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ACCREDITED

NVLAP LAB CODE 201042-0

Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002

Prepared For

Techbrite LLC
1000 Kieley Pl
Cincinnati OH 45127
United States

Catalog Number

RB4126SS1B5C0000

Order Number
11621041
Test Number
11621041.10

Test Date

2017-05-22

Prepared By

Dane Hernandez-Adams, Technician

Approved By

Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.
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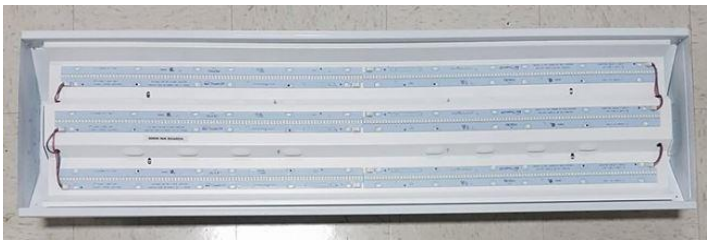
Luminaire Description: Formed white steel housing, no lens enclosureTested in body - Preapproved by DLCTechbrite B-4-14-4-T5-*M-*-*-blank
Lamp: 384 white LEDs
Mounting: Pendant
Ballast/Driver: Two Universal Lighting Technologies Everline D21CC80UNVTW-D drivers

Luminaire



Luminaire Characteristics

Luminous Length:	48.25 in.
Luminous Width:	12.50 in.

Summary of Results

Total Luminaire Output:	17600 Lumens
Luminaire Efficacy:	139.9 lm/w
Maximum Candela:	6065 Candela

Test Conditions

Test Temperature:	24.9	°C
Voltage:	120.0	VAC
Current:	1.050	A
Power:	125.8	W
Power Factor:	0.998	
Frequency:	60	Hz
Current THD:	5.97	%

Laboratory results may not be representative of field performance
Ballast factors have not been applied

Distribution - Goniophotometer

Distribution Test Conditions

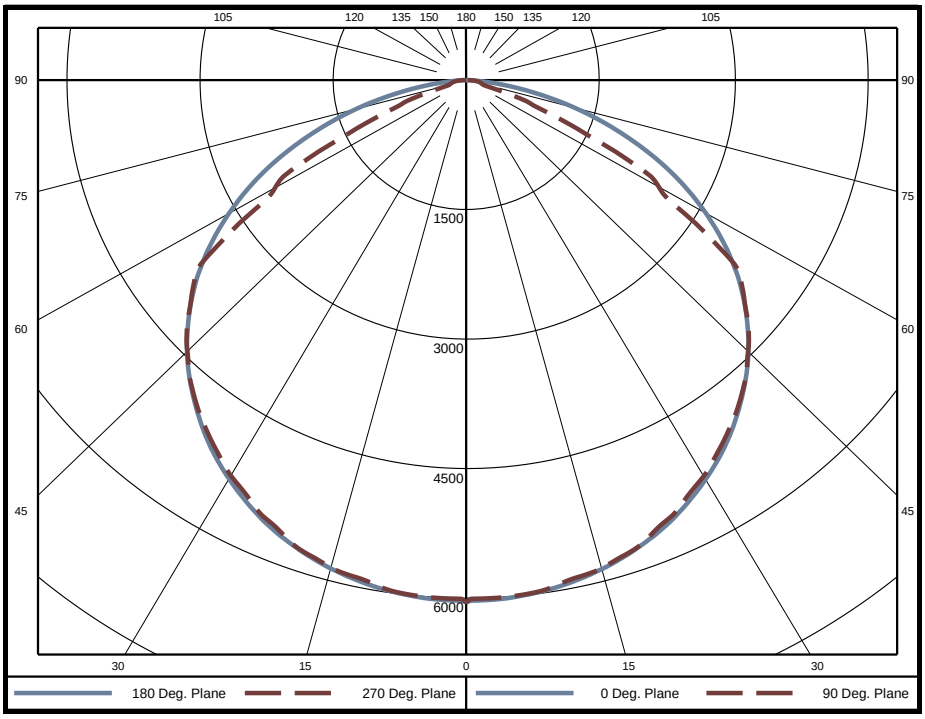
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.0 VAC	1.050 A	125.8 W	0.998	60 Hz	5.97 %

Summary of Results

Spacing Criteria
0-180: 1.31
90-270: 1.31

Total Lumen Output: 17600 Lumens
Luminaire Efficacy: 139.9 lm/w
Maximum Candela: 6065 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	144	0.8%	60-65	1248	7.1%	120-125	0	0.0%
5-10	430	2.4%	65-70	873	5.0%	125-130	0	0.0%
10-15	703	4.0%	70-75	518	2.9%	130-135	0	0.0%
15-20	958	5.4%	75-80	253	1.4%	135-140	0	0.0%
20-25	1185	6.7%	80-85	104	0.6%	140-145	0	0.0%
25-30	1379	7.8%	85-90	33	0.2%	145-150	0	0.0%
30-35	1534	8.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	1645	9.3%	95-100	0	0.0%	155-160	0	0.0%
40-45	1707	9.7%	100-105	0	0.0%	160-165	0	0.0%
45-50	1716	9.8%	105-110	0	0.0%	165-170	0	0.0%
50-55	1667	9.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	1506	8.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	7978	45.3%
0-60	14574	82.8%
0-90	17603	100.0%
90-180	0	0.0%

Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	6048	6048	6048	6048	6048	6048	6048	6048	6048	6048	6048	6048	6048	6048	6048	6048
5	6013	6032	6041	6047	6000	6047	6041	6032	6013	6032	6041	6047	6000	6047	6041	6032
10	5955	5975	5986	5993	5931	5993	5986	5975	5955	5975	5986	5993	5931	5993	5986	5975
15	5860	5883	5892	5892	5849	5892	5892	5883	5860	5883	5892	5892	5849	5892	5892	5883
20	5725	5751	5753	5745	5715	5745	5753	5751	5725	5751	5753	5745	5715	5745	5753	5751
25	5552	5577	5570	5559	5518	5559	5570	5577	5552	5577	5570	5559	5518	5559	5570	5577
30	5333	5361	5344	5331	5291	5331	5344	5361	5333	5361	5344	5331	5291	5331	5344	5361
35	5079	5097	5080	5076	5037	5076	5080	5097	5079	5097	5080	5076	5037	5076	5080	5097
40	4778	4793	4779	4775	4764	4775	4779	4793	4778	4793	4779	4775	4764	4775	4779	4793
45	4440	4449	4434	4436	4436	4436	4434	4449	4440	4449	4434	4436	4436	4436	4434	4449
50	4046	4049	4046	4055	4050	4055	4046	4049	4046	4049	4046	4055	4050	4055	4046	4049
55	3594	3595	3612	3628	3540	3628	3612	3595	3594	3595	3612	3628	3540	3628	3612	3595
60	3077	3084	3128	2592	2475	2592	3128	3084	3077	3084	3128	2592	2475	2592	3128	3084
65	2509	2510	2314	1799	1449	1799	2314	2510	2509	2510	2314	1799	1449	1799	2314	2510
70	1882	1908	1507	764	715	764	1507	1908	1882	1908	1507	764	715	764	1507	1908
75	1265	1220	537	194	189	194	537	1220	1265	1220	537	194	189	194	537	1220
80	672	506	139	155	158	155	139	506	672	506	139	155	158	155	139	506
85	201	73	91	102	104	102	91	73	201	73	91	102	104	102	91	73
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	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
120	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
130	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
140	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
150	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
160	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
170	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
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m^2)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
0	15540	15540	15540
45	16140	16110	16120
55	16100	16180	15860
65	15260	14070	8813
75	12560	5327	1878
85	5915	2688	3075

Utilization of Lumens - Zonal Cavity Method

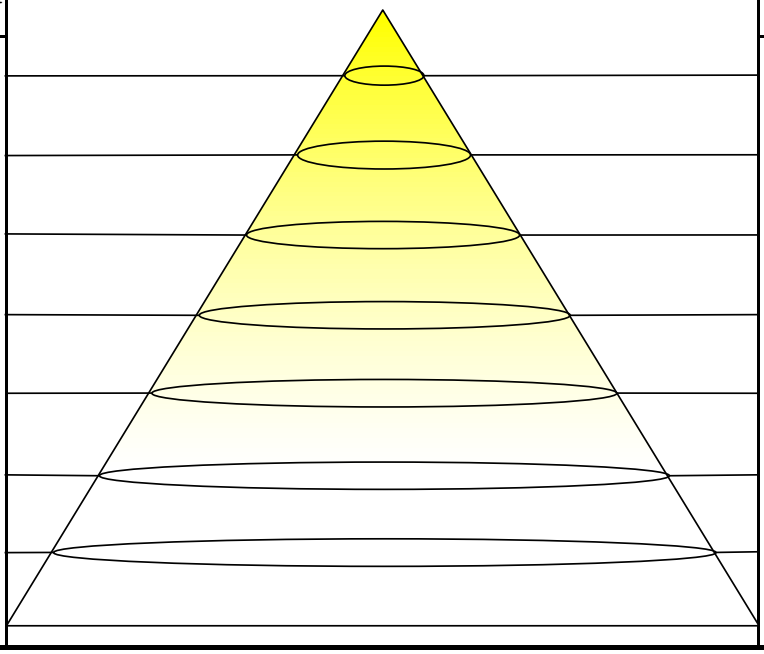
Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	20955	20955	20955	20955	20467	20467	20467	20467	19558	19558	19558	18725	18725	18725	17961	17961	17961	17602
1	19278	18494	17791	17157	18805	18097	17457	16878	17353	16828	16346	16670	16243	15848	16040	15698	15378	15018
2	17577	16185	15034	14066	17120	15855	14797	13899	15235	14345	13576	14663	13921	13268	14134	13521	12974	12602
3	16030	14225	12828	11714	15599	13948	12653	11609	13427	12317	11403	12944	11999	11205	12497	11698	11014	10635
4	14666	12592	11073	9912	14265	12359	10940	9843	11919	10684	9707	11510	10441	9575	11130	10208	9446	9068
5	13471	11231	9666	8511	13102	11034	9563	8464	10661	9365	8370	10314	9174	8279	9990	8992	8190	7818
6	12422	10091	8527	7404	12085	9924	8445	7371	9606	8288	7304	9310	8136	7239	9033	7990	7175	6814
7	11501	9130	7593	6516	11196	8987	7528	6491	8715	7400	6443	8461	7278	6395	8222	7159	6348	5999
8	10692	8315	6820	5793	10416	8192	6766	5774	7958	6662	5738	7739	6562	5702	7532	6465	5666	5330
9	9978	7617	6172	5195	9727	7511	6128	5181	7309	6042	5153	7119	5958	5125	6940	5878	5098	4776
10	9345	7017	5624	4697	9118	6925	5587	4686	6749	5515	4664	6584	5445	4642	6427	5378	4620	4312

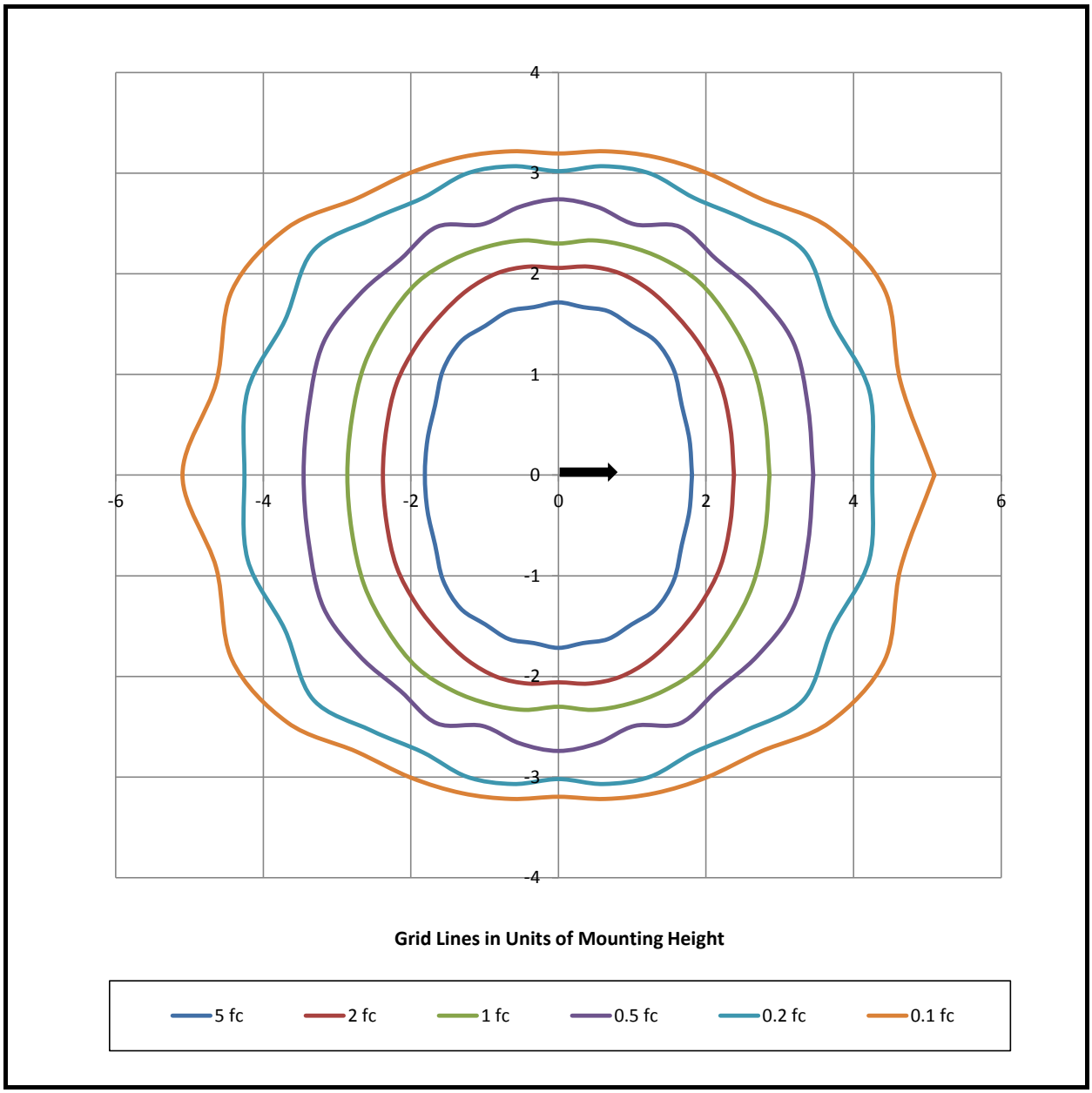
Beam and Field Information

CIE Type:	Direct
Center Beam Intenisty:	6048 Candela
Central Cone Intensity:	6042 Candela
Beam Flux:	14505.5 Lumens
Beam Angle (0-180):	120.9 Degrees
Beam Angle (90-270):	114.1 Degrees
Field Angle (0-180):	161.2 Degrees
Field Angle (90-270):	141.4 Degrees

Cone of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	378	5.25
6.00	168	7.87
8.00	94.5	10.5
10.0	60.5	13.1
12.0	42.0	15.7
14.0	30.9	18.4
16.0	23.6	21.0



ISOFootcandle Plot

Mounting Height - 8 Feet