

Floodlight Summary:

Report based on lamp delivering 1000 lumens.

Maximum Intensity (Luminaire orientation as tested.)	304.6 cd per klm. 0.0 degrees vertical 0.0 degrees horizontal
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Beam Spread	At 10% of Imax	155.9V x 177.9H
	At 50% of Imax	107.9V x 141.4H
	At 90% of Imax	43.6V x 74.5H

Beam Flux	Total	996.7 lumens per klm.
	To 10% of Imax	991.8 lumens per klm.
	To 50% of Imax	778.3 lumens per klm.
	To 90% of Imax	228.4 lumens per klm.

Upward LOR	0.0 %
Downward LOR	99.7 %

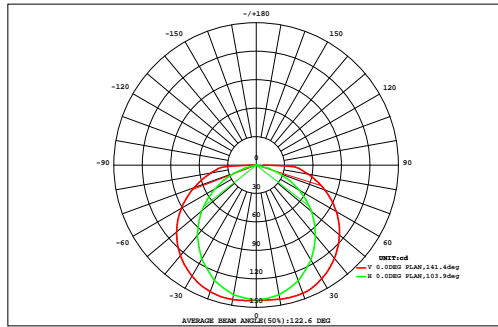
Luminaire Efficiency(Light Output Ratio)	100.0 %
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H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.5DEG
Operators:QC1
Test Date:2024-04-11

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.4683A P:11.24W PF:1.000 Lamp Flux:472.524x1 lm		
NAME: 8.02.019.0067 LLS-OP-W30A-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:202404000016
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:



DATA OF LAMP		Eff:42.04lm/W	
MODEL	LLS-OP-W30A-L6-S	Imax(cd)	143.9
NOMINAL POWER(W)	12	AVAILABILITY(%)	99.7
RATED VOLTAGE(V)	24	Avai. FLUX(lm)	471.2
NOMINAL FLUX(lm)	472.524	LOR(%)	100.0
LAMPS INSIDE	1	TOTAL FLUX(lm)	472.5
TEST VOLTAGE(V)	24.0	θ @50%(H,V)	141,108DEG

VERTICAL(DEG)	AREA FLUX DIAGRAM																UNIT:lm	Φ t	Φ a	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00
80	0.01	0.22	0.53	0.70	0.78	0.77	0.68	0.52	0.36	0.39	0.62	0.84	0.98	0.99	0.89	0.69	0.42	0.13	10.5	10.2
70	0.05	0.32	0.55	0.79	1.01	1.19	1.28	1.29	1.23	1.24	1.36	1.43	1.38	1.22	0.98	0.69	0.39	0.11	16.5	16.5
60	0.08	0.34	0.65	1.01	1.38	1.69	1.91	2.01	1.99	1.99	2.06	2.04	1.87	1.58	1.21	0.81	0.43	0.12	23.1	23.1
50	0.09	0.37	0.76	1.22	1.71	2.15	2.47	2.65	2.67	2.67	2.69	2.58	2.31	1.90	1.42	0.91	0.47	0.13	29.2	29.2
40	0.09	0.40	0.85	1.41	2.00	2.54	2.96	3.20	3.26	3.25	3.24	3.06	2.69	2.18	1.60	1.01	0.50	0.13	34.4	34.4
30	0.10	0.42	0.92	1.56	2.23	2.85	3.35	3.66	3.75	3.74	3.69	3.45	3.00	2.41	1.74	1.08	0.52	0.13	38.6	38.6
	0.10	0.44	0.98	1.66	2.39	3.07	3.63	3.99	4.12	4.10	4.02	3.74	3.22	2.56	1.83	1.13	0.54	0.13	41.7	41.7
	0.10	0.46	1.01	1.72	2.48	3.20	3.79	4.18	4.31	4.29	4.20	3.89	3.33	2.63	1.88	1.15	0.54	0.13	43.3	43.3
	0.10	0.47	1.04	1.75	2.52	3.23	3.81	4.19	4.31	4.30	4.20	3.89	3.32	2.61	1.86	1.13	0.53	0.13	43.4	43.4
	0.09	0.47	1.03	1.72	2.45	3.13	3.67	4.00	4.11	4.10	4.01	3.71	3.17	2.51	1.78	1.09	0.51	0.11	41.7	41.7
	0.06	0.44	0.98	1.62	2.29	2.90	3.38	3.66	3.74	3.73	3.68	3.41	2.94	2.34	1.67	1.03	0.49	0.09	38.5	38.5
-30	0.05	0.38	0.90	1.47	2.05	2.58	2.98	3.20	3.25	3.24	3.21	3.01	2.62	2.11	1.53	0.95	0.45	0.07	34.1	34.0
-40	0.04	0.31	0.80	1.28	1.76	2.18	2.49	2.64	2.65	2.64	2.65	2.52	2.23	1.81	1.34	0.85	0.38	0.07	28.6	28.6
-50	0.04	0.25	0.67	1.06	1.42	1.72	1.92	2.00	1.96	1.95	2.00	1.95	1.77	1.48	1.12	0.74	0.31	0.07	22.4	22.4
-60	0.03	0.20	0.53	0.84	1.06	1.21	1.29	1.28	1.19	1.19	1.28	1.32	1.26	1.11	0.89	0.61	0.24	0.07	15.6	15.6
-70	0.02	0.16	0.41	0.63	0.71	0.72	0.66	0.54	0.41	0.41	0.54	0.68	0.76	0.76	0.67	0.47	0.19	0.06	8.80	8.29
-80	0.01	0.07	0.17	0.24	0.23	0.18	0.10	0.02	0.00	0.00	0.03	0.13	0.22	0.26	0.26	0.17	0.08	0.03	2.21	1.84
-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	1.08	5.72	12.8	20.7	28.5	35.3	40.4	43.0	43.3	43.2	43.5	41.7	37.1	30.5	22.7	14.5	6.99	1.70	473	---
Φ a	0.98	5.70	12.8	20.7	28.5	35.2	40.2	42.8	43.1	43.0	43.3	41.5	37.0	30.5	22.7	14.5	6.99	1.70	---	471

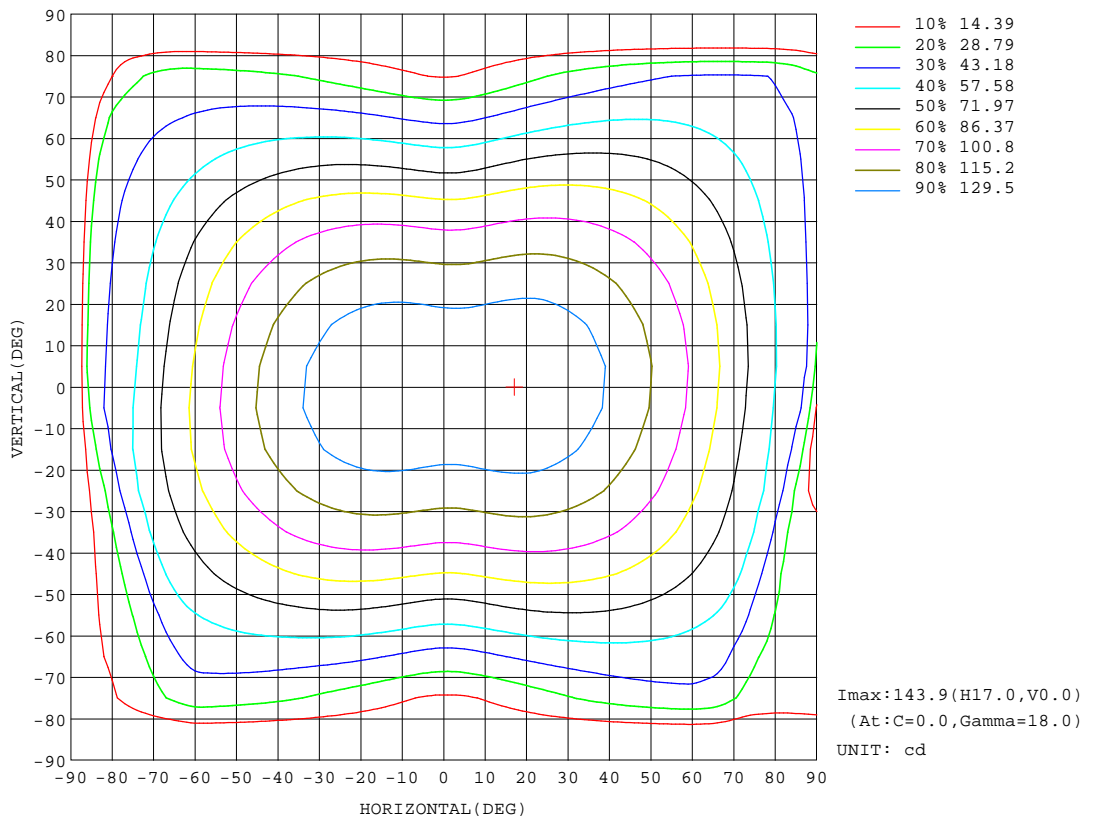
one-half-peak spread: U:53.8,D:54.7 , L:59.4,R:55.7 NEMA Beam Type: Type 7

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.5DEG
Operators:QC1
Test Date:2024-04-11

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.4683A P:11.24W PF:1.000 Lamp Flux:472.524x1 lm		
NAME: 8.02.019.0067 LLS-OP-W30A-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:202404000016
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

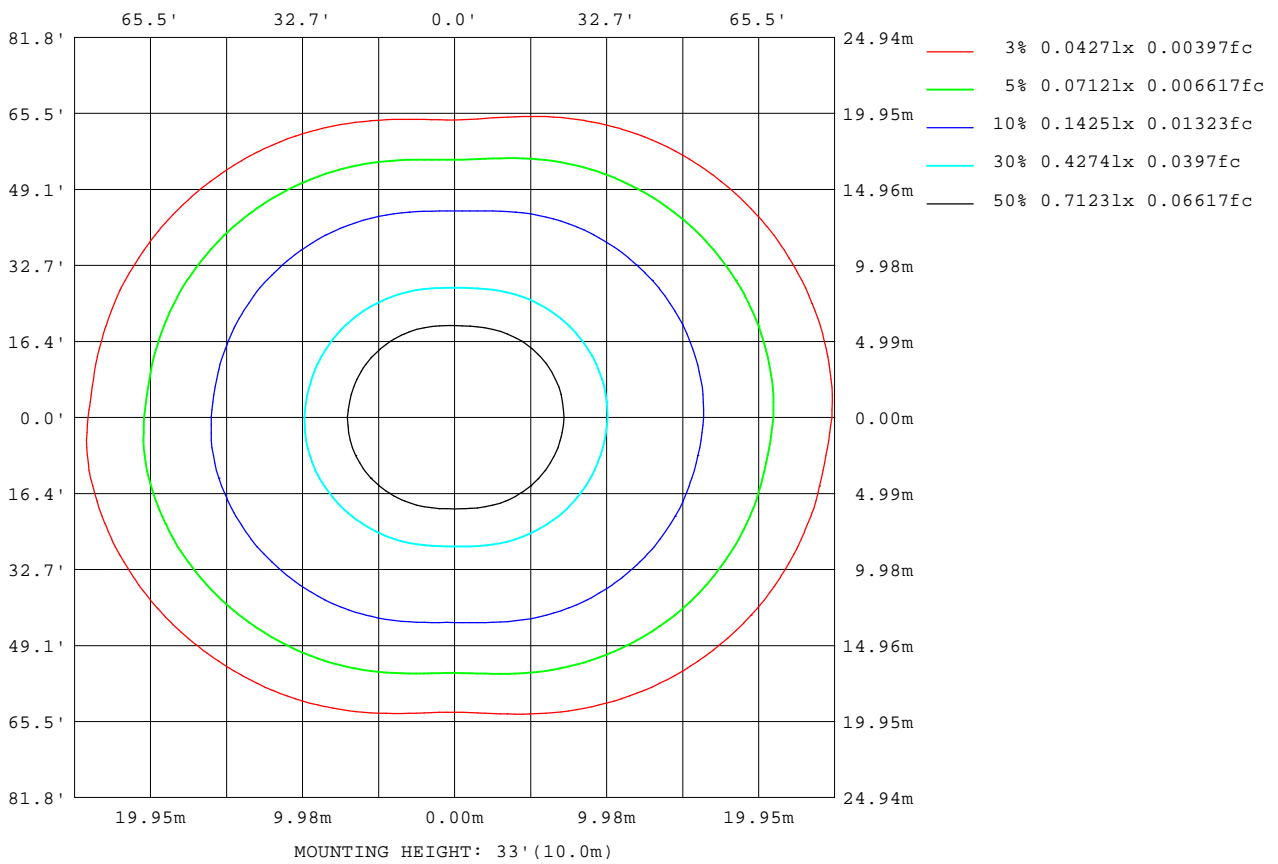


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.5DEG
Operators:QC1
Test Date:2024-04-11

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.4683A P:11.24W PF:1.000 Lamp Flux:472.524x1 lm		
NAME: 8.02.019.0067 LLS-OP-W30A-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:202404000016
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

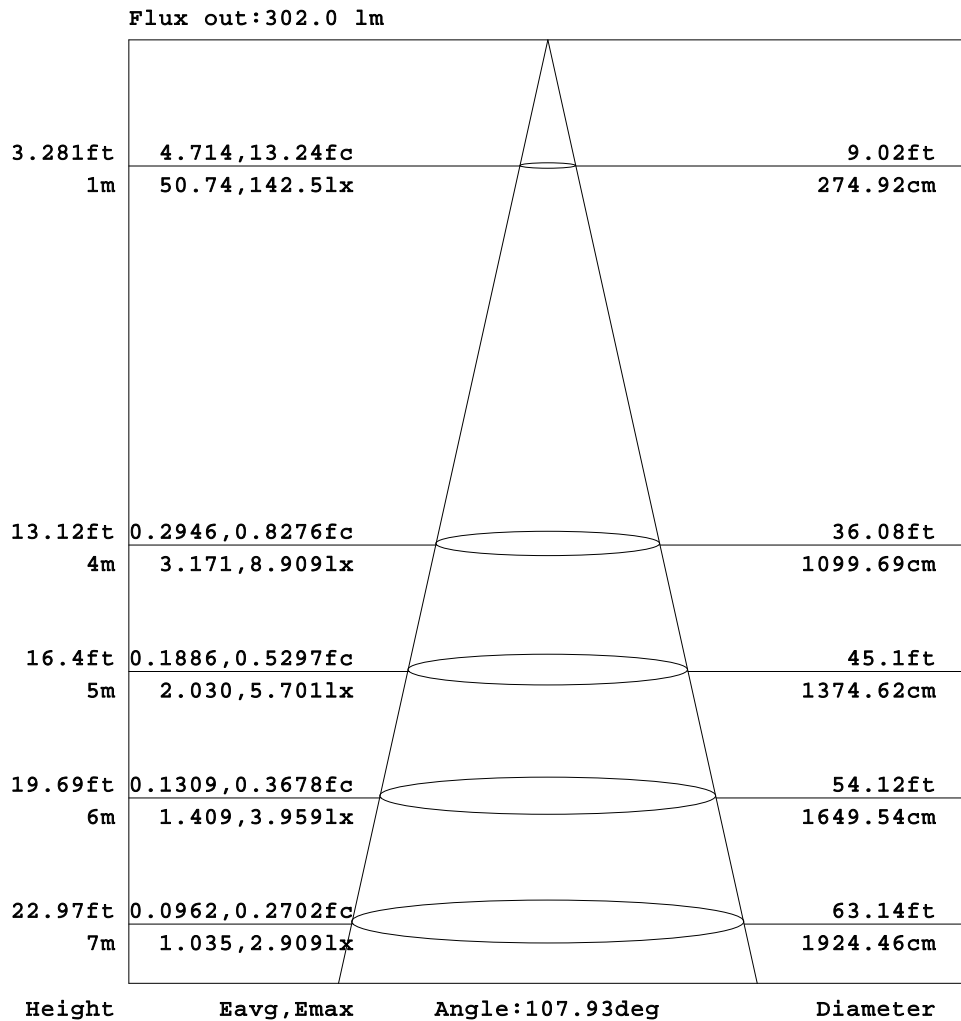


H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.5DEG
Operators:QC1
Test Date:2024-04-11

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:0.4683A P:11.24W PF:1.000 Lamp Flux:472.524x1 lm		
NAME: 8.02.019.0067 LLS-OP-W30A-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:202404000016
MFR.: TPK OPTOELECTRONIC TECH CO., LTD	SUR.:	PROTECTION ANGLE:

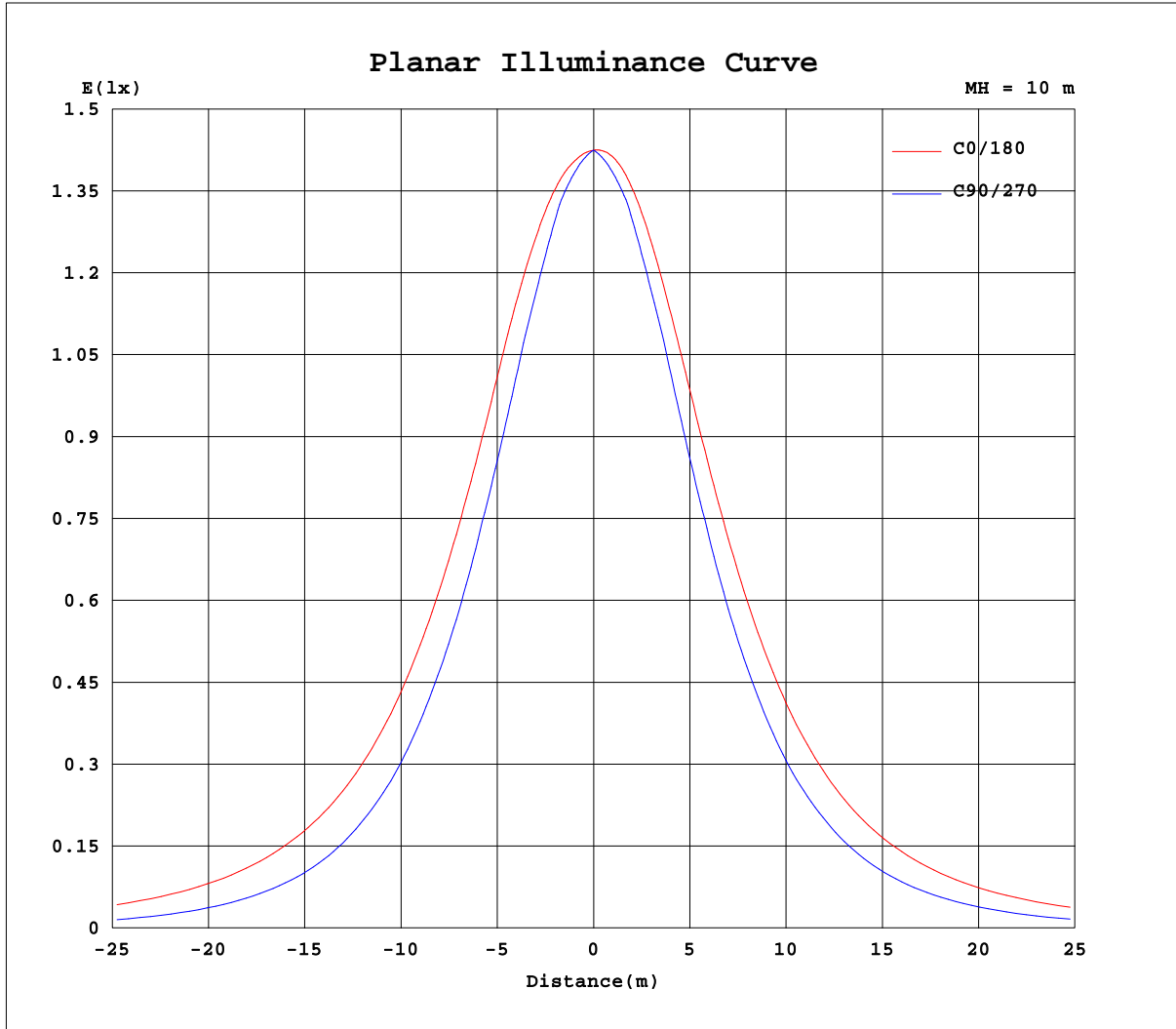


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(β) Range:-90 - 90DEG
H(β) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.5DEG
Operators:QC1
Test Date:2024-04-11

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks:

Planar Illuminance Curve



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Test Speed: HIGH
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Operators:QC1
Test Date:2024-04-11

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.4683A P:11.24W PF:1.000 Lamp Flux:472.524x1 lm		
NAME: 8.02.019.0067 LLS-OP-W30A-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:202404000016
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	0.00	3.30	12.4	18.2	23.1	28.0	32.3	30.6	28.2	25.6	22.6	19.5	16.1	12.7	9.30	6.01	2.93	0.55	0.00
-75	0.00	3.66	12.9	19.3	25.2	31.1	36.7	36.3	35.0	33.4	31.4	29.2	26.8	24.3	21.6	18.8	16.0	13.6	12.5
-70	0.00	8.51	15.9	22.8	29.7	36.8	41.6	41.6	41.2	40.5	39.4	38.0	36.5	34.8	32.8	30.5	28.0	25.9	25.0
-65	0.00	7.79	16.4	23.7	32.0	40.7	46.7	47.9	48.6	49.0	48.9	48.5	47.8	46.9	45.4	43.5	41.3	39.2	38.0
-60	0.00	12.4	19.1	28.1	37.6	48.1	52.4	54.6	56.2	57.5	58.3	58.7	58.9	58.5	57.4	55.7	53.7	51.8	50.9
-55	0.00	10.6	19.1	29.0	40.1	51.7	57.1	60.4	63.2	65.4	67.1	68.4	69.3	69.5	69.0	67.8	66.1	64.2	63.1
-50	0.01	13.7	22.6	34.3	47.4	58.5	63.2	67.4	71.0	74.1	76.6	78.5	79.9	80.4	80.2	79.2	77.7	76.0	75.3
-45	0.00	11.7	22.7	35.7	50.6	61.4	67.2	72.4	77.0	81.0	84.3	86.9	88.9	90.0	90.2	89.7	88.5	87.0	86.0
-40	0.00	14.5	27.7	42.8	59.4	66.8	73.4	79.4	84.7	89.3	93.1	96.2	98.4	99.8	100	99.9	98.7	97.3	96.6
-35	0.00	12.9	27.7	44.7	59.9	68.7	76.1	83.0	89.2	94.6	99.1	103	106	108	109	109	108	107	106
-30	0.03	17.3	34.0	54.0	64.9	73.6	81.7	89.2	95.9	102	107	111	114	116	117	117	117	116	115
-25	0.00	16.1	35.6	53.5	65.2	74.5	83.3	91.5	98.9	105	111	116	119	122	124	124	124	123	122
-20	0.00	22.6	45.5	59.2	69.2	79.1	88.3	96.8	105	111	117	122	126	129	130	131	131	130	129
-15	0.00	22.3	44.1	57.7	68.0	78.3	88.0	97.1	105	113	119	124	129	132	134	136	136	135	134
-10	0.05	33.2	49.5	60.3	71.0	81.5	91.5	101	109	117	123	129	133	137	139	140	140	139	139
-5	0.00	31.7	47.2	57.5	68.2	79.0	89.3	99.0	108	116	123	128	133	137	140	142	142	141	141
0	0.11	39.6	48.8	59.0	69.8	80.7	91.2	101	110	118	124	130	135	139	142	143	144	143	142
5	0.00	35.9	46.1	55.8	66.4	77.2	87.7	97.4	106	114	121	127	133	137	140	142	142	142	141
10	0.06	38.2	47.2	56.8	67.3	78.0	88.2	97.7	106	114	121	127	132	136	138	140	140	140	139
15	0.00	35.1	45.0	53.9	64.0	74.4	84.3	93.7	102	110	117	122	127	131	134	135	136	135	134
20	0.00	38.7	46.1	55.0	64.9	74.8	84.3	93.2	101	108	115	120	124	128	130	131	131	131	130
25	0.00	33.8	43.8	51.8	61.0	70.3	79.4	87.9	95.7	103	109	114	118	121	123	124	124	124	123
30	0.04	37.4	44.5	52.2	60.8	69.5	78.0	85.8	92.9	99.2	105	109	113	115	117	117	117	116	115
35	0.00	30.8	42.4	49.1	56.8	64.8	72.5	79.7	86.3	92.1	97.1	101	104	107	108	109	108	107	106
40	0.00	35.1	42.8	49.0	56.0	63.2	70.0	76.4	82.2	87.2	91.5	94.9	97.5	99.2	100	100	99.4	98.2	97.4
45	0.00	25.5	40.8	45.9	51.7	57.9	63.9	69.5	74.6	79.0	82.8	85.8	88.0	89.5	90.1	90.0	89.2	87.9	86.9
50	0.01	29.0	40.6	45.0	49.9	55.1	60.1	64.7	68.8	72.4	75.4	77.7	79.3	80.1	80.2	79.6	78.5	77.1	76.3
55	0.00	17.9	38.5	42.3	46.1	50.1	54.1	57.7	61.0	63.7	66.0	67.7	68.8	69.3	69.0	68.2	66.9	65.4	64.4
60	0.00	20.0	38.5	41.1	43.9	46.8	49.6	52.1	54.3	56.0	57.4	58.2	58.6	58.5	57.7	56.4	54.8	53.2	52.4
65	0.00	9.08	31.1	38.8	40.7	42.5	44.1	45.6	46.7	47.5	47.9	48.0	47.7	47.0	45.8	44.2	42.3	40.6	39.6
70	0.00	8.31	28.8	37.5	38.2	38.9	39.3	39.5	39.5	39.2	38.6	37.7	36.5	35.0	33.3	31.3	29.2	27.4	26.7
75	0.00	2.11	14.3	25.5	31.7	35.0	35.3	34.5	33.5	32.1	30.5	28.7	26.6	24.4	21.9	19.3	16.9	14.7	13.8
80	0.00	0.00	5.55	16.1	27.0	31.8	31.1	29.2	26.9	24.4	21.8	19.0	15.9	12.7	9.53	6.42	3.62	1.49	0.91
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:25.5DEG
Operators:QC1
Test Date:2024-04-11

V(β) Range:-80 - 80DEG
V(β) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.4683A P:11.24W PF:1.000 Lamp Flux:472.524x1 lm		
NAME: 8.02.019.0067 LLS-OP-W30A-L6-S	TYPE:LED	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:202404000016
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	0.78	3.48	6.92	10.7	14.6	18.4	22.0	25.3	28.3	30.9	33.2	34.1	29.3	24.8	20.2	21.5	23.1	24.5
-75	13.1	15.4	18.4	21.6	24.8	27.9	30.8	33.3	35.5	37.3	38.7	39.5	37.4	29.8	24.0	22.5	22.9	24.2
-70	26.1	28.4	31.1	33.8	36.3	38.6	40.6	42.3	43.6	44.4	44.8	44.6	43.3	31.5	27.0	23.4	23.2	23.6
-65	38.7	40.7	43.2	45.5	47.6	49.3	50.6	51.5	51.9	51.8	51.3	50.2	48.7	40.3	30.4	25.8	23.9	23.4
-60	51.9	54.1	56.3	58.2	59.6	60.5	60.9	60.9	60.3	59.1	57.5	55.3	52.7	44.7	30.9	27.4	23.6	22.5
-55	63.7	65.6	67.6	69.3	70.4	70.9	70.8	70.1	68.8	66.9	64.4	61.3	57.8	52.1	38.8	28.4	24.8	22.0
-50	76.1	77.9	79.7	81.0	81.5	81.3	80.4	78.8	76.6	73.7	70.1	66.0	61.4	55.4	41.1	27.5	24.5	20.4
-45	86.5	88.1	89.8	90.8	91.1	90.6	89.3	87.2	84.5	81.0	76.8	71.9	66.4	60.4	48.9	32.7	23.9	20.7
-40	97.4	99.0	100	101	101	99.5	97.5	94.7	91.1	86.7	81.6	75.6	69.1	62.2	50.3	32.1	22.2	19.6
-35	106	108	109	109	109	108	105	102	98.1	93.3	87.6	81.2	74.1	66.4	57.2	41.0	22.2	17.8
-30	115	117	118	118	117	115	112	108	103	97.7	91.3	84.0	76.0	67.5	58.8	41.4	18.0	14.9
-25	122	124	125	125	124	121	118	114	109	103	96.2	88.6	80.2	71.2	61.9	49.6	26.8	11.0
-20	130	131	131	131	130	127	123	118	112	106	98.2	89.9	80.7	71.1	61.3	51.4	24.9	5.47
-15	134	135	136	136	134	131	127	122	117	110	102	94.0	84.7	74.8	64.7	54.6	39.0	6.43
-10	139	140	141	140	138	135	130	125	119	111	103	94.5	84.8	74.5	64.0	53.6	42.7	3.10
-5	141	142	142	142	141	137	133	128	122	115	107	97.8	88.2	77.9	67.3	56.7	46.7	13.5
0	143	143	144	144	142	138	134	128	122	115	106	97.4	87.5	77.0	66.3	55.6	45.8	7.67
5	141	141	142	142	141	138	134	128	122	116	108	99.1	89.6	79.4	68.8	58.1	48.1	25.4
10	139	140	141	141	139	136	132	127	120	114	106	97.2	87.7	77.5	67.0	56.5	46.7	19.3
15	134	135	136	136	136	133	129	125	119	113	105	97.2	88.2	78.4	68.3	58.1	48.4	31.3
20	130	131	132	132	131	129	125	121	115	109	102	93.7	84.8	75.3	65.5	55.7	46.4	26.2
25	123	124	125	126	125	123	120	117	112	106	99.8	92.5	84.3	75.5	66.2	56.8	47.9	32.9
30	116	117	118	119	119	117	114	111	107	101	95.2	88.1	80.3	71.9	63.2	54.3	46.0	27.9
35	107	108	110	111	111	110	108	105	102	97.0	91.7	85.5	78.6	71.0	63.0	54.8	47.0	33.1
40	98.0	99.7	101	103	103	102	101	98.1	94.9	90.8	85.9	80.2	73.8	66.9	59.6	52.1	45.0	28.8
45	87.3	89.0	91.1	92.7	93.5	93.4	92.5	90.9	88.5	85.3	81.3	76.6	71.2	65.2	58.9	52.3	45.8	32.7
50	77.1	79.2	81.4	83.2	84.2	84.4	84.0	82.8	80.9	78.3	75.0	70.9	66.3	61.1	55.5	49.8	44.2	28.8
55	65.0	67.2	69.7	72.0	73.6	74.5	74.8	74.4	73.4	71.7	69.3	66.3	62.8	58.6	54.1	49.3	44.5	32.2
60	53.6	56.2	59.0	61.5	63.4	64.8	65.5	65.7	65.3	64.2	62.6	60.4	57.7	54.5	50.8	46.9	42.7	29.4
65	40.5	43.0	46.1	49.0	51.6	53.7	55.2	56.3	56.8	56.8	56.3	55.2	53.6	51.5	49.0	46.1	42.7	31.7
70	28.2	31.1	34.3	37.6	40.6	43.3	45.5	47.2	48.5	49.3	49.6	49.5	48.8	47.7	46.1	44.1	39.8	30.0
75	15.0	17.8	21.4	25.1	28.7	32.2	35.1	37.8	40.0	41.8	43.2	44.1	44.5	44.4	43.8	42.3	38.1	31.2
80	2.72	5.97	9.91	14.1	18.2	22.2	25.9	29.3	32.3	34.9	37.1	38.9	40.2	41.0	41.3	39.3	33.5	30.4
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:25.5DEG
Operators:QC1
Test Date:2024-04-11

V(B) Range:-80 - 80DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity:66%
Test Distance:8.300m [K=1.0000]
Remarks: