

SJA1-9W-930-38°



Light Output Ratio:	100.0%	
Luminaire Power:	10.66 W	
SHR Nominal:	0.50	Calculated using the TM5
SHR Maximum:	0.60	fine grid method.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2021-12-16

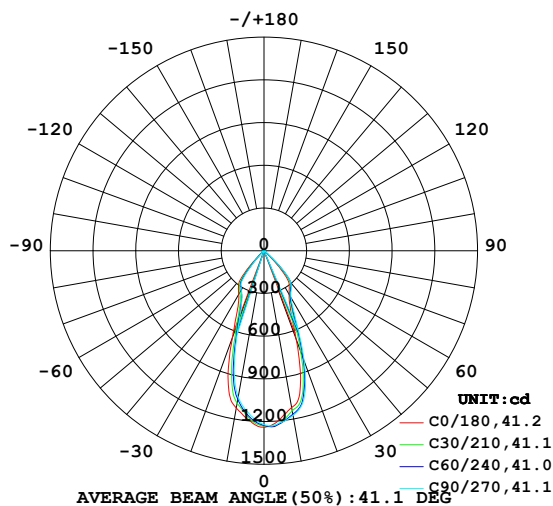
γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 8.967m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

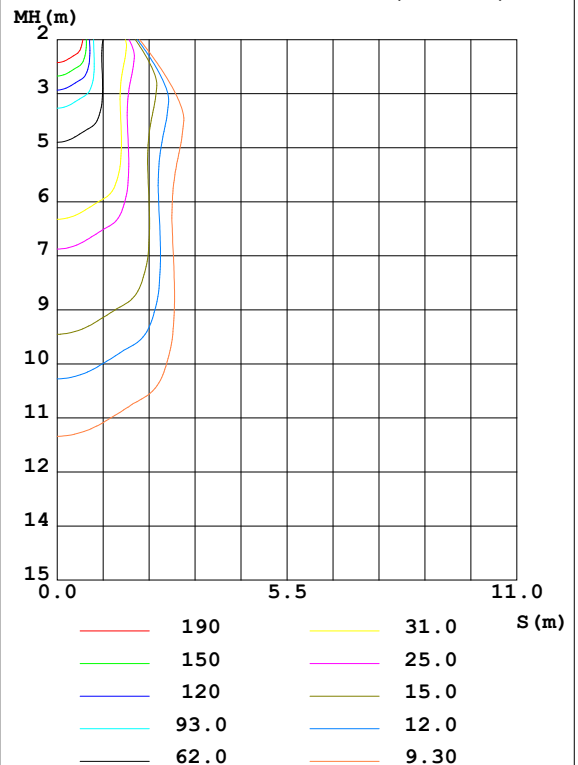
Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ70mm*H150mm	
MFR.: NEKO LIGHTING AG		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.47 lm/W			
MODEL	3000K	I _{max} (cd)	1239	S/MH (C0/180)	0.68
NOMINAL POWER (W)	10	LOR (%)	100.0	S/MH (C90/270)	0.60
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	878.83	η UP, DN (C0-180)	0.0, 55.3
NOMINAL FLUX (lm)	878.833	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 44.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	0.60

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 2021-12-16

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 58%
 Test Distance: 8.967m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1119	1154	1175	1134	1122	1074	1044	1058	0- 10	110.7	110.7	12.6,12.6
20	662.5	779.8	827.4	753.1	652.3	544.3	503.0	545.4	10- 20	255.6	366.3	41.7,41.7
30	352.7	366.3	380.4	367.7	355.9	329.6	320.6	323.9	20- 30	208.4	574.7	65.4,65.4
40	249.3	287.4	293.4	272.1	241.6	185.1	151.8	181.6	30- 40	188.2	762.9	86.8,86.8
50	21.05	26.33	31.99	23.60	20.12	18.43	17.89	19.02	40- 50	78.34	841.2	95.7,95.7
60	12.55	13.79	14.86	13.76	12.45	11.63	11.47	12.11	50- 60	14.69	855.9	97.4,97.4
70	8.001	8.447	9.080	8.603	7.853	7.967	8.327	8.297	60- 70	10.23	866.1	98.6,98.6
80	6.047	6.813	7.096	6.743	5.336	6.266	6.346	5.494	70- 80	7.800	873.9	99.4,99.4
90	0.1254	3.423	4.761	3.094	0.0836	0.0758	0.0784	0.0810	80- 90	4.900	878.8	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 822.38 lm

%lum = 93.6%

%lamp = 93.6%

Conical surface Flux(120deg): 855.9 lm

%lum = 97.4%

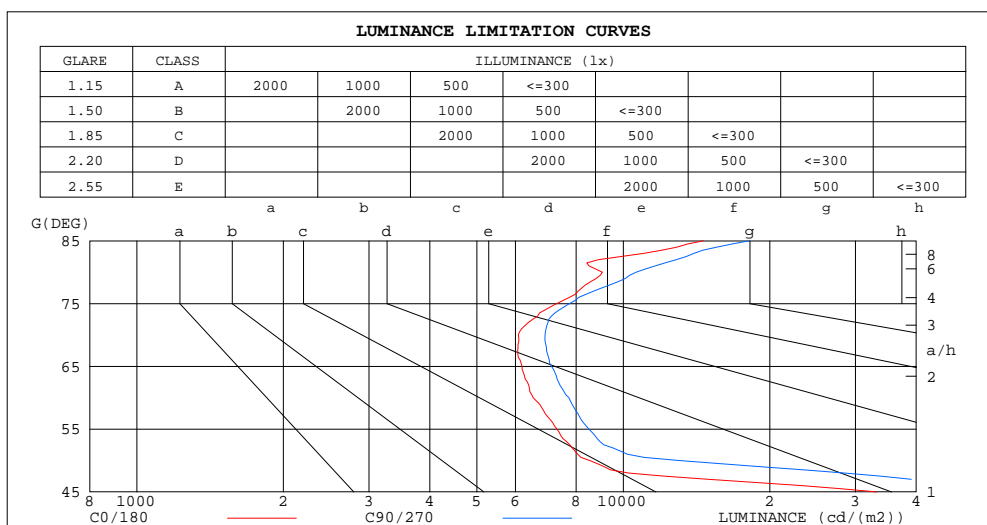
%lamp = 97.4%

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ70mm*H150mm	
MFR.: NEKO LIGHTING AG		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	14601	18144
80	9054	10626
75	7295	7754
70	6082	6903
65	6189	7119
60	6527	7728
55	7303	8490
50	8516	12942
45	33151	62367

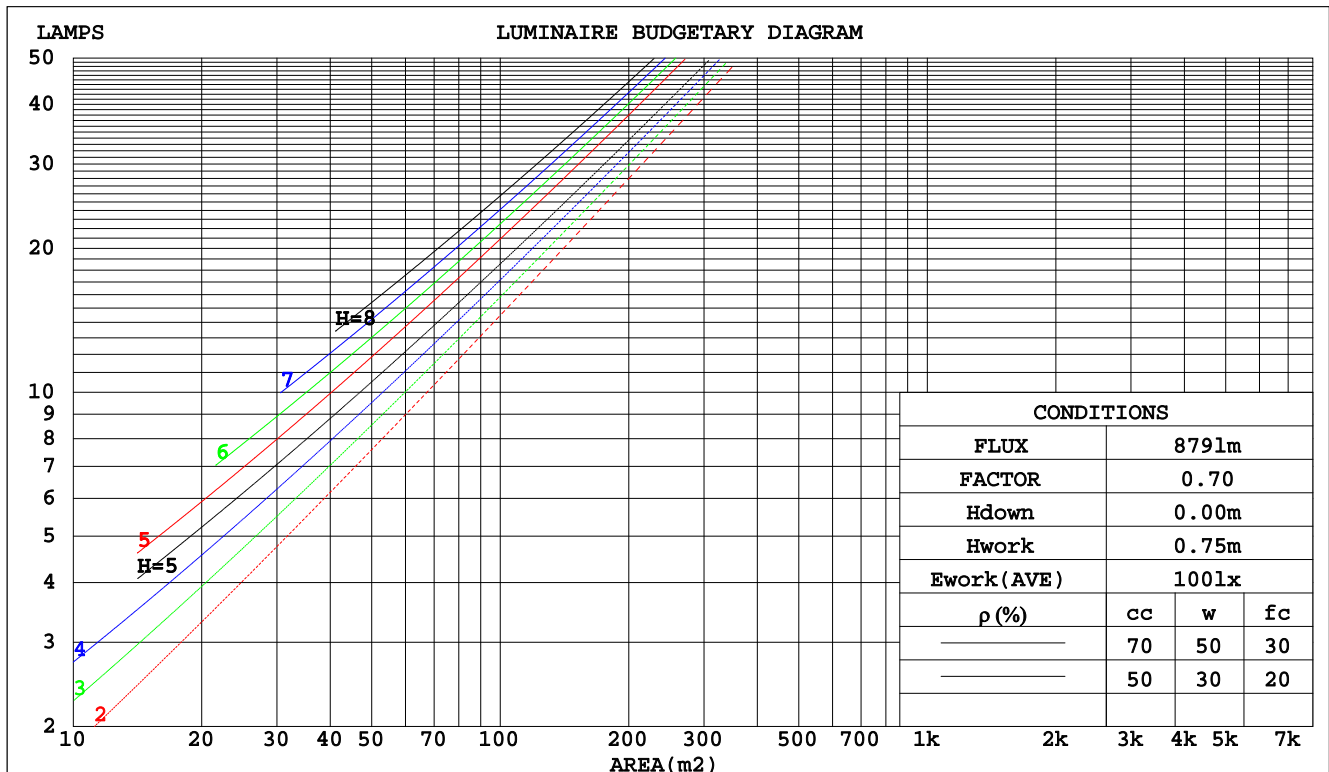
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ70mm*H150mm	
MFR.: NEKO LIGHTING AG		

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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.10	1.07	1.05	1.08	1.06	1.03	1.04	1.02	1.00	1.00	.99	.97	.97	.95	.94	.93
2.0	1.02	.98	.94	1.00	.96	.93	.97	.94	.91	.94	.91	.89	.91	.89	.87	.86
3.0	.95	.90	.86	.93	.89	.85	.91	.87	.83	.88	.85	.82	.86	.83	.81	.79
4.0	.88	.83	.78	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.74
5.0	.83	.77	.72	.82	.76	.72	.80	.75	.71	.78	.74	.71	.77	.73	.70	.69
6.0	.78	.72	.67	.77	.71	.67	.75	.70	.66	.74	.69	.66	.73	.69	.66	.64
7.0	.73	.67	.63	.72	.67	.62	.71	.66	.62	.70	.65	.62	.69	.65	.61	.60
8.0	.69	.63	.59	.68	.63	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.56
9.0	.65	.59	.55	.65	.59	.55	.64	.58	.55	.63	.58	.55	.62	.58	.54	.53
10.0	.62	.56	.52	.61	.56	.52	.60	.55	.52	.60	.55	.52	.59	.55	.51	.50



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ70mm*H150mm	
MFR.: NEKO LIGHTING AG		

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	.191	.109	.034	.184	.105	.033	.171	.098	.031	.160	.092	.030	.149	.086	.028	
2.0	.181	.099	.030	.175	.096	.030	.164	.091	.028	.154	.087	.027	.145	.082	.026	
3.0	.171	.091	.027	.166	.089	.027	.157	.085	.026	.148	.081	.025	.140	.078	.024	
4.0	.161	.084	.025	.157	.082	.024	.149	.079	.024	.142	.076	.023	.135	.073	.022	
5.0	.153	.078	.023	.149	.077	.022	.143	.074	.022	.136	.072	.021	.130	.070	.021	
6.0	.145	.073	.021	.142	.072	.021	.136	.070	.020	.130	.068	.020	.125	.066	.020	
7.0	.138	.068	.019	.136	.068	.019	.130	.066	.019	.125	.064	.019	.120	.063	.018	
8.0	.132	.064	.018	.129	.064	.018	.125	.062	.018	.120	.061	.018	.116	.059	.017	
9.0	.126	.061	.017	.124	.060	.017	.119	.059	.017	.115	.058	.017	.112	.057	.016	
10.0	.121	.058	.016	.119	.057	.016	.115	.056	.016	.111	.055	.016	.108	.054	.016	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.172	.157	.144	.147	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.111	.135	.114	.096	.092	.079	.067	.053	.046	.039	.017	.015	.013	
3.0	.145	.114	.088	.125	.098	.077	.086	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.071	.116	.086	.062	.080	.060	.044	.046	.035	.026	.015	.011	.008	
5.0	.127	.088	.059	.109	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.071	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.113	.071	.041	.097	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.107	.065	.036	.092	.056	.031	.064	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.102	.059	.031	.088	.052	.027	.061	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm										
NAME: SJA1-9W-930-38°					TYPE:Downlight			SERIAL No.:		
SPEC.:3000K					DIM.: φ70mm*H150mm					
MFR.: NEKO LIGHTING AG										
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	22.0	23.0	22.2	23.2	23.3	22.8	23.8	23.0	24.0	24.1
3H	22.0	22.9	22.2	23.1	23.3	22.7	23.7	23.0	23.9	24.1
4H	22.0	22.8	22.2	23.0	23.3	22.7	23.6	23.0	23.8	24.1
6H	22.0	22.8	22.3	23.1	23.3	22.8	23.6	23.1	23.9	24.1
8H	22.1	22.8	22.4	23.1	23.4	22.9	23.7	23.2	23.9	24.2
12H	22.2	22.9	22.5	23.2	23.5	23.0	23.7	23.3	24.0	24.3
4H 2H	21.8	22.7	22.1	22.9	23.1	22.6	23.4	22.9	23.7	23.9
3H	21.8	22.5	22.1	22.8	23.1	22.6	23.3	22.9	23.6	23.9
4H	21.9	22.6	22.2	22.9	23.2	22.6	23.3	23.0	23.6	23.9
6H	22.1	22.7	22.4	23.0	23.3	22.8	23.4	23.2	23.7	24.1
8H	22.2	22.7	22.6	23.1	23.4	23.0	23.5	23.3	23.9	24.2
12H	22.4	22.9	22.8	23.2	23.6	23.2	23.7	23.6	24.1	24.4
8H 4H	21.9	22.4	22.2	22.8	23.1	22.6	23.1	23.0	23.5	23.8
6H	22.2	22.6	22.6	23.0	23.4	22.9	23.3	23.3	23.7	24.1
8H	22.4	22.8	22.8	23.2	23.6	23.1	23.5	23.6	23.9	24.4
12H	22.7	23.1	23.2	23.5	24.0	23.5	23.8	24.0	24.3	24.7
12H 4H	21.8	22.3	22.2	22.7	23.1	22.6	23.1	23.0	23.4	23.8
6H	22.2	22.6	22.6	23.0	23.5	22.9	23.3	23.3	23.7	24.1
8H	22.5	22.8	22.9	23.2	23.7	23.2	23.5	23.7	24.0	24.4
Variations with the observer position at spacings:										
S = 1.0H	+ 2.4 / - 4.3					+ 2.3 / - 4.2				
1.5H	+ 3.7 / - 4.4					+ 3.2 / - 4.6				
2.0H	+ 3.6 / - 1.0					+ 5.8 / - 2.0				

CIE Pub.117, 878.8 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.4$)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ70mm*H150mm	
MFR.: NEKO LIGHTING AG		

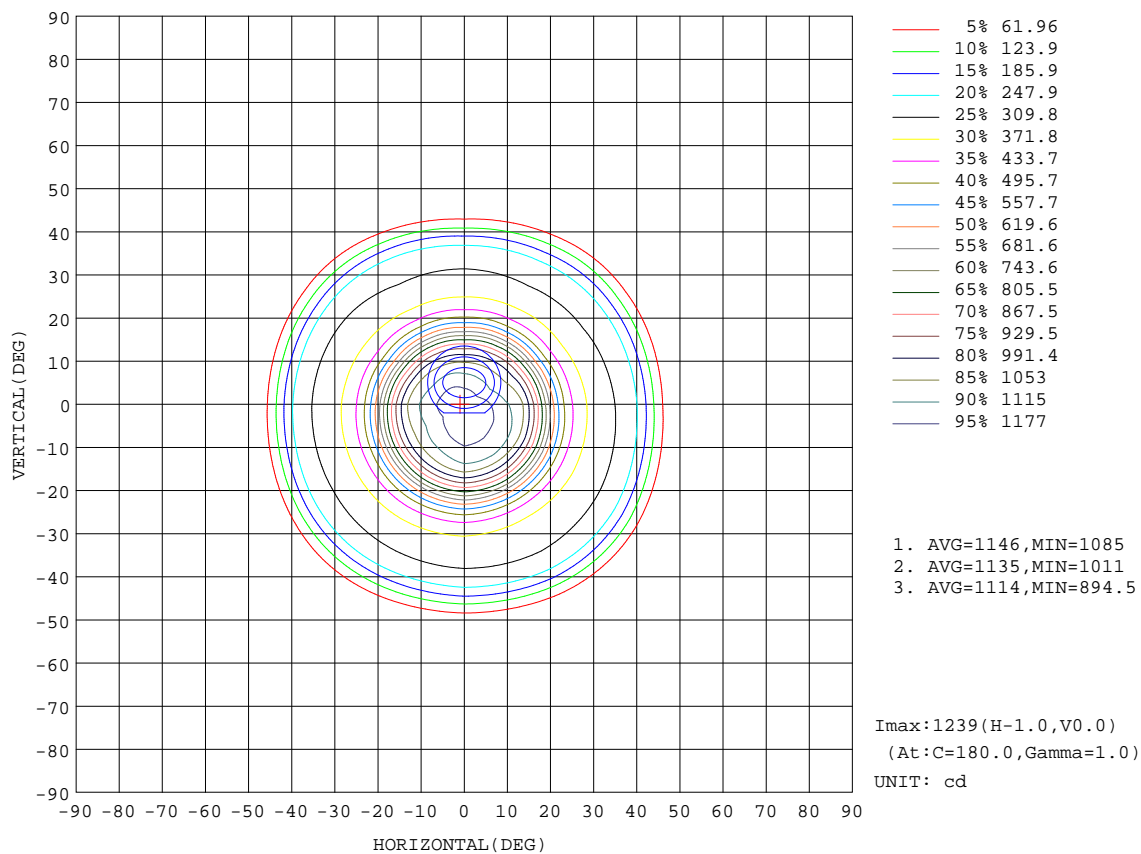
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	83	76	72	82	76	72	68
0.80	91	85	81	91	84	80	89	84	80	76
1.00	96	90	86	96	90	86	94	90	85	81
1.25	101	95	91	100	94	91	98	93	90	85
1.50	104	98	95	103	98	94	100	96	93	88
2.00	107	102	99	106	101	98	103	99	96	91
2.50	109	105	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	109	112	110	108	108	106	105	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:2021-12-16

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:58%
 Test Distance:8.967m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: ϕ 70mm*H150mm	
MFR.: NEKO LIGHTING AG		



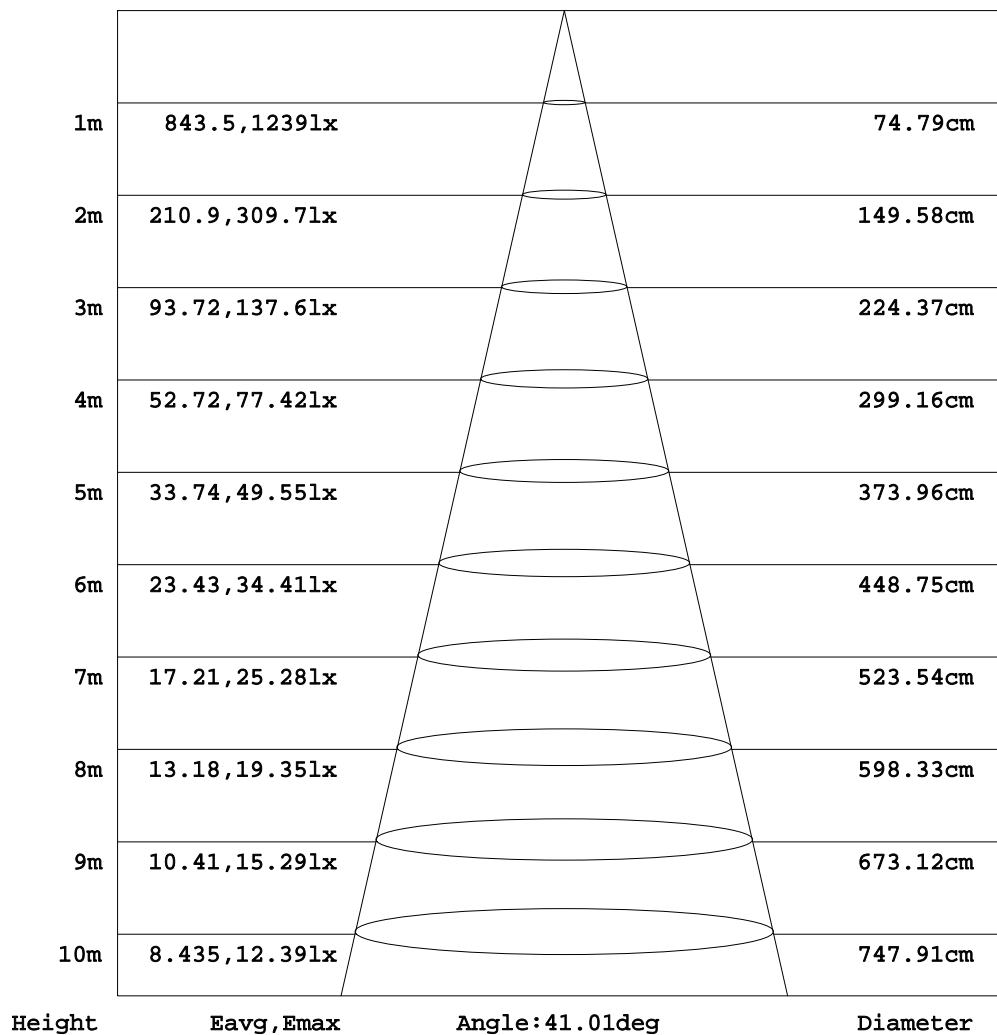
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ70mm*H150mm	
MFR.: NEKO LIGHTING AG		

Flux out:390.5 lm



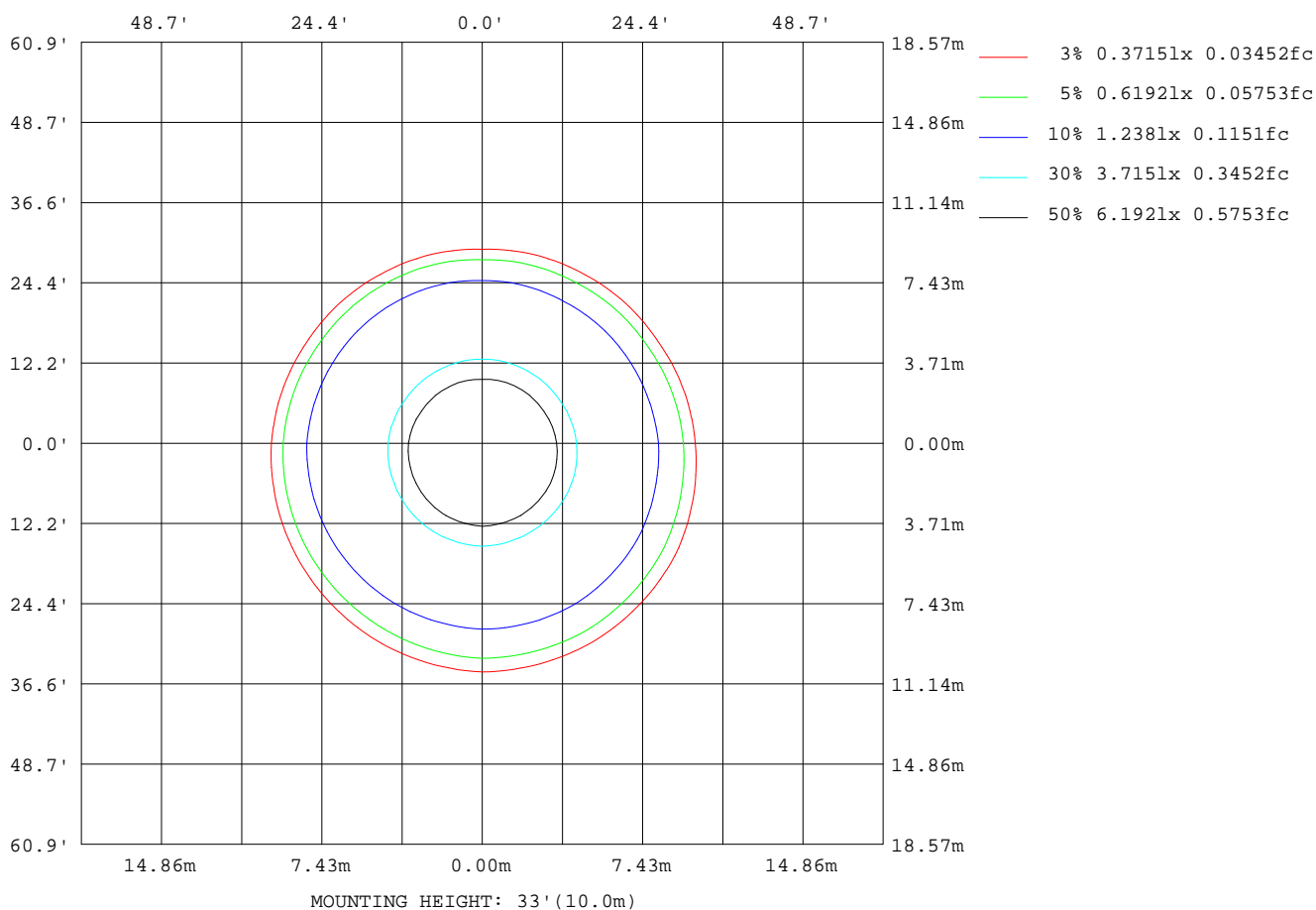
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: ϕ 70mm*H150mm	
MFR.: NEKO LIGHTING AG		



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.8V I:0.0503A P:10.66W PF:0.9593 Freq:50.09Hz Lamp Flux:878.833x1 lm		
NAME: SJA1-9W-930-38°	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ70mm*H150mm	
MFR.: NEKO LIGHTING AG		

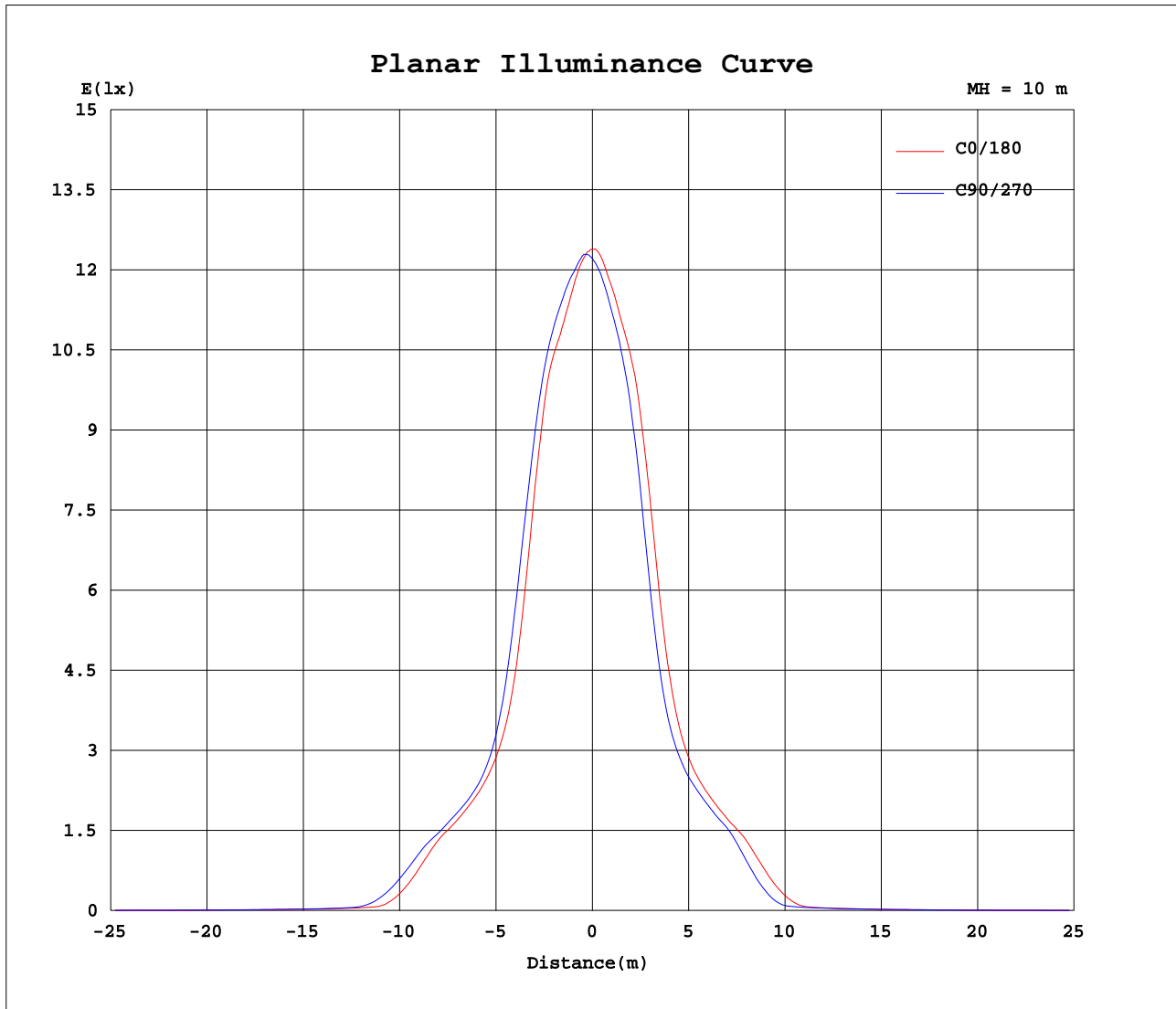
AvgL	cd/m2
L_0~180 (65) av	6148
L_0~180 (75) av	7257
L_0~180 (85) av	14751
L_90~270 (65) av	6479
L_90~270 (75) av	7663
L_90~270 (85) av	15243
L_45 (65) av	6279
L_45 (75) av	7437
L_45 (85) av	15650

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:2021-12-16

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 2021-12-16

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 58%
Test Distance: 8.967m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:58%
Test Distance:8.967m [K=1.0000]
Remarks:

```