

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: P333128-935

Luminaire Tested: **S125DIP-S375D590U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333128-935
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-S375D590U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3019.7 lumens
Efficiency: N/A
Efficacy: 118.0 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: Semi-Indirect

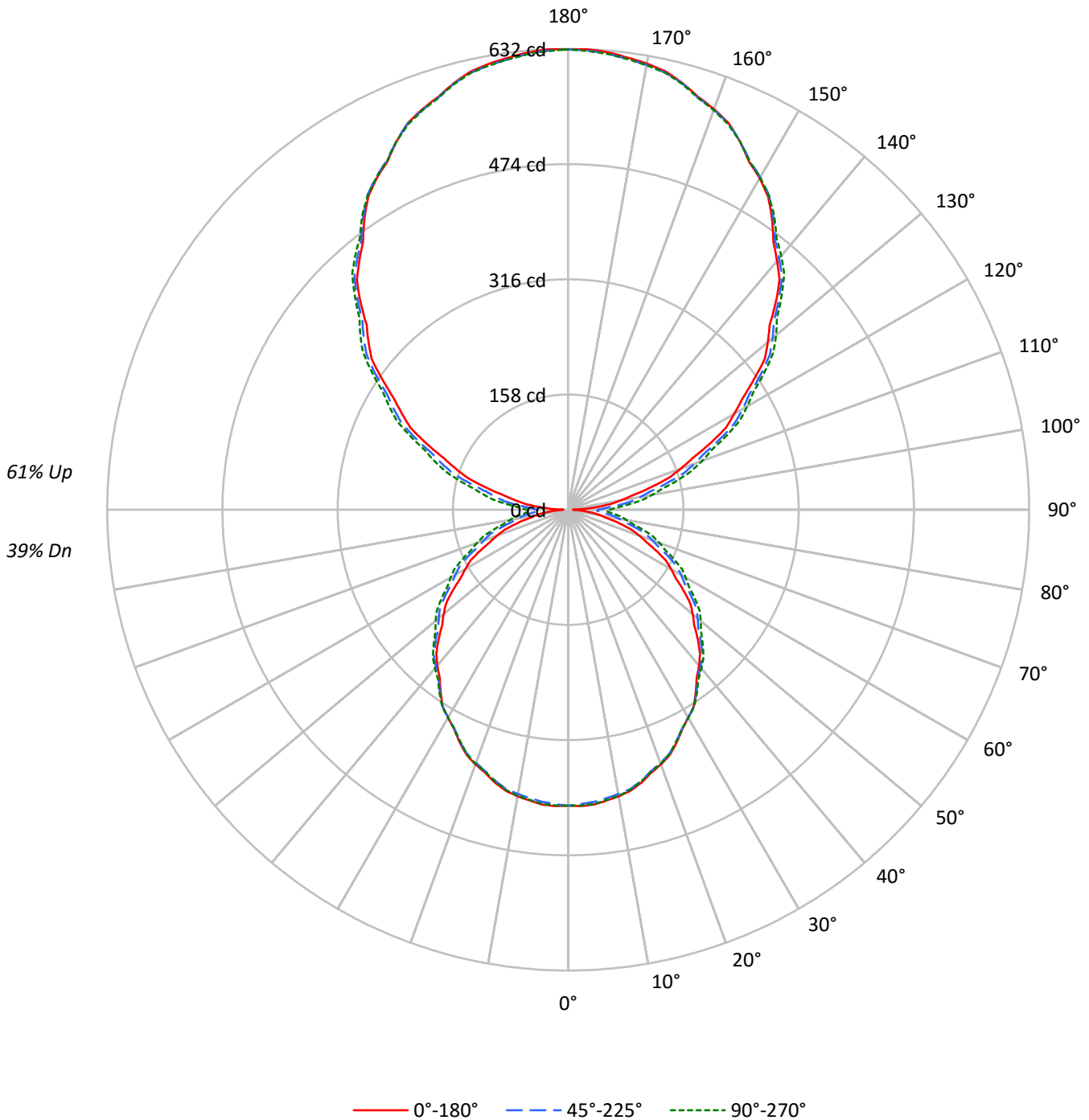
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333128-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





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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	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	90	86	83	86	82	79	76	67	64	62	53	51	50	40	39	38	32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26
3	78	69	61	55	71	63	56	51	51	46	43	40	37	34	31	28	26	22
4	72	61	53	47	65	55	48	43	45	40	36	36	32	29	27	25	23	19
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	20	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	25	21	24	20	17	18	16	14	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2621	2621	2621
5°	2627	2573	2581
10°	2608	2527	2523
15°	2577	2472	2450
20°	2535	2404	2376
25°	2485	2331	2285
30°	2425	2251	2203
35°	2369	2178	2127
40°	2312	2100	2051
45°	2247	2033	1983
50°	2184	1962	1924
55°	2110	1894	1854
60°	2028	1817	1782
65°	1944	1736	1703
70°	1849	1625	1620
75°	1695	1518	1517
80°	1493	1389	1408
85°	1311	1301	1373



TEST NUMBER: P333128-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	1.3
10°-20°	108.9	3.6
20°-30°	162.0	5.4
30°-40°	191.9	6.4
40°-50°	198.4	6.6
50°-60°	182.8	6.1
60°-70°	147.8	4.9
70°-80°	99.0	3.3
80°-90°	52.7	1.7
90°-100°	71.1	2.4
100°-110°	146.1	4.8
110°-120°	225.7	7.5
120°-130°	286.3	9.5
130°-140°	315.3	10.4
140°-150°	306.3	10.1
150°-160°	256.7	8.5
160°-170°	170.6	5.7
170°-180°	59.7	2.0
0°-30°	309.4	10.2
0°-40°	501.3	16.6
0°-60°	882.5	29.2
0°-90°	1181.9	39.1
90°-120°	442.8	14.7
90°-150°	1350.8	44.7
90°-180°	1838.0	60.9
0°-180°	3019.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	406	405	402	405	405	38
15°	388	388	385	387	386	109
25°	352	353	351	352	351	162
35°	305	307	306	308	308	191
45°	251	255	257	260	261	194
55°	193	199	206	210	212	172
65°	133	142	152	157	159	132
75°	73	84	96	104	106	78
85°	22	35	49	57	61	23
90°	7	24	40	52	56	6
95°	37	49	67	79	83	38
105°	116	125	139	150	154	123
115°	214	219	230	237	239	212
125°	311	313	322	327	328	278
135°	403	405	408	413	414	310
145°	487	489	490	492	492	304
155°	557	557	558	559	557	256
165°	606	605	605	607	604	171
175°	630	628	628	630	627	60
180°	631	631	631	631	631	



TEST NUMBER: P333128-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	406.8	406.7	406.6	406.4	406.3	406.0	405.4	404.9	404.5	404.0	404.5
5°	405.9	405.7	405.5	405.4	405.2	404.8	404.2	403.6	402.9	402.3	403.0
7.5°	402.3	402.3	402.2	402.1	402.0	401.7	401.1	400.4	399.8	399.1	399.8
10°	399.1	399.1	399.1	399.1	399.1	398.7	398.0	397.4	396.7	395.9	396.6
12.5°	394.7	394.8	394.8	394.9	394.9	394.7	394.2	393.6	393.0	392.4	392.9
15°	387.5	387.6	387.7	387.9	388.0	387.6	387.0	386.4	385.8	385.2	385.7
17.5°	378.3	378.5	378.7	378.8	379.0	378.8	378.2	377.5	376.9	376.3	376.8
20°	371.7	371.9	372.0	372.2	372.4	372.1	371.5	370.9	370.3	369.6	370.0
22.5°	364.0	364.4	364.6	365.0	365.3	365.1	364.4	363.7	363.0	362.3	362.7
25°	352.1	352.4	352.7	352.9	353.2	353.1	352.6	352.1	351.5	350.9	351.3
27.5°	339.0	339.3	339.8	340.1	340.5	340.4	339.8	339.2	338.6	338.0	338.2
30°	329.1	329.6	330.1	330.7	331.2	331.2	330.7	330.1	329.6	329.1	329.2
32.5°	320.2	320.6	321.1	321.6	322.0	322.0	321.7	321.2	320.9	320.5	320.6
35°	304.8	305.4	306.1	306.7	307.3	307.5	307.2	306.9	306.7	306.4	306.7
37.5°	289.5	290.0	290.6	291.1	291.7	292.0	291.9	291.8	291.7	291.6	292.0
40°	279.0	279.7	280.3	281.0	281.8	282.1	282.0	281.9	281.8	281.7	282.1
42.5°	267.5	268.4	269.3	270.3	271.1	271.7	271.9	272.1	272.3	272.5	272.9
45°	251.1	252.1	253.0	254.0	254.9	255.7	256.1	256.6	257.0	257.4	258.0
47.5°	234.3	235.2	236.1	237.0	237.9	238.8	239.5	240.2	241.0	241.8	242.7
50°	222.8	223.8	224.8	225.8	226.7	227.7	228.7	229.6	230.6	231.6	232.6
52.5°	210.8	211.9	213.1	214.3	215.5	216.6	217.8	219.0	220.2	221.4	222.5
55°	193.0	194.4	195.8	197.3	198.6	200.1	201.5	202.9	204.3	205.7	206.7
57.5°	174.9	176.5	178.2	179.9	181.7	183.3	184.9	186.6	188.2	189.8	190.9
60°	162.7	164.5	166.3	168.1	169.8	171.6	173.3	175.1	176.9	178.7	179.9
62.5°	150.9	152.7	154.5	156.3	158.1	159.9	161.8	163.7	165.7	167.6	169.0
65°	132.9	134.9	137.0	139.0	141.0	143.1	145.3	147.4	149.5	151.6	152.9
67.5°	115.9	117.9	119.8	121.7	123.7	125.8	127.9	130.1	132.2	134.4	136.0
70°	103.5	105.5	107.5	109.5	111.6	113.7	116.1	118.4	120.6	123.0	124.7
72.5°	91.4	93.5	95.6	97.6	99.8	102.1	104.6	107.1	109.6	112.1	114.0
75°	73.2	75.5	77.8	80.1	82.4	85.0	87.8	90.7	93.5	96.3	98.1
77.5°	55.8	58.5	61.1	63.7	66.4	69.1	71.8	74.6	77.2	80.0	82.0
80°	44.9	47.6	50.3	53.0	55.5	58.4	61.4	64.4	67.4	70.4	72.4
82.5°	35.1	37.9	40.7	43.5	46.2	49.2	52.3	55.4	58.5	61.5	63.4
85°	21.9	24.8	27.7	30.7	33.6	36.6	39.7	42.8	45.9	48.9	50.9
87.5°	12.5	15.5	18.5	21.5	24.5	27.6	30.7	33.9	37.1	40.2	42.4
90°	6.9	10.6	14.3	18.0	21.7	25.4	29.2	33.0	36.7	40.5	43.0
92.5°	17.7	20.8	24.1	27.3	30.6	34.2	38.1	42.2	46.2	50.2	52.9
95°	37.1	39.6	42.1	44.7	47.2	50.5	54.6	58.6	62.8	66.9	69.6
97.5°	57.8	59.9	62.1	64.2	66.4	69.7	74.0	78.4	82.8	87.3	89.9
100°	73.1	75.0	76.9	78.7	80.6	83.6	87.9	92.1	96.3	100.7	103.5
102.5°	89.7	91.9	94.0	96.2	98.3	101.2	104.6	108.1	111.6	115.0	118.0
105°	115.5	117.5	119.5	121.5	123.4	126.1	129.3	132.7	136.0	139.3	141.7
107.5°	144.1	145.9	147.7	149.4	151.2	153.6	156.6	159.6	162.7	165.7	167.8
110°	163.9	165.5	167.1	168.7	170.3	172.5	175.3	178.1	180.9	183.7	185.7



TEST NUMBER: P333128-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	184.3	185.5	186.6	187.7	188.8	190.8	193.6	196.5	199.3	202.1	203.9
115°	214.0	215.2	216.2	217.2	218.3	220.1	222.6	225.2	227.6	230.1	231.6
117.5°	243.9	244.5	245.1	245.7	246.3	247.9	250.2	252.6	254.9	257.4	258.9
120°	262.8	263.6	264.4	265.3	266.0	267.5	269.7	271.8	274.0	276.1	277.6
122.5°	282.9	283.3	283.5	283.9	284.2	285.5	287.7	290.0	292.2	294.5	295.8
125°	310.6	311.1	311.7	312.2	312.8	314.0	315.9	317.8	319.7	321.6	322.7
127.5°	339.6	339.9	340.2	340.4	340.8	341.6	343.3	344.8	346.4	348.0	349.2
130°	357.3	357.7	358.2	358.7	359.1	360.1	361.5	363.0	364.5	365.9	367.0
132.5°	374.6	375.6	376.4	377.3	378.2	379.1	380.0	380.9	381.8	382.7	383.8
135°	402.6	403.1	403.7	404.2	404.8	405.5	406.2	406.9	407.7	408.4	409.6
137.5°	428.9	429.4	430.0	430.5	431.1	431.6	432.1	432.7	433.3	433.8	435.0
140°	445.4	445.9	446.5	447.0	447.5	448.1	448.5	448.9	449.4	449.7	450.9
142.5°	462.3	462.7	463.0	463.5	463.8	464.3	464.7	465.1	465.5	466.0	466.9
145°	487.2	487.5	487.8	488.2	488.5	488.9	489.2	489.6	489.9	490.2	490.6
147.5°	509.7	510.0	510.2	510.5	510.7	510.9	511.2	511.5	511.8	512.0	512.4
150°	525.0	525.0	524.9	524.8	524.6	524.8	525.2	525.6	526.1	526.5	526.5
152.5°	537.6	537.8	538.0	538.1	538.2	538.4	538.6	538.7	538.9	539.2	539.4
155°	557.0	557.0	557.0	557.0	557.0	557.1	557.2	557.2	557.4	557.5	557.9
157.5°	574.3	574.0	573.8	573.6	573.3	573.3	573.3	573.5	573.6	573.7	574.1
160°	584.5	584.2	583.8	583.5	583.2	583.1	583.2	583.3	583.4	583.5	583.9
162.5°	593.6	593.3	593.1	592.8	592.5	592.5	592.5	592.5	592.5	592.5	593.1
165°	605.6	605.4	605.2	604.9	604.8	604.7	604.8	604.9	605.0	605.1	605.5
167.5°	615.9	615.4	614.9	614.5	614.1	613.9	613.9	613.9	613.9	613.9	614.5
170°	621.3	620.9	620.4	620.0	619.6	619.4	619.4	619.4	619.4	619.4	620.0
172.5°	625.3	624.8	624.4	624.0	623.5	623.3	623.3	623.3	623.3	623.3	624.0
175°	629.6	629.2	628.8	628.4	627.9	627.8	627.8	627.8	627.8	627.8	628.4
177.5°	632.0	631.6	631.3	630.9	630.5	630.3	630.3	630.2	630.1	630.0	630.5
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2



TEST NUMBER: P333128-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	404.9	405.4	406.0	406.1	406.0	406.0	406.0	405.9
5°	403.7	404.4	405.1	405.4	405.4	405.3	405.2	405.1
7.5°	400.4	401.0	401.6	401.8	401.7	401.7	401.6	401.5
10°	397.2	397.8	398.4	398.6	398.6	398.5	398.4	398.3
12.5°	393.4	393.8	394.3	394.4	394.3	394.0	393.7	393.6
15°	386.2	386.8	387.3	387.4	387.0	386.7	386.3	386.0
17.5°	377.2	377.5	378.0	378.1	377.9	377.6	377.5	377.2
20°	370.2	370.5	370.7	370.8	370.8	370.8	370.8	370.8
22.5°	363.0	363.3	363.7	363.8	363.5	363.3	363.1	362.9
25°	351.6	352.1	352.4	352.3	351.9	351.5	351.0	350.6
27.5°	338.5	338.7	339.0	339.1	338.9	338.7	338.5	338.4
30°	329.4	329.6	329.8	329.8	329.8	329.7	329.6	329.5
32.5°	320.8	321.0	321.2	321.2	321.2	321.1	321.0	320.9
35°	306.9	307.2	307.5	307.5	307.5	307.5	307.5	307.5
37.5°	292.3	292.7	293.0	293.2	293.2	293.1	293.1	293.0
40°	282.4	282.8	283.2	283.4	283.6	283.8	284.0	284.1
42.5°	273.4	273.8	274.2	274.4	274.5	274.5	274.5	274.6
45°	258.7	259.3	259.9	260.3	260.4	260.5	260.5	260.6
47.5°	243.6	244.5	245.4	245.9	246.2	246.3	246.5	246.7
50°	233.5	234.5	235.5	236.1	236.3	236.6	236.9	237.1
52.5°	223.5	224.5	225.6	226.2	226.4	226.6	226.8	227.0
55°	207.7	208.6	209.7	210.3	210.6	210.9	211.4	211.7
57.5°	192.0	193.1	194.2	194.9	195.2	195.4	195.8	196.0
60°	181.3	182.6	184.0	184.8	185.0	185.3	185.5	185.8
62.5°	170.5	171.9	173.4	174.3	174.6	175.0	175.3	175.6
65°	154.3	155.6	156.9	157.7	158.1	158.4	158.9	159.2
67.5°	137.7	139.2	140.9	141.9	142.3	142.8	143.3	143.7
70°	126.3	128.0	129.7	130.8	131.3	131.8	132.3	132.9
72.5°	115.8	117.6	119.4	120.5	120.9	121.3	121.7	122.1
75°	99.9	101.6	103.4	104.4	105.0	105.4	105.8	106.2
77.5°	83.9	85.8	87.7	88.9	89.3	89.6	90.0	90.3
80°	74.3	76.3	78.2	79.4	79.7	80.1	80.4	80.8
82.5°	65.3	67.2	69.1	70.3	70.9	71.5	72.2	72.8
85°	52.9	54.8	56.7	58.0	58.7	59.5	60.2	60.9
87.5°	44.5	46.7	48.8	50.2	50.9	51.6	52.3	53.0
90°	45.6	48.2	50.8	52.6	53.6	54.5	55.4	56.4
92.5°	55.6	58.3	61.0	62.7	63.5	64.4	65.3	66.1
95°	72.3	75.0	77.7	79.5	80.3	81.2	82.0	82.8
97.5°	92.5	95.0	97.6	99.3	100.0	100.7	101.4	102.2
100°	106.3	109.2	112.0	113.7	114.5	115.3	116.0	116.8
102.5°	120.8	123.6	126.5	128.3	129.2	130.0	130.9	131.6
105°	144.1	146.5	149.0	150.7	151.6	152.6	153.5	154.5
107.5°	169.9	172.0	174.1	175.4	175.9	176.4	176.9	177.5
110°	187.8	189.8	191.7	193.0	193.6	194.1	194.6	195.1



TEST NUMBER: P333128-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	205.6	207.4	209.1	210.3	210.7	211.1	211.5	212.0
115°	233.2	234.6	236.1	237.0	237.5	237.9	238.3	238.8
117.5°	260.5	262.1	263.7	264.6	264.8	264.9	265.1	265.2
120°	279.1	280.6	282.1	282.9	283.0	283.1	283.2	283.3
122.5°	297.1	298.5	299.9	300.6	300.8	301.0	301.2	301.4
125°	323.9	325.1	326.3	327.1	327.4	327.8	328.1	328.4
127.5°	350.4	351.6	352.8	353.5	353.9	354.1	354.5	354.7
130°	368.2	369.3	370.4	371.1	371.3	371.5	371.8	372.0
132.5°	385.0	386.1	387.2	387.8	387.9	388.0	388.1	388.1
135°	410.7	411.8	413.0	413.5	413.6	413.6	413.6	413.6
137.5°	436.1	437.3	438.5	438.9	438.8	438.6	438.4	438.2
140°	452.1	453.3	454.5	455.0	454.8	454.6	454.4	454.3
142.5°	468.0	468.9	469.8	470.2	470.0	469.8	469.7	469.4
145°	491.1	491.5	492.0	492.2	492.2	492.2	492.2	492.3
147.5°	512.8	513.2	513.6	513.5	513.0	512.4	511.8	511.2
150°	526.5	526.5	526.5	526.5	526.3	526.2	526.1	526.0
152.5°	539.7	539.9	540.2	540.1	539.8	539.3	539.0	538.6
155°	558.4	558.8	559.2	559.2	558.6	558.1	557.5	557.0
157.5°	574.5	575.0	575.4	575.3	574.5	573.9	573.2	572.4
160°	584.4	584.8	585.2	585.2	584.7	584.1	583.6	583.1
162.5°	593.6	594.1	594.7	594.6	594.0	593.3	592.7	592.0
165°	606.0	606.4	606.9	606.7	606.1	605.5	604.8	604.2
167.5°	615.2	615.9	616.5	616.5	615.8	615.1	614.4	613.8
170°	620.7	621.3	622.0	621.9	621.2	620.4	619.7	618.9
172.5°	624.7	625.3	625.9	625.9	625.3	624.6	623.9	623.2
175°	629.0	629.6	630.3	630.3	629.6	628.8	628.0	627.2
177.5°	631.0	631.5	632.1	632.1	631.5	630.9	630.2	629.6
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2

(END OF REPORT)