

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 : 190313

2. Purpose of Report : 190313 HDV24 40K-24V-C90-5

3. Test Standard / Item : LED / 190313 HDV24 40K-24V-C90-5

4. Test Period : 190313 ~ 190313

5. Test Environment

Ambient Temp. : (0 +- 3) °C
Relative Humidity : (0 +- 10) % RH

6. Test Result : Refer to the attachment

Test Item
Name of Product :
FEELUX
Model / Rating :
Model : FEELUX
Rating :

Confirmation	Test by CGR	Technical manager CGR
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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
190313	FEELUX		LED

Test Item	Unit	Result	Memo
Beam Distribution Test	-	See attachment	
ATHD	%	0.0	
CIE 1931 Cxy		0.3893, 0.3867	
Correlated Color Temperature	K	3851	
Ra	-	93.47	
Power Factor	%	1.000	
Input Voltage	V	23.900	
Input Current	A	0.962	
Input Watt	W	22.98	
Lamp Flux	lm	1914.9	
Efficient	lm/W	83.29	
Illuminance	lx	734	1 m
		183	2 m
		82	3 m

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

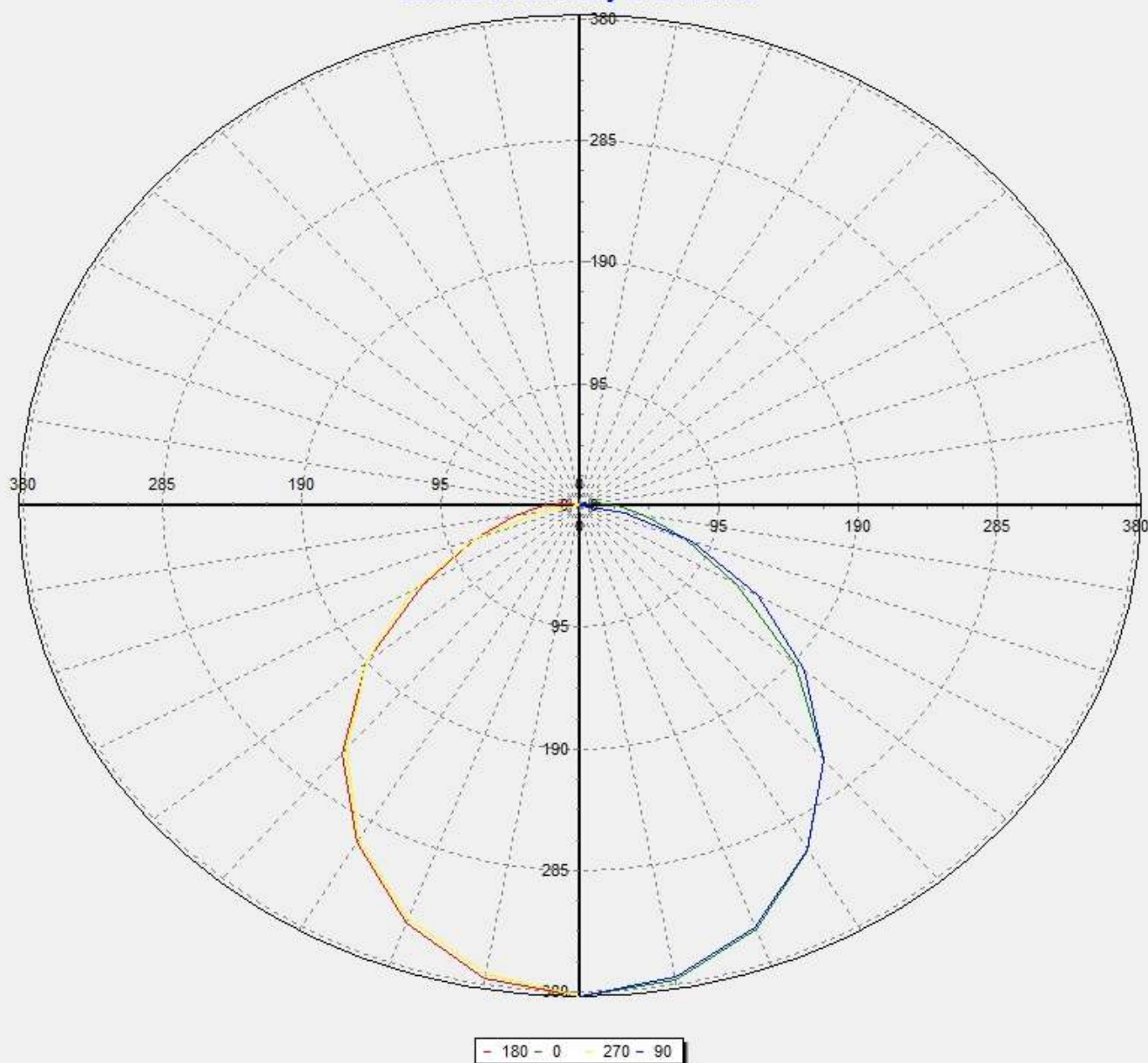
Sample photo

Click to load image

Luminaire

Lamp	Report	190313
No. of lamps	Filename C:\Users\WFEELUX\Desktop\완료 리포트\Data\2019\190313 HDV24 40K-24V-C90-5.jdt	
Lamp flux (lm)	191Operator	Current (A) 0.962 CGR
Total flux (lm)	191Date	Power Factor 1 2019-03-13 오후 12:19:53

Luminous Intensity Distribution

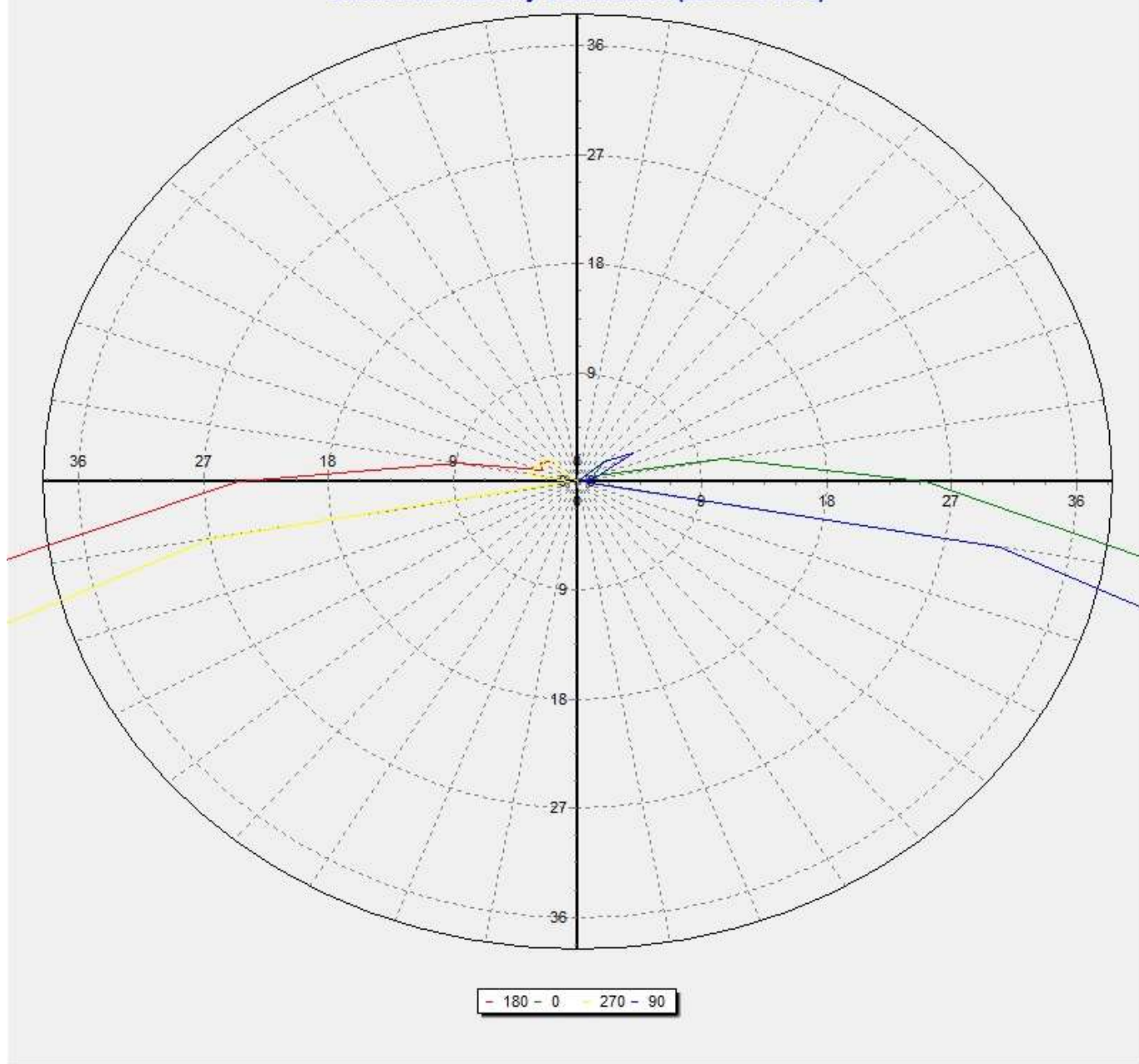


All luminous intensity values are in Cd/KLm unit.

Luminaire

Lamp	Report	190313
No. of lamps	Filename C:\Users\WFEELUX\Desktop\완료 리포트\Data\2019\190313 HDV24 40K-24V-C90-5.jdt	
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Luminous Intensity Distribution (Lowest 10%)



All luminous intensity values are in Cd/Klm unit.

Luminaire

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Luminous Intensity Data

GWC	0	30	60	90	120	150	180	210	240	270	300	330	360
0	733.52	732.74	731.34	733.66	731.06	729.66	733.52	732.74	731.34	733.66	731.06	729.66	733.52
10	718.87	716.84	717.26	715.93	718.38	719.50	718.03	715.44	712.64	711.24	710.96	711.17	718.87
20	673.97	670.33	671.73	671.66	674.60	668.44	663.18	659.82	660.66	657.51	660.24	661.29	673.97
30	596.07	595.30	597.12	595.16	596.56	590.19	581.71	579.12	578.07	577.23	577.30	582.48	596.07
40	496.88	498.70	494.91	495.19	492.74	491.97	485.18	478.52	476.21	475.65	474.67	481.53	496.88
50	368.82	380.31	385.56	383.32	387.17	383.25	364.76	367.28	361.81	364.33	363.21	361.74	368.82
60	237.05	248.75	268.01	268.64	270.60	261.71	237.40	249.94	251.62	253.93	253.30	229.13	237.05
70	146.05	152.63	160.13	156.42	165.87	162.72	148.85	152.00	150.88	145.63	144.51	141.22	146.05
80	87.83	87.06	77.68	59.32	80.90	93.79	87.41	88.68	68.85	51.41	65.63	79.57	87.83
90	48.04	42.65	25.14	0.62	25.07	46.22	46.99	41.67	20.09	1.11	23.39	38.03	48.04
100	20.44	12.32	4.47	2.16	5.31	17.85	16.80	17.08	2.09	6.78	2.44	12.53	20.44
110	2.51	5.94	5.45	3.35	3.07	5.94	5.31	1.95	4.89	6.29	3.42	2.58	2.51
120	2.65	4.68	5.31	8.95	5.73	5.73	5.87	4.82	6.50	5.38	3.21	4.26	2.65
130	5.17	7.27	4.19	4.82	5.17	5.45	4.82	4.26	5.31	5.73	6.57	6.99	5.17

Luminaire

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Lamp flux (lm)	191Operator	Current (A) 0.962 CGR
Total flux (lm)	191Date	Power Factor 1 2019-03-13 오후 12:19:53

Luminous Flux Table

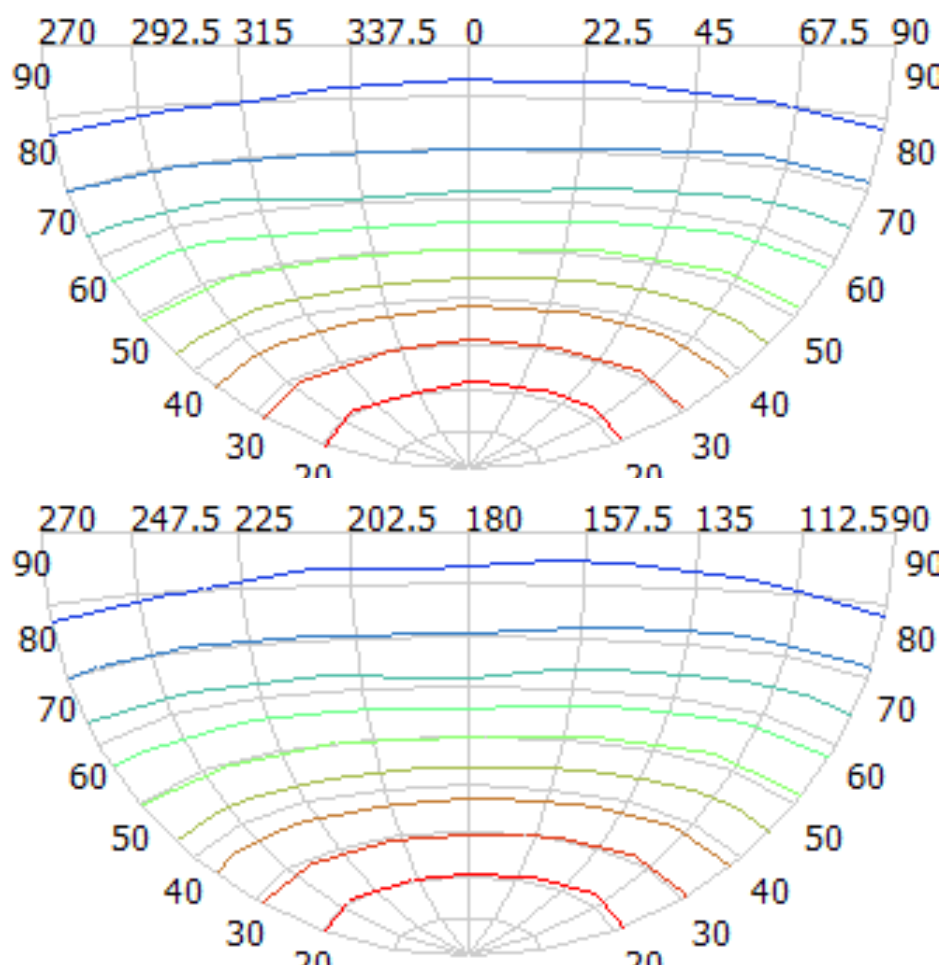
Total Lamp Lumens: 1915
 Luminaire Efficiency (lm/W) 1914.95
 CIE Classification: Direct

Elevation	Lumens	Cumulative	Lamp %	Luminaire %
0	17.50	17.50	0.91	0.91
10	136.08	153.58	8.02	8.02
20	249.52	403.11	21.05	21.05
30	321.56	724.66	37.84	37.84
40	342.74	1067.40	55.74	55.74
50	312.64	1380.04	72.07	72.07
60	239.50	1619.54	84.58	84.57
70	156.69	1776.22	92.76	92.76
80	83.42	1859.65	97.11	97.11
90	32.77	1892.41	98.83	98.82
100	10.81	1903.22	99.39	99.39
110	4.35	1907.57	99.62	99.62
120	4.99	1912.56	99.88	99.88
130	2.38	1914.95	100.00	100.00

Luminaire

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IsoCandela (Type C)

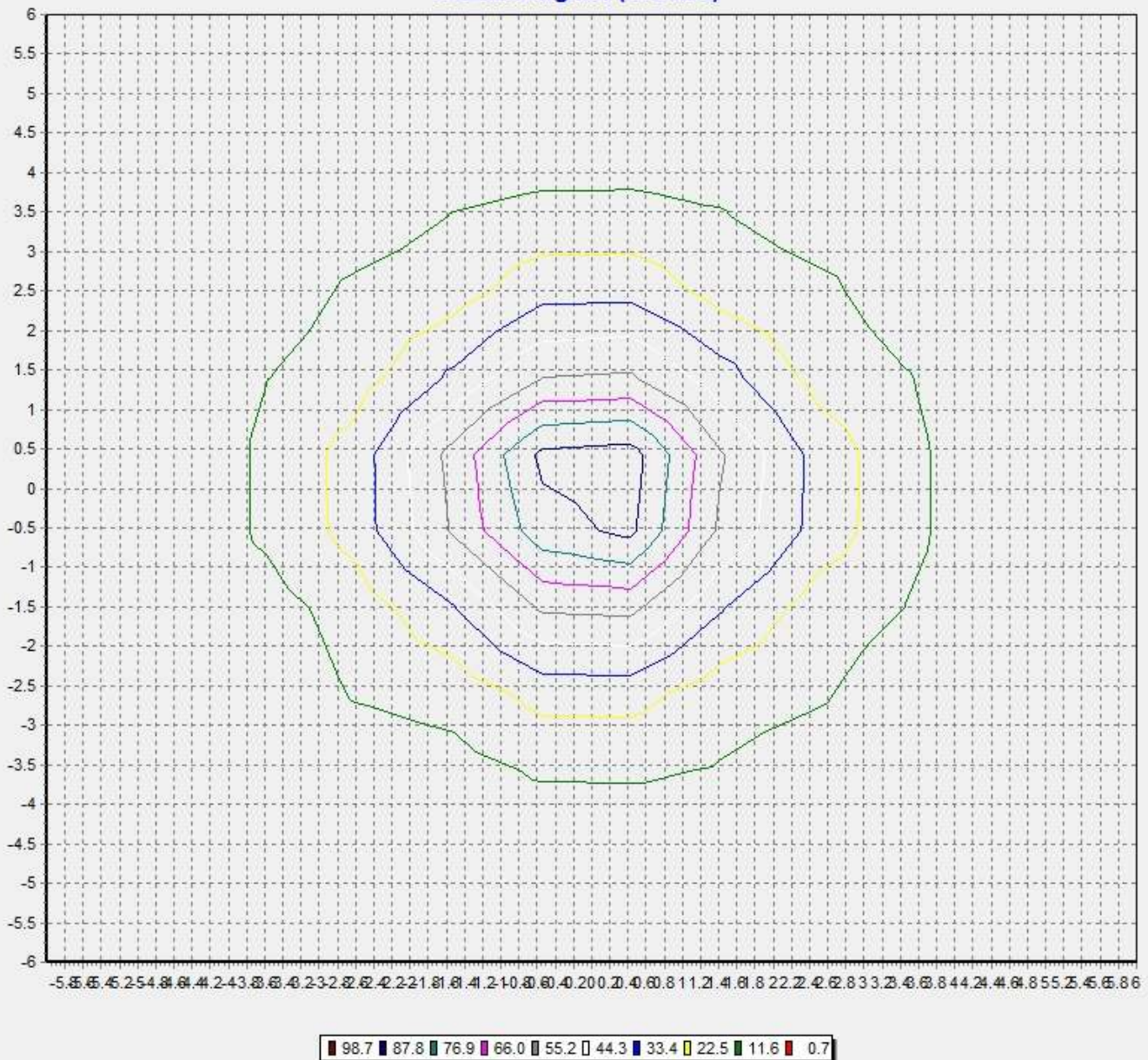


1 ~ 74	367 ~ 440
74 ~ 147	440 ~ 514
147 ~ 221	514 ~ 587
221 ~ 294	587 ~ 660
294 ~ 367	660 ~ 734

Luminaire

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IsoLux Diagram (Ground)



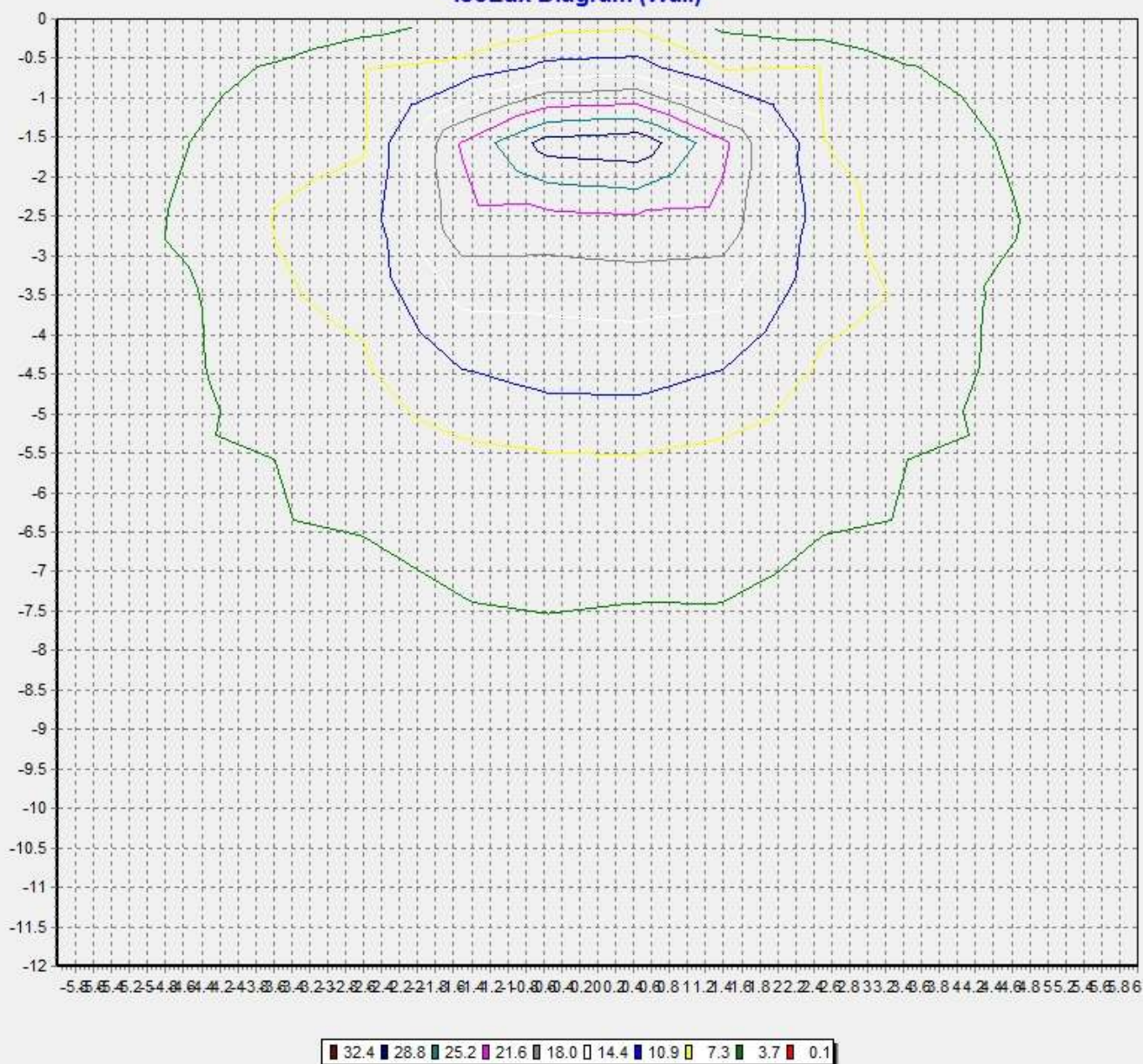
Pole Height (m): 2.7

Area Width (m): 12

Luminaire

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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				Report	190313
No. of lamps	1	Voltage (V)	23.9	Filename	C:\Users\WFEELUX\Desktop\완료 리포트\Data\2019\190313 HDV24 40K-24V-C90-5.jdt
Lamp flux (lm)	1915	Current (A)	0.962	Operator	CGR
Total flux (lm)	1915	Power Factor	1	Date	2019-03-13 오후 12:19:53

Illuminance Levels (Ground)

6.00	0.93	1.24	0.97	1.32	1.63	1.85	1.93	1.84	1.55	1.23	0.97	1.21	0.84
5.00	1.22	1.06	1.53	2.15	4.29	5.06	5.37	5.06	4.18	2.16	1.51	0.98	1.11
4.00	1.00	1.55	3.66	5.38	5.37	6.89	7.56	6.89	5.03	5.37	3.46	1.40	0.90
3.00	1.32	2.15	5.36	6.33	13.58	14.68	16.65	14.57	13.60	5.85	5.15	1.94	1.22
2.00	1.63	4.28	5.35	13.52	19.20	31.14	37.71	31.45	18.96	13.50	4.97	4.11	1.49
1.00	1.73	4.86	6.52	14.68	31.11	58.55	80.82	58.52	31.46	14.34	6.21	4.73	1.63
0.00	1.77	5.06	6.93	15.96	36.92	81.02	100.62	81.15	37.82	16.19	6.97	5.11	1.75
-1.00	1.80	4.92	6.55	13.97	30.27	57.17	80.26	56.88	30.03	13.83	6.22	4.76	1.65
-2.00	1.50	4.03	4.96	13.19	18.45	30.20	36.36	29.99	18.27	13.09	4.98	4.00	1.45
-3.00	1.22	1.95	5.08	5.82	13.01	13.92	15.87	13.86	13.00	5.96	5.02	1.88	1.18
-4.00	0.91	1.42	3.41	5.07	4.98	6.50	7.17	6.50	5.03	5.09	3.45	1.36	0.87
-5.00	1.11	0.99	1.45	2.03	4.04	4.78	5.10	4.77	4.03	2.02	1.42	0.96	1.09
-6.00	0.85	1.16	0.92	1.22	1.51	1.73	1.81	1.74	1.48	1.18	0.89	1.17	0.87
-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.): 101

All illuminance level values are in lux.

Illum. (Min.): 0.84

Illum. Avg.: 10.6

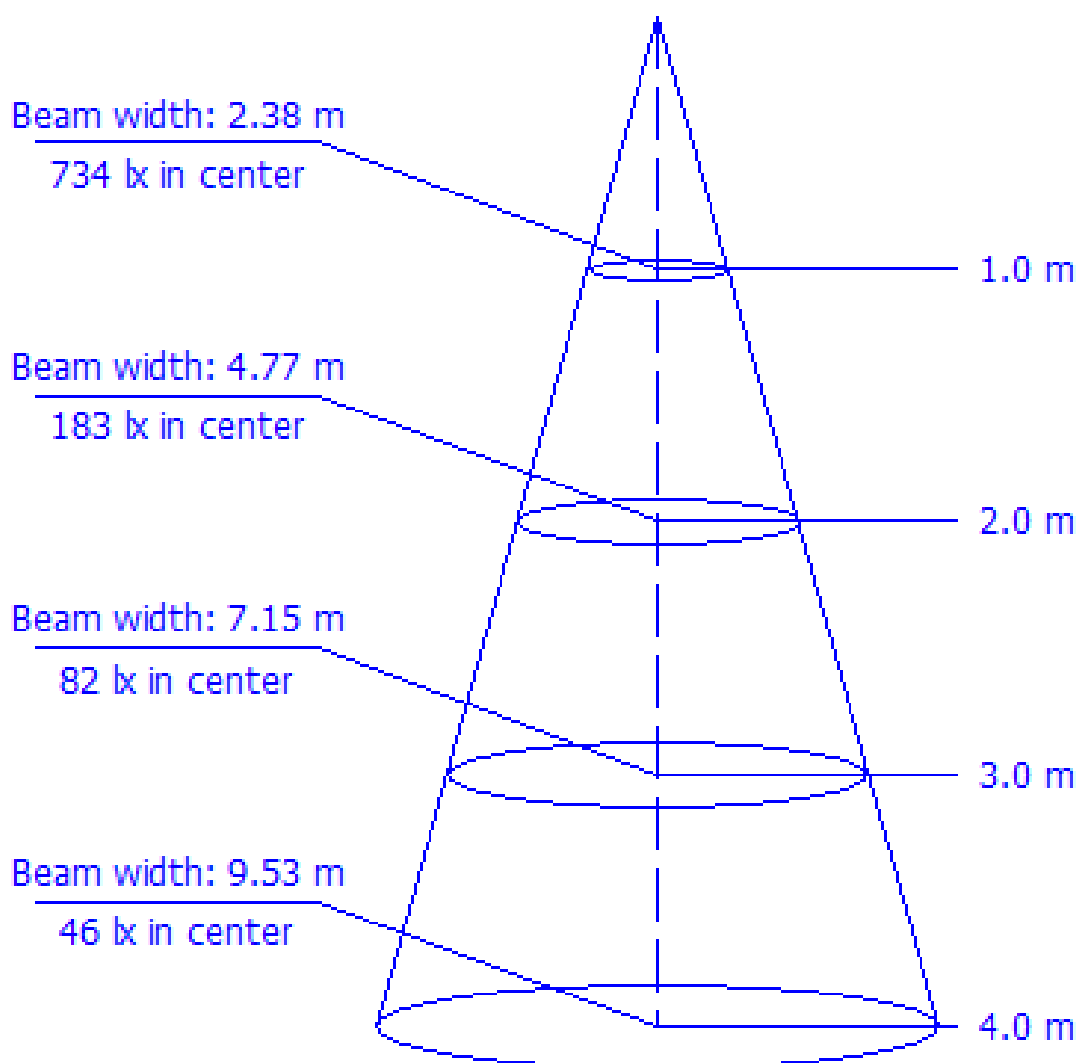
Total Optical Solution Provider


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

Luminaire

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Illuminance Cone Diagram



Beam Angle = 100 deg.

Based on 50% of maximum illuminance.

Luminaire

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Total flux (lm)	1915	Power Factor	1	Date	2019-03-13 오후 12:19:53

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Room CR 10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00