

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: P333298-927

Luminaire Tested: **S125DIP-S1270D365U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333298-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIP-S1270D365U927-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5062.8 lumens  
Efficiency: N/A  
Efficacy: 101.7 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

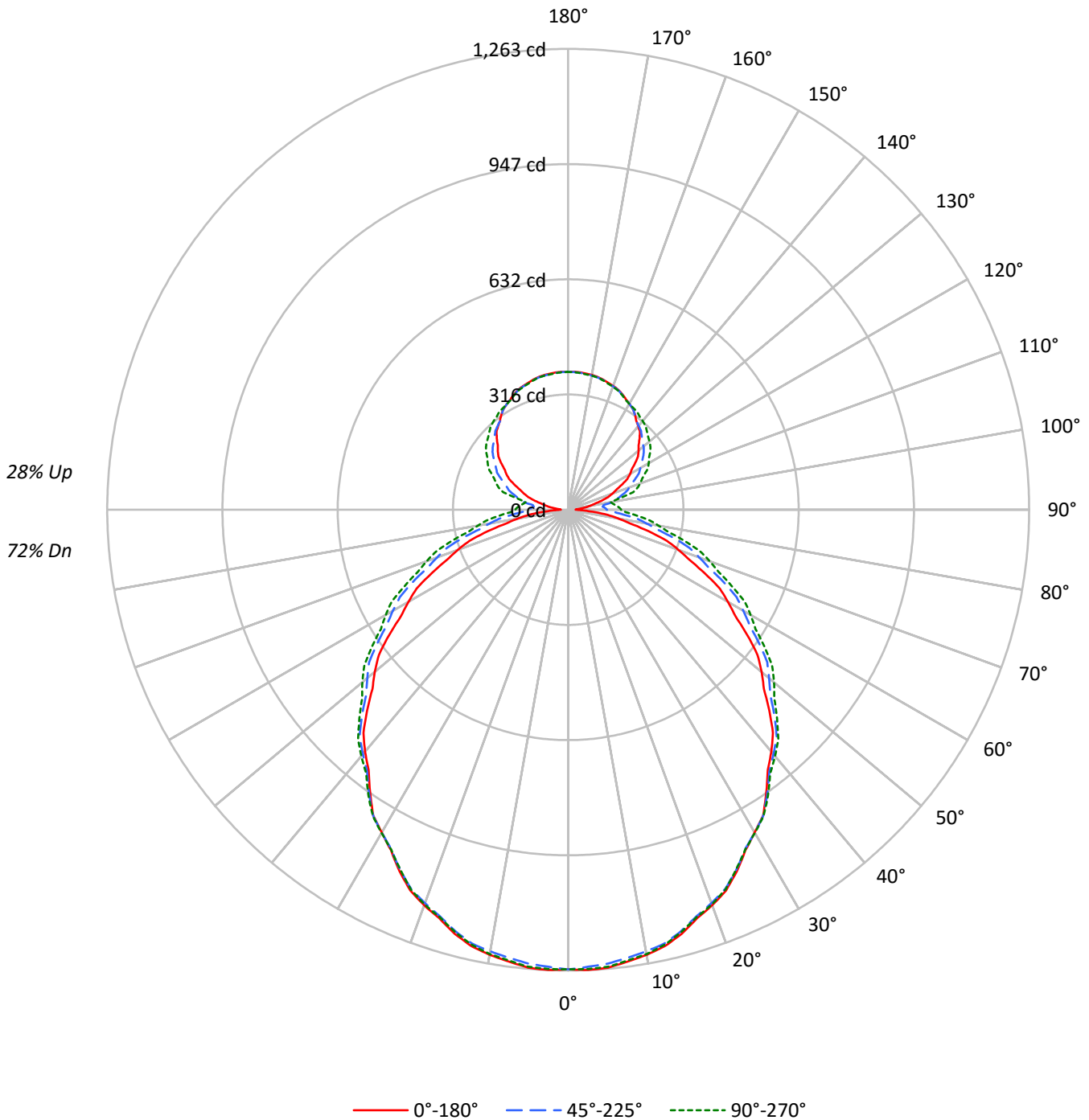
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333298-927

CATALOG NUMBER: S125DIP-S1270D365U927-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





TEST NUMBER: P333298-927

CATALOG NUMBER: S125DIP-S1270D365U927-4F0-1E-UDD-D

**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°	8136	8136	8136
5°	8152	7986	8012
10°	8094	7843	7832
15°	7999	7673	7603
20°	7869	7462	7374
25°	7714	7235	7092
30°	7527	6987	6837
35°	7352	6759	6602
40°	7174	6519	6367
45°	6972	6313	6157
50°	6781	6089	5972
55°	6550	5879	5755
60°	6298	5638	5533
65°	6034	5387	5283
70°	5737	5044	5027
75°	5263	4712	4712
80°	4643	4312	4369
85°	4070	4042	4260



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.1	2.4
10°-20°	338.2	6.7
20°-30°	502.9	9.9
30°-40°	595.7	11.8
40°-50°	615.9	12.2
50°-60°	567.4	11.2
60°-70°	458.6	9.1
70°-80°	307.2	6.1
80°-90°	160.1	3.2
90°-100°	103.1	2.0
100°-110°	150.5	3.0
110°-120°	197.6	3.9
120°-130°	222.0	4.4
130°-140°	222.8	4.4
140°-150°	201.0	4.0
150°-160°	160.8	3.2
160°-170°	104.0	2.1
170°-180°	35.9	0.7
0°-30°	960.2	19.0
0°-40°	1555.9	30.7
0°-60°	2739.2	54.1
0°-90°	3665.1	72.4
90°-120°	451.2	8.9
90°-150°	1097.0	21.7
90°-180°	1398.0	27.6
0°-180°	5062.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1260	1260	1260	1260	1260	
5°	1260	1257	1249	1258	1257	119
15°	1203	1204	1196	1202	1198	339
25°	1093	1096	1089	1094	1088	503
35°	946	954	951	954	955	592
45°	779	792	799	807	809	601
55°	599	619	639	652	657	535
65°	412	441	471	488	494	409
75°	227	260	299	323	330	241
85°	68	109	152	178	189	72
90°	20	62	106	134	145	14
95°	32	63	95	122	132	33
105°	94	115	151	175	184	99
115°	162	173	204	225	231	161
125°	225	227	250	268	274	200
135°	277	278	285	300	305	213
145°	319	318	318	325	328	199
155°	350	348	349	350	348	161
165°	369	368	368	369	367	104
175°	378	376	376	378	376	36
180°	378	378	378	378	378	



TEST NUMBER: P333298-927

CATALOG NUMBER: S125DIP-S1270D365U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1262.7	1262.3	1261.9	1261.5	1261.0	1260.0	1258.5	1257.0	1255.5	1253.9	1255.5
5°	1259.8	1259.3	1258.7	1258.1	1257.6	1256.4	1254.4	1252.5	1250.6	1248.7	1250.9
7.5°	1248.7	1248.5	1248.2	1248.0	1247.8	1246.7	1244.8	1242.8	1240.8	1238.8	1240.7
10°	1238.8	1238.8	1238.8	1238.8	1238.8	1237.7	1235.5	1233.3	1231.1	1228.9	1230.8
12.5°	1225.0	1225.2	1225.4	1225.7	1225.8	1225.1	1223.4	1221.5	1219.8	1218.1	1219.6
15°	1203.0	1203.2	1203.6	1203.8	1204.1	1203.2	1201.3	1199.4	1197.5	1195.6	1197.2
17.5°	1174.3	1174.9	1175.4	1176.0	1176.5	1175.8	1173.9	1172.0	1170.1	1168.2	1169.4
20°	1153.6	1154.1	1154.7	1155.2	1155.8	1155.1	1153.2	1151.3	1149.3	1147.4	1148.3
22.5°	1129.9	1130.8	1131.9	1132.8	1133.9	1133.2	1131.1	1128.9	1126.8	1124.7	1125.7
25°	1093.1	1093.9	1094.7	1095.5	1096.4	1096.0	1094.3	1092.7	1091.0	1089.3	1090.4
27.5°	1052.1	1053.3	1054.5	1055.7	1056.9	1056.5	1054.7	1052.8	1051.0	1049.1	1049.9
30°	1021.4	1023.1	1024.7	1026.4	1028.0	1028.0	1026.4	1024.7	1023.1	1021.4	1022.0
32.5°	993.8	995.2	996.6	998.1	999.5	999.6	998.4	997.2	995.9	994.7	995.3
35°	946.1	948.0	949.9	951.9	953.8	954.3	953.5	952.7	951.9	951.0	951.9
37.5°	898.4	900.2	901.9	903.7	905.5	906.2	905.9	905.6	905.4	905.1	906.2
40°	865.8	868.0	870.2	872.4	874.6	875.5	875.3	875.0	874.7	874.5	875.5
42.5°	830.2	833.1	835.9	838.8	841.7	843.4	844.0	844.6	845.2	845.8	847.1
45°	779.3	782.4	785.4	788.4	791.4	793.6	795.0	796.4	797.7	799.1	801.1
47.5°	727.2	730.0	732.8	735.6	738.4	741.0	743.4	745.8	748.1	750.4	753.3
50°	691.7	694.7	697.7	700.7	703.8	706.8	709.8	712.8	715.8	718.8	721.8
52.5°	654.1	657.8	661.5	665.1	668.8	672.5	676.2	679.9	683.5	687.2	690.5
55°	599.0	603.4	607.8	612.2	616.6	621.0	625.3	629.8	634.1	638.6	641.6
57.5°	542.7	548.0	553.3	558.5	563.8	568.9	574.0	579.0	584.1	589.1	592.6
60°	505.2	510.6	516.1	521.7	527.1	532.6	538.1	543.6	549.1	554.5	558.6
62.5°	468.6	474.1	479.6	485.1	490.5	496.3	502.2	508.1	514.0	520.0	524.5
65°	412.5	418.8	425.2	431.5	437.8	444.3	450.8	457.4	464.0	470.6	474.7
67.5°	359.7	365.8	371.9	378.0	384.0	390.5	397.1	403.9	410.5	417.2	422.2
70°	321.2	327.4	333.7	340.1	346.3	353.1	360.2	367.4	374.5	381.7	386.9
72.5°	283.6	290.1	296.7	303.2	309.7	316.9	324.6	332.5	340.2	348.1	353.7
75°	227.3	234.4	241.5	248.7	255.8	263.8	272.5	281.3	290.1	298.9	304.4
77.5°	173.2	181.4	189.6	197.9	206.1	214.4	222.9	231.3	239.8	248.3	254.3
80°	139.6	147.8	156.1	164.3	172.5	181.3	190.6	199.9	209.3	218.6	224.7
82.5°	108.9	117.6	126.3	135.0	143.6	152.7	162.3	171.8	181.4	190.9	196.8
85°	68.0	77.0	86.0	95.1	104.2	113.5	123.1	132.7	142.3	151.9	158.0
87.5°	38.6	47.5	56.3	65.3	74.1	83.3	92.7	102.1	111.5	121.0	127.3
90°	20.0	29.3	38.6	47.8	57.2	66.7	76.4	86.2	96.0	105.8	112.4
92.5°	22.1	29.9	37.6	45.4	53.2	62.0	72.0	81.9	91.9	101.8	108.2
95°	32.0	39.0	45.9	52.8	59.8	66.8	73.8	80.7	87.7	94.7	101.0
97.5°	47.9	54.7	61.4	68.2	74.9	80.5	84.8	89.1	93.5	97.8	101.8
100°	60.4	66.3	72.2	78.2	84.1	91.7	100.7	109.7	118.7	127.8	124.3
102.5°	73.0	78.6	84.1	89.7	95.3	102.4	111.1	119.9	128.6	137.3	141.1
105°	93.5	98.1	102.7	107.3	112.0	118.4	126.7	134.9	143.1	151.4	156.9
107.5°	114.7	118.4	122.2	125.9	129.6	135.5	143.5	151.5	159.6	167.6	173.1
110°	128.5	131.8	135.1	138.4	141.6	147.2	155.0	162.9	170.6	178.5	183.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	142.4	145.2	148.0	150.8	153.5	158.7	166.2	173.7	181.3	188.9	193.6
115°	162.0	164.2	166.4	168.7	170.9	175.6	182.8	190.0	197.3	204.4	209.1
117.5°	182.3	183.5	184.8	186.1	187.3	191.4	198.4	205.4	212.4	219.4	223.7
120°	195.7	196.5	197.3	198.0	198.8	202.4	208.9	215.4	221.9	228.4	233.0
122.5°	206.6	207.2	207.9	208.5	209.1	212.5	218.7	224.9	231.1	237.3	241.5
125°	224.7	224.9	225.1	225.2	225.4	228.2	233.7	239.2	244.7	250.2	254.3
127.5°	241.1	241.1	241.1	241.1	241.2	243.4	248.0	252.4	256.8	261.3	265.2
130°	251.8	251.8	251.9	251.9	251.9	253.9	257.9	261.7	265.6	269.6	273.2
132.5°	261.6	261.9	262.2	262.4	262.8	264.4	267.2	270.1	272.8	275.7	279.5
135°	276.6	276.7	276.8	276.9	277.0	278.0	279.7	281.5	283.4	285.1	288.6
137.5°	290.4	290.5	290.7	290.7	290.8	291.3	292.2	292.9	293.7	294.6	297.9
140°	298.7	298.7	298.9	299.0	299.1	299.3	299.5	299.7	299.9	300.2	303.2
142.5°	306.9	306.7	306.7	306.5	306.3	306.3	306.5	306.6	306.7	306.9	309.5
145°	319.1	318.9	318.8	318.6	318.5	318.4	318.4	318.4	318.4	318.4	319.8
147.5°	328.4	328.4	328.4	328.4	328.4	328.4	328.4	328.5	328.6	328.7	329.2
150°	335.2	335.1	334.9	334.8	334.7	334.7	334.8	334.9	335.1	335.2	335.3
152.5°	341.7	341.4	341.1	340.9	340.6	340.5	340.6	340.8	340.9	341.0	341.1
155°	350.1	349.7	349.3	348.9	348.6	348.4	348.6	348.6	348.8	348.9	349.1
157.5°	356.5	356.2	356.0	355.8	355.6	355.5	355.5	355.5	355.5	355.5	355.7
160°	360.9	360.6	360.2	359.8	359.5	359.3	359.3	359.4	359.5	359.6	359.8
162.5°	364.6	364.2	363.8	363.4	363.1	362.9	363.0	363.0	363.1	363.1	363.5
165°	369.3	369.0	368.6	368.2	367.9	367.7	367.7	367.8	367.9	368.0	368.3
167.5°	373.0	372.6	372.2	371.8	371.4	371.2	371.3	371.4	371.5	371.5	371.9
170°	374.9	374.5	374.1	373.7	373.2	373.0	373.1	373.1	373.2	373.3	373.8
172.5°	376.3	375.9	375.4	375.0	374.5	374.4	374.5	374.6	374.7	374.9	375.3
175°	377.7	377.4	377.0	376.6	376.3	376.1	376.1	376.2	376.3	376.4	376.8
177.5°	378.4	378.1	377.8	377.6	377.2	377.1	377.2	377.2	377.2	377.3	377.6
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8	1259.8
2.5°	1257.0	1258.5	1260.0	1260.7	1260.4	1260.3	1260.0	1259.8
5°	1253.1	1255.3	1257.5	1258.5	1258.1	1257.9	1257.6	1257.4
7.5°	1242.6	1244.6	1246.5	1247.3	1247.1	1246.7	1246.5	1246.2
10°	1232.8	1234.7	1236.6	1237.5	1237.2	1236.9	1236.6	1236.4
12.5°	1221.0	1222.5	1224.0	1224.4	1223.7	1223.0	1222.3	1221.5
15°	1198.9	1200.6	1202.1	1202.5	1201.3	1200.2	1199.1	1198.0
17.5°	1170.7	1172.0	1173.2	1173.5	1172.8	1172.2	1171.6	1170.8
20°	1149.1	1149.9	1150.7	1151.1	1151.1	1151.1	1151.1	1151.1
22.5°	1126.8	1127.8	1128.9	1129.0	1128.4	1127.8	1127.0	1126.4
25°	1091.5	1092.7	1093.8	1093.6	1092.3	1090.8	1089.5	1088.1
27.5°	1050.7	1051.4	1052.2	1052.3	1051.8	1051.3	1050.8	1050.4
30°	1022.5	1023.1	1023.7	1023.7	1023.5	1023.2	1022.9	1022.6
32.5°	995.9	996.4	997.0	997.1	996.8	996.6	996.2	996.0
35°	952.7	953.5	954.3	954.7	954.7	954.7	954.7	954.7
37.5°	907.3	908.4	909.5	910.0	909.8	909.7	909.7	909.5
40°	876.6	877.7	878.8	879.6	880.2	880.7	881.3	881.9
42.5°	848.4	849.8	851.0	851.8	851.9	852.0	852.2	852.2
45°	803.0	804.9	806.8	807.9	808.2	808.4	808.7	809.0
47.5°	756.1	758.8	761.7	763.3	764.0	764.5	765.2	765.8
50°	724.8	727.9	730.9	732.8	733.6	734.5	735.3	736.1
52.5°	693.7	697.0	700.1	702.1	702.7	703.3	703.9	704.5
55°	644.6	647.6	650.6	652.7	653.8	654.9	656.0	657.1
57.5°	596.0	599.5	603.0	605.1	605.9	606.7	607.6	608.4
60°	562.8	566.9	571.0	573.5	574.3	575.1	576.0	576.8
62.5°	529.1	533.6	538.2	541.0	542.0	543.1	544.2	545.2
65°	478.8	482.9	487.0	489.6	490.8	491.9	493.0	494.0
67.5°	427.2	432.2	437.2	440.4	441.8	443.2	444.7	446.2
70°	392.1	397.3	402.5	405.9	407.6	409.2	410.9	412.5
72.5°	359.3	365.0	370.7	374.1	375.3	376.5	377.7	378.9
75°	309.9	315.4	320.8	324.3	325.7	327.0	328.4	329.8
77.5°	260.3	266.3	272.4	276.0	277.1	278.1	279.2	280.4
80°	230.7	236.7	242.8	246.4	247.4	248.5	249.6	250.7
82.5°	202.6	208.4	214.2	218.1	220.1	222.0	224.0	226.0
85°	164.0	170.0	176.1	180.2	182.4	184.6	186.8	188.9
87.5°	133.7	140.1	146.5	150.6	152.6	154.6	156.5	158.4
90°	119.0	125.6	132.2	136.7	138.7	140.9	142.9	145.0
92.5°	114.6	121.0	127.5	131.7	133.6	135.6	137.7	139.7
95°	107.3	113.7	120.0	124.2	126.1	128.0	129.9	131.9
97.5°	105.8	109.8	113.8	116.8	118.6	120.5	122.3	124.2
100°	120.7	117.2	113.8	112.6	114.1	115.5	116.8	118.3
102.5°	144.8	148.6	152.4	153.0	150.4	147.8	145.3	142.7
105°	162.3	167.9	173.3	177.0	178.9	180.7	182.6	184.4
107.5°	178.6	183.9	189.4	192.9	194.4	195.9	197.4	198.9
110°	188.5	193.5	198.6	202.1	204.1	206.0	208.0	210.0





TEST NUMBER: P333298-927

CATALOG NUMBER: S125DIP-S1270D365U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	198.4	203.1	207.9	211.2	213.0	214.8	216.7	218.5
115°	213.8	218.5	223.2	226.2	227.4	228.7	230.0	231.2
117.5°	228.1	232.4	236.8	239.8	241.5	243.2	244.9	246.6
120°	237.5	242.0	246.6	249.5	250.9	252.2	253.5	254.8
122.5°	245.9	250.2	254.5	257.3	258.6	259.9	261.2	262.4
125°	258.5	262.6	266.7	269.4	270.6	271.8	273.0	274.2
127.5°	269.2	273.1	277.0	279.6	280.7	281.8	283.0	284.1
130°	276.9	280.5	284.2	286.5	287.6	288.7	289.7	290.7
132.5°	283.3	287.1	290.9	293.2	294.1	294.9	295.7	296.6
135°	292.0	295.5	298.9	301.1	302.1	303.2	304.1	305.1
137.5°	301.1	304.4	307.6	309.7	310.5	311.2	312.0	312.8
140°	306.4	309.6	312.7	314.7	315.4	316.1	316.8	317.5
142.5°	312.1	314.7	317.3	319.0	319.7	320.4	321.2	321.9
145°	321.2	322.7	324.2	325.2	325.9	326.6	327.4	328.1
147.5°	329.7	330.3	330.7	331.1	331.1	331.1	331.1	331.2
150°	335.4	335.6	335.6	335.6	335.4	335.2	334.9	334.8
152.5°	341.3	341.4	341.5	341.4	341.0	340.6	340.2	339.8
155°	349.3	349.4	349.7	349.5	349.0	348.5	348.0	347.5
157.5°	355.9	356.1	356.3	356.2	355.7	355.1	354.7	354.2
160°	360.0	360.3	360.5	360.4	359.9	359.4	358.9	358.5
162.5°	363.8	364.2	364.6	364.4	363.8	363.3	362.8	362.3
165°	368.7	369.1	369.5	369.4	368.9	368.4	367.9	367.4
167.5°	372.4	372.8	373.3	373.2	372.6	372.1	371.5	371.0
170°	374.2	374.8	375.3	375.3	374.7	374.1	373.5	373.0
172.5°	375.7	376.2	376.6	376.6	376.0	375.4	374.9	374.3
175°	377.3	377.9	378.3	378.3	377.7	377.2	376.6	376.0
177.5°	378.0	378.3	378.7	378.7	378.3	377.9	377.5	377.1
180°	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7

(END OF REPORT)