

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: P333679-927

Luminaire Tested: **S125RDIW-S610D1560U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333679-927  
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-S610D1560U927-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6170.0 lumens  
Efficiency: N/A  
Efficacy: 101.8 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: Semi-Indirect

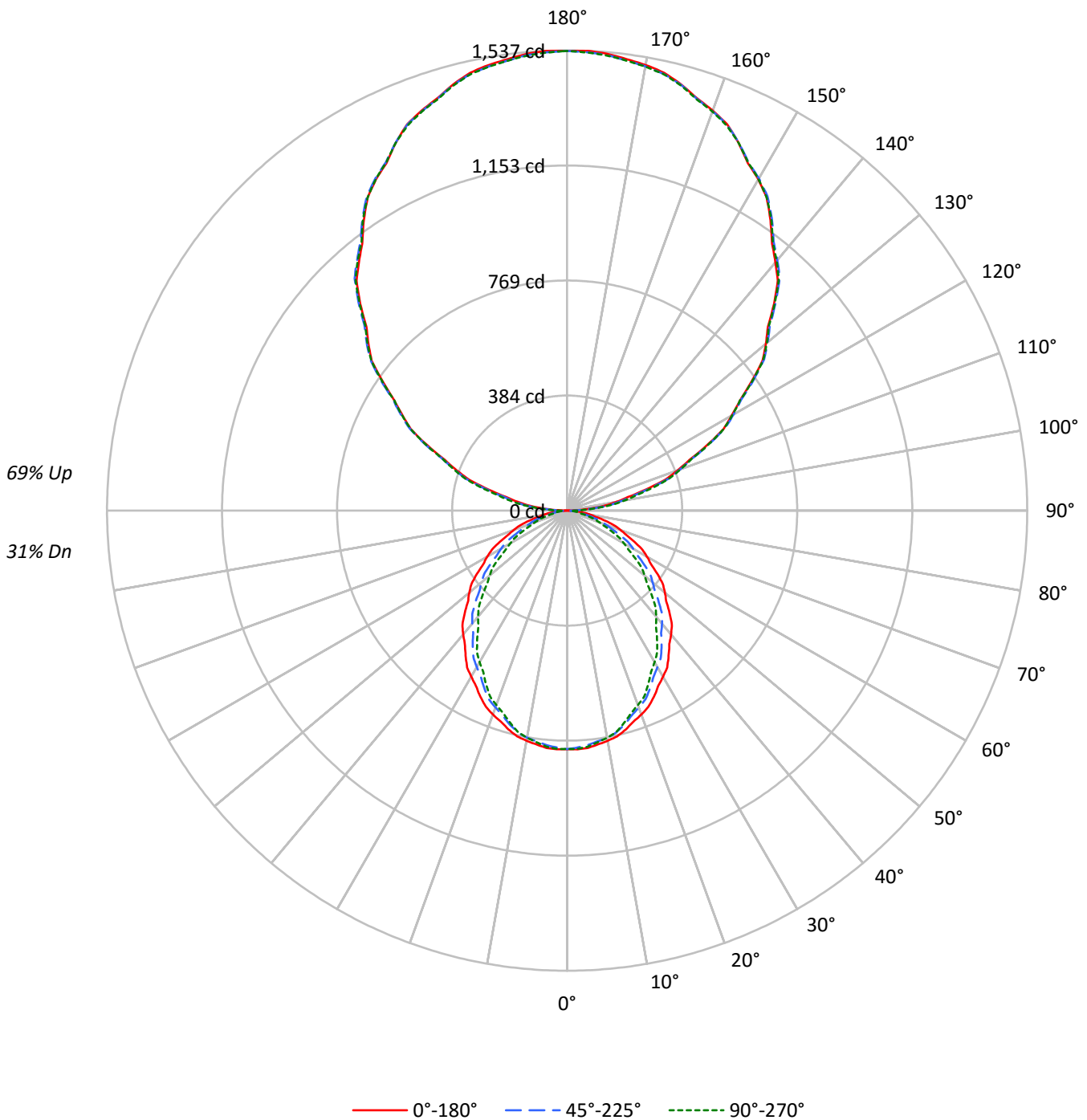
Input Watts (W): 60.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### 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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31
1	94	89	86	82	84	80	77	75	64	62	60	48	47	46	34	33	33	26
2	85	78	72	67	76	70	65	61	56	52	50	42	40	38	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	36	34	30	28	24	22	20	16
5	65	54	46	41	58	49	42	37	39	34	31	30	27	24	22	19	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	17	16	12
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	16	14	12	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.9	1.2
10°-20°	209.4	3.4
20°-30°	303.7	4.9
30°-40°	346.1	5.6
40°-50°	337.4	5.5
50°-60°	284.0	4.6
60°-70°	199.1	3.2
70°-80°	102.3	1.7
80°-90°	29.2	0.5
90°-100°	102.8	1.7
100°-110°	303.6	4.9
110°-120°	514.3	8.3
120°-130°	676.9	11.0
130°-140°	758.4	12.3
140°-150°	743.3	12.0
150°-160°	624.3	10.1
160°-170°	415.0	6.7
170°-180°	145.2	2.4
0°-30°	588.0	9.5
0°-40°	934.1	15.1
0°-60°	1555.4	25.2
0°-90°	1886.0	30.6
90°-120°	920.8	14.9
90°-150°	3099.4	50.2
90°-180°	4284.0	69.4
0°-180°	6170.0	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	11	19	25	29	6
95°	78	81	92	100	103	83
105°	272	278	286	292	296	291
115°	515	520	522	521	520	509
125°	752	758	760	758	756	673
135°	977	984	986	985	981	753
145°	1184	1189	1192	1192	1189	740
155°	1355	1355	1356	1360	1355	624
165°	1473	1471	1472	1476	1470	415
175°	1532	1527	1527	1533	1526	145
180°	1535	1535	1535	1535	1535	



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**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°	11.3	11.0	10.7	10.4	10.0	10.0	10.2	10.5	10.8	11.0	11.3
90°	1.2	3.3	5.5	7.6	9.7	11.6	13.5	15.4	17.3	19.1	20.4
92.5°	28.9	30.4	31.9	33.4	34.9	36.8	39.1	41.3	43.6	45.9	47.6
95°	77.6	78.2	78.7	79.2	79.8	81.4	84.1	86.7	89.4	92.0	93.9
97.5°	129.0	129.2	129.4	129.7	129.9	131.8	135.5	139.2	142.8	146.5	148.2
100°	167.2	167.2	167.2	167.2	167.2	169.0	172.5	175.9	179.4	182.8	185.2
102.5°	208.3	209.5	210.5	211.5	212.6	214.0	215.8	217.5	219.3	221.0	223.6
105°	272.4	273.7	275.0	276.4	277.7	279.2	280.7	282.3	283.9	285.6	287.2
107.5°	343.1	344.4	345.8	347.1	348.4	349.7	350.9	352.1	353.4	354.6	355.4
110°	391.9	393.2	394.5	395.9	397.2	398.2	399.0	399.8	400.6	401.4	402.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	441.6	442.3	443.0	443.6	444.3	445.2	446.2	447.2	448.2	449.2	449.6
115°	514.9	516.0	517.1	518.1	519.2	520.0	520.5	521.0	521.6	522.1	521.8
117.5°	588.5	589.0	589.5	589.9	590.4	590.9	591.4	591.8	592.3	592.9	593.0
120°	634.4	635.7	637.1	638.4	639.7	640.5	640.8	641.0	641.3	641.6	641.6
122.5°	684.1	684.6	685.1	685.6	686.0	686.6	687.3	688.0	688.6	689.4	689.1
125°	751.5	753.0	754.7	756.3	757.9	758.8	759.1	759.3	759.6	759.9	759.3
127.5°	823.2	824.1	825.0	825.9	826.8	827.4	827.8	828.1	828.4	828.7	828.4
130°	866.2	867.5	868.9	870.1	871.5	872.4	873.0	873.5	874.0	874.6	874.3
132.5°	909.2	911.4	913.5	915.8	917.9	918.9	918.9	918.7	918.6	918.5	918.2
135°	977.3	978.9	980.5	982.1	983.7	984.6	984.8	985.2	985.4	985.6	985.6
137.5°	1041.3	1042.9	1044.4	1045.9	1047.5	1048.5	1049.2	1049.7	1050.3	1050.9	1051.2
140°	1082.4	1083.8	1085.1	1086.4	1087.7	1088.8	1089.6	1090.4	1091.2	1092.0	1092.5
142.5°	1123.6	1124.7	1125.8	1126.9	1128.0	1129.0	1130.0	1131.1	1132.1	1133.1	1133.4
145°	1184.0	1185.0	1186.1	1187.2	1188.3	1189.1	1189.9	1190.7	1191.5	1192.3	1192.3
147.5°	1239.9	1240.5	1241.0	1241.7	1242.2	1242.9	1243.5	1244.1	1244.8	1245.4	1246.0
150°	1277.2	1276.9	1276.7	1276.4	1276.1	1276.5	1277.6	1278.7	1279.7	1280.8	1280.8
152.5°	1307.7	1308.1	1308.5	1308.8	1309.2	1309.6	1310.1	1310.5	1310.9	1311.4	1312.0
155°	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1355.3	1355.5	1355.7	1356.1	1357.1
157.5°	1396.9	1396.3	1395.7	1395.1	1394.6	1394.4	1394.6	1395.0	1395.2	1395.4	1396.5
160°	1421.7	1420.9	1420.1	1419.4	1418.6	1418.3	1418.6	1418.8	1419.1	1419.4	1420.4
162.5°	1443.8	1443.1	1442.6	1442.0	1441.4	1441.1	1441.1	1441.2	1441.3	1441.3	1442.6
165°	1473.1	1472.6	1472.0	1471.6	1471.0	1470.8	1471.2	1471.4	1471.6	1472.0	1473.0
167.5°	1497.9	1496.9	1495.9	1494.8	1493.7	1493.2	1493.2	1493.2	1493.2	1493.2	1494.8
170°	1511.3	1510.3	1509.2	1508.2	1507.1	1506.6	1506.6	1506.6	1506.6	1506.6	1508.2
172.5°	1520.9	1519.9	1518.8	1517.7	1516.6	1516.2	1516.2	1516.2	1516.2	1516.2	1517.7
175°	1531.7	1530.6	1529.5	1528.4	1527.4	1526.9	1526.9	1526.9	1526.9	1526.9	1528.4
177.5°	1537.2	1536.3	1535.5	1534.6	1533.7	1533.2	1533.0	1532.8	1532.6	1532.4	1533.7
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2



