

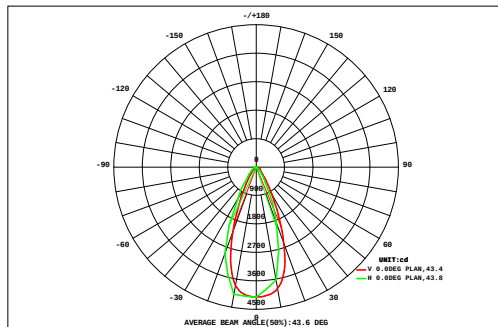
Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)		1560.9 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
Beam Spread	At 10% of Imax	75.6V x 74.2H
	At 50% of Imax	43.8V x 43.4H
	At 90% of Imax	22.7V x 23.6H
Beam Flux	Total	999.7 lumens per klm.
	To 10% of Imax	851.0 lumens per klm.
	To 50% of Imax	535.2 lumens per klm.
	To 90% of Imax	177.6 lumens per klm.
Upward LOR		0.0 %
Downward LOR		100.0 %
Luminaire Efficiency(Light Output Ratio)		100.0 %

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:277.3V I:0.2817A P:48.81W PF:0.6080 Freq:50.00Hz Lamp Flux:2630.82x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080029
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



DATA OF LAMP		Eff:53.90lm/W	
MODEL	SP-PZT-R170-12P-RDM	Imax(cd)	4107
NOMINAL POWER(W)	49	AVAILABILITY(%)	85.3
RATED VOLTAGE(V)	277	Avai. FLUX(lm)	2244
NOMINAL FLUX(lm)	2630.82	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	2631
TEST VOLTAGE(V)	277	θ @50%(H,V)	43,44DEG

		AREA FLUX DIAGRAM																UNIT:lm				Φ t	Φ a
		0.00	0.02	0.18	0.43	0.73	1.02	1.29	1.48	1.56	1.52	1.37	1.13	0.83	0.53	0.26	0.05	0.01	0.00	12.4	0.00		
VERTICAL (DEG)	72	0.01	0.17	0.46	0.85	1.30	1.77	2.18	2.46	2.61	2.56	2.36	2.01	1.56	1.09	0.66	0.31	0.06	0.00	22.4	0.00		
	64	0.05	0.31	0.72	1.27	1.92	2.61	3.24	3.73	3.99	3.96	3.63	3.08	2.41	1.70	1.08	0.57	0.20	0.01	34.5	0.00		
	56	0.11	0.46	0.99	1.72	2.64	3.71	4.86	5.96	6.61	6.55	5.79	4.68	3.49	2.39	1.51	0.82	0.34	0.05	52.7	3.36		
	48	0.19	0.61	1.28	2.24	3.57	5.42	7.93	10.8	12.7	12.4	10.2	7.43	4.99	3.15	1.90	1.02	0.44	0.08	86.4	52.6		
	40	0.23	0.72	1.50	2.74	4.80	8.27	14.0	21.4	26.6	25.8	19.7	12.6	7.32	4.12	2.33	1.24	0.55	0.13	154	131		
	32	0.26	0.79	1.65	3.18	6.31	13.0	26.1	43.4	55.2	54.0	40.6	23.2	11.2	5.41	2.79	1.41	0.63	0.16	289	271		
	24	0.26	0.81	1.72	3.46	7.41	17.3	37.9	61.6	73.8	74.0	60.4	35.7	15.9	6.66	3.12	1.53	0.69	0.19	402	386		
		0.27	0.82	1.74	3.57	8.01	20.0	44.9	71.0	81.4	81.7	69.9	42.6	18.2	7.13	3.18	1.55	0.69	0.18	457	441		
		0.27	0.81	1.72	3.51	7.99	20.1	44.3	67.6	76.8	76.5	64.9	38.5	16.0	6.32	2.89	1.42	0.61	0.15	430	415		
		0.22	0.70	1.51	3.01	6.17	14.2	31.4	52.8	65.4	64.1	49.1	27.6	12.1	5.24	2.57	1.30	0.54	0.13	338	321		
-24	0.17	0.58	1.23	2.29	4.30	8.22	15.8	26.6	34.9	34.5	25.5	15.0	7.83	3.98	2.10	1.06	0.44	0.09	185	163			
-32	0.09	0.44	0.97	1.73	2.97	4.98	7.97	11.9	15.3	15.2	11.6	7.52	4.59	2.74	1.59	0.82	0.33	0.05	90.9	60.2			
-40	0.04	0.28	0.70	1.27	2.00	2.91	3.75	4.36	4.78	4.62	4.19	3.45	2.52	1.72	1.07	0.55	0.18	0.01	38.4	0.00			
-48	0.01	0.13	0.42	0.83	1.26	1.72	2.10	2.32	2.36	2.35	2.22	1.87	1.46	1.02	0.61	0.27	0.04	0.00	21.0	0.00			
-56	0.00	0.01	0.11	0.29	0.54	0.81	1.08	1.29	1.35	1.27	1.12	0.93	0.71	0.47	0.21	0.04	0.01	0.00	10.2	0.00			
-64	0.00	0.00	0.01	0.03	0.10	0.19	0.27	0.34	0.38	0.38	0.34	0.24	0.13	0.07	0.04	0.01	0.00	0.00	2.56	0.00			
-72	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.05	0.06	0.06	0.05	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.35	0.00			
		-72	-64	-56	-48	-40	-32	-24	-16	HORIZONTAL (DEG)				16	24	32	40	48	56	64	72		
Φ t		2.19	7.66	16.9	32.4	62.0	126	249	389	466	461	373	228	111	53.7	27.9	14.0	5.76	1.24	2627	---		
Φ a		0.00	0.00	0.00	0.00	24.4	98.6	224	366	443	439	349	203	83.4	14.8	0.00	0.00	0.00	0.00	---	2244		

one-half-peak spread: U:18.9,D:25.1 , L:22.9,R:20.8

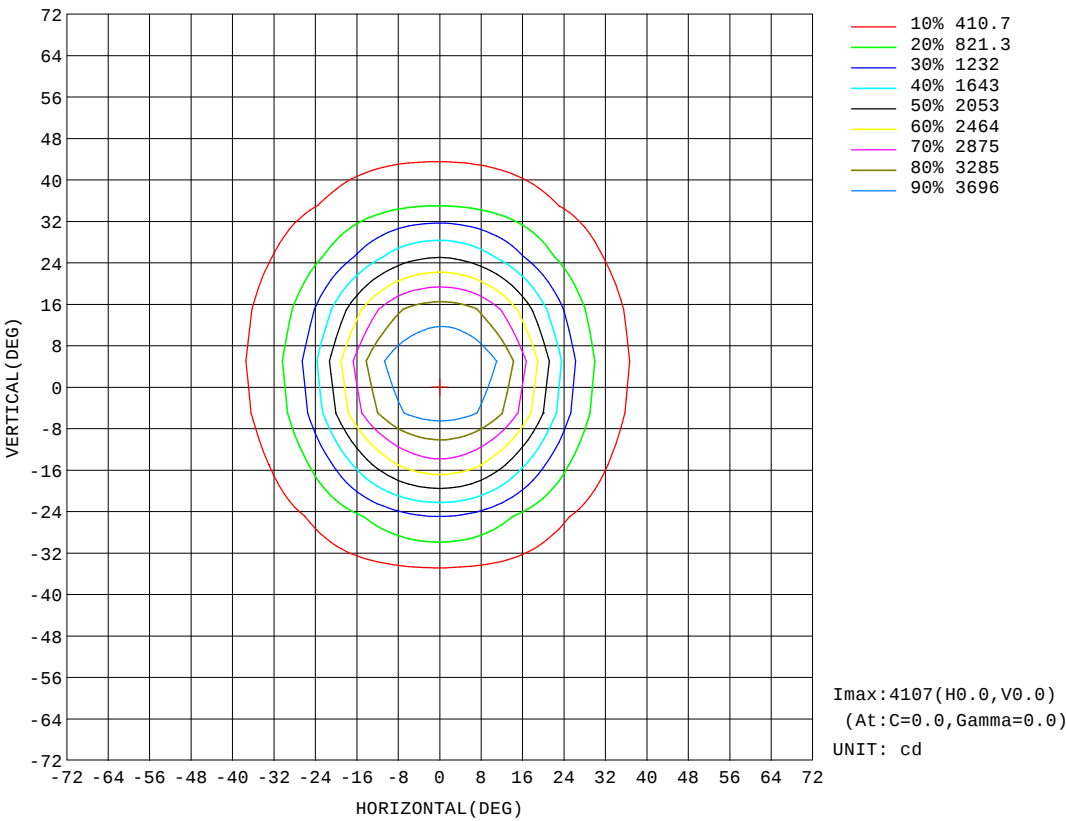
NEMA Beam Type: Type 5

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:277.3V I:0.2817A P:48.81W PF:0.6080 Freq:50.00Hz Lamp Flux:2630.82x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080029
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:

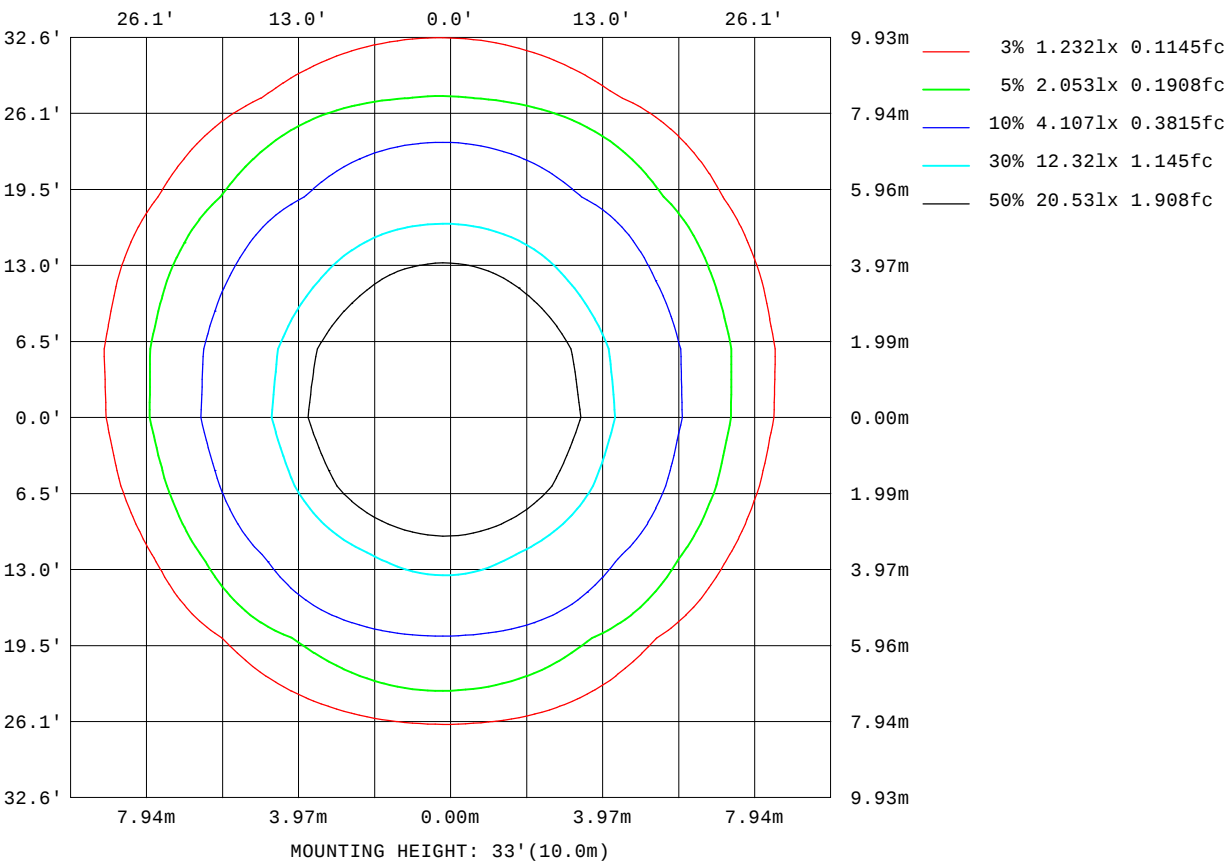


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

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

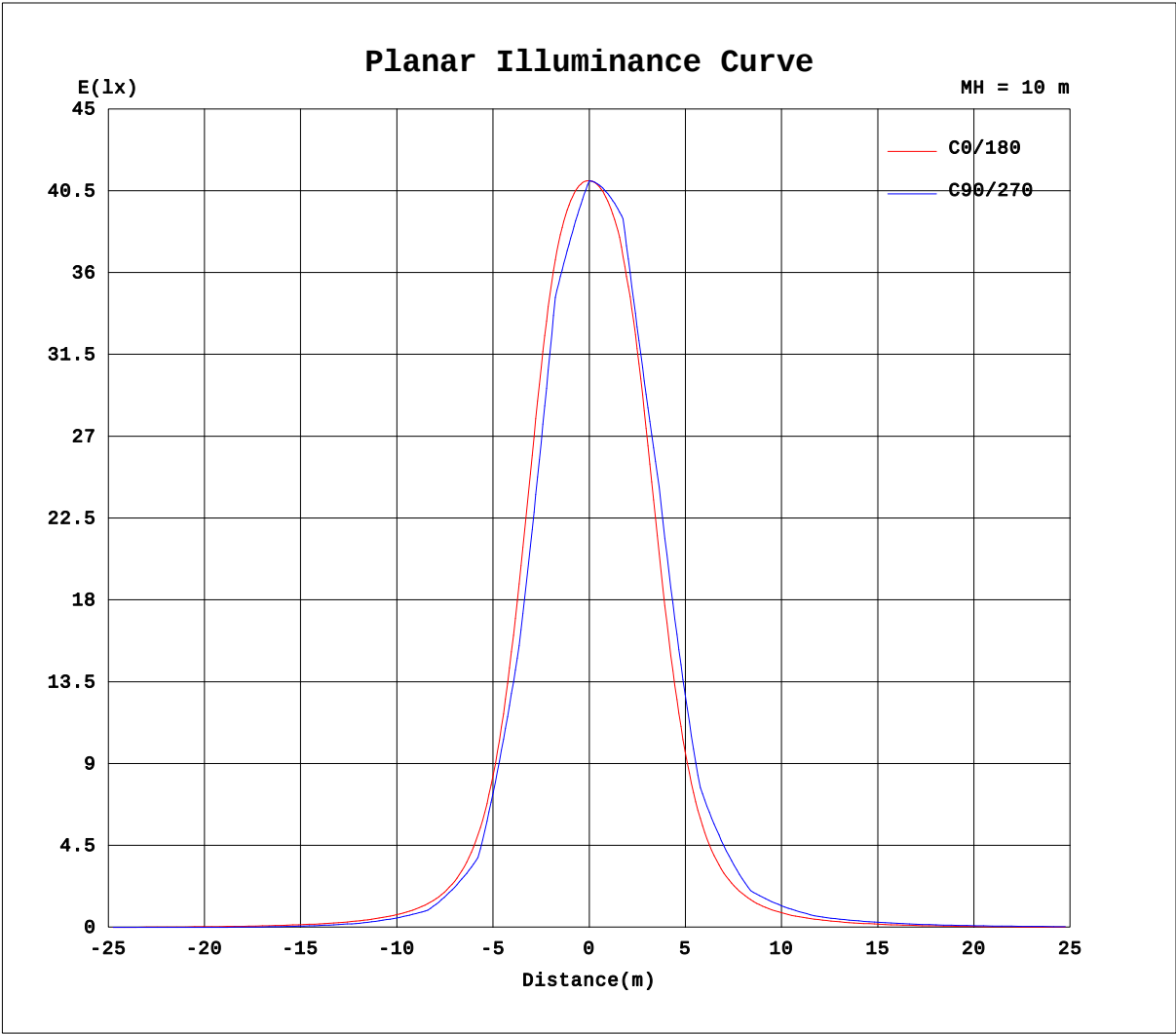
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SPEC.:	DIM.:	SERIAL No.:2025080029
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	Shielding Angle:



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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:

Planar Illuminance Curve

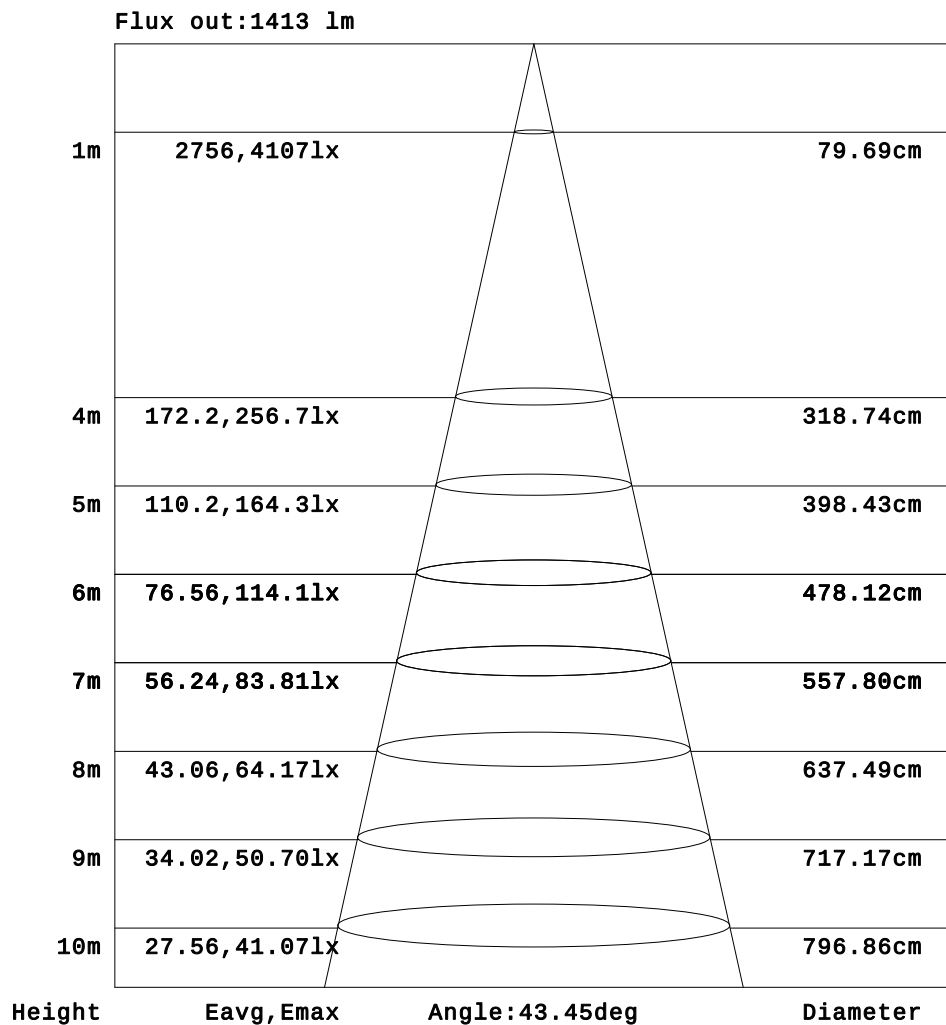


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:28.0DEG
Operators:QC1
Test Date:2025-08-05

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:277.3V I:0.2817A P:48.81W PF:0.6080 Freq:50.00Hz Lamp Flux:2630.82x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080029
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:277.3V I:0.2817A P:48.81W PF:0.6080 Freq:50.00Hz Lamp Flux:2630.82x1 lm		
NAME: 8.03.034.0002 45° SP-PZT-R170-12P-RDM	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:2025080029
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	1.25	3.07	4.68	5.98	7.21	8.25	9.01	9.44	9.55
-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.26	6.86	9.92	12.5	14.9	16.9	18.3	19.0	19.1
-55	0.00	0.00	0.00	0.00	0.00	0.00	0.13	3.87	8.14	12.7	18.9	25.8	32.2	38.4	44.3	49.4	53.0	54.6	54.2
-50	0.00	0.00	0.00	0.00	0.00	0.00	1.30	9.42	18.1	27.4	37.4	47.4	57.1	66.7	75.9	83.6	88.7	90.3	88.9
-45	0.00	0.00	0.00	0.00	0.00	1.98	9.02	20.5	33.6	47.5	61.5	75.1	89.6	105	119	132	142	148	150
-40	0.00	0.00	0.00	0.00	0.00	6.51	20.8	36.6	54.5	73.3	91.1	108	128	149	167	184	198	207	210
-35	0.00	0.00	0.00	0.00	0.70	11.5	28.7	46.9	67.3	88.6	112	140	175	215	260	306	352	389	402
-30	0.00	0.00	0.00	0.00	4.38	23.0	43.7	65.0	88.4	113	143	185	237	299	371	446	524	581	591
-25	0.00	0.00	0.00	0.00	6.21	26.2	48.3	71.7	97.6	128	170	230	316	437	605	807	1012	1171	1230
-20	0.00	0.00	0.00	0.00	15.4	37.8	62.1	88.2	118	158	217	303	437	634	916	1253	1574	1804	1864
-15	0.00	0.00	0.00	0.01	14.5	37.6	63.3	91.3	125	171	240	348	532	842	1301	1840	2322	2636	2747
-10	0.00	0.00	0.00	1.24	22.8	47.2	75.1	107	147	208	299	452	728	1211	1897	2638	3226	3545	3622
-5	0.00	0.00	0.00	0.55	20.4	45.4	74.2	107	147	207	302	466	768	1299	2066	2884	3477	3776	3866
0	0.00	0.00	0.00	4.31	27.7	54.6	85.3	121	167	237	358	574	978	1663	2572	3417	3901	4071	4107
5	0.00	0.00	0.00	1.27	23.1	49.4	79.8	115	157	222	327	513	851	1439	2286	3161	3757	4018	4092
10	0.00	0.00	0.00	4.99	28.2	55.9	87.3	123	170	241	356	557	915	1524	2364	3205	3775	4013	4080
15	0.00	0.00	0.00	1.30	22.6	49.0	78.8	113	154	214	305	456	712	1138	1769	2473	3059	3390	3498
20	0.00	0.00	0.00	4.30	26.6	53.6	83.2	117	158	216	302	437	648	980	1453	2007	2519	2840	2912
25	0.00	0.00	0.00	0.58	19.3	44.1	71.4	102	139	186	250	346	485	695	994	1357	1716	1968	2052
30	0.00	0.00	0.00	1.34	20.9	45.4	71.2	101	136	178	231	301	393	516	672	857	1038	1156	1183
35	0.00	0.00	0.00	0.01	13.4	35.3	59.0	84.8	116	150	191	242	305	384	482	597	711	791	818
40	0.00	0.00	0.00	0.00	13.8	34.7	56.4	80.4	109	138	169	205	245	288	337	384	423	446	450
45	0.00	0.00	0.00	0.00	5.69	23.4	43.1	63.5	87.4	112	138	167	196	227	259	291	317	334	339
50	0.00	0.00	0.00	0.00	4.00	20.0	37.6	55.5	76.2	96.9	118	140	160	179	195	209	220	226	226
55	0.00	0.00	0.00	0.00	0.63	9.87	24.8	40.0	56.8	74.6	91.9	110	127	142	155	166	174	179	181
60	0.00	0.00	0.00	0.00	0.00	5.57	18.0	30.8	44.6	59.2	72.8	86.3	99.4	111	120	127	132	134	134
65	0.00	0.00	0.00	0.00	0.00	1.64	7.76	16.9	27.5	38.9	50.3	60.9	71.4	80.9	88.8	94.7	98.8	101	101
70	0.00	0.00	0.00	0.00	0.00	0.00	0.07	6.99	14.8	23.2	32.0	39.8	47.4	54.4	60.3	64.5	67.2	68.3	67.8
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.73	6.60	10.7	15.2	19.3	24.5	29.4	33.7	36.9	39.0	40.0	39.6
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.72	6.26	8.57	10.4	11.4	11.6	11.0
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
 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:

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SPEC.:	DIM.:	SERIAL No.:2025080029
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	9.33	8.89	7.89	6.00	3.57	1.13	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	18.5	17.5	15.1	11.1	6.14	1.31	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	52.2	49.1	45.0	39.6	33.1	26.6	21.1	15.9	10.1	4.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-50	84.8	79.3	72.9	65.6	57.4	49.3	40.2	29.6	17.9	6.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-45	147	139	127	112	96.8	82.0	67.6	53.7	39.4	25.7	13.4	4.95	0.00	0.00	0.00	0.00	0.00	0.00	
-40	206	195	176	152	130	109	89.4	72.2	55.3	39.3	23.4	6.83	0.00	0.00	0.00	0.00	0.00	0.00	
-35	386	350	302	249	200	160	127	101	78.5	57.3	38.3	20.7	6.40	0.00	0.00	0.00	0.00	0.00	
-30	554	488	407	325	253	196	154	121	92.9	67.3	45.9	28.0	8.71	0.00	0.00	0.00	0.00	0.00	
-25	1166	997	778	574	413	295	215	160	120	87.4	60.6	38.6	18.8	2.22	0.00	0.00	0.00	0.00	
-20	1725	1422	1061	750	519	357	250	182	133	96.1	65.6	41.1	20.9	1.15	0.00	0.00	0.00	0.00	
-15	2638	2308	1809	1270	818	513	332	226	162	117	82.0	52.6	29.2	8.27	0.00	0.00	0.00	0.00	
-10	3455	3016	2336	1588	970	580	362	241	171	124	85.7	53.8	29.0	8.04	0.00	0.00	0.00	0.00	
-5	3791	3502	2890	2055	1269	738	441	282	195	138	98.1	64.2	36.3	13.5	0.00	0.00	0.00	0.00	
0	4051	3800	3126	2183	1311	745	440	280	192	136	96.3	62.5	33.7	10.8	0.00	0.00	0.00	0.00	
5	4049	3788	3168	2268	1408	817	483	305	208	146	104	70.5	40.3	15.6	0.00	0.00	0.00	0.00	
10	3990	3597	2873	1984	1221	720	437	283	196	138	98.4	65.8	36.0	11.8	0.00	0.00	0.00	0.00	
15	3401	3051	2456	1736	1109	682	429	284	200	142	101	69.2	40.2	14.9	0.00	0.00	0.00	0.00	
20	2721	2308	1756	1209	792	520	350	245	178	128	90.1	60.8	33.1	9.31	0.00	0.00	0.00	0.00	
25	1952	1692	1336	969	669	461	323	232	172	127	89.9	61.5	35.4	11.4	0.00	0.00	0.00	0.00	
30	1102	947	765	593	449	338	253	191	147	110	77.1	51.7	27.3	5.41	0.00	0.00	0.00	0.00	
35	782	693	583	472	373	292	226	175	136	103	73.0	49.3	26.7	5.67	0.00	0.00	0.00	0.00	
40	432	398	354	308	261	217	177	141	112	84.2	58.7	37.8	17.1	0.23	0.00	0.00	0.00	0.00	
45	330	310	282	251	218	186	154	125	99.8	75.5	52.8	33.8	15.1	1.03	0.00	0.00	0.00	0.00	
50	222	212	198	182	162	141	119	97.5	77.6	57.0	39.1	22.2	5.52	0.00	0.00	0.00	0.00	0.00	
55	178	171	161	148	133	116	98.3	80.5	63.7	46.6	30.9	16.4	4.43	0.00	0.00	0.00	0.00	0.00	
60	131	126	118	109	97.2	84.3	70.1	56.8	42.9	29.5	16.8	4.75	0.00	0.00	0.00	0.00	0.00	0.00	
65	99.0	95.1	89.3	81.7	72.7	62.4	51.5	40.8	29.8	18.9	9.69	3.64	0.00	0.00	0.00	0.00	0.00	0.00	
70	65.8	62.3	57.5	51.3	44.2	36.2	28.4	20.5	12.3	4.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
75	38.1	35.7	32.3	27.9	23.0	18.9	15.0	11.0	6.95	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
80	9.71	7.92	5.44	2.55	0.05	0.00	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(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: