

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: P333678-927

Luminaire Tested: **S125RDIW-S610D1560U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333678-927
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: S125RDIW-S610D1560U927-4F0-1E-UDD-F
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, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6826.1 lumens
Efficiency: N/A
Efficacy: 112.6 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

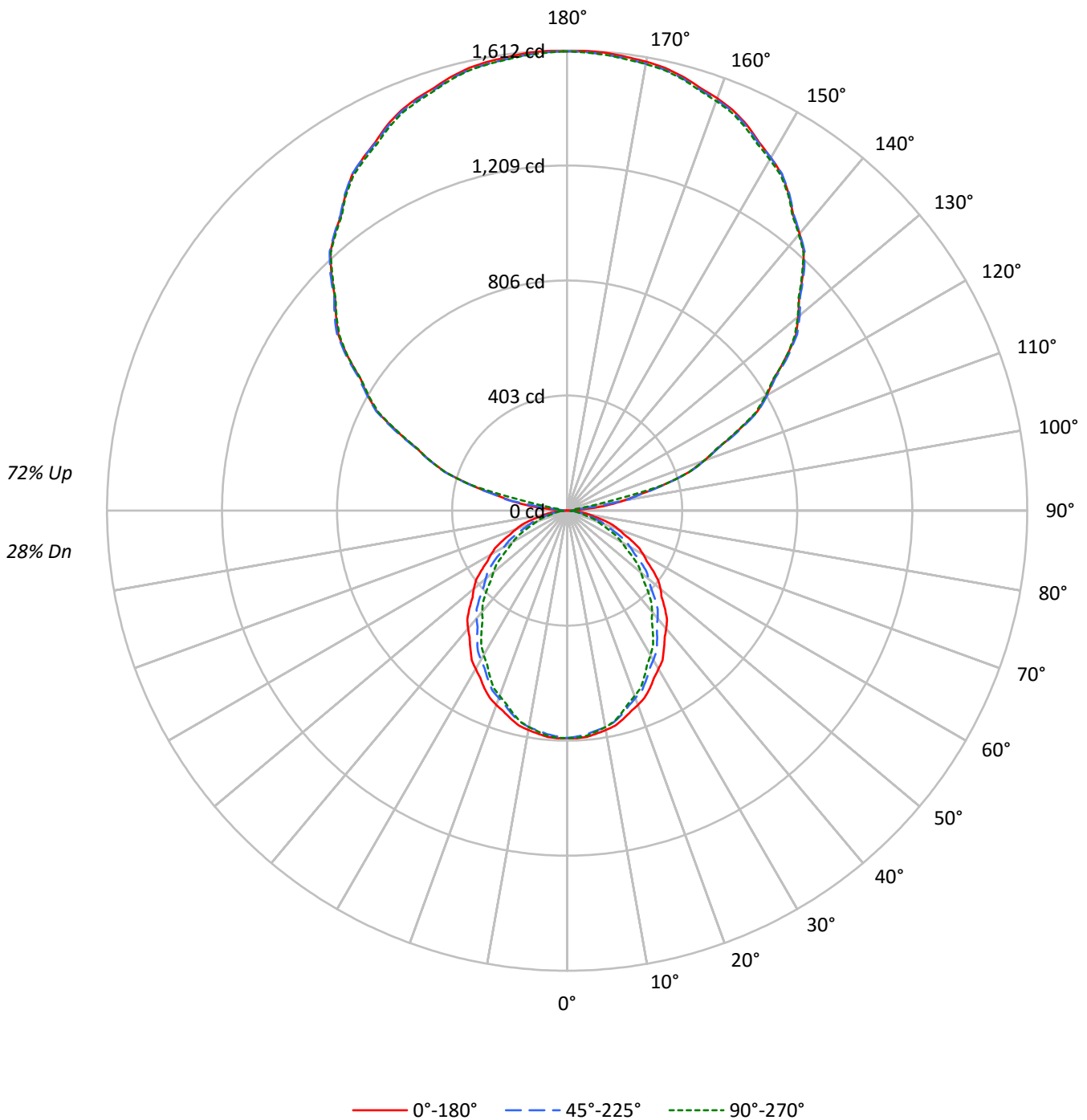
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	36	36	36	28
1	93	89	85	82	83	80	76	74	62	60	58	46	45	44	32	31	30	24
2	85	78	72	67	75	70	65	61	55	51	48	41	39	37	28	27	26	20
3	77	68	61	56	69	61	55	51	48	44	41	36	33	31	25	23	22	17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	22	20	19	15
5	65	54	46	40	58	48	42	37	38	33	30	29	26	23	20	18	16	13
6	60	48	40	35	53	43	37	32	34	29	26	26	23	20	18	16	15	11
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	27	45	35	29	24	28	23	20	22	18	16	15	13	12	9
9	47	36	28	24	42	32	26	22	26	21	18	20	16	14	14	12	10	8
10	44	33	26	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.1
10°-20°	209.4	3.1
20°-30°	303.7	4.4
30°-40°	346.1	5.1
40°-50°	337.4	4.9
50°-60°	284.0	4.2
60°-70°	199.1	2.9
70°-80°	102.3	1.5
80°-90°	29.2	0.4
90°-100°	58.5	0.9
100°-110°	360.3	5.3
110°-120°	653.4	9.6
120°-130°	838.6	12.3
130°-140°	902.0	13.2
140°-150°	846.7	12.4
150°-160°	684.9	10.0
160°-170°	442.9	6.5
170°-180°	152.8	2.2
0°-30°	588.0	8.6
0°-40°	934.1	13.7
0°-60°	1555.4	22.8
0°-90°	1886.0	27.6
90°-120°	1072.2	15.7
90°-150°	3659.5	53.6
90°-180°	4940.0	72.4
0°-180°	6826.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	1	11	19	25	29	4
95°	68	62	19	25	25	87
105°	351	355	355	355	354	372
115°	658	664	665	661	654	652
125°	936	944	944	940	936	836
135°	1167	1174	1172	1170	1163	900
145°	1354	1356	1356	1357	1350	846
155°	1491	1484	1486	1489	1480	686
165°	1573	1566	1567	1573	1565	444
175°	1609	1602	1603	1611	1602	153
180°	1609	1609	1609	1609	1609	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.3	11.0	10.7	10.4	10.0	10.0	10.2	10.5	10.8	11.0	11.3
90°	1.2	3.3	5.5	7.5	9.7	11.6	13.5	15.4	17.2	19.1	20.4
92.5°	18.4	16.9	15.4	13.9	12.4	12.5	14.2	15.8	17.4	19.1	20.4
95°	68.0	67.2	66.4	65.6	64.8	59.3	49.3	39.2	29.2	19.1	20.4
97.5°	141.9	143.3	144.7	146.2	147.7	138.4	118.4	98.5	78.6	58.7	51.2
100°	199.2	199.9	200.7	201.5	202.3	203.3	204.3	205.4	206.4	207.5	168.0
102.5°	257.4	258.3	259.4	260.4	261.3	262.2	262.8	263.5	264.1	264.7	257.3
105°	350.6	351.6	352.8	353.8	354.8	355.4	355.4	355.4	355.4	355.4	355.4
107.5°	447.4	447.4	447.4	447.4	447.4	447.7	448.2	448.8	449.3	449.8	449.9
110°	510.4	510.4	510.4	510.4	510.4	510.6	511.2	511.7	512.2	512.8	512.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	569.6	570.2	570.8	571.5	572.1	572.6	572.9	573.2	573.5	573.9	572.8
115°	658.3	659.6	660.9	662.3	663.5	664.3	664.6	664.9	665.2	665.4	664.3
117.5°	750.1	750.0	750.0	750.0	749.9	750.4	751.4	752.3	753.4	754.4	753.0
120°	807.3	807.1	806.8	806.5	806.3	806.5	807.3	808.1	808.9	809.7	809.2
122.5°	857.9	858.9	859.9	860.9	861.9	862.6	863.0	863.3	863.7	864.1	863.6
125°	936.1	937.9	939.8	941.7	943.6	944.4	944.4	944.4	944.4	944.4	943.4
127.5°	1010.7	1012.1	1013.4	1014.8	1016.1	1016.7	1016.5	1016.4	1016.2	1016.1	1015.4
130°	1056.5	1057.9	1059.2	1060.6	1061.8	1062.6	1063.0	1063.2	1063.4	1063.7	1063.0
132.5°	1102.3	1103.9	1105.4	1107.0	1108.5	1109.0	1108.4	1107.8	1107.2	1106.7	1106.5
135°	1167.4	1169.0	1170.7	1172.3	1173.9	1174.3	1173.9	1173.3	1172.7	1172.3	1171.7
137.5°	1227.3	1228.7	1230.1	1231.4	1232.9	1233.3	1232.8	1232.3	1231.8	1231.4	1231.5
140°	1266.5	1267.0	1267.5	1268.0	1268.6	1268.7	1268.4	1268.2	1267.9	1267.7	1268.2
142.5°	1301.7	1302.0	1302.3	1302.7	1303.0	1303.4	1303.8	1304.1	1304.5	1304.9	1305.0
145°	1353.5	1354.0	1354.6	1355.1	1355.7	1355.9	1355.9	1355.9	1355.9	1355.9	1356.1
147.5°	1398.8	1398.7	1398.6	1398.5	1398.4	1398.5	1398.8	1399.2	1399.5	1399.8	1400.1
150°	1427.4	1426.9	1426.4	1425.8	1425.3	1425.3	1425.8	1426.4	1426.9	1427.4	1428.0
152.5°	1455.1	1454.0	1452.8	1451.6	1450.4	1450.1	1450.6	1451.2	1451.8	1452.2	1452.8
155°	1490.6	1489.1	1487.5	1485.9	1484.3	1483.8	1484.3	1484.8	1485.3	1485.9	1486.7
157.5°	1518.1	1517.1	1516.2	1515.2	1514.3	1513.8	1513.9	1513.9	1513.9	1514.0	1514.9
160°	1537.2	1535.6	1534.0	1532.4	1530.8	1530.1	1530.4	1530.7	1530.9	1531.2	1532.2
162.5°	1552.4	1550.9	1549.3	1547.6	1546.0	1545.4	1545.6	1545.9	1546.2	1546.4	1547.9
165°	1573.0	1571.4	1569.7	1568.1	1566.5	1565.9	1566.1	1566.5	1566.7	1566.9	1568.5
167.5°	1588.2	1586.6	1584.9	1583.3	1581.6	1581.0	1581.2	1581.4	1581.8	1582.0	1583.9
170°	1596.8	1594.9	1593.1	1591.2	1589.4	1588.6	1588.8	1589.1	1589.4	1589.6	1591.7
172.5°	1602.5	1600.7	1598.8	1597.0	1595.1	1594.4	1594.9	1595.4	1595.9	1596.3	1598.2
175°	1608.7	1607.1	1605.5	1603.9	1602.3	1601.7	1602.0	1602.2	1602.5	1602.7	1604.9
177.5°	1611.5	1610.3	1609.0	1607.7	1606.5	1605.9	1606.1	1606.4	1606.5	1606.8	1608.3
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	11.6	11.8	12.1	12.3	12.3	12.4	12.4	12.4
90°	21.7	23.1	24.4	25.4	26.2	27.0	27.8	28.6
92.5°	21.7	23.1	24.4	25.2	25.6	26.0	26.4	26.7
95°	21.7	23.1	24.4	25.0	25.0	25.0	25.0	25.0
97.5°	43.7	36.3	28.8	25.0	25.0	25.0	25.0	25.0
100°	128.5	89.0	49.6	29.3	28.2	27.2	26.1	25.0
102.5°	249.8	242.3	234.9	222.1	204.1	186.1	168.0	150.0
105°	355.4	355.4	355.4	355.2	355.0	354.7	354.4	354.2
107.5°	450.0	450.0	450.0	449.6	448.9	448.1	447.3	446.5
110°	511.2	510.4	509.6	509.4	509.6	509.8	510.2	510.4



TEST NUMBER: P333678-927

CATALOG NUMBER: S125RDIW-S610D1560U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	571.8	570.8	569.8	569.1	568.8	568.4	568.0	567.6
115°	663.3	662.3	661.2	659.9	658.3	656.6	655.1	653.5
117.5°	751.6	750.3	748.8	747.8	747.2	746.5	745.8	745.0
120°	808.7	808.1	807.6	806.7	805.3	804.0	802.7	801.4
122.5°	863.0	862.5	862.0	860.9	859.4	857.9	856.3	854.8
125°	942.4	941.3	940.2	939.3	938.5	937.7	936.9	936.1
127.5°	1014.9	1014.3	1013.7	1012.4	1010.4	1008.5	1006.5	1004.6
130°	1062.2	1061.4	1060.6	1059.5	1058.2	1056.9	1055.5	1054.2
132.5°	1106.4	1106.2	1106.0	1105.3	1104.0	1102.6	1101.3	1099.9
135°	1171.2	1170.7	1170.1	1169.0	1167.4	1165.9	1164.3	1162.7
137.5°	1231.6	1231.7	1231.8	1231.2	1229.8	1228.4	1227.0	1225.7
140°	1268.7	1269.2	1269.8	1269.2	1267.7	1266.1	1264.5	1262.9
142.5°	1305.0	1305.2	1305.3	1304.6	1302.9	1301.3	1299.7	1298.1
145°	1356.5	1356.7	1356.9	1356.3	1354.7	1353.1	1351.5	1350.0
147.5°	1400.4	1400.7	1401.1	1400.3	1398.4	1396.5	1394.6	1392.7
150°	1428.5	1429.0	1429.6	1428.8	1426.6	1424.5	1422.4	1420.3
152.5°	1453.3	1453.8	1454.4	1453.7	1451.8	1449.9	1448.0	1446.0
155°	1487.5	1488.3	1489.1	1488.4	1486.3	1484.2	1482.0	1479.9
157.5°	1515.7	1516.6	1517.4	1516.8	1514.7	1512.5	1510.4	1508.3
160°	1533.3	1534.4	1535.4	1534.9	1532.8	1530.7	1528.5	1526.5
162.5°	1549.4	1550.9	1552.4	1552.0	1549.7	1547.3	1545.0	1542.6
165°	1570.1	1571.8	1573.4	1573.0	1571.0	1568.8	1566.7	1564.6
167.5°	1585.8	1587.7	1589.6	1589.4	1587.0	1584.6	1582.2	1579.8
170°	1593.9	1596.0	1598.1	1598.0	1595.6	1593.2	1590.8	1588.4
172.5°	1600.1	1602.0	1603.9	1603.7	1601.3	1598.9	1596.6	1594.2
175°	1606.9	1609.1	1611.2	1611.1	1608.7	1606.3	1603.9	1601.6
177.5°	1609.8	1611.2	1612.7	1612.6	1610.9	1609.2	1607.5	1605.8
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7

(END OF REPORT)