

**LUMINAIRE:** HBLH60LU5KA070WH  
 HBLH Classified Location, Extreme Environment  
 18" diameter Led with custom engineered TIR aisle optics  
**BALLAST:** LED40W-54-CO700-M-D  
**BALLAST FACTOR:** 1.00  
**LAMP:** Led  
**FIXTURE LUMENS:** 12842  
**WATTS:** 142.00  
**MOUNTING:** Specialty  
**SHIELDING ANGLE:** 0° = 90 90° = 90  
**SPACING CRITERION:** 0° = 0.60 90° = 0.53  
**LUMINOUS OPENING IN FEET**  
 LENGTH: 1.17  
 WIDTH: 1.17  
 HEIGHT: 0.00

TEST #7181  
 DATE: 6/19/2013

**TOTAL LUMINAIRE EFFICIENCY = 100.0**  
**TOTAL LUMENS PER WATT = 90**

**ANSI/IESNA RP-1-2004 COMPLIANCE: NONCOMPLIANT**  
**COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$2.67**  
**BASED ON 3000 HRS. AND \$.08 PER KWH**

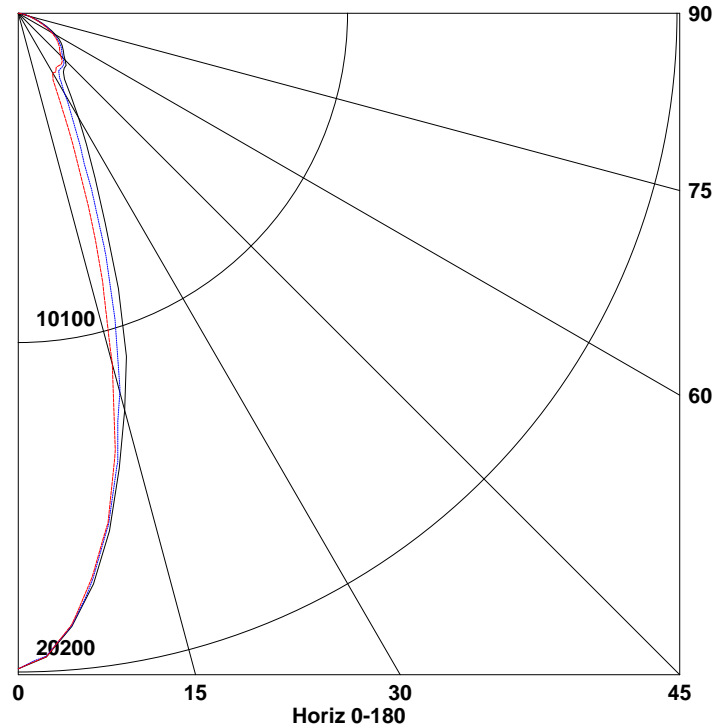
**ZONAL LUMENS**

ZONE	LUMENS	% LAMP	% FIXTURE
0-30	7155	55.7	55.7
0-40	8613	67.1	67.1
0-60	11464	89.3	89.3
0-90	12842	100.0	100.0
0-180	12842	100.0	100.0

**AVERAGE LUMINANCE**

ANGLE	CANDELA/SQ M					
	0.0	20.0	40.0	60.0	80.0	90.0
0	201205	201205	201205	201205	201205	201205
30	42809	27549	27410	43456	27653	24439
40	28648	27367	27354	28609	27289	26792
45	28785	26817	26689	28700	26732	25953
50	28098	26494	26416	28083	26447	25684
55	28155	26200	26095	28137	26235	25379
60	26351	23768	23768	26591	23848	23748
65	22837	21629	21676	23027	21534	20231
70	17681	17007	17124	18003	17183	16393
75	13616	13500	13500	13694	13462	13307
80	10436	10205	10320	10782	10205	10147
85	7926	7352	7237	7697	7467	7237

**INDOOR CANDELA PLOT**



0.0 ——— 45.0 ——— 90.0 ——— 20200

**COEFFICIENTS OF UTILIZATION (%)**

RC	EFFECTIVE FLOOR CAVITY REFLECTANCE = 20%																		
	80%				70%				50%				30%						
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80	
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72	
R	4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
C	5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
R	6	81	71	64	59	80	70	63	59	68	63	58	67	62	58	66	61	57	56
7	77	66	59	55	76	66	59	54	64	58	54	63	58	54	62	57	53	52	
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49	
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47	46	
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	43	

RCR = ROOM CAVITY RATIO RC = EFFECTIVE CEILING CAVITY REFLECTANCE RW = WALL REFLECTANCE

THE DATA IN THIS REPORT ARE BASED ON ABSOLUTE MEASUREMENTS.  
 ANSI/IESNA RP-1 COMPLIANCE IS BASED ON ABSOLUTE MEASUREMENTS.  
 THIS TEST RUN IN ACCORDANCE WITH CURRENT I.E.S.N.A. PUBLISHED PROCEDURES.

APPROVED BY: \_\_\_\_\_



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**CANDELA VALUES**

ANGLE	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0
0.0	20097*	20097	20097	20097	20097	20097	20097	20097	20097	20097	20097	20097	20097	20097	20097	20097	20097
2.5	19753	19763	19756	19715	19730	19726	19729	19729	19722	19730	19734	19729	19747	19760	19733	19757	19751
5.0	18869	18896	18878	18801	18815	18825	18824	18813	18819	18840	18932	18874	18894	18861	18847	18850	18817
7.5	17647	17674	17604	17472	17447	17469	17438	17420	17462	17497	17690	17621	17692	17623	17569	17533	17465
10.0	16112	16118	16048	15905	15887	15862	15807	15841	15881	15939	16157	16077	16162	16068	16048	16004	15917
12.5	14296	14391	14260	14044	13871	13828	13756	13760	13917	14086	14388	14365	14425	14352	14263	14117	13928
15.0	12596	12552	12351	11995	11594	11337	11225	11255	11641	12036	12455	12549	12698	12559	12330	11995	11618
17.5	11032	10909	10482	9879	9311	8805	8597	8784	9234	9864	10563	10840	11055	10853	10473	9917	9338
20.0	8982	8882	8544	7849	7058	6545	6317	6404	6985	7769	8643	8842	9033	8903	8492	7789	7041
22.5	6957	6925	6591	5892	5101	4608	4389	4571	5073	5893	6665	6816	6991	6858	6556	5912	5119
25.0	5577	5482	5212	4492	3761	3211	3143	3203	3718	4517	5255	5497	5604	5483	5205	4540	3743
27.5	4528	4447	4143	3503	2871	2432	2325	2432	2864	3541	4211	4475	4581	4467	4174	3561	2876
30.0	3703	3601	3292	2803	2383	2156	2096	2156	2371	2814	3371	3606	3759	3637	3343	2836	2392
32.5	2992	2924	2657	2352	2173	2113	2113	2112	2174	2363	2714	2923	3036	2934	2675	2376	2194
35.0	2469	2437	2281	2150	2075	2033	2019	2036	2079	2158	2302	2434	2515	2445	2296	2172	2088
37.5	2270	2246	2190	2128	2084	2045	2031	2046	2088	2133	2194	2251	2277	2246	2193	2136	2086
40.0	2192	2179	2148	2120	2094	2066	2054	2067	2093	2121	2147	2176	2189	2176	2143	2117	2088
42.5	2172	2162	2126	2081	2038	2011	2001	2006	2037	2078	2125	2154	2171	2157	2122	2078	2030
45.0	2033	2022	1993	1938	1894	1855	1839	1853	1885	1933	2001	2005	2027	2012	1986	1935	1888
47.5	1894	1886	1862	1820	1777	1744	1727	1742	1776	1817	1862	1879	1891	1883	1859	1819	1776
50.0	1804	1798	1780	1740	1701	1667	1648	1661	1696	1737	1777	1792	1803	1792	1773	1740	1698
52.5	1714	1707	1687	1650	1610	1579	1557	1571	1606	1646	1689	1703	1711	1706	1680	1646	1607
55.0	1613	1609	1574	1536	1501	1464	1451	1468	1495	1528	1582	1598	1612	1599	1572	1533	1503
57.5	1487	1473	1418	1376	1341	1327	1328	1326	1338	1372	1426	1459	1487	1460	1421	1379	1340
60.0	1316	1312	1260	1216	1187	1179	1181	1178	1187	1211	1265	1298	1328	1300	1256	1219	1191
62.5	1147	1148	1126	1072	1060	1038	1016	1034	1056	1072	1128	1145	1146	1142	1120	1079	1060
65.0	964	988	969	929	913	894	855	885	915	923	970	982	972	987	967	924	909
67.5	773	802	789	755	746	729	696	722	750	750	797	801	793	808	794	759	750
70.0	604	625	609	587	581	571	553	574	585	587	619	618	615	622	615	592	587
72.5	465	478	469	455	452	439	427	442	449	453	478	473	471	478	470	455	455
75.0	352	358	363	348	349	348	341	344	349	351	367	358	354	356	360	351	348
77.5	254	266	261	255	254	256	251	255	257	255	264	260	262	263	262	258	257
80.0	181	185	181	177	177	180	177	177	179	176	184	183	187	186	182	177	177
82.5	119	122	120	115	117	118	114	115	118	114	122	121	124	123	120	116	116
85.0	69	68	65	62	64	63	62	65	63	61	69	65	67	67	66	62	65
87.5	20	24	23	22	21	22	22	21	23	21	25	22	25	24	23	22	21
90.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

\*MAXIMUM CANDELA VALUE



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**CANDELA VALUES**

<b>ANGLE</b>	<b>85.0</b>	<b>90.0</b>
0.0	20097	20097
2.5	19741	19749
5.0	18793	18814
7.5	17431	17413
10.0	15863	15861
12.5	13810	13734
15.0	11278	11142
17.5	8761	8588
20.0	6475	6269
22.5	4582	4391
25.0	3214	3113
27.5	2447	2320
30.0	2175	2114
32.5	2133	2135
35.0	2042	2024
37.5	2042	2027
40.0	2059	2050
42.5	2003	1996
45.0	1848	1833
47.5	1740	1725
50.0	1663	1649
52.5	1572	1559
55.0	1468	1454
57.5	1328	1331
60.0	1180	1186
62.5	1042	1021
65.0	893	854
67.5	731	698
70.0	580	560
72.5	444	430
75.0	347	344
77.5	258	251
80.0	180	176
82.5	117	114
85.0	65	63
87.5	22	21
90.0	0	0