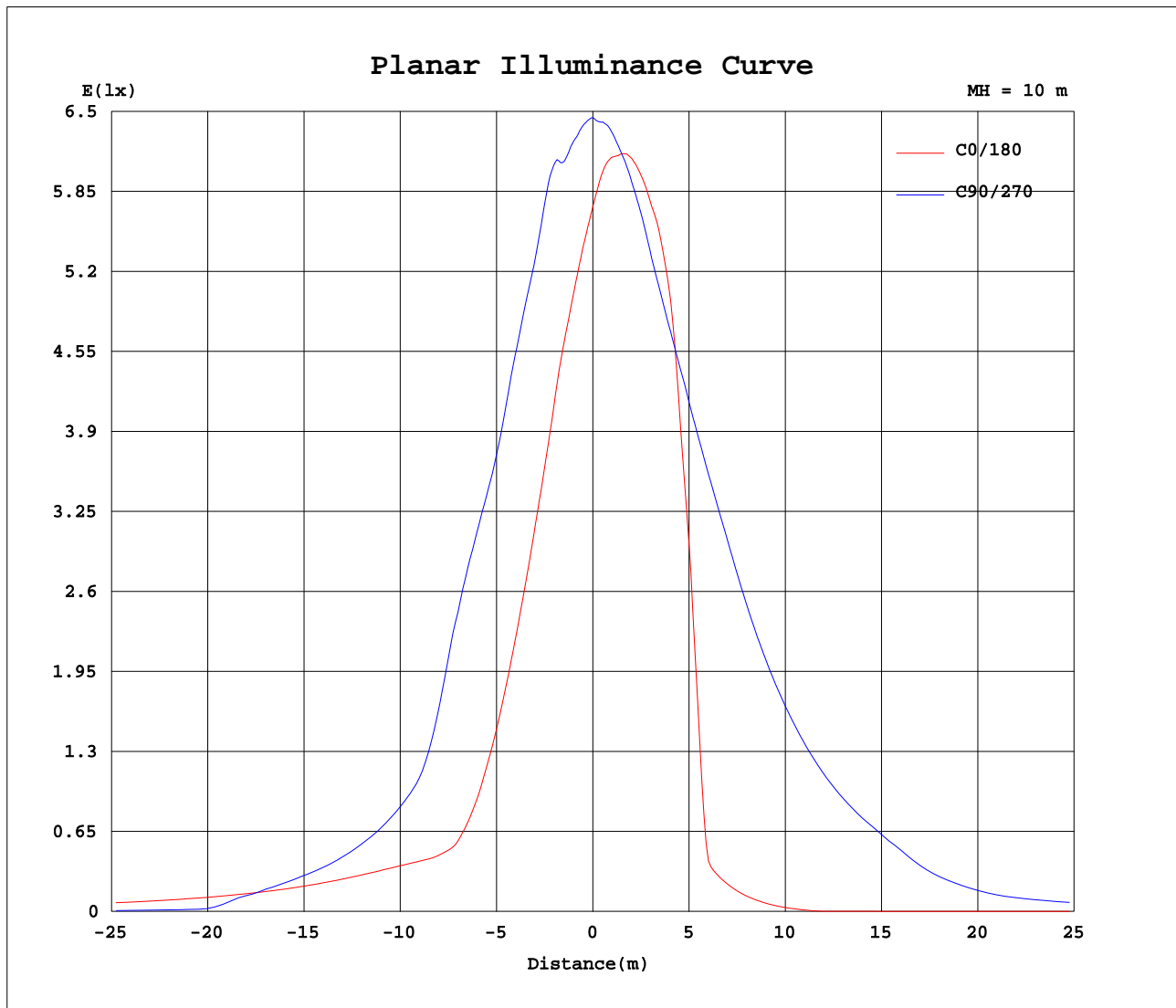
AvgL	cd/m2
L_0~180(65)av	5215
L_0~180(75)av	7023
L_0~180(85)av	6993
L_90~270(65)av	7233
L_90~270(75)av	6297
L_90~270(85)av	5556
L_45(65)av	3462
L_45(75)av	6143
L_45(85)av	12946

