

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: P333537-935

Luminaire Tested: **S125RDIP-S610D810U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333537-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S610D810U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4552.1 lumens
Efficiency: N/A
Efficacy: 118.5 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: General Diffuse

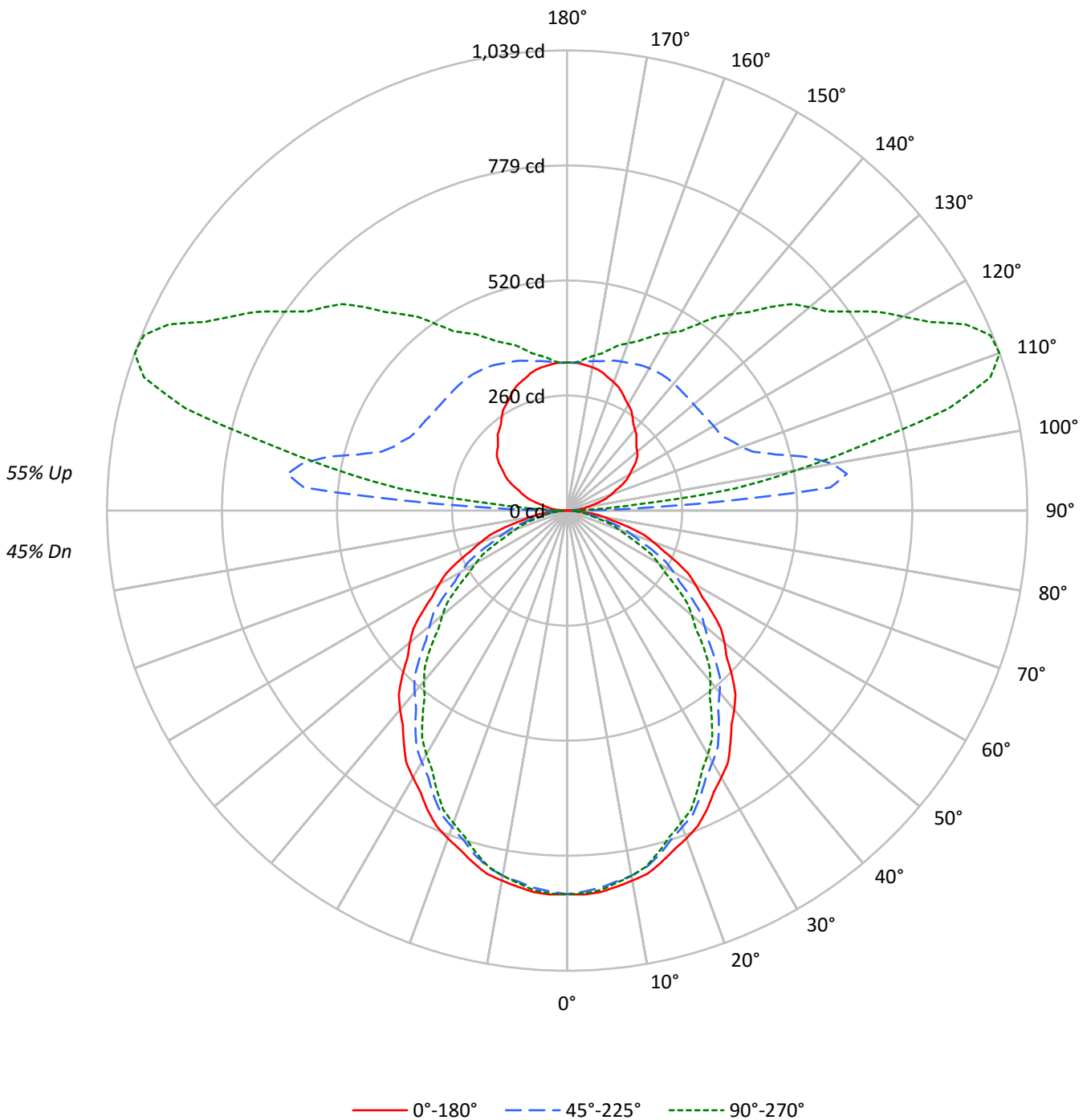
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333537-935

CATALOG NUMBER: S125RDIP-S610D810U935-4F0-1E-UDD-F4

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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	97	93	89	85	89	85	82	79	71	69	67	58	56	55	46	45	44	38
2	88	81	75	70	81	75	69	65	62	59	55	51	48	46	41	39	37	32
3	81	71	64	59	74	66	60	55	55	51	47	45	42	39	36	34	32	28
4	74	63	56	50	67	58	52	46	49	44	40	40	37	34	32	30	28	24
5	68	56	48	43	62	52	45	40	44	39	34	36	32	29	29	26	24	21
6	62	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	21	18
7	58	46	38	32	53	42	35	30	36	31	27	30	26	23	24	21	19	16
8	54	42	34	29	49	39	32	27	33	27	24	27	23	20	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	15	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5594	5594	5594
5°	5607	5543	5577
10°	5564	5491	5491
15°	5498	5380	5336
20°	5413	5225	5161
25°	5315	5072	4960
30°	5190	4894	4737
35°	5065	4709	4487
40°	4947	4517	4242
45°	4804	4302	3974
50°	4660	4068	3693
55°	4494	3845	3396
60°	4326	3574	3077
65°	4129	3260	2709
70°	3903	2866	2334
75°	3593	2415	1941
80°	3165	1901	1629
85°	2668	1549	1452



TEST NUMBER: P333537-935

CATALOG NUMBER: S125RDIP-S610D810U935-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	1.8
10°-20°	227.6	5.0
20°-30°	330.1	7.3
30°-40°	376.2	8.3
40°-50°	366.7	8.1
50°-60°	308.6	6.8
60°-70°	216.4	4.8
70°-80°	111.2	2.4
80°-90°	29.9	0.7
90°-100°	242.0	5.3
100°-110°	520.3	11.4
110°-120°	488.3	10.7
120°-130°	395.7	8.7
130°-140°	317.6	7.0
140°-150°	239.7	5.3
150°-160°	168.7	3.7
160°-170°	99.4	2.2
170°-180°	32.3	0.7
0°-30°	639.1	14.0
0°-40°	1015.3	22.3
0°-60°	1690.5	37.1
0°-90°	2048.1	45.0
90°-120°	1250.6	27.5
90°-150°	2203.6	48.4
90°-180°	2504.0	55.0
0°-180°	4552.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	865	862	855	861	860	82
15°	822	818	805	804	798	232
25°	746	735	712	703	696	343
35°	642	626	597	579	569	402
45°	526	506	471	446	435	406
55°	399	377	342	313	302	357
65°	270	247	213	188	177	268
75°	144	124	97	83	78	152
85°	36	25	21	20	20	40
90°	1	6	11	14	16	3
95°	22	66	596	271	158	24
105°	76	106	488	961	892	80
115°	136	164	392	845	994	134
125°	188	221	376	672	783	167
135°	221	266	373	563	650	171
145°	257	295	374	466	513	161
155°	294	316	365	412	430	135
165°	320	329	350	371	377	90
175°	333	333	336	340	339	32
180°	334	334	334	334	334	



TEST NUMBER: P333537-935

CATALOG NUMBER: S125RDIP-S610D810U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	867.7	867.4	867.0	866.7	866.3	865.6	864.4	863.2	862.0	860.9	862.0
5°	864.8	864.3	863.7	863.1	862.5	861.4	859.8	858.2	856.6	855.0	856.4
7.5°	856.4	855.7	855.2	854.6	854.1	852.9	850.9	849.0	847.1	845.2	846.2
10°	848.4	848.0	847.6	847.1	846.7	845.5	843.4	841.5	839.4	837.3	837.8
12.5°	839.6	839.0	838.4	837.9	837.3	835.7	833.0	830.3	827.5	824.8	825.1
15°	822.3	821.4	820.5	819.7	818.8	816.8	813.8	810.7	807.7	804.6	804.5
17.5°	802.8	801.5	800.1	798.8	797.5	794.9	791.0	787.2	783.3	779.5	778.8
20°	787.6	786.2	784.7	783.3	781.8	778.8	774.1	769.5	764.8	760.2	759.4
22.5°	770.9	769.4	768.0	766.5	765.1	761.9	757.0	752.2	747.3	742.4	741.0
25°	745.8	743.6	741.4	739.3	737.0	733.2	727.9	722.5	717.1	711.7	709.9
27.5°	717.0	714.4	711.7	709.0	706.4	702.2	696.5	690.7	684.9	679.2	676.5
30°	696.0	693.3	690.5	687.8	685.0	680.5	674.4	668.4	662.3	656.2	652.8
32.5°	675.6	672.4	669.2	666.0	662.7	658.0	651.8	645.6	639.3	633.1	629.4
35°	642.4	638.9	635.4	632.0	628.4	623.5	616.9	610.4	603.8	597.3	593.1
37.5°	609.8	605.5	601.3	597.1	592.9	587.4	580.6	573.9	567.1	560.3	555.3
40°	586.8	582.5	578.1	573.7	569.4	563.7	556.7	549.7	542.8	535.8	530.3
42.5°	562.7	558.3	553.8	549.3	544.8	539.0	531.8	524.5	517.4	510.1	504.8
45°	526.0	521.8	517.5	513.3	509.1	503.0	495.0	487.0	479.0	471.0	465.2
47.5°	487.9	483.5	479.0	474.6	470.1	463.8	455.8	447.7	439.7	431.6	425.7
50°	463.8	459.0	454.2	449.4	444.6	438.1	429.8	421.5	413.2	404.9	398.8
52.5°	437.6	432.7	427.8	422.9	418.0	411.6	403.8	396.0	388.1	380.3	373.8
55°	399.1	394.4	389.8	385.1	380.5	374.0	365.9	357.7	349.7	341.5	334.9
57.5°	360.1	355.1	350.1	345.2	340.2	333.7	325.9	318.1	310.2	302.4	295.9
60°	334.9	329.8	324.8	319.7	314.6	308.2	300.2	292.4	284.6	276.7	270.4
62.5°	308.2	303.4	298.5	293.7	288.9	282.4	274.5	266.5	258.6	250.6	244.6
65°	270.2	265.3	260.3	255.4	250.4	244.1	236.3	228.7	220.9	213.3	207.4
67.5°	232.4	227.4	222.5	217.6	212.6	206.5	199.1	191.7	184.3	176.8	171.6
70°	206.7	201.8	196.8	191.9	186.9	180.8	173.6	166.3	159.0	151.8	147.2
72.5°	181.6	176.8	171.9	167.1	162.3	156.4	149.6	142.8	136.0	129.2	125.1
75°	144.0	139.6	135.2	130.9	126.5	121.2	115.1	109.0	102.9	96.8	93.6
77.5°	106.5	103.0	99.5	96.0	92.6	88.3	83.4	78.6	73.7	68.8	66.6
80°	85.1	81.5	78.1	74.6	71.1	67.3	63.2	59.2	55.1	51.1	49.7
82.5°	64.1	61.0	57.9	54.7	51.6	48.6	45.8	43.0	40.2	37.5	36.9
85°	36.0	33.3	30.7	28.2	25.5	23.8	23.1	22.4	21.7	20.9	20.8
87.5°	12.1	11.5	10.9	10.4	9.8	9.6	9.6	9.8	9.8	10.0	10.2
90°	0.7	1.4	2.7	4.0	5.4	6.7	7.4	8.8	9.4	10.8	11.5
92.5°	8.2	10.0	15.6	23.9	35.6	55.2	92.0	153.6	220.5	217.1	175.7
95°	22.2	22.9	28.2	35.6	50.5	80.8	152.8	300.9	486.7	596.5	583.7
97.5°	36.9	37.7	41.5	48.9	62.2	84.0	131.6	240.2	434.6	637.0	738.5
100°	47.1	48.5	51.1	58.5	71.4	91.5	130.6	218.1	387.8	608.0	776.2
102.5°	58.5	59.2	61.4	69.3	81.0	100.7	135.4	209.0	352.2	556.7	753.6
105°	76.1	76.1	79.5	86.2	96.9	115.8	145.4	205.3	317.8	488.1	681.3
107.5°	93.3	94.6	97.9	103.4	114.6	131.6	160.2	211.5	303.2	440.8	607.5
110°	105.7	107.0	109.7	115.8	125.9	143.4	171.0	217.5	298.9	418.7	565.5



TEST NUMBER: P333537-935

CATALOG NUMBER: S125RDIP-S610D810U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	118.0	119.4	121.6	127.6	137.8	154.7	181.2	225.0	298.9	405.8	534.3
115°	136.0	137.3	139.4	145.4	155.5	172.4	197.3	236.3	300.9	391.8	500.2
117.5°	152.1	154.2	156.4	162.4	173.8	190.1	213.7	249.3	305.4	385.0	479.8
120°	162.9	165.0	167.6	173.7	185.1	202.0	225.5	257.9	309.7	381.7	468.6
122.5°	174.3	175.7	177.9	183.9	196.5	213.3	236.9	267.5	313.4	379.0	458.8
125°	188.5	189.9	193.2	199.2	212.1	229.5	251.8	280.7	319.8	375.7	445.7
127.5°	199.7	201.7	206.0	213.7	227.3	244.8	266.2	292.8	326.9	374.0	433.5
130°	206.6	208.7	214.0	222.8	236.9	254.5	275.3	300.9	331.2	373.0	425.5
132.5°	212.1	214.6	221.1	230.9	245.6	263.1	284.0	307.9	336.0	373.0	419.0
135°	220.8	223.5	231.6	242.4	256.5	274.7	295.6	317.8	342.7	373.0	411.3
137.5°	231.9	233.8	241.4	252.2	266.0	284.7	303.8	325.0	348.7	373.8	404.5
140°	238.3	240.3	248.4	259.2	272.0	290.2	309.7	329.8	351.4	374.3	401.2
142.5°	245.8	247.4	254.9	265.6	277.9	295.0	313.4	332.6	353.0	374.9	398.6
145°	257.2	258.5	265.3	274.7	286.8	302.3	319.8	336.6	354.8	374.3	394.5
147.5°	269.0	269.8	275.6	284.4	294.9	308.5	323.8	339.1	355.4	372.6	390.3
150°	276.0	277.3	282.1	290.8	300.2	311.7	326.5	340.6	355.4	370.9	387.1
152.5°	283.5	284.4	288.5	296.2	305.1	315.5	329.2	341.7	354.9	368.8	383.3
155°	293.5	293.5	297.6	304.3	311.0	320.5	331.9	342.7	353.4	364.9	377.0
157.5°	302.4	302.3	305.5	311.3	317.2	324.3	334.2	343.4	351.7	360.8	371.1
160°	308.3	307.6	310.4	315.0	320.5	326.5	335.3	343.4	350.1	358.2	366.3
162.5°	313.1	312.5	315.2	319.3	323.6	328.6	336.3	342.8	348.4	354.9	361.9
165°	320.5	319.1	321.2	324.5	327.2	331.2	336.6	342.0	346.0	350.1	355.4
167.5°	325.3	324.6	325.8	327.7	329.6	332.2	336.6	340.4	342.2	345.3	349.1
170°	328.6	327.9	328.6	329.8	331.2	333.2	336.6	339.3	340.6	342.7	345.3
172.5°	330.7	329.5	330.1	331.5	332.3	333.2	336.0	338.2	338.5	339.4	341.6
175°	333.2	331.9	332.6	333.2	333.2	333.2	335.3	336.6	336.0	336.0	336.6
177.5°	334.4	333.4	333.4	333.9	333.4	333.4	334.4	335.0	333.9	333.9	334.4
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9



TEST NUMBER: P333537-935

CATALOG NUMBER: S125RDIP-S610D810U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	866.2	866.2	866.2	866.2	866.2	866.2	866.2	866.2
2.5°	863.2	864.4	865.6	866.1	866.0	865.8	865.7	865.6
5°	857.9	859.4	860.8	861.4	861.1	860.8	860.6	860.2
7.5°	847.2	848.3	849.3	849.6	849.3	848.9	848.7	848.3
10°	838.2	838.6	839.1	839.1	838.6	838.2	837.8	837.3
12.5°	825.4	825.8	826.0	825.9	825.2	824.6	823.9	823.2
15°	804.3	804.2	804.1	803.3	802.0	800.7	799.4	798.1
17.5°	778.1	777.3	776.6	775.7	774.6	773.5	772.5	771.4
20°	758.7	757.9	757.2	756.2	754.9	753.6	752.3	751.0
22.5°	739.5	738.0	736.7	735.4	734.3	733.2	732.2	731.1
25°	708.0	706.1	704.2	702.4	700.9	699.2	697.7	696.0
27.5°	673.9	671.2	668.6	666.5	665.0	663.4	661.9	660.3
30°	649.5	646.1	642.7	640.4	639.1	637.8	636.5	635.2
32.5°	625.7	622.1	618.4	615.7	614.0	612.3	610.7	609.1
35°	588.8	584.6	580.4	577.3	575.2	573.2	571.2	569.1
37.5°	550.3	545.2	540.1	536.6	534.6	532.7	530.7	528.7
40°	524.7	519.2	513.7	510.1	508.3	506.5	504.8	503.1
42.5°	499.6	494.2	489.0	485.0	482.5	479.9	477.3	474.8
45°	459.3	453.6	447.7	443.8	441.6	439.4	437.2	435.1
47.5°	419.7	413.6	407.7	403.5	401.1	398.6	396.2	393.8
50°	392.7	386.6	380.5	376.3	374.2	372.0	369.8	367.6
52.5°	367.2	360.6	354.0	349.7	347.5	345.3	343.1	341.0
55°	328.4	321.8	315.3	310.9	308.6	306.3	303.9	301.6
57.5°	289.6	283.2	276.8	272.5	270.4	268.4	266.4	264.3
60°	263.9	257.5	251.2	246.8	244.7	242.5	240.3	238.2
62.5°	238.7	232.7	226.8	222.7	220.6	218.4	216.2	214.0
65°	201.6	195.8	190.0	186.0	183.8	181.7	179.4	177.3
67.5°	166.3	160.9	155.6	152.1	150.3	148.6	146.8	145.1
70°	142.8	138.3	133.7	130.6	128.9	127.2	125.4	123.6
72.5°	121.0	116.8	112.6	109.9	108.8	107.6	106.5	105.3
75°	90.4	87.2	84.0	81.9	80.9	79.9	78.9	77.8
77.5°	64.3	62.1	59.8	58.4	57.6	56.8	56.1	55.4
80°	48.4	47.1	45.8	45.0	44.7	44.4	44.1	43.8
82.5°	36.2	35.6	35.0	34.6	34.4	34.3	34.1	33.9
85°	20.7	20.5	20.3	20.2	20.1	19.9	19.8	19.6
87.5°	10.2	10.4	10.5	10.8	10.7	10.5	10.5	10.4
90°	12.1	12.8	13.4	14.8	14.8	14.8	15.5	15.5
92.5°	119.3	86.6	65.2	55.2	46.6	44.9	44.0	43.0
95°	484.1	381.7	298.9	242.4	194.6	174.4	169.0	158.2
97.5°	720.9	649.1	568.4	489.8	448.2	410.5	391.0	382.4
100°	828.0	795.0	725.7	655.7	609.2	560.8	535.9	525.1
102.5°	864.1	884.5	851.2	803.8	754.1	719.6	692.6	684.5
105°	842.8	935.1	964.8	957.3	935.7	913.5	900.1	892.0
107.5°	766.9	890.0	966.0	1001.2	1012.1	1011.9	1007.5	1002.1
110°	710.9	838.8	933.8	990.9	1021.2	1034.1	1038.8	1038.8



TEST NUMBER: P333537-935

CATALOG NUMBER: S125RDIP-S610D810U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	666.8	788.2	884.2	951.7	995.9	1017.9	1029.6	1034.5
115°	611.3	715.7	807.9	881.2	933.8	966.0	984.9	993.7
117.5°	575.5	665.4	744.9	812.2	864.7	898.0	916.8	922.1
120°	556.0	636.9	710.9	770.2	819.9	852.3	870.5	875.8
122.5°	541.6	616.4	682.3	737.9	782.3	811.9	830.1	834.9
125°	520.4	589.1	647.6	696.1	733.8	761.4	776.2	782.9
127.5°	498.9	562.9	617.6	663.0	697.2	721.5	735.6	738.5
130°	485.3	544.7	597.1	640.9	674.6	696.8	710.2	714.3
132.5°	471.9	527.4	575.1	617.2	650.8	673.0	685.4	690.0
135°	454.4	500.8	544.0	582.3	611.9	634.1	646.3	650.3
137.5°	439.6	477.2	513.0	545.5	572.1	592.3	603.5	608.0
140°	431.5	463.1	494.1	522.4	547.3	564.8	574.9	578.2
142.5°	424.6	451.3	477.9	502.5	523.7	538.5	548.0	550.8
145°	415.3	436.3	457.1	475.3	491.5	502.9	510.3	513.0
147.5°	406.7	423.7	439.7	453.5	466.2	475.4	479.7	481.0
150°	401.9	416.7	429.5	441.6	451.8	459.8	462.5	463.1
152.5°	396.5	409.7	421.5	430.8	439.4	445.8	448.5	449.2
155°	388.5	399.2	408.6	416.0	422.8	427.5	429.5	430.2
157.5°	380.4	389.3	396.5	402.3	407.6	411.5	413.4	413.2
160°	375.0	381.7	388.5	393.1	397.9	401.2	402.6	401.9
162.5°	369.0	375.2	380.9	385.0	388.7	391.5	391.8	391.7
165°	360.8	365.6	369.6	373.0	375.7	377.0	377.0	377.0
167.5°	353.0	356.1	359.2	361.6	363.0	364.2	363.7	363.5
170°	348.7	350.8	352.8	354.1	355.4	356.1	356.1	355.4
172.5°	343.9	345.9	347.4	348.2	348.4	349.7	348.6	347.9
175°	338.6	338.6	340.0	340.0	340.0	340.6	339.3	338.6
177.5°	335.0	335.5	335.5	335.5	335.0	335.5	333.9	333.9
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9

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