

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: P333450-930

Luminaire Tested: **S125DIW-S1090D1340U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333450-930
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-S1090D1340U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7853.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

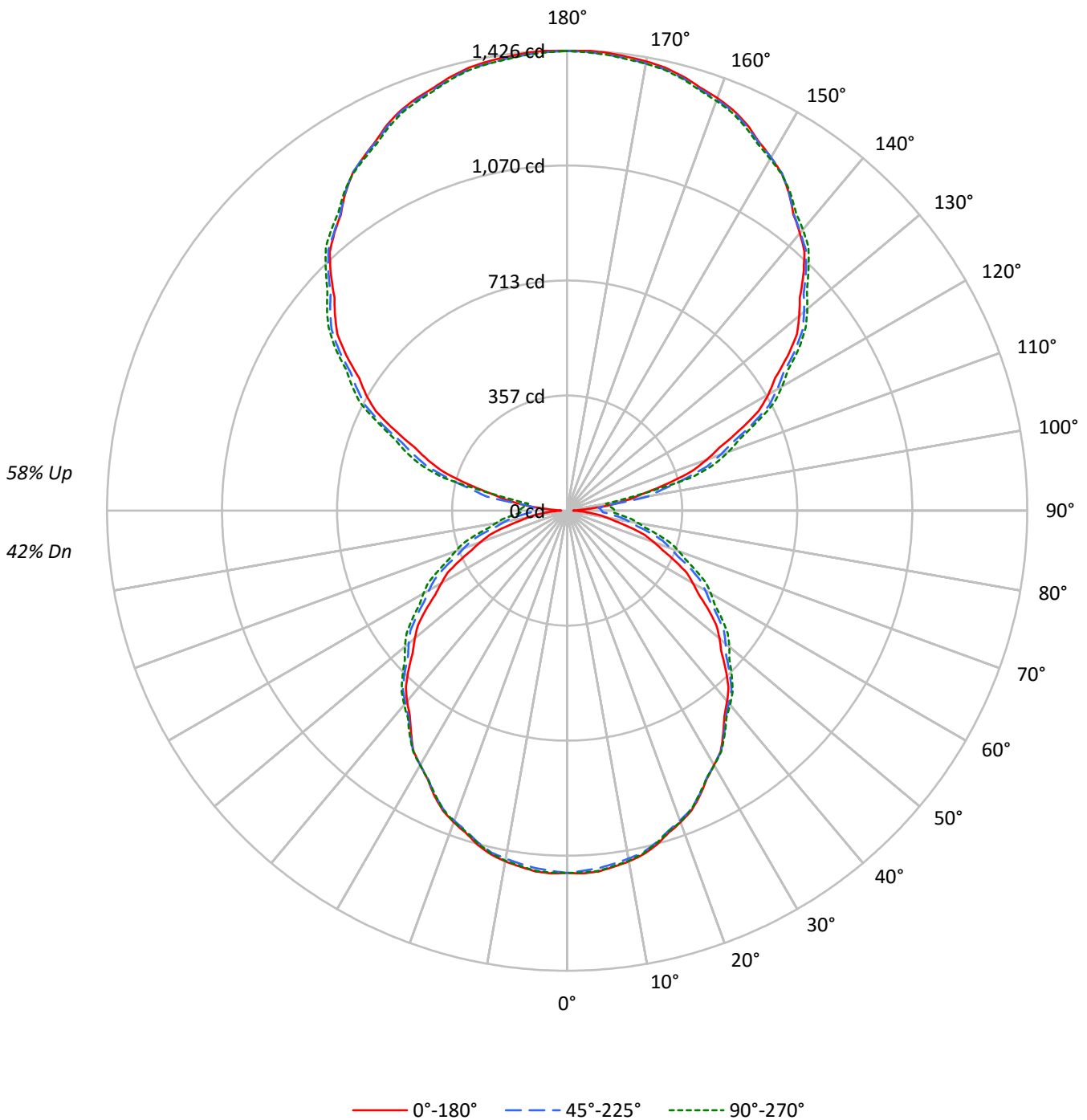
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333450-930

CATALOG NUMBER: S125DIW-S1090D1340U930-4F0-1E-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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	41	40	34
2	86	79	73	67	79	72	67	62	59	55	52	47	45	42	36	35	33	28
3	79	69	62	56	71	63	57	51	52	47	43	42	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	29	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	21	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17	21	17	14	17	14	12	10

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	1.4
10°-20°	301.3	3.8
20°-30°	448.2	5.7
30°-40°	530.9	6.8
40°-50°	548.9	7.0
50°-60°	505.6	6.4
60°-70°	408.7	5.2
70°-80°	273.7	3.5
80°-90°	144.9	1.8
90°-100°	131.4	1.7
100°-110°	377.7	4.8
110°-120°	617.8	7.9
120°-130°	764.7	9.7
130°-140°	808.2	10.3
140°-150°	751.4	9.6
150°-160°	606.3	7.7
160°-170°	392.1	5.0
170°-180°	135.2	1.7
0°-30°	855.7	10.9
0°-40°	1386.5	17.7
0°-60°	2441.0	31.1
0°-90°	3268.3	41.6
90°-120°	1126.8	14.3
90°-150°	3451.2	43.9
90°-180°	4585.0	58.4
0°-180°	7853.0	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°	19	62	107	137	149	14
95°	74	98	97	126	134	88
105°	320	343	375	396	404	339
115°	589	603	632	647	648	584
125°	833	840	861	874	877	744
135°	1036	1041	1046	1058	1058	798
145°	1199	1200	1200	1206	1205	749
155°	1320	1314	1315	1318	1310	608
165°	1392	1386	1387	1393	1385	393
175°	1424	1418	1419	1426	1418	136
180°	1424	1424	1424	1424	1424	



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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°	34.6	42.7	51.0	59.2	67.3	75.7	84.5	93.1	101.7	110.4	116.2
90°	18.7	28.4	38.1	47.8	57.5	67.3	77.3	87.2	97.2	107.1	114.0
92.5°	32.1	38.0	43.9	49.9	55.8	63.8	73.7	83.6	93.7	103.6	110.2
95°	74.5	80.1	85.8	91.5	97.1	99.6	99.1	98.4	97.8	97.3	103.8
97.5°	138.6	145.6	152.6	159.6	166.6	165.3	155.6	146.0	136.4	126.8	125.3
100°	188.4	194.2	200.1	205.9	211.7	219.1	227.8	236.6	245.3	254.1	224.3
102.5°	239.0	244.7	250.3	255.9	261.5	268.5	276.7	284.9	293.1	301.3	299.6
105°	320.2	325.1	330.0	334.8	339.7	345.8	353.1	360.4	367.8	375.1	380.0
107.5°	404.6	408.0	411.3	414.7	417.9	423.4	430.9	438.4	445.9	453.4	458.3
110°	459.5	462.4	465.4	468.3	471.2	476.4	483.7	491.0	498.3	505.6	509.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	511.8	514.8	517.7	520.6	523.5	528.4	535.3	542.3	549.3	556.2	559.7
115°	589.3	592.2	595.1	597.9	600.9	605.6	612.2	618.7	625.3	631.9	635.4
117.5°	669.4	670.6	671.6	672.7	673.8	677.8	684.7	691.6	698.5	705.4	708.3
120°	720.2	720.6	721.1	721.6	722.1	725.5	731.9	738.3	744.5	750.9	754.6
122.5°	764.0	765.2	766.5	767.8	769.0	772.5	778.2	784.0	789.7	795.5	799.0
125°	833.1	834.5	835.8	837.2	838.6	841.8	846.7	851.6	856.5	861.4	864.3
127.5°	898.1	898.9	899.9	900.8	901.7	904.2	908.0	911.9	915.7	919.7	922.8
130°	938.6	939.5	940.4	941.3	942.2	944.6	948.3	951.9	955.5	959.2	961.9
132.5°	978.2	979.5	980.9	982.2	983.5	985.2	987.3	989.4	991.6	993.7	996.9
135°	1035.7	1036.8	1038.0	1039.1	1040.3	1041.5	1042.8	1044.0	1045.2	1046.4	1049.2
137.5°	1088.4	1089.4	1090.5	1091.5	1092.5	1093.2	1093.6	1094.1	1094.5	1094.9	1097.8
140°	1122.2	1122.6	1123.1	1123.6	1124.1	1124.3	1124.3	1124.3	1124.3	1124.3	1127.5
142.5°	1153.4	1153.5	1153.6	1153.6	1153.7	1154.0	1154.4	1154.7	1155.1	1155.5	1157.9
145°	1199.2	1199.5	1199.6	1199.9	1200.1	1200.2	1200.2	1200.2	1200.2	1200.2	1201.7
147.5°	1238.2	1238.1	1238.0	1238.0	1237.9	1238.0	1238.2	1238.5	1238.8	1239.1	1239.7
150°	1263.6	1263.1	1262.7	1262.2	1261.7	1261.7	1262.2	1262.7	1263.1	1263.6	1264.0
152.5°	1288.0	1287.0	1286.0	1285.0	1283.9	1283.6	1284.1	1284.6	1285.1	1285.5	1286.0
155°	1319.5	1318.1	1316.7	1315.3	1313.9	1313.4	1313.9	1314.3	1314.8	1315.3	1316.0
157.5°	1343.8	1343.0	1342.1	1341.2	1340.4	1340.0	1340.0	1340.1	1340.2	1340.2	1340.9
160°	1360.7	1359.3	1357.9	1356.4	1355.0	1354.5	1354.7	1354.9	1355.2	1355.4	1356.3
162.5°	1374.2	1372.8	1371.3	1369.9	1368.6	1368.0	1368.2	1368.5	1368.6	1368.9	1370.2
165°	1392.4	1390.9	1389.5	1388.1	1386.7	1386.1	1386.3	1386.6	1386.8	1387.1	1388.5
167.5°	1405.8	1404.4	1403.0	1401.5	1400.0	1399.5	1399.6	1399.9	1400.1	1400.4	1402.1
170°	1413.5	1411.9	1410.1	1408.5	1406.9	1406.1	1406.4	1406.6	1406.9	1407.1	1409.0
172.5°	1418.5	1416.9	1415.3	1413.6	1411.9	1411.4	1411.8	1412.2	1412.6	1413.0	1414.7
175°	1424.0	1422.6	1421.2	1419.8	1418.4	1417.8	1418.1	1418.3	1418.5	1418.7	1420.6
177.5°	1426.5	1425.4	1424.3	1423.2	1422.0	1421.6	1421.8	1422.0	1422.1	1422.3	1423.7
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0



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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°	122.1	127.9	133.8	137.6	139.5	141.4	143.2	145.0
90°	120.7	127.5	134.4	138.9	141.4	143.7	146.2	148.6
92.5°	116.8	123.4	130.0	134.4	136.4	138.4	140.5	142.5
95°	110.3	116.9	123.4	127.6	129.3	131.0	132.7	134.4
97.5°	123.8	122.4	120.8	121.0	122.6	124.3	126.0	127.6
100°	194.4	164.7	134.9	120.2	120.7	121.2	121.8	122.3
102.5°	297.9	296.2	294.6	286.5	272.0	257.6	243.0	228.5
105°	384.9	389.8	394.7	397.9	399.3	400.8	402.3	403.7
107.5°	463.2	468.1	473.0	475.8	476.6	477.4	478.3	479.1
110°	513.6	517.5	521.4	524.3	526.3	528.2	530.2	532.1



TEST NUMBER: P333450-930

CATALOG NUMBER: S125DIW-S1090D1340U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	563.3	566.9	570.4	572.9	574.3	575.7	577.0	578.4
115°	638.9	642.4	645.8	647.6	647.6	647.7	647.8	647.8
117.5°	711.3	714.2	717.1	719.2	720.2	721.3	722.4	723.4
120°	758.2	762.0	765.6	767.6	767.9	768.2	768.5	768.8
122.5°	802.5	806.0	809.4	811.2	811.4	811.5	811.5	811.7
125°	867.3	870.3	873.3	875.0	875.5	876.0	876.5	877.1
127.5°	925.9	929.0	932.1	933.4	933.1	932.8	932.5	932.1
130°	964.7	967.4	970.1	971.5	971.5	971.6	971.6	971.7
132.5°	1000.3	1003.6	1006.8	1008.4	1008.3	1008.1	1008.0	1007.8
135°	1051.9	1054.6	1057.3	1058.6	1058.4	1058.2	1058.0	1057.9
137.5°	1100.8	1103.8	1106.8	1108.2	1107.9	1107.7	1107.4	1107.2
140°	1130.7	1133.8	1136.9	1138.3	1137.9	1137.4	1137.0	1136.6
142.5°	1160.3	1162.7	1165.1	1166.0	1165.6	1165.1	1164.7	1164.3
145°	1203.1	1204.6	1206.1	1206.6	1206.2	1205.7	1205.3	1204.8
147.5°	1240.4	1241.0	1241.8	1241.5	1240.2	1239.0	1237.7	1236.5
150°	1264.5	1264.9	1265.4	1264.9	1263.2	1261.6	1260.0	1258.3
152.5°	1286.5	1286.9	1287.4	1286.8	1285.2	1283.5	1281.9	1280.3
155°	1316.7	1317.4	1318.1	1317.5	1315.6	1313.8	1311.9	1310.0
157.5°	1341.7	1342.5	1343.2	1342.6	1340.8	1338.9	1337.0	1335.1
160°	1357.3	1358.2	1359.2	1358.7	1356.8	1354.9	1353.1	1351.2
162.5°	1371.5	1372.9	1374.2	1373.8	1371.7	1369.6	1367.6	1365.5
165°	1389.8	1391.3	1392.7	1392.4	1390.6	1388.7	1386.8	1384.9
167.5°	1403.8	1405.4	1407.1	1406.9	1404.8	1402.7	1400.6	1398.5
170°	1410.9	1412.8	1414.6	1414.5	1412.4	1410.3	1408.2	1406.1
172.5°	1416.4	1418.1	1419.8	1419.6	1417.5	1415.4	1413.2	1411.1
175°	1422.5	1424.3	1426.2	1426.1	1424.0	1421.9	1419.8	1417.6
177.5°	1425.0	1426.3	1427.6	1427.5	1426.0	1424.5	1422.9	1421.5
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0

(END OF REPORT)