

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: P333299-927

Luminaire Tested: **S125DIP-S1270D365U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333299-927  
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-S1270D365U927-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4906.8 lumens  
Efficiency: N/A  
Efficacy: 98.5 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

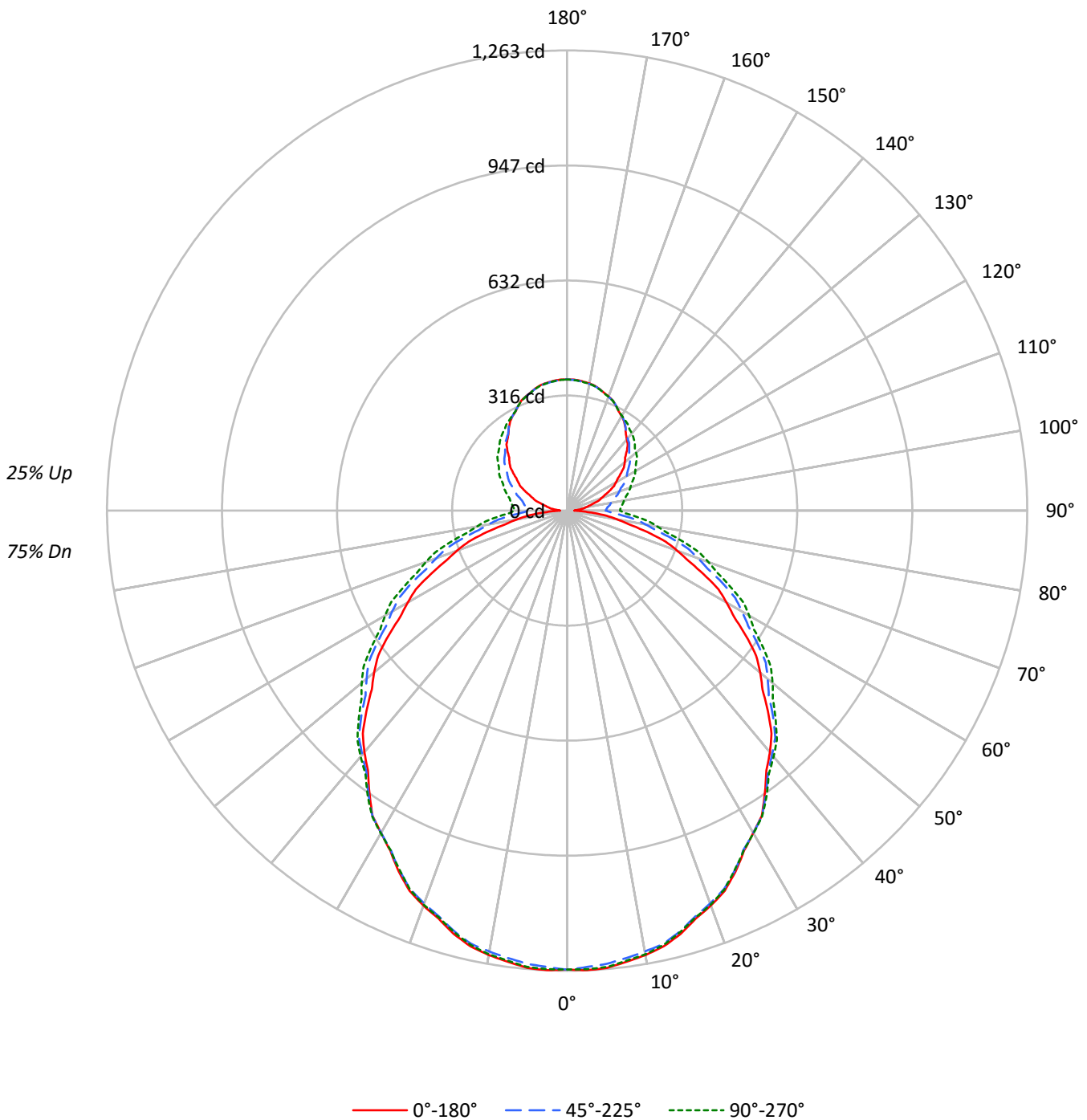
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	97	97	97		88	88	88		79	79	79	75
1	102	97	93	89	97	92	89	85	84	81	78		75	73	71		68	66	64	61
2	93	84	77	72	88	80	74	69	73	68	63		66	62	58		59	56	53	50
3	84	74	66	59	80	70	63	57	64	58	53		58	53	49		52	48	45	42
4	77	65	57	50	73	62	54	48	57	50	45		51	46	42		46	42	38	36
5	71	58	49	43	67	56	47	41	51	44	39		46	40	36		42	37	33	31
6	65	52	43	37	62	50	42	36	46	39	34		42	36	32		38	33	29	27
7	60	47	39	33	57	45	37	32	41	35	30		38	32	28		34	30	26	24
8	56	43	35	29	53	41	33	28	38	31	27		35	29	25		32	27	23	21
9	52	39	31	26	50	38	30	25	35	28	24		32	26	22		29	24	21	19
10	49	36	28	23	47	35	28	23	32	26	22		30	24	20		27	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	6.9
20°-30°	502.9	10.2
30°-40°	595.7	12.1
40°-50°	615.9	12.6
50°-60°	567.4	11.6
60°-70°	458.6	9.3
70°-80°	307.2	6.3
80°-90°	160.1	3.3
90°-100°	113.5	2.3
100°-110°	137.1	2.8
110°-120°	164.7	3.4
120°-130°	183.7	3.7
130°-140°	188.7	3.8
140°-150°	176.4	3.6
150°-160°	146.3	3.0
160°-170°	97.3	2.0
170°-180°	34.0	0.7
0°-30°	960.2	19.6
0°-40°	1555.9	31.7
0°-60°	2739.2	55.8
0°-90°	3665.1	74.7
90°-120°	415.2	8.5
90°-150°	964.1	19.6
90°-180°	1242.0	25.3
0°-180°	4906.8	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°	34	68	112	140	150	32
105°	75	97	135	160	171	80
115°	128	139	171	192	200	127
125°	181	183	206	225	232	162
135°	232	232	241	256	262	178
145°	279	279	279	286	290	174
155°	318	318	318	319	318	146
165°	345	345	345	346	344	97
175°	359	358	358	359	358	34
180°	360	360	360	360	360	



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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°	38.6	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°	24.6	33.0	41.5	50.0	58.5	67.7	77.8	87.9	98.0	108.1	114.5
95°	34.2	41.5	48.8	56.0	63.3	71.9	81.8	91.8	101.8	111.7	118.2
97.5°	44.8	51.3	57.8	64.2	70.7	78.9	88.7	98.6	108.4	118.4	124.5
100°	52.8	58.5	64.3	70.1	75.8	83.5	93.1	102.7	112.3	121.9	128.2
102.5°	61.4	67.0	72.6	78.2	83.7	91.0	100.0	108.9	118.0	126.9	133.0
105°	74.9	79.7	84.4	89.0	93.8	100.4	109.0	117.6	126.3	134.8	140.7
107.5°	90.1	94.1	98.2	102.2	106.2	112.3	120.6	128.7	136.9	145.1	150.8
110°	100.4	104.1	107.7	111.3	114.9	120.6	128.5	136.4	144.3	152.1	157.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	112.1	114.9	117.7	120.5	123.3	128.6	136.3	143.9	151.7	159.4	164.5
115°	128.1	130.2	132.5	134.6	136.7	141.5	148.8	156.0	163.3	170.6	175.4
117.5°	144.1	145.4	146.9	148.2	149.6	153.7	160.6	167.5	174.3	181.2	185.9
120°	154.9	156.0	157.1	158.3	159.4	163.1	169.5	175.9	182.3	188.6	193.3
122.5°	165.5	166.0	166.5	167.0	167.5	170.9	177.1	183.4	189.6	195.9	200.3
125°	181.1	181.2	181.3	181.3	181.5	184.3	189.8	195.4	200.9	206.4	210.7
127.5°	196.6	196.5	196.5	196.5	196.4	198.6	203.2	207.8	212.4	216.9	220.9
130°	206.7	206.8	206.8	206.8	206.8	208.8	212.8	216.7	220.8	224.7	228.5
132.5°	215.8	216.3	216.7	217.1	217.6	219.3	222.3	225.2	228.1	231.1	234.9
135°	231.5	231.6	231.7	231.8	231.9	232.9	235.0	236.9	238.9	240.9	244.5
137.5°	246.3	246.4	246.5	246.7	246.8	247.4	248.5	249.5	250.6	251.7	255.0
140°	254.9	255.2	255.6	255.9	256.1	256.5	257.0	257.5	257.9	258.4	261.5
142.5°	264.5	264.6	264.6	264.7	264.7	264.9	265.1	265.5	265.8	266.0	268.7
145°	278.7	278.7	278.7	278.6	278.6	278.7	278.8	279.1	279.2	279.4	280.8
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.5
150°	299.3	299.3	299.2	299.1	299.0	299.1	299.4	299.7	299.9	300.2	300.2
152.5°	306.5	306.6	306.7	306.7	306.8	306.9	307.0	307.1	307.2	307.3	307.4
155°	317.5	317.5	317.5	317.5	317.5	317.5	317.6	317.7	317.7	317.8	318.1
157.5°	327.3	327.3	327.1	326.9	326.9	326.8	326.9	326.9	326.9	327.0	327.3
160°	333.2	333.0	332.8	332.6	332.5	332.4	332.5	332.5	332.6	332.6	332.9
162.5°	338.3	338.2	338.1	337.9	337.8	337.7	337.7	337.8	337.8	337.8	338.1
165°	345.2	345.1	345.0	344.8	344.8	344.7	344.8	344.8	344.9	344.9	345.2
167.5°	351.0	350.8	350.5	350.3	350.1	349.9	349.9	349.9	349.9	349.9	350.3
170°	354.2	353.9	353.7	353.5	353.2	353.1	353.1	353.1	353.1	353.1	353.5
172.5°	356.4	356.2	355.9	355.7	355.5	355.3	355.3	355.3	355.3	355.3	355.7
175°	358.9	358.7	358.5	358.2	358.0	357.8	357.8	357.8	357.8	357.8	358.2
177.5°	360.2	360.0	359.8	359.7	359.4	359.3	359.3	359.3	359.2	359.1	359.4
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8



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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°	121.1	127.6	134.1	138.4	140.5	142.5	144.6	146.6
95°	124.7	131.1	137.6	141.9	143.9	146.0	148.0	150.0
97.5°	130.6	136.8	143.0	147.1	149.0	151.0	152.9	154.9
100°	134.5	140.9	147.2	151.2	153.0	154.8	156.5	158.3
102.5°	139.2	145.4	151.5	155.5	157.3	159.1	161.0	162.8
105°	146.6	152.4	158.3	162.3	164.4	166.5	168.6	170.7
107.5°	156.4	162.0	167.6	171.3	172.9	174.6	176.3	178.0
110°	163.0	168.3	173.7	177.4	179.2	181.1	182.9	184.8





TEST NUMBER: P333299-927

CATALOG NUMBER: S125DIP-S1270D365U927-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	169.5	174.6	179.7	183.2	185.0	186.8	188.5	190.4
115°	180.3	185.1	190.0	193.3	194.9	196.5	198.0	199.6
117.5°	190.6	195.4	200.0	203.2	204.9	206.4	208.0	209.7
120°	198.0	202.6	207.3	210.3	211.8	213.1	214.5	215.9
122.5°	204.7	209.1	213.5	216.4	217.9	219.3	220.8	222.2
125°	215.0	219.3	223.6	226.3	227.7	228.9	230.3	231.6
127.5°	224.9	228.9	232.9	235.7	237.1	238.6	240.0	241.5
130°	232.3	236.1	239.9	242.3	243.6	244.9	246.1	247.3
132.5°	238.6	242.4	246.2	248.6	249.5	250.5	251.5	252.5
135°	248.0	251.6	255.2	257.5	258.6	259.8	260.9	262.0
137.5°	258.3	261.7	265.0	267.0	267.8	268.6	269.3	270.1
140°	264.7	267.8	270.9	272.9	273.7	274.5	275.3	276.1
142.5°	271.3	274.0	276.6	278.4	279.2	280.0	280.7	281.5
145°	282.2	283.5	284.9	286.1	287.0	287.9	288.8	289.7
147.5°	293.0	293.7	294.2	294.5	294.6	294.7	294.8	294.9
150°	300.2	300.2	300.2	300.2	300.4	300.6	300.7	300.8
152.5°	307.6	307.8	307.9	307.9	307.8	307.6	307.4	307.2
155°	318.3	318.5	318.8	318.8	318.5	318.1	317.8	317.5
157.5°	327.5	327.8	328.0	328.0	327.6	327.1	326.7	326.3
160°	333.1	333.4	333.6	333.6	333.3	333.0	332.6	332.3
162.5°	338.3	338.7	339.0	339.0	338.6	338.2	337.9	337.5
165°	345.5	345.7	345.9	345.9	345.5	345.2	344.8	344.4
167.5°	350.7	351.0	351.4	351.4	351.0	350.6	350.2	349.9
170°	353.8	354.2	354.6	354.5	354.1	353.6	353.2	352.8
172.5°	356.1	356.4	356.8	356.8	356.4	356.0	355.6	355.2
175°	358.5	358.9	359.3	359.3	358.9	358.4	358.0	357.5
177.5°	359.7	360.0	360.3	360.3	360.0	359.6	359.3	358.9
180°	359.8	359.8	359.8	359.8	359.8	359.8	359.8	359.8

(END OF REPORT)