

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: P333646-930

Luminaire Tested: **S125RDIW-S375D770U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333646-930
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: S125RDIW-S375D770U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3682.8 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

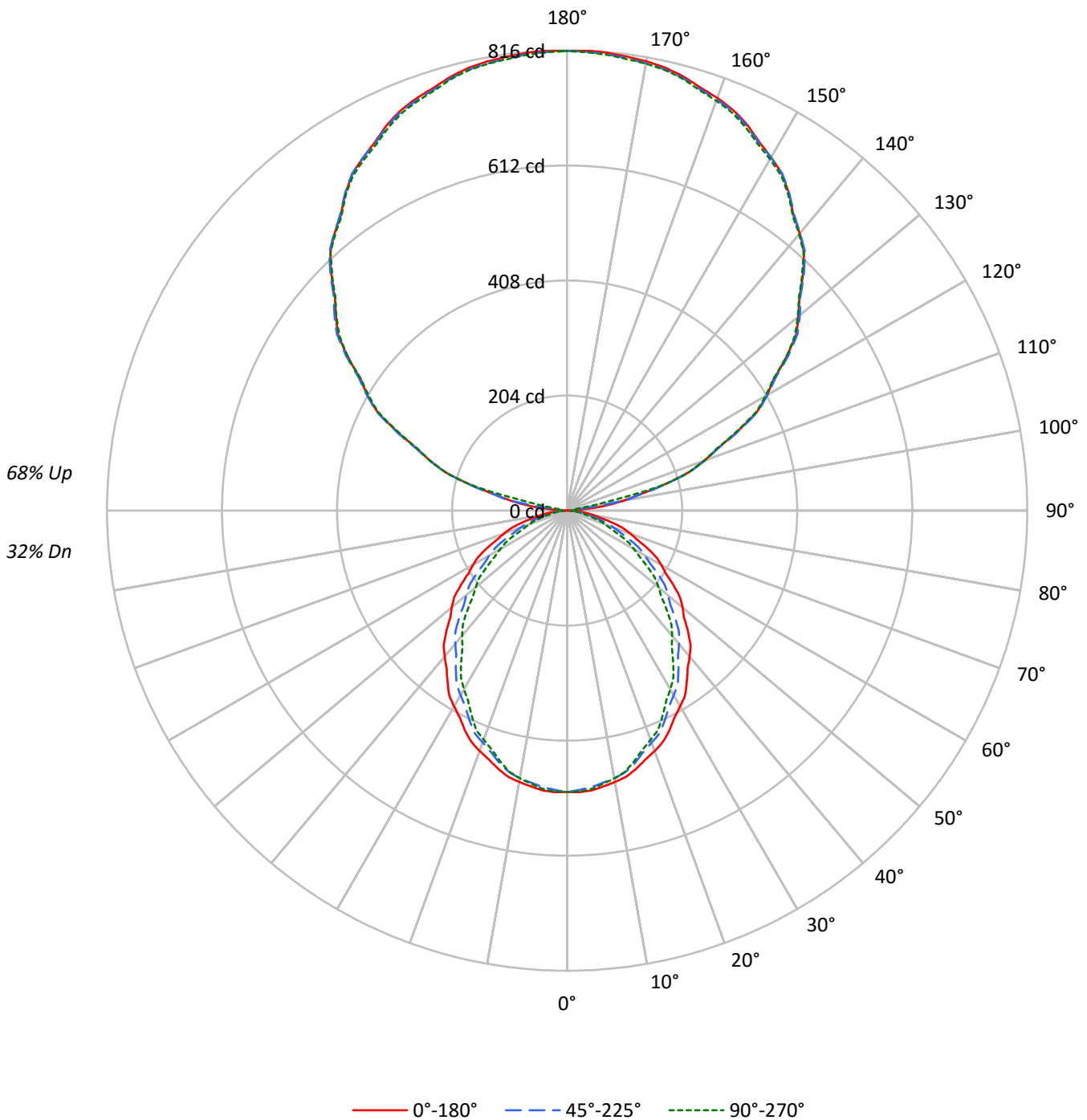
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333646-930

CATALOG NUMBER: S125RDIW-S375D770U930-4F0-1E-UDD-F

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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	86	78	73	68	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	52	50	46	42	38	36	33	28	26	24	20
4	71	61	53	48	64	55	49	44	44	40	36	34	31	28	25	23	21	17
5	66	54	47	41	59	49	43	37	40	35	31	31	27	25	22	20	18	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	14	12
8	52	40	32	27	46	36	30	25	29	24	21	23	20	17	17	15	13	10
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	13	12	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3222	3222	3222
5°	3229	3192	3212
10°	3205	3163	3163
15°	3167	3099	3074
20°	3118	3009	2973
25°	3061	2921	2857
30°	2990	2818	2729
35°	2917	2713	2584
40°	2850	2602	2443
45°	2767	2478	2288
50°	2685	2344	2127
55°	2587	2215	1956
60°	2492	2059	1771
65°	2378	1878	1560
70°	2247	1650	1344
75°	2069	1392	1118
80°	1822	1093	941
85°	1534	897	837



TEST NUMBER: P333646-930

CATALOG NUMBER: S125RDIW-S375D770U930-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	1.3
10°-20°	131.1	3.6
20°-30°	190.1	5.2
30°-40°	216.7	5.9
40°-50°	211.2	5.7
50°-60°	177.8	4.8
60°-70°	124.6	3.4
70°-80°	64.1	1.7
80°-90°	17.9	0.5
90°-100°	29.6	0.8
100°-110°	182.5	5.0
110°-120°	331.0	9.0
120°-130°	424.8	11.5
130°-140°	456.9	12.4
140°-150°	428.9	11.6
150°-160°	346.9	9.4
160°-170°	224.4	6.1
170°-180°	77.4	2.1
0°-30°	368.1	10.0
0°-40°	584.8	15.9
0°-60°	973.7	26.4
0°-90°	1180.3	32.0
90°-120°	543.2	14.7
90°-150°	1853.8	50.3
90°-180°	2503.0	68.0
0°-180°	3682.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	498	496	492	496	496	47
15°	474	471	464	463	460	133
25°	430	423	410	405	401	198
35°	370	361	344	333	328	232
45°	303	292	271	257	250	234
55°	230	217	197	180	174	206
65°	156	142	123	108	102	154
75°	83	71	56	48	45	88
85°	21	14	12	12	11	23
90°	1	5	10	13	14	2
95°	34	32	10	12	13	44
105°	178	180	180	180	179	188
115°	334	336	337	335	331	330
125°	474	478	478	476	474	423
135°	591	595	594	592	589	456
145°	686	687	687	687	684	429
155°	755	752	753	754	750	348
165°	797	793	794	797	793	225
175°	815	812	812	816	811	78
180°	815	815	815	815	815	



TEST NUMBER: P333646-930

CATALOG NUMBER: S125RDIW-S375D770U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	499.8	499.6	499.4	499.2	499.0	498.6	497.9	497.2	496.5	495.9	496.5
5°	498.1	497.8	497.5	497.1	496.8	496.2	495.2	494.3	493.4	492.4	493.3
7.5°	493.3	492.9	492.6	492.3	492.0	491.2	490.2	489.0	488.0	486.8	487.4
10°	488.7	488.4	488.2	488.0	487.7	487.0	485.8	484.6	483.5	482.3	482.6
12.5°	483.6	483.2	483.0	482.7	482.3	481.4	479.8	478.3	476.6	475.1	475.2
15°	473.6	473.1	472.6	472.1	471.7	470.5	468.7	467.0	465.2	463.5	463.4
17.5°	462.4	461.6	460.9	460.1	459.3	457.9	455.6	453.4	451.2	449.0	448.6
20°	453.6	452.8	452.0	451.2	450.3	448.6	445.9	443.2	440.5	437.8	437.4
22.5°	444.0	443.2	442.4	441.5	440.7	438.9	436.0	433.3	430.4	427.6	426.8
25°	429.6	428.3	427.1	425.7	424.5	422.3	419.2	416.1	413.0	409.9	408.9
27.5°	412.9	411.5	409.9	408.4	406.8	404.5	401.1	397.8	394.5	391.2	389.6
30°	400.9	399.3	397.7	396.2	394.5	392.0	388.5	385.0	381.5	377.9	376.0
32.5°	389.1	387.3	385.5	383.6	381.7	379.0	375.4	371.9	368.3	364.7	362.6
35°	370.0	368.0	366.0	363.9	362.0	359.1	355.3	351.6	347.8	344.1	341.6
37.5°	351.2	348.8	346.3	343.9	341.4	338.3	334.4	330.5	326.7	322.8	319.8
40°	338.0	335.5	333.0	330.4	327.9	324.7	320.7	316.7	312.6	308.6	305.4
42.5°	324.1	321.6	318.9	316.4	313.8	310.5	306.3	302.1	298.0	293.8	290.8
45°	303.0	300.5	298.1	295.6	293.3	289.7	285.1	280.5	275.9	271.3	267.9
47.5°	281.0	278.4	275.9	273.3	270.8	267.2	262.5	257.9	253.2	248.6	245.2
50°	267.2	264.4	261.6	258.9	256.1	252.3	247.5	242.8	238.0	233.3	229.8
52.5°	252.1	249.2	246.4	243.6	240.8	237.1	232.6	228.0	223.6	219.1	215.3
55°	229.8	227.1	224.5	221.8	219.2	215.5	210.8	206.0	201.4	196.7	192.9
57.5°	207.4	204.6	201.6	198.8	195.9	192.2	187.7	183.2	178.7	174.1	170.5
60°	192.9	190.0	187.0	184.1	181.2	177.5	172.9	168.4	163.9	159.4	155.7
62.5°	177.6	174.7	171.9	169.2	166.3	162.7	158.1	153.5	148.9	144.3	140.9
65°	155.6	152.8	149.9	147.1	144.2	140.6	136.2	131.8	127.3	122.9	119.5
67.5°	133.9	131.0	128.2	125.3	122.5	118.9	114.6	110.4	106.2	101.9	98.8
70°	119.0	116.3	113.4	110.6	107.7	104.2	100.0	95.8	91.6	87.4	84.8
72.5°	104.6	101.8	99.1	96.3	93.5	90.1	86.2	82.3	78.4	74.4	72.1
75°	82.9	80.4	77.9	75.3	72.9	69.9	66.3	62.8	59.3	55.8	53.9
77.5°	61.3	59.4	57.3	55.3	53.3	50.9	48.1	45.2	42.5	39.6	38.3
80°	49.0	47.0	45.0	43.0	40.9	38.8	36.4	34.1	31.7	29.4	28.6
82.5°	36.9	35.1	33.3	31.5	29.7	28.0	26.4	24.8	23.2	21.5	21.2
85°	20.7	19.2	17.7	16.2	14.7	13.7	13.3	12.9	12.5	12.1	12.0
87.5°	7.1	6.8	6.5	6.3	6.0	6.0	6.1	6.2	6.4	6.4	6.6
90°	0.6	1.7	2.8	3.8	4.9	5.9	6.8	7.8	8.7	9.7	10.4
92.5°	9.3	8.6	7.8	7.0	6.3	6.4	7.2	8.0	8.8	9.7	10.4
95°	34.4	34.0	33.6	33.3	32.9	30.1	24.9	19.9	14.8	9.7	10.4
97.5°	71.9	72.6	73.4	74.0	74.8	70.1	60.0	49.9	39.8	29.8	25.9
100°	100.9	101.3	101.7	102.1	102.5	103.0	103.5	104.0	104.6	105.1	85.1
102.5°	130.4	130.9	131.4	131.9	132.4	132.8	133.1	133.5	133.8	134.1	130.4
105°	177.6	178.1	178.7	179.2	179.8	180.0	180.0	180.0	180.0	180.0	180.0
107.5°	226.7	226.7	226.7	226.7	226.7	226.8	227.1	227.3	227.6	227.9	227.9
110°	258.5	258.5	258.5	258.5	258.5	258.7	258.9	259.3	259.5	259.8	259.3



TEST NUMBER: P333646-930

CATALOG NUMBER: S125RDIW-S375D770U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	288.5	288.9	289.2	289.5	289.8	290.1	290.2	290.4	290.6	290.7	290.2
115°	333.5	334.1	334.8	335.5	336.1	336.6	336.7	336.8	337.0	337.1	336.6
117.5°	380.0	379.9	379.9	379.9	379.8	380.1	380.7	381.2	381.6	382.1	381.5
120°	409.0	408.9	408.7	408.5	408.5	408.5	409.0	409.4	409.8	410.2	409.9
122.5°	434.6	435.1	435.6	436.1	436.7	437.0	437.2	437.3	437.6	437.7	437.5
125°	474.3	475.2	476.1	477.0	478.0	478.4	478.4	478.4	478.4	478.4	477.9
127.5°	512.0	512.7	513.4	514.0	514.7	515.0	514.9	514.9	514.8	514.7	514.4
130°	535.2	535.9	536.5	537.3	537.9	538.3	538.4	538.6	538.7	538.8	538.4
132.5°	558.4	559.2	560.0	560.8	561.6	561.8	561.5	561.2	560.9	560.6	560.5
135°	591.4	592.2	593.0	593.9	594.7	594.9	594.7	594.4	594.1	593.9	593.5
137.5°	621.7	622.5	623.1	623.9	624.5	624.8	624.5	624.3	624.0	623.8	623.9
140°	641.6	641.8	642.1	642.4	642.6	642.7	642.5	642.5	642.3	642.1	642.5
142.5°	659.4	659.6	659.7	659.9	660.1	660.2	660.5	660.6	660.8	661.0	661.0
145°	685.7	685.9	686.2	686.5	686.7	686.9	686.9	686.9	686.9	686.9	687.0
147.5°	708.7	708.6	708.5	708.5	708.4	708.5	708.7	708.7	708.9	709.1	709.2
150°	723.1	722.8	722.6	722.3	722.0	722.0	722.3	722.6	722.8	723.1	723.4
152.5°	737.1	736.5	736.0	735.4	734.7	734.6	734.9	735.2	735.4	735.6	736.0
155°	755.1	754.3	753.5	752.7	752.0	751.6	752.0	752.2	752.4	752.7	753.1
157.5°	769.0	768.6	768.1	767.6	767.1	766.9	766.9	767.0	767.0	767.0	767.4
160°	778.7	777.9	777.1	776.2	775.5	775.1	775.3	775.4	775.5	775.7	776.2
162.5°	786.4	785.6	784.8	784.0	783.2	782.9	783.0	783.2	783.3	783.4	784.2
165°	796.8	796.0	795.2	794.4	793.6	793.3	793.4	793.5	793.7	793.8	794.6
167.5°	804.5	803.7	802.9	802.1	801.2	800.9	801.0	801.1	801.3	801.4	802.3
170°	808.9	808.0	807.0	806.1	805.1	804.7	804.9	805.0	805.1	805.3	806.3
172.5°	811.8	810.9	809.9	808.9	808.0	807.7	808.0	808.2	808.5	808.7	809.6
175°	815.0	814.2	813.3	812.5	811.7	811.4	811.5	811.6	811.8	812.0	813.0
177.5°	816.4	815.7	815.1	814.5	813.8	813.5	813.7	813.8	813.8	814.0	814.7
180°	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0



TEST NUMBER: P333646-930

CATALOG NUMBER: S125RDIW-S375D770U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	497.2	497.9	498.6	498.9	498.8	498.7	498.6	498.6
5°	494.2	495.0	495.8	496.2	496.0	495.8	495.6	495.5
7.5°	488.0	488.6	489.2	489.3	489.2	489.0	488.9	488.6
10°	482.8	483.1	483.3	483.3	483.1	482.8	482.6	482.3
12.5°	475.4	475.6	475.8	475.7	475.3	474.9	474.6	474.2
15°	463.3	463.2	463.1	462.7	461.9	461.2	460.5	459.7
17.5°	448.2	447.8	447.4	446.8	446.2	445.6	444.9	444.3
20°	437.0	436.6	436.2	435.6	434.8	434.1	433.3	432.6
22.5°	425.9	425.1	424.3	423.5	423.0	422.3	421.8	421.1
25°	407.8	406.7	405.6	404.6	403.7	402.8	401.9	400.9
27.5°	388.2	386.6	385.1	383.9	383.0	382.1	381.2	380.3
30°	374.1	372.2	370.2	368.9	368.1	367.4	366.6	365.9
32.5°	360.4	358.3	356.1	354.7	353.7	352.7	351.7	350.8
35°	339.2	336.7	334.3	332.5	331.3	330.2	329.0	327.8
37.5°	316.9	314.1	311.1	309.1	307.9	306.8	305.7	304.5
40°	302.2	299.1	295.9	293.8	292.8	291.8	290.7	289.8
42.5°	287.7	284.7	281.6	279.4	277.9	276.4	274.9	273.5
45°	264.6	261.2	257.9	255.6	254.4	253.1	251.8	250.5
47.5°	241.7	238.2	234.8	232.4	231.0	229.6	228.2	226.8
50°	226.2	222.7	219.2	216.8	215.6	214.3	213.0	211.7
52.5°	211.5	207.7	203.9	201.4	200.2	198.9	197.6	196.4
55°	189.1	185.4	181.6	179.0	177.7	176.3	175.0	173.7
57.5°	166.8	163.1	159.4	156.9	155.8	154.6	153.4	152.2
60°	152.1	148.3	144.6	142.2	140.9	139.7	138.4	137.1
62.5°	137.5	134.0	130.6	128.3	127.0	125.8	124.6	123.3
65°	116.1	112.8	109.4	107.1	105.9	104.6	103.4	102.1
67.5°	95.7	92.7	89.6	87.6	86.6	85.6	84.5	83.6
70°	82.3	79.7	77.0	75.3	74.2	73.2	72.2	71.2
72.5°	69.6	67.3	64.9	63.3	62.7	62.0	61.3	60.7
75°	52.1	50.2	48.4	47.2	46.6	46.0	45.4	44.8
77.5°	37.1	35.8	34.5	33.6	33.2	32.8	32.3	31.9
80°	27.9	27.1	26.4	25.9	25.8	25.6	25.4	25.3
82.5°	20.9	20.5	20.1	19.9	19.8	19.7	19.6	19.5
85°	11.9	11.8	11.7	11.7	11.6	11.5	11.4	11.3
87.5°	6.7	6.8	7.0	7.1	7.1	7.1	7.1	7.1
90°	11.0	11.7	12.3	12.9	13.3	13.7	14.1	14.5
92.5°	11.0	11.7	12.3	12.8	13.0	13.1	13.4	13.5
95°	11.0	11.7	12.3	12.7	12.7	12.7	12.7	12.7
97.5°	22.2	18.3	14.6	12.7	12.7	12.7	12.7	12.7
100°	65.1	45.1	25.1	14.8	14.3	13.8	13.2	12.7
102.5°	126.5	122.8	119.0	112.5	103.4	94.2	85.1	76.0
105°	180.0	180.0	180.0	179.9	179.9	179.7	179.5	179.4
107.5°	228.0	228.0	228.0	227.8	227.4	227.0	226.6	226.2
110°	258.9	258.5	258.1	258.0	258.1	258.3	258.4	258.5



TEST NUMBER: P333646-930

CATALOG NUMBER: S125RDIW-S375D770U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	289.7	289.2	288.6	288.3	288.1	288.0	287.7	287.6
115°	336.0	335.5	334.9	334.3	333.5	332.6	331.8	331.0
117.5°	380.7	380.1	379.4	378.9	378.5	378.1	377.8	377.5
120°	409.7	409.4	409.1	408.6	408.0	407.3	406.7	405.9
122.5°	437.2	436.9	436.7	436.1	435.4	434.6	433.8	433.0
125°	477.4	476.9	476.3	475.8	475.4	475.0	474.7	474.3
127.5°	514.1	513.8	513.6	512.9	511.8	510.9	509.9	508.9
130°	538.1	537.7	537.3	536.7	536.1	535.4	534.7	534.0
132.5°	560.4	560.4	560.3	559.9	559.2	558.6	557.9	557.3
135°	593.3	593.0	592.8	592.2	591.4	590.6	589.8	589.0
137.5°	623.9	623.9	624.0	623.7	623.0	622.3	621.6	620.9
140°	642.7	642.9	643.3	642.9	642.1	641.4	640.6	639.8
142.5°	661.1	661.2	661.2	660.9	660.1	659.3	658.4	657.6
145°	687.1	687.3	687.4	687.1	686.2	685.4	684.7	683.9
147.5°	709.4	709.6	709.7	709.3	708.4	707.4	706.5	705.5
150°	723.7	723.9	724.2	723.8	722.7	721.6	720.6	719.5
152.5°	736.2	736.5	736.8	736.4	735.4	734.5	733.5	732.5
155°	753.5	753.9	754.3	754.0	752.9	751.9	750.8	749.7
157.5°	767.8	768.3	768.7	768.3	767.3	766.2	765.2	764.1
160°	776.7	777.3	777.8	777.6	776.5	775.4	774.4	773.2
162.5°	784.9	785.6	786.4	786.2	785.1	783.8	782.7	781.5
165°	795.4	796.2	797.0	796.9	795.8	794.8	793.7	792.6
167.5°	803.3	804.3	805.3	805.2	804.0	802.7	801.5	800.3
170°	807.4	808.5	809.6	809.5	808.3	807.1	805.8	804.7
172.5°	810.6	811.5	812.5	812.4	811.2	810.0	808.8	807.6
175°	814.1	815.1	816.2	816.1	815.0	813.8	812.5	811.3
177.5°	815.5	816.2	817.0	816.9	816.0	815.2	814.3	813.5
180°	815.0	815.0	815.0	815.0	815.0	815.0	815.0	815.0

(END OF REPORT)