

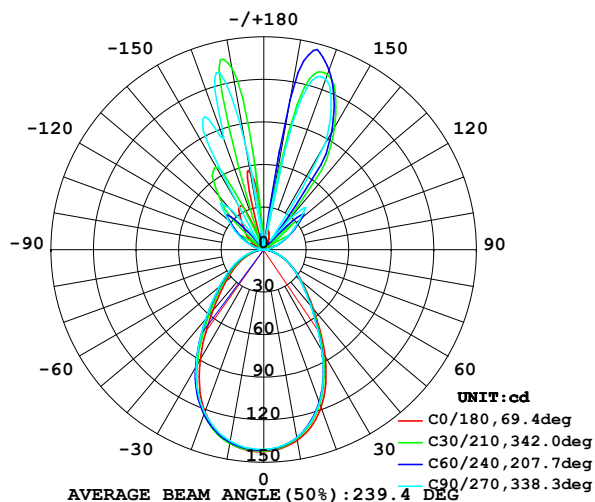
## EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINAIRE PHOTOMETRIC TEST REPORT

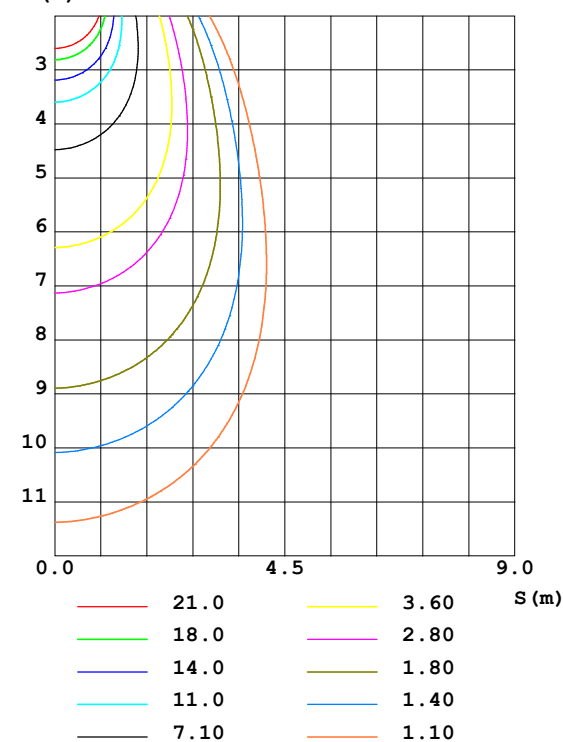
Test:U:120.0V I:0.1165A P:12.90W PF:0.9225 Lamp Flux:370.3x1 lm		
NAME: 86109AL	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 28.69 lm/W			
MODEL		Imax(cd)	168.4	S/MH(C0/180)	0.99
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.97
RATED VOLTAGE(V)		TOTAL FLUX(lm)	370.30	$\eta$ UP,DN(C0-180)	18.4,29.7
NOMINAL FLUX(lm)	370.3	CIE CLASS	SEMI-D.	$\eta$ UP,DN(C180-360)	19.1,32.8
LAMPS INSIDE	1	$\eta$ up(%)	37.5	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)		$\eta$ down(%)	62.5	CIBSE SHR MAX	1.10

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



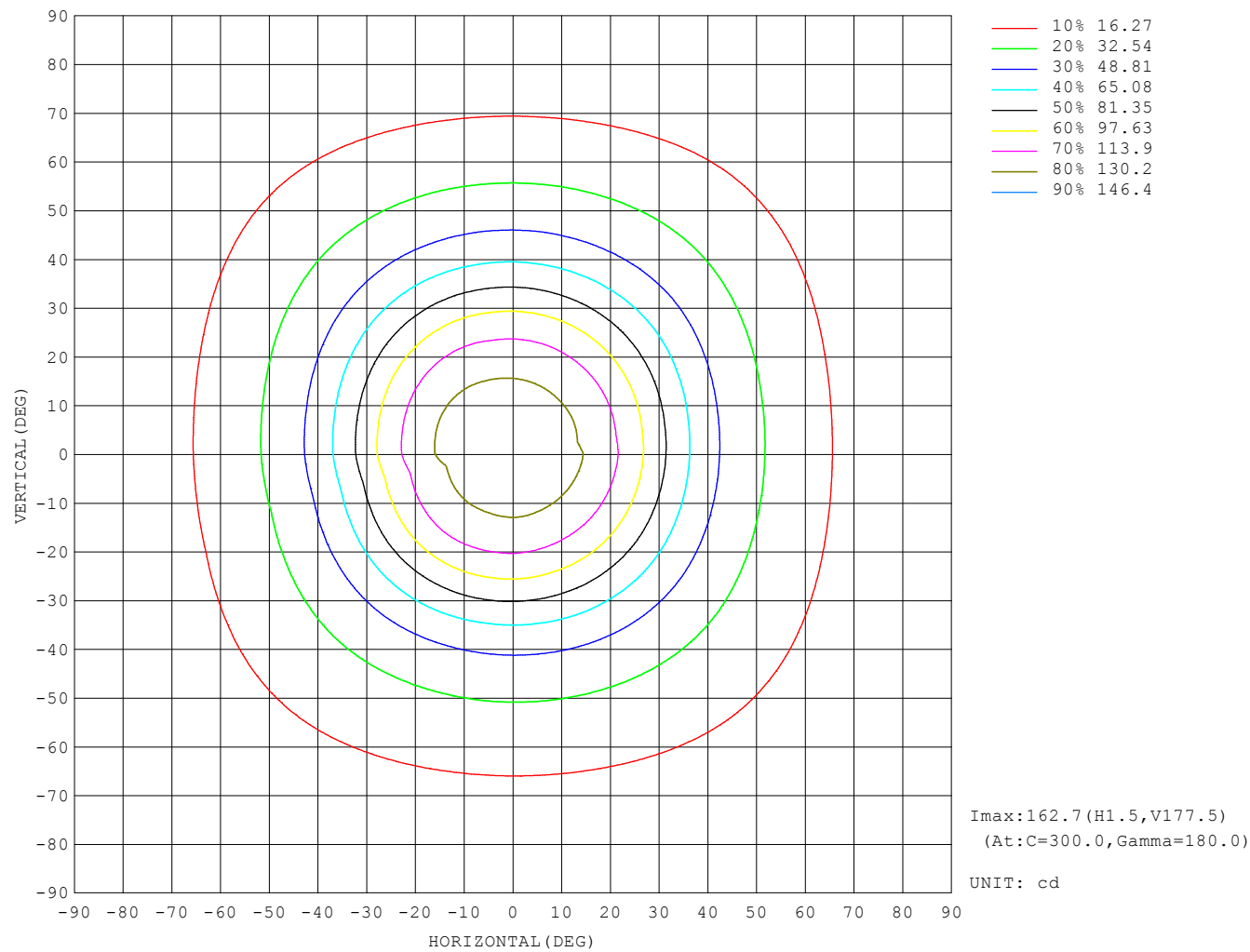
C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.0DEG  
Operators:  
Test Date: 2018-01-19

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.273  
Humidity: 55.0%  
Test Distance: 2.482m [K=1.0000]  
Remarks:

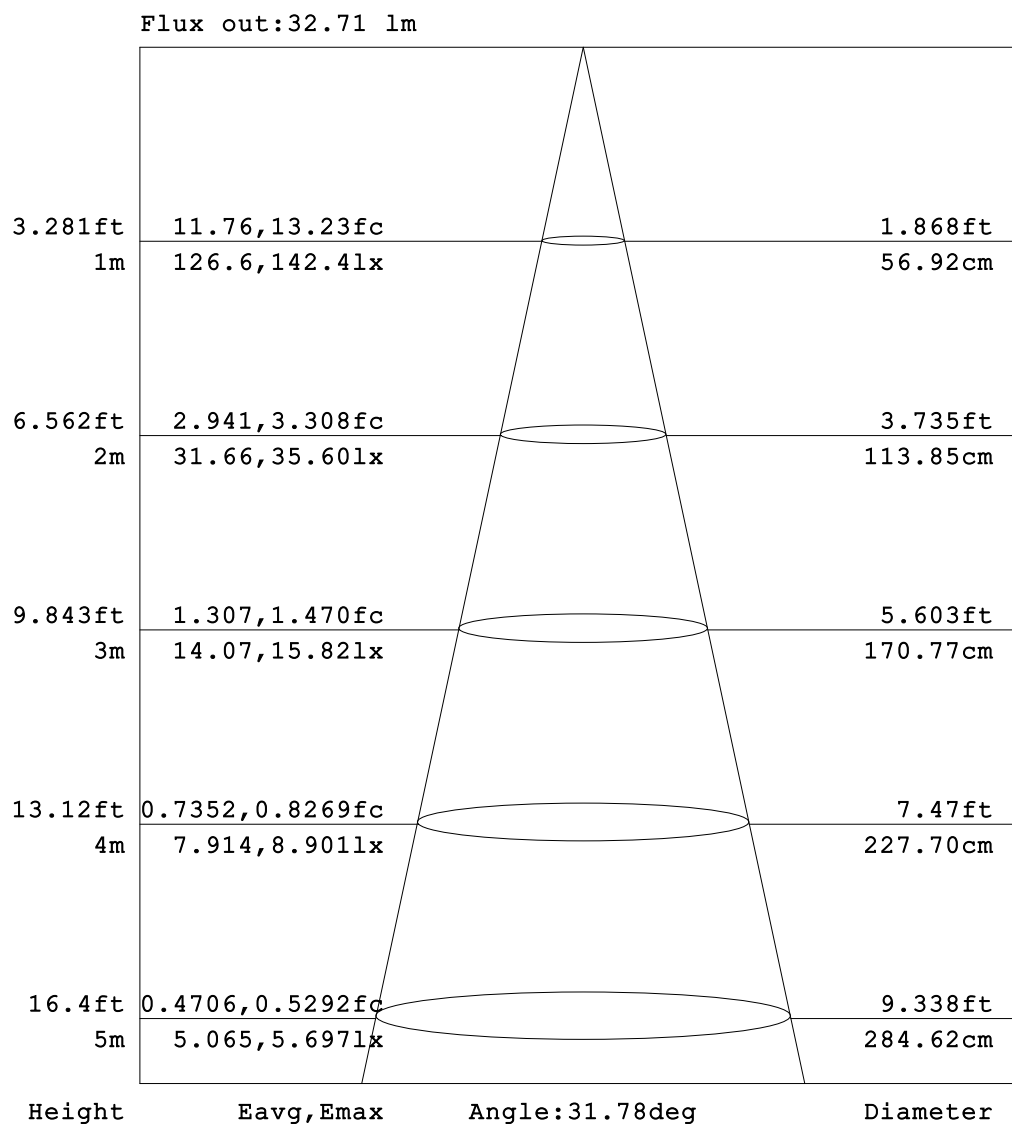
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.0DEG  
Operators:  
Test Date:2018-01-19

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.273  
Humidity:55.0%  
Test Distance:2.482m [K=1.0000]  
Remarks:

## AAI Figure

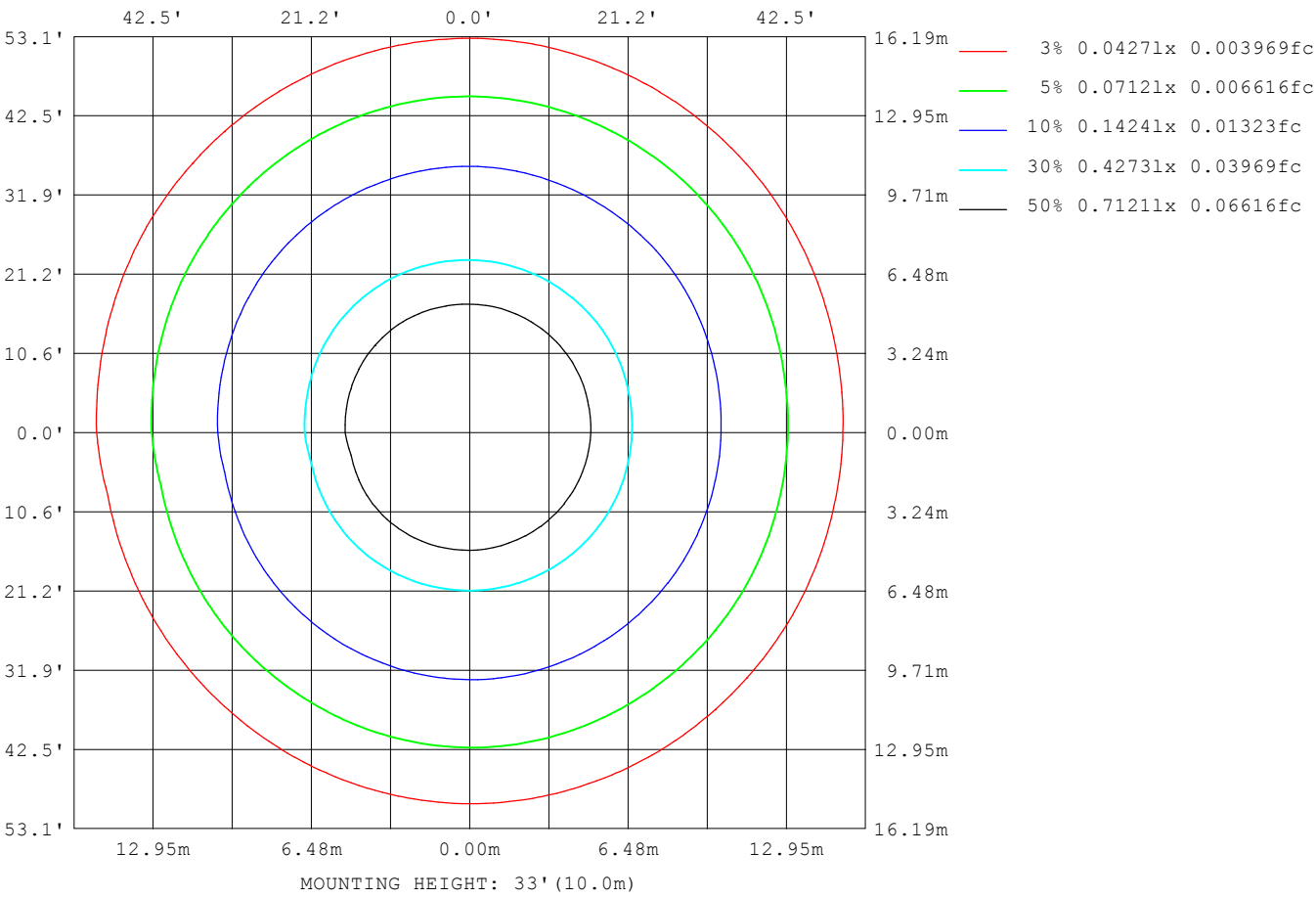


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.0DEG  
Operators:  
Test Date: 2018-01-19

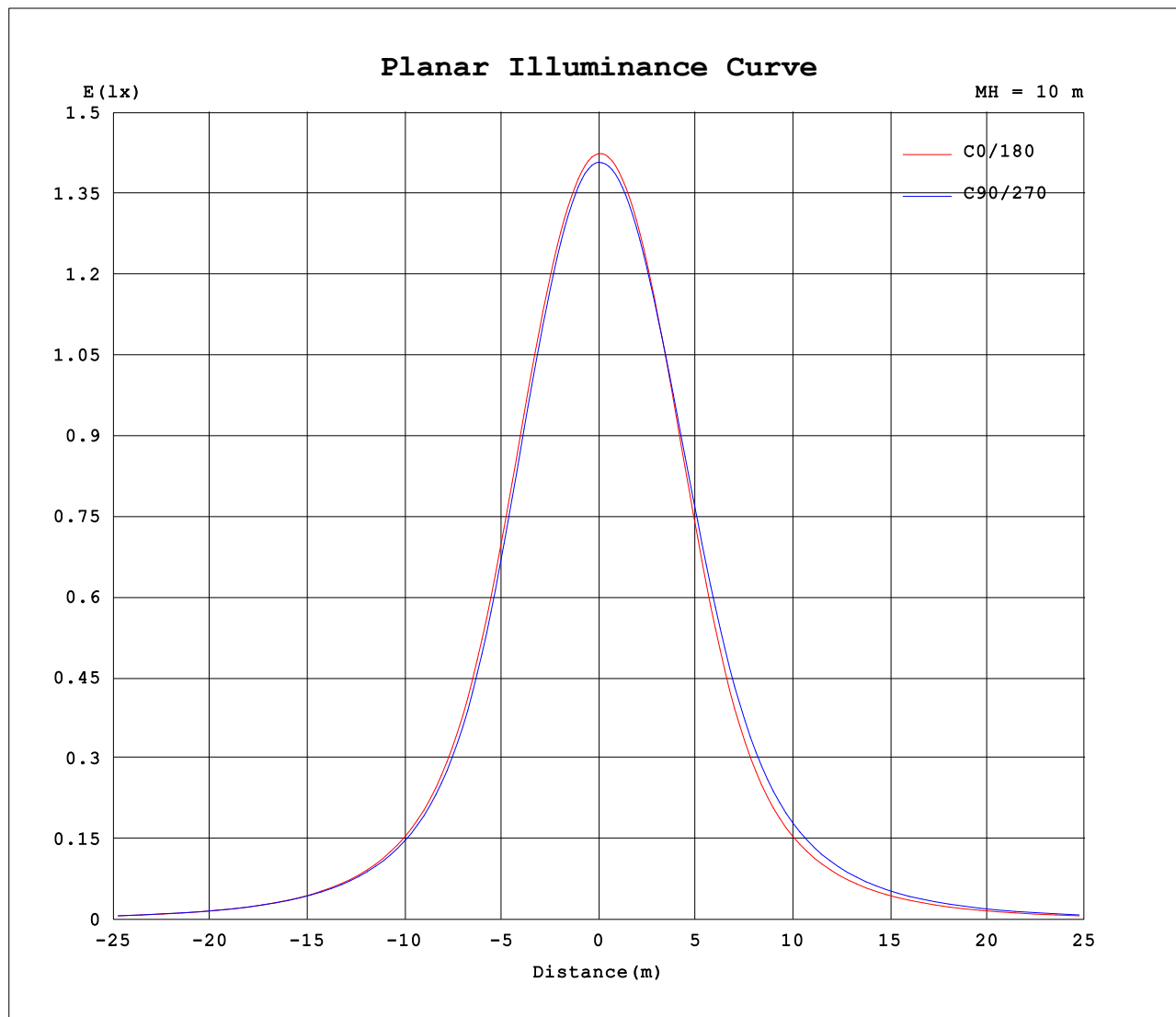
γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.273  
Humidity: 55.0%  
Test Distance: 2.482m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG	γ Range: 0 - 180DEG
C Interval: 10.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.273
Temperature:25.0DEG	Humidity:55.0%
Operators:	Test Distance:2.482m [K=1.0000]
Test Date:2018-01-19	Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.0DEG  
Operators:  
Test Date: 2018-01-19

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.273  
Humidity: 55.0%  
Test Distance: 2.482m [K=1.0000]  
Remarks:

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	142	142	142	142	142	141	141	141	141	141	141	140	140	140	140	140	140	140	142
5	141	140	140	140	140	140	139	139	139	139	139	139	139	139	139	139	139	139	142
10	136	136	136	135	135	135	134	134	134	135	134	134	134	135	135	135	135	135	138
15	129	129	128	127	127	126	126	126	126	126	126	127	127	128	128	128	128	128	132
20	118	117	117	116	115	115	114	114	115	115	115	115	116	117	117	117	117	118	121
25	104	103	102	101	100	99.7	99.3	99.1	99.3	99.7	100.0	101	101	102	103	103	103	103	107
30	86.3	85.3	84.4	83.8	83.1	82.5	82.1	81.8	81.8	82.1	82.3	82.9	83.4	84.2	84.8	85.1	85.3	85.8	89.7
35	69.1	68.2	67.6	67.1	66.6	66.0	65.7	65.4	65.2	65.3	65.2	65.6	66.1	66.7	67.2	67.5	67.7	68.1	71.5
40	54.5	53.9	53.5	53.2	52.8	52.4	52.1	51.9	51.7	51.6	51.5	51.5	51.8	52.2	52.5	52.7	52.9	53.2	55.8
45	43.5	42.9	42.6	42.4	42.2	41.9	41.7	41.5	41.5	41.4	41.2	41.1	41.2	41.3	41.4	41.6	41.6	41.9	43.9
50	35.0	34.6	34.4	34.2	34.0	33.8	33.7	33.6	33.7	33.7	33.6	33.3	33.2	33.2	33.2	33.2	33.3	33.4	35.1
55	28.1	27.8	27.6	27.5	27.4	27.3	27.3	27.4	27.4	27.5	27.3	27.1	26.9	26.7	26.7	26.6	26.6	26.7	28.1
60	22.2	21.9	21.8	21.7	21.7	21.7	21.8	21.9	22.0	22.0	21.9	21.7	21.5	21.3	21.1	21.0	21.0	21.1	22.1
65	16.8	16.6	16.5	16.5	16.6	16.7	16.8	17.0	17.1	17.2	17.1	16.9	16.6	16.4	16.2	16.0	15.9	16.0	16.9
70	11.8	11.6	11.6	11.6	11.8	12.0	12.2	12.4	12.6	12.7	12.6	12.4	12.1	11.9	11.6	11.4	11.3	11.4	12.1
75	7.22	7.09	7.08	7.16	7.36	7.62	7.89	8.13	8.35	8.44	8.36	8.14	7.89	7.60	7.31	7.10	7.00	7.03	7.59
80	3.23	3.16	3.18	3.28	3.45	3.71	4.03	4.29	4.51	4.63	4.55	4.35	4.09	3.79	3.54	3.35	3.27	3.27	3.63
85	0.49	0.44	0.46	0.50	0.58	0.73	0.94	1.21	1.41	1.53	1.45	1.28	1.05	0.86	0.73	0.65	0.62	0.63	0.80
90	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.09	0.10	0.11	0.13	0.14
95	0.23	0.22	0.19	0.21	0.22	0.23	0.22	0.22	0.21	0.21	0.20	0.19	0.19	0.18	0.18	0.19	0.19	0.20	0.17
100	2.06	1.95	2.05	2.24	2.36	2.43	2.44	2.49	2.45	2.35	2.27	2.19	2.11	2.57	2.01	1.99	1.97	1.96	1.79
105	4.91	4.89	5.28	5.66	5.90	6.02	6.07	6.14	6.06	5.88	5.69	5.52	5.37	5.26	5.16	5.11	5.07	5.04	4.87
110	5.28	1.53	9.54	10.1	10.3	10.5	10.5	10.6	10.5	10.2	9.85	9.56	9.31	9.15	9.02	8.92	8.86	8.77	8.68
115	2.29	13.2	4.46	15.2	15.5	15.6	15.6	15.6	15.4	15.0	14.5	14.1	13.8	13.5	13.3	13.2	2.81	12.7	8.62
120	0.32	0.93	0.31	19.3	21.3	21.3	21.3	21.2	20.9	20.4	19.7	19.1	18.7	18.3	18.1	15.5	4.19	14.4	10.1
125	4.72	24.3	26.5	0.92	27.4	28.0	27.8	27.6	27.1	26.4	25.6	24.9	24.2	23.8	21.6	1.10	22.1	21.2	9.23
130	6.89	33.7	35.5	20.1	5.40	31.3	35.4	34.9	34.3	33.4	32.4	31.4	30.7	24.0	1.51	22.2	29.5	29.4	15.6
135	7.40	32.9	28.4	11.3	1.78	5.08	28.5	39.0	42.7	42.0	39.9	33.0	20.9	1.26	19.5	37.2	37.2	34.3	19.0
140	0.49	11.2	10.5	15.3	48.3	26.2	4.81	13.9	21.9	24.6	17.9	5.98	1.19	22.4	47.7	48.0	47.7	38.8	23.4
145	3.52	29.0	53.6	76.9	77.8	75.4	50.1	27.2	14.1	12.3	14.3	8.57	0.07	34.8	55.9	62.5	62.4	42.1	29.2
150	6.98	59.0	98.1	99.8	99.0	97.5	95.8	92.8	89.9	87.1	85.8	28.8	1.16	3.47	43.2	67.0	71.7	36.0	34.8
155	8.79	35.2	111	120	120	119	117	116	114	112	102	16.8	11.3	25.0	7.98	12.7	48.4	15.5	31.5
160	11.0	15.3	110	131	136	135	135	134	132	128	94.9	8.97	19.2	103	53.3	17.5	6.35	1.95	3.85
165	13.6	7.29	58.6	125	139	145	146	144	138	119	38.8	5.28	20.1	105	127	109	39.7	12.1	28.3
170	10.3	3.25	9.79	30.8	72.6	100	107	98.1	66.2	25.6	7.31	3.16	12.5	54.9	81.0	44.3	17.5	16.5	54.9
175	2.85	0.86	0.06	0.05	0.09	0.26	3.76	0.60	0.27	0.09	0.05	0.05	0.23	0.67	1.31	2.18	3.57	6.59	18.4
180	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.12	0.14	0.14	0.14	0.13	0.12	0.07	0.05	0.04	0.04	0.03	0.03

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.0DEG  
Operators:  
Test Date:2018-01-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.273  
Humidity:55.0%  
Test Distance:2.482m [K=1.0000]  
Remarks:

# EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	142	142	142	142	141	141	141	141	141	141	140	140	140	140	140	140	140		
5	142	142	141	141	141	141	141	140	140	140	140	139	139	139	139	138	138		
10	139	139	139	139	138	138	138	137	137	137	136	136	136	135	135	135	134		
15	132	133	133	133	133	132	132	131	131	131	130	130	130	129	129	128	128		
20	122	123	123	124	124	124	123	123	122	122	121	121	120	120	119	119	118		
25	108	109	110	111	112	112	111	111	110	110	109	109	108	107	106	105	104		
30	91.0	92.5	94.1	95.2	95.9	96.3	96.2	95.8	95.6	95.0	94.3	93.4	92.5	91.3	90.0	88.6	87.2		
35	72.9	74.6	76.2	77.6	78.6	79.2	79.4	79.2	79.0	78.4	77.6	76.7	75.7	74.6	73.2	71.6	70.1		
40	57.0	58.5	60.1	61.4	62.5	63.2	63.6	63.6	63.6	63.1	62.4	61.5	60.6	59.6	58.3	56.8	55.4		
45	44.8	46.1	47.4	48.6	49.5	50.3	50.7	51.0	51.0	50.7	50.0	49.3	48.5	47.6	46.5	45.2	44.1		
50	35.8	36.8	37.9	38.8	39.6	40.4	40.9	41.2	41.2	41.0	40.5	39.8	39.2	38.4	37.4	36.4	35.5		
55	28.7	29.5	30.4	31.2	31.9	32.5	33.1	33.4	33.5	33.3	32.8	32.3	31.7	31.0	30.1	29.3	28.5		
60	22.6	23.3	24.1	24.8	25.4	26.0	26.5	26.8	26.9	26.8	26.4	25.9	25.3	24.6	23.8	23.0	22.5		
65	17.2	17.8	18.4	19.0	19.6	20.1	20.6	20.9	21.0	20.8	20.4	20.0	19.5	18.8	18.1	17.5	17.1		
70	12.3	12.7	13.3	13.8	14.3	14.8	15.2	15.5	15.6	15.5	15.1	14.7	14.1	13.6	13.0	12.5	12.1		
75	7.78	8.08	8.46	8.94	9.51	10.00	10.4	10.6	10.7	10.6	10.2	9.85	9.27	8.69	8.22	7.82	7.52		
80	3.74	3.95	4.23	4.68	5.13	5.56	5.91	6.17	6.24	6.10	5.81	5.43	4.93	4.44	3.98	3.70	3.51		
85	0.81	0.97	1.09	1.29	1.56	1.90	2.22	2.43	2.52	2.39	2.13	1.76	1.39	1.10	0.87	0.74	0.65		
90	0.09	0.15	0.16	0.17	0.18	0.19	0.19	0.19	0.19	0.18	0.17	0.16	0.13	0.11	0.08	0.06	0.05		
95	0.11	0.18	0.19	0.19	0.20	0.21	0.22	0.23	0.23	0.23	0.23	0.22	0.22	0.21	0.20	0.19	0.17		
100	1.48	1.78	1.80	1.82	1.86	1.91	1.98	2.06	2.13	2.21	2.29	2.35	2.39	2.36	2.26	2.10	1.97		
105	4.09	4.84	4.87	4.91	4.99	5.11	5.25	5.42	5.60	5.78	5.95	6.07	6.00	5.78	5.41	5.15	4.30		
110	7.34	8.67	8.72	8.83	8.95	9.13	9.39	9.67	9.97	10.3	10.5	10.5	10.1	9.47	9.05	8.58	6.45		
115	12.8	12.6	13.1	13.3	13.4	13.7	14.1	14.5	15.0	15.4	15.3	14.8	14.0	13.4	13.0	0.43	11.5		
120	13.3	0.58	17.9	18.2	18.4	18.8	19.3	19.9	20.5	20.6	19.9	18.8	18.2	17.8	16.9	0.20	0.81		
125	22.0	19.0	7.21	23.7	24.1	24.6	25.2	26.0	26.3	25.7	24.3	23.6	23.4	23.1	2.14	22.5	22.4		
130	29.7	29.7	6.67	14.2	30.6	31.4	32.3	33.0	32.8	31.4	30.5	30.3	29.5	11.3	13.1	30.5	30.3		
135	37.6	37.8	35.2	5.27	14.3	32.6	40.8	41.8	41.3	39.4	38.9	29.7	14.1	1.04	9.15	23.2	29.8		
140	48.2	48.6	49.1	37.3	5.58	3.90	23.2	36.1	38.8	35.7	22.6	10.0	11.7	35.6	14.4	4.76	2.04		
145	63.0	63.6	63.3	55.2	23.1	0.96	7.42	6.02	3.33	5.38	10.4	21.6	50.6	57.8	55.9	40.4	27.6		
150	76.0	74.3	67.3	35.9	1.34	4.41	58.3	41.7	31.2	31.3	56.6	65.6	66.4	67.4	68.7	71.1	69.5		
155	71.4	55.0	22.0	8.22	7.15	4.26	76.5	109	102	72.3	103	97.7	92.0	89.9	91.1	94.7	88.7		
160	8.65	10.9	17.1	36.8	62.1	6.39	34.6	108	82.8	120	129	126	123	121	120	121	107		
165	46.5	81.4	115	128	80.0	9.79	8.15	61.3	129	143	143	142	141	141	140	137	119		
170	65.9	119	130	112	50.1	10.8	5.15	21.9	75.6	125	140	151	149	146	140	131	102		
175	19.8	46.5	36.7	18.0	2.52	6.70	3.02	0.00	0.00	48.7	120	160	154	144	128	115	67.6		
180	0.00	0.00	0.00	0.00	0.00	2.61	0.89	0.00	0.00	0.00	99.5	168	159	142	116	97.9	33.7		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.0DEG  
Operators:  
Test Date:2018-01-19

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.273  
Humidity:55.0%  
Test Distance:2.482m [K=1.0000]  
Remarks: