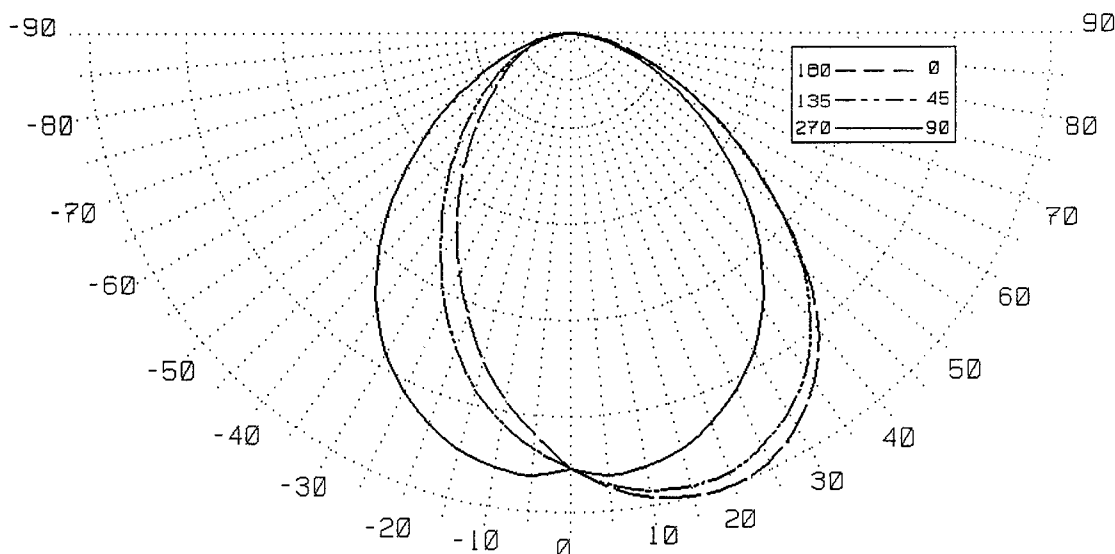


BALLABS CERTIFIED TEST REPORT NO.: 20261.0 DATE 02/15/18
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: 2-56 LED 22"ARRAYS 1x4'RECESSED LUMINAIRE
WHITE ASYM REFL w/FROSTED PAT12 ACRYLIC LENS
ADVANCE #XI095C275V054BSS1 @ 1850mA
CATALOG NBR: MDSG-14-L100/840-SYM/ASY
LAMP TYPE : HLM 2256_5630 REV A 10560223

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	3214.	NA.	32.6	90-120	0.	NA.	.0
0- 40	5148.	NA.	52.3	90-130	0.	NA.	.0
0- 60	8348.	NA.	84.8	90-150	0.	NA.	.0
0- 90	9844.	NA.	100.0	90-180	0.	NA.	.0
TOTAL LUMINAIRE =				0-180	9844.	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.

BALLABS CERTIFIED TEST REPORT NO.: 20261.0 DATE 02/15/18
 PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
 DESCRIPTION: 2-56 LED 22"ARRAYS 1x4'RECESSED LUMINAIRE
 WHITE ASYM REFL w/FROSTED PAT12 ACRYLIC LENS
 ADVANCE #XI095C275V054BSS1 @ 1850mA
 CATALOG NBR: MDSG-14-L100/840-SYM/ASY
 LAMP TYPE : HLM 2256_5630 REV A 10560223

CANDLEPOWER DISTRIBUTION
 0 DEGREE PLANE CONTAINS MAXIMUM CANDLEPOWER

VERT	HORIZONTAL									LUMENS		TOTAL
	.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	FRONT	BACK	
0	4146.	4146.	4146.	4146.	4146.	4146.	4146.	4146.	4146.			
5	4333.	4341.	4315.	4291.	4226.	4084.	3977.	3894.	3838.	206.0	190.4	396.3
10	4483.	4477.	4420.	4329.	4188.	3954.	3771.	3640.	3553.			
15	4556.	4552.	4464.	4321.	4105.	3799.	3516.	3357.	3231.	628.7	507.1	1135.8
20	4577.	4554.	4449.	4248.	3956.	3566.	3189.	3012.	2852.			
25	4507.	4453.	4348.	4109.	3756.	3303.	2846.	2668.	2510.	990.7	690.9	1681.7
30	4337.	4287.	4180.	3928.	3521.	2982.	2468.	2288.	2159.			
35	4067.	4048.	3939.	3678.	3220.	2634.	2129.	1958.	1837.	1213.3	721.2	1934.6
40	3700.	3687.	3587.	3302.	2866.	2283.	1816.	1648.	1536.			
45	3191.	3219.	3145.	2850.	2473.	1914.	1512.	1338.	1264.	1174.9	629.5	1804.4
50	2639.	2692.	2622.	2394.	2058.	1570.	1235.	1066.	1020.			
55	2103.	2142.	2083.	1944.	1658.	1275.	1006.	858.	828.	916.5	478.3	1394.8
60	1607.	1662.	1588.	1524.	1293.	1010.	802.	694.	678.			
65	1175.	1282.	1160.	1141.	966.	753.	625.	555.	542.	601.5	324.5	925.9
70	836.	930.	803.	812.	687.	546.	463.	427.	422.			
75	573.	609.	515.	535.	455.	376.	327.	297.	310.	302.5	178.1	480.7
80	333.	346.	286.	308.	253.	217.	191.	161.	186.			
85	107.	121.	91.	108.	81.	66.	55.	32.	49.	62.7	26.9	89.6
90	0.	0.	2.	0.	0.	0.	0.	0.	0.			

USE .682 FT. AS LENGTH AND 3.682 FT. AS WIDTH

BALLABS CERTIFIED TEST REPORT NO.: 20261.0 DATE 02/15/18
 PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
 DESCRIPTION: 2-56 LED 22"ARRAYS 1x4'RECESSED LUMINAIRE
 WHITE ASYM REFL w/FROSTED PAT12 ACRYLIC LENS
 ADVANCE #XI095C275V054BSS1 @ 1850mA
 CATALOG NBR: MDSG-14-L100/840-SYM/ASY
 LAMP TYPE : HLM 2256_5630 REV A 10560223

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	1.11	1.07	1.03	1.00	1.08	1.04	1.01	.98	1.00	.97	.95	.96	.94	.92	.93	.91	.89	.87			
2	1.02	.95	.89	.84	1.00	.93	.88	.83	.90	.85	.81	.87	.83	.80	.84	.81	.78	.76			
3	.94	.85	.78	.72	.92	.84	.77	.72	.81	.75	.70	.78	.73	.69	.76	.72	.68	.66			
4	.87	.76	.68	.62	.85	.75	.68	.62	.73	.66	.61	.70	.65	.60	.68	.64	.60	.58			
5	.80	.68	.60	.54	.78	.67	.59	.54	.65	.58	.53	.63	.57	.52	.61	.56	.52	.50			
6	.74	.61	.53	.47	.72	.61	.53	.47	.59	.52	.47	.57	.51	.46	.56	.50	.46	.44			
7	.68	.56	.47	.41	.67	.55	.47	.41	.53	.46	.41	.52	.45	.41	.50	.45	.40	.39			
8	.63	.50	.42	.36	.61	.49	.42	.36	.48	.41	.36	.47	.40	.36	.46	.40	.35	.34			
9	.58	.45	.37	.32	.57	.44	.37	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29			
10	.54	.41	.33	.28	.53	.40	.33	.28	.39	.33	.28	.38	.32	.28	.38	.32	.28	.26			

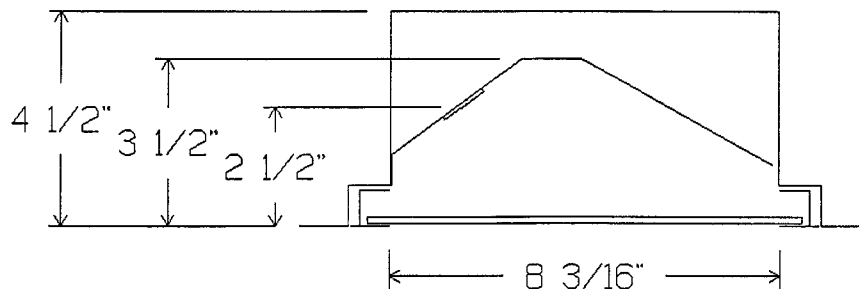
TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

BALLABS CERTIFIED TEST REPORT NO.: 20261.0 DATE 02/15/18
PREPARED FOR: H.E. WILLIAMS, INC - CARTHAGE, MO
DESCRIPTION: 2-56 LED 22"ARRAYS 1x4'RECESSED LUMINAIRE
WHITE ASYM REFL w/FROSTED PAT12 ACRYLIC LENS
ADVANCE #XI095C275V054BSS1 @ 1850mA
CATALOG NBR: MDSG-14-L100/840-SYM/ASY
LAMP TYPE : HLM 2256_5630 REV A 10560223

ELECTRICAL CHARACTERISTICS 120.07V .7463A 89.360W

LUMINOUS EFFICACY (LUMENS / WATTS) = 110.2

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



Ø DEGREE PLANE →