

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: P621693

Luminaire Tested: VLT-FA-100U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621693
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-100U-125D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

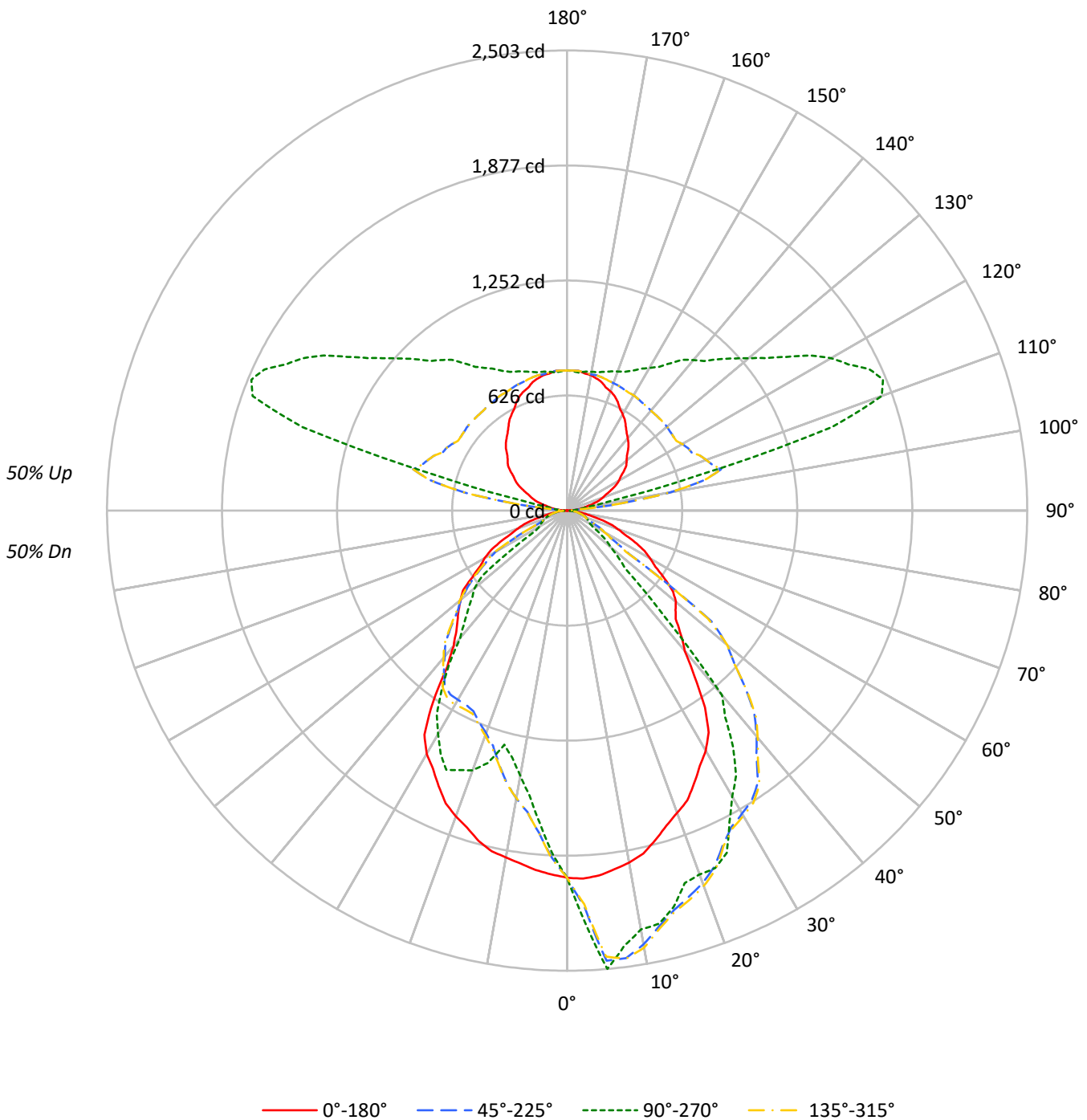
Lumens per Lamp: N/A
Luminaire Lumens: 8212.8 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 67.7
Input Voltage (V): 120
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: 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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	99	95	91	88	91	88	85	82	74	72	70	62	61	59	51	50	49	44				
2	91	84	78	73	83	78	73	68	66	63	59	56	53	51	46	44	43	38				
3	83	74	67	62	77	69	63	58	59	55	51	50	47	44	41	39	37	33				
4	76	66	59	53	70	62	55	50	53	48	44	45	41	38	38	35	33	29				
5	70	59	52	46	65	55	49	43	48	43	39	41	37	34	34	31	29	26				
6	65	54	46	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23				
7	60	49	41	36	56	45	39	34	39	34	30	34	30	27	29	26	23	21				
8	56	44	37	32	52	41	35	30	36	31	27	31	27	24	26	23	21	19				
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17				
10	49	37	30	26	45	35	29	24	31	26	22	27	23	20	23	20	17	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14330	14330	14330	14330
5°	14355	18028	14135	12292
10°	14165	16860	13958	10672
15°	13779	16600	13824	9795
20°	13356	16087	13511	11479
25°	12948	16261	13093	12320
30°	12490	14880	12658	11631
35°	11443	13791	11158	10428
40°	9324	12273	9000	8487
45°	8473	4556	8555	7731
50°	8617	3470	8459	7348
55°	8132	2694	7853	4396
60°	7493	2070	7434	2448
65°	6899	2138	6761	2588
70°	6137	2260	5967	2686
75°	5237	2365	5013	2759
80°	3947	2434	3694	2856
85°	2676	2174	2338	2676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15689 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.6	2.3
10°-20°	527.7	6.4
20°-30°	789.6	9.6
30°-40°	898.0	10.9
40°-50°	768.0	9.4
50°-60°	517.9	6.3
60°-70°	267.3	3.3
70°-80°	120.7	1.5
80°-90°	37.6	0.5
90°-100°	93.7	1.1
100°-110°	667.6	8.1
110°-120°	906.4	11.0
120°-130°	737.7	9.0
130°-140°	593.3	7.2
140°-150°	467.8	5.7
150°-160°	342.0	4.2
160°-170°	212.4	2.6
170°-180°	72.4	0.9
0°-30°	1509.9	18.4
0°-40°	2407.9	29.3
0°-60°	3693.7	45.0
0°-90°	4119.3	50.2
90°-120°	1667.7	20.3
90°-150°	3466.6	42.2
90°-180°	4094.0	49.8
0°-180°	8212.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1997	1997	1997	1997	1997	
5°	1993	2503	1962	1706	1993	188
15°	1855	2234	1861	1318	1855	522
25°	1635	2054	1654	1556	1635	753
35°	1306	1574	1274	1190	1306	799
45°	835	449	843	762	835	662
55°	650	215	628	351	650	579
65°	406	126	398	152	406	402
75°	189	85	181	100	189	201
85°	32	26	28	32	32	42
90°	0	14	0	14	0	3
95°	38	53	38	53	38	43
105°	149	733	149	733	149	157
115°	264	1816	264	1816	264	262
125°	379	1457	379	1457	379	336
135°	470	1165	470	1165	470	361
145°	556	978	556	978	556	349
155°	652	839	652	839	652	299
165°	724	781	724	781	724	203
175°	762	752	762	752	762	72
180°	762	762	762	762	762	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9
2.5°	2003.4	2071.7	2157.7	2216.8	2242.3	2216.8	2143.1	2071.2	1980.6	1953.6	1889.6
5°	1992.8	2203.3	2458.0	2488.8	2502.7	2488.8	2435.6	2190.7	1962.3	1865.0	1759.2
7.5°	1968.4	2336.7	2455.1	2386.5	2386.9	2399.6	2458.8	2325.2	1936.7	1783.8	1654.0
10°	1944.0	2410.8	2395.0	2295.9	2313.8	2305.8	2413.3	2396.3	1915.6	1738.8	1590.6
12.5°	1911.5	2433.9	2315.4	2282.9	2302.4	2291.3	2327.2	2421.3	1897.7	1706.6	1517.4
15°	1854.7	2400.9	2248.8	2234.5	2234.5	2244.5	2258.9	2410.9	1860.8	1648.2	1428.1
17.5°	1796.2	2334.8	2202.4	2132.0	2124.4	2137.5	2219.1	2351.8	1808.3	1583.5	1341.5
20°	1749.0	2289.3	2155.3	2072.8	2106.6	2076.8	2173.6	2301.7	1769.3	1542.9	1287.9
22.5°	1706.8	2232.7	2095.2	2060.0	2104.9	2060.8	2111.8	2245.0	1723.8	1497.4	1247.3
25°	1635.3	2137.8	2005.0	2037.8	2053.7	2037.8	2013.1	2146.1	1653.6	1439.0	1204.6
27.5°	1564.2	2037.7	1937.5	1959.6	1911.1	1948.5	1948.5	2038.1	1581.2	1371.1	1191.6
30°	1507.3	1968.1	1903.4	1871.2	1795.8	1855.3	1917.6	1968.6	1527.6	1327.0	1188.4
32.5°	1432.5	1904.5	1869.3	1758.1	1709.6	1750.1	1885.1	1903.2	1444.7	1287.0	1185.1
35°	1306.2	1814.7	1807.9	1624.0	1574.3	1612.1	1822.2	1810.0	1273.7	1224.0	1159.9
37.5°	1136.8	1734.6	1690.5	1488.4	1409.4	1478.5	1703.9	1726.0	1071.4	1166.3	1101.0
40°	995.4	1680.6	1602.8	1387.7	1310.2	1377.8	1612.9	1675.9	960.8	1125.7	1036.0
42.5°	915.8	1632.8	1510.1	1281.1	801.6	1264.8	1520.3	1626.7	892.6	1073.3	979.1
45°	834.9	1546.0	1375.3	709.1	448.9	675.4	1377.3	1524.3	843.0	994.0	891.8
47.5°	799.6	1439.1	1234.3	427.1	379.1	414.8	1233.1	1415.7	800.0	914.4	808.5
50°	771.9	1371.8	1133.5	376.3	310.8	362.4	1135.5	1349.6	757.7	861.0	751.6
52.5°	726.4	1291.3	988.9	311.9	268.6	304.3	964.9	1266.0	713.8	802.8	680.1
55°	650.0	1136.7	412.4	245.1	215.3	235.2	392.1	1098.4	627.7	711.1	597.2
57.5°	569.2	967.6	289.3	190.8	167.0	188.8	287.2	928.9	558.6	602.3	520.8
60°	522.1	853.8	235.6	160.1	144.2	158.1	233.6	819.9	518.0	529.9	451.0
62.5°	474.9	738.3	195.0	140.9	136.1	138.9	194.6	701.2	467.6	468.4	317.7
65°	406.3	559.2	144.2	127.9	125.9	125.9	140.2	539.2	398.2	386.2	182.8
67.5°	336.4	401.5	115.8	117.8	115.8	115.8	113.8	390.2	328.3	308.0	138.1
70°	292.5	308.4	107.7	109.7	107.7	107.7	105.6	300.3	284.4	238.7	130.0
72.5°	250.3	210.5	99.5	99.9	99.5	99.5	97.5	197.6	242.1	167.9	118.6
75°	188.9	105.5	85.3	85.3	85.3	85.3	83.3	101.3	180.8	109.3	101.6
77.5°	131.2	69.7	70.7	70.3	70.3	68.7	68.7	69.1	123.5	75.4	82.1
80°	95.5	57.7	60.9	58.9	58.9	58.9	58.9	55.6	89.4	63.6	69.1
82.5°	67.8	46.0	49.6	47.5	47.5	47.5	47.5	45.5	61.8	51.8	56.1
85°	32.5	30.5	32.5	28.4	26.4	28.4	30.5	30.4	28.4	34.4	36.6
87.5°	9.8	15.5	14.9	12.6	12.6	12.6	13.3	13.8	8.1	17.0	16.5
90°	0.0	4.7	9.6	14.4	14.4	14.4	9.6	4.7	0.0	4.7	9.6
92.5°	11.5	16.2	21.1	29.8	33.5	29.8	21.1	16.2	11.5	16.2	21.1
95°	38.3	71.1	38.3	43.3	52.7	43.3	38.3	71.1	38.3	71.1	38.3
97.5°	68.1	136.5	281.8	83.1	71.9	83.1	281.8	136.5	68.1	136.5	281.8
100°	91.1	170.7	565.5	166.5	110.2	166.5	565.5	170.7	91.1	170.7	565.5
102.5°	114.1	197.5	764.9	439.3	240.6	439.3	764.9	197.5	114.1	197.5	764.9
105°	148.6	228.2	867.5	1108.2	733.3	1108.2	867.5	228.2	148.6	228.2	867.5
107.5°	183.1	243.1	828.2	1612.8	1510.7	1612.8	828.2	243.1	183.1	243.1	828.2
110°	206.1	262.3	805.2	1694.7	1821.3	1694.7	805.2	262.3	206.1	262.3	805.2



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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°	229.1	285.3	782.2	1646.8	1859.6	1646.8	782.2	285.3	229.1	285.3	782.2
115°	263.6	319.8	747.7	1554.0	1816.5	1554.0	747.7	319.8	263.6	319.8	747.7
117.5°	299.1	354.4	739.0	1453.6	1723.5	1453.6	739.0	354.4	299.1	354.4	739.0
120°	325.9	377.5	723.7	1377.1	1658.3	1377.1	723.7	377.5	325.9	377.5	723.7
122.5°	345.1	400.4	704.5	1311.4	1570.1	1311.4	704.5	400.4	345.1	400.4	704.5
125°	378.6	430.2	704.5	1232.1	1457.0	1232.1	704.5	430.2	378.6	430.2	704.5
127.5°	406.4	458.9	705.5	1140.0	1362.1	1140.0	705.5	458.9	406.4	458.9	705.5
130°	421.8	478.0	709.3	1078.4	1289.3	1078.4	709.3	478.0	421.8	478.0	709.3
132.5°	440.9	497.2	709.3	1050.7	1224.1	1050.7	709.3	497.2	440.9	497.2	709.3
135°	469.7	521.2	709.3	1014.7	1164.6	1014.7	709.3	521.2	469.7	521.2	709.3
137.5°	493.7	549.0	709.3	974.9	1103.3	974.9	709.3	549.0	493.7	549.0	709.3
140°	512.8	564.4	709.3	951.6	1068.8	951.6	709.3	564.4	512.8	564.4	709.3
142.5°	532.0	579.8	713.2	924.6	1034.3	924.6	713.2	579.8	532.0	579.8	713.2
145°	556.0	602.8	714.1	884.0	977.7	884.0	714.1	602.8	556.0	602.8	714.1
147.5°	584.7	626.0	719.9	854.8	926.9	854.8	719.9	626.0	584.7	626.0	719.9
150°	603.9	641.4	723.7	835.3	896.2	835.3	723.7	641.4	603.9	641.4	723.7
152.5°	623.1	656.8	723.7	819.7	869.4	819.7	723.7	656.8	623.1	656.8	723.7
155°	651.8	675.2	728.5	801.2	838.7	801.2	728.5	675.2	651.8	675.2	728.5
157.5°	674.8	697.3	734.3	789.5	816.7	789.5	734.3	697.3	674.8	697.3	734.3
160°	690.2	708.9	738.1	781.8	805.2	781.8	738.1	708.9	690.2	708.9	738.1
162.5°	701.7	720.4	741.9	777.7	793.7	777.7	741.9	720.4	701.7	720.4	741.9
165°	723.7	733.1	747.7	767.2	781.2	767.2	747.7	733.1	723.7	733.1	747.7
167.5°	736.2	744.6	752.5	762.2	770.7	762.2	752.5	744.6	736.2	744.6	752.5
170°	747.7	752.4	752.5	762.2	766.8	762.2	752.5	752.4	747.7	752.4	752.5
172.5°	751.5	759.9	756.3	758.3	763.0	758.3	756.3	759.9	751.5	759.9	756.3
175°	762.1	766.7	762.1	757.2	752.5	757.2	762.1	766.7	762.1	766.7	762.1
177.5°	762.1	765.8	762.1	762.0	758.2	762.0	762.1	765.8	762.1	765.8	762.1
180°	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9
2.5°	1866.8	1865.2	1868.4	1896.1	1952.5	2003.4
5°	1700.4	1706.4	1712.3	1759.2	1857.7	1992.8
7.5°	1572.5	1563.8	1577.3	1653.6	1774.6	1968.4
10°	1484.5	1464.6	1484.5	1588.5	1729.5	1944.0
12.5°	1401.5	1376.9	1407.9	1521.9	1692.3	1911.5
15°	1294.5	1318.4	1304.5	1432.1	1636.2	1854.7
17.5°	1319.9	1439.9	1345.3	1354.1	1580.5	1796.2
20°	1380.1	1503.2	1419.8	1302.1	1544.4	1749.0
22.5°	1434.7	1527.6	1452.1	1258.2	1508.5	1706.8
25°	1476.6	1556.0	1472.6	1218.8	1456.5	1635.3
27.5°	1478.7	1489.8	1479.5	1215.6	1392.2	1564.2
30°	1451.4	1403.7	1447.4	1218.8	1346.4	1507.3
32.5°	1373.2	1319.2	1356.5	1212.3	1300.3	1432.5
35°	1261.9	1190.4	1242.0	1178.2	1228.7	1306.2
37.5°	1144.5	1053.9	1125.4	1110.8	1167.8	1136.8
40°	1064.9	906.0	1049.0	1044.1	1134.4	995.4
42.5°	963.1	828.0	948.8	990.5	1097.7	915.8
45°	777.7	761.8	769.7	899.9	1019.6	834.9
47.5°	711.1	700.4	707.2	817.4	931.4	799.6
50°	672.1	658.2	668.1	763.8	875.2	771.9
52.5°	617.9	580.2	613.9	690.7	817.0	726.4
55°	464.6	351.4	462.7	607.4	729.5	650.0
57.5°	272.7	203.1	266.7	528.6	618.1	569.2
60°	184.5	170.6	186.5	465.2	543.9	522.1
62.5°	168.5	164.1	168.9	323.8	477.7	474.9
65°	154.3	152.4	154.3	186.9	394.4	406.3
67.5°	139.7	137.7	141.3	143.4	311.4	336.4
70°	130.0	128.0	130.0	132.0	238.9	292.5
72.5°	118.6	116.6	118.6	120.7	168.0	250.3
75°	101.5	99.5	101.5	103.6	111.5	188.9
77.5°	82.1	82.1	84.1	84.1	78.0	131.2
80°	69.1	69.1	71.1	71.1	67.7	95.5
82.5°	56.0	54.4	58.0	59.7	55.9	67.8
85°	34.5	32.5	36.5	38.6	36.5	32.5
87.5°	15.8	14.3	17.4	19.8	18.6	9.8
90°	14.4	14.4	14.4	9.6	4.7	0.0
92.5°	29.8	33.5	29.8	21.1	16.2	11.5
95°	43.3	52.7	43.3	38.3	71.1	38.3
97.5°	83.1	71.9	83.1	281.8	136.5	68.1
100°	166.5	110.2	166.5	565.5	170.7	91.1
102.5°	439.3	240.6	439.3	764.9	197.5	114.1
105°	1108.2	733.3	1108.2	867.5	228.2	148.6
107.5°	1612.8	1510.7	1612.8	828.2	243.1	183.1
110°	1694.7	1821.3	1694.7	805.2	262.3	206.1



TEST NUMBER: P621693

CATALOG NUMBER: VLT-FA-100U-125D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1646.8	1859.6	1646.8	782.2	285.3	229.1
115°	1554.0	1816.5	1554.0	747.7	319.8	263.6
117.5°	1453.6	1723.5	1453.6	739.0	354.4	299.1
120°	1377.1	1658.3	1377.1	723.7	377.5	325.9
122.5°	1311.4	1570.1	1311.4	704.5	400.4	345.1
125°	1232.1	1457.0	1232.1	704.5	430.2	378.6
127.5°	1140.0	1362.1	1140.0	705.5	458.9	406.4
130°	1078.4	1289.3	1078.4	709.3	478.0	421.8
132.5°	1050.7	1224.1	1050.7	709.3	497.2	440.9
135°	1014.7	1164.6	1014.7	709.3	521.2	469.7
137.5°	974.9	1103.3	974.9	709.3	549.0	493.7
140°	951.6	1068.8	951.6	709.3	564.4	512.8
142.5°	924.6	1034.3	924.6	713.2	579.8	532.0
145°	884.0	977.7	884.0	714.1	602.8	556.0
147.5°	854.8	926.9	854.8	719.9	626.0	584.7
150°	835.3	896.2	835.3	723.7	641.4	603.9
152.5°	819.7	869.4	819.7	723.7	656.8	623.1
155°	801.2	838.7	801.2	728.5	675.2	651.8
157.5°	789.5	816.7	789.5	734.3	697.3	674.8
160°	781.8	805.2	781.8	738.1	708.9	690.2
162.5°	777.7	793.7	777.7	741.9	720.4	701.7
165°	767.2	781.2	767.2	747.7	733.1	723.7
167.5°	762.2	770.7	762.2	752.5	744.6	736.2
170°	762.2	766.8	762.2	752.5	752.4	747.7
172.5°	758.3	763.0	758.3	756.3	759.9	751.5
175°	757.2	752.5	757.2	762.1	766.7	762.1
177.5°	762.0	758.2	762.0	762.1	765.8	762.1
180°	762.1	762.1	762.1	762.1	762.1	762.1

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