

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: P333254-927

Luminaire Tested: **S125DIP-S1090D365U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333254-927  
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-S1090D365U927-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 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: 4383.3 lumens  
Efficiency: N/A  
Efficacy: 100.8 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

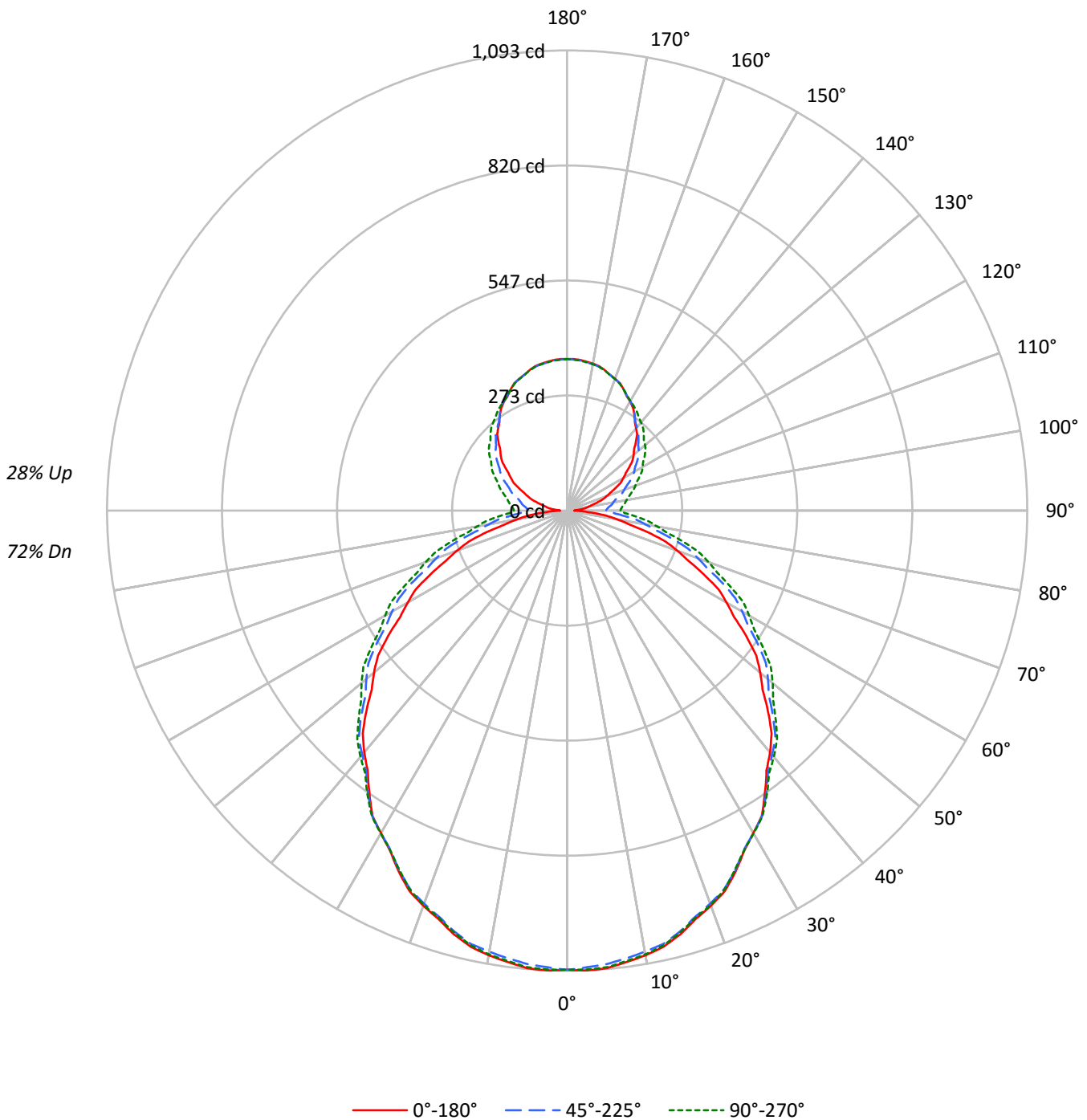
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	7045	7045	7045
5°	7059	6915	6937
10°	7008	6791	6781
15°	6926	6644	6583
20°	6814	6461	6385
25°	6679	6266	6141
30°	6517	6050	5920
35°	6366	5853	5717
40°	6211	5644	5513
45°	6037	5466	5331
50°	5872	5272	5172
55°	5671	5090	4983
60°	5453	4881	4791
65°	5225	4664	4575
70°	4967	4366	4353
75°	4557	4080	4079
80°	4018	3734	3783
85°	3519	3499	3689



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.1	2.4
10°-20°	292.8	6.7
20°-30°	435.5	9.9
30°-40°	515.8	11.8
40°-50°	533.3	12.2
50°-60°	491.3	11.2
60°-70°	397.1	9.1
70°-80°	265.9	6.1
80°-90°	138.7	3.2
90°-100°	101.5	2.3
100°-110°	128.2	2.9
110°-120°	158.8	3.6
120°-130°	180.3	4.1
130°-140°	187.2	4.3
140°-150°	176.1	4.0
150°-160°	146.3	3.3
160°-170°	97.3	2.2
170°-180°	34.0	0.8
0°-30°	831.4	19.0
0°-40°	1347.2	30.7
0°-60°	2371.8	54.1
0°-90°	3173.5	72.4
90°-120°	388.5	8.9
90°-150°	932.2	21.3
90°-180°	1210.0	27.6
0°-180°	4383.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1091	1088	1081	1089	1089	103
15°	1042	1042	1035	1041	1037	293
25°	946	949	943	947	942	435
35°	819	826	824	826	827	512
45°	675	686	692	699	700	521
55°	519	536	553	564	569	463
65°	357	382	407	423	428	354
75°	197	225	259	279	286	209
85°	59	94	132	154	164	63
90°	17	54	92	117	126	12
95°	32	61	100	124	133	30
105°	73	93	126	148	157	78
115°	127	137	164	182	189	126
125°	180	182	203	219	224	161
135°	231	232	240	253	258	178
145°	278	279	279	285	288	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°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1093.4	1093.0	1092.6	1092.3	1091.9	1091.0	1089.6	1088.3	1087.0	1085.7	1087.0
5°	1090.8	1090.4	1089.9	1089.4	1088.9	1087.8	1086.2	1084.5	1082.8	1081.2	1083.1
7.5°	1081.2	1081.0	1080.8	1080.6	1080.5	1079.5	1077.8	1076.0	1074.4	1072.6	1074.3
10°	1072.6	1072.6	1072.6	1072.6	1072.6	1071.7	1069.8	1067.9	1066.0	1064.1	1065.7
12.5°	1060.7	1060.8	1061.0	1061.2	1061.4	1060.7	1059.2	1057.7	1056.2	1054.6	1056.0
15°	1041.6	1041.9	1042.1	1042.4	1042.6	1041.9	1040.2	1038.6	1036.9	1035.2	1036.6
17.5°	1016.8	1017.2	1017.7	1018.2	1018.7	1018.1	1016.4	1014.8	1013.1	1011.5	1012.6
20°	998.9	999.3	999.8	1000.3	1000.8	1000.1	998.5	996.8	995.1	993.5	994.2
22.5°	978.3	979.1	980.0	980.9	981.8	981.2	979.4	977.6	975.7	973.8	974.7
25°	946.4	947.1	947.8	948.6	949.3	949.0	947.5	946.1	944.7	943.3	944.2
27.5°	910.9	912.0	913.0	914.1	915.1	914.8	913.2	911.6	910.0	908.4	909.0
30°	884.4	885.8	887.2	888.7	890.1	890.1	888.7	887.2	885.8	884.4	884.9
32.5°	860.5	861.7	862.9	864.2	865.4	865.5	864.4	863.4	862.4	861.3	861.8
35°	819.2	820.9	822.5	824.2	825.9	826.3	825.6	824.9	824.2	823.5	824.2
37.5°	777.9	779.4	780.9	782.4	783.9	784.7	784.4	784.2	783.9	783.7	784.7
40°	749.6	751.5	753.4	755.3	757.2	758.1	757.9	757.6	757.4	757.2	758.1
42.5°	718.8	721.4	723.8	726.3	728.7	730.2	730.8	731.3	731.8	732.4	733.5
45°	674.8	677.4	680.0	682.6	685.2	687.1	688.3	689.5	690.7	691.9	693.6
47.5°	629.7	632.1	634.5	636.9	639.4	641.6	643.6	645.7	647.8	649.7	652.2
50°	598.9	601.5	604.1	606.7	609.3	612.0	614.6	617.2	619.8	622.4	625.0
52.5°	566.3	569.6	572.7	575.9	579.1	582.3	585.5	588.7	591.8	595.0	597.9
55°	518.6	522.4	526.2	530.0	533.9	537.7	541.5	545.3	549.1	552.9	555.5
57.5°	469.9	474.4	479.0	483.6	488.1	492.7	497.0	501.4	505.7	510.1	513.1
60°	437.4	442.1	446.9	451.6	456.4	461.1	465.9	470.6	475.4	480.1	483.7
62.5°	405.8	410.5	415.3	420.0	424.8	429.7	434.8	440.0	445.1	450.2	454.2
65°	357.2	362.7	368.1	373.6	379.1	384.6	390.3	396.0	401.7	407.4	411.0
67.5°	311.4	316.7	321.9	327.3	332.5	338.0	343.9	349.7	355.5	361.2	365.6
70°	278.1	283.5	289.0	294.5	299.9	305.7	311.9	318.1	324.2	330.4	334.9
72.5°	245.6	251.2	256.8	262.5	268.2	274.3	281.1	287.9	294.6	301.3	306.3
75°	196.8	203.0	209.1	215.3	221.5	228.4	236.0	243.6	251.2	258.8	263.6
77.5°	150.0	157.1	164.2	171.3	178.5	185.7	193.0	200.3	207.6	214.9	220.1
80°	120.8	127.9	135.1	142.2	149.3	156.9	165.0	173.1	181.2	189.3	194.5
82.5°	94.3	101.8	109.3	116.8	124.4	132.2	140.5	148.8	157.1	165.3	170.4
85°	58.8	66.6	74.5	82.3	90.2	98.2	106.5	114.9	123.2	131.5	136.7
87.5°	33.4	41.1	48.8	56.6	64.2	72.2	80.3	88.5	96.6	104.8	110.4
90°	17.4	25.5	33.6	41.7	49.8	58.1	66.6	75.2	83.7	92.2	97.9
92.5°	22.2	29.5	36.9	44.4	51.7	59.8	68.6	77.4	86.2	95.0	100.7
95°	32.1	38.4	44.7	51.0	57.4	64.8	73.5	82.2	90.9	99.7	105.3
97.5°	42.9	48.5	54.1	59.7	65.3	72.4	81.1	89.8	98.4	107.0	112.4
100°	50.9	55.9	60.9	65.9	70.9	77.6	86.0	94.4	102.9	111.3	116.8
102.5°	59.7	64.6	69.5	74.3	79.1	85.6	93.3	101.2	109.0	116.8	122.2
105°	73.4	77.6	81.7	85.8	89.9	95.7	103.2	110.7	118.2	125.7	130.9
107.5°	88.7	92.3	95.9	99.4	102.9	108.3	115.4	122.6	129.7	136.8	141.6
110°	99.3	102.5	105.7	108.8	111.9	117.0	123.8	130.6	137.5	144.3	149.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	111.0	113.4	115.9	118.3	120.7	125.3	132.0	138.7	145.4	152.1	156.5
115°	127.1	129.0	130.9	132.8	134.8	138.9	145.1	151.5	157.7	164.1	168.3
117.5°	143.3	144.5	145.7	146.9	148.1	151.7	157.6	163.6	169.5	175.5	179.6
120°	154.0	155.0	156.1	157.1	158.1	161.4	166.9	172.5	178.0	183.5	187.5
122.5°	164.9	165.2	165.7	166.1	166.6	169.5	175.0	180.4	185.8	191.3	195.1
125°	180.4	180.5	180.7	180.8	180.9	183.4	188.2	193.1	197.9	202.6	206.4
127.5°	196.1	196.1	196.1	196.1	196.0	198.0	201.9	206.0	209.9	213.9	217.3
130°	206.2	206.3	206.4	206.4	206.5	208.3	211.7	215.2	218.6	222.0	225.3
132.5°	215.4	215.9	216.3	216.8	217.3	218.8	221.3	223.9	226.4	228.9	232.2
135°	231.2	231.3	231.5	231.6	231.7	232.7	234.4	236.1	237.8	239.6	242.6
137.5°	246.0	246.1	246.3	246.4	246.7	247.2	248.1	249.1	250.0	251.0	253.9
140°	254.8	255.1	255.4	255.6	256.0	256.4	256.7	257.2	257.6	258.0	260.8
142.5°	264.4	264.4	264.5	264.6	264.7	264.8	265.1	265.4	265.7	265.9	268.3
145°	278.5	278.5	278.5	278.6	278.6	278.7	278.8	279.1	279.2	279.4	280.6
147.5°	290.6	290.7	290.8	291.0	291.1	291.3	291.4	291.6	291.7	291.8	292.4
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°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1088.3	1089.6	1091.0	1091.5	1091.4	1091.2	1091.0	1090.8
5°	1085.0	1086.9	1088.8	1089.6	1089.4	1089.2	1088.9	1088.7
7.5°	1075.9	1077.6	1079.3	1080.0	1079.7	1079.5	1079.3	1079.0
10°	1067.4	1069.1	1070.7	1071.4	1071.2	1071.0	1070.7	1070.5
12.5°	1057.2	1058.5	1059.8	1060.1	1059.5	1058.9	1058.3	1057.6
15°	1038.1	1039.5	1040.9	1041.2	1040.2	1039.3	1038.3	1037.4
17.5°	1013.7	1014.7	1015.8	1016.1	1015.5	1014.9	1014.4	1013.8
20°	994.9	995.6	996.3	996.7	996.7	996.7	996.7	996.7
22.5°	975.7	976.5	977.4	977.6	977.0	976.4	975.9	975.3
25°	945.2	946.1	947.1	946.9	945.7	944.5	943.3	942.1
27.5°	909.7	910.4	911.0	911.2	910.7	910.3	909.8	909.4
30°	885.3	885.8	886.3	886.5	886.2	886.0	885.7	885.5
32.5°	862.3	862.8	863.2	863.3	863.1	862.8	862.6	862.4
35°	824.9	825.6	826.3	826.6	826.6	826.6	826.6	826.6
37.5°	785.6	786.6	787.5	787.9	787.8	787.7	787.6	787.5
40°	759.1	760.0	761.0	761.7	762.2	762.6	763.1	763.6
42.5°	734.6	735.8	736.9	737.5	737.6	737.7	737.8	737.9
45°	695.2	696.9	698.5	699.5	699.7	700.0	700.2	700.4
47.5°	654.7	657.0	659.5	660.9	661.5	662.0	662.5	663.1
50°	627.6	630.3	632.9	634.5	635.3	636.0	636.7	637.4
52.5°	600.6	603.4	606.3	607.9	608.4	609.0	609.5	610.0
55°	558.1	560.7	563.3	565.1	566.1	567.0	568.0	568.9
57.5°	516.1	519.1	522.1	523.9	524.7	525.4	526.1	526.8
60°	487.3	490.8	494.4	496.5	497.3	498.0	498.7	499.4
62.5°	458.1	462.1	466.0	468.4	469.4	470.2	471.1	472.1
65°	414.5	418.1	421.7	424.0	424.9	425.9	426.8	427.8
67.5°	369.9	374.2	378.6	381.4	382.5	383.8	385.0	386.3
70°	339.5	344.0	348.5	351.5	352.9	354.3	355.8	357.2
72.5°	311.2	316.1	320.9	323.9	325.0	326.0	327.0	328.1
75°	268.3	273.1	277.8	280.7	281.9	283.1	284.3	285.5
77.5°	225.4	230.6	235.8	238.9	239.9	240.8	241.8	242.7
80°	199.7	204.9	210.2	213.3	214.2	215.2	216.1	217.1
82.5°	175.4	180.5	185.4	188.9	190.6	192.3	194.0	195.7
85°	142.0	147.2	152.4	156.0	157.9	159.8	161.7	163.6
87.5°	115.9	121.4	127.0	130.6	132.3	134.0	135.7	137.4
90°	103.7	109.5	115.3	119.1	121.0	122.8	124.6	126.5
92.5°	106.4	112.1	117.8	121.5	123.3	125.1	126.9	128.7
95°	111.0	116.6	122.3	126.0	127.8	129.6	131.3	133.2
97.5°	117.9	123.3	128.7	132.2	133.9	135.5	137.3	138.9
100°	122.4	127.9	133.5	137.0	138.6	140.1	141.7	143.2
102.5°	127.6	133.1	138.5	142.0	143.5	145.1	146.8	148.4
105°	136.0	141.1	146.2	149.7	151.5	153.4	155.3	157.2
107.5°	146.6	151.5	156.4	159.5	161.0	162.5	163.9	165.4
110°	153.8	158.4	163.1	166.3	167.9	169.5	171.1	172.7





TEST NUMBER: P333254-927

CATALOG NUMBER: S125DIP-S1090D365U927-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	161.0	165.3	169.8	172.8	174.3	175.9	177.4	179.0
115°	172.5	176.7	180.9	183.7	185.1	186.5	187.8	189.2
117.5°	183.7	187.7	191.9	194.6	196.0	197.3	198.7	200.0
120°	191.5	195.6	199.6	202.2	203.4	204.6	205.8	207.0
122.5°	198.9	202.7	206.5	209.0	210.2	211.4	212.7	213.9
125°	210.0	213.7	217.4	219.8	220.9	222.0	223.2	224.3
127.5°	220.8	224.3	227.7	230.0	231.3	232.6	233.9	235.0
130°	228.6	231.9	235.1	237.3	238.4	239.4	240.5	241.5
132.5°	235.4	238.8	242.0	244.1	244.9	245.7	246.5	247.3
135°	245.7	248.8	251.9	253.9	254.8	255.8	256.7	257.7
137.5°	256.7	259.6	262.5	264.3	264.9	265.5	266.2	266.8
140°	263.6	266.3	269.0	270.7	271.3	272.0	272.6	273.2
142.5°	270.6	272.9	275.2	276.7	277.3	278.0	278.6	279.2
145°	281.8	283.0	284.2	285.2	285.9	286.7	287.5	288.2
147.5°	292.9	293.4	294.0	294.2	294.2	294.3	294.3	294.3
150°	300.2	300.2	300.2	300.2	300.3	300.4	300.6	300.6
152.5°	307.6	307.8	307.9	307.9	307.8	307.5	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)