

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: P333308-940

Luminaire Tested: **S125DIP-S1270D590U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333308-940
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-S1270D590U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6217.7 lumens
Efficiency: N/A
Efficacy: 112.8 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

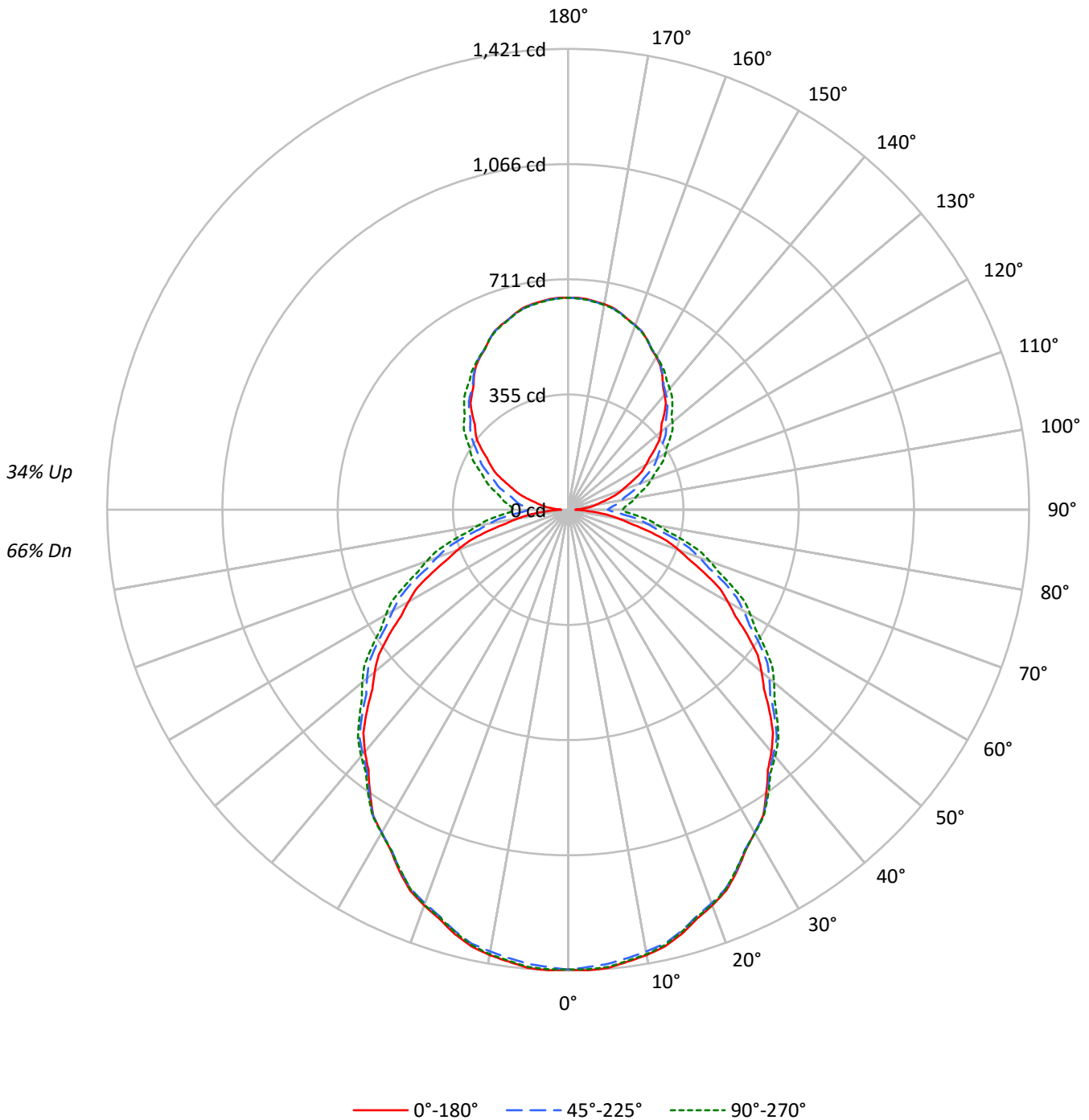
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	100	96	91	87	94	90	86	83	80	77	74	70	68	66	61	60	58	54
2	91	83	76	71	85	78	72	67	69	65	61	61	57	54	53	51	48	44
3	83	73	65	58	78	69	61	56	61	55	50	54	49	45	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	48	42	65	54	46	40	48	42	37	43	38	33	38	33	30	27
6	64	51	43	37	60	49	41	35	43	37	32	39	33	29	34	30	26	24
7	59	46	38	32	56	44	36	31	39	33	28	35	30	26	31	27	23	21
8	55	42	34	28	52	40	32	27	36	30	25	32	27	23	29	24	21	19
9	51	38	31	25	48	37	29	24	33	27	23	30	24	21	26	22	19	17
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

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	2.2
10°-20°	380.7	6.1
20°-30°	566.1	9.1
30°-40°	670.6	10.8
40°-50°	693.3	11.2
50°-60°	638.7	10.3
60°-70°	516.3	8.3
70°-80°	345.7	5.6
80°-90°	180.7	2.9
90°-100°	144.4	2.3
100°-110°	203.5	3.3
110°-120°	268.7	4.3
120°-130°	316.4	5.1
130°-140°	335.3	5.4
140°-150°	319.0	5.1
150°-160°	265.8	4.3
160°-170°	176.7	2.8
170°-180°	61.8	1.0
0°-30°	1080.9	17.4
0°-40°	1751.4	28.2
0°-60°	3083.4	49.6
0°-90°	4126.1	66.4
90°-120°	616.5	9.9
90°-150°	1587.2	25.5
90°-180°	2092.0	33.6
0°-180°	6217.7	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	71	122	155	168	17
95°	51	89	141	174	186	49
105°	128	154	198	228	240	137
115°	228	241	276	300	309	225
125°	326	329	356	376	383	291
135°	419	421	431	448	454	323
145°	506	506	508	514	519	316
155°	577	577	577	579	577	266
165°	627	626	627	628	626	177
175°	652	650	650	653	650	62
180°	654	654	654	654	654	



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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	53.5	63.6	73.7	83.7	94.1	104.8	115.5	126.1	136.8	144.0
90°	22.7	33.5	44.3	55.1	65.9	77.0	88.3	99.5	110.8	122.2	129.8
92.5°	32.4	42.1	51.9	61.7	71.4	82.2	93.9	105.7	117.3	129.1	136.7
95°	51.1	59.4	67.7	75.9	84.2	94.2	105.8	117.3	129.0	140.6	148.3
97.5°	71.3	78.6	86.0	93.3	100.6	110.1	121.8	133.5	145.2	156.9	164.2
100°	86.5	93.0	99.5	105.9	112.4	121.4	132.8	144.1	155.4	166.8	174.3
102.5°	102.9	109.3	115.8	122.3	128.7	137.1	147.5	157.8	168.3	178.6	186.0
105°	128.5	134.0	139.6	145.0	150.5	158.3	168.2	178.2	188.1	198.0	204.9
107.5°	156.9	161.7	166.5	171.2	176.0	183.1	192.5	202.0	211.3	220.8	227.2
110°	176.6	180.8	185.1	189.4	193.7	200.3	209.3	218.3	227.3	236.3	242.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	197.8	201.0	204.3	207.5	210.8	216.9	225.7	234.5	243.3	252.2	258.0
115°	227.6	230.2	232.8	235.4	238.1	243.5	251.7	260.0	268.2	276.5	282.0
117.5°	257.5	259.1	260.8	262.4	264.0	268.8	276.5	284.4	292.1	300.0	305.3
120°	277.1	278.6	280.1	281.5	283.0	287.4	294.6	301.8	309.1	316.3	321.6
122.5°	297.1	297.7	298.4	299.0	299.7	303.5	310.7	317.9	325.0	332.2	337.1
125°	325.6	325.9	326.3	326.6	327.0	330.4	336.6	343.0	349.2	355.5	360.3
127.5°	354.6	354.7	354.8	354.9	355.0	357.6	362.8	368.0	373.2	378.4	382.9
130°	373.0	373.3	373.4	373.7	374.0	376.4	380.9	385.5	390.0	394.6	398.9
132.5°	390.2	391.0	391.9	392.8	393.6	395.7	399.0	402.3	405.6	408.8	413.1
135°	418.9	419.3	419.6	420.0	420.4	421.7	424.0	426.2	428.6	430.8	434.8
137.5°	445.9	446.3	446.7	447.1	447.5	448.4	449.7	450.9	452.3	453.5	457.4
140°	462.3	462.8	463.4	464.0	464.5	465.1	465.7	466.5	467.1	467.7	471.4
142.5°	479.7	480.0	480.2	480.5	480.7	481.1	481.5	482.1	482.5	483.0	486.1
145°	505.5	505.7	505.8	506.0	506.0	506.3	506.7	507.0	507.4	507.7	509.3
147.5°	527.9	528.2	528.4	528.7	529.0	529.1	529.4	529.8	530.0	530.3	531.0
150°	543.8	543.7	543.6	543.5	543.3	543.5	543.9	544.4	544.8	545.3	545.3
152.5°	556.8	557.0	557.1	557.3	557.4	557.6	557.8	557.9	558.1	558.4	558.7
155°	576.8	576.8	576.8	576.8	576.8	576.9	577.0	577.1	577.3	577.4	577.8
157.5°	594.8	594.5	594.2	594.1	593.8	593.7	593.8	594.0	594.1	594.1	594.6
160°	605.4	605.0	604.7	604.3	604.0	603.9	604.0	604.1	604.2	604.3	604.8
162.5°	614.7	614.5	614.2	613.9	613.7	613.6	613.6	613.7	613.7	613.7	614.2
165°	627.2	627.0	626.8	626.5	626.3	626.2	626.3	626.5	626.6	626.7	627.1
167.5°	637.8	637.4	636.9	636.4	636.0	635.8	635.8	635.8	635.8	635.8	636.4
170°	643.5	643.0	642.6	642.1	641.7	641.5	641.5	641.5	641.5	641.5	642.1
172.5°	647.6	647.1	646.7	646.2	645.8	645.5	645.5	645.5	645.5	645.5	646.2
175°	652.1	651.7	651.2	650.8	650.3	650.1	650.1	650.1	650.1	650.1	650.8
177.5°	654.5	654.2	653.8	653.4	653.0	652.8	652.7	652.6	652.6	652.5	653.0
180°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7



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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°	151.2	158.5	165.7	170.4	172.6	174.9	177.1	179.3
90°	137.5	145.2	152.8	157.9	160.4	162.9	165.4	167.9
92.5°	144.3	151.9	159.5	164.5	166.9	169.3	171.7	174.2
95°	155.9	163.5	171.0	176.0	178.4	180.7	183.2	185.6
97.5°	171.4	178.6	185.8	190.6	192.8	195.0	197.2	199.6
100°	181.8	189.3	196.8	201.6	203.7	205.8	207.9	209.9
102.5°	193.3	200.7	208.0	212.8	215.0	217.1	219.3	221.5
105°	211.8	218.6	225.5	230.2	232.6	235.1	237.6	240.1
107.5°	233.7	240.1	246.6	250.7	252.7	254.6	256.5	258.3
110°	248.7	254.9	261.1	265.2	267.2	269.3	271.3	273.4



TEST NUMBER: P333308-940

CATALOG NUMBER: S125DIP-S1270D590U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	263.8	269.5	275.3	279.2	281.2	283.1	285.1	287.0
115°	287.4	292.8	298.3	301.9	303.6	305.4	307.1	308.9
117.5°	310.7	316.0	321.4	324.9	326.5	328.1	329.8	331.4
120°	326.8	332.0	337.2	340.6	342.0	343.4	344.8	346.3
122.5°	342.0	346.9	351.9	355.0	356.5	358.0	359.5	361.0
125°	365.0	369.7	374.3	377.5	378.9	380.3	381.7	383.2
127.5°	387.4	391.8	396.3	399.2	400.8	402.4	403.9	405.6
130°	403.1	407.2	411.4	414.2	415.5	416.9	418.2	419.5
132.5°	417.3	421.5	425.7	428.3	429.3	430.3	431.2	432.2
135°	438.8	442.8	446.8	449.4	450.5	451.6	452.7	453.8
137.5°	461.1	464.9	468.7	470.9	471.6	472.3	473.0	473.6
140°	475.0	478.6	482.2	484.4	485.0	485.7	486.4	487.1
142.5°	489.1	492.1	495.2	497.0	497.7	498.4	499.0	499.7
145°	510.8	512.3	513.9	515.1	515.9	516.8	517.7	518.7
147.5°	531.8	532.5	533.3	533.6	533.4	533.2	533.0	532.8
150°	545.3	545.3	545.3	545.4	545.5	545.5	545.6	545.7
152.5°	558.9	559.2	559.5	559.4	559.0	558.7	558.4	558.0
155°	578.3	578.7	579.2	579.2	578.5	578.0	577.4	576.8
157.5°	595.0	595.5	595.9	595.8	595.0	594.3	593.6	592.8
160°	605.2	605.6	606.1	606.1	605.6	604.9	604.4	603.9
162.5°	614.7	615.3	615.9	615.8	615.2	614.5	613.9	613.1
165°	627.6	628.0	628.6	628.4	627.8	627.1	626.3	625.7
167.5°	637.1	637.8	638.5	638.5	637.8	637.0	636.3	635.7
170°	642.8	643.5	644.2	644.1	643.4	642.6	641.8	641.0
172.5°	646.9	647.6	648.3	648.3	647.6	646.8	646.1	645.4
175°	651.5	652.1	652.8	652.7	652.0	651.2	650.4	649.6
177.5°	653.5	654.1	654.6	654.6	654.0	653.4	652.6	652.0
180°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7

(END OF REPORT)