

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: P333165-930

Luminaire Tested: **S125DIP-S610D365U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333165-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S610D365U930-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

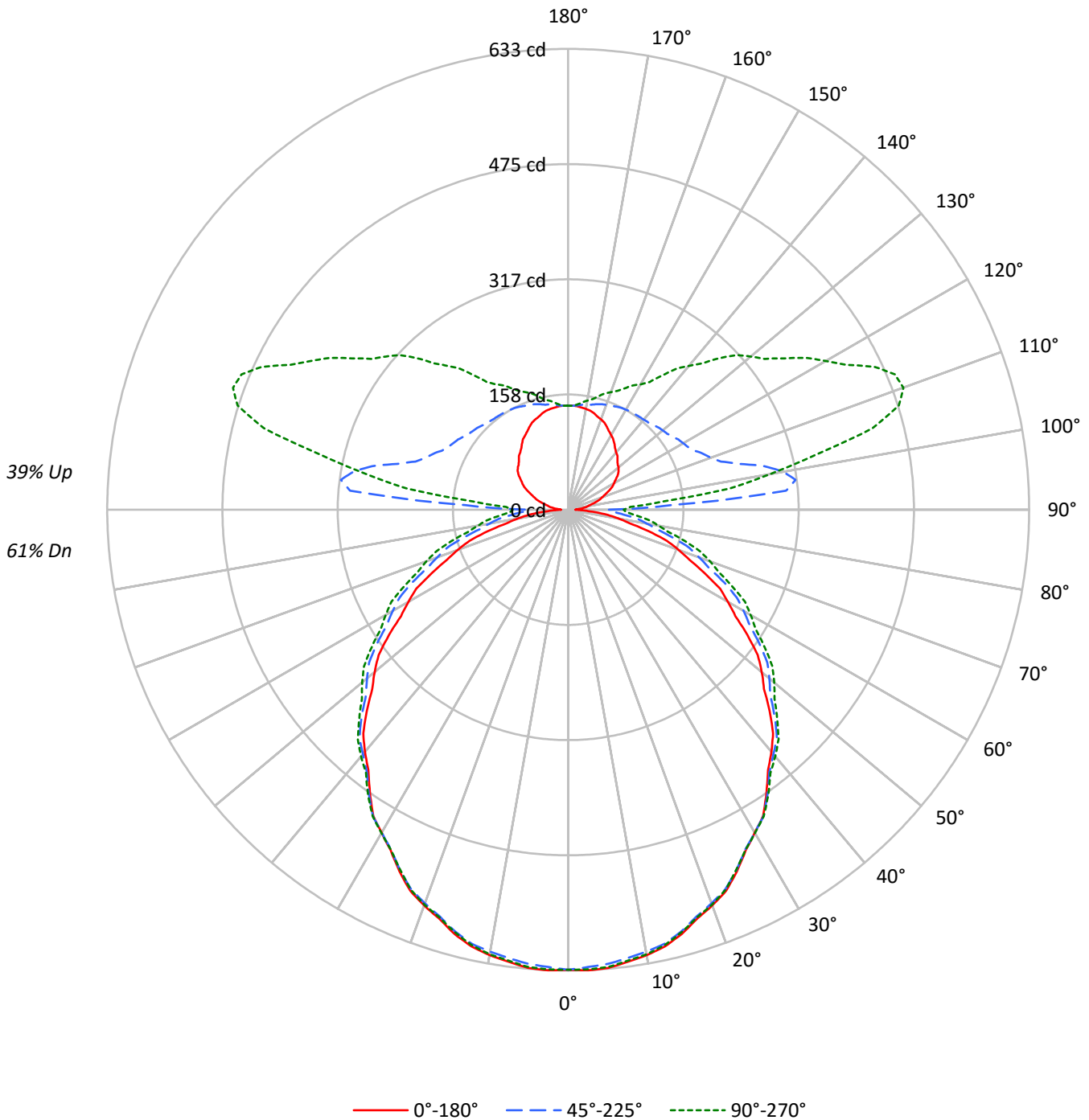
Lumens per Lamp: N/A
Luminaire Lumens: 3029.5 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

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: P333165-930
CATALOG NUMBER: S125DIP-S610D365U930-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333165-930

CATALOG NUMBER: S125DIP-S610D365U930-4F0-1E-UDD-D4

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	89	89	89	77	77	77	66	66	66	61
1	99	94	90	86	93	88	85	81	77	74	72	67	64	62	57	55	54	49
2	90	82	75	70	84	77	71	66	67	62	59	58	54	51	50	47	45	41
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	40	38	34
4	75	63	55	49	70	60	52	46	52	46	41	45	41	37	39	35	32	29
5	69	56	48	42	64	53	45	40	47	40	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	54	43	35	30	38	32	27	33	28	24	29	25	22	19
8	54	42	33	28	51	39	32	27	35	29	24	30	25	22	26	22	19	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	24	20	18	15
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



