

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: P621609

Luminaire Tested: VLT-FA-050U-075D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621609
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-075D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

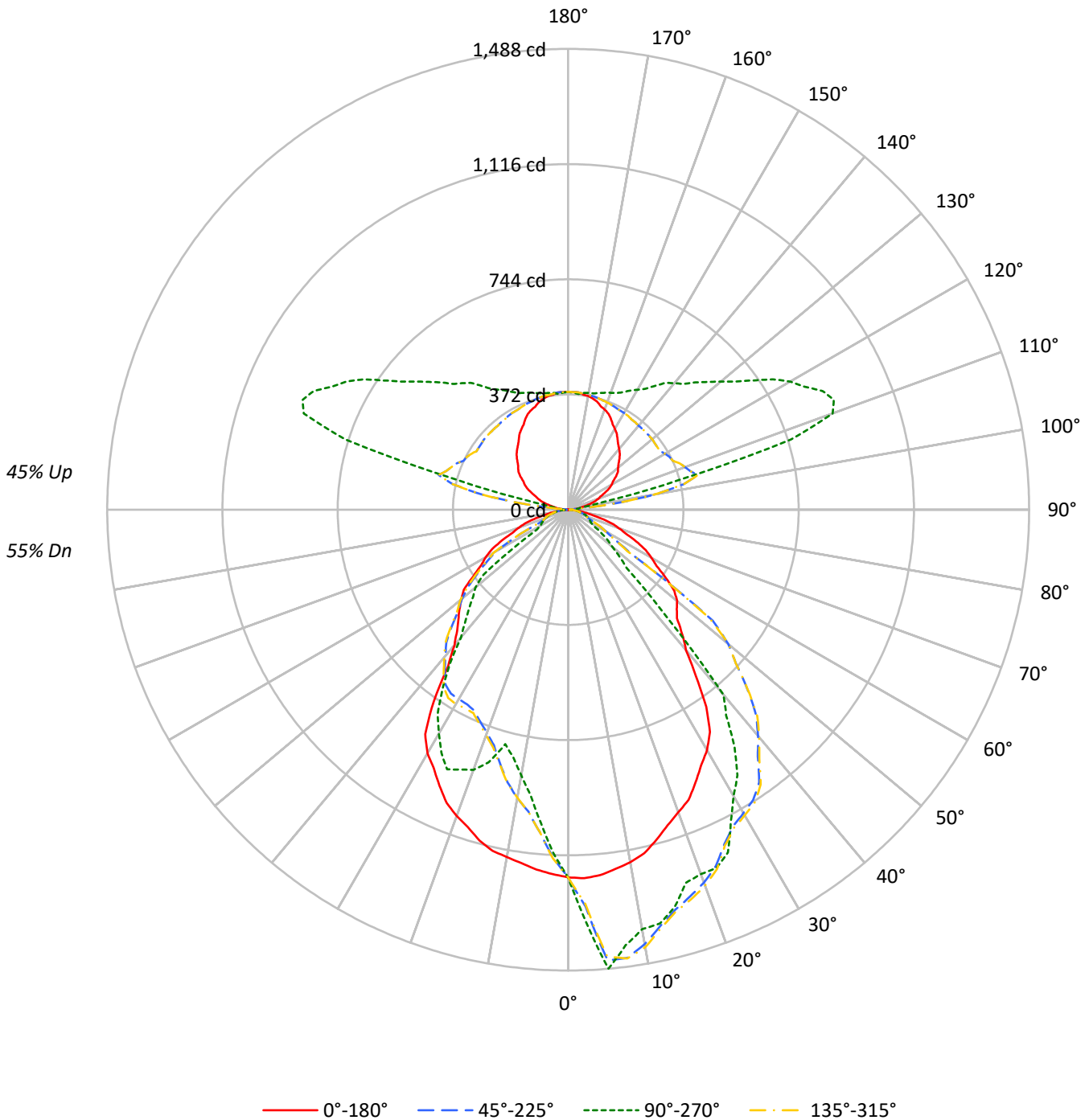
Lumens per Lamp: N/A
Luminaire Lumens: 4490.9 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.2
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



TEST NUMBER: P621609
CATALOG NUMBER: VLT-FA-050U-075D-840-UNV-STD-W-4

Luminous Intensity Polar Plot





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CATALOG NUMBER: VLT-FA-050U-075D-840-UNV-STD-W-4

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55				
1	100	96	92	89	92	89	86	83	77	74	72	65	64	62	55	54	53	48				
2	92	85	79	74	85	79	74	70	68	65	61	58	56	53	49	47	46	41				
3	84	75	68	63	78	70	64	59	61	56	53	52	49	46	44	42	40	36				
4	77	67	60	54	72	63	56	51	55	50	46	47	43	40	40	37	35	32				
5	71	60	53	47	66	57	50	44	49	44	40	43	39	36	37	34	31	28				
6	66	54	47	41	61	51	44	39	45	39	35	39	35	31	34	30	28	25				
7	61	49	42	36	57	46	40	35	41	35	31	36	31	28	31	28	25	23				
8	57	45	37	32	53	42	36	31	37	32	28	33	28	25	28	25	23	20				
9	53	41	34	29	49	39	32	28	34	29	25	30	26	23	26	23	21	18				
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	24	21	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8518	8518	8518	8518
5°	8533	10716	8403	7307
10°	8420	10022	8297	6344
15°	8191	9868	8217	5822
20°	7940	9562	8032	6824
25°	7697	9666	7783	7324
30°	7424	8845	7525	6914
35°	6802	8199	6632	6199
40°	5543	7296	5351	5045
45°	5037	2709	5085	4595
50°	5123	2063	5028	4367
55°	4834	1601	4668	2614
60°	4453	1230	4419	1455
65°	4101	1272	4019	1538
70°	3649	1343	3548	1597
75°	3114	1406	2981	1641
80°	2347	1446	2194	1698
85°	1589	1293	1391	1589

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9326 cd/sqm



TEST NUMBER: P621609

CATALOG NUMBER: VLT-FA-050U-075D-840-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	2.6
10°-20°	313.7	7.0
20°-30°	469.4	10.5
30°-40°	533.8	11.9
40°-50°	456.5	10.2
50°-60°	307.9	6.9
60°-70°	158.9	3.5
70°-80°	71.7	1.6
80°-90°	22.2	0.5
90°-100°	46.8	1.0
100°-110°	333.1	7.4
110°-120°	452.2	10.1
120°-130°	368.1	8.2
130°-140°	296.0	6.6
140°-150°	233.4	5.2
150°-160°	170.7	3.8
160°-170°	106.0	2.4
170°-180°	36.1	0.8
0°-30°	897.6	20.0
0°-40°	1431.3	31.9
0°-60°	2195.7	48.9
0°-90°	2448.6	54.5
90°-120°	832.1	18.5
90°-150°	1729.6	38.5
90°-180°	2042.0	45.5
0°-180°	4490.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1187	1187	1187	1187	1187	
5°	1185	1488	1166	1014	1185	112
15°	1102	1328	1106	784	1102	310
25°	972	1221	983	925	972	447
35°	776	936	757	708	776	475
45°	496	267	501	453	496	394
55°	386	128	373	209	386	344
65°	242	75	237	91	242	239
75°	112	51	108	59	112	120
85°	19	16	17	19	19	25
90°	0	7	0	7	0	2
95°	19	26	19	26	19	21
105°	74	366	74	366	74	78
115°	132	906	132	906	132	131
125°	189	727	189	727	189	168
135°	234	581	234	581	234	180
145°	277	488	277	488	277	174
155°	325	418	325	418	325	149
165°	361	390	361	390	361	101
175°	380	375	380	375	380	36
180°	380	380	380	380	380	



TEST NUMBER: P621609

CATALOG NUMBER: VLT-FA-050U-075D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1190.9	1231.5	1282.7	1317.8	1332.9	1317.8	1274.0	1231.2	1177.4	1161.3	1123.3
5°	1184.6	1309.8	1461.1	1479.4	1487.7	1479.4	1447.9	1302.3	1166.5	1108.6	1045.7
7.5°	1170.1	1389.0	1459.5	1418.6	1418.9	1426.4	1461.6	1382.2	1151.3	1060.4	983.2
10°	1155.6	1433.1	1423.7	1364.8	1375.4	1370.7	1434.6	1424.5	1138.7	1033.6	945.5
12.5°	1136.3	1446.8	1376.4	1357.1	1368.6	1362.0	1383.4	1439.3	1128.1	1014.5	902.0
15°	1102.5	1427.2	1336.8	1328.3	1328.3	1334.2	1342.8	1433.2	1106.1	979.8	848.9
17.5°	1067.7	1387.9	1309.2	1267.4	1262.9	1270.7	1319.1	1398.0	1075.0	941.3	797.5
20°	1039.7	1360.9	1281.2	1232.2	1252.2	1234.5	1292.1	1368.2	1051.8	917.2	765.6
22.5°	1014.6	1327.2	1245.5	1224.6	1251.3	1225.1	1255.4	1334.6	1024.7	890.1	741.4
25°	972.1	1270.8	1191.9	1211.4	1220.8	1211.4	1196.7	1275.8	983.0	855.4	716.1
27.5°	929.8	1211.3	1151.8	1164.9	1136.1	1158.3	1158.3	1211.5	940.0	815.0	708.4
30°	896.0	1169.9	1131.5	1112.4	1067.5	1102.9	1139.9	1170.2	908.1	788.8	706.4
32.5°	851.6	1132.1	1111.2	1045.1	1016.3	1040.4	1120.6	1131.3	858.8	765.1	704.5
35°	776.5	1078.7	1074.7	965.4	935.9	958.3	1083.2	1075.9	757.1	727.6	689.5
37.5°	675.8	1031.1	1004.9	884.8	837.8	878.9	1012.9	1026.0	636.9	693.3	654.5
40°	591.7	999.1	952.8	824.9	778.9	819.0	958.8	996.2	571.2	669.2	615.9
42.5°	544.4	970.6	897.7	761.5	476.5	751.8	903.7	967.0	530.6	638.0	582.0
45°	496.3	919.0	817.5	421.5	266.9	401.5	818.7	906.1	501.1	590.9	530.1
47.5°	475.3	855.5	733.7	253.9	225.3	246.6	733.0	841.6	475.5	543.5	480.6
50°	458.9	815.5	673.8	223.7	184.8	215.5	675.0	802.3	450.4	511.8	446.8
52.5°	431.8	767.6	587.8	185.4	159.6	180.9	573.6	752.6	424.3	477.2	404.3
55°	386.4	675.7	245.1	145.7	128.0	139.8	233.1	653.0	373.1	422.7	355.0
57.5°	338.4	575.2	172.0	113.4	99.3	112.2	170.7	552.2	332.1	358.1	309.6
60°	310.3	507.5	140.1	95.2	85.7	94.0	138.9	487.4	307.9	315.0	268.1
62.5°	282.3	438.9	115.9	83.7	80.9	82.6	115.7	416.8	278.0	278.5	188.9
65°	241.5	332.4	85.7	76.0	74.9	74.9	83.3	320.5	236.7	229.6	108.7
67.5°	200.0	238.7	68.8	70.0	68.8	68.8	67.6	232.0	195.1	183.1	82.1
70°	173.9	183.3	64.0	65.2	64.0	64.0	62.8	178.5	169.1	141.9	77.3
72.5°	148.8	125.2	59.2	59.4	59.2	59.2	58.0	117.5	143.9	99.8	70.5
75°	112.3	62.7	50.7	50.7	50.7	50.7	49.5	60.2	107.5	65.0	60.4
77.5°	78.0	41.4	42.0	41.8	41.8	40.8	40.8	41.1	73.4	44.8	48.8
80°	56.8	34.3	36.2	35.0	35.0	35.0	35.0	33.1	53.1	37.8	41.1
82.5°	40.3	27.3	29.5	28.3	28.3	28.3	28.3	27.0	36.7	30.8	33.3
85°	19.3	18.1	19.3	16.9	15.7	16.9	18.1	18.1	16.9	20.4	21.7
87.5°	5.8	9.1	8.7	7.2	7.2	7.2	7.7	8.1	4.8	10.0	9.7
90°	0.0	2.3	4.8	7.2	7.2	7.2	4.8	2.3	0.0	2.3	4.8
92.5°	5.7	8.1	10.5	14.9	16.7	14.9	10.5	8.1	5.7	8.1	10.5
95°	19.1	35.5	19.1	21.6	26.3	21.6	19.1	35.5	19.1	35.5	19.1
97.5°	34.0	68.1	140.6	41.5	35.9	41.5	140.6	68.1	34.0	68.1	140.6
100°	45.4	85.2	282.2	83.1	55.0	83.1	282.2	85.2	45.4	85.2	282.2
102.5°	56.9	98.5	381.6	219.2	120.0	219.2	381.6	98.5	56.9	98.5	381.6
105°	74.1	113.9	432.8	552.9	365.9	552.9	432.8	113.9	74.1	113.9	432.8
107.5°	91.3	121.3	413.2	804.7	753.7	804.7	413.2	121.3	91.3	121.3	413.2
110°	102.8	130.9	401.7	845.5	908.7	845.5	401.7	130.9	102.8	130.9	401.7



TEST NUMBER: P621609

CATALOG NUMBER: VLT-FA-050U-075D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	114.3	142.4	390.2	821.6	927.8	821.6	390.2	142.4	114.3	142.4	390.2
115°	131.5	159.6	373.0	775.3	906.3	775.3	373.0	159.6	131.5	159.6	373.0
117.5°	149.2	176.8	368.7	725.2	859.9	725.2	368.7	176.8	149.2	176.8	368.7
120°	162.6	188.3	361.1	687.1	827.4	687.1	361.1	188.3	162.6	188.3	361.1
122.5°	172.2	199.8	351.5	654.3	783.4	654.3	351.5	199.8	172.2	199.8	351.5
125°	188.9	214.6	351.5	614.7	726.9	614.7	351.5	214.6	188.9	214.6	351.5
127.5°	202.8	229.0	352.0	568.8	679.6	568.8	352.0	229.0	202.8	229.0	352.0
130°	210.4	238.5	353.9	538.0	643.2	538.0	353.9	238.5	210.4	238.5	353.9
132.5°	220.0	248.0	353.9	524.2	610.7	524.2	353.9	248.0	220.0	248.0	353.9
135°	234.3	260.1	353.9	506.2	581.1	506.2	353.9	260.1	234.3	260.1	353.9
137.5°	246.3	273.9	353.9	486.4	550.5	486.4	353.9	273.9	246.3	273.9	353.9
140°	255.9	281.6	353.9	474.8	533.2	474.8	353.9	281.6	255.9	281.6	353.9
142.5°	265.4	289.3	355.8	461.3	516.0	461.3	355.8	289.3	265.4	289.3	355.8
145°	277.4	300.8	356.3	441.0	487.8	441.0	356.3	300.8	277.4	300.8	356.3
147.5°	291.7	312.3	359.2	426.5	462.5	426.5	359.2	312.3	291.7	312.3	359.2
150°	301.3	320.0	361.1	416.8	447.2	416.8	361.1	320.0	301.3	320.0	361.1
152.5°	310.9	327.7	361.1	409.0	433.8	409.0	361.1	327.7	310.9	327.7	361.1
155°	325.2	336.9	363.5	399.8	418.5	399.8	363.5	336.9	325.2	336.9	363.5
157.5°	336.7	347.9	366.3	393.9	407.5	393.9	366.3	347.9	336.7	347.9	366.3
160°	344.3	353.7	368.2	390.0	401.7	390.0	368.2	353.7	344.3	353.7	368.2
162.5°	350.1	359.4	370.2	388.0	396.0	388.0	370.2	359.4	350.1	359.4	370.2
165°	361.1	365.7	373.0	382.8	389.8	382.8	373.0	365.7	361.1	365.7	373.0
167.5°	367.3	371.5	375.4	380.3	384.5	380.3	375.4	371.5	367.3	371.5	375.4
170°	373.0	375.4	375.4	380.3	382.6	380.3	375.4	375.4	373.0	375.4	375.4
172.5°	374.9	379.1	377.3	378.3	380.7	378.3	377.3	379.1	374.9	379.1	377.3
175°	380.2	382.5	380.2	377.8	375.4	377.8	380.2	382.5	380.2	382.5	380.2
177.5°	380.2	382.1	380.2	380.2	378.3	380.2	380.2	382.1	380.2	382.1	380.2
180°	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2



TEST NUMBER: P621609

CATALOG NUMBER: VLT-FA-050U-075D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1109.7	1108.8	1110.7	1127.1	1160.7	1190.9
5°	1010.8	1014.4	1017.9	1045.7	1104.3	1184.6
7.5°	934.8	929.6	937.6	983.0	1054.9	1170.1
10°	882.5	870.7	882.5	944.3	1028.1	1155.6
12.5°	833.1	818.5	836.9	904.7	1006.0	1136.3
15°	769.5	783.7	775.4	851.3	972.6	1102.5
17.5°	784.6	855.9	799.7	805.0	939.5	1067.7
20°	820.4	893.6	844.0	774.0	918.1	1039.7
22.5°	852.8	908.1	863.2	748.0	896.8	1014.6
25°	877.8	925.0	875.4	724.5	865.8	972.1
27.5°	879.0	885.6	879.5	722.6	827.6	929.8
30°	862.8	834.4	860.4	724.5	800.4	896.0
32.5°	816.3	784.2	806.4	720.7	772.9	851.6
35°	750.1	707.6	738.3	700.4	730.4	776.5
37.5°	680.3	626.5	669.0	660.3	694.2	675.8
40°	633.0	538.6	623.6	620.7	674.4	591.7
42.5°	572.5	492.2	564.0	588.8	652.5	544.4
45°	462.3	452.8	457.6	534.9	606.1	496.3
47.5°	422.7	416.4	420.4	485.9	553.7	475.3
50°	399.5	391.2	397.2	454.0	520.3	458.9
52.5°	367.3	344.9	365.0	410.6	485.7	431.8
55°	276.2	208.9	275.0	361.1	433.6	386.4
57.5°	162.1	120.8	158.5	314.2	367.4	338.4
60°	109.7	101.4	110.9	276.5	323.3	310.3
62.5°	100.2	97.6	100.4	192.5	284.0	282.3
65°	91.7	90.6	91.7	111.1	234.4	241.5
67.5°	83.1	81.9	84.0	85.3	185.1	200.0
70°	77.3	76.1	77.3	78.5	142.0	173.9
72.5°	70.5	69.3	70.5	71.7	99.9	148.8
75°	60.4	59.2	60.4	61.6	66.3	112.3
77.5°	48.8	48.8	50.0	50.0	46.4	78.0
80°	41.1	41.1	42.2	42.3	40.2	56.8
82.5°	33.3	32.4	34.5	35.5	33.2	40.3
85°	20.5	19.3	21.7	22.9	21.7	19.3
87.5°	9.1	8.2	10.1	11.6	11.0	5.8
90°	7.2	7.2	7.2	4.8	2.3	0.0
92.5°	14.9	16.7	14.9	10.5	8.1	5.7
95°	21.6	26.3	21.6	19.1	35.5	19.1
97.5°	41.5	35.9	41.5	140.6	68.1	34.0
100°	83.1	55.0	83.1	282.2	85.2	45.4
102.5°	219.2	120.0	219.2	381.6	98.5	56.9
105°	552.9	365.9	552.9	432.8	113.9	74.1
107.5°	804.7	753.7	804.7	413.2	121.3	91.3
110°	845.5	908.7	845.5	401.7	130.9	102.8



TEST NUMBER: P621609

CATALOG NUMBER: VLT-FA-050U-075D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	821.6	927.8	821.6	390.2	142.4	114.3
115°	775.3	906.3	775.3	373.0	159.6	131.5
117.5°	725.2	859.9	725.2	368.7	176.8	149.2
120°	687.1	827.4	687.1	361.1	188.3	162.6
122.5°	654.3	783.4	654.3	351.5	199.8	172.2
125°	614.7	726.9	614.7	351.5	214.6	188.9
127.5°	568.8	679.6	568.8	352.0	229.0	202.8
130°	538.0	643.2	538.0	353.9	238.5	210.4
132.5°	524.2	610.7	524.2	353.9	248.0	220.0
135°	506.2	581.1	506.2	353.9	260.1	234.3
137.5°	486.4	550.5	486.4	353.9	273.9	246.3
140°	474.8	533.2	474.8	353.9	281.6	255.9
142.5°	461.3	516.0	461.3	355.8	289.3	265.4
145°	441.0	487.8	441.0	356.3	300.8	277.4
147.5°	426.5	462.5	426.5	359.2	312.3	291.7
150°	416.8	447.2	416.8	361.1	320.0	301.3
152.5°	409.0	433.8	409.0	361.1	327.7	310.9
155°	399.8	418.5	399.8	363.5	336.9	325.2
157.5°	393.9	407.5	393.9	366.3	347.9	336.7
160°	390.0	401.7	390.0	368.2	353.7	344.3
162.5°	388.0	396.0	388.0	370.2	359.4	350.1
165°	382.8	389.8	382.8	373.0	365.7	361.1
167.5°	380.3	384.5	380.3	375.4	371.5	367.3
170°	380.3	382.6	380.3	375.4	375.4	373.0
172.5°	378.3	380.7	378.3	377.3	379.1	374.9
175°	377.8	375.4	377.8	380.2	382.5	380.2
177.5°	380.2	378.3	380.2	380.2	382.1	380.2
180°	380.2	380.2	380.2	380.2	380.2	380.2

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