

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: P333140-930

Luminaire Tested: **S125DIP-S375D810U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333140-930  
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-S375D810U930-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3527.1 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

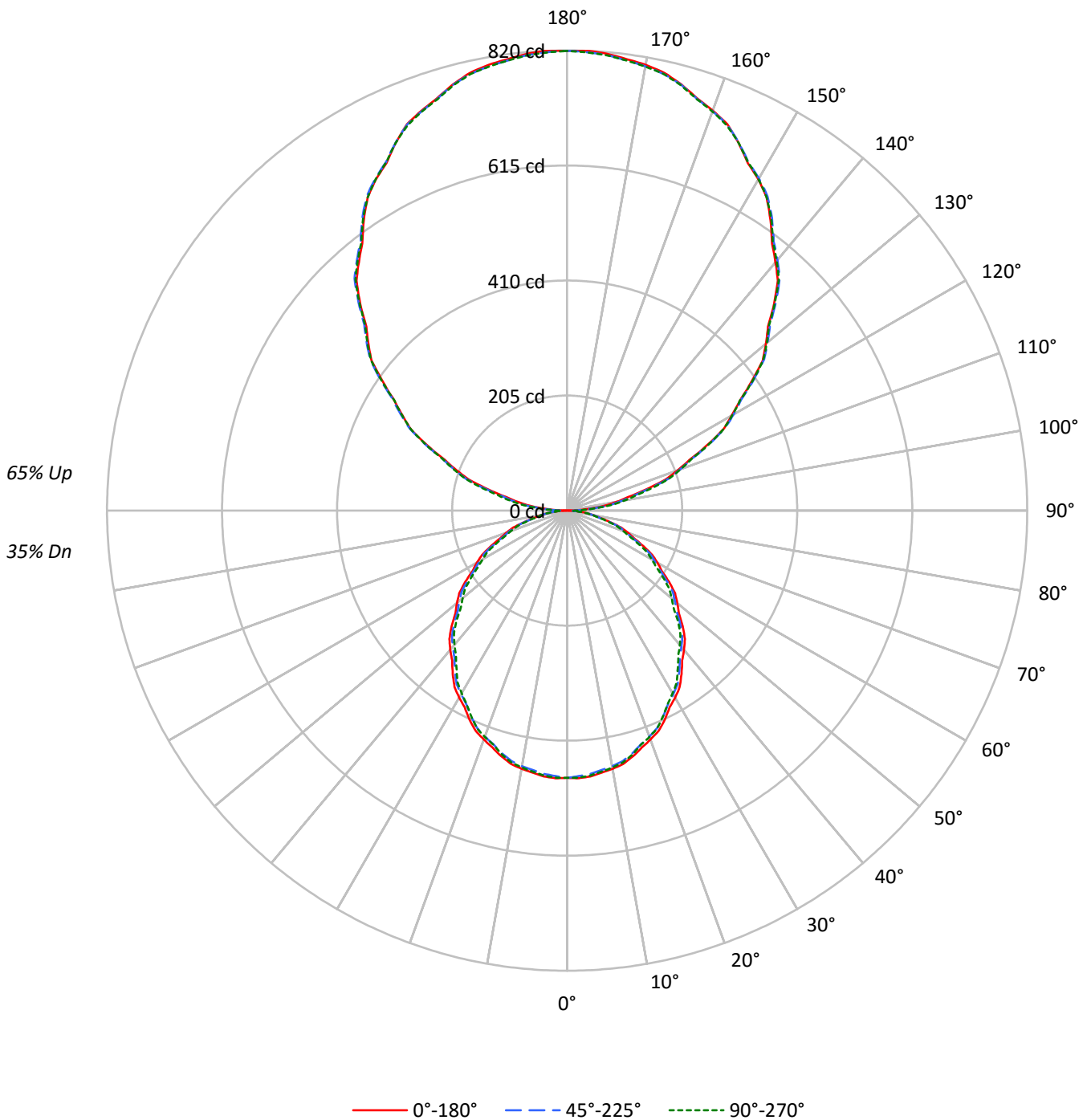
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333140-930

CATALOG NUMBER: S125DIP-S375D810U930-4F0-1E-UDD-F1

### 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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	94	90	86	83	85	82	78	75	66	63	61	51	50	48	37	37	36	30
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	25
3	78	69	62	56	71	63	57	52	51	46	43	39	36	34	29	27	26	21
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	16
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

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

	0°	45°	90°
0°	3076	3076	3076
5°	3083	3053	3073
10°	3064	3032	3049
15°	3031	2995	3008
20°	2983	2944	2950
25°	2932	2884	2881
30°	2869	2818	2804
35°	2801	2748	2709
40°	2732	2672	2633
45°	2657	2602	2550
50°	2574	2517	2442
55°	2494	2423	2354
60°	2399	2326	2244
65°	2286	2211	2136
70°	2177	2079	2005
75°	1984	1919	1852
80°	1767	1737	1696
85°	1534	1564	1482



TEST NUMBER: P333140-930

CATALOG NUMBER: S125DIP-S375D810U930-4F0-1E-UDD-F1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.9	1.3
10°-20°	126.9	3.6
20°-30°	187.3	5.3
30°-40°	218.5	6.2
40°-50°	219.5	6.2
50°-60°	192.7	5.5
60°-70°	143.6	4.1
70°-80°	82.1	2.3
80°-90°	25.7	0.7
90°-100°	54.9	1.6
100°-110°	162.0	4.6
110°-120°	274.4	7.8
120°-130°	361.2	10.2
130°-140°	404.7	11.5
140°-150°	396.7	11.2
150°-160°	333.1	9.4
160°-170°	221.5	6.3
170°-180°	77.5	2.2
0°-30°	359.1	10.2
0°-40°	577.6	16.4
0°-60°	989.8	28.1
0°-90°	1241.1	35.2
90°-120°	491.4	13.9
90°-150°	1653.9	46.9
90°-180°	2286.0	64.8
0°-180°	3527.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	471	474	474	45
15°	453	452	448	450	450	128
25°	412	409	405	405	404	189
35°	355	354	348	347	344	222
45°	291	289	285	281	279	224
55°	222	220	215	212	209	198
65°	150	149	145	141	140	148
75°	80	79	77	76	74	85
85°	21	21	21	21	20	23
90°	1	6	10	13	15	3
95°	41	43	49	53	55	44
105°	145	149	152	156	158	155
115°	275	277	279	278	277	272
125°	401	405	405	404	404	359
135°	522	525	526	526	523	402
145°	632	634	636	636	634	395
155°	723	723	724	726	723	333
165°	786	785	786	788	784	222
175°	817	815	815	818	814	78
180°	819	819	819	819	819	



TEST NUMBER: P333140-930

CATALOG NUMBER: S125DIP-S375D810U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	477.4	477.3	477.1	476.9	476.7	476.2	475.6	474.9	474.3	473.5	474.3
5°	475.5	475.3	475.2	475.0	474.8	474.3	473.5	472.7	471.8	471.0	471.7
7.5°	471.2	471.0	470.8	470.7	470.5	469.9	469.0	468.1	467.2	466.3	467.0
10°	467.2	467.1	466.9	466.8	466.6	466.0	465.1	464.1	463.3	462.4	463.0
12.5°	462.4	462.1	461.8	461.5	461.2	460.6	459.7	458.9	458.0	457.2	457.7
15°	453.3	453.1	452.8	452.6	452.2	451.7	450.8	449.9	448.9	448.0	448.4
17.5°	442.8	442.5	442.1	441.7	441.3	440.7	439.7	438.8	437.8	436.8	437.4
20°	434.1	433.9	433.7	433.6	433.4	432.8	431.7	430.6	429.5	428.4	429.0
22.5°	425.3	425.0	424.7	424.4	424.1	423.5	422.4	421.4	420.4	419.4	419.8
25°	411.5	411.1	410.6	410.2	409.8	409.0	408.0	406.8	405.8	404.7	404.9
27.5°	395.3	395.0	394.8	394.5	394.3	393.5	392.5	391.3	390.2	389.1	389.1
30°	384.7	384.5	384.2	383.9	383.7	382.9	381.7	380.4	379.2	377.9	377.7
32.5°	373.2	372.8	372.5	372.1	371.7	371.0	369.8	368.7	367.6	366.5	366.2
35°	355.3	355.0	354.7	354.3	354.0	353.2	352.0	350.9	349.7	348.5	348.1
37.5°	336.7	336.3	335.9	335.4	335.0	334.3	333.1	332.1	330.9	329.9	329.2
40°	324.1	323.6	323.2	322.8	322.4	321.6	320.4	319.3	318.0	316.9	316.2
42.5°	310.5	310.1	309.8	309.4	309.1	308.3	307.1	306.0	304.8	303.6	303.0
45°	290.9	290.6	290.2	289.9	289.5	288.9	287.9	286.9	285.8	284.9	283.9
47.5°	269.8	269.8	269.8	269.9	269.9	269.3	268.1	266.8	265.6	264.4	263.4
50°	256.2	256.0	255.8	255.4	255.2	254.6	253.6	252.6	251.6	250.5	249.5
52.5°	242.4	242.1	242.0	241.8	241.7	241.0	239.9	238.9	237.7	236.7	235.8
55°	221.5	221.3	221.0	220.8	220.5	219.8	218.7	217.5	216.3	215.2	214.4
57.5°	199.7	199.5	199.3	199.3	199.1	198.5	197.5	196.6	195.6	194.6	193.6
60°	185.7	185.4	185.1	184.7	184.4	183.8	182.9	182.0	181.0	180.1	179.3
62.5°	171.3	171.0	170.7	170.5	170.2	169.7	168.9	168.1	167.3	166.6	165.7
65°	149.6	149.4	149.3	149.1	149.0	148.4	147.5	146.5	145.6	144.7	143.9
67.5°	128.6	128.2	127.8	127.5	127.2	126.6	126.0	125.2	124.6	123.9	123.3
70°	115.3	114.9	114.5	114.1	113.7	113.0	112.3	111.5	110.8	110.1	109.5
72.5°	100.9	100.5	100.3	100.0	99.7	99.3	98.8	98.3	97.8	97.3	96.8
75°	79.5	79.3	79.2	79.0	78.8	78.5	78.1	77.7	77.3	76.9	76.6
77.5°	59.8	59.8	59.7	59.6	59.6	59.4	59.2	58.9	58.7	58.5	58.3
80°	47.5	47.5	47.5	47.5	47.5	47.4	47.2	47.0	46.9	46.7	46.6
82.5°	36.6	36.5	36.4	36.2	36.1	36.0	36.0	36.0	35.9	35.9	35.7
85°	20.7	20.8	20.9	21.0	21.0	21.1	21.1	21.1	21.1	21.1	21.0
87.5°	8.2	8.5	8.7	9.0	9.2	9.4	9.5	9.6	9.8	9.9	10.0
90°	0.7	1.8	2.9	4.1	5.1	6.2	7.3	8.2	9.2	10.2	10.9
92.5°	15.4	16.2	17.0	17.8	18.6	19.6	20.8	22.0	23.2	24.5	25.4
95°	41.4	41.7	42.0	42.3	42.6	43.5	44.8	46.2	47.7	49.1	50.1
97.5°	68.9	69.0	69.1	69.2	69.3	70.4	72.3	74.3	76.2	78.2	79.1
100°	89.3	89.3	89.3	89.3	89.3	90.2	92.0	93.8	95.7	97.5	98.8
102.5°	111.2	111.8	112.3	112.9	113.5	114.2	115.1	116.1	117.0	118.0	119.4
105°	145.4	146.1	146.8	147.5	148.2	149.0	149.9	150.7	151.5	152.4	153.2
107.5°	183.1	183.8	184.5	185.2	186.0	186.6	187.3	187.9	188.6	189.2	189.6
110°	209.1	209.9	210.5	211.2	212.0	212.5	213.0	213.4	213.8	214.2	214.7



TEST NUMBER: P333140-930

CATALOG NUMBER: S125DIP-S375D810U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	235.6	236.0	236.4	236.8	237.1	237.6	238.1	238.6	239.2	239.7	239.9
115°	274.8	275.3	275.9	276.5	277.0	277.4	277.8	278.0	278.3	278.6	278.4
117.5°	314.1	314.3	314.5	314.8	315.0	315.4	315.6	315.8	316.1	316.3	316.4
120°	338.5	339.2	340.0	340.6	341.4	341.8	341.9	342.1	342.2	342.3	342.3
122.5°	365.0	365.3	365.6	365.8	366.1	366.4	366.7	367.1	367.5	367.9	367.7
125°	401.0	401.9	402.7	403.6	404.4	404.9	405.0	405.2	405.3	405.4	405.2
127.5°	439.3	439.8	440.2	440.7	441.2	441.5	441.6	441.8	442.1	442.2	442.1
130°	462.2	462.9	463.7	464.3	465.0	465.5	465.8	466.1	466.4	466.7	466.5
132.5°	485.2	486.3	487.5	488.6	489.8	490.3	490.3	490.2	490.2	490.2	490.0
135°	521.5	522.4	523.2	524.1	524.9	525.4	525.5	525.7	525.8	525.9	525.9
137.5°	555.7	556.5	557.3	558.2	559.0	559.5	559.9	560.1	560.4	560.8	560.9
140°	577.6	578.3	579.0	579.8	580.4	581.0	581.4	581.9	582.3	582.7	583.0
142.5°	599.6	600.1	600.7	601.3	601.9	602.5	603.0	603.6	604.1	604.6	604.8
145°	631.8	632.3	632.9	633.5	634.1	634.5	635.0	635.4	635.9	636.3	636.3
147.5°	661.6	661.9	662.3	662.6	662.8	663.2	663.6	663.9	664.2	664.6	664.9
150°	681.5	681.3	681.3	681.1	680.9	681.2	681.8	682.3	682.9	683.5	683.5
152.5°	697.8	698.1	698.2	698.5	698.6	698.9	699.0	699.3	699.5	699.8	700.1
155°	722.9	722.9	722.9	722.9	722.9	723.0	723.2	723.3	723.4	723.6	724.1
157.5°	745.4	745.1	744.8	744.4	744.1	744.0	744.2	744.4	744.4	744.6	745.2
160°	758.6	758.2	757.8	757.4	756.9	756.8	756.9	757.1	757.2	757.4	758.0
162.5°	770.4	770.1	769.7	769.5	769.2	769.0	769.0	769.1	769.1	769.2	769.8
165°	786.1	785.8	785.5	785.2	785.0	784.9	785.0	785.1	785.3	785.5	786.0
167.5°	799.3	798.7	798.2	797.6	797.0	796.8	796.8	796.8	796.8	796.8	797.6
170°	806.5	805.9	805.4	804.8	804.2	803.9	803.9	803.9	803.9	803.9	804.8
172.5°	811.5	811.0	810.4	809.8	809.3	809.0	809.0	809.0	809.0	809.0	809.8
175°	817.3	816.8	816.2	815.6	815.1	814.7	814.7	814.7	814.7	814.7	815.6
177.5°	820.3	819.8	819.4	818.9	818.4	818.2	818.1	817.9	817.8	817.7	818.4
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2



TEST NUMBER: P333140-930

CATALOG NUMBER: S125DIP-S375D810U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	474.9	475.6	476.2	476.5	476.5	476.4	476.4	476.3
5°	472.5	473.3	474.0	474.3	474.3	474.2	474.1	474.0
7.5°	467.7	468.5	469.2	469.5	469.4	469.4	469.3	469.2
10°	463.7	464.3	465.0	465.3	465.2	465.1	465.0	465.0
12.5°	458.3	458.9	459.3	459.6	459.6	459.6	459.6	459.5
15°	448.8	449.2	449.7	449.9	449.9	449.9	449.9	449.9
17.5°	437.9	438.4	439.0	439.0	438.5	438.1	437.7	437.3
20°	429.6	430.2	430.7	430.9	430.4	430.0	429.6	429.2
22.5°	420.1	420.5	420.9	420.9	420.7	420.4	420.1	419.8
25°	405.0	405.2	405.4	405.3	405.0	404.8	404.6	404.3
27.5°	389.1	389.1	389.2	389.1	388.8	388.6	388.3	388.1
30°	377.6	377.4	377.2	377.1	376.8	376.6	376.3	376.0
32.5°	365.9	365.6	365.3	364.9	364.4	363.9	363.5	363.1
35°	347.7	347.3	346.8	346.3	345.7	345.0	344.3	343.6
37.5°	328.6	328.0	327.3	326.9	326.4	326.1	325.7	325.3
40°	315.4	314.6	313.9	313.4	313.2	312.8	312.6	312.3
42.5°	302.2	301.6	300.8	300.4	299.9	299.5	299.2	298.8
45°	282.8	281.8	280.9	280.2	280.0	279.7	279.5	279.2
47.5°	262.4	261.4	260.3	259.5	258.9	258.4	257.8	257.2
50°	248.4	247.3	246.2	245.4	244.8	244.2	243.6	243.0
52.5°	234.8	233.8	232.8	232.1	231.5	230.8	230.2	229.5
55°	213.6	212.9	212.1	211.5	210.9	210.3	209.7	209.1
57.5°	192.7	191.7	190.7	190.0	189.7	189.4	189.1	188.7
60°	178.5	177.6	176.8	176.0	175.5	174.9	174.3	173.7
62.5°	164.8	163.8	162.9	162.2	161.8	161.3	160.9	160.5
65°	143.2	142.4	141.7	141.1	140.8	140.5	140.1	139.8
67.5°	122.6	122.0	121.3	120.9	120.7	120.5	120.3	120.1
70°	109.0	108.5	108.0	107.6	107.3	107.0	106.6	106.2
72.5°	96.2	95.6	95.1	94.7	94.3	94.0	93.6	93.3
75°	76.4	76.1	75.8	75.6	75.3	74.9	74.6	74.2
77.5°	58.2	58.0	57.9	57.7	57.5	57.2	57.0	56.7
80°	46.6	46.5	46.4	46.2	46.1	45.9	45.7	45.6
82.5°	35.5	35.4	35.3	35.1	35.1	35.1	35.1	35.1
85°	21.0	20.9	20.8	20.6	20.5	20.3	20.1	20.0
87.5°	10.2	10.3	10.4	10.5	10.4	10.4	10.4	10.3
90°	11.6	12.3	13.0	13.6	14.0	14.4	14.8	15.3
92.5°	26.3	27.3	28.2	28.9	29.2	29.4	29.8	30.1
95°	51.0	52.1	53.1	53.7	54.0	54.3	54.5	54.8
97.5°	80.1	81.0	81.9	82.4	82.6	82.8	83.0	83.2
100°	100.1	101.3	102.6	103.5	103.7	104.0	104.3	104.5
102.5°	120.7	122.1	123.5	124.4	124.8	125.1	125.6	126.0
105°	154.1	154.9	155.8	156.4	156.9	157.3	157.7	158.1
107.5°	190.0	190.5	190.9	191.1	191.1	191.0	191.0	191.0
110°	215.1	215.5	215.9	216.1	215.9	215.7	215.6	215.5





