

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P621622

Luminaire Tested: VLT-FA-050U-125D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621622
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-21)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-FA-050U-125D-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

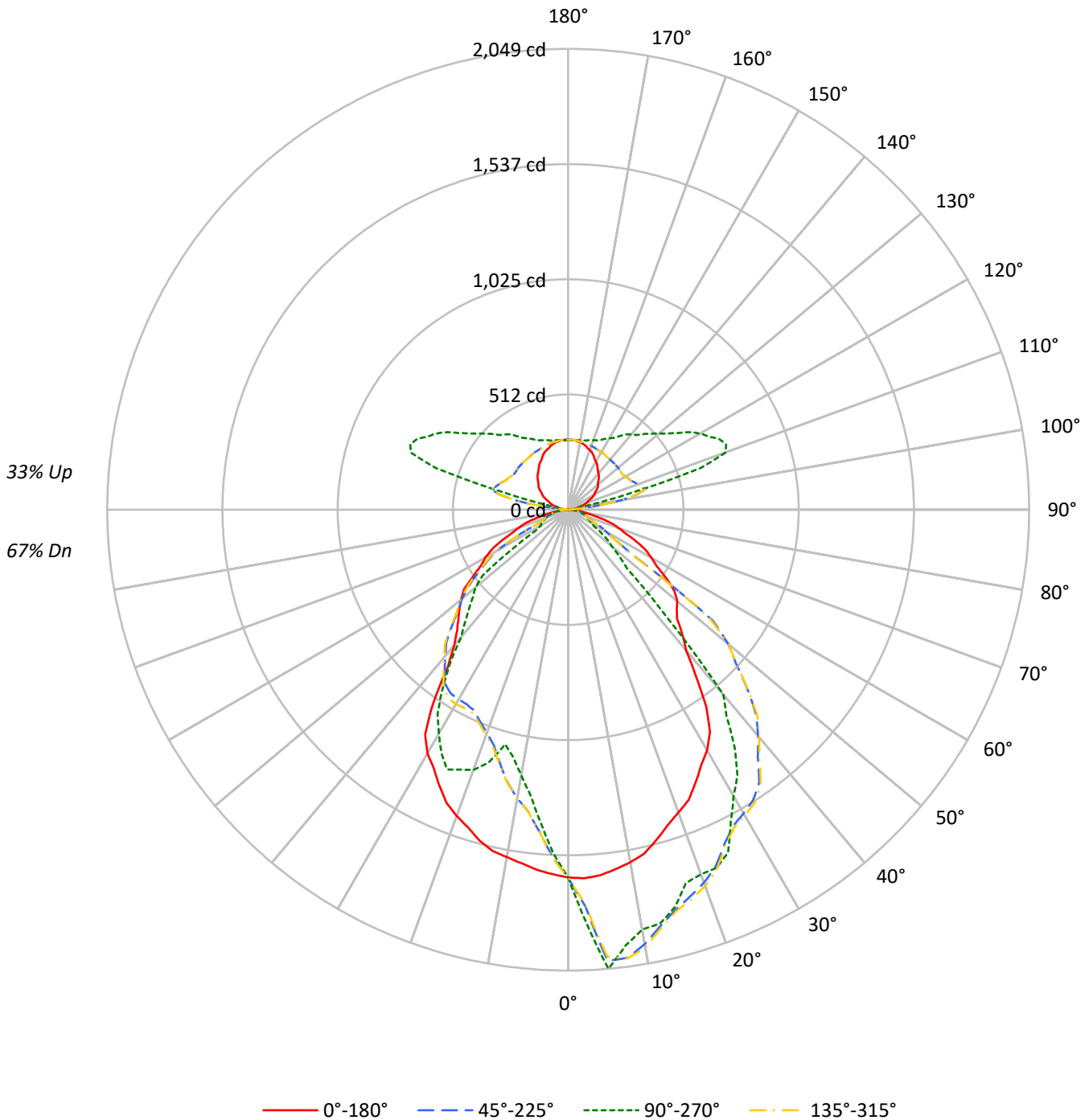
Lumens per Lamp: N/A
Luminaire Lumens: 5044.4 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53.3
Input Voltage (V): 120
Input Current (A_{in}): 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: 24 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	95	92	97	93	90	87	83	81	79	74	72	70	65	64	63	59				
2	94	88	82	77	89	83	78	74	74	70	67	66	63	61	59	56	55	51				
3	87	78	71	65	82	74	68	63	66	62	58	59	56	53	53	50	48	44				
4	80	70	62	56	75	66	60	54	60	54	50	54	49	46	48	45	42	39				
5	74	63	55	49	70	60	53	47	54	48	44	49	44	41	44	40	37	34				
6	68	57	49	43	65	54	47	42	49	43	39	44	40	36	40	36	33	31				
7	64	52	44	38	60	49	42	37	45	39	35	41	36	32	37	33	30	28				
8	59	47	40	34	56	45	38	33	41	35	31	37	33	29	34	30	27	25				
9	55	43	36	31	52	41	35	30	38	32	28	35	30	26	31	28	25	23				
10	52	40	33	28	49	38	32	27	35	30	26	32	27	24	29	25	23	21				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11733	11733	11733	11733
5°	11754	14760	11574	10064
10°	11598	13805	11429	8738
15°	11282	13592	11319	8020
20°	10936	13171	11063	9399
25°	10601	13315	10720	10088
30°	10226	12183	10364	9523
35°	9369	11292	9136	8539
40°	7635	10049	7369	6949
45°	6937	3731	7005	6330
50°	7056	2841	6926	6016
55°	6658	2206	6429	3599
60°	6135	1695	6087	2005
65°	5649	1751	5535	2117
70°	5025	1851	4886	2199
75°	4289	1938	4103	2260
80°	3232	1992	3025	2339
85°	2190	1778	1918	2190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 12846 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	3.1
10°-20°	432.1	8.6
20°-30°	646.5	12.8
30°-40°	735.2	14.6
40°-50°	628.8	12.5
50°-60°	424.0	8.4
60°-70°	218.9	4.3
70°-80°	98.8	2.0
80°-90°	30.1	0.6
90°-100°	38.3	0.8
100°-110°	272.7	5.4
110°-120°	370.3	7.3
120°-130°	301.4	6.0
130°-140°	242.4	4.8
140°-150°	191.1	3.8
150°-160°	139.7	2.8
160°-170°	86.8	1.7
170°-180°	29.6	0.6
0°-30°	1236.3	24.5
0°-40°	1971.5	39.1
0°-60°	3024.3	60.0
0°-90°	3372.1	66.8
90°-120°	681.3	13.5
90°-150°	1416.2	28.1
90°-180°	1672.0	33.1
0°-180°	5044.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1635	1635	1635	1635	1635	
5°	1632	2049	1607	1397	1632	154
15°	1519	1830	1524	1080	1519	427
25°	1339	1682	1354	1274	1339	616
35°	1070	1289	1043	975	1070	654
45°	684	368	690	624	684	542
55°	532	176	514	288	532	474
65°	333	103	326	125	333	329
75°	155	70	148	82	155	165
85°	27	22	23	27	27	34
90°	0	6	0	6	0	2
95°	16	22	16	22	16	18
105°	61	300	61	300	61	64
115°	108	742	108	742	108	107
125°	155	595	155	595	155	137
135°	192	476	192	476	192	148
145°	227	399	227	399	227	143
155°	266	343	266	343	266	122
165°	296	319	296	319	296	83
175°	311	307	311	307	311	29
180°	311	311	311	311	311	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0
2.5°	1640.3	1696.3	1766.7	1815.1	1835.9	1815.1	1754.7	1695.8	1621.7	1599.6	1547.2
5°	1631.7	1804.1	2012.6	2037.8	2049.1	2037.8	1994.3	1793.7	1606.7	1527.0	1440.4
7.5°	1611.7	1913.2	2010.2	1954.0	1954.3	1964.7	2013.2	1903.9	1585.8	1460.5	1354.2
10°	1591.7	1973.9	1961.0	1879.8	1894.5	1888.0	1976.0	1962.0	1568.5	1423.7	1302.3
12.5°	1565.1	1992.9	1895.8	1869.2	1885.1	1876.0	1905.4	1982.5	1553.8	1397.4	1242.5
15°	1518.6	1965.8	1841.2	1829.6	1829.6	1837.7	1849.6	1974.0	1523.6	1349.5	1169.3
17.5°	1470.7	1911.7	1803.3	1745.6	1739.4	1750.2	1817.0	1925.6	1480.6	1296.5	1098.4
20°	1432.1	1874.4	1764.7	1697.2	1724.8	1700.4	1779.7	1884.6	1448.7	1263.3	1054.5
22.5°	1397.5	1828.1	1715.5	1686.7	1723.5	1687.4	1729.1	1838.2	1411.4	1226.0	1021.2
25°	1338.9	1750.4	1641.6	1668.6	1681.6	1668.6	1648.3	1757.2	1353.9	1178.3	986.3
27.5°	1280.7	1668.4	1586.4	1604.5	1564.8	1595.4	1595.4	1668.7	1294.7	1122.6	975.7
30°	1234.1	1611.4	1558.5	1532.1	1470.3	1519.1	1570.1	1611.8	1250.8	1086.5	973.0
32.5°	1172.9	1559.3	1530.5	1439.5	1399.8	1433.0	1543.5	1558.3	1182.9	1053.8	970.3
35°	1069.5	1485.8	1480.3	1329.7	1289.0	1319.9	1491.9	1482.0	1042.9	1002.2	949.7
37.5°	930.8	1420.3	1384.2	1218.7	1154.0	1210.6	1395.1	1413.2	877.2	954.9	901.5
40°	815.0	1376.1	1312.3	1136.2	1072.8	1128.1	1320.6	1372.2	786.7	921.7	848.3
42.5°	749.8	1336.9	1236.5	1048.9	656.3	1035.6	1244.8	1331.9	730.8	878.8	801.7
45°	683.6	1265.8	1126.0	580.6	367.6	553.0	1127.7	1248.1	690.3	813.9	730.2
47.5°	654.7	1178.3	1010.6	349.7	310.4	339.6	1009.6	1159.1	655.0	748.7	662.0
50°	632.0	1123.2	928.1	308.1	254.5	296.8	929.8	1105.0	620.4	705.0	615.4
52.5°	594.8	1057.3	809.7	255.3	219.9	249.2	790.1	1036.6	584.5	657.3	556.9
55°	532.2	930.7	337.6	200.7	176.3	192.6	321.0	899.4	513.9	582.3	489.0
57.5°	466.0	792.3	236.8	156.2	136.7	154.6	235.2	760.5	457.4	493.2	426.5
60°	427.5	699.1	192.9	131.1	118.1	129.5	191.3	671.3	424.1	433.9	369.2
62.5°	388.9	604.5	159.7	115.3	111.4	113.7	159.3	574.1	382.9	383.5	260.1
65°	332.7	457.9	118.1	104.7	103.1	103.1	114.8	441.5	326.0	316.2	149.7
67.5°	275.4	328.8	94.8	96.4	94.8	94.8	93.1	319.5	268.8	252.2	113.1
70°	239.5	252.5	88.2	89.8	88.2	88.2	86.5	245.9	232.9	195.5	106.4
72.5°	204.9	172.4	81.5	81.8	81.5	81.5	79.8	161.8	198.3	137.4	97.1
75°	154.7	86.4	69.9	69.9	69.9	69.9	68.2	83.0	148.0	89.5	83.2
77.5°	107.4	57.0	57.9	57.5	57.5	56.2	56.2	56.6	101.1	61.8	67.2
80°	78.2	47.3	49.9	48.2	48.2	48.2	48.2	45.5	73.2	52.0	56.6
82.5°	55.6	37.7	40.6	38.9	38.9	38.9	38.9	37.2	50.6	42.4	45.9
85°	26.6	25.0	26.6	23.2	21.6	23.2	24.9	24.9	23.3	28.2	29.9
87.5°	8.0	12.3	11.4	9.2	9.2	9.2	10.1	10.9	6.7	13.5	12.8
90°	0.0	1.9	3.9	5.9	5.9	5.9	3.9	1.9	0.0	1.9	3.9
92.5°	4.7	6.6	8.6	12.2	13.7	12.2	8.6	6.6	4.7	6.6	8.6
95°	15.7	29.1	15.7	17.7	21.5	17.7	15.7	29.1	15.7	29.1	15.7
97.5°	27.8	55.8	115.1	34.0	29.4	34.0	115.1	55.8	27.8	55.8	115.1
100°	37.2	69.7	231.0	68.0	45.0	68.0	231.0	69.7	37.2	69.7	231.0
102.5°	46.6	80.7	312.5	179.5	98.3	179.5	312.5	80.7	46.6	80.7	312.5
105°	60.7	93.2	354.4	452.7	299.6	452.7	354.4	93.2	60.7	93.2	354.4
107.5°	74.8	99.3	338.3	658.9	617.1	658.9	338.3	99.3	74.8	99.3	338.3
110°	84.2	107.2	328.9	692.3	744.0	692.3	328.9	107.2	84.2	107.2	328.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	93.6	116.6	319.5	672.7	759.7	672.7	319.5	116.6	93.6	116.6	319.5
115°	107.7	130.7	305.4	634.8	742.0	634.8	305.4	130.7	107.7	130.7	305.4
117.5°	122.2	144.8	301.9	593.8	704.1	593.8	301.9	144.8	122.2	144.8	301.9
120°	133.1	154.2	295.6	562.6	677.4	562.6	295.6	154.2	133.1	154.2	295.6
122.5°	141.0	163.6	287.8	535.7	641.4	535.7	287.8	163.6	141.0	163.6	287.8
125°	154.7	175.7	287.8	503.3	595.2	503.3	287.8	175.7	154.7	175.7	287.8
127.5°	166.0	187.5	288.2	465.7	556.4	465.7	288.2	187.5	166.0	187.5	288.2
130°	172.3	195.3	289.8	440.5	526.7	440.5	289.8	195.3	172.3	195.3	289.8
132.5°	180.1	203.1	289.8	429.2	500.0	429.2	289.8	203.1	180.1	203.1	289.8
135°	191.9	212.9	289.8	414.5	475.8	414.5	289.8	212.9	191.9	212.9	289.8
137.5°	201.7	224.3	289.8	398.2	450.7	398.2	289.8	224.3	201.7	224.3	289.8
140°	209.5	230.6	289.8	388.7	436.6	388.7	289.8	230.6	209.5	230.6	289.8
142.5°	217.3	236.9	291.3	377.7	422.5	377.7	291.3	236.9	217.3	236.9	291.3
145°	227.1	246.3	291.7	361.1	399.4	361.1	291.7	246.3	227.1	246.3	291.7
147.5°	238.9	255.7	294.1	349.2	378.7	349.2	294.1	255.7	238.9	255.7	294.1
150°	246.7	262.0	295.6	341.2	366.1	341.2	295.6	262.0	246.7	262.0	295.6
152.5°	254.5	268.3	295.6	334.9	355.2	334.9	295.6	268.3	254.5	268.3	295.6
155°	266.3	275.8	297.6	327.3	342.6	327.3	297.6	275.8	266.3	275.8	297.6
157.5°	275.7	284.9	299.9	322.5	333.6	322.5	299.9	284.9	275.7	284.9	299.9
160°	281.9	289.6	301.5	319.4	328.9	319.4	301.5	289.6	281.9	289.6	301.5
162.5°	286.6	294.3	303.1	317.7	324.2	317.7	303.1	294.3	286.6	294.3	303.1
165°	295.6	299.5	305.4	313.4	319.1	313.4	305.4	299.5	295.6	299.5	305.4
167.5°	300.7	304.2	307.4	311.4	314.8	311.4	307.4	304.2	300.7	304.2	307.4
170°	305.4	307.3	307.4	311.3	313.3	311.3	307.4	307.3	305.4	307.3	307.4
172.5°	307.0	310.4	309.0	309.8	311.7	309.8	309.0	310.4	307.0	310.4	309.0
175°	311.3	313.2	311.3	309.3	307.4	309.3	311.3	313.2	311.3	313.2	311.3
177.5°	311.3	312.8	311.3	311.3	309.7	311.3	311.3	312.8	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0
2.5°	1528.5	1527.2	1529.8	1552.5	1598.7	1640.3
5°	1392.3	1397.1	1402.0	1440.4	1521.1	1631.7
7.5°	1287.5	1280.4	1291.4	1353.9	1453.0	1611.7
10°	1215.5	1199.2	1215.5	1300.7	1416.1	1591.7
12.5°	1147.5	1127.4	1152.7	1246.1	1385.6	1565.1
15°	1059.9	1079.5	1068.1	1172.6	1339.7	1518.6
17.5°	1080.7	1178.9	1101.5	1108.7	1294.0	1470.7
20°	1130.0	1230.8	1162.5	1066.2	1264.6	1432.1
22.5°	1174.7	1250.8	1189.0	1030.2	1235.2	1397.5
25°	1209.0	1274.1	1205.8	998.0	1192.6	1338.9
27.5°	1210.7	1219.8	1211.4	995.3	1139.9	1280.7
30°	1188.3	1149.3	1185.1	998.0	1102.4	1234.1
32.5°	1124.4	1080.1	1110.7	992.6	1064.6	1172.9
35°	1033.2	974.7	1017.0	964.7	1006.1	1069.5
37.5°	937.1	862.9	921.4	909.5	956.1	930.8
40°	871.9	741.8	858.9	854.9	928.8	815.0
42.5°	788.5	677.9	776.8	811.0	898.8	749.8
45°	636.7	623.7	630.2	736.8	834.8	683.6
47.5°	582.3	573.5	579.0	669.3	762.6	654.7
50°	550.3	538.9	547.0	625.4	716.6	632.0
52.5°	505.9	475.0	502.7	565.5	668.9	594.8
55°	380.4	287.7	378.8	497.3	597.3	532.2
57.5°	223.2	166.3	218.4	432.8	506.1	466.0
60°	151.1	139.7	152.7	380.9	445.3	427.5
62.5°	138.0	134.4	138.3	265.1	391.1	388.9
65°	126.4	124.7	126.4	153.0	322.9	332.7
67.5°	114.4	112.8	115.7	117.4	254.9	275.4
70°	106.4	104.8	106.4	108.1	195.6	239.5
72.5°	97.1	95.5	97.1	98.8	137.6	204.9
75°	83.1	81.5	83.1	84.8	91.3	154.7
77.5°	67.2	67.2	68.8	68.9	63.9	107.4
80°	56.6	56.6	58.2	58.2	55.4	78.2
82.5°	45.9	44.6	47.5	48.9	45.8	55.6
85°	28.2	26.6	29.9	31.6	29.9	26.6
87.5°	11.8	10.5	13.1	15.4	14.9	8.0
90°	5.9	5.9	5.9	3.9	1.9	0.0
92.5°	12.2	13.7	12.2	8.6	6.6	4.7
95°	17.7	21.5	17.7	15.7	29.1	15.7
97.5°	34.0	29.4	34.0	115.1	55.8	27.8
100°	68.0	45.0	68.0	231.0	69.7	37.2
102.5°	179.5	98.3	179.5	312.5	80.7	46.6
105°	452.7	299.6	452.7	354.4	93.2	60.7
107.5°	658.9	617.1	658.9	338.3	99.3	74.8
110°	692.3	744.0	692.3	328.9	107.2	84.2



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CATALOG NUMBER: VLT-FA-050U-125D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	672.7	759.7	672.7	319.5	116.6	93.6
115°	634.8	742.0	634.8	305.4	130.7	107.7
117.5°	593.8	704.1	593.8	301.9	144.8	122.2
120°	562.6	677.4	562.6	295.6	154.2	133.1
122.5°	535.7	641.4	535.7	287.8	163.6	141.0
125°	503.3	595.2	503.3	287.8	175.7	154.7
127.5°	465.7	556.4	465.7	288.2	187.5	166.0
130°	440.5	526.7	440.5	289.8	195.3	172.3
132.5°	429.2	500.0	429.2	289.8	203.1	180.1
135°	414.5	475.8	414.5	289.8	212.9	191.9
137.5°	398.2	450.7	398.2	289.8	224.3	201.7
140°	388.7	436.6	388.7	289.8	230.6	209.5
142.5°	377.7	422.5	377.7	291.3	236.9	217.3
145°	361.1	399.4	361.1	291.7	246.3	227.1
147.5°	349.2	378.7	349.2	294.1	255.7	238.9
150°	341.2	366.1	341.2	295.6	262.0	246.7
152.5°	334.9	355.2	334.9	295.6	268.3	254.5
155°	327.3	342.6	327.3	297.6	275.8	266.3
157.5°	322.5	333.6	322.5	299.9	284.9	275.7
160°	319.4	328.9	319.4	301.5	289.6	281.9
162.5°	317.7	324.2	317.7	303.1	294.3	286.6
165°	313.4	319.1	313.4	305.4	299.5	295.6
167.5°	311.4	314.8	311.4	307.4	304.2	300.7
170°	311.3	313.3	311.3	307.4	307.3	305.4
172.5°	309.8	311.7	309.8	309.0	310.4	307.0
175°	309.3	307.4	309.3	311.3	313.2	311.3
177.5°	311.3	309.7	311.3	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3

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