

## Outdoor Distribution Test Report

### Photopia Photometric Analysis & Optical Design

**Catalog Number**

LambertianTilt

**Test Number**

1

**Test Date**

Tue Dec 12 11:14:47 2017

The results contained in this report pertain only to this IES file.

LambertianTilt  
LED 1W 1mm x 1mm Lambertian LED chip top surface  
Lambertian

**Input**

Number of Lamps	1
Lumens per Lamp	100 lm
Input Watts	1 W

**Photometry Information**

Distribution	Semi-Direct
Photometry Type	C

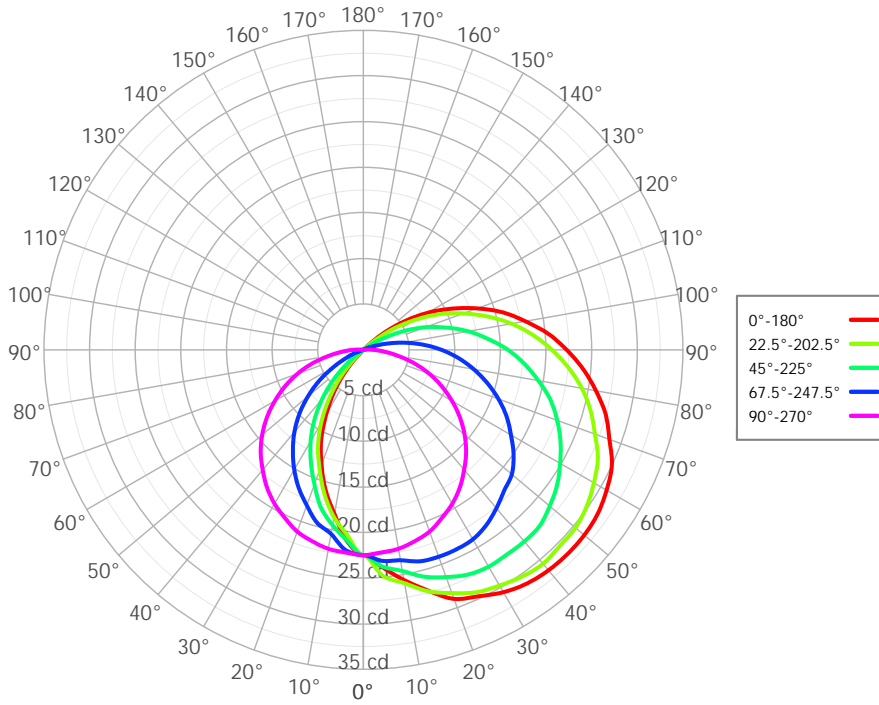
**Luminous Dimensions**

0° - 180° Size	0
90° - 270° Size	0
Height	0

**Roadway Summary**

Total Luminaire Optical Efficiency	100%
IESNA lateral classification	Type IV
IESNA vertical classification	Undefined (Very Short)
Cutoff classification	Noncutoff
IESNA TM-15-11 BUG Rating	B3 U3 G3
Maximum Candela	31.63 at 0° horizontal, 45° vertical.
Street side total	70.1%
House side total	15.3%

**Candela Polar Plot**



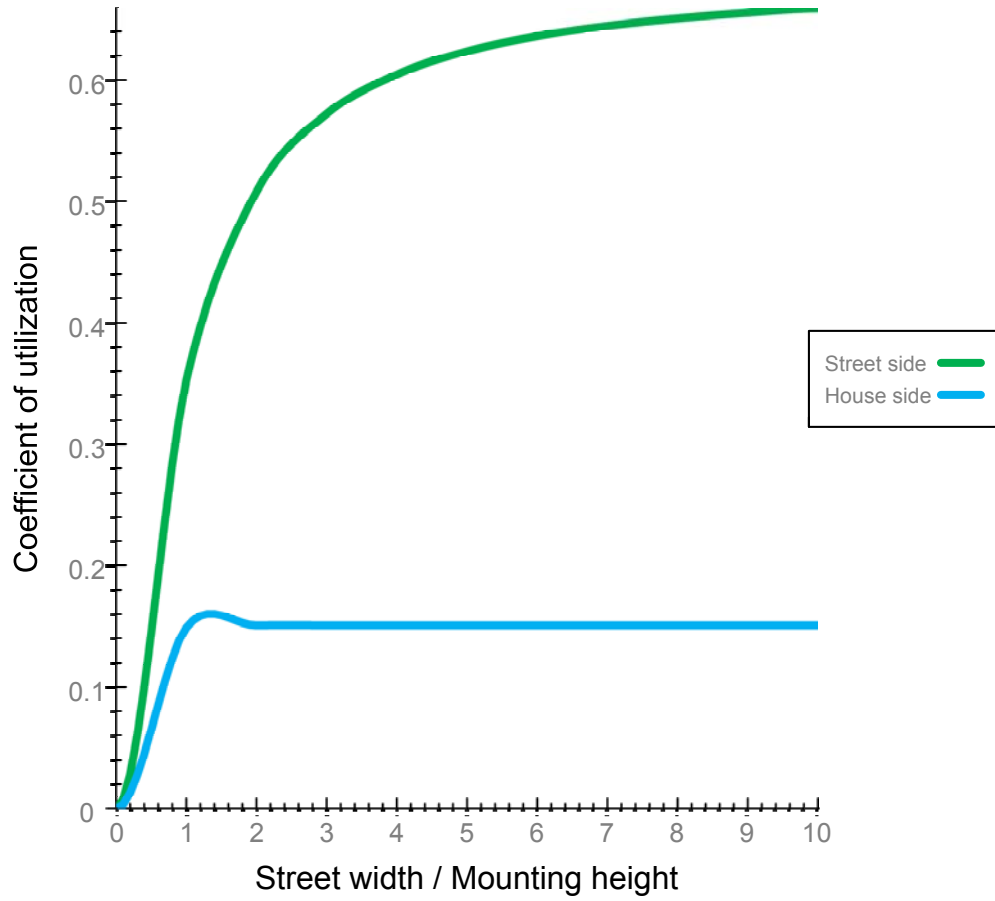
**Zonal Lumen Summary**

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0° - 10°	2.36	2.36%	90° - 100°	6.74	6.73%
10° - 20°	6.13	6.12%	100° - 110°	4.51	4.51%
20° - 30°	9.39	9.38%	100° - 120°	6.98	6.97%
30° - 40°	11.5	11.49%	120° - 130°	0.88	0.87%
40° - 50°	12.31	12.3%	130° - 140°	0.07	0.07%
50° - 60°	12.4	12.39%	140° - 150°	0	0%
60° - 70°	11.85	11.84%	150° - 160°	0	0%
70° - 80°	10.64	10.63%	160° - 170°	0	0%
80° - 90°	8.86	8.85%	170° - 180°	0	0%
0° - 90°	85.44	85.35%	0° - 180°	100.11	100%

**Candela Distribution**

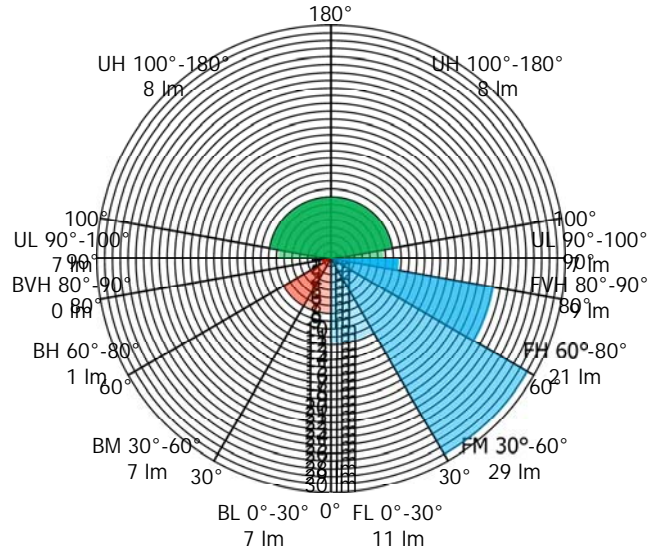
	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	22.49	22.49	22.49	22.49	22.49	22.49	22.49	22.49	22.49
5°	23.91	24.89	23.83	23.2	22.29	22.04	20.93	20.36	21.01
10°	25.6	25.96	24.6	23.41	22.13	20.46	19.49	18.61	18.24
15°	27.29	27.38	25.73	23.98	21.7	19.61	17.92	16.43	15.97
20°	29.04	28.36	26.49	24.12	21.19	18.13	15.68	14	13.41
25°	29.79	29.3	27.16	24.11	20.33	16.73	13.6	11.78	10.95
30°	30.66	29.81	27.43	23.97	19.47	15.15	11.56	9.27	8.13
35°	31.25	30.32	27.38	23.45	18.41	13.47	9.35	6.62	5.56
40°	31.53	30.6	27.41	22.66	17.16	11.76	7.01	3.96	2.86
45°	31.63	30.4	27.29	21.81	15.91	9.92	4.67	1.26	0.28
50°	31.58	30.32	26.64	21.22	14.47	7.92	2.31	0.02	0
55°	31.33	29.87	25.89	20.08	12.9	5.92	0.6	0	0
60°	30.76	29.15	24.88	18.66	11.2	3.79	0.02	0	0
65°	30.03	28.34	23.82	17.31	9.48	1.97	0	0	0
70°	28.68	26.99	22.59	15.74	7.7	0.76	0	0	0
75°	27.49	25.77	21.22	14.04	5.83	0.12	0	0	0
80°	25.87	24.3	19.46	12.28	3.89	0	0	0	0
85°	24.16	22.56	17.71	10.46	2.31	0	0	0	0
90°	22.26	20.65	15.83	8.55	1.08	0	0	0	0
95°	20.32	18.65	13.7	6.53	0.33	0	0	0	0
100°	18	16.48	11.67	4.49	0.01	0	0	0	0
105°	15.84	14.09	9.41	2.59	0	0	0	0	0
110°	13.26	11.64	7.24	1.11	0	0	0	0	0
115°	10.67	9.26	4.85	0.24	0	0	0	0	0
120°	8.11	6.59	2.43	0	0	0	0	0	0
125°	5.38	4.07	0.67	0	0	0	0	0	0
130°	2.67	1.34	0	0	0	0	0	0	0
135°	0.17	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0

**Roadway Coefficients of Utilization**



Mounting Heights	1	2	3	4	5	6	7	8	9	10
House Side CU	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Street Side CU	0.35	0.51	0.57	0.6	0.62	0.64	0.64	0.65	0.66	0.66

**IES TM-15-11 BUG Ratings**



**Iso-Illuminance Plot**

