

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: P333166-935

Luminaire Tested: **S125DIP-S610D365U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333166-935
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-S610D365U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3413.3 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

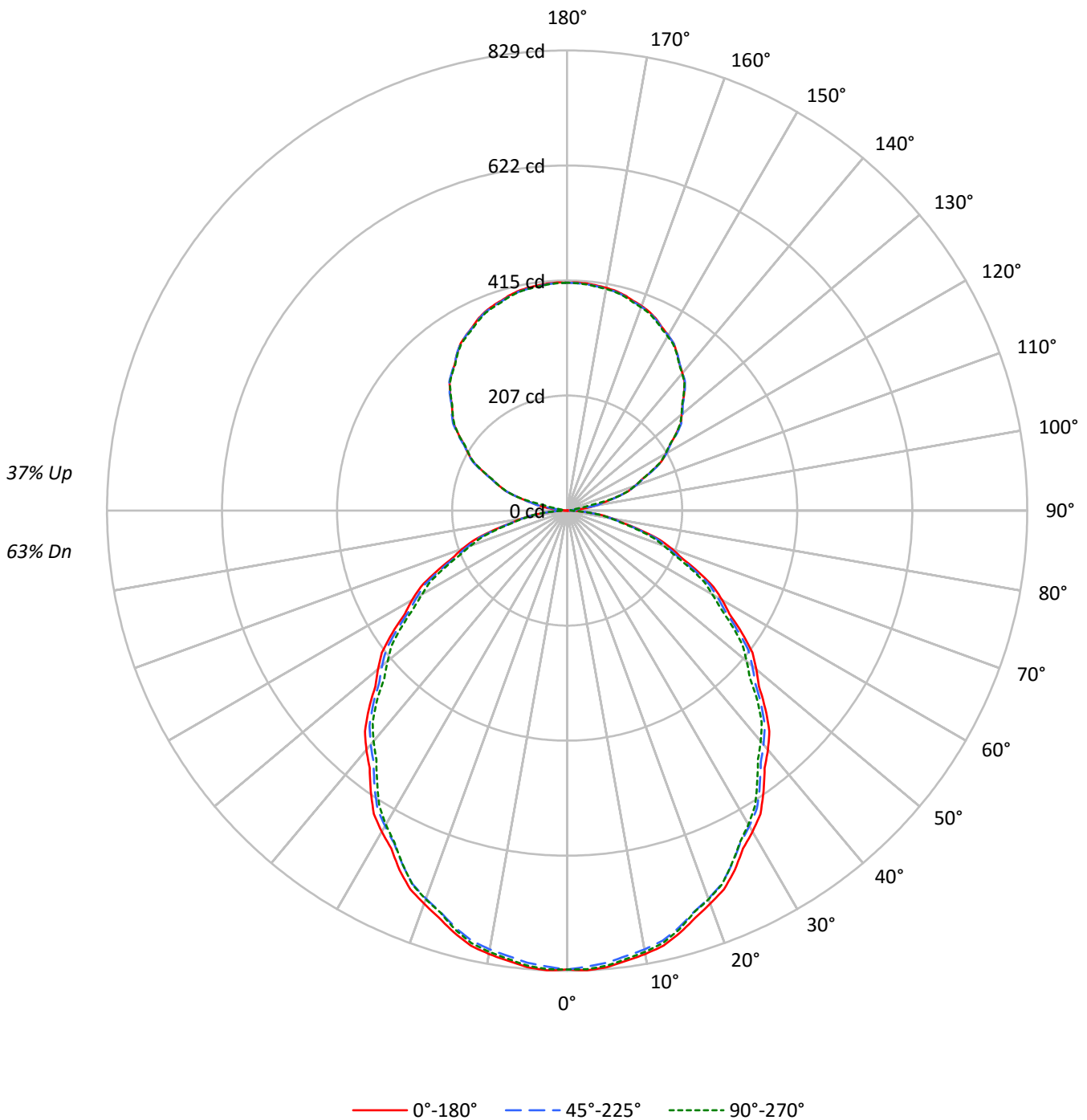
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333166-935

CATALOG NUMBER: S125DIP-S610D365U935-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333166-935

CATALOG NUMBER: S125DIP-S610D365U935-4F0-1E-UDD-F

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	91	91	91	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	70	65	62	61	58	55	53	50	48	44
3	84	74	66	60	78	69	63	57	61	56	52	54	50	46	47	44	41	37
4	76	65	57	51	71	62	54	49	55	49	44	48	43	40	42	38	35	32
5	70	58	50	44	66	55	48	42	49	43	38	43	38	34	38	34	31	28
6	65	52	44	38	61	50	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	19
9	52	39	32	27	49	37	30	26	34	28	24	30	25	22	27	23	20	17
10	49	36	29	24	46	34	28	23	31	25	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5352	5301	5335
10°	5319	5264	5294
15°	5262	5201	5223
20°	5179	5112	5121
25°	5091	5007	5002
30°	4981	4894	4869
35°	4864	4771	4704
40°	4743	4639	4572
45°	4613	4517	4427
50°	4470	4372	4240
55°	4332	4206	4088
60°	4166	4039	3896
65°	3969	3839	3709
70°	3780	3609	3484
75°	3444	3331	3216
80°	3065	3016	2942
85°	2668	2712	2571



TEST NUMBER: P333166-935

CATALOG NUMBER: S125DIP-S610D365U935-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	2.3
10°-20°	220.2	6.5
20°-30°	325.2	9.5
30°-40°	379.4	11.1
40°-50°	381.1	11.2
50°-60°	334.5	9.8
60°-70°	249.3	7.3
70°-80°	142.5	4.2
80°-90°	42.3	1.2
90°-100°	14.9	0.4
100°-110°	92.0	2.7
110°-120°	166.8	4.9
120°-130°	214.0	6.3
130°-140°	230.2	6.7
140°-150°	216.1	6.3
150°-160°	174.8	5.1
160°-170°	113.0	3.3
170°-180°	39.0	1.1
0°-30°	623.4	18.3
0°-40°	1002.8	29.4
0°-60°	1718.4	50.3
0°-90°	2152.5	63.1
90°-120°	273.7	8.0
90°-150°	934.0	27.4
90°-180°	1261.0	36.9
0°-180°	3413.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	826	824	818	823	823	78
15°	787	785	778	781	781	222
25°	714	711	703	704	702	329
35°	617	614	605	602	597	386
45°	505	502	495	487	485	389
55°	385	382	374	368	363	343
65°	260	258	251	246	243	258
75°	138	137	134	131	129	147
85°	36	37	37	36	35	40
90°	0	3	5	6	7	3
95°	17	16	5	6	6	22
105°	90	91	91	91	90	95
115°	168	169	170	169	167	166
125°	239	241	241	240	239	213
135°	298	300	299	298	297	230
145°	345	346	346	346	344	216
155°	380	379	379	380	378	175
165°	401	400	400	402	399	113
175°	410	409	409	411	409	39
180°	410	410	410	410	410	



TEST NUMBER: P333166-935

CATALOG NUMBER: S125DIP-S610D365U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	829.0	828.6	828.3	827.9	827.6	826.8	825.7	824.5	823.4	822.2	823.4
5°	825.6	825.3	825.0	824.7	824.4	823.5	822.1	820.6	819.2	817.7	819.1
7.5°	817.9	817.7	817.4	817.1	816.8	815.9	814.2	812.7	811.1	809.5	810.7
10°	811.1	810.9	810.6	810.3	810.0	809.1	807.4	805.9	804.3	802.7	803.8
12.5°	802.8	802.3	801.8	801.2	800.7	799.7	798.2	796.8	795.2	793.8	794.7
15°	787.0	786.5	786.1	785.7	785.2	784.2	782.6	781.0	779.4	777.8	778.5
17.5°	768.8	768.2	767.5	766.9	766.2	765.1	763.4	761.7	760.1	758.5	759.3
20°	753.6	753.3	753.0	752.8	752.4	751.4	749.5	747.6	745.7	743.8	744.9
22.5°	738.4	737.9	737.4	736.8	736.3	735.2	733.4	731.7	729.9	728.1	728.8
25°	714.4	713.6	712.9	712.2	711.4	710.2	708.3	706.4	704.5	702.6	702.9
27.5°	686.2	685.8	685.4	684.9	684.5	683.3	681.3	679.4	677.4	675.5	675.5
30°	667.9	667.4	667.0	666.6	666.2	664.9	662.7	660.5	658.3	656.2	655.8
32.5°	648.0	647.4	646.7	646.0	645.3	644.0	642.1	640.2	638.2	636.3	635.8
35°	616.9	616.3	615.7	615.2	614.6	613.3	611.2	609.2	607.2	605.1	604.4
37.5°	584.5	583.8	583.2	582.4	581.7	580.3	578.4	576.5	574.5	572.7	571.6
40°	562.6	561.9	561.1	560.4	559.6	558.3	556.3	554.2	552.2	550.2	548.9
42.5°	539.1	538.5	537.8	537.2	536.6	535.3	533.2	531.2	529.2	527.1	526.0
45°	505.1	504.5	503.9	503.3	502.7	501.5	499.8	498.1	496.3	494.6	492.8
47.5°	468.4	468.4	468.5	468.5	468.5	467.4	465.4	463.3	461.2	459.1	457.4
50°	444.9	444.4	443.9	443.5	443.1	442.0	440.2	438.5	436.8	435.1	433.2
52.5°	420.8	420.4	420.2	419.8	419.5	418.4	416.6	414.7	412.8	411.0	409.3
55°	384.7	384.2	383.7	383.3	382.9	381.7	379.6	377.6	375.6	373.5	372.2
57.5°	346.6	346.4	346.1	345.9	345.7	344.7	342.9	341.2	339.5	337.9	336.1
60°	322.5	321.9	321.3	320.7	320.2	319.1	317.5	315.9	314.3	312.7	311.3
62.5°	297.4	297.0	296.4	296.0	295.5	294.6	293.3	291.9	290.5	289.1	287.6
65°	259.7	259.4	259.2	258.8	258.6	257.6	256.0	254.4	252.8	251.2	249.9
67.5°	223.2	222.6	222.0	221.4	220.8	219.9	218.7	217.5	216.3	215.1	214.0
70°	200.2	199.5	198.7	198.0	197.3	196.2	194.9	193.6	192.3	191.1	190.1
72.5°	175.0	174.5	174.1	173.6	173.1	172.4	171.6	170.7	169.9	169.0	168.1
75°	138.0	137.8	137.4	137.2	136.9	136.4	135.6	134.9	134.1	133.5	133.0
77.5°	103.9	103.8	103.7	103.5	103.4	103.1	102.7	102.4	101.9	101.5	101.3
80°	82.4	82.4	82.4	82.4	82.4	82.3	82.0	81.7	81.5	81.1	80.9
82.5°	63.6	63.4	63.1	62.9	62.7	62.5	62.4	62.4	62.3	62.3	62.0
85°	36.0	36.2	36.2	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.5
87.5°	14.2	14.3	14.4	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
90°	0.3	0.9	1.4	1.9	2.5	3.0	3.4	4.0	4.4	4.9	5.2
92.5°	4.6	4.3	4.0	3.5	3.2	3.2	3.6	4.0	4.5	4.9	5.2
95°	17.3	17.1	17.0	16.7	16.5	15.2	12.6	10.0	7.4	4.9	5.2
97.5°	36.2	36.6	36.9	37.3	37.7	35.3	30.2	25.1	20.1	15.0	13.1
100°	50.8	51.1	51.2	51.4	51.7	51.8	52.2	52.4	52.7	53.0	42.9
102.5°	65.7	66.0	66.2	66.5	66.7	66.9	67.1	67.2	67.4	67.6	65.7
105°	89.5	89.7	90.1	90.3	90.6	90.7	90.7	90.7	90.7	90.7	90.7
107.5°	114.2	114.2	114.2	114.2	114.2	114.3	114.4	114.5	114.7	114.8	114.8
110°	130.3	130.3	130.3	130.3	130.3	130.4	130.4	130.6	130.7	130.9	130.7



TEST NUMBER: P333166-935

CATALOG NUMBER: S125DIP-S610D365U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	145.3	145.5	145.7	145.9	146.0	146.1	146.2	146.3	146.4	146.5	146.2
115°	168.0	168.3	168.7	169.0	169.4	169.5	169.6	169.7	169.8	169.8	169.5
117.5°	191.4	191.4	191.4	191.4	191.4	191.5	191.7	192.0	192.3	192.5	192.2
120°	206.0	206.0	206.0	205.9	205.8	205.9	206.0	206.2	206.5	206.6	206.6
122.5°	219.0	219.2	219.5	219.7	220.0	220.2	220.2	220.3	220.4	220.5	220.4
125°	238.9	239.4	239.9	240.3	240.8	241.1	241.1	241.1	241.1	241.1	240.7
127.5°	258.0	258.3	258.6	259.0	259.3	259.5	259.4	259.4	259.3	259.3	259.2
130°	269.7	270.0	270.4	270.7	271.0	271.2	271.3	271.3	271.4	271.5	271.3
132.5°	281.4	281.7	282.1	282.5	282.9	283.0	282.9	282.8	282.6	282.4	282.4
135°	298.0	298.3	298.8	299.2	299.5	299.7	299.5	299.5	299.3	299.2	299.0
137.5°	313.2	313.6	313.9	314.3	314.6	314.8	314.6	314.5	314.4	314.3	314.3
140°	323.2	323.4	323.5	323.6	323.7	323.8	323.7	323.6	323.6	323.6	323.6
142.5°	332.3	332.3	332.4	332.4	332.5	332.6	332.8	332.9	332.9	333.0	333.0
145°	345.4	345.6	345.7	345.9	345.9	346.0	346.0	346.0	346.0	346.0	346.1
147.5°	357.0	357.0	357.0	356.9	356.9	356.9	357.0	357.1	357.1	357.2	357.3
150°	364.3	364.2	364.0	363.9	363.8	363.8	363.9	364.0	364.2	364.3	364.5
152.5°	371.3	371.1	370.7	370.5	370.1	370.1	370.2	370.4	370.5	370.7	370.7
155°	380.5	380.0	379.6	379.2	378.8	378.7	378.8	378.9	379.1	379.2	379.4
157.5°	387.4	387.2	386.9	386.7	386.5	386.3	386.3	386.4	386.4	386.4	386.6
160°	392.3	391.9	391.5	391.1	390.7	390.5	390.5	390.6	390.7	390.8	391.1
162.5°	396.2	395.8	395.4	394.9	394.6	394.4	394.5	394.5	394.6	394.7	395.0
165°	401.4	401.1	400.6	400.2	399.8	399.7	399.7	399.8	399.8	399.9	400.3
167.5°	405.4	404.9	404.5	404.1	403.6	403.5	403.6	403.6	403.7	403.7	404.2
170°	407.5	407.1	406.6	406.1	405.6	405.4	405.5	405.5	405.6	405.7	406.2
172.5°	409.0	408.5	408.0	407.6	407.1	406.9	407.0	407.2	407.3	407.4	407.9
175°	410.5	410.2	409.7	409.3	409.0	408.8	408.8	408.9	409.0	409.1	409.6
177.5°	411.3	411.0	410.6	410.4	410.0	409.8	409.9	410.0	410.0	410.1	410.4
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5



TEST NUMBER: P333166-935

CATALOG NUMBER: S125DIP-S610D365U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	824.5	825.7	826.8	827.3	827.2	827.1	827.0	826.9
5°	820.4	821.7	822.9	823.5	823.4	823.3	823.1	822.9
7.5°	812.0	813.3	814.6	815.2	815.0	814.9	814.8	814.6
10°	805.0	806.2	807.4	807.9	807.7	807.5	807.4	807.3
12.5°	795.7	796.6	797.5	798.0	797.9	797.9	797.9	797.8
15°	779.3	780.0	780.8	781.1	781.1	781.1	781.1	781.1
17.5°	760.3	761.1	762.1	762.2	761.4	760.7	760.0	759.2
20°	745.8	746.8	747.9	748.0	747.3	746.6	745.8	745.1
22.5°	729.4	730.1	730.8	730.9	730.4	729.9	729.4	728.9
25°	703.2	703.4	703.8	703.7	703.3	702.8	702.4	702.0
27.5°	675.6	675.7	675.7	675.5	675.1	674.7	674.2	673.8
30°	655.6	655.3	655.0	654.6	654.2	653.8	653.3	652.9
32.5°	635.2	634.6	634.1	633.5	632.7	632.0	631.1	630.3
35°	603.6	603.0	602.2	601.2	600.1	598.9	597.8	596.6
37.5°	570.5	569.5	568.3	567.5	566.8	566.2	565.5	564.8
40°	547.5	546.2	544.9	544.1	543.6	543.2	542.8	542.3
42.5°	524.8	523.6	522.4	521.4	520.7	520.1	519.4	518.8
45°	491.0	489.3	487.6	486.5	486.0	485.6	485.2	484.7
47.5°	455.6	453.7	452.0	450.6	449.6	448.6	447.5	446.5
50°	431.3	429.4	427.5	426.0	425.0	424.0	422.9	422.0
52.5°	407.6	406.0	404.3	402.9	401.8	400.6	399.5	398.4
55°	370.9	369.6	368.3	367.1	366.1	365.1	364.1	363.1
57.5°	334.4	332.8	331.1	329.9	329.4	328.8	328.3	327.8
60°	309.8	308.3	306.9	305.7	304.6	303.6	302.6	301.6
62.5°	286.0	284.5	282.8	281.7	280.9	280.1	279.3	278.5
65°	248.6	247.3	246.0	245.0	244.4	243.8	243.3	242.7
67.5°	212.9	211.8	210.7	209.9	209.6	209.2	208.9	208.5
70°	189.2	188.4	187.5	186.8	186.2	185.6	185.0	184.5
72.5°	167.0	166.1	165.1	164.3	163.7	163.2	162.6	162.0
75°	132.6	132.2	131.7	131.2	130.6	130.0	129.5	128.9
77.5°	101.0	100.7	100.5	100.1	99.7	99.4	98.9	98.5
80°	80.8	80.7	80.5	80.3	80.0	79.7	79.5	79.1
82.5°	61.7	61.5	61.2	61.0	61.0	61.0	60.9	60.9
85°	36.3	36.2	36.1	35.8	35.6	35.2	35.0	34.7
87.5°	14.7	14.8	14.8	14.8	14.6	14.4	14.2	14.0
90°	5.5	5.9	6.2	6.5	6.7	6.9	7.1	7.3
92.5°	5.5	5.9	6.2	6.5	6.5	6.6	6.7	6.8
95°	5.5	5.9	6.2	6.4	6.4	6.4	6.4	6.4
97.5°	11.2	9.2	7.3	6.4	6.4	6.4	6.4	6.4
100°	32.8	22.7	12.7	7.5	7.2	7.0	6.6	6.4
102.5°	63.7	61.8	59.9	56.7	52.1	47.5	42.9	38.3
105°	90.7	90.7	90.7	90.7	90.6	90.5	90.5	90.4
107.5°	114.9	114.9	114.9	114.8	114.6	114.3	114.2	113.9
110°	130.4	130.3	130.1	130.0	130.1	130.1	130.2	130.3



TEST NUMBER: P333166-935

CATALOG NUMBER: S125DIP-S610D365U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	145.9	145.7	145.4	145.3	145.2	145.1	145.0	144.9
115°	169.3	169.0	168.8	168.4	168.0	167.6	167.2	166.8
117.5°	191.8	191.5	191.1	190.9	190.7	190.5	190.4	190.2
120°	206.4	206.2	206.1	205.9	205.5	205.2	204.8	204.5
122.5°	220.2	220.2	220.0	219.7	219.3	219.0	218.5	218.2
125°	240.5	240.2	240.0	239.7	239.5	239.4	239.1	238.9
127.5°	259.0	258.8	258.7	258.4	257.9	257.4	256.9	256.4
130°	271.0	270.9	270.7	270.4	270.1	269.8	269.4	269.1
132.5°	282.3	282.3	282.2	282.1	281.7	281.4	281.0	280.8
135°	298.9	298.8	298.6	298.3	298.0	297.6	297.1	296.7
137.5°	314.4	314.4	314.4	314.2	313.8	313.5	313.1	312.8
140°	323.8	323.9	324.1	323.9	323.6	323.1	322.7	322.3
142.5°	333.0	333.1	333.1	332.9	332.5	332.1	331.7	331.3
145°	346.2	346.2	346.3	346.1	345.8	345.3	344.9	344.5
147.5°	357.4	357.5	357.6	357.4	356.9	356.4	355.9	355.4
150°	364.5	364.7	364.8	364.6	364.1	363.6	363.0	362.5
152.5°	370.9	371.0	371.2	371.0	370.5	370.1	369.5	369.0
155°	379.6	379.8	380.0	379.9	379.4	378.8	378.2	377.7
157.5°	386.8	387.0	387.3	387.1	386.6	386.0	385.5	385.0
160°	391.3	391.6	391.8	391.8	391.2	390.6	390.1	389.6
162.5°	395.5	395.8	396.2	396.1	395.5	394.9	394.3	393.7
165°	400.7	401.1	401.6	401.5	401.0	400.4	399.8	399.3
167.5°	404.8	405.2	405.7	405.6	405.0	404.4	403.8	403.2
170°	406.7	407.3	407.9	407.9	407.3	406.7	406.0	405.4
172.5°	408.4	408.9	409.3	409.3	408.7	408.0	407.4	406.8
175°	410.1	410.7	411.2	411.2	410.5	409.9	409.3	408.7
177.5°	410.9	411.2	411.6	411.6	411.1	410.7	410.3	409.8
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5

(END OF REPORT)