

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: P333667-927

Luminaire Tested: **S125RDIW-S610D770U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333667-927
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: S125RDIW-S610D770U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3993.0 lumens
Efficiency: N/A
Efficacy: 106.2 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

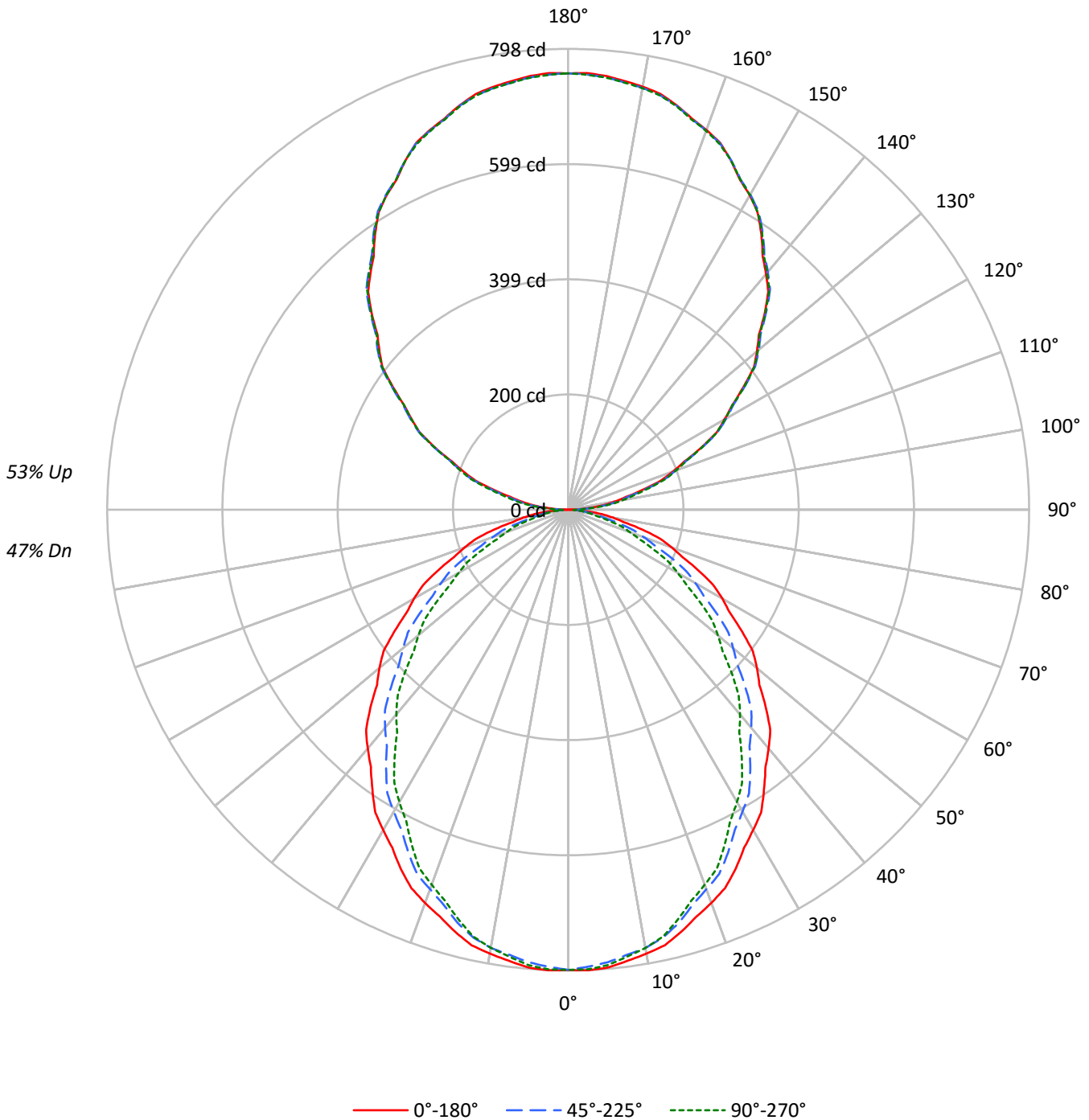
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333667-927

CATALOG NUMBER: S125RDIW-S610D770U927-4F0-1E-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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46	40
2	89	82	76	70	81	75	70	66	63	60	56	52	50	47	42	40	39	34
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	38	35	33	29
4	74	64	56	50	68	59	52	47	50	45	41	41	38	35	34	31	29	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	30	27	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	23	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	21	18	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5147	5147	5147
5°	5159	5100	5131
10°	5119	5052	5052
15°	5059	4950	4910
20°	4981	4807	4748
25°	4890	4666	4563
30°	4776	4502	4359
35°	4660	4332	4128
40°	4552	4156	3903
45°	4420	3958	3656
50°	4287	3744	3399
55°	4135	3538	3125
60°	3981	3289	2830
65°	3799	2998	2492
70°	3592	2638	2149
75°	3306	2221	1787
80°	2912	1748	1499
85°	2453	1430	1341



TEST NUMBER: P333667-927

CATALOG NUMBER: S125RDIW-S610D770U927-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	1.9
10°-20°	209.4	5.2
20°-30°	303.7	7.6
30°-40°	346.1	8.7
40°-50°	337.4	8.4
50°-60°	284.0	7.1
60°-70°	199.1	5.0
70°-80°	102.3	2.6
80°-90°	27.5	0.7
90°-100°	50.6	1.3
100°-110°	149.5	3.7
110°-120°	253.2	6.3
120°-130°	333.2	8.3
130°-140°	373.3	9.3
140°-150°	365.9	9.2
150°-160°	307.3	7.7
160°-170°	204.3	5.1
170°-180°	71.5	1.8
0°-30°	588.0	14.7
0°-40°	934.1	23.4
0°-60°	1555.4	39.0
0°-90°	1884.3	47.2
90°-120°	453.2	11.4
90°-150°	1525.6	38.2
90°-180°	2109.0	52.8
0°-180°	3993.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	793	787	792	792	75
15°	757	752	740	739	734	213
25°	686	676	655	647	640	316
35°	591	576	550	533	524	370
45°	484	466	433	410	400	373
55°	367	347	314	288	278	328
65°	249	228	196	173	163	246
75°	132	114	89	76	72	140
85°	33	23	19	19	18	37
90°	1	5	9	12	14	4
95°	38	40	45	49	50	41
105°	134	137	140	144	146	143
115°	254	256	257	256	256	251
125°	370	373	374	373	372	331
135°	481	484	485	485	483	371
145°	583	585	587	587	585	364
155°	667	667	668	670	667	307
165°	725	724	724	726	723	204
175°	754	752	752	755	751	72
180°	756	756	756	756	756	



TEST NUMBER: P333667-927

CATALOG NUMBER: S125RDIW-S610D770U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	798.4	798.0	797.7	797.4	797.1	796.4	795.3	794.2	793.1	792.1	793.1
5°	795.7	795.2	794.6	794.1	793.5	792.6	791.1	789.6	788.1	786.6	788.0
7.5°	787.9	787.3	786.9	786.3	785.8	784.7	782.9	781.2	779.4	777.6	778.6
10°	780.6	780.2	779.8	779.4	779.0	777.9	776.0	774.2	772.3	770.4	770.8
12.5°	772.5	772.0	771.4	771.0	770.4	768.9	766.4	763.9	761.4	758.8	759.1
15°	756.6	755.7	754.9	754.2	753.4	751.5	748.8	745.9	743.1	740.3	740.2
17.5°	738.6	737.4	736.2	735.0	733.7	731.3	727.8	724.3	720.7	717.2	716.5
20°	724.7	723.3	722.0	720.6	719.3	716.5	712.3	708.0	703.7	699.4	698.7
22.5°	709.2	707.9	706.6	705.3	703.9	701.0	696.5	692.1	687.5	683.0	681.8
25°	686.2	684.1	682.1	680.2	678.1	674.6	669.7	664.7	659.8	654.8	653.2
27.5°	659.7	657.3	654.8	652.4	649.9	646.1	640.8	635.5	630.2	624.9	622.4
30°	640.4	637.9	635.3	632.8	630.3	626.1	620.5	615.0	609.3	603.7	600.6
32.5°	621.6	618.7	615.7	612.8	609.7	605.4	599.7	594.0	588.2	582.5	579.1
35°	591.0	587.9	584.6	581.5	578.2	573.6	567.6	561.6	555.6	549.5	545.7
37.5°	561.1	557.1	553.3	549.4	545.5	540.4	534.2	528.0	521.8	515.6	511.0
40°	539.9	535.9	531.9	527.8	523.9	518.6	512.2	505.8	499.4	493.0	487.9
42.5°	517.8	513.7	509.5	505.4	501.3	495.9	489.3	482.6	476.0	469.4	464.5
45°	483.9	480.1	476.2	472.3	468.4	462.8	455.4	448.1	440.7	433.3	428.0
47.5°	448.9	444.8	440.7	436.7	432.5	426.7	419.4	411.9	404.6	397.1	391.7
50°	426.7	422.3	417.9	413.5	409.1	403.1	395.5	387.9	380.2	372.6	366.9
52.5°	402.7	398.2	393.6	389.1	384.6	378.7	371.5	364.3	357.1	349.9	343.9
55°	367.2	362.9	358.6	354.3	350.1	344.1	336.7	329.2	321.7	314.2	308.2
57.5°	331.3	326.7	322.1	317.6	313.0	307.0	299.8	292.6	285.4	278.2	272.3
60°	308.2	303.5	298.8	294.1	289.5	283.5	276.2	269.0	261.8	254.6	248.7
62.5°	283.6	279.2	274.6	270.2	265.8	259.8	252.5	245.2	237.9	230.5	225.1
65°	248.6	244.1	239.5	235.0	230.4	224.6	217.5	210.4	203.3	196.2	190.8
67.5°	213.8	209.2	204.7	200.2	195.6	190.0	183.2	176.3	169.5	162.7	157.9
70°	190.2	185.7	181.1	176.6	172.0	166.4	159.7	153.0	146.3	139.7	135.5
72.5°	167.1	162.6	158.2	153.8	149.3	143.9	137.7	131.4	125.2	118.9	115.1
75°	132.5	128.4	124.4	120.4	116.4	111.5	105.9	100.3	94.7	89.0	86.1
77.5°	98.0	94.7	91.6	88.3	85.2	81.3	76.8	72.3	67.8	63.3	61.2
80°	78.3	75.0	71.9	68.6	65.4	61.9	58.1	54.4	50.7	47.0	45.7
82.5°	59.0	56.1	53.2	50.3	47.5	44.7	42.1	39.5	37.0	34.5	33.9
85°	33.1	30.7	28.3	25.9	23.4	21.9	21.2	20.6	20.0	19.3	19.1
87.5°	11.2	10.6	10.1	9.6	9.0	8.8	8.9	9.0	9.0	9.1	9.3
90°	0.6	1.7	2.7	3.7	4.8	5.8	6.7	7.6	8.5	9.4	10.1
92.5°	14.3	15.0	15.7	16.4	17.2	18.1	19.3	20.4	21.5	22.6	23.4
95°	38.3	38.5	38.7	39.0	39.3	40.1	41.4	42.7	44.0	45.3	46.2
97.5°	63.5	63.6	63.7	63.8	63.9	64.9	66.7	68.5	70.3	72.1	73.0
100°	82.3	82.3	82.3	82.3	82.3	83.2	84.8	86.6	88.2	90.0	91.2
102.5°	102.6	103.1	103.6	104.1	104.6	105.4	106.2	107.1	107.9	108.8	110.1
105°	134.1	134.8	135.4	136.0	136.7	137.4	138.2	138.9	139.7	140.5	141.3
107.5°	168.9	169.5	170.2	170.9	171.5	172.1	172.8	173.3	174.0	174.5	174.9
110°	192.9	193.5	194.2	194.9	195.5	196.0	196.4	196.8	197.2	197.6	198.0



TEST NUMBER: P333667-927

CATALOG NUMBER: S125RDIW-S610D770U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	217.4	217.7	218.0	218.4	218.7	219.1	219.6	220.1	220.6	221.1	221.3
115°	253.5	254.0	254.5	255.0	255.6	256.0	256.2	256.4	256.7	257.0	256.8
117.5°	289.7	289.9	290.2	290.4	290.7	290.9	291.1	291.4	291.6	291.8	291.9
120°	312.3	312.9	313.5	314.3	314.9	315.3	315.4	315.5	315.7	315.8	315.8
122.5°	336.8	337.0	337.2	337.5	337.7	337.9	338.3	338.7	339.0	339.3	339.2
125°	369.9	370.7	371.5	372.2	373.0	373.5	373.6	373.8	373.9	374.0	373.8
127.5°	405.2	405.6	406.1	406.5	406.9	407.3	407.4	407.6	407.7	407.9	407.7
130°	426.4	427.0	427.7	428.3	429.0	429.4	429.7	429.9	430.2	430.5	430.3
132.5°	447.5	448.6	449.6	450.8	451.8	452.3	452.3	452.2	452.2	452.1	452.0
135°	481.0	481.8	482.6	483.4	484.2	484.7	484.7	484.9	485.1	485.1	485.1
137.5°	512.5	513.3	514.0	514.8	515.6	516.1	516.4	516.7	517.0	517.3	517.5
140°	532.8	533.5	534.1	534.7	535.4	535.9	536.3	536.7	537.1	537.5	537.7
142.5°	553.0	553.6	554.1	554.7	555.2	555.7	556.3	556.7	557.2	557.7	557.9
145°	582.8	583.3	583.8	584.3	584.9	585.3	585.7	586.1	586.5	586.9	586.9
147.5°	610.3	610.6	610.9	611.2	611.5	611.7	612.0	612.4	612.7	613.0	613.3
150°	628.7	628.5	628.4	628.3	628.1	628.4	628.8	629.4	629.9	630.4	630.4
152.5°	643.7	643.9	644.0	644.3	644.4	644.6	644.8	645.1	645.2	645.5	645.8
155°	666.9	666.9	666.9	666.9	666.9	666.9	667.1	667.2	667.3	667.5	668.0
157.5°	687.6	687.3	687.0	686.7	686.4	686.3	686.5	686.6	686.7	686.9	687.4
160°	699.8	699.4	699.0	698.6	698.2	698.1	698.2	698.4	698.5	698.6	699.2
162.5°	710.7	710.3	710.0	709.8	709.5	709.3	709.4	709.4	709.4	709.5	710.1
165°	725.1	724.8	724.6	724.3	724.1	724.0	724.1	724.2	724.4	724.5	725.0
167.5°	737.4	736.8	736.3	735.8	735.2	735.0	735.0	735.0	735.0	735.0	735.8
170°	743.9	743.4	742.8	742.4	741.8	741.6	741.6	741.6	741.6	741.6	742.4
172.5°	748.6	748.1	747.6	747.0	746.6	746.2	746.2	746.2	746.2	746.2	747.0
175°	753.9	753.4	752.9	752.3	751.8	751.5	751.5	751.5	751.5	751.5	752.3
177.5°	756.6	756.2	755.7	755.3	754.9	754.7	754.6	754.5	754.4	754.2	754.9
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7



TEST NUMBER: P333667-927

CATALOG NUMBER: S125RDIW-S610D770U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	796.9	796.9	796.9	796.9	796.9	796.9	796.9	796.9
2.5°	794.2	795.3	796.4	796.9	796.8	796.6	796.5	796.5
5°	789.3	790.7	792.0	792.6	792.3	792.0	791.8	791.5
7.5°	779.5	780.5	781.4	781.7	781.4	781.1	780.9	780.5
10°	771.2	771.6	772.1	772.1	771.6	771.2	770.8	770.4
12.5°	759.5	759.8	760.0	759.9	759.2	758.7	758.0	757.4
15°	740.1	739.9	739.8	739.1	737.9	736.7	735.5	734.3
17.5°	715.9	715.2	714.5	713.7	712.7	711.7	710.7	709.7
20°	698.1	697.4	696.7	695.8	694.6	693.4	692.2	690.9
22.5°	680.4	679.1	677.8	676.6	675.7	674.6	673.7	672.6
25°	651.4	649.7	647.9	646.3	644.8	643.3	641.9	640.4
27.5°	620.0	617.6	615.1	613.2	611.8	610.4	609.0	607.5
30°	597.5	594.5	591.4	589.2	588.0	586.8	585.7	584.5
32.5°	575.7	572.4	568.9	566.5	564.9	563.4	561.9	560.4
35°	541.8	537.9	534.0	531.2	529.3	527.4	525.5	523.6
37.5°	506.3	501.6	496.9	493.7	491.9	490.1	488.3	486.5
40°	482.8	477.7	472.6	469.3	467.7	466.0	464.5	462.9
42.5°	459.6	454.7	449.9	446.2	443.9	441.6	439.2	436.9
45°	422.6	417.3	411.9	408.3	406.3	404.3	402.3	400.3
47.5°	386.1	380.6	375.1	371.2	369.0	366.8	364.6	362.3
50°	361.3	355.7	350.1	346.3	344.3	342.3	340.2	338.3
52.5°	337.9	331.8	325.7	321.7	319.7	317.7	315.7	313.7
55°	302.1	296.1	290.1	286.1	283.9	281.8	279.6	277.5
57.5°	266.4	260.5	254.7	250.7	248.8	246.9	245.1	243.2
60°	242.8	236.9	231.1	227.1	225.1	223.1	221.1	219.1
62.5°	219.6	214.1	208.7	204.9	203.0	201.0	198.9	196.9
65°	185.5	180.1	174.8	171.1	169.1	167.2	165.1	163.1
67.5°	153.0	148.1	143.1	139.9	138.3	136.7	135.1	133.5
70°	131.3	127.2	123.0	120.2	118.6	117.0	115.3	113.8
72.5°	111.3	107.4	103.6	101.2	100.1	99.0	98.0	96.9
75°	83.2	80.2	77.3	75.3	74.5	73.5	72.6	71.6
77.5°	59.2	57.1	55.1	53.7	53.0	52.3	51.7	50.9
80°	44.5	43.3	42.1	41.4	41.1	40.9	40.6	40.3
82.5°	33.3	32.7	32.2	31.8	31.7	31.5	31.4	31.2
85°	19.0	18.9	18.7	18.6	18.5	18.3	18.2	18.1
87.5°	9.3	9.5	9.7	9.7	9.7	9.6	9.6	9.6
90°	10.7	11.4	12.0	12.5	12.9	13.3	13.7	14.1
92.5°	24.3	25.2	26.1	26.6	26.9	27.2	27.5	27.7
95°	47.1	48.0	49.0	49.5	49.8	50.1	50.3	50.5
97.5°	73.8	74.7	75.6	76.0	76.2	76.4	76.5	76.7
100°	92.3	93.5	94.7	95.4	95.7	95.9	96.2	96.4
102.5°	111.4	112.6	113.9	114.7	115.1	115.5	115.8	116.2
105°	142.1	142.9	143.7	144.3	144.7	145.0	145.4	145.8
107.5°	175.3	175.7	176.1	176.3	176.3	176.3	176.2	176.2
110°	198.4	198.8	199.2	199.3	199.2	199.0	198.9	198.8



TEST NUMBER: P333667-927

CATALOG NUMBER: S125RDIW-S610D770U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	221.5	221.7	221.8	221.8	221.6	221.3	221.1	220.9
115°	256.7	256.6	256.4	256.4	256.2	256.1	256.0	255.8
117.5°	292.0	292.1	292.2	292.0	291.5	291.0	290.4	289.9
120°	315.8	315.8	315.8	315.5	315.1	314.5	313.9	313.5
122.5°	339.1	339.0	338.9	338.7	338.2	337.8	337.4	337.0
125°	373.5	373.2	373.0	372.8	372.6	372.5	372.4	372.2
127.5°	407.7	407.5	407.3	407.2	406.9	406.6	406.4	406.2
130°	430.2	430.1	429.9	429.8	429.5	429.2	429.0	428.7
132.5°	451.9	451.7	451.6	451.3	451.0	450.6	450.3	449.9
135°	485.1	485.1	485.1	484.9	484.3	483.9	483.3	482.8
137.5°	517.6	517.8	517.9	517.6	517.0	516.3	515.7	515.0
140°	538.1	538.3	538.5	538.4	537.7	537.0	536.4	535.8
142.5°	558.0	558.2	558.3	558.1	557.5	556.8	556.1	555.5
145°	586.9	586.9	586.9	586.7	586.3	585.9	585.5	585.1
147.5°	613.6	613.9	614.3	613.9	613.1	612.2	611.3	610.5
150°	630.4	630.4	630.4	630.3	630.0	629.8	629.5	629.2
152.5°	646.1	646.4	646.7	646.7	646.2	645.7	645.2	644.8
155°	668.5	669.0	669.6	669.5	668.8	668.2	667.5	666.9
157.5°	687.9	688.4	689.0	688.8	687.9	687.1	686.2	685.3
160°	699.7	700.2	700.7	700.7	700.0	699.3	698.7	698.1
162.5°	710.7	711.3	711.9	711.9	711.1	710.3	709.6	708.8
165°	725.6	726.1	726.6	726.4	725.7	724.9	724.1	723.3
167.5°	736.6	737.4	738.1	738.1	737.3	736.5	735.7	734.8
170°	743.1	743.9	744.7	744.7	743.7	742.8	741.9	741.0
172.5°	747.8	748.6	749.4	749.4	748.6	747.7	746.9	746.2
175°	753.1	753.9	754.7	754.6	753.7	752.8	751.9	751.0
177.5°	755.5	756.1	756.8	756.7	756.0	755.3	754.6	753.8
180°	755.7	755.7	755.7	755.7	755.7	755.7	755.7	755.7

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