

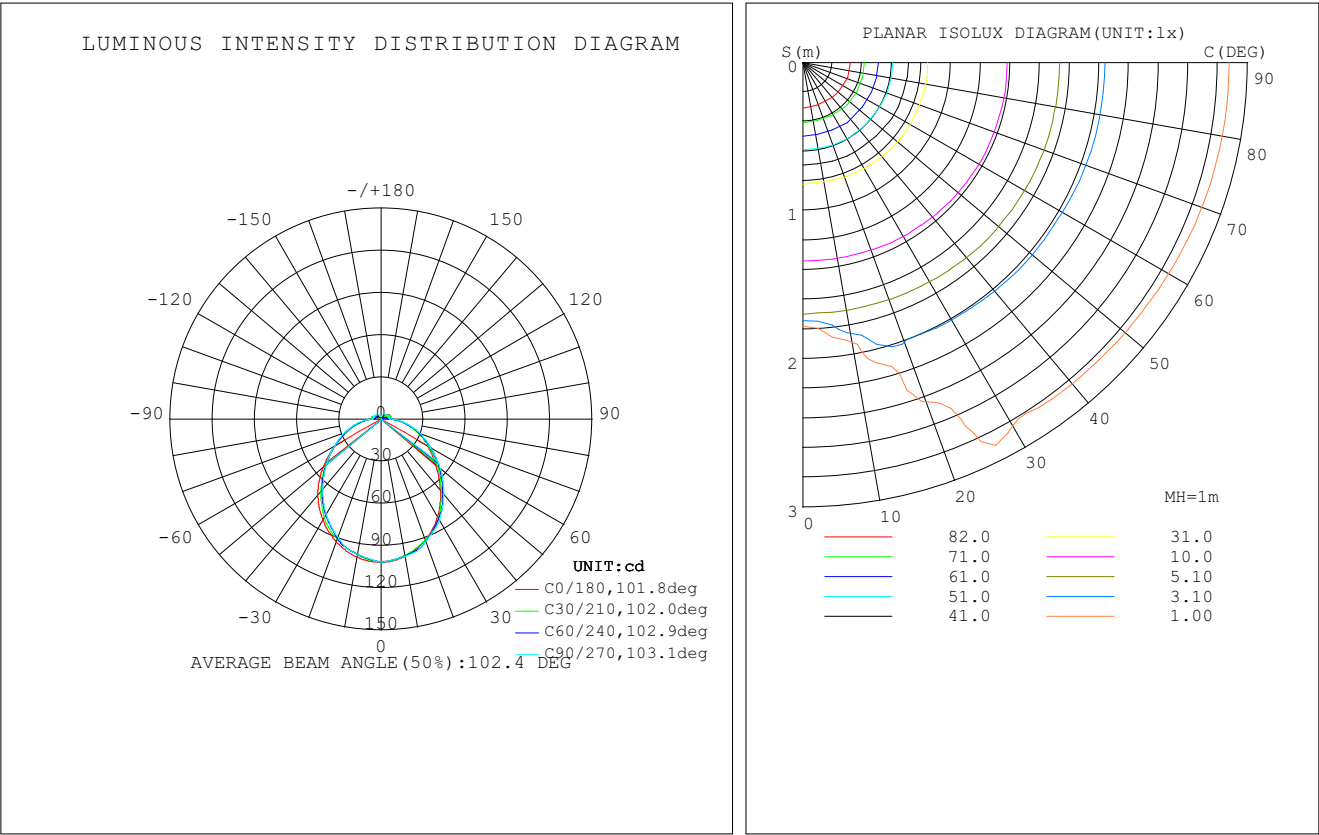


IDEA

/ADEL (13.96.0010.__)

LUMINAIRE PHOTOMETRIC TEST REPORT

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 58.13 lm/W
MODEL	13.96.0010.__	I _{max} (cd)	101.9	S/MH (C0/180)	1.18	
NOMINAL POWER (W)	5	I _{OR} (%)	62.8	S/MH (C90/270)	1.22	
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	282.53	h UP, DN (C0-180)	2.2, 29.7	
NOMINAL FLUX (lm)	450	CIE CLASS	DIRECT	h UP, DN (C180-360)	2.2, 28.6	
LAMPS INSIDE	1	h up (%)	4.4	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	220.8	h down (%)	58.4	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 30DEG
Operators: LCM
Test Date: 2017-03-04

g Range: 0 - 180DEG
g Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity: 65.0%
Test Distance: 6.172m [K=1.0000]
Remarks:



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
5	101.2	100.6	100.5	100.7	101.4	100.1	99.78	100.1	0- 5	2.415	2.415	0.85,0.54
10	99.11	98.57	99.08	98.86	99.73	97.78	97.64	97.54	5- 10	7.111	9.526	3.37,2.12
15	95.95	96.00	97.66	96.60	96.97	94.93	95.51	94.48	10- 15	11.52	21.05	7.45,4.68
20	91.83	93.01	92.90	93.91	93.15	91.69	89.83	91.04	15- 20	15.47	36.51	12.9,8.11
25	86.67	87.54	88.13	88.77	88.36	85.88	84.15	84.98	20- 25	18.70	55.21	19.5,12.3
30	80.50	81.39	83.37	83.03	82.96	79.38	78.47	78.16	25- 30	21.18	76.39	27,17
35	73.41	74.95	76.41	77.21	76.89	72.83	71.54	71.09	30- 35	22.84	99.23	35.1,22.1
40	65.85	68.03	69.46	71.10	70.14	66.25	64.61	64.08	35- 40	23.59	122.8	43.5,27.3
45	58.13	60.54	62.50	63.33	62.63	58.90	57.69	57.20	40- 45	23.53	146.4	51.8,32.5
50	50.93	53.51	55.21	55.50	54.12	51.64	51.17	50.78	45- 50	22.78	169.1	59.9,37.6
55	44.43	46.81	47.92	47.80	45.77	44.72	44.64	44.80	50- 55	21.41	190.5	67.4,42.3
60	38.37	40.05	40.63	39.99	38.22	37.97	38.12	38.68	55- 60	19.55	210.1	74.4,46.7
65	0	33.70	34.88	32.62	0	31.52	32.77	32.76	60- 65	15.54	225.6	79.9,50.1
70	0	27.72	29.13	26.34	0	25.76	27.43	27.17	65- 70	11.92	237.5	84.1,52.8
75	0	22.07	23.39	21.04	0	20.55	22.08	21.72	70- 75	9.468	247.0	87.4,54.9
80	0	16.57	17.64	15.88	0	15.43	16.74	16.33	75- 80	7.122	254.1	90,56.5
85	0	11.16	11.89	10.82	0	10.39	11.39	11.10	80- 85	5.213	259.3	91.8,57.6
90	0	5.821	6.143	5.828	0	5.421	6.049	5.937	85- 90	3.241	262.6	92.9,58.4
95	0	5.947	6.058	5.738	0	5.288	5.984	6.005	90- 95	2.211	264.8	93.7,58.8
100	0	6.023	5.973	5.619	0	5.121	5.919	6.015	95-100	2.133	266.9	94.5,59.3
105	0	5.975	5.889	5.429	0	4.822	5.855	5.983	100-105	2.029	269.0	95.2,59.8
110	0	5.773	5.804	5.100	0	4.373	5.790	5.661	105-110	2.044	271.0	95.9,60.2
115	0	5.004	5.720	4.249	0	3.629	5.725	4.818	110-115	1.961	273.0	96.6,60.7
120	7.045	3.807	5.635	2.968	5.385	2.690	5.660	3.577	115-120	1.961	274.9	97.3,61.1
125	5.845	2.432	5.373	1.670	3.672	1.740	5.275	2.156	120-125	1.835	276.8	98,61.5
130	4.468	1.450	5.111	1.306	1.699	1.512	4.890	1.168	125-130	1.372	278.1	98.4,61.8
135	2.771	1.170	4.849	1.464	0.4939	1.501	4.505	0.8764	130-135	1.008	279.1	98.8,62
140	1.101	1.378	4.420	1.759	0.4607	1.530	4.028	1.032	135-140	0.7650	279.9	99.1,62.2
145	0.5202	1.597	3.991	1.913	0.5226	1.577	3.551	1.205	140-145	0.6296	280.5	99.3,62.3
150	0.6021	1.713	3.562	1.994	0.6637	1.604	3.074	1.310	145-150	0.5439	281.1	99.5,62.5
155	0.7409	1.778	3.133	2.017	0.8319	1.579	2.658	1.363	150-155	0.4575	281.5	99.6,62.6
160	0.8696	1.777	2.705	1.982	1.028	1.511	2.242	1.372	155-160	0.3668	281.9	99.8,62.6
165	1.028	1.750	2.276	1.950	1.198	1.561	1.825	1.391	160-165	0.2754	282.2	99.9,62.7
170	1.211	1.706	2.073	1.889	1.377	1.621	1.706	1.354	165-170	0.1932	282.4	99.9,62.7
175	1.430	1.702	1.870	1.817	1.615	1.665	1.586	1.378	170-175	0.1160	282.5	100,62.8
180	1.667	1.667	1.667	1.667	1.467	1.467	1.467	1.467	175-180	0.0387	282.5	100,62.8
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

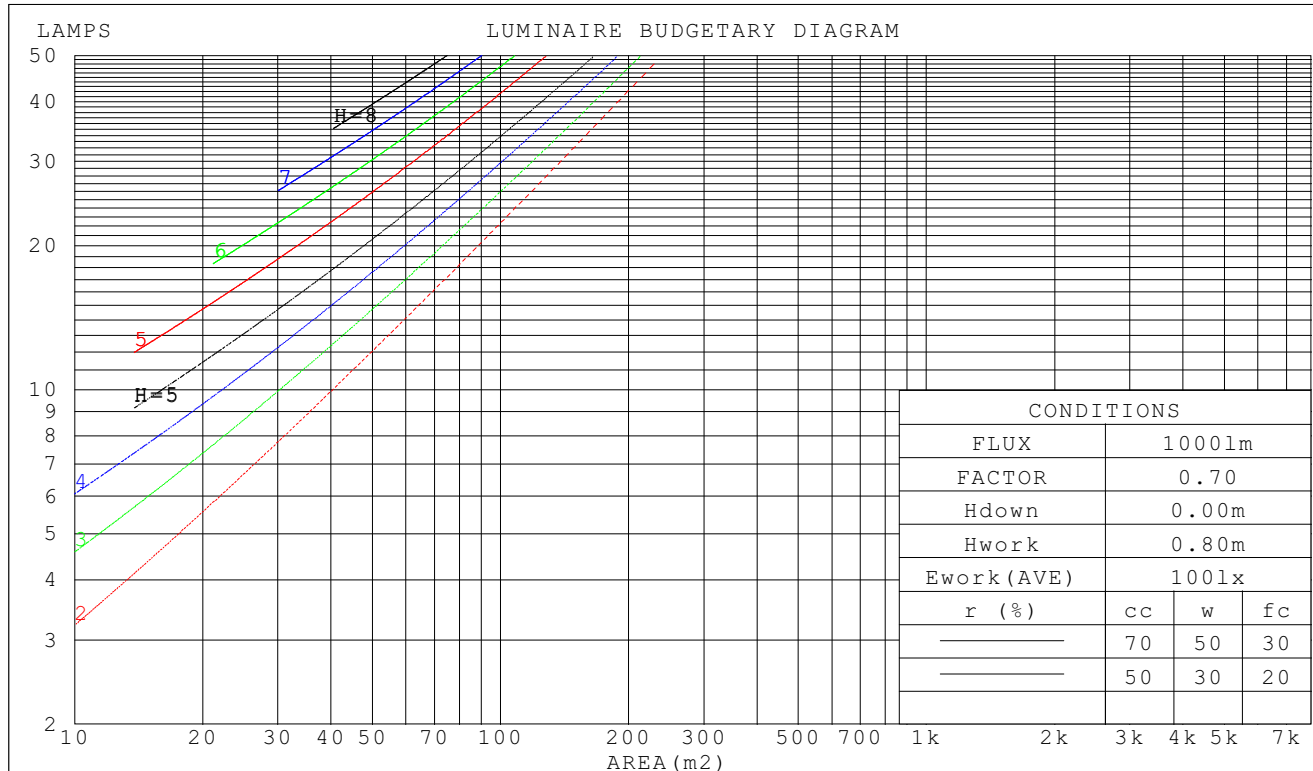
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:30DEG
 Operators:LCM
 Test Date:2017-03-04

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity:65.0%
 Test Distance:6.172m [K=1.0000]
 Remarks:



CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	.74	.74	.74	.71	.71	.71	.67	.67	.67	.63	.63	.63	.60	.60	.60	.58
1.0	.64	.61	.59	.62	.60	.58	.59	.57	.55	.56	.54	.53	.53	.51	.50	.49
2.0	.56	.52	.48	.55	.51	.47	.52	.48	.46	.49	.46	.44	.46	.44	.42	.41
3.0	.49	.44	.40	.48	.43	.40	.46	.42	.38	.43	.40	.37	.41	.38	.36	.35
4.0	.44	.39	.34	.43	.38	.34	.41	.36	.33	.39	.35	.32	.37	.34	.31	.30
5.0	.39	.34	.30	.38	.33	.29	.37	.32	.29	.35	.31	.28	.33	.30	.27	.26
6.0	.35	.30	.26	.35	.29	.26	.33	.29	.25	.32	.28	.25	.30	.27	.24	.23
7.0	.32	.27	.23	.31	.26	.23	.30	.26	.22	.29	.25	.22	.28	.24	.21	.20
8.0	.29	.24	.21	.29	.24	.20	.28	.23	.20	.26	.23	.20	.25	.22	.19	.18
9.0	.27	.22	.19	.26	.22	.18	.25	.21	.18	.24	.21	.18	.24	.20	.17	.16
10.0	.25	.20	.17	.24	.20	.17	.24	.19	.16	.23	.19	.16	.22	.18	.16	.15



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
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 Test Date: 2017-03-04

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
 Test Distance: 6.172m [K=1.0000]
 Remarks:



WEC AND CCEC

rcc	80%			70%			50%			30%			10%			0	
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
rfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.195	.111	.035	.189	.108	.034	.178	.102	.033	.168	.097	.031	.159	.092	.030		
2.0	.179	.098	.030	.174	.096	.030	.165	.092	.028	.156	.087	.027	.148	.083	.026		
3.0	.165	.088	.026	.161	.086	.026	.152	.082	.025	.144	.079	.024	.137	.076	.023		
4.0	.152	.079	.023	.148	.078	.023	.140	.074	.022	.133	.072	.022	.127	.069	.021		
5.0	.141	.072	.021	.137	.070	.020	.130	.068	.020	.124	.065	.019	.118	.063	.019		
6.0	.131	.065	.019	.127	.064	.019	.121	.062	.018	.115	.060	.018	.110	.058	.017		
7.0	.122	.060	.017	.119	.059	.017	.113	.057	.016	.108	.055	.016	.103	.053	.016		
8.0	.114	.056	.016	.111	.055	.015	.106	.053	.015	.101	.051	.015	.096	.050	.014		
9.0	.107	.052	.014	.104	.051	.014	.100	.049	.014	.095	.048	.014	.091	.046	.013		
10.0	.100	.048	.013	.098	.047	.013	.094	.046	.013	.090	.045	.013	.086	.043	.012		

rcc	80%			70%			50%			30%			10%			0	
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
rfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)										
0.0	.153	.153	.153	.131	.131	.131	.089	.089	.089	.051	.051	.051	.016	.016	.016		
1.0	.147	.132	.118	.126	.113	.102	.086	.078	.070	.050	.045	.041	.016	.015	.013		
2.0	.142	.117	.096	.122	.101	.083	.083	.070	.058	.048	.041	.034	.015	.013	.011		
3.0	.137	.106	.082	.117	.092	.071	.081	.064	.050	.047	.037	.029	.015	.012	.010		
4.0	.132	.098	.072	.113	.085	.062	.078	.059	.044	.045	.035	.026	.015	.011	.009		
5.0	.127	.091	.065	.109	.079	.056	.075	.055	.040	.044	.032	.024	.014	.011	.008		
6.0	.123	.086	.060	.106	.075	.052	.073	.052	.037	.042	.031	.022	.014	.010	.007		
7.0	.119	.082	.056	.102	.071	.049	.071	.050	.035	.041	.029	.021	.013	.010	.007		
8.0	.115	.078	.053	.099	.068	.047	.068	.048	.033	.040	.028	.020	.013	.009	.007		
9.0	.111	.075	.051	.096	.065	.045	.066	.046	.032	.039	.027	.019	.013	.009	.006		
10.0	.108	.073	.049	.093	.063	.043	.064	.044	.031	.038	.026	.018	.012	.009	.006		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: LCM
 Test Date: 2017-03-04

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
 Test Distance: 6.172m [K=1.0000]
 Remarks:



Uncorrected UGR Table

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	15.4	16.8	15.7	17.1	17.4	16.1	17.5	16.5	17.8	18.2
3H	15.3	16.6	15.7	17.0	17.3	17.9	19.2	18.3	19.5	19.9
4H	15.2	16.4	15.6	16.8	17.2	18.8	20.0	19.2	20.4	20.8
6H	15.1	16.2	15.5	16.6	17.0	19.6	20.8	20.1	21.2	21.6
8H	15.0	16.1	15.5	16.5	17.0	20.0	21.1	20.5	21.6	22.0
12H	15.0	16.0	15.4	16.4	16.9	20.4	21.5	20.9	21.9	22.4
4H 2H	16.2	17.4	16.6	17.8	18.2	16.7	17.9	17.1	18.3	18.7
3H	16.9	18.0	17.4	18.4	18.9	18.7	19.8	19.2	20.2	20.6
4H	16.9	17.9	17.4	18.3	18.8	19.8	20.7	20.2	21.2	21.7
6H	16.8	17.7	17.3	18.1	18.7	20.8	21.7	21.3	22.1	22.6
8H	16.8	17.6	17.3	18.0	18.6	21.3	22.1	21.8	22.6	23.1
12H	16.7	17.4	17.2	17.9	18.5	21.8	22.5	22.3	23.0	23.6
8H 4H	17.8	18.6	18.4	19.1	19.7	20.1	20.9	20.6	21.4	21.9
6H	18.2	18.9	18.7	19.4	20.0	21.4	22.0	21.9	22.6	23.1
8H	18.2	18.8	18.8	19.4	20.0	22.0	22.6	22.6	23.2	23.8
12H	18.2	18.7	18.8	19.2	19.9	22.7	23.2	23.3	23.8	24.4
12H 4H	18.0	18.7	18.5	19.2	19.8	20.1	20.9	20.7	21.4	21.9
6H	18.6	19.2	19.2	19.7	20.3	21.5	22.1	22.0	22.6	23.2
8H	18.9	19.4	19.4	19.9	20.6	22.2	22.7	22.8	23.3	23.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.1 / - 0.2				
1.5H	+ 0.5 / - 0.4					+ 0.2 / - 0.3				
2.0H	+ 0.4 / - 0.7					+ 0.1 / - 0.2				

CIE Pub.117 Corrected 450.0 lm Total Lamp Luminous Flux. (8log(F/F0) = -2.8)

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 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
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 Remarks:



UTILIZATION FACTORS TABLE

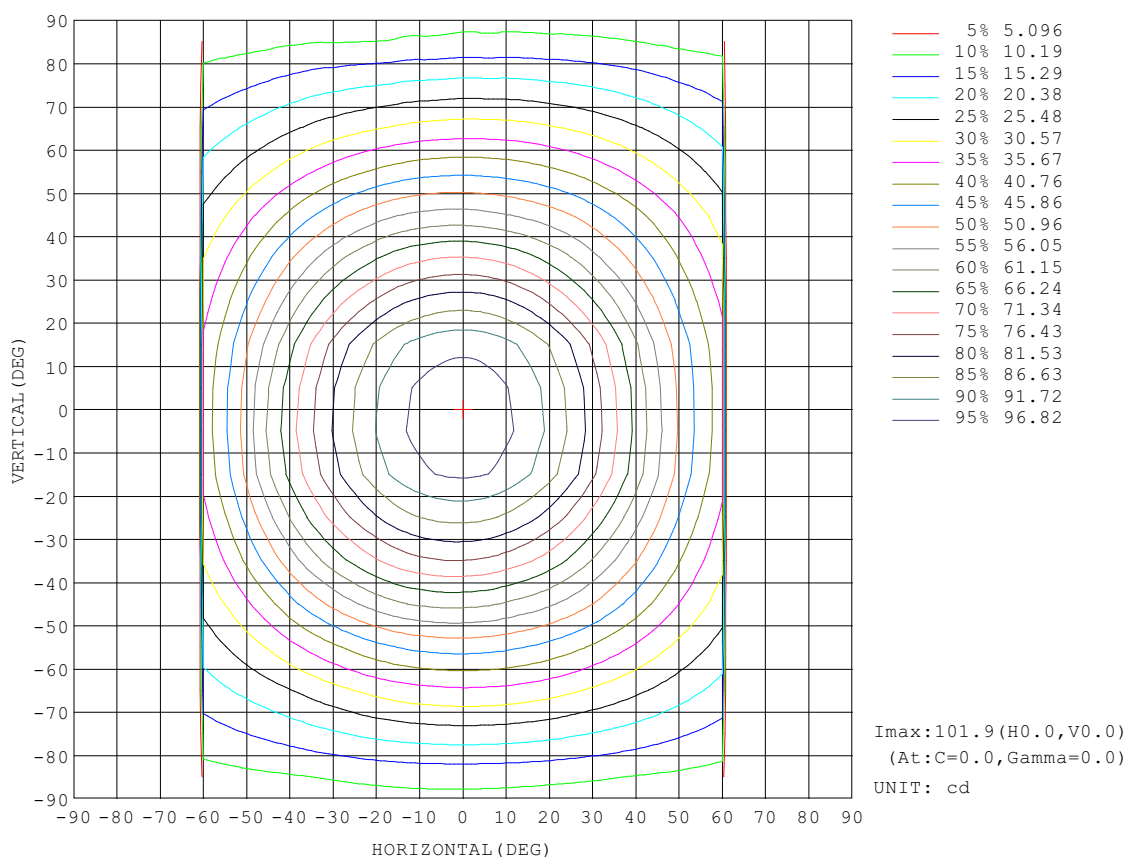
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	35	28	24	35	28	24	34	28	24	20
0.80	42	34	30	41	34	30	40	33	29	25
1.00	47	40	35	46	39	35	44	40	35	30
1.25	51	45	40	50	44	40	48	43	39	34
1.50	54	48	44	53	47	43	51	46	42	37
2.00	58	53	49	57	52	48	54	50	47	41
2.50	61	56	52	59	55	51	56	53	49	43
3.00	63	58	55	61	57	54	58	55	52	46
4.00	65	62	58	63	60	57	60	57	55	48
5.00	67	64	61	65	62	60	61	59	57	50
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

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 Remarks:



ISOCANDELA DIAGRAM

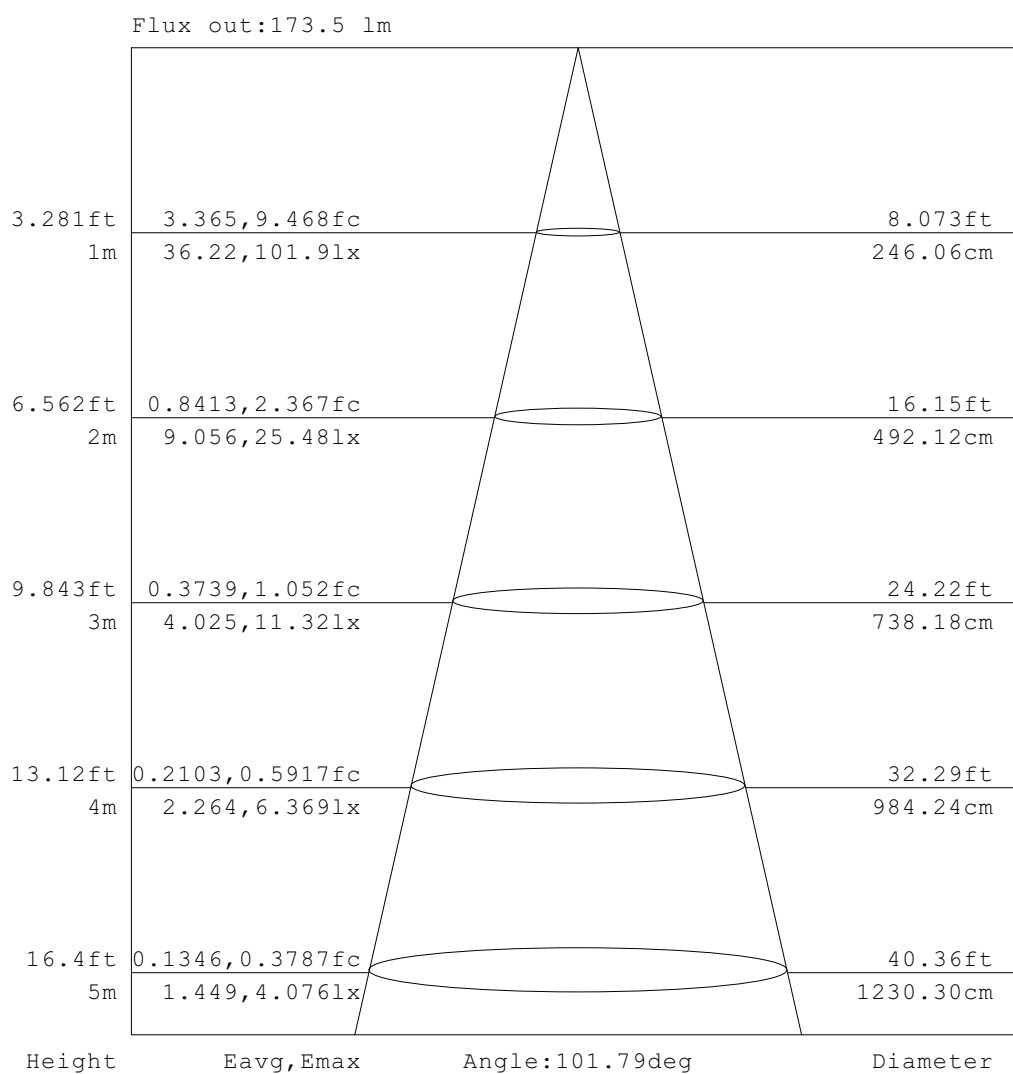


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Remarks:



AAI Figure



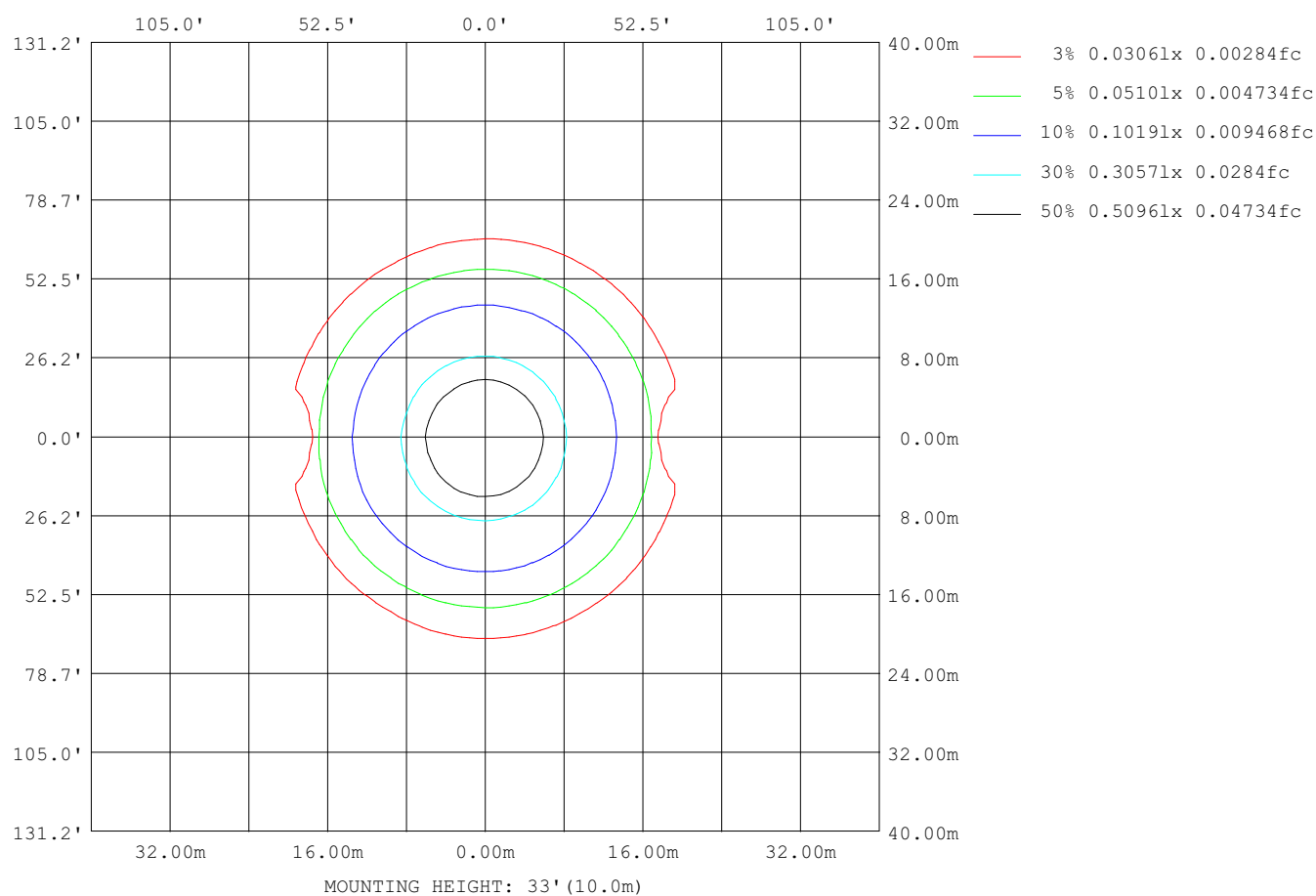
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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g Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
Humidity: 65.0%
Test Distance: 6.172m [K=1.0000]
Remarks:



ISOLUX DIAGRAM

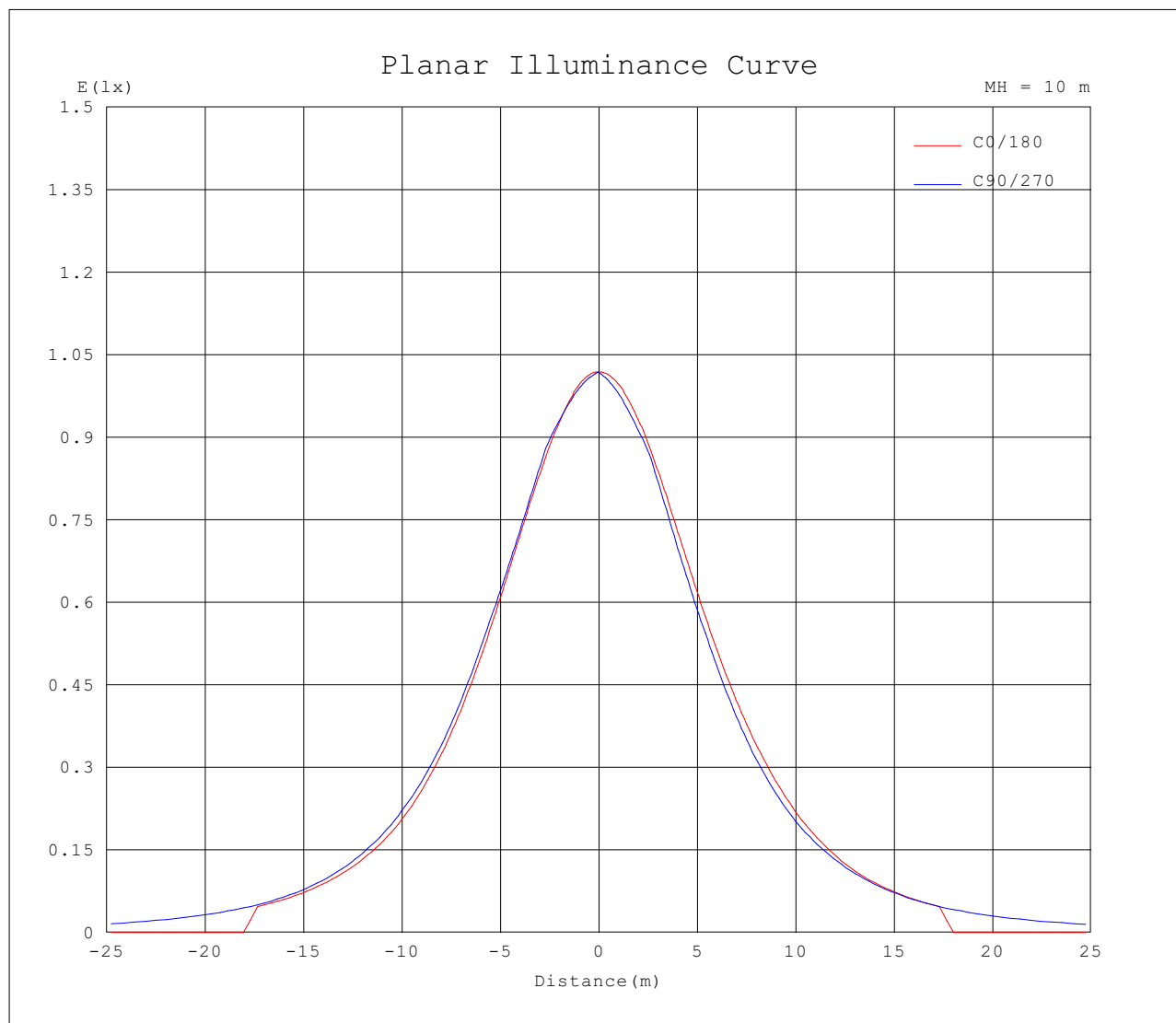


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Planar Illuminance Curve



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Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

g (DEG) \ C (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102
5	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	100	100
10	99.1	98.9	98.7	98.6	98.5	98.5	98.4	98.5	98.5	98.6	98.6	98.7	98.8	98.9	99.0	99.0	99.0	99.1	99.1
15	95.9	95.7	95.4	95.3	95.3	95.3	95.4	95.5	95.8	96.0	96.3	96.5	96.8	97.1	97.3	97.4	97.6	97.6	97.7
20	91.8	91.5	91.3	91.2	91.3	91.4	91.7	92.1	92.5	93.0	93.1	93.0	92.9	92.9	92.9	92.9	92.9	92.9	92.9
25	86.7	86.3	86.1	86.2	86.4	86.8	87.4	88.1	87.8	87.5	87.4	87.4	87.5	87.6	87.7	87.9	88.0	88.1	88.1
30	80.5	80.1	80.0	80.2	80.7	81.5	81.8	81.5	81.4	81.4	81.5	81.7	82.0	82.3	82.6	82.9	83.1	83.3	83.4
35	73.4	73.0	73.0	73.4	74.2	74.5	74.3	74.3	74.5	74.9	75.4	75.9	75.9	75.9	76.0	76.1	76.2	76.3	76.4
40	65.8	65.5	65.6	66.3	66.9	66.7	66.8	67.1	67.5	68.0	68.3	68.5	68.6	68.7	68.7	68.9	69.2	69.3	69.5
45	58.1	57.9	58.3	59.2	59.2	59.3	59.6	60.2	60.3	60.5	60.9	61.2	61.4	61.6	61.6	61.8	62.2	62.3	62.5
50	50.9	50.7	51.1	51.6	51.8	52.2	52.8	52.9	53.1	53.5	53.9	54.3	54.4	54.6	54.6	54.7	54.9	55.1	55.2
55	44.4	44.2	44.6	44.6	44.9	45.5	45.6	46.0	46.4	46.8	47.1	47.3	47.4	47.5	47.6	47.7	47.8	47.9	47.9
60	38.4	38.2	38.5	38.4	38.8	38.8	39.1	39.6	39.9	40.1	40.2	40.4	40.5	40.6	40.7	40.7	40.7	40.6	40.6
65	0.00	0.00	0.00	0.00	32.7	33.0	33.1	33.2	33.5	33.7	33.8	33.8	34.0	34.3	34.5	34.7	34.8	34.8	34.9
70	0.00	0.00	0.00	0.00	0.00	27.2	27.3	27.4	27.6	27.7	27.9	28.1	28.3	28.5	28.8	28.9	29.1	29.1	29.1
75	0.00	0.00	0.00	0.00	0.00	0.00	21.7	21.8	21.9	22.1	22.3	22.4	22.6	22.8	23.1	23.2	23.3	23.3	23.4
80	0.00	0.00	0.00	0.00	0.00	0.00	16.2	16.3	16.4	16.6	16.7	16.9	17.0	17.2	17.3	17.5	17.6	17.6	17.6
85	0.00	0.00	0.00	0.00	0.00	0.00	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.7	11.8	11.8	11.9
90	0.00	0.00	0.00	0.00	0.00	0.00	5.84	5.81	5.80	5.82	5.87	5.90	5.94	5.96	6.00	6.04	6.07	6.10	6.14
95	0.00	0.00	0.00	0.00	0.00	0.00	6.42	6.31	6.14	5.95	5.76	5.56	5.37	5.21	5.28	5.52	5.75	5.94	6.06
100	0.00	0.00	0.00	0.00	0.00	0.00	6.99	6.77	6.43	6.02	5.61	5.17	4.76	4.46	4.58	5.02	5.44	5.77	5.97
105	0.00	0.00	0.00	0.00	0.00	0.00	7.51	7.13	6.59	5.98	5.36	4.70	4.10	3.68	3.92	4.55	5.15	5.62	5.89
110	0.00	0.00	0.00	0.00	0.00	7.57	7.34	7.05	6.55	5.77	4.95	4.10	3.36	2.90	3.32	4.12	4.88	5.47	5.80
115	0.00	0.00	0.00	0.00	7.32	7.03	6.65	6.17	5.63	5.00	4.23	3.34	2.49	2.13	2.79	3.75	4.64	5.33	5.72
120	7.05	7.02	6.87	6.69	6.39	6.04	5.60	5.05	4.46	3.81	3.01	2.36	1.90	1.83	2.57	3.51	4.44	5.21	5.64
125	5.84	5.83	5.67	5.48	5.19	4.78	4.36	3.81	3.17	2.43	1.83	1.63	1.77	2.13	2.86	3.66	4.41	5.03	5.37
130	4.47	4.46	4.31	4.07	3.80	3.39	2.89	2.36	1.89	1.45	1.23	1.48	1.98	2.52	3.14	3.79	4.37	4.84	5.11
135	2.77	2.79	2.64	2.36	2.13	1.83	1.47	1.14	1.08	1.17	1.36	1.75	2.21	2.74	3.30	3.83	4.29	4.64	4.85
140	1.10	1.14	1.09	0.99	0.89	0.87	0.86	0.93	1.13	1.38	1.67	2.00	2.40	2.82	3.25	3.66	4.00	4.26	4.42
145	0.52	0.57	0.62	0.68	0.76	0.86	0.98	1.14	1.34	1.60	1.88	2.20	2.52	2.85	3.16	3.45	3.69	3.88	3.99
150	0.60	0.66	0.74	0.82	0.92	1.04	1.17	1.32	1.51	1.71	1.95	2.22	2.49	2.75	2.98	3.19	3.36	3.48	3.56
155	0.74	0.81	0.89	0.98	1.07	1.18	1.30	1.43	1.59	1.78	1.97	2.18	2.37	2.55	2.72	2.87	2.99	3.08	3.13
160	0.87	0.94	1.02	1.10	1.20	1.30	1.41	1.53	1.65	1.78	1.91	2.05	2.18	2.31	2.43	2.53	2.61	2.67	2.70
165	1.03	1.09	1.17	1.24	1.32	1.40	1.49	1.57	1.66	1.75	1.84	1.92	2.00	2.07	2.13	2.19	2.23	2.26	2.28
170	1.21	1.26	1.31	1.36	1.42	1.48	1.53	1.59	1.65	1.71	1.76	1.81	1.86	1.92	1.97	2.01	2.04	2.06	2.07
175	1.43	1.45	1.48	1.51	1.54	1.57	1.60	1.63	1.67	1.70	1.74	1.77	1.79	1.81	1.83	1.84	1.85	1.86	1.87
180	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: LCM
 Test Date: 2017-03-04

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
 Test Distance: 6.172m [K=1.0000]
 Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

g (DEG) \ C (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102
5	100	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
10	99.1	99.1	99.0	99.0	99.0	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.0	99.0	99.2	99.3	99.5	99.7	99.4
15	97.6	97.6	97.5	97.4	97.2	97.1	96.9	96.8	96.6	96.5	96.3	96.2	96.2	96.2	96.3	96.4	96.7	97.0	96.5
20	92.9	93.0	93.1	93.2	93.3	93.5	93.7	93.9	93.9	93.5	93.1	92.8	92.6	92.4	92.4	92.5	92.8	93.1	92.5
25	88.2	88.3	88.3	88.4	88.4	88.5	88.6	88.6	88.8	89.0	89.3	88.7	88.2	87.9	87.7	87.7	87.9	88.4	87.6
30	83.5	83.5	83.6	83.6	83.5	83.4	83.2	83.1	83.0	83.0	83.2	83.5	83.3	82.7	82.4	82.3	82.5	83.0	82.1
35	76.6	76.8	77.0	77.2	77.4	77.7	77.8	77.5	77.2	77.0	76.9	77.0	77.3	77.2	76.6	76.3	76.4	76.9	75.8
40	69.7	69.8	70.0	70.2	70.3	70.4	70.5	70.7	71.1	70.9	70.5	70.3	70.3	70.6	70.2	69.7	69.7	70.1	68.9
45	62.8	62.9	63.0	63.2	63.2	63.1	63.1	63.2	63.3	63.6	64.0	63.3	62.9	63.0	63.3	62.5	62.2	62.6	61.3
50	55.4	55.5	55.6	55.8	55.8	55.8	55.8	55.6	55.5	55.5	55.6	55.8	55.2	54.9	54.9	54.4	53.8	54.1	53.1
55	48.0	48.0	48.1	48.1	48.0	47.9	47.9	47.8	47.8	47.5	47.2	47.1	47.1	46.5	46.1	46.1	45.5	45.8	44.9
60	40.5	40.5	40.5	40.4	40.3	40.2	40.1	40.1	40.0	39.6	39.3	39.1	38.9	39.0	38.4	38.5	38.1	38.2	37.7
65	34.8	34.6	34.5	34.1	33.7	33.1	32.7	32.6	32.6	32.5	32.3	32.1	32.0	31.9	0.00	0.00	0.00	0.00	0.00
70	29.0	28.9	28.8	28.4	28.0	27.5	27.1	26.7	26.3	26.2	26.3	26.2	26.1	0.00	0.00	0.00	0.00	0.00	0.00
75	23.3	23.2	23.1	22.8	22.5	22.1	21.7	21.3	21.0	20.9	20.8	20.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	17.6	17.5	17.4	17.2	17.0	16.7	16.4	16.1	15.9	15.8	15.7	15.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	11.9	11.9	11.8	11.7	11.5	11.3	11.1	11.0	10.8	10.7	10.7	10.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	6.17	6.18	6.18	6.16	6.11	6.04	5.94	5.88	5.83	5.80	5.78	5.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	6.05	5.96	5.78	5.56	5.36	5.36	5.47	5.62	5.74	5.86	6.08	6.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	5.94	5.73	5.39	4.99	4.62	4.65	4.96	5.32	5.62	5.87	6.30	6.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	5.83	5.52	5.03	4.45	3.90	3.91	4.36	4.95	5.43	5.79	6.33	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	5.72	5.33	4.71	3.96	3.21	3.12	3.66	4.43	5.10	5.58	5.90	6.36	6.76	0.00	0.00	0.00	0.00	0.00	0.00
115	5.62	5.16	4.43	3.55	2.62	2.32	2.83	3.61	4.25	4.67	4.87	5.21	5.83	6.48	0.00	0.00	0.00	0.00	0.00
120	5.52	5.02	4.25	3.35	2.49	2.03	2.11	2.44	2.97	3.54	3.81	4.07	4.53	5.13	5.44	4.87	3.92	5.38	5.52
125	5.27	4.86	4.25	3.50	2.76	2.15	1.83	1.57	1.67	2.22	2.67	2.91	3.17	3.50	3.83	3.88	3.08	3.67	3.60
130	5.01	4.69	4.22	3.63	3.02	2.44	1.94	1.48	1.31	1.40	1.52	1.60	1.86	2.04	2.09	2.13	1.97	1.70	1.66
135	4.74	4.49	4.13	3.67	3.15	2.63	2.18	1.78	1.46	1.28	1.10	1.02	1.05	1.05	1.01	1.03	0.96	0.49	0.52
140	4.35	4.16	3.91	3.57	3.18	2.77	2.37	2.04	1.76	1.49	1.26	1.09	0.97	0.89	0.81	0.73	0.68	0.46	0.47
145	3.96	3.83	3.65	3.41	3.15	2.84	2.53	2.20	1.91	1.65	1.43	1.25	1.10	0.99	0.89	0.81	0.73	0.52	0.53
150	3.55	3.48	3.35	3.18	2.99	2.76	2.50	2.24	1.99	1.78	1.59	1.41	1.25	1.13	1.02	0.93	0.85	0.66	0.68
155	3.12	3.08	2.99	2.88	2.75	2.58	2.41	2.22	2.02	1.83	1.66	1.54	1.42	1.30	1.20	1.10	1.01	0.83	0.86
160	2.70	2.67	2.62	2.55	2.46	2.36	2.24	2.11	1.98	1.87	1.76	1.65	1.55	1.46	1.37	1.29	1.22	1.03	1.05
165	2.27	2.27	2.25	2.22	2.18	2.13	2.08	2.02	1.95	1.87	1.79	1.72	1.64	1.57	1.50	1.43	1.37	1.20	1.23
170	2.08	2.07	2.06	2.05	2.03	2.01	1.97	1.93	1.89	1.84	1.78	1.74	1.69	1.64	1.59	1.55	1.51	1.38	1.39
175	1.87	1.87	1.87	1.87	1.86	1.85	1.84	1.83	1.82	1.80	1.79	1.77	1.75	1.73	1.72	1.70	1.68	1.61	1.62
180	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.47	1.47

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: LCM
 Test Date: 2017-03-04

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
 Test Distance: 6.172m [K=1.0000]
 Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

Table--3

UNIT: cd

g (DEG) \ C (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102
5	101	101	101	101	100	100	100	100	100	100.0	99.9	99.9	99.8	99.8	99.8	99.8	99.8	99.8	99.8
10	99.0	98.8	98.5	98.3	98.1	98.0	97.9	97.8	97.7	97.7	97.7	97.6	97.6	97.6	97.6	97.6	97.6	97.7	97.6
15	96.0	95.7	95.4	95.2	95.1	95.0	94.9	94.9	95.0	95.0	95.1	95.2	95.3	95.4	95.4	95.5	95.5	95.5	95.5
20	92.0	91.6	91.4	91.3	91.3	91.3	91.5	91.7	91.5	91.1	90.7	90.4	90.2	90.0	89.9	89.8	89.8	89.8	89.9
25	87.0	86.7	86.5	86.6	86.8	87.1	86.4	85.9	85.5	85.1	84.8	84.6	84.4	84.3	84.2	84.2	84.1	84.1	84.1
30	81.5	81.1	81.1	81.3	81.1	80.4	79.8	79.4	79.1	79.0	78.9	78.8	78.7	78.6	78.5	78.5	78.5	78.4	78.4
35	75.2	75.0	75.1	74.8	74.0	73.5	73.1	72.8	72.7	72.6	72.5	72.3	72.1	71.9	71.7	71.6	71.5	71.5	71.4
40	68.2	68.0	68.0	67.2	66.8	66.5	66.4	66.3	65.8	65.5	65.4	65.3	65.2	65.0	64.8	64.7	64.6	64.5	64.3
45	60.6	60.6	59.9	59.6	59.4	59.5	59.2	58.9	58.7	58.5	58.4	58.4	58.3	58.1	57.9	57.8	57.7	57.5	57.3
50	52.8	52.6	52.1	52.0	52.2	51.9	51.8	51.6	51.6	51.6	51.5	51.6	51.5	51.4	51.3	51.2	51.2	51.0	50.9
55	45.0	44.7	44.7	44.8	44.6	44.6	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.6	44.6	44.6	44.6
60	37.8	37.7	37.9	37.7	37.8	37.9	37.9	38.0	38.0	38.0	38.0	37.9	37.9	37.9	38.0	38.0	38.1	38.3	38.4
65	0.00	0.00	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.7	31.9	32.1	32.3	32.5	32.6	32.8	32.9	32.9
70	0.00	0.00	0.00	25.7	25.6	25.6	25.6	25.8	26.0	26.2	26.3	26.5	26.6	26.9	27.1	27.2	27.4	27.5	27.6
75	0.00	0.00	0.00	0.00	20.1	20.2	20.3	20.6	20.8	21.0	21.0	21.2	21.3	21.5	21.7	21.8	22.1	22.1	22.2
80	0.00	0.00	0.00	0.00	15.1	15.1	15.2	15.4	15.7	15.9	15.8	15.9	15.9	16.2	16.3	16.4	16.7	16.7	16.9
85	0.00	0.00	0.00	0.00	10.2	10.2	10.2	10.4	10.7	10.8	10.6	10.6	10.5	10.8	11.0	11.0	11.4	11.3	11.6
90	0.00	0.00	0.00	0.00	5.57	5.34	5.30	5.42	5.70	5.82	5.47	5.40	5.21	5.46	5.59	5.62	6.05	5.91	6.22
95	0.00	0.00	0.00	0.00	6.07	5.73	5.42	5.29	5.35	5.41	5.10	5.10	5.12	5.46	5.64	5.68	5.98	5.76	5.89
100	0.00	0.00	0.00	0.00	6.52	6.03	5.47	5.12	4.99	4.98	4.72	4.80	5.05	5.48	5.68	5.74	5.92	5.63	5.57
105	0.00	0.00	0.00	0.00	6.84	6.14	5.35	4.82	4.63	4.52	4.35	4.54	5.00	5.51	5.73	5.80	5.85	5.49	5.26
110	0.00	0.00	0.00	6.77	6.28	5.66	5.00	4.37	4.29	4.08	4.01	4.37	4.99	5.55	5.78	5.86	5.79	5.37	4.97
115	0.00	0.00	6.25	5.70	5.12	4.41	3.90	3.63	3.78	3.64	3.70	4.32	5.02	5.60	5.85	5.91	5.73	5.25	4.72
120	5.41	5.06	4.63	4.11	3.55	3.07	2.78	2.69	2.75	3.08	3.45	4.24	4.96	5.58	5.89	5.94	5.66	5.14	4.50
125	3.35	3.14	2.70	2.25	1.98	1.87	1.77	1.74	2.21	2.75	3.27	4.01	4.61	5.11	5.38	5.46	5.28	4.86	4.30
130	1.46	1.27	1.14	0.96	0.85	1.02	1.22	1.51	2.02	2.60	3.13	3.75	4.23	4.63	4.87	4.99	4.89	4.57	4.11
135	0.52	0.46	0.54	0.56	0.62	0.76	1.09	1.50	2.00	2.46	2.96	3.46	3.85	4.16	4.38	4.52	4.50	4.27	3.90
140	0.48	0.50	0.53	0.61	0.73	0.91	1.18	1.53	1.92	2.32	2.76	3.15	3.47	3.74	3.92	4.04	4.03	3.85	3.57
145	0.55	0.58	0.63	0.72	0.88	1.09	1.32	1.58	1.87	2.17	2.52	2.84	3.10	3.32	3.47	3.57	3.55	3.43	3.23
150	0.71	0.75	0.80	0.87	0.98	1.17	1.38	1.60	1.84	2.09	2.34	2.55	2.74	2.90	3.03	3.09	3.07	2.99	2.87
155	0.89	0.93	0.99	1.05	1.13	1.21	1.39	1.58	1.77	1.95	2.12	2.28	2.42	2.54	2.62	2.67	2.66	2.60	2.52
160	1.09	1.13	1.18	1.23	1.30	1.36	1.44	1.51	1.62	1.74	1.86	1.98	2.08	2.16	2.21	2.25	2.24	2.20	2.15
165	1.26	1.29	1.33	1.37	1.42	1.47	1.52	1.56	1.61	1.66	1.70	1.75	1.78	1.80	1.82	1.83	1.83	1.80	1.78
170	1.42	1.44	1.46	1.49	1.52	1.55	1.58	1.62	1.66	1.69	1.72	1.73	1.74	1.74	1.74	1.73	1.71	1.68	1.66
175	1.63	1.63	1.64	1.65	1.65	1.66	1.67	1.67	1.66	1.66	1.66	1.65	1.64	1.63	1.62	1.60	1.59	1.57	1.55
180	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: LCM
 Test Date: 2017-03-04

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
 Test Distance: 6.172m [K=1.0000]
 Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

Table--4

UNIT: cd

g \ C (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102				
5	99.8	99.8	99.9	99.9	100.0	100	100	100	100	100	100	101	101	101	101				
10	97.6	97.6	97.6	97.6	97.5	97.5	97.5	97.6	97.6	97.7	97.9	98.0	98.2	98.5	98.8				
15	95.4	95.3	95.1	94.9	94.8	94.6	94.5	94.4	94.3	94.3	94.4	94.6	94.8	95.1	95.5				
20	90.0	90.0	90.1	90.3	90.6	91.0	91.0	90.7	90.5	90.3	90.3	90.3	90.5	90.8	91.2				
25	84.1	84.1	84.2	84.2	84.4	84.6	85.0	85.5	86.1	85.7	85.4	85.2	85.2	85.5	86.0				
30	78.3	78.2	78.1	78.0	77.9	78.0	78.2	78.5	78.9	79.5	79.6	79.2	79.1	79.2	79.7				
35	71.4	71.4	71.4	71.4	71.3	71.1	71.1	71.2	71.5	71.9	72.5	72.5	72.1	72.1	72.5				
40	64.3	64.3	64.3	64.2	64.2	64.1	64.1	64.0	64.1	64.2	64.5	65.0	64.7	64.6	65.0				
45	57.3	57.4	57.4	57.5	57.5	57.4	57.2	57.1	57.2	57.1	57.1	57.3	57.6	57.3	57.4				
50	50.9	50.9	50.9	51.0	51.1	50.9	50.8	50.7	50.6	50.7	50.6	50.5	50.6	50.5	50.4				
55	44.7	44.7	44.7	44.8	44.8	44.7	44.8	44.7	44.5	44.4	44.5	44.2	44.2	44.4	44.1				
60	38.5	38.5	38.6	38.6	38.7	38.7	38.7	38.7	38.7	38.5	38.4	38.5	38.2	38.4	38.1				
65	33.0	32.9	32.8	32.8	32.8	32.8	32.8	32.7	32.7	32.9	32.8	32.6	0.00	0.00	0.00				
70	27.6	27.5	27.5	27.4	27.3	27.2	27.2	27.1	27.0	26.9	27.0	0.00	0.00	0.00	0.00				
75	22.2	22.2	22.2	22.1	22.0	21.9	21.7	21.5	21.4	21.3	0.00	0.00	0.00	0.00	0.00				
80	16.9	16.8	16.9	16.8	16.7	16.6	16.3	16.1	16.1	16.0	0.00	0.00	0.00	0.00	0.00				
85	11.6	11.5	11.6	11.5	11.5	11.4	11.1	10.9	10.9	11.0	0.00	0.00	0.00	0.00	0.00				
90	6.24	6.19	6.33	6.31	6.27	6.23	5.94	5.78	5.90	6.10	0.00	0.00	0.00	0.00	0.00				
95	5.75	5.51	5.56	5.67	5.80	6.00	6.01	6.12	6.39	6.63	0.00	0.00	0.00	0.00	0.00				
100	5.27	4.86	4.78	5.01	5.29	5.73	6.02	6.39	6.82	7.15	0.00	0.00	0.00	0.00	0.00				
105	4.81	4.24	3.99	4.30	4.69	5.34	5.98	6.56	7.17	7.66	0.00	0.00	0.00	0.00	0.00				
110	4.38	3.68	3.21	3.52	3.99	4.80	5.66	6.48	7.03	7.39	7.65	0.00	0.00	0.00	0.00				
115	4.00	3.18	2.45	2.65	3.23	3.98	4.82	5.52	6.11	6.62	7.03	7.37	0.00	0.00	0.00				
120	3.72	2.89	2.09	2.00	2.28	2.74	3.58	4.32	4.94	5.54	6.04	6.42	6.73	6.91	7.07				
125	3.62	2.90	2.19	1.72	1.48	1.56	2.16	2.97	3.68	4.28	4.76	5.18	5.48	5.66	5.84				
130	3.52	2.90	2.31	1.73	1.22	0.95	1.17	1.63	2.16	2.74	3.31	3.75	4.03	4.27	4.44				
135	3.39	2.88	2.38	1.88	1.44	1.07	0.88	0.80	0.88	1.24	1.64	1.99	2.24	2.56	2.73				
140	3.19	2.78	2.37	1.98	1.61	1.30	1.03	0.83	0.66	0.60	0.62	0.65	0.80	0.97	1.06				
145	2.96	2.66	2.34	2.03	1.73	1.45	1.21	0.99	0.82	0.70	0.57	0.53	0.50	0.48	0.48				
150	2.69	2.48	2.24	2.00	1.75	1.52	1.31	1.13	0.97	0.83	0.74	0.68	0.63	0.59	0.56				
155	2.39	2.25	2.09	1.90	1.72	1.54	1.36	1.20	1.07	0.98	0.90	0.84	0.79	0.74	0.71				
160	2.07	1.98	1.88	1.76	1.62	1.49	1.37	1.27	1.18	1.09	1.02	0.96	0.90	0.86	0.82				
165	1.75	1.70	1.65	1.59	1.53	1.46	1.39	1.32	1.24	1.17	1.11	1.05	0.99	0.94	0.89				
170	1.63	1.58	1.53	1.48	1.44	1.40	1.35	1.31	1.27	1.22	1.18	1.14	1.10	1.06	1.02				
175	1.53	1.51	1.50	1.47	1.45	1.41	1.38	1.34	1.31	1.28	1.25	1.22	1.20	1.18	1.15				
180	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47				

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 30DEG
 Operators: LCM
 Test Date: 2017-03-04

g Range: 0 - 180DEG
 g Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.275
 Humidity: 65.0%
 Test Distance: 6.172m [K=1.0000]
 Remarks: