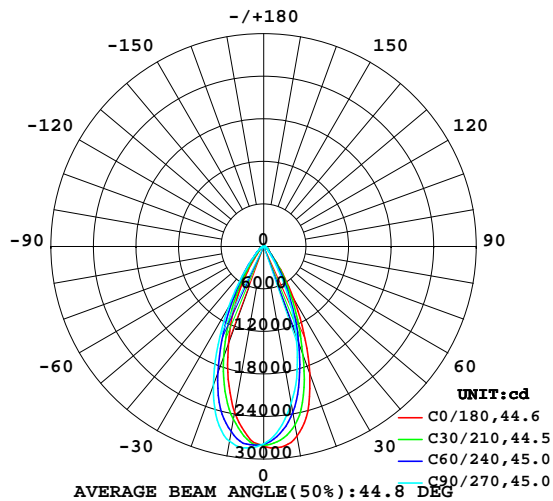


LUMINAIRE PHOTOMETRIC TEST REPORT

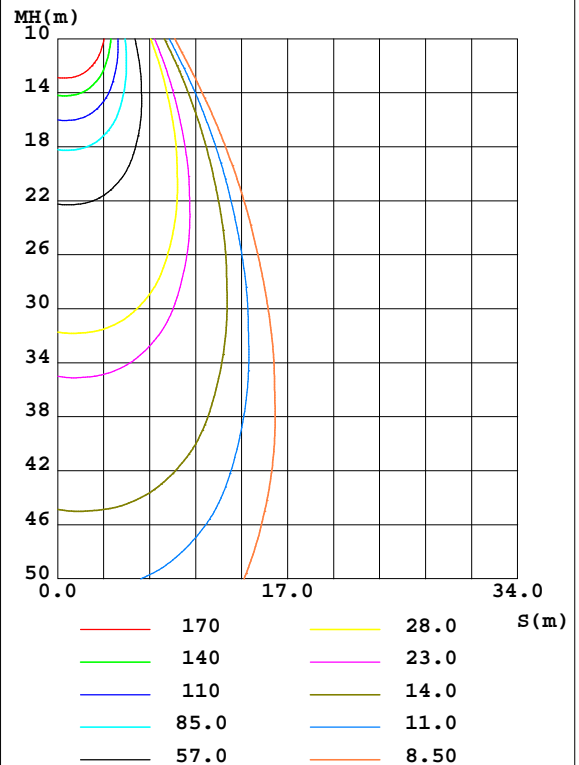
Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 149.68 lm/W			
MODEL	NTB-130C_A45	Imax(cd)	28956	S/MH(C0/180)	0.65
NOMINAL POWER(W)	130	LOR(%)	100.0	S/MH(C90/270)	0.80
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	19394	η UP,DN(C0-180)	0.9,43.3
NOMINAL FLUX(lm)	19393.9	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.7,55.1
LAMPS INSIDE	1	η up(%)	1.6	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	220	η down(%)	98.4	CIBSE SHR MAX	0.75

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:KAR
 Test Date:22 July 2021

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: NTB-130C_A45

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	2716	2488	2244	2244	2376	2523	2788	2839	0- 10	2542	2542	13.1,13.1
20	1900	1565	1347	1315	1458	1736	2078	2094	10- 20	5952	8494	43.8,43.8
30	844.7	672.6	514.5	570.1	618.3	824.0	999.8	984.0	20- 30	5400	13894	71.6,71.6
40	222.1	231.3	156.7	185.9	167.2	284.9	317.8	373.9	30- 40	2790	16683	86,86
50	101.1	94.74	78.21	80.66	85.52	105.4	113.0	137.5	40- 50	1151	17834	92,92
60	61.22	52.66	44.66	48.57	56.33	59.15	60.72	65.87	50- 60	665.7	18500	95.4,95.4
70	30.49	23.95	17.97	22.44	28.01	30.45	28.85	31.13	60- 70	402.6	18903	97.5,97.5
80	7.890	4.264	2.363	3.708	6.684	7.324	6.766	7.654	70- 80	159.4	19062	98.3,98.3
90	0.5174	0.5695	0.6138	0.6545	0.5090	0.4895	0.4964	0.4878	80- 90	21.96	19084	98.4,98.4
100	0.8569	1.011	1.158	1.180	0.8687	0.7348	0.6518	0.6736	90-100	7.448	19092	98.4,98.4
110	1.770	2.096	2.435	2.437	1.839	1.447	1.252	1.273	100-110	13.65	19105	98.5,98.5
120	3.504	4.078	4.630	4.626	3.746	3.007	2.611	2.598	110-120	26.01	19131	98.6,98.6
130	6.001	6.733	7.341	7.315	6.433	5.451	4.841	4.770	120-130	42.83	19174	98.9,98.9
140	8.806	9.441	9.931	9.841	9.259	8.272	7.609	7.478	130-140	57.41	19232	99.2,99.2
150	11.19	11.45	11.71	11.58	11.50	10.71	10.24	10.06	140-150	62.38	19294	99.5,99.5
160	12.41	12.19	12.13	12.14	12.51	12.01	11.83	11.63	150-160	53.78	19348	99.8,99.8
170	12.53	12.12	12.02	12.16	12.51	12.25	12.24	12.09	160-170	34.46	19382	99.9,99.9
180	12.61	12.48	12.66	12.46	12.66	12.45	12.68	12.45	170-180	11.75	19394	100,100
DEG	LUMINOUS INTENSITY:≠10cd									UNIT:lm		

Conical surface Flux(90deg): 17362 lm

%lum = 89.5%

%lamp = 89.5%

Conical surface Flux(120deg): 18500 lm

%lum = 95.4%

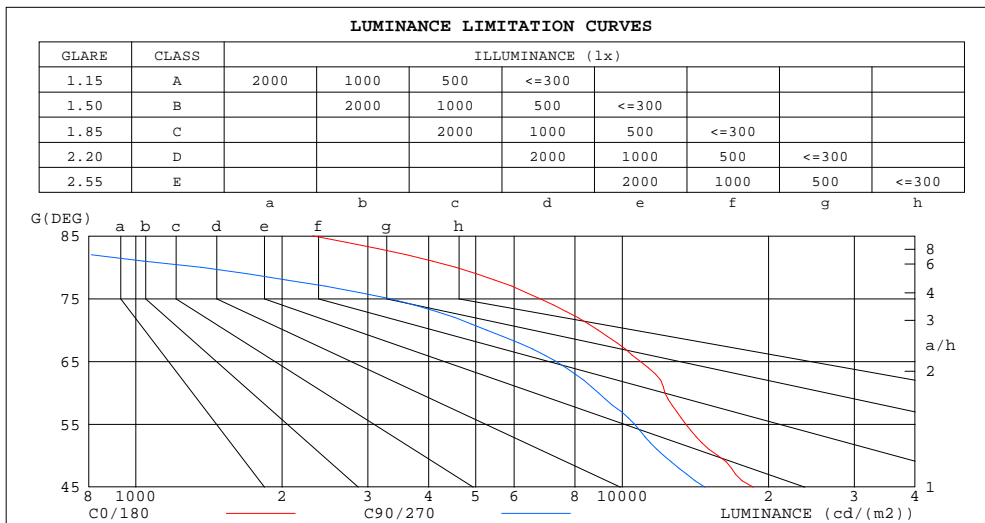
%lamp = 95.4%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

LUMINANCE LIMITATION CURVES

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2311	721
80	4544	1361
75	6774	3328
70	8913	5255
65	10886	7308
60	12244	8932
55	13513	10600
50	15729	12168
45	18600	14784

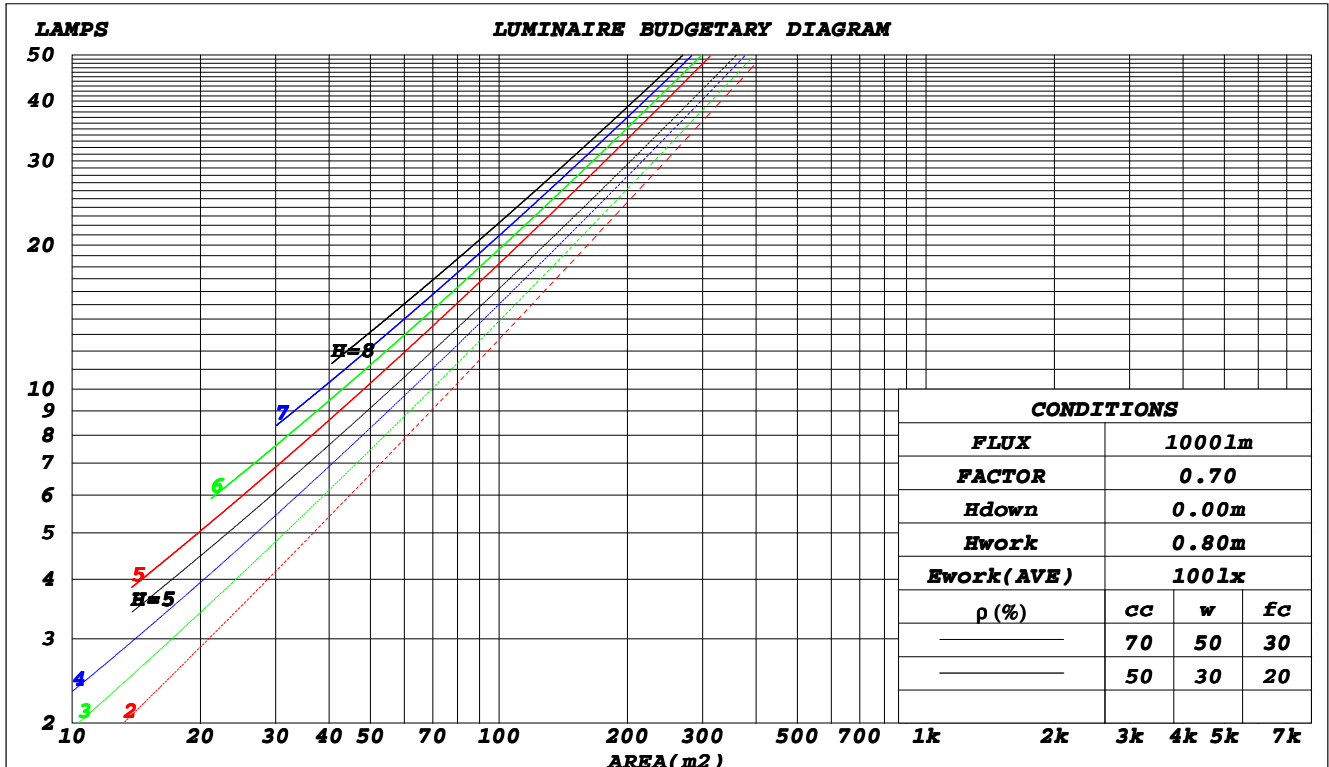
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	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	1.01	1.01	1.01	.98
1.0	1.10	1.07	1.05	1.08	1.05	1.03	1.03	1.01	.00	.99	.98	.96	.96	.94	.93	.92
2.0	1.02	.98	.94	1.00	.96	.93	.97	.94	.91	.93	.91	.89	.90	.88	.87	.85
3.0	.95	.90	.86	.93	.89	.85	.91	.87	.83	.88	.85	.82	.85	.83	.80	.79
4.0	.89	.83	.79	.87	.82	.78	.85	.81	.77	.83	.79	.76	.81	.78	.75	.73
5.0	.83	.77	.73	.82	.77	.73	.80	.75	.72	.78	.74	.71	.77	.73	.70	.69
6.0	.78	.72	.68	.77	.72	.68	.76	.71	.67	.74	.70	.66	.73	.69	.66	.64
7.0	.74	.68	.64	.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	.56	.66	.60	.56	.65	.60	.56	.64	.59	.56	.63	.59	.55	.54
10.0	.63	.57	.53	.62	.57	.53	.62	.57	.53	.61	.56	.53	.60	.56	.53	.51



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

WEC AND CCEC

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	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	.186	.106	.033	.179	.102	.032	.165	.095	.030	.153	.088	.028	.141	.082	.026		
2.0	.177	.097	.030	.171	.094	.029	.160	.089	.028	.149	.084	.026	.139	.079	.025		
3.0	.168	.089	.027	.162	.087	.026	.153	.083	.025	.143	.079	.024	.135	.075	.023		
4.0	.159	.082	.024	.154	.081	.024	.145	.077	.023	.137	.074	.022	.130	.071	.022		
5.0	.150	.076	.022	.146	.075	.022	.138	.072	.021	.131	.069	.021	.125	.067	.020		
6.0	.142	.071	.020	.139	.070	.020	.132	.068	.020	.126	.065	.019	.120	.063	.019		
7.0	.135	.067	.019	.132	.066	.019	.126	.064	.018	.121	.062	.018	.115	.060	.018		
8.0	.129	.063	.018	.126	.062	.018	.121	.060	.017	.116	.059	.017	.111	.057	.017		
9.0	.123	.059	.017	.120	.059	.016	.116	.057	.016	.111	.056	.016	.107	.054	.016		
10.0	.117	.056	.016	.115	.056	.016	.111	.054	.015	.107	.053	.015	.103	.052	.015		

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	.203	.203	.203	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.184	.169	.156	.157	.145	.135	.108	.100	.093	.062	.058	.054	.020	.019	.018	
2.0	.169	.145	.124	.145	.125	.107	.099	.086	.075	.057	.050	.044	.018	.016	.014	
3.0	.157	.126	.101	.135	.109	.088	.093	.076	.062	.053	.044	.036	.017	.014	.012	
4.0	.147	.111	.084	.126	.096	.073	.087	.067	.052	.050	.039	.031	.016	.013	.010	
5.0	.138	.100	.072	.119	.086	.062	.082	.060	.044	.047	.035	.026	.015	.012	.009	
6.0	.131	.091	.062	.112	.079	.054	.077	.055	.038	.045	.032	.023	.015	.011	.007	
7.0	.124	.083	.054	.107	.072	.047	.074	.051	.034	.043	.030	.020	.014	.010	.007	
8.0	.118	.077	.049	.102	.067	.042	.070	.047	.030	.041	.028	.018	.013	.009	.006	
9.0	.113	.072	.044	.097	.062	.038	.067	.044	.027	.039	.026	.016	.013	.008	.005	
10.0	.108	.067	.040	.093	.058	.035	.065	.041	.025	.038	.024	.015	.012	.008	.005	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

UGR(Unified Glare Rating) Table

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm										
NAME: NTB-130C_A45					TYPE:LED			WEIGHT:		
SPEC.:130C_A45					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	18.5	19.5	18.8	19.7	19.9	16.9	17.9	17.2	18.0	18.2
3H	19.1	19.9	19.3	20.2	20.4	17.2	18.1	17.5	18.3	18.6
4H	19.2	20.0	19.5	20.3	20.5	17.3	18.1	17.6	18.4	18.6
6H	19.2	20.0	19.6	20.3	20.6	17.2	18.0	17.5	18.3	18.5
8H	19.2	20.0	19.6	20.3	20.6	17.2	17.9	17.5	18.2	18.5
12H	19.2	19.9	19.5	20.2	20.5	17.1	17.8	17.5	18.1	18.4
4H 2H	18.6	19.4	18.9	19.7	19.9	17.2	18.0	17.5	18.2	18.5
3H	19.3	20.0	19.6	20.3	20.6	17.6	18.3	18.0	18.6	18.9
4H	19.5	20.1	19.8	20.4	20.8	17.7	18.3	18.0	18.6	19.0
6H	19.5	20.1	19.9	20.5	20.9	17.6	18.2	18.0	18.6	18.9
8H	19.5	20.1	19.9	20.4	20.8	17.6	18.1	18.0	18.5	18.9
12H	19.5	20.0	19.9	20.4	20.8	17.5	18.0	18.0	18.4	18.8
8H 4H	19.4	19.9	19.8	20.3	20.7	17.7	18.2	18.1	18.6	19.0
6H	19.5	19.9	20.0	20.4	20.8	17.6	18.1	18.1	18.5	18.9
8H	19.5	19.9	20.0	20.3	20.8	17.6	18.0	18.1	18.4	18.9
12H	19.5	19.8	20.0	20.3	20.8	17.5	17.9	18.0	18.3	18.8
12H 4H	19.3	19.8	19.8	20.2	20.7	17.6	18.1	18.1	18.5	18.9
6H	19.4	19.8	19.9	20.3	20.8	17.6	18.0	18.1	18.4	18.9
8H	19.4	19.8	19.9	20.2	20.8	17.5	17.9	18.0	18.3	18.8
Variations with the observer position at spacings:										
S = 1.0H	+ 1.3 / - 1.3					+ 1.0 / - 1.4				
1.5H	+ 2.5 / - 0.9					+ 1.3 / - 1.1				
2.0H	+ 1.0 / - 0.7					+ 1.0 / - 1.1				

CIE Pub.117 Corrected 19394 lm Total Lamp Luminous Flux.(8log(F/F0) = 10.3)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

UTILIZATION FACTORS TABLE

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

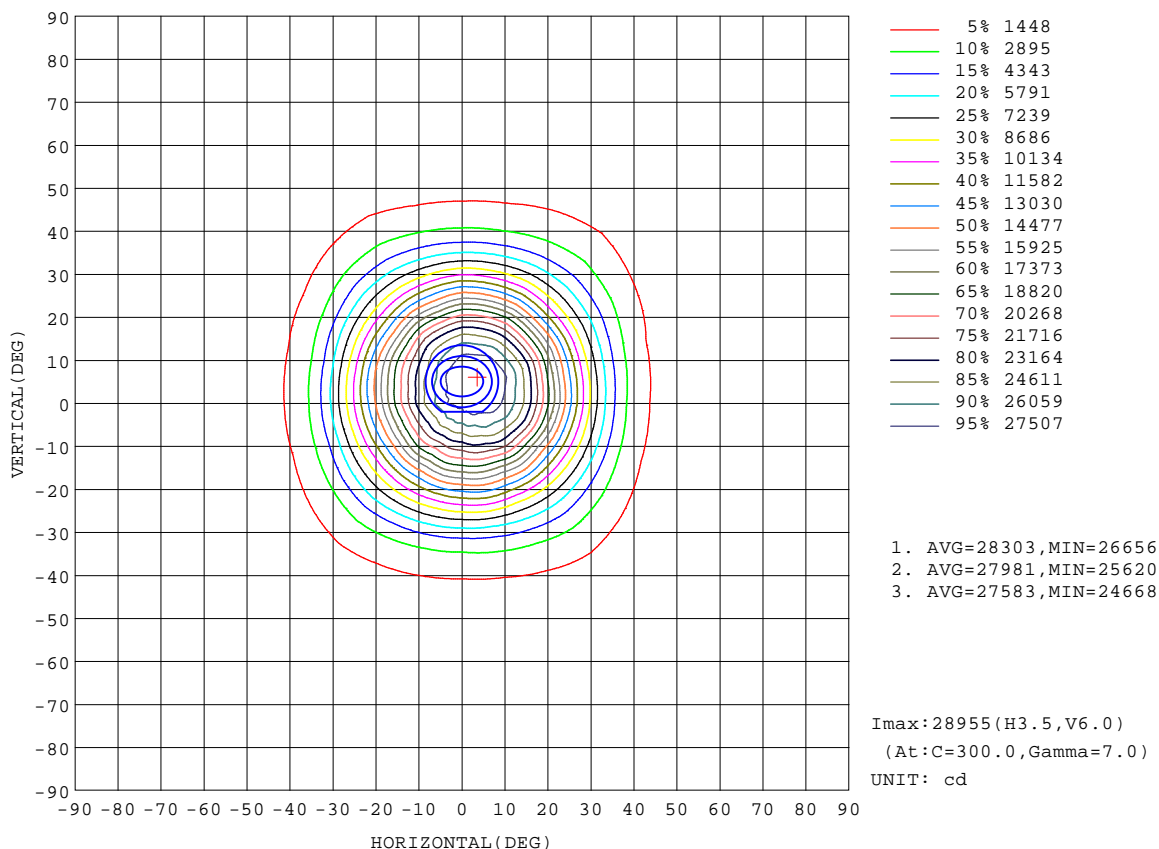
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	82	76	71	81	75	71	67
0.80	91	84	80	90	84	80	88	83	79	75
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	92	89	84
1.50	103	98	94	102	97	93	99	95	92	87
2.00	106	102	98	105	100	97	102	98	96	90
2.50	108	104	101	107	103	100	103	100	98	91
3.00	110	106	103	108	105	102	104	102	100	93
4.00	112	109	107	110	108	105	106	104	102	95
5.00	114	111	109	112	109	107	107	106	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

ISOCANDELA DIAGRAM

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



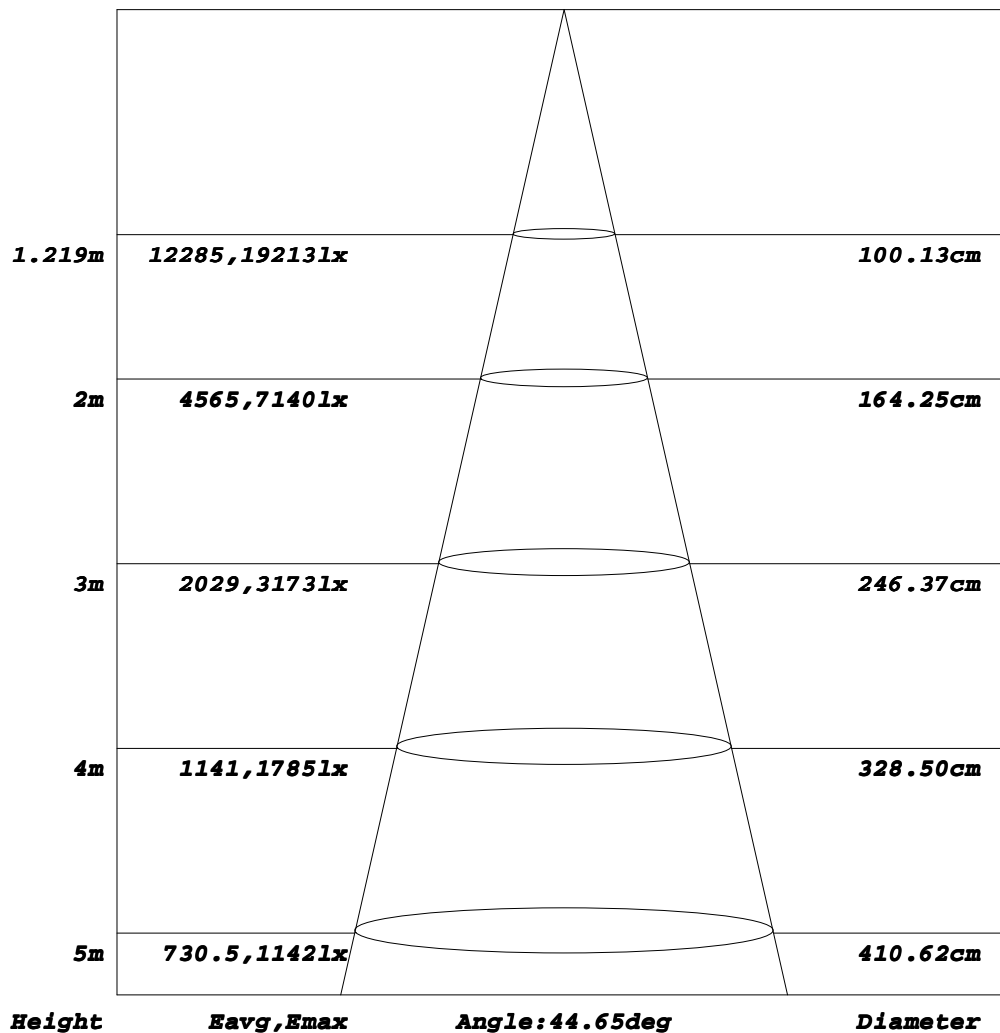
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

AAI Figure

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Flux out:10337 lm



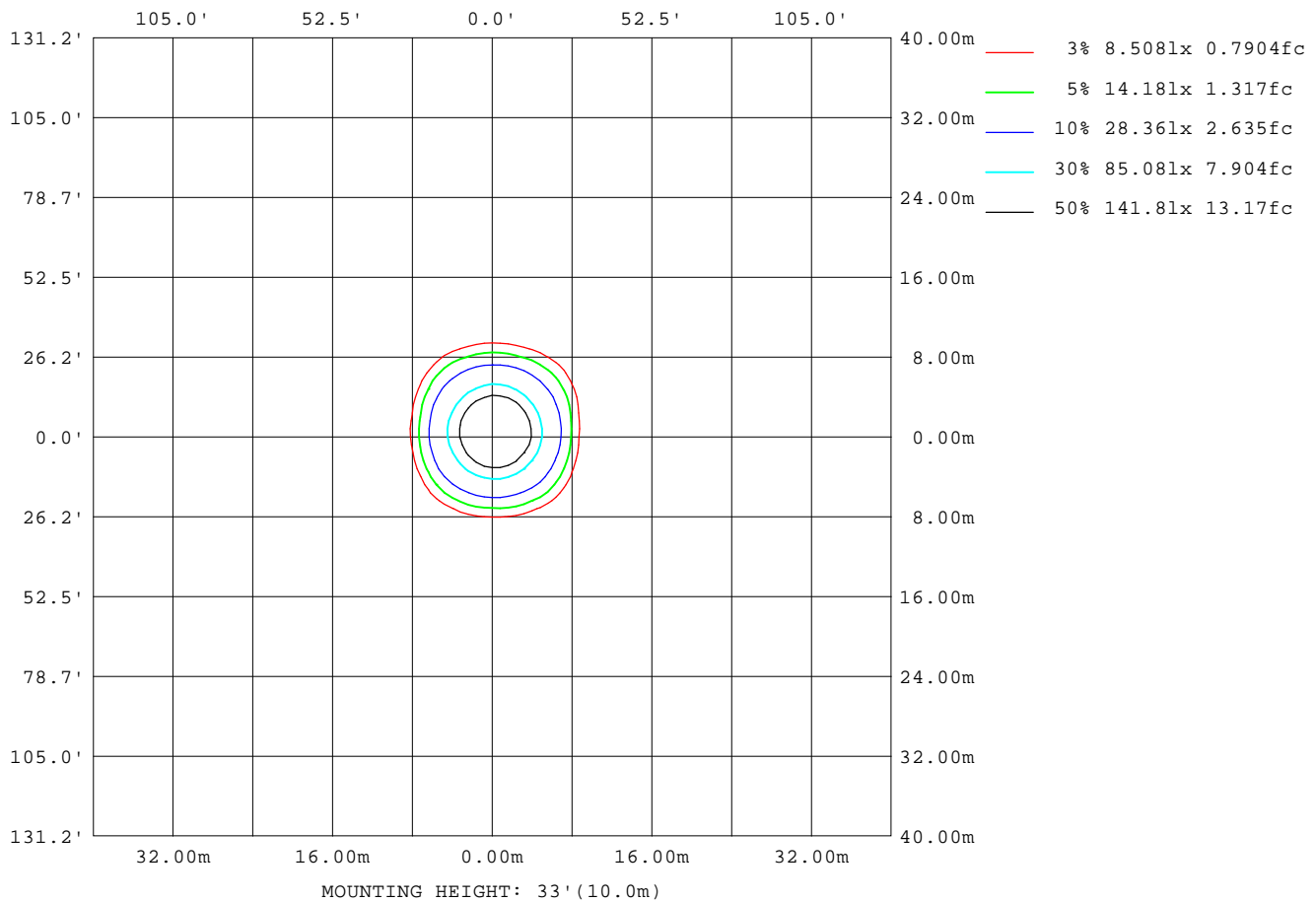
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 22 July 2021

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: NTB-130C_A45

ISOLUX DIAGRAM

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

LED Avg.L Report

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

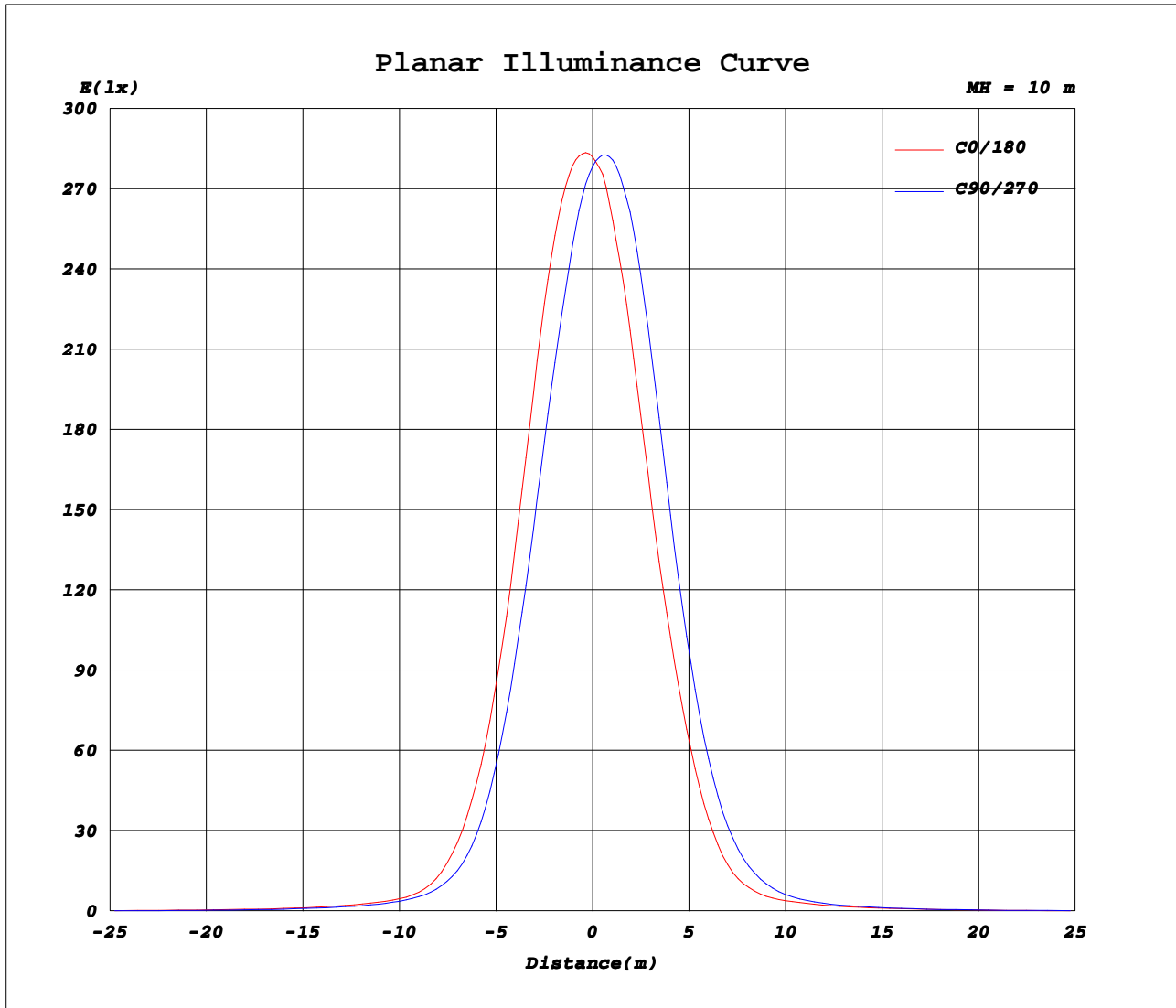
AvgL	cd/m2
L_0~180(65)av	10422
L_0~180(75)av	6438
L_0~180(85)av	2008
L_90~270(65)av	8790
L_90~270(75)av	4745
L_90~270(85)av	1239
L_45(65)av	9699
L_45(75)av	5640
L_45(85)av	1463

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 22 July 2021

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: NTB-130C_A45

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
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	2819	2808	2802	2797	2790	2797	2784	2794	2781	2794	2780	2791	2819	2808	2802	2797	2790	2797	2784
5	2841	2794	2740	2717	2647	2637	2584	2595	2569	2600	2580	2615	2678	2674	2730	2743	2796	2821	2852
10	2716	2661	2553	2488	2374	2321	2244	2239	2205	2244	2246	2295	2376	2395	2473	2523	2650	2717	2788
15	2407	2323	2169	2086	1949	1893	1829	1823	1771	1816	1802	1844	1941	1993	2113	2221	2369	2446	2537
20	1900	1775	1618	1565	1448	1416	1347	1328	1299	1315	1325	1379	1458	1540	1651	1736	1887	1961	2078
25	1344	1231	1139	1064	974	942	891	876	890	898	913	956	1022	1084	1166	1234	1352	1407	1525
30	845	783	728	673	602	543	514	518	536	570	575	571	618	664	751	824	892	939	1000
35	467	442	422	407	343	304	276	279	296	326	314	305	317	347	422	503	545	560	580
40	222	220	237	231	193	168	157	161	171	186	171	158	167	179	223	285	323	313	318
45	132	126	136	140	123	109	105	103	106	111	107	101	109	114	128	161	186	174	176
50	101	98.7	94.0	94.7	87.6	80.5	78.2	77.7	80.4	80.7	78.0	81.6	85.5	89.9	91.5	105	119	114	113
55	77.5	75.3	73.5	70.9	66.0	62.0	60.8	59.9	61.4	63.0	63.7	64.6	67.5	69.6	75.2	77.4	82.5	81.1	81.9
60	61.2	57.7	56.6	52.7	49.0	45.4	44.7	44.6	46.6	48.6	50.9	51.2	56.3	56.1	58.6	59.1	60.9	60.0	60.7
65	46.0	44.0	40.8	37.9	34.1	31.6	30.9	30.9	32.0	35.1	36.7	39.4	42.1	43.7	43.4	43.7	44.0	42.7	43.4
70	30.5	29.4	26.5	23.9	20.5	19.0	18.0	18.4	19.6	22.4	23.9	26.2	28.0	29.2	30.6	30.4	29.5	28.4	28.9
75	17.5	16.7	14.8	12.1	10.0	9.07	8.61	8.87	9.48	11.0	12.9	14.3	15.8	16.9	18.0	17.4	16.5	15.7	16.0
80	7.89	7.16	5.60	4.26	3.10	2.61	2.36	2.51	2.82	3.71	4.59	5.70	6.68	7.53	7.91	7.32	7.07	6.76	6.77
85	2.01	1.73	1.11	0.74	0.63	0.64	0.63	0.65	0.67	0.71	0.89	1.24	1.49	1.90	1.94	1.77	1.66	1.51	1.53
90	0.52	0.53	0.55	0.57	0.59	0.60	0.61	0.63	0.65	0.65	0.65	0.63	0.51	0.49	0.49	0.49	0.49	0.49	0.50
95	0.64	0.66	0.70	0.74	0.77	0.79	0.82	0.84	0.86	0.85	0.84	0.80	0.64	0.61	0.59	0.57	0.55	0.54	0.53
100	0.86	0.90	0.96	1.01	1.07	1.11	1.16	1.18	1.20	1.18	1.16	1.11	0.87	0.81	0.77	0.73	0.70	0.67	0.65
105	1.22	1.29	1.37	1.45	1.53	1.61	1.68	1.71	1.72	1.69	1.66	1.60	1.25	1.16	1.07	1.01	0.95	0.91	0.88
110	1.77	1.86	1.98	2.10	2.22	2.33	2.44	2.47	2.49	2.44	2.39	2.30	1.84	1.70	1.56	1.45	1.36	1.30	1.25
115	2.53	2.66	2.82	2.98	3.15	3.30	3.43	3.48	3.49	3.43	3.37	3.25	2.67	2.47	2.26	2.10	1.97	1.89	1.82
120	3.50	3.68	3.88	4.08	4.30	4.48	4.63	4.69	4.69	4.63	4.55	4.41	3.75	3.49	3.23	3.01	2.82	2.70	2.61
125	4.68	4.88	5.12	5.35	5.60	5.80	5.96	6.02	6.03	5.95	5.87	5.71	5.03	4.72	4.41	4.14	3.91	3.75	3.63
130	6.00	6.23	6.48	6.73	6.98	7.19	7.34	7.40	7.40	7.31	7.23	7.07	6.43	6.09	5.75	5.45	5.18	4.99	4.84
135	7.40	7.64	7.88	8.13	8.36	8.55	8.69	8.74	8.72	8.64	8.55	8.40	7.87	7.52	7.17	6.86	6.58	6.37	6.20
140	8.81	9.02	9.23	9.44	9.64	9.81	9.93	9.96	9.93	9.84	9.75	9.64	9.26	8.91	8.58	8.27	8.00	7.78	7.61
145	10.1	10.3	10.4	10.6	10.7	10.9	11.0	11.0	10.9	10.8	10.8	10.7	10.5	10.2	9.87	9.59	9.36	9.16	8.99
150	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.7	11.6	11.6	11.5	11.5	11.5	11.2	10.9	10.7	10.5	10.4	10.2
155	12.0	12.0	12.0	12.0	12.0	12.1	12.1	12.1	12.0	12.0	12.0	12.0	12.2	11.9	11.7	11.5	11.4	11.3	11.2
160	12.4	12.4	12.3	12.2	12.1	12.1	12.1	12.2	12.1	12.1	12.2	12.3	12.5	12.3	12.2	12.0	11.9	11.9	11.8
165	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.1	12.1	12.1	12.2	12.3	12.6	12.4	12.3	12.2	12.2	12.1	12.1
170	12.5	12.5	12.3	12.1	12.0	12.0	12.0	12.1	12.1	12.2	12.2	12.3	12.5	12.4	12.3	12.2	12.3	12.2	12.2
175	12.5	12.5	12.3	12.3	12.2	12.3	12.3	12.4	12.3	12.3	12.3	12.3	12.6	12.4	12.4	12.3	12.4	12.4	12.5
180	12.6	12.6	12.5	12.5	12.5	12.6	12.7	12.6	12.5	12.5	12.4	12.4	12.7	12.5	12.5	12.5	12.5	12.6	12.7

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.4V I:0.6047A P:129.6W PF:0.9763 Lamp Flux:19393.9x1 lm		
NAME: NTB-130C_A45	TYPE:LED	WEIGHT:
SPEC.:130C_A45	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: #10cd

C(DEC) γ (DEC)	285	300	315	330	345														
0	2794	2781	2794	2780	2791														
5	2878	2889	2886	2867	2839														
10	2819	2844	2839	2821	2761														
15	2546	2596	2571	2554	2455														
20	2114	2143	2094	2070	1956														
25	1544	1563	1504	1487	1392														
30	1009	1030	984	963	899														
35	599	626	622	586	516														
40	327	357	374	337	263														
45	182	207	224	187	141														
50	117	130	137	117	104														
55	83.4	90.6	92.6	84.6	79.6														
60	61.4	65.0	65.9	65.2	61.5														
65	44.0	45.4	47.3	47.4	46.5														
70	28.7	30.4	31.1	31.9	31.8														
75	16.0	16.9	17.9	18.8	18.7														
80	6.88	7.24	7.65	8.60	8.56														
85	1.55	1.72	1.89	2.26	2.41														
90	0.49	0.49	0.49	0.50	0.50														
95	0.52	0.53	0.54	0.55	0.55														
100	0.65	0.66	0.67	0.68	0.70														
105	0.87	0.88	0.90	0.92	0.95														
110	1.24	1.24	1.27	1.30	1.35														
115	1.79	1.79	1.82	1.86	1.94														
120	2.58	2.55	2.60	2.64	2.74														
125	3.57	3.54	3.59	3.64	3.76														
130	4.77	4.73	4.77	4.82	4.97														
135	6.10	6.05	6.09	6.15	6.30														
140	7.50	7.45	7.48	7.53	7.68														
145	8.89	8.83	8.84	8.89	9.03														
150	10.1	10.1	10.1	10.1	10.2														
155	11.1	11.0	11.0	11.0	11.1														
160	11.7	11.7	11.6	11.7	11.8														
165	12.0	12.0	11.9	12.0	12.1														
170	12.2	12.1	12.1	12.2	12.2														
175	12.4	12.3	12.3	12.3	12.3														
180	12.6	12.5	12.4	12.4	12.4														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:KAR
Test Date:22 July 2021

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: NTB-130C_A45

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	28190	28081	28019	27973	27905	27966	27837	27943	27813	27936
3.0	28428	28111	27776	27746	27232	27263	26828	26976	26709	26990
6.0	28304	27828	27146	26812	26021	25820	25231	25331	25077	25407
9.0	27579	27033	26000	25467	24411	23929	23190	23168	22900	23256
12.0	26133	25504	24307	23528	22269	21649	20903	20832	20358	20822
15.0	24068	23229	21689	20863	19493	18926	18294	18225	17711	18162
18.0	21100	20057	18497	17705	16427	16016	15360	15242	14777	15093
21.0	17917	16633	15079	14627	13563	13210	12569	12307	12157	12247
24.0	14472	13330	12297	11598	10681	10324	9771	9575	9683	9737
27.0	11360	10431	9615	8880	8073	7666	7263	7246	7374	7582
30.0	8447	7835	7277	6726	6018	5431	5145	5176	5363	5701
33.0	6041	5676	5311	5011	4339	3835	3530	3573	3736	4087
36.0	4068	3862	3767	3645	3044	2672	2451	2470	2654	2887
39.0	2582	2524	2673	2594	2151	1873	1743	1783	1915	2071
42.0	1716	1695	1867	1861	1572	1378	1314	1322	1364	1493
45.0	1315	1259	1358	1399	1232	1095	1045	1035	1064	1107
48.0	1123	1063	1057	1096	992.0	901.0	876.1	862.1	892.8	897.2
51.0	949.7	937.6	890.3	886.5	829.5	763.2	741.4	738.3	762.1	763.6
54.0	813.4	792.4	767.2	747.9	699.3	651.9	639.2	630.9	646.0	661.3
57.0	705.6	679.9	667.0	633.0	588.5	554.7	542.2	536.4	557.5	567.1
60.0	612.2	577.2	565.6	526.6	490.5	454.2	446.6	446.1	466.1	485.7
63.0	531.7	494.4	469.8	434.8	394.7	372.0	363.8	365.5	369.1	403.7
66.0	426.9	408.4	377.6	351.7	314.4	289.4	282.1	283.2	297.4	322.1
69.0	334.0	321.6	290.9	265.7	231.4	213.7	203.4	207.9	220.3	248.9
72.0	250.4	240.2	215.7	189.5	159.2	145.9	140.1	143.1	150.3	175.7
75.0	175.3	167.1	147.6	121.1	100.4	90.69	86.13	88.66	94.80	109.7
78.0	113.6	105.6	88.17	68.62	54.64	46.24	42.45	44.56	49.75	61.37
81.0	63.74	57.28	42.63	31.95	22.57	18.34	16.26	17.49	20.48	26.91
84.0	28.31	24.50	16.42	10.59	7.528	6.979	6.907	7.066	7.398	9.176
87.0	9.810	8.367	6.029	5.483	5.319	5.328	5.420	5.592	5.777	5.931
90.0	5.174	5.303	5.476	5.695	5.860	5.990	6.138	6.327	6.502	6.545
93.0	5.771	5.979	6.293	6.607	6.839	7.028	7.238	7.435	7.621	7.620
96.0	6.709	7.005	7.413	7.810	8.164	8.410	8.714	8.939	9.128	9.063
99.0	8.023	8.418	8.979	9.452	9.960	10.31	10.75	10.95	11.17	11.02
102.0	9.811	10.31	11.04	11.63	12.34	12.87	13.38	13.68	13.79	13.62
105.0	12.22	12.88	13.70	14.51	15.35	16.10	16.82	17.10	17.21	16.93
108.0	15.23	16.08	17.10	18.10	19.21	20.16	21.06	21.39	21.50	21.12
111.0	19.03	20.05	21.31	22.53	23.90	25.10	26.16	26.58	26.65	26.20
114.0	23.60	24.82	26.33	27.83	29.47	30.90	32.13	32.61	32.68	32.14
117.0	28.91	30.41	32.16	33.94	35.87	37.49	38.87	39.43	39.51	38.87
120.0	35.04	36.76	38.78	40.78	42.97	44.75	46.30	46.87	46.93	46.26
123.0	41.88	43.82	46.05	48.27	50.63	52.54	54.18	54.78	54.87	54.09
126.0	49.34	51.45	53.86	56.21	58.68	60.70	62.37	63.00	63.02	62.24
129.0	57.27	59.53	62.06	64.53	66.99	69.04	70.63	71.24	71.23	70.41
132.0	65.58	67.93	70.43	72.93	75.35	77.38	78.90	79.45	79.35	78.52
135.0	74.05	76.39	78.82	81.25	83.59	85.52	86.94	87.40	87.21	86.37
138.0	82.49	84.80	87.08	89.31	91.46	93.26	94.60	94.93	94.65	93.80
141.0	90.77	92.90	94.86	96.89	98.76	100.4	101.6	101.9	101.5	100.6
144.0	98.54	100.5	102.0	103.8	105.3	106.8	107.8	108.0	107.5	106.6
147.0	105.7	107.2	108.3	109.7	110.9	112.2	113.0	113.1	112.5	111.8
150.0	111.9	113.1	113.6	114.5	115.4	116.5	117.1	117.1	116.5	115.8
153.0	117.0	117.8	117.7	118.1	118.6	119.5	119.9	119.9	119.3	118.8
156.0	120.9	121.3	120.6	120.4	120.5	121.1	121.3	121.4	120.8	120.5
159.0	123.5	123.6	122.3	121.7	121.0	121.4	121.5	121.6	121.2	121.3
162.0	125.0	124.9	123.1	122.0	120.8	120.8	120.7	121.1	121.1	121.5
165.0	125.5	125.3	123.1	121.7	120.3	120.1	120.1	120.6	120.8	121.4
168.0	125.5	125.1	122.8	121.2	119.8	119.8	119.9	120.5	120.8	121.3
171.0	125.3	124.8	122.7	121.2	120.0	120.3	120.6	121.4	121.5	121.7
174.0	125.2	124.8	123.1	122.1	121.4	122.0	122.5	123.2	122.7	122.6
177.0	125.5	125.3	124.2	123.8	123.6	124.4	125.0	125.2	124.3	123.8
180.0	126.1	125.8	124.8	124.8	124.7	126.0	126.6	126.4	125.1	124.6
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	27800	27913	28190	28081	28019	27973	27905	27966	27837	27943
3.0	26797	27113	27664	27521	27923	27845	28033	28205	28378	28513
6.0	25180	25573	26230	26221	26859	27102	27918	28145	28534	28831
9.0	23195	23686	24462	24578	25299	25731	26957	27510	28123	28504
12.0	20852	21253	22077	22446	23467	24209	25522	26292	27178	27318
15.0	18020	18435	19408	19933	21129	22208	23694	24459	25370	25462
18.0	15075	15563	16446	17225	18511	19406	21014	21789	22836	23089
21.0	12392	12969	13708	14514	15489	16307	17784	18467	19702	20027
24.0	9894	10416	11096	11791	12575	13261	14545	15107	16337	16583
27.0	7717	7952	8546	9089	9880	10607	11528	12227	13094	13213
30.0	5746	5705	6183	6641	7508	8240	8917	9386	9998	10092

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 22 July 2021

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: NTB-130C_A45

Photometric Data Table [cd]

33.0	4066	3909	4198	4551	5415	6183	6681	6950	7296	7480
36.0	2745	2654	2709	3014	3705	4516	4915	5016	5150	5338
39.0	1900	1780	1870	2015	2523	3210	3588	3533	3561	3708
42.0	1393	1289	1354	1453	1750	2251	2578	2472	2481	2559
45.0	1071	1012	1095	1136	1278	1610	1865	1742	1755	1817
48.0	874.4	882.2	970.0	989.8	1029	1227	1402	1332	1321	1378
51.0	740.1	776.5	803.3	845.4	872.1	983.7	1100	1065	1052	1083
54.0	660.8	672.8	701.9	722.0	784.4	821.9	880.4	864.2	868.9	887.6
57.0	585.1	591.8	621.8	640.6	680.2	693.6	731.5	719.3	726.8	738.2
60.0	508.9	512.0	563.3	560.6	585.7	591.5	608.6	599.9	607.2	614.5
63.0	421.5	441.0	482.9	496.9	492.4	497.3	504.8	490.2	499.5	502.8
66.0	340.9	367.4	392.7	405.0	406.6	409.1	405.1	397.8	403.7	408.7
69.0	265.0	287.7	306.3	318.4	331.3	330.9	321.2	313.1	315.6	316.2
72.0	191.4	212.8	228.6	240.5	252.8	249.4	239.9	230.1	233.9	234.0
75.0	129.1	142.8	157.9	169.2	180.2	173.7	165.0	156.7	159.5	159.6
78.0	74.84	86.82	99.05	109.9	115.6	108.7	103.3	99.78	101.2	102.1
81.0	35.13	44.47	52.83	60.66	63.43	58.98	56.44	52.96	53.35	53.88
84.0	12.81	17.74	21.29	26.60	26.99	25.15	23.48	22.12	22.25	22.56
87.0	6.235	7.039	6.851	8.936	8.960	8.074	7.717	7.318	7.429	7.416
90.0	6.467	6.261	5.090	4.941	4.891	4.895	4.915	4.950	4.964	4.932
93.0	7.502	7.202	5.791	5.511	5.402	5.235	5.070	4.887	4.815	4.786
96.0	8.925	8.534	6.762	6.389	6.164	5.946	5.752	5.547	5.463	5.410
99.0	10.84	10.37	8.129	7.626	7.243	6.948	6.648	6.367	6.199	6.153
102.0	13.34	12.82	9.995	9.318	8.714	8.297	7.883	7.526	7.274	7.227
105.0	16.59	15.98	12.54	11.60	10.72	10.12	9.524	9.107	8.761	8.703
108.0	20.72	19.91	15.78	14.53	13.40	12.52	11.73	11.22	10.78	10.70
111.0	25.71	24.74	19.83	18.30	16.78	15.59	14.62	13.95	13.48	13.30
114.0	31.58	30.46	24.83	22.95	21.02	19.52	18.28	17.49	16.89	16.66
117.0	38.22	36.93	30.72	28.44	26.19	24.37	22.79	21.84	21.08	20.79
120.0	45.54	44.11	37.46	34.88	32.26	30.07	28.23	27.04	26.11	25.75
123.0	53.33	51.78	44.93	42.05	39.10	36.62	34.48	33.05	31.97	31.47
126.0	61.43	59.80	52.99	49.86	46.62	43.92	41.50	39.85	38.58	37.98
129.0	69.60	67.95	61.45	58.08	54.70	51.77	49.13	47.30	45.90	45.16
132.0	77.66	76.08	70.09	66.57	63.15	60.02	57.31	55.30	53.74	52.88
135.0	85.48	84.04	78.73	75.19	71.74	68.56	65.77	63.66	61.96	61.03
138.0	92.91	91.61	87.15	83.64	80.24	77.11	74.36	72.17	70.41	69.39
141.0	99.75	98.65	95.20	91.78	88.52	85.49	82.82	80.66	78.92	77.85
144.0	105.9	105.0	102.7	99.32	96.26	93.41	90.97	88.93	87.26	86.16
147.0	111.1	110.5	109.3	106.1	103.3	100.7	98.55	96.73	95.16	94.08
150.0	115.4	115.1	115.0	112.1	109.4	107.1	105.3	103.7	102.4	101.3
153.0	118.6	118.7	119.6	116.8	114.6	112.5	111.1	109.7	108.7	107.6
156.0	120.6	121.2	122.8	120.3	118.4	116.6	115.5	114.5	113.7	112.6
159.0	121.7	122.5	124.7	122.5	121.0	119.4	118.7	117.9	117.4	116.4
162.0	122.0	123.0	125.6	123.5	122.4	121.1	120.5	120.0	119.7	118.7
165.0	121.9	123.0	125.7	123.9	123.0	122.0	121.7	121.1	120.8	120.0
168.0	121.8	122.7	125.3	123.7	123.1	122.4	122.3	121.9	121.8	120.9
171.0	122.0	122.7	125.1	123.7	123.3	122.6	122.9	122.8	122.7	121.8
174.0	122.6	122.9	125.4	124.1	123.7	123.1	123.7	123.9	124.1	123.1
177.0	123.4	123.6	126.1	124.9	124.5	123.9	124.6	125.4	125.9	124.9
180.0	124.3	124.3	126.6	125.3	125.1	124.5	124.9	125.8	126.8	126.2
G/C	300.0	315.0	330.0	345.0						
0.0	27813	27936	27800	27913						
3.0	28568	28565	28452	28292						
6.0	28952	28919	28724	28382						
9.0	28704	28637	28429	27939						
12.0	27744	27614	27536	26583						
15.0	25956	25711	25540	24553						
18.0	23397	23080	22908	21786						
21.0	20361	19805	19508	18430						
24.0	16815	16242	16002	15024						
27.0	13360	12794	12634	11921						
30.0	10301	9840	9630	8991						
33.0	7698	7532	7213	6539						
36.0	5620	5638	5263	4557						
39.0	3993	4153	3789	3048						
42.0	2863	3042	2655	1971						
45.0	2075	2245	1869	1409						
48.0	1535	1647	1368	1136						
51.0	1201	1255	1084	995.7						
54.0	968.6	997.9	895.0	841.4						
57.0	791.6	807.1	765.2	719.7						
60.0	650.1	658.7	652.2	615.5						
63.0	536.2	542.4	545.4	519.7						
66.0	419.0	438.1	438.8	437.1						

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 22 July 2021

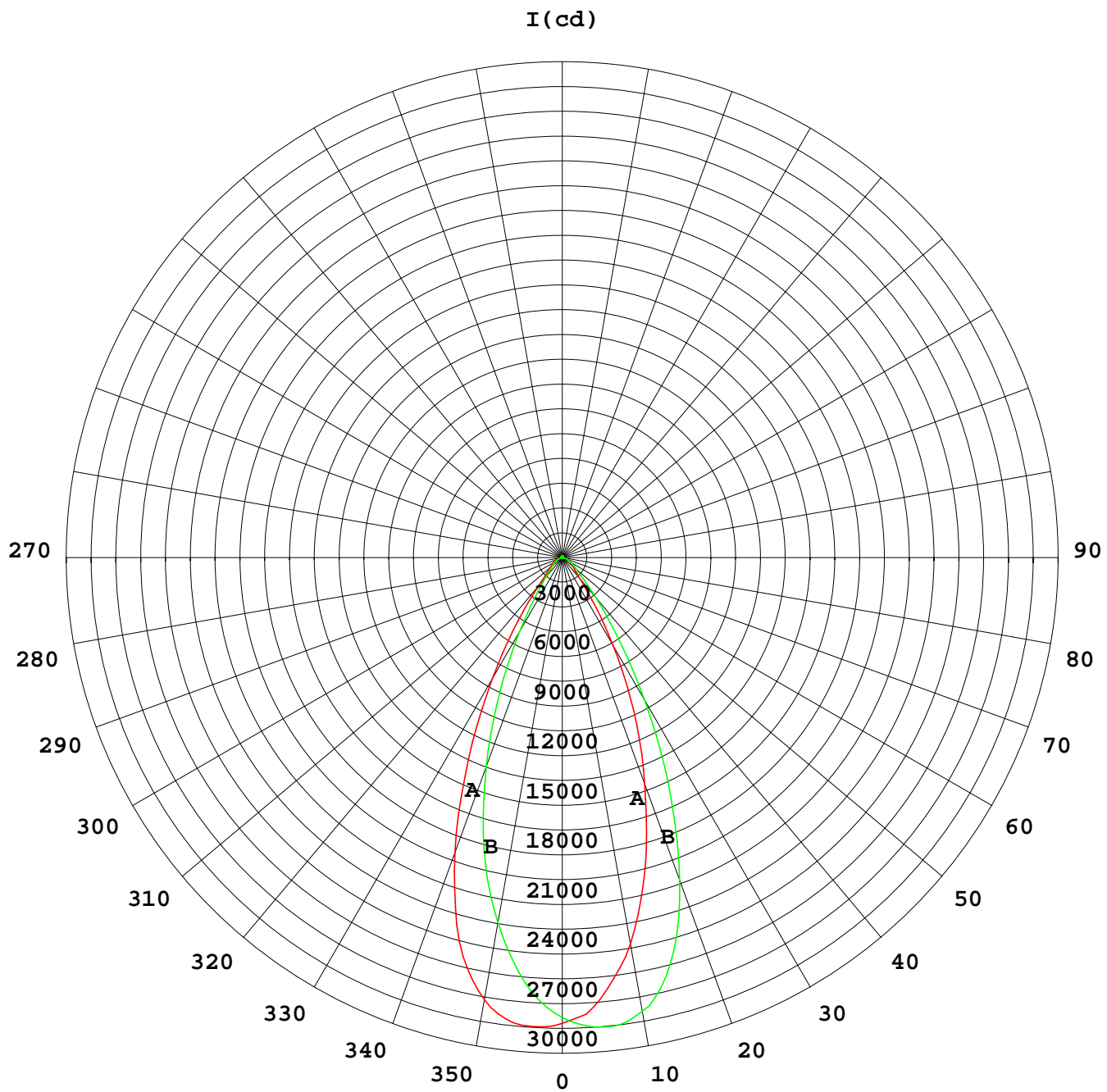
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: NTB-130C_A45

Photometric Data Table [cd]

69.0	328.7	342.6	346.6	347.1
72.0	248.7	257.7	264.3	262.7
75.0	169.5	179.4	187.7	186.9
78.0	105.9	112.0	123.0	121.5
81.0	57.75	61.71	69.26	69.95
84.0	24.24	26.70	31.29	32.88
87.0	7.970	8.518	10.45	11.54
90.0	4.882	4.878	4.954	5.034
93.0	4.886	4.986	5.108	5.172
96.0	5.504	5.567	5.677	5.771
99.0	6.249	6.390	6.511	6.640
102.0	7.325	7.502	7.636	7.836
105.0	8.777	9.020	9.182	9.483
108.0	10.73	11.05	11.24	11.67
111.0	13.35	13.64	13.97	14.47
114.0	16.62	16.95	17.33	18.03
117.0	20.67	21.06	21.47	22.34
120.0	25.55	25.98	26.43	27.45
123.0	31.25	31.65	32.19	33.26
126.0	37.67	38.09	38.64	39.88
129.0	44.77	45.21	45.78	47.10
132.0	52.46	52.86	53.39	54.87
135.0	60.55	60.89	61.49	62.96
138.0	68.89	69.20	69.76	71.27
141.0	77.29	77.58	78.12	79.59
144.0	85.57	85.77	86.26	87.68
147.0	93.46	93.54	93.98	95.29
150.0	100.7	100.6	101.0	102.2
153.0	106.9	106.7	107.1	108.2
156.0	112.0	111.7	112.0	113.0
159.0	115.7	115.4	115.8	116.6
162.0	118.1	117.9	118.4	119.2
165.0	119.5	119.5	120.1	120.8
168.0	120.4	120.4	121.1	121.8
171.0	121.3	121.2	121.8	122.4
174.0	122.6	122.3	122.7	123.1
177.0	124.3	123.7	123.9	123.9
180.0	125.3	124.5	124.5	124.2

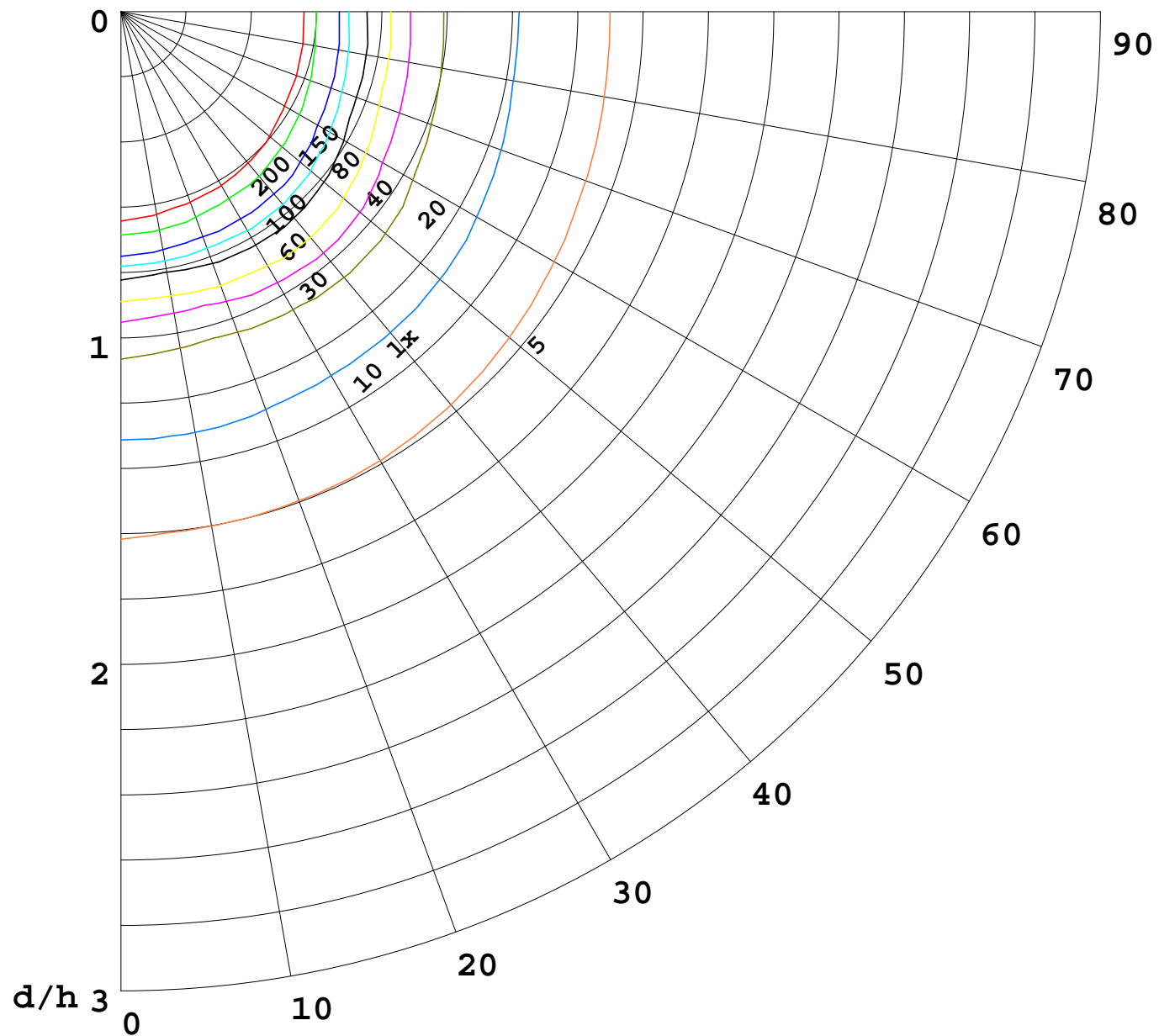
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: KAR
Test Date: 22 July 2021

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: NTB-130C_A45



1000 lm

$K = 1$



F = 1000 lm
 K = 0.7
 H_{cc} = 0.8 m
 H_{fc} = 0.0 m
 E_{ave} = 100 lx

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