TEST NUMBER: P333140-930

CATALOG NUMBER: S125DIP-S375D810U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	240.1	240.3	240.5	240.5	240.2	239.9	239.7	239.5
115°	278.3	278.2	278.0	277.9	277.8	277.6	277.4	277.4
117.5°	316.6	316.7	316.8	316.6	316.0	315.4	314.9	314.3
120°	342.3	342.3	342.3	342.1	341.5	341.0	340.4	339.8
122.5°	367.6	367.5	367.4	367.1	366.6	366.2	365.7	365.3
125°	404.9	404.6	404.3	404.1	404.0	403.8	403.7	403.6
127.5°	441.9	441.7	441.6	441.4	441.2	440.8	440.6	440.3
130°	466.4	466.3	466.1	465.9	465.6	465.3	465.0	464.7
132.5°	489.8	489.7	489.6	489.3	488.9	488.5	488.1	487.7
135°	525.9	525.9	525.9	525.7	525.1	524.6	524.0	523.4
137.5°	561.1	561.3	561.4	561.2	560.4	559.8	559.1	558.3
140°	583.3	583.5	583.8	583.6	582.9	582.2	581.5	580.8
142.5°	605.0	605.1	605.3	605.0	604.3	603.6	602.9	602.2
145°	636.3	636.3	636.3	636.0	635.6	635.2	634.8	634.3
147.5°	665.2	665.6	665.9	665.6	664.6	663.7	662.8	661.8
150°	683.5	683.5	683.5	683.3	683.0	682.7	682.4	682.2
152.5°	700.4	700.7	701.1	701.0	700.5	700.0	699.5	699.0
155°	724.7	725.3	725.9	725.8	725.0	724.4	723.7	722.9
157.5°	745.8	746.3	746.9	746.7	745.8	744.9	743.9	743.0
160°	758.6	759.0	759.6	759.6	758.9	758.1	757.4	756.8
162.5°	770.5	771.2	771.8	771.8	770.9	770.1	769.3	768.5
165°	786.6	787.2	787.7	787.6	786.7	785.9	785.0	784.2
167.5°	798.5	799.3	800.2	800.1	799.3	798.4	797.5	796.6
170°	805.6	806.5	807.3	807.2	806.2	805.3	804.3	803.3
172.5°	810.7	811.5	812.4	812.4	811.5	810.7	809.8	808.9
175°	816.4	817.3	818.2	818.1	817.1	816.1	815.1	814.2
177.5°	819.0	819.7	820.4	820.4	819.5	818.8	818.0	817.2
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2

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