

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: P333366-940

Luminaire Tested: **S125DIW-S375D1560U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333366-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S375D1560U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6866.5 lumens
Efficiency: N/A
Efficacy: 128.6 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

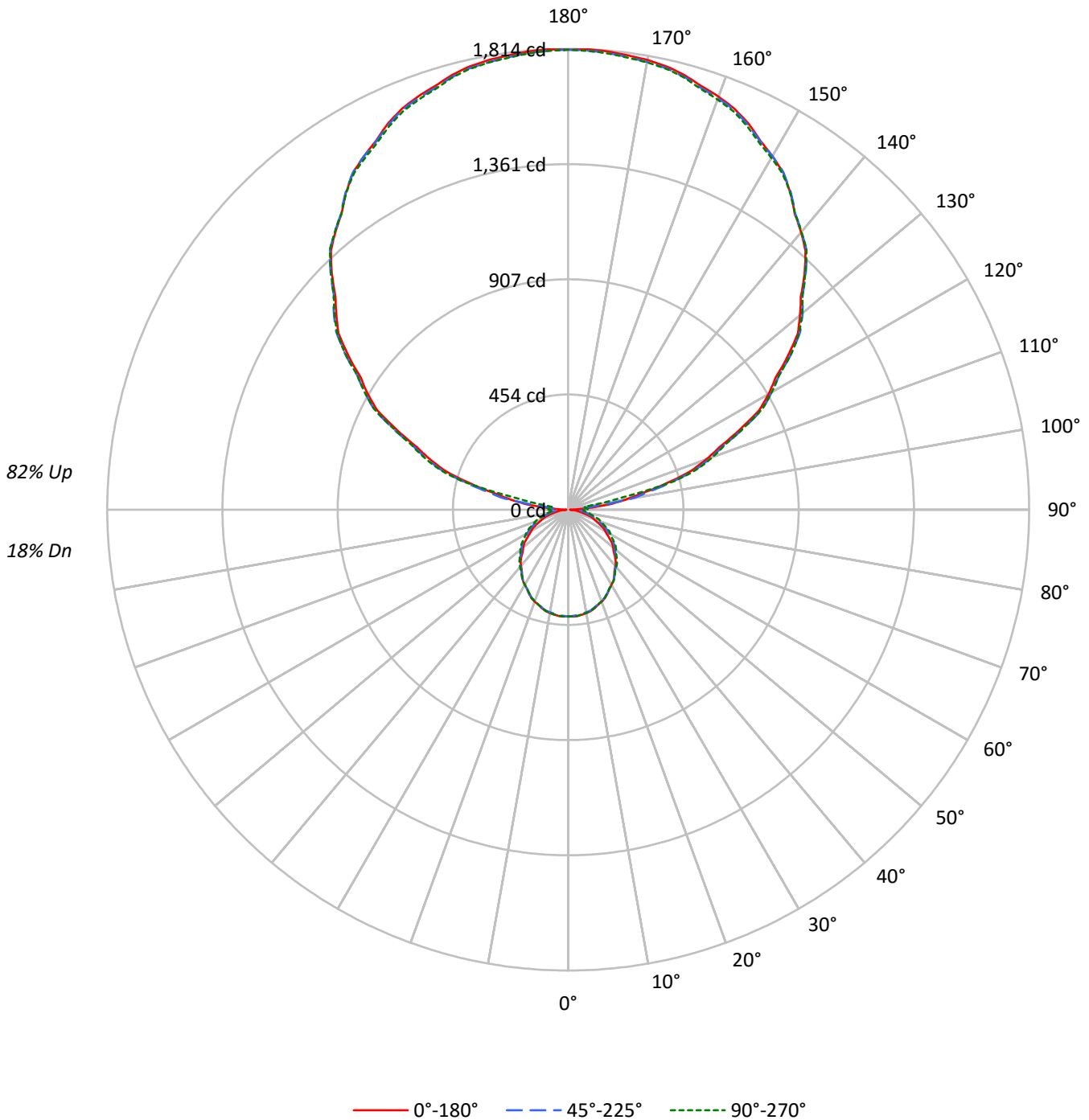
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333366-940

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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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	99	99	99	99	88	88	88	88	65	65	65	45	45	45	27	27	27	18																												
1	90	86	82	79	79	76	73	70	57	55	53	39	38	37	23	22	22	14																												
2	82	75	69	64	72	66	61	57	50	46	43	34	32	31	20	19	18	12																												
3	75	66	59	53	65	58	52	47	44	40	36	30	28	26	18	16	15	10																												
4	68	58	50	45	60	51	45	40	38	34	31	27	24	22	16	14	13	8																												
5	62	51	44	38	55	45	39	34	34	30	26	24	21	19	14	13	11	7																												
6	57	46	38	33	50	41	34	29	31	26	23	21	18	16	13	11	10	6																												
7	53	41	34	28	46	36	30	25	28	23	20	19	16	14	12	10	9	6																												
8	49	37	30	25	43	33	27	22	25	21	17	18	15	12	11	9	8	5																												
9	45	34	27	22	40	30	24	20	23	18	15	16	13	11	10	8	7	5																												
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	7	6	4																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.6
10°-20°	112.8	1.6
20°-30°	167.8	2.4
30°-40°	198.8	2.9
40°-50°	205.5	3.0
50°-60°	189.3	2.8
60°-70°	153.0	2.2
70°-80°	102.5	1.5
80°-90°	56.9	0.8
90°-100°	95.6	1.4
100°-110°	427.6	6.2
110°-120°	750.3	10.9
120°-130°	952.3	13.9
130°-140°	1019.0	14.8
140°-150°	953.8	13.9
150°-160°	770.9	11.2
160°-170°	498.6	7.3
170°-180°	172.0	2.5
0°-30°	320.4	4.7
0°-40°	519.2	7.6
0°-60°	914.0	13.3
0°-90°	1226.4	17.9
90°-120°	1273.5	18.5
90°-150°	4198.5	61.1
90°-180°	5640.0	82.1
0°-180°	6866.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	8	32	55	71	78	8
95°	82	86	52	67	70	102
105°	398	410	423	431	432	422
115°	743	753	765	767	762	737
125°	1055	1064	1073	1074	1072	942
135°	1315	1322	1323	1325	1320	1013
145°	1524	1526	1526	1529	1523	953
155°	1678	1670	1673	1676	1666	773
165°	1771	1763	1764	1771	1761	500
175°	1811	1803	1804	1814	1803	172
180°	1811	1811	1811	1811	1811	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.1	16.5	20.0	23.4	26.8	30.2	33.8	37.3	40.8	44.3	46.7
90°	7.9	13.3	18.5	23.9	29.2	34.4	39.7	44.9	50.0	55.3	58.9
92.5°	26.6	27.6	28.7	29.7	30.8	33.8	38.9	43.9	49.0	53.9	57.5
95°	81.9	83.4	84.8	86.3	87.8	84.4	76.2	68.0	59.7	51.5	55.1
97.5°	164.6	168.4	172.1	175.8	179.6	171.7	152.4	133.0	113.5	94.1	87.6
100°	228.7	231.5	234.3	237.2	240.0	243.4	247.5	251.7	255.8	259.9	217.4
102.5°	293.9	296.8	299.7	302.6	305.5	308.8	312.4	315.9	319.5	323.1	316.5
105°	398.3	401.0	403.7	406.4	409.0	411.7	414.5	417.2	419.9	422.7	424.5
107.5°	506.8	508.1	509.3	510.6	511.8	514.1	517.3	520.6	523.8	527.0	528.9
110°	577.4	578.5	579.6	580.7	581.8	583.9	587.1	590.2	593.4	596.6	597.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	644.0	645.6	647.2	648.8	650.3	652.6	655.4	658.3	661.1	664.0	664.5
115°	743.4	745.6	747.7	749.8	752.0	754.4	757.1	759.7	762.4	765.1	765.5
117.5°	846.4	846.8	847.1	847.5	847.8	849.7	853.1	856.5	859.9	863.3	863.3
120°	910.8	910.8	910.8	910.8	910.7	912.2	915.3	918.2	921.2	924.3	925.1
122.5°	967.4	968.7	969.9	971.2	972.5	974.3	976.8	979.2	981.7	984.1	985.0
125°	1055.4	1057.4	1059.4	1061.4	1063.4	1065.3	1067.1	1069.0	1070.8	1072.6	1072.9
127.5°	1139.0	1140.4	1141.8	1143.2	1144.6	1145.9	1147.3	1148.6	1150.0	1151.3	1151.9
130°	1190.5	1191.9	1193.4	1194.7	1196.1	1197.7	1199.3	1200.8	1202.4	1204.0	1204.3
132.5°	1241.8	1243.5	1245.2	1246.9	1248.6	1249.6	1250.0	1250.3	1250.6	1251.0	1252.1
135°	1315.0	1316.7	1318.4	1320.1	1321.8	1322.7	1322.7	1322.8	1322.8	1322.9	1323.4
137.5°	1382.2	1383.8	1385.3	1386.7	1388.2	1388.8	1388.6	1388.4	1388.1	1387.9	1389.1
140°	1425.9	1426.6	1427.2	1427.8	1428.3	1428.5	1428.3	1428.2	1427.9	1427.7	1429.3
142.5°	1465.7	1466.0	1466.2	1466.6	1466.9	1467.2	1467.7	1468.1	1468.6	1468.9	1469.9
145°	1523.9	1524.5	1525.0	1525.4	1526.0	1526.3	1526.3	1526.3	1526.3	1526.3	1527.0
147.5°	1574.6	1574.4	1574.3	1574.2	1574.0	1574.2	1574.6	1574.9	1575.3	1575.7	1576.1
150°	1606.8	1606.1	1605.6	1605.0	1604.4	1604.4	1605.0	1605.6	1606.1	1606.8	1607.4
152.5°	1637.9	1636.6	1635.3	1634.0	1632.6	1632.3	1632.9	1633.5	1634.1	1634.7	1635.3
155°	1677.9	1676.1	1674.4	1672.6	1670.8	1670.2	1670.8	1671.3	1672.0	1672.6	1673.5
157.5°	1708.8	1707.7	1706.6	1705.6	1704.5	1704.0	1704.1	1704.1	1704.1	1704.2	1705.2
160°	1730.3	1728.5	1726.7	1724.9	1723.1	1722.3	1722.7	1723.0	1723.2	1723.6	1724.7
162.5°	1747.5	1745.7	1743.9	1742.0	1740.3	1739.5	1739.8	1740.2	1740.4	1740.7	1742.4
165°	1770.6	1768.8	1766.9	1765.1	1763.4	1762.6	1762.9	1763.3	1763.5	1763.8	1765.6
167.5°	1787.7	1785.9	1784.0	1782.2	1780.3	1779.6	1779.9	1780.1	1780.5	1780.7	1782.9
170°	1797.4	1795.3	1793.2	1791.1	1789.0	1788.1	1788.4	1788.8	1789.0	1789.3	1791.7
172.5°	1803.8	1801.8	1799.7	1797.6	1795.5	1794.7	1795.3	1795.8	1796.4	1796.9	1799.0
175°	1810.8	1809.0	1807.2	1805.4	1803.7	1803.0	1803.2	1803.5	1803.8	1804.1	1806.5
177.5°	1814.0	1812.6	1811.2	1809.7	1808.3	1807.7	1807.9	1808.2	1808.4	1808.7	1810.4
180°	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	49.1	51.5	53.9	55.6	56.4	57.2	58.1	58.9
90°	62.5	66.1	69.6	72.2	73.7	75.3	76.9	78.4
92.5°	61.0	64.6	68.0	70.4	71.4	72.5	73.5	74.5
95°	58.6	62.1	65.6	67.7	68.3	68.9	69.6	70.3
97.5°	81.1	74.6	68.1	65.2	65.8	66.4	67.1	67.7
100°	174.9	132.3	89.9	68.3	67.6	67.0	66.3	65.7
102.5°	310.0	303.4	296.9	283.7	263.9	244.2	224.4	204.7
105°	426.3	428.2	430.0	431.1	431.4	431.8	432.1	432.5
107.5°	530.7	532.6	534.5	535.3	534.9	534.7	534.3	534.0
110°	598.2	599.1	599.9	600.8	601.8	602.7	603.7	604.6



TEST NUMBER: P333366-940

CATALOG NUMBER: S125DIW-S375D1560U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	665.0	665.6	666.1	666.5	666.7	666.9	667.2	667.4
115°	766.0	766.4	767.0	766.5	765.3	764.0	762.8	761.5
117.5°	863.3	863.3	863.3	863.2	863.1	862.9	862.7	862.6
120°	926.1	927.1	928.1	928.1	927.1	926.2	925.2	924.3
122.5°	985.9	986.8	987.7	987.5	986.3	985.2	984.0	982.8
125°	1073.2	1073.4	1073.7	1073.6	1073.2	1072.7	1072.3	1071.8
127.5°	1152.6	1153.3	1154.1	1153.6	1151.9	1150.2	1148.5	1146.8
130°	1204.7	1205.1	1205.5	1205.1	1204.2	1203.1	1202.1	1201.0
132.5°	1253.2	1254.3	1255.4	1255.4	1254.3	1253.1	1252.1	1251.0
135°	1324.0	1324.6	1325.2	1324.8	1323.5	1322.1	1320.8	1319.5
137.5°	1390.4	1391.5	1392.7	1392.8	1391.5	1390.4	1389.2	1387.9
140°	1430.9	1432.5	1434.1	1434.2	1432.8	1431.4	1429.9	1428.5
142.5°	1470.9	1471.9	1472.8	1472.7	1471.2	1469.8	1468.4	1467.0
145°	1527.8	1528.5	1529.3	1528.9	1527.5	1526.1	1524.6	1523.2
147.5°	1576.6	1577.2	1577.6	1576.9	1574.9	1573.0	1570.9	1569.0
150°	1607.9	1608.6	1609.2	1608.3	1606.1	1603.7	1601.4	1599.1
152.5°	1635.9	1636.5	1637.1	1636.3	1634.1	1632.1	1630.0	1627.8
155°	1674.4	1675.3	1676.1	1675.3	1673.0	1670.6	1668.2	1665.8
157.5°	1706.1	1707.1	1708.1	1707.4	1705.0	1702.5	1700.1	1697.8
160°	1725.9	1727.2	1728.3	1727.8	1725.4	1723.0	1720.6	1718.2
162.5°	1744.1	1745.8	1747.4	1747.0	1744.4	1741.7	1739.1	1736.4
165°	1767.4	1769.2	1771.0	1770.7	1768.4	1765.9	1763.5	1761.1
167.5°	1785.0	1787.2	1789.3	1789.0	1786.4	1783.7	1781.0	1778.3
170°	1794.1	1796.5	1798.8	1798.8	1796.1	1793.4	1790.6	1788.0
172.5°	1801.2	1803.3	1805.4	1805.2	1802.5	1799.8	1797.2	1794.5
175°	1808.8	1811.2	1813.7	1813.5	1810.8	1808.1	1805.4	1802.8
177.5°	1812.0	1813.7	1815.3	1815.3	1813.3	1811.4	1809.5	1807.6
180°	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8	1810.8

(END OF REPORT)