

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: P233294

Luminaire Tested: **4VT3-LD5-4-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233294  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-9)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VT3-LD5-4-W-UNV-L850-CD1-U  
Description: 4FT VT3 WIDE APPLICATION, 4000LM  
Light Source: (392) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4767.0 lumens  
Efficiency: N/A  
Efficacy: 152.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.67 / 1.66  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')  
CIE Type: Semi-Direct

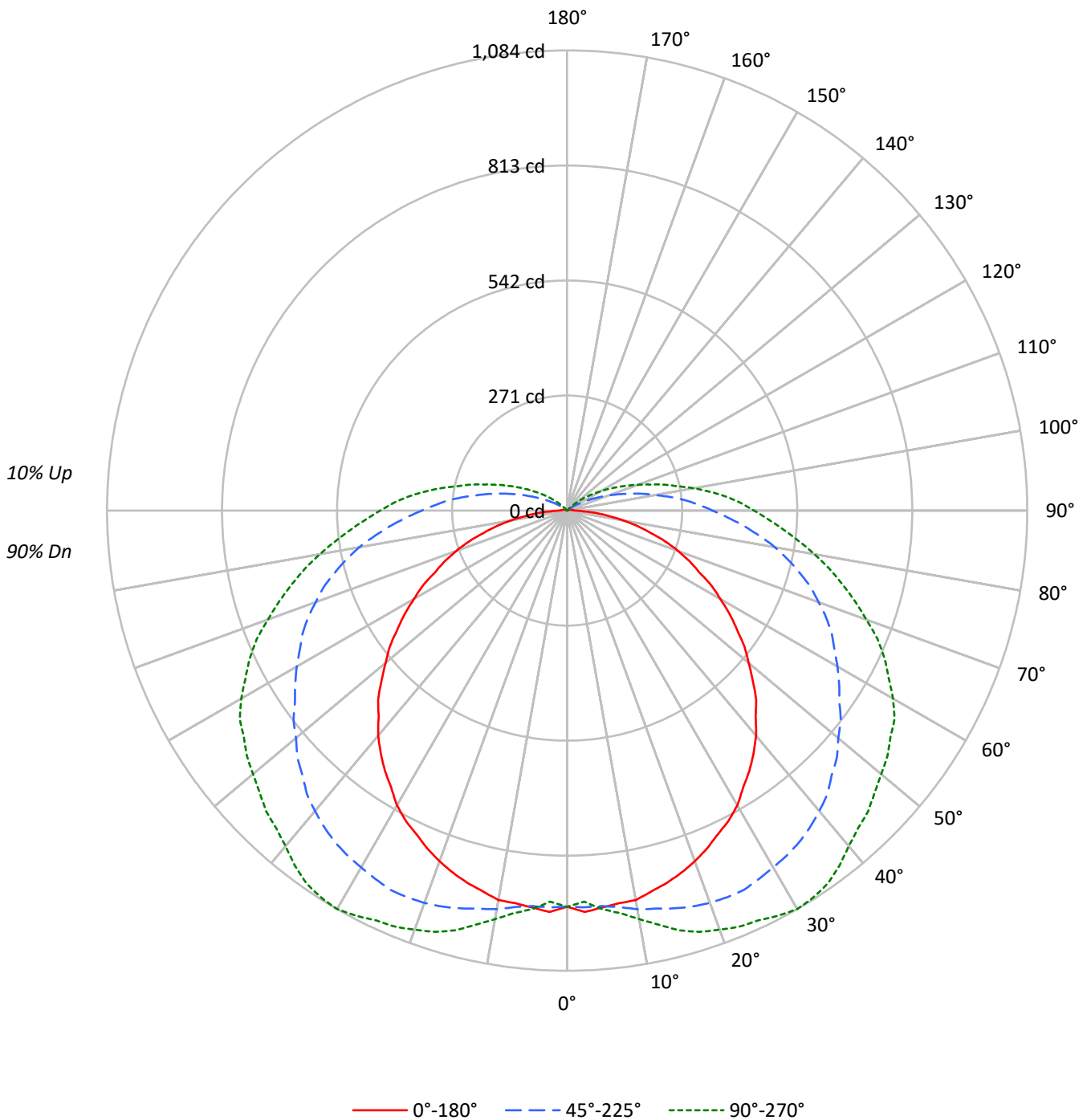
Input Watts (W): 31.32  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P233294

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L850-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P233294

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L850-CD1-U

**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	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	46	40	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	40	34	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	33	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6026	6026	6026
5°	6062	5902	5902
10°	6064	5927	5986
15°	6003	5986	6183
20°	5950	6070	6304
25°	5877	6131	6397
30°	5837	6133	6567
35°	5733	6169	6600
40°	5642	6172	6514
45°	5522	6136	6540
50°	5345	6105	6572
55°	5186	6095	6664
60°	5019	6165	6763
65°	4813	6299	6788
70°	4712	6406	6747
75°	4395	6539	6724
80°	4070	6673	6733
85°	3479	6781	6797



TEST NUMBER: P233294

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L850-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	1.9
10°-20°	274.5	5.8
20°-30°	448.2	9.4
30°-40°	584.1	12.3
40°-50°	655.7	13.8
50°-60°	670.3	14.1
60°-70°	629.5	13.2
70°-80°	532.1	11.2
80°-90°	394.0	8.3
90°-100°	257.9	5.4
100°-110°	142.2	3.0
110°-120°	64.4	1.4
120°-130°	21.5	0.5
130°-140°	2.6	0.1
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°	812.8	17.1
0°-40°	1396.9	29.3
0°-60°	2722.9	57.1
0°-90°	4278.5	89.8
90°-120°	464.5	9.7
90°-150°	488.5	10.2
90°-180°	489.0	10.3
0°-180°	4767.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	938	937	935	943	942	89
15°	908	929	970	1013	1024	256
25°	841	894	986	1050	1065	388
35°	748	822	954	1053	1072	468
45°	630	724	882	975	1002	484
55°	488	603	783	897	930	438
65°	343	474	688	800	825	343
75°	204	356	568	654	672	217
85°	69	240	418	496	511	70
90°	18	179	342	421	440	12
95°	13	128	280	351	376	10
105°	7	40	154	217	236	8
115°	3	4	64	118	130	3
125°	1	1	13	48	58	1
135°	0	0	0	3	9	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



TEST NUMBER: P233294

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	933.1	933.1	933.1	933.1	933.1	933.1	933.1	933.1	933.1	933.1	933.1
2.5°	946.5	935.3	935.8	934.2	934.2	940.6	939.0	934.7	935.8	933.7	935.3
5°	938.5	933.1	933.7	936.9	936.3	937.4	938.5	935.8	940.6	939.0	935.3
7.5°	933.1	928.8	929.9	925.6	934.2	936.3	936.3	934.7	939.6	941.2	941.7
10°	931.5	923.5	926.7	920.2	928.8	938.5	936.9	942.8	946.5	950.3	953.5
12.5°	918.6	915.4	913.8	918.6	930.4	938.0	933.1	937.4	947.6	954.6	960.5
15°	907.9	906.8	906.3	911.1	916.5	929.4	931.0	942.3	956.2	960.0	970.2
17.5°	894.5	891.2	893.4	897.2	914.3	922.4	929.9	938.0	957.3	964.8	978.2
20°	878.9	876.7	883.7	888.6	904.7	914.3	923.5	936.3	950.8	969.1	983.6
22.5°	861.2	860.1	866.0	875.7	896.6	905.7	912.2	929.9	952.5	967.5	985.7
25°	840.8	840.8	847.2	862.8	887.5	893.9	904.1	919.7	940.6	960.0	985.7
27.5°	823.6	823.6	829.5	845.1	865.5	882.7	895.5	906.8	934.2	955.7	978.2
30°	801.6	804.3	809.1	823.6	848.8	863.9	875.7	897.7	924.0	947.6	970.7
32.5°	772.1	773.1	785.5	803.2	829.0	844.0	860.1	882.1	916.5	931.0	963.2
35°	748.4	748.4	759.7	778.0	811.2	822.5	838.1	863.9	894.5	920.8	953.5
37.5°	721.0	721.6	736.6	761.3	787.6	802.1	817.2	845.6	876.2	903.6	940.1
40°	692.6	696.9	704.4	729.1	760.2	778.0	790.8	823.1	862.3	889.1	924.0
42.5°	657.2	662.0	675.4	700.6	730.7	755.4	771.0	799.4	835.9	871.9	906.8
45°	629.8	632.5	645.3	670.6	704.4	723.7	739.3	775.3	813.4	848.8	881.6
47.5°	593.3	599.2	612.1	640.5	676.5	698.0	711.4	746.8	787.6	821.4	861.7
50°	558.4	563.2	581.5	607.2	647.0	665.2	683.5	718.9	765.1	801.0	833.8
52.5°	526.7	530.5	546.6	577.2	612.1	636.2	650.7	692.1	737.7	773.7	812.3
55°	488.0	497.2	513.3	543.9	583.6	602.9	616.9	660.4	706.6	748.4	782.8
57.5°	454.2	463.3	480.0	512.2	550.9	569.1	591.1	634.1	676.5	720.5	759.7
60°	416.6	426.3	445.1	480.5	519.2	538.0	556.8	603.5	649.1	690.4	735.5
62.5°	383.9	390.9	413.4	442.9	482.7	504.7	525.6	571.8	626.0	668.4	709.8
65°	343.1	357.6	378.0	412.9	452.1	473.5	496.6	543.9	592.2	639.4	688.3
67.5°	311.9	320.5	344.7	377.4	419.3	445.1	466.0	519.2	568.0	614.7	660.9
70°	278.1	286.2	309.8	344.7	388.7	411.3	439.7	490.2	544.4	588.4	630.3
72.5°	242.7	252.3	274.9	310.9	359.2	385.5	409.7	463.9	519.7	560.0	601.9
75°	203.5	218.0	244.3	279.2	328.6	356.5	380.7	438.1	488.0	529.4	567.5
77.5°	170.7	182.0	211.5	254.5	304.4	329.7	355.4	410.2	459.6	497.7	533.1
80°	135.3	150.9	177.2	222.3	272.7	299.1	325.9	377.4	424.7	462.8	497.2
82.5°	100.4	114.4	147.1	193.8	245.4	270.6	293.1	343.6	389.2	427.4	456.9
85°	69.3	82.1	118.7	165.9	214.8	240.0	262.5	313.5	354.9	386.6	418.2
87.5°	38.7	55.8	93.4	138.0	186.3	210.5	230.9	278.6	317.3	351.1	378.5
90°	17.7	35.4	68.7	111.7	156.2	179.3	200.8	243.8	283.5	313.0	342.5
92.5°	15.0	21.5	51.0	89.7	132.6	153.6	175.0	215.3	250.2	283.5	309.8
95°	13.4	14.5	33.3	69.3	107.4	128.3	147.6	186.3	219.6	250.7	279.7
97.5°	11.8	11.8	20.4	48.9	85.4	102.5	120.8	158.4	189.5	219.1	244.3
100°	9.7	10.2	11.8	31.7	61.7	78.4	96.6	129.4	160.5	188.5	211.0
102.5°	8.6	8.6	9.1	19.3	42.4	57.4	73.6	102.5	133.7	158.4	182.5
105°	7.0	7.5	7.5	10.2	28.5	39.7	53.2	81.1	106.8	131.5	153.6
107.5°	5.9	5.9	5.9	6.4	17.2	25.8	36.5	59.1	83.8	107.4	127.8
110°	4.8	4.8	4.8	5.4	8.1	15.0	23.6	41.9	63.4	85.9	103.6



TEST NUMBER: P233294

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	3.8	4.3	4.3	4.3	4.8	7.0	13.4	30.1	46.2	65.5	82.1
115°	3.2	3.2	3.2	3.2	3.8	3.8	5.4	17.7	33.3	48.3	64.4
117.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	8.6	22.0	34.9	48.3
120°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2	11.8	24.2	34.9
122.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	13.4	23.6
125°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	4.3	13.4
127.5°	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5	0.5	1.1	4.8
130°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5
132.5°	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.5	0.5	0.5	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



TEST NUMBER: P233294

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	933.1	933.1	933.1	933.1	933.1	933.1	933.1	933.1	933.1	933.1
2.5°	926.1	930.4	935.8	938.0	933.7	937.4	937.4	932.0	932.6	921.8
5°	931.0	939.0	946.5	942.3	942.8	942.3	948.2	943.9	942.3	942.3
7.5°	943.9	950.8	952.5	957.3	956.7	962.1	957.3	961.6	960.0	956.2
10°	957.3	960.5	964.8	977.7	978.8	976.6	984.7	978.2	978.8	977.1
12.5°	963.7	982.0	982.5	995.4	992.7	1000.8	1001.8	1004.0	1004.5	999.2
15°	979.3	992.2	1002.4	1013.1	1013.1	1019.6	1025.5	1024.9	1025.5	1023.9
17.5°	989.5	1009.4	1016.3	1025.5	1029.2	1036.2	1039.4	1044.8	1043.2	1040.5
20°	997.0	1012.0	1027.6	1037.3	1035.7	1044.3	1052.9	1044.3	1050.2	1050.7
22.5°	994.9	1018.5	1029.8	1042.1	1046.9	1050.2	1057.1	1063.6	1063.6	1060.9
25°	996.5	1016.9	1034.1	1046.4	1050.2	1057.7	1066.8	1069.0	1072.2	1065.2
27.5°	993.8	1017.4	1035.7	1049.1	1049.1	1065.2	1069.0	1078.1	1080.8	1075.9
30°	994.9	1015.8	1033.0	1054.5	1059.3	1067.9	1077.5	1084.0	1082.9	1084.0
32.5°	987.3	1011.5	1031.4	1054.5	1062.0	1066.8	1078.1	1079.2	1078.1	1080.2
35°	974.5	1004.0	1034.1	1046.4	1052.9	1062.5	1065.2	1070.6	1079.7	1071.6
37.5°	966.4	995.4	1011.5	1030.8	1037.8	1045.9	1051.8	1052.9	1054.5	1053.9
40°	951.4	978.8	993.3	1013.1	1015.8	1028.7	1024.9	1030.3	1035.1	1031.9
42.5°	935.3	957.3	976.6	990.6	997.0	1000.2	1010.4	1012.6	1018.5	1014.7
45°	910.0	933.7	954.6	969.6	975.0	985.7	990.6	994.3	1000.2	1002.4
47.5°	889.6	913.3	934.7	956.7	955.7	968.0	977.1	975.5	980.4	982.5
50°	862.3	891.2	917.6	933.1	938.5	950.3	954.1	964.8	969.6	965.9
52.5°	840.2	871.9	888.6	914.3	920.8	930.4	941.2	942.3	952.5	950.8
55°	817.7	846.1	873.0	889.6	897.2	909.5	917.0	921.3	925.6	929.9
57.5°	789.2	825.7	848.3	869.2	877.3	885.3	896.6	902.0	911.1	914.3
60°	767.2	804.8	823.6	847.8	855.8	864.9	873.0	877.8	884.8	886.4
62.5°	743.6	777.4	800.5	823.1	830.6	838.1	847.2	855.3	858.0	854.2
65°	716.2	750.6	771.5	794.1	800.0	814.5	811.8	819.8	823.1	825.2
67.5°	690.4	728.6	744.7	758.1	772.1	770.4	781.2	780.6	787.1	791.4
70°	659.8	689.9	704.9	724.8	728.6	733.4	742.0	744.1	747.9	750.0
72.5°	628.2	659.3	672.7	686.7	695.8	695.3	701.2	705.5	710.3	710.8
75°	597.0	617.4	634.1	647.5	654.5	655.5	663.1	662.0	673.3	671.7
77.5°	561.1	583.6	594.3	607.8	613.7	619.6	623.3	626.6	628.2	632.5
80°	518.6	545.5	553.5	568.0	572.3	578.8	580.4	587.4	590.0	591.7
82.5°	482.7	500.4	512.7	527.2	536.9	535.8	542.8	547.1	550.3	550.3
85°	442.4	462.8	474.1	487.0	496.1	497.7	504.7	504.7	509.0	511.1
87.5°	400.5	425.2	434.3	448.3	458.5	456.9	461.7	468.2	470.3	474.1
90°	363.5	383.3	398.4	411.8	420.9	422.0	427.4	432.7	433.8	440.3
92.5°	333.4	350.1	366.2	380.1	383.3	387.6	392.5	401.1	402.7	409.1
95°	298.5	318.9	331.8	345.8	351.1	354.4	359.7	366.2	371.5	376.4
97.5°	266.8	285.1	299.1	309.8	317.3	319.5	326.4	330.7	334.5	339.9
100°	233.0	249.1	264.2	276.5	282.4	284.0	291.5	294.8	298.0	302.8
102.5°	201.9	221.2	229.8	243.2	248.0	250.7	256.1	263.1	263.6	265.2
105°	170.2	189.0	201.3	211.0	216.9	219.1	224.4	231.9	232.5	236.2
107.5°	145.5	161.6	174.0	184.2	190.1	192.2	196.5	199.2	202.9	204.0
110°	121.3	135.8	148.2	156.8	161.6	165.9	170.7	175.0	177.2	177.7





TEST NUMBER: P233294

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	98.3	112.2	122.9	133.7	138.0	141.2	146.0	151.4	154.1	154.1
115°	78.9	91.8	103.1	111.7	117.6	119.2	123.5	127.8	129.9	129.9
117.5°	60.7	74.1	84.3	91.8	96.1	98.3	103.6	107.9	109.5	110.6
120°	46.2	56.9	66.6	74.6	77.3	81.1	84.8	88.6	90.7	90.7
122.5°	33.8	43.5	50.5	57.4	62.3	63.4	68.2	72.5	73.6	74.6
125°	23.1	31.1	38.1	44.0	47.8	48.9	52.6	56.4	57.4	58.5
127.5°	11.8	19.9	26.3	32.2	34.9	37.0	40.3	43.5	44.6	45.1
130°	3.2	9.1	15.6	20.9	23.1	24.7	28.5	30.6	32.8	32.2
132.5°	0.0	1.6	5.4	10.2	11.8	14.0	17.2	19.3	20.4	21.5
135°	0.0	0.0	0.5	2.1	3.2	4.3	6.4	9.1	9.1	9.1
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)