

**LUMINAIRE:** LLHP3-40VH-W-EU  
 LLHP Led High Bay, Industrial  
 11" x 24" led with wide distribution optics  
**BALLAST:** (3) LXMG2203  
**BALLAST FACTOR:** 1.00  
**LAMP:** Led  
**LUMENS PER LAMP:** 13352  
**WATTS:** 408  
**MOUNTING:** Pendant  
**SHIELDING ANGLE:** 0° = 90 90° = 90  
**SPACING CRITERION:** 0° = 2.00 90° = 1.98  
**LUMINOUS OPENING IN FEET**  
 LENGTH: 0.75  
 WIDTH: 0.75  
 HEIGHT: 0.00

TEST #15364  
 DATE: 6/19/2012

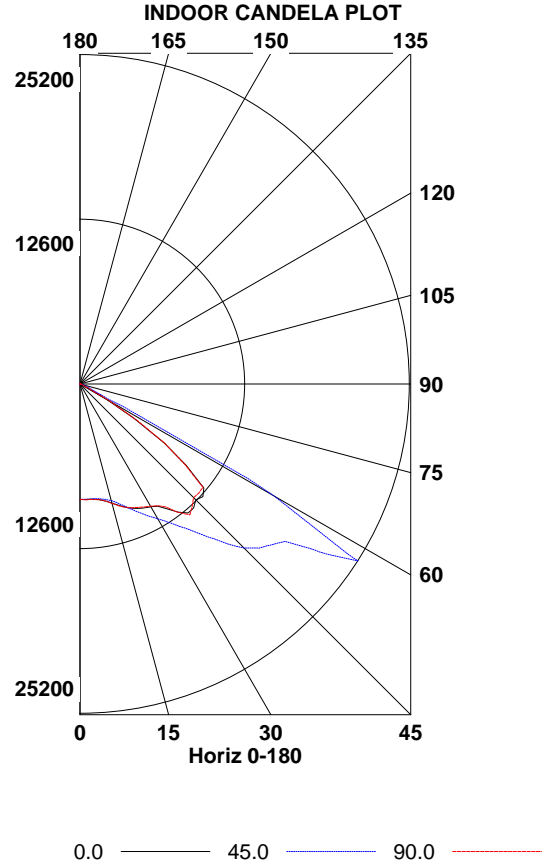
**TOTAL LUMINAIRE EFFICIENCY = 100.0**  
**LUMINAIRE EFFICACY RATING (LER) = 98**  
**ANSI/IESNA RP-1-2004 COMPLIANCE: NONCOMPLIANT**  
**COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = \$2.45**  
**BASED ON 3000 HRS. AND \$.08 PER KWH**

**ZONAL LUMENS**

ZONE	LUMENS	% LAMP	% FIXTURE
0-30	8440	21.1	21.1
0-40	16279	40.6	40.6
0-60	38308	95.6	95.6
0-90	40025	99.9	99.9
90-120	40	0.1	0.1
90-130	40	0.1	0.1
90-150	40	0.1	0.1
90-180	40	0.1	0.1
0-180	40064	100.0	100.0

**AVERAGE LUMINANCE**

ANGLE	CANDELA/SQ M					
	0.0	20.0	40.0	60.0	80.0	90.0
0	168893	168893	168893	168893	168893	168893
30	239368	244141	262503	253686	239699	238440
40	321719	343227	380022	367657	330337	326665
45	339198	388722	473399	448394	339279	332540
50	368316	393502	555958	465754	360457	365994
55	263129	323282	690502	418465	274740	264731
60	91049	128708	591989	300128	112978	100349
65	17931	19968	40887	26896	19968	19153
70	10742	11414	16449	12253	11078	10575
75	11756	10425	18188	12199	10869	12643
80	8926	8596	16200	10249	8265	9257
85	7904	9222	11198	9881	8563	7904



**COEFFICIENTS OF UTILIZATION (%)**

RC	EFFECTIVE FLOOR CAVITY REFLECTANCE = 20%																		
	80%				70%				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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87	
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74	
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	
R	4	84	73	64	58	82	72	64	58	69	62	57	67	61	56	65	60	55	53
C	5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
R	6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
	7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
	8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	35	31	29
	9	55	42	33	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
	10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

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

THIS PHOTOMETRIC TEST WAS PERFORMED USING A SPECIFIC LAMP/BALLAST COMBINATION. EXTRAPOLATION OF THESE DATA FOR OTHER LAMP/BALLAST COMBINATIONS MAY PRODUCE ERRONEOUS RESULTS. THE BALLAST FACTOR MUST BE APPLIED TO THE LUMEN OUTPUT RATING ASSIGNED TO THE LAMP(S) OR TO THE CANDELA VALUES SHOWN.  
 LUMINAIRE EFFICACY RATING (LER) PER NEMA LE5-1993. ANSI/IESNA RP-1 COMPLIANCE IS BASED ON TEST LUMENS AND STANDARD BALLAST FACTOR. THIS TEST RUN IN ACCORDANCE WITH CURRENT IESNA PUBLISHED PROCEDURES.

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

LUMINAIRE: LLHP3-40VH-W-EU  
LLHP Led High Bay, Industrial  
11" x 24" led with wide distribution optics

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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	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826	8826
2.5	8850	8850	8853	8850	8841	8841	8847	8829	8844	8835	8841	8823	8850	8835	8850	8832	8856
5.0	8856	8853	8850	8853	8850	8835	8847	8844	8844	8835	8835	8832	8844	8838	8850	8838	8862
7.5	8889	8889	8892	8886	8874	8856	8862	8859	8853	8856	8859	8841	8865	8865	8874	8871	8886
10.0	8997	9000	9000	8973	8979	8949	8949	8937	8928	8925	8910	8916	8943	8946	8970	8964	8982
12.5	9183	9177	9165	9141	9123	9084	9081	9057	9045	9033	9039	9042	9066	9075	9111	9126	9153
15.0	9426	9414	9411	9381	9351	9300	9285	9261	9243	9240	9243	9261	9285	9309	9345	9369	9411
17.5	9717	9714	9693	9663	9636	9588	9567	9546	9531	9534	9540	9552	9579	9597	9630	9666	9711
20.0	10029	10017	10008	9978	9954	9918	9924	9921	9921	9924	9930	9927	9936	9936	9951	9963	10014
22.5	10284	10281	10266	10251	10257	10263	10302	10338	10371	10392	10377	10341	10299	10263	10239	10224	10254
25.0	10491	10491	10488	10479	10518	10581	10683	10767	10833	10872	10854	10755	10665	10560	10470	10422	10434
27.5	10665	10659	10686	10689	10779	10908	11085	11226	11346	11403	11367	11223	11064	10875	10731	10635	10635
30.0	10833	10833	10878	10893	11049	11250	11487	11712	11880	11934	11877	11694	11481	11226	11034	10881	10848
32.5	11088	11091	11133	11223	11421	11682	11994	12267	12468	12534	12465	12258	11979	11688	11409	11199	11224
35.0	11673	11667	11691	11790	12042	12306	12675	12960	13212	13305	13212	12975	12669	12324	11976	11691	11595
37.5	12351	12336	12375	12531	12879	13215	13569	13845	14091	14181	14094	13860	13542	13206	12849	12546	12447
40.0	12879	12879	12972	13257	13740	14202	14628	14934	15213	15285	15177	14991	14718	14328	13896	13461	13224
42.5	12867	12885	13041	13500	14280	15048	15660	16083	16410	16536	16476	16203	15822	15285	14556	13698	13110
45.0	12534	12519	12648	13281	14364	15402	16320	16974	17493	17745	17619	17187	16569	15630	14328	13155	12537
47.5	12750	12627	12498	12906	13863	15066	16329	17409	18264	18582	18366	17706	16548	15141	13854	12855	12351
50.0	12372	12234	12054	12369	13218	14103	15483	17319	18675	19134	18780	17445	15645	14103	13035	12348	12108
52.5	10239	10233	10341	10782	11388	11988	13893	16617	18930	19785	18981	16626	13965	12141	11367	10815	10308
55.0	7887	7962	8289	9015	9690	9801	12216	16512	20697	22422	20844	16854	12543	10065	9447	8877	8235
57.5	4908	5091	5724	6852	7791	7920	11721	18252	23064	25200*	23007	18213	12351	8394	7893	7269	6186
60.0	2379	2430	2661	3033	3363	4107	7656	11781	15468	17166	15474	12024	7842	4689	3678	3363	2952
62.5	705	720	777	831	867	885	1500	2940	4185	3732	4221	2940	1503	954	885	852	798
65.0	396	396	417	438	441	432	582	801	903	903	891	786	594	450	456	450	441
67.5	261	255	276	279	297	294	351	462	573	618	573	459	369	303	297	276	282
70.0	192	198	204	195	204	201	201	231	294	291	300	237	219	213	207	192	198
72.5	189	183	171	162	174	156	168	177	222	231	216	177	180	162	171	159	168
75.0	159	159	138	126	141	141	162	192	246	255	240	192	165	147	141	120	147
77.5	132	126	123	108	117	120	156	183	222	225	225	183	162	126	117	105	114
80.0	81	69	69	69	78	69	93	117	147	138	144	111	93	75	78	54	75
82.5	51	39	51	39	54	48	57	66	81	75	84	63	54	48	57	33	51
85.0	36	30	33	30	42	36	51	45	51	45	42	36	45	36	42	21	39
87.5	27	27	33	24	42	33	45	33	42	33	39	39	42	27	39	24	36
90.0	24	15	21	12	27	18	21	18	24	15	24	15	18	15	21	9	21
92.5	30	27	24	21	39	30	36	33	36	30	36	21	33	30	33	21	33
95.0	3	3	9	12	15	6	12	9	15	6	9	6	15	9	9	3	9
97.5	24	9	15	12	21	18	18	15	15	12	18	9	24	15	21	9	15
100.0	21	12	18	18	24	18	21	18	21	21	18	18	27	15	21	9	21
102.5	27	9	15	15	27	21	27	21	24	18	24	15	24	18	27	9	18
105.0	12	12	15	9	21	15	21	12	24	9	15	9	21	9	18	9	15
107.5	18	15	18	18	30	15	21	15	27	18	24	15	33	21	27	15	18
110.0	21	9	12	21	24	12	21	15	24	9	24	12	24	9	27	12	15
112.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

\*MAXIMUM CANDELA VALUE

**LUMINAIRE:** LLHP3-40VH-W-EU  
LLHP Led High Bay, Industrial  
11" x 24" led with wide distribution optics

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**CANDELA VALUES**

ANGLE	85.0	90.0
0.0	8826	8826
2.5	8862	8871
5.0	8868	8865
7.5	8892	8907
10.0	8997	9003
12.5	9168	9171
15.0	9423	9456
17.5	9720	9747
20.0	10011	10032
22.5	10245	10254
25.0	10422	10416
27.5	10617	10611
30.0	10803	10791
32.5	11067	11049
35.0	11490	11496
37.5	12387	12393
40.0	13089	13077
42.5	12774	12702
45.0	12279	12288
47.5	12264	12339
50.0	12201	12294
52.5	10128	10098
55.0	7956	7935
57.5	5484	5274
60.0	2691	2622
62.5	729	726
65.0	405	423
67.5	261	264
70.0	186	189
72.5	180	192
75.0	156	171
77.5	114	132
80.0	69	84
82.5	36	42
85.0	18	36
87.5	15	27
90.0	9	21
92.5	15	33
95.0	0	0
97.5	6	12
100.0	6	24
102.5	0	15
105.0	0	21
107.5	6	12
110.0	9	18
112.5	0	0
115.0	0	0
117.5	0	0
120.0	0	0
122.5	0	0
125.0	0	0
127.5	0	0
130.0	0	0
132.5	0	0
135.0	0	0
137.5	0	0
140.0	0	0
142.5	0	0
145.0	0	0
147.5	0	0
150.0	0	0
152.5	0	0
155.0	0	0
157.5	0	0
160.0	0	0
162.5	0	0
165.0	0	0
167.5	0	0
170.0	0	0
172.5	0	0
175.0	0	0
177.5	0	0
180.0	0	0