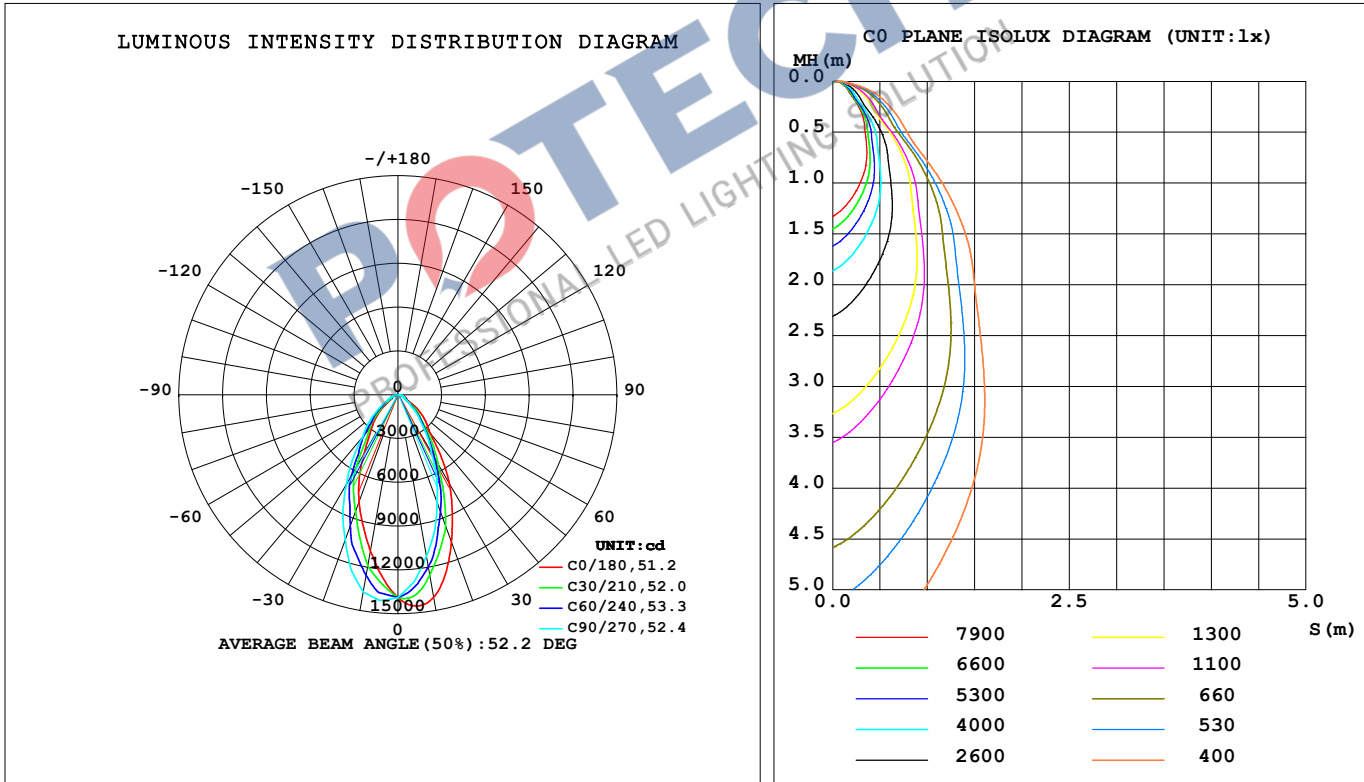




**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:220.10V I:0.4735A P:102.59W PF:0.9844 Freq:50.00Hz Lamp Flux:14069.7x1 lm		
NAME: PHA PT-FL3 100W	TYPE:GO	WEIGHT:
SPEC.:	DIM.: 130	SERIAL No.:
MFR.: LAB VILAS 317	SUR.:180	Shielding Angle:180

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 137.14 lm/W
MODEL	PHA PT-FL3 100W	I <sub>max</sub> (cd)	14523	S/MH (C0/180)	0.90	
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	0.69	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	14070	η UP, DN (C0-180)	0.0, 55.5	
NOMINAL FLUX (lm)	14069.7	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 44.5	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	0.85	



H (β) Range:-90 - 90DEG  
H (β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



**ZONAL FLUX DIAGRAM**

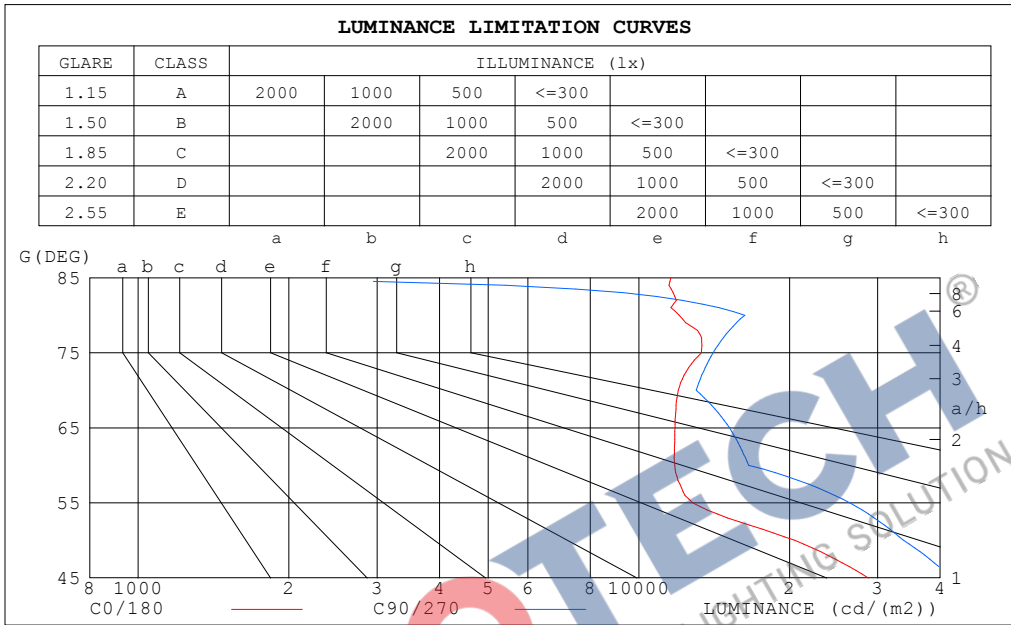
ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1086	1213	1371	1414	1409	1227	1124	1079	0- 10	1248	1248	8.87,8.87
20	779.4	923.9	1057	1086	1073	875.4	784.4	767.6	10- 20	3023	4271	30.4,30.4
30	465.6	588.5	705.6	736.2	705.5	549.0	459.5	440.1	20- 30	3409	7680	54.6,54.6
40	272.4	307.8	372.9	394.3	350.1	278.8	247.2	234.4	30- 40	2679	10360	73.6,73.6
50	131.6	170.4	217.2	220.7	217.2	153.1	119.4	107.8	40- 50	1784	12143	86.3,86.3
60	58.97	66.00	82.91	91.79	72.20	56.40	49.21	52.09	50- 60	983.4	13127	93.3,93.3
70	41.04	45.70	44.51	45.47	45.87	39.31	33.97	37.67	60- 70	501.8	13629	96.9,96.9
80	20.91	29.09	28.27	29.92	29.48	21.56	19.89	18.84	70- 80	339.9	13968	99.3,99.3
90	0.0089	0	0	0	0.8986	0	0	0	80- 90	101.3	14070	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY: $\leq 10$ cd Less than 35% Percent = 12.9 %									UNIT:lm		

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023

**LUMINANCE LIMITATION CURVES**



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	11598	0
80	12039	16282
75	13323	14087
70	11998	13013
65	11809	15184
60	11794	16582
55	12805	26403
50	20477	33792
45	28753	42104

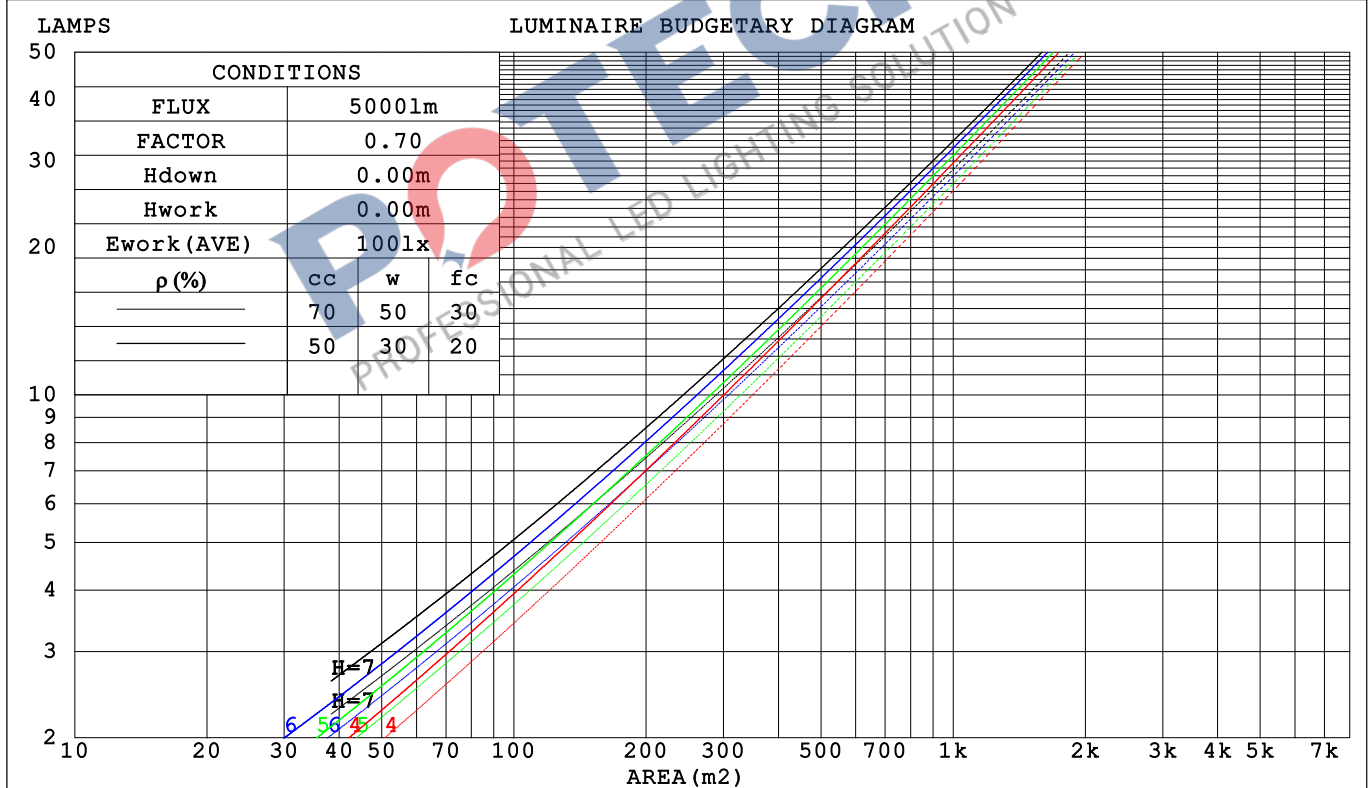
H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.08	1.05	1.03	1.06	1.03	1.01	1.02	.90	.98	.98	.96	.95	.95	.93	.92	.90
2.0	.99	.94	.90	.97	.92	.89	.94	.90	.87	.91	.87	.85	.88	.85	.83	.81
3.0	.90	.84	.79	.89	.83	.79	.86	.81	.77	.84	.80	.76	.81	.78	.75	.73
4.0	.83	.76	.71	.82	.76	.71	.80	.74	.70	.77	.73	.69	.75	.72	.68	.66
5.0	.77	.70	.65	.76	.69	.64	.74	.68	.64	.72	.67	.63	.70	.66	.62	.61
6.0	.71	.64	.59	.70	.64	.59	.69	.63	.58	.67	.62	.58	.66	.61	.57	.56
7.0	.66	.59	.54	.65	.59	.54	.64	.58	.54	.63	.57	.53	.62	.57	.53	.52
8.0	.62	.55	.50	.61	.55	.50	.60	.54	.50	.59	.53	.50	.58	.53	.49	.48
9.0	.58	.51	.47	.57	.51	.47	.56	.50	.46	.55	.50	.46	.54	.50	.46	.44
10.0	.54	.48	.44	.54	.48	.43	.53	.47	.43	.52	.47	.43	.51	.47	.43	.42



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



WEC AND CCEC

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.223	.127	.040	.216	.123	.039	.203	.117	.037	.192	.111	.035	.181	.105	.034	
2.0	.212	.116	.036	.206	.114	.035	.195	.109	.034	.185	.104	.033	.176	.099	.031	
3.0	.200	.106	.032	.195	.104	.031	.185	.100	.030	.176	.097	.030	.168	.093	.029	
4.0	.188	.098	.029	.183	.096	.028	.175	.093	.028	.167	.090	.027	.160	.087	.027	
5.0	.177	.090	.026	.173	.089	.026	.166	.086	.025	.159	.084	.025	.152	.081	.024	
6.0	.167	.084	.024	.163	.082	.024	.157	.080	.023	.151	.078	.023	.145	.076	.023	
7.0	.158	.078	.022	.155	.077	.022	.149	.075	.022	.143	.074	.021	.138	.072	.021	
8.0	.149	.073	.020	.147	.072	.020	.141	.071	.020	.137	.069	.020	.132	.068	.020	
9.0	.142	.069	.019	.139	.068	.019	.135	.067	.019	.130	.065	.019	.126	.064	.019	
10.0	.135	.065	.018	.133	.064	.018	.128	.063	.018	.124	.062	.018	.121	.061	.017	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.174	.157	.141	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.162	.132	.108	.138	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.151	.114	.084	.129	.098	.073	.089	.068	.051	.051	.040	.030	.016	.013	.010	
4.0	.142	.100	.067	.122	.086	.059	.084	.060	.041	.048	.035	.024	.016	.011	.008	
5.0	.134	.088	.055	.115	.077	.048	.079	.053	.034	.046	.031	.020	.015	.010	.007	
6.0	.126	.080	.046	.109	.069	.040	.075	.048	.028	.043	.028	.017	.014	.009	.006	
7.0	.120	.072	.039	.103	.063	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.114	.066	.033	.098	.057	.029	.068	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.109	.061	.029	.093	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.104	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.009	.012	.007	.003	

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023

**UGR(Unified Glare Rating) Table**

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	11.6	12.7	11.8	12.9	13.1	13.4	14.5	13.6	14.7	14.9
3H	12.2	13.2	12.5	13.4	13.7	13.9	14.9	14.1	15.1	15.3
4H	12.6	13.6	12.9	13.8	14.0	14.2	15.2	14.4	15.4	15.6
6H	13.0	13.9	13.3	14.2	14.4	14.5	15.5	14.8	15.7	16.0
8H	13.1	14.0	13.5	14.3	14.6	14.6	15.5	14.9	15.8	16.1
12H	13.3	14.1	13.6	14.4	14.7	14.6	15.5	14.9	15.7	16.0
4H 2H	11.8	12.8	12.1	13.1	13.3	13.4	14.4	13.7	14.6	14.9
3H	12.7	13.5	13.0	13.8	14.1	14.1	15.0	14.4	15.3	15.5
4H	13.2	14.0	13.6	14.3	14.7	14.6	15.4	14.9	15.7	16.0
6H	13.8	14.5	14.2	14.8	15.2	15.2	15.9	15.5	16.2	16.5
8H	14.0	14.7	14.4	15.1	15.4	15.3	16.0	15.7	16.3	16.7
12H	14.3	14.9	14.7	15.2	15.6	15.3	15.9	15.7	16.3	16.7
8H 4H	13.6	14.2	14.0	14.6	14.9	14.8	15.4	15.2	15.8	16.2
6H	14.3	14.9	14.8	15.3	15.7	15.6	16.1	16.0	16.5	16.9
8H	14.7	15.2	15.2	15.6	16.1	15.8	16.3	16.2	16.7	17.1
12H	15.1	15.5	15.5	15.9	16.4	15.8	16.2	16.2	16.6	17.1
12H 4H	13.6	14.2	14.0	14.6	15.0	14.8	15.4	15.2	15.8	16.2
6H	14.5	15.0	14.9	15.4	15.8	15.6	16.1	16.1	16.5	17.0
8H	14.9	15.3	15.4	15.8	16.3	15.9	16.3	16.4	16.7	17.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.6 / - 0.8					+ 0.5 / - 0.5				
1.5H	+ 0.5 / - 0.8					+ 0.8 / - 0.7				
2.0H	+ 1.5 / - 0.7					+ 1.6 / - 1.3				

CIE Pub.117, 14070 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 9.2$ )  
Area: 0.1 m<sup>2</sup>

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



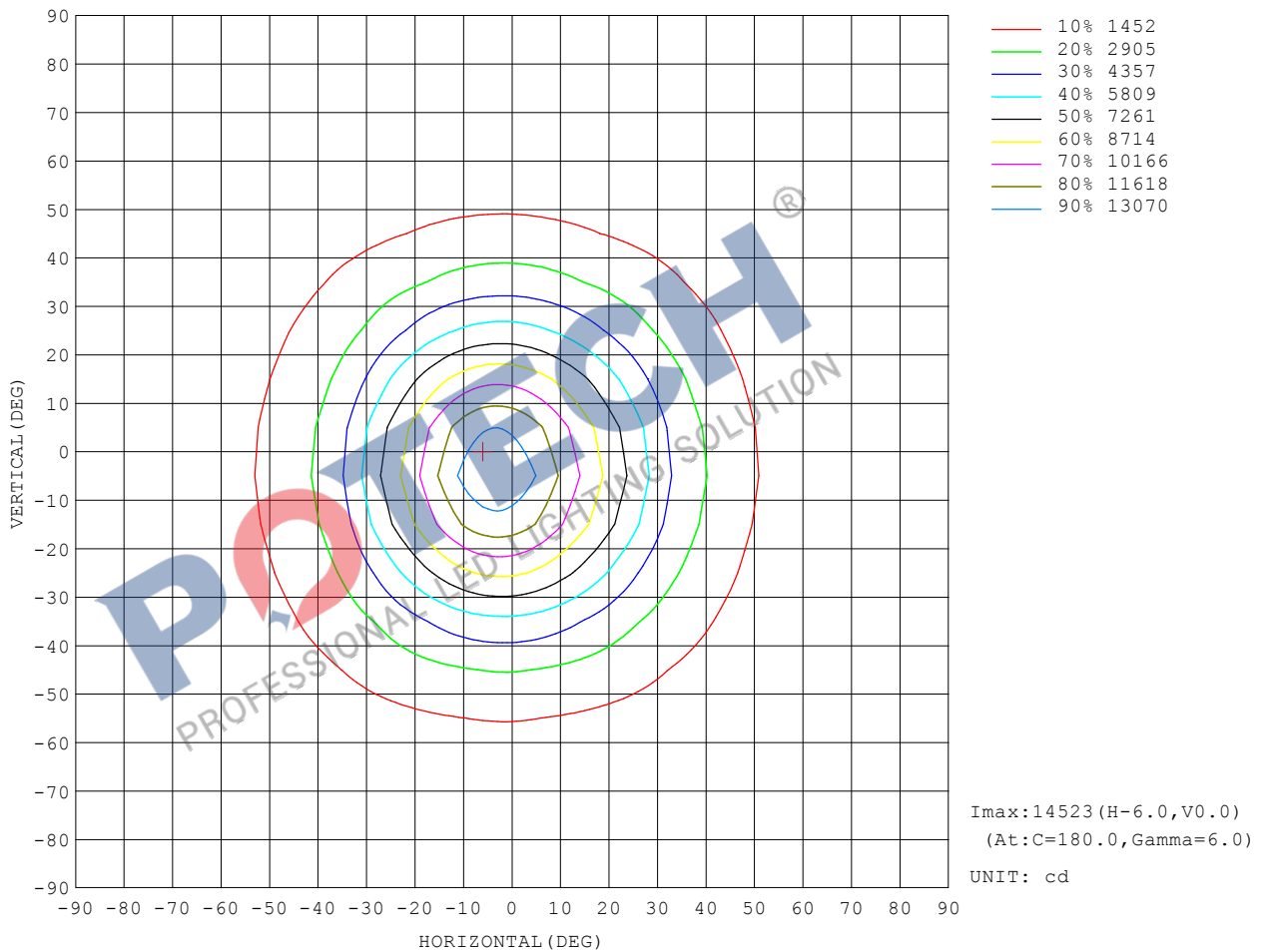
**UTILIZATION FACTORS TABLE**

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	75	66	61	74	66	61	73	66	61	56
0.80	84	76	71	83	75	70	82	75	70	65
1.00	90	83	78	89	82	77	87	83	77	72
1.25	96	88	84	94	88	83	92	87	82	77
1.50	99	93	88	98	92	87	95	90	86	81
2.00	104	98	94	102	97	93	99	95	91	85
2.50	106	101	97	104	100	96	101	97	94	87
3.00	108	104	100	106	102	99	103	99	97	89
4.00	111	107	104	109	105	103	105	102	100	92
5.00	113	109	107	110	107	105	106	104	102	94
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023

### ISOCANDELA DIAGRAM

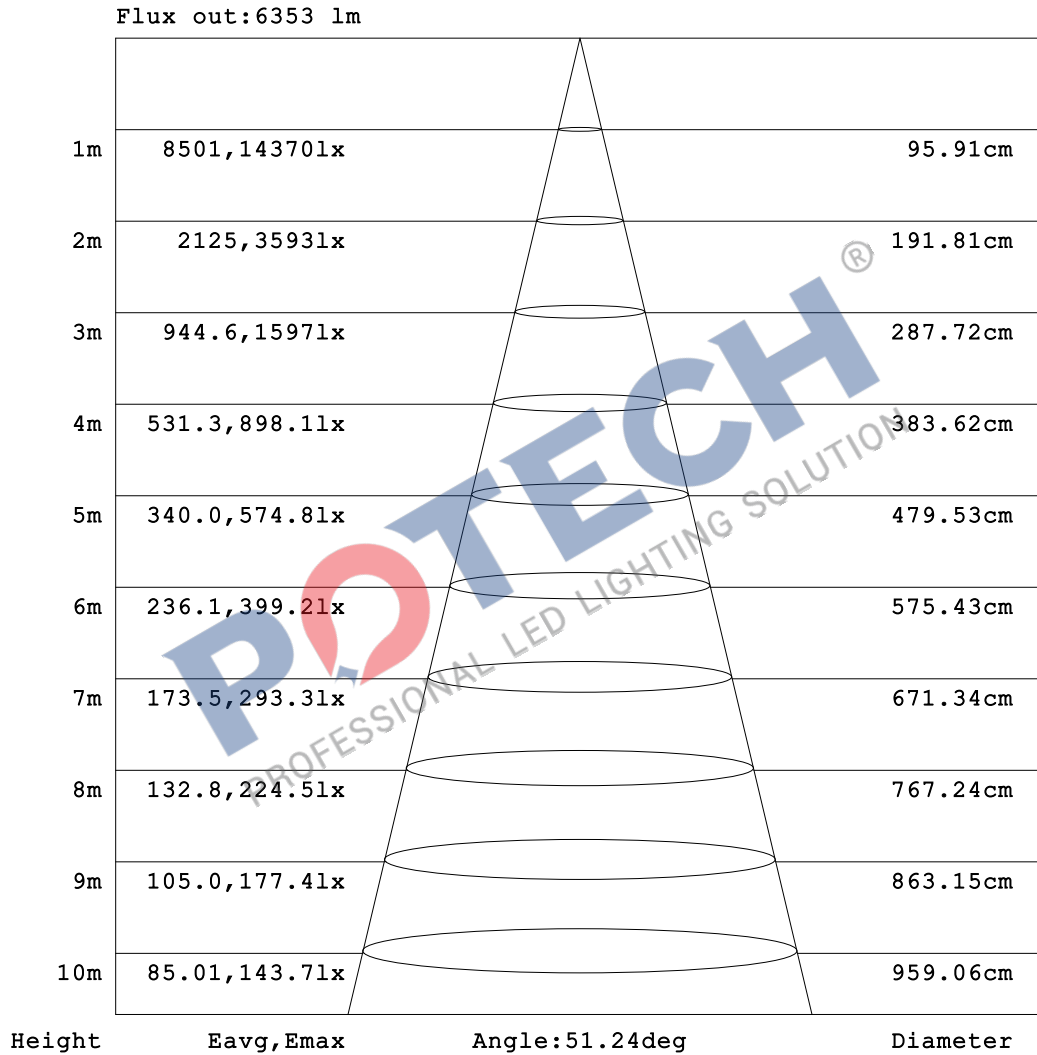


H( $\beta$ ) Range: -90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature: 25.2DEG  
Operators: GONIOPHOTOMETERS  
Test Date: 14 July 2023

V(B) Range: -80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity: 61%  
Test Distance: 10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



**AAI Figure**



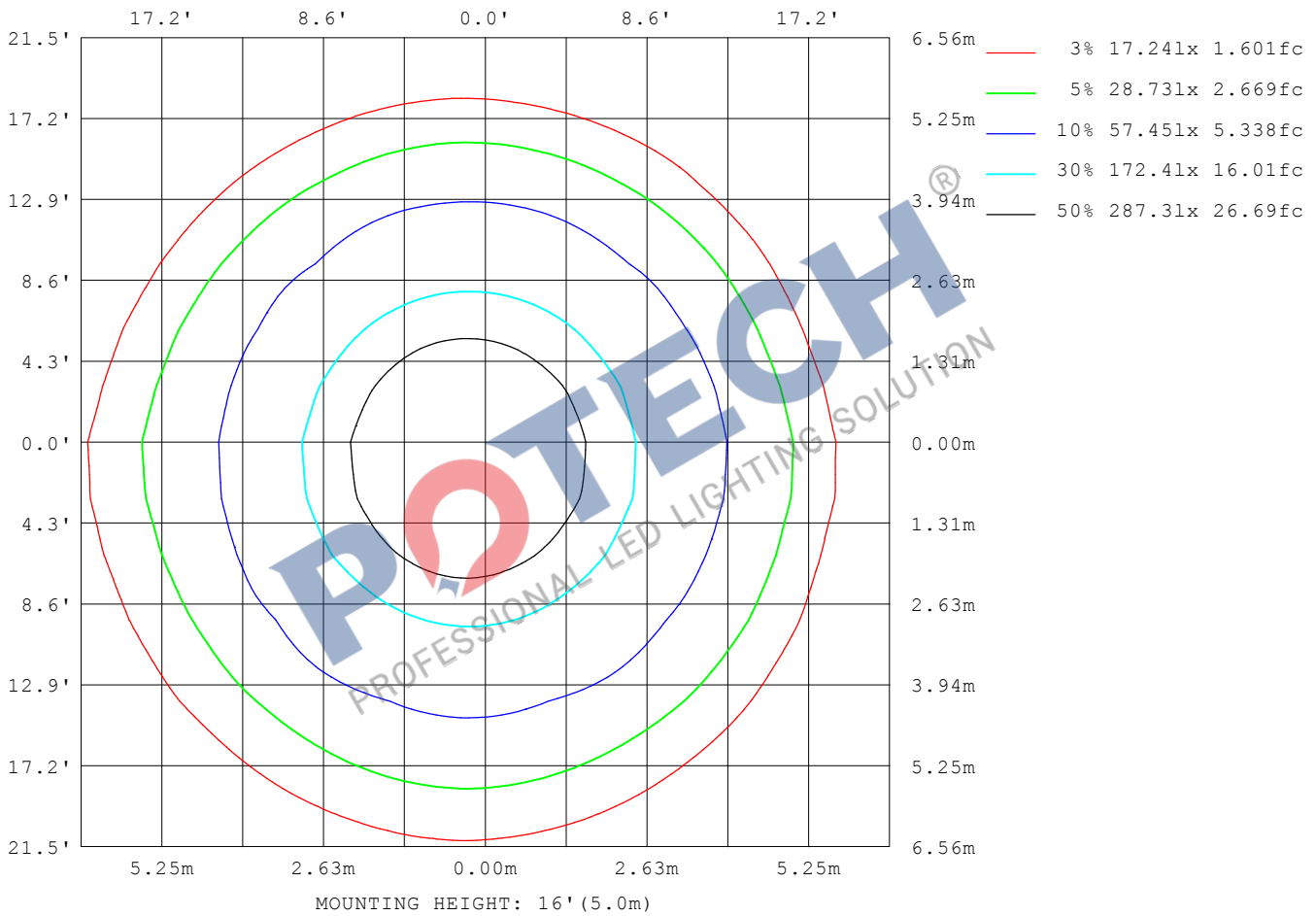
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



**ISOLUX DIAGRAM**



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



**LED Avg.L Report**

Test:U:220.10V I:0.4735A P:102.59W PF:0.9844 Freq:50.00Hz Lamp Flux:14069.7x1 lm		
NAME: PHA PT-FL3 100W	TYPE:GO	WEIGHT:
SPEC.:	DIM.: 130	SERIAL No.:
MFR.: LAB VILAS 317	SUR.:180	Shielding Angle:180

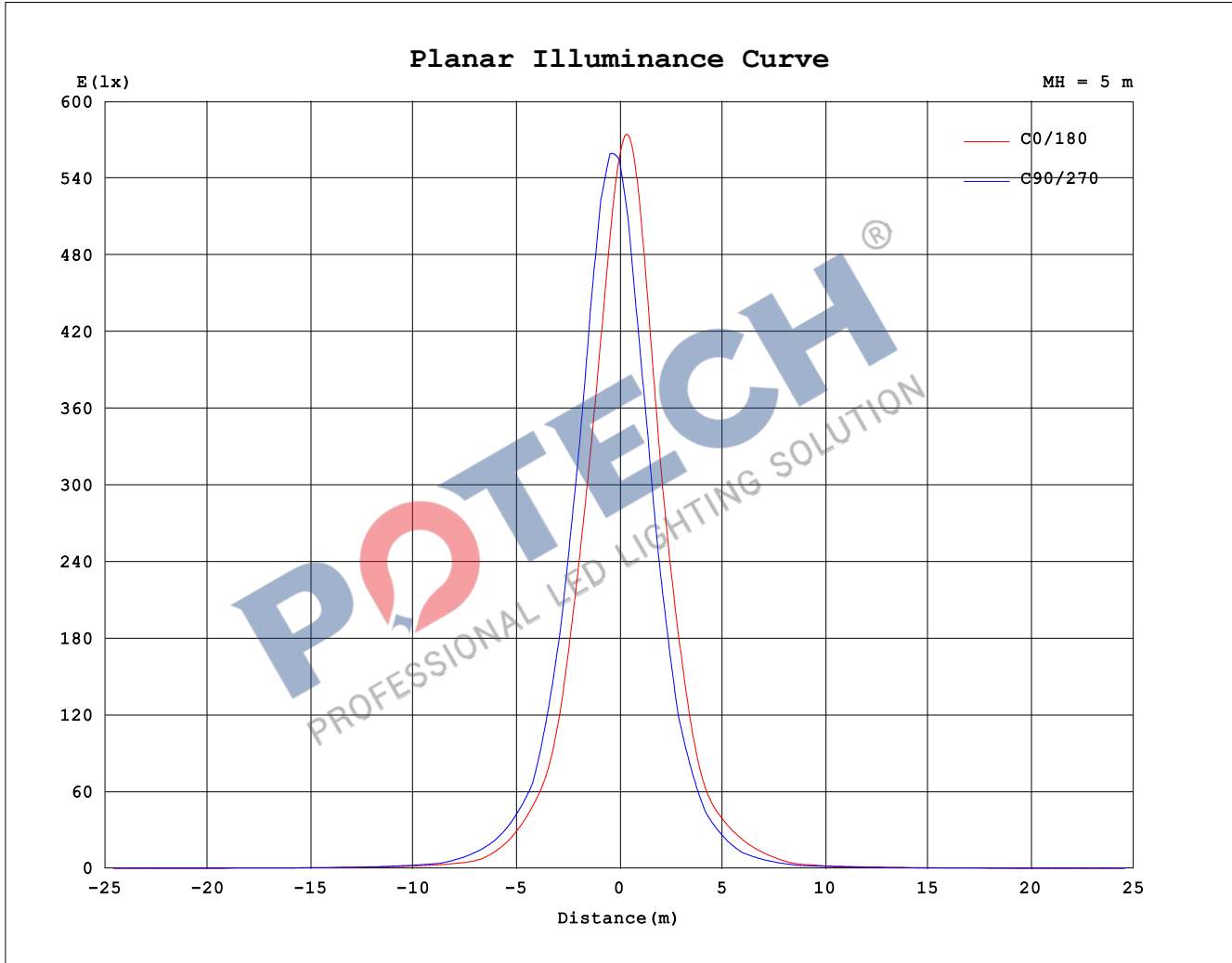
AvgL	cd/m2
L_0~180 (65) av	12438
L_0~180 (75) av	13919
L_0~180 (85) av	15057
L_90~270 (65) av	12528
L_90~270 (75) av	12280
L_90~270 (85) av	0
L_45 (65) av	12096
L_45 (75) av	13310
L_45 (85) av	8983

Standard: GB/T 29293-2012

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023

### Planar Illuminance Curve



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Table--1

 UNIT:  $\mu\text{A}10\text{cd}$ 

$\gamma$ (DEG)	C (DEG)																		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389
5	1250	1256	1262	1270	1278	1288	1298	1308	1319	1330	1341	1352	1363	1373	1383	1392	1401	1408	1415
10	1086	1098	1112	1129	1148	1169	1190	1195	1203	1213	1225	1240	1256	1274	1293	1313	1333	1353	1371
15	927	944	965	989	1011	1010	1014	1021	1033	1052	1074	1097	1121	1145	1169	1190	1209	1226	1240
20	779	802	828	850	845	844	851	873	897	924	940	946	956	968	982	999	1018	1038	1057
25	627	658	694	690	683	695	722	752	747	747	751	768	789	810	831	851	869	883	894
30	466	504	532	515	522	558	570	558	561	589	615	634	637	644	654	667	679	693	706
35	342	373	378	365	396	407	389	407	440	448	442	439	463	487	506	520	531	539	544
40	272	293	284	289	301	287	302	319	312	308	328	350	360	361	360	360	361	366	373
45	203	231	210	232	216	228	235	226	239	252	251	249	252	260	269	278	286	293	298
50	132	156	146	151	149	161	155	174	172	170	181	191	194	197	200	204	208	212	217
55	73.4	85.5	89.9	77.3	96.0	88.7	106	96.0	109	121	119	117	126	135	140	143	146	149	151
60	59.0	60.6	59.2	58.5	55.9	63.1	59.1	69.1	69.1	66.0	75.4	84.7	86.8	85.3	82.5	80.3	79.7	80.6	82.9
65	49.9	50.3	46.5	45.9	48.6	48.5	50.0	49.8	52.9	55.2	55.6	53.7	54.8	56.2	57.7	59.6	61.4	63.0	64.2
70	41.0	42.2	40.0	40.1	40.8	41.0	42.1	42.5	43.3	45.7	46.8	47.0	47.0	47.2	46.9	46.3	45.4	44.6	44.5
75	34.5	32.3	30.3	31.8	33.1	34.3	33.8	35.6	36.8	38.4	39.4	38.8	38.4	38.2	37.6	37.0	36.5	36.3	36.5
80	20.9	23.8	22.3	22.8	23.7	25.4	25.6	26.4	27.9	29.1	29.6	29.6	29.3	29.0	28.6	28.3	28.0	28.0	28.3
85	10.1	13.6	13.6	13.8	14.8	14.9	15.1	12.9	10.8	9.03	7.38	5.70	4.13	2.80	1.76	0.97	0.43	0.11	0.00
90	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.2DEG  
 Operators:GONIOPHOTOMETERS  
 Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
 Humidity:61%  
 Test Distance:10.000m [K=1.0000]  
 Remarks: 2855-PTN-2023

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Table--2

UNIT:  $\mu\text{A}10\text{cd}$

C (DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389
5	1420	1426	1430	1433	1436	1437	1439	1440	1441	1442	1443	1443	1444	1445	1447	1448	1450	1452	1439
10	1388	1402	1414	1423	1428	1430	1427	1422	1414	1404	1392	1379	1378	1379	1383	1390	1399	1409	1378
15	1253	1263	1272	1279	1288	1297	1307	1320	1335	1341	1309	1275	1242	1211	1212	1225	1243	1266	1219
20	1076	1093	1106	1113	1116	1113	1103	1090	1086	1098	1115	1135	1100	1052	1011	1018	1042	1073	1018
25	903	909	914	919	924	931	940	944	920	895	868	887	912	903	853	820	848	882	824
30	717	727	735	738	735	727	715	720	736	758	732	693	688	722	705	648	661	705	636
35	549	552	556	560	564	568	568	551	532	526	552	556	502	495	537	476	461	513	442
40	381	388	395	400	401	398	395	397	394	379	359	371	375	334	348	344	319	350	309
45	299	298	296	294	292	290	291	286	273	276	281	264	266	272	256	278	253	277	242
50	221	223	223	222	219	215	212	215	221	210	202	213	201	205	202	209	195	217	182
55	152	153	153	154	156	158	156	150	142	149	153	133	146	129	149	126	130	149	117
60	85.5	87.7	89.8	91.7	93.9	95.7	95.9	96.4	91.8	85.3	81.4	85.8	72.6	79.5	65.7	64.8	70.1	72.2	63.8
65	64.5	64.0	63.1	61.5	59.7	57.8	55.9	58.5	57.3	54.1	52.5	50.6	50.4	47.6	48.4	50.3	54.2	55.2	50.2
70	44.8	45.3	46.1	46.7	46.9	46.7	46.3	45.9	45.5	44.8	42.8	41.5	42.4	40.9	38.6	38.9	42.2	45.9	39.6
75	36.5	36.6	36.9	37.2	37.6	38.2	38.9	39.5	39.4	37.1	35.0	35.2	35.3	34.9	31.3	31.1	34.4	37.6	32.1
80	28.4	28.5	28.9	29.0	29.4	29.9	30.5	30.8	29.9	28.7	28.4	28.6	27.9	26.0	22.4	21.7	24.1	29.5	22.3
85	0.11	0.43	0.99	1.79	2.86	4.26	6.06	8.20	10.5	13.0	15.9	19.3	18.0	16.0	15.7	14.1	9.43	16.1	11.9
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



LUMINOUS DISTRIBUTION INTENSITY DATA

Table--3

UNIT: cd

γ (DEG)	C (DEG)																		
	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389	1389
5	1425	1412	1400	1388	1376	1366	1355	1346	1337	1329	1321	1314	1308	1302	1296	1290	1285	1280	1276
10	1348	1320	1295	1273	1253	1244	1235	1227	1217	1207	1197	1185	1172	1160	1148	1137	1124	1113	1104
15	1176	1137	1109	1107	1106	1105	1103	1085	1064	1046	1031	1017	1005	995	985	977	969	962	954
20	969	936	944	953	955	925	898	875	864	859	852	842	831	819	807	795	784	775	768
25	773	777	797	781	743	710	714	717	717	702	684	669	657	647	640	634	629	624	619
30	597	625	620	571	554	568	574	549	526	510	506	501	494	485	477	468	460	453	447
35	431	461	415	399	417	410	388	380	377	372	371	369	367	364	361	359	357	353	349
40	316	310	290	302	290	278	282	279	273	268	268	269	267	263	257	252	247	244	243
45	256	229	237	224	216	223	211	201	203	204	199	195	192	190	188	187	185	183	180
50	186	173	171	159	165	149	150	153	145	137	134	132	130	128	126	123	119	116	115
55	106	120	97.4	106	92.5	98.8	98.0	91.2	88.3	84.8	85.6	87.1	87.5	87.1	86.4	85.9	85.1	83.8	82.3
60	57.3	56.7	60.6	56.5	58.9	57.5	58.5	56.4	57.8	58.3	59.0	58.3	56.4	53.9	51.6	49.9	49.2	49.4	50.7
65	46.5	45.5	44.5	45.1	44.5	45.4	45.3	46.0	46.0	44.5	43.5	42.6	42.2	42.0	41.8	41.8	41.7	41.5	41.4
70	36.4	36.7	38.5	38.7	37.3	38.0	39.7	39.3	38.3	37.0	35.9	35.1	34.8	34.5	34.3	34.3	34.0	33.6	33.5
75	28.9	28.8	32.0	31.5	31.0	30.1	31.1	32.1	31.2	29.4	28.1	27.2	26.9	26.8	26.8	27.1	27.1	26.7	26.3
80	19.8	19.8	21.8	22.4	22.9	22.1	21.6	21.6	21.3	20.5	19.8	19.1	19.1	19.3	19.7	20.1	19.9	19.3	18.6
85	12.9	13.0	12.2	12.6	12.7	10.2	8.21	6.60	5.11	3.79	2.70	1.81	1.16	0.66	0.30	0.08	0.00	0.07	0.28
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

H(β) Range:-90 - 90DEG  
 H(β) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.2DEG  
 Operators:GONIOPHOTOMETERS  
 Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
 Humidity:61%  
 Test Distance:10.000m [K=1.0000]  
 Remarks: 2855-PTN-2023







**Photometric Data Table [cd]**

G/C	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0
0.0	13885	13885	13885	13885	13885	13885	13885	13885	13885	13885
2.5	13261	13282	13308	13339	13375	13414	13457	13503	13549	13596
5.0	12503	12557	12622	12697	12782	12875	12976	13083	13191	13301
7.5	11686	11774	11880	12003	12141	12293	12456	12629	12810	12919
10.0	10862	10981	11125	11292	11480	11688	11905	11954	12029	12130
12.5	10054	10201	10377	10581	10814	10984	11016	11077	11172	11304
15.0	9270	9444	9652	9892	10105	10105	10142	10210	10327	10517
17.5	8528	8721	8954	9226	9260	9255	9296	9398	9614	9843
20.0	7794	8017	8284	8502	8449	8445	8515	8729	8975	9239
22.5	7054	7311	7617	7706	7643	7640	7861	8110	8387	8399
25.0	6274	6581	6945	6896	6827	6951	7218	7519	7465	7469
27.5	5458	5816	6201	6032	5965	6267	6585	6561	6516	6563
30.0	4656	5041	5323	5147	5221	5580	5705	5584	5606	5885
32.5	3966	4335	4487	4314	4551	4918	4746	4633	4956	5263
35.0	3421	3727	3778	3647	3965	4069	3890	4072	4401	4479
37.5	3031	3273	3243	3222	3494	3388	3350	3625	3752	3665
40.0	2724	2925	2840	2890	3015	2870	3019	3189	3117	3078
42.5	2392	2627	2481	2598	2580	2544	2740	2697	2650	2795
45.0	2033	2314	2102	2315	2164	2277	2345	2264	2391	2517
47.5	1668	1938	1769	1940	1769	2022	1923	1990	2143	2103
50.0	1316	1558	1457	1510	1493	1606	1550	1738	1722	1704
52.5	965.1	1181	1157	1099	1245	1177	1302	1360	1296	1452
55.0	734.5	855.3	899.5	772.7	960.1	887.1	1060	960.0	1087	1214
57.5	648.9	682.8	711.9	655.3	692.5	752.0	757.2	775.1	917.9	887.0
60.0	589.7	605.8	592.0	585.4	559.0	631.2	591.0	691.0	660.7	660.0
62.5	544.4	551.0	520.3	521.1	524.9	526.5	552.5	571.8	559.4	610.6
65.0	499.1	502.5	465.1	459.0	485.6	485.3	499.9	498.0	528.9	551.8
67.5	454.0	460.4	434.3	424.6	430.7	457.6	446.9	470.9	481.7	486.7
70.0	410.4	421.9	399.9	400.7	408.1	410.4	421.0	425.0	432.6	457.0
72.5	374.0	382.0	337.1	339.6	374.4	381.2	377.7	382.4	408.2	427.4
75.0	344.8	323.3	302.5	318.0	331.2	342.9	338.1	356.2	367.5	384.3
77.5	286.2	274.2	252.9	252.9	289.0	299.9	304.6	306.9	320.7	339.8
80.0	209.1	238.2	223.3	227.6	237.0	253.6	255.6	264.1	279.5	290.9
82.5	154.1	181.5	177.5	180.4	187.0	201.3	213.9	215.6	221.7	230.4
85.0	101.1	136.3	135.8	137.6	148.0	149.3	150.7	129.3	108.1	90.26
87.5	11.74	49.48	87.42	85.29	50.32	23.31	0	0	0	0
90.0	0.0888	0	0	0	0	0	0	0	0	0
G/C	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	90.0	95.0
0.0	13885	13885	13885	13885	13885	13885	13885	13885	13885	13885
2.5	13644	13693	13743	13794	13841	13886	13930	13974	14016	14052
5.0	13413	13523	13629	13733	13830	13922	14007	14079	14148	14204
7.5	13002	13095	13201	13317	13437	13565	13689	13809	13926	14035
10.0	12252	12397	12564	12739	12934	13135	13333	13526	13705	13876
12.5	11466	11660	11871	12086	12297	12507	12702	12886	13055	13218
15.0	10737	10974	11215	11452	11686	11902	12089	12257	12405	12527
17.5	10099	10361	10567	10688	10826	10984	11152	11321	11489	11644
20.0	9395	9461	9557	9680	9825	9995	10176	10379	10573	10763
22.5	8433	8501	8595	8773	8988	9202	9407	9596	9758	9903
25.0	7511	7677	7887	8096	8307	8506	8687	8830	8944	9027
27.5	6797	7017	7239	7418	7513	7629	7755	7883	8000	8098
30.0	6148	6336	6367	6439	6544	6665	6795	6932	7056	7171
32.5	5364	5351	5384	5470	5694	5876	6027	6153	6250	6330
35.0	4416	4386	4634	4872	5057	5199	5308	5387	5444	5486
37.5	3631	3893	4136	4326	4388	4426	4471	4526	4587	4645
40.0	3279	3502	3601	3612	3601	3595	3614	3661	3729	3807
42.5	2968	2992	2983	2926	2977	3084	3191	3284	3353	3389
45.0	2512	2493	2518	2601	2687	2778	2864	2932	2977	2988
47.5	2087	2170	2250	2327	2377	2424	2477	2529	2575	2598
50.0	1814	1906	1945	1968	2002	2040	2079	2125	2172	2209
52.5	1561	1555	1567	1596	1660	1716	1761	1805	1843	1866
55.0	1185	1171	1260	1346	1398	1433	1461	1490	1514	1524
57.5	847.0	975.5	1071	1122	1126	1125	1131	1149	1172	1189
60.0	754.4	846.7	868.2	853.3	825.0	803.4	796.7	806.4	829.1	854.5
62.5	665.8	676.9	648.5	603.0	625.9	654.7	684.8	713.0	735.4	745.2
65.0	556.0	536.8	547.9	561.7	577.3	596.0	613.7	629.9	641.7	644.6
67.5	496.1	504.2	512.6	520.6	525.4	530.8	534.0	538.0	543.4	546.1
70.0	468.4	469.6	470.3	472.1	469.5	463.4	453.7	446.1	445.1	447.8
72.5	433.4	429.9	426.8	425.6	420.5	413.8	407.1	404.0	404.8	405.3
75.0	394.4	388.0	383.7	381.6	376.2	370.1	364.6	363.2	364.6	364.5
77.5	347.8	344.2	339.9	336.5	331.4	326.4	322.0	321.6	321.7	324.1
80.0	295.9	295.6	293.2	289.8	286.2	282.5	279.5	280.0	282.7	283.8
82.5	232.2	215.1	195.7	178.0	163.9	152.8	144.8	141.3	141.4	143.2
85.0	73.77	56.98	41.25	28.00	17.58	9.704	4.251	1.062	0	1.076

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



Photometric Data Table [cd]

87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	100.0	105.0	110.0	115.0	120.0	125.0	130.0	135.0	140.0	145.0
0.0	13885	13885	13885	13885	13885	13885	13885	13885	13885	13885
2.5	14086	14120	14152	14180	14201	14221	14240	14258	14274	14287
5.0	14259	14298	14332	14359	14374	14391	14400	14407	14417	14426
7.5	14132	14215	14275	14322	14346	14350	14336	14309	14283	14272
10.0	14017	14136	14228	14282	14296	14271	14216	14136	14037	13923
12.5	13365	13511	13650	13785	13923	14071	14099	13934	13747	13539
15.0	12628	12716	12793	12877	12965	13074	13198	13349	13414	13091
17.5	11781	11872	11940	11952	11932	11949	12025	12136	12276	12452
20.0	10927	11058	11134	11160	11129	11034	10897	10860	10983	11145
22.5	10025	10134	10232	10331	10388	10280	10122	9922	9712	9874
25.0	9093	9143	9192	9245	9311	9400	9436	9205	8946	8679
27.5	8175	8219	8218	8162	8176	8249	8360	8520	8287	7965
30.0	7273	7348	7375	7346	7268	7148	7201	7362	7582	7323
32.5	6400	6467	6521	6569	6509	6394	6236	6205	6420	6689
35.0	5523	5560	5597	5639	5675	5679	5510	5317	5265	5523
37.5	4694	4725	4730	4717	4764	4793	4787	4618	4404	4421
40.0	3880	3947	3995	4012	3982	3946	3969	3943	3794	3591
42.5	3396	3389	3365	3361	3395	3363	3245	3271	3271	3132
45.0	2979	2962	2938	2903	2903	2912	2856	2728	2765	2811
47.5	2597	2578	2541	2503	2503	2514	2537	2452	2331	2409
50.0	2227	2229	2216	2187	2148	2121	2150	2207	2102	2016
52.5	1876	1882	1889	1895	1871	1822	1758	1806	1892	1747
55.0	1528	1533	1542	1559	1577	1563	1497	1420	1487	1532
57.5	1200	1207	1213	1221	1247	1261	1242	1163	1094	1179
60.0	877.2	897.8	917.3	938.9	957.1	959.2	964.0	917.9	853.2	813.6
62.5	741.9	728.2	704.2	674.1	709.1	739.6	733.6	708.6	658.8	633.5
65.0	640.3	631.0	615.4	597.0	578.3	559.2	585.1	573.4	541.4	525.0
67.5	545.8	543.5	536.0	525.3	515.3	507.4	501.4	499.3	483.3	461.8
70.0	453.0	461.3	467.2	468.9	467.1	463.3	458.9	454.7	448.1	428.0
72.5	406.5	410.2	413.7	418.2	424.4	428.5	427.6	417.8	401.8	396.3
75.0	365.9	369.2	371.6	375.8	381.7	388.8	395.3	393.8	370.9	350.3
77.5	325.3	328.8	330.6	334.2	339.4	345.4	349.7	347.8	339.4	327.1
80.0	284.7	288.6	290.2	293.5	298.8	305.0	307.5	299.2	287.0	284.1
82.5	147.6	156.5	167.0	181.9	202.2	228.3	257.4	262.1	250.6	240.7
85.0	4.332	9.942	17.91	28.62	42.65	60.59	81.99	104.9	129.6	158.8
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	150.0	155.0	160.0	165.0	170.0	175.0	180.0	185.0	190.0	195.0
0.0	13885	13885	13885	13885	13885	13885	13885	13885	13885	13885
2.5	14296	14304	14311	14315	14318	14319	14318	14261	14202	14142
5.0	14432	14441	14453	14468	14485	14502	14518	14386	14254	14123
7.5	14260	14264	14280	14304	14340	14385	14437	14216	14002	13800
10.0	13793	13782	13793	13833	13899	13987	14092	13776	13477	13201
12.5	13309	13076	13014	13076	13171	13304	13471	13071	12703	12369
15.0	12754	12420	12106	12117	12249	12432	12659	12187	11758	11372
17.5	12139	11717	11321	11063	11223	11443	11719	11201	10734	10317
20.0	11348	10996	10525	10110	10176	10423	10734	10185	9694	9359
22.5	10064	10273	9762	9301	9161	9420	9747	9189	8695	8551
25.0	8873	9116	9032	8528	8201	8477	8823	8240	7726	7774
27.5	7743	7983	8298	7794	7306	7555	7938	7311	6816	7020
30.0	6932	6883	7216	7051	6480	6608	7055	6360	5970	6252
32.5	6242	5771	6094	6284	5612	5600	6115	5370	5110	5463
35.0	5565	5024	4950	5374	4760	4608	5132	4420	4305	4612
37.5	4658	4341	3920	4300	4006	3766	4222	3633	3636	3725
40.0	3705	3751	3342	3481	3440	3188	3501	3087	3164	3099
42.5	2986	3154	2987	2938	3051	2830	3061	2729	2831	2653
45.0	2642	2662	2723	2556	2779	2529	2769	2421	2561	2285
47.5	2409	2256	2444	2266	2456	2246	2484	2129	2232	1987
50.0	2132	2008	2051	2016	2093	1950	2172	1823	1863	1728
52.5	1722	1785	1634	1768	1697	1641	1841	1512	1468	1472
55.0	1334	1459	1290	1487	1260	1298	1494	1171	1061	1199
57.5	1105	1026	1047	1036	823.7	941.9	1069	837.2	701.3	823.9
60.0	857.7	726.4	795.5	656.9	647.7	700.8	722.0	637.6	573.2	567.3
62.5	611.4	594.7	561.3	525.8	558.6	602.7	610.6	552.4	509.2	483.9
65.0	506.4	503.5	476.0	483.7	502.6	542.0	552.2	501.8	465.1	454.7
67.5	464.8	444.3	453.5	434.7	443.5	482.8	506.3	450.4	413.9	414.0
70.0	414.8	424.0	409.0	386.5	389.4	421.9	458.7	395.8	364.1	367.4
72.5	384.1	384.5	378.7	370.8	362.1	370.4	414.9	347.7	340.3	351.9
75.0	351.9	352.8	349.1	312.5	311.1	344.1	375.7	321.0	288.6	288.5
77.5	313.9	319.4	304.8	291.3	274.2	305.0	338.5	281.7	250.3	262.3

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



Photometric Data Table [cd]

80.0	286.0	278.8	260.4	223.7	217.3	240.9	294.8	222.9	197.8	197.7
82.5	232.3	231.2	216.6	190.6	185.0	187.1	234.7	175.6	167.1	165.1
85.0	193.0	180.0	159.7	157.0	141.4	94.25	161.4	119.5	128.9	130.2
87.5	0	30.24	65.52	112.9	88.00	53.35	100.0	60.47	79.38	84.39
90.0	0	0	0	0	0	0	8.986	0	0	0
G/C	200.0	205.0	210.0	215.0	220.0	225.0	230.0	235.0	240.0	245.0
0.0	13885	13885	13885	13885	13885	13885	13885	13885	13885	13885
2.5	14081	14020	13961	13902	13844	13785	13730	13677	13627	13580
5.0	13997	13876	13763	13657	13554	13457	13370	13288	13210	13143
7.5	13612	13434	13272	13131	13001	12896	12800	12702	12604	12506
10.0	12950	12728	12530	12440	12352	12268	12172	12072	11965	11847
12.5	12063	11860	11601	11477	11388	11324	11247	11157	11051	10908
15.0	11089	11072	11063	11054	11034	10848	10643	10464	10306	10170
17.5	10247	10288	10340	10325	10054	9824	9621	9452	9330	9250
20.0	9435	9532	9552	9248	8981	8754	8636	8586	8517	8422
22.5	8676	8829	8484	8166	7897	7885	7873	7827	7749	7603
25.0	7966	7812	7428	7099	7140	7172	7173	7015	6839	6692
27.5	7233	6767	6369	6371	6451	6478	6246	6047	5883	5773
30.0	6196	5707	5545	5678	5736	5490	5264	5104	5064	5011
32.5	5134	4663	4832	5002	4775	4532	4422	4389	4338	4267
35.0	4147	3988	4171	4098	3876	3796	3772	3720	3706	3692
37.5	3337	3435	3498	3320	3239	3244	3200	3176	3151	3125
40.0	2899	3025	2902	2777	2822	2788	2729	2678	2662	2694
42.5	2611	2627	2441	2475	2485	2383	2302	2326	2328	2302
45.0	2371	2240	2162	2232	2109	2015	2031	2035	1993	1952
47.5	2101	1855	1930	1869	1740	1769	1780	1712	1653	1607
50.0	1706	1593	1649	1487	1502	1531	1450	1374	1338	1321
52.5	1294	1358	1263	1211	1275	1207	1122	1097	1073	1048
55.0	974.3	1065	925.1	988.0	979.9	911.7	883.1	848.1	856.0	871.2
57.5	766.9	745.6	733.2	758.9	724.1	711.4	671.3	698.3	710.9	710.4
60.0	606.4	564.5	589.2	574.9	584.9	564.0	578.2	582.9	590.0	582.5
62.5	493.1	499.6	491.1	500.9	497.3	502.3	505.5	507.3	493.3	465.8
65.0	444.6	451.3	444.6	453.9	452.6	459.8	459.7	445.3	434.6	426.4
67.5	426.3	408.4	416.1	408.7	423.6	432.4	420.9	407.3	395.9	387.6
70.0	385.1	386.8	372.8	380.0	397.5	393.1	383.5	370.3	359.0	351.3
72.5	354.3	348.7	344.5	348.5	347.8	353.1	349.0	334.7	322.8	313.5
75.0	320.1	315.4	309.8	300.6	311.2	320.9	312.1	294.0	281.1	272.2
77.5	265.0	274.3	264.5	271.0	274.1	269.9	262.0	249.9	239.2	231.5
80.0	217.9	224.5	229.2	221.3	215.9	215.6	213.0	205.2	197.7	191.5
82.5	173.1	175.8	171.9	170.2	168.3	168.4	160.6	143.0	128.1	115.3
85.0	121.9	125.8	127.0	102.3	82.06	65.98	51.13	37.94	27.02	18.14
87.5	45.66	20.42	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	250.0	255.0	260.0	265.0	270.0	275.0	280.0	285.0	290.0	295.0
0.0	13885	13885	13885	13885	13885	13885	13885	13885	13885	13885
2.5	13532	13486	13443	13404	13369	13332	13299	13270	13245	13223
5.0	13077	13016	12960	12902	12852	12802	12759	12711	12664	12621
7.5	12407	12315	12223	12133	12048	11971	11904	11846	11798	11766
10.0	11724	11600	11480	11367	11244	11135	11035	10950	10883	10831
12.5	10936	10803	10684	10578	10470	10372	10273	10182	10093	10005
15.0	10053	9949	9853	9771	9695	9623	9545	9466	9385	9303
17.5	9164	9064	8962	8860	8769	8689	8621	8567	8535	8517
20.0	8314	8192	8069	7948	7844	7752	7679	7627	7588	7574
22.5	7461	7342	7238	7146	7065	6990	6918	6845	6772	6701
25.0	6571	6475	6401	6340	6287	6239	6191	6138	6075	6015
27.5	5716	5649	5579	5507	5441	5386	5340	5312	5308	5333
30.0	4937	4854	4768	4677	4595	4528	4467	4433	4432	4462
32.5	4242	4209	4173	4130	4080	4021	3940	3844	3732	3612
35.0	3668	3639	3614	3591	3565	3534	3490	3421	3340	3243
37.5	3130	3115	3087	3054	3019	2989	2967	2945	2929	2901
40.0	2673	2625	2572	2518	2472	2442	2432	2437	2447	2456
42.5	2263	2232	2210	2188	2161	2129	2096	2067	2035	2021
45.0	1922	1896	1878	1865	1850	1828	1805	1783	1762	1737
47.5	1593	1581	1564	1547	1522	1497	1479	1472	1475	1479
50.0	1304	1281	1255	1229	1194	1164	1147	1141	1148	1168
52.5	1052	1053	1049	1042	1023	996.8	968.0	932.7	887.4	853.7
55.0	874.5	871.4	864.4	859.4	851.2	838.3	823.5	805.9	779.2	742.5
57.5	709.1	701.3	689.0	679.2	671.6	666.3	665.9	668.6	668.8	660.9
60.0	563.6	539.5	516.2	499.4	492.1	494.4	506.9	526.5	547.0	560.9
62.5	461.5	458.9	457.0	456.0	454.7	451.9	451.2	453.7	460.3	468.4
65.0	421.8	419.6	418.0	417.9	417.3	414.6	413.8	415.8	421.9	429.7
67.5	384.0	381.9	380.5	380.5	378.5	375.1	374.6	376.8	382.6	390.2
70.0	348.1	345.0	343.3	343.1	339.7	335.6	335.0	337.6	342.2	348.4

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023



Photometric Data Table [cd]

72.5	309.5	306.7	305.8	307.0	305.4	301.1	298.8	299.4	302.1	306.7
75.0	268.5	267.9	268.2	270.9	271.1	266.7	263.0	261.5	262.3	265.3
77.5	229.4	230.3	232.7	236.0	235.0	229.8	224.6	221.7	220.6	223.0
80.0	191.2	193.1	197.4	201.2	198.9	192.8	186.0	181.4	177.9	179.9
82.5	108.3	103.8	102.1	101.5	99.43	97.18	95.97	97.13	99.74	107.0
85.0	11.60	6.594	2.995	0.7628	0	0.7303	2.816	6.166	10.69	16.84
87.5	0	0	0	0	0	0	0	0	0	0
90.0	0	0	0	0	0	0	0	0	0	0
G/C	300.0	305.0	310.0	315.0	320.0	325.0	330.0	335.0	340.0	345.0
0.0	13885	13885	13885	13885	13885	13885	13885	13885	13885	13885
2.5	13200	13182	13167	13158	13152	13150	13151	13156	13166	13182
5.0	12578	12540	12503	12470	12444	12422	12405	12397	12398	12408
7.5	11746	11740	11748	11773	11780	11728	11682	11647	11625	11616
10.0	10792	10775	10774	10794	10836	10899	10981	10923	10873	10839
12.5	9926	9850	9826	9841	9886	9954	10042	10160	10156	10093
15.0	9217	9137	9066	9004	8976	9047	9144	9267	9422	9380
17.5	8522	8480	8394	8320	8258	8214	8287	8414	8577	8703
20.0	7582	7612	7675	7676	7598	7530	7486	7588	7755	7970
22.5	6654	6682	6740	6837	6962	6871	6799	6751	6923	7159
25.0	5944	5862	5804	5896	6037	6231	6118	6025	6071	6323
27.5	5299	5221	5117	4984	5092	5294	5462	5323	5194	5450
30.0	4522	4599	4538	4401	4238	4386	4642	4666	4501	4600
32.5	3696	3803	3909	3902	3741	3573	3828	4081	3895	3829
35.0	3139	3067	3216	3335	3334	3176	3151	3400	3411	3265
37.5	2817	2734	2668	2772	2878	2851	2741	2862	3032	2896
40.0	2464	2451	2394	2344	2413	2514	2466	2419	2617	2586
42.5	2052	2083	2130	2083	2028	2103	2207	2104	2207	2292
45.0	1708	1704	1753	1818	1769	1709	1839	1836	1795	2001
47.5	1461	1431	1378	1440	1525	1447	1439	1583	1423	1643
50.0	1199	1212	1167	1078	1159	1222	1105	1211	1171	1248
52.5	899.5	952.4	990.2	922.4	817.1	938.3	920.7	866.7	962.2	897.8
55.0	697.2	690.4	761.7	792.4	715.3	675.4	766.5	672.4	758.5	653.7
57.5	632.7	600.6	572.9	628.0	639.7	580.3	598.0	601.2	590.9	577.5
60.0	563.3	555.4	536.9	520.9	539.0	540.6	508.8	536.1	509.4	531.8
62.5	488.0	497.8	500.9	494.1	476.5	479.1	479.6	472.7	481.2	482.2
65.0	437.2	445.7	457.9	459.8	450.5	430.9	436.4	437.1	447.2	427.7
67.5	398.7	407.9	418.0	416.6	408.6	403.0	388.2	407.8	398.0	394.2
70.0	357.5	368.2	378.4	376.7	361.2	359.3	361.5	364.9	373.0	370.1
72.5	315.8	325.5	331.0	333.8	325.1	315.2	318.7	331.7	332.0	305.0
75.0	275.1	281.6	282.5	278.9	277.2	279.6	275.4	283.1	278.5	277.4
77.5	229.9	237.5	238.2	233.5	226.9	225.8	233.0	230.6	232.9	215.9
80.0	185.4	188.2	188.6	188.4	186.5	182.5	175.6	181.6	180.7	188.2
82.5	117.8	126.0	133.0	135.5	136.0	137.8	139.8	133.0	133.8	142.4
85.0	24.82	33.34	42.25	52.02	62.99	75.41	87.57	89.46	93.66	96.65
87.5	0	0	0	0	0	0	0	13.20	27.30	46.31
90.0	0	0	0	0	0	0	0	0	0	0
G/C	350.0	355.0								
0.0	13885	13885								
2.5	13203	13229								
5.0	12429	12460								
7.5	11622	11645								
10.0	10825	10832								
12.5	10053	10039								
15.0	9313	9275								
17.5	8609	8550								
20.0	7928	7840								
22.5	7248	7126								
25.0	6554	6386								
27.5	5794	5614								
30.0	4940	4848								
32.5	4148	4153								
35.0	3512	3584								
37.5	3022	3153								
40.0	2627	2816								
42.5	2254	2512								
45.0	1867	2192								
47.5	1544	1816								
50.0	1248	1440								
52.5	977.9	1079								
55.0	769.8	784.4								
57.5	630.0	630.9								
60.0	539.5	561.8								
62.5	477.9	511.1								

H(β) Range:-90 - 90DEG

H(β) Interval: 1.0DEG

Test Speed: HIGH

Temperature:25.2DEG

Operators:GONIOPHOTOMETERS

Test Date:14 July 2023

V(B) Range:-80 - 80DEG

V(B) Interval: 5.0DEG

Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420

Humidity:61%

Test Distance:10.000m [K=1.0000]

Remarks: 2855-PTN-2023



Photometric Data Table [cd]

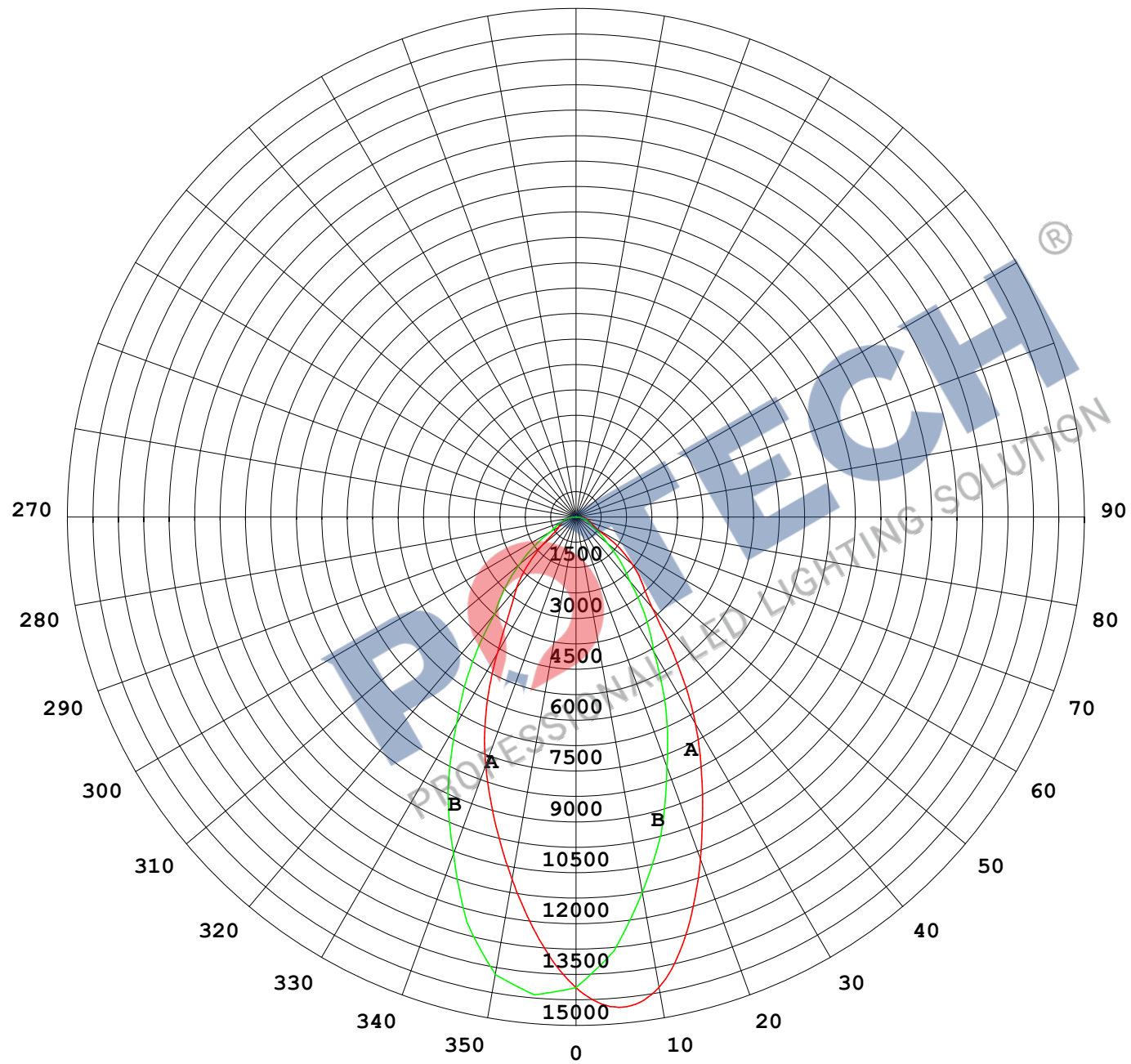
65.0	428.4	468.6
67.5	401.1	431.6
70.0	369.6	395.8
72.5	308.7	357.9
75.0	272.9	303.7
77.5	225.9	256.5
80.0	196.5	220.5
82.5	150.7	164.8
85.0	105.5	121.1
87.5	57.88	46.44
90.0	0	0



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:GONIOPHOTOMETERS  
Test Date:14 July 2023

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.00.420  
Humidity:61%  
Test Distance:10.000m [K=1.0000]  
Remarks: 2855-PTN-2023

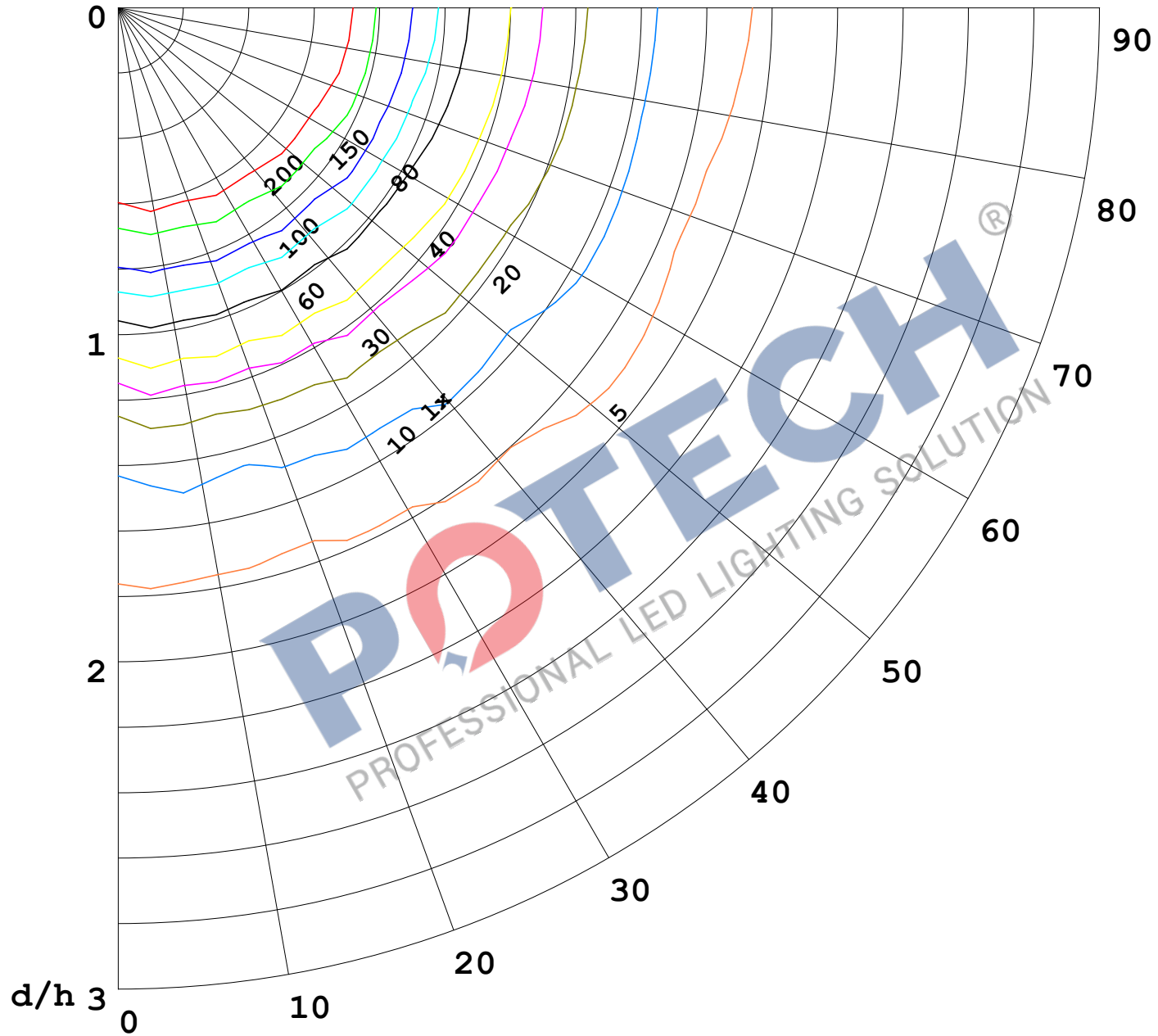
I (cd)





1000 lm

$K = 1$



F = 5000 lm  
 K = 0.7  
 Hcc = 0.0 m  
 Hfc = 0.0 m  
 Eave = 100 lx

	Pcc	Pw	Pfc
—	70	50	30
—	50	30	20

