

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: P333583-927

Luminaire Tested: **S125RDIP-S1090D365U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333583-927  
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: S125RDIP-S1090D365U927-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4505.8 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Direct

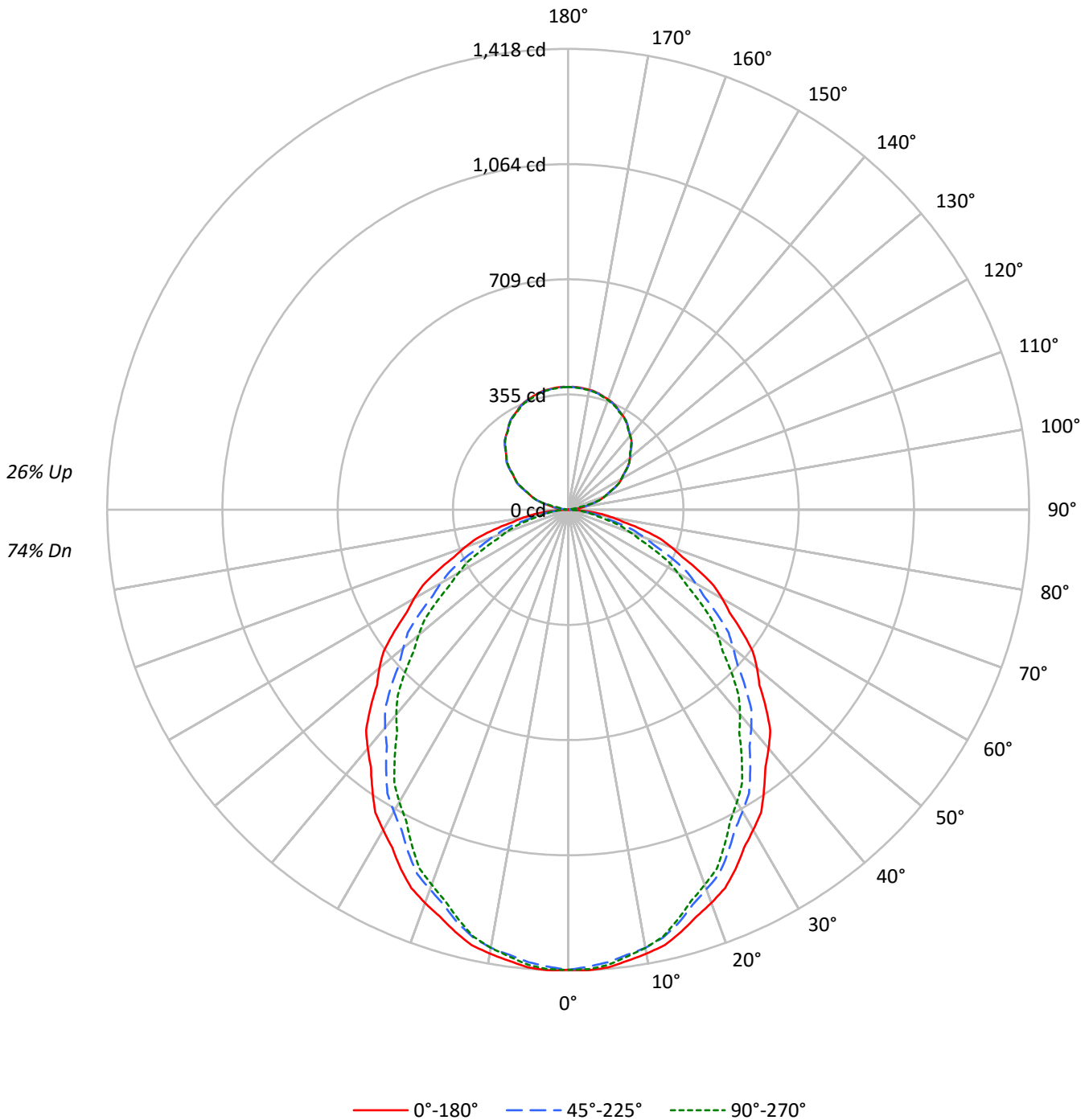
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74				
1	104	99	95	92	98	94	91	88	86	83	80	77	75	74	70	68	67	63				
2	95	87	81	76	90	83	77	73	75	71	67	68	65	62	62	59	57	53				
3	87	77	69	63	82	73	67	61	67	61	57	61	56	53	55	52	49	46				
4	79	68	60	54	75	65	58	52	60	54	49	54	49	45	49	46	42	39				
5	73	61	53	47	69	59	51	45	54	47	42	49	44	40	45	40	37	34				
6	68	55	47	41	64	53	45	40	48	42	37	44	39	35	41	36	33	30				
7	63	50	42	36	59	48	40	35	44	38	33	41	35	31	37	33	29	27				
8	58	46	38	32	55	44	36	31	40	34	30	37	32	28	34	30	26	24				
9	54	42	34	29	52	40	33	28	37	31	27	34	29	25	32	27	24	22				
10	51	39	31	26	48	37	30	26	34	28	24	32	27	23	29	25	22	20				

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

	0°	45°	90°
0°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.1	3.0
10°-20°	372.1	8.3
20°-30°	539.6	12.0
30°-40°	614.9	13.6
40°-50°	599.4	13.3
50°-60°	504.6	11.2
60°-70°	353.7	7.8
70°-80°	181.8	4.0
80°-90°	46.7	1.0
90°-100°	13.7	0.3
100°-110°	84.6	1.9
110°-120°	153.4	3.4
120°-130°	196.9	4.4
130°-140°	211.8	4.7
140°-150°	198.8	4.4
150°-160°	160.8	3.6
160°-170°	104.0	2.3
170°-180°	35.9	0.8
0°-30°	1044.8	23.2
0°-40°	1659.7	36.8
0°-60°	2763.6	61.3
0°-90°	3345.8	74.3
90°-120°	251.8	5.6
90°-150°	859.3	19.1
90°-180°	1160.0	25.7
0°-180°	4505.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	0	3	4	6	7	3
95°	16	15	4	6	6	20
105°	82	83	83	83	83	87
115°	155	156	156	155	153	153
125°	220	222	222	221	220	196
135°	274	276	275	275	273	211
145°	318	318	318	319	317	199
155°	350	348	349	350	348	161
165°	369	368	368	369	367	104
175°	378	376	376	378	376	36
180°	378	378	378	378	378	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.7	18.5	17.3	16.0	14.8	14.2	14.0	13.9	13.9	13.7	13.8
90°	0.3	0.8	1.3	1.7	2.3	2.8	3.2	3.6	4.0	4.5	4.8
92.5°	4.3	4.0	3.6	3.2	2.9	2.9	3.3	3.7	4.1	4.5	4.8
95°	15.9	15.8	15.6	15.4	15.2	13.9	11.6	9.2	6.8	4.5	4.8
97.5°	33.4	33.7	34.0	34.3	34.7	32.5	27.8	23.1	18.5	13.8	12.0
100°	46.7	47.0	47.1	47.3	47.5	47.7	48.0	48.2	48.5	48.7	39.5
102.5°	60.4	60.7	60.9	61.2	61.4	61.6	61.7	61.9	62.0	62.2	60.4
105°	82.3	82.5	82.9	83.1	83.3	83.4	83.4	83.4	83.4	83.4	83.4
107.5°	105.0	105.0	105.0	105.0	105.0	105.1	105.3	105.4	105.5	105.6	105.6
110°	119.9	119.9	119.9	119.9	119.9	119.9	120.0	120.2	120.3	120.4	120.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	133.7	133.9	134.0	134.2	134.4	134.4	134.5	134.6	134.7	134.8	134.5
115°	154.6	154.9	155.2	155.5	155.8	156.0	156.1	156.1	156.2	156.2	156.0
117.5°	176.1	176.1	176.1	176.1	176.1	176.2	176.4	176.7	176.9	177.1	176.8
120°	189.6	189.5	189.5	189.4	189.3	189.4	189.6	189.7	190.0	190.1	190.0
122.5°	201.5	201.7	201.9	202.2	202.4	202.6	202.6	202.7	202.8	202.9	202.8
125°	219.8	220.2	220.7	221.1	221.6	221.8	221.8	221.8	221.8	221.8	221.5
127.5°	237.3	237.7	238.0	238.3	238.6	238.8	238.7	238.7	238.6	238.6	238.4
130°	248.1	248.4	248.7	249.1	249.4	249.5	249.6	249.6	249.7	249.8	249.6
132.5°	258.9	259.2	259.6	259.9	260.3	260.4	260.3	260.2	260.0	259.8	259.8
135°	274.2	274.5	274.9	275.3	275.6	275.8	275.6	275.5	275.4	275.3	275.1
137.5°	288.2	288.5	288.8	289.1	289.5	289.6	289.5	289.4	289.2	289.1	289.1
140°	297.4	297.5	297.6	297.8	297.9	297.9	297.9	297.8	297.7	297.7	297.8
142.5°	305.7	305.8	305.9	305.9	305.9	306.0	306.2	306.3	306.3	306.4	306.4
145°	317.8	318.0	318.1	318.2	318.3	318.4	318.4	318.4	318.4	318.4	318.5
147.5°	328.4	328.4	328.4	328.4	328.4	328.4	328.4	328.5	328.6	328.7	328.8
150°	335.2	335.1	334.9	334.8	334.7	334.7	334.8	334.9	335.1	335.2	335.3
152.5°	341.7	341.4	341.1	340.9	340.6	340.5	340.6	340.8	340.9	341.0	341.1
155°	350.1	349.7	349.3	348.9	348.6	348.4	348.6	348.6	348.8	348.9	349.1
157.5°	356.5	356.2	356.0	355.8	355.6	355.5	355.5	355.5	355.5	355.5	355.7
160°	360.9	360.6	360.2	359.8	359.5	359.3	359.3	359.4	359.5	359.6	359.8
162.5°	364.6	364.2	363.8	363.4	363.1	362.9	363.0	363.0	363.1	363.1	363.5
165°	369.3	369.0	368.6	368.2	367.9	367.7	367.7	367.8	367.9	368.0	368.3
167.5°	373.0	372.6	372.2	371.8	371.4	371.2	371.3	371.4	371.5	371.5	371.9
170°	374.9	374.5	374.1	373.7	373.2	373.0	373.1	373.1	373.2	373.3	373.8
172.5°	376.3	375.9	375.4	375.0	374.5	374.4	374.5	374.6	374.7	374.9	375.3
175°	377.7	377.4	377.0	376.6	376.3	376.1	376.1	376.2	376.3	376.4	376.8
177.5°	378.4	378.1	377.8	377.6	377.2	377.1	377.2	377.2	377.2	377.3	377.6
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	13.9	13.9	13.9	13.9	13.8	13.6	13.5	13.3
90°	5.1	5.4	5.7	5.9	6.2	6.3	6.5	6.7
92.5°	5.1	5.4	5.7	5.9	6.0	6.1	6.2	6.3
95°	5.1	5.4	5.7	5.9	5.9	5.9	5.9	5.9
97.5°	10.3	8.5	6.7	5.9	5.9	5.9	5.9	5.9
100°	30.2	20.9	11.6	6.9	6.7	6.4	6.1	5.9
102.5°	58.6	56.9	55.1	52.1	47.9	43.7	39.5	35.3
105°	83.4	83.4	83.4	83.4	83.3	83.3	83.3	83.2
107.5°	105.7	105.7	105.7	105.6	105.4	105.2	105.0	104.8
110°	120.0	119.9	119.7	119.6	119.7	119.7	119.8	119.9





TEST NUMBER: P333583-927

CATALOG NUMBER: S125RDIP-S1090D365U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	134.3	134.0	133.8	133.6	133.6	133.5	133.4	133.3
115°	155.7	155.5	155.3	155.0	154.6	154.2	153.8	153.4
117.5°	176.5	176.2	175.9	175.6	175.5	175.3	175.2	175.0
120°	189.9	189.7	189.6	189.4	189.1	188.8	188.5	188.1
122.5°	202.6	202.6	202.4	202.2	201.8	201.5	201.1	200.7
125°	221.3	221.0	220.8	220.5	220.4	220.2	220.0	219.8
127.5°	238.3	238.1	238.1	237.7	237.3	236.8	236.4	235.9
130°	249.4	249.2	249.1	248.7	248.5	248.2	247.9	247.6
132.5°	259.8	259.8	259.7	259.5	259.2	258.9	258.6	258.3
135°	275.0	274.9	274.7	274.5	274.2	273.8	273.4	273.0
137.5°	289.2	289.2	289.2	289.1	288.8	288.4	288.1	287.8
140°	297.9	298.0	298.2	298.0	297.7	297.3	296.9	296.5
142.5°	306.4	306.5	306.5	306.3	305.9	305.5	305.2	304.8
145°	318.5	318.5	318.6	318.5	318.1	317.7	317.3	317.0
147.5°	328.8	328.9	329.0	328.8	328.4	327.9	327.5	327.0
150°	335.4	335.6	335.6	335.5	335.0	334.5	334.0	333.5
152.5°	341.3	341.4	341.5	341.4	340.9	340.5	340.0	339.5
155°	349.3	349.4	349.7	349.5	349.0	348.5	348.0	347.5
157.5°	355.9	356.1	356.3	356.2	355.7	355.1	354.7	354.2
160°	360.0	360.3	360.5	360.4	359.9	359.4	358.9	358.5
162.5°	363.8	364.2	364.6	364.4	363.8	363.3	362.8	362.3
165°	368.7	369.1	369.5	369.4	368.9	368.4	367.9	367.4
167.5°	372.4	372.8	373.3	373.2	372.6	372.1	371.5	371.0
170°	374.2	374.8	375.3	375.3	374.7	374.1	373.5	373.0
172.5°	375.7	376.2	376.6	376.6	376.0	375.4	374.9	374.3
175°	377.3	377.9	378.3	378.3	377.7	377.2	376.6	376.0
177.5°	378.0	378.3	378.7	378.7	378.3	377.9	377.5	377.1
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7

(END OF REPORT)