

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: P333367

Luminaire Tested: **S125DIW-S375D1560U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333367  
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-S375D1560U835-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP 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: 6872.1 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

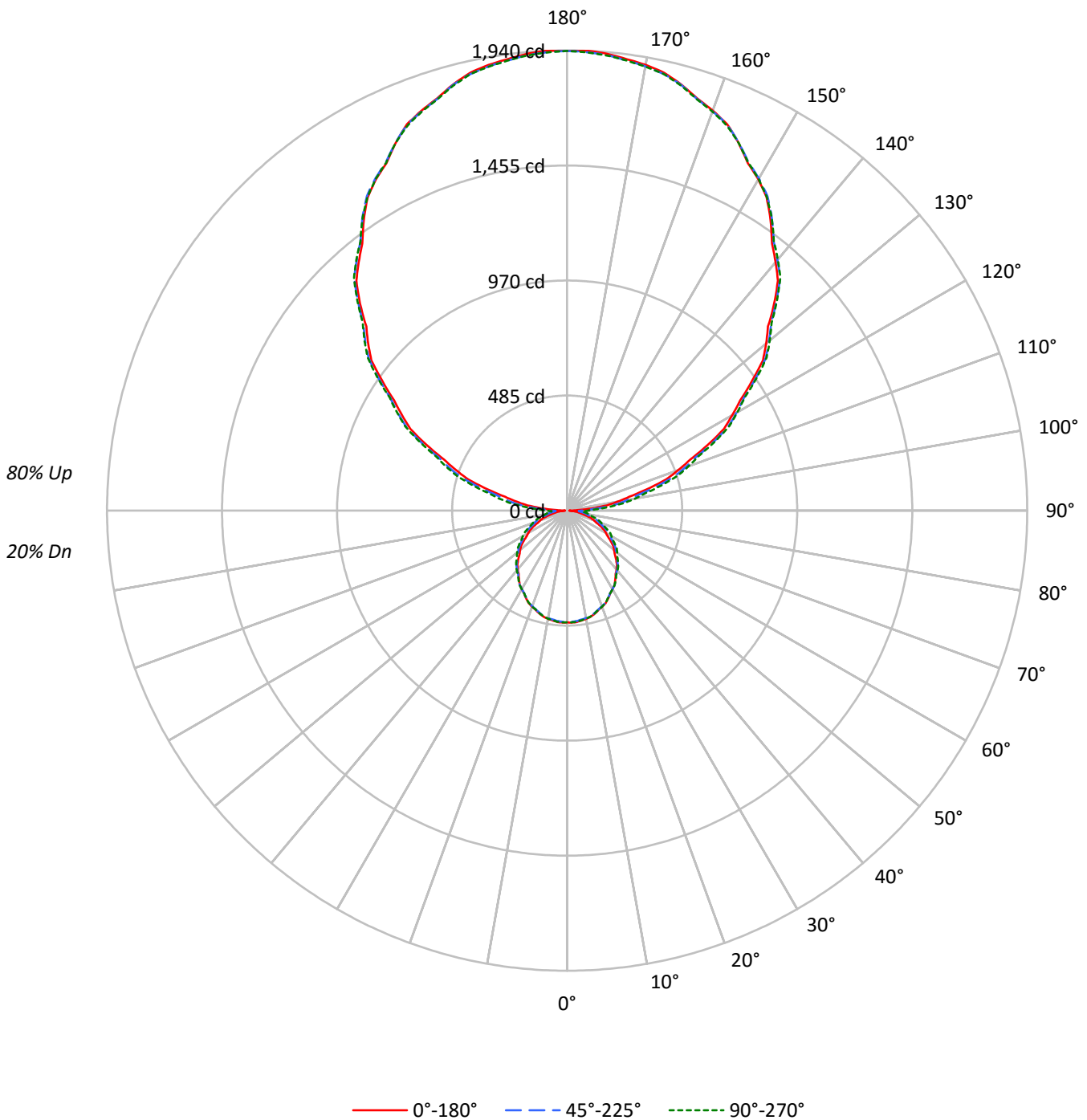
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20				
1	91	86	83	79	80	76	73	70	58	56	54	41	39	38	25	24	23	16				
2	82	75	69	64	73	67	62	57	50	47	44	35	33	32	22	20	19	13				
3	75	66	59	53	66	58	53	48	44	40	37	31	29	27	19	18	16	11				
4	69	58	51	45	60	52	45	40	39	35	31	28	25	23	17	15	14	9				
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	15	13	12	8				
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11	7				
7	53	41	34	28	47	37	30	26	28	23	20	20	17	15	12	11	9	6				
8	49	37	30	25	43	33	27	22	25	21	18	18	15	13	11	10	8	6				
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7	5				
10	42	31	24	19	37	28	22	18	21	17	14	15	12	10	10	8	7	5				

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

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.6	0.6
10°-20°	126.5	1.8
20°-30°	188.2	2.7
30°-40°	222.9	3.2
40°-50°	230.5	3.4
50°-60°	212.3	3.1
60°-70°	171.6	2.5
70°-80°	114.9	1.7
80°-90°	63.8	0.9
90°-100°	163.2	2.4
100°-110°	408.0	5.9
110°-120°	665.8	9.7
120°-130°	863.8	12.6
130°-140°	961.5	14.0
140°-150°	939.2	13.7
150°-160°	788.1	11.5
160°-170°	523.9	7.6
170°-180°	183.3	2.7
0°-30°	359.3	5.2
0°-40°	582.2	8.5
0°-60°	1025.0	14.9
0°-90°	1375.4	20.0
90°-120°	1237.0	18.0
90°-150°	4001.4	58.2
90°-180°	5497.0	80.0
0°-180°	6872.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	9	36	62	80	88	10
95°	104	120	150	170	177	109
105°	348	363	386	404	412	372
115°	653	662	677	684	685	645
125°	950	959	970	974	975	851
135°	1235	1243	1248	1253	1250	951
145°	1495	1501	1505	1507	1505	934
155°	1710	1710	1712	1717	1710	787
165°	1860	1857	1858	1863	1855	524
175°	1934	1928	1927	1935	1926	184
180°	1938	1938	1938	1938	1938	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.7	18.5	22.4	26.2	30.0	33.9	37.9	41.8	45.8	49.7	52.4
90°	8.9	14.9	20.8	26.8	32.8	38.7	44.5	50.4	56.2	62.0	66.1
92.5°	43.2	48.1	53.0	57.9	62.8	68.5	75.0	81.4	87.9	94.3	98.8
95°	104.0	107.4	110.7	114.1	117.4	122.5	129.3	136.2	143.0	149.9	154.5
97.5°	168.3	171.0	173.7	176.3	179.0	184.4	192.3	200.3	208.3	216.3	220.7
100°	216.2	218.4	220.5	222.7	224.9	229.8	237.4	245.0	252.7	260.3	265.5
102.5°	267.7	271.1	274.4	277.7	281.1	285.4	290.9	296.3	301.7	307.1	312.5
105°	348.0	351.3	354.7	358.0	361.3	365.5	370.6	375.7	380.8	385.9	389.9
107.5°	436.7	439.8	442.9	446.0	449.0	452.8	457.3	461.8	466.3	470.8	473.9
110°	497.9	500.8	503.7	506.6	509.5	512.9	516.8	520.7	524.6	528.5	531.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	560.7	562.5	564.4	566.2	568.1	571.0	575.1	579.2	583.2	587.3	589.7
115°	652.8	654.9	656.9	659.0	661.0	663.7	667.1	670.4	673.8	677.1	678.6
117.5°	745.2	746.3	747.4	748.5	749.5	751.6	754.8	757.9	761.0	764.2	766.2
120°	803.1	805.1	807.1	809.1	811.1	813.4	816.1	818.8	821.5	824.2	826.0
122.5°	865.5	866.3	867.0	867.8	868.5	870.5	873.6	876.8	879.9	883.1	884.5
125°	950.5	952.4	954.3	956.2	958.1	960.3	962.7	965.0	967.4	969.8	970.8
127.5°	1040.5	1041.5	1042.6	1043.6	1044.7	1046.2	1048.3	1050.4	1052.5	1054.6	1055.8
130°	1094.8	1096.4	1098.0	1099.5	1101.1	1102.9	1105.0	1107.2	1109.3	1111.4	1112.5
132.5°	1148.7	1151.5	1154.2	1156.9	1159.6	1161.5	1162.5	1163.4	1164.4	1165.4	1166.5
135°	1234.6	1236.5	1238.4	1240.3	1242.2	1243.7	1244.8	1245.8	1246.9	1247.9	1249.3
137.5°	1315.3	1317.2	1319.1	1320.9	1322.8	1324.3	1325.4	1326.4	1327.5	1328.6	1330.2
140°	1366.9	1368.5	1370.2	1371.9	1373.6	1375.0	1376.1	1377.2	1378.3	1379.4	1381.2
142.5°	1418.7	1420.1	1421.4	1422.7	1424.0	1425.4	1426.6	1427.9	1429.2	1430.5	1431.9
145°	1495.1	1496.3	1497.5	1498.8	1500.0	1501.1	1502.1	1503.1	1504.1	1505.1	1505.7
147.5°	1565.2	1565.9	1566.6	1567.4	1568.1	1568.9	1569.7	1570.5	1571.3	1572.1	1573.1
150°	1612.2	1611.9	1611.6	1611.2	1610.9	1611.4	1612.7	1614.1	1615.4	1616.8	1616.8
152.5°	1650.8	1651.3	1651.8	1652.2	1652.7	1653.2	1653.8	1654.3	1654.8	1655.4	1656.2
155°	1710.3	1710.3	1710.3	1710.3	1710.3	1710.4	1710.8	1711.1	1711.4	1711.8	1713.1
157.5°	1763.3	1762.6	1761.9	1761.1	1760.4	1760.2	1760.5	1760.9	1761.2	1761.5	1762.9
160°	1794.7	1793.7	1792.7	1791.7	1790.7	1790.4	1790.7	1791.0	1791.4	1791.7	1793.0
162.5°	1822.5	1821.7	1821.0	1820.3	1819.5	1819.2	1819.2	1819.3	1819.4	1819.4	1821.1
165°	1859.6	1858.9	1858.2	1857.6	1856.9	1856.7	1857.1	1857.4	1857.7	1858.1	1859.4
167.5°	1890.9	1889.6	1888.3	1886.9	1885.6	1884.9	1884.9	1884.9	1884.9	1884.9	1886.9
170°	1907.8	1906.5	1905.1	1903.8	1902.5	1901.8	1901.8	1901.8	1901.8	1901.8	1903.8
172.5°	1919.9	1918.6	1917.2	1915.9	1914.5	1913.9	1913.9	1913.9	1913.9	1913.9	1915.9
175°	1933.5	1932.1	1930.8	1929.4	1928.1	1927.4	1927.4	1927.4	1927.4	1927.4	1929.4
177.5°	1940.4	1939.3	1938.3	1937.2	1936.1	1935.4	1935.2	1934.9	1934.6	1934.4	1936.0
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	55.1	57.8	60.5	62.3	63.3	64.2	65.1	66.0
90°	70.1	74.1	78.2	81.1	82.8	84.5	86.2	88.0
92.5°	103.3	107.8	112.3	115.3	116.7	118.2	119.6	121.1
95°	159.1	163.7	168.3	171.3	172.7	174.1	175.5	176.8
97.5°	225.1	229.4	233.8	236.5	237.6	238.7	239.8	240.9
100°	270.7	275.8	281.0	284.2	285.5	286.8	288.1	289.4
102.5°	317.8	323.2	328.5	332.0	333.6	335.1	336.7	338.2
105°	394.0	398.1	402.1	405.0	406.7	408.5	410.2	411.9
107.5°	476.9	479.9	483.0	484.8	485.4	485.9	486.5	487.1
110°	534.4	537.3	540.3	542.0	542.3	542.7	543.1	543.5





TEST NUMBER: P333367

CATALOG NUMBER: S125DIW-S375D1560U835-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	592.0	594.3	596.7	597.9	598.0	598.1	598.2	598.4
115°	680.1	681.6	683.1	684.0	684.3	684.6	684.9	685.2
117.5°	768.2	770.2	772.2	772.9	772.3	771.6	771.0	770.3
120°	827.7	829.4	831.2	831.7	831.0	830.3	829.5	828.8
122.5°	885.8	887.2	888.6	889.1	888.7	888.2	887.7	887.3
125°	971.8	972.7	973.7	974.3	974.5	974.6	974.8	975.0
127.5°	1056.9	1058.1	1059.3	1059.9	1059.8	1059.7	1059.6	1059.6
130°	1113.6	1114.7	1115.8	1116.3	1116.1	1115.9	1115.8	1115.6
132.5°	1167.6	1168.7	1169.8	1170.1	1169.6	1169.1	1168.6	1168.1
135°	1250.6	1251.9	1253.3	1253.5	1252.7	1251.9	1251.0	1250.2
137.5°	1331.8	1333.5	1335.1	1335.2	1334.0	1332.7	1331.4	1330.2
140°	1383.0	1384.8	1386.6	1386.9	1385.6	1384.3	1383.1	1381.8
142.5°	1433.3	1434.6	1436.0	1436.0	1434.8	1433.5	1432.3	1431.0
145°	1506.2	1506.7	1507.2	1507.2	1506.6	1506.0	1505.4	1504.8
147.5°	1574.0	1575.0	1576.0	1575.4	1573.3	1571.2	1569.1	1567.0
150°	1616.8	1616.8	1616.8	1616.5	1615.9	1615.3	1614.8	1614.2
152.5°	1657.0	1657.8	1658.6	1658.4	1657.2	1656.0	1654.8	1653.6
155°	1714.4	1715.8	1717.1	1717.0	1715.3	1713.6	1711.9	1710.3
157.5°	1764.2	1765.6	1766.9	1766.5	1764.2	1762.0	1759.8	1757.6
160°	1794.4	1795.7	1797.1	1796.9	1795.2	1793.5	1791.9	1790.2
162.5°	1822.7	1824.3	1825.9	1825.7	1823.8	1821.8	1819.9	1817.9
165°	1860.7	1862.1	1863.4	1863.1	1861.1	1859.1	1857.1	1855.0
167.5°	1888.9	1890.9	1892.9	1892.9	1890.8	1888.8	1886.7	1884.6
170°	1905.8	1907.8	1909.8	1909.7	1907.3	1905.0	1902.6	1900.3
172.5°	1917.9	1919.9	1921.9	1921.9	1919.8	1917.7	1915.6	1913.6
175°	1931.5	1933.5	1935.5	1935.3	1933.0	1930.6	1928.3	1925.9
177.5°	1937.6	1939.2	1940.8	1940.7	1938.8	1936.9	1935.0	1933.2
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0

(END OF REPORT)