

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: P333679

Luminaire Tested: **S125RDIW-S610D1560U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333679
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: S125RDIW-S610D1560U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7788.6 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

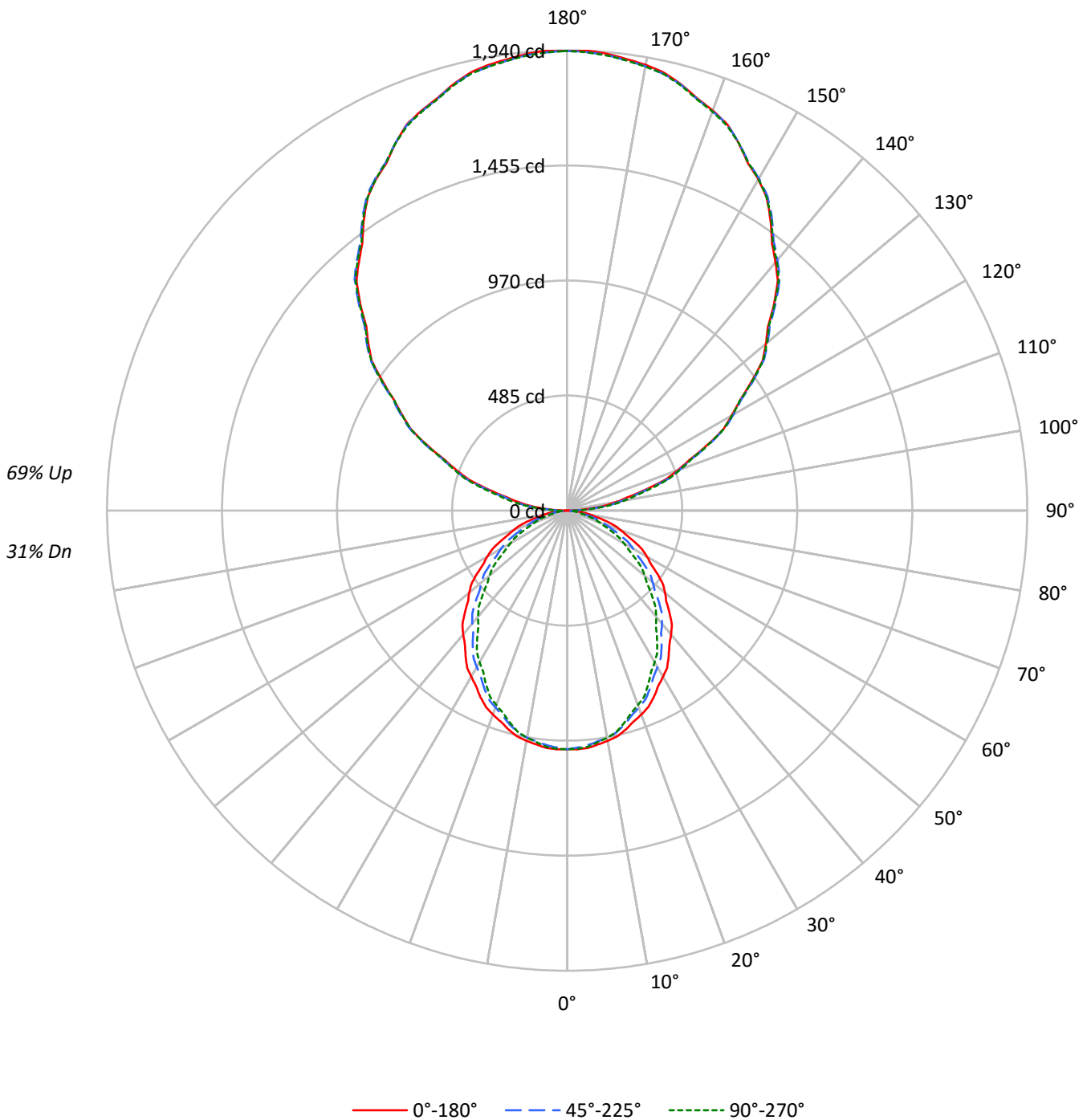
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31				
1	94	89	86	82	84	80	77	75	64	62	60	48	47	46	34	33	33	26				
2	85	78	72	67	76	70	65	61	56	52	50	42	40	38	30	29	28	22				
3	78	69	62	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19				
4	71	61	53	47	64	55	48	43	44	39	36	34	30	28	24	22	20	16				
5	65	54	46	41	58	49	42	37	39	34	31	30	27	24	22	19	18	14				
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	17	16	12				
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11				
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	16	14	12	10				
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9				
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6497	6497	6497
5°	6512	6438	6477
10°	6462	6378	6378
15°	6386	6248	6197
20°	6287	6068	5994
25°	6173	5890	5761
30°	6029	5683	5502
35°	5882	5469	5211
40°	5746	5246	4926
45°	5580	4996	4615
50°	5413	4725	4290
55°	5219	4466	3944
60°	5025	4151	3573
65°	4795	3785	3147
70°	4534	3329	2712
75°	4172	2805	2256
80°	3675	2205	1893
85°	3097	1801	1690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	1.2
10°-20°	264.3	3.4
20°-30°	383.3	4.9
30°-40°	436.9	5.6
40°-50°	425.9	5.5
50°-60°	358.5	4.6
60°-70°	251.3	3.2
70°-80°	129.2	1.7
80°-90°	36.9	0.5
90°-100°	129.8	1.7
100°-110°	383.3	4.9
110°-120°	649.2	8.3
120°-130°	854.4	11.0
130°-140°	957.4	12.3
140°-150°	938.3	12.0
150°-160°	788.1	10.1
160°-170°	523.9	6.7
170°-180°	183.3	2.4
0°-30°	742.3	9.5
0°-40°	1179.2	15.1
0°-60°	1963.5	25.2
0°-90°	2380.8	30.6
90°-120°	1162.3	14.9
90°-150°	3912.5	50.2
90°-180°	5408.0	69.4
0°-180°	7788.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1004	1001	993	1000	999	95
15°	955	950	934	933	927	269
25°	866	854	827	817	808	398
35°	746	727	694	672	661	467
45°	611	588	547	518	505	471
55°	464	438	397	364	350	414
65°	314	287	248	218	206	311
75°	167	144	112	96	90	177
85°	42	29	24	24	23	47
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°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1007.8	1007.4	1007.0	1006.6	1006.2	1005.3	1003.9	1002.6	1001.2	999.9	1001.2
5°	1004.4	1003.8	1003.1	1002.4	1001.7	1000.5	998.6	996.8	994.9	993.0	994.7
7.5°	994.6	993.9	993.3	992.6	992.0	990.6	988.3	986.1	983.9	981.6	982.8
10°	985.4	984.9	984.4	983.9	983.4	982.0	979.6	977.3	974.9	972.5	973.0
12.5°	975.1	974.5	973.8	973.2	972.5	970.6	967.5	964.3	961.1	957.9	958.3
15°	955.1	954.0	953.0	952.0	951.0	948.7	945.2	941.6	938.1	934.5	934.4
17.5°	932.4	930.9	929.3	927.8	926.2	923.2	918.7	914.3	909.8	905.4	904.5
20°	914.8	913.1	911.4	909.7	908.0	904.5	899.1	893.7	888.3	882.9	882.0
22.5°	895.3	893.6	892.0	890.3	888.6	884.9	879.2	873.6	867.9	862.2	860.6
25°	866.2	863.6	861.1	858.6	856.0	851.6	845.4	839.1	832.9	826.6	824.5
27.5°	832.7	829.7	826.6	823.5	820.4	815.6	808.9	802.2	795.5	788.8	785.7
30°	808.4	805.2	802.0	798.8	795.6	790.4	783.3	776.3	769.2	762.1	758.2
32.5°	784.7	781.0	777.2	773.5	769.7	764.2	757.0	749.8	742.5	735.3	731.0
35°	746.1	742.1	738.0	734.0	729.9	724.1	716.5	708.9	701.3	693.7	688.8
37.5°	708.3	703.3	698.4	693.5	688.6	682.2	674.3	666.5	658.7	650.8	645.0
40°	681.5	676.5	671.4	666.3	661.3	654.7	646.6	638.5	630.4	622.3	615.9
42.5°	653.6	648.4	643.2	638.0	632.8	626.0	617.6	609.2	600.9	592.5	586.3
45°	610.9	606.0	601.1	596.2	591.3	584.2	574.9	565.6	556.3	547.0	540.3
47.5°	566.7	561.5	556.3	551.2	546.0	538.7	529.4	520.0	510.7	501.3	494.4
50°	538.7	533.1	527.5	522.0	516.4	508.8	499.2	489.6	479.9	470.3	463.2
52.5°	508.3	502.6	496.9	491.2	485.5	478.1	469.0	459.9	450.8	441.7	434.1
55°	463.5	458.1	452.7	447.3	441.9	434.4	425.0	415.5	406.1	396.6	389.0
57.5°	418.2	412.4	406.6	400.9	395.1	387.6	378.5	369.4	360.3	351.2	343.7
60°	389.0	383.1	377.2	371.3	365.4	357.9	348.7	339.6	330.5	321.4	314.0
62.5°	358.0	352.4	346.7	341.1	335.5	328.0	318.8	309.5	300.3	291.0	284.1
65°	313.8	308.1	302.3	296.6	290.8	283.5	274.5	265.6	256.6	247.7	240.9
67.5°	269.9	264.1	258.4	252.7	246.9	239.8	231.2	222.6	214.0	205.4	199.3
70°	240.1	234.4	228.6	222.9	217.1	210.0	201.6	193.2	184.7	176.3	171.0
72.5°	210.9	205.3	199.7	194.1	188.5	181.7	173.8	165.9	158.0	150.1	145.3
75°	167.2	162.1	157.0	152.0	146.9	140.8	133.7	126.6	119.5	112.4	108.7
77.5°	123.7	119.6	115.6	111.5	107.5	102.6	96.9	91.3	85.6	79.9	77.3
80°	98.8	94.7	90.7	86.6	82.6	78.2	73.4	68.7	64.0	59.3	57.7
82.5°	74.5	70.8	67.2	63.5	59.9	56.4	53.2	49.9	46.7	43.5	42.8
85°	41.8	38.7	35.7	32.7	29.6	27.7	26.8	26.0	25.2	24.3	24.1
87.5°	14.3	13.9	13.5	13.1	12.6	12.6	12.9	13.3	13.6	13.9	14.3
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°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1002.6	1003.9	1005.3	1005.9	1005.8	1005.6	1005.5	1005.4
5°	996.4	998.1	999.8	1000.5	1000.1	999.8	999.5	999.1
7.5°	984.0	985.2	986.4	986.8	986.4	986.0	985.7	985.3
10°	973.5	974.0	974.6	974.6	974.0	973.5	973.0	972.5
12.5°	958.7	959.1	959.4	959.2	958.4	957.7	956.9	956.1
15°	934.2	934.0	933.9	933.0	931.5	930.0	928.5	926.9
17.5°	903.7	902.8	902.0	900.9	899.7	898.4	897.2	895.9
20°	881.2	880.3	879.5	878.3	876.8	875.3	873.8	872.2
22.5°	858.9	857.2	855.6	854.1	852.9	851.6	850.4	849.1
25°	822.3	820.1	817.9	815.8	814.0	812.1	810.3	808.4
27.5°	782.7	779.6	776.5	774.1	772.3	770.5	768.7	766.9
30°	754.3	750.4	746.5	743.8	742.3	740.8	739.3	737.8
32.5°	726.7	722.5	718.2	715.1	713.1	711.2	709.3	707.4
35°	683.9	679.0	674.1	670.5	668.1	665.7	663.4	661.0
37.5°	639.1	633.2	627.3	623.2	620.9	618.7	616.4	614.1
40°	609.4	603.0	596.6	592.4	590.4	588.3	586.3	584.3
42.5°	580.2	574.0	567.9	563.3	560.4	557.4	554.4	551.5
45°	533.5	526.8	520.0	515.4	512.9	510.3	507.8	505.3
47.5°	487.4	480.4	473.5	468.6	465.8	463.0	460.2	457.4
50°	456.1	449.0	441.9	437.1	434.6	432.1	429.5	427.0
52.5°	426.5	418.8	411.2	406.1	403.6	401.1	398.5	396.0
55°	381.4	373.8	366.2	361.1	358.4	355.7	353.0	350.3
57.5°	336.3	328.9	321.5	316.5	314.1	311.7	309.4	307.0
60°	306.5	299.1	291.7	286.7	284.2	281.6	279.1	276.6
62.5°	277.2	270.3	263.4	258.7	256.2	253.7	251.1	248.6
65°	234.2	227.4	220.7	216.0	213.5	211.0	208.4	205.9
67.5°	193.1	186.9	180.7	176.6	174.6	172.6	170.5	168.5
70°	165.8	160.6	155.3	151.7	149.7	147.7	145.6	143.6
72.5°	140.5	135.6	130.8	127.7	126.4	125.0	123.7	122.3
75°	105.0	101.3	97.6	95.1	94.0	92.8	91.6	90.4
77.5°	74.7	72.1	69.5	67.8	66.9	66.0	65.2	64.3
80°	56.2	54.7	53.2	52.3	51.9	51.6	51.2	50.9
82.5°	42.0	41.3	40.6	40.2	40.0	39.8	39.6	39.4
85°	24.0	23.8	23.6	23.5	23.3	23.1	23.0	22.8
87.5°	14.6	14.9	15.3	15.5	15.6	15.6	15.7	15.7
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: P333679

CATALOG NUMBER: S125RDIW-S610D1560U835-4F0-1E-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)