

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)	401.9 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
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Beam Spread	At 10% of Imax	156.7V x 121.1H
	At 50% of Imax	107.1V x 105.9H
	At 90% of Imax	51.4V x 52.3H

Beam Flux	Total	997.4 lumens per klm.
	To 10% of Imax	978.3 lumens per klm.
	To 50% of Imax	830.0 lumens per klm.
	To 90% of Imax	243.5 lumens per klm.

Upward LOR	0.0 %
Downward LOR	99.7 %

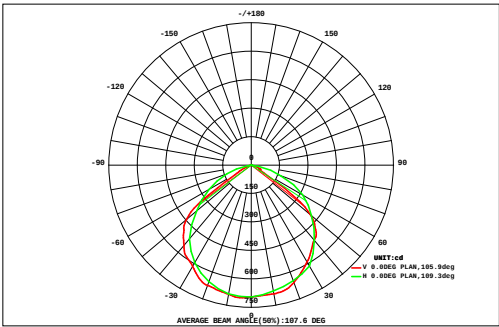
Luminaire Efficiency(Light Output Ratio)	100.0 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.7372A P:17.69W PF:1.000 Lamp Flux:1743.68x1 lm		
NAME: 8.02.038.0016 LLS-WZB-W40-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100041
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:



DATA OF LAMP		Eff:98.55lm/W	
MODEL	LLS-WZB-W40-L6-S	Imax(cd)	700.8
NOMINAL POWER(W)	18	AVAILABILITY(%)	98.2
RATED VOLTAGE(V)	24	Avai. FLUX(lm)	1713
NOMINAL FLUX(lm)	1743.68	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	1744
TEST VOLTAGE(V)	24.0	θ @50%(H,V)	106,107DEG

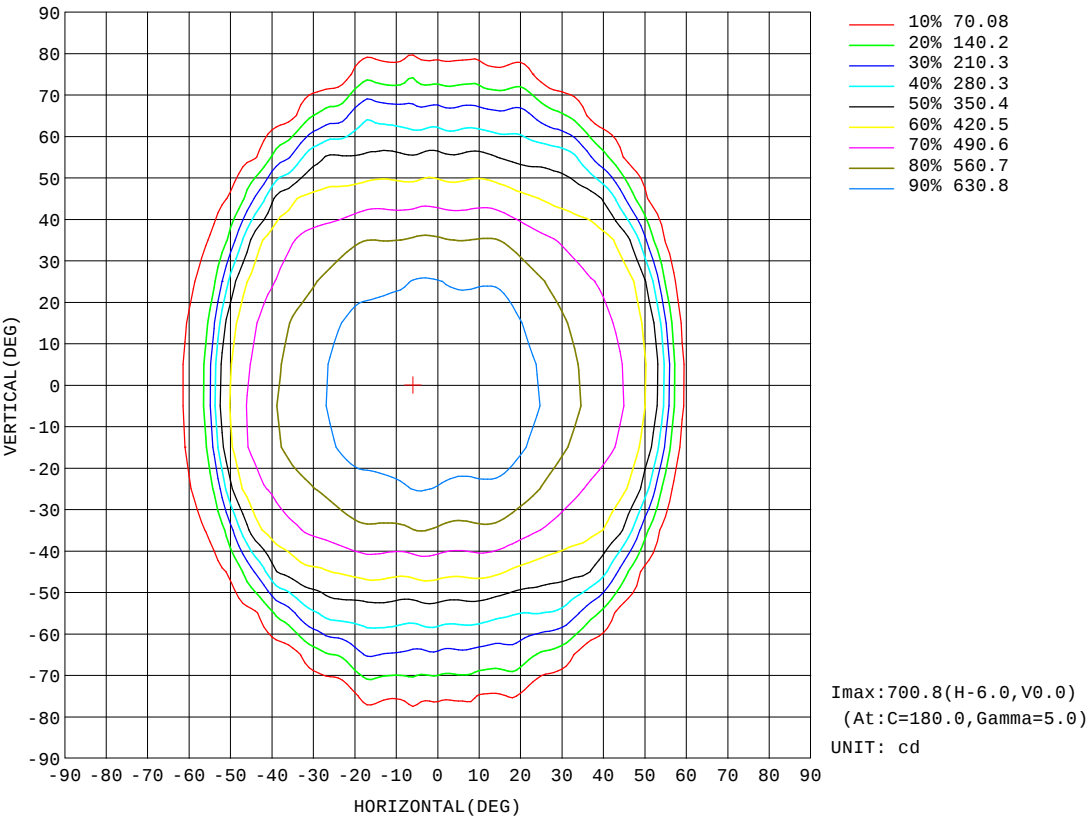
AREA FLUX DIAGRAM																		UNIT:lm	Φ t	Φ a
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	0.00	0.00	0.00	0.00	0.04	0.21	0.60	2.35	3.26	3.04	2.06	0.99	0.25	0.17	0.05	0.00	0.00	0.00	13.0	10.6
70	0.00	0.00	0.00	0.04	0.42	1.54	4.53	8.04	7.38	7.19	7.04	4.66	1.77	0.54	0.27	0.02	0.00	0.00	43.4	40.5
60	0.00	0.00	0.00	0.35	1.48	5.70	10.3	10.7	11.1	11.1	10.2	9.34	5.81	1.44	0.61	0.13	0.00	0.00	78.3	75.4
50	0.00	0.00	0.05	0.90	4.10	10.7	12.3	13.7	14.2	14.1	13.4	11.5	9.81	4.28	0.79	0.33	0.00	0.00	110	108
40	0.00	0.00	0.21	1.49	7.95	12.4	14.7	16.5	17.2	17.0	16.3	14.0	11.5	7.81	1.44	0.50	0.02	0.00	139	137
30	0.00	0.00	0.40	2.57	9.58	13.3	16.3	18.4	19.4	19.2	18.4	15.7	12.7	9.64	2.71	0.57	0.04	0.00	159	158
20	0.00	0.00	0.54	3.80	10.3	14.1	17.2	19.1	20.1	19.9	19.2	16.5	13.3	9.98	3.75	0.60	0.06	0.00	168	167
10	0.00	0.00	0.60	4.41	10.7	14.6	17.8	19.7	20.9	20.6	19.7	17.1	13.7	10.3	4.28	0.63	0.07	0.00	175	174
0	0.00	0.01	0.61	4.52	10.9	14.7	17.9	20.0	21.2	20.9	20.0	17.3	13.9	10.4	4.18	0.63	0.06	0.00	177	176
-10	0.00	0.01	0.56	4.10	10.8	14.5	17.5	19.5	20.6	20.3	19.4	16.7	13.3	9.98	3.49	0.60	0.05	0.00	171	170
-20	0.00	0.00	0.46	3.09	9.87	13.5	16.2	18.1	19.2	18.8	18.1	15.4	12.3	9.00	2.21	0.54	0.02	0.00	157	155
-30	0.00	0.00	0.28	1.77	7.99	12.0	14.6	16.3	17.0	16.7	16.0	13.5	11.0	6.99	1.04	0.45	0.01	0.00	136	134
-40	0.00	0.00	0.11	0.90	4.74	9.81	11.9	13.2	13.6	13.5	12.6	10.7	9.01	3.54	0.62	0.26	0.00	0.00	105	103
-50	0.00	0.00	0.01	0.42	1.34	5.52	8.33	9.21	9.44	9.45	8.57	7.63	5.08	0.77	0.55	0.07	0.00	0.00	66.4	64.2
-60	0.00	0.00	0.00	0.06	0.33	1.26	4.38	6.08	6.04	5.88	5.25	3.99	0.88	0.29	0.25	0.01	0.00	0.00	34.7	32.5
-70	0.00	0.00	0.00	0.00	0.03	0.12	0.44	2.61	2.52	2.34	2.08	0.38	0.04	0.18	0.01	0.00	0.00	0.00	10.8	7.75
-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	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
Φ t	0.00	0.02	3.82	28.4	90.6	144	185	213	223	220	208	175	134	85.3	26.2	5.34	0.32	0.00	1744	---
Φ a	0.00	0.00	0.93	25.0	88.1	142	184	213	222	219	208	174	133	82.7	20.7	0.00	0.00	0.00	---	1713

one-half-peak spread: U:51.9,D:55.8 , L:47.7,MEAS Beam Type: Type 6 x 7 (H x V)

H(β) Range:-90 - 90DEG	V(B) Range:-80 - 80DEG
H(β) Interval: 1.0DEG	V(B) Interval: 5.0DEG
Test Speed: HIGH	Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Temperature:24.0DEG	Humidity:40%
Operators:QC1	Test Distance:8.300m [K=1.0000]
Test Date:2024-03-25	Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.7372A P:17.69W PF:1.000 Lamp Flux:1743.68x1 lm		
NAME: 8.02.038.0016 LLS-WZB-W40-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100041
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

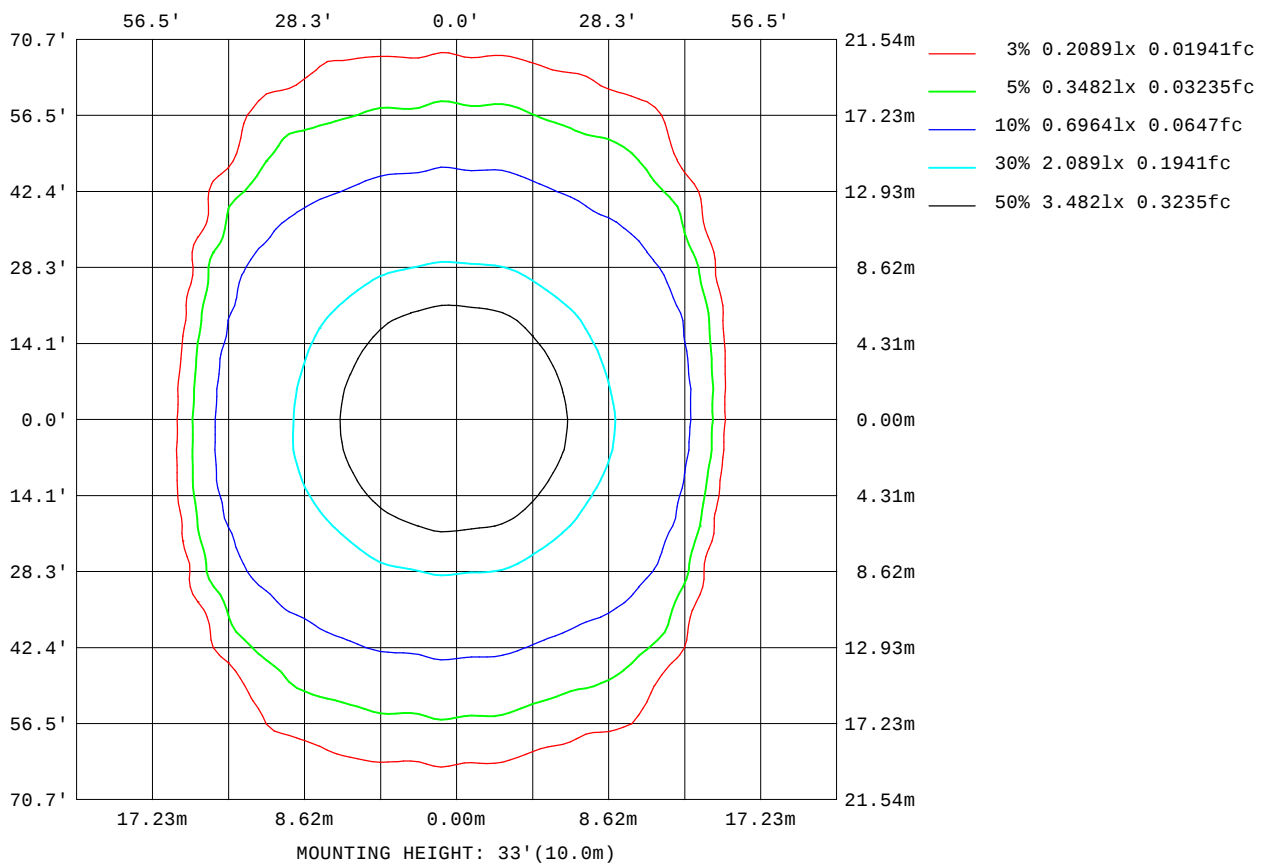


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.7372A P:17.69W PF:1.000 Lamp Flux:1743.68x1 lm		
NAME: 8.02.038.0016 LLS-WZB-W40-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100041
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

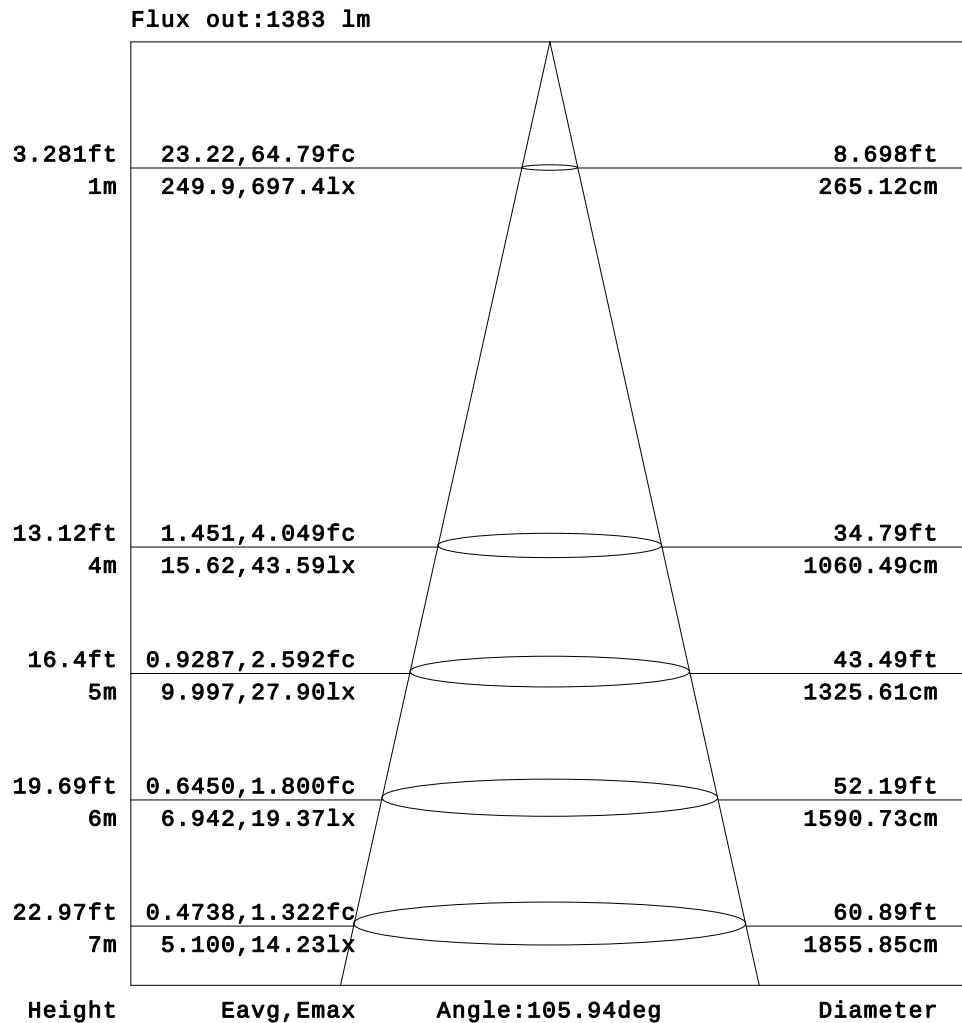


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:0.7372A P:17.69W PF:1.000 Lamp Flux:1743.68x1 lm		
NAME: 8.02.038.0016 LLS-WZB-W40-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100041
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

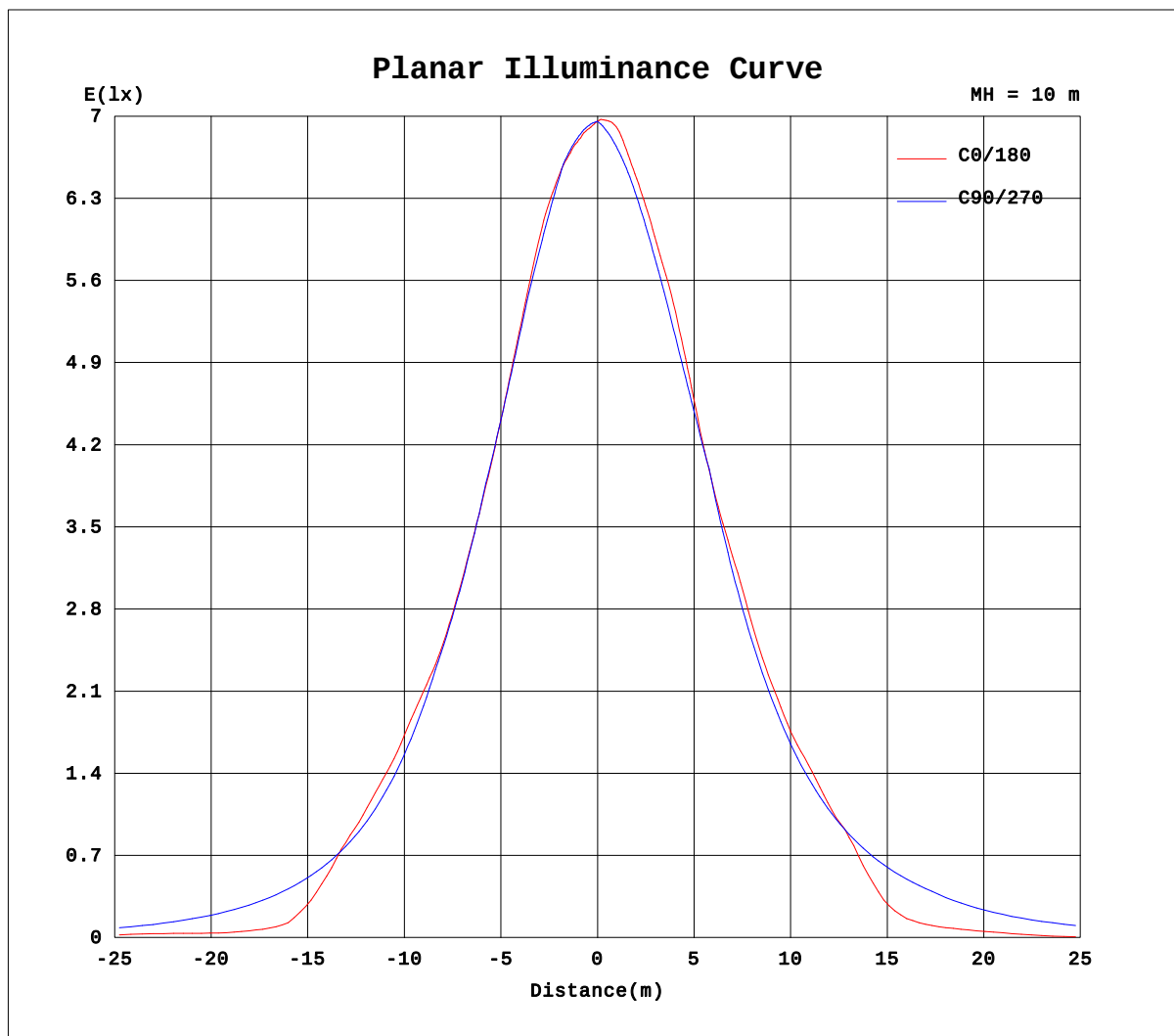


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
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: 24.0DEG
Operators: QC1
Test Date: 2024-03-25

V(β) Range: -80 - 80DEG
V(β) Interval: 5.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity: 40%
Test Distance: 8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.7372A P:17.69W PF:1.000 Lamp Flux:1743.68x1 lm		
NAME: 8.02.038.0016 LLS-WZB-W40-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:20240100041
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION 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	1.99	28.3	20.3
-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	5.44	9.40	8.27	10.9	60.4	85.7	74.9	88.2	81.5
-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.31	12.9	17.6	17.9	27.2	145	162	151	134	137
-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	11.5	18.6	24.9	45.3	109	141	188	213	205	194	200
-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.39	25.5	35.3	40.8	96.7	215	260	254	258	257	255	255
-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.09	21.0	38.6	54.5	131	200	273	311	311	318	313	311
-50	0.00	0.00	0.00	0.00	0.00	0.01	13.0	42.2	55.8	89.5	258	340	343	364	369	380	364	378	374
-45	0.00	0.00	0.00	0.00	0.00	2.87	23.4	51.0	79.0	194	325	384	409	423	437	447	435	445	444
-40	0.00	0.00	0.00	0.00	0.00	9.80	45.7	67.1	131	344	439	445	477	487	511	511	506	519	507
-35	0.00	0.00	0.00	0.00	0.08	11.5	49.5	77.4	188	370	449	477	505	521	545	551	549	562	554
-30	0.00	0.00	0.00	0.00	1.44	25.5	66.2	104	324	449	477	520	539	564	586	589	595	606	595
-25	0.00	0.00	0.00	0.00	1.29	24.8	67.5	119	335	459	498	540	559	584	608	613	620	634	627
-20	0.00	0.00	0.00	0.00	5.21	43.5	80.1	190	418	496	535	570	587	617	634	640	650	663	654
-15	0.00	0.00	0.00	0.00	3.13	35.7	76.1	171	412	498	540	577	596	628	651	657	665	679	674
-10	0.00	0.00	0.00	0.00	7.20	49.9	85.4	257	446	510	564	592	615	651	672	677	685	696	689
-5	0.00	0.00	0.00	0.00	4.15	40.9	79.1	206	424	499	549	589	610	647	672	678	686	698	694
0	0.00	0.00	0.00	0.00	8.22	53.7	89.5	275	445	504	553	593	618	655	674	682	691	701	695
5	0.00	0.00	0.00	0.00	3.83	40.0	78.6	200	417	492	536	584	606	642	665	670	678	690	686
10	0.00	0.00	0.00	0.00	6.29	48.6	83.8	241	429	498	540	584	607	641	657	661	669	680	674
15	0.00	0.00	0.00	0.00	2.19	32.8	73.3	157	391	478	516	566	587	620	643	647	654	666	662
20	0.00	0.00	0.00	0.00	3.80	39.1	74.9	165	394	476	510	556	579	613	632	636	641	652	648
25	0.00	0.00	0.00	0.00	0.60	21.1	62.9	105	306	436	486	533	556	585	613	619	624	635	633
30	0.00	0.00	0.00	0.00	0.48	20.8	61.2	92.8	292	426	474	523	543	571	600	604	608	620	614
35	0.00	0.00	0.00	0.00	0.00	8.67	44.3	72.8	167	355	451	486	512	527	552	560	560	570	568
40	0.00	0.00	0.00	0.00	0.00	6.69	41.1	67.3	117	349	449	464	487	492	512	515	513	524	517
45	0.00	0.00	0.00	0.00	0.00	1.78	19.5	50.1	75.8	191	337	409	439	445	455	468	463	468	468
50	0.00	0.00	0.00	0.00	0.00	0.00	10.8	41.9	58.2	88.0	281	374	395	400	404	421	412	418	415
55	0.00	0.00	0.00	0.00	0.00	0.00	3.15	19.5	40.8	59.0	145	223	324	360	355	364	364	358	368
60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.47	29.0	42.7	50.7	118	270	316	307	310	309	307	313
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	12.3	22.2	31.4	56.2	140	175	239	263	252	237	245
70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.24	17.5	25.2	24.8	39.7	197	208	192	167	168
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	7.52	13.0	11.6	15.5	84.6	110	98.2	117	107
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	2.05	0.11	1.98	11.2	48.5	39.5
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:24.0DEG
Operators:QC1
Test Date:2024-03-25

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Humidity:40%
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DIM.:	SPEC.:	SERIAL No.:20240100041
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

Table--2																	UNIT: cd	
H(DEC) V(DEC)	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	19.7	0.95	0.00	0.00	0.00	0.00	1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-75	79.7	66.0	64.7	63.0	13.0	5.12	4.32	3.24	9.57	4.47	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-70	140	127	137	108	17.6	9.88	7.93	7.68	19.5	6.85	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-65	197	188	180	174	131	105	41.1	15.7	19.1	18.4	13.6	5.08	0.00	0.00	0.00	0.00	0.00	0.00
-60	256	244	230	222	234	181	50.4	22.8	18.3	32.0	21.1	7.52	0.00	0.00	0.00	0.00	0.00	0.00
-55	311	312	294	281	281	266	196	120	37.0	30.4	32.2	22.6	5.41	0.00	0.00	0.00	0.00	0.00
-50	371	374	353	338	324	333	305	179	45.6	30.9	43.6	28.4	7.02	0.00	0.00	0.00	0.00	0.00
-45	435	442	428	404	387	378	367	301	166	52.8	38.9	42.4	18.6	1.58	0.00	0.00	0.00	0.00
-40	501	509	493	463	443	418	415	375	234	57.6	37.7	50.7	20.5	0.77	0.00	0.00	0.00	0.00
-35	544	550	544	517	489	462	444	420	341	165	52.1	45.8	37.9	8.70	0.00	0.00	0.00	0.00
-30	587	592	586	559	526	496	466	442	386	211	56.1	43.7	42.5	9.04	0.00	0.00	0.00	0.00
-25	617	620	618	594	558	526	492	472	429	313	107	44.7	51.9	19.0	0.03	0.00	0.00	0.00
-20	646	649	643	615	577	543	507	489	445	343	105	44.1	54.1	17.1	0.00	0.00	0.00	0.00
-15	664	665	661	640	605	570	534	504	469	393	196	54.0	52.7	28.7	1.03	0.00	0.00	0.00
-10	681	680	674	651	618	583	545	512	473	392	188	52.9	55.1	25.2	0.00	0.00	0.00	0.00
-5	686	685	681	661	629	593	557	518	490	422	256	62.2	49.7	35.0	2.36	0.00	0.00	0.00
0	690	689	683	658	624	590	552	517	481	407	214	56.4	53.2	27.3	0.33	0.00	0.00	0.00
5	679	679	675	654	622	587	552	513	487	425	262	62.6	48.3	35.9	2.64	0.00	0.00	0.00
10	667	668	663	639	605	572	535	501	467	401	199	53.9	52.4	26.5	0.30	0.00	0.00	0.00
15	655	657	655	633	600	568	534	498	470	406	218	56.6	49.8	31.2	1.71	0.00	0.00	0.00
20	642	646	641	614	579	553	515	490	453	367	134	46.6	53.6	20.4	0.01	0.00	0.00	0.00
25	625	627	625	600	566	541	505	486	451	356	133	47.9	52.0	23.2	0.43	0.00	0.00	0.00
30	606	609	602	571	540	517	482	474	428	273	67.1	42.5	48.7	13.6	0.00	0.00	0.00	0.00
35	559	563	560	533	505	482	458	442	385	223	65.9	44.5	45.2	13.8	0.00	0.00	0.00	0.00
40	513	519	510	483	463	435	429	398	298	88.5	42.4	50.3	29.9	4.31	0.00	0.00	0.00	0.00
45	462	469	460	437	418	400	390	343	217	82.7	40.1	43.8	27.3	4.41	0.00	0.00	0.00	0.00
50	413	421	402	383	365	362	345	252	75.5	37.3	37.2	37.3	13.1	0.00	0.00	0.00	0.00	0.00
55	358	368	347	332	329	317	253	160	66.4	32.4	34.8	28.3	8.95	0.22	0.00	0.00	0.00	0.00
60	310	310	286	276	291	260	123	35.8	25.5	28.3	30.9	12.5	0.01	0.00	0.00	0.00	0.00	0.00
65	239	238	226	237	185	148	86.1	26.4	24.1	22.0	21.1	7.19	0.57	0.00	0.00	0.00	0.00	0.00
70	176	161	169	183	60.6	20.2	15.1	12.2	25.3	14.6	5.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	105	105	83.8	97.7	41.5	11.2	9.59	9.97	10.5	9.57	3.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	36.4	28.3	2.67	0.46	0.00	0.23	5.80	4.51	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:24.0DEG
Operators:QC1
Test Date:2024-03-25

V(β) Range:-80 - 80DEG
V(β) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:40%
Test Distance:8.300m [K=1.0000]
Remarks: