

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: P333342

Luminaire Tested: **S125DIW-S375D470U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333342
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: S125DIW-S375D470U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3335.4 lumens
Efficiency: N/A
Efficacy: 145.0 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

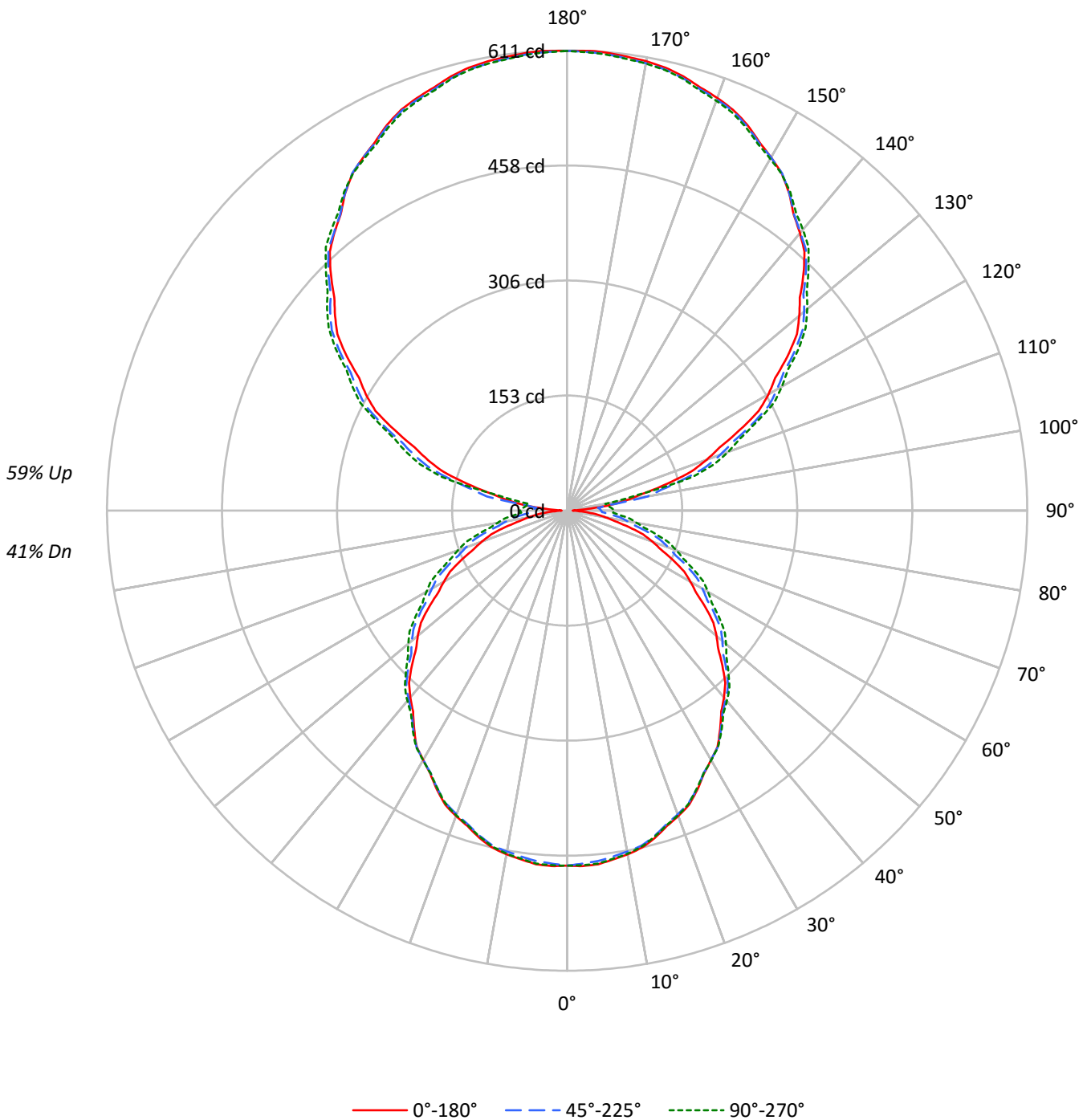
Input Watts (W): 23
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333342

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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	105	105	105	105	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39	33
2	86	79	72	67	78	72	66	62	59	55	52	47	44	42	36	34	33	27
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	29	27	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	23	20
5	66	54	46	40	60	50	42	37	41	35	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	1.3
10°-20°	126.5	3.8
20°-30°	188.2	5.6
30°-40°	222.9	6.7
40°-50°	230.5	6.9
50°-60°	212.3	6.4
60°-70°	171.6	5.1
70°-80°	114.9	3.4
80°-90°	60.9	1.8
90°-100°	55.6	1.7
100°-110°	161.3	4.8
110°-120°	264.4	7.9
120°-130°	327.5	9.8
130°-140°	346.3	10.4
140°-150°	322.0	9.7
150°-160°	259.8	7.8
160°-170°	168.0	5.0
170°-180°	58.0	1.7
0°-30°	359.3	10.8
0°-40°	582.2	17.5
0°-60°	1025.0	30.7
0°-90°	1372.4	41.1
90°-120°	481.4	14.4
90°-150°	1477.2	44.3
90°-180°	1963.0	58.9
0°-180°	3335.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	8	26	45	58	63	6
95°	32	42	41	53	57	38
105°	137	147	160	169	172	145
115°	252	258	270	277	277	250
125°	357	360	369	374	376	319
135°	444	446	448	453	453	342
145°	514	514	514	517	516	321
155°	566	563	564	565	561	260
165°	597	594	594	597	594	168
175°	610	608	608	611	608	58
180°	610	610	610	610	610	



TEST NUMBER: P333342

CATALOG NUMBER: S125DIW-S375D470U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.5	18.0	21.4	24.9	28.3	31.8	35.5	39.1	42.7	46.4	48.8
90°	7.8	11.9	16.0	20.1	24.2	28.4	32.5	36.7	40.9	45.1	48.0
92.5°	13.6	16.1	18.6	21.1	23.5	26.9	31.1	35.3	39.5	43.7	46.4
95°	31.8	34.2	36.5	38.9	41.3	42.3	42.0	41.6	41.3	41.0	43.7
97.5°	59.3	62.2	65.2	68.1	71.1	70.5	66.3	62.1	57.9	53.7	53.0
100°	80.6	83.1	85.6	88.0	90.5	93.5	97.2	100.9	104.6	108.3	95.5
102.5°	102.3	104.7	107.1	109.5	111.8	114.7	118.2	121.6	125.1	128.5	127.8
105°	137.2	139.2	141.3	143.3	145.3	147.9	151.0	154.1	157.2	160.2	162.3
107.5°	173.3	174.7	176.1	177.5	178.9	181.2	184.4	187.5	190.7	193.8	195.9
110°	196.9	198.1	199.3	200.6	201.8	203.9	207.0	210.1	213.2	216.3	217.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	219.3	220.5	221.8	223.0	224.2	226.3	229.2	232.1	235.0	237.9	239.4
115°	252.5	253.7	254.9	256.2	257.4	259.4	262.1	264.9	267.7	270.5	271.9
117.5°	286.9	287.3	287.8	288.2	288.7	290.4	293.3	296.2	299.1	302.0	303.2
120°	308.6	308.8	309.0	309.2	309.4	310.8	313.5	316.2	318.8	321.5	323.0
122.5°	327.4	327.9	328.4	329.0	329.5	331.0	333.4	335.8	338.2	340.7	342.1
125°	357.0	357.6	358.2	358.8	359.4	360.7	362.8	364.8	366.9	368.9	370.2
127.5°	384.8	385.2	385.6	386.0	386.4	387.4	389.1	390.7	392.3	393.9	395.2
130°	402.2	402.6	403.0	403.4	403.8	404.8	406.3	407.9	409.4	410.9	412.1
132.5°	419.2	419.8	420.3	420.9	421.5	422.2	423.1	424.0	424.8	425.7	427.1
135°	443.8	444.3	444.8	445.3	445.8	446.3	446.8	447.4	447.9	448.4	449.5
137.5°	466.4	466.9	467.3	467.8	468.2	468.5	468.7	468.8	469.0	469.2	470.4
140°	480.9	481.1	481.3	481.5	481.7	481.8	481.8	481.8	481.8	481.8	483.1
142.5°	494.3	494.3	494.4	494.4	494.4	494.5	494.7	494.9	495.0	495.2	496.2
145°	513.9	514.0	514.1	514.2	514.3	514.4	514.4	514.4	514.4	514.4	515.0
147.5°	530.7	530.6	530.6	530.5	530.5	530.5	530.7	530.8	530.9	531.0	531.3
150°	541.5	541.3	541.1	540.9	540.7	540.7	540.9	541.1	541.3	541.5	541.7
152.5°	552.0	551.6	551.1	550.7	550.2	550.1	550.3	550.5	550.7	550.9	551.1
155°	565.5	564.9	564.3	563.7	563.1	562.9	563.1	563.3	563.5	563.7	564.0
157.5°	575.9	575.5	575.2	574.8	574.4	574.3	574.3	574.3	574.3	574.4	574.7
160°	583.1	582.5	581.9	581.3	580.7	580.5	580.6	580.7	580.8	580.9	581.3
162.5°	588.9	588.3	587.7	587.1	586.5	586.3	586.4	586.5	586.6	586.7	587.2
165°	596.7	596.1	595.5	594.9	594.3	594.0	594.1	594.2	594.3	594.4	595.0
167.5°	602.5	601.9	601.3	600.6	600.0	599.7	599.8	599.9	600.0	600.1	600.9
170°	605.8	605.1	604.3	603.6	602.9	602.6	602.7	602.8	602.9	603.0	603.8
172.5°	607.9	607.2	606.5	605.8	605.1	604.9	605.0	605.2	605.4	605.6	606.3
175°	610.3	609.7	609.1	608.5	607.9	607.6	607.7	607.8	607.9	608.0	608.8
177.5°	611.4	610.9	610.4	609.9	609.4	609.2	609.3	609.4	609.5	609.6	610.1
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	51.3	53.8	56.2	57.8	58.6	59.4	60.2	61.0
90°	50.9	53.7	56.6	58.5	59.6	60.6	61.6	62.6
92.5°	49.2	52.0	54.8	56.6	57.5	58.3	59.2	60.0
95°	46.5	49.3	52.0	53.8	54.5	55.2	55.9	56.6
97.5°	52.3	51.6	51.0	51.0	51.7	52.4	53.1	53.8
100°	82.6	69.8	57.0	50.7	50.9	51.1	51.3	51.6
102.5°	127.0	126.2	125.5	122.0	115.8	109.6	103.3	97.1
105°	164.3	166.4	168.4	169.8	170.4	171.0	171.6	172.3
107.5°	198.0	200.0	202.1	203.3	203.6	203.9	204.3	204.6
110°	219.6	221.2	222.8	224.1	224.9	225.7	226.5	227.4



TEST NUMBER: P333342

CATALOG NUMBER: S125DIW-S375D470U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	240.9	242.4	243.9	244.9	245.5	246.1	246.7	247.2
115°	273.4	274.8	276.2	277.0	277.0	277.0	277.0	277.0
117.5°	304.4	305.7	306.9	307.7	308.2	308.6	309.0	309.5
120°	324.6	326.1	327.7	328.5	328.6	328.7	328.9	329.0
122.5°	343.6	345.0	346.5	347.3	347.3	347.3	347.4	347.4
125°	371.4	372.6	373.9	374.6	374.8	375.0	375.3	375.5
127.5°	396.5	397.8	399.1	399.7	399.6	399.4	399.3	399.1
130°	413.2	414.3	415.5	416.0	416.1	416.1	416.1	416.1
132.5°	428.5	429.9	431.2	431.9	431.8	431.8	431.7	431.6
135°	450.7	451.8	452.9	453.5	453.4	453.3	453.2	453.1
137.5°	471.7	472.9	474.2	474.8	474.6	474.5	474.4	474.3
140°	484.5	485.8	487.1	487.7	487.5	487.3	487.1	486.9
142.5°	497.2	498.2	499.2	499.6	499.4	499.2	499.0	498.9
145°	515.6	516.2	516.8	517.0	516.8	516.7	516.5	516.3
147.5°	531.6	531.9	532.2	532.0	531.5	531.0	530.4	529.9
150°	541.9	542.1	542.3	542.1	541.4	540.7	540.0	539.3
152.5°	551.3	551.5	551.7	551.5	550.8	550.1	549.4	548.7
155°	564.3	564.6	564.9	564.6	563.8	563.0	562.2	561.4
157.5°	575.0	575.3	575.6	575.4	574.6	573.8	573.0	572.2
160°	581.7	582.1	582.5	582.3	581.5	580.7	579.9	579.1
162.5°	587.8	588.4	588.9	588.8	587.9	587.0	586.1	585.2
165°	595.7	596.3	596.9	596.8	596.0	595.1	594.3	593.5
167.5°	601.6	602.3	603.0	603.0	602.0	601.1	600.2	599.3
170°	604.6	605.5	606.3	606.2	605.3	604.4	603.5	602.6
172.5°	607.0	607.7	608.5	608.4	607.5	606.6	605.7	604.8
175°	609.6	610.4	611.2	611.2	610.3	609.4	608.5	607.6
177.5°	610.7	611.2	611.8	611.8	611.1	610.5	609.8	609.2
180°	610.3	610.3	610.3	610.3	610.3	610.3	610.3	610.3

(END OF REPORT)