

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: P333317-940

Luminaire Tested: **S125DIP-S1270D810U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333317-940
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-S1270D810U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 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: 6894.5 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

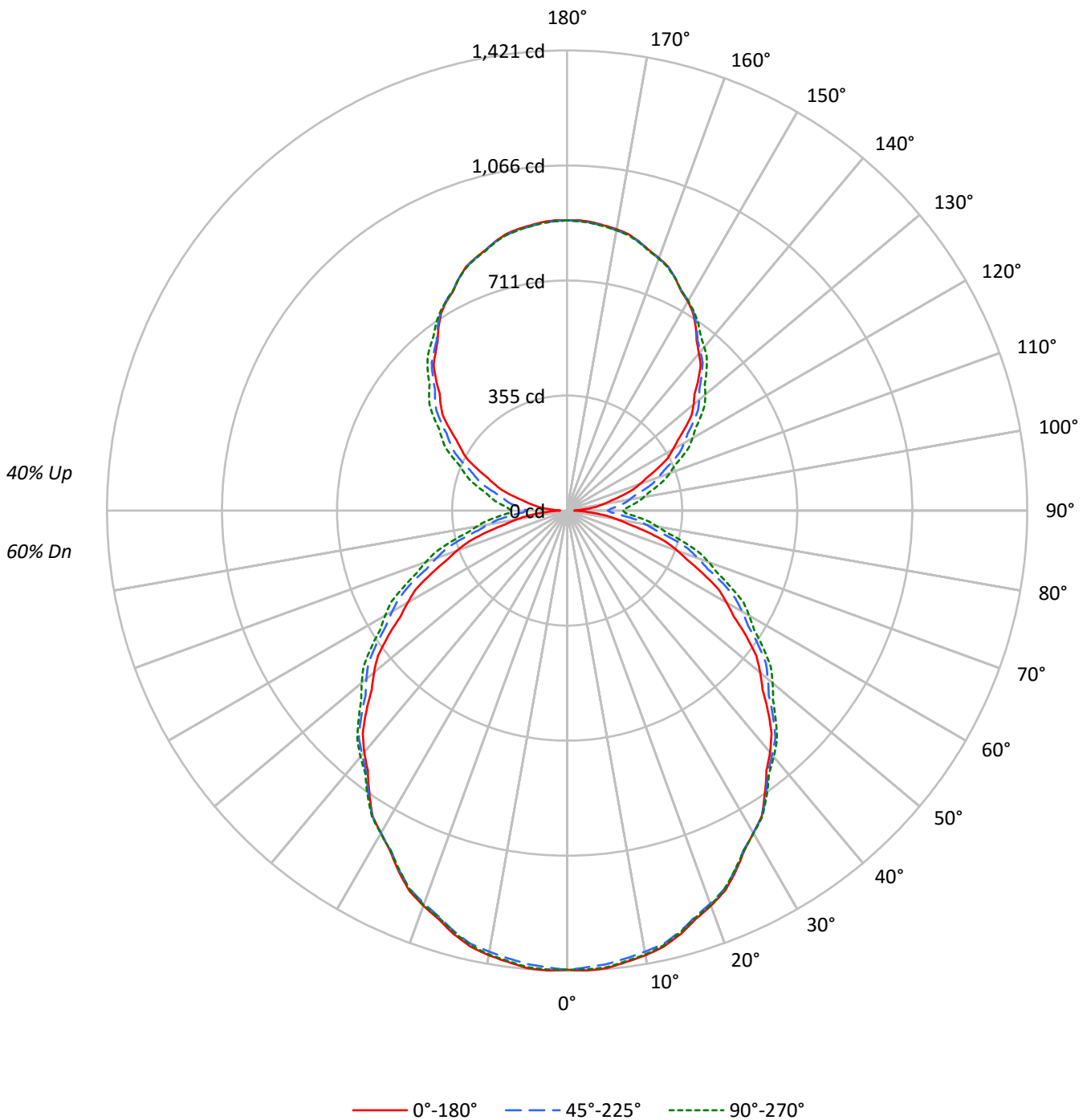
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		102	102	102	102		89	89	89		76	76	76			65	65	65	60
1	99	94	90	86		92	88	84	81		77	74	71		66	64	62			56	55	53	49
2	90	82	75	70		84	77	71	66		67	62	58		57	54	51			49	46	44	40
3	82	72	64	58		76	67	60	55		58	53	49		51	46	43			43	40	37	33
4	75	63	55	49		69	59	52	46		52	46	41		45	40	36			38	35	32	28
5	69	56	48	42		64	53	45	39		46	40	35		40	35	31			34	31	28	25
6	63	51	42	36		59	47	40	34		42	35	31		36	31	28			31	27	24	21
7	58	46	37	32		54	43	35	30		38	32	27		33	28	24			28	25	21	19
8	54	41	33	28		50	39	32	27		34	28	24		30	25	22			26	22	19	17
9	50	38	30	25		47	36	29	24		32	26	22		28	23	19			24	20	17	15
10	47	35	27	22		44	33	26	21		29	23	19		26	21	18			22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9159	9159	9159
5°	9177	8990	9018
10°	9112	8829	8816
15°	9004	8637	8558
20°	8857	8400	8301
25°	8683	8145	7984
30°	8473	7865	7696
35°	8276	7608	7432
40°	8075	7338	7167
45°	7849	7106	6931
50°	7633	6854	6723
55°	7373	6618	6478
60°	7089	6346	6229
65°	6792	6064	5947
70°	6457	5677	5658
75°	5923	5304	5304
80°	5225	4854	4918
85°	4578	4550	4797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	1.9
10°-20°	380.7	5.5
20°-30°	566.1	8.2
30°-40°	670.6	9.7
40°-50°	693.3	10.1
50°-60°	638.7	9.3
60°-70°	516.3	7.5
70°-80°	345.7	5.0
80°-90°	181.3	2.6
90°-100°	160.6	2.3
100°-110°	251.4	3.6
110°-120°	349.9	5.1
120°-130°	423.3	6.1
130°-140°	455.0	6.6
140°-150°	436.3	6.3
150°-160°	364.4	5.3
160°-170°	242.2	3.5
170°-180°	84.8	1.2
0°-30°	1080.9	15.7
0°-40°	1751.4	25.4
0°-60°	3083.4	44.7
0°-90°	4126.6	59.9
90°-120°	761.9	11.1
90°-150°	2076.5	30.1
90°-180°	2768.0	40.1
0°-180°	6894.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1418	1415	1406	1416	1415	134
15°	1354	1355	1346	1353	1348	381
25°	1230	1234	1226	1231	1225	566
35°	1065	1074	1070	1074	1075	666
45°	877	892	900	909	911	677
55°	674	696	719	734	740	603
65°	464	496	530	550	556	461
75°	256	292	336	363	371	271
85°	76	123	171	201	213	81
90°	23	73	125	159	172	17
95°	63	102	155	189	202	63
105°	172	198	243	274	287	183
115°	309	323	359	382	391	305
125°	444	448	476	496	503	397
135°	573	576	586	604	609	442
145°	692	694	696	703	706	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°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1421.4	1420.9	1420.4	1420.0	1419.4	1418.4	1416.6	1414.9	1413.2	1411.4	1413.2
5°	1418.1	1417.5	1416.8	1416.2	1415.6	1414.3	1412.0	1409.9	1407.7	1405.6	1408.0
7.5°	1405.6	1405.3	1405.1	1404.8	1404.6	1403.4	1401.1	1398.9	1396.7	1394.5	1396.6
10°	1394.5	1394.5	1394.5	1394.5	1394.5	1393.2	1390.7	1388.3	1385.8	1383.3	1385.5
12.5°	1378.9	1379.1	1379.4	1379.7	1379.8	1379.0	1377.1	1375.0	1373.1	1371.1	1372.8
15°	1354.2	1354.4	1354.8	1355.0	1355.4	1354.4	1352.3	1350.1	1348.0	1345.8	1347.6
17.5°	1321.9	1322.5	1323.1	1323.7	1324.4	1323.6	1321.4	1319.3	1317.1	1314.9	1316.3
20°	1298.5	1299.1	1299.8	1300.4	1301.0	1300.2	1298.1	1295.9	1293.7	1291.6	1292.5
22.5°	1271.8	1272.9	1274.1	1275.1	1276.3	1275.6	1273.2	1270.8	1268.4	1266.0	1267.1
25°	1230.4	1231.4	1232.3	1233.1	1234.1	1233.7	1231.8	1229.9	1228.1	1226.2	1227.4
27.5°	1184.3	1185.6	1187.0	1188.3	1189.7	1189.3	1187.2	1185.1	1183.0	1180.9	1181.8
30°	1149.8	1151.6	1153.4	1155.3	1157.2	1157.2	1155.3	1153.4	1151.6	1149.8	1150.4
32.5°	1118.7	1120.3	1121.9	1123.5	1125.1	1125.2	1123.8	1122.5	1121.1	1119.7	1120.3
35°	1065.0	1067.1	1069.3	1071.5	1073.6	1074.2	1073.3	1072.4	1071.5	1070.5	1071.5
37.5°	1011.3	1013.3	1015.2	1017.3	1019.2	1020.0	1019.8	1019.4	1019.1	1018.8	1020.0
40°	974.6	977.0	979.5	982.0	984.4	985.5	985.3	984.9	984.6	984.4	985.5
42.5°	934.5	937.7	940.9	944.1	947.4	949.3	950.0	950.7	951.4	952.1	953.5
45°	877.3	880.7	884.0	887.4	890.8	893.3	894.9	896.4	898.0	899.5	901.7
47.5°	818.6	821.7	824.9	828.0	831.2	834.1	836.8	839.5	842.0	844.7	847.9
50°	778.6	781.9	785.3	788.7	792.2	795.6	799.0	802.4	805.7	809.1	812.5
52.5°	736.3	740.5	744.6	748.7	752.9	757.0	761.2	765.3	769.4	773.6	777.2
55°	674.3	679.2	684.2	689.1	694.0	699.0	703.9	708.9	713.8	718.8	722.2
57.5°	610.9	616.8	622.8	628.7	634.6	640.4	646.1	651.8	657.5	663.2	667.1
60°	568.6	574.8	580.9	587.2	593.3	599.5	605.7	611.9	618.0	624.2	628.8
62.5°	527.4	533.7	539.8	546.0	552.1	558.7	565.3	571.9	578.6	585.3	590.4
65°	464.3	471.4	478.6	485.7	492.8	500.1	507.5	514.9	522.3	529.7	534.3
67.5°	404.8	411.7	418.6	425.4	432.3	439.5	447.0	454.6	462.1	469.7	475.3
70°	361.5	368.5	375.7	382.8	389.9	397.4	405.5	413.6	421.6	429.6	435.5
72.5°	319.2	326.5	333.9	341.3	348.7	356.7	365.4	374.3	383.0	391.8	398.1
75°	255.8	263.9	271.9	279.9	287.9	296.9	306.7	316.6	326.5	336.4	342.6
77.5°	194.9	204.2	213.5	222.7	232.0	241.4	250.9	260.4	269.9	279.5	286.2
80°	157.1	166.4	175.7	184.9	194.2	204.0	214.5	225.1	235.6	246.1	252.9
82.5°	122.6	132.4	142.1	151.9	161.7	171.9	182.7	193.4	204.2	214.9	221.5
85°	76.5	86.7	96.8	107.1	117.3	127.8	138.6	149.4	160.2	171.0	177.8
87.5°	43.5	53.7	63.8	73.9	84.1	94.5	105.2	115.9	126.6	137.3	144.6
90°	22.9	34.1	45.2	56.4	67.4	78.8	90.4	102.0	113.6	125.2	133.0
92.5°	36.9	46.9	56.9	67.0	77.0	88.0	100.0	112.2	124.2	136.3	144.2
95°	63.4	71.8	80.1	88.5	96.8	107.0	119.0	131.1	143.1	155.2	163.1
97.5°	91.7	99.1	106.4	113.8	121.1	130.9	143.2	155.5	167.7	180.0	187.5
100°	112.9	119.4	125.9	132.4	138.8	148.0	160.0	171.8	183.8	195.6	203.6
102.5°	135.8	142.4	149.0	155.6	162.2	170.9	181.6	192.2	202.9	213.6	221.3
105°	171.5	177.2	182.9	188.7	194.4	202.3	212.5	222.7	232.9	243.1	250.2
107.5°	211.1	216.1	221.1	226.0	231.0	238.3	247.9	257.5	267.2	276.8	283.3
110°	238.4	242.9	247.4	251.9	256.4	263.1	272.2	281.4	290.5	299.6	305.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	267.4	270.8	274.2	277.6	280.9	287.1	296.1	305.1	314.1	323.1	329.0
115°	308.9	311.7	314.4	317.2	320.0	325.6	333.9	342.2	350.6	358.9	364.4
117.5°	350.4	352.1	353.8	355.5	357.2	362.0	369.9	377.8	385.7	393.5	399.0
120°	377.2	378.9	380.6	382.3	384.0	388.5	395.7	403.1	410.3	417.5	422.8
122.5°	405.1	405.8	406.5	407.2	408.0	412.0	419.2	426.4	433.7	441.0	445.9
125°	444.2	444.8	445.4	446.0	446.7	450.1	456.5	462.8	469.1	475.5	480.1
127.5°	484.6	484.8	485.0	485.3	485.4	488.2	493.5	498.7	504.0	509.3	513.6
130°	509.7	510.1	510.6	511.1	511.6	514.1	518.7	523.3	528.0	532.6	536.8
132.5°	533.7	534.9	536.1	537.3	538.5	540.7	544.0	547.3	550.6	553.8	558.0
135°	573.2	573.8	574.4	575.0	575.6	577.1	579.4	581.8	584.1	586.4	590.4
137.5°	610.3	610.9	611.5	612.2	612.9	613.9	615.3	616.6	618.0	619.5	623.3
140°	633.1	633.9	634.6	635.4	636.2	637.0	637.8	638.6	639.4	640.1	643.8
142.5°	657.1	657.5	657.9	658.4	658.7	659.2	659.9	660.6	661.2	661.8	664.9
145°	692.4	692.7	693.0	693.3	693.7	694.0	694.5	694.9	695.4	695.9	697.4
147.5°	723.6	724.0	724.3	724.7	725.0	725.3	725.8	726.1	726.5	726.8	727.7
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°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1414.9	1416.6	1418.4	1419.1	1418.8	1418.6	1418.4	1418.1
5°	1410.5	1413.0	1415.5	1416.6	1416.2	1415.9	1415.6	1415.3
7.5°	1398.7	1401.0	1403.1	1404.0	1403.7	1403.4	1403.1	1402.8
10°	1387.7	1389.8	1392.0	1392.9	1392.6	1392.3	1392.0	1391.7
12.5°	1374.4	1376.1	1377.8	1378.2	1377.4	1376.6	1375.8	1375.0
15°	1349.5	1351.4	1353.2	1353.5	1352.3	1351.0	1349.8	1348.5
17.5°	1317.8	1319.2	1320.6	1321.0	1320.2	1319.5	1318.8	1317.9
20°	1293.4	1294.3	1295.3	1295.7	1295.7	1295.7	1295.7	1295.7
22.5°	1268.4	1269.5	1270.7	1270.9	1270.2	1269.4	1268.6	1267.9
25°	1228.7	1229.9	1231.2	1231.0	1229.5	1227.9	1226.4	1224.9
27.5°	1182.7	1183.5	1184.4	1184.5	1183.9	1183.4	1182.9	1182.3
30°	1151.0	1151.6	1152.3	1152.4	1152.1	1151.7	1151.5	1151.1
32.5°	1121.0	1121.6	1122.2	1122.4	1122.0	1121.8	1121.4	1121.1
35°	1072.4	1073.3	1074.2	1074.7	1074.7	1074.7	1074.7	1074.7
37.5°	1021.3	1022.5	1023.8	1024.3	1024.1	1024.0	1024.0	1023.8
40°	986.8	988.0	989.3	990.2	990.8	991.4	992.0	992.7
42.5°	955.0	956.5	958.0	958.8	958.9	959.0	959.2	959.3
45°	903.8	906.0	908.1	909.4	909.7	910.0	910.3	910.6
47.5°	851.0	854.2	857.4	859.3	860.0	860.6	861.3	862.0
50°	815.9	819.3	822.8	824.9	825.8	826.8	827.7	828.6
52.5°	780.9	784.5	788.1	790.3	790.9	791.7	792.4	793.0
55°	725.6	729.0	732.4	734.7	735.9	737.2	738.4	739.7
57.5°	670.9	674.8	678.8	681.2	682.1	683.0	683.9	684.8
60°	633.5	638.1	642.7	645.5	646.5	647.4	648.4	649.3
62.5°	595.6	600.7	605.8	608.9	610.1	611.4	612.5	613.7
65°	539.0	543.6	548.2	551.2	552.4	553.7	554.9	556.1
67.5°	480.9	486.5	492.1	495.7	497.3	498.9	500.6	502.2
70°	441.3	447.2	453.1	456.9	458.8	460.7	462.5	464.3
72.5°	404.5	410.9	417.2	421.1	422.5	423.8	425.2	426.5
75°	348.8	355.0	361.1	365.1	366.6	368.1	369.7	371.2
77.5°	293.0	299.8	306.7	310.7	311.9	313.1	314.3	315.6
80°	259.7	266.4	273.3	277.3	278.5	279.7	281.0	282.2
82.5°	228.0	234.6	241.1	245.5	247.7	249.9	252.2	254.4
85°	184.6	191.4	198.2	202.9	205.3	207.8	210.3	212.7
87.5°	151.9	159.2	166.4	171.2	173.4	175.7	177.9	180.2
90°	140.9	148.8	156.7	161.9	164.5	167.2	169.8	172.5
92.5°	152.1	160.0	167.8	173.1	175.6	178.1	180.6	183.1
95°	170.9	178.8	186.7	191.9	194.4	196.8	199.3	201.8
97.5°	195.0	202.6	210.1	215.0	217.2	219.5	221.9	224.1
100°	211.4	219.3	227.2	232.2	234.3	236.6	238.7	240.9
102.5°	229.1	236.8	244.6	249.6	251.9	254.1	256.5	258.8
105°	257.3	264.5	271.5	276.4	279.0	281.7	284.3	287.0
107.5°	289.9	296.5	303.1	307.3	309.2	311.1	313.0	314.9
110°	312.3	318.6	324.9	329.1	331.2	333.1	335.2	337.2



TEST NUMBER: P333317-940

CATALOG NUMBER: S125DIP-S1270D810U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	334.7	340.6	346.4	350.3	352.1	354.1	356.0	357.8
115°	369.7	375.1	380.6	384.1	385.8	387.5	389.2	390.9
117.5°	404.3	409.7	415.0	418.5	419.9	421.4	422.9	424.4
120°	428.0	433.3	438.5	441.8	443.0	444.3	445.5	446.7
122.5°	450.8	455.7	460.5	463.6	464.9	466.4	467.7	469.0
125°	484.7	489.4	494.0	497.0	498.4	499.8	501.1	502.6
127.5°	518.1	522.5	526.9	529.9	531.3	532.8	534.3	535.7
130°	541.0	545.2	549.3	552.1	553.3	554.5	555.7	557.0
132.5°	562.2	566.4	570.5	573.1	573.9	574.8	575.7	576.5
135°	594.4	598.4	602.4	604.9	605.8	606.7	607.7	608.6
137.5°	627.1	631.0	634.8	636.9	637.4	637.8	638.3	638.7
140°	647.5	651.2	655.0	657.0	657.5	657.9	658.4	658.9
142.5°	668.1	671.1	674.2	676.0	676.5	676.9	677.3	677.9
145°	699.0	700.5	702.0	703.2	704.0	704.7	705.5	706.3
147.5°	728.6	729.4	730.3	730.5	730.0	729.5	729.0	728.5
150°	747.5	747.5	747.5	747.5	747.5	747.5	747.5	747.5
152.5°	766.1	766.4	766.8	766.8	766.2	765.8	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)