



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: P397179

Luminaire Tested: **2VRVT2-LD5-2-FR50-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: P397179  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-8)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: io LED  
Catalog Number: 2VRVT2-LD5-2-FR50-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: 1746.5 lumens  
Efficiency: N/A  
Efficacy: 42.2 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')  
IES Classification: Type V - Short - Cutoff  
BUG Rating: B1 - U2 - G1  
  
Input Watts (W): 41.4  
Input Voltage (V): NR  
Input Current (Ain): 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

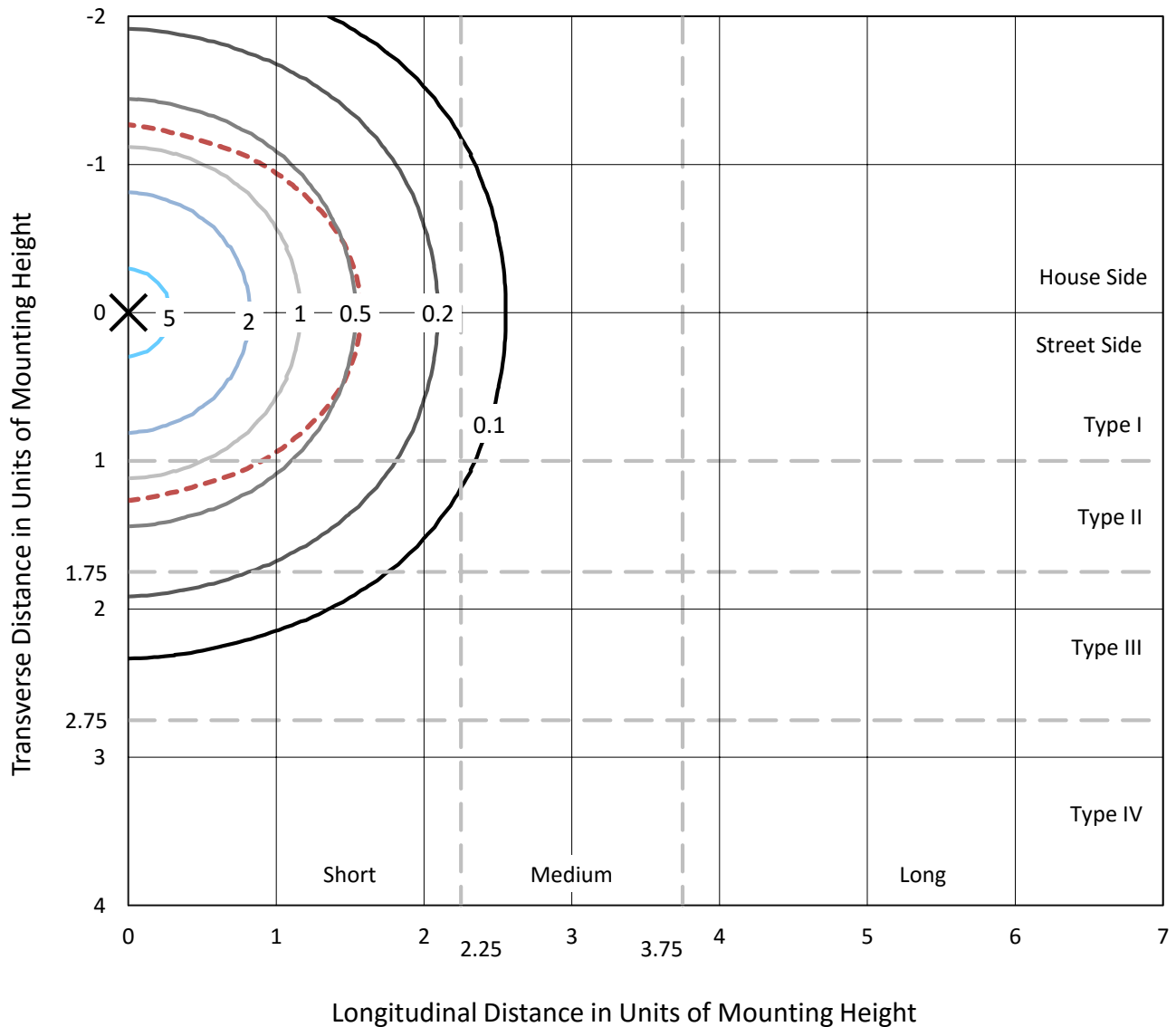


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd



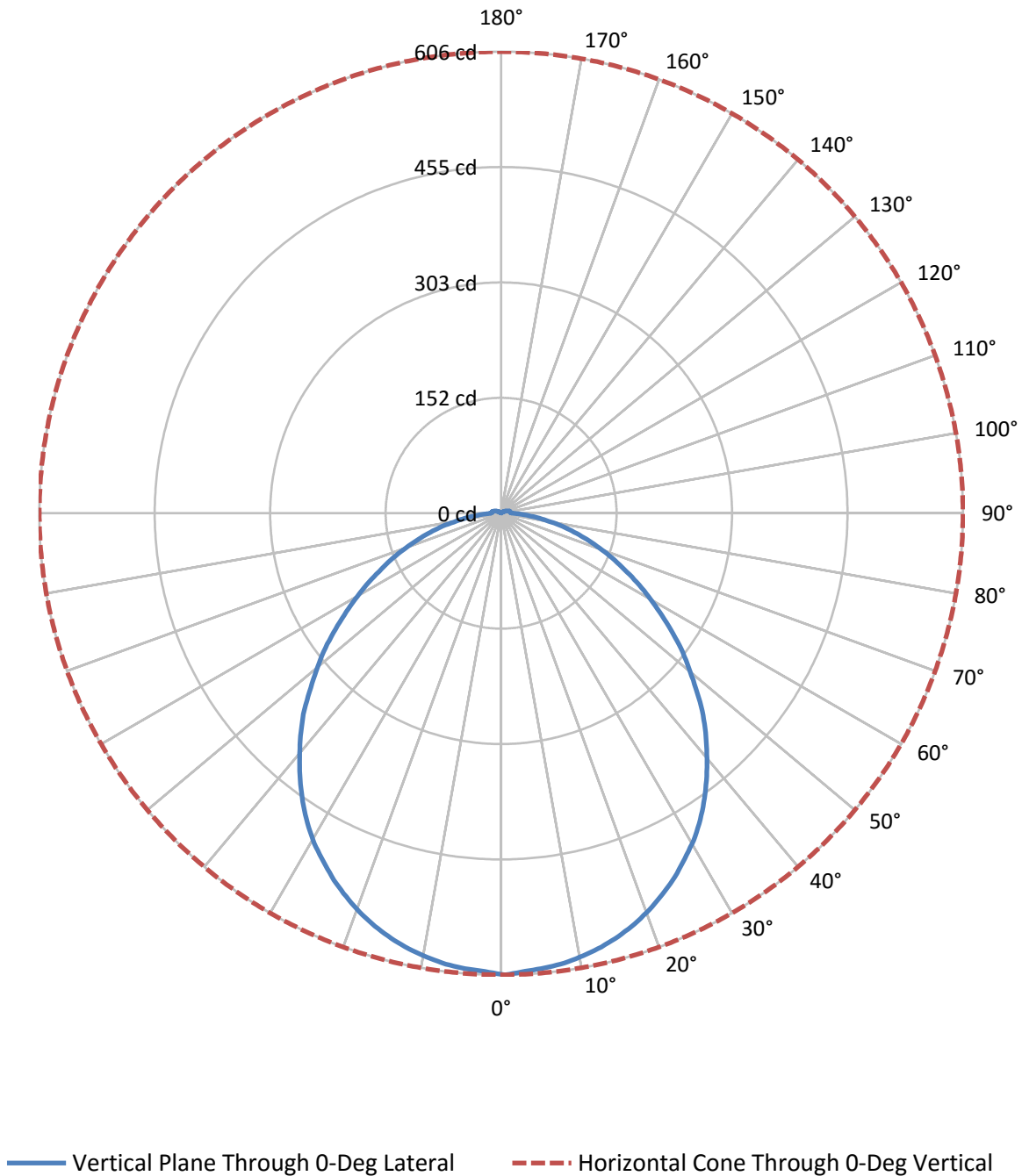
Based on 10 foot mounting height. Maximum calculated value = 6.1 fc  
 Type V - Short - Cutoff



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### Luminous Intensity Polar Plot





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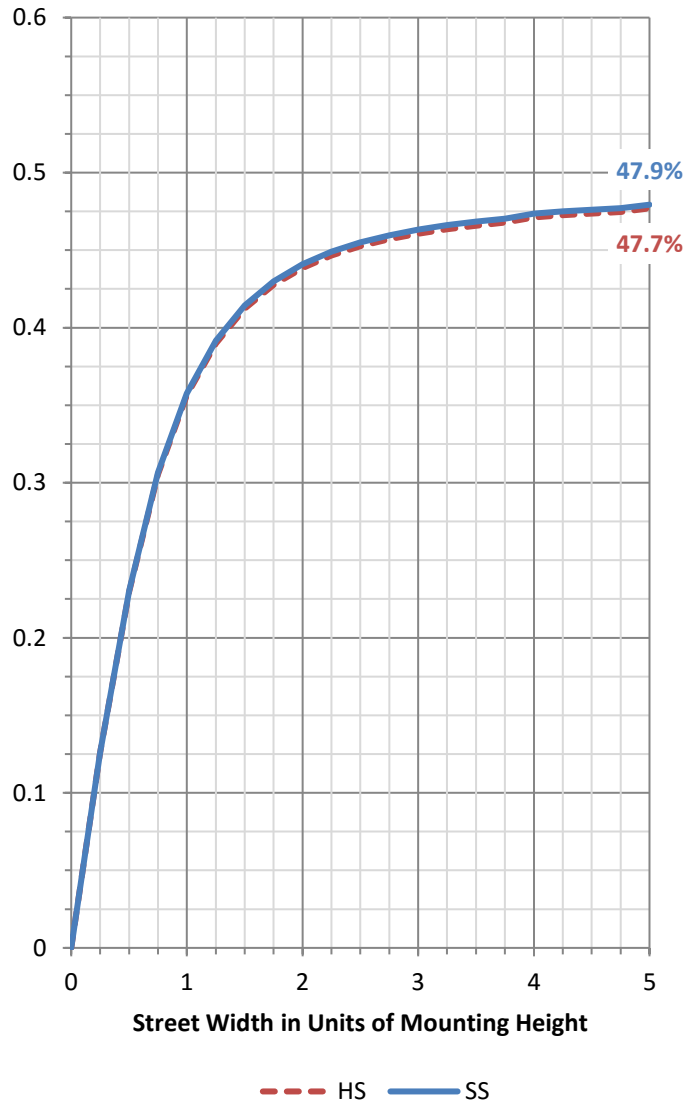
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	848.6	24.6	873.2
	% Fixture	48.6	1.4	50.0
<b>Street Side</b>	Lumens	848.6	24.6	873.2
	% Fixture	48.6	1.4	50.0
<b>Total</b>	Lumens	1697.2	49.3	1746.5
	% Fixture	97.2	2.8	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.9	3.3
10°-20°	160.8	9.2
20°-30°	241.2	13.8
30°-40°	286.5	16.4
40°-50°	291.2	16.7
50°-60°	262.1	15.0
60°-70°	209.2	12.0
70°-80°	131.8	7.5
80°-90°	57.7	3.3
90°-100°	22.0	1.3
100°-110°	12.1	0.7
110°-120°	8.0	0.5
120°-130°	4.6	0.3
130°-140°	2.0	0.1
140°-150°	0.5	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1697.2	97.2
0°-180°	1746.5	100.0





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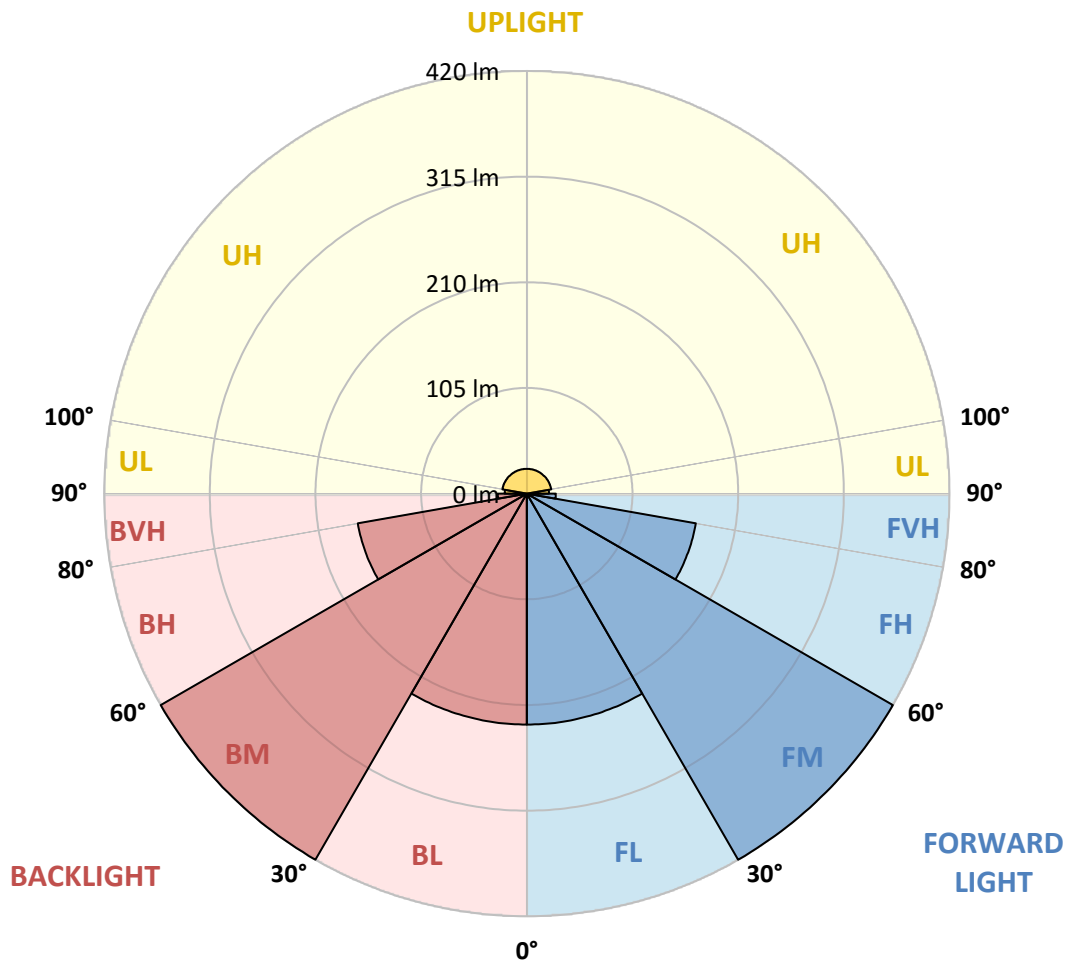
CATALOG NUMBER: 2VRVT2-LD5-2-FR50-UNV-LG52-CD1-WL-U

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.4	13.1			
FM (30°-60°)	419.9	24.0			
FH (60°-80°)	170.5	9.8			G0/660
FVH (80°-90°)	28.8	1.7			G1/100
BL (0°-30°)	229.4	13.1	B1/500		
BM (30°-60°)	419.9	24.0	B1/1000		
BH (60°-80°)	170.5	9.8	B1/500		G0/660
BVH (80°-90°)	28.8	1.7			G1/100
UL (90°-100°)	22.0	1.3		U2/50	
UH (100°-180°)	24.6	1.4		U2/50	

**BUG Rating: B1-U2-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4
2.5°	602.4	602.4	603.2	603.2	604.0	604.8	604.8	604.8	605.6	605.6	606.4
5°	600.0	600.8	600.8	600.8	601.6	601.6	601.6	601.6	601.6	601.6	601.6
7.5°	596.8	596.8	596.8	596.8	596.8	596.8	596.8	596.0	595.2	595.2	594.4
10°	591.2	592.0	591.2	591.2	590.4	589.6	589.6	588.0	588.0	586.4	586.4
12.5°	584.8	584.8	584.8	583.2	582.4	581.6	580.8	579.2	578.4	576.8	576.8
15°	576.8	576.8	576.8	574.4	572.8	572.0	571.2	569.6	568.8	568.0	567.2
17.5°	567.2	567.2	566.4	564.0	561.6	560.8	560.0	558.4	557.6	556.8	556.8
20°	556.0	556.0	554.4	552.0	550.4	548.0	547.2	546.4	545.6	545.6	546.4
22.5°	543.2	543.2	541.6	538.4	536.8	534.4	533.6	533.6	532.8	533.6	534.4
25°	529.6	529.6	526.4	524.0	522.4	520.0	519.2	519.2	519.2	520.8	521.6
27.5°	513.6	512.8	511.2	508.0	505.6	504.8	504.0	504.0	505.6	506.4	508.0
30°	498.4	496.8	494.4	491.2	488.8	488.8	488.0	488.8	490.4	491.2	492.8
32.5°	480.0	478.4	475.2	472.8	470.4	470.4	471.2	471.2	472.8	473.6	476.8
35°	460.0	459.2	456.0	452.8	452.0	451.2	451.2	452.8	455.2	456.8	456.8
37.5°	438.4	438.4	434.4	432.8	431.2	431.2	432.0	433.6	434.4	437.6	439.2
40°	416.0	415.2	412.8	410.4	409.6	409.6	409.6	412.0	414.4	416.8	419.2
42.5°	393.6	391.2	389.6	388.0	387.2	388.0	388.0	391.2	392.8	396.0	398.4
45°	370.4	367.2	365.6	364.0	364.0	364.8	365.6	368.8	372.0	374.4	377.6
47.5°	344.0	343.2	340.8	340.0	340.8	341.6	343.2	345.6	348.8	353.6	356.0
50°	319.2	317.6	316.8	315.2	316.0	316.8	318.4	322.4	326.4	331.2	334.4
52.5°	296.0	293.6	292.0	292.0	293.6	294.4	296.0	300.0	304.8	309.6	312.8
55°	270.4	269.6	267.2	267.2	269.6	270.4	272.8	276.8	282.4	287.2	292.8
57.5°	245.6	244.0	244.0	244.0	245.6	247.2	249.6	253.6	260.8	266.4	272.0
60°	222.4	220.8	220.0	220.0	222.4	225.6	227.2	232.0	238.4	245.6	252.0
62.5°	200.0	199.2	198.4	199.2	201.6	203.2	206.4	212.0	218.4	225.6	232.8
65°	177.6	177.6	176.0	177.6	180.8	183.2	186.4	192.0	199.2	206.4	214.4
67.5°	157.6	156.8	157.6	159.2	161.6	163.2	166.4	172.8	180.0	186.4	195.2
70°	136.8	136.8	137.6	139.2	142.4	144.0	147.2	153.6	160.8	168.0	173.6
72.5°	117.6	117.6	118.4	120.0	124.0	126.4	129.6	135.2	140.8	148.0	152.8
75°	99.2	99.2	100.0	102.4	106.4	108.8	111.2	116.0	121.6	127.2	129.6
77.5°	82.4	80.8	82.4	84.8	88.8	91.2	93.6	97.6	102.4	106.4	109.6
80°	63.2	64.0	65.6	68.0	72.0	73.6	76.0	80.0	83.2	86.4	88.8
82.5°	48.0	48.0	49.6	52.8	56.8	57.6	60.8	64.0	66.4	69.6	71.2
85°	33.6	34.4	36.0	39.2	43.2	44.8	46.4	49.6	52.0	54.4	56.0
87.5°	21.6	23.2	24.8	28.8	32.0	33.6	35.2	37.6	40.8	41.6	44.0
90°	14.4	15.2	17.6	20.0	23.2	24.8	26.4	28.8	31.2	32.8	34.4
92.5°	12.8	12.8	13.6	15.2	17.6	18.4	20.0	22.4	24.0	25.6	27.2
95°	12.0	12.0	12.0	12.8	14.4	14.4	16.0	17.6	19.2	20.8	21.6
97.5°	12.0	12.0	11.2	11.2	12.0	12.0	12.8	14.4	16.0	16.8	18.4
100°	12.0	11.2	10.4	9.6	10.4	10.4	11.2	12.0	13.6	14.4	15.2
102.5°	11.2	11.2	9.6	8.8	8.8	9.6	9.6	10.4	11.2	12.8	13.6
105°	11.2	10.4	8.8	8.0	8.0	8.0	8.8	9.6	10.4	11.2	12.0
107.5°	9.6	9.6	8.0	7.2	7.2	7.2	8.0	8.0	8.8	9.6	10.4
110°	8.8	8.8	7.2	6.4	6.4	6.4	6.4	7.2	8.0	8.8	9.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	8.0	7.2	6.4	5.6	5.6	5.6	5.6	6.4	7.2	8.0	8.8
115°	6.4	6.4	5.6	4.8	4.8	4.8	4.8	5.6	6.4	7.2	8.0
117.5°	5.6	5.6	4.8	4.0	4.0	4.0	4.0	4.8	5.6	6.4	7.2
120°	4.8	4.8	4.0	3.2	3.2	3.2	4.0	4.0	4.8	5.6	6.4
122.5°	4.0	4.0	3.2	3.2	2.4	2.4	3.2	3.2	4.0	4.8	5.6
125°	3.2	3.2	3.2	2.4	2.4	2.4	2.4	2.4	3.2	4.0	4.8
127.5°	2.4	2.4	2.4	2.4	1.6	1.6	1.6	2.4	3.2	3.2	4.0
130°	2.4	2.4	2.4	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.2
132.5°	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	1.6	2.4	2.4
135°	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6
137.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
140°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
142.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0
145°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
147.5°	0.8	0.8	0.8	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°	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4
2.5°	606.4	606.4	606.4	606.4	606.4	606.4	605.6	606.4	605.6	605.6
5°	600.8	600.8	600.8	600.8	600.0	600.0	600.0	599.2	599.2	599.2
7.5°	593.6	593.6	592.8	592.8	592.0	592.0	591.2	591.2	590.4	591.2
10°	585.6	584.8	584.8	584.0	584.0	584.0	583.2	583.2	582.4	582.4
12.5°	576.8	576.0	576.0	576.0	575.2	575.2	575.2	574.4	574.4	574.4
15°	567.2	568.0	568.0	568.0	568.0	568.0	567.2	567.2	567.2	566.4
17.5°	557.6	558.4	558.4	559.2	559.2	559.2	558.4	558.4	557.6	558.4
20°	547.2	548.0	548.0	548.8	548.8	548.8	548.0	548.8	548.0	548.8
22.5°	535.2	536.8	536.8	537.6	537.6	537.6	536.8	537.6	537.6	536.8
25°	523.2	524.0	524.0	525.6	525.6	525.6	524.0	524.8	524.8	524.8
27.5°	508.8	508.8	511.2	510.4	510.4	510.4	511.2	510.4	510.4	510.4
30°	493.6	494.4	495.2	496.0	496.0	496.0	495.2	496.0	496.0	495.2
32.5°	477.6	478.4	479.2	480.0	480.0	480.0	480.0	480.0	480.0	480.0
35°	458.4	460.0	461.6	462.4	463.2	462.4	463.2	463.2	463.2	462.4
37.5°	440.0	442.4	443.2	444.0	444.8	444.8	444.8	444.8	445.6	445.6
40°	420.0	423.2	423.2	425.6	425.6	426.4	427.2	426.4	427.2	427.2
42.5°	400.8	403.2	404.8	406.4	406.4	407.2	408.0	408.8	409.6	408.8
45°	380.0	383.2	385.6	386.4	387.2	388.0	388.8	389.6	391.2	390.4
47.5°	359.2	362.4	364.8	367.2	368.0	368.8	370.4	371.2	373.6	371.2
50°	338.4	342.4	346.4	348.0	348.8	349.6	352.8	353.6	354.4	355.2
52.5°	317.6	321.6	325.6	328.8	330.4	332.0	334.4	336.0	336.8	336.8
55°	297.6	301.6	306.4	311.2	312.8	313.6	316.8	318.4	320.0	320.8
57.5°	278.4	284.0	288.8	293.6	295.2	297.6	300.0	302.4	303.2	304.0
60°	259.2	264.8	270.4	276.0	278.4	280.0	283.2	284.8	286.4	285.6
62.5°	240.8	246.4	253.6	257.6	260.0	261.6	263.2	265.6	266.4	266.4
65°	221.6	228.8	234.4	238.4	240.0	240.0	242.4	243.2	244.0	244.8
67.5°	202.4	208.0	212.0	215.2	216.8	216.0	217.6	219.2	218.4	216.8
70°	179.2	184.0	188.0	190.4	191.2	190.4	192.8	190.4	191.2	190.4
72.5°	157.6	161.6	163.2	164.8	164.8	164.8	164.8	164.8	164.0	163.2
75°	133.6	136.0	138.4	138.4	139.2	139.2	139.2	139.2	138.4	137.6
77.5°	112.0	113.6	115.2	114.4	115.2	115.2	114.4	114.4	114.4	114.4
80°	91.2	92.0	93.6	93.6	92.8	92.8	92.8	92.0	92.0	91.2
82.5°	72.8	73.6	73.6	73.6	74.4	72.8	73.6	72.0	72.8	71.2
85°	57.6	58.4	58.4	57.6	57.6	56.8	56.0	56.8	56.0	56.0
87.5°	44.8	44.8	45.6	45.6	44.8	44.8	44.0	44.0	43.2	43.2
90°	35.2	36.0	35.2	36.0	35.2	35.2	34.4	34.4	34.4	34.4
92.5°	28.0	28.8	28.0	28.0	28.0	28.0	28.0	27.2	27.2	27.2
95°	22.4	22.4	23.2	22.4	23.2	22.4	22.4	22.4	22.4	22.4
97.5°	18.4	19.2	19.2	19.2	19.2	19.2	19.2	19.2	18.4	18.4
100°	16.0	16.0	16.8	16.8	16.8	16.8	16.8	16.0	16.0	16.0
102.5°	13.6	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
105°	12.8	12.8	12.8	13.6	13.6	13.6	13.6	13.6	12.8	12.8
107.5°	11.2	12.0	12.0	12.0	12.8	12.8	12.0	12.0	12.0	12.0
110°	10.4	11.2	11.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0



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CATALOG NUMBER: 2VRVT2-LD5-2-FR50-UNV-LG52-CD1-WL-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	9.6	10.4	10.4	11.2	11.2	11.2	11.2	11.2	11.2	11.2
115°	8.8	9.6	9.6	10.4	10.4	10.4	11.2	11.2	11.2	11.2
117.5°	8.0	8.8	9.6	9.6	9.6	9.6	10.4	10.4	10.4	10.4
120°	7.2	8.0	8.0	8.8	8.8	9.6	9.6	9.6	9.6	9.6
122.5°	6.4	7.2	8.0	8.0	8.0	8.8	8.8	8.8	9.6	9.6
125°	5.6	6.4	7.2	7.2	7.2	8.0	8.0	8.0	8.0	8.8
127.5°	4.8	5.6	5.6	6.4	6.4	7.2	7.2	7.2	7.2	7.2
130°	4.0	4.8	4.8	5.6	5.6	5.6	6.4	6.4	6.4	6.4
132.5°	3.2	4.0	4.0	4.8	4.8	4.8	5.6	5.6	5.6	5.6
135°	2.4	3.2	3.2	4.0	4.0	4.0	4.8	4.8	4.8	4.8
137.5°	1.6	2.4	3.2	3.2	3.2	3.2	4.0	4.0	4.0	4.0
140°	1.6	1.6	2.4	2.4	2.4	3.2	3.2	3.2	3.2	3.2
142.5°	0.8	0.8	1.6	1.6	1.6	2.4	2.4	2.4	2.4	2.4
145°	0.0	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6	1.6
147.5°	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)