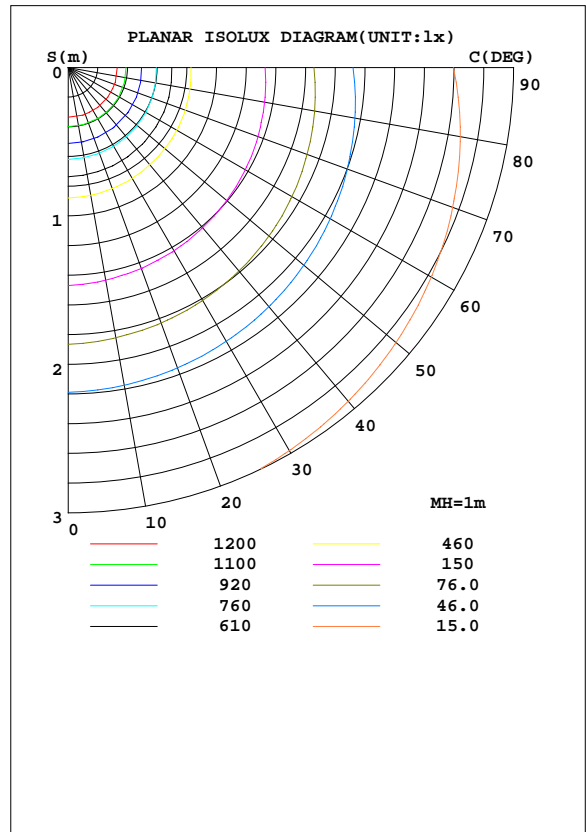
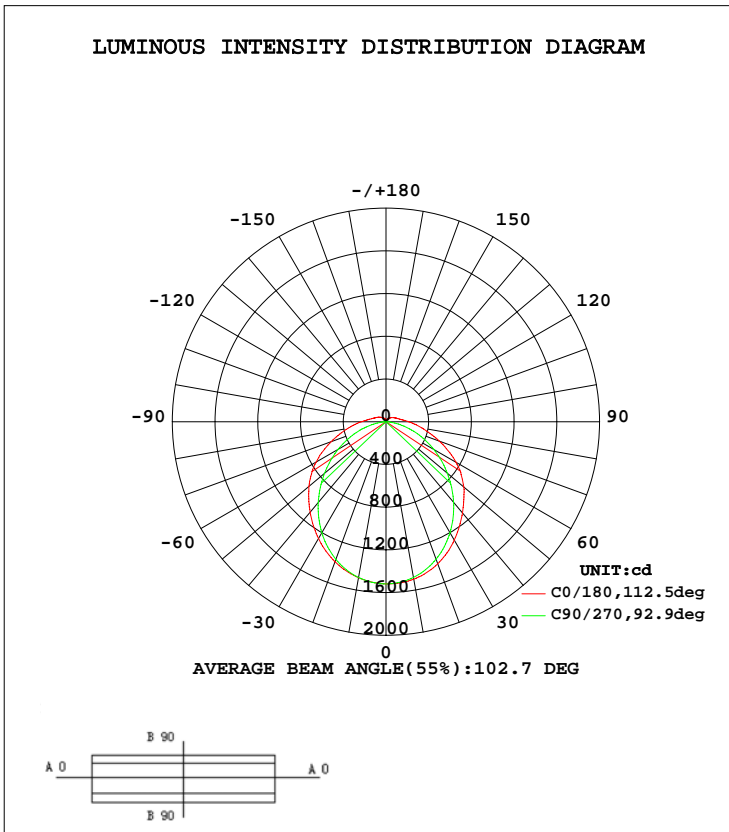


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 128.38 lm/W			
MODEL	ASD-LVP3SM-4N3640PRM	Imax(cd)	1518	S/MH(C0/180)	1.24
NOMINAL POWER(W)	36	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	4712.4	η UP, DN(C0-180)	3.6, 46.6
NOMINAL FLUX(lm)	4712.44	CIE CLASS	DIRECT	η UP, DN(C180-360)	3.4, 46.5
LAMPS INSIDE	1	η up(%)	6.9	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120.3	η down(%)	93.1	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
10	1483	1483	1481	1492	1497	1490	1481	1486	0- 10	143.4	143.4	3.04,3.04
20	1395	1385	1372	1406	1415	1396	1371	1396	10- 20	408.0	551.4	11.7,11.7
30	1264	1235	1201	1261	1279	1245	1200	1250	20- 30	609.4	1161	24.6,24.6
40	1106	1051	986.8	1071	1114	1052	984.6	1067	30- 40	719.9	1881	39.9,39.9
50	943.2	851.2	751.5	867.3	950.6	848.3	750.1	867.4	40- 50	736.4	2617	55.5,55.5
60	755.5	653.6	518.0	668.9	756.5	650.9	517.3	672.6	50- 60	672.4	3289	69.8,69.8
70	545.9	456.0	298.0	459.9	531.8	446.9	295.3	472.9	60- 70	537.9	3827	81.2,81.2
80	364.8	275.9	100.6	276.1	343.6	265.3	100.3	282.6	70- 80	359.9	4187	88.9,88.9
90	231.8	151.9	1.898	151.9	214.2	142.3	1.176	151.3	80- 90	199.3	4386	93.1,93.1
100	149.9	91.82	1.750	92.05	138.0	85.50	1.442	98.42	90-100	112.4	4499	95.5,95.5
110	109.9	68.07	2.778	67.28	101.6	62.61	2.433	67.96	100-110	74.13	4573	97,97
120	86.19	48.10	4.228	51.05	79.18	47.46	3.541	47.13	110-120	52.75	4626	98.2,98.2
130	66.68	32.95	5.645	38.71	60.57	36.09	4.778	32.33	120-130	35.95	4662	98.9,98.9
140	49.31	23.25	6.906	28.69	44.26	27.09	6.069	22.05	130-140	23.42	4685	99.4,99.4
150	35.12	16.77	8.553	21.24	30.63	20.27	7.920	15.36	140-150	14.26	4699	99.7,99.7
160	23.50	13.80	9.836	16.40	20.68	15.99	9.592	12.71	150-160	8.042	4707	99.9,99.9
170	15.27	11.77	10.96	12.68	13.71	12.64	10.97	11.83	160-170	3.957	4711	100,100
180	8.940	11.25	11.69	11.30	8.948	11.20	11.72	11.30	170-180	1.106	4712	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

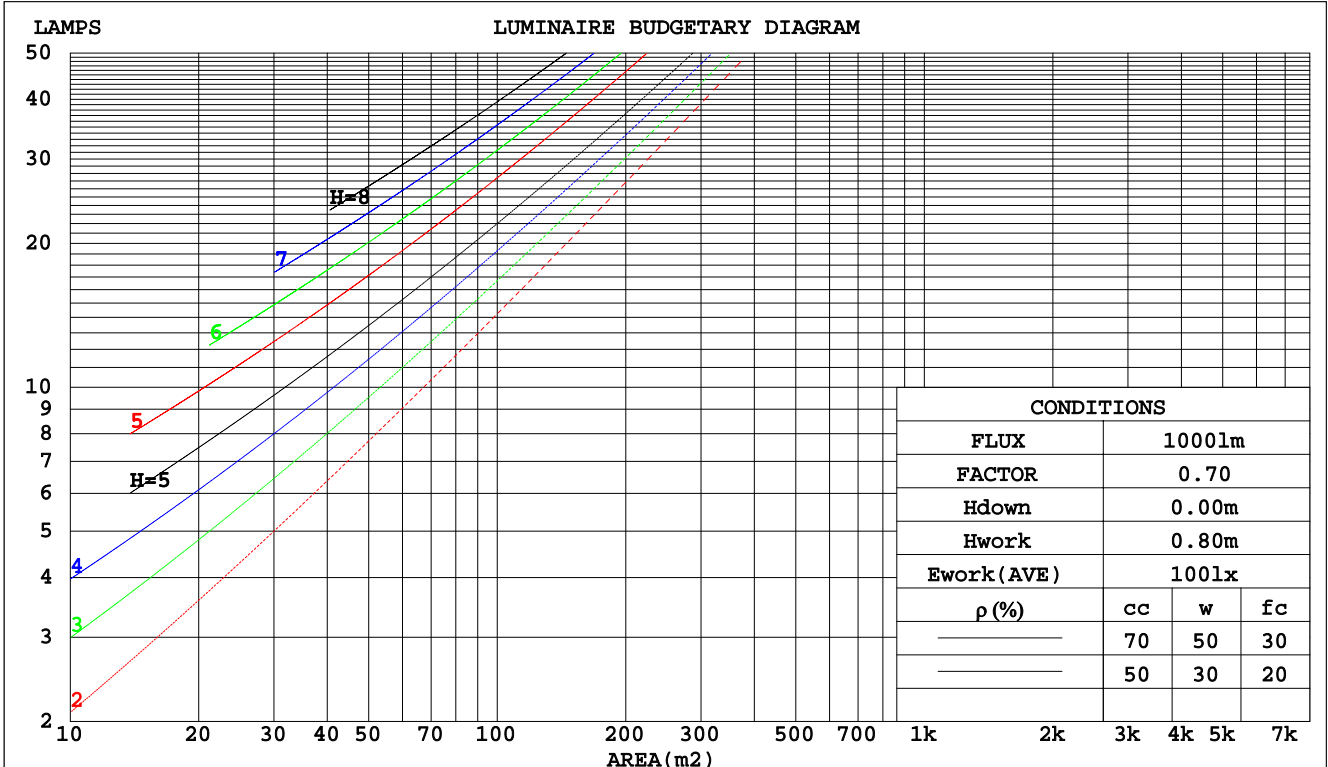
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION 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															
	Coefficients of Utilization(CU)															
0.0	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	.96	.96	.96	.93
1.0	1.01	.96	.92	.98	.94	.90	.92	.89	.86	.87	.84	.82	.82	.80	.78	.76
2.0	.87	.80	.74	.85	.78	.73	.80	.75	.70	.76	.71	.67	.72	.68	.65	.62
3.0	.77	.68	.61	.74	.67	.60	.70	.64	.58	.67	.61	.57	.63	.59	.55	.52
4.0	.68	.59	.52	.66	.58	.51	.63	.55	.50	.59	.53	.48	.56	.51	.47	.44
5.0	.60	.51	.45	.59	.50	.44	.56	.49	.43	.53	.47	.42	.51	.45	.41	.38
6.0	.54	.45	.39	.53	.45	.38	.51	.43	.38	.48	.42	.37	.46	.40	.36	.34
7.0	.49	.40	.34	.48	.40	.34	.46	.39	.33	.44	.37	.32	.42	.36	.32	.30
8.0	.45	.36	.31	.44	.36	.30	.42	.35	.30	.40	.34	.29	.39	.33	.28	.26
9.0	.41	.33	.27	.40	.33	.27	.39	.32	.27	.37	.31	.26	.36	.30	.26	.24
10.0	.38	.30	.25	.37	.30	.25	.36	.29	.24	.34	.28	.24	.33	.27	.23	.22



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

WEC AND CCEC

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION ANGLE:

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
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.336	.191	.061	.327	.187	.059	.310	.178	.057	.294	.170	.054	.279	.162	.052	
2.0	.305	.167	.051	.296	.163	.050	.281	.156	.049	.267	.150	.047	.254	.143	.045	
3.0	.277	.147	.044	.270	.144	.043	.256	.139	.042	.243	.133	.041	.231	.128	.040	
4.0	.253	.132	.039	.247	.129	.038	.234	.124	.037	.223	.120	.036	.212	.115	.035	
5.0	.233	.119	.034	.227	.116	.034	.216	.112	.033	.205	.108	.032	.195	.104	.031	
6.0	.215	.108	.031	.209	.106	.030	.199	.102	.030	.190	.099	.029	.181	.095	.028	
7.0	.199	.099	.028	.194	.097	.028	.185	.094	.027	.177	.091	.026	.169	.088	.026	
8.0	.186	.091	.026	.181	.089	.025	.173	.086	.025	.165	.084	.024	.158	.081	.024	
9.0	.174	.084	.023	.170	.083	.023	.162	.080	.023	.155	.078	.022	.148	.075	.022	
10.0	.163	.078	.022	.160	.077	.021	.153	.075	.021	.146	.073	.021	.140	.070	.020	

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
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.243	.243	.243	.208	.208	.208	.142	.142	.142	.081	.081	.081	.026	.026	.026	
1.0	.235	.209	.185	.201	.179	.160	.138	.123	.110	.079	.071	.064	.025	.023	.021	
2.0	.227	.185	.150	.195	.160	.130	.134	.110	.090	.077	.064	.053	.025	.021	.017	
3.0	.220	.168	.127	.188	.145	.110	.129	.101	.077	.075	.059	.046	.024	.019	.015	
4.0	.212	.155	.112	.182	.134	.097	.125	.093	.068	.072	.055	.040	.023	.018	.013	
5.0	.204	.145	.101	.175	.125	.088	.121	.088	.062	.070	.051	.037	.023	.017	.012	
6.0	.197	.137	.093	.169	.118	.081	.117	.083	.058	.068	.049	.034	.022	.016	.011	
7.0	.190	.130	.088	.164	.113	.076	.113	.079	.054	.066	.046	.032	.021	.015	.011	
8.0	.184	.124	.083	.158	.108	.073	.109	.076	.052	.064	.045	.031	.021	.015	.010	
9.0	.177	.119	.080	.153	.103	.070	.106	.073	.050	.062	.043	.030	.020	.014	.010	
10.0	.172	.115	.077	.148	.100	.067	.103	.070	.048	.060	.042	.029	.019	.014	.009	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

Uncorrected UGR Table

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm										
NAME: LED vapor tight fixture					TYPE:			WEIGHT:		
DIM.: 1250*85.5*60.8					SPEC.:			SERIAL No.:		
MFR.: ASD LIGHTING CORPORATION					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	37.9	39.3	38.2	39.6	40.0	36.6	38.1	37.0	38.4	38.8
3H	39.8	41.2	40.2	41.5	41.9	38.0	39.3	38.3	39.6	40.0
4H	40.8	42.1	41.2	42.5	42.9	38.4	39.7	38.8	40.1	40.5
6H	41.8	43.0	42.3	43.4	43.8	38.7	39.9	39.1	40.3	40.7
8H	42.4	43.5	42.8	43.9	44.4	38.8	39.9	39.2	40.3	40.8
12H	43.0	44.1	43.5	44.5	45.0	38.8	39.9	39.2	40.3	40.8
4H 2H	38.4	39.7	38.8	40.0	40.4	37.5	38.7	37.9	39.1	39.5
3H	40.6	41.7	41.0	42.1	42.5	39.0	40.1	39.5	40.6	41.0
4H	41.7	42.7	42.2	43.2	43.7	39.7	40.7	40.2	41.1	41.6
6H	42.9	43.8	43.4	44.3	44.8	40.1	41.0	40.6	41.5	42.0
8H	43.6	44.4	44.1	44.9	45.4	40.2	41.1	40.8	41.6	42.1
12H	44.3	45.1	44.9	45.6	46.2	40.3	41.1	40.8	41.6	42.1
8H 4H	42.0	42.8	42.5	43.3	43.9	40.3	41.1	40.8	41.6	42.1
6H	43.4	44.1	44.0	44.7	45.2	41.0	41.7	41.5	42.2	42.8
8H	44.3	44.9	44.8	45.4	46.0	41.3	41.9	41.8	42.4	43.0
12H	45.2	45.8	45.8	46.4	47.0	41.5	42.0	42.0	42.6	43.2
12H 4H	42.0	42.8	42.5	43.3	43.8	40.4	41.2	40.9	41.7	42.2
6H	43.5	44.2	44.1	44.7	45.3	41.3	41.9	41.8	42.4	43.0
8H	44.4	45.0	45.0	45.6	46.2	41.7	42.2	42.2	42.8	43.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117 Corrected 4712 lm Total Lamp Luminous Flux. (8log(F/F0) = 5.4)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION ANGLE:

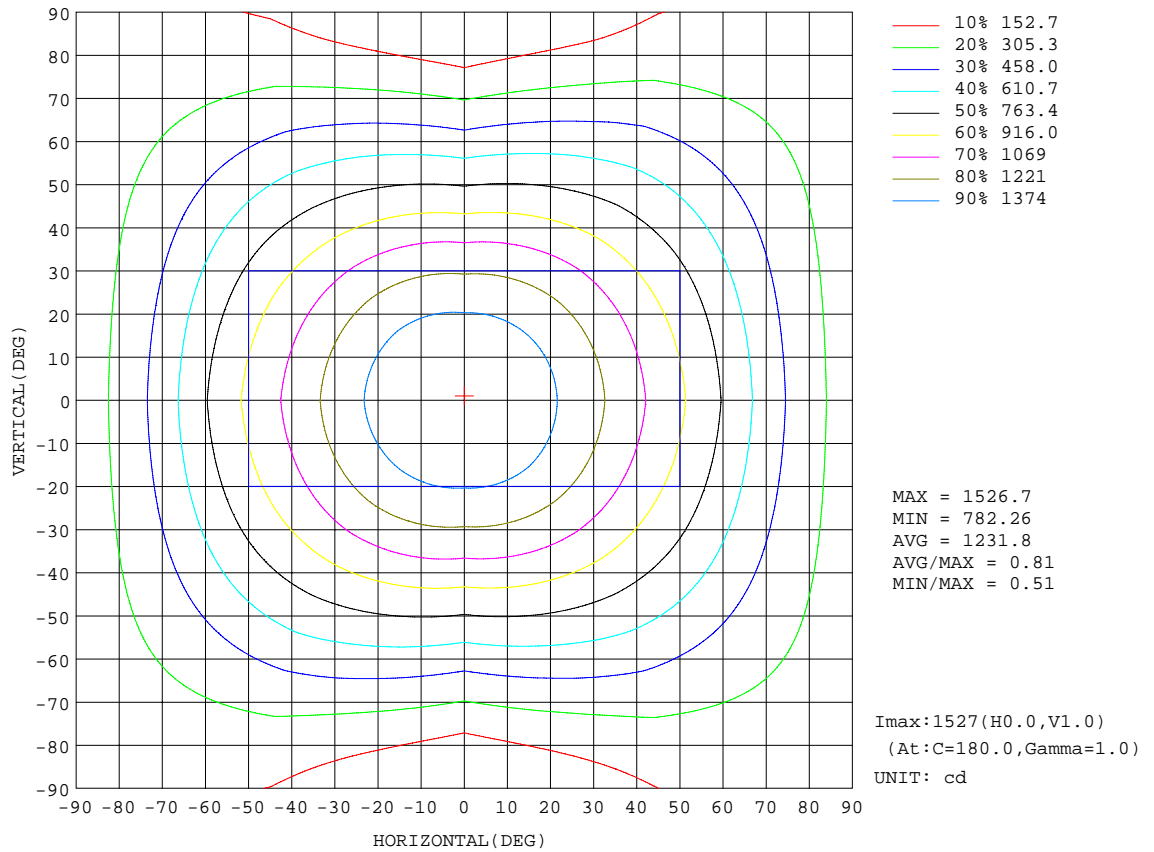
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	43	36	54	43	36	52	42	35	29
0.80	64	52	45	63	52	44	61	51	44	37
1.00	72	61	53	71	60	53	68	61	52	44
1.25	79	68	60	77	67	60	74	65	59	51
1.50	84	74	66	82	72	65	78	70	64	55
2.00	91	82	75	89	80	74	84	77	72	62
2.50	95	86	80	93	85	79	88	81	76	66
3.00	99	91	85	96	89	83	91	85	80	70
4.00	103	96	91	100	94	89	94	90	86	75
5.00	105	100	95	102	97	93	97	93	89	78
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION ANGLE:

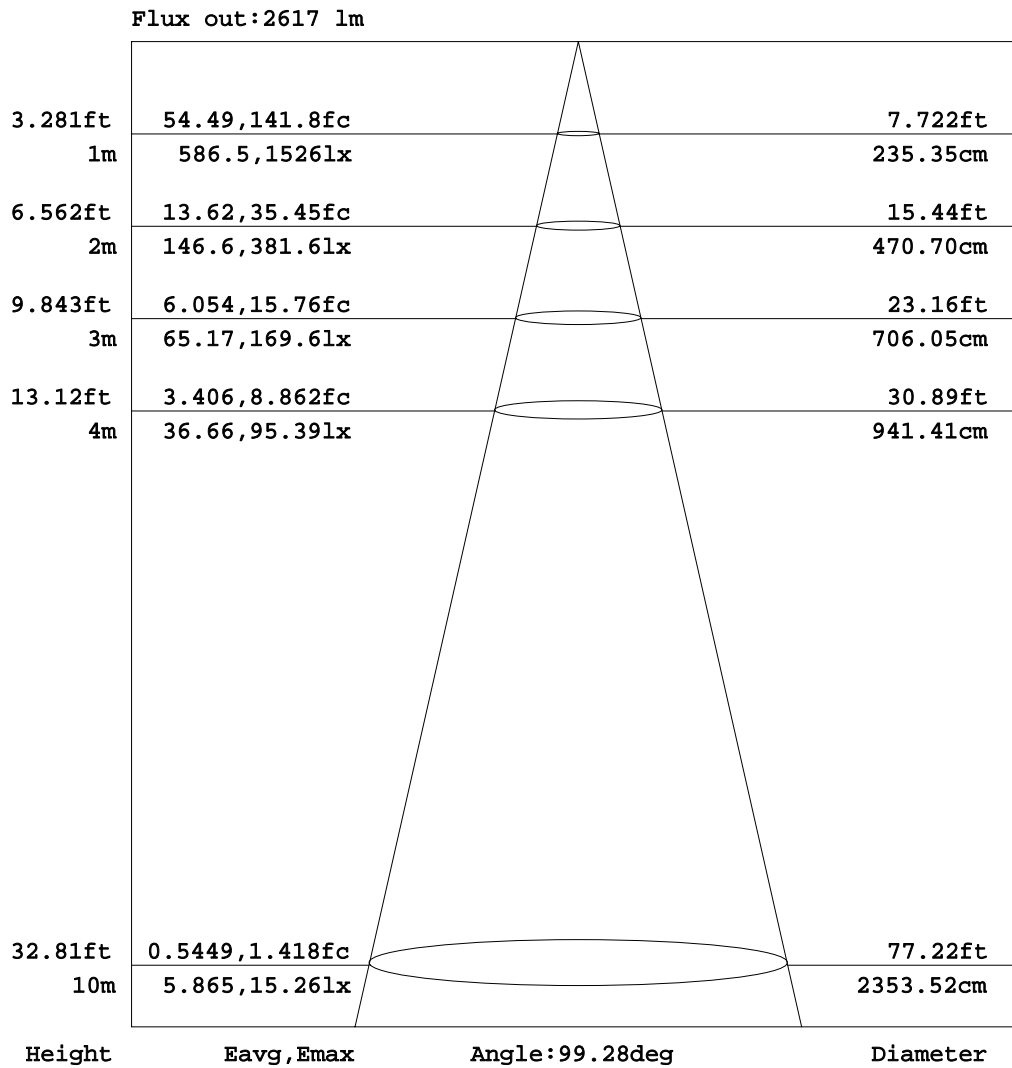


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

AAI Figure

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION ANGLE:



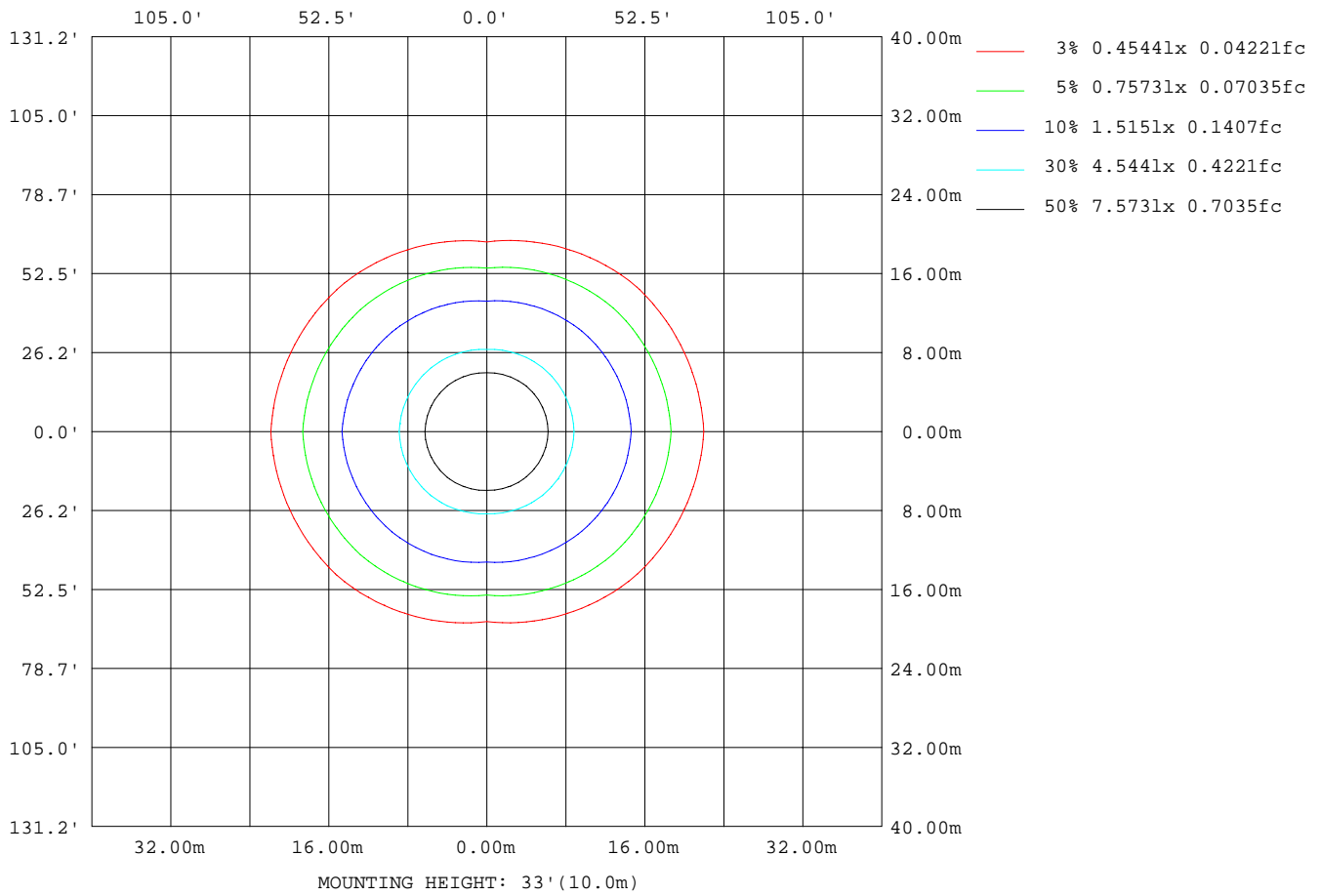
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks:

ISOLUX DIAGRAM

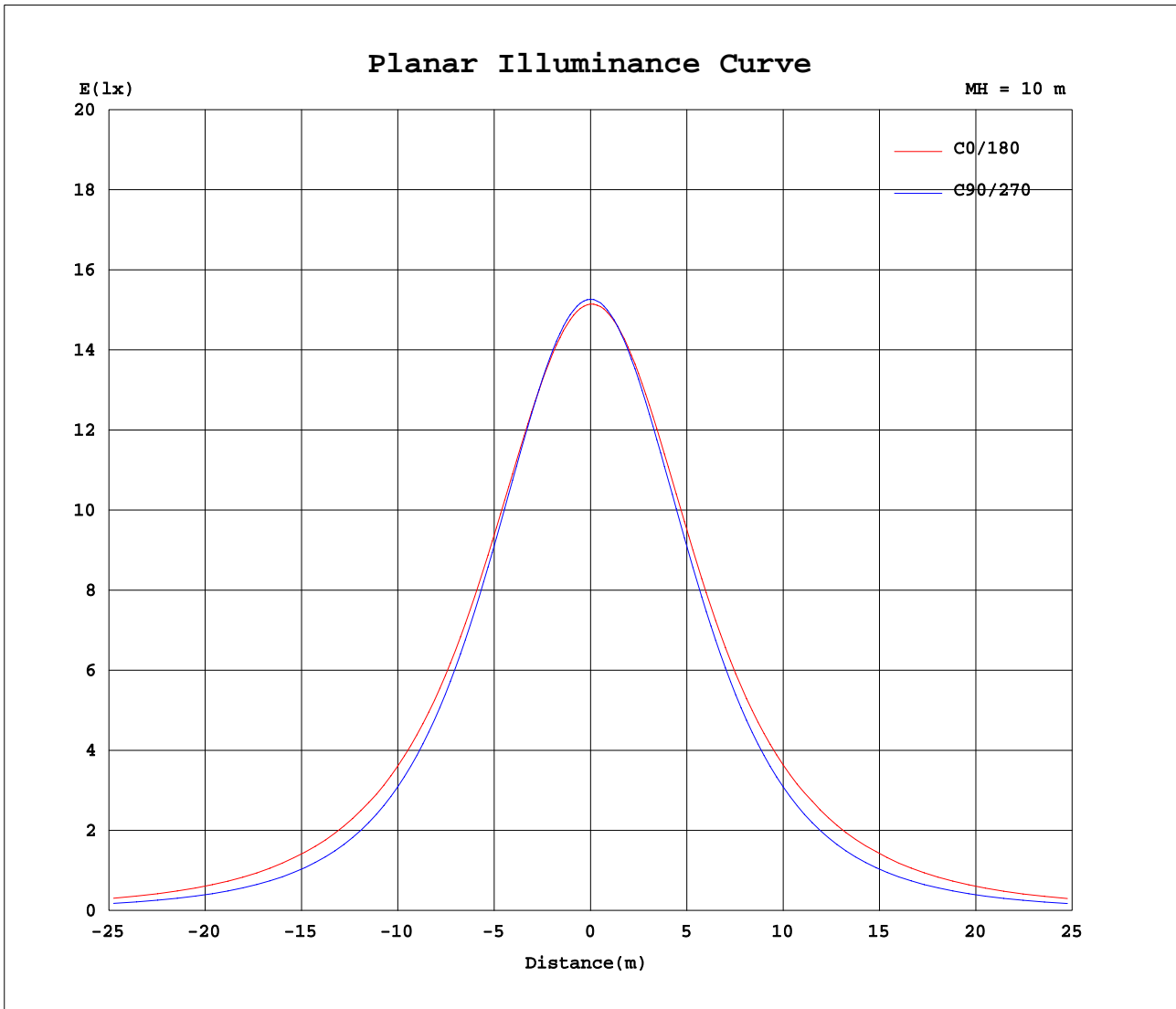
Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 31DEG
 Operators: 01
 Test Date: 2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity: %
 Test Distance: 9.190m [K=0.9684]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.3V I:0.3115A P:36.71W PF:0.9795 Lamp Flux:4712.44x1 lm		
NAME: LED vapor tight fixture	TYPE:	WEIGHT:
DIM.: 1250*85.5*60.8	SPEC.:	SERIAL No.:
MFR.: ASD LIGHTING CORPORATION	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG)\γ (DEG)	0	45	90	135	180	225	270	315										
0	1518	1518	1518	1518	1518	1518	1518	1518										
5	1507	1509	1508	1513	1515	1513	1509	1510										
10	1483	1483	1481	1492	1497	1490	1481	1486										
15	1445	1441	1435	1456	1464	1451	1434	1449										
20	1395	1385	1372	1406	1415	1396	1371	1396										
25	1335	1316	1293	1341	1354	1327	1292	1329										
30	1264	1235	1201	1261	1279	1245	1200	1250										
35	1186	1146	1098	1170	1198	1151	1096	1162										
40	1106	1051	987	1071	1114	1052	985	1067										
45	1023	952	870	969	1031	950	869	967										
50	943	851	751	867	951	848	750	867										
55	852	751	634	767	860	748	633	769										
60	756	654	518	669	756	651	517	673										
65	650	557	406	567	642	549	403	572										
70	546	456	298	460	532	447	295	473										
75	450	360	193	362	429	351	193	376										
80	365	276	101	276	344	265	100	283										
85	292	206	29.3	205	272	194	28.9	202										
90	232	152	1.90	152	214	142	1.18	151										
95	184	115	1.46	115	170	107	1.02	118										
100	150	91.8	1.75	92.0	138	85.5	1.44	98.4										
105	126	78.4	2.15	78.0	116	72.5	1.99	83.4										
110	110	68.1	2.78	67.3	102	62.6	2.43	68.0										
115	97.2	58.3	3.50	58.6	89.7	54.4	2.92	60.5										
120	86.2	48.1	4.23	51.1	79.2	47.5	3.54	47.1										
125	76.3	39.8	4.93	44.5	69.6	41.4	4.18	38.5										
130	66.7	33.0	5.65	38.7	60.6	36.1	4.78	32.3										
135	57.7	27.6	6.32	33.6	52.1	31.4	5.36	26.6										
140	49.3	23.3	6.91	28.7	44.3	27.1	6.07	22.1										
145	41.8	19.7	7.78	24.9	37.1	23.6	6.98	18.8										
150	35.1	16.8	8.55	21.2	30.6	20.3	7.92	15.4										
155	29.1	15.0	9.23	18.7	25.1	18.1	8.79	13.7										
160	23.5	13.8	9.84	16.4	20.7	16.0	9.59	12.7										
165	19.0	12.5	10.4	14.4	17.0	14.3	10.3	12.3										
170	15.3	11.8	11.0	12.7	13.7	12.6	11.0	11.8										
175	9.84	11.3	11.4	11.0	10.8	11.2	11.4	11.3										
180	8.94	11.3	11.7	11.3	8.95	11.2	11.7	11.3										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:31DEG
 Operators:01
 Test Date:2017-07-04

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.276
 Humidity:%
 Test Distance:9.190m [K=0.9684]
 Remarks: