

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	289.8 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of I _{max}	162.6V x 166.3H
	At 50% of I _{max}	145.3V x 142.8H
	At 90% of I _{max}	132.6V x 49.5H

Beam Flux	Total	977.7 lumens per klm.
	To 10% of I _{max}	958.0 lumens per klm.
	To 50% of I _{max}	854.7 lumens per klm.
	To 90% of I _{max}	72.4 lumens per klm.

Upward LOR	0.7 %
Downward LOR	97.1 %

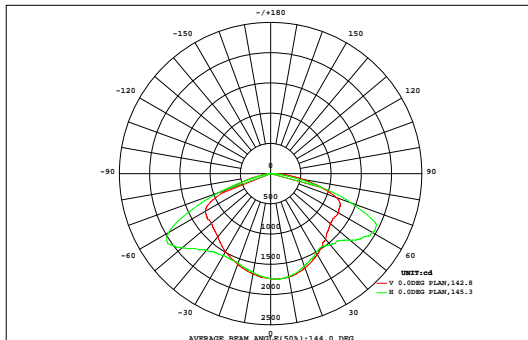
Luminaire Efficiency(Light Output Ratio)	97.8 %
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C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.0DEG
Operators:YangWenPeng
Test Date:2023-11-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:8.835m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: TP421-W50-4000K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:141.9lm/W	
MODEL	TP421-W50-4000K	Imax(cd)	2056
NOMINAL POWER(W)	50	AVAILABILITY(%)	95.8
RATED VOLTAGE(V)	220	Avai. FLUX(lm)	6797
NOMINAL FLUX(lm)	7095.9	LOR(%)	97.8
LAMPS INSIDE	1	TOTAL FLUX(lm)	7096
TEST VOLTAGE(V)	219.9	θ @50%(H,V)	143,145DEG

VERTICAL(DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.05	0.18	0.42	0.88	1.49	2.17	2.96	3.83	4.61	4.74	4.19	3.50	2.67	1.77	1.01	0.75	0.61	0.24	36.1	9.13
90	0.06	0.36	1.33	3.17	5.67	8.46	12.6	18.9	24.5	25.1	20.3	14.4	9.01	5.27	2.85	1.90	1.12	0.31	155	143
80	0.07	0.74	3.10	7.66	13.8	22.4	33.1	44.0	52.0	53.4	48.0	38.9	25.2	12.9	5.61	3.48	1.80	0.40	367	364
70	0.10	1.25	5.41	12.6	23.7	35.9	45.4	51.2	54.9	55.8	53.8	49.8	38.5	22.3	10.0	5.69	2.59	0.50	469	468
60	0.14	1.86	7.77	17.8	29.0	37.0	41.7	45.0	47.6	48.8	48.9	46.9	40.8	29.0	15.2	8.48	3.49	0.60	470	469
50	0.17	2.47	10.1	21.3	28.5	33.5	38.5	42.4	44.8	46.0	45.9	43.3	39.3	32.2	20.3	11.2	4.43	0.70	465	464
40	0.20	2.99	12.0	22.4	27.6	32.7	38.9	44.4	47.3	47.9	46.5	42.4	37.8	31.7	23.0	13.3	5.34	0.79	477	477
30	0.22	3.37	13.2	22.4	27.8	33.9	40.9	46.9	50.6	51.0	47.5	42.5	37.0	30.5	23.4	14.8	6.13	0.86	493	492
20	0.23	3.56	13.7	22.3	28.2	35.2	42.3	48.2	52.2	52.4	48.8	43.7	36.8	29.5	22.8	15.8	6.74	0.92	503	503
10	0.23	3.58	13.8	22.7	28.8	35.9	42.7	48.3	51.7	51.9	49.3	43.8	36.6	29.1	22.7	16.1	6.87	0.92	505	505
0	0.23	3.43	13.5	23.6	29.8	36.0	42.5	47.3	49.4	49.1	47.0	42.2	35.9	29.4	23.2	16.0	6.51	0.89	496	495
-10	0.22	3.07	12.5	24.2	31.1	36.4	42.6	46.8	47.9	47.2	45.0	41.1	35.5	29.9	23.6	15.3	5.93	0.82	489	489
-20	0.19	2.56	10.7	23.4	32.8	39.4	44.6	48.0	48.8	48.0	45.8	42.3	37.3	30.8	23.4	13.9	5.15	0.74	498	497
-30	0.16	1.98	8.37	19.6	32.3	42.5	50.1	53.0	53.7	52.8	50.4	46.6	40.1	31.3	21.3	11.6	4.24	0.64	521	520
-40	0.12	1.46	5.73	14.0	23.7	35.4	47.3	55.7	59.8	59.4	55.0	48.2	37.7	26.2	16.4	8.72	3.26	0.54	499	498
-50	0.10	1.00	3.58	7.90	12.7	18.4	25.6	35.0	42.2	43.2	38.1	30.1	22.1	15.7	10.4	5.84	2.30	0.44	315	313
-60	0.09	0.58	2.05	3.94	5.17	6.02	7.34	10.1	12.5	13.0	11.5	9.28	7.96	7.00	5.39	3.25	1.45	0.34	107	90.1
-70	0.07	0.33	0.89	1.46	1.62	1.51	1.45	1.65	1.74	1.85	1.97	1.94	2.06	2.16	1.91	1.41	0.83	0.26	25.1	0.00
-80	0.07	0.33	0.89	1.46	1.62	1.51	1.45	1.65	1.74	1.85	1.97	1.94	2.06	2.16	1.91	1.41	0.83	0.26	25.1	0.00
-90	0.07	0.33	0.89	1.46	1.62	1.51	1.45	1.65	1.74	1.85	1.97	1.94	2.06	2.16	1.91	1.41	0.83	0.26	25.1	0.00
-90 -80 -70 -60 -50 -40 -30 -20 HORIZONTAL(DEG) 20 30 40 50 60 70 80 90																				
Φ t	2.65	34.8	138	271	384	493	600	691	746	752	708	631	522	397	273	168	68.8	10.9	6890	---
Φ a	0.00	27.4	133	266	378	487	595	685	741	747	702	625	517	391	267	163	64.7	7.53	---	6797

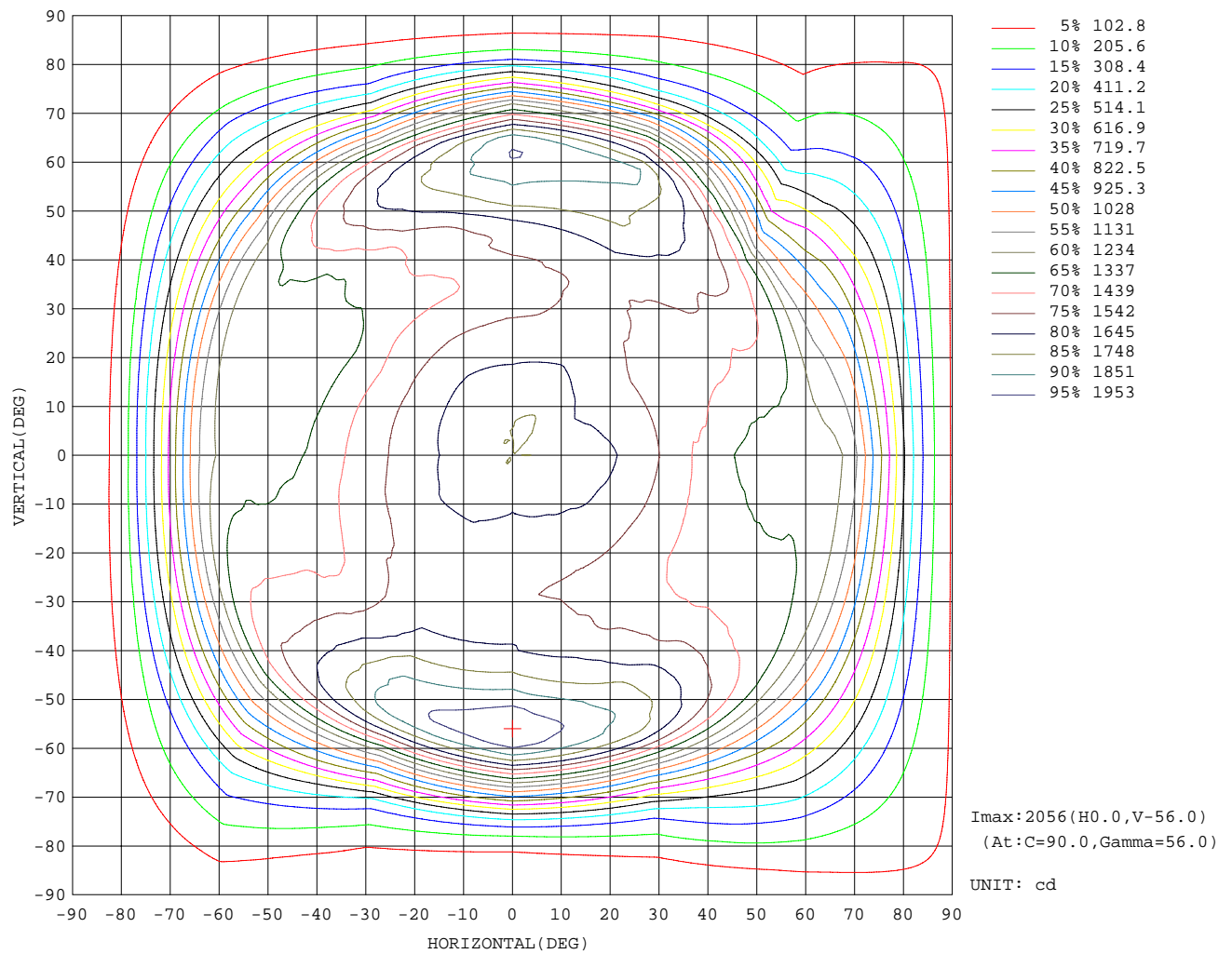
one-half-peak spread: U:14.4,D:11.0 , L:13.2,R:15.8

NEMA Beam Type: Type 7

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.0DEG
 Operators:YangWenPeng
 Test Date:2023-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:8.835m [K=1.0000]
 Remarks:

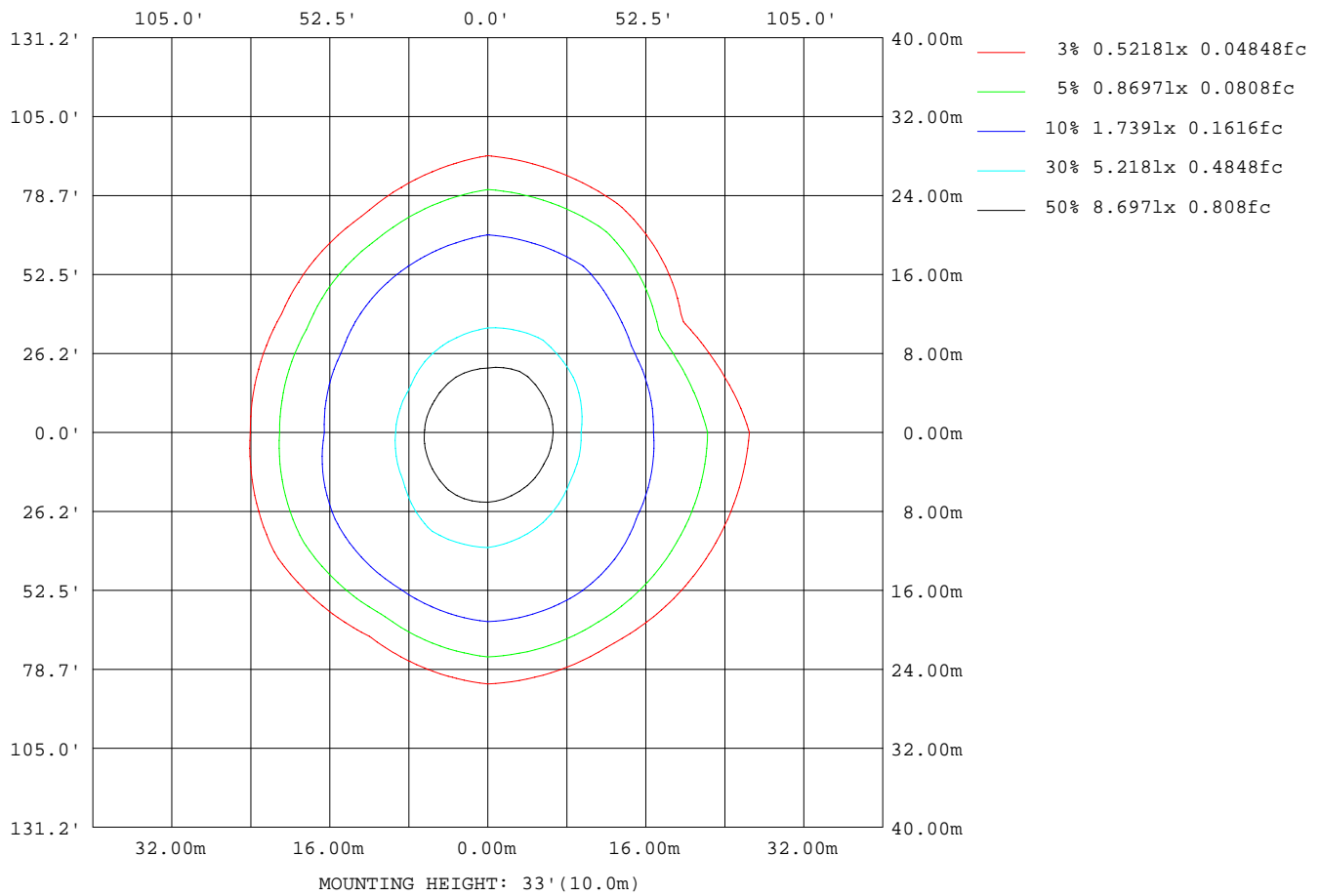
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Test Speed: HIGH
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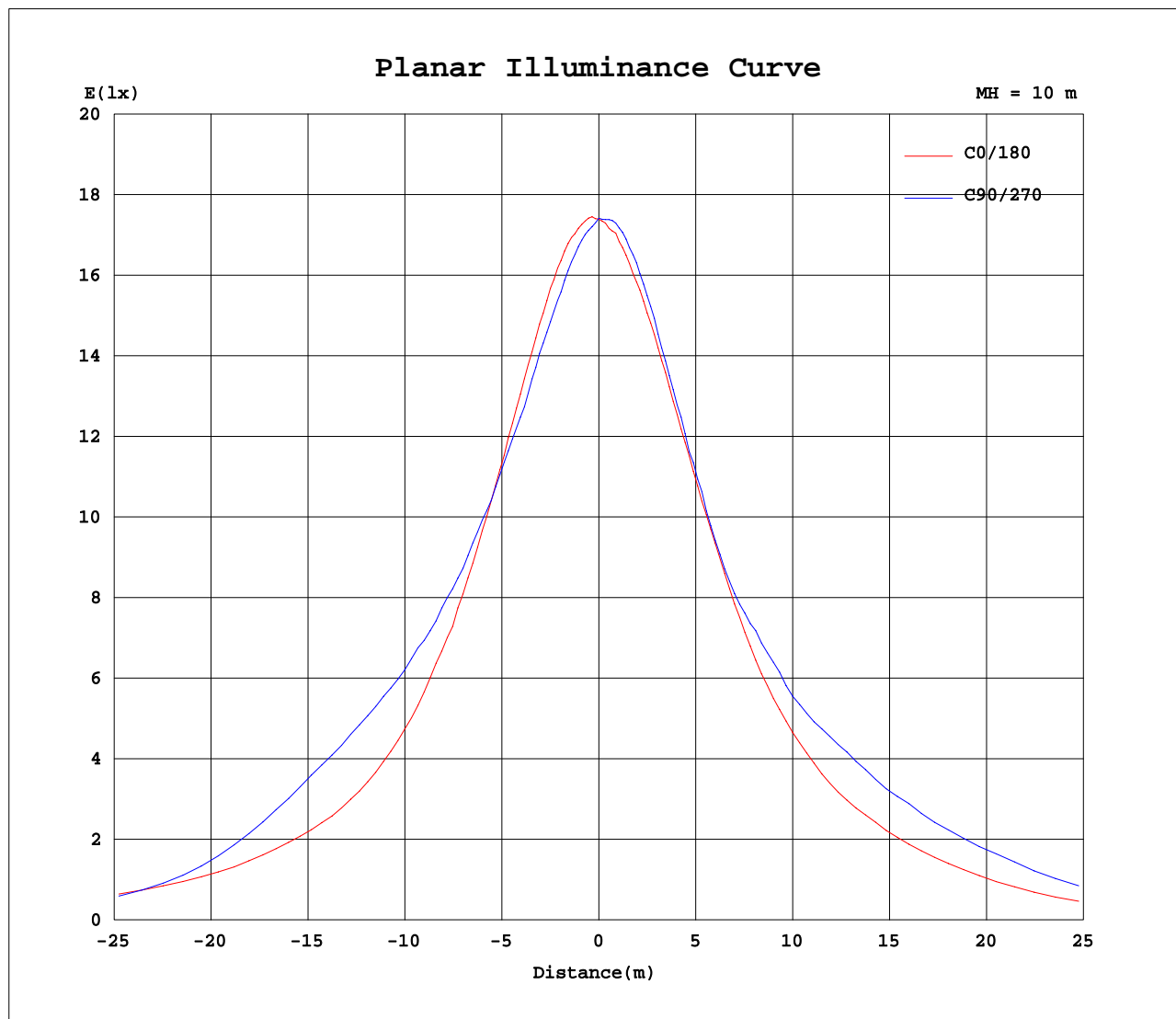
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: YangWenPeng
Test Date: 2023-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 8.835m [K=1.0000]
Remarks:

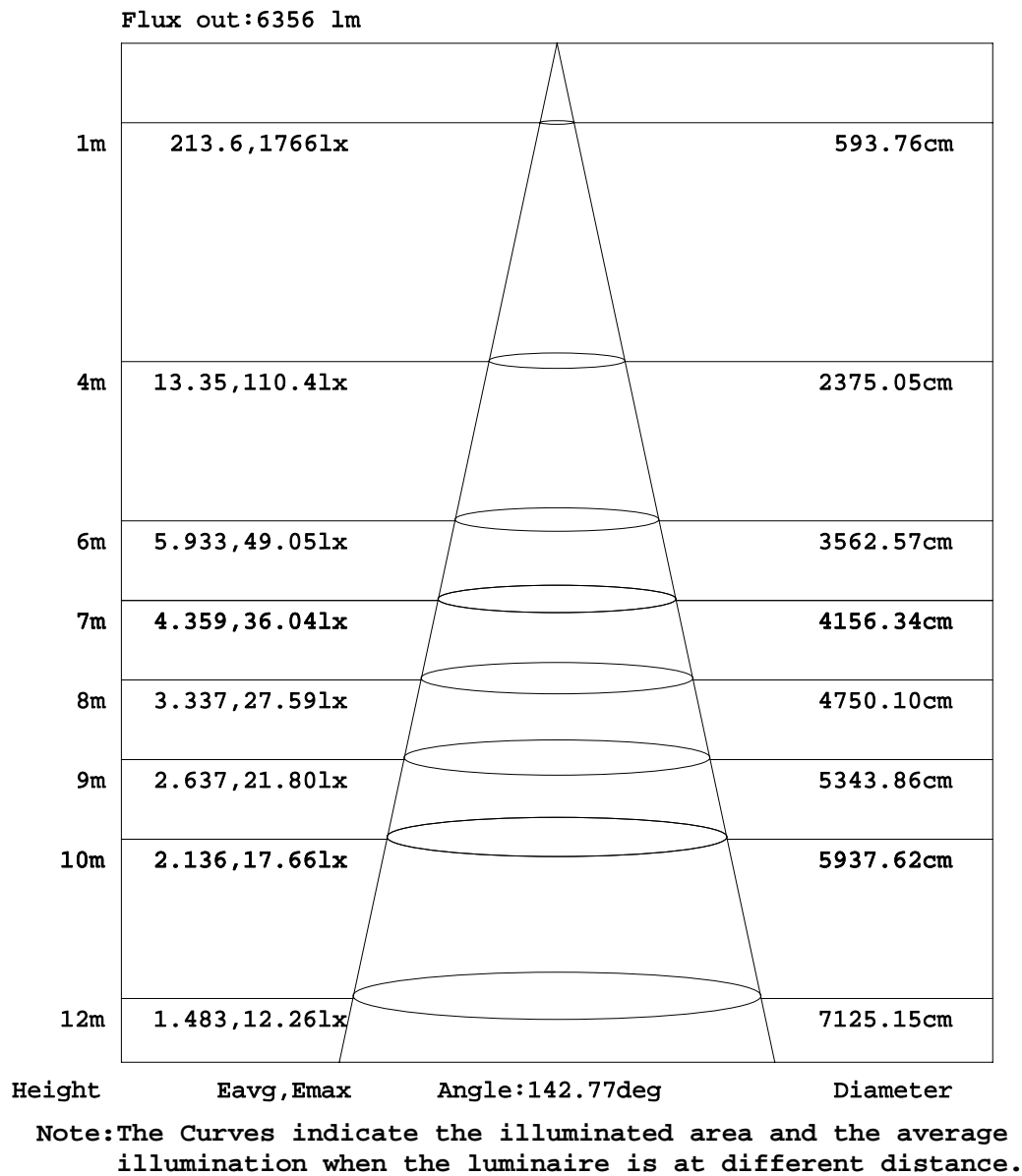
Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: YangWenPeng
Test Date: 2023-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 8.835m [K=1.0000]
Remarks:

AAI Figure



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.0DEG
 Operators: YangWenPeng
 Test Date: 2023-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 8.835m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

H(DEG) V(DEG)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-180	19.3	12.5	6.99	4.03	2.33	1.71	1.27	1.10	1.27	1.49	1.66	1.78	1.84	1.89	1.95	2.01	2.09	2.17	2.20
-170	19.3	13.0	7.61	4.73	2.99	2.26	1.85	1.65	1.67	1.79	1.92	2.06	2.18	2.32	2.45	2.47	2.37	2.31	2.27
-160	19.3	13.7	8.50	5.66	3.86	2.93	2.52	2.29	2.20	2.17	2.17	2.29	2.42	2.44	2.44	2.41	2.37	2.36	2.34
-150	19.3	14.5	9.74	6.89	5.13	3.97	3.36	3.10	2.97	2.83	2.66	2.41	2.36	2.36	2.36	2.35	2.34	2.32	2.29
-140	19.3	15.6	11.4	8.47	6.85	5.47	4.59	4.16	3.99	3.69	3.21	2.82	2.55	2.39	2.31	2.28	2.28	2.28	2.27
-130	19.3	16.7	13.5	10.6	8.97	7.92	6.80	6.06	5.05	4.55	4.10	3.72	3.38	3.09	2.85	2.71	2.61	2.54	2.51
-120	19.3	17.9	16.4	13.9	11.9	10.9	10.3	9.33	7.65	6.51	5.70	5.11	4.78	4.52	4.32	4.16	4.06	3.99	3.97
-110	19.3	19.0	19.3	18.5	17.1	15.9	14.9	13.5	12.1	10.8	9.60	8.40	7.46	7.06	6.90	6.80	6.75	6.75	6.80
-100	19.3	20.1	21.4	23.2	24.7	25.5	25.5	23.0	20.7	18.9	17.4	16.2	15.3	15.1	15.1	15.2	15.4	15.7	16.1
-90	19.3	22.0	24.7	27.4	30.1	32.8	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.5	36.6	36.7	36.8	36.9	37.0
-80	19.3	25.5	37.1	53.6	75.1	104	138	143	142	139	131	121	109	115	122	127	131	133	133
-70	19.3	28.8	47.0	89.0	148	211	279	318	343	366	390	409	426	505	614	710	794	863	916
-60	19.3	30.8	68.3	147	230	339	473	622	729	850	956	1075	1199	1354	1539	1687	1798	1883	1948
-50	19.3	31.4	101	197	339	531	749	971	1157	1350	1536	1689	1811	1904	1920	1916	1913	1906	1909
-40	19.3	30.8	129	250	470	731	997	1252	1471	1564	1618	1666	1693	1711	1722	1691	1668	1656	1651
-30	19.3	35.2	149	323	592	900	1189	1406	1468	1483	1493	1501	1524	1556	1588	1605	1596	1580	1565
-20	19.3	39.6	158	376	683	1014	1286	1388	1402	1413	1414	1434	1494	1540	1571	1594	1606	1592	1576
-10	19.3	41.1	159	407	737	1080	1284	1334	1337	1361	1387	1447	1503	1551	1591	1633	1662	1675	1662
0	19.3	39.6	154	410	746	1089	1244	1284	1279	1316	1359	1427	1494	1547	1594	1644	1680	1724	1739
10	19.3	39.5	156	404	725	1062	1249	1290	1270	1306	1328	1395	1457	1511	1576	1629	1680	1711	1729
20	19.3	36.5	151	373	661	981	1223	1298	1292	1274	1302	1315	1380	1447	1507	1555	1598	1622	1628
30	19.3	30.7	135	318	567	850	1123	1286	1325	1291	1269	1325	1344	1374	1411	1465	1488	1502	1507
40	19.3	25.1	110	240	454	680	923	1150	1299	1371	1401	1391	1396	1417	1454	1480	1493	1507	1529
50	19.3	24.4	84.0	174	328	501	678	864	1078	1291	1440	1533	1607	1633	1648	1654	1661	1684	1715
60	19.3	23.0	52.3	111	200	321	451	569	704	866	1046	1243	1411	1563	1680	1767	1828	1883	1938
70	19.3	21.7	29.9	62.7	103	142	230	302	362	426	493	563	642	781	936	1077	1205	1317	1413
80	19.3	20.9	22.1	27.1	39.3	59.6	83.9	102	118	133	151	170	189	219	253	288	324	357	387
90	19.3	19.7	20.1	20.6	21.0	21.4	21.9	23.8	25.7	27.6	29.5	31.4	33.3	35.2	37.1	39.0	40.9	42.8	44.7
100	19.3	18.4	17.7	17.2	16.8	16.4	16.0	16.3	16.5	16.6	16.7	16.8	17.0	17.4	18.0	18.5	19.2	19.9	20.8
110	19.3	17.2	15.6	14.1	12.7	11.6	10.4	9.46	8.83	8.46	8.16	7.83	7.58	7.39	7.28	7.24	7.30	7.44	7.68
120	19.3	16.1	13.6	11.2	9.14	7.34	5.85	4.86	4.43	4.18	3.96	3.82	3.75	3.67	3.57	3.50	3.47	3.50	3.59
130	19.3	15.2	11.6	8.73	6.42	4.69	3.62	3.02	2.54	2.38	2.29	2.18	2.13	2.08	2.02	1.98	1.97	1.98	2.02
140	19.3	14.3	10.1	6.93	4.65	3.28	2.55	2.00	1.74	1.65	1.62	1.61	1.61	1.66	1.74	1.79	1.84	1.89	1.94
150	19.3	13.6	8.84	5.64	3.58	2.54	1.91	1.58	1.43	1.42	1.46	1.57	1.71	1.84	1.98	2.12	2.21	2.29	2.37
160	19.3	13.1	7.94	4.78	2.92	2.09	1.59	1.33	1.31	1.41	1.56	1.71	1.83	1.92	2.02	2.10	2.19	2.23	2.28
170	19.3	12.7	7.33	4.28	2.54	1.84	1.39	1.19	1.28	1.47	1.64	1.78	1.85	1.90	1.94	2.00	2.07	2.14	2.18
180	19.3	12.5	6.99	4.03	2.33	1.71	1.27	1.10	1.27	1.49	1.66	1.78	1.84	1.89	1.95	2.01	2.09	2.17	2.19

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γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 8.835m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

H(DEG) V(DEG)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	
-180	2.35	2.42	2.44	2.43	2.36	2.29	2.30	2.22	2.23	2.34	2.75	3.32	4.31	6.40	10.0	15.4	21.0	91.8	
-170	2.34	2.40	2.43	2.40	2.34	2.26	2.24	2.21	2.21	2.39	2.82	3.40	4.45	6.58	10.2	15.6	21.1	91.8	
-160	2.36	2.36	2.34	2.32	2.26	2.20	2.20	2.17	2.27	2.57	3.01	3.65	4.84	7.14	10.9	16.2	21.1	91.8	
-150	2.29	2.28	2.25	2.21	2.18	2.20	2.16	2.28	2.53	2.90	3.36	4.23	5.65	8.17	12.1	17.1	21.2	91.8	
-140	2.25	2.23	2.22	2.20	2.22	2.35	2.53	2.79	3.07	3.40	4.18	5.22	7.04	9.82	13.7	18.4	21.5	91.8	
-130	2.53	2.59	2.69	2.86	3.08	3.26	3.47	3.71	4.15	4.72	5.62	7.13	9.35	12.3	15.9	20.0	22.1	91.8	
-120	4.01	4.10	4.24	4.44	4.72	4.99	5.32	5.71	6.29	7.23	8.62	10.4	12.8	15.5	18.7	21.6	33.0	91.8	
-110	6.88	7.02	7.24	7.54	7.94	8.45	9.13	10.0	11.0	12.2	13.7	15.5	17.5	19.8	21.9	22.6	49.1	91.8	
-100	15.8	15.7	15.6	15.6	15.8	16.2	17.1	18.1	19.2	20.5	21.9	23.1	23.8	23.9	28.9	44.4	65.9	91.8	
-90	36.5	35.9	35.4	34.9	34.3	33.8	37.4	40.9	44.5	48.1	51.6	55.2	61.3	67.4	73.5	79.6	85.7	91.8	
-80	140	146	149	150	149	148	166	180	189	192	189	182	168	153	139	124	109	91.8	
-70	890	847	789	719	639	574	543	511	483	464	444	404	344	285	227	176	132	91.8	
-60	1905	1848	1778	1687	1567	1401	1249	1104	976	861	767	662	556	449	339	237	157	91.8	
-50	1877	1855	1837	1814	1786	1723	1637	1538	1410	1251	1099	940	780	620	458	305	182	91.8	
-40	1630	1620	1615	1611	1589	1579	1564	1521	1448	1391	1320	1176	992	787	574	373	205	91.8	
-30	1553	1543	1529	1518	1491	1469	1445	1426	1409	1386	1361	1292	1153	935	683	433	227	91.8	
-20	1576	1569	1560	1533	1503	1458	1419	1388	1377	1357	1346	1314	1235	1045	769	481	244	91.8	
-10	1667	1664	1645	1610	1564	1511	1454	1402	1355	1324	1313	1312	1264	1120	825	513	256	91.8	
0	1746	1738	1706	1661	1608	1543	1473	1418	1341	1292	1280	1295	1268	1159	855	528	261	91.8	
10	1736	1679	1621	1592	1563	1519	1478	1441	1397	1354	1330	1280	1201	1071	794	500	253	91.8	
20	1635	1631	1601	1567	1527	1505	1493	1478	1436	1419	1354	1203	1105	950	711	457	239	91.8	
30	1530	1552	1579	1565	1538	1534	1546	1515	1511	1427	1272	1077	958	798	607	403	220	91.8	
40	1543	1559	1579	1607	1630	1633	1625	1594	1474	1233	1000	872	772	630	487	339	197	91.8	
50	1726	1742	1760	1759	1751	1714	1648	1490	1219	908	676	623	536	468	376	273	173	91.8	
60	1925	1914	1901	1880	1802	1593	1356	1088	822	603	402	362	350	319	273	210	147	91.8	
70	1356	1282	1193	1085	955	780	612	482	367	283	220	193	208	200	181	153	123	91.8	
80	363	336	306	274	243	217	195	172	149	126	104	87.1	99.8	106	106	104	101	91.8	
90	43.9	43.0	42.2	41.4	40.5	39.7	36.9	34.0	31.2	28.3	25.5	22.7	34.2	45.7	57.2	68.7	80.3	91.8	
100	20.5	20.4	20.3	20.4	20.6	20.9	20.1	19.3	18.5	17.6	16.7	15.8	17.5	19.1	25.8	42.1	63.5	91.8	
110	7.54	7.53	7.63	7.88	8.28	8.70	8.88	9.09	9.27	9.43	9.38	10.0	12.6	15.7	18.4	20.3	48.0	91.8	
120	3.52	3.53	3.60	3.71	3.88	3.99	4.11	4.30	4.47	4.67	4.98	6.63	9.16	12.2	15.9	19.5	32.1	91.8	
130	1.97	1.95	1.96	2.02	2.11	2.20	2.35	2.53	2.71	2.98	3.48	4.62	6.68	9.82	13.6	18.2	21.2	91.8	
140	1.85	1.74	1.64	1.54	1.53	1.54	1.59	1.69	1.83	2.13	2.80	3.81	5.31	8.00	12.0	17.0	20.7	91.8	
150	2.31	2.24	2.11	1.97	1.80	1.64	1.49	1.42	1.59	1.96	2.50	3.30	4.64	6.92	10.9	16.1	20.6	91.8	
160	2.27	2.27	2.23	2.16	2.08	1.96	1.83	1.70	1.74	1.99	2.45	3.10	4.26	6.39	10.2	15.5	20.7	91.8	
170	2.19	2.16	2.12	2.14	2.17	2.15	2.12	2.01	1.98	2.12	2.54	3.14	4.17	6.24	9.88	15.3	20.9	91.8	
180	2.35	2.42	2.44	2.43	2.36	2.29	2.30	2.22	2.23	2.34	2.75	3.32	4.31	6.40	10.0	15.4	21.0	91.8	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.0DEG
Operators: YangWenPeng
Test Date: 2023-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 8.835m [K=1.0000]
Remarks: