

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: P333549

Luminaire Tested: **S125RDIP-S610D1205U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333549
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-S610D1205U835-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6701.7 lumens
Efficiency: N/A
Efficacy: 135.7 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

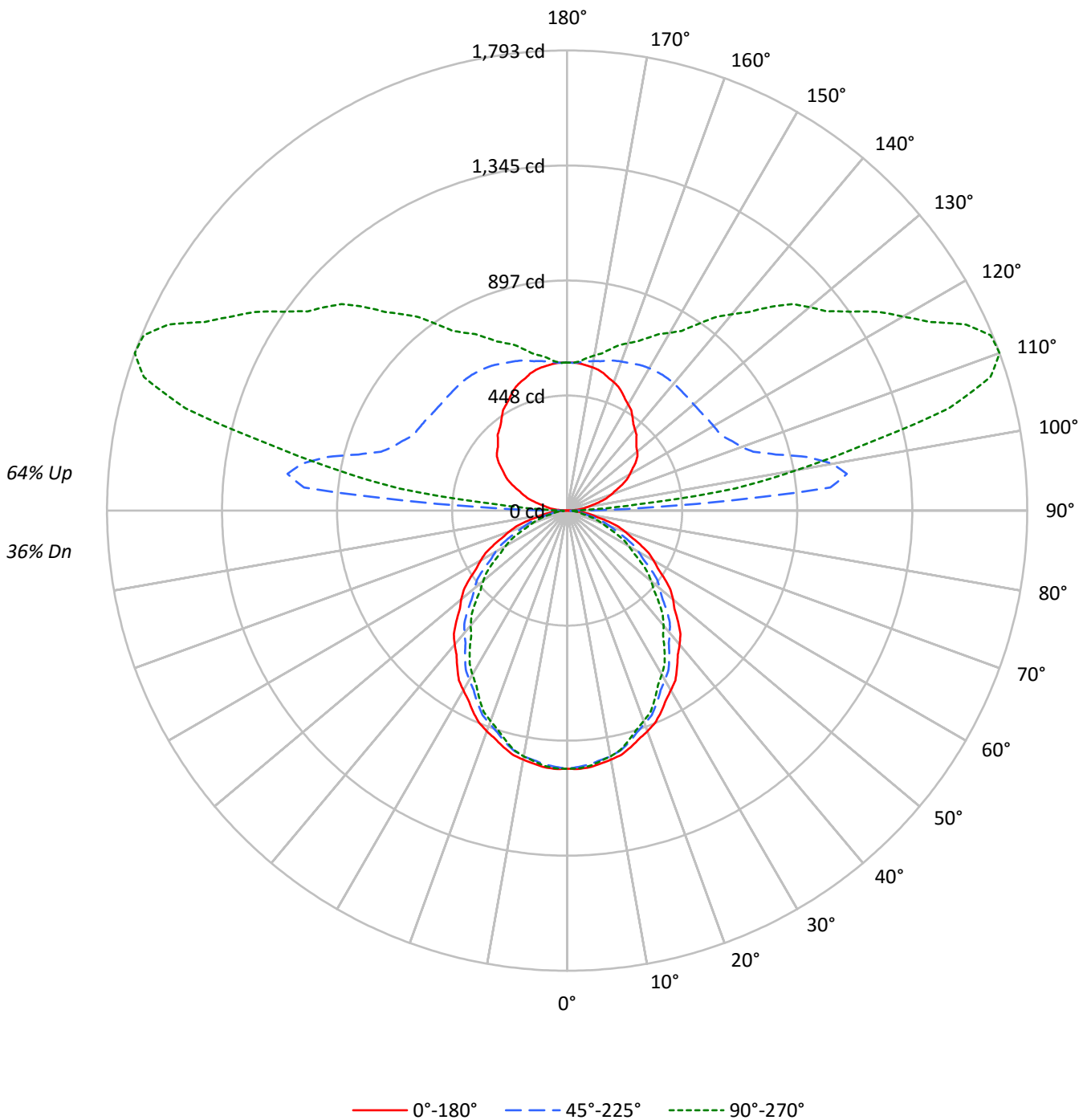
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	36																				
1	95	91	87	83	86	82	79	76	66	64	62	52	50	49	38	37	36	30																				
2	86	79	73	68	78	72	67	63	58	55	52	45	43	41	34	32	31	26																				
3	79	70	63	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22																				
4	72	62	54	48	65	56	50	44	46	41	37	36	33	30	27	25	23	19																				
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20	16																				
6	61	49	41	36	55	45	38	33	37	32	28	29	25	23	22	20	18	14																				
7	56	44	37	31	51	41	34	29	33	28	24	26	23	20	20	18	16	13																				
8	52	40	33	28	47	37	30	26	30	25	22	24	21	18	18	16	14	12																				
9	48	37	29	24	44	34	27	23	28	23	19	22	19	16	17	15	13	10																				
10	45	34	27	22	41	31	25	20	25	21	17	21	17	14	16	13	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	1.4
10°-20°	264.3	3.9
20°-30°	383.3	5.7
30°-40°	436.9	6.5
40°-50°	425.9	6.4
50°-60°	358.5	5.3
60°-70°	251.3	3.7
70°-80°	129.2	1.9
80°-90°	35.8	0.5
90°-100°	417.8	6.2
100°-110°	898.0	13.4
110°-120°	842.8	12.6
120°-130°	683.0	10.2
130°-140°	548.1	8.2
140°-150°	413.6	6.2
150°-160°	291.2	4.3
160°-170°	171.6	2.6
170°-180°	55.8	0.8
0°-30°	742.3	11.1
0°-40°	1179.2	17.6
0°-60°	1963.5	29.3
0°-90°	2379.7	35.5
90°-120°	2158.6	32.2
90°-150°	3803.4	56.8
90°-180°	4322.0	64.5
0°-180°	6701.7	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	10	19	24	27	4
95°	38	113	1030	467	273	41
105°	131	184	842	1659	1540	138
115°	235	283	676	1458	1715	231
125°	325	381	648	1160	1351	289
135°	381	458	644	972	1122	296
145°	444	508	646	805	885	278
155°	507	545	630	712	742	233
165°	553	568	604	641	651	156
175°	575	575	580	587	584	55
180°	576	576	576	576	576	



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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	13.5	13.0	12.5	12.1	12.0	12.1	12.4	12.5	12.8	13.1
90°	1.2	2.3	4.6	7.0	9.3	11.6	12.8	15.1	16.3	18.6	19.8
92.5°	14.2	17.2	27.0	41.4	61.4	95.3	158.7	265.2	380.7	374.6	303.3
95°	38.3	39.5	48.8	61.6	87.1	139.4	263.8	519.4	840.1	1029.5	1007.4
97.5°	63.7	65.1	71.6	84.4	107.4	145.0	227.3	414.6	750.2	1099.4	1274.7
100°	81.3	83.7	88.3	101.1	123.2	158.0	225.4	376.5	669.3	1049.2	1339.7
102.5°	100.9	102.3	106.0	119.7	139.9	173.8	233.8	360.7	607.9	960.9	1300.7
105°	131.3	131.3	137.1	148.7	167.3	199.9	251.0	354.4	548.4	842.4	1175.9
107.5°	161.0	163.4	168.9	178.5	197.8	227.0	276.5	365.1	523.3	760.8	1048.6
110°	182.4	184.8	189.4	199.9	217.3	247.5	295.1	375.3	515.9	722.7	976.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	203.8	206.1	209.8	220.3	237.7	267.0	312.8	388.3	515.9	700.4	922.1
115°	234.7	237.0	240.5	251.0	268.4	297.5	340.5	407.8	519.4	676.3	863.3
117.5°	262.6	266.1	269.8	280.3	300.0	328.1	368.8	430.2	527.1	664.4	828.2
120°	281.2	284.7	289.3	299.8	319.5	348.6	389.3	445.0	534.5	658.8	808.7
122.5°	300.7	303.3	307.0	317.4	339.1	368.1	408.8	461.8	541.0	654.2	792.0
125°	325.3	327.7	333.5	343.9	366.0	396.2	434.6	484.5	551.9	648.4	769.2
127.5°	344.6	348.1	355.6	368.8	392.3	422.5	459.4	505.5	564.2	645.6	748.3
130°	356.7	360.2	369.5	384.6	409.0	439.2	475.2	519.4	571.7	643.7	734.4
132.5°	366.0	370.4	381.6	398.6	423.9	454.1	490.1	531.5	580.0	643.7	723.2
135°	381.1	385.8	399.7	418.3	442.7	474.1	510.1	548.4	591.4	643.7	710.0
137.5°	400.2	403.7	416.7	435.3	459.2	491.5	524.3	561.0	601.9	645.1	698.1
140°	411.3	414.8	428.8	447.4	469.4	500.8	534.5	569.4	606.5	646.0	692.5
142.5°	424.3	426.9	439.9	458.5	479.7	509.2	541.0	574.0	609.3	647.0	687.9
145°	443.9	446.2	457.8	474.1	495.0	521.7	551.9	581.0	612.4	646.0	680.9
147.5°	464.3	465.7	475.7	490.8	508.9	532.4	558.9	585.2	613.5	643.0	673.7
150°	476.4	478.7	486.9	502.0	518.2	538.0	563.5	588.0	613.5	640.2	668.1
152.5°	489.4	490.8	498.0	511.3	526.6	544.5	568.2	589.8	612.6	636.5	661.6
155°	506.6	506.6	513.6	525.2	536.8	553.1	572.8	591.4	610.0	629.8	650.7
157.5°	522.0	521.7	527.3	537.3	547.5	559.8	576.8	592.6	607.0	622.8	640.5
160°	532.2	531.0	535.7	543.8	553.1	563.5	578.7	592.6	604.2	618.2	632.1
162.5°	540.5	539.4	544.0	551.2	558.7	567.3	580.5	591.7	601.4	612.6	624.7
165°	553.1	550.8	554.3	560.1	564.7	571.7	581.0	590.3	597.2	604.2	613.5
167.5°	561.5	560.3	562.4	565.6	568.9	573.3	581.0	587.5	590.7	596.1	602.6
170°	567.0	565.9	567.0	569.4	571.7	575.2	581.0	585.6	588.0	591.4	596.1
172.5°	570.8	568.7	569.8	572.1	573.5	575.2	580.0	583.8	584.2	585.9	589.6
175°	575.2	572.8	574.0	575.2	575.2	575.2	578.7	581.0	579.8	579.8	581.0
177.5°	577.3	575.4	575.4	576.3	575.4	575.4	577.3	578.2	576.3	576.3	577.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3



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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°	13.3	13.5	13.8	14.2	14.0	13.9	14.0	13.9
90°	20.9	22.1	23.2	25.6	25.6	25.6	26.7	26.7
92.5°	205.9	149.4	112.5	95.3	80.4	77.6	76.0	74.1
95°	835.4	658.8	515.9	418.3	335.8	300.9	291.7	273.1
97.5°	1244.2	1120.4	981.2	845.4	773.6	708.6	674.9	660.0
100°	1429.2	1372.3	1252.6	1131.7	1051.6	967.9	924.9	906.3
102.5°	1491.5	1526.6	1469.2	1387.4	1301.6	1242.1	1195.4	1181.5
105°	1454.8	1614.0	1665.1	1652.3	1615.1	1576.8	1553.5	1539.6
107.5°	1323.7	1536.1	1667.4	1728.1	1746.9	1746.7	1739.0	1729.7
110°	1227.0	1447.8	1611.6	1710.4	1762.7	1784.8	1792.9	1792.9



TEST NUMBER: P333549

CATALOG NUMBER: S125RDIP-S610D1205U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1150.8	1360.4	1526.1	1642.5	1719.0	1756.9	1777.1	1785.5
115°	1055.1	1235.2	1394.3	1521.0	1611.6	1667.4	1699.9	1715.0
117.5°	993.2	1148.5	1285.6	1401.8	1492.4	1550.1	1582.4	1591.6
120°	959.8	1099.2	1227.0	1329.3	1415.3	1471.0	1502.4	1511.7
122.5°	934.7	1063.9	1177.8	1273.5	1350.2	1401.3	1432.7	1441.1
125°	898.2	1016.7	1117.8	1201.5	1266.5	1314.2	1339.7	1351.4
127.5°	861.0	971.6	1066.0	1144.3	1203.3	1245.4	1269.6	1274.7
130°	837.8	940.0	1030.7	1106.2	1164.3	1202.6	1225.9	1232.8
132.5°	814.5	910.3	992.5	1065.3	1123.4	1161.7	1183.1	1191.0
135°	784.3	864.5	938.9	1005.1	1056.2	1094.6	1115.5	1122.5
137.5°	758.8	823.6	885.4	941.7	987.4	1022.3	1041.6	1049.2
140°	744.8	799.4	852.9	901.7	944.7	974.9	992.3	998.1
142.5°	732.7	779.0	825.0	867.3	903.8	929.3	945.8	950.7
145°	716.9	752.9	789.0	820.3	848.2	868.0	880.8	885.4
147.5°	702.1	731.3	759.0	782.7	804.8	820.6	828.0	830.1
150°	693.7	719.3	741.3	762.2	779.7	793.6	798.3	799.4
152.5°	684.4	707.2	727.4	743.7	758.3	769.4	774.1	775.3
155°	670.4	689.0	705.3	718.1	729.7	737.8	741.3	742.5
157.5°	656.5	671.8	684.4	694.4	703.4	710.2	713.4	713.2
160°	647.2	658.8	670.4	678.6	686.7	692.5	694.9	693.7
162.5°	637.0	647.7	657.4	664.6	670.9	675.8	676.3	676.0
165°	622.8	630.9	637.9	643.7	648.4	650.7	650.7	650.7
167.5°	609.3	614.7	620.0	624.2	626.5	628.6	627.7	627.5
170°	601.9	605.4	608.9	611.2	613.5	614.7	614.7	613.5
172.5°	593.5	597.0	599.6	601.0	601.4	603.5	601.7	600.5
175°	584.5	584.5	586.8	586.8	586.8	588.0	585.6	584.5
177.5°	578.2	579.1	579.1	579.1	578.2	579.1	576.3	576.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3

(END OF REPORT)