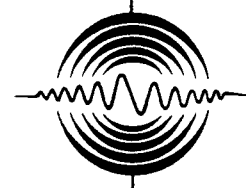


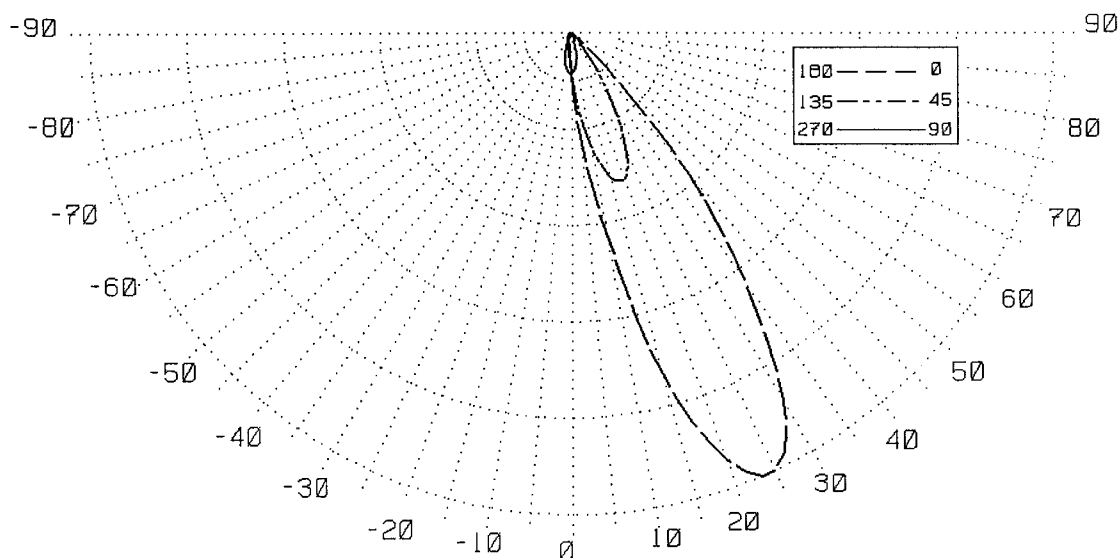
# BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC.

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



BALLABS CERTIFIED TEST REPORT NO.: 20467.0 DATE 05/21/18  
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO  
DESCRIPTION: GEN7 V13 LED 4"SHORT HEATSINK 4"RND ADJ DOWNLIGHT @ 25 TILT  
ACRYLIC MED TIR OPTIC & 4"ASYM TRIM w/SOLITE LENS  
ADVANCE # XI025C070V054DSM1 @ 610mA  
CATALOG NBR: 4AR-L20/835-DIM-A-M-OF-WH (25 DEGREE TILT)  
LAMP TYPE : BXRE-35E2000

0 DEGREE PLANE CONTAINS MAXIMUM CANDLEPOWER



*[Handwritten signature]*

**NVLAP**<sup>®</sup>  
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY							
ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	878.	NA.	61.8	90-120	0.	NA.	.0
0- 40	1276.	NA.	89.7	90-130	0.	NA.	.0
0- 60	1409.	NA.	99.1	90-150	0.	NA.	.0
0- 90	1422.	NA.	100.0	90-180	0.	NA.	.0
TOTAL LUMINAIRE =				0-180	1422.	NA.	100.0

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.

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CANDLEPOWER DISTRIBUTION  
 0 DEGREE PLANE CONTAINS MAXIMUM CANDLEPOWER

VERT	HORIZONTAL									LUMENS		
	.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	FRONT	BACK	TOTAL
0	451.	451.	451.	451.	451.	451.	451.	451.	451.			
5	1163.	988.	806.	620.	434.	301.	229.	185.	164.	38.4	11.6	50.0
10	2258.	1938.	1272.	682.	347.	196.	125.	100.	89.			
15	3925.	3285.	1641.	643.	252.	119.	77.	58.	52.	278.4	12.6	290.9
20	5035.	4089.	1743.	499.	161.	70.	50.	38.	34.			
25	5359.	4237.	1482.	325.	94.	49.	38.	35.	33.	527.9	9.7	537.6
30	4721.	3806.	993.	171.	58.	38.	35.	37.	38.			
35	3382.	2367.	543.	91.	42.	36.	39.	39.	42.	385.9	11.7	397.6
40	2050.	1212.	242.	56.	36.	38.	40.	42.	43.			
45	685.	437.	96.	34.	33.	37.	38.	41.	41.	91.0	15.0	106.0
50	229.	140.	39.	26.	29.	32.	34.	35.	36.			
55	68.	46.	22.	20.	24.	26.	26.	25.	26.	14.8	11.6	26.5
60	27.	20.	17.	15.	17.	17.	17.	17.	16.			
65	17.	15.	13.	11.	11.	10.	10.	9.	7.	6.6	4.8	11.4
70	11.	10.	8.	6.	6.	4.	3.	1.	3.			
75	6.	6.	3.	1.	0.	0.	0.	0.	1.	1.9	.0	1.9
80	3.	2.	0.	0.	0.	0.	0.	0.	0.			
85	0.	0.	0.	0.	0.	0.	0.	0.	0.	.0	.0	.0
90	0.	0.	0.	0.	0.	0.	0.	0.	0.			

USE .333 FT. AS LENGTH AND .333 FT. AS WIDTH

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 LAMP TYPE : BXRE-35E2000

# 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	.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	1.02	1.02	1.00	
1	1.13	1.11	1.08	1.06	1.11	1.08	1.06	1.04	1.04	1.03	1.01	1.01	.99	.98	.97	.96	.95	.95	.95	.93	
2	1.08	1.03	.98	.95	1.05	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.88	.86	.86	
3	1.02	.95	.90	.86	1.00	.94	.89	.85	.91	.87	.84	.89	.86	.83	.87	.84	.81	.81	.80	.80	
4	.96	.88	.83	.78	.94	.87	.82	.78	.85	.80	.77	.83	.79	.76	.81	.78	.75	.75	.73	.73	
5	.91	.82	.76	.71	.89	.81	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.69	.67	.67	
6	.86	.76	.70	.66	.84	.76	.70	.65	.74	.69	.65	.73	.68	.64	.71	.67	.64	.64	.63	.63	
7	.81	.71	.65	.60	.79	.70	.64	.60	.69	.64	.60	.68	.63	.59	.67	.62	.59	.59	.58	.58	
8	.76	.65	.59	.55	.74	.65	.59	.55	.64	.58	.54	.63	.58	.54	.62	.57	.54	.54	.52	.52	
9	.71	.60	.54	.49	.69	.60	.53	.49	.58	.53	.49	.58	.52	.49	.57	.52	.49	.49	.47	.47	
10	.66	.55	.49	.45	.65	.55	.49	.44	.54	.48	.44	.53	.48	.44	.52	.47	.44	.44	.43	.43	

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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LAMP TYPE : BXRE-35E2000

\*\*\*\*\*

ELECTRICAL CHARACTERISTICS 120.00V .2027A 24.0970W

LUMINOUS EFFICACY (LUMENS / WATTS) = 59.0

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

