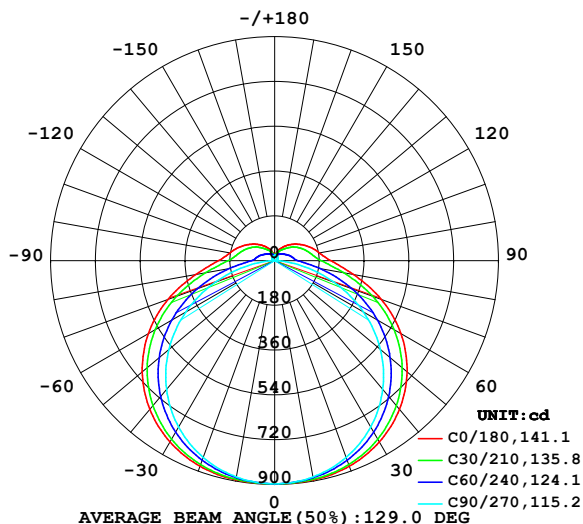


## LUMINAIRE PHOTOMETRIC TEST REPORT

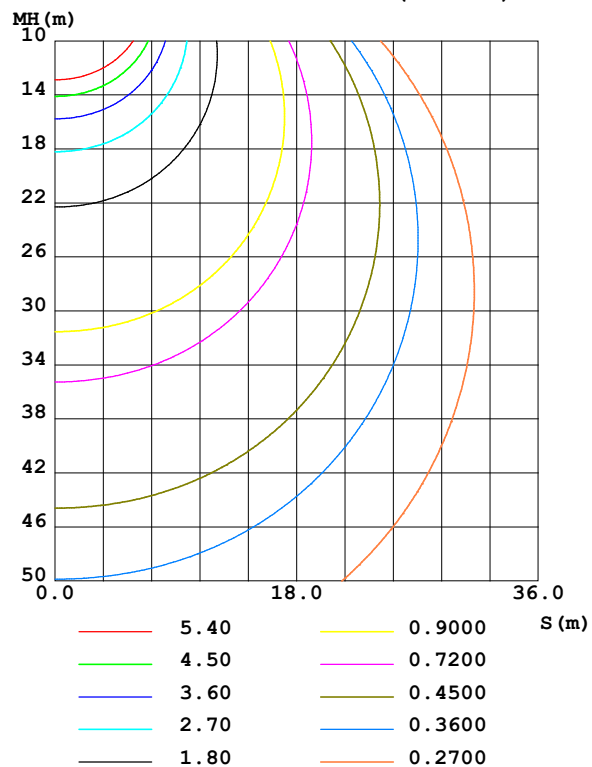
Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 132.53 lm/W			
MODEL	NU28	Imax (cd)	896.9	S/MH(C0/180)	1.40
NOMINAL POWER(W)	29	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	3662.7	□ UP,DN(C0-180)	6.5,43.5
NOMINAL FLUX(lm)	3662.69	CIE CLASS	SEMI-D.	□ UP,DN(C180-360)	6.5,43.5
LAMPS INSIDE	1	□ up (%)	13.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	230	□ down (%)	87.0	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:QC  
Test Date:2022-06-22

□ Range: 0 - 180DEG  
□ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	894.7	889.4	883.1	889.4	894.7	889.4	883.1	889.4	0- 10	85.25	85.25	2.33,2.33
20	879.0	863.3	841.5	863.3	879.0	863.3	841.5	863.3	10- 20	248.3	333.6	9.11,9.11
30	841.6	813.7	772.2	813.7	841.6	813.7	772.2	813.7	20- 30	387.3	720.8	19.7,19.7
40	780.3	739.0	676.0	739.0	780.3	739.0	676.0	739.0	30- 40	485.5	1206	32.9,32.9
50	695.0	640.1	555.1	640.1	695.0	640.1	555.1	640.1	40- 50	530.0	1736	47.4,47.4
60	586.0	518.4	412.4	518.4	586.0	518.4	412.4	518.4	50- 60	513.5	2250	61.4,61.4
70	455.8	378.6	254.0	378.6	455.8	378.6	254.0	378.6	60- 70	436.4	2686	73.3,73.3
80	321.7	236.9	96.09	236.9	321.7	236.9	96.09	236.9	70- 80	312.4	2999	81.9,81.9
90	226.7	144.4	5.085	144.4	226.7	144.4	5.085	144.4	80- 90	187.4	3186	87,87
100	183.1	116.6	7.125	116.6	183.1	116.6	7.125	116.6	90-100	128.4	3315	90.5,90.5
110	155.5	99.59	9.184	99.59	155.5	99.59	9.184	99.59	100-110	105.3	3420	93.4,93.4
120	128.8	79.17	11.31	79.17	128.8	79.17	11.31	79.17	110-120	83.21	3503	95.6,95.6
130	104.1	62.93	13.48	62.93	104.1	62.93	13.48	62.93	120-130	61.86	3565	97.3,97.3
140	81.80	50.32	15.72	50.32	81.80	50.32	15.72	50.32	130-140	43.23	3608	98.5,98.5
150	61.78	39.63	17.73	39.63	61.78	39.63	17.73	39.63	140-150	28.21	3636	99.3,99.3
160	43.95	31.45	19.38	31.45	43.95	31.45	19.38	31.45	150-160	16.44	3653	99.7,99.7
170	28.66	24.29	20.63	24.29	28.66	24.29	20.63	24.29	160-170	7.822	3661	99.9,99.9
180	21.19	20.96	21.21	20.96	21.19	20.96	21.21	20.96	170-180	2.148	3663	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1469.5 lm

%lum = 40.1%

%lamp = 40.1%

Conical surface Flux(130deg): 2481.2 lm

%lum = 67.7%

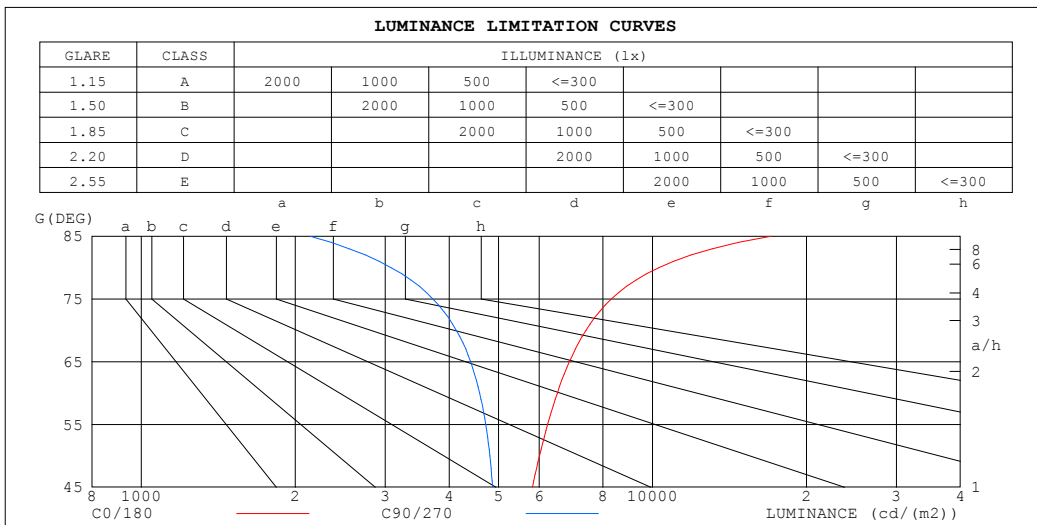
%lamp = 67.7%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:QC  
Test Date:2022-06-22

□ Range: 0 - 180DEG  
□ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

### LUMINANCE LIMITATION CURVES

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	17028	2142
80	10294	3080
75	8305	3720
70	7404	4133
65	6877	4408
60	6512	4590
55	6233	4719
50	6007	4806
45	5819	4868

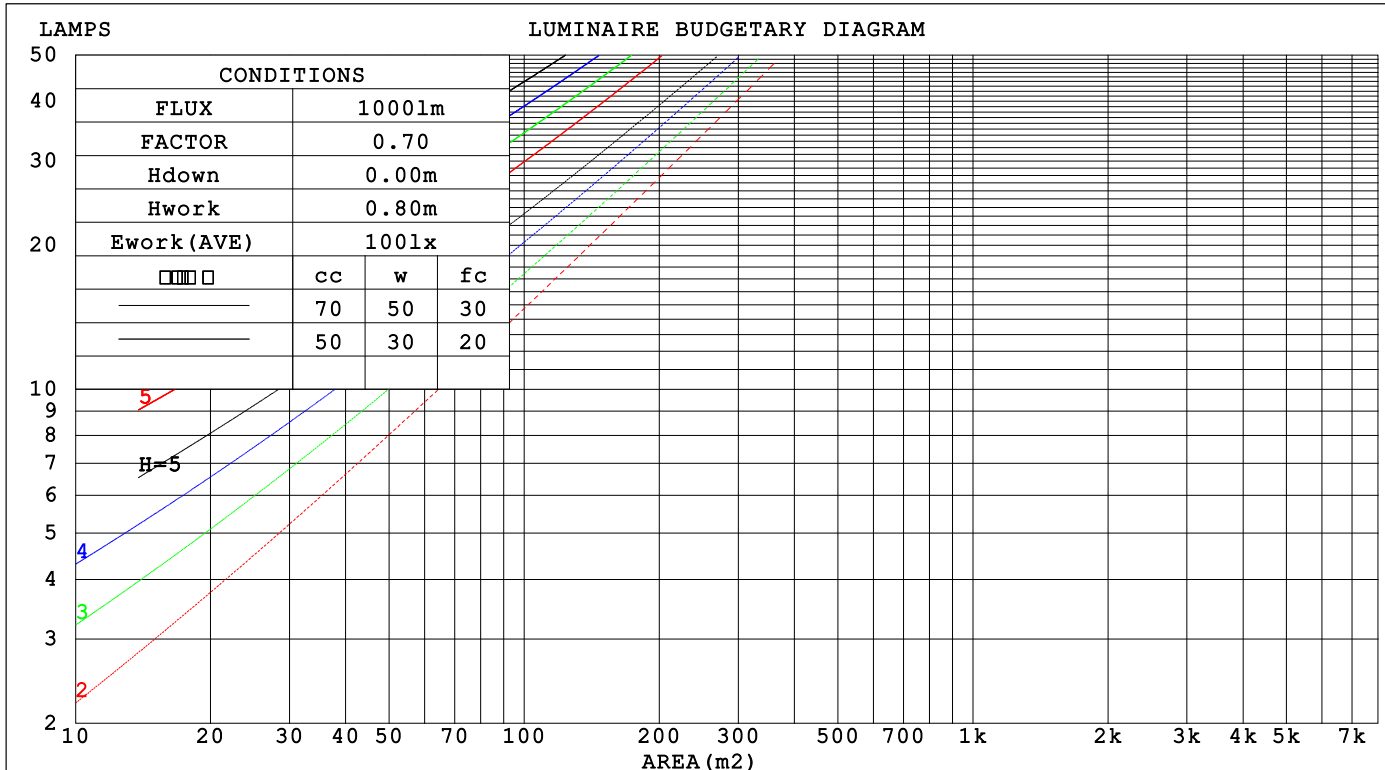
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:QC  
Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:

□cc	80%			70%			50%			30%			10%			0														
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0														
□fc	20%			20%			20%			20%			20%			0														
RCR	RCR:Room Cavity Ratio															Coefficients of Utilization(CU)														
0.0	1.16	1.16	1.16	1.12	1.12	1.12	1.04	1.04	1.04	.97	.97	.97	.90	.90	.90	.87														
1.0	.98	.93	.89	.95	.90	.86	.88	.84	.81	.82	.79	.76	.76	.74	.72	.69														
2.0	.85	.77	.71	.82	.75	.69	.76	.70	.65	.71	.66	.62	.66	.62	.59	.56														
3.0	.74	.65	.58	.71	.63	.56	.66	.59	.54	.62	.56	.51	.57	.53	.49	.46														
4.0	.65	.55	.48	.62	.54	.47	.58	.51	.45	.54	.48	.43	.51	.46	.41	.39														
5.0	.57	.48	.41	.56	.47	.40	.52	.44	.39	.49	.42	.37	.45	.40	.35	.33														
6.0	.51	.42	.36	.50	.41	.35	.47	.39	.34	.44	.37	.32	.41	.35	.31	.29														
7.0	.46	.37	.31	.45	.37	.31	.42	.35	.29	.40	.33	.28	.37	.32	.27	.25														
8.0	.42	.33	.28	.41	.33	.27	.39	.31	.26	.36	.30	.25	.34	.28	.24	.22														
9.0	.39	.30	.25	.37	.30	.24	.35	.28	.23	.33	.27	.23	.31	.26	.22	.20														
10.0	.35	.27	.22	.34	.27	.22	.33	.26	.21	.31	.25	.20	.29	.24	.20	.18														



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3℃  
 Operators:QC  
 Test Date:2022-06-22

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

### WEC AND CCEC

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio					Wall Exitance Coefficients(WEC)
0.0						
1.0	.356 .203 .064	.345 .197 .063	.324 .186 .059	.305 .176 .056	.287 .167 .054	
2.0	.318 .174 .053	.308 .170 .052	.289 .161 .050	.272 .153 .048	.256 .145 .046	
3.0	.287 .153 .046	.278 .149 .045	.261 .141 .043	.245 .134 .041	.231 .128 .040	
4.0	.261 .136 .040	.253 .132 .039	.237 .126 .038	.223 .120 .036	.210 .114 .035	
5.0	.239 .122 .035	.231 .119 .035	.217 .113 .033	.204 .108 .032	.192 .103 .031	
6.0	.220 .110 .031	.213 .108 .031	.200 .103 .030	.189 .098 .029	.178 .093 .028	
7.0	.203 .100 .028	.197 .098 .028	.186 .094 .027	.175 .090 .026	.165 .086 .025	
8.0	.189 .092 .026	.183 .090 .026	.173 .086 .025	.163 .083 .024	.154 .079 .023	
9.0	.176 .085 .024	.171 .083 .023	.162 .080 .023	.153 .076 .022	.144 .073 .021	
10.0	.165 .079 .022	.161 .078 .022	.152 .074 .021	.143 .071 .020	.135 .068 .020	

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio					Ceiling Cavity Exitance Coefficients(CCEC)
0.0	.290 .290 .290	.248 .248 .248	.169 .169 .169	.097 .097 .097	.031 .031 .031	
1.0	.283 .256 .231	.243 .219 .199	.166 .151 .137	.095 .087 .080	.031 .028 .026	
2.0	.276 .232 .195	.237 .200 .169	.162 .138 .118	.094 .081 .069	.030 .026 .023	
3.0	.269 .216 .173	.231 .186 .150	.158 .129 .105	.091 .075 .062	.029 .024 .020	
4.0	.261 .203 .158	.224 .175 .137	.154 .122 .097	.089 .072 .057	.029 .023 .019	
5.0	.254 .193 .148	.218 .167 .129	.150 .117 .091	.087 .068 .054	.028 .022 .018	
6.0	.247 .185 .141	.212 .160 .122	.146 .112 .087	.085 .066 .051	.027 .022 .017	
7.0	.240 .178 .135	.206 .154 .118	.142 .108 .083	.083 .064 .050	.027 .021 .016	
8.0	.233 .173 .131	.201 .150 .114	.139 .105 .081	.081 .062 .048	.026 .020 .016	
9.0	.227 .168 .128	.195 .146 .112	.135 .102 .079	.079 .060 .047	.026 .020 .016	
10.0	.221 .164 .125	.190 .142 .109	.132 .100 .078	.077 .059 .046	.025 .019 .015	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:QC  
Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz UTHDi:0.22% ITHDi:16.38% KDisp:0.9259Lamp Flux:3662.69x1 lm											
NAME: NU28-LC-29W-1500K-30H					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.: Ervan					SUR.:			Shielding 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		14.3	15.7	14.8	16.2	16.6	12.9	14.3	13.3	14.7	15.2
3H		16.5	17.8	17.0	18.3	18.8	14.4	15.7	14.8	16.1	16.6
4H		17.7	18.9	18.2	19.4	19.9	14.9	16.2	15.4	16.6	17.2
6H		18.8	20.0	19.4	20.5	21.0	15.3	16.5	15.8	17.0	17.5
8H		19.5	20.6	20.0	21.1	21.7	15.4	16.5	15.9	17.0	17.6
12H		20.2	21.3	20.7	21.8	22.4	15.4	16.5	15.9	17.0	17.6
4H 2H		14.9	16.1	15.4	16.6	17.1	13.8	15.1	14.3	15.5	16.1
3H		17.3	18.4	17.9	18.9	19.5	15.5	16.6	16.1	17.1	17.7
4H		18.6	19.6	19.2	20.2	20.8	16.2	17.2	16.8	17.8	18.4
6H		20.0	20.9	20.6	21.4	22.1	16.7	17.6	17.3	18.2	18.8
8H		20.7	21.6	21.3	22.1	22.8	16.9	17.7	17.5	18.3	19.0
12H		21.6	22.3	22.2	22.9	23.6	17.0	17.7	17.6	18.3	19.0
8H 4H		18.9	19.7	19.5	20.3	21.0	16.9	17.7	17.5	18.3	19.0
6H		20.5	21.2	21.2	21.8	22.5	17.7	18.4	18.3	19.0	19.7
8H		21.5	22.1	22.1	22.7	23.4	18.0	18.6	18.6	19.2	20.0
12H		22.6	23.1	23.2	23.8	24.5	18.2	18.7	18.8	19.4	20.1
12H 4H		18.9	19.7	19.5	20.3	20.9	17.1	17.8	17.7	18.4	19.1
6H		20.6	21.2	21.3	21.9	22.6	18.0	18.6	18.7	19.3	20.0
8H		21.6	22.2	22.3	22.8	23.6	18.4	19.0	19.1	19.6	20.4
Variations with the observer position at spacings(CIE Pub.117):											
S = 1.0H		+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 3663 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.5)  
Area: 0.1797 m2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:QC  
Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:

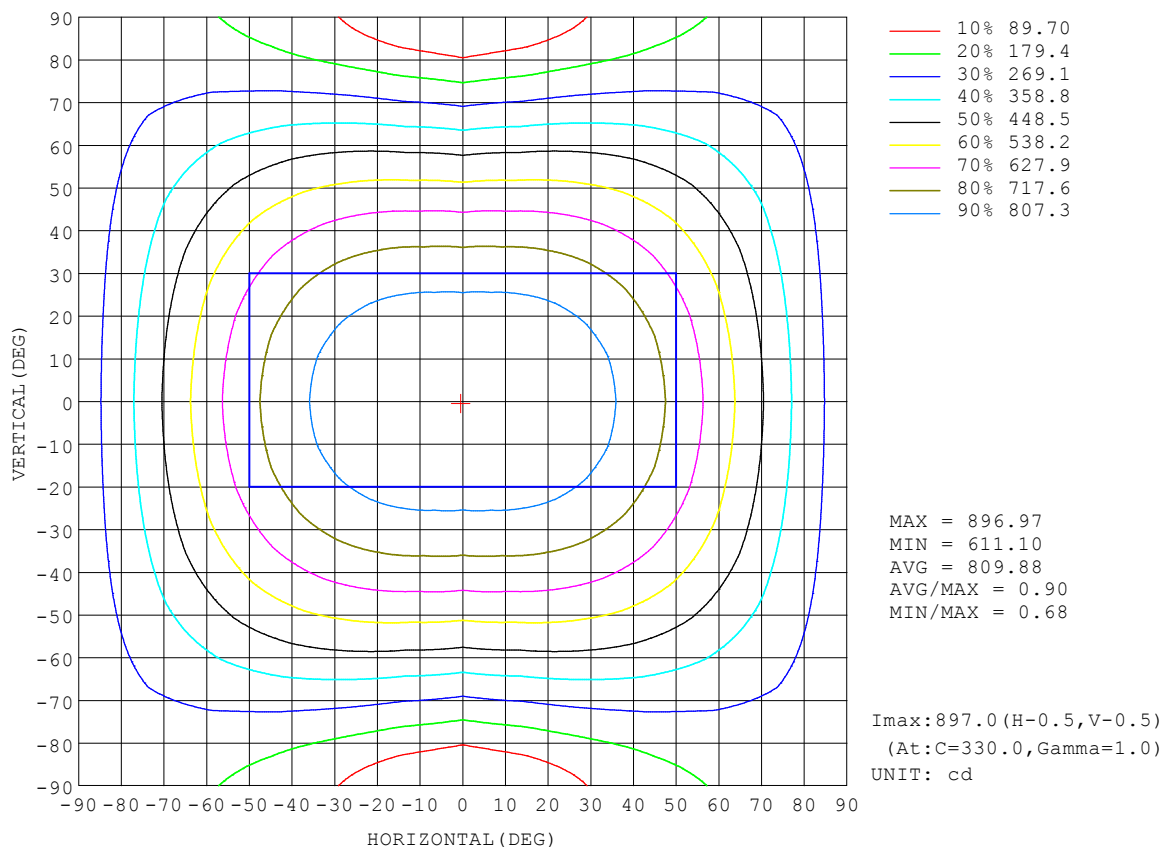
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	50	38	31	49	38	31	48	37	30	24
0.80	60	47	39	58	47	39	56	45	38	31
1.00	68	56	47	66	55	47	63	55	46	38
1.25	75	63	55	73	62	54	69	60	53	44
1.50	80	69	61	78	67	60	73	64	58	48
2.00	87	77	69	85	75	68	79	72	66	55
2.50	92	82	75	89	80	74	83	76	70	59
3.00	95	87	80	92	85	78	86	80	75	63
4.00	100	93	87	96	90	85	90	85	80	68
5.00	103	97	91	99	94	89	92	88	84	71
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: QC  
Test Date: 2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity: 65.0%  
Test Distance: 10.640m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:



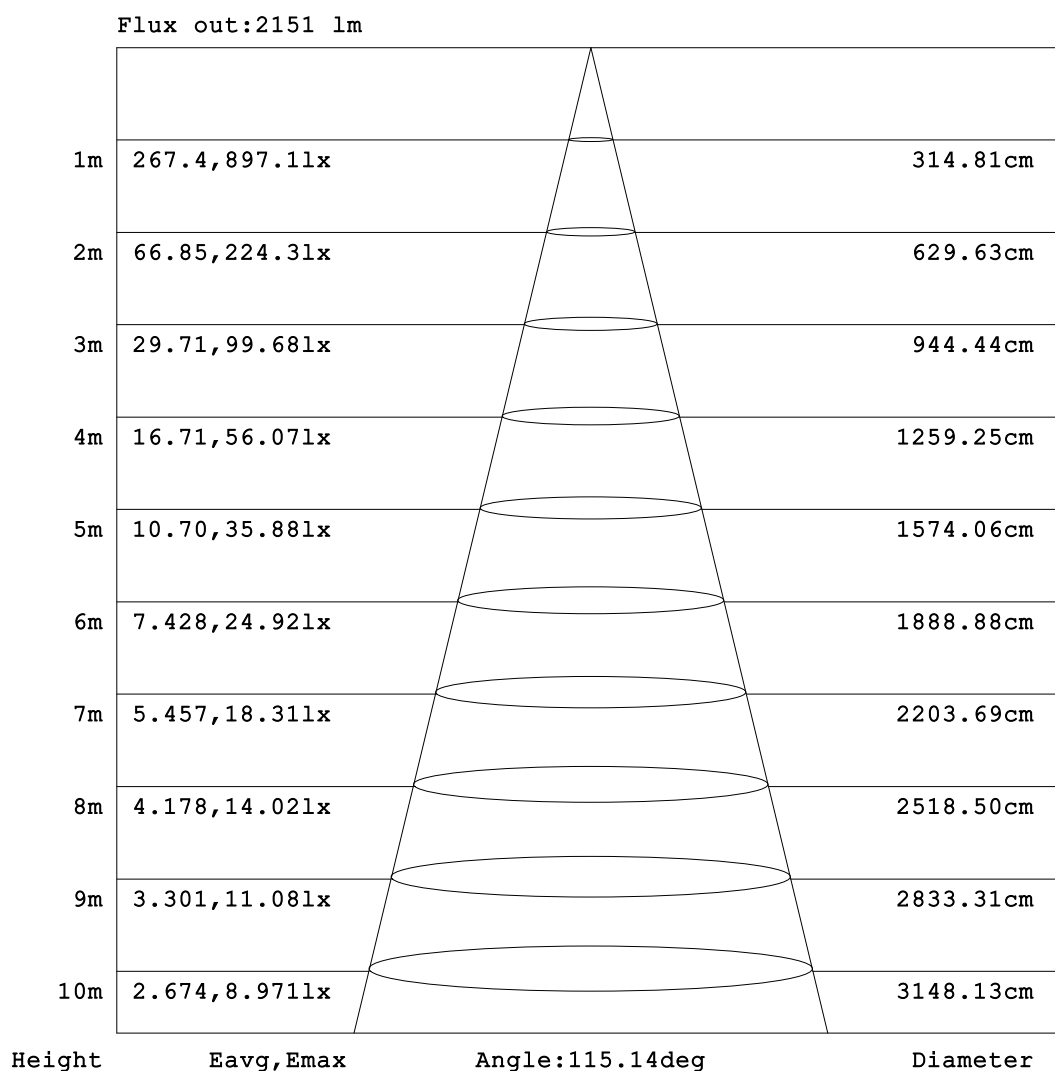
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:QC  
Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:



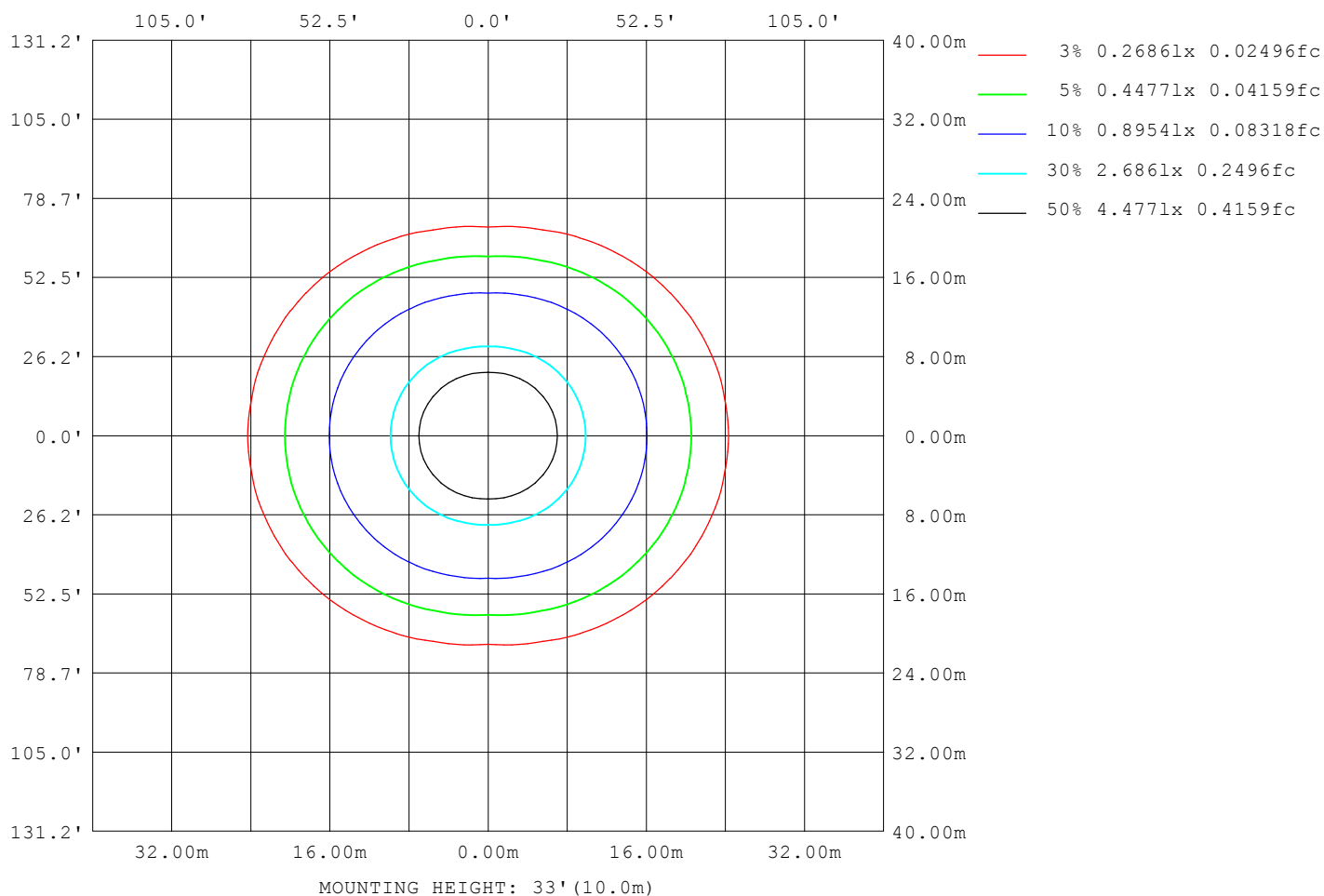
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:QC  
Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

### LED Avg.L Report

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:

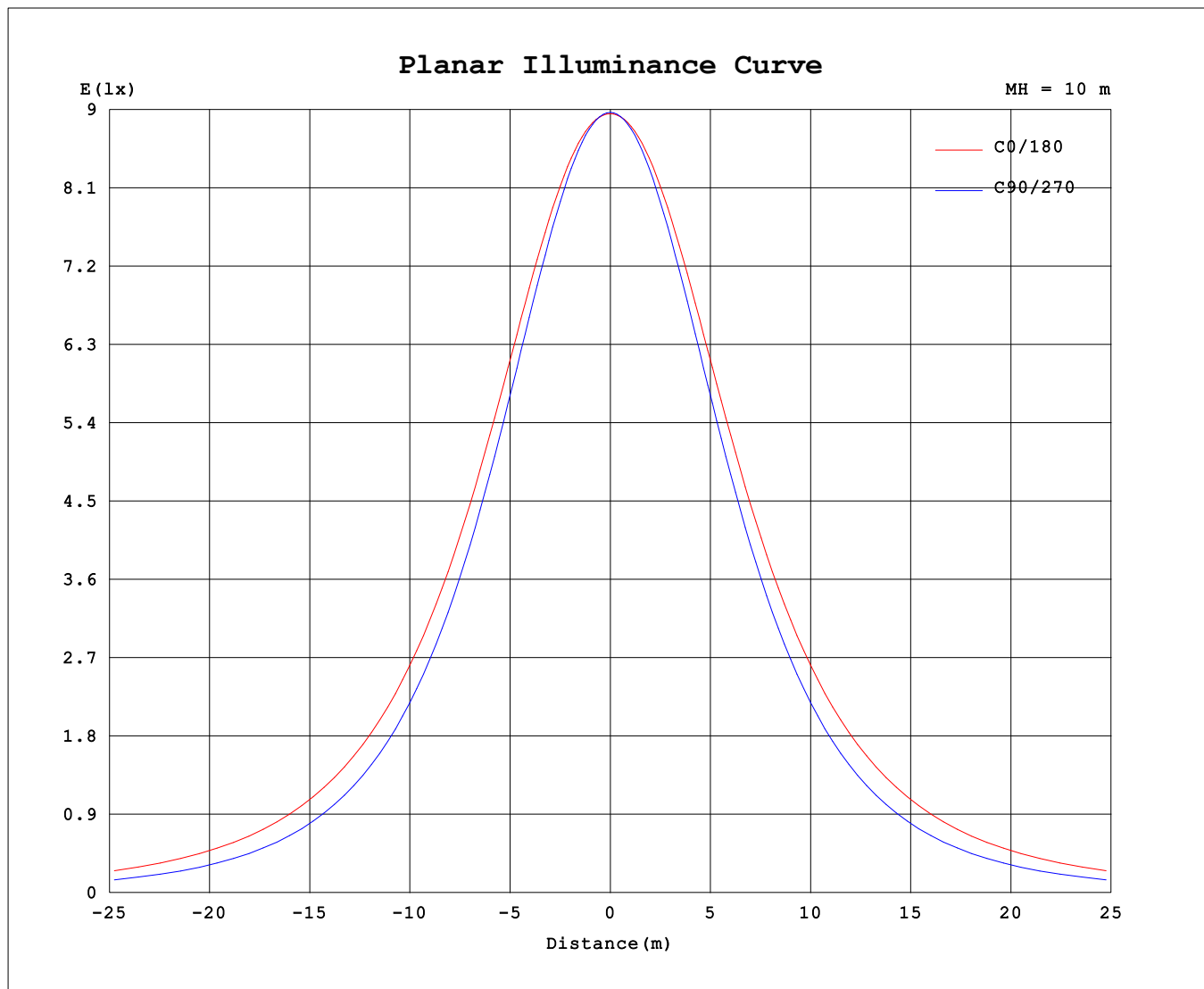
AvgL	cd/m2
L_0~180 (65) av	6889
L_0~180 (75) av	8319
L_0~180 (85) av	17056
L_90~270 (65) av	4408
L_90~270 (75) av	3719
L_90~270 (85) av	2142
L_45 (65) av	5928
L_45 (75) av	6577
L_45 (85) av	11519

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:QC  
Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: QC  
 Test Date: 2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity: 65.0%  
 Test Distance: 10.640m [K=1.0000]  
 Remarks:

### LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259		Lamp Flux:3662.69x1 lm
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) □ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	897	897	897	897	897	897	897	897	897	897	897	897	897	897	897	897	897	897	897
5	897	896	896	895	894	894	893	894	894	895	896	896	897	896	896	895	894	894	893
10	895	894	893	889	886	884	883	884	886	889	893	894	895	894	893	889	886	884	883
15	889	888	885	879	873	868	866	868	873	879	885	888	889	888	885	879	873	868	866
20	879	877	872	863	854	845	841	845	854	863	872	877	879	877	872	863	854	845	841
25	863	861	853	842	828	816	810	816	828	842	853	861	863	861	853	842	828	816	810
30	842	838	829	814	796	780	772	780	796	814	829	838	842	838	829	814	796	780	772
35	814	810	798	779	758	737	727	737	758	779	798	810	814	810	798	779	758	737	727
40	780	775	761	739	713	688	676	688	713	739	761	775	780	775	761	739	713	688	676
45	741	735	718	692	662	633	618	633	662	692	718	735	741	735	718	692	662	633	618
50	695	688	669	640	606	573	555	573	606	640	669	688	695	688	669	640	606	573	555
55	644	636	614	582	544	507	486	507	544	582	614	636	644	636	614	582	544	507	486
60	586	577	554	518	477	436	412	436	477	518	554	577	586	577	554	518	477	436	412
65	523	514	488	450	406	361	335	361	406	450	488	514	523	514	488	450	406	361	335
70	456	446	419	379	331	283	254	283	331	379	419	446	456	446	419	379	331	283	254
75	387	377	348	306	256	205	173	205	256	306	348	377	387	377	348	306	256	205	173
80	322	311	281	237	185	131	96.1	131	185	237	281	311	322	311	281	237	185	131	96.1
85	267	256	226	180	126	70.1	33.5	70.1	126	180	226	256	267	256	226	180	126	70.1	33.5
90	227	216	187	144	92.9	39.2	5.09	39.2	92.9	144	187	216	227	216	187	144	92.9	39.2	5.09
95	200	191	165	126	80.7	33.6	6.03	33.6	80.7	126	165	191	200	191	165	126	80.7	33.6	6.03
100	183	175	152	117	74.5	31.3	7.13	31.3	74.5	117	152	175	183	175	152	117	74.5	31.3	7.13
105	169	162	140	108	68.8	29.5	8.26	29.5	68.8	108	140	162	169	162	140	108	68.8	29.5	8.26
110	156	149	129	99.6	62.7	27.7	9.18	27.7	62.7	99.6	129	149	156	149	129	99.6	62.7	27.7	9.18
115	142	136	118	90.1	56.2	26.4	10.2	26.4	56.2	90.1	118	136	142	136	118	90.1	56.2	26.4	10.2
120	129	123	108	79.2	50.6	25.3	11.3	25.3	50.6	79.2	108	123	129	123	108	79.2	50.6	25.3	11.3
125	116	111	95.9	69.8	46.2	24.4	12.4	24.4	46.2	69.8	95.9	111	116	111	95.9	69.8	46.2	24.4	12.4
130	104	99.8	84.8	62.9	42.4	23.5	13.5	23.5	42.4	62.9	84.8	99.8	104	99.8	84.8	62.9	42.4	23.5	13.5
135	92.6	88.8	72.9	56.3	39.0	22.9	14.6	22.9	39.0	56.3	72.9	88.8	92.6	88.8	72.9	56.3	39.0	22.9	14.6
140	81.8	78.0	63.3	50.3	35.8	22.4	15.7	22.4	35.8	50.3	63.3	78.0	81.8	78.0	63.3	50.3	35.8	22.4	15.7
145	71.5	68.4	55.5	44.9	33.0	22.2	16.8	22.2	33.0	44.9	55.5	68.4	71.5	68.4	55.5	44.9	33.0	22.2	16.8
150	61.8	58.4	48.8	39.6	30.9	22.0	17.7	22.0	30.9	39.6	48.8	58.4	61.8	58.4	48.8	39.6	30.9	22.0	17.7
155	52.6	47.6	42.0	35.4	28.6	21.7	18.6	21.7	28.6	35.4	42.0	47.6	52.6	47.6	42.0	35.4	28.6	21.7	18.6
160	44.0	38.7	35.8	31.5	26.3	21.4	19.4	21.4	26.3	31.5	35.8	38.7	44.0	38.7	35.8	31.5	26.3	21.4	19.4
165	35.5	31.6	30.1	27.6	24.3	21.1	20.1	21.1	24.3	27.6	30.1	31.6	35.5	31.6	30.1	27.6	24.3	21.1	20.1
170	28.7	26.1	25.6	24.3	22.5	21.0	20.6	21.0	22.5	24.3	25.6	26.1	28.7	26.1	25.6	24.3	22.5	21.0	20.6
175	23.2	22.0	22.0	21.7	21.3	21.1	21.0	21.1	21.3	21.7	22.0	22.0	23.2	22.0	22.0	21.7	21.3	21.1	21.0
180	21.2	20.6	20.8	21.0	21.1	21.2	21.2	21.1	21.0	20.8	20.6	21.2	20.6	20.8	21.0	21.1	21.2	21.2	21.2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:QC  
Test Date:2022-06-22

□ Range: 0 - 180DEG  
□ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks:

### LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.37V I:0.1321A P:27.637W PF:0.9081 Freq:49.99Hz		
UTHDi:0.22% ITHDi:16.38% KDisp:0.9259 Lamp Flux:3662.69x1 lm		
NAME: NU28-LC-29W-1500K-30H	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Ervan	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) □ (DEG)	285	300	315	330	345													
0	897	897	897	897	897													
5	894	894	895	896	896													
10	884	886	889	893	894													
15	868	873	879	885	888													
20	845	854	863	872	877													
25	816	828	842	853	861													
30	780	796	814	829	838													
35	737	758	779	798	810													
40	688	713	739	761	775													
45	633	662	692	718	735													
50	573	606	640	669	688													
55	507	544	582	614	636													
60	436	477	518	554	577													
65	361	406	450	488	514													
70	283	331	379	419	446													
75	205	256	306	348	377													
80	131	185	237	281	311													
85	70.1	126	180	226	256													
90	39.2	92.9	144	187	216													
95	33.6	80.7	126	165	191													
100	31.3	74.5	117	152	175													
105	29.5	68.8	108	140	162													
110	27.7	62.7	99.6	129	149													
115	26.4	56.2	90.1	118	136													
120	25.3	50.6	79.2	108	123													
125	24.4	46.2	69.8	95.9	111													
130	23.5	42.4	62.9	84.8	99.8													
135	22.9	39.0	56.3	72.9	88.8													
140	22.4	35.8	50.3	63.3	78.0													
145	22.2	33.0	44.9	55.5	68.4													
150	22.0	30.9	39.6	48.8	58.4													
155	21.7	28.6	35.4	42.0	47.6													
160	21.4	26.3	31.5	35.8	38.7													
165	21.1	24.3	27.6	30.1	31.6													
170	21.0	22.5	24.3	25.6	26.1													
175	21.1	21.3	21.7	22.0	22.0													
180	21.2	21.1	21.0	20.8	20.6													

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:QC  
Test Date:2022-06-22

☐ Range: 0 - 180DEG  
☐ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
Humidity:65.0%  
Test Distance:10.640m [K=1.0000]  
Remarks: