

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: P333272-940

Luminaire Tested: **S125DIP-S1090D810U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333272-940
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-S1090D810U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6305.2 lumens
Efficiency: N/A
Efficacy: 115.9 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

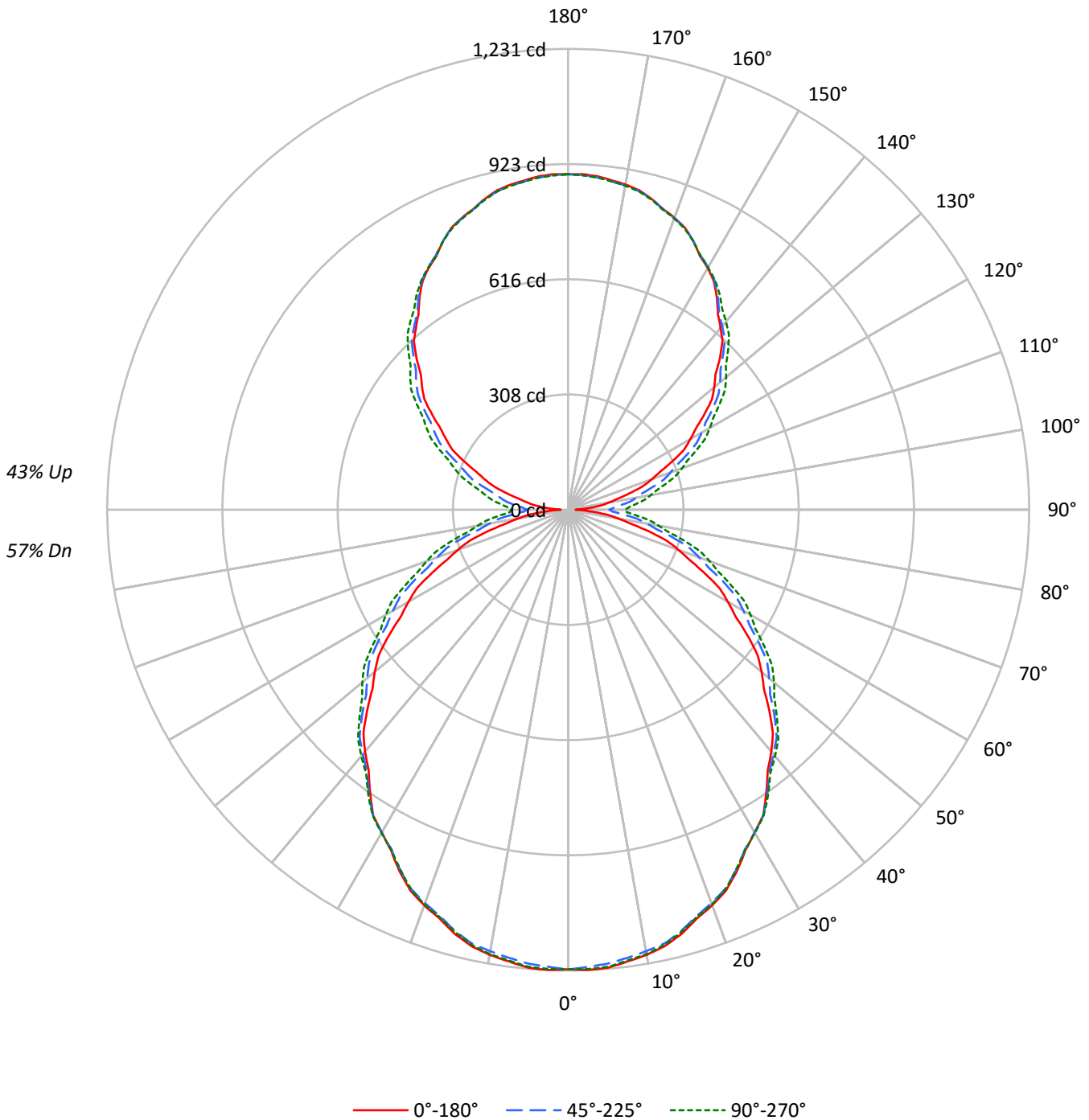
Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	62	62	62	57
1	98	94	89	86	91	87	84	80	75	72	70	64	62	60	54	52	51	46
2	89	81	75	69	83	76	70	65	65	61	57	56	52	50	47	44	42	38
3	81	71	63	57	75	66	60	54	57	52	48	49	45	42	41	38	36	32
4	74	63	55	48	69	59	51	46	51	45	40	43	39	35	37	33	30	27
5	68	56	48	41	63	52	45	39	45	39	35	39	34	31	33	29	26	23
6	63	50	42	36	58	47	39	34	41	35	30	35	30	27	30	26	23	20
7	58	45	37	31	54	42	35	30	37	31	27	32	27	24	27	23	21	18
8	54	41	33	28	50	39	31	26	34	28	24	29	24	21	25	21	18	16
9	50	38	30	25	47	35	28	23	31	25	21	27	22	19	23	19	17	14
10	47	34	27	22	44	32	26	21	29	23	19	25	20	17	21	18	15	13

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	1.8
10°-20°	329.6	5.2
20°-30°	490.2	7.8
30°-40°	580.6	9.2
40°-50°	600.3	9.5
50°-60°	553.0	8.8
60°-70°	447.0	7.1
70°-80°	299.4	4.7
80°-90°	157.2	2.5
90°-100°	147.1	2.3
100°-110°	241.4	3.8
110°-120°	343.2	5.4
120°-130°	419.5	6.7
130°-140°	453.3	7.2
140°-150°	436.0	6.9
150°-160°	364.4	5.8
160°-170°	242.2	3.8
170°-180°	84.8	1.3
0°-30°	935.9	14.8
0°-40°	1516.5	24.1
0°-60°	2669.7	42.3
0°-90°	3573.3	56.7
90°-120°	731.8	11.6
90°-150°	2040.6	32.4
90°-180°	2732.0	43.3
0°-180°	6305.2	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	64	110	140	152	15
95°	61	95	142	172	183	61
105°	170	194	233	260	272	181
115°	308	320	352	372	379	304
125°	443	448	471	488	494	397
135°	573	576	585	600	604	441
145°	692	694	696	702	705	432
155°	791	791	791	794	791	364
165°	860	858	859	861	858	242
175°	894	891	891	895	890	85
180°	896	896	896	896	896	



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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	55.3	64.1	72.9	81.9	91.3	100.6	109.9	119.2	125.6
90°	20.0	29.8	39.6	49.4	59.1	69.1	79.4	89.5	99.7	109.9	116.8
92.5°	34.2	43.0	51.8	60.5	69.4	79.1	89.7	100.3	111.0	121.6	128.6
95°	61.0	68.2	75.5	82.8	90.1	99.0	109.6	120.3	130.9	141.6	148.6
97.5°	89.5	95.9	102.3	108.7	115.0	123.7	134.6	145.5	156.4	167.4	174.0
100°	110.8	116.5	122.1	127.7	133.3	141.4	152.0	162.6	173.2	183.7	190.7
102.5°	133.8	139.7	145.5	151.3	157.1	164.7	174.1	183.4	192.8	202.2	209.1
105°	169.8	174.9	179.9	184.9	190.0	197.1	206.0	215.0	223.9	232.8	239.2
107.5°	209.6	214.1	218.5	222.9	227.3	233.7	242.1	250.6	259.0	267.4	273.1
110°	237.1	241.1	245.1	249.1	253.1	259.0	267.0	274.9	282.9	290.9	296.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	266.2	269.1	272.1	275.1	278.0	283.5	291.3	299.2	307.0	314.9	319.9
115°	307.7	310.2	312.7	315.2	317.7	322.6	329.8	337.2	344.4	351.7	356.3
117.5°	349.5	351.0	352.5	354.0	355.5	359.7	366.6	373.4	380.3	387.2	391.8
120°	376.3	377.8	379.4	381.0	382.5	386.6	392.8	399.1	405.5	411.8	416.3
122.5°	404.3	404.9	405.6	406.3	406.9	410.5	416.8	423.1	429.4	435.8	440.0
125°	443.4	444.1	444.7	445.4	446.0	449.2	454.7	460.1	465.7	471.2	475.1
127.5°	484.0	484.3	484.6	484.8	485.1	487.5	492.0	496.6	501.2	505.8	509.6
130°	509.2	509.6	510.1	510.7	511.1	513.4	517.5	521.6	525.6	529.7	533.2
132.5°	533.2	534.5	535.7	536.9	538.1	540.2	543.0	545.8	548.7	551.4	555.1
135°	572.7	573.5	574.1	574.8	575.4	576.8	578.8	580.9	582.8	584.9	588.4
137.5°	609.9	610.6	611.3	612.0	612.7	613.6	614.8	616.1	617.3	618.6	622.0
140°	632.9	633.7	634.5	635.3	636.1	636.8	637.5	638.3	639.0	639.7	643.0
142.5°	656.9	657.4	657.8	658.3	658.7	659.2	659.9	660.5	661.1	661.7	664.5
145°	692.2	692.6	692.9	693.3	693.6	694.0	694.5	694.9	695.4	695.9	697.2
147.5°	723.6	724.0	724.3	724.7	725.0	725.3	725.8	726.1	726.5	726.8	727.6
150°	745.4	745.2	745.1	744.9	744.8	745.0	745.6	746.3	746.9	747.5	747.5
152.5°	763.2	763.5	763.7	763.9	764.1	764.4	764.6	764.8	765.1	765.4	765.7
155°	790.7	790.7	790.7	790.7	790.7	790.8	790.9	791.1	791.2	791.4	792.0
157.5°	815.3	814.9	814.6	814.2	813.9	813.8	814.0	814.1	814.2	814.4	815.0
160°	829.7	829.3	828.8	828.4	827.9	827.8	827.9	828.0	828.2	828.4	829.0
162.5°	842.6	842.2	841.9	841.6	841.2	841.1	841.1	841.2	841.2	841.2	842.0
165°	859.8	859.4	859.2	858.8	858.5	858.4	858.5	858.7	858.9	859.1	859.7
167.5°	874.2	873.6	873.0	872.4	871.7	871.5	871.5	871.5	871.5	871.5	872.4
170°	882.1	881.5	880.8	880.2	879.6	879.2	879.2	879.2	879.2	879.2	880.2
172.5°	887.6	887.0	886.4	885.7	885.1	884.8	884.8	884.8	884.8	884.8	885.7
175°	893.9	893.3	892.7	892.1	891.4	891.1	891.1	891.1	891.1	891.1	892.1
177.5°	897.2	896.6	896.2	895.6	895.1	894.8	894.7	894.6	894.5	894.3	895.1
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0



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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°	131.9	138.1	144.5	148.6	150.6	152.6	154.5	156.5
90°	123.7	130.6	137.6	142.2	144.5	146.9	149.2	151.6
92.5°	135.5	142.5	149.5	154.1	156.3	158.5	160.7	162.9
95°	155.5	162.5	169.4	174.1	176.2	178.3	180.6	182.7
97.5°	180.7	187.3	193.9	198.2	200.2	202.2	204.2	206.3
100°	197.8	204.7	211.8	216.2	218.1	220.1	221.9	223.9
102.5°	216.1	222.9	229.9	234.3	236.4	238.4	240.5	242.5
105°	245.4	251.7	258.0	262.3	264.7	267.0	269.3	271.6
107.5°	278.9	284.6	290.4	294.1	295.8	297.4	299.0	300.6
110°	301.9	307.5	313.1	316.6	318.4	320.1	321.8	323.5



TEST NUMBER: P333272-940

CATALOG NUMBER: S125DIP-S1090D810U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	325.0	330.2	335.3	338.6	340.2	341.8	343.4	344.9
115°	361.0	365.6	370.3	373.4	374.8	376.2	377.7	379.2
117.5°	396.5	401.2	405.8	408.8	410.0	411.2	412.4	413.6
120°	420.9	425.4	430.0	432.7	433.7	434.7	435.7	436.7
122.5°	444.3	448.4	452.6	455.3	456.4	457.5	458.6	459.8
125°	479.1	483.0	487.1	489.6	490.8	492.0	493.1	494.4
127.5°	513.4	517.2	521.0	523.5	524.8	526.0	527.3	528.5
130°	536.8	540.5	544.0	546.4	547.3	548.4	549.4	550.5
132.5°	558.7	562.2	565.9	568.0	568.6	569.4	570.1	570.7
135°	591.8	595.3	598.8	600.9	601.6	602.4	603.1	603.8
137.5°	625.3	628.7	632.0	633.8	634.1	634.4	634.7	635.0
140°	646.2	649.4	652.7	654.5	654.8	655.1	655.4	655.7
142.5°	667.2	669.9	672.6	674.0	674.4	674.7	674.9	675.3
145°	698.6	699.9	701.2	702.2	702.8	703.4	704.0	704.6
147.5°	728.4	729.2	730.0	730.1	729.6	729.0	728.4	727.9
150°	747.5	747.5	747.5	747.4	747.4	747.3	747.3	747.3
152.5°	766.1	766.4	766.8	766.8	766.2	765.7	765.3	764.7
155°	792.6	793.3	793.9	793.8	793.0	792.3	791.5	790.7
157.5°	815.6	816.3	816.9	816.7	815.6	814.7	813.6	812.6
160°	829.6	830.2	830.8	830.8	830.0	829.2	828.4	827.7
162.5°	842.7	843.5	844.2	844.1	843.2	842.3	841.4	840.5
165°	860.3	860.9	861.5	861.4	860.4	859.5	858.5	857.6
167.5°	873.3	874.2	875.2	875.1	874.2	873.3	872.3	871.3
170°	881.1	882.1	883.0	882.9	881.8	880.7	879.7	878.6
172.5°	886.7	887.6	888.6	888.6	887.6	886.6	885.6	884.7
175°	893.0	893.9	894.8	894.7	893.7	892.6	891.5	890.5
177.5°	895.8	896.5	897.3	897.2	896.3	895.5	894.7	893.8
180°	896.0	896.0	896.0	896.0	896.0	896.0	896.0	896.0

(END OF REPORT)