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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

RB4126SS1B5D0000

Order Number

11621041

Test Number

11621041.07

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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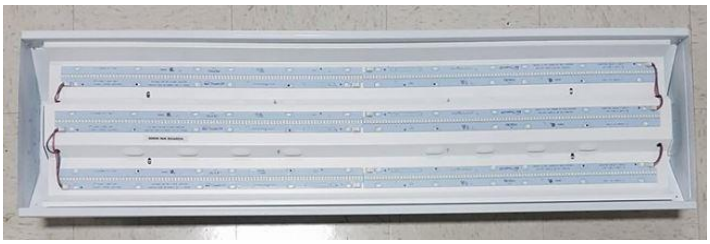
Luminaire Description: Formed white steel housing, no lens enclosureTested in body - Preapproved by DLCTechbrite B-4-14-4-T5-*M-*-*-blank
Lamp: 384 white LEDs
Mounting: Pendant
Ballast/Driver: Two Universal Lighting Technologies Everline D21CC80UNVTW-D drivers

Luminaire



Luminaire Characteristics

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

Summary of Results

Total Luminaire Output:	19780 Lumens
Luminaire Efficacy:	136.4 lm/w
Maximum Candela:	6811 Candela

Test Conditions

Test Temperature:	24.7	°C
Voltage:	120.0	VAC
Current:	1.212	A
Power:	145.0	W
Power Factor:	0.998	
Frequency:	60	Hz
Current THD:	6.38	%

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

Distribution - Goniophotometer

Distribution Test Conditions

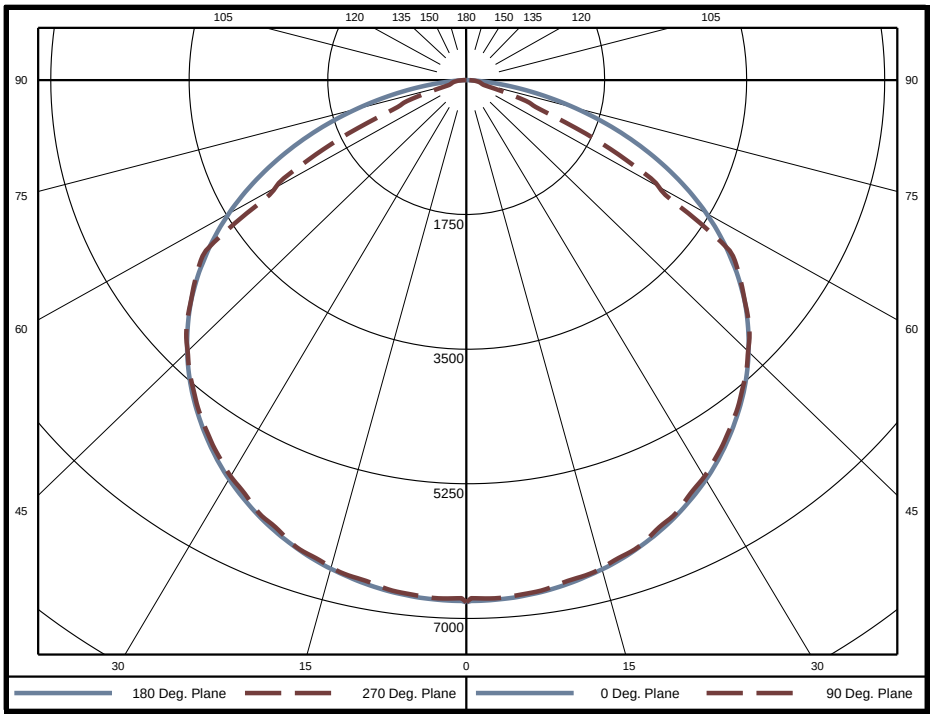
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.0 VAC	1.212 A	145.0 W	0.998	60 Hz	6.38 %

Summary of Results

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

Total Lumen Output: 19780 Lumens
Luminaire Efficacy: 136.4 lm/w
Maximum Candela: 6811 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	162	0.8%	60-65	1400	7.1%	120-125	0	0.0%
5-10	482	2.4%	65-70	976	4.9%	125-130	0	0.0%
10-15	790	4.0%	70-75	582	2.9%	130-135	0	0.0%
15-20	1076	5.4%	75-80	285	1.4%	135-140	0	0.0%
20-25	1331	6.7%	80-85	116	0.6%	140-145	0	0.0%
25-30	1548	7.8%	85-90	35	0.2%	145-150	0	0.0%
30-35	1722	8.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	1846	9.3%	95-100	0	0.0%	155-160	0	0.0%
40-45	1916	9.7%	100-105	0	0.0%	160-165	0	0.0%
45-50	1926	9.7%	105-110	0	0.0%	165-170	0	0.0%
50-55	1870	9.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	1713	8.7%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	8957	45.3%
0-60	16382	82.8%
0-90	19776	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	6790	6790	6790	6790	6790	6790	6790	6790	6790	6790	6790	6790	6790	6790	6790	6790
5	6756	6773	6784	6790	6734	6790	6784	6773	6756	6773	6784	6790	6734	6790	6784	6773
10	6690	6710	6720	6729	6656	6729	6720	6710	6690	6710	6720	6729	6656	6729	6720	6710
15	6582	6604	6614	6615	6564	6615	6614	6604	6582	6604	6614	6615	6564	6615	6614	6604
20	6431	6456	6458	6450	6417	6450	6458	6456	6431	6456	6458	6450	6417	6450	6458	6456
25	6235	6260	6253	6240	6205	6240	6253	6260	6235	6260	6253	6240	6205	6240	6253	6260
30	5992	6019	5999	5985	5948	5985	5999	6019	5992	6019	5999	5985	5948	5985	5999	6019
35	5701	5722	5702	5698	5659	5698	5702	5722	5701	5722	5702	5698	5659	5698	5702	5722
40	5368	5382	5363	5360	5336	5360	5363	5382	5368	5382	5363	5360	5336	5360	5363	5382
45	4985	4992	4978	4978	4975	4978	4978	4992	4985	4992	4978	4978	4975	4978	4978	4992
50	4549	4542	4537	4549	4551	4549	4537	4542	4549	4542	4537	4549	4551	4549	4537	4542
55	4031	4030	4047	4071	4091	4071	4047	4030	4031	4030	4047	4071	4091	4071	4047	4030
60	3458	3455	3506	3048	2772	3048	3506	3455	3458	3455	3506	3048	2772	3048	3506	3455
65	2812	2813	2747	1961	1644	1961	2747	2813	2812	2813	2747	1961	1644	1961	2747	2813
70	2120	2139	1642	836	794	836	1642	2139	2120	2139	1642	836	794	836	1642	2139
75	1416	1389	598	229	210	229	598	1389	1416	1389	598	229	210	229	598	1389
80	759	572	154	170	172	170	154	572	759	572	154	170	172	170	154	572
85	221	86	99	111	113	111	99	86	221	86	99	111	113	111	99	86
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	17450	17450	17450
45	18120	18090	18080
55	18060	18130	18330
65	17100	16710	9996
75	14060	5935	2085
85	6514	2919	3341

Utilization of Lumens - Zonal Cavity Method

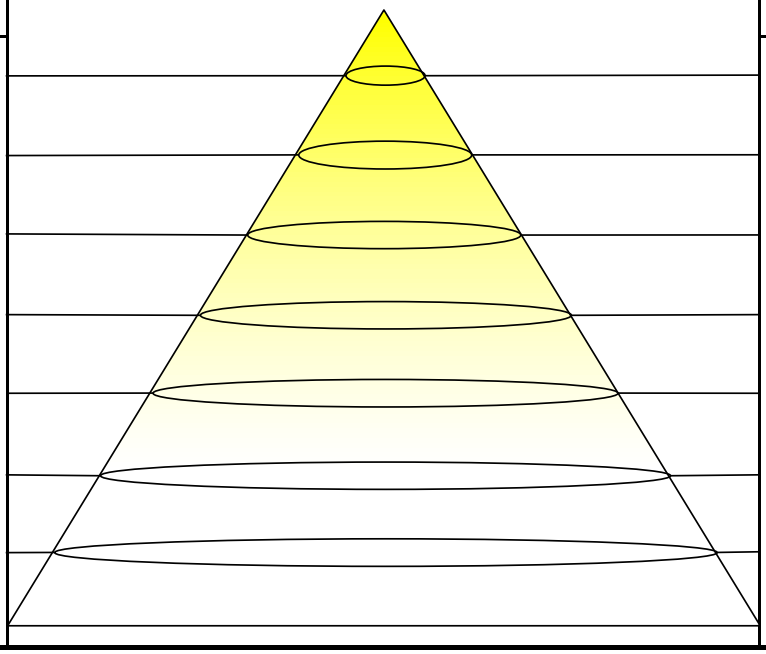
Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	####	23543	23543	23543	22996	22996	22996	22996	21973	21973	21973	21038	21038	21038	20180	20180	20180	####
1	####	20779	19989	19278	21129	20333	19615	18964	19498	18908	18367	18730	18251	17807	18023	17639	17279	####
2	####	18185	16892	15804	19235	17814	16625	15616	17117	16117	15254	16475	15641	14908	15880	15192	14578	####
3	####	15982	14412	13161	17525	15671	14215	13042	15085	13838	12811	14543	13481	12589	14040	13142	12374	####
4	####	14146	12439	11135	16026	13884	12290	11057	13390	12003	10904	12931	11729	10756	12504	11468	10611	####
5	####	12617	10858	9561	14719	12396	10743	9507	11977	10519	9402	11587	10306	9300	11223	10101	9200	8782
6	####	11336	9578	8317	13577	11148	9487	8279	10791	9309	8204	10458	9139	8131	10146	8975	8059	7653
7	####	10256	8529	7318	12577	10095	8455	7291	9790	8312	7236	9504	8174	7182	9235	8041	7129	6737
8	####	9339	7659	6505	11700	9202	7599	6485	8939	7483	6444	8693	7370	6403	8460	7260	6363	5986
9	####	8556	6931	5834	10927	8437	6882	5819	8210	6785	5787	7996	6692	5756	7794	6601	5725	5363
10	####	7881	6316	5274	10242	7778	6275	5262	7581	6194	5237	7395	6116	5213	7218	6040	5188	4842

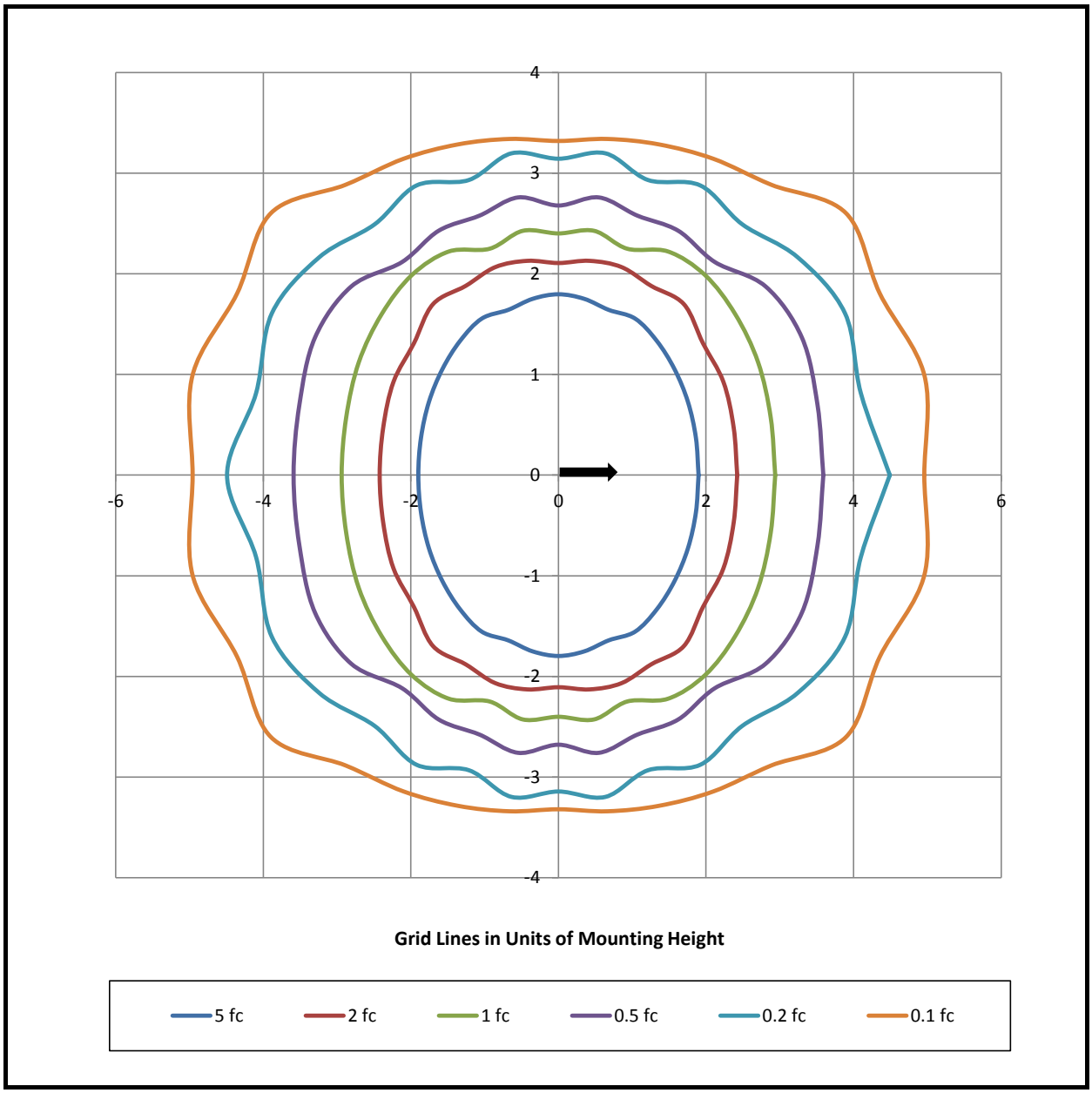
Beam and Field Information

CIE Type:	Direct
Center Beam Intenisty:	6790 Candela
Central Cone Intensity:	6785 Candela
Beam Flux:	16363.7 Lumens
Beam Angle (0-180):	121.1 Degrees
Beam Angle (90-270):	115.3 Degrees
Field Angle (0-180):	161.3 Degrees
Field Angle (90-270):	141.4 Degrees

Cone of Light Tabulation

Mounting Height (Feet)	Footcandles at Nadir	Diameter (Feet)
4.00	424	5.25
6.00	189	7.87
8.00	106	10.5
10.0	67.9	13.1
12.0	47.2	15.7
14.0	34.6	18.4
16.0	26.5	21.0



ISOFootcandle Plot

Mounting Height - 8 Feet