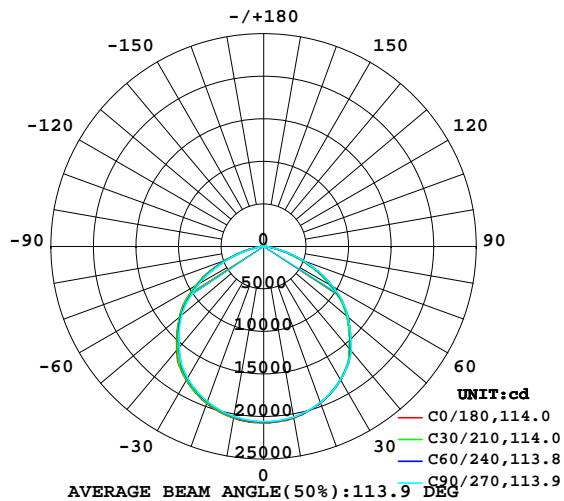


LUMINAIRE PHOTOMETRIC TEST REPORT

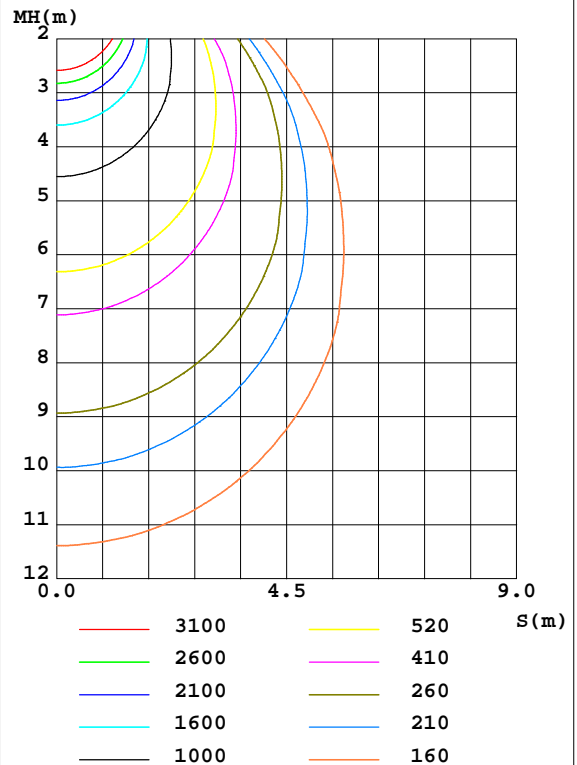
Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 147.15 lm/W			
MODEL	NCD-400W	Imax(cd)	20745	S/MH(C0/180)	1.30
NOMINAL POWER(W)	400	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	59254	η UP,DN(C0-180)	1.1,49.4
NOMINAL FLUX(lm)	59253.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.0,48.6
LAMPS INSIDE	1	η up(%)	2.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)		η down(%)	98.0	CIBSE SHR MAX	1.35

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:10 April 2023

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-400W_2835 9V

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

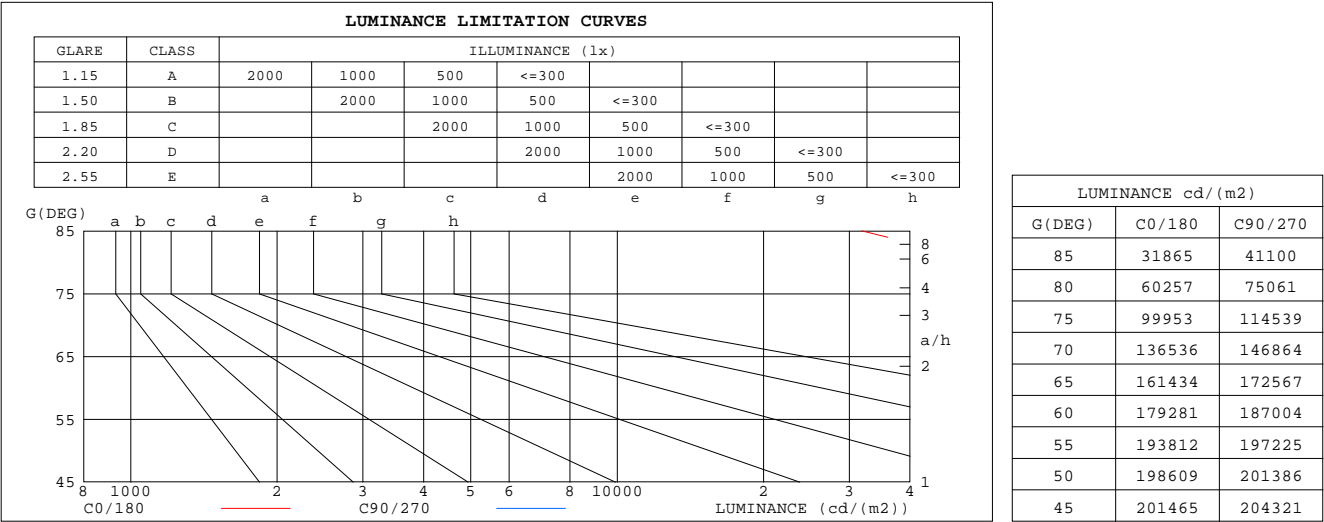
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2046	2037	2035	2032	2049	2040	2029	2028	0- 10	1955	1955	3.3,3.3
20	1958	1951	1952	1947	1964	1953	1938	1939	10- 20	5646	7602	12.8,12.8
30	1809	1804	1810	1804	1818	1808	1789	1792	20- 30	8683	16285	27.5,27.5
40	1568	1573	1599	1583	1592	1570	1545	1546	30- 40	10641	26926	45.4,45.4
50	1277	1282	1294	1294	1295	1287	1259	1271	40- 50	11013	37939	64,64
60	896.4	902.7	935.0	923.6	921.0	906.6	879.4	881.1	50- 60	9868	47807	80.7,80.7
70	467.0	477.0	502.3	501.7	493.9	486.0	448.0	452.7	60- 70	6865	54672	92.3,92.3
80	104.6	108.8	130.3	125.8	120.3	115.1	95.82	98.07	70- 80	2936	57608	97.2,97.2
90	12.84	12.56	13.87	13.63	11.25	11.16	11.04	10.82	80- 90	448.5	58057	98,98
100	18.25	17.88	18.72	18.74	15.62	15.80	17.51	16.41	90-100	144.4	58201	98.2,98.2
110	20.29	21.68	23.76	22.92	17.98	18.60	19.81	18.95	100-110	210.8	58412	98.6,98.6
120	21.14	23.01	24.21	23.84	18.19	21.20	21.81	20.63	110-120	209.0	58621	98.9,98.9
130	19.22	19.09	19.89	20.10	16.94	17.54	17.89	17.39	120-130	176.0	58797	99.2,99.2
140	20.17	20.04	19.99	20.14	17.94	18.04	18.10	17.97	130-140	143.5	58941	99.5,99.5
150	21.70	21.44	21.29	21.43	19.65	19.72	19.68	19.52	140-150	124.1	59065	99.7,99.7
160	23.51	23.27	23.13	23.16	22.09	21.82	21.97	21.66	150-160	99.12	59164	99.8,99.8
170	24.69	24.57	24.52	24.52	23.99	23.90	23.92	23.76	160-170	66.42	59230	100,100
180	24.93	24.86	24.81	24.75	24.96	24.84	24.86	24.74	170-180	23.39	59254	100,100
DEG	LUMINOUS INTENSITY: $\neq 10\text{cd}$									UNIT: lm		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: HSO
 Test Date: 10 April 2023

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-400W_2835 9V

LUMINANCE LIMITATION CURVES

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



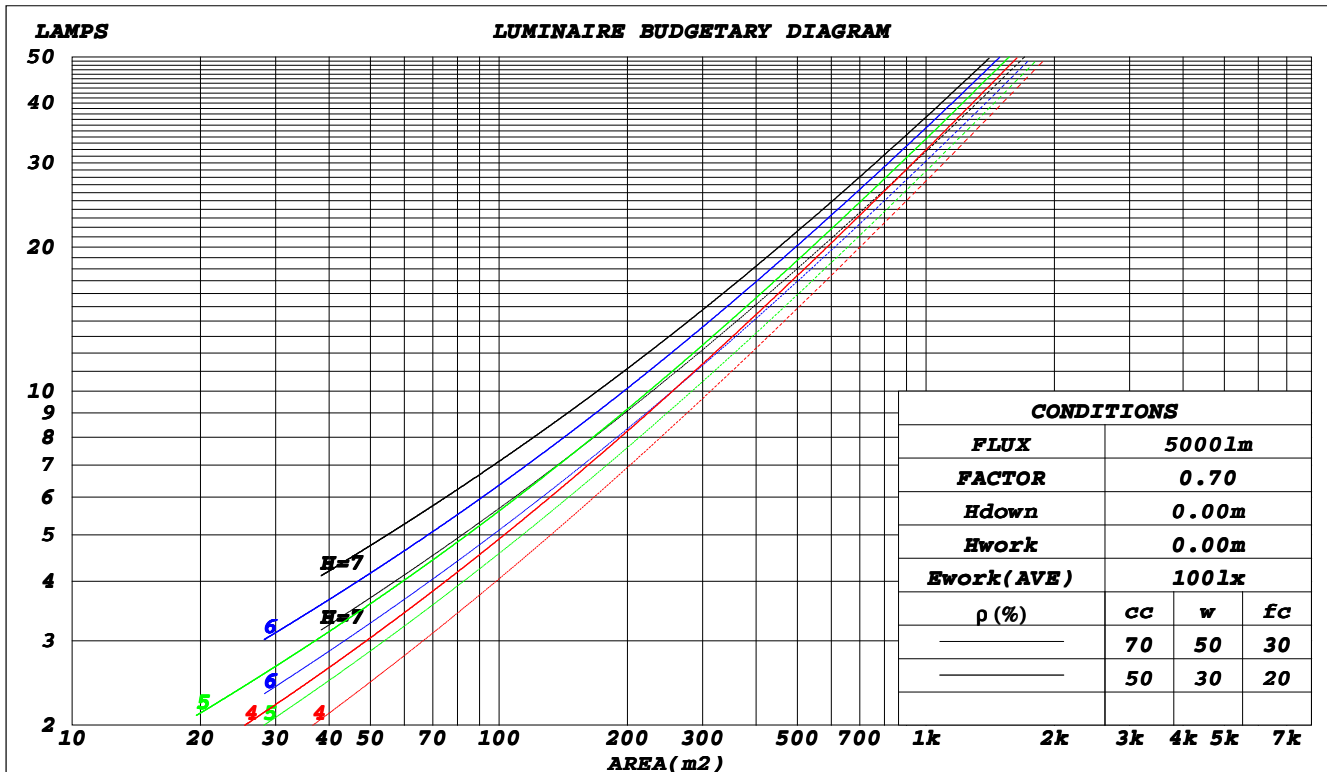
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:10 April 2023

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-400W_2835 9V

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
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	1.05	1.01	.97	1.02	.98	.95	.98	.95	.92	.93	.91	.89	.89	.87	.86	.84
2.0	.92	.85	.80	.89	.83	.78	.86	.81	.76	.82	.78	.74	.79	.75	.72	.70
3.0	.81	.73	.66	.79	.71	.66	.76	.69	.64	.73	.67	.63	.70	.65	.62	.59
4.0	.71	.63	.56	.70	.62	.56	.67	.60	.55	.65	.59	.54	.62	.57	.53	.51
5.0	.64	.55	.48	.62	.54	.48	.60	.53	.47	.58	.52	.47	.56	.50	.46	.44
6.0	.57	.49	.42	.56	.48	.42	.54	.47	.41	.52	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.43	.37	.49	.42	.37	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.30	.43	.35	.30	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: HSO
 Test Date: 10 April 2023

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-400W_2835 9V

WEC AND CCEC

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
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	.288	.163	.052	.280	.160	.051	.266	.152	.049	.252	.146	.047	.240	.139	.045		
2.0	.277	.152	.047	.270	.149	.046	.257	.143	.044	.246	.138	.043	.235	.133	.042		
3.0	.259	.138	.041	.253	.136	.041	.242	.131	.040	.232	.127	.039	.222	.123	.038		
4.0	.242	.126	.037	.236	.124	.037	.226	.120	.036	.217	.117	.035	.208	.113	.034		
5.0	.225	.114	.033	.220	.113	.033	.211	.110	.032	.203	.107	.032	.195	.104	.031		
6.0	.209	.105	.030	.205	.104	.030	.197	.101	.029	.190	.099	.029	.183	.096	.029		
7.0	.195	.097	.027	.192	.095	.027	.184	.093	.027	.178	.091	.027	.171	.089	.026		
8.0	.183	.089	.025	.180	.088	.025	.173	.086	.025	.167	.085	.024	.161	.083	.024		
9.0	.172	.083	.023	.169	.082	.023	.163	.081	.023	.157	.079	.023	.152	.077	.022		
10.0	.162	.078	.022	.159	.077	.021	.154	.075	.021	.149	.074	.021	.144	.072	.021		

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	.206	.206	.206	.176	.176	.176	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.194	.172	.152	.166	.147	.131	.114	.101	.090	.065	.059	.052	.021	.019	.017	
2.0	.186	.148	.115	.159	.127	.100	.109	.088	.070	.063	.051	.041	.020	.017	.013	
3.0	.178	.130	.091	.153	.112	.079	.105	.078	.056	.061	.045	.033	.019	.015	.011	
4.0	.171	.117	.075	.147	.101	.065	.101	.070	.046	.058	.041	.027	.019	.013	.009	
5.0	.164	.106	.064	.140	.092	.056	.097	.064	.039	.056	.038	.023	.018	.012	.008	
6.0	.157	.098	.056	.135	.085	.048	.093	.059	.034	.054	.035	.020	.017	.011	.007	
7.0	.150	.091	.050	.129	.079	.043	.089	.055	.031	.052	.033	.018	.017	.011	.006	
8.0	.144	.085	.045	.124	.074	.039	.086	.052	.028	.050	.031	.017	.016	.010	.005	
9.0	.138	.080	.041	.119	.070	.036	.082	.049	.026	.048	.029	.015	.016	.009	.005	
10.0	.132	.076	.039	.114	.066	.034	.079	.046	.024	.046	.027	.014	.015	.009	.005	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 10 April 2023

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-400W_2835 9V

UGR(Unified Glare Rating) Table

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm										
NAME: NCD-400W_2835 9V					TYPE:			WEIGHT:		
SPEC.:SB 2835 9V Chip_628EA					DIM.:			SERIAL No.:		
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	31.1	32.6	31.4	32.8	33.0	31.3	32.7	31.6	33.0	33.2
3H	32.2	33.6	32.6	33.8	34.1	32.5	33.8	32.8	34.1	34.4
4H	32.5	33.8	32.9	34.1	34.4	32.8	34.1	33.2	34.4	34.7
6H	32.6	33.8	32.9	34.1	34.4	32.9	34.1	33.3	34.5	34.8
8H	32.6	33.7	32.9	34.0	34.4	32.9	34.1	33.3	34.4	34.7
12H	32.5	33.6	32.9	34.0	34.3	32.9	34.0	33.3	34.3	34.7
4H 2H	31.6	32.9	32.0	33.2	33.5	31.8	33.0	32.1	33.3	33.6
3H	32.9	34.0	33.3	34.3	34.7	33.1	34.2	33.5	34.6	34.9
4H	33.2	34.2	33.6	34.6	35.0	33.5	34.6	33.9	34.9	35.3
6H	33.4	34.3	33.8	34.6	35.1	33.7	34.6	34.2	35.0	35.4
8H	33.4	34.2	33.8	34.6	35.0	33.7	34.6	34.2	35.0	35.4
12H	33.3	34.1	33.8	34.5	35.0	33.7	34.5	34.2	34.9	35.4
8H 4H	33.3	34.2	33.8	34.6	35.0	33.6	34.4	34.1	34.9	35.3
6H	33.5	34.2	34.0	34.6	35.1	33.9	34.6	34.3	35.0	35.5
8H	33.5	34.1	34.0	34.6	35.1	33.9	34.5	34.4	35.0	35.5
12H	33.5	34.1	34.0	34.5	35.1	33.9	34.4	34.4	34.9	35.4
12H 4H	33.3	34.1	33.8	34.5	34.9	33.6	34.3	34.0	34.8	35.2
6H	33.5	34.1	34.0	34.6	35.1	33.9	34.5	34.3	34.9	35.4
8H	33.5	34.1	34.0	34.5	35.1	33.9	34.4	34.4	34.9	35.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.5					+ 0.3 / - 0.4				
2.0H	+ 0.4 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 59254 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:10 April 2023

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-400W_2835 9V

UTILIZATION FACTORS TABLE

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

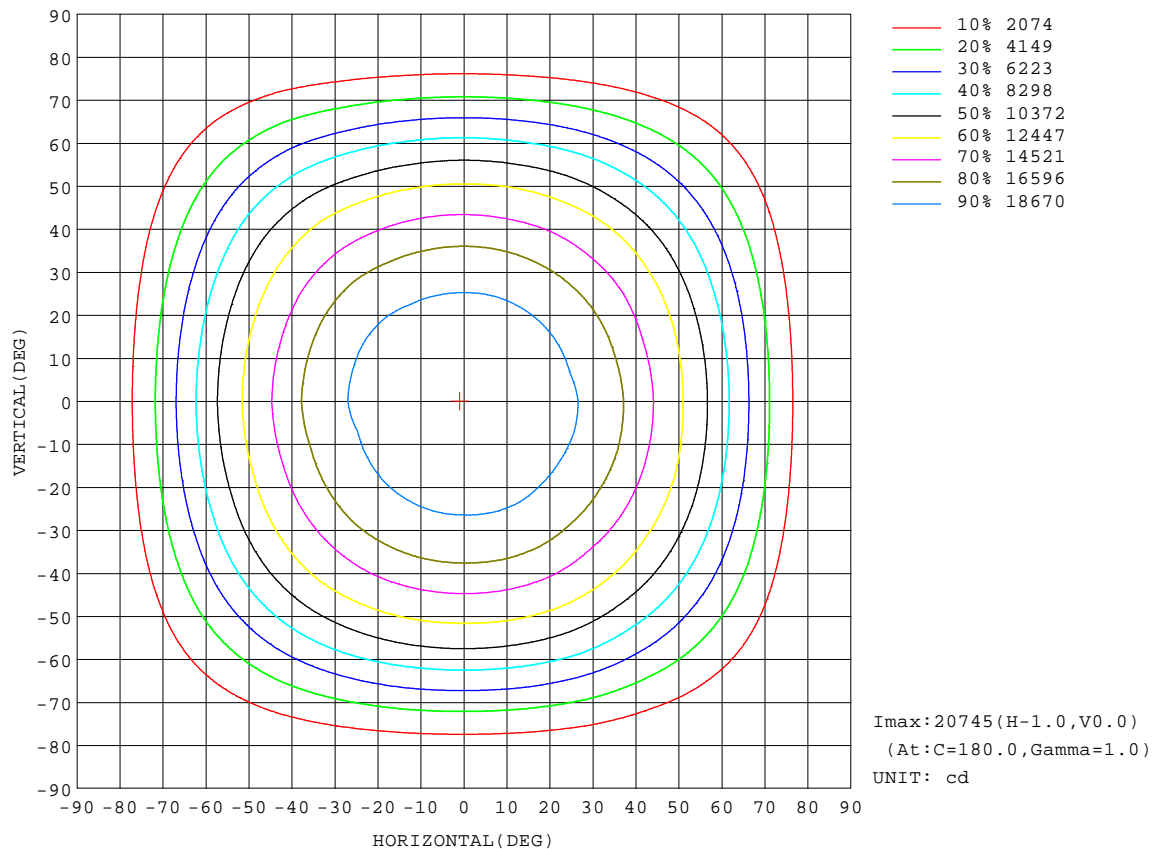
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	33
0.80	68	56	49	67	56	49	65	55	49	42
1.00	77	66	59	75	65	58	73	66	58	51
1.25	84	74	67	82	73	66	79	71	65	58
1.50	89	79	72	87	78	72	84	76	71	63
2.00	96	87	81	94	86	80	90	84	79	71
2.50	99	92	86	97	91	85	93	88	83	75
3.00	103	96	91	100	95	90	96	91	87	79
4.00	107	101	97	104	99	95	100	96	92	83
5.00	109	104	101	106	102	99	102	98	95	86
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:10 April 2023

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-400W_2835 9V

ISOCANDELA DIAGRAM

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



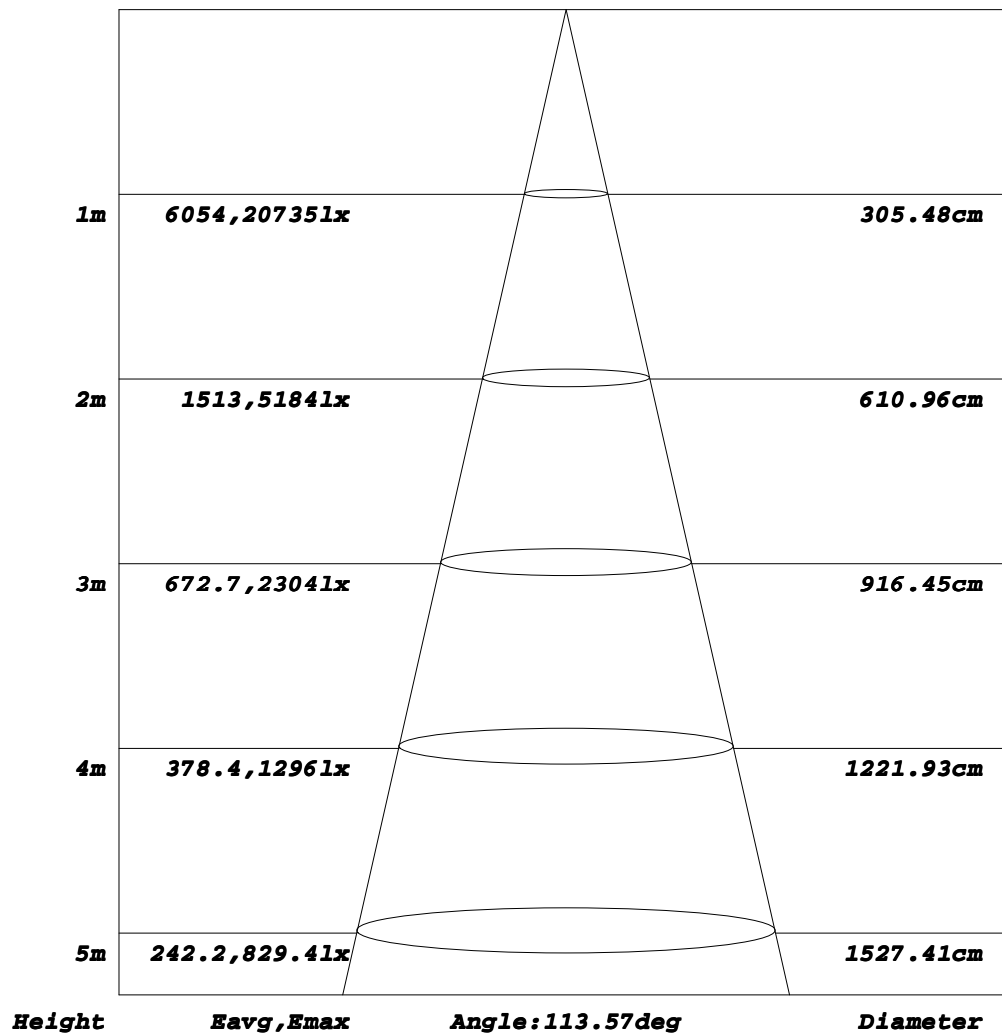
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:10 April 2023

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-400W_2835 9V

AAI Figure

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Flux out:45098 lm



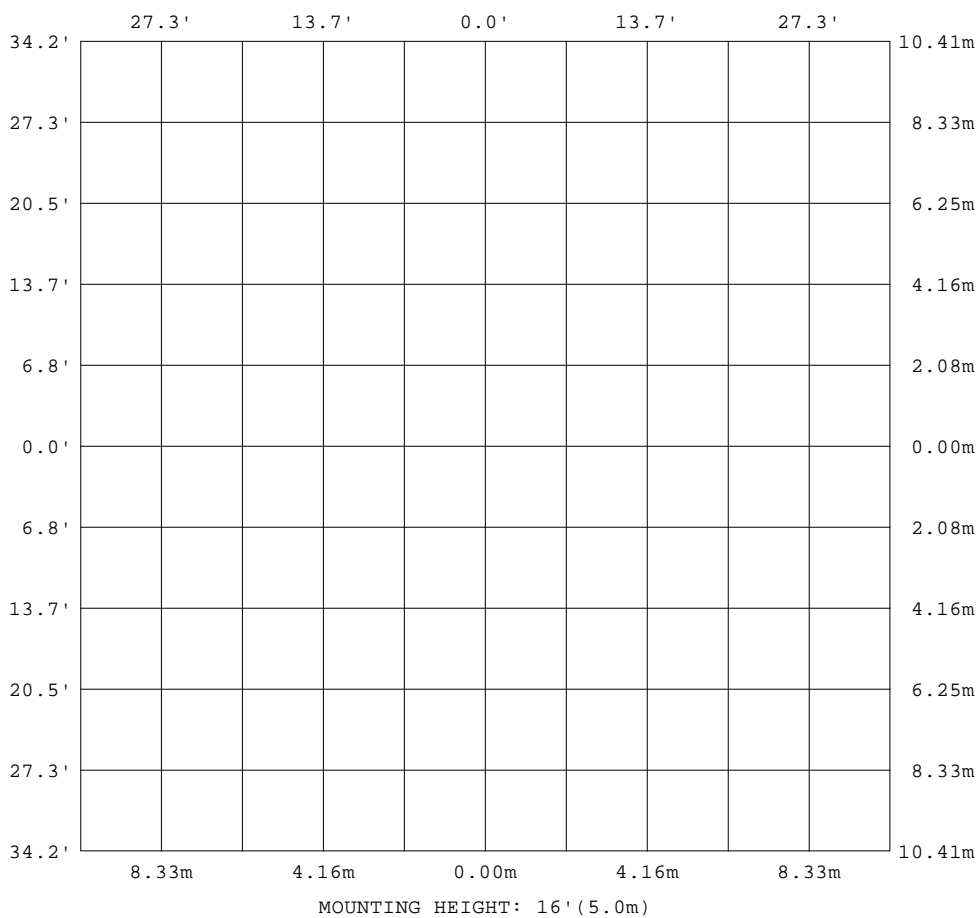
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: HSO
 Test Date: 10 April 2023

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-400W_2835 9V

ISOLUX DIAGRAM

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 10 April 2023

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-400W_2835 9V

LED Avg.L Report

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

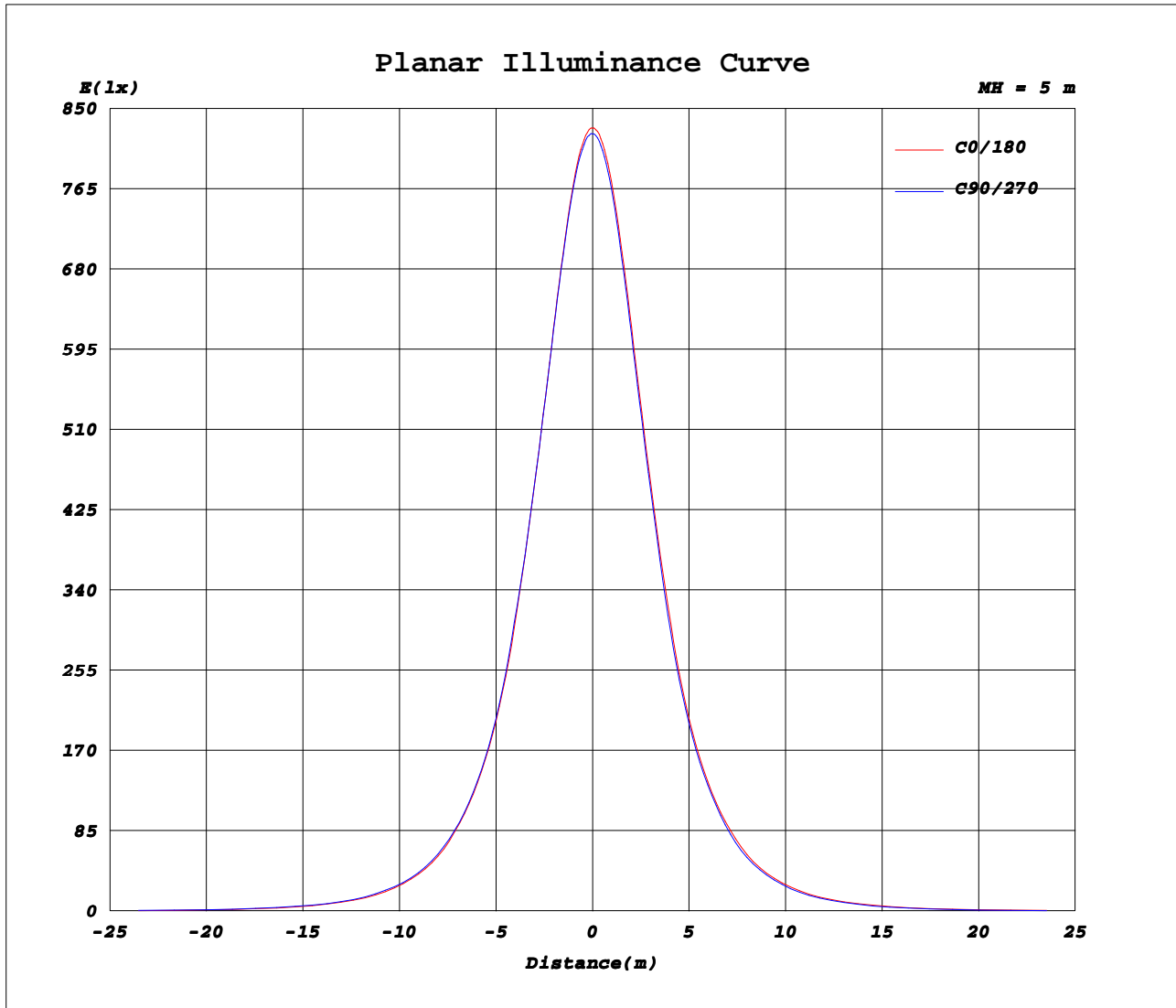
AvgL	cd/m2
L_0~180(65)av	165541
L_0~180(75)av	104594
L_0~180(85)av	35078
L_90~270(65)av	164449
L_90~270(75)av	104601
L_90~270(85)av	33824
L_45(65)av	165363
L_45(75)av	104894
L_45(85)av	34201

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HSO
Test Date:10 April 2023

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-400W_2835 9V

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 10 April 2023

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-400W_2835 9V

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm																		
NAME: NCD-400W_2835 9V									TYPE:					WEIGHT:				
SPEC.:SB 2835 9V Chip_628EA									DIM.:					SERIAL No.:				
MFR.: ICEPIPE									SUR.:					Shielding Angle:				

Table--1

UNIT: #10cd

γ (DEG) \ C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	2073	2070	2068	2064	2062	2061	2058	2059	2057	2056	2055	2055	2073	2070	2068	2064	2062	2061	2058
5	2066	2064	2062	2059	2059	2056	2053	2054	2051	2051	2049	2049	2068	2065	2061	2059	2054	2052	2050
10	2046	2042	2041	2037	2040	2037	2035	2035	2032	2032	2029	2029	2049	2045	2042	2040	2033	2030	2029
15	2008	2008	2002	2001	2004	2004	2001	2001	2000	1997	1994	1994	2014	2008	2006	2005	1995	1992	1993
20	1958	1957	1952	1951	1955	1955	1952	1953	1950	1947	1945	1942	1964	1959	1959	1953	1944	1940	1938
25	1890	1889	1885	1884	1892	1890	1888	1888	1887	1885	1880	1876	1898	1895	1893	1887	1875	1872	1870
30	1809	1809	1803	1804	1811	1813	1810	1811	1807	1804	1800	1799	1818	1812	1812	1808	1796	1791	1789
35	1711	1711	1706	1706	1717	1719	1715	1716	1712	1711	1706	1704	1724	1718	1719	1713	1695	1688	1688
40	1568	1576	1568	1573	1589	1597	1599	1598	1588	1583	1578	1573	1592	1583	1579	1570	1549	1546	1545
45	1425	1425	1424	1423	1441	1445	1445	1443	1441	1436	1429	1427	1443	1436	1437	1430	1416	1408	1406
50	1277	1285	1275	1282	1296	1298	1294	1295	1293	1294	1285	1279	1295	1289	1290	1287	1267	1261	1259
55	1112	1116	1111	1116	1133	1136	1131	1132	1132	1130	1125	1119	1133	1127	1131	1120	1089	1077	1078
60	896	898	900	903	927	932	935	933	932	924	916	907	921	910	917	907	887	878	879
65	682	696	692	700	724	730	729	729	727	725	715	709	717	711	714	703	671	660	661
70	467	474	471	477	498	505	502	504	503	502	493	486	494	487	492	486	459	447	448
75	259	263	261	267	289	295	296	297	296	293	285	279	283	276	281	275	253	246	245
80	105	107	106	109	125	127	130	129	130	126	123	118	120	118	119	115	99.7	95.1	95.8
85	27.8	30.3	27.8	30.3	34.1	35.5	35.8	35.9	35.4	34.9	33.3	33.6	33.4	30.3	32.5	29.8	26.7	23.3	23.1
90	12.8	12.7	12.5	12.6	13.7	13.6	13.9	13.7	13.9	13.6	13.8	13.2	11.3	11.1	11.3	11.2	11.0	11.1	11.0
95	13.5	13.3	13.3	13.3	13.0	13.2	13.3	13.4	13.5	13.5	13.6	13.6	11.2	11.3	11.4	11.6	12.0	12.2	12.1
100	18.2	18.1	18.1	17.9	18.0	18.4	18.7	18.8	18.8	18.7	18.4	18.3	15.6	15.8	15.7	15.8	17.3	17.7	17.5
105	21.8	21.8	21.8	22.1	22.4	22.1	22.2	22.1	21.8	21.6	21.0	20.3	17.7	17.8	18.1	18.9	19.8	20.4	20.9
110	20.3	20.6	20.3	21.7	22.3	23.4	23.8	23.7	23.2	22.9	21.7	20.4	18.0	18.0	17.8	18.6	19.6	19.8	19.8
115	20.9	20.7	20.8	21.6	22.6	22.9	23.2	23.3	23.3	22.6	22.0	21.2	18.3	18.3	18.5	19.4	20.3	20.8	20.8
120	21.1	20.8	21.4	23.0	23.8	24.1	24.2	24.1	23.8	23.8	23.3	22.1	18.2	18.1	19.6	21.2	21.9	21.8	21.8
125	19.5	19.2	19.4	20.0	20.4	20.7	21.1	21.2	21.2	20.9	20.4	19.8	17.0	16.9	17.5	18.1	18.7	18.7	18.8
130	19.2	18.9	19.0	19.1	19.3	19.6	19.9	20.1	20.2	20.1	19.9	19.4	16.9	16.9	17.1	17.5	17.9	17.9	17.9
135	19.5	19.4	19.3	19.4	19.4	19.5	19.5	19.6	19.6	19.7	19.6	19.5	17.2	17.2	17.2	17.4	17.6	17.6	17.6
140	20.2	20.1	20.0	20.0	19.9	20.0	20.0	20.1	20.1	20.1	20.1	20.1	17.9	18.0	17.9	18.0	18.2	18.1	18.1
145	20.9	20.8	20.8	20.8	20.6	20.6	20.6	20.7	20.7	20.8	20.9	20.8	18.8	18.8	18.8	19.0	19.0	18.9	18.9
150	21.7	21.6	21.5	21.4	21.3	21.3	21.3	21.3	21.4	21.4	21.5	21.5	19.7	19.7	19.7	19.7	19.8	19.7	19.7
155	22.6	22.5	22.4	22.3	22.1	22.1	22.1	22.2	22.2	22.2	22.2	22.3	20.8	20.8	20.7	20.6	20.7	20.7	20.7
160	23.5	23.5	23.4	23.3	23.1	23.1	23.1	23.2	23.2	23.2	23.2	23.2	22.1	22.1	21.9	21.8	21.9	22.0	22.0
165	24.3	24.3	24.2	24.1	24.0	24.0	24.0	24.1	24.1	24.1	24.1	24.1	23.2	23.2	23.1	23.1	23.2	23.2	23.1
170	24.7	24.7	24.6	24.6	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.0	23.9	23.9	23.9	24.0	24.0	23.9
175	25.0	24.9	24.9	24.9	24.8	24.8	24.8	24.8	24.8	24.8	24.7	24.7	24.6	24.5	24.5	24.5	24.5	24.5	24.5
180	24.9	24.9	24.9	24.9	24.9	24.8	24.8	24.8	24.8	24.8	24.8	24.7	25.0	24.9	24.9	24.8	24.9	24.8	24.9

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:HSO

Test Date:10 April 2023

 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-400W_2835 9V

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.8V I:1.875A P:402.7W PF:0.9771 Lamp Flux:59253.7x1 lm		
NAME: NCD-400W_2835 9V	TYPE:	WEIGHT:
SPEC.:SB 2835 9V Chip_628EA	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: #10cd

γ (DEG) \ C (DEG)	285	300	315	330	345														
0	2059	2057	2056	2055	2055														
5	2050	2049	2048	2048	2048														
10	2027	2027	2028	2027	2026														
15	1990	1989	1991	1991	1990														
20	1938	1939	1939	1939	1939														
25	1872	1872	1872	1873	1873														
30	1788	1790	1792	1794	1794														
35	1686	1686	1689	1695	1697														
40	1544	1548	1546	1550	1555														
45	1407	1410	1412	1415	1413														
50	1263	1261	1271	1268	1273														
55	1080	1081	1081	1091	1095														
60	874	884	881	889	887														
65	661	664	667	672	680														
70	448	449	453	460	466														
75	245	248	251	255	258														
80	95.9	97.4	98.1	102	104														
85	23.1	23.7	24.3	27.3	26.1														
90	11.0	11.0	10.8	10.7	10.6														
95	11.9	11.8	11.5	11.2	11.0														
100	17.2	16.8	16.4	15.6	15.3														
105	20.7	20.3	20.1	19.6	19.0														
110	19.3	19.2	19.0	17.8	17.4														
115	21.1	20.9	20.4	19.6	18.2														
120	20.9	20.4	20.6	20.5	19.7														
125	18.8	18.9	18.8	18.4	17.5														
130	17.7	17.4	17.4	17.2	16.9														
135	17.5	17.4	17.4	17.2	17.0														
140	18.1	18.0	18.0	17.9	17.7														
145	18.9	18.8	18.8	18.7	18.6														
150	19.6	19.5	19.5	19.5	19.5														
155	20.6	20.5	20.5	20.4	20.5														
160	21.9	21.8	21.7	21.6	21.7														
165	23.1	23.0	22.9	22.9	22.9														
170	23.8	23.8	23.8	23.7	23.7														
175	24.5	24.4	24.4	24.4	24.3														
180	24.8	24.8	24.7	24.8	24.7														

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:HSO

Test Date:10 April 2023

 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-400W_2835 9V

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	20735	20697	20681	20635	20621	20609	20577	20587	20572	20562
3.0	20704	20696	20659	20626	20593	20594	20584	20568	20553	20531
6.0	20632	20616	20573	20544	20551	20546	20506	20512	20502	20478
9.0	20522	20495	20453	20427	20426	20429	20420	20394	20383	20374
12.0	20316	20304	20273	20248	20264	20254	20233	20227	20210	20189
15.0	20082	20076	20022	20011	20044	20037	20014	20013	19997	19973
18.0	19803	19779	19747	19733	19753	19763	19741	19738	19715	19679
21.0	19463	19445	19404	19395	19430	19433	19417	19412	19381	19353
24.0	19055	19046	18998	18989	19046	19049	19030	19005	19007	18976
27.0	18600	18602	18532	18521	18611	18615	18582	18588	18571	18547
30.0	18089	18090	18032	18038	18108	18133	18102	18111	18068	18042
33.0	17521	17519	17465	17474	17561	17576	17563	17548	17517	17502
36.0	16879	16912	16843	16855	16952	16967	16958	16940	16921	16901
39.0	15985	16078	16008	16041	16220	16263	16281	16256	16198	16154
42.0	15126	15120	15104	15144	15269	15357	15339	15352	15288	15208
45.0	14246	14249	14240	14227	14415	14447	14448	14428	14413	14357
48.0	13379	13415	13356	13402	13550	13563	13547	13537	13530	13529
51.0	12437	12536	12434	12504	12646	12682	12647	12659	12631	12633
54.0	11502	11516	11457	11524	11654	11700	11653	11666	11637	11645
57.0	10217	10284	10258	10290	10527	10579	10616	10584	10522	10492
60.0	8964	8982	8998	9027	9268	9322	9350	9327	9320	9236
63.0	7773	7807	7796	7844	8076	8111	8114	8112	8112	8072
66.0	6338	6440	6394	6481	6751	6868	6865	6872	6811	6776
69.0	5088	5137	5109	5173	5374	5460	5431	5452	5446	5405
72.0	3753	3827	3789	3859	4108	4189	4214	4218	4167	4136
75.0	2587	2633	2612	2668	2894	2948	2964	2973	2960	2929
78.0	1595	1623	1602	1640	1814	1871	1891	1889	1872	1852
81.0	830.8	854.2	832.4	860.9	985.0	1015	1037	1040	1023	1002
84.0	376.4	387.0	377.5	386.7	453.6	478.8	474.6	477.6	474.3	468.7
87.0	180.0	183.6	178.6	183.5	201.8	206.7	204.4	205.3	205.1	204.8
90.0	128.4	126.8	125.4	125.6	136.9	136.5	138.7	137.1	139.3	136.3
93.0	127.5	125.4	124.6	124.5	123.7	124.6	125.4	126.2	126.9	126.9
96.0	141.4	139.1	139.3	138.9	136.5	138.0	139.9	141.2	142.4	142.3
99.0	171.2	168.8	169.7	167.5	167.2	170.2	173.7	174.5	175.0	174.7
102.0	202.8	200.0	200.9	200.6	206.1	208.8	211.4	210.6	209.3	207.3
105.0	217.5	217.9	221.0	223.5	221.0	222.0	221.2	221.2	218.2	216.2
108.0	207.3	208.7	212.7	218.9	221.7	222.6	225.2	225.4	220.2	216.2
111.0	202.5	207.3	205.8	217.6	230.4	238.6	240.3	236.2	233.8	230.1
114.0	207.3	207.3	210.1	217.3	225.9	229.4	231.2	230.8	232.6	226.4
117.0	210.4	208.5	208.8	220.1	228.1	233.5	239.2	239.9	235.1	232.6
120.0	211.4	208.5	213.9	230.1	237.7	240.9	242.1	240.6	238.3	238.4
123.0	200.9	195.8	202.2	209.3	213.7	215.1	218.2	219.1	218.1	214.3
126.0	193.6	191.0	192.4	197.4	201.2	203.8	208.0	209.2	209.6	207.5
129.0	192.2	189.4	190.2	192.2	194.8	198.0	200.8	203.0	203.6	202.4
132.0	192.8	190.5	190.3	191.5	192.5	193.9	195.5	197.0	197.6	197.7
135.0	194.8	194.0	193.3	194.0	193.9	194.7	195.3	196.4	196.5	196.8
138.0	198.7	198.0	197.4	197.5	196.9	197.1	197.6	198.5	198.7	199.0
141.0	203.2	202.3	201.7	202.0	200.9	200.7	201.2	201.8	202.0	202.7
144.0	207.7	206.9	206.4	206.6	205.0	204.9	205.2	205.9	206.0	206.7
147.0	212.3	211.2	210.5	210.3	208.8	208.5	208.9	209.7	209.6	210.3
150.0	217.0	215.9	215.4	214.4	213.0	212.6	212.9	213.3	213.6	214.3
153.0	221.9	221.5	220.5	219.2	217.4	217.1	217.4	217.9	218.1	218.3
156.0	227.4	227.3	226.2	224.6	222.8	222.9	223.2	223.6	223.9	224.0
159.0	233.3	233.2	231.9	230.4	228.5	228.8	229.3	229.7	229.8	229.4
162.0	238.8	238.8	237.7	236.9	235.3	235.1	235.6	236.1	236.0	235.9
165.0	243.0	242.6	241.7	241.2	239.9	240.0	240.0	240.6	240.7	240.9
168.0	245.7	245.2	244.5	244.1	243.3	243.2	243.1	243.6	243.7	243.8
171.0	247.7	247.5	246.7	246.6	245.8	245.7	245.7	246.0	246.0	246.1
174.0	249.2	248.9	248.4	248.5	247.8	248.0	247.9	247.8	247.6	247.4
177.0	249.6	249.4	248.8	249.1	248.8	248.8	248.6	248.3	248.0	247.8
180.0	249.3	249.1	248.6	248.6	248.5	248.5	248.1	248.1	247.8	247.5
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	20551	20547	20735	20697	20681	20635	20621	20609	20577	20587
3.0	20528	20511	20726	20682	20650	20628	20591	20570	20553	20547
6.0	20468	20460	20660	20627	20593	20566	20539	20498	20472	20467
9.0	20348	20324	20543	20484	20466	20444	20383	20352	20331	20330
12.0	20152	20160	20359	20315	20305	20263	20189	20156	20149	20132
15.0	19941	19937	20139	20079	20058	20048	19951	19917	19926	19897
18.0	19661	19644	19856	19809	19790	19742	19651	19608	19608	19607
21.0	19332	19310	19514	19473	19457	19425	19305	19281	19251	19259
24.0	18947	18931	19124	19077	19072	19003	18925	18869	18874	18844
27.0	18497	18485	18673	18635	18642	18573	18454	18419	18399	18409
30.0	17999	17994	18182	18123	18122	18082	17957	17907	17892	17879

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: HSO

Test Date: 10 April 2023

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-400W_2835 9V

Photometric Data Table [cd]

33.0	17450	17429	17629	17574	17574	17517	17387	17336	17323	17319
36.0	16869	16840	17026	16965	16967	16894	16681	16596	16597	16590
39.0	16084	16053	16235	16138	16112	15986	15775	15737	15722	15732
42.0	15158	15137	15320	15227	15207	15124	14962	14915	14895	14873
45.0	14290	14274	14433	14356	14373	14302	14158	14085	14060	14073
48.0	13437	13403	13547	13478	13496	13467	13291	13205	13171	13211
51.0	12536	12476	12628	12579	12599	12579	12378	12291	12293	12306
54.0	11596	11539	11685	11619	11662	11606	11330	11203	11227	11225
57.0	10431	10358	10524	10420	10436	10316	10036	9937	9958	9925
60.0	9157	9068	9210	9100	9167	9066	8872	8780	8794	8744
63.0	7983	7917	8025	7933	7985	7916	7680	7572	7569	7574
66.0	6659	6595	6673	6589	6616	6530	6256	6177	6172	6174
69.0	5330	5270	5335	5274	5322	5264	5044	4946	4942	4937
72.0	4042	3980	4050	3968	4019	3945	3703	3629	3624	3627
75.0	2846	2788	2827	2761	2809	2755	2530	2465	2450	2453
78.0	1793	1742	1780	1724	1761	1698	1538	1465	1474	1467
81.0	970.8	937.0	955.9	923.2	939.4	903.2	785.5	749.6	744.3	747.4
84.0	444.5	431.6	438.1	418.3	425.6	404.0	341.2	320.9	333.1	320.2
87.0	198.8	195.6	180.8	176.4	180.1	175.8	159.4	153.1	152.2	151.0
90.0	137.8	131.9	112.5	110.8	112.9	111.6	110.3	110.7	110.4	110.0
93.0	127.3	127.6	105.3	106.5	107.2	108.3	111.0	112.4	111.6	110.3
96.0	142.8	142.7	117.4	119.0	119.6	121.7	127.8	130.2	128.8	126.1
99.0	171.7	172.0	144.5	145.9	146.6	147.1	160.3	163.3	162.1	158.8
102.0	202.1	197.6	170.6	171.6	174.8	180.1	191.0	196.7	198.0	195.3
105.0	209.8	203.1	177.1	178.4	188.9	198.2	203.6	209.0	209.0	206.6
108.0	205.5	199.9	176.0	178.2	180.1	182.5	188.8	191.5	193.5	199.9
111.0	220.5	209.8	182.2	183.0	182.4	193.0	202.8	203.5	202.5	196.2
114.0	218.6	211.3	182.8	181.8	185.5	193.2	201.6	206.6	208.4	210.5
117.0	229.2	215.7	183.8	183.0	187.4	200.2	209.1	214.1	211.9	210.1
120.0	233.3	220.9	181.9	181.4	196.1	212.0	218.7	217.7	218.1	209.0
123.0	208.2	201.2	171.4	170.7	180.2	189.5	194.3	194.4	197.3	200.1
126.0	202.6	197.2	169.2	169.0	173.8	179.4	184.5	184.8	184.9	184.4
129.0	199.8	195.1	169.4	168.8	171.2	176.0	180.3	180.2	179.7	177.9
132.0	195.8	193.5	169.8	169.4	170.2	173.5	176.6	177.3	176.7	175.3
135.0	196.1	194.8	172.3	172.2	172.4	173.8	175.7	175.7	175.9	175.5
138.0	198.7	198.0	176.1	176.4	176.3	177.4	178.8	178.4	178.6	178.3
141.0	203.1	202.1	181.0	181.2	181.0	182.1	183.1	182.6	182.6	182.3
144.0	207.5	206.8	186.0	186.3	186.6	187.7	188.3	187.4	187.4	186.9
147.0	211.3	210.8	190.8	191.0	192.0	193.0	193.3	192.5	192.2	191.7
150.0	214.8	215.0	196.5	196.7	196.9	197.2	197.8	197.2	196.8	196.0
153.0	218.8	219.5	203.1	202.9	202.7	202.2	203.1	202.8	202.3	201.2
156.0	223.9	224.8	210.5	210.1	209.5	208.4	209.6	209.7	209.1	208.2
159.0	229.5	230.1	218.3	217.8	216.6	215.7	217.0	217.3	216.9	216.0
162.0	236.2	236.5	226.1	225.7	224.7	224.0	225.2	225.1	225.1	224.1
165.0	240.8	240.8	231.9	231.7	231.5	231.3	232.3	231.8	231.4	230.5
168.0	243.7	243.4	237.0	236.4	236.5	236.1	237.2	236.6	236.2	235.4
171.0	245.7	245.3	241.1	240.4	240.5	240.5	241.3	241.1	240.5	239.9
174.0	247.1	246.9	244.9	244.3	244.0	244.0	244.5	244.5	244.2	243.7
177.0	247.7	247.5	247.8	247.0	246.9	246.6	247.0	246.7	246.7	246.4
180.0	247.5	247.2	249.6	248.8	248.7	248.4	248.6	248.4	248.6	248.2
G/C	300.0	315.0	330.0	345.0						
0.0	20572	20562	20551	20547						
3.0	20539	20535	20526	20509						
6.0	20457	20440	20448	20430						
9.0	20316	20330	20330	20314						
12.0	20128	20139	20136	20127						
15.0	19892	19914	19909	19902						
18.0	19611	19628	19609	19624						
21.0	19248	19266	19272	19274						
24.0	18851	18873	18866	18888						
27.0	18416	18409	18430	18425						
30.0	17897	17924	17937	17935						
33.0	17331	17344	17359	17376						
36.0	16570	16595	16678	16736						
39.0	15743	15738	15752	15850						
42.0	14951	14905	14991	14961						
45.0	14096	14120	14148	14131						
48.0	13196	13306	13286	13328						
51.0	12312	12371	12386	12425						
54.0	11244	11243	11369	11393						
57.0	10010	9970	10061	10118						
60.0	8842	8811	8886	8875						
63.0	7589	7651	7697	7730						
66.0	6216	6236	6287	6335						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: HSO

Test Date: 10 April 2023

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]

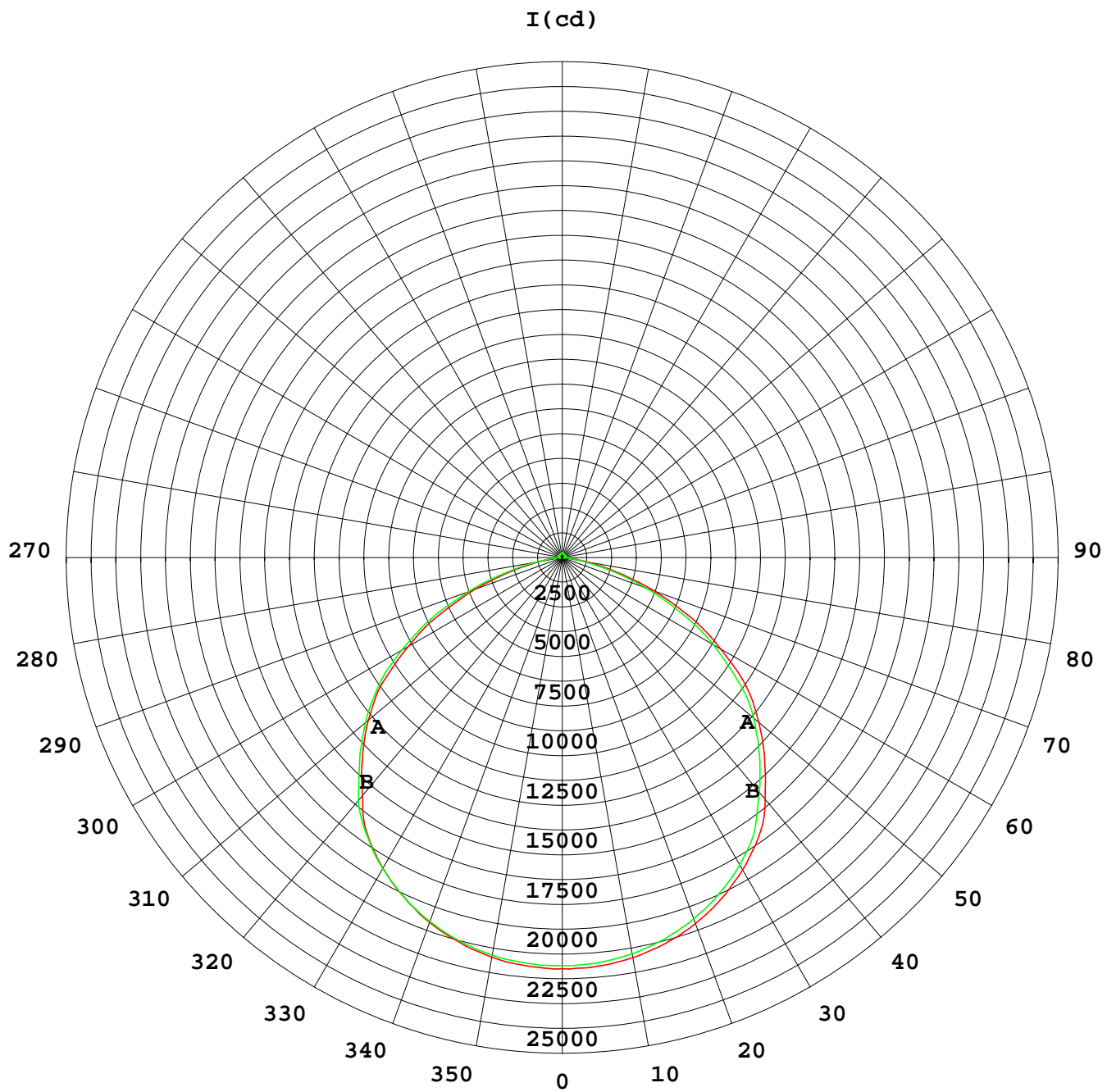
Remarks: NCD-400W_2835 9V

Photometric Data Table [cd]

69.0	4981	5020	5053	5090
72.0	3661	3684	3732	3761
75.0	2476	2509	2551	2583
78.0	1489	1496	1546	1580
81.0	762.4	773.4	802.7	819.1
84.0	341.5	333.8	352.4	361.2
87.0	154.0	154.6	158.4	159.8
90.0	109.5	108.2	107.0	105.6
93.0	108.7	106.2	104.5	102.9
96.0	123.9	121.2	117.4	115.0
99.0	154.4	151.2	144.2	143.5
102.0	190.4	187.6	180.4	174.2
105.0	202.6	200.6	196.0	190.1
108.0	198.2	194.5	188.9	177.1
111.0	191.8	190.5	178.6	176.1
114.0	206.6	202.5	193.7	181.6
117.0	207.1	203.9	197.6	184.1
120.0	204.1	206.3	204.6	196.9
123.0	200.7	199.3	197.6	185.8
126.0	184.6	182.9	180.2	172.3
129.0	175.9	175.5	173.0	169.2
132.0	173.3	172.4	171.9	169.0
135.0	174.4	173.6	171.9	169.7
138.0	177.7	177.0	175.6	173.7
141.0	181.8	181.3	180.3	178.7
144.0	186.5	186.0	185.5	184.3
147.0	191.0	190.7	190.6	189.9
150.0	195.2	195.2	195.1	194.9
153.0	200.5	200.1	200.2	200.8
156.0	207.2	206.8	206.6	207.7
159.0	214.9	214.0	214.0	214.8
162.0	223.2	222.4	222.0	222.4
165.0	229.8	229.5	229.1	229.1
168.0	234.9	234.6	234.1	234.1
171.0	239.5	238.9	238.8	238.5
174.0	243.3	243.0	242.7	242.3
177.0	245.9	245.8	245.6	245.4
180.0	247.8	247.4	247.5	247.3

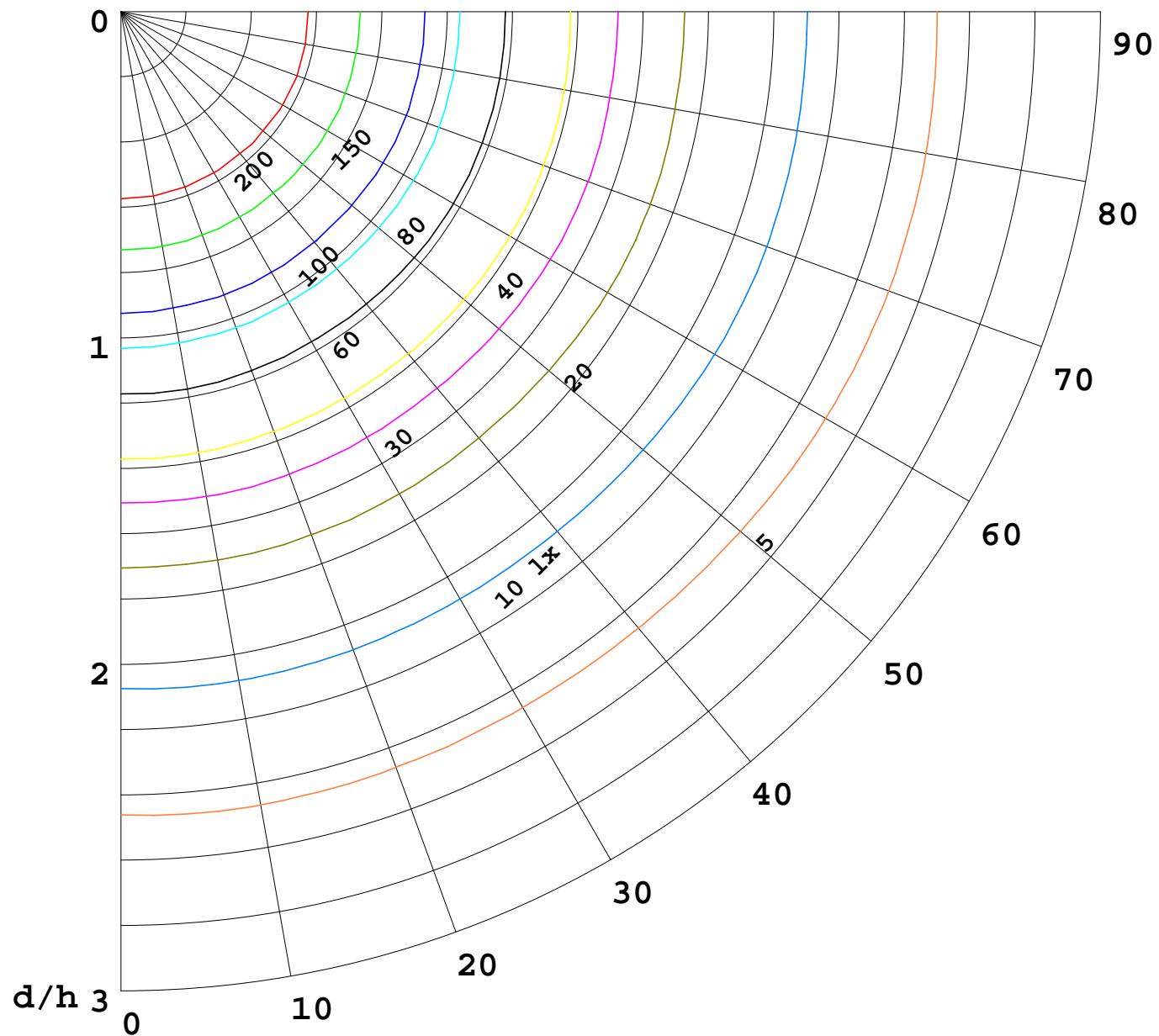
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HSO
Test Date: 10 April 2023

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-400W_2835 9V



1000 lm

$K = 1$



F = 5000 lm
 K = 0.7
 H_{cc} = 0.0 m
 H_{fc} = 0.0 m
 E_{ave} = 100 lx

	P_{cc}	P_w	P_{fc}
—————	70	50	30
—————	50	30	20

