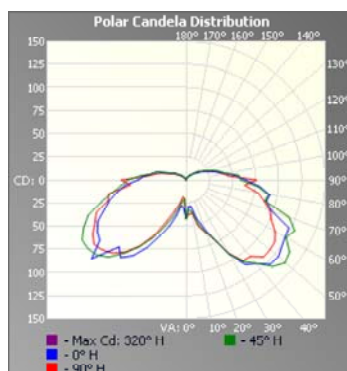


GENERATION BRANDS

Goniophotometer Test Report

Filename: **15087 - MULBERRY-CHAMBERS LED**
Manufacturer: TECH LIGHTING
Lamp Output: 1 lamp, rated Lumens/lamp: 729.1
Max Candela: 144.0 at Horizontal: 320Â°, Vertical: 55Â°
Input Wattage: 37
Luminous Opening: Point
Test Date: 10-Sep-2015 07:05:56
Test Lab: GENERATION BRANDS INTERNAL TESTING
Color Constant: 2847K - 81.3CRI
Photometry : Type C
CIE Class: Semi-Direct
Cutoff Class: Noncutoff

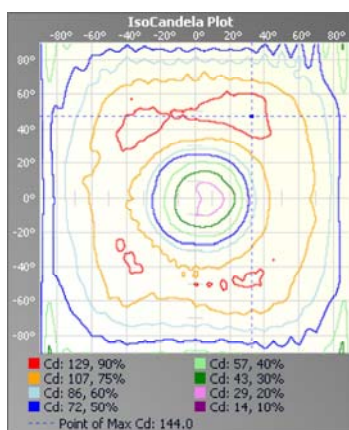
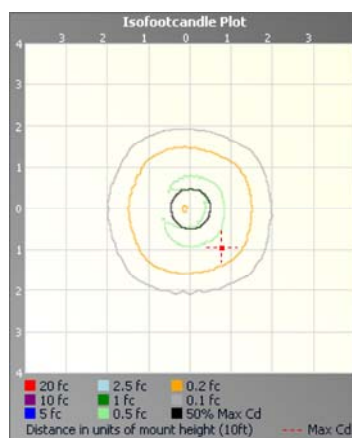


Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	45.3	6.2%	6.2%
0-40	107.7	14.8%	14.8%
0-60	311.2	42.7%	42.7%
60-90	289.0	39.6%	39.6%
70-100	232.1	31.8%	31.8%
90-120	109.3	15%	15%
0-90	600.2	82.3%	82.3%
90-180	128.9	17.7%	17.7%
0-180	729.1	100%	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	2.8	0.4%	90-100	54.9	7.5%
10-20	11.8	1.6%	100-110	34.5	4.7%
20-30	30.7	4.2%	110-120	19.9	2.7%
30-40	62.4	8.6%	120-130	10.9	1.5%
40-50	92.4	12.7%	130-140	5.2	0.7%
50-60	111.1	15.2%	140-150	2.3	0.3%
60-70	111.8	15.3%	150-160	0.9	0.1%
70-80	98.4	13.5%	160-170	0.3	0%
80-90	78.8	10.8%	170-180	0.1	0%



Illuminance at a Distance		
Center Beam fc	Beam Width	
2.0 ft	10.54 ft	47.6 ft
4.0 ft	2.64 ft	95.2 ft
6.0 ft	1.17 ft	142.7 ft
8.0 ft	0.66 ft	190.3 ft
10.0 ft	0.42 ft	237.9 ft

Candela Table - Type C

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230						
0	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42				
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Luminaire Report Summary

IESNA:LM-63-2002
[TEST]
[TESTDATE] 10-Sep-2015 07:05:56
[TESTLAB] GENERATION BRANDS INTERNAL TESTING
[ISSUEDATE] 9/10/2015 8:03:26 AM
[MANUFAC] TECH LIGHTING
[COLORCONSTANT] 2847K - 81.3CRI
[_TOTALLUMINAIRELUMENS] 729.1
[_NUMBEROFRAYS]10000000
FILE: CANDELA MULTIPLIER: 1
FILE: VERTICAL ANGLES: 37, HORIZONTAL ANGLES: 73
FILE: COORDINATE SYSTEM: TYPE C
FILE: UNIT OF MEASURE: METRIC
FILE: BALLAST FACTOR: 1

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Reported data calculated from manufacturer's data file, based on IES recommended methods.