

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity	341.0 cd per klm.
(Luminaire orientation as tested.)	0.0 degrees vertical
	-4.0 degrees horizontal

Beam Spread	At 10% of Imax	147.7V x 151.1H
	At 50% of Imax	108.6V x 113.8H
	At 90% of Imax	56.0V x 56.3H

Beam Flux	Total	930.9 lumens per klm.
	To 10% of Imax	915.9 lumens per klm.
	To 50% of Imax	732.9 lumens per klm.
	To 90% of Imax	235.9 lumens per klm.

Upward LOR	0.0 %
Downward LOR	93.1 %

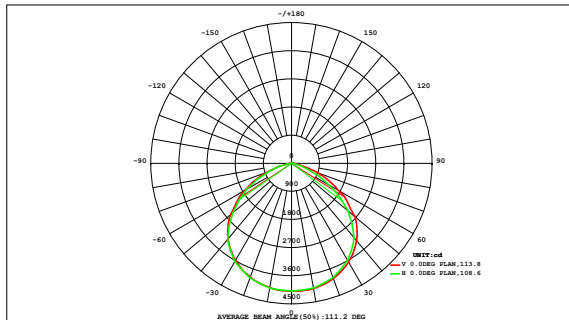
Luminaire Efficiency (Light Output Ratio)	93.2 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:01 July 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 98Helios200	TYPE: 98Helios200	WEIGHT: 1.412
SPEC.:	DIM.: 0.338 x 0.230 x 0.145	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	98Helios200	Imax (cd)	4092
NOMINAL POWER (W)	200	AVAILABILITY (%)	92.0
RATED VOLTAGE (V)	230	Avai. FLUX (lm)	11035
NOMINAL FLUX (lm)	12000	LOR (%)	93.2
LAMPS INSIDE	1	TOTAL FLUX (lm)	11187
TEST VOLTAGE (V)	230	θ @50% (H,V)	114,109DEG

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	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.00												
90	0.02	0.15	0.72	1.96	3.91	6.32	8.70	10.4	11.3	11.2	10.3	8.52	6.10	3.81	1.89	0.65	0.14	0.02	86.2	52.2											
80	0.03	0.39	2.37	6.69	13.3	21.0	28.4	33.4	35.9	35.8	33.2	27.9	20.4	12.9	6.51	2.21	0.36	0.02	281	266											
70	0.03	0.93	5.37	14.2	26.3	39.8	51.1	58.7	62.5	62.4	58.2	50.4	38.7	25.4	13.8	5.13	0.90	0.03	514	508											
60	0.05	1.71	8.86	22.2	39.1	57.1	70.9	80.7	85.6	85.3	79.8	69.7	55.5	37.9	21.4	8.63	1.66	0.05	726	722											
50	0.07	2.54	12.3	29.5	50.4	70.8	87.1	98.5	104	104	97.6	85.8	69.3	49.0	28.4	11.9	2.46	0.07	904	901											
40	0.10	3.26	14.8	33.9	57.4	78.7	96.1	108	114	114	107	94.7	77.1	55.6	33.0	14.3	3.16	0.10	1006	1004											
30	0.12	3.79	16.4	37.0	61.9	83.8	102	115	121	120	113	100	82.0	59.9	35.8	16.0	3.64	0.13	1072	1070											
-30	0.13	3.92	17.2	38.7	63.8	86.1	105	117	124	123	116	103	84.3	62.1	37.2	16.9	3.85	0.12	1103	1101											
	0.13	3.91	17.1	38.5	63.6	86.0	104	117	124	123	116	103	84.3	62.0	37.1	16.8	3.82	0.12	1101	1099											
	0.11	3.65	16.1	36.5	61.4	83.4	102	114	121	120	113	100	81.8	59.6	35.5	15.8	3.57	0.12	1068	1066											
	0.08	3.12	14.3	33.0	56.4	77.7	95.3	108	114	113	107	94.0	76.3	54.7	32.3	14.0	3.05	0.10	996	994											
	0.05	2.33	11.7	28.0	48.5	68.8	85.0	96.5	102	102	95.6	83.9	67.5	47.3	27.3	11.3	2.33	0.06	881	878											
-40	0.04	1.53	8.24	20.9	37.5	55.2	69.2	79.1	84.0	83.7	78.3	68.2	54.0	36.6	20.2	8.00	1.51	0.04	706	702											
-50	0.03	0.72	4.43	12.3	23.2	35.8	46.6	53.9	57.5	57.4	53.5	46.1	35.1	22.9	12.2	4.39	0.74	0.03	467	460											
-60	0.02	0.25	1.63	5.08	10.2	16.7	23.0	27.2	29.2	29.0	26.8	22.5	16.1	10.1	4.92	1.61	0.24	0.02	225	206											
-70	0.01	0.07	0.30	0.96	2.15	3.77	5.43	6.89	7.35	7.19	6.47	4.92	3.34	1.90	0.88	0.28	0.07	0.01	52.0	6.38											
-80	0.00	0.01	0.02	0.02	0.04	0.05	0.06	0.07	0.08	0.08	0.08	0.07	0.05	0.04	0.03	0.02	0.01	0.00	0.74	0.00											
-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)																20	30	40	50	60	70	80	90
Φ t	1.01	32.3	152	359	619	871	1079	1225	1297	1293	1213	1063	852	602	349	148	31.5	1.04	11187	---											
Φ a	0.00	18.5	141	349	609	863	1072	1217	1289	1285	1206	1056	843	592	339	138	17.5	0.00	---	11035											

one-half-peak spread: U:53.6,D:55.5 , L:53.6,R:60.7

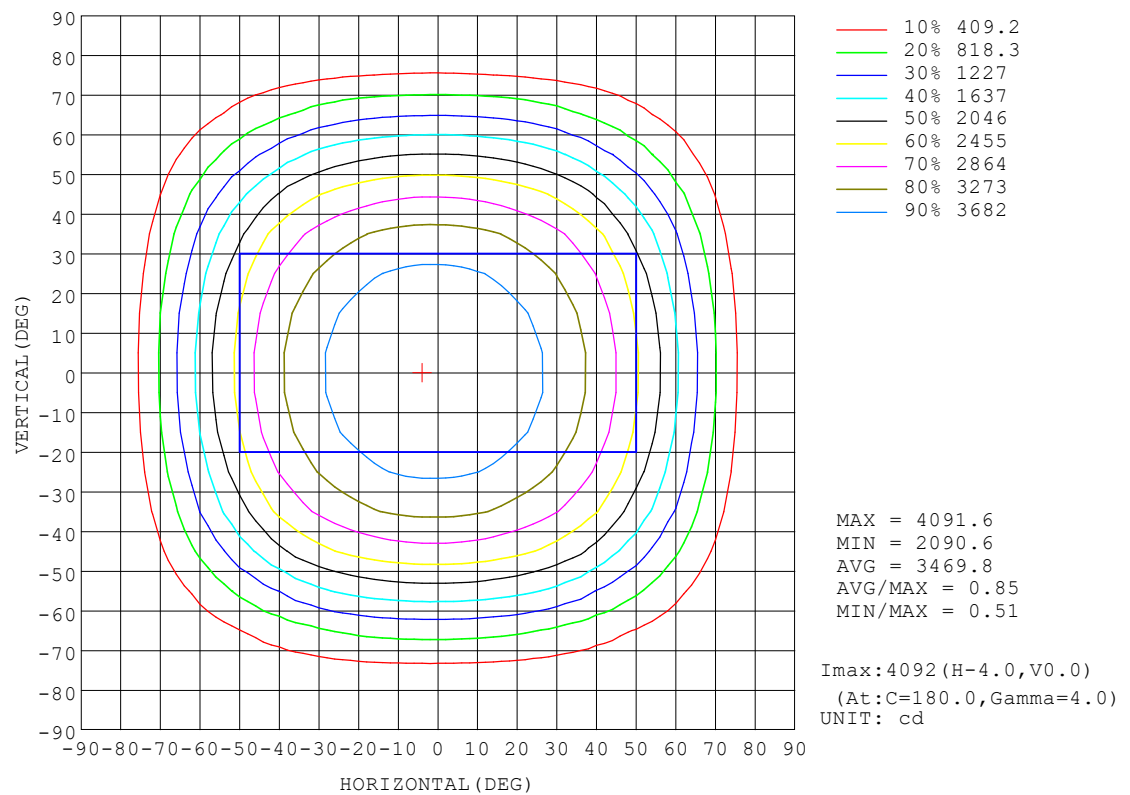
NEMA Beam Type: Type 7

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:01 July 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: 98Helios200	TYPE: 98Helios200	WEIGHT: 1.412
SPEC.:	DIM.: 0.338 x 0.230 x 0.145	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

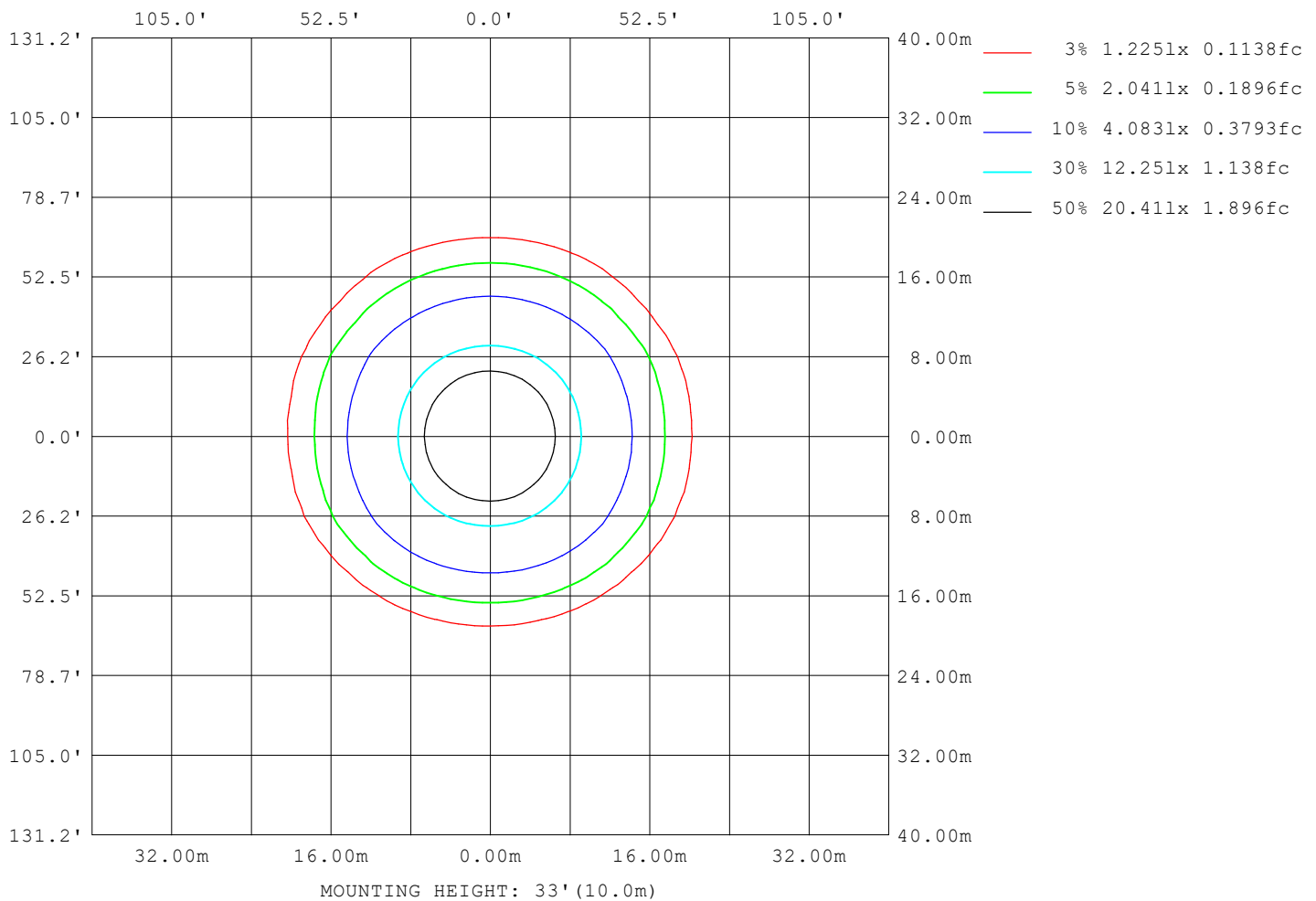


H(β) Range:-90 - 90DEG
 H(β) Interval: 2.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:
 Test Date:01 July 2022

V(B) Range:-80 - 80DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
 Humidity:65.0%
 Test Distance:6.265m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

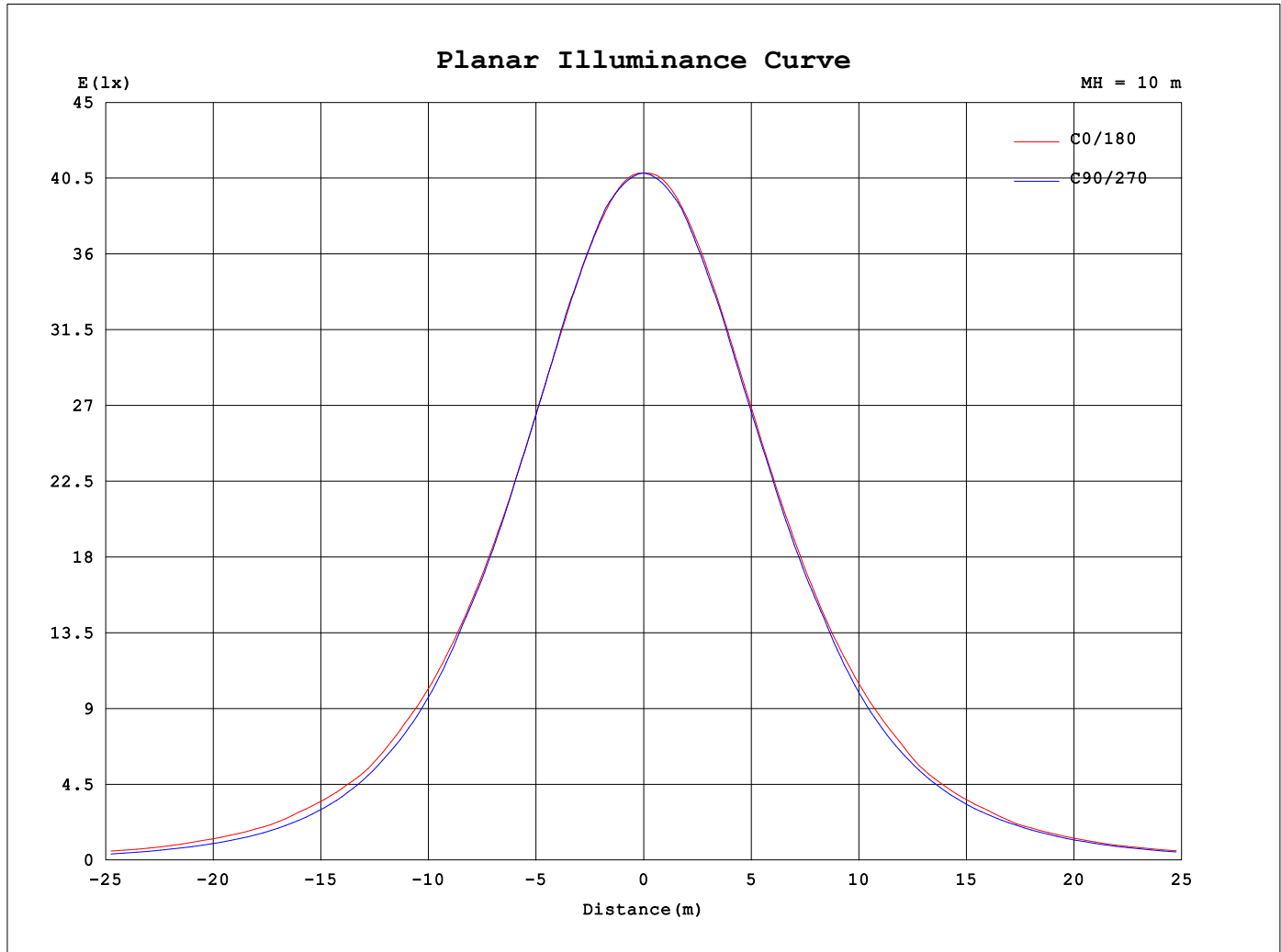
NAME: 98Helios200	TYPE: 98Helios200	WEIGHT: 1.412
SPEC.:	DIM.: 0.338 x 0.230 x 0.145	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:01 July 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

Planar Illuminance Curve

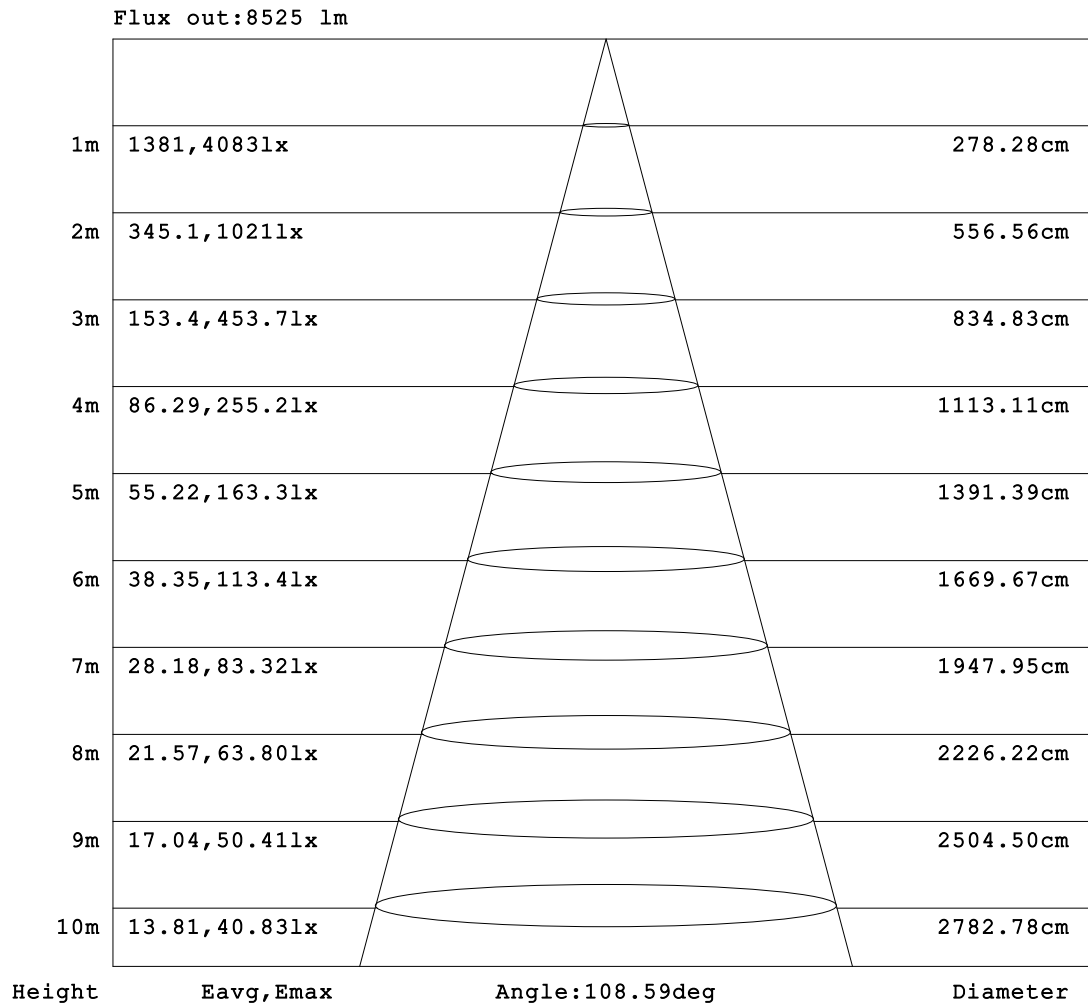


H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:01 July 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

AAI Figure

NAME: 98Helios200	TYPE: 98Helios200	WEIGHT: 1.412
SPEC.:	DIM.: 0.338 x 0.230 x 0.145	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:



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

H(β) Range:-90 - 90DEG
H(β) Interval: 2.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:
Test Date:01 July 2022

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456
Humidity:65.0%
Test Distance:6.265m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 98Helios200	TYPE: 98Helios200	WEIGHT: 1.412
SPEC.:	DIM.: 0.338 x 0.230 x 0.145	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

Table--1

UNIT: cd

H(°) \ V(°)	-90	-86	-80	-76	-70	-66	-60	-56	-50	-46	-40	-36	-30	-26	-20	-16	-10	-6	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	3.45	3.50	3.88	4.93	7.56	9.96	14.4	17.8	23.2	26.7	31.9	35.2	39.9	42.8	46.4	48.4	50.4	51.3	51.8
-75	3.54	3.63	6.11	9.67	18.8	29.8	54.2	74.5	107	131	164	188	220	243	270	280	290	292	292
-70	3.64	3.75	8.33	14.4	30.1	49.7	94.0	131	192	234	295	341	400	443	493	512	529	532	533
-65	3.76	4.15	12.5	25.6	71.6	121	212	282	404	471	584	670	774	836	900	932	960	970	974
-60	3.88	4.54	16.8	36.8	113	192	331	432	616	707	873	998	1148	1229	1308	1351	1391	1409	1415
-55	4.02	5.03	22.7	65.2	188	307	511	660	896	1032	1237	1405	1570	1657	1756	1805	1856	1877	1884
-50	4.15	5.52	28.7	93.7	264	422	692	888	1175	1357	1600	1812	1992	2085	2204	2259	2322	2345	2353
-45	4.29	6.12	42.5	140	362	554	886	1123	1465	1654	1962	2155	2347	2451	2579	2641	2707	2733	2740
-40	4.43	6.72	56.4	186	460	686	1080	1358	1756	1950	2324	2497	2703	2817	2954	3023	3092	3120	3127
-35	4.56	7.19	71.5	218	539	789	1238	1501	1925	2169	2532	2704	2922	3041	3179	3252	3324	3353	3361
-30	4.70	7.66	86.6	251	619	893	1395	1644	2094	2387	2741	2912	3141	3265	3404	3481	3556	3586	3595
-25	4.80	8.20	102	284	689	994	1492	1799	2217	2541	2883	3060	3290	3415	3556	3631	3708	3737	3745
-20	4.91	8.73	118	317	759	1094	1588	1955	2340	2696	3025	3207	3439	3565	3709	3782	3859	3887	3895
-15	4.99	8.99	129	342	797	1139	1644	2018	2450	2775	3105	3290	3520	3646	3791	3864	3940	3968	3975
-10	5.08	9.25	139	366	835	1183	1699	2081	2559	2854	3186	3372	3602	3728	3874	3947	4021	4049	4056
-5	5.14	9.96	153	375	851	1202	1721	2107	2602	2881	3211	3398	3627	3751	3897	3970	4043	4069	4069
0	5.20	10.7	166	384	867	1221	1743	2133	2646	2908	3237	3424	3651	3774	3921	3993	4065	4089	4083
5	5.27	10.8	154	379	857	1210	1728	2115	2619	2888	3215	3402	3631	3752	3899	3972	4043	4069	4067
10	5.34	10.9	142	373	848	1198	1713	2098	2591	2868	3194	3381	3610	3731	3876	3950	4022	4049	4052
15	5.38	10.6	136	360	820	1159	1665	2041	2495	2797	3123	3307	3532	3654	3800	3873	3943	3971	3977
20	5.42	10.3	131	347	791	1120	1618	1985	2398	2726	3052	3234	3454	3578	3724	3795	3865	3892	3902
25	5.48	9.22	117	312	721	1036	1529	1855	2272	2603	2923	3100	3321	3443	3584	3656	3727	3755	3764
30	5.53	8.13	103	277	651	952	1440	1725	2145	2480	2795	2966	3188	3307	3445	3518	3589	3617	3627
35	5.54	7.80	85.4	242	573	857	1289	1574	1985	2249	2600	2768	2983	3098	3233	3303	3373	3401	3409
40	5.56	7.47	67.9	207	495	763	1137	1423	1825	2019	2404	2570	2778	2890	3021	3089	3157	3185	3192
45	5.57	7.10	52.7	163	406	630	948	1195	1545	1754	2065	2246	2439	2544	2665	2726	2791	2816	2822
50	5.58	6.72	37.5	119	317	497	759	967	1264	1490	1726	1922	2100	2198	2309	2363	2426	2447	2452
55	5.57	6.43	29.5	86.4	241	379	598	766	1010	1195	1413	1558	1740	1827	1927	1976	2030	2049	2058
60	5.57	6.14	21.4	53.3	164	262	437	564	755	900	1100	1193	1381	1457	1545	1588	1635	1652	1663
65	5.56	5.87	16.9	37.0	108	173	295	382	522	624	769	848	985	1043	1125	1159	1195	1209	1217
70	5.55	5.60	12.5	20.6	51.7	85.2	153	200	289	349	438	503	590	628	705	730	755	766	771
75	5.59	5.53	9.80	15.0	33.1	52.0	90.0	117	166	199	249	285	333	354	396	410	425	431	434
80	5.63	5.46	7.10	9.34	14.4	18.9	27.2	33.3	43.0	49.7	59.8	66.2	75.1	80.4	87.2	90.8	94.4	95.8	96.5
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: 2.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:01 July 2022

V(B) Range:-80 - 80DEG

V(B) Interval: 5.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456

Humidity:65.0%

Test Distance:6.265m [K=1.0000]

Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: 98Helios200	TYPE: 98Helios200	WEIGHT: 1.412
SPEC.:	DIM.: 0.338 x 0.230 x 0.145	SERIAL No.: 0
MFR.: Elmark Industries JSC	SUR.: rectangular	Shielding Angle:

Table--2

UNIT: cd

H(°) \ V(°)	4	10	14	20	24	30	34	40	44	50	54	60	64	70	74	80	84	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	51.5	50.4	49.1	46.4	44.1	39.9	36.8	31.8	28.3	23.0	19.4	14.2	11.1	7.41	5.69	4.24	4.03	3.40	
-75	290	281	274	257	235	205	187	152	131	101	79.2	51.6	36.7	18.8	12.0	6.23	4.40	3.42	
-70	528	512	499	467	426	371	338	272	233	178	139	89.0	62.2	30.3	18.3	8.22	4.77	3.43	
-65	968	948	926	881	832	753	678	564	504	393	316	208	146	71.3	38.3	12.3	5.76	3.48	
-60	1409	1384	1353	1296	1238	1134	1017	857	775	608	492	326	230	112	58.3	16.3	6.75	3.53	
-55	1878	1847	1809	1738	1672	1546	1428	1215	1097	880	721	504	370	189	103	22.8	8.41	3.60	
-50	2348	2311	2265	2181	2106	1958	1839	1573	1420	1152	949	682	510	266	148	29.3	10.1	3.68	
-45	2733	2690	2642	2548	2464	2307	2177	1922	1705	1431	1186	865	652	359	205	47.7	12.0	3.77	
-40	3117	3070	3019	2916	2823	2656	2514	2271	1991	1710	1422	1048	794	452	261	66.2	13.8	3.85	
-35	3353	3304	3252	3142	3050	2875	2729	2472	2234	1878	1616	1207	923	531	311	77.1	16.1	3.94	
-30	3588	3537	3486	3369	3277	3094	2944	2673	2478	2047	1810	1366	1051	611	362	88.0	18.4	4.03	
-25	3735	3686	3634	3517	3422	3238	3088	2814	2607	2163	1921	1456	1126	670	407	100	20.0	4.13	
-20	3883	3834	3783	3664	3567	3381	3231	2955	2737	2279	2032	1545	1201	730	453	113	21.7	4.22	
-15	3964	3912	3862	3745	3648	3460	3310	3035	2814	2374	2097	1602	1266	775	475	133	23.4	4.29	
-10	4045	3991	3941	3826	3729	3539	3389	3114	2891	2469	2162	1660	1330	821	496	153	25.1	4.36	
-5	4064	4014	3963	3850	3753	3563	3413	3140	2917	2503	2186	1678	1360	832	509	149	25.6	4.43	
0	4084	4036	3985	3873	3776	3587	3437	3165	2943	2538	2209	1697	1389	843	521	145	26.2	4.50	
5	4063	4013	3962	3848	3750	3562	3414	3142	2919	2510	2190	1683	1369	836	512	150	26.0	4.57	
10	4042	3989	3939	3823	3724	3537	3391	3118	2896	2481	2171	1668	1350	829	502	156	25.9	4.64	
15	3965	3912	3862	3747	3650	3464	3318	3047	2826	2394	2113	1619	1286	798	482	139	24.4	4.73	
20	3889	3835	3785	3671	3576	3391	3245	2976	2756	2306	2055	1571	1222	767	463	122	22.9	4.82	
25	3752	3701	3650	3537	3443	3261	3115	2847	2639	2198	1957	1487	1154	701	420	110	21.4	4.89	
30	3615	3566	3515	3403	3310	3132	2985	2718	2521	2091	1859	1404	1086	635	378	98.5	20.0	4.95	
35	3398	3352	3302	3194	3102	2930	2787	2529	2298	1933	1673	1255	964	558	330	83.7	18.1	5.04	
40	3180	3137	3089	2985	2894	2729	2589	2341	2075	1776	1488	1105	842	481	282	68.9	16.2	5.12	
45	2813	2772	2726	2631	2547	2392	2261	2001	1799	1503	1264	922	698	396	228	52.1	14.0	5.18	
50	2445	2407	2363	2277	2201	2054	1933	1660	1522	1230	1040	738	554	311	174	35.3	11.8	5.23	
55	2051	2017	1980	1904	1837	1704	1576	1364	1228	985	821	581	425	230	126	27.4	10.0	5.30	
60	1657	1627	1598	1531	1473	1354	1218	1068	934	739	602	424	297	150	77.6	19.6	8.26	5.36	
65	1212	1189	1165	1111	1059	965	866	747	649	509	413	283	197	98.2	51.3	15.4	7.28	5.43	
70	767	750	732	692	645	576	513	426	363	280	225	141	96.9	46.8	24.9	11.1	6.29	5.49	
75	432	422	412	389	363	325	290	242	207	160	130	83.4	58.1	29.7	17.2	8.72	5.83	5.54	
80	96.1	93.9	91.5	86.2	81.7	73.7	67.8	58.2	51.5	41.2	34.5	25.3	19.4	12.7	9.38	6.30	5.37	5.60	
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(β) Range:-90 - 90DEG

H(β) Interval: 2.0DEG

Test Speed: HIGH

Temperature:25.3°C

Operators:

Test Date:01 July 2022

V(B) Range:-80 - 80DEG

V(B) Interval: 5.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.456

Humidity:65.0%

Test Distance:6.265m [K=1.0000]

Remarks: