

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: P333254-940

Luminaire Tested: **S125DIP-S1090D365U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333254-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1090D365U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4934.0 lumens
Efficiency: N/A
Efficacy: 113.4 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: Semi-Direct

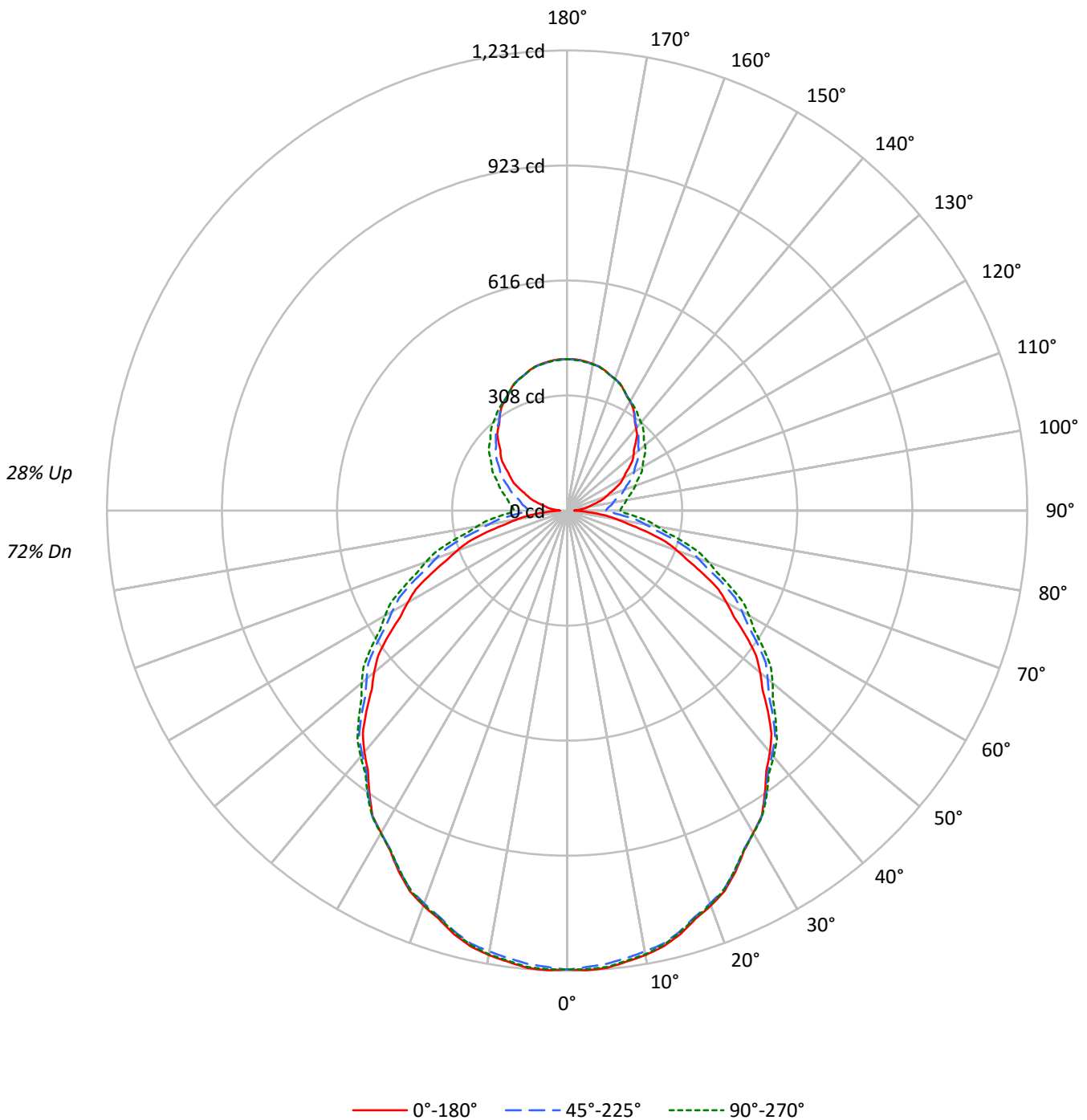
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333254-940

CATALOG NUMBER: S125DIP-S1090D365U940-4F0-1E-UDD-D1

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	112	112	112	112	107	107	107	107	96	96	96		86	86	86		77	77	77	72
1	102	97	92	88	96	92	88	84	83	79	77		74	72	69		66	64	63	59
2	92	84	77	71	87	80	74	68	72	67	63		64	61	57		58	55	52	48
3	84	74	65	59	79	70	63	57	63	57	52		57	52	48		51	47	44	40
4	77	65	56	50	72	62	54	48	56	49	44		50	45	41		45	41	37	34
5	70	58	49	43	66	55	47	41	50	43	38		45	40	35		41	36	33	30
6	65	52	43	37	61	50	42	36	45	38	33		41	35	31		37	32	29	26
7	60	47	38	32	57	45	37	31	41	34	29		37	31	27		34	29	25	23
8	56	43	34	29	53	41	33	28	37	31	26		34	28	24		31	26	23	20
9	52	39	31	26	49	37	30	25	34	28	23		31	26	22		28	24	20	18
10	49	36	28	23	46	34	27	23	32	25	21		29	24	20		26	22	19	17

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



TEST NUMBER: P333254-940

CATALOG NUMBER: S125DIP-S1090D365U940-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	2.4
10°-20°	329.6	6.7
20°-30°	490.2	9.9
30°-40°	580.6	11.8
40°-50°	600.3	12.2
50°-60°	553.0	11.2
60°-70°	447.0	9.1
70°-80°	299.4	6.1
80°-90°	156.1	3.2
90°-100°	114.2	2.3
100°-110°	144.3	2.9
110°-120°	178.7	3.6
120°-130°	203.0	4.1
130°-140°	210.8	4.3
140°-150°	198.3	4.0
150°-160°	164.7	3.3
160°-170°	109.5	2.2
170°-180°	38.3	0.8
0°-30°	935.9	19.0
0°-40°	1516.5	30.7
0°-60°	2669.7	54.1
0°-90°	3572.2	72.4
90°-120°	437.3	8.9
90°-150°	1049.3	21.3
90°-180°	1362.0	27.6
0°-180°	4934.0	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	70
90°	20	61	104	132	142	14
95°	36	69	112	140	150	34
105°	83	104	142	167	177	88
115°	143	154	185	205	213	141
125°	203	205	228	246	252	182
135°	260	261	270	285	290	201
145°	314	314	314	320	324	196
155°	357	357	358	359	357	165
165°	389	388	388	389	388	110
175°	404	403	403	404	402	38
180°	405	405	405	405	405	



TEST NUMBER: P333254-940

CATALOG NUMBER: S125DIP-S1090D365U940-4F0-1E-UDD-D1

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°	37.6	46.3	54.9	63.7	72.3	81.2	90.4	99.6	108.8	118.0	124.2
90°	19.6	28.7	37.8	46.9	56.1	65.5	75.0	84.6	94.2	103.8	110.2
92.5°	25.0	33.3	41.6	49.9	58.2	67.3	77.2	87.1	97.0	106.9	113.3
95°	36.1	43.2	50.3	57.4	64.6	72.9	82.8	92.6	102.4	112.2	118.5
97.5°	48.2	54.6	60.9	67.1	73.5	81.5	91.3	101.0	110.8	120.5	126.5
100°	57.3	63.0	68.6	74.2	79.8	87.4	96.8	106.3	115.8	125.3	131.5
102.5°	67.2	72.7	78.2	83.6	89.1	96.3	105.0	113.9	122.7	131.5	137.6
105°	82.7	87.3	91.9	96.6	101.2	107.7	116.2	124.7	133.0	141.5	147.3
107.5°	99.9	103.9	107.9	111.9	115.8	121.9	129.9	137.9	146.0	154.0	159.4
110°	111.8	115.4	119.0	122.5	126.0	131.7	139.4	147.0	154.8	162.5	167.7



TEST NUMBER: P333254-940

CATALOG NUMBER: S125DIP-S1090D365U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	124.9	127.7	130.5	133.1	135.9	141.1	148.6	156.1	163.7	171.2	176.2
115°	143.0	145.2	147.4	149.5	151.7	156.3	163.4	170.5	177.5	184.7	189.4
117.5°	161.3	162.6	164.0	165.3	166.7	170.8	177.5	184.1	190.8	197.5	202.2
120°	173.3	174.5	175.7	176.8	178.0	181.6	187.9	194.1	200.4	206.5	211.1
122.5°	185.6	186.0	186.5	187.0	187.5	190.8	197.0	203.0	209.2	215.3	219.6
125°	203.0	203.2	203.4	203.5	203.7	206.4	211.9	217.3	222.7	228.1	232.3
127.5°	220.8	220.7	220.7	220.7	220.6	222.8	227.3	231.8	236.3	240.8	244.6
130°	232.1	232.2	232.3	232.4	232.5	234.4	238.3	242.2	246.1	249.9	253.6
132.5°	242.5	243.0	243.5	244.1	244.6	246.3	249.1	252.0	254.9	257.7	261.4
135°	260.2	260.4	260.6	260.6	260.8	261.9	263.9	265.7	267.7	269.7	273.1
137.5°	276.9	277.1	277.2	277.4	277.7	278.3	279.3	280.4	281.4	282.5	285.8
140°	286.8	287.1	287.5	287.8	288.1	288.6	289.0	289.5	290.0	290.4	293.6
142.5°	297.6	297.7	297.7	297.8	297.9	298.1	298.5	298.7	299.1	299.3	302.0
145°	313.5	313.5	313.5	313.6	313.6	313.7	313.9	314.1	314.3	314.5	315.8
147.5°	327.1	327.3	327.3	327.5	327.7	327.9	328.1	328.2	328.3	328.5	329.1
150°	336.9	336.9	336.8	336.7	336.6	336.7	337.0	337.3	337.6	337.9	337.9
152.5°	345.0	345.1	345.2	345.3	345.4	345.4	345.6	345.7	345.8	345.9	346.1
155°	357.4	357.4	357.4	357.4	357.4	357.4	357.5	357.6	357.7	357.8	358.0
157.5°	368.5	368.4	368.2	368.0	367.9	367.8	367.9	368.0	368.0	368.1	368.4
160°	375.1	374.9	374.6	374.4	374.3	374.2	374.3	374.3	374.3	374.4	374.7
162.5°	380.8	380.7	380.6	380.4	380.2	380.1	380.1	380.2	380.2	380.2	380.6
165°	388.6	388.4	388.3	388.2	388.1	388.0	388.1	388.2	388.3	388.3	388.6
167.5°	395.1	394.8	394.6	394.3	394.0	393.9	393.9	393.9	393.9	393.9	394.3
170°	398.7	398.4	398.1	397.9	397.5	397.4	397.4	397.4	397.4	397.4	397.9
172.5°	401.2	400.9	400.6	400.4	400.1	399.9	399.9	399.9	399.9	399.9	400.4
175°	404.0	403.8	403.5	403.2	403.0	402.8	402.8	402.8	402.8	402.8	403.2
177.5°	405.5	405.3	405.0	404.8	404.6	404.5	404.4	404.4	404.3	404.2	404.6
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0



TEST NUMBER: P333254-940

CATALOG NUMBER: S125DIP-S1090D365U940-4F0-1E-UDD-D1

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°	130.5	136.7	142.9	147.0	148.9	150.8	152.8	154.6
90°	116.7	123.2	129.7	134.0	136.2	138.2	140.3	142.4
92.5°	119.8	126.2	132.6	136.8	138.8	140.8	142.9	144.9
95°	124.9	131.3	137.7	141.9	143.8	145.9	147.8	149.9
97.5°	132.7	138.8	144.8	148.8	150.7	152.6	154.5	156.4
100°	137.8	144.0	150.3	154.3	156.0	157.7	159.5	161.2
102.5°	143.7	149.8	155.9	159.8	161.6	163.4	165.2	167.0
105°	153.1	158.8	164.6	168.5	170.6	172.7	174.8	176.9
107.5°	165.0	170.5	176.0	179.6	181.2	182.9	184.5	186.2
110°	173.1	178.3	183.6	187.2	189.0	190.8	192.6	194.4



TEST NUMBER: P333254-940

CATALOG NUMBER: S125DIP-S1090D365U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	181.2	186.1	191.1	194.5	196.2	198.0	199.7	201.4
115°	194.1	198.9	203.7	206.8	208.3	209.9	211.4	212.9
117.5°	206.8	211.3	216.0	219.0	220.6	222.1	223.6	225.2
120°	215.6	220.2	224.7	227.7	229.0	230.3	231.7	233.0
122.5°	223.9	228.2	232.5	235.2	236.7	238.0	239.4	240.8
125°	236.4	240.6	244.7	247.4	248.7	249.9	251.2	252.4
127.5°	248.5	252.4	256.3	259.0	260.4	261.8	263.2	264.6
130°	257.3	261.0	264.7	267.1	268.3	269.5	270.7	271.9
132.5°	265.0	268.8	272.4	274.7	275.6	276.6	277.5	278.4
135°	276.6	280.1	283.6	285.8	286.9	287.9	289.0	290.1
137.5°	289.0	292.2	295.5	297.5	298.2	298.9	299.6	300.3
140°	296.7	299.7	302.8	304.7	305.4	306.1	306.8	307.6
142.5°	304.6	307.2	309.8	311.5	312.2	312.9	313.6	314.3
145°	317.2	318.5	319.9	321.0	321.8	322.7	323.6	324.4
147.5°	329.8	330.3	330.9	331.2	331.2	331.3	331.3	331.3
150°	337.9	337.9	337.9	338.0	338.0	338.1	338.3	338.4
152.5°	346.3	346.4	346.6	346.6	346.4	346.2	346.0	345.8
155°	358.3	358.6	358.8	358.8	358.5	358.1	357.8	357.4
157.5°	368.6	369.0	369.3	369.2	368.7	368.2	367.7	367.3
160°	375.0	375.2	375.5	375.5	375.1	374.8	374.4	374.1
162.5°	380.8	381.2	381.6	381.6	381.1	380.7	380.3	379.9
165°	388.9	389.1	389.4	389.3	388.9	388.5	388.1	387.6
167.5°	394.8	395.1	395.6	395.6	395.1	394.7	394.2	393.9
170°	398.2	398.7	399.1	399.0	398.6	398.1	397.6	397.1
172.5°	400.8	401.2	401.6	401.6	401.2	400.7	400.3	399.8
175°	403.6	404.0	404.5	404.4	403.9	403.4	403.0	402.4
177.5°	404.9	405.3	405.6	405.6	405.2	404.7	404.4	403.9
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0

(END OF REPORT)