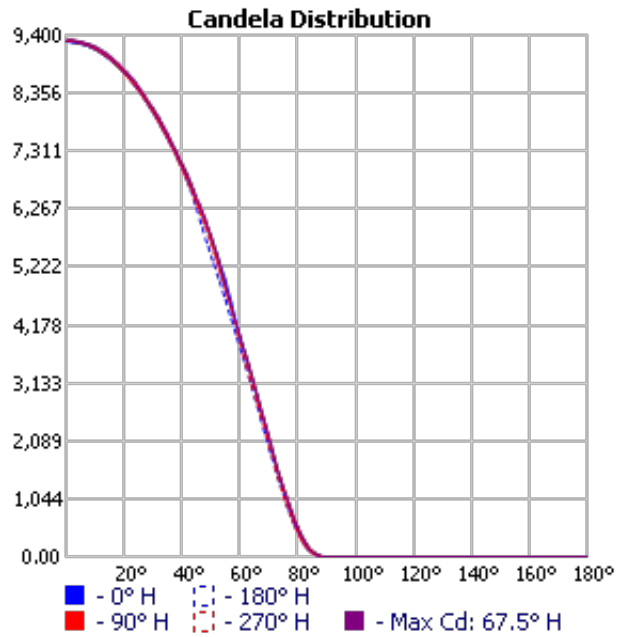
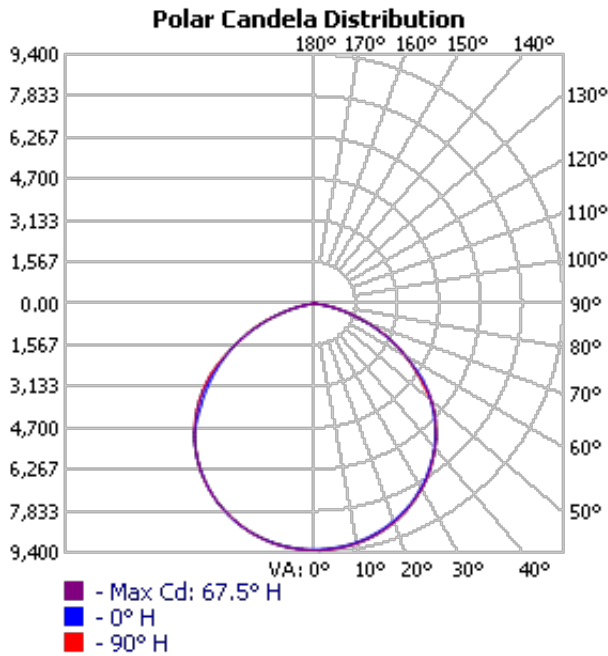


**OUTDOOR PHOTOMETRIC REPORT**

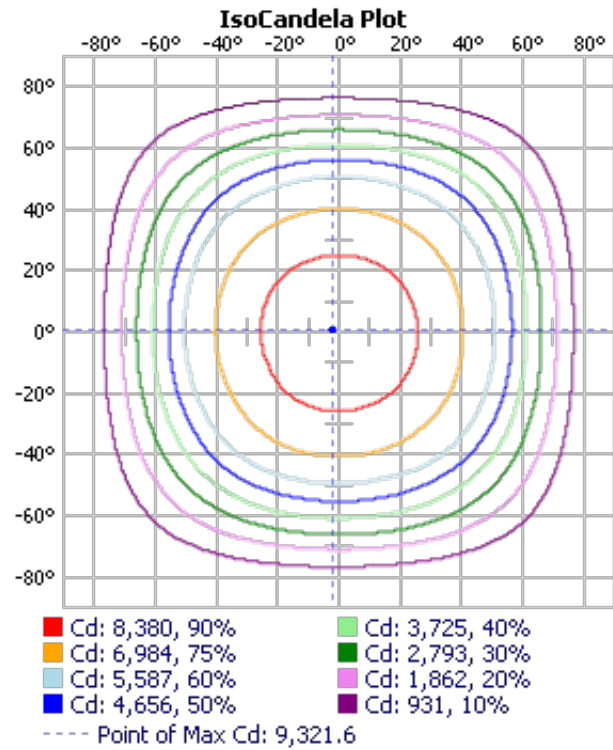
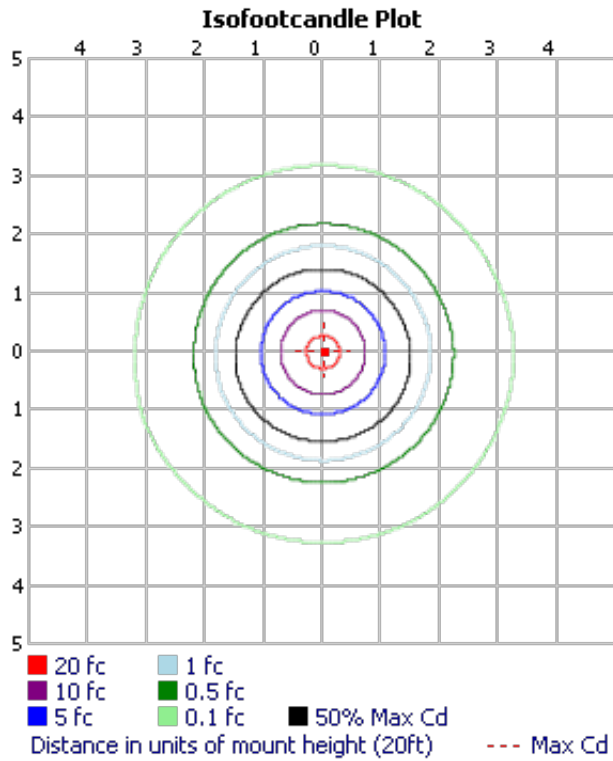
CATALOG: LRHB200-4100K

MANUFACTURER: ARCHIPELAGO LIGHTING  
 TEST LAB: STANDARD-TECH CO. LTD  
 TEST DATE: 2017/06/02  
 DESCRIPTION: LRHB200-4100K  
 LAMP OUTPUT: TOTAL LUMINAIRE LUMENS: 25678.1, **ABSOLUTE PHOTOMETRY \***  
 INPUT WATTAGE: 197.3  
 LUMINOUS OPENING: POINT  
 NEMA TYPE: 7 X 7  
 MAX CD: 9,321.6 AT HORIZONTAL: 67.5°, VERTICAL: 1°



**\*TEST BASED ON ABSOLUTE PHOTOMETRY WHERE LAMP LUMENS=LUMENS TOTAL.**  
**\*CUTOFF CLASSIFICATION AND EFFICIENCY CANNOT BE PROPERLY CALCULATED FOR ABSOLUTE PHOTOMETRY.**

VISUAL PHOTOMETRIC TOOL 1.2.46 COPYRIGHT 2018, ACUITY BRANDS LIGHTING.  
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**ZONAL LUMEN SUMMARY**

ZONE	LUMENS	% LUMINAIRE
0-30	7,304.8	28.4%
0-40	12,040.5	46.9%
0-60	21,267.9	82.8%
60-90	4,383.9	17.1%
70-100	1,431.7	5.6%
90-120	10.8	0%
0-90	25,651.7	99.9%
90-180	26.4	0.1%
0-180	25,678.1	100%

**LUMENS PER ZONE**

ZONE	LUMENS	% TOTAL	ZONE	LUMENS	% TOTAL
0-10	881.1	3.4%	90-100	4.7	0%
10-20	2,538.5	9.9%	100-110	3.0	0%
20-30	3,885.2	15.1%	110-120	3.1	0%
30-40	4,735.6	18.4%	120-130	3.3	0%
40-50	4,927.2	19.2%	130-140	3.5	0%
50-60	4,300.1	16.7%	140-150	3.4	0%
60-70	2,956.9	11.5%	150-160	2.8	0%
70-80	1,275.3	5.0%	160-170	1.9	0%
80-90	151.7	0.6%	170-180	0.7	0%

**LCS TABLE**

<b>BUG RATING</b>	<b>B4 - U2 - G2</b>	
<b>FORWARD LIGHT</b>	<b>LUMENS</b>	<b>LUMENS %</b>
LOW(0-30):	3,654.5	14.2%
MEDIUM(30-60):	7,059.6	27.5%
HIGH(60-80):	2,181.0	8.5%
VERY HIGH(80-90):	82.7	0.3%
<b>BACK LIGHT</b>		
LOW(0-30):	3,650.5	14.2%
MEDIUM(30-60):	6,906.2	26.9%
HIGH(60-80):	2,051.1	8%
VERY HIGH(80-90):	68.9	0.3%
<b>UPLIGHT</b>		
LOW(90-100):	4.7	0%
HIGH(100-180):	21.7	0.1%
<b>TRAPPED LIGHT:</b>	0.000	0%

**FLOOD SUMMARY**

	<b>EFFICIENCY</b>	<b>LUMENS</b>	<b>HORIZONTAL SPREAD</b>	<b>VERTICAL SPREAD</b>
<b>FIELD (10%):</b>	98.3%	25,239.8	153.4	153.2
<b>BEAM (50%):</b>	76.5%	19,637.2	112.1	111.6
<b>TOTAL:</b>	99.9%	25,645.9		

**ILLUMINANCE AT A DISTANCE**

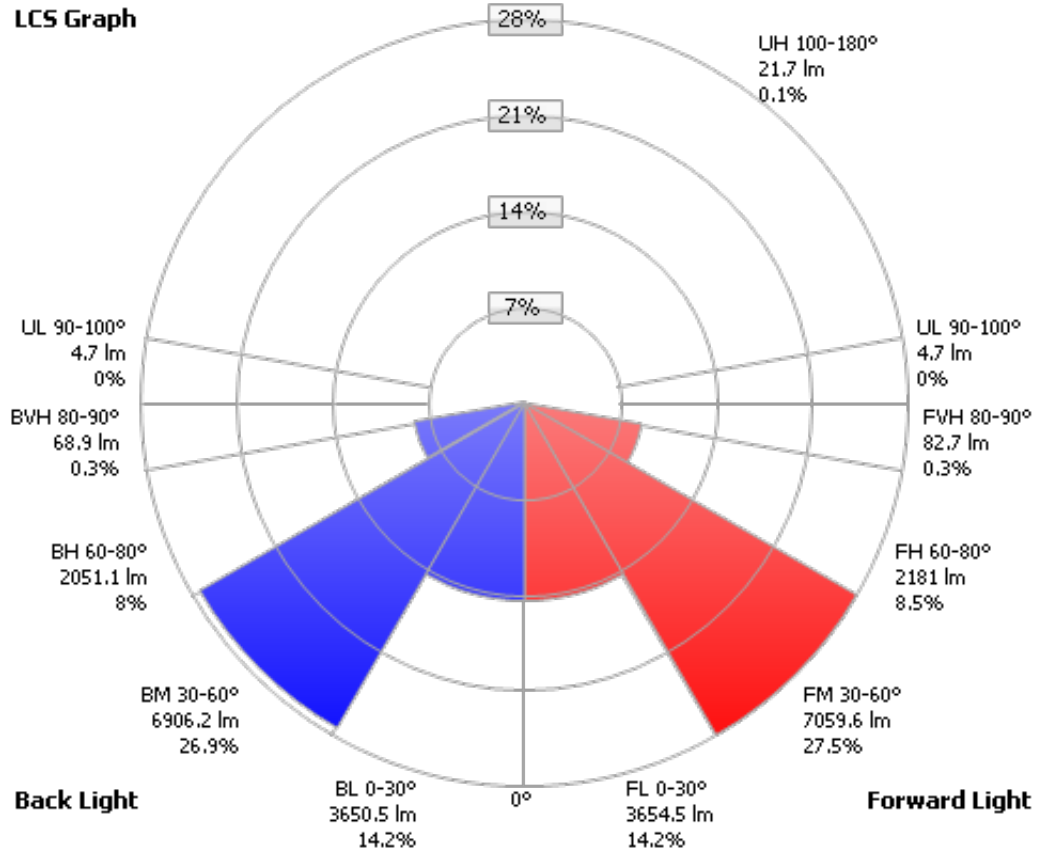
<b>HEIGHT(FT)</b>	<b>CENTER BEAM</b>	<b>BEAM SPREAD(FT)</b>		<b>FIELD SPREAD(FT)</b>	
	<b>FOOTCANDLE</b>	<b>HORIZONTAL</b>	<b>VERTICAL</b>	<b>HORIZONTAL</b>	<b>VERTICAL</b>
<b>4.00</b>	581.14 FC	11.9	11.8	33.8	33.6
<b>8.00</b>	145.28 FC	23.8	23.5	67.7	67.2
<b>12.00</b>	64.57 FC	35.7	35.3	101.5	100.7
<b>16.00</b>	36.32 FC	47.6	47.1	135.4	134.3
<b>20.00</b>	23.25 FC	59.5	58.8	169.2	167.9
		<b>BEAM ANGLE</b>		<b>FIELD ANGLE</b>	
		112.1°	111.6°	153.4°	153.2°

**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	0	50	30	20	0	50	30	20	0	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.00	1.06	1.06	1.06	1.00	1.02	1.02	1.02	1.00	1.00	1.00	1.00	1.00
1	1.10	1.05	1.01	.98	1.07	1.03	.99	.86	.99	.96	.93	.86	.95	.92	.90	.86	.91	.89	.87	.85	.85	.85	.85	.85
2	1.00	.92	.86	.80	.97	.90	.84	.73	.87	.82	.77	.73	.83	.79	.76	.73	.80	.77	.74	.72	.72	.72	.72	.72
3	.91	.81	.73	.67	.89	.80	.72	.62	.77	.70	.65	.62	.74	.69	.64	.62	.71	.67	.63	.61	.61	.61	.61	.61
4	.84	.72	.63	.57	.81	.71	.63	.54	.68	.61	.56	.54	.66	.60	.55	.54	.64	.59	.54	.52	.52	.52	.52	.52
5	.77	.64	.56	.49	.75	.63	.55	.47	.61	.54	.48	.47	.59	.53	.48	.47	.57	.52	.47	.45	.45	.45	.45	.45
6	.71	.58	.49	.43	.69	.57	.49	.41	.55	.48	.42	.42	.53	.47	.42	.42	.52	.46	.41	.39	.39	.39	.39	.39
7	.66	.53	.44	.38	.64	.52	.43	.37	.50	.43	.37	.37	.49	.42	.37	.37	.47	.41	.37	.35	.35	.35	.35	.35
8	.61	.48	.39	.34	.60	.47	.39	.33	.46	.39	.33	.33	.45	.38	.33	.33	.43	.37	.33	.31	.31	.31	.31	.31
9	.57	.44	.36	.30	.56	.43	.36	.30	.42	.35	.30	.30	.41	.35	.30	.30	.40	.34	.30	.28	.28	.28	.28	.28
10	.54	.41	.33	.27	.52	.40	.32	.27	.39	.32	.27	.27	.38	.32	.27	.27	.37	.31	.27	.25	.25	.25	.25	.25

**LCS Graph**



Scale = Max LCS %  
 Trapped Light: 0lm, 0%

**CANDELA TABLE - TYPE C**

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	360
0	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298	9298
5	9248	9254	9274	9286	9273	9253	9258	9267	9255	9254	9267	9279	9261	9248	9254	9256	9248
10	9150	9164	9186	9199	9179	9147	9163	9177	9156	9158	9163	9176	9157	9152	9152	9161	9150
15	8975	8987	9016	9033	9014	8981	8990	9001	8976	8976	8988	8991	8982	8969	8979	8984	8975
20	8732	8747	8772	8791	8769	8736	8750	8766	8738	8727	8726	8737	8723	8726	8740	8739	8732
25	8419	8441	8459	8484	8460	8426	8448	8447	8412	8408	8402	8419	8406	8417	8415	8429	8419
30	8038	8059	8078	8097	8071	8025	8046	8033	8019	8001	8007	8011	8016	8034	8025	8038	8038
35	7585	7608	7625	7633	7605	7563	7559	7575	7539	7539	7540	7546	7554	7560	7566	7587	7585
40	7064	7059	7104	7090	7083	7004	7020	7040	7001	6995	6970	7006	6993	7025	7034	7033	7064
45	6451	6451	6494	6448	6480	6390	6386	6316	6294	6324	6358	6360	6368	6416	6426	6421	6451
50	5767	5760	5808	5802	5762	5611	5553	5507	5433	5442	5578	5662	5671	5728	5739	5726	5767
55	4995	4973	4974	4895	4836	4696	4721	4678	4647	4648	4643	4803	4861	4953	4976	4958	4995
60	3972	4012	4020	3994	3948	3821	3793	3813	3771	3764	3775	3820	3883	4099	4111	4006	3972
65	3066	3089	3089	3122	3076	2898	2887	2920	2898	2907	2881	2878	2904	3075	3098	3065	3066
70	2148	2132	2162	2174	2162	1986	1985	1989	1975	1968	1942	2003	2019	2111	2111	2117	2148
75	1223	1241	1250	1251	1257	1138	1138	1155	1134	1128	1086	1105	1108	1223	1209	1230	1223
80	494	517	525	547	532	442	451	460	439	432	408	427	429	510	515	499	494
85	89	89	111	113	112	80	79	73	65	66	68	71	67	94	96	83	89
90	5	5	6	6	5	7	7	7	7	6	7	7	7	5	5	5	5
95	4	4	4	4	4	5	5	5	5	5	5	5	5	4	4	4	4
100	3	3	3	3	3	4	4	4	4	4	4	4	4	3	3	3	3
105	2	2	2	2	2	3	3	3	3	3	3	3	3	2	2	2	2
110	2	2	2	2	2	3	3	3	3	3	3	3	3	2	2	2	2
115	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
120	3	3	3	3	3	4	4	4	4	4	4	4	4	3	3	3	3
125	3	3	3	4	4	4	4	4	4	4	4	4	4	3	3	3	3
130	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4
135	5	4	4	4	5	5	5	4	5	5	5	4	5	4	4	4	5
140	5	4	5	5	5	5	5	5	5	5	5	5	6	5	5	5	5
145	5	5	5	5	5	6	6	5	6	6	5	5	6	5	5	5	5
150	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
155	7	6	6	6	6	6	6	6	7	6	6	6	7	6	6	6	7
160	7	6	6	6	6	7	6	6	7	7	6	6	7	6	6	6	7
165	7	6	6	7	7	7	7	7	7	7	7	7	7	6	6	7	7
170	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
175	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
180	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8