

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 : 20150413

2. Purpose of Report : Test

3. Test Standard / Item : LED / NDV7 35K-24V -1

4. Test Period : 20150413 ~ 20150413

5. Test Environment

Ambient Temp. : (23.76 +- 3) °C

Relative Humidity : (21.41 +- 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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TEST RESULT

Report Number	Sample Name	Sample Number	Test Standard
20150413-0002	FEELUX		LED

Test Item	Unit	Result	Memo
Beam Distribution Test	-	See attachment	
ATHD	%	0.0	
CIE 1931 Cxy		0.4082, 0.3870	
Correlated Color Temperature	K	3422	
Ra	-	85.1	
Power Factor	%	1.000	
Input Voltage	V	23.970	
Input Current	A	0.313	
Input Watt	W	7.5	
Lamp Flux	lm	581.6	
Efficient	lm/W	77.52	
Illuminance	lx	239	1 m
		60	2 m
		27	3 m

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

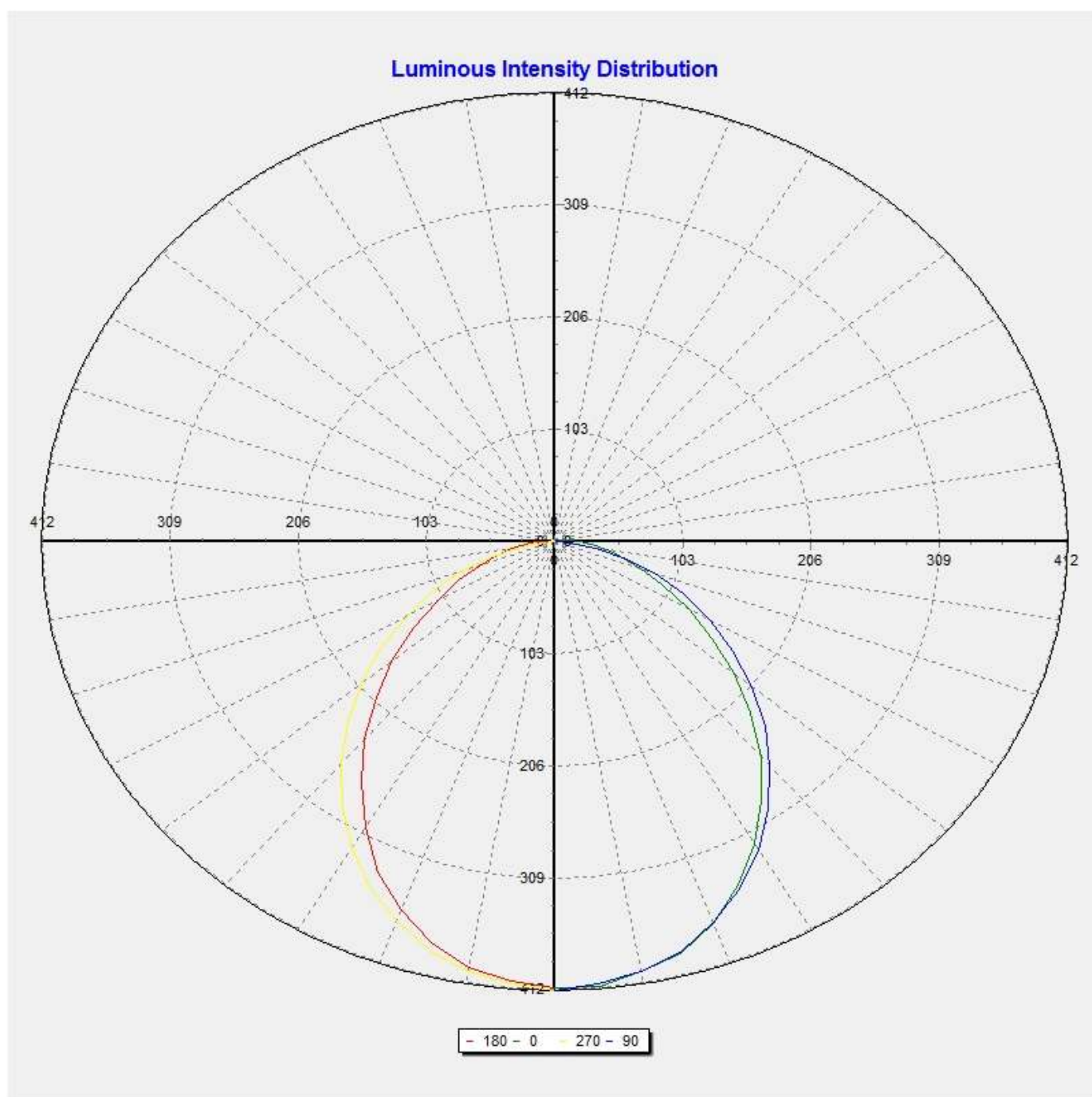
Sample photo

Click to load image

Luminaire

Lamp		Report	20150413-0002	
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt	
Lamp flux (lm)	582	Operator	Current (A)	0.313
Total flux (lm)	582	Date	Power Factor	1

2015-04-13 오후 4:39:10

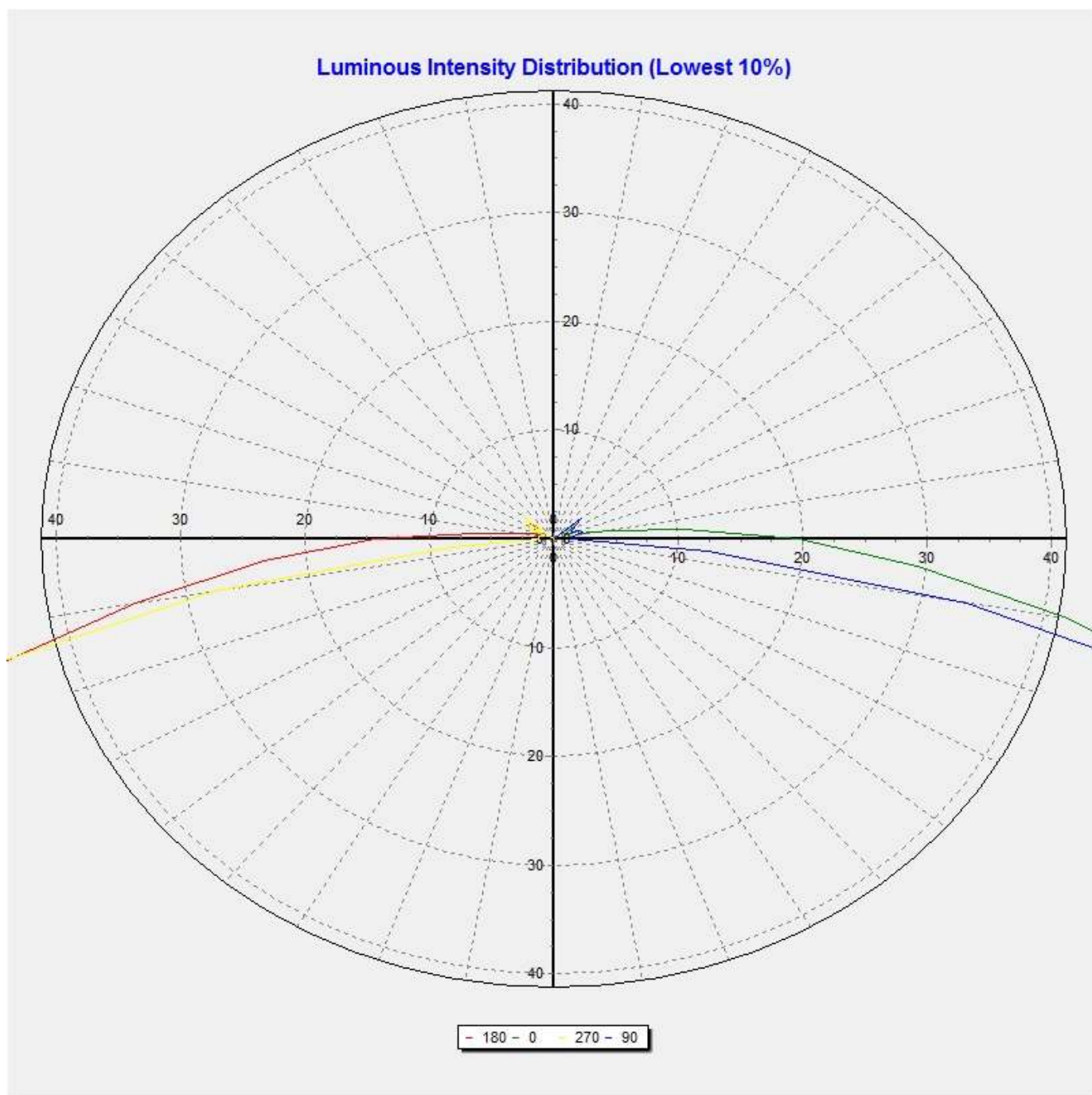


All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150413-0002
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt
Lamp flux (lm)	582	Operator	Current (A) 0.313
Total flux (lm)	582	Date	Power Factor 1

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All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150413-0002
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt	
Lamp flux (lm)	582	Operator Current (A)	0.313
Total flux (lm)	582	Date Power Factor	1
			2015-04-13 오후 4:39:10

Luminous Intensity Data

GWC	0	10	20	30	40	50	60	70	80	90	100	110	120
0	238.38	239.12	238.94	239.30	237.91	238.44	238.23	240.45	239.14	240.17	239.69	239.35	239.41
5	239.15	238.54	238.14	238.42	238.99	237.91	238.69	238.22	238.43	237.56	237.68	237.26	238.85
10	233.74	234.37	236.03	233.85	234.47	234.42	235.47	234.58	233.66	233.62	234.06	234.81	233.32
15	227.99	226.33	226.97	227.70	227.17	228.28	227.75	227.42	227.32	227.07	226.97	227.08	226.22
20	217.28	216.89	216.93	216.56	217.80	216.95	217.81	217.11	218.24	216.37	216.83	216.56	215.78
25	203.10	202.28	204.20	203.62	205.00	204.72	206.18	204.50	206.07	204.83	205.42	203.15	203.59
30	187.21	186.88	186.86	187.81	189.35	190.01	190.30	191.00	191.82	190.74	190.56	189.74	188.89
35	168.62	168.26	169.99	169.76	172.75	172.95	174.54	174.36	175.23	174.12	175.59	172.95	173.09
40	150.09	149.03	149.76	149.76	153.03	154.37	156.10	157.28	157.71	156.85	156.80	155.68	154.28
45	129.47	129.27	130.12	130.63	133.55	135.55	137.58	138.39	140.86	139.40	138.60	137.46	135.56
50	109.16	109.39	110.87	112.49	114.90	116.10	118.96	120.31	122.63	120.78	120.22	118.05	116.25
55	90.02	90.08	92.06	93.66	96.51	97.24	99.79	101.25	102.23	101.59	101.86	99.99	97.41
60	72.19	72.10	73.45	75.11	78.26	80.20	81.95	82.97	84.52	84.42	84.30	81.49	80.26
65	56.10	55.87	57.53	58.92	62.09	63.71	65.32	65.21	67.01	66.23	66.89	64.10	63.66
70	42.82	43.10	43.90	44.20	47.21	49.37	49.47	49.45	50.15	50.07	49.06	48.52	47.63
75	32.03	32.27	32.39	33.36	34.36	34.45	35.62	34.53	34.62	33.14	33.85	33.29	33.47
80	24.44	23.76	23.45	24.21	23.54	22.57	22.38	21.02	20.64	19.61	20.30	20.18	21.51
85	17.07	16.50	15.82	16.01	15.36	13.66	12.24	9.99	8.28	7.24	8.98	10.13	12.24
90	11.45	11.00	10.34	9.72	9.19	7.95	5.22	3.41	1.42	0.75	1.35	3.06	5.63
95	6.16	6.20	6.16	4.99	4.21	3.51	1.49	1.18	0.50	0.86	0.10	0.63	1.45
100	2.69	3.21	2.65	1.95	1.13	0.82	1.00	0.80	1.65	0.90	1.20	0.46	0.61
105	1.17	1.07	0.94	0.83	0.80	0.34	0.85	0.89	0.74	1.41	0.66	0.47	0.54
110	1.23	1.17	1.31	1.49	1.00	0.61	1.04	0.98	0.39	1.23	0.68	1.05	1.67
115	0.60	0.98	1.86	1.13	0.75	0.65	1.04	1.27	0.85	0.94	1.11	1.58	1.09
120	0.84	1.24	1.41	1.89	1.27	1.50	1.52	1.11	1.51	1.00	1.56	0.74	0.80
125	1.21	1.69	1.76	1.45	2.09	1.67	1.61	0.82	1.44	1.34	1.18	2.10	1.38
130	1.14	1.75	1.80	1.41	1.67	1.29	1.39	1.65	1.77	1.69	1.24	1.42	1.94

Luminaire

Lamp		Report	20150413-0002										
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt										
Lamp flux (lm)	582	Operator	Current (A)	0.313									
Total flux (lm)	582	Date	Power Factor	1									
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Luminous Intensity Data (Continued)

GWC	130	140	150	160	170	180	190	200	210	220	230	240	250
0	240.26	240.10	240.90	240.30	239.40	238.38	239.12	238.94	239.30	237.91	238.44	238.23	240.45
5	238.46	238.47	238.77	238.29	239.22	235.87	236.65	236.93	237.80	237.94	237.86	237.47	236.78
10	234.26	234.35	234.38	232.42	234.04	231.06	232.28	231.69	232.18	233.03	232.21	233.78	234.28
15	226.19	226.97	226.47	226.16	226.90	222.38	222.78	223.62	224.15	223.63	224.63	223.97	225.21
20	215.63	216.60	215.61	215.27	215.20	209.72	210.51	211.55	213.33	212.40	214.20	214.79	216.07
25	203.07	202.09	201.23	201.21	201.08	195.85	196.71	196.94	198.01	199.72	200.09	201.54	203.57
30	187.55	187.56	184.78	184.40	183.78	176.96	178.40	179.44	182.07	182.56	184.33	186.26	187.25
35	169.91	169.00	167.49	167.02	165.18	157.35	159.74	159.98	162.98	164.18	167.10	168.89	170.88
40	151.59	149.97	146.38	146.12	145.22	138.04	139.04	139.94	143.22	144.94	148.79	151.27	153.30
45	132.99	130.07	127.26	126.24	125.04	117.93	120.35	120.30	123.59	125.50	128.76	130.95	134.70
50	113.43	111.02	108.64	108.15	106.17	99.21	100.75	101.21	104.14	105.89	108.75	111.93	115.98
55	94.02	92.31	90.73	88.88	87.32	80.65	81.96	82.32	87.00	88.67	91.42	93.23	96.42
60	77.09	76.04	73.25	71.47	69.62	63.85	64.76	65.90	69.46	71.22	74.29	75.01	77.63
65	61.22	59.61	57.70	55.57	54.40	49.17	50.15	51.52	53.26	54.15	58.46	58.24	60.62
70	46.15	44.93	43.17	43.29	41.88	37.52	38.66	38.94	40.44	40.92	43.35	43.87	44.75
75	33.15	32.93	32.49	31.68	30.25	27.80	28.11	28.20	29.59	29.06	30.19	30.14	30.00
80	21.72	22.23	22.09	22.42	22.26	19.89	20.08	20.11	19.55	19.70	19.26	18.79	17.09
85	12.74	13.87	13.65	15.67	15.12	13.64	13.46	12.89	12.96	11.63	11.57	8.96	7.16
90	6.62	7.64	8.13	9.78	10.25	8.37	8.42	7.53	7.19	5.86	5.05	3.86	2.20
95	2.31	3.46	4.01	5.11	5.41	3.74	4.63	3.99	3.39	2.41	0.92	0.82	1.06
100	0.98	1.16	1.08	2.37	2.19	1.70	1.34	1.01	0.79	1.13	0.55	1.23	-0.11
105	0.61	0.80	1.16	0.59	0.74	1.02	1.34	1.16	0.67	0.69	0.44	0.66	1.25
110	0.59	0.95	1.07	1.14	0.41	0.52	0.68	0.03	0.98	0.85	1.20	1.16	0.67
115	1.60	1.32	1.13	1.14	1.11	1.15	0.86	0.15	1.01	1.30	1.43	1.79	1.04
120	1.66	0.93	0.81	1.12	1.20	0.83	1.12	1.55	1.83	0.68	1.44	1.74	0.58
125	1.58	1.54	1.21	1.55	1.59	1.37	0.86	0.73	0.89	1.04	1.11	1.26	1.72
130	1.89	1.71	1.58	1.76	2.61	0.96	1.77	1.40	1.60	0.92	1.61	1.86	1.48

Luminaire

Lamp		Report		20150413-0002
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt	
Lamp flux (lm)	582	Operator	Current (A)	0.313
Total flux (lm)	582	Date	Power Factor	1
				2015-04-13 오후 4:39:10

Luminous Intensity Data (Continued)

GWC	260	270	280	290	300	310	320	330	340	350	360
0	239.14	240.17	239.69	239.35	239.41	240.26	240.10	240.90	240.30	239.40	238.38
5	238.40	237.12	237.38	238.38	237.30	237.43	237.82	238.13	237.41	238.67	239.15
10	233.34	233.81	232.70	234.49	233.35	233.77	232.89	233.70	232.76	233.12	233.74
15	226.06	226.38	226.16	226.63	226.39	225.98	225.14	225.25	224.85	225.28	227.99
20	215.74	216.19	215.58	216.12	215.20	215.63	215.14	214.42	213.36	213.64	217.28
25	202.81	204.49	203.54	203.60	201.86	201.45	200.51	199.97	199.29	199.47	203.10
30	188.43	189.43	188.78	189.11	186.87	186.71	185.69	183.95	183.45	181.93	187.21
35	172.38	173.48	172.15	172.50	171.07	169.82	167.13	165.30	163.57	163.29	168.62
40	154.07	155.36	154.41	154.05	151.56	151.73	147.49	145.88	144.57	142.77	150.09
45	134.64	137.01	135.42	135.62	133.17	130.89	128.78	126.51	124.14	123.95	129.47
50	116.73	117.96	116.73	116.73	113.34	112.84	109.13	106.63	104.25	104.17	109.16
55	96.65	99.68	98.47	97.25	94.98	93.63	90.73	88.78	85.51	84.80	90.02
60	80.36	80.08	79.48	78.95	77.66	76.03	73.40	70.70	67.77	66.76	72.19
65	61.14	62.66	62.39	61.96	61.19	60.33	57.28	54.92	52.64	51.93	56.10
70	45.54	45.49	45.16	45.77	44.37	44.29	42.64	40.85	40.10	39.26	42.82
75	28.63	30.01	29.38	30.99	31.29	31.42	30.77	30.16	29.70	29.89	32.03
80	15.70	16.14	16.27	18.75	19.36	20.88	20.61	21.91	21.20	21.59	24.44
85	4.57	4.78	5.42	8.07	10.18	11.86	13.81	14.77	14.30	14.55	17.07
90	0.01	0.71	1.47	2.76	4.65	5.82	7.06	8.37	9.01	9.07	11.45
95	0.61	0.73	0.32	0.49	0.85	2.30	2.63	4.43	5.18	4.92	6.16
100	0.61	0.67	1.09	1.13	0.78	1.34	1.37	1.89	2.19	2.33	2.69
105	0.74	0.47	0.89	0.92	1.29	1.27	1.13	1.25	0.76	1.13	1.17
110	1.45	0.59	1.29	1.30	1.23	1.00	0.87	0.41	1.32	0.34	1.23
115	1.57	1.32	0.77	0.83	0.69	0.20	0.97	1.14	0.75	0.79	0.60
120	1.66	0.74	1.01	1.31	1.22	1.64	1.00	0.74	0.84	1.12	0.84
125	1.95	1.44	1.92	1.49	1.00	0.93	1.28	1.00	1.61	1.01	1.21
130	1.47	1.84	1.00	1.42	1.74	1.49	1.87	1.20	2.02	1.23	1.14

Luminaire

Lamp		Report	20150413-0002
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt	
Lamp flux (lm)	582	Operator Current (A)	0.313
Total flux (lm)	582	Date Power Factor	1
			2015-04-13 오후 4:39:10

Luminous Flux Table

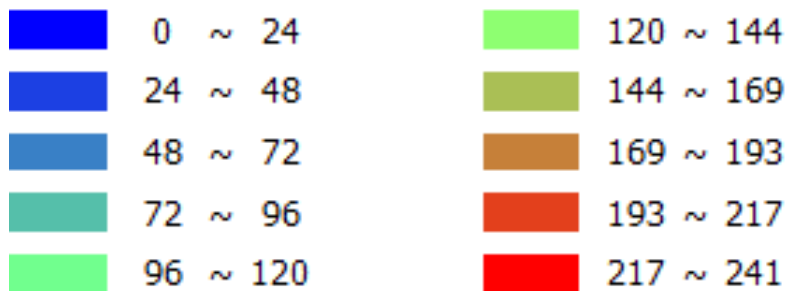
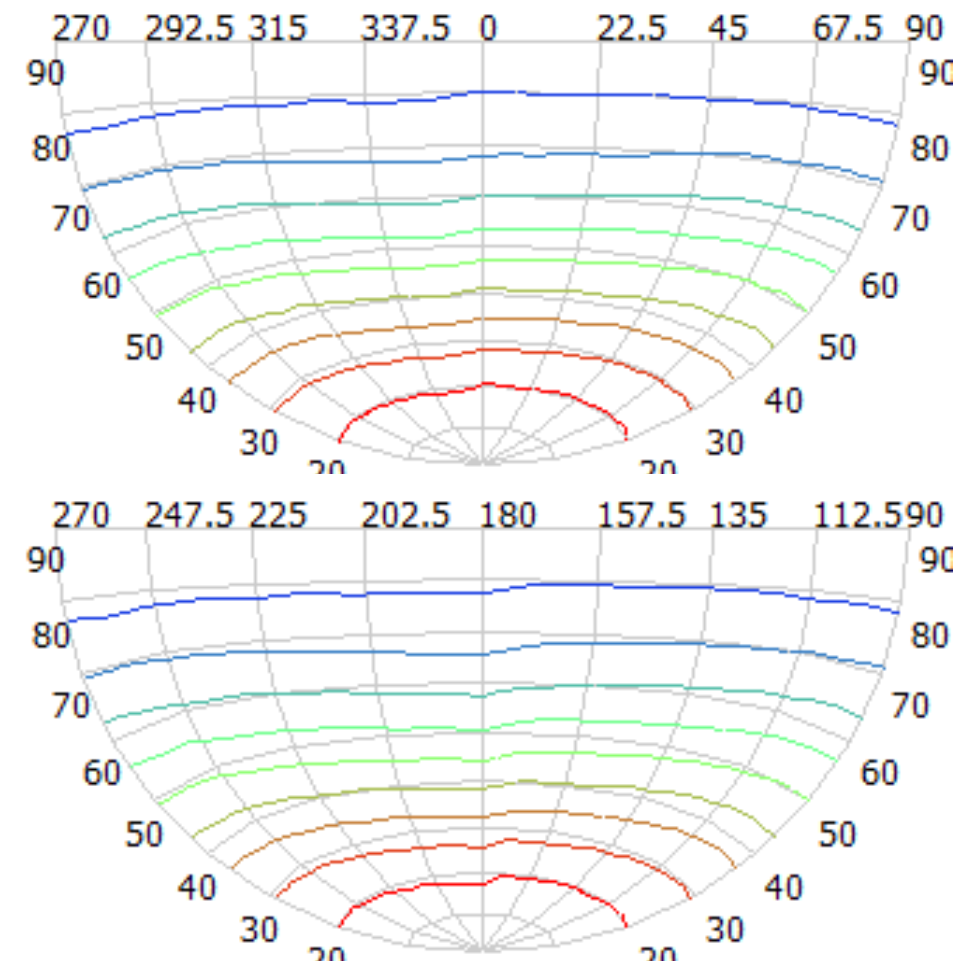
Total Lamp Lumens: 582
 Luminaire Efficiency (lm/W): 581.62
 CIE Classification: Direct

Elevation	Lumens	Cumulative	Lamp %	Luminaire %
0	1.43	1.43	0.25	0.25
5	11.37	12.80	2.20	2.20
10	22.24	35.04	6.02	6.02
15	32.06	67.10	11.54	11.54
20	40.37	107.47	18.48	18.48
25	46.81	154.28	26.53	26.53
30	51.09	205.37	35.31	35.31
35	53.12	258.49	44.45	44.44
40	52.85	311.35	53.53	53.53
45	50.71	362.06	62.25	62.25
50	46.93	408.99	70.32	70.32
55	41.77	450.77	77.50	77.50
60	35.76	486.53	83.65	83.65
65	29.30	515.83	88.69	88.69
70	22.84	538.67	92.62	92.61
75	16.67	555.33	95.48	95.48
80	11.17	566.51	97.40	97.40
85	6.51	573.02	98.52	98.52
90	3.35	576.37	99.10	99.10
95	1.53	577.90	99.36	99.36
100	0.72	578.62	99.49	99.48
105	0.47	579.09	99.57	99.56
110	0.49	579.57	99.65	99.65
115	0.52	580.10	99.74	99.74
120	0.57	580.67	99.84	99.84
125	0.62	581.29	99.95	99.94
130	0.34	581.62	100.00	100.00

Luminaire

Lamp		Report	20150413-0002
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt	
Lamp flux (lm)	582	Operator Current (A)	0.313
Total flux (lm)	582	Date Power Factor	1
			2015-04-13 오후 4:39:10

IsoCandela (Type C)

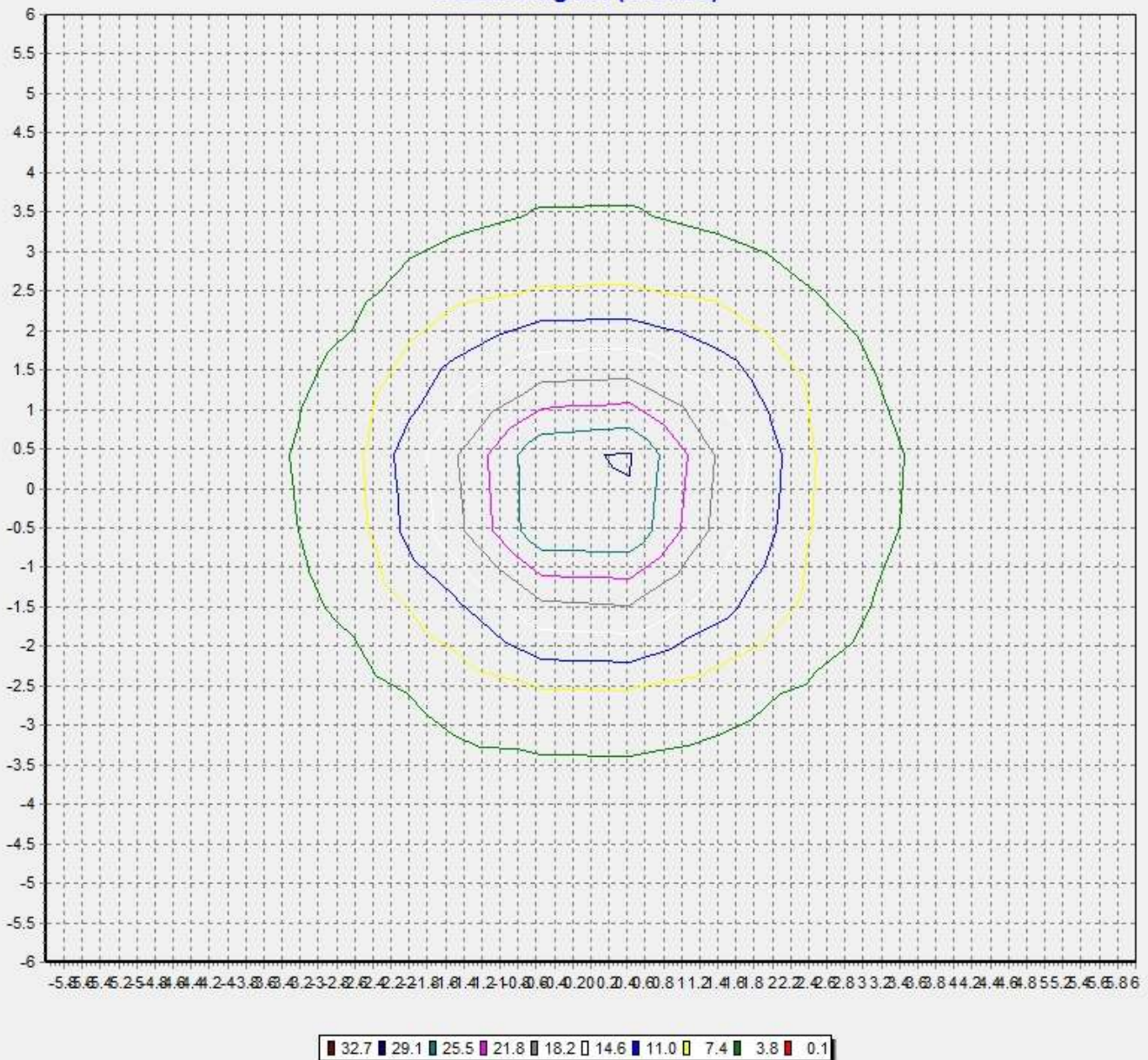


Luminaire

Lamp		Report	20150413-0002
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt
Lamp flux (lm)	582	Operator	Current (A) 0.313
Total flux (lm)	582	Date	Power Factor 1

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IsoLux Diagram (Ground)



Pole Height (m): 2.7

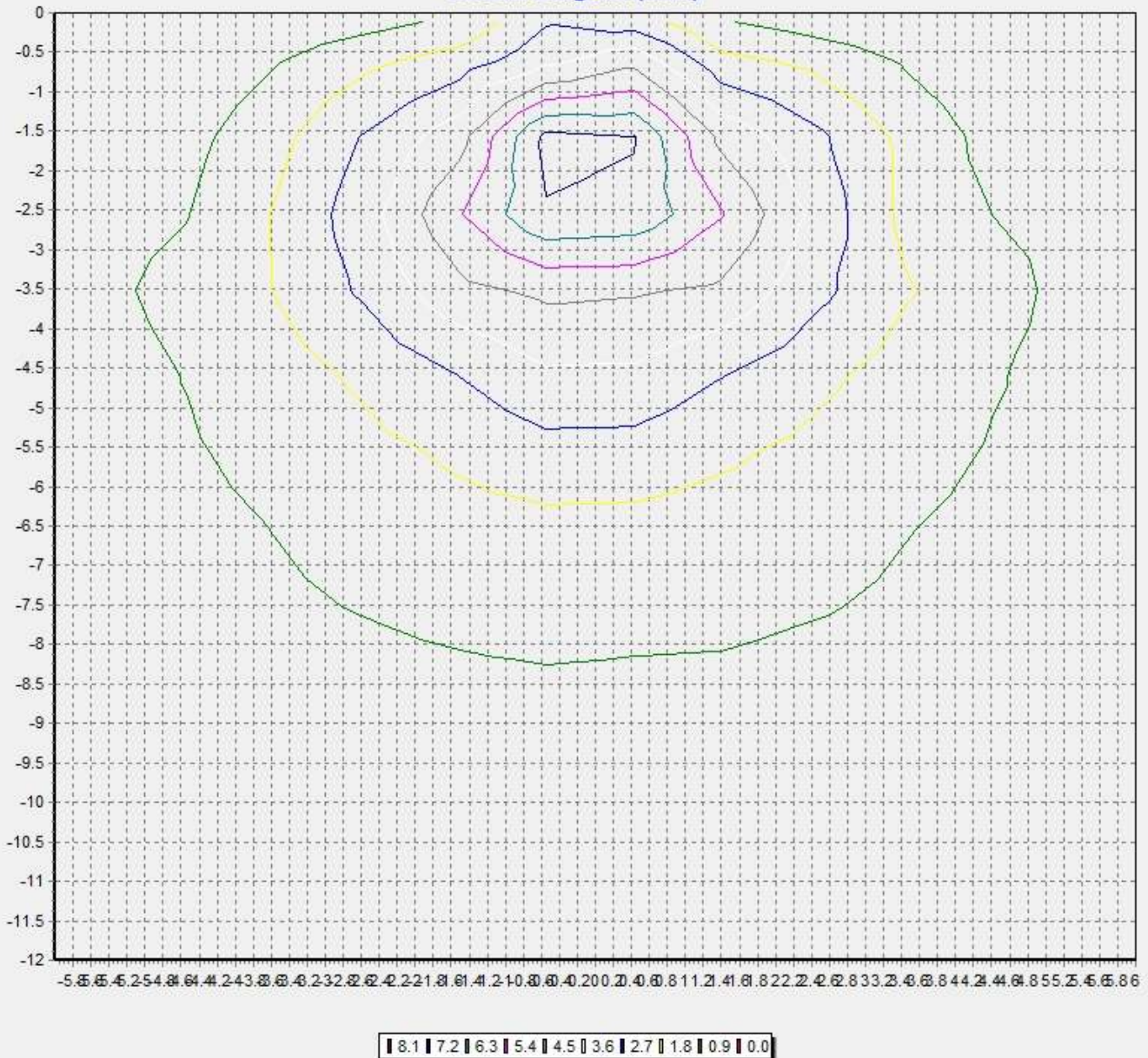
Area Width (m): 12

Luminaire

Lamp	Report			20150413-0002
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt	
Lamp flux (lm)	582	Operator	Current (A)	0.313
Total flux (lm)	582	Date	Power Factor	1

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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)	23.97
Lamp flux (lm)	582	Current (A)	0.313
Total flux (lm)	582	Power Factor	1

Report

20150413-0002

Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt

Operator

Date

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Illuminance Levels (Ground)

6.00	0.21	0.28	0.29	0.39	0.63	0.74	0.77	0.73	0.63	0.39	0.30	0.28	0.20
5.00	0.28	0.31	0.57	0.82	0.89	1.33	1.41	1.33	0.88	0.83	0.58	0.30	0.28
4.00	0.27	0.56	0.70	1.32	1.60	2.57	2.81	2.59	1.60	1.34	0.68	0.57	0.27
3.00	0.36	0.74	1.30	1.85	3.12	4.52	5.26	4.54	3.13	1.82	1.32	0.74	0.35
2.00	0.56	0.75	1.49	2.89	6.68	9.78	13.21	9.80	6.60	2.94	1.49	0.76	0.56
1.00	0.62	1.13	2.26	4.15	9.41	18.63	25.61	18.69	9.48	4.23	2.31	1.16	0.63
0.00	0.58	1.11	2.30	4.38	12.17	25.06	32.70	25.71	12.92	4.81	2.53	1.24	0.66
-1.00	0.56	1.04	2.10	3.87	9.00	18.13	25.53	18.48	9.30	4.06	2.20	1.09	0.59
-2.00	0.50	0.68	1.37	2.68	6.27	9.46	13.14	9.64	6.61	2.84	1.45	0.72	0.53
-3.00	0.32	0.67	1.21	1.68	2.93	4.30	5.16	4.45	3.05	1.81	1.28	0.72	0.34
-4.00	0.24	0.51	0.61	1.23	1.49	2.47	2.75	2.50	1.55	1.30	0.68	0.55	0.25
-5.00	0.25	0.27	0.52	0.76	0.81	1.26	1.37	1.28	0.84	0.80	0.56	0.29	0.27
-6.00	0.18	0.25	0.27	0.35	0.57	0.68	0.73	0.70	0.60	0.37	0.28	0.27	0.20
-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.): 32.7

All illuminance level values are in lux.

