

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: P333165-927

Luminaire Tested: **S125DIP-S610D365U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333165-927
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-S610D365U927-4F0-1E-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: 2943.7 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

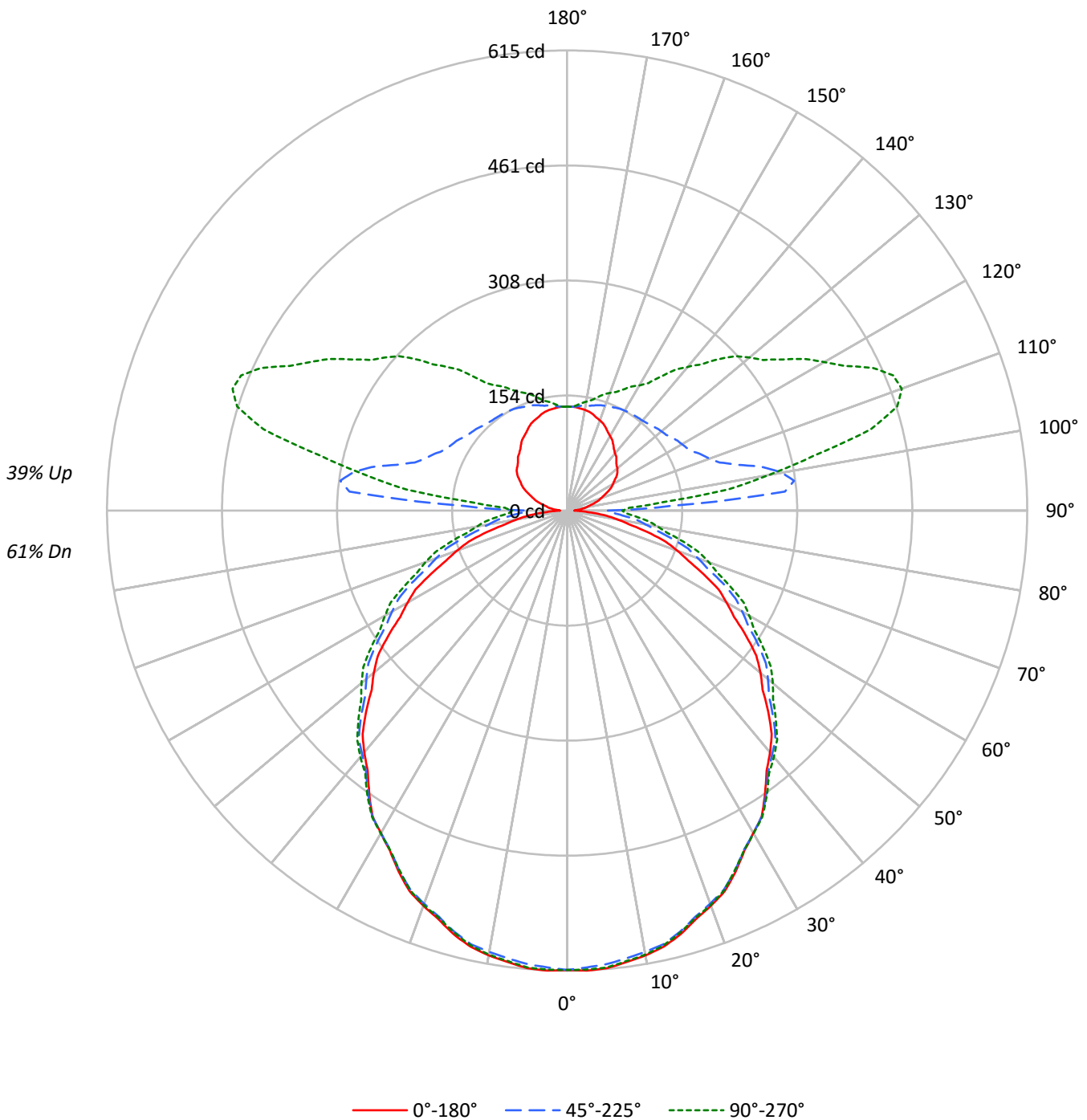
Input Watts (W): 27.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333165-927

CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333165-927

CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-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°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



TEST NUMBER: P333165-927

CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	2.0
10°-20°	164.8	5.6
20°-30°	245.1	8.3
30°-40°	290.3	9.9
40°-50°	300.2	10.2
50°-60°	276.5	9.4
60°-70°	223.5	7.6
70°-80°	149.7	5.1
80°-90°	78.4	2.7
90°-100°	144.2	4.9
100°-110°	248.5	8.4
110°-120°	224.6	7.6
120°-130°	176.8	6.0
130°-140°	137.4	4.7
140°-150°	100.7	3.4
150°-160°	70.2	2.4
160°-170°	41.4	1.4
170°-180°	13.5	0.5
0°-30°	467.9	15.9
0°-40°	758.2	25.8
0°-60°	1334.9	45.3
0°-90°	1786.5	60.7
90°-120°	617.3	21.0
90°-150°	1032.2	35.1
90°-180°	1157.0	39.3
0°-180°	2943.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	32	54	69	74	7
95°	17	51	292	169	127	16
105°	37	60	236	444	420	39
115°	60	77	186	385	451	59
125°	81	94	170	303	352	72
135°	93	111	160	247	286	72
145°	108	122	156	197	219	67
155°	122	131	152	171	179	56
165°	133	137	146	154	157	38
175°	139	139	140	141	141	13
180°	139	139	139	139	139	



TEST NUMBER: P333165-927

CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.1	27.6	31.9	36.4	40.9	45.5	50.1	54.7	59.4	62.5
90°	9.9	14.5	19.3	24.2	29.0	34.0	38.8	43.9	48.7	53.9	57.2
92.5°	12.1	16.8	23.1	30.5	39.3	51.7	71.7	102.0	134.5	137.7	123.5
95°	17.0	20.8	26.5	33.1	42.7	59.3	93.9	160.0	241.8	292.0	289.6
97.5°	22.4	25.9	30.6	36.8	45.5	58.3	82.5	132.1	217.3	305.9	350.9
100°	26.2	29.5	33.5	39.4	47.5	59.5	80.0	120.6	195.5	291.4	364.2
102.5°	30.4	33.4	36.8	42.8	50.2	61.8	80.4	115.2	178.9	268.2	352.7
105°	37.1	39.2	42.7	47.7	54.3	65.2	81.5	110.4	161.2	236.1	319.1
107.5°	43.5	45.9	49.0	53.2	59.7	69.5	85.3	110.5	152.5	213.6	285.5
110°	48.2	50.3	53.1	57.2	63.0	73.0	88.2	111.2	148.9	202.4	266.0



TEST NUMBER: P333165-927

CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	53.3	55.1	57.4	61.2	66.6	76.1	90.8	112.6	147.0	195.1	251.0
115°	60.1	61.6	63.5	66.9	72.0	81.2	95.1	114.8	145.1	186.4	233.9
117.5°	66.3	67.7	69.2	72.4	77.8	86.5	99.6	117.6	144.3	180.7	222.4
120°	70.7	72.0	73.5	76.4	81.6	90.3	103.2	119.7	144.3	177.4	215.8
122.5°	75.0	75.8	76.8	79.6	85.0	93.6	106.3	122.1	144.1	174.4	209.7
125°	80.8	81.2	82.5	84.8	90.1	98.6	110.5	125.2	144.2	170.1	201.3
127.5°	84.8	85.6	87.2	90.2	95.8	104.1	115.2	128.5	144.8	166.6	193.4
130°	87.8	88.5	90.5	94.1	99.8	108.0	118.5	131.0	145.5	164.7	188.5
132.5°	89.5	90.5	93.2	97.3	103.4	111.3	121.4	132.8	146.0	162.8	183.9
135°	93.0	94.0	97.3	101.6	107.3	115.3	124.9	135.1	146.4	159.9	177.6
137.5°	97.5	98.2	101.2	105.7	111.3	119.2	127.6	136.9	147.2	158.1	172.5
140°	99.7	100.5	103.9	108.4	113.7	121.4	129.6	138.2	147.2	156.9	169.5
142.5°	102.8	103.4	106.4	110.7	115.7	122.8	130.6	138.5	147.0	156.1	167.2
145°	107.6	108.0	110.7	114.4	119.3	125.7	133.0	140.0	147.5	155.7	164.7
147.5°	111.9	112.2	114.6	118.3	122.6	128.3	134.7	141.0	147.8	155.0	162.6
150°	114.8	115.3	117.3	121.0	124.8	129.6	135.8	141.6	147.8	154.2	161.0
152.5°	118.0	118.3	120.0	123.2	126.9	131.2	136.9	142.1	147.6	153.4	159.4
155°	122.1	122.1	123.7	126.5	129.4	133.2	138.0	142.5	146.9	151.8	156.8
157.5°	125.8	125.7	127.1	129.4	131.9	134.9	138.9	142.8	146.2	150.0	154.3
160°	128.3	127.9	129.0	131.0	133.2	135.8	139.4	142.8	145.6	148.9	152.3
162.5°	130.2	130.0	131.1	132.8	134.6	136.7	139.9	142.6	144.9	147.6	150.5
165°	133.2	132.7	133.6	134.9	136.1	137.8	140.0	142.2	143.9	145.6	147.8
167.5°	135.3	135.0	135.5	136.3	137.0	138.2	140.0	141.6	142.4	143.6	145.2
170°	136.7	136.3	136.7	137.2	137.8	138.6	140.0	141.1	141.6	142.5	143.6
172.5°	137.5	137.0	137.3	137.8	138.2	138.6	139.7	140.7	140.8	141.2	142.0
175°	138.6	138.0	138.3	138.6	138.6	138.6	139.4	140.0	139.7	139.7	140.0
177.5°	139.1	138.6	138.6	138.9	138.6	138.6	139.1	139.3	138.9	138.9	139.1
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9



TEST NUMBER: P333165-927

CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	65.7	68.8	71.9	74.1	75.0	75.9	76.9	77.9
90°	60.5	63.9	67.3	69.8	70.7	71.7	72.9	73.8
92.5°	103.0	92.4	86.4	84.2	81.6	81.8	82.4	82.9
95°	251.1	211.5	180.0	158.4	139.5	132.1	130.7	127.2
97.5°	346.3	319.3	288.6	257.7	241.3	226.6	219.4	216.7
100°	388.5	377.6	351.6	324.2	305.7	286.4	276.8	273.1
102.5°	401.4	412.5	401.4	383.4	363.6	350.1	339.6	337.1
105°	389.0	430.0	445.0	443.7	435.7	427.4	422.7	420.3
107.5°	354.4	408.3	442.6	458.9	464.3	465.1	464.1	462.6
110°	329.0	384.8	426.7	452.3	465.8	472.1	475.0	475.9



TEST NUMBER: P333165-927

CATALOG NUMBER: S125DIP-S610D365U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	308.5	361.5	403.8	433.6	452.9	463.0	468.8	471.7
115°	282.5	328.3	369.1	401.2	423.8	438.1	446.7	451.1
117.5°	264.4	304.1	339.5	369.0	391.7	406.5	415.3	418.4
120°	254.4	290.3	323.4	349.6	371.1	385.3	393.7	396.7
122.5°	246.3	279.6	309.2	333.7	353.0	366.1	374.5	377.3
125°	234.6	265.2	291.8	313.3	329.6	341.8	348.6	352.1
127.5°	222.5	251.1	275.8	296.1	311.1	322.0	328.6	330.6
130°	215.2	241.8	265.5	284.9	299.6	309.5	315.8	318.1
132.5°	207.7	232.7	254.4	273.1	287.6	297.5	303.2	305.6
135°	197.3	218.3	238.0	255.2	268.2	278.1	283.8	286.1
137.5°	188.6	205.8	222.3	236.9	248.5	257.4	262.6	265.0
140°	183.6	198.2	212.6	225.4	236.2	244.1	248.8	250.7
142.5°	179.3	191.7	204.1	215.2	224.4	231.2	235.7	237.3
145°	174.0	183.4	192.7	200.9	208.2	213.5	217.1	218.7
147.5°	169.6	176.8	183.7	189.6	195.2	199.3	201.3	202.1
150°	167.2	173.3	178.6	183.7	188.1	191.5	192.8	193.2
152.5°	164.9	170.4	175.2	179.2	182.8	185.4	186.6	186.9
155°	161.5	166.0	169.9	173.0	175.8	177.8	178.6	178.9
157.5°	158.2	161.8	164.9	167.3	169.5	171.1	171.9	171.8
160°	156.0	158.8	161.5	163.5	165.5	166.8	167.4	167.2
162.5°	153.4	156.1	158.4	160.2	161.7	162.8	163.0	162.9
165°	150.0	152.0	153.7	155.1	156.2	156.8	156.8	156.8
167.5°	146.8	148.1	149.4	150.4	151.0	151.5	151.2	151.1
170°	145.0	145.8	146.7	147.3	147.8	148.1	148.1	147.8
172.5°	143.0	143.9	144.5	144.8	144.9	145.4	145.0	144.7
175°	140.9	140.9	141.4	141.4	141.4	141.6	141.1	140.9
177.5°	139.3	139.5	139.5	139.5	139.3	139.5	138.9	138.9
180°	138.9	138.9	138.9	138.9	138.9	138.9	138.9	138.9

(END OF REPORT)