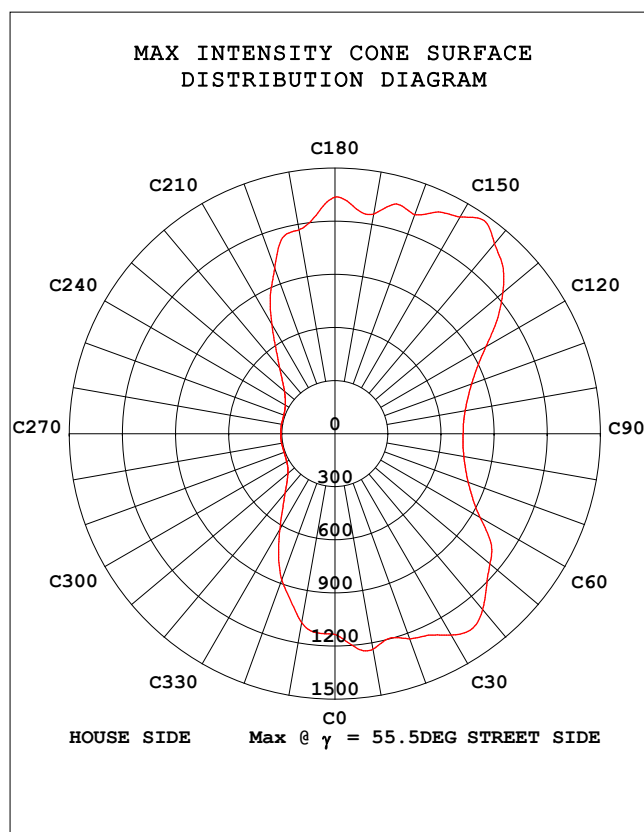
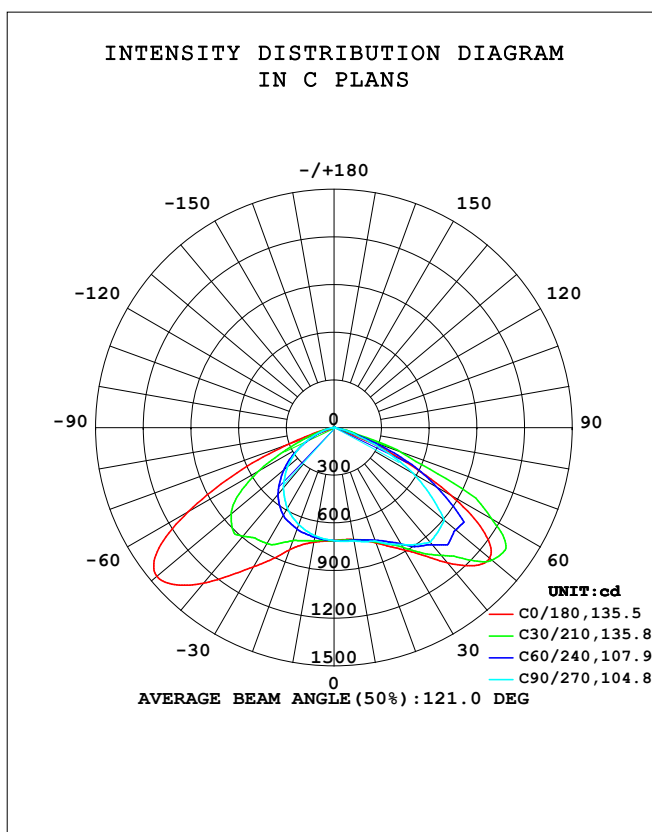


# STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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: 148.47 lm/W			
MODEL	H-21-V01-RZ-T3-1-TG	Imax(cd)	1470	$\eta$ street_up(%)	0.0
NOMINAL POWER(W)	21	LOR(%)	100.0	$\eta$ street_down(%)	60.8
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	3210	$\eta$ house_up(%)	0.0
NOMINAL FLUX(lm)	3210.37	MAXIMUM @ (C, $\gamma$ )	145,55.5	$\eta$ house_down(%)	39.2
LAMPS INSIDE	1	$\eta$ up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	120	$\eta$ down(%)	100.0	SLI	14.420

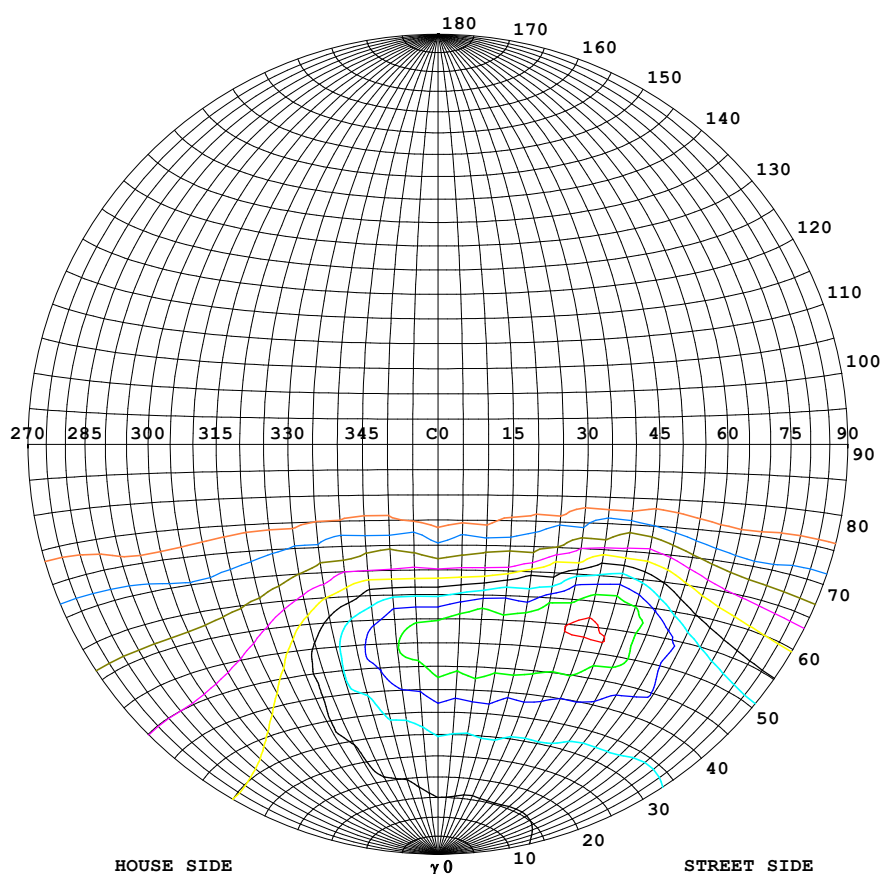


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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:

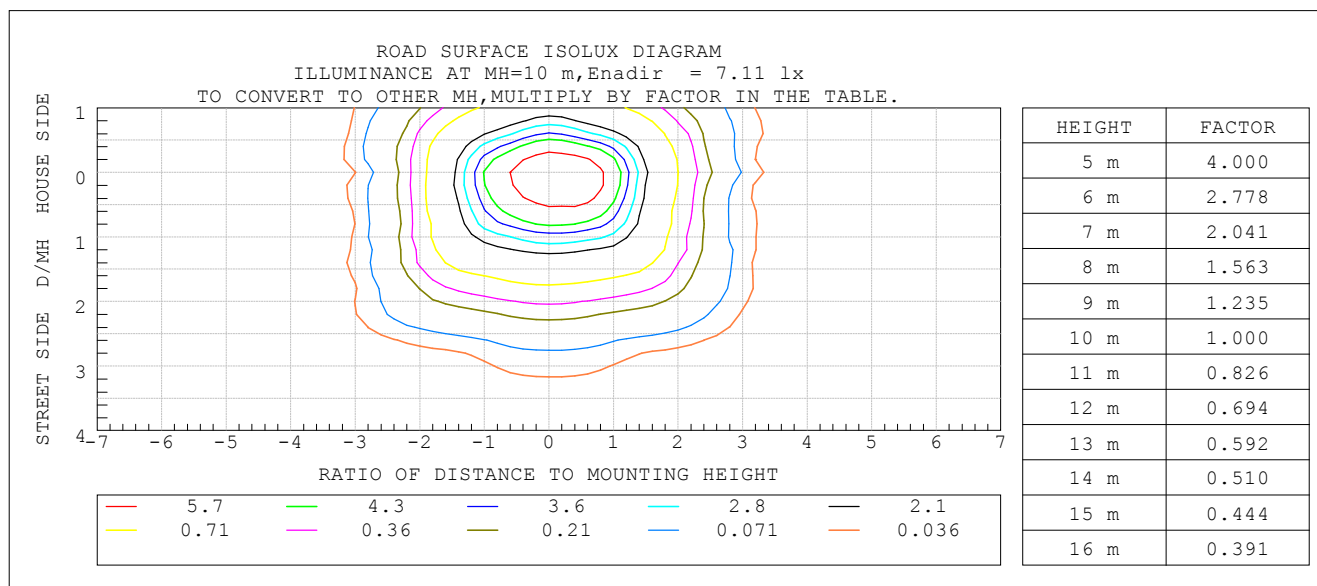
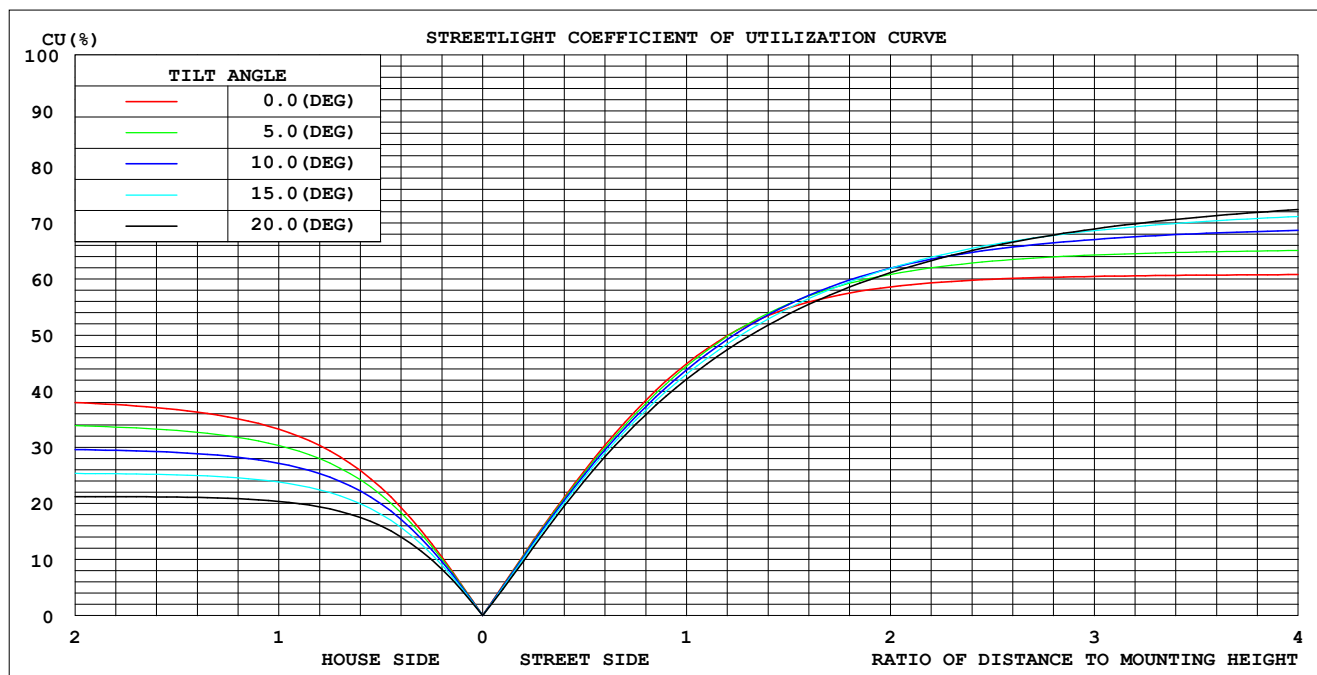
IES:Type II - Short  
 CIE:Average - Short  
 IES:Cut-off  
 CIE:Full cut-off  
 Max.At80:15.44cd/klm  
 Max.At90:0.3104cd/klm  
 Max.80-90:15.44cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I <sub>max</sub> =100%	1470
90%	1323
80%	1176
70%	1029
60%	882
50%	735
40%	588
30%	441
20%	294
10%	147
5%	74

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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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

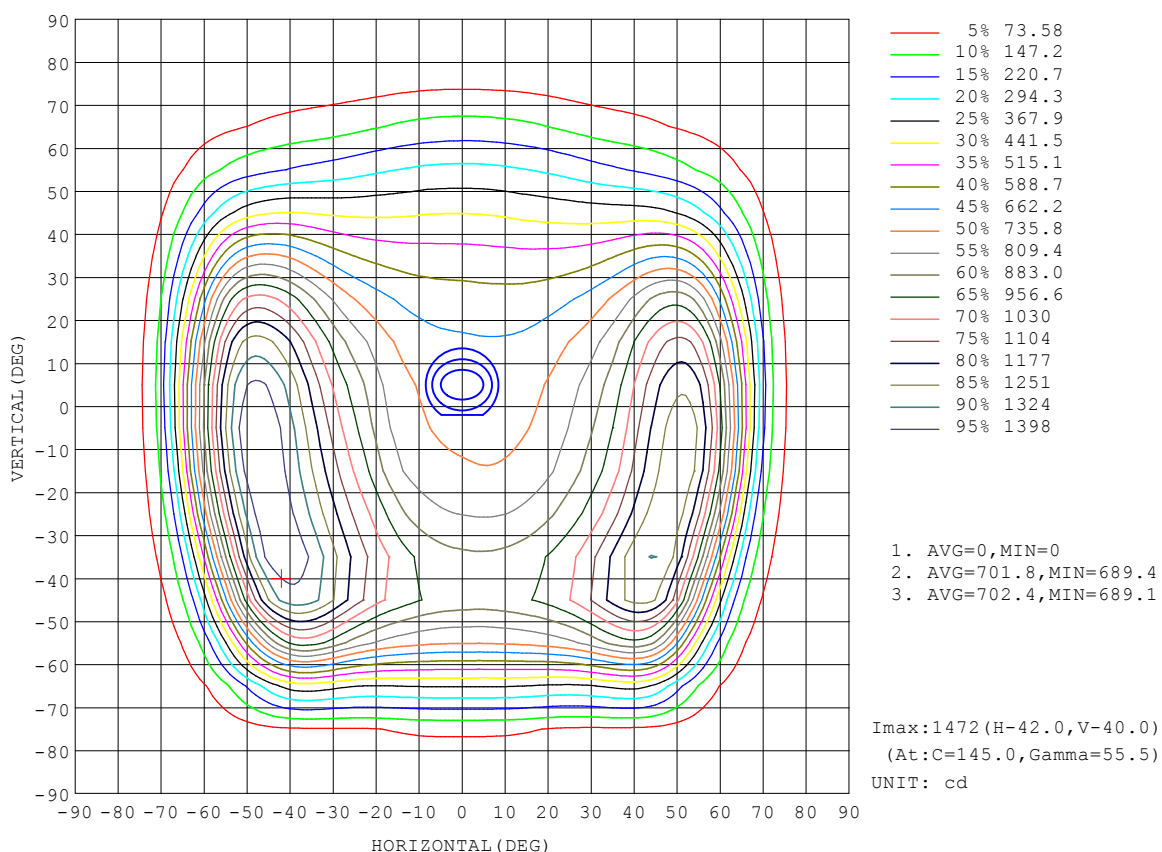
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	715.9	718.4	723.3	734.1	731.8	710.7	692.3	695.0	0- 10	68.07	68.07	2.12,2.12
20	772.4	754.4	759.1	807.5	817.8	721.1	650.9	680.1	10- 20	206.6	274.7	8.56,8.56
30	889.7	862.3	849.9	966.9	1011	716.3	588.2	667.1	20- 30	362.1	636.8	19.8,19.8
40	1111	1020	942.1	1139	1278	660.1	496.6	615.6	30- 40	542.6	1179	36.7,36.7
50	1279	1243	906.4	1330	1456	522.3	381.3	485.0	40- 50	721.9	1901	59.2,59.2
60	848.3	1164	574.4	1237	1059	309.7	246.1	284.1	50- 60	753.5	2655	82.7,82.7
70	159.0	488.8	172.7	509.0	298.7	112.9	105.2	104.9	60- 70	446.5	3101	96.6,96.6
80	9.203	47.44	6.904	48.86	29.84	22.93	11.14	20.54	70- 80	104.1	3205	99.8,99.8
90	0.9966	0	0	0	0.6064	0	0	0	80- 90	5.009	3210	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

