

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: P333367-930

Luminaire Tested: **S125DIW-S375D1560U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333367-930  
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-S375D1560U930-4F0-1E-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: 5602.8 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

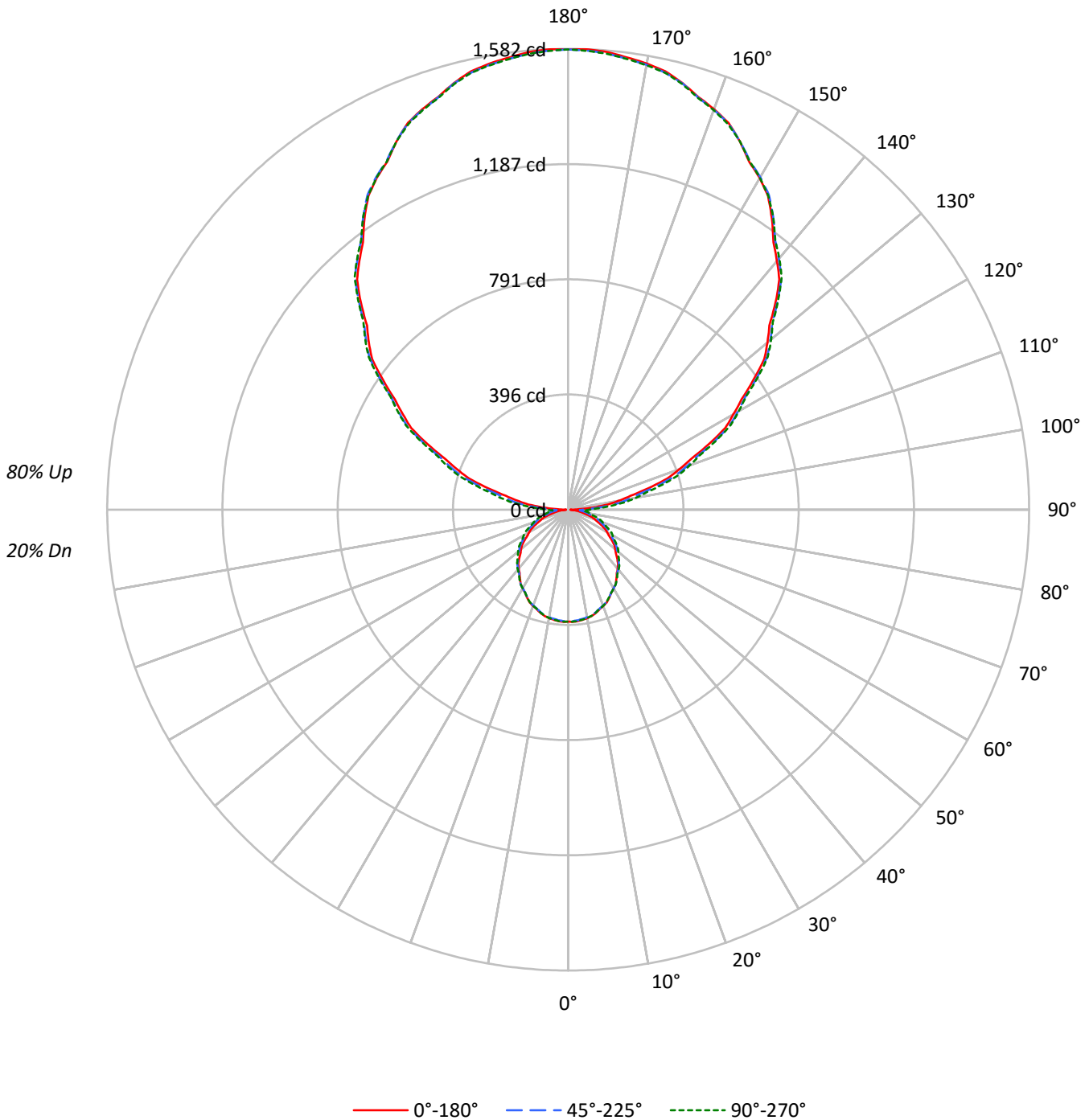
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333367-930

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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°	2482	2482	2482
5°	2487	2436	2444
10°	2469	2393	2389
15°	2440	2341	2319
20°	2401	2276	2249
25°	2354	2207	2164
30°	2296	2132	2086
35°	2243	2062	2014
40°	2189	1989	1942
45°	2127	1926	1878
50°	2069	1858	1821
55°	1998	1793	1756
60°	1921	1720	1687
65°	1842	1644	1612
70°	1750	1538	1534
75°	1605	1438	1437
80°	1417	1316	1333
85°	1239	1232	1299



