

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: P333444-930

Luminaire Tested: **S125DIW-S1090D1050U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333444-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S1090D1050U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6895.3 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

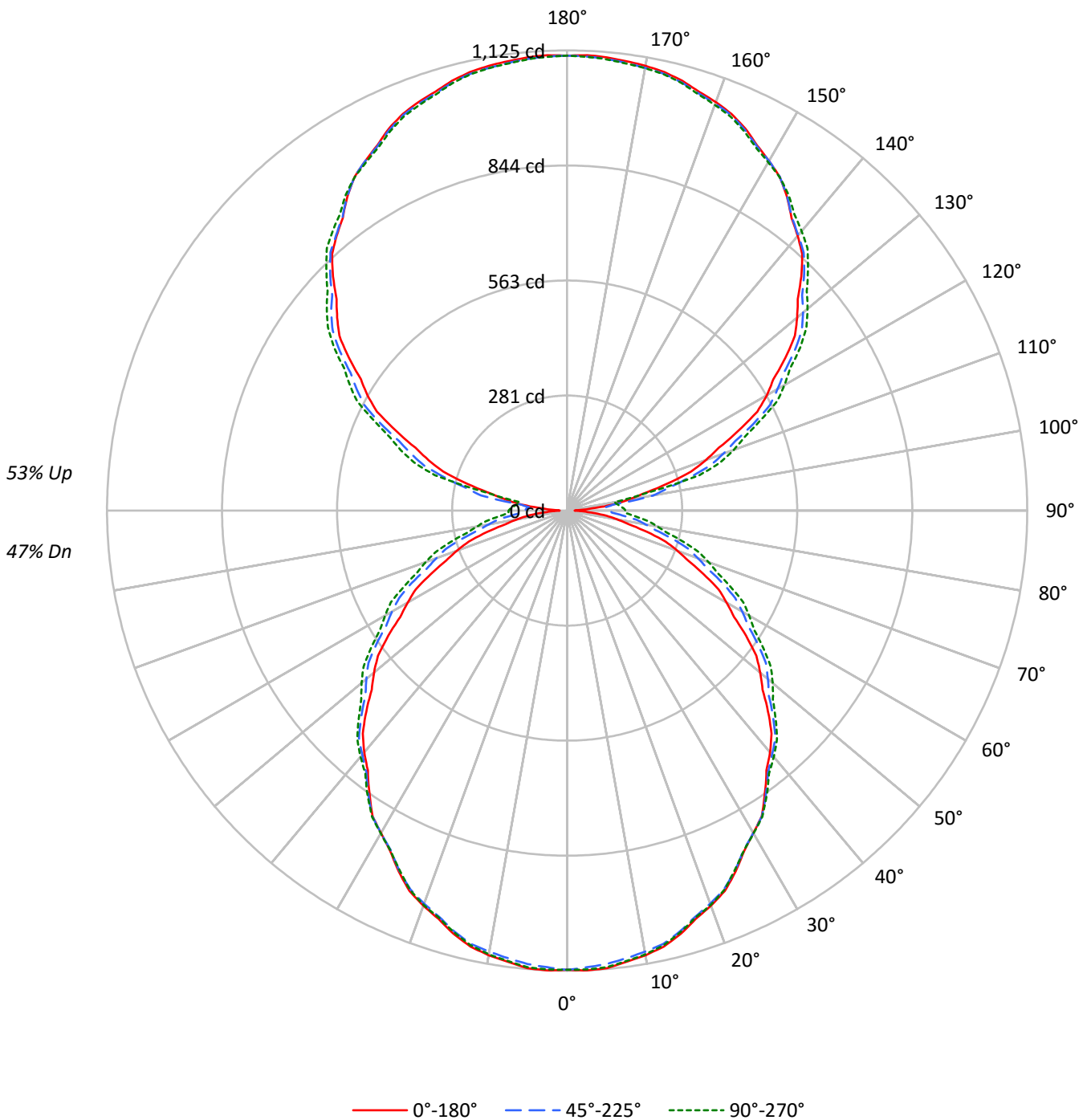
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333444-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-D

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	96	92	88	84	88	85	81	78	71	68	66	58	56	55	46	45	44	38
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	40	38	36	32
3	80	70	62	56	73	64	58	52	54	49	45	44	41	38	36	33	31	26
4	73	62	54	47	67	57	50	44	48	42	38	39	35	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7251	7251	7251
5°	7265	7116	7139
10°	7213	6989	6979
15°	7128	6837	6775
20°	7012	6650	6572
25°	6874	6448	6320
30°	6707	6226	6092
35°	6552	6023	5884
40°	6393	5809	5674
45°	6214	5626	5487
50°	6043	5427	5322
55°	5837	5239	5128
60°	5611	5024	4931
65°	5377	4800	4709
70°	5112	4494	4480
75°	4688	4200	4198
80°	4134	3842	3893
85°	3621	3600	3798



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	1.5
10°-20°	301.3	4.4
20°-30°	448.2	6.5
30°-40°	530.9	7.7
40°-50°	548.9	8.0
50°-60°	505.6	7.3
60°-70°	408.7	5.9
70°-80°	273.7	4.0
80°-90°	144.2	2.1
90°-100°	120.1	1.7
100°-110°	307.9	4.5
110°-120°	491.2	7.1
120°-130°	602.2	8.7
130°-140°	633.5	9.2
140°-150°	587.4	8.5
150°-160°	473.6	6.9
160°-170°	306.3	4.4
170°-180°	105.6	1.5
0°-30°	855.7	12.4
0°-40°	1386.5	20.1
0°-60°	2441.0	35.4
0°-90°	3267.6	47.4
90°-120°	919.1	13.3
90°-150°	2742.2	39.8
90°-180°	3628.0	52.6
0°-180°	6895.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1123	1120	1113	1121	1120	106
15°	1072	1073	1065	1071	1068	302
25°	974	977	971	975	970	448
35°	843	850	848	851	851	527
45°	694	706	712	719	721	536
55°	534	551	569	581	586	477
65°	368	393	419	435	440	365
75°	202	232	266	287	294	215
85°	60	97	135	159	168	64
90°	18	60	104	132	143	14
95°	61	86	94	121	130	71
105°	252	274	306	327	335	267
115°	462	475	503	519	521	458
125°	652	657	678	692	696	582
135°	809	813	819	831	833	624
145°	937	938	938	943	943	585
155°	1031	1026	1027	1029	1023	475
165°	1088	1083	1084	1088	1082	307
175°	1112	1108	1108	1114	1107	106
