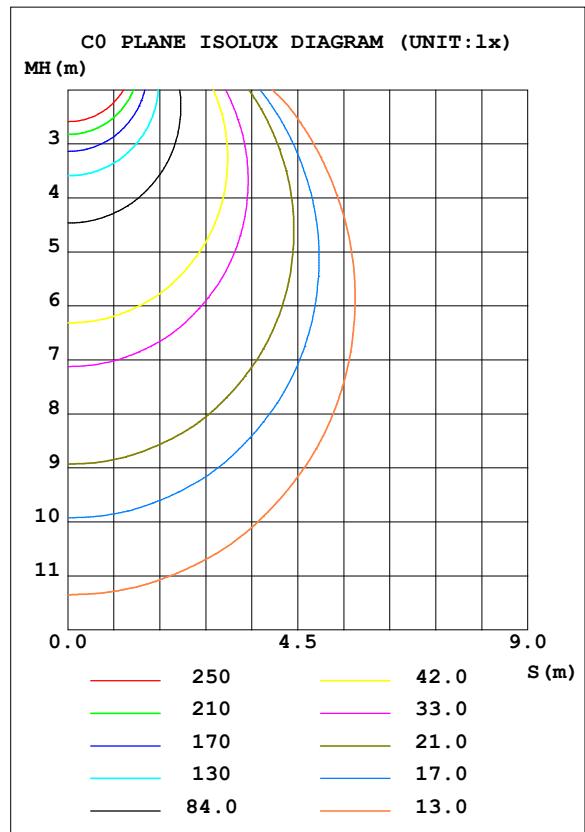
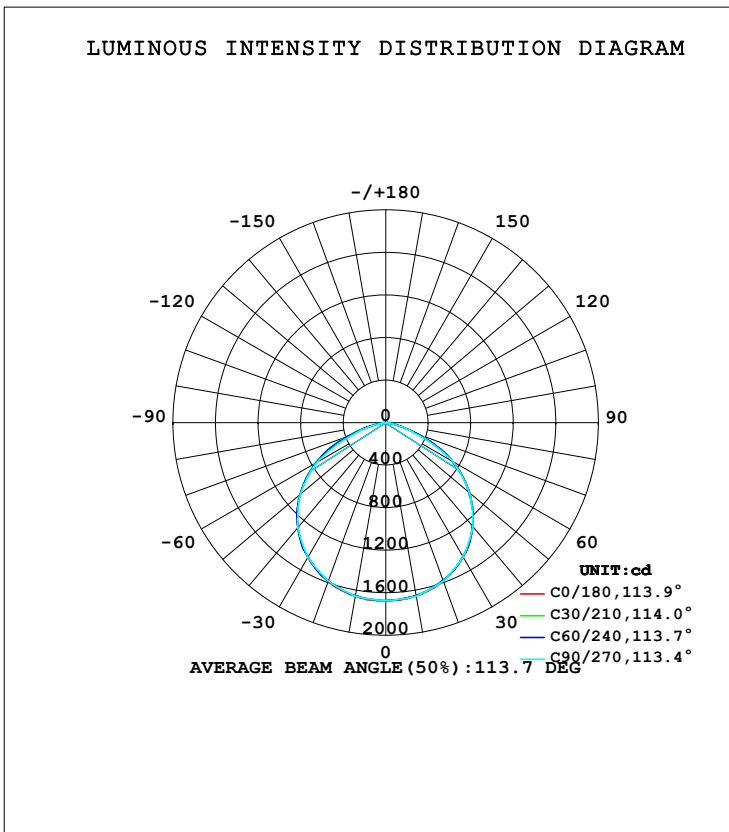


**LUMINAIRE PHOTOMETRIC TEST REPORT**

NAME: AK50W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL		Imax (cd)	1675	S/MH (C0/180)	1.29
NOMINAL POWER (W)	54	LOR (%)	100.0	S/MH (C90/270)	1.29
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4631.0	η UP, DN (C0-180)	0.0, 49.6
NOMINAL FLUX (lm)	4630.99	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.4
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230.1	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2019-01-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 12.300m [K=1.0000]  
Remarks:

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
5	1671	1665	1665	1667	1674	1668	1665	1665	0- 5	39.93	39.93	0.86,0.86
10	1653	1649	1656	1651	1656	1652	1656	1650	5- 10	118.7	158.7	3.43,3.43
15	1626	1623	1620	1625	1630	1625	1620	1624	10- 15	194.2	352.9	7.62,7.62
20	1583	1578	1583	1577	1588	1579	1585	1580	15- 20	263.9	616.8	13.3,13.3
25	1524	1527	1520	1529	1534	1529	1524	1529	20- 25	325.9	942.7	20.4,20.4
30	1457	1456	1457	1460	1463	1464	1463	1460	25- 30	377.7	1320	28.5,28.5
35	1372	1371	1365	1377	1383	1382	1375	1379	30- 35	417.5	1738	37.5,37.5
40	1273	1279	1274	1282	1288	1292	1288	1289	35- 40	443.0	2181	47.1,47.1
45	1160	1155	1151	1164	1176	1179	1170	1173	40- 45	453.0	2634	56.9,56.9
50	1032	1027	1028	1042	1052	1062	1051	1049	45- 50	445.8	3080	66.5,66.5
55	883.3	874.9	876.0	893.9	908.9	913.7	900.5	900.6	50- 55	421.1	3501	75.6,75.6
60	725.6	720.0	724.3	740.6	757.2	763.8	749.7	748.3	55- 60	377.8	3879	83.8,83.8
65	516.2	545.0	503.4	572.6	590.2	592.9	534.4	573.3	60- 65	315.5	4194	90.6,90.6
70	327.3	355.5	282.4	385.4	366.4	411.0	319.0	380.4	65- 70	228.1	4422	95.5,95.5
75	148.6	150.7	157.3	171.9	175.0	213.9	180.0	171.2	70- 75	135.3	4558	98.4,98.4
80	28.76	62.24	32.25	71.56	37.32	86.76	41.04	69.41	75- 80	59.20	4617	99.7,99.7
85	1.479	8.599	0	9.164	2.786	9.680	0	8.034	80- 85	13.45	4630	100,100
90	0.6250	0	0	0	0.9366	0	0	0	85- 90	0.8154	4631	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

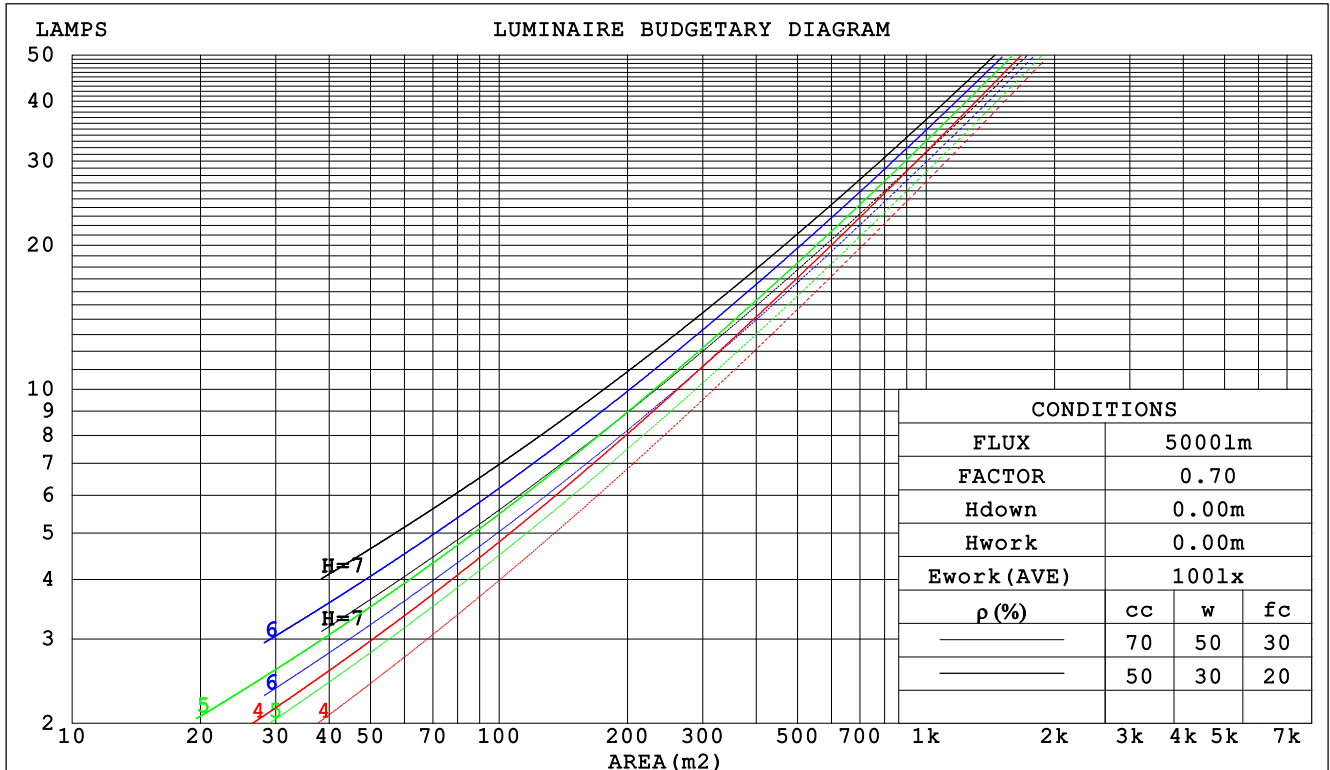
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-01-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 $\gamma$  Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:12.300m [K=1.0000]  
Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

NAME: AK50W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.05	1.02	.98	1.03	.90	.97	.99	.96	.93	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.72
3.0	.82	.74	.67	.80	.73	.67	.77	.71	.66	.74	.69	.65	.72	.67	.63	.61
4.0	.72	.64	.57	.71	.63	.57	.69	.62	.56	.66	.60	.55	.64	.59	.55	.53
5.0	.65	.56	.49	.63	.55	.49	.61	.54	.49	.59	.53	.48	.58	.52	.48	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.48	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.27	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-01-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity:65.0%  
 Test Distance:12.300m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

NAME: AK50W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.279	.159	.050	.272	.155	.049	.259	.148	.047	.247	.142	.046	.236	.137	.044	
2.0	.272	.149	.046	.265	.146	.045	.254	.141	.044	.243	.136	.043	.233	.132	.042	
3.0	.256	.136	.041	.251	.134	.040	.241	.130	.040	.231	.127	.039	.222	.123	.038	
4.0	.239	.124	.037	.235	.123	.036	.226	.120	.036	.217	.117	.035	.209	.114	.035	
5.0	.223	.114	.033	.219	.112	.033	.211	.110	.032	.203	.107	.032	.196	.105	.032	
6.0	.208	.104	.030	.204	.103	.030	.197	.101	.029	.191	.099	.029	.184	.097	.029	
7.0	.195	.096	.027	.191	.095	.027	.185	.093	.027	.179	.092	.027	.173	.090	.026	
8.0	.182	.089	.025	.179	.088	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.162	.077	.022	.159	.077	.021	.154	.076	.021	.150	.075	.021	.146	.073	.021	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.156	.137	.152	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.145	.114	.087	.100	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.162	.114	.076	.139	.099	.066	.095	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.133	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.048	.127	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-01-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:12.300m [K=1.0000]  
Remarks:

**Uncorrected UGR Table**

NAME: AK50W		TYPE:					WEIGHT:				
DIM.:		SPEC.:					SERIAL No.:				
MFR.: EVERFINE		SUR.:					PROTECTION ANGLE:				
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		17.6	19.1	17.9	19.3	19.5	17.6	19.0	17.8	19.2	19.5
	3H	18.5	19.9	18.8	20.1	20.4	18.4	19.8	18.7	20.0	20.2
	4H	18.7	20.0	19.0	20.2	20.5	18.5	19.8	18.9	20.1	20.3
	6H	18.6	19.9	19.0	20.1	20.4	18.5	19.7	18.9	20.0	20.3
	8H	18.6	19.8	18.9	20.0	20.3	18.5	19.6	18.8	19.9	20.2
	12H	18.5	19.7	18.9	20.0	20.3	18.4	19.5	18.8	19.8	20.1
	4H 2H	18.1	19.4	18.4	19.7	19.9	18.1	19.4	18.4	19.6	19.9
	3H	19.2	20.3	19.5	20.6	20.9	19.0	20.1	19.4	20.4	20.7
	4H	19.4	20.4	19.7	20.7	21.0	19.2	20.2	19.6	20.6	20.9
	6H	19.3	20.2	19.7	20.6	21.0	19.2	20.1	19.6	20.5	20.8
	8H	19.3	20.1	19.7	20.5	20.9	19.2	20.0	19.6	20.4	20.8
	12H	19.3	20.0	19.7	20.4	20.8	19.2	19.9	19.6	20.3	20.7
	8H 4H	19.4	20.2	19.8	20.6	21.0	19.3	20.1	19.7	20.5	20.8
	6H	19.4	20.1	19.8	20.5	20.9	19.3	20.0	19.8	20.4	20.8
	8H	19.4	20.0	19.8	20.4	20.9	19.3	19.9	19.7	20.3	20.8
	12H	19.4	19.9	19.8	20.3	20.8	19.3	19.8	19.7	20.2	20.7
	12H 4H	19.4	20.1	19.8	20.5	20.9	19.2	20.0	19.6	20.4	20.8
	6H	19.4	20.0	19.8	20.4	20.9	19.3	19.9	19.7	20.3	20.8
	8H	19.4	19.9	19.8	20.3	20.8	19.3	19.8	19.7	20.2	20.7
Variations with the observer position at spacings:											
S = 1.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H		+ 0.3 / - 0.5					+ 0.2 / - 0.4				
2.0H		+ 0.5 / - 0.6					+ 0.4 / - 0.7				

CIE Pub.117 Corrected 4631 lm Total Lamp Luminous Flux. (8log(F/F0) = 5.3)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-01-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:12.300m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

NAME: AK50W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

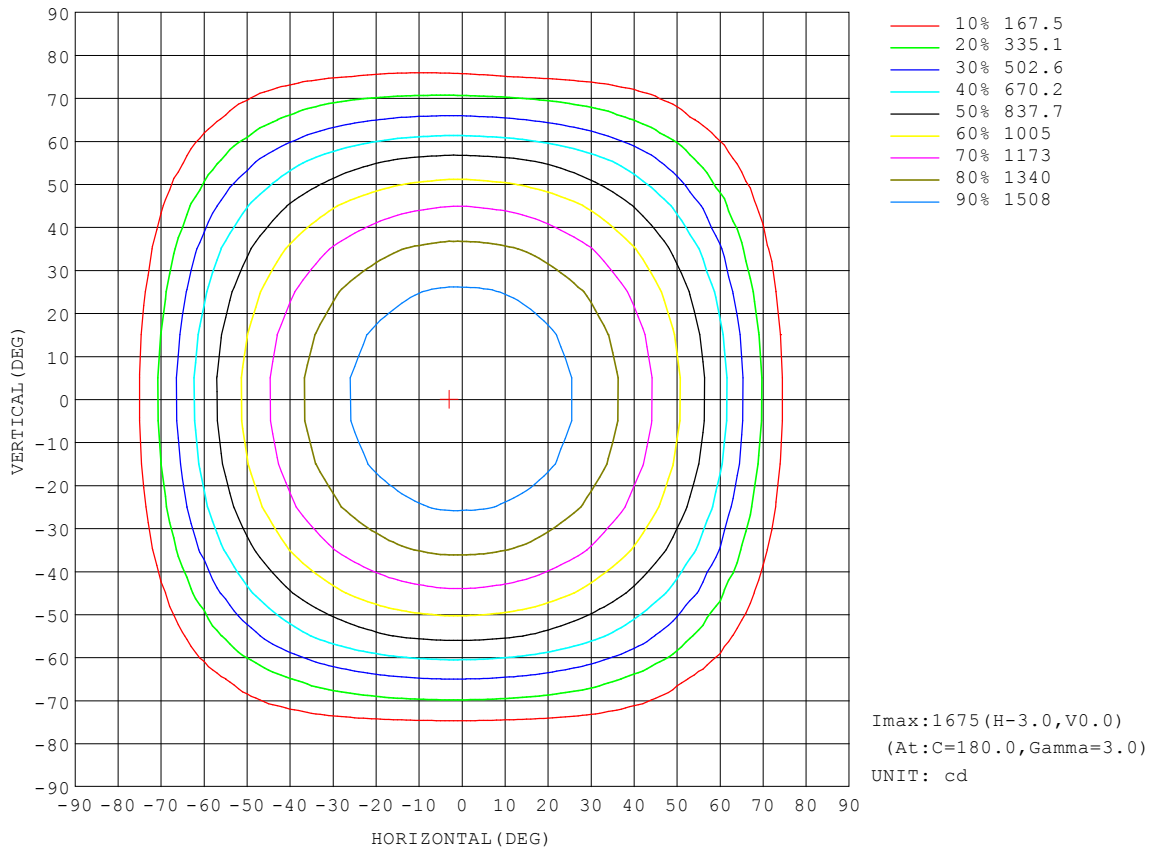
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	40	58	47	40	57	46	40	34
0.80	69	58	50	68	57	50	66	56	50	43
1.00	78	67	60	77	67	60	74	68	59	52
1.25	85	75	68	84	74	68	81	73	67	60
1.50	90	81	74	88	80	74	85	78	73	65
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	93	88	99	92	87	95	89	85	77
3.00	104	98	92	102	96	91	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	105	102	107	104	100	103	100	97	88
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-01-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity: 65.0%  
 Test Distance: 12.300m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

NAME: AK50W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

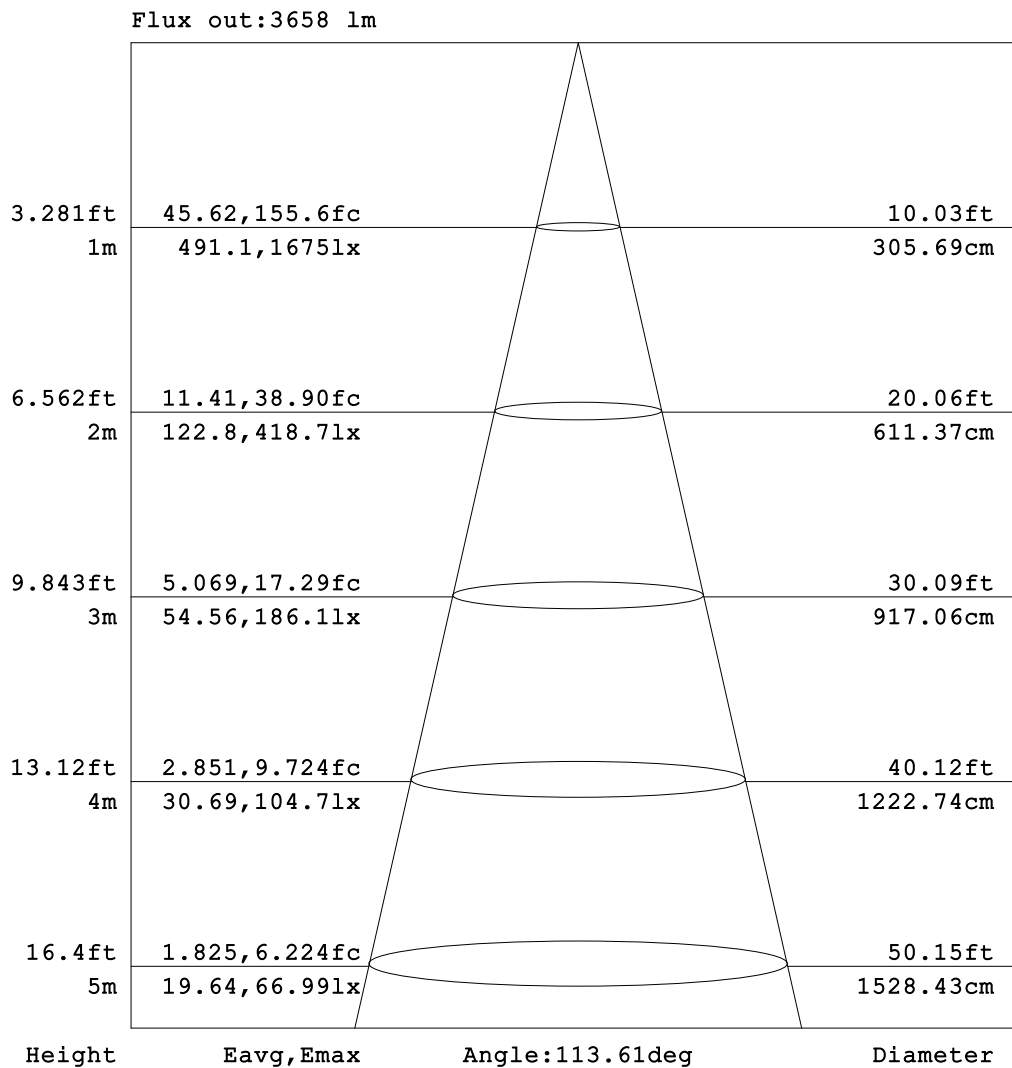


C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2019-01-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 12.300m [K=1.0000]  
Remarks:

**AAI Figure**

NAME: AK50W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:



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

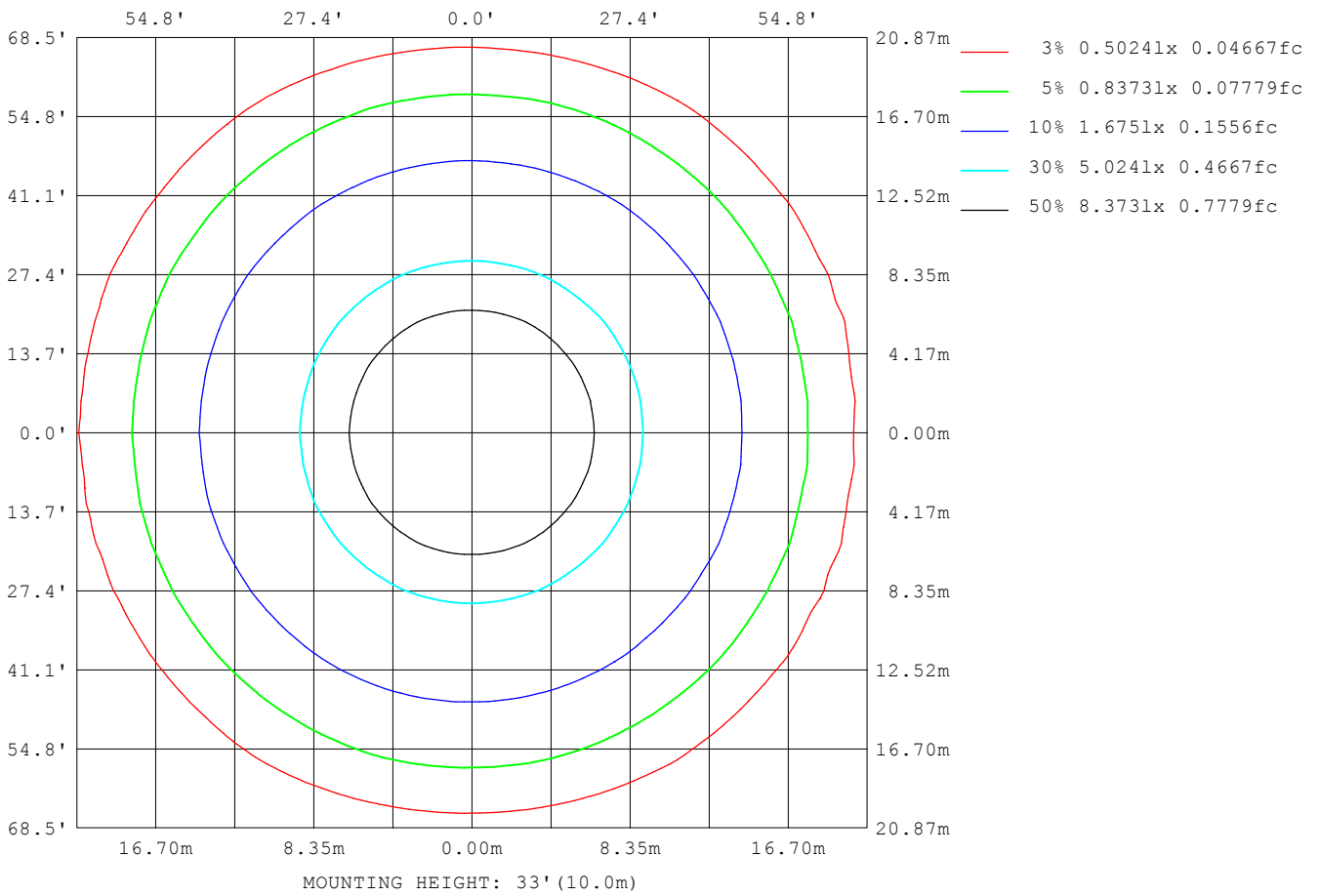
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2019-01-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity: 65.0%  
Test Distance: 12.300m [K=1.0000]  
Remarks:



**ISOLUX DIAGRAM**

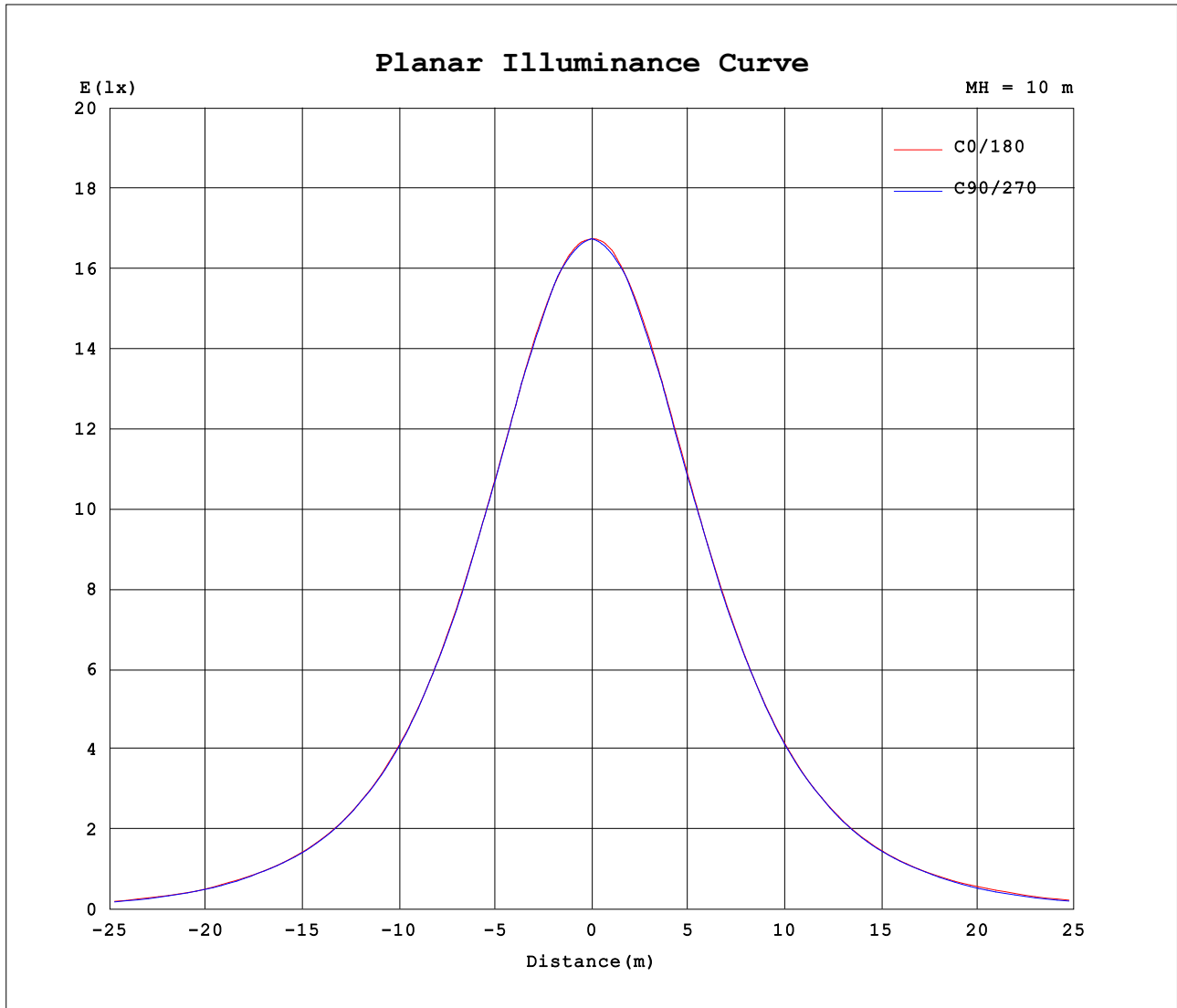
<b>NAME:</b> AK50W	<b>TYPE:</b>	<b>WEIGHT:</b>
<b>DIM.:</b>	<b>SPEC.:</b>	<b>SERIAL No.:</b>
<b>MFR.:</b> EVERFINE	<b>SUR.:</b>	<b>PROTECTION ANGLE:</b>



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-01-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity: 65.0%  
 Test Distance: 12.300m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-01-15

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
 Humidity: 65.0%  
 Test Distance: 12.300m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: AK50W	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675	1675
5	1671	1670	1669	1668	1667	1667	1666	1666	1666	1665	1665	1665	1665	1665	1665	1665	1665	1665	1665
10	1653	1651	1650	1649	1648	1648	1648	1648	1649	1649	1649	1650	1650	1652	1653	1655	1656	1656	1656
15	1626	1623	1621	1620	1619	1620	1622	1624	1625	1623	1621	1620	1619	1618	1618	1619	1620	1619	1620
20	1583	1580	1578	1579	1580	1580	1582	1581	1579	1578	1578	1577	1577	1579	1580	1581	1583	1584	1583
25	1524	1521	1520	1522	1525	1526	1523	1523	1525	1527	1530	1527	1523	1521	1521	1521	1521	1521	1520
30	1457	1453	1453	1456	1456	1452	1452	1454	1458	1456	1455	1456	1456	1454	1455	1458	1459	1458	1457
35	1372	1369	1371	1376	1371	1369	1371	1371	1370	1371	1374	1378	1375	1372	1368	1366	1366	1365	1365
40	1273	1269	1273	1273	1271	1274	1269	1271	1275	1279	1272	1269	1269	1271	1270	1270	1270	1271	1274
45	1160	1158	1166	1157	1157	1154	1158	1165	1157	1155	1155	1155	1155	1155	1153	1151	1148	1150	1151
50	1032	1029	1032	1026	1027	1028	1032	1024	1023	1027	1024	1021	1021	1023	1025	1026	1025	1027	1028
55	883	885	882	879	880	886	878	879	877	875	876	881	881	878	877	876	875	875	876
60	726	731	721	722	729	718	719	716	718	720	718	716	716	717	719	720	722	723	724
65	516	524	512	521	527	538	531	550	541	545	548	546	537	526	518	511	506	503	503
70	327	322	319	317	319	330	340	341	346	355	346	334	325	311	301	292	284	283	282
75	149	149	156	154	161	160	166	170	164	151	148	157	164	162	161	159	157	157	157
80	28.8	30.9	35.3	40.5	43.7	47.0	43.0	53.9	60.6	62.2	61.7	59.7	56.0	49.8	44.0	39.0	35.2	32.9	32.3
85	1.48	7.72	9.69	10.8	11.0	11.2	11.4	11.0	9.94	8.60	7.15	5.69	4.26	2.99	1.92	1.09	0.48	0.12	0.00
90	0.63	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

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2019-01-15

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.265  
Humidity:65.0%  
Test Distance:12.300m [K=1.0000]  
Remarks:





