

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: P333679-830

Luminaire Tested: **S125RDIW-S610D1560U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333679-830
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-S610D1560U830-4F0-1E-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: 7341.1 lumens
Efficiency: N/A
Efficacy: 121.1 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

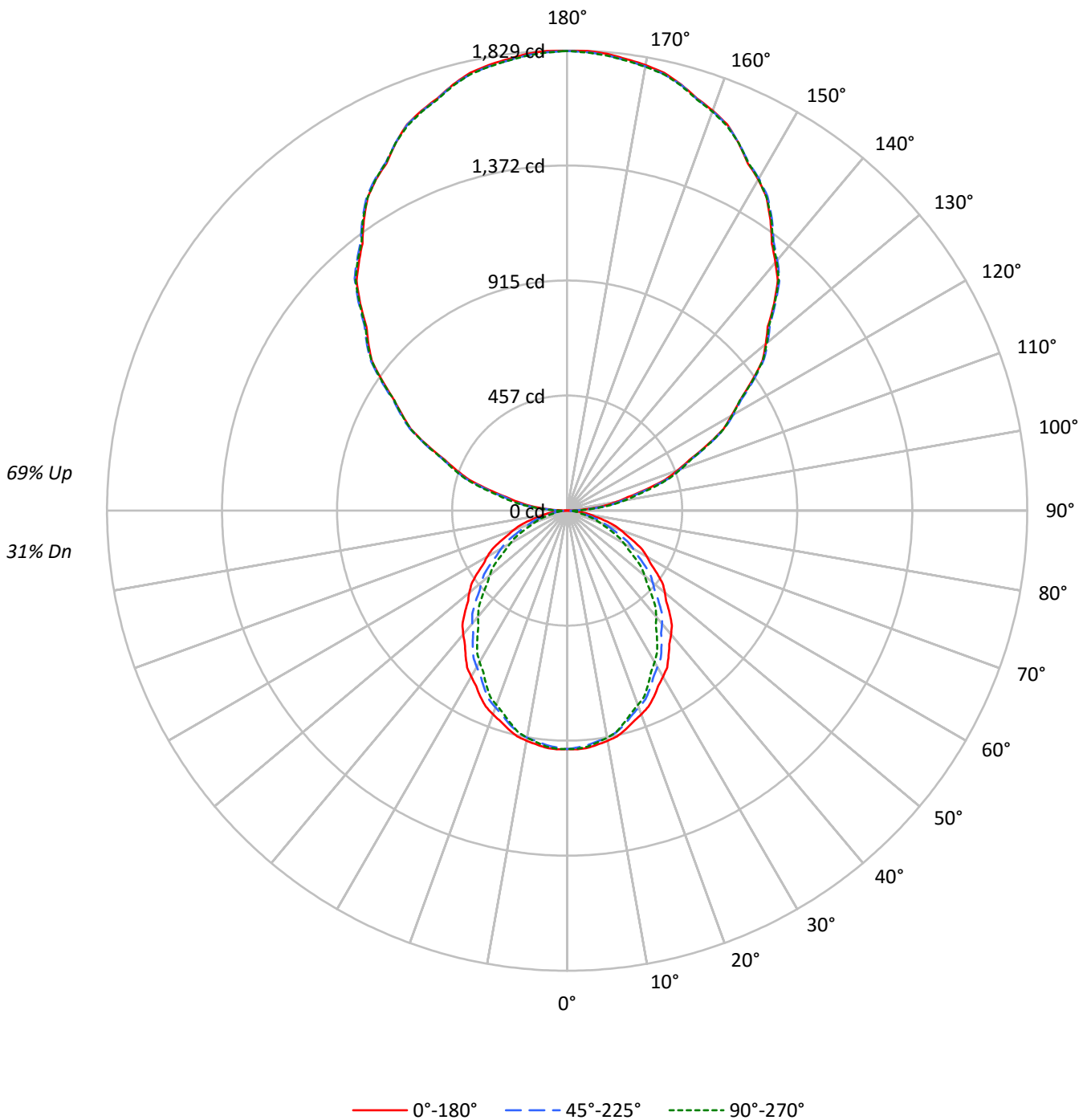
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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	1.2
10°-20°	249.2	3.4
20°-30°	361.3	4.9
30°-40°	411.8	5.6
40°-50°	401.4	5.5
50°-60°	337.9	4.6
60°-70°	236.8	3.2
70°-80°	121.7	1.7
80°-90°	34.7	0.5
90°-100°	122.3	1.7
100°-110°	361.3	4.9
110°-120°	611.9	8.3
120°-130°	805.3	11.0
130°-140°	902.4	12.3
140°-150°	884.4	12.0
150°-160°	742.8	10.1
160°-170°	493.8	6.7
170°-180°	172.8	2.4
0°-30°	699.6	9.5
0°-40°	1111.4	15.1
0°-60°	1850.7	25.2
0°-90°	2244.0	30.6
90°-120°	1095.5	14.9
90°-150°	3687.7	50.2
90°-180°	5097.0	69.4
0°-180°	7341.1	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	13	23	30	34	7
95°	92	96	109	119	122	99
105°	324	331	340	348	352	346
115°	613	618	621	620	618	606
125°	894	902	904	901	900	800
135°	1163	1171	1173	1172	1167	896
145°	1409	1414	1419	1418	1414	880
155°	1612	1612	1613	1618	1612	742
165°	1753	1750	1751	1756	1748	494
175°	1822	1817	1817	1824	1815	173
180°	1827	1827	1827	1827	1827	



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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°	13.5	13.1	12.7	12.3	11.9	11.9	12.2	12.5	12.8	13.1	13.5
90°	1.4	4.0	6.5	9.0	11.5	13.9	16.1	18.3	20.5	22.7	24.3
92.5°	34.4	36.2	38.0	39.7	41.5	43.7	46.5	49.1	51.8	54.6	56.6
95°	92.4	93.0	93.7	94.3	94.9	96.8	100.0	103.1	106.3	109.4	111.7
97.5°	153.5	153.7	154.0	154.3	154.6	156.8	161.2	165.6	169.9	174.3	176.3
100°	199.0	199.0	199.0	199.0	199.0	201.0	205.2	209.2	213.4	217.4	220.4
102.5°	247.9	249.2	250.4	251.7	253.0	254.7	256.7	258.8	260.9	263.0	266.1
105°	324.1	325.6	327.3	328.9	330.5	332.2	334.0	335.9	337.8	339.8	341.7
107.5°	408.2	409.8	411.4	413.0	414.5	416.1	417.5	419.0	420.5	421.9	422.8
110°	466.3	467.9	469.4	471.0	472.6	473.8	474.8	475.7	476.6	477.6	478.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	525.4	526.2	527.1	527.8	528.7	529.7	530.8	532.1	533.3	534.5	534.9
115°	612.7	614.0	615.2	616.4	617.7	618.7	619.3	619.9	620.6	621.2	620.9
117.5°	700.2	700.8	701.3	701.9	702.5	703.0	703.6	704.2	704.7	705.4	705.6
120°	754.8	756.4	758.0	759.6	761.1	762.0	762.4	762.7	763.0	763.4	763.4
122.5°	814.0	814.5	815.1	815.7	816.2	816.9	817.7	818.6	819.4	820.2	819.9
125°	894.1	896.0	898.0	899.8	901.7	902.9	903.1	903.4	903.8	904.1	903.4
127.5°	979.4	980.5	981.6	982.6	983.7	984.5	984.9	985.2	985.6	986.0	985.6
130°	1030.6	1032.2	1033.8	1035.3	1036.9	1038.0	1038.7	1039.2	1039.9	1040.6	1040.2
132.5°	1081.8	1084.4	1086.9	1089.6	1092.1	1093.3	1093.3	1093.1	1093.0	1092.9	1092.5
135°	1162.8	1164.7	1166.6	1168.5	1170.4	1171.5	1171.8	1172.1	1172.4	1172.7	1172.7
137.5°	1239.0	1240.9	1242.6	1244.4	1246.3	1247.5	1248.3	1249.0	1249.6	1250.4	1250.8
140°	1287.9	1289.5	1291.0	1292.6	1294.2	1295.4	1296.4	1297.4	1298.4	1299.3	1299.9
142.5°	1336.8	1338.1	1339.4	1340.8	1342.1	1343.3	1344.5	1345.8	1347.0	1348.1	1348.5
145°	1408.7	1409.9	1411.3	1412.5	1413.8	1414.9	1415.8	1416.7	1417.7	1418.6	1418.6
147.5°	1475.3	1475.9	1476.6	1477.3	1478.0	1478.8	1479.5	1480.3	1481.0	1481.8	1482.5
150°	1519.6	1519.3	1519.0	1518.6	1518.3	1518.8	1520.0	1521.4	1522.6	1523.9	1523.9
152.5°	1555.9	1556.4	1556.9	1557.3	1557.7	1558.2	1558.8	1559.2	1559.7	1560.3	1561.0
155°	1612.0	1612.0	1612.0	1612.0	1612.0	1612.1	1612.5	1612.8	1613.1	1613.4	1614.7
157.5°	1662.0	1661.3	1660.7	1659.9	1659.3	1659.1	1659.3	1659.7	1660.0	1660.3	1661.6
160°	1691.6	1690.6	1689.7	1688.8	1687.8	1687.5	1687.8	1688.1	1688.5	1688.8	1690.0
162.5°	1717.8	1717.0	1716.4	1715.7	1715.0	1714.7	1714.7	1714.8	1714.9	1714.9	1716.5
165°	1752.8	1752.1	1751.4	1750.9	1750.2	1750.0	1750.4	1750.7	1751.0	1751.3	1752.6
167.5°	1782.3	1781.0	1779.8	1778.5	1777.3	1776.6	1776.6	1776.6	1776.6	1776.6	1778.5
170°	1798.2	1797.0	1795.6	1794.4	1793.2	1792.5	1792.5	1792.5	1792.5	1792.5	1794.4
172.5°	1809.6	1808.4	1807.0	1805.8	1804.5	1803.9	1803.9	1803.9	1803.9	1803.9	1805.8
175°	1822.4	1821.1	1819.9	1818.5	1817.3	1816.7	1816.7	1816.7	1816.7	1816.7	1818.5
177.5°	1828.9	1827.9	1826.9	1825.9	1824.9	1824.2	1824.0	1823.7	1823.4	1823.3	1824.8
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6



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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°	13.8	14.0	14.4	14.6	14.7	14.7	14.8	14.8
90°	25.9	27.5	29.0	30.3	31.3	32.2	33.2	34.1
92.5°	58.7	60.8	63.0	64.3	65.0	65.7	66.4	67.1
95°	113.9	116.1	118.3	119.7	120.4	121.0	121.6	122.2
97.5°	178.4	180.5	182.6	183.9	184.3	184.6	185.0	185.4
100°	223.2	226.0	228.8	230.6	231.2	231.9	232.5	233.1
102.5°	269.2	272.3	275.3	277.4	278.2	279.1	280.0	280.9
105°	343.6	345.4	347.3	348.7	349.7	350.6	351.6	352.5
107.5°	423.8	424.7	425.7	426.1	426.0	426.0	425.9	425.8
110°	479.6	480.5	481.5	481.7	481.5	481.1	480.8	480.5



TEST NUMBER: P333679-830

CATALOG NUMBER: S125RDIW-S610D1560U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	535.4	535.8	536.2	536.2	535.6	535.1	534.5	534.0
115°	620.6	620.3	619.9	619.6	619.3	619.0	618.7	618.4
117.5°	705.9	706.2	706.3	705.9	704.6	703.3	702.1	700.8
120°	763.4	763.4	763.4	762.7	761.5	760.2	758.9	757.7
122.5°	819.7	819.4	819.2	818.6	817.6	816.5	815.5	814.5
125°	902.9	902.2	901.5	901.1	900.8	900.4	900.1	899.8
127.5°	985.3	985.1	984.7	984.2	983.5	983.0	982.3	981.7
130°	1039.9	1039.6	1039.2	1038.8	1038.2	1037.6	1036.9	1036.3
132.5°	1092.2	1091.9	1091.6	1091.0	1090.1	1089.2	1088.4	1087.4
135°	1172.7	1172.7	1172.7	1172.1	1170.8	1169.6	1168.3	1167.1
137.5°	1251.1	1251.5	1251.9	1251.3	1249.7	1248.1	1246.5	1244.9
140°	1300.5	1301.2	1301.7	1301.3	1299.8	1298.2	1296.6	1295.0
142.5°	1348.9	1349.2	1349.7	1349.1	1347.5	1346.0	1344.3	1342.7
145°	1418.6	1418.6	1418.6	1418.1	1417.2	1416.3	1415.3	1414.4
147.5°	1483.3	1484.0	1484.8	1484.1	1482.0	1479.8	1477.7	1475.6
150°	1523.9	1523.9	1523.9	1523.5	1522.9	1522.3	1521.6	1521.0
152.5°	1561.8	1562.5	1563.3	1563.1	1562.0	1560.9	1559.7	1558.6
155°	1615.9	1617.2	1618.4	1618.3	1616.7	1615.1	1613.5	1612.0
157.5°	1662.8	1664.2	1665.4	1665.0	1662.8	1660.8	1658.7	1656.6
160°	1691.3	1692.5	1693.8	1693.7	1692.1	1690.5	1688.9	1687.3
162.5°	1718.0	1719.5	1721.0	1720.8	1719.0	1717.1	1715.3	1713.4
165°	1753.8	1755.1	1756.3	1756.1	1754.2	1752.3	1750.4	1748.4
167.5°	1780.4	1782.3	1784.1	1784.1	1782.2	1780.3	1778.3	1776.3
170°	1796.3	1798.2	1800.1	1800.0	1797.7	1795.5	1793.3	1791.1
172.5°	1807.7	1809.6	1811.5	1811.5	1809.5	1807.5	1805.5	1803.6
175°	1820.5	1822.4	1824.3	1824.1	1821.9	1819.7	1817.5	1815.2
177.5°	1826.3	1827.8	1829.3	1829.2	1827.4	1825.6	1823.8	1822.1
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6

(END OF REPORT)