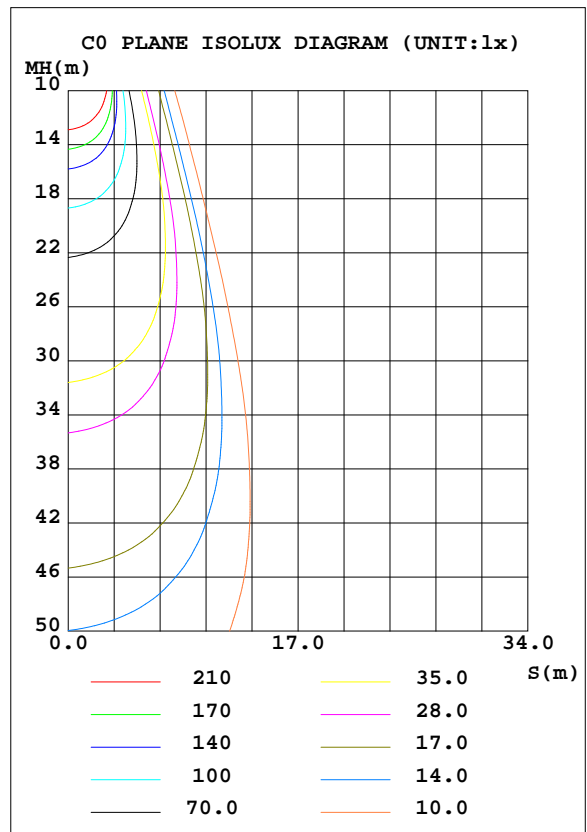
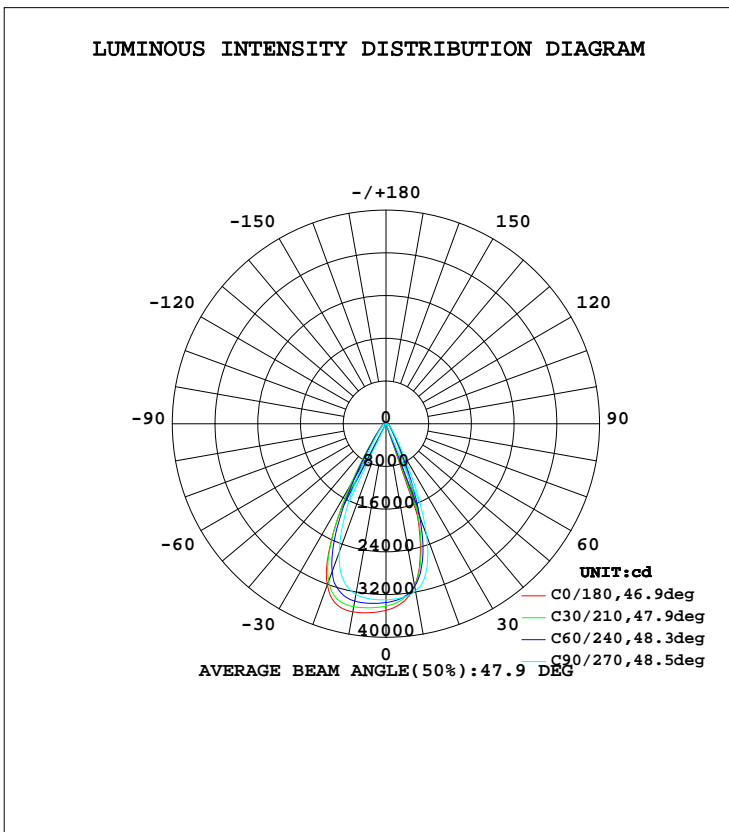


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.62 lm/W			
MODEL		I _{max} (cd)	35765	S/MH(C0/180)	0.81
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	0.75
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	24981	η UP, DN(C0-180)	0.6, 46.2
NOMINAL FLUX(lm)	79.3044	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.6, 52.7
LAMPS INSIDE	315	η up(%)	1.1	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230	η down(%)	98.9	CIBSE SHR MAX	0.75



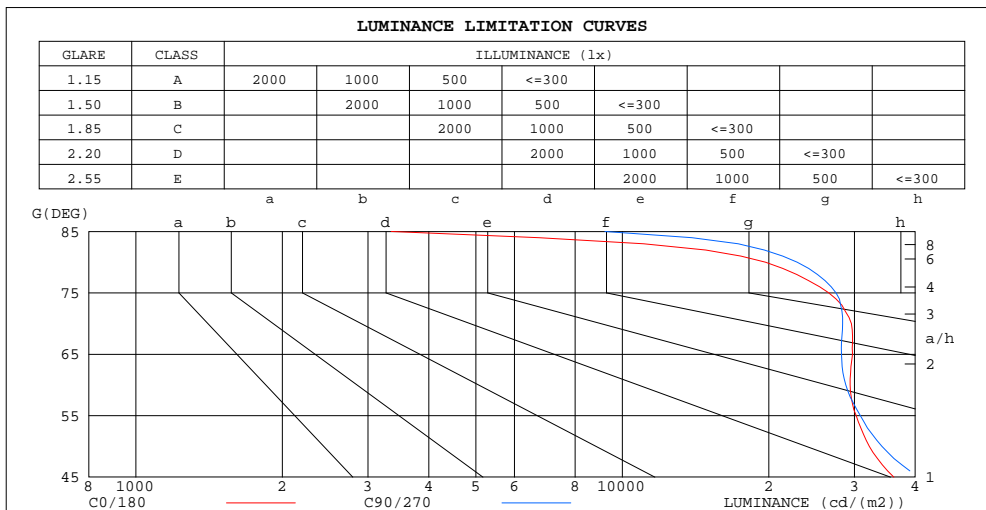
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	3080	3086	3178	3236	3576	3428	3245	3062	0- 10	3139	3139	12.6,12.6
20	1619	1750	2228	2754	3212	3065	2572	2080	10- 20	8144	11283	45.2,45.2
30	432.6	459.9	618.1	981.0	1309	1283	877.1	604.5	20- 30	7161	18443	73.8,73.8
40	183.4	187.8	220.5	283.1	341.9	326.7	259.6	211.2	30- 40	2807	21250	85.1,85.1
50	112.4	111.5	119.3	135.0	154.5	148.2	128.6	113.6	40- 50	1361	22612	90.5,90.5
60	79.83	76.79	78.20	82.78	94.39	89.44	80.74	74.63	50- 60	912.4	23524	94.2,94.2
70	54.91	52.46	52.69	53.82	63.13	58.52	53.39	50.34	60- 70	669.6	24194	96.8,96.8
80	18.57	18.62	21.57	24.32	30.44	28.40	23.93	19.73	70- 80	418.1	24612	98.5,98.5
90	0.2976	0.2859	0.2634	0.2380	0.7019	0.4852	0.3078	0.3239	80- 90	90.88	24703	98.9,98.9
100	0.4945	0.4752	0.4376	0.3941	0.5157	0.4994	0.5073	0.5404	90-100	4.197	24707	98.9,98.9
110	0.8144	0.7842	0.7026	0.6224	0.7754	0.7555	0.7880	0.8695	100-110	6.463	24714	98.9,98.9
120	1.596	1.545	1.283	1.071	1.189	1.185	1.319	1.602	110-120	9.988	24724	99,99
130	4.150	4.030	3.178	2.441	2.293	2.379	2.934	3.930	120-130	18.70	24742	99,99
140	8.842	8.590	7.156	5.732	5.378	5.566	6.707	8.453	130-140	38.01	24780	99.2,99.2
150	13.87	13.58	12.06	10.33	10.68	10.69	11.96	13.87	140-150	59.54	24840	99.4,99.4
160	17.72	17.66	16.50	14.86	16.44	16.09	16.90	18.37	150-160	66.62	24906	99.7,99.7
170	21.71	21.71	20.89	19.49	21.36	20.88	21.26	22.14	160-170	53.21	24960	99.9,99.9
180	24.00	23.71	23.47	23.12	23.98	23.72	23.44	23.13	170-180	21.26	24981	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3350	9206
80	19690	22880
75	26588	27500
70	29569	28372
65	29742	28225
60	29404	28802
55	30253	30849
50	32190	34187
45	36142	40602

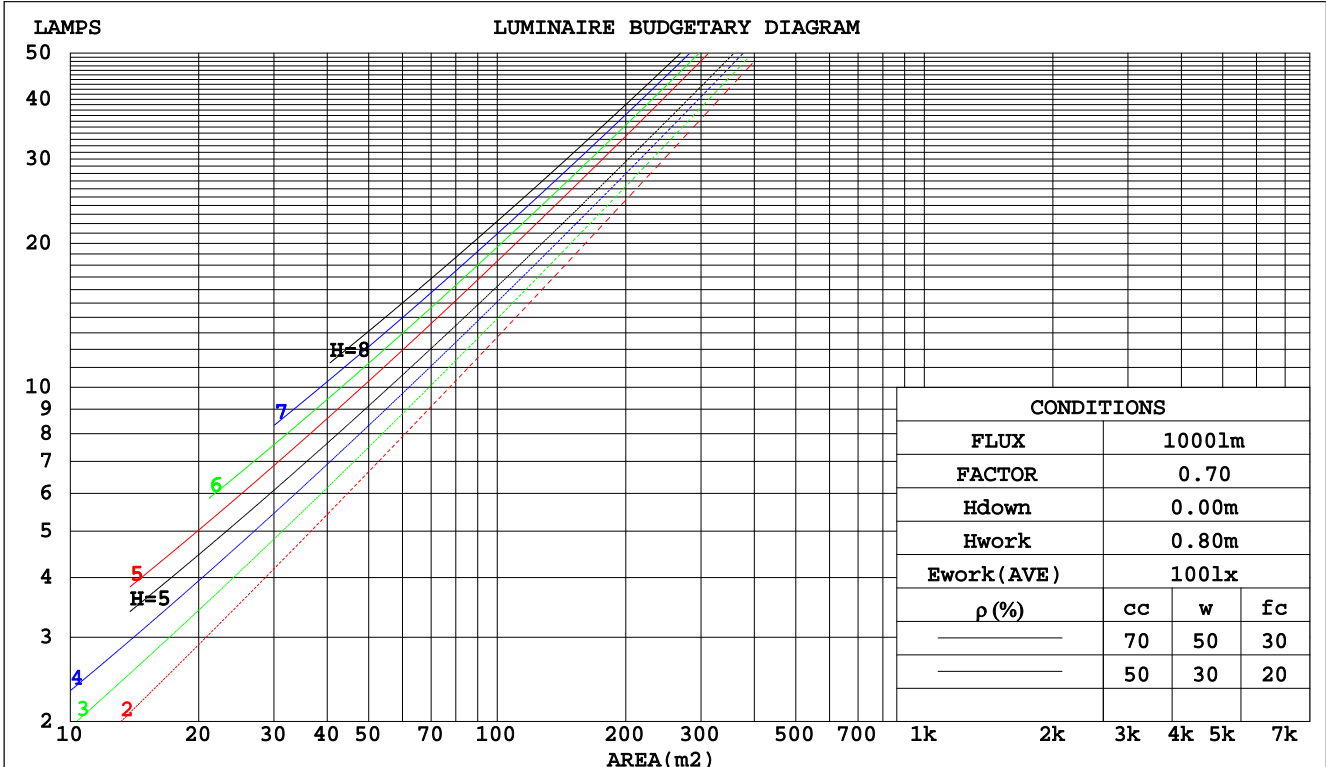
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
Humidity:65.0%
Test Distance:10.100m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.06	1.06	1.06	1.01	1.01	1.01	.99
1.0	1.10	1.07	1.05	1.07	1.05	1.03	1.03	1.01	.99	.99	.98	.96	.96	.94	.93	.91
2.0	1.02	.97	.94	.90	.96	.93	.96	.93	.90	.93	.91	.88	.90	.88	.86	.84
3.0	.95	.89	.85	.93	.88	.84	.90	.86	.83	.88	.84	.81	.85	.82	.80	.78
4.0	.88	.83	.78	.87	.82	.78	.85	.80	.77	.83	.79	.76	.81	.77	.75	.73
5.0	.83	.77	.73	.82	.76	.72	.80	.75	.71	.78	.74	.71	.76	.73	.70	.68
6.0	.78	.72	.68	.77	.72	.67	.76	.71	.67	.74	.70	.66	.73	.69	.66	.64
7.0	.74	.68	.63	.73	.67	.63	.72	.67	.63	.70	.66	.62	.69	.65	.62	.61
8.0	.70	.64	.60	.69	.64	.60	.68	.63	.59	.67	.62	.59	.66	.62	.59	.57
9.0	.66	.60	.57	.66	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.56	.54
10.0	.63	.57	.54	.63	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.52



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 10.100m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm									
NAME: SPS2004-HL12B-315DW-50-5					TYPE:			WEIGHT:	
SPEC.:					DIM.:			SERIAL No.:	
MFR.:					SUR.:D263mm			PROTECTION ANGLE:	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.193	.110	.035	.186	.106	.034	.173	.099	.032	.160	.093	.030	.149	.086	.028	
2.0	.182	.100	.031	.176	.097	.030	.165	.092	.028	.155	.087	.027	.145	.082	.026	
3.0	.171	.091	.027	.166	.089	.027	.156	.085	.026	.147	.081	.025	.139	.077	.024	
4.0	.161	.084	.025	.156	.082	.024	.148	.078	.023	.140	.075	.023	.133	.072	.022	
5.0	.152	.077	.022	.148	.076	.022	.140	.073	.022	.133	.070	.021	.127	.068	.020	
6.0	.143	.072	.021	.140	.071	.020	.133	.068	.020	.127	.066	.019	.122	.064	.019	
7.0	.136	.067	.019	.133	.066	.019	.127	.064	.018	.122	.062	.018	.116	.061	.018	
8.0	.129	.063	.018	.126	.062	.018	.121	.061	.017	.116	.059	.017	.112	.057	.017	
9.0	.123	.059	.017	.121	.059	.016	.116	.057	.016	.112	.056	.016	.107	.055	.016	
10.0	.117	.056	.016	.115	.056	.016	.111	.054	.015	.107	.053	.015	.103	.052	.015	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.199	.199	.199	.170	.170	.170	.116	.116	.116	.067	.067	.067	.021	.021	.021	
1.0	.181	.166	.152	.155	.142	.131	.106	.098	.091	.061	.057	.053	.020	.018	.017	
2.0	.166	.141	.120	.142	.121	.104	.098	.084	.072	.056	.049	.042	.018	.016	.014	
3.0	.154	.122	.097	.132	.105	.084	.091	.073	.059	.052	.043	.035	.017	.014	.011	
4.0	.144	.108	.080	.123	.093	.070	.085	.065	.049	.049	.038	.029	.016	.012	.010	
5.0	.135	.096	.068	.116	.083	.059	.080	.058	.042	.046	.034	.025	.015	.011	.008	
6.0	.127	.087	.058	.109	.075	.051	.075	.053	.036	.044	.031	.021	.014	.010	.007	
7.0	.120	.079	.051	.104	.069	.044	.072	.048	.031	.042	.028	.019	.013	.009	.006	
8.0	.114	.073	.045	.098	.063	.039	.068	.045	.028	.040	.026	.016	.013	.009	.005	
9.0	.109	.068	.040	.094	.059	.035	.065	.041	.025	.038	.024	.015	.012	.008	.005	
10.0	.104	.063	.036	.090	.055	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm										
NAME: SPS2004-HL12B-315DW-50-5					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:D263mm			PROTECTION ANGLE:		
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	19.9	20.8	20.1	21.0	21.2	20.1	21.1	20.4	21.3	21.4
3H	21.4	22.3	21.7	22.5	22.7	21.5	22.4	21.8	22.6	22.8
4H	22.0	22.9	22.3	23.1	23.4	22.1	22.9	22.4	23.2	23.4
6H	22.4	23.2	22.7	23.4	23.7	22.5	23.3	22.8	23.6	23.8
8H	22.4	23.2	22.7	23.5	23.7	22.6	23.4	22.9	23.6	23.9
12H	22.4	23.1	22.7	23.4	23.7	22.6	23.3	22.9	23.6	23.9
4H 2H	20.4	21.2	20.7	21.5	21.7	20.6	21.5	20.9	21.7	21.9
3H	22.2	22.9	22.5	23.2	23.5	22.2	22.9	22.6	23.2	23.5
4H	22.9	23.6	23.3	23.9	24.2	22.9	23.6	23.3	23.9	24.3
6H	23.3	23.9	23.7	24.3	24.7	23.4	24.0	23.8	24.4	24.8
8H	23.4	24.0	23.8	24.3	24.7	23.6	24.1	24.0	24.5	24.9
12H	23.4	23.9	23.8	24.3	24.7	23.6	24.1	24.0	24.5	24.9
8H 4H	23.1	23.7	23.6	24.1	24.5	23.2	23.7	23.6	24.1	24.5
6H	23.7	24.1	24.1	24.5	25.0	23.8	24.2	24.2	24.6	25.1
8H	23.8	24.2	24.2	24.6	25.1	23.9	24.3	24.4	24.7	25.2
12H	23.7	24.1	24.2	24.5	25.0	23.9	24.3	24.4	24.7	25.2
12H 4H	23.1	23.6	23.6	24.0	24.4	23.2	23.7	23.6	24.1	24.5
6H	23.7	24.1	24.1	24.5	25.0	23.8	24.2	24.2	24.6	25.1
8H	23.8	24.1	24.3	24.6	25.1	23.9	24.3	24.4	24.7	25.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.3				
1.5H	+ 0.2 / - 0.2					+ 0.5 / - 0.2				
2.0H	+ 0.3 / - 0.3					+ 0.4 / - 0.3				

CIE Pub.117 Corrected 24981 lm Total Lamp Luminous Flux.(8log(F/F0) = 11.2)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:

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	82	75	71	82	75	71	81	75	71	67
0.80	90	83	79	89	83	79	88	82	78	74
1.00	95	89	84	94	88	84	92	88	83	79
1.25	100	93	89	98	93	89	96	91	88	83
1.50	103	97	93	101	96	92	99	94	91	86
2.00	106	101	97	104	100	96	101	98	95	89
2.50	108	103	100	106	102	99	103	100	97	90
3.00	110	106	103	108	104	101	104	101	99	92
4.00	112	109	106	110	107	105	106	104	102	94
5.00	114	111	109	111	109	107	107	105	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

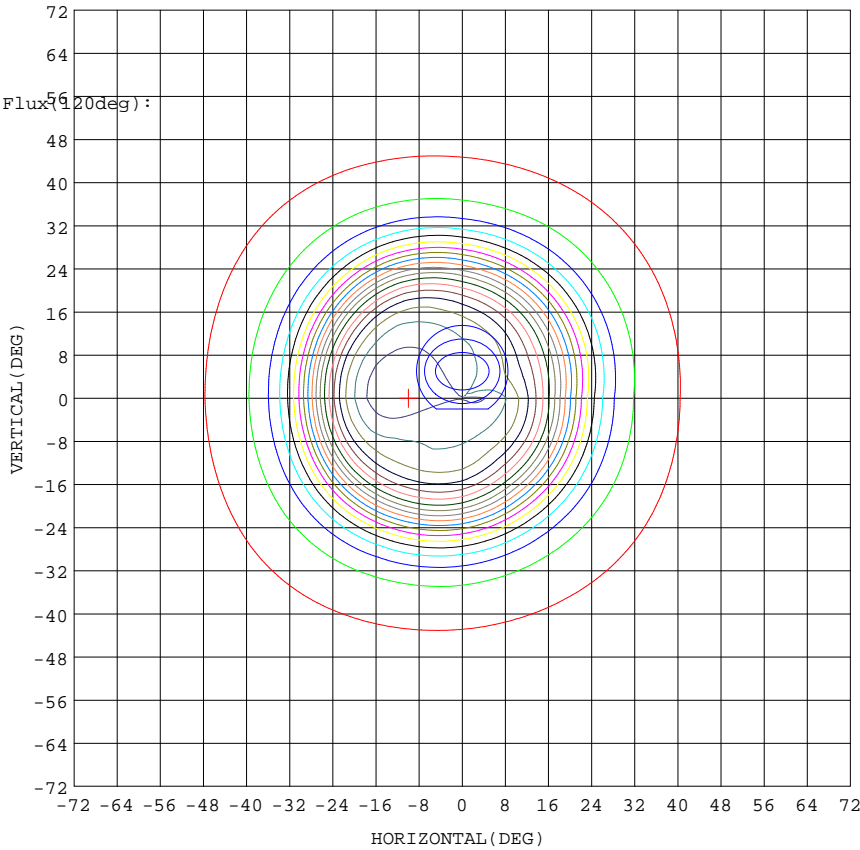
Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:

Conical surface Flux(90deg):

22016 lm
%lum = 88.1%
%lamp = 88.1%

Conical surface Flux(20deg):

23524 lm
%lum = 94.2%
%lamp = 94.2%



- 1. AVG=32917, MIN=31409
- 2. AVG=32991, MIN=30722
- 3. AVG=32892, MIN=30036

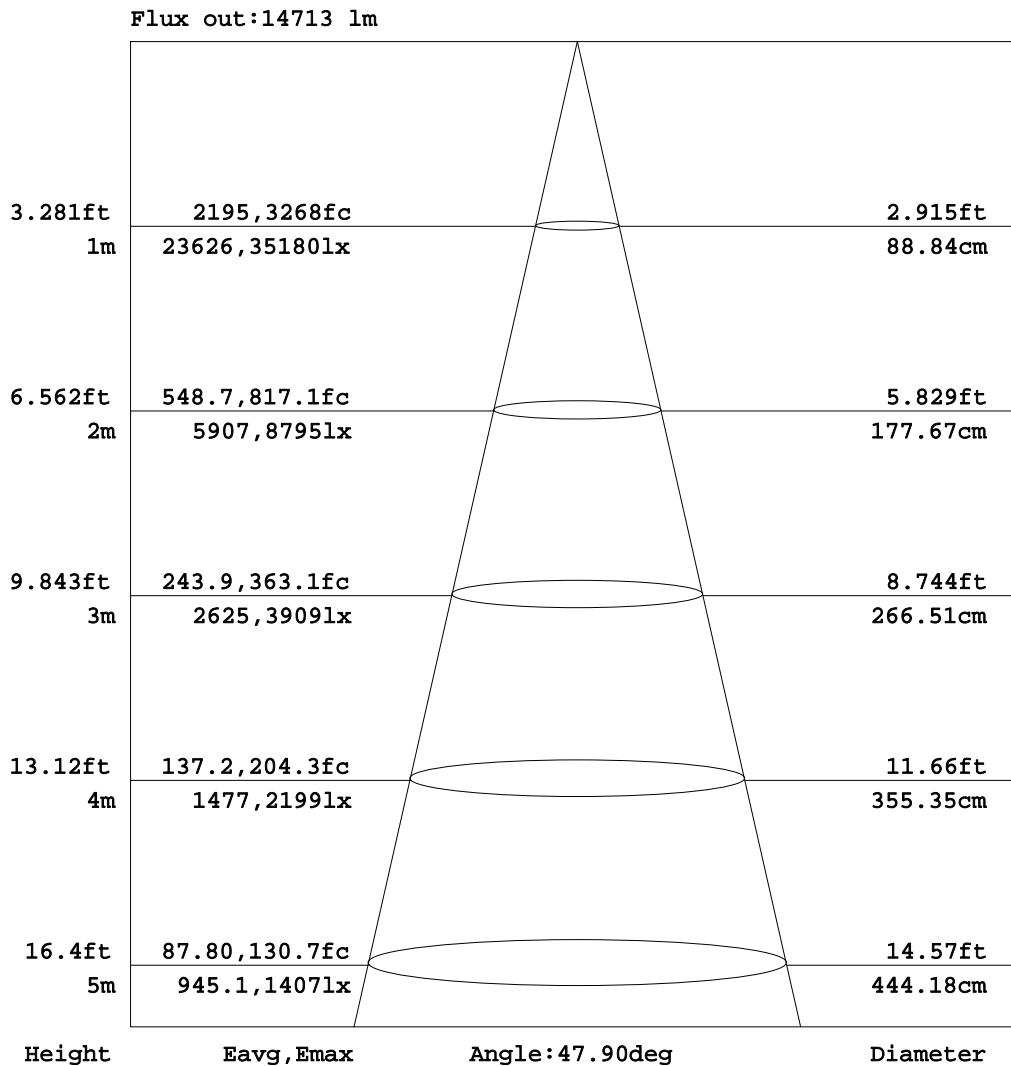
Imax: 35765 (H=-10.0, V0.0)
(At: C=180.0, Gamma=10.0)
UNIT: cd

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2016-07-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.287
Humidity: 65.0%
Test Distance: 10.100m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:



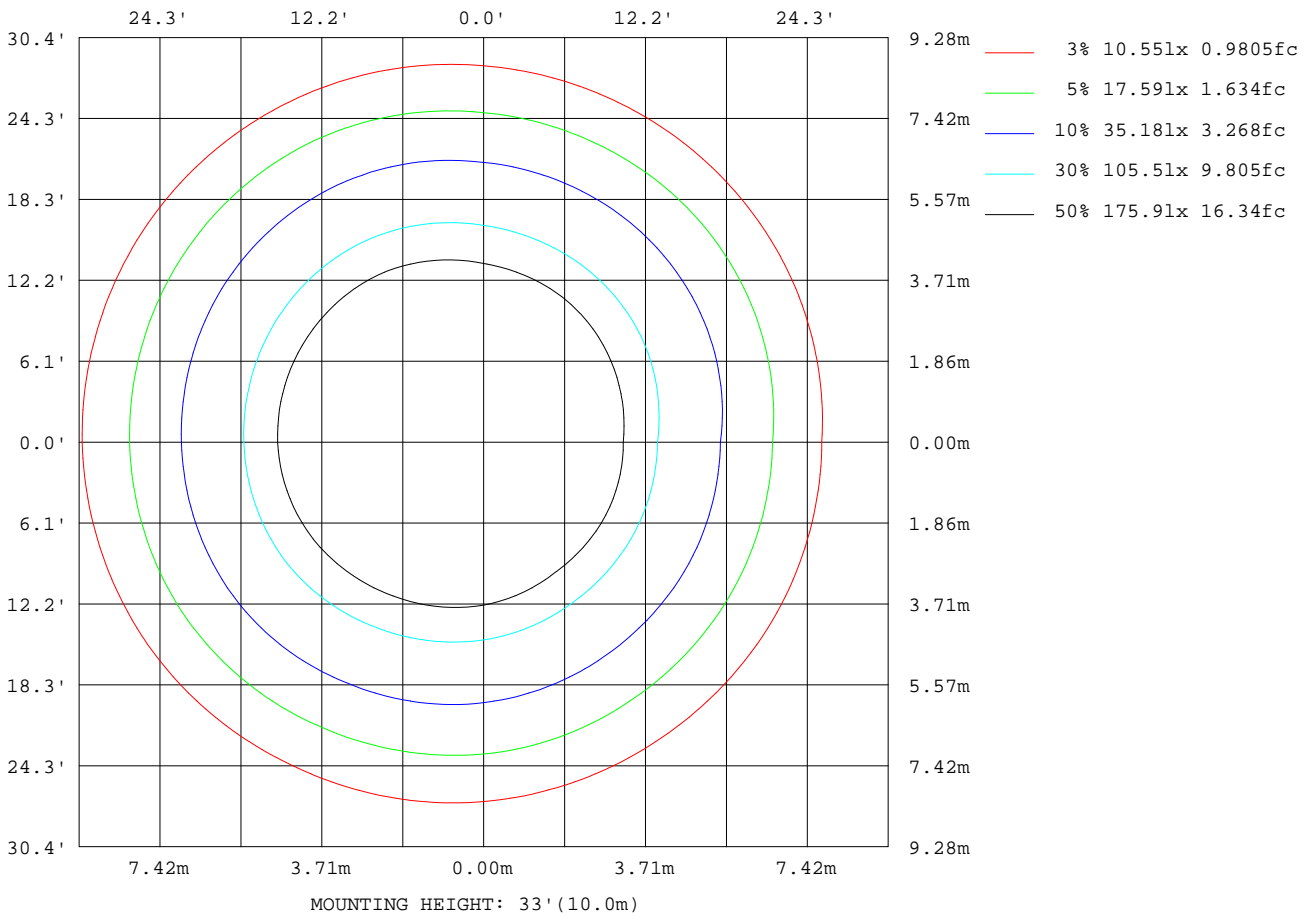
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

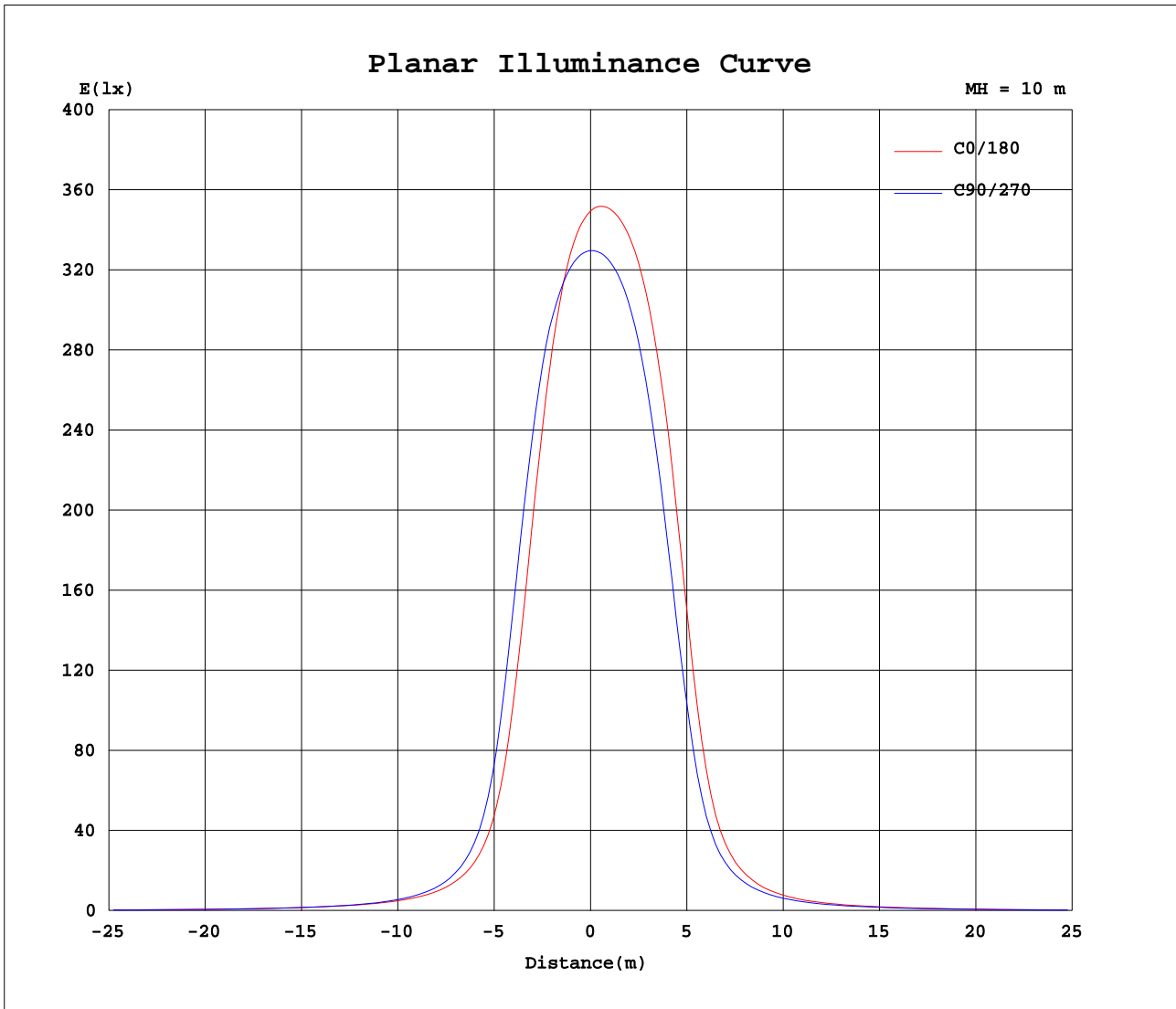
Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 10.100m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity: 65.0%
 Test Distance: 10.100m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:

Table--1

UNIT: x10cd

C(DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	3494	3466	3440	3415	3391	3369	3349	3330	3312	3296	3282	3268	3255	3229	3214	3222	3311	3410	3494
5	3372	3350	3331	3315	3301	3290	3282	3278	3275	3274	3271	3268	3264	3244	3235	3250	3350	3460	3552
10	3080	3084	3086	3089	3086	3087	3093	3118	3147	3178	3200	3218	3234	3232	3239	3266	3372	3484	3576
15	2496	2507	2523	2545	2568	2600	2645	2722	2808	2893	2957	3014	3066	3106	3151	3206	3319	3429	3516
20	1619	1627	1648	1681	1722	1778	1854	1967	2095	2228	2346	2462	2577	2695	2812	2924	3041	3141	3212
25	828	827	837	857	883	923	979	1064	1165	1280	1404	1538	1682	1846	2009	2160	2282	2378	2444
30	433	431	434	441	452	468	492	525	567	618	678	747	827	929	1033	1132	1206	1265	1309
35	266	264	265	268	272	280	290	306	325	346	369	395	425	464	505	542	570	591	607
40	183	183	183	185	186	189	194	201	210	220	232	244	258	274	292	308	322	334	342
45	139	138	138	139	139	140	142	146	150	156	162	168	175	183	192	200	207	213	218
50	112	112	112	112	111	112	112	114	116	119	122	125	128	133	137	142	147	151	155
55	94.2	93.6	93.2	92.8	92.4	92.2	92.3	93.3	94.6	96.1	97.5	99.1	101	103	105	108	112	115	118
60	79.8	78.6	77.7	77.1	76.8	76.8	76.9	77.2	77.6	78.2	79.1	80.2	81.3	82.2	83.4	84.9	88.4	91.7	94.4
65	68.3	66.7	65.6	64.8	64.7	64.8	65.0	64.8	64.7	64.8	65.3	66.0	66.8	66.9	67.2	68.1	71.4	74.7	77.3
70	54.9	54.0	53.3	52.7	52.5	52.4	52.4	52.5	52.5	52.7	52.9	53.3	53.6	53.7	54.0	54.8	57.8	60.8	63.1
75	37.4	37.2	37.1	36.9	36.6	36.4	36.3	37.0	37.8	38.6	38.9	39.1	39.3	39.8	40.6	41.7	44.1	46.3	48.1
80	18.6	18.7	18.7	18.8	18.6	18.6	18.8	19.6	20.6	21.6	22.1	22.6	23.1	23.9	24.8	25.8	27.5	29.2	30.4
85	1.59	1.57	1.59	1.65	1.65	1.74	1.99	2.66	3.47	4.36	5.08	5.83	6.64	7.62	8.66	9.74	11.0	12.1	12.9
90	0.30	0.30	0.30	0.29	0.29	0.28	0.28	0.27	0.27	0.26	0.26	0.25	0.25	0.24	0.24	0.28	0.42	0.58	0.70
95	0.39	0.39	0.39	0.38	0.38	0.37	0.36	0.36	0.35	0.34	0.34	0.33	0.32	0.31	0.31	0.31	0.34	0.38	0.41
100	0.49	0.49	0.49	0.49	0.48	0.47	0.46	0.45	0.45	0.44	0.43	0.42	0.41	0.40	0.39	0.39	0.43	0.48	0.52
105	0.63	0.63	0.63	0.62	0.61	0.60	0.59	0.58	0.57	0.55	0.54	0.53	0.52	0.50	0.49	0.49	0.54	0.59	0.64
110	0.81	0.82	0.81	0.80	0.79	0.78	0.76	0.74	0.72	0.70	0.68	0.67	0.65	0.63	0.62	0.62	0.67	0.72	0.78
115	1.10	1.10	1.09	1.08	1.07	1.05	1.02	0.99	0.95	0.92	0.89	0.86	0.84	0.81	0.78	0.78	0.83	0.89	0.95
120	1.60	1.61	1.61	1.59	1.56	1.53	1.48	1.41	1.35	1.28	1.23	1.18	1.14	1.09	1.05	1.03	1.08	1.13	1.19
125	2.55	2.58	2.58	2.56	2.51	2.44	2.35	2.23	2.10	1.97	1.86	1.77	1.69	1.60	1.52	1.48	1.50	1.54	1.59
130	4.15	4.19	4.19	4.16	4.08	3.97	3.83	3.62	3.40	3.18	2.99	2.83	2.67	2.51	2.37	2.27	2.25	2.26	2.29
135	6.32	6.36	6.35	6.30	6.20	6.06	5.86	5.58	5.27	4.95	4.69	4.44	4.20	3.95	3.74	3.57	3.51	3.50	3.52
140	8.84	8.88	8.87	8.80	8.68	8.50	8.26	7.92	7.54	7.16	6.83	6.51	6.21	5.88	5.58	5.36	5.31	5.33	5.38
145	11.5	11.5	11.5	11.4	11.3	11.1	10.8	10.4	10.0	9.63	9.25	8.89	8.53	8.14	7.80	7.55	7.58	7.69	7.83
150	13.9	13.9	13.9	13.8	13.7	13.5	13.2	12.9	12.5	12.1	11.7	11.3	10.9	10.5	10.1	9.92	10.1	10.4	10.7
155	15.9	16.0	16.0	15.9	15.8	15.6	15.4	15.1	14.7	14.3	14.0	13.6	13.3	12.8	12.4	12.3	12.7	13.2	13.6
160	17.7	17.8	17.9	17.8	17.7	17.6	17.4	17.1	16.8	16.5	16.2	15.8	15.5	15.0	14.7	14.6	15.1	15.8	16.4
165	19.6	19.8	19.8	19.8	19.7	19.6	19.4	19.2	19.0	18.7	18.4	18.0	17.7	17.3	16.9	16.8	17.5	18.3	19.0
170	21.7	21.8	21.8	21.8	21.8	21.7	21.5	21.3	21.1	20.9	20.6	20.3	20.0	19.6	19.3	19.3	19.9	20.7	21.4
175	23.3	23.3	23.3	23.3	23.2	23.1	23.0	22.9	22.8	22.7	22.5	22.3	22.1	21.8	21.6	21.6	22.1	22.7	23.2
180	24.0	23.9	23.9	23.8	23.8	23.7	23.6	23.6	23.5	23.5	23.4	23.3	23.3	23.2	23.1	23.1	23.4	23.7	24.0

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.1V I:0.9153A P:203.7W PF:0.9674 Lamp Flux:79.3044x315 lm		
NAME: SPS2004-HL12B-315DW-50-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D263mm	PROTECTION ANGLE:

Table--2

UNIT: x10cd

C(DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	3489	3458	3415	3391	3369	3349	3330	3312	3296	3282	3268	3255	3229	3214	3222	3279	3369		
5	3545	3509	3460	3431	3403	3375	3348	3320	3294	3270	3247	3225	3191	3168	3165	3204	3273		
10	3570	3533	3480	3446	3410	3373	3330	3287	3245	3212	3179	3144	3087	3036	3000	3002	3029		
15	3514	3479	3425	3382	3332	3274	3203	3128	3052	2985	2918	2848	2765	2684	2610	2558	2520		
20	3218	3192	3144	3097	3034	2952	2834	2705	2572	2461	2353	2247	2135	2024	1915	1813	1714		
25	2463	2452	2415	2365	2291	2192	2046	1887	1728	1604	1490	1384	1280	1181	1087	996	910		
30	1341	1355	1348	1312	1254	1179	1082	978	877	802	736	679	627	582	540	501	465		
35	619	624	621	604	580	550	512	473	436	408	384	363	343	324	307	292	278		
40	345	344	340	332	321	309	293	276	260	247	235	224	215	207	200	194	188		
45	219	219	216	212	206	199	192	183	175	168	162	156	151	146	143	140	139		
50	155	154	152	150	147	143	138	133	129	125	121	118	115	112	110	110	111		
55	118	117	115	114	112	110	107	104	101	98.6	96.6	94.7	92.4	90.6	89.5	89.9	91.5		
60	94.1	92.9	91.2	90.1	88.8	87.3	85.1	82.9	80.7	79.5	78.5	77.6	75.5	73.8	72.8	73.9	76.2		
65	76.7	75.1	73.1	72.5	72.0	71.2	69.4	67.4	65.6	65.1	64.8	64.5	62.8	61.3	60.6	61.9	64.4		
70	62.5	61.0	59.3	58.7	58.3	57.7	56.3	54.8	53.4	52.8	52.4	52.1	50.8	49.8	49.4	50.3	52.2		
75	47.8	46.9	45.7	45.1	44.5	43.8	42.8	41.7	40.6	39.6	38.7	37.8	36.8	36.0	35.5	35.7	36.3		
80	30.5	30.1	29.5	28.8	28.0	27.1	26.1	25.0	23.9	22.9	22.0	21.1	20.1	19.3	18.7	18.4	18.3		
85	12.9	12.5	12.0	11.5	10.9	10.2	9.31	8.32	7.32	6.45	5.61	4.80	3.92	3.11	2.42	1.97	1.69		
90	0.69	0.64	0.57	0.51	0.46	0.41	0.36	0.33	0.31	0.30	0.31	0.32	0.32	0.33	0.33	0.32	0.31		
95	0.41	0.40	0.39	0.39	0.39	0.40	0.40	0.40	0.40	0.41	0.41	0.42	0.42	0.43	0.43	0.42	0.41		
100	0.52	0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.51	0.52	0.53	0.54	0.54	0.54	0.54	0.52		
105	0.64	0.63	0.62	0.62	0.62	0.62	0.62	0.63	0.63	0.64	0.65	0.66	0.68	0.69	0.69	0.68	0.66		
110	0.78	0.77	0.75	0.75	0.76	0.76	0.77	0.78	0.79	0.80	0.82	0.83	0.86	0.88	0.89	0.88	0.86		
115	0.95	0.94	0.93	0.93	0.93	0.94	0.96	0.98	1.00	1.02	1.05	1.08	1.12	1.16	1.19	1.18	1.15		
120	1.19	1.19	1.18	1.18	1.19	1.21	1.24	1.28	1.32	1.37	1.42	1.48	1.56	1.64	1.70	1.70	1.67		
125	1.59	1.59	1.58	1.60	1.62	1.66	1.72	1.80	1.90	1.99	2.09	2.21	2.38	2.55	2.67	2.70	2.66		
130	2.30	2.31	2.33	2.36	2.40	2.47	2.60	2.76	2.93	3.11	3.29	3.50	3.79	4.07	4.28	4.34	4.30		
135	3.53	3.55	3.59	3.64	3.72	3.84	4.05	4.29	4.56	4.83	5.10	5.40	5.80	6.16	6.45	6.54	6.49		
140	5.38	5.40	5.44	5.51	5.62	5.79	6.05	6.36	6.71	7.05	7.40	7.78	8.24	8.66	8.99	9.09	9.04		
145	7.82	7.81	7.81	7.90	8.03	8.23	8.52	8.87	9.25	9.64	10.0	10.5	11.0	11.4	11.8	11.8	11.7		
150	10.7	10.6	10.6	10.6	10.8	10.9	11.2	11.6	12.0	12.3	12.7	13.2	13.7	14.1	14.4	14.4	14.2		
155	13.6	13.5	13.4	13.4	13.5	13.7	13.9	14.2	14.6	14.9	15.3	15.6	16.1	16.5	16.7	16.6	16.4		
160	16.4	16.3	16.1	16.1	16.1	16.2	16.4	16.6	16.9	17.2	17.5	17.8	18.2	18.5	18.7	18.6	18.2		
165	18.9	18.8	18.5	18.5	18.5	18.6	18.7	18.9	19.1	19.4	19.6	19.9	20.2	20.5	20.6	20.5	20.1		
170	21.4	21.2	20.9	20.9	20.9	20.9	21.0	21.1	21.3	21.4	21.6	21.8	22.0	22.2	22.3	22.2	22.0		
175	23.2	23.1	22.9	22.8	22.8	22.8	22.8	22.8	22.8	22.9	23.0	23.1	23.1	23.2	23.2	23.3	23.3		
180	24.0	23.9	23.8	23.7	23.7	23.6	23.6	23.5	23.4	23.4	23.3	23.3	23.2	23.1	23.1	23.3	23.6		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.287
 Humidity:65.0%
 Test Distance:10.100m [K=1.0000]
 Remarks: