

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: P333136-927

Luminaire Tested: **S125DIP-S375D810U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333136-927  
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: S125DIP-S375D810U927-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3724.8 lumens  
Efficiency: N/A  
Efficacy: 119.4 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

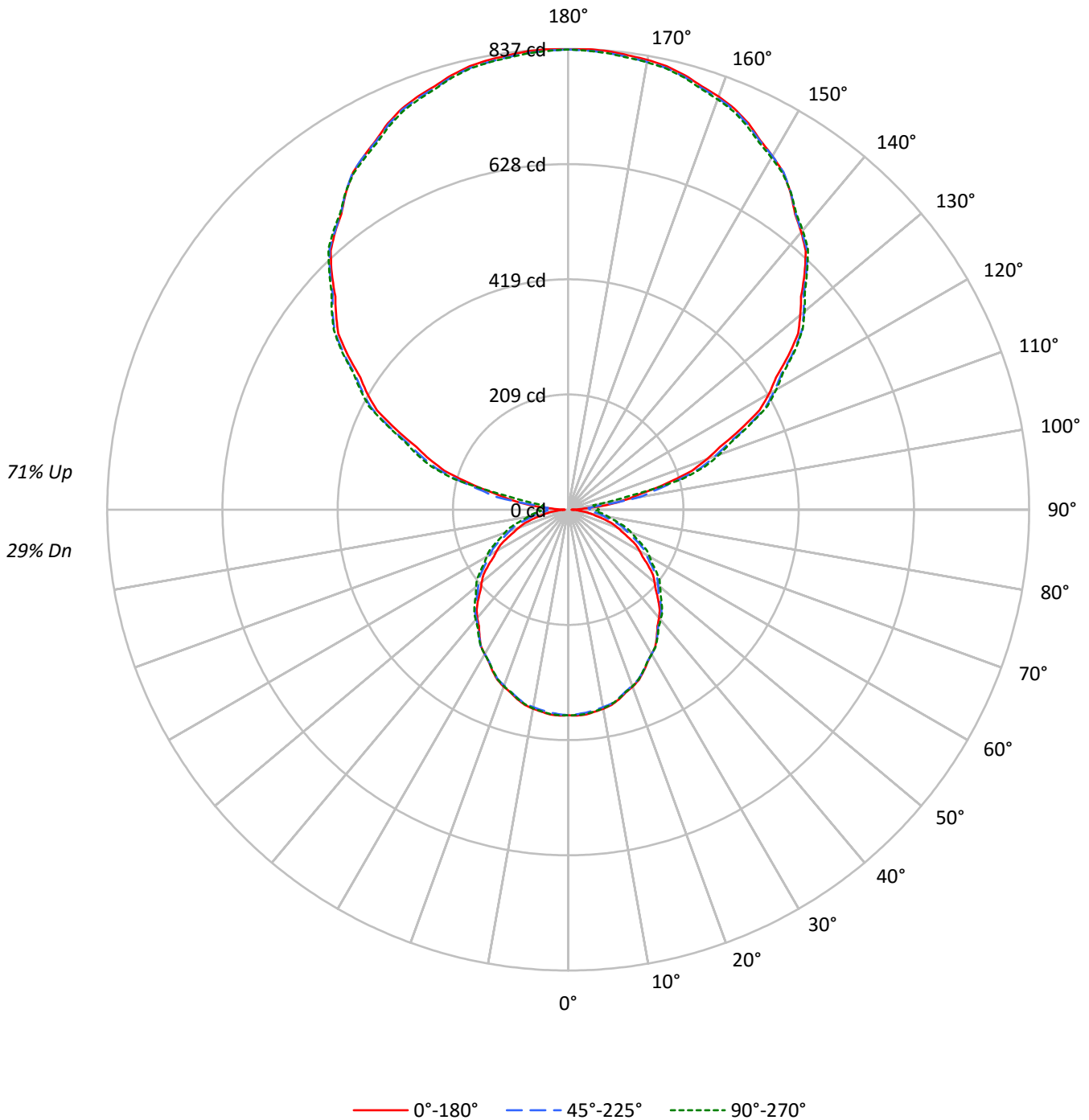
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333136-927

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### Luminous Intensity Polar Plot





TEST NUMBER: P333136-927

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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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24
2	84	77	71	66	75	69	64	59	54	51	47	40	38	36	28	26	25	19
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	21	16
4	70	59	52	46	62	53	47	42	42	37	34	32	28	26	22	20	18	14
5	64	53	45	39	57	47	41	35	37	33	29	28	25	22	20	17	16	12
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10
7	54	42	35	29	48	38	31	27	30	25	22	23	20	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	13	11	8
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	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: P333136-927

CATALOG NUMBER: S125DIP-S375D810U927-4F0-1E-UDD-D

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.3	0.9
10°-20°	100.2	2.7
20°-30°	149.1	4.0
30°-40°	176.6	4.7
40°-50°	182.6	4.9
50°-60°	168.2	4.5
60°-70°	135.9	3.6
70°-80°	91.0	2.4
80°-90°	49.0	1.3
90°-100°	56.9	1.5
100°-110°	206.7	5.5
110°-120°	352.6	9.5
120°-130°	443.1	11.9
130°-140°	471.8	12.7
140°-150°	440.5	11.8
150°-160°	355.8	9.6
160°-170°	230.1	6.2
170°-180°	79.4	2.1
0°-30°	284.6	7.6
0°-40°	461.2	12.4
0°-60°	812.0	21.8
0°-90°	1087.9	29.2
90°-120°	616.1	16.5
90°-150°	1971.6	52.9
90°-180°	2637.0	70.8
0°-180°	3724.8	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	51	56	5
95°	40	47	37	47	50	49
105°	185	194	205	212	214	197
115°	344	350	360	364	363	341
125°	488	492	499	502	502	435
135°	607	610	612	615	614	468
145°	704	704	704	707	705	440
155°	774	771	772	773	769	357
165°	817	814	814	817	813	231
175°	836	832	833	837	832	80
180°	836	836	836	836	836	



TEST NUMBER: P333136-927

CATALOG NUMBER: S125DIP-S375D810U927-4F0-1E-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	28.7	31.7	34.6	37.5	39.6
90°	6.5	10.2	13.9	17.6	21.3	25.0	28.8	32.5	36.2	39.9	42.5
92.5°	14.8	16.5	18.1	19.7	21.4	24.0	27.7	31.4	35.1	38.7	41.3
95°	40.1	41.7	43.5	45.2	46.9	46.5	44.0	41.6	39.1	36.7	39.1
97.5°	78.0	80.7	83.3	86.0	88.6	86.1	78.4	70.7	63.1	55.4	53.2
100°	107.5	109.6	111.7	113.8	116.0	118.6	121.8	124.9	128.1	131.3	112.4
102.5°	137.4	139.5	141.6	143.7	145.8	148.3	151.1	154.1	156.9	159.8	157.6
105°	185.4	187.3	189.2	191.0	192.8	195.0	197.4	199.9	202.3	204.8	206.4
107.5°	235.3	236.4	237.5	238.6	239.7	241.6	244.2	246.8	249.5	252.1	253.7
110°	267.8	268.7	269.7	270.6	271.6	273.4	275.9	278.5	281.1	283.6	284.7



TEST NUMBER: P333136-927

CATALOG NUMBER: S125DIP-S375D810U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	298.4	299.5	300.6	301.7	302.9	304.7	307.0	309.4	311.8	314.2	315.1
115°	344.2	345.4	346.7	347.9	349.2	350.9	353.2	355.5	357.7	360.0	360.9
117.5°	391.5	391.9	392.2	392.5	392.9	394.3	396.9	399.4	401.9	404.4	405.1
120°	421.3	421.4	421.4	421.6	421.7	422.9	425.2	427.5	429.8	432.0	433.1
122.5°	447.2	447.8	448.5	449.2	449.8	451.1	453.0	455.1	457.1	459.1	460.1
125°	487.8	488.7	489.6	490.4	491.3	492.6	494.2	495.8	497.5	499.1	499.9
127.5°	526.2	526.8	527.4	528.0	528.6	529.6	530.8	532.0	533.3	534.6	535.4
130°	550.0	550.6	551.2	551.8	552.4	553.3	554.6	556.0	557.2	558.5	559.2
132.5°	573.5	574.3	575.0	575.8	576.6	577.3	577.9	578.5	579.0	579.6	580.7
135°	607.2	608.0	608.7	609.5	610.2	610.8	611.0	611.3	611.6	611.9	612.7
137.5°	638.3	638.9	639.6	640.2	640.9	641.2	641.3	641.3	641.3	641.4	642.4
140°	658.3	658.5	658.9	659.1	659.4	659.5	659.5	659.4	659.3	659.3	660.4
142.5°	676.6	676.8	676.8	676.9	677.0	677.2	677.4	677.6	677.8	678.0	678.8
145°	703.5	703.7	703.9	704.1	704.3	704.4	704.4	704.4	704.4	704.4	705.0
147.5°	726.7	726.7	726.6	726.5	726.5	726.5	726.7	726.8	727.1	727.2	727.5
150°	741.6	741.3	741.0	740.8	740.5	740.5	740.8	741.0	741.3	741.6	741.9
152.5°	756.0	755.3	754.7	754.2	753.5	753.4	753.6	753.9	754.2	754.5	754.7
155°	774.4	773.6	772.8	771.9	771.1	770.8	771.1	771.3	771.7	771.9	772.3
157.5°	788.6	788.1	787.7	787.2	786.6	786.4	786.5	786.5	786.5	786.6	787.0
160°	798.6	797.7	796.9	796.1	795.3	795.0	795.0	795.2	795.4	795.4	796.0
162.5°	806.5	805.6	804.9	804.0	803.2	802.9	803.0	803.1	803.3	803.4	804.1
165°	817.1	816.3	815.5	814.7	813.8	813.5	813.7	813.8	813.9	814.0	814.9
167.5°	825.1	824.3	823.4	822.5	821.7	821.3	821.4	821.6	821.7	821.9	822.8
170°	829.6	828.5	827.6	826.6	825.7	825.3	825.4	825.5	825.7	825.9	827.0
172.5°	832.5	831.6	830.6	829.7	828.6	828.3	828.5	828.8	829.0	829.3	830.3
175°	835.8	834.9	834.1	833.3	832.4	832.1	832.2	832.3	832.5	832.7	833.8
177.5°	837.3	836.5	835.9	835.3	834.6	834.3	834.4	834.5	834.6	834.7	835.5
180°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8



TEST NUMBER: P333136-927

CATALOG NUMBER: S125DIP-S375D810U927-4F0-1E-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°	41.6	43.6	45.6	46.9	47.6	48.2	48.9	49.5
90°	45.1	47.6	50.1	52.0	52.9	53.9	54.9	55.8
92.5°	43.7	46.3	48.7	50.4	51.1	51.9	52.7	53.4
95°	41.6	44.0	46.6	48.1	48.6	49.2	49.7	50.4
97.5°	51.0	48.9	46.7	45.9	46.4	47.0	47.5	48.1
100°	93.6	74.8	56.0	46.6	46.5	46.4	46.4	46.3
102.5°	155.3	153.0	150.8	145.3	136.4	127.5	118.7	109.8
105°	208.0	209.6	211.3	212.3	212.7	213.2	213.6	214.0
107.5°	255.3	257.0	258.6	259.5	259.6	259.7	259.8	259.8
110°	285.9	287.0	288.1	289.1	289.8	290.5	291.2	291.9





TEST NUMBER: P333136-927

CATALOG NUMBER: S125DIP-S375D810U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	316.1	317.0	318.0	318.6	319.0	319.4	319.8	320.1
115°	361.8	362.7	363.6	363.9	363.6	363.2	362.9	362.6
117.5°	405.8	406.5	407.1	407.5	407.7	407.9	408.1	408.3
120°	434.2	435.3	436.4	436.9	436.7	436.5	436.3	436.1
122.5°	461.2	462.2	463.3	463.6	463.3	463.0	462.7	462.4
125°	500.6	501.4	502.1	502.5	502.5	502.5	502.4	502.4
127.5°	536.4	537.3	538.2	538.4	537.8	537.3	536.7	536.1
130°	559.9	560.6	561.3	561.6	561.3	561.0	560.8	560.5
132.5°	581.7	582.8	583.8	584.2	583.8	583.5	583.1	582.8
135°	613.5	614.3	615.1	615.2	614.8	614.4	613.9	613.5
137.5°	643.3	644.4	645.4	645.7	645.3	644.9	644.5	644.1
140°	661.6	662.8	663.9	664.3	663.8	663.3	662.8	662.3
142.5°	679.7	680.5	681.3	681.4	681.0	680.5	679.9	679.5
145°	705.5	706.0	706.5	706.6	706.1	705.6	705.1	704.6
147.5°	727.8	728.1	728.4	728.1	727.2	726.4	725.6	724.7
150°	742.1	742.4	742.7	742.3	741.2	740.3	739.3	738.2
152.5°	755.0	755.3	755.6	755.2	754.2	753.3	752.3	751.3
155°	772.8	773.2	773.6	773.2	772.1	771.0	769.9	768.8
157.5°	787.4	787.9	788.3	788.0	786.9	785.8	784.7	783.5
160°	796.5	797.1	797.6	797.4	796.3	795.2	794.1	793.0
162.5°	804.9	805.7	806.4	806.3	805.0	803.8	802.6	801.5
165°	815.7	816.5	817.4	817.2	816.1	815.0	813.9	812.8
167.5°	823.9	824.8	825.9	825.7	824.4	823.2	822.0	820.8
170°	828.0	829.1	830.2	830.1	828.9	827.7	826.4	825.2
172.5°	831.2	832.3	833.3	833.1	831.9	830.7	829.4	828.1
175°	834.8	835.9	837.0	836.9	835.8	834.5	833.3	832.0
177.5°	836.3	837.0	837.8	837.8	836.9	836.0	835.1	834.2
180°	835.8	835.8	835.8	835.8	835.8	835.8	835.8	835.8

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