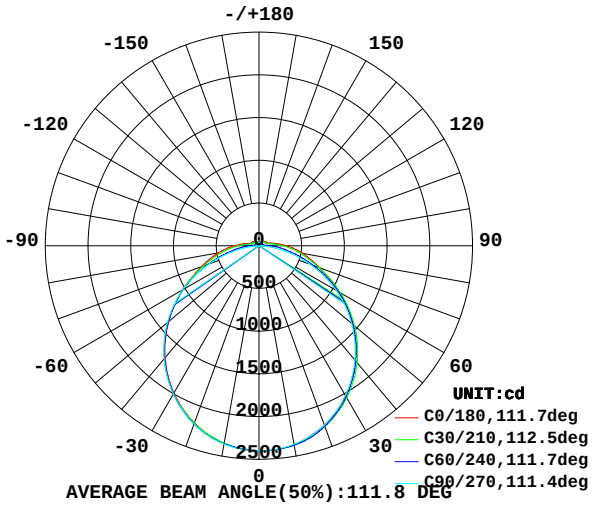
LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.3V I:0.2982A P:70.15W PF:0.9791 Lamp Flux:7513.96x1 lm		
NAME: --	SUR.:--	
MFR.: Zhongshen Halcon Lighting & Electrical Co., Ltd.		

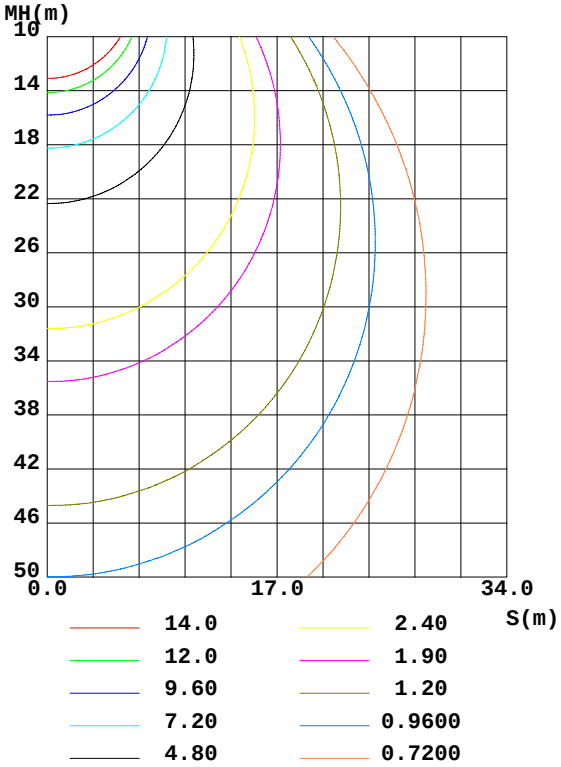
DATA OF LAMP		PHOTOMETRIC DATA Eff: 107.11 lm/W			
MODEL	HG-L201-70W	Imax(cd)	2403	S/MH(C0/180)	1.24
NOMINAL POWER(W)	70	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	240	TOTAL FLUX(lm)	7514.0	η UP,DN(C0-180)	2.9,47.4
NOMINAL FLUX(lm)	7513.96	CIE CLASS	DIRECT	η UP,DN(C180-360)	2.8,46.9
LAMPS INSIDE	1	η up(%)	5.7	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	240	η down(%)	94.3	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



AVERAGE BEAM ANGLE(50%):111.8 DEG

C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Taylor
Test Date:2016-09-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.283
Humidity:55.0%
Test Distance:30.000m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

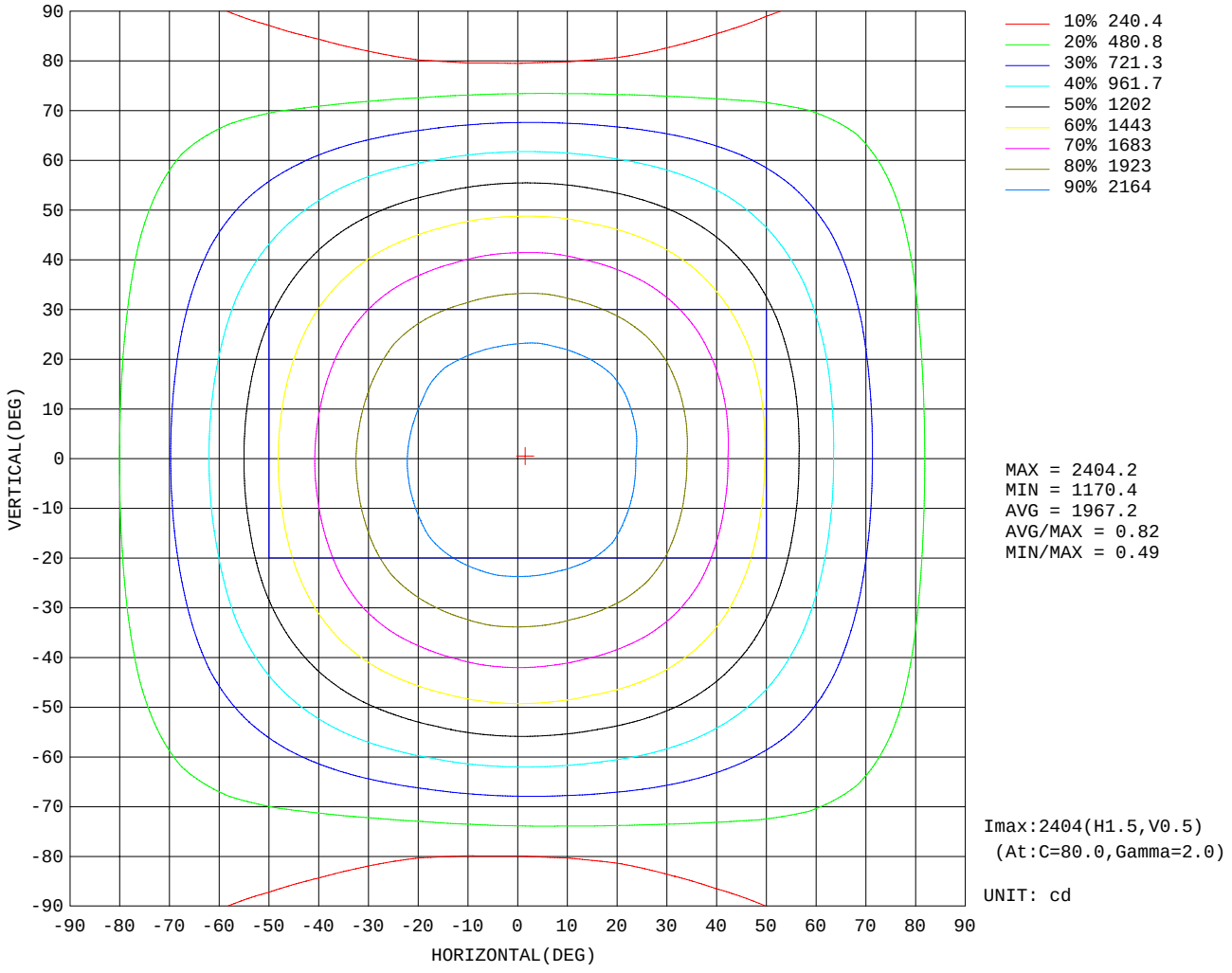
ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	2363	2371	2359	2353	2348	2352	2357	2370	0- 10	227.2	227.2	3.02,3.02
20	2234	2259	2234	2227	2207	2221	2220	2252	10- 20	650.6	877.8	11.7,11.7
30	2029	2057	2024	2024	1993	2013	2005	2049	20- 30	984.1	1862	24.8,24.8
40	1756	1785	1746	1748	1708	1729	1727	1774	30- 40	1183	3045	40.5,40.5
50	1433	1457	1418	1413	1379	1393	1399	1445	40- 50	1223	4268	56.8,56.8
60	1083	1090	1043	1041	1034	1030	1030	1081	50- 60	1106	5374	71.5,71.5
70	758.2	717.2	634.7	669.3	715.9	661.8	620.3	708.8	60- 70	859.4	6234	83,83
80	521.2	424.5	237.1	386.0	482.4	381.4	220.8	407.6	70- 80	557.5	6791	90.4,90.4
90	322.2	217.2	2.430	186.6	291.1	187.7	1.185	203.5	80- 90	296.4	7088	94.3,94.3
100	173.4	94.27	5.130	77.69	153.1	81.19	5.235	85.76	90-100	137.3	7225	96.2,96.2
110	96.77	68.07	13.50	61.92	93.23	65.19	12.21	64.46	100-110	72.75	7298	97.1,97.1
120	89.16	65.00	20.11	59.19	85.84	61.88	18.33	61.88	110-120	58.57	7356	97.9,97.9
130	80.54	60.88	26.32	55.26	77.24	57.60	25.35	58.37	120-130	50.71	7407	98.6,98.6
140	70.57	55.47	31.43	50.23	67.55	52.21	30.76	53.74	130-140	41.19	7448	99.1,99.1
150	59.74	47.73	32.32	43.79	56.76	45.16	32.79	45.92	140-150	30.54	7479	99.5,99.5
160	47.77	38.59	36.43	41.56	45.11	41.81	36.31	38.54	150-160	20.00	7499	99.8,99.8
170	40.17	40.59	39.22	40.85	41.95	38.41	40.20	41.09	160-170	11.47	7510	99.9,99.9
180	42.27	40.76	40.25	40.85	42.61	39.86	41.63	41.46	170-180	3.809	7514	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Taylor
Test Date:2016-09-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.283
Humidity:55.0%
Test Distance:30.000m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM



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C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
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Test Date:2016-09-29

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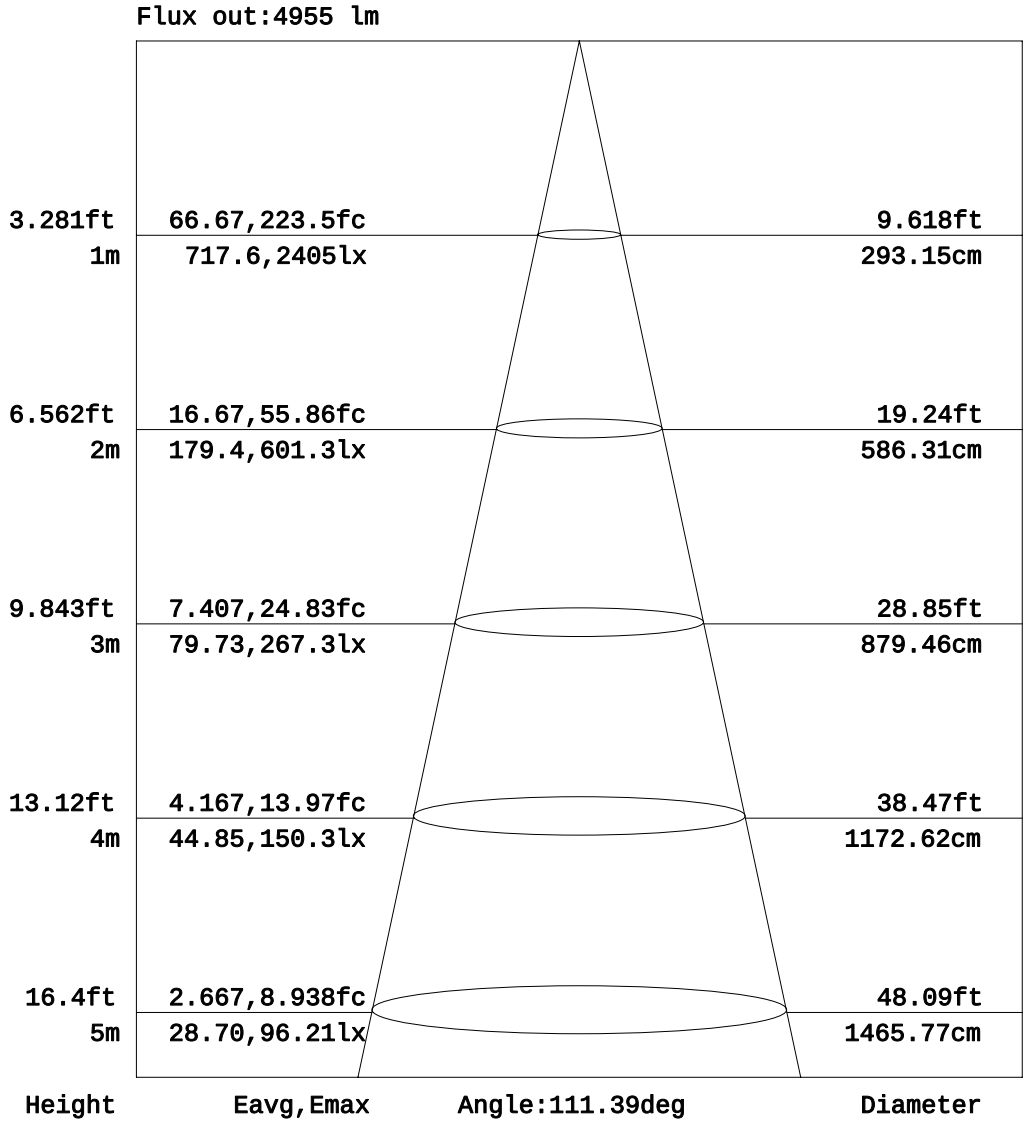
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.283
Humidity:55.0%
Test Distance:30.000m [K=1.0000]
Remarks:

AAI Figure

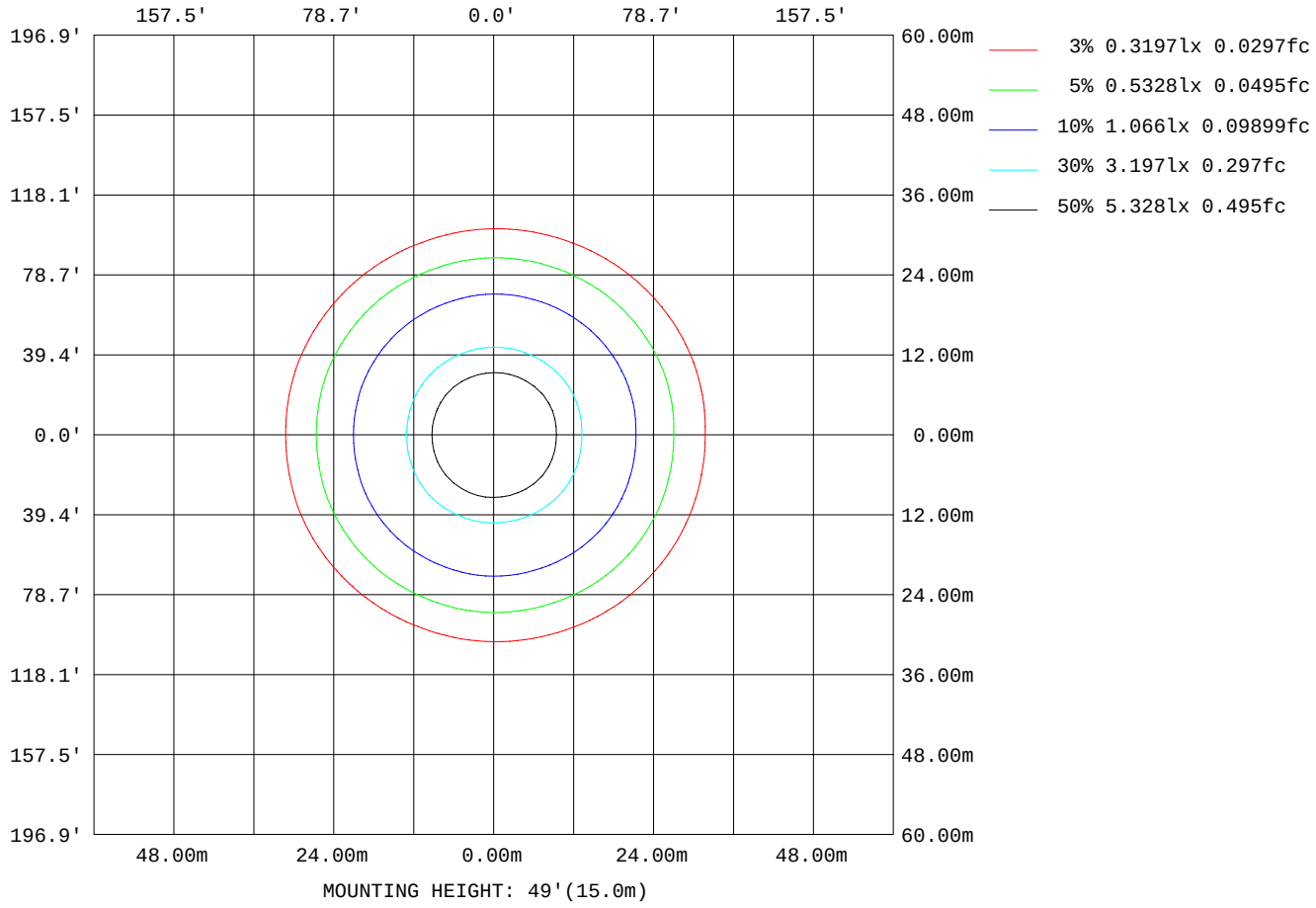


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Taylor
Test Date:2016-09-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.283
Humidity:55.0%
Test Distance:30.000m [K=1.0000]
Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
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γ Range: 0 - 180DEG
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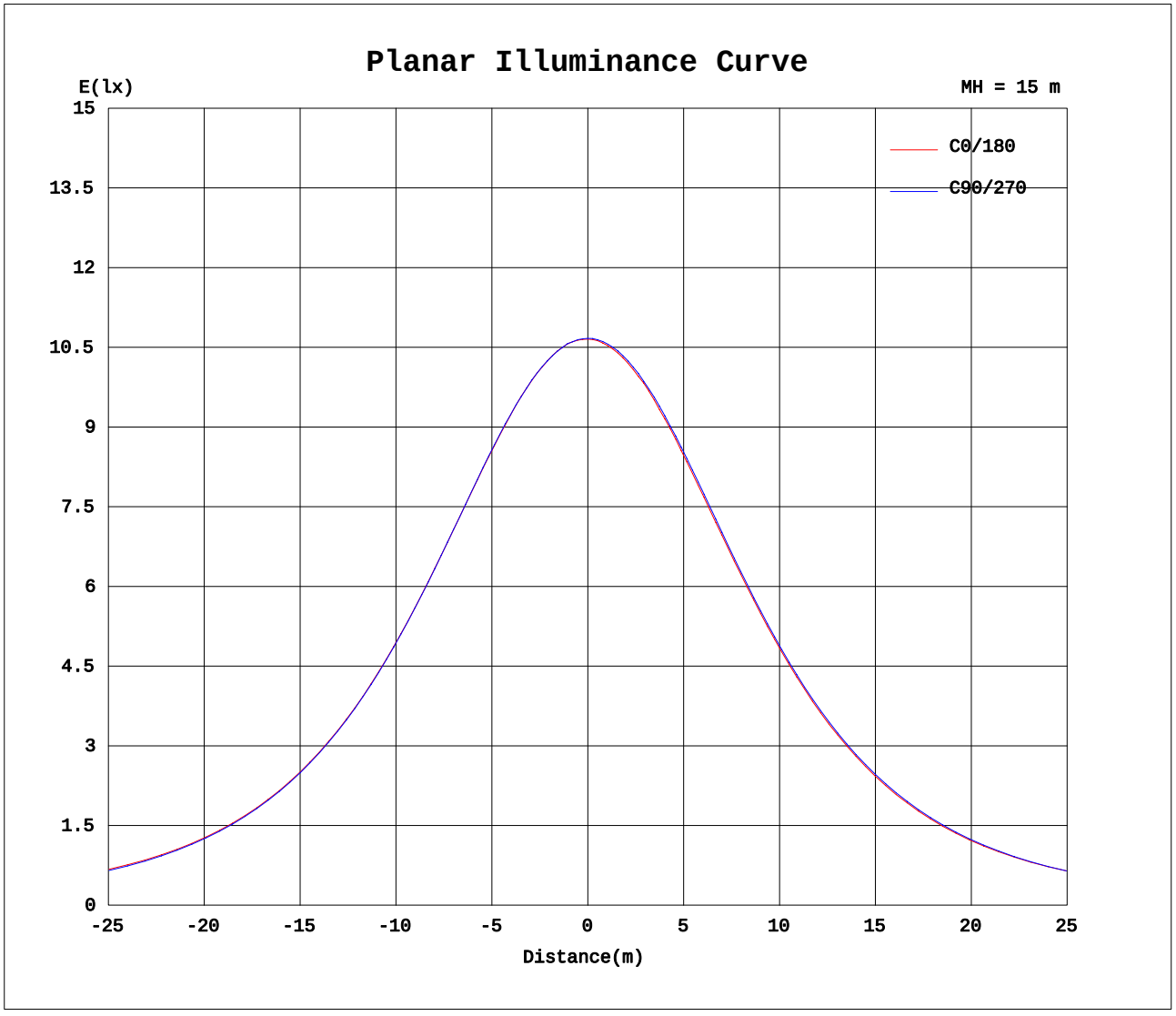
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.283
Humidity:55.0%
Test Distance:30.000m [K=1.0000]
Remarks:

Planar Illuminance Curve



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Test Distance:30.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401
5	2394	2393	2395	2395	2395	2400	2397	2396	2394	2390	2389	2388	2389	2388	2386	2388	2383	2385	2386
10	2363	2362	2366	2369	2370	2372	2371	2371	2366	2359	2358	2356	2355	2353	2353	2350	2346	2345	2348
15	2308	2311	2315	2323	2323	2328	2325	2317	2312	2306	2307	2303	2304	2302	2296	2293	2285	2285	2289
20	2234	2235	2243	2252	2257	2261	2248	2243	2237	2234	2234	2230	2231	2230	2225	2218	2207	2204	2207
25	2140	2143	2152	2161	2170	2168	2153	2145	2138	2138	2138	2134	2134	2136	2135	2121	2109	2105	2109
30	2029	2030	2042	2054	2059	2056	2038	2030	2025	2024	2026	2021	2020	2023	2025	2012	1995	1988	1993
35	1899	1903	1915	1929	1933	1925	1907	1898	1892	1893	1893	1886	1889	1893	1895	1884	1866	1855	1857
40	1756	1758	1773	1788	1787	1782	1762	1753	1747	1746	1746	1738	1740	1747	1749	1740	1720	1708	1708
45	1599	1600	1616	1630	1630	1622	1606	1594	1589	1588	1586	1577	1580	1587	1587	1579	1562	1549	1548
50	1433	1436	1449	1461	1460	1453	1437	1423	1419	1418	1414	1405	1406	1412	1414	1409	1394	1380	1379
55	1259	1261	1274	1282	1281	1273	1258	1244	1238	1235	1231	1220	1223	1230	1231	1229	1220	1205	1204
60	1083	1085	1094	1098	1093	1087	1071	1054	1047	1043	1037	1028	1032	1040	1041	1045	1043	1030	1034
65	913	915	918	917	906	895	878	860	848	841	835	830	836	846	855	865	869	861	866
70	758	758	757	748	727	707	683	660	644	635	630	629	641	659	679	699	711	711	716
75	629	627	620	601	570	539	502	472	448	435	432	441	465	499	532	562	583	588	594
80	521	518	508	486	448	401	347	296	257	237	241	267	311	363	409	447	473	482	482
85	417	413	401	377	337	287	228	165	108	77.3	92.3	140	198	253	301	340	367	379	381
90	322	318	305	280	241	193	138	80.9	31.4	2.43	20.7	62.7	113	164	209	247	274	288	291
95	239	235	222	199	164	122	78.2	38.8	13.8	2.04	8.92	28.0	61.1	100.0	138	172	197	210	214
100	173	169	158	138	110	78.5	49.9	31.1	15.2	5.13	10.5	25.1	41.9	64.0	91.4	117	138	150	153
105	125	121	112	97.4	78.7	63.1	47.8	32.1	17.8	9.33	12.8	26.2	41.5	56.7	70.4	85.5	99.8	108	111
110	96.8	94.9	90.5	84.2	74.3	61.8	47.8	33.4	20.3	13.5	14.9	27.6	41.6	55.7	68.2	79.3	87.6	92.4	93.2
115	92.9	91.3	87.5	81.4	72.4	60.8	47.9	34.8	22.6	17.2	17.2	28.7	41.8	54.8	66.4	76.6	84.3	88.6	89.7
120	89.2	87.6	84.1	78.4	70.2	59.8	48.0	36.0	24.4	20.1	20.6	29.7	41.8	53.8	64.6	73.9	81.1	84.5	85.8
125	85.0	83.6	80.4	75.1	67.8	58.3	47.6	36.8	26.3	23.1	24.1	30.3	41.5	52.4	62.3	70.9	77.6	80.4	81.7
130	80.5	79.3	76.2	71.4	65.2	56.6	47.0	37.2	29.2	26.3	27.3	30.5	40.8	50.8	59.7	67.5	73.5	75.9	77.2
135	75.7	74.6	72.0	67.8	62.2	54.6	46.2	37.4	31.8	29.4	28.9	31.6	39.9	48.9	56.9	63.8	69.2	71.2	72.6
140	70.6	69.7	67.4	63.5	58.8	52.2	45.0	36.7	35.0	31.4	30.3	33.9	38.8	46.6	53.8	59.9	64.1	66.3	67.6
145	65.3	64.4	62.4	59.3	55.0	49.5	42.4	37.1	34.4	32.1	31.7	36.4	37.8	44.0	50.3	55.7	59.0	61.1	62.3
150	59.7	59.0	57.6	54.7	50.9	44.5	38.6	36.3	34.8	32.3	32.8	37.6	38.3	41.3	46.3	51.1	53.7	55.4	56.8
155	53.8	53.4	52.2	49.8	44.6	39.6	37.9	36.7	36.5	34.6	34.4	35.5	40.0	40.5	42.6	45.7	48.3	49.7	50.8
160	47.8	47.3	46.5	43.4	38.9	38.3	38.5	39.3	37.7	36.4	36.1	37.9	40.6	41.4	41.8	42.0	43.4	44.0	45.1
165	43.8	43.6	43.8	38.9	38.8	38.4	40.6	40.1	38.7	37.9	37.6	38.9	40.0	40.7	42.4	42.2	42.0	42.2	43.3
170	40.2	41.7	38.9	38.8	40.2	40.9	40.9	40.8	40.0	39.2	39.1	39.9	40.6	41.5	40.2	38.6	39.9	42.0	41.9
175	37.2	41.4	37.9	39.3	40.3	40.8	41.2	41.6	41.5	40.1	40.0	40.6	40.8	40.8	40.1	39.9	39.4	38.9	30.9
180	42.3	35.1	39.1	39.5	40.3	41.2	41.6	42.4	41.6	40.3	40.2	40.7	41.1	40.9	40.8	40.2	38.3	31.8	42.6

C Range: 0 - 360DEG
C Interval: 10.0DEG
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γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.283
Humidity:55.0%
Test Distance:30.000m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2 UNIT: cd

C(DEG) / γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401	2401		
5	2383	2383	2385	2384	2386	2387	2387	2388	2390	2390	2392	2395	2396	2396	2399	2392	2394		
10	2342	2346	2348	2350	2353	2353	2357	2357	2357	2358	2359	2366	2369	2371	2371	2365	2363		
15	2284	2286	2287	2292	2298	2298	2303	2300	2300	2306	2307	2314	2322	2324	2320	2314	2311		
20	2204	2204	2211	2217	2226	2223	2220	2219	2220	2229	2231	2239	2250	2255	2253	2244	2238		
25	2105	2108	2113	2124	2131	2121	2120	2120	2122	2134	2135	2144	2156	2166	2165	2153	2148		
30	1986	1990	2002	2013	2013	2002	2001	2000	2005	2017	2017	2028	2042	2056	2057	2044	2037		
35	1856	1859	1870	1879	1877	1867	1864	1868	1873	1882	1883	1895	1912	1926	1930	1918	1908		
40	1707	1714	1724	1730	1728	1719	1716	1722	1727	1736	1736	1749	1767	1780	1785	1775	1765		
45	1550	1557	1563	1567	1567	1557	1557	1562	1568	1577	1577	1591	1608	1620	1627	1620	1610		
50	1381	1388	1393	1393	1394	1388	1385	1393	1399	1406	1408	1422	1438	1451	1457	1455	1445		
55	1206	1214	1213	1212	1212	1206	1203	1211	1218	1224	1229	1243	1259	1271	1278	1279	1270		
60	1034	1041	1037	1031	1029	1021	1018	1023	1030	1035	1041	1057	1075	1087	1098	1102	1095		
65	865	868	857	845	837	827	820	822	828	835	845	863	884	902	918	927	925		
70	716	711	693	671	652	633	621	617	620	629	644	669	695	722	745	762	765		
75	592	583	557	524	489	455	428	415	415	426	449	484	523	562	596	622	632		
80	480	468	440	403	360	308	262	230	221	238	275	326	382	433	475	503	516		
85	379	365	336	298	253	199	142	91.1	67.4	91.0	146	209	270	323	365	395	411		
90	288	273	246	210	166	117	67.1	25.0	1.19	20.9	66.9	122	178	229	269	300	315		
95	211	198	173	140	104	65.7	33.0	12.9	2.29	9.69	30.2	67.2	111	153	191	218	233		
100	151	139	119	94.4	68.0	46.1	29.3	14.3	5.24	11.6	26.6	43.8	69.9	102	132	154	168		
105	109	102	88.3	73.8	60.2	45.3	30.2	16.1	8.64	13.8	27.8	43.4	58.6	73.6	92.9	109	120		
110	93.3	89.9	81.9	71.3	59.0	45.1	31.0	17.7	12.2	15.9	29.1	43.7	58.0	70.9	81.6	89.1	94.0		
115	89.7	86.5	79.1	69.3	57.8	44.9	31.8	19.1	15.6	17.9	30.4	43.9	57.2	69.2	79.4	86.1	90.3		
120	85.9	83.1	76.1	67.1	56.6	44.7	32.3	20.9	18.3	19.9	31.4	43.9	56.3	67.5	76.8	82.4	86.7		
125	81.6	79.2	72.8	64.8	55.1	44.0	32.6	23.6	22.1	23.0	32.1	43.7	55.0	65.5	73.6	79.2	83.1		
130	77.1	74.9	69.4	62.0	53.2	43.1	32.5	26.9	25.4	24.7	32.6	43.4	53.6	63.1	70.4	75.4	78.1		
135	72.4	70.3	65.6	59.1	51.1	41.9	32.7	29.7	28.5	28.9	32.9	42.7	51.8	60.4	66.7	71.2	73.7		
140	67.4	65.4	61.5	55.7	48.7	40.5	34.1	31.2	30.8	32.2	32.8	41.9	50.0	57.4	63.0	67.0	69.4		
145	62.1	60.4	57.1	52.1	46.0	39.1	36.2	31.1	32.0	32.4	33.7	39.6	47.5	54.1	59.0	62.3	64.5		
150	56.6	55.1	52.3	47.8	42.5	38.8	38.1	33.4	32.8	32.7	29.9	36.5	42.5	49.4	54.4	57.5	59.1		
155	50.8	49.6	47.3	43.6	41.1	39.9	38.2	34.8	34.4	34.0	35.5	36.6	38.7	42.8	48.9	52.0	53.3		
160	45.0	44.3	42.8	41.7	41.9	41.4	35.0	36.6	36.3	35.5	37.3	34.4	38.1	39.0	41.1	46.3	47.4		
165	43.2	43.1	42.2	42.6	42.3	39.0	38.7	38.9	38.1	38.5	38.0	39.4	39.4	37.2	39.1	39.8	42.9		
170	43.0	42.1	40.4	37.9	38.9	40.9	40.5	40.7	40.2	39.5	39.2	40.2	41.2	41.0	39.9	39.0	37.0		
175	31.1	38.4	39.3	39.6	40.0	40.4	40.8	41.4	41.1	40.1	40.3	40.7	41.3	41.1	41.0	39.6	39.5		
180	42.7	35.4	37.9	39.4	40.3	40.8	41.2	41.9	41.6	40.4	40.3	41.2	41.5	41.5	40.9	40.2	38.9		

C Range: 0 - 360DEG
C Interval: 10.0DEG
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Operators:Taylor
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