

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: P621642

Luminaire Tested: VLT-FA-075U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621642
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-075U-100D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

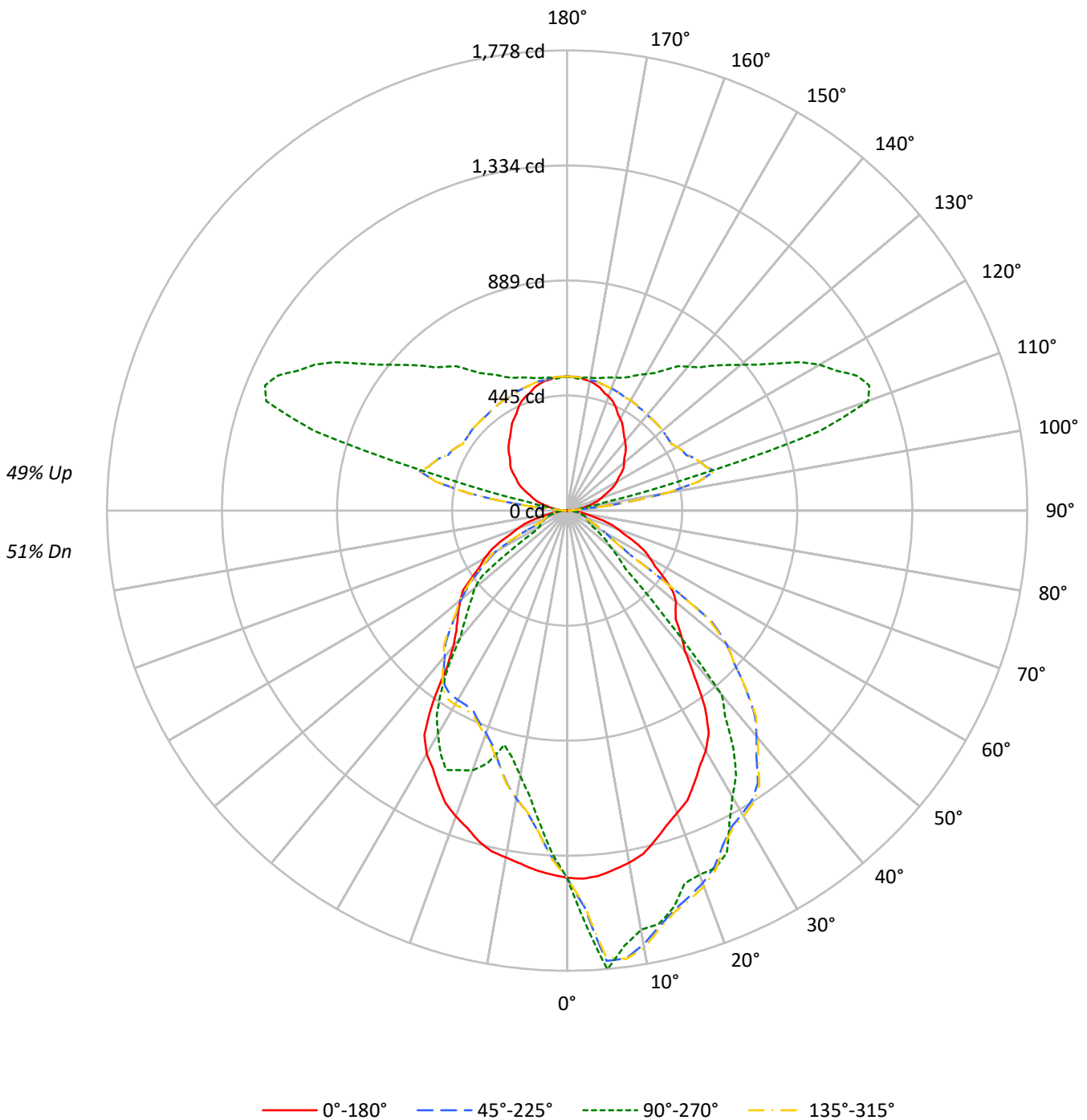
Lumens per Lamp: N/A
Luminaire Lumens: 5708.5 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50
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	0
RCR																		
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	91	88	91	88	85	82	75	73	71	63	62	60	52	51	50	45
2	91	84	78	73	84	78	73	69	67	63	60	56	54	52	47	45	44	39
3	83	74	68	62	77	69	63	59	60	55	51	51	47	45	42	40	38	34
4	77	66	59	53	71	62	55	50	53	48	45	46	42	39	38	36	33	30
5	71	60	52	46	65	56	49	44	48	43	39	41	37	34	35	32	30	26
6	65	54	46	40	60	50	43	38	44	38	34	38	33	30	32	29	26	24
7	61	49	41	36	56	46	39	34	40	34	30	34	30	27	29	26	24	21
8	56	44	37	32	52	42	35	30	36	31	27	32	27	24	27	24	21	19
9	52	41	33	29	49	38	32	27	34	28	25	29	25	22	25	22	19	17
10	49	37	30	26	46	35	29	25	31	26	22	27	23	20	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10182	10182	10182	10182
5°	10201	12810	10044	8734
10°	10066	11980	9919	7583
15°	9791	11796	9823	6960
20°	9491	11431	9601	8157
25°	9200	11555	9303	8755
30°	8875	10573	8995	8265
35°	8131	9800	7929	7410
40°	6626	8721	6396	6031
45°	6021	3237	6079	5493
50°	6123	2466	6011	5221
55°	5779	1914	5580	3124
60°	5325	1471	5283	1741
65°	4902	1520	4804	1839
70°	4362	1605	4240	1907
75°	3721	1680	3563	1960
80°	2802	1732	2624	2029
85°	1902	1548	1663	1902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 11149 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.9	2.4
10°-20°	375.0	6.6
20°-30°	561.1	9.8
30°-40°	638.1	11.2
40°-50°	545.7	9.6
50°-60°	368.0	6.4
60°-70°	189.9	3.3
70°-80°	85.8	1.5
80°-90°	26.7	0.5
90°-100°	63.7	1.1
100°-110°	453.7	7.9
110°-120°	615.9	10.8
120°-130°	501.3	8.8
130°-140°	403.2	7.1
140°-150°	317.8	5.6
150°-160°	232.4	4.1
160°-170°	144.4	2.5
170°-180°	49.2	0.9
0°-30°	1072.9	18.8
0°-40°	1711.0	30.0
0°-60°	2624.7	46.0
0°-90°	2927.1	51.3
90°-120°	1133.2	19.9
90°-150°	2355.5	41.3
90°-180°	2781.0	48.7
0°-180°	5708.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1419	1419	1419	1419	1419	
5°	1416	1778	1394	1212	1416	134
15°	1318	1588	1322	937	1318	371
25°	1162	1459	1175	1106	1162	535
35°	928	1119	905	846	928	567
45°	593	319	599	541	593	471
55°	462	153	446	250	462	412
65°	289	90	283	108	289	285
75°	134	61	128	71	134	143
85°	23	19	20	23	23	30
90°	0	10	0	10	0	2
95°	26	36	26	36	26	29
105°	101	498	101	498	101	106
115°	179	1234	179	1234	179	178
125°	257	990	257	990	257	229
135°	319	791	319	791	319	246
145°	378	664	378	664	378	237
155°	443	570	443	570	443	203
165°	492	531	492	531	492	138
175°	518	511	518	511	518	49
180°	518	518	518	518	518	



TEST NUMBER: P621642

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9
2.5°	1423.6	1472.1	1533.3	1575.2	1593.3	1575.2	1522.9	1471.8	1407.4	1388.2	1342.7
5°	1416.1	1565.7	1746.6	1768.5	1778.4	1768.5	1730.7	1556.7	1394.4	1325.2	1250.1
7.5°	1398.7	1660.4	1744.6	1695.8	1696.1	1705.1	1747.2	1652.3	1376.2	1267.5	1175.3
10°	1381.4	1713.1	1701.9	1631.4	1644.1	1638.5	1714.9	1702.8	1361.2	1235.6	1130.2
12.5°	1358.3	1729.5	1645.3	1622.2	1636.0	1628.1	1653.7	1720.5	1348.5	1212.7	1078.3
15°	1317.9	1706.0	1597.9	1587.8	1587.8	1594.9	1605.2	1713.2	1322.2	1171.2	1014.8
17.5°	1276.3	1659.1	1565.0	1515.0	1509.6	1518.9	1576.9	1671.1	1285.0	1125.2	953.3
20°	1242.8	1626.7	1531.5	1472.9	1496.9	1475.7	1544.5	1635.5	1257.3	1096.4	915.2
22.5°	1212.8	1586.6	1488.8	1463.8	1495.7	1464.4	1500.6	1595.3	1224.9	1064.0	886.3
25°	1162.0	1519.1	1424.7	1448.1	1459.4	1448.1	1430.5	1525.0	1175.0	1022.6	856.0
27.5°	1111.5	1448.0	1376.8	1392.5	1358.0	1384.6	1384.6	1448.2	1123.6	974.3	846.7
30°	1071.1	1398.5	1352.5	1329.7	1276.0	1318.4	1362.6	1398.8	1085.5	942.9	844.4
32.5°	1017.9	1353.3	1328.3	1249.3	1214.8	1243.6	1339.6	1352.4	1026.6	914.5	842.1
35°	928.2	1289.5	1284.7	1154.0	1118.7	1145.5	1294.8	1286.1	905.1	869.8	824.2
37.5°	807.8	1232.6	1201.3	1057.7	1001.5	1050.6	1210.8	1226.5	761.3	828.8	782.4
40°	707.3	1194.2	1138.9	986.1	931.0	979.0	1146.1	1190.9	682.8	799.9	736.2
42.5°	650.7	1160.2	1073.1	910.3	569.6	898.7	1080.3	1155.9	634.3	762.7	695.8
45°	593.3	1098.6	977.2	503.9	319.0	479.9	978.7	1083.2	599.0	706.3	633.7
47.5°	568.2	1022.6	877.1	303.5	269.4	294.8	876.2	1006.0	568.4	649.7	574.5
50°	548.5	974.8	805.5	267.4	220.9	257.5	806.9	959.0	538.4	611.8	534.1
52.5°	516.2	917.6	702.7	221.6	190.8	216.2	685.7	899.6	507.2	570.5	483.3
55°	461.9	807.7	293.0	174.2	153.0	167.1	278.6	780.5	446.0	505.3	424.4
57.5°	404.5	687.6	205.6	135.6	118.7	134.2	204.1	660.0	397.0	428.0	370.1
60°	371.0	606.7	167.4	113.8	102.5	112.4	166.0	582.6	368.1	376.6	320.5
62.5°	337.5	524.6	138.6	100.1	96.7	98.7	138.3	498.3	332.3	332.9	225.8
65°	288.7	397.4	102.5	90.9	89.5	89.5	99.6	383.1	282.9	274.5	129.9
67.5°	239.0	285.3	82.3	83.7	82.3	82.3	80.8	277.3	233.3	218.9	98.2
70°	207.9	219.2	76.5	77.9	76.5	76.5	75.1	213.4	202.1	169.6	92.4
72.5°	177.8	149.6	70.7	71.0	70.7	70.7	69.3	140.4	172.1	119.3	84.3
75°	134.2	75.0	60.6	60.6	60.6	60.6	59.2	72.0	128.5	77.7	72.2
77.5°	93.2	49.5	50.2	49.9	49.9	48.8	48.8	49.1	87.8	53.6	58.3
80°	67.8	41.0	43.3	41.9	41.9	41.9	41.9	39.5	63.5	45.2	49.1
82.5°	48.2	32.7	35.2	33.8	33.8	33.8	33.8	32.3	43.9	36.8	39.8
85°	23.1	21.7	23.1	20.2	18.8	20.2	21.7	21.6	20.2	24.4	26.0
87.5°	6.9	11.0	10.5	8.9	8.9	8.9	9.4	9.8	5.8	12.1	11.7
90°	0.0	3.2	6.5	9.8	9.8	9.8	6.5	3.2	0.0	3.2	6.5
92.5°	7.8	11.0	14.3	20.2	22.8	20.2	14.3	11.0	7.8	11.0	14.3
95°	26.1	48.3	26.1	29.5	35.8	29.5	26.1	48.3	26.1	48.3	26.1
97.5°	46.2	92.7	191.5	56.5	48.8	56.5	191.5	92.7	46.2	92.7	191.5
100°	61.9	116.0	384.3	113.1	74.9	113.1	384.3	116.0	61.9	116.0	384.3
102.5°	77.5	134.2	519.7	298.5	163.5	298.5	519.7	134.2	77.5	134.2	519.7
105°	101.0	155.1	589.4	753.0	498.3	753.0	589.4	155.1	101.0	155.1	589.4
107.5°	124.4	165.2	562.7	1095.9	1026.5	1095.9	562.7	165.2	124.4	165.2	562.7
110°	140.0	178.2	547.1	1151.5	1237.5	1151.5	547.1	178.2	140.0	178.2	547.1



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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°	155.7	193.9	531.5	1119.0	1263.5	1119.0	531.5	193.9	155.7	193.9	531.5
115°	179.1	217.3	508.0	1055.9	1234.2	1055.9	508.0	217.3	179.1	217.3	508.0
117.5°	203.2	240.8	502.2	987.6	1171.1	987.6	502.2	240.8	203.2	240.8	502.2
120°	221.4	256.5	491.7	935.7	1126.8	935.7	491.7	256.5	221.4	256.5	491.7
122.5°	234.5	272.0	478.7	891.1	1066.8	891.1	478.7	272.0	234.5	272.0	478.7
125°	257.3	292.3	478.7	837.2	990.0	837.2	478.7	292.3	257.3	292.3	478.7
127.5°	276.2	311.8	479.4	774.6	925.5	774.6	479.4	311.8	276.2	311.8	479.4
130°	286.6	324.8	482.0	732.7	876.0	732.7	482.0	324.8	286.6	324.8	482.0
132.5°	299.6	337.8	482.0	713.9	831.7	713.9	482.0	337.8	299.6	337.8	482.0
135°	319.1	354.2	482.0	689.4	791.3	689.4	482.0	354.2	319.1	354.2	482.0
137.5°	335.4	373.0	482.0	662.4	749.7	662.4	482.0	373.0	335.4	373.0	482.0
140°	348.5	383.5	482.0	646.6	726.2	646.6	482.0	383.5	348.5	383.5	482.0
142.5°	361.5	394.0	484.6	628.3	702.8	628.3	484.6	394.0	361.5	394.0	484.6
145°	377.8	409.6	485.2	600.7	664.3	600.7	485.2	409.6	377.8	409.6	485.2
147.5°	397.3	425.3	489.1	580.8	629.8	580.8	489.1	425.3	397.3	425.3	489.1
150°	410.3	435.8	491.7	567.6	609.0	567.6	491.7	435.8	410.3	435.8	491.7
152.5°	423.4	446.3	491.7	557.0	590.7	557.0	491.7	446.3	423.4	446.3	491.7
155°	442.9	458.8	495.0	544.4	569.9	544.4	495.0	458.8	442.9	458.8	495.0
157.5°	458.5	473.8	498.9	536.4	554.9	536.4	498.9	473.8	458.5	473.8	498.9
160°	468.9	481.7	501.5	531.2	547.1	531.2	501.5	481.7	468.9	481.7	501.5
162.5°	476.8	489.5	504.1	528.5	539.3	528.5	504.1	489.5	476.8	489.5	504.1
165°	491.7	498.1	508.0	521.3	530.8	521.3	508.0	498.1	491.7	498.1	508.0
167.5°	500.2	505.9	511.3	517.9	523.7	517.9	511.3	505.9	500.2	505.9	511.3
170°	508.0	511.2	511.3	517.9	521.0	517.9	511.3	511.2	508.0	511.2	511.3
172.5°	510.6	516.4	513.9	515.3	518.4	515.3	513.9	516.4	510.6	516.4	513.9
175°	517.8	521.0	517.8	514.5	511.3	514.5	517.8	521.0	517.8	521.0	517.8
177.5°	517.8	520.3	517.8	517.7	515.2	517.7	517.8	520.3	517.8	520.3	517.8
180°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8



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CATALOG NUMBER: VLT-FA-075U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9
2.5°	1326.5	1325.4	1327.7	1347.3	1387.4	1423.6
5°	1208.3	1212.5	1216.8	1250.1	1320.1	1416.1
7.5°	1117.4	1111.2	1120.8	1175.0	1261.0	1398.7
10°	1054.9	1040.7	1054.9	1128.8	1229.0	1381.4
12.5°	995.9	978.4	1000.4	1081.5	1202.5	1358.3
15°	919.9	936.8	926.9	1017.7	1162.6	1317.9
17.5°	937.9	1023.1	956.0	962.2	1123.0	1276.3
20°	980.7	1068.2	1008.9	925.3	1097.5	1242.8
22.5°	1019.4	1085.5	1031.9	894.1	1072.0	1212.8
25°	1049.3	1105.7	1046.4	866.1	1035.0	1162.0
27.5°	1050.7	1058.6	1051.3	863.8	989.3	1111.5
30°	1031.3	997.4	1028.5	866.1	956.7	1071.1
32.5°	975.8	937.4	963.9	861.5	923.9	1017.9
35°	896.7	845.9	882.6	837.2	873.1	928.2
37.5°	813.2	748.9	799.7	789.3	829.8	807.8
40°	756.7	643.8	745.4	741.9	806.1	707.3
42.5°	684.3	588.4	674.2	703.8	780.0	650.7
45°	552.6	541.3	547.0	639.5	724.5	593.3
47.5°	505.3	497.7	502.5	580.9	661.9	568.2
50°	477.6	467.7	474.7	542.7	621.9	548.5
52.5°	439.1	412.3	436.3	490.8	580.5	516.2
55°	330.2	249.7	328.8	431.6	518.4	461.9
57.5°	193.7	144.3	189.5	375.6	439.2	404.5
60°	131.1	121.3	132.5	330.6	386.5	371.0
62.5°	119.7	116.6	120.0	230.1	339.5	337.5
65°	109.7	108.3	109.7	132.8	280.2	288.7
67.5°	99.3	97.9	100.4	101.9	221.3	239.0
70°	92.4	90.9	92.4	93.8	169.8	207.9
72.5°	84.3	82.9	84.3	85.7	119.4	177.8
75°	72.1	70.7	72.1	73.6	79.2	134.2
77.5°	58.3	58.3	59.7	59.8	55.4	93.2
80°	49.1	49.1	50.5	50.5	48.1	67.8
82.5°	39.8	38.7	41.2	42.4	39.7	48.2
85°	24.5	23.1	25.9	27.4	25.9	23.1
87.5°	11.2	10.0	12.3	14.0	13.2	6.9
90°	9.8	9.8	9.8	6.5	3.2	0.0
92.5°	20.2	22.8	20.2	14.3	11.0	7.8
95°	29.5	35.8	29.5	26.1	48.3	26.1
97.5°	56.5	48.8	56.5	191.5	92.7	46.2
100°	113.1	74.9	113.1	384.3	116.0	61.9
102.5°	298.5	163.5	298.5	519.7	134.2	77.5
105°	753.0	498.3	753.0	589.4	155.1	101.0
107.5°	1095.9	1026.5	1095.9	562.7	165.2	124.4
110°	1151.5	1237.5	1151.5	547.1	178.2	140.0



TEST NUMBER: P621642

CATALOG NUMBER: VLT-FA-075U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1119.0	1263.5	1119.0	531.5	193.9	155.7
115°	1055.9	1234.2	1055.9	508.0	217.3	179.1
117.5°	987.6	1171.1	987.6	502.2	240.8	203.2
120°	935.7	1126.8	935.7	491.7	256.5	221.4
122.5°	891.1	1066.8	891.1	478.7	272.0	234.5
125°	837.2	990.0	837.2	478.7	292.3	257.3
127.5°	774.6	925.5	774.6	479.4	311.8	276.2
130°	732.7	876.0	732.7	482.0	324.8	286.6
132.5°	713.9	831.7	713.9	482.0	337.8	299.6
135°	689.4	791.3	689.4	482.0	354.2	319.1
137.5°	662.4	749.7	662.4	482.0	373.0	335.4
140°	646.6	726.2	646.6	482.0	383.5	348.5
142.5°	628.3	702.8	628.3	484.6	394.0	361.5
145°	600.7	664.3	600.7	485.2	409.6	377.8
147.5°	580.8	629.8	580.8	489.1	425.3	397.3
150°	567.6	609.0	567.6	491.7	435.8	410.3
152.5°	557.0	590.7	557.0	491.7	446.3	423.4
155°	544.4	569.9	544.4	495.0	458.8	442.9
157.5°	536.4	554.9	536.4	498.9	473.8	458.5
160°	531.2	547.1	531.2	501.5	481.7	468.9
162.5°	528.5	539.3	528.5	504.1	489.5	476.8
165°	521.3	530.8	521.3	508.0	498.1	491.7
167.5°	517.9	523.7	517.9	511.3	505.9	500.2
170°	517.9	521.0	517.9	511.3	511.2	508.0
172.5°	515.3	518.4	515.3	513.9	516.4	510.6
175°	514.5	511.3	514.5	517.8	521.0	517.8
177.5°	517.7	515.2	517.7	517.8	520.3	517.8
180°	517.8	517.8	517.8	517.8	517.8	517.8

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