

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

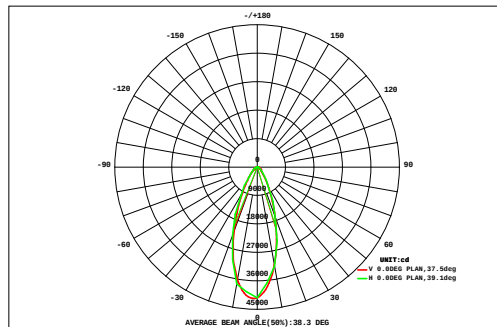
Maximum Intensity (Luminaire orientation as tested.)		1685.4 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
Beam Spread	At 10% of Imax	76.7V x 74.9H
	At 50% of Imax	38.7V x 37.5H
	At 90% of Imax	14.2V x 14.3H
Beam Flux	Total	999.8 lumens per klm.
	To 10% of Imax	808.6 lumens per klm.
	To 50% of Imax	411.9 lumens per klm.
	To 90% of Imax	67.7 lumens per klm.
Upward LOR		0.0 %
Downward LOR		100.0 %
Luminaire Efficiency(Light Output Ratio)		100.0 %

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:30.0DEG
Operators:QC1
Test Date:2023-09-07

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:44%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.4V I:1.986A P:425.8W PF:0.9772 Lamp Flux:24640.3x1 lm		
NAME: 8.03.006.0113 45°SP-F620A-144P-RDM	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2023090011
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:



DATA OF LAMP		Eff:57.87lm/W	
MODEL	SP-F620A-144P-RDM	Imax(cd)	41528
NOMINAL POWER(W)	432	AVAILABILITY(%)	81.2
RATED VOLTAGE(V)	220	Avai. FLUX(lm)	20004
NOMINAL FLUX(lm)	24640.3	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	24640
TEST VOLTAGE(V)	219.5	θ @50%(H,V)	37,39DEG

VERTICAL (DEG)	AREA FLUX DIAGRAM																UNIT:lm		Φ t	Φ a
	0.26	0.92	1.99	3.51	5.35	7.10	8.62	9.85	10.4	10.4	9.85	8.65	7.12	5.30	3.45	1.98	0.95	0.31	96.0	0.00
72	0.26	0.92	1.99	3.51	5.35	7.10	8.62	9.85	10.4	10.4	9.85	8.65	7.12	5.30	3.45	1.98	0.95	0.31	96.0	0.00
64	0.76	2.07	4.23	6.93	9.78	12.6	15.3	17.3	18.2	18.2	17.3	15.4	12.8	9.99	7.04	4.27	2.12	0.79	175	0.00
56	1.22	3.28	6.46	10.3	14.4	18.8	23.0	26.2	28.1	28.2	26.6	23.5	19.5	15.1	10.8	6.91	3.60	1.40	267	0.00
48	1.81	4.70	8.93	14.0	19.7	26.5	33.8	40.4	44.7	45.1	41.4	35.1	27.7	20.7	14.6	9.40	5.05	2.02	396	0.00
40	2.66	6.52	11.8	18.4	27.0	38.9	54.0	69.4	79.8	80.1	70.0	54.4	39.0	26.8	18.0	11.3	6.07	2.42	617	152
32	3.28	7.80	14.1	23.0	37.0	60.1	93.7	131	156	155	128	90.9	57.7	35.6	22.2	13.6	7.36	2.98	1040	749
24	3.66	8.68	15.9	27.6	50.4	94.8	167	255	318	314	246	159	90.1	48.6	27.2	15.7	8.49	3.52	1854	1635
	3.87	9.23	17.3	31.6	62.7	130	251	409	532	536	415	254	132	63.9	32.1	17.5	9.36	3.94	2912	2724
	4.18	9.84	18.5	35.1	74.4	163	328	549	716	716	545	324	161	73.1	34.6	18.2	9.58	4.00	3784	3608
	4.63	10.5	19.8	39.0	86.0	193	388	632	796	764	562	322	155	69.5	33.0	17.4	9.05	3.65	4106	3934
	4.16	9.71	18.3	34.6	72.2	157	312	519	675	667	511	302	150	68.9	33.0	17.7	9.33	3.88	3566	3386
	3.72	8.86	16.3	28.8	54.7	108	202	326	425	431	339	215	116	58.1	30.1	16.6	8.89	3.73	2392	2190
-24	3.09	7.68	14.1	23.8	40.6	71.7	122	185	235	241	197	134	79.3	44.5	25.6	15.1	8.24	3.48	1451	1206
-32	2.60	6.62	12.2	19.8	30.6	46.9	69.0	92.3	108	107	92.2	69.4	47.5	31.1	20.1	12.6	6.95	2.86	778	420
-40	2.25	5.71	10.4	16.1	23.0	31.3	39.9	47.1	50.3	48.6	43.3	36.1	28.4	21.3	14.9	9.63	5.07	1.93	435	0.00
-48	1.49	4.07	7.72	12.0	16.5	21.2	25.4	28.5	30.3	30.4	28.7	25.4	21.0	16.2	11.6	7.42	3.82	1.41	293	0.00
-56	0.79	2.37	4.97	8.03	11.3	14.7	17.7	20.0	21.3	21.5	20.5	18.3	15.2	12.5	9.64	6.27	3.35	1.32	210	0.00
-64	0.32	1.12	2.60	4.64	6.95	9.25	11.4	13.1	13.9	14.2	13.7	12.4	10.4	8.23	6.17	3.88	2.04	0.80	135	0.00
-72	0.26	0.92	1.99	3.51	5.35	7.10	8.62	9.85	10.4	10.4	9.85	8.65	7.12	5.30	3.45	1.98	0.95	0.31	96.0	0.00
	-72	-64	-56	-48	-40	-32	-24	-16	HORIZONTAL (DEG)	16	24	32	40	48	56	64	72			
Φ t	44.7	110	206	357	643	1205	2162	3371	4258	4229	3307	2101	1170	629	354	206	109	44.4	24505	---
Φ a	0.00	0.00	0.00	2.00	238	879	1883	3108	3994	3969	3060	1820	852	199	0.00	0.00	0.00	0.00	---	20004

one-half-peak spread: U:21.8,D:17.2 , L:18.7,R:19.1

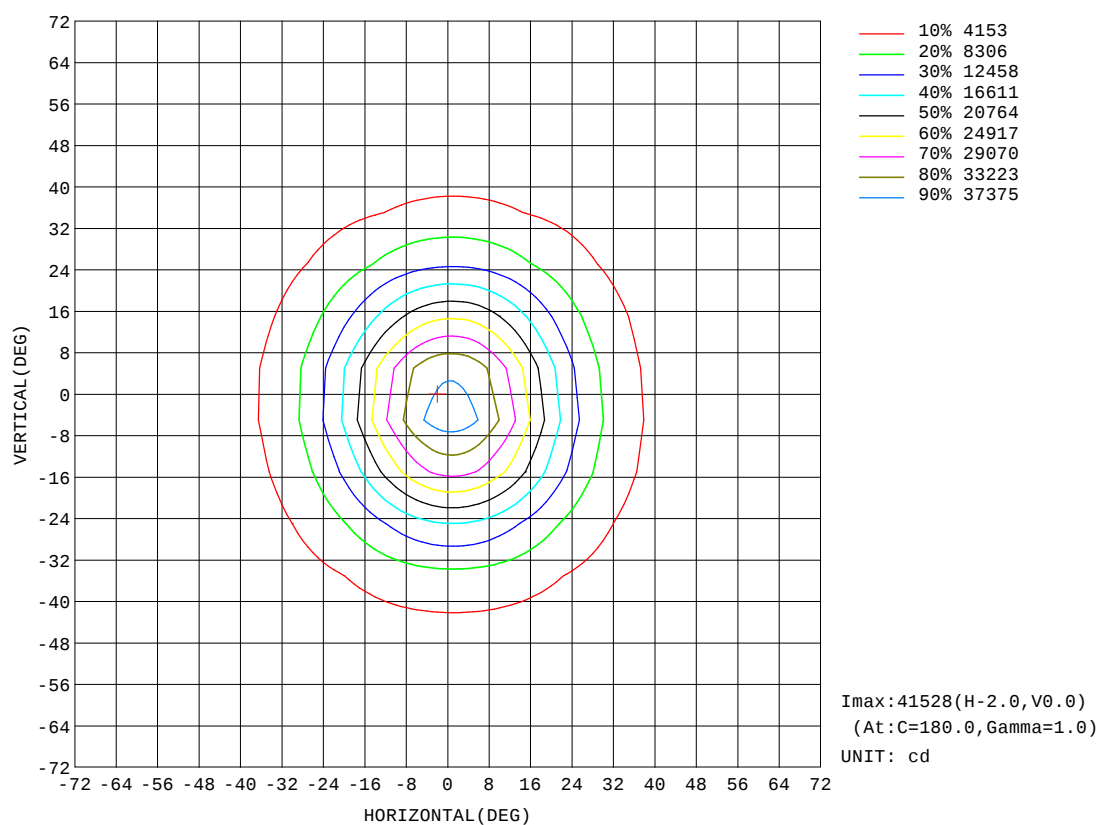
NEMA Beam Type: Type 5

H(β) Range:-90 - 90DEG
 H(β) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:30.0DEG
 Operators:QC1
 Test Date:2023-09-07

V(B) Range:-80 - 80DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:44%
 Test Distance:8.300m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:219.4V I:1.986A P:425.8W PF:0.9772 Lamp Flux:24640.3x1 lm		
NAME: 8.03.006.0113 45°SP-F620A-144P-RDM	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2023090011
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

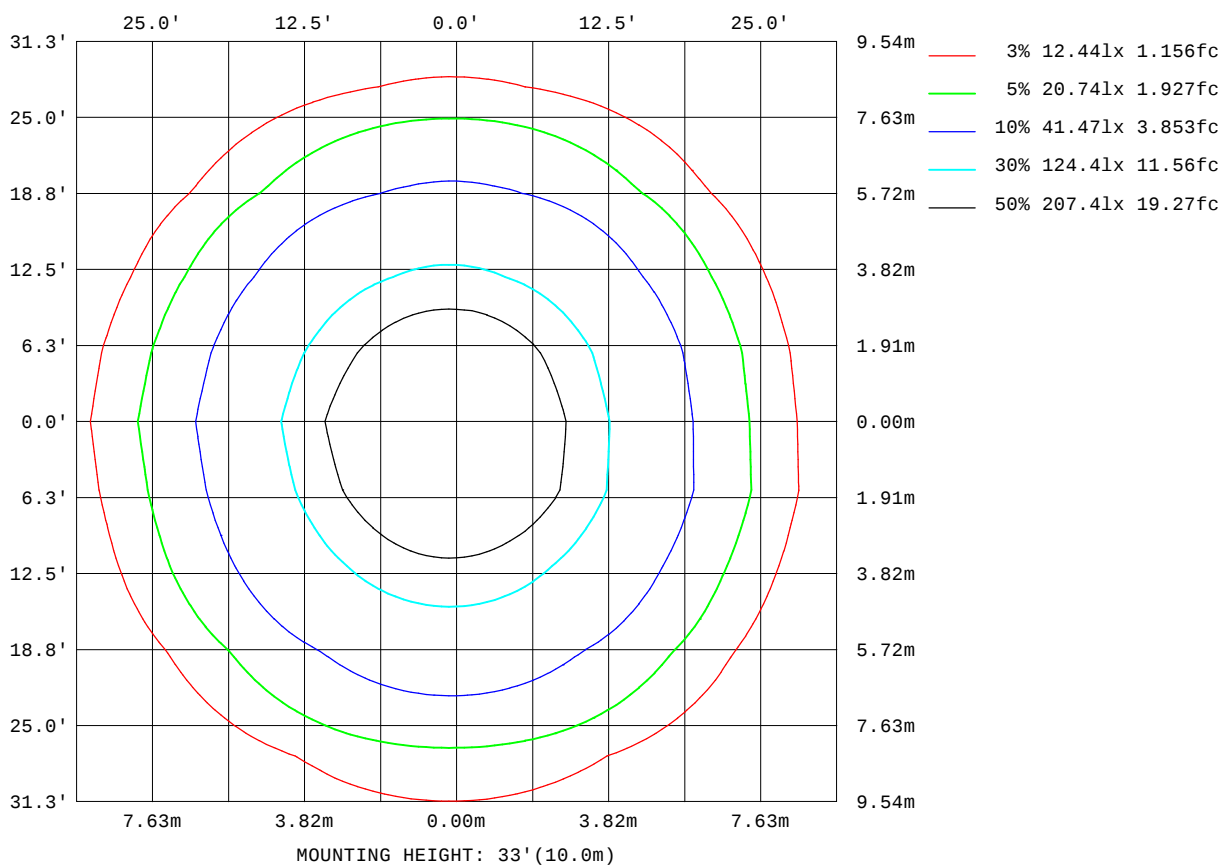


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V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:44%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

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DIM.:	SPEC.:	SERIAL No.:2023090011
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

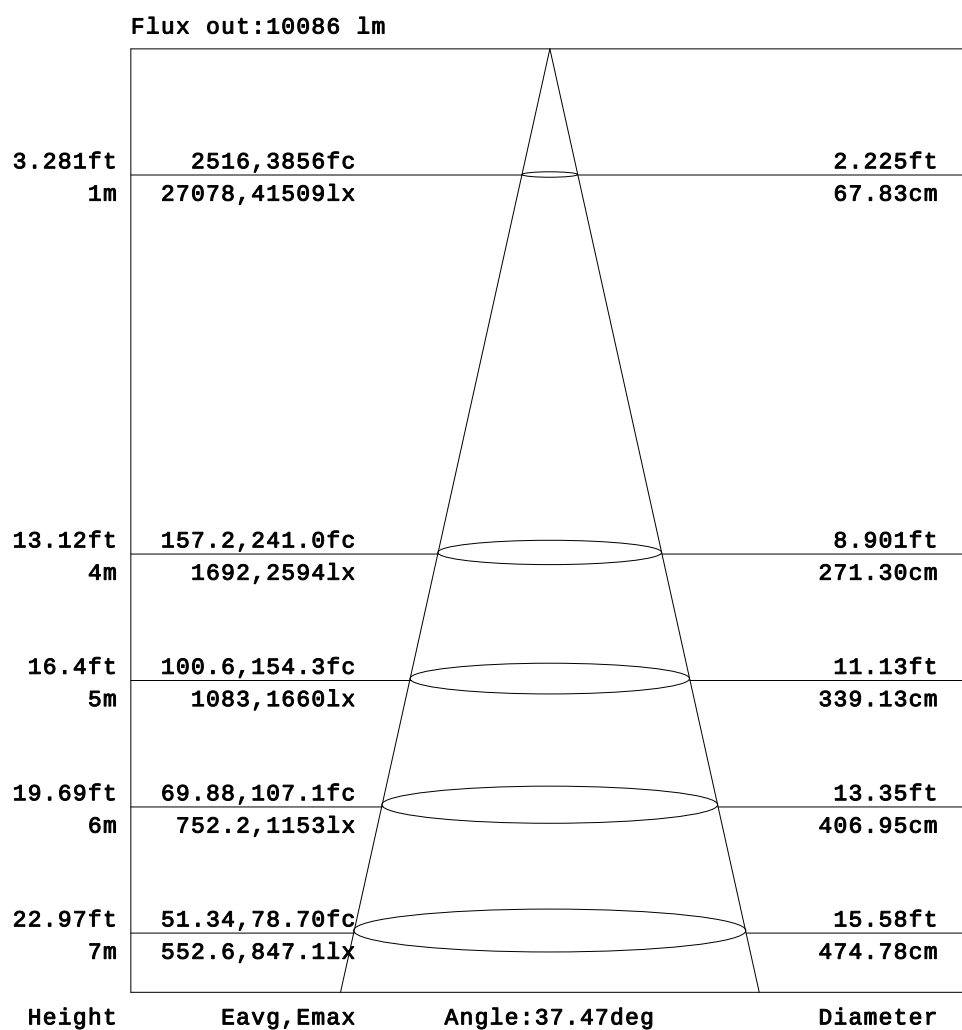


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:30.0DEG
Operators:QC1
Test Date:2023-09-07

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:44%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

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DIM.:	SPEC.:	SERIAL No.:2023090011
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

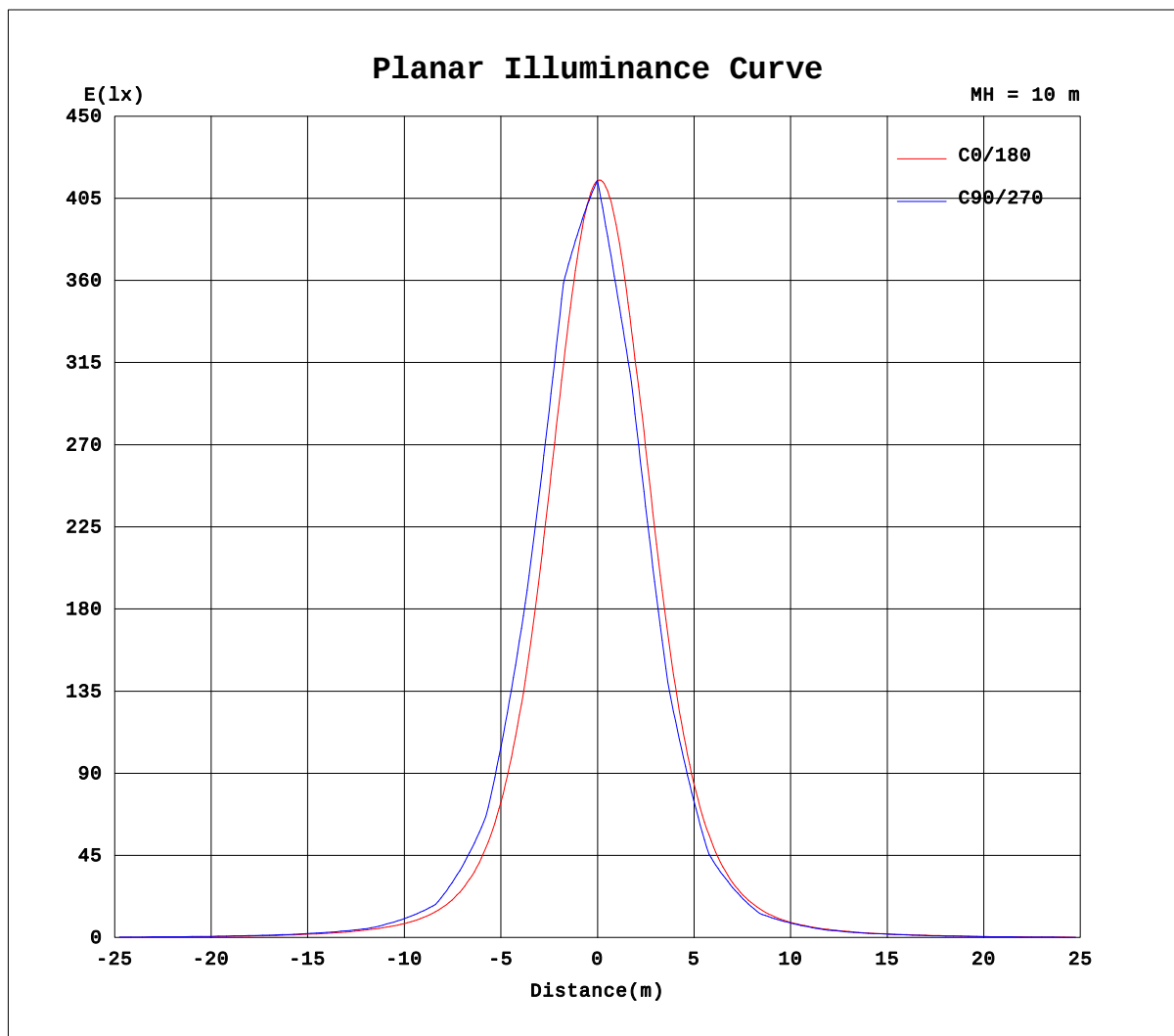


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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H(β) Interval: 1.0DEG
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Temperature:30.0DEG
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Test Date:2023-09-07

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity:44%
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: 30.0DEG
Operators: QC1
Test Date: 2023-09-07

V(β) Range: -80 - 80DEG
V(β) Interval: 5.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.275
Humidity: 44%
Test Distance: 8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

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NAME: 8.03.006.0113 45°SP-F620A-144P-RDM									TYPE:LED			WEIGHT:					
DIM.:									SPEC.:			SERIAL No.:2023090011					
MFR.: TPK OPTOELECTRONIC TECH CO., LTD									SUR.:			PROTECTION ANGLE:					

Table--1

UNIT: ×10cd

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	0.22	1.15	2.54	4.23	6.22	8.27	10.7	13.4	15.7	17.8	19.4	21.0	21.7	21.9
-75	0.00	0.00	0.00	0.00	0.77	2.14	4.50	7.48	11.2	15.3	19.8	24.1	28.3	32.2	35.8	38.9	41.4	42.9	43.6
-70	0.00	0.00	0.00	0.12	2.41	5.77	10.0	15.4	21.4	28.1	34.7	40.7	46.4	51.6	56.4	60.5	63.3	64.9	65.8
-65	0.00	0.00	0.00	1.13	4.60	9.20	15.6	23.2	31.6	39.9	47.9	55.5	62.7	69.6	75.7	80.8	84.5	86.8	88.0
-60	0.00	0.00	0.30	4.21	9.93	17.5	26.8	37.8	48.4	58.1	67.3	76.2	84.7	92.7	99.4	104	108	110	111
-55	0.00	0.00	0.21	3.97	10.9	20.0	31.7	44.8	57.7	69.9	81.5	93.1	105	116	127	136	144	148	151
-50	0.00	0.00	1.78	8.89	18.4	31.3	46.8	62.3	76.8	91.1	105	119	134	149	163	175	184	190	191
-45	0.00	0.00	0.94	7.69	17.7	32.2	49.4	67.0	84.0	101	119	139	162	188	217	245	272	290	298
-40	0.00	0.00	4.03	13.8	27.7	46.2	66.2	85.3	105	125	148	177	211	250	294	336	376	400	406
-35	0.00	0.00	2.13	11.5	25.3	44.2	65.8	86.8	109	134	164	204	258	328	416	512	607	679	713
-30	0.00	0.01	6.63	18.9	37.3	59.1	82.2	105	132	165	208	270	358	473	614	765	902	996	1021
-25	0.00	0.00	3.94	15.7	33.1	55.2	79.7	104	132	167	219	298	416	586	811	1076	1345	1557	1656
-20	0.00	0.67	9.61	25.1	45.7	71.0	96.4	124	158	206	283	409	598	866	1213	1606	1977	2231	2290
-15	0.00	0.00	5.59	19.0	38.2	62.5	89.0	117	150	197	272	398	600	906	1326	1846	2385	2817	3020
-10	0.00	1.38	11.1	27.1	48.8	75.6	103	134	175	239	345	528	822	1260	1838	2523	3179	3632	3748
-5	0.00	0.06	6.81	21.3	41.5	67.3	94.9	124	162	217	311	473	739	1150	1724	2435	3141	3704	3950
0	0.00	2.09	13.1	30.5	53.7	81.2	109	142	187	259	388	602	948	1466	2157	2941	3611	4063	4128
5	0.00	0.06	6.92	21.6	42.0	67.9	95.4	125	162	217	308	465	719	1107	1651	2300	2947	3456	3668
10	0.00	1.58	11.5	27.6	49.8	76.3	104	134	175	235	336	503	766	1149	1637	2206	2743	3103	3175
15	0.00	0.00	5.60	19.4	38.1	62.3	88.4	115	148	191	259	368	542	797	1143	1544	1962	2290	2435
20	0.00	1.09	9.86	24.6	44.7	68.7	93.9	120	151	193	257	357	502	701	950	1223	1476	1646	1683
25	0.00	0.00	3.97	16.1	32.3	53.3	76.9	101	126	157	200	261	352	476	634	815	994	1132	1195
30	0.00	0.33	6.81	19.4	35.7	56.3	78.5	101	124	151	186	232	293	370	460	553	635	690	704
35	0.00	0.00	2.60	12.0	24.9	41.9	61.6	81.6	102	123	149	179	218	266	323	383	439	482	501
40	0.00	0.00	4.25	14.1	26.5	42.6	61.0	79.0	96.8	115	133	155	179	206	234	260	282	296	299
45	0.00	0.00	1.42	7.52	17.1	29.6	44.4	60.3	76.3	91.7	107	123	141	160	179	198	213	224	229
50	0.00	0.00	2.16	8.19	17.0	27.7	40.6	54.8	67.9	80.9	92.9	105	117	129	140	148	155	159	160
55	0.00	0.00	0.36	3.56	9.60	17.7	27.2	38.1	49.7	60.9	71.1	81.2	90.8	100	109	116	122	125	127
60	0.00	0.00	0.44	3.18	8.66	15.0	22.2	30.9	40.7	49.3	57.4	64.8	71.9	78.6	84.7	89.4	92.4	94.0	94.4
65	0.00	0.00	0.00	1.05	3.72	7.69	12.8	18.4	25.1	32.0	38.5	45.0	50.6	55.9	60.7	64.7	67.8	69.3	69.9
70	0.00	0.00	0.00	0.28	1.95	4.31	7.71	11.3	15.3	19.9	25.1	29.6	33.7	37.1	40.0	42.8	44.7	45.3	45.4
75	0.00	0.00	0.00	0.00	0.63	1.56	3.19	4.87	7.03	9.73	12.7	15.7	18.3	20.8	23.0	24.9	26.3	27.1	27.2
80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.84	1.83	2.83	3.93	5.02	6.27	7.45	8.23	8.74	9.13	8.98
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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$V(\beta)$ Range:-80 - 80DEG
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 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
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DIM.:	SPEC.:	SERIAL No.:2023090011
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: ×10cd

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	22.3	22.1	21.1	19.7	18.2	16.1	13.5	11.1	8.93	6.79	5.05	3.20	1.84	0.79	0.00	0.00	0.00	0.00
-75	44.1	44.0	42.9	40.9	38.2	35.0	31.2	27.2	23.1	18.5	14.3	10.5	6.78	4.09	1.64	0.16	0.00	0.00
-70	65.9	65.2	63.3	60.0	55.8	50.8	45.8	40.0	33.7	26.6	20.5	14.6	9.36	5.35	1.88	0.00	0.00	0.00
-65	88.1	87.0	84.7	80.8	75.6	69.4	62.5	59.9	52.0	43.5	34.8	26.1	18.0	10.9	5.43	1.12	0.00	0.00
-60	110	107	103	97.8	90.7	82.5	73.8	73.1	63.9	53.4	42.1	30.9	20.8	11.5	5.25	0.58	0.00	0.00
-55	150	146	140	131	121	110	98.1	90.8	78.8	66.8	54.0	40.6	28.2	16.9	8.37	2.12	0.00	0.00
-50	188	180	170	157	142	128	113	98.5	84.2	70.3	55.1	39.8	26.2	14.4	6.03	0.46	0.00	0.00
-45	295	280	257	229	200	173	149	126	107	90.3	73.3	55.7	38.8	24.0	12.0	3.59	0.00	0.00
-40	392	363	323	278	236	198	166	139	117	96.9	77.4	57.7	38.9	23.1	10.3	2.08	0.00	0.00
-35	700	644	559	462	369	290	227	180	146	119	96.4	74.4	53.2	33.9	17.8	6.39	0.19	0.00
-30	973	862	718	568	434	325	247	192	152	123	97.9	74.1	51.2	31.1	15.0	4.13	0.00	0.00
-25	1611	1434	1181	910	667	477	339	246	186	145	115	88.8	64.3	41.3	22.4	8.67	0.72	0.00
-20	2134	1816	1425	1048	735	504	347	247	184	141	111	83.6	58.1	35.2	17.4	5.02	0.00	0.00
-15	2927	2579	2077	1534	1064	711	469	316	223	166	128	98.7	71.6	46.4	25.4	10.2	1.37	0.00
-10	3488	2978	2283	1618	1082	697	450	298	210	157	121	91.6	64.4	39.4	19.6	6.05	0.00	0.00
-5	3800	3313	2626	1898	1288	834	533	348	238	175	133	102	73.5	47.4	25.7	10.1	1.30	0.00
0	3783	3143	2371	1648	1091	695	444	294	208	156	119	88.9	61.3	36.7	17.6	4.64	0.00	0.00
5	3532	3062	2415	1749	1191	778	502	330	230	170	131	99.7	71.7	46.0	24.6	9.32	1.00	0.00
10	2965	2487	1912	1365	924	609	403	273	198	151	117	87.9	60.9	36.6	17.6	4.93	0.00	0.00
15	2366	2077	1674	1251	882	604	411	284	207	158	123	94.9	68.4	43.9	23.6	9.03	1.01	0.00
20	1576	1359	1089	823	597	425	305	225	173	135	107	80.5	55.6	33.5	16.2	4.45	0.00	0.00
25	1163	1047	879	695	527	391	290	220	172	137	109	84.5	60.8	38.8	20.9	7.93	0.87	0.00
30	675	609	521	428	341	268	213	172	141	115	92.0	69.3	47.6	28.8	13.9	3.80	0.00	0.00
35	494	461	410	350	291	238	195	161	134	111	90.0	69.4	49.3	31.3	16.6	6.05	0.55	0.00
40	292	275	251	225	197	171	147	127	108	90.0	71.6	53.1	35.8	21.2	10.1	2.70	0.00	0.00
45	228	219	206	188	170	150	132	115	99.1	83.5	67.5	51.1	35.6	22.2	11.6	3.94	0.15	0.00
50	158	153	146	138	127	115	103	90.4	77.6	64.4	50.4	36.3	24.1	13.9	6.28	1.51	0.00	0.00
55	127	124	120	113	106	96.5	87.0	77.0	66.6	55.5	43.9	32.5	22.2	13.6	6.77	2.08	0.00	0.00
60	93.6	91.8	88.5	83.5	77.3	70.5	63.4	55.4	46.7	37.5	28.3	20.1	12.9	7.32	2.95	0.19	0.00	0.00
65	69.7	68.8	66.7	63.2	58.8	53.9	48.5	42.2	35.5	28.7	21.9	15.9	10.6	6.25	2.71	0.56	0.00	0.00
70	45.3	44.5	42.4	39.6	36.6	33.0	28.5	23.6	18.8	14.5	10.6	7.47	4.38	2.27	0.43	0.00	0.00	0.00
75	27.2	26.9	25.9	24.3	22.2	20.0	17.5	14.5	11.6	8.86	6.47	4.52	2.81	1.47	0.56	0.00	0.00	0.00
80	9.14	8.64	8.21	7.30	6.14	5.04	3.96	3.02	2.13	1.21	0.71	0.13	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:30.0DEG
 Operators:QC1
 Test Date:2023-09-07

$V(\beta)$ Range:-80 - 80DEG
 $V(\beta)$ Interval: 5.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.275
 Humidity:44%
 Test Distance:8.300m [K=1.0000]
 Remarks: