

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: P333318-927

Luminaire Tested: **S125DIP-S1270D810U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333318-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIP-S1270D810U927-4F0-1E-UDD-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6207.7 lumens  
Efficiency: N/A  
Efficacy: 102.3 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

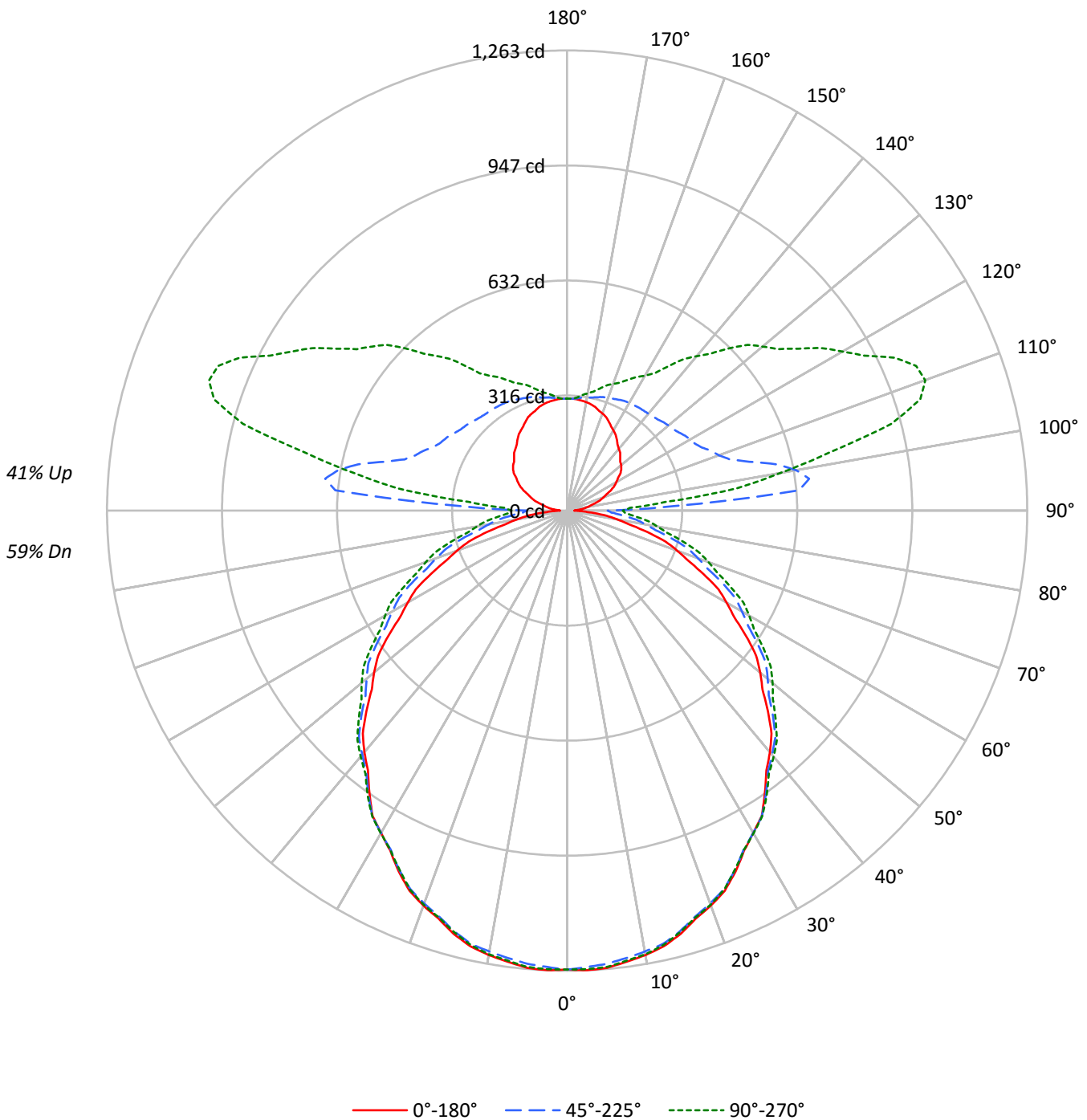
Input Watts (W): 60.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	88	88	88	76	76	76	64	64	64	59
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	56	54	53	48
2	90	82	75	70	83	76	71	66	66	62	58	57	54	51	48	46	44	39
3	82	72	64	58	76	67	60	54	58	53	48	50	46	42	43	39	37	33
4	75	63	55	49	69	59	52	46	52	46	41	45	40	36	38	34	32	28
5	68	56	48	41	63	53	45	39	46	40	35	40	35	31	34	30	27	24
6	63	50	42	36	59	47	40	34	41	35	31	36	31	27	31	27	24	21
7	58	46	37	31	54	43	35	30	38	31	27	33	28	24	28	24	21	19
8	54	41	33	28	50	39	32	27	34	28	24	30	25	21	26	22	19	17
9	50	38	30	25	47	36	29	24	31	26	21	28	23	19	24	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	16	14

**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	1.9
10°-20°	338.2	5.4
20°-30°	502.9	8.1
30°-40°	595.7	9.6
40°-50°	615.9	9.9
50°-60°	567.4	9.1
60°-70°	458.6	7.4
70°-80°	307.2	4.9
80°-90°	161.0	2.6
90°-100°	312.1	5.0
100°-110°	544.6	8.8
110°-120°	493.4	7.9
120°-130°	389.2	6.3
130°-140°	303.1	4.9
140°-150°	222.7	3.6
150°-160°	155.2	2.5
160°-170°	91.5	1.5
170°-180°	29.8	0.5
0°-30°	960.2	15.5
0°-40°	1555.9	25.1
0°-60°	2739.2	44.1
0°-90°	3666.0	59.1
90°-120°	1350.1	21.7
90°-150°	2265.2	36.5
90°-180°	2542.0	40.9
0°-180°	6207.7	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	65	111	142	153	14
95°	36	109	639	365	272	34
105°	81	130	517	976	922	86
115°	132	168	409	847	992	130
125°	178	208	374	666	775	158
135°	206	246	353	544	630	160
145°	238	271	344	435	483	149
155°	270	290	336	379	396	124
165°	295	303	322	342	347	83
175°	307	307	309	313	312	29
180°	307	307	307	307	307	



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**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°	38.7	47.5	56.6	65.6	74.6	84.0	93.4	103.0	112.5	122.0	128.5
90°	20.4	29.8	39.8	49.8	59.8	70.1	80.1	90.7	100.6	111.2	118.1
92.5°	25.3	35.1	48.4	64.2	83.0	109.9	153.3	219.6	290.7	297.0	265.1
95°	36.5	44.3	56.3	70.3	91.0	127.1	202.8	348.4	528.6	639.0	633.2
97.5°	48.5	55.7	65.6	78.8	97.5	125.2	178.2	287.0	474.8	670.0	769.2
100°	57.0	63.9	72.2	84.8	102.3	128.2	172.9	262.1	427.1	638.3	799.0
102.5°	66.4	72.4	79.8	92.4	108.4	133.5	174.0	250.3	390.6	587.3	774.0
105°	81.1	85.5	93.0	103.5	117.9	141.6	177.1	240.3	352.0	517.0	700.3
107.5°	95.5	100.4	107.2	116.0	130.0	151.4	185.7	240.8	333.1	467.6	626.4
110°	105.9	110.4	116.2	125.1	137.7	159.2	192.3	242.7	325.3	443.3	583.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	117.3	121.1	125.8	134.0	145.9	166.6	198.4	246.2	321.6	427.5	550.6
115°	132.5	135.7	139.5	146.9	158.2	178.2	208.3	251.3	317.9	408.7	513.3
117.5°	146.2	149.2	152.5	159.4	171.2	190.1	218.6	258.0	316.5	396.4	488.4
120°	156.1	158.8	162.1	168.4	179.8	198.8	226.9	262.9	316.9	389.5	474.0
122.5°	165.5	167.2	169.6	175.5	187.4	206.2	233.9	268.3	316.6	383.0	461.0
125°	178.4	179.4	182.1	187.4	198.9	217.7	243.6	275.8	317.1	374.1	442.8
127.5°	187.4	189.0	192.7	199.5	211.8	230.0	254.1	283.1	319.0	366.9	425.7
130°	193.8	195.4	200.1	207.9	220.6	238.5	261.6	289.0	320.7	362.9	415.1
132.5°	197.8	200.1	206.0	215.0	228.5	246.1	268.2	293.2	322.0	358.9	405.2
135°	205.7	207.9	215.0	224.7	237.3	254.9	276.0	298.4	323.2	353.0	391.9
137.5°	215.6	217.2	223.9	233.6	246.1	263.7	282.1	302.6	325.3	349.4	380.8
140°	220.5	222.4	229.8	239.7	251.4	268.3	286.5	305.5	325.5	346.9	374.6
142.5°	227.4	228.5	235.3	245.0	256.0	271.7	288.8	306.3	325.3	345.4	369.8
145°	237.8	238.8	244.7	253.1	264.0	278.1	294.2	309.7	326.5	344.4	364.3
147.5°	247.5	248.3	253.6	261.7	271.3	283.8	297.9	312.0	327.0	342.8	359.6
150°	254.0	255.2	259.5	267.6	276.2	286.8	300.4	313.4	327.0	341.3	356.2
152.5°	260.9	261.7	265.5	272.5	280.7	290.3	302.9	314.4	326.5	339.3	352.7
155°	270.1	270.1	273.8	280.0	286.1	294.9	305.4	315.3	325.2	335.7	346.9
157.5°	278.2	278.1	281.1	286.4	291.8	298.4	307.4	315.9	323.6	332.0	341.4
160°	283.7	283.0	285.6	289.9	294.9	300.4	308.5	315.9	322.1	329.5	337.0
162.5°	288.1	287.6	290.0	293.8	297.8	302.4	309.4	315.4	320.6	326.5	333.0
165°	294.9	293.6	295.5	298.6	301.0	304.8	309.7	314.7	318.4	322.1	327.0
167.5°	299.3	298.7	299.8	301.5	303.2	305.6	309.7	313.1	314.9	317.7	321.2
170°	302.3	301.7	302.3	303.5	304.8	306.6	309.7	312.2	313.4	315.3	317.7
172.5°	304.3	303.2	303.7	305.0	305.7	306.6	309.2	311.2	311.4	312.3	314.3
175°	306.6	305.4	306.0	306.6	306.6	306.6	308.5	309.7	309.1	309.1	309.7
177.5°	307.7	306.7	306.7	307.2	306.7	306.7	307.7	308.2	307.2	307.2	307.7
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2



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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°	134.9	141.3	147.7	152.2	154.1	156.0	158.0	159.9
90°	125.1	132.0	138.9	144.3	146.2	148.1	150.7	152.6
92.5°	219.3	195.3	181.6	176.5	170.5	171.0	172.0	172.9
95°	547.6	459.5	389.4	341.3	299.2	282.6	279.6	271.6
97.5°	758.8	698.5	630.1	561.5	525.1	492.3	476.2	470.2
100°	852.5	827.8	769.8	709.1	668.0	625.0	603.8	595.6
102.5°	881.2	905.5	880.4	840.4	796.4	766.3	743.1	737.3
105°	854.4	944.8	977.5	974.4	956.5	937.9	927.5	922.0
107.5°	778.5	897.1	972.6	1008.4	1020.3	1021.8	1019.4	1016.1
110°	722.5	845.5	938.0	994.3	1024.1	1037.8	1044.0	1045.9





TEST NUMBER: P333318-927

CATALOG NUMBER: S125DIP-S1270D810U927-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	677.6	794.2	887.6	953.2	995.8	1018.0	1030.6	1037.0
115°	620.4	721.4	811.2	882.0	932.0	963.4	982.4	992.0
117.5°	581.1	668.4	746.2	811.4	861.6	894.2	913.3	920.1
120°	559.3	638.3	711.1	768.7	816.2	847.6	865.9	872.5
122.5°	541.5	614.8	679.9	734.0	776.6	805.5	823.9	830.0
125°	516.0	583.5	641.8	689.3	725.4	752.2	767.1	774.7
127.5°	489.8	552.9	607.2	651.8	684.8	708.8	723.3	727.6
130°	474.0	532.3	584.6	627.4	659.7	681.6	695.3	700.4
132.5°	457.7	512.5	560.3	601.6	633.7	655.3	667.8	673.2
135°	435.1	481.4	524.7	562.4	591.0	612.8	625.3	630.4
137.5°	416.4	454.2	490.4	522.5	548.0	567.7	579.1	584.2
140°	405.5	437.7	469.2	497.3	521.3	538.4	548.9	553.1
142.5°	396.2	423.5	450.6	475.0	495.5	510.2	520.1	523.9
145°	384.9	405.5	426.0	444.0	460.0	471.6	479.5	483.1
147.5°	375.1	391.2	406.4	419.5	431.7	440.6	445.1	446.7
150°	369.8	383.4	395.1	406.5	416.1	423.7	426.5	427.4
152.5°	364.8	377.0	387.8	396.4	404.3	410.3	412.8	413.5
155°	357.4	367.3	376.0	382.8	389.0	393.3	395.1	395.8
157.5°	350.0	358.1	364.8	370.2	375.0	378.6	380.3	380.2
160°	345.0	351.2	357.4	361.7	366.1	369.2	370.4	369.8
162.5°	339.5	345.2	350.5	354.3	357.7	360.2	360.5	360.4
165°	332.0	336.4	340.1	343.2	345.6	346.9	346.9	346.9
167.5°	324.8	327.6	330.5	332.7	334.0	335.1	334.6	334.5
170°	320.8	322.7	324.6	325.8	327.0	327.6	327.6	327.0
172.5°	316.4	318.2	319.6	320.4	320.6	321.7	320.8	320.1
175°	311.6	311.6	312.8	312.8	312.8	313.4	312.2	311.6
177.5°	308.2	308.7	308.7	308.7	308.2	308.7	307.2	307.2
180°	307.2	307.2	307.2	307.2	307.2	307.2	307.2	307.2

(END OF REPORT)