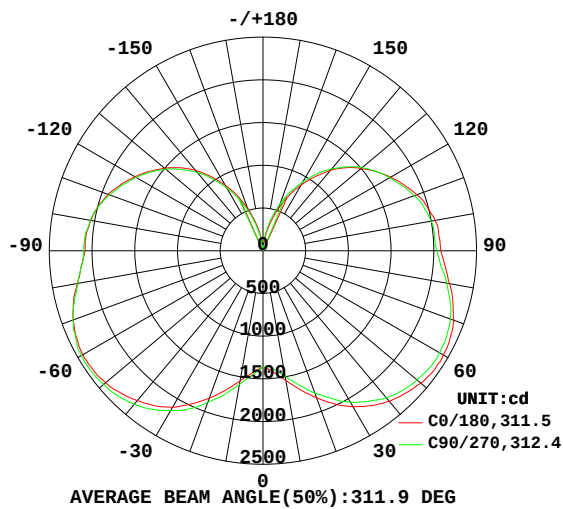


LUMINAIRE PHOTOMETRIC TEST REPORT

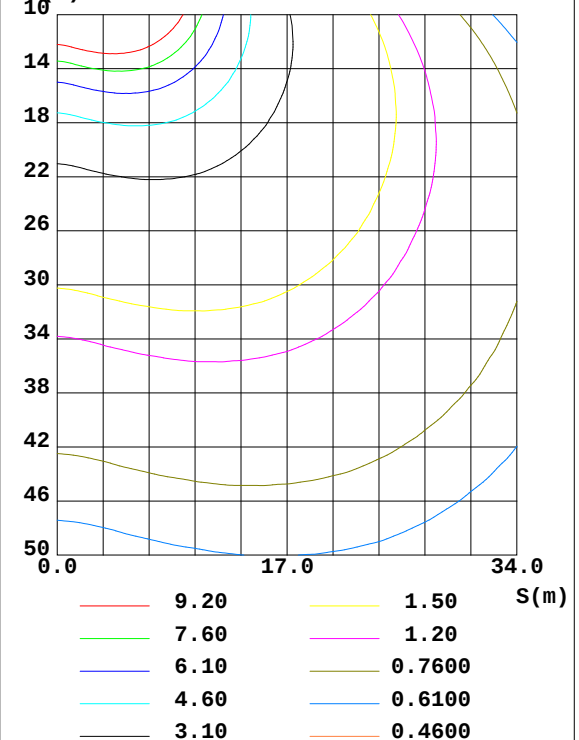
Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: 宏盛泰达	SUR.:	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 196.50 lm/W			
MODEL	120W玉米灯	I _{max} (cd)	2493	S/MH(C0/180)	2.29
NOMINAL POWER(W)	120	LOR(%)	100.0	S/MH(C90/270)	2.31
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	23849	η UP, DN(C0-180)	20.5, 29.2
NOMINAL FLUX(lm)	23849.1	CIE CLASS	DIFFUSE	η UP, DN(C180-360)	20.5, 29.8
LAMPS INSIDE	1	η up(%)	41.1	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	220	η down(%)	58.9	CIBSE SHR MAX	2.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:William
 Test Date:2019-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
 Humidity:56.4%
 Test Distance:26.000m [K=1.3952]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1544	1501	1490	1515	1549	1576	1590	1573	0- 10	139.7	139.7	0.59, 0.59
20	1829	1780	1771	1796	1836	1872	1889	1866	10- 20	481.9	621.5	2.61, 2.61
30	2108	2060	2047	2069	2116	2146	2164	2152	20- 30	917.1	1539	6.45, 6.45
40	2301	2254	2246	2264	2290	2323	2345	2337	30- 40	1389	2927	12.3, 12.3
50	2411	2365	2354	2376	2403	2424	2433	2441	40- 50	1825	4752	19.9, 19.9
60	2438	2406	2387	2411	2436	2445	2454	2468	50- 60	2174	6926	29, 29
70	2376	2346	2333	2341	2363	2361	2365	2386	60- 70	2385	9312	39, 39
80	2217	2200	2184	2195	2205	2197	2199	2230	70- 80	2417	11729	49.2, 49.2
90	2081	2050	2034	2053	2085	2095	2096	2112	80- 90	2326	14055	58.9, 58.9
100	2045	2014	1998	2020	2047	2050	2051	2069	90-100	2250	16304	68.4, 68.4
110	1917	1895	1884	1901	1932	1919	1913	1942	100-110	2098	18402	77.2, 77.2
120	1724	1715	1711	1721	1733	1718	1719	1741	110-120	1808	20210	84.7, 84.7
130	1500	1509	1514	1508	1501	1489	1488	1507	120-130	1452	21662	90.8, 90.8
140	1228	1247	1250	1242	1231	1204	1196	1224	130-140	1064	22726	95.3, 95.3
150	884.6	914.9	927.0	910.0	885.5	860.3	849.9	867.4	140-150	670.6	23396	98.1, 98.1
160	526.6	564.1	578.6	560.1	531.0	499.9	485.7	495.5	150-160	335.2	23732	99.5, 99.5
170	194.4	227.5	242.9	227.9	195.1	174.8	139.1	163.4	160-170	106.7	23838	100, 100
180	6.308	5.806	6.268	4.376	10.11	10.23	11.87	11.15	170-180	10.88	23849	100, 100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3789.5 lm

%lum = 15.9%

%lamp = 15.9%

Conical surface Flux(120deg): 6926.5 lm

%lum = 29.0%

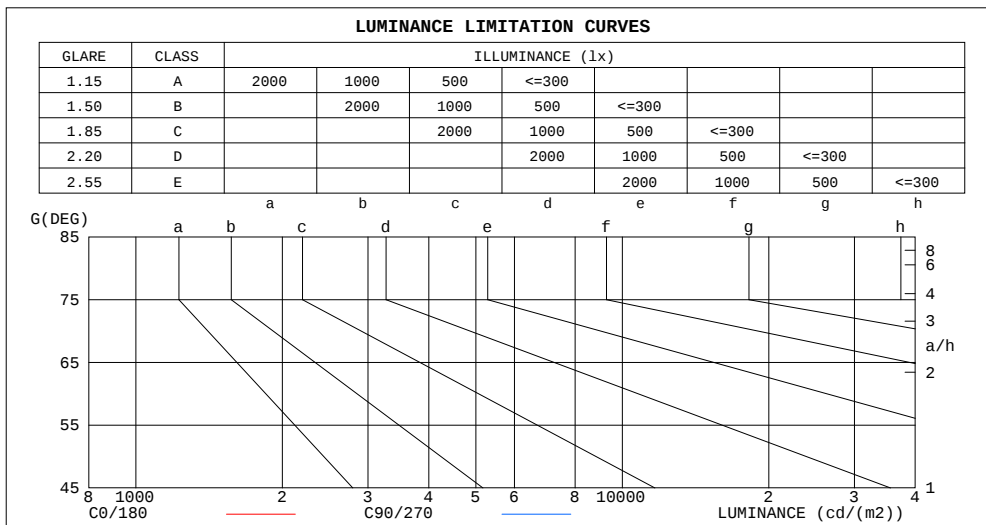
%lamp = 29.0%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2019-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
Humidity:56.4%
Test Distance:26.000m [K=1.3952]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: 宏盛泰达	SUR.:	Shielding Angle:N/A



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2467208	2392749
80	1281548	1255118
75	892303	873849
70	697094	680596
65	573992	559895
60	489431	476395
55	427243	414408
50	376387	365319
45	334587	325946

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2019-11-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
Humidity:56.4%
Test Distance:26.000m [K=1.3952]
Remarks:

WEC AND CCEC

Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm									
NAME:				TYPE:LED				WEIGHT:N/A	
SPEC.:N/A				DIM.:				SERIAL No.:N/A	
MFR.: 宏盛泰达				SUR.:				Shielding Angle:N/A	

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coeffcients(WEC)									
0.0																
1.0	.419	.238	.075	.399	.228	.072	.362	.208	.066	.328	.189	.061	.297	.172	.055	
2.0	.351	.192	.059	.333	.184	.057	.299	.166	.052	.268	.150	.047	.239	.135	.043	
3.0	.307	.163	.049	.290	.155	.047	.259	.141	.043	.231	.126	.039	.204	.113	.035	
4.0	.273	.142	.042	.258	.135	.040	.230	.122	.036	.203	.109	.033	.179	.097	.030	
5.0	.246	.125	.036	.232	.119	.035	.206	.107	.032	.182	.096	.029	.160	.085	.026	
6.0	.224	.112	.032	.211	.107	.031	.188	.096	.028	.165	.086	.025	.144	.076	.023	
7.0	.206	.102	.029	.194	.097	.028	.172	.087	.025	.151	.078	.023	.132	.069	.020	
8.0	.190	.093	.026	.179	.088	.025	.159	.079	.023	.140	.071	.020	.121	.062	.018	
9.0	.177	.085	.024	.167	.081	.023	.148	.073	.021	.130	.065	.019	.113	.057	.017	
10.0	.165	.079	.022	.155	.075	.021	.138	.067	.019	.121	.060	.017	.105	.053	.015	

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.503	.503	.503	.430	.430	.430	.294	.294	.294	.169	.169	.169	.054	.054	.054	
1.0	.503	.471	.441	.431	.404	.380	.295	.278	.263	.170	.161	.153	.054	.052	.049	
2.0	.498	.449	.408	.426	.387	.353	.292	.268	.246	.168	.156	.144	.054	.050	.047	
3.0	.491	.434	.388	.421	.374	.337	.289	.260	.236	.167	.152	.139	.054	.049	.046	
4.0	.483	.422	.375	.415	.365	.326	.285	.254	.230	.165	.149	.136	.053	.048	.045	
5.0	.476	.413	.367	.409	.357	.319	.282	.250	.225	.163	.147	.134	.053	.048	.044	
6.0	.469	.406	.360	.403	.351	.314	.278	.246	.222	.161	.145	.132	.052	.047	.044	
7.0	.462	.399	.356	.397	.346	.310	.274	.243	.220	.159	.143	.131	.051	.047	.043	
8.0	.455	.394	.352	.392	.342	.307	.271	.240	.218	.158	.142	.130	.051	.046	.043	
9.0	.449	.390	.350	.387	.338	.305	.268	.238	.217	.156	.140	.129	.051	.046	.043	
10.0	.443	.386	.348	.382	.335	.303	.265	.236	.215	.155	.139	.129	.050	.046	.043	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:William
 Test Date:2019-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
 Humidity:56.4%
 Test Distance:26.000m [K=1.3952]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm											
NAME:					TYPE:LED			WEIGHT:N/A			
SPEC.:N/A					DIM.:			SERIAL No.:N/A			
MFR.: 宏盛泰达					SUR.:			Shielding Angle:N/A			
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions		Viewed crosswise					Viewed endwise				
x = 2H y = 2H	2H	31.5	32.7	32.3	33.5	34.5	31.5	32.7	32.2	33.5	34.5
	3H	34.6	35.7	35.4	36.5	37.6	34.6	35.7	35.4	36.5	37.5
	4H	36.3	37.3	37.1	38.2	39.2	36.3	37.3	37.1	38.2	39.2
	6H	38.2	39.2	39.0	40.0	41.1	38.1	39.1	39.0	40.0	41.0
	8H	39.2	40.2	40.1	41.0	42.1	39.2	40.1	40.0	41.0	42.1
	12H	40.4	41.3	41.3	42.2	43.3	40.3	41.2	41.2	42.1	43.2
4H	2H	32.5	33.5	33.3	34.3	35.4	32.5	33.5	33.3	34.3	35.4
	3H	35.7	36.6	36.5	37.5	38.6	35.7	36.6	36.5	37.5	38.6
	4H	37.5	38.3	38.4	39.2	40.4	37.5	38.4	38.4	39.2	40.4
	6H	39.5	40.3	40.4	41.2	42.3	39.5	40.3	40.4	41.2	42.3
	8H	40.7	41.4	41.6	42.3	43.4	40.7	41.3	41.6	42.3	43.4
	12H	42.0	42.6	42.9	43.5	44.7	41.9	42.6	42.8	43.5	44.7
8H	4H	38.2	38.9	39.1	39.8	41.0	38.2	38.9	39.1	39.8	41.0
	6H	40.5	41.1	41.4	42.0	43.2	40.5	41.1	41.4	42.0	43.2
	8H	41.8	42.3	42.7	43.3	44.5	41.8	42.3	42.7	43.3	44.5
	12H	43.3	43.7	44.2	44.7	45.9	43.3	43.7	44.2	44.7	45.9
12H	4H	38.4	39.0	39.3	39.9	41.1	38.4	39.0	39.3	39.9	41.1
	6H	40.8	41.3	41.7	42.2	43.5	40.8	41.3	41.7	42.3	43.5
	8H	42.2	42.6	43.1	43.6	44.8	42.2	42.7	43.2	43.6	44.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					

CIE Pub.117, 23849 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 11.0$)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2019-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
Humidity:56.4%
Test Distance:26.000m [K=1.3952]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: 宏盛泰达	SUR.:	Shielding Angle:N/A

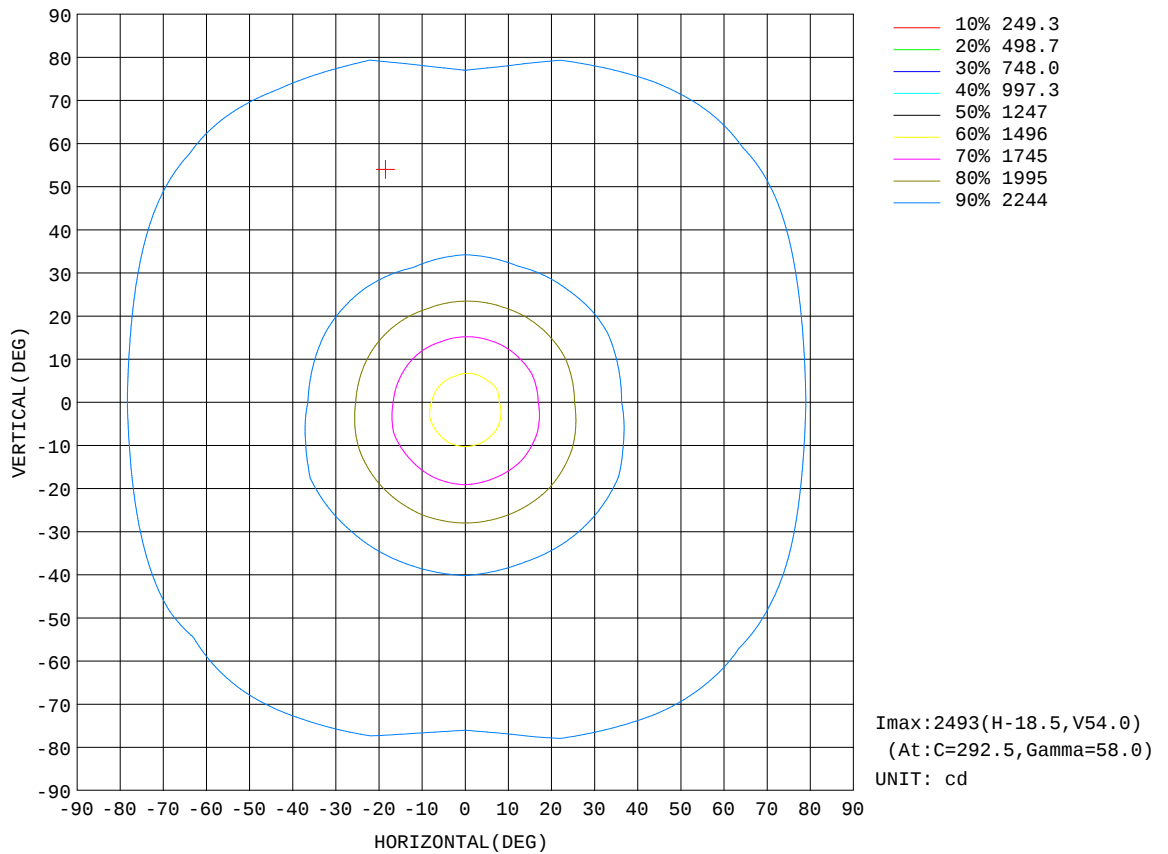
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	37	25	17	36	24	17	33	22	16	9
0.80	46	32	24	44	31	23	39	28	21	12
1.00	53	39	30	51	37	29	45	36	27	16
1.25	60	46	37	57	44	35	50	40	32	20
1.50	66	52	42	62	49	40	54	44	36	22
2.00	74	61	51	69	57	49	60	51	44	27
2.50	79	67	57	73	63	54	64	55	49	30
3.00	83	72	63	77	67	60	67	59	53	33
4.00	88	79	71	82	74	67	71	65	59	38
5.00	91	83	76	85	78	72	74	68	63	40
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:William
 Test Date:2019-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
 Humidity:56.4%
 Test Distance:26.000m [K=1.3952]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: 宏盛泰达	SUR.:	Shielding Angle:N/A

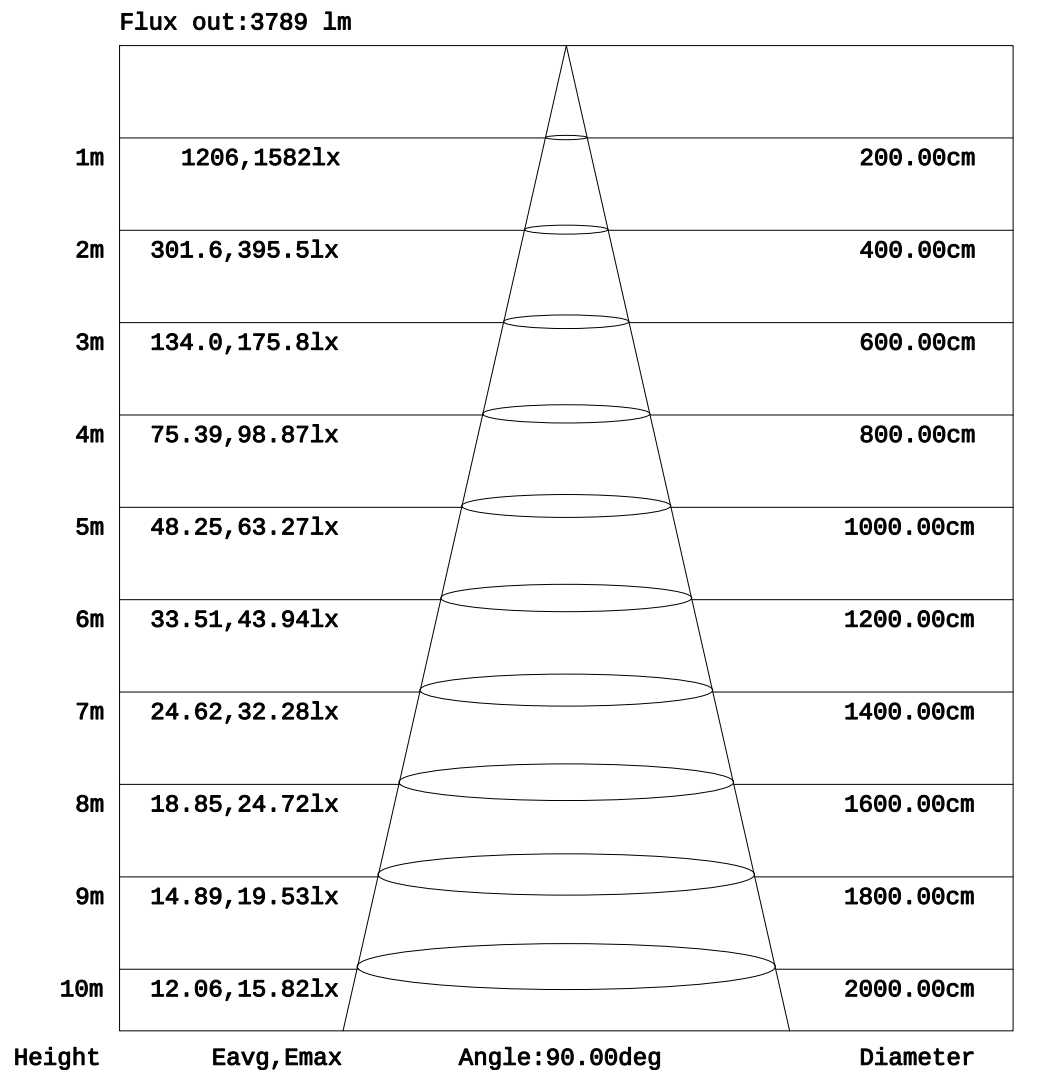


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 24.5DEG
Operators: William
Test Date: 2019-11-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.0.366
Humidity: 56.4%
Test Distance: 26.000m [K=1.3952]
Remarks:

AAI Figure

Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.: 宏盛泰达	SUR.:	Shielding Angle:N/A

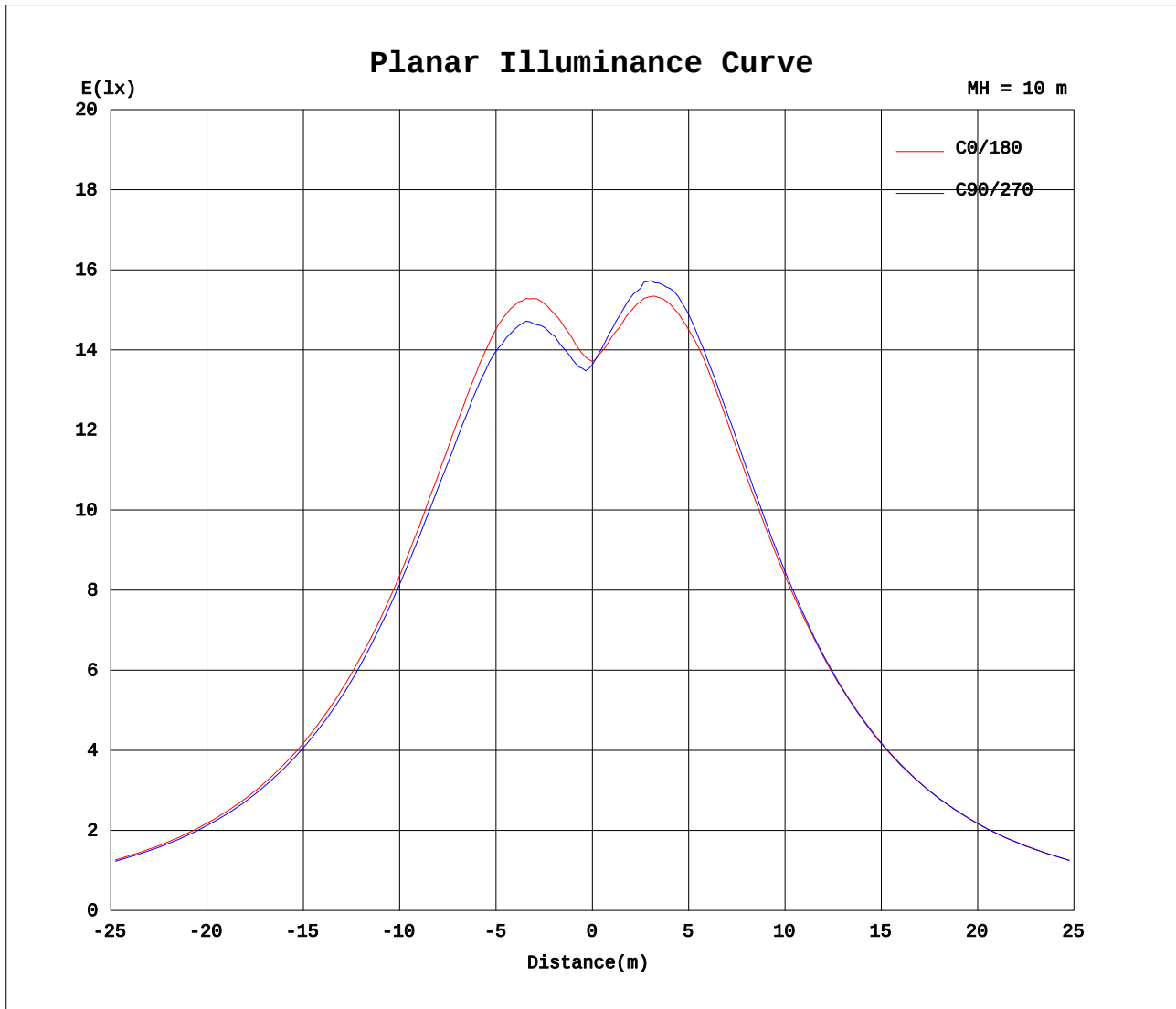


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:William
 Test Date:2019-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
 Humidity:56.4%
 Test Distance:26.000m [K=1.3952]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 24.5DEG
Operators: William
Test Date: 2019-11-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-R5000_V2 SYSTEM V2.0.366
Humidity: 56.4%
Test Distance: 26.000m [K=1.3952]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.11V I:0.5605A P:121.37W PF:0.9837 Freq:50.01Hz Lamp Flux:23849.1x1 lm																		
NAME:									TYPE:LED					WEIGHT:N/A				
SPEC.:N/A									DIM.:					SERIAL No.:N/A				
MFR.: 宏盛泰达									SUR.:					Shielding Angle:N/A				

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	1366	1366	1366	1366	1366	1366	1366	1366	1366	1366	1366	1366	1366	1366	1366	1366			
5	1426	1407	1391	1387	1386	1390	1402	1414	1434	1440	1451	1457	1461	1453	1448	1432			
10	1544	1516	1501	1491	1490	1495	1515	1526	1549	1564	1576	1594	1590	1589	1573	1554			
15	1683	1648	1636	1627	1625	1631	1653	1665	1690	1711	1721	1741	1745	1735	1719	1702			
20	1829	1795	1780	1781	1771	1778	1796	1806	1836	1856	1872	1899	1889	1889	1866	1849			
25	1977	1934	1917	1920	1907	1917	1942	1949	1975	2000	2022	2044	2042	2040	2021	1994			
30	2108	2068	2060	2057	2047	2059	2069	2068	2116	2131	2146	2177	2164	2170	2152	2125			
35	2213	2167	2168	2168	2152	2165	2174	2174	2213	2228	2244	2273	2265	2271	2255	2227			
40	2301	2257	2254	2257	2246	2254	2264	2256	2290	2307	2323	2357	2345	2351	2337	2309			
45	2357	2317	2324	2328	2310	2325	2334	2318	2355	2369	2384	2421	2400	2419	2397	2372			
50	2411	2359	2365	2374	2354	2375	2376	2364	2403	2410	2424	2465	2433	2465	2441	2416			
55	2442	2387	2391	2407	2382	2406	2405	2383	2427	2423	2444	2490	2455	2484	2464	2441			
60	2438	2392	2406	2418	2387	2419	2411	2379	2436	2426	2445	2489	2454	2485	2468	2439			
65	2417	2374	2387	2402	2372	2399	2392	2362	2407	2399	2416	2457	2417	2462	2445	2411			
70	2376	2328	2346	2366	2333	2359	2341	2320	2363	2343	2361	2402	2365	2403	2386	2361			
75	2301	2254	2276	2299	2267	2295	2271	2247	2295	2266	2285	2326	2285	2330	2313	2287			
80	2217	2172	2200	2225	2184	2219	2195	2160	2205	2175	2197	2244	2199	2248	2230	2194			
85	2143	2092	2110	2136	2090	2130	2112	2083	2135	2103	2134	2180	2138	2181	2159	2121			
90	2081	2030	2050	2077	2034	2073	2053	2031	2085	2064	2095	2139	2096	2137	2112	2062			
95	2065	2015	2029	2055	2012	2057	2042	2026	2078	2057	2085	2134	2089	2128	2105	2061			
100	2045	1998	2014	2041	1998	2041	2020	2002	2047	2020	2050	2087	2051	2085	2069	2023			
105	1989	1947	1967	1986	1953	1989	1967	1954	2000	1970	1997	2034	1995	2033	2013	1976			
110	1917	1876	1895	1922	1884	1927	1901	1882	1932	1897	1919	1952	1913	1950	1942	1901			
115	1823	1795	1805	1833	1801	1834	1812	1797	1835	1801	1819	1854	1817	1851	1843	1811			
120	1724	1699	1715	1742	1711	1741	1721	1699	1733	1703	1718	1747	1719	1746	1741	1708			
125	1617	1604	1619	1642	1617	1642	1618	1600	1621	1596	1611	1631	1609	1631	1630	1604			
130	1500	1492	1509	1533	1514	1528	1508	1489	1501	1481	1489	1506	1488	1507	1507	1494			
135	1376	1364	1381	1410	1389	1407	1383	1365	1376	1344	1352	1369	1343	1367	1371	1359			
140	1228	1225	1247	1268	1250	1265	1242	1219	1231	1199	1204	1213	1196	1211	1224	1210			
145	1057	1071	1086	1105	1101	1102	1083	1064	1060	1037	1033	1030	1028	1037	1044	1052			
150	885	895	915	935	927	930	910	892	885	862	860	856	850	861	867	876			
155	710	728	746	764	761	765	742	722	712	699	680	675	677	675	686	703			
160	527	544	564	582	579	582	560	540	531	521	500	486	486	488	495	515			
165	352	371	389	405	407	406	386	368	352	352	327	302	307	309	319	336			
170	194	213	228	238	243	238	228	212	195	194	175	147	139	154	163	177			
175	71.3	83.1	94.4	102	105	103	96.6	87.2	70.9	71.5	58.2	46.9	42.5	29.7	48.7	61.0			
180	6.31	4.80	5.81	6.98	6.27	11.8	4.38	0.00	10.1	10.0	10.2	11.0	11.9	11.6	11.2	10.4			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.5DEG
Operators:William
Test Date:2019-11-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-R5000_V2 SYSTEM V2.0.366
Humidity:56.4%
Test Distance:26.000m [K=1.3952]
Remarks: