

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: P333273-935

Luminaire Tested: **S125DIP-S1090D810U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333273-935
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-S1090D810U935-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6178.0 lumens
Efficiency: N/A
Efficacy: 113.6 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

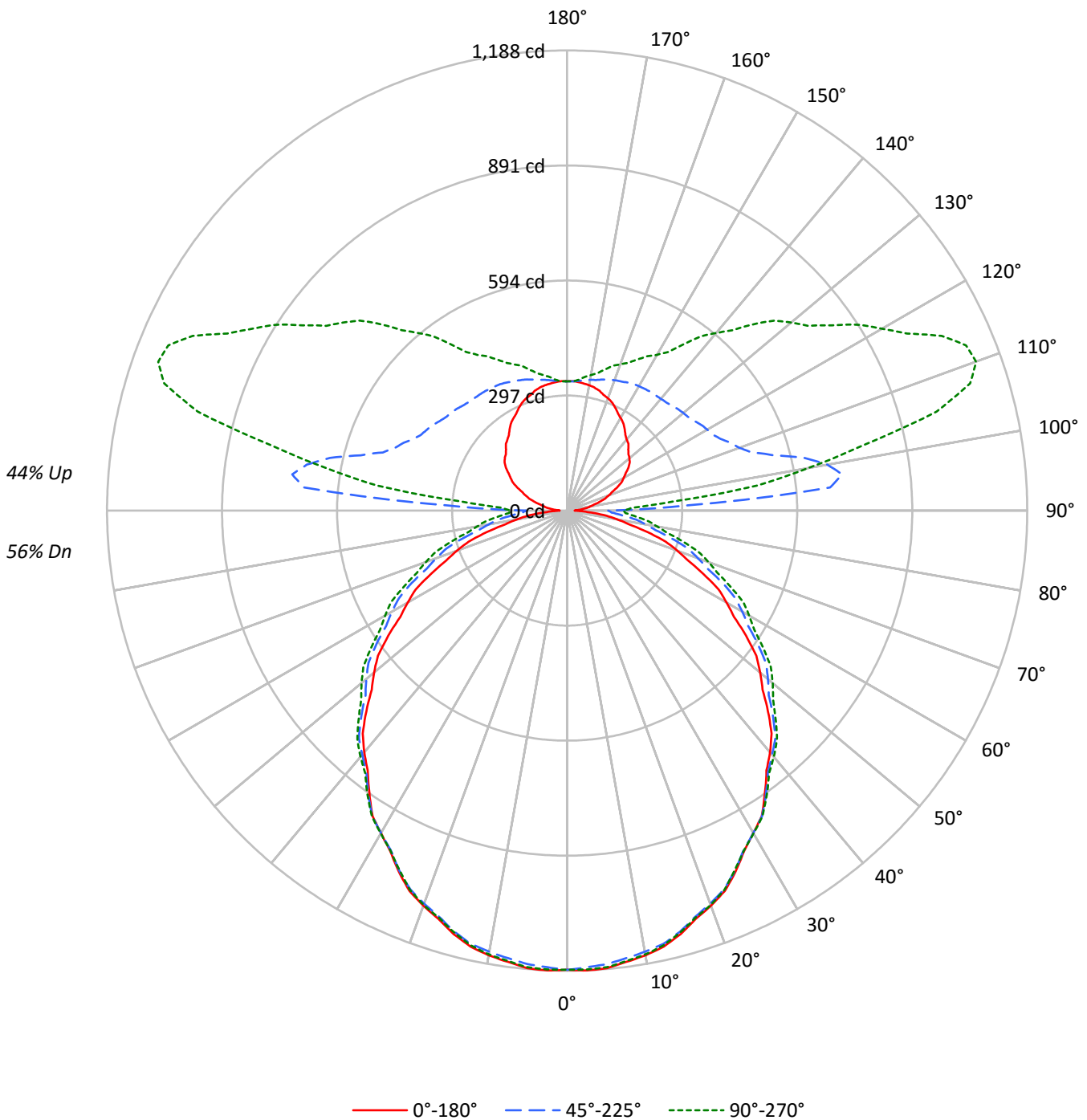
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	61	61	61	56
1	98	94	89	85	91	87	83	80	75	72	69	63	61	60	53	52	50	45
2	89	81	75	69	82	76	70	65	65	61	57	55	52	49	46	44	42	37
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	35	31
4	74	63	55	48	68	59	51	45	51	45	40	43	39	35	36	33	30	27
5	68	56	47	41	63	52	45	39	45	39	35	39	34	30	33	29	26	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	26	29	26	23	20
7	58	45	37	31	54	42	35	30	37	31	26	32	27	23	27	23	20	18
8	54	41	33	28	50	38	31	26	34	28	23	29	24	21	25	21	18	16
9	50	37	30	25	46	35	28	23	31	25	21	27	22	19	23	19	16	14
10	47	34	27	22	43	32	26	21	28	23	19	25	20	17	21	17	15	13

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	1.8
10°-20°	318.2	5.2
20°-30°	473.3	7.7
30°-40°	560.6	9.1
40°-50°	579.6	9.4
50°-60°	533.9	8.6
60°-70°	431.6	7.0
70°-80°	289.0	4.7
80°-90°	151.7	2.5
90°-100°	326.1	5.3
100°-110°	582.3	9.4
110°-120°	529.9	8.6
120°-130°	419.3	6.8
130°-140°	327.9	5.3
140°-150°	241.7	3.9
150°-160°	168.7	2.7
160°-170°	99.4	1.6
170°-180°	32.3	0.5
0°-30°	903.6	14.6
0°-40°	1464.2	23.7
0°-60°	2577.8	41.7
0°-90°	3450.2	55.8
90°-120°	1438.3	23.3
90°-150°	2427.3	39.3
90°-180°	2728.0	44.2
0°-180°	6178.0	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°	19	62	106	135	146	14
95°	37	112	681	380	277	35
105°	86	136	552	1047	987	91
115°	143	180	437	910	1067	141
125°	193	226	402	716	834	171
135°	223	267	382	587	680	173
145°	258	295	374	472	524	162
155°	294	316	365	412	430	135
165°	320	329	350	371	377	90
175°	333	333	336	340	339	32
180°	334	334	334	334	334	



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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°	36.4	44.8	53.3	61.9	70.4	79.2	88.1	97.1	106.1	115.1	121.2
90°	19.3	28.2	37.8	47.4	57.1	66.9	76.4	86.5	95.9	106.1	112.7
92.5°	25.0	34.4	47.6	63.6	82.8	110.8	156.6	227.2	303.2	308.7	273.0
95°	37.4	44.7	56.8	70.9	92.5	130.5	211.3	368.2	562.8	681.3	674.2
97.5°	50.6	57.4	67.2	80.8	100.1	129.2	185.3	302.3	505.1	716.0	822.9
100°	59.9	66.6	74.8	87.6	105.8	132.9	180.2	276.0	453.9	682.3	856.0
102.5°	70.3	76.1	83.3	96.3	113.0	139.1	181.9	263.6	414.8	627.4	829.5
105°	86.5	90.7	98.2	109.0	123.9	148.7	186.1	253.7	373.9	552.0	750.4
107.5°	102.4	107.2	114.0	123.0	137.7	160.1	196.2	255.0	354.1	499.2	671.0
110°	113.8	118.3	124.1	133.2	146.5	169.1	203.9	257.6	346.3	473.4	625.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	126.2	130.0	134.7	143.2	155.8	177.5	211.0	261.8	342.8	456.8	589.9
115°	142.9	146.1	150.0	157.8	169.7	190.8	222.4	268.2	339.6	437.1	550.2
117.5°	158.0	161.2	164.5	171.8	184.4	204.5	234.4	276.3	338.8	424.7	524.0
120°	168.8	171.5	175.0	181.8	194.1	214.2	243.7	282.0	339.8	417.8	508.9
122.5°	179.1	181.0	183.5	189.9	202.8	222.7	251.9	288.3	340.0	411.3	495.3
125°	193.1	194.2	197.3	203.1	215.7	235.7	263.0	297.1	341.3	402.3	476.6
127.5°	203.2	204.9	209.0	216.4	229.7	249.3	274.8	305.7	344.1	395.5	458.7
130°	210.2	211.9	217.1	225.6	239.4	258.6	283.1	312.3	346.2	391.6	447.7
132.5°	214.6	217.1	223.5	233.3	248.0	266.8	290.5	317.2	348.2	387.8	437.5
135°	223.2	225.6	233.4	243.9	257.8	276.7	299.5	323.5	350.2	382.3	424.0
137.5°	233.9	235.7	243.1	253.7	267.3	286.4	306.3	328.4	352.9	378.8	412.6
140°	239.4	241.5	249.6	260.4	273.1	291.4	311.3	331.7	353.4	376.6	406.4
142.5°	247.0	248.3	255.6	266.2	278.3	295.2	313.7	332.9	353.4	375.3	401.4
145°	258.3	259.4	265.9	275.1	286.9	302.3	319.8	336.6	354.8	374.3	395.8
147.5°	269.0	269.8	275.6	284.4	294.9	308.5	323.8	339.1	355.4	372.6	390.7
150°	276.0	277.3	282.1	290.8	300.2	311.7	326.5	340.6	355.4	370.9	387.1
152.5°	283.5	284.4	288.5	296.2	305.1	315.5	329.2	341.7	354.9	368.8	383.3
155°	293.5	293.5	297.6	304.3	311.0	320.5	331.9	342.7	353.4	364.9	377.0
157.5°	302.4	302.3	305.5	311.3	317.2	324.3	334.2	343.4	351.7	360.8	371.1
160°	308.3	307.6	310.4	315.0	320.5	326.5	335.3	343.4	350.1	358.2	366.3
162.5°	313.1	312.5	315.2	319.3	323.6	328.6	336.3	342.8	348.4	354.9	361.9
165°	320.5	319.1	321.2	324.5	327.2	331.2	336.6	342.0	346.0	350.1	355.4
167.5°	325.3	324.6	325.8	327.7	329.6	332.2	336.6	340.4	342.2	345.3	349.1
170°	328.6	327.9	328.6	329.8	331.2	333.2	336.6	339.3	340.6	342.7	345.3
172.5°	330.7	329.5	330.1	331.5	332.3	333.2	336.0	338.2	338.5	339.4	341.6
175°	333.2	331.9	332.6	333.2	333.2	333.2	335.3	336.6	336.0	336.0	336.6
177.5°	334.4	333.4	333.4	333.9	333.4	333.4	334.4	335.0	333.9	333.9	334.4
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9



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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°	127.3	133.4	139.4	143.6	145.4	147.2	149.1	150.9
90°	119.3	126.0	132.5	137.8	139.6	141.4	143.9	145.7
92.5°	222.3	195.4	179.7	173.5	166.7	166.9	167.7	168.5
95°	580.2	483.6	406.5	353.7	307.7	289.3	285.8	276.7
97.5°	810.7	744.4	669.2	594.2	554.3	518.3	500.6	493.7
100°	913.3	885.7	821.8	755.3	710.4	663.5	640.1	630.9
102.5°	945.2	970.8	942.7	898.7	850.6	817.7	792.2	785.7
105°	917.1	1014.5	1049.3	1045.4	1025.6	1005.2	993.6	987.3
107.5°	835.5	963.7	1044.8	1083.4	1095.9	1097.3	1094.5	1090.7
110°	775.3	908.2	1008.0	1068.6	1100.7	1115.3	1121.8	1123.6



TEST NUMBER: P333273-935

CATALOG NUMBER: S125DIP-S1090D810U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	727.0	853.2	953.9	1024.6	1070.7	1094.5	1108.0	1114.7
115°	665.9	774.9	871.8	948.2	1002.3	1036.2	1056.6	1066.9
117.5°	624.0	718.3	802.2	872.5	926.8	962.0	982.4	989.5
120°	600.9	686.0	764.5	826.7	878.0	912.0	931.7	938.6
122.5°	582.2	661.2	731.4	789.8	835.8	866.9	886.7	893.0
125°	555.4	628.2	690.9	742.1	781.1	809.9	826.0	834.1
127.5°	527.9	595.8	654.3	702.3	738.0	763.9	779.4	783.9
130°	511.2	574.1	630.2	676.4	711.4	734.9	749.6	754.9
132.5°	494.0	553.1	604.4	648.8	683.6	707.0	720.4	726.1
135°	470.5	520.2	566.7	607.3	638.3	661.8	675.2	680.5
137.5°	450.8	491.5	530.3	564.9	592.5	613.7	625.9	631.4
140°	439.5	474.0	507.8	538.0	564.0	582.6	593.7	598.1
142.5°	429.8	459.1	488.2	514.4	536.6	552.4	563.0	566.9
145°	417.9	440.1	462.3	481.6	498.8	511.3	519.7	523.5
147.5°	407.6	425.0	441.4	455.6	468.8	478.5	483.2	484.9
150°	401.9	416.7	429.5	441.8	452.1	460.5	463.4	464.3
152.5°	396.5	409.7	421.5	430.8	439.5	445.9	448.7	449.4
155°	388.5	399.2	408.6	416.0	422.8	427.5	429.5	430.2
157.5°	380.4	389.3	396.5	402.3	407.6	411.5	413.4	413.2
160°	375.0	381.7	388.5	393.1	397.9	401.2	402.6	401.9
162.5°	369.0	375.2	380.9	385.0	388.7	391.5	391.8	391.7
165°	360.8	365.6	369.6	373.0	375.7	377.0	377.0	377.0
167.5°	353.0	356.1	359.2	361.6	363.0	364.2	363.7	363.5
170°	348.7	350.8	352.8	354.1	355.4	356.1	356.1	355.4
172.5°	343.9	345.9	347.4	348.2	348.4	349.7	348.6	347.9
175°	338.6	338.6	340.0	340.0	340.0	340.6	339.3	338.6
177.5°	335.0	335.5	335.5	335.5	335.0	335.5	333.9	333.9
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9

(END OF REPORT)