

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: P333136-840

Luminaire Tested: **S125DIP-S375D810U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333136-840
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-S375D810U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4748.3 lumens
Efficiency: N/A
Efficacy: 152.2 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-Indirect

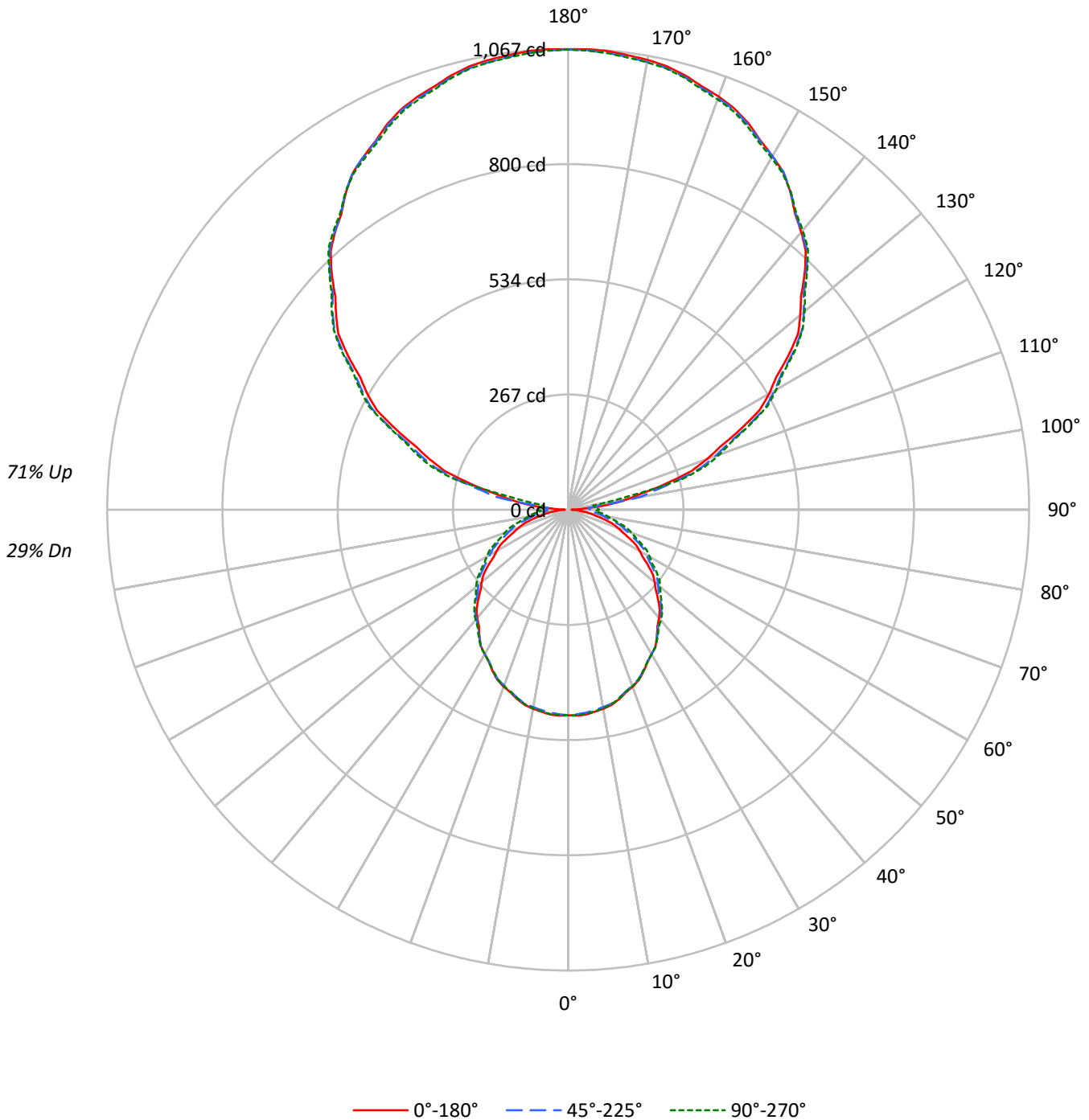
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333136-840

CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333136-840

CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24
2	84	77	71	66	75	69	64	59	54	51	47	40	38	36	28	26	25	19
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	21	16
4	70	59	52	46	62	53	47	42	42	37	34	32	28	26	22	20	18	14
5	64	53	45	39	57	47	41	35	37	33	29	28	25	22	20	17	16	12
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10
7	54	42	35	29	48	38	31	27	30	25	22	23	20	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	13	11	8
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



TEST NUMBER: P333136-840

CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.9
10°-20°	127.8	2.7
20°-30°	190.0	4.0
30°-40°	225.1	4.7
40°-50°	232.7	4.9
50°-60°	214.4	4.5
60°-70°	173.3	3.6
70°-80°	116.1	2.4
80°-90°	62.4	1.3
90°-100°	72.5	1.5
100°-110°	263.5	5.5
110°-120°	449.4	9.5
120°-130°	564.9	11.9
130°-140°	601.5	12.7
140°-150°	561.5	11.8
150°-160°	453.6	9.6
160°-170°	293.3	6.2
170°-180°	101.2	2.1
0°-30°	362.8	7.6
0°-40°	587.9	12.4
0°-60°	1035.1	21.8
0°-90°	1386.9	29.2
90°-120°	785.5	16.5
90°-150°	2513.4	52.9
90°-180°	3361.0	70.8
0°-180°	4748.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	30	51	65	71	7
95°	51	60	47	60	64	62
105°	236	247	261	270	273	251
115°	439	446	459	464	462	435
125°	622	627	636	640	640	555
135°	774	778	780	784	782	596
145°	897	898	898	901	898	561
155°	987	983	984	986	980	455
165°	1042	1037	1038	1042	1036	294
175°	1065	1061	1062	1067	1061	101
180°	1065	1065	1065	1065	1065	



TEST NUMBER: P333136-840

CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.7	18.3	21.9	25.5	29.1	32.8	36.6	40.4	44.1	47.9	50.5
90°	8.3	13.0	17.7	22.4	27.2	31.9	36.7	41.4	46.2	50.9	54.1
92.5°	18.9	21.0	23.0	25.1	27.3	30.6	35.3	40.0	44.7	49.4	52.6
95°	51.1	53.2	55.4	57.6	59.8	59.3	56.1	53.0	49.9	46.8	49.9
97.5°	99.5	102.9	106.2	109.6	113.0	109.8	100.0	90.2	80.4	70.6	67.9
100°	137.0	139.8	142.4	145.1	147.8	151.2	155.2	159.3	163.3	167.3	171.3
102.5°	175.2	177.8	180.6	183.2	185.9	189.0	192.7	196.4	200.1	203.7	207.3
105°	236.4	238.7	241.2	243.5	245.8	248.5	251.7	254.8	257.9	261.1	264.2
107.5°	299.9	301.3	302.8	304.2	305.6	308.0	311.3	314.7	318.0	321.3	324.5
110°	341.3	342.5	343.8	345.0	346.3	348.5	351.7	355.1	358.3	361.5	364.7



TEST NUMBER: P333136-840

CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	380.4	381.8	383.2	384.7	386.2	388.4	391.4	394.5	397.5	400.5	401.7
115°	438.8	440.3	441.9	443.5	445.1	447.4	450.3	453.1	456.1	458.9	460.1
117.5°	499.1	499.6	500.0	500.4	500.9	502.7	505.9	509.2	512.3	515.5	516.4
120°	537.0	537.1	537.2	537.5	537.6	539.1	542.0	544.9	547.9	550.7	552.1
122.5°	570.1	570.9	571.8	572.6	573.4	575.0	577.5	580.2	582.7	585.2	586.5
125°	621.9	623.0	624.1	625.2	626.3	627.9	630.0	632.1	634.2	636.2	637.2
127.5°	670.8	671.6	672.4	673.1	673.9	675.1	676.7	678.2	679.8	681.5	682.6
130°	701.1	701.9	702.7	703.5	704.2	705.4	707.0	708.7	710.3	712.0	712.9
132.5°	731.0	732.1	733.1	734.1	735.1	735.9	736.7	737.4	738.1	738.9	740.2
135°	774.1	775.1	776.0	777.0	777.9	778.6	778.9	779.3	779.7	780.0	781.0
137.5°	813.6	814.5	815.4	816.2	817.0	817.4	817.5	817.5	817.5	817.6	818.9
140°	839.2	839.5	839.9	840.2	840.6	840.7	840.7	840.6	840.5	840.4	841.9
142.5°	862.5	862.7	862.8	862.9	863.0	863.2	863.5	863.8	864.0	864.3	865.4
145°	896.9	897.1	897.4	897.6	897.9	898.0	898.0	898.0	898.0	898.0	898.7
147.5°	926.3	926.3	926.2	926.1	926.1	926.1	926.3	926.6	926.9	927.1	927.4
150°	945.3	945.0	944.6	944.3	943.9	943.9	944.3	944.6	945.0	945.3	945.7
152.5°	963.7	962.9	962.1	961.4	960.6	960.4	960.7	961.1	961.4	961.8	962.1
155°	987.2	986.1	985.1	984.0	983.0	982.6	983.0	983.3	983.7	984.0	984.5
157.5°	1005.3	1004.7	1004.1	1003.5	1002.8	1002.5	1002.6	1002.6	1002.6	1002.7	1003.2
160°	1018.0	1016.9	1015.9	1014.8	1013.8	1013.4	1013.5	1013.7	1013.9	1014.0	1014.7
162.5°	1028.1	1027.0	1026.0	1024.9	1023.9	1023.5	1023.6	1023.8	1024.0	1024.2	1025.1
165°	1041.7	1040.7	1039.6	1038.5	1037.4	1037.0	1037.2	1037.4	1037.5	1037.7	1038.8
167.5°	1051.8	1050.8	1049.7	1048.5	1047.4	1047.0	1047.1	1047.3	1047.5	1047.7	1048.9
170°	1057.5	1056.2	1055.0	1053.8	1052.6	1052.1	1052.2	1052.4	1052.6	1052.8	1054.2
172.5°	1061.3	1060.1	1058.8	1057.6	1056.3	1055.9	1056.2	1056.5	1056.8	1057.1	1058.4
175°	1065.4	1064.3	1063.3	1062.3	1061.2	1060.8	1060.9	1061.1	1061.3	1061.5	1062.9
177.5°	1067.3	1066.4	1065.6	1064.8	1063.9	1063.6	1063.7	1063.8	1064.0	1064.1	1065.1
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4



TEST NUMBER: P333136-840

CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	53.0	55.5	58.2	59.8	60.7	61.5	62.3	63.1
90°	57.5	60.7	63.9	66.2	67.5	68.8	70.0	71.2
92.5°	55.7	59.0	62.1	64.2	65.1	66.1	67.2	68.1
95°	53.0	56.1	59.4	61.3	62.0	62.7	63.4	64.2
97.5°	65.0	62.3	59.5	58.5	59.2	59.9	60.6	61.3
100°	119.4	95.3	71.4	59.4	59.3	59.2	59.2	59.1
102.5°	198.0	195.1	192.3	185.2	173.9	162.6	151.3	140.0
105°	265.2	267.2	269.3	270.6	271.1	271.8	272.3	272.9
107.5°	325.5	327.6	329.7	330.8	330.9	331.0	331.1	331.2
110°	364.5	365.9	367.3	368.5	369.4	370.3	371.2	372.1



TEST NUMBER: P333136-840

CATALOG NUMBER: S125DIP-S375D810U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	402.9	404.1	405.4	406.2	406.7	407.2	407.7	408.1
115°	461.2	462.4	463.5	463.9	463.5	463.0	462.6	462.2
117.5°	517.3	518.2	519.0	519.5	519.8	520.0	520.3	520.5
120°	553.5	554.9	556.3	556.9	556.6	556.4	556.1	555.9
122.5°	587.9	589.3	590.6	591.0	590.7	590.3	589.9	589.5
125°	638.1	639.1	640.1	640.6	640.6	640.6	640.5	640.5
127.5°	683.8	684.9	686.1	686.3	685.6	684.9	684.2	683.5
130°	713.8	714.7	715.6	715.9	715.6	715.2	714.9	714.5
132.5°	741.5	743.0	744.3	744.7	744.3	743.9	743.4	743.0
135°	782.0	783.0	784.1	784.3	783.8	783.3	782.6	782.1
137.5°	820.1	821.4	822.7	823.1	822.6	822.1	821.6	821.1
140°	843.4	845.0	846.4	846.9	846.2	845.6	845.0	844.2
142.5°	866.5	867.5	868.5	868.7	868.1	867.5	866.8	866.2
145°	899.4	900.0	900.7	900.8	900.1	899.5	898.9	898.2
147.5°	927.8	928.2	928.6	928.2	927.1	926.0	924.9	923.8
150°	946.0	946.4	946.7	946.2	944.9	943.7	942.4	941.1
152.5°	962.5	962.8	963.2	962.7	961.5	960.3	959.0	957.8
155°	985.1	985.6	986.1	985.7	984.3	982.9	981.5	980.1
157.5°	1003.8	1004.4	1004.9	1004.5	1003.1	1001.7	1000.3	998.9
160°	1015.4	1016.1	1016.8	1016.5	1015.1	1013.7	1012.3	1010.9
162.5°	1026.1	1027.1	1028.0	1027.8	1026.2	1024.7	1023.2	1021.7
165°	1039.9	1040.9	1042.0	1041.8	1040.4	1038.9	1037.5	1036.1
167.5°	1050.3	1051.5	1052.8	1052.6	1051.0	1049.5	1047.8	1046.3
170°	1055.5	1056.9	1058.3	1058.2	1056.7	1055.1	1053.5	1052.0
172.5°	1059.7	1061.0	1062.3	1062.1	1060.5	1058.9	1057.3	1055.7
175°	1064.2	1065.6	1067.0	1066.9	1065.4	1063.8	1062.3	1060.7
177.5°	1066.1	1067.0	1068.0	1068.0	1066.8	1065.7	1064.6	1063.5
180°	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4	1065.4

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