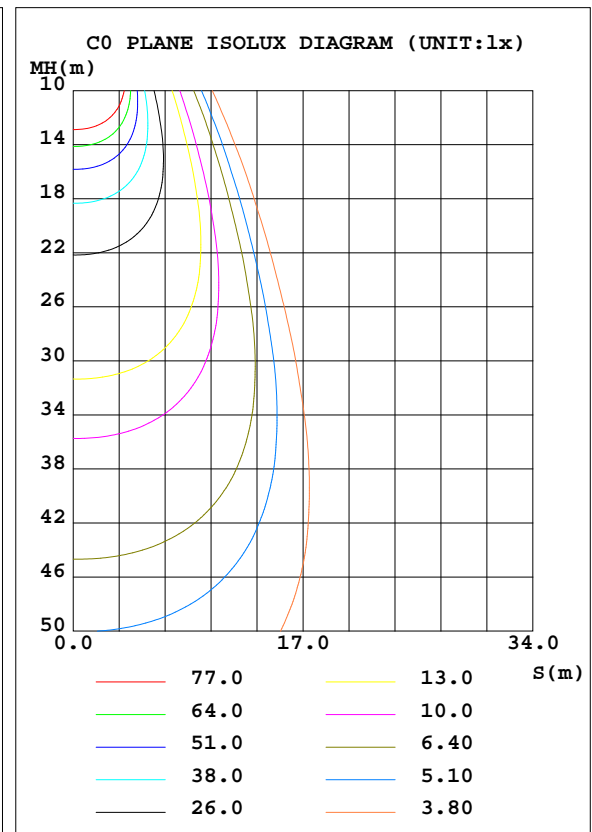
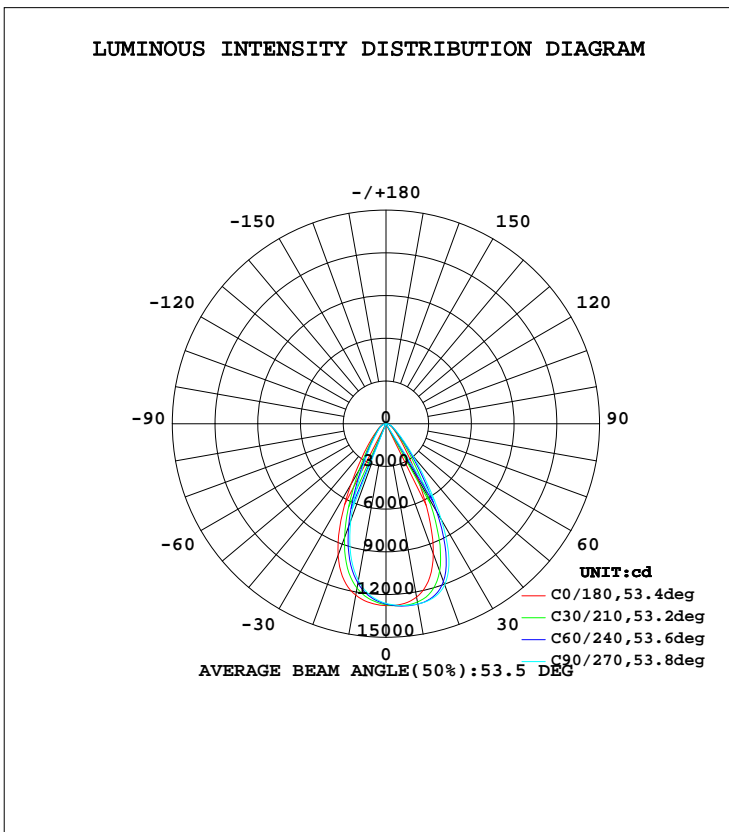


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 119.84 lm/W			
MODEL		I _{max} (cd)	12882	S/MH(C0/180)	0.82
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	0.69
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	12116	η UP, DN(C0-180)	0.5, 58.0
NOMINAL FLUX(lm)	91.0975	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.7, 40.8
LAMPS INSIDE	133	η up(%)	1.2	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230	η down(%)	98.8	CIBSE SHR MAX	0.85



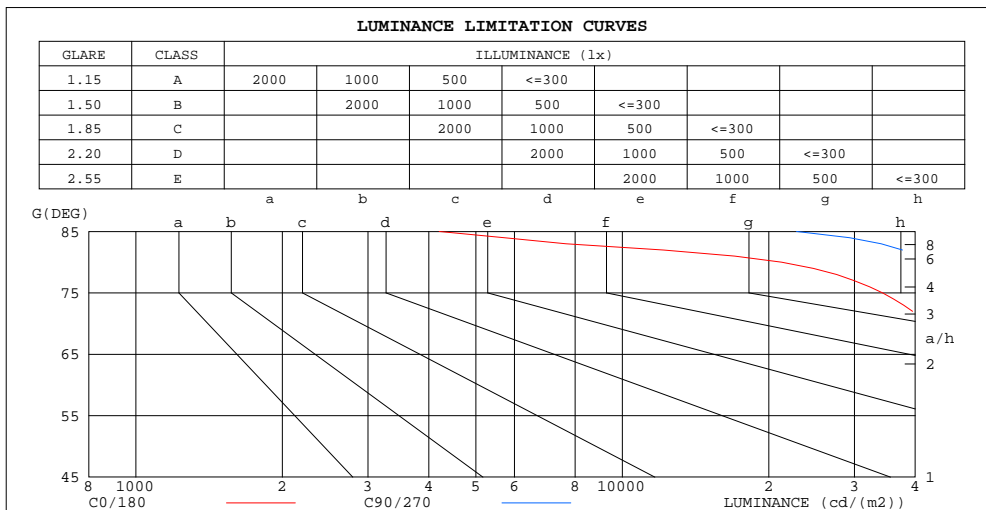
C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-19

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	1236	1281	1285	1254	1223	1152	1119	1147	0- 10	1183	1183	9.76,9.76
20	971.9	1146	1204	1125	982.7	805.8	723.3	787.0	10- 20	3114	4297	35.5,35.5
30	448.9	654.3	777.2	672.0	493.7	344.5	294.2	324.6	20- 30	3356	7653	63.2,63.2
40	177.8	246.8	297.9	257.4	196.6	147.5	128.6	138.7	30- 40	2009	9662	79.7,79.7
50	85.43	106.8	122.8	111.1	93.43	78.26	72.31	74.24	40- 50	1045	10707	88.4,88.4
60	50.20	58.04	63.79	60.43	54.99	48.80	45.26	45.64	50- 60	631.3	11338	93.6,93.6
70	27.46	32.56	35.91	34.63	31.89	27.29	23.87	24.33	60- 70	405.9	11744	96.9,96.9
80	6.977	11.00	14.02	13.35	10.94	6.988	4.417	4.750	70- 80	201.8	11946	98.6,98.6
90	0.1300	0.1122	0.1868	0.1680	0.1419	0.1641	0.1809	0.1809	80- 90	29.88	11976	98.8,98.8
100	0.2499	0.2181	0.1992	0.1947	0.2778	0.3229	0.3555	0.3477	90-100	2.189	11978	98.9,98.9
110	0.4599	0.3885	0.3553	0.3543	0.5025	0.6046	0.6823	0.6483	100-110	3.951	11982	98.9,98.9
120	0.8858	0.7032	0.6288	0.6472	0.9398	1.213	1.420	1.312	110-120	6.954	11989	98.9,98.9
130	1.851	1.419	1.238	1.321	1.942	2.549	2.962	2.744	120-130	12.73	12001	99.1,99.1
140	3.491	2.787	2.485	2.644	3.697	4.571	5.120	4.883	130-140	21.62	12023	99.2,99.2
150	5.447	4.648	4.274	4.450	5.857	6.746	7.280	7.057	140-150	29.40	12052	99.5,99.5
160	7.364	6.615	6.230	6.326	7.848	8.541	8.922	8.696	150-160	30.60	12083	99.7,99.7
170	9.230	8.599	8.247	8.292	9.582	9.995	10.20	10.13	160-170	23.65	12107	99.9,99.9
180	10.36	10.22	10.13	10.15	10.41	10.23	10.11	10.15	170-180	9.266	12116	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		



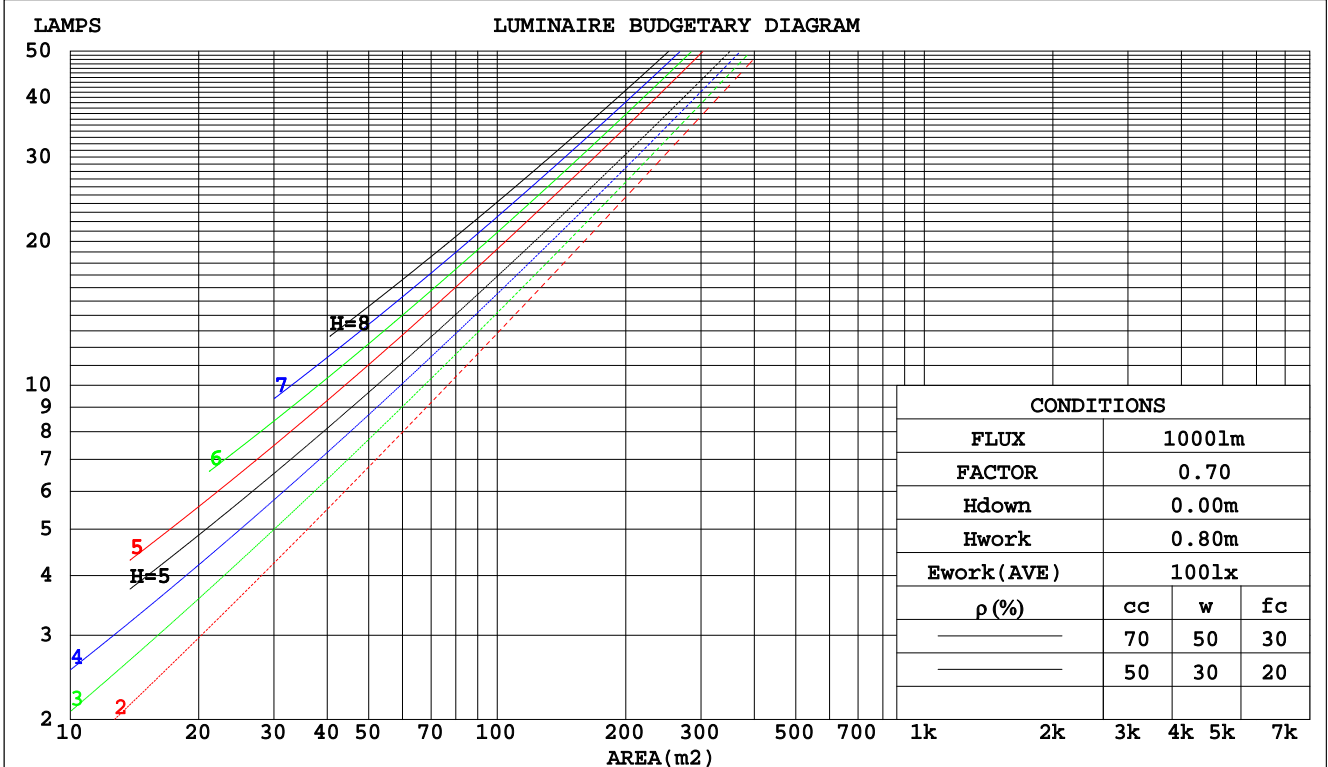
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2016-07-19

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:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	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	1.09	1.06	1.04	1.07	1.04	1.02	1.02	1.00	.98	.99	.97	.95	.95	.94	.92	.90
2.0	1.00	.95	.92	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.86	.84	.82
3.0	.92	.87	.82	.91	.86	.81	.88	.84	.80	.85	.82	.78	.83	.80	.77	.75
4.0	.85	.79	.74	.84	.78	.74	.82	.77	.73	.80	.75	.72	.78	.74	.71	.69
5.0	.79	.73	.68	.78	.72	.68	.76	.71	.67	.75	.70	.66	.73	.69	.66	.64
6.0	.74	.68	.63	.73	.67	.63	.72	.66	.62	.70	.65	.61	.68	.64	.61	.59
7.0	.69	.63	.58	.69	.62	.58	.67	.62	.58	.66	.61	.57	.65	.60	.57	.55
8.0	.65	.59	.54	.65	.58	.54	.63	.58	.54	.62	.57	.53	.61	.57	.53	.52
9.0	.61	.55	.51	.61	.55	.51	.60	.54	.50	.59	.54	.50	.58	.53	.50	.48
10.0	.58	.52	.48	.57	.52	.48	.57	.51	.47	.56	.51	.47	.55	.50	.47	.46



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2016-07-19

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:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	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	.205	.117	.037	.198	.113	.036	.185	.106	.034	.172	.099	.032	.161	.093	.030	
2.0	.196	.108	.033	.190	.105	.032	.179	.099	.031	.168	.094	.030	.158	.090	.028	
3.0	.185	.099	.030	.180	.096	.029	.170	.092	.028	.161	.088	.027	.153	.084	.026	
4.0	.175	.091	.027	.170	.089	.026	.162	.086	.026	.154	.082	.025	.146	.079	.024	
5.0	.165	.084	.024	.161	.083	.024	.153	.080	.023	.146	.077	.023	.140	.075	.022	
6.0	.156	.078	.022	.152	.077	.022	.146	.075	.022	.139	.072	.021	.133	.070	.021	
7.0	.148	.073	.021	.145	.072	.021	.139	.070	.020	.133	.068	.020	.128	.066	.019	
8.0	.140	.069	.019	.137	.068	.019	.132	.066	.019	.127	.064	.019	.122	.063	.018	
9.0	.133	.065	.018	.131	.064	.018	.126	.062	.018	.122	.061	.017	.117	.060	.017	
10.0	.127	.061	.017	.125	.060	.017	.121	.059	.017	.116	.058	.016	.113	.057	.016	

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	.182	.166	.152	.156	.142	.130	.106	.098	.090	.061	.057	.052	.020	.018	.017	
2.0	.168	.141	.119	.144	.122	.102	.099	.084	.071	.057	.049	.042	.018	.016	.014	
3.0	.157	.123	.095	.135	.106	.083	.093	.074	.058	.053	.043	.034	.017	.014	.011	
4.0	.148	.108	.078	.127	.094	.068	.087	.065	.048	.050	.038	.028	.016	.012	.009	
5.0	.139	.097	.066	.120	.084	.057	.082	.059	.041	.048	.034	.024	.015	.011	.008	
6.0	.132	.088	.057	.113	.076	.049	.078	.053	.035	.045	.031	.021	.015	.010	.007	
7.0	.125	.081	.049	.108	.070	.043	.074	.049	.030	.043	.029	.018	.014	.009	.006	
8.0	.119	.074	.044	.103	.065	.038	.071	.045	.027	.041	.027	.016	.013	.009	.005	
9.0	.114	.069	.039	.098	.060	.034	.068	.042	.024	.040	.025	.014	.013	.008	.005	
10.0	.109	.065	.036	.094	.056	.031	.065	.040	.022	.038	.023	.013	.012	.008	.004	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-19

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:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm										
NAME: SPS1004-HL12B-133NW-60-5					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:D155mm			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	25.0	26.1	25.3	26.3	26.5	26.7	27.8	27.0	27.9	28.1
3H	25.7	26.6	25.9	26.9	27.1	27.2	28.2	27.5	28.4	28.7
4H	25.9	26.8	26.2	27.0	27.3	27.5	28.4	27.8	28.7	28.9
6H	26.0	26.8	26.3	27.1	27.4	27.7	28.5	28.0	28.8	29.1
8H	25.9	26.8	26.3	27.0	27.3	27.7	28.5	28.0	28.8	29.1
12H	25.9	26.7	26.2	27.0	27.3	27.7	28.5	28.0	28.8	29.1
4H 2H	25.3	26.2	25.6	26.5	26.7	26.8	27.7	27.1	27.9	28.2
3H	26.2	27.0	26.5	27.2	27.5	27.5	28.3	27.9	28.6	28.9
4H	26.5	27.2	26.8	27.5	27.9	27.9	28.6	28.2	28.9	29.3
6H	26.6	27.3	27.0	27.6	28.0	28.1	28.8	28.5	29.1	29.5
8H	26.6	27.2	27.0	27.6	28.0	28.2	28.8	28.6	29.2	29.6
12H	26.6	27.1	27.0	27.5	27.9	28.2	28.8	28.6	29.2	29.6
8H 4H	26.6	27.2	27.0	27.6	28.0	27.9	28.5	28.3	28.9	29.3
6H	26.8	27.3	27.3	27.7	28.2	28.3	28.8	28.7	29.2	29.6
8H	26.8	27.3	27.3	27.7	28.2	28.4	28.8	28.8	29.2	29.7
12H	26.8	27.2	27.3	27.6	28.1	28.4	28.8	28.9	29.2	29.7
12H 4H	26.6	27.1	27.0	27.5	28.0	27.9	28.4	28.3	28.8	29.2
6H	26.8	27.3	27.3	27.7	28.2	28.2	28.7	28.7	29.1	29.6
8H	26.8	27.2	27.3	27.7	28.2	28.4	28.7	28.8	29.2	29.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.8 / - 1.0					+ 1.1 / - 1.1				
1.5H	+ 1.1 / - 0.9					+ 2.0 / - 0.9				
2.0H	+ 1.0 / - 0.9					+ 1.7 / - 0.8				

CIE Pub.117 Corrected 12116 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.7)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-19

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:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	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	79	71	67	78	71	66	77	71	66	62
0.80	87	80	75	86	79	75	85	79	75	70
1.00	93	86	81	92	85	81	90	85	80	75
1.25	98	91	87	96	90	86	94	89	85	80
1.50	101	95	91	100	94	90	97	92	89	84
2.00	105	100	96	103	98	95	100	96	93	87
2.50	107	102	99	105	101	98	102	98	96	89
3.00	109	105	101	107	103	100	103	100	98	91
4.00	112	108	105	109	106	104	105	103	101	93
5.00	113	110	108	111	108	106	107	105	103	95
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:2016-07-19

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

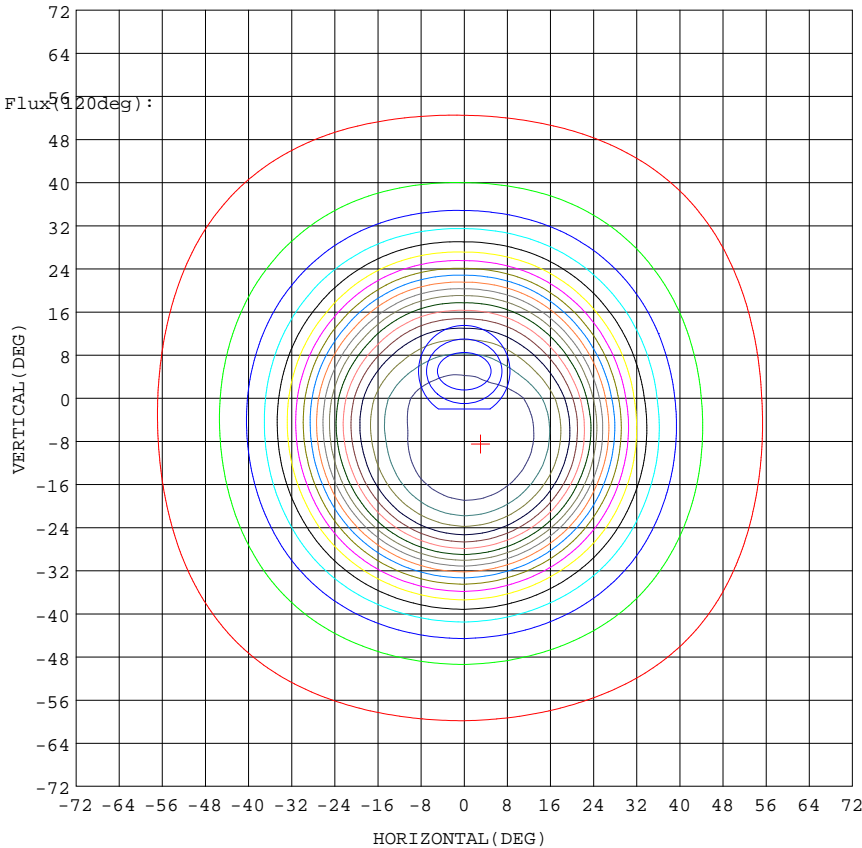
Test:U:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	PROTECTION ANGLE:

Conical surface Flux(90deg):

10261 lm
%lum = 84.7%
%lamp = 84.7%

Conical surface Flux(20deg):

11338 lm
%lum = 93.6%
%lamp = 93.6%



- 5% 644.1
- 10% 1288
- 15% 1932
- 20% 2576
- 25% 3220
- 30% 3864
- 35% 4509
- 40% 5153
- 45% 5797
- 50% 6441
- 55% 7085
- 60% 7729
- 65% 8373
- 70% 9017
- 75% 9661
- 80% 10305
- 85% 10949
- 90% 11593
- 95% 12237

1. AVG=12085,MIN=11528
2. AVG=12006,MIN=10908
3. AVG=11864,MIN=10119

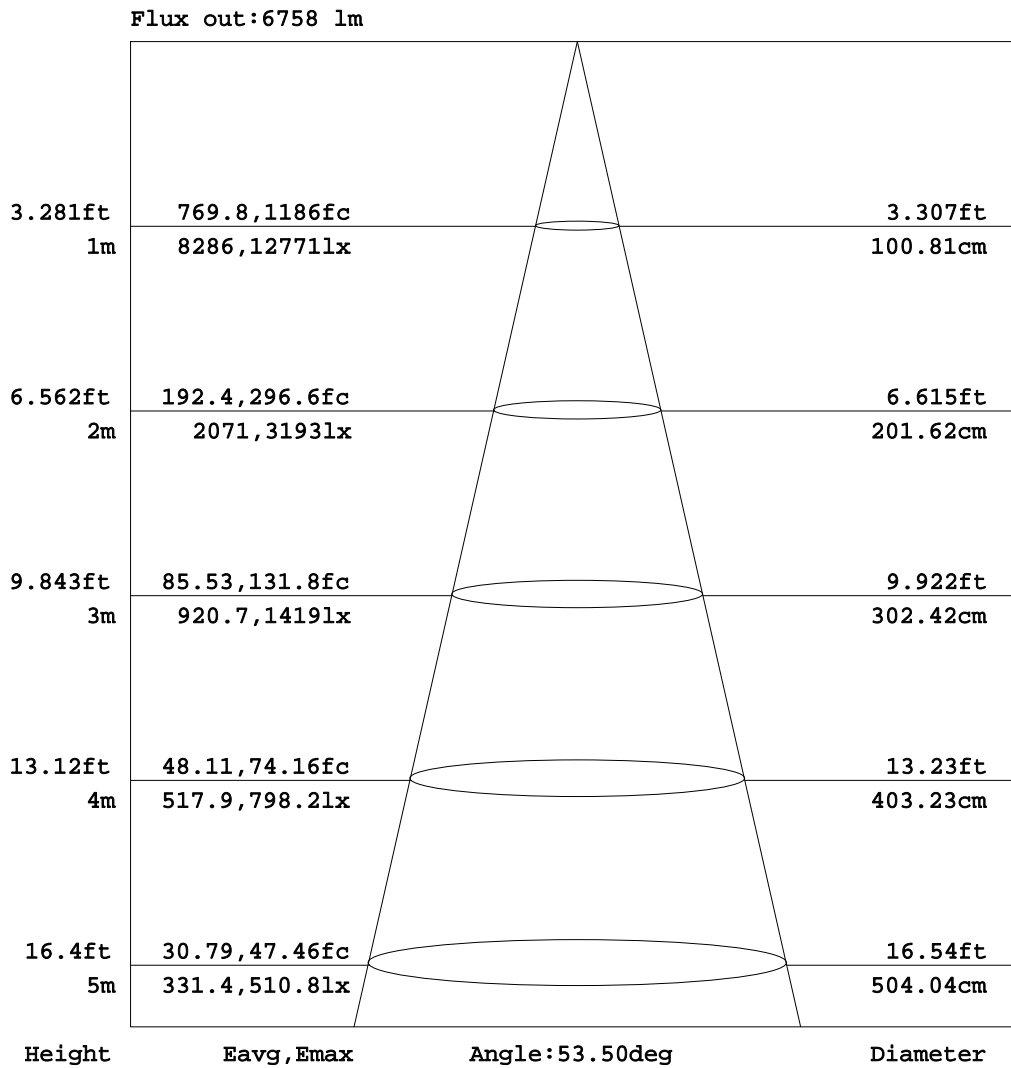
I_{max}:12881(H3.0,V-8.5)
(At:C=70.0,Gamma=9.0)
UNIT: cd

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2016-07-19

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:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	PROTECTION ANGLE:



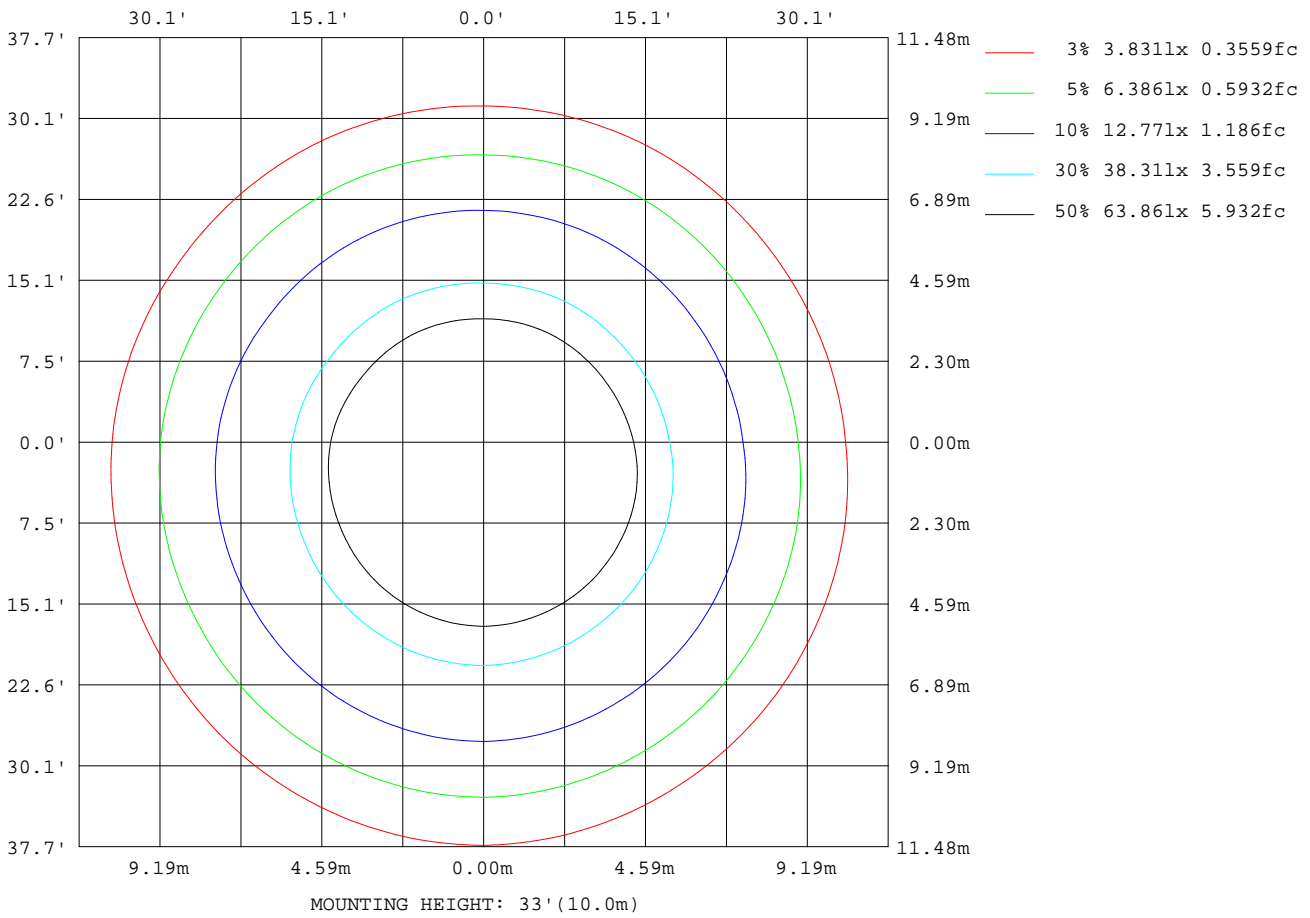
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-19

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

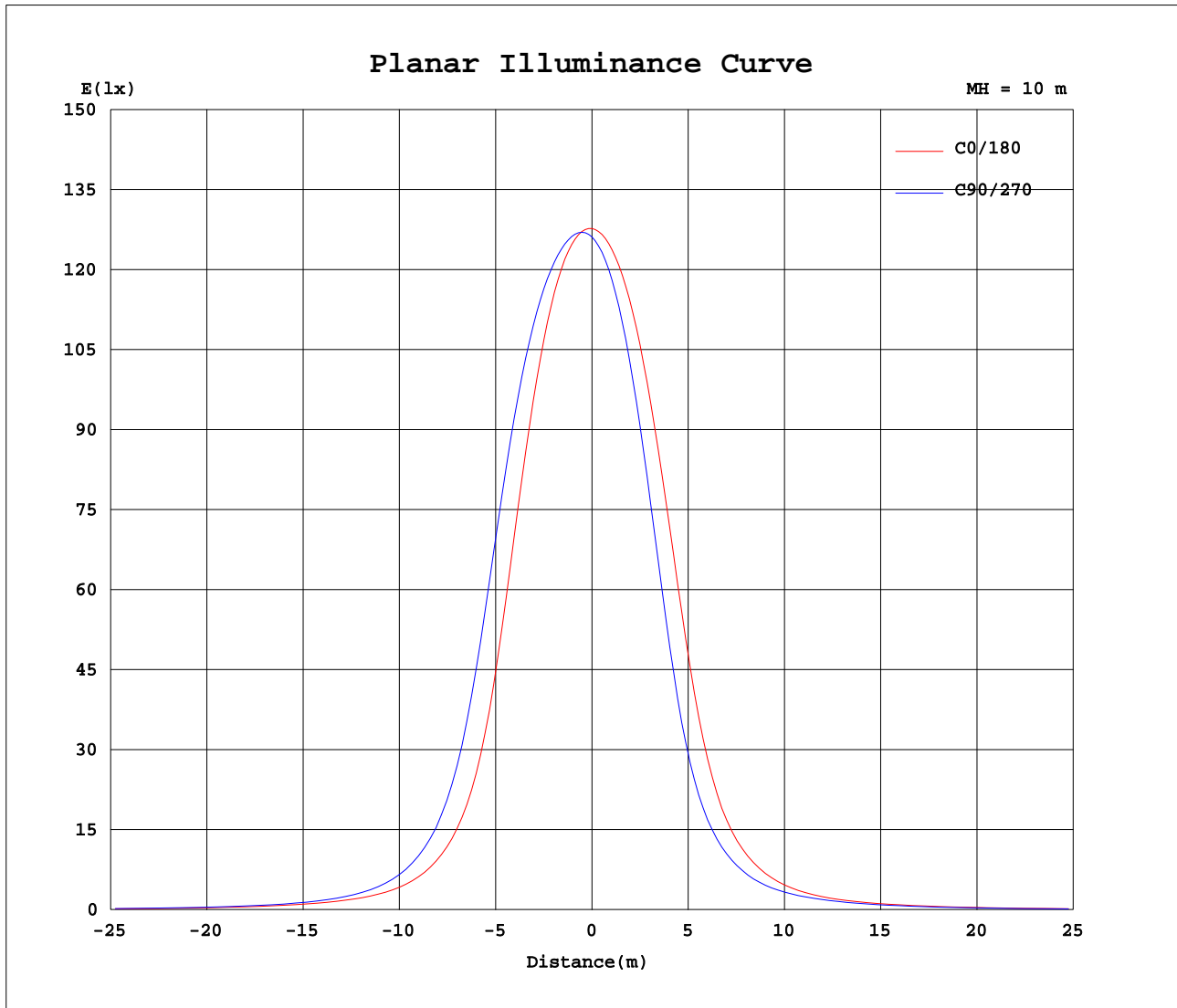
Test:U:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2016-07-19

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: 2016-07-19

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:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	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	1277	1275	1273	1271	1269	1268	1266	1265	1263	1261	1260	1259	1258	1255	1253	1254	1261	1270	1277
5	1272	1276	1279	1282	1283	1284	1285	1284	1283	1281	1278	1275	1271	1265	1260	1256	1258	1261	1263
10	1236	1250	1262	1272	1279	1283	1286	1288	1287	1285	1281	1276	1269	1259	1249	1239	1235	1230	1223
15	1146	1176	1202	1223	1240	1253	1262	1268	1270	1269	1264	1255	1244	1227	1209	1189	1174	1157	1137
20	972	1020	1063	1101	1133	1159	1179	1194	1202	1204	1197	1184	1165	1139	1110	1079	1049	1017	983
25	712	773	828	878	924	964	996	1022	1039	1046	1039	1021	995	960	920	877	836	795	751
30	449	496	543	587	633	676	713	744	766	777	771	754	728	692	652	609	570	532	494
35	277	305	333	360	389	416	440	463	481	491	487	475	456	432	405	377	352	328	305
40	178	193	208	223	239	255	269	282	292	298	296	289	278	265	250	235	222	209	197
45	119	128	136	145	154	162	170	177	183	186	185	181	176	169	161	152	145	138	131
50	85.4	90.4	95.2	99.9	105	109	113	117	121	123	122	120	117	113	109	105	101	97.2	93.4
55	65.0	67.9	70.7	73.4	76.0	78.5	80.9	83.3	85.3	86.6	86.2	85.1	83.3	81.4	79.1	76.8	74.8	72.7	70.6
60	50.2	52.1	53.9	55.6	57.3	58.8	60.3	61.8	63.0	63.8	63.7	63.1	62.2	61.1	59.8	58.5	57.4	56.2	55.0
65	38.3	39.8	41.1	42.4	43.6	44.7	45.7	46.7	47.6	48.2	48.2	47.9	47.3	46.7	45.9	45.1	44.4	43.6	42.8
70	27.5	28.8	30.1	31.2	32.1	33.0	33.7	34.6	35.4	35.9	35.9	35.7	35.2	34.9	34.4	33.9	33.3	32.6	31.9
75	16.8	18.0	19.2	20.2	21.1	21.9	22.7	23.5	24.2	24.7	24.8	24.6	24.3	24.0	23.6	23.1	22.6	21.9	21.1
80	6.98	7.98	8.92	9.80	10.6	11.4	12.1	12.9	13.5	14.0	14.1	14.1	13.8	13.5	13.2	12.7	12.2	11.6	10.9
85	0.69	0.85	1.06	1.31	1.59	1.92	2.30	2.83	3.33	3.76	3.91	3.93	3.83	3.66	3.41	3.10	2.71	2.31	1.91
90	0.13	0.13	0.12	0.12	0.11	0.11	0.11	0.14	0.16	0.19	0.20	0.20	0.19	0.18	0.16	0.14	0.14	0.14	0.14
95	0.18	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.17	0.18	0.20
100	0.25	0.24	0.24	0.23	0.22	0.21	0.21	0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.20	0.20	0.23	0.25	0.28
105	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.27	0.27	0.26	0.26	0.26	0.27	0.28	0.31	0.34	0.38
110	0.46	0.44	0.42	0.41	0.39	0.38	0.37	0.36	0.36	0.36	0.35	0.35	0.35	0.35	0.36	0.37	0.41	0.46	0.50
115	0.63	0.60	0.57	0.55	0.53	0.51	0.49	0.48	0.47	0.47	0.46	0.47	0.47	0.47	0.48	0.50	0.55	0.62	0.68
120	0.89	0.83	0.79	0.75	0.72	0.69	0.67	0.65	0.64	0.63	0.63	0.63	0.64	0.64	0.65	0.69	0.76	0.85	0.94
125	1.28	1.20	1.12	1.06	1.01	0.96	0.93	0.90	0.88	0.87	0.87	0.87	0.89	0.90	0.92	0.97	1.08	1.21	1.34
130	1.85	1.73	1.62	1.53	1.45	1.39	1.33	1.29	1.26	1.24	1.24	1.25	1.28	1.30	1.34	1.42	1.57	1.75	1.94
135	2.60	2.44	2.29	2.17	2.06	1.97	1.90	1.84	1.80	1.78	1.78	1.80	1.83	1.87	1.93	2.03	2.25	2.49	2.74
140	3.49	3.29	3.12	2.96	2.84	2.73	2.65	2.57	2.52	2.48	2.49	2.52	2.57	2.61	2.68	2.81	3.08	3.39	3.70
145	4.46	4.24	4.05	3.89	3.74	3.62	3.52	3.44	3.37	3.34	3.34	3.37	3.43	3.47	3.56	3.71	4.03	4.40	4.77
150	5.45	5.23	5.03	4.86	4.71	4.58	4.48	4.39	4.32	4.27	4.28	4.31	4.37	4.41	4.49	4.65	5.03	5.45	5.86
155	6.42	6.21	6.02	5.85	5.70	5.57	5.46	5.37	5.30	5.26	5.26	5.28	5.34	5.36	5.44	5.60	6.01	6.46	6.90
160	7.36	7.17	6.99	6.83	6.68	6.55	6.44	6.35	6.28	6.23	6.22	6.24	6.28	6.29	6.36	6.51	6.93	7.40	7.85
165	8.31	8.13	7.96	7.81	7.66	7.53	7.42	7.33	7.26	7.22	7.20	7.20	7.23	7.23	7.29	7.44	7.85	8.31	8.74
170	9.23	9.07	8.93	8.79	8.66	8.54	8.43	8.35	8.29	8.25	8.23	8.23	8.25	8.26	8.32	8.46	8.82	9.21	9.58
175	9.98	9.88	9.78	9.69	9.59	9.50	9.42	9.36	9.32	9.29	9.28	9.28	9.29	9.31	9.36	9.46	9.70	9.96	10.2
180	10.4	10.3	10.3	10.3	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.2	10.2	10.3	10.4	10.4

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-19

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:230.2V I:0.4465A P:101.1W PF:0.9836 Lamp Flux:91.0975x133 lm		
NAME: SPS1004-HL12B-133NW-60-5	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:D155mm	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	1277	1274	1271	1269	1268	1266	1265	1263	1261	1260	1259	1258	1255	1253	1254	1258	1266		
5	1257	1249	1240	1233	1228	1223	1219	1216	1214	1214	1216	1219	1221	1224	1230	1240	1254		
10	1207	1190	1172	1158	1147	1137	1128	1122	1119	1121	1126	1133	1142	1153	1167	1186	1209		
15	1109	1078	1048	1025	1004	987	972	961	956	959	967	980	996	1015	1040	1070	1105		
20	939	895	853	820	792	768	747	732	723	727	738	755	774	800	832	871	918		
25	699	649	602	568	540	517	496	480	471	474	484	499	516	539	569	608	656		
30	452	413	379	354	335	320	308	299	294	295	299	307	317	332	352	378	411		
35	281	259	240	226	215	206	198	193	190	190	193	197	203	211	222	237	255		
40	183	170	159	151	144	139	134	131	129	129	130	133	136	141	147	155	166		
45	124	116	110	105	102	98.8	96.2	94.4	93.3	93.2	93.9	95.2	96.7	99.0	102	107	112		
50	89.3	85.4	81.9	79.3	77.2	75.5	74.1	73.0	72.3	72.1	72.2	72.8	73.6	74.9	76.6	79.0	82.0		
55	68.3	66.0	63.9	62.3	61.0	59.8	58.8	57.9	57.3	57.0	57.0	57.3	57.7	58.5	59.5	61.0	62.8		
60	53.4	51.8	50.4	49.3	48.3	47.5	46.6	45.9	45.3	45.0	44.9	45.1	45.4	45.9	46.6	47.6	48.8		
65	41.6	40.3	39.1	38.2	37.3	36.5	35.7	35.0	34.4	34.2	34.1	34.2	34.5	35.0	35.6	36.4	37.3		
70	30.9	29.9	28.8	27.8	26.8	25.9	25.1	24.4	23.9	23.6	23.6	23.8	24.1	24.6	25.2	25.8	26.6		
75	20.2	19.2	18.2	17.2	16.2	15.3	14.5	13.9	13.5	13.3	13.4	13.5	13.8	14.1	14.6	15.2	15.9		
80	9.98	8.97	8.00	7.30	6.68	6.11	5.44	4.86	4.42	4.32	4.38	4.54	4.65	4.85	5.15	5.62	6.23		
85	1.57	1.28	1.03	0.87	0.76	0.66	0.56	0.47	0.40	0.37	0.37	0.39	0.40	0.43	0.47	0.53	0.60		
90	0.14	0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.16	0.15		
95	0.21	0.21	0.22	0.23	0.24	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.25	0.24	0.23	0.21		
100	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.35	0.36	0.36	0.36	0.35	0.35	0.34	0.33	0.31	0.28		
105	0.39	0.41	0.42	0.43	0.45	0.46	0.47	0.48	0.49	0.49	0.49	0.48	0.48	0.47	0.45	0.42	0.39		
110	0.53	0.55	0.57	0.59	0.62	0.64	0.66	0.67	0.68	0.68	0.68	0.67	0.66	0.64	0.61	0.57	0.52		
115	0.72	0.76	0.79	0.83	0.86	0.90	0.93	0.96	0.97	0.97	0.96	0.94	0.92	0.89	0.85	0.79	0.72		
120	1.01	1.06	1.12	1.18	1.24	1.30	1.35	1.39	1.42	1.42	1.40	1.37	1.34	1.29	1.22	1.13	1.02		
125	1.45	1.54	1.64	1.73	1.82	1.91	1.98	2.04	2.08	2.08	2.05	2.01	1.95	1.88	1.78	1.65	1.48		
130	2.09	2.23	2.36	2.49	2.61	2.72	2.82	2.91	2.96	2.96	2.92	2.86	2.79	2.70	2.56	2.37	2.13		
135	2.93	3.11	3.27	3.43	3.58	3.72	3.84	3.94	4.00	4.00	3.97	3.90	3.82	3.70	3.53	3.28	2.97		
140	3.92	4.11	4.29	4.48	4.66	4.81	4.95	5.05	5.12	5.13	5.10	5.03	4.95	4.82	4.62	4.32	3.95		
145	5.00	5.21	5.39	5.59	5.77	5.94	6.08	6.18	6.25	6.26	6.23	6.17	6.09	5.95	5.74	5.41	4.98		
150	6.10	6.30	6.46	6.66	6.84	6.99	7.12	7.22	7.28	7.29	7.26	7.19	7.12	6.99	6.79	6.44	6.00		
155	7.13	7.31	7.45	7.62	7.78	7.92	8.03	8.11	8.16	8.16	8.12	8.06	7.99	7.87	7.68	7.36	6.94		
160	8.06	8.21	8.33	8.47	8.61	8.72	8.82	8.88	8.92	8.92	8.88	8.81	8.75	8.64	8.47	8.18	7.82		
165	8.93	9.05	9.13	9.26	9.37	9.48	9.55	9.60	9.62	9.62	9.60	9.55	9.49	9.39	9.23	8.99	8.69		
170	9.73	9.81	9.86	9.95	10.0	10.1	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.1	9.99	9.80	9.54		
175	10.3	10.3	10.3	10.3	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.3	10.2	10.1		
180	10.4	10.3	10.3	10.2	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.2	10.2	10.2	10.3		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2016-07-19

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: