

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: P333535-840

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333535-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
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-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5673.8 lumens
Efficiency: N/A
Efficacy: 147.8 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

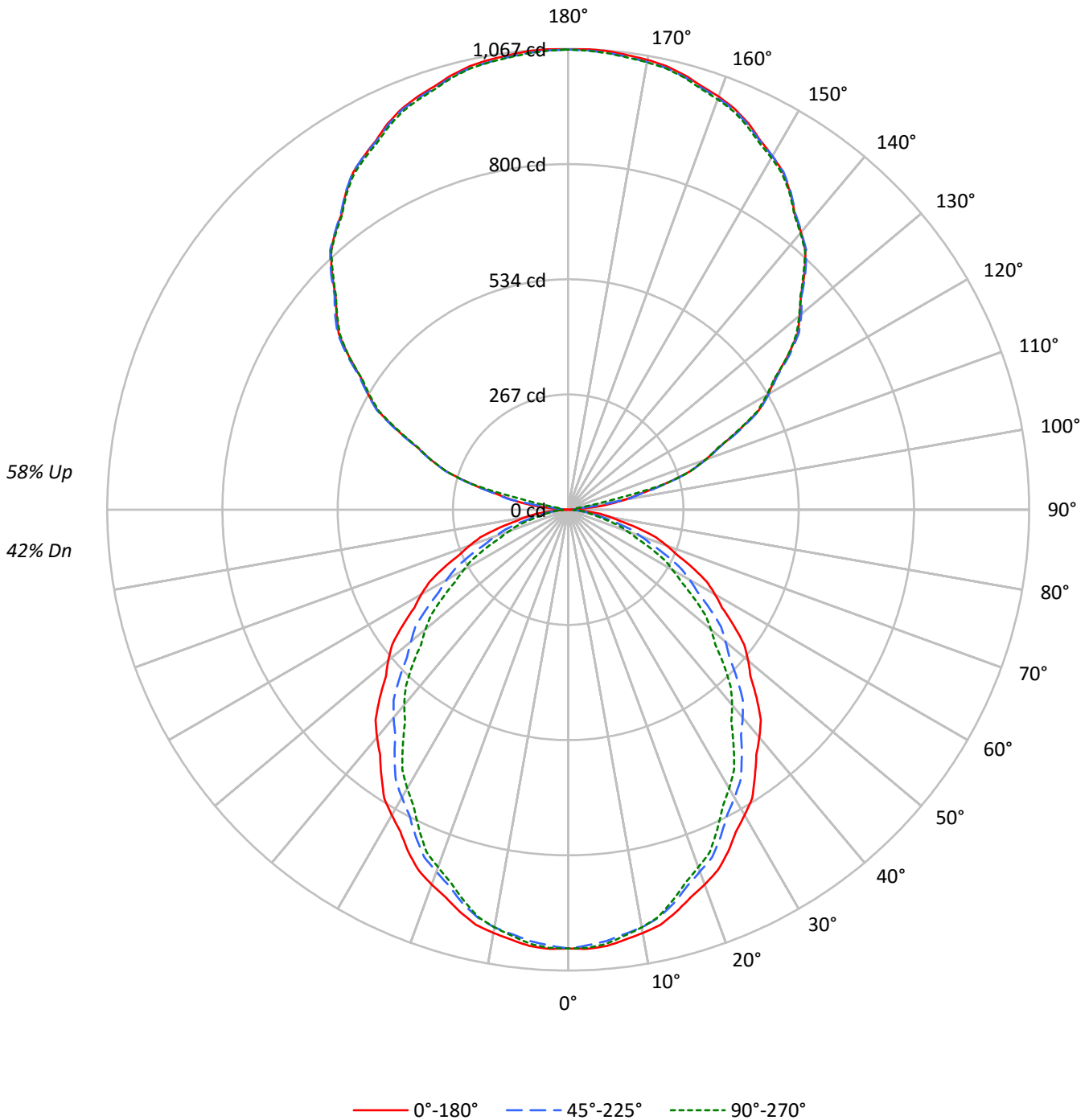
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42																				
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36																				
2	88	81	75	70	80	74	69	64	61	57	54	49	47	45	39	37	35	30																				
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	34	32	30	26																				
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	28	26	22																				
5	67	56	48	42	61	52	45	39	43	38	34	35	31	28	28	25	23	20																				
6	62	50	42	37	57	46	39	34	39	33	29	32	28	25	25	22	20	17																				
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15																				
8	53	41	34	28	49	38	31	27	32	27	23	26	23	20	21	18	16	14																				
9	50	38	30	25	45	35	28	24	29	24	21	24	20	18	20	17	15	12																				
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	15	13	11																				

