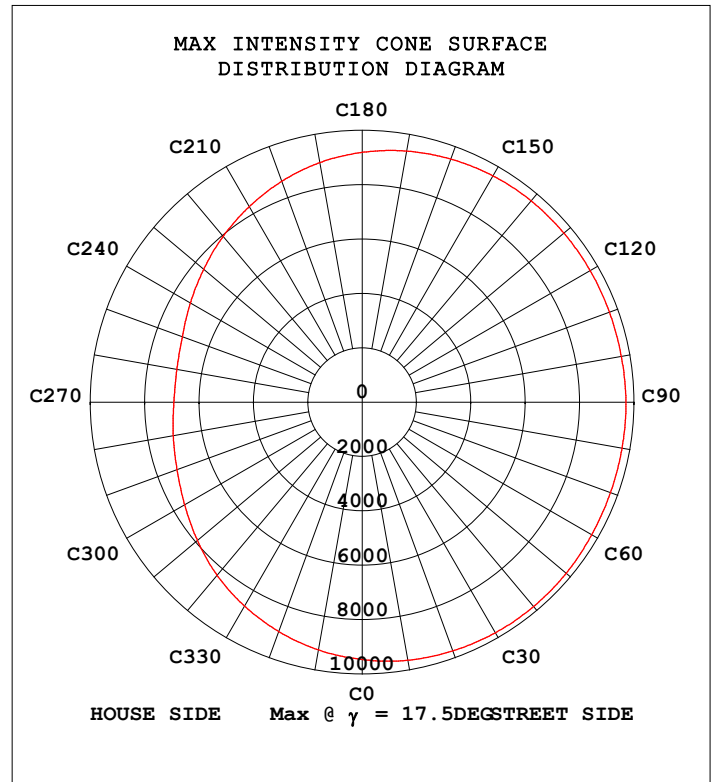
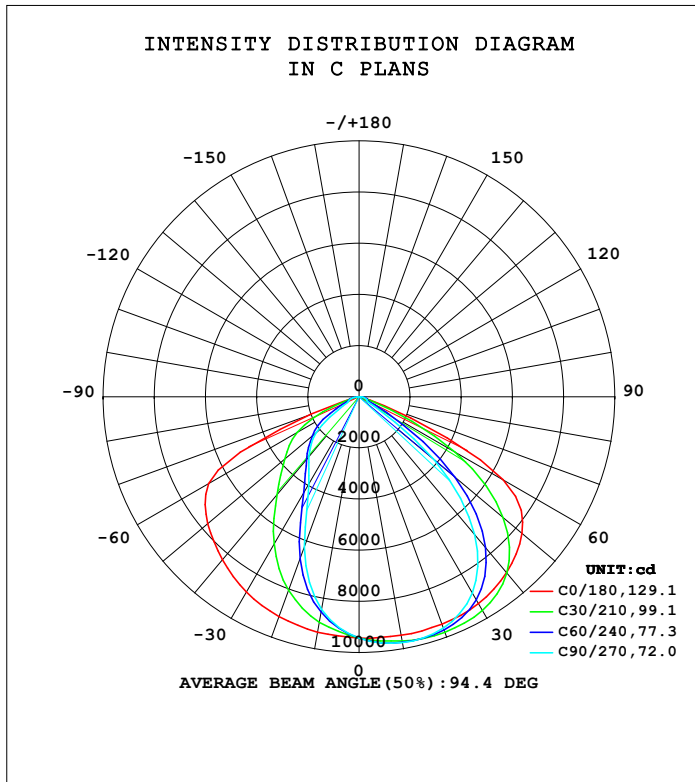


STREETLIGHT PHOTOMETRIC TEST REPORT

NAME: 98Tivoli200SMD	TYPE: 98Tivoli200SMD	WEIGHT: 1
SPEC.:	DIM.: 625 x 225 x 100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	98Tivoli200SMD	Imax (cd)	9811	η street_up (%)	0.0
NOMINAL POWER (W)	200	LOR (%)	914.7	η street_down (%)	531.4
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	21953	η house_up (%)	0.0
NOMINAL FLUX (lm)	2400	MAXIMUM @ (C, γ)	40, 17.5	η house_down (%)	383.3
LAMPS INSIDE	1	η up (%)	0.0	76 FLASHAREA (m2)	0.00100
TEST VOLTAGE (V)	230	η down (%)	914.7	SLI	17.267

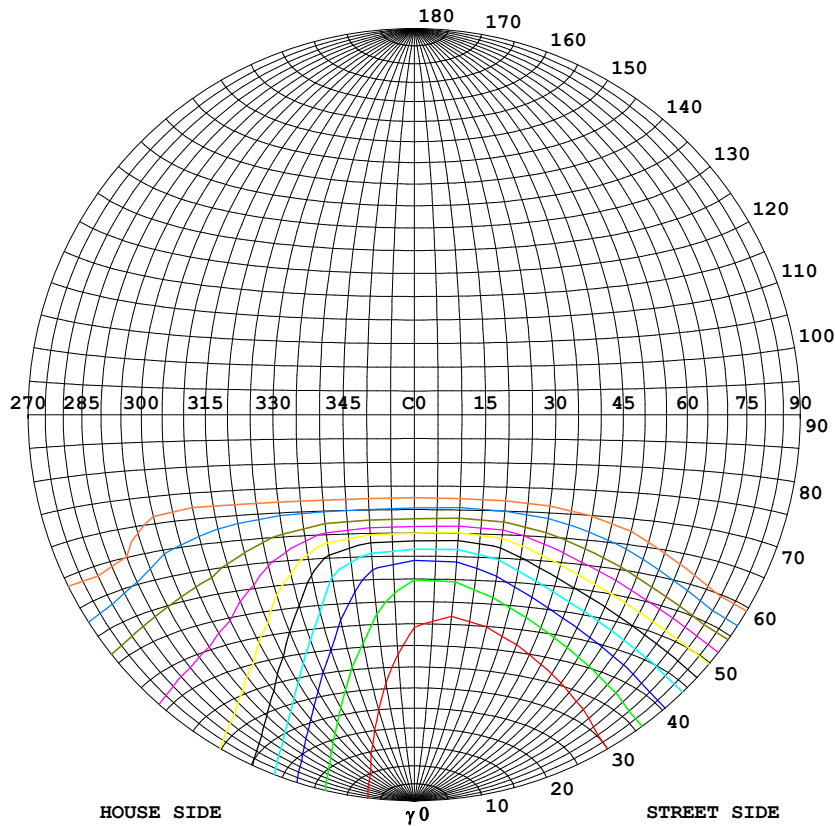


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature: 25.3°C
Operators:
Test Date: 22 August 2022

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: 98Tivoli200SMD	TYPE: 98Tivoli200SMD	WEIGHT: 1
SPEC.:	DIM.: 625 x 225 x 100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:



Classification:

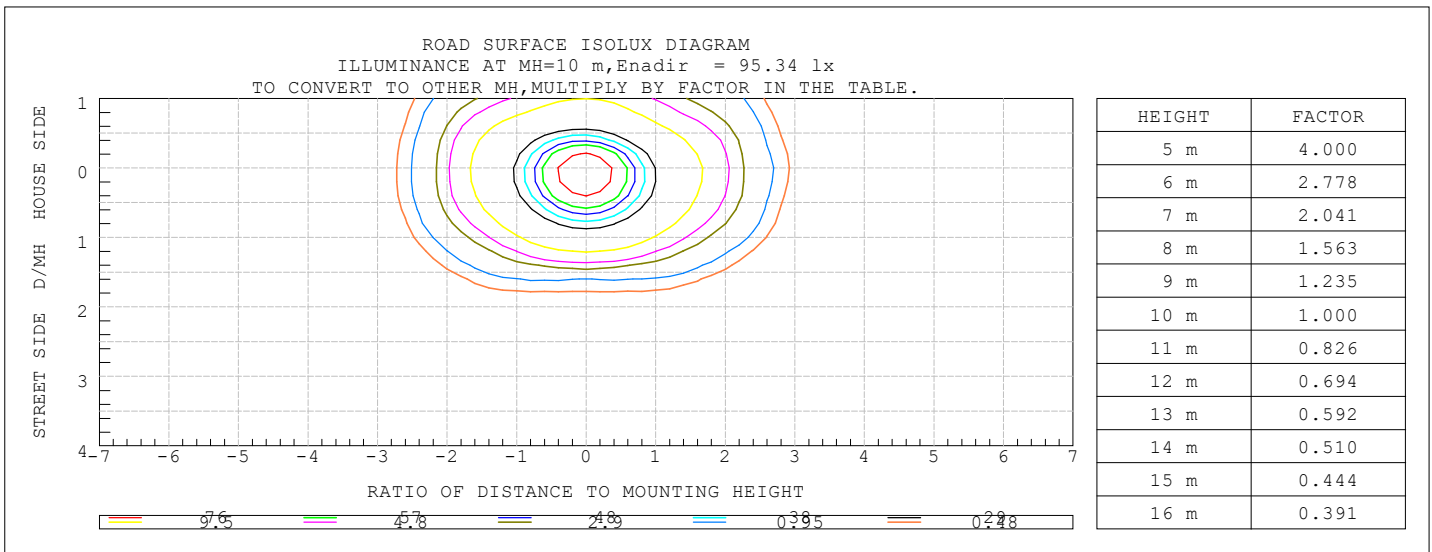
IES:Type II - Very Short
CIE:Narrow - Short
IES:Semi cut-off
CIE:Non-cut-off
Max.At80:113.3cd/klm
Max.At90:12.84cd/klm
Max.80-90:113.3cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	9811
90%	8830
80%	7849
70%	6868
60%	5887
50%	4905
40%	3924
30%	2943
20%	1962
10%	981
5%	491

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
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: MEDIUM
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: 98Tivoli200SMD	TYPE: 98Tivoli200SMD	WEIGHT: 1
SPEC.:	DIM.: 625 x 225 x 100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

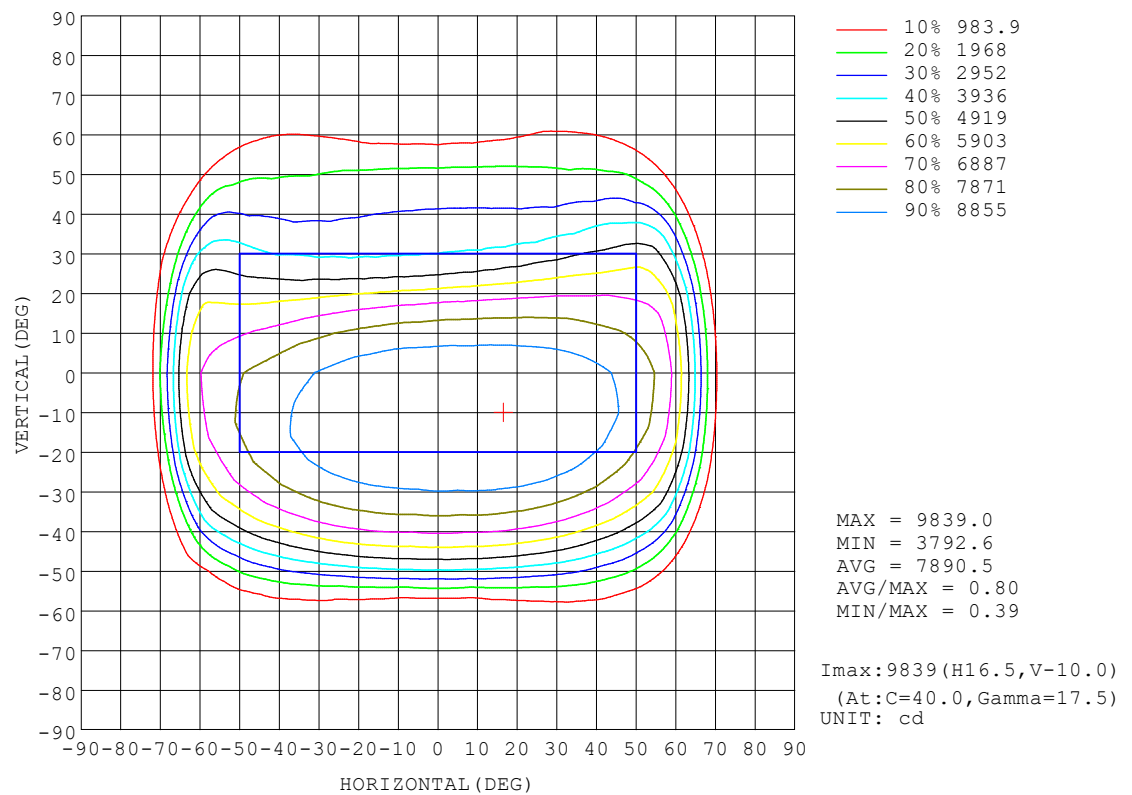
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	9462	9728	9757	9664	9342	8736	8444	8849	0- 10	891.4	891.4	4.06,37.1
20	9458	9780	9624	9650	9140	7358	6269	7776	10- 20	2536	3428	15.6,143
30	9336	9438	8859	9289	8813	5279	3950	6092	20- 30	3753	7181	32.7,299
40	8967	8352	7031	8299	8307	3736	3061	4449	30- 40	4447	11628	53,484
50	8310	6079	3836	6182	7721	2775	2194	3276	40- 50	4500	16127	73.5,672
60	6498	2618	415.7	2704	6785	1856	745.0	2049	50- 60	3578	19706	89.8,821
70	1055	413.0	307.1	363.7	2003	719.9	413.6	698.8	60- 70	1789	21495	97.9,896
80	91.12	212.6	187.3	196.1	113.6	203.7	198.9	176.1	70- 80	366.4	21861	99.6,911
90	30.13	17.84	5.668	19.23	27.25	9.489	3.652	10.80	80- 90	91.66	21953	100,915
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: MEDIUM
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

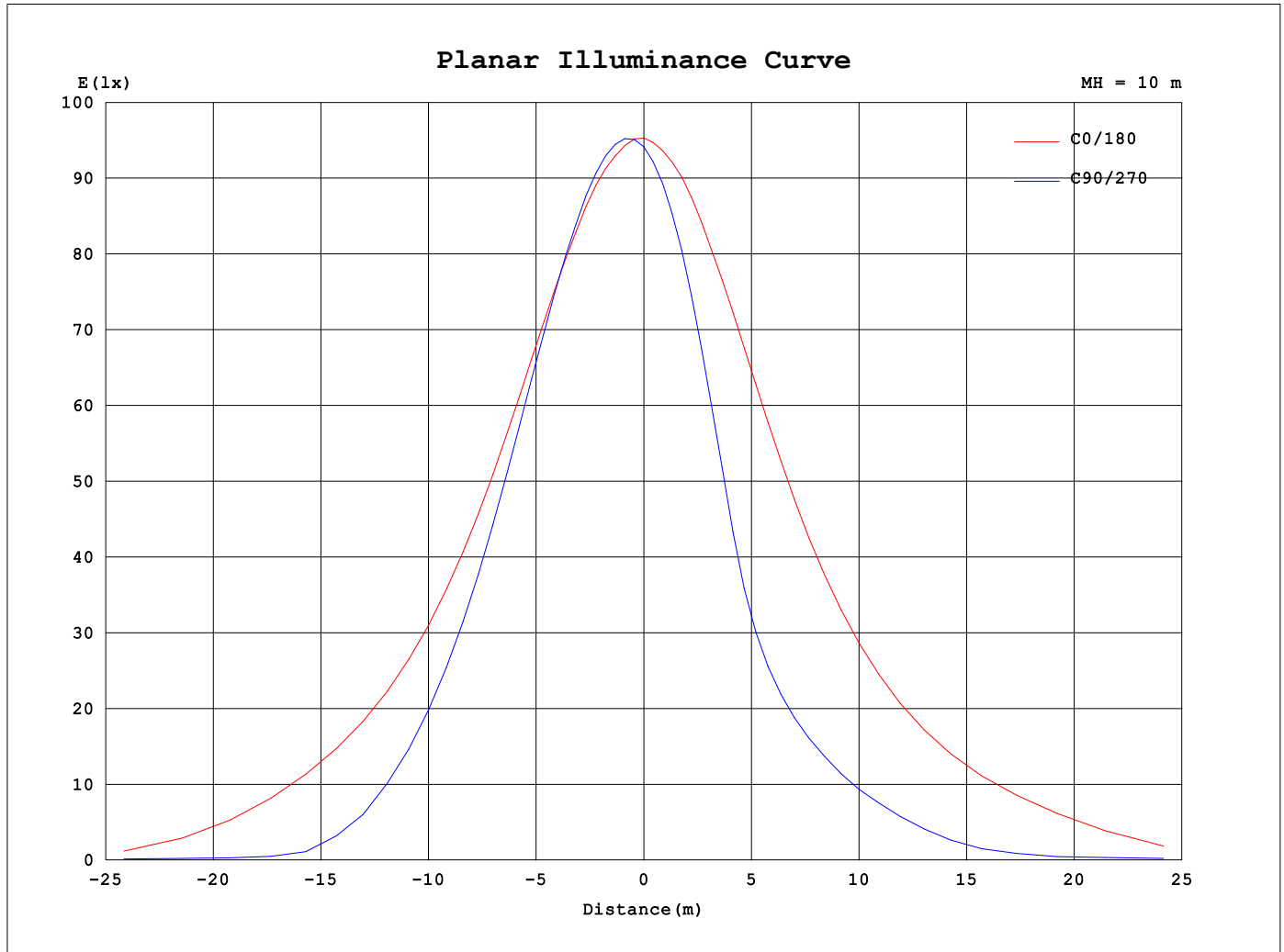
NAME: 98Tivoli200SMD	TYPE: 98Tivoli200SMD	WEIGHT: 1
SPEC.:	DIM.: 625 x 225 x 100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 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

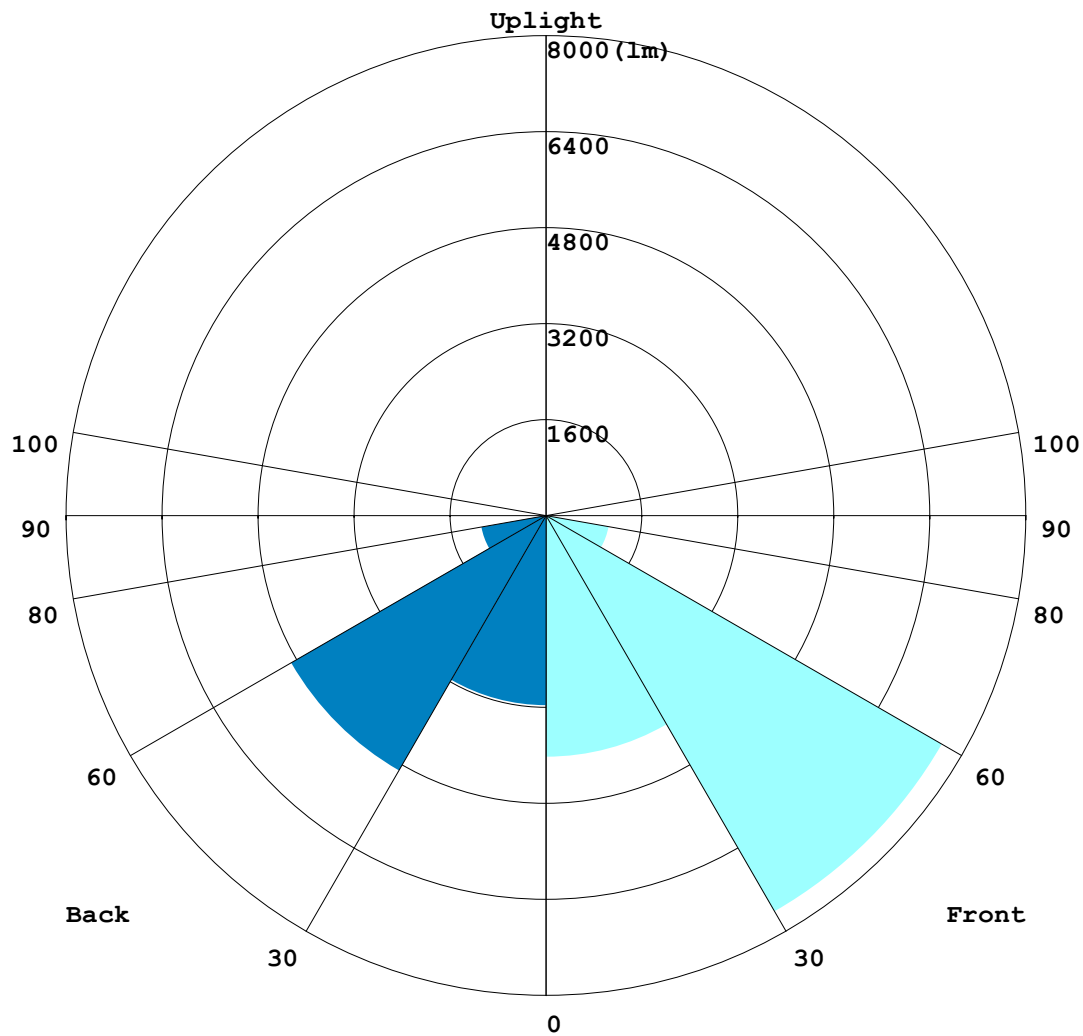


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: MEDIUM
 Temperature: 25.3°C
 Operators:
 Test Date: 22 August 2022

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: 98Tivoli200SMD	TYPE: 98Tivoli200SMD	WEIGHT: 1
SPEC.:	DIM.: 625 x 225 x 100	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: MEDIUM
 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: 98Tivoli200SMD	TYPE: 98Tivoli200SMD	WEIGHT: 1
SPEC.:	DIM.: 625 x 225 x 100	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: Rectangular	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	4019.1	18.3
FM - Front-Medium(30-60)	7619.8	34.7
FH - Front-High(60-80)	1063.3	4.8
FVH - Front-Very High(80-90)	51.137	0.2
Total Forward Light	12753	58.1

BL - Back-Low(0-30)	3161.6	14.4
BM - Back-Medium(30-60)	4905.2	22.3
BH - Back-High(60-80)	1092	5.0
BVH - Back-Very High(80-90)	40.527	0.2
Total Back Light	9199.4	41.9

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	B4-U0-G3
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	9199.4	0	9199.4
Street Side	12753	0	12753

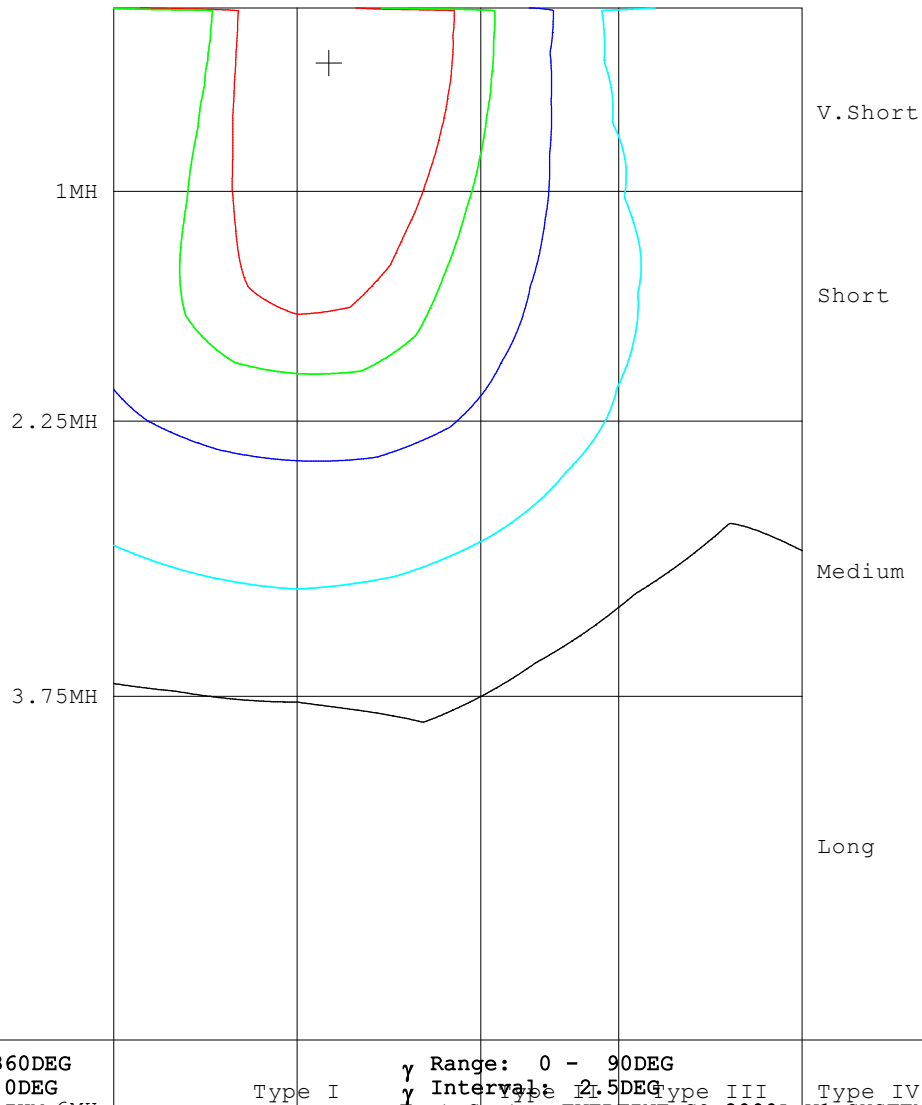
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: MEDIUM
Temperature:25.3°C
Operators:
Test Date:22 August 2022

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: 98Tivoli200SMD	TYPE: 98Tivoli200SMD	WEIGHT: 1
SPEC.:	DIM.: 625 x 225 x 100	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: MEDIUM 6MH
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=1.0009]
Remarks:

70% 6888.4 Road 20% 1968.1 2.9% 246.02
50% 4920.3 5% 492.03

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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:

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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:

```