

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: P333348-927

Luminaire Tested: **S125DIW-S375D770U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333348-927  
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: S125DIW-S375D770U927-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3589.9 lumens  
Efficiency: N/A  
Efficacy: 118.1 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-Indirect

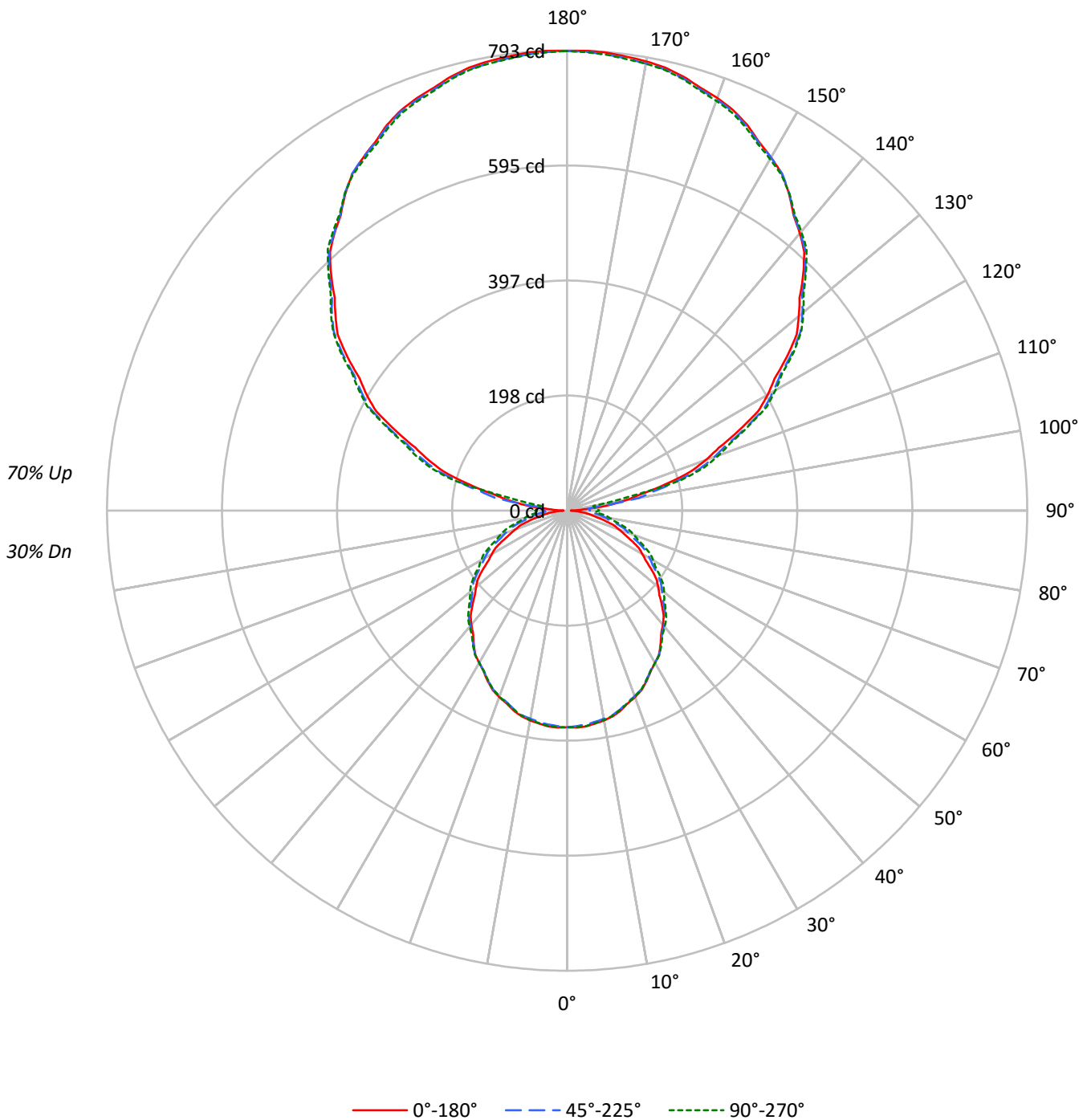
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333348-927

CATALOG NUMBER: S125DIW-S375D770U927-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





TEST NUMBER: P333348-927

CATALOG NUMBER: S125DIW-S375D770U927-4F0-1E-UDD-D

**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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	93	89	85	81	83	80	76	73	63	60	58	47	46	44	33	32	31	25
2	84	77	71	66	75	69	64	60	55	51	48	41	39	37	29	27	26	20
3	77	67	60	54	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	19	14
5	64	53	45	39	57	48	41	36	38	33	29	29	25	22	20	18	16	12
6	59	47	39	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	54	42	35	29	49	38	32	27	31	26	22	23	20	17	17	14	12	10
8	50	38	31	26	45	35	28	24	28	23	19	21	18	15	15	13	11	9
9	47	35	28	23	42	32	25	21	25	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	23	19	15	18	15	12	13	11	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2412	2412	2412
5°	2416	2367	2375
10°	2399	2324	2322
15°	2371	2274	2253
20°	2333	2212	2186
25°	2287	2145	2103
30°	2231	2071	2027
35°	2179	2003	1957
40°	2127	1932	1887
45°	2067	1871	1825
50°	2010	1805	1770
55°	1941	1743	1706
60°	1866	1671	1640
65°	1789	1597	1567
70°	1700	1494	1490
75°	1558	1397	1397
80°	1377	1278	1295
85°	1203	1197	1263



TEST NUMBER: P333348-927

CATALOG NUMBER: S125DIW-S375D770U927-4F0-1E-UDD-D

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.3	1.0
10°-20°	100.2	2.8
20°-30°	149.1	4.2
30°-40°	176.6	4.9
40°-50°	182.6	5.1
50°-60°	168.2	4.7
60°-70°	135.9	3.8
70°-80°	91.0	2.5
80°-90°	48.9	1.4
90°-100°	55.3	1.5
100°-110°	196.9	5.5
110°-120°	334.7	9.3
120°-130°	420.2	11.7
130°-140°	447.2	12.5
140°-150°	417.4	11.6
150°-160°	337.1	9.4
160°-170°	218.0	6.1
170°-180°	75.2	2.1
0°-30°	284.6	7.9
0°-40°	461.2	12.8
0°-60°	812.0	22.6
0°-90°	1087.8	30.3
90°-120°	586.9	16.3
90°-150°	1871.7	52.1
90°-180°	2502.0	69.7
0°-180°	3589.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	373	373	370	373	373	35
15°	357	357	354	356	355	100
25°	324	325	323	324	323	149
35°	280	283	282	283	283	175
45°	231	235	237	239	240	178
55°	178	183	189	193	195	159
65°	122	131	140	145	146	121
75°	67	77	89	96	98	71
85°	20	32	45	53	56	21
90°	6	23	40	50	55	5
95°	38	45	36	47	50	46
105°	176	184	195	202	204	186
115°	326	332	342	346	345	323
125°	462	466	473	477	477	413
135°	575	578	580	583	582	443
145°	667	667	667	670	668	417
155°	734	730	731	733	728	338
165°	774	771	771	774	770	219
175°	792	789	789	793	788	75
180°	792	792	792	792	792	



TEST NUMBER: P333348-927

CATALOG NUMBER: S125DIW-S375D770U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	374.3	374.1	374.1	373.9	373.8	373.5	373.0	372.6	372.2	371.7	372.2
5°	373.4	373.3	373.1	373.0	372.8	372.4	371.9	371.3	370.7	370.1	370.8
7.5°	370.1	370.1	370.0	369.9	369.9	369.6	369.0	368.4	367.8	367.2	367.8
10°	367.2	367.2	367.2	367.2	367.2	366.9	366.2	365.6	365.0	364.2	364.9
12.5°	363.1	363.2	363.2	363.3	363.4	363.1	362.7	362.1	361.6	361.1	361.5
15°	356.6	356.6	356.7	356.9	357.0	356.6	356.1	355.5	355.0	354.4	354.9
17.5°	348.1	348.2	348.4	348.6	348.7	348.6	348.0	347.4	346.8	346.3	346.7
20°	342.0	342.1	342.3	342.5	342.6	342.4	341.8	341.3	340.7	340.1	340.4
22.5°	334.9	335.3	335.5	335.8	336.1	335.9	335.3	334.6	334.0	333.4	333.7
25°	324.0	324.2	324.5	324.7	325.0	324.9	324.4	323.9	323.4	322.9	323.2
27.5°	311.9	312.2	312.6	312.9	313.3	313.2	312.7	312.1	311.6	311.0	311.2
30°	302.8	303.2	303.7	304.3	304.8	304.8	304.3	303.7	303.2	302.8	302.9
32.5°	294.6	295.0	295.4	295.9	296.3	296.3	296.0	295.6	295.2	294.9	295.0
35°	280.4	281.0	281.6	282.2	282.7	282.9	282.7	282.4	282.2	281.9	282.2
37.5°	266.3	266.8	267.4	267.8	268.4	268.6	268.5	268.5	268.4	268.3	268.6
40°	256.7	257.3	257.9	258.6	259.3	259.5	259.4	259.4	259.3	259.2	259.5
42.5°	246.1	246.9	247.8	248.7	249.5	250.0	250.2	250.3	250.6	250.7	251.1
45°	231.0	232.0	232.8	233.7	234.6	235.3	235.7	236.1	236.5	236.9	237.4
47.5°	215.6	216.4	217.2	218.1	218.9	219.7	220.4	221.0	221.7	222.4	223.3
50°	205.0	205.9	206.8	207.7	208.6	209.5	210.4	211.3	212.1	213.1	214.0
52.5°	193.9	195.0	196.1	197.2	198.3	199.3	200.4	201.5	202.6	203.7	204.7
55°	177.5	178.9	180.1	181.5	182.8	184.1	185.4	186.6	188.0	189.3	190.2
57.5°	160.9	162.4	164.0	165.6	167.2	168.7	170.2	171.7	173.2	174.6	175.6
60°	149.7	151.4	153.0	154.6	156.2	157.9	159.5	161.1	162.8	164.4	165.6
62.5°	138.9	140.5	142.2	143.8	145.4	147.1	148.9	150.6	152.4	154.2	155.5
65°	122.3	124.1	126.0	127.9	129.8	131.7	133.6	135.6	137.5	139.5	140.7
67.5°	106.6	108.4	110.2	112.0	113.8	115.7	117.7	119.7	121.7	123.7	125.2
70°	95.2	97.0	98.9	100.8	102.7	104.6	106.8	108.9	111.0	113.1	114.7
72.5°	84.1	86.0	87.9	89.8	91.8	94.0	96.3	98.5	100.8	103.1	104.9
75°	67.3	69.5	71.6	73.7	75.8	78.2	80.8	83.4	86.0	88.6	90.2
77.5°	51.3	53.8	56.2	58.6	61.1	63.5	66.1	68.6	71.1	73.6	75.4
80°	41.4	43.8	46.3	48.7	51.1	53.7	56.5	59.3	62.0	64.8	66.6
82.5°	32.3	34.9	37.5	40.0	42.5	45.3	48.1	50.9	53.8	56.6	58.3
85°	20.1	22.8	25.5	28.2	30.9	33.7	36.5	39.4	42.2	45.0	46.8
87.5°	11.6	14.3	17.2	20.0	22.8	25.7	28.6	31.5	34.5	37.5	39.5
90°	6.4	10.1	13.7	17.3	21.1	24.7	28.4	32.1	35.7	39.5	41.9
92.5°	14.3	16.0	17.7	19.3	21.0	23.7	27.3	31.0	34.6	38.3	40.7
95°	38.2	39.9	41.7	43.4	45.1	44.9	42.7	40.5	38.3	36.1	38.6
97.5°	74.1	76.8	79.4	82.0	84.6	82.3	75.2	68.0	60.9	53.8	51.8
100°	102.0	104.2	106.2	108.4	110.4	113.0	116.2	119.3	122.5	125.6	107.8
102.5°	130.4	132.5	134.6	136.7	138.7	141.2	144.0	146.9	149.7	152.6	150.5
105°	175.9	177.7	179.5	181.3	183.2	185.3	187.7	190.2	192.6	195.0	196.7
107.5°	223.1	224.2	225.3	226.4	227.5	229.3	232.0	234.6	237.2	239.8	241.5
110°	253.8	254.8	255.7	256.7	257.7	259.4	262.0	264.5	267.0	269.6	270.8



TEST NUMBER: P333348-927

CATALOG NUMBER: S125DIW-S375D770U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	282.9	284.0	285.1	286.2	287.2	289.0	291.4	293.7	296.1	298.5	299.4
115°	326.2	327.4	328.7	329.9	331.1	332.8	335.1	337.3	339.5	341.8	342.8
117.5°	371.1	371.4	371.8	372.1	372.4	373.8	376.4	378.8	381.4	383.8	384.5
120°	399.2	399.3	399.4	399.6	399.7	400.8	403.1	405.4	407.7	409.9	411.1
122.5°	423.8	424.5	425.0	425.6	426.3	427.5	429.5	431.5	433.5	435.5	436.6
125°	462.2	463.1	463.9	464.8	465.6	466.8	468.4	470.1	471.7	473.3	474.1
127.5°	498.6	499.2	499.8	500.3	500.9	501.8	503.0	504.3	505.6	506.8	507.8
130°	521.2	521.7	522.3	522.8	523.5	524.3	525.6	526.9	528.1	529.4	530.2
132.5°	543.4	544.2	544.9	545.7	546.4	547.0	547.6	548.2	548.8	549.4	550.5
135°	575.4	576.1	576.8	577.5	578.2	578.7	579.0	579.3	579.6	580.0	580.7
137.5°	604.8	605.4	606.0	606.7	607.2	607.5	607.6	607.6	607.7	607.8	608.7
140°	623.8	624.0	624.2	624.6	624.8	624.9	624.9	624.8	624.7	624.7	625.8
142.5°	641.1	641.2	641.3	641.4	641.5	641.6	641.8	642.0	642.2	642.4	643.3
145°	666.6	666.8	666.9	667.1	667.3	667.4	667.4	667.4	667.4	667.4	668.0
147.5°	688.6	688.5	688.4	688.4	688.3	688.4	688.6	688.6	688.8	689.0	689.3
150°	702.6	702.3	702.1	701.8	701.6	701.6	701.8	702.1	702.3	702.6	702.9
152.5°	716.2	715.7	715.1	714.5	713.9	713.8	714.1	714.3	714.5	714.8	715.1
155°	733.7	732.9	732.1	731.3	730.6	730.3	730.6	730.9	731.1	731.3	731.7
157.5°	747.2	746.8	746.3	745.8	745.4	745.1	745.1	745.2	745.2	745.2	745.7
160°	756.6	755.8	755.0	754.2	753.5	753.1	753.3	753.4	753.5	753.7	754.2
162.5°	764.1	763.3	762.6	761.8	761.0	760.7	760.8	761.0	761.0	761.2	761.9
165°	774.2	773.4	772.7	771.9	771.1	770.8	770.9	771.0	771.2	771.3	772.1
167.5°	781.7	780.9	780.1	779.3	778.5	778.2	778.3	778.4	778.6	778.7	779.6
170°	786.0	785.1	784.1	783.2	782.3	781.9	782.0	782.2	782.3	782.4	783.5
172.5°	788.8	787.9	787.0	786.0	785.1	784.8	785.1	785.3	785.5	785.8	786.6
175°	791.9	791.1	790.3	789.5	788.7	788.4	788.5	788.6	788.8	788.9	790.0
177.5°	793.2	792.6	792.0	791.4	790.8	790.4	790.6	790.7	790.8	790.9	791.6
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9



TEST NUMBER: P333348-927

CATALOG NUMBER: S125DIW-S375D770U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	372.6	373.0	373.5	373.7	373.6	373.6	373.5	373.4
5°	371.5	372.1	372.7	373.0	373.0	372.9	372.8	372.7
7.5°	368.4	368.9	369.5	369.7	369.6	369.6	369.5	369.4
10°	365.4	366.0	366.5	366.8	366.7	366.6	366.5	366.5
12.5°	361.9	362.3	362.8	362.9	362.7	362.5	362.3	362.1
15°	355.4	355.8	356.3	356.4	356.1	355.8	355.5	355.1
17.5°	347.1	347.4	347.8	347.8	347.7	347.5	347.3	347.1
20°	340.6	340.9	341.1	341.2	341.2	341.2	341.2	341.2
22.5°	334.0	334.3	334.6	334.7	334.5	334.3	334.1	333.9
25°	323.5	323.9	324.2	324.2	323.8	323.4	323.0	322.6
27.5°	311.4	311.6	311.9	312.0	311.8	311.6	311.5	311.3
30°	303.1	303.2	303.4	303.5	303.4	303.3	303.2	303.2
32.5°	295.2	295.3	295.5	295.6	295.5	295.4	295.3	295.2
35°	282.4	282.7	282.9	283.0	283.0	283.0	283.0	283.0
37.5°	268.9	269.3	269.6	269.7	269.7	269.7	269.7	269.6
40°	259.8	260.2	260.5	260.8	260.9	261.1	261.3	261.4
42.5°	251.5	251.9	252.3	252.5	252.5	252.5	252.5	252.6
45°	238.1	238.6	239.2	239.5	239.6	239.6	239.7	239.8
47.5°	224.1	225.0	225.8	226.2	226.5	226.6	226.8	227.0
50°	214.8	215.8	216.7	217.2	217.5	217.7	217.9	218.2
52.5°	205.7	206.6	207.6	208.1	208.3	208.5	208.7	208.8
55°	191.1	191.9	192.9	193.5	193.8	194.1	194.5	194.8
57.5°	176.7	177.7	178.7	179.4	179.6	179.8	180.1	180.4
60°	166.8	168.0	169.3	170.0	170.2	170.5	170.7	171.0
62.5°	156.9	158.2	159.5	160.3	160.7	161.0	161.3	161.6
65°	142.0	143.1	144.3	145.1	145.4	145.8	146.2	146.5
67.5°	126.7	128.1	129.6	130.6	130.9	131.4	131.8	132.2
70°	116.2	117.8	119.3	120.3	120.8	121.3	121.8	122.3
72.5°	106.5	108.2	109.9	110.9	111.2	111.6	111.9	112.3
75°	91.9	93.5	95.1	96.1	96.6	97.0	97.4	97.8
77.5°	77.2	79.0	80.7	81.8	82.1	82.5	82.8	83.1
80°	68.4	70.2	71.9	73.0	73.4	73.7	74.0	74.3
82.5°	60.0	61.8	63.5	64.6	65.3	65.8	66.4	67.0
85°	48.6	50.4	52.2	53.4	54.0	54.7	55.4	56.0
87.5°	41.4	43.5	45.5	46.8	47.5	48.1	48.7	49.4
90°	44.4	47.0	49.5	51.3	52.2	53.2	54.1	55.1
92.5°	43.2	45.6	48.1	49.7	50.5	51.2	52.0	52.7
95°	41.0	43.4	45.9	47.4	47.9	48.6	49.1	49.7
97.5°	49.8	47.8	45.9	45.2	45.7	46.3	46.8	47.4
100°	90.2	72.4	54.7	45.8	45.7	45.7	45.7	45.6
102.5°	148.5	146.5	144.4	139.2	130.9	122.5	114.1	105.7
105°	198.3	199.9	201.5	202.6	203.0	203.5	203.9	204.4
107.5°	243.0	244.7	246.4	247.2	247.3	247.4	247.6	247.6
110°	272.0	273.1	274.3	275.1	275.8	276.6	277.3	278.0





TEST NUMBER: P333348-927

CATALOG NUMBER: S125DIW-S375D770U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	300.5	301.4	302.5	303.1	303.5	303.9	304.3	304.7
115°	343.7	344.7	345.5	345.9	345.6	345.3	345.0	344.8
117.5°	385.2	386.0	386.7	387.1	387.3	387.5	387.8	388.0
120°	412.2	413.3	414.4	414.9	414.7	414.5	414.4	414.2
122.5°	437.6	438.7	439.7	440.1	439.8	439.6	439.3	439.0
125°	474.8	475.6	476.4	476.8	476.8	476.9	476.9	476.9
127.5°	508.7	509.6	510.5	510.7	510.2	509.8	509.2	508.7
130°	530.9	531.7	532.4	532.7	532.4	532.2	532.0	531.7
132.5°	551.5	552.5	553.7	554.1	553.7	553.4	553.1	552.8
135°	581.5	582.3	583.1	583.4	583.0	582.6	582.2	581.9
137.5°	609.7	610.8	611.8	612.1	611.7	611.4	611.0	610.7
140°	627.0	628.1	629.3	629.6	629.2	628.8	628.3	627.8
142.5°	644.0	644.8	645.7	645.9	645.4	644.9	644.5	644.0
145°	668.4	669.0	669.6	669.6	669.2	668.7	668.2	667.7
147.5°	689.6	689.8	690.1	689.9	689.1	688.3	687.5	686.7
150°	703.1	703.4	703.7	703.3	702.3	701.4	700.4	699.5
152.5°	715.3	715.6	715.9	715.5	714.6	713.7	712.8	711.9
155°	732.1	732.5	732.9	732.6	731.6	730.6	729.5	728.4
157.5°	746.1	746.5	746.9	746.6	745.5	744.5	743.5	742.4
160°	754.7	755.3	755.7	755.5	754.5	753.4	752.4	751.3
162.5°	762.6	763.3	764.1	763.9	762.8	761.6	760.5	759.3
165°	772.9	773.6	774.4	774.3	773.2	772.2	771.2	770.1
167.5°	780.5	781.5	782.4	782.4	781.2	780.0	778.8	777.6
170°	784.5	785.6	786.6	786.6	785.4	784.2	783.0	781.9
172.5°	787.6	788.5	789.5	789.3	788.2	787.0	785.8	784.7
175°	791.0	792.0	793.1	793.0	791.9	790.7	789.5	788.3
177.5°	792.3	793.1	793.8	793.8	792.9	792.1	791.2	790.4
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9

(END OF REPORT)