



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Eaton Lighting Division  
(formerly Cooper Lighting)

Brand: io LED

Report Number: P397185

Luminaire Tested: **2VRVT2-LD5-3-DR-W-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Eaton or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P397185  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-4)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: io LED  
Catalog Number: 2VRVT2-LD5-3-DR-W-UNV-LG52-CD1-WL-U  
Description:  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: 

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
a	good	reflector
b	good	lens
c	good	housing
d	good	cord

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2186.5 lumens  
Efficiency: N/A  
Efficacy: 42.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B1 - U3 - G2  
  
Input Watts (W): 51.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

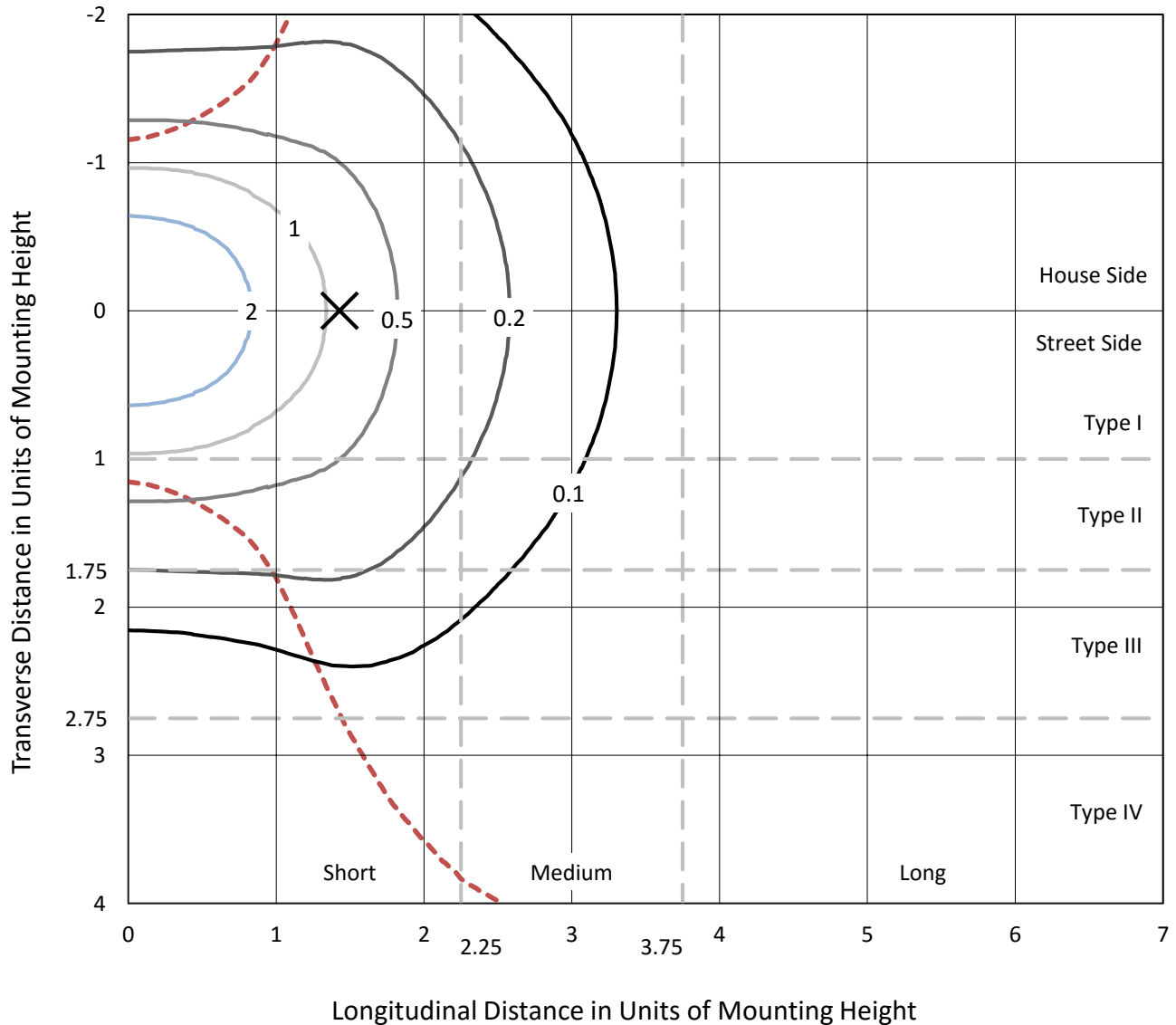


REPORT NUMBER: P397185

CATALOG NUMBER: 2VRVT2-LD5-3-DR-W-UNV-LG52-CD1-WL-U

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd



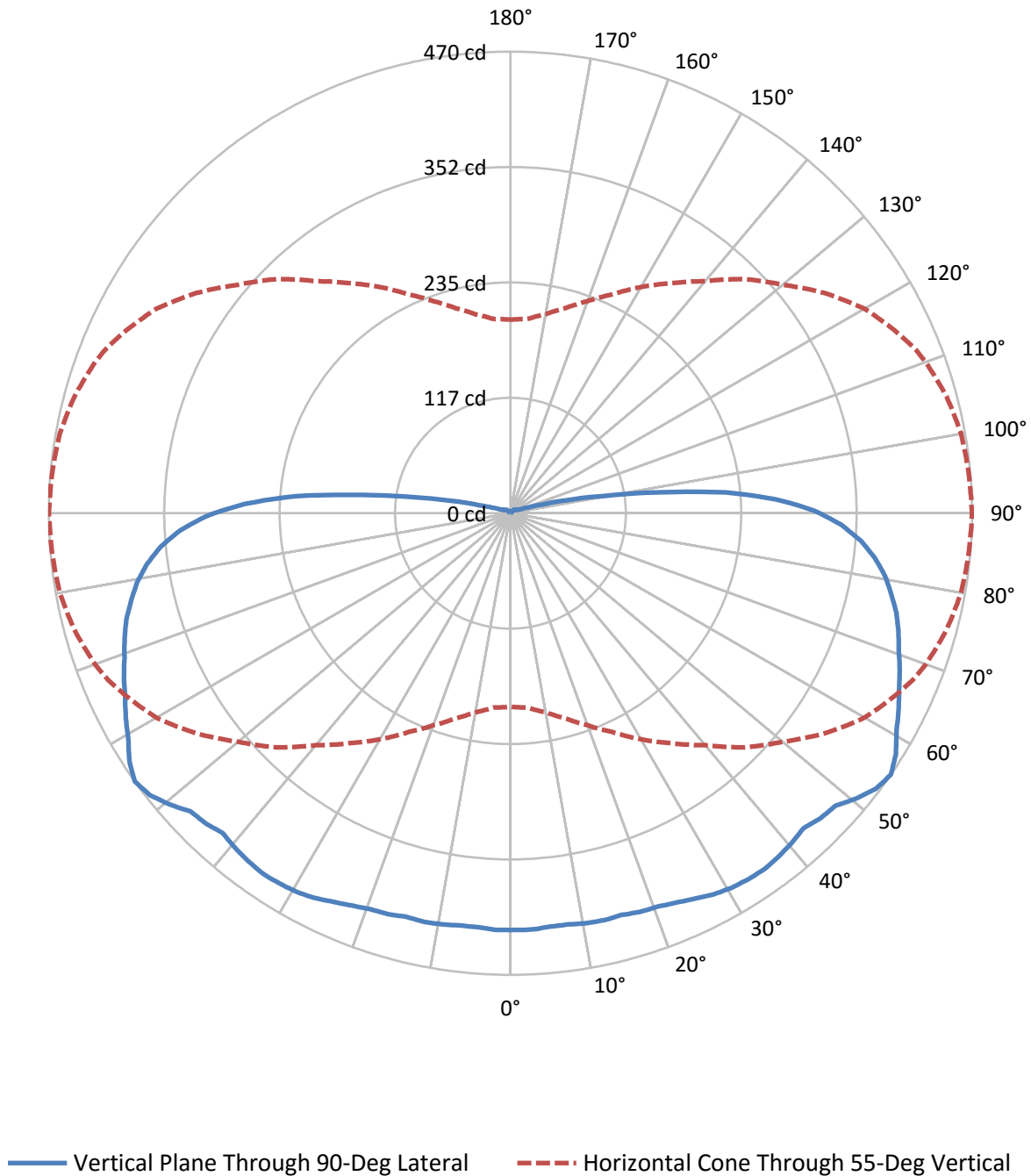
Based on 10 foot mounting height. Maximum calculated value = 4.2 fc  
 Type V - Short - Non-Cutoff



REPORT NUMBER: P397185

CATALOG NUMBER: 2VRVT2-LD5-3-DR-W-UNV-LG52-CD1-WL-U

### Luminous Intensity Polar Plot





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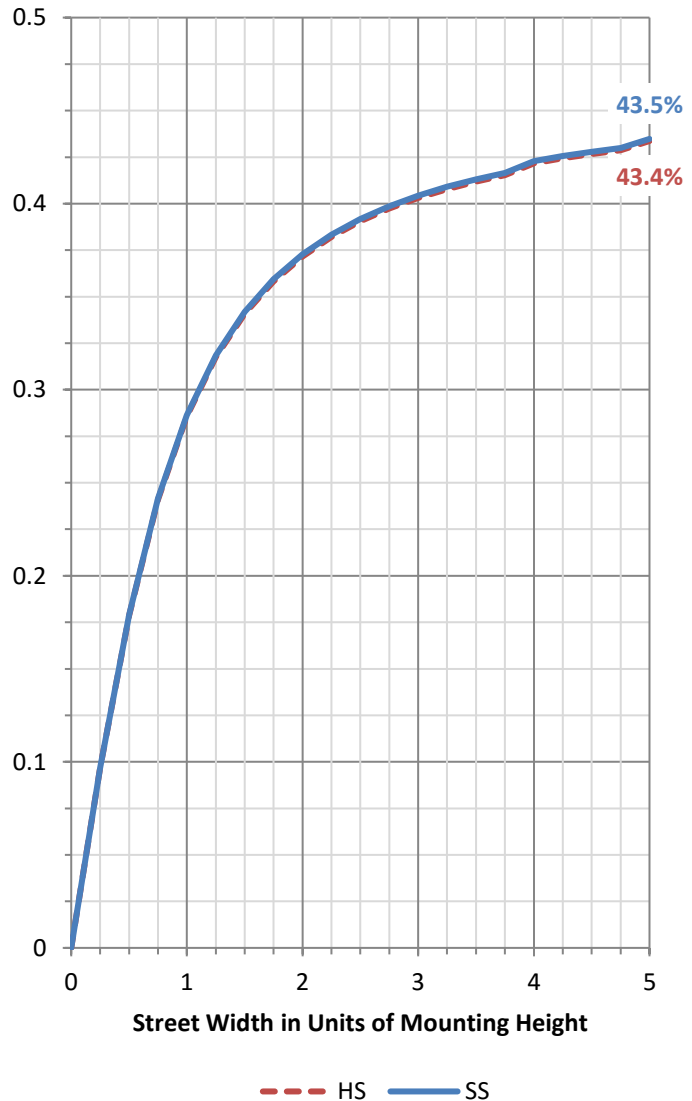
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1000.8	92.5	1093.3
	% Fixture	45.8	4.2	50.0
<b>Street Side</b>	Lumens	1000.8	92.5	1093.3
	% Fixture	45.8	4.2	50.0
<b>Total</b>	Lumens	2001.5	185.0	2186.5
	% Fixture	91.5	8.5	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.4	1.8
10°-20°	117.9	5.4
20°-30°	186.4	8.5
30°-40°	241.0	11.0
40°-50°	274.9	12.6
50°-60°	301.6	13.8
60°-70°	310.7	14.2
70°-80°	291.9	13.3
80°-90°	236.7	10.8
90°-100°	133.5	6.1
100°-110°	32.9	1.5
110°-120°	10.8	0.5
120°-130°	5.6	0.3
130°-140°	2.1	0.1
140°-150°	0.2	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2001.5	91.5
0°-180°	2186.5	100.0





REPORT NUMBER: P397185

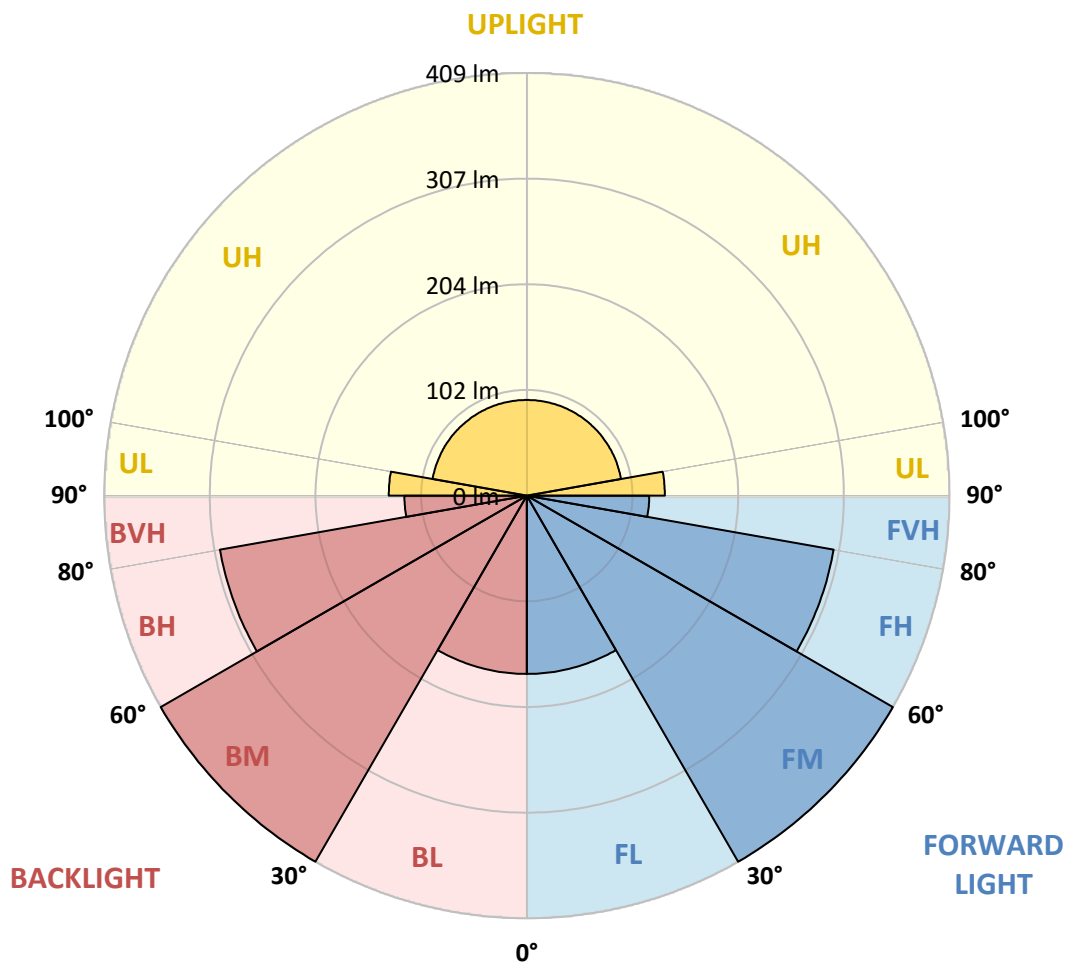
CATALOG NUMBER: 2VRVT2-LD5-3-DR-W-UNV-LG52-CD1-WL-U

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	172.4	7.9			
FM	(30°-60°)	408.7	18.7			
FH	(60°-80°)	301.3	13.8			G0/660
FVH	(80°-90°)	118.3	5.4			G2/225
BL	(0°-30°)	172.4	7.9	B1/500		
BM	(30°-60°)	408.7	18.7	B1/1000		
BH	(60°-80°)	301.3	13.8	B1/500		G0/660
BVH	(80°-90°)	118.3	5.4			G2/225
UL	(90°-100°)	133.5	6.1		U3/500	
UH	(100°-180°)	92.5	4.2		U3/500	

**BUG Rating: B1-U3-G2**

Type V Short





REPORT NUMBER: P397185

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0
2.5°	426.4	426.4	425.6	426.4	426.4	425.6	426.4	426.4	426.4	426.4	426.4
5°	424.0	424.8	424.8	424.8	424.8	425.6	425.6	425.6	425.6	425.6	425.6
7.5°	420.8	421.6	422.4	422.4	423.2	423.2	423.2	423.2	424.0	424.8	424.8
10°	418.4	418.4	419.2	420.0	419.2	420.0	420.8	420.8	421.6	422.4	423.2
12.5°	413.6	413.6	414.4	415.2	415.2	415.2	416.0	416.8	417.6	418.4	419.2
15°	408.0	408.0	408.8	408.8	409.6	409.6	409.6	411.2	412.8	415.2	416.8
17.5°	401.6	400.8	401.6	402.4	403.2	404.0	404.0	406.4	410.4	412.8	414.4
20°	391.2	392.8	393.6	395.2	396.0	396.0	397.6	401.6	404.8	407.2	411.2
22.5°	382.4	383.2	383.2	385.6	388.0	388.0	389.6	393.6	398.4	402.4	408.0
25°	372.0	372.0	373.6	375.2	378.4	380.0	381.6	387.2	392.0	398.4	404.8
27.5°	359.2	360.8	362.4	364.0	368.8	371.2	374.4	380.0	386.4	393.6	400.0
30°	348.8	348.8	350.4	352.8	358.4	361.6	364.8	372.0	379.2	387.2	395.2
32.5°	334.4	335.2	337.6	340.8	347.2	351.2	354.4	363.2	371.2	380.0	391.2
35°	320.8	321.6	324.8	328.8	336.0	339.2	344.0	353.6	363.2	374.4	387.2
37.5°	306.4	307.2	309.6	316.0	324.0	328.0	332.8	342.4	354.4	368.0	381.6
40°	290.4	292.8	295.2	303.2	310.4	316.0	320.8	332.8	346.4	361.6	375.2
42.5°	275.2	276.8	280.8	288.8	296.8	304.0	308.8	321.6	337.6	352.8	367.2
45°	259.2	260.8	266.4	274.4	284.8	290.4	296.8	311.2	328.8	344.0	360.0
47.5°	244.0	246.4	251.2	260.0	270.4	277.6	284.8	300.8	317.6	334.4	351.2
50°	228.0	230.4	236.0	245.6	256.0	264.0	272.0	289.6	307.2	324.8	342.4
52.5°	212.0	214.4	220.8	230.4	242.4	251.2	259.2	277.6	296.8	315.2	336.8
55°	196.8	198.4	205.6	216.0	229.6	237.6	245.6	265.6	285.6	308.0	336.8
57.5°	181.6	181.6	190.4	201.6	216.0	224.0	233.6	253.6	277.6	307.2	337.6
60°	164.8	167.2	175.2	186.4	203.2	212.0	221.6	244.0	274.4	308.8	348.0
62.5°	149.6	152.0	160.0	172.0	190.4	200.8	212.0	240.0	276.0	317.6	356.8
65°	134.4	136.8	144.8	160.0	180.0	191.2	205.6	240.8	284.0	328.0	362.4
67.5°	119.2	122.4	132.8	148.0	172.0	186.4	203.2	246.4	293.6	332.0	357.6
70°	105.6	108.8	120.8	139.2	166.4	184.8	205.6	253.6	296.0	325.6	345.6
72.5°	92.8	96.8	110.4	132.0	164.8	186.4	209.6	255.2	289.6	311.2	325.6
75°	80.0	84.8	101.6	128.0	165.6	188.8	210.4	248.0	274.4	289.6	302.4
77.5°	68.0	73.6	94.4	124.0	164.8	184.8	202.4	231.2	249.6	264.8	280.8
80°	55.2	64.0	87.2	120.0	156.0	171.2	184.0	205.6	224.8	240.0	259.2
82.5°	44.0	54.4	79.2	110.4	139.2	152.0	162.4	182.4	200.0	219.2	240.0
85°	32.8	44.8	69.6	96.0	120.0	130.4	140.8	159.2	177.6	199.2	223.2
87.5°	24.8	36.0	58.4	80.8	102.4	111.2	120.8	140.0	158.4	180.0	204.8
90°	20.0	29.6	48.0	68.0	86.4	95.2	104.0	120.8	140.8	160.0	184.0
92.5°	19.2	24.8	40.0	56.0	72.0	80.0	87.2	102.4	120.0	137.6	157.6
95°	18.4	20.8	31.2	44.0	56.8	63.2	68.8	80.8	94.4	108.0	124.0
97.5°	17.6	18.4	24.8	33.6	43.2	48.0	52.8	61.6	70.4	80.0	89.6
100°	16.8	16.8	20.0	26.4	32.8	36.0	38.4	45.6	51.2	56.8	63.2
102.5°	15.2	15.2	16.8	20.0	24.8	27.2	28.8	32.8	36.8	40.8	44.0
105°	14.4	13.6	14.4	16.8	19.2	20.8	22.4	24.8	26.4	28.8	30.4
107.5°	12.8	12.8	12.8	14.4	16.0	16.8	17.6	19.2	20.8	21.6	22.4
110°	11.2	11.2	10.4	12.0	13.6	14.4	15.2	16.0	16.8	17.6	17.6



REPORT NUMBER: P397185

CATALOG NUMBER: 2VRVT2-LD5-3-DR-W-UNV-LG52-CD1-WL-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	9.6	9.6	9.6	9.6	11.2	12.0	12.8	13.6	15.2	15.2	15.2
115°	8.0	8.0	8.0	8.0	9.6	10.4	11.2	12.0	12.8	13.6	13.6
117.5°	6.4	6.4	6.4	6.4	8.0	8.0	8.8	10.4	11.2	12.0	12.0
120°	5.6	5.6	5.6	4.8	6.4	7.2	7.2	8.8	9.6	10.4	11.2
122.5°	4.8	4.0	4.0	4.0	4.8	4.8	5.6	7.2	8.0	8.8	9.6
125°	4.0	3.2	3.2	3.2	3.2	4.0	4.8	5.6	7.2	8.0	8.0
127.5°	3.2	2.4	2.4	2.4	2.4	2.4	3.2	4.0	5.6	6.4	6.4
130°	2.4	2.4	2.4	1.6	1.6	1.6	1.6	3.2	4.0	4.8	5.6
132.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	1.6	2.4	3.2	4.0
135°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	1.6	2.4	3.2
137.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.8	1.6	1.6
140°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8
142.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0
2.5°	426.4	426.4	425.6	425.6	425.6	424.8	424.8	424.0	424.0	424.0
5°	425.6	425.6	424.8	424.8	424.0	424.0	423.2	423.2	423.2	422.4
7.5°	424.0	424.0	424.0	423.2	423.2	423.2	422.4	422.4	422.4	422.4
10°	422.4	422.4	422.4	423.2	423.2	423.2	423.2	424.0	424.0	424.0
12.5°	420.0	420.8	422.4	422.4	423.2	423.2	423.2	424.0	424.8	424.8
15°	417.6	420.0	421.6	423.2	423.2	424.0	424.0	424.8	424.8	424.0
17.5°	416.8	419.2	421.6	423.2	424.0	424.8	425.6	426.4	427.2	426.4
20°	414.4	418.4	421.6	424.0	424.8	424.8	427.2	428.0	428.0	427.2
22.5°	412.0	416.8	420.0	423.2	424.8	425.6	428.0	428.8	429.6	430.4
25°	409.6	413.6	419.2	424.0	425.6	428.0	430.4	432.8	433.6	434.4
27.5°	407.2	412.8	420.0	425.6	428.0	430.4	434.4	437.6	437.6	439.2
30°	403.2	412.8	420.0	427.2	429.6	432.8	438.4	441.6	442.4	442.4
32.5°	401.6	412.0	420.8	428.0	431.2	433.6	439.2	442.4	444.0	444.0
35°	398.4	409.6	419.2	426.4	430.4	432.8	438.4	443.2	444.0	444.8
37.5°	393.6	405.6	416.0	424.0	427.2	431.2	436.8	440.0	442.4	443.2
40°	388.8	400.0	411.2	420.0	424.0	427.2	433.6	438.4	440.0	440.8
42.5°	380.8	394.4	405.6	416.0	420.0	423.2	430.4	434.4	437.6	437.6
45°	374.4	387.2	400.8	411.2	416.8	421.6	431.2	438.4	442.4	442.4
47.5°	367.2	381.6	397.6	414.4	420.8	426.4	435.2	440.0	444.0	444.8
50°	360.8	381.6	400.8	416.0	422.4	429.6	441.6	450.4	455.2	456.0
52.5°	360.0	383.2	404.0	424.8	432.8	441.6	452.8	460.0	464.0	465.6
55°	361.6	390.4	416.0	434.4	443.2	449.6	459.2	465.6	468.0	469.6
57.5°	371.2	400.8	424.0	440.0	446.4	451.2	457.6	460.0	462.4	462.4
60°	380.8	408.0	424.8	436.0	440.8	444.8	448.8	451.2	452.8	451.2
62.5°	387.2	406.4	419.2	426.4	429.6	432.0	436.8	440.8	440.8	443.2
65°	384.0	397.6	408.0	415.2	418.4	421.6	428.0	431.2	435.2	434.4
67.5°	373.6	386.4	394.4	404.0	408.0	411.2	419.2	423.2	427.2	427.2
70°	357.6	368.8	379.2	389.6	393.6	398.4	407.2	413.6	416.8	419.2
72.5°	336.8	348.8	362.4	377.6	384.8	389.6	400.0	407.2	412.0	412.8
75°	316.8	332.8	352.0	368.8	375.2	381.6	392.8	400.0	403.2	405.6
77.5°	298.4	317.6	338.4	356.8	364.0	371.2	382.4	390.4	395.2	396.0
80°	280.8	303.2	324.0	344.0	352.0	358.4	370.4	379.2	384.0	386.4
82.5°	263.2	288.0	309.6	330.4	338.4	346.4	358.4	367.2	372.8	373.6
85°	247.2	270.4	292.8	312.8	320.0	329.6	342.4	351.2	356.0	357.6
87.5°	228.0	250.4	272.0	291.2	299.2	308.0	320.8	330.4	334.4	336.8
90°	204.8	227.2	246.4	264.8	272.8	280.0	291.2	301.6	306.4	308.8
92.5°	176.8	196.8	216.0	231.2	238.4	244.0	256.8	264.8	268.0	270.4
95°	140.8	155.2	172.0	185.6	192.0	196.8	205.6	213.6	218.4	220.0
97.5°	100.0	111.2	119.2	129.6	132.0	137.6	144.8	149.6	152.8	152.0
100°	68.8	76.0	80.8	84.8	86.4	89.6	93.6	94.4	97.6	96.8
102.5°	46.4	48.8	51.2	53.6	54.4	55.2	57.6	56.8	58.4	59.2
105°	31.2	32.0	32.8	33.6	33.6	33.6	33.6	33.6	33.6	32.8
107.5°	22.4	21.6	21.6	21.6	20.8	20.8	20.0	20.0	20.0	19.2
110°	17.6	16.8	16.0	15.2	14.4	14.4	13.6	13.6	12.8	12.8



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	14.4	13.6	12.8	12.0	12.0	11.2	11.2	10.4	9.6	9.6
115°	12.8	12.0	12.0	11.2	10.4	10.4	9.6	8.8	8.8	8.0
117.5°	12.0	11.2	10.4	9.6	9.6	9.6	8.8	8.0	8.0	8.0
120°	10.4	10.4	9.6	9.6	8.8	8.8	8.0	8.0	7.2	7.2
122.5°	9.6	9.6	8.8	8.8	8.0	8.0	7.2	7.2	7.2	6.4
125°	8.0	8.0	8.0	8.0	7.2	7.2	7.2	6.4	6.4	6.4
127.5°	7.2	7.2	7.2	7.2	6.4	6.4	6.4	6.4	5.6	5.6
130°	5.6	6.4	6.4	6.4	6.4	5.6	5.6	5.6	5.6	5.6
132.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
135°	3.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
137.5°	2.4	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
140°	0.8	1.6	1.6	1.6	2.4	2.4	2.4	2.4	1.6	1.6
142.5°	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)