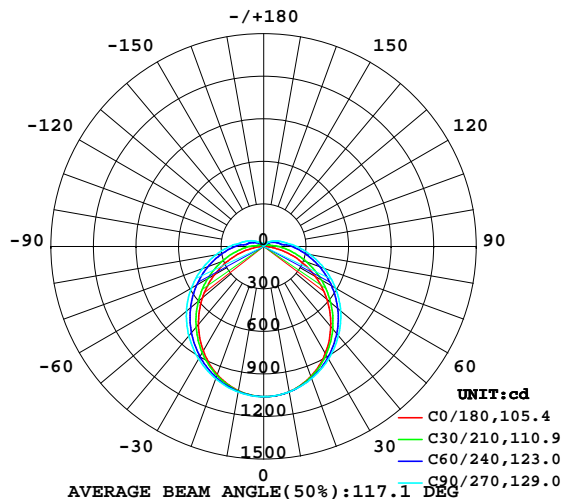


LUMINAIRE PHOTOMETRIC TEST REPORT

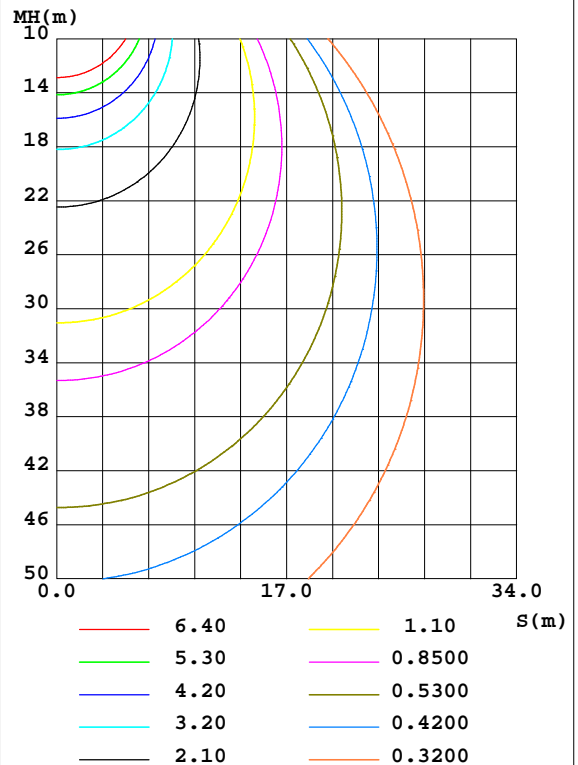
Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.64 lm/W			
MODEL	GRW-S28	I _{max} (cd)	1060	S/MH(C0/180)	1.20
NOMINAL POWER(W)	28	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3653.8	η UP,DN(C0-180)	4.2,45.7
NOMINAL FLUX(lm)	3653.81	CIE CLASS	DIRECT	η UP,DN(C180-360)	4.3,45.8
LAMPS INSIDE	1	η up(%)	8.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	91.5	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:ARK
 Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1040	1041	1041	1036	1032	1036	1042	1041	0- 10	100.2	100.2	2.74,2.74
20	975.3	984.1	990.9	973.8	960.6	974.8	992.5	984.7	10- 20	286.0	386.1	10.6,10.6
30	870.5	894.7	916.1	880.9	852.0	882.3	917.2	894.2	20- 30	432.0	818.2	22.4,22.4
40	736.7	781.0	820.9	765.2	716.9	766.6	822.4	780.7	30- 40	521.6	1340	36.7,36.7
50	583.4	651.3	709.0	635.1	564.4	638.3	711.4	651.7	40- 50	547.9	1888	51.7,51.7
60	419.1	514.1	584.6	498.8	402.9	503.0	590.2	515.2	50- 60	513.4	2401	65.7,65.7
70	250.5	377.5	455.4	364.4	239.2	370.0	462.9	380.1	60- 70	429.0	2830	77.5,77.5
80	93.64	253.8	332.8	243.2	87.24	248.8	341.6	255.6	70- 80	314.0	3144	86,86
90	6.210	159.4	232.7	152.3	4.671	155.3	239.3	159.1	80- 90	200.1	3344	91.5,91.5
100	6.952	85.99	157.9	79.89	5.504	81.89	163.8	85.43	90-100	117.7	3462	94.7,94.7
110	7.886	60.90	112.9	55.65	6.364	57.80	116.6	60.69	100-110	74.25	3536	96.8,96.8
120	8.789	42.35	77.99	33.33	7.279	34.86	79.31	41.24	110-120	48.78	3585	98.1,98.1
130	9.648	28.80	52.08	22.07	8.241	22.30	52.69	28.21	120-130	30.26	3615	98.9,98.9
140	10.55	19.63	33.54	15.62	9.301	15.07	33.99	19.09	130-140	17.98	3633	99.4,99.4
150	11.34	13.39	20.19	12.17	10.35	11.51	20.53	12.75	140-150	10.30	3643	99.7,99.7
160	12.04	12.01	12.13	11.85	11.35	11.13	11.87	11.28	150-160	5.813	3649	99.9,99.9
170	12.59	12.40	12.30	12.29	12.23	11.95	11.98	12.02	160-170	3.366	3653	100,100
180	12.73	12.46	12.45	12.44	12.73	12.46	12.46	12.45	170-180	1.177	3654	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1614.4 lm

%lum = 44.2%

%lamp = 44.2%

Conical surface Flux(120deg): 2401.1 lm

%lum = 65.7%

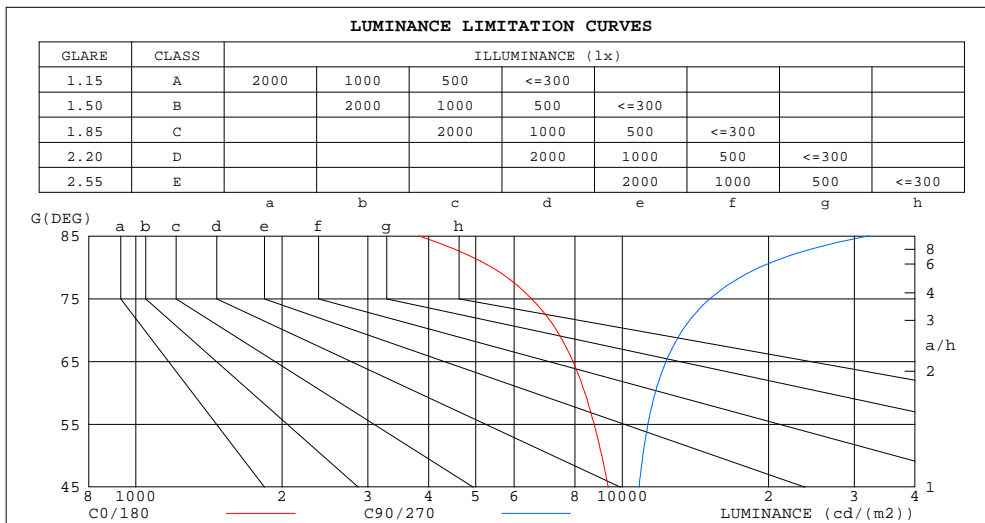
%lamp = 65.7%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

LUMINANCE LIMITATION CURVES

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3819	32128
80	5393	19165
75	6512	15159
70	7323	13314
65	7925	12304
60	8382	11692
55	8752	11296
50	9077	11030
45	9359	10841

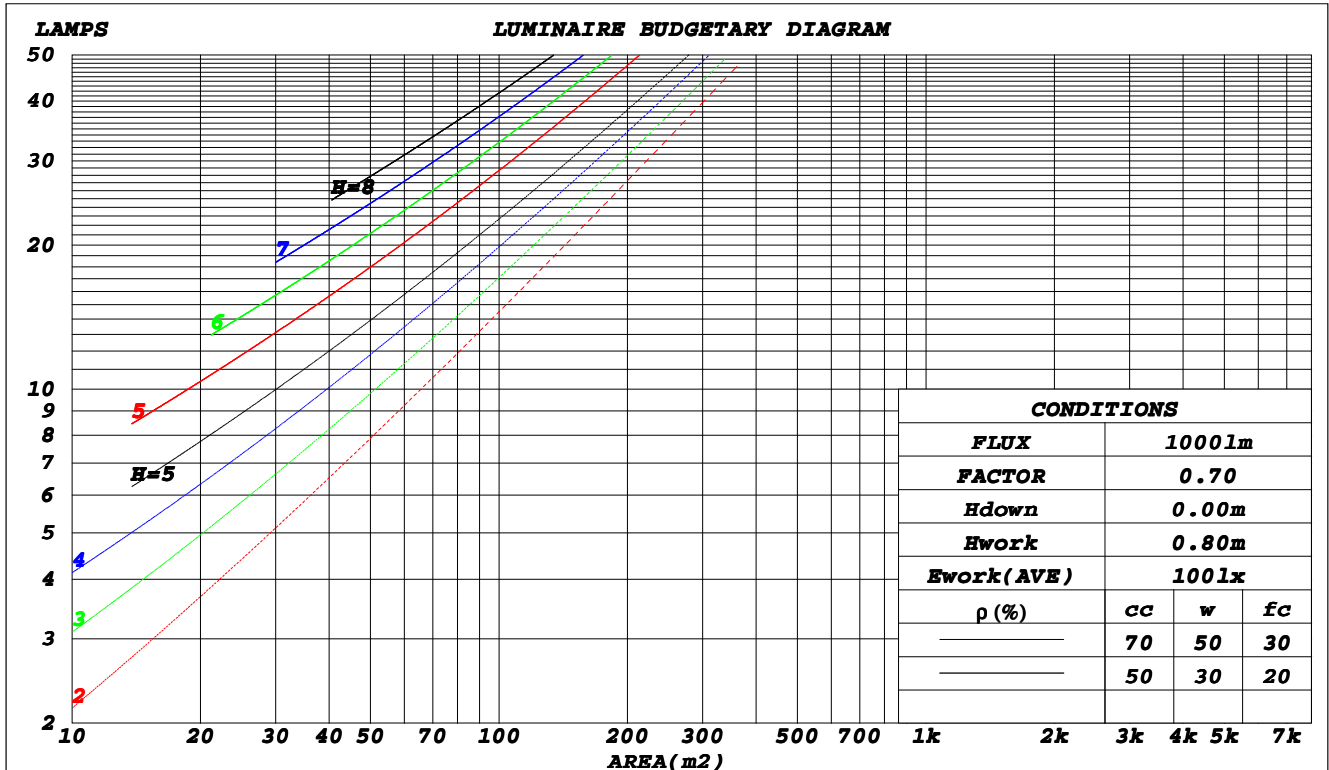
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28es	TYPE:LED	WEIGHT:
SPEC.:28W	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	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	1.00	1.00	1.00	.94	.94	.94	.92
1.0	.99	.94	.90	.96	.92	.88	.90	.87	.83	.85	.82	.79	.80	.78	.75	.73
2.0	.86	.78	.72	.83	.76	.70	.78	.72	.67	.73	.69	.65	.69	.65	.62	.59
3.0	.75	.66	.59	.73	.65	.58	.68	.62	.56	.64	.59	.54	.61	.56	.52	.49
4.0	.66	.57	.50	.64	.56	.49	.60	.53	.47	.57	.51	.46	.54	.49	.44	.42
5.0	.59	.49	.43	.57	.48	.42	.54	.46	.41	.51	.45	.39	.48	.43	.38	.36
6.0	.53	.44	.37	.51	.43	.36	.49	.41	.35	.46	.40	.34	.44	.38	.34	.31
7.0	.48	.39	.33	.47	.38	.32	.44	.37	.31	.42	.35	.30	.40	.34	.30	.28
8.0	.44	.35	.29	.42	.34	.29	.40	.33	.28	.39	.32	.27	.37	.31	.27	.24
9.0	.40	.32	.26	.39	.31	.26	.37	.30	.25	.35	.29	.24	.34	.28	.24	.22
10.0	.37	.29	.23	.36	.28	.23	.34	.27	.23	.33	.27	.22	.31	.26	.22	.20



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: ARK
 Test Date: 27 SEP 2022

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: GRW-S28 / Z-WFL-28es

WEC AND CCEC

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	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	.357	.203	.064	.347	.198	.063	.328	.188	.060	.312	.180	.058	.296	.172	.055		
2.0	.317	.174	.053	.309	.170	.052	.292	.162	.050	.277	.155	.049	.263	.149	.047		
3.0	.286	.152	.046	.278	.149	.045	.263	.143	.043	.250	.137	.042	.237	.131	.041		
4.0	.260	.135	.040	.253	.132	.039	.240	.127	.038	.227	.122	.037	.216	.117	.036		
5.0	.238	.121	.035	.231	.119	.035	.219	.114	.034	.208	.110	.033	.198	.106	.032		
6.0	.219	.110	.031	.213	.108	.031	.202	.104	.030	.192	.100	.029	.183	.096	.029		
7.0	.202	.100	.028	.197	.098	.028	.188	.095	.027	.178	.091	.027	.170	.088	.026		
8.0	.188	.092	.026	.184	.090	.026	.175	.087	.025	.166	.084	.024	.159	.081	.024		
9.0	.176	.085	.024	.172	.084	.023	.164	.081	.023	.156	.078	.022	.149	.076	.022		
10.0	.165	.079	.022	.161	.078	.022	.154	.075	.021	.147	.073	.021	.140	.070	.020		

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	.255	.255	.255	.218	.218	.218	.149	.149	.149	.085	.085	.085	.027	.027	.027	
1.0	.249	.221	.196	.213	.190	.168	.146	.130	.117	.084	.075	.068	.027	.024	.022	
2.0	.241	.197	.160	.207	.170	.139	.142	.118	.097	.082	.068	.057	.026	.022	.018	
3.0	.233	.180	.138	.200	.156	.120	.137	.108	.084	.079	.063	.049	.025	.020	.016	
4.0	.226	.167	.123	.194	.145	.107	.133	.101	.075	.077	.059	.044	.025	.019	.015	
5.0	.218	.157	.112	.187	.136	.098	.129	.095	.069	.075	.056	.041	.024	.018	.014	
6.0	.211	.149	.105	.181	.129	.091	.125	.090	.065	.072	.053	.038	.023	.017	.013	
7.0	.204	.142	.099	.175	.123	.087	.121	.087	.061	.070	.051	.037	.023	.017	.012	
8.0	.197	.137	.095	.170	.119	.083	.117	.083	.059	.068	.049	.035	.022	.016	.012	
9.0	.191	.132	.092	.164	.114	.080	.114	.080	.057	.066	.047	.034	.021	.016	.011	
10.0	.185	.128	.089	.159	.111	.078	.111	.078	.055	.064	.046	.033	.021	.015	.011	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

UGR(Unified Glare Rating) Table

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm										
NAME: 레이스웨이센서 / Z-WFL-28eS					TYPE:LED			WEIGHT:		
SPEC.:28W					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	19.6	21.1	20.0	21.4	21.8	21.0	22.5	21.4	22.8	23.2
3H	21.0	22.4	21.4	22.8	23.2	23.2	24.6	23.7	25.0	25.4
4H	21.6	22.9	22.0	23.3	23.7	24.4	25.7	24.8	26.1	26.5
6H	21.9	23.1	22.4	23.6	24.0	25.6	26.8	26.1	27.3	27.7
8H	22.0	23.2	22.5	23.6	24.1	26.3	27.5	26.7	27.9	28.4
12H	22.1	23.2	22.5	23.6	24.1	27.0	28.2	27.5	28.6	29.1
4H 2H	20.5	21.8	21.0	22.2	22.6	21.6	22.9	22.0	23.3	23.7
3H	22.2	23.3	22.6	23.7	24.2	24.0	25.2	24.5	25.6	26.1
4H	22.9	23.9	23.4	24.4	24.9	25.4	26.4	25.9	26.9	27.4
6H	23.4	24.3	23.9	24.8	25.4	26.8	27.7	27.3	28.2	28.8
8H	23.6	24.4	24.1	24.9	25.5	27.6	28.5	28.1	29.0	29.6
12H	23.6	24.4	24.2	25.0	25.6	28.5	29.3	29.1	29.8	30.4
8H 4H	23.6	24.5	24.2	25.0	25.6	25.7	26.5	26.2	27.1	27.6
6H	24.4	25.2	25.0	25.7	26.3	27.4	28.1	28.0	28.7	29.3
8H	24.8	25.4	25.4	26.0	26.6	28.4	29.1	29.0	29.6	30.3
12H	25.0	25.6	25.6	26.2	26.8	29.6	30.1	30.2	30.7	31.4
12H 4H	23.8	24.6	24.4	25.1	25.7	25.7	26.5	26.3	27.0	27.6
6H	24.8	25.5	25.4	26.0	26.7	27.5	28.2	28.1	28.7	29.4
8H	25.3	25.9	25.9	26.5	27.1	28.6	29.2	29.2	29.8	30.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 3654 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.5)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

UTILIZATION FACTORS TABLE

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.8lx1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

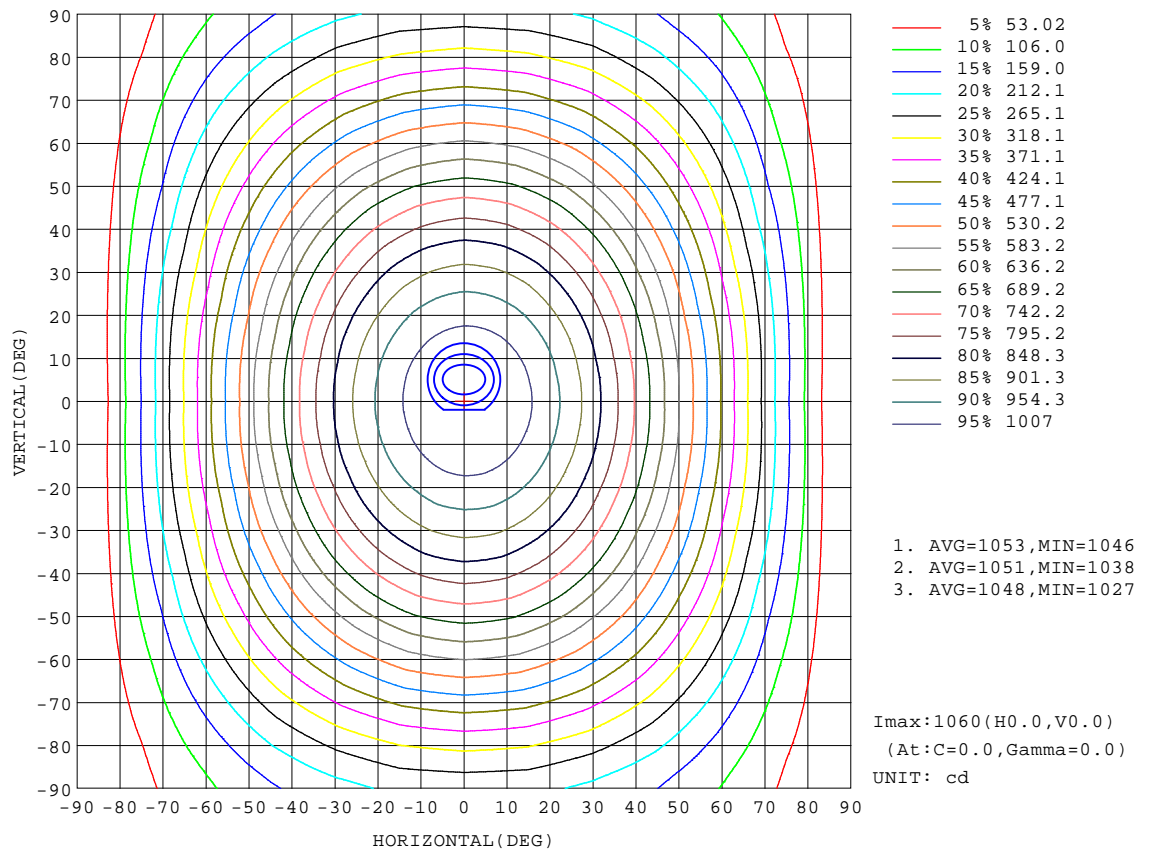
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	34	52	40	33	50	40	33	27
0.80	62	50	42	61	49	42	59	48	41	34
1.00	70	58	50	69	57	50	66	58	49	41
1.25	77	65	58	75	64	57	72	63	56	47
1.50	82	71	63	80	70	62	76	67	61	52
2.00	89	79	72	87	78	71	82	75	69	59
2.50	93	84	77	91	82	76	86	79	73	63
3.00	97	89	82	94	87	81	89	83	78	67
4.00	101	94	89	98	92	87	93	87	83	72
5.00	104	98	93	101	95	91	95	91	87	75
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:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

ISOCANDELA DIAGRAM

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

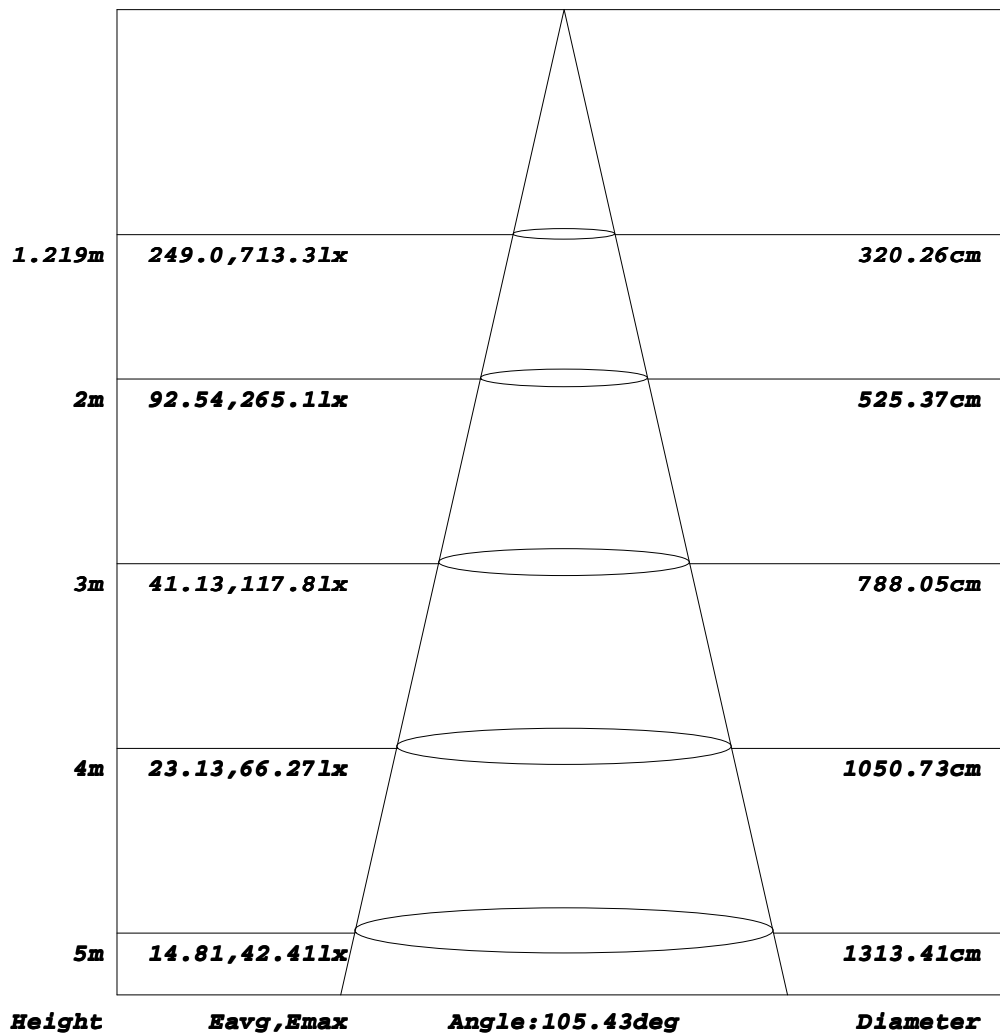


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ARK
 Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

AAI Figure

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Flux out:2048 lm


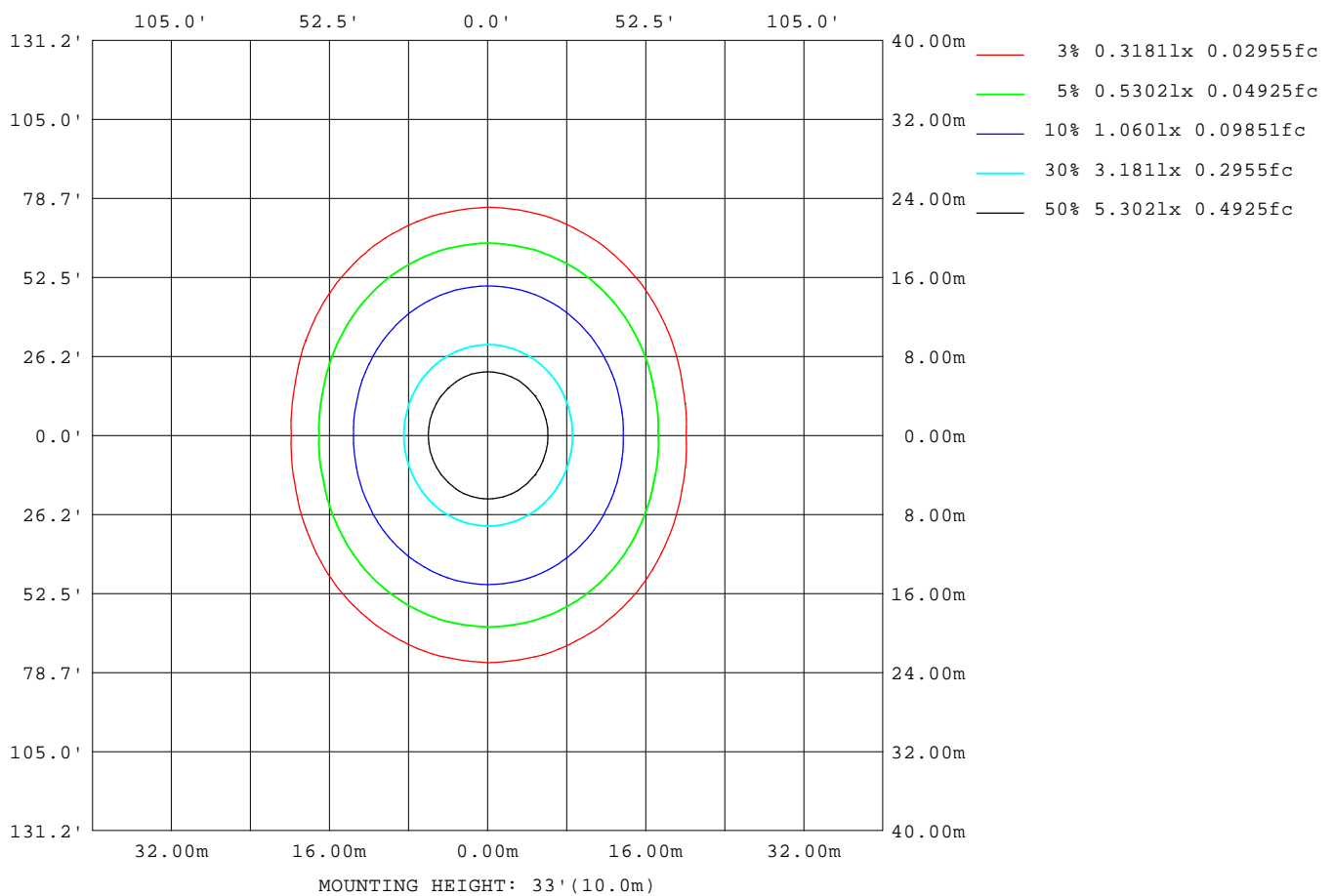
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

ISOLUX DIAGRAM

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

LED Avg.L Report

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

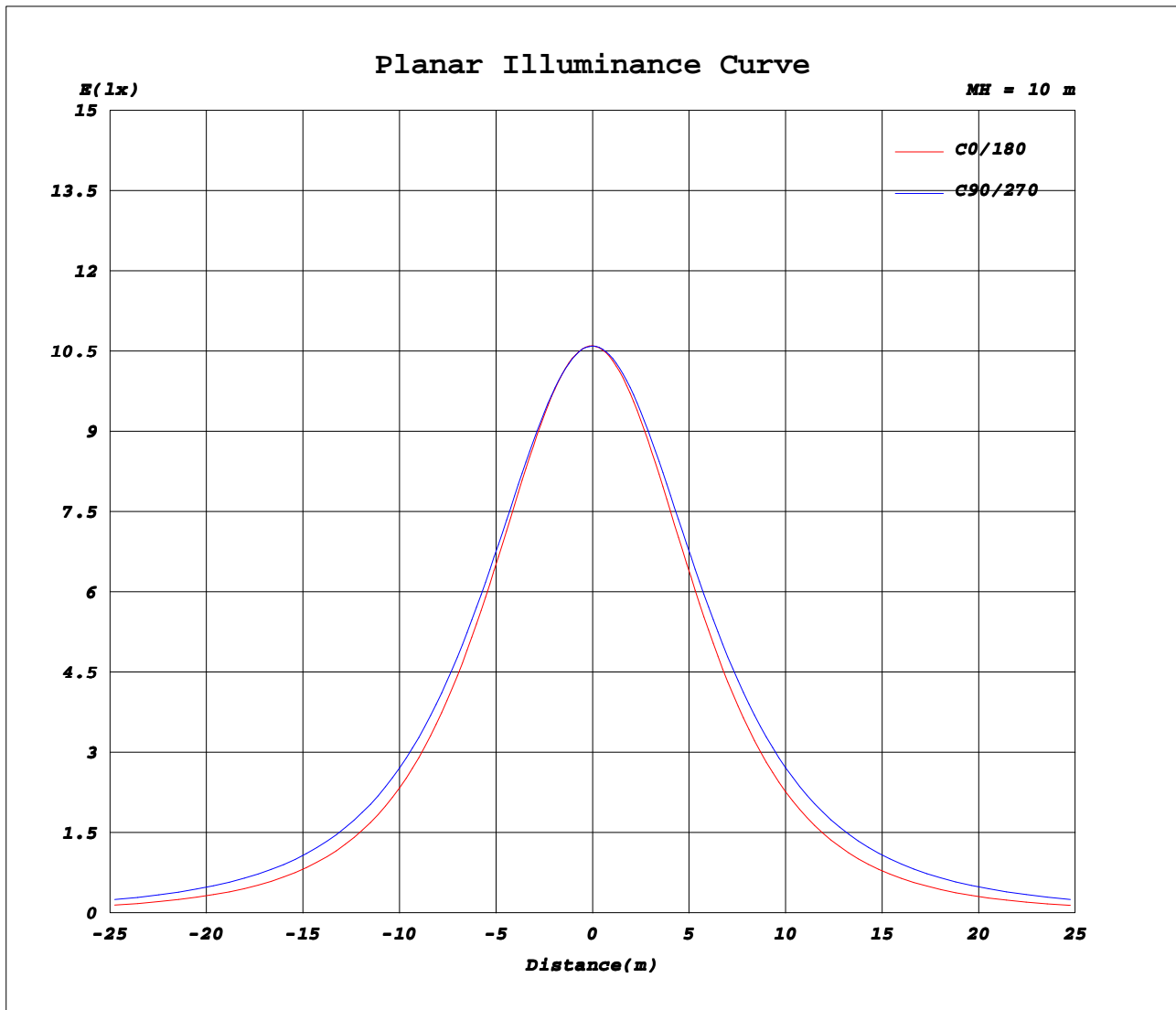
AvgL	cd/m2
L_0~180(65)av	7755
L_0~180(75)av	6345
L_0~180(85)av	3619
L_90~270(65)av	12382
L_90~270(75)av	15326
L_90~270(85)av	32594
L_45(65)av	10405
L_45(75)av	11950
L_45(85)av	22787

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm																		
NAME: 레이스웨이센서 / Z-WFL-28es									TYPE:LED					WEIGHT:				
SPEC.:28W									DIM.:					SERIAL No.:				
MFR.: ICEPIPE									SUR.:					Shielding Angle:				

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1060	1060	1060	1060	1059	1059	1060	1060	1059	1060	1060	1060	1060	1060	1060	1060	1059	1059	1060
5	1056	1056	1056	1056	1055	1055	1055	1055	1053	1053	1052	1052	1052	1052	1053	1054	1054	1055	1055
10	1040	1040	1040	1041	1042	1042	1041	1040	1038	1036	1033	1032	1032	1032	1035	1036	1039	1041	1042
15	1013	1014	1015	1017	1019	1021	1020	1018	1014	1009	1005	1002	1002	1002	1006	1010	1015	1018	1021
20	975	976	979	984	988	991	991	989	981	974	966	962	961	962	968	975	983	988	993
25	927	929	934	943	951	956	956	952	943	931	919	912	911	913	921	932	944	952	958
30	870	874	882	895	906	915	916	910	897	881	865	855	852	855	867	882	899	910	917
35	807	811	823	840	857	869	871	864	846	826	804	792	787	792	807	827	848	864	872
40	737	742	758	781	802	817	821	812	790	765	739	722	717	723	742	767	794	813	822
45	662	670	689	718	744	763	767	757	732	702	670	650	642	650	673	704	735	758	768
50	583	593	617	651	682	704	709	698	670	635	598	573	564	574	603	638	674	700	711
55	502	514	544	583	618	642	648	636	606	567	525	495	484	497	530	571	611	639	652
60	419	434	470	514	552	579	585	573	541	499	452	417	403	418	457	503	547	577	590
65	335	354	396	445	486	513	520	508	475	431	380	338	321	340	386	436	482	513	527
70	250	276	324	377	421	449	455	443	410	364	309	262	239	263	316	370	418	450	463
75	169	201	256	313	357	385	392	381	348	301	243	189	160	190	250	307	356	388	401
80	93.6	133	194	254	298	326	333	322	290	243	183	123	87.2	126	190	249	299	329	342
85	33.3	78.6	141	201	245	273	280	270	238	192	133	70.9	29.8	73.2	138	198	247	276	288
90	6.21	44.1	104	159	201	227	233	224	195	152	96.5	39.1	4.67	40.3	99.9	155	201	228	239
95	6.46	26.9	73.3	113	146	176	188	172	140	104	66.0	23.2	5.05	23.7	69.3	107	144	176	197
100	6.95	16.6	48.7	86.0	119	146	158	141	114	79.9	43.9	14.7	5.50	14.4	43.0	81.9	117	146	164
105	7.43	13.9	39.9	73.2	103	126	134	122	98.7	68.8	36.6	12.5	5.91	12.1	37.8	70.1	102	128	139
110	7.89	12.4	32.8	60.9	87.7	106	113	103	83.0	55.7	28.0	10.9	6.36	10.4	29.3	57.8	83.0	108	117
115	8.36	11.2	27.5	51.0	73.4	88.8	94.1	86.2	67.6	44.5	22.1	10.1	6.83	9.08	22.9	46.1	70.9	84.8	96.4
120	8.79	10.4	23.3	42.4	60.7	73.6	78.0	71.7	52.5	33.3	18.3	9.61	7.28	8.38	18.6	34.9	57.4	72.7	79.3
125	9.22	9.83	19.8	34.9	49.8	60.5	64.0	59.0	43.6	26.0	15.6	9.41	7.73	8.03	15.3	27.4	46.1	60.6	62.8
130	9.65	9.79	16.9	28.8	40.6	49.2	52.1	46.8	32.1	22.1	13.7	9.78	8.24	8.16	13.0	22.3	33.9	49.2	52.7
135	10.1	10.2	14.6	23.9	33.0	39.8	42.0	36.2	25.9	18.4	12.4	10.2	8.77	8.64	11.5	18.0	26.6	39.5	42.6
140	10.5	10.6	12.8	19.6	26.7	31.8	33.5	29.3	20.8	15.6	11.5	10.6	9.30	9.17	10.6	15.1	21.0	30.5	34.0
145	11.0	11.1	11.3	16.2	21.3	25.2	26.4	22.0	17.2	13.6	11.0	11.0	9.83	9.70	9.90	12.9	17.0	22.5	26.6
150	11.3	11.4	11.5	13.4	16.9	19.6	20.2	17.2	14.3	12.2	11.3	11.4	10.4	10.2	10.2	11.5	13.9	16.9	20.5
155	11.7	11.8	11.8	11.8	13.4	15.1	15.0	13.8	12.4	11.6	11.6	11.7	10.9	10.7	10.7	10.7	12.0	13.5	15.6
160	12.0	12.1	12.1	12.0	11.9	11.9	12.1	11.9	11.8	11.8	11.9	12.0	11.4	11.2	11.1	11.1	11.1	11.5	11.9
165	12.4	12.4	12.3	12.2	12.1	12.0	12.1	12.1	12.1	12.1	12.2	12.3	11.8	11.7	11.6	11.6	11.6	11.6	11.6
170	12.6	12.6	12.5	12.4	12.3	12.2	12.3	12.3	12.3	12.3	12.4	12.5	12.2	12.1	12.0	11.9	11.9	12.0	12.0
175	12.7	12.7	12.6	12.5	12.4	12.3	12.4	12.4	12.4	12.4	12.5	12.6	12.5	12.4	12.3	12.3	12.2	12.2	12.3
180	12.7	12.6	12.5	12.5	12.4	12.4	12.5	12.4	12.4	12.4	12.5	12.6	12.7	12.6	12.5	12.5	12.4	12.4	12.5

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28es

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.9V I:0.1305A P:27.55W PF:0.9594 Lamp Flux:3653.81x1 lm		
NAME: 레이스웨이센서 / Z-WFL-28eS	TYPE:LED	WEIGHT:
SPEC.:28W	DIM.:	SERIAL No.:
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEC) γ (DEC)	285	300	315	330	345														
0	1060	1059	1060	1060	1060														
5	1056	1056	1056	1055	1055														
10	1042	1043	1041	1041	1040														
15	1021	1020	1018	1015	1013														
20	992	989	985	980	975														
25	956	952	943	935	929														
30	915	908	894	883	873														
35	869	858	840	824	810														
40	818	804	781	759	742														
45	763	745	718	690	668														
50	705	684	652	619	592														
55	644	621	584	545	514														
60	581	556	515	471	433														
65	517	491	447	398	353														
70	454	426	380	326	274														
75	391	363	316	258	199														
80	332	304	256	196	131														
85	278	251	203	143	76.6														
90	230	204	159	103	41.5														
95	179	150	113	72.9	24.1														
100	145	120	85.4	47.4	14.9														
105	126	104	72.8	39.0	12.1														
110	107	87.1	60.7	31.8	10.7														
115	89.6	72.8	50.1	26.0	9.63														
120	74.5	60.6	41.2	21.9	8.88														
125	61.4	49.9	34.1	18.6	8.32														
130	50.1	40.9	28.2	15.9	8.37														
135	40.4	33.2	23.3	13.6	8.82														
140	32.2	26.8	19.1	11.7	9.32														
145	24.2	21.3	15.6	10.3	9.83														
150	19.0	16.7	12.7	10.4	10.3														
155	14.8	13.1	10.9	10.9	10.8														
160	11.5	11.2	11.3	11.3	11.3														
165	11.5	11.6	11.7	11.7	11.7														
170	11.9	11.9	12.0	12.1	12.1														
175	12.2	12.2	12.3	12.3	12.4														
180	12.4	12.4	12.5	12.5	12.6														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ARK
Test Date:27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

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	1060	1060	1060	1060	1059	1059	1060	1060	1059	1060
3.0	1059	1059	1059	1058	1058	1058	1058	1057	1057	1057
6.0	1054	1054	1054	1054	1053	1053	1053	1052	1051	1050
9.0	1044	1044	1044	1045	1046	1045	1045	1043	1042	1040
12.0	1031	1031	1031	1033	1034	1034	1033	1032	1030	1026
15.0	1013	1014	1015	1017	1019	1021	1020	1018	1014	1009
18.0	991.4	992.3	994.6	998.6	1002	1004	1003	1001	995.4	989.4
21.0	966.2	967.5	970.8	976.5	981.6	985.0	985.0	981.2	973.7	965.8
24.0	937.4	939.2	944.0	951.7	958.7	963.8	963.5	959.7	949.9	939.8
27.0	905.3	907.6	914.0	924.6	933.9	940.4	941.0	935.9	924.6	911.2
30.0	870.5	873.8	881.7	894.7	906.3	915.2	916.1	910.0	896.6	880.9
33.0	833.1	837.0	846.8	862.6	877.3	887.9	888.9	882.9	866.5	848.1
36.0	792.9	798.1	810.2	828.7	845.8	859.0	860.8	853.5	835.4	813.4
39.0	751.0	756.9	771.7	793.0	813.7	828.7	830.8	822.7	802.4	777.6
42.0	707.1	713.8	730.8	755.7	779.5	796.0	799.7	789.9	767.9	739.9
45.0	661.8	669.6	689.2	717.9	743.8	762.6	766.5	756.8	732.2	701.5
48.0	615.3	623.7	646.1	678.5	707.2	728.2	732.5	721.9	695.1	661.8
51.0	567.0	577.3	602.8	638.0	669.5	692.0	696.9	685.5	657.3	621.5
54.0	518.6	530.0	558.6	597.0	630.9	655.3	660.6	649.0	619.1	580.8
57.0	469.0	482.3	514.1	555.7	591.8	617.2	622.8	611.1	580.0	539.9
60.0	419.1	434.2	469.7	514.1	552.4	578.8	584.6	572.8	540.7	498.8
63.0	368.5	386.0	425.2	472.6	512.5	539.7	546.0	533.9	501.6	457.8
66.0	317.8	338.3	381.4	431.3	472.9	500.5	507.0	494.9	461.9	417.2
69.0	267.4	290.9	338.2	390.9	433.6	461.5	468.5	456.4	423.2	377.4
72.0	217.3	245.1	296.2	351.4	395.0	422.9	429.7	418.1	385.1	338.6
75.0	168.5	200.6	256.1	313.0	357.4	385.4	392.4	380.8	348.0	301.2
78.0	122.7	159.0	218.0	276.9	321.1	349.2	356.1	344.8	312.6	265.9
81.0	80.00	121.0	182.7	242.4	286.7	314.8	321.8	310.8	278.7	232.3
84.0	43.49	88.22	151.1	210.8	254.9	283.1	289.9	279.7	247.8	201.8
87.0	17.06	61.90	124.2	182.5	225.2	252.1	257.4	249.2	219.5	174.9
90.0	6.210	44.06	103.5	159.4	200.9	226.9	232.7	223.9	195.0	152.3
93.0	6.268	33.27	88.04	140.7	181.0	206.3	211.5	203.4	174.4	133.6
96.0	6.566	23.47	65.23	101.6	136.7	167.2	180.5	163.0	125.9	93.05
99.0	6.860	17.49	50.61	88.11	121.7	149.0	163.1	144.9	115.8	81.59
102.0	7.147	15.39	45.12	81.15	112.6	137.9	147.8	133.5	108.0	75.87
105.0	7.426	13.91	39.94	73.23	102.9	125.8	134.4	121.6	98.70	68.84
108.0	7.701	12.91	35.40	65.52	93.73	113.9	121.1	110.2	89.16	60.74
111.0	7.985	12.12	31.62	58.79	84.72	102.5	108.9	99.41	80.02	53.46
114.0	8.249	11.45	28.47	52.89	76.16	92.16	97.71	89.41	70.95	46.83
117.0	8.519	10.89	25.70	47.37	68.13	82.49	87.42	80.16	61.96	39.08
120.0	8.789	10.43	23.26	42.35	60.70	73.63	77.99	71.75	52.52	33.33
123.0	9.048	10.04	21.12	37.72	53.93	65.49	69.35	64.00	49.16	28.69
126.0	9.299	9.713	19.19	33.59	47.81	58.07	61.47	55.47	41.05	25.25
129.0	9.560	9.715	17.45	29.92	42.34	51.36	54.32	48.79	34.25	22.85
132.0	9.830	9.942	15.92	26.70	37.41	45.26	47.87	42.48	29.05	20.47
135.0	10.10	10.21	14.59	23.85	33.02	39.78	42.02	36.24	25.85	18.38
138.0	10.37	10.47	13.45	21.22	29.09	34.84	36.75	32.20	22.24	16.63
141.0	10.63	10.71	12.43	18.87	25.54	30.41	32.03	27.91	20.06	15.16
144.0	10.88	10.97	11.54	16.80	22.31	26.46	27.78	23.34	17.86	13.94
147.0	11.12	11.22	11.31	14.98	19.43	22.79	23.84	20.06	15.92	12.95
150.0	11.34	11.45	11.50	13.39	16.92	19.59	20.19	17.18	14.33	12.17
153.0	11.55	11.66	11.69	12.03	14.71	16.80	16.58	14.98	13.08	11.56
156.0	11.78	11.86	11.87	11.81	12.87	14.39	14.41	13.26	12.15	11.64
159.0	11.99	12.06	12.05	11.95	11.85	12.42	12.68	12.11	11.79	11.79
162.0	12.18	12.23	12.20	12.11	12.00	11.88	11.90	11.94	11.94	11.94
165.0	12.36	12.38	12.33	12.24	12.13	12.03	12.07	12.09	12.09	12.10
168.0	12.51	12.51	12.43	12.34	12.24	12.15	12.22	12.22	12.21	12.21
171.0	12.60	12.60	12.51	12.42	12.33	12.24	12.34	12.31	12.29	12.33
174.0	12.69	12.65	12.55	12.47	12.38	12.32	12.42	12.38	12.36	12.39
177.0	12.74	12.66	12.49	12.41	12.37	12.37	12.45	12.40	12.38	12.43
180.0	12.73	12.63	12.53	12.46	12.40	12.37	12.45	12.37	12.39	12.44
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1060	1060	1060	1060	1060	1060	1059	1059	1060	1060
3.0	1056	1056	1057	1056	1057	1057	1058	1057	1058	1058
6.0	1049	1049	1049	1049	1050	1051	1052	1053	1053	1054
9.0	1038	1037	1038	1037	1039	1041	1043	1044	1046	1046
12.0	1024	1022	1021	1022	1025	1027	1031	1033	1035	1035
15.0	1005	1002	1002	1002	1006	1010	1015	1018	1021	1021
18.0	982.5	979.2	978.5	979.7	984.5	989.8	997.1	1001	1004	1004
21.0	957.8	952.6	951.4	953.1	959.5	966.9	975.4	982.3	985.8	985.3
24.0	929.4	922.8	921.2	923.2	931.3	940.5	952.3	959.6	965.2	964.0
27.0	898.6	890.4	888.3	890.7	900.3	912.8	926.6	936.1	942.1	940.0
30.0	864.8	855.1	852.0	855.3	867.1	882.3	898.6	910.1	917.2	915.0

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 27 SEP 2022

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: GRW-S28 / Z-WFL-28eS

Photometric Data Table [cd]

33.0	829.2	817.5	814.0	818.3	831.8	849.0	869.1	882.8	890.8	887.6
36.0	791.5	777.8	773.6	778.2	794.3	815.3	837.6	853.9	862.0	858.6
39.0	752.1	736.5	731.3	736.7	755.6	779.2	804.7	822.8	832.2	828.2
42.0	711.8	693.4	687.4	693.8	715.1	741.9	770.7	790.9	801.5	796.1
45.0	670.1	649.6	642.2	649.8	673.5	703.8	735.0	757.7	768.4	763.1
48.0	627.2	604.0	595.8	605.0	631.2	664.3	698.9	723.0	735.1	728.4
51.0	584.2	557.7	548.8	558.9	588.3	624.8	661.9	687.8	699.8	692.9
54.0	540.2	511.3	500.7	512.6	544.5	584.4	623.8	651.5	663.9	656.4
57.0	496.2	464.2	452.1	465.5	501.1	544.1	585.6	614.2	627.4	619.4
60.0	452.1	416.7	402.9	418.3	457.5	503.0	547.0	576.6	590.2	581.2
63.0	408.5	369.5	353.6	371.2	414.3	462.7	508.0	538.6	552.0	543.2
66.0	365.5	322.6	304.2	324.3	371.2	422.5	469.3	500.3	513.7	504.7
69.0	323.4	276.9	255.7	278.5	329.5	383.1	431.0	462.2	475.6	466.3
72.0	282.6	232.0	206.9	233.6	288.9	344.4	393.5	424.5	437.9	428.5
75.0	243.1	188.8	159.9	190.4	250.1	307.3	356.5	387.6	401.0	391.0
78.0	206.1	148.3	115.0	149.9	213.0	271.5	321.1	351.7	364.6	355.2
81.0	171.9	111.5	74.08	114.0	178.6	237.8	287.6	317.8	330.3	320.7
84.0	141.4	79.95	39.40	82.38	147.7	207.1	256.6	286.3	298.3	288.7
87.0	115.9	55.19	14.69	57.12	120.8	179.5	227.9	255.1	265.7	256.6
90.0	96.52	39.10	4.671	40.31	99.90	155.3	201.2	228.2	239.3	229.7
93.0	81.78	29.37	4.876	30.22	84.89	133.3	181.4	207.4	217.7	209.1
96.0	58.36	20.19	5.146	20.38	60.99	95.89	131.7	166.5	187.2	168.7
99.0	45.33	15.39	5.410	15.09	45.93	83.48	118.9	148.7	169.0	149.2
102.0	40.94	13.69	5.671	12.86	42.11	77.90	111.3	138.8	153.4	137.6
105.0	36.57	12.55	5.912	12.11	37.77	70.05	102.3	127.7	138.8	125.7
108.0	31.07	11.42	6.169	10.99	31.90	58.90	93.37	115.7	125.3	114.0
111.0	26.84	10.67	6.462	10.06	27.91	55.21	77.81	103.9	112.4	103.0
114.0	22.92	10.17	6.740	9.283	23.76	48.73	72.78	89.77	100.2	92.76
117.0	20.46	9.843	7.019	8.758	21.27	40.88	64.57	79.18	89.50	83.31
120.0	18.31	9.606	7.279	8.385	18.60	34.86	57.37	72.68	79.31	74.49
123.0	16.63	9.467	7.525	8.148	16.51	30.36	50.76	65.32	67.85	66.44
126.0	15.21	9.450	7.832	7.985	14.80	26.32	43.61	58.22	61.26	59.01
129.0	14.07	9.700	8.148	8.068	13.43	23.32	36.27	51.49	54.85	52.20
132.0	13.14	9.952	8.460	8.341	12.34	20.43	30.68	44.69	48.50	46.00
135.0	12.40	10.21	8.766	8.644	11.52	18.05	26.64	39.54	42.64	40.37
138.0	11.83	10.46	9.082	8.950	10.87	16.15	22.65	32.13	37.28	35.32
141.0	11.37	10.71	9.407	9.272	10.39	14.59	20.14	28.67	32.41	30.59
144.0	10.99	10.95	9.724	9.587	10.01	13.32	17.68	23.73	27.93	25.62
147.0	11.15	11.17	10.05	9.908	9.901	12.30	15.61	19.93	24.03	21.74
150.0	11.34	11.40	10.35	10.21	10.18	11.51	13.95	16.91	20.53	18.98
153.0	11.52	11.60	10.65	10.51	10.46	10.92	12.65	14.53	17.39	16.40
156.0	11.69	11.78	10.96	10.82	10.75	10.77	11.71	13.00	14.78	14.03
159.0	11.86	11.96	11.25	11.11	11.03	11.04	11.07	11.79	12.43	12.06
162.0	12.01	12.12	11.55	11.41	11.31	11.31	11.31	11.35	11.31	11.28
165.0	12.16	12.27	11.83	11.68	11.58	11.57	11.56	11.60	11.57	11.54
168.0	12.29	12.40	12.09	11.93	11.83	11.80	11.79	11.83	11.82	11.76
171.0	12.39	12.49	12.31	12.15	12.06	12.02	11.99	12.03	12.05	11.95
174.0	12.46	12.56	12.49	12.35	12.26	12.21	12.15	12.18	12.21	12.13
177.0	12.49	12.60	12.65	12.51	12.42	12.36	12.29	12.30	12.36	12.27
180.0	12.50	12.59	12.73	12.62	12.53	12.46	12.39	12.37	12.46	12.38
G/C	300.0	315.0	330.0	345.0						
0.0	1059	1060	1060	1060						
3.0	1058	1059	1058	1058						
6.0	1054	1054	1053	1053						
9.0	1046	1045	1045	1044						
12.0	1035	1033	1032	1030						
15.0	1020	1018	1015	1013						
18.0	1003	998.8	995.1	991.9						
21.0	982.7	976.5	971.5	966.3						
24.0	959.8	951.8	944.4	938.6						
27.0	935.1	924.1	915.0	907.2						
30.0	907.6	894.2	882.8	872.7						
33.0	878.2	862.4	847.9	835.6						
36.0	847.3	828.6	811.0	797.0						
39.0	814.9	793.3	772.2	755.8						
42.0	780.6	756.0	732.4	712.6						
45.0	745.2	718.0	690.3	668.2						
48.0	708.8	678.5	647.6	623.0						
51.0	671.8	638.2	604.3	576.4						
54.0	633.8	597.5	560.2	529.0						
57.0	595.0	556.4	515.6	481.7						
60.0	556.0	515.2	471.5	433.5						
63.0	516.7	474.0	427.2	385.1						
66.0	477.4	433.3	383.1	337.1						

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 27 SEP 2022

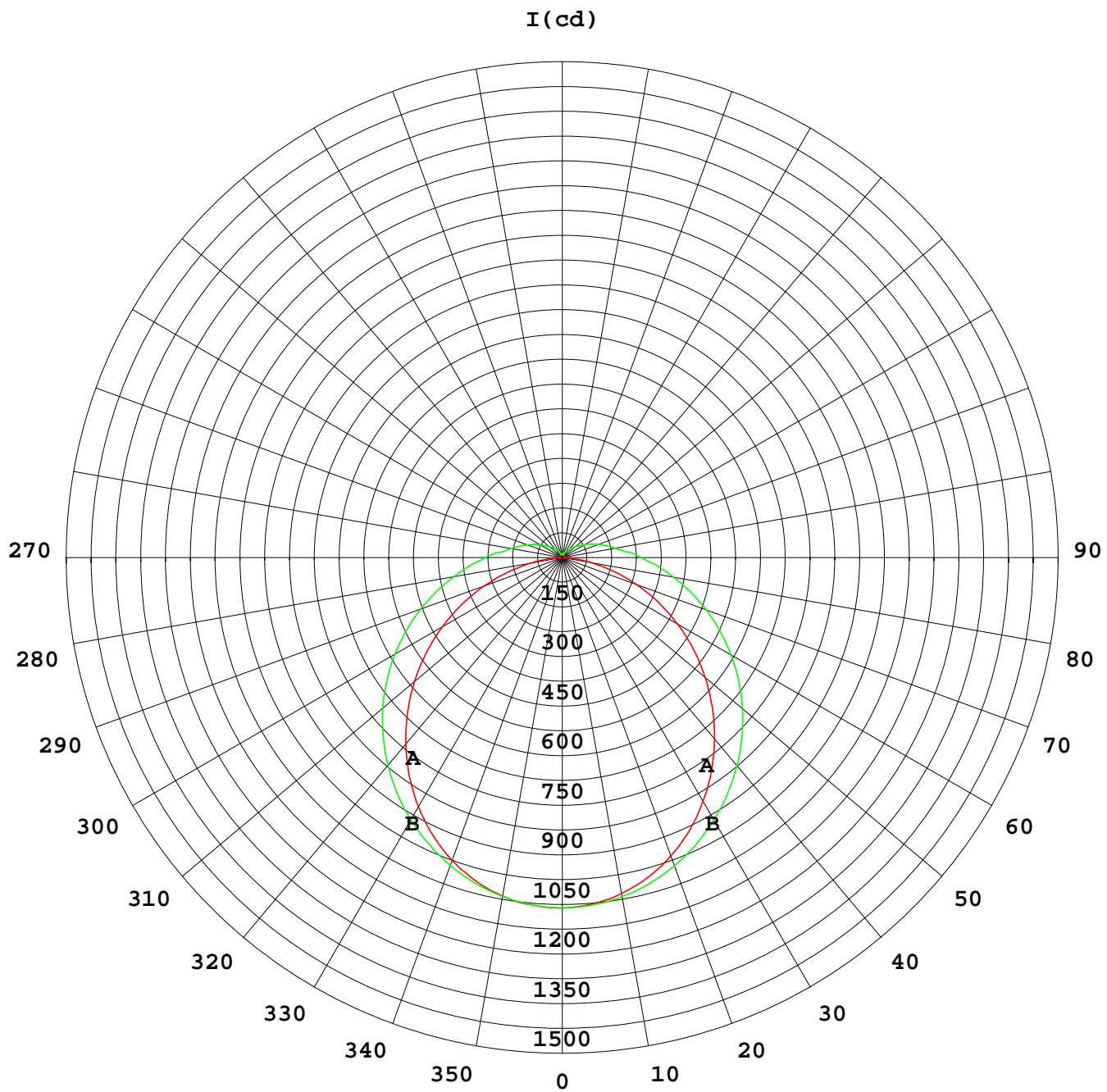
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.351
Humidity: 65.0%
Test Distance: 8.100m [K=1.0000]
Remarks: GRW-S28 / Z-WFL-28eS

Photometric Data Table [cd]

69.0	438.9	393.1	340.2	289.6
72.0	400.5	353.6	298.6	243.2
75.0	363.1	315.6	258.4	198.7
78.0	326.9	278.9	220.3	156.7
81.0	292.3	244.2	184.7	119.2
84.0	261.1	212.7	152.7	86.25
87.0	230.8	183.6	124.6	59.67
90.0	204.4	159.1	102.8	41.55
93.0	184.5	140.4	87.17	30.82
96.0	138.3	101.7	64.41	21.27
99.0	122.4	87.60	49.19	15.79
102.0	113.7	80.64	43.88	13.52
105.0	103.6	72.82	39.04	12.07
108.0	93.55	65.35	34.56	11.18
111.0	84.09	58.44	30.51	10.45
114.0	75.45	52.09	27.01	9.817
117.0	67.64	46.32	24.23	9.296
120.0	60.56	41.24	21.90	8.878
123.0	54.00	36.81	19.87	8.520
126.0	48.02	32.84	18.03	8.209
129.0	42.57	29.31	16.38	8.282
132.0	37.65	26.15	14.89	8.547
135.0	33.24	23.34	13.60	8.825
138.0	29.22	20.71	12.45	9.118
141.0	25.59	18.33	11.41	9.420
144.0	22.27	16.25	10.54	9.736
147.0	19.31	14.38	10.17	10.03
150.0	16.70	12.75	10.43	10.33
153.0	14.44	11.36	10.70	10.62
156.0	12.48	10.96	10.96	10.90
159.0	11.14	11.20	11.21	11.19
162.0	11.37	11.45	11.46	11.47
165.0	11.61	11.69	11.71	11.74
168.0	11.81	11.89	11.93	11.99
171.0	12.01	12.08	12.13	12.20
174.0	12.17	12.25	12.29	12.38
177.0	12.31	12.39	12.43	12.51
180.0	12.39	12.45	12.51	12.58

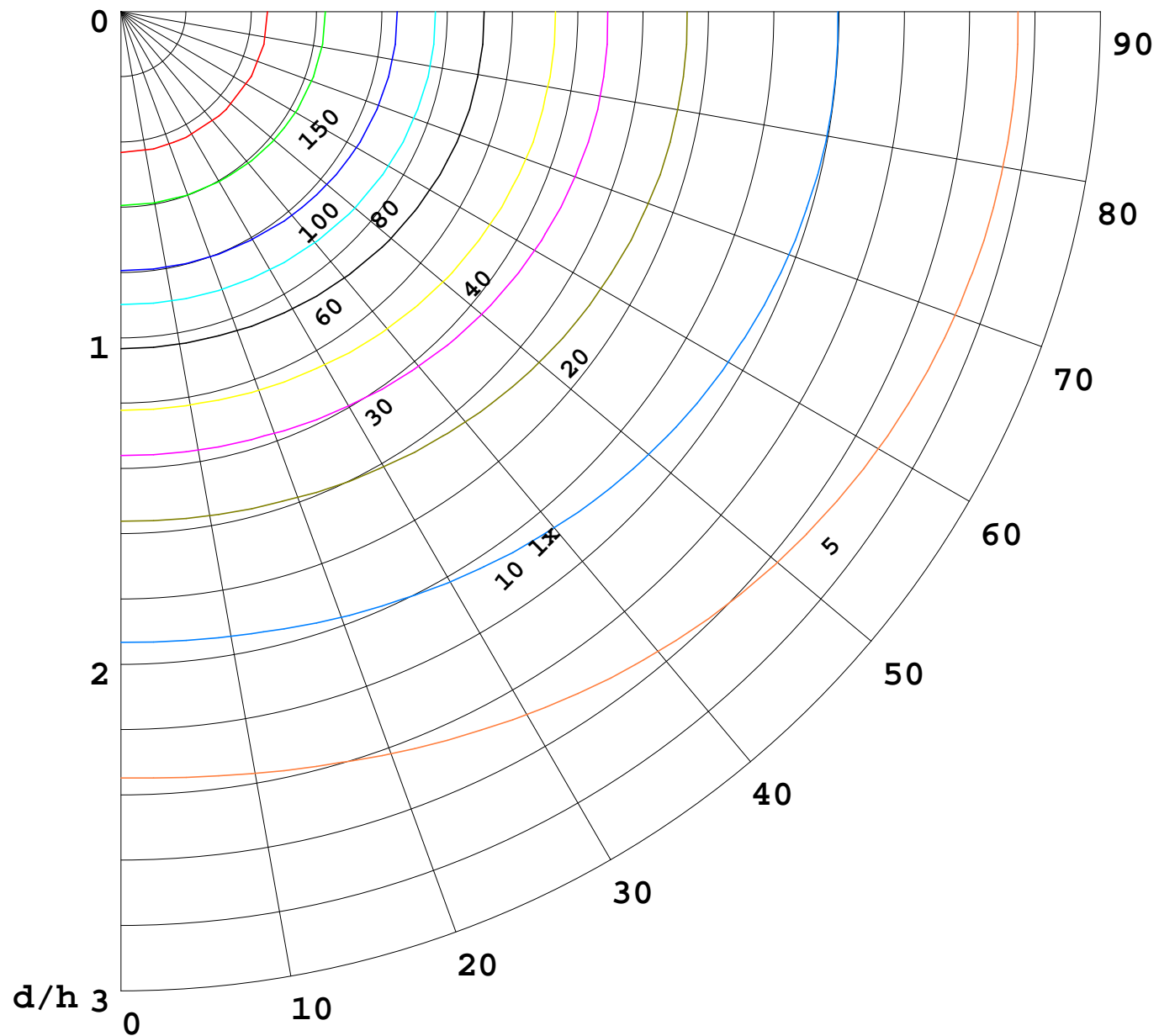
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: ARK
Test Date: 27 SEP 2022

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: GRW-S28 / Z-WFL-28eS



1000 lm

$\kappa = 1$



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

