

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: P333675

Luminaire Tested: **S125RDIW-S610D1340U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333675
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-S610D1340U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7031.4 lumens
Efficiency: N/A
Efficacy: 130.7 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

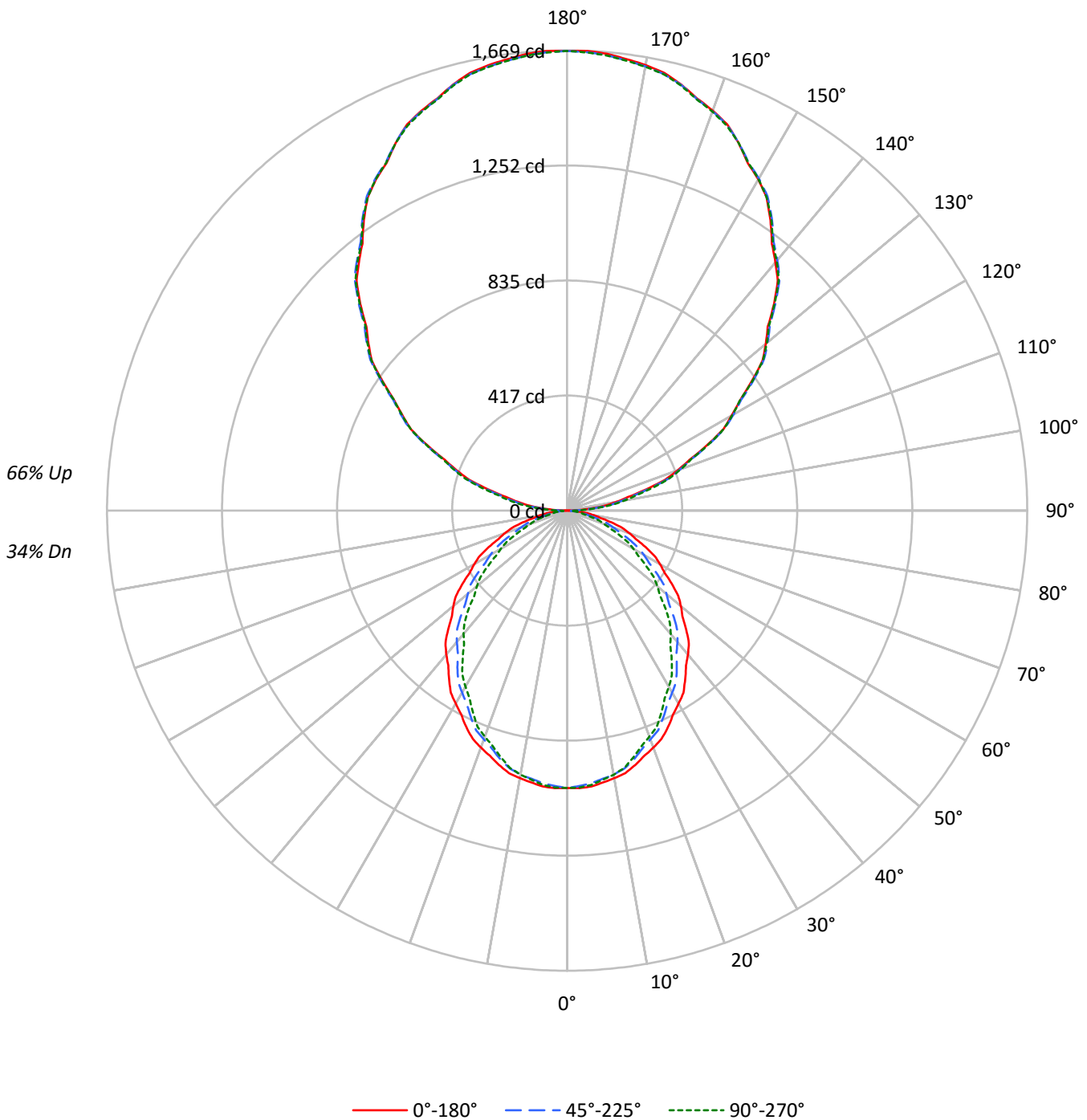
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	81	78	76	65	63	61	50	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	30	24
3	78	69	62	57	71	63	57	52	51	46	43	39	36	34	29	27	25	21
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	16
6	61	49	41	36	55	45	38	33	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	29	33	28	24	26	22	20	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	14	11
9	48	36	29	24	44	33	27	23	27	22	19	22	18	16	16	14	12	10
10	45	33	26	22	41	30	24	20	25	20	17	20	17	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6497	6497	6497
5°	6512	6438	6477
10°	6462	6378	6378
15°	6386	6248	6197
20°	6287	6068	5994
25°	6173	5890	5761
30°	6029	5683	5502
35°	5882	5469	5211
40°	5746	5246	4926
45°	5580	4996	4615
50°	5413	4725	4290
55°	5219	4466	3944
60°	5025	4151	3573
65°	4795	3785	3147
70°	4534	3329	2712
75°	4172	2805	2256
80°	3675	2205	1893
85°	3097	1801	1690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	1.3
10°-20°	264.3	3.8
20°-30°	383.3	5.5
30°-40°	436.9	6.2
40°-50°	425.9	6.1
50°-60°	358.5	5.1
60°-70°	251.3	3.6
70°-80°	129.2	1.8
80°-90°	36.3	0.5
90°-100°	111.6	1.6
100°-110°	329.7	4.7
110°-120°	558.4	7.9
120°-130°	734.9	10.5
130°-140°	823.5	11.7
140°-150°	807.1	11.5
150°-160°	677.9	9.6
160°-170°	450.6	6.4
170°-180°	157.7	2.2
0°-30°	742.3	10.6
0°-40°	1179.2	16.8
0°-60°	1963.5	27.9
0°-90°	2380.2	33.9
90°-120°	999.7	14.2
90°-150°	3365.1	47.9
90°-180°	4651.0	66.1
0°-180°	7031.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1004	1001	993	1000	999	95
15°	955	950	934	933	927	269
25°	866	854	827	817	808	398
35°	746	727	694	672	661	467
45°	611	588	547	518	505	471
55°	464	438	397	364	350	414
65°	314	287	248	218	206	311
75°	167	144	112	96	90	177
85°	42	29	24	24	23	47
90°	1	12	21	27	31	7
95°	84	88	100	109	112	90
105°	296	302	310	318	322	316
115°	559	564	567	566	564	553
125°	816	823	825	822	821	730
135°	1061	1068	1070	1070	1065	818
145°	1286	1291	1295	1294	1291	803
155°	1471	1471	1472	1477	1471	677
165°	1599	1597	1598	1603	1596	451
175°	1663	1658	1658	1665	1656	158
180°	1667	1667	1667	1667	1667	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1007.8	1007.4	1007.0	1006.6	1006.2	1005.3	1003.9	1002.6	1001.2	999.9	1001.2
5°	1004.4	1003.8	1003.1	1002.4	1001.7	1000.5	998.6	996.8	994.9	993.0	994.7
7.5°	994.6	993.9	993.3	992.6	992.0	990.6	988.3	986.1	983.9	981.6	982.8
10°	985.4	984.9	984.4	983.9	983.4	982.0	979.6	977.3	974.9	972.5	973.0
12.5°	975.1	974.5	973.8	973.2	972.5	970.6	967.5	964.3	961.1	957.9	958.3
15°	955.1	954.0	953.0	952.0	951.0	948.7	945.2	941.6	938.1	934.5	934.4
17.5°	932.4	930.9	929.3	927.8	926.2	923.2	918.7	914.3	909.8	905.4	904.5
20°	914.8	913.1	911.4	909.7	908.0	904.5	899.1	893.7	888.3	882.9	882.0
22.5°	895.3	893.6	892.0	890.3	888.6	884.9	879.2	873.6	867.9	862.2	860.6
25°	866.2	863.6	861.1	858.6	856.0	851.6	845.4	839.1	832.9	826.6	824.5
27.5°	832.7	829.7	826.6	823.5	820.4	815.6	808.9	802.2	795.5	788.8	785.7
30°	808.4	805.2	802.0	798.8	795.6	790.4	783.3	776.3	769.2	762.1	758.2
32.5°	784.7	781.0	777.2	773.5	769.7	764.2	757.0	749.8	742.5	735.3	731.0
35°	746.1	742.1	738.0	734.0	729.9	724.1	716.5	708.9	701.3	693.7	688.8
37.5°	708.3	703.3	698.4	693.5	688.6	682.2	674.3	666.5	658.7	650.8	645.0
40°	681.5	676.5	671.4	666.3	661.3	654.7	646.6	638.5	630.4	622.3	615.9
42.5°	653.6	648.4	643.2	638.0	632.8	626.0	617.6	609.2	600.9	592.5	586.3
45°	610.9	606.0	601.1	596.2	591.3	584.2	574.9	565.6	556.3	547.0	540.3
47.5°	566.7	561.5	556.3	551.2	546.0	538.7	529.4	520.0	510.7	501.3	494.4
50°	538.7	533.1	527.5	522.0	516.4	508.8	499.2	489.6	479.9	470.3	463.2
52.5°	508.3	502.6	496.9	491.2	485.5	478.1	469.0	459.9	450.8	441.7	434.1
55°	463.5	458.1	452.7	447.3	441.9	434.4	425.0	415.5	406.1	396.6	389.0
