

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: P333262-927

Luminaire Tested: **S125DIP-S1090D590U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333262-927
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-S1090D590U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5252.1 lumens
Efficiency: N/A
Efficacy: 107.6 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

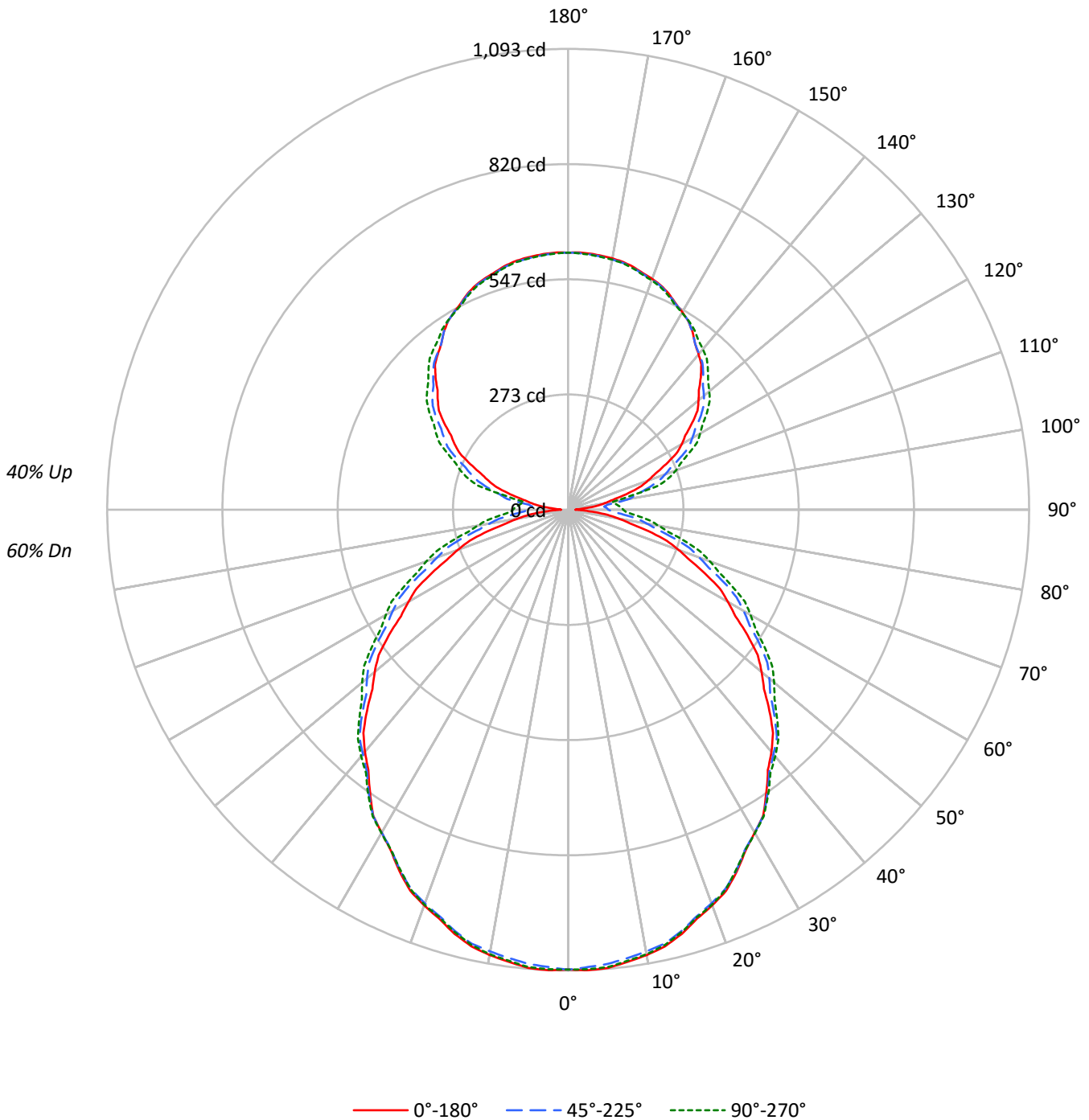
Input Watts (W): 48.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66
1	99	94	90	86	92	88	85	81	77	74	71	66	64	62	57	55	54
2	90	82	75	70	84	77	71	66	67	62	58	58	54	51	49	47	45
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	43	40	38
4	75	63	55	49	70	59	52	46	52	46	41	45	40	37	39	35	32
5	69	56	48	42	64	53	45	40	46	40	36	40	36	32	35	31	28
6	63	51	42	36	59	48	40	34	42	36	31	36	31	28	31	28	24
7	58	46	37	32	54	43	35	30	38	32	27	33	28	24	29	25	22
8	54	41	33	28	51	39	32	27	35	29	24	30	25	22	26	22	19
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	24	20	17
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16

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	2.0
10°-20°	292.8	5.6
20°-30°	435.5	8.3
30°-40°	515.8	9.8
40°-50°	533.3	10.2
50°-60°	491.3	9.4
60°-70°	397.1	7.6
70°-80°	265.9	5.1
80°-90°	139.2	2.6
90°-100°	99.5	1.9
100°-110°	193.6	3.7
110°-120°	285.9	5.4
120°-130°	339.6	6.5
130°-140°	351.4	6.7
140°-150°	322.8	6.1
150°-160°	259.6	4.9
160°-170°	167.9	3.2
170°-180°	57.9	1.1
0°-30°	831.4	15.8
0°-40°	1347.2	25.7
0°-60°	2371.8	45.2
0°-90°	3174.0	60.4
90°-120°	579.0	11.0
90°-150°	1592.8	30.3
90°-180°	2078.0	39.6
0°-180°	5252.1	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°	18	56	95	121	131	12
95°	40	66	85	110	119	44
105°	142	162	194	214	222	151
115°	256	267	294	311	315	254
125°	359	362	382	397	402	320
135°	445	447	453	465	468	343
145°	514	514	514	519	521	321
155°	565	562	563	564	561	260
165°	596	594	594	596	593	168
175°	610	607	607	611	607	58
180°	610	610	610	610	610	



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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	41.2	49.0	56.7	64.5	72.5	80.7	89.0	97.2	105.4	111.0
90°	17.6	26.0	34.4	42.8	51.2	59.8	68.6	77.4	86.1	94.9	100.9
92.5°	22.3	28.8	35.3	41.7	48.2	55.9	64.8	73.8	82.6	91.5	97.3
95°	39.7	45.6	51.4	57.3	63.1	68.2	72.5	76.8	81.0	85.3	91.0
97.5°	66.4	72.5	78.6	84.7	90.8	94.0	94.3	94.5	94.7	95.0	97.1
100°	87.2	92.5	97.8	103.1	108.4	115.0	123.1	131.1	139.1	147.1	137.1
102.5°	108.4	113.4	118.4	123.4	128.4	134.8	142.4	150.0	157.7	165.3	167.3
105°	142.5	146.7	150.9	155.1	159.3	165.0	172.1	179.3	186.4	193.5	198.3
107.5°	177.9	181.2	184.4	187.6	190.8	196.0	203.0	210.1	217.1	224.2	228.9
110°	200.9	203.7	206.6	209.5	212.3	217.2	224.0	230.9	237.7	244.6	248.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	223.3	225.9	228.4	230.9	233.5	238.0	244.5	251.1	257.8	264.4	268.2
115°	255.9	258.1	260.2	262.4	264.6	268.8	275.0	281.4	287.6	293.9	297.8
117.5°	289.6	290.7	291.8	292.9	293.9	297.5	303.8	310.1	316.2	322.5	326.0
120°	311.3	312.0	312.6	313.1	313.8	317.0	322.7	328.5	334.3	340.0	343.9
122.5°	329.6	330.3	331.1	331.8	332.5	335.6	341.0	346.4	351.8	357.2	360.8
125°	359.1	359.6	360.0	360.4	360.9	363.5	368.3	373.0	377.8	382.5	386.0
127.5°	386.3	386.6	386.8	387.1	387.4	389.4	393.2	397.1	400.9	404.7	408.1
130°	403.6	403.9	404.2	404.4	404.7	406.5	410.0	413.4	416.8	420.3	423.3
132.5°	420.2	420.7	421.2	421.8	422.3	423.7	426.1	428.4	430.8	433.1	436.4
135°	444.7	445.0	445.4	445.7	446.1	447.0	448.5	449.9	451.4	452.8	455.7
137.5°	467.1	467.4	467.8	468.1	468.4	468.9	469.5	470.2	470.8	471.4	474.3
140°	481.1	481.3	481.5	481.6	481.9	482.0	482.2	482.3	482.4	482.6	485.4
142.5°	494.4	494.4	494.3	494.2	494.2	494.2	494.4	494.6	494.8	495.0	497.3
145°	514.0	514.0	514.0	514.0	513.9	513.9	513.9	513.9	513.9	513.9	515.2
147.5°	530.1	530.1	530.0	530.0	530.0	530.0	530.1	530.3	530.4	530.5	531.0
150°	541.0	540.8	540.6	540.4	540.2	540.2	540.4	540.6	540.8	541.0	541.2
152.5°	551.5	551.0	550.6	550.2	549.7	549.6	549.8	550.0	550.2	550.4	550.6
155°	565.0	564.4	563.8	563.2	562.5	562.4	562.5	562.8	562.9	563.2	563.5
157.5°	575.4	575.0	574.6	574.3	573.9	573.8	573.8	573.8	573.8	573.9	574.2
160°	582.6	582.0	581.4	580.7	580.2	580.0	580.0	580.1	580.2	580.4	580.7
162.5°	588.4	587.8	587.2	586.5	586.0	585.7	585.8	585.9	586.0	586.1	586.7
165°	596.1	595.6	594.9	594.4	593.7	593.5	593.6	593.7	593.8	593.9	594.5
167.5°	601.9	601.3	600.7	600.1	599.4	599.2	599.3	599.4	599.4	599.6	600.3
170°	605.2	604.5	603.8	603.1	602.4	602.1	602.1	602.3	602.4	602.5	603.2
172.5°	607.4	606.7	605.9	605.2	604.5	604.3	604.4	604.7	604.8	605.0	605.7
175°	609.7	609.1	608.5	607.9	607.3	607.0	607.1	607.3	607.4	607.4	608.2
177.5°	610.8	610.3	609.8	609.3	608.9	608.6	608.7	608.8	608.9	609.0	609.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7



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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°	116.5	122.1	127.6	131.3	133.0	134.8	136.5	138.2
90°	106.9	112.8	118.8	122.8	124.7	126.7	128.7	130.6
92.5°	103.1	108.8	114.6	118.4	120.2	122.0	123.8	125.6
95°	96.7	102.5	108.2	111.9	113.6	115.3	116.9	118.6
97.5°	99.3	101.4	103.6	105.4	107.1	108.7	110.4	111.9
100°	127.1	117.2	107.2	102.7	103.7	104.7	105.8	106.8
102.5°	169.3	171.3	173.3	171.5	166.1	160.7	155.3	149.9
105°	203.0	207.8	212.5	215.7	217.2	218.8	220.4	221.9
107.5°	233.6	238.4	243.0	246.1	247.2	248.3	249.5	250.7
110°	253.0	257.2	261.5	264.4	266.3	268.0	269.7	271.5



TEST NUMBER: P333262-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	272.2	276.2	280.1	282.8	284.4	285.9	287.4	288.9
115°	301.7	305.5	309.4	311.7	312.6	313.4	314.3	315.1
117.5°	329.5	333.0	336.6	339.0	340.3	341.7	343.1	344.4
120°	347.7	351.6	355.4	357.7	358.7	359.7	360.5	361.5
122.5°	364.6	368.2	371.9	374.1	374.9	375.7	376.6	377.5
125°	389.4	392.8	396.2	398.3	399.2	400.1	401.0	401.9
127.5°	411.4	414.6	418.0	419.9	420.6	421.2	421.8	422.5
130°	426.4	429.4	432.4	434.2	434.9	435.6	436.3	437.0
132.5°	439.7	442.9	446.2	448.1	448.5	449.1	449.6	450.0
135°	458.6	461.5	464.4	466.1	466.8	467.3	467.9	468.5
137.5°	477.1	479.9	482.8	484.4	484.8	485.3	485.7	486.2
140°	488.2	491.0	493.8	495.4	495.7	496.1	496.5	496.8
142.5°	499.6	501.8	504.1	505.4	505.7	506.0	506.4	506.8
145°	516.5	517.8	519.0	519.8	520.2	520.5	520.9	521.3
147.5°	531.6	532.0	532.5	532.7	532.3	532.0	531.7	531.5
150°	541.4	541.6	541.8	541.6	541.1	540.5	540.0	539.4
152.5°	550.8	551.0	551.2	551.0	550.3	549.6	549.0	548.3
155°	563.8	564.0	564.4	564.1	563.3	562.5	561.7	560.9
157.5°	574.5	574.8	575.1	574.9	574.1	573.2	572.4	571.6
160°	581.1	581.5	581.9	581.7	580.9	580.1	579.3	578.5
162.5°	587.2	587.8	588.4	588.2	587.3	586.5	585.6	584.6
165°	595.1	595.7	596.3	596.2	595.4	594.6	593.8	592.9
167.5°	601.0	601.7	602.5	602.4	601.5	600.6	599.7	598.7
170°	604.1	604.9	605.7	605.6	604.8	603.8	602.9	602.1
172.5°	606.4	607.2	607.9	607.8	606.9	606.0	605.1	604.2
175°	609.0	609.8	610.7	610.6	609.7	608.8	607.9	607.0
177.5°	610.1	610.7	611.2	611.2	610.5	609.9	609.3	608.6
180°	609.7	609.7	609.7	609.7	609.7	609.7	609.7	609.7

(END OF REPORT)