TEST NUMBER: P333367-930

CATALOG NUMBER: S125DIW-S375D1560U930-4F0-1E-UDD-D1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.3	0.6
10°-20°	103.2	1.8
20°-30°	153.4	2.7
30°-40°	181.7	3.2
40°-50°	187.9	3.4
50°-60°	173.1	3.1
60°-70°	139.9	2.5
70°-80°	93.7	1.7
80°-90°	52.0	0.9
90°-100°	133.1	2.4
100°-110°	332.6	5.9
110°-120°	542.8	9.7
120°-130°	704.3	12.6
130°-140°	783.9	14.0
140°-150°	765.7	13.7
150°-160°	642.6	11.5
160°-170°	427.1	7.6
170°-180°	149.5	2.7
0°-30°	292.9	5.2
0°-40°	474.7	8.5
0°-60°	835.7	14.9
0°-90°	1121.3	20.0
90°-120°	1008.5	18.0
90°-150°	3262.4	58.2
90°-180°	4482.0	80.0
0°-180°	5602.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	384	381	384	384	36
15°	367	367	365	367	366	103
25°	334	334	332	334	332	153
35°	289	291	290	291	291	181
45°	238	242	244	246	247	183
55°	183	189	195	199	200	163
65°	126	134	144	149	151	125
75°	69	79	91	98	101	74
85°	21	33	46	54	58	22
90°	7	29	50	65	72	8
95°	85	98	122	138	144	89
105°	284	296	315	329	336	303
115°	532	540	552	557	559	526
125°	775	782	791	794	795	694
135°	1007	1013	1017	1022	1019	776
145°	1219	1223	1227	1229	1227	762
155°	1394	1394	1396	1400	1394	642
165°	1516	1514	1515	1519	1512	428
175°	1576	1572	1571	1578	1570	150
180°	1580	1580	1580	1580	1580	



TEST NUMBER: P333367-930

CATALOG NUMBER: S125DIW-S375D1560U930-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	385.2	385.1	385.0	384.8	384.7	384.4	383.9	383.4	383.0	382.5	383.0
5°	384.3	384.2	384.0	383.8	383.7	383.3	382.7	382.1	381.6	380.9	381.6
7.5°	380.9	380.9	380.8	380.7	380.7	380.3	379.8	379.1	378.5	377.9	378.5
10°	377.9	377.9	377.9	377.9	377.9	377.6	376.9	376.3	375.6	374.9	375.5
12.5°	373.7	373.8	373.8	373.9	374.0	373.7	373.2	372.7	372.1	371.6	372.0
15°	367.0	367.0	367.1	367.3	367.4	367.0	366.5	365.9	365.3	364.8	365.3
17.5°	358.2	358.4	358.6	358.7	358.9	358.7	358.2	357.5	356.9	356.4	356.8
20°	352.0	352.1	352.3	352.5	352.6	352.4	351.8	351.2	350.7	350.0	350.3
22.5°	344.7	345.0	345.3	345.6	345.9	345.7	345.0	344.4	343.7	343.1	343.4
25°	333.5	333.7	333.9	334.2	334.4	334.4	333.9	333.4	332.8	332.3	332.6
27.5°	321.0	321.3	321.7	322.0	322.5	322.4	321.8	321.2	320.7	320.1	320.2
30°	311.6	312.1	312.6	313.2	313.6	313.6	313.2	312.6	312.1	311.6	311.8
32.5°	303.2	303.6	304.0	304.5	304.9	304.9	304.6	304.2	303.9	303.5	303.6
35°	288.6	289.2	289.8	290.4	291.0	291.1	290.9	290.7	290.4	290.2	290.4
37.5°	274.1	274.6	275.2	275.7	276.2	276.5	276.4	276.3	276.2	276.1	276.5
40°	264.2	264.8	265.5	266.1	266.8	267.1	267.0	266.9	266.8	266.8	267.1
42.5°	253.3	254.1	255.0	255.9	256.7	257.3	257.5	257.6	257.9	258.0	258.4
45°	237.7	238.7	239.6	240.5	241.4	242.1	242.6	243.0	243.4	243.8	244.3
47.5°	221.8	222.7	223.6	224.5	225.3	226.1	226.8	227.5	228.2	228.9	229.8
50°	211.0	211.9	212.9	213.8	214.7	215.6	216.5	217.4	218.3	219.3	220.2
52.5°	199.6	200.6	201.8	202.9	204.1	205.1	206.3	207.4	208.6	209.6	210.7
55°	182.7	184.1	185.4	186.8	188.1	189.5	190.8	192.1	193.5	194.8	195.8
57.5°	165.6	167.1	168.8	170.4	172.0	173.6	175.1	176.7	178.2	179.7	180.8
60°	154.1	155.8	157.4	159.1	160.8	162.5	164.1	165.8	167.5	169.2	170.4
62.5°	142.9	144.6	146.3	148.0	149.7	151.4	153.2	155.0	156.9	158.7	160.0
65°	125.9	127.8	129.7	131.6	133.5	135.5	137.5	139.6	141.5	143.6	144.8
67.5°	109.7	111.6	113.4	115.3	117.2	119.1	121.2	123.2	125.2	127.3	128.8
70°	98.0	99.9	101.8	103.7	105.7	107.7	109.9	112.1	114.2	116.4	118.1
72.5°	86.5	88.5	90.5	92.5	94.5	96.7	99.1	101.4	103.8	106.2	107.9
75°	69.3	71.5	73.7	75.8	78.0	80.5	83.2	85.9	88.5	91.2	92.9
77.5°	52.8	55.4	57.9	60.3	62.9	65.4	68.0	70.6	73.1	75.7	77.6
80°	42.6	45.1	47.6	50.1	52.6	55.3	58.1	61.0	63.8	66.7	68.6
82.5°	33.3	35.9	38.6	41.2	43.8	46.6	49.5	52.4	55.4	58.2	60.0
85°	20.7	23.5	26.3	29.0	31.8	34.7	37.6	40.5	43.5	46.3	48.2
87.5°	12.0	15.1	18.3	21.4	24.5	27.6	30.9	34.1	37.3	40.5	42.7
90°	7.3	12.1	17.0	21.9	26.7	31.6	36.3	41.1	45.8	50.5	53.9
92.5°	35.2	39.2	43.2	47.2	51.2	55.8	61.1	66.4	71.7	76.9	80.6
95°	84.8	87.6	90.3	93.0	95.7	99.9	105.4	111.0	116.6	122.2	126.0
97.5°	137.2	139.4	141.6	143.7	145.9	150.3	156.8	163.3	169.8	176.3	179.9
100°	176.3	178.1	179.8	181.6	183.4	187.4	193.6	199.7	206.0	212.2	216.5
102.5°	218.3	221.0	223.7	226.4	229.2	232.7	237.2	241.6	246.0	250.4	254.8
105°	283.7	286.4	289.2	291.9	294.6	298.0	302.1	306.3	310.5	314.6	317.9
107.5°	356.0	358.6	361.1	363.6	366.1	369.2	372.8	376.5	380.2	383.8	386.4
110°	405.9	408.3	410.7	413.0	415.4	418.2	421.3	424.5	427.7	430.9	433.3



TEST NUMBER: P333367-930

CATALOG NUMBER: S125DIW-S375D1560U930-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	457.1	458.6	460.2	461.6	463.2	465.5	468.9	472.2	475.5	478.8	480.8
115°	532.2	533.9	535.6	537.3	538.9	541.1	543.9	546.6	549.3	552.0	553.3
117.5°	607.6	608.5	609.4	610.3	611.1	612.8	615.4	617.9	620.4	623.1	624.7
120°	654.8	656.4	658.0	659.7	661.3	663.2	665.4	667.6	669.8	672.0	673.4
122.5°	705.6	706.3	706.9	707.5	708.1	709.7	712.2	714.9	717.4	720.0	721.1
125°	774.9	776.5	778.0	779.6	781.1	782.9	784.9	786.8	788.7	790.7	791.5
127.5°	848.3	849.1	850.0	850.8	851.7	853.0	854.7	856.4	858.1	859.8	860.8
130°	892.6	893.9	895.2	896.4	897.7	899.2	900.9	902.7	904.4	906.1	907.0
132.5°	936.5	938.8	941.0	943.2	945.4	947.0	947.8	948.5	949.3	950.1	951.0
135°	1006.6	1008.1	1009.7	1011.2	1012.8	1014.0	1014.9	1015.7	1016.6	1017.4	1018.6
137.5°	1072.4	1073.9	1075.5	1076.9	1078.5	1079.7	1080.6	1081.4	1082.3	1083.2	1084.5
140°	1114.4	1115.7	1117.1	1118.5	1119.9	1121.0	1121.9	1122.8	1123.7	1124.6	1126.1
142.5°	1156.7	1157.8	1158.9	1159.9	1161.0	1162.1	1163.1	1164.2	1165.2	1166.3	1167.4
145°	1219.0	1219.9	1220.9	1222.0	1222.9	1223.8	1224.7	1225.5	1226.3	1227.1	1227.6
147.5°	1276.1	1276.7	1277.2	1277.9	1278.5	1279.1	1279.8	1280.4	1281.1	1281.7	1282.5
150°	1314.4	1314.2	1313.9	1313.6	1313.4	1313.8	1314.8	1316.0	1317.0	1318.2	1318.2
152.5°	1345.9	1346.3	1346.7	1347.0	1347.4	1347.9	1348.3	1348.7	1349.2	1349.6	1350.3
155°	1394.4	1394.4	1394.4	1394.4	1394.4	1394.5	1394.8	1395.1	1395.3	1395.6	1396.7
157.5°	1437.6	1437.0	1436.5	1435.8	1435.3	1435.1	1435.3	1435.7	1435.9	1436.1	1437.3
160°	1463.2	1462.4	1461.6	1460.8	1460.0	1459.7	1460.0	1460.2	1460.5	1460.8	1461.8
162.5°	1485.9	1485.2	1484.7	1484.1	1483.4	1483.2	1483.2	1483.3	1483.4	1483.4	1484.7
165°	1516.1	1515.6	1515.0	1514.5	1513.9	1513.8	1514.1	1514.3	1514.6	1514.9	1516.0
167.5°	1541.6	1540.6	1539.5	1538.4	1537.3	1536.8	1536.8	1536.8	1536.8	1536.8	1538.4
170°	1555.4	1554.4	1553.2	1552.2	1551.1	1550.5	1550.5	1550.5	1550.5	1550.5	1552.2
172.5°	1565.3	1564.2	1563.1	1562.0	1560.9	1560.4	1560.4	1560.4	1560.4	1560.4	1562.0
175°	1576.4	1575.2	1574.2	1573.0	1572.0	1571.4	1571.4	1571.4	1571.4	1571.4	1573.0
177.5°	1582.0	1581.1	1580.3	1579.4	1578.5	1577.9	1577.8	1577.5	1577.3	1577.1	1578.4
180°	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1



TEST NUMBER: P333367-930

CATALOG NUMBER: S125DIW-S375D1560U930-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	383.4	383.9	384.4	384.6	384.5	384.5	384.4	384.3
5°	382.3	382.9	383.6	383.9	383.8	383.8	383.7	383.6
7.5°	379.1	379.7	380.3	380.5	380.4	380.3	380.3	380.2
10°	376.1	376.7	377.2	377.5	377.4	377.3	377.2	377.2
12.5°	372.5	372.9	373.4	373.5	373.3	373.1	372.8	372.7
15°	365.7	366.2	366.7	366.8	366.5	366.2	365.8	365.5
17.5°	357.2	357.5	357.9	358.0	357.8	357.6	357.4	357.2
20°	350.6	350.8	351.1	351.1	351.1	351.1	351.1	351.1
22.5°	343.7	344.1	344.4	344.5	344.2	344.1	343.8	343.6
25°	333.0	333.4	333.7	333.6	333.2	332.8	332.4	332.0
27.5°	320.5	320.7	321.0	321.1	320.9	320.7	320.6	320.4
30°	311.9	312.1	312.3	312.3	312.3	312.2	312.1	312.0
32.5°	303.8	303.9	304.1	304.2	304.1	304.0	303.9	303.9
35°	290.7	290.9	291.1	291.2	291.2	291.2	291.2	291.2
37.5°	276.8	277.1	277.4	277.6	277.6	277.5	277.5	277.4
40°	267.4	267.7	268.2	268.4	268.6	268.7	268.9	269.0
42.5°	258.9	259.3	259.7	259.8	259.9	259.9	259.9	260.0
45°	245.0	245.6	246.1	246.5	246.5	246.6	246.7	246.8
47.5°	230.6	231.5	232.4	232.8	233.1	233.3	233.4	233.6
50°	221.1	222.1	223.0	223.6	223.8	224.0	224.3	224.5
52.5°	211.7	212.6	213.6	214.2	214.3	214.6	214.7	214.9
55°	196.7	197.5	198.5	199.1	199.4	199.7	200.2	200.5
57.5°	181.8	182.9	183.9	184.6	184.8	185.1	185.4	185.6
60°	171.7	172.9	174.2	175.0	175.2	175.5	175.7	175.9
62.5°	161.4	162.8	164.2	165.0	165.3	165.7	166.0	166.3
65°	146.1	147.3	148.5	149.4	149.7	150.0	150.4	150.7
67.5°	130.4	131.8	133.4	134.4	134.8	135.3	135.7	136.1
70°	119.6	121.2	122.8	123.8	124.3	124.8	125.3	125.9
72.5°	109.7	111.4	113.1	114.1	114.5	114.9	115.2	115.6
75°	94.6	96.2	97.9	98.9	99.4	99.8	100.2	100.6
77.5°	79.4	81.3	83.1	84.2	84.5	84.9	85.2	85.5
80°	70.4	72.2	74.0	75.2	75.5	75.8	76.1	76.5
82.5°	61.8	63.6	65.4	66.5	67.2	67.8	68.3	69.0
85°	50.1	51.9	53.7	55.0	55.6	56.3	57.0	57.6
87.5°	44.9	47.1	49.3	50.8	51.6	52.3	53.1	53.8
90°	57.2	60.4	63.8	66.1	67.5	68.9	70.3	71.7
92.5°	84.2	87.9	91.6	94.0	95.1	96.4	97.5	98.7
95°	129.7	133.5	137.2	139.7	140.8	141.9	143.1	144.1
97.5°	183.5	187.0	190.6	192.8	193.7	194.6	195.5	196.4
100°	220.7	224.9	229.1	231.7	232.8	233.8	234.9	235.9
102.5°	259.1	263.5	267.8	270.7	272.0	273.2	274.5	275.7
105°	321.2	324.6	327.8	330.2	331.6	333.0	334.4	335.8
107.5°	388.8	391.3	393.8	395.3	395.7	396.2	396.6	397.1
110°	435.7	438.1	440.5	441.9	442.1	442.5	442.8	443.1





TEST NUMBER: P333367-930

CATALOG NUMBER: S125DIW-S375D1560U930-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	482.7	484.5	486.5	487.5	487.5	487.6	487.7	487.9
115°	554.5	555.7	556.9	557.7	557.9	558.2	558.4	558.6
117.5°	626.3	627.9	629.6	630.1	629.7	629.1	628.6	628.0
120°	674.8	676.2	677.7	678.1	677.5	676.9	676.3	675.7
122.5°	722.2	723.3	724.5	724.9	724.6	724.1	723.7	723.4
125°	792.3	793.0	793.9	794.3	794.5	794.6	794.8	794.9
127.5°	861.7	862.7	863.6	864.1	864.1	864.0	863.9	863.9
130°	907.9	908.8	909.7	910.1	910.0	909.8	909.7	909.5
132.5°	951.9	952.8	953.7	954.0	953.6	953.2	952.8	952.4
135°	1019.6	1020.7	1021.8	1022.0	1021.3	1020.7	1019.9	1019.3
137.5°	1085.8	1087.2	1088.5	1088.6	1087.6	1086.5	1085.5	1084.5
140°	1127.6	1129.0	1130.5	1130.7	1129.7	1128.6	1127.6	1126.6
142.5°	1168.6	1169.6	1170.8	1170.8	1169.8	1168.7	1167.8	1166.7
145°	1228.0	1228.4	1228.8	1228.8	1228.3	1227.8	1227.4	1226.9
147.5°	1283.3	1284.1	1284.9	1284.4	1282.7	1281.0	1279.3	1277.6
150°	1318.2	1318.2	1318.2	1317.9	1317.4	1317.0	1316.5	1316.1
152.5°	1351.0	1351.6	1352.3	1352.1	1351.1	1350.1	1349.2	1348.2
155°	1397.7	1398.9	1400.0	1399.9	1398.5	1397.1	1395.7	1394.4
157.5°	1438.4	1439.5	1440.6	1440.2	1438.4	1436.6	1434.8	1433.0
160°	1463.0	1464.0	1465.2	1465.0	1463.6	1462.2	1460.9	1459.5
162.5°	1486.0	1487.4	1488.7	1488.5	1486.9	1485.3	1483.8	1482.1
165°	1517.0	1518.2	1519.2	1519.0	1517.4	1515.7	1514.1	1512.4
167.5°	1540.0	1541.6	1543.3	1543.3	1541.6	1539.9	1538.2	1536.5
170°	1553.8	1555.4	1557.1	1557.0	1555.0	1553.1	1551.2	1549.3
172.5°	1563.7	1565.3	1566.9	1566.9	1565.2	1563.5	1561.8	1560.2
175°	1574.8	1576.4	1578.0	1577.8	1576.0	1574.0	1572.1	1570.2
177.5°	1579.7	1581.0	1582.3	1582.3	1580.7	1579.2	1577.6	1576.1
180°	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1

(END OF REPORT)