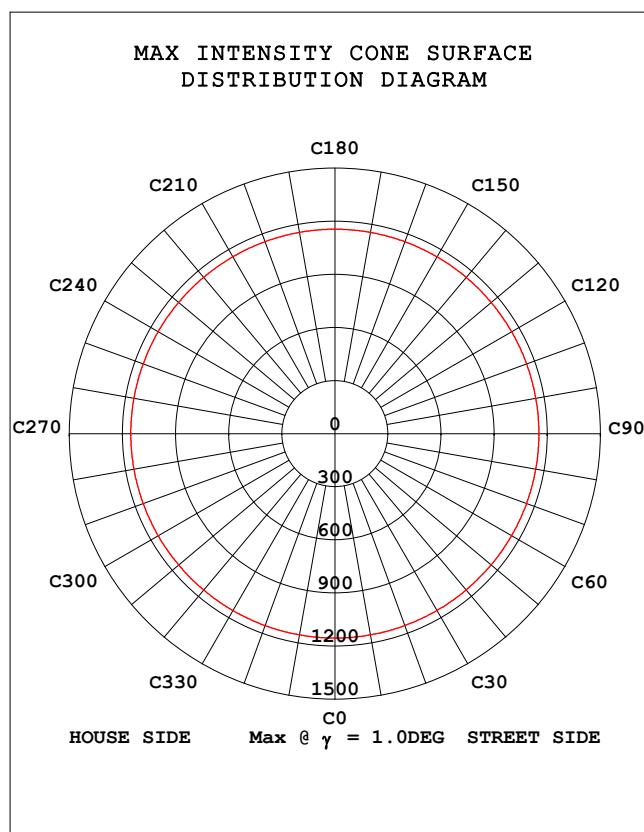
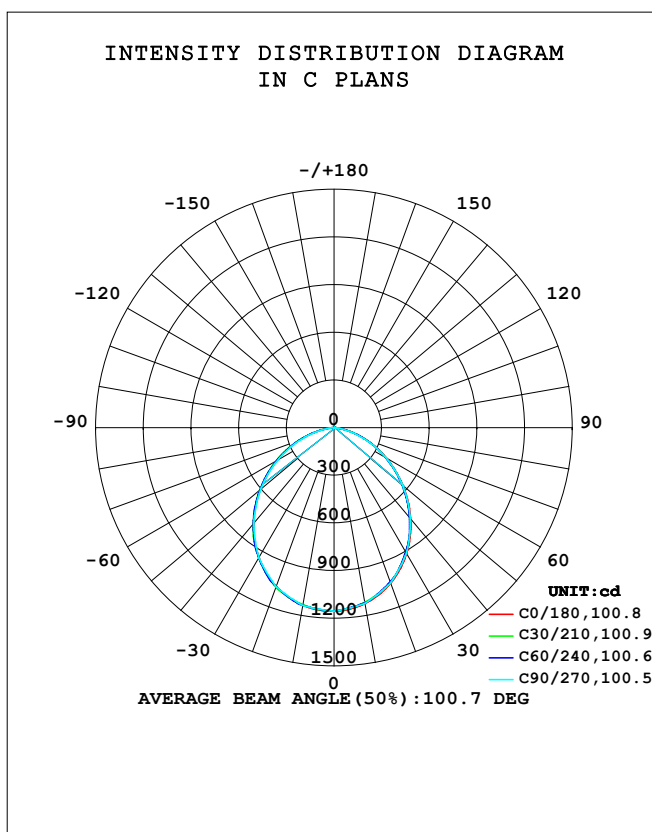


# STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.58 lm/W			
MODEL	H-21-V01-RZ-T5-1-FG	Imax (cd)	1156	$\eta$ street_up (%)	0.0
NOMINAL POWER (W)	21	LOR (%)	100.0	$\eta$ street_down (%)	49.0
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	2824	$\eta$ house_up (%)	0.0
NOMINAL FLUX (lm)	2823.86	MAXIMUM @ (C, $\gamma$ )	180,1.0	$\eta$ house_down (%)	51.0
LAMPS INSIDE	1	$\eta$ up (%)	0.0	76 FLASHAREA (m2)	0.00100
TEST VOLTAGE (V)	120	$\eta$ down (%)	100.0	SLI	17.096

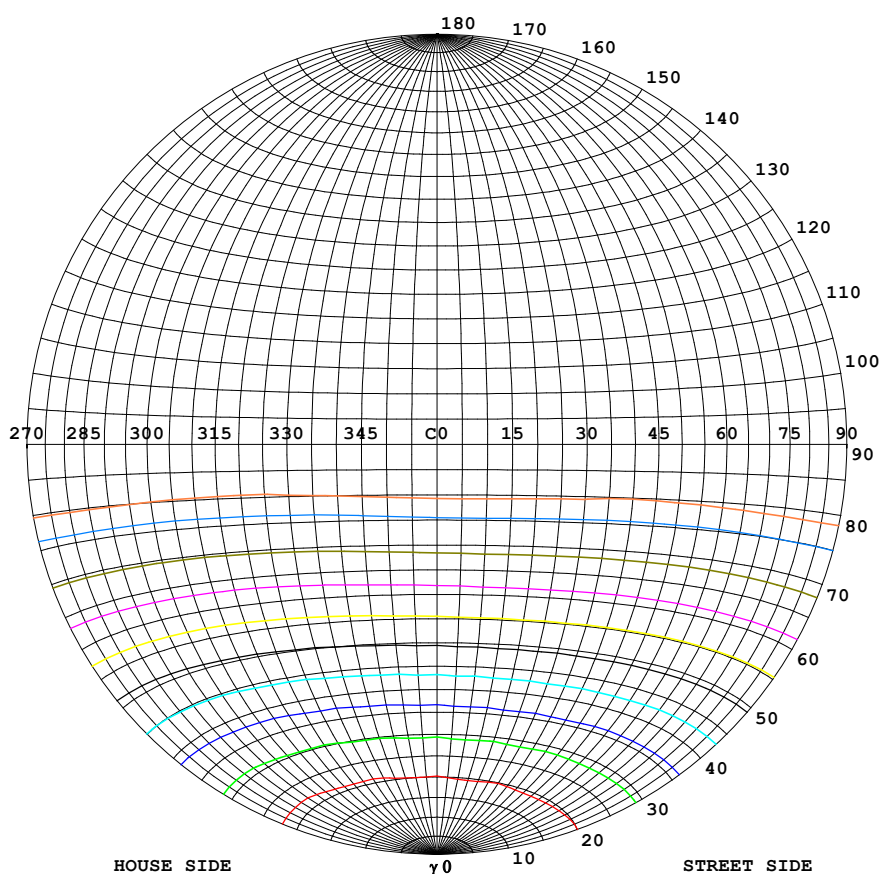


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

# STREETLIGHT ISOCANDELA DIAGRAM

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



## Classification:

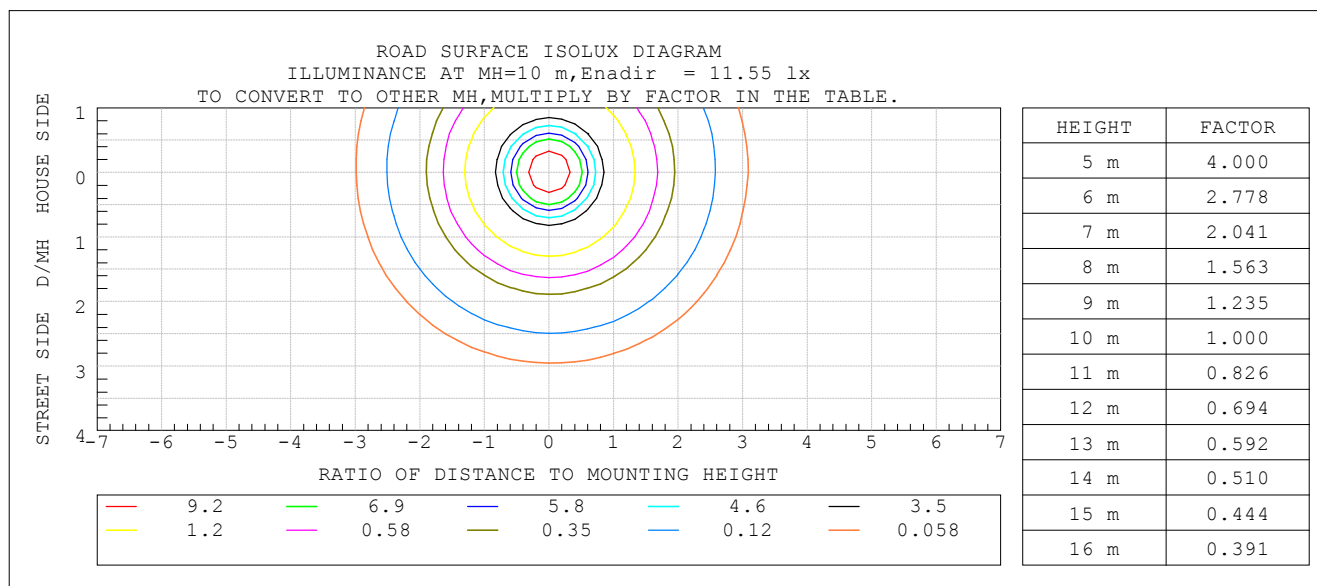
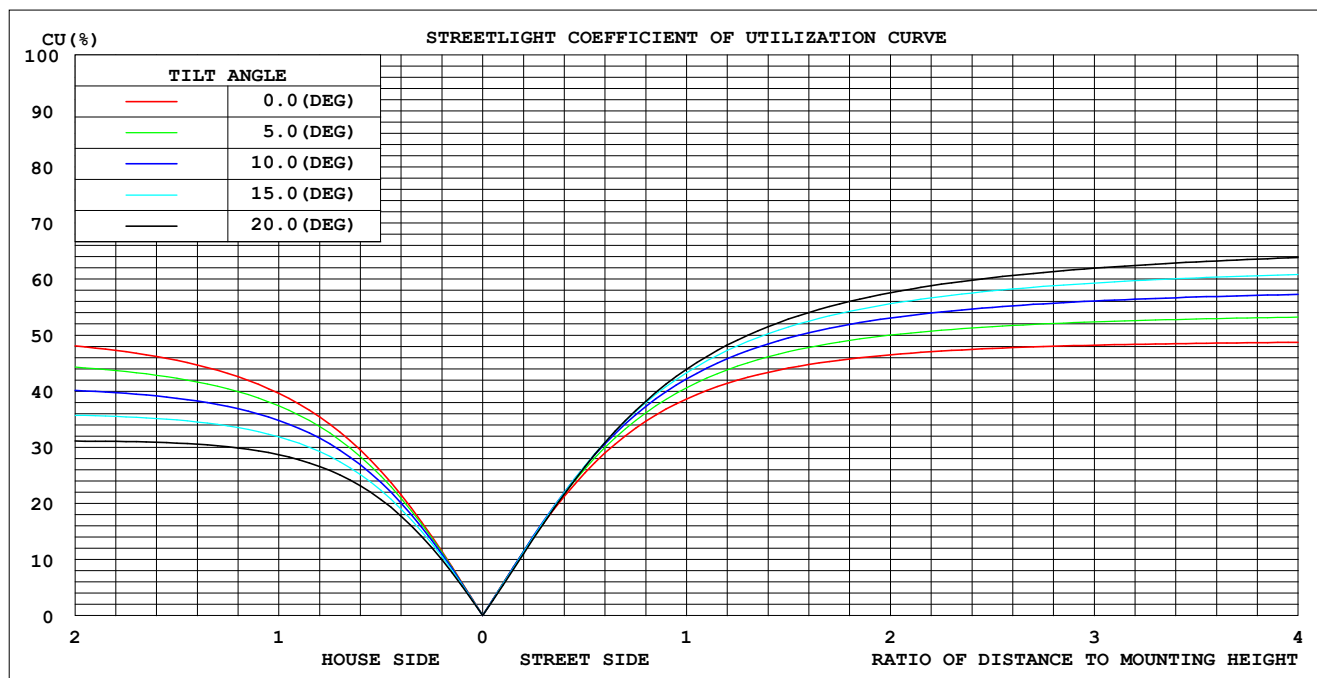
IES:Type V - Very Short  
 CIE:Narrow - Short  
 IES:Cut-off  
 CIE:Full cut-off  
 Max.At80:25.42cd/klm  
 Max.At90:0.2543cd/klm  
 Max.80-90:25.42cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I <sub>max</sub> =100%	1156
90%	1040
80%	925
70%	809
60%	693
50%	578
40%	462
30%	347
20%	231
10%	116
5%	58

H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

# COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### ZONAL FLUX DIAGRAM

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

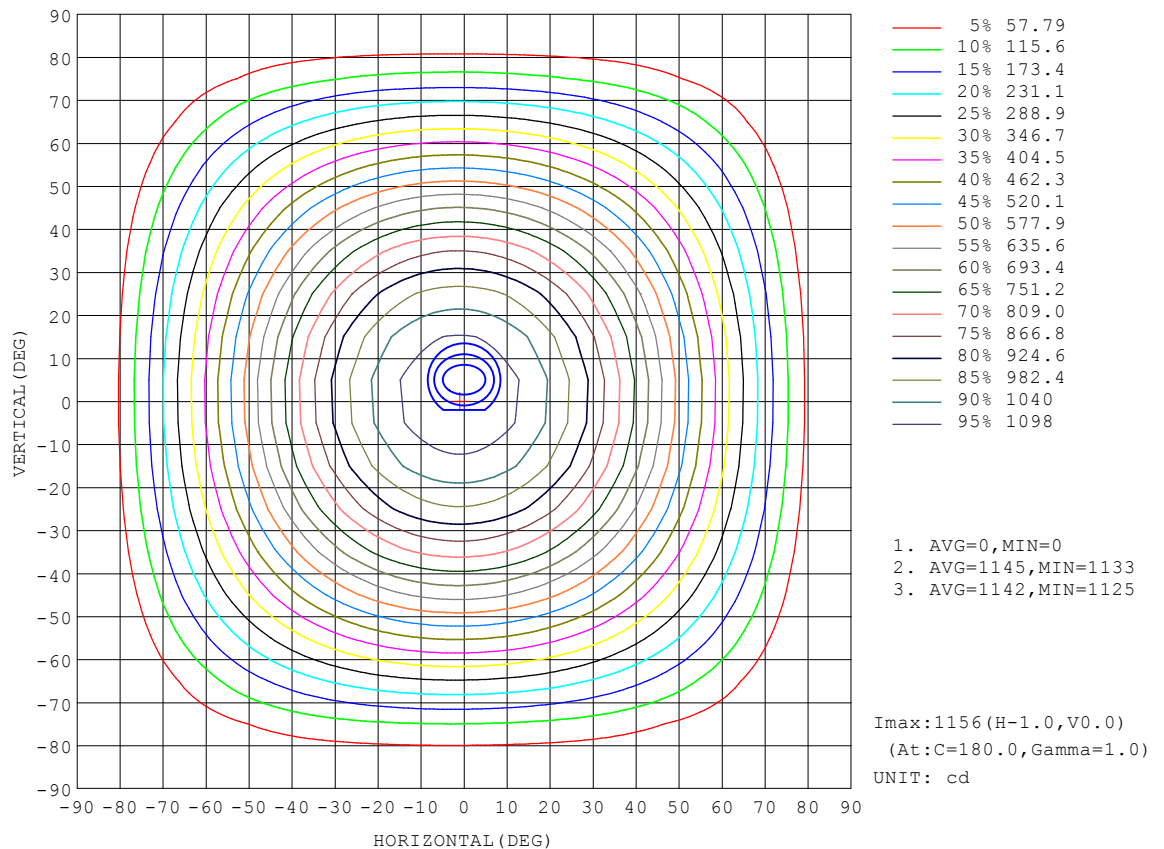
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	1124	1117	1124	1124	1135	1133	1137	1126	0- 10	108.7	108.7	3.85,3.85
20	1043	1032	1041	1046	1065	1064	1066	1049	10- 20	308.3	417.0	14.8,14.8
30	915.1	904.4	912.2	924.8	945.6	949.6	946.4	928.4	20- 30	457.3	874.3	31,31
40	750.6	742.0	747.6	764.8	787.4	794.2	786.5	770.4	30- 40	531.2	1405	49.8,49.8
50	566.4	558.9	563.1	582.7	605.3	613.6	602.1	587.5	40- 50	521.5	1927	68.2,68.2
60	379.0	376.0	374.3	396.2	414.5	424.2	408.6	401.9	50- 60	437.8	2365	83.7,83.7
70	204.4	202.8	195.8	218.7	232.1	239.9	221.4	222.4	60- 70	302.3	2667	94.4,94.4
80	47.09	53.03	34.04	61.00	64.10	70.82	51.61	64.13	70- 80	141.7	2809	99.5,99.5
90	0.7182	0	0	0	0.5725	0	0	0	80- 90	15.13	2824	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

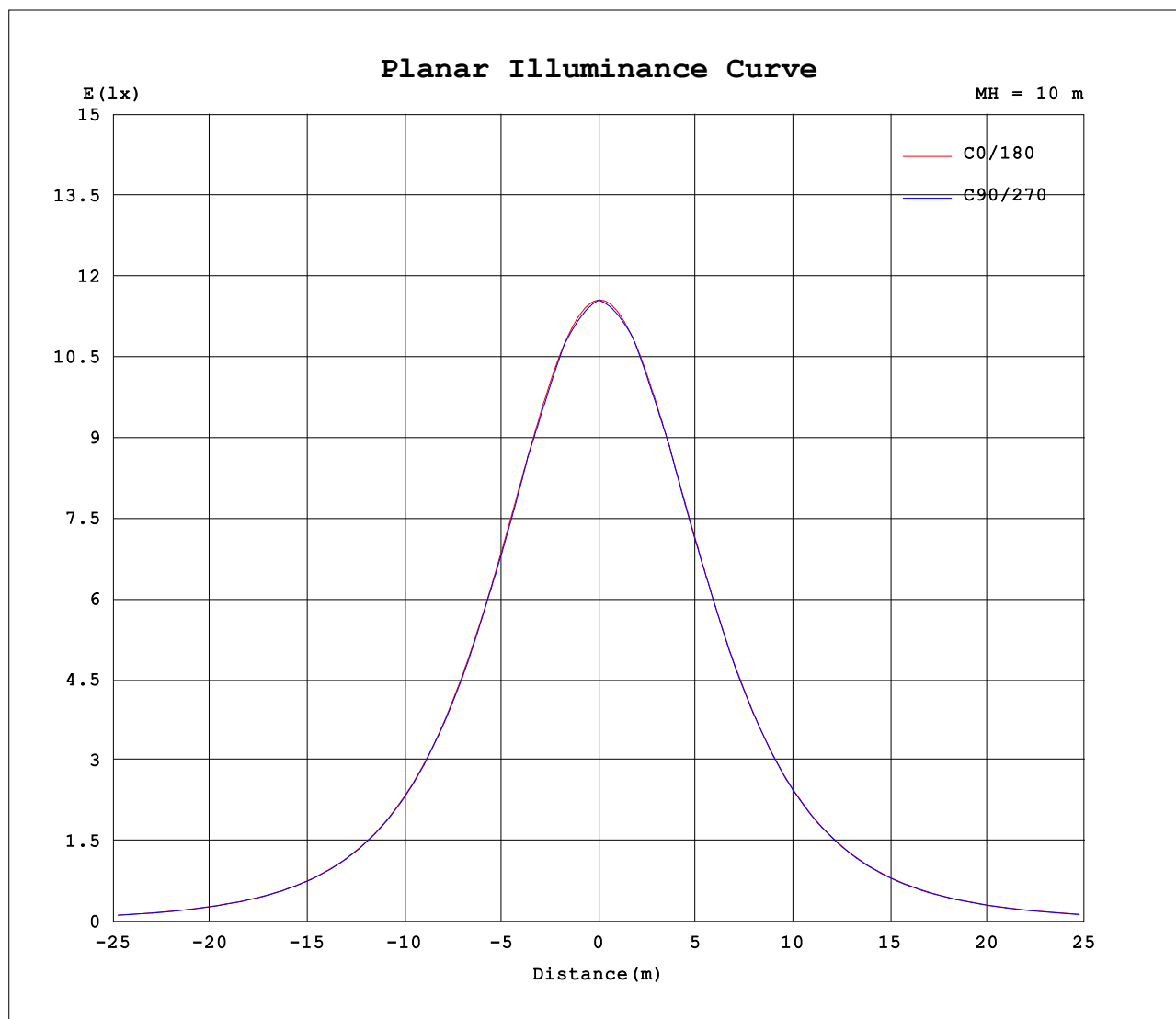
Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



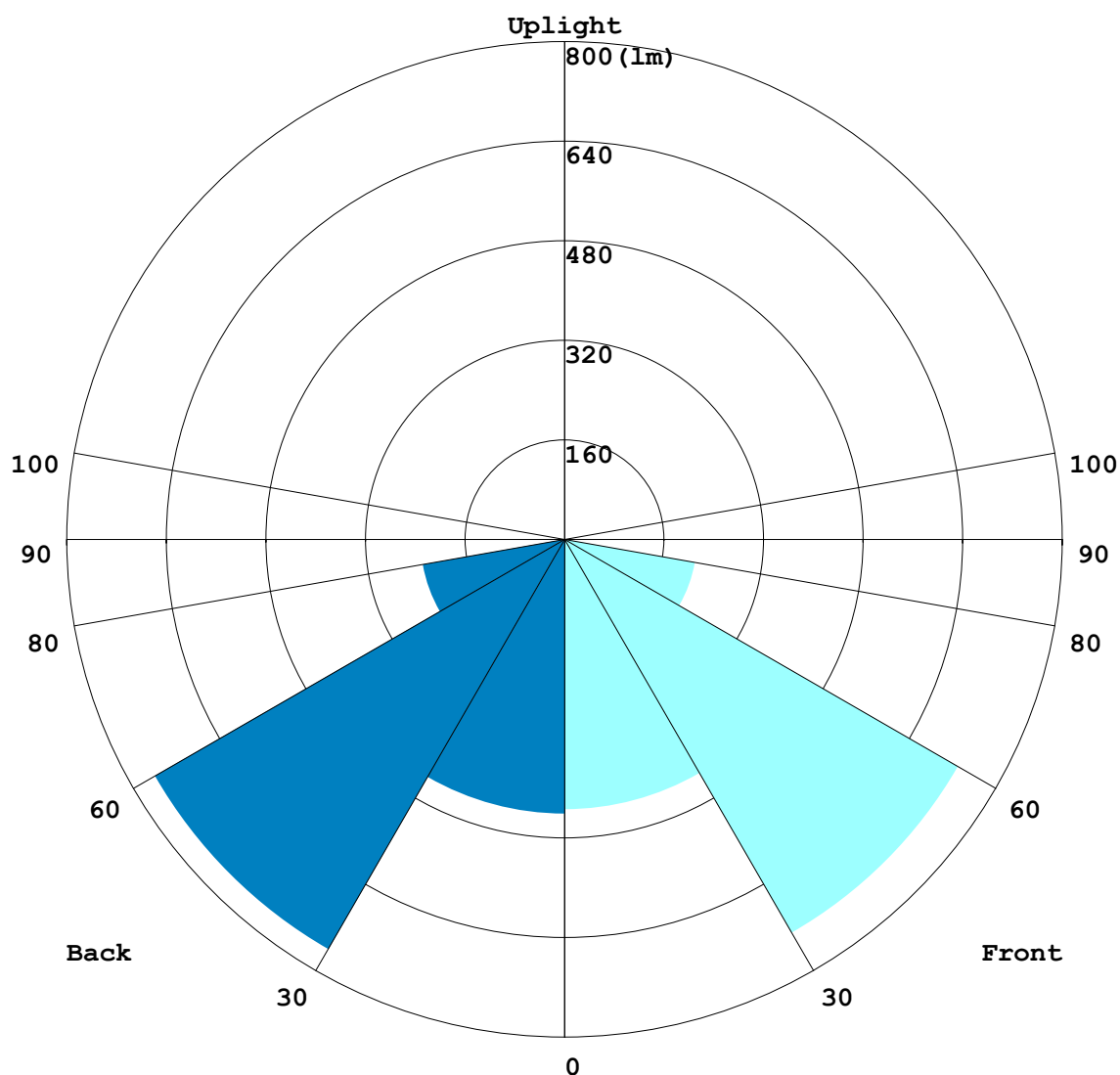
$H(\beta)$  Range:-90 - 90DEG  
 $H(\beta)$  Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:CL  
 Test Date:10 May 2019

$V(B)$  Range:-80 - 80DEG  
 $V(B)$  Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:6.010m [K=1.0000]  
 Remarks:

# LCS REPORT

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

## LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

# BUG REPORT

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

## IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	433.77	15.4
FM - Front-Medium(30-60)	730.23	25.9
FH - Front-High(60-80)	212.62	7.5
FVH - Front-Very High(80-90)	6.5657	0.2
Total Forward Light	1383.2	49.0

BL - Back-Low(0-30)	440.52	15.6
BM - Back-Medium(30-60)	760.23	26.9
BH - Back-High(60-80)	231.36	8.2
BVH - Back-Very High(80-90)	8.568	0.3
Total Back Light	1440.7	51.0

UL - Uplight-Low(90-100)	0	0.0
UH - Uplight-High(100-180)	0	0.0
Total Up Light	0	0.0

BUG(Back,Up,Glare) Rating	B1-U0-G0
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	1440.7	0	1440.7
Street Side	1383.2	0	1383.2

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

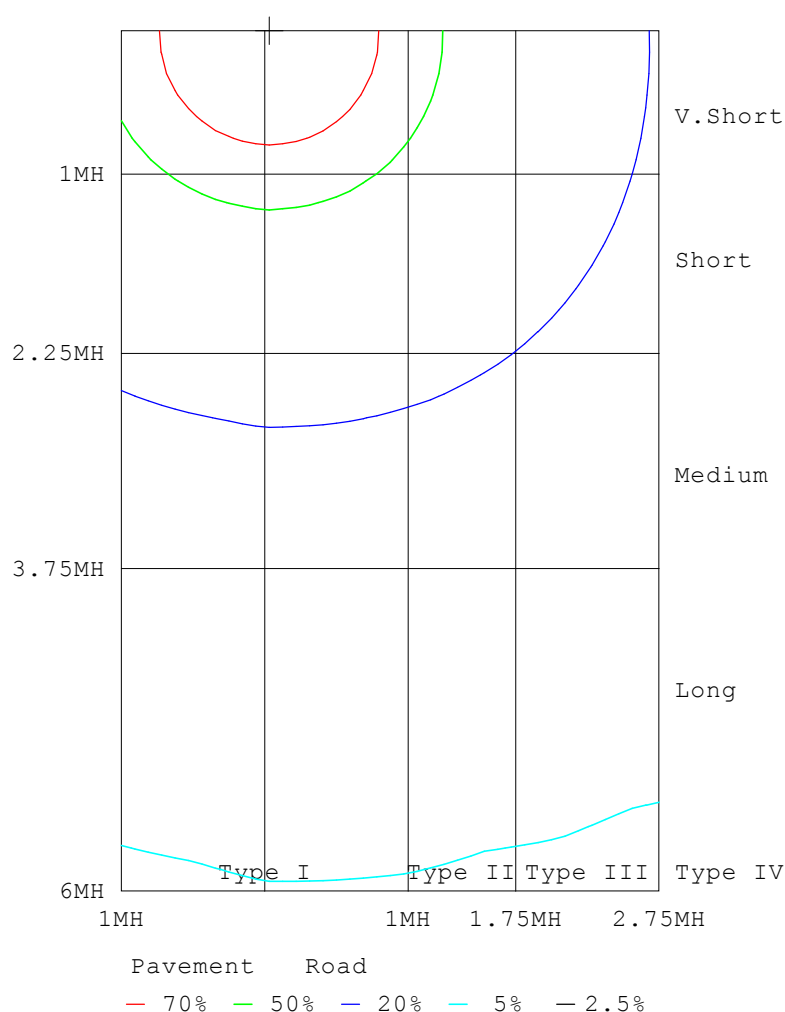
V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:



### ROAD ISOCANDELA REPORT

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

ROAD SURFACE ISOCANDELA DIAGRAM



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--1

UNIT: cd

[illegible]

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

```
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:
```

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--2

UNIT: cd

[illegible]

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

```
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:
```

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--3

UNIT: cd

[illegible]

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

```
V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.010m [K=1.0000]
Remarks:
```

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.1816A P:21.626W PF:0.9924 Freq:59.98Hz Lamp Flux:2823.86x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A

Table--4

UNIT: cd

[illegible]

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks: