

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: P333675-830

Luminaire Tested: **S125RDIW-S610D1340U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333675-830
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-S610D1340U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6627.4 lumens
Efficiency: N/A
Efficacy: 123.2 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

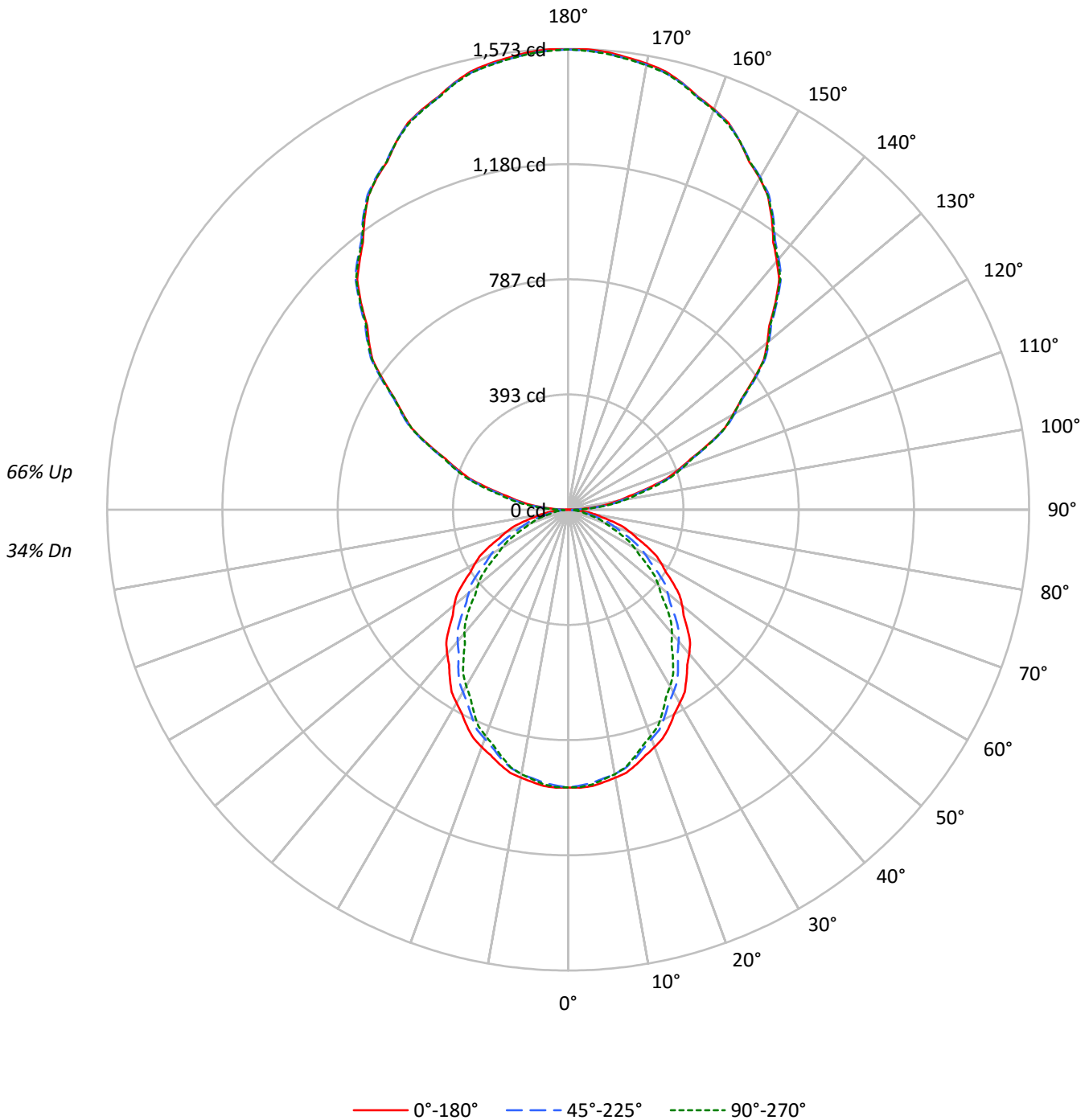
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	76	65	63	61	50	49	48	37	36	35
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	30
3	78	69	62	57	71	63	57	52	51	46	43	39	36	34	29	27	25
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19
6	61	49	41	36	55	45	38	33	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	29	33	28	24	26	22	20	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	14
9	48	36	29	24	44	33	27	23	27	22	19	22	18	16	16	14	12
10	45	33	26	22	41	30	24	20	25	20	17	20	17	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6124	6124	6124
5°	6137	6067	6105
10°	6091	6011	6011
15°	6019	5889	5841
20°	5926	5720	5650
25°	5818	5552	5430
30°	5683	5357	5186
35°	5544	5155	4912
40°	5415	4945	4643
45°	5259	4709	4350
50°	5101	4454	4044
55°	4919	4209	3718
60°	4735	3912	3367
65°	4520	3568	2966
70°	4273	3138	2555
75°	3933	2643	2126
80°	3463	2079	1785
85°	2920	1697	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	1.3
10°-20°	249.2	3.8
20°-30°	361.3	5.5
30°-40°	411.8	6.2
40°-50°	401.4	6.1
50°-60°	337.9	5.1
60°-70°	236.8	3.6
70°-80°	121.7	1.8
80°-90°	34.2	0.5
90°-100°	105.2	1.6
100°-110°	310.7	4.7
110°-120°	526.3	7.9
120°-130°	692.7	10.5
130°-140°	776.1	11.7
140°-150°	760.7	11.5
150°-160°	638.9	9.6
160°-170°	424.7	6.4
170°-180°	148.6	2.2
0°-30°	699.6	10.6
0°-40°	1111.4	16.8
0°-60°	1850.7	27.9
0°-90°	2243.4	33.9
90°-120°	942.3	14.2
90°-150°	3171.8	47.9
90°-180°	4384.0	66.1
0°-180°	6627.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	947	944	936	943	942	90
15°	900	895	881	880	874	254
25°	816	805	779	770	762	375
35°	703	685	654	634	623	440
45°	576	554	516	488	476	444
55°	437	413	374	343	330	391
65°	296	271	234	206	194	293
75°	158	136	106	91	85	167
85°	39	27	23	22	22	44
90°	1	11	20	26	29	6
95°	80	82	94	102	105	85
105°	279	285	292	299	303	298
115°	527	532	534	533	532	521
125°	769	776	778	775	774	688
135°	1000	1007	1009	1008	1004	771
145°	1212	1216	1220	1220	1216	757
155°	1386	1387	1388	1392	1386	638
165°	1508	1505	1506	1510	1504	425
175°	1567	1563	1562	1569	1561	149
180°	1571	1571	1571	1571	1571	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	949.9	949.5	949.1	948.8	948.4	947.5	946.2	945.0	943.7	942.4	943.7
5°	946.7	946.1	945.5	944.8	944.1	943.0	941.2	939.5	937.7	935.9	937.5
7.5°	937.5	936.8	936.2	935.6	935.0	933.7	931.5	929.4	927.4	925.2	926.3
10°	928.8	928.3	927.8	927.4	926.9	925.6	923.3	921.1	918.9	916.6	917.1
12.5°	919.1	918.5	917.8	917.3	916.6	914.8	911.9	908.9	905.9	902.9	903.2
15°	900.2	899.2	898.2	897.3	896.4	894.2	890.9	887.5	884.2	880.8	880.7
17.5°	878.8	877.4	875.9	874.5	873.0	870.2	865.9	861.8	857.5	853.4	852.5
20°	862.2	860.6	859.0	857.4	855.8	852.5	847.4	842.4	837.3	832.2	831.3
22.5°	843.9	842.3	840.7	839.1	837.5	834.1	828.7	823.4	818.0	812.7	811.2
25°	816.4	814.0	811.6	809.3	806.8	802.7	796.8	790.9	785.0	779.1	777.1
27.5°	784.9	782.0	779.1	776.2	773.3	768.7	762.4	756.1	749.8	743.5	740.6
30°	762.0	758.9	755.9	752.9	749.9	745.0	738.3	731.7	725.0	718.3	714.6
32.5°	739.6	736.1	732.5	729.1	725.5	720.3	713.5	706.7	699.8	693.1	689.0
35°	703.2	699.5	695.6	691.8	688.0	682.5	675.3	668.2	661.0	653.8	649.2
37.5°	667.6	662.9	658.3	653.7	649.0	643.0	635.6	628.2	620.9	613.4	607.9
40°	642.3	637.6	632.8	628.0	623.3	617.1	609.4	601.8	594.2	586.5	580.5
42.5°	616.0	611.1	606.2	601.3	596.4	590.0	582.1	574.2	566.4	558.5	552.6
45°	575.8	571.2	566.6	561.9	557.3	550.6	541.9	533.1	524.3	515.6	509.3
47.5°	534.1	529.2	524.3	519.5	514.6	507.7	499.0	490.1	481.4	472.5	466.0
50°	507.7	502.5	497.2	492.0	486.7	479.6	470.5	461.5	452.3	443.3	436.6
52.5°	479.1	473.7	468.3	463.0	457.6	450.6	442.1	433.5	424.9	416.3	409.2
55°	436.9	431.8	426.7	421.6	416.5	409.4	400.6	391.6	382.8	373.8	366.6
57.5°	394.2	388.7	383.2	377.9	372.4	365.3	356.8	348.2	339.6	331.0	324.0
60°	366.6	361.1	355.5	350.0	344.4	337.3	328.7	320.1	311.5	302.9	296.0
62.5°	337.4	332.2	326.8	321.5	316.2	309.2	300.5	291.7	283.0	274.3	267.8
65°	295.8	290.4	284.9	279.6	274.1	267.2	258.7	250.3	241.9	233.5	227.1
67.5°	254.4	248.9	243.6	238.2	232.7	226.0	217.9	209.8	201.7	193.6	187.8
70°	226.3	220.9	215.5	210.1	204.6	197.9	190.0	182.1	174.1	166.2	161.2
72.5°	198.8	193.5	188.2	182.9	177.7	171.3	163.8	156.4	148.9	141.5	137.0
75°	157.6	152.8	148.0	143.3	138.5	132.7	126.0	119.3	112.6	105.9	102.5
77.5°	116.6	112.7	109.0	105.1	101.3	96.7	91.3	86.1	80.7	75.3	72.9
80°	93.1	89.3	85.5	81.6	77.9	73.7	69.2	64.8	60.3	55.9	54.4
82.5°	70.2	66.7	63.3	59.9	56.5	53.2	50.1	47.0	44.0	41.0	40.3
85°	39.4	36.5	33.6	30.8	27.9	26.1	25.3	24.5	23.8	22.9	22.7
87.5°	13.4	13.0	12.5	12.1	11.6	11.5	11.8	12.0	12.3	12.5	12.8
90°	1.2	3.4	5.6	7.7	9.9	12.0	13.9	15.7	17.6	19.6	20.9
92.5°	29.6	31.1	32.6	34.1	35.6	37.6	40.0	42.3	44.6	46.9	48.7
95°	79.5	80.0	80.6	81.1	81.6	83.3	86.0	88.7	91.4	94.2	96.0
97.5°	132.1	132.2	132.5	132.7	132.9	134.9	138.6	142.4	146.2	149.9	151.7
100°	171.2	171.2	171.2	171.2	171.2	173.0	176.4	180.0	183.5	187.1	189.5
102.5°	213.2	214.3	215.4	216.5	217.5	219.0	220.8	222.6	224.4	226.2	228.8
105°	278.8	280.1	281.4	282.9	284.2	285.7	287.3	289.0	290.6	292.2	293.9
107.5°	351.1	352.5	353.8	355.2	356.6	357.9	359.1	360.3	361.7	362.9	363.7
110°	401.1	402.4	403.8	405.1	406.4	407.6	408.4	409.2	410.0	410.8	411.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	451.9	452.6	453.3	454.0	454.7	455.6	456.6	457.6	458.6	459.7	460.1
115°	527.0	528.0	529.1	530.2	531.3	532.2	532.6	533.2	533.8	534.3	534.0
117.5°	602.3	602.8	603.2	603.7	604.3	604.7	605.2	605.7	606.1	606.7	606.9
120°	649.2	650.5	652.0	653.3	654.7	655.4	655.7	656.0	656.3	656.6	656.6
122.5°	700.1	700.6	701.1	701.5	702.0	702.7	703.3	704.1	704.7	705.5	705.2
125°	769.0	770.6	772.3	773.9	775.5	776.5	776.7	777.0	777.3	777.6	777.0
127.5°	842.4	843.3	844.2	845.2	846.1	846.7	847.1	847.3	847.7	848.0	847.7
130°	886.4	887.8	889.1	890.5	891.8	892.8	893.3	893.9	894.4	894.9	894.7
132.5°	930.4	932.6	934.9	937.1	939.3	940.4	940.3	940.2	940.1	940.0	939.7
135°	1000.1	1001.7	1003.3	1005.0	1006.6	1007.6	1007.9	1008.1	1008.4	1008.7	1008.7
137.5°	1065.6	1067.2	1068.8	1070.4	1072.0	1073.0	1073.7	1074.2	1074.9	1075.4	1075.7
140°	1107.7	1109.1	1110.4	1111.8	1113.1	1114.2	1115.0	1115.9	1116.6	1117.5	1118.0
142.5°	1149.8	1150.9	1152.1	1153.2	1154.3	1155.4	1156.4	1157.4	1158.5	1159.5	1159.9
145°	1211.6	1212.7	1213.8	1214.8	1216.0	1216.9	1217.8	1218.5	1219.4	1220.2	1220.2
147.5°	1268.9	1269.4	1270.1	1270.6	1271.2	1271.9	1272.5	1273.2	1273.8	1274.5	1275.2
150°	1307.0	1306.7	1306.5	1306.2	1305.9	1306.3	1307.4	1308.5	1309.6	1310.7	1310.7
152.5°	1338.3	1338.7	1339.1	1339.4	1339.8	1340.2	1340.7	1341.0	1341.5	1342.0	1342.7
155°	1386.5	1386.5	1386.5	1386.5	1386.5	1386.6	1386.9	1387.1	1387.4	1387.7	1388.7
157.5°	1429.5	1428.9	1428.3	1427.7	1427.1	1426.9	1427.2	1427.5	1427.8	1428.0	1429.1
160°	1454.9	1454.2	1453.3	1452.5	1451.7	1451.4	1451.7	1452.0	1452.2	1452.5	1453.6
162.5°	1477.4	1476.9	1476.2	1475.6	1475.1	1474.8	1474.8	1474.9	1474.9	1475.0	1476.3
165°	1507.5	1506.9	1506.4	1505.9	1505.3	1505.2	1505.4	1505.7	1506.0	1506.3	1507.4
167.5°	1533.0	1531.8	1530.8	1529.7	1528.6	1528.0	1528.0	1528.0	1528.0	1528.0	1529.7
170°	1546.6	1545.6	1544.5	1543.4	1542.3	1541.7	1541.7	1541.7	1541.7	1541.7	1543.4
172.5°	1556.4	1555.3	1554.3	1553.1	1552.1	1551.5	1551.5	1551.5	1551.5	1551.5	1553.1
175°	1567.4	1566.3	1565.3	1564.1	1563.1	1562.5	1562.5	1562.5	1562.5	1562.5	1564.1
177.5°	1573.0	1572.2	1571.3	1570.5	1569.5	1569.1	1568.8	1568.6	1568.4	1568.1	1569.4
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	948.2	948.2	948.2	948.2	948.2	948.2	948.2	948.2
2.5°	945.0	946.2	947.5	948.1	948.0	947.8	947.7	947.6
5°	939.1	940.8	942.4	943.0	942.6	942.4	942.1	941.7
7.5°	927.5	928.6	929.7	930.1	929.7	929.3	929.1	928.7
10°	917.6	918.0	918.6	918.6	918.0	917.6	917.1	916.6
12.5°	903.6	904.0	904.3	904.1	903.3	902.7	901.9	901.2
15°	880.5	880.3	880.2	879.4	878.0	876.6	875.2	873.6
17.5°	851.8	850.9	850.2	849.1	848.0	846.8	845.6	844.4
20°	830.6	829.7	829.0	827.8	826.4	825.0	823.6	822.1
22.5°	809.5	807.9	806.4	805.0	803.9	802.7	801.5	800.3
25°	775.1	773.0	770.9	768.9	767.2	765.4	763.7	762.0
27.5°	737.7	734.8	731.9	729.6	727.9	726.2	724.5	722.8
30°	711.0	707.3	703.6	701.1	699.6	698.2	696.8	695.4
32.5°	684.9	681.0	676.9	674.0	672.1	670.3	668.5	666.8
35°	644.6	640.0	635.4	632.0	629.7	627.5	625.3	623.0
37.5°	602.4	596.8	591.3	587.4	585.2	583.2	581.0	578.8
40°	574.4	568.4	562.3	558.4	556.5	554.5	552.6	550.7
42.5°	546.9	541.0	535.3	530.9	528.2	525.4	522.5	519.8
45°	502.8	496.5	490.1	485.8	483.4	481.0	478.6	476.3
47.5°	459.4	452.8	446.3	441.7	439.0	436.4	433.8	431.1
50°	429.9	423.2	416.5	412.0	409.6	407.3	404.8	402.5
52.5°	402.0	394.7	387.6	382.8	380.4	378.1	375.6	373.2
55°	359.5	352.3	345.2	340.4	337.8	335.3	332.7	330.2
57.5°	317.0	310.0	303.0	298.3	296.1	293.8	291.6	289.4
60°	288.9	281.9	274.9	270.2	267.9	265.4	263.1	260.7
62.5°	261.3	254.8	248.3	243.8	241.5	239.1	236.7	234.3
65°	220.7	214.3	208.0	203.6	201.2	198.9	196.4	194.1
67.5°	182.0	176.2	170.3	166.5	164.6	162.7	160.7	158.8
70°	156.3	151.4	146.4	143.0	141.1	139.2	137.2	135.3
72.5°	132.4	127.8	123.3	120.4	119.1	117.8	116.6	115.3
75°	99.0	95.5	92.0	89.6	88.6	87.5	86.3	85.2
77.5°	70.4	68.0	65.5	63.9	63.1	62.2	61.5	60.6
80°	53.0	51.6	50.1	49.3	48.9	48.6	48.3	48.0
82.5°	39.6	38.9	38.3	37.9	37.7	37.5	37.3	37.1
85°	22.6	22.4	22.2	22.1	22.0	21.8	21.7	21.5
87.5°	13.0	13.3	13.6	13.8	13.8	13.9	13.9	13.9
90°	22.2	23.7	25.0	26.1	26.9	27.7	28.6	29.3
92.5°	50.5	52.3	54.1	55.3	55.9	56.6	57.1	57.7
95°	97.9	99.8	101.8	102.9	103.5	104.1	104.6	105.2
97.5°	153.4	155.2	157.0	158.2	158.4	158.8	159.1	159.5
100°	192.0	194.4	196.8	198.3	198.9	199.4	200.0	200.5
102.5°	231.5	234.1	236.9	238.6	239.3	240.1	240.8	241.6
105°	295.5	297.1	298.7	299.9	300.8	301.6	302.4	303.2
107.5°	364.5	365.3	366.2	366.6	366.5	366.4	366.4	366.3
110°	412.5	413.2	414.1	414.3	414.1	413.8	413.5	413.2



TEST NUMBER: P333675-830

CATALOG NUMBER: S125RDIW-S610D1340U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	460.4	460.8	461.2	461.2	460.7	460.2	459.7	459.2
115°	533.8	533.5	533.2	532.9	532.6	532.3	532.2	531.9
117.5°	607.1	607.3	607.6	607.1	606.1	604.9	603.9	602.8
120°	656.6	656.6	656.6	656.0	654.9	653.8	652.7	651.7
122.5°	705.0	704.8	704.6	704.1	703.1	702.3	701.4	700.6
125°	776.5	776.0	775.4	775.1	774.8	774.5	774.2	773.9
127.5°	847.4	847.2	847.0	846.5	846.0	845.5	844.9	844.3
130°	894.4	894.2	893.9	893.4	893.0	892.4	891.8	891.3
132.5°	939.4	939.1	938.9	938.4	937.6	936.8	936.0	935.3
135°	1008.7	1008.7	1008.7	1008.1	1007.0	1006.0	1004.8	1003.8
137.5°	1076.1	1076.4	1076.8	1076.2	1074.9	1073.5	1072.1	1070.8
140°	1118.6	1119.1	1119.6	1119.3	1117.9	1116.5	1115.2	1113.8
142.5°	1160.2	1160.6	1160.8	1160.4	1159.0	1157.6	1156.2	1154.9
145°	1220.2	1220.2	1220.2	1219.7	1219.0	1218.1	1217.3	1216.5
147.5°	1275.7	1276.4	1277.1	1276.5	1274.6	1272.8	1270.9	1269.1
150°	1310.7	1310.7	1310.7	1310.4	1309.9	1309.3	1308.7	1308.2
152.5°	1343.2	1343.9	1344.5	1344.4	1343.4	1342.5	1341.4	1340.5
155°	1389.9	1390.9	1392.0	1391.9	1390.5	1389.2	1387.8	1386.5
157.5°	1430.2	1431.3	1432.4	1432.0	1430.2	1428.4	1426.6	1424.8
160°	1454.6	1455.8	1456.8	1456.7	1455.4	1454.0	1452.6	1451.2
162.5°	1477.6	1478.8	1480.2	1480.1	1478.5	1476.9	1475.4	1473.8
165°	1508.4	1509.6	1510.6	1510.3	1508.7	1507.1	1505.4	1503.8
167.5°	1531.3	1533.0	1534.6	1534.6	1532.9	1531.2	1529.5	1527.8
170°	1545.0	1546.6	1548.2	1548.1	1546.2	1544.4	1542.4	1540.5
172.5°	1554.8	1556.4	1558.0	1558.0	1556.3	1554.6	1552.9	1551.2
175°	1565.8	1567.4	1569.1	1568.9	1567.0	1565.1	1563.2	1561.3
177.5°	1570.7	1572.1	1573.4	1573.3	1571.7	1570.2	1568.7	1567.2
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1

(END OF REPORT)