

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: P333542-830

Luminaire Tested: **S125RDIP-S610D1035U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333542-830  
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: S125RDIP-S610D1035U830-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5616.7 lumens  
Efficiency: N/A  
Efficacy: 126.2 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

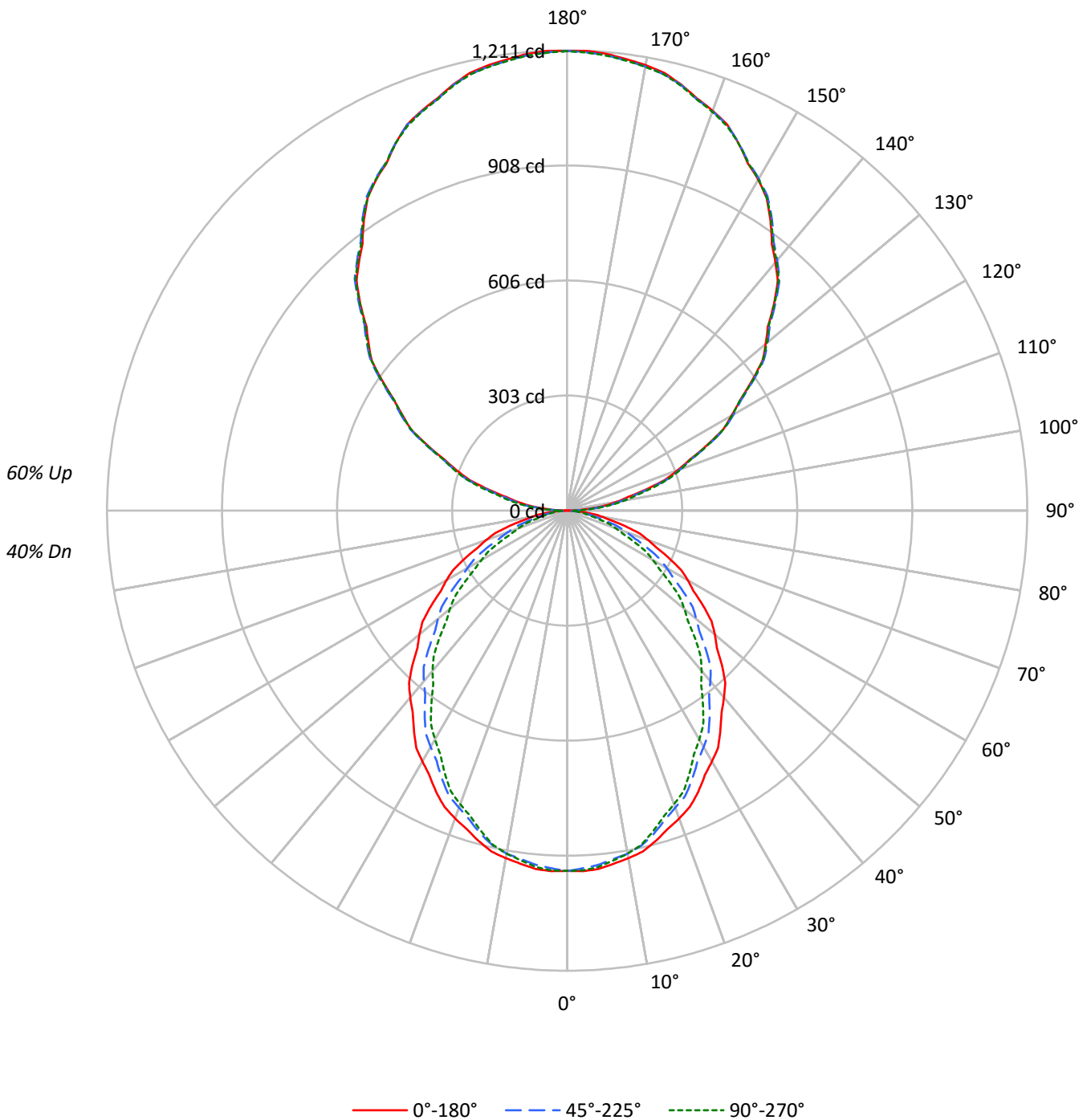
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	84	87	83	80	77	68	66	64	54	53	52	42	41	40	34
2	87	80	74	69	79	73	68	64	60	56	53	48	46	43	37	35	34	29
3	80	70	63	58	72	64	58	53	53	49	45	43	39	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	34	32	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	27	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	35	30	35	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	17	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	1.6
10°-20°	249.2	4.4
20°-30°	361.3	6.4
30°-40°	411.8	7.3
40°-50°	401.4	7.1
50°-60°	337.9	6.0
60°-70°	236.8	4.2
70°-80°	121.7	2.2
80°-90°	33.4	0.6
90°-100°	81.0	1.4
100°-110°	239.1	4.3
110°-120°	405.1	7.2
120°-130°	533.1	9.5
130°-140°	597.3	10.6
140°-150°	585.5	10.4
150°-160°	491.7	8.8
160°-170°	326.9	5.8
170°-180°	114.4	2.0
0°-30°	699.6	12.5
0°-40°	1111.4	19.8
0°-60°	1850.7	32.9
0°-90°	2242.6	39.9
90°-120°	725.2	12.9
90°-150°	2441.1	43.5
90°-180°	3374.0	60.1
0°-180°	5616.7	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	8	15	20	23	5
95°	61	64	72	79	81	65
105°	214	219	225	230	233	229
115°	406	409	411	410	409	401
125°	592	597	598	597	596	530
135°	770	775	776	776	772	593
145°	933	936	939	939	936	583
155°	1067	1067	1068	1071	1067	491
165°	1160	1159	1159	1162	1157	327
175°	1206	1203	1203	1208	1202	115
180°	1209	1209	1209	1209	1209	



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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	12.8	12.3	11.7	11.1	10.9	11.1	11.3	11.4	11.6	11.8
90°	0.9	2.6	4.2	5.9	7.6	9.2	10.7	12.2	13.6	15.1	16.1
92.5°	22.8	23.9	25.1	26.3	27.4	28.9	30.7	32.5	34.3	36.1	37.5
95°	61.2	61.5	62.0	62.4	62.9	64.1	66.2	68.2	70.4	72.5	73.9
97.5°	101.6	101.8	102.0	102.2	102.3	103.9	106.7	109.6	112.4	115.4	116.8
100°	131.8	131.8	131.8	131.8	131.8	133.1	135.8	138.6	141.3	143.9	145.8
102.5°	164.1	164.9	165.8	166.6	167.5	168.5	169.9	171.4	172.7	174.1	176.2
105°	214.5	215.6	216.6	217.7	218.8	219.9	221.1	222.3	223.7	224.9	226.1
107.5°	270.2	271.3	272.3	273.4	274.5	275.4	276.4	277.4	278.3	279.3	279.9
110°	308.7	309.7	310.8	311.8	312.8	313.7	314.2	314.9	315.6	316.1	316.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	347.8	348.4	348.8	349.4	350.0	350.6	351.5	352.2	353.0	353.8	354.1
115°	405.6	406.4	407.3	408.1	408.9	409.5	409.9	410.4	410.8	411.2	411.0
117.5°	463.5	463.9	464.3	464.7	465.1	465.4	465.8	466.2	466.6	466.9	467.1
120°	499.6	500.7	501.7	502.8	503.9	504.4	504.6	504.9	505.1	505.3	505.3
122.5°	538.9	539.2	539.6	540.0	540.4	540.7	541.3	541.9	542.4	542.9	542.8
125°	591.9	593.1	594.4	595.7	596.9	597.7	597.9	598.0	598.2	598.5	598.0
127.5°	648.4	649.0	649.8	650.4	651.2	651.7	652.0	652.1	652.4	652.7	652.4
130°	682.2	683.2	684.3	685.3	686.4	687.1	687.6	688.0	688.3	688.8	688.6
132.5°	716.0	717.8	719.5	721.2	722.9	723.8	723.7	723.6	723.5	723.4	723.2
135°	769.8	771.0	772.2	773.5	774.8	775.5	775.7	775.9	776.1	776.3	776.3
137.5°	820.2	821.3	822.6	823.8	825.0	825.9	826.3	826.8	827.3	827.6	827.9
140°	852.5	853.6	854.6	855.6	856.7	857.5	858.2	858.8	859.4	860.1	860.4
142.5°	884.9	885.8	886.6	887.5	888.4	889.3	890.0	890.9	891.6	892.4	892.7
145°	932.6	933.4	934.2	935.0	935.9	936.6	937.3	937.8	938.5	939.1	939.1
147.5°	976.6	977.0	977.5	978.0	978.4	978.9	979.4	979.9	980.3	980.9	981.4
150°	1005.9	1005.7	1005.5	1005.3	1005.1	1005.4	1006.3	1007.1	1007.9	1008.7	1008.7
152.5°	1030.0	1030.3	1030.6	1030.9	1031.1	1031.5	1031.8	1032.2	1032.5	1032.8	1033.3
155°	1067.1	1067.1	1067.1	1067.1	1067.1	1067.1	1067.4	1067.6	1067.8	1068.0	1068.8
157.5°	1100.2	1099.8	1099.3	1098.8	1098.3	1098.3	1098.4	1098.6	1098.9	1099.1	1099.9
160°	1119.7	1119.2	1118.5	1117.9	1117.3	1117.1	1117.3	1117.5	1117.7	1117.9	1118.7
162.5°	1137.1	1136.6	1136.1	1135.7	1135.3	1135.0	1135.1	1135.1	1135.2	1135.2	1136.2
165°	1160.3	1159.8	1159.4	1159.0	1158.6	1158.5	1158.7	1158.9	1159.0	1159.3	1160.2
167.5°	1179.8	1178.9	1178.2	1177.3	1176.5	1176.0	1176.0	1176.0	1176.0	1176.0	1177.3
170°	1190.3	1189.5	1188.6	1187.9	1187.0	1186.6	1186.6	1186.6	1186.6	1186.6	1187.9
172.5°	1197.9	1197.0	1196.2	1195.3	1194.6	1194.1	1194.1	1194.1	1194.1	1194.1	1195.3
175°	1206.4	1205.5	1204.7	1203.8	1203.0	1202.6	1202.6	1202.6	1202.6	1202.6	1203.8
177.5°	1210.7	1210.0	1209.4	1208.6	1208.0	1207.6	1207.4	1207.2	1207.1	1206.9	1208.0
180°	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2



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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°	12.1	12.3	12.4	12.5	12.5	12.5	12.5	12.5
90°	17.2	18.2	19.2	20.1	20.7	21.3	22.0	22.6
92.5°	38.9	40.2	41.7	42.6	43.1	43.5	43.9	44.4
95°	75.4	76.8	78.3	79.3	79.6	80.1	80.5	81.0
97.5°	118.1	119.5	120.9	121.7	122.0	122.2	122.4	122.7
100°	147.7	149.6	151.5	152.7	153.1	153.4	153.9	154.3
102.5°	178.1	180.2	182.3	183.6	184.2	184.7	185.4	186.0
105°	227.4	228.7	229.9	230.8	231.5	232.1	232.7	233.4
107.5°	280.5	281.2	281.8	282.1	282.0	282.0	282.0	281.9
110°	317.4	318.0	318.7	318.9	318.7	318.5	318.3	318.0





TEST NUMBER: P333542-830

CATALOG NUMBER: S125RDIP-S610D1035U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	354.4	354.7	355.0	355.0	354.6	354.2	353.8	353.5
115°	410.8	410.6	410.4	410.2	409.9	409.7	409.5	409.3
117.5°	467.2	467.4	467.6	467.2	466.4	465.6	464.8	463.9
120°	505.3	505.3	505.3	504.9	504.1	503.2	502.4	501.5
122.5°	542.6	542.4	542.2	541.9	541.2	540.5	539.9	539.2
125°	597.7	597.2	596.8	596.4	596.3	596.1	595.9	595.7
127.5°	652.2	652.1	651.9	651.5	651.1	650.6	650.3	649.9
130°	688.3	688.2	688.0	687.7	687.2	686.8	686.4	686.0
132.5°	723.0	722.8	722.6	722.2	721.6	721.0	720.5	719.8
135°	776.3	776.3	776.3	775.9	775.1	774.2	773.4	772.5
137.5°	828.2	828.4	828.7	828.3	827.3	826.2	825.2	824.2
140°	860.9	861.3	861.8	861.4	860.4	859.3	858.3	857.2
142.5°	893.0	893.2	893.4	893.1	892.0	891.0	889.9	888.8
145°	939.1	939.1	939.1	938.8	938.2	937.5	936.9	936.3
147.5°	981.8	982.4	982.9	982.4	981.0	979.6	978.2	976.8
150°	1008.7	1008.7	1008.7	1008.5	1008.1	1007.7	1007.3	1006.8
152.5°	1033.9	1034.3	1034.8	1034.7	1034.0	1033.2	1032.5	1031.7
155°	1069.7	1070.5	1071.4	1071.3	1070.3	1069.1	1068.1	1067.1
157.5°	1100.7	1101.5	1102.4	1102.1	1100.8	1099.4	1098.0	1096.6
160°	1119.6	1120.4	1121.2	1121.2	1120.1	1119.1	1118.0	1116.9
162.5°	1137.2	1138.2	1139.3	1139.2	1137.9	1136.7	1135.5	1134.3
165°	1160.9	1161.8	1162.6	1162.4	1161.2	1159.9	1158.7	1157.4
167.5°	1178.6	1179.8	1181.1	1181.0	1179.8	1178.5	1177.1	1175.8
170°	1189.1	1190.3	1191.6	1191.5	1190.1	1188.5	1187.1	1185.6
172.5°	1196.7	1197.9	1199.1	1199.1	1197.8	1196.6	1195.2	1193.9
175°	1205.1	1206.4	1207.6	1207.5	1206.1	1204.6	1203.1	1201.6
177.5°	1208.9	1209.9	1210.9	1210.9	1209.7	1208.5	1207.3	1206.2
180°	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2

(END OF REPORT)