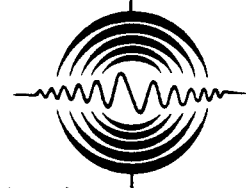


BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC.

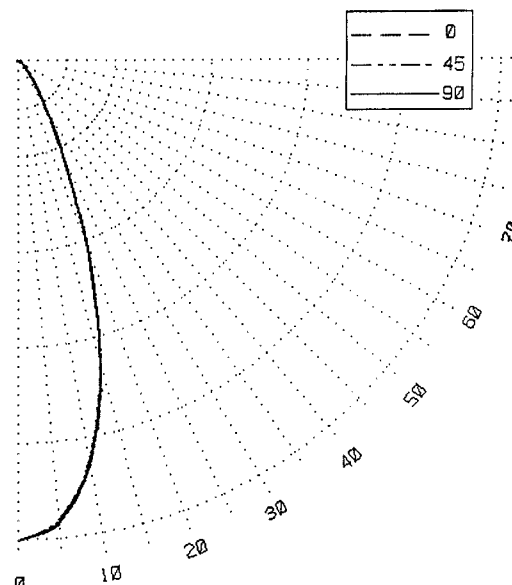
1618 HEADLAND DR.
FENTON, MO 63026
(636) - 343-6006
(636) - 343-6051 FAX



BALLABS CERTIFIED TEST REPORT NO.: 20341.0 DATE 04/24/18
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: GEN7 V18 LED 4" TALL HEATSINK 4" SQ FORMED HOUSING DOWNLIGHT
ACRYLIC MED TIR OPTIC & 4" CAST SHALLOW WHITE FLUSH TRIM
w/SOLITE LENS ADVANCE #XI050C140V054DSM5 @ 1125mA
CATALOG NBR: 4PS-L40/835-DIM-UNV-L-M-OF-WH
LAMP TYPE : BXRE-35E4000

CANDLEPOWER DISTRIBUTION

VERT ANG	0	22.5	45	67.5	90	ZONAL LUMENS
0	9143.	9143.	9143.	9143.	9143.	
5	8842.	8815.	8817.	8822.	8847.	842.4
10	7837.	7810.	7789.	7805.	7827.	
15	6053.	5974.	6054.	6121.	6011.	1713.6
20	3843.	3812.	3894.	3773.	3816.	
25	2094.	2052.	2085.	2128.	2088.	967.0
30	1133.	1074.	1093.	1125.	1131.	
35	611.	591.	616.	632.	649.	387.8
40	358.	359.	369.	365.	373.	
45	226.	227.	244.	238.	238.	182.1
50	148.	152.	165.	159.	155.	
55	100.	101.	111.	103.	103.	93.3
60	71.	72.	75.	74.	73.	
65	48.	48.	52.	50.	52.	49.7
70	34.	34.	35.	35.	38.	
75	21.	19.	21.	21.	24.	22.4
80	11.	10.	11.	11.	13.	
85	1.	1.	3.	2.	2.	2.2
90	0.	0.	0.	0.	0.	



[Handwritten signature]

NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	3523.	NA.	82.7	90-120	0.	NA.	.0
0- 40	3911.	NA.	91.8	90-130	0.	NA.	.0
0- 60	4186.	NA.	98.3	90-150	0.	NA.	.0
0- 90	4261.	NA.	100.0	90-180	0.	NA.	.0
TOTAL LUMINAIRE = 0-180					4261.	NA.	100.0

IES SPACING CRITERIA: END= .6 DIAGONAL = .6 CROSS= .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.

SIGNIFICANCE OF THE TEST IS LIMITED TO THE DEGREE THAT THE TESTED SAMPLE IS REPRESENTATIVE. OTHER FACTORS AFFECT FIELD PERFORMANCE.

BALLABS CERTIFIED TEST REPORT NO.: 20341.0 DATE 04/24/18
 PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
 DESCRIPTION: GEN7 V18 LED 4"TALL HEATSINK 4"SQ FORMED HOUSING DOWNLIGHT
 ACRYLIC MED TIR OPTIC & 4"CAST SHALLOW WHITE FLUSH TRIM
 w/SOLITE LENS ADVANCE #XI050C140V054DSM5 @ 1125mA
 CATALOG NBR: 4PS-L40/835-DIM-UNV-L-M-OF-WH
 LAMP TYPE : BXRE-35E4000

LUMINANCES-CD/SQ-M

HORIZONTAL ANGLE

VERT ANGLE	0	45	90
45	30658.	33140.	32410.
55	16738.	18538.	17278.
65	10992.	11725.	11725.
75	7977.	7977.	8775.
85	1184.	3553.	2369.

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	1.00			
1	1.15	1.12	1.10	1.08	1.12	1.10	1.08	1.06	1.06	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96			
2	1.09	1.05	1.02	.99	1.07	1.04	1.00	.98	1.00	.98	.95	.97	.95	.93	.95	.93	.92	.90			
3	1.05	1.00	.95	.92	1.03	.98	.94	.91	.96	.92	.90	.93	.91	.88	.91	.89	.87	.86			
4	1.01	.94	.89	.86	.99	.93	.89	.85	.91	.87	.84	.89	.86	.83	.87	.85	.82	.81			
5	.96	.89	.84	.80	.95	.88	.84	.80	.87	.82	.79	.85	.81	.79	.83	.80	.78	.77			
6	.93	.85	.80	.77	.91	.84	.80	.76	.83	.79	.76	.82	.78	.75	.80	.77	.75	.74			
7	.89	.81	.76	.73	.88	.81	.76	.73	.80	.75	.72	.78	.75	.72	.77	.74	.71	.70			
8	.86	.77	.72	.69	.84	.77	.72	.69	.76	.72	.68	.75	.71	.68	.74	.70	.68	.67			
9	.82	.74	.69	.65	.81	.73	.68	.65	.72	.68	.65	.71	.67	.65	.71	.67	.64	.63			
10	.78	.70	.65	.61	.77	.69	.65	.61	.69	.64	.61	.68	.64	.61	.67	.64	.61	.60			

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

BALLABS CERTIFIED TEST REPORT NO.: 20341.0 DATE 04/24/18
 PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
 DESCRIPTION: GEN7 V18 LED 4"TALL HEATSINK 4"SQ FORMED HOUSING DOWNLIGHT
 ACRYLIC MED TIR OPTIC & 4"CAST SHALLOW WHITE FLUSH TRIM
 w/SOLITE LENS ADVANCE #XI050C140V054DSM5 @ 1125mA
 CATALOG NBR: 4PS-L40/835-DIM-UNV-L-M-OF-WH
 LAMP TYPE : BXRE-35E4000

ELECTRICAL CHARACTERISTICS 119.96V .3739A 44.6960W

LUMINOUS EFFICACY (LUMENS / WATTS) = 95.3

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

