

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: P333369-840

Luminaire Tested: **S125DIW-S375D1560U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333369-840
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-S375D1560U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7000.6 lumens
Efficiency: N/A
Efficacy: 131.1 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

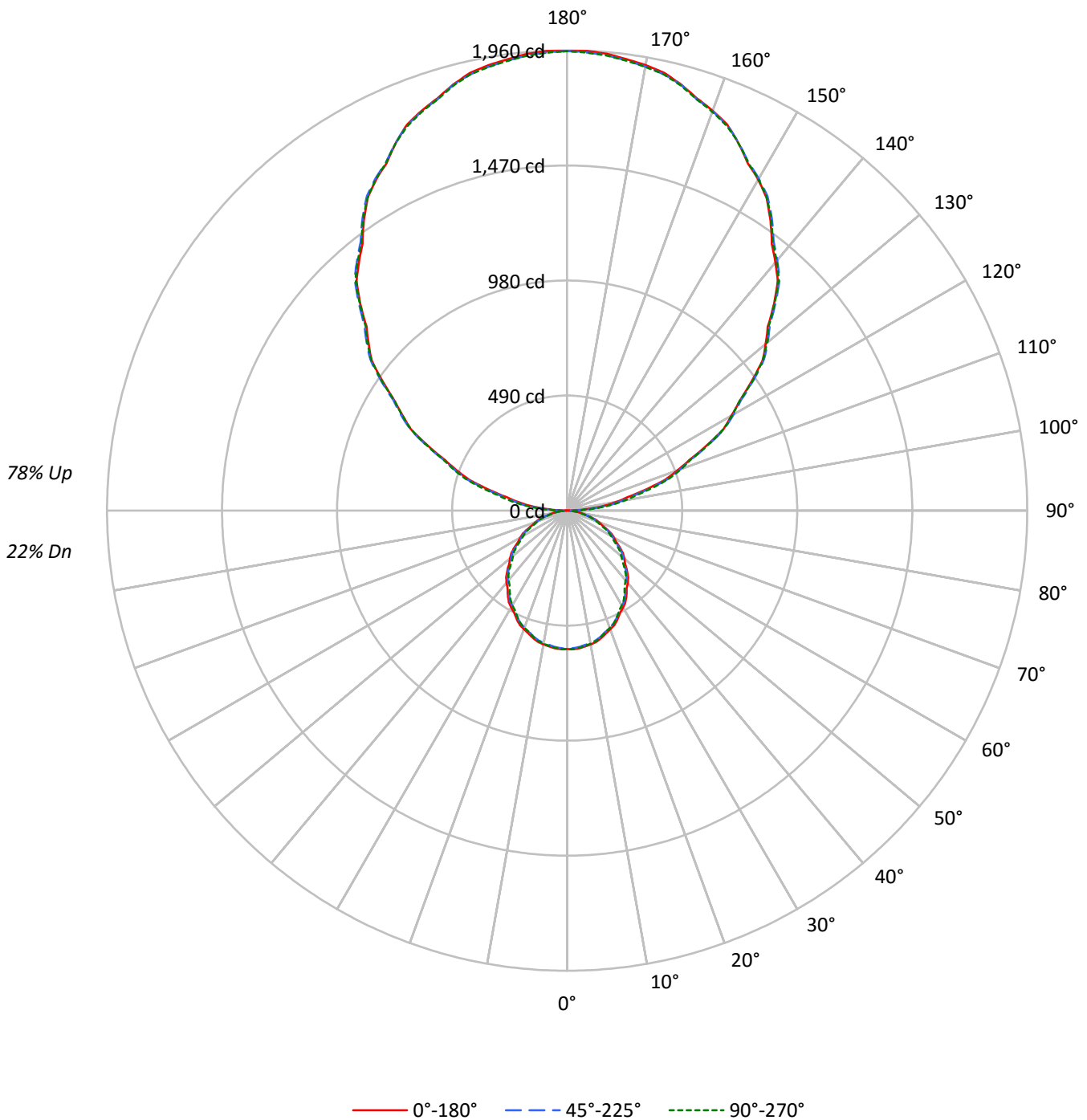
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333369-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333369-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-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	50	30	10	0	
RCR																						
0	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22				
1	91	87	84	80	81	78	74	72	59	57	55	42	41	40	27	26	26	18				
2	83	76	70	65	74	68	63	59	52	48	46	37	35	33	23	22	21	15				
3	76	67	60	54	67	59	54	49	46	42	38	33	30	28	21	19	18	13				
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	19	17	16	11				
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10				
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	9				
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	11	8				
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	13	11	9	7				
9	46	35	27	23	41	31	25	20	24	20	16	18	15	12	12	10	8	6				
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	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



TEST NUMBER: P333369-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	0.8
10°-20°	157.1	2.2
20°-30°	232.0	3.3
30°-40°	270.7	3.9
40°-50°	271.9	3.9
50°-60°	238.7	3.4
60°-70°	177.8	2.5
70°-80°	101.7	1.5
80°-90°	33.9	0.5
90°-100°	131.1	1.9
100°-110°	387.1	5.5
110°-120°	655.6	9.4
120°-130°	862.9	12.3
130°-140°	966.8	13.8
140°-150°	947.6	13.5
150°-160°	795.9	11.4
160°-170°	529.1	7.6
170°-180°	185.2	2.6
0°-30°	444.7	6.4
0°-40°	715.5	10.2
0°-60°	1226.0	17.5
0°-90°	1539.4	22.0
90°-120°	1173.8	16.8
90°-150°	3951.1	56.4
90°-180°	5461.0	78.0
0°-180°	7000.6	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°	2	14	24	32	37	7
95°	99	103	117	128	131	106
105°	347	355	364	373	378	371
115°	656	662	666	664	663	649
125°	958	967	969	966	964	858
135°	1246	1255	1256	1256	1250	960
145°	1509	1515	1520	1520	1515	943
155°	1727	1727	1729	1734	1727	795
165°	1878	1875	1876	1882	1873	530
175°	1953	1947	1946	1954	1945	185
180°	1957	1957	1957	1957	1957	



TEST NUMBER: P333369-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-F1

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°	10.4	10.9	11.5	12.0	12.5	13.0	13.4	13.8	14.2	14.5	14.9
90°	1.5	4.2	7.0	9.7	12.3	14.8	17.3	19.6	22.0	24.3	26.1
92.5°	36.9	38.8	40.7	42.5	44.4	46.9	49.8	52.6	55.5	58.5	60.7
95°	99.0	99.7	100.4	101.0	101.7	103.7	107.1	110.5	113.9	117.2	119.7
97.5°	164.5	164.7	165.0	165.3	165.6	168.0	172.7	177.4	182.1	186.7	188.9
100°	213.2	213.2	213.2	213.2	213.2	215.4	219.8	224.2	228.6	233.0	236.1
102.5°	265.6	267.0	268.3	269.6	271.0	272.9	275.1	277.3	279.5	281.8	285.1
105°	347.3	348.9	350.6	352.3	354.1	355.9	357.9	359.9	361.9	364.1	366.1
107.5°	437.4	439.1	440.8	442.5	444.1	445.9	447.4	448.9	450.5	452.0	453.0
110°	499.6	501.3	502.9	504.6	506.3	507.7	508.7	509.7	510.7	511.7	512.7



TEST NUMBER: P333369-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	562.9	563.8	564.7	565.5	566.4	567.5	568.8	570.1	571.4	572.7	573.1
115°	656.4	657.8	659.1	660.5	661.9	662.9	663.6	664.2	664.9	665.6	665.2
117.5°	750.2	750.8	751.4	752.0	752.7	753.3	753.9	754.5	755.1	755.8	756.0
120°	808.7	810.4	812.1	813.9	815.5	816.5	816.9	817.2	817.5	817.9	817.9
122.5°	872.1	872.7	873.3	873.9	874.5	875.3	876.2	877.1	877.9	878.8	878.5
125°	958.0	960.0	962.1	964.1	966.1	967.3	967.7	968.0	968.4	968.7	968.0
127.5°	1049.4	1050.6	1051.7	1052.8	1054.0	1054.8	1055.2	1055.6	1056.0	1056.4	1056.0
130°	1104.2	1105.9	1107.6	1109.2	1111.0	1112.2	1112.9	1113.5	1114.2	1114.9	1114.5
132.5°	1159.0	1161.8	1164.6	1167.4	1170.1	1171.4	1171.3	1171.1	1171.0	1170.9	1170.5
135°	1245.9	1247.9	1249.9	1251.9	1253.9	1255.2	1255.5	1255.9	1256.2	1256.5	1256.5
137.5°	1327.5	1329.5	1331.4	1333.3	1335.3	1336.7	1337.5	1338.2	1338.9	1339.7	1340.1
140°	1379.9	1381.6	1383.2	1384.9	1386.6	1388.0	1389.0	1390.1	1391.1	1392.1	1392.7
142.5°	1432.3	1433.7	1435.1	1436.5	1437.9	1439.3	1440.6	1441.9	1443.2	1444.4	1444.8
145°	1509.3	1510.7	1512.1	1513.4	1514.8	1515.9	1516.9	1517.9	1518.9	1519.9	1519.9
147.5°	1580.6	1581.3	1582.1	1582.9	1583.6	1584.4	1585.2	1586.0	1586.8	1587.6	1588.4
150°	1628.1	1627.8	1627.5	1627.1	1626.8	1627.3	1628.6	1630.0	1631.3	1632.7	1632.7
152.5°	1667.1	1667.6	1668.1	1668.5	1669.0	1669.5	1670.1	1670.6	1671.1	1671.7	1672.5
155°	1727.2	1727.2	1727.2	1727.2	1727.2	1727.3	1727.7	1728.0	1728.3	1728.7	1730.0
157.5°	1780.7	1780.0	1779.3	1778.5	1777.8	1777.6	1777.9	1778.3	1778.6	1778.9	1780.3
160°	1812.4	1811.4	1810.4	1809.4	1808.4	1808.1	1808.4	1808.7	1809.1	1809.4	1810.7
162.5°	1840.5	1839.7	1839.0	1838.3	1837.4	1837.1	1837.1	1837.2	1837.3	1837.3	1839.1
165°	1877.9	1877.2	1876.5	1875.9	1875.2	1875.0	1875.4	1875.7	1876.0	1876.4	1877.7
167.5°	1909.6	1908.2	1906.9	1905.5	1904.2	1903.5	1903.5	1903.5	1903.5	1903.5	1905.5
170°	1926.6	1925.3	1923.9	1922.6	1921.3	1920.6	1920.6	1920.6	1920.6	1920.6	1922.6
172.5°	1938.8	1937.5	1936.1	1934.8	1933.4	1932.8	1932.8	1932.8	1932.8	1932.8	1934.8
175°	1952.6	1951.2	1949.8	1948.4	1947.1	1946.4	1946.4	1946.4	1946.4	1946.4	1948.4
177.5°	1959.5	1958.4	1957.4	1956.3	1955.2	1954.5	1954.3	1954.0	1953.7	1953.5	1955.1
180°	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1



TEST NUMBER: P333369-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-F1

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°	15.2	15.6	16.0	16.2	16.2	16.2	16.3	16.3
90°	27.8	29.5	31.1	32.5	33.5	34.5	35.5	36.6
92.5°	62.9	65.1	67.5	68.9	69.7	70.4	71.1	71.9
95°	122.0	124.4	126.7	128.3	129.0	129.7	130.3	131.0
97.5°	191.2	193.4	195.6	197.0	197.4	197.8	198.2	198.6
100°	239.1	242.2	245.2	247.1	247.7	248.4	249.1	249.7
102.5°	288.4	291.8	295.0	297.2	298.1	299.0	300.0	300.9
105°	368.1	370.1	372.1	373.7	374.7	375.7	376.7	377.7
107.5°	454.0	455.0	456.1	456.6	456.5	456.5	456.4	456.3
110°	513.8	514.8	515.8	516.1	515.8	515.4	515.1	514.8



TEST NUMBER: P333369-840

CATALOG NUMBER: S125DIW-S375D1560U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	573.6	574.1	574.5	574.5	573.9	573.3	572.7	572.1
115°	664.9	664.6	664.2	663.9	663.6	663.2	662.9	662.6
117.5°	756.3	756.6	756.8	756.3	754.9	753.6	752.2	750.8
120°	817.9	817.9	817.9	817.2	815.9	814.5	813.1	811.8
122.5°	878.3	878.0	877.7	877.1	876.0	874.8	873.7	872.7
125°	967.3	966.6	965.9	965.4	965.1	964.7	964.4	964.1
127.5°	1055.7	1055.4	1055.0	1054.5	1053.8	1053.2	1052.5	1051.8
130°	1114.2	1113.9	1113.5	1113.0	1112.4	1111.7	1111.0	1110.3
132.5°	1170.2	1169.9	1169.5	1168.9	1168.0	1167.0	1166.1	1165.1
135°	1256.5	1256.5	1256.5	1255.9	1254.5	1253.1	1251.7	1250.4
137.5°	1340.5	1340.9	1341.3	1340.7	1339.0	1337.3	1335.5	1333.8
140°	1393.4	1394.1	1394.7	1394.2	1392.6	1390.9	1389.2	1387.5
142.5°	1445.2	1445.6	1446.1	1445.4	1443.7	1442.1	1440.4	1438.7
145°	1519.9	1519.9	1519.9	1519.4	1518.4	1517.4	1516.4	1515.4
147.5°	1589.2	1590.0	1590.8	1590.1	1587.8	1585.5	1583.3	1580.9
150°	1632.7	1632.7	1632.7	1632.3	1631.6	1631.0	1630.3	1629.6
152.5°	1673.3	1674.2	1675.0	1674.8	1673.5	1672.3	1671.1	1669.9
155°	1731.3	1732.7	1734.0	1733.9	1732.2	1730.5	1728.8	1727.2
157.5°	1781.6	1783.0	1784.3	1783.9	1781.6	1779.4	1777.2	1774.9
160°	1812.1	1813.4	1814.8	1814.6	1812.9	1811.2	1809.6	1807.9
162.5°	1840.7	1842.3	1843.9	1843.7	1841.8	1839.8	1837.9	1835.8
165°	1879.1	1880.5	1881.8	1881.5	1879.5	1877.4	1875.4	1873.3
167.5°	1907.5	1909.6	1911.6	1911.6	1909.5	1907.4	1905.3	1903.2
170°	1924.6	1926.6	1928.6	1928.5	1926.1	1923.8	1921.4	1919.0
172.5°	1936.8	1938.8	1940.9	1940.9	1938.7	1936.6	1934.5	1932.5
175°	1950.6	1952.6	1954.6	1954.4	1952.1	1949.6	1947.3	1944.9
177.5°	1956.7	1958.3	1959.9	1959.8	1957.9	1956.0	1954.1	1952.3
180°	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1	1957.1

(END OF REPORT)