

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

Luminaire Tested: **S125DIW-S375D1560U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333369  
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-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: 6932.2 lumens  
Efficiency: N/A  
Efficacy: 129.8 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

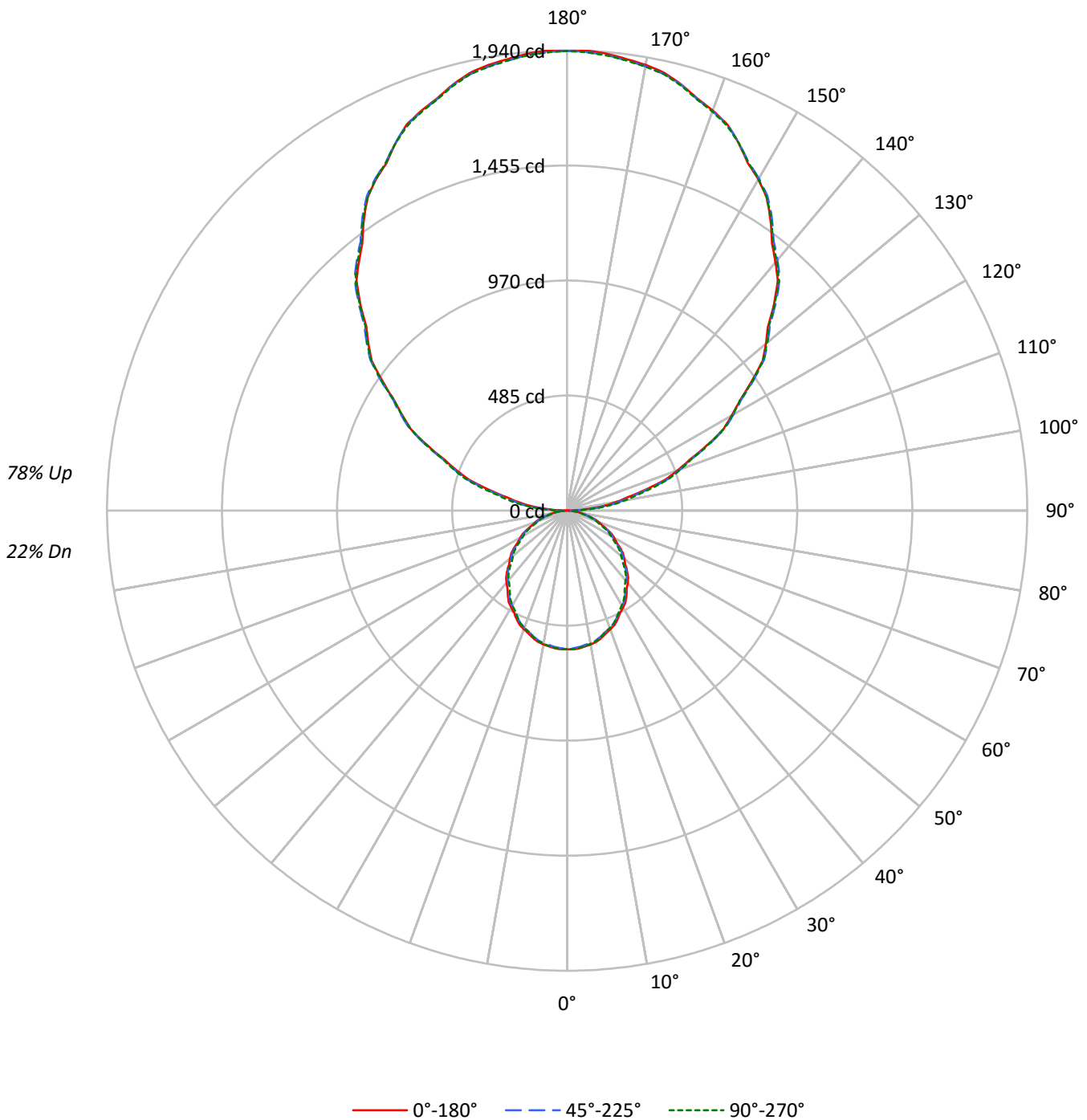
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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°	3773	3773	3773
5°	3781	3745	3769
10°	3758	3719	3740
15°	3718	3674	3689
20°	3659	3612	3618
25°	3596	3537	3534
30°	3519	3457	3439
35°	3436	3370	3323
40°	3351	3277	3230
45°	3259	3191	3128
50°	3158	3088	2995
55°	3059	2971	2888
60°	2942	2853	2753
65°	2804	2713	2621
70°	2670	2549	2460
75°	2433	2353	2271
80°	2165	2131	2079
85°	1882	1919	1815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.1	0.8
10°-20°	155.6	2.2
20°-30°	229.7	3.3
30°-40°	268.1	3.9
40°-50°	269.2	3.9
50°-60°	236.3	3.4
60°-70°	176.1	2.5
70°-80°	100.7	1.5
80°-90°	33.5	0.5
90°-100°	129.8	1.9
100°-110°	383.3	5.5
110°-120°	649.2	9.4
120°-130°	854.4	12.3
130°-140°	957.4	13.8
140°-150°	938.3	13.5
150°-160°	788.1	11.4
160°-170°	523.9	7.6
170°-180°	183.3	2.6
0°-30°	440.4	6.4
0°-40°	708.5	10.2
0°-60°	1214.0	17.5
0°-90°	1524.3	22.0
90°-120°	1162.3	16.8
90°-150°	3912.5	56.4
90°-180°	5408.0	78.0
0°-180°	6932.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	583	582	578	582	581	55
15°	556	554	550	552	552	157
25°	505	502	496	497	496	232
35°	436	434	428	425	422	272
45°	357	355	349	344	342	275
55°	272	270	264	260	256	243
65°	184	182	178	173	172	182
75°	98	96	94	93	91	104
85°	25	26	26	25	24	28
90°	2	13	24	32	36	7
95°	98	102	116	126	130	105
105°	344	352	360	369	374	367
115°	650	656	659	658	656	643
125°	949	957	959	956	955	849
135°	1234	1242	1244	1244	1238	951
145°	1495	1501	1505	1505	1501	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°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	585.6	585.4	585.2	584.9	584.7	584.1	583.3	582.5	581.7	580.8	581.7
5°	583.2	583.0	582.8	582.6	582.4	581.8	580.8	579.8	578.7	577.7	578.6
7.5°	577.9	577.7	577.5	577.3	577.1	576.4	575.3	574.1	573.0	571.9	572.8
10°	573.1	572.9	572.7	572.5	572.3	571.6	570.5	569.3	568.2	567.1	567.9
12.5°	567.2	566.8	566.4	566.1	565.7	565.0	563.9	562.9	561.8	560.8	561.4
15°	556.0	555.7	555.4	555.1	554.7	554.0	552.9	551.8	550.6	549.5	550.0
17.5°	543.1	542.7	542.2	541.8	541.3	540.5	539.3	538.2	537.0	535.8	536.5
20°	532.4	532.2	532.0	531.8	531.6	530.8	529.5	528.1	526.8	525.5	526.2
22.5°	521.7	521.3	520.9	520.6	520.2	519.4	518.1	516.9	515.6	514.4	514.9
25°	504.7	504.2	503.6	503.1	502.6	501.7	500.4	499.0	497.7	496.4	496.6
27.5°	484.8	484.5	484.2	483.9	483.6	482.7	481.4	480.0	478.6	477.2	477.3
30°	471.9	471.6	471.2	470.9	470.6	469.7	468.2	466.6	465.1	463.5	463.3
32.5°	457.8	457.3	456.9	456.4	455.9	455.0	453.6	452.2	450.9	449.5	449.1
35°	435.8	435.4	435.0	434.6	434.2	433.2	431.8	430.4	428.9	427.5	427.0
37.5°	413.0	412.5	412.0	411.4	410.9	410.0	408.6	407.3	405.9	404.6	403.8
40°	397.5	396.9	396.4	395.9	395.4	394.4	393.0	391.6	390.1	388.7	387.8
42.5°	380.8	380.4	380.0	379.5	379.1	378.2	376.7	375.3	373.8	372.4	371.6
45°	356.8	356.4	356.0	355.6	355.1	354.3	353.1	351.9	350.6	349.4	348.2
47.5°	330.9	330.9	330.9	331.0	331.0	330.3	328.8	327.3	325.8	324.3	323.1
50°	314.3	314.0	313.7	313.3	313.0	312.3	311.0	309.8	308.6	307.3	306.0
52.5°	297.3	297.0	296.8	296.6	296.4	295.6	294.3	293.0	291.6	290.3	289.2
55°	271.7	271.4	271.1	270.8	270.5	269.6	268.2	266.8	265.3	263.9	263.0
57.5°	244.9	244.7	244.5	244.4	244.2	243.5	242.3	241.1	239.9	238.7	237.5
60°	227.8	227.4	227.0	226.6	226.2	225.4	224.3	223.2	222.0	220.9	219.9
62.5°	210.1	209.8	209.4	209.1	208.8	208.1	207.2	206.2	205.2	204.3	203.2
65°	183.5	183.3	183.1	182.9	182.7	182.0	180.9	179.7	178.6	177.5	176.5
67.5°	157.7	157.3	156.8	156.4	156.0	155.3	154.5	153.6	152.8	152.0	151.2
70°	141.4	140.9	140.4	139.9	139.4	138.6	137.7	136.8	135.9	135.0	134.3
72.5°	123.7	123.3	123.0	122.6	122.3	121.8	121.2	120.6	120.0	119.4	118.7
75°	97.5	97.3	97.1	96.9	96.7	96.3	95.8	95.3	94.8	94.3	94.0
77.5°	73.4	73.3	73.2	73.1	73.1	72.9	72.6	72.3	72.0	71.7	71.5
80°	58.2	58.2	58.2	58.2	58.2	58.1	57.9	57.7	57.5	57.3	57.2
82.5°	44.9	44.8	44.6	44.4	44.3	44.2	44.1	44.1	44.0	44.0	43.8
85°	25.4	25.5	25.6	25.7	25.8	25.9	25.9	25.9	25.9	25.9	25.8
87.5°	10.3	10.8	11.4	11.9	12.4	12.9	13.3	13.7	14.1	14.4	14.8
90°	1.5	4.2	6.9	9.6	12.2	14.7	17.1	19.4	21.8	24.1	25.8
92.5°	36.5	38.4	40.3	42.1	44.0	46.4	49.3	52.1	55.0	57.9	60.1
95°	98.0	98.7	99.4	100.0	100.7	102.7	106.1	109.4	112.8	116.1	118.5
97.5°	162.9	163.1	163.4	163.7	164.0	166.4	171.0	175.7	180.3	184.9	187.1
100°	211.1	211.1	211.1	211.1	211.1	213.3	217.7	222.0	226.4	230.7	233.8
102.5°	263.0	264.4	265.7	267.0	268.4	270.2	272.4	274.6	276.8	279.0	282.3
105°	343.9	345.5	347.2	348.9	350.6	352.4	354.4	356.4	358.4	360.5	362.5
107.5°	433.1	434.8	436.5	438.2	439.8	441.5	443.0	444.5	446.1	447.6	448.6
110°	494.7	496.4	498.0	499.7	501.4	502.7	503.7	504.7	505.7	506.7	507.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	557.4	558.3	559.2	560.0	560.9	562.0	563.2	564.5	565.8	567.1	567.5
115°	650.0	651.4	652.7	654.0	655.4	656.4	657.1	657.7	658.4	659.1	658.7
117.5°	742.9	743.5	744.1	744.7	745.3	745.9	746.5	747.1	747.7	748.4	748.6
120°	800.8	802.5	804.2	805.9	807.5	808.5	808.9	809.2	809.5	809.9	809.9
122.5°	863.6	864.2	864.8	865.4	866.0	866.7	867.6	868.5	869.3	870.2	869.9
125°	948.6	950.6	952.7	954.7	956.7	957.9	958.2	958.5	958.9	959.2	958.5
127.5°	1039.1	1040.3	1041.4	1042.5	1043.7	1044.5	1044.9	1045.3	1045.7	1046.1	1045.7
130°	1093.4	1095.1	1096.8	1098.4	1100.1	1101.3	1102.0	1102.6	1103.3	1104.0	1103.6
132.5°	1147.7	1150.5	1153.2	1156.0	1158.7	1160.0	1159.9	1159.7	1159.6	1159.5	1159.1
135°	1233.7	1235.7	1237.7	1239.7	1241.7	1242.9	1243.2	1243.6	1243.9	1244.2	1244.2
137.5°	1314.5	1316.5	1318.4	1320.3	1322.3	1323.6	1324.4	1325.1	1325.8	1326.6	1327.0
140°	1366.4	1368.1	1369.7	1371.4	1373.1	1374.4	1375.4	1376.5	1377.5	1378.5	1379.1
142.5°	1418.3	1419.7	1421.1	1422.5	1423.9	1425.2	1426.5	1427.8	1429.1	1430.3	1430.7
145°	1494.6	1495.9	1497.3	1498.6	1500.0	1501.1	1502.1	1503.1	1504.1	1505.1	1505.1
147.5°	1565.2	1565.9	1566.6	1567.4	1568.1	1568.9	1569.7	1570.5	1571.3	1572.1	1572.9
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°	584.2	584.2	584.2	584.2	584.2	584.2	584.2	584.2
2.5°	582.5	583.3	584.1	584.5	584.4	584.3	584.3	584.2
5°	579.5	580.5	581.4	581.8	581.7	581.6	581.5	581.4
7.5°	573.7	574.6	575.5	575.9	575.8	575.7	575.6	575.5
10°	568.7	569.5	570.4	570.7	570.6	570.5	570.4	570.3
12.5°	562.1	562.8	563.4	563.7	563.7	563.7	563.7	563.6
15°	550.5	551.0	551.6	551.8	551.8	551.8	551.8	551.8
17.5°	537.1	537.7	538.4	538.4	537.9	537.4	536.9	536.4
20°	526.9	527.6	528.3	528.5	527.9	527.4	526.9	526.4
22.5°	515.3	515.8	516.3	516.3	516.0	515.6	515.3	514.9
25°	496.8	497.0	497.2	497.1	496.8	496.5	496.2	495.9
27.5°	477.3	477.3	477.4	477.3	476.9	476.6	476.3	476.0
30°	463.1	462.9	462.7	462.5	462.2	461.9	461.5	461.2
32.5°	448.8	448.4	448.0	447.6	447.0	446.4	445.9	445.3
35°	426.5	426.0	425.4	424.8	424.0	423.1	422.3	421.5
37.5°	403.1	402.3	401.5	400.9	400.4	400.0	399.5	399.0
40°	386.8	385.9	385.0	384.4	384.1	383.7	383.4	383.1
42.5°	370.7	369.9	369.0	368.4	367.9	367.4	367.0	366.5
45°	346.9	345.7	344.5	343.7	343.4	343.1	342.8	342.5
47.5°	321.8	320.6	319.3	318.3	317.6	316.9	316.2	315.5
50°	304.7	303.3	302.0	301.0	300.2	299.5	298.8	298.1
52.5°	288.0	286.8	285.6	284.7	283.9	283.1	282.3	281.5
55°	262.0	261.1	260.2	259.4	258.7	257.9	257.2	256.5
57.5°	236.3	235.1	233.9	233.1	232.7	232.3	231.9	231.5
60°	218.9	217.8	216.8	215.9	215.2	214.5	213.8	213.1
62.5°	202.1	200.9	199.8	199.0	198.5	197.9	197.3	196.8
65°	175.6	174.7	173.8	173.1	172.7	172.3	171.9	171.5
67.5°	150.4	149.6	148.8	148.3	148.1	147.8	147.6	147.3
70°	133.7	133.1	132.5	132.0	131.6	131.2	130.7	130.3
72.5°	118.0	117.3	116.6	116.1	115.7	115.3	114.8	114.4
75°	93.7	93.4	93.0	92.7	92.3	91.9	91.5	91.0
77.5°	71.4	71.2	71.0	70.8	70.5	70.2	69.9	69.6
80°	57.1	57.0	56.9	56.7	56.5	56.3	56.1	55.9
82.5°	43.6	43.4	43.3	43.1	43.1	43.1	43.0	43.0
85°	25.7	25.6	25.5	25.3	25.1	24.9	24.7	24.5
87.5°	15.1	15.4	15.8	16.0	16.0	16.0	16.1	16.1
90°	27.5	29.2	30.8	32.2	33.2	34.2	35.2	36.2
92.5°	62.3	64.5	66.8	68.2	69.0	69.7	70.4	71.2
95°	120.8	123.2	125.5	127.0	127.7	128.4	129.0	129.7
97.5°	189.3	191.5	193.7	195.1	195.5	195.9	196.3	196.7
100°	236.8	239.8	242.8	244.7	245.3	246.0	246.7	247.3
102.5°	285.6	288.9	292.1	294.3	295.2	296.1	297.1	298.0
105°	364.5	366.5	368.5	370.0	371.0	372.0	373.0	374.0
107.5°	449.6	450.6	451.6	452.1	452.0	452.0	451.9	451.8
110°	508.8	509.8	510.8	511.1	510.8	510.4	510.1	509.8





TEST NUMBER: P333369

CATALOG NUMBER: S125DIW-S375D1560U835-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	568.0	568.5	568.9	568.9	568.3	567.7	567.1	566.5
115°	658.4	658.1	657.7	657.4	657.1	656.7	656.4	656.1
117.5°	748.9	749.2	749.4	748.9	747.5	746.2	744.9	743.5
120°	809.9	809.9	809.9	809.2	807.9	806.5	805.2	803.9
122.5°	869.7	869.4	869.1	868.5	867.4	866.3	865.2	864.2
125°	957.9	957.2	956.5	956.0	955.7	955.3	955.0	954.7
127.5°	1045.4	1045.1	1044.7	1044.2	1043.5	1042.9	1042.2	1041.5
130°	1103.3	1103.0	1102.6	1102.1	1101.5	1100.8	1100.1	1099.5
132.5°	1158.8	1158.5	1158.1	1157.5	1156.6	1155.6	1154.7	1153.7
135°	1244.2	1244.2	1244.2	1243.6	1242.2	1240.9	1239.5	1238.2
137.5°	1327.4	1327.8	1328.2	1327.6	1325.9	1324.2	1322.5	1320.8
140°	1379.8	1380.5	1381.1	1380.6	1379.0	1377.3	1375.6	1373.9
142.5°	1431.1	1431.5	1432.0	1431.3	1429.6	1428.0	1426.3	1424.6
145°	1505.1	1505.1	1505.1	1504.6	1503.6	1502.6	1501.6	1500.6
147.5°	1573.7	1574.5	1575.3	1574.6	1572.3	1570.0	1567.8	1565.5
150°	1616.8	1616.8	1616.8	1616.4	1615.7	1615.1	1614.4	1613.7
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)