

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

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P233248

Luminaire Tested: **2VRVT3-LD5-2-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233248
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2VRVT3-LD5-2-W-UNV-L840-CD1-U
Description: 2FT VRVT3 WIDE APPLICATION, 2000LM
Light Source: (196) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2273.0 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.66 / 1.64
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.17')
CIE Type: Semi-Direct

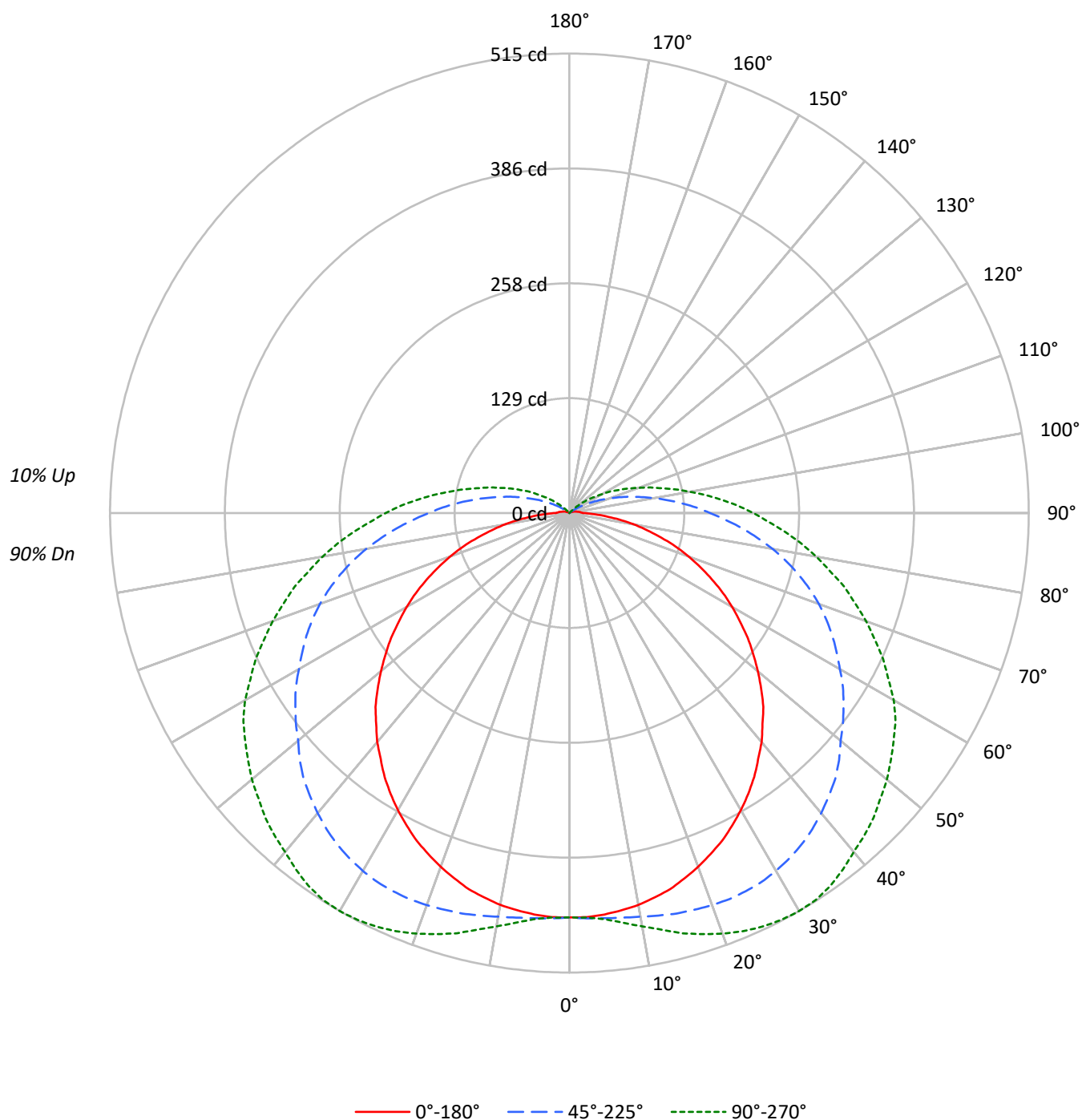
Input Watts (W): 16.94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	117	117	117	117	113	113	113	113	106	106	106		99	99	99		93
1	103	96	91	86	99	93	88	83	87	83	79		81	78	75		76
2	92	82	74	67	88	79	72	65	74	68	62		69	64	59		64
3	83	71	61	54	79	68	60	53	64	56	50		60	53	48		56
4	75	62	52	44	72	60	51	44	56	48	42		52	46	40		49
5	69	55	45	38	66	53	44	37	50	42	35		46	40	34		44
6	63	49	39	32	61	47	38	32	44	37	31		42	35	29		39
7	59	44	35	28	56	43	34	28	40	32	27		38	31	26		36
8	54	40	31	25	52	39	30	24	37	29	24		35	28	23		33
9	51	36	28	22	49	35	27	22	34	26	21		32	25	20		30
10	47	33	25	20	46	33	25	19	31	24	19		29	23	18		28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5854	5854	5854
5°	5813	5738	5723
10°	5764	5683	5762
15°	5710	5692	5888
20°	5630	5718	6019
25°	5560	5749	6144
30°	5472	5769	6241
35°	5380	5773	6281
40°	5281	5754	6259
45°	5185	5737	6293
50°	5041	5669	6322
55°	4910	5676	6361
60°	4757	5683	6408
65°	4574	5736	6385
70°	4364	5796	6366
75°	4062	5832	6384
80°	3708	5861	6395
85°	3082	5863	6450



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	1.9
10°-20°	131.2	5.8
20°-30°	213.8	9.4
30°-40°	278.4	12.2
40°-50°	314.5	13.8
50°-60°	322.1	14.2
60°-70°	301.1	13.2
70°-80°	253.5	11.2
80°-90°	186.8	8.2
90°-100°	119.9	5.3
100°-110°	66.3	2.9
110°-120°	30.7	1.3
120°-130°	10.1	0.4
130°-140°	1.1	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	388.5	17.1
0°-40°	666.9	29.3
0°-60°	1303.4	57.3
0°-90°	2044.9	90.0
90°-120°	216.9	9.5
90°-150°	228.1	10.0
90°-180°	228.0	10.0
0°-180°	2273.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	452	453	456	457	457	43
15°	436	444	465	482	488	123
25°	405	425	468	501	512	187
35°	361	392	454	498	510	226
45°	308	346	421	468	482	237
55°	244	291	375	429	444	218
65°	176	232	325	376	388	175
75°	107	173	266	308	319	113
85°	41	114	194	233	242	40
90°	15	85	158	195	206	10
95°	12	60	126	160	171	9
105°	7	20	71	100	107	7
115°	3	4	30	54	61	3
125°	1	1	6	22	28	1
135°	0	0	0	0	4	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	453.2	452.7	452.7	452.7	453.2	453.7	453.7	454.2	454.2	454.7	454.7
5°	451.6	451.1	451.6	451.6	452.1	452.7	453.2	453.7	454.2	455.3	455.8
7.5°	449.0	449.0	449.0	450.1	450.6	451.1	452.1	453.2	454.7	456.3	457.3
10°	445.9	445.9	446.4	446.9	448.5	449.5	450.6	452.7	454.7	457.3	459.4
12.5°	441.2	441.2	441.7	443.3	445.4	446.9	448.5	451.6	455.3	458.4	462.0
15°	436.5	436.0	437.1	439.7	442.3	444.3	446.4	450.6	454.7	459.4	464.6
17.5°	429.2	429.8	431.3	434.4	438.1	440.7	443.3	448.5	454.7	459.9	466.2
20°	422.0	422.5	424.6	427.7	432.9	436.0	439.7	445.9	453.2	460.5	467.7
22.5°	413.6	414.2	416.8	421.4	427.7	430.8	435.0	442.8	451.1	459.4	468.3
25°	405.3	405.8	409.0	413.6	420.9	425.1	429.2	439.1	448.5	458.4	467.7
27.5°	394.9	396.5	400.1	405.8	413.6	417.8	423.5	433.9	444.3	455.3	466.2
30°	384.5	385.5	389.2	396.5	405.3	410.5	415.7	427.2	439.7	451.1	463.1
32.5°	373.1	374.6	379.3	386.1	397.0	402.2	407.4	420.4	433.4	446.4	458.9
35°	361.1	362.6	366.8	375.7	386.6	391.8	398.5	412.1	426.1	440.2	453.7
37.5°	347.6	349.6	355.4	364.2	375.1	381.9	389.2	403.2	418.3	432.9	446.9
40°	335.1	336.1	341.8	351.2	363.2	370.5	377.7	393.9	409.0	424.6	439.1
42.5°	320.5	323.1	329.3	339.2	351.7	358.5	366.3	382.9	399.6	414.7	430.3
45°	307.5	308.5	315.3	326.2	339.2	346.5	354.8	371.0	387.6	404.8	421.4
47.5°	291.4	292.9	300.2	311.7	325.7	333.5	341.3	359.5	376.7	394.4	410.0
50°	275.8	278.4	285.6	297.6	312.2	320.0	328.8	346.0	364.7	380.9	397.0
52.5°	259.6	262.8	270.6	282.5	297.6	306.5	314.8	333.0	350.7	368.9	386.6
55°	244.0	246.6	253.9	266.9	283.6	290.8	299.7	318.9	337.2	356.9	375.1
57.5°	226.9	230.5	239.3	252.3	268.5	276.8	286.2	304.4	325.2	345.5	363.7
60°	210.7	213.3	223.7	236.7	252.9	261.2	270.6	290.8	312.2	332.5	350.2
62.5°	194.1	197.2	207.1	220.6	237.3	246.6	256.0	276.8	299.2	318.9	337.7
65°	176.4	180.5	191.5	204.5	222.7	231.5	241.9	263.8	285.1	305.9	325.2
67.5°	159.2	162.9	174.8	188.9	205.5	217.0	227.4	250.3	272.6	293.4	311.7
70°	142.0	145.7	156.6	172.7	190.9	202.4	212.8	235.7	258.6	278.4	297.6
72.5°	124.9	128.5	140.5	156.1	176.4	186.8	198.8	222.2	244.0	264.8	282.0
75°	106.7	112.9	123.8	141.5	161.8	173.3	184.7	208.1	229.5	249.2	265.9
77.5°	89.0	95.7	108.2	126.4	147.2	159.7	171.2	193.6	214.9	232.6	248.7
80°	73.4	79.1	92.6	110.3	133.2	144.1	155.6	177.9	198.2	216.4	231.5
82.5°	56.2	63.0	76.5	96.3	118.1	129.6	141.0	161.3	181.1	197.7	212.3
85°	40.6	47.3	62.4	82.7	103.0	114.5	124.9	145.7	163.9	180.5	194.1
87.5°	26.5	33.3	48.9	69.2	89.0	99.4	108.7	128.0	146.2	162.3	175.3
90°	15.1	22.9	38.0	56.2	75.4	84.8	94.7	112.9	129.6	144.6	157.7
92.5°	13.5	16.1	28.6	45.8	63.0	72.8	81.2	98.3	115.0	129.0	142.0
95°	12.0	12.5	20.3	35.4	52.0	59.8	68.7	85.3	100.4	113.9	126.4
97.5°	10.4	10.4	14.0	25.5	40.6	48.9	56.7	71.8	86.9	99.9	110.8
100°	8.8	9.4	9.9	17.7	30.7	38.5	45.3	59.8	73.4	84.8	96.3
102.5°	7.8	7.8	8.3	12.0	21.9	28.6	34.9	48.4	60.4	71.8	82.2
105°	6.8	6.8	6.8	7.8	15.1	19.8	25.5	37.5	49.4	60.4	70.8
107.5°	5.7	5.7	5.7	6.2	9.9	14.0	18.2	28.1	39.0	49.4	58.8
110°	4.7	4.7	4.7	5.2	5.7	8.8	12.5	20.3	29.7	40.1	47.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	3.6	3.6	3.6	4.2	4.2	4.7	7.8	14.6	21.9	30.7	39.0
115°	3.1	3.1	3.1	3.1	3.6	3.6	3.6	8.8	15.6	22.9	29.7
117.5°	2.6	2.6	2.6	2.6	2.6	2.6	3.1	5.2	10.4	16.6	22.4
120°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	5.7	10.9	16.1
122.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.1	6.2	10.9
125°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	6.2
127.5°	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.6
130°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
132.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
135°	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	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°	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2	453.2
2.5°	455.3	455.3	455.3	454.7	454.7	454.7	454.2	454.2	453.7	453.7
5°	456.3	456.8	457.3	457.3	457.3	457.3	457.3	457.3	456.8	456.8
7.5°	458.9	459.9	460.5	461.5	461.5	462.0	462.5	462.5	462.5	463.1
10°	461.5	463.6	465.1	467.2	467.7	468.3	469.3	469.3	469.8	470.3
12.5°	465.1	468.3	471.4	474.0	474.5	475.6	476.6	478.2	478.2	478.2
15°	468.8	473.5	477.1	479.7	482.3	482.8	484.4	486.5	486.5	487.5
17.5°	472.4	477.6	483.4	487.0	489.1	490.6	492.2	493.2	495.3	494.8
20°	475.0	481.3	487.0	492.2	493.8	495.3	498.4	500.5	501.6	501.6
22.5°	476.1	483.9	490.1	495.8	497.9	500.0	503.1	505.7	506.8	507.3
25°	476.6	484.9	492.2	498.4	501.0	503.1	507.3	509.4	510.9	511.5
27.5°	476.1	484.9	493.2	500.0	502.6	505.2	509.4	512.0	514.1	514.1
30°	474.0	483.9	492.7	500.0	503.1	505.7	509.9	513.0	514.6	515.1
32.5°	470.3	481.3	490.6	497.9	501.6	504.2	508.9	512.0	513.5	514.1
35°	466.2	477.1	487.0	494.3	497.9	500.5	505.2	507.8	509.4	509.9
37.5°	459.9	471.4	481.3	489.1	492.2	494.8	498.4	502.1	503.1	503.6
40°	452.7	464.1	473.5	481.3	483.9	487.0	490.1	493.8	495.3	495.8
42.5°	443.8	454.7	464.6	472.4	475.0	478.7	483.4	486.5	488.6	489.6
45°	433.4	445.4	455.3	464.1	467.7	469.8	475.6	479.2	481.3	482.3
47.5°	423.0	436.0	446.4	455.3	458.9	462.5	467.7	470.9	473.0	473.0
50°	413.1	425.6	436.5	445.9	449.5	453.7	458.4	462.0	464.1	464.6
52.5°	402.7	415.7	426.6	436.0	439.7	443.3	448.5	452.1	454.2	454.2
55°	390.7	404.8	415.7	424.6	428.7	431.8	438.1	441.2	443.8	443.8
57.5°	378.8	392.8	404.3	413.6	418.3	420.9	427.2	430.3	432.9	433.4
60°	366.8	380.3	392.3	402.2	405.3	409.5	413.6	417.3	419.4	419.9
62.5°	354.3	367.9	379.8	387.6	392.3	394.4	399.6	401.7	403.8	403.2
65°	342.4	354.3	365.8	373.6	376.2	379.8	382.9	386.6	388.1	388.1
67.5°	327.8	339.8	350.2	358.0	361.6	363.7	367.3	369.4	372.0	370.5
70°	312.2	323.6	333.0	340.8	343.4	346.0	350.2	352.2	353.8	353.8
72.5°	296.0	307.0	316.3	323.1	325.7	328.8	332.0	334.0	335.1	335.6
75°	278.9	289.8	298.1	304.9	308.0	311.7	314.3	317.4	317.9	318.9
77.5°	262.8	272.6	280.4	288.2	289.8	292.4	295.5	298.1	299.2	298.7
80°	243.5	255.5	261.7	268.5	271.1	273.2	276.8	278.4	281.0	281.0
82.5°	224.2	234.7	241.9	249.7	252.9	253.9	258.6	261.2	261.7	262.2
85°	206.6	215.9	223.7	230.0	233.1	234.1	238.3	242.5	243.0	242.5
87.5°	186.8	196.7	205.0	210.7	213.3	215.9	219.6	221.6	223.7	223.2
90°	169.1	178.5	186.8	193.0	195.1	197.7	200.8	204.0	204.5	206.0
92.5°	151.9	161.8	170.1	175.9	179.0	180.0	183.7	186.3	187.3	188.9
95°	136.3	144.6	152.4	159.7	160.3	162.9	166.5	168.6	171.2	170.7
97.5°	120.7	130.1	136.8	142.0	144.6	147.2	150.4	152.4	154.0	154.0
100°	105.6	114.5	120.7	125.9	129.0	130.1	133.2	135.8	136.8	136.8
102.5°	92.1	99.4	105.6	111.9	113.4	115.0	118.1	121.2	121.2	122.3
105°	78.6	86.4	92.6	97.8	100.4	100.9	104.1	106.1	107.7	107.2
107.5°	66.6	73.9	80.6	84.8	86.9	88.5	91.6	93.1	94.7	95.2
110°	56.2	62.4	68.7	73.4	74.9	77.0	80.1	81.7	83.2	82.7



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CATALOG NUMBER: 2VRVT3-LD5-2-W-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	45.8	52.6	57.8	62.4	64.5	66.1	69.2	70.2	71.8	71.8
115°	36.9	42.7	47.9	52.6	54.1	55.7	58.3	59.8	60.9	61.4
117.5°	28.1	34.3	39.5	43.7	44.7	46.8	49.4	50.5	51.5	52.6
120°	21.3	26.0	30.7	34.3	36.4	37.5	40.1	41.6	42.7	42.7
122.5°	15.6	19.8	23.9	27.1	28.6	29.7	32.3	33.8	34.3	34.3
125°	9.9	14.0	17.2	20.3	21.9	22.9	24.5	26.0	27.1	27.6
127.5°	5.7	8.8	12.0	14.6	15.6	16.6	18.7	19.8	20.8	20.8
130°	1.0	3.6	6.8	8.8	9.9	10.9	12.5	13.5	14.6	14.6
132.5°	0.0	0.0	2.1	4.2	4.7	5.7	7.3	8.3	8.8	8.8
135°	0.0	0.0	0.0	0.0	0.5	1.0	2.6	3.1	3.6	3.6
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	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
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)