

## Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	459.4 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	0.0 degrees horizontal

Beam Spread	At 10% of Imax	133.2V x 150.0H
	At 50% of Imax	74.9V x 138.3H
	At 90% of Imax	30.4V x 129.0H

Beam Flux	Total	998.4 lumens per klm.
	To 10% of Imax	969.2 lumens per klm.
	To 50% of Imax	728.5 lumens per klm.
	To 90% of Imax	118.1 lumens per klm.

Upward LOR	0.0 %
Downward LOR	99.8 %

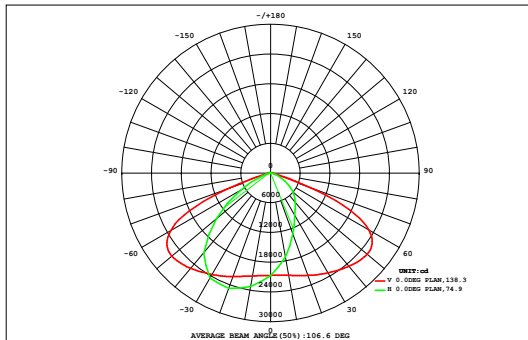
Luminaire Efficiency (Light Output Ratio)	100.0 %
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H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:217.8V I:1.916A P:404.1W PF:0.9731 Lamp Flux:69044.8x1 lm		
NAME: FL-400H-70140	TYPE:LED	WEIGHT:6.5
SPEC.:C470SP-Q2-P-03A 230V50HZ	DIM.:	SERIAL No.:1
MFR.: LUXSUN	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:170.88lm/W	
MODEL	FL-400H-70140	Imax(cd)	31719
NOMINAL POWER(W)	400	AVAILABILITY(%)	97.2
RATED VOLTAGE(V)	220	Avai. FLUX(lm)	67139
NOMINAL FLUX(lm)	69044.8	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	69045
TEST VOLTAGE(V)	220	θ @50% (H,V)	138,75DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.50	2.24	5.17	9.12	12.8	17.1	22.8	28.9	34.1	34.0	28.7	22.8	17.2	12.8	9.21	5.29	2.29	0.52	266	0.00
70	0.52	2.96	8.38	16.5	25.0	37.2	51.6	64.0	69.5	69.3	63.5	51.4	37.2	25.0	16.4	8.35	3.05	0.55	550	40.6
60	0.64	4.16	15.7	39.1	66.6	96.0	119	134	141	140	133	117	95.1	66.6	39.9	16.0	4.21	0.69	1230	1025
50	0.75	5.71	36.0	96.0	143	172	192	205	211	210	203	189	169	142	97.4	37.7	5.88	0.84	2116	2067
40	0.86	8.79	74.8	178	232	248	257	263	266	266	261	254	243	228	176	76.6	9.40	0.96	3044	3017
30	0.94	14.2	122	263	330	347	346	344	343	343	341	342	339	322	259	123	15.2	1.08	4195	4175
20	1.00	20.3	169	342	428	462	469	464	460	459	460	462	452	418	335	168	21.2	1.17	5591	5575
10	1.05	24.3	210	411	514	564	585	585	579	578	580	576	552	503	403	209	25.8	1.26	6901	6886
0	1.06	25.5	243	471	588	647	675	678	673	671	672	665	635	575	461	239	26.1	1.30	7948	7933
-10	1.00	20.9	256	517	650	714	741	742	737	734	735	730	701	636	508	256	23.1	1.28	8705	8689
-20	0.96	14.4	240	532	679	744	766	764	758	755	757	754	730	665	524	239	16.0	1.21	8939	8920
-30	0.94	8.36	174	492	653	709	721	715	707	704	707	708	695	640	489	184	10.4	1.16	8320	8295
-40	0.94	6.02	86.5	363	531	566	563	558	552	551	552	554	555	524	368	90.9	6.68	1.12	6430	6398
-50	0.94	4.93	20.0	155	283	306	311	321	327	326	319	308	303	283	165	23.6	5.42	1.11	3463	3417
-60	0.94	4.19	9.87	23.9	54.0	76.0	101	118	125	125	119	103	78.4	54.6	23.6	9.69	4.57	1.08	1032	704
-70	0.92	3.49	7.24	9.96	12.6	13.7	16.0	20.9	23.6	23.7	21.4	16.4	13.8	12.3	10.1	7.78	3.89	1.07	219	0.00
-80	0.45	1.52	2.83	4.10	5.43	6.70	8.10	8.89	9.21	9.36	9.19	8.20	6.78	5.57	4.30	3.02	1.70	0.53	95.9	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90 -80 -70 -60 -50 -40 -30 -20 HORIZONTAL (DEG) 20 30 40 50 60 70 80 90																				
Φ t	14.4	172	1682	3924	5208	5726	5944	6013	6015	5997	5962	5861	5624	5114	3889	1697	185	16.9	69045	---
Φ a	0.00	73.0	1585	3832	5101	5594	5815	5878	5869	5851	5825	5732	5492	5007	3801	1601	84.3	0.00	---	67139

one-half-peak spread: U:32.9,D:42.6 , L:19.2,R:18.1

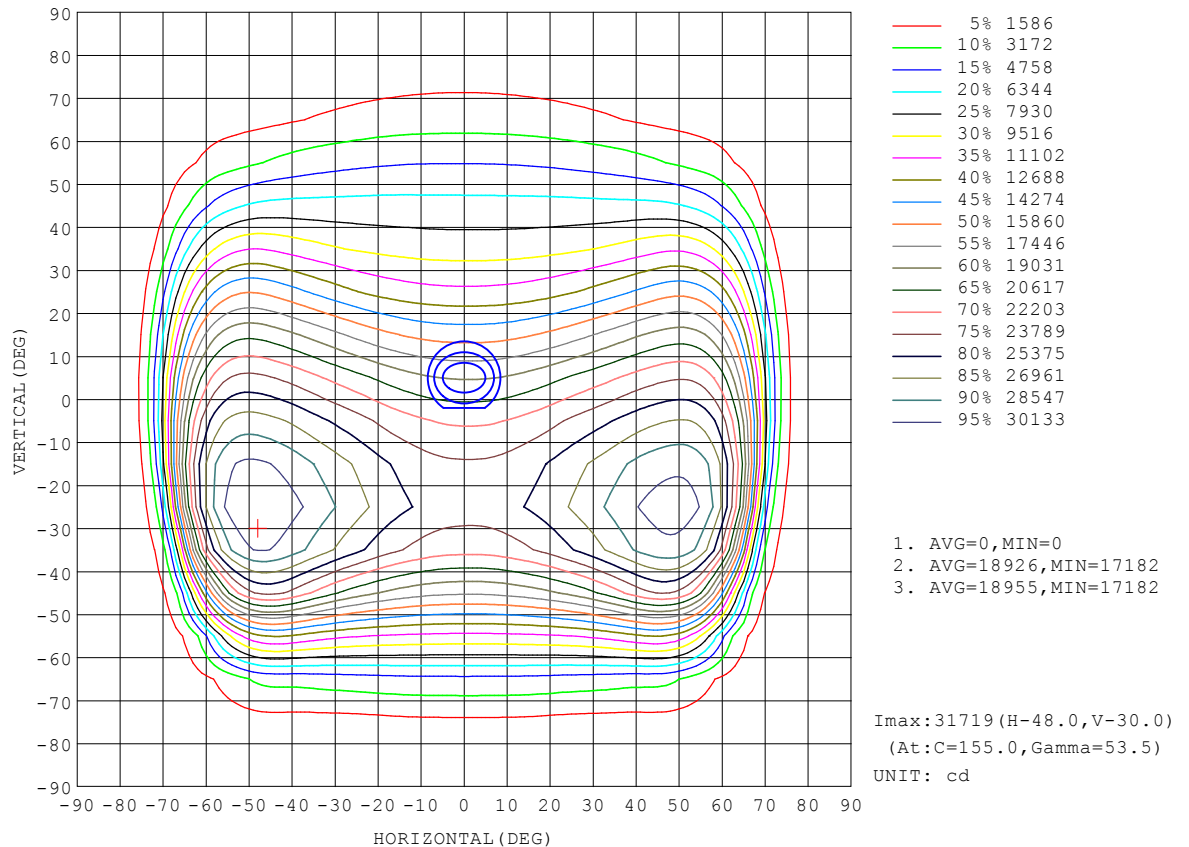
NEMA Beam Type: Type 7

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:217.8V I:1.916A P:404.1W PF:0.9731 Lamp Flux:69044.8x1 lm		
NAME: FL-400H-70140	TYPE:LED	WEIGHT:6.5
SPEC.:C470SP-Q2-P-03A 230V50HZ	DIM.:	SERIAL No.:1
MFR.: LUXSUN	SUR.:	Shielding Angle:

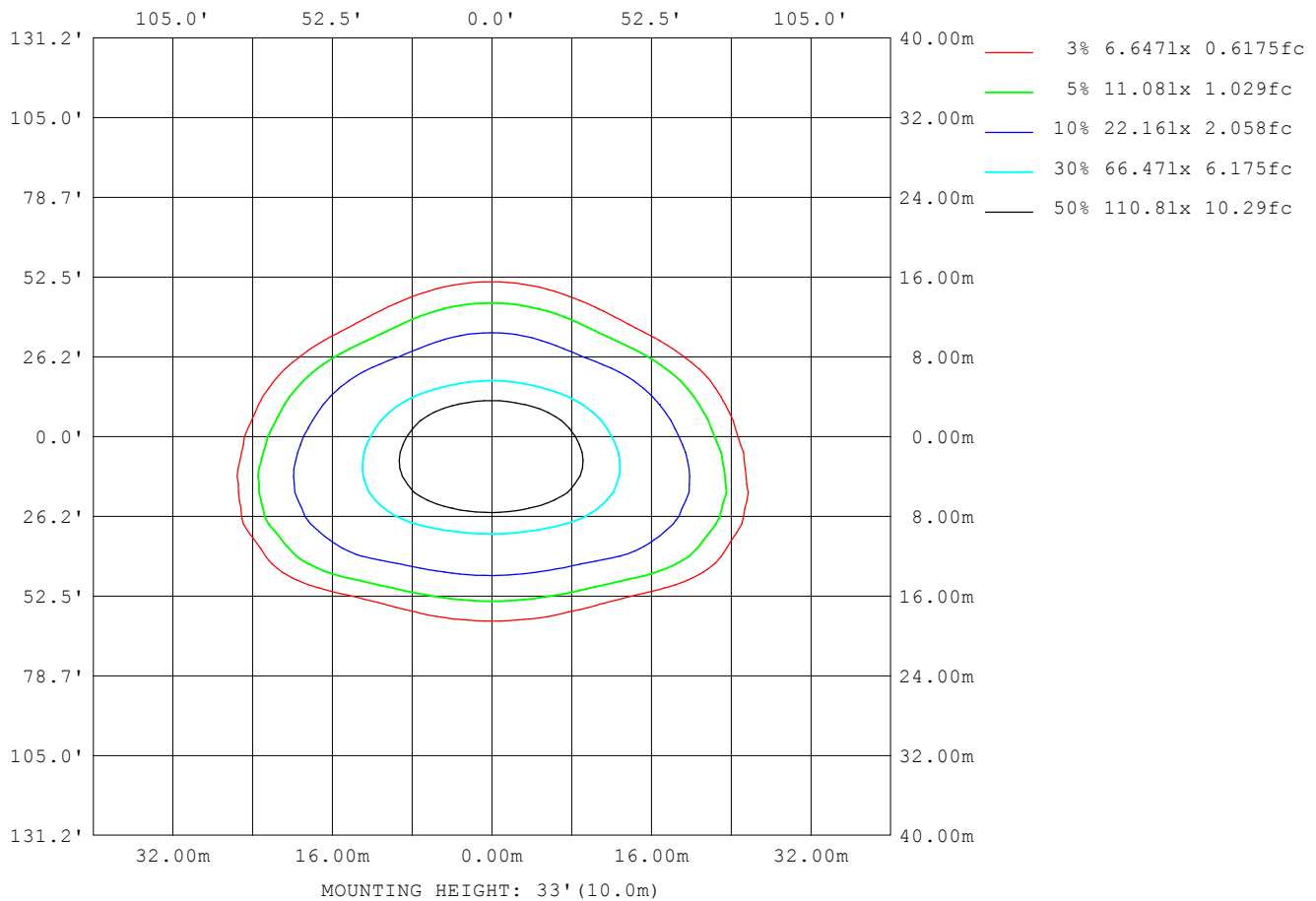


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

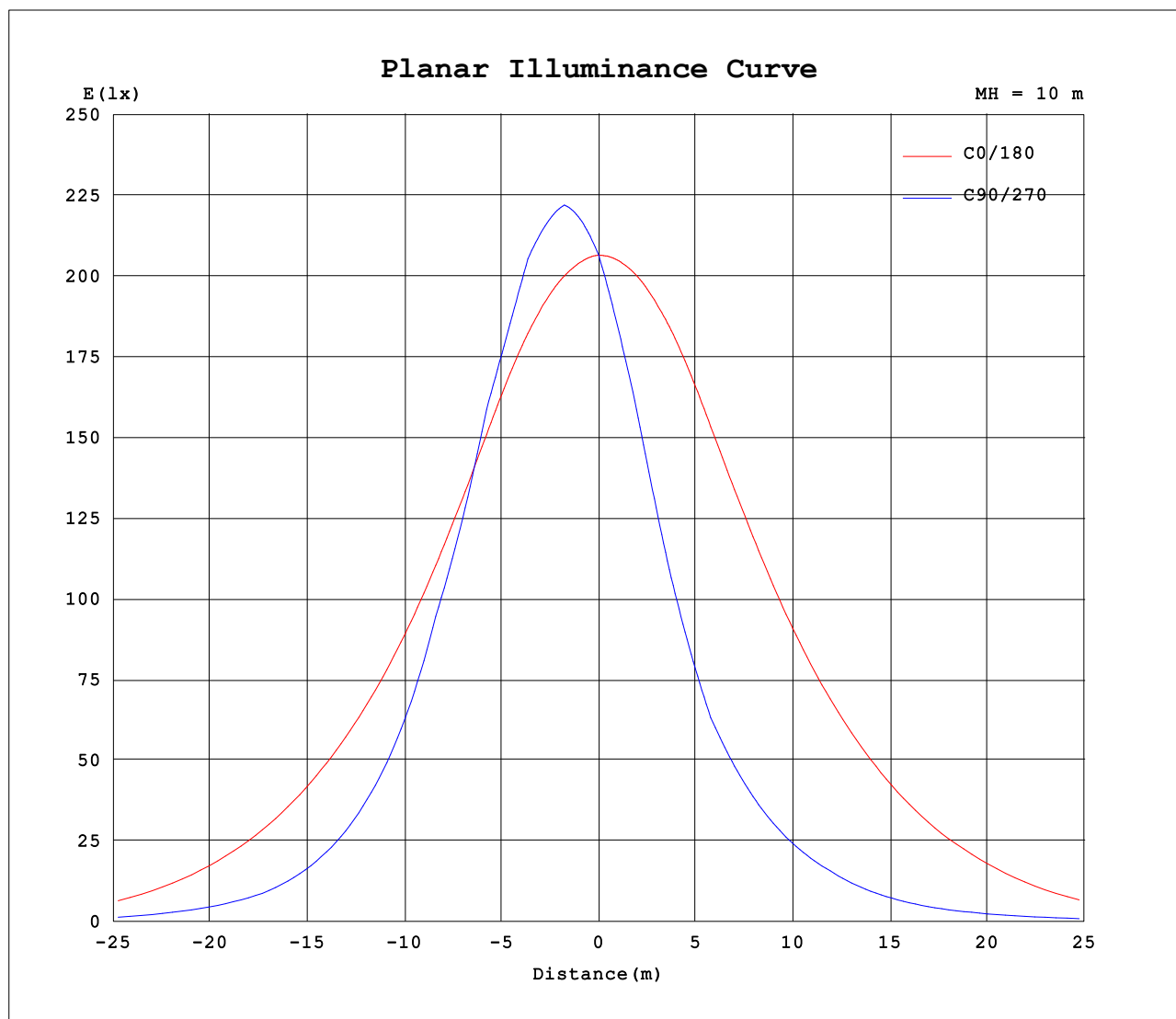
Test:U:217.8V I:1.916A P:404.1W PF:0.9731 Lamp Flux:69044.8x1 lm		
NAME: FL-400H-70140	TYPE:LED	WEIGHT:6.5
SPEC.:C470SP-Q2-P-03A 230V50HZ	DIM.:	SERIAL No.:1
MFR.: LUXSUN	SUR.:	Shielding Angle:



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## Planar Illuminance Curve

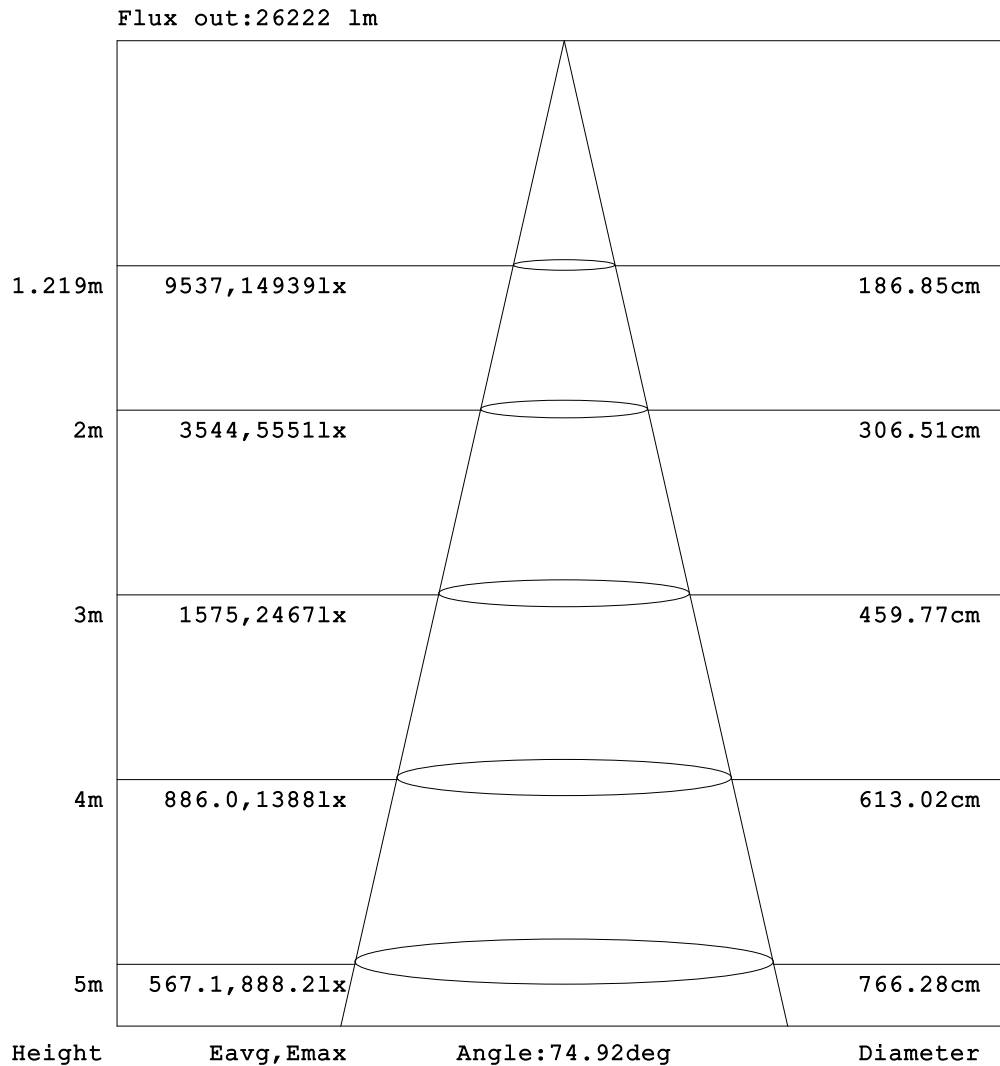


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

### AAI Figure

Test:U:217.8V I:1.916A P:404.1W PF:0.9731 Lamp Flux:69044.8x1 lm		
NAME: FL-400H-70140	TYPE:LED	WEIGHT:6.5
SPEC.:C470SP-Q2-P-03A 230V50HZ	DIM.:	SERIAL No.:1
MFR.: LUXSUN	SUR.:	Shielding Angle:



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

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:217.8V I:1.916A P:404.1W PF:0.9731 Lamp Flux:69044.8x1 lm		
NAME: FL-400H-70140	TYPE:LED	WEIGHT:6.5
SPEC.:C470SP-Q2-P-03A 230V50HZ	DIM.:	SERIAL No.:1
MFR.: LUXSUN	SUR.:	Shielding Angle:

Table--1

UNIT: ×10cd

H (DEG) V (DEG)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-80	30.4	33.2	36.4	40.1	44.3	48.9	53.7	58.2	61.3	66.5	68.1	67.1	69.2	72.3	76.9	79.6	81.8	82.4	81.7
-75	30.0	33.1	37.7	43.6	51.1	58.9	69.1	79.7	90.1	98.9	95.7	95.3	96.6	99.7	109	118	123	125	125
-70	29.5	33.1	38.9	47.1	57.9	68.9	84.5	101	119	131	123	123	124	127	141	156	165	168	169
-65	28.7	33.0	40.1	51.5	66.7	89.1	133	219	316	366	369	380	395	407	419	430	435	437	438
-60	27.9	32.9	41.4	55.8	75.6	109	181	336	513	600	615	637	665	687	697	703	705	706	707
-55	27.0	32.3	42.4	59.7	89.0	172	469	903	1182	1278	1257	1198	1152	1123	1103	1088	1078	1071	1068
-50	26.0	31.8	43.4	63.6	102	235	756	1470	1850	1956	1899	1759	1639	1559	1508	1474	1451	1437	1430
-45	25.1	31.3	44.7	69.5	143	545	1385	2031	2343	2412	2337	2202	2078	1980	1904	1845	1804	1777	1768
-40	24.1	30.8	46.0	75.4	183	854	2015	2592	2836	2868	2775	2644	2516	2400	2299	2216	2156	2118	2106
-35	23.2	30.1	47.3	87.1	271	1241	2318	2807	2998	3011	2924	2807	2687	2575	2472	2389	2328	2288	2275
-30	22.3	29.5	48.6	98.7	359	1628	2620	3021	3160	3154	3074	2969	2857	2750	2645	2562	2501	2458	2445
-25	21.3	29.4	51.0	118	525	1848	2698	3045	3157	3140	3063	2963	2857	2756	2655	2576	2515	2473	2460
-20	20.4	29.3	53.5	137	690	2067	2776	3069	3154	3126	3051	2956	2856	2762	2665	2589	2528	2487	2475
-15	19.4	29.7	55.4	156	768	2029	2699	2972	3044	3014	2945	2855	2763	2675	2583	2509	2451	2412	2400
-10	18.5	30.1	57.3	176	845	1991	2622	2875	2934	2903	2838	2753	2669	2588	2501	2430	2374	2338	2325
-5	17.6	31.5	58.6	190	860	1901	2474	2714	2768	2736	2674	2594	2515	2440	2361	2293	2241	2207	2195
0	16.7	32.9	59.9	205	874	1811	2326	2553	2602	2570	2510	2435	2362	2293	2222	2157	2108	2077	2065
5	16.0	31.8	58.2	194	795	1647	2145	2369	2422	2388	2328	2254	2180	2111	2041	1979	1931	1902	1892
10	15.3	30.7	56.4	182	716	1482	1965	2186	2241	2207	2146	2074	1998	1928	1861	1801	1755	1727	1719
15	14.8	30.0	54.9	166	633	1314	1762	1972	2027	1992	1927	1853	1778	1704	1639	1586	1546	1524	1516
20	14.3	29.2	53.4	149	551	1147	1560	1757	1814	1778	1708	1633	1557	1480	1417	1370	1338	1320	1314
25	13.8	27.8	50.9	126	442	949	1328	1520	1578	1546	1478	1405	1336	1273	1223	1187	1162	1148	1144
30	13.4	26.3	48.3	103	333	750	1097	1283	1342	1314	1248	1177	1115	1065	1029	1004	986	977	974
35	13.1	25.2	46.0	88.3	253	581	868	1038	1104	1093	1049	1004	965	935	913	897	885	879	877
40	12.8	24.1	43.6	73.4	173	411	639	794	867	871	850	830	815	805	798	791	785	781	779
45	12.6	22.7	40.0	64.4	130	288	457	578	647	678	686	688	689	690	692	691	690	688	687
50	12.4	21.2	36.4	55.3	87.0	164	275	362	428	484	523	546	562	576	586	592	594	595	594
55	12.3	19.9	33.0	49.5	73.7	122	190	245	289	333	371	400	423	440	455	464	469	471	471
60	12.2	18.6	29.5	43.6	60.4	81.2	105	128	151	181	219	255	283	305	323	336	344	347	348
65	12.2	17.0	25.6	36.5	49.2	64.4	82.8	97.6	110	125	145	167	186	205	222	234	242	245	247
70	12.1	15.4	21.7	29.4	37.9	47.7	60.7	67.2	69.0	69.1	72.0	78.8	89.2	105	121	133	140	144	145
75	12.2	14.3	18.8	24.3	29.9	36.2	44.0	49.0	52.1	53.6	56.4	61.8	68.4	77.4	86.2	93.9	101	106	107
80	12.2	13.2	16.0	19.1	21.9	24.7	27.3	30.8	35.3	38.0	40.7	44.7	47.6	49.5	51.3	55.2	63.2	68.0	68.1
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:217.8V I:1.916A P:404.1W PF:0.9731 Lamp Flux:69044.8x1 lm		
NAME: FL-400H-70140	TYPE:LED	WEIGHT:6.5
SPEC.:C470SP-Q2-P-03A 230V50HZ	DIM.:	SERIAL No.:1
MFR.: LUXSUN	SUR.:	Shielding Angle:

Table--2

UNIT: ×10cd

H (DEG) V (DEG)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-80	83.3	83.3	81.8	78.7	73.3	70.2	67.8	68.5	66.8	62.4	60.0	56.3	52.1	48.3	44.9	42.2	39.1	35.1	
-75	126	124	120	111	102	98.4	95.9	95.5	97.4	89.5	80.6	72.2	62.6	55.5	48.8	43.2	39.0	34.7	
-70	168	165	158	144	130	127	124	122	128	117	101	88.2	73.1	62.7	52.7	44.3	38.9	34.2	
-65	438	436	431	421	409	399	385	371	365	318	221	135	91.6	71.5	56.7	45.7	38.7	33.6	
-60	707	706	703	698	689	671	646	619	602	519	341	183	110	80.3	60.7	47.1	38.4	33.0	
-55	1069	1074	1082	1094	1112	1141	1186	1244	1275	1197	947	521	193	95.4	66.2	48.8	38.4	32.4	
-50	1431	1442	1461	1489	1535	1610	1727	1868	1949	1876	1553	859	276	111	71.8	50.5	38.4	31.8	
-45	1771	1792	1827	1878	1947	2039	2161	2296	2383	2338	2068	1448	597	155	77.9	52.4	38.1	31.4	
-40	2111	2142	2194	2267	2358	2467	2594	2723	2816	2801	2584	2037	917	199	84.1	54.2	37.7	30.9	
-35	2279	2312	2364	2437	2529	2633	2752	2868	2953	2953	2789	2328	1328	313	98.5	57.1	37.6	30.5	
-30	2448	2481	2535	2607	2700	2798	2909	3014	3090	3105	2993	2618	1740	428	113	60.0	37.5	30.0	
-25	2464	2497	2550	2620	2711	2804	2907	3006	3077	3097	3003	2674	1869	557	133	62.1	37.5	29.3	
-20	2480	2513	2566	2634	2723	2809	2904	2998	3064	3088	3014	2729	1999	685	153	64.3	37.5	28.7	
-15	2405	2435	2488	2553	2636	2717	2803	2889	2951	2978	2915	2659	2008	787	176	66.8	38.8	27.7	
-10	2329	2358	2409	2472	2549	2625	2701	2779	2837	2867	2817	2588	2017	890	200	69.3	40.2	26.8	
-5	2199	2226	2274	2334	2406	2474	2545	2618	2675	2705	2658	2435	1888	870	205	68.3	40.1	25.7	
0	2069	2095	2139	2197	2262	2324	2389	2456	2512	2543	2500	2282	1759	850	210	67.4	40.1	24.6	
5	1895	1919	1962	2018	2081	2143	2209	2277	2334	2366	2323	2113	1628	802	207	66.0	39.1	23.5	
10	1722	1743	1785	1838	1899	1961	2029	2097	2156	2190	2145	1944	1497	753	204	64.6	38.0	22.4	
15	1519	1538	1573	1620	1679	1743	1812	1883	1945	1979	1932	1740	1315	652	179	61.6	36.3	21.3	
20	1317	1332	1360	1402	1459	1525	1596	1668	1733	1768	1718	1535	1133	551	154	58.5	34.6	20.2	
25	1147	1158	1179	1211	1256	1311	1374	1443	1507	1541	1493	1319	954	458	131	55.9	33.1	19.2	
30	976	983	997	1020	1053	1097	1153	1217	1281	1315	1269	1104	776	364	108	53.4	31.5	18.2	
35	878	882	890	904	924	950	983	1026	1069	1085	1029	874	599	271	91.1	49.9	29.4	17.4	
40	779	780	783	789	794	802	813	834	858	855	789	645	422	178	74.0	46.4	27.3	16.6	
45	686	685	685	684	682	679	676	676	670	644	582	470	300	133	65.6	43.0	25.5	15.9	
50	593	591	587	579	569	556	540	518	482	433	375	294	177	88.7	57.3	39.5	23.7	15.3	
55	470	466	459	449	435	418	396	368	332	292	251	198	128	73.9	50.6	35.3	21.7	14.7	
60	346	341	332	319	301	280	253	218	182	152	128	103	78.7	59.2	43.9	31.2	19.7	14.2	
65	245	240	232	220	204	185	166	145	125	110	97.5	81.7	64.1	49.2	37.5	27.0	18.0	13.8	
70	144	140	132	121	106	90.6	79.6	72.3	69.0	68.4	67.3	60.4	49.5	39.1	31.1	22.8	16.3	13.4	
75	106	101	93.3	85.9	77.6	69.0	62.1	56.7	53.7	52.1	49.5	44.2	37.4	30.7	25.1	19.5	15.0	13.1	
80	67.3	62.0	54.4	50.9	49.1	47.4	44.6	41.0	38.4	35.7	31.6	28.0	25.3	22.2	19.2	16.1	13.6	12.8	
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Bob Chen  
Test Date:2019-12-16

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks: