

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 : 20150421

2. Purpose of Report : Test

3. Test Standard / Item : LED / HDV3 40K-24V-1

4. Test Period : 20150421 ~ 20150421

5. Test Environment

Ambient Temp. : (18.39 +- 3) °C

Relative Humidity : (28.48 +- 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
20150421-0003	FEELUX		LED

Test Item	Unit	Result	Memo
Beam Distribution Test	-	See attachment	
ATHD	%	0.0	
CIE 1931 Cxy		0.3763, 0.3699	
Correlated Color Temperature	K	4075	
Ra	-	85.51	
Power Factor	%	1.000	
Input Voltage	V	23.990	
Input Current	A	0.119	
Input Watt	W	2.84	
Lamp Flux	lm	265.5	
Efficient	lm/W	93.00	
Illuminance	lx	108	1 m
		27	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	20150421-0003		
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150420\HDTV 3W 40K -1.jdt		
Lamp flux (lm)	266	Operator	Current (A)	0.119	
Total flux (lm)	266	Date	Power Factor	1	
2015-04-21 오후 3:22:59					

Luminous Intensity Data

GWC	0	10	20	30	40	50	60	70	80	90	100	110	120
0	108.06	107.82	108.23	108.09	107.72	107.90	107.99	107.80	107.74	108.40	107.93	108.34	108.79
5	107.62	107.79	108.14	107.95	107.97	108.27	107.61	106.90	107.64	107.76	107.83	107.72	107.66
10	106.31	106.25	106.44	106.11	106.75	106.45	106.91	106.27	105.58	106.04	106.51	106.51	106.02
15	103.17	102.49	103.55	103.08	104.01	103.53	103.26	103.45	104.01	103.24	103.76	103.49	102.97
20	98.59	98.35	99.35	98.73	99.58	99.51	99.61	99.71	99.30	99.54	99.47	99.09	98.73
25	92.48	92.26	92.68	92.70	93.65	93.76	94.68	94.13	94.42	93.88	93.92	93.60	93.30
30	85.49	86.10	86.09	86.05	87.37	87.35	87.38	88.23	88.92	88.24	88.54	86.63	86.56
35	78.58	78.20	79.13	79.20	79.92	79.97	80.06	80.77	81.32	80.84	80.90	79.87	79.64
40	70.93	70.43	71.20	71.35	71.52	72.09	73.07	72.74	73.57	73.21	73.35	71.61	71.19
45	62.02	62.31	62.67	62.71	63.04	63.32	63.74	64.45	65.29	64.80	64.39	63.51	62.31
50	53.73	53.54	54.47	54.46	54.78	54.87	55.59	55.43	56.10	56.24	55.37	53.98	54.15
55	42.47	42.83	44.50	45.01	46.47	46.83	46.36	47.12	47.65	47.13	47.26	45.60	45.86
60	33.56	33.93	34.16	35.44	37.38	38.21	39.29	38.52	39.02	39.17	37.78	37.69	37.24
65	25.59	26.14	27.44	27.60	29.23	29.73	30.92	30.47	31.52	30.48	29.43	29.08	29.27
70	20.15	20.33	21.19	21.01	22.78	22.75	23.68	23.02	22.28	22.12	21.98	21.61	21.63
75	15.44	14.89	16.22	15.78	16.05	16.42	16.71	16.26	16.28	15.92	15.37	14.91	15.19
80	11.11	11.90	11.41	11.03	11.62	11.76	11.11	9.47	9.12	9.30	9.07	9.21	9.90
85	7.95	8.22	7.25	8.74	7.96	7.19	6.94	5.45	3.95	4.02	3.85	5.11	5.99
90	5.81	6.18	5.98	5.28	5.21	4.11	3.30	2.78	1.65	1.50	1.69	2.77	3.78
95	4.57	4.16	3.81	3.17	3.84	2.84	1.47	0.97	-0.21	0.22	-0.08	0.81	1.31
100	2.11	2.70	1.85	1.95	1.58	1.00	0.48	0.53	0.30	0.81	0.14	0.29	0.58
105	1.50	0.94	0.73	0.41	0.55	-0.45	0.47	0.84	0.12	0.53	0.38	0.79	0.43
110	0.41	0.49	1.20	0.06	1.22	0.42	0.64	-0.02	0.58	0.28	0.22	0.42	0.51
115	1.03	0.33	0.59	1.09	0.84	0.11	0.22	0.67	0.41	0.14	1.52	0.60	0.64
120	0.31	0.41	0.85	0.25	0.64	1.00	0.17	1.33	0.46	0.59	0.48	1.21	-0.02
125	0.42	0.23	0.00	0.92	0.74	0.52	0.93	0.70	0.76	0.86	0.77	0.67	0.61
130	0.63	0.88	1.00	0.25	0.59	0.55	0.49	0.17	0.02	0.78	0.56	0.28	0.48

Luminaire

Lamp		Report	20150421-0003			
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150420\HDTV 3W 40K -1.jdt			
Lamp flux (lm)	266	Operator	Current (A)	0.119		
Total flux (lm)	266	Date	Power Factor	1	2015-04-21 오후 3:22:59	

Luminous Intensity Data (Continued)

GWC	130	140	150	160	170	180	190	200	210	220	230	240	250
0	107.82	107.43	108.21	107.45	108.31	108.06	107.82	108.23	108.09	107.72	107.90	107.99	107.80
5	108.09	107.98	107.97	107.59	107.90	107.10	107.12	107.00	107.16	106.13	107.45	106.83	106.70
10	106.26	105.43	105.96	106.07	105.43	104.74	104.98	104.59	104.90	105.06	104.48	103.93	104.02
15	102.68	102.73	102.81	102.28	102.16	100.34	100.79	100.27	100.69	100.10	100.82	100.68	100.88
20	98.31	98.77	97.15	97.66	95.78	94.68	94.92	94.13	95.30	94.83	95.88	96.68	96.89
25	92.37	91.56	91.11	90.80	90.21	87.86	87.91	87.69	88.42	88.26	89.04	90.09	90.52
30	85.57	84.81	84.16	83.74	84.07	80.78	81.52	81.22	81.43	80.92	82.19	82.86	83.18
35	77.80	77.73	77.02	76.76	76.12	73.84	73.28	73.56	73.97	73.07	73.74	74.54	74.94
40	69.86	69.22	68.64	68.31	68.20	65.38	65.17	64.56	64.48	65.71	65.71	64.79	66.39
45	61.15	61.56	59.75	60.79	59.38	56.33	56.56	56.60	57.11	56.93	57.08	56.79	58.19
50	53.45	52.76	51.31	50.46	48.41	45.28	46.18	46.58	48.13	48.03	48.38	48.49	49.61
55	44.45	43.48	42.06	39.83	39.30	35.59	35.78	36.13	37.91	39.46	40.17	40.41	40.83
60	36.04	33.91	32.08	32.01	29.77	27.41	27.80	28.11	29.25	30.75	31.77	31.60	33.00
65	27.76	26.39	24.10	24.04	22.88	21.30	21.07	21.46	22.61	23.05	24.10	25.20	25.53
70	21.00	20.52	18.59	18.12	17.09	16.26	16.55	16.51	16.86	17.03	17.85	17.75	18.46
75	14.75	14.48	14.69	13.97	13.68	11.87	12.48	12.45	12.72	11.83	12.38	12.10	12.65
80	9.57	10.25	10.50	10.99	10.57	9.27	9.64	9.32	9.44	8.84	8.45	8.08	6.62
85	6.75	6.77	7.15	8.02	7.91	6.59	6.88	6.30	6.65	5.80	5.03	4.51	3.37
90	3.99	5.43	4.23	5.29	5.79	4.53	4.05	4.17	4.07	3.69	3.26	1.79	1.03
95	2.32	2.63	2.95	3.52	3.54	2.91	2.67	2.33	2.62	1.24	1.50	1.17	0.60
100	0.80	0.88	1.32	1.63	1.71	2.31	1.80	1.39	1.50	1.02	0.60	0.42	0.54
105	0.18	0.46	0.93	1.37	1.79	0.40	0.69	0.37	0.85	-0.07	-0.12	0.40	0.15
110	0.32	0.52	0.43	0.88	0.55	0.76	0.01	-0.11	0.00	0.31	0.69	0.35	0.75
115	0.35	0.83	0.62	0.09	0.69	0.95	0.94	0.72	0.96	0.27	0.32	0.38	0.41
120	0.64	0.37	0.63	0.68	0.40	0.96	0.06	0.56	0.75	0.32	0.58	0.07	0.16
125	0.01	0.24	1.09	0.69	0.27	0.99	0.51	1.01	0.61	0.31	0.61	1.09	1.27
130	0.61	1.08	0.71	0.72	0.52	0.96	1.00	0.74	0.62	0.49	0.81	0.39	0.74

Luminaire

Lamp		Report		20150421-0003
No. of lamps	1	Filename	C:\Program Files\WJNCTECH\GoniLED\StartUp\Data\150420\HVDV 3W 40K -1.jdt	
Lamp flux (lm)	266	Operator	Current (A)	0.119
Total flux (lm)	266	Date	Power Factor	1
				2015-04-21 오후 3:22:59

Luminous Intensity Data (Continued)

GWC	260	270	280	290	300	310	320	330	340	350	360
0	107.74	108.40	107.93	108.34	108.79	107.82	107.43	108.21	107.45	108.31	108.06
5	106.72	107.33	107.45	107.06	107.11	107.23	107.23	107.52	107.31	107.47	107.62
10	104.64	105.06	105.09	104.82	105.12	104.96	105.39	105.02	105.26	104.26	106.31
15	100.85	101.18	100.92	101.14	101.58	101.84	101.81	101.64	101.10	101.33	103.17
20	96.50	96.25	96.85	96.30	96.52	96.48	96.73	96.54	95.85	96.04	98.59
25	89.74	90.24	89.83	91.58	90.72	90.74	89.93	89.73	89.95	90.77	92.48
30	83.60	83.60	84.32	83.90	83.27	83.49	82.71	83.40	82.87	84.01	85.49
35	76.22	76.75	76.61	76.12	75.81	75.96	75.77	75.55	75.80	75.69	78.58
40	67.32	68.28	67.91	68.26	67.76	67.19	66.90	67.81	67.80	68.01	70.93
45	58.64	59.16	59.10	59.55	59.29	58.93	58.39	59.23	59.02	59.18	62.02
50	50.33	50.52	50.12	50.51	50.56	50.89	50.16	50.25	49.73	49.62	53.73
55	41.21	42.05	41.41	42.09	41.84	42.21	41.32	40.77	40.20	39.65	42.47
60	33.48	34.29	33.50	33.80	34.20	34.16	32.85	32.77	31.85	31.09	33.56
65	25.87	26.18	26.00	26.81	26.34	26.16	25.27	24.99	24.14	23.91	25.59
70	18.84	18.52	18.28	19.21	18.83	19.32	19.02	18.94	18.41	17.47	20.15
75	11.59	12.23	11.84	13.05	13.61	13.65	14.09	14.06	13.69	13.75	15.44
80	5.99	6.75	6.55	8.33	9.31	8.95	9.21	10.29	9.92	10.34	11.11
85	2.00	1.76	3.11	4.38	5.16	6.17	6.56	7.70	7.08	8.22	7.95
90	0.79	0.14	0.68	1.94	2.56	3.69	4.75	4.78	5.36	5.59	5.81
95	0.83	0.68	0.49	0.52	1.12	1.67	1.86	3.17	3.50	3.32	4.57
100	0.25	-0.09	-0.13	-0.02	0.09	0.31	1.22	0.84	2.22	1.83	2.11
105	0.18	0.40	0.62	0.03	0.51	0.30	0.22	-0.08	0.47	0.86	1.50
110	0.45	0.81	-0.41	0.59	0.19	0.84	0.38	-0.06	0.32	0.76	0.41
115	0.30	0.84	0.51	0.28	0.37	1.27	0.34	0.30	0.63	0.56	1.03
120	0.21	0.42	0.98	0.83	0.23	1.02	0.89	0.44	0.40	0.64	0.31
125	0.82	0.50	0.25	0.48	1.02	1.11	0.60	0.97	0.99	0.89	0.42
130	0.18	0.52	0.99	0.36	0.94	0.44	0.93	0.20	0.99	0.41	0.63

Luminaire

Lamp		Report	20150421-0003
No. of lamps	1	Filename C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150420\HVDV 3W 40K -1.jdt	
Lamp flux (lm)	266	Operator Current (A)	0.119
Total flux (lm)	266	Date Power Factor	1
			2015-04-21 오후 3:22:59

Luminous Flux Table

Total Lamp Lumens: 266

Luminaire Efficiency (lm/W):265.54

CIE Classification: Direct

Elevation	Lumens	Cumulative	Lamp %	Luminaire %
0	0.65	0.65	0.24	0.24
5	5.13	5.78	2.18	2.18
10	10.04	15.82	5.96	5.96
15	14.48	30.30	11.41	11.41
20	18.25	48.55	18.29	18.28
25	21.14	69.69	26.25	26.24
30	23.18	92.87	34.98	34.97
35	24.24	117.10	44.11	44.10
40	24.27	141.37	53.25	53.24
45	23.40	164.77	62.06	62.05
50	21.61	186.38	70.20	70.19
55	19.00	205.38	77.35	77.34
60	16.05	221.42	83.40	83.38
65	13.00	234.42	88.29	88.28
70	10.07	244.49	92.09	92.07
75	7.46	251.95	94.90	94.88
80	5.15	257.10	96.83	96.82
85	3.28	260.38	98.07	98.06
90	2.00	262.38	98.83	98.81
95	1.12	263.51	99.25	99.23
100	0.55	264.06	99.46	99.44
105	0.27	264.33	99.56	99.54
110	0.23	264.55	99.64	99.63
115	0.29	264.84	99.75	99.74
120	0.26	265.11	99.85	99.84
125	0.31	265.41	99.97	99.95
130	0.13	265.54	100.02	100.00

Luminaire

Lamp

Report

20150421-0003

No. of lamps

1

Filename C:\Program Files\WJNCTECH\GoniLED\StartUp\Data\W150420\HVDV 3W 40K -1.jdt

Lamp flux (lm)

266

Operator

Current (A)

0.119

Total flux (lm)

266

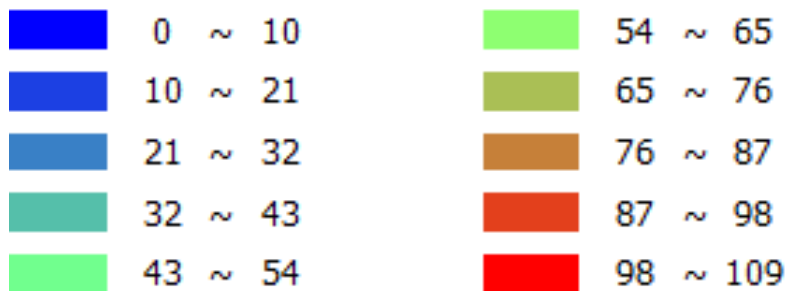
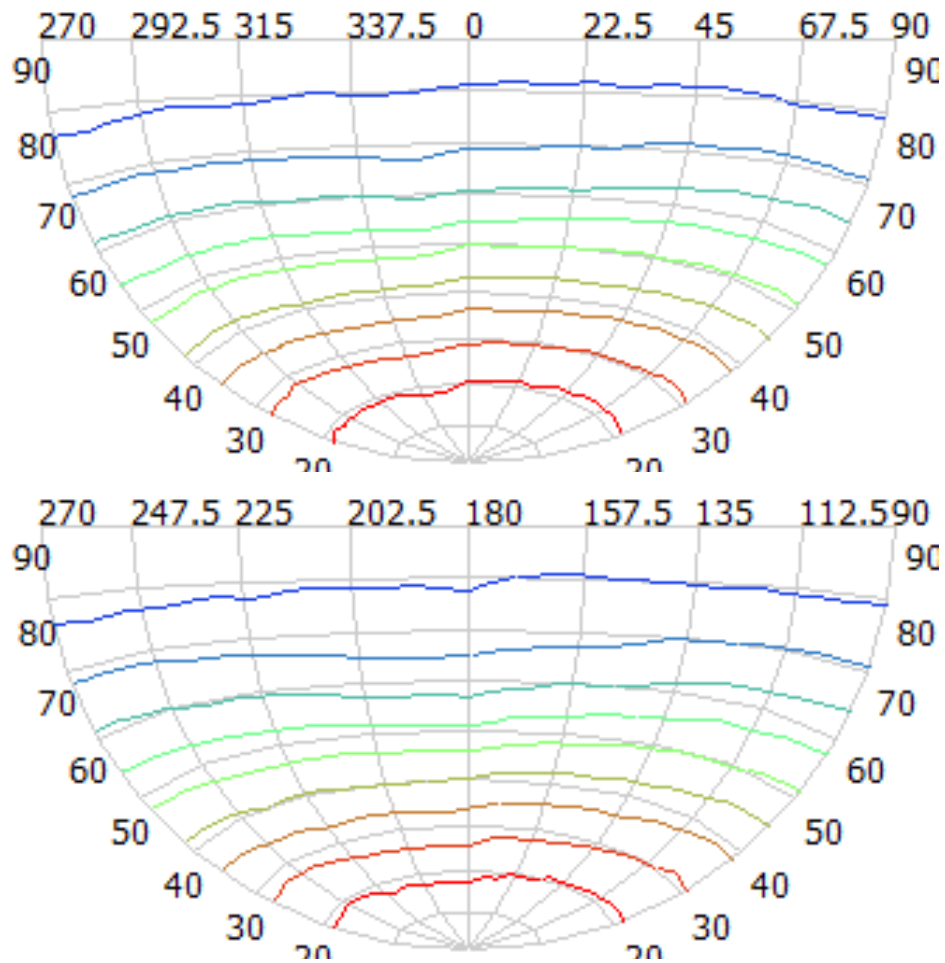
Date

Power Factor

1

2015-04-21 오후 3:22:59

IsoCandela (Type C)



Luminaire

Lamp		Report	20150421-0003										
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150420\HDTV 3W 40K -1.jdt										
Lamp flux (lm)	266	Operator	Current (A)	0.119									
Total flux (lm)	266	Date	Power Factor	1									
2015-04-21 오후 3:22:59													

Illuminance Levels (Ground)

6.00	0.10	0.13	0.13	0.18	0.29	0.33	0.36	0.34	0.30	0.18	0.14	0.13	0.10
5.00	0.13	0.14	0.26	0.38	0.40	0.61	0.66	0.62	0.41	0.40	0.27	0.14	0.13
4.00	0.12	0.26	0.32	0.62	0.74	1.19	1.31	1.19	0.76	0.64	0.32	0.27	0.13
3.00	0.16	0.33	0.61	0.87	1.44	2.07	2.45	2.12	1.47	0.87	0.63	0.35	0.17
2.00	0.24	0.33	0.67	1.36	3.08	4.51	6.12	4.57	3.12	1.43	0.70	0.36	0.26
1.00	0.28	0.50	1.03	1.95	4.36	8.51	11.65	8.56	4.50	2.07	1.12	0.55	0.30
0.00	0.25	0.48	1.04	2.04	5.60	11.31	14.82	11.64	5.93	2.34	1.24	0.58	0.31
-1.00	0.24	0.45	0.95	1.78	4.09	8.06	11.41	8.28	4.25	1.92	1.04	0.51	0.28
-2.00	0.21	0.29	0.58	1.20	2.84	4.14	5.80	4.29	2.95	1.31	0.66	0.33	0.25
-3.00	0.13	0.29	0.53	0.73	1.28	1.86	2.22	1.93	1.33	0.81	0.58	0.33	0.15
-4.00	0.10	0.22	0.26	0.54	0.64	1.06	1.17	1.07	0.68	0.58	0.30	0.25	0.12
-5.00	0.10	0.11	0.22	0.32	0.34	0.53	0.58	0.54	0.35	0.34	0.25	0.13	0.12
-6.00	0.08	0.11	0.11	0.15	0.24	0.29	0.31	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.): 14.8

Illum. (Min.): 0.08

Illum. Avg.: 1.49

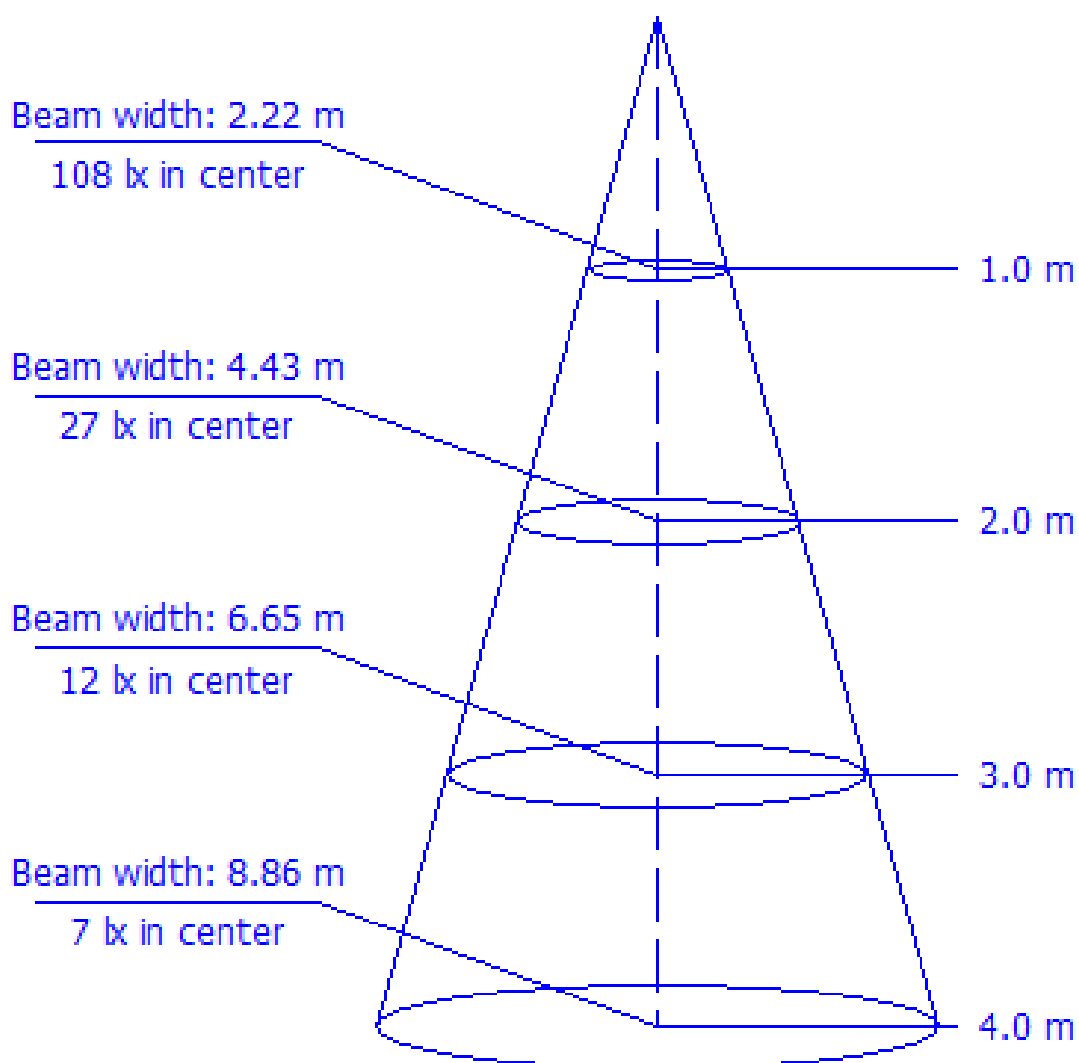
All illuminance level values are in lux.

Luminaire

Lamp		Report	20150421-0003	
No. of lamps	1	Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150420\HVDV 3W 40K -1.jdt	
Lamp flux (lm)	266	Operator	Current (A)	0.119
Total flux (lm)	266	Date	Power Factor	1

2015-04-21 오후 3:22:59

Illuminance Cone Diagram



Beam Angle = 96 deg.

Based on 50% of maximum illuminance.

Luminaire

Lamp

Report

20150421-0003

No. of lamps	1	Voltage (V)	23.99
Lamp flux (lm)	266	Current (A)	0.119
Total flux (lm)	266	Power Factor	1

Filename	C:\Program Files\JNCTECH\GoniLED\StartUp\Data\150420\HVDV 3W 40K -1.jdt
Operator	
Date	2015-04-21 오후 3:22:59

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	1.20	1.20	1.20	1.17	1.17	1.17	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	0.99
Room CR 1	1.05	1.01	0.97	1.02	0.99	0.95	0.98	0.95	0.92	0.93	0.91	0.89	0.90	0.88	0.86	0.83
Room CR 2	0.92	0.85	0.80	0.90	0.84	0.79	0.86	0.81	0.77	0.83	0.78	0.75	0.79	0.76	0.73	0.71
Room CR 3	0.82	0.74	0.67	0.80	0.72	0.67	0.77	0.70	0.65	0.74	0.68	0.64	0.71	0.66	0.62	0.60
Room CR 4	0.73	0.64	0.58	0.71	0.63	0.57	0.68	0.62	0.56	0.66	0.60	0.55	0.64	0.58	0.54	0.52
Room CR 5	0.65	0.57	0.50	0.64	0.56	0.50	0.62	0.55	0.49	0.60	0.53	0.48	0.58	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	0.54	0.45	0.39	0.53	0.45	0.39	0.51	0.44	0.39	0.50	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	0.34	0.44	0.38	0.34	0.32
Room CR 9	0.45	0.37	0.32	0.45	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	0.26