

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: P333662-927

Luminaire Tested: **S125RDIW-S610D470U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333662-927
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: S125RDIW-S610D470U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3368.2 lumens
Efficiency: N/A
Efficacy: 111.5 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

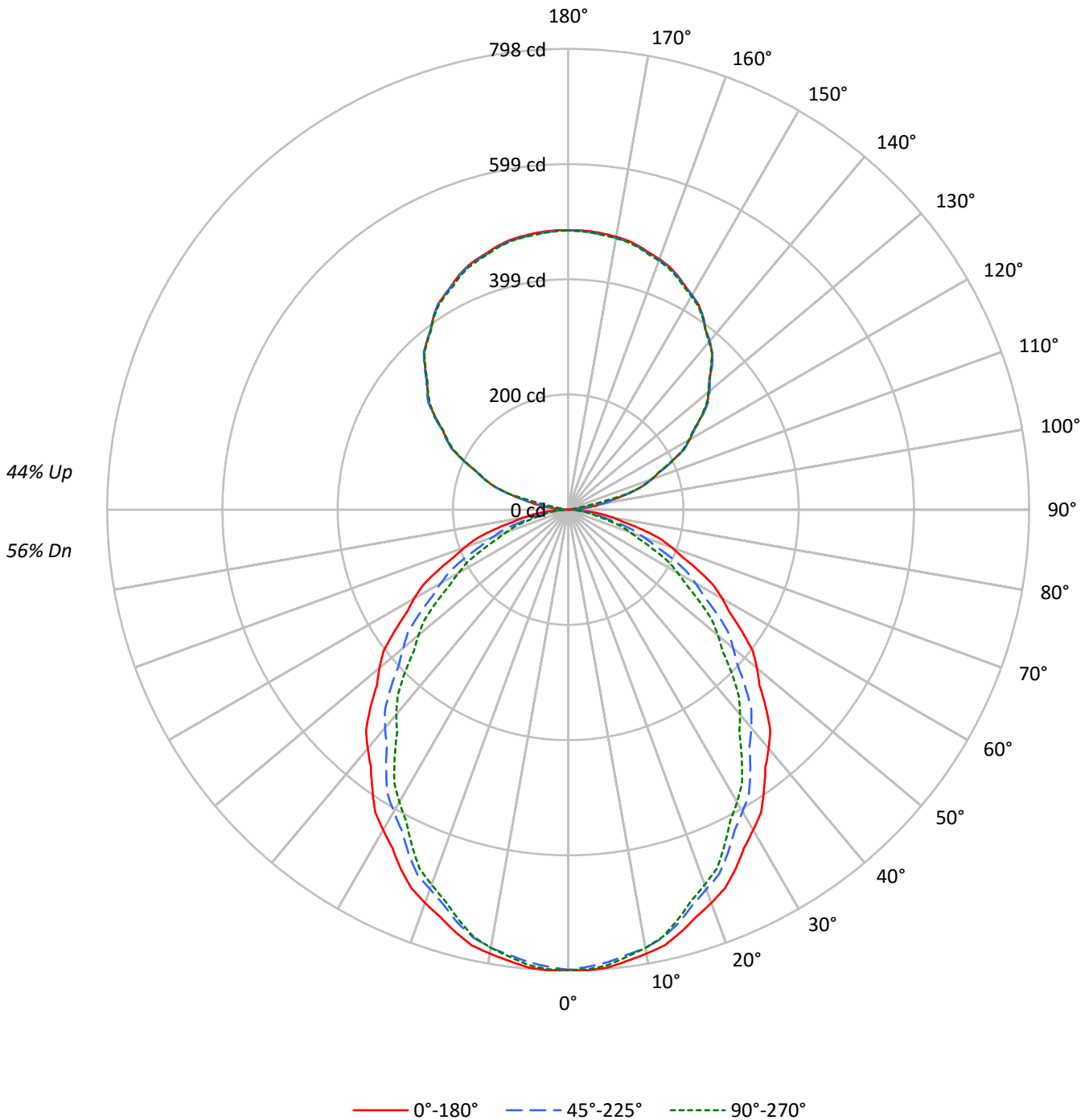
Input Watts (W): 30.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333662-927

CATALOG NUMBER: S125RDIW-S610D470U927-4F0-1E-UDD-F

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	99	95	91	88	92	89	85	82	76	74	72	65	63	62	55	54	53	48
2	91	83	77	72	84	78	72	68	67	63	60	57	55	52	49	46	45	40
3	83	73	66	60	77	69	62	57	59	55	51	51	47	44	43	40	38	34
4	76	65	57	51	70	61	54	49	53	48	43	46	41	38	39	36	33	30
5	70	58	50	44	65	55	47	42	48	42	37	41	37	33	35	32	29	26
6	64	52	44	38	60	49	42	37	43	37	33	37	33	29	32	28	26	23
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	26	23	20
8	55	43	35	30	51	40	33	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	16
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17	15

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: P333662-927

CATALOG NUMBER: S125RDIW-S610D470U927-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	2.2
10°-20°	209.4	6.2
20°-30°	303.7	9.0
30°-40°	346.1	10.3
40°-50°	337.4	10.0
50°-60°	284.0	8.4
60°-70°	199.1	5.9
70°-80°	102.3	3.0
80°-90°	26.9	0.8
90°-100°	17.6	0.5
100°-110°	108.3	3.2
110°-120°	196.4	5.8
120°-130°	252.0	7.5
130°-140°	271.1	8.0
140°-150°	254.4	7.6
150°-160°	205.8	6.1
160°-170°	133.1	4.0
170°-180°	45.9	1.4
0°-30°	588.0	17.5
0°-40°	934.1	27.7
0°-60°	1555.4	46.2
0°-90°	1883.7	55.9
90°-120°	322.2	9.6
90°-150°	1099.7	32.7
90°-180°	1485.0	44.1
0°-180°	3368.2	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°	0	3	6	8	9	2
95°	20	19	6	7	8	26
105°	105	107	107	107	106	112
115°	198	200	200	198	196	196
125°	281	284	284	282	281	251
135°	351	353	352	351	349	270
145°	407	407	408	408	406	254
155°	448	446	447	447	445	206
165°	473	471	471	473	470	133
175°	484	481	482	484	481	46
180°	484	484	484	484	484	



TEST NUMBER: P333662-927

CATALOG NUMBER: S125RDIW-S610D470U927-4F0-1E-UDD-F

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	10.5	9.9	9.3	8.6	8.3	8.3	8.4	8.4	8.4	8.5
90°	0.4	1.0	1.7	2.3	2.9	3.5	4.0	4.6	5.1	5.7	6.1
92.5°	5.5	5.1	4.6	4.2	3.7	3.7	4.3	4.8	5.2	5.7	6.1
95°	20.4	20.2	20.0	19.7	19.5	17.8	14.8	11.8	8.8	5.7	6.1
97.5°	42.6	43.1	43.5	44.0	44.4	41.6	35.6	29.6	23.6	17.7	15.4
100°	59.8	60.1	60.4	60.6	60.8	61.1	61.4	61.7	62.0	62.3	50.5
102.5°	77.3	77.6	78.0	78.3	78.6	78.8	79.0	79.1	79.4	79.5	77.3
105°	105.4	105.7	106.0	106.3	106.6	106.8	106.8	106.8	106.8	106.8	106.8
107.5°	134.4	134.4	134.4	134.4	134.4	134.5	134.7	134.8	135.0	135.1	135.2
110°	153.4	153.4	153.4	153.4	153.4	153.4	153.6	153.8	153.9	154.1	153.8



TEST NUMBER: P333662-927

CATALOG NUMBER: S125RDIW-S610D470U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	171.2	171.3	171.5	171.7	171.9	172.1	172.1	172.3	172.4	172.5	172.1
115°	197.8	198.2	198.6	199.0	199.4	199.6	199.7	199.8	199.9	199.9	199.6
117.5°	225.5	225.4	225.4	225.4	225.4	225.5	225.8	226.1	226.4	226.7	226.3
120°	242.6	242.6	242.5	242.4	242.3	242.4	242.6	242.9	243.1	243.4	243.2
122.5°	257.9	258.1	258.4	258.7	259.0	259.2	259.4	259.4	259.6	259.7	259.5
125°	281.3	281.9	282.4	283.0	283.5	283.8	283.8	283.8	283.8	283.8	283.5
127.5°	303.7	304.2	304.6	305.0	305.4	305.5	305.5	305.5	305.4	305.3	305.1
130°	317.5	317.9	318.3	318.7	319.1	319.3	319.4	319.5	319.6	319.6	319.4
132.5°	331.3	331.8	332.2	332.6	333.1	333.3	333.1	333.0	332.7	332.6	332.6
135°	350.9	351.3	351.8	352.3	352.8	352.9	352.8	352.6	352.4	352.3	352.1
137.5°	368.8	369.2	369.6	370.1	370.5	370.7	370.5	370.3	370.2	370.0	370.1
140°	380.6	380.7	380.9	381.0	381.2	381.3	381.2	381.1	381.0	381.0	381.1
142.5°	391.2	391.3	391.4	391.5	391.6	391.7	391.8	391.9	392.1	392.1	392.1
145°	406.8	406.9	407.1	407.3	407.4	407.5	407.5	407.5	407.5	407.5	407.6
147.5°	420.4	420.3	420.3	420.3	420.3	420.3	420.4	420.5	420.6	420.6	420.7
150°	429.0	428.8	428.6	428.5	428.3	428.3	428.5	428.6	428.8	429.0	429.1
152.5°	437.3	437.0	436.6	436.3	435.9	435.8	435.9	436.1	436.3	436.4	436.6
155°	448.0	447.5	447.0	446.6	446.1	445.9	446.1	446.2	446.4	446.6	446.8
157.5°	456.2	455.9	455.7	455.3	455.0	455.0	455.0	455.0	455.0	455.0	455.3
160°	461.9	461.4	461.0	460.5	460.0	459.9	459.9	460.0	460.1	460.2	460.5
162.5°	466.5	466.0	465.6	465.1	464.6	464.5	464.5	464.6	464.7	464.8	465.2
165°	472.7	472.2	471.7	471.3	470.8	470.6	470.6	470.7	470.8	470.9	471.3
167.5°	477.3	476.8	476.3	475.8	475.3	475.1	475.2	475.2	475.3	475.4	476.0
170°	479.9	479.3	478.7	478.2	477.6	477.4	477.4	477.5	477.6	477.7	478.3
172.5°	481.6	481.0	480.5	479.9	479.3	479.2	479.3	479.4	479.6	479.7	480.3
175°	483.5	483.0	482.5	482.0	481.6	481.3	481.4	481.5	481.6	481.6	482.3
177.5°	484.3	483.9	483.5	483.2	482.8	482.6	482.7	482.8	482.8	482.9	483.3
180°	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5



TEST NUMBER: P333662-927

CATALOG NUMBER: S125RDIW-S610D470U927-4F0-1E-UDD-F

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°	8.6	8.6	8.7	8.7	8.6	8.6	8.6	8.5
90°	6.5	6.9	7.3	7.7	7.9	8.2	8.4	8.6
92.5°	6.5	6.9	7.3	7.6	7.7	7.8	7.9	8.0
95°	6.5	6.9	7.3	7.5	7.5	7.5	7.5	7.5
97.5°	13.2	10.9	8.6	7.5	7.5	7.5	7.5	7.5
100°	38.7	26.8	14.9	8.8	8.5	8.2	7.8	7.5
102.5°	75.1	72.8	70.6	66.8	61.3	55.9	50.5	45.1
105°	106.8	106.8	106.8	106.8	106.7	106.6	106.5	106.5
107.5°	135.2	135.2	135.2	135.1	134.9	134.7	134.4	134.2
110°	153.6	153.4	153.1	153.0	153.1	153.2	153.3	153.4



TEST NUMBER: P333662-927

CATALOG NUMBER: S125RDIW-S610D470U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	171.8	171.5	171.3	171.0	171.0	170.8	170.7	170.6
115°	199.3	199.0	198.7	198.3	197.8	197.3	196.9	196.4
117.5°	225.9	225.5	225.1	224.7	224.5	224.3	224.1	223.9
120°	243.0	242.9	242.7	242.4	242.0	241.6	241.2	240.8
122.5°	259.4	259.2	259.0	258.7	258.3	257.8	257.4	256.9
125°	283.2	282.9	282.6	282.3	282.0	281.8	281.5	281.3
127.5°	305.0	304.8	304.7	304.3	303.6	303.1	302.5	301.9
130°	319.2	318.9	318.7	318.4	318.0	317.6	317.2	316.8
132.5°	332.5	332.4	332.4	332.2	331.8	331.4	331.0	330.6
135°	352.0	351.8	351.6	351.3	350.9	350.4	349.9	349.4
137.5°	370.1	370.2	370.2	370.0	369.6	369.2	368.8	368.4
140°	381.3	381.4	381.6	381.4	381.0	380.5	380.0	379.5
142.5°	392.2	392.2	392.3	392.1	391.6	391.1	390.6	390.1
145°	407.7	407.7	407.8	407.6	407.1	406.6	406.2	405.7
147.5°	420.9	421.0	421.0	420.8	420.3	419.7	419.1	418.5
150°	429.3	429.4	429.6	429.4	428.7	428.1	427.5	426.8
152.5°	436.7	436.9	437.0	436.9	436.3	435.7	435.1	434.6
155°	447.0	447.3	447.5	447.3	446.6	446.0	445.4	444.7
157.5°	455.5	455.7	456.0	455.8	455.2	454.6	453.9	453.3
160°	460.8	461.1	461.4	461.3	460.7	460.0	459.4	458.8
162.5°	465.6	466.1	466.5	466.4	465.7	465.0	464.3	463.6
165°	471.9	472.4	472.9	472.8	472.1	471.4	470.8	470.2
167.5°	476.6	477.1	477.7	477.7	476.9	476.2	475.5	474.8
170°	479.0	479.7	480.3	480.2	479.5	478.8	478.1	477.4
172.5°	480.9	481.4	482.0	482.0	481.3	480.5	479.8	479.1
175°	482.9	483.5	484.2	484.2	483.5	482.8	482.0	481.3
177.5°	483.8	484.2	484.7	484.7	484.1	483.6	483.1	482.6
180°	483.5	483.5	483.5	483.5	483.5	483.5	483.5	483.5

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