

LKOI-18W-930-Black



Light Output Ratio:	100.0%	
Luminaire Power:	19.94 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.55	fine grid method.

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

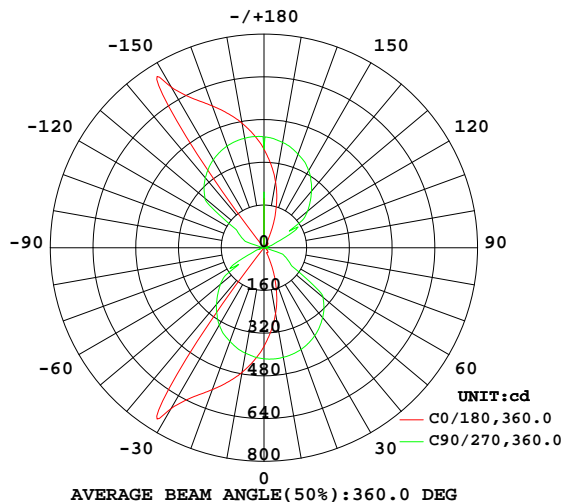
γ Range: 0 - 180DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 8.967m [K=1.1152]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

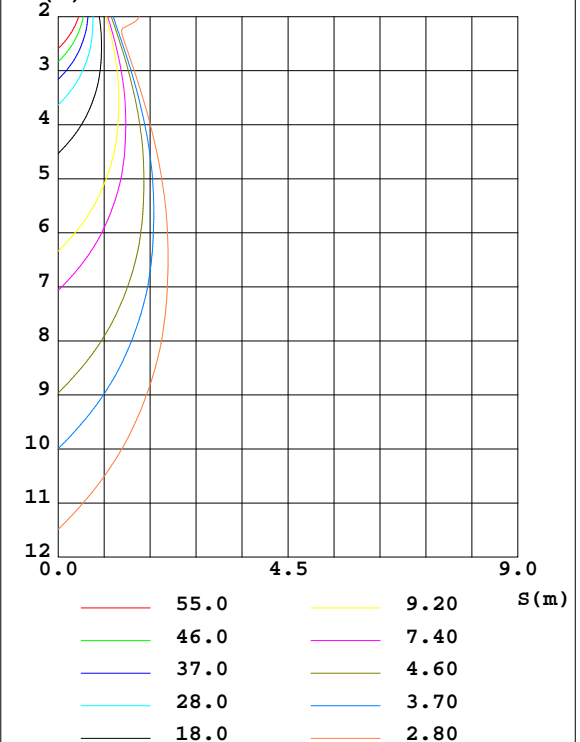
Test:U:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm					
NAME: LKOI-18W-930-Black		TYPE:Downlight		WEIGHT:	
SPEC.:3000K		DIM.: L300*W100*H70mm		SERIAL No.:	
MFR.: NEKO LIGHTING AG		SUR.:L300*W100		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 66.94 lm/W
MODEL	Zigen-3000K	Imax(cd)	756.2	S/MH(C0/180)	1.07	
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.20	
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	1334.6	η UP,DN(C0-180)	25.4,24.0	
NOMINAL FLUX(lm)	1334.58	CIE CLASS	DIFFUSE	η UP,DN(C180-360)	24.6,26.0	
LAMPS INSIDE	1	η up(%)	50.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE(V)	220.0	η down(%)	50.0	CIBSE SHR MAX	0.55	

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

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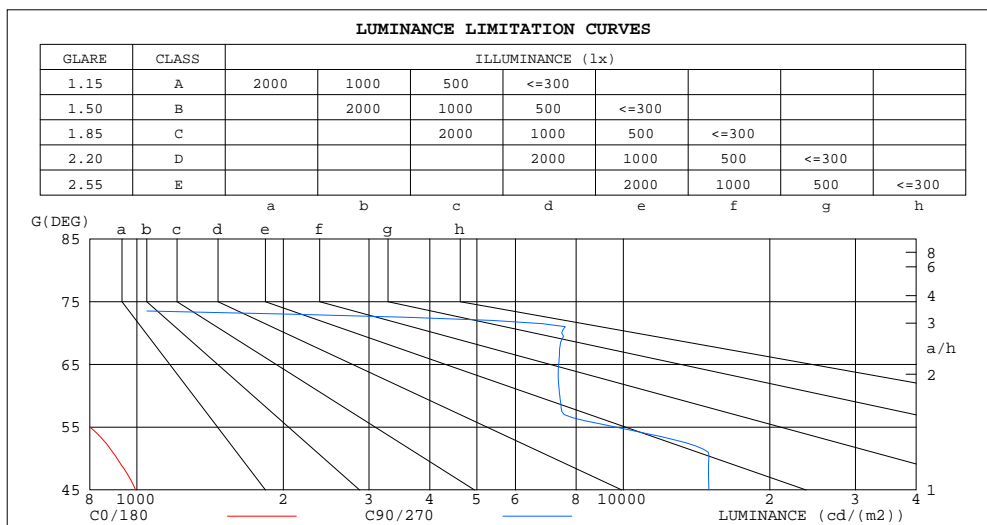
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	$\%lum, lamp$
10	250.7	311.4	416.8	463.1	473.8	458.0	400.9	309.4	0- 10	37.15	37.15	2.78,2.78
20	115.8	220.2	405.5	519.8	565.2	510.7	373.2	211.6	10- 20	106.4	143.6	10.8,10.8
30	21.03	120.9	380.4	573.0	694.9	547.8	334.5	95.74	20- 30	163.0	306.6	23,23
40	23.24	26.46	341.7	304.6	0.7350	582.4	277.1	18.51	30- 40	182.7	489.3	36.7,36.7
50	17.56	19.72	289.1	0.7100	0.1095	5.686	213.0	19.01	40- 50	101.5	590.7	44.3,44.3
60	9.959	15.45	111.0	0.2295	0.0105	0.7465	139.8	17.46	50- 60	51.63	642.3	48.1,48.1
70	5.678	8.607	76.63	0.0784	0.0157	0.0523	35.63	9.617	60- 70	18.47	660.8	49.5,49.5
80	0.2668	0.5272	0.6653	0.0732	0.0209	0.0784	1.737	3.477	70- 80	5.863	666.7	50,50
90	0.1411	0.3231	0.9460	0.0888	0.0209	0.0732	0.1829	0.2038	80- 90	0.6281	667.3	50,50
100	0.2668	3.477	1.737	0.0784	0.0209	0.0732	0.6653	0.5272	90-100	0.6281	667.9	50,50
110	5.678	9.617	35.63	0.0523	0.0157	0.0784	76.63	8.607	100-110	5.863	673.8	50.5,50.5
120	9.959	17.46	139.8	0.7465	0.0105	0.2295	111.0	15.45	110-120	18.47	692.2	51.9,51.9
130	17.56	19.01	213.0	5.686	0.1095	0.7100	289.1	19.72	120-130	51.63	743.9	55.7,55.7
140	23.24	18.51	277.1	582.4	0.7350	304.6	341.7	26.46	130-140	101.5	845.3	63.3,63.3
150	21.03	95.74	334.5	547.8	694.9	573.0	380.4	120.9	140-150	182.7	1028	77,77
160	115.8	211.6	373.2	510.7	565.2	519.8	405.5	220.2	150-160	163.0	1191	89.2,89.2
170	250.7	309.4	400.9	458.0	473.8	463.1	416.8	311.4	160-170	106.4	1297	97.2,97.2
180	369.5	369.5	369.5	369.5	369.5	369.5	369.5	369.5	170-180	37.15	1335	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Jason
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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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
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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	72	84
80	51	128
75	61	680
70	553	7468
65	560	7361
60	664	7400
55	801	9630
50	911	14993
45	994	14991

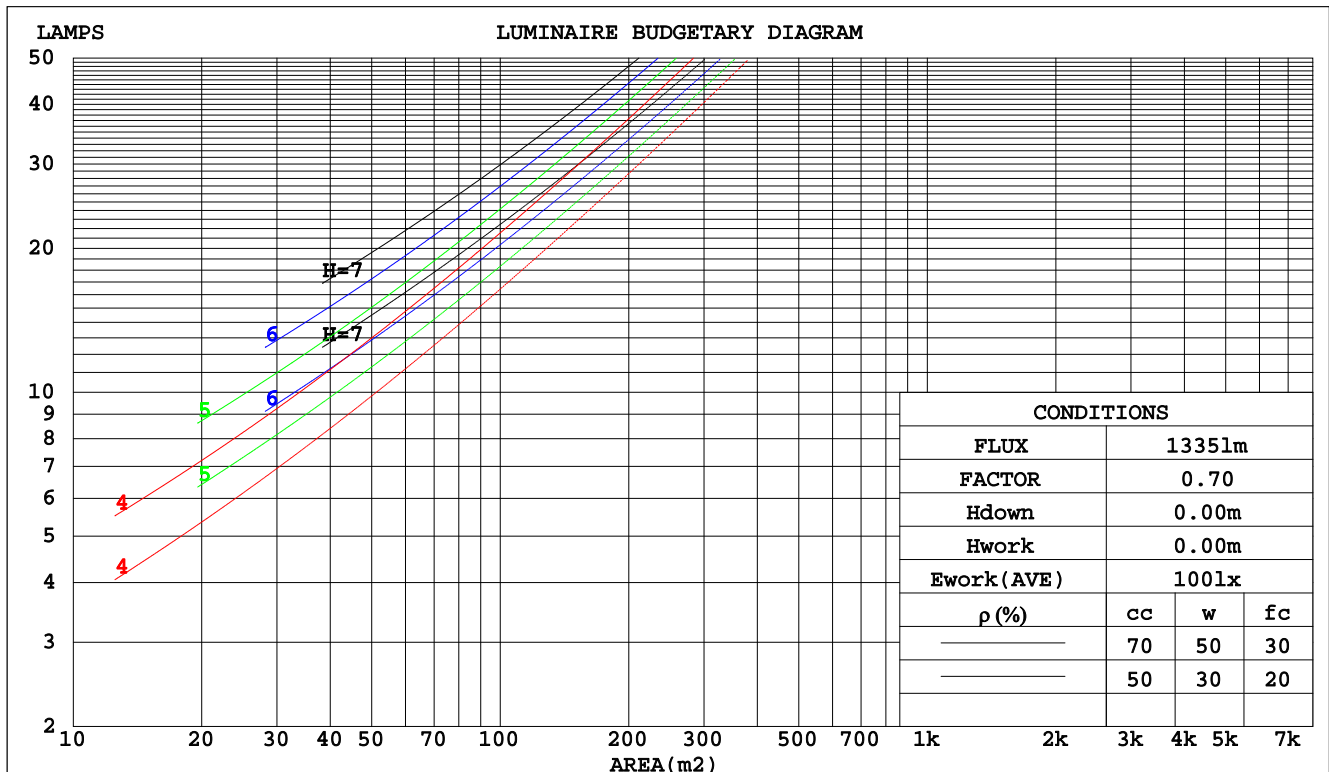
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
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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	.96	.92	.89	.89	.86	.83	.75	.73	.72	.63	.62	.61	.52	.51	.50	.45
2.0	.85	.80	.76	.79	.75	.71	.68	.65	.62	.57	.55	.53	.48	.46	.45	.41
3.0	.77	.70	.65	.71	.66	.61	.61	.57	.54	.52	.49	.47	.44	.42	.40	.36
4.0	.69	.62	.56	.64	.58	.53	.56	.51	.47	.48	.44	.42	.40	.38	.36	.33
5.0	.62	.55	.49	.58	.52	.47	.51	.46	.42	.44	.40	.37	.37	.34	.32	.29
6.0	.56	.49	.44	.53	.46	.42	.46	.41	.37	.40	.36	.33	.34	.31	.29	.27
7.0	.51	.44	.39	.48	.42	.37	.42	.37	.34	.37	.33	.30	.32	.29	.27	.24
8.0	.47	.40	.35	.44	.38	.33	.39	.34	.30	.34	.30	.27	.29	.26	.24	.22
9.0	.43	.36	.32	.41	.34	.30	.36	.31	.28	.31	.28	.25	.27	.24	.22	.20
10.0	.40	.33	.29	.38	.32	.27	.33	.28	.25	.29	.25	.23	.25	.23	.20	.19



C Range: 0 - 360DEG
C Interval: 5.0DEG
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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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
NAME: LKOI-18W-930-Black	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	.237	.135	.043	.215	.123	.039	.174	.100	.032	.136	.079	.025	.101	.059	.019	
2.0	.224	.123	.038	.204	.112	.035	.167	.093	.029	.132	.074	.023	.100	.057	.018	
3.0	.210	.112	.034	.192	.103	.031	.158	.086	.026	.127	.069	.021	.097	.054	.017	
4.0	.197	.103	.030	.181	.095	.028	.150	.079	.024	.121	.065	.020	.094	.051	.015	
5.0	.185	.094	.027	.170	.087	.025	.141	.074	.022	.115	.060	.018	.090	.048	.014	
6.0	.174	.087	.025	.160	.081	.023	.134	.069	.020	.109	.057	.017	.086	.045	.013	
7.0	.164	.081	.023	.151	.075	.021	.127	.064	.018	.103	.053	.015	.082	.042	.012	
8.0	.155	.076	.021	.143	.070	.020	.120	.060	.017	.098	.050	.014	.078	.040	.012	
9.0	.147	.071	.020	.135	.066	.019	.114	.056	.016	.094	.047	.013	.075	.038	.011	
10.0	.139	.067	.018	.128	.062	.017	.108	.053	.015	.089	.044	.013	.071	.036	.010	

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	.559	.541	.524	.479	.464	.451	.327	.319	.312	.188	.185	.181	.060	.059	.059	
2.0	.550	.519	.493	.471	.447	.426	.323	.309	.297	.186	.180	.174	.060	.058	.057	
3.0	.542	.503	.471	.464	.434	.409	.319	.301	.287	.184	.176	.169	.059	.057	.055	
4.0	.535	.490	.456	.459	.424	.397	.315	.295	.279	.182	.173	.165	.059	.056	.054	
5.0	.528	.481	.446	.453	.416	.388	.312	.291	.274	.181	.171	.162	.058	.056	.054	
6.0	.522	.473	.438	.449	.410	.381	.310	.287	.270	.180	.169	.160	.058	.055	.053	
7.0	.516	.467	.432	.444	.405	.376	.307	.284	.267	.178	.167	.159	.058	.055	.052	
8.0	.511	.461	.427	.440	.400	.373	.304	.281	.264	.177	.166	.158	.057	.054	.052	
9.0	.506	.457	.424	.436	.397	.370	.302	.279	.263	.176	.165	.157	.057	.054	.052	
10.0	.502	.453	.421	.432	.394	.367	.300	.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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm											
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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	0.8	1.7	1.7	2.5	3.5	14.8	15.7	15.7	16.5	17.5	
	3H	1.6	2.3	2.4	3.2	4.3	15.6	16.3	16.4	17.2	
	4H	1.4	2.1	2.3	3.0	4.1	15.5	16.2	16.4	17.0	
	6H	1.2	1.9	2.2	2.8	3.9	15.3	15.9	16.2	16.8	
	8H	1.2	1.8	2.1	2.7	3.8	15.2	15.8	16.1	16.7	
	12H	1.1	1.7	2.0	2.6	3.7	15.1	15.7	16.1	16.6	
4H	2H	1.8	2.4	2.6	3.3	4.4	14.4	15.0	15.2	15.9	
	3H	2.6	3.1	3.5	4.1	5.2	15.1	15.7	16.0	16.6	
	4H	2.4	2.9	3.4	3.9	5.1	15.0	15.5	15.9	16.4	
	6H	2.3	2.7	3.2	3.7	4.9	14.8	15.3	15.8	16.2	
	8H	2.2	2.6	3.1	3.5	4.8	14.7	15.1	15.7	16.1	
	12H	2.1	2.4	3.1	3.4	4.7	14.6	15.0	15.6	16.0	
8H	4H	2.6	3.0	3.6	4.0	5.2	14.7	15.1	15.7	16.1	
	6H	2.4	2.7	3.4	3.7	5.0	14.6	14.9	15.6	15.9	
	8H	2.3	2.6	3.3	3.6	4.9	14.5	14.8	15.5	15.8	
	12H	2.2	2.5	3.2	3.5	4.8	14.4	14.6	15.4	15.6	
12H	4H	2.6	3.0	3.6	3.9	5.2	14.6	15.0	15.6	16.0	
	6H	2.4	2.7	3.4	3.7	5.0	14.5	14.8	15.5	15.8	
	8H	2.3	2.6	3.4	3.6	4.9	14.4	14.6	15.4	15.6	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.4					+ 1.7 / - 1.4					
1.5H	+ 0.6 / - 0.9					+ 4.0 / -10.9					
2.0H	+ 0.6 / - 1.0					+ 5.4 / -11.6					

CIE Pub.117, 1335 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 1.0$)

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Operators:Jason
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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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
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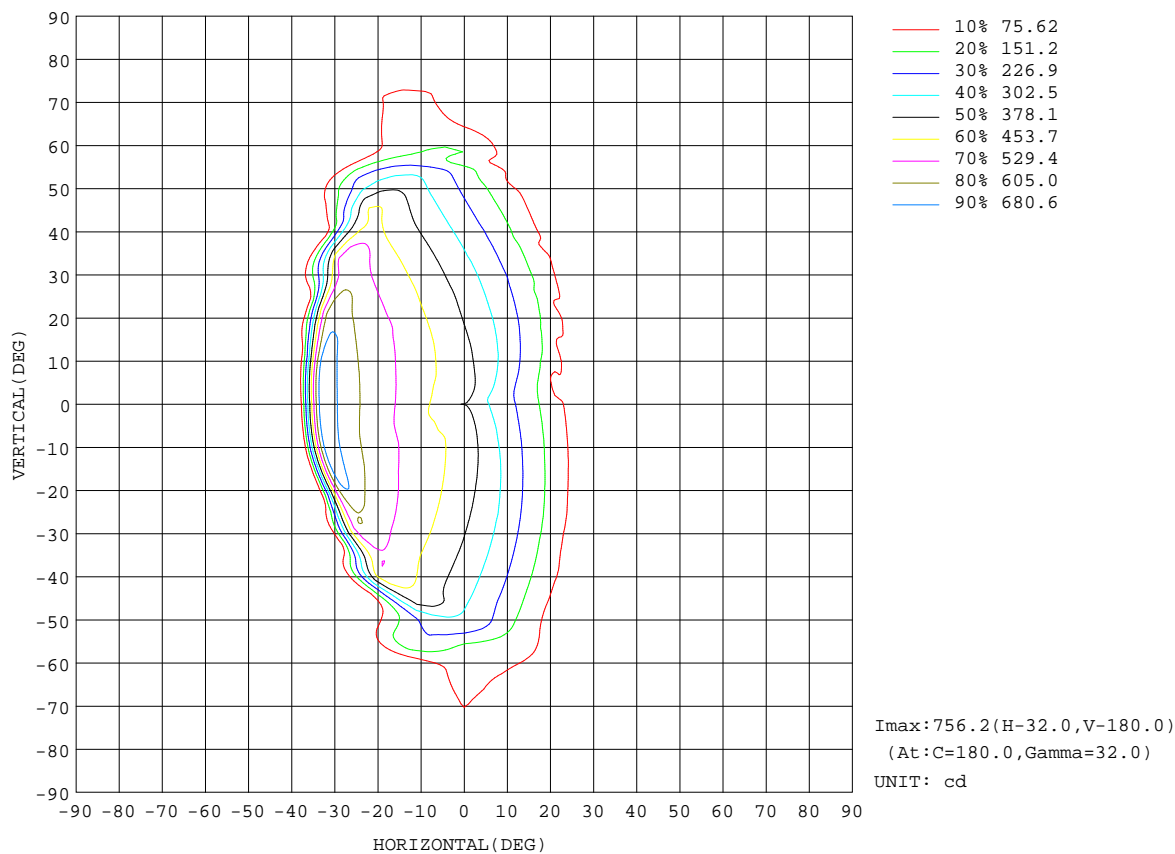
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	44	38	50	42	37	46	39	35	28
0.80	62	52	47	59	50	45	52	46	42	32
1.00	69	60	54	65	57	52	58	52	47	36
1.25	75	66	60	71	63	58	62	56	52	39
1.50	80	71	65	74	67	62	65	60	56	41
2.00	86	78	72	80	73	69	69	65	61	43
2.50	89	82	77	83	77	73	71	67	64	44
3.00	92	86	81	85	80	76	73	70	67	45
4.00	96	90	86	89	84	81	76	73	70	47
5.00	98	93	90	90	87	84	77	75	73	47
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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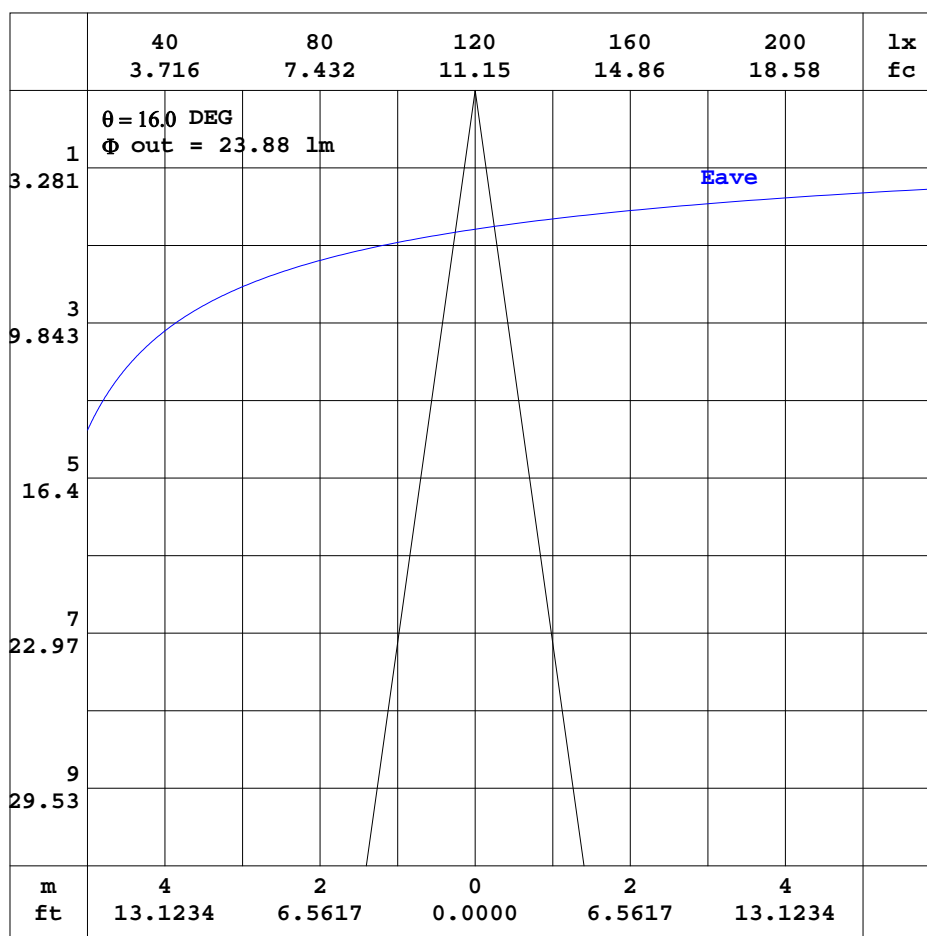


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AAI CURVES

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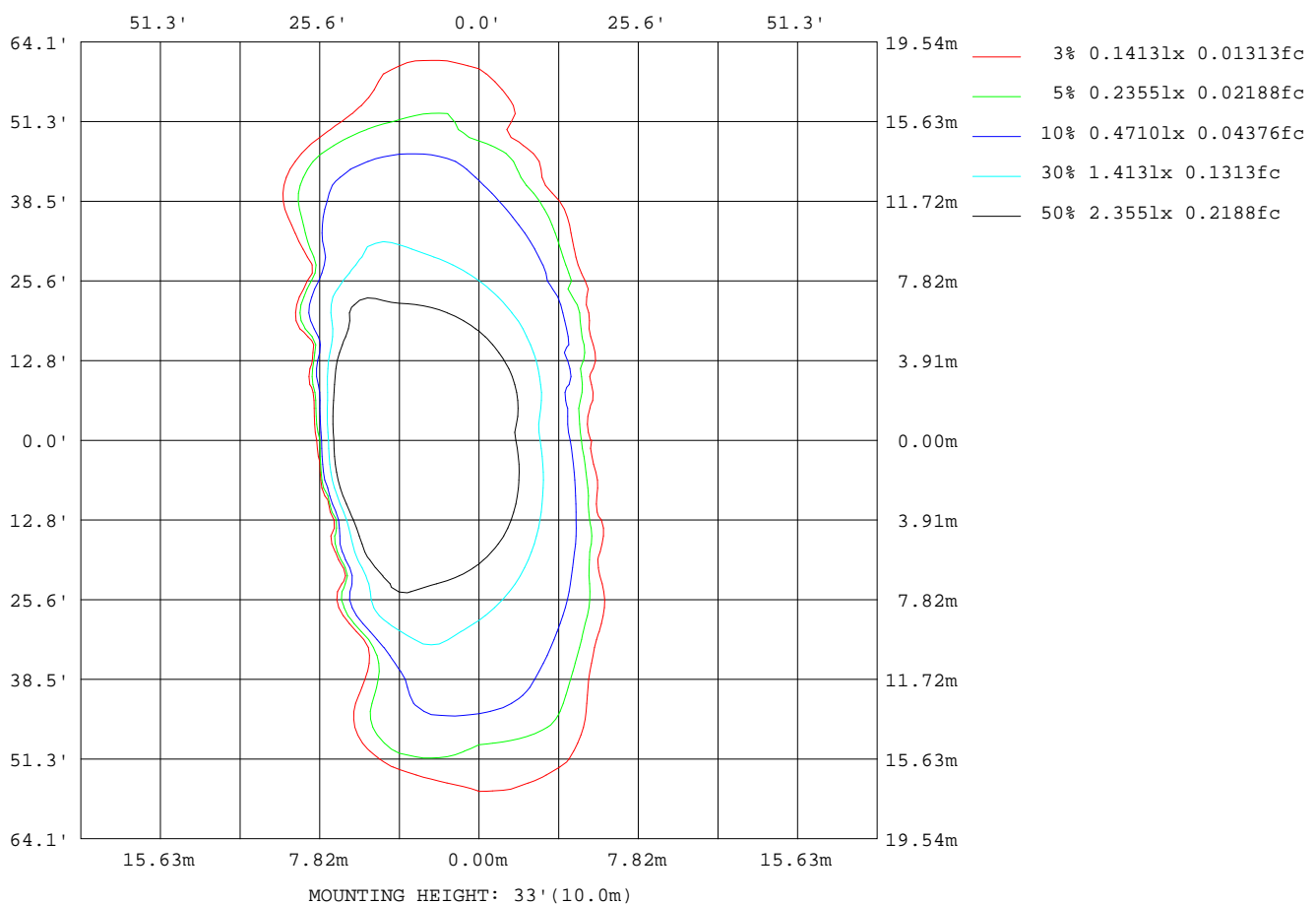
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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Remarks:

