

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: P333536-830

Luminaire Tested: **S125RDIP-S610D810U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333536-830  
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-S610D810U830-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4884.8 lumens  
Efficiency: N/A  
Efficacy: 127.2 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: General Diffuse

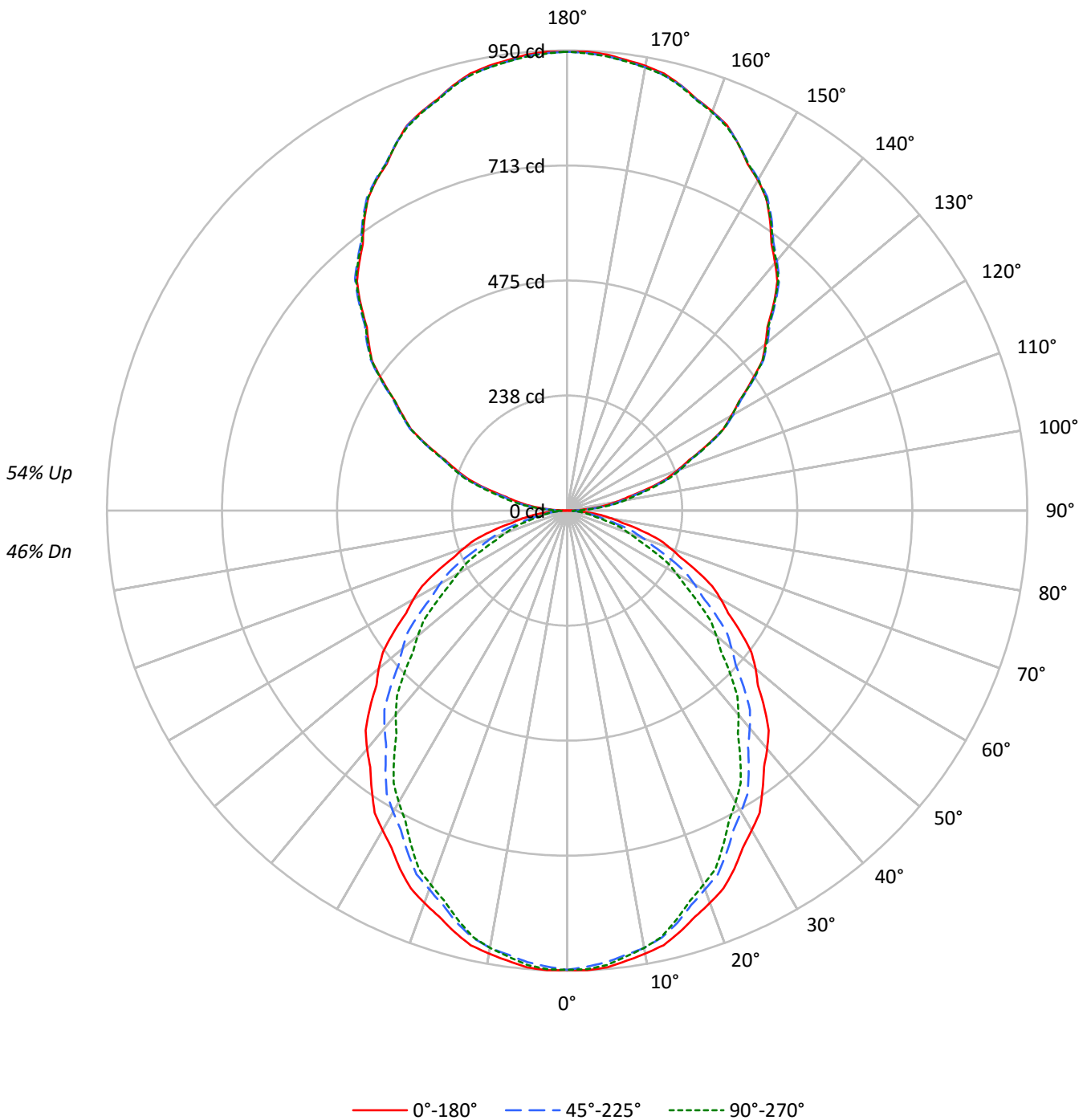
Input Watts (W): 38.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	47	46	45	39
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	41	39	38	33
3	81	72	64	59	74	66	60	55	55	51	47	46	42	40	37	34	32	28
4	74	63	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28	24
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25	21
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	22	19
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	19	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	16	14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	19	16	14	12

**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	1.8
10°-20°	249.2	5.1
20°-30°	361.3	7.4
30°-40°	411.8	8.4
40°-50°	401.4	8.2
50°-60°	337.9	6.9
60°-70°	236.8	4.8
70°-80°	121.7	2.5
80°-90°	32.8	0.7
90°-100°	63.4	1.3
100°-110°	187.3	3.8
110°-120°	317.3	6.5
120°-130°	417.5	8.5
130°-140°	467.9	9.6
140°-150°	458.6	9.4
150°-160°	385.1	7.9
160°-170°	256.0	5.2
170°-180°	89.6	1.8
0°-30°	699.6	14.3
0°-40°	1111.4	22.8
0°-60°	1850.7	37.9
0°-90°	2242.1	45.9
90°-120°	568.0	11.6
90°-150°	1912.0	39.1
90°-180°	2643.0	54.1
0°-180°	4884.8	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	7	12	15	18	4
95°	48	50	57	62	63	51
105°	168	172	176	180	183	180
115°	318	320	322	321	321	314
125°	464	468	469	467	467	415
135°	603	607	608	608	605	465
145°	730	733	736	735	733	456
155°	836	836	836	839	836	385
165°	909	907	908	911	906	256
175°	945	942	942	946	941	90
180°	947	947	947	947	947	



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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°	13.3	12.7	12.1	11.4	10.8	10.6	10.7	10.7	10.8	10.9	11.1
90°	0.8	2.1	3.4	4.7	5.9	7.2	8.4	9.5	10.7	11.8	12.6
92.5°	17.8	18.8	19.7	20.5	21.5	22.6	24.0	25.4	26.9	28.3	29.4
95°	47.9	48.3	48.5	48.9	49.2	50.2	51.8	53.4	55.1	56.7	57.9
97.5°	79.6	79.7	79.8	80.0	80.1	81.3	83.6	85.9	88.1	90.4	91.4
100°	103.2	103.2	103.2	103.2	103.2	104.2	106.4	108.5	110.7	112.7	114.2
102.5°	128.6	129.2	129.9	130.5	131.2	132.1	133.1	134.2	135.3	136.4	138.0
105°	168.1	168.9	169.7	170.5	171.4	172.2	173.2	174.2	175.1	176.2	177.1
107.5°	211.7	212.4	213.3	214.1	215.0	215.7	216.5	217.3	218.0	218.8	219.2
110°	241.8	242.6	243.4	244.2	245.1	245.7	246.2	246.7	247.1	247.6	248.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	272.4	272.9	273.2	273.7	274.1	274.7	275.2	275.9	276.5	277.1	277.4
115°	317.6	318.3	319.0	319.6	320.3	320.7	321.1	321.4	321.8	322.1	321.9
117.5°	363.1	363.4	363.6	363.9	364.2	364.6	364.9	365.1	365.4	365.7	365.8
120°	391.3	392.2	393.0	393.8	394.6	395.1	395.3	395.5	395.6	395.8	395.8
122.5°	422.0	422.4	422.6	422.9	423.2	423.6	424.0	424.4	424.8	425.3	425.1
125°	463.5	464.6	465.5	466.6	467.5	468.1	468.3	468.4	468.5	468.7	468.4
127.5°	507.8	508.4	508.9	509.4	510.0	510.4	510.6	510.8	511.0	511.2	511.0
130°	534.3	535.2	536.0	536.8	537.6	538.2	538.5	538.9	539.1	539.5	539.3
132.5°	560.9	562.2	563.5	564.9	566.3	566.8	566.8	566.8	566.7	566.7	566.5
135°	602.9	603.9	604.8	605.9	606.8	607.4	607.6	607.8	607.8	608.0	608.0
137.5°	642.4	643.4	644.3	645.3	646.2	646.9	647.2	647.5	647.9	648.3	648.5
140°	667.8	668.5	669.4	670.2	671.0	671.7	672.1	672.7	673.2	673.6	674.0
142.5°	693.1	693.8	694.5	695.1	695.9	696.5	697.1	697.8	698.3	699.0	699.2
145°	730.4	731.0	731.7	732.4	733.0	733.6	734.1	734.5	735.1	735.6	735.6
147.5°	764.9	765.3	765.6	766.0	766.3	766.7	767.1	767.5	767.9	768.3	768.6
150°	787.9	787.7	787.6	787.4	787.2	787.5	788.2	788.8	789.5	790.1	790.1
152.5°	806.7	807.0	807.2	807.5	807.7	807.9	808.1	808.4	808.7	809.0	809.4
155°	835.8	835.8	835.8	835.8	835.8	835.8	836.0	836.2	836.3	836.5	837.2
157.5°	861.8	861.4	861.0	860.6	860.3	860.2	860.4	860.5	860.6	860.8	861.5
160°	877.0	876.6	876.1	875.6	875.1	875.0	875.1	875.2	875.4	875.6	876.3
162.5°	890.6	890.2	889.9	889.6	889.2	889.0	889.0	889.1	889.1	889.2	889.9
165°	908.8	908.4	908.1	907.8	907.5	907.4	907.5	907.7	907.9	908.0	908.7
167.5°	924.1	923.4	922.7	922.1	921.4	921.1	921.1	921.1	921.1	921.1	922.1
170°	932.4	931.7	931.0	930.4	929.7	929.3	929.3	929.3	929.3	929.3	930.4
172.5°	938.2	937.5	936.9	936.2	935.6	935.3	935.3	935.3	935.3	935.3	936.2
175°	944.9	944.2	943.6	942.9	942.3	941.9	941.9	941.9	941.9	941.9	942.9
177.5°	948.3	947.7	947.3	946.7	946.1	945.8	945.7	945.6	945.5	945.3	946.1
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1



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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°	11.3	11.4	11.6	11.7	11.7	11.6	11.6	11.6
90°	13.4	14.2	15.1	15.7	16.2	16.7	17.2	17.7
92.5°	30.4	31.6	32.6	33.4	33.7	34.0	34.4	34.8
95°	59.0	60.2	61.4	62.1	62.4	62.8	63.1	63.3
97.5°	92.6	93.6	94.7	95.3	95.5	95.7	96.0	96.1
100°	115.7	117.2	118.7	119.6	119.9	120.2	120.6	120.8
102.5°	139.6	141.2	142.8	143.8	144.3	144.7	145.2	145.6
105°	178.1	179.1	180.1	180.8	181.3	181.8	182.3	182.8
107.5°	219.7	220.2	220.7	220.9	220.9	220.8	220.8	220.8
110°	248.6	249.1	249.6	249.8	249.6	249.4	249.3	249.1





TEST NUMBER: P333536-830

CATALOG NUMBER: S125RDIP-S610D810U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	277.6	277.8	278.1	278.1	277.7	277.4	277.1	276.8
115°	321.8	321.6	321.4	321.2	321.1	320.9	320.7	320.7
117.5°	366.0	366.1	366.3	366.0	365.3	364.7	364.0	363.4
120°	395.8	395.8	395.8	395.5	394.8	394.2	393.5	392.9
122.5°	425.0	424.9	424.7	424.4	423.9	423.4	422.8	422.4
125°	468.1	467.8	467.4	467.2	467.0	466.8	466.7	466.6
127.5°	510.9	510.7	510.6	510.3	510.0	509.6	509.3	509.0
130°	539.1	539.0	538.9	538.6	538.3	537.9	537.6	537.2
132.5°	566.3	566.1	566.0	565.6	565.2	564.8	564.3	563.8
135°	608.0	608.0	608.0	607.8	607.1	606.4	605.8	605.1
137.5°	648.7	648.8	649.0	648.8	647.9	647.1	646.3	645.5
140°	674.3	674.6	675.0	674.7	673.9	673.1	672.2	671.5
142.5°	699.4	699.6	699.7	699.5	698.6	697.9	697.0	696.2
145°	735.6	735.6	735.6	735.3	734.8	734.3	733.9	733.3
147.5°	769.0	769.5	769.9	769.5	768.4	767.2	766.2	765.1
150°	790.1	790.1	790.1	789.9	789.6	789.3	788.9	788.6
152.5°	809.7	810.1	810.5	810.4	809.8	809.3	808.7	808.0
155°	837.8	838.5	839.1	839.1	838.2	837.4	836.6	835.8
157.5°	862.1	862.8	863.5	863.3	862.1	861.1	860.0	858.9
160°	876.9	877.5	878.2	878.2	877.3	876.5	875.6	874.9
162.5°	890.7	891.6	892.3	892.2	891.3	890.3	889.4	888.4
165°	909.4	910.0	910.6	910.5	909.5	908.5	907.5	906.5
167.5°	923.1	924.1	925.1	925.0	924.1	923.0	922.0	921.0
170°	931.3	932.4	933.3	933.2	932.1	930.9	929.8	928.7
172.5°	937.3	938.2	939.2	939.2	938.2	937.2	936.1	935.1
175°	943.9	944.9	945.8	945.7	944.6	943.5	942.4	941.2
177.5°	946.9	947.6	948.5	948.4	947.4	946.6	945.7	944.7
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1

(END OF REPORT)