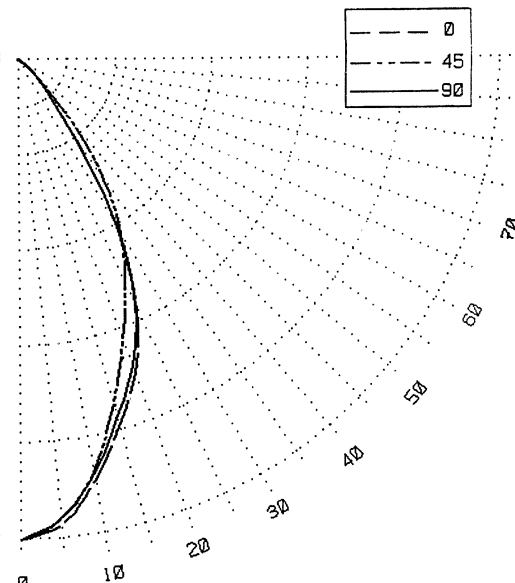


BALLABS CERTIFIED TEST REPORT NO.: 20328.0 DATE 04/13/18  
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO  
DESCRIPTION: GEN7 V18 LED 4" TALL HEATSINK 4" SQ CAST HOUSING DOWNLIGHT  
WHITE MIXING CHAMBER & 4" SEMI-SPEC TRIM w/FROST FILM  
ADVANCE # XI036C100V054SDM5 @ 915mA  
CATALOG NBR: 4DS-L30/835-DIM-UNV-O-W-OF-CS  
LAMP TYPE : BXRE-35E4000

## CANDLEPOWER DISTRIBUTION

VERT ANG	0	22.5	45	67.5	90	ZONAL LUMENS
0	3604.	3604.	3604.	3604.	3604.	332.1
5	3508.	3495.	3475.	3459.	3466.	784.4
10	3216.	3180.	3156.	3128.	3171.	901.5
15	2863.	2790.	2698.	2748.	2803.	582.8
20	2524.	2401.	2253.	2339.	2460.	187.3
25	2071.	1952.	1872.	1907.	2047.	43.7
30	1452.	1479.	1516.	1457.	1468.	.5
35	799.	894.	1114.	919.	768.	.0
40	390.	456.	666.	475.	390.	.0
45	231.	225.	284.	233.	222.	.0
50	130.	122.	120.	123.	121.	.0
55	47.	52.	54.	47.	38.	.0
60	3.	5.	16.	6.	2.	.0
65	0.	0.	2.	0.	0.	.0
70	0.	0.	0.	0.	0.	.0
75	0.	0.	0.	0.	0.	.0
80	0.	0.	0.	0.	0.	.0
85	0.	0.	0.	0.	0.	.0
90	0.	0.	0.	0.	0.	.0



*[Handwritten signature]*

**NVLAP**<sup>®</sup>  
TESTING

NVLAP LAB CODE 200921-0

## LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	2018.	NA.	71.2	90-120	0.	NA.	.0
0- 40	2601.	NA.	91.8	90-130	0.	NA.	.0
0- 60	2832.	NA.	100.0	90-150	0.	NA.	.0
0- 90	2832.	NA.	100.0	90-180	0.	NA.	.0

TOTAL LUMINAIRE = 0-180

2832. NA. 100.0

IES SPACING CRITERIA: END= .8 DIAGONAL = .8 CROSS= .8

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.: 20328.0 DATE 04/13/18  
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 WHITE MIXING CHAMBER & 4"SEMI-SPEC TRIM w/FROST FILM  
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 LAMP TYPE : BXRE-35E4000

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LUMINANCES-CD/SQ-M  
 HORIZONTAL ANGLE

VERT ANGLE	0	45	90
45	31393.	38572.	30126.
55	7810.	9024.	6421.
65	0.	471.	0.
75	0.	0.	0.
85	0.	0.	0.

\*\*MAXIMUM BRIGHTNESSES NOT MEASURED\*\*

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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	1.00	
1	1.14	1.12	1.09	1.07	1.12	1.09	1.07	1.05	1.05	1.04	1.02	1.02	1.00	.99	.98	.97	.96	.95	
2	1.09	1.04	1.00	.97	1.07	1.03	.99	.96	.99	.97	.94	.96	.94	.92	.94	.92	.90	.89	
3	1.04	.98	.93	.89	1.02	.96	.92	.89	.94	.90	.87	.91	.89	.86	.89	.87	.85	.83	
4	.99	.92	.86	.82	.97	.90	.86	.82	.88	.84	.81	.86	.83	.80	.85	.82	.79	.78	
5	.94	.86	.80	.76	.92	.85	.80	.76	.83	.79	.75	.82	.78	.75	.80	.77	.74	.72	
6	.89	.81	.75	.71	.88	.80	.75	.71	.79	.74	.71	.77	.73	.70	.76	.73	.70	.68	
7	.85	.76	.71	.67	.84	.76	.70	.66	.74	.70	.66	.73	.69	.66	.72	.68	.65	.64	
8	.81	.71	.66	.62	.79	.71	.65	.62	.70	.65	.61	.69	.64	.61	.68	.64	.61	.59	
9	.76	.67	.61	.57	.75	.66	.61	.57	.65	.60	.57	.64	.60	.56	.63	.59	.56	.55	
10	.72	.62	.57	.53	.71	.62	.56	.53	.61	.56	.52	.60	.56	.52	.59	.55	.52	.51	

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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LAMP TYPE : BRXE-35E4000

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ELECTRICAL CHARACTERISTICS 120.02V .2973A 35.4950W

LUMINOUS EFFICACY (LUMENS / WATTS) = 79.8

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

