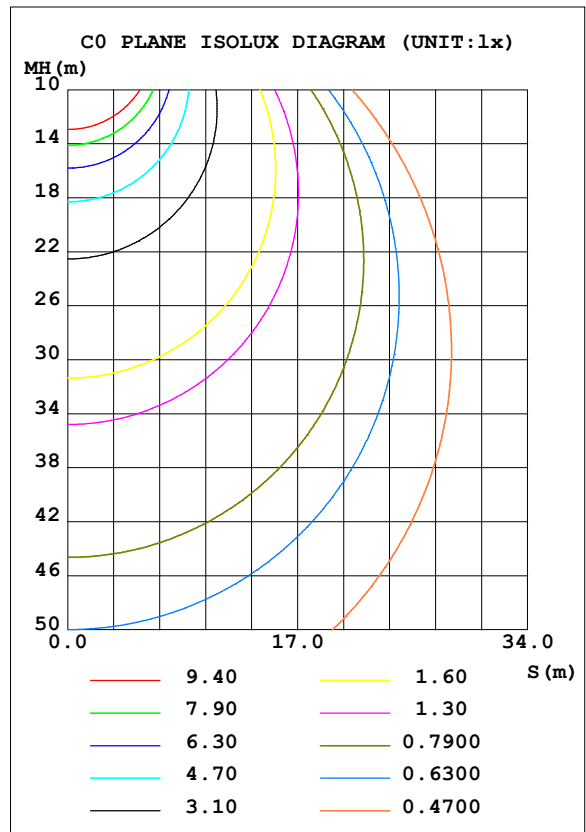
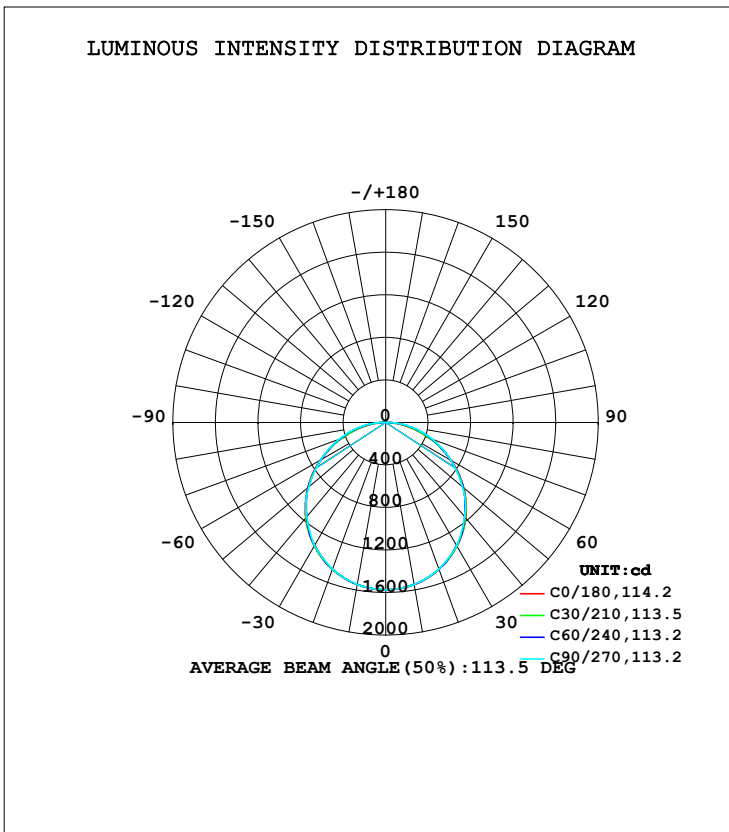


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.42 lm/W			
MODEL		I _{max} (cd)	1574	S/MH (C0/180)	1.27
NOMINAL POWER (W)	36	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	4616.2	η UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	4616.19	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: QC
 Test Date: 2020-01-02

γ Range: -90 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 53.0%
 Test Distance: 10.380m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1548	1546	1547	1546	1548	1546	1547	1546	0- 10	148.9	148.9	3.23,3.23
20	1470	1468	1468	1468	1470	1468	1468	1468	10- 20	427.2	576.1	12.5,12.5
30	1343	1338	1340	1338	1343	1338	1340	1338	20- 30	649.3	1225	26.5,26.5
40	1171	1167	1156	1167	1171	1167	1156	1167	30- 40	785.7	2011	43.6,43.6
50	958.3	947.3	944.9	947.3	958.3	947.3	944.9	947.3	40- 50	818.9	2830	61.3,61.3
60	712.5	703.9	706.3	703.9	712.5	703.9	706.3	703.9	50- 60	742.7	3573	77.4,77.4
70	448.0	450.7	471.7	450.7	448.0	450.7	471.7	450.7	60- 70	574.6	4147	89.8,89.8
80	191.6	221.9	237.1	221.9	191.6	221.9	237.1	221.9	70- 80	352.8	4500	97.5,97.5
90	2.243	2.645	2.436	2.645	2.243	2.645	2.436	2.645	80- 90	116.0	4616	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2423.1 lm

%lum = 52.5%

%lamp = 52.5%

Conical surface Flux(120deg): 3572.8 lm

%lum = 77.4%

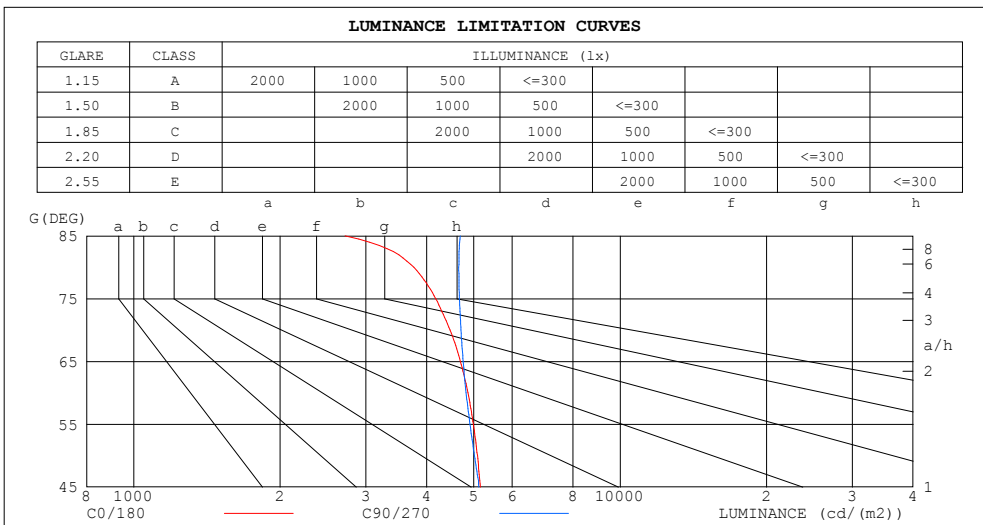
%lamp = 77.4%

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2720	4689
80	3765	4659
75	4177	4673
70	4471	4707
65	4695	4757
60	4863	4821
55	4991	4913
50	5088	5017
45	5160	5123

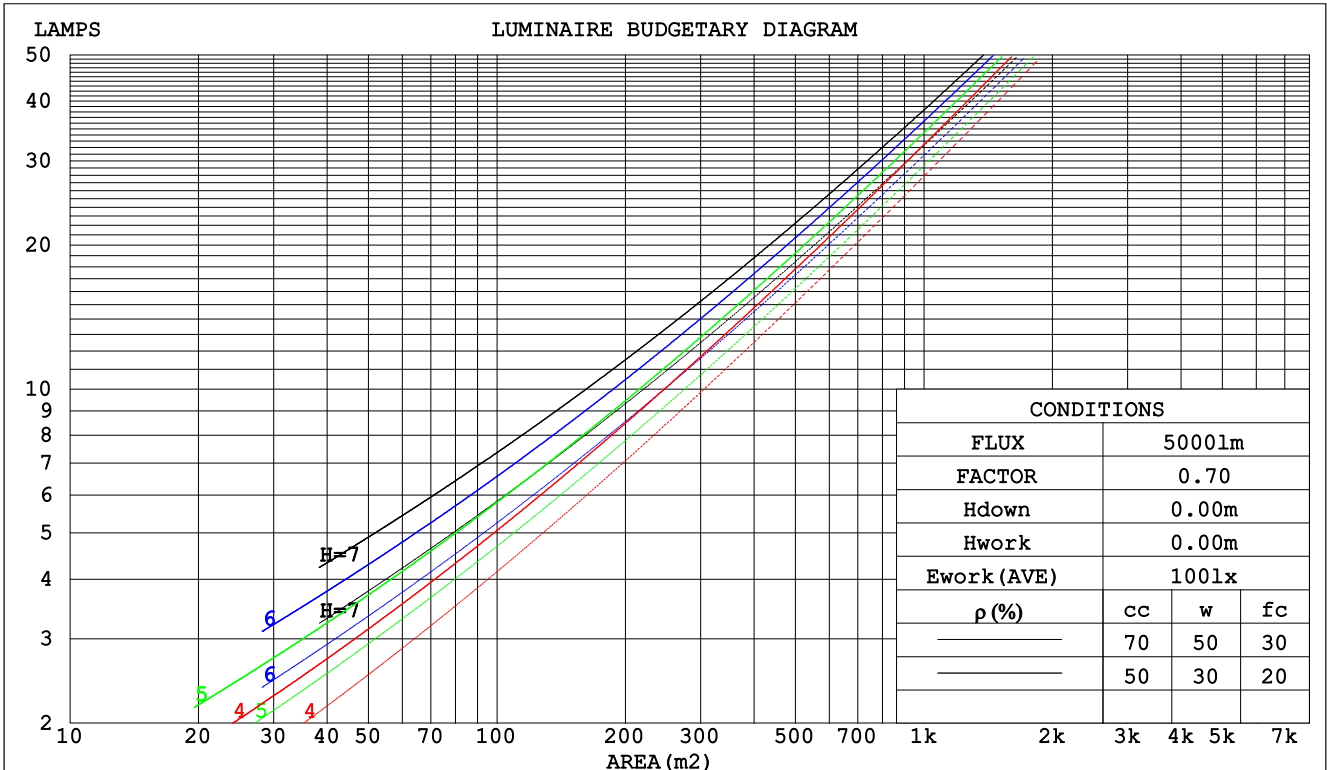
C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	pw	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	.00
1.0	1.03	.99	.95	1.01	.97	.93	.97	.93	.90	.93	.90	.88	.89	.87	.85	.83
2.0	.90	.83	.77	.88	.81	.76	.84	.79	.74	.81	.76	.72	.78	.74	.71	.69
3.0	.79	.70	.64	.77	.69	.63	.74	.67	.62	.71	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.53	.66	.58	.53	.63	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.52	.46	.59	.51	.45	.57	.50	.45	.55	.49	.44	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.45	.40	.51	.45	.39	.50	.44	.39	.37
7.0	.51	.42	.35	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.35	.33
8.0	.46	.38	.32	.45	.37	.31	.44	.37	.31	.43	.36	.31	.42	.35	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.41	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.30	.26	.37	.30	.25	.36	.30	.25	.24



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.320	.182	.058	.313	.179	.057	.300	.172	.055	.287	.166	.053	.276	.160	.052	
2.0	.298	.163	.050	.292	.161	.050	.280	.156	.048	.269	.151	.047	.259	.147	.046	
3.0	.275	.146	.044	.269	.144	.043	.259	.140	.043	.249	.136	.042	.240	.133	.041	
4.0	.253	.131	.039	.248	.130	.038	.238	.126	.038	.230	.123	.037	.222	.121	.037	
5.0	.233	.119	.034	.229	.117	.034	.220	.115	.034	.213	.112	.033	.206	.110	.033	
6.0	.216	.108	.031	.212	.107	.031	.205	.105	.030	.198	.103	.030	.191	.101	.030	
7.0	.200	.099	.028	.197	.098	.028	.191	.096	.028	.184	.095	.028	.179	.093	.027	
8.0	.187	.091	.026	.184	.091	.026	.178	.089	.025	.173	.087	.025	.168	.086	.025	
9.0	.175	.085	.024	.172	.084	.024	.167	.083	.023	.162	.081	.023	.158	.080	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.149	.075	.021	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	.181	.156	.134	.155	.134	.115	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.173	.132	.097	.148	.114	.084	.102	.079	.059	.059	.046	.034	.019	.015	.011	
3.0	.165	.114	.074	.142	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.158	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.130	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.015	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.101	.052	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm										
NAME: P30-36-1203-40H-R8					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	13.1	14.7	13.4	14.9	15.1	13.1	14.6	13.4	14.8	15.0
3H	14.7	16.1	15.0	16.3	16.6	14.8	16.2	15.1	16.4	16.7
4H	15.3	16.6	15.6	16.9	17.2	15.5	16.9	15.8	17.1	17.4
6H	15.7	17.0	16.1	17.3	17.6	16.1	17.4	16.5	17.7	18.0
8H	15.9	17.1	16.2	17.4	17.7	16.4	17.6	16.7	17.9	18.2
12H	15.9	17.1	16.3	17.4	17.7	16.5	17.7	16.9	18.0	18.3
4H 2H	13.7	15.1	14.0	15.3	15.6	13.7	15.1	14.0	15.3	15.6
3H	15.5	16.7	15.8	17.0	17.3	15.6	16.8	15.9	17.1	17.4
4H	16.2	17.3	16.6	17.6	18.0	16.5	17.6	16.8	17.9	18.2
6H	16.8	17.8	17.2	18.1	18.5	17.2	18.2	17.6	18.6	18.9
8H	17.0	17.9	17.4	18.3	18.6	17.5	18.5	18.0	18.8	19.2
12H	17.1	17.9	17.5	18.3	18.7	17.8	18.6	18.2	19.0	19.4
8H 4H	16.5	17.4	17.0	17.8	18.2	16.8	17.7	17.2	18.0	18.4
6H	17.3	18.0	17.7	18.5	18.9	17.7	18.5	18.2	18.9	19.3
8H	17.6	18.3	18.0	18.7	19.1	18.1	18.8	18.6	19.2	19.7
12H	17.8	18.4	18.3	18.8	19.3	18.5	19.1	19.0	19.5	20.0
12H 4H	16.6	17.4	17.0	17.8	18.2	16.8	17.6	17.2	18.0	18.4
6H	17.4	18.1	17.9	18.5	18.9	17.8	18.5	18.3	18.9	19.3
8H	17.7	18.3	18.2	18.8	19.2	18.3	18.9	18.8	19.3	19.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.3				

CIE Pub.117, 4616 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.3)

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

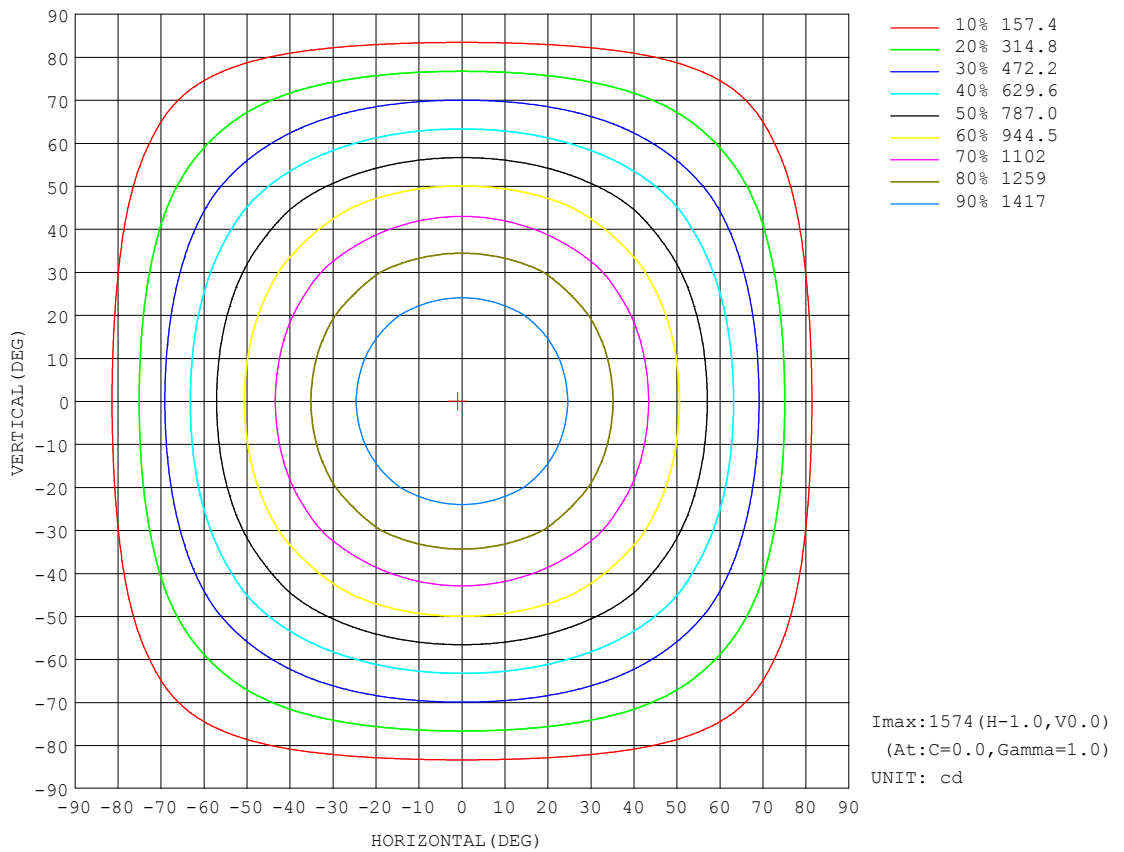
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	45	38	31
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	63	56	72	65	56	49
1.25	82	72	64	81	71	64	78	70	63	56
1.50	87	77	70	86	76	70	83	75	69	61
2.00	94	86	79	92	84	78	89	82	77	69
2.50	98	90	84	96	89	83	92	86	81	73
3.00	102	95	89	100	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	97	101	98	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

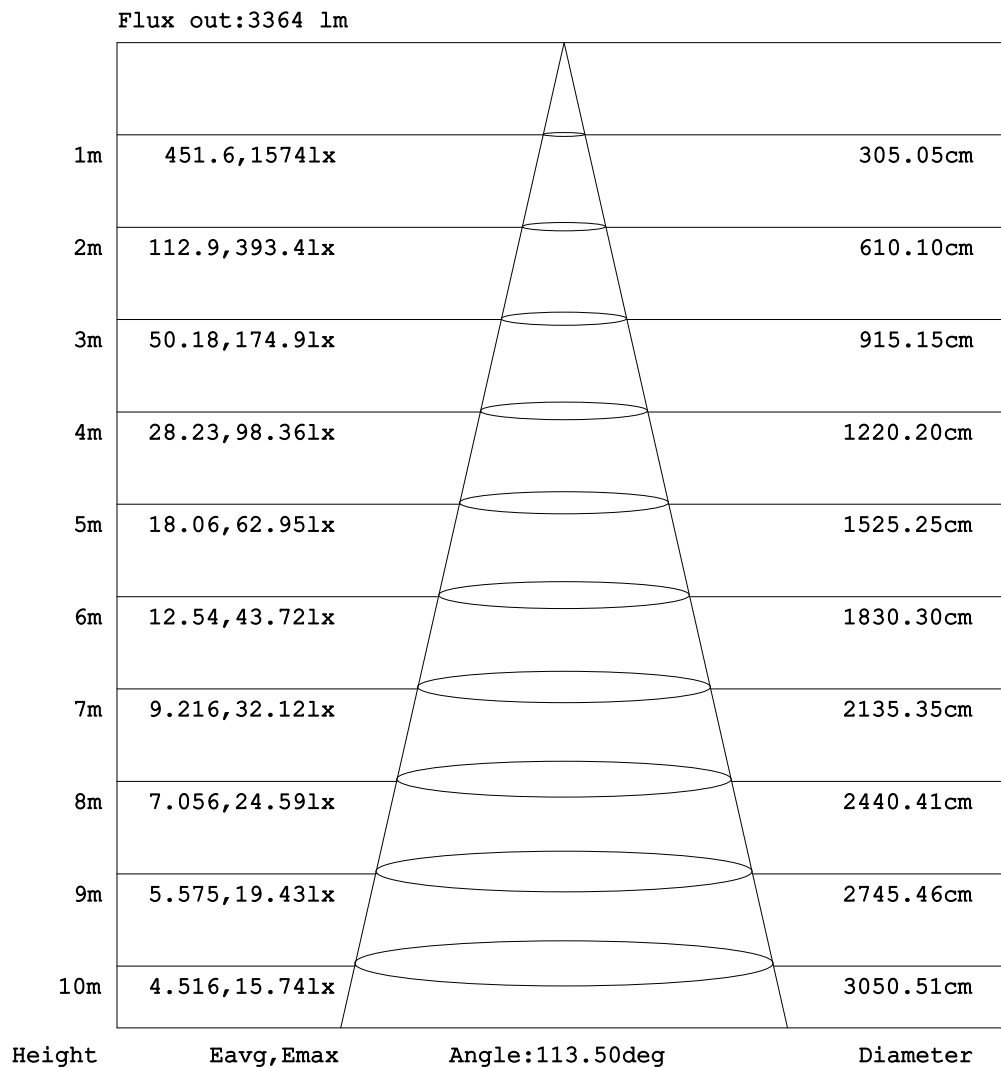


C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



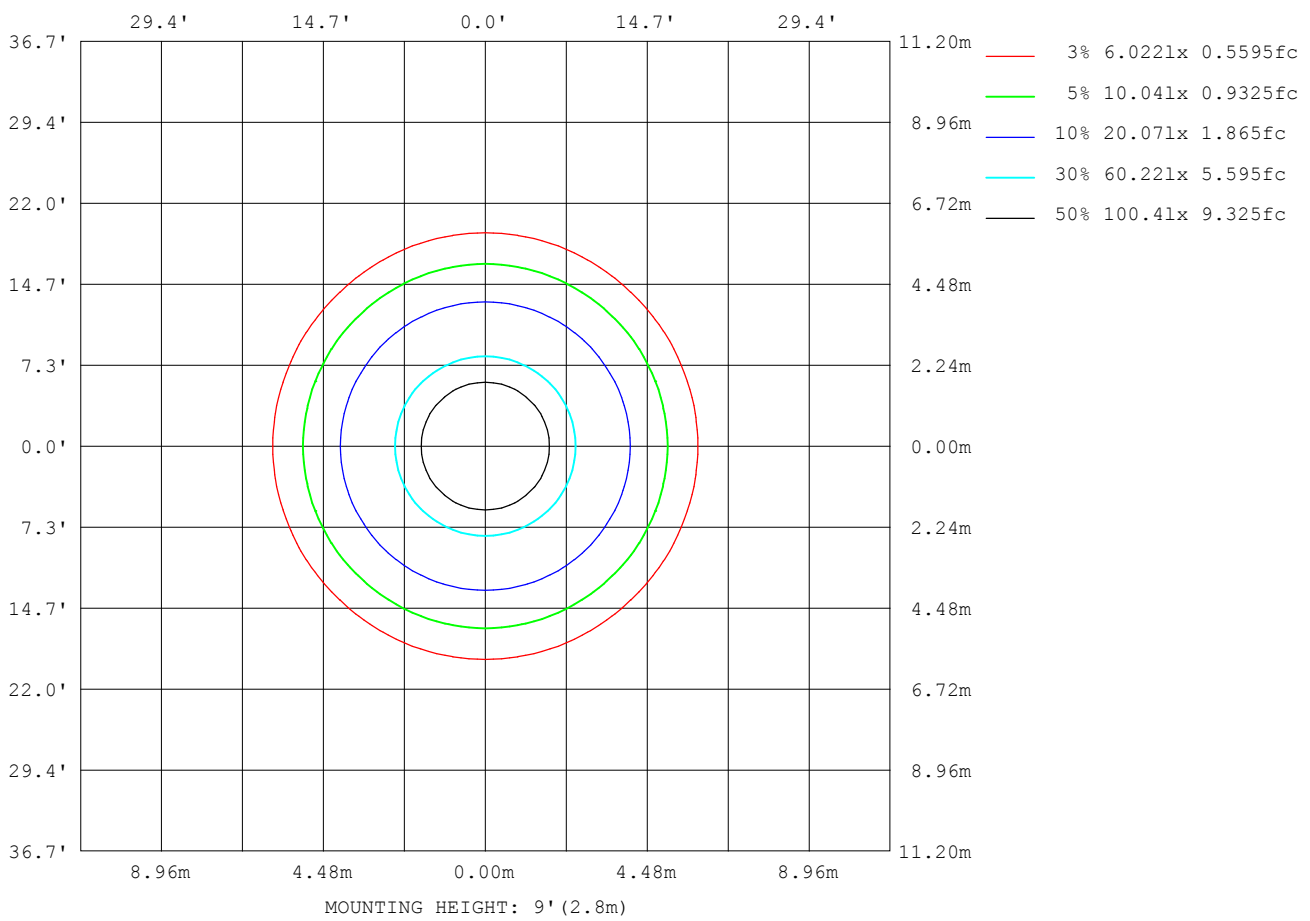
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.4V I:0.1599A P:35.40W PF:0.9607 Freq:49.99Hz Lamp Flux:4616.19x1 lm		
NAME: P30-36-1203-40H-R8	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: ERVAN	SUR.:	Shielding Angle:

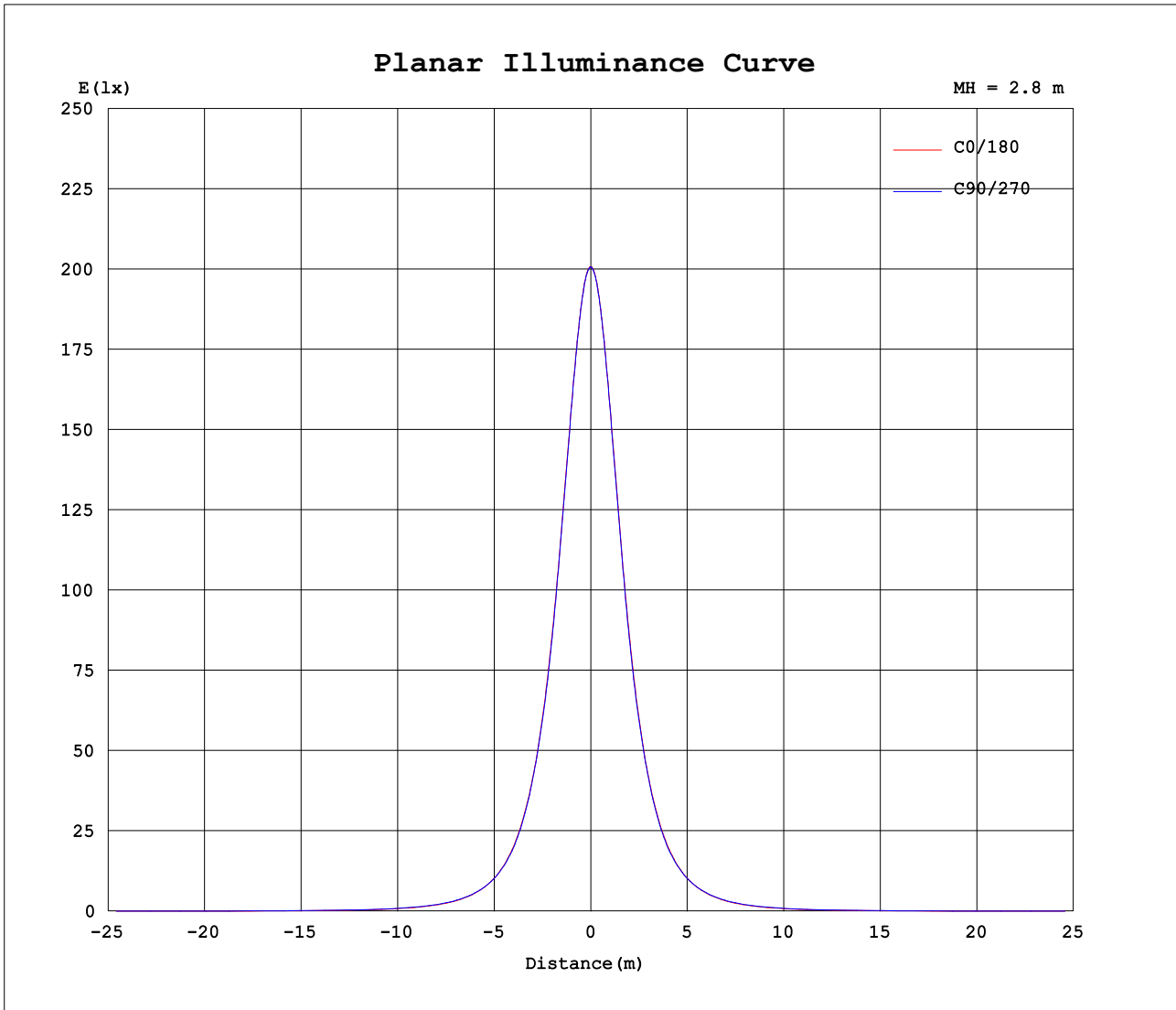
AvgL	cd/m2
L_0~180 (65) av	4695
L_0~180 (75) av	4177
L_0~180 (85) av	2720
L_90~270 (65) av	4757
L_90~270 (75) av	4673
L_90~270 (85) av	4689
L_45 (65) av	4639
L_45 (75) av	4413
L_45 (85) av	4370

Standard: GB/T 29293-2012

C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 90DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:QC
 Test Date:2020-01-02

γ Range:-90 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:53.0%
 Test Distance:10.380m [K=1.0000]
 Remarks:

