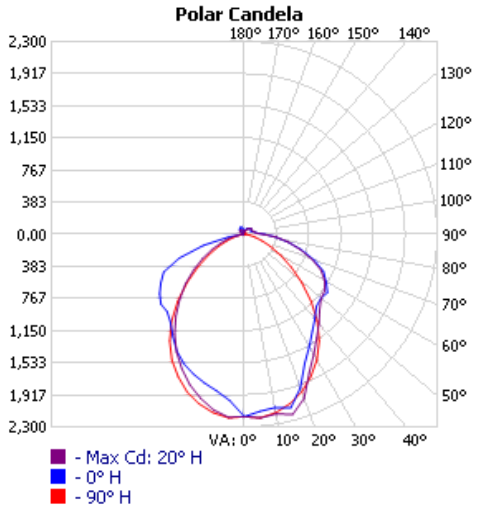
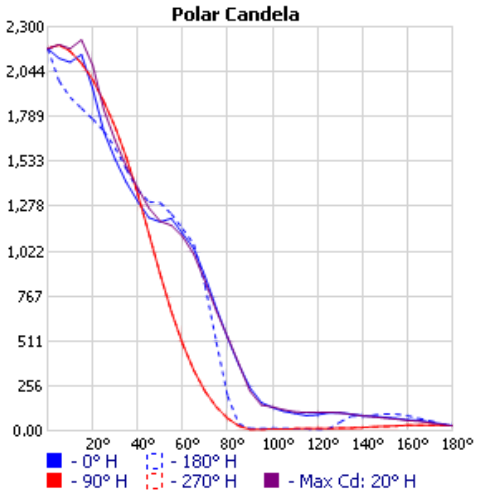
OUTDOOR PHOTOMETRIC REPORT
CATALOG: L-1-6LM-SA-850-1-U1-CP

Manufacturer:	LUX Dynamics
Test #:	L012512503
Test Lab:	LIGHT LABORATORY, INC. (www.lightlaboratory.com)
Catalog:	L-1-6lm-SA-850-1-U1-CP
Description:	LED Luminaire
Lamp Output:	Total luminaire Lumens: 6100.2, absolute photometry *
Ballast / Driver:	OTi 50/120-277/1A4 DIM-1 L G2 / (1)
Input Wattage:	45.36
Luminous Opening:	Rectangle (L: 2.52", W: 12")
Nema Type:	7 X 7
Max Cd:	2,226.0 at Horizontal: 20°, Vertical: 15°
Roadway Class:	VERY SHORT, TYPE III

No Photo Available





*Test based on absolute photometry where lamp lumens=lumens total.
*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

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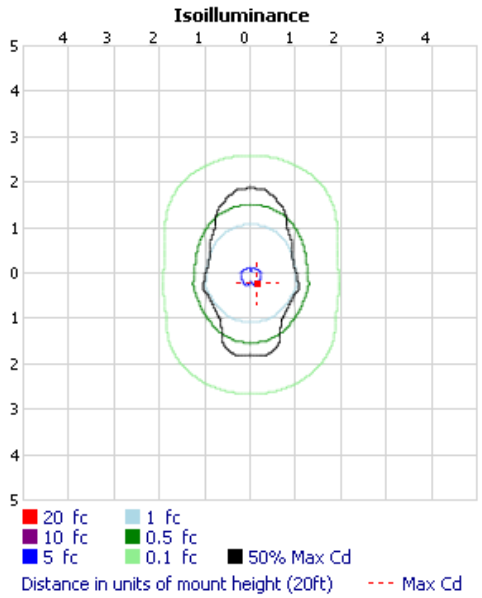
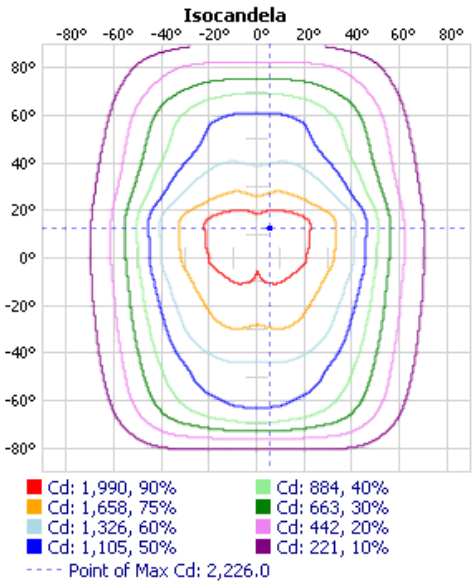




Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	1,632.4	26.8%
0-40	2,589.6	42.5%
0-60	4,397.4	72.1%
60-90	1,342.9	22%
70-100	679.4	11.1%
90-120	158.1	2.6%
0-90	5,740.4	94.1%
90-180	359.8	5.9%
0-180	6,100.2	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	204.6	3.4%	90-100	55.5	0.9%
10-20	581.3	9.5%	100-110	51.8	0.8%
20-30	846.5	13.9%	110-120	50.9	0.8%
30-40	957.3	15.7%	120-130	56.7	0.9%
40-50	942.4	15.4%	130-140	55.5	0.9%
50-60	865.4	14.2%	140-150	42.9	0.7%
60-70	719.0	11.8%	150-160	28.6	0.5%
70-80	452.5	7.4%	160-170	14.4	0.2%
80-90	171.4	2.8%	170-180	3.6	0.1%

Roadway Summary

Distribution:	TYPE III, VERY SHORT	
Max Cd, 90 Deg Vert:		246.0
Max Cd, 80 to <90 Deg:		533.0
	Lumens	% Lamp
Downward Street Side:	2,964.7	48.6%
Downward House Side:	2,778.4	45.5%
Downward Total:	5,743.1	94.1%
Upward Street Side:	236.5	3.9%
Upward House Side:	123.2	2%
Upward Total:	359.7	5.9%
Total Lumens:	6,102.8	100%

LCS Table

BUG Rating	**B2 - U3 - G2**	
Forward Light	Lumens	Lumens %
Low(0-30):	846.2	13.9%
Medium(30-60):	1,386.3	22.7%
High(60-80):	604.9	9.9%
Very High(80-90):	127.3	2.1%
Back Light		
Low(0-30):	787.2	12.9%
Medium(30-60):	1,380.1	22.6%
High(60-80):	567.0	9.3%
Very High(80-90):	44.1	0.7%
Uplight		
Low(90-100):	55.5	0.9%
High(100-180):	304.2	5%
Trapped Light:	0.000	0%

Flood Summary

	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	92.5%	5,643.4	140.3	169.7
Beam (50%):	61.9%	3,777.4	91.9	123.6
Total:	94.1%	5,740.9		

Illuminance at a Distance

	Center Beam	Beam Spread(ft)		Field Spread(ft)	
Height(ft)	Footcandle	Horizontal	Vertical	Horizontal	Vertical
4.00	136.00 fc	8.3	14.9	22.2	88.8
8.00	34.00 fc	16.5	29.9	44.3	177.5
12.00	15.11 fc	24.8	44.8	66.5	266.3
16.00	8.50 fc	33.1	59.7	88.6	355.1
20.00	5.44 fc	41.3	74.7	110.8	443.8
		Beam Angle		Field Angle	
		91.9°	123.6°	140.3°	169.7°

Average Luminance (Cd/m2)

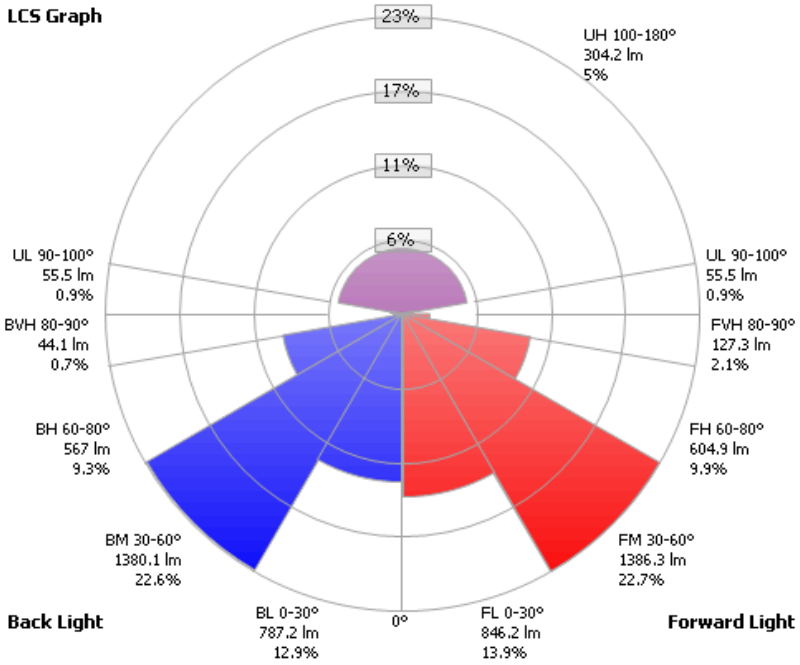
	0	20	40	60	80	100	120	140	160	180
0	111535	111535	111535	111535	111535	111535	111535	111535	111535	111535
45	88000	91987	88073	84521	85028	77780	83144	92350	95032	94524
55	108040	104555	88470	72742	67380	59427	75601	93653	107504	110364
65	125893	122011	102606	65857	44875	41722	68768	103576	121769	128925
75	138232	135460	113675	65155	28716	28518	63571	104764	101397	100209
85	221127	224068	191134	77630	22348	18819	38815	48813	28229	22936

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance: 20%

RCC %:	***80***				***70***				***50***			***30***			***10***			***0***
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.18	1.18	1.18	1.18	1.14	1.14	1.14	.94	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.94
1	1.07	1.02	.98	.94	1.04	.99	.95	.79	.94	.90	.87	.89	.86	.84	.84	.82	.80	.78
2	.97	.89	.82	.76	.94	.86	.80	.66	.82	.76	.72	.78	.73	.69	.74	.70	.67	.64
3	.88	.78	.70	.63	.85	.76	.68	.56	.72	.66	.60	.68	.63	.58	.65	.61	.57	.54
4	.81	.69	.60	.53	.78	.67	.59	.48	.64	.57	.51	.61	.55	.50	.58	.53	.49	.46
5	.75	.62	.53	.46	.72	.60	.52	.42	.57	.50	.45	.55	.49	.44	.52	.47	.43	.40
6	.69	.56	.47	.40	.67	.54	.46	.37	.52	.45	.39	.50	.43	.38	.48	.42	.37	.35
7	.64	.51	.42	.36	.62	.49	.41	.33	.47	.40	.35	.45	.39	.34	.44	.38	.33	.31
8	.60	.46	.38	.32	.58	.45	.37	.30	.43	.36	.31	.42	.35	.31	.40	.34	.30	.28
9	.56	.42	.34	.29	.54	.42	.34	.27	.40	.33	.28	.39	.32	.28	.37	.31	.27	.25
10	.52	.39	.31	.26	.51	.38	.31	.25	.37	.30	.26	.36	.30	.25	.35	.29	.25	.23

LCS Graph



Scale = Max LCS %

Trapped Light: 0 lm, 0%

UGR Table (Corrected)

Ceiling Cavity Reflectance:		70%	70%	50%	50%	30%	70%	70%	50%	50%	30%
Wall Cavity Reflectance:		50%	30%	50%	30%	30%	50%	30%	50%	30%	30%
Floor Cavity Reflectance:		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Room Dimensions		Viewed Crosswise					Viewed Endwise				
Room Width	Room Length										
2H	2H	28.8	30.3	29.2	30.7	31.1	24.8	26.3	25.2	26.7	27.2
	3H	31.4	32.8	31.9	33.2	33.7	25.7	27.0	26.1	27.5	28.0
	4H	32.5	33.8	33.0	34.3	34.8	25.9	27.2	26.4	27.7	28.2
	6H	33.6	34.8	34.1	35.2	35.8	26.1	27.3	26.6	27.8	28.3
	8H	34.0	35.2	34.6	35.7	36.2	26.1	27.3	26.6	27.8	28.3
	12H	34.5	35.6	35.1	36.1	36.7	26.1	27.2	26.6	27.7	28.3
4H	2H	29.2	30.5	29.7	31.0	31.5	26.4	27.7	26.9	28.2	28.7
	3H	32.2	33.3	32.7	33.8	34.3	27.7	28.8	28.2	29.3	29.9
	4H	33.5	34.5	34.1	35.0	35.6	28.1	29.1	28.6	29.6	30.2
	6H	34.8	35.7	35.3	36.2	36.8	28.3	29.2	28.8	29.7	30.3
	8H	35.4	36.2	35.9	36.7	37.3	28.3	29.1	28.9	29.7	30.3
	12H	36.0	36.7	36.6	37.3	37.9	28.4	29.1	28.9	29.7	30.3
8H	4H	33.8	34.6	34.4	35.2	35.8	29.4	30.2	29.9	30.7	31.3
	6H	35.3	36.0	35.9	36.6	37.2	29.8	30.5	30.4	31.1	31.7
	8H	36.1	36.7	36.7	37.3	37.9	29.9	30.5	30.5	31.1	31.7
	12H	36.9	37.5	37.5	38.1	38.8	30.0	30.5	30.6	31.1	31.8
12H	4H	33.8	34.5	34.4	35.1	35.7	29.6	30.4	30.2	31.0	31.6
	6H	35.4	36.0	36.0	36.6	37.2	30.3	30.9	30.9	31.4	32.1
	8H	36.3	36.8	36.9	37.4	38.1	30.5	31.0	31.1	31.6	32.3

Max UGR: 38.8

Candela Table - Type C

	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260
0	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176	2176
5	2121	2152	2199	2205	2207	2204	2198	2194	2194	2198	2195	2192	2184	2168	2147	2119	2093	2042	1993	2042	2093	2119	2147	2168	2184	2192	2195
10	2099	2135	2176	2188	2203	2209	2203	2181	2161	2161	2153	2127	2091	2062	2041	2020	1999	1952	1899	1952	1999	2020	2041	2062	2091	2127	2153
15	2142	2184	**2226**	2215	2189	2161	2153	2142	2110	2093	2082	2025	1993	1976	1961	1943	1929	1887	1837	1887	1929	1943	1961	1976	1993	2025	2082
20	1949	2005	2082	2129	2173	2156	2086	2061	2028	2000	1968	1909	1890	1883	1874	1869	1861	1821	1776	1821	1861	1869	1874	1883	1890	1909	1968
25	1701	1759	1826	1884	1971	2049	2023	1941	1914	1873	1820	1768	1762	1768	1775	1779	1781	1746	1706	1746	1781	1779	1775	1768	1762	1768	1820
30	1546	1602	1654	1674	1715	1802	1895	1824	1776	1730	1661	1620	1618	1631	1666	1686	1684	1641	1611	1641	1684	1686	1666	1631	1618	1620	1661
35	1413	1457	1504	1518	1524	1544	1669	1684	1595	1555	1475	1452	1462	1499	1545	1563	1555	1514	1489	1514	1555	1563	1545	1499	1462	1452	1475
40	1308	1345	1384	1374	1360	1355	1395	1497	1391	1352	1282	1272	1303	1365	1408	1429	1426	1392	1372	1392	1426	1429	1408	1365	1303	1272	1282
45	1214	1244	1269	1251	1215	1188	1166	1261	1173	1123	1073	1091	1147	1224	1274	1298	1311	1307	1304	1307	1311	1298	1274	1224	1147	1091	1073
50	1190	1203	1193	1147	1090	1036	983	999	966	892	866	917	995	1090	1143	1206	1264	1292	1299	1292	1264	1206	1143	1090	995	917	866
55	1209	1215	1170	1087	990	900	814	757	754	679	665	739	846	956	1048	1146	1203	1233	1235	1233	1203	1146	1048	956	846	739	665
60	1123	1134	1106	1044	928	790	665	569	550	495	490	575	698	838	960	1054	1107	1149	1150	1149	1107	1054	960	838	698	575	490
65	1038	1042	1006	939	846	707	543	415	370	344	344	427	567	725	854	945	1004	1057	1063	1057	1004	945	854	725	567	427	344
70	878	876	850	806	721	597	436	297	239	224	230	298	447	603	727	792	816	832	827	832	816	792	727	603	447	298	230
75	698	699	684	643	574	464	329	201	145	136	144	202	321	448	529	525	512	509	506	509	512	525	529	448	321	202	144
80	530	531	533	513	445	336	222	127	80	71	79	121	190	258	303	288	241	211	198	211	241	288	303	258	190	121	79
85	376	378	381	375	325	227	132	71	38	28	32	43	66	89	83	64	48	41	39	41	48	64	83	89	66	43	32
90	245	244	226	193	137	76	38	19	12	8	8	9	10	11	12	13	13	14	14	14	13	13	12	11	10	9	8
95	161	165	147	121	84	43	25	16	11	9	9	9	10	11	11	12	13	13	14	13	13	12	11	11	10	9	9
100	132	134	136	136	124	91	56	33	18	11	13	10	10	10	11	12	12	13	13	13	12	12	11	10	10	10	13
105	111	112	119	125	120	98	66	40	21	11	21	16	10	10	11	11	12	12	13	12	12	11	11	10	10	16	21
110	99	101	108	113	110	95	73	47	20	12	27	38	16	9	9	10	11	11	11	11	11	10	9	9	16	38	27
115	87	97	104	107	105	96	75	50	23	13	33	50	54	18	9	9	9	10	10	10	9	9	9	18	54	50	33
120	91	96	104	109	106	96	74	50	26	14	38	61	69	64	28	9	8	9	8	9	8	9	28	64	69	61	38
125	103	101	106	107	102	90	72	50	28	14	37	67	77	82	72	40	25	12	11	12	25	40	72	82	77	67	37
130	103	99	102	101	93	83	69	51	30	15	36	70	84	83	86	84	68	50	49	50	68	84	86	83	84	70	36
135	96	93	94	91	84	78	65	50	29	16	37	69	87	89	84	85	86	84	84	84	86	85	84	89	87	69	37
140	87	84	85	83	78	71	62	47	31	19	34	65	83	93	89	86	82	81	83	81	82	86	89	93	83	65	34
145	82	79	80	77	72	65	56	44	29	23	34	59	78	90	96	92	88	88	89	88	88	92	96	90	78	59	34
150	77	74	73	70	66	60	52	42	29	25	34	52	71	83	90	95	95	96	96	96	95	95	90	83	71	52	34
155	71	68	67	65	59	54	48	40	29	28	32	48	62	74	83	86	89	93	95	93	89	86	83	74	62	48	32
160	62	60	59	58	56	51	45	38	31	32	33	43	55	64	72	78	81	83	86	83	81	78	72	64	55	43	33
165	59	57	55	53	50	46	40	37	31	32	33	39	47	54	61	65	68	69	71	69	68	65	61	54	47	39	33
170	49	47	46	46	42	40	38	33	31	32	32	36	40	44	48	52	54	56	57	56	54	52	48	44	40	36	32
175	39	38	37	34	33	31	31	30	30	31	30	32	33	35	36	38	40	40	40	40	40	38	36	35	33	32	30
180	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29