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	1.7
10°-20°	267.0	4.7
20°-30°	387.1	6.8
30°-40°	441.2	7.8
40°-50°	430.0	7.6
50°-60°	362.0	6.4
60°-70°	253.8	4.5
70°-80°	130.4	2.3
80°-90°	35.2	0.6
90°-100°	38.7	0.7
100°-110°	238.6	4.2
110°-120°	432.8	7.6
120°-130°	555.4	9.8
130°-140°	597.4	10.5
140°-150°	560.7	9.9
150°-160°	453.6	8.0
160°-170°	293.3	5.2
170°-180°	101.2	1.8
0°-30°	749.6	13.2
0°-40°	1190.8	21.0
0°-60°	1982.8	34.9
0°-90°	2402.2	42.3
90°-120°	710.1	12.5
90°-150°	2423.5	42.7
90°-180°	3272.0	57.7
0°-180°	5673.8	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	4
95°	45	41	13	16	17	57
105°	232	235	235	235	235	246
115°	436	440	441	437	433	432
125°	620	625	626	622	620	554
135°	773	778	776	775	770	596
145°	896	898	898	898	894	560
155°	987	983	984	986	980	455
165°	1042	1037	1038	1042	1036	294
175°	1065	1061	1062	1067	1061	101
180°	1065	1065	1065	1065	1065	



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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°	12.1	11.2	10.2	9.2	8.3	8.3	9.4	10.5	11.5	12.6	13.5
95°	45.0	44.5	43.9	43.4	42.9	39.3	32.6	26.0	19.3	12.6	13.5
97.5°	94.0	94.9	95.8	96.8	97.8	91.7	78.5	65.2	52.0	38.9	33.9
100°	131.9	132.4	132.9	133.5	134.0	134.6	135.3	136.0	136.7	137.4	111.3
102.5°	170.5	171.1	171.8	172.4	173.1	173.6	174.1	174.5	174.9	175.3	170.4
105°	232.2	232.9	233.6	234.3	235.0	235.3	235.3	235.3	235.3	235.3	235.3
107.5°	296.3	296.3	296.3	296.3	296.3	296.5	296.8	297.2	297.5	297.9	297.9
110°	338.0	338.0	338.0	338.0	338.0	338.2	338.5	338.9	339.2	339.6	339.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.2	377.6	378.0	378.5	378.9	379.2	379.4	379.6	379.8	380.0	379.4
115°	436.0	436.9	437.7	438.6	439.5	440.0	440.2	440.3	440.5	440.7	440.0
117.5°	496.8	496.8	496.7	496.7	496.7	497.0	497.6	498.3	499.0	499.6	498.7
120°	534.6	534.5	534.3	534.1	533.9	534.1	534.6	535.2	535.7	536.2	535.9
122.5°	568.2	568.9	569.5	570.2	570.8	571.3	571.5	571.8	572.0	572.3	571.9
125°	620.0	621.2	622.4	623.7	624.9	625.5	625.5	625.5	625.5	625.5	624.8
127.5°	669.4	670.2	671.2	672.1	672.9	673.3	673.2	673.1	673.0	672.9	672.5
130°	699.7	700.6	701.5	702.4	703.3	703.8	704.0	704.1	704.3	704.5	704.0
132.5°	730.0	731.0	732.1	733.1	734.2	734.5	734.1	733.7	733.3	732.9	732.8
135°	773.2	774.3	775.3	776.4	777.4	777.7	777.4	777.0	776.7	776.4	776.0
137.5°	812.8	813.7	814.7	815.6	816.5	816.8	816.5	816.2	815.9	815.5	815.6
140°	838.7	839.1	839.4	839.8	840.1	840.2	840.0	839.9	839.7	839.5	839.9
142.5°	862.1	862.3	862.5	862.7	862.9	863.1	863.4	863.6	863.9	864.1	864.2
145°	896.4	896.8	897.1	897.5	897.8	898.0	898.0	898.0	898.0	898.0	898.2
147.5°	926.3	926.3	926.2	926.1	926.1	926.1	926.3	926.6	926.9	927.1	927.3
150°	945.3	945.0	944.6	944.3	943.9	943.9	944.3	944.6	945.0	945.3	945.7
152.5°	963.7	962.9	962.1	961.4	960.6	960.4	960.7	961.1	961.4	961.8	962.1
155°	987.2	986.1	985.1	984.0	983.0	982.6	983.0	983.3	983.7	984.0	984.5
157.5°	1005.3	1004.7	1004.1	1003.5	1002.8	1002.5	1002.6	1002.6	1002.6	1002.7	1003.2
160°	1018.0	1016.9	1015.9	1014.8	1013.8	1013.4	1013.5	1013.7	1013.9	1014.0	1014.7
162.5°	1028.1	1027.0	1026.0	1024.9	1023.9	1023.5	1023.6	1023.8	1024.0	1024.2	1025.1
165°	1041.7	1040.7	1039.6	1038.5	1037.4	1037.0	1037.2	1037.4	1037.5	1037.7	1038.8
167.5°	1051.8	1050.8	1049.7	1048.5	1047.4	1047.0	1047.1	1047.3	1047.5	1047.7	1048.9
170°	1057.5	1056.2	1055.0	1053.8	1052.6	1052.1	1052.2	1052.4	1052.6	1052.8	1054.2
172.5°	1061.3	1060.1	1058.8	1057.6	1056.3	1055.9	1056.2	1056.5	1056.8	1057.1	1058.4
175°	1065.4	1064.3	1063.3	1062.3	1061.2	1060.8	1060.9	1061.1	1061.3	1061.5	1062.9
177.5°	1067.3	1066.4	1065.6	1064.8	1063.9	1063.6	1063.7	1063.8	1064.0	1064.1	1065.1
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4



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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°	14.4	15.2	16.2	16.9	17.4	17.9	18.4	19.0
92.5°	14.4	15.2	16.2	16.7	17.0	17.2	17.5	17.7
95°	14.4	15.2	16.2	16.6	16.6	16.6	16.6	16.6
97.5°	29.0	24.0	19.1	16.6	16.6	16.6	16.6	16.6
100°	85.1	59.0	32.8	19.4	18.7	18.0	17.3	16.6
102.5°	165.4	160.5	155.5	147.1	135.1	123.2	111.3	99.4
105°	235.3	235.3	235.3	235.3	235.1	234.9	234.7	234.6
107.5°	298.0	298.0	298.0	297.8	297.3	296.7	296.2	295.7
110°	338.5	338.0	337.5	337.3	337.5	337.7	337.8	338.0



TEST NUMBER: P333535-840

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	378.7	378.0	377.4	376.9	376.7	376.4	376.2	376.0
115°	439.3	438.6	437.9	437.0	436.0	434.8	433.8	432.8
117.5°	497.8	496.9	495.9	495.2	494.8	494.3	493.9	493.4
120°	535.5	535.2	534.8	534.2	533.3	532.5	531.6	530.7
122.5°	571.6	571.2	570.9	570.2	569.2	568.2	567.1	566.1
125°	624.1	623.4	622.7	622.1	621.6	621.0	620.5	620.0
127.5°	672.1	671.8	671.4	670.4	669.2	667.9	666.6	665.3
130°	703.4	702.9	702.4	701.7	700.7	699.9	699.0	698.1
132.5°	732.7	732.6	732.5	732.0	731.1	730.2	729.3	728.5
135°	775.7	775.3	775.0	774.3	773.2	772.1	771.0	770.0
137.5°	815.7	815.7	815.8	815.4	814.5	813.5	812.6	811.7
140°	840.2	840.6	840.9	840.6	839.5	838.5	837.4	836.4
142.5°	864.3	864.3	864.4	863.9	862.9	861.8	860.8	859.7
145°	898.3	898.5	898.7	898.2	897.2	896.2	895.0	894.0
147.5°	927.5	927.7	927.9	927.4	926.0	924.8	923.5	922.3
150°	946.0	946.4	946.7	946.2	944.8	943.4	942.0	940.6
152.5°	962.5	962.8	963.2	962.7	961.5	960.2	959.0	957.7
155°	985.1	985.6	986.1	985.7	984.3	982.9	981.5	980.1
157.5°	1003.8	1004.4	1004.9	1004.5	1003.1	1001.7	1000.3	998.9
160°	1015.4	1016.1	1016.8	1016.5	1015.1	1013.7	1012.3	1010.9
162.5°	1026.1	1027.1	1028.0	1027.8	1026.2	1024.7	1023.2	1021.7
165°	1039.9	1040.9	1042.0	1041.8	1040.4	1038.9	1037.5	1036.1
167.5°	1050.3	1051.5	1052.8	1052.6	1051.0	1049.5	1047.8	1046.3
170°	1055.5	1056.9	1058.3	1058.2	1056.7	1055.1	1053.5	1052.0
172.5°	1059.7	1061.0	1062.3	1062.1	1060.5	1058.9	1057.3	1055.7
175°	1064.2	1065.6	1067.0	1066.9	1065.4	1063.8	1062.3	1060.7
177.5°	1066.1	1067.0	1068.0	1068.0	1066.8	1065.7	1064.6	1063.5
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4

(END OF REPORT)