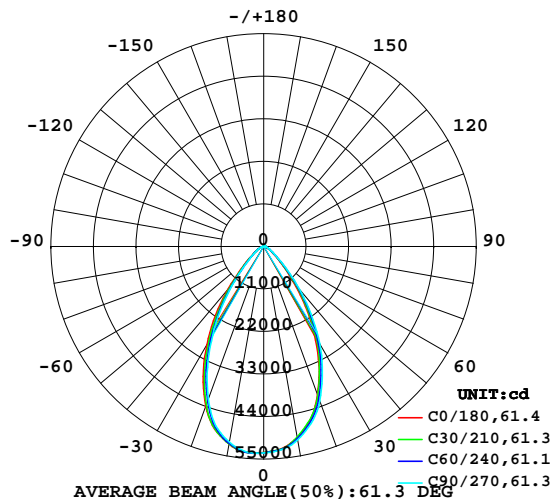


LUMINAIRE PHOTOMETRIC TEST REPORT

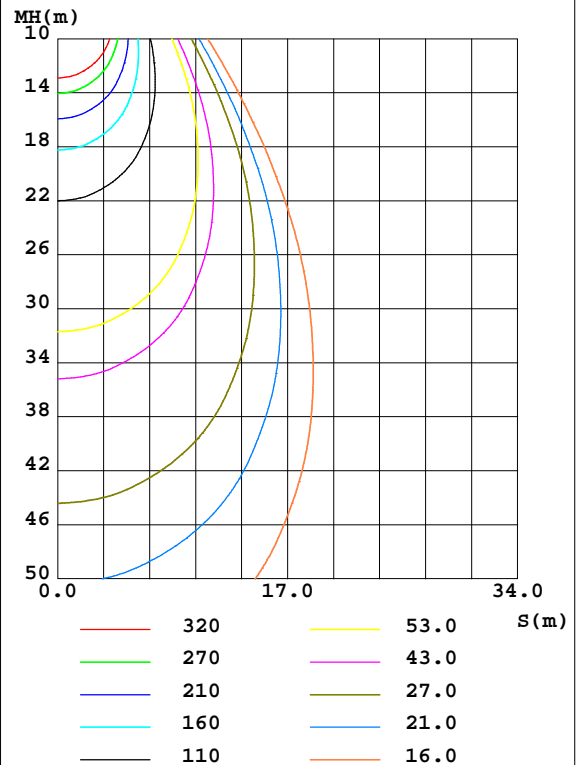
Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 149.40 lm/W			
MODEL	NCD-400C-D60	Imax(cd)	53567	S/MH(C0/180)	0.95
NOMINAL POWER(W)	400	LOR(%)	100.0	S/MH(C90/270)	0.91
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	59022	η UP,DN(C0-180)	0.9,49.8
NOMINAL FLUX(lm)	59021.5	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.8,48.4
LAMPS INSIDE	1	η up(%)	1.7	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	98.3	CIBSE SHR MAX	0.95

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HSO
 Test Date:24 October 2006

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:8.100m [K=1.0000]
 Remarks: NCD-400C-D60

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	5017	5000	5076	5111	5188	5186	5137	5105	0- 10	4998	4998	8.47,8.47
20	4076	4101	4252	4317	4386	4359	4196	4174	10- 20	13286	18284	31,31
30	2622	2734	2899	2874	2941	2809	2646	2671	20- 30	16118	34402	58.3,58.3
40	1207	1311	1434	1407	1421	1295	1177	1216	30- 40	12497	46898	79.5,79.5
50	433.8	471.5	516.5	503.1	497.4	459.3	423.9	437.7	40- 50	6226	53124	90,90
60	191.8	207.8	223.0	217.4	210.2	201.9	192.5	198.0	50- 60	2774	55898	94.7,94.7
70	86.53	94.00	108.3	100.8	95.80	88.37	85.32	86.80	60- 70	1423	57322	97.1,97.1
80	20.31	26.29	33.89	30.06	24.91	20.65	18.67	19.95	70- 80	584.4	57906	98.1,98.1
90	5.080	4.993	4.795	4.821	2.211	2.292	2.297	2.240	80- 90	102.8	58009	98.3,98.3
100	7.615	7.371	7.045	7.134	3.679	3.867	4.134	3.981	90-100	48.61	58058	98.4,98.4
110	11.54	11.18	10.74	10.89	6.843	7.133	7.611	7.434	100-110	76.53	58134	98.5,98.5
120	16.59	16.09	15.64	15.72	11.64	11.98	12.63	12.44	110-120	114.2	58248	98.7,98.7
130	22.11	21.61	21.12	21.17	17.46	17.90	18.51	18.41	120-130	151.1	58399	98.9,98.9
140	27.27	26.82	26.35	26.42	23.53	23.96	24.46	24.35	130-140	174.7	58574	99.2,99.2
150	31.13	30.79	30.34	30.54	28.69	29.01	29.24	29.07	140-150	173.8	58748	99.5,99.5
160	33.32	33.00	32.78	33.01	32.10	32.34	32.35	32.07	150-160	144.7	58893	99.8,99.8
170	34.91	34.67	34.65	34.91	34.49	34.67	34.75	34.52	160-170	95.13	58988	99.9,99.9
180	35.96	35.91	36.10	36.03	35.96	35.92	36.09	36.03	170-180	33.68	59022	100,100
DEG	LUMINOUS INTENSITY:≠10cd									UNIT: lm		

Conical surface Flux(90deg): 50670 lm

%lum = 85.9%

%lamp = 85.9%

Conical surface Flux(120deg): 55898 lm

%lum = 94.7%

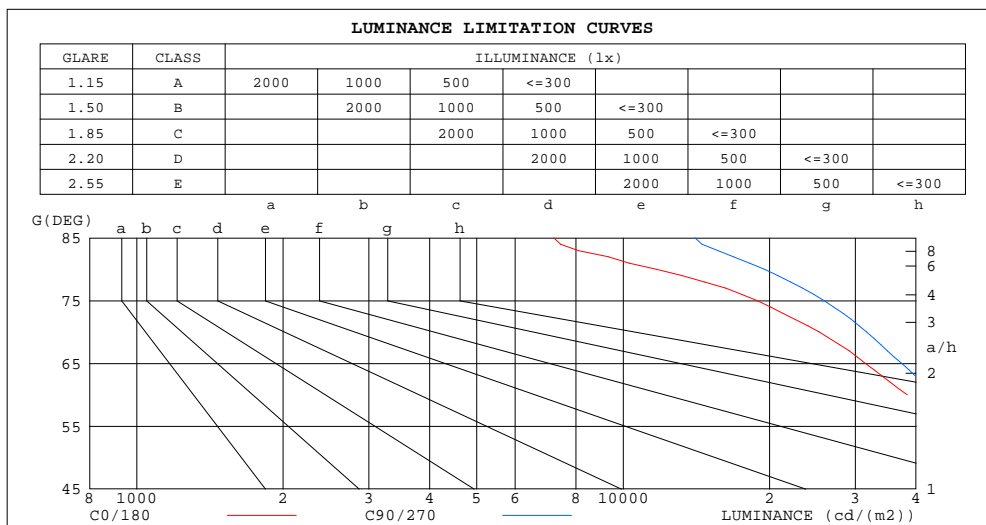
%lamp = 94.7%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

LUMINANCE LIMITATION CURVES

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	7200	14059
80	11693	19519
75	18839	25886
70	25300	31672
65	31483	37366
60	38356	44603
55	48716	56818
50	67488	80361
45	102126	123197

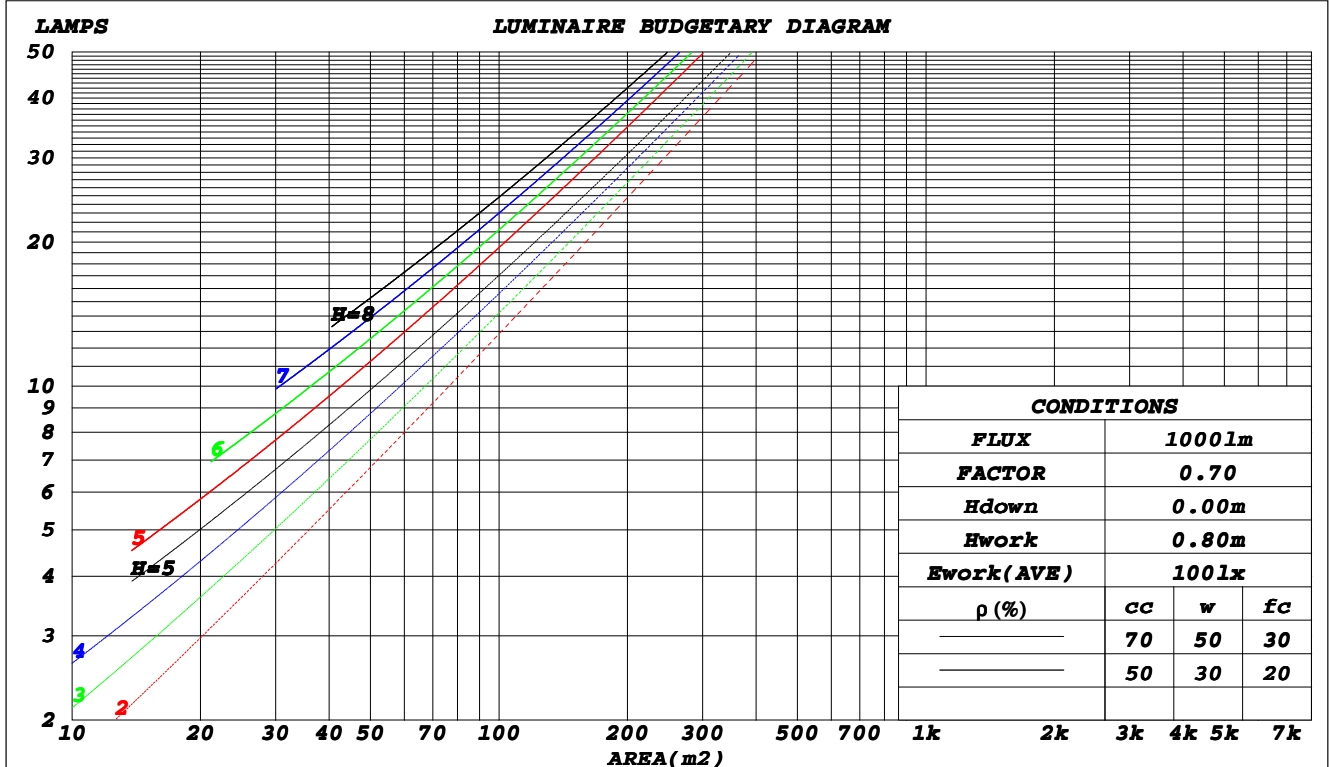
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	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	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.09	1.06	1.04	1.07	1.04	1.02	1.02	1.00	.98	.98	.97	.95	.94	.93	.92	.90
2.0	1.00	.95	.92	.98	.94	.90	.95	.91	.88	.91	.88	.86	.88	.86	.84	.82
3.0	.92	.86	.82	.90	.85	.81	.88	.83	.80	.85	.81	.78	.82	.79	.77	.75
4.0	.85	.79	.74	.84	.78	.73	.81	.76	.72	.79	.75	.71	.77	.73	.70	.68
5.0	.79	.72	.67	.78	.71	.67	.76	.70	.66	.74	.69	.65	.72	.68	.65	.63
6.0	.73	.66	.62	.72	.66	.61	.70	.65	.61	.69	.64	.60	.67	.63	.60	.58
7.0	.68	.61	.57	.67	.61	.57	.66	.60	.56	.64	.59	.56	.63	.59	.55	.54
8.0	.64	.57	.53	.63	.57	.52	.62	.56	.52	.61	.55	.52	.59	.55	.51	.50
9.0	.60	.53	.49	.59	.53	.49	.58	.52	.48	.57	.52	.48	.56	.51	.48	.46
10.0	.56	.50	.46	.56	.50	.46	.55	.49	.45	.54	.49	.45	.53	.48	.45	.43



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HSO
 Test Date:24 October 2006

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
 Humidity:65.0%
 Test Distance:8.100m [K=1.0000]
 Remarks: NCD-400C-D60

WEC AND CCEC

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.204	.116	.037	.196	.112	.036	.183	.105	.033	.170	.098	.031	.158	.092	.030		
2.0	.196	.107	.033	.190	.104	.032	.178	.099	.031	.167	.094	.029	.157	.089	.028		
3.0	.186	.099	.030	.181	.097	.029	.171	.092	.028	.161	.088	.027	.152	.084	.026		
4.0	.176	.092	.027	.172	.090	.027	.163	.086	.026	.155	.083	.025	.147	.080	.024		
5.0	.167	.085	.025	.163	.084	.024	.155	.081	.024	.148	.078	.023	.141	.075	.023		
6.0	.159	.080	.023	.155	.078	.023	.148	.076	.022	.141	.074	.022	.135	.071	.021		
7.0	.151	.075	.021	.147	.073	.021	.141	.071	.021	.135	.069	.020	.130	.067	.020		
8.0	.143	.070	.020	.140	.069	.020	.135	.067	.019	.130	.066	.019	.125	.064	.019		
9.0	.137	.066	.018	.134	.065	.018	.129	.064	.018	.124	.062	.018	.120	.061	.018		
10.0	.130	.063	.017	.128	.062	.017	.123	.060	.017	.119	.059	.017	.115	.058	.017		

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.204	.204	.204	.174	.174	.174	.119	.119	.119	.068	.068	.068	.022	.022	.022	
1.0	.186	.170	.156	.159	.146	.134	.109	.101	.093	.063	.058	.054	.020	.019	.017	
2.0	.173	.146	.123	.148	.125	.106	.101	.087	.074	.058	.050	.043	.019	.016	.014	
3.0	.162	.127	.099	.139	.110	.086	.095	.076	.061	.055	.044	.036	.018	.014	.012	
4.0	.152	.113	.083	.131	.097	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010	
5.0	.144	.102	.070	.124	.088	.061	.085	.061	.043	.049	.036	.026	.016	.012	.008	
6.0	.137	.093	.061	.118	.080	.053	.081	.056	.037	.047	.033	.022	.015	.011	.007	
7.0	.131	.085	.053	.112	.074	.046	.078	.052	.033	.045	.031	.020	.015	.010	.006	
8.0	.125	.079	.048	.108	.069	.042	.074	.048	.029	.043	.028	.018	.014	.009	.006	
9.0	.120	.074	.043	.103	.064	.038	.072	.045	.027	.042	.027	.016	.014	.009	.005	
10.0	.115	.070	.040	.099	.061	.035	.069	.043	.025	.040	.025	.015	.013	.008	.005	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

UGR(Unified Glare Rating) Table

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding 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	24.9	26.0	25.2	26.2	26.4	25.5	26.6	25.8	26.8	27.0
3H	25.1	26.1	25.4	26.3	26.6	25.7	26.7	26.0	27.0	27.2
4H	25.1	26.1	25.4	26.3	26.6	25.8	26.7	26.1	27.0	27.3
6H	25.1	26.0	25.4	26.2	26.5	25.8	26.7	26.2	27.0	27.3
8H	25.1	25.9	25.4	26.2	26.5	25.8	26.6	26.2	26.9	27.2
12H	25.0	25.8	25.4	26.1	26.4	25.8	26.6	26.1	26.9	27.2
4H 2H	24.9	25.9	25.2	26.1	26.4	25.5	26.4	25.8	26.7	26.9
3H	25.2	26.0	25.6	26.3	26.6	25.8	26.6	26.2	26.9	27.2
4H	25.3	26.0	25.7	26.3	26.7	26.0	26.7	26.3	27.0	27.4
6H	25.3	25.9	25.7	26.3	26.7	26.0	26.7	26.4	27.0	27.4
8H	25.3	25.8	25.7	26.2	26.6	26.0	26.6	26.4	27.0	27.4
12H	25.2	25.7	25.7	26.2	26.6	26.0	26.5	26.4	26.9	27.4
8H 4H	25.2	25.8	25.7	26.2	26.6	25.9	26.5	26.3	26.9	27.3
6H	25.3	25.8	25.7	26.2	26.6	26.0	26.5	26.5	26.9	27.4
8H	25.3	25.7	25.7	26.1	26.6	26.0	26.5	26.5	26.9	27.4
12H	25.2	25.6	25.7	26.1	26.6	26.0	26.4	26.5	26.9	27.4
12H 4H	25.2	25.7	25.6	26.1	26.6	25.9	26.4	26.3	26.8	27.2
6H	25.2	25.7	25.7	26.1	26.6	26.0	26.4	26.4	26.8	27.3
8H	25.2	25.6	25.7	26.1	26.6	26.0	26.4	26.5	26.8	27.3
Variations with the observer position at spacings:										
S = 1.0H	+ 1.6 / - 2.5					+ 1.5 / - 2.3				
1.5H	+ 2.4 / - 2.0					+ 2.5 / - 2.0				
2.0H	+ 2.8 / - 1.8					+ 2.9 / - 1.7				

CIE Pub.117 Corrected 59022 lm Total Lamp Luminous Flux.(8log(F/F0) = 14.2)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

UTILIZATION FACTORS TABLE

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

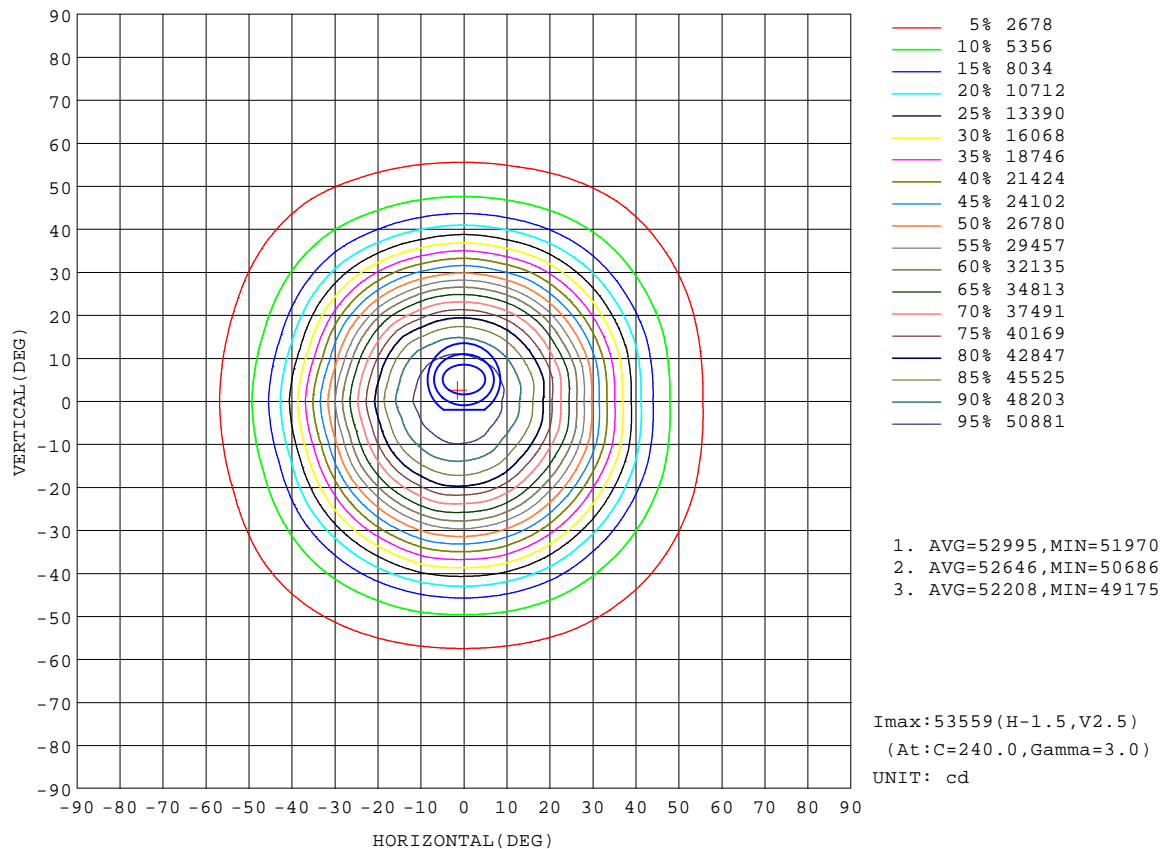
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	79	71	66	78	71	66	77	70	66	61
0.80	87	80	75	86	79	75	85	79	74	70
1.00	93	86	81	92	85	81	90	85	80	76
1.25	98	91	87	97	91	87	94	89	86	81
1.50	101	95	91	100	94	91	97	93	89	84
2.00	105	100	96	103	99	95	100	96	93	87
2.50	107	103	99	105	101	98	102	98	96	89
3.00	109	105	102	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	106	104	103	94
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

ISOCANDELA DIAGRAM

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

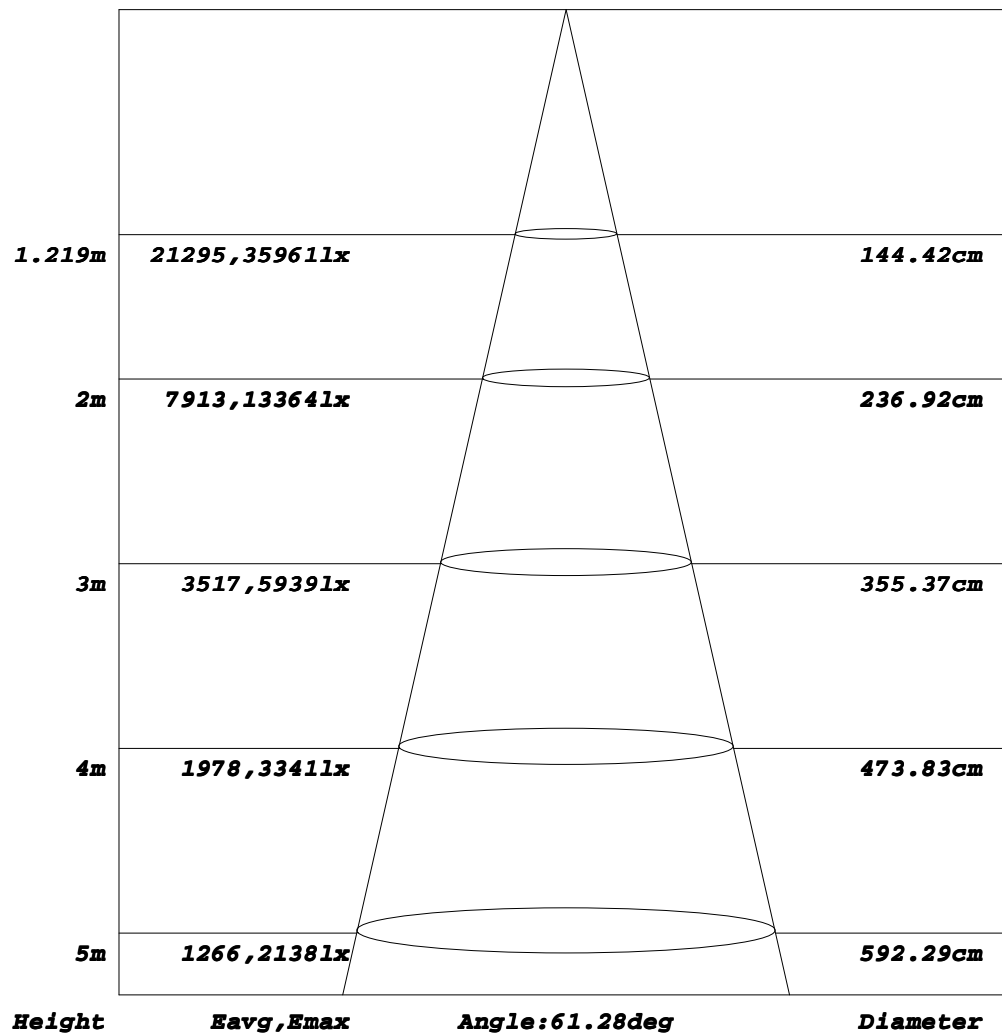


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

AAI Figure

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Flux out:35902 lm


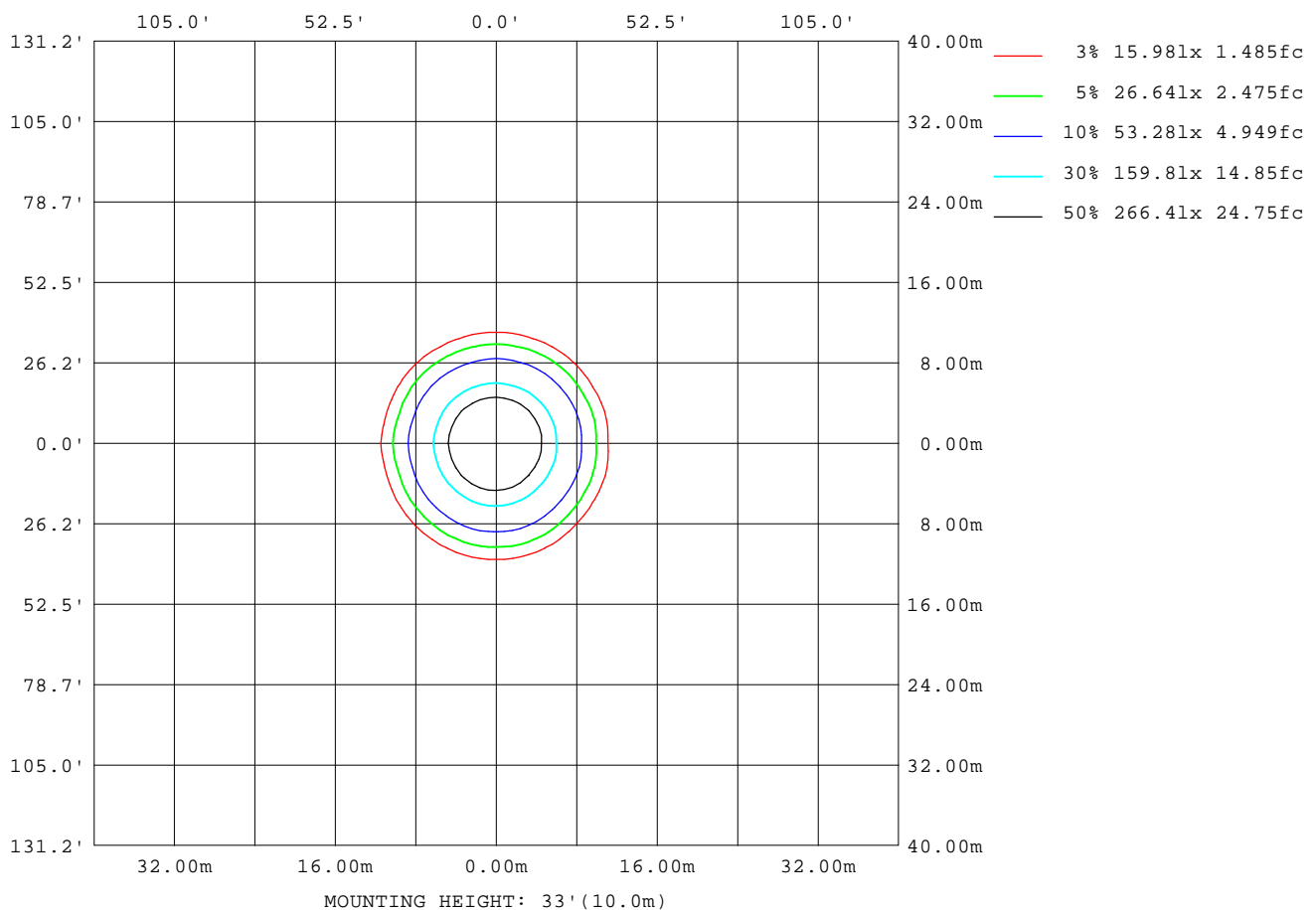
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: NCD-400C-D60

ISOLUX DIAGRAM

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: NCD-400C-D60

LED Avg.L Report

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

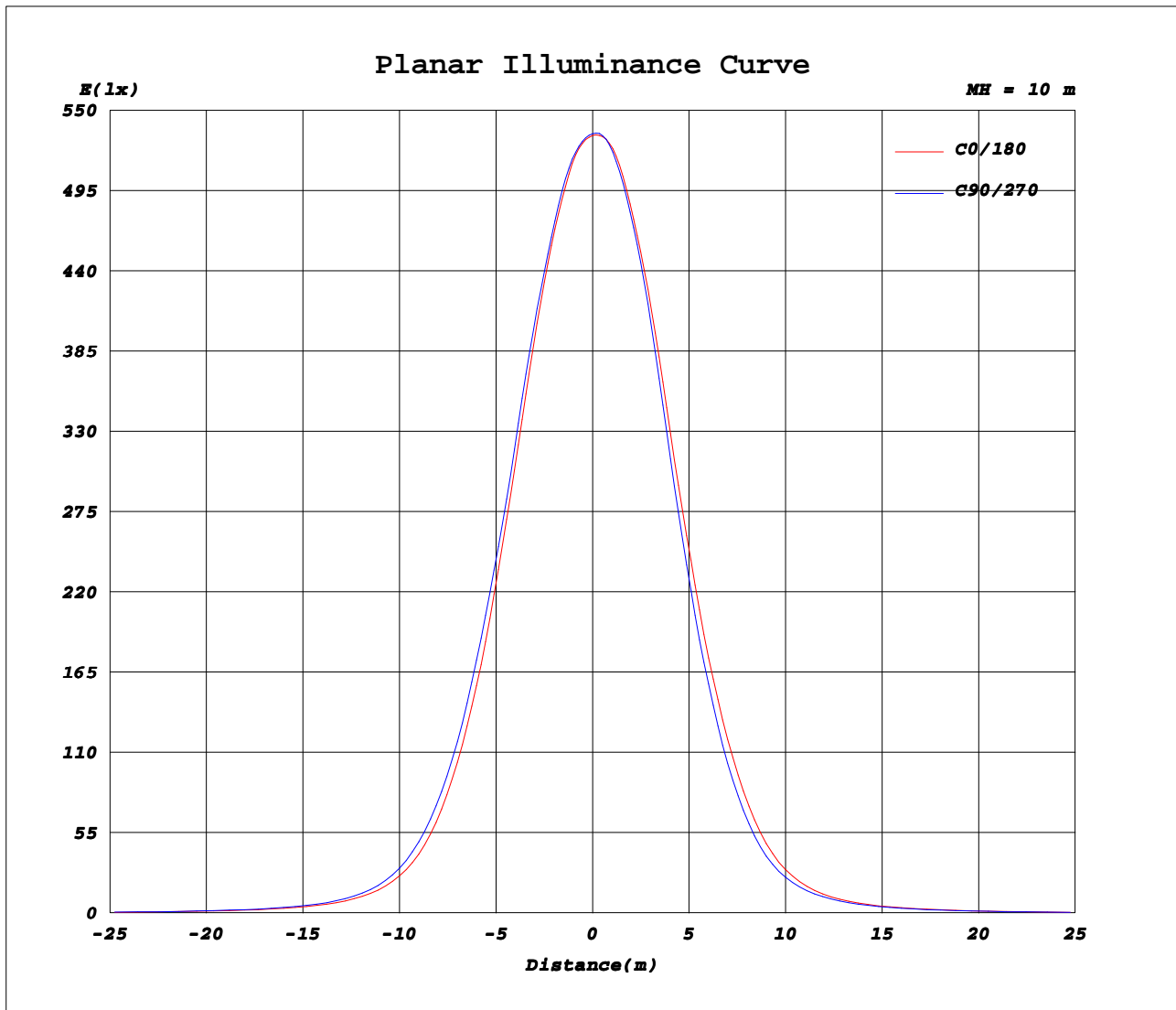
AvgL	cd/m2
L_0~180(65)av	32920
L_0~180(75)av	20158
L_0~180(85)av	7103
L_90~270(65)av	34377
L_90~270(75)av	21971
L_90~270(85)av	9249
L_45(65)av	33592
L_45(75)av	20615
L_45(85)av	8323

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 24 October 2006

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: NCD-400C-D60

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--1

UNIT: #10cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	5328	5330	5330	5328	5336	5340	5341	5341	5341	5342	5345	5344	5328	5330	5330	5328	5336	5340	5341
5	5255	5265	5256	5251	5264	5269	5274	5281	5290	5304	5320	5325	5336	5337	5344	5350	5344	5335	5326
10	5017	5029	5002	5000	5042	5062	5076	5100	5108	5111	5143	5143	5188	5175	5184	5186	5166	5155	5137
15	4648	4661	4634	4631	4696	4713	4739	4764	4797	4803	4823	4821	4891	4868	4889	4892	4839	4826	4797
20	4076	4127	4097	4101	4175	4224	4252	4296	4284	4317	4326	4303	4386	4331	4351	4359	4246	4221	4196
25	3392	3467	3420	3439	3521	3585	3590	3655	3635	3651	3637	3614	3706	3642	3628	3632	3523	3486	3444
30	2622	2728	2714	2734	2812	2850	2899	2913	2899	2874	2901	2834	2941	2819	2835	2809	2716	2650	2646
35	1882	1991	1961	1997	2074	2129	2139	2175	2136	2125	2105	2075	2166	2032	2051	2012	1936	1869	1867
40	1207	1295	1291	1311	1377	1432	1434	1460	1410	1407	1385	1345	1421	1303	1323	1295	1217	1181	1177
45	722	775	766	781	838	858	871	870	856	835	829	789	843	779	780	765	716	700	693
50	434	464	462	472	503	518	517	524	511	503	489	472	497	462	468	459	435	426	424
55	279	298	296	303	318	325	326	327	323	318	312	299	313	295	298	296	284	281	278
60	192	203	203	208	219	223	223	224	221	217	212	203	210	200	201	202	196	193	193
65	133	140	140	144	154	157	158	158	155	151	146	139	145	136	138	138	136	132	133
70	86.5	90.9	91.1	94.0	105	107	108	107	106	101	96.5	89.9	95.8	88.1	88.1	88.4	88.1	85.8	85.3
75	48.8	53.1	52.4	55.0	64.3	66.4	67.0	67.0	65.4	60.9	56.5	52.1	55.6	50.3	49.1	49.1	49.2	47.8	46.7
80	20.3	23.4	22.5	26.3	31.9	33.8	33.9	34.2	32.5	30.1	25.6	23.1	24.9	20.8	19.7	20.6	20.5	19.3	18.7
85	6.28	7.27	7.65	8.82	11.3	11.9	12.3	12.2	11.8	10.4	8.93	7.50	6.11	4.75	4.90	5.16	4.54	4.09	3.87
90	5.08	4.99	5.01	4.99	4.88	4.83	4.80	4.77	4.79	4.82	4.83	4.89	2.21	2.30	2.30	2.29	2.32	2.32	2.30
95	6.17	5.99	6.01	6.00	5.85	5.77	5.72	5.71	5.76	5.81	5.80	5.87	2.73	2.85	2.85	2.88	2.99	3.03	3.02
100	7.61	7.38	7.40	7.37	7.17	7.10	7.04	7.03	7.10	7.13	7.13	7.25	3.68	3.85	3.83	3.87	4.03	4.12	4.13
105	9.41	9.12	9.14	9.10	8.85	8.76	8.71	8.70	8.78	8.84	8.83	8.98	5.04	5.27	5.25	5.29	5.51	5.62	5.66
110	11.5	11.2	11.2	11.2	10.9	10.8	10.7	10.7	10.8	10.9	10.9	11.0	6.84	7.12	7.08	7.13	7.41	7.55	7.61
115	14.0	13.6	13.6	13.6	13.2	13.1	13.1	13.0	13.1	13.2	13.2	13.4	9.06	9.38	9.33	9.38	9.71	9.87	9.96
120	16.6	16.1	16.2	16.1	15.8	15.6	15.6	15.5	15.7	15.7	15.8	15.9	11.6	12.0	11.9	12.0	12.4	12.5	12.6
125	19.3	18.9	19.0	18.8	18.5	18.3	18.3	18.2	18.4	18.4	18.5	18.6	14.4	14.9	14.7	14.9	15.2	15.4	15.5
130	22.1	21.6	21.7	21.6	21.3	21.1	21.1	21.0	21.2	21.2	21.2	21.4	17.5	17.9	17.8	17.9	18.2	18.5	18.5
135	24.8	24.4	24.4	24.3	24.0	23.8	23.8	23.7	23.9	23.9	23.9	24.1	20.5	21.0	20.9	21.0	21.3	21.5	21.6
140	27.3	26.9	27.0	26.8	26.5	26.3	26.3	26.2	26.4	26.4	26.5	26.6	23.5	24.0	23.9	24.0	24.3	24.5	24.5
145	29.4	29.1	29.1	29.0	28.7	28.6	28.5	28.5	28.6	28.7	28.7	28.9	26.3	26.7	26.6	26.7	26.9	27.1	27.1
150	31.1	30.9	30.9	30.8	30.5	30.4	30.3	30.3	30.4	30.5	30.6	30.7	28.7	29.0	29.0	29.0	29.2	29.3	29.2
155	32.4	32.2	32.2	32.1	31.9	31.7	31.7	31.7	31.8	31.9	32.0	32.1	30.6	30.8	30.8	30.9	31.0	31.0	31.0
160	33.3	33.2	33.1	33.0	32.8	32.7	32.8	32.8	32.9	33.0	33.1	33.2	32.1	32.3	32.3	32.3	32.5	32.4	32.3
165	34.1	34.0	33.9	33.8	33.7	33.6	33.7	33.7	33.9	34.0	34.0	34.1	33.4	33.5	33.6	33.6	33.7	33.7	33.6
170	34.9	34.8	34.8	34.7	34.6	34.6	34.7	34.7	34.8	34.9	34.9	34.9	34.5	34.6	34.6	34.7	34.8	34.8	34.7
175	35.6	35.6	35.6	35.5	35.5	35.5	35.6	35.7	35.7	35.7	35.7	35.7	35.4	35.5	35.5	35.5	35.6	35.7	35.7
180	36.0	35.9	35.9	35.9	35.9	36.0	36.1	36.1	36.1	36.0	36.0	36.0	36.0	35.9	35.9	35.9	35.9	36.0	36.1

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:HSO

Test Date:24 October 2006

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity:65.0%

Test Distance:8.100m [K=1.0000]

Remarks: NCD-400C-D60

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:1.842A P:395.1W PF:0.9748 Lamp Flux:59021.5x1 lm		
NAME: NCD-400C-D60	TYPE:LED	WEIGHT:
SPEC.:SB3535_274EA_D1*2EA	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: #10cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	5341	5341	5342	5345	5344														
5	5316	5309	5301	5288	5283														
10	5113	5104	5105	5078	5072														
15	4775	4762	4743	4720	4718														
20	4183	4186	4174	4163	4179														
25	3440	3466	3479	3447	3488														
30	2618	2664	2671	2681	2715														
35	1844	1898	1907	1924	1953														
40	1168	1197	1216	1230	1269														
45	692	710	724	725	756														
50	422	432	438	441	454														
55	277	283	287	284	290														
60	192	195	198	195	198														
65	131	135	135	133	135														
70	84.5	87.9	86.8	84.1	86.1														
75	46.8	48.9	48.4	45.5	48.1														
80	18.6	20.1	19.9	17.5	19.1														
85	3.88	4.31	4.62	4.27	4.54														
90	2.29	2.26	2.24	2.24	2.19														
95	3.03	2.97	2.91	2.87	2.78														
100	4.14	4.06	3.98	3.95	3.82														
105	5.68	5.58	5.49	5.45	5.29														
110	7.65	7.53	7.43	7.40	7.20														
115	10.00	9.87	9.77	9.75	9.53														
120	12.7	12.6	12.4	12.4	12.2														
125	15.6	15.4	15.4	15.3	15.1														
130	18.6	18.4	18.4	18.4	18.2														
135	21.7	21.5	21.4	21.4	21.3														
140	24.5	24.4	24.3	24.3	24.2														
145	27.1	26.9	27.0	26.9	26.9														
150	29.2	29.1	29.1	29.1	29.0														
155	30.9	30.8	30.7	30.8	30.7														
160	32.2	32.1	32.1	32.1	32.1														
165	33.5	33.3	33.3	33.3	33.3														
170	34.7	34.6	34.5	34.5	34.4														
175	35.7	35.6	35.6	35.5	35.5														
180	36.1	36.1	36.0	36.0	36.0														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity:65.0%
Test Distance:8.100m [K=1.0000]
Remarks: NCD-400C-D60

Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	53275	53305	53303	53282	53364	53399	53410	53409	53405	53423
3.0	52960	52962	52904	52879	52964	53013	53099	53145	53211	53305
6.0	52209	52390	52273	52183	52366	52447	52519	52579	52672	52835
9.0	50748	50881	50704	50668	51037	51198	51315	51538	51588	51676
12.0	48879	48991	48576	48578	49159	49344	49495	49776	49972	49973
15.0	46478	46614	46343	46311	46958	47130	47390	47642	47975	48034
18.0	43328	43723	43442	43456	44129	44445	44748	45085	45167	45450
21.0	39453	39974	39604	39702	40471	40999	41247	41754	41568	41885
24.0	35389	36071	35529	35764	36543	37198	37214	37910	37683	37921
27.0	30870	31764	31541	31639	32460	33035	33244	33678	33561	33531
30.0	26224	27277	27138	27340	28116	28503	28990	29131	28990	28744
33.0	21756	22784	22573	22863	23647	24144	24410	24725	24369	24262
36.0	17376	18477	18206	18586	19296	19889	19899	20302	19857	19776
39.0	13229	14267	14112	14438	15090	15700	15659	16009	15487	15455
42.0	9838	10552	10528	10684	11423	11740	11904	11956	11671	11467
45.0	7221	7746	7660	7812	8377	8582	8711	8698	8556	8355
48.0	5290	5699	5634	5758	6171	6349	6347	6399	6292	6174
51.0	3946	4217	4199	4278	4554	4669	4679	4739	4620	4553
54.0	3025	3221	3210	3276	3458	3538	3554	3573	3509	3458
57.0	2398	2540	2530	2583	2718	2768	2778	2781	2754	2705
60.0	1918	2031	2028	2078	2185	2233	2230	2235	2211	2174
63.0	1547	1627	1629	1674	1768	1801	1813	1817	1787	1751
66.0	1235	1291	1293	1327	1433	1459	1469	1473	1442	1402
69.0	951.8	999.1	999.9	1032	1143	1161	1175	1167	1155	1100
72.0	697.8	746.6	747.6	777.2	881.8	897.7	910.2	901.6	892.9	838.4
75.0	487.6	531.4	523.7	550.0	643.1	663.7	670.0	670.0	653.8	608.5
78.0	305.8	343.9	330.2	361.8	438.5	457.8	459.4	463.2	445.3	412.9
81.0	160.8	186.1	182.1	213.6	267.5	285.7	284.3	290.0	272.8	247.9
84.0	77.68	90.73	94.69	111.5	143.3	151.4	151.8	154.9	146.3	131.9
87.0	48.65	52.37	54.09	58.13	68.57	72.59	73.12	74.45	69.40	64.35
90.0	50.80	49.92	50.13	49.93	48.77	48.33	47.95	47.73	47.88	48.21
93.0	56.86	55.57	55.83	55.67	54.17	53.44	52.88	52.72	53.22	53.71
96.0	64.29	62.34	62.52	62.42	60.84	60.15	59.60	59.45	60.00	60.43
99.0	73.01	70.72	70.93	70.64	68.74	68.05	67.54	67.40	68.03	68.35
102.0	82.91	80.33	80.51	80.18	77.90	77.19	76.68	76.56	77.25	77.73
105.0	94.11	91.17	91.41	91.01	88.50	87.65	87.15	87.00	87.77	88.42
108.0	106.5	103.3	103.5	103.1	100.3	99.37	98.87	98.71	99.54	100.3
111.0	120.0	116.5	116.8	113.3	112.3	111.8	111.6	111.6	112.5	113.4
114.0	134.6	130.9	131.2	130.7	127.4	126.3	125.8	125.6	126.6	127.4
117.0	149.9	145.3	146.3	145.0	142.4	140.9	140.7	140.1	141.5	141.9
120.0	165.9	161.2	162.2	160.9	158.2	156.1	156.4	155.3	157.1	157.2
123.0	182.3	177.5	178.5	177.3	174.4	172.4	172.5	171.5	173.2	173.3
126.0	198.9	194.2	195.2	194.0	191.0	188.9	189.0	187.9	189.7	189.9
129.0	215.6	210.9	211.9	210.5	207.6	205.6	205.6	204.5	206.2	206.3
132.0	231.9	227.4	228.4	227.0	224.1	221.7	222.1	220.8	222.6	222.7
135.0	247.9	243.5	244.4	243.1	240.2	238.1	238.2	237.1	238.7	238.9
138.0	263.1	258.9	259.8	258.5	255.6	253.6	253.6	252.4	254.1	254.1
141.0	277.1	273.4	273.7	272.9	270.2	268.1	268.2	267.2	268.6	269.0
144.0	289.8	286.6	286.9	286.1	283.1	281.4	281.2	280.6	281.7	282.4
147.0	301.5	298.6	298.7	298.0	294.9	293.4	293.0	292.8	293.7	294.6
150.0	311.3	308.9	308.9	307.9	305.3	303.8	303.4	303.3	304.3	305.4
153.0	319.4	317.5	317.0	316.2	313.8	312.5	312.3	312.2	313.1	314.3
156.0	326.0	324.4	323.8	323.0	320.5	319.5	319.6	319.7	320.6	321.7
159.0	331.6	330.1	329.4	328.3	326.4	325.5	325.9	326.2	326.9	328.2
162.0	336.5	335.3	334.5	333.2	331.6	330.9	331.4	331.9	333.0	334.0
165.0	341.4	340.2	339.3	338.1	336.6	336.1	336.8	337.4	338.6	339.5
168.0	346.0	345.1	344.1	343.1	341.9	341.7	342.6	343.3	344.4	345.2
171.0	350.7	350.0	349.3	348.6	347.8	347.7	348.7	349.4	350.4	350.9
174.0	355.4	354.9	354.5	354.0	353.7	353.8	354.9	355.4	355.9	355.6
177.0	358.0	357.8	357.5	357.2	357.2	357.6	358.4	358.9	358.8	358.3
180.0	359.6	359.5	359.2	359.1	359.4	360.0	361.0	360.9	360.6	360.3
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	53446	53437	53275	53305	53303	53282	53364	53399	53410	53409
3.0	53386	53451	53414	53465	53502	53511	53567	53525	53477	53428
6.0	53025	53053	53244	53182	53285	53346	53239	53114	53000	52915
9.0	51961	51928	52366	52206	52311	52303	52124	52023	51893	51679
12.0	50189	50257	50801	50663	50783	50823	50608	50482	50175	49906
15.0	48229	48208	48914	48675	48885	48917	48393	48259	47974	47746
18.0	45591	45425	46197	45808	46044	46111	45138	44899	44664	44484
21.0	41926	41724	42555	41992	42126	42249	41073	40831	40520	40401
24.0	37749	37601	38462	37903	37796	37867	36771	36419	35994	35954
27.0	33581	33104	34156	33241	33228	33120	32003	31608	31280	31191
30.0	29012	28340	29409	28193	28353	28091	27157	26504	26456	26180

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: HSO

Test Date: 24 October 2006

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity: 65.0%

Test Distance: 8.100m [K=1.0000]

Remarks: NCD-400C-D60

Photometric Data Table [cd]

33.0	24200	23782	24809	23334	23685	23213	22431	21682	21750	21435
36.0	19528	19243	20124	18833	18964	18614	17832	17202	17199	16987
39.0	15200	14830	15621	14392	14593	14199	13500	12920	13042	12910
42.0	11461	10886	11590	10662	10731	10518	9814	9557	9520	9457
45.0	8285	7892	8425	7794	7802	7652	7165	7001	6932	6917
48.0	6018	5794	6143	5710	5700	5606	5284	5163	5119	5116
51.0	4446	4260	4496	4198	4246	4177	3968	3901	3871	3859
54.0	3397	3239	3399	3212	3224	3207	3086	3036	3019	2995
57.0	2657	2534	2647	2519	2527	2531	2443	2415	2397	2386
60.0	2122	2028	2102	2000	2011	2019	1964	1934	1925	1915
63.0	1695	1619	1683	1593	1607	1612	1581	1549	1548	1538
66.0	1350	1281	1346	1262	1267	1273	1253	1226	1223	1212
69.0	1058	988.2	1050	969.6	972.2	972.0	967.7	941.7	939.9	927.6
72.0	795.8	737.5	787.6	717.7	715.0	719.5	712.3	695.1	688.1	683.5
75.0	565.3	520.9	555.9	503.3	491.2	491.3	492.1	478.5	467.3	467.8
78.0	366.0	335.4	364.0	316.6	301.5	306.4	308.7	293.8	286.9	285.3
81.0	209.9	186.6	198.7	159.8	153.7	163.8	161.8	150.1	144.9	144.7
84.0	111.8	93.69	84.91	65.65	66.39	71.34	65.59	59.40	56.14	56.59
87.0	59.25	52.72	31.86	26.60	27.30	27.00	23.64	22.35	21.86	21.77
90.0	48.32	48.95	22.11	23.04	22.98	22.92	23.24	23.19	22.97	22.93
93.0	53.79	54.59	24.72	25.97	25.96	26.11	26.85	27.04	26.90	26.89
96.0	60.27	61.04	28.81	30.07	29.98	30.35	31.66	32.13	32.14	32.15
99.0	68.28	69.42	34.55	36.15	36.00	36.31	37.89	38.65	38.78	38.86
102.0	77.71	78.99	41.73	43.67	43.48	43.85	45.73	46.67	46.92	47.06
105.0	88.35	89.79	50.43	52.72	52.49	52.87	55.12	56.23	56.63	56.82
108.0	100.3	101.8	60.74	63.31	62.98	63.42	66.03	67.28	67.83	68.08
111.0	113.3	114.9	72.55	75.41	75.01	75.51	78.42	79.84	80.51	80.85
114.0	127.3	129.0	85.82	88.99	88.50	88.97	92.20	93.75	94.59	94.98
117.0	142.2	143.6	100.5	103.9	103.3	103.8	107.4	109.0	109.9	110.3
120.0	157.8	158.7	116.4	120.0	119.3	119.8	123.6	125.3	126.3	126.8
123.0	173.9	175.0	133.3	137.1	136.3	136.8	140.4	142.5	143.1	144.1
126.0	190.3	191.5	150.2	154.9	153.3	154.6	157.8	160.4	160.6	161.9
129.0	206.9	208.0	168.4	173.2	171.7	172.8	176.2	178.6	178.9	180.2
132.0	223.3	224.4	187.0	191.7	190.2	191.4	194.6	197.0	197.3	198.6
135.0	239.5	240.6	205.4	210.2	208.7	209.8	213.0	215.3	215.6	216.7
138.0	255.0	256.0	223.7	228.3	226.9	227.9	231.0	233.1	233.3	234.3
141.0	269.7	270.7	241.1	245.7	244.4	245.3	248.2	250.1	250.1	251.0
144.0	282.8	284.3	257.8	262.2	261.0	261.8	264.4	266.0	265.8	266.4
147.0	295.1	296.6	273.1	276.9	276.0	276.7	279.1	279.9	279.9	280.0
150.0	305.9	307.2	286.9	290.1	289.6	290.1	292.4	292.6	292.4	292.0
153.0	314.6	316.0	298.8	301.6	301.5	301.9	303.6	303.7	303.2	302.5
156.0	322.3	323.4	309.2	311.6	311.7	311.9	313.5	313.2	312.6	311.6
159.0	328.8	329.7	318.2	320.3	320.3	320.7	321.9	321.6	320.9	319.7
162.0	334.7	335.5	326.3	328.2	328.3	328.7	329.7	329.5	328.6	327.4
165.0	340.3	341.1	333.7	335.4	335.7	336.0	336.9	336.6	335.9	334.8
168.0	345.9	346.1	340.4	341.7	342.1	342.6	343.6	343.6	343.0	342.0
171.0	351.0	351.0	347.0	347.9	348.0	348.6	350.0	350.2	349.8	348.9
174.0	355.7	355.4	353.0	353.2	353.1	353.4	354.6	355.4	355.5	355.0
177.0	358.4	358.4	357.2	357.3	357.2	357.3	357.8	359.0	359.6	359.3
180.0	360.3	360.0	359.6	359.4	359.2	359.2	359.3	359.9	360.9	361.0
G/C	300.0	315.0	330.0	345.0						
0.0	53405	53423	53446	53437						
3.0	53412	53349	53314	53275						
6.0	52801	52697	52588	52544						
9.0	51568	51564	51331	51275						
12.0	49840	49824	49443	49413						
15.0	47618	47434	47201	47180						
18.0	44451	44278	44153	44226						
21.0	40516	40457	40300	40482						
24.0	36212	36297	35984	36302						
27.0	31447	31631	31397	31914						
30.0	26640	26713	26805	27153						
33.0	22022	22011	22254	22493						
36.0	17491	17601	17777	18081						
39.0	13271	13365	13590	13889						
42.0	9677	9843	9971	10353						
45.0	7103	7241	7248	7564						
48.0	5243	5327	5336	5549						
51.0	3942	3997	4010	4123						
54.0	3072	3101	3097	3153						
57.0	2431	2470	2437	2478						
60.0	1953	1980	1953	1980						
63.0	1571	1580	1561	1579						
66.0	1247	1249	1221	1245						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: HSO

Test Date: 24 October 2006

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351

Humidity: 65.0%

Test Distance: 8.100m [K=1.0000]

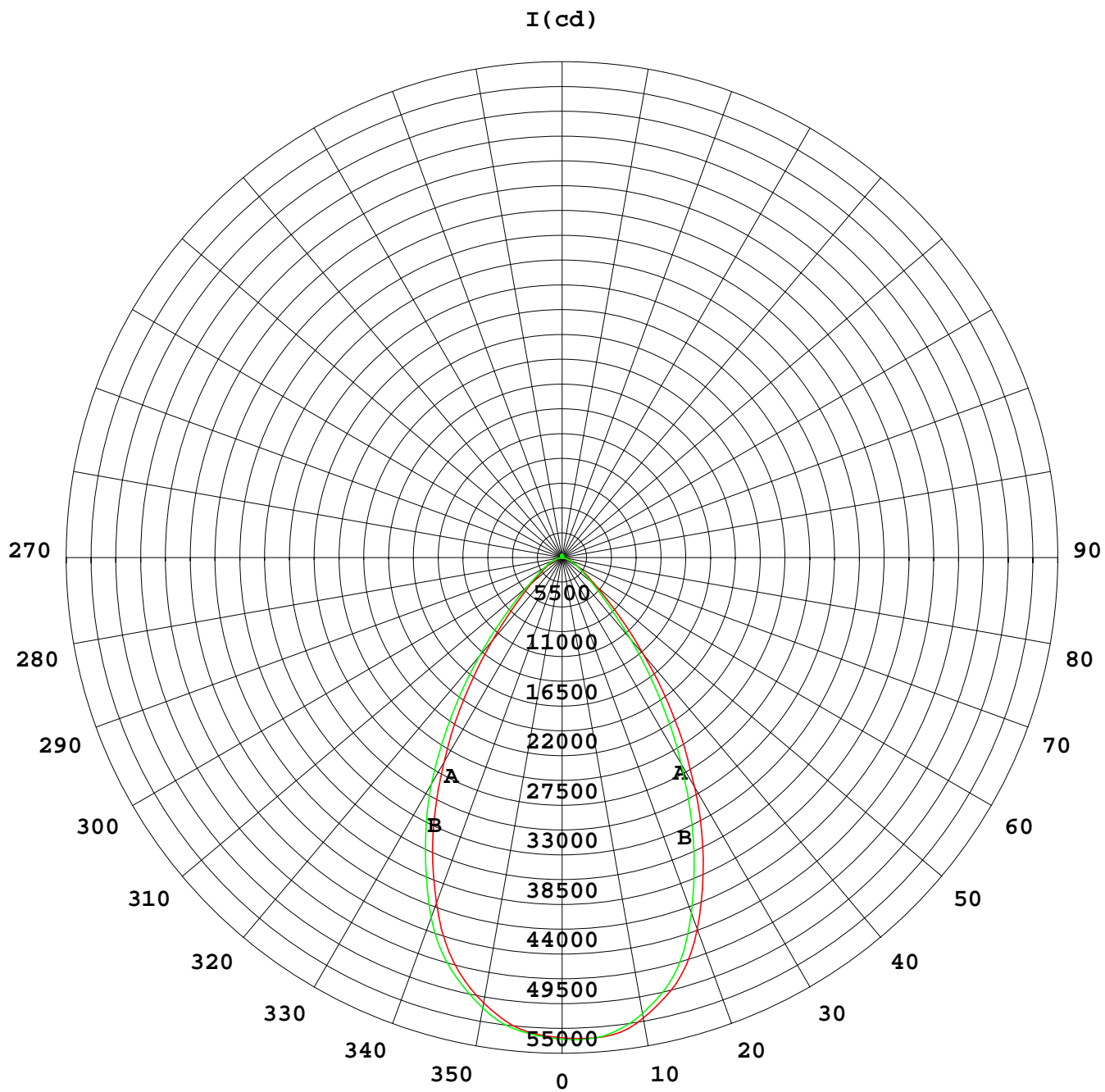
Remarks: NCD-400C-D60

Photometric Data Table [cd]

69.0	964.7	955.1	929.2	950.5
72.0	711.0	703.8	678.1	698.8
75.0	488.6	484.4	455.2	481.0
78.0	304.1	298.4	274.5	294.0
81.0	158.3	157.8	138.2	148.0
84.0	63.09	66.01	58.93	62.50
87.0	22.71	23.87	23.84	25.11
90.0	22.61	22.40	22.37	21.93
93.0	26.44	26.04	25.79	25.10
96.0	31.54	30.91	30.51	29.55
99.0	38.09	37.29	36.98	35.81
102.0	46.14	45.30	44.96	43.56
105.0	55.77	54.86	54.55	52.92
108.0	66.98	66.04	65.70	63.87
111.0	79.66	78.70	78.36	76.36
114.0	93.77	92.73	92.47	90.37
117.0	109.1	108.1	107.9	105.6
120.0	125.5	124.4	124.4	122.1
123.0	142.4	141.8	141.4	139.5
126.0	159.9	159.7	159.0	157.5
129.0	178.1	177.9	177.4	176.0
132.0	196.6	196.3	195.9	194.5
135.0	214.6	214.5	214.1	212.9
138.0	232.3	232.2	231.9	230.7
141.0	249.0	249.0	248.8	247.8
144.0	264.6	264.6	264.4	263.7
147.0	278.6	278.8	278.6	277.7
150.0	290.9	290.7	291.0	290.1
153.0	301.5	301.2	301.6	301.0
156.0	310.5	310.3	310.5	310.2
159.0	318.6	318.3	318.4	318.3
162.0	326.1	325.7	325.8	325.9
165.0	333.4	332.9	333.0	333.0
168.0	340.8	340.3	340.0	339.9
171.0	348.1	347.6	347.1	346.7
174.0	354.3	353.9	353.6	353.1
177.0	358.8	358.4	358.2	357.7
180.0	360.8	360.3	360.2	360.1

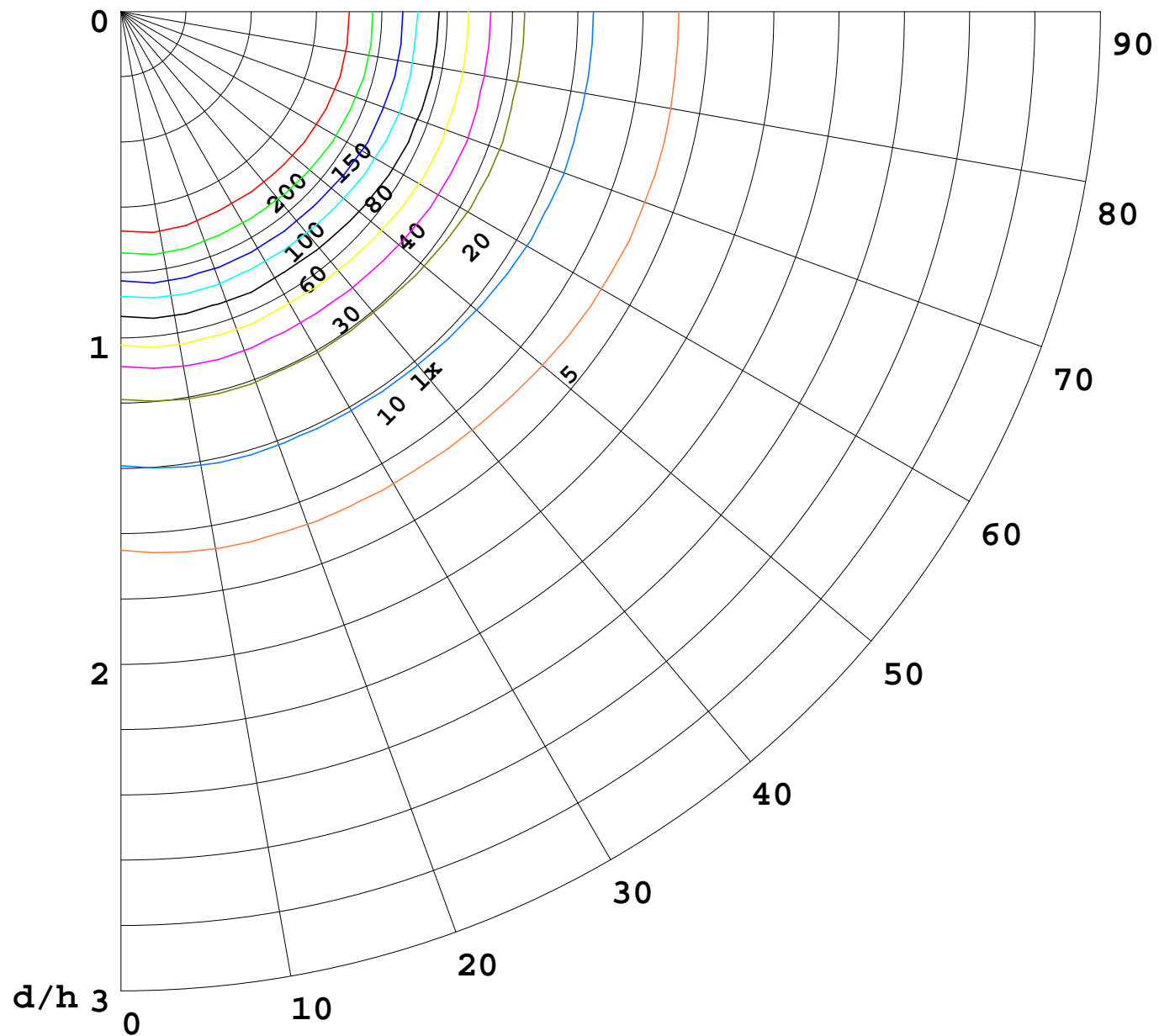
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 24 October 2006

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: NCD-400C-D60



1000 lm

$K = 1$



F = 1000 lm
K = 0.7
Hcc = 0.8 m
Hfc = 0.0 m
Eave = 100 lx

	Pcc	Pw	Pfc
—————	70	50	30
—————	50	30	20

