

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: P333164-840

Luminaire Tested: **S125DIP-S610D365U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333164-840
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-S610D365U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 3704.9 lumens
Efficiency: N/A
Efficacy: 134.7 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

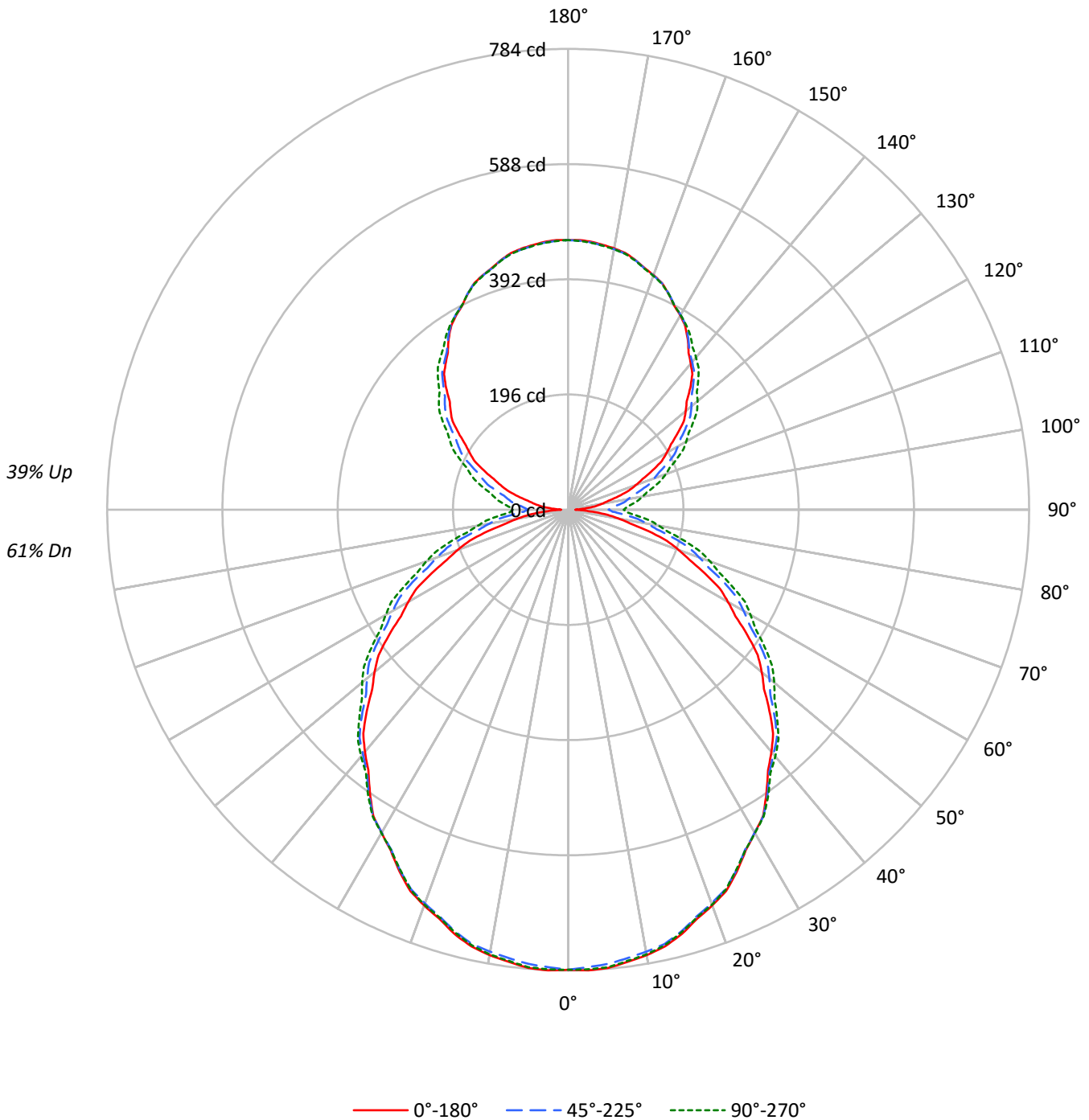
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333164-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333164-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-D1

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	99	95	90	86	93	89	85	81	77	74	72	67	65	63	57	56	54	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	54	49	51	47	43	44	41	38	34
4	75	64	55	49	70	60	52	46	52	46	42	46	41	37	39	36	33	29
5	69	57	48	42	64	53	45	40	47	41	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	34	28	25	29	25	22	19
8	54	42	34	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16
10	47	35	27	22	44	33	26	22	29	24	20	26	21	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5054	5054	5054
5°	5064	4961	4977
10°	5029	4873	4865
15°	4969	4767	4723
20°	4888	4635	4581
25°	4792	4495	4406
30°	4676	4340	4247
35°	4567	4199	4102
40°	4457	4049	3955
45°	4331	3922	3825
50°	4213	3783	3710
55°	4069	3652	3575
60°	3913	3503	3437
65°	3749	3347	3282
70°	3561	3133	3123
75°	3269	2928	2928
80°	2884	2679	2713
85°	2526	2512	2645



TEST NUMBER: P333164-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	2.0
10°-20°	210.1	5.7
20°-30°	312.4	8.4
30°-40°	370.1	10.0
40°-50°	382.6	10.3
50°-60°	352.5	9.5
60°-70°	284.9	7.7
70°-80°	190.8	5.2
80°-90°	100.0	2.7
90°-100°	86.2	2.3
100°-110°	131.7	3.6
110°-120°	181.1	4.9
120°-130°	217.8	5.9
130°-140°	233.4	6.3
140°-150°	223.4	6.0
150°-160°	186.5	5.0
160°-170°	124.0	3.3
170°-180°	43.4	1.2
0°-30°	596.5	16.1
0°-40°	966.6	26.1
0°-60°	1701.7	45.9
0°-90°	2277.4	61.5
90°-120°	399.0	10.8
90°-150°	1073.6	29.0
90°-180°	1428.0	38.5
0°-180°	3704.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	781	776	781	781	74
15°	747	748	743	747	744	210
25°	679	681	677	679	676	312
35°	588	593	591	593	593	368
45°	484	492	496	502	503	373
55°	372	384	397	405	408	333
65°	256	274	292	303	307	254
75°	141	161	186	200	205	150
85°	42	68	94	111	117	45
90°	13	40	69	87	94	9
95°	33	54	84	102	109	33
105°	88	103	128	144	152	94
115°	158	166	186	199	204	157
125°	228	230	245	256	260	204
135°	294	295	301	310	313	226
145°	354	355	356	360	362	221
155°	405	405	405	406	405	186
165°	440	439	440	441	439	124
175°	458	456	456	458	456	43
180°	459	459	459	459	459	