TEST NUMBER: P333165-930

CATALOG NUMBER: S125DIP-S610D365U930-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	2.0
10°-20°	169.6	5.6
20°-30°	252.2	8.3
30°-40°	298.8	9.9
40°-50°	308.9	10.2
50°-60°	284.6	9.4
60°-70°	230.0	7.6
70°-80°	154.0	5.1
80°-90°	80.7	2.7
90°-100°	148.4	4.9
100°-110°	255.7	8.4
110°-120°	231.1	7.6
120°-130°	182.0	6.0
130°-140°	141.4	4.7
140°-150°	103.7	3.4
150°-160°	72.2	2.4
160°-170°	42.6	1.4
170°-180°	13.8	0.5
0°-30°	481.6	15.9
0°-40°	780.4	25.8
0°-60°	1373.8	45.3
0°-90°	1838.6	60.7
90°-120°	635.3	21.0
90°-150°	1062.4	35.1
90°-180°	1191.0	39.3
0°-180°	3029.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	10	32	55	70	76	7
95°	18	52	300	174	131	16
105°	38	61	243	457	433	40
115°	62	79	192	396	464	61
125°	83	97	175	311	362	74
135°	96	115	165	254	294	74
145°	111	126	160	203	225	69
155°	126	135	156	176	184	58
165°	137	141	150	159	161	39
175°	143	143	144	146	145	14
180°	143	143	143	143	143	



TEST NUMBER: P333165-930

CATALOG NUMBER: S125DIP-S610D365U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.4	23.8	28.4	32.9	37.4	42.1	46.8	51.6	56.3	61.1	64.3
90°	10.2	14.9	19.9	24.9	29.8	35.0	39.9	45.2	50.1	55.4	58.9
92.5°	12.5	17.3	23.7	31.4	40.4	53.2	73.8	105.0	138.4	141.7	127.1
95°	17.5	21.4	27.3	34.1	43.9	61.1	96.6	164.7	248.8	300.5	298.1
97.5°	23.1	26.7	31.5	37.9	46.8	60.0	85.0	135.9	223.6	314.8	361.1
100°	27.0	30.4	34.5	40.5	48.9	61.2	82.3	124.2	201.2	299.9	374.8
102.5°	31.3	34.3	37.9	44.0	51.7	63.6	82.8	118.5	184.1	276.0	363.0
105°	38.2	40.4	43.9	49.1	55.8	67.1	83.9	113.7	165.9	243.0	328.4
107.5°	44.8	47.2	50.5	54.7	61.4	71.5	87.8	113.7	156.9	219.8	293.8
110°	49.6	51.8	54.6	58.9	64.8	75.1	90.7	114.5	153.2	208.3	273.8



TEST NUMBER: P333165-930

CATALOG NUMBER: S125DIP-S610D365U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	54.9	56.7	59.0	62.9	68.6	78.4	93.4	115.9	151.3	200.8	258.3
115°	61.9	63.4	65.3	68.8	74.1	83.6	97.8	118.1	149.4	191.8	240.8
117.5°	68.2	69.7	71.3	74.5	80.1	89.0	102.5	121.1	148.5	186.0	228.9
120°	72.8	74.1	75.7	78.7	84.0	92.9	106.2	123.2	148.5	182.5	222.1
122.5°	77.2	78.0	79.1	81.9	87.5	96.3	109.4	125.6	148.3	179.4	215.8
125°	83.2	83.6	84.9	87.3	92.7	101.5	113.7	128.9	148.4	175.0	207.2
127.5°	87.3	88.1	89.8	92.9	98.6	107.1	118.5	132.2	149.0	171.5	199.0
130°	90.3	91.1	93.2	96.9	102.7	111.1	122.0	134.9	149.8	169.5	194.0
132.5°	92.1	93.2	96.0	100.1	106.4	114.5	125.0	136.7	150.3	167.5	189.2
135°	95.7	96.8	100.1	104.5	110.5	118.6	128.6	139.0	150.7	164.6	182.8
137.5°	100.4	101.1	104.2	108.8	114.5	122.7	131.3	140.9	151.5	162.7	177.5
140°	102.6	103.5	107.0	111.5	117.0	124.9	133.4	142.2	151.5	161.4	174.5
142.5°	105.8	106.4	109.5	114.0	119.1	126.4	134.4	142.5	151.3	160.7	172.1
145°	110.7	111.1	113.9	117.7	122.8	129.4	136.9	144.1	151.8	160.2	169.5
147.5°	115.1	115.4	118.0	121.7	126.2	132.0	138.6	145.1	152.1	159.5	167.3
150°	118.1	118.7	120.7	124.5	128.5	133.4	139.7	145.8	152.1	158.7	165.7
152.5°	121.4	121.7	123.5	126.8	130.6	135.0	140.9	146.3	151.9	157.8	164.0
155°	125.6	125.6	127.3	130.2	133.1	137.1	142.0	146.7	151.2	156.2	161.3
157.5°	129.5	129.4	130.8	133.2	135.7	138.8	143.0	146.9	150.5	154.4	158.8
160°	132.0	131.7	132.8	134.9	137.1	139.7	143.5	146.9	149.9	153.3	156.8
162.5°	134.0	133.8	134.9	136.7	138.5	140.6	144.0	146.8	149.1	151.9	154.9
165°	137.1	136.6	137.5	138.8	140.1	141.8	144.1	146.3	148.1	149.9	152.1
167.5°	139.3	138.9	139.5	140.2	141.0	142.2	144.1	145.7	146.5	147.8	149.4
170°	140.6	140.3	140.6	141.2	141.8	142.6	144.1	145.2	145.8	146.7	147.8
172.5°	141.5	141.0	141.3	141.9	142.2	142.6	143.8	144.8	144.9	145.3	146.2
175°	142.6	142.0	142.4	142.6	142.6	142.6	143.5	144.1	143.8	143.8	144.1
177.5°	143.2	142.7	142.7	142.9	142.7	142.7	143.2	143.4	142.9	142.9	143.2
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9



TEST NUMBER: P333165-930

CATALOG NUMBER: S125DIP-S610D365U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	67.6	70.8	74.0	76.2	77.2	78.1	79.2	80.1
90°	62.3	65.8	69.2	71.8	72.8	73.8	75.0	76.0
92.5°	106.0	95.1	88.9	86.7	84.0	84.2	84.8	85.3
95°	258.4	217.7	185.2	163.1	143.6	135.9	134.5	130.9
97.5°	356.4	328.6	297.0	265.2	248.3	233.2	225.8	223.0
100°	399.8	388.6	361.8	333.7	314.6	294.7	284.9	281.1
102.5°	413.1	424.5	413.1	394.6	374.2	360.3	349.5	346.9
105°	400.3	442.5	458.0	456.6	448.4	439.9	435.0	432.6
107.5°	364.8	420.2	455.5	472.3	477.8	478.7	477.6	476.1
110°	338.6	396.0	439.2	465.5	479.4	485.8	488.9	489.8



TEST NUMBER: P333165-930

CATALOG NUMBER: S125DIP-S610D365U930-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	317.5	372.0	415.6	446.2	466.1	476.5	482.5	485.5
115°	290.7	337.9	379.8	412.9	436.2	450.9	459.7	464.3
117.5°	272.1	313.0	349.4	379.8	403.2	418.4	427.4	430.6
120°	261.9	298.8	332.8	359.8	381.9	396.6	405.2	408.3
122.5°	253.5	287.7	318.2	343.5	363.3	376.8	385.4	388.3
125°	241.4	273.0	300.3	322.5	339.2	351.8	358.8	362.4
127.5°	229.0	258.4	283.9	304.8	320.2	331.4	338.2	340.2
130°	221.5	248.8	273.2	293.3	308.3	318.5	325.0	327.4
132.5°	213.8	239.5	261.8	281.0	296.0	306.1	312.0	314.5
135°	203.0	224.7	244.9	262.6	276.0	286.2	292.0	294.5
137.5°	194.1	211.8	228.8	243.9	255.8	264.9	270.3	272.7
140°	189.0	204.0	218.8	232.0	243.1	251.2	256.1	258.0
142.5°	184.5	197.3	210.0	221.4	231.0	237.9	242.6	244.3
145°	179.1	188.7	198.4	206.8	214.3	219.7	223.5	225.1
147.5°	174.6	182.0	189.1	195.2	200.9	205.1	207.2	208.0
150°	172.0	178.4	183.8	189.1	193.6	197.1	198.4	198.9
152.5°	169.7	175.4	180.3	184.4	188.1	190.9	192.1	192.3
155°	166.2	170.9	174.9	178.1	180.9	183.0	183.8	184.1
157.5°	162.8	166.6	169.7	172.2	174.5	176.1	176.9	176.8
160°	160.5	163.4	166.2	168.3	170.3	171.7	172.3	172.0
162.5°	157.9	160.6	163.1	164.9	166.4	167.5	167.7	167.6
165°	154.4	156.5	158.2	159.6	160.8	161.3	161.3	161.3
167.5°	151.1	152.5	153.8	154.8	155.4	155.9	155.6	155.6
170°	149.3	150.1	151.0	151.6	152.1	152.5	152.5	152.1
172.5°	147.2	148.1	148.7	149.0	149.1	149.7	149.2	148.9
175°	145.0	145.0	145.5	145.5	145.5	145.8	145.2	145.0
177.5°	143.4	143.6	143.6	143.6	143.4	143.6	142.9	142.9
180°	142.9	142.9	142.9	142.9	142.9	142.9	142.9	142.9

(END OF REPORT)