

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: METALUX

Report Number: P1212241

Luminaire Tested: 4VT3-LD5-4-W-UNV-L830-CD1-U

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P1212241
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
Product Line: METALUX
Catalog Number: 4VT3-LD5-4-W-UNV-L830-CD1-U
Description: 4FT VT3 WIDE APPLICATION, 4000LM
Light Source: (392) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

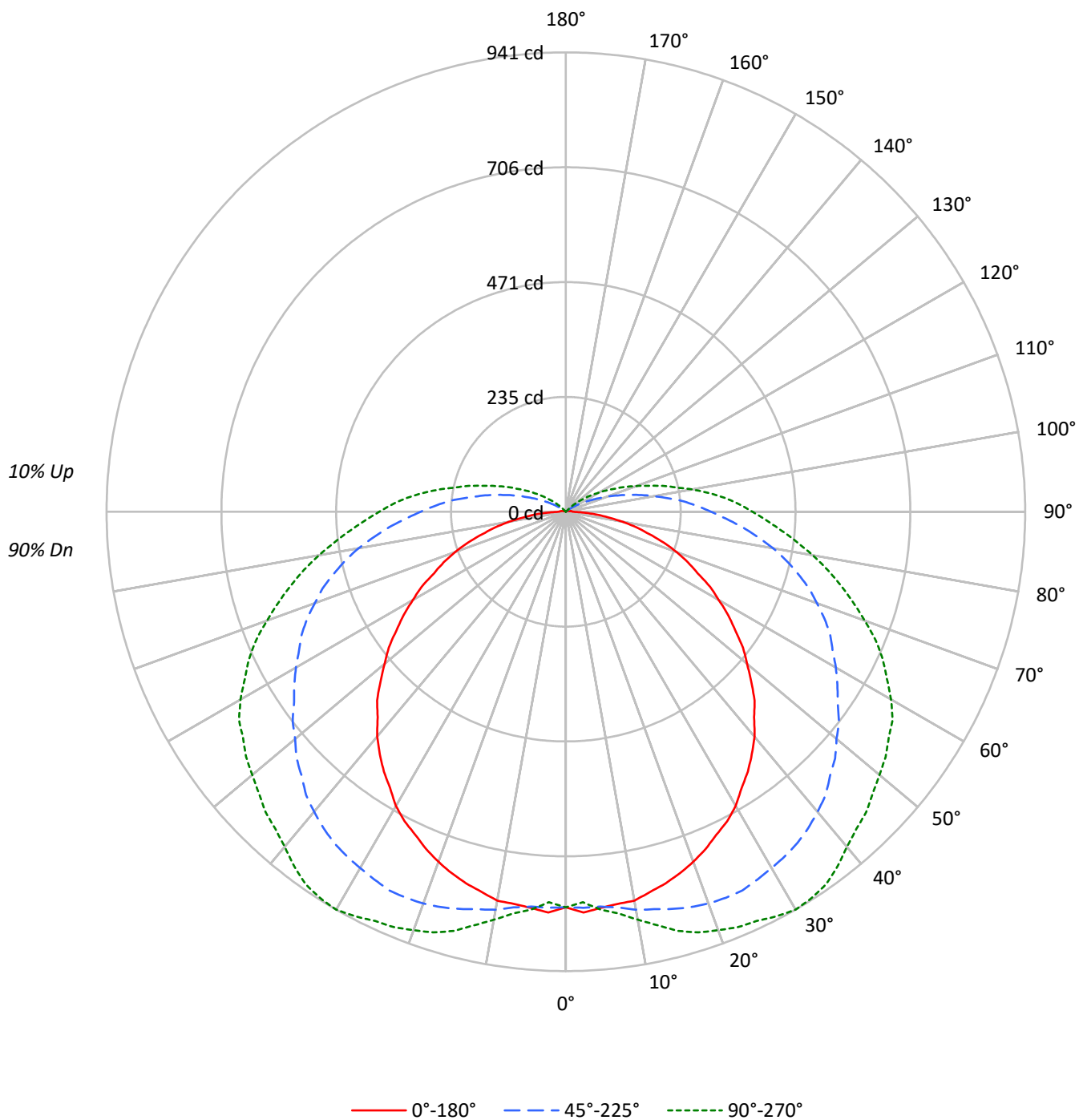
Lumens per Lamp: N/A
Luminaire Lumens: 4138.6 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.67 / 1.66
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 31.3
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: 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46
4	75	62	52	44	72	60	51	44	56	48	42	52	46	40	49	43	38
5	69	55	45	38	66	53	44	37	50	42	35	46	40	34	43	38	33
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	33	26	22
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5233	5233	5233
5°	5263	5124	5124
10°	5265	5145	5197
15°	5212	5197	5368
20°	5166	5270	5472
25°	5102	5323	5554
30°	5068	5324	5702
35°	4978	5355	5730
40°	4898	5359	5655
45°	4794	5326	5677
50°	4640	5300	5705
55°	4503	5292	5785
60°	4357	5353	5871
65°	4179	5469	5893
70°	4090	5561	5858
75°	3814	5677	5837
80°	3535	5793	5845
85°	3017	5888	5901

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 90°

Luminance: 6171 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	1.9
10°-20°	238.3	5.8
20°-30°	389.1	9.4
30°-40°	507.1	12.3
40°-50°	569.2	13.8
50°-60°	582.0	14.1
60°-70°	546.5	13.2
70°-80°	461.9	11.2
80°-90°	342.1	8.3
90°-100°	223.9	5.4
100°-110°	123.5	3.0
110°-120°	55.9	1.4
120°-130°	18.6	0.5
130°-140°	2.3	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°	705.7	17.1
0°-40°	1212.7	29.3
0°-60°	2363.9	57.1
0°-90°	3714.4	89.8
90°-120°	403.2	9.7
90°-150°	424.1	10.2
90°-180°	424.0	10.2
0°-180°	4138.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	815	814	812	818	818	78
15°	788	807	842	880	889	222
25°	730	776	856	912	925	337
35°	650	714	828	914	930	406
45°	547	628	765	846	870	420
55°	424	523	680	779	807	380
65°	298	411	598	694	716	298
75°	177	310	493	568	583	189
85°	60	208	363	431	444	61
90°	15	156	297	366	382	11
95°	12	111	243	305	327	9
105°	6	34	133	188	205	7
115°	3	3	56	102	113	3
125°	1	1	12	42	51	1
135°	0	0	0	3	8	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

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CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2
2.5°	821.7	811.9	812.4	811.1	811.1	816.6	815.2	811.5	812.4	810.6	811.9
5°	814.7	810.2	810.6	813.3	812.9	813.8	814.7	812.4	816.6	815.2	811.9
7.5°	810.2	806.4	807.3	803.6	811.1	812.9	812.9	811.5	815.7	817.1	817.5
10°	808.8	801.7	804.5	798.9	806.4	814.7	813.3	818.5	821.7	825.0	827.8
12.5°	797.5	794.7	793.3	797.5	807.8	814.3	810.2	813.8	822.7	828.7	833.9
15°	788.2	787.3	786.8	791.0	795.7	806.9	808.3	818.0	830.1	833.4	842.3
17.5°	776.5	773.7	775.6	778.9	793.8	800.8	807.3	814.3	831.1	837.6	849.3
20°	763.0	761.2	767.2	771.4	785.4	793.8	801.7	812.9	825.5	841.3	854.0
22.5°	747.7	746.7	751.9	760.3	778.4	786.3	791.9	807.3	826.9	839.9	855.8
25°	729.9	729.9	735.5	749.1	770.5	776.1	784.9	798.5	816.6	833.4	855.8
27.5°	715.0	715.0	720.1	733.7	751.4	766.3	777.5	787.3	811.1	829.7	849.3
30°	695.9	698.3	702.5	715.0	736.9	750.0	760.3	779.3	802.2	822.7	842.7
32.5°	670.2	671.2	681.9	697.3	719.6	732.7	746.7	765.8	795.7	808.3	836.2
35°	649.8	649.8	659.6	675.4	704.3	714.0	727.6	750.0	776.5	799.4	827.8
37.5°	626.0	626.4	639.5	661.0	683.8	696.4	709.5	734.1	760.7	784.5	816.1
40°	601.3	605.0	611.6	633.0	660.1	675.4	686.6	714.5	748.6	771.9	802.2
42.5°	570.5	574.7	586.4	608.3	634.4	655.9	669.3	694.1	725.7	757.0	787.3
45°	546.8	549.1	560.3	582.2	611.6	628.3	641.8	673.0	706.2	736.9	765.3
47.5°	515.1	520.1	531.4	556.1	587.3	606.0	617.6	648.4	683.8	713.1	748.1
50°	484.7	488.9	504.8	527.1	561.7	577.5	593.4	624.1	664.2	695.5	723.8
52.5°	457.3	460.6	474.5	501.1	531.4	552.4	565.0	600.8	640.4	671.6	705.3
55°	423.7	431.6	445.6	472.1	506.7	523.4	535.6	573.3	613.5	649.8	679.6
57.5°	394.3	402.3	416.8	444.7	478.2	494.1	513.2	550.5	587.3	625.5	659.6
60°	361.7	370.1	386.4	417.2	450.7	467.1	483.3	523.9	563.6	599.4	638.6
62.5°	333.3	339.3	358.9	384.5	419.0	438.1	456.4	496.4	543.5	580.3	616.2
65°	297.9	310.5	328.1	358.5	392.5	411.1	431.1	472.1	514.2	555.2	597.6
67.5°	270.8	278.2	299.3	327.6	364.1	386.4	404.6	450.7	493.2	533.7	573.8
70°	241.4	248.4	269.0	299.3	337.5	357.1	381.7	425.5	472.6	510.9	547.2
72.5°	210.7	219.1	238.6	269.9	311.9	334.7	355.7	402.7	451.2	486.1	522.5
75°	176.6	189.2	212.1	242.4	285.2	309.5	330.4	380.3	423.7	459.6	492.7
77.5°	148.2	158.0	183.6	221.0	264.3	286.2	308.6	356.1	399.0	432.1	462.9
80°	117.5	130.9	153.8	193.0	236.8	259.7	282.9	327.6	368.7	401.8	431.6
82.5°	87.1	99.3	127.7	168.3	213.0	234.9	254.5	298.3	337.9	371.0	396.7
85°	60.1	71.4	103.0	144.0	186.4	208.4	227.9	272.2	308.1	335.6	363.1
87.5°	33.5	48.5	81.1	119.8	161.8	182.7	200.4	241.9	275.4	304.9	328.6
90°	15.4	30.7	59.7	96.9	135.6	155.7	174.3	211.6	246.1	271.7	297.4
92.5°	13.1	18.7	44.3	77.8	115.2	133.3	152.0	186.9	217.2	246.1	269.0
95°	11.7	12.6	28.9	60.1	93.2	111.4	128.1	161.8	190.6	217.7	242.8
97.5°	10.3	10.3	17.7	42.4	74.1	89.0	104.9	137.5	164.6	190.2	212.1
100°	8.4	8.9	10.3	27.5	53.6	68.1	83.9	112.4	139.4	163.6	183.2
102.5°	7.5	7.5	7.9	16.8	36.8	49.9	63.9	89.0	116.1	137.5	158.5
105°	6.1	6.5	6.5	8.9	24.7	34.5	46.1	70.4	92.7	114.2	133.3
107.5°	5.1	5.1	5.1	5.6	14.9	22.4	31.7	51.3	72.8	93.2	111.0
110°	4.2	4.2	4.2	4.7	7.0	13.1	20.5	36.3	55.0	74.5	89.9

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	3.3	3.7	3.7	3.7	4.2	6.1	11.7	26.1	40.1	56.9	71.4
115°	2.8	2.8	2.8	2.8	3.3	3.3	4.7	15.4	28.9	41.9	55.9
117.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	7.5	19.1	30.3	41.9
120°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.8	10.3	21.0	30.3
122.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	11.7	20.5
125°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	3.7	11.7
127.5°	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5	0.5	0.9	4.2
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

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2
2.5°	804.1	807.8	812.4	814.3	810.6	813.8	813.8	809.2	809.7	800.3
5°	808.3	815.2	821.7	818.0	818.5	818.0	823.1	819.4	818.0	818.0
7.5°	819.4	825.5	826.9	831.1	830.6	835.3	831.1	834.8	833.4	830.1
10°	831.1	833.9	837.6	848.8	849.8	847.9	854.9	849.3	849.8	848.4
12.5°	836.7	852.6	853.0	864.1	861.8	868.8	869.7	871.6	872.1	867.4
15°	850.2	861.3	870.2	879.5	879.5	885.2	890.3	889.8	890.3	888.9
17.5°	859.1	876.3	882.3	890.3	893.6	899.6	902.4	907.1	905.7	903.4
20°	865.5	878.6	892.2	900.6	899.2	906.6	914.0	906.6	911.7	912.1
22.5°	863.7	884.2	894.0	904.8	909.0	911.7	917.7	923.4	923.4	921.0
25°	865.1	882.8	897.8	908.5	911.7	918.2	926.2	928.0	930.8	924.8
27.5°	862.7	883.3	899.2	910.7	910.7	924.8	928.0	936.0	938.3	934.1
30°	863.7	881.9	896.8	915.4	919.6	927.1	935.5	941.1	940.2	941.1
32.5°	857.2	878.1	895.4	915.4	922.0	926.2	936.0	936.9	936.0	937.8
35°	846.0	871.6	897.8	908.5	914.0	922.4	924.8	929.4	937.4	930.4
37.5°	839.0	864.1	878.1	895.0	901.0	908.0	913.1	914.0	915.4	914.9
40°	825.9	849.8	862.3	879.5	881.9	893.1	889.8	894.5	898.7	895.9
42.5°	811.9	831.1	847.9	860.0	865.5	868.3	877.2	879.1	884.2	880.9
45°	790.1	810.6	828.7	841.8	846.5	855.8	860.0	863.2	868.3	870.2
47.5°	772.3	792.9	811.5	830.6	829.7	840.4	848.4	847.0	851.2	853.0
50°	748.6	773.7	796.6	810.2	814.7	825.0	828.3	837.6	841.8	838.5
52.5°	729.5	757.0	771.4	793.8	799.4	807.8	817.1	818.0	826.9	825.5
55°	709.9	734.6	757.9	772.3	778.9	789.6	796.1	799.9	803.6	807.3
57.5°	685.2	716.8	736.5	754.7	761.7	768.6	778.4	783.1	791.0	793.8
60°	666.0	698.7	715.0	736.0	743.0	750.9	757.9	762.1	768.1	769.5
62.5°	645.6	674.9	695.0	714.5	721.0	727.6	735.5	742.5	744.9	741.6
65°	621.8	651.7	669.8	689.4	694.5	707.1	704.8	711.8	714.5	716.4
67.5°	599.4	632.5	646.5	658.2	670.2	668.8	678.2	677.7	683.3	687.1
70°	572.8	599.0	612.1	629.2	632.5	636.7	644.2	646.0	649.3	651.2
72.5°	545.4	572.4	584.0	596.2	604.1	603.6	608.8	612.5	616.6	617.1
75°	518.3	536.0	550.5	562.2	568.2	569.1	575.6	574.7	584.5	583.1
77.5°	487.1	506.7	516.0	527.6	532.8	537.9	541.2	544.0	545.4	549.1
80°	450.3	473.5	480.5	493.2	496.9	502.5	503.9	510.0	512.3	513.7
82.5°	419.0	434.4	445.1	457.8	466.2	465.2	471.2	474.9	477.7	477.7
85°	384.1	401.8	411.6	422.7	430.7	432.1	438.1	438.1	441.9	443.7
87.5°	347.7	369.1	377.1	389.2	398.1	396.7	400.9	406.5	408.3	411.6
90°	315.6	332.8	345.9	357.5	365.5	366.4	371.0	375.7	376.6	382.2
92.5°	289.4	303.9	317.9	330.0	332.8	336.5	340.7	348.2	349.6	355.2
95°	259.2	276.8	288.0	300.2	304.9	307.7	312.3	317.9	322.5	326.7
97.5°	231.6	247.5	259.7	269.0	275.4	277.3	283.4	287.1	290.4	295.1
100°	202.3	216.3	229.3	240.0	245.2	246.6	253.1	255.9	258.7	262.9
102.5°	175.2	192.0	199.5	211.2	215.4	217.7	222.3	228.4	228.8	230.2
105°	147.8	164.1	174.8	183.2	188.3	190.2	194.8	201.4	201.8	205.1
107.5°	126.3	140.3	151.0	159.9	165.0	166.9	170.6	172.9	176.2	177.1
110°	105.4	118.0	128.6	136.1	140.3	144.0	148.2	152.0	153.8	154.3

TEST NUMBER: P1212241

CATALOG NUMBER: 4VT3-LD5-4-W-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	85.3	97.4	106.8	116.1	119.8	122.6	126.7	131.4	133.7	133.7
115°	68.6	79.7	89.5	96.9	102.1	103.5	107.2	111.0	112.8	112.8
117.5°	52.7	64.4	73.2	79.7	83.4	85.3	89.9	93.7	95.1	96.0
120°	40.1	49.4	57.8	64.8	67.2	70.4	73.7	76.9	78.7	78.7
122.5°	29.3	37.7	43.8	49.9	54.1	55.0	59.2	63.0	63.9	64.8
125°	20.1	27.0	33.1	38.2	41.5	42.4	45.7	48.9	49.9	50.8
127.5°	10.3	17.3	22.9	27.9	30.3	32.1	34.9	37.7	38.7	39.1
130°	2.8	7.9	13.5	18.2	20.1	21.5	24.7	26.5	28.4	27.9
132.5°	0.0	1.4	4.7	8.9	10.3	12.1	14.9	16.8	17.7	18.7
135°	0.0	0.0	0.5	1.9	2.8	3.7	5.6	7.9	7.9	7.9
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)