

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)	3309.8 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
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Beam Spread	At 10% of Imax	54.4V x 51.1H
	At 50% of Imax	28.1V x 26.9H
	At 90% of Imax	7.5V x 10.9H

Beam Flux	Total	999.4 lumens per klm.
	To 10% of Imax	773.1 lumens per klm.
	To 50% of Imax	401.9 lumens per klm.
	To 90% of Imax	48.0 lumens per klm.

Upward LOR	0.0 %
Downward LOR	99.9 %

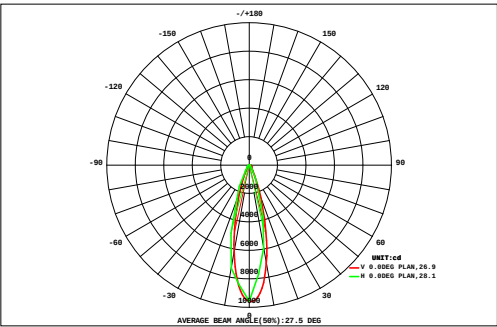
Luminaire Efficiency(Light Output Ratio)	100.0 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-08

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:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.4V I:0.6379A P:50.00W PF:0.6641 Freq:50.00Hz Lamp Flux:2895.48x1 lm		
NAME: SP-PZT-R170-12P-RDM-5	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080071
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:57.91lm/W	
MODEL:SP-PZT-R170-12P-RDM-5		Imax(cd)	9583
NOMINAL POWER(W)	50	AVAILABILITY(%)	77.7
RATED VOLTAGE(V)	120	Avai. FLUX(lm)	2249
NOMINAL FLUX(lm)	2895.48	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	2895
TEST VOLTAGE(V)	120	θ @50%(H,V)	27,28DEG

AREA FLUX DIAGRAM																	UNIT:lm		Φ t	Φ a
45	0.54	0.72	0.94	1.17	1.39	1.62	1.82	1.99	2.08	2.10	2.03	1.89	1.71	1.50	1.28	1.05	0.83	0.62	25.3	0.00
40	0.75	0.98	1.26	1.53	1.81	2.08	2.33	2.52	2.59	2.55	2.41	2.20	1.94	1.66	1.38	1.10	0.84	0.62	30.5	0.00
35	0.72	1.00	1.34	1.73	2.19	2.73	3.38	4.06	4.54	4.59	4.24	3.68	3.08	2.51	1.97	1.53	1.16	0.85	45.3	0.00
30	0.97	1.35	1.79	2.32	2.98	3.81	4.80	5.72	6.14	5.89	5.16	4.29	3.45	2.69	2.04	1.54	1.13	0.81	56.9	0.00
25	0.89	1.27	1.82	2.59	3.77	5.68	8.62	12.4	15.5	16.1	13.9	10.5	7.21	4.76	3.17	2.19	1.54	1.08	113	81.6
20	1.19	1.74	2.56	3.81	5.93	9.46	14.7	20.4	23.5	22.0	17.3	12.0	7.60	4.70	3.03	2.05	1.40	0.96	154	126
15	0.99	1.48	2.24	3.60	6.36	12.1	21.7	33.8	44.0	46.9	40.9	29.3	17.4	9.31	5.00	2.96	1.89	1.25	281	258
10	1.33	2.05	3.30	5.87	11.6	22.7	39.0	55.6	64.8	61.7	48.2	30.4	16.0	7.89	4.15	2.47	1.56	1.05	380	359
5	0.99	1.50	2.33	3.89	7.36	15.3	30.0	48.5	63.9	69.0	61.4	44.4	26.0	13.0	6.32	3.40	2.04	1.31	401	380
0	1.29	2.02	3.38	6.37	13.3	27.4	48.3	67.8	77.3	73.1	56.5	35.2	18.0	8.44	4.23	2.41	1.52	1.03	448	427
-5	0.91	1.34	1.98	3.11	5.47	10.7	20.9	34.9	47.6	52.7	47.9	35.3	21.3	11.2	5.64	3.10	1.86	1.21	307	285
-10	1.13	1.68	2.57	4.42	8.14	15.2	24.6	33.7	38.4	35.7	26.7	16.2	8.95	4.98	2.97	1.91	1.26	0.87	229	206
-15	0.74	1.07	1.51	2.13	3.17	5.04	8.55	13.6	18.7	21.6	20.3	15.5	10.1	5.98	3.55	2.22	1.46	1.00	136	109
-20	0.84	1.21	1.70	2.39	3.31	4.32	5.16	5.65	5.63	4.93	3.66	2.63	2.05	1.83	1.59	1.24	0.95	0.69	49.8	14.3
-25	0.56	0.77	1.06	1.40	1.83	2.41	3.21	4.23	5.29	5.98	5.78	4.80	3.59	2.60	1.88	1.37	1.01	0.74	48.5	3.04
-30	0.59	0.78	1.04	1.29	1.50	1.63	1.65	1.50	1.33	1.17	1.10	1.12	1.17	1.13	0.96	0.80	0.63	0.48	19.9	0.00
-35	0.38	0.52	0.67	0.87	1.06	1.26	1.46	1.66	1.84	1.95	1.92	1.76	1.52	1.26	1.03	0.82	0.64	0.48	21.1	0.00
-40	0.37	0.48	0.59	0.72	0.82	0.89	0.93	0.93	0.93	0.93	0.91	0.86	0.78	0.68	0.59	0.49	0.38	0.28	12.6	0.00
-45	-45	-40	-35	-30	-25	-20	-15	-10	HORIZONTAL(DEG)	10	15	20	25	30	35	40	45			
Φ t	15.2	21.9	32.1	49.2	82.0	144	241	349	424	429	360	252	152	86.2	50.8	32.7	22.1	15.3	2759	---
Φ a	0.00	0.00	0.00	5.42	42.9	114	215	324	399	404	335	229	127	49.6	5.32	0.00	0.00	0.00	---	2249

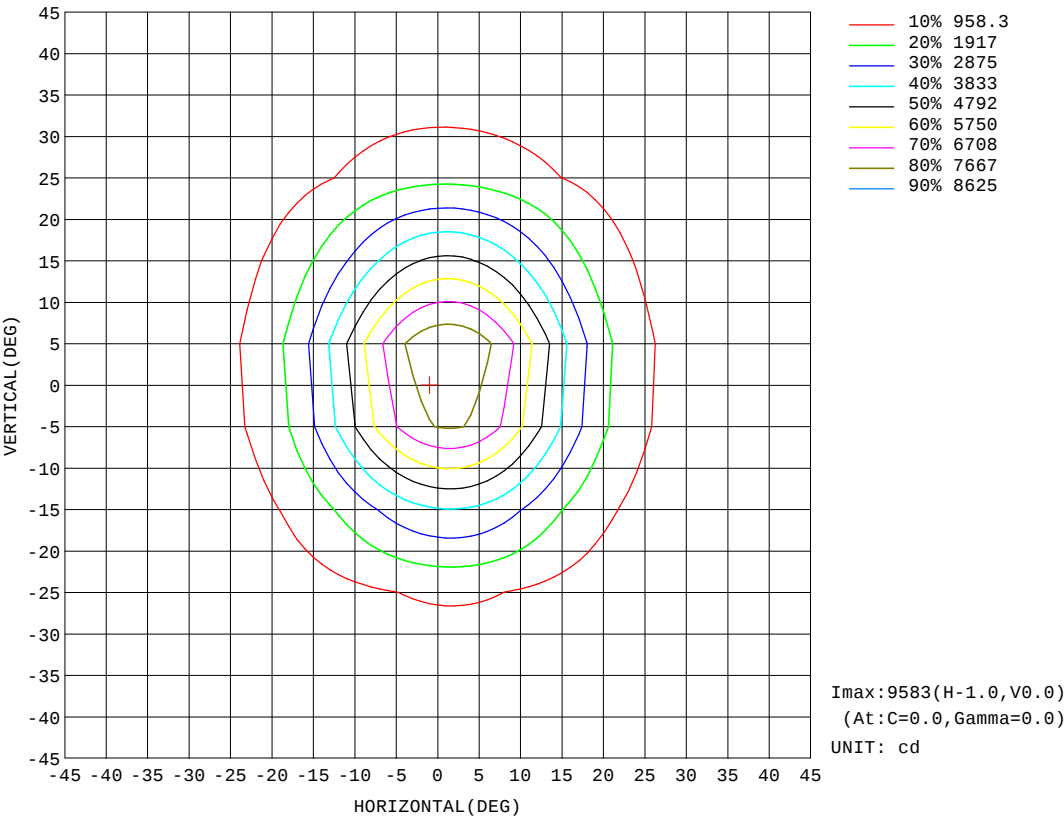
one-half-peak spread: U:12.9,D:15.4 , L:13.3,R:13.8 NEMA Beam Type: Type 4

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

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:120.4V I:0.6379A P:50.00W PF:0.6641 Freq:50.00Hz Lamp Flux:2895.48x1 lm		
NAME: SP-PZT-R170-12P-RDM-5	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080071
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

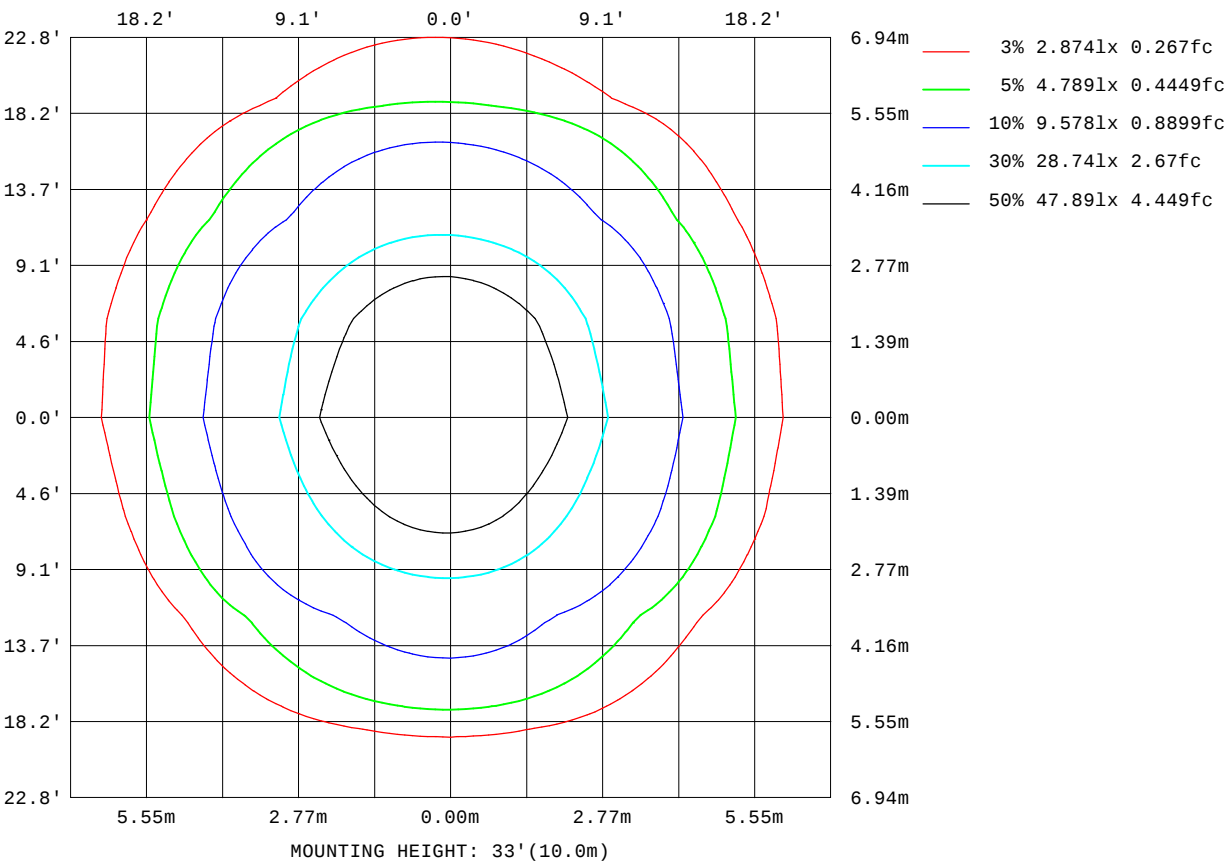


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Remarks:

ISOLUX DIAGRAM

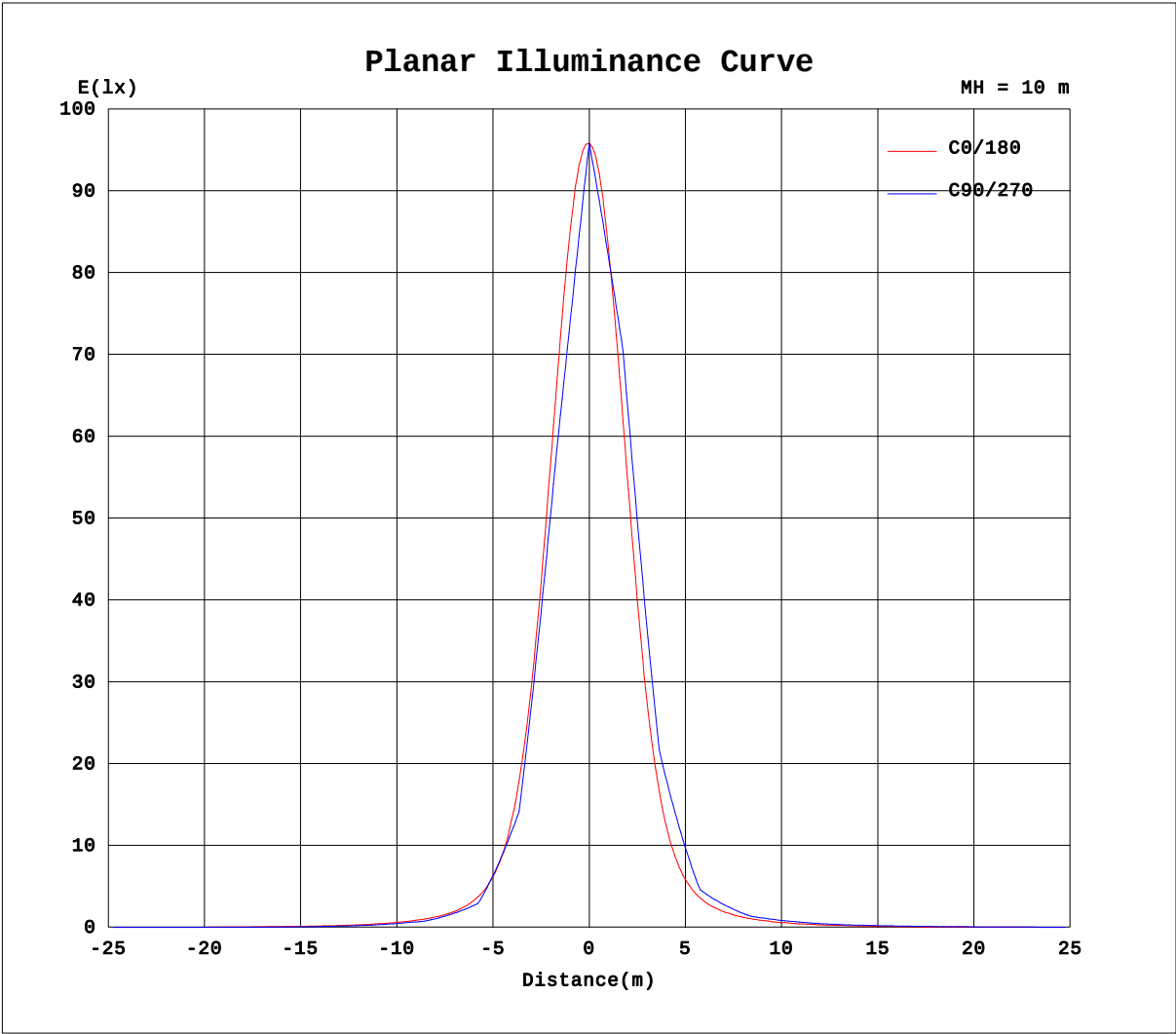
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Test Speed: HIGH
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Test Date:2025-08-08

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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

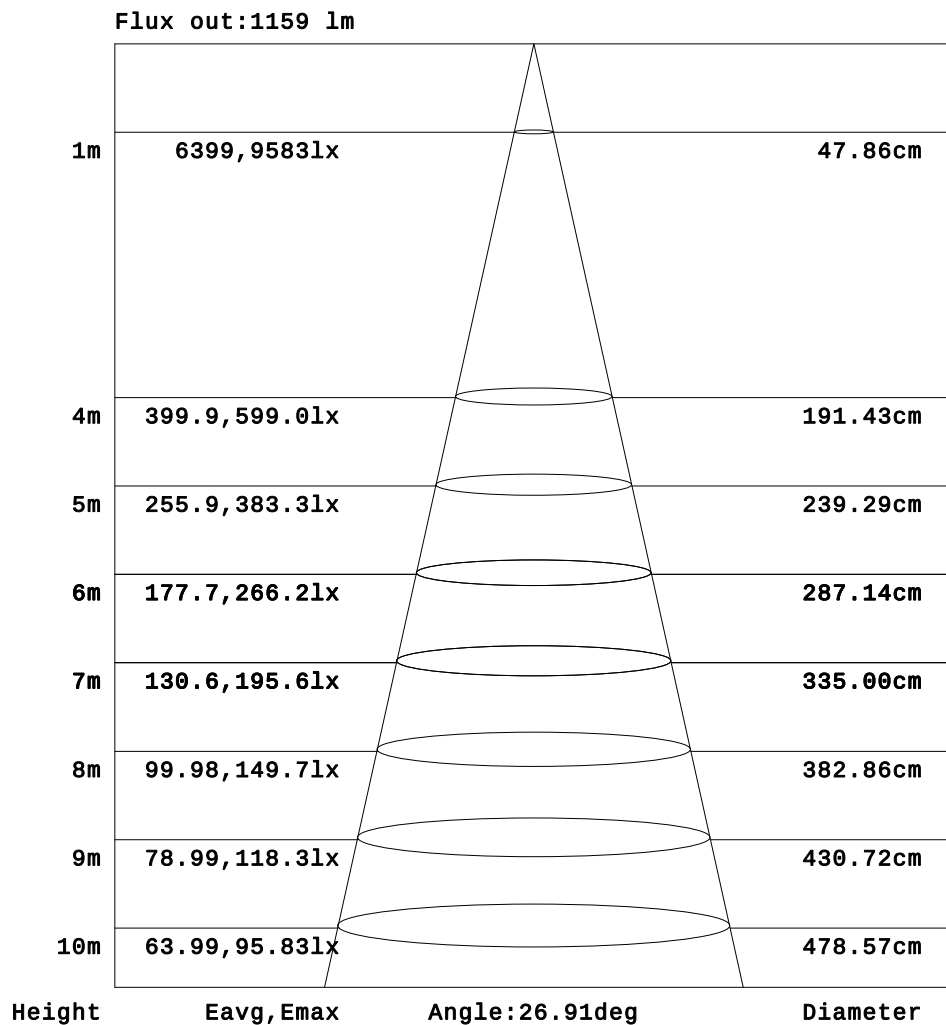


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Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:120.4V I:0.6379A P:50.00W PF:0.6641 Freq:50.00Hz Lamp Flux:2895.48x1 lm		
NAME: SP-PZT-R170-12P-RDM-5	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080071
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.

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Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
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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

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SPEC.:	DIM.:	SERIAL No.:2025080071
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

Table--1																	UNIT: cd			
H(DEG) V(DEG)	-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	1.95	3.89	5.82	7.62	9.16	10.4	11.5	12.2	
-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	5.45	9.33	13.2	16.5	19.4	21.8	23.6	25.0	
-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	5.14	9.32	14.2	21.2	28.2	35.3	42.4	48.8	53.3	55.8	56.6	
-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.48	13.4	22.5	32.5	42.6	52.7	63.1	73.8	82.3	87.3	89.3	88.0	
-45	0.00	0.00	0.00	0.00	0.00	0.00	3.46	11.5	23.0	36.0	50.3	63.6	77.4	91.9	106	118	127	134	137	
-40	0.00	0.00	0.00	0.00	0.00	0.27	12.2	26.3	42.3	61.0	79.0	95.3	114	132	148	161	173	182	187	
-35	0.00	0.00	0.00	0.00	0.00	2.71	15.1	32.5	51.0	70.5	91.5	114	142	172	203	236	270	300	318	
-30	0.00	0.00	0.00	0.00	0.00	11.9	31.9	52.9	75.0	96.5	121	155	194	237	284	337	394	437	453	
-25	0.00	0.00	0.00	0.00	0.00	11.3	31.5	53.9	77.2	102	133	174	229	303	411	563	754	949	1074	
-20	0.00	0.00	0.00	0.00	5.08	26.2	48.6	73.4	98.6	130	174	233	316	446	648	932	1280	1589	1715	
-15	0.00	0.00	0.00	0.00	1.65	21.0	44.3	69.4	96.8	131	177	242	341	523	873	1499	2372	3260	3783	
-10	0.00	0.00	0.00	0.00	11.6	33.8	59.7	86.2	120	165	228	318	484	828	1518	2723	4215	5478	5918	
-5	0.00	0.00	0.00	0.00	5.27	26.9	52.3	79.9	113	154	212	301	452	769	1467	2819	4781	6683	7703	
0	0.00	0.00	0.00	0.00	15.9	39.0	66.4	98.4	135	184	257	382	618	1148	2309	4409	6986	9002	9573	
5	0.00	0.00	0.00	0.00	7.34	28.9	55.5	85.2	120	162	224	322	489	833	1598	3081	5233	7326	8433	
10	0.00	0.00	0.00	0.00	15.7	38.8	67.3	98.5	134	184	258	372	573	995	1884	3384	5281	6867	7364	
15	0.00	0.00	0.00	0.00	6.77	27.5	53.7	82.9	115	155	212	294	422	648	1099	1925	3102	4310	4970	
20	0.00	0.00	0.00	0.00	13.8	35.9	63.0	91.9	125	168	224	303	417	592	882	1338	1946	2474	2604	
25	0.00	0.00	0.00	0.00	3.91	22.8	47.2	73.1	102	137	180	237	312	412	566	803	1133	1480	1661	
30	0.00	0.00	0.00	0.00	8.58	27.8	51.7	76.5	105	138	178	226	279	341	417	511	615	691	704	
35	0.00	0.00	0.00	0.00	0.85	15.5	36.2	57.9	82.3	111	141	177	218	261	309	366	429	484	508	
40	0.00	0.00	0.00	0.00	2.43	18.2	38.0	58.1	81.2	107	132	161	190	218	245	271	293	306	308	
45	0.00	0.00	0.00	0.00	0.00	6.65	22.4	39.8	58.5	80.1	101	124	148	171	192	211	228	239	244	
50	0.00	0.00	0.00	0.00	0.00	6.56	20.8	35.9	52.4	71.1	88.3	106	125	141	155	166	174	178	180	
55	0.00	0.00	0.00	0.00	0.00	0.82	7.75	20.3	33.4	47.8	63.0	77.2	91.9	106	118	128	135	140	142	
60	0.00	0.00	0.00	0.00	0.00	0.00	4.49	14.8	25.3	37.0	49.2	59.8	70.7	81.0	89.8	96.9	102	104	105	
65	0.00	0.00	0.00	0.00	0.00	0.00	0.43	5.32	10.6	18.5	27.7	36.5	44.8	52.9	60.2	66.4	71.1	74.2	75.4	
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	7.31	13.4	19.9	25.5	30.8	35.9	40.0	43.5	45.6	45.8	
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.49	5.41	8.70	11.7	14.3	17.0	19.2	21.1	22.5	22.9	
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	

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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	12.8	12.8	12.3	10.9	8.68	6.03	3.54	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-60	25.7	25.4	23.7	20.2	15.3	10.0	5.09	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-55	55.7	53.5	50.6	46.5	41.0	34.8	28.4	21.1	14.8	9.44	3.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-50	84.0	79.5	74.6	68.5	61.9	54.5	45.9	35.9	25.4	14.4	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-45	137	131	122	110	97.1	85.1	72.6	59.1	45.5	32.2	19.2	8.80	1.66	0.00	0.00	0.00	0.00	0.00
-40	187	177	161	140	123	106	88.5	71.3	55.0	39.2	25.5	11.9	0.00	0.00	0.00	0.00	0.00	0.00
-35	315	292	258	218	183	151	125	101	80.3	60.1	41.1	25.2	9.81	0.73	0.00	0.00	0.00	0.00
-30	430	382	321	267	217	175	142	114	89.4	65.2	43.8	25.8	10.3	0.00	0.00	0.00	0.00	0.00
-25	1046	874	657	472	344	257	195	152	118	89.3	62.8	39.7	21.0	4.62	0.00	0.00	0.00	0.00
-20	1552	1192	830	562	394	285	211	160	123	92.1	62.3	37.7	18.2	1.85	0.00	0.00	0.00	0.00
-15	3649	2899	1934	1157	680	423	286	204	152	114	82.5	53.9	30.0	10.6	0.00	0.00	0.00	0.00
-10	5255	3825	2345	1302	720	433	283	201	149	110	79.0	49.8	25.3	5.90	0.00	0.00	0.00	0.00
-5	7392	5828	3764	2072	1062	584	363	245	178	130	94.0	63.9	36.9	14.6	0.00	0.00	0.00	0.00
0	8515	6194	3684	1876	931	521	328	228	165	119	84.0	55.4	29.3	7.98	0.00	0.00	0.00	0.00
5	8067	6359	4090	2225	1124	615	383	258	187	137	97.5	66.6	40.2	16.3	0.00	0.00	0.00	0.00
10	6506	4742	2839	1514	810	483	318	224	166	121	84.6	55.9	30.8	8.58	0.00	0.00	0.00	0.00
15	4724	3733	2473	1443	819	501	340	239	177	132	94.0	63.4	38.6	15.4	0.00	0.00	0.00	0.00
20	2275	1728	1189	778	519	367	268	198	149	111	76.9	50.4	27.1	6.22	0.00	0.00	0.00	0.00
25	1565	1279	954	676	479	350	264	200	152	116	83.4	55.3	32.9	11.9	0.00	0.00	0.00	0.00
30	653	569	481	397	320	258	205	160	125	94.4	65.4	41.9	21.2	2.55	0.00	0.00	0.00	0.00
35	492	447	393	338	285	235	192	154	121	93.1	66.8	43.4	24.1	6.16	0.00	0.00	0.00	0.00
40	300	283	261	235	207	177	148	119	93.9	70.7	47.7	29.4	12.2	0.00	0.00	0.00	0.00	0.00
45	241	232	218	200	179	157	133	109	86.3	66.3	46.2	28.8	13.2	1.26	0.00	0.00	0.00	0.00
50	177	171	161	149	134	117	98.8	79.7	62.6	45.9	29.6	15.4	2.56	0.00	0.00	0.00	0.00	0.00
55	141	137	131	122	110	96.9	82.5	67.0	52.6	38.8	25.1	12.8	3.81	0.00	0.00	0.00	0.00	0.00
60	103	99.5	93.6	85.5	75.9	65.6	53.9	42.4	31.6	20.5	10.5	1.04	0.00	0.00	0.00	0.00	0.00	0.00
65	74.7	72.3	68.1	62.3	55.5	47.5	38.9	30.1	21.8	13.4	7.23	2.26	0.00	0.00	0.00	0.00	0.00	0.00
70	44.7	42.1	38.4	34.0	28.9	22.6	16.7	11.1	5.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	22.6	21.7	20.0	17.9	15.5	12.6	9.52	6.66	3.83	0.92	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:2025-08-08

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: