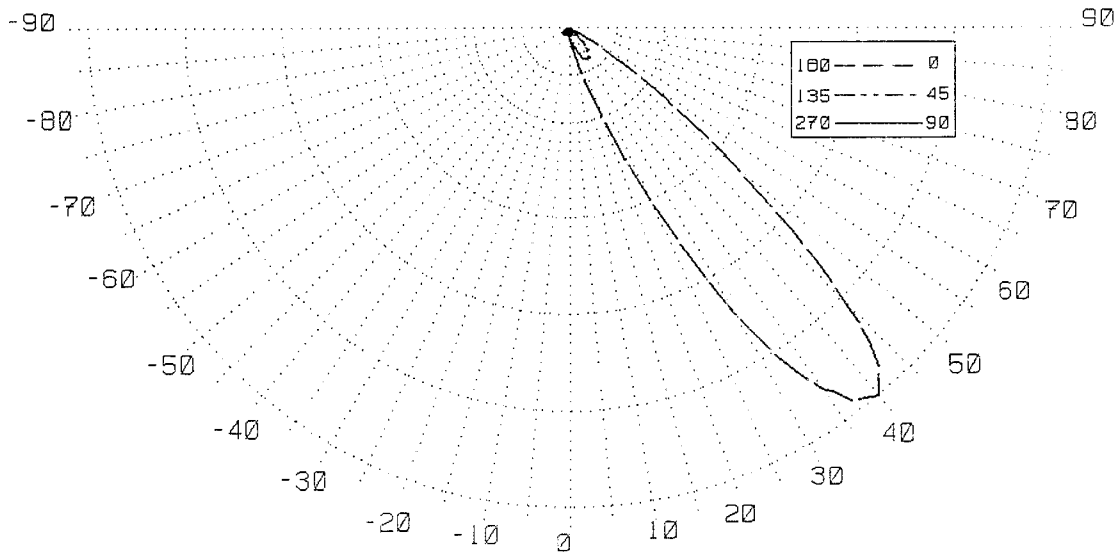


BALLABS CERTIFIED TEST REPORT NO.: 20468.0 DATE 05/29/18
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: GEN7 V13 LED 4"SHORT HEATSINK 4"RND ADJ DOWNLIGHT @ 45 TILT
ACRYLIC MED TIR OPTIC & 4"ASYM TRIM w/ANGLED SOLITE LENS
ADVANCE # XI025C070V054DSM1 @ 610mA
CATALOG NBR: 4AR-L20/835-DIM-UNV-A-M-OF-WH (45 DEGREE TILT)
LAMP TYPE : BXRE-35E2000

0 DEGREE PLANE CONTAINS MAXIMUM CANDLEPOWER



[Handwritten signature]

NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY							
ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	215.	NA.	17.5	90-120	0.	NA.	.0
0- 40	643.	NA.	52.3	90-130	0.	NA.	.0
0- 60	1197.	NA.	97.3	90-150	0.	NA.	.0
0- 90	1230.	NA.	100.0	90-180	0.	NA.	.0
TOTAL LUMINAIRE =				0-180	1230.	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	78.	78.	78.	78.	78.	78.	78.	78.	78.			
5	139.	132.	117.	98.	82.	69.	60.	57.	56.	5.5	3.0	8.5
10	236.	207.	158.	109.	78.	60.	53.	50.	48.			
15	446.	373.	210.	113.	71.	54.	50.	46.	46.	34.5	7.1	41.6
20	945.	690.	271.	110.	63.	52.	50.	50.	50.			
25	1880.	1209.	338.	103.	57.	52.	54.	58.	60.	151.8	12.8	164.6
30	3319.	1844.	372.	87.	53.	53.	62.	71.	74.			
35	4427.	2520.	358.	71.	50.	57.	69.	77.	81.	406.9	21.1	428.0
40	4824.	2615.	282.	57.	49.	59.	73.	79.	83.			
45	3948.	2036.	180.	47.	47.	60.	71.	78.	80.	403.2	26.8	430.0
50	2191.	1119.	94.	36.	43.	53.	62.	69.	71.			
55	951.	425.	49.	28.	36.	46.	53.	55.	55.	101.7	22.6	124.3
60	295.	137.	26.	23.	27.	31.	40.	40.	38.			
65	86.	45.	18.	17.	19.	21.	25.	23.	23.	15.2	10.8	26.1
70	25.	17.	11.	10.	10.	12.	14.	16.	17.			
75	9.	7.	5.	5.	4.	4.	7.	9.	10.	3.3	3.6	6.9
80	4.	3.	2.	0.	0.	0.	3.	3.	5.			
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	.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	1.12	1.08	1.05	1.02	1.09	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.91	.89
2	1.04	.98	.92	.88	1.02	.96	.91	.87	.93	.89	.85	.89	.86	.83	.87	.84	.81	.80
3	.96	.88	.81	.76	.94	.86	.80	.75	.83	.78	.74	.81	.76	.73	.78	.75	.71	.70
4	.89	.79	.71	.65	.87	.77	.70	.65	.75	.69	.64	.73	.67	.63	.71	.66	.62	.61
5	.81	.70	.62	.56	.79	.69	.61	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6	.74	.62	.54	.48	.73	.61	.54	.48	.60	.53	.47	.58	.52	.47	.56	.51	.47	.45
7	.68	.55	.46	.40	.66	.54	.46	.40	.52	.45	.40	.51	.44	.40	.50	.44	.39	.37
8	.61	.47	.39	.33	.59	.47	.39	.33	.45	.38	.33	.44	.38	.33	.43	.37	.33	.31
9	.55	.41	.33	.27	.53	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.26	.25
10	.50	.36	.28	.22	.48	.36	.28	.22	.34	.27	.22	.33	.27	.22	.33	.26	.22	.20

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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 LAMP TYPE : BXRE-35E2000

ELECTRICAL CHARACTERISTICS 119.98V .2029A 24.1230W

LUMINOUS EFFICACY (LUMENS / WATTS) = 51.0

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