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Jason
Test Date: 2022-03-09

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 8.967m [K=1.1152]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LK0I-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

Table--1

UNIT: cd

C(DEC)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
γ (DEC)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	573	575	577	580	584	588	594	602	611	619	623	627	630	633	635	637	640	643	645
5	518	521	524	529	534	540	549	562	576	589	600	608	616	621	625	628	631	634	636
10	459	463	468	474	479	486	495	509	525	542	559	576	591	604	615	625	632	636	639
15	381	385	391	399	409	421	436	455	477	499	521	542	562	582	600	614	619	621	619
20	306	310	316	326	338	354	373	399	428	459	487	514	540	568	592	609	605	594	581
25	231	234	240	250	264	281	302	332	364	397	426	454	481	507	530	546	549	544	534
30	159	162	168	178	191	208	230	260	294	329	360	390	419	449	476	496	509	511	497
35	104	106	110	118	128	142	161	188	219	254	290	327	362	395	423	444	457	458	442
40	96.3	93.5	92.5	93.1	93.0	96.5	105	125	152	183	222	262	302	343	375	393	382	353	307
45	105	103	101	98.3	92.3	87.6	86.3	91.7	104	123	155	193	234	280	318	341	326	291	241
50	113	112	109	106	102	97.0	92.2	83.6	78.9	81.6	103	133	168	213	253	281	275	251	211
55	119	118	115	112	108	103	97.6	89.4	82.3	77.7	78.2	84.0	96.4	126	157	184	196	196	180
60	125	123	120	117	113	108	102	94.4	86.7	79.3	71.7	66.7	66.0	76.5	90.3	105	121	131	129
65	132	130	127	123	119	113	106	98.6	90.4	81.4	68.4	56.9	49.1	56.8	65.9	71.5	57.3	38.8	20.0
70	139	138	135	131	126	119	112	103	94.0	83.8	71.5	59.7	49.7	47.3	45.9	43.6	33.2	21.7	10.9
75	108	105	103	101	101	101	100	97.6	93.3	86.7	75.0	61.8	48.4	37.7	28.2	19.9	13.0	7.57	3.54
80	63.4	60.6	58.3	56.5	55.3	54.6	54.5	56.2	57.6	58.0	55.4	50.9	44.7	35.4	25.4	15.9	9.37	4.39	0.99
85	35.6	33.6	31.9	30.4	29.3	28.3	27.4	26.7	25.9	24.8	23.2	21.1	18.7	15.8	12.7	9.43	6.07	3.06	0.72
90	19.5	34.4	48.6	61.9	75.8	87.9	97.4	102	103	100	92.4	82.0	70.1	59.2	0.00	0.00	28.1	19.3	11.9
95	35.6	64.5	88.2	106	119	127	129	125	118	108	98.7	88.0	76.8	64.7	53.0	42.7	37.3	32.9	28.3
100	63.4	98.2	123	138	140	134	125	119	112	104	96.3	87.6	78.2	64.9	53.0	44.6	51.0	58.6	62.6
105	108	120	127	131	130	126	121	115	109	101	93.3	84.8	76.3	65.3	56.9	53.2	68.8	84.8	94.3
110	139	134	129	125	122	119	116	112	106	99.2	88.7	78.9	71.6	71.6	75.8	83.7	101	117	127
115	132	127	123	119	117	114	111	105	98.5	92.1	83.9	79.0	80.0	98.5	121	143	154	161	163
120	125	121	117	113	110	107	104	97.3	92.2	89.8	92.7	101	117	147	181	215	243	263	273
125	119	115	110	106	102	98.4	96.7	96.5	100	108	125	147	174	206	240	276	321	359	382
130	113	105	100	97.8	96.8	99.4	106	121	140	162	185	209	236	268	301	335	367	399	428
135	105	98.0	97.1	102	116	134	156	178	201	225	249	273	299	328	359	389	418	445	472
140	96.3	113	131	151	174	197	221	244	268	291	314	338	362	388	414	440	465	489	512
145	104	148	186	219	246	269	290	312	335	356	378	400	421	443	465	486	508	528	548
150	159	210	254	291	319	341	360	381	401	420	438	455	473	492	510	528	542	556	568
155	231	282	327	363	390	410	428	446	462	478	493	507	520	533	546	557	567	575	583
160	306	356	399	433	457	475	489	503	516	528	541	552	562	570	576	581	587	592	597
165	381	430	470	502	522	536	546	557	566	574	582	588	593	598	602	606	610	614	618
170	459	498	530	556	574	586	594	602	607	611	614	616	618	621	623	626	629	631	634
175	518	554	583	604	616	622	625	629	632	634	636	638	639	640	641	641	642	643	644
180	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

Table--2

UNIT: cd

C(DEC) γ (DEC)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	646	646	646	646	646	646	645	645	644	644	643	641	641	637	631	611	590	573	571
5	638	640	641	641	640	639	639	639	639	640	641	642	643	644	642	634	626	618	617
10	637	634	630	629	627	624	620	615	611	609	609	611	618	626	634	638	642	644	645
15	618	614	610	608	601	587	548	505	463	433	415	411	436	473	518	569	617	657	667
20	584	583	573	542	497	438	349	256	171	116	81.8	69.5	77.1	114	184	339	503	647	679
25	531	517	485	401	304	207	138	82.9	43.7	30.9	30.2	36.3	15.8	12.8	43.5	187	349	497	537
30	458	401	329	229	130	45.6	22.0	18.6	25.9	22.4	20.3	19.5	15.8	16.4	24.2	50.6	84.0	121	149
35	399	340	269	182	98.6	29.0	9.25	6.50	12.9	10.1	8.48	7.82	6.92	7.60	10.6	20.0	30.6	40.4	43.0
40	232	154	81.7	47.5	27.0	16.4	8.32	4.55	3.50	1.86	1.09	0.92	0.00	0.00	1.30	7.79	15.2	22.1	24.1
45	169	95.0	31.1	10.6	4.45	6.57	3.24	1.51	0.89	0.50	0.52	0.73	0.23	0.05	0.53	3.16	6.24	9.25	10.4
50	146	78.3	19.2	1.63	0.00	1.11	0.00	0.00	0.74	0.70	0.68	0.66	0.59	0.53	0.50	0.49	0.59	0.86	1.34
55	125	64.7	9.70	0.00	0.00	0.83	0.22	0.26	0.63	0.61	0.61	0.61	0.57	0.54	0.52	0.56	0.61	0.66	0.58
60	89.8	44.5	2.72	0.00	0.00	0.60	0.47	0.50	0.61	0.61	0.62	0.61	0.59	0.57	0.55	0.55	0.55	0.55	0.54
65	10.7	4.55	0.96	0.00	0.00	0.56	0.58	0.62	0.68	0.70	0.71	0.70	0.68	0.65	0.62	0.59	0.55	0.53	0.51
70	5.63	2.41	0.78	0.13	0.24	0.72	0.71	0.71	0.72	0.75	0.79	0.81	0.80	0.77	0.74	0.68	0.63	0.58	0.53
75	1.56	0.68	0.52	0.33	0.38	0.54	0.60	0.66	0.72	0.76	0.78	0.80	0.79	0.78	0.76	0.74	0.72	0.70	0.65
80	0.00	0.00	0.51	0.48	0.50	0.55	0.62	0.70	0.77	0.81	0.83	0.85	0.84	0.83	0.82	0.83	0.84	0.84	0.81
85	0.12	0.17	0.54	0.53	0.54	0.57	0.64	0.72	0.79	0.84	0.88	0.90	0.90	0.89	0.88	0.91	0.95	0.97	0.94
90	7.32	4.23	2.07	0.00	1.48	1.69	1.51	1.36	1.24	1.16	1.10	0.96	1.03	1.02	1.01	1.02	1.03	1.01	1.00
95	19.0	9.80	2.08	0.48	0.79	2.03	1.85	1.63	1.41	1.26	1.14	1.05	0.98	0.92	0.89	0.91	0.94	0.97	0.95
100	46.2	26.2	7.21	2.07	0.83	1.85	1.57	1.67	1.89	1.60	1.27	0.95	0.83	0.77	0.76	0.77	0.81	0.84	0.84
105	72.4	44.0	16.0	6.62	2.51	1.82	1.03	1.26	1.94	1.68	1.36	1.04	0.85	0.71	0.63	0.62	0.65	0.70	0.72
110	116	96.6	72.7	46.5	21.7	1.56	0.00	0.00	1.76	1.51	1.21	0.91	0.73	0.61	0.53	0.51	0.53	0.58	0.63
115	169	167	155	108	55.7	8.92	0.00	0.00	1.43	0.79	0.67	0.82	0.69	0.59	0.53	0.51	0.51	0.53	0.55
120	266	245	210	145	77.5	17.9	0.76	0.00	1.37	0.19	0.21	0.84	0.72	0.62	0.55	0.54	0.54	0.55	0.55
125	367	330	276	191	105	30.1	8.41	3.90	8.77	5.30	3.11	1.86	1.02	0.64	0.57	0.53	0.58	0.66	0.61
130	481	512	504	362	198	45.1	8.73	4.97	18.5	14.4	11.7	9.87	7.34	5.12	3.29	2.12	1.34	0.86	0.59
135	512	541	549	503	432	343	231	122	32.0	9.81	9.96	21.4	18.0	15.0	12.4	11.3	10.4	9.25	6.24
140	542	566	582	594	580	531	375	204	51.3	17.8	18.9	37.4	33.1	29.3	26.1	25.1	24.1	22.1	15.2
145	567	584	597	619	626	609	527	425	314	219	135	69.6	47.3	42.1	46.3	44.5	43.0	40.4	30.6
150	581	593	603	614	618	611	576	534	492	478	463	438	370	295	223	182	149	121	84.0
155	592	600	607	612	615	616	615	613	611	614	615	612	593	570	546	548	537	497	349
160	602	608	613	618	624	630	637	645	653	658	662	664	664	661	658	677	679	647	503
165	622	627	631	636	641	645	650	654	657	659	660	660	661	662	662	667	667	657	617
170	636	639	641	643	645	646	647	648	648	648	647	646	645	644	643	644	645	644	642
175	643	643	642	642	642	641	640	638	636	632	628	625	623	622	621	619	617	618	626
180	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	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	574	580	584	588	594	602	611	619	623	627	630	633	635	637	640	643	645	646	646
5	619	621	622	623	625	628	632	636	638	640	641	642	642	642	643	643	644	643	642
10	644	643	644	645	646	647	648	648	648	647	646	645	643	641	639	636	634	631	629
15	667	662	662	661	660	660	659	657	654	650	645	641	636	631	627	622	618	614	610
20	677	658	661	664	664	662	658	653	645	637	630	624	618	613	608	602	597	592	587
25	548	546	570	593	612	615	614	611	613	615	616	615	612	607	600	592	583	575	567
30	182	223	295	370	438	463	478	492	534	576	611	618	614	603	593	581	568	556	542
35	44.5	46.3	42.1	47.3	69.6	135	219	314	425	527	609	626	619	597	584	567	548	528	508
40	25.1	26.1	29.3	33.1	37.4	18.9	17.8	51.3	204	375	531	580	594	582	566	542	512	489	465
45	11.3	12.4	15.0	18.0	21.4	9.96	9.81	32.0	122	231	343	432	503	549	541	512	472	445	418
50	2.12	3.29	5.12	7.34	9.87	11.7	14.4	18.5	4.97	8.73	45.1	198	362	504	512	481	428	399	367
55	0.53	0.57	0.64	1.02	1.86	3.11	5.30	8.77	3.90	8.41	30.1	105	191	276	330	367	382	359	321
60	0.54	0.55	0.62	0.72	0.84	0.21	0.19	1.37	0.00	0.76	17.9	77.5	145	210	245	266	273	263	243
65	0.51	0.53	0.59	0.69	0.82	0.67	0.79	1.43	0.00	0.00	8.92	55.7	108	155	167	169	163	161	154
70	0.51	0.53	0.61	0.73	0.91	1.21	1.51	1.76	0.00	0.00	1.56	21.7	46.5	72.7	96.6	116	127	117	101
75	0.62	0.63	0.71	0.85	1.04	1.36	1.68	1.94	1.26	1.03	1.82	2.51	6.62	16.0	44.0	72.4	94.3	84.8	68.8
80	0.77	0.76	0.77	0.83	0.95	1.27	1.60	1.89	1.67	1.57	1.85	0.83	2.07	7.21	26.2	46.2	62.6	58.6	51.0
85	0.91	0.89	0.92	0.98	1.05	1.14	1.26	1.41	1.63	1.85	2.03	0.79	0.48	2.08	9.80	19.0	28.3	32.9	37.3
90	0.96	0.93	0.93	0.94	0.95	0.89	0.84	0.79	0.75	0.71	0.67	0.64	0.61	1.84	0.37	0.32	0.59	1.74	3.19
95	0.91	0.88	0.89	0.90	0.90	0.88	0.84	0.79	0.72	0.64	0.57	0.54	0.53	0.54	0.17	0.12	0.72	3.06	6.07
100	0.83	0.82	0.83	0.84	0.85	0.83	0.81	0.77	0.70	0.62	0.55	0.50	0.48	0.51	0.00	0.00	0.99	4.39	9.37
105	0.74	0.76	0.78	0.79	0.80	0.78	0.76	0.72	0.66	0.60	0.54	0.38	0.33	0.52	0.68	1.56	3.54	7.57	13.0
110	0.68	0.74	0.77	0.80	0.81	0.79	0.75	0.72	0.71	0.71	0.72	0.24	0.13	0.78	2.41	5.63	10.9	21.7	33.2
115	0.59	0.62	0.65	0.68	0.70	0.71	0.70	0.68	0.62	0.58	0.56	0.00	0.00	0.96	4.55	10.7	20.0	38.8	57.3
120	0.55	0.55	0.57	0.59	0.61	0.62	0.61	0.61	0.50	0.47	0.60	0.00	0.00	2.72	44.5	89.8	129	131	121
125	0.56	0.52	0.54	0.57	0.61	0.61	0.61	0.63	0.26	0.22	0.83	0.00	0.00	9.70	64.7	125	180	196	196
130	0.49	0.50	0.53	0.59	0.66	0.68	0.70	0.74	0.00	0.00	1.11	0.00	1.63	19.2	78.3	146	211	251	275
135	3.16	0.53	0.05	0.23	0.73	0.52	0.50	0.89	1.51	3.24	6.57	4.45	10.6	31.1	95.0	169	241	291	326
140	7.79	1.30	0.00	0.00	0.92	1.09	1.86	3.50	4.56	8.32	16.4	27.0	47.5	81.7	154	232	307	353	382
145	20.0	10.6	7.60	6.92	7.82	8.48	10.1	12.9	6.50	9.25	29.0	98.6	182	269	340	399	442	458	457
150	50.6	24.2	16.4	15.8	19.5	20.3	22.4	25.9	18.6	22.0	45.6	130	229	329	401	458	497	511	509
155	187	43.5	12.8	15.8	36.3	30.2	30.9	43.7	82.9	138	207	304	401	485	517	531	534	544	549
160	339	184	114	77.1	69.5	81.8	116	171	256	349	438	497	542	573	583	584	581	594	605
165	569	518	473	436	411	415	433	463	505	548	587	601	608	610	614	618	619	621	619
170	638	634	626	618	611	609	609	611	615	620	624	627	629	630	634	637	639	636	632
175	634	642	644	643	642	641	640	639	639	639	639	640	641	641	640	638	636	634	631
180	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.0V I:0.0929A P:20.10W PF:0.0929 Freq:49.99Hz Lamp Flux:1835.57x1 lm		
NAME: LKOI-18W-930-White	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

Table--4

UNIT: cd

C(DEC)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
γ (DEC)																			
0	646	646	646	646	645	645	644	644	643	641	641	637	631	616	597				
5	641	641	640	639	638	636	634	632	629	625	622	616	604	583	554				
10	626	623	621	618	616	614	611	607	602	594	586	574	556	530	498				
15	606	602	598	593	588	582	574	566	557	546	536	522	502	470	430				
20	581	576	570	562	552	541	528	516	503	489	475	457	433	399	356				
25	557	546	533	520	507	493	478	462	446	428	410	390	363	327	282				
30	528	510	492	473	455	438	420	401	381	360	341	319	291	254	210				
35	486	465	443	421	400	378	356	335	312	290	269	246	219	186	148				
40	440	414	388	362	338	314	291	268	244	221	197	174	151	131	113				
45	389	359	328	299	273	249	225	201	178	156	134	116	102	97.1	98.0				
50	335	301	268	236	209	185	162	140	121	106	99.4	96.8	97.8	100	105				
55	276	240	206	174	147	125	108	100	96.5	96.7	98.4	102	106	110	115				
60	215	181	147	117	101	92.7	89.8	92.2	97.3	104	107	110	113	117	121				
65	143	121	98.5	80.0	79.0	83.9	92.1	98.5	105	111	114	117	119	123	127				
70	83.7	75.8	71.6	71.6	78.9	88.7	99.2	106	112	116	119	122	125	129	134				
75	53.2	56.9	65.3	76.3	84.8	93.3	101	109	115	121	126	130	131	127	120				
80	44.6	53.0	64.9	78.2	87.6	96.3	104	112	119	125	134	140	138	123	98.2				
85	42.7	53.0	64.7	76.8	88.0	98.7	108	118	125	129	127	119	106	88.2	64.5				
90	4.77	6.10	7.38	8.59	9.64	10.6	11.6	12.6	13.5	14.4	15.0	15.5	16.1	17.1	18.2				
95	9.43	12.7	15.8	18.7	21.1	23.2	24.8	25.9	26.7	27.4	28.3	29.3	30.4	31.9	33.6				
100	15.9	25.4	35.4	44.7	50.9	55.4	58.0	57.6	56.2	54.5	54.6	55.3	56.5	58.3	60.6				
105	19.9	28.2	37.7	48.4	61.8	75.0	86.7	93.3	97.6	100	101	101	101	103	105				
110	43.6	45.9	47.3	49.7	59.7	71.5	83.8	94.0	103	112	119	126	131	135	138				
115	71.5	65.9	56.8	49.1	56.9	68.4	81.4	90.4	98.6	106	113	119	123	127	130				
120	105	90.3	76.5	66.0	66.7	71.7	79.3	86.7	94.4	102	108	113	117	120	123				
125	184	157	126	96.4	84.0	78.2	77.7	82.3	89.4	97.6	103	108	112	115	118				
130	281	253	213	168	133	103	81.6	78.9	83.6	92.2	97.0	102	106	109	112				
135	341	318	280	234	193	155	123	104	91.7	86.3	87.6	92.3	98.3	101	103				
140	393	375	343	302	262	222	183	152	125	105	96.5	93.0	93.1	92.5	93.5				
145	444	423	395	362	327	290	254	219	188	161	142	128	118	110	106				
150	496	476	449	419	390	360	329	294	260	230	208	191	178	168	162				
155	546	530	507	481	454	426	397	364	332	302	281	264	250	240	234				
160	609	592	568	540	514	487	459	428	399	373	354	338	326	316	310				
165	614	600	582	562	542	521	499	477	455	436	421	409	399	391	385				
170	625	615	604	591	576	559	542	525	509	495	486	479	474	468	463				
175	628	625	621	616	608	600	589	576	562	549	540	534	529	524	521				
180	573	573	573	573	573	573	573	573	573	573	573	573	573	573	573				

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
Test Date:2022-03-09

γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.967m [K=1.1152]
Remarks: