

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: P333650-840

Luminaire Tested: **S125RDIW-S375D1050U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333650-840
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: S125RDIW-S375D1050U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5693.7 lumens
Efficiency: N/A
Efficacy: 149.8 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-Indirect

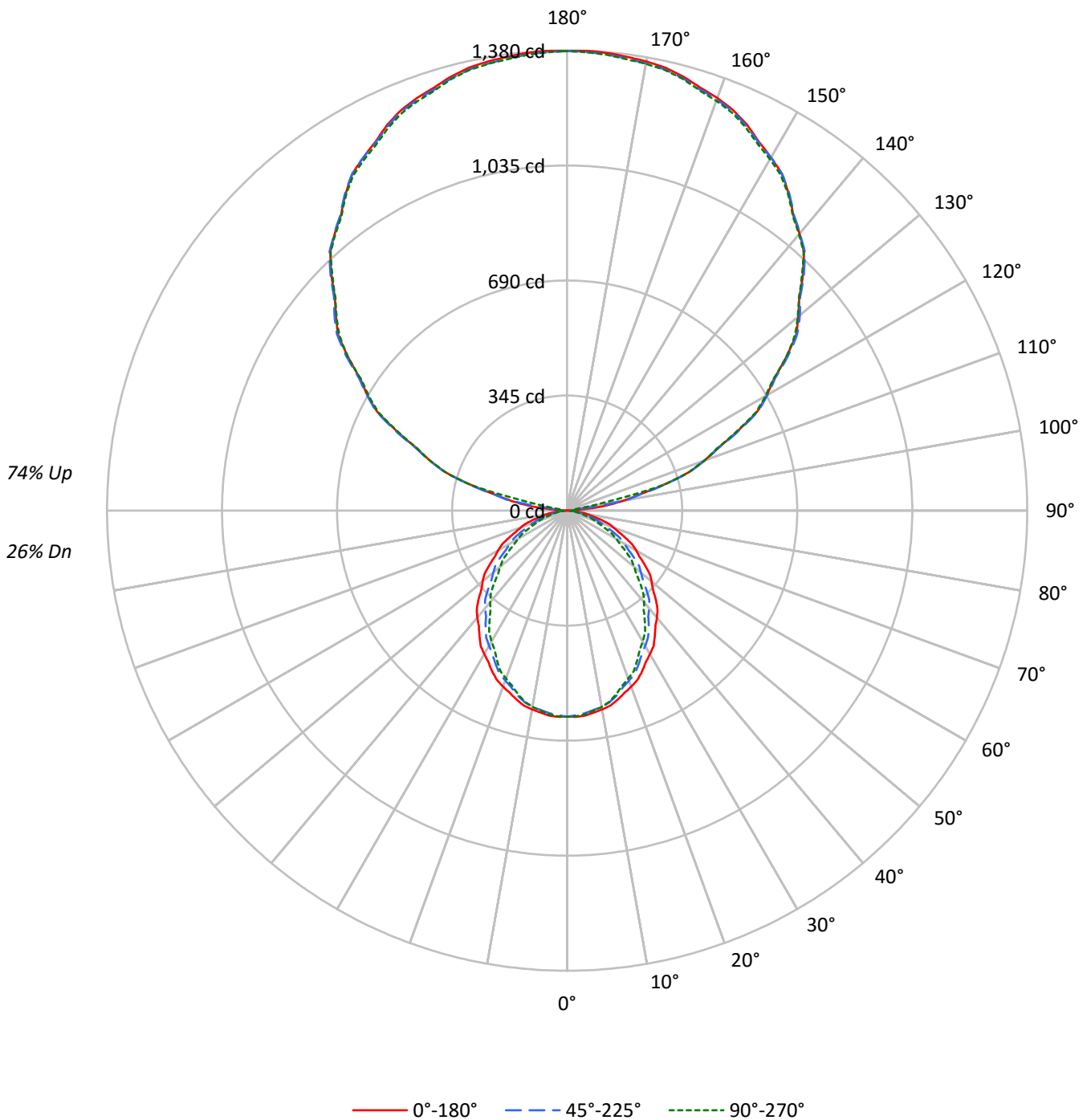
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333650-840

CATALOG NUMBER: S125RDIW-S375D1050U840-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333650-840

CATALOG NUMBER: S125RDIW-S375D1050U840-4F0-1E-UDD-F

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	85	81	82	79	76	73	61	59	57	45	44	43	30	29	29	22
2	84	77	71	66	75	69	64	60	54	50	48	40	37	36	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	24	22	21	16
4	70	60	52	47	62	54	47	42	42	38	34	31	28	26	21	19	18	14
5	64	53	46	40	57	48	41	36	38	33	29	28	25	22	19	17	16	12
6	59	48	40	34	53	43	36	31	34	29	25	25	22	20	17	15	14	10
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	12	9
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	18	19	16	14	13	11	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



TEST NUMBER: P333650-840

CATALOG NUMBER: S125RDIW-S375D1050U840-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.0
10°-20°	162.4	2.9
20°-30°	235.5	4.1
30°-40°	268.4	4.7
40°-50°	261.6	4.6
50°-60°	220.2	3.9
60°-70°	154.3	2.7
70°-80°	79.3	1.4
80°-90°	22.9	0.4
90°-100°	50.1	0.9
100°-110°	308.6	5.4
110°-120°	559.7	9.8
120°-130°	718.2	12.6
130°-140°	772.5	13.6
140°-150°	725.1	12.7
150°-160°	586.6	10.3
160°-170°	379.4	6.7
170°-180°	130.8	2.3
0°-30°	456.0	8.0
0°-40°	724.3	12.7
0°-60°	1206.1	21.2
0°-90°	1462.7	25.7
90°-120°	918.3	16.1
90°-150°	3134.2	55.0
90°-180°	4231.0	74.3
0°-180°	5693.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	1	9	16	21	24	4
95°	58	53	16	21	21	74
105°	300	304	304	304	303	318
115°	564	569	570	566	560	559
125°	802	808	809	805	802	716
135°	1000	1006	1004	1002	996	770
145°	1159	1161	1161	1162	1156	725
155°	1277	1271	1273	1275	1268	588
165°	1347	1341	1342	1347	1340	380
175°	1378	1372	1373	1380	1372	131
180°	1378	1378	1378	1378	1378	



TEST NUMBER: P333650-840

CATALOG NUMBER: S125RDIW-S375D1050U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.8	8.6	8.4	8.2	7.9	8.0	8.2	8.4	8.6	8.9	9.1
90°	1.0	2.8	4.6	6.5	8.3	10.0	11.6	13.1	14.7	16.4	17.5
92.5°	15.8	14.4	13.2	11.9	10.6	10.7	12.1	13.5	14.9	16.4	17.5
95°	58.2	57.6	56.9	56.1	55.5	50.8	42.2	33.6	24.9	16.4	17.5
97.5°	121.6	122.8	124.0	125.2	126.4	118.6	101.5	84.4	67.4	50.3	43.8
100°	170.6	171.3	171.9	172.6	173.3	174.1	175.0	175.9	176.8	177.7	143.9
102.5°	220.5	221.3	222.2	223.0	223.9	224.6	225.1	225.6	226.2	226.7	220.4
105°	300.2	301.1	302.1	303.0	303.9	304.4	304.4	304.4	304.4	304.4	304.4
107.5°	383.2	383.2	383.2	383.2	383.2	383.4	383.8	384.4	384.8	385.3	385.3
110°	437.2	437.2	437.2	437.2	437.2	437.4	437.8	438.3	438.7	439.2	438.5



TEST NUMBER: P333650-840

CATALOG NUMBER: S125RDIW-S375D1050U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	487.8	488.4	488.9	489.4	490.0	490.4	490.7	490.9	491.2	491.5	490.6
115°	563.8	564.9	566.0	567.1	568.4	569.0	569.3	569.5	569.7	569.9	569.0
117.5°	642.5	642.4	642.4	642.3	642.3	642.7	643.5	644.4	645.2	646.1	644.9
120°	691.5	691.3	690.9	690.7	690.5	690.7	691.5	692.2	692.8	693.5	693.1
122.5°	734.8	735.6	736.5	737.3	738.2	738.8	739.1	739.4	739.7	740.0	739.6
125°	801.7	803.3	805.0	806.5	808.1	808.9	808.9	808.9	808.9	808.9	808.0
127.5°	865.7	866.9	868.0	869.1	870.2	870.7	870.6	870.5	870.3	870.2	869.7
130°	904.9	906.1	907.2	908.3	909.5	910.1	910.4	910.6	910.8	911.0	910.4
132.5°	944.1	945.4	946.7	948.1	949.4	949.8	949.3	948.8	948.3	947.9	947.7
135°	999.9	1001.3	1002.6	1004.0	1005.3	1005.8	1005.3	1004.9	1004.4	1004.0	1003.5
137.5°	1051.2	1052.4	1053.5	1054.7	1055.9	1056.3	1055.9	1055.5	1055.0	1054.6	1054.7
140°	1084.7	1085.1	1085.6	1086.0	1086.5	1086.6	1086.4	1086.1	1085.9	1085.7	1086.1
142.5°	1114.9	1115.2	1115.5	1115.7	1116.0	1116.3	1116.6	1116.9	1117.2	1117.5	1117.6
145°	1159.2	1159.7	1160.1	1160.6	1161.0	1161.2	1161.2	1161.2	1161.2	1161.2	1161.5
147.5°	1198.0	1198.0	1197.9	1197.8	1197.7	1197.8	1198.0	1198.3	1198.6	1198.8	1199.1
150°	1222.5	1222.1	1221.6	1221.2	1220.7	1220.7	1221.2	1221.6	1222.1	1222.5	1223.0
152.5°	1246.3	1245.3	1244.3	1243.2	1242.2	1242.0	1242.4	1242.9	1243.3	1243.7	1244.3
155°	1276.7	1275.4	1273.9	1272.6	1271.2	1270.8	1271.2	1271.7	1272.1	1272.6	1273.2
157.5°	1300.2	1299.4	1298.6	1297.8	1296.9	1296.6	1296.6	1296.6	1296.7	1296.7	1297.5
160°	1316.6	1315.1	1313.8	1312.4	1311.1	1310.5	1310.7	1311.0	1311.2	1311.4	1312.3
162.5°	1329.6	1328.3	1326.9	1325.5	1324.1	1323.5	1323.8	1324.0	1324.2	1324.4	1325.8
165°	1347.2	1345.8	1344.4	1343.1	1341.7	1341.1	1341.4	1341.6	1341.8	1342.0	1343.4
167.5°	1360.2	1358.9	1357.5	1356.0	1354.6	1354.0	1354.2	1354.4	1354.7	1354.9	1356.6
170°	1367.6	1366.0	1364.4	1362.8	1361.2	1360.6	1360.8	1361.0	1361.2	1361.5	1363.3
172.5°	1372.5	1370.9	1369.3	1367.8	1366.1	1365.5	1365.9	1366.3	1366.8	1367.2	1368.8
175°	1377.8	1376.4	1375.0	1373.7	1372.3	1371.8	1372.0	1372.2	1372.5	1372.7	1374.5
177.5°	1380.3	1379.2	1378.1	1377.0	1375.9	1375.4	1375.6	1375.8	1375.9	1376.1	1377.5
180°	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8



TEST NUMBER: P333650-840

CATALOG NUMBER: S125RDIW-S375D1050U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	9.3	9.6	9.8	9.9	10.0	10.0	10.1	10.1
90°	18.6	19.8	20.9	21.8	22.5	23.1	23.8	24.5
92.5°	18.6	19.8	20.9	21.6	21.9	22.2	22.5	22.9
95°	18.6	19.8	20.9	21.4	21.4	21.4	21.4	21.4
97.5°	37.5	31.0	24.6	21.4	21.4	21.4	21.4	21.4
100°	110.1	76.2	42.4	25.0	24.1	23.2	22.3	21.4
102.5°	213.9	207.5	201.2	190.3	174.8	159.4	143.9	128.5
105°	304.4	304.4	304.4	304.3	304.1	303.8	303.6	303.4
107.5°	385.4	385.4	385.5	385.2	384.5	383.7	383.0	382.4
110°	437.8	437.2	436.5	436.3	436.5	436.7	436.9	437.2



TEST NUMBER: P333650-840

CATALOG NUMBER: S125RDIW-S375D1050U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	489.8	488.9	488.1	487.5	487.2	486.8	486.5	486.1
115°	568.0	567.1	566.2	565.1	563.8	562.4	561.1	559.7
117.5°	643.8	642.6	641.4	640.5	640.0	639.3	638.7	638.1
120°	692.6	692.2	691.7	690.8	689.7	688.6	687.5	686.3
122.5°	739.1	738.7	738.2	737.4	736.1	734.8	733.5	732.2
125°	807.1	806.2	805.3	804.5	803.9	803.1	802.4	801.7
127.5°	869.2	868.7	868.2	867.1	865.5	863.7	862.0	860.4
130°	909.7	909.0	908.3	907.4	906.3	905.1	904.0	902.9
132.5°	947.6	947.4	947.3	946.6	945.5	944.3	943.2	942.1
135°	1003.1	1002.6	1002.2	1001.3	999.9	998.6	997.1	995.8
137.5°	1054.8	1054.9	1055.0	1054.5	1053.3	1052.1	1051.0	1049.8
140°	1086.6	1087.0	1087.5	1087.0	1085.7	1084.3	1083.0	1081.6
142.5°	1117.7	1117.8	1117.9	1117.3	1115.9	1114.6	1113.2	1111.9
145°	1161.7	1162.0	1162.2	1161.6	1160.2	1158.9	1157.5	1156.2
147.5°	1199.4	1199.7	1199.9	1199.3	1197.6	1196.0	1194.4	1192.8
150°	1223.5	1224.0	1224.4	1223.7	1221.8	1220.0	1218.2	1216.4
152.5°	1244.7	1245.2	1245.6	1245.1	1243.3	1241.7	1240.1	1238.5
155°	1273.9	1274.7	1275.4	1274.8	1272.9	1271.1	1269.3	1267.5
157.5°	1298.2	1298.9	1299.6	1299.1	1297.3	1295.5	1293.6	1291.8
160°	1313.2	1314.1	1315.0	1314.5	1312.8	1311.0	1309.2	1307.4
162.5°	1327.1	1328.3	1329.6	1329.2	1327.2	1325.2	1323.2	1321.2
165°	1344.7	1346.2	1347.5	1347.3	1345.4	1343.6	1341.8	1340.0
167.5°	1358.2	1359.8	1361.5	1361.3	1359.2	1357.2	1355.1	1353.1
170°	1365.1	1367.0	1368.8	1368.6	1366.5	1364.5	1362.5	1360.4
172.5°	1370.5	1372.1	1373.7	1373.5	1371.5	1369.4	1367.4	1365.3
175°	1376.3	1378.2	1380.0	1379.9	1377.8	1375.7	1373.7	1371.7
177.5°	1378.7	1380.0	1381.3	1381.2	1379.7	1378.3	1376.8	1375.3
180°	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8	1377.8

(END OF REPORT)