

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: P333543

Luminaire Tested: **S125RDIP-S610D1035U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333543  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-S610D1035U835-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6092.4 lumens  
Efficiency: N/A  
Efficacy: 136.9 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

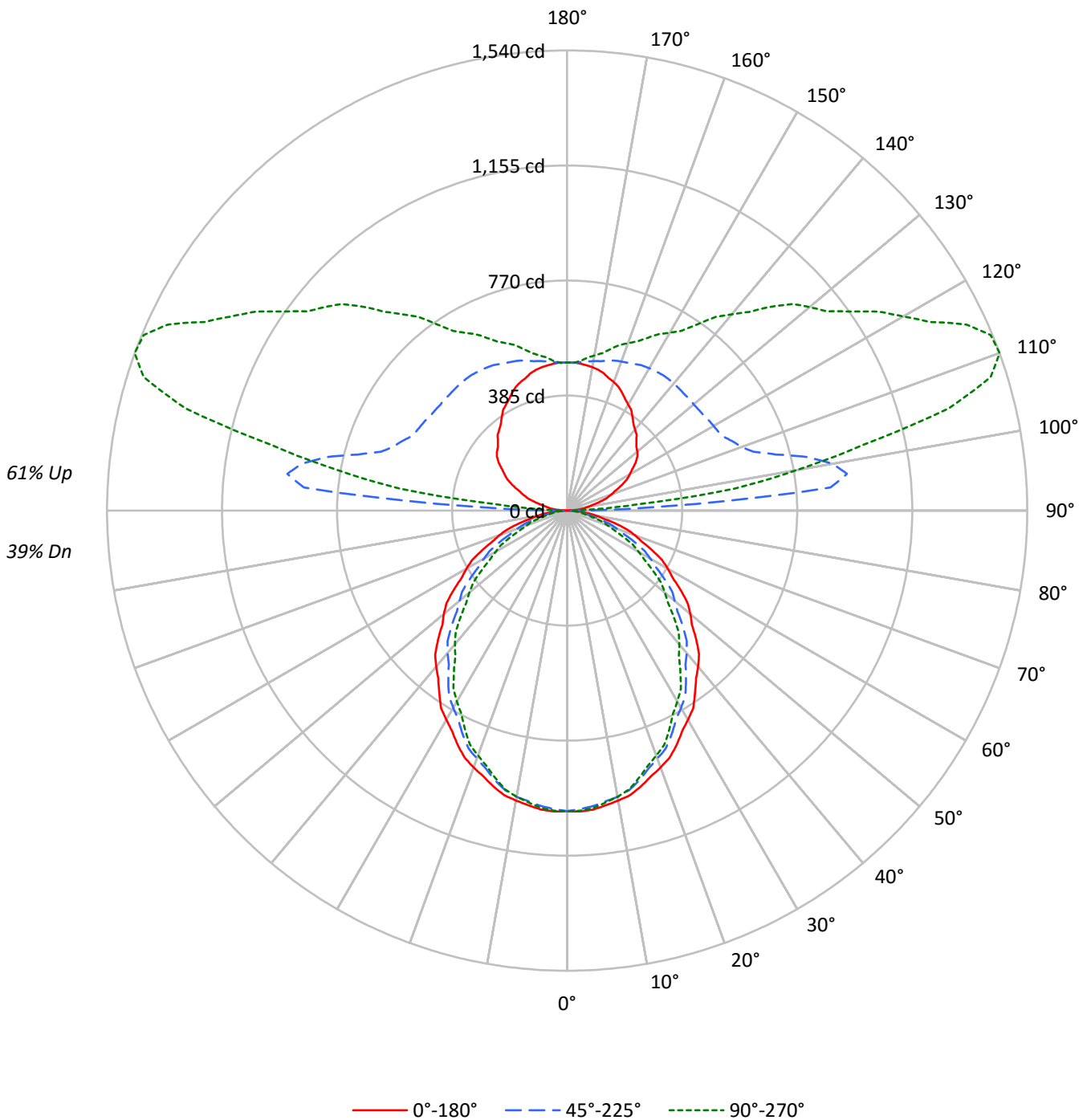
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	95	95	95	95	77	77	77	61	61	61	46	46	46	39																				
1	96	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33																				
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28																				
3	79	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24																				
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21																				
5	67	55	48	42	60	51	44	39	42	37	33	34	30	27	26	24	22	18																				
6	61	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16																				
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14																				
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13																				
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11																				
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	14	12	10																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6497	6497	6497
5°	6512	6438	6477
10°	6462	6378	6378
15°	6386	6248	6197
20°	6287	6068	5994
25°	6173	5890	5761
30°	6029	5683	5502
35°	5882	5469	5211
40°	5746	5246	4926
45°	5580	4996	4615
50°	5413	4725	4290
55°	5219	4466	3944
60°	5025	4151	3573
65°	4795	3785	3147
70°	4534	3329	2712
75°	4172	2805	2256
80°	3675	2205	1893
85°	3097	1801	1690



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.6	1.6
10°-20°	264.3	4.3
20°-30°	383.3	6.3
30°-40°	436.9	7.2
40°-50°	425.9	7.0
50°-60°	358.5	5.9
60°-70°	251.3	4.1
70°-80°	129.2	2.1
80°-90°	35.4	0.6
90°-100°	358.9	5.9
100°-110°	771.5	12.7
110°-120°	724.1	11.9
120°-130°	586.8	9.6
130°-140°	470.9	7.7
140°-150°	355.4	5.8
150°-160°	250.1	4.1
160°-170°	147.4	2.4
170°-180°	48.0	0.8
0°-30°	742.3	12.2
0°-40°	1179.2	19.4
0°-60°	1963.5	32.2
0°-90°	2379.3	39.1
90°-120°	1854.5	30.4
90°-150°	3267.6	53.6
90°-180°	3713.0	60.9
0°-180°	6092.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1004	1001	993	1000	999	95
15°	955	950	934	933	927	269
25°	866	854	827	817	808	398
35°	746	727	694	672	661	467
45°	611	588	547	518	505	471
55°	464	438	397	364	350	414
65°	314	287	248	218	206	311
75°	167	144	112	96	90	177
85°	42	29	24	24	23	47
90°	1	9	16	21	23	4
95°	33	97	884	401	235	35
105°	113	158	724	1425	1323	119
115°	202	243	581	1252	1474	198
125°	280	327	557	996	1161	248
135°	327	394	553	835	964	254
145°	381	437	555	691	761	239
155°	435	468	541	611	638	200
165°	475	488	519	551	559	134
175°	494	494	498	504	502	47
180°	495	495	495	495	495	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1007.8	1007.4	1007.0	1006.6	1006.2	1005.3	1003.9	1002.6	1001.2	999.9	1001.2
5°	1004.4	1003.8	1003.1	1002.4	1001.7	1000.5	998.6	996.8	994.9	993.0	994.7
7.5°	994.6	993.9	993.3	992.6	992.0	990.6	988.3	986.1	983.9	981.6	982.8
10°	985.4	984.9	984.4	983.9	983.4	982.0	979.6	977.3	974.9	972.5	973.0
12.5°	975.1	974.5	973.8	973.2	972.5	970.6	967.5	964.3	961.1	957.9	958.3
15°	955.1	954.0	953.0	952.0	951.0	948.7	945.2	941.6	938.1	934.5	934.4
17.5°	932.4	930.9	929.3	927.8	926.2	923.2	918.7	914.3	909.8	905.4	904.5
20°	914.8	913.1	911.4	909.7	908.0	904.5	899.1	893.7	888.3	882.9	882.0
22.5°	895.3	893.6	892.0	890.3	888.6	884.9	879.2	873.6	867.9	862.2	860.6
25°	866.2	863.6	861.1	858.6	856.0	851.6	845.4	839.1	832.9	826.6	824.5
27.5°	832.7	829.7	826.6	823.5	820.4	815.6	808.9	802.2	795.5	788.8	785.7
30°	808.4	805.2	802.0	798.8	795.6	790.4	783.3	776.3	769.2	762.1	758.2
32.5°	784.7	781.0	777.2	773.5	769.7	764.2	757.0	749.8	742.5	735.3	731.0
35°	746.1	742.1	738.0	734.0	729.9	724.1	716.5	708.9	701.3	693.7	688.8
37.5°	708.3	703.3	698.4	693.5	688.6	682.2	674.3	666.5	658.7	650.8	645.0
40°	681.5	676.5	671.4	666.3	661.3	654.7	646.6	638.5	630.4	622.3	615.9
42.5°	653.6	648.4	643.2	638.0	632.8	626.0	617.6	609.2	600.9	592.5	586.3
45°	610.9	606.0	601.1	596.2	591.3	584.2	574.9	565.6	556.3	547.0	540.3
47.5°	566.7	561.5	556.3	551.2	546.0	538.7	529.4	520.0	510.7	501.3	494.4
50°	538.7	533.1	527.5	522.0	516.4	508.8	499.2	489.6	479.9	470.3	463.2
52.5°	508.3	502.6	496.9	491.2	485.5	478.1	469.0	459.9	450.8	441.7	434.1
55°	463.5	458.1	452.7	447.3	441.9	434.4	425.0	415.5	406.1	396.6	389.0
57.5°	418.2	412.4	406.6	400.9	395.1	387.6	378.5	369.4	360.3	351.2	343.7
60°	389.0	383.1	377.2	371.3	365.4	357.9	348.7	339.6	330.5	321.4	314.0
62.5°	358.0	352.4	346.7	341.1	335.5	328.0	318.8	309.5	300.3	291.0	284.1
65°	313.8	308.1	302.3	296.6	290.8	283.5	274.5	265.6	256.6	247.7	240.9
67.5°	269.9	264.1	258.4	252.7	246.9	239.8	231.2	222.6	214.0	205.4	199.3
70°	240.1	234.4	228.6	222.9	217.1	210.0	201.6	193.2	184.7	176.3	171.0
72.5°	210.9	205.3	199.7	194.1	188.5	181.7	173.8	165.9	158.0	150.1	145.3
75°	167.2	162.1	157.0	152.0	146.9	140.8	133.7	126.6	119.5	112.4	108.7
77.5°	123.7	119.6	115.6	111.5	107.5	102.6	96.9	91.3	85.6	79.9	77.3
80°	98.8	94.7	90.7	86.6	82.6	78.2	73.4	68.7	64.0	59.3	57.7
82.5°	74.5	70.8	67.2	63.5	59.9	56.4	53.2	49.9	46.7	43.5	42.8
85°	41.8	38.7	35.7	32.7	29.6	27.7	26.8	26.0	25.2	24.3	24.1
87.5°	14.2	13.4	12.9	12.3	11.8	11.7	11.7	12.0	12.0	12.3	12.5
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.5	52.7	81.9	136.4	227.8	327.0	321.8	260.5
95°	32.9	33.9	41.9	52.9	74.9	119.8	226.6	446.2	721.8	884.5	865.5
97.5°	54.7	55.9	61.5	72.5	92.2	124.6	195.3	356.2	644.5	944.6	1095.1
100°	69.9	71.9	75.9	86.8	105.8	135.8	193.7	323.4	575.0	901.4	1151.0
102.5°	86.7	87.8	91.0	102.8	120.2	149.3	200.9	309.9	522.3	825.6	1117.5
105°	112.8	112.8	117.8	127.8	143.8	171.7	215.6	304.5	471.2	723.7	1010.3
107.5°	138.4	140.4	145.1	153.3	169.9	195.1	237.6	313.7	449.6	653.7	900.8
110°	156.7	158.7	162.7	171.7	186.7	212.6	253.6	322.4	443.2	620.9	838.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.1	177.1	180.3	189.3	204.2	229.4	268.7	333.6	443.2	601.8	792.2
115°	201.7	203.6	206.6	215.6	230.6	255.6	292.5	350.4	446.2	581.0	741.7
117.5°	225.6	228.6	231.8	240.8	257.8	281.9	316.9	369.6	452.8	570.8	711.6
120°	241.6	244.6	248.6	257.6	274.5	299.5	334.4	382.3	459.2	566.0	694.8
122.5°	258.4	260.5	263.7	272.7	291.3	316.3	351.2	396.7	464.8	562.0	680.4
125°	279.5	281.5	286.5	295.5	314.5	340.4	373.4	416.3	474.2	557.0	660.9
127.5°	296.1	299.1	305.5	316.9	337.0	363.0	394.7	434.2	484.8	554.6	642.9
130°	306.5	309.5	317.5	330.4	351.4	377.3	408.3	446.2	491.2	553.0	630.9
132.5°	314.5	318.2	327.8	342.4	364.2	390.1	421.1	456.6	498.3	553.0	621.3
135°	327.4	331.4	343.4	359.4	380.3	407.3	438.2	471.2	508.1	553.0	609.9
137.5°	343.8	346.8	358.0	374.0	394.5	422.3	450.4	482.0	517.1	554.2	599.8
140°	353.4	356.4	368.4	384.3	403.3	430.3	459.2	489.2	521.1	555.0	595.0
142.5°	364.6	366.8	377.9	393.9	412.1	437.4	464.8	493.1	523.5	555.8	591.0
145°	381.3	383.3	393.3	407.3	425.3	448.2	474.2	499.1	526.1	555.0	585.0
147.5°	398.9	400.1	408.7	421.7	437.2	457.4	480.2	502.7	527.1	552.4	578.8
150°	409.3	411.3	418.3	431.3	445.2	462.2	484.2	505.1	527.1	550.0	574.0
152.5°	420.5	421.7	427.9	439.2	452.4	467.8	488.2	506.7	526.3	546.9	568.4
155°	435.2	435.2	441.2	451.2	461.2	475.2	492.1	508.1	524.1	541.1	559.0
157.5°	448.4	448.2	453.0	461.6	470.4	481.0	495.5	509.1	521.5	535.1	550.2
160°	457.2	456.2	460.2	467.2	475.2	484.2	497.1	509.1	519.1	531.1	543.1
162.5°	464.4	463.4	467.4	473.6	480.0	487.4	498.7	508.3	516.7	526.3	536.7
165°	475.2	473.2	476.2	481.2	485.2	491.2	499.1	507.1	513.1	519.1	527.1
167.5°	482.4	481.4	483.2	486.0	488.8	492.5	499.1	504.7	507.5	512.1	517.7
170°	487.2	486.2	487.2	489.2	491.2	494.1	499.1	503.1	505.1	508.1	512.1
172.5°	490.4	488.6	489.6	491.5	492.7	494.1	498.3	501.5	501.9	503.3	506.5
175°	494.1	492.1	493.1	494.1	494.1	494.1	497.1	499.1	498.1	498.1	499.1
177.5°	495.9	494.3	494.3	495.1	494.3	494.3	495.9	496.7	495.1	495.1	495.9
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1002.6	1003.9	1005.3	1005.9	1005.8	1005.6	1005.5	1005.4
5°	996.4	998.1	999.8	1000.5	1000.1	999.8	999.5	999.1
7.5°	984.0	985.2	986.4	986.8	986.4	986.0	985.7	985.3
10°	973.5	974.0	974.6	974.6	974.0	973.5	973.0	972.5
12.5°	958.7	959.1	959.4	959.2	958.4	957.7	956.9	956.1
15°	934.2	934.0	933.9	933.0	931.5	930.0	928.5	926.9
17.5°	903.7	902.8	902.0	900.9	899.7	898.4	897.2	895.9
20°	881.2	880.3	879.5	878.3	876.8	875.3	873.8	872.2
22.5°	858.9	857.2	855.6	854.1	852.9	851.6	850.4	849.1
25°	822.3	820.1	817.9	815.8	814.0	812.1	810.3	808.4
27.5°	782.7	779.6	776.5	774.1	772.3	770.5	768.7	766.9
30°	754.3	750.4	746.5	743.8	742.3	740.8	739.3	737.8
32.5°	726.7	722.5	718.2	715.1	713.1	711.2	709.3	707.4
35°	683.9	679.0	674.1	670.5	668.1	665.7	663.4	661.0
37.5°	639.1	633.2	627.3	623.2	620.9	618.7	616.4	614.1
40°	609.4	603.0	596.6	592.4	590.4	588.3	586.3	584.3
42.5°	580.2	574.0	567.9	563.3	560.4	557.4	554.4	551.5
45°	533.5	526.8	520.0	515.4	512.9	510.3	507.8	505.3
47.5°	487.4	480.4	473.5	468.6	465.8	463.0	460.2	457.4
50°	456.1	449.0	441.9	437.1	434.6	432.1	429.5	427.0
52.5°	426.5	418.8	411.2	406.1	403.6	401.1	398.5	396.0
55°	381.4	373.8	366.2	361.1	358.4	355.7	353.0	350.3
57.5°	336.3	328.9	321.5	316.5	314.1	311.7	309.4	307.0
60°	306.5	299.1	291.7	286.7	284.2	281.6	279.1	276.6
62.5°	277.2	270.3	263.4	258.7	256.2	253.7	251.1	248.6
65°	234.2	227.4	220.7	216.0	213.5	211.0	208.4	205.9
67.5°	193.1	186.9	180.7	176.6	174.6	172.6	170.5	168.5
70°	165.8	160.6	155.3	151.7	149.7	147.7	145.6	143.6
72.5°	140.5	135.6	130.8	127.7	126.4	125.0	123.7	122.3
75°	105.0	101.3	97.6	95.1	94.0	92.8	91.6	90.4
77.5°	74.7	72.1	69.5	67.8	66.9	66.0	65.2	64.3
80°	56.2	54.7	53.2	52.3	51.9	51.6	51.2	50.9
82.5°	42.0	41.3	40.6	40.2	40.0	39.8	39.6	39.4
85°	24.0	23.8	23.6	23.5	23.3	23.1	23.0	22.8
87.5°	12.7	12.9	13.1	13.4	13.3	13.2	13.2	13.1
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	176.9	128.4	96.6	81.9	69.1	66.7	65.3	63.7
95°	717.8	566.0	443.2	359.4	288.5	258.6	250.6	234.6
97.5°	1069.0	962.5	842.9	726.3	664.7	608.7	579.8	567.0
100°	1227.9	1179.0	1076.1	972.3	903.4	831.6	794.6	778.7
102.5°	1281.4	1311.5	1262.2	1191.9	1118.3	1067.2	1027.0	1015.0
105°	1249.8	1386.6	1430.5	1419.5	1387.6	1354.7	1334.7	1322.7
107.5°	1137.2	1319.7	1432.5	1484.6	1500.8	1500.6	1494.0	1486.0
110°	1054.2	1243.8	1384.6	1469.5	1514.4	1533.3	1540.3	1540.3





TEST NUMBER: P333543

CATALOG NUMBER: S125RDIP-S610D1035U835-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	988.7	1168.8	1311.1	1411.2	1476.8	1509.4	1526.8	1533.9
115°	906.4	1061.2	1197.9	1306.7	1384.6	1432.5	1460.5	1473.5
117.5°	853.3	986.7	1104.5	1204.3	1282.2	1331.7	1359.4	1367.4
120°	824.6	944.4	1054.2	1142.0	1215.9	1263.8	1290.8	1298.8
122.5°	803.0	914.0	1011.8	1094.1	1160.0	1203.9	1230.9	1238.1
125°	771.7	873.5	960.3	1032.2	1088.1	1129.0	1151.0	1161.0
127.5°	739.7	834.8	915.8	983.1	1033.8	1069.9	1090.7	1095.1
130°	719.8	807.6	885.5	950.4	1000.3	1033.2	1053.2	1059.2
132.5°	699.8	782.0	852.7	915.2	965.1	998.1	1016.4	1023.2
135°	673.8	742.7	806.6	863.5	907.4	940.4	958.3	964.3
137.5°	651.9	707.6	760.7	809.0	848.3	878.3	894.9	901.4
140°	639.9	686.8	732.7	774.7	811.6	837.6	852.5	857.5
142.5°	629.5	669.2	708.8	745.1	776.5	798.4	812.6	816.8
145°	615.9	646.9	677.8	704.8	728.7	745.7	756.7	760.7
147.5°	603.2	628.3	652.1	672.4	691.4	705.0	711.4	713.2
150°	596.0	617.9	636.9	654.9	669.8	681.8	685.8	686.8
152.5°	588.0	607.5	624.9	638.9	651.5	661.1	665.0	666.0
155°	576.0	592.0	606.0	616.9	626.9	633.9	636.9	637.9
157.5°	564.0	577.2	588.0	596.6	604.4	610.1	612.9	612.7
160°	556.0	566.0	576.0	583.0	590.0	595.0	597.0	596.0
162.5°	547.3	556.4	564.8	571.0	576.4	580.6	581.0	580.8
165°	535.1	542.1	548.1	553.0	557.0	559.0	559.0	559.0
167.5°	523.5	528.1	532.7	536.3	538.3	540.1	539.3	539.1
170°	517.1	520.1	523.1	525.1	527.1	528.1	528.1	527.1
172.5°	509.9	512.9	515.1	516.3	516.7	518.5	516.9	515.9
175°	502.1	502.1	504.1	504.1	504.1	505.1	503.1	502.1
177.5°	496.7	497.5	497.5	497.5	496.7	497.5	495.1	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)