

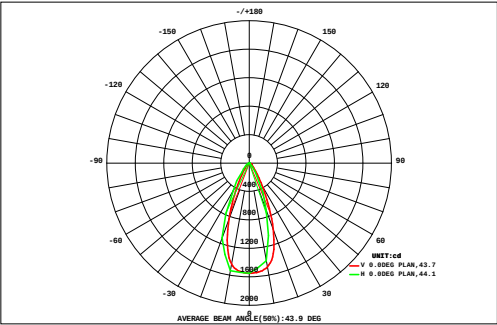
Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)		1605.4 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
Beam Spread	At 10% of Imax	74.0V x 73.0H
	At 50% of Imax	44.1V x 43.7H
	At 90% of Imax	23.7V x 24.6H
Beam Flux	Total	999.5 lumens per klm.
	To 10% of Imax	873.3 lumens per klm.
	To 50% of Imax	562.0 lumens per klm.
	To 90% of Imax	196.6 lumens per klm.
Upward LOR		0.0 %
Downward LOR		100.0 %
Luminaire Efficiency(Light Output Ratio)		100.0 %

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:277.8V I:0.1029A P:14.08W PF:0.4923 Freq:50.00Hz Lamp Flux:963.898x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM-W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080033
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:68.45lm/W	
MODEL: PZT-R170-12P-RDM-W		Imax(cd)	1547
NOMINAL POWER(W)	14	AVAILABILITY(%)	87.6
RATED VOLTAGE(V)	277	Avai. FLUX(lm)	844.0
NOMINAL FLUX(lm)	963.898	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	963.9
TEST VOLTAGE(V)	277	θ @50%(H,V)	44,44DEG

AREA FLUX DIAGRAM																	UNIT:lm			Φ t	Φ a
VERTICAL (DEG)	72	0.00	0.00	0.00	0.01	0.04	0.14	0.23	0.29	0.31	0.30	0.24	0.16	0.06	0.01	0.01	0.00	0.00	0.00	1.79	0.00
	64	0.00	0.00	0.02	0.15	0.29	0.46	0.60	0.70	0.74	0.73	0.65	0.53	0.37	0.21	0.06	0.00	0.00	0.00	5.51	0.00
	56	0.00	0.01	0.11	0.30	0.54	0.79	1.01	1.19	1.29	1.27	1.15	0.95	0.70	0.45	0.23	0.06	0.00	0.00	10.1	0.00
	48	0.00	0.04	0.22	0.49	0.82	1.21	1.64	2.05	2.29	2.26	1.98	1.56	1.11	0.71	0.40	0.15	0.02	0.00	17.0	0.24
	40	0.00	0.10	0.34	0.69	1.18	1.87	2.83	3.93	4.65	4.56	3.71	2.62	1.68	1.01	0.55	0.24	0.04	0.00	30.0	17.7
	32	0.01	0.15	0.43	0.88	1.63	2.97	5.21	8.14	10.2	9.85	7.48	4.64	2.58	1.39	0.73	0.32	0.08	0.00	56.6	48.8
	24	0.02	0.18	0.49	1.06	2.22	4.78	9.94	16.7	21.2	20.8	15.7	8.77	4.11	1.88	0.90	0.39	0.11	0.00	109	103
		0.02	0.19	0.52	1.16	2.66	6.50	14.4	23.4	28.0	28.0	23.2	13.7	5.92	2.37	1.04	0.44	0.14	0.00	152	146
		0.02	0.19	0.53	1.20	2.88	7.52	17.2	27.0	30.7	30.7	26.7	16.3	6.84	2.56	1.07	0.45	0.14	0.00	172	167
		0.02	0.19	0.52	1.19	2.85	7.54	17.0	25.9	29.1	29.0	24.7	14.7	5.98	2.26	0.96	0.40	0.11	0.00	162	157
		0.01	0.15	0.43	0.99	2.19	5.23	11.9	20.2	25.1	24.7	18.9	10.4	4.43	1.85	0.84	0.35	0.08	0.00	128	122
	-24	0.00	0.10	0.32	0.72	1.48	2.97	5.83	9.93	13.2	13.1	9.61	5.64	2.84	1.36	0.65	0.26	0.05	0.00	68.1	61.0
-32	0.00	0.05	0.22	0.50	0.97	1.73	2.86	4.33	5.68	5.66	4.25	2.71	1.59	0.88	0.44	0.16	0.02	0.00	32.0	21.5	
-40	0.00	0.01	0.12	0.32	0.58	0.93	1.25	1.48	1.62	1.59	1.40	1.12	0.78	0.48	0.24	0.06	0.00	0.00	12.0	0.00	
-48	0.00	0.00	0.03	0.15	0.30	0.46	0.61	0.70	0.72	0.70	0.64	0.52	0.36	0.20	0.07	0.01	0.00	0.00	5.45	0.00	
-56	0.00	0.00	0.00	0.00	0.04	0.12	0.21	0.28	0.31	0.28	0.22	0.16	0.09	0.03	0.01	0.00	0.00	0.00	1.75	0.00	
-64	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.04	0.05	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.27	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	0.00	
	-72	-64	-56	-48	-40	-32	-24	-16	HORIZONTAL (DEG)					16	24	32	40	48	56	64	72
Φ t	0.10	1.35	4.32	9.82	20.7	45.2	92.8	146	175	173	141	84.5	39.5	17.7	8.18	3.29	0.78	0.01	964	---	
Φ a	0.00	0.00	0.00	0.00	7.74	36.0	84.6	139	168	166	132	76.7	30.3	4.31	0.00	0.00	0.00	0.00	---	844	

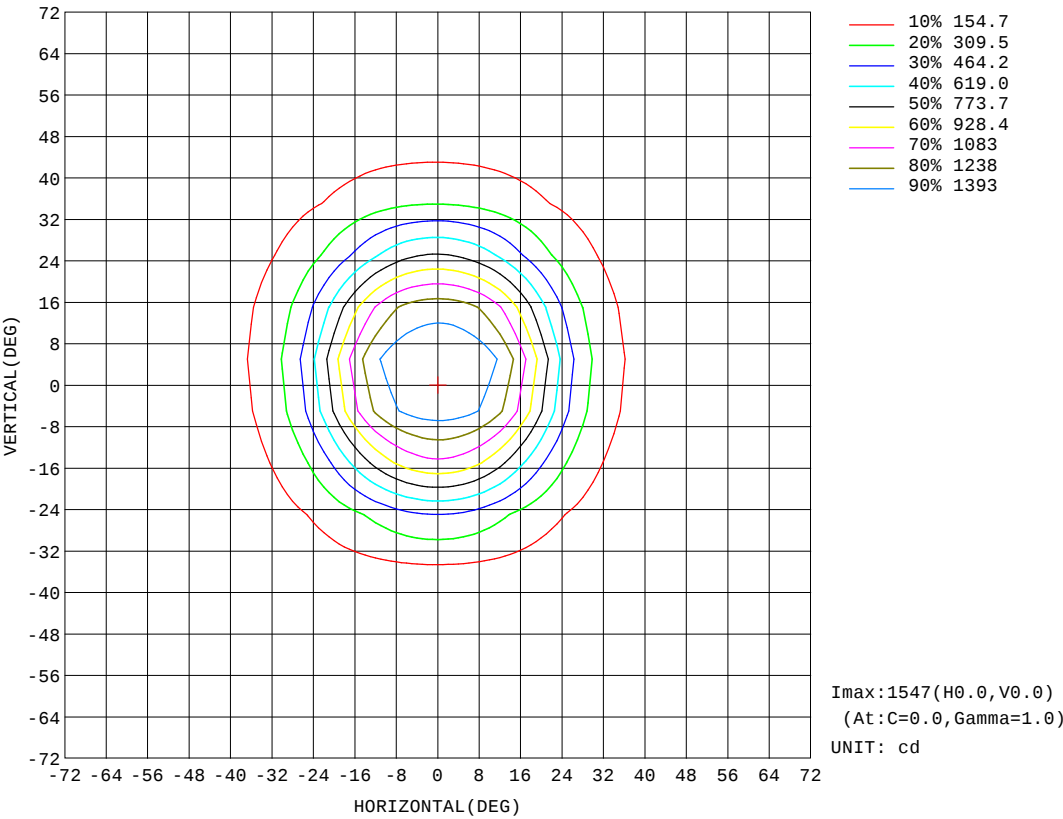
one-half-peak spread: U:19.0,D:25.3 , L:23.1,R:20.9 NEMA Beam Type: Type 5

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

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:277.8V I:0.1029A P:14.08W PF:0.4923 Freq:50.00Hz Lamp Flux:963.898x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM-W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080033
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

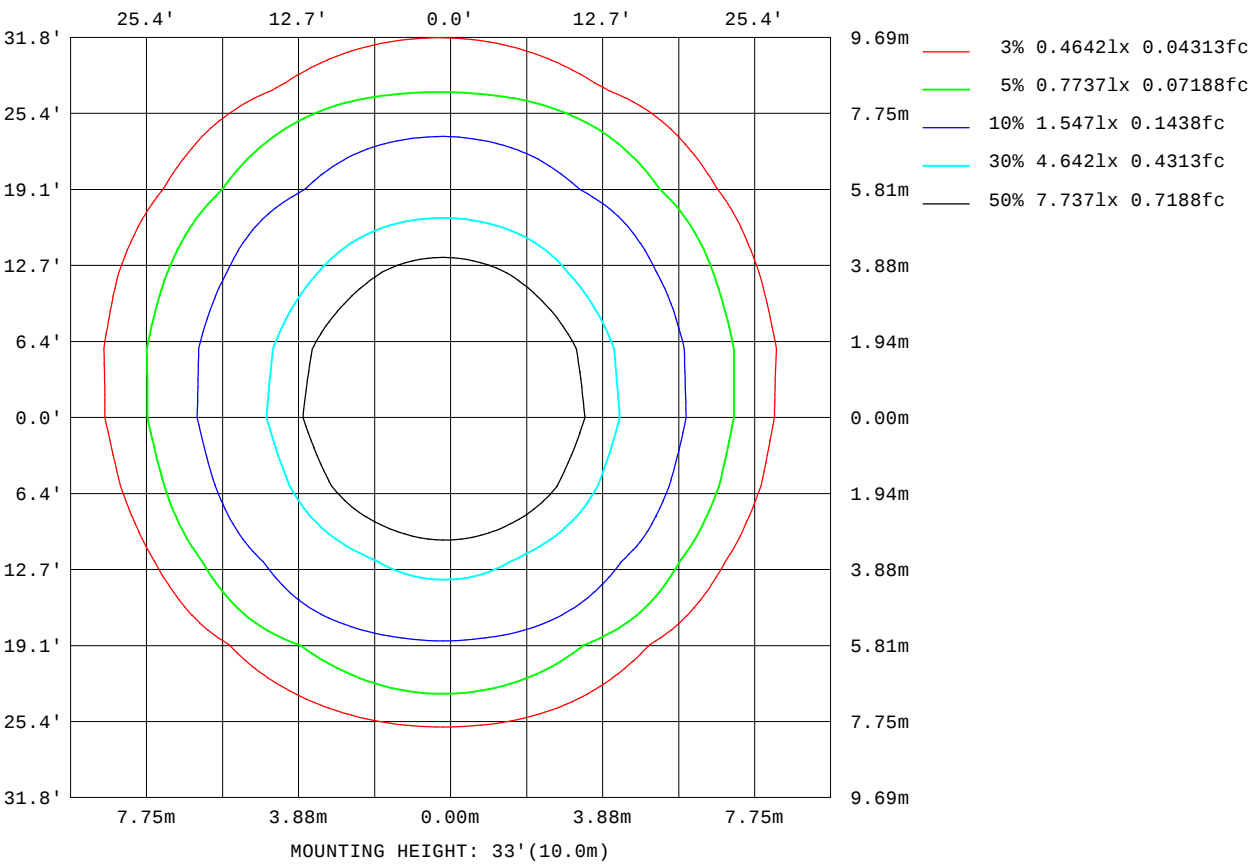


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Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

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

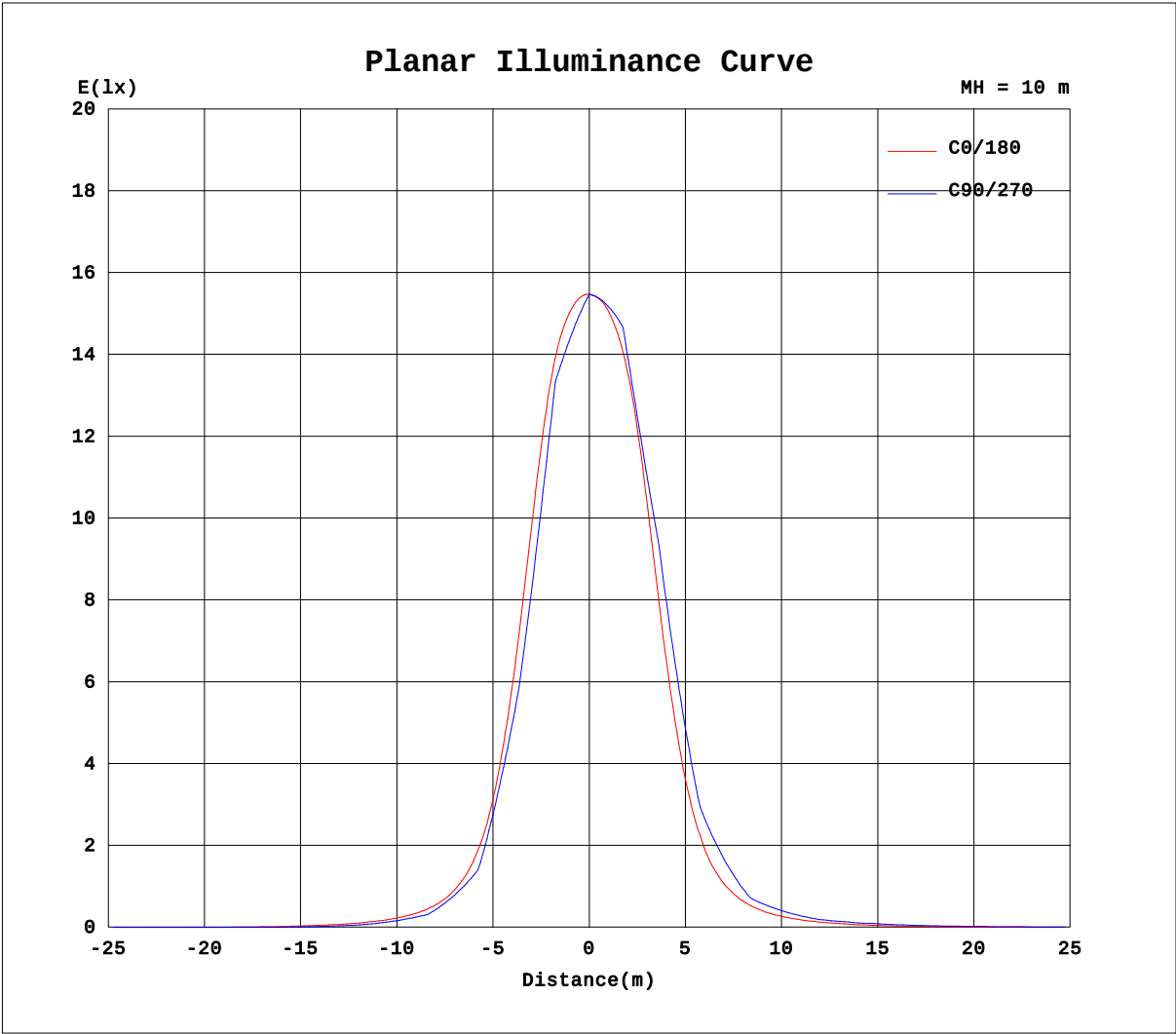
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Test Date:2025-08-05

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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

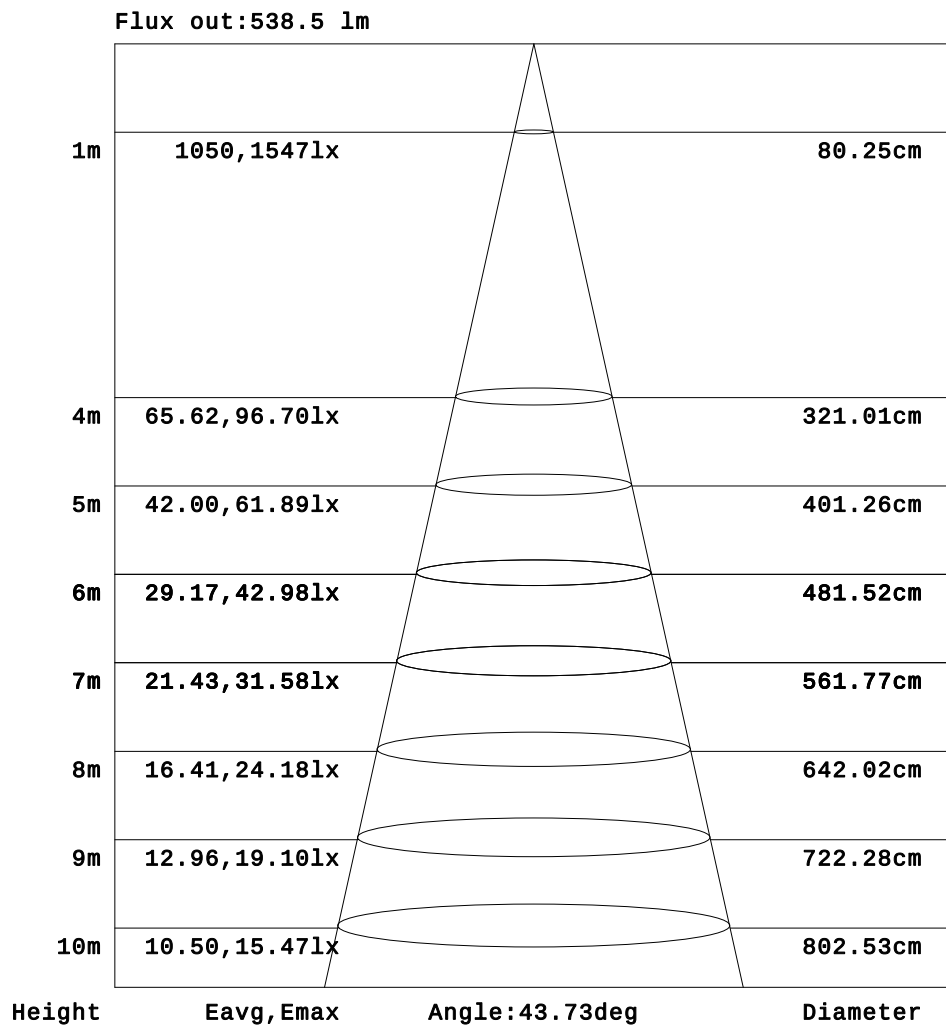


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

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:277.8V I:0.1029A P:14.08W PF:0.4923 Freq:50.00Hz Lamp Flux:963.898x1 lm		
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SPEC.:	DIM.:	SERIAL No.:2025080033
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:2025-08-05

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:277.8V I:0.1029A P:14.08W PF:0.4923 Freq:50.00Hz Lamp Flux:963.898x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM-W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080033
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	0.62	2.65	4.65	6.58	8.43	10.1	11.3	11.8
-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.05	6.11	10.1	13.9	17.6	20.7	22.9	23.6	23.1
-45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	3.46	7.15	11.4	16.9	22.8	28.9	34.6	39.7	43.9	46.5	47.1
-40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	8.37	15.8	23.0	30.0	37.9	46.1	53.7	60.5	66.2	69.9	70.8
-35	0.00	0.00	0.00	0.00	0.00	0.00	1.07	5.33	13.3	21.8	31.2	42.2	55.9	72.0	89.3	107	124	139	144
-30	0.00	0.00	0.00	0.00	0.00	0.00	3.77	12.2	21.5	31.3	43.6	59.6	80.1	105	132	161	189	212	217
-25	0.00	0.00	0.00	0.00	0.00	0.11	5.54	14.8	25.1	37.5	54.2	77.3	110	157	221	297	375	440	463
-20	0.00	0.00	0.00	0.00	0.00	1.35	10.9	21.3	33.3	49.6	72.8	106	157	233	341	466	591	685	709
-15	0.00	0.00	0.00	0.00	0.00	1.56	11.3	22.5	36.0	54.3	81.1	123	193	312	489	697	883	1005	1052
-10	0.00	0.00	0.00	0.00	0.00	4.96	16.0	28.6	45.1	68.2	103	162	268	453	721	1010	1235	1358	1393
-5	0.00	0.00	0.00	0.00	0.00	4.22	15.6	28.6	45.1	68.2	104	166	283	489	789	1106	1330	1435	1471
0	0.00	0.00	0.00	0.00	0.00	7.82	19.9	34.4	53.0	80.1	125	206	365	634	990	1312	1481	1537	1547
5	0.00	0.00	0.00	0.00	0.00	5.74	17.8	31.7	48.9	73.8	114	184	316	547	875	1211	1429	1518	1541
10	0.00	0.00	0.00	0.00	0.00	8.29	20.8	35.0	53.3	80.5	124	203	343	579	902	1221	1430	1514	1535
15	0.00	0.00	0.00	0.00	0.00	5.57	17.4	30.8	47.3	70.3	105	163	262	431	673	946	1167	1291	1328
20	0.00	0.00	0.00	0.00	0.00	7.41	19.0	32.5	49.2	71.6	104	155	236	368	555	773	972	1094	1119
25	0.00	0.00	0.00	0.00	0.00	3.67	14.4	26.5	41.3	59.5	84.0	120	173	257	375	518	659	756	787
30	0.00	0.00	0.00	0.00	0.00	4.10	14.2	26.0	40.0	55.9	76.0	103	138	187	249	323	395	440	451
35	0.00	0.00	0.00	0.00	0.00	1.06	9.43	19.7	32.0	45.4	60.9	80.1	104	136	174	219	265	295	306
40	0.00	0.00	0.00	0.00	0.00	0.40	8.45	17.9	29.0	40.7	52.8	66.5	81.8	98.7	117	135	149	158	159
45	0.00	0.00	0.00	0.00	0.00	0.00	3.48	11.3	20.7	30.6	40.7	51.6	63.1	75.0	87.0	99.0	109	115	117
50	0.00	0.00	0.00	0.00	0.00	0.00	1.14	8.15	16.3	24.4	32.7	41.2	49.0	56.3	62.4	67.8	71.9	74.1	74.3
55	0.00	0.00	0.00	0.00	0.00	0.00	0.11	3.33	8.66	15.6	22.4	29.3	35.8	41.8	46.8	51.0	54.2	56.0	56.4
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.84	9.58	14.8	20.1	25.1	29.5	33.0	35.6	37.4	38.3	38.3
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35	4.23	6.91	10.2	14.2	17.8	20.8	23.1	24.6	25.4	25.5
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	4.78	7.45	9.68	11.3	12.3	12.7	12.5
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	2.11	3.47	4.64	5.50	6.05	6.33	6.29
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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SPEC.:	DIM.:	SERIAL No.:2025080033
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

Table--2																	UNIT: cd	
H(DEG) V(DEG)	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	10.9	9.85	8.61	7.13	5.43	3.72	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-50	21.4	19.3	16.7	13.6	10.2	6.73	2.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-45	45.6	42.4	37.6	31.7	25.7	19.8	13.8	8.40	4.90	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-40	68.8	63.9	56.3	47.4	38.8	30.4	22.5	15.4	8.50	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-35	138	124	105	84.8	66.4	50.6	37.7	27.1	17.6	9.10	3.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-30	203	176	145	114	87.1	65.1	48.4	34.8	23.2	12.9	4.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-25	439	372	289	212	150	103	71.7	50.2	34.1	20.9	10.2	2.14	0.00	0.00	0.00	0.00	0.00	0.00
-20	654	536	400	282	191	126	85.3	58.4	39.4	24.3	12.2	2.49	0.00	0.00	0.00	0.00	0.00	0.00
-15	1008	882	690	481	305	185	117	76.5	51.1	33.0	18.7	7.05	0.14	0.00	0.00	0.00	0.00	0.00
-10	1325	1159	895	601	363	210	128	82.8	54.7	35.5	20.0	7.53	0.00	0.00	0.00	0.00	0.00	0.00
-5	1441	1335	1105	782	479	272	159	98.2	63.7	41.5	25.2	11.6	0.92	0.00	0.00	0.00	0.00	0.00
0	1529	1442	1195	831	496	275	158	97.0	62.4	40.5	24.4	10.9	0.26	0.00	0.00	0.00	0.00	0.00
5	1526	1441	1215	868	535	302	174	107	68.9	44.5	27.7	14.0	2.12	0.00	0.00	0.00	0.00	0.00
10	1503	1377	1108	762	463	263	156	98.3	64.1	41.0	25.2	12.1	0.77	0.00	0.00	0.00	0.00	0.00
15	1291	1171	945	664	418	250	152	97.9	65.2	42.6	26.3	13.5	2.06	0.00	0.00	0.00	0.00	0.00
20	1046	893	673	457	294	188	122	82.1	56.1	36.7	21.8	10.1	0.16	0.00	0.00	0.00	0.00	0.00
25	747	651	509	363	245	165	111	77.1	54.0	36.2	21.6	10.4	0.72	0.00	0.00	0.00	0.00	0.00
30	419	359	284	215	159	116	85.0	61.5	44.1	29.3	16.6	6.56	0.00	0.00	0.00	0.00	0.00	0.00
35	291	258	213	168	130	98.4	74.2	54.9	39.9	26.8	14.9	5.61	0.00	0.00	0.00	0.00	0.00	0.00
40	153	140	123	105	86.8	70.0	54.8	41.7	30.3	19.2	9.25	1.09	0.00	0.00	0.00	0.00	0.00	0.00
45	114	106	95.4	83.2	70.6	58.2	46.2	35.1	25.4	15.8	6.92	1.37	0.00	0.00	0.00	0.00	0.00	0.00
50	72.5	68.7	63.4	56.8	49.3	41.4	32.9	24.4	16.7	8.58	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	55.2	52.6	48.7	43.8	38.0	31.6	24.7	17.8	11.2	5.10	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	37.1	35.2	32.2	28.6	24.1	19.1	13.7	8.49	3.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	24.7	23.2	20.9	18.0	14.6	10.6	7.39	4.76	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	11.7	10.4	8.58	6.24	3.50	0.44	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	5.96	5.35	4.49	3.37	2.04	0.52	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:2025-08-05

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