

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 35K-24V-1

4. Test Period : 20150408 ~ 20150408

5. Test Environment

Ambient Temp. : (24.56 +- 3) °C

Relative Humidity : (20.76 +- 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
20150408-0003	FEELUX		LED

Test Item	Unit	Result	Memo
Beam Distribution Test	-	See attachment	
ATHD	%	0.0	
CIE 1931 Cxy		0.4089, 0.3877	
Correlated Color Temperature	K	3413	
Ra	-	84.28	
Power Factor	%	1.000	
Input Voltage	V	23.990	
Input Current	A	0.101	
Input Watt	W	2.41	
Lamp Flux	lm	192.2	
Efficient	lm/W	79.32	
Illuminance	lx	80	1 m
		20	2 m
		9	3 m

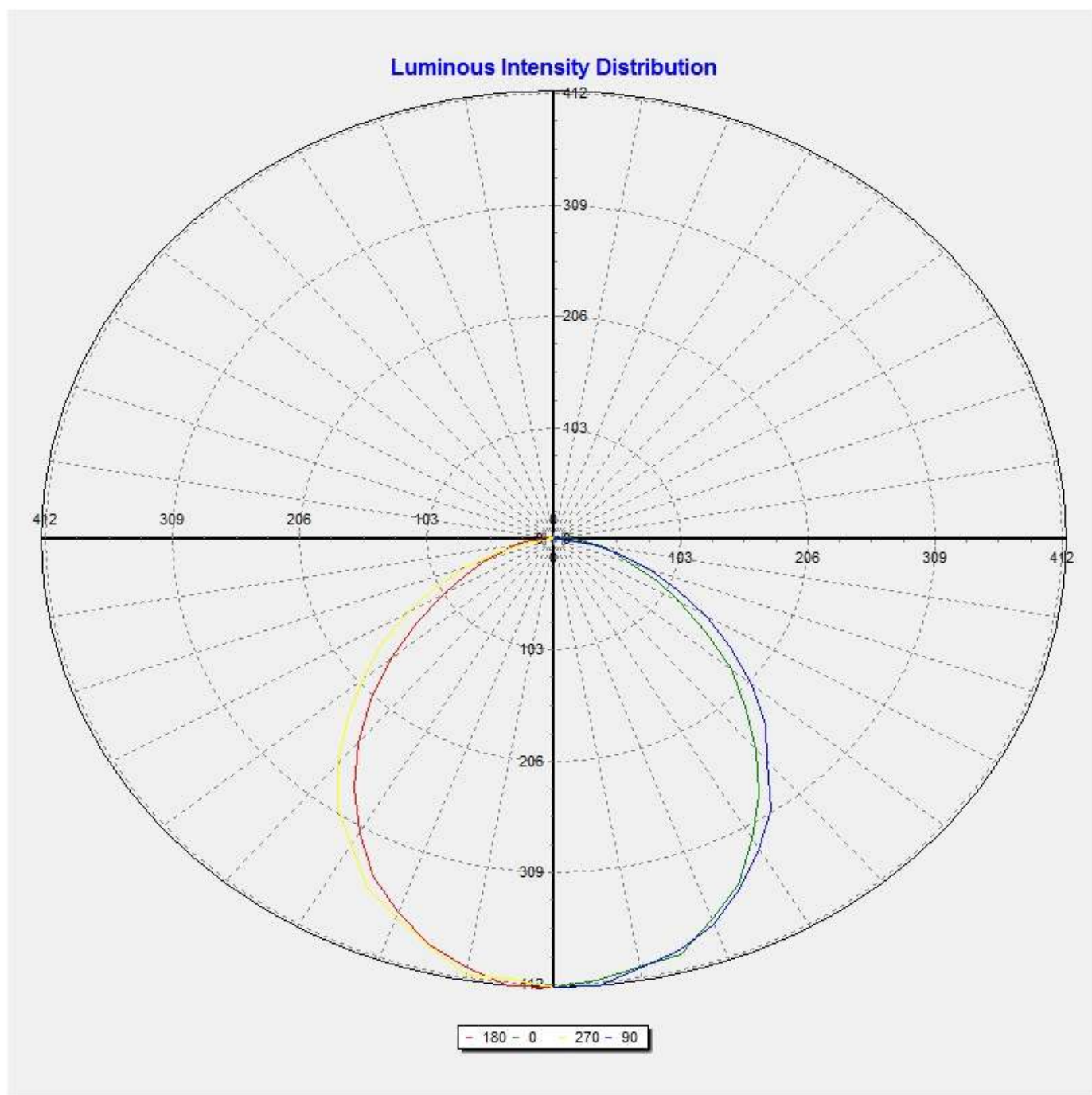
* This test result is for the sample provided by the client.

Sample photo

Click to load image

Luminaire

Lamp		Report	20150408-0003
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt
Lamp flux (lm)	192	Operator	Current (A) 0.101
Total flux (lm)	192	Date	Power Factor 1
			2015-04-08 오전 11:54:11

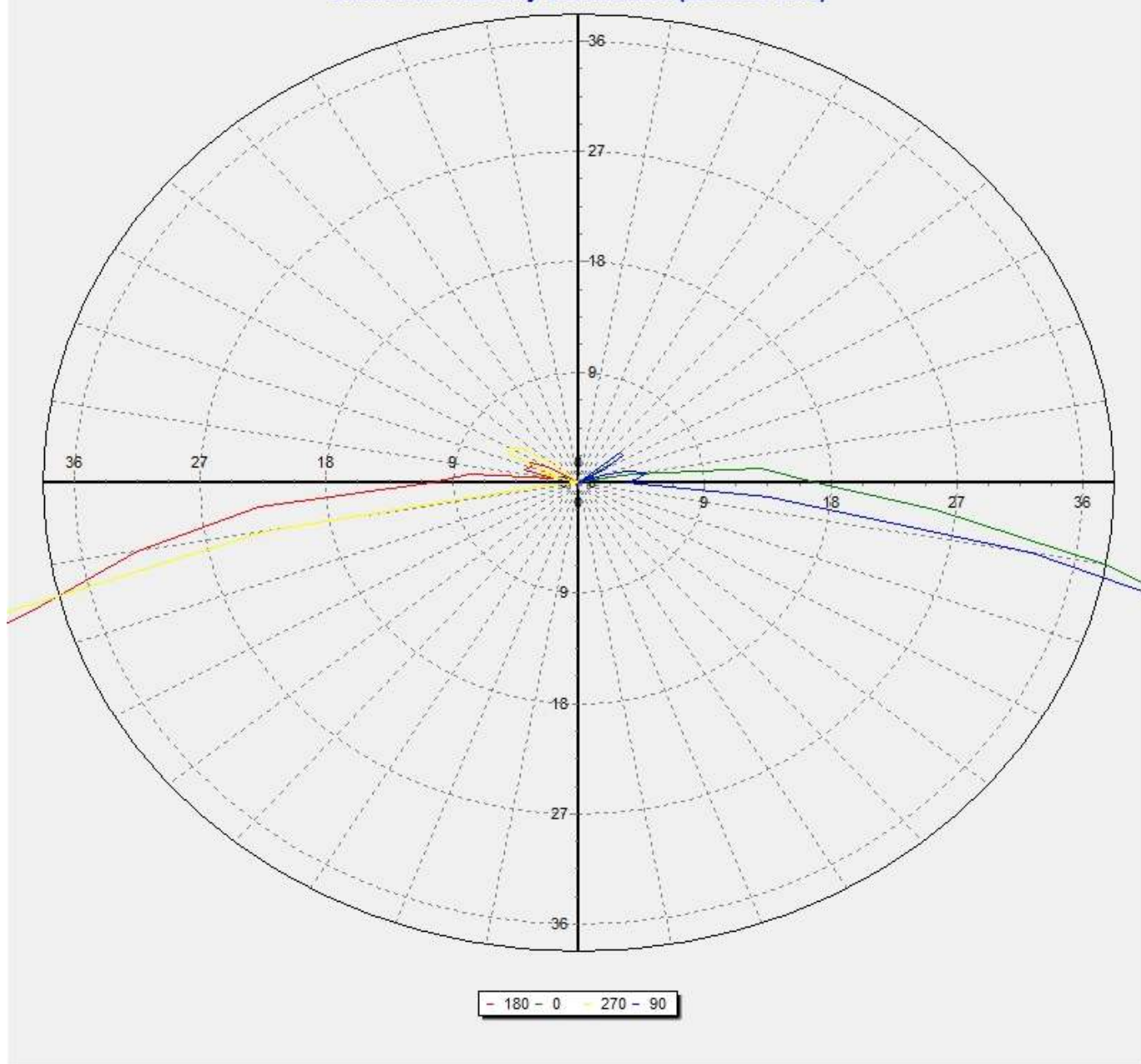


All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150408-0003
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt
Lamp flux (lm)	192	Operator	Current (A) 0.101
Total flux (lm)	192	Date	Power Factor 1
			2015-04-08 오전 11:54:11

Luminous Intensity Distribution (Lowest 10%)



All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp		Report	20150408-0003
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt	
Lamp flux (lm)	192	Operator Current (A)	0.101
Total flux (lm)	192	Date Power Factor	1
			2015-04-08 오전 11:54:11

Luminous Intensity Data

GWC	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
0	79.68	78.93	80.05	80.54	78.86	79.16	79.27	79.80	79.79	79.65	79.87	79.95	80.70	79.33	79.59
5	78.76	79.03	78.99	78.72	78.83	78.52	79.07	78.90	79.81	79.69	79.93	79.55	79.31	78.68	79.31
10	77.20	77.39	77.83	77.39	77.35	77.28	77.35	77.58	78.20	77.58	77.96	77.66	77.86	78.71	77.82
15	76.37	76.13	75.74	76.19	76.05	75.62	76.15	75.82	74.68	75.77	75.69	76.13	75.62	75.66	75.54
20	71.92	72.54	72.50	72.50	72.89	71.28	72.60	72.06	71.84	72.81	72.82	73.65	73.15	73.32	72.58
25	67.93	67.87	67.67	67.19	67.97	68.55	68.65	68.27	68.13	68.52	68.88	68.47	68.83	68.24	68.98
30	61.69	61.87	61.70	62.44	62.86	62.94	64.34	63.98	63.90	63.77	64.51	64.43	63.84	63.29	63.06
35	55.40	55.73	55.83	56.36	56.31	57.83	58.47	58.02	57.12	58.85	59.19	58.17	58.85	57.83	57.42
40	48.76	49.27	49.67	49.29	50.72	51.51	52.18	52.25	52.52	51.71	53.18	51.74	52.50	51.52	51.19
45	42.11	41.33	42.45	42.92	43.60	44.69	45.76	46.00	46.71	46.58	46.85	45.93	45.74	44.87	44.49
50	35.95	35.16	35.52	36.49	37.86	37.88	39.08	39.75	39.34	40.35	40.54	39.89	38.24	38.03	37.59
55	28.90	28.98	30.44	30.52	31.04	31.90	32.72	32.72	33.90	33.57	33.90	33.62	32.74	32.48	31.78
60	22.48	22.50	23.22	24.73	24.58	25.45	26.33	26.75	27.41	27.54	27.77	27.71	26.93	24.80	24.85
65	17.85	17.58	19.00	19.03	19.92	20.26	21.47	21.55	21.08	21.17	22.42	21.29	21.33	19.82	19.71
70	12.75	13.16	13.52	14.24	15.62	16.32	16.18	16.12	16.54	16.08	16.75	14.88	15.48	15.04	14.22
75	9.69	10.04	10.27	10.77	11.15	11.10	11.39	11.30	11.57	10.95	10.80	11.42	10.57	10.52	10.15
80	7.31	6.50	7.76	7.43	7.61	7.52	6.49	6.78	6.56	6.29	6.49	6.67	6.99	6.73	6.83
85	4.90	4.01	5.10	4.57	5.39	4.45	4.36	3.16	2.52	2.60	2.66	2.73	3.03	4.43	4.67
90	3.25	3.83	3.48	2.55	3.48	2.17	1.63	1.32	0.42	0.66	0.99	1.82	1.52	2.13	2.86
95	2.50	1.92	1.47	1.50	1.62	1.44	0.82	0.42	-0.17	0.83	0.28	0.69	1.15	0.97	0.74
100	0.76	1.12	0.55	1.42	0.42	0.03	0.52	0.37	-0.09	0.93	-0.22	0.64	0.33	0.13	0.46
105	0.29	0.53	0.39	0.25	0.20	0.43	0.77	0.03	0.42	0.68	0.13	0.10	-0.18	0.50	0.16
110	-0.35	-0.33	0.51	1.07	0.21	-0.49	0.39	0.23	0.78	0.32	0.34	-0.33	-0.02	0.19	0.30
115	0.19	0.07	0.27	0.68	0.34	0.27	0.50	0.45	0.94	-0.21	0.98	-0.07	-0.27	0.90	0.34
120	-0.09	0.38	0.21	0.09	0.33	0.76	0.03	0.92	0.66	0.43	0.19	0.72	0.06	0.69	0.75
125	0.56	0.16	1.00	0.89	0.55	0.29	0.13	0.60	0.32	0.74	0.45	1.06	0.41	0.83	0.54
130	-0.18	0.72	-0.03	-0.07	0.31	0.29	0.67	0.61	0.46	0.73	0.18	1.08	0.87	0.41	0.16

Luminaire

Lamp		Report	20150408-0003		
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt		
Lamp flux (lm)	192	Operator	Current (A)	0.101	
Total flux (lm)	192	Date	Power Factor	1	2015-04-08 오전 11:54:11

Luminous Intensity Data (Continued)

GWC	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290
0	79.61	79.75	79.99	79.68	78.93	80.05	80.54	78.86	79.16	79.27	79.80	79.79	79.65	79.87	79.95
5	79.12	78.45	79.82	79.67	79.25	79.41	79.64	79.96	79.08	79.28	79.13	78.96	78.50	78.65	78.98
10	77.99	78.89	78.54	77.34	78.17	77.61	77.50	78.95	77.43	78.28	77.79	77.90	78.59	77.55	78.21
15	75.82	75.86	76.38	74.59	74.93	75.70	75.20	74.71	75.67	74.99	75.12	74.80	74.95	74.58	74.26
20	72.69	72.60	73.33	70.56	72.03	71.14	71.76	71.25	72.31	72.46	73.27	72.61	71.50	71.49	72.20
25	67.91	67.95	68.07	66.17	66.65	65.67	67.40	67.95	68.03	68.98	68.35	67.96	68.54	67.24	67.40
30	62.65	63.63	62.34	60.20	62.14	60.61	60.94	62.18	62.65	63.26	63.69	62.50	62.88	62.99	63.27
35	56.89	56.93	55.29	54.00	53.60	53.50	55.08	55.50	56.21	57.62	57.54	57.98	58.52	56.73	56.30
40	50.19	50.10	49.71	47.34	48.01	47.99	48.42	48.51	49.48	50.95	51.58	50.87	52.27	50.74	50.32
45	43.74	43.59	42.72	40.37	40.71	40.65	41.72	42.19	43.57	44.32	45.34	44.58	45.34	43.60	45.42
50	36.79	36.05	35.74	32.68	33.08	33.74	34.83	36.61	37.23	37.60	38.13	38.45	38.83	38.96	37.92
55	29.66	29.99	28.35	26.00	26.61	26.68	28.50	29.27	30.07	30.70	31.74	32.02	32.73	32.19	31.63
60	23.93	23.03	22.12	19.97	21.58	21.39	22.44	23.46	24.14	24.94	26.23	26.13	26.52	25.76	25.77
65	18.41	18.12	17.36	15.29	15.70	15.83	16.74	17.28	19.53	18.73	20.35	20.59	20.47	20.45	19.98
70	14.55	13.15	12.80	11.77	11.77	12.44	12.35	13.21	13.74	14.33	14.56	14.43	14.66	13.88	14.58
75	10.49	9.72	9.56	7.76	8.33	8.64	8.28	9.07	9.64	9.56	10.17	9.36	8.98	10.14	10.57
80	7.21	5.94	6.87	6.14	5.95	5.88	5.93	6.66	6.13	5.80	5.02	5.54	4.36	4.69	5.11
85	4.97	4.29	4.51	4.39	4.74	4.36	4.19	4.22	4.57	2.92	1.62	1.58	0.47	1.95	2.68
90	3.03	3.27	3.25	2.01	2.63	1.97	1.93	1.91	2.02	1.06	0.93	0.73	-0.09	0.31	0.44
95	1.25	1.55	1.34	1.49	1.90	1.42	1.17	0.43	0.47	0.35	0.65	0.08	-0.06	0.05	0.39
100	1.02	1.03	1.13	0.35	-0.09	0.46	0.29	0.36	0.02	0.38	0.03	0.13	-0.07	0.77	-0.82
105	0.32	0.07	0.20	0.78	-0.02	0.30	0.39	0.61	0.26	-0.11	-0.05	0.69	0.51	0.53	0.36
110	0.04	-0.05	-0.24	0.69	1.27	-0.38	-0.14	0.15	0.38	0.52	0.39	-0.10	0.34	0.34	0.31
115	0.33	0.19	1.08	0.74	0.20	0.31	0.55	0.37	0.80	-0.15	0.26	0.61	1.05	-0.45	0.38
120	0.04	0.07	-0.26	0.47	0.54	-0.06	0.60	0.68	0.55	0.19	0.20	0.17	1.09	0.25	0.15
125	0.29	0.18	0.45	-0.29	-0.04	0.37	0.31	0.27	0.76	1.15	0.87	0.83	0.94	0.64	0.05
130	-0.22	0.16	0.27	0.48	0.39	0.39	0.01	0.45	0.62	0.45	0.48	0.78	0.46	0.49	-0.27

Luminaire

Lamp		Report	20150408-0003
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt	
Lamp flux (lm)	192	Operator Current (A)	0.101
Total flux (lm)	192	Date Power Factor	1
			2015-04-08 오전 11:54:11

Luminous Intensity Data (Continued)

GWC	300	310	320	330	340	350	360
0	80.70	79.33	79.59	79.61	79.75	79.99	79.68
5	79.53	78.82	79.59	78.45	78.84	78.97	78.76
10	77.79	76.46	77.53	78.19	77.73	77.61	77.20
15	74.96	75.87	74.88	74.79	75.52	75.06	76.37
20	71.46	71.36	71.29	72.14	71.39	71.15	71.92
25	67.43	68.14	67.20	67.45	66.42	66.49	67.93
30	61.92	62.17	60.98	61.22	60.63	60.07	61.69
35	57.14	56.22	54.74	54.71	54.03	53.93	55.40
40	50.54	49.30	48.36	47.94	47.49	47.02	48.76
45	43.22	42.81	41.53	41.86	40.12	40.69	42.11
50	37.39	36.42	34.94	35.03	33.99	33.57	35.95
55	31.04	30.05	29.15	29.21	27.99	26.62	28.90
60	24.64	24.38	23.37	22.99	21.63	21.38	22.48
65	19.04	18.60	18.18	17.57	16.75	16.61	17.85
70	14.16	14.32	13.10	13.25	12.35	11.75	12.75
75	10.59	10.06	9.44	9.10	9.45	9.23	9.69
80	6.35	6.40	6.64	6.81	7.20	6.67	7.31
85	2.91	3.43	4.20	3.82	4.16	3.85	4.90
90	0.73	1.61	1.87	2.75	2.84	2.95	3.25
95	0.06	1.46	0.69	1.01	1.36	1.84	2.50
100	0.05	0.00	-0.01	0.64	0.38	0.25	0.76
105	0.48	0.67	0.02	0.31	0.02	0.48	0.29
110	-0.19	0.25	0.24	0.14	0.64	0.37	-0.35
115	0.64	0.16	0.64	0.34	0.08	0.17	0.19
120	0.55	1.08	0.67	0.07	0.53	0.93	-0.09
125	0.23	1.17	0.47	1.16	0.17	0.20	0.56
130	0.18	0.39	0.26	0.34	1.33	0.42	-0.18

Luminaire

Lamp		Report		20150408-0003
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt	
Lamp flux (lm)	192	Operator	Current (A)	0.101
Total flux (lm)	192	Date	Power Factor	1
				2015-04-08 오전 11:54:11

Luminous Flux Table

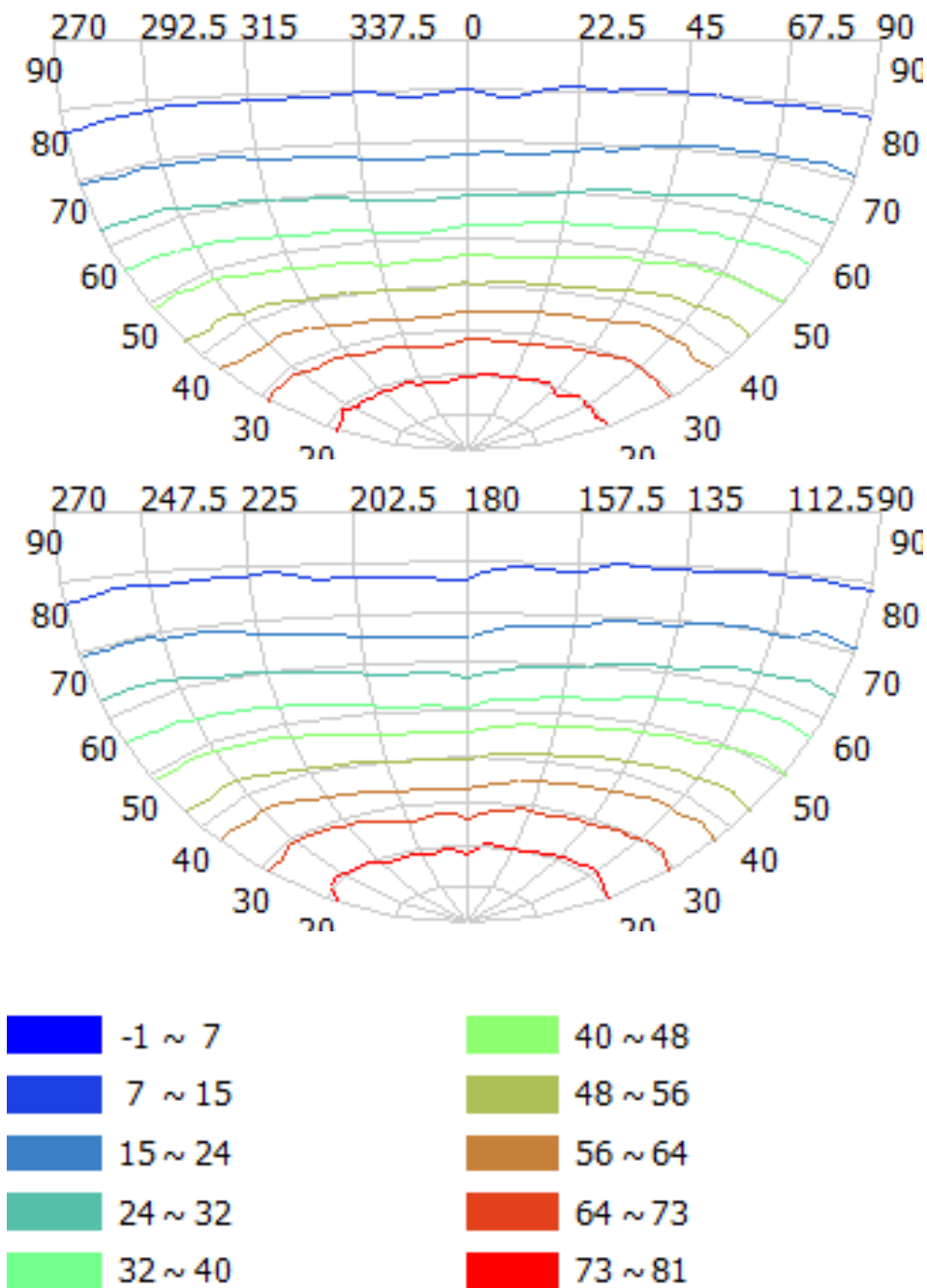
Total Lamp Lumens: 192
 Luminaire Efficiency (lm/W): 192.15
 CIE Classification: Direct

Elevation	Lumens	Cumulative	Lamp %	Luminaire %
0	0.48	0.48	0.25	0.25
5	3.78	4.26	2.22	2.22
10	7.41	11.66	6.07	6.07
15	10.70	22.37	11.64	11.64
20	13.53	35.90	18.68	18.68
25	15.71	51.61	26.85	26.86
30	17.14	68.75	35.77	35.78
35	17.76	86.51	45.01	45.02
40	17.67	104.18	54.20	54.22
45	16.88	121.06	62.99	63.00
50	15.51	136.57	71.06	71.08
55	13.71	150.28	78.19	78.21
60	11.59	161.87	84.22	84.24
65	9.45	171.33	89.14	89.16
70	7.27	178.60	92.92	92.95
75	5.29	183.89	95.67	95.70
80	3.47	187.35	97.48	97.50
85	2.01	189.36	98.52	98.55
90	1.07	190.43	99.08	99.11
95	0.53	190.97	99.36	99.38
100	0.20	191.17	99.46	99.49
105	0.17	191.34	99.55	99.58
110	0.11	191.45	99.61	99.64
115	0.19	191.64	99.71	99.73
120	0.19	191.83	99.81	99.84
125	0.23	192.07	99.93	99.96
130	0.08	192.15	99.97	100.00

Luminaire

Lamp	Report			20150408-0003
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt	
Lamp flux (lm)	192	Operator	Current (A)	0.101
Total flux (lm)	192	Date	Power Factor	1
				2015-04-08 오전 11:54:11

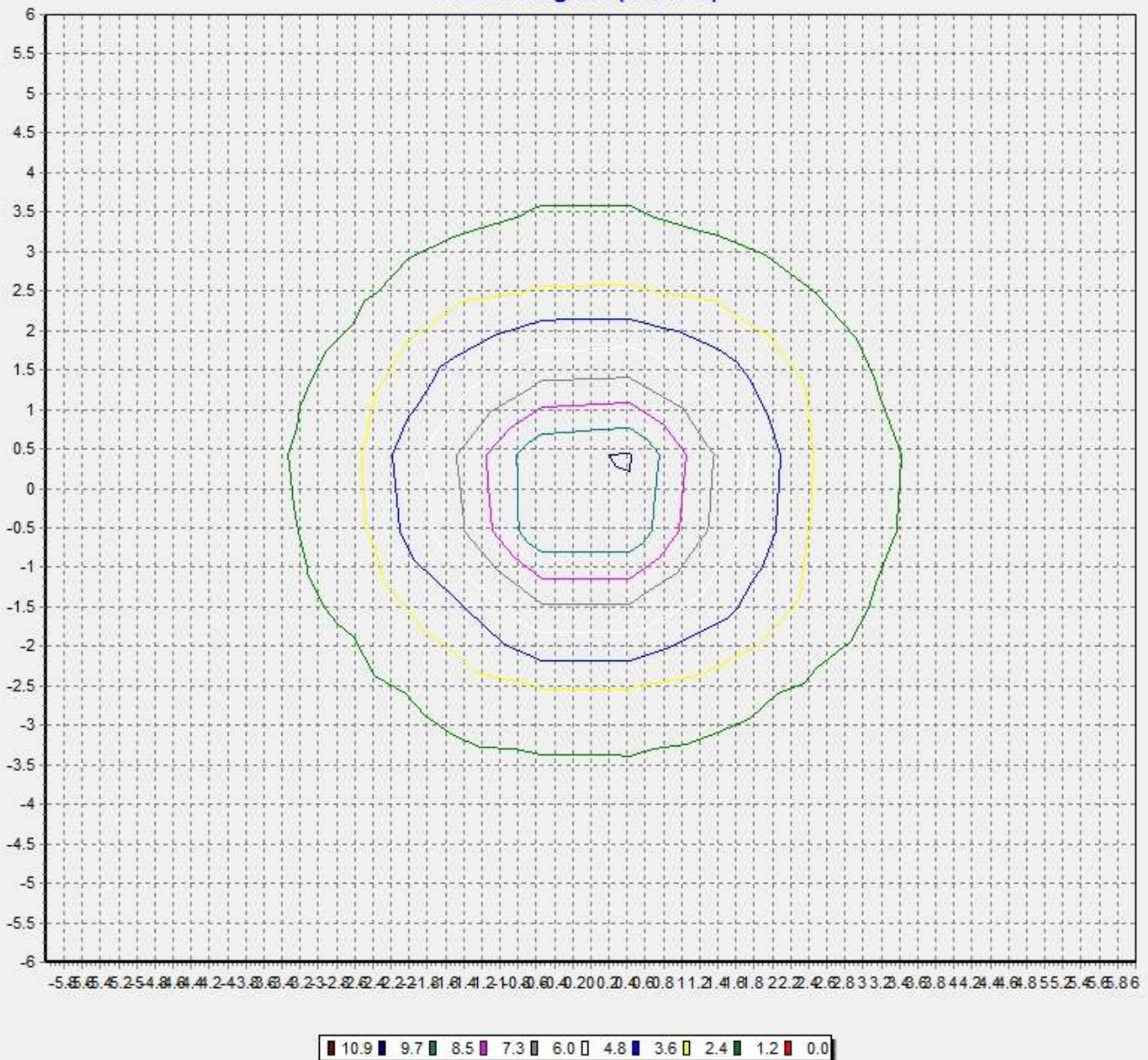
IsoCandela (Type C)



Luminaire

Lamp		Report	20150408-0003
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt
Lamp flux (lm)	192	Operator	Current (A) 0.101
Total flux (lm)	192	Date	Power Factor 1
			2015-04-08 오전 11:54:11

IsoLux Diagram (Ground)



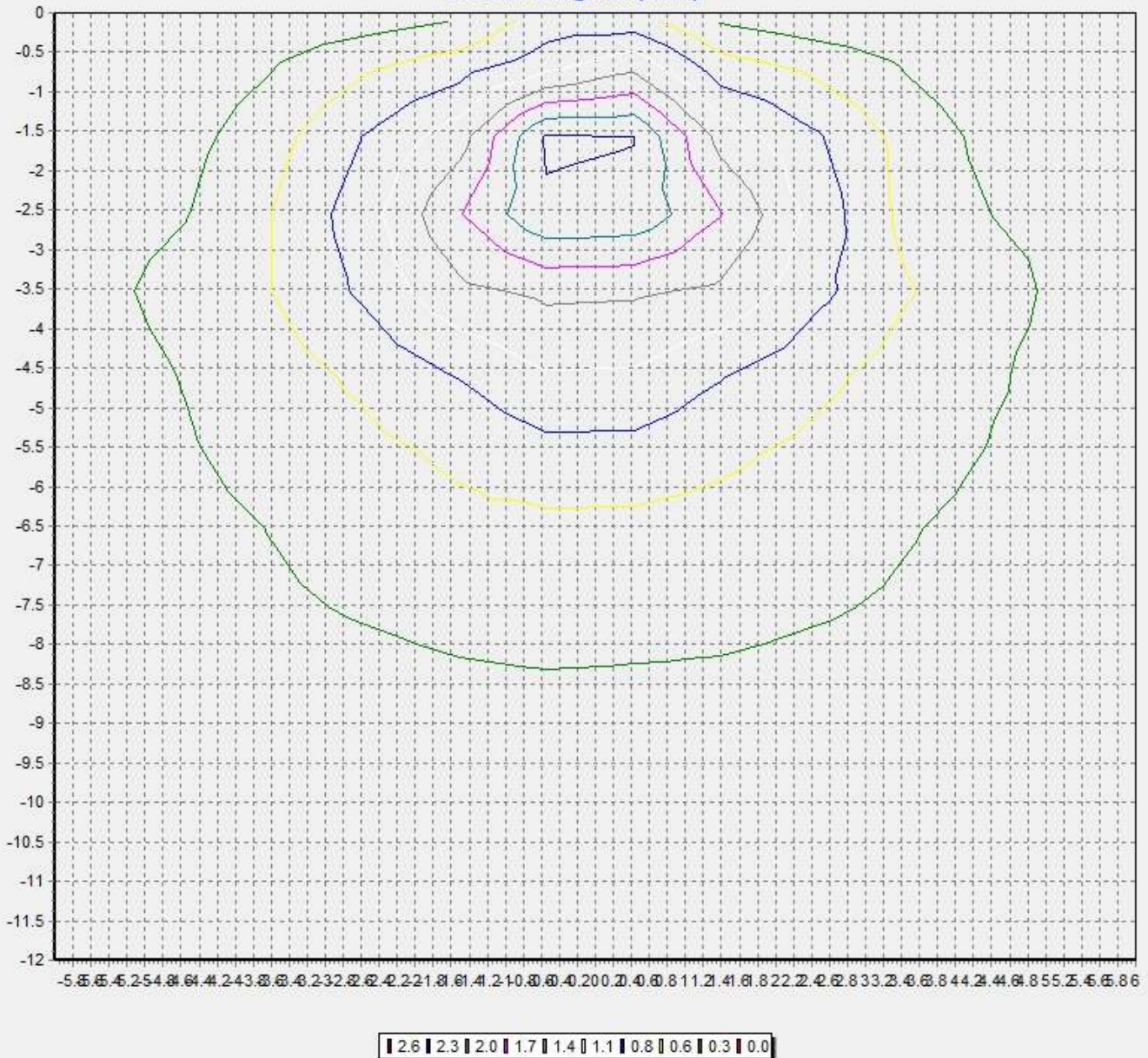
Pole Height (m): 2.7

Area Width (m): 12

Luminaire

Lamp		Report	20150408-0003
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt
Lamp flux (lm)	192	Operator	Current (A) 0.101
Total flux (lm)	192	Date	Power Factor 1
			2015-04-08 오전 11:54:11

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)	192	Current (A)	0.101
Total flux (lm)	192	Power Factor	1

Report

20150408-0003

Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt

Operator

Date

2015-04-08 오전 11:54:11

Illuminance Levels (Ground)

6.00	0.07	0.09	0.09	0.13	0.21	0.24	0.25	0.24	0.20	0.13	0.10	0.09	0.07
5.00	0.09	0.10	0.18	0.28	0.30	0.44	0.47	0.44	0.29	0.27	0.18	0.10	0.09
4.00	0.09	0.18	0.23	0.45	0.54	0.86	0.94	0.84	0.52	0.43	0.22	0.18	0.08
3.00	0.12	0.24	0.44	0.62	1.05	1.52	1.76	1.50	1.02	0.59	0.42	0.24	0.11
2.00	0.18	0.24	0.49	0.97	2.27	3.30	4.43	3.27	2.18	0.96	0.49	0.24	0.18
1.00	0.20	0.36	0.75	1.40	3.22	6.28	8.55	6.20	3.13	1.36	0.75	0.37	0.20
0.00	0.18	0.35	0.75	1.47	4.15	8.41	10.93	8.61	4.25	1.58	0.83	0.39	0.21
-1.00	0.19	0.33	0.69	1.29	3.05	6.14	8.45	6.17	3.05	1.33	0.71	0.34	0.19
-2.00	0.16	0.22	0.44	0.88	2.11	3.16	4.38	3.19	2.17	0.92	0.47	0.23	0.17
-3.00	0.10	0.22	0.40	0.55	0.98	1.44	1.70	1.46	1.00	0.58	0.41	0.23	0.11
-4.00	0.08	0.17	0.19	0.41	0.49	0.81	0.90	0.83	0.50	0.42	0.21	0.18	0.08
-5.00	0.08	0.08	0.17	0.25	0.27	0.42	0.45	0.42	0.27	0.26	0.18	0.09	0.09
-6.00	0.06	0.08	0.09	0.11	0.19	0.23	0.24	0.23	0.20	0.12	0.09	0.09	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.): 10.9

All illuminance level values are in lux.

Illum. (Min.): 0.06

Illum. Avg.: 1.09

Total Optical Solution Provider

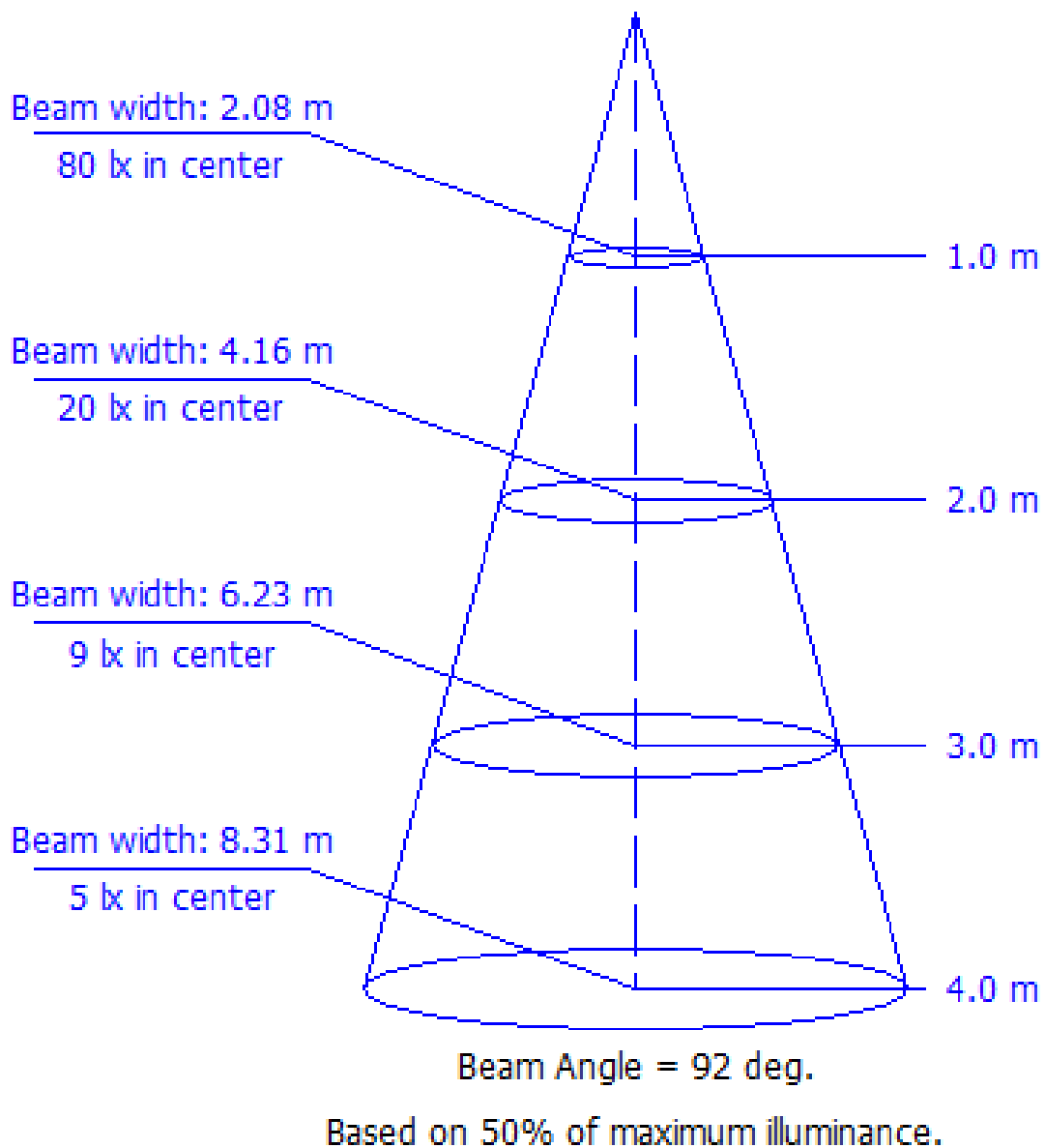


<http://www.jnctech.co.kr>
J & C Technology Co., Ltd.

Luminaire

Lamp		Report		20150408-0003
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt	
Lamp flux (lm)	192	Operator	Current (A)	0.101
Total flux (lm)	192	Date	Power Factor	1
				2015-04-08 오전 11:54:11

Illuminance Cone Diagram



Luminaire

Lamp

Report

20150408-0003

No. of lamps	1	Voltage (V)	23.99
Lamp flux (lm)	192	Current (A)	0.101
Total flux (lm)	192	Power Factor	1

Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150408\NDV 3W 35K -1.jdt
Operator	
Date	2015-04-08 오전 11:54:11

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	1.04	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	0.92	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	0.75	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	0.64	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	0.64	0.56	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	0.59	0.50	0.44	0.58	0.50	0.44	0.56	0.49	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	0.53	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	0.41	0.35	0.47	0.40	0.35	0.46	0.39	0.35	0.44	0.39	0.34	0.32
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	0.32	0.28	0.27