

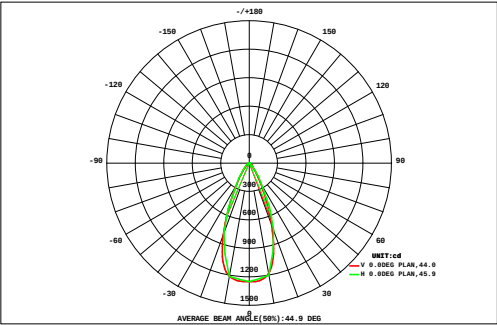
Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)		1595.1 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
Beam Spread	At 10% of Imax	76.1V x 73.3H
	At 50% of Imax	45.8V x 44.0H
	At 90% of Imax	24.3V x 25.6H
Beam Flux	Total	999.2 lumens per klm.
	To 10% of Imax	885.5 lumens per klm.
	To 50% of Imax	573.1 lumens per klm.
	To 90% of Imax	217.1 lumens per klm.
Upward LOR		0.0 %
Downward LOR		99.9 %
Luminaire Efficiency(Light Output Ratio)		100.0 %

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:277.2V I:0.1192A P:18.49W PF:0.5595 Freq:50.00Hz Lamp Flux:784.133x1 lm		
NAME: 8.03.036.0003 45° SP-PZT-R110-3P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025070103
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:42.40lm/W	
MODEL SP-PZT-R110-3P-RDM	Imax(cd)	1251	
NOMINAL POWER(W)	18	AVAILABILITY(%)	88.6
RATED VOLTAGE(V)	277	Avai. FLUX(lm)	694.6
NOMINAL FLUX(lm)	784.133	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	784.1
TEST VOLTAGE(V)	277	θ @50%(H,V)	44,46DEG

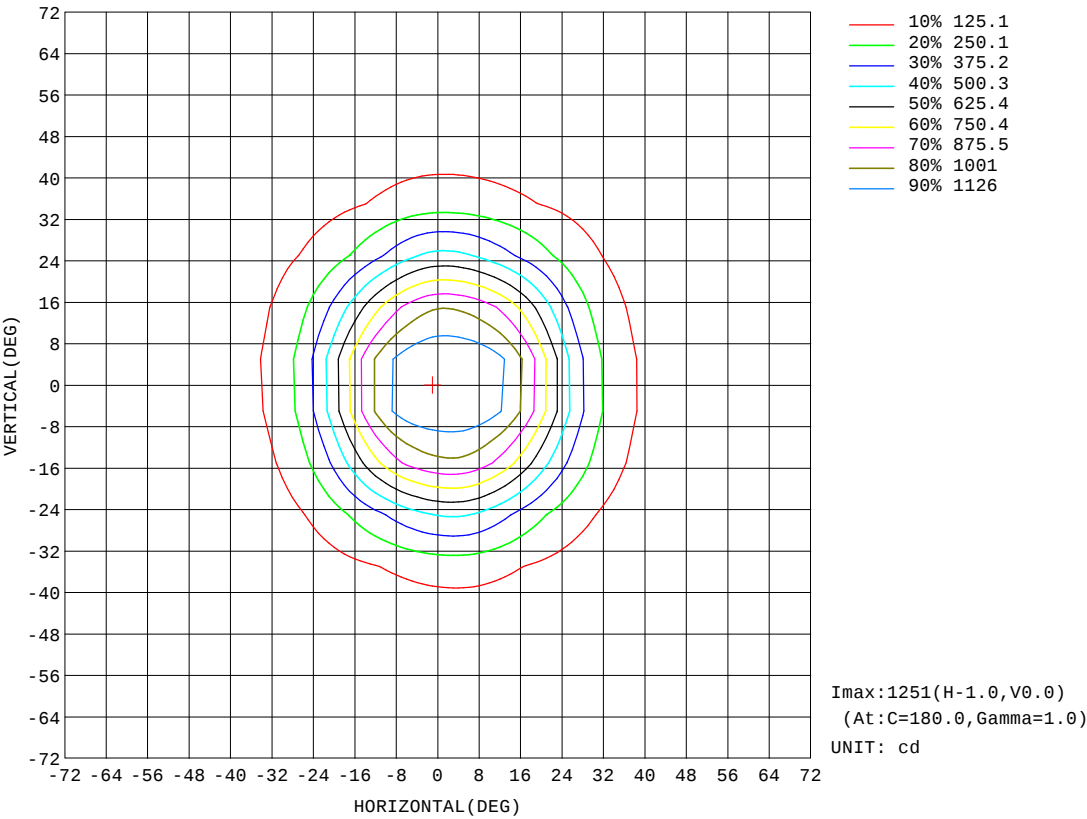
AREA FLUX DIAGRAM																	UNIT:lm		Φ t	Φ a
72	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.04	0.07	0.08	0.07	0.04	0.02	0.01	0.00	0.00	0.00	0.37	0.00	
64	0.00	0.00	0.00	0.00	0.09	0.20	0.29	0.36	0.40	0.42	0.40	0.34	0.26	0.16	0.05	0.00	0.00	2.99	0.00	
56	0.00	0.00	0.01	0.10	0.26	0.43	0.57	0.69	0.77	0.79	0.74	0.64	0.51	0.37	0.20	0.06	0.00	6.13	0.00	
48	0.00	0.00	0.05	0.23	0.46	0.70	0.94	1.20	1.41	1.44	1.30	1.08	0.83	0.59	0.36	0.15	0.02	10.8	0.00	
40	0.00	0.01	0.13	0.38	0.69	1.07	1.57	2.22	2.85	2.93	2.48	1.87	1.30	0.84	0.51	0.24	0.05	19.1	6.37	
32	0.00	0.03	0.20	0.50	0.96	1.66	2.76	4.46	6.25	6.42	5.09	3.48	2.12	1.20	0.66	0.32	0.09	36.2	29.1	
24	0.00	0.05	0.24	0.62	1.33	2.72	5.47	9.87	14.2	14.6	11.4	7.19	3.63	1.70	0.83	0.39	0.13	74.4	69.2	
VERTICAL (DEG)	0.00	0.05	0.26	0.69	1.62	3.93	9.07	16.1	20.9	21.7	18.7	12.0	5.49	2.24	1.00	0.44	0.15	0.01	114	110
	0.00	0.06	0.27	0.72	1.80	4.71	11.6	20.3	24.5	24.9	22.6	15.1	6.75	2.59	1.09	0.46	0.15	0.01	138	133
	0.00	0.06	0.28	0.72	1.85	4.97	12.3	20.8	24.0	24.1	21.9	14.6	6.55	2.51	1.03	0.41	0.13	0.01	136	132
	0.00	0.04	0.23	0.59	1.50	3.94	9.61	17.4	21.9	22.3	18.9	12.0	5.61	2.25	0.93	0.37	0.12	0.01	118	114
	0.00	0.02	0.17	0.44	1.01	2.45	5.43	9.69	13.5	14.4	11.3	6.94	3.60	1.66	0.72	0.30	0.09	0.00	71.8	67.0
	0.00	0.00	0.09	0.31	0.67	1.39	2.74	4.60	6.45	7.11	5.64	3.55	2.02	1.05	0.51	0.22	0.05	0.00	36.4	30.2
	0.00	0.00	0.03	0.16	0.39	0.71	1.13	1.63	2.12	2.32	1.96	1.42	0.95	0.57	0.30	0.11	0.01	0.00	13.8	3.31
	0.00	0.00	0.00	0.04	0.17	0.32	0.47	0.58	0.70	0.75	0.67	0.53	0.38	0.24	0.11	0.02	0.00	0.00	4.98	0.00
	0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.11	0.15	0.17	0.16	0.12	0.07	0.03	0.01	0.00	0.00	0.00	0.93	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.16	0.00
-72	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	
-72	-64	-56	-48	-40	-32	-24	-16	HORIZONTAL(DEG)					16	24	32	40	48	56	64	72
Φ t	0.00	0.33	1.97	5.50	12.8	29.2	64.1	110	140	145	123	81.0	40.1	18.0	8.32	3.51	1.00	0.05	784	---
Φ a	0.00	0.00	0.00	0.00	2.54	21.9	57.8	104	134	139	118	75.3	33.4	8.58	0.00	0.00	0.00	0.00	---	695

one-half-peak spread: U:22.8,D:23.3 , L:20.2,R:20.0 NEMA Beam Type: Type 5

H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:28.0DEG
 Operators:QC1
 Test Date:2025-08-01
 V(B) Range:-80 - 80DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
 Humidity:83%
 Test Distance:8.300m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:277.2V I:0.1192A P:18.49W PF:0.5595 Freq:50.00Hz Lamp Flux:784.133x1 lm		
NAME: 8.03.036.0003 45° SP-PZT-R110-3P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025070103
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

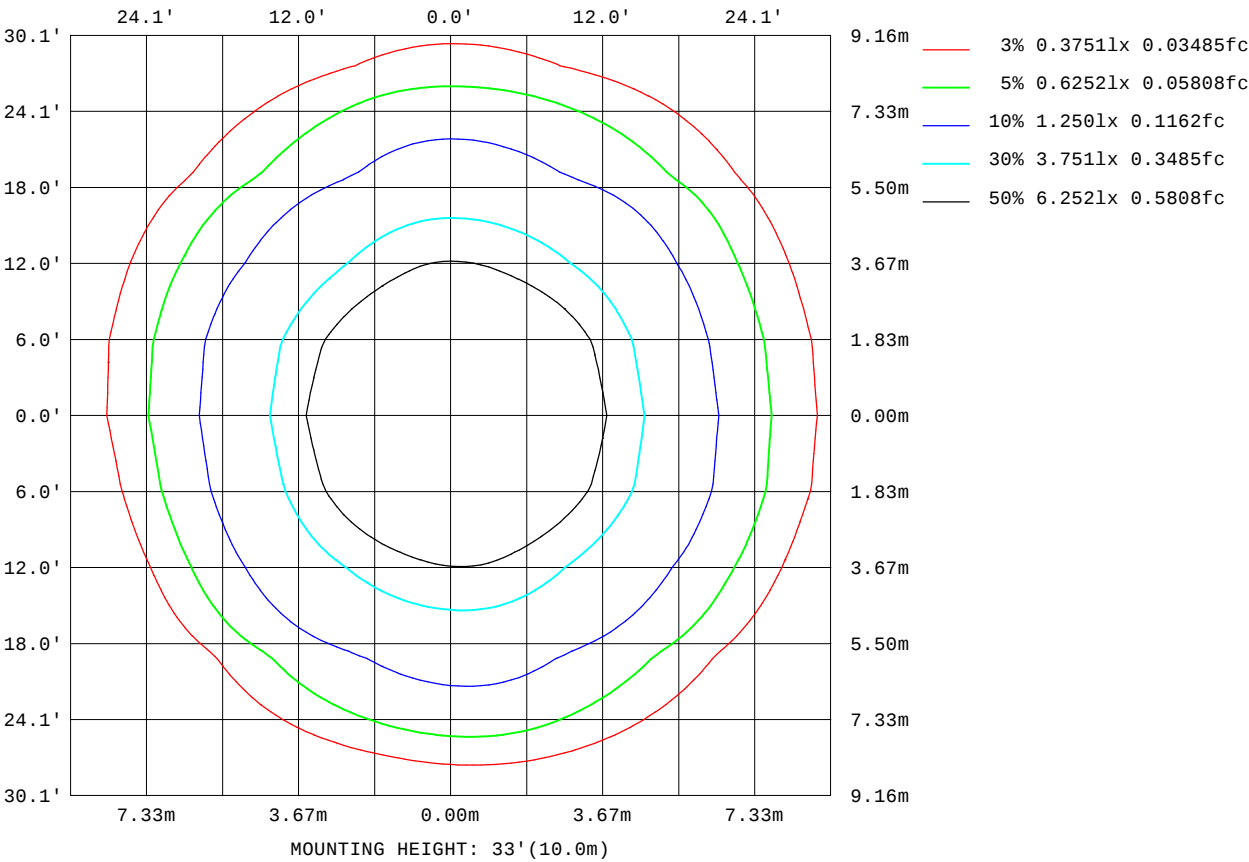


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-01

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

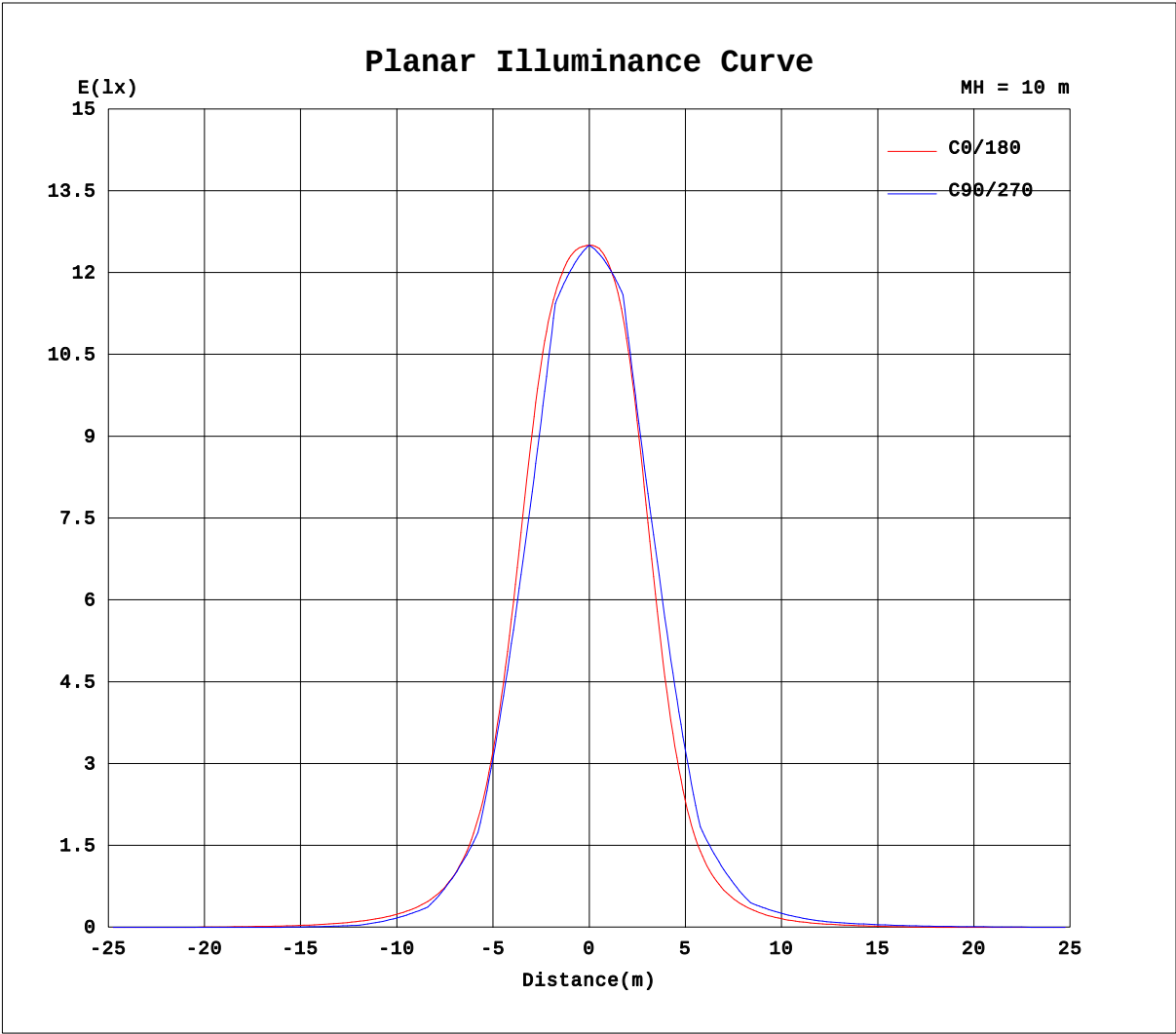
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H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-01

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

Planar Illuminance Curve

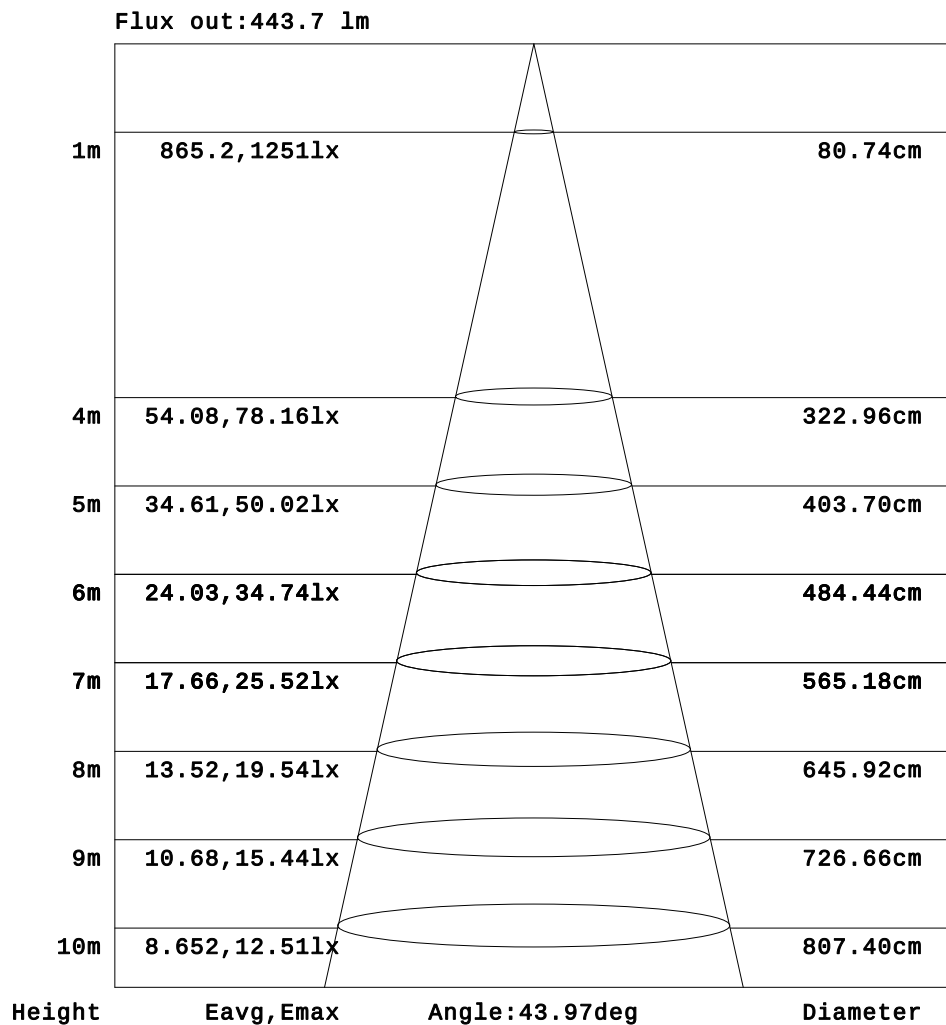


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-01

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:277.2V I:0.1192A P:18.49W PF:0.5595 Freq:50.00Hz Lamp Flux:784.133x1 lm		
NAME: 8.03.036.0003 45° SP-PZT-R110-3P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025070103
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



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:28.0DEG
Operators:QC1
Test Date:2025-08-01

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:277.2V I:0.1192A P:18.49W PF:0.5595 Freq:50.00Hz Lamp Flux:784.133x1 lm		
NAME: 8.03.036.0003 45° SP-PZT-R110-3P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025070103
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

Table--1

UNIT: cd

H(°) \ V(°)	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
-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
-85	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
-80	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
-75	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
-70	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
-65	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
-60	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
-55	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	0.28	1.95	3.45	4.88	6.15	7.13
-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	4.51	7.48	10.3	12.7	14.6	15.7
-45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	5.10	8.92	13.3	19.4	25.5	31.7	38.0	44.3	49.1
-40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.41	11.7	19.4	27.8	36.7	46.1	55.6	65.9	76.3	83.7
-35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	4.37	10.1	18.4	28.5	41.2	58.1	79.8	105	131	157	174
-30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.03	10.4	18.9	28.8	42.1	60.6	87.4	123	165	208	245	269
-25	0.00	0.00	0.00	0.00	0.00	0.00	0.08	4.21	12.8	22.4	34.7	53.2	83.7	133	203	290	377	456	506
-20	0.00	0.00	0.00	0.00	0.00	0.00	1.17	9.46	18.7	30.3	46.7	74.2	123	202	316	451	581	691	752
-15	0.00	0.00	0.00	0.00	0.00	0.00	1.63	9.87	19.6	32.0	51.0	83.3	142	243	402	603	789	912	970
-10	0.00	0.00	0.00	0.00	0.00	0.00	4.73	13.9	24.8	40.0	65.2	110	193	337	566	837	1059	1165	1199
-5	0.00	0.00	0.00	0.00	0.00	0.00	4.05	13.4	24.3	39.7	65.4	109	188	335	572	860	1090	1195	1223
0	0.00	0.00	0.00	0.00	0.00	0.00	6.84	16.9	28.9	47.8	79.2	132	229	413	692	991	1182	1243	1250
5	0.00	0.00	0.00	0.00	0.00	0.00	4.90	14.7	26.2	43.1	70.7	115	196	345	582	862	1085	1193	1231
10	0.00	0.00	0.00	0.00	0.00	0.00	6.62	16.7	28.8	47.6	76.6	123	209	358	583	838	1049	1167	1214
15	0.00	0.00	0.00	0.00	0.00	0.00	4.02	13.6	24.7	40.5	63.8	98.4	157	255	407	598	787	926	994
20	0.00	0.00	0.00	0.00	0.00	0.00	5.00	14.6	25.8	41.3	62.7	92.3	137	204	303	438	591	725	779
25	0.00	0.00	0.00	0.00	0.00	0.00	1.79	10.3	20.3	33.3	49.9	71.1	101	143	203	285	385	480	530
30	0.00	0.00	0.00	0.00	0.00	0.00	1.43	9.79	19.4	31.4	44.8	60.1	78.8	102	132	171	219	266	284
35	0.00	0.00	0.00	0.00	0.00	0.00	0.16	5.20	13.6	23.8	35.1	46.8	60.1	75.6	94.7	118	148	177	192
40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79	11.4	20.6	30.0	38.5	47.2	56.3	66.2	77.0	88.5	97.5	101
45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	5.52	13.0	21.3	28.8	35.8	42.7	49.6	56.8	64.0	70.2	73.3
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41	8.74	15.7	21.9	27.3	31.9	35.8	39.4	42.4	44.7	45.7
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	3.69	7.63	13.3	18.1	22.2	25.4	28.2	30.6	32.4	33.4
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	6.66	10.7	14.0	16.2	18.1	19.7	20.7	21.3
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	2.89	4.95	6.69	7.92	8.92	10.2	11.2	11.8
70	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	0.26	1.21	1.91	2.30
75	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	0.04	0.52	0.89	1.12
80	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
85	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
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
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 Operators:QC1
 Test Date:2025-08-01

V(B) Range:-80 - 80DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
 Humidity:83%
 Test Distance:8.300m [K=1.0000]
 Remarks:

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SPEC.:	DIM.:	SERIAL No.:2025070103
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

Table--2 UNIT: cd

H(°) \ V(°)	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
-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
-85	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
-80	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
-75	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
-70	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
-65	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
-60	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
-55	7.92	7.61	6.93	5.85	4.54	3.06	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-50	15.8	15.0	13.5	11.2	8.51	5.50	2.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-45	50.2	47.3	41.4	34.6	27.8	21.7	15.8	10.6	6.88	3.39	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-40	84.1	77.6	66.6	55.2	44.5	35.5	27.2	19.6	12.4	5.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-35	177	162	134	106	81.9	61.4	45.0	32.0	21.9	13.5	5.87	1.55	0.00	0.00	0.00	0.00	0.00	0.00
-30	267	235	190	147	111	80.3	57.1	39.9	27.8	18.4	9.75	1.44	0.00	0.00	0.00	0.00	0.00	0.00
-25	509	451	359	267	190	131	87.6	58.1	38.4	25.0	15.1	6.21	0.36	0.00	0.00	0.00	0.00	0.00
-20	736	632	490	353	242	161	104	67.1	42.8	27.4	16.8	7.56	0.01	0.00	0.00	0.00	0.00	0.00
-15	970	890	743	554	374	232	142	88.6	55.8	35.1	21.7	11.5	2.49	0.00	0.00	0.00	0.00	0.00
-10	1185	1099	924	679	441	260	154	94.5	59.0	36.5	22.3	11.7	2.48	0.00	0.00	0.00	0.00	0.00
-5	1221	1172	1041	797	523	308	179	108	68.2	42.9	26.2	14.6	4.91	0.00	0.00	0.00	0.00	0.00
0	1248	1210	1075	803	507	291	168	102	65.6	41.3	25.0	13.4	3.66	0.00	0.00	0.00	0.00	0.00
5	1226	1184	1055	804	519	302	176	107	70.0	45.4	28.1	15.7	5.57	0.00	0.00	0.00	0.00	0.00
10	1195	1125	951	687	431	249	149	94.5	63.1	41.4	25.8	13.8	3.70	0.00	0.00	0.00	0.00	0.00
15	979	905	768	576	379	230	142	92.1	62.4	42.1	26.9	14.6	4.65	0.00	0.00	0.00	0.00	0.00
20	742	641	514	381	258	168	110	75.4	52.6	36.1	22.8	11.3	1.93	0.00	0.00	0.00	0.00	0.00
25	516	455	373	288	206	142	97.7	69.4	49.7	35.1	22.7	11.4	2.30	0.00	0.00	0.00	0.00	0.00
30	271	237	198	160	126	96.1	72.3	54.5	40.6	29.0	17.7	7.63	0.07	0.00	0.00	0.00	0.00	0.00
35	188	169	145	121	98.9	78.7	61.5	48.0	36.6	26.1	16.0	6.58	0.45	0.00	0.00	0.00	0.00	0.00
40	98.8	92.1	83.3	73.8	63.7	53.8	44.7	36.6	28.3	19.2	10.2	2.22	0.00	0.00	0.00	0.00	0.00	0.00
45	72.6	69.0	63.7	57.5	50.9	44.1	37.3	30.5	23.4	15.6	7.72	1.85	0.00	0.00	0.00	0.00	0.00	0.00
50	45.4	44.0	41.7	38.7	35.4	31.6	27.1	21.6	15.4	8.74	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	33.5	32.8	31.2	29.1	26.5	23.6	19.9	15.3	10.2	5.05	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	21.5	21.1	20.0	18.5	16.6	14.2	10.9	7.13	2.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	12.0	11.7	11.0	9.98	8.55	7.38	5.81	3.98	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	2.37	2.18	1.66	0.94	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
75	1.18	1.12	0.89	0.55	0.06	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
80	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
85	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
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

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-01

V(β) Range:-80 - 80DEG
V(β) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354
Humidity:83%
Test Distance:8.300m [K=1.0000]
Remarks: