

IES ROAD REPORT



Light measurement results

Print date 12/22/2025

PHOTOMETRIC FILENAME : DE-LED-TR-X98

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] Viso LabSpion - serial: n/a sensor serial: n/a
[TESTLAB] UL Verification Services Inc.
[MANUFAC] B-K Lighting Inc
[ISSUEDATE] 12/22/2025
[LUMINAIRE] DE-LED-TR-X98
[LUMCAT] N/A
[SERIALNUMBER] n/a - n/a

Measurement Conditions

Tested c-planes, qty	3
Tested gamma angles, qty	181

Tested Light Source

Luminaire	DE-LED-TR-X98
Item No.	
Manufacturer	B-K Lighting Inc

Main Light Measurement Results

Luminaire lumens	1179 lm
Downward Total Efficiency	100%
Total Luminaire Efficiency	100%
Luminaire Efficacy Rating (LER)	91.62 lm/W
Total Luminaire Watts	12.87 W
Upward Waste Light Ratio	0.0004%
Maximum Candela	1483 cd
Maximum Candela Angle	180H 0V
Maximum Candela (<90 Degrees Vertical)	92.15 cd
Maximum Candela Angle (<90 Degrees Vertical)	180H 90V
Maximum Candela At 90 Degrees Vertical	92.19 cd
Maximum Candela from 80 to <90 Degrees Vertical	1.843 cd
Correlated Color Temperature, CCT	2700 K
Color Rendering Index, CRI	80.0

Distribution

IES Classification (type I,II,III,IV,V)	Type V
Longitudinal Classification (Short, Medium, Long)	Very Short
Cutoff Classification (deprecated)	Full Cutoff
BUG rating (IESNA TM-15-07)	B1 U0 G0

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IESNA TM-15-07 LUMINIARE CLASSIFICATION SYSTEM FOR OUTDOOR LUMINAIRES

Forward Light

Low (0-30°)	446	lm	37.9%
Medium (30-60°)	140	lm	11.9%
High (60-80°)	2.45	lm	0.208%
Very High (80-90°)	0.745	lm	0.0632%

Back Light

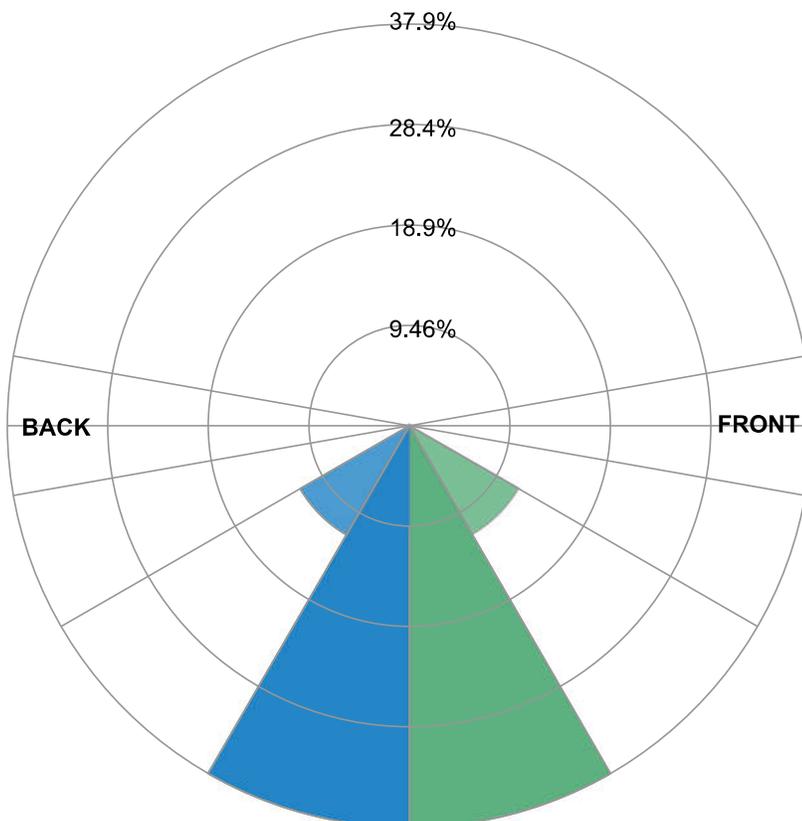
Low (0-30°)	446	lm	37.9%
Medium (30-60°)	140	lm	11.9%
High (60-80°)	2.45	lm	0.208%
Very High (80-90°)	0.745	lm	0.0632%

Uplight

Low (90-100°)	0.00505	lm	0.000429%
High (100-180°)	0	lm	0%

Total			
Sum	1179	lm	100%

BUG RATING B1 U0 G0



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Gamma	C0	C10	C20	C30	C40	C50	C60	C70	C80
180	0	0	0	0	0	0	0	0	0
177,5	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0
172,5	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0
167,5	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0
162,5	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0
157,5	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0
152,5	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0
147,5	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0
142,5	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0
137,5	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0
132,5	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0
127,5	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0
122,5	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0
117,5	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0
112,5	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0
107,5	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0
102,5	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0
97,5	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0
92,5	0	0	0	0	0	0	0	0	0
90	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15
87,5	0	0	0	0	0	0	0	0	0
85	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659
82,5	0	0	0	0	0	0	0	0	0
80	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
77,5	0	0	0	0	0	0	0	0	0
75	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
72,5	0	0	0	0	0	0	0	0	0
70	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212
67,5	0	0	0	0	0	0	0	0	0
65	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857
62,5	0	0	0	0	0	0	0	0	0
60	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778
57,5	0	0	0	0	0	0	0	0	0
55	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819
52,5	0	0	0	0	0	0	0	0	0
50	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22
47,5	0	0	0	0	0	0	0	0	0
45	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68
42,5	0	0	0	0	0	0	0	0	0
40	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4
37,5	0	0	0	0	0	0	0	0	0
35	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7
32,5	0	0	0	0	0	0	0	0	0
30	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8
27,5	0	0	0	0	0	0	0	0	0
25	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
22,5	0	0	0	0	0	0	0	0	0
20	1113	1113	1113	1113	1113	1113	1113	1113	1113
17,5	0	0	0	0	0	0	0	0	0
15	1275	1275	1275	1275	1275	1275	1275	1275	1275
12,5	0	0	0	0	0	0	0	0	0
10	1385	1385	1385	1385	1385	1385	1385	1385	1385
7,5	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
5	1456	1456	1456	1456	1456	1456	1456	1456	1456
2,5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
0	1483	1483	1483	1483	1483	1483	1483	1483	1483

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Gamma	C90	C100	C110	C120	C130	C140	C150	C160	C170
180	0	0	0	0	0	0	0	0	0
177,5	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0
172,5	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0
167,5	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0
162,5	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0
157,5	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0
152,5	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0
147,5	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0
142,5	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0
137,5	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0
132,5	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0
127,5	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0
122,5	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0
117,5	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0
112,5	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0
107,5	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0
102,5	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0
97,5	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0
92,5	0	0	0	0	0	0	0	0	0
90	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15
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85	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659
82,5	0	0	0	0	0	0	0	0	0
80	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
77,5	0	0	0	0	0	0	0	0	0
75	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
72,5	0	0	0	0	0	0	0	0	0
70	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212
67,5	0	0	0	0	0	0	0	0	0
65	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857
62,5	0	0	0	0	0	0	0	0	0
60	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778
57,5	0	0	0	0	0	0	0	0	0
55	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819
52,5	0	0	0	0	0	0	0	0	0
50	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22
47,5	0	0	0	0	0	0	0	0	0
45	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68
42,5	0	0	0	0	0	0	0	0	0
40	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4
37,5	0	0	0	0	0	0	0	0	0
35	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7
32,5	0	0	0	0	0	0	0	0	0
30	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8
27,5	0	0	0	0	0	0	0	0	0
25	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
22,5	0	0	0	0	0	0	0	0	0
20	1113	1113	1113	1113	1113	1113	1113	1113	1113
17,5	0	0	0	0	0	0	0	0	0
15	1275	1275	1275	1275	1275	1275	1275	1275	1275
12,5	0	0	0	0	0	0	0	0	0
10	1385	1385	1385	1385	1385	1385	1385	1385	1385
7,5	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
5	1456	1456	1456	1456	1456	1456	1456	1456	1456
2,5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
0	1483	1483	1483	1483	1483	1483	1483	1483	1483

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Gamma	C180	C190	C200	C210	C220	C230	C240	C250	C260
180	0	0	0	0	0	0	0	0	0
177,5	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0
172,5	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0
167,5	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0
162,5	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0
157,5	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0
152,5	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0
147,5	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0
142,5	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0
137,5	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0
132,5	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0
127,5	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0
122,5	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0
117,5	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0
112,5	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0
107,5	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0
102,5	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0
97,5	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0
92,5	0	0	0	0	0	0	0	0	0
90	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15
87,5	0	0	0	0	0	0	0	0	0
85	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659
82,5	0	0	0	0	0	0	0	0	0
80	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
77,5	0	0	0	0	0	0	0	0	0
75	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
72,5	0	0	0	0	0	0	0	0	0
70	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212
67,5	0	0	0	0	0	0	0	0	0
65	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857
62,5	0	0	0	0	0	0	0	0	0
60	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778
57,5	0	0	0	0	0	0	0	0	0
55	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819
52,5	0	0	0	0	0	0	0	0	0
50	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22
47,5	0	0	0	0	0	0	0	0	0
45	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68
42,5	0	0	0	0	0	0	0	0	0
40	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4
37,5	0	0	0	0	0	0	0	0	0
35	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7
32,5	0	0	0	0	0	0	0	0	0
30	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8
27,5	0	0	0	0	0	0	0	0	0
25	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
22,5	0	0	0	0	0	0	0	0	0
20	1113	1113	1113	1113	1113	1113	1113	1113	1113
17,5	0	0	0	0	0	0	0	0	0
15	1275	1275	1275	1275	1275	1275	1275	1275	1275
12,5	0	0	0	0	0	0	0	0	0
10	1385	1385	1385	1385	1385	1385	1385	1385	1385
7,5	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
5	1456	1456	1456	1456	1456	1456	1456	1456	1456
2,5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
0	1483	1483	1483	1483	1483	1483	1483	1483	1483

