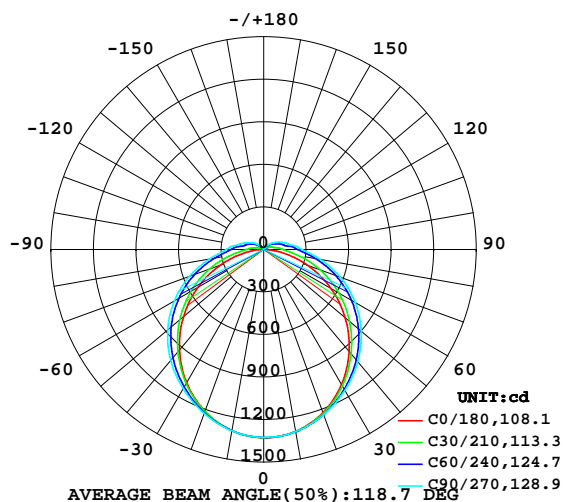


LUMINAIRE PHOTOMETRIC TEST REPORT

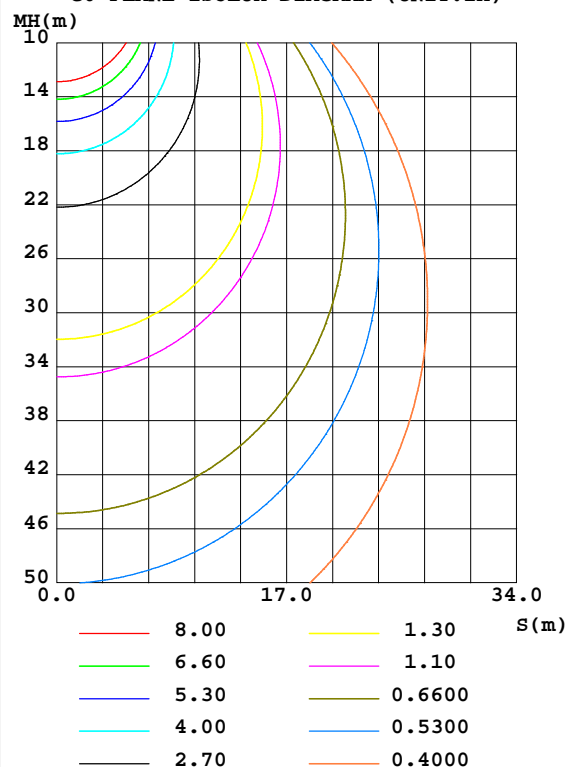
Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 123.75 lm/W			
MODEL	GDP-40	Imax(cd)	1328	S/MH(C0/180)	1.22
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	4586.0	η UP,DN(C0-180)	4.4,46.1
NOMINAL FLUX(lm)	4585.97	CIE CLASS	DIRECT	η UP,DN(C180-360)	4.1,45.4
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: OHS
 Test Date: 20 October 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: Z-WFL-40eS

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1303	1305	1305	1299	1298	1297	1298	1299	0- 10	125.3	125.3	2.73,2.73
20	1224	1235	1240	1225	1214	1220	1231	1223	10- 20	357.9	483.3	10.5,10.5
30	1099	1126	1146	1109	1087	1106	1136	1108	20- 30	541.1	1024	22.3,22.3
40	937.9	991.7	1033	967.6	924.3	969.9	1020	968.2	30- 40	655.9	1680	36.6,36.6
50	750.7	839.5	898.3	810.5	738.8	816.2	884.0	809.8	40- 50	693.5	2374	51.8,51.8
60	545.9	672.1	744.7	640.4	536.2	647.8	728.2	637.1	50- 60	654.1	3028	66,66
70	331.5	495.7	576.6	463.5	325.5	471.6	557.9	456.5	60- 70	546.3	3574	77.9,77.9
80	129.2	322.6	406.0	292.3	126.7	301.4	386.7	283.1	70- 80	390.4	3965	86.4,86.4
90	19.45	195.1	269.8	168.9	17.60	187.0	265.4	168.1	80- 90	232.8	4197	91.5,91.5
100	18.07	121.3	193.9	99.27	16.24	111.0	189.0	101.7	90-100	149.0	4346	94.8,94.8
110	16.79	90.66	144.6	73.12	15.11	82.87	139.3	71.31	100-110	95.80	4442	96.9,96.9
120	14.00	60.19	102.2	44.09	13.15	52.07	96.12	44.08	110-120	63.95	4506	98.3,98.3
130	13.48	34.65	65.14	22.86	12.15	25.57	59.33	22.60	120-130	37.50	4544	99.1,99.1
140	13.83	17.88	34.69	14.30	12.61	13.74	29.66	13.59	130-140	19.57	4563	99.5,99.5
150	14.57	15.25	16.37	14.43	13.66	13.63	14.64	14.01	140-150	10.16	4573	99.7,99.7
160	15.68	15.63	15.70	15.04	15.00	14.44	15.02	14.79	150-160	6.813	4580	99.9,99.9
170	16.51	15.91	15.97	15.63	16.17	15.36	15.64	15.56	160-170	4.370	4584	100,100
180	16.90	16.40	16.32	16.36	16.92	16.41	16.33	16.36	170-180	1.530	4586	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2027.2 lm

%lum = 44.2%

%lamp = 44.2%

Conical surface Flux(120deg): 3027.9 lm

%lum = 66.0%

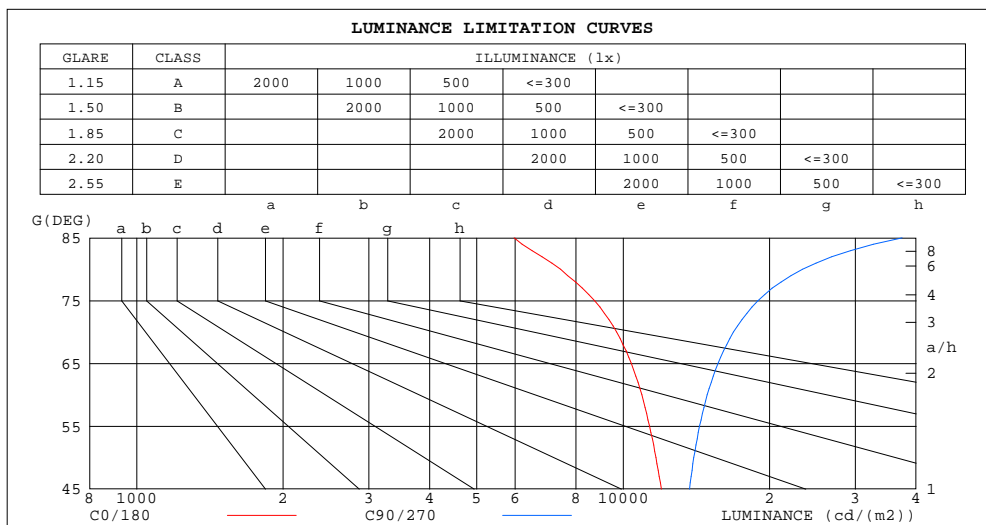
%lamp = 66.0%

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:OHS
Test Date:20 October 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: Z-WFL-40eS

LUMINANCE LIMITATION CURVES

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5971	37447
80	7438	23381
75	8729	18942
70	9691	16859
65	10394	15674
60	10918	14895
55	11330	14356
50	11679	13975
45	11980	13690

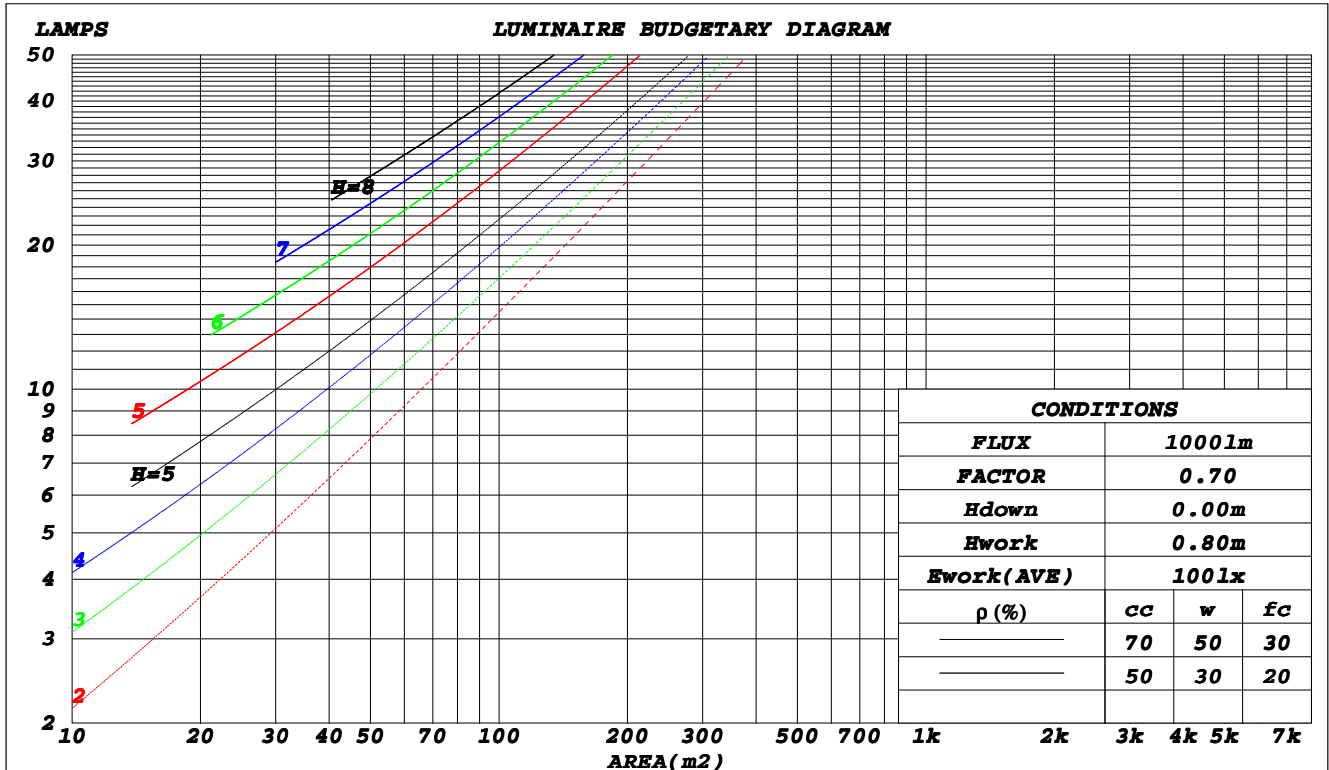
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:OHS
Test Date:20 October 2022

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: Z-WFL-40eS

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.17	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	.00	.95	.90	.96	.92	.88	.91	.87	.84	.85	.82	.80	.80	.78	.76	.73
2.0	.86	.78	.72	.83	.76	.71	.78	.73	.68	.74	.69	.65	.69	.66	.62	.60
3.0	.75	.66	.59	.73	.65	.58	.68	.62	.56	.65	.59	.54	.61	.56	.52	.49
4.0	.66	.57	.50	.64	.56	.49	.61	.53	.47	.57	.51	.46	.54	.49	.44	.42
5.0	.59	.50	.43	.57	.49	.42	.54	.47	.41	.51	.45	.40	.48	.43	.38	.36
6.0	.53	.44	.37	.51	.43	.37	.49	.41	.36	.46	.40	.35	.44	.38	.34	.31
7.0	.48	.39	.33	.47	.38	.32	.44	.37	.31	.42	.35	.31	.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:OHS
 Test Date:20 October 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: Z-WFL-40eS

WEC AND CCEC

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm					
NAME: 방습등-40W-(1)			TYPE:LED		WEIGHT:
SPEC.:40W			DIM.:		SERIAL No.:1
MFR.: ICEPIPE			SUR.:		Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.353	.201	.064	.343	.196	.062	.325	.186	.059	.308	.178	.057	.292	.169	.055		
2.0	.316	.173	.053	.307	.169	.052	.290	.162	.050	.275	.154	.048	.261	.148	.047		
3.0	.285	.152	.045	.277	.148	.045	.263	.142	.043	.249	.136	.042	.236	.131	.041		
4.0	.259	.135	.040	.252	.132	.039	.239	.127	.038	.227	.122	.037	.215	.117	.036		
5.0	.237	.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	.248	.221	.196	.213	.190	.169	.145	.130	.117	.084	.075	.068	.027	.024	.022	
2.0	.241	.197	.161	.206	.170	.139	.141	.118	.097	.082	.068	.057	.026	.022	.019	
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	.045	.025	.019	.015	
5.0	.218	.157	.113	.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:OHS
Test Date:20 October 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: Z-WFL-40eS

UGR(Unified Glare Rating) Table

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm										
NAME: 방습등-40W-(1)					TYPE:LED			WEIGHT:		
SPEC.:40W					DIM.:			SERIAL No.:1		
MFR.: ICEPIPE					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	20.6	22.1	21.0	22.4	22.8	21.9	23.4	22.3	23.8	24.1
3H	22.1	23.4	22.5	23.8	24.2	24.2	25.5	24.6	25.9	26.3
4H	22.7	23.9	23.1	24.3	24.8	25.3	26.6	25.7	27.0	27.4
6H	23.0	24.3	23.5	24.7	25.1	26.4	27.6	26.9	28.1	28.5
8H	23.2	24.3	23.6	24.8	25.2	27.0	28.2	27.5	28.6	29.1
12H	23.2	24.3	23.7	24.8	25.3	27.7	28.8	28.2	29.3	29.8
4H 2H	21.5	22.8	22.0	23.2	23.7	22.5	23.8	23.0	24.2	24.7
3H	23.2	24.4	23.7	24.8	25.3	25.0	26.1	25.4	26.5	27.0
4H	24.0	25.0	24.5	25.5	26.0	26.3	27.3	26.8	27.8	28.3
6H	24.5	25.4	25.0	25.9	26.5	27.6	28.6	28.2	29.1	29.6
8H	24.7	25.6	25.2	26.1	26.6	28.4	29.2	28.9	29.7	30.3
12H	24.8	25.6	25.4	26.1	26.7	29.2	30.0	29.7	30.5	31.1
8H 4H	24.7	25.5	25.2	26.1	26.6	26.6	27.5	27.1	28.0	28.5
6H	25.5	26.2	26.1	26.8	27.4	28.2	29.0	28.8	29.5	30.1
8H	25.9	26.5	26.4	27.1	27.7	29.2	29.8	29.7	30.4	31.0
12H	26.1	26.7	26.7	27.3	27.9	30.2	30.8	30.8	31.4	32.0
12H 4H	24.9	25.7	25.4	26.2	26.8	26.6	27.4	27.2	27.9	28.5
6H	25.9	26.5	26.5	27.1	27.7	28.3	29.0	28.9	29.6	30.2
8H	26.3	26.9	26.9	27.5	28.1	29.4	29.9	30.0	30.5	31.2
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 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 4586 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.3)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:OHS
Test Date:20 October 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: Z-WFL-40eS

UTILIZATION FACTORS TABLE

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

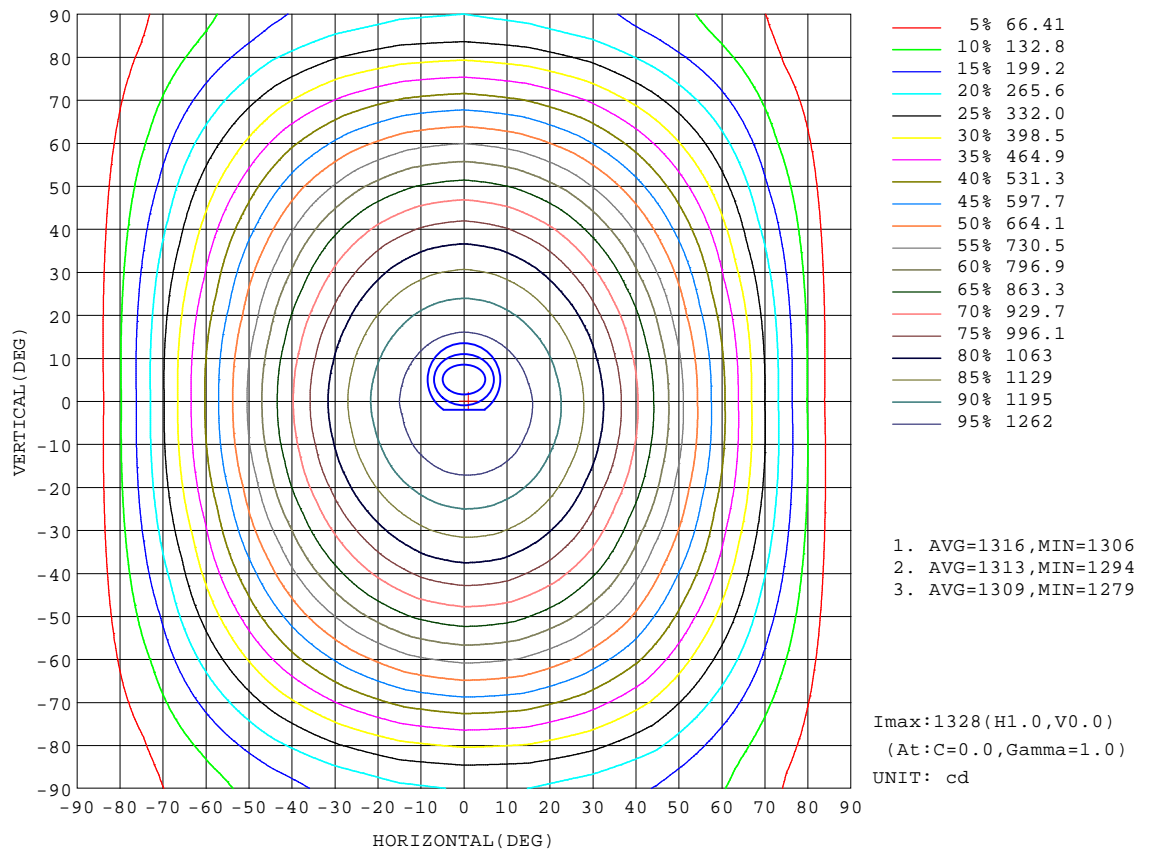
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	53	41	33	52	40	33	50	40	33	26
0.80	62	50	42	61	49	42	59	48	41	34
1.00	70	58	50	69	57	50	66	58	49	41
1.25	77	66	58	75	65	57	72	63	56	48
1.50	82	71	63	80	70	62	76	68	61	52
2.00	89	79	72	87	78	71	82	75	69	59
2.50	94	84	77	91	83	76	86	79	73	63
3.00	97	89	82	94	87	81	89	83	78	67
4.00	101	95	89	98	92	87	93	88	83	72
5.00	104	98	93	101	96	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:OHS
Test Date:20 October 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: Z-WFL-40eS

ISOCANDELA DIAGRAM

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

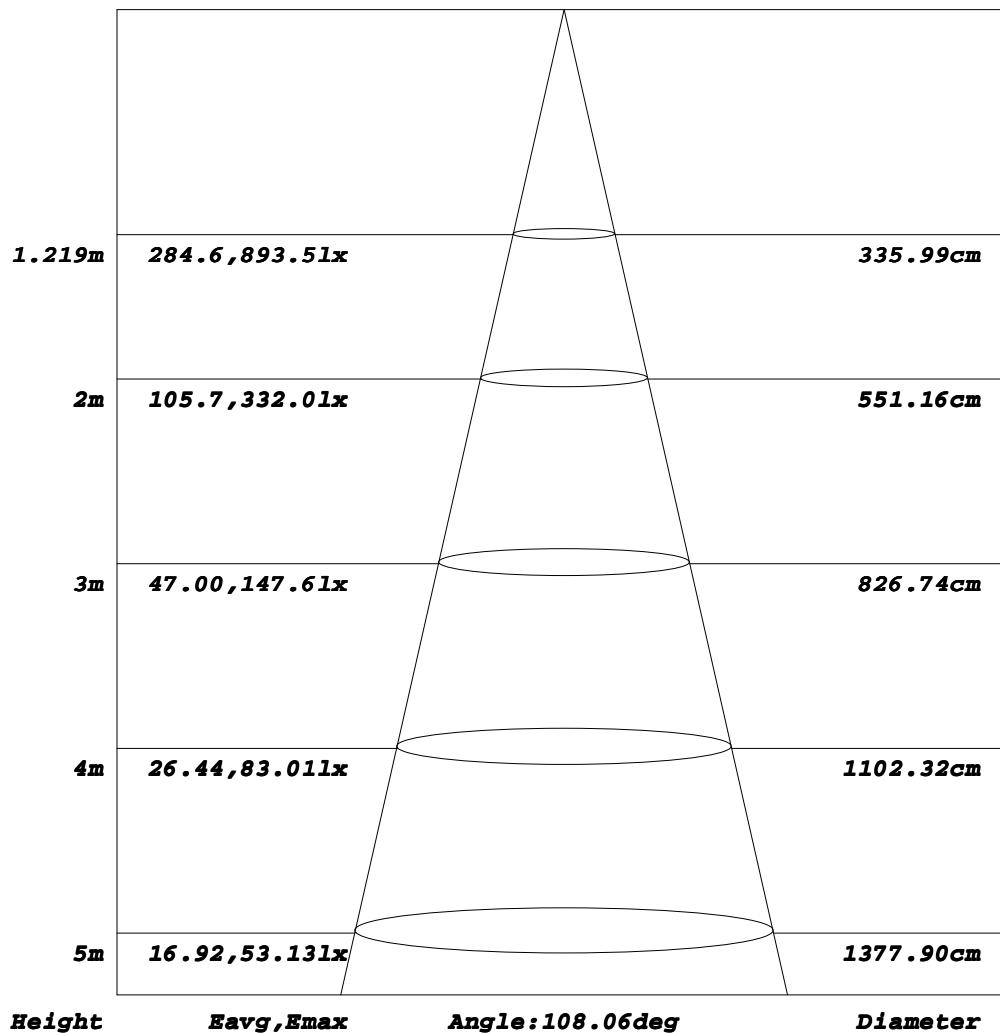


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:OHS
Test Date:20 October 2022

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: Z-WFL-40eS

AAI Figure

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Flux out:2710 lm


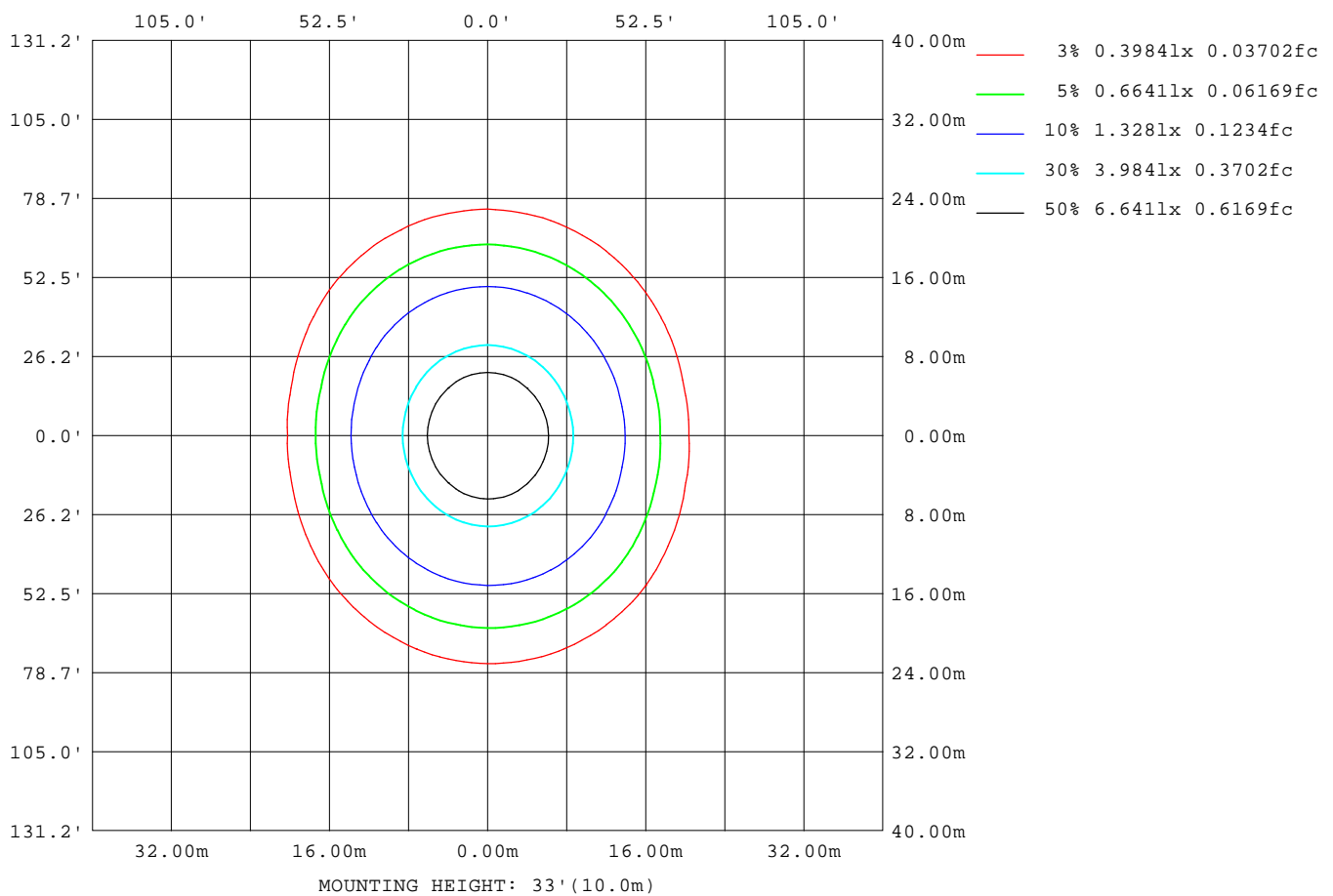
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: OHS
Test Date: 20 October 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: Z-WFL-40eS

ISOLUX DIAGRAM

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: OHS
Test Date: 20 October 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: Z-WFL-40eS

LED Avg.L Report

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

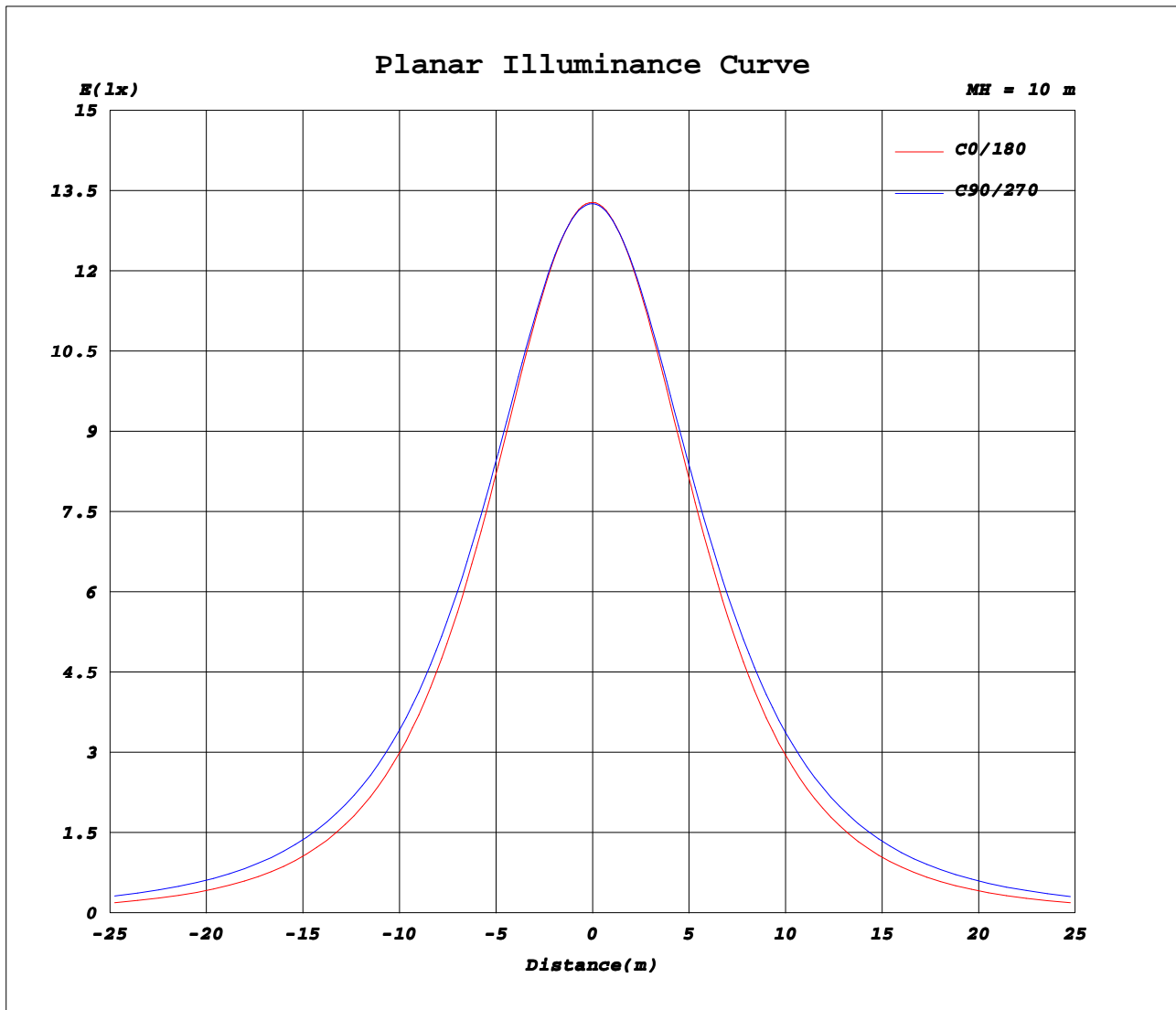
AvgL	cd/m2
L_0~180(65)av	10300
L_0~180(75)av	8661
L_0~180(85)av	5878
L_90~270(65)av	15459
L_90~270(75)av	18561
L_90~270(85)av	36587
L_45(65)av	13271
L_45(75)av	14824
L_45(85)av	26070

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: OHS
Test Date: 20 October 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: Z-WFL-40eS

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: OHS
Test Date: 20 October 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: Z-WFL-40eS

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm																		
NAME: 방습등-40W-(1)									TYPE:LED					WEIGHT:				
SPEC.:40W									DIM.:					SERIAL No.:1				
MFR.: ICEPIPE									SUR.:					Shielding Angle:				

Table--1

UNIT: cd

γ (DEG) \ C (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1328	1327	1327	1327	1326	1326	1326	1325	1325	1325	1325	1325	1328	1327	1327	1327	1326	1326	1326
5	1323	1323	1323	1323	1322	1322	1321	1321	1319	1319	1317	1317	1320	1319	1318	1318	1318	1318	1318
10	1303	1303	1304	1305	1306	1306	1305	1303	1301	1299	1296	1295	1298	1297	1297	1297	1298	1298	1298
15	1270	1271	1273	1276	1277	1278	1277	1275	1271	1268	1263	1260	1262	1261	1262	1264	1266	1268	1269
20	1224	1227	1229	1235	1239	1241	1240	1237	1231	1225	1217	1213	1214	1213	1216	1220	1225	1229	1231
25	1166	1170	1175	1185	1191	1196	1196	1190	1181	1171	1161	1154	1155	1155	1159	1167	1176	1182	1185
30	1099	1103	1111	1126	1137	1146	1146	1139	1124	1109	1094	1087	1087	1087	1094	1106	1120	1131	1136
35	1022	1028	1038	1061	1079	1092	1093	1083	1063	1041	1021	1010	1009	1010	1020	1040	1062	1075	1081
40	938	945	960	992	1016	1031	1033	1021	997	968	941	926	924	927	942	970	997	1014	1020
45	847	856	877	918	947	966	968	955	926	891	856	837	834	837	858	896	927	947	954
50	751	763	791	839	874	896	898	883	851	811	768	743	739	744	773	816	852	876	884
55	650	665	702	757	796	821	823	807	771	727	678	645	639	648	684	734	774	800	808
60	546	566	611	672	714	742	745	728	689	640	587	545	536	550	594	648	691	719	728
65	439	465	518	584	630	658	662	644	604	552	494	444	431	451	501	560	606	635	644
70	331	366	425	496	543	573	577	559	518	463	401	344	325	353	409	472	519	548	558
75	226	270	334	407	456	486	490	472	431	376	310	248	222	257	318	384	432	461	471
80	129	180	247	323	371	401	406	388	348	292	225	159	127	169	234	301	349	378	387
85	52.0	105	175	248	294	322	326	311	272	219	152	85.6	50.4	97.7	163	231	278	304	311
90	19.5	61.8	137	195	239	266	270	255	219	169	107	45.1	17.6	58.1	121	187	232	258	265
95	18.7	46.1	114	167	210	235	239	225	191	144	86.5	32.4	16.9	42.3	99.0	159	203	227	234
100	18.1	32.6	81.5	121	158	187	194	173	137	99.3	59.9	23.1	16.2	28.8	68.8	111	148	178	189
105	17.4	24.9	66.7	107	139	163	168	152	123	86.3	47.1	18.4	15.7	21.2	53.9	97.9	131	154	163
110	16.8	19.8	54.6	90.7	120	140	145	132	106	73.1	37.6	16.3	15.1	16.7	43.1	82.9	113	132	139
115	15.8	16.5	43.3	75.0	101	119	123	112	89.2	60.0	27.7	15.5	14.5	14.3	31.7	67.7	93.9	111	117
120	14.0	14.8	33.1	60.2	83.4	98.9	102	92.7	72.9	44.1	20.8	14.2	13.2	12.8	22.2	52.1	76.3	91.5	96.1
125	13.4	14.2	24.4	46.6	66.7	80.1	82.9	74.9	57.8	32.0	16.0	13.5	12.2	12.0	16.2	36.5	59.9	73.1	76.9
130	13.5	14.0	18.2	34.7	51.4	62.8	65.1	58.5	42.4	22.9	14.1	13.4	12.2	11.9	13.0	25.6	44.6	56.1	59.3
135	13.6	14.0	15.0	24.7	37.8	47.1	49.0	43.7	28.2	17.3	13.9	13.4	12.3	12.1	12.6	17.6	30.4	40.8	43.4
140	13.8	14.1	14.7	17.9	26.3	33.3	34.7	30.7	19.8	14.3	13.9	13.6	12.6	12.3	12.6	13.7	19.8	27.8	29.7
145	14.1	14.3	14.7	15.2	18.4	22.4	23.2	20.9	15.3	14.2	14.0	13.8	13.0	12.7	12.9	13.3	14.6	18.5	19.6
150	14.6	14.6	15.0	15.2	15.4	16.0	16.4	15.4	14.7	14.4	14.2	14.2	13.7	13.2	13.3	13.6	13.9	14.6	14.6
155	15.2	15.1	15.3	15.4	15.5	15.5	15.6	15.2	15.0	14.7	14.6	14.7	14.3	13.9	13.8	14.0	14.3	14.8	14.7
160	15.7	15.5	15.6	15.6	15.6	15.6	15.7	15.3	15.2	15.0	15.1	15.2	15.0	14.6	14.4	14.4	14.6	14.9	15.0
165	16.1	15.9	15.8	15.8	15.7	15.7	15.9	15.5	15.3	15.4	15.4	15.7	15.6	15.3	15.0	14.9	14.9	15.2	15.3
170	16.5	16.3	16.0	15.9	15.8	15.8	16.0	15.6	15.6	15.6	15.7	16.1	16.2	16.0	15.6	15.4	15.3	15.5	15.6
175	16.8	16.6	16.3	16.1	15.9	15.9	16.1	15.7	15.8	15.9	16.1	16.4	16.6	16.4	16.3	16.0	15.9	15.8	16.1
180	16.9	16.8	16.6	16.4	16.3	16.2	16.3	16.2	16.3	16.4	16.5	16.6	16.9	16.7	16.6	16.4	16.3	16.2	16.3

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:OHS

Test Date:20 October 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: Z-WFL-40eS

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.1725A P:37.06W PF:0.9765 Lamp Flux:4585.97x1 lm		
NAME: 방습등-40W-(1)	TYPE:LED	WEIGHT:
SPEC.:40W	DIM.:	SERIAL No.:1
MFR.: ICEPIPE	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345														
0	1325	1325	1325	1325	1325														
5	1318	1318	1318	1319	1319														
10	1299	1298	1299	1299	1299														
15	1268	1268	1267	1266	1266														
20	1229	1227	1223	1222	1220														
25	1182	1177	1170	1166	1163														
30	1131	1121	1108	1101	1096														
35	1074	1060	1041	1027	1020														
40	1012	994	968	947	937														
45	945	922	891	862	847														
50	872	846	810	775	753														
55	795	766	725	684	654														
60	714	682	637	591	553														
65	629	595	547	497	450														
70	542	507	456	402	349														
75	454	420	367	309	250														
80	371	336	283	223	159														
85	297	264	211	151	85.6														
90	251	219	168	108	46.3														
95	220	190	142	87.0	32.8														
100	170	138	102	61.6	23.2														
105	147	121	86.0	47.0	18.0														
110	127	104	71.3	36.8	15.8														
115	107	85.8	57.2	27.4	14.2														
120	87.3	69.0	44.1	19.7	12.5														
125	69.5	53.5	32.3	14.8	12.0														
130	53.0	39.5	22.6	13.2	11.9														
135	38.3	27.6	16.2	13.0	12.2														
140	25.9	18.9	13.6	13.0	12.5														
145	17.5	14.4	13.7	13.2	12.9														
150	14.5	14.3	14.0	13.6	13.4														
155	14.7	14.6	14.4	14.2	14.1														
160	14.9	14.9	14.8	14.7	14.9														
165	15.2	15.2	15.2	15.2	15.5														
170	15.5	15.5	15.6	15.8	16.1														
175	15.9	16.0	16.2	16.3	16.5														
180	16.2	16.3	16.4	16.5	16.6														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:OHS
Test Date:20 October 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: Z-WFL-40eS

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	1328	1327	1327	1327	1326	1326	1326	1325	1325	1325
3.0	1327	1326	1326	1326	1325	1325	1324	1324	1323	1323
6.0	1320	1320	1320	1320	1320	1319	1319	1318	1317	1316
9.0	1308	1309	1309	1310	1310	1310	1309	1308	1305	1304
12.0	1291	1292	1293	1295	1296	1295	1295	1293	1290	1288
15.0	1270	1271	1273	1276	1277	1278	1277	1275	1271	1268
18.0	1243	1246	1248	1253	1256	1257	1256	1253	1248	1243
21.0	1213	1216	1219	1226	1230	1233	1232	1228	1221	1215
24.0	1179	1182	1187	1195	1202	1206	1205	1200	1191	1182
27.0	1141	1145	1150	1162	1170	1177	1176	1170	1159	1147
30.0	1099	1103	1111	1126	1137	1146	1146	1139	1124	1109
33.0	1054	1059	1068	1088	1103	1114	1115	1106	1088	1069
36.0	1006	1012	1023	1047	1067	1080	1081	1071	1050	1026
39.0	955.2	962.2	976.1	1006	1029	1044	1045	1034	1010	982.1
42.0	902.2	910.1	926.9	962.9	989.0	1006	1007	995.5	969.4	937.0
45.0	847.1	856.0	876.7	917.7	947.1	966.2	968.0	954.8	925.7	890.9
48.0	789.6	800.1	825.3	871.4	903.7	924.4	926.9	912.1	881.4	843.0
51.0	730.9	742.9	773.4	823.3	858.5	881.0	883.7	868.4	835.0	793.8
54.0	670.5	684.8	720.0	811.6	835.9	838.8	822.6	787.4	743.7	692.4
57.0	608.7	625.3	665.7	723.3	763.7	789.5	792.7	775.7	738.7	692.4
60.0	545.9	565.6	610.9	672.1	714.0	741.5	744.7	727.7	689.1	640.4
63.0	482.1	505.3	555.4	619.7	663.8	692.0	695.6	677.9	638.2	587.6
66.0	417.6	445.5	499.6	566.9	612.3	641.4	645.2	627.5	587.0	534.5
69.0	353.0	386.1	443.5	513.6	560.3	590.1	594.1	576.2	535.1	481.4
72.0	288.8	326.9	388.1	460.4	507.9	537.9	542.1	524.2	482.9	428.1
75.0	225.9	269.9	333.5	407.4	455.8	485.7	490.3	472.5	431.1	375.9
78.0	166.0	214.7	281.0	355.8	404.2	434.3	439.1	421.5	380.3	324.9
81.0	111.7	163.4	231.2	306.8	354.9	384.6	389.8	372.3	331.9	276.9
84.0	64.78	118.3	187.2	261.8	308.6	337.3	341.7	325.8	286.6	232.7
87.0	31.64	82.75	155.5	222.3	267.5	295.3	299.6	284.5	246.9	194.6
90.0	19.45	61.79	136.9	238.8	295.6	338.8	341.7	325.8	286.6	232.7
93.0	19.01	51.71	122.3	178.9	221.0	246.6	250.7	236.9	202.3	153.9
96.0	18.59	43.43	108.1	155.5	200.5	227.8	231.9	217.4	179.0	134.6
99.0	18.22	34.98	87.10	125.4	164.9	194.2	200.5	180.7	141.0	104.8
102.0	17.82	28.82	74.14	115.7	149.7	176.3	183.3	163.4	131.4	93.61
105.0	17.41	24.89	66.69	106.7	139.0	162.9	168.5	152.0	122.6	86.31
108.0	17.03	21.65	59.42	97.03	128.1	149.3	154.0	139.8	112.8	78.37
111.0	16.67	19.04	52.20	87.47	116.4	136.0	140.1	127.6	102.7	70.50
114.0	16.11	17.02	45.48	78.07	105.0	123.1	127.3	115.5	92.50	62.63
117.0	15.19	15.69	39.09	68.96	93.97	110.7	114.5	103.9	82.53	54.25
120.0	14.00	14.82	33.13	60.19	83.39	98.89	102.2	92.68	72.93	44.09
123.0	13.53	14.41	27.67	51.87	73.18	87.44	90.45	81.88	63.74	36.20
126.0	13.44	14.18	22.88	44.12	63.49	76.50	79.23	71.53	54.97	30.29
129.0	13.47	14.05	19.22	36.93	54.38	66.17	68.58	61.70	45.51	24.69
132.0	13.54	13.97	16.56	30.38	45.76	56.30	58.47	52.38	36.41	20.10
135.0	13.63	13.99	15.02	24.65	37.85	47.07	48.97	43.65	28.22	17.27
138.0	13.74	14.05	14.74	20.20	30.65	38.51	40.15	35.61	22.78	15.14
141.0	13.87	14.14	14.68	16.92	24.40	30.79	32.12	28.40	18.67	14.18
144.0	14.07	14.26	14.71	15.25	19.73	24.18	25.14	22.48	15.90	14.16
147.0	14.31	14.44	14.78	15.17	16.41	19.31	19.97	17.96	14.70	14.28
150.0	14.57	14.62	14.97	15.25	15.42	16.04	16.37	15.40	14.74	14.43
153.0	14.93	14.91	15.17	15.36	15.46	15.48	15.51	15.19	14.87	14.59
156.0	15.29	15.18	15.36	15.49	15.54	15.51	15.58	15.20	14.99	14.76
159.0	15.58	15.44	15.53	15.59	15.62	15.58	15.68	15.29	15.11	14.97
162.0	15.86	15.68	15.70	15.71	15.68	15.64	15.77	15.41	15.22	15.19
165.0	16.14	15.94	15.85	15.81	15.75	15.70	15.87	15.51	15.33	15.38
168.0	16.37	16.20	15.96	15.87	15.80	15.75	15.95	15.61	15.46	15.55
171.0	16.57	16.42	16.05	15.94	15.84	15.80	16.01	15.64	15.60	15.66
174.0	16.74	16.61	16.25	16.02	15.88	15.84	16.06	15.66	15.72	15.84
177.0	16.85	16.72	16.47	16.24	16.09	16.01	16.11	15.84	16.02	16.14
180.0	16.90	16.75	16.56	16.40	16.27	16.17	16.32	16.17	16.26	16.36
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1325	1325	1328	1327	1327	1327	1326	1326	1326	1325
3.0	1322	1321	1325	1324	1323	1323	1323	1322	1323	1322
6.0	1314	1313	1316	1315	1315	1315	1315	1315	1315	1315
9.0	1302	1300	1303	1302	1302	1302	1303	1303	1304	1304
12.0	1284	1282	1284	1283	1284	1285	1287	1288	1288	1288
15.0	1263	1260	1262	1261	1262	1264	1266	1268	1269	1268
18.0	1236	1233	1234	1234	1235	1239	1243	1245	1247	1246
21.0	1207	1202	1204	1203	1205	1210	1215	1220	1222	1220
24.0	1172	1167	1168	1167	1171	1178	1186	1192	1195	1192
27.0	1135	1128	1129	1129	1134	1143	1154	1162	1166	1162
30.0	1094	1087	1087	1087	1094	1106	1120	1131	1136	1131

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: OHS

Test Date: 20 October 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: Z-WFL-40eS

Photometric Data Table [cd]

33.0	1051	1041	1041	1041	1050	1068	1086	1099	1103	1098
36.0	1005	993.4	992.8	993.9	1005	1027	1049	1064	1069	1062
39.0	956.8	943.5	941.8	943.4	957.7	984.7	1010	1027	1033	1025
42.0	906.7	891.0	889.0	891.1	908.7	940.9	969.1	988.0	994.8	985.6
45.0	855.7	837.0	834.4	837.3	858.4	895.5	926.7	947.4	954.5	944.8
48.0	803.1	781.4	777.5	781.8	807.6	848.7	882.3	905.0	912.8	901.5
51.0	749.7	723.3	719.2	725.0	755.8	799.9	837.0	860.9	869.3	857.1
54.0	695.9	665.0	659.2	667.3	702.4	750.6	789.4	815.0	823.4	810.5
57.0	641.6	605.4	598.3	608.9	648.5	699.5	741.1	767.7	776.6	762.8
60.0	586.5	545.4	536.2	549.8	593.5	647.8	691.4	719.1	728.2	713.6
63.0	531.0	484.7	473.8	490.7	538.3	595.3	640.3	668.8	678.5	663.2
66.0	475.0	424.1	410.0	431.3	482.7	542.3	588.7	617.6	627.2	611.5
69.0	419.4	364.0	346.7	372.5	427.1	489.3	536.3	565.6	575.2	558.9
72.0	364.0	305.1	283.9	314.3	372.5	436.4	484.3	513.4	522.4	506.7
75.0	309.9	248.1	222.4	257.3	318.5	384.0	432.1	461.1	470.5	454.4
78.0	257.8	193.3	163.4	203.1	266.6	333.4	381.5	410.1	419.4	403.5
81.0	208.9	142.5	109.3	152.9	218.8	285.9	333.7	362.0	371.1	355.0
84.0	164.9	98.30	63.18	110.2	175.8	243.6	290.6	317.5	325.6	310.6
87.0	130.0	64.17	30.13	76.63	141.5	208.3	254.6	280.7	288.2	273.8
90.0	106.9	45.07	17.60	58.14	121.2	187.0	232.1	257.7	265.4	250.7
93.0	94.20	36.73	17.15	48.02	107.5	171.0	214.4	238.9	246.4	232.3
96.0	82.09	30.42	16.77	39.67	94.34	146.7	194.2	219.9	227.6	212.9
99.0	64.59	24.58	16.38	31.15	74.40	115.2	155.5	185.0	195.9	177.5
102.0	53.07	20.71	16.01	24.99	60.83	106.0	140.8	166.9	178.3	159.8
105.0	47.10	18.44	15.66	21.17	53.91	97.90	131.0	153.8	163.2	147.5
108.0	41.52	16.92	15.32	18.22	47.39	88.86	120.1	140.5	148.6	135.0
111.0	35.64	16.13	15.01	16.07	40.69	79.81	108.7	128.1	134.7	122.8
114.0	29.87	15.73	14.67	14.61	33.76	70.75	97.55	115.4	121.2	110.5
117.0	24.45	15.00	13.99	13.68	27.67	61.20	86.68	103.2	108.4	98.72
120.0	20.78	14.21	13.15	12.80	22.17	52.07	76.26	91.49	96.12	87.28
123.0	17.59	13.64	12.28	12.21	18.22	42.57	66.28	80.26	84.45	76.45
126.0	15.37	13.41	12.11	11.97	15.30	33.84	56.85	69.53	73.33	66.03
129.0	14.21	13.37	12.12	11.94	13.34	27.47	47.68	59.40	62.72	56.16
132.0	13.97	13.39	12.22	11.97	12.65	22.12	39.22	49.77	52.74	46.89
135.0	13.87	13.44	12.35	12.06	12.57	17.59	30.45	40.84	43.39	38.29
138.0	13.86	13.54	12.49	12.20	12.57	14.97	23.17	32.69	34.84	30.50
141.0	13.89	13.67	12.68	12.39	12.67	13.38	18.44	25.54	27.23	23.77
144.0	13.94	13.80	12.95	12.59	12.81	13.25	15.36	20.03	21.16	18.80
147.0	14.04	13.98	13.28	12.86	12.97	13.43	13.89	16.09	16.76	15.32
150.0	14.20	14.21	13.66	13.20	13.25	13.63	13.95	14.58	14.64	14.48
153.0	14.47	14.50	14.06	13.59	13.60	13.84	14.16	14.71	14.65	14.58
156.0	14.74	14.80	14.48	14.02	13.95	14.08	14.36	14.82	14.79	14.73
159.0	15.00	15.11	14.87	14.47	14.33	14.33	14.55	14.87	14.97	14.87
162.0	15.23	15.40	15.24	14.90	14.66	14.65	14.75	14.98	15.15	15.04
165.0	15.43	15.68	15.62	15.32	14.97	14.95	14.94	15.16	15.34	15.20
168.0	15.58	15.92	15.95	15.72	15.32	15.21	15.12	15.35	15.52	15.37
171.0	15.81	16.17	16.26	16.06	15.76	15.48	15.35	15.50	15.69	15.55
174.0	16.05	16.36	16.55	16.34	16.15	15.91	15.74	15.70	15.92	15.80
177.0	16.31	16.51	16.79	16.61	16.44	16.26	16.17	16.05	16.25	16.16
180.0	16.46	16.62	16.92	16.74	16.59	16.41	16.28	16.17	16.33	16.17
G/C	300.0	315.0	330.0	345.0						
0.0	1325	1325	1325	1325						
3.0	1322	1322	1323	1323						
6.0	1315	1315	1316	1316						
9.0	1303	1303	1304	1304						
12.0	1287	1287	1288	1287						
15.0	1268	1267	1266	1266						
18.0	1244	1242	1241	1240						
21.0	1217	1213	1212	1210						
24.0	1187	1181	1178	1176						
27.0	1155	1146	1141	1138						
30.0	1121	1108	1101	1096						
33.0	1084	1068	1058	1051						
36.0	1047	1026	1011	1004						
39.0	1007	982.9	963.6	953.9						
42.0	965.3	937.9	913.4	901.4						
45.0	922.0	891.0	862.4	846.6						
48.0	877.2	842.7	810.0	790.6						
51.0	830.4	793.2	756.6	732.9						
54.0	782.1	742.0	702.5	673.8						
57.0	732.6	689.8	647.2	613.7						
60.0	681.7	637.1	591.0	552.9						
63.0	630.4	583.1	534.5	491.3						
66.0	577.8	528.9	477.7	429.9						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: OHS

Test Date: 20 October 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]

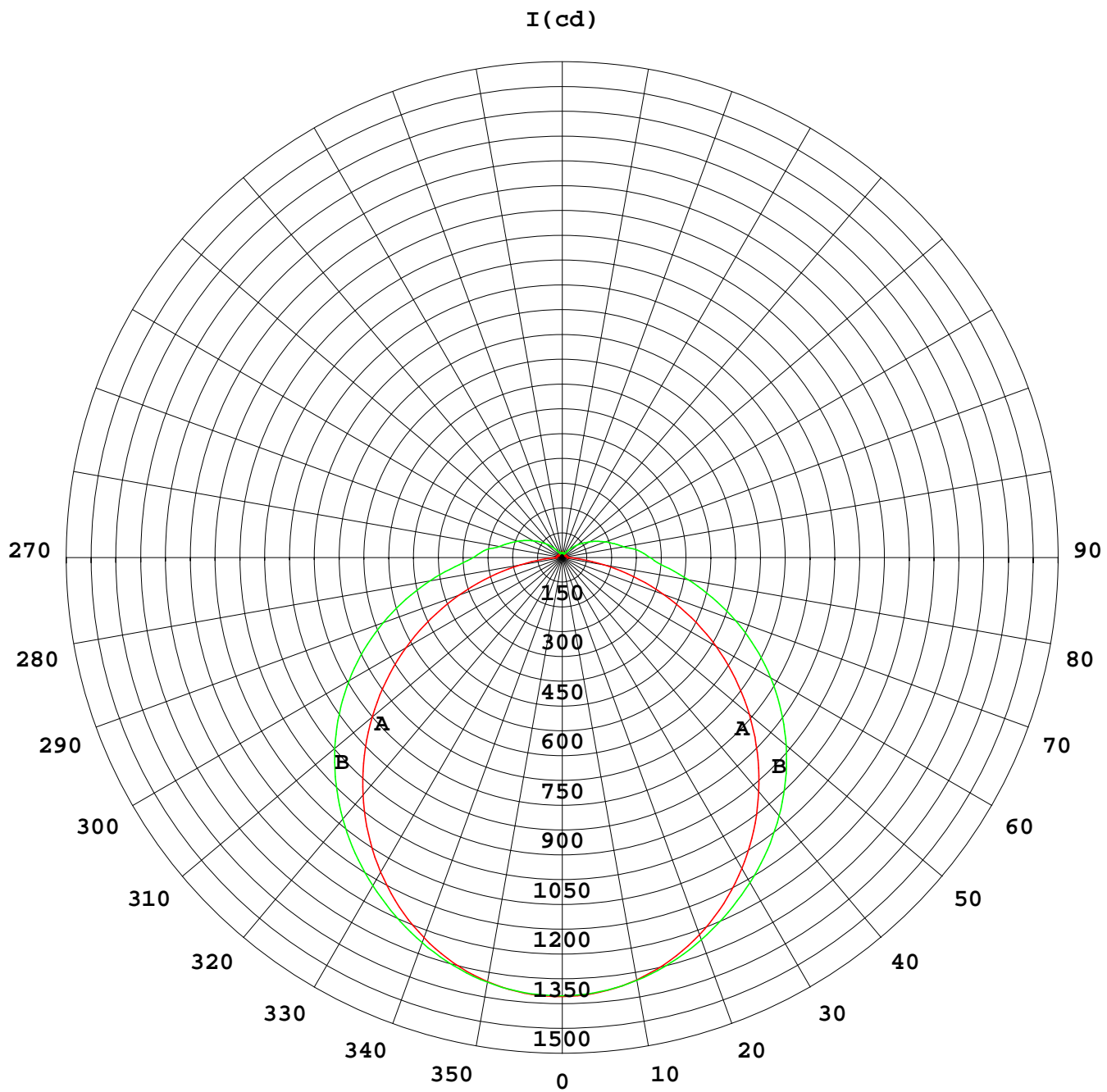
Remarks: Z-WFL-40eS

Photometric Data Table [cd]

69.0	524.8	474.5	420.6	368.6
72.0	472.1	420.6	364.3	308.5
75.0	419.6	367.3	309.1	249.9
78.0	368.6	315.9	256.6	193.9
81.0	320.3	267.5	207.2	142.1
84.0	277.4	224.2	163.5	98.30
87.0	241.0	189.2	128.7	64.42
90.0	218.6	168.1	108.5	46.35
93.0	201.5	152.7	95.15	37.53
96.0	179.9	133.6	82.81	30.74
99.0	144.0	107.5	66.35	24.78
102.0	131.6	94.66	54.15	20.58
105.0	121.4	85.99	47.04	17.96
108.0	110.8	77.16	40.73	16.37
111.0	99.96	68.50	34.78	15.53
114.0	89.32	60.04	29.21	14.58
117.0	78.92	51.82	24.14	13.44
120.0	68.97	44.08	19.71	12.50
123.0	59.52	36.82	16.46	12.16
126.0	50.59	30.20	14.21	11.94
129.0	42.18	24.34	13.27	11.92
132.0	34.47	19.62	13.06	12.01
135.0	27.62	16.20	12.97	12.17
138.0	21.87	14.01	12.98	12.37
141.0	17.65	13.55	13.03	12.57
144.0	14.77	13.64	13.16	12.83
147.0	14.18	13.80	13.35	13.10
150.0	14.31	14.01	13.62	13.40
153.0	14.46	14.24	13.95	13.81
156.0	14.63	14.47	14.28	14.26
159.0	14.82	14.71	14.59	14.71
162.0	15.00	14.95	14.89	15.14
165.0	15.19	15.18	15.19	15.52
168.0	15.38	15.40	15.55	15.89
171.0	15.56	15.67	15.93	16.16
174.0	15.88	16.06	16.23	16.40
177.0	16.24	16.32	16.43	16.57
180.0	16.26	16.36	16.46	16.63

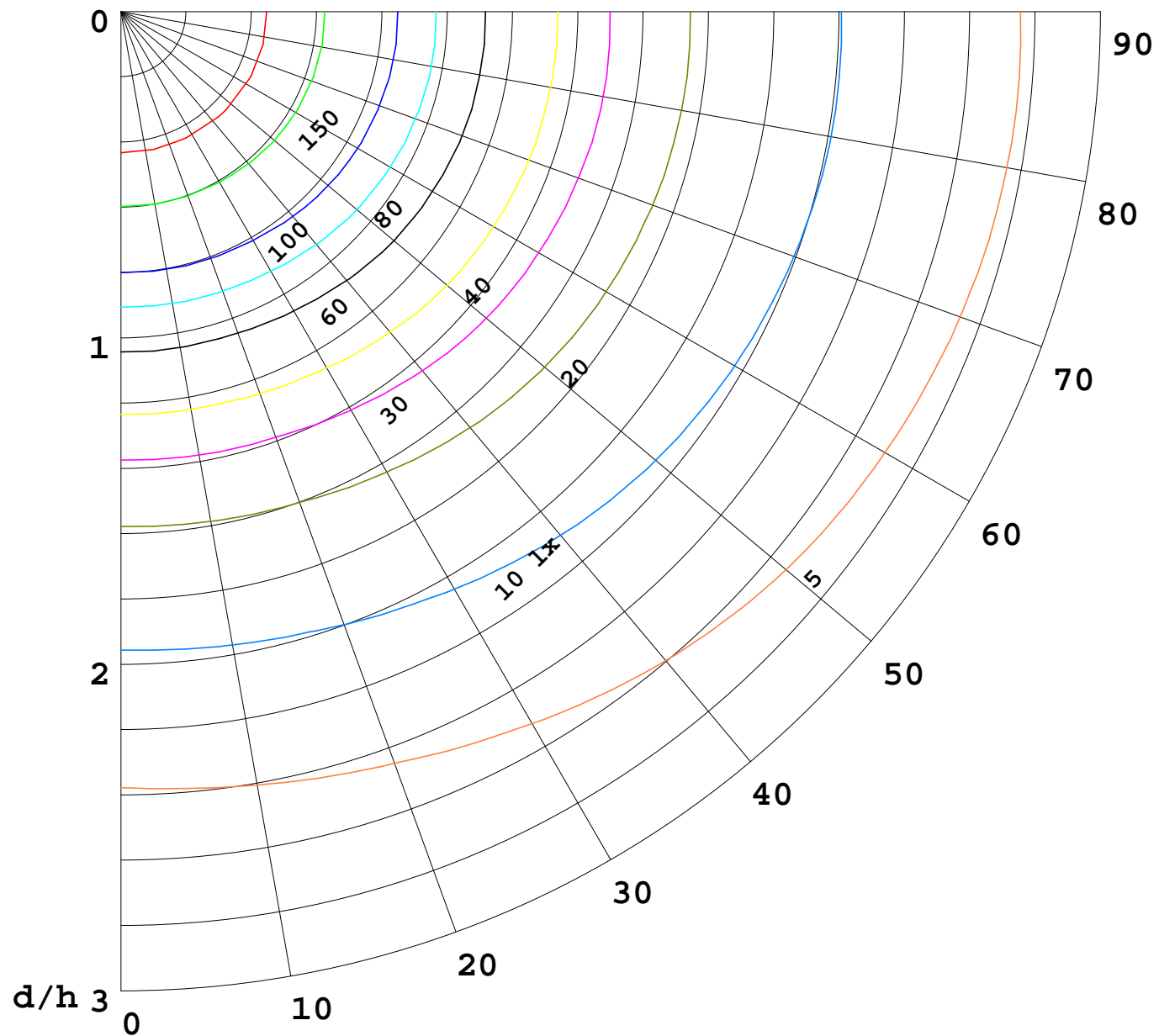
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: OHS
Test Date: 20 October 2022

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: Z-WFL-40eS



1000 lm

$K = 1$



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

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

