

TEST REPORT

1. Applicant

Client Name : FEELUX Co. Ltd.

Address : 235-48 Gwangjeok-ro Gwangjeok-myeon Yangju-si Gyeonggi-do 482-844 Korea

Date of Receipt : 20150820

2. Purpose of Report : Sample test

3. Test Standard / Item : LED / NDV1 35K-24V -1 D1502 VER1.0 35S2A

4. Test Period : 20150820 ~ 20150820

5. Test Environment

Ambient Temp. : (26.18 +- 3) °C

Relative Humidity : (68.41 +- 10) % RH

6. Test Result : Refer to the attachment

Test Item

Name of Product :

Model / Rating :

Model :

Rating :

Confirmation	Test by Jincheol, Kim	Technical manager Soobeom, Park
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The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

This report cannot be reporduced, except in full.

This report is for reference only. It cannot replace the report by standard organization(s).

TEST RESULT

Report Number	Sample Name	Sample Number	Test Standard
20150820-0003			LED

Test Item	Unit	Result	Memo
Beam Distribution Test	-	See attachment	
ATHD	%	0.0	
CIE 1931 Cxy		0.4056, 0.3844	
Correlated Color Temperature	K	3457	
Ra	-	84.79	
Power Factor	%	1.000	
Input Voltage	V	24.000	
Input Current	A	0.051	
Input Watt	W	1.22	
Lamp Flux	lm	92.5	
Efficient	lm/W	75.57	
Illuminance	lx	40	1 m
		10	2 m
		4	3 m

* This test result is for the sample provided by the client.

Sample photo

Click to load image

Luminaire

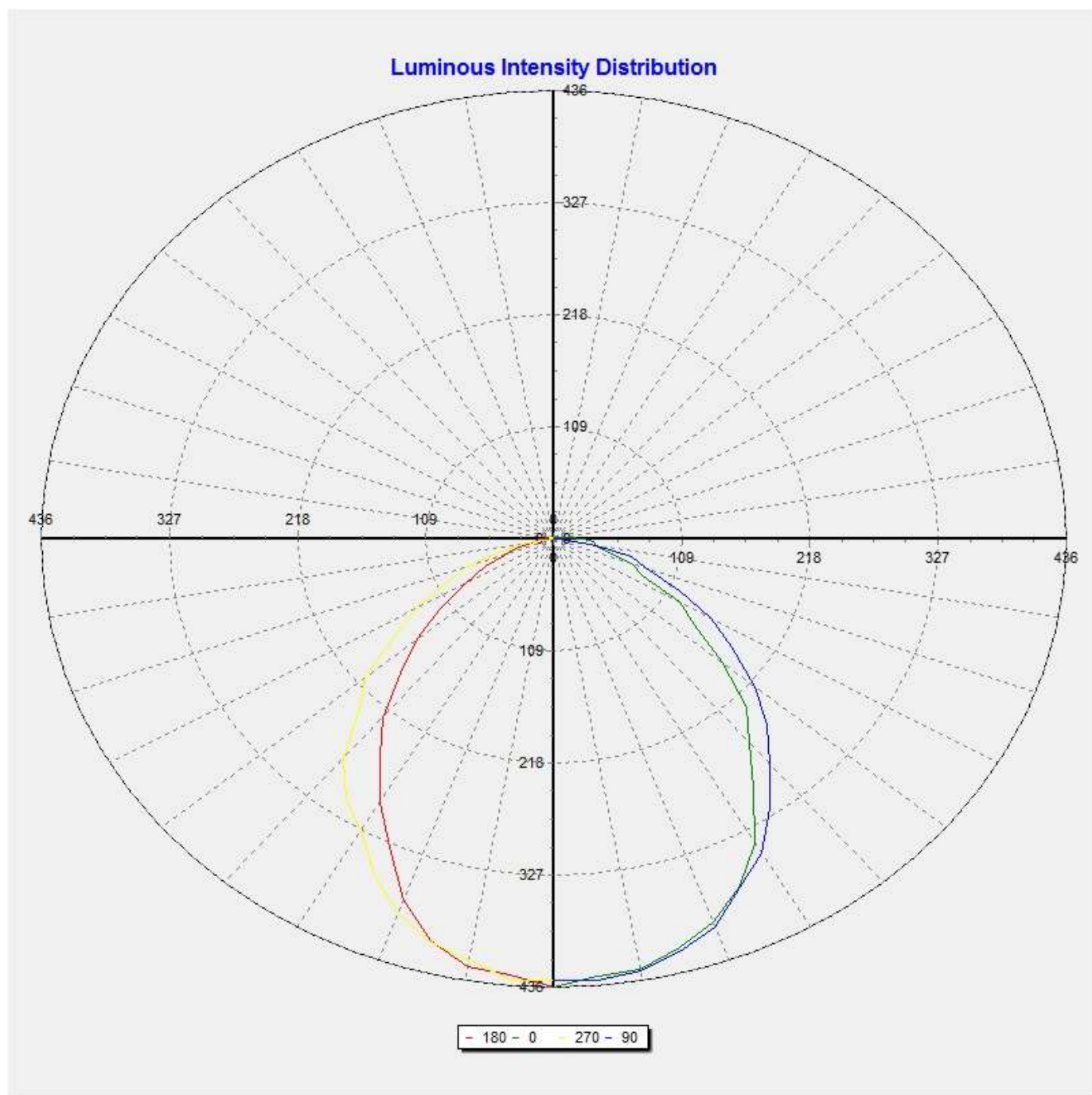
Lamp Report

20150820-0003

No. of lampsFilename : C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt

Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13



All luminous intensity values are in Cd/KLm unit.

Luminaire

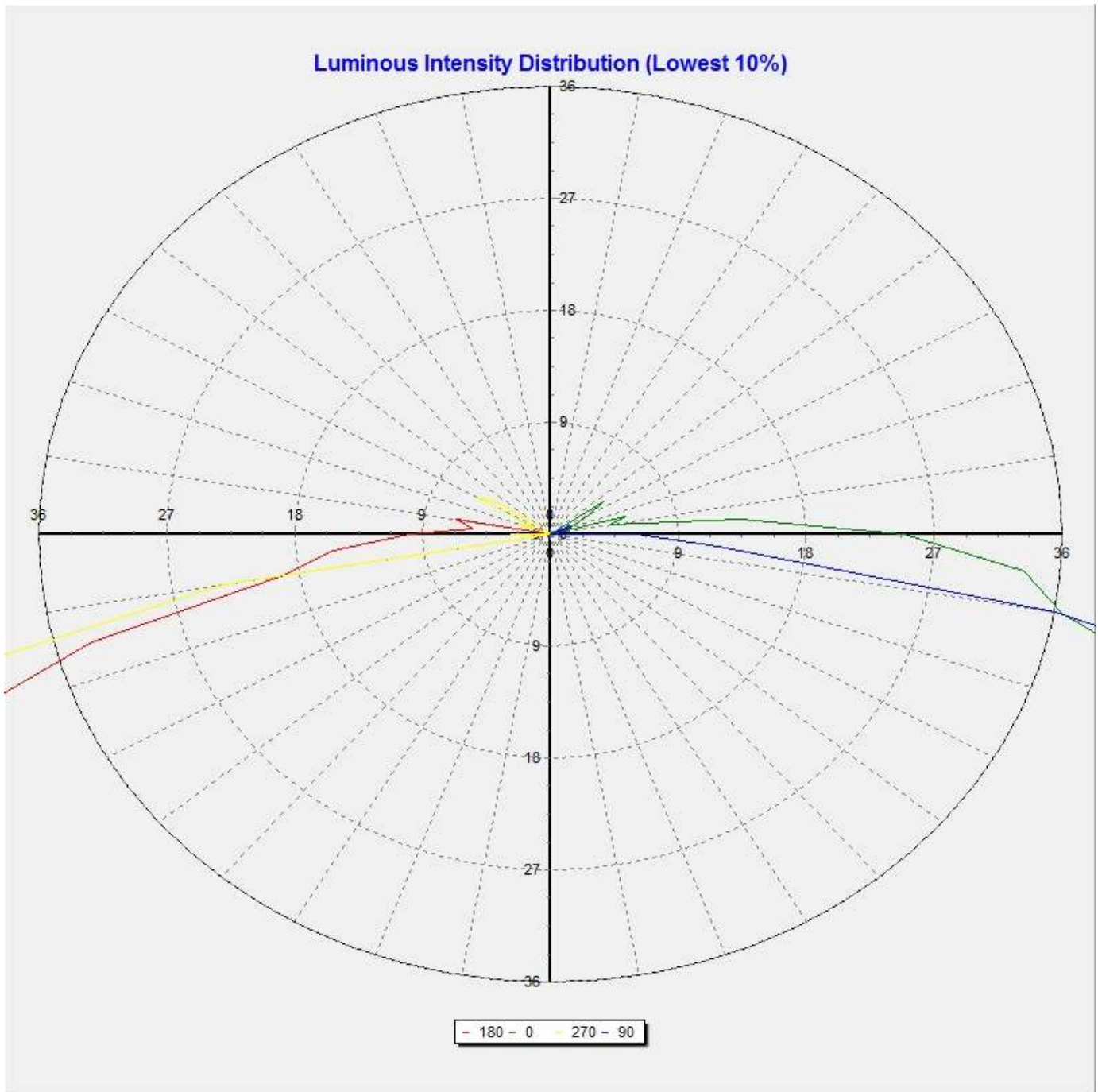
Lamp Report

20150820-0003

No. of lampsFilename :C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt

Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13



All luminous intensity values are in Cd/Klm unit.

Luminaire

Lamp Report

20150820-0003

No. of lampsFilename : C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt

Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13

Luminous Intensity Data

GWC	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
0	40.38	39.95	39.98	39.49	39.92	40.19	40.54	39.98	40.38	39.71	39.81	40.73	40.20	40.03	40.41
5	39.50	39.84	39.63	40.15	39.87	39.71	39.20	39.38	39.04	39.88	39.45	40.07	39.75	40.37	40.31
10	39.33	39.09	39.61	39.14	39.51	39.41	39.02	39.28	39.56	39.55	39.24	39.29	39.93	38.68	39.24
15	38.15	38.74	38.46	38.26	38.14	39.07	38.50	38.25	37.63	38.46	38.72	38.20	38.12	37.89	37.66
20	36.71	36.35	36.33	37.00	37.56	37.25	36.76	37.25	36.68	37.22	37.45	36.68	36.55	36.41	36.12
25	34.53	34.33	34.93	33.71	34.32	35.12	34.88	35.46	35.16	34.63	34.70	33.63	33.86	34.27	33.58
30	31.76	31.90	31.97	32.18	32.22	32.96	32.86	32.74	32.78	32.64	31.68	32.08	31.80	31.09	30.37
35	27.41	27.47	28.50	28.59	28.98	28.76	30.09	29.12	29.91	29.61	29.59	29.41	28.35	27.50	27.19
40	23.93	24.75	25.45	25.14	25.71	25.39	26.96	27.15	27.39	26.44	26.80	25.75	25.73	23.98	23.58
45	21.42	21.25	21.80	21.08	22.42	22.29	23.99	23.31	23.22	23.69	23.87	23.12	22.03	21.57	19.99
50	17.28	17.50	17.59	17.96	19.03	19.14	20.10	20.15	20.91	20.68	20.05	19.73	18.22	17.01	17.10
55	13.55	13.78	14.86	14.54	15.34	15.81	15.92	17.16	17.91	17.03	16.86	16.73	14.76	14.20	13.51
60	11.43	10.64	11.38	12.57	11.97	12.76	13.39	13.24	14.32	14.28	13.79	13.10	12.71	12.14	10.69
65	7.73	8.49	9.05	8.87	10.02	9.48	10.66	10.78	11.36	10.95	10.88	9.75	9.48	9.16	8.91
70	6.49	7.19	6.15	6.68	7.08	7.70	8.20	7.97	8.57	7.71	7.64	7.48	7.49	6.31	6.55
75	4.22	5.31	4.82	4.54	5.58	6.13	5.82	5.11	5.64	6.34	5.74	4.61	4.90	4.81	4.91
80	3.39	3.07	4.10	3.61	3.69	3.70	3.89	3.52	3.40	3.34	3.25	3.61	3.16	3.95	3.51
85	3.09	2.74	2.71	2.45	2.29	1.87	2.11	1.38	1.99	1.10	1.88	2.16	1.47	2.22	1.70
90	2.30	1.27	1.69	1.47	1.41	1.50	0.70	0.43	0.67	0.56	1.17	1.02	0.49	0.75	0.68
95	1.24	0.85	1.61	0.44	0.96	0.66	0.53	0.15	-0.15	0.00	-0.74	0.12	0.65	1.13	0.90
100	0.39	0.83	0.20	0.78	0.36	1.18	0.23	-0.02	0.01	-0.56	0.47	-0.24	0.34	0.46	-0.08
105	0.50	0.39	0.28	0.58	0.20	-0.47	0.70	0.65	0.02	-0.03	0.58	0.39	-0.51	-0.01	0.15
110	-0.09	0.63	0.67	0.09	0.23	0.68	0.14	0.15	0.66	0.14	0.13	0.38	-0.02	-0.06	0.52
115	0.18	-0.72	-0.31	0.30	0.07	0.22	0.19	-0.06	0.29	0.14	-0.11	0.16	0.39	-0.19	-0.23
120	0.29	0.18	-0.37	0.20	-0.10	0.34	0.62	0.31	-0.48	-0.24	0.35	-0.30	0.29	0.26	0.01
125	0.42	-0.53	0.16	-0.52	0.10	0.48	0.57	-0.29	1.25	-0.23	-0.48	0.09	0.46	0.34	0.56
130	-0.09	-0.46	-0.21	0.61	0.54	0.64	0.56	-0.25	0.32	-0.07	0.66	0.32	0.05	0.56	0.12

Luminaire

Lamp Report

20150820-0003

No. of lampsFilename:C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt

Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13

Luminous Intensity Data (Continued)

GWC	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290
0	40.38	39.94	40.19	40.38	39.95	39.98	39.49	39.92	40.19	40.54	39.98	40.38	39.71	39.81	40.73
5	39.77	40.14	39.81	39.45	39.21	39.01	39.34	39.37	39.63	39.23	39.37	39.40	39.95	39.47	39.46
10	39.23	39.08	39.40	39.10	38.20	38.21	38.36	38.31	38.51	38.78	38.74	38.14	38.51	39.11	39.45
15	37.01	37.77	37.99	37.41	37.09	37.21	37.63	37.12	36.96	37.56	37.31	37.60	37.59	37.67	38.11
20	35.85	35.43	35.32	34.62	34.91	34.08	34.93	35.35	35.90	35.08	36.07	35.23	35.84	35.98	36.31
25	32.97	32.81	33.12	30.69	30.92	31.36	32.21	31.64	33.72	32.90	33.86	33.40	33.40	34.03	33.28
30	29.52	29.49	28.52	27.46	27.95	28.08	29.04	29.11	29.77	30.23	30.50	31.31	30.37	31.40	31.66
35	26.65	25.94	25.15	23.87	23.82	24.34	24.50	25.18	26.14	27.16	27.62	28.18	28.56	28.24	28.52
40	22.53	21.98	21.66	20.99	20.06	20.74	20.93	21.42	23.10	23.65	24.67	25.27	25.80	25.95	25.97
45	19.56	18.62	17.99	17.10	18.04	17.35	18.02	19.08	18.74	19.98	20.71	21.96	21.58	21.66	21.73
50	15.82	15.22	15.24	14.03	14.19	13.88	14.48	15.23	15.83	16.45	18.45	18.62	19.34	19.07	19.36
55	13.27	12.67	11.48	10.94	11.09	10.79	11.59	12.71	12.83	12.99	14.04	14.45	15.29	15.99	15.70
60	10.12	9.45	9.39	8.14	7.89	8.97	9.55	9.75	10.25	10.86	11.44	12.35	12.52	12.27	12.04
65	7.42	7.36	7.00	5.97	6.73	6.22	6.96	7.42	7.40	8.41	8.59	8.44	9.52	9.32	10.27
70	6.29	5.14	5.83	4.17	5.00	4.86	4.87	5.25	5.91	5.38	5.90	5.60	6.97	6.58	6.90
75	3.73	4.34	3.59	3.10	3.05	2.96	4.00	3.77	3.77	4.21	3.86	4.01	4.22	4.14	4.85
80	2.84	3.32	2.39	1.79	2.20	2.43	3.12	2.39	2.68	2.39	2.70	1.51	2.17	2.42	2.57
85	2.18	1.69	1.76	1.42	2.16	1.56	1.51	1.77	1.53	1.24	1.10	0.38	-0.12	0.39	1.37
90	0.85	1.00	1.16	0.92	0.88	0.85	1.44	1.19	1.21	0.89	0.44	0.53	0.25	0.42	0.05
95	1.29	0.59	1.66	0.50	0.93	0.55	0.05	0.51	0.65	0.29	-0.04	-0.14	-0.11	0.17	0.02
100	-0.24	0.56	0.65	0.62	0.17	0.15	-0.14	0.56	0.48	-0.28	0.64	0.31	-0.05	0.26	0.70
105	-0.23	-0.12	0.22	-0.12	0.42	0.30	0.13	0.26	0.10	-0.28	0.41	0.73	-0.38	0.58	-0.18
110	0.43	0.39	0.64	-0.21	-0.82	-0.19	-0.16	-0.15	0.23	0.35	-0.04	-0.07	0.22	-0.37	-0.09
115	0.22	-0.05	-0.12	0.00	-0.13	-0.06	0.56	0.85	0.47	0.02	-0.15	0.38	0.13	0.51	0.22
120	0.53	-0.14	-0.40	-0.18	0.09	0.51	0.58	-0.14	-0.04	0.32	0.49	-0.28	0.55	-0.11	0.20
125	-0.03	-0.11	0.41	-0.06	-0.03	0.05	0.30	0.12	0.20	-0.16	0.11	-0.39	0.41	0.33	0.03
130	0.06	0.35	0.03	0.01	0.58	0.35	0.24	0.47	0.43	-0.20	0.67	-0.20	0.07	-0.37	0.44

Luminaire

Lamp Report

20150820-0003

No. of lampsFilename : C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt

Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13

Luminous Intensity Data (Continued)

GWC	300	310	320	330	340	350	360
0	40.20	40.03	40.41	40.38	39.94	40.19	40.38
5	39.54	39.95	39.69	39.59	39.84	40.12	39.50
10	38.89	39.30	38.77	39.23	39.77	38.74	39.33
15	37.98	38.18	37.86	38.14	37.64	36.99	38.15
20	36.65	36.48	36.82	36.56	35.32	36.18	36.71
25	34.28	33.69	33.90	33.43	33.67	33.08	34.53
30	31.42	31.67	31.21	31.21	30.43	30.23	31.76
35	28.47	27.80	27.63	26.94	27.12	26.15	27.41
40	24.90	24.00	23.87	24.05	23.14	22.70	23.93
45	21.76	20.87	21.05	19.97	19.83	19.83	21.42
50	18.62	17.58	17.19	16.71	16.31	16.25	17.28
55	14.84	14.24	14.12	14.00	13.04	12.50	13.55
60	11.70	11.26	10.75	11.18	10.25	9.91	11.43
65	8.70	9.46	8.99	8.11	7.52	7.72	7.73
70	6.64	6.76	5.90	6.22	5.85	5.92	6.49
75	4.39	4.48	4.97	4.57	4.63	4.47	4.22
80	2.83	3.16	2.63	2.86	2.96	2.81	3.39
85	1.31	2.07	2.58	2.06	1.95	2.67	3.09
90	1.05	0.92	0.64	1.26	1.02	1.08	2.30
95	-0.01	0.11	0.41	1.55	0.25	1.22	1.24
100	-0.17	0.15	0.49	-0.38	0.70	0.77	0.39
105	-0.02	0.20	-0.18	-0.24	0.32	-0.40	0.50
110	-0.40	-0.08	-0.27	-0.06	-0.07	0.03	-0.09
115	0.02	0.07	0.29	0.29	-0.14	0.10	0.18
120	0.01	-0.26	-0.10	-0.41	0.53	0.17	0.29
125	-0.05	0.01	0.40	0.06	1.07	0.49	0.42
130	0.10	-0.01	0.14	0.47	0.28	-0.41	-0.09

Luminaire

Lamp Report

20150820-0003

No. of lampsFilename : C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt

Lamp flux (lm)Operator3 Current (A) 0.051

Total flux (lm)Date 93 Power Factor 1 2015-08-20 오후 1:31:13

Luminous Flux Table

Total Lamp Lumens: 92.5

Luminaire Efficiency (lm/W): 92.49

CIE Classification: Direct

Elevation	Lumens	Cumulative	Lamp %	Luminaire %
0	0.24	0.24	0.26	0.26
5	1.89	2.13	2.31	2.31
10	3.72	5.85	6.33	6.33
15	5.37	11.22	12.13	12.13
20	6.78	18.00	19.46	19.46
25	7.78	25.78	27.87	27.87
30	8.46	34.24	37.02	37.02
35	8.63	42.88	46.35	46.36
40	8.53	51.41	55.57	55.58
45	8.08	59.49	64.31	64.32
50	7.35	66.84	72.26	72.26
55	6.37	73.21	79.14	79.15
60	5.39	78.59	84.96	84.97
65	4.32	82.91	89.63	89.64
70	3.31	86.22	93.21	93.22
75	2.41	88.63	95.81	95.82
80	1.61	90.24	97.55	97.56
85	0.97	91.20	98.60	98.61
90	0.52	91.72	99.16	99.17
95	0.29	92.01	99.47	99.48
100	0.15	92.16	99.63	99.64
105	0.07	92.23	99.71	99.72
110	0.05	92.29	99.77	99.78
115	0.05	92.34	99.82	99.83
120	0.04	92.38	99.87	99.88
125	0.07	92.45	99.95	99.96
130	0.04	92.49	99.99	100.00

Luminaire

Lamp Report

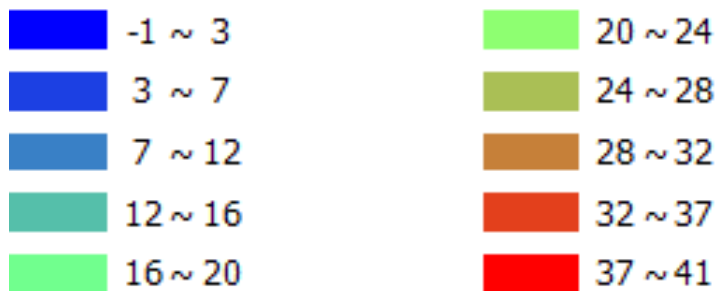
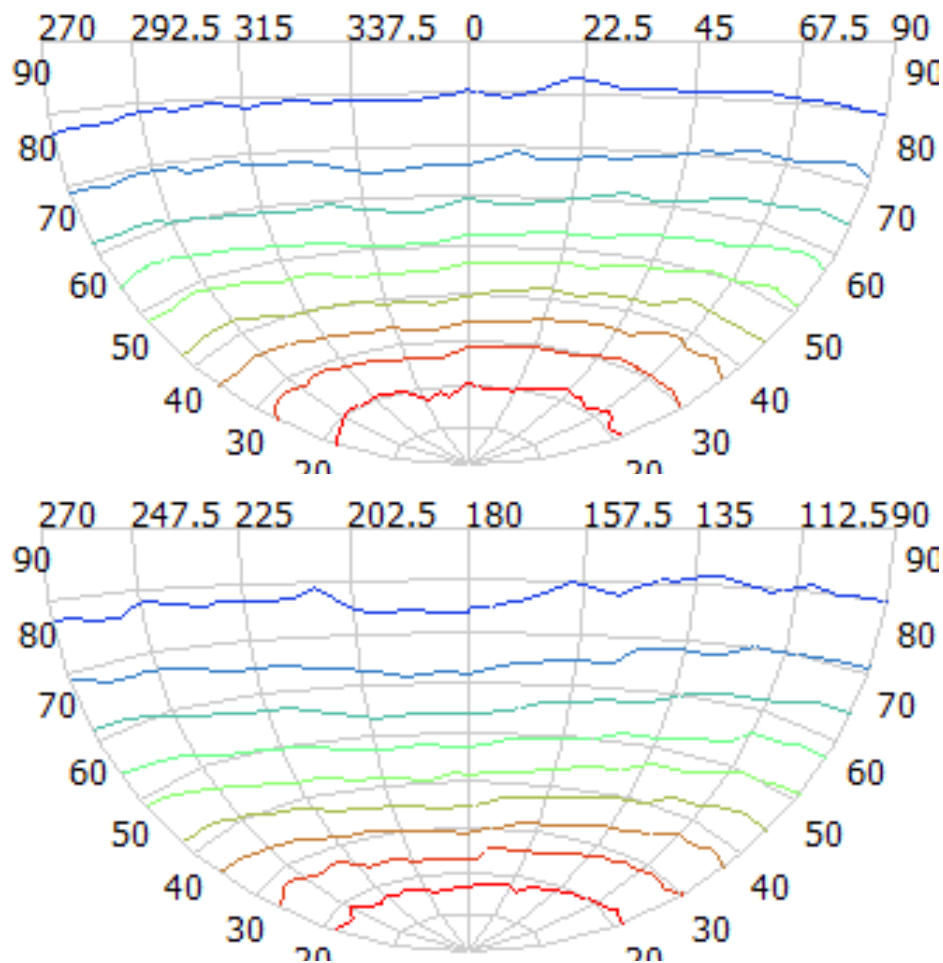
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Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13

IsoCandela (Type C)



Luminaire

Lamp Report

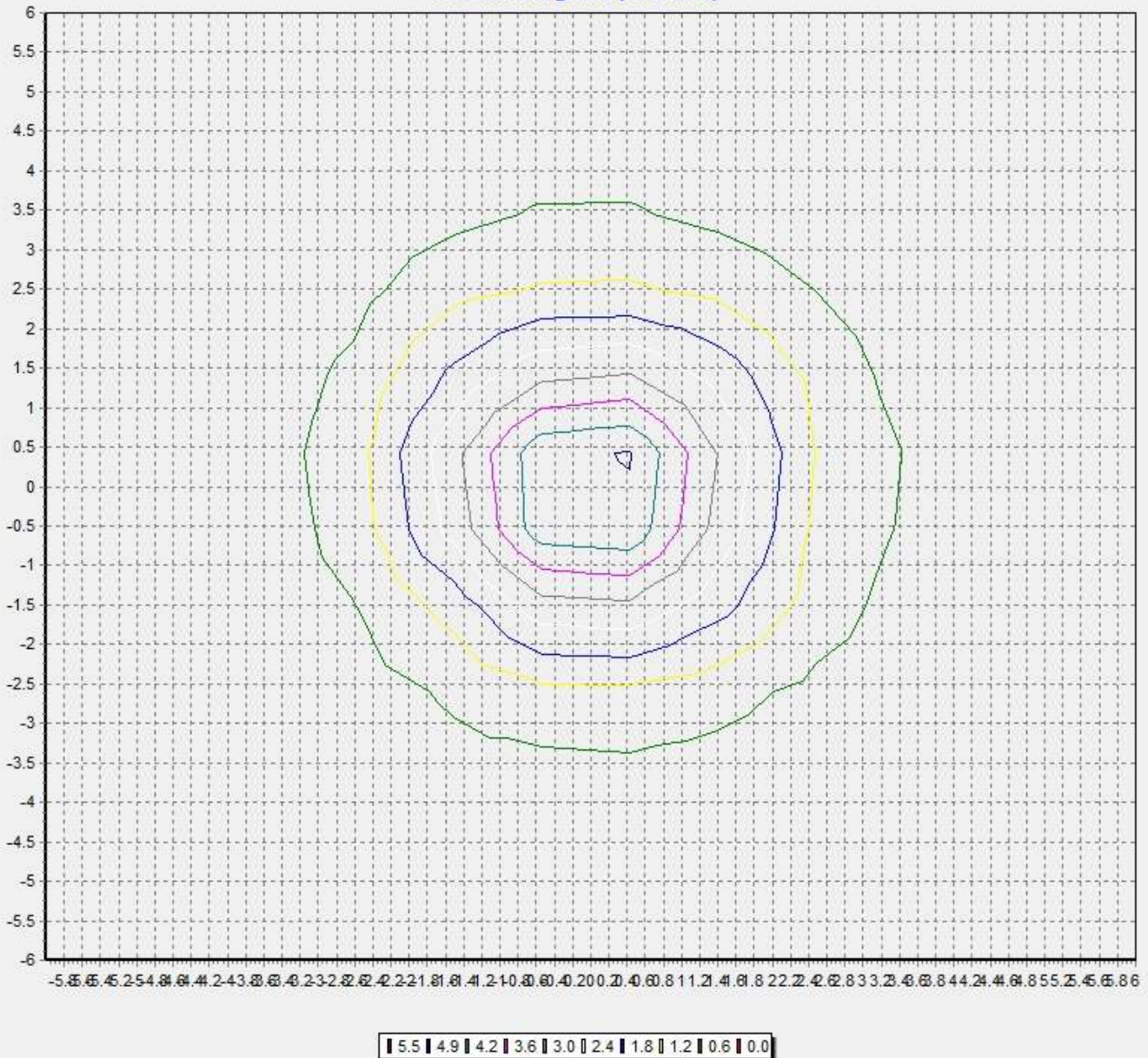
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Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13

IsoLux Diagram (Ground)



Pole Height (m): 2.7

Area Width (m): 12

Luminaire

Lamp Report

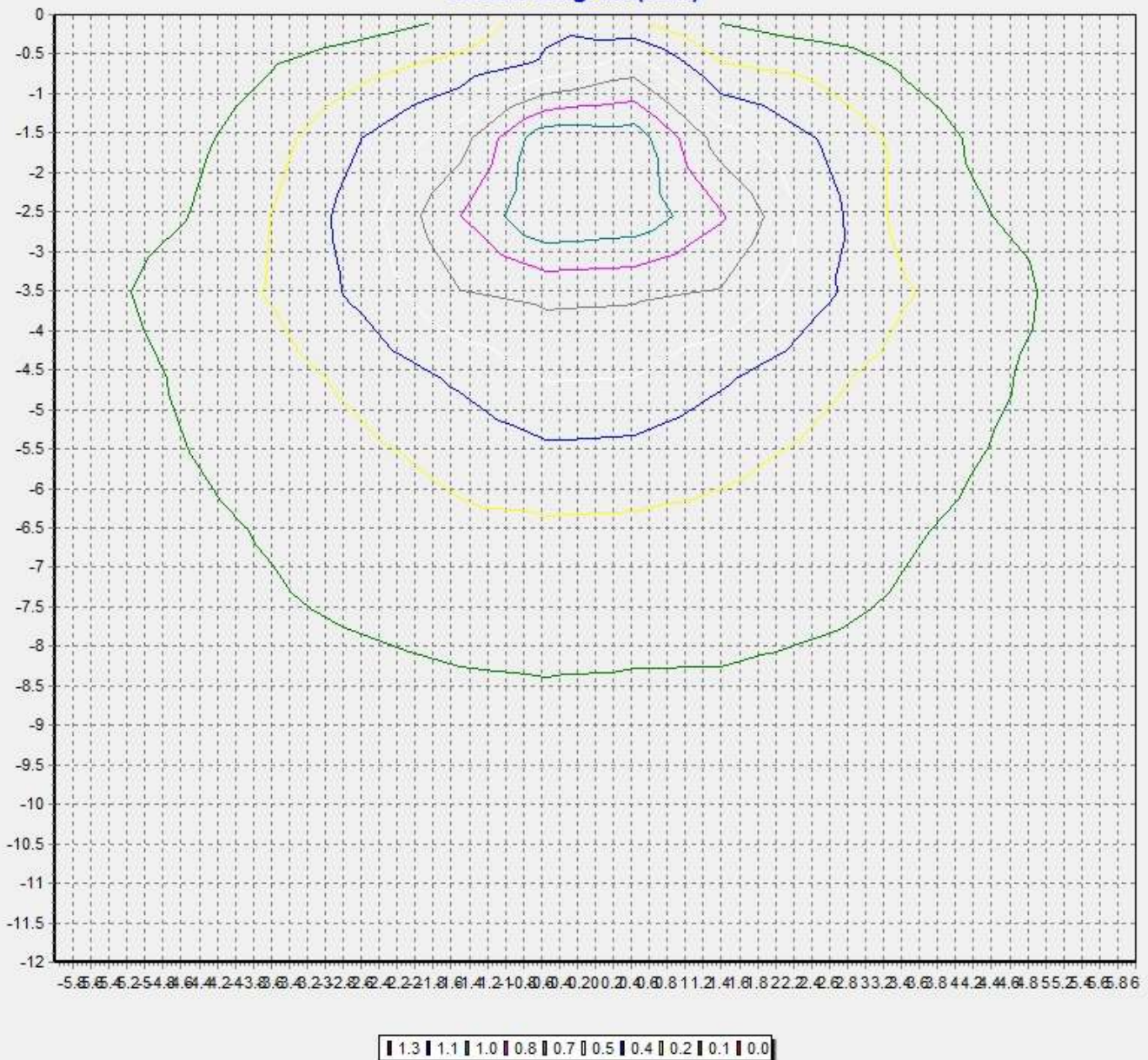
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Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lrDate 93 Power Factor 1 2015-08-20 오후 1:31:13

IsoLux Diagram (Wall)



Pole Height (m): 2.7

Wall Distance (m): 2.7

Aiming Plane: 0

Wall Height (m): 12

Luminaire

Lamp

Report

20150820-0003

No. of lamps	1	Voltage (V)	24	Filename	C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt
Lamp flux (lm)	93	Current (A)	0.051	Operator	
Total flux (lm)	93	Power Factor	1	Date	2015-08-20 오후 1:31:13

Illuminance Levels (Ground)

6.00	0.03	0.04	0.05	0.06	0.10	0.12	0.13	0.12	0.10	0.06	0.05	0.05	0.03
5.00	0.04	0.05	0.09	0.13	0.14	0.22	0.24	0.23	0.14	0.13	0.09	0.05	0.05
4.00	0.04	0.09	0.11	0.20	0.25	0.43	0.48	0.44	0.26	0.21	0.11	0.09	0.04
3.00	0.05	0.10	0.19	0.29	0.51	0.76	0.90	0.77	0.51	0.29	0.21	0.12	0.05
2.00	0.07	0.10	0.21	0.43	1.09	1.63	2.26	1.64	1.10	0.47	0.24	0.11	0.09
1.00	0.08	0.15	0.32	0.60	1.47	3.12	4.34	3.15	1.60	0.68	0.36	0.18	0.09
0.00	0.07	0.15	0.32	0.63	1.88	4.21	5.54	4.30	2.17	0.78	0.40	0.19	0.10
-1.00	0.07	0.14	0.29	0.54	1.32	2.90	4.24	3.12	1.52	0.64	0.34	0.16	0.09
-2.00	0.07	0.09	0.19	0.36	0.92	1.47	2.12	1.60	1.07	0.45	0.22	0.11	0.08
-3.00	0.04	0.09	0.17	0.23	0.42	0.64	0.83	0.73	0.49	0.28	0.19	0.11	0.05
-4.00	0.03	0.07	0.08	0.17	0.21	0.38	0.45	0.40	0.24	0.20	0.10	0.08	0.04
-5.00	0.03	0.03	0.07	0.11	0.12	0.19	0.21	0.20	0.13	0.12	0.08	0.04	0.04
-6.00	0.02	0.03	0.03	0.05	0.08	0.10	0.11	0.11	0.09	0.05	0.04	0.04	0.03
-6.00	-5.00	-4.00	-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	4.00	5.00	6.00	

Illum. (Max.): 5.54

All illuminance level values are in lux.

Illum. (Min.): 0.02

Illum. Avg.: 0.53

Total Optical Solution Provider



<http://www.jnctech.co.kr>
J & C Technology Co., Ltd.

Luminaire

Lamp Report

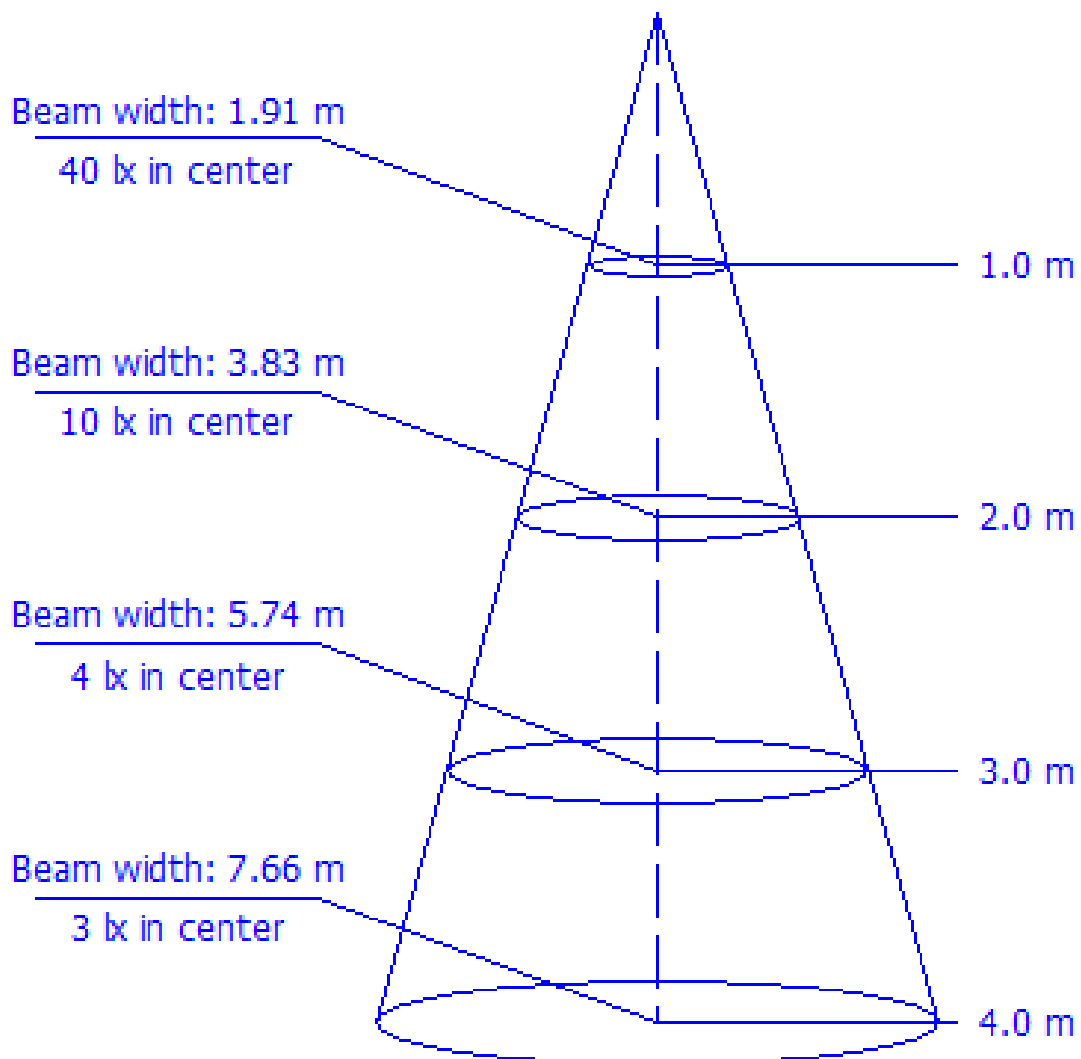
20150820-0003

No. of lampsFilename :C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\W\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt

Lamp flux (lrOperator3 Current (A) 0.051

Total flux (lnDate 93 Power Factor 1 2015-08-20 오후 1:31:13

Illuminance Cone Diagram



Beam Angle = 88 deg.

Based on 50% of maximum illuminance.

Luminaire

Lamp				Report		20150820-0003
No. of lamps	1	Voltage (V)	24	Filename C:\Users\WFEELUX\Desktop\완료 리포트\Data\150820\NDV1 35K-24V -1 D1502 VER1.0 35S2A.jdt		
Lamp flux (lm)	93	Current (A)	0.051	Operator		
Total flux (lm)	93	Power Factor	1	Date		2015-08-20 오후 1:31:13

Coefficient of Utilization

	Refl.	Ceiling (%)	80%	80%	80%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	Refl.	Wall (%)	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
Eff. Floor Cavity	Refl.		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Room CR	0		1.17	1.17	1.17	1.14	1.14	1.14	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.98
Room CR	1		1.03	0.99	0.96	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.90	0.88	0.89	0.87	0.85	0.83
Room CR	2		0.91	0.85	0.79	0.89	0.83	0.78	0.86	0.81	0.76	0.82	0.78	0.75	0.79	0.76	0.73	0.71
Room CR	3		0.81	0.73	0.67	0.79	0.72	0.67	0.76	0.70	0.65	0.73	0.68	0.64	0.71	0.67	0.63	0.61
Room CR	4		0.72	0.64	0.58	0.71	0.63	0.57	0.68	0.62	0.57	0.66	0.60	0.56	0.64	0.59	0.55	0.53
Room CR	5		0.65	0.57	0.51	0.64	0.56	0.50	0.62	0.55	0.50	0.60	0.54	0.49	0.58	0.53	0.48	0.46
Room CR	6		0.59	0.51	0.45	0.58	0.50	0.44	0.56	0.49	0.44	0.55	0.48	0.43	0.53	0.47	0.43	0.41
Room CR	7		0.54	0.46	0.40	0.53	0.45	0.40	0.51	0.44	0.39	0.50	0.44	0.39	0.49	0.43	0.39	0.37
Room CR	8		0.49	0.41	0.36	0.49	0.41	0.36	0.47	0.40	0.35	0.46	0.40	0.35	0.45	0.39	0.35	0.33
Room CR	9		0.46	0.38	0.32	0.45	0.37	0.32	0.44	0.37	0.32	0.43	0.36	0.32	0.42	0.36	0.32	0.30
Room CR	10		0.42	0.35	0.30	0.42	0.34	0.30	0.41	0.34	0.29	0.40	0.34	0.29	0.39	0.33	0.29	0.27