

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: P333363-840

Luminaire Tested: **S125DIW-S375D1340U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333363-840
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: S125DIW-S375D1340U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6235.9 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

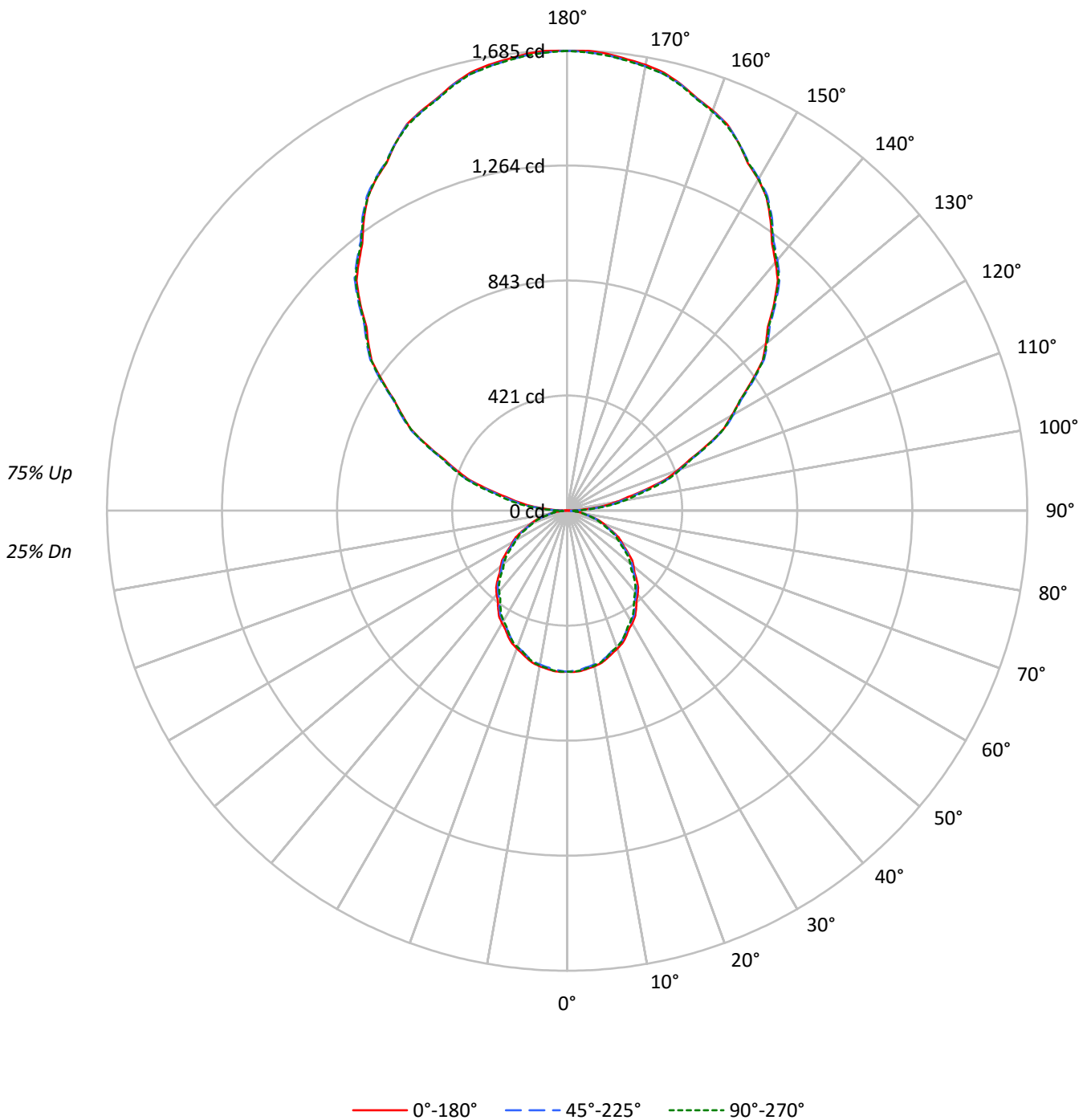
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	25
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	28	21
2	84	77	71	66	74	68	63	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	49	47	43	39	34	31	29	22	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	28	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	24	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3810	3810	3810
5°	3818	3782	3806
10°	3796	3756	3777
15°	3754	3710	3726
20°	3696	3647	3654
25°	3632	3572	3569
30°	3554	3491	3473
35°	3470	3404	3356
40°	3384	3309	3262
45°	3291	3222	3159
50°	3189	3118	3024
55°	3090	3001	2916
60°	2971	2882	2780
65°	2832	2740	2647
70°	2696	2574	2485
75°	2458	2376	2293
80°	2187	2153	2101
85°	1904	1941	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	0.9
10°-20°	157.1	2.5
20°-30°	232.0	3.7
30°-40°	270.7	4.3
40°-50°	271.9	4.4
50°-60°	238.7	3.8
60°-70°	177.8	2.9
70°-80°	101.7	1.6
80°-90°	33.2	0.5
90°-100°	112.7	1.8
100°-110°	332.9	5.3
110°-120°	563.9	9.0
120°-130°	742.1	11.9
130°-140°	831.6	13.3
140°-150°	815.0	13.1
150°-160°	684.5	11.0
160°-170°	455.0	7.3
170°-180°	159.2	2.6
0°-30°	444.7	7.1
0°-40°	715.5	11.5
0°-60°	1226.0	19.7
0°-90°	1538.8	24.7
90°-120°	1009.6	16.2
90°-150°	3398.3	54.5
90°-180°	4697.0	75.3
0°-180°	6235.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	588	583	587	587	56
15°	562	560	555	557	557	158
25°	510	507	501	502	501	234
35°	440	438	432	429	426	275
45°	360	358	353	348	346	278
55°	274	273	266	262	259	245
65°	185	184	179	175	173	184
75°	98	98	95	94	92	105
85°	26	26	26	26	25	29
90°	1	12	21	27	31	6
95°	85	88	101	110	113	91
105°	299	305	313	321	325	319
115°	565	570	572	571	570	558
125°	824	831	833	831	829	738
135°	1072	1079	1081	1080	1076	826
145°	1298	1303	1307	1307	1303	811
155°	1486	1486	1487	1491	1486	684
165°	1615	1613	1614	1618	1611	455
175°	1679	1674	1674	1681	1673	160
180°	1683	1683	1683	1683	1683	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	591.4	591.2	591.0	590.7	590.5	589.9	589.1	588.2	587.4	586.5	587.4
5°	589.0	588.8	588.5	588.3	588.1	587.5	586.5	585.5	584.4	583.4	584.3
7.5°	583.6	583.4	583.2	583.0	582.8	582.1	581.0	579.8	578.7	577.5	578.5
10°	578.8	578.6	578.3	578.1	577.9	577.2	576.1	574.9	573.8	572.7	573.5
12.5°	572.8	572.4	572.0	571.7	571.3	570.6	569.5	568.5	567.3	566.3	566.9
15°	561.5	561.2	560.9	560.6	560.2	559.5	558.4	557.2	556.0	554.9	555.4
17.5°	548.5	548.1	547.5	547.1	546.6	545.8	544.6	543.5	542.3	541.1	541.8
20°	537.7	537.5	537.2	537.0	536.8	536.0	534.7	533.3	532.0	530.7	531.4
22.5°	526.8	526.4	526.0	525.7	525.3	524.5	523.2	522.0	520.7	519.5	520.0
25°	509.7	509.2	508.6	508.1	507.6	506.6	505.3	503.9	502.6	501.3	501.5
27.5°	489.6	489.3	489.0	488.7	488.4	487.5	486.1	484.7	483.3	481.9	482.0
30°	476.6	476.3	475.8	475.5	475.2	474.3	472.8	471.2	469.7	468.1	467.9
32.5°	462.3	461.8	461.4	460.9	460.4	459.5	458.1	456.7	455.3	453.9	453.5
35°	440.1	439.7	439.3	438.9	438.5	437.5	436.1	434.6	433.1	431.7	431.2
37.5°	417.1	416.6	416.1	415.5	415.0	414.0	412.6	411.3	409.9	408.6	407.8
40°	401.4	400.8	400.3	399.8	399.3	398.3	396.9	395.5	393.9	392.5	391.6
42.5°	384.6	384.2	383.7	383.2	382.8	381.9	380.4	379.0	377.5	376.1	375.3
45°	360.3	359.9	359.5	359.1	358.6	357.8	356.6	355.4	354.1	352.8	351.6
47.5°	334.2	334.2	334.2	334.3	334.3	333.6	332.0	330.5	329.0	327.5	326.3
50°	317.4	317.1	316.8	316.4	316.1	315.4	314.1	312.9	311.6	310.3	309.0
52.5°	300.2	299.9	299.7	299.5	299.3	298.5	297.2	295.9	294.5	293.2	292.1
55°	274.4	274.1	273.8	273.5	273.2	272.3	270.8	269.4	267.9	266.5	265.6
57.5°	247.3	247.1	246.9	246.8	246.6	245.9	244.7	243.5	242.3	241.1	239.8
60°	230.0	229.6	229.2	228.8	228.4	227.6	226.5	225.4	224.2	223.1	222.1
62.5°	212.2	211.9	211.5	211.2	210.9	210.2	209.2	208.2	207.2	206.3	205.2
65°	185.3	185.1	184.9	184.7	184.5	183.8	182.7	181.5	180.4	179.3	178.2
67.5°	159.3	158.9	158.3	157.9	157.5	156.8	156.0	155.1	154.3	153.5	152.7
70°	142.8	142.3	141.8	141.3	140.8	140.0	139.1	138.1	137.2	136.3	135.6
72.5°	124.9	124.5	124.2	123.8	123.5	123.0	122.4	121.8	121.2	120.6	119.9
75°	98.5	98.3	98.1	97.9	97.7	97.3	96.7	96.2	95.7	95.2	94.9
77.5°	74.1	74.0	73.9	73.8	73.8	73.6	73.3	73.0	72.7	72.4	72.2
80°	58.8	58.8	58.8	58.8	58.8	58.7	58.5	58.3	58.1	57.9	57.8
82.5°	45.3	45.2	45.0	44.8	44.7	44.6	44.5	44.5	44.4	44.4	44.2
85°	25.7	25.8	25.9	26.0	26.1	26.2	26.2	26.2	26.2	26.2	26.1
87.5°	10.3	10.8	11.3	11.7	12.2	12.6	12.9	13.2	13.5	13.9	14.2
90°	1.3	3.6	6.0	8.3	10.6	12.8	14.8	16.9	18.9	21.0	22.4
92.5°	31.7	33.3	34.9	36.6	38.2	40.3	42.8	45.3	47.8	50.3	52.2
95°	85.1	85.7	86.3	86.8	87.5	89.3	92.1	95.0	98.0	100.9	102.9
97.5°	141.5	141.7	142.0	142.2	142.4	144.5	148.6	152.6	156.6	160.6	162.5
100°	183.4	183.4	183.4	183.4	183.4	185.3	189.0	192.9	196.6	200.5	203.1
102.5°	228.4	229.6	230.8	232.0	233.1	234.7	236.6	238.5	240.4	242.4	245.2
105°	298.7	300.1	301.5	303.1	304.5	306.1	307.8	309.6	311.3	313.1	314.9
107.5°	376.2	377.7	379.1	380.6	382.0	383.4	384.8	386.1	387.5	388.8	389.7
110°	429.7	431.1	432.6	434.0	435.5	436.7	437.6	438.4	439.3	440.1	441.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	484.1	484.9	485.6	486.5	487.2	488.2	489.2	490.3	491.4	492.5	492.9
115°	564.6	565.7	566.9	568.0	569.3	570.2	570.7	571.3	571.9	572.5	572.2
117.5°	645.3	645.8	646.3	646.8	647.4	647.9	648.4	648.9	649.4	650.1	650.3
120°	695.6	697.0	698.5	699.9	701.5	702.3	702.6	702.9	703.2	703.5	703.5
122.5°	750.1	750.6	751.1	751.6	752.1	752.9	753.6	754.4	755.1	755.9	755.6
125°	823.9	825.7	827.5	829.2	830.9	831.9	832.2	832.5	832.8	833.1	832.5
127.5°	902.5	903.5	904.5	905.5	906.6	907.2	907.6	907.9	908.3	908.6	908.3
130°	949.7	951.2	952.6	954.1	955.5	956.5	957.2	957.8	958.3	958.9	958.6
132.5°	996.8	999.3	1001.7	1004.0	1006.4	1007.5	1007.4	1007.3	1007.2	1007.1	1006.8
135°	1071.6	1073.3	1075.0	1076.8	1078.5	1079.5	1079.8	1080.2	1080.5	1080.8	1080.8
137.5°	1141.8	1143.5	1145.2	1146.8	1148.5	1149.6	1150.3	1150.9	1151.7	1152.3	1152.6
140°	1186.8	1188.3	1189.7	1191.2	1192.7	1193.8	1194.7	1195.6	1196.4	1197.3	1197.9
142.5°	1231.9	1233.1	1234.4	1235.6	1236.8	1237.9	1239.0	1240.1	1241.2	1242.3	1242.7
145°	1298.2	1299.3	1300.5	1301.6	1302.8	1303.8	1304.7	1305.6	1306.5	1307.4	1307.4
147.5°	1359.5	1360.1	1360.8	1361.4	1362.0	1362.7	1363.4	1364.1	1364.8	1365.5	1366.2
150°	1400.4	1400.1	1399.8	1399.5	1399.2	1399.6	1400.8	1402.0	1403.1	1404.3	1404.3
152.5°	1433.9	1434.3	1434.7	1435.1	1435.5	1435.9	1436.4	1436.8	1437.3	1437.8	1438.6
155°	1485.5	1485.5	1485.5	1485.5	1485.5	1485.6	1485.9	1486.2	1486.5	1486.8	1487.9
157.5°	1531.6	1531.0	1530.3	1529.6	1529.0	1528.8	1529.1	1529.4	1529.7	1530.0	1531.2
160°	1558.8	1558.0	1557.1	1556.2	1555.4	1555.1	1555.4	1555.7	1555.9	1556.2	1557.4
162.5°	1583.0	1582.4	1581.7	1581.0	1580.4	1580.1	1580.1	1580.2	1580.2	1580.3	1581.8
165°	1615.2	1614.6	1614.0	1613.5	1612.9	1612.8	1613.0	1613.3	1613.6	1613.9	1615.1
167.5°	1642.4	1641.2	1640.1	1638.9	1637.8	1637.2	1637.2	1637.2	1637.2	1637.2	1638.9
170°	1657.1	1656.0	1654.8	1653.7	1652.4	1651.8	1651.8	1651.8	1651.8	1651.8	1653.7
172.5°	1667.6	1666.4	1665.3	1664.1	1662.9	1662.3	1662.3	1662.3	1662.3	1662.3	1664.1
175°	1679.4	1678.2	1677.1	1675.9	1674.8	1674.2	1674.2	1674.2	1674.2	1674.2	1675.9
177.5°	1685.4	1684.5	1683.5	1682.6	1681.6	1681.1	1680.8	1680.6	1680.4	1680.1	1681.5
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	588.2	589.1	589.9	590.3	590.2	590.1	590.1	590.0
5°	585.2	586.2	587.1	587.5	587.4	587.3	587.2	587.1
7.5°	579.4	580.3	581.2	581.6	581.5	581.4	581.3	581.2
10°	574.3	575.1	576.0	576.3	576.2	576.1	576.0	575.9
12.5°	567.6	568.4	569.0	569.3	569.3	569.3	569.3	569.2
15°	555.9	556.4	557.0	557.2	557.2	557.2	557.2	557.2
17.5°	542.4	543.0	543.7	543.7	543.2	542.7	542.2	541.7
20°	532.1	532.8	533.5	533.7	533.1	532.6	532.1	531.6
22.5°	520.4	520.9	521.4	521.4	521.1	520.7	520.4	520.0
25°	501.7	501.9	502.1	502.0	501.7	501.4	501.1	500.8
27.5°	482.0	482.0	482.1	482.0	481.6	481.3	481.0	480.7
30°	467.7	467.5	467.3	467.1	466.8	466.5	466.1	465.7
32.5°	453.2	452.8	452.4	452.0	451.4	450.8	450.3	449.7
35°	430.7	430.2	429.6	429.0	428.2	427.3	426.5	425.7
37.5°	407.1	406.3	405.5	404.9	404.3	403.9	403.4	402.9
40°	390.6	389.7	388.8	388.2	387.9	387.5	387.2	386.9
42.5°	374.4	373.5	372.6	372.0	371.5	371.0	370.6	370.1
45°	350.3	349.1	347.9	347.1	346.8	346.5	346.2	345.9
47.5°	325.0	323.8	322.4	321.4	320.7	320.0	319.3	318.6
50°	307.7	306.3	305.0	304.0	303.2	302.5	301.7	301.0
52.5°	290.8	289.6	288.4	287.5	286.7	285.9	285.1	284.3
55°	264.6	263.7	262.8	262.0	261.3	260.4	259.7	259.0
57.5°	238.6	237.4	236.2	235.4	235.0	234.6	234.2	233.8
60°	221.1	219.9	218.9	218.0	217.3	216.6	215.9	215.2
62.5°	204.1	202.9	201.8	201.0	200.5	199.9	199.2	198.7
65°	177.3	176.4	175.5	174.8	174.4	174.0	173.6	173.2
67.5°	151.9	151.1	150.3	149.8	149.6	149.3	149.1	148.8
70°	135.0	134.4	133.8	133.3	132.9	132.5	132.0	131.6
72.5°	119.2	118.5	117.8	117.2	116.8	116.4	115.9	115.5
75°	94.6	94.3	93.9	93.6	93.2	92.8	92.4	91.9
77.5°	72.1	71.9	71.7	71.5	71.2	70.9	70.6	70.3
80°	57.7	57.6	57.5	57.3	57.1	56.9	56.7	56.5
82.5°	44.0	43.8	43.7	43.5	43.5	43.5	43.4	43.4
85°	26.0	25.9	25.8	25.5	25.3	25.1	24.9	24.7
87.5°	14.4	14.7	15.0	15.2	15.2	15.2	15.2	15.2
90°	23.8	25.3	26.8	28.0	28.8	29.7	30.6	31.4
92.5°	54.1	56.0	58.0	59.3	59.9	60.6	61.2	61.8
95°	104.9	106.9	109.1	110.3	110.9	111.5	112.1	112.7
97.5°	164.4	166.3	168.2	169.5	169.8	170.2	170.5	170.9
100°	205.7	208.2	210.9	212.5	213.1	213.7	214.3	214.8
102.5°	248.0	250.9	253.8	255.6	256.4	257.2	258.0	258.8
105°	316.6	318.3	320.0	321.3	322.2	323.2	324.0	324.9
107.5°	390.5	391.4	392.3	392.7	392.6	392.5	392.5	392.4
110°	441.9	442.7	443.6	443.9	443.6	443.3	443.0	442.7



TEST NUMBER: P333363-840

CATALOG NUMBER: S125DIW-S375D1340U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	493.3	493.7	494.1	494.1	493.6	493.1	492.5	492.0
115°	571.9	571.6	571.3	571.0	570.7	570.4	570.2	569.9
117.5°	650.5	650.7	651.0	650.5	649.3	648.1	647.0	645.8
120°	703.5	703.5	703.5	702.9	701.7	700.5	699.3	698.2
122.5°	755.4	755.2	754.9	754.4	753.4	752.5	751.5	750.6
125°	831.9	831.4	830.8	830.4	830.1	829.8	829.5	829.2
127.5°	908.0	907.7	907.5	907.0	906.5	905.8	905.2	904.6
130°	958.3	958.1	957.8	957.3	956.7	956.1	955.5	954.9
132.5°	1006.5	1006.2	1005.9	1005.4	1004.6	1003.7	1002.9	1002.1
135°	1080.8	1080.8	1080.8	1080.2	1078.9	1077.8	1076.6	1075.5
137.5°	1153.0	1153.3	1153.7	1153.1	1151.7	1150.1	1148.7	1147.3
140°	1198.5	1199.0	1199.6	1199.2	1197.7	1196.3	1194.9	1193.4
142.5°	1243.0	1243.4	1243.7	1243.2	1241.7	1240.3	1238.8	1237.4
145°	1307.4	1307.4	1307.4	1306.9	1306.1	1305.1	1304.2	1303.4
147.5°	1366.9	1367.6	1368.3	1367.7	1365.6	1363.7	1361.7	1359.8
150°	1404.3	1404.3	1404.3	1404.0	1403.4	1402.8	1402.2	1401.7
152.5°	1439.2	1439.9	1440.6	1440.5	1439.4	1438.4	1437.2	1436.2
155°	1489.1	1490.3	1491.5	1491.3	1489.9	1488.4	1486.9	1485.5
157.5°	1532.4	1533.5	1534.7	1534.3	1532.4	1530.5	1528.5	1526.6
160°	1558.5	1559.7	1560.8	1560.7	1559.3	1557.8	1556.4	1554.9
162.5°	1583.2	1584.5	1585.9	1585.8	1584.1	1582.4	1580.7	1579.0
165°	1616.2	1617.4	1618.5	1618.2	1616.5	1614.8	1613.0	1611.2
167.5°	1640.7	1642.4	1644.2	1644.2	1642.3	1640.5	1638.7	1636.9
170°	1655.4	1657.1	1658.8	1658.7	1656.7	1654.7	1652.5	1650.5
172.5°	1665.9	1667.6	1669.3	1669.3	1667.5	1665.7	1663.9	1662.0
175°	1677.6	1679.4	1681.1	1680.9	1678.9	1676.9	1674.9	1672.8
177.5°	1682.9	1684.4	1685.8	1685.7	1683.9	1682.3	1680.7	1679.1
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3

(END OF REPORT)