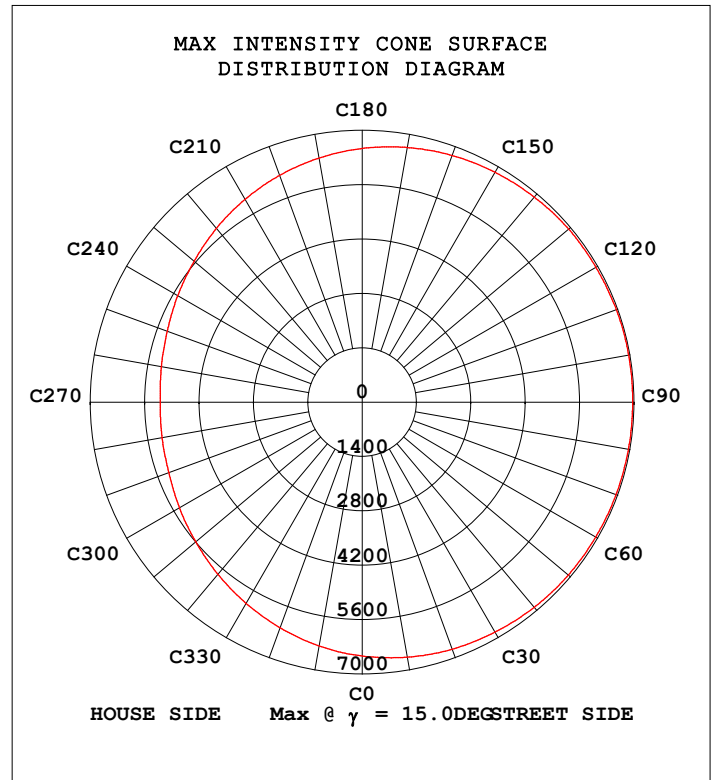
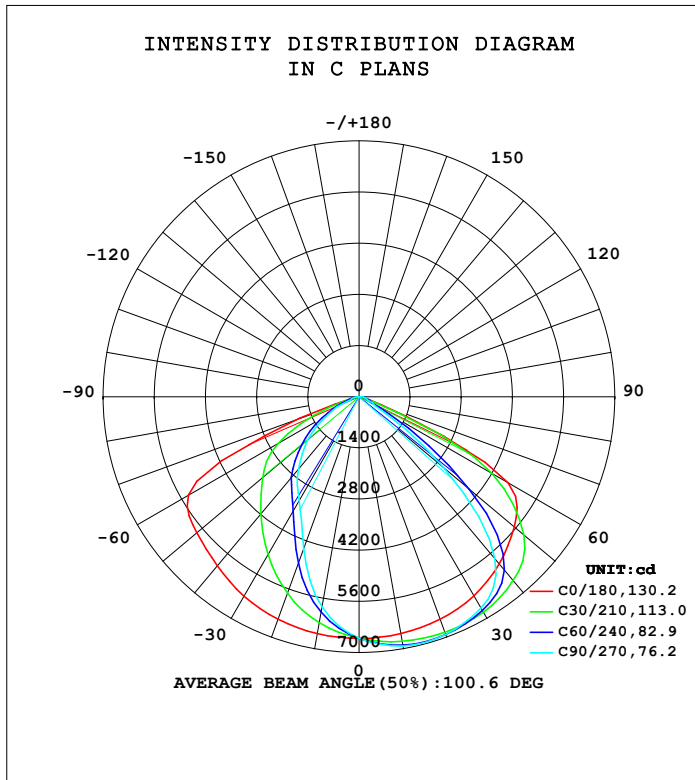


STREETLIGHT PHOTOMETRIC TEST REPORT

NAME: 98Tivoli150SMD	TYPE: 98Tivoli150SMD	WEIGHT: 1
SPEC.:	DIM.: 545 x 205 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	98Tivoli150SMD	Imax(cd)	6968	η street_up(%)	0.0
NOMINAL POWER(W)	150	LOR(%)	927.5	η street_down(%)	543.0
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	16696	η house_up(%)	0.0
NOMINAL FLUX(lm)	1800	MAXIMUM @ (C, γ)	100,15.0	η house_down(%)	384.5
LAMPS INSIDE	1	η up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	230	η down(%)	927.5	SLI	16.886

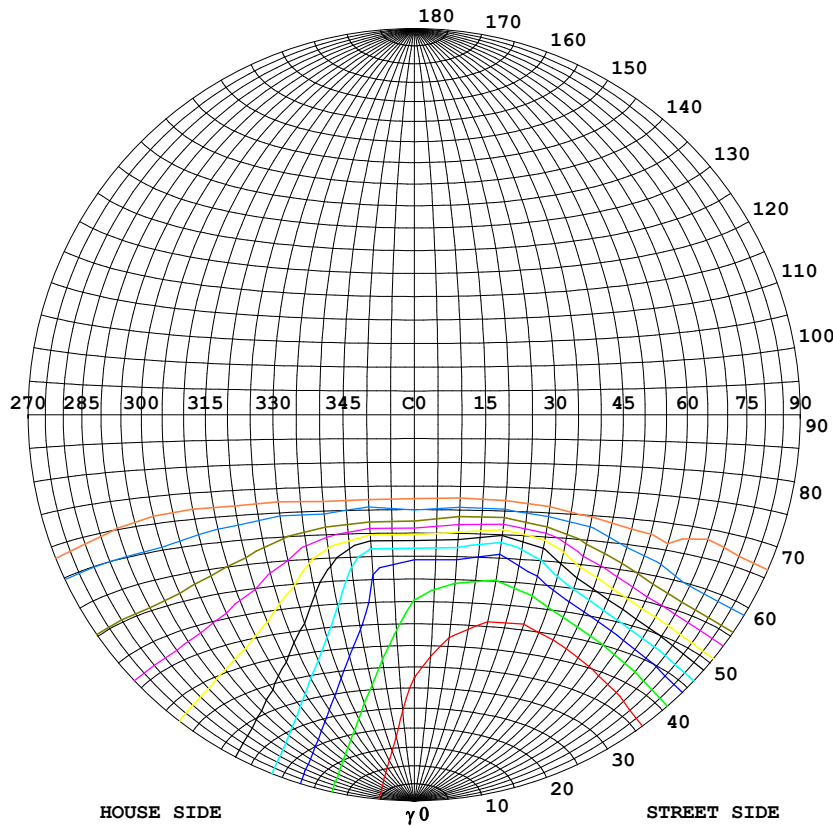


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:22 August 2022

γ Range: 0 - 90DEG
 γ Interval: 2.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:6.265m [K=1.0000]
 Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

NAME: 98Tivoli1150SMD	TYPE: 98Tivoli1150SMD	WEIGHT: 1
SPEC.:	DIM.: 545 x 205 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:



Classification:

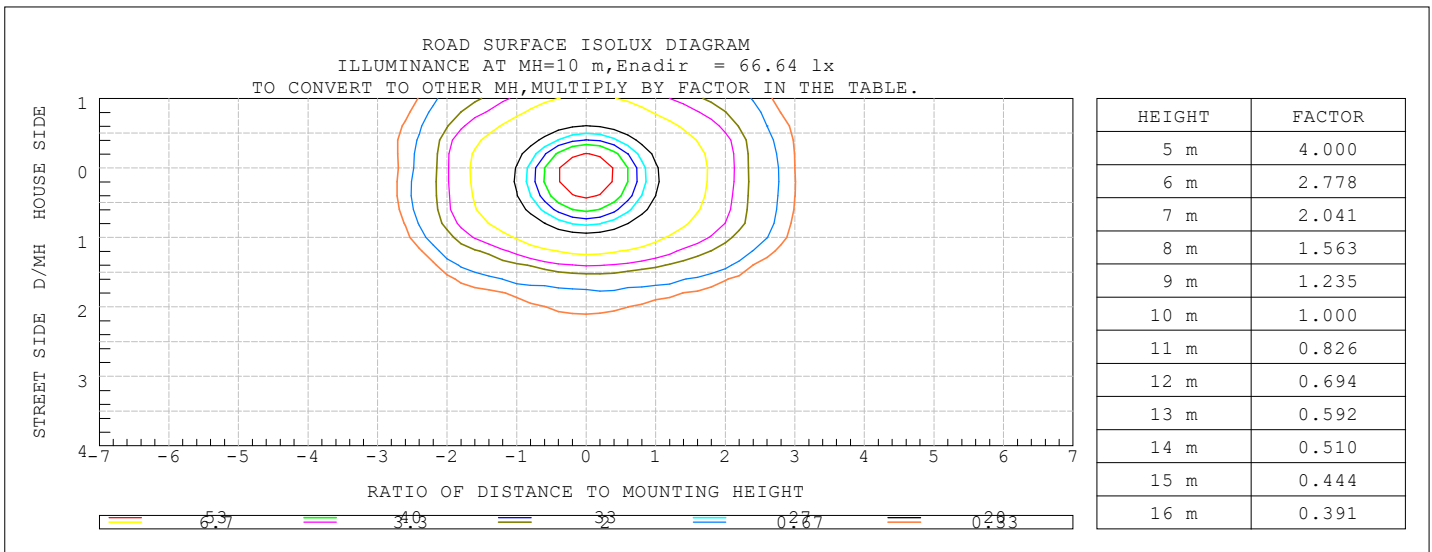
IES:Type II - Very Short
 CIE:Narrow - Short
 IES:Semi cut-off
 CIE:Non-cut-off
 Max.At80:104.1cd/klm
 Max.At90:24.46cd/klm
 Max.80-90:104.1cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	6968
90%	6271
80%	5574
70%	4878
60%	4181
50%	3484
40%	2787
30%	2090
20%	1394
10%	697
5%	348

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:22 August 2022

γ Range: 0 - 90DEG
 γ Interval: 2.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:6.265m [K=1.0000]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 22 August 2022

γ Range: 0 - 90DEG
 γ Interval: 2.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 6.265m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

NAME: 98Tivoli1150SMD	TYPE: 98Tivoli1150SMD	WEIGHT: 1
SPEC.:	DIM.: 545 x 205 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

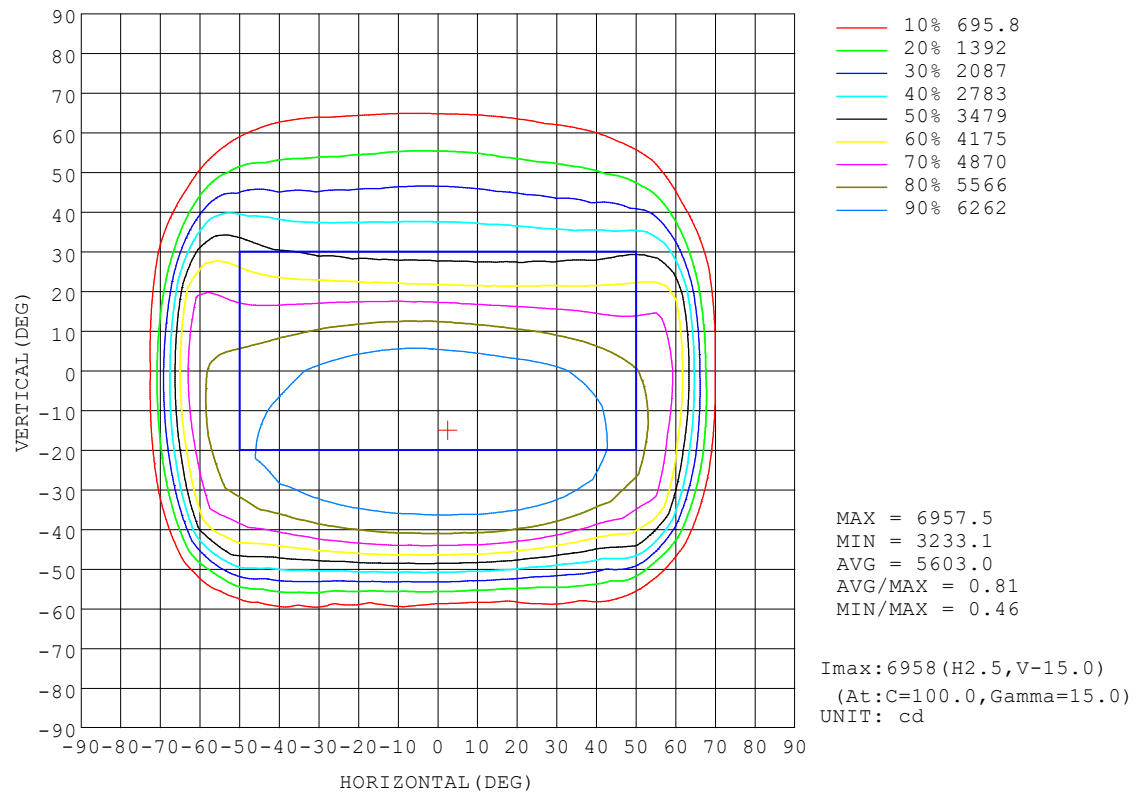
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	6577	6852	6927	6860	6581	6124	5845	6097	0- 10	624.9	624.9	3.74,34.7
20	6476	6914	6928	6927	6479	5277	4431	5182	10- 20	1780	2405	14.4,134
30	6292	6805	6678	6803	6302	4196	3283	4088	20- 30	2683	5088	30.5,283
40	5967	6458	5776	6456	6034	3309	2581	3214	30- 40	3316	8404	50.3,467
50	5546	5006	3017	5250	5796	2552	1841	2387	40- 50	3475	11878	71.1,660
60	4718	2149	507.1	2683	5386	1619	975.1	1412	50- 60	2873	14751	88.4,820
70	669.1	285.3	234.2	357.8	1734	658.9	256.7	476.0	60- 70	1570	16321	97.8,907
80	79.61	129.4	159.9	159.6	110.4	160.5	130.8	126.1	70- 80	297.2	16619	99.5,923
90	38.60	19.18	3.933	22.43	39.93	14.69	3.208	12.15	80- 90	77.10	16696	100,928
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		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:22 August 2022

γ Range: 0 - 90DEG
 γ Interval: 2.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

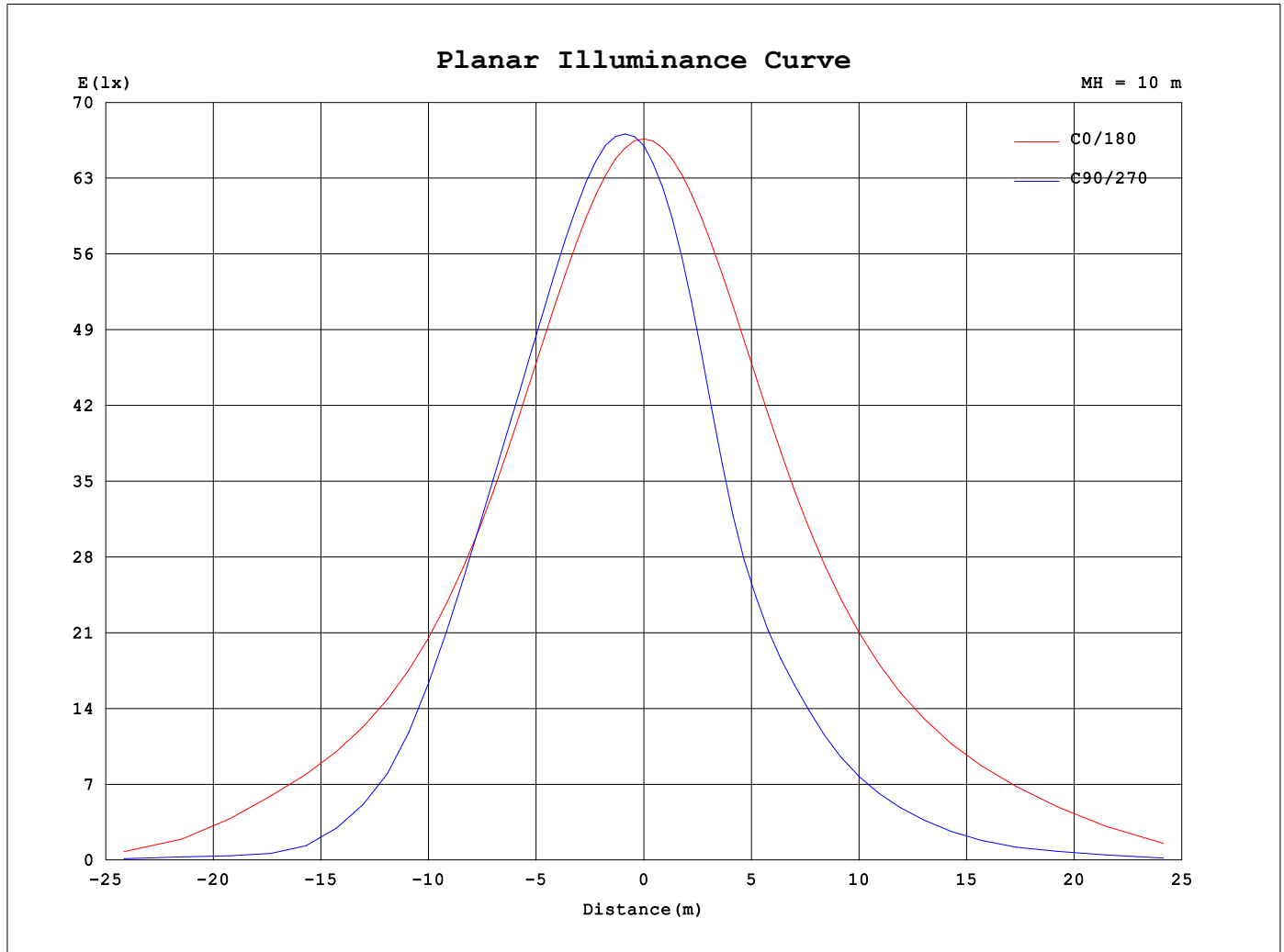
NAME: 98Tivoli1150SMD	TYPE: 98Tivoli1150SMD	WEIGHT: 1
SPEC.:	DIM.: 545 x 205 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators:
Test Date: 22 August 2022

γ Range: 0 - 90DEG
γ Interval: 2.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity: 65.0%
Test Distance: 6.265m [K=1.0000]
Remarks:

Planar Illuminance Curve

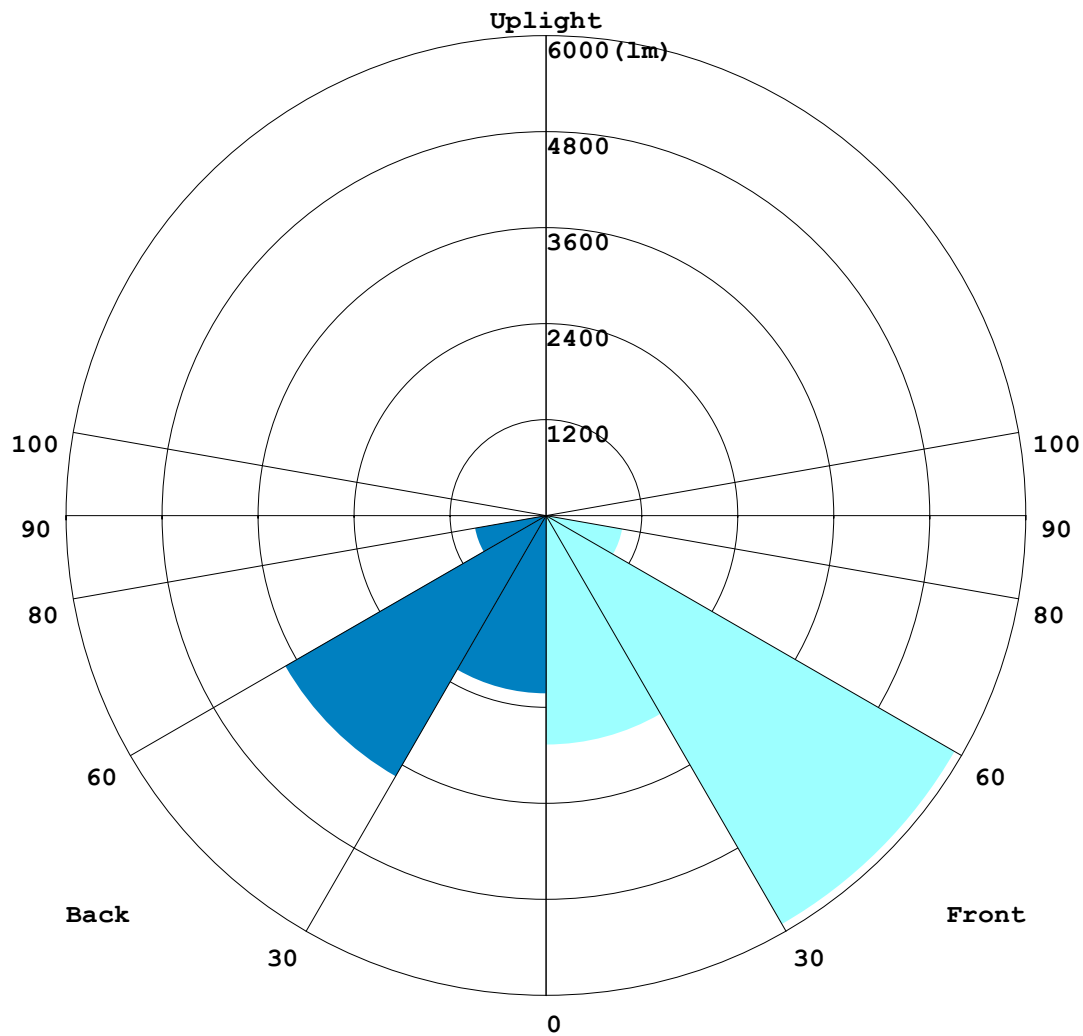


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 22 August 2022

γ Range: 0 - 90DEG
 γ Interval: 2.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity: 65.0%
 Test Distance: 6.265m [K=1.0000]
 Remarks:

LCS REPORT

NAME: 98Tivoli1150SMD	TYPE: 98Tivoli1150SMD	WEIGHT: 1
SPEC.:	DIM.: 545 x 205 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators:
 Test Date: 22 August 2022

γ Range: 0 - 90DEG
 γ Interval: 2.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity: 65.0%
 Test Distance: 6.265m [K=1.0000]
 Remarks:

BUG REPORT

NAME: 98Tivoli150SMD	TYPE: 98Tivoli150SMD	WEIGHT: 1
SPEC.:	DIM.: 545 x 205 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	2862.9	17.1
FM - Front-Medium(30-60)	5901	35.3
FH - Front-High(60-80)	968.08	5.8
FVH - Front-Very High(80-90)	42.733	0.3
Total Forward Light	9774.7	58.5

BL - Back-Low(0-30)	2225.1	13.3
BM - Back-Medium(30-60)	3762.2	22.5
BH - Back-High(60-80)	899.26	5.4
BVH - Back-Very High(80-90)	34.365	0.2
Total Back Light	6920.9	41.5

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	B3-U0-G2
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	6920.9	0	6920.9
Street Side	9774.7	0	9774.7

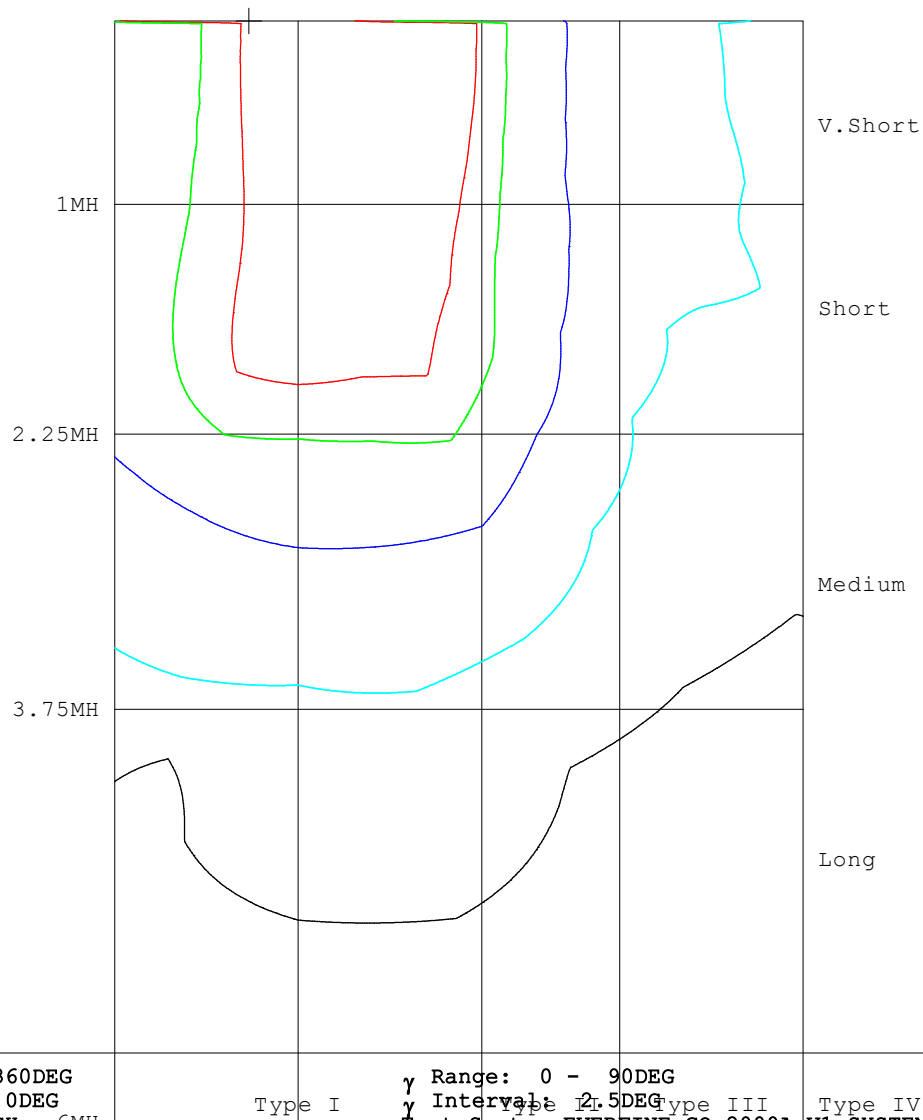
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:22 August 2022

γ Range: 0 - 90DEG
γ Interval: 2.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

ROAD ISOCANDELA REPORT

NAME: 98Tivoli150SMD	TYPE: 98Tivoli150SMD	WEIGHT: 1
SPEC.:	DIM.: 545 x 205 x 90	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG

C Interval: 10.0DEG

Test Speed: HIGH 6MH

Temperature: 25.3°C 1MH

Operators:

Test Date: 22 August 2022

γ Range: 0 - 90DEG

γ Interval: 2.5DEG

Test System: EVERFINE GO-2000A-V1 SYSTEM V2.00.456

Humidity: 65.0% 75MH 2.75MH

Test Distance: 6.265m [K=1.0000]

Remarks:

70% 4867.6

20% 1350.8

2.5% 143.84

50% 3476.9

5% 347.69

```

γ Range: 0 - 90DEG
γ Interval: 2.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

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γ Range: 0 - 90DEG
γ Interval: 2.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

```