Illum. (Min.): 0.18

Illum. Avg.: 3.28

Total Optical Solution Provider

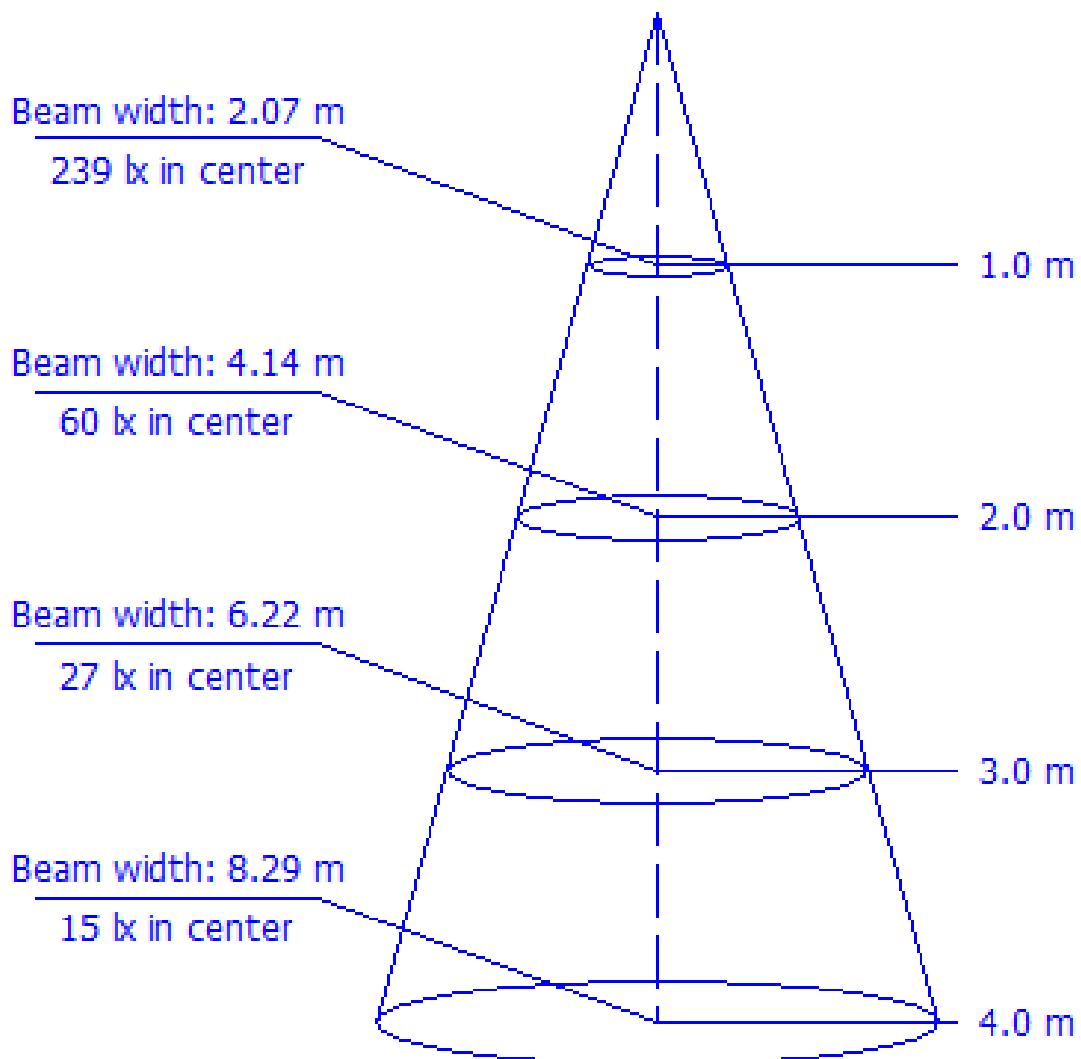


<http://www.jnctech.co.kr>
J & C Technology Co., Ltd.

Luminaire

Lamp		Report		20150413-0002
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt	
Lamp flux (lm)	582	Operator	Current (A)	0.313
Total flux (lm)	582	Date	Power Factor	1
				2015-04-13 오후 4:39:10

Illuminance Cone Diagram



Beam Angle = 92 deg.

Based on 50% of maximum illuminance.

Luminaire

Lamp

Report

20150413-0002

No. of lamps	1	Voltage (V)	23.97
Lamp flux (lm)	582	Current (A)	0.313
Total flux (lm)	582	Power Factor	1

Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150413\NDV 7W 35K -1.jdt
Operator	
Date	2015-04-13 오후 4:39:10

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	1.09	1.09	1.09	1.05	1.05	1.05	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	0.66	0.79	0.71	0.66	0.76	0.69	0.64	0.73	0.67	0.63	0.70	0.66	0.62	0.60
Room CR 4	0.72	0.63	0.57	0.70	0.62	0.56	0.68	0.61	0.56	0.65	0.59	0.55	0.63	0.58	0.54	0.52
Room CR 5	0.64	0.56	0.49	0.63	0.55	0.49	0.61	0.54	0.49	0.59	0.53	0.48	0.57	0.52	0.47	0.45
Room CR 6	0.58	0.50	0.44	0.57	0.49	0.43	0.55	0.48	0.43	0.54	0.47	0.42	0.52	0.46	0.42	0.40
Room CR 7	0.53	0.45	0.39	0.52	0.44	0.39	0.51	0.43	0.38	0.49	0.43	0.38	0.48	0.42	0.38	0.36
Room CR 8	0.49	0.40	0.35	0.48	0.40	0.35	0.46	0.39	0.34	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	0.31	0.43	0.36	0.31	0.42	0.35	0.31	0.41	0.35	0.31	0.29
Room CR 10	0.41	0.34	0.29	0.41	0.34	0.29	0.40	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28	0.26