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**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°	11.6	11.8	12.1	12.3	12.4	12.4	12.4	12.4
90°	21.8	23.1	24.4	25.5	26.3	27.1	27.9	28.7
92.5°	49.4	51.1	52.9	54.0	54.7	55.2	55.8	56.4
95°	95.7	97.6	99.4	100.6	101.2	101.7	102.2	102.7
97.5°	150.0	151.7	153.4	154.6	154.9	155.2	155.5	155.8
100°	187.6	190.0	192.3	193.8	194.3	194.9	195.4	195.9
102.5°	226.2	228.9	231.4	233.1	233.9	234.6	235.4	236.1
105°	288.8	290.3	291.9	293.1	293.9	294.7	295.5	296.3
107.5°	356.2	357.0	357.7	358.1	358.1	358.1	358.0	357.9
110°	403.1	403.9	404.6	404.9	404.6	404.3	404.1	403.9





TEST NUMBER: P333679-927

CATALOG NUMBER: S125RDIW-S610D1560U927-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	450.0	450.4	450.7	450.7	450.2	449.7	449.2	448.8
115°	521.6	521.3	521.0	520.8	520.5	520.2	520.0	519.8
117.5°	593.3	593.5	593.7	593.3	592.2	591.1	590.1	589.0
120°	641.6	641.6	641.6	641.0	640.0	638.9	637.9	636.8
122.5°	689.0	688.7	688.5	688.0	687.1	686.3	685.4	684.6
125°	758.8	758.3	757.7	757.3	757.1	756.8	756.5	756.3
127.5°	828.1	827.9	827.6	827.2	826.6	826.2	825.6	825.1
130°	874.0	873.8	873.5	873.1	872.6	872.0	871.5	871.0
132.5°	918.0	917.7	917.4	917.0	916.2	915.4	914.7	913.9
135°	985.6	985.6	985.6	985.2	984.0	983.0	981.9	980.9
137.5°	1051.5	1051.9	1052.2	1051.7	1050.4	1049.0	1047.7	1046.3
140°	1093.1	1093.6	1094.1	1093.7	1092.4	1091.1	1089.7	1088.4
142.5°	1133.7	1134.0	1134.4	1133.9	1132.5	1131.2	1129.9	1128.5
145°	1192.3	1192.3	1192.3	1191.9	1191.1	1190.3	1189.5	1188.7
147.5°	1246.7	1247.3	1247.9	1247.4	1245.5	1243.7	1242.0	1240.2
150°	1280.8	1280.8	1280.8	1280.5	1279.9	1279.5	1278.9	1278.3
152.5°	1312.6	1313.3	1313.9	1313.8	1312.8	1311.9	1310.9	1310.0
155°	1358.1	1359.2	1360.3	1360.2	1358.8	1357.5	1356.1	1354.9
157.5°	1397.6	1398.7	1399.7	1399.4	1397.6	1395.8	1394.1	1392.3
160°	1421.5	1422.5	1423.6	1423.5	1422.1	1420.8	1419.5	1418.2
162.5°	1443.9	1445.2	1446.4	1446.3	1444.8	1443.2	1441.7	1440.1
165°	1474.0	1475.1	1476.2	1475.9	1474.3	1472.7	1471.2	1469.5
167.5°	1496.4	1497.9	1499.5	1499.5	1497.9	1496.3	1494.6	1492.9
170°	1509.7	1511.3	1512.9	1512.8	1510.9	1509.1	1507.2	1505.4
172.5°	1519.3	1520.9	1522.5	1522.5	1520.8	1519.2	1517.5	1515.9
175°	1530.1	1531.7	1533.3	1533.1	1531.3	1529.4	1527.6	1525.7
177.5°	1534.9	1536.2	1537.5	1537.4	1535.9	1534.4	1532.9	1531.4
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2

(END OF REPORT)