

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 / NDV4 27K-24V -1

4. Test Period : 20150408 ~ 20150408

5. Test Environment

Ambient Temp. : (24.37 +- 3) °C

Relative Humidity : (19.72 +- 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
20150408-0005	FEELUX		LED

Test Item	Unit	Result	Memo
Beam Distribution Test	-	See attachment	
ATHD	%	0.0	
CIE 1931 Cxy		0.4587, 0.4083	
Correlated Color Temperature	K	2714	
Ra	-	82.99	
Power Factor	%	1.000	
Input Voltage	V	23.990	
Input Current	A	0.151	
Input Watt	W	3.62	
Lamp Flux	lm	252.6	
Efficient	lm/W	69.73	
Illuminance	lx	105	1 m
		26	2 m
		12	3 m

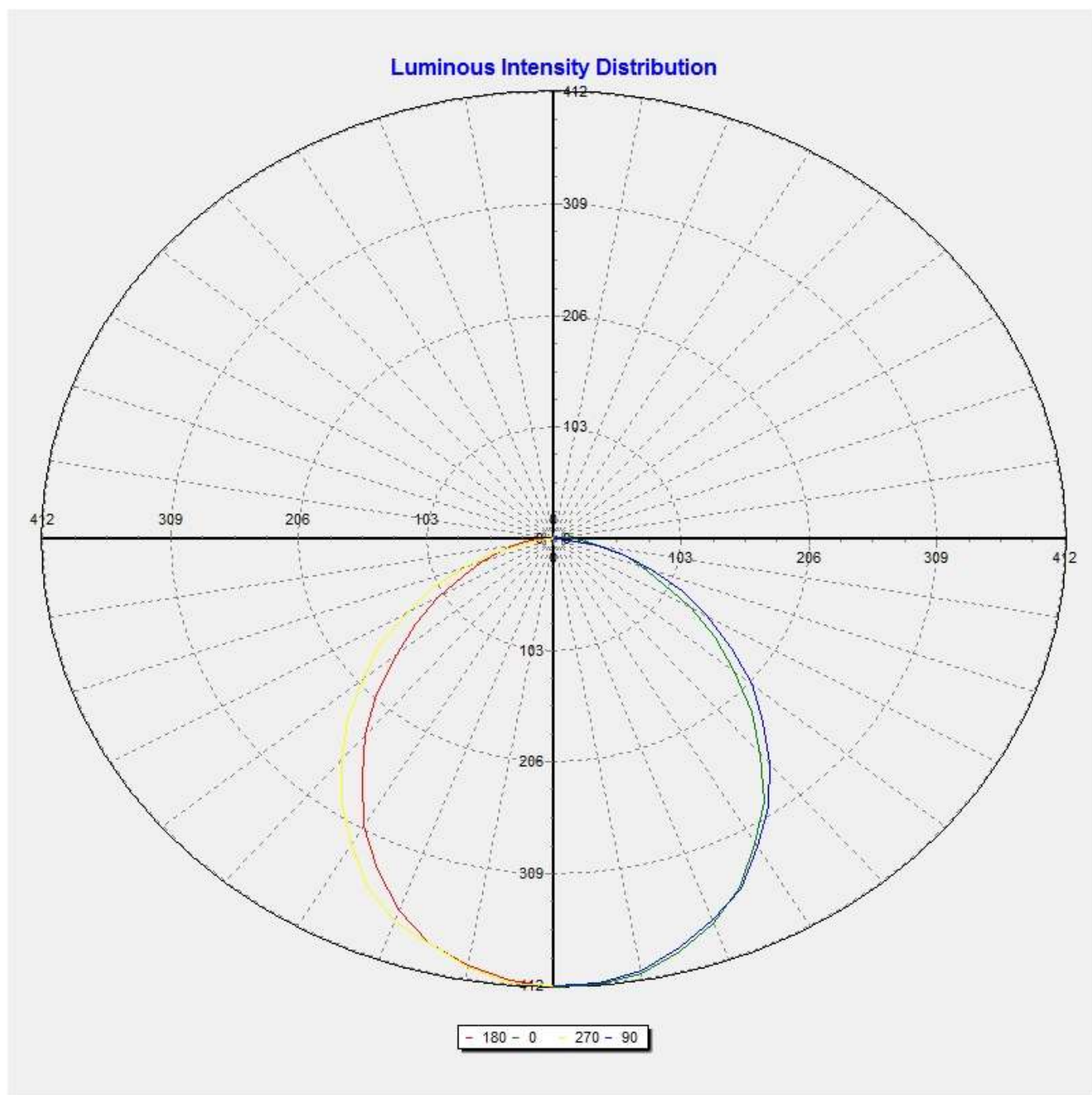
* This test result is for the sample provided by the client.

Sample photo

Click to load image

Luminaire

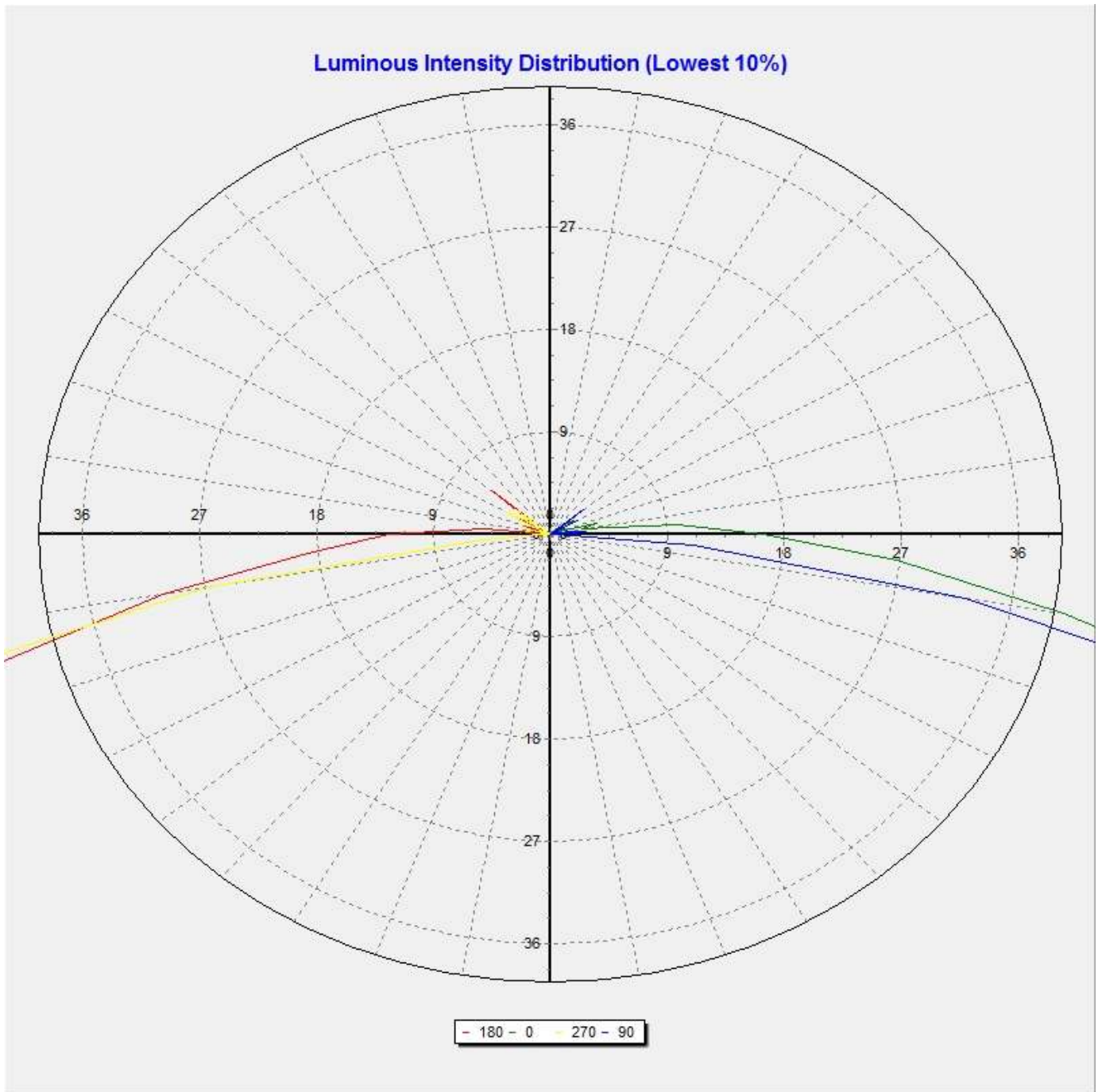
Lamp		Report	20150408-0005
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt
Lamp flux (lm)	253	Operator	Current (A) 0.151
Total flux (lm)	253	Date	Power Factor 1
			2015-04-08 오후 2:52:48



All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150408-0005
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt
Lamp flux (lm)	253	Operator	Current (A) 0.151
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All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150408-0005
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt	
Lamp flux (lm)	253	Operator Current (A)	0.151
Total flux (lm)	253	Date Power Factor	1
			2015-04-08 오후 2:52:48

Luminous Intensity Data

GWC	0	10	20	30	40	50	60	70	80	90	100	110	120
0	104.63	103.87	104.62	104.89	105.19	104.41	105.45	104.51	104.25	104.39	105.18	104.18	104.11
5	104.52	104.26	104.82	104.10	104.77	104.09	104.82	105.02	104.18	104.15	103.78	103.55	103.65
10	102.92	103.32	102.95	103.05	103.58	102.54	102.35	103.05	101.99	102.41	101.70	101.67	103.19
15	99.68	100.20	99.49	99.82	99.73	99.61	99.05	98.99	99.34	98.78	98.66	99.29	99.12
20	95.39	95.42	95.87	95.34	95.59	95.57	95.08	95.25	94.60	94.68	94.68	94.64	94.17
25	89.68	89.56	89.88	89.26	90.30	90.06	90.77	90.58	89.80	90.15	89.77	89.34	89.43
30	82.03	82.31	82.57	82.58	83.50	83.21	84.40	82.72	83.31	82.87	83.32	82.60	82.71
35	74.70	74.52	74.65	74.54	75.36	75.70	75.85	76.41	76.29	76.25	76.89	76.58	74.88
40	65.62	65.45	65.98	65.85	67.51	67.24	68.81	69.09	68.97	68.45	68.27	67.74	67.12
45	57.29	56.26	56.27	58.27	59.13	59.87	60.55	60.75	61.22	60.36	61.21	59.66	59.01
50	48.15	48.72	48.43	49.01	50.45	50.77	51.96	52.24	52.56	52.68	52.34	52.23	50.67
55	40.14	39.62	41.22	41.37	41.97	41.76	43.39	44.05	44.95	44.42	44.56	43.71	42.45
60	32.14	31.37	32.24	34.05	34.37	34.49	35.76	35.98	37.55	36.01	37.28	35.28	34.84
65	24.60	24.72	26.16	26.38	27.20	27.43	27.54	28.68	28.93	29.01	28.66	26.92	27.25
70	18.89	18.77	19.68	20.30	20.49	21.23	22.16	21.55	21.36	21.25	21.60	20.47	20.72
75	14.92	13.91	14.69	14.57	15.19	15.29	14.93	14.45	14.65	15.00	14.17	14.36	14.30
80	10.13	9.46	10.48	10.51	10.18	10.02	10.06	8.73	8.86	8.21	9.10	8.46	8.83
85	6.78	7.49	7.57	7.66	6.69	5.86	5.72	4.89	3.17	2.81	3.25	4.45	4.40
90	4.14	4.76	4.38	4.38	4.38	2.46	2.65	1.55	0.58	0.08	0.19	1.63	2.30
95	2.47	2.74	2.48	1.84	1.67	1.43	1.12	0.72	0.61	0.71	0.30	0.08	0.89
100	0.63	1.15	0.99	0.52	0.51	1.05	0.07	-0.10	0.37	0.39	0.13	0.71	0.15
105	0.95	0.27	0.34	-0.06	0.35	0.36	0.55	-0.16	0.08	0.02	0.17	0.20	0.18
110	0.16	-0.44	0.55	-0.06	0.60	-0.19	0.75	-0.28	0.24	0.15	0.15	0.49	0.81
115	0.25	1.02	0.55	0.55	0.42	0.23	0.59	0.61	1.35	-0.02	0.58	1.06	-0.38
120	0.32	0.32	0.75	0.83	0.67	0.67	0.76	0.43	1.01	0.62	0.56	0.64	1.06
125	0.55	0.33	0.74	0.01	0.54	0.38	1.29	0.01	0.41	0.15	0.43	0.43	0.41
130	0.12	0.06	0.98	0.92	0.49	-0.06	1.13	0.53	0.48	0.83	1.03	0.87	0.90

Luminaire

Lamp		Report	20150408-0005			
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt				
Lamp flux (lm)	253	Operator	Current (A)	0.151		
Total flux (lm)	253	Date	Power Factor	1	2015-04-08 오후 2:52:48	

Luminous Intensity Data (Continued)

GWC	130	140	150	160	170	180	190	200	210	220	230	240	250
0	104.85	104.24	104.40	104.70	104.51	104.63	103.87	104.62	104.89	105.19	104.41	105.45	104.51
5	103.26	103.59	104.13	104.64	103.88	103.28	104.24	103.90	102.59	103.25	103.79	104.57	103.85
10	102.31	101.91	102.45	102.07	101.85	101.21	101.31	101.72	101.70	102.00	102.75	102.03	102.28
15	99.09	98.69	99.10	98.23	98.61	97.90	98.84	98.68	98.81	98.38	99.34	99.20	98.00
20	94.88	94.68	94.07	93.64	93.92	92.40	92.89	91.73	92.74	93.71	94.59	94.67	94.25
25	88.69	88.64	88.44	88.61	86.92	85.17	85.66	86.39	86.82	85.98	88.29	87.74	89.47
30	81.57	81.69	80.50	80.50	79.94	77.32	77.56	77.86	78.68	79.30	81.57	81.91	82.56
35	73.31	73.41	72.00	72.77	71.46	67.89	69.71	69.41	70.34	71.76	73.80	74.07	74.94
40	65.09	64.67	63.16	63.06	63.55	59.73	60.62	60.23	61.82	62.84	64.26	66.59	66.78
45	57.02	56.47	54.88	54.32	54.16	51.22	51.15	51.12	52.73	54.50	55.70	56.77	57.95
50	49.15	47.36	46.25	45.60	45.10	41.95	43.31	43.95	44.97	46.09	47.02	48.11	49.99
55	40.64	39.39	38.55	38.03	36.94	34.40	35.18	35.18	36.69	38.25	39.59	40.48	41.93
60	32.86	32.21	31.17	30.54	28.98	27.30	26.64	28.30	30.21	29.89	31.11	32.22	33.66
65	26.26	24.73	23.81	23.40	22.77	20.23	20.60	21.21	22.54	23.00	24.27	24.95	25.70
70	19.38	18.69	17.55	17.52	17.82	15.61	15.85	15.66	16.68	17.99	18.15	18.57	19.02
75	13.54	13.17	13.04	12.82	12.97	11.22	11.03	11.75	11.95	12.04	12.17	12.38	12.53
80	8.69	8.25	8.91	8.41	8.78	7.67	7.67	7.95	7.65	8.80	7.65	7.31	7.01
85	5.08	6.04	6.29	6.49	6.02	4.76	5.56	5.62	4.45	5.04	4.74	3.50	2.76
90	2.89	3.26	3.35	3.29	3.69	3.12	3.48	2.67	2.32	2.92	2.12	0.87	0.67
95	0.99	1.43	2.36	2.04	1.78	1.31	1.36	0.89	0.75	0.49	0.18	-0.23	0.57
100	0.38	-0.35	0.35	0.86	0.62	-0.12	1.21	1.22	0.10	-0.17	0.45	0.62	0.19
105	0.62	0.57	0.33	-0.12	0.60	0.00	-0.02	0.36	0.51	-0.16	0.29	0.45	0.10
110	0.01	0.97	0.15	0.04	0.90	0.47	-0.65	0.58	0.13	-0.50	0.35	-0.40	0.35
115	0.54	0.63	0.58	1.02	0.47	0.29	0.02	0.37	0.18	0.00	0.05	0.90	0.23
120	-0.01	1.37	0.50	-0.19	-0.26	0.68	0.90	0.09	0.84	0.17	0.67	0.30	0.21
125	0.53	0.96	0.45	0.51	0.52	0.47	0.53	0.77	1.01	-0.06	1.14	1.07	0.12
130	1.03	0.80	0.68	0.88	0.12	1.50	0.70	0.54	0.56	0.46	0.30	0.84	1.15

Luminaire

Lamp		Report		20150408-0005
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt	
Lamp flux (lm)	253	Operator	Current (A)	0.151
Total flux (lm)	253	Date	Power Factor	1
				2015-04-08 오후 2:52:48

Luminous Intensity Data (Continued)

GWC	260	270	280	290	300	310	320	330	340	350	360
0	104.25	104.39	105.18	104.18	104.11	104.85	104.24	104.40	104.70	104.51	104.63
5	104.40	104.09	103.33	103.63	103.70	104.33	104.09	104.00	103.39	103.05	104.52
10	102.57	101.51	101.40	102.36	102.79	102.18	101.36	101.82	102.38	102.05	102.92
15	99.23	97.73	98.36	98.33	99.17	99.09	98.90	98.90	99.90	98.09	99.68
20	94.44	94.93	94.69	94.77	95.22	94.69	94.85	94.81	94.34	94.12	95.39
25	88.51	89.77	88.96	89.72	89.14	90.09	88.57	89.01	87.80	87.62	89.68
30	82.54	82.37	82.49	82.86	82.67	82.16	81.36	80.36	80.23	80.49	82.03
35	74.59	75.56	75.65	75.38	75.18	74.61	73.43	73.16	72.30	71.82	74.70
40	67.52	67.42	68.16	67.54	67.62	66.09	65.24	64.66	63.41	62.91	65.62
45	58.49	59.74	59.66	59.71	57.98	58.20	56.52	55.39	54.54	53.99	57.29
50	50.74	50.53	50.92	51.22	49.54	49.29	48.01	47.42	45.76	45.45	48.15
55	42.34	43.57	42.39	43.39	41.58	40.66	39.52	39.36	37.70	37.60	40.14
60	34.72	34.52	33.77	34.39	33.68	33.51	32.39	31.19	30.32	29.13	32.14
65	25.45	27.33	26.13	26.84	26.25	25.93	24.82	24.72	23.14	23.19	24.60
70	18.63	19.38	19.54	20.39	19.91	19.08	18.52	18.58	17.95	17.56	18.89
75	12.53	13.05	13.43	12.64	13.62	14.08	13.93	13.43	12.20	12.44	14.92
80	6.75	6.80	6.73	7.65	8.19	8.48	9.01	9.18	8.85	9.17	10.13
85	1.96	1.31	2.05	3.37	3.84	5.00	5.47	5.62	5.76	5.93	6.78
90	0.53	0.20	0.64	1.29	1.47	2.12	2.72	3.35	3.61	3.96	4.14
95	-0.20	-0.04	0.30	0.73	0.53	1.43	1.24	1.35	1.49	2.38	2.47
100	0.43	0.15	0.25	0.72	1.45	0.58	0.45	0.21	0.90	0.65	0.63
105	-0.20	0.59	0.08	0.33	0.66	0.73	0.60	0.15	0.01	0.02	0.95
110	0.84	0.02	0.21	0.19	-0.03	0.65	0.35	0.50	0.25	0.60	0.16
115	0.71	0.41	-0.25	0.38	0.79	0.21	0.45	0.23	0.26	0.38	0.25
120	0.20	0.97	0.77	0.31	0.65	0.51	0.48	0.70	0.56	0.57	0.32
125	0.59	0.42	-0.39	0.54	0.68	0.42	1.06	0.73	0.84	1.04	0.55
130	0.59	0.85	0.97	0.81	0.87	0.80	0.28	0.34	0.98	0.42	0.12

Luminaire

Lamp		Report	20150408-0005
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt	
Lamp flux (lm)	253	Operator Current (A)	0.151
Total flux (lm)	253	Date Power Factor	1
			2015-04-08 오후 2:52:48

Luminous Flux Table

Total Lamp Lumens: 253

Luminaire Efficiency (lm/W):252.59

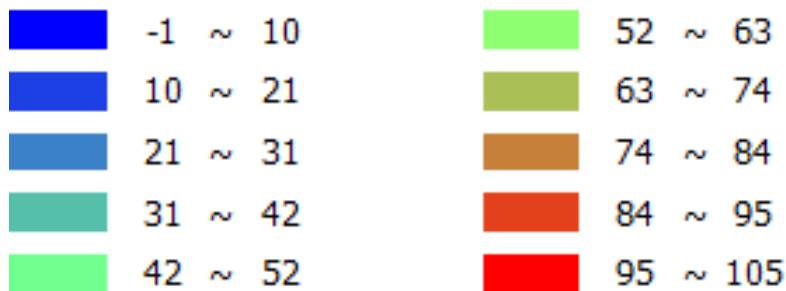
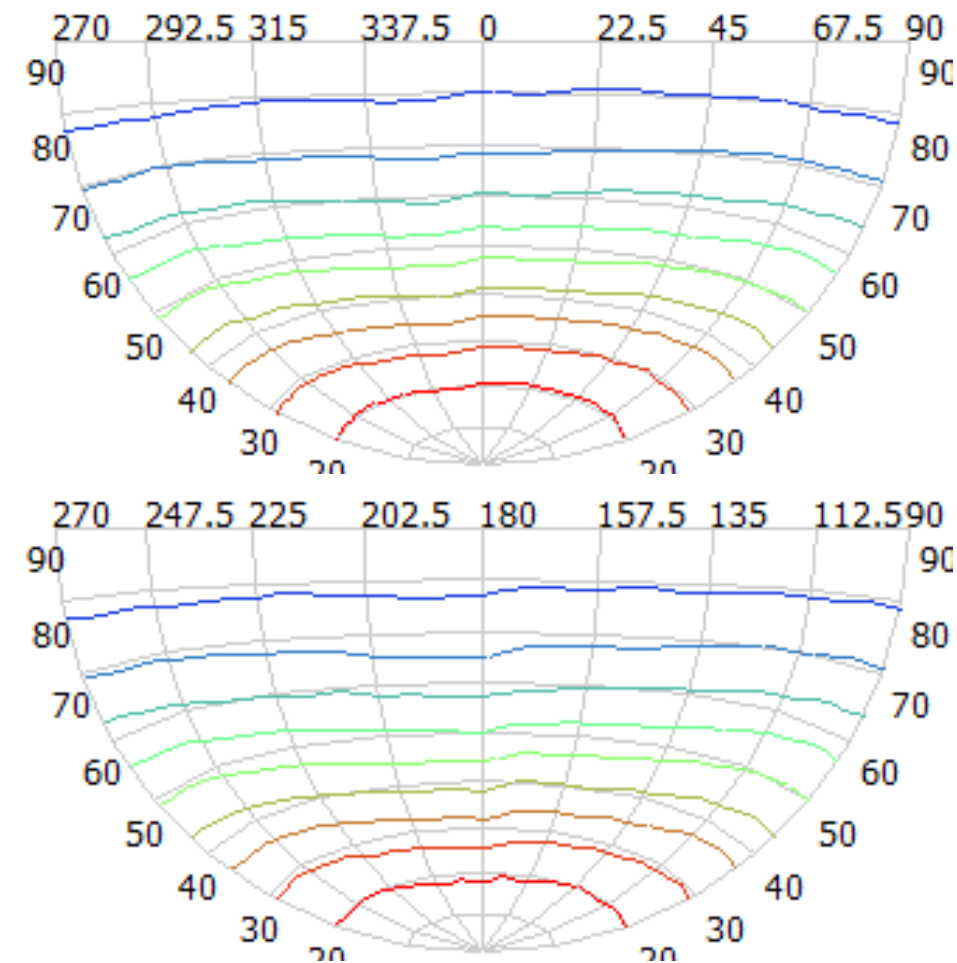
CIE Classification: Direct

Elevation	Lumens	Cumulative	Lamp %	Luminaire %
0	0.63	0.63	0.25	0.25
5	4.97	5.59	2.21	2.21
10	9.73	15.32	6.07	6.07
15	14.04	29.36	11.62	11.62
20	17.71	47.07	18.64	18.64
25	20.56	67.63	26.77	26.78
30	22.36	89.99	35.62	35.63
35	23.22	113.21	44.82	44.82
40	23.09	136.30	53.96	53.96
45	22.09	158.39	62.70	62.71
50	20.39	178.78	70.78	70.78
55	18.17	196.95	77.97	77.97
60	15.48	212.43	84.10	84.10
65	12.57	225.00	89.07	89.08
70	9.82	234.82	92.96	92.97
75	7.09	241.92	95.77	95.78
80	4.63	246.55	97.60	97.61
85	2.69	249.24	98.67	98.67
90	1.34	250.58	99.20	99.20
95	0.61	251.19	99.44	99.44
100	0.27	251.45	99.55	99.55
105	0.14	251.59	99.60	99.61
110	0.13	251.72	99.65	99.66
115	0.22	251.94	99.74	99.74
120	0.26	252.20	99.84	99.84
125	0.24	252.44	99.94	99.94
130	0.15	252.59	100.00	100.00

Luminaire

Lamp		Report	20150408-0005
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt
Lamp flux (lm)	253	Operator	Current (A) 0.151
Total flux (lm)	253	Date	Power Factor 1
			2015-04-08 오후 2:52:48

IsoCandela (Type C)

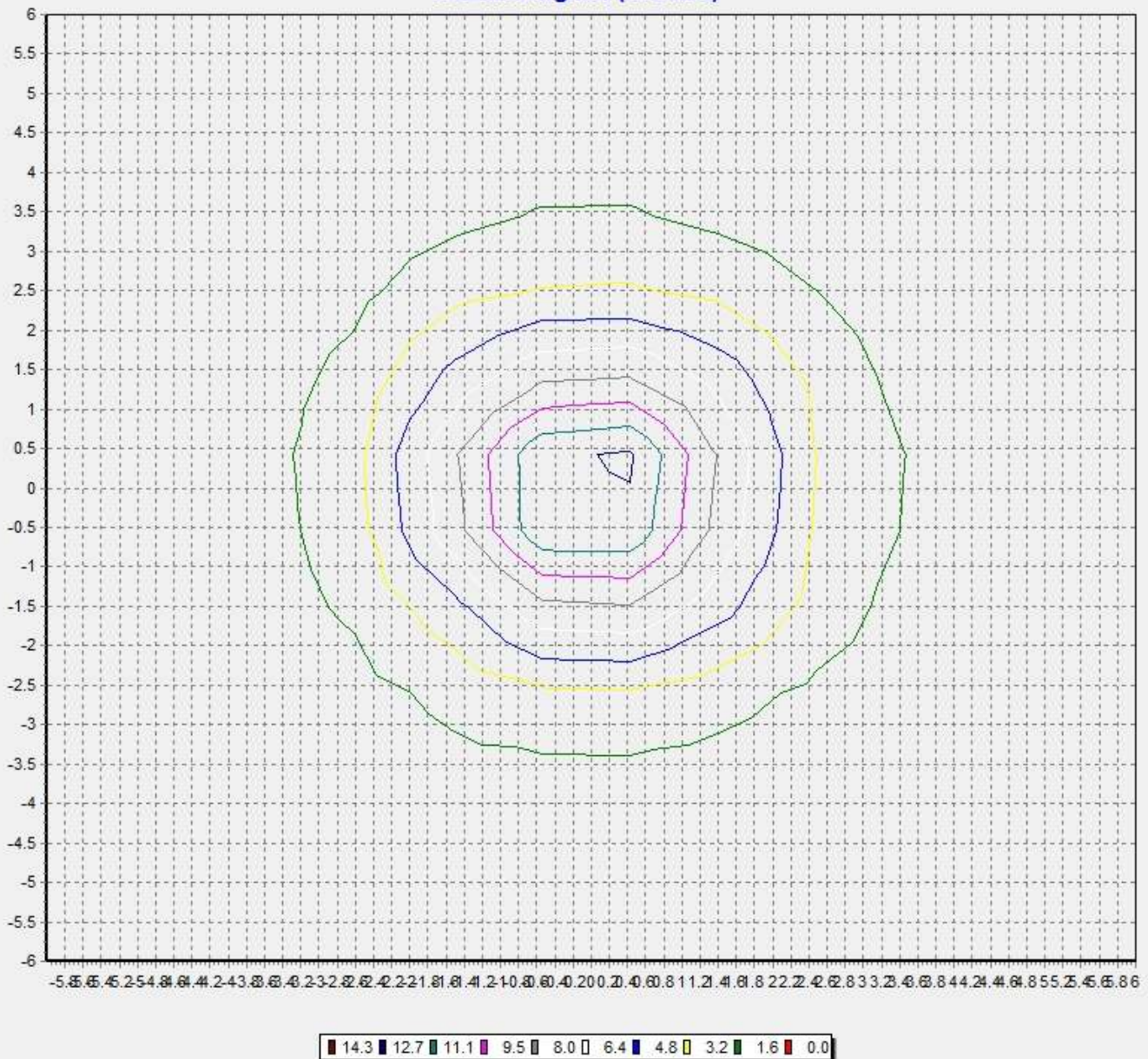


Luminaire

Lamp		Report	20150408-0005
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt
Lamp flux (lm)	253	Operator	Current (A) 0.151
Total flux (lm)	253	Date	Power Factor 1

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IsoLux Diagram (Ground)



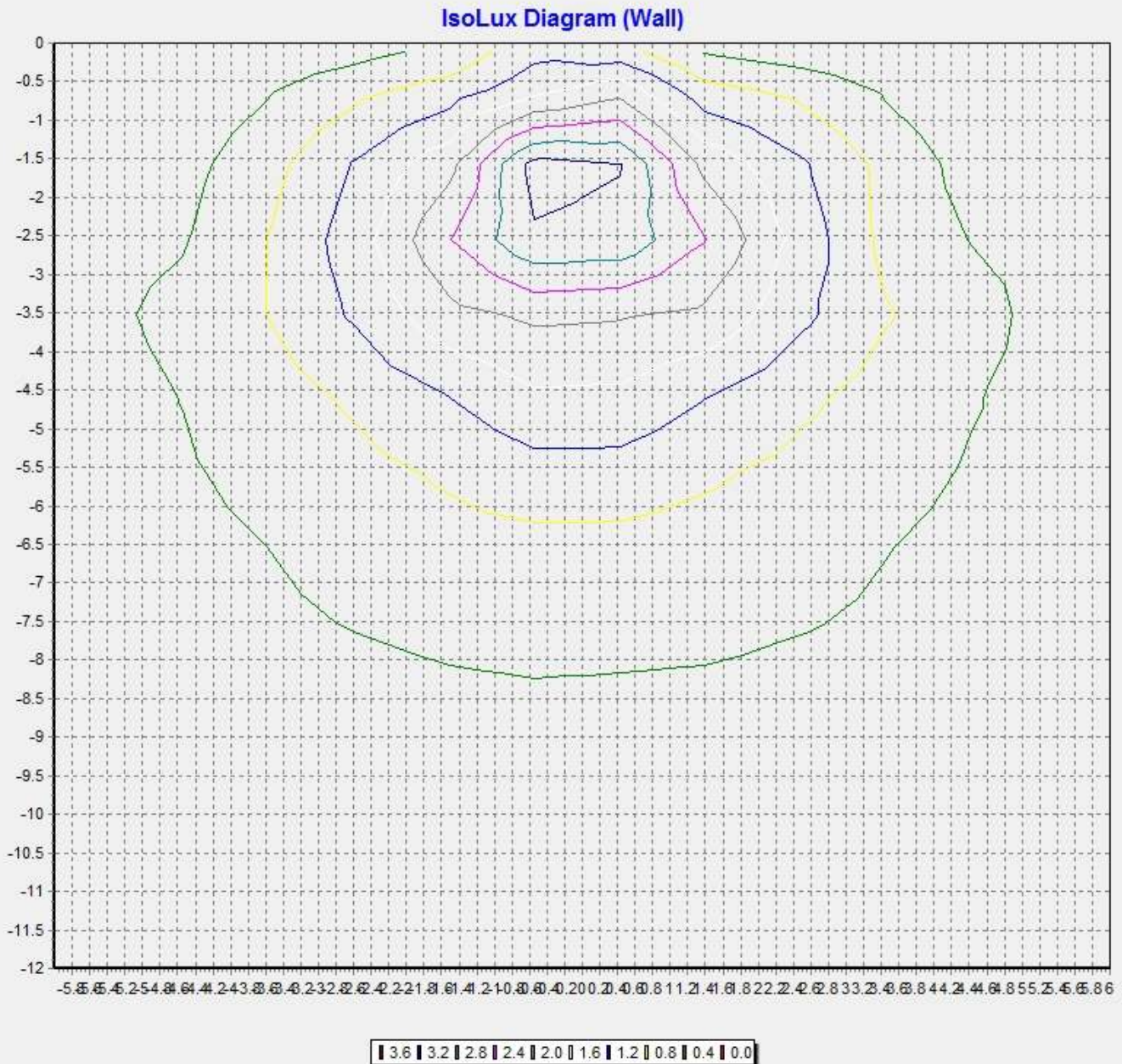
Pole Height (m): 2.7

Area Width (m): 12

Luminaire

Lamp		Report	20150408-0005
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt
Lamp flux (lm)	253	Operator	Current (A) 0.151
Total flux (lm)	253	Date	Power Factor 1

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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)	253	Current (A)	0.151
Total flux (lm)	253	Power Factor	1

Report

20150408-0005

Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt

Operator

Date

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Illuminance Levels (Ground)

6.00	0.09	0.12	0.13	0.17	0.27	0.32	0.33	0.32	0.27	0.17	0.13	0.12	0.09
5.00	0.12	0.13	0.24	0.36	0.38	0.58	0.61	0.59	0.38	0.36	0.25	0.13	0.12
4.00	0.11	0.24	0.30	0.57	0.70	1.12	1.23	1.12	0.69	0.58	0.30	0.25	0.12
3.00	0.15	0.32	0.56	0.80	1.37	1.99	2.29	1.98	1.36	0.80	0.58	0.33	0.16
2.00	0.24	0.32	0.63	1.23	2.89	4.26	5.75	4.28	2.92	1.30	0.67	0.33	0.25
1.00	0.27	0.47	0.96	1.76	4.06	8.14	11.14	8.22	4.17	1.85	1.02	0.52	0.27
0.00	0.25	0.47	0.97	1.87	5.30	11.03	14.35	11.24	5.68	2.13	1.12	0.55	0.29
-1.00	0.23	0.44	0.90	1.67	3.88	7.86	11.03	8.18	4.11	1.80	0.96	0.48	0.26
-2.00	0.21	0.28	0.59	1.15	2.71	4.12	5.71	4.27	2.91	1.25	0.64	0.32	0.24
-3.00	0.13	0.29	0.52	0.72	1.27	1.85	2.23	1.95	1.35	0.79	0.56	0.32	0.15
-4.00	0.10	0.22	0.26	0.53	0.63	1.07	1.18	1.08	0.68	0.57	0.29	0.24	0.11
-5.00	0.11	0.11	0.22	0.32	0.35	0.55	0.60	0.56	0.35	0.35	0.24	0.13	0.12
-6.00	0.08	0.11	0.11	0.15	0.25	0.29	0.32	0.29	0.26	0.16	0.12	0.12	0.09
-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.): 14.4

All illuminance level values are in lux.

Illum. (Min.): 0.08

Illum. Avg.: 1.43

Total Optical Solution Provider

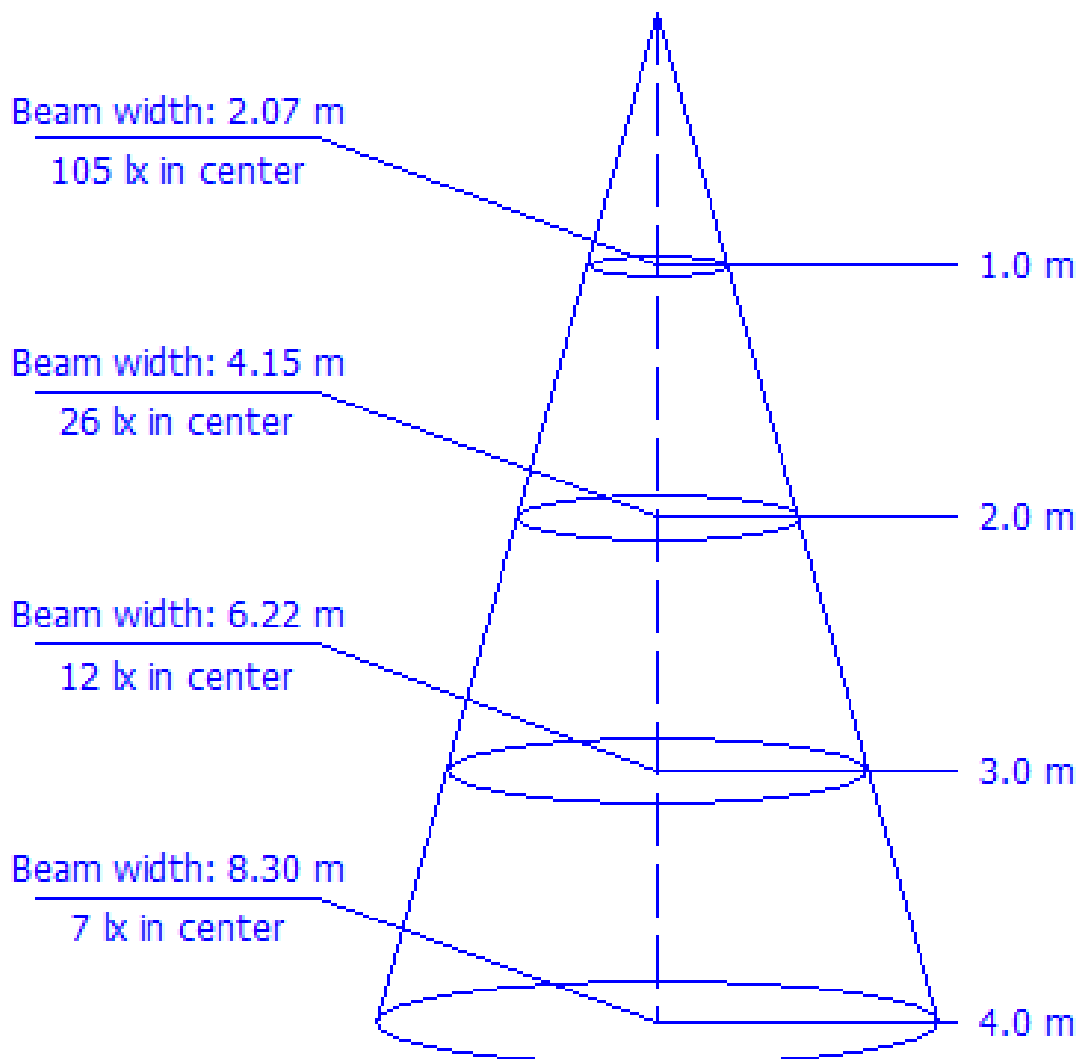


<http://www.jnctech.co.kr>
J & C Technology Co., Ltd.

Luminaire

Lamp		Report		20150408-0005
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt	
Lamp flux (lm)	253	Operator	Current (A)	0.151
Total flux (lm)	253	Date	Power Factor	1
				2015-04-08 오후 2:52:48

Illuminance Cone Diagram



Beam Angle = 92 deg.

Based on 50% of maximum illuminance.

Luminaire

Lamp

Report

20150408-0005

No. of lamps	1	Voltage (V)	23.99
Lamp flux (lm)	253	Current (A)	0.151
Total flux (lm)	253	Power Factor	1

Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 4W 27K -1.jdt
Operator	
Date	2015-04-08 오후 2:52:48

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	1.18	1.18	1.18	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.98
Room CR 1	1.04	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	0.85	0.80	0.76	0.82	0.78	0.74	0.79	0.76	0.72	0.70
Room CR 3	0.81	0.73	0.67	0.79	0.72	0.66	0.76	0.70	0.65	0.73	0.68	0.63	0.70	0.66	0.62	0.60
Room CR 4	0.72	0.64	0.57	0.71	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	0.65	0.56	0.50	0.63	0.55	0.49	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	0.58	0.49	0.44	0.56	0.48	0.43	0.54	0.48	0.43	0.52	0.47	0.42	0.40
Room CR 7	0.53	0.45	0.39	0.52	0.44	0.39	0.51	0.44	0.38	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	0.45	0.39	0.34	0.44	0.38	0.34	0.32
Room CR 9	0.45	0.37	0.32	0.44	0.37	0.32	0.43	0.36	0.31	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	0.28	0.38	0.32	0.28	0.27