

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

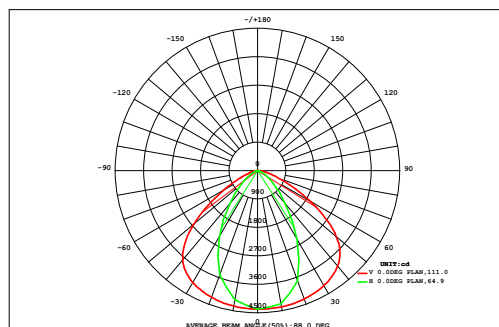
Maximum Intensity (Luminaire orientation as tested.)		575.4 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
Beam Spread	At 10% of Imax	112.1V x 144.2H
	At 50% of Imax	64.9V x 111.0H
	At 90% of Imax	29.2V x 74.6H
Beam Flux	Total	1000.0 lumens per klm.
	To 10% of Imax	944.7 lumens per klm.
	To 50% of Imax	688.2 lumens per klm.
	To 90% of Imax	262.7 lumens per klm.
Upward LOR		0.0 %
Downward LOR		100.0 %
Luminaire Efficiency(Light Output Ratio)		100.0 %

H(ϕ) Range:-90 - 90DEG
H(ϕ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:23 October 2023

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:11.900m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:231.4V I:0.2570A P:48.49W PF:0.8153 Freq:60.07Hz Lamp Flux:7619.11x1 lm		
NAME: HBL200W-03-G4-4000K-25%	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:157.14lm/W	
MODEL		Imax (cd)	4384
NOMINAL POWER (W)	50	AVAILABILITY (%)	94.4
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	7196
NOMINAL FLUX (lm)	7619.11	LOR (%)	100.0
LAMPS INSIDE	1	TOTAL FLUX (lm)	7619
TEST VOLTAGE (V)	230	q @50% (H,V)	111,65DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		F t	F 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	0.12	0.51	0.96	1.32	1.59	1.79	1.96	2.08	2.15	2.15	2.09	1.98	1.82	1.62	1.35	0.99	0.54	0.13	25.1	0.00
70	0.12	0.66	1.42	2.15	2.84	3.56	4.31	4.97	5.35	5.37	5.01	4.36	3.61	2.88	2.17	1.43	0.66	0.11	51.0	0.00
60	0.14	0.91	2.20	3.66	5.32	7.42	9.86	12.1	13.4	13.5	12.1	9.86	7.41	5.32	3.64	2.18	0.88	0.12	110	39.5
50	0.16	1.22	3.35	6.15	9.77	14.8	20.7	26.1	29.2	29.1	25.8	20.4	14.5	9.62	6.05	3.26	1.14	0.13	221	191
40	0.19	1.62	5.10	10.5	18.0	28.5	40.4	50.0	55.2	54.9	49.3	39.4	27.6	17.4	10.2	4.84	1.46	0.14	415	404
30	0.22	2.10	7.71	18.0	33.0	52.1	70.4	83.3	89.5	89.0	81.9	68.2	49.9	31.5	17.1	7.07	1.82	0.16	703	697
	0.25	2.60	11.0	29.0	54.5	80.4	99.8	112	117	117	111	97.3	76.9	51.3	26.9	9.70	2.17	0.17	999	994
	0.27	2.97	13.7	39.4	72.4	98.0	115	126	131	130	125	113	95.4	68.5	35.7	11.7	2.40	0.19	1180	1176
	0.28	3.05	14.4	41.5	75.0	100.0	117	127	132	132	127	116	98.6	71.8	37.1	12.0	2.44	0.19	1208	1204
	0.27	2.82	12.3	33.2	60.6	85.8	105	117	122	122	116	104	84.7	57.7	29.7	10.4	2.28	0.19	1067	1062
-30	0.25	2.41	9.19	21.6	37.9	57.7	76.4	89.5	95.9	95.7	88.8	75.1	55.6	35.4	19.3	7.79	1.98	0.18	771	765
-40	0.23	1.95	6.31	12.6	20.1	30.4	42.2	52.1	57.5	57.1	51.1	40.6	28.7	18.9	11.7	5.57	1.66	0.17	439	431
-50	0.21	1.55	4.24	7.41	11.1	15.8	21.1	25.7	28.4	28.1	25.0	20.0	14.8	10.6	7.16	3.92	1.35	0.16	227	202
-60	0.19	1.19	2.80	4.44	6.18	8.21	10.5	12.4	13.5	13.3	12.0	10.0	7.88	6.02	4.40	2.69	1.08	0.15	117	31.4
-70	0.16	0.87	1.78	2.60	3.34	4.05	4.74	5.26	5.52	5.48	5.16	4.61	3.98	3.33	2.63	1.76	0.81	0.14	56.2	0.00
-80	0.13	0.56	1.03	1.39	1.66	1.87	2.01	2.08	2.11	2.10	2.07	2.00	1.87	1.69	1.43	1.04	0.55	0.11	25.7	0.00
-90	0.06	0.18	0.28	0.34	0.38	0.40	0.40	0.40	0.39	0.40	0.41	0.42	0.42	0.41	0.37	0.29	0.17	0.04	5.75	0.00
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)	20	30	40	50	60	70	80	90			
F t	3.26	27.2	97.7	235	414	591	741	847	901	898	839	728	574	394	217	86.6	23.4	2.49	7619	---
F a	0.00	6.91	72.5	210	386	563	714	821	875	871	813	700	544	367	189	59.5	3.78	0.00	---	7196

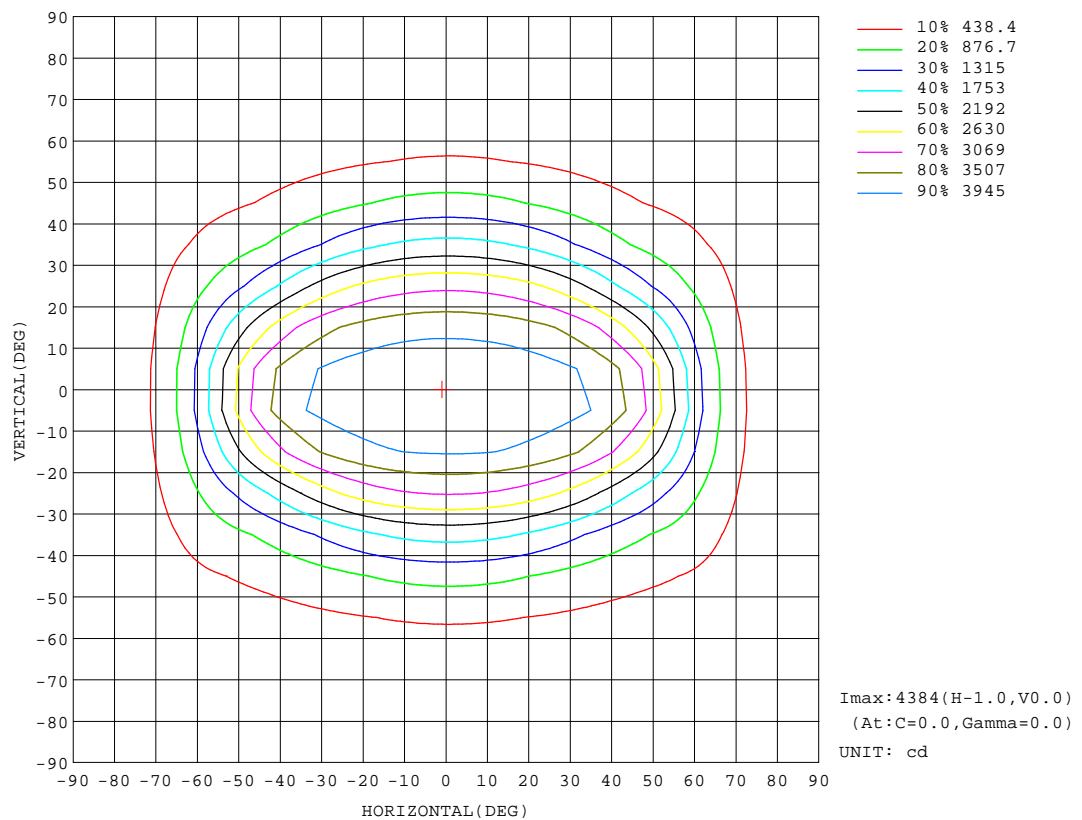
one-half-peak spread: U:32.9,D:32.4 , L:57.1,NEMA Beam Type: Type 7 x 6 (H x V)

H(B) Range:-90 - 90DEG
H(B) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:23 October 2023

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:11.900m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:231.4V I:0.2570A P:48.49W PF:0.8153 Freq:60.07Hz Lamp Flux:7619.11x1 lm		
NAME: HBL200W-03-G4-4000K-25%	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

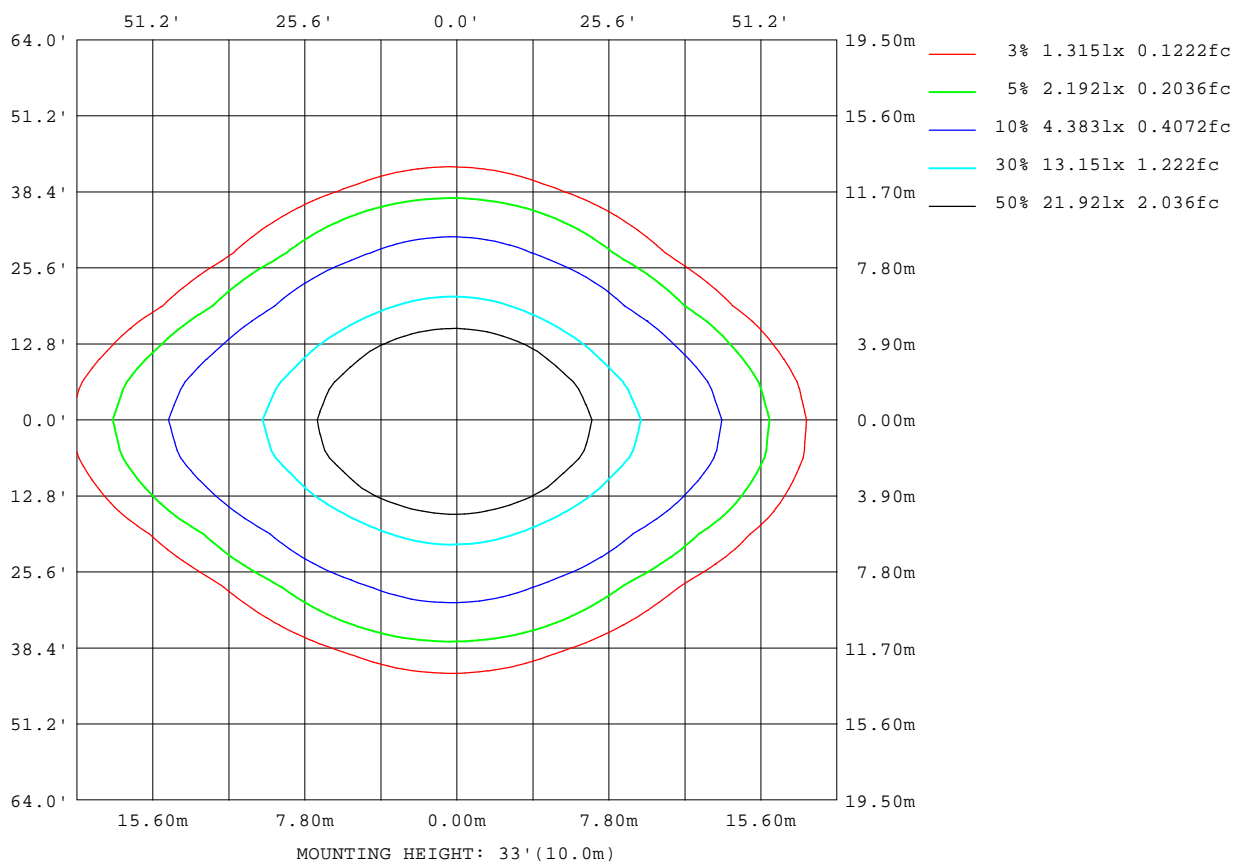


H(B) Range: -90 - 90DEG
H(B) Interval: 1.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 23 October 2023

V(B) Range: -80 - 80DEG
V(B) Interval: 5.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 11.900m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

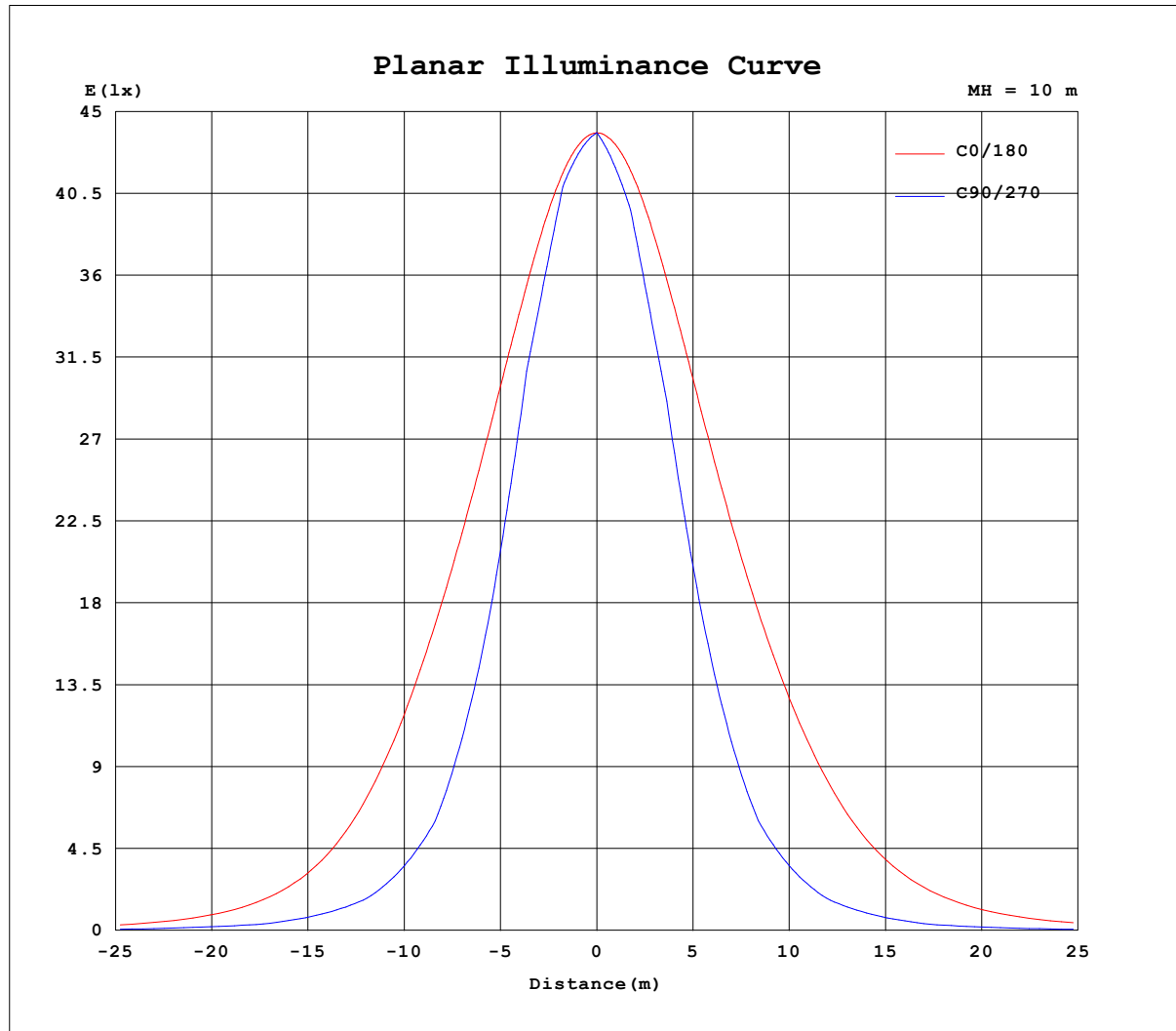
Test:U:231.4V I:0.2570A P:48.49W PF:0.8153 Freq:60.07Hz Lamp Flux:7619.11x1 lm		
NAME: HBL200W-03-G4-4000K-25%	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



H(θ) Range:-90 - 90DEG
H(θ) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:23 October 2023

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:11.900m [K=1.0000]
Remarks:

Planar Illuminance Curve

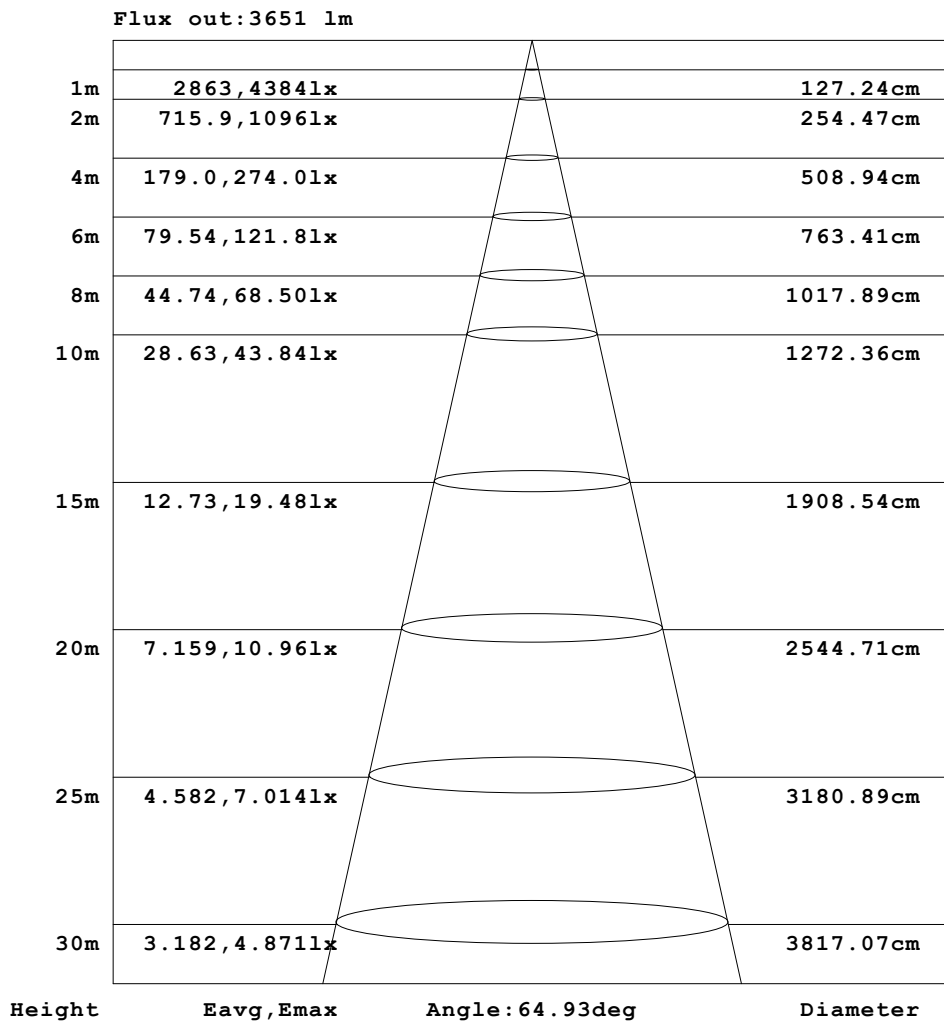


H₀ Range:-90 - 90DEG
H₀ Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:23 October 2023

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:11.900m [K=1.0000]
Remarks:

AAI Figure

Test:U:231.4V I:0.2570A P:48.49W PF:0.8153 Freq:60.07Hz Lamp Flux:7619.11x1 lm		
NAME: HBL200W-03-G4-4000K-25%	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:



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

H_(b) Range: -90 - 90DEG
H_(b) Interval: 1.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 23 October 2023

V(B) Range: -80 - 80DEG
V(B) Interval: 5.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 11.900m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:231.4V I:0.2570A P:48.49W PF:0.8153 Freq:60.07Hz Lamp Flux:7619.11x1 lm		
NAME: HBL200W-03-G4-4000K-25%	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

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
-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	26.8	40.8	49.1	53.5	55.4	55.7	55.3	54.0	52.5	51.0	49.8	48.7	47.6	46.7	45.9	45.2	44.7	44.5	44.4
-75	22.0	34.1	54.2	67.0	75.6	80.4	82.5	82.9	82.6	81.9	81.5	81.3	81.2	81.4	81.5	81.7	81.8	81.8	81.9
-70	27.5	53.3	75.9	91.9	102	108	111	112	112	112	113	114	115	116	117	118	119	119	119
-65	22.2	37.0	72.0	99.2	121	136	146	152	156	161	166	171	178	185	192	198	203	206	207
-60	27.2	63.9	102	134	160	178	189	198	206	215	225	237	250	263	275	284	291	295	295
-55	22.0	37.9	87.3	131	173	209	236	256	273	292	313	338	366	395	423	447	466	479	484
-50	25.7	71.2	126	179	232	275	308	335	362	394	431	472	517	561	600	633	658	671	671
-45	21.2	37.5	100	163	234	306	369	420	467	517	578	645	716	790	859	917	964	995	1007
-40	23.6	77.7	149	231	324	415	494	561	630	710	804	902	1005	1104	1190	1260	1312	1338	1338
-35	20.3	36.8	112	196	306	435	567	691	805	923	1061	1211	1370	1522	1657	1767	1849	1901	1921
-30	22.0	82.5	171	286	440	614	792	958	1118	1295	1496	1710	1920	2108	2263	2379	2456	2495	2497
-25	19.6	36.7	124	230	386	596	850	1120	1385	1648	1922	2195	2445	2656	2823	2948	3033	3082	3103
-20	21.2	88.8	194	348	572	876	1232	1602	1965	2328	2680	2987	3233	3415	3544	3627	3677	3701	3704
-15	19.1	37.1	134	260	464	764	1175	1660	2153	2604	2991	3298	3529	3698	3817	3899	3952	3979	3992
-10	20.9	92.7	210	397	689	1121	1691	2316	2896	3362	3691	3903	4041	4133	4198	4240	4264	4275	4280
-5	18.5	37.4	140	279	512	879	1409	2066	2731	3277	3658	3899	4053	4157	4227	4276	4308	4324	4331
0	19.9	94.9	218	415	741	1232	1898	2629	3260	3688	3941	4095	4199	4270	4320	4356	4374	4382	4383
5	17.3	36.2	138	276	507	868	1387	2024	2665	3195	3568	3809	3969	4078	4151	4206	4241	4260	4265
10	18.2	90.4	206	390	674	1088	1625	2203	2743	3186	3510	3730	3880	3980	4052	4104	4134	4147	4144
15	16.1	33.7	129	252	447	730	1113	1556	2009	2437	2816	3124	3358	3527	3645	3731	3786	3818	3828
20	16.2	83.6	184	330	537	811	1125	1455	1799	2159	2511	2815	3053	3226	3349	3430	3481	3506	3504
25	15.0	31.0	114	214	357	543	765	1002	1247	1509	1792	2074	2327	2537	2698	2820	2902	2951	2969
30	15.2	73.8	154	259	391	537	688	839	1004	1196	1416	1645	1865	2053	2203	2317	2390	2426	2426
35	14.6	28.8	98.2	172	267	375	485	593	705	831	979	1148	1320	1483	1624	1737	1820	1870	1889
40	15.3	65.6	127	196	272	345	412	479	552	639	744	858	976	1088	1187	1264	1317	1344	1344
45	15.4	27.9	83.3	136	194	252	304	351	399	454	520	598	681	766	845	913	964	997	1010
50	17.0	57.1	101	145	187	223	253	280	310	346	389	437	489	540	588	627	655	670	671
55	17.7	28.3	69.7	105	139	168	192	211	230	251	276	305	337	371	404	433	455	470	477
60	20.2	50.4	80.4	106	128	144	155	164	174	184	197	211	226	241	255	267	275	280	280
65	21.2	29.5	57.4	78.8	96.8	110	120	126	131	136	142	149	157	165	173	181	186	190	192
70	24.2	43.6	60.9	74.0	83.4	89.1	91.9	93.1	93.8	94.5	95.4	96.5	97.8	99.4	101	102	103	103	103
75	25.1	30.2	45.1	55.3	62.7	67.3	69.4	69.9	69.7	69.3	68.9	68.6	68.6	68.8	69.2	69.5	69.8	70.0	70.1
80	27.4	36.1	42.2	46.1	48.1	48.5	47.8	46.6	45.1	43.5	42.0	40.7	39.5	38.6	37.9	37.3	36.9	36.7	36.6
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_b Range:-90 - 90DEG
H_b Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:23 October 2023

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:11.900m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:231.4V I:0.2570A P:48.49W PF:0.8153 Freq:60.07Hz Lamp Flux:7619.11x1 lm																	
NAME: HBL200W-03-G4-4000K-25%									TYPE:			WEIGHT:					
SPEC.:									DIM.:			SERIAL No.:					
MFR.: EVERFINE									SUR.:			Shielding Angle:					

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	
-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	44.7	45.2	45.8	46.6	47.4	48.5	49.8	51.4	53.2	55.0	56.8	58.2	58.3	57.4	53.2	44.5	29.2	27.4	
-75	82.0	82.0	82.0	82.0	82.0	81.9	82.1	82.6	83.5	84.5	85.5	86.1	85.0	81.3	74.3	62.5	42.9	27.1	
-70	119	119	118	117	116	115	115	115	115	115	115	113	108	97.9	82.3	59.2	31.2	27.8	
-65	207	205	201	195	189	182	176	170	166	162	159	155	146	132	111	85.1	49.6	28.2	
-60	292	286	277	266	254	241	230	220	212	205	198	187	169	142	110	70.7	31.9	27.9	
-55	481	471	454	432	406	378	350	325	304	286	271	253	227	192	150	105	54.0	28.5	
-50	659	637	606	567	524	481	440	404	374	348	323	290	245	192	136	79.7	31.1	27.5	
-45	999	975	934	879	812	740	669	602	544	494	449	399	337	263	189	123	56.0	27.7	
-40	1314	1267	1199	1113	1014	914	816	728	652	586	518	437	340	245	160	85.3	29.2	26.3	
-35	1909	1867	1796	1695	1567	1421	1266	1114	977	857	743	620	484	349	231	139	57.0	26.4	
-30	2461	2388	2279	2130	1947	1744	1532	1331	1155	993	825	639	462	306	185	91.3	27.4	25.2	
-25	3092	3050	2976	2865	2714	2520	2284	2018	1745	1479	1214	938	672	448	273	153	57.7	25.4	
-20	3681	3631	3548	3429	3257	3022	2722	2375	2014	1649	1273	910	601	366	206	94.4	26.1	24.6	
-15	3988	3963	3915	3841	3736	3587	3379	3096	2734	2303	1817	1316	875	539	309	165	58.0	24.6	
-10	4270	4244	4199	4136	4047	3919	3716	3400	2953	2383	1753	1169	718	413	222	97.9	24.9	24.0	
-5	4329	4314	4284	4236	4169	4079	3943	3728	3388	2883	2240	1565	996	588	327	169	57.3	23.6	
0	4373	4353	4317	4261	4189	4091	3937	3684	3260	2633	1906	1239	745	422	221	95.8	23.4	22.9	
5	4260	4243	4212	4160	4086	3985	3839	3618	3275	2777	2155	1509	963	572	319	165	55.1	22.0	
10	4128	4101	4050	3975	3868	3718	3500	3175	2731	2194	1617	1087	675	391	211	92.4	21.1	21.1	
15	3817	3789	3740	3660	3544	3382	3162	2871	2504	2084	1635	1188	798	497	287	153	51.6	19.9	
20	3476	3425	3341	3215	3038	2798	2493	2142	1782	1439	1110	800	536	330	187	84.3	18.9	19.3	
25	2956	2913	2837	2723	2567	2365	2117	1839	1554	1288	1042	803	583	393	242	135	47.5	18.1	
30	2390	2317	2205	2054	1865	1644	1412	1192	1000	838	683	535	392	263	159	76.7	17.4	17.8	
35	1876	1832	1757	1650	1515	1355	1182	1011	858	728	616	507	398	292	194	116	43.8	17.1	
40	1317	1265	1188	1091	979	860	745	642	554	481	416	348	275	200	131	67.7	17.3	17.4	
45	1002	973	926	862	786	701	617	538	469	411	362	316	266	210	152	97.9	41.0	17.7	
50	657	630	592	544	492	440	392	349	313	282	254	226	191	150	106	60.9	19.2	18.5	
55	473	460	440	413	381	346	314	284	258	235	216	198	176	149	116	81.6	39.6	20.1	
60	276	268	257	243	228	213	199	186	175	166	156	145	130	110	84.8	54.1	22.6	21.2	
65	191	188	183	176	168	160	152	145	138	133	128	122	114	103	86.7	66.6	38.6	23.6	
70	103	103	101	100	98.6	97.2	96.1	95.3	94.7	93.9	92.7	90.3	85.7	77.6	65.3	47.8	26.6	24.7	
75	70.0	70.0	69.8	69.5	69.2	69.0	69.0	69.3	69.8	70.4	70.9	70.8	69.7	66.6	60.5	51.5	36.5	27.0	
80	36.8	37.2	37.8	38.6	39.5	40.7	42.2	43.9	45.7	47.6	49.2	50.3	50.5	49.1	45.6	39.1	29.1	27.9	
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_b Range:-90 - 90DEG
H_b Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:23 October 2023

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:11.900m [K=1.0000]
Remarks: