

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)	286.9 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
---	---

Beam Spread	At 10% of Imax	150.8V x 179.0H
	At 50% of Imax	112.3V x 146.2H
	At 90% of Imax	51.6V x 60.0H

Beam Flux	Total	995.5 lumens per klm.
	To 10% of Imax	992.1 lumens per klm.
	To 50% of Imax	801.1 lumens per klm.
	To 90% of Imax	199.2 lumens per klm.

Upward LOR	0.0 %
Downward LOR	99.5 %

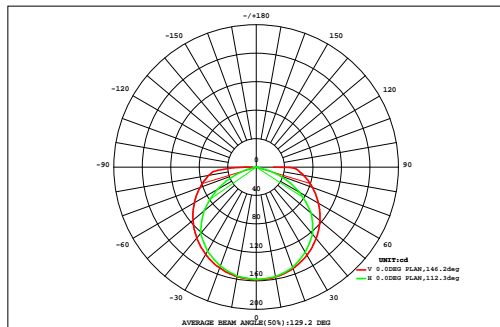
Luminaire Efficiency(Light Output Ratio)	100.0 %
--	---------

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:27.1DEG  
Operators:QC1  
Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:61%  
Test Distance:8.300m [K=1.0000]  
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.9757A P:23.42W PF:1.000 Lamp Flux:551.089x1 lm		
NAME: 8.02.019.0063 LLS-OP-W30A-L12-DMX	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2024010093
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:



DATA OF LAMP		Eff:23.53lm/W	
MODELLS-OP-W30A-L12-DMX	Imax(cd)	158.1	
NOMINAL POWER(W)	24	AVAILABILITY(%)	99.8
RATED VOLTAGE(V)	24	Avai. FLUX(lm)	550.2
NOMINAL FLUX(lm)	551.089	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	551.1
TEST VOLTAGE(V)	24.0	θ @50%(H,V)	146,112DEG

VERTICAL( DEG )	AREA FLUX DIAGRAM																UNIT:lm	Φ t	Φ a	
	90	80	70	60	50	40	30	20	10	0	10	20	30	40	50	60				70
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	
80	0.12	0.51	0.97	1.34	1.50	1.46	1.23	0.89	0.57	0.56	0.87	1.21	1.42	1.46	1.30	0.95	0.55	0.17	17.1	16.8
70	0.13	0.50	0.89	1.31	1.60	1.76	1.78	1.72	1.63	1.63	1.71	1.76	1.73	1.56	1.25	0.87	0.48	0.15	22.4	22.4
60	0.14	0.52	0.97	1.46	1.91	2.26	2.48	2.59	2.61	2.61	2.58	2.45	2.21	1.83	1.40	0.95	0.51	0.15	29.6	29.6
50	0.15	0.55	1.04	1.60	2.15	2.66	3.07	3.33	3.44	3.43	3.31	3.02	2.59	2.09	1.55	1.02	0.54	0.16	35.7	35.7
40	0.16	0.57	1.11	1.73	2.36	2.95	3.45	3.81	3.98	3.97	3.78	3.41	2.91	2.32	1.69	1.09	0.57	0.16	40.0	40.0
30	0.16	0.59	1.15	1.82	2.52	3.18	3.75	4.16	4.36	4.36	4.14	3.73	3.16	2.49	1.80	1.14	0.58	0.16	43.2	43.2
20	0.16	0.60	1.19	1.88	2.62	3.34	3.96	4.41	4.64	4.65	4.41	3.95	3.33	2.61	1.87	1.18	0.60	0.16	45.6	45.6
10	0.16	0.61	1.19	1.90	2.65	3.39	4.04	4.51	4.76	4.78	4.53	4.06	3.42	2.67	1.91	1.20	0.60	0.17	46.6	46.6
0	0.13	0.60	1.19	1.89	2.65	3.38	4.02	4.50	4.75	4.76	4.52	4.05	3.41	2.67	1.91	1.20	0.61	0.15	46.4	46.4
-10	0.09	0.55	1.17	1.85	2.58	3.28	3.90	4.35	4.59	4.62	4.39	3.94	3.33	2.62	1.88	1.19	0.59	0.12	45.0	45.0
-20	0.08	0.42	1.08	1.76	2.44	3.10	3.67	4.08	4.30	4.32	4.12	3.71	3.15	2.49	1.80	1.14	0.51	0.11	42.3	42.3
-30	0.09	0.34	0.91	1.64	2.26	2.84	3.35	3.72	3.91	3.93	3.77	3.41	2.91	2.32	1.69	1.04	0.44	0.12	38.7	38.7
-40	0.10	0.32	0.74	1.44	2.03	2.52	2.93	3.21	3.33	3.34	3.23	2.98	2.58	2.09	1.55	0.89	0.45	0.13	33.9	33.9
-50	0.10	0.33	0.63	1.20	1.78	2.14	2.37	2.46	2.46	2.45	2.44	2.36	2.17	1.84	1.36	0.81	0.45	0.13	27.5	27.5
-60	0.10	0.33	0.56	1.00	1.49	1.67	1.66	1.57	1.47	1.46	1.56	1.64	1.64	1.52	1.15	0.76	0.42	0.12	20.1	20.1
-70	0.08	0.30	0.50	0.82	1.16	1.17	1.00	0.74	0.50	0.49	0.72	0.98	1.14	1.17	0.94	0.67	0.37	0.12	12.9	12.5
-80	0.04	0.13	0.22	0.35	0.45	0.42	0.28	0.10	0.00	0.00	0.09	0.27	0.40	0.47	0.38	0.27	0.16	0.06	4.09	3.83
-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	1.97	7.77	15.5	25.0	34.2	41.5	47.0	50.1	51.3	51.4	50.2	46.9	41.5	34.2	25.4	16.4	8.43	2.33	551	---
Φ a	1.97	7.77	15.5	25.0	34.2	41.5	46.9	50.0	51.1	51.1	50.0	46.9	41.5	34.2	25.4	16.4	8.43	2.33	---	550

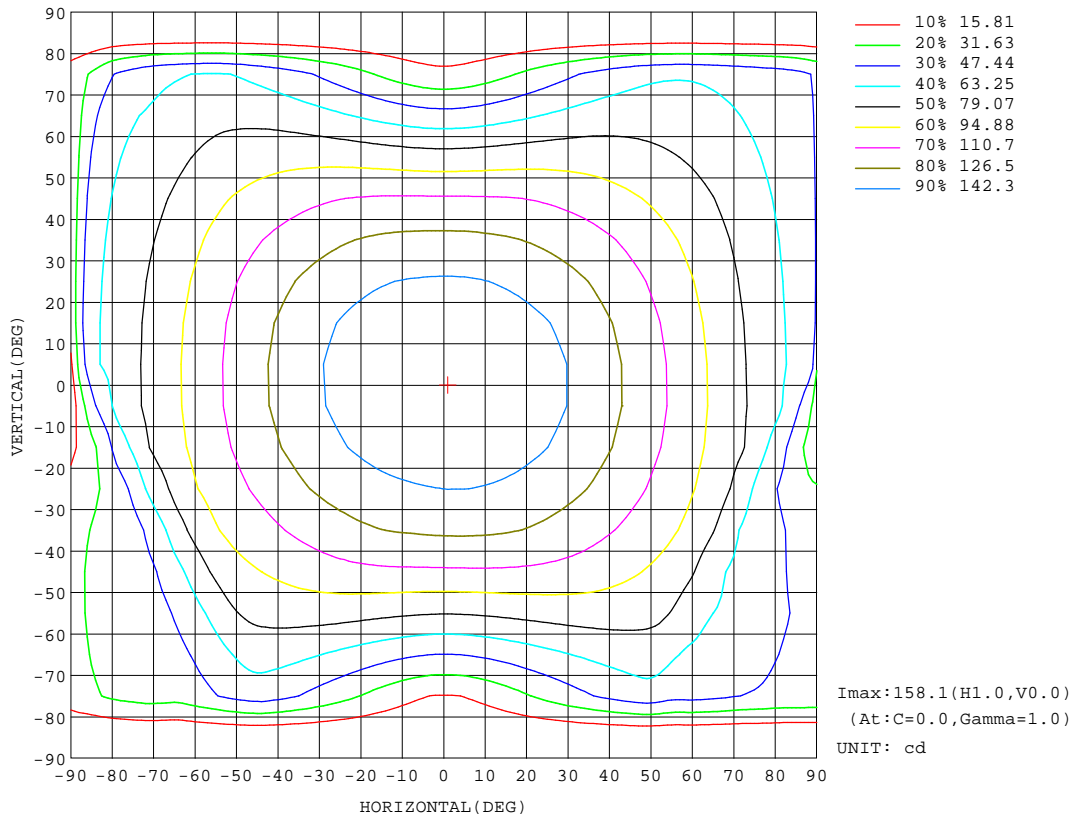
one-half-peak spread: U:55.5,D:57.3 , L:74.6,R:69.5 NEMA Beam Type: Type 7

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:27.1DEG  
Operators:QC1  
Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:61%  
Test Distance:8.300m [K=1.0000]  
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.9757A P:23.42W PF:1.000 Lamp Flux:551.089x1 lm		
NAME: 8.02.019.0063 LLS-OP-W30A-L12-DMX	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2024010093
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

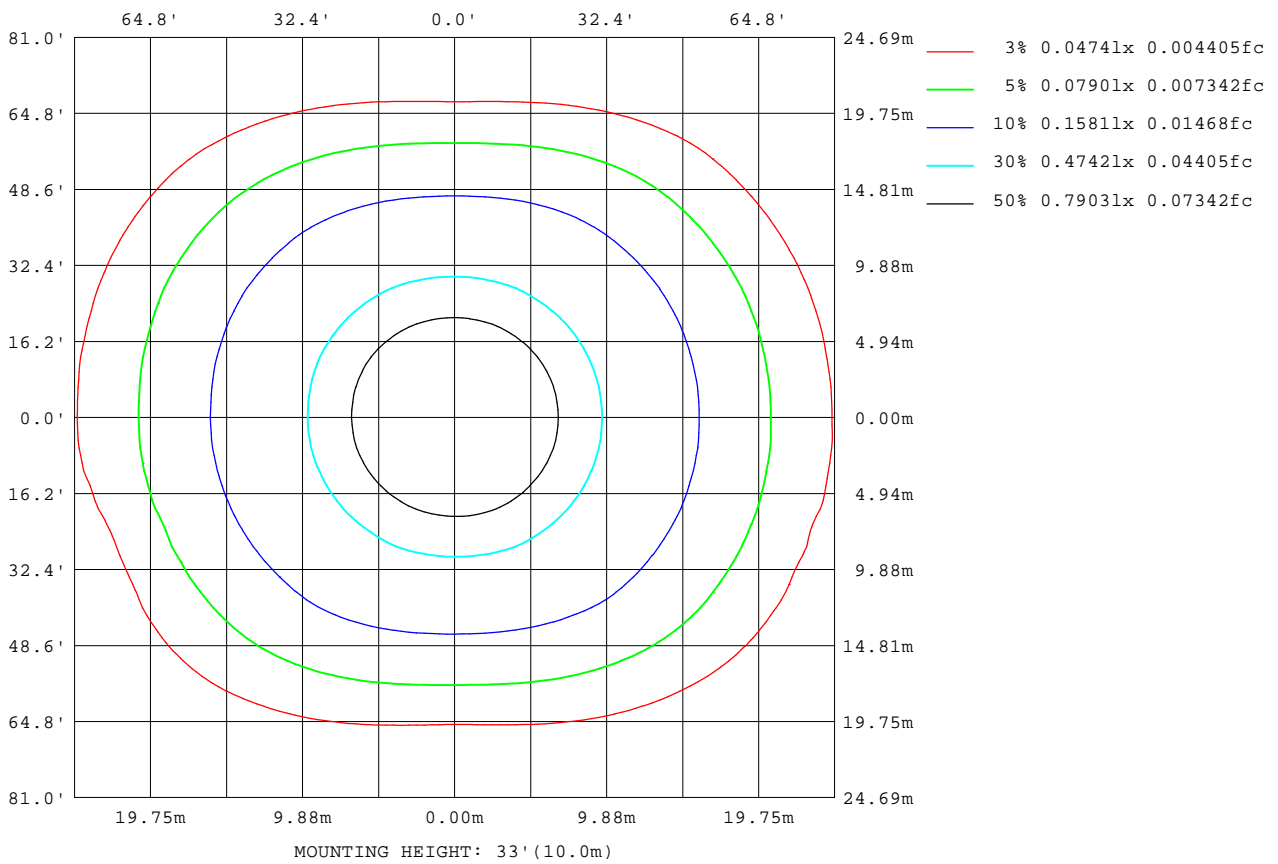


H(β) Range:-90 - 90DEG  
 H(β) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:27.1DEG  
 Operators:QC1  
 Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
 Humidity:61%  
 Test Distance:8.300m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:24.00V I:0.9757A P:23.42W PF:1.000 Lamp Flux:551.089x1 lm		
NAME: 8.02.019.0063 LLS-OP-W30A-L12-DMX	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2024010093
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:



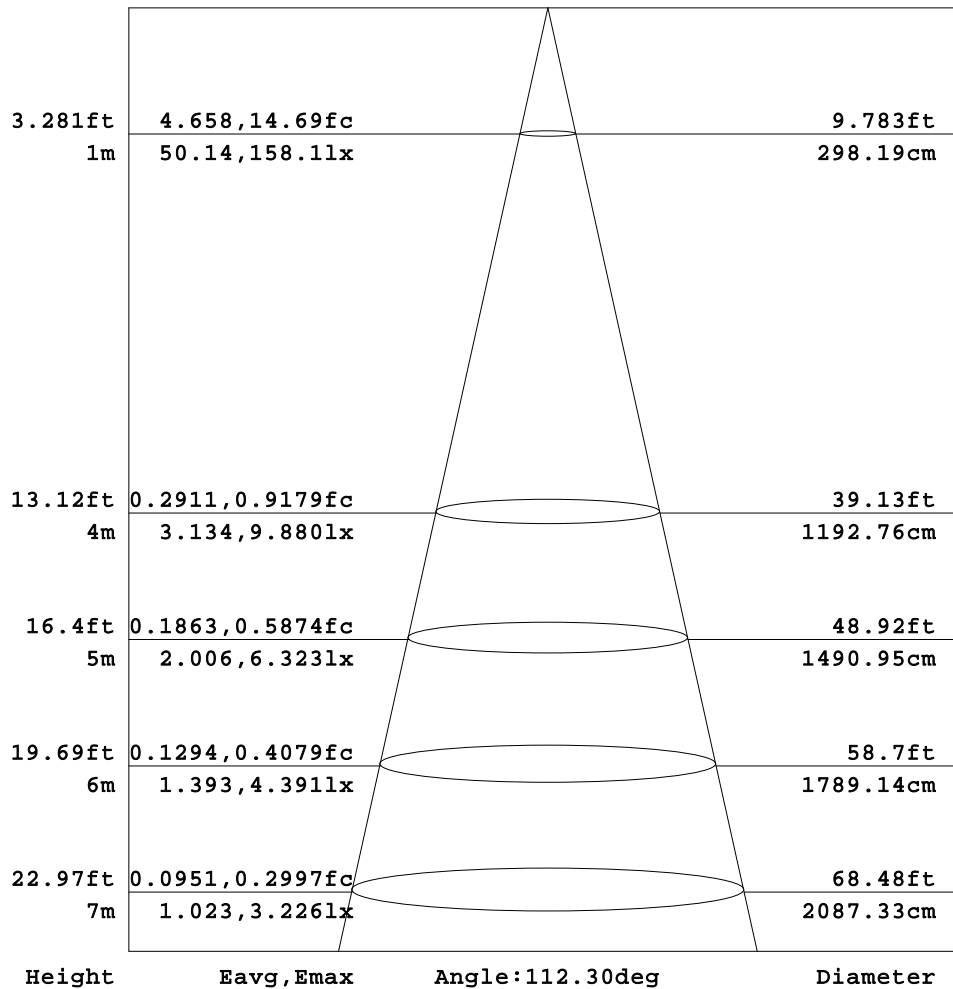
H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:27.1DEG  
 Operators:QC1  
 Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
 Humidity:61%  
 Test Distance:8.300m [K=1.0000]  
 Remarks:

**AAI Figure**

Test:U:24.00V I:0.9757A P:23.42W PF:1.000 Lamp Flux:551.089x1 lm		
NAME: 8.02.019.0063 LLS-OP-W30A-L12-DMX	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2024010093
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

Flux out:359.6 lm

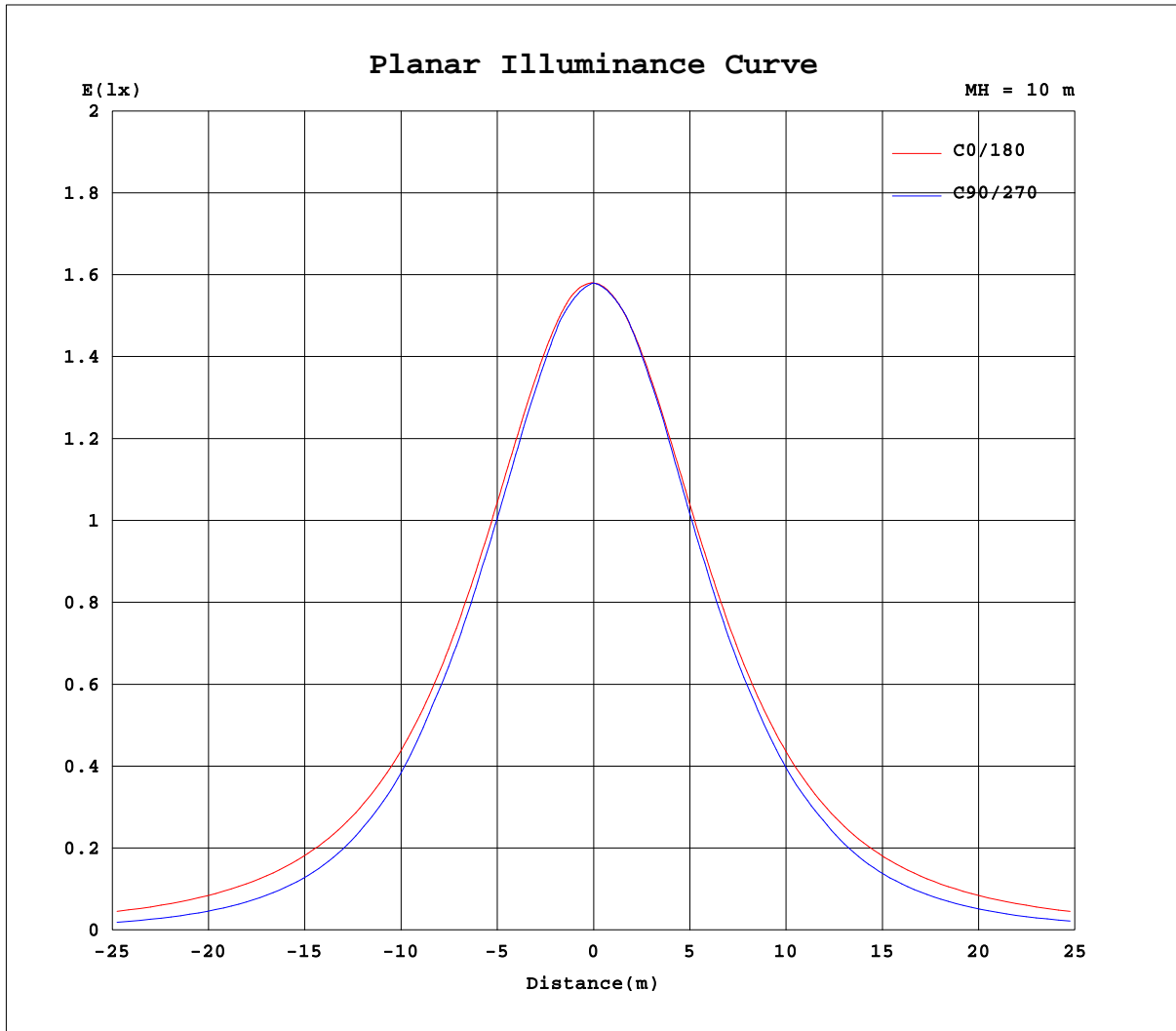


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:27.1DEG  
Operators:QC1  
Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:61%  
Test Distance:8.300m [K=1.0000]  
Remarks:

Planar Illuminance Curve



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:27.1DEG  
Operators:QC1  
Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:61%  
Test Distance:8.300m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.9757A P:23.42W PF:1.000 Lamp Flux:551.089x1 lm		
NAME: 8.02.019.0063 LLS-OP-W30A-L12-DMX	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2024010093
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

H( DEG) V( DEG)	-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	23.8	27.2	29.9	33.1	36.6	35.3	38.3	42.5	45.3	46.7	43.8	38.4	32.4	26.0	19.4	12.7	6.54	1.63	0.00
-75	24.0	28.8	34.1	37.1	38.6	37.3	41.7	46.9	51.6	54.7	52.0	47.4	42.4	36.9	31.3	25.7	20.6	16.6	15.2
-70	24.1	30.4	38.3	41.1	40.7	39.2	45.0	51.4	57.9	62.7	60.3	56.5	52.3	47.8	43.2	38.7	34.7	31.7	30.4
-65	24.1	32.6	40.2	41.7	41.1	42.1	49.2	56.9	64.7	70.0	69.0	66.7	63.6	60.3	56.8	53.4	50.4	48.1	47.1
-60	24.1	34.9	42.1	42.3	41.6	45.0	53.3	62.4	71.5	77.3	77.8	76.8	74.9	72.7	70.4	68.2	66.1	64.6	63.9
-55	24.3	36.3	41.8	41.3	42.1	48.7	58.2	68.6	78.5	83.0	84.7	85.5	85.6	85.2	84.0	82.7	81.4	80.3	79.8
-50	24.5	37.8	41.5	40.3	42.5	52.4	63.1	74.9	85.5	88.7	91.5	94.2	96.3	97.7	97.6	97.2	96.6	96.1	95.8
-45	24.0	36.7	38.9	39.4	45.8	57.3	69.9	82.3	90.4	94.2	97.7	101	104	106	107	108	109	109	109
-40	23.5	35.6	36.3	38.5	49.1	62.2	76.6	89.6	95.2	99.6	104	108	111	114	117	119	120	121	122
-35	23.3	32.3	34.8	41.8	54.3	70.3	84.0	93.7	99.5	104	109	114	118	121	124	126	128	129	129
-30	23.0	29.1	33.3	45.1	59.5	78.3	91.4	97.7	104	109	115	119	124	128	131	133	135	136	137
-25	20.2	27.3	35.8	51.1	69.3	83.5	93.8	101	107	113	119	124	129	133	136	138	140	142	142
-20	17.5	25.5	38.3	57.2	79.1	88.6	96.3	103	110	117	123	128	133	138	141	144	146	147	148
-15	12.5	27.3	48.3	65.7	81.3	90.1	97.9	105	113	119	126	131	136	141	145	147	150	151	152
-10	7.52	29.0	58.3	74.3	83.6	91.7	99.6	107	115	122	128	134	140	144	148	151	154	155	156
-5	6.67	41.6	63.2	75.2	83.9	92.1	100	108	115	123	129	135	141	146	149	153	155	156	157
0	5.82	54.2	68.0	76.0	84.2	92.5	101	108	116	123	130	136	142	147	151	154	156	157	158
5	13.5	57.1	67.9	75.9	84.0	92.3	100	108	116	123	130	136	141	146	150	153	155	157	157
10	21.1	59.9	67.9	75.8	83.9	92.0	100	108	115	123	129	135	141	146	149	152	155	156	156
15	22.2	60.0	67.8	75.6	83.5	91.5	99.3	107	114	121	128	133	138	143	147	150	151	153	153
20	23.2	60.0	67.7	75.4	83.1	90.9	98.6	106	113	120	126	132	136	141	144	147	148	149	150
25	23.2	59.2	66.9	74.3	81.7	89.2	96.6	104	110	117	122	127	132	136	139	141	143	144	144
30	23.2	58.5	66.1	73.2	80.3	87.5	94.5	101	108	113	119	123	127	131	134	136	137	138	138
35	23.1	57.6	65.4	72.0	78.8	85.5	92.2	98.6	104	109	114	118	122	125	127	129	130	130	131
40	23.1	56.6	64.6	70.9	77.2	83.6	89.9	95.8	101	105	109	113	116	119	121	122	123	123	123
45	23.1	54.1	63.5	69.2	75.0	80.8	86.6	91.8	96.2	99.9	103	106	109	110	111	112	112	112	112
50	23.2	51.7	62.5	67.6	72.9	78.1	83.3	87.9	91.4	94.4	97.0	99.3	101	102	102	102	102	101	101
55	23.1	48.4	61.3	65.9	70.5	75.2	79.8	83.7	86.4	88.5	89.7	90.3	90.3	89.9	89.0	87.9	86.8	85.9	85.5
60	23.1	45.1	60.1	64.2	68.2	72.3	76.2	79.5	81.4	82.5	82.4	81.2	79.5	77.6	75.6	73.6	71.7	70.3	69.8
65	23.2	41.4	57.4	62.2	65.5	68.9	72.2	74.8	75.4	74.8	73.2	70.9	68.0	65.0	61.7	58.6	55.8	53.7	52.9
70	23.2	37.8	54.7	60.2	62.9	65.6	68.2	70.1	69.4	67.0	64.0	60.5	56.6	52.3	47.9	43.7	39.9	37.1	36.0
75	23.3	33.6	46.6	53.9	59.1	61.9	63.5	64.1	62.5	59.3	55.3	50.8	45.9	40.6	35.1	29.7	24.8	21.1	19.5
80	23.3	29.4	38.5	47.5	55.4	58.2	58.8	58.1	55.7	51.5	46.6	41.2	35.2	28.9	22.3	15.8	9.73	5.03	3.07
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:27.1DEG  
Operators:QC1  
Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:61%  
Test Distance:8.300m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.9757A P:23.42W PF:1.000 Lamp Flux:551.089x1 lm		
NAME: 8.02.019.0063 LLS-OP-W30A-L12-DMX	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:2024010093
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION 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	1.25	5.89	11.9	18.4	25.0	31.3	37.2	42.7	47.7	49.6	45.5	46.8	44.5	43.6	43.2	43.3	43.5	43.8
-75	16.3	20.0	24.9	30.4	35.9	41.3	46.3	50.9	55.1	57.0	52.6	52.5	50.9	48.2	46.6	44.9	44.0	43.7
-70	31.4	34.1	38.0	42.3	46.9	51.3	55.4	59.1	62.4	64.4	59.6	58.1	57.2	52.8	50.0	46.5	44.4	43.6
-65	47.9	50.0	52.9	56.2	59.5	62.8	65.8	68.4	70.5	71.3	65.6	61.0	59.4	55.9	52.3	48.0	45.3	43.2
-60	64.4	65.9	67.8	70.0	72.2	74.3	76.1	77.7	78.6	78.2	71.7	64.0	61.7	59.0	54.6	49.6	46.1	42.8
-55	80.2	81.1	82.4	83.7	84.9	85.9	86.4	86.1	85.2	83.4	78.4	68.8	63.3	60.2	56.0	50.1	46.2	42.1
-50	96.0	96.4	97.0	97.4	97.7	97.6	96.6	94.6	91.7	88.6	85.0	73.6	64.9	61.3	57.5	50.7	46.4	41.4
-45	109	109	109	108	107	106	103	101	97.0	93.2	89.1	80.4	68.7	61.4	57.2	51.5	45.4	40.8
-40	122	122	121	119	117	114	110	107	102	97.9	93.1	87.3	72.5	61.5	57.0	52.4	44.4	40.2
-35	129	129	128	126	123	120	116	112	107	102	96.7	90.6	79.8	66.2	55.9	51.1	43.0	38.4
-30	137	136	135	133	130	126	122	117	112	106	100	93.8	87.1	70.9	54.8	49.8	41.6	36.6
-25	142	142	140	138	134	131	126	121	115	109	103	95.8	88.7	76.7	61.7	48.5	39.4	33.0
-20	148	147	145	142	139	135	130	125	119	112	105	97.7	90.2	82.5	68.6	47.3	37.2	29.4
-15	152	151	149	146	142	138	133	127	121	114	107	99.3	91.5	83.5	72.4	57.7	39.5	19.4
-10	156	155	153	150	146	141	136	130	123	116	109	101	92.8	84.6	76.3	68.2	41.8	9.37
-5	157	156	154	151	147	142	137	131	124	117	109	101	92.7	84.4	76.1	67.9	50.7	17.0
0	158	157	154	151	147	143	137	131	124	117	109	101	92.7	84.2	76.0	67.7	59.6	24.6
5	157	156	154	151	147	142	137	130	124	116	109	101	92.4	84.1	75.8	67.6	59.6	34.3
10	156	155	153	150	146	141	136	130	123	116	108	100	92.2	83.9	75.6	67.5	59.5	43.9
15	153	152	150	147	143	138	133	127	121	114	107	99.0	91.0	82.9	74.9	66.9	59.2	44.9
20	150	148	146	143	140	136	130	125	119	112	105	97.5	89.8	82.0	74.1	66.4	58.8	45.9
25	144	143	141	138	135	131	126	121	115	109	102	95.5	88.2	80.8	73.3	65.9	58.6	46.1
30	138	137	135	133	130	126	122	117	112	106	100	93.5	86.6	79.6	72.5	65.4	58.4	46.3
35	130	129	128	126	123	120	116	112	107	102	96.6	90.6	84.3	77.8	71.1	64.5	57.9	46.3
40	123	122	121	119	117	114	111	107	103	98.2	93.1	87.8	82.0	76.0	69.8	63.6	57.4	46.2
45	112	112	111	110	109	106	104	101	97.0	93.1	88.9	84.3	79.4	73.8	68.2	62.4	56.8	46.0
50	101	102	102	102	101	98.7	96.6	94.1	91.3	88.1	84.6	80.8	76.8	71.7	66.5	61.3	56.1	45.9
55	85.9	86.6	87.6	88.4	88.8	88.8	88.3	87.1	85.1	82.8	80.1	77.1	73.5	69.1	64.6	60.0	55.4	45.8
60	70.3	71.6	73.3	75.2	77.1	78.8	80.1	80.0	78.9	77.5	75.6	73.3	70.3	66.6	62.7	58.7	54.7	45.6
65	53.6	55.6	58.3	61.3	64.3	67.2	69.7	71.4	72.2	72.2	71.2	69.7	67.4	64.3	61.0	57.6	54.2	45.7
70	37.0	39.6	43.2	47.3	51.5	55.6	59.3	62.8	65.6	66.9	66.9	66.1	64.4	61.9	59.2	56.5	53.7	45.7
75	21.0	24.6	29.3	34.5	39.8	44.9	49.6	54.0	57.8	60.5	61.8	61.8	60.7	58.9	56.9	54.9	51.8	45.5
80	4.97	9.51	15.3	21.7	28.0	34.2	40.0	45.2	50.0	54.1	56.7	57.5	56.9	55.8	54.6	53.3	49.9	45.3
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:27.1DEG  
Operators:QC1  
Test Date:2024-01-23

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
Humidity:61%  
Test Distance:8.300m [K=1.0000]  
Remarks: