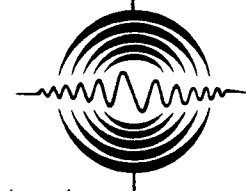


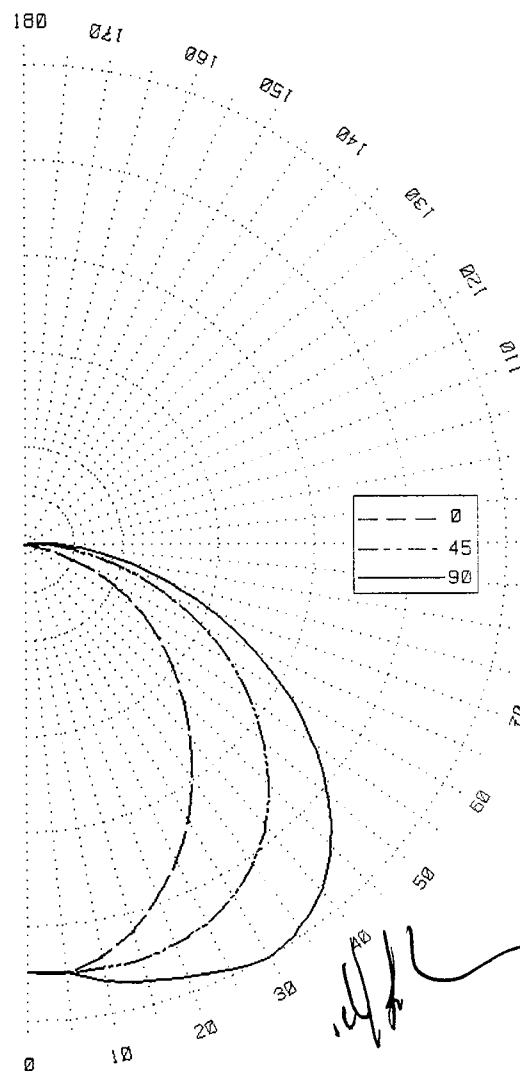
Building Acoustics & Lighting Laboratories, Inc.

1618 HEADLAND DR.
FENTON, MO 63026
(636) - 343-6006
(636) - 343-6051 FAX



BALLABS CERTIFIED TEST REPORT NO.: 20624.0 DATE 10/17/18
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: 4-56 LED ARRAYS 4'SURFACE MNT LUMINAIRE w/WHITE REFL
WHITE FROST INTERIOR LENS w/CLEAR POLYCARB LENS
2 EVERLINE #DI5CC55UNVPW-C @ 950mA
CATALOG NBR: AVX-4-L100/835-CPC-DIM-UNV
LAMP TYPE : HLM2256_5630 REV B 10560222

CANDLEPOWER DISTRIBUTION						
VERT	HORIZONTAL ANGLE					ZONAL
ANG	0	22.5	45	67.5	90	LUMENS
0	2998.	2998.	2998.	2998.	2998.	
5	3006.	2991.	2999.	3021.	3027.	287.0
10	2926.	2944.	3010.	3075.	3104.	
15	2801.	2866.	3012.	3119.	3168.	849.1
20	2629.	2739.	2976.	3161.	3225.	
25	2445.	2590.	2935.	3188.	3292.	1340.2
30	2232.	2407.	2850.	3204.	3342.	
35	2002.	2218.	2728.	3164.	3289.	1689.2
40	1771.	1966.	2575.	3051.	3176.	
45	1546.	1713.	2374.	2884.	2984.	1788.4
50	1318.	1459.	2146.	2652.	2729.	
55	1112.	1212.	1899.	2363.	2436.	1625.7
60	905.	984.	1634.	2078.	2105.	
65	680.	760.	1361.	1693.	1739.	1246.9
70	450.	554.	1060.	1347.	1397.	
75	229.	347.	772.	1005.	1036.	729.0
80	86.	183.	508.	681.	725.	
85	20.	63.	296.	428.	465.	281.1
90	0.	15.	136.	229.	256.	
95	0.	0.	40.	99.	117.	53.9
100	0.	0.	5.	25.	33.	
105	0.	0.	0.	5.	7.	2.1
110	0.	0.	0.	0.	0.	
115	0.	0.	0.	0.	0.	.0
120	0.	0.	0.	0.	0.	
125	0.	0.	0.	0.	0.	.0
130	0.	0.	0.	0.	0.	
135	0.	0.	0.	0.	0.	.0
140	0.	0.	0.	0.	0.	
145	0.	0.	0.	0.	0.	.0
150	0.	0.	0.	0.	0.	
155	0.	0.	0.	0.	0.	.0
160	0.	0.	0.	0.	0.	
165	0.	0.	0.	0.	0.	.0
170	0.	0.	0.	0.	0.	
175	0.	0.	0.	0.	0.	.0
180	0.	0.	0.	0.	0.	



NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	2476.	NA.	25.0	90-120	56.	NA.	.6
0- 40	4165.	NA.	42.1	90-130	56.	NA.	.6
0- 60	7580.	NA.	76.6	90-150	56.	NA.	.6
0- 90	9836.	NA.	99.4	90-180	56.	NA.	.6
TOTAL LUMINAIRE = 0-180					9893.	NA.	100.0

IES SPACING CRITERIA: END= 1.1 DIAGONAL = 1.4 CROSS= 1.6
THIS BALLABS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THIS CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

BALLABS CERTIFIED TEST REPORT NO.: 20624.0 DATE 10/17/18
 PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
 DESCRIPTION: 4-56 LED ARRAYS 4'SURFACE MNT LUMINAIRE w/WHITE REFL
 WHITE FROST INTERIOR LENS w/CLEAR POLYCARB LENS
 2 EVERLINE #DI5CC55UNVPW-C @ 950mA
 CATALOG NBR: AVX-4-L100/835-CPC-DIM-UNV
 LAMP TYPE : HLM2256_5630 REV B 10560222

VERT ANGLE	LUMINANCES-CD/SQ-M HORIZONTAL ANGLE		
	0	45	90
45	10278.	14256.	17918.
55	9112.	13495.	17316.
65	7563.	12311.	15729.
75	4151.	10014.	13442.
85	1053.	7184.	11278.

MAXIMUM BRIGHTNESSES NOT MEASURED

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

EFFECTIVE FLOOR CAVITY REFLECTANCE=.20

CEILING																		
	.80				.70				.50				.30				.10	.00
WALL	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.00
RCR																		
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.99
1	1.09	1.04	1.00	.96	1.06	1.02	.98	.94	.97	.94	.91	.94	.91	.88	.90	.88	.86	.84
2	.99	.91	.84	.79	.97	.89	.83	.78	.86	.80	.76	.82	.78	.74	.79	.76	.72	.70
3	.91	.81	.73	.66	.88	.79	.72	.66	.76	.70	.64	.73	.68	.63	.71	.66	.62	.60
4	.83	.71	.63	.56	.81	.70	.62	.56	.67	.60	.55	.65	.59	.54	.63	.58	.53	.51
5	.76	.63	.54	.47	.74	.62	.53	.47	.59	.52	.46	.57	.51	.46	.56	.50	.45	.43
6	.70	.56	.47	.41	.68	.55	.47	.40	.53	.46	.40	.51	.45	.40	.50	.44	.39	.37
7	.64	.50	.41	.35	.62	.49	.41	.35	.48	.40	.35	.46	.39	.34	.45	.39	.34	.32
8	.59	.45	.36	.30	.57	.44	.36	.30	.43	.35	.30	.41	.35	.30	.40	.34	.29	.27
9	.54	.40	.32	.26	.52	.39	.31	.26	.38	.31	.26	.37	.30	.25	.36	.30	.25	.23
10	.50	.36	.28	.23	.49	.36	.28	.23	.35	.27	.23	.34	.27	.22	.33	.27	.22	.20

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

BALLABS CERTIFIED TEST REPORT NO.: 20624.0 DATE 10/17/18
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: 4-56 LED ARRAYS 4'SURFACE MNT LUMINAIRE w/WHITE REFL
WHITE FROST INTERIOR LENS w/CLEAR POLYCARB LENS
2 EVERLINE #DI5CC55UNVPW-C @ 950mA
CATALOG NBR: AVX-4-L100/835-CPC-DIM-UNV
LAMP TYPE : HLM2256_5630 REV B 10560222

ELECTRICAL CHARACTERISTICS 120.07V .7366A 88.1400W

LUMINOUS EFFICACY (LUMENS / WATTS) = 112.2

TESTED IN ACCORDANCE WITH CURRENT IES STANDARDS
UTILIZING ABSOLUTE PHOTOMETRY PER LM-79-08