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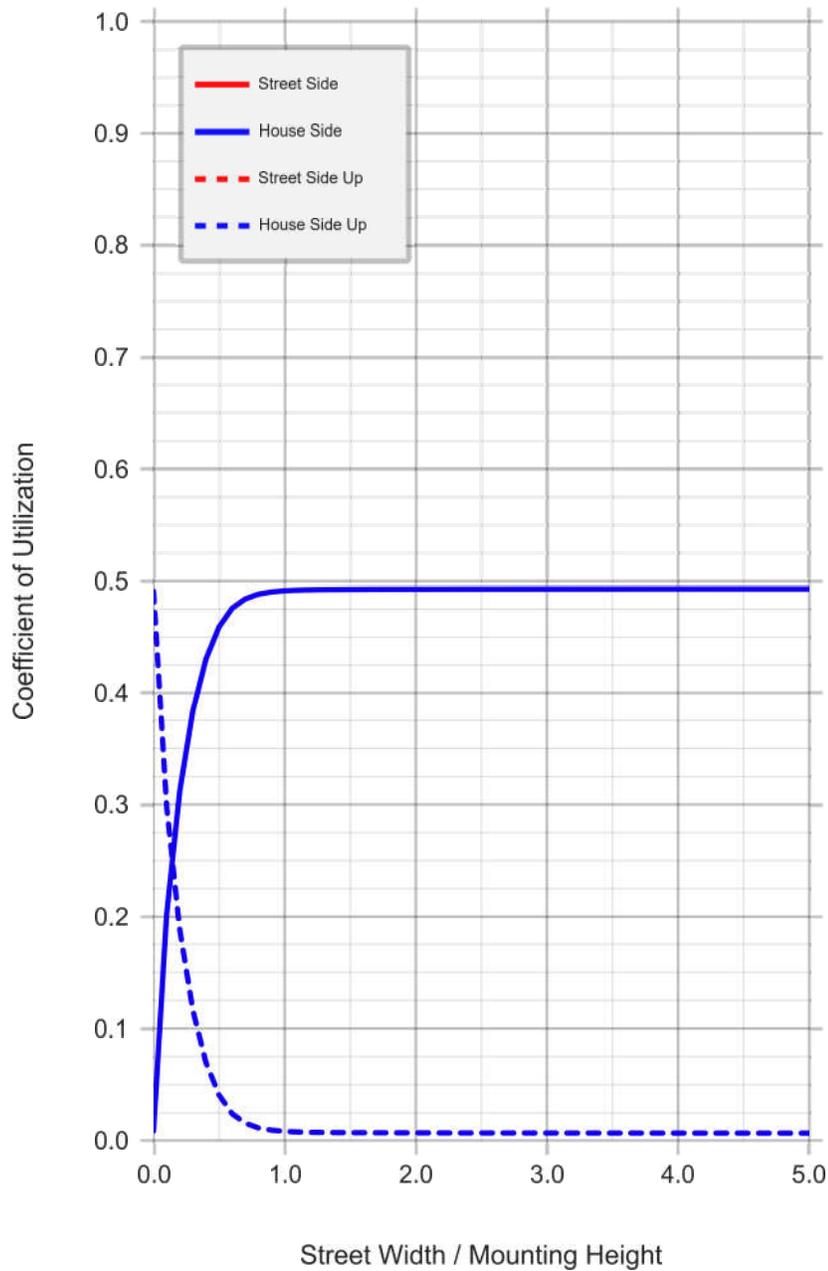
Gamma	C270	C280	C290	C300	C310	C320	C330	C340	C350
180	0	0	0	0	0	0	0	0	0
177,5	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0
172,5	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0
167,5	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0
162,5	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0
157,5	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0
152,5	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0
147,5	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0
142,5	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0
137,5	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0
132,5	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0
127,5	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0
122,5	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0
117,5	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0
112,5	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0
107,5	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0
102,5	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0
97,5	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0
92,5	0	0	0	0	0	0	0	0	0
90	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15	92.15
87,5	0	0	0	0	0	0	0	0	0
85	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659	1.659
82,5	0	0	0	0	0	0	0	0	0
80	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
77,5	0	0	0	0	0	0	0	0	0
75	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
72,5	0	0	0	0	0	0	0	0	0
70	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212	2.212
67,5	0	0	0	0	0	0	0	0	0
65	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857	2.857
62,5	0	0	0	0	0	0	0	0	0
60	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778	3.778
57,5	0	0	0	0	0	0	0	0	0
55	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819	6.819
52,5	0	0	0	0	0	0	0	0	0
50	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22	23.22
47,5	0	0	0	0	0	0	0	0	0
45	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68
42,5	0	0	0	0	0	0	0	0	0
40	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4	154.4
37,5	0	0	0	0	0	0	0	0	0
35	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7	339.7
32,5	0	0	0	0	0	0	0	0	0
30	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8	617.8
27,5	0	0	0	0	0	0	0	0	0
25	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
22,5	0	0	0	0	0	0	0	0	0
20	1113	1113	1113	1113	1113	1113	1113	1113	1113
17,5	0	0	0	0	0	0	0	0	0
15	1275	1275	1275	1275	1275	1275	1275	1275	1275
12,5	0	0	0	0	0	0	0	0	0
10	1385	1385	1385	1385	1385	1385	1385	1385	1385
7,5	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843	1.843
5	1456	1456	1456	1456	1456	1456	1456	1456	1456
2,5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5	891.5
0	1483	1483	1483	1483	1483	1483	1483	1483	1483

IES ROAD REPORT



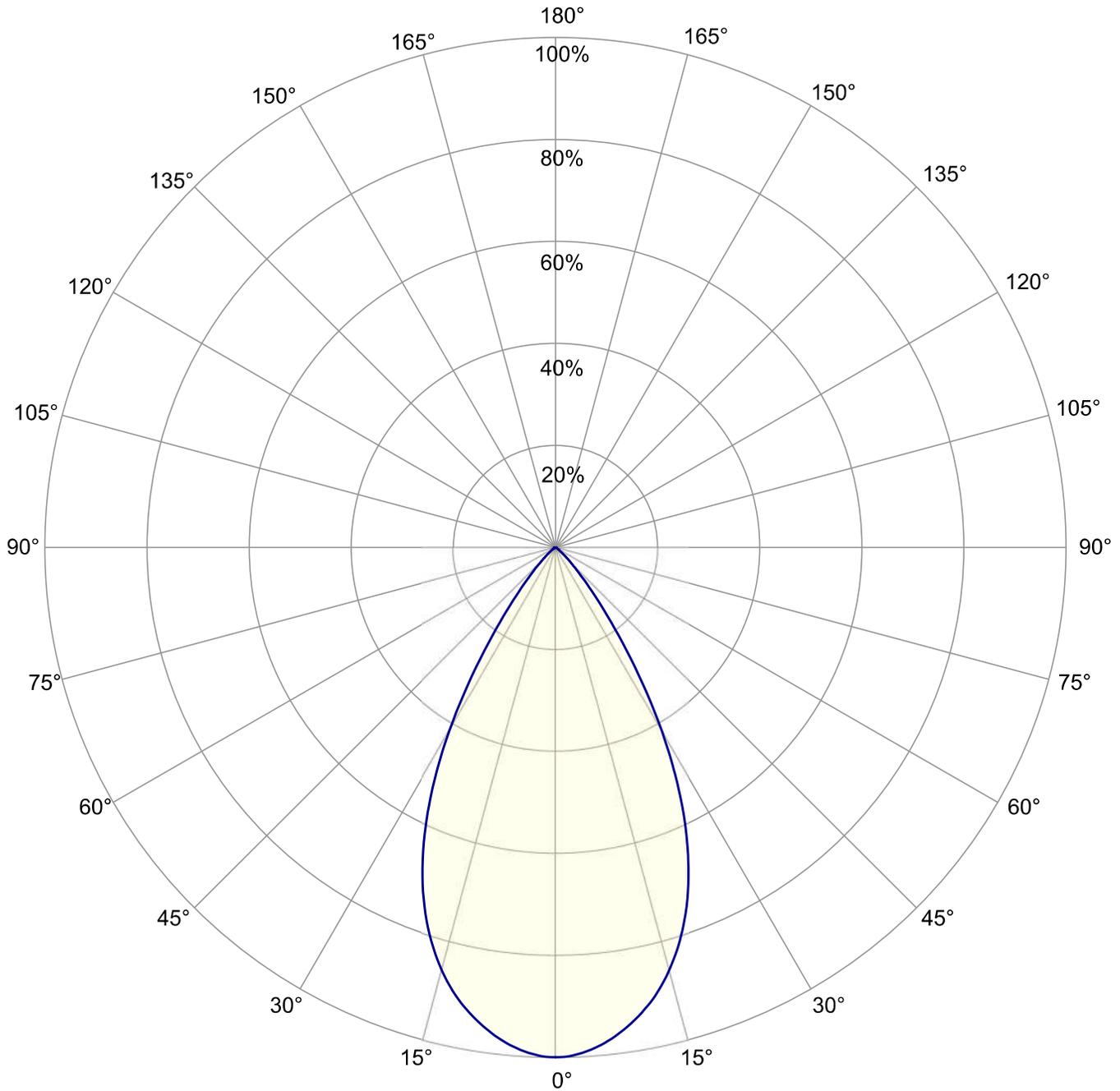
Light measurement results

Print date 12/22/2025



	Flux	Percent of lamp
Downward Street Side	589.50 lm	50.00%
Downward House Side	589.50 lm	50.00%
Downward Total	1178.99 lm	100.00%
Upward Total	0.01 lm	0.00%
Total Flux	1179.00 lm	100%

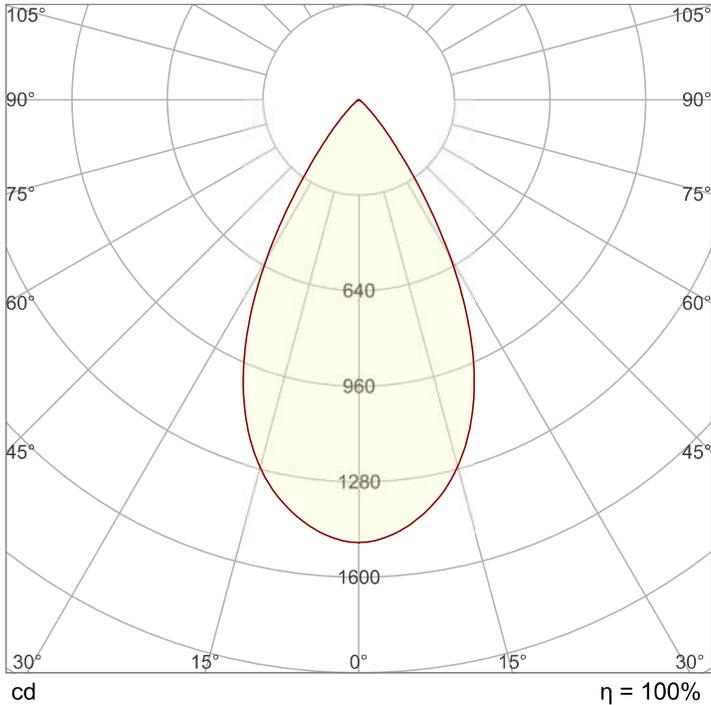
POLAR GRAPH - PEAK VALUES



Maximum intensity = 1483 cd. Located at horizontal, vertical angles 180H 0V

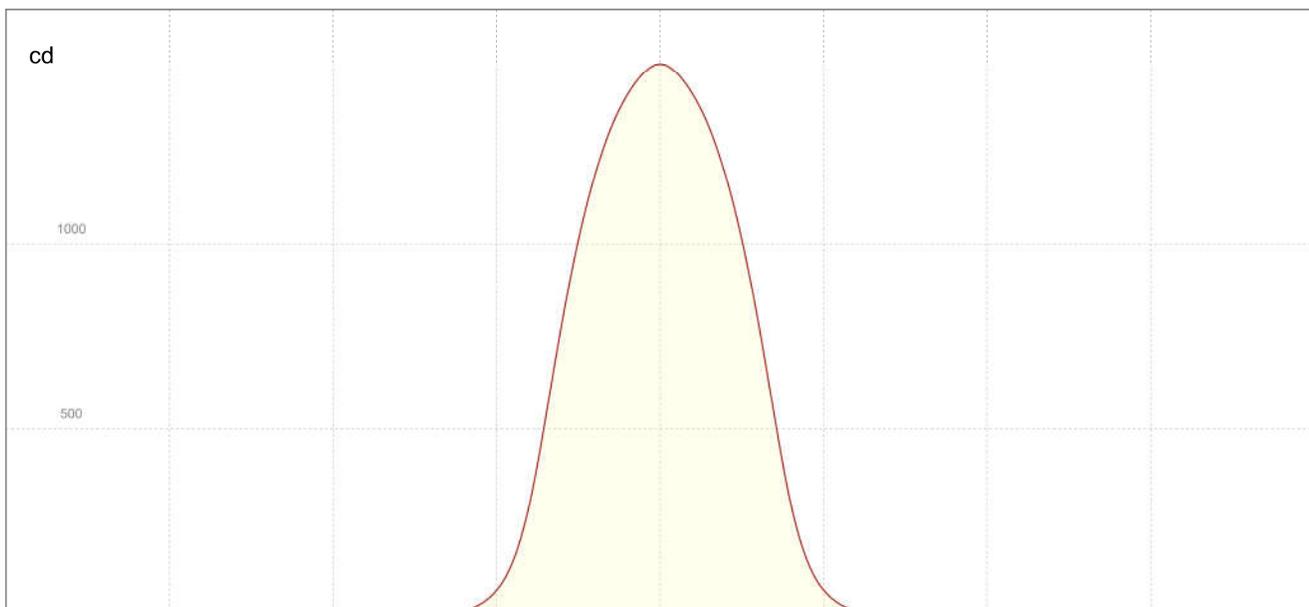
-  Peak plane: C0 - C180 (through max.intensity cd)
-  Horizontal cone through vertical angle 0V

POLAR GRAPH - MAIN PLANES



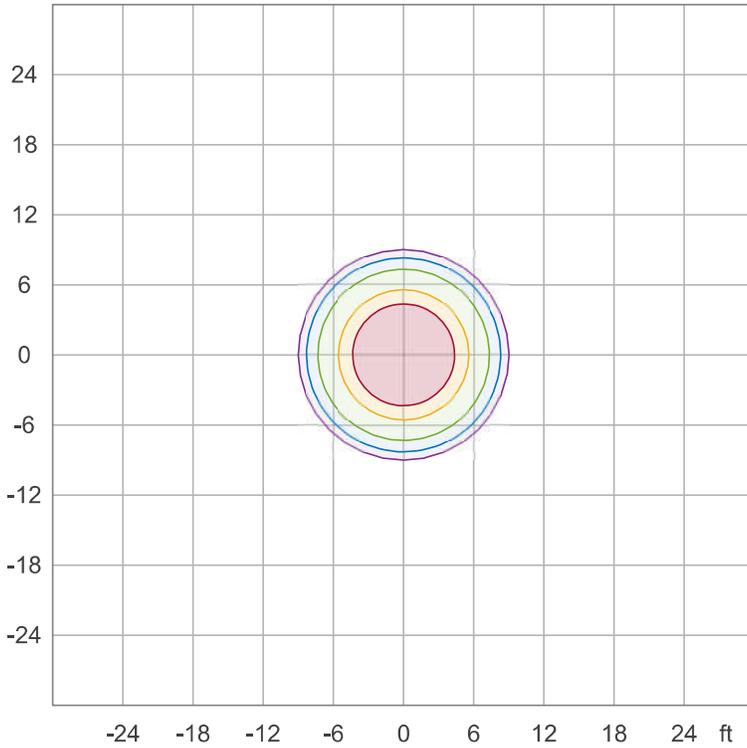
- C0 - C180
- C90 - C270

LINEAR INTENSITY DISTRIBUTION DIAGRAM



- C0 - C180
- C90 - C270
- Peak plane: C0 - C180

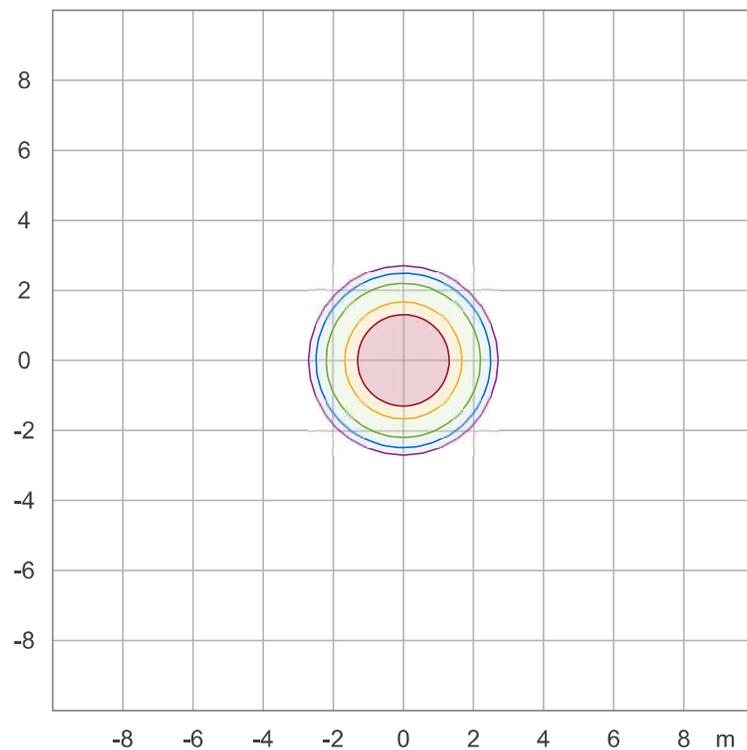
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



50.0 %	7.41 fc
30.0 %	4.45 fc
10.0 %	1.48 fc
5.0 %	0.741 fc
3.0 %	0.445 fc

Peak illuminance: 14.8 fc
Mounting height: 10 ft
Number of c-planes: 2

ISOLUX LINES OF HORIZONTAL ILLUMINANCE



50.0 %	82.4 lx
30.0 %	49.4 lx
10.0 %	16.5 lx
5.0 %	8.24 lx
3.0 %	4.94 lx

Peak illuminance: 165 lx
Mounting height: 3 m
Number of c-planes: 2