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1125.3	1124.9	1124.5	1124.1	1123.7	1122.8	1121.4	1120.1	1118.8	1117.4	1118.8
5°	1122.7	1122.2	1121.7	1121.2	1120.7	1119.6	1117.9	1116.1	1114.4	1112.7	1114.7
7.5°	1112.7	1112.6	1112.3	1112.1	1112.0	1111.0	1109.2	1107.4	1105.7	1103.9	1105.6
10°	1103.9	1103.9	1103.9	1103.9	1103.9	1102.9	1101.0	1099.0	1097.1	1095.1	1096.8
12.5°	1091.6	1091.8	1092.0	1092.2	1092.4	1091.7	1090.1	1088.6	1087.0	1085.4	1086.8
15°	1072.0	1072.3	1072.5	1072.8	1073.0	1072.3	1070.6	1068.9	1067.1	1065.4	1066.9
17.5°	1046.4	1046.9	1047.4	1047.9	1048.4	1047.8	1046.1	1044.4	1042.7	1041.0	1042.1
20°	1028.0	1028.5	1029.0	1029.5	1030.0	1029.3	1027.6	1025.9	1024.2	1022.5	1023.2
22.5°	1006.8	1007.7	1008.6	1009.5	1010.4	1009.8	1008.0	1006.1	1004.1	1002.2	1003.1
25°	974.0	974.8	975.5	976.2	977.0	976.6	975.2	973.7	972.2	970.8	971.8
27.5°	937.5	938.6	939.6	940.8	941.8	941.5	939.9	938.2	936.5	934.9	935.6
30°	910.2	911.7	913.1	914.6	916.1	916.1	914.6	913.1	911.7	910.2	910.7
32.5°	885.6	886.8	888.1	889.4	890.6	890.7	889.7	888.6	887.5	886.5	887.0
35°	843.1	844.8	846.5	848.2	849.9	850.4	849.7	849.0	848.2	847.5	848.2
37.5°	800.6	802.2	803.7	805.3	806.8	807.6	807.3	807.1	806.8	806.6	807.6
40°	771.5	773.5	775.4	777.4	779.3	780.2	780.0	779.8	779.5	779.3	780.2
42.5°	739.8	742.4	744.9	747.5	750.0	751.5	752.1	752.6	753.2	753.7	754.9
45°	694.5	697.2	699.9	702.5	705.2	707.2	708.4	709.6	710.9	712.1	713.8
47.5°	648.1	650.5	653.1	655.5	658.0	660.3	662.4	664.6	666.7	668.7	671.2
50°	616.4	619.1	621.7	624.4	627.1	629.8	632.5	635.2	637.9	640.6	643.3
52.5°	582.9	586.2	589.5	592.7	596.0	599.2	602.6	605.8	609.1	612.4	615.3
55°	533.8	537.7	541.6	545.5	549.4	553.3	557.3	561.2	565.1	569.0	571.7
57.5°	483.6	488.3	493.0	497.7	502.4	507.0	511.5	516.0	520.5	525.0	528.1
60°	450.1	455.0	459.9	464.8	469.7	474.6	479.5	484.4	489.3	494.2	497.8
62.5°	417.6	422.5	427.4	432.3	437.2	442.2	447.5	452.8	458.1	463.3	467.4
65°	367.6	373.2	378.9	384.5	390.1	395.8	401.7	407.6	413.4	419.3	423.0
67.5°	320.5	326.0	331.3	336.8	342.2	347.9	353.9	359.9	365.8	371.8	376.3
70°	286.2	291.8	297.4	303.0	308.7	314.6	321.0	327.3	333.7	340.1	344.7
72.5°	252.7	258.5	264.3	270.2	276.0	282.3	289.3	296.3	303.2	310.1	315.2
75°	202.5	208.9	215.2	221.6	228.0	235.1	242.9	250.7	258.5	266.4	271.3
77.5°	154.3	161.7	169.0	176.3	183.7	191.1	198.6	206.2	213.7	221.2	226.6
80°	124.3	131.7	139.0	146.3	153.7	161.5	169.8	178.1	186.5	194.8	200.2
82.5°	97.1	104.8	112.5	120.3	128.0	136.1	144.6	153.1	161.7	170.2	175.4
85°	60.5	68.6	76.6	84.7	92.8	101.1	109.7	118.2	126.8	135.3	140.7
87.5°	34.5	42.6	50.7	58.9	67.0	75.3	83.9	92.5	101.0	109.7	115.4
90°	18.4	27.7	37.0	46.3	55.6	65.1	74.7	84.2	93.8	103.5	110.0
92.5°	28.5	34.7	41.0	47.2	53.4	61.3	71.0	80.6	90.3	100.0	106.2
95°	61.3	67.1	72.9	78.8	84.5	88.1	89.5	90.8	92.2	93.5	99.9
97.5°	111.1	117.8	124.5	131.3	137.9	138.4	132.6	126.9	121.2	115.4	115.4
100°	149.8	155.5	161.2	166.9	172.5	179.7	188.3	196.8	205.4	213.9	191.8
102.5°	189.1	194.6	200.1	205.5	210.9	217.7	225.8	233.8	241.9	250.0	249.7
105°	252.3	257.0	261.6	266.3	270.9	276.9	284.2	291.6	298.9	306.2	311.1
107.5°	318.0	321.3	324.7	327.9	331.3	336.6	344.1	351.5	358.9	366.3	371.1
110°	360.6	363.5	366.5	369.4	372.3	377.4	384.7	391.8	399.1	406.3	410.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	401.5	404.3	407.1	409.9	412.7	417.5	424.4	431.2	438.1	445.0	448.7
115°	461.8	464.4	467.0	469.6	472.3	476.9	483.4	489.9	496.5	503.0	506.7
117.5°	524.2	525.2	526.4	527.4	528.5	532.4	539.2	545.8	552.5	559.3	562.5
120°	563.7	564.3	564.8	565.4	565.9	569.3	575.4	581.6	587.8	594.0	597.8
122.5°	597.9	598.8	599.9	601.0	601.9	605.4	611.0	616.7	622.4	628.1	631.7
125°	651.7	652.7	653.8	654.8	655.8	658.8	663.7	668.6	673.5	678.4	681.6
127.5°	702.2	702.9	703.5	704.3	704.9	707.2	711.1	715.0	718.8	722.8	726.0
130°	733.9	734.5	735.2	735.9	736.5	738.7	742.3	745.9	749.5	753.1	756.0
132.5°	764.7	765.6	766.7	767.7	768.7	770.4	772.6	774.8	777.1	779.3	782.6
135°	809.4	810.3	811.1	812.0	812.9	814.0	815.3	816.7	818.0	819.4	822.1
137.5°	850.6	851.4	852.2	852.9	853.6	854.3	854.8	855.3	855.8	856.3	859.2
140°	876.8	877.2	877.5	877.9	878.2	878.5	878.6	878.6	878.6	878.7	881.7
142.5°	901.2	901.2	901.2	901.3	901.3	901.5	901.8	902.0	902.4	902.7	905.1
145°	937.0	937.1	937.3	937.3	937.5	937.5	937.5	937.5	937.5	937.5	939.0
147.5°	967.2	967.2	967.1	967.0	966.9	967.0	967.2	967.4	967.7	967.8	968.5
150°	987.0	986.7	986.3	985.9	985.5	985.5	985.9	986.3	986.7	987.0	987.4
152.5°	1006.2	1005.3	1004.5	1003.7	1002.9	1002.7	1003.1	1003.5	1003.8	1004.1	1004.5
155°	1030.7	1029.6	1028.5	1027.4	1026.3	1026.0	1026.3	1026.7	1027.0	1027.4	1027.9
157.5°	1049.7	1049.0	1048.4	1047.7	1047.0	1046.8	1046.8	1046.8	1046.8	1046.8	1047.5
160°	1062.9	1061.8	1060.7	1059.6	1058.5	1058.0	1058.2	1058.4	1058.6	1058.7	1059.5
162.5°	1073.4	1072.4	1071.2	1070.2	1069.0	1068.5	1068.8	1068.9	1069.1	1069.3	1070.3
165°	1087.6	1086.5	1085.4	1084.3	1083.2	1082.7	1083.0	1083.1	1083.3	1083.5	1084.6
167.5°	1098.1	1097.1	1095.9	1094.8	1093.6	1093.2	1093.3	1093.5	1093.7	1093.9	1095.2
170°	1104.1	1102.9	1101.6	1100.2	1098.9	1098.5	1098.6	1098.8	1098.9	1099.2	1100.7
172.5°	1108.1	1106.8	1105.5	1104.2	1102.9	1102.4	1102.8	1103.1	1103.4	1103.8	1105.1
175°	1112.3	1111.3	1110.1	1109.1	1107.9	1107.5	1107.7	1107.8	1108.1	1108.2	1109.7
177.5°	1114.4	1113.5	1112.6	1111.7	1110.8	1110.4	1110.6	1110.8	1110.8	1111.0	1112.1
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7	1122.7
2.5°	1120.1	1121.4	1122.8	1123.4	1123.2	1123.0	1122.8	1122.7
5°	1116.6	1118.6	1120.5	1121.4	1121.2	1121.0	1120.7	1120.5
7.5°	1107.3	1109.1	1110.8	1111.5	1111.3	1111.0	1110.8	1110.5
10°	1098.5	1100.2	1102.0	1102.7	1102.4	1102.2	1102.0	1101.7
12.5°	1088.1	1089.4	1090.7	1091.0	1090.5	1089.8	1089.2	1088.5
15°	1068.4	1069.8	1071.3	1071.5	1070.6	1069.6	1068.6	1067.6
17.5°	1043.3	1044.3	1045.5	1045.7	1045.1	1044.6	1044.0	1043.4
20°	1023.9	1024.7	1025.4	1025.8	1025.8	1025.8	1025.8	1025.8
22.5°	1004.1	1005.0	1005.9	1006.1	1005.5	1004.9	1004.4	1003.8
25°	972.7	973.7	974.7	974.5	973.3	972.1	970.9	969.6
27.5°	936.2	936.9	937.6	937.8	937.3	936.9	936.4	936.0
30°	911.2	911.7	912.2	912.3	912.1	911.8	911.6	911.3
32.5°	887.5	887.9	888.4	888.5	888.3	888.0	887.8	887.5
35°	849.0	849.7	850.4	850.8	850.8	850.8	850.8	850.8
37.5°	808.5	809.5	810.5	810.9	810.8	810.7	810.6	810.5
40°	781.2	782.2	783.2	783.9	784.4	784.9	785.4	785.9
42.5°	756.0	757.2	758.4	759.0	759.1	759.2	759.4	759.5
45°	715.5	717.2	718.9	719.9	720.2	720.4	720.6	720.9
47.5°	673.8	676.2	678.7	680.2	680.8	681.3	681.8	682.4
50°	646.0	648.7	651.3	653.1	653.8	654.5	655.3	656.0
52.5°	618.2	621.0	623.9	625.7	626.1	626.7	627.3	627.8
55°	574.4	577.1	579.8	581.6	582.6	583.6	584.6	585.5
57.5°	531.2	534.3	537.4	539.2	540.0	540.7	541.4	542.2
60°	501.5	505.2	508.8	511.0	511.8	512.5	513.2	514.0
62.5°	471.5	475.6	479.6	482.1	483.1	484.0	484.9	485.8
65°	426.6	430.3	434.0	436.3	437.3	438.3	439.3	440.3
67.5°	380.7	385.1	389.6	392.5	393.7	395.0	396.2	397.5
70°	349.4	354.0	358.7	361.7	363.2	364.7	366.2	367.6
72.5°	320.2	325.3	330.3	333.4	334.4	335.5	336.6	337.7
75°	276.1	281.0	285.9	288.9	290.2	291.4	292.6	293.8
77.5°	232.0	237.3	242.7	245.9	246.9	247.9	248.8	249.8
80°	205.5	210.9	216.3	219.5	220.5	221.4	222.4	223.4
82.5°	180.5	185.7	190.9	194.4	196.2	197.9	199.7	201.4
85°	146.1	151.5	156.9	160.5	162.5	164.4	166.4	168.4
87.5°	121.2	127.0	132.9	136.6	138.5	140.3	142.1	144.0
90°	116.5	123.0	129.6	134.0	136.2	138.5	140.8	143.1
92.5°	112.6	119.0	125.3	129.5	131.4	133.4	135.3	137.4
95°	106.2	112.4	118.7	122.7	124.4	126.1	127.8	129.6
97.5°	115.4	115.3	115.3	116.1	117.7	119.4	121.1	122.8
100°	169.6	147.4	125.2	114.5	115.3	116.0	116.8	117.5
102.5°	249.5	249.3	249.1	243.4	232.4	221.4	210.5	199.5
105°	316.0	320.9	325.8	329.1	330.5	332.1	333.6	335.2
107.5°	376.0	380.9	385.8	388.7	389.7	390.7	391.6	392.6
110°	414.5	418.6	422.7	425.7	427.5	429.5	431.4	433.3



TEST NUMBER: P333444-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	452.5	456.2	460.0	462.6	464.1	465.5	467.0	468.5
115°	510.4	514.0	517.7	519.8	520.1	520.5	520.8	521.2
117.5°	565.7	568.9	572.1	574.3	575.4	576.7	577.8	579.0
120°	601.6	605.4	609.2	611.3	611.9	612.5	613.0	613.5
122.5°	635.3	638.9	642.5	644.5	644.9	645.3	645.7	646.1
125°	684.8	687.9	691.1	693.0	693.7	694.4	695.0	695.7
127.5°	729.2	732.5	735.6	737.3	737.4	737.4	737.5	737.5
130°	758.9	761.7	764.6	766.2	766.5	766.8	767.1	767.4
132.5°	785.9	789.2	792.6	794.3	794.3	794.5	794.6	794.7
135°	825.0	827.8	830.6	832.1	832.2	832.3	832.4	832.6
137.5°	862.2	865.2	868.1	869.6	869.7	869.7	869.7	869.8
140°	884.8	887.9	891.0	892.4	892.3	892.2	892.0	891.9
142.5°	907.4	909.8	912.2	913.3	913.2	913.1	913.0	912.8
145°	940.4	941.8	943.1	943.8	943.7	943.5	943.5	943.3
147.5°	969.1	969.7	970.3	970.2	969.3	968.4	967.5	966.7
150°	987.7	988.1	988.5	988.1	986.8	985.6	984.4	983.2
152.5°	1004.9	1005.3	1005.6	1005.2	1003.9	1002.7	1001.4	1000.1
155°	1028.5	1029.1	1029.6	1029.2	1027.7	1026.2	1024.7	1023.3
157.5°	1048.1	1048.6	1049.2	1048.8	1047.3	1045.9	1044.4	1042.9
160°	1060.2	1060.9	1061.7	1061.3	1059.9	1058.4	1057.0	1055.5
162.5°	1071.4	1072.4	1073.4	1073.1	1071.5	1069.9	1068.3	1066.7
165°	1085.7	1086.8	1087.9	1087.7	1086.2	1084.8	1083.3	1081.8
167.5°	1096.5	1097.8	1099.2	1099.0	1097.3	1095.7	1094.1	1092.4
170°	1102.1	1103.6	1105.1	1104.9	1103.3	1101.6	1100.0	1098.3
172.5°	1106.4	1107.7	1109.1	1108.9	1107.3	1105.5	1103.9	1102.3
175°	1111.2	1112.6	1114.1	1114.0	1112.3	1110.7	1109.1	1107.4
177.5°	1113.0	1114.1	1115.2	1115.1	1113.9	1112.7	1111.6	1110.4
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3

(END OF REPORT)