

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 : 20150408

2. Purpose of Report : Test

3. Test Standard / Item : LED / NDV3 30K-24V-1

4. Test Period : 20150408 ~ 20150408

5. Test Environment

Ambient Temp. : (24.28 +- 3) °C

Relative Humidity : (20.75 +- 10) % RH

6. Test Result : Refer to the attachment

Test Item

Name of Product :

FEELUX

Model / Rating :

Model : FEELUX

Rating :

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

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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
20150408-0001	FEELUX		LED

Test Item	Unit	Result	Memo
Beam Distribution Test	-	See attachment	
ATHD	%	0.0	
CIE 1931 Cxy		0.4323, 0.3998	
Correlated Color Temperature	K	3061	
Ra	-	83.94	
Power Factor	%	1.000	
Input Voltage	V	23.990	
Input Current	A	0.101	
Input Watt	W	2.42	
Lamp Flux	lm	179	
Efficient	lm/W	73.88	
Illuminance	lx	76	1 m
		19	2 m
		8	3 m

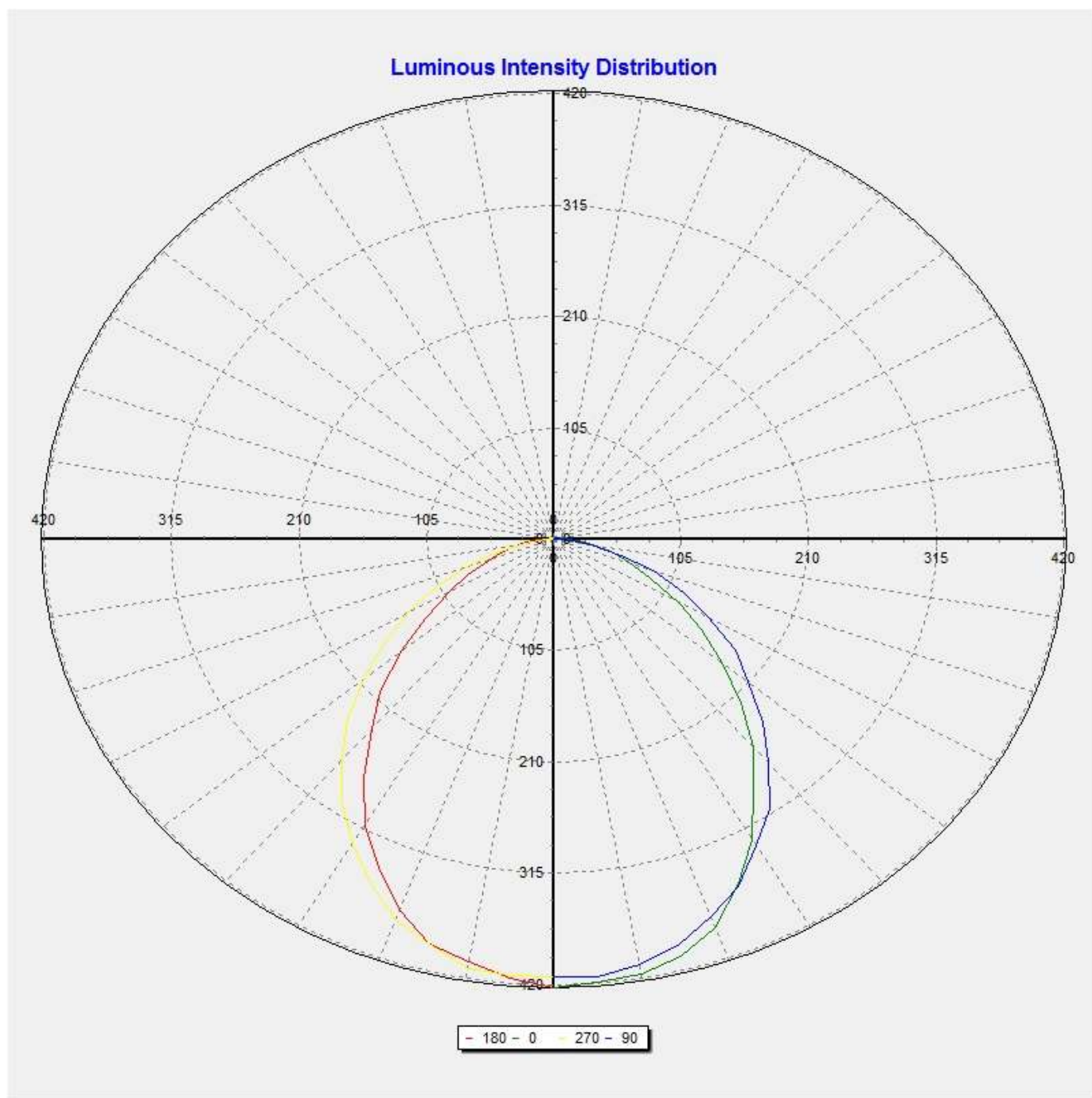
* This test result is for the sample provided by the client.

Sample photo

Click to load image

Luminaire

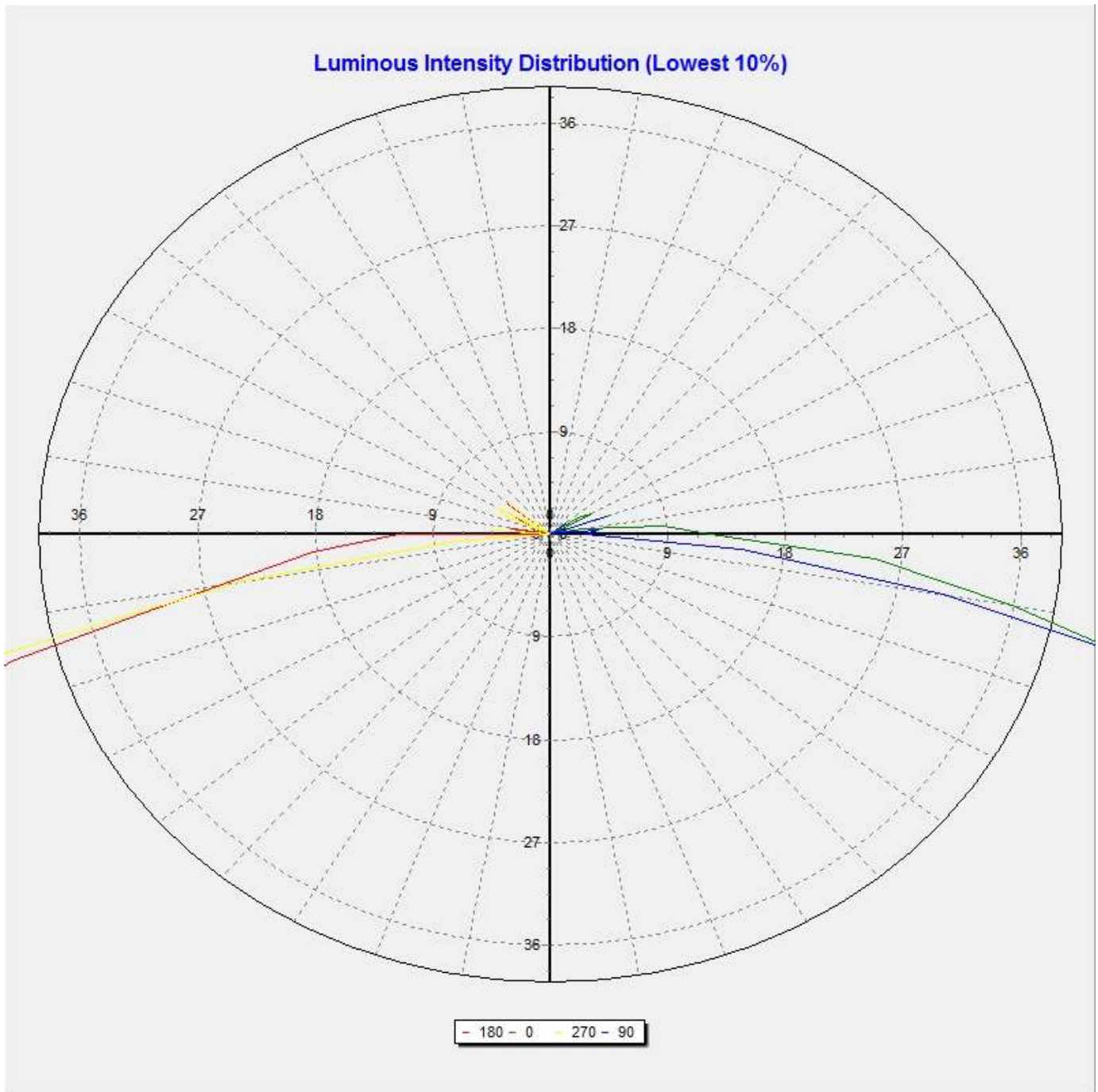
Lamp		Report	20150408-0001
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator Current (A)	0.101
Total flux (lm)	179	Date	2015-04-08 오전 10:35:55
		Power Factor	1



All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150408-0001
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\Startup\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator Current (A)	0.101
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All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150408-0001
No. of lamps	1	Filename C:\Program Files\WJNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator Current (A)	0.101
Total flux (lm)	179	Date	2015-04-08 오전 10:35:55
		Power Factor	1

Luminous Intensity Data

GWC	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
0	75.64	74.94	74.61	75.82	74.65	75.25	75.20	75.05	74.74	73.82	74.87	75.72	73.95	74.71	75.19
5	75.04	74.10	74.35	74.28	74.72	74.21	74.98	74.46	73.92	74.13	75.37	74.99	74.69	74.02	74.86
10	74.47	74.13	72.81	72.81	73.22	73.64	73.31	72.90	73.81	72.72	73.74	73.32	73.44	72.92	73.85
15	72.72	72.23	72.37	72.07	71.94	71.44	71.16	71.30	71.50	70.94	71.50	71.87	72.34	71.03	70.94
20	69.78	69.07	68.82	68.81	68.83	68.19	69.17	68.49	68.14	67.84	68.45	68.76	68.14	68.41	68.19
25	64.24	64.48	64.58	64.64	64.79	65.41	64.14	64.61	64.72	64.62	64.18	64.49	64.90	63.47	64.00
30	58.63	58.76	59.07	59.79	60.24	60.66	61.15	59.90	60.81	59.71	59.58	59.75	60.04	59.07	58.43
35	51.39	52.13	52.53	53.08	54.01	54.65	54.99	55.30	54.93	55.56	55.02	55.01	54.80	53.32	54.33
40	45.70	44.93	46.66	45.86	47.90	48.24	49.80	50.11	49.29	49.13	49.30	49.57	49.41	47.47	47.11
45	39.03	39.05	39.80	40.36	41.28	41.39	43.40	44.18	44.01	43.78	43.88	42.90	42.81	41.37	40.60
50	32.42	32.86	32.86	33.38	35.21	35.88	36.02	37.59	38.56	37.45	37.53	36.73	36.74	35.12	34.10
55	26.70	27.31	27.21	27.64	28.57	29.54	30.72	30.57	32.83	32.74	32.32	30.81	29.82	29.07	28.30
60	21.49	21.30	22.19	22.04	23.61	24.05	24.93	24.74	26.47	26.32	26.10	24.72	24.90	23.38	23.57
65	15.87	15.87	16.65	17.34	18.35	18.51	19.35	20.10	20.92	21.12	20.73	19.17	18.92	18.61	17.71
70	11.73	11.89	12.31	13.47	14.16	13.94	14.58	15.14	15.15	15.71	14.83	14.74	14.53	13.49	13.56
75	9.17	8.97	8.84	10.18	9.84	10.44	10.26	10.59	11.17	10.29	10.55	9.92	9.59	9.79	9.20
80	6.43	6.44	7.57	6.46	6.39	6.17	6.83	6.56	6.46	5.48	6.16	6.57	5.87	6.14	6.58
85	4.47	4.85	4.76	4.77	4.89	3.83	4.08	2.96	2.84	2.63	2.40	2.98	3.41	4.04	4.66
90	2.19	2.53	3.08	2.29	2.47	2.38	2.33	1.01	1.03	0.47	0.32	1.61	1.47	1.23	1.75
95	1.55	1.70	1.37	1.48	0.69	1.04	1.07	0.66	0.12	0.65	-0.15	-0.13	0.94	0.89	1.03
100	0.46	1.47	1.09	0.56	0.53	1.12	0.22	-0.16	0.12	0.08	0.70	0.13	0.13	-0.63	0.81
105	-0.02	1.08	-0.06	0.37	-0.27	0.18	0.29	1.21	0.84	-0.24	-0.62	0.25	0.86	0.10	0.13
110	0.87	0.55	-0.05	0.45	0.40	0.38	0.48	-0.15	0.05	0.82	0.28	-0.12	0.63	0.14	0.34
115	0.06	0.81	-0.24	0.73	0.35	0.03	0.57	0.35	0.25	-0.04	0.40	1.24	-0.25	1.21	0.29
120	0.65	1.17	0.60	0.45	0.56	-0.12	0.12	0.20	0.72	-0.29	0.66	0.55	0.54	-0.16	0.33
125	0.46	0.61	-0.13	1.07	0.14	0.91	0.43	0.67	1.02	-0.05	1.51	0.46	-0.08	-0.25	0.30
130	0.07	0.62	0.24	0.83	0.37	0.73	0.96	0.63	0.55	0.26	-0.12	1.15	0.44	0.09	0.42

Luminaire

Lamp		Report		20150408-0001
No. of lamps	1	Filename	C:\Program Files\WJNCTECH\GoniLED\StartUp\Data\150408\WNDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator	Current (A)	0.101
Total flux (lm)	179	Date	Power Factor	1
				2015-04-08 오전 10:35:55

Luminous Intensity Data (Continued)

GWC	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290
0	74.66	74.63	74.07	75.64	74.94	74.61	75.82	74.65	75.25	75.20	75.05	74.74	73.82	74.87	75.72
5	74.07	75.05	75.28	74.31	74.88	74.67	74.72	74.76	74.15	73.84	74.67	74.84	73.92	74.14	74.88
10	73.26	73.66	73.18	72.37	73.56	73.11	73.07	73.38	73.31	72.94	73.47	72.62	73.47	73.18	73.48
15	71.64	71.65	70.89	70.78	70.61	70.36	70.69	71.10	70.77	71.08	71.61	70.90	70.56	71.03	70.58
20	68.19	67.36	67.80	66.56	66.74	66.03	67.75	67.72	68.53	67.60	68.30	67.85	68.17	68.21	67.36
25	64.07	62.98	62.76	61.03	61.56	61.91	62.69	63.09	64.41	64.03	63.99	63.57	64.03	63.25	64.24
30	58.17	59.12	57.71	55.86	56.98	56.86	57.41	57.49	58.53	58.62	59.68	59.47	59.46	59.57	59.84
35	51.97	51.70	52.06	48.89	50.30	50.07	51.56	52.19	53.17	54.19	54.44	54.50	54.43	54.21	54.39
40	46.26	45.30	44.30	41.83	43.51	43.59	44.18	45.34	46.61	47.85	48.18	48.50	48.50	49.12	48.95
45	39.13	39.03	38.42	36.26	35.97	36.88	37.46	39.55	40.24	40.57	42.10	42.66	43.08	42.08	42.74
50	33.55	32.79	32.51	29.23	29.82	30.51	31.70	31.84	33.93	35.01	35.70	36.81	36.51	36.27	36.42
55	26.56	26.25	25.20	23.02	24.89	24.81	25.62	26.85	27.34	28.84	30.15	30.92	30.52	30.28	30.00
60	21.02	20.85	19.97	17.85	18.76	19.30	19.63	20.75	22.47	23.11	24.05	24.15	24.66	24.65	23.29
65	15.81	15.86	15.22	14.08	14.66	14.16	15.24	16.09	17.17	17.98	18.67	19.23	19.15	19.16	18.34
70	11.59	11.81	11.58	9.71	10.20	11.05	11.20	11.88	12.65	12.85	12.93	13.54	13.52	13.23	13.81
75	9.24	8.65	7.80	7.64	7.68	7.72	7.99	8.50	8.59	8.64	8.36	8.28	9.37	8.37	9.19
80	6.93	6.02	5.94	4.64	5.26	5.29	5.46	6.11	5.41	5.78	4.89	5.13	4.35	4.48	5.64
85	4.01	3.95	3.82	3.27	3.68	3.16	3.92	3.11	2.78	2.07	1.29	1.73	1.29	1.53	2.50
90	2.37	2.64	2.18	2.08	2.15	2.19	2.29	1.87	1.93	0.91	0.02	0.07	0.05	0.19	0.86
95	1.98	1.72	1.56	-0.06	0.85	0.79	0.93	0.59	0.26	0.59	-0.03	0.38	0.76	0.87	0.30
100	0.86	0.89	0.79	0.55	0.12	0.90	0.06	0.26	-0.06	0.11	-0.09	-0.03	-0.09	0.39	0.66
105	0.43	0.08	0.69	0.10	0.74	0.16	-0.24	-0.35	0.19	0.60	0.68	0.23	-0.34	0.01	0.04
110	0.33	0.28	0.82	0.15	0.77	-0.63	0.26	0.34	0.85	0.73	0.39	0.40	0.04	0.38	0.84
115	-0.02	0.23	0.12	0.35	0.27	0.49	0.84	0.09	0.06	0.24	0.17	0.67	0.67	0.34	0.29
120	-0.22	-0.19	0.28	0.64	0.16	1.18	0.19	0.28	0.12	0.12	0.40	0.39	0.82	0.24	0.78
125	0.07	-0.43	-0.30	-0.08	0.85	0.29	0.88	0.36	0.39	0.01	0.16	0.91	-0.07	0.19	0.68
130	-0.02	0.66	1.04	0.75	0.69	0.75	0.38	0.18	0.54	0.24	0.43	0.59	0.74	0.12	0.70

Luminaire

Lamp		Report	20150408-0001
No. of lamps	1	Filename C:\Program Files\WJNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator Current (A)	0.101
Total flux (lm)	179	Date	2015-04-08 오전 10:35:55
		Power Factor	1

Luminous Intensity Data (Continued)

GWC	300	310	320	330	340	350	360
0	73.95	74.71	75.19	74.66	74.63	74.07	75.64
5	73.95	74.29	74.28	73.94	74.79	74.48	75.04
10	72.80	73.20	73.14	73.05	72.72	73.09	74.47
15	71.32	71.20	71.48	71.21	71.88	71.47	72.72
20	67.75	68.11	68.19	68.49	67.99	68.14	69.78
25	63.80	64.54	63.30	63.99	62.72	62.98	64.24
30	58.95	59.36	58.29	57.38	56.99	56.69	58.63
35	53.95	52.50	51.75	51.05	50.23	50.57	51.39
40	47.46	47.37	45.64	44.66	43.46	43.86	45.70
45	40.47	39.97	38.08	38.21	36.95	37.81	39.03
50	34.18	34.72	32.80	32.53	31.75	31.89	32.42
55	28.75	27.52	26.64	26.68	25.70	24.76	26.70
60	22.31	22.67	22.19	20.92	19.16	19.67	21.49
65	18.39	17.52	16.12	16.15	14.95	14.81	15.87
70	12.89	13.47	12.09	12.09	11.40	10.72	11.73
75	9.17	9.17	8.61	8.57	8.42	8.40	9.17
80	5.38	5.86	5.60	6.25	4.79	6.36	6.43
85	2.88	3.65	2.84	3.53	4.70	4.13	4.47
90	1.46	1.91	1.90	2.56	2.19	2.05	2.19
95	1.23	0.47	1.02	1.35	1.48	0.80	1.55
100	0.08	-0.06	0.15	0.17	0.60	0.72	0.46
105	0.72	0.14	0.39	0.23	0.61	0.29	-0.02
110	0.16	-0.36	0.10	0.90	0.63	0.53	0.87
115	-0.15	1.01	0.16	-0.56	0.91	0.35	0.06
120	-0.26	-0.29	0.47	0.33	0.44	0.34	0.65
125	1.00	-0.13	0.58	0.49	0.44	0.25	0.46
130	0.62	-0.05	1.04	-0.30	0.37	0.47	0.07

Luminaire

Lamp		Report	20150408-0001
No. of lamps	1	Filename C:\Program Files\JUNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator Current (A)	0.101
Total flux (lm)	179	Date	2015-04-08 오전 10:35:55
		Power Factor	1

Luminous Flux Table

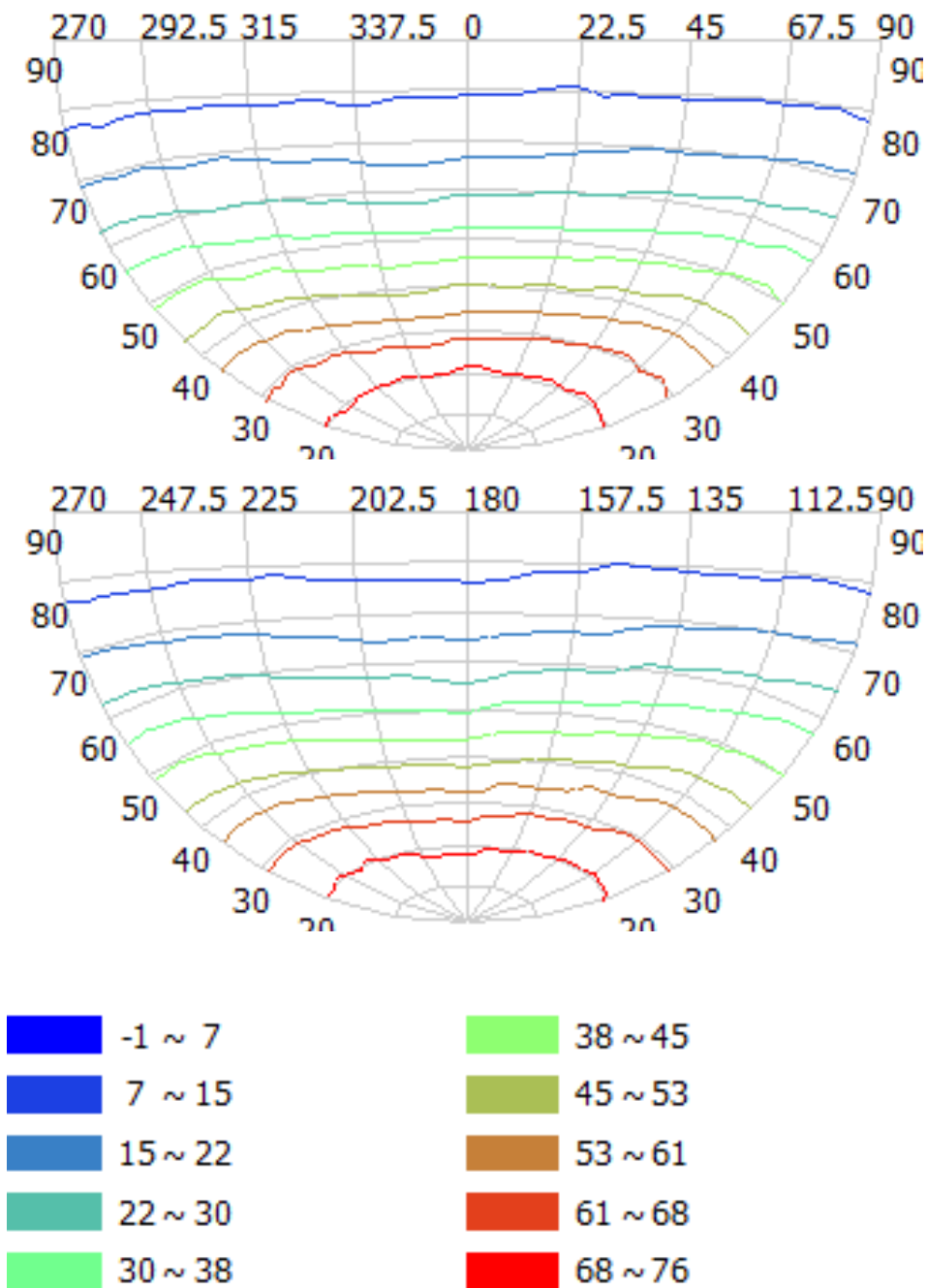
Total Lamp Lumens: 179
 Luminaire Efficiency (lm/W):178.98
 CIE Classification: Direct

Elevation	Lumens	Cumulative	Lamp %	Luminaire %
0	0.45	0.45	0.25	0.25
5	3.56	4.01	2.24	2.24
10	6.97	10.98	6.13	6.13
15	10.12	21.10	11.79	11.79
20	12.77	33.87	18.92	18.92
25	14.78	48.64	27.18	27.18
30	16.12	64.77	36.18	36.19
35	16.67	81.44	45.50	45.50
40	16.49	97.93	54.71	54.72
45	15.67	113.60	63.47	63.47
50	14.38	127.98	71.50	71.51
55	12.66	140.65	78.57	78.58
60	10.70	151.35	84.55	84.56
65	8.67	160.01	89.39	89.40
70	6.63	166.64	93.10	93.11
75	4.81	171.45	95.78	95.79
80	3.17	174.63	97.56	97.57
85	1.84	176.47	98.59	98.60
90	0.91	177.38	99.10	99.11
95	0.47	177.85	99.36	99.37
100	0.20	178.05	99.47	99.48
105	0.14	178.19	99.55	99.56
110	0.19	178.38	99.65	99.66
115	0.17	178.55	99.75	99.76
120	0.16	178.71	99.84	99.85
125	0.17	178.88	99.93	99.94
130	0.10	178.98	99.99	100.00

Luminaire

Lamp		Report	20150408-0001
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator Current (A)	0.101
Total flux (lm)	179	Date	2015-04-08 오전 10:35:55
		Power Factor	1

IsoCandela (Type C)



Luminaire

Lamp

Report

20150408-0001

No. of lamps 1

Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt

Lamp flux (lm) 179

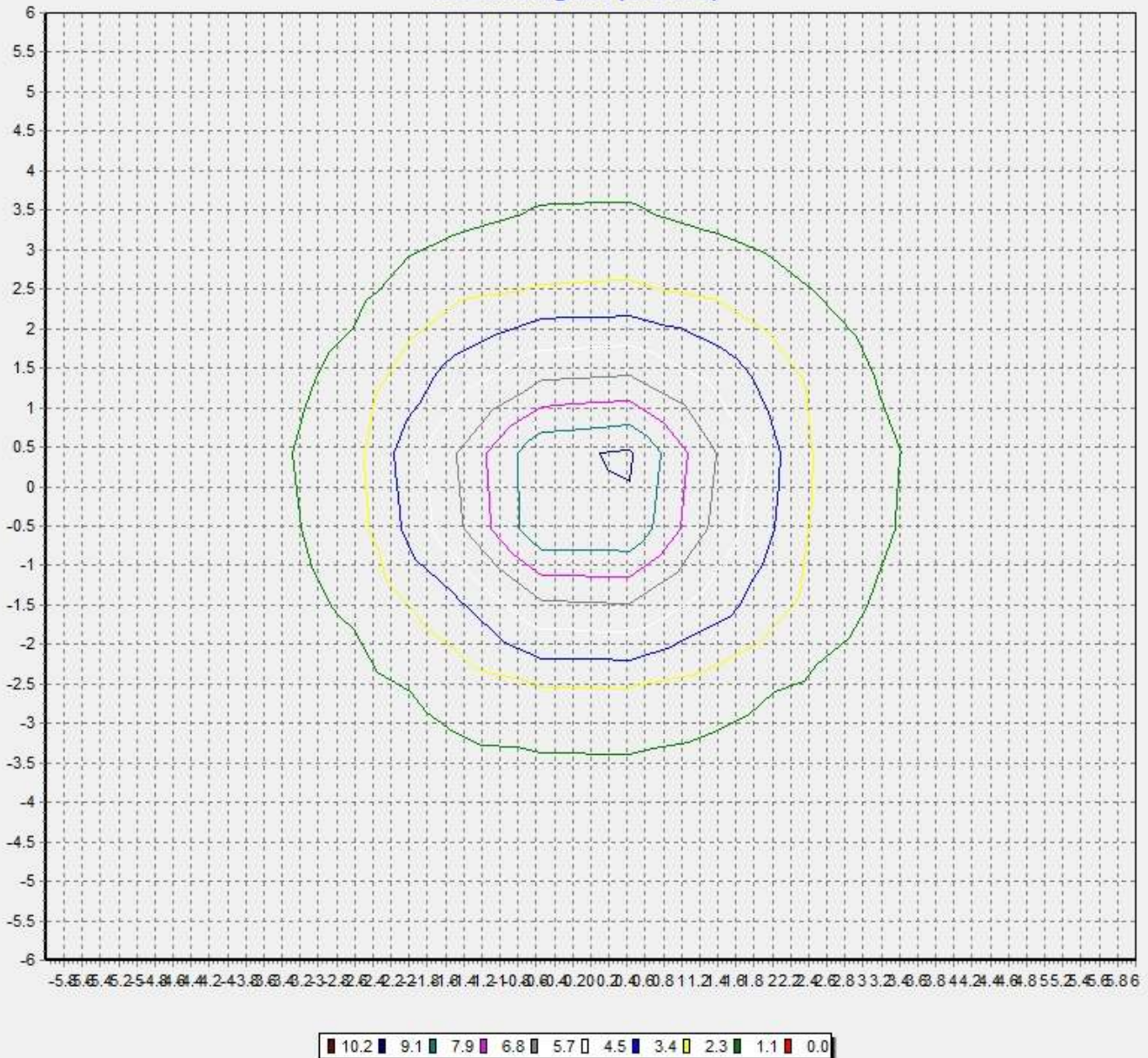
Operator Current (A) 0.101

Total flux (lm) 179

Date Power Factor 1

2015-04-08 오전 10:35:55

IsoLux Diagram (Ground)



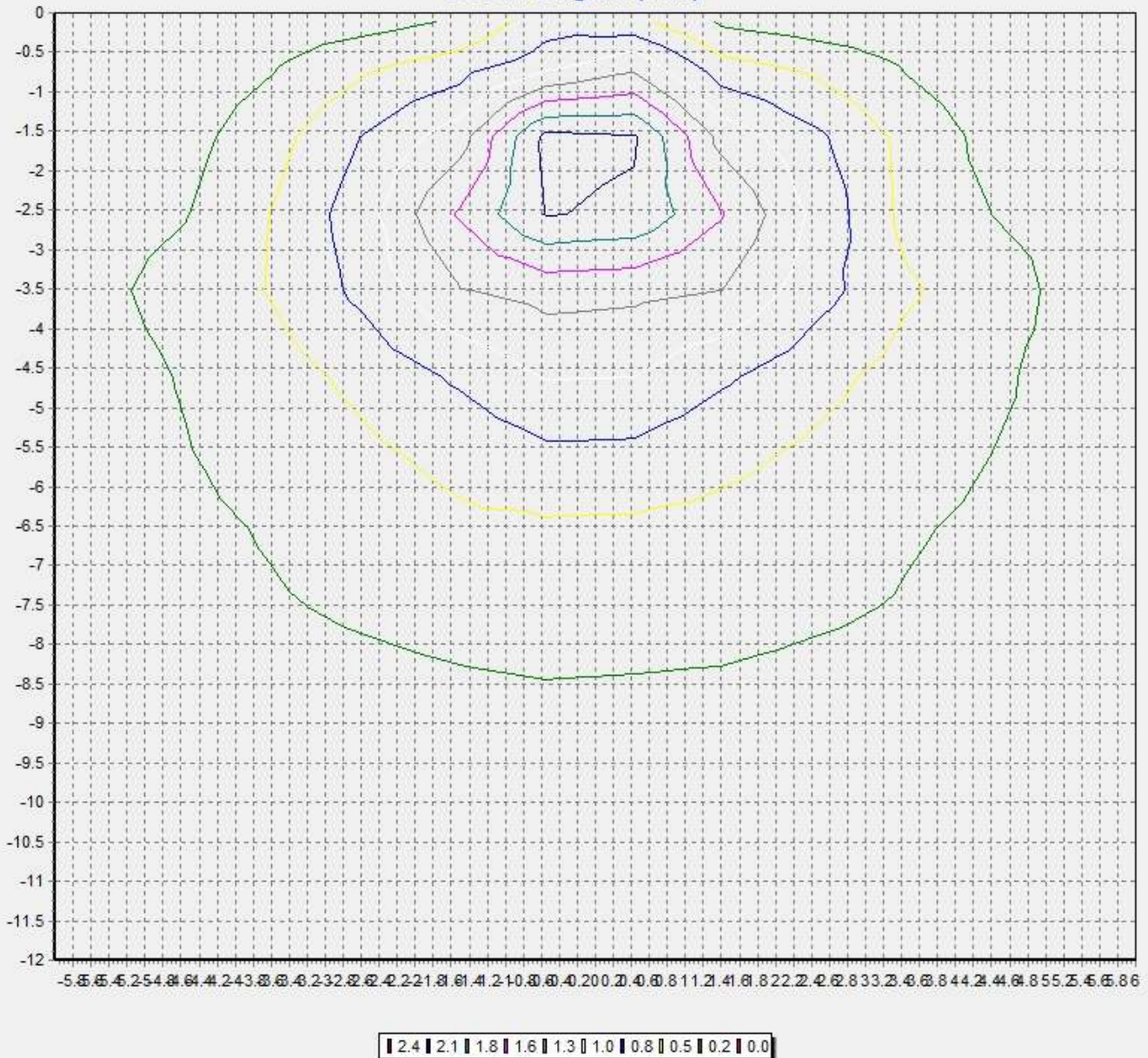
Pole Height (m): 2.7

Area Width (m): 12

Luminaire

Lamp	Report		20150408-0001
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt
Lamp flux (lm)	179	Operator	Current (A) 0.101
Total flux (lm)	179	Date	Power Factor 1 2015-04-08 오전 10:35:55

IsoLux Diagram (Wall)



Pole Height (m):	2.7	Wall Distance (m):	2.7
Aiming Plane:	0	Wall Height (m):	12

Luminaire

Lamp

No. of lamps	1	Voltage (V)	23.99
Lamp flux (lm)	179	Current (A)	0.101
Total flux (lm)	179	Power Factor	1

Report

20150408-0001

Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt

Operator

Date

2015-04-08 오전 10:35:55

Illuminance Levels (Ground)

6.00	0.06	0.08	0.09	0.12	0.19	0.23	0.24	0.22	0.19	0.11	0.09	0.08	0.06
5.00	0.08	0.09	0.17	0.25	0.27	0.42	0.45	0.42	0.27	0.25	0.17	0.09	0.08
4.00	0.08	0.17	0.21	0.41	0.49	0.81	0.88	0.81	0.48	0.40	0.20	0.17	0.08
3.00	0.10	0.21	0.40	0.57	0.97	1.41	1.64	1.39	0.96	0.54	0.39	0.22	0.10
2.00	0.16	0.22	0.45	0.87	2.11	3.12	4.16	3.08	2.04	0.87	0.44	0.22	0.17
1.00	0.18	0.33	0.68	1.28	2.97	5.89	8.00	5.93	2.92	1.26	0.69	0.35	0.18
0.00	0.16	0.31	0.67	1.32	3.82	7.98	10.38	8.20	4.02	1.44	0.75	0.37	0.20
-1.00	0.16	0.30	0.62	1.17	2.79	5.72	7.96	5.87	2.87	1.24	0.66	0.32	0.17
-2.00	0.14	0.20	0.39	0.80	1.95	2.98	4.12	3.03	2.05	0.85	0.43	0.20	0.16
-3.00	0.09	0.20	0.36	0.49	0.90	1.34	1.61	1.39	0.94	0.54	0.38	0.21	0.10
-4.00	0.07	0.15	0.18	0.37	0.45	0.77	0.85	0.77	0.46	0.38	0.20	0.16	0.07
-5.00	0.07	0.08	0.15	0.23	0.25	0.39	0.42	0.39	0.26	0.23	0.16	0.09	0.08
-6.00	0.05	0.07	0.08	0.10	0.18	0.21	0.23	0.22	0.18	0.11	0.08	0.08	0.06
-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.): 10.4

All illuminance level values are in lux.

Illum. (Min.): 0.05

Illum. Avg.: 1.02

Total Optical Solution Provider

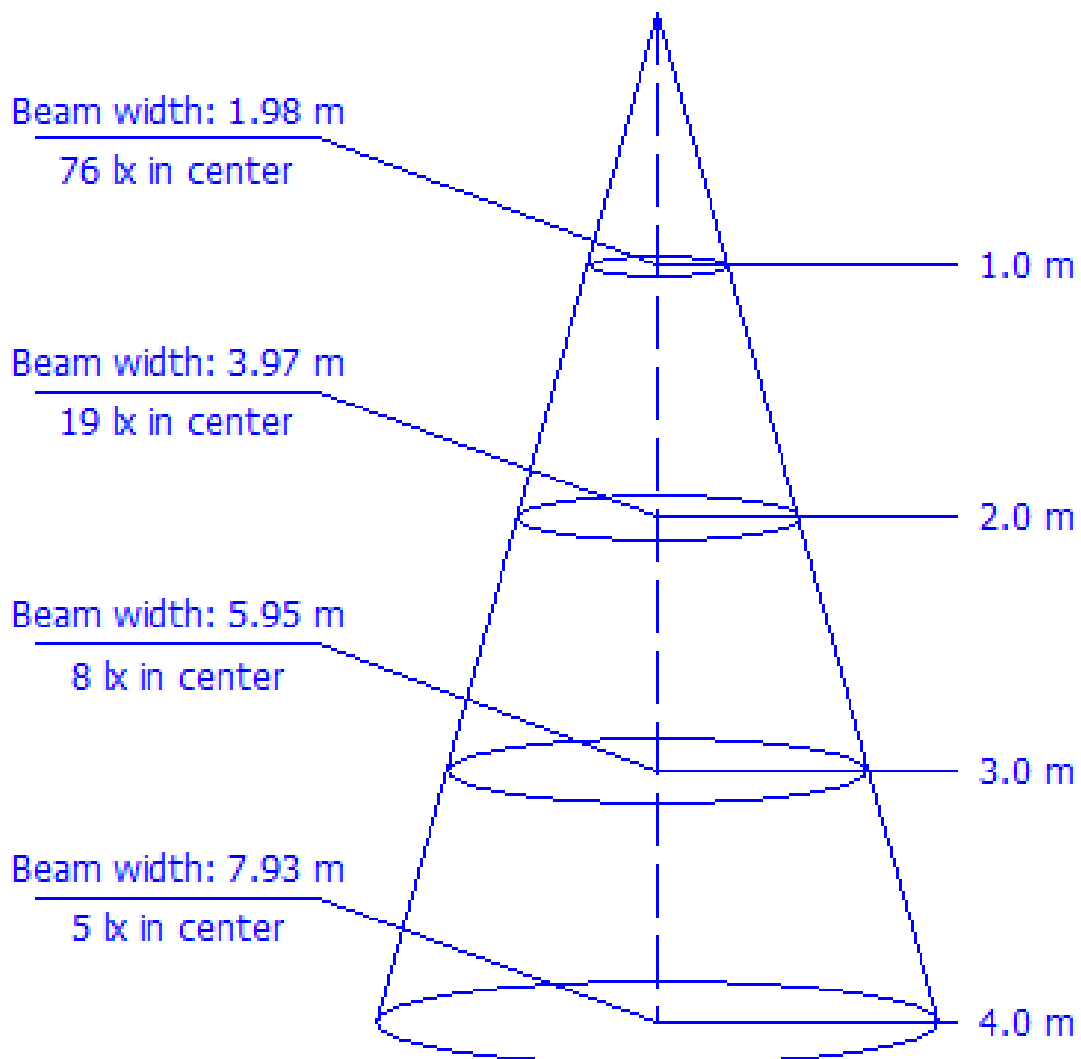


<http://www.jnctech.co.kr>
J & C Technology Co., Ltd.

Luminaire

Lamp		Report		20150408-0001
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Operator	Current (A)	0.101
Total flux (lm)	179	Date	Power Factor	1
				2015-04-08 오전 10:35:55

Illuminance Cone Diagram



Beam Angle = 90 deg.

Based on 50% of maximum illuminance.

Luminaire

Lamp				Report	20150408-0001
No. of lamps	1	Voltage (V)	23.99	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 3K -1.jdt	
Lamp flux (lm)	179	Current (A)	0.101	Operator	
Total flux (lm)	179	Power Factor	1	Date	2015-04-08 오전 10:35:55

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	0.95	1.01	0.97	0.94	0.96	0.93	0.91	0.92	0.90	0.88	0.89	0.87	0.85	0.83
Room CR	2	0.91	0.84	0.79	0.89	0.83	0.78	0.85	0.80	0.76	0.82	0.78	0.74	0.79	0.75	0.72	0.70
Room CR	3	0.80	0.73	0.67	0.79	0.72	0.66	0.76	0.70	0.65	0.73	0.68	0.64	0.70	0.66	0.62	0.60
Room CR	4	0.72	0.63	0.57	0.70	0.63	0.57	0.68	0.61	0.56	0.66	0.60	0.55	0.63	0.58	0.54	0.52
Room CR	5	0.64	0.56	0.50	0.63	0.55	0.50	0.61	0.54	0.49	0.59	0.53	0.48	0.57	0.52	0.48	0.46
Room CR	6	0.58	0.50	0.44	0.57	0.49	0.44	0.56	0.49	0.43	0.54	0.48	0.43	0.52	0.47	0.42	0.41
Room CR	7	0.53	0.45	0.39	0.52	0.45	0.39	0.51	0.44	0.39	0.49	0.43	0.38	0.48	0.42	0.38	0.36
Room CR	8	0.49	0.41	0.35	0.48	0.40	0.35	0.47	0.40	0.35	0.46	0.39	0.35	0.44	0.39	0.34	0.33
Room CR	9	0.45	0.37	0.32	0.44	0.37	0.32	0.43	0.36	0.32	0.42	0.36	0.31	0.41	0.35	0.31	0.29
Room CR	10	0.42	0.34	0.29	0.41	0.34	0.29	0.40	0.33	0.29	0.39	0.33	0.29	0.38	0.33	0.29	0.27