

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: P333518-840

Luminaire Tested: **S125RDIP-S375D1205U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333518-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S375D1205U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5671.0 lumens
Efficiency: N/A
Efficacy: 134.4 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

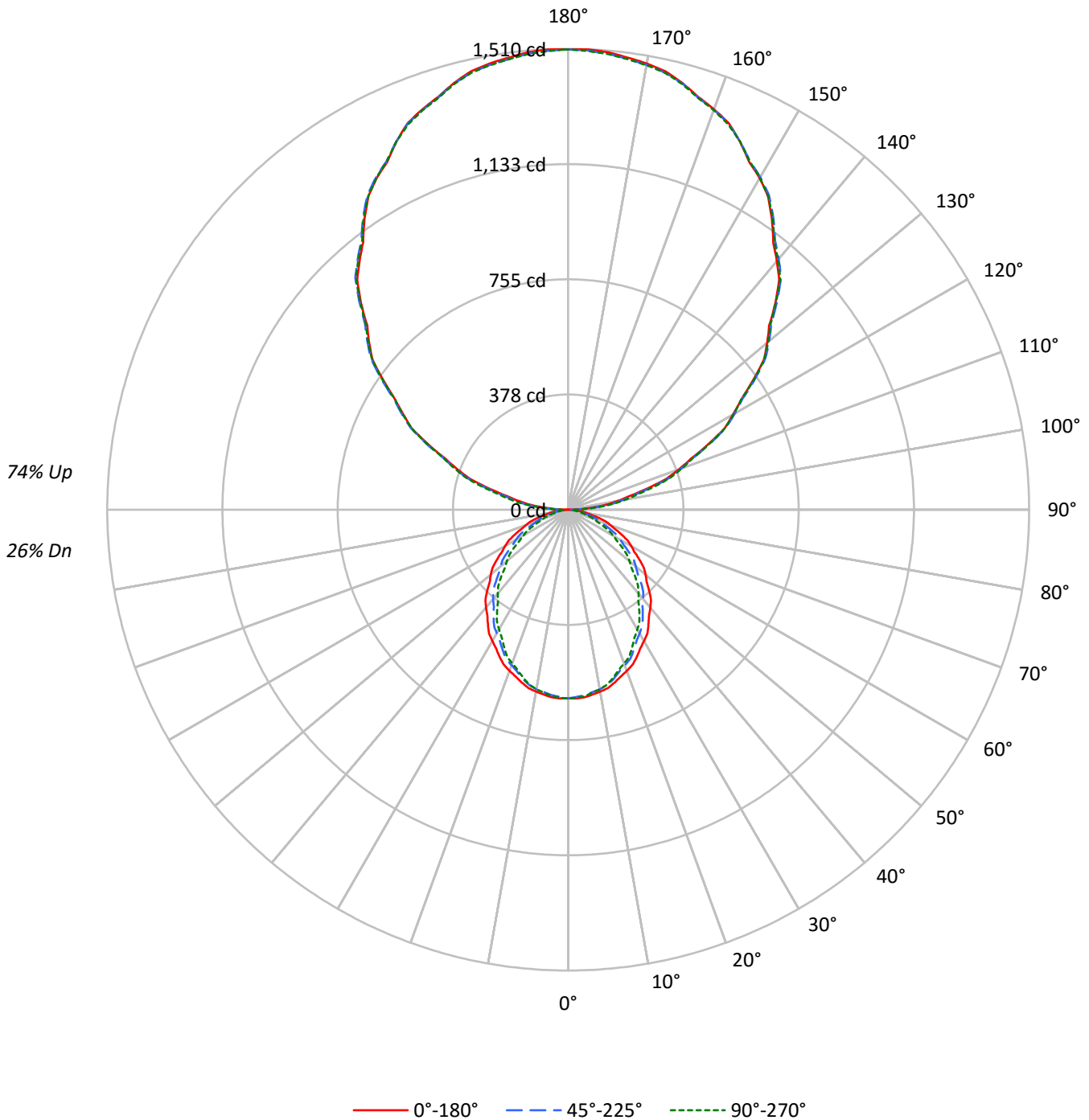
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333518-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





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CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F1

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	38	36	27	25	24	19
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	11
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	15	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: P333518-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.0
10°-20°	162.4	2.9
20°-30°	235.5	4.2
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°	23.3	0.4
90°-100°	101.0	1.8
100°-110°	298.2	5.3
110°-120°	505.2	8.9
120°-130°	664.8	11.7
130°-140°	745.0	13.1
140°-150°	730.1	12.9
150°-160°	613.2	10.8
160°-170°	407.6	7.2
170°-180°	142.7	2.5
0°-30°	456.0	8.0
0°-40°	724.3	12.8
0°-60°	1206.1	21.3
0°-90°	1463.1	25.8
90°-120°	904.4	15.9
90°-150°	3044.3	53.7
90°-180°	4208.0	74.2
0°-180°	5671.0	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	10	19	24	28	5
95°	76	79	90	98	101	81
105°	268	274	280	287	291	286
115°	506	510	513	512	510	500
125°	738	745	746	744	743	661
135°	960	967	968	968	963	740
145°	1163	1168	1171	1171	1168	727
155°	1331	1331	1332	1336	1331	613
165°	1447	1445	1446	1450	1443	408
175°	1504	1500	1500	1506	1498	143
180°	1508	1508	1508	1508	1508	



TEST NUMBER: P333518-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F1

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	8.7	8.5	8.4	8.2	8.2	8.5	8.8	9.1	9.4	9.6
90°	1.2	3.2	5.4	7.5	9.5	11.5	13.3	15.1	17.0	18.8	20.1
92.5°	28.4	29.9	31.3	32.8	34.2	36.1	38.4	40.6	42.8	45.0	46.8
95°	76.2	76.7	77.4	77.9	78.4	79.9	82.5	85.1	87.8	90.4	92.2
97.5°	126.7	126.9	127.1	127.3	127.5	129.5	133.1	136.6	140.3	143.9	145.6
100°	164.3	164.3	164.3	164.3	164.3	166.0	169.4	172.8	176.1	179.6	181.9
102.5°	204.7	205.7	206.7	207.8	208.8	210.3	212.0	213.7	215.4	217.1	219.6
105°	267.5	268.8	270.1	271.5	272.8	274.2	275.8	277.3	278.9	280.4	282.1
107.5°	337.0	338.3	339.6	340.9	342.2	343.5	344.7	345.9	347.1	348.3	349.1
110°	385.0	386.2	387.5	388.8	390.1	391.1	391.9	392.7	393.5	394.3	395.1



TEST NUMBER: P333518-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	433.7	434.4	435.0	435.8	436.5	437.3	438.3	439.3	440.2	441.2	441.6
115°	505.7	506.9	507.9	508.9	510.0	510.7	511.3	511.8	512.3	512.8	512.6
117.5°	578.0	578.6	579.1	579.5	580.0	580.4	580.9	581.4	581.8	582.3	582.5
120°	623.1	624.4	625.7	627.0	628.3	629.1	629.3	629.7	630.0	630.2	630.2
122.5°	672.0	672.5	672.9	673.4	673.8	674.4	675.1	675.8	676.4	677.1	676.9
125°	738.1	739.7	741.2	742.9	744.4	745.3	745.6	745.8	746.1	746.4	745.8
127.5°	808.6	809.4	810.3	811.2	812.1	812.7	813.0	813.3	813.6	814.0	813.6
130°	850.8	852.1	853.4	854.7	856.0	857.0	857.5	858.0	858.5	859.0	858.8
132.5°	893.0	895.1	897.4	899.5	901.6	902.6	902.5	902.4	902.3	902.2	901.9
135°	960.0	961.5	963.1	964.6	966.2	967.1	967.3	967.7	967.9	968.2	968.2
137.5°	1022.8	1024.3	1025.8	1027.3	1028.9	1030.0	1030.5	1031.1	1031.7	1032.2	1032.5
140°	1063.2	1064.5	1065.8	1067.1	1068.4	1069.4	1070.3	1071.1	1071.8	1072.6	1073.1
142.5°	1103.6	1104.7	1105.8	1106.8	1107.9	1109.0	1109.9	1111.0	1112.0	1113.0	1113.3
145°	1163.0	1164.0	1165.1	1166.1	1167.1	1168.0	1168.8	1169.6	1170.3	1171.1	1171.1
147.5°	1217.9	1218.4	1219.0	1219.6	1220.1	1220.7	1221.4	1222.0	1222.6	1223.2	1223.9
150°	1254.5	1254.3	1253.9	1253.7	1253.4	1253.8	1254.9	1255.9	1257.0	1258.0	1258.0
152.5°	1284.5	1284.9	1285.3	1285.7	1286.0	1286.4	1286.8	1287.2	1287.7	1288.1	1288.7
155°	1330.8	1330.8	1330.8	1330.8	1330.8	1330.9	1331.2	1331.4	1331.7	1331.9	1333.0
157.5°	1372.1	1371.5	1370.9	1370.4	1369.8	1369.6	1369.9	1370.2	1370.4	1370.7	1371.7
160°	1396.4	1395.7	1394.9	1394.1	1393.3	1393.1	1393.3	1393.6	1393.9	1394.1	1395.1
162.5°	1418.1	1417.5	1416.9	1416.3	1415.7	1415.5	1415.5	1415.6	1415.6	1415.7	1416.9
165°	1446.9	1446.4	1445.9	1445.4	1444.8	1444.7	1445.0	1445.2	1445.5	1445.7	1446.8
167.5°	1471.4	1470.3	1469.3	1468.2	1467.1	1466.6	1466.6	1466.6	1466.6	1466.6	1468.2
170°	1484.5	1483.5	1482.4	1481.4	1480.4	1479.8	1479.8	1479.8	1479.8	1479.8	1481.4
172.5°	1493.9	1492.9	1491.8	1490.8	1489.8	1489.1	1489.1	1489.1	1489.1	1489.1	1490.8
175°	1504.4	1503.4	1502.4	1501.3	1500.3	1499.8	1499.8	1499.8	1499.8	1499.8	1501.3
177.5°	1509.8	1509.0	1508.1	1507.3	1506.5	1506.0	1505.8	1505.6	1505.3	1505.1	1506.4
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9



TEST NUMBER: P333518-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F1

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°	9.9	10.1	10.4	10.6	10.6	10.7	10.8	10.9
90°	21.4	22.7	24.0	25.0	25.9	26.6	27.4	28.2
92.5°	48.5	50.2	51.9	53.1	53.6	54.2	54.8	55.3
95°	94.0	95.8	97.7	98.9	99.4	99.9	100.4	100.9
97.5°	147.3	149.1	150.8	151.8	152.1	152.4	152.7	153.0
100°	184.2	186.6	188.9	190.4	190.9	191.4	192.0	192.5
102.5°	222.2	224.8	227.3	228.9	229.7	230.5	231.2	231.9
105°	283.6	285.2	286.7	287.9	288.7	289.4	290.2	291.0
107.5°	349.8	350.6	351.4	351.8	351.7	351.7	351.6	351.5
110°	395.9	396.7	397.4	397.7	397.4	397.2	396.9	396.7



TEST NUMBER: P333518-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	442.0	442.3	442.7	442.6	442.2	441.7	441.2	440.8
115°	512.3	512.0	511.8	511.5	511.3	511.0	510.7	510.5
117.5°	582.7	582.9	583.1	582.7	581.7	580.7	579.6	578.6
120°	630.2	630.2	630.2	629.7	628.6	627.5	626.5	625.5
122.5°	676.7	676.5	676.3	675.8	674.9	674.1	673.3	672.5
125°	745.3	744.8	744.3	743.9	743.7	743.4	743.1	742.9
127.5°	813.4	813.1	812.9	812.5	812.0	811.4	810.9	810.4
130°	858.5	858.2	858.0	857.6	857.1	856.6	856.0	855.5
132.5°	901.7	901.4	901.1	900.7	899.9	899.2	898.5	897.8
135°	968.2	968.2	968.2	967.7	966.5	965.5	964.5	963.4
137.5°	1032.9	1033.2	1033.5	1033.0	1031.7	1030.4	1029.1	1027.7
140°	1073.6	1074.2	1074.7	1074.3	1073.0	1071.7	1070.4	1069.0
142.5°	1113.6	1113.9	1114.2	1113.7	1112.4	1111.2	1109.8	1108.5
145°	1171.1	1171.1	1171.1	1170.7	1170.0	1169.2	1168.4	1167.6
147.5°	1224.6	1225.2	1225.8	1225.2	1223.5	1221.6	1219.9	1218.1
150°	1258.0	1258.0	1258.0	1257.8	1257.2	1256.7	1256.2	1255.7
152.5°	1289.3	1289.9	1290.5	1290.4	1289.5	1288.5	1287.6	1286.7
155°	1334.0	1335.0	1336.2	1336.0	1334.6	1333.3	1332.1	1330.8
157.5°	1372.7	1373.8	1374.8	1374.5	1372.8	1371.1	1369.4	1367.7
160°	1396.2	1397.2	1398.3	1398.2	1396.8	1395.5	1394.2	1393.0
162.5°	1418.3	1419.5	1420.8	1420.6	1419.1	1417.5	1416.0	1414.5
165°	1447.8	1448.9	1450.0	1449.7	1448.1	1446.5	1445.0	1443.4
167.5°	1469.8	1471.4	1472.9	1472.9	1471.3	1469.7	1468.0	1466.4
170°	1482.9	1484.5	1486.0	1485.9	1484.1	1482.3	1480.5	1478.6
172.5°	1492.3	1493.9	1495.4	1495.4	1493.8	1492.2	1490.6	1488.9
175°	1502.9	1504.4	1506.0	1505.9	1504.1	1502.3	1500.4	1498.5
177.5°	1507.6	1508.9	1510.2	1510.1	1508.6	1507.1	1505.7	1504.2
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9

(END OF REPORT)