

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: P333536-840

Luminaire Tested: **S125RDIP-S610D810U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333536-840
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-S610D810U840-4F0-1E-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: 5233.7 lumens
Efficiency: N/A
Efficacy: 136.3 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

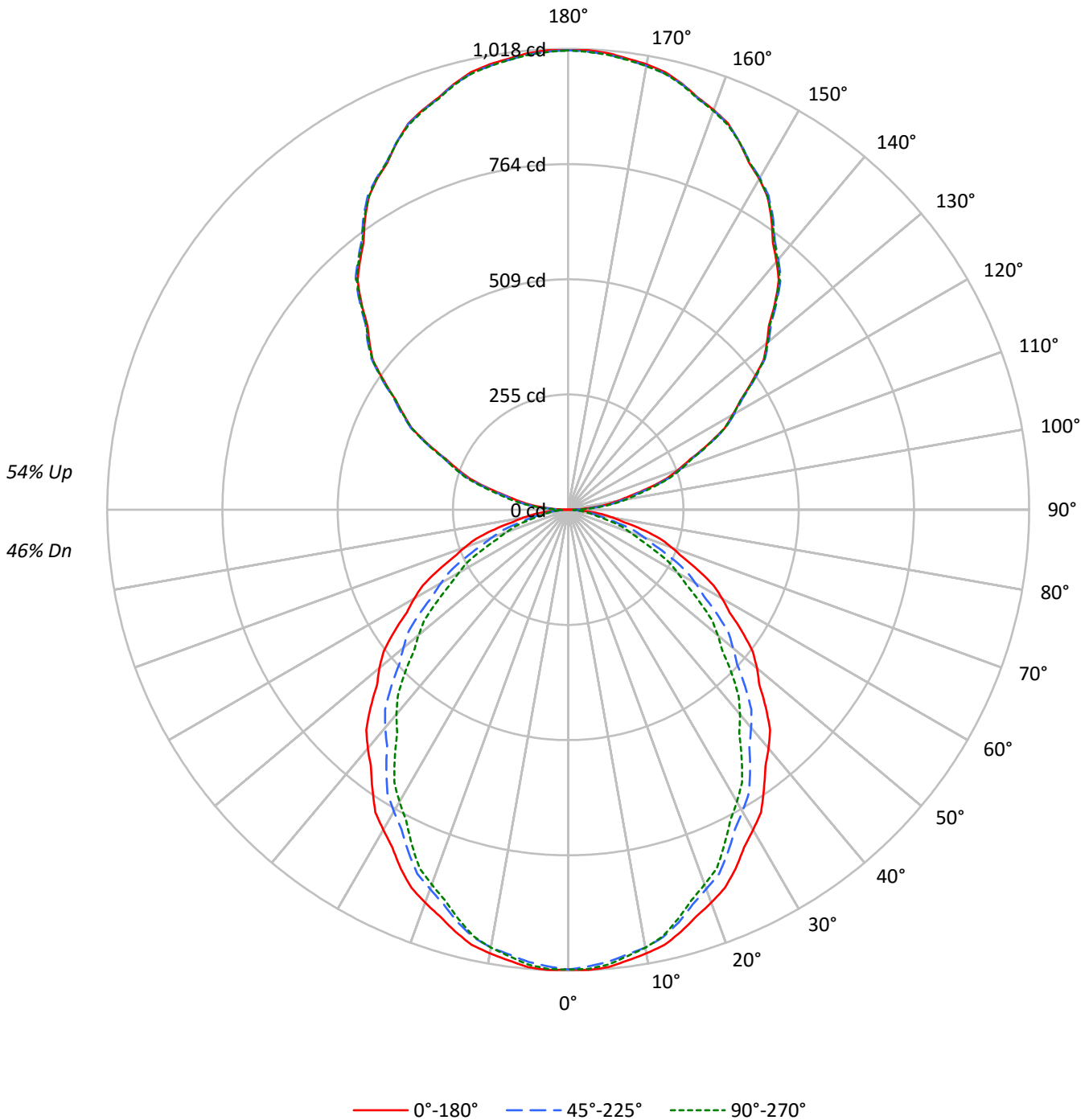
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333536-840

CATALOG NUMBER: S125RDIP-S610D810U840-4F0-1E-UDD-F1

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°	6561	6561	6561
5°	6576	6501	6541
10°	6526	6441	6441
15°	6449	6310	6258
20°	6349	6128	6054
25°	6233	5949	5818
30°	6088	5739	5557
35°	5941	5523	5263
40°	5802	5298	4975
45°	5634	5045	4661
50°	5466	4772	4332
55°	5271	4510	3984
60°	5074	4193	3608
65°	4843	3822	3177
70°	4579	3361	2738
75°	4212	2832	2278
80°	3712	2228	1912
85°	3127	1815	1704



TEST NUMBER: P333536-840

CATALOG NUMBER: S125RDIP-S610D810U840-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	1.8
10°-20°	267.0	5.1
20°-30°	387.1	7.4
30°-40°	441.2	8.4
40°-50°	430.0	8.2
50°-60°	362.0	6.9
60°-70°	253.8	4.8
70°-80°	130.4	2.5
80°-90°	35.2	0.7
90°-100°	68.0	1.3
100°-110°	200.7	3.8
110°-120°	339.9	6.5
120°-130°	447.4	8.5
130°-140°	501.3	9.6
140°-150°	491.3	9.4
150°-160°	412.7	7.9
160°-170°	274.3	5.2
170°-180°	96.0	1.8
0°-30°	749.6	14.3
0°-40°	1190.8	22.8
0°-60°	1982.8	37.9
0°-90°	2402.2	45.9
90°-120°	608.6	11.6
90°-150°	2048.6	39.1
90°-180°	2832.0	54.1
0°-180°	5233.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1014	1011	1003	1010	1009	96
15°	964	959	944	943	936	272
25°	875	862	835	825	816	402
35°	754	734	700	679	668	472
45°	617	594	552	523	510	476
55°	468	442	400	367	354	418
65°	317	290	250	220	208	314
75°	169	145	114	97	91	179
85°	42	29	24	24	23	47
90°	1	7	13	17	19	5
95°	51	53	61	66	68	55
105°	180	184	189	193	196	192
115°	340	343	345	344	344	336
125°	497	501	502	501	500	445
135°	646	650	652	651	648	498
145°	782	786	788	788	786	489
155°	895	895	896	899	895	412
165°	974	972	973	976	971	275
175°	1012	1009	1009	1013	1008	96
180°	1015	1015	1015	1015	1015	



TEST NUMBER: P333536-840

CATALOG NUMBER: S125RDIP-S610D810U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1017.7	1017.3	1016.9	1016.5	1016.1	1015.2	1013.8	1012.5	1011.1	1009.8	1011.1
5°	1014.3	1013.7	1013.0	1012.3	1011.6	1010.4	1008.5	1006.6	1004.7	1002.8	1004.5
7.5°	1004.4	1003.7	1003.1	1002.4	1001.8	1000.4	998.0	995.8	993.6	991.3	992.5
10°	995.1	994.6	994.1	993.6	993.1	991.7	989.3	986.9	984.5	982.1	982.6
12.5°	984.7	984.1	983.4	982.8	982.1	980.2	977.0	973.8	970.6	967.3	967.8
15°	964.5	963.4	962.4	961.4	960.4	958.1	954.5	950.9	947.4	943.7	943.6
17.5°	941.6	940.1	938.5	937.0	935.3	932.3	927.8	923.3	918.8	914.3	913.4
20°	923.8	922.1	920.4	918.7	917.0	913.4	908.0	902.5	897.1	891.6	890.7
22.5°	904.1	902.4	900.8	899.1	897.4	893.6	887.9	882.2	876.5	870.7	869.1
25°	874.7	872.1	869.6	867.1	864.4	860.0	853.7	847.4	841.1	834.8	832.6
27.5°	840.9	837.9	834.8	831.6	828.5	823.6	816.9	810.1	803.3	796.6	793.5
30°	816.4	813.1	809.9	806.7	803.4	798.2	791.0	784.0	776.8	769.6	765.7
32.5°	792.4	788.7	784.9	781.1	777.3	771.7	764.5	757.2	749.8	742.6	738.2
35°	753.5	749.4	745.3	741.2	737.1	731.2	723.6	715.9	708.2	700.5	695.6
37.5°	715.3	710.2	705.3	700.3	695.4	688.9	681.0	673.1	665.2	657.2	651.4
40°	688.2	683.2	678.0	672.9	667.8	661.2	653.0	644.8	636.6	628.4	622.0
42.5°	660.0	654.8	649.5	644.3	639.0	632.2	623.7	615.2	606.8	598.3	592.1
45°	616.9	612.0	607.0	602.1	597.1	590.0	580.6	571.2	561.8	552.4	545.6
47.5°	572.3	567.0	561.8	556.6	551.4	544.0	534.6	525.1	515.7	506.2	499.3
50°	544.0	538.4	532.7	527.1	521.5	513.8	504.1	494.4	484.6	474.9	467.8
52.5°	513.3	507.6	501.8	496.0	490.3	482.8	473.6	464.4	455.2	446.1	438.4
55°	468.1	462.6	457.2	451.7	446.3	438.7	429.2	419.6	410.1	400.5	392.8
57.5°	422.3	416.5	410.6	404.9	399.0	391.4	382.2	373.0	363.9	354.7	347.1
60°	392.8	386.9	380.9	375.0	369.0	361.4	352.1	343.0	333.8	324.6	317.1
62.5°	361.5	355.9	350.1	344.5	338.8	331.2	321.9	312.6	303.3	293.9	286.9
65°	316.9	311.1	305.3	299.5	293.7	286.3	277.2	268.2	259.1	250.1	243.3
67.5°	272.6	266.7	260.9	255.2	249.3	242.2	233.5	224.8	216.1	207.4	201.3
70°	242.5	236.7	230.9	225.1	219.2	212.1	203.6	195.1	186.5	178.0	172.7
72.5°	213.0	207.3	201.7	196.0	190.4	183.5	175.5	167.5	159.6	151.6	146.7
75°	168.8	163.7	158.5	153.5	148.3	142.2	135.0	127.8	120.7	113.5	109.8
77.5°	124.9	120.8	116.7	112.6	108.6	103.6	97.9	92.2	86.4	80.7	78.1
80°	99.8	95.6	91.6	87.5	83.4	79.0	74.1	69.4	64.6	59.9	58.3
82.5°	75.2	71.5	67.9	64.1	60.5	57.0	53.7	50.4	47.2	43.9	43.2
85°	42.2	39.1	36.1	33.0	29.9	28.0	27.1	26.3	25.4	24.5	24.3
87.5°	14.2	13.6	12.9	12.2	11.6	11.3	11.4	11.5	11.6	11.7	11.9
90°	0.8	2.2	3.6	5.0	6.4	7.7	9.0	10.2	11.4	12.6	13.5
92.5°	19.1	20.1	21.1	22.0	23.0	24.2	25.8	27.3	28.8	30.3	31.5
95°	51.3	51.7	52.0	52.4	52.7	53.8	55.5	57.3	59.1	60.8	62.0
97.5°	85.3	85.4	85.5	85.7	85.8	87.2	89.6	92.0	94.4	96.8	98.0
100°	110.6	110.6	110.6	110.6	110.6	111.7	114.0	116.2	118.6	120.8	122.4
102.5°	137.7	138.5	139.2	139.9	140.6	141.5	142.6	143.8	144.9	146.1	147.8
105°	180.1	181.0	181.8	182.7	183.6	184.5	185.6	186.6	187.6	188.7	189.8
107.5°	226.8	227.6	228.5	229.4	230.4	231.2	232.0	232.8	233.6	234.4	234.9
110°	259.0	259.9	260.7	261.7	262.6	263.3	263.8	264.3	264.8	265.3	265.9



TEST NUMBER: P333536-840

CATALOG NUMBER: S125RDIP-S610D810U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	291.9	292.4	292.8	293.3	293.7	294.3	294.9	295.6	296.3	296.9	297.2
115°	340.3	341.0	341.7	342.4	343.2	343.7	344.1	344.4	344.8	345.1	344.9
117.5°	389.0	389.3	389.6	389.9	390.2	390.6	390.9	391.2	391.5	391.8	391.9
120°	419.3	420.2	421.1	421.9	422.8	423.3	423.5	423.7	423.8	424.0	424.0
122.5°	452.1	452.5	452.8	453.1	453.4	453.8	454.2	454.7	455.1	455.7	455.4
125°	496.7	497.8	498.8	499.9	500.9	501.5	501.7	501.9	502.0	502.2	501.9
127.5°	544.1	544.7	545.2	545.8	546.4	546.8	547.0	547.2	547.5	547.8	547.5
130°	572.5	573.4	574.3	575.1	576.0	576.6	576.9	577.3	577.6	578.0	577.8
132.5°	601.0	602.4	603.8	605.2	606.7	607.3	607.3	607.2	607.1	607.1	606.9
135°	645.9	647.0	648.0	649.1	650.2	650.8	651.0	651.2	651.3	651.5	651.5
137.5°	688.3	689.3	690.3	691.4	692.4	693.1	693.5	693.8	694.2	694.6	694.8
140°	715.5	716.3	717.2	718.1	718.9	719.6	720.1	720.7	721.2	721.8	722.2
142.5°	742.7	743.4	744.1	744.8	745.6	746.3	746.9	747.6	748.2	748.9	749.1
145°	782.5	783.3	784.0	784.7	785.4	786.0	786.5	787.0	787.6	788.1	788.1
147.5°	819.5	819.9	820.3	820.7	821.0	821.4	821.9	822.3	822.7	823.1	823.5
150°	844.1	843.9	843.8	843.6	843.4	843.7	844.4	845.2	845.9	846.6	846.6
152.5°	864.3	864.6	864.8	865.2	865.4	865.7	865.9	866.2	866.5	866.8	867.2
155°	895.4	895.4	895.4	895.4	895.4	895.5	895.8	896.0	896.1	896.3	897.0
157.5°	923.3	922.9	922.5	922.1	921.7	921.6	921.8	922.0	922.1	922.3	923.0
160°	939.7	939.2	938.7	938.2	937.6	937.5	937.6	937.8	938.0	938.2	938.9
162.5°	954.2	953.8	953.4	953.1	952.7	952.5	952.5	952.6	952.6	952.7	953.5
165°	973.7	973.3	973.0	972.6	972.3	972.2	972.3	972.5	972.7	972.9	973.6
167.5°	990.1	989.4	988.7	988.0	987.2	986.9	986.9	986.9	986.9	986.9	988.0
170°	999.0	998.3	997.5	996.8	996.1	995.7	995.7	995.7	995.7	995.7	996.8
172.5°	1005.2	1004.5	1003.8	1003.1	1002.4	1002.1	1002.1	1002.1	1002.1	1002.1	1003.1
175°	1012.4	1011.7	1011.0	1010.3	1009.6	1009.2	1009.2	1009.2	1009.2	1009.2	1010.3
177.5°	1016.0	1015.4	1014.9	1014.3	1013.7	1013.4	1013.3	1013.1	1013.0	1012.8	1013.7
180°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7



TEST NUMBER: P333536-840

CATALOG NUMBER: S125RDIP-S610D810U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9	1015.9
2.5°	1012.5	1013.8	1015.2	1015.8	1015.7	1015.5	1015.4	1015.3
5°	1006.2	1007.9	1009.7	1010.4	1010.0	1009.7	1009.4	1009.0
7.5°	993.7	994.9	996.1	996.5	996.1	995.7	995.4	995.0
10°	983.1	983.6	984.2	984.2	983.6	983.1	982.6	982.1
12.5°	968.2	968.6	968.9	968.7	967.9	967.1	966.3	965.5
15°	943.4	943.2	943.1	942.2	940.7	939.2	937.7	936.0
17.5°	912.6	911.7	910.9	909.8	908.6	907.3	906.1	904.7
20°	889.9	889.0	888.2	887.0	885.4	883.9	882.4	880.8
22.5°	867.4	865.7	864.0	862.5	861.3	860.0	858.8	857.5
25°	830.4	828.2	826.0	823.8	822.0	820.1	818.3	816.4
27.5°	790.4	787.3	784.2	781.7	779.9	778.1	776.3	774.5
30°	761.7	757.8	753.9	751.1	749.6	748.1	746.6	745.1
32.5°	733.9	729.6	725.3	722.2	720.1	718.2	716.3	714.4
35°	690.6	685.7	680.8	677.1	674.7	672.3	669.9	667.5
37.5°	645.4	639.4	633.5	629.3	627.0	624.8	622.5	620.2
40°	615.4	608.9	602.5	598.2	596.2	594.1	592.1	590.1
42.5°	585.9	579.7	573.5	568.9	565.9	562.9	559.9	556.9
45°	538.8	532.0	525.1	520.5	518.0	515.3	512.8	510.3
47.5°	492.2	485.1	478.2	473.2	470.4	467.6	464.7	461.9
50°	460.6	453.4	446.3	441.4	438.9	436.4	433.7	431.2
52.5°	430.7	422.9	415.3	410.1	407.6	405.1	402.4	399.9
55°	385.2	377.5	369.8	364.7	361.9	359.2	356.5	353.8
57.5°	339.6	332.1	324.7	319.6	317.2	314.8	312.5	310.0
60°	309.5	302.1	294.6	289.5	287.0	284.4	281.9	279.3
62.5°	279.9	273.0	266.0	261.3	258.7	256.2	253.6	251.1
65°	236.5	229.6	222.9	218.1	215.6	213.1	210.5	207.9
67.5°	195.0	188.7	182.5	178.3	176.3	174.3	172.2	170.2
70°	167.4	162.2	156.8	153.2	151.2	149.2	147.0	145.0
72.5°	141.9	136.9	132.1	129.0	127.6	126.2	124.9	123.5
75°	106.0	102.3	98.6	96.0	94.9	93.7	92.5	91.3
77.5°	75.4	72.8	70.2	68.5	67.6	66.7	65.8	64.9
80°	56.8	55.2	53.7	52.8	52.4	52.1	51.7	51.4
82.5°	42.4	41.7	41.0	40.6	40.4	40.2	40.0	39.8
85°	24.2	24.0	23.8	23.7	23.5	23.3	23.2	23.0
87.5°	12.1	12.2	12.4	12.5	12.5	12.4	12.4	12.4
90°	14.3	15.2	16.2	16.9	17.4	17.9	18.4	19.0
92.5°	32.6	33.8	34.9	35.7	36.2	36.5	36.9	37.3
95°	63.2	64.5	65.7	66.6	66.9	67.3	67.6	67.9
97.5°	99.2	100.3	101.5	102.1	102.3	102.5	102.8	103.0
100°	124.0	125.5	127.1	128.2	128.5	128.8	129.2	129.5
102.5°	149.6	151.3	153.0	154.1	154.6	155.0	155.5	156.0
105°	190.9	191.9	193.0	193.7	194.3	194.8	195.3	195.8
107.5°	235.4	235.9	236.5	236.7	236.7	236.6	236.6	236.6
110°	266.4	266.9	267.4	267.6	267.4	267.2	267.1	266.9



TEST NUMBER: P333536-840

CATALOG NUMBER: S125RDIP-S610D810U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.4	297.6	297.9	297.9	297.5	297.2	296.9	296.6
115°	344.8	344.6	344.4	344.2	344.1	343.9	343.7	343.6
117.5°	392.1	392.2	392.4	392.1	391.4	390.7	390.0	389.3
120°	424.0	424.0	424.0	423.7	423.0	422.3	421.6	420.9
122.5°	455.3	455.2	455.0	454.7	454.1	453.6	453.0	452.5
125°	501.5	501.2	500.8	500.6	500.4	500.2	500.1	499.9
127.5°	547.3	547.1	547.0	546.7	546.4	546.0	545.7	545.3
130°	577.6	577.5	577.3	577.0	576.7	576.3	576.0	575.6
132.5°	606.7	606.5	606.4	606.0	605.6	605.1	604.6	604.1
135°	651.5	651.5	651.5	651.2	650.5	649.7	649.0	648.3
137.5°	695.0	695.2	695.4	695.1	694.2	693.4	692.5	691.6
140°	722.5	722.8	723.2	722.9	722.1	721.1	720.2	719.4
142.5°	749.3	749.5	749.7	749.4	748.5	747.7	746.8	745.9
145°	788.1	788.1	788.1	787.8	787.3	786.8	786.3	785.7
147.5°	823.9	824.5	824.9	824.5	823.2	822.0	820.9	819.7
150°	846.6	846.6	846.6	846.4	846.0	845.7	845.3	845.0
152.5°	867.6	868.0	868.4	868.3	867.7	867.1	866.5	865.8
155°	897.7	898.4	899.1	899.0	898.1	897.3	896.4	895.4
157.5°	923.7	924.4	925.1	924.9	923.7	922.6	921.4	920.3
160°	939.6	940.2	940.9	940.9	940.0	939.1	938.2	937.4
162.5°	954.3	955.2	956.0	955.9	954.9	953.9	952.9	951.9
165°	974.3	975.0	975.6	975.5	974.4	973.4	972.3	971.3
167.5°	989.1	990.1	991.2	991.1	990.1	989.0	987.8	986.7
170°	997.8	999.0	1000.0	999.9	998.7	997.4	996.2	995.0
172.5°	1004.2	1005.2	1006.3	1006.3	1005.2	1004.1	1003.0	1001.9
175°	1011.3	1012.4	1013.4	1013.3	1012.1	1010.9	1009.7	1008.5
177.5°	1014.5	1015.3	1016.2	1016.1	1015.1	1014.2	1013.2	1012.2
180°	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7	1014.7

(END OF REPORT)