

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: NEO-RAY

Report Number: P331451-935

Luminaire Tested: **SA2XXDIP-C1005D925U935-4F0-1E-UDD-D1**

Issue Date: 10/7/2019

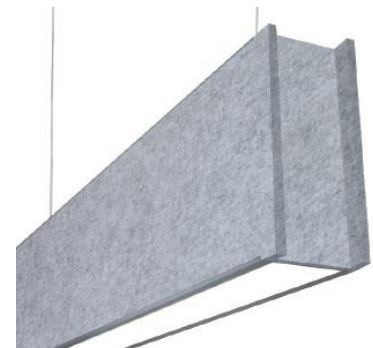
Test Information

Test Method: LM-79-08
Report Number: P331451-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C1005D925U935-4F0-1E-UDD-D1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 925 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6324.6 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: General Diffuse

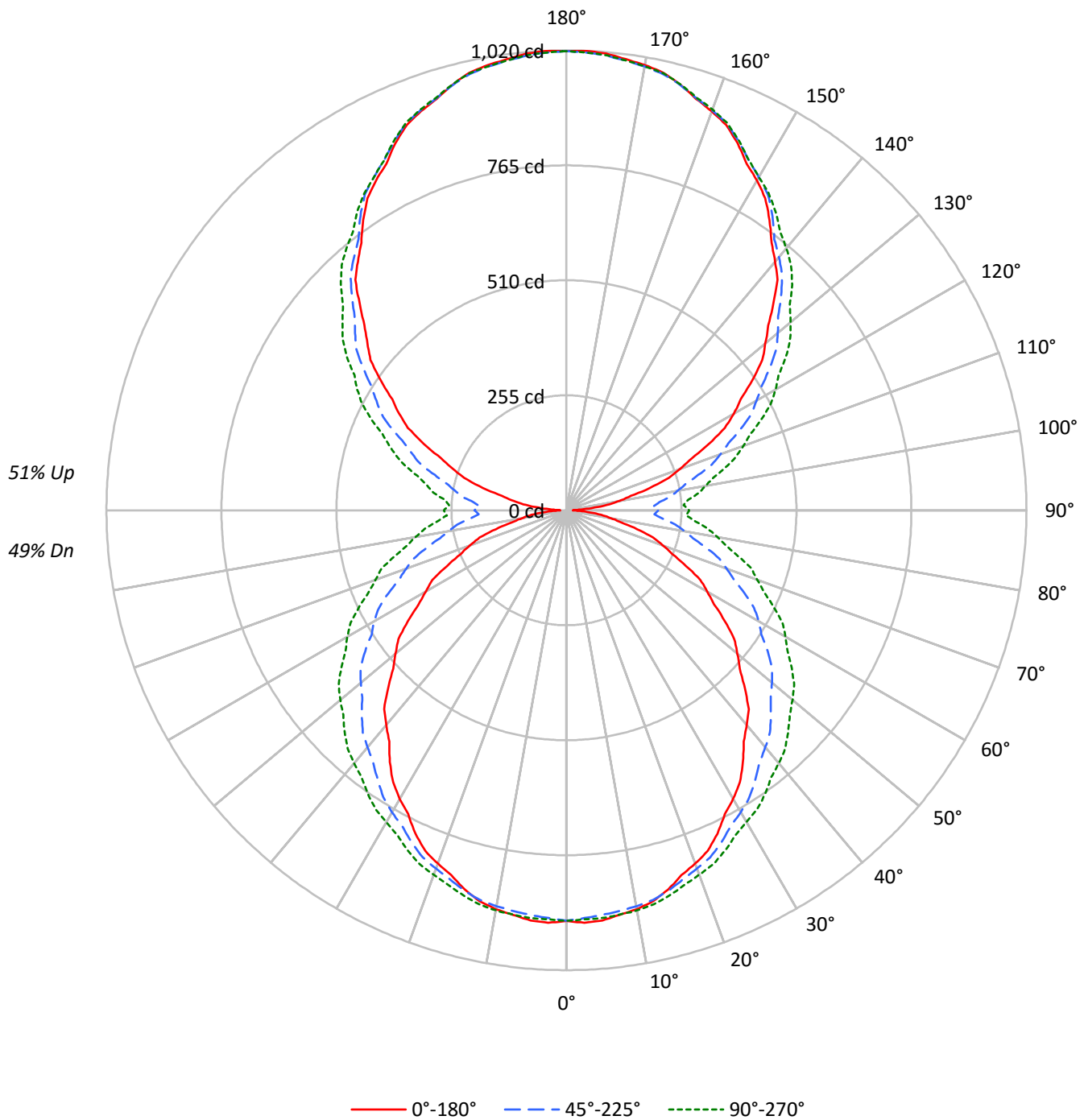
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	96	91	87	83	88	84	80	77	70	67	65	58	56	54	46	45	44
2	87	79	72	66	79	72	67	62	61	56	52	50	47	44	40	38	36
3	79	69	61	55	72	63	56	51	53	48	43	44	40	36	35	32	30
4	72	60	52	46	66	56	48	43	47	41	37	39	34	31	31	28	25
5	66	54	45	39	60	50	42	36	42	36	31	34	30	26	28	24	22
6	61	48	40	33	55	44	37	31	37	32	27	31	26	23	25	22	19
7	56	43	35	29	51	40	33	27	34	28	24	28	24	20	23	19	17
8	52	39	31	26	47	36	29	24	31	25	21	26	21	18	21	17	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	19	16	13
10	45	33	25	20	41	30	24	19	26	20	17	22	17	14	18	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14699	14699	14699
5°	14772	14150	14097
10°	14679	13733	13578
15°	14477	13289	13032
20°	14222	12815	12506
25°	13968	12358	12028
30°	13612	11889	11549
35°	13253	11434	11211
40°	12874	11047	10874
45°	12515	10702	10584
50°	12128	10388	10300
55°	11724	10052	10011
60°	11226	9702	9705
65°	10711	9294	9342
70°	10136	8856	8949
75°	9394	8423	8587
80°	8224	7984	8220
85°	7107	7603	7937

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	1.4
10°-20°	247.4	3.9
20°-30°	374.9	5.9
30°-40°	456.6	7.2
40°-50°	491.2	7.8
50°-60°	477.0	7.5
60°-70°	416.5	6.6
70°-80°	320.7	5.1
80°-90°	219.3	3.5
90°-100°	212.8	3.4
100°-110°	308.6	4.9
110°-120°	414.0	6.5
120°-130°	490.4	7.8
130°-140°	522.3	8.3
140°-150°	498.6	7.9
150°-160°	415.8	6.6
160°-170°	275.8	4.4
170°-180°	96.4	1.5
0°-30°	708.5	11.2
0°-40°	1165.2	18.4
0°-60°	2133.4	33.7
0°-90°	3089.9	48.9
90°-120°	935.5	14.8
90°-150°	2446.7	38.7
90°-180°	3235.0	51.1
0°-180°	6324.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	913	909	901	909	908	87
15°	871	873	874	885	884	245
25°	792	801	813	828	833	364
35°	682	705	730	758	768	426
45°	560	596	641	681	695	432
55°	429	478	545	591	610	383
65°	293	358	435	488	507	291
75°	162	237	321	375	394	172
85°	48	129	214	267	288	51
90°	14	102	204	253	272	11
95°	55	126	207	255	271	60
105°	191	234	302	349	365	203
115°	349	371	426	464	477	345
125°	503	512	550	582	594	450
135°	648	658	673	698	708	501
145°	785	791	796	805	808	491
155°	898	900	903	907	905	413
165°	977	976	976	982	978	275
175°	1016	1014	1012	1018	1013	97
180°	1018	1018	1018	1018	1018	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4
2.5°	915.8	915.1	914.3	913.6	912.9	911.7	910.1	908.4	906.8	905.2	906.4
5°	913.1	912.2	911.4	910.4	909.6	908.3	906.5	904.7	903.0	901.2	903.0
7.5°	904.9	904.3	903.7	903.2	902.6	901.6	900.3	898.9	897.6	896.2	898.3
10°	898.6	898.0	897.4	896.8	896.2	895.5	894.7	893.7	892.9	892.0	894.3
12.5°	888.0	888.1	888.3	888.4	888.5	888.2	887.6	886.9	886.3	885.6	888.0
15°	870.9	871.5	872.0	872.6	873.2	873.5	873.5	873.5	873.5	873.5	876.2
17.5°	848.7	850.0	851.2	852.4	853.6	854.7	855.7	856.6	857.6	858.5	861.3
20°	834.0	835.4	836.9	838.4	839.8	841.1	842.3	843.4	844.6	845.8	849.0
22.5°	818.1	819.8	821.5	823.2	824.9	826.6	828.2	829.8	831.5	833.1	836.4
25°	791.7	793.8	795.8	797.9	800.0	802.3	804.9	807.5	810.2	812.8	816.3
27.5°	760.0	763.4	766.7	770.1	773.4	776.6	779.7	782.8	785.9	789.1	793.5
30°	738.9	742.7	746.6	750.4	754.1	758.0	761.8	765.6	769.4	773.3	777.9
32.5°	715.7	720.0	724.3	728.6	732.8	737.2	741.8	746.2	750.8	755.3	760.7
35°	682.2	687.2	692.2	697.2	702.1	707.4	713.0	718.5	724.1	729.7	736.2
37.5°	645.8	651.5	657.3	663.0	668.7	675.2	682.4	689.7	696.9	704.1	711.3
40°	621.5	627.9	634.4	640.8	647.3	654.4	662.4	670.3	678.2	686.1	693.8
42.5°	598.3	604.7	611.1	617.6	624.1	631.8	640.9	650.1	659.1	668.2	676.5
45°	559.5	567.4	575.3	583.2	591.2	600.2	610.5	620.8	631.0	641.3	650.4
47.5°	521.2	529.9	538.5	547.1	555.7	566.0	578.1	590.0	602.1	614.1	623.6
50°	494.8	503.9	513.0	522.1	531.2	542.3	555.5	568.7	581.9	595.1	605.1
52.5°	469.5	479.1	488.6	498.2	507.7	519.4	533.3	547.3	561.1	575.1	585.2
55°	428.9	439.4	450.0	460.5	471.1	484.0	499.2	514.4	529.7	544.9	555.5
57.5°	388.7	400.6	412.5	424.5	436.4	450.0	465.6	481.1	496.7	512.2	523.6
60°	360.2	372.8	385.5	398.0	410.7	425.3	442.0	458.7	475.4	492.1	503.3
62.5°	334.9	347.9	361.0	374.1	387.2	402.1	418.8	435.5	452.3	469.0	480.8
65°	292.9	307.3	321.7	336.0	350.4	366.3	383.6	400.8	418.1	435.4	447.5
67.5°	254.4	269.4	284.4	299.5	314.4	330.8	348.5	366.3	383.9	401.7	413.8
70°	227.0	242.2	257.4	272.7	287.9	304.6	322.9	341.0	359.2	377.4	389.9
72.5°	201.6	217.3	233.1	248.7	264.5	281.5	300.0	318.4	336.8	355.2	367.6
75°	162.3	178.7	195.1	211.5	228.0	245.6	264.3	283.1	301.9	320.6	333.2
77.5°	124.3	141.5	158.7	175.8	193.0	211.1	230.2	249.3	268.3	287.4	300.0
80°	98.9	116.8	134.7	152.7	170.5	189.0	208.0	227.1	246.2	265.2	277.5
82.5°	77.8	95.5	113.1	130.8	148.4	166.9	186.2	205.5	224.8	244.1	256.4
85°	47.5	65.7	83.9	102.0	120.2	138.7	157.5	176.2	195.0	213.8	226.1
87.5°	26.0	44.0	61.9	79.8	97.8	116.6	136.1	155.8	175.4	194.9	206.9
90°	14.0	33.3	52.7	72.0	91.3	112.4	135.3	158.3	181.2	204.2	215.6
92.5°	27.5	44.9	62.4	80.0	97.5	115.8	134.8	153.9	173.0	192.0	203.5
95°	55.3	70.9	86.6	102.3	118.0	134.8	152.8	170.8	188.7	206.7	217.9
97.5°	90.8	104.8	118.7	132.7	146.6	162.4	180.0	197.6	215.2	232.8	243.7
100°	118.4	130.7	143.1	155.5	167.9	182.5	199.6	216.5	233.5	250.6	261.4
102.5°	146.2	157.3	168.4	179.6	190.7	204.6	221.3	238.0	254.7	271.3	282.1
105°	191.3	200.4	209.5	218.5	227.6	240.0	255.6	271.2	286.9	302.5	313.1
107.5°	238.2	245.8	253.5	261.1	268.7	279.8	294.5	309.0	323.6	338.3	348.3
110°	267.3	274.3	281.4	288.3	295.4	306.1	320.5	334.8	349.2	363.5	372.9

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	300.3	306.4	312.5	318.6	324.6	334.4	347.9	361.4	375.0	388.5	397.4
115°	349.0	353.4	357.7	362.1	366.4	375.1	387.9	400.7	413.5	426.3	434.9
117.5°	396.1	399.8	403.4	407.0	410.7	418.0	429.2	440.3	451.4	462.5	470.8
120°	428.4	431.1	433.9	436.5	439.2	445.7	455.9	466.1	476.3	486.5	494.7
122.5°	458.0	460.3	462.6	464.9	467.2	473.3	483.3	493.3	503.2	513.2	520.6
125°	502.7	504.5	506.2	507.9	509.6	514.9	523.7	532.4	541.3	550.1	557.4
127.5°	547.6	549.5	551.3	553.2	555.1	559.5	566.4	573.3	580.1	587.0	593.6
130°	575.8	577.9	580.1	582.3	584.5	588.5	594.3	600.0	605.8	611.6	618.3
132.5°	607.3	609.1	610.8	612.6	614.3	617.6	622.4	627.2	632.1	636.9	642.8
135°	648.3	650.4	652.6	654.6	656.7	659.4	662.7	666.1	669.3	672.7	678.6
137.5°	692.8	694.5	696.1	697.8	699.5	701.2	703.0	704.7	706.5	708.3	713.6
140°	719.6	721.1	722.5	723.9	725.3	726.9	728.4	729.9	731.4	733.0	737.7
142.5°	747.2	748.6	750.0	751.4	752.9	753.9	754.7	755.4	756.2	757.0	760.9
145°	785.3	786.7	788.0	789.4	790.7	791.9	793.1	794.2	795.4	796.5	798.5
147.5°	820.5	822.2	823.8	825.4	827.0	828.2	829.0	829.7	830.4	831.2	831.9
150°	844.6	845.8	846.9	848.1	849.2	850.2	850.9	851.7	852.5	853.3	853.8
152.5°	865.9	867.1	868.2	869.4	870.6	871.6	872.5	873.4	874.3	875.2	876.0
155°	897.9	898.5	899.1	899.7	900.2	900.8	901.4	901.9	902.5	903.0	904.0
157.5°	925.2	925.6	926.0	926.3	926.8	927.1	927.5	927.8	928.2	928.5	929.8
160°	941.8	942.1	942.5	942.9	943.2	943.6	943.7	943.9	944.1	944.3	945.5
162.5°	956.8	956.9	957.0	957.1	957.2	957.3	957.5	957.7	957.9	958.0	959.3
165°	977.0	976.8	976.5	976.4	976.2	976.1	976.1	976.1	976.1	976.1	977.4
167.5°	993.8	993.2	992.6	992.0	991.5	991.2	991.2	991.1	991.1	991.0	992.4
170°	1002.7	1002.1	1001.6	1001.0	1000.4	1000.1	999.9	999.7	999.4	999.3	1000.7
172.5°	1008.9	1008.3	1007.8	1007.2	1006.6	1006.3	1006.1	1005.8	1005.6	1005.5	1006.9
175°	1016.5	1015.9	1015.3	1014.8	1014.2	1013.7	1013.3	1013.0	1012.5	1012.2	1013.5
177.5°	1019.6	1019.1	1018.6	1018.2	1017.7	1017.4	1017.0	1016.8	1016.4	1016.2	1017.0
180°	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	910.4	910.4	910.4	910.4	910.4	910.4	910.4	910.4
2.5°	907.5	908.7	909.9	910.2	909.7	909.3	908.8	908.4
5°	904.7	906.5	908.3	909.0	908.7	908.4	908.1	907.8
7.5°	900.4	902.6	904.7	905.6	905.3	905.0	904.7	904.4
10°	896.6	899.1	901.4	902.4	902.1	901.8	901.6	901.2
12.5°	890.4	892.7	895.0	896.0	895.8	895.4	895.2	894.9
15°	878.8	881.4	884.1	885.3	884.9	884.7	884.3	884.1
17.5°	864.0	866.8	869.5	870.9	870.9	870.9	870.9	870.9
20°	852.2	855.5	858.7	860.3	860.3	860.3	860.3	860.3
22.5°	839.6	842.8	846.0	847.9	848.3	848.9	849.3	849.8
25°	819.8	823.4	826.9	829.1	830.0	830.9	831.7	832.6
27.5°	798.0	802.5	806.9	809.4	810.1	810.7	811.4	812.0
30°	782.6	787.3	792.0	794.8	795.7	796.5	797.5	798.3
32.5°	766.1	771.5	776.9	780.3	782.0	783.5	785.1	786.7
35°	742.6	749.1	755.5	759.7	761.8	763.9	765.9	767.9
37.5°	718.4	725.6	732.7	737.4	739.5	741.8	743.9	746.1
40°	701.4	709.0	716.6	721.8	724.4	727.0	729.7	732.4
42.5°	684.8	693.2	701.5	707.0	709.6	712.3	714.9	717.6
45°	659.4	668.6	677.6	683.6	686.6	689.5	692.4	695.3
47.5°	633.1	642.6	652.1	658.5	661.7	665.0	668.1	671.4
50°	615.0	625.0	635.0	641.6	644.8	648.0	651.3	654.4
52.5°	595.5	605.6	615.9	622.7	626.1	629.6	633.1	636.5
55°	566.1	576.6	587.2	594.3	598.1	602.0	605.8	609.6
57.5°	535.0	546.4	557.8	565.3	569.2	573.1	577.0	580.8
60°	514.4	525.6	536.7	544.4	548.5	552.6	556.7	560.8
62.5°	492.7	504.5	516.3	524.2	528.1	531.9	535.8	539.7
65°	459.5	471.5	483.5	491.5	495.2	499.0	502.9	506.7
67.5°	425.9	438.1	450.2	458.3	462.3	466.2	470.3	474.2
70°	402.6	415.2	427.8	435.8	439.4	442.9	446.4	450.0
72.5°	380.0	392.4	404.7	413.0	417.2	421.5	425.7	429.9
75°	345.9	358.4	371.1	379.3	383.1	386.9	390.7	394.5
77.5°	312.5	325.0	337.6	345.9	350.0	354.1	358.3	362.3
80°	289.8	302.2	314.5	322.7	326.8	330.9	335.0	339.1
82.5°	268.7	281.0	293.3	301.4	305.3	309.2	313.1	316.9
85°	238.4	250.7	263.0	271.2	275.3	279.5	283.5	287.7
87.5°	218.8	230.7	242.5	250.4	254.2	258.0	261.7	265.5
90°	227.0	238.3	249.6	257.2	260.9	264.6	268.3	272.0
92.5°	215.2	226.7	238.3	245.8	249.4	253.0	256.5	260.1
95°	229.0	240.1	251.3	258.5	261.6	264.8	267.9	271.0
97.5°	254.5	265.4	276.2	283.4	286.8	290.2	293.7	297.0
100°	272.2	283.1	293.9	300.8	303.9	306.9	310.0	313.0
102.5°	292.8	303.6	314.4	321.3	324.3	327.4	330.4	333.5
105°	323.8	334.4	345.1	352.1	355.2	358.4	361.7	364.9
107.5°	358.3	368.2	378.3	384.4	386.8	389.2	391.5	393.8
110°	382.3	391.7	401.1	407.1	409.7	412.4	415.1	417.7

TEST NUMBER: P331451-935

CATALOG NUMBER: SA2XXDIP-C1005D925U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	406.3	415.3	424.1	430.1	432.8	435.7	438.4	441.3
115°	443.5	452.1	460.7	466.3	469.0	471.7	474.3	477.0
117.5°	479.0	487.2	495.4	500.8	503.2	505.6	508.0	510.5
120°	502.9	511.1	519.4	524.8	527.4	530.0	532.7	535.4
122.5°	528.1	535.7	543.2	548.1	550.4	552.8	555.2	557.5
125°	564.8	572.1	579.5	584.4	586.9	589.3	591.7	594.2
127.5°	600.2	606.7	613.3	617.6	619.6	621.6	623.5	625.5
130°	624.9	631.5	638.2	642.3	643.9	645.5	647.0	648.7
132.5°	648.8	654.8	660.7	664.6	666.3	668.0	669.8	671.5
135°	684.6	690.6	696.5	700.4	702.2	704.0	705.8	707.5
137.5°	718.8	724.1	729.4	732.5	733.7	735.0	736.2	737.4
140°	742.4	747.1	751.7	754.6	755.6	756.6	757.6	758.5
142.5°	764.8	768.7	772.7	775.0	775.8	776.4	777.2	778.0
145°	800.4	802.4	804.3	805.6	806.3	807.0	807.8	808.5
147.5°	832.5	833.2	833.9	834.1	834.1	834.1	834.1	834.1
150°	854.4	855.0	855.5	855.5	855.0	854.4	853.8	853.3
152.5°	876.7	877.4	878.1	878.1	877.4	876.7	876.0	875.2
155°	905.0	905.9	906.9	907.1	906.5	905.9	905.3	904.7
157.5°	931.1	932.4	933.7	933.8	933.0	932.0	931.1	930.2
160°	946.6	947.7	948.9	949.1	948.3	947.5	946.8	946.0
162.5°	960.6	961.9	963.2	963.5	962.5	961.6	960.7	959.8
165°	978.8	980.1	981.5	981.6	980.7	979.7	978.8	977.8
167.5°	993.7	995.1	996.3	996.5	995.6	994.5	993.6	992.6
170°	1001.9	1003.3	1004.6	1004.7	1003.6	1002.5	1001.3	1000.1
172.5°	1008.1	1009.5	1010.8	1010.9	1009.8	1008.7	1007.5	1006.3
175°	1014.9	1016.2	1017.5	1017.6	1016.5	1015.3	1014.2	1013.1
177.5°	1018.0	1018.9	1019.8	1019.8	1018.9	1018.0	1017.0	1016.2
180°	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2	1018.2

(END OF REPORT)