

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: P333282-940

Luminaire Tested: **S125DIP-S1090D1035U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333282-940
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-S1090D1035U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7116.5 lumens
Efficiency: N/A
Efficacy: 117.6 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

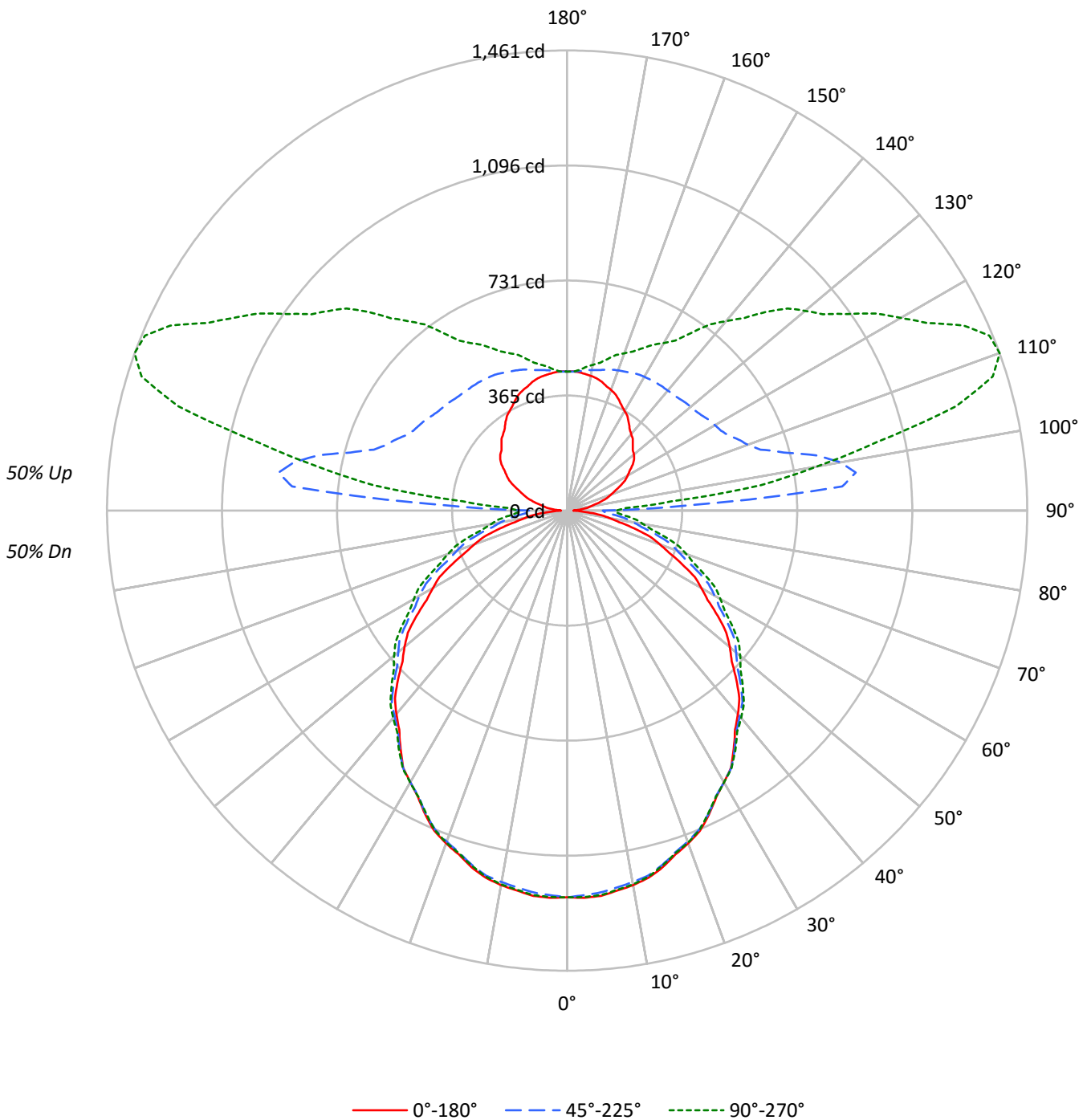
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	49	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	35	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	36	32	29	30	27	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7930	7930	7930
5°	7946	7783	7808
10°	7889	7644	7633
15°	7796	7478	7410
20°	7670	7273	7188
25°	7518	7053	6912
30°	7336	6810	6664
35°	7165	6588	6435
40°	6992	6353	6205
45°	6796	6152	6001
50°	6609	5935	5821
55°	6384	5729	5609
60°	6137	5495	5392
65°	5882	5250	5150
70°	5590	4914	4900
75°	5128	4592	4592
80°	4524	4201	4257
85°	3962	3938	4152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	1.6
10°-20°	329.6	4.6
20°-30°	490.2	6.9
30°-40°	580.6	8.2
40°-50°	600.3	8.4
50°-60°	553.0	7.8
60°-70°	447.0	6.3
70°-80°	299.4	4.2
80°-90°	157.7	2.2
90°-100°	407.1	5.7
100°-110°	752.2	10.6
110°-120°	688.7	9.7
120°-130°	547.7	7.7
130°-140°	430.6	6.1
140°-150°	319.1	4.5
150°-160°	223.1	3.1
160°-170°	131.5	1.8
170°-180°	42.8	0.6
0°-30°	935.9	13.2
0°-40°	1516.5	21.3
0°-60°	2669.7	37.5
0°-90°	3573.8	50.2
90°-120°	1848.1	26.0
90°-150°	3145.4	44.2
90°-180°	3543.0	49.8
0°-180°	7116.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1228	1225	1217	1226	1226	116
15°	1172	1173	1165	1172	1168	330
25°	1065	1068	1062	1066	1060	490
35°	922	930	927	930	930	577
45°	760	772	779	787	788	586
55°	584	603	622	635	640	522
65°	402	430	459	476	482	399
75°	222	253	291	314	321	235
85°	66	106	148	174	184	71
90°	20	66	113	144	155	15
95°	45	134	877	471	332	43
105°	112	172	712	1360	1278	118
115°	187	234	565	1185	1390	184
125°	254	297	524	935	1088	225
135°	294	353	503	769	891	229
145°	341	390	495	622	689	214
155°	388	418	482	545	569	179
165°	424	435	463	491	498	119
175°	441	441	444	450	448	42
180°	442	442	442	442	442	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9
2.5°	1230.7	1230.3	1229.8	1229.5	1229.0	1228.1	1226.5	1225.0	1223.6	1222.1	1223.6
5°	1227.9	1227.4	1226.8	1226.3	1225.7	1224.5	1222.6	1220.8	1218.9	1217.0	1219.1
7.5°	1217.0	1216.8	1216.6	1216.4	1216.2	1215.1	1213.2	1211.2	1209.3	1207.4	1209.2
10°	1207.4	1207.4	1207.4	1207.4	1207.4	1206.3	1204.2	1202.0	1199.9	1197.7	1199.6
12.5°	1193.9	1194.1	1194.4	1194.5	1194.8	1194.0	1192.3	1190.6	1188.9	1187.1	1188.7
15°	1172.5	1172.8	1173.0	1173.3	1173.6	1172.8	1170.9	1169.0	1167.2	1165.3	1166.9
17.5°	1144.5	1145.0	1145.6	1146.1	1146.7	1146.0	1144.2	1142.3	1140.4	1138.5	1139.8
20°	1124.4	1124.9	1125.4	1126.0	1126.5	1125.8	1123.9	1122.0	1120.2	1118.3	1119.1
22.5°	1101.2	1102.2	1103.1	1104.1	1105.1	1104.5	1102.4	1100.4	1098.2	1096.2	1097.2
25°	1065.3	1066.1	1066.9	1067.7	1068.5	1068.2	1066.6	1065.0	1063.4	1061.8	1062.8
27.5°	1025.4	1026.5	1027.7	1028.9	1030.1	1029.7	1028.0	1026.1	1024.3	1022.5	1023.2
30°	995.5	997.1	998.7	1000.3	1001.9	1001.9	1000.3	998.7	997.1	995.5	996.0
32.5°	968.6	969.9	971.3	972.8	974.1	974.2	973.0	971.9	970.7	969.6	970.1
35°	922.1	924.0	925.9	927.7	929.6	930.1	929.3	928.5	927.7	926.9	927.7
37.5°	875.7	877.4	879.0	880.7	882.4	883.2	883.0	882.7	882.4	882.2	883.2
40°	843.8	846.0	848.1	850.2	852.4	853.4	853.1	852.8	852.6	852.3	853.4
42.5°	809.1	812.0	814.8	817.5	820.3	822.0	822.6	823.1	823.8	824.4	825.6
45°	759.6	762.5	765.4	768.4	771.3	773.5	774.8	776.1	777.5	778.8	780.7
47.5°	708.8	711.5	714.3	716.9	719.7	722.2	724.5	726.8	729.2	731.4	734.1
50°	674.1	677.1	680.0	683.0	685.9	688.8	691.8	694.7	697.7	700.6	703.6
52.5°	637.5	641.1	644.7	648.3	651.8	655.4	659.1	662.6	666.2	669.8	673.0
55°	583.8	588.1	592.4	596.6	600.9	605.2	609.5	613.8	618.0	622.3	625.3
57.5°	529.0	534.0	539.2	544.4	549.5	554.6	559.5	564.4	569.3	574.2	577.6
60°	492.3	497.7	503.0	508.4	513.7	519.1	524.4	529.8	535.1	540.5	544.5
62.5°	456.7	462.1	467.4	472.8	478.1	483.7	489.5	495.3	501.1	506.8	511.2
65°	402.1	408.2	414.4	420.5	426.7	432.9	439.3	445.8	452.2	458.6	462.6
67.5°	350.5	356.5	362.4	368.4	374.3	380.5	387.1	393.6	400.1	406.6	411.5
70°	313.0	319.1	325.3	331.4	337.6	344.1	351.1	358.0	365.0	371.9	377.0
72.5°	276.4	282.8	289.1	295.5	301.8	308.8	316.5	324.0	331.6	339.2	344.7
75°	221.5	228.5	235.4	242.4	249.3	257.1	265.6	274.2	282.8	291.3	296.7
77.5°	168.8	176.8	184.9	192.9	200.9	209.0	217.2	225.5	233.7	241.9	247.8
80°	136.0	144.0	152.0	160.1	168.1	176.6	185.7	194.8	203.9	213.0	218.9
82.5°	106.2	114.6	123.1	131.5	140.0	148.8	158.2	167.5	176.8	186.1	191.8
85°	66.2	75.0	83.8	92.6	101.5	110.6	119.9	129.3	138.7	148.0	153.9
87.5°	37.7	46.5	55.4	64.3	73.2	82.4	91.7	101.1	110.4	119.8	126.2
90°	20.2	29.6	39.9	50.3	60.6	71.2	81.2	92.1	102.1	113.0	120.0
92.5°	28.2	38.4	53.9	72.8	96.0	130.6	188.5	279.4	377.2	381.8	333.1
95°	45.0	52.9	67.0	83.7	110.2	158.3	262.7	467.6	722.4	876.6	865.6
97.5°	63.0	70.4	81.6	97.6	121.5	157.8	229.6	381.9	647.7	924.2	1064.0
100°	75.5	82.9	92.1	107.5	130.1	163.9	224.1	348.3	581.2	880.8	1109.0
102.5°	89.5	95.8	103.9	119.6	140.2	173.0	227.3	332.8	530.6	809.3	1075.0
105°	111.5	115.7	124.4	137.6	156.1	187.3	234.4	321.6	478.3	711.6	972.4
107.5°	132.8	138.2	146.1	157.0	175.5	203.6	249.1	324.7	453.7	643.3	869.1
110°	148.2	153.2	160.0	171.2	187.7	216.2	260.2	329.1	444.3	610.3	809.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	164.5	168.9	174.3	184.9	200.8	228.2	270.5	335.6	440.7	589.3	764.0
115°	187.1	190.6	195.2	205.1	220.3	247.0	286.9	345.4	437.9	565.0	713.2
117.5°	207.2	211.1	215.2	224.4	240.8	266.3	304.0	357.6	438.4	550.2	680.2
120°	221.4	224.9	229.3	238.1	254.0	279.7	317.1	366.0	440.7	542.1	661.4
122.5°	235.4	237.7	241.0	249.4	266.3	291.7	328.8	375.3	442.0	534.7	644.5
125°	254.0	255.6	259.8	267.5	284.2	309.9	344.6	388.2	445.1	524.4	621.3
127.5°	267.6	270.0	275.4	285.3	303.1	328.2	361.0	400.6	450.0	516.7	599.4
130°	276.9	279.3	286.1	297.5	315.8	340.7	372.1	409.7	453.5	512.4	585.6
132.5°	283.0	286.4	294.9	307.8	327.2	351.7	382.2	416.8	456.9	508.5	573.2
135°	294.4	297.7	308.1	322.1	340.5	365.3	394.8	426.1	460.8	502.7	557.0
137.5°	308.7	311.2	320.9	335.0	353.1	378.2	404.2	433.3	465.5	499.5	543.2
140°	316.3	319.0	329.7	343.9	360.9	385.0	411.1	438.1	466.8	497.3	535.9
142.5°	326.3	328.1	337.8	351.8	367.8	390.3	414.8	440.1	467.3	496.1	529.9
145°	341.3	342.8	351.4	363.6	379.3	399.7	422.8	445.1	469.1	494.9	523.0
147.5°	355.7	356.8	364.4	376.0	389.9	407.9	428.2	448.3	470.0	492.6	516.6
150°	365.0	366.8	373.0	384.6	397.0	412.1	431.8	450.4	470.0	490.4	511.8
152.5°	375.0	376.0	381.6	391.6	403.4	417.1	435.3	451.8	469.3	487.7	506.8
155°	388.1	388.1	393.4	402.3	411.3	423.7	438.8	453.1	467.3	482.5	498.5
157.5°	399.8	399.7	403.9	411.6	419.5	428.9	441.8	454.0	465.0	477.2	490.6
160°	407.7	406.8	410.4	416.6	423.7	431.8	443.3	454.0	462.9	473.6	484.3
162.5°	414.1	413.2	416.8	422.3	428.0	434.6	444.7	453.3	460.7	469.3	478.6
165°	423.7	422.0	424.6	429.1	432.7	438.0	445.1	452.2	457.5	462.9	470.0
167.5°	430.2	429.3	430.9	433.4	435.9	439.2	445.1	450.0	452.5	456.6	461.6
170°	434.4	433.5	434.4	436.2	438.0	440.6	445.1	448.6	450.4	453.1	456.6
172.5°	437.3	435.7	436.6	438.3	439.3	440.6	444.3	447.2	447.5	448.8	451.7
175°	440.6	438.8	439.7	440.6	440.6	440.6	443.3	445.1	444.2	444.2	445.1
177.5°	442.2	440.8	440.8	441.5	440.8	440.8	442.2	442.9	441.5	441.5	442.2
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9
2.5°	1225.0	1226.5	1228.1	1228.7	1228.5	1228.2	1228.1	1227.9
5°	1221.3	1223.4	1225.6	1226.5	1226.3	1226.0	1225.7	1225.5
7.5°	1211.1	1213.0	1214.9	1215.7	1215.4	1215.1	1214.9	1214.6
10°	1201.5	1203.4	1205.2	1206.0	1205.8	1205.5	1205.2	1205.0
12.5°	1190.1	1191.5	1192.9	1193.3	1192.7	1191.9	1191.2	1190.5
15°	1168.5	1170.1	1171.7	1172.0	1170.9	1169.8	1168.8	1167.7
17.5°	1141.0	1142.2	1143.4	1143.7	1143.1	1142.5	1141.8	1141.2
20°	1119.9	1120.7	1121.5	1122.0	1122.0	1122.0	1122.0	1122.0
22.5°	1098.2	1099.2	1100.2	1100.4	1099.7	1099.1	1098.5	1097.9
25°	1063.9	1065.0	1066.0	1065.9	1064.5	1063.2	1061.8	1060.5
27.5°	1024.0	1024.8	1025.5	1025.6	1025.1	1024.7	1024.1	1023.7
30°	996.6	997.1	997.6	997.8	997.6	997.3	997.0	996.8
32.5°	970.6	971.2	971.7	971.8	971.5	971.3	971.0	970.7
35°	928.5	929.3	930.1	930.5	930.5	930.5	930.5	930.5
37.5°	884.3	885.4	886.4	886.9	886.8	886.7	886.5	886.4
40°	854.4	855.5	856.6	857.4	857.9	858.4	859.0	859.5
42.5°	826.9	828.2	829.5	830.2	830.3	830.4	830.5	830.6
45°	782.6	784.4	786.3	787.4	787.6	787.9	788.2	788.5
47.5°	736.9	739.6	742.3	744.0	744.6	745.2	745.7	746.4
50°	706.5	709.4	712.4	714.3	715.1	715.9	716.7	717.5
52.5°	676.1	679.2	682.4	684.3	684.8	685.5	686.1	686.6
55°	628.2	631.2	634.1	636.1	637.2	638.3	639.4	640.4
57.5°	580.9	584.3	587.7	589.8	590.6	591.4	592.2	593.0
60°	548.5	552.5	556.5	558.9	559.7	560.5	561.3	562.1
62.5°	515.7	520.1	524.6	527.3	528.3	529.3	530.3	531.4
65°	466.6	470.6	474.7	477.2	478.3	479.4	480.5	481.5
67.5°	416.3	421.2	426.1	429.3	430.6	432.0	433.4	434.8
70°	382.1	387.2	392.3	395.7	397.3	398.9	400.5	402.1
72.5°	350.3	355.8	361.2	364.6	365.8	366.9	368.1	369.3
75°	302.0	307.4	312.7	316.0	317.4	318.7	320.0	321.4
77.5°	253.7	259.6	265.5	268.9	270.0	271.1	272.2	273.2
80°	224.8	230.7	236.6	240.0	241.1	242.2	243.3	244.3
82.5°	197.4	203.1	208.7	212.6	214.5	216.4	218.4	220.3
85°	159.8	165.7	171.6	175.6	177.7	179.9	182.0	184.1
87.5°	132.5	138.8	145.2	149.5	151.4	153.3	155.3	157.2
90°	127.1	134.1	141.2	147.0	148.8	150.7	153.5	155.3
92.5°	264.5	227.1	204.7	195.6	186.0	185.7	186.4	186.8
95°	739.7	610.3	506.7	435.8	374.4	349.6	344.4	332.0
97.5°	1046.2	957.0	856.0	755.7	702.6	654.5	630.5	620.9
100°	1183.2	1145.2	1059.1	970.2	910.3	847.8	816.5	803.9
102.5°	1226.6	1258.9	1220.3	1161.2	1097.1	1053.1	1019.0	1009.9
105°	1191.4	1318.7	1363.2	1357.0	1330.4	1303.0	1287.0	1278.2
107.5°	1085.1	1253.1	1359.0	1409.0	1425.0	1426.6	1422.3	1416.8
110°	1006.7	1181.0	1311.6	1390.7	1432.6	1451.4	1459.6	1461.4



TEST NUMBER: P333282-940

CATALOG NUMBER: S125DIP-S1090D1035U940-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	944.1	1109.6	1241.4	1333.9	1394.4	1425.2	1442.6	1450.9
115°	864.9	1007.6	1134.4	1234.7	1305.7	1350.1	1376.5	1389.7
117.5°	811.2	934.7	1044.3	1136.5	1207.7	1253.7	1280.2	1289.1
120°	781.7	893.0	995.5	1076.9	1144.4	1188.7	1214.4	1223.2
122.5°	758.2	861.5	953.1	1029.4	1089.8	1130.5	1156.2	1164.2
125°	724.3	819.4	901.2	968.0	1019.2	1057.0	1078.0	1088.2
127.5°	689.6	778.4	854.6	917.4	964.1	997.9	1018.0	1023.5
130°	668.6	750.6	823.9	884.2	930.1	960.8	979.9	986.6
132.5°	646.9	724.0	790.8	848.9	894.6	925.1	942.5	949.8
135°	617.4	682.3	742.8	795.9	836.4	867.2	884.5	891.2
137.5°	592.9	645.7	696.2	741.5	777.6	805.4	821.2	828.1
140°	578.9	623.7	667.5	706.9	740.9	765.2	779.6	785.2
142.5°	566.9	604.8	642.6	676.7	705.8	726.4	740.1	744.9
145°	551.9	580.9	609.8	635.0	657.5	673.7	684.5	689.1
147.5°	538.7	561.6	583.2	601.8	619.2	631.8	637.9	640.1
150°	531.5	551.0	567.9	584.1	597.7	608.7	612.5	613.7
152.5°	524.3	541.7	557.2	569.7	581.0	589.6	593.3	594.1
155°	513.6	527.9	540.4	550.1	559.0	565.3	567.9	568.8
157.5°	502.9	514.7	524.3	532.0	539.0	544.0	546.5	546.4
160°	495.8	504.7	513.6	519.9	526.1	530.6	532.4	531.5
162.5°	488.0	496.1	503.6	509.2	514.0	517.7	518.1	517.9
165°	477.2	483.4	488.7	493.1	496.7	498.5	498.5	498.5
167.5°	466.8	470.9	475.0	478.2	480.0	481.6	480.9	480.7
170°	461.1	463.8	466.5	468.2	470.0	470.9	470.9	470.0
172.5°	454.7	457.4	459.3	460.4	460.7	462.4	460.9	460.0
175°	447.7	447.7	449.5	449.5	449.5	450.4	448.6	447.7
177.5°	442.9	443.6	443.6	443.6	442.9	443.6	441.5	441.5
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5

(END OF REPORT)