

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: P333291-935

Luminaire Tested: **S125DIP-S1090D1205U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333291-935
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: S125DIP-S1090D1205U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7396.0 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

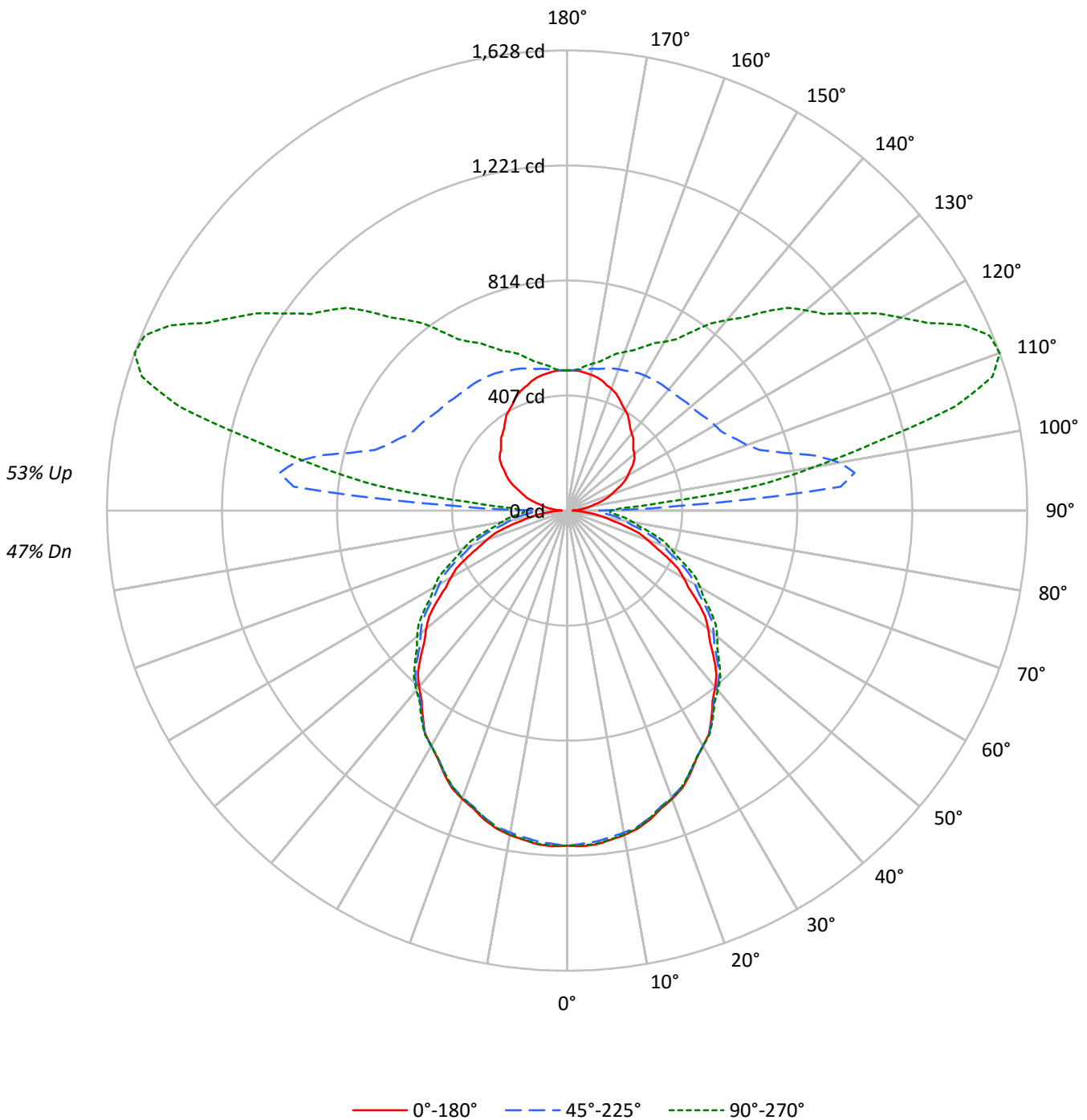
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	98	98	98	81	81	81	67	67	67	53	53	53	47
1	96	92	88	84	88	84	81	78	70	68	65	58	56	54	46	45	43	38
2	87	80	73	68	80	73	68	63	61	57	54	50	47	45	40	38	36	31
3	80	70	62	56	73	64	58	52	54	49	45	44	40	37	35	33	30	26
4	73	62	54	47	66	57	50	44	48	42	38	39	35	32	31	28	26	22
5	67	55	46	40	61	51	43	38	43	37	33	35	31	27	28	25	22	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	25	22	20	17
7	57	44	36	30	52	41	34	29	35	29	25	29	24	21	23	20	17	15
8	53	40	32	27	48	37	30	25	31	26	22	26	22	19	21	18	16	13
9	49	37	29	24	45	34	27	22	29	23	20	24	20	17	20	16	14	12
10	46	33	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7657	7657	7657
5°	7672	7516	7539
10°	7617	7381	7370
15°	7527	7221	7155
20°	7405	7022	6940
25°	7259	6810	6675
30°	7083	6575	6434
35°	6919	6361	6214
40°	6751	6134	5991
45°	6562	5941	5794
50°	6381	5731	5621
55°	6164	5532	5416
60°	5927	5306	5207
65°	5679	5069	4972
70°	5397	4745	4731
75°	4952	4435	4434
80°	4367	4057	4111
85°	3824	3802	4009



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.5
10°-20°	318.2	4.3
20°-30°	473.3	6.4
30°-40°	560.6	7.6
40°-50°	579.6	7.8
50°-60°	533.9	7.2
60°-70°	431.6	5.8
70°-80°	289.0	3.9
80°-90°	152.7	2.1
90°-100°	443.8	6.0
100°-110°	835.2	11.3
110°-120°	767.2	10.4
120°-130°	611.7	8.3
130°-140°	482.3	6.5
140°-150°	358.2	4.8
150°-160°	250.7	3.4
160°-170°	147.8	2.0
170°-180°	48.1	0.7
0°-30°	903.6	12.2
0°-40°	1464.2	19.8
0°-60°	2577.8	34.9
0°-90°	3451.1	46.7
90°-120°	2046.2	27.7
90°-150°	3498.4	47.3
90°-180°	3945.0	53.3
0°-180°	7396.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1186	1183	1175	1184	1183	112
15°	1132	1133	1125	1132	1128	319
25°	1029	1032	1025	1029	1024	473
35°	890	898	895	898	898	557
45°	733	746	752	760	761	566
55°	564	582	601	613	618	504
65°	388	415	443	460	465	385
75°	214	244	281	304	310	227
85°	64	102	143	168	178	68
90°	20	65	111	142	153	14
95°	48	143	971	512	354	47
105°	124	188	789	1514	1421	130
115°	209	260	628	1321	1550	206
125°	285	333	585	1043	1215	252
135°	330	396	564	861	997	257
145°	383	438	556	699	773	240
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1188.4	1187.9	1187.5	1187.1	1186.7	1185.8	1184.3	1182.8	1181.5	1180.0	1181.5
5°	1185.6	1185.1	1184.6	1184.0	1183.5	1182.3	1180.5	1178.7	1176.9	1175.1	1177.2
7.5°	1175.1	1174.9	1174.7	1174.5	1174.3	1173.3	1171.4	1169.5	1167.7	1165.8	1167.6
10°	1165.8	1165.8	1165.8	1165.8	1165.8	1164.8	1162.7	1160.6	1158.6	1156.5	1158.3
12.5°	1152.8	1153.0	1153.2	1153.4	1153.7	1152.9	1151.2	1149.6	1148.0	1146.2	1147.7
15°	1132.1	1132.4	1132.6	1132.9	1133.2	1132.4	1130.6	1128.8	1127.0	1125.2	1126.7
17.5°	1105.1	1105.6	1106.1	1106.6	1107.2	1106.6	1104.7	1102.9	1101.1	1099.3	1100.5
20°	1085.6	1086.2	1086.7	1087.2	1087.7	1087.0	1085.2	1083.4	1081.6	1079.8	1080.6
22.5°	1063.2	1064.2	1065.1	1066.1	1067.0	1066.4	1064.5	1062.5	1060.4	1058.4	1059.4
25°	1028.6	1029.4	1030.2	1031.0	1031.7	1031.4	1029.8	1028.3	1026.7	1025.2	1026.2
27.5°	990.1	991.2	992.3	993.5	994.6	994.3	992.6	990.8	989.0	987.3	988.0
30°	961.2	962.8	964.3	965.9	967.4	967.4	965.9	964.3	962.8	961.2	961.7
32.5°	935.2	936.5	937.9	939.3	940.6	940.6	939.5	938.4	937.3	936.2	936.7
35°	890.4	892.2	894.0	895.8	897.6	898.1	897.3	896.6	895.8	895.0	895.8
37.5°	845.5	847.1	848.8	850.4	852.0	852.8	852.6	852.3	852.0	851.8	852.8
40°	814.8	816.8	818.9	821.0	823.0	824.0	823.7	823.5	823.2	822.9	824.0
42.5°	781.3	784.0	786.7	789.4	792.0	793.7	794.3	794.8	795.4	796.0	797.2
45°	733.4	736.2	739.1	741.9	744.8	746.8	748.1	749.4	750.7	752.0	753.8
47.5°	684.4	687.0	689.7	692.2	694.9	697.3	699.6	701.8	704.0	706.2	708.9
50°	650.9	653.8	656.6	659.4	662.3	665.1	668.0	670.8	673.6	676.5	679.3
52.5°	615.5	619.1	622.5	625.9	629.4	632.8	636.4	639.8	643.3	646.7	649.8
55°	563.7	567.8	572.0	576.1	580.2	584.4	588.5	592.6	596.8	600.9	603.7
57.5°	510.7	515.7	520.6	525.6	530.5	535.5	540.2	544.9	549.7	554.4	557.7
60°	475.4	480.5	485.7	490.9	496.0	501.2	506.4	511.5	516.7	521.9	525.7
62.5°	441.0	446.2	451.3	456.5	461.7	467.0	472.6	478.2	483.8	489.3	493.6
65°	388.2	394.2	400.1	406.0	412.0	418.0	424.2	430.4	436.6	442.8	446.7
67.5°	338.5	344.2	349.9	355.7	361.4	367.4	373.8	380.0	386.3	392.6	397.4
70°	302.2	308.2	314.1	320.0	326.0	332.3	339.0	345.7	352.4	359.1	364.0
72.5°	266.9	273.0	279.1	285.3	291.4	298.2	305.6	312.9	320.2	327.5	332.9
75°	213.9	220.6	227.3	234.0	240.7	248.2	256.5	264.8	273.0	281.3	286.5
77.5°	163.0	170.7	178.5	186.2	194.0	201.8	209.7	217.7	225.7	233.6	239.3
80°	131.3	139.1	146.8	154.5	162.3	170.6	179.3	188.1	196.9	205.7	211.4
82.5°	102.5	110.6	118.8	127.0	135.2	143.7	152.7	161.7	170.7	179.7	185.2
85°	63.9	72.4	80.9	89.5	98.0	106.8	115.8	124.8	133.9	142.9	148.6
87.5°	36.5	44.9	53.6	62.3	70.9	79.8	88.9	98.0	107.0	116.1	122.3
90°	19.6	28.8	39.1	49.4	59.7	70.2	80.0	90.7	100.6	111.3	118.3
92.5°	28.9	39.2	55.3	75.3	100.1	137.7	201.3	302.0	410.4	414.1	358.4
95°	48.1	55.9	70.6	88.3	117.0	169.8	285.6	514.4	799.4	971.2	957.9
97.5°	68.5	75.8	87.4	104.4	130.4	170.0	249.3	419.0	716.4	1025.6	1182.0
100°	82.8	90.2	99.7	116.1	140.5	177.4	243.7	382.0	642.4	977.8	1233.3
102.5°	98.7	104.9	113.1	129.9	152.3	188.1	247.8	365.1	586.1	898.0	1195.8
105°	123.6	127.7	136.8	150.9	171.1	205.0	256.8	353.5	528.4	789.3	1081.5
107.5°	147.7	153.3	161.5	173.2	193.4	224.1	274.1	357.8	501.5	713.4	966.3
110°	165.2	170.3	177.4	189.5	207.6	238.8	287.1	363.3	491.6	676.9	899.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	183.7	188.1	193.8	205.3	222.7	252.7	299.1	371.2	488.1	654.0	849.5
115°	209.1	212.8	217.7	228.5	245.3	274.6	318.3	383.1	485.8	627.6	793.3
117.5°	232.0	236.1	240.5	250.7	268.9	296.9	338.2	397.4	487.2	611.8	757.2
120°	247.9	251.7	256.5	266.2	284.0	312.4	353.4	407.3	490.3	603.3	736.8
122.5°	263.8	266.4	269.9	279.3	298.3	326.3	367.0	418.4	492.4	595.6	718.4
125°	284.7	286.5	291.3	300.0	318.7	347.2	385.4	433.6	496.8	585.0	693.2
127.5°	300.2	303.0	309.1	320.3	340.2	368.2	404.2	448.2	503.0	577.2	669.5
130°	310.6	313.4	321.2	333.9	354.6	382.3	416.9	458.6	507.2	572.8	654.5
132.5°	317.7	321.4	331.0	345.5	367.3	394.7	428.5	466.9	511.5	569.1	641.2
135°	330.5	334.2	345.9	361.7	382.5	410.3	443.1	477.9	516.7	563.5	624.0
137.5°	346.6	349.5	360.4	376.3	396.7	424.8	453.9	486.4	522.5	560.6	609.2
140°	355.3	358.3	370.3	386.3	405.4	432.5	461.8	492.1	524.3	558.5	601.4
142.5°	366.5	368.5	379.5	395.3	413.3	438.7	466.1	494.6	525.0	557.5	595.1
145°	383.3	385.0	394.9	408.5	426.3	449.2	475.2	500.2	527.3	556.2	587.5
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.5
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1182.8	1184.3	1185.8	1186.4	1186.2	1185.9	1185.8	1185.6
5°	1179.2	1181.3	1183.4	1184.3	1184.0	1183.8	1183.5	1183.3
7.5°	1169.4	1171.2	1173.0	1173.8	1173.5	1173.3	1173.0	1172.8
10°	1160.1	1161.9	1163.7	1164.5	1164.2	1164.0	1163.7	1163.5
12.5°	1149.1	1150.5	1151.8	1152.2	1151.6	1150.9	1150.2	1149.5
15°	1128.3	1129.8	1131.4	1131.6	1130.6	1129.5	1128.5	1127.5
17.5°	1101.7	1102.9	1104.1	1104.3	1103.7	1103.1	1102.5	1101.9
20°	1081.3	1082.1	1082.9	1083.3	1083.3	1083.3	1083.3	1083.3
22.5°	1060.4	1061.4	1062.3	1062.5	1061.9	1061.3	1060.7	1060.1
25°	1027.3	1028.3	1029.3	1029.2	1027.9	1026.6	1025.3	1024.0
27.5°	988.7	989.5	990.2	990.3	989.8	989.4	988.9	988.4
30°	962.3	962.8	963.3	963.5	963.2	962.9	962.7	962.4
32.5°	937.2	937.7	938.2	938.3	938.1	937.8	937.5	937.3
35°	896.6	897.3	898.1	898.5	898.5	898.5	898.5	898.5
37.5°	853.9	854.9	855.9	856.4	856.3	856.2	856.0	855.9
40°	825.0	826.0	827.1	827.9	828.4	828.9	829.4	829.9
42.5°	798.4	799.7	800.9	801.6	801.7	801.8	801.9	802.0
45°	755.6	757.4	759.2	760.3	760.5	760.8	761.0	761.3
47.5°	711.5	714.1	716.8	718.3	718.9	719.5	720.1	720.7
50°	682.2	685.0	687.9	689.7	690.4	691.2	692.0	692.8
52.5°	652.8	655.8	658.9	660.7	661.2	661.9	662.5	663.0
55°	606.6	609.4	612.3	614.2	615.3	616.3	617.3	618.4
57.5°	560.9	564.2	567.5	569.5	570.2	571.0	571.8	572.6
60°	529.6	533.5	537.4	539.7	540.4	541.2	542.0	542.8
62.5°	497.9	502.2	506.5	509.1	510.1	511.1	512.0	513.1
65°	450.6	454.4	458.3	460.8	461.8	462.9	463.9	464.9
67.5°	402.0	406.7	411.5	414.5	415.8	417.2	418.4	419.8
70°	368.9	373.8	378.8	382.0	383.6	385.1	386.7	388.2
72.5°	338.2	343.5	348.8	352.1	353.2	354.3	355.4	356.6
75°	291.6	296.8	302.0	305.1	306.4	307.7	309.0	310.3
77.5°	245.0	250.6	256.3	259.7	260.7	261.7	262.8	263.8
80°	217.1	222.7	228.4	231.8	232.8	233.8	234.9	235.9
82.5°	190.6	196.1	201.6	205.3	207.2	209.0	210.9	212.7
85°	154.3	160.0	165.7	169.5	171.6	173.7	175.7	177.8
87.5°	128.5	134.6	140.8	145.0	146.8	148.6	150.7	152.5
90°	125.2	132.2	139.1	145.0	146.8	148.6	151.4	153.2
92.5°	280.3	237.5	211.4	200.4	189.3	188.7	189.2	189.3
95°	815.5	669.2	551.8	471.5	402.3	374.0	367.8	353.7
97.5°	1161.1	1060.0	945.6	832.2	772.1	717.9	690.7	679.6
100°	1315.8	1272.2	1174.6	1074.0	1006.5	936.1	900.6	886.1
102.5°	1365.3	1400.7	1356.5	1289.4	1217.2	1167.5	1128.9	1118.4
105°	1326.8	1469.0	1518.2	1510.7	1480.5	1449.3	1431.1	1420.9
107.5°	1208.2	1396.3	1514.4	1570.0	1587.9	1589.2	1584.2	1577.9
110°	1120.9	1315.9	1461.9	1550.2	1597.1	1617.9	1626.7	1628.5



TEST NUMBER: P333291-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1051.2	1236.3	1383.7	1487.2	1554.8	1589.2	1608.4	1617.5
115°	963.0	1122.7	1264.5	1376.7	1456.2	1505.8	1535.3	1549.9
117.5°	903.7	1041.7	1164.2	1267.3	1347.1	1398.5	1428.1	1437.8
120°	871.2	995.7	1110.1	1201.1	1276.7	1326.2	1354.8	1364.3
122.5°	845.4	960.9	1063.1	1148.4	1216.0	1261.5	1290.1	1298.9
125°	808.3	914.6	1005.7	1080.5	1137.7	1180.1	1203.3	1214.7
127.5°	770.3	869.4	954.5	1024.6	1076.9	1114.7	1137.0	1142.8
130°	747.2	838.8	920.5	987.9	1039.2	1073.6	1094.8	1102.2
132.5°	723.4	809.5	883.9	948.9	1000.0	1034.1	1053.6	1061.5
135°	691.3	763.7	831.1	890.4	935.7	970.1	989.4	996.6
137.5°	664.5	723.4	779.6	830.1	870.6	901.6	919.2	926.9
140°	649.3	699.1	748.0	791.9	830.0	857.0	873.1	879.2
142.5°	636.2	678.5	720.5	758.6	791.1	814.2	829.4	834.6
145°	619.8	652.1	684.5	712.6	737.7	755.7	767.8	772.8
147.5°	605.3	630.9	655.1	676.0	695.4	709.6	716.4	718.7
150°	597.3	619.3	638.3	656.4	671.7	684.0	688.2	689.5
152.5°	589.3	608.9	626.3	640.3	653.0	662.6	666.7	667.7
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

(END OF REPORT)