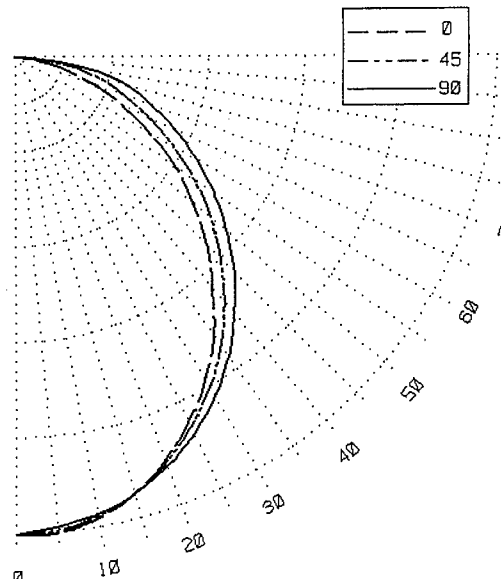


BALLABS CERTIFIED TEST REPORT NO.: 20934.0 DATE 08/19/19
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: 1-56LED 22"ARRAY 2X2'RETROFIT KIT w/WHITE REFL & RIBBED
FROST CENTER LENS-LITHONIA 2GT82U316A12MVOLT TEST HOUSING
ADVANCE #XI020C056V054BST2 @ 320mA
CATALOG NBR: PTR-22-L26/835-RA-(19)-DIM-PH-UNV
LAMP TYPE : 10560222 HLM2256_5630 REV B

CANDLEPOWER DISTRIBUTION

VERT ANG	0	22.5	45	67.5	90	ZONAL LUMENS
0	743.	743.	743.	743.	743.	
5	743.	739.	739.	737.	734.	70.5
10	729.	729.	726.	725.	723.	
15	705.	701.	704.	705.	704.	199.5
20	670.	669.	674.	680.	680.	
25	630.	634.	638.	650.	650.	296.4
30	584.	587.	598.	609.	614.	
35	532.	536.	552.	567.	572.	346.6
40	473.	484.	502.	519.	525.	
45	419.	426.	447.	469.	479.	346.7
50	356.	364.	393.	416.	425.	
55	303.	310.	338.	364.	375.	303.0
60	237.	253.	281.	313.	322.	
65	183.	198.	228.	259.	274.	226.7
70	132.	148.	179.	212.	224.	
75	84.	99.	137.	169.	183.	142.5
80	41.	59.	91.	118.	125.	
85	11.	21.	33.	35.	35.	30.6
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	566.	NA.	28.9	90-120	0.	NA.	.0
0- 40	913.	NA.	46.5	90-130	0.	NA.	.0
0- 60	1563.	NA.	79.6	90-150	0.	NA.	.0
0- 90	1962.	NA.	100.0	90-180	0.	NA.	.0
TOTAL LUMINAIRE = 0-180					1962.	NA.	100.0

IES SPACING CRITERIA: END= 1.2 DIAGONAL = 1.2 CROSS= 1.2

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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VERT ANGLE	LUMINANCES-CD/SQ-M HORIZONTAL ANGLE		
	0	45	90
45	1920.	2052.	2197.
55	1713.	1910.	2119.
65	1406.	1752.	2105.
75	1052.	1719.	2296.
85	419.	1219.	1295.

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	1.10	1.05	1.01	.98	1.07	1.03	.99	.96	.99	.96	.93	.95	.93	.90	.91	.90	.88	.86
2	1.01	.93	.86	.81	.98	.91	.85	.80	.87	.83	.78	.84	.80	.76	.81	.78	.75	.73
3	.92	.82	.75	.69	.90	.81	.74	.68	.78	.72	.67	.75	.70	.66	.73	.68	.65	.62
4	.85	.73	.65	.59	.83	.72	.64	.58	.70	.63	.57	.67	.61	.57	.65	.60	.56	.54
5	.77	.65	.56	.50	.75	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.52	.48	.46
6	.71	.58	.50	.43	.69	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.47	.42	.40
7	.66	.53	.44	.38	.64	.52	.44	.38	.50	.43	.37	.49	.42	.37	.47	.41	.37	.35
8	.61	.47	.39	.33	.59	.46	.38	.33	.45	.38	.33	.44	.37	.32	.43	.37	.32	.30
9	.56	.42	.34	.29	.54	.42	.34	.28	.41	.33	.28	.39	.33	.28	.38	.32	.28	.26
10	.52	.39	.31	.25	.51	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.25	.23

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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ELECTRICAL CHARACTERISTICS 120.03V .1368A 15.9710W

LUMINOUS EFFICACY (LUMENS / WATTS) = 122.8

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