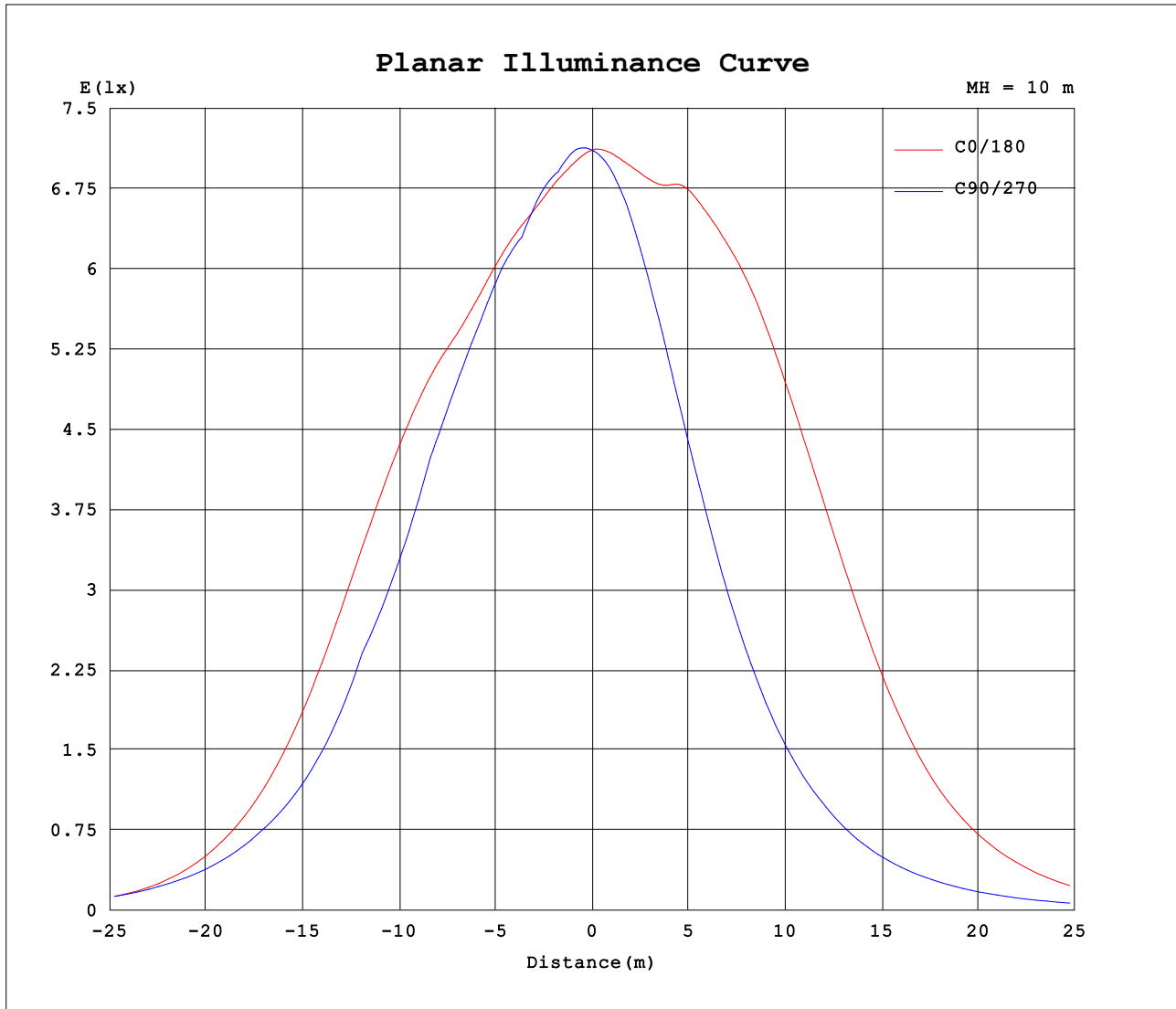
Test:U:120.00V I:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 lm		
NAME: LED Area Light	TYPE:Arealight	WEIGHT:N/A
SPEC.:21W/5000K	DIM.: N/A	SERIAL No.:N/A
MFR.: NJZ Lighting Technology Co.,Ltd	SUR.:N/A	Shielding Angle:N/A



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



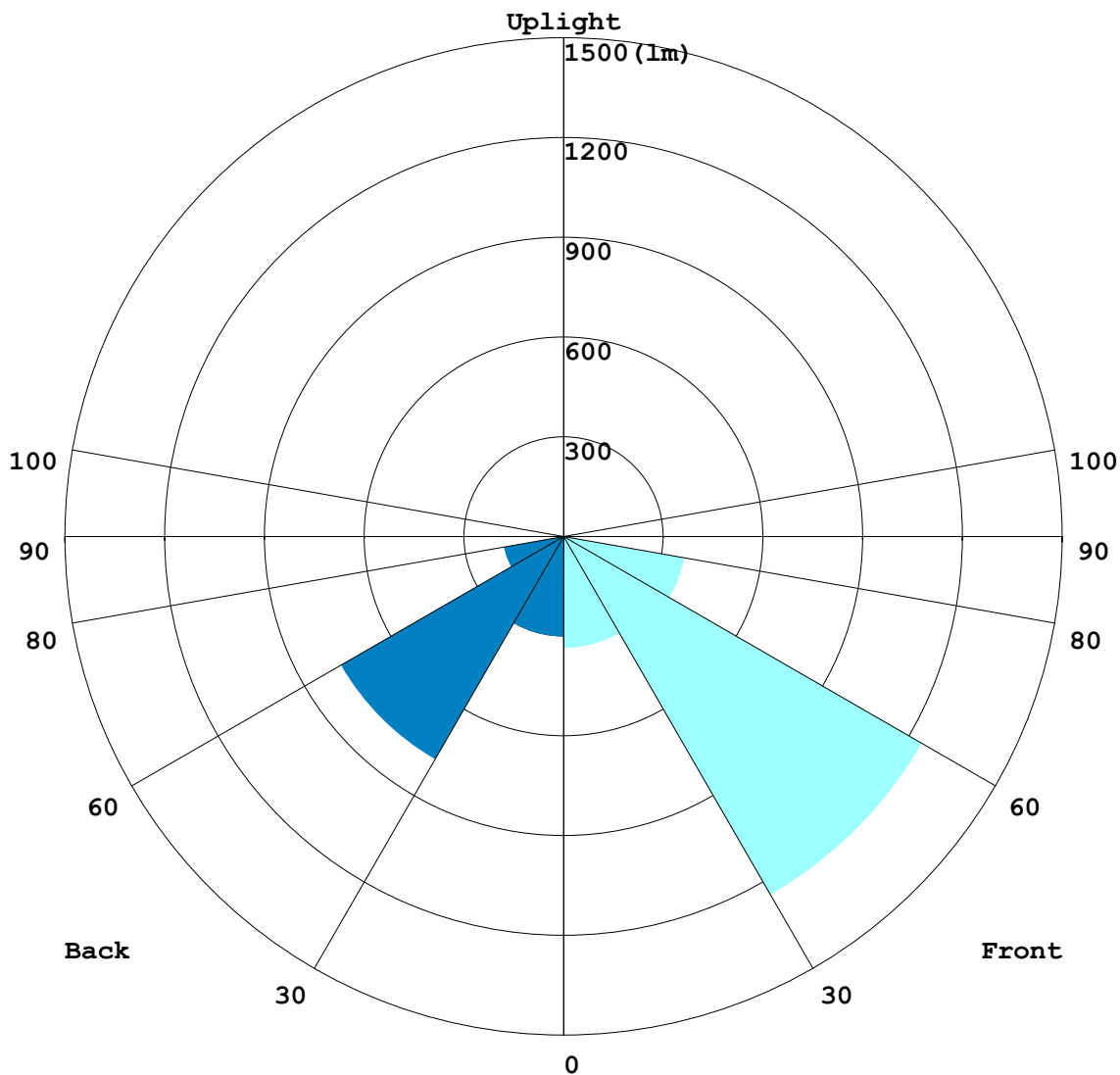
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:CL  
Test Date:10 May 2019

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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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)	336.02	10.5
FM - Front-Medium(30-60)	1244.3	38.8
FH - Front-High(60-80)	368.32	11.5
FVH - Front-Very High(80-90)	2.6048	0.1
Total Forward Light	1951.3	60.8

BL - Back-Low(0-30)	300.76	9.4
BM - Back-Medium(30-60)	773.64	24.1
BH - Back-High(60-80)	182.28	5.7
BVH - Back-Very High(80-90)	2.4037	0.1
Total Back Light	1259.1	39.2

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-G1
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	1259.1	0	1259.1
Street Side	1951.3	0	1951.3

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

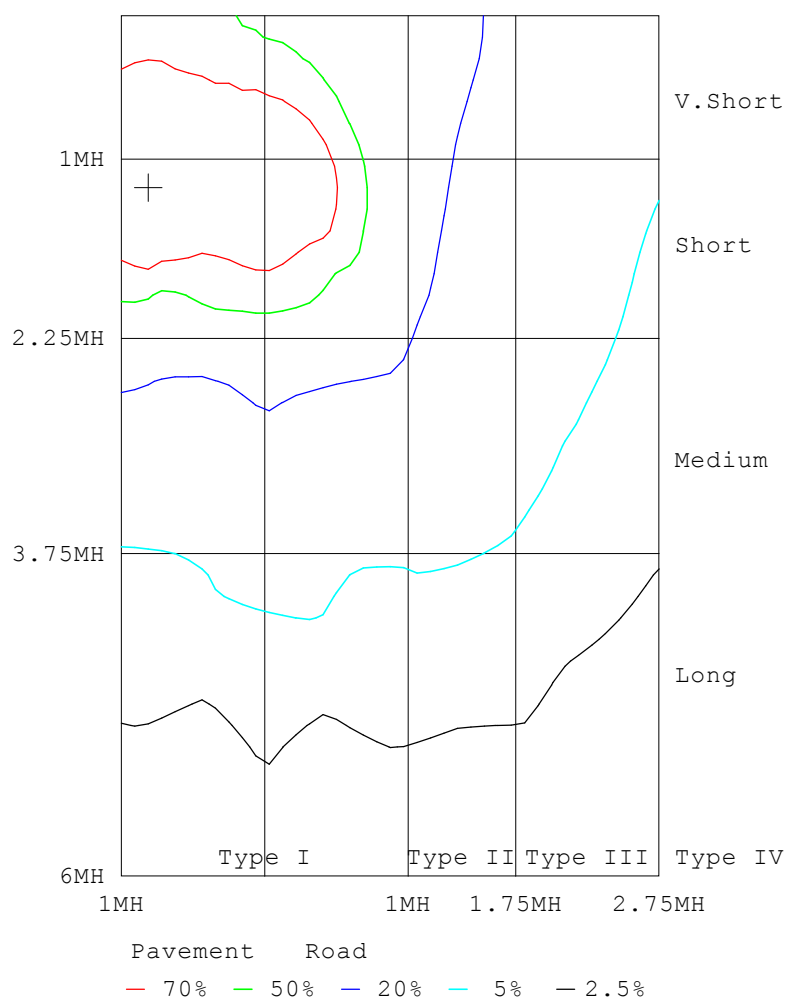
V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:6.010m [K=1.0000]  
Remarks:



### ROAD ISOCANDELA REPORT

Test:U:120.00V I:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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:0.1788A P:21.623W PF:0.9922 Freq:59.98Hz Lamp Flux:3210.37x1 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:
```