ISOLUX DIAGRAM

Test:U:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
NAME: LK0I-18W-930-Black	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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
NAME: LKOI-18W-930-Black	TYPE:Downlight	WEIGHT:
SPEC.:3000K	DIM.: L300*W100*H70mm	SERIAL No.:
MFR.: NEKO LIGHTING AG	SUR.:L300*W100	Shielding Angle:

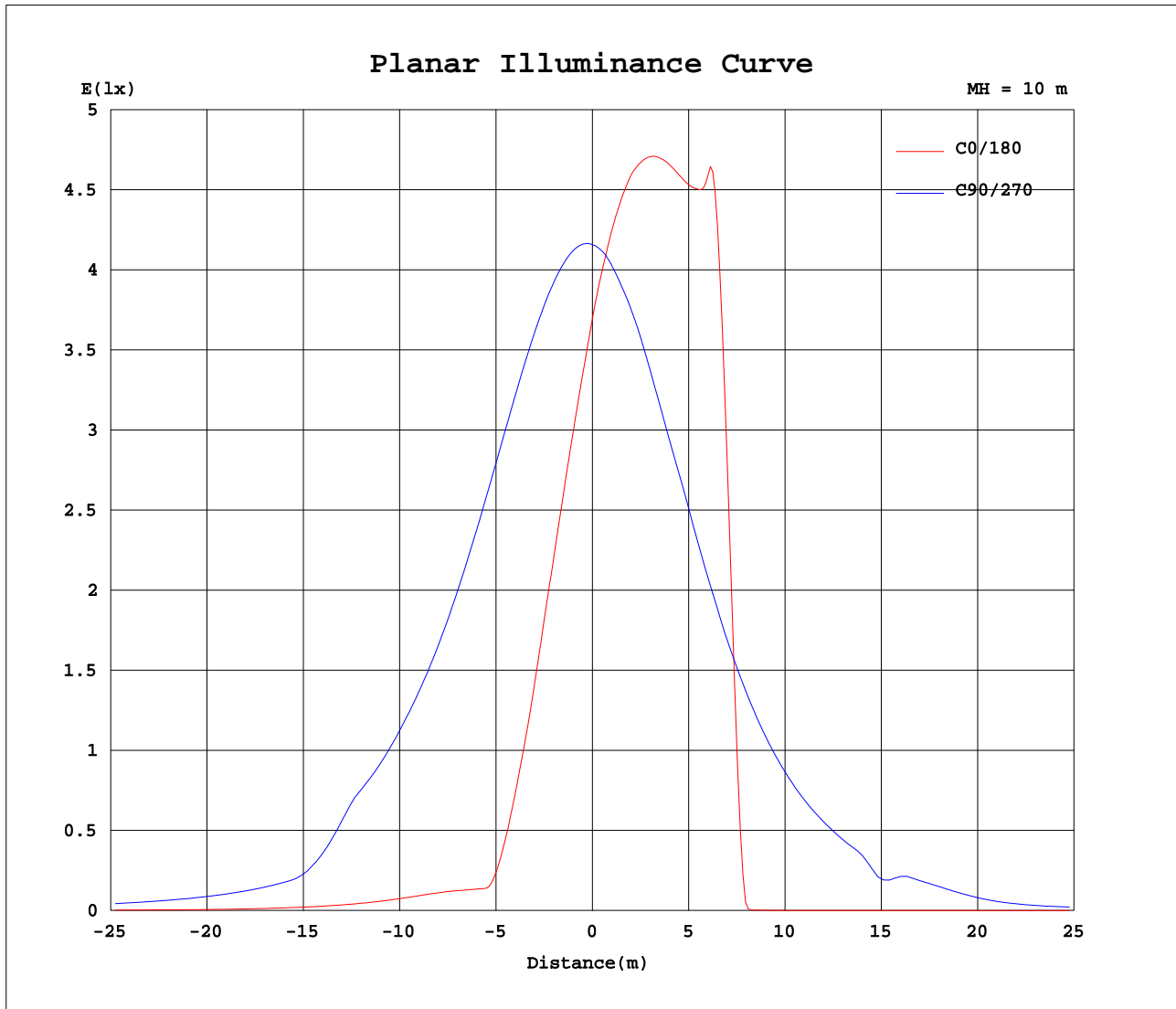
AvgL	cd/m2
L_0~180(65)av	281
L_0~180(75)av	32
L_0~180(85)av	40
L_90~270(65)av	6296
L_90~270(75)av	1555
L_90~270(85)av	264
L_45(65)av	511
L_45(75)av	414
L_45(85)av	104

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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
NAME: LKOI-18W-930-Black	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(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	369	372	374	376	378	380	382	386	389	393	396	399	402	406	410	414	415	416	416
5	311	314	317	320	324	328	333	340	346	354	361	368	376	385	394	402	408	413	418
10	251	253	257	262	268	275	282	291	301	311	323	335	348	361	374	387	398	408	417
15	185	189	194	200	209	218	229	241	253	267	283	300	317	335	352	369	385	399	413
20	116	120	126	134	145	157	171	186	203	220	240	260	282	304	327	349	369	388	405
25	50.2	55.3	62.5	71.7	82.8	96.0	111	129	149	170	194	219	245	272	299	325	349	372	394
30	21.0	17.8	18.1	21.9	29.3	40.3	55.0	74.0	96.2	121	147	175	205	236	267	297	326	354	380
35	22.7	22.4	22.0	21.6	18.3	17.0	19.6	31.7	49.3	71.7	99.1	130	163	197	232	267	300	332	363
40	23.2	23.3	23.2	23.0	22.1	21.3	21.0	18.0	18.8	26.5	51.6	84.0	121	158	196	235	272	307	342
45	21.1	21.3	21.5	21.7	22.0	22.1	22.0	18.0	16.1	18.8	32.1	52.3	79.4	116	158	201	240	279	318
50	17.6	17.9	18.3	18.7	19.3	19.9	20.3	19.2	18.8	19.7	19.8	25.3	39.3	74.2	117	164	214	258	289
55	13.8	14.0	14.4	14.9	15.6	16.3	17.1	17.9	18.4	18.5	11.9	9.14	14.7	48.2	87.5	126	143	155	166
60	9.96	10.1	10.4	10.8	11.3	11.9	12.7	13.9	14.9	15.5	11.0	8.87	12.2	34.4	60.4	85.7	102	110	111
65	7.10	7.02	7.09	7.32	7.72	8.28	8.97	10.0	11.1	11.9	10.7	10.1	11.0	14.5	21.2	31.7	57.4	80.3	93.3
70	5.68	5.98	6.24	6.45	6.54	6.65	6.85	7.42	8.04	8.61	8.70	8.78	8.96	6.60	6.71	11.5	36.4	60.6	76.6
75	0.47	0.42	0.45	0.57	0.67	0.94	1.49	2.82	4.29	5.68	6.49	6.98	7.13	6.66	6.01	5.37	5.48	5.53	5.28
80	0.27	0.23	0.23	0.25	0.31	0.39	0.47	0.25	0.21	0.53	2.33	4.18	5.56	4.72	3.33	1.81	1.23	0.88	0.67
85	0.19	0.17	0.17	0.17	0.19	0.22	0.26	0.31	0.39	0.49	0.67	0.85	1.00	1.06	1.05	0.97	0.73	0.46	0.22
90	0.14	0.20	0.24	0.27	0.26	0.26	0.21	0.27	0.30	0.32	0.40	0.47	0.54	0.62	0.00	0.00	0.86	0.94	0.95
95	0.19	0.48	0.66	0.73	0.60	0.43	0.27	0.28	0.35	0.44	0.34	0.38	0.70	2.22	3.73	4.82	3.93	2.58	1.16
100	0.27	0.57	0.77	0.87	0.65	0.48	0.52	1.42	2.47	3.48	3.73	3.88	4.11	5.28	6.32	6.85	5.38	3.52	1.74
105	0.47	0.01	0.09	0.73	2.36	4.20	5.93	6.56	6.88	7.02	7.26	7.50	7.78	7.81	8.20	9.22	12.7	16.2	18.9
110	5.68	6.09	6.41	6.63	6.58	6.57	6.73	7.53	8.52	9.62	10.9	11.9	12.4	10.2	8.64	9.07	14.0	22.6	35.6
115	7.10	7.11	7.20	7.37	7.46	7.75	8.37	9.95	11.7	13.5	14.9	15.8	15.9	11.0	7.84	9.07	24.3	44.2	66.3
120	9.96	9.97	10.1	10.5	10.9	11.5	12.4	14.2	16.0	17.5	17.4	17.0	16.7	11.6	11.2	19.6	58.5	102	140
125	13.8	13.7	13.9	14.2	14.9	15.7	16.6	17.8	18.7	19.3	16.9	15.4	16.3	21.3	31.7	49.2	80.8	118	159
130	17.6	17.9	18.2	18.5	18.8	19.1	19.3	19.4	19.3	19.0	14.7	13.1	16.8	33.8	58.1	89.0	127	169	213
135	21.1	19.5	18.6	18.4	19.5	20.9	22.1	20.8	19.6	19.4	18.5	22.0	32.5	59.9	94.2	133	169	207	245
140	23.2	22.3	21.6	21.1	21.2	21.4	21.4	18.2	16.6	18.5	27.6	42.7	64.5	98.2	136	176	211	244	277
145	22.7	22.6	22.3	21.9	19.5	18.3	19.4	24.8	34.5	49.3	72.9	101	131	160	189	219	248	278	307
150	21.0	18.6	18.3	20.1	23.2	29.2	38.7	54.1	73.2	95.7	122	151	179	206	232	257	283	309	334
155	50.2	48.4	49.2	52.6	57.1	65.4	78.4	102	129	157	180	203	224	246	268	290	313	335	357
160	116	108	107	111	124	142	161	177	194	212	230	249	268	286	304	322	339	356	373
165	185	182	182	186	196	208	222	235	248	262	277	292	307	321	336	350	363	376	389
170	251	248	248	251	258	268	279	289	299	309	321	333	344	354	364	373	383	392	401
175	311	309	308	310	317	324	333	339	346	353	361	370	378	384	390	395	400	406	410
180	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369

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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
NAME: LKOI-18W-930-Black	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 (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	415	414	413	412	410	407	403	398	393	389	386	382	376	370	366	366	367	369	371
5	422	426	429	432	434	435	434	432	430	430	429	428	425	422	419	420	421	423	425
10	425	433	440	447	453	458	460	462	463	466	468	470	469	468	467	469	471	474	475
15	425	437	448	459	469	477	483	488	493	499	505	510	511	512	513	516	518	520	521
20	422	438	453	468	481	494	503	512	520	530	539	547	551	554	557	560	563	565	565
25	416	436	455	473	490	506	520	533	546	560	574	586	593	599	603	608	612	614	613
30	405	429	452	474	496	516	535	554	573	598	622	644	658	668	676	685	692	695	690
35	391	418	444	470	495	521	554	584	605	602	590	575	565	555	545	525	510	508	548
40	373	404	434	482	518	531	479	401	305	193	87.7	1.62	0.00	0.00	1.06	0.74	0.58	0.73	0.00
45	364	404	431	436	418	370	248	117	1.09	0.00	0.00	0.66	0.60	0.56	0.52	0.42	0.33	0.27	0.29
50	292	276	239	161	78.0	5.07	0.00	0.00	0.71	0.37	0.34	0.47	0.42	0.38	0.33	0.25	0.17	0.11	0.13
55	197	219	222	155	76.7	3.85	0.00	0.00	0.44	0.19	0.19	0.31	0.29	0.27	0.24	0.16	0.08	0.03	0.03
60	94.5	72.0	47.6	28.7	12.8	0.91	0.00	0.00	0.23	0.17	0.16	0.16	0.13	0.11	0.08	0.05	0.03	0.01	0.01
65	67.5	33.7	0.95	0.00	0.00	0.40	0.28	0.18	0.11	0.09	0.09	0.09	0.08	0.06	0.04	0.03	0.02	0.01	0.01
70	56.2	28.2	0.53	0.00	0.00	0.25	0.17	0.12	0.08	0.07	0.07	0.07	0.06	0.05	0.04	0.03	0.02	0.02	0.02
75	3.66	1.86	0.24	0.00	0.00	0.20	0.16	0.12	0.08	0.07	0.07	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02
80	0.43	0.26	0.16	0.14	0.15	0.17	0.14	0.10	0.07	0.07	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02	0.02
85	0.15	0.13	0.14	0.13	0.13	0.12	0.11	0.09	0.07	0.07	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.02	0.02
90	0.72	0.45	0.16	0.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.06	0.04	0.02	0.02	0.02	0.02	0.03
95	0.71	0.48	0.40	0.25	0.16	0.09	0.07	0.07	0.08	0.08	0.08	0.08	0.06	0.04	0.02	0.02	0.02	0.02	0.03
100	1.49	1.56	1.70	1.19	0.61	0.09	0.00	0.00	0.08	0.08	0.07	0.07	0.05	0.04	0.02	0.02	0.02	0.02	0.03
105	18.0	15.8	12.5	8.28	4.03	0.43	0.00	0.00	0.07	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03
110	64.8	90.6	105	75.9	37.6	0.50	0.00	0.00	0.05	0.02	0.01	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.03
115	93.6	114	122	86.6	42.8	1.35	0.00	0.00	0.45	0.26	0.12	0.02	0.00	0.00	0.03	0.02	0.01	0.01	0.02
120	150	149	137	113	85.0	55.7	33.1	14.4	0.75	0.00	0.00	0.10	0.04	0.03	0.04	0.02	0.01	0.01	0.03
125	205	246	277	293	289	263	179	86.7	3.93	0.00	0.00	0.26	0.00	0.00	0.10	0.06	0.03	0.03	0.08
130	255	296	337	402	446	448	313	153	5.69	0.00	0.00	0.43	0.05	0.05	0.25	0.18	0.13	0.11	0.17
135	283	320	358	402	441	468	483	472	427	287	136	0.91	0.00	0.00	0.45	0.35	0.29	0.27	0.33
140	311	344	377	409	441	474	526	567	582	531	451	349	224	104	4.53	0.00	0.00	0.73	0.58
145	337	367	396	424	452	480	507	536	566	607	644	672	677	667	645	597	548	508	510
150	360	384	409	433	457	481	504	526	548	569	589	609	631	651	668	681	690	695	692
155	378	399	419	438	457	476	496	516	535	548	560	571	583	594	603	609	613	614	612
160	391	408	425	440	455	469	483	498	511	522	531	540	547	554	559	563	565	565	563
165	403	416	428	439	449	458	468	478	486	493	500	505	510	515	518	520	521	520	518
170	410	418	426	432	437	442	448	453	458	462	465	468	471	473	475	475	475	474	471
175	415	419	422	423	424	424	425	426	427	428	427	427	427	427	427	426	425	423	421
180	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369

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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm		
NAME: LKOI-18W-930-Black	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	374	376	378	380	382	386	389	393	396	399	402	406	410	414	415	416	416	415	414
5	426	427	427	427	427	427	428	427	426	425	424	424	423	422	419	415	410	406	400
10	475	475	473	471	468	465	462	458	453	448	442	437	432	426	418	410	401	392	383
15	520	518	515	510	505	500	493	486	478	468	458	449	439	428	416	403	389	376	363
20	563	559	554	547	540	531	522	511	498	483	469	455	440	425	408	391	373	356	339
25	609	603	594	583	571	560	548	535	516	496	476	457	438	419	399	378	357	335	313
30	681	668	651	631	609	589	569	548	526	504	481	457	433	409	384	360	334	309	283
35	597	645	667	677	672	644	607	566	536	507	480	452	424	396	367	337	307	278	248
40	0.00	4.53	104	224	349	451	531	582	567	526	474	441	409	377	344	311	277	244	211
45	0.35	0.45	0.00	0.00	0.91	136	287	427	472	483	468	441	402	358	320	283	245	207	169
50	0.18	0.25	0.05	0.05	0.43	0.00	0.00	5.69	153	313	448	446	402	337	296	255	213	169	127
55	0.06	0.10	0.00	0.00	0.26	0.00	0.00	3.93	86.7	179	263	289	293	277	246	205	159	118	80.8
60	0.02	0.04	0.03	0.04	0.10	0.00	0.00	0.75	14.4	33.1	55.7	85.0	113	137	149	150	140	102	58.5
65	0.02	0.03	0.00	0.00	0.02	0.12	0.26	0.45	0.00	0.00	1.35	42.8	86.6	122	114	93.6	66.3	44.2	24.3
70	0.02	0.02	0.02	0.02	0.03	0.01	0.02	0.05	0.00	0.00	0.50	37.6	75.9	105	90.6	64.8	35.6	22.6	14.0
75	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.07	0.00	0.00	0.43	4.03	8.28	12.5	15.8	18.0	18.9	16.2	12.7
80	0.02	0.02	0.04	0.05	0.07	0.07	0.08	0.08	0.00	0.00	0.09	0.61	1.19	1.70	1.56	1.49	1.74	3.52	5.38
85	0.02	0.02	0.04	0.06	0.08	0.08	0.08	0.08	0.07	0.07	0.09	0.16	0.25	0.40	0.48	0.71	1.16	2.58	3.93
90	0.03	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.18	0.26	0.35
95	0.03	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.09	0.11	0.12	0.13	0.13	0.14	0.13	0.15	0.22	0.46	0.73
100	0.03	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.10	0.14	0.17	0.15	0.14	0.16	0.26	0.43	0.67	0.88	1.23
105	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.08	0.12	0.16	0.20	0.00	0.00	0.24	1.86	3.66	5.28	5.53	5.48
110	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.08	0.12	0.17	0.25	0.00	0.00	0.53	28.2	56.2	76.6	60.6	36.4
115	0.03	0.04	0.06	0.08	0.09	0.09	0.09	0.11	0.18	0.28	0.40	0.00	0.00	0.95	33.7	67.5	93.3	80.3	57.4
120	0.05	0.08	0.11	0.13	0.16	0.16	0.17	0.23	0.00	0.00	0.91	12.8	28.7	47.6	72.0	94.5	111	110	102
125	0.16	0.24	0.27	0.29	0.31	0.19	0.19	0.44	0.00	0.00	3.85	76.7	155	222	219	197	166	155	143
130	0.25	0.33	0.38	0.42	0.47	0.34	0.37	0.71	0.00	0.00	5.07	78.0	161	239	276	292	289	258	214
135	0.42	0.52	0.56	0.60	0.66	0.00	0.00	1.09	117	248	370	418	436	431	404	364	318	279	240
140	0.74	1.06	0.00	0.00	1.62	87.7	193	305	401	479	531	518	482	434	404	373	342	307	272
145	525	545	555	565	575	590	602	605	584	554	521	495	470	444	418	391	363	332	300
150	685	676	668	658	644	622	598	573	554	535	516	496	474	452	429	405	380	354	326
155	608	603	599	593	586	574	560	546	533	520	506	490	473	455	436	416	394	372	349
160	560	557	554	551	547	539	530	520	512	503	494	481	468	453	438	422	405	388	369
165	516	513	512	511	510	505	499	493	488	483	477	469	459	448	437	425	413	399	385
170	469	467	468	469	470	468	466	463	462	460	458	453	447	440	433	425	417	408	398
175	420	419	422	425	428	429	430	430	432	434	435	434	432	429	426	422	418	413	408
180	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369

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:220.9V I:0.9827A P:19.94W PF:0.9827 Freq:49.99Hz Lamp Flux:1334.58x1 lm					
NAME: LKOI-18W-930-Black			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) γ (DEC)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	413	412	410	407	403	398	393	389	386	382	376	370	366	365	366				
5	395	390	384	378	370	361	353	346	339	333	324	317	310	308	309				
10	373	364	354	344	333	321	309	299	289	279	268	258	251	248	248				
15	350	336	321	307	292	277	262	248	235	222	208	196	186	182	182				
20	322	304	286	268	249	230	212	194	177	161	142	124	111	107	108				
25	290	268	246	224	203	180	157	129	102	78.4	65.4	57.1	52.6	49.2	48.4				
30	257	232	206	179	151	122	95.7	73.2	54.1	38.7	29.2	23.2	20.1	18.3	18.6				
35	219	189	160	131	101	72.9	49.3	34.5	24.8	19.4	18.3	19.5	21.9	22.3	22.6				
40	176	136	98.2	64.5	42.7	27.6	18.5	16.6	18.2	21.4	21.4	21.2	21.1	21.6	22.3				
45	133	94.2	59.9	32.5	22.0	18.5	19.4	19.6	20.8	22.1	20.9	19.5	18.4	18.6	19.5				
50	89.0	58.1	33.8	16.8	13.1	14.7	19.0	19.3	19.4	19.3	19.1	18.8	18.5	18.2	17.9				
55	49.2	31.7	21.3	16.3	15.4	16.9	19.3	18.7	17.8	16.6	15.7	14.9	14.2	13.9	13.7				
60	19.6	11.2	11.6	16.7	17.0	17.4	17.5	16.0	14.2	12.4	11.5	10.9	10.5	10.1	9.97				
65	9.07	7.84	11.0	15.9	15.8	14.9	13.5	11.7	9.95	8.37	7.75	7.46	7.37	7.20	7.11				
70	9.07	8.64	10.2	12.4	11.9	10.9	9.62	8.52	7.53	6.73	6.57	6.58	6.63	6.41	6.09				
75	9.22	8.20	7.81	7.78	7.50	7.26	7.02	6.88	6.56	5.93	4.20	2.36	0.73	0.09	0.01				
80	6.85	6.32	5.28	4.11	3.88	3.73	3.48	2.47	1.42	0.52	0.48	0.65	0.87	0.77	0.57				
85	4.82	3.73	2.22	0.70	0.38	0.34	0.44	0.35	0.28	0.27	0.43	0.60	0.73	0.66	0.48				
90	0.43	0.49	0.52	0.53	0.43	0.31	0.20	0.18	0.17	0.17	0.16	0.15	0.23	0.13	0.13				
95	0.97	1.05	1.06	1.00	0.85	0.67	0.49	0.39	0.31	0.26	0.22	0.19	0.17	0.17	0.17				
100	1.81	3.33	4.72	5.56	4.18	2.33	0.53	0.21	0.25	0.47	0.39	0.31	0.25	0.23	0.23				
105	5.37	6.01	6.66	7.13	6.98	6.49	5.68	4.29	2.82	1.49	0.94	0.67	0.57	0.45	0.42				
110	11.5	6.71	6.60	8.96	8.78	8.70	8.61	8.04	7.42	6.85	6.65	6.54	6.45	6.24	5.98				
115	31.7	21.2	14.5	11.0	10.1	10.7	11.9	11.1	10.0	8.97	8.28	7.72	7.32	7.09	7.02				
120	85.7	60.4	34.4	12.2	8.87	11.0	15.5	14.9	13.9	12.7	11.9	11.3	10.8	10.4	10.1				
125	126	87.5	48.2	14.7	9.14	11.9	18.5	18.4	17.9	17.1	16.3	15.6	14.9	14.4	14.0				
130	164	117	74.2	39.3	25.3	19.8	19.7	18.8	19.2	20.3	19.9	19.3	18.7	18.3	17.9				
135	201	158	116	79.4	52.3	32.1	18.8	16.1	18.0	22.0	22.1	22.0	21.7	21.5	21.3				
140	235	196	158	121	84.0	51.6	26.5	18.8	18.0	21.0	21.3	22.1	23.0	23.2	23.3				
145	267	232	197	163	130	99.1	71.7	49.3	31.7	19.6	17.0	18.3	21.6	22.0	22.4				
150	297	267	236	205	175	147	121	96.2	74.0	55.0	40.3	29.3	21.9	18.1	17.8				
155	325	299	272	245	219	194	170	149	129	111	96.0	82.8	71.7	62.5	55.3				
160	349	327	304	282	260	240	220	203	186	171	157	145	134	126	120				
165	369	352	335	317	300	283	267	253	241	229	218	209	200	194	189				
170	387	374	361	348	335	323	311	301	291	282	275	268	262	257	253				
175	402	394	385	376	368	361	354	346	340	333	328	324	320	317	314				
180	369	369	369	369	369	369	369	369	369	369	369	369	369	369	369				

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: