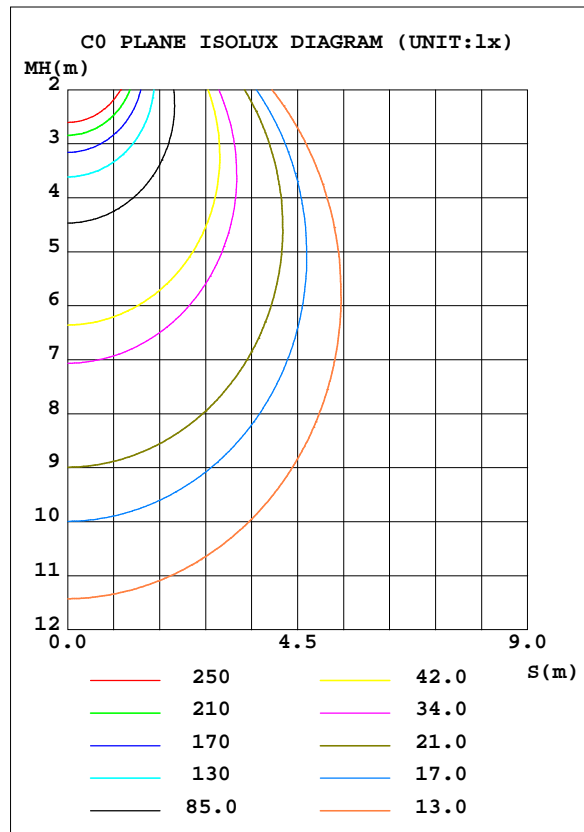
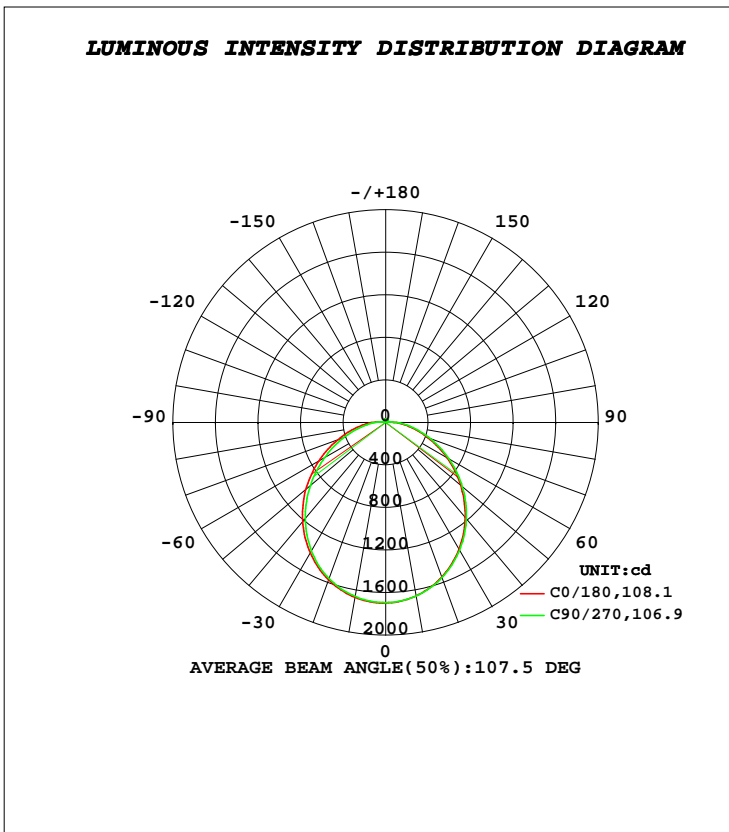


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.27 lm/W			
MODEL		I <sub>max</sub> (cd)	1698	S/MH(C0/180)	1.21
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	4951.0	η UP, DN(C0-180)	1.8,47.5
NOMINAL FLUX(lm)	4951.03	CIE CLASS	DIRECT	η UP, DN(C180-360)	2.1,48.6
LAMPS INSIDE	1	η up(%)	3.9	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	221.6	η down(%)	96.1	CIBSE SHR MAX	1.35



**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**ZONAL FLUX DIAGRAM**

**ZONAL FLUX DIAGRAM:**

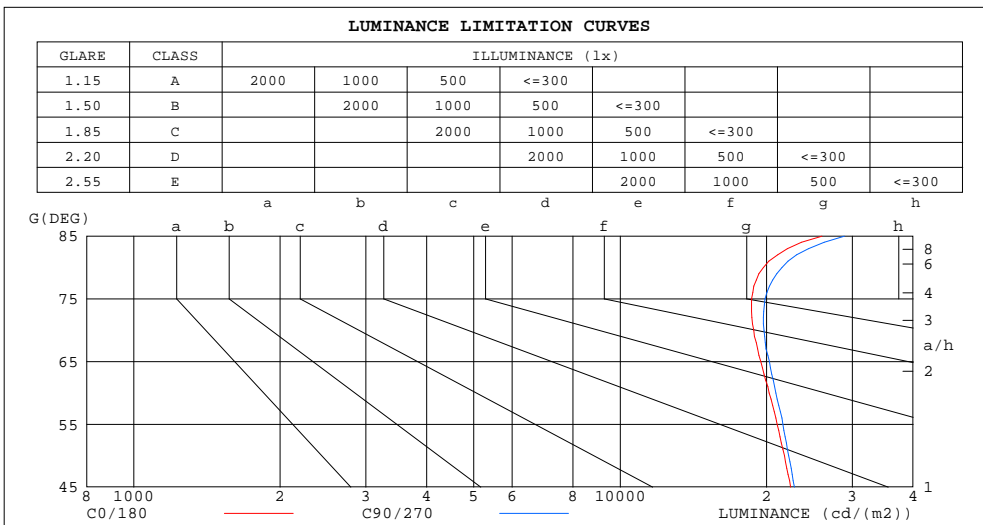
$\gamma$	C0	C90	C180	C270				$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	1656	1656	1670	1661				0- 10	160.2	160.2	3.24,3.24
20	1547	1552	1574	1562				10- 20	456.3	616.5	12.5,12.5
30	1379	1390	1419	1397				20- 30	683.5	1300	26.3,26.3
40	1165	1182	1216	1177				30- 40	809.8	2110	42.6,42.6
50	923.1	941.6	983.9	926.4				40- 50	822.5	2932	59.2,59.2
60	668.5	690.0	728.3	664.2				50- 60	729.7	3662	74,74
70	424.6	446.2	479.6	419.9				60- 70	557.1	4219	85.2,85.2
80	225.7	246.4	274.7	219.4				70- 80	356.3	4575	92.4,92.4
90	90.08	102.5	123.9	102.3				80- 90	182.4	4758	96.1,96.1
100	32.54	36.66	45.23	40.58				90-100	72.09	4830	97.6,97.6
110	17.02	17.34	21.36	19.99				100-110	27.95	4858	98.1,98.1
120	17.57	16.77	19.67	19.50				110-120	17.92	4876	98.5,98.5
130	20.13	19.82	22.19	22.18				120-130	17.65	4893	98.8,98.8
140	23.13	22.75	24.75	24.69				130-140	17.37	4911	99.2,99.2
150	26.00	25.64	27.15	27.03				140-150	15.76	4927	99.5,99.5
160	29.08	28.70	29.51	29.34				150-160	12.82	4939	99.8,99.8
170	31.57	31.40	31.60	31.38				160-170	8.567	4948	99.9,99.9
180	32.52	32.36	32.60	32.33				170-180	3.051	4951	100,100
DEG	<b>LUMINOUS INTENSITY:cd</b>								<b>UNIT:lm</b>		

**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2022-05-07**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**LUMINANCE LIMITATION CURVES**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	26001	28913
80	19692	21495
75	18634	19843
70	18812	19766
65	19467	20272
60	20258	20909
55	21038	21615
50	21758	22194
45	22391	22808

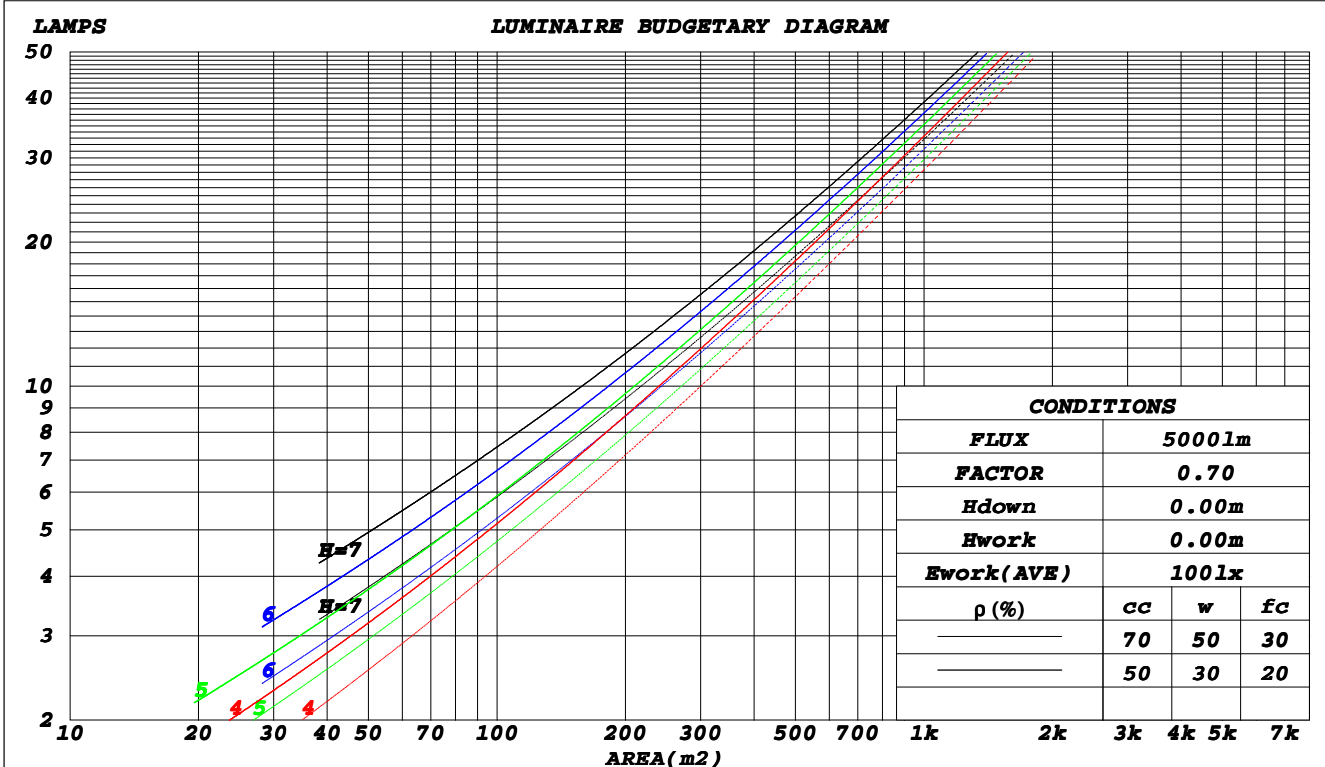
**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
<b>RCR</b>	<b>RCR:Room Cavity Ratio</b>						<b>Coefficients of Utilization(CU)</b>									
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.03	1.03	1.03	.98	.98	.98	.96
1.0	1.02	.97	.93	.99	.95	.92	.94	.91	.88	.90	.87	.84	.86	.83	.81	.79
2.0	.89	.82	.76	.87	.80	.75	.82	.77	.72	.78	.74	.70	.75	.71	.68	.65
3.0	.78	.70	.63	.76	.68	.62	.72	.66	.61	.69	.64	.59	.66	.61	.57	.55
4.0	.69	.60	.53	.67	.59	.53	.64	.57	.52	.62	.55	.50	.59	.54	.49	.47
5.0	.62	.53	.46	.60	.52	.46	.58	.50	.45	.55	.49	.44	.53	.48	.43	.41
6.0	.56	.47	.40	.54	.46	.40	.52	.45	.39	.50	.44	.38	.48	.42	.38	.36
7.0	.50	.42	.35	.49	.41	.35	.48	.40	.35	.46	.39	.34	.44	.38	.34	.32
8.0	.46	.37	.32	.45	.37	.31	.43	.36	.31	.42	.35	.31	.40	.35	.30	.28
9.0	.42	.34	.28	.41	.34	.28	.40	.33	.28	.39	.32	.28	.37	.32	.27	.25
10.0	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2022-05-07

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443  
 Humidity: 65.0%  
 Test Distance: 8.000m [K=0.7063]  
 Remarks:

**WEC AND CCEC**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
<b>RCR</b>	<b>RCR:Room Cavity Ratio</b>						<b>Wall Exitance Coefficients(WEC)</b>									
0.0																
1.0	.327	.186	.059	.319	.182	.058	.303	.174	.056	.289	.167	.053	.276	.160	.052	
2.0	.299	.164	.050	.291	.161	.049	.278	.154	.048	.265	.149	.047	.253	.143	.045	
3.0	.273	.145	.044	.267	.143	.043	.254	.138	.042	.243	.133	.041	.232	.129	.040	
4.0	.250	.130	.038	.245	.128	.038	.234	.124	.037	.223	.120	.036	.214	.116	.035	
5.0	.231	.118	.034	.225	.116	.034	.216	.112	.033	.207	.109	.032	.198	.106	.032	
6.0	.213	.107	.031	.209	.105	.030	.200	.102	.030	.192	.100	.029	.184	.097	.029	
7.0	.198	.098	.028	.194	.097	.028	.186	.094	.027	.179	.092	.027	.172	.089	.026	
8.0	.185	.090	.025	.181	.089	.025	.174	.087	.025	.167	.085	.024	.161	.083	.024	
9.0	.173	.084	.023	.170	.083	.023	.163	.081	.023	.157	.079	.023	.151	.077	.022	
10.0	.163	.078	.022	.160	.077	.022	.154	.075	.021	.148	.074	.021	.143	.072	.021	

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
<b>RCR</b>	<b>RCR:Room Cavity Ratio</b>						<b>Ceiling Cavity Exitance Coefficients(CCEC)</b>									
0.0	.220	.220	.220	.188	.188	.188	.128	.128	.128	.074	.074	.074	.024	.024	.024	
1.0	.211	.186	.163	.181	.160	.140	.124	.110	.097	.071	.064	.056	.023	.020	.018	
2.0	.203	.162	.127	.174	.139	.110	.119	.097	.077	.069	.056	.045	.022	.018	.015	
3.0	.195	.145	.104	.168	.125	.090	.115	.087	.063	.066	.051	.037	.021	.016	.012	
4.0	.188	.131	.089	.161	.114	.077	.111	.079	.054	.064	.046	.032	.021	.015	.011	
5.0	.180	.121	.078	.155	.105	.068	.107	.073	.048	.062	.043	.028	.020	.014	.009	
6.0	.173	.113	.070	.149	.098	.061	.102	.068	.043	.059	.040	.026	.019	.013	.008	
7.0	.166	.106	.064	.143	.092	.056	.099	.064	.040	.057	.038	.024	.019	.012	.008	
8.0	.159	.100	.060	.137	.087	.052	.095	.061	.037	.055	.036	.022	.018	.012	.007	
9.0	.153	.095	.056	.132	.083	.049	.092	.058	.035	.053	.034	.021	.017	.011	.007	
10.0	.148	.091	.053	.127	.079	.047	.088	.056	.033	.052	.033	.020	.017	.011	.007	

**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**UGR(Unified Glare Rating) Table**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	

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				
<b>x = 2H y = 2H</b>	<b>23.0</b>	<b>24.5</b>	<b>23.3</b>	<b>24.8</b>	<b>25.1</b>	<b>23.1</b>	<b>24.6</b>	<b>23.5</b>	<b>24.9</b>	<b>25.2</b>
3H	24.5	25.9	24.9	26.2	26.5	24.7	26.1	25.0	26.4	26.7
4H	25.2	26.5	25.6	26.8	27.2	25.4	26.7	25.8	27.0	27.4
6H	25.8	27.0	26.2	27.4	27.7	26.1	27.3	26.5	27.6	28.0
8H	26.1	27.3	26.5	27.6	28.0	26.4	27.6	26.8	27.9	28.3
12H	26.4	27.5	26.8	27.9	28.3	26.7	27.8	27.1	28.2	28.6
<b>4H 2H</b>	<b>23.6</b>	<b>24.9</b>	<b>24.0</b>	<b>25.2</b>	<b>25.6</b>	<b>23.7</b>	<b>25.0</b>	<b>24.1</b>	<b>25.3</b>	<b>25.7</b>
3H	25.3	26.5	25.7	26.8	27.2	25.5	26.6	25.9	27.0	27.4
4H	26.2	27.2	26.6	27.6	28.0	26.3	27.4	26.8	27.8	28.2
6H	26.9	27.8	27.4	28.3	28.7	27.2	28.1	27.6	28.5	29.0
8H	27.3	28.1	27.8	28.6	29.1	27.6	28.4	28.0	28.9	29.3
12H	27.7	28.5	28.2	28.9	29.4	28.0	28.8	28.5	29.2	29.7
<b>8H 4H</b>	<b>26.5</b>	<b>27.3</b>	<b>27.0</b>	<b>27.8</b>	<b>28.3</b>	<b>26.6</b>	<b>27.5</b>	<b>27.1</b>	<b>27.9</b>	<b>28.4</b>
6H	27.5	28.2	28.0	28.7	29.2	27.7	28.4	28.2	28.9	29.4
8H	28.0	28.6	28.5	29.1	29.6	28.2	28.9	28.7	29.4	29.9
12H	28.5	29.1	29.0	29.6	30.1	28.8	29.4	29.3	29.9	30.4
<b>12H 4H</b>	<b>26.5</b>	<b>27.3</b>	<b>27.0</b>	<b>27.8</b>	<b>28.3</b>	<b>26.7</b>	<b>27.5</b>	<b>27.2</b>	<b>27.9</b>	<b>28.4</b>
6H	27.6	28.2	28.1	28.7	29.3	27.8	28.4	28.3	28.9	29.5
8H	28.2	28.7	28.7	29.2	29.8	28.4	29.0	28.9	29.5	30.0
<b>Variations with the observer position at spacings(CIE Pub.117):</b>										
<b>S = 1.0H</b>	<b>+ 0.1 / - 0.2</b>					<b>+ 0.1 / - 0.2</b>				
<b>1.5H</b>	<b>+ 0.2 / - 0.3</b>					<b>+ 0.2 / - 0.3</b>				
<b>2.0H</b>	<b>+ 0.1 / - 0.3</b>					<b>+ 0.1 / - 0.3</b>				

CIE Pub.117, 4951 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 5.6)  
 Area: 0.066 m2

**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**UTILIZATION FACTORS TABLE**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	

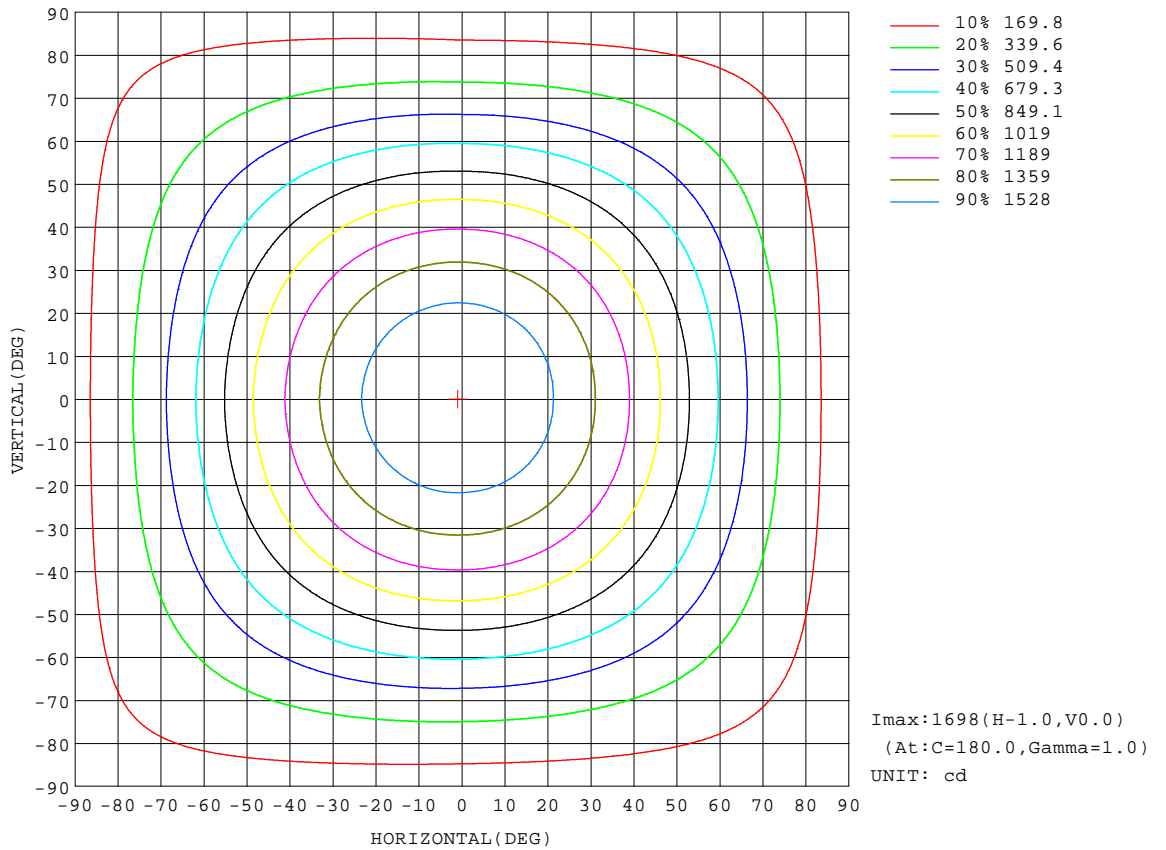
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
<b>ROOM INDEX</b>	<b>UTILIZATION FACTORS(PERCENT) <math>k(RI) \times RCR = 5</math></b>									
<b>k = 0.60</b>	56	45	38	55	44	38	54	44	37	31
<b>0.80</b>	66	54	47	65	54	47	63	53	46	39
<b>1.00</b>	74	63	55	73	62	55	70	63	54	47
<b>1.25</b>	81	70	63	80	70	63	77	68	62	54
<b>1.50</b>	86	76	69	84	75	68	81	73	67	59
<b>2.00</b>	93	84	77	91	82	76	87	80	74	66
<b>2.50</b>	97	89	82	94	87	81	90	84	79	70
<b>3.00</b>	100	93	87	98	91	86	93	88	83	74
<b>4.00</b>	104	98	93	102	96	91	97	92	88	78
<b>5.00</b>	107	101	97	104	99	95	99	95	92	81
<b>ROOM INDEX</b>	<b>UF(total)</b>									<b>Direct</b>
<b>According to DIN EN 13032-2 2004</b>			<b>Suspended</b>					<b>SHRNOM = 1.25</b>		

**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**

**ISOCANDELA DIAGRAM**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	



**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2022-05-07**

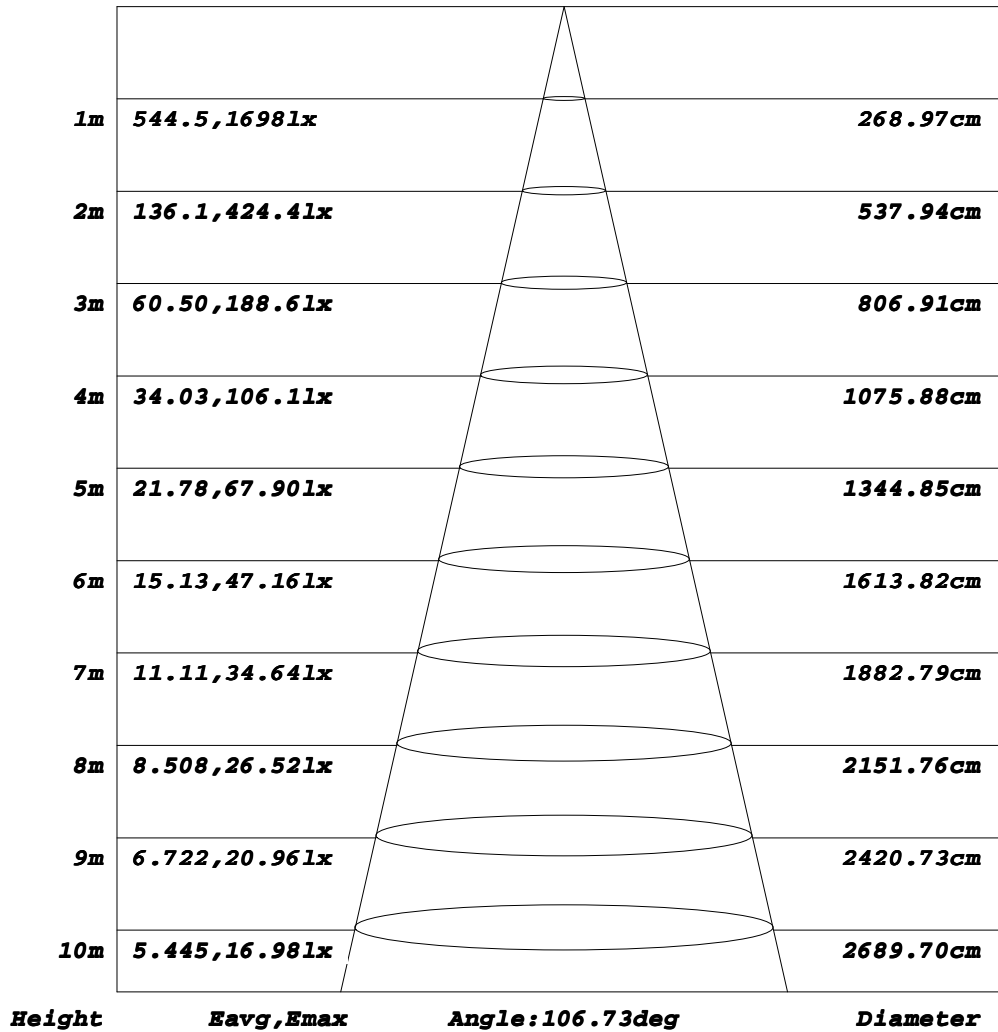
**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**



**AAI Figure**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	

**Flux out:3241 lm**



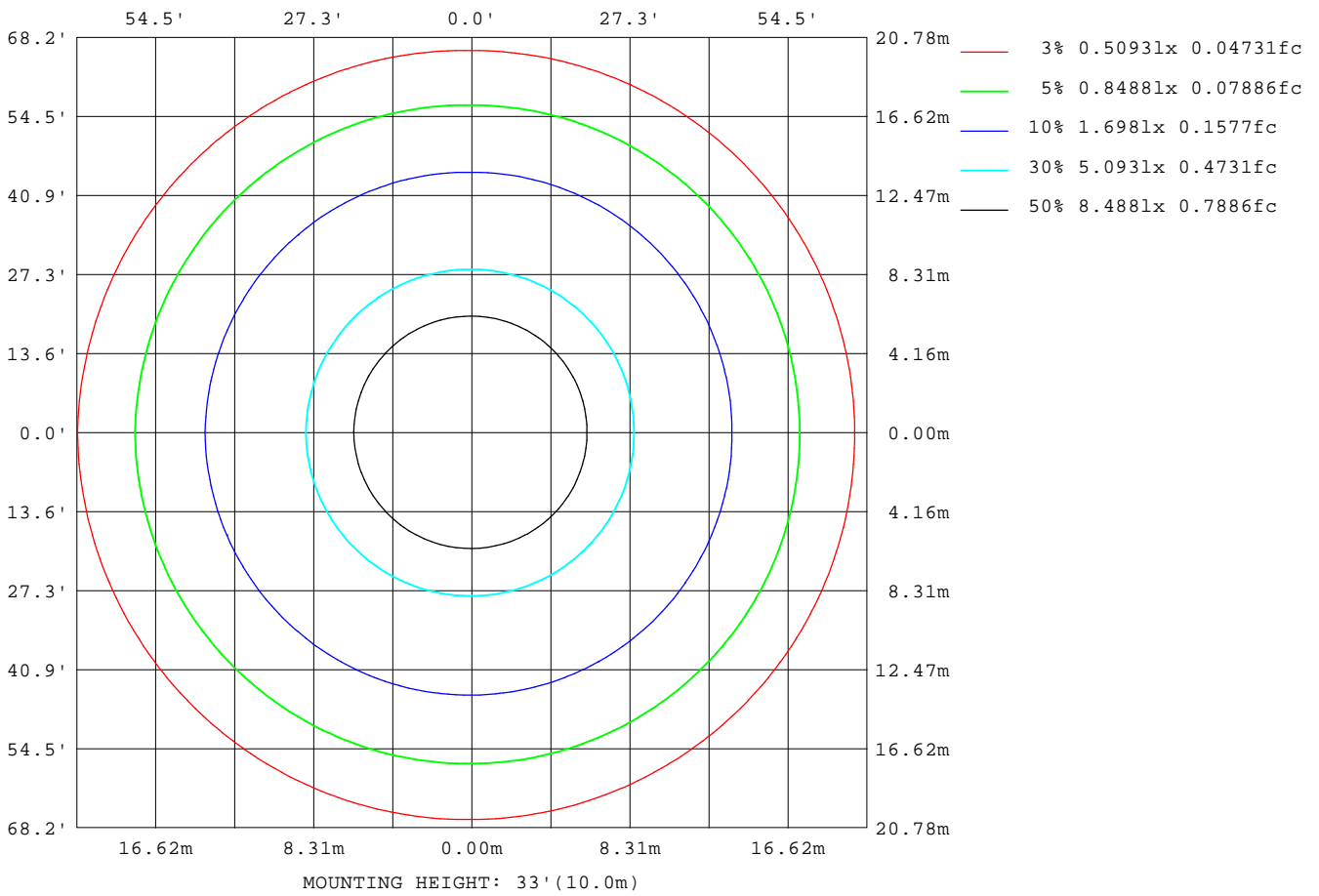
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**

**ISOLUX DIAGRAM**

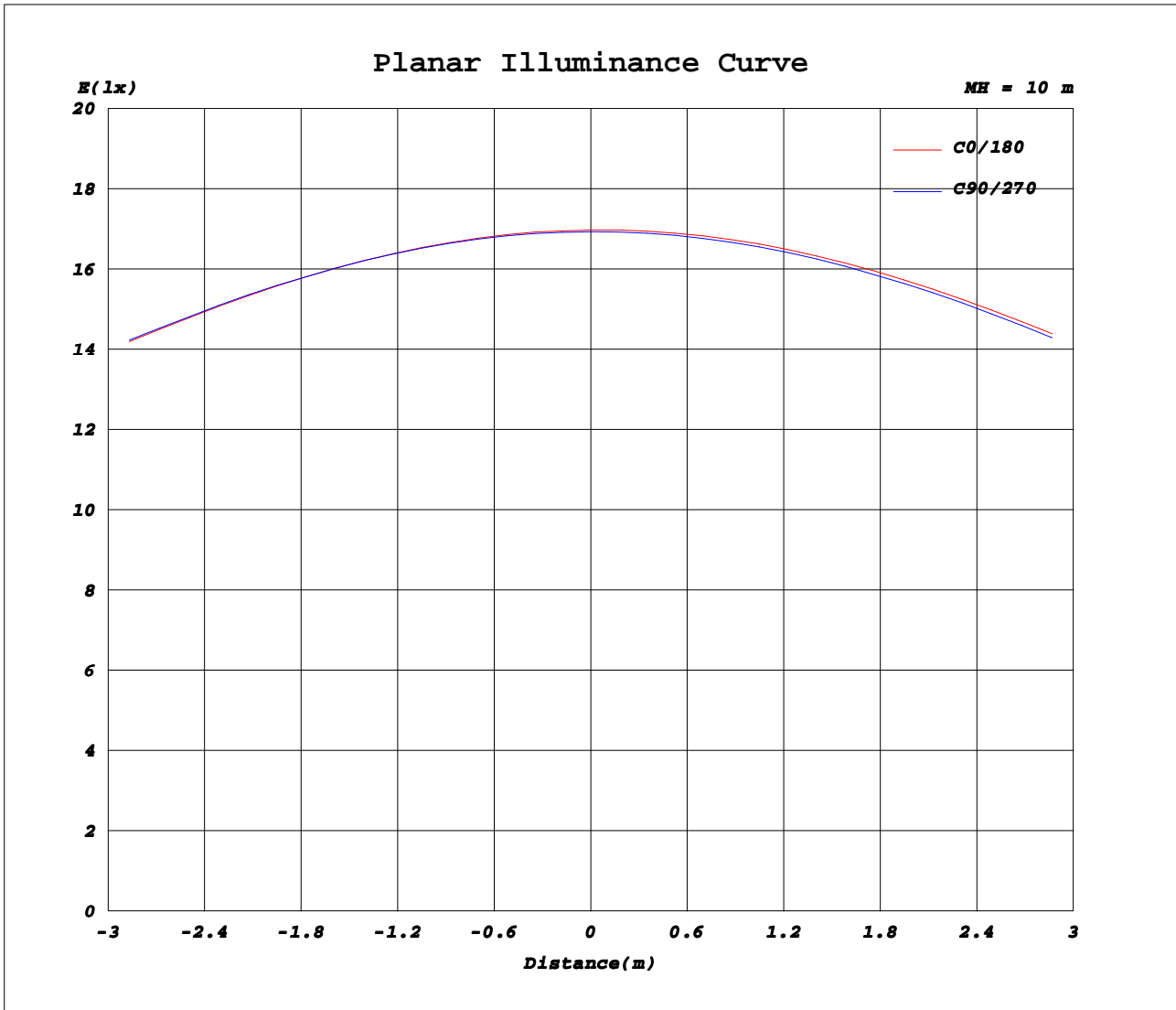
Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	



**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**

**Planar Illuminance Curve**



**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: DAMIN**  
**Test Date: 2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity: 65.0%**  
**Test Distance: 8.000m [K=0.7063]**  
**Remarks:**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:221.70V I:0.1720A P:38.300W PF:0.9680 Freq:50.00Hz		
Lamp Flux:4951.03x1 lm		
Name: NS44-φ350MM-40W(ROUND)	Type: LED	
MFR.: Lumega Group	DIM.: D350*H70mm	
	SUR.: D290mm	

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270															
0	1698	1693	1698	1693															
5	1685	1684	1693	1686															
10	1656	1656	1670	1661															
15	1609	1612	1630	1619															
20	1547	1552	1574	1562															
25	1469	1477	1503	1488															
30	1379	1390	1419	1397															
35	1276	1291	1323	1292															
40	1165	1182	1216	1177															
45	1045	1064	1100	1054															
50	923	942	984	926															
55	796	818	855	795															
60	668	690	728	664															
65	543	565	602	538															
70	425	446	480	420															
75	318	339	371	313															
80	226	246	275	219															
85	150	166	192	152															
90	90.1	102	124	102															
95	53.0	60.3	73.3	65.5															
100	32.5	36.7	45.2	40.6															
105	21.4	23.2	29.2	26.3															
110	17.0	17.3	21.4	20.0															
115	16.6	16.3	19.3	19.0															
120	17.6	16.8	19.7	19.5															
125	18.7	18.3	20.9	20.8															
130	20.1	19.8	22.2	22.2															
135	21.6	21.3	23.5	23.5															
140	23.1	22.7	24.7	24.7															
145	24.6	24.2	25.9	25.9															
150	26.0	25.6	27.2	27.0															
155	27.4	27.2	28.3	28.2															
160	29.1	28.7	29.5	29.3															
165	30.2	30.2	30.6	30.4															
170	31.6	31.4	31.6	31.4															
175	32.4	32.2	32.2	32.0															
180	32.5	32.4	32.6	32.3															

**C Range: 0 - 360DEG**  
**C Interval: 90.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:DAMIN**  
**Test Date:2022-05-07**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.443**  
**Humidity:65.0%**  
**Test Distance:8.000m [K=0.7063]**  
**Remarks:**