

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)	1027.4 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
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Beam Spread	At 10% of Imax	100.5V x 97.9H
	At 50% of Imax	55.4V x 55.1H
	At 90% of Imax	20.5V x 20.8H

Beam Flux	Total	999.5 lumens per klm.
	To 10% of Imax	908.4 lumens per klm.
	To 50% of Imax	525.8 lumens per klm.
	To 90% of Imax	97.0 lumens per klm.

Upward LOR	0.0 %
Downward LOR	99.9 %

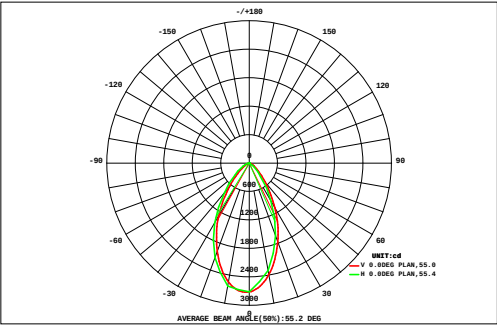
Luminaire Efficiency(Light Output Ratio)	100.0 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-06

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:120.3V I:0.6385A P:50.16W PF:0.6609 Freq:50.00Hz Lamp Flux:2651.22x1 lm		
NAME: SP-PZT-R170-12P-RDM-2	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080052
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:52.86lm/W	
MODEL:SP-PZT-R170-12P-RDM-2		Imax(cd)	2724
NOMINAL POWER(W)	50	AVAILABILITY(%)	91.0
RATED VOLTAGE(V)	120	Avai. FLUX(lm)	2413
NOMINAL FLUX(lm)	2651.22	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	2651
TEST VOLTAGE(V)	120	θ @50%(H,V)	55,55DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.04	0.22	0.52	1.01	1.47	1.76	1.81	1.61	1.20	0.74	0.32	0.10	0.00	0.00	0.00	10.8	0.00
80	0.00	0.00	0.02	0.30	0.99	1.91	2.91	3.74	4.27	4.34	3.95	3.15	2.16	1.24	0.49	0.06	0.00	0.00	29.5	0.00
70	0.00	0.00	0.13	0.83	1.99	3.57	5.40	7.13	8.34	8.53	7.63	5.90	3.96	2.28	1.05	0.26	0.00	0.00	57.0	19.4
60	0.00	0.00	0.34	1.36	3.11	5.87	9.74	13.9	17.0	17.5	15.1	11.0	6.79	3.60	1.61	0.50	0.02	0.00	107	88.2
50	0.00	0.01	0.53	1.86	4.48	9.41	17.1	25.8	32.2	33.2	28.2	19.7	11.3	5.38	2.17	0.71	0.06	0.00	192	179
40	0.00	0.03	0.67	2.27	6.05	13.9	26.6	41.3	52.0	53.5	45.1	31.0	16.9	7.49	2.73	0.87	0.09	0.00	301	290
30	0.00	0.05	0.77	2.58	7.38	17.9	35.6	55.2	69.5	71.6	59.9	41.1	22.1	9.28	3.15	0.96	0.11	0.00	397	388
20	0.00	0.05	0.77	2.67	7.86	19.8	39.7	61.7	78.9	81.5	67.6	45.8	24.6	10.0	3.30	0.97	0.11	0.00	445	437
10	0.00	0.04	0.70	2.50	7.26	18.5	37.4	58.3	74.3	76.8	63.7	43.1	22.8	9.15	3.06	0.88	0.09	0.00	419	410
0	0.00	0.02	0.56	2.07	5.69	14.2	29.0	45.8	57.9	59.8	50.2	34.0	17.7	7.19	2.52	0.74	0.06	0.00	327	317
-10	0.00	0.00	0.37	1.55	3.93	9.04	18.0	29.0	37.0	38.2	31.9	21.1	11.0	4.82	1.83	0.54	0.02	0.00	208	196
-20	0.00	0.00	0.15	0.96	2.42	4.93	8.74	13.6	17.6	18.4	15.2	10.3	5.87	2.85	1.21	0.30	0.00	0.00	102	83.1
-30	0.00	0.00	0.02	0.38	1.22	2.37	3.85	5.32	6.50	6.66	5.77	4.32	2.70	1.45	0.59	0.07	0.00	0.00	41.2	5.41
-40	0.00	0.00	0.00	0.03	0.24	0.63	1.15	1.66	2.00	2.07	1.80	1.32	0.84	0.44	0.09	0.00	0.00	0.00	12.3	0.00
-50	0.00	0.00	0.00	0.00	0.00	0.03	0.12	0.19	0.20	0.21	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.00	1.13	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	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	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	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	0.00
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)	20	30	40	50	60	70	80	90			
Φ t	0.00	0.20	5.03	19.4	52.8	123	236	364	460	474	398	273	150	65.5	23.9	6.87	0.57	0.00	2651	---
Φ a	0.00	0.00	0.00	0.00	26.3	103	219	348	443	458	382	257	132	43.7	0.22	0.00	0.00	0.00	---	2413

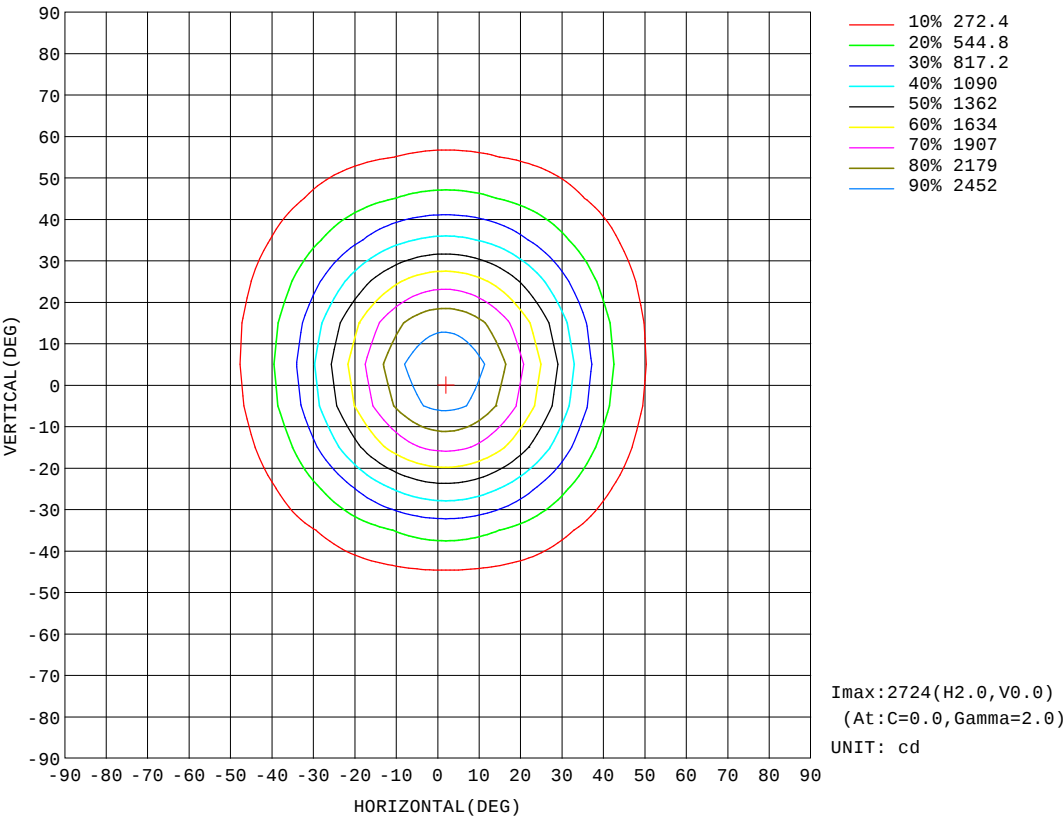
one-half-peak spread: U:24.0,D:31.8 , L:28.2, Beam Type: Type 5 x 6 (H x V)

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-06

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:

ISOCANDELA DIAGRAM

Test:U:120.3V I:0.6385A P:50.16W PF:0.6609 Freq:50.00Hz Lamp Flux:2651.22x1 lm		
NAME: SP-PZT-R170-12P-RDM-2	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080052
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

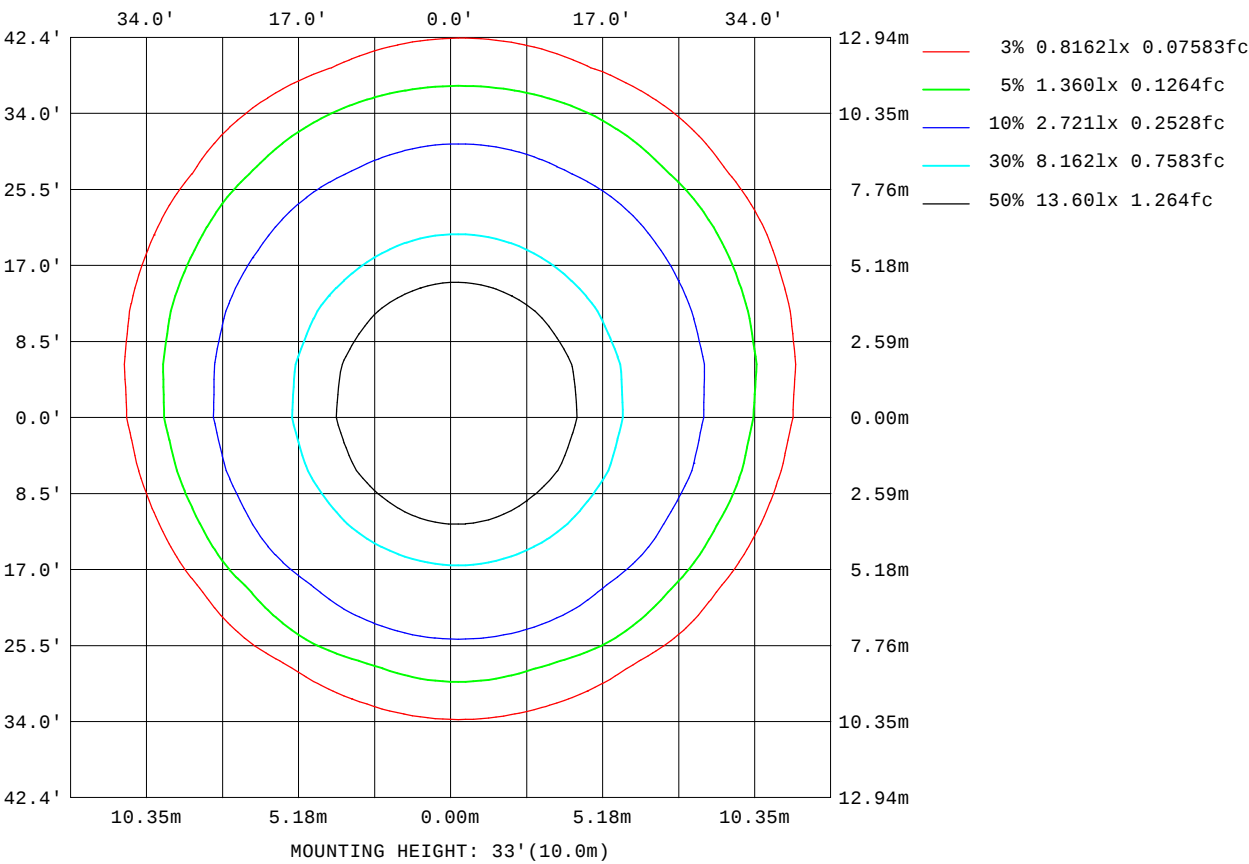


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H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
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Test Date:2025-08-06

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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:

ISOLUX DIAGRAM

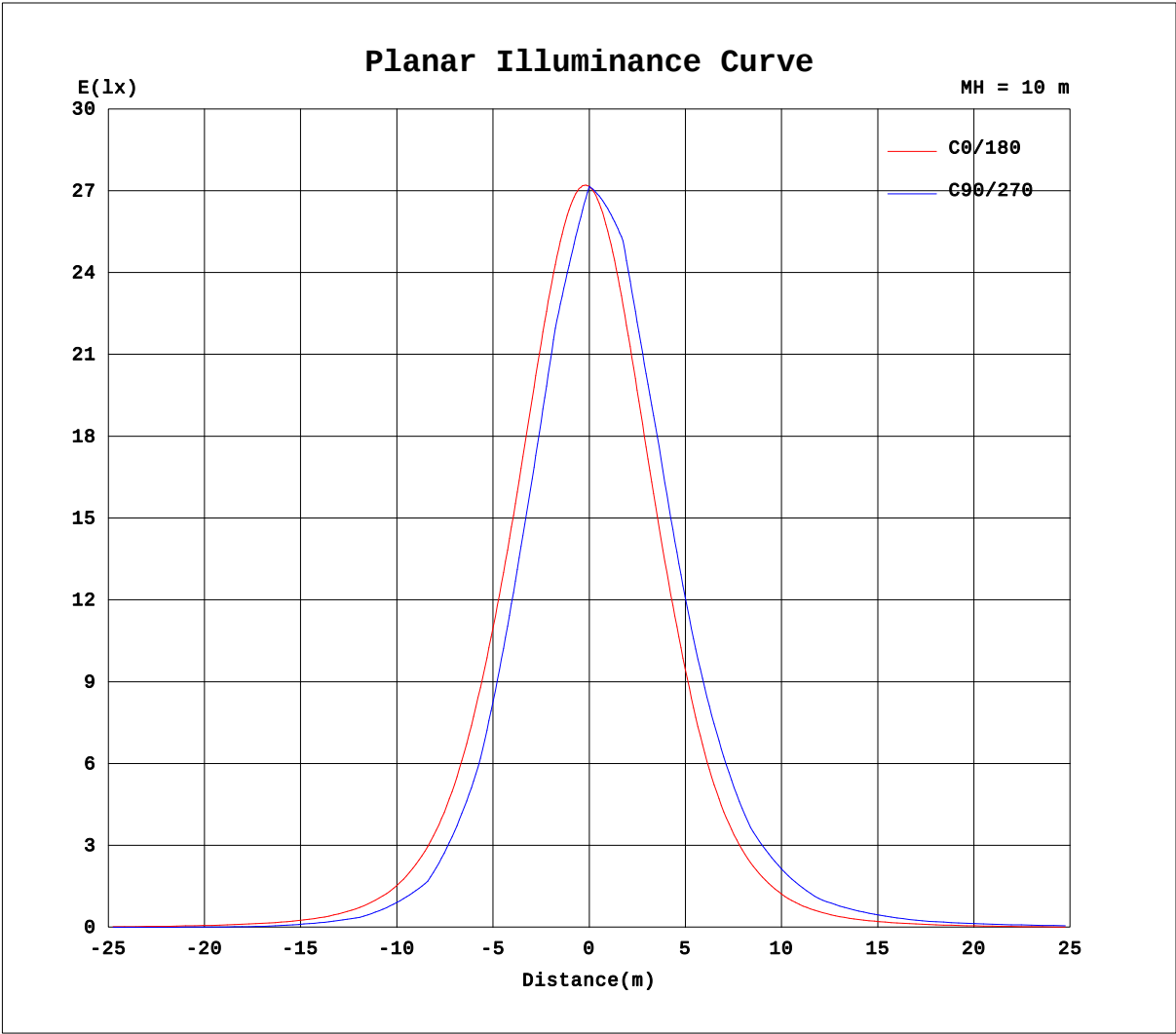
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Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-06

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

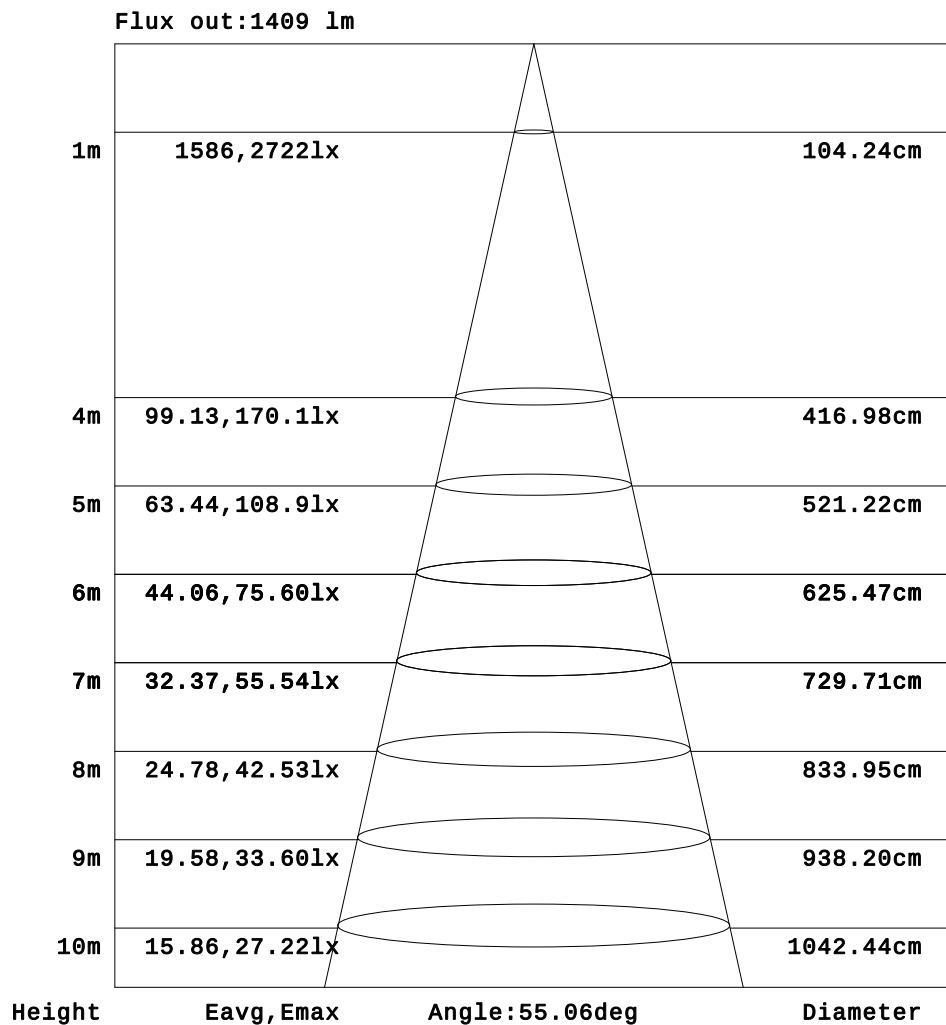


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Remarks:

AAI Figure

Test:U:120.3V I:0.6385A P:50.16W PF:0.6609 Freq:50.00Hz Lamp Flux:2651.22x1 lm		
NAME: SP-PZT-R170-12P-RDM-2	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080052
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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H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-06

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:120.3V I:0.6385A P:50.16W PF:0.6609 Freq:50.00Hz Lamp Flux:2651.22x1 lm		
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SPEC.:	DIM.:	SERIAL No.:2025080052
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	2.80	5.89	8.76	10.9	12.2	13.0	13.5	13.8
-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.60	11.8	17.5	21.9	24.3	26.1	27.1	27.5
-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.27	8.37	14.3	20.6	30.1	40.2	50.5	60.4	68.7	75.7	81.1	84.2
-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.54	16.7	28.6	41.2	54.7	68.6	83.4	99.0	113	125	135	141
-45	0.00	0.00	0.00	0.00	0.00	0.61	7.94	21.2	38.1	56.4	75.6	98.6	124	151	179	206	230	249	259
-40	0.00	0.00	0.00	0.00	0.00	1.23	15.9	35.8	59.5	84.2	110	142	180	219	260	298	334	363	377
-35	0.00	0.00	0.00	0.00	0.01	9.06	29.1	53.0	80.2	112	153	203	264	334	414	489	557	613	641
-30	0.00	0.00	0.00	0.00	0.01	16.9	42.4	70.2	101	140	196	264	349	449	568	679	780	862	905
-25	0.00	0.00	0.00	0.00	4.21	25.8	53.6	85.6	124	178	253	355	491	646	816	978	1116	1217	1269
-20	0.00	0.00	0.00	0.00	8.41	34.6	64.9	101	147	215	310	446	634	842	1064	1278	1452	1573	1634
-15	0.00	0.00	0.00	0.00	12.4	40.3	73.3	114	169	252	376	546	770	1027	1290	1535	1741	1892	1967
-10	0.00	0.00	0.00	0.00	16.3	45.9	81.8	126	191	289	442	646	907	1212	1516	1791	2030	2211	2300
-5	0.00	0.00	0.00	0.00	19.3	50.3	88.6	135	206	318	485	708	995	1321	1641	1943	2209	2409	2508
0	0.00	0.00	0.00	0.00	22.3	54.6	95.3	143	221	347	528	771	1082	1431	1765	2094	2388	2607	2717
5	0.00	0.00	0.00	0.02	22.7	55.6	95.8	144	222	348	525	763	1069	1412	1744	2066	2353	2569	2676
10	0.00	0.00	0.00	0.03	23.0	56.6	96.2	144	224	348	523	756	1056	1393	1722	2038	2319	2530	2635
15	0.00	0.00	0.00	0.02	22.3	55.7	93.7	140	214	328	488	698	966	1271	1576	1859	2105	2288	2379
20	0.00	0.00	0.00	0.00	21.6	54.7	91.2	135	203	307	453	640	875	1149	1430	1680	1891	2047	2123
25	0.00	0.00	0.00	0.00	18.5	49.9	84.3	125	185	273	395	550	743	966	1199	1414	1596	1727	1791
30	0.00	0.00	0.00	0.00	15.5	45.1	77.3	115	167	239	337	460	610	783	967	1147	1300	1408	1460
35	0.00	0.00	0.00	0.00	11.8	39.1	68.7	103	147	205	281	378	496	628	766	900	1015	1097	1137
40	0.00	0.00	0.00	0.00	8.15	33.0	60.1	90.8	128	172	226	296	382	473	565	654	730	786	814
45	0.00	0.00	0.00	0.00	4.08	24.7	49.1	75.9	108	144	186	238	300	365	431	494	548	588	608
50	0.00	0.00	0.00	0.00	0.01	16.4	38.1	60.9	87.4	116	146	181	218	257	297	335	366	389	401
55	0.00	0.00	0.00	0.00	0.01	8.76	27.1	46.6	68.6	92.4	117	144	172	201	228	253	274	290	297
60	0.00	0.00	0.00	0.00	0.00	1.11	16.2	32.2	49.7	68.9	88.1	108	127	144	159	172	182	190	194
65	0.00	0.00	0.00	0.00	0.00	0.56	8.08	18.7	32.4	47.6	62.9	78.0	93.3	107	119	130	138	144	146
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.16	15.0	26.4	37.7	48.4	59.9	70.6	80.1	87.6	93.6	97.8	99.2
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.58	7.49	13.2	18.9	25.7	33.6	41.0	47.9	53.6	58.2	61.4	62.7
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.90	7.34	11.4	15.7	19.6	22.7	25.0	26.1
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

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:28.0DEG
 Operators:QC1
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 $V(\beta)$ Interval: 5.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.354
 Humidity:83%
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SPEC.:	DIM.:	SERIAL No.:2025080052
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	14.1	13.7	13.0	11.9	10.1	7.67	4.63	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-60	28.2	27.4	26.0	23.8	20.3	15.3	9.27	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-55	84.1	80.5	74.6	67.2	57.8	47.7	38.3	29.4	21.7	14.5	6.98	1.11	0.00	0.00	0.00	0.00	0.00	0.00
-50	140	134	123	111	95.4	80.1	67.4	55.5	43.4	29.0	14.0	2.23	0.00	0.00	0.00	0.00	0.00	0.00
-45	257	244	225	201	173	143	116	90.0	69.7	50.6	32.7	16.2	4.53	0.00	0.00	0.00	0.00	0.00
-40	375	355	327	292	250	206	164	125	95.9	72.2	51.5	30.2	9.06	0.00	0.00	0.00	0.00	0.00
-35	638	601	543	472	392	313	242	181	132	95.8	68.1	43.6	21.1	3.62	0.00	0.00	0.00	0.00
-30	901	847	759	653	533	419	320	238	169	119	84.7	57.0	33.0	7.24	0.00	0.00	0.00	0.00
-25	1261	1194	1081	932	760	592	435	311	219	150	102	67.2	40.1	14.5	0.00	0.00	0.00	0.00
-20	1622	1541	1403	1211	988	765	549	384	269	181	119	77.5	47.1	21.8	0.00	0.00	0.00	0.00
-15	1955	1856	1684	1461	1206	939	681	474	319	210	136	88.6	53.7	26.5	1.39	0.00	0.00	0.00
-10	2287	2170	1964	1711	1425	1112	814	564	369	240	154	99.8	60.3	31.2	2.78	0.00	0.00	0.00
-5	2491	2357	2127	1843	1532	1205	884	613	402	259	164	106	64.1	32.8	4.95	0.00	0.00	0.00
0	2695	2543	2290	1975	1639	1299	954	661	435	279	175	113	67.9	34.4	7.11	0.00	0.00	0.00
5	2655	2508	2261	1955	1626	1291	951	664	441	281	176	115	70.5	35.3	8.39	0.00	0.00	0.00
10	2615	2472	2232	1935	1614	1283	949	666	447	283	178	117	73.0	36.1	9.68	0.00	0.00	0.00
15	2360	2235	2026	1765	1474	1165	866	612	416	267	170	113	71.0	34.5	8.80	0.00	0.00	0.00
20	2104	1998	1820	1595	1333	1047	782	559	384	251	162	109	68.9	32.9	7.92	0.00	0.00	0.00
25	1778	1691	1542	1349	1126	890	672	487	339	225	149	102	64.4	30.3	6.40	0.00	0.00	0.00
30	1451	1384	1264	1102	919	733	562	416	293	199	136	94.7	60.0	27.7	4.88	0.00	0.00	0.00
35	1131	1079	988	867	729	589	457	343	247	172	121	84.3	52.6	23.2	2.45	0.00	0.00	0.00
40	810	775	713	631	539	444	352	270	201	145	105	74.0	45.2	18.7	0.03	0.00	0.00	0.00
45	605	581	538	480	413	345	278	218	167	124	89.9	63.1	37.0	13.8	0.01	0.00	0.00	0.00
50	400	387	363	328	288	246	204	166	133	102	74.8	52.1	28.7	8.92	0.00	0.00	0.00	0.00
55	297	288	272	249	221	191	161	133	106	81.3	59.2	39.6	19.7	4.46	0.00	0.00	0.00	0.00
60	193	189	181	170	155	137	119	99.2	80.2	60.5	43.7	27.1	10.6	0.00	0.00	0.00	0.00	0.00
65	146	143	137	128	116	102	88.2	73.2	58.1	42.9	29.5	15.8	5.30	0.00	0.00	0.00	0.00	0.00
70	99.3	97.4	92.9	86.1	77.9	67.8	57.6	47.3	36.1	25.4	15.3	4.57	0.00	0.00	0.00	0.00	0.00	0.00
75	62.7	61.3	57.9	53.0	47.2	40.5	33.4	26.0	18.1	12.7	7.65	2.28	0.00	0.00	0.00	0.00	0.00	0.00
80	26.1	25.1	22.9	19.8	16.6	13.3	9.22	4.64	0.17	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

$H(\beta)$ Range:-90 - 90DEG
 $H(\beta)$ Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:28.0DEG
 Operators:QC1
 Test Date:2025-08-06

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