

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: P333181-940

Luminaire Tested: **S125DIP-S610D810U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333181-940
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-S610D810U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 5031.2 lumens
Efficiency: N/A
Efficacy: 131.0 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

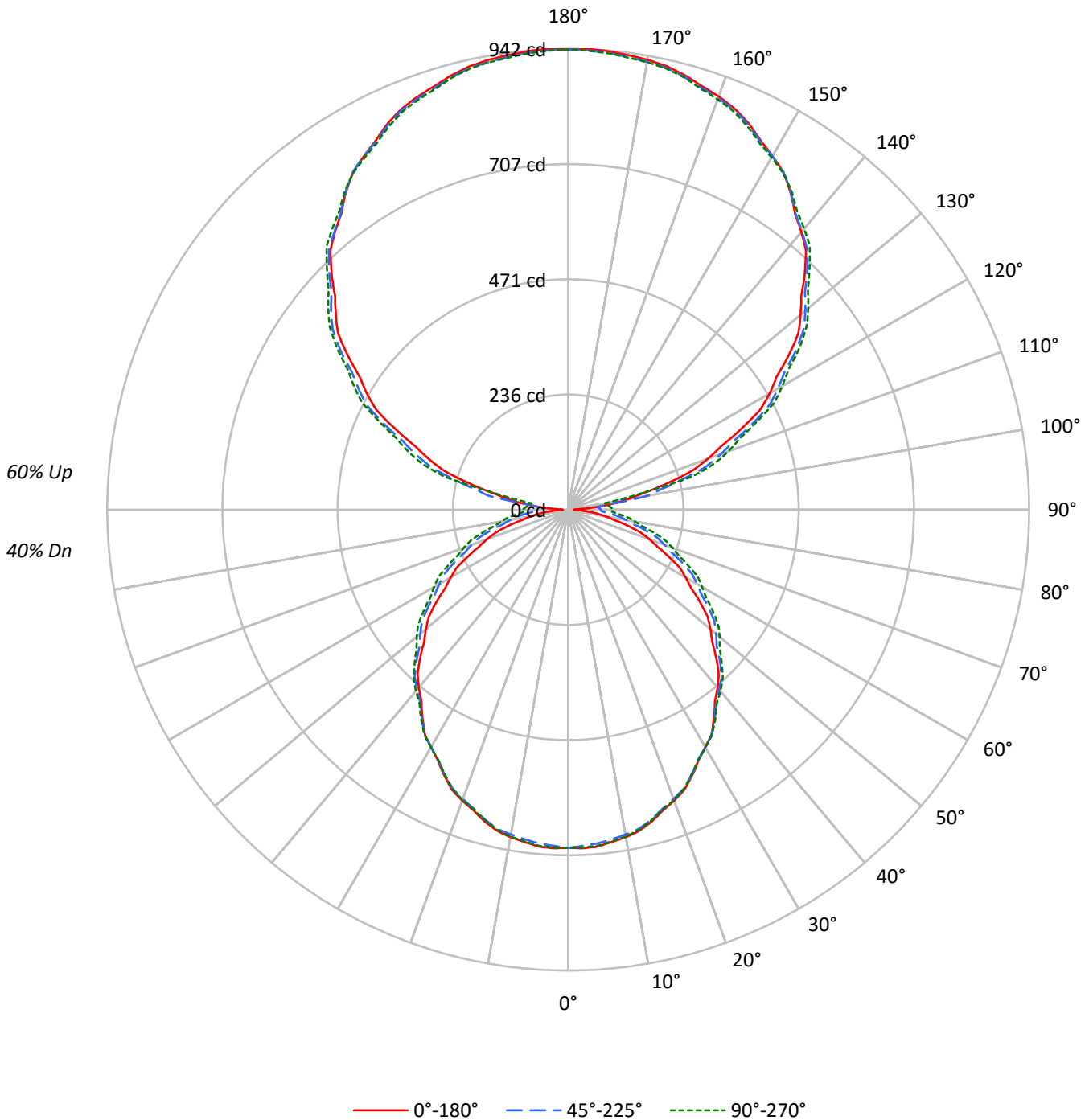
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333181-940

CATALOG NUMBER: S125DIP-S610D810U940-4F0-1E-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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	95	90	86	83	86	82	79	76	67	65	63	53	52	50	41	39	38	32
2	86	79	72	67	78	72	66	62	59	55	51	46	44	41	35	33	32	27
3	78	69	61	56	71	63	56	51	51	47	43	41	38	35	31	29	27	22
4	72	61	53	47	65	55	49	43	46	40	36	36	33	30	28	25	23	19
5	66	54	46	40	59	49	42	37	41	35	31	32	29	25	25	22	20	16
6	60	48	40	34	55	44	37	32	36	31	27	29	25	22	22	20	17	14
7	56	43	36	30	51	40	33	28	33	28	24	27	23	20	20	18	15	13
8	52	39	32	26	47	36	29	25	30	25	21	24	20	17	19	16	14	11
9	48	36	28	23	44	33	26	22	27	22	19	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4463	4463	4463
5°	4472	4380	4394
10°	4440	4302	4295
15°	4388	4209	4171
20°	4316	4093	4045
25°	4232	3969	3891
30°	4129	3833	3751
35°	4033	3708	3622
40°	3935	3576	3493
45°	3825	3463	3378
50°	3720	3340	3276
55°	3593	3225	3156
60°	3455	3093	3035
65°	3310	2956	2898
70°	3145	2767	2758
75°	2887	2586	2585
80°	2548	2365	2396
85°	2232	2219	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.3
10°-20°	185.5	3.7
20°-30°	275.9	5.5
30°-40°	326.8	6.5
40°-50°	337.9	6.7
50°-60°	311.2	6.2
60°-70°	251.6	5.0
70°-80°	168.5	3.3
80°-90°	89.3	1.8
90°-100°	83.2	1.7
100°-110°	246.8	4.9
110°-120°	406.3	8.1
120°-130°	504.2	10.0
130°-140°	533.5	10.6
140°-150°	496.3	9.9
150°-160°	400.5	8.0
160°-170°	259.0	5.1
170°-180°	89.3	1.8
0°-30°	526.7	10.5
0°-40°	853.5	17.0
0°-60°	1502.6	29.9
0°-90°	2012.0	40.0
90°-120°	736.4	14.6
90°-150°	2270.4	45.1
90°-180°	3019.0	60.0
0°-180°	5031.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	691	690	685	690	690	66
15°	660	660	656	660	657	186
25°	600	601	598	600	597	276
35°	519	523	522	524	524	325
45°	428	435	438	443	444	330
55°	329	339	350	357	360	294
65°	226	242	258	268	271	224
75°	125	143	164	177	181	132
85°	37	60	83	98	104	40
90°	12	39	67	85	93	9
95°	49	63	61	78	84	58
105°	211	225	245	258	263	224
115°	389	398	416	424	425	385
125°	550	555	568	576	577	491
135°	684	688	691	698	698	527
145°	792	793	793	797	796	495
155°	872	868	869	871	865	401
165°	920	916	916	920	915	260
175°	941	937	937	942	937	90
180°	941	941	941	941	941	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	692.7	692.4	692.2	692.0	691.7	691.2	690.4	689.5	688.7	687.8	688.7
5°	691.1	690.7	690.5	690.2	689.8	689.2	688.1	687.1	686.0	684.9	686.2
7.5°	684.9	684.8	684.7	684.6	684.5	683.9	682.8	681.7	680.6	679.6	680.6
10°	679.6	679.6	679.6	679.6	679.6	678.9	677.7	676.5	675.3	674.1	675.2
12.5°	672.0	672.1	672.2	672.3	672.4	672.0	671.0	670.1	669.1	668.2	669.0
15°	659.9	660.0	660.2	660.3	660.5	660.0	659.0	657.9	656.9	655.9	656.7
17.5°	644.2	644.4	644.8	645.1	645.4	645.0	644.0	642.9	641.9	640.8	641.5
20°	632.8	633.1	633.4	633.7	634.0	633.6	632.6	631.5	630.4	629.4	629.8
22.5°	619.8	620.4	620.9	621.4	622.0	621.6	620.5	619.3	618.1	617.0	617.5
25°	599.6	600.0	600.5	600.9	601.4	601.2	600.3	599.4	598.4	597.5	598.2
27.5°	577.1	577.7	578.5	579.1	579.8	579.6	578.5	577.6	576.5	575.5	575.9
30°	560.3	561.2	562.1	563.0	563.9	563.9	563.0	562.1	561.2	560.3	560.6
32.5°	545.1	545.9	546.7	547.5	548.2	548.3	547.7	547.0	546.4	545.6	546.0
35°	519.0	520.0	521.1	522.1	523.2	523.5	523.1	522.5	522.1	521.7	522.1
37.5°	492.8	493.8	494.7	495.7	496.7	497.0	497.0	496.8	496.6	496.5	497.0
40°	474.9	476.2	477.3	478.6	479.7	480.3	480.1	480.0	479.8	479.7	480.3
42.5°	455.4	457.0	458.5	460.1	461.7	462.6	463.0	463.3	463.6	464.0	464.7
45°	427.5	429.2	430.8	432.5	434.2	435.3	436.1	436.8	437.6	438.4	439.4
47.5°	399.0	400.5	402.0	403.5	405.1	406.4	407.8	409.0	410.4	411.6	413.2
50°	379.4	381.0	382.7	384.4	386.0	387.7	389.3	391.0	392.6	394.3	396.0
52.5°	358.8	360.8	362.8	364.9	366.8	368.9	371.0	372.9	375.0	376.9	378.7
55°	328.6	331.0	333.4	335.8	338.2	340.6	343.0	345.4	347.9	350.3	352.0
57.5°	297.7	300.6	303.4	306.4	309.2	312.1	314.9	317.6	320.4	323.2	325.0
60°	277.1	280.1	283.1	286.1	289.2	292.1	295.2	298.2	301.2	304.2	306.5
62.5°	257.1	260.0	263.1	266.1	269.1	272.2	275.4	278.7	282.0	285.3	287.8
65°	226.3	229.8	233.2	236.7	240.1	243.7	247.3	250.9	254.5	258.2	260.4
67.5°	197.3	200.6	203.9	207.3	210.6	214.2	217.8	221.5	225.2	228.9	231.6
70°	176.1	179.6	183.1	186.5	190.0	193.7	197.6	201.5	205.5	209.4	212.2
72.5°	155.5	159.2	162.7	166.3	169.9	173.8	178.1	182.4	186.6	190.9	194.0
75°	124.7	128.6	132.5	136.4	140.4	144.7	149.5	154.4	159.2	164.0	166.9
77.5°	95.0	99.5	104.1	108.5	113.1	117.6	122.3	126.9	131.5	136.2	139.5
80°	76.6	81.1	85.6	90.2	94.6	99.4	104.6	109.7	114.8	119.9	123.2
82.5°	59.7	64.5	69.3	74.0	78.8	83.8	89.0	94.3	99.5	104.8	107.9
85°	37.3	42.3	47.2	52.2	57.2	62.2	67.5	72.8	78.0	83.4	86.7
87.5°	21.3	26.3	31.4	36.5	41.6	46.7	52.1	57.4	62.8	68.1	71.7
90°	11.5	17.6	23.6	29.7	35.8	41.9	48.1	54.3	60.5	66.7	71.0
92.5°	20.5	24.1	27.6	31.3	34.9	39.8	45.9	52.2	58.3	64.6	68.7
95°	48.6	52.0	55.5	58.9	62.3	63.7	63.0	62.2	61.3	60.6	64.7
97.5°	91.0	95.3	99.7	104.1	108.4	107.3	100.5	93.8	87.1	80.3	79.2
100°	123.9	127.5	131.2	134.8	138.4	142.9	148.4	153.8	159.3	164.7	144.8
102.5°	157.4	161.0	164.4	167.9	171.5	175.8	180.8	185.8	190.9	196.0	194.7
105°	211.2	214.2	217.2	220.2	223.2	227.0	231.5	236.0	240.6	245.0	248.1
107.5°	266.9	268.9	271.0	273.0	275.1	278.5	283.1	287.8	292.4	297.0	300.1
110°	303.2	305.1	306.8	308.6	310.4	313.6	318.2	322.6	327.2	331.7	334.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	337.8	339.7	341.4	343.2	345.1	348.1	352.4	356.7	361.0	365.2	367.4
115°	389.0	390.8	392.6	394.5	396.4	399.3	403.3	407.4	411.4	415.5	417.7
117.5°	442.0	442.6	443.4	444.0	444.7	447.2	451.5	455.8	460.0	464.3	466.1
120°	475.5	475.8	476.1	476.4	476.7	478.8	482.7	486.7	490.6	494.5	496.8
122.5°	504.5	505.3	506.1	506.9	507.7	509.9	513.4	517.0	520.6	524.1	526.3
125°	550.1	551.1	552.0	552.9	553.8	555.8	558.8	561.9	564.9	567.9	569.7
127.5°	593.1	593.7	594.3	594.9	595.6	597.1	599.5	601.9	604.2	606.6	608.5
130°	619.9	620.5	621.2	621.8	622.4	623.8	626.1	628.4	630.6	632.8	634.5
132.5°	646.1	647.0	647.8	648.7	649.6	650.7	651.9	653.3	654.5	655.9	657.8
135°	684.0	684.8	685.6	686.4	687.2	688.0	688.7	689.5	690.2	690.9	692.6
137.5°	718.9	719.6	720.3	721.0	721.7	722.1	722.4	722.6	722.8	723.1	724.9
140°	741.3	741.5	741.9	742.2	742.5	742.7	742.6	742.6	742.6	742.6	744.6
142.5°	761.9	762.0	762.1	762.1	762.1	762.3	762.6	762.9	763.0	763.3	764.8
145°	792.2	792.4	792.5	792.6	792.8	792.9	792.9	792.9	792.9	792.9	793.8
147.5°	818.0	818.0	817.9	817.8	817.8	817.8	818.0	818.1	818.4	818.6	818.9
150°	834.7	834.5	834.1	833.8	833.5	833.5	833.8	834.1	834.5	834.7	835.1
152.5°	851.0	850.2	849.5	848.9	848.2	848.0	848.3	848.6	848.9	849.3	849.5
155°	871.7	870.8	869.9	868.9	868.0	867.6	868.0	868.3	868.6	868.9	869.3
157.5°	887.7	887.2	886.6	886.1	885.5	885.2	885.3	885.3	885.3	885.4	885.8
160°	898.9	898.0	897.1	896.1	895.2	894.8	894.9	895.1	895.3	895.4	896.0
162.5°	907.9	906.9	906.0	905.0	904.1	903.7	903.8	904.0	904.2	904.4	905.2
165°	919.8	918.9	917.9	917.0	916.1	915.7	915.9	916.1	916.1	916.3	917.3
167.5°	928.7	927.8	926.8	925.9	924.9	924.5	924.6	924.8	925.0	925.1	926.2
170°	933.8	932.6	931.6	930.5	929.4	929.0	929.1	929.3	929.4	929.6	930.9
172.5°	937.1	936.0	935.0	933.9	932.7	932.4	932.6	932.9	933.2	933.4	934.6
175°	940.8	939.8	938.9	938.0	937.0	936.7	936.7	936.9	937.1	937.3	938.5
177.5°	942.4	941.6	940.9	940.2	939.4	939.1	939.2	939.3	939.5	939.6	940.5
180°	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	689.5	690.4	691.2	691.5	691.4	691.3	691.2	691.1
5°	687.3	688.6	689.7	690.3	690.2	690.0	689.8	689.7
7.5°	681.6	682.7	683.8	684.2	684.0	683.9	683.8	683.6
10°	676.3	677.3	678.3	678.8	678.7	678.5	678.3	678.1
12.5°	669.8	670.6	671.5	671.6	671.2	670.8	670.5	670.0
15°	657.6	658.5	659.4	659.6	659.0	658.4	657.8	657.2
17.5°	642.2	642.8	643.5	643.7	643.4	643.0	642.7	642.3
20°	630.4	630.8	631.2	631.4	631.4	631.4	631.4	631.4
22.5°	618.0	618.7	619.2	619.3	618.9	618.6	618.2	617.9
25°	598.8	599.4	599.9	599.9	599.1	598.4	597.6	596.9
27.5°	576.3	576.8	577.2	577.2	576.9	576.7	576.4	576.1
30°	560.9	561.2	561.5	561.6	561.4	561.2	561.2	561.0
32.5°	546.3	546.5	546.9	547.0	546.8	546.6	546.5	546.4
35°	522.5	523.1	523.5	523.7	523.7	523.7	523.7	523.7
37.5°	497.7	498.3	498.9	499.2	499.1	499.0	499.0	498.9
40°	480.9	481.5	482.1	482.5	482.9	483.1	483.5	483.8
42.5°	465.4	466.1	466.8	467.3	467.3	467.3	467.4	467.5
45°	440.4	441.5	442.6	443.2	443.4	443.4	443.6	443.8
47.5°	414.7	416.3	417.8	418.7	419.1	419.4	419.7	420.1
50°	397.6	399.3	400.9	402.0	402.4	402.9	403.3	403.8
52.5°	380.5	382.3	384.1	385.1	385.5	385.8	386.1	386.5
55°	353.6	355.3	356.9	358.0	358.6	359.3	359.8	360.4
57.5°	327.0	328.9	330.7	331.9	332.4	332.9	333.3	333.8
60°	308.7	310.9	313.3	314.6	315.0	315.5	315.9	316.4
62.5°	290.3	292.7	295.2	296.8	297.3	297.9	298.5	299.1
65°	262.6	264.9	267.2	268.6	269.2	269.8	270.4	271.0
67.5°	234.3	237.1	239.8	241.6	242.4	243.2	244.0	244.7
70°	215.1	217.9	220.8	222.7	223.6	224.4	225.4	226.3
72.5°	197.2	200.2	203.3	205.2	205.9	206.5	207.2	207.9
75°	170.0	173.0	176.0	177.9	178.6	179.4	180.1	180.9
77.5°	142.8	146.2	149.5	151.4	151.9	152.6	153.2	153.8
80°	126.5	129.8	133.1	135.1	135.7	136.3	137.0	137.5
82.5°	111.1	114.3	117.5	119.7	120.7	121.8	122.9	123.9
85°	90.0	93.3	96.6	98.8	100.0	101.2	102.5	103.6
87.5°	75.3	78.9	82.6	85.0	86.1	87.2	88.4	89.5
90°	75.2	79.5	83.6	86.6	88.1	89.6	91.1	92.6
92.5°	72.8	76.9	81.1	83.7	85.0	86.2	87.5	88.8
95°	68.8	72.9	77.0	79.5	80.6	81.7	82.7	83.7
97.5°	77.9	76.8	75.5	75.4	76.5	77.5	78.6	79.5
100°	124.8	105.0	85.0	75.2	75.4	75.7	76.0	76.3
102.5°	193.3	192.0	190.6	185.2	175.6	165.9	156.3	146.7
105°	251.1	254.1	257.1	259.0	259.9	260.9	261.8	262.7
107.5°	303.1	306.1	309.1	310.9	311.3	311.7	312.3	312.7
110°	336.5	338.9	341.3	343.1	344.3	345.5	346.7	347.9



TEST NUMBER: P333181-940

CATALOG NUMBER: S125DIP-S610D810U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	369.5	371.7	373.8	375.3	376.2	377.0	377.8	378.7
115°	419.7	421.8	423.9	424.9	424.9	424.9	424.9	424.8
117.5°	467.8	469.6	471.4	472.5	473.1	473.8	474.4	475.0
120°	499.0	501.2	503.5	504.7	504.8	505.0	505.1	505.2
122.5°	528.4	530.6	532.6	533.7	533.7	533.7	533.8	533.8
125°	571.5	573.3	575.1	576.0	576.4	576.7	576.9	577.2
127.5°	610.4	612.2	614.1	615.0	614.7	614.4	614.1	613.9
130°	636.1	637.8	639.4	640.2	640.2	640.2	640.2	640.2
132.5°	659.9	661.8	663.9	664.9	664.7	664.5	664.4	664.2
135°	694.2	695.9	697.5	698.2	698.0	697.9	697.7	697.5
137.5°	726.7	728.6	730.4	731.2	731.0	730.8	730.7	730.4
140°	746.5	748.5	750.6	751.4	751.0	750.6	750.4	750.0
142.5°	766.2	767.8	769.2	769.8	769.5	769.2	768.8	768.5
145°	794.7	795.6	796.6	796.8	796.5	796.1	795.9	795.5
147.5°	819.4	819.8	820.3	820.0	819.2	818.4	817.5	816.7
150°	835.4	835.7	836.0	835.6	834.5	833.4	832.3	831.3
152.5°	849.9	850.2	850.5	850.1	849.0	847.9	846.9	845.8
155°	869.9	870.3	870.8	870.4	869.2	867.9	866.7	865.4
157.5°	886.4	886.9	887.3	887.0	885.7	884.5	883.2	882.0
160°	896.6	897.2	897.9	897.6	896.3	895.1	893.9	892.6
162.5°	906.1	907.0	907.8	907.6	906.2	904.8	903.5	902.1
165°	918.2	919.1	920.1	919.9	918.6	917.4	916.1	914.9
167.5°	927.4	928.4	929.6	929.4	928.0	926.7	925.2	923.9
170°	932.0	933.3	934.5	934.4	933.1	931.7	930.2	928.9
172.5°	935.7	936.8	938.0	937.8	936.4	935.0	933.6	932.2
175°	939.7	940.9	942.2	942.1	940.8	939.3	938.0	936.6
177.5°	941.4	942.2	943.1	943.1	942.0	941.0	940.0	939.1
180°	940.8	940.8	940.8	940.8	940.8	940.8	940.8	940.8

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