TEST NUMBER: P333164-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	784.5	784.2	784.0	783.7	783.4	782.7	781.8	780.8	779.9	778.9	779.9
5°	782.6	782.2	781.9	781.6	781.2	780.5	779.3	778.1	776.9	775.7	777.1
7.5°	775.7	775.6	775.5	775.3	775.2	774.5	773.3	772.0	770.8	769.6	770.7
10°	769.6	769.6	769.6	769.6	769.6	768.9	767.5	766.2	764.8	763.5	764.7
12.5°	761.0	761.1	761.2	761.4	761.5	761.0	759.9	758.9	757.8	756.7	757.6
15°	747.3	747.5	747.7	747.8	748.0	747.5	746.3	745.1	744.0	742.8	743.8
17.5°	729.5	729.8	730.2	730.5	730.9	730.4	729.3	728.1	726.9	725.7	726.5
20°	716.6	717.0	717.3	717.7	718.0	717.6	716.4	715.2	714.0	712.8	713.3
22.5°	702.0	702.6	703.2	703.8	704.4	704.0	702.7	701.4	700.0	698.7	699.3
25°	679.0	679.5	680.0	680.5	681.1	680.9	679.8	678.8	677.7	676.7	677.4
27.5°	653.6	654.3	655.1	655.8	656.6	656.4	655.2	654.1	652.9	651.8	652.2
30°	634.5	635.6	636.6	637.6	638.6	638.6	637.6	636.6	635.6	634.5	634.9
32.5°	617.3	618.2	619.1	620.1	620.9	621.0	620.3	619.5	618.7	617.9	618.3
35°	587.7	589.0	590.2	591.3	592.5	592.9	592.4	591.8	591.3	590.8	591.3
37.5°	558.2	559.3	560.3	561.4	562.5	562.9	562.8	562.6	562.4	562.3	562.9
40°	537.9	539.3	540.6	542.0	543.3	543.9	543.7	543.6	543.4	543.2	543.9
42.5°	515.7	517.6	519.3	521.1	522.9	523.9	524.3	524.7	525.0	525.4	526.2
45°	484.1	486.0	487.9	489.8	491.7	493.0	493.9	494.7	495.5	496.4	497.7
47.5°	451.8	453.5	455.2	457.0	458.8	460.3	461.8	463.2	464.7	466.2	468.0
50°	429.7	431.5	433.4	435.4	437.2	439.1	440.9	442.8	444.6	446.6	448.5
52.5°	406.4	408.6	410.9	413.2	415.5	417.8	420.1	422.3	424.6	426.9	428.9
55°	372.1	374.9	377.6	380.3	383.0	385.8	388.5	391.2	393.9	396.7	398.6
57.5°	337.2	340.4	343.7	347.0	350.2	353.5	356.6	359.7	362.8	366.0	368.1
60°	313.9	317.2	320.6	324.1	327.5	330.8	334.3	337.7	341.1	344.5	347.1
62.5°	291.1	294.5	297.9	301.3	304.8	308.3	311.9	315.7	319.3	323.1	325.9
65°	256.3	260.2	264.1	268.0	272.0	276.0	280.0	284.2	288.2	292.4	294.9
67.5°	223.5	227.2	231.0	234.8	238.5	242.6	246.7	250.9	255.0	259.2	262.3
70°	199.4	203.4	207.3	211.3	215.2	219.3	223.8	228.2	232.7	237.1	240.3
72.5°	176.1	180.3	184.3	188.3	192.4	196.8	201.7	206.5	211.4	216.2	219.7
75°	141.2	145.6	150.1	154.5	159.0	163.9	169.4	174.8	180.3	185.7	189.0
77.5°	107.6	112.7	117.9	122.9	128.1	133.2	138.5	143.7	149.0	154.2	157.9
80°	86.7	91.8	96.9	102.1	107.1	112.6	118.5	124.2	130.0	135.8	139.6
82.5°	67.7	73.0	78.5	83.8	89.3	94.9	100.8	106.7	112.7	118.7	122.2
85°	42.2	47.9	53.4	59.1	64.7	70.5	76.4	82.4	88.4	94.4	98.2
87.5°	24.0	29.6	35.1	40.8	46.4	52.1	58.0	63.9	69.8	75.7	79.7
90°	12.6	18.7	24.8	30.9	37.0	43.2	49.6	55.9	62.3	68.7	72.9
92.5°	19.7	25.1	30.7	36.2	41.6	47.7	54.3	60.9	67.6	74.1	78.5
95°	33.2	37.8	42.3	47.0	51.5	57.2	63.7	70.3	77.0	83.5	87.8
97.5°	47.6	51.7	55.7	59.8	63.8	69.2	75.8	82.6	89.3	95.9	100.1
100°	58.4	62.0	65.5	69.2	72.7	77.8	84.2	90.8	97.3	103.7	108.1
102.5°	70.1	73.7	77.4	81.0	84.5	89.3	95.1	101.0	106.8	112.7	116.9
105°	88.3	91.4	94.5	97.7	100.8	105.1	110.8	116.3	121.9	127.5	131.4
107.5°	108.5	111.2	113.9	116.6	119.4	123.3	128.7	133.9	139.2	144.4	148.0
110°	122.4	124.9	127.3	129.8	132.2	135.9	141.0	145.9	151.0	156.0	159.5



TEST NUMBER: P333164-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.3	139.2	141.0	142.8	144.7	148.0	153.0	157.9	162.9	167.8	171.1
115°	158.4	160.0	161.5	163.0	164.5	167.5	172.1	176.7	181.3	185.9	188.8
117.5°	179.7	180.6	181.5	182.5	183.4	186.0	190.4	194.7	199.0	203.4	206.3
120°	193.4	194.3	195.2	196.1	197.0	199.4	203.5	207.4	211.5	215.5	218.3
122.5°	207.6	207.9	208.3	208.7	209.1	211.3	215.3	219.3	223.3	227.3	229.9
125°	227.6	227.9	228.2	228.5	228.8	230.7	234.2	237.7	241.2	244.7	247.2
127.5°	248.2	248.3	248.4	248.5	248.6	250.1	253.0	255.9	258.8	261.7	264.1
130°	261.1	261.3	261.6	261.8	262.0	263.4	265.9	268.4	271.0	273.6	275.9
132.5°	273.3	274.0	274.6	275.2	275.8	277.0	278.8	280.6	282.5	284.3	286.5
135°	293.5	293.8	294.1	294.4	294.7	295.5	296.8	298.0	299.3	300.6	302.9
137.5°	312.5	312.8	313.2	313.5	313.8	314.3	315.1	315.8	316.6	317.3	319.4
140°	324.2	324.6	325.0	325.4	325.7	326.1	326.6	327.0	327.4	327.8	329.8
142.5°	336.4	336.6	336.8	337.0	337.2	337.5	337.8	338.1	338.5	338.8	340.5
145°	354.5	354.7	354.8	355.0	355.1	355.3	355.5	355.8	356.0	356.2	357.1
147.5°	370.4	370.6	370.7	370.9	371.1	371.3	371.5	371.7	371.8	372.0	372.5
150°	381.5	381.5	381.4	381.3	381.2	381.3	381.6	382.0	382.3	382.6	382.6
152.5°	390.7	390.8	390.9	391.0	391.1	391.2	391.4	391.5	391.6	391.7	391.9
155°	404.8	404.8	404.8	404.8	404.8	404.8	404.9	405.0	405.1	405.2	405.5
157.5°	417.3	417.2	417.0	416.8	416.7	416.6	416.7	416.8	416.8	416.9	417.2
160°	424.7	424.5	424.2	424.0	423.8	423.7	423.8	423.8	423.9	424.0	424.3
162.5°	431.3	431.1	431.0	430.8	430.6	430.5	430.5	430.6	430.6	430.6	431.0
165°	440.1	439.9	439.8	439.6	439.5	439.4	439.5	439.6	439.7	439.7	440.1
167.5°	447.5	447.2	446.9	446.6	446.3	446.1	446.1	446.1	446.1	446.1	446.6
170°	451.5	451.2	450.9	450.6	450.2	450.1	450.1	450.1	450.1	450.1	450.6
172.5°	454.3	454.0	453.7	453.4	453.1	452.9	452.9	452.9	452.9	452.9	453.4
175°	457.6	457.3	457.0	456.7	456.4	456.2	456.2	456.2	456.2	456.2	456.7
177.5°	459.2	459.0	458.7	458.5	458.2	458.1	458.0	458.0	457.9	457.8	458.2
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7



TEST NUMBER: P333164-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	782.6	782.6	782.6	782.6	782.6	782.6	782.6	782.6
2.5°	780.8	781.8	782.7	783.2	783.0	782.9	782.7	782.6
5°	778.4	779.8	781.1	781.7	781.6	781.4	781.2	781.1
7.5°	771.9	773.2	774.4	774.9	774.7	774.6	774.4	774.2
10°	765.9	767.0	768.2	768.7	768.6	768.4	768.2	768.0
12.5°	758.5	759.4	760.4	760.6	760.1	759.7	759.3	758.8
15°	744.8	745.8	746.8	747.0	746.3	745.6	745.0	744.3
17.5°	727.3	728.0	728.8	729.0	728.6	728.2	727.8	727.4
20°	713.9	714.4	714.9	715.1	715.1	715.1	715.1	715.1
22.5°	699.9	700.6	701.3	701.4	700.9	700.5	700.1	699.7
25°	678.1	678.8	679.4	679.4	678.5	677.7	676.8	676.0
27.5°	652.7	653.2	653.7	653.7	653.4	653.1	652.8	652.5
30°	635.2	635.6	635.9	636.0	635.8	635.6	635.5	635.3
32.5°	618.6	618.9	619.4	619.5	619.2	619.0	618.9	618.7
35°	591.8	592.4	592.9	593.1	593.1	593.1	593.1	593.1
37.5°	563.6	564.3	565.0	565.3	565.2	565.1	565.1	565.0
40°	544.6	545.3	545.9	546.4	546.8	547.1	547.5	547.9
42.5°	527.0	527.9	528.7	529.2	529.3	529.3	529.4	529.5
45°	498.8	500.0	501.2	501.9	502.1	502.2	502.4	502.6
47.5°	469.7	471.4	473.1	474.2	474.6	474.9	475.3	475.7
50°	450.3	452.2	454.0	455.2	455.8	456.3	456.8	457.3
52.5°	430.9	432.9	434.9	436.2	436.6	436.9	437.3	437.7
55°	400.4	402.3	404.1	405.5	406.2	406.9	407.5	408.2
57.5°	370.3	372.4	374.6	375.9	376.5	377.0	377.5	378.0
60°	349.6	352.1	354.8	356.3	356.8	357.3	357.8	358.3
62.5°	328.7	331.5	334.4	336.1	336.7	337.4	338.0	338.7
65°	297.4	300.0	302.6	304.2	304.9	305.6	306.2	306.9
67.5°	265.4	268.5	271.6	273.6	274.5	275.4	276.3	277.1
70°	243.6	246.8	250.0	252.2	253.2	254.2	255.3	256.3
72.5°	223.3	226.7	230.2	232.4	233.2	233.9	234.7	235.4
75°	192.5	195.9	199.3	201.5	202.3	203.2	204.0	204.9
77.5°	161.7	165.5	169.3	171.5	172.1	172.8	173.5	174.2
80°	143.3	147.0	150.8	153.0	153.7	154.4	155.1	155.7
82.5°	125.8	129.5	133.1	135.5	136.7	137.9	139.2	140.4
85°	101.9	105.6	109.4	111.9	113.3	114.6	116.0	117.3
87.5°	83.7	87.8	91.7	94.3	95.6	96.8	98.1	99.3
90°	77.3	81.6	85.9	88.8	90.2	91.6	93.1	94.5
92.5°	82.8	87.1	91.4	94.2	95.6	96.9	98.4	99.7
95°	92.1	96.4	100.7	103.5	104.9	106.2	107.7	109.0
97.5°	104.1	108.3	112.4	115.0	116.2	117.5	118.8	120.1
100°	112.3	116.6	120.9	123.6	124.8	126.0	127.1	128.4
102.5°	121.1	125.3	129.6	132.3	133.5	134.8	136.0	137.2
105°	135.3	139.2	143.1	145.7	147.1	148.6	150.0	151.5
107.5°	151.7	155.3	159.0	161.3	162.3	163.3	164.4	165.4
110°	163.0	166.4	169.9	172.2	173.3	174.4	175.5	176.6



TEST NUMBER: P333164-840

CATALOG NUMBER: S125DIP-S610D365U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	174.2	177.4	180.7	182.8	183.9	184.9	185.9	187.0
115°	191.9	194.9	197.8	199.9	200.8	201.7	202.7	203.6
117.5°	209.2	212.3	215.2	217.1	217.9	218.7	219.6	220.5
120°	221.3	224.2	227.0	228.8	229.5	230.2	231.0	231.7
122.5°	232.7	235.4	238.0	239.8	240.5	241.4	242.1	242.9
125°	249.8	252.4	254.9	256.6	257.4	258.1	258.9	259.7
127.5°	266.6	269.0	271.5	273.1	274.0	274.8	275.6	276.4
130°	278.1	280.4	282.8	284.3	285.0	285.7	286.4	287.1
132.5°	288.8	291.1	293.5	294.9	295.4	295.9	296.3	296.8
135°	305.1	307.3	309.4	310.8	311.3	311.9	312.5	313.0
137.5°	321.5	323.7	325.8	327.0	327.2	327.5	327.8	328.1
140°	331.8	333.9	335.9	337.1	337.4	337.6	337.9	338.2
142.5°	342.2	344.0	345.6	346.6	346.9	347.2	347.5	347.7
145°	357.9	358.8	359.6	360.3	360.7	361.1	361.6	362.0
147.5°	372.9	373.4	374.0	374.1	373.8	373.5	373.3	373.1
150°	382.6	382.6	382.6	382.6	382.6	382.6	382.6	382.6
152.5°	392.1	392.3	392.5	392.5	392.2	392.0	391.7	391.5
155°	405.8	406.1	406.4	406.4	406.0	405.6	405.2	404.8
157.5°	417.5	417.9	418.2	418.1	417.6	417.0	416.5	416.0
160°	424.6	425.0	425.3	425.3	424.9	424.4	424.0	423.6
162.5°	431.3	431.7	432.1	432.1	431.6	431.1	430.7	430.2
165°	440.4	440.7	441.0	440.9	440.4	440.0	439.5	439.0
167.5°	447.1	447.5	448.0	448.0	447.5	447.0	446.5	446.1
170°	451.0	451.5	452.0	451.9	451.4	450.8	450.3	449.7
172.5°	453.9	454.3	454.8	454.8	454.3	453.8	453.3	452.8
175°	457.1	457.6	458.1	458.0	457.5	456.9	456.4	455.8
177.5°	458.6	459.0	459.3	459.3	458.9	458.4	458.0	457.5
180°	458.7	458.7	458.7	458.7	458.7	458.7	458.7	458.7

(END OF REPORT)