57.5°	418.2	412.4	406.6	400.9	395.1	387.6	378.5	369.4	360.3	351.2	343.7
60°	389.0	383.1	377.2	371.3	365.4	357.9	348.7	339.6	330.5	321.4	314.0
62.5°	358.0	352.4	346.7	341.1	335.5	328.0	318.8	309.5	300.3	291.0	284.1
65°	313.8	308.1	302.3	296.6	290.8	283.5	274.5	265.6	256.6	247.7	240.9
67.5°	269.9	264.1	258.4	252.7	246.9	239.8	231.2	222.6	214.0	205.4	199.3
70°	240.1	234.4	228.6	222.9	217.1	210.0	201.6	193.2	184.7	176.3	171.0
72.5°	210.9	205.3	199.7	194.1	188.5	181.7	173.8	165.9	158.0	150.1	145.3
75°	167.2	162.1	157.0	152.0	146.9	140.8	133.7	126.6	119.5	112.4	108.7
77.5°	123.7	119.6	115.6	111.5	107.5	102.6	96.9	91.3	85.6	79.9	77.3
80°	98.8	94.7	90.7	86.6	82.6	78.2	73.4	68.7	64.0	59.3	57.7
82.5°	74.5	70.8	67.2	63.5	59.9	56.4	53.2	49.9	46.7	43.5	42.8
85°	41.8	38.7	35.7	32.7	29.6	27.7	26.8	26.0	25.2	24.3	24.1
87.5°	14.2	13.8	13.3	12.8	12.3	12.2	12.5	12.7	13.0	13.3	13.6
90°	1.3	3.6	5.9	8.2	10.5	12.7	14.7	16.7	18.7	20.8	22.2
92.5°	31.4	33.0	34.6	36.2	37.8	39.9	42.4	44.9	47.3	49.8	51.7
95°	84.3	84.9	85.5	86.0	86.6	88.4	91.2	94.1	97.0	99.9	101.9
97.5°	140.1	140.3	140.6	140.8	141.0	143.1	147.1	151.1	155.1	159.0	160.9
100°	181.6	181.6	181.6	181.6	181.6	183.5	187.2	191.0	194.7	198.5	201.1
102.5°	226.2	227.4	228.5	229.7	230.8	232.4	234.3	236.2	238.1	240.0	242.8
105°	295.8	297.2	298.6	300.1	301.5	303.1	304.8	306.6	308.3	310.0	311.8
107.5°	372.5	374.0	375.4	376.9	378.3	379.7	381.0	382.3	383.7	385.0	385.9
110°	425.5	426.9	428.4	429.8	431.2	432.4	433.3	434.1	435.0	435.8	436.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	479.4	480.2	480.9	481.7	482.4	483.4	484.4	485.5	486.6	487.7	488.1
115°	559.1	560.2	561.4	562.5	563.7	564.6	565.1	565.7	566.3	566.9	566.6
117.5°	639.0	639.5	640.0	640.5	641.1	641.6	642.1	642.6	643.1	643.7	643.9
120°	688.8	690.2	691.7	693.1	694.6	695.4	695.7	696.0	696.3	696.6	696.6
122.5°	742.8	743.3	743.8	744.3	744.8	745.5	746.2	747.0	747.7	748.5	748.2
125°	815.9	817.6	819.4	821.1	822.8	823.8	824.1	824.4	824.7	825.0	824.4
127.5°	893.7	894.7	895.7	896.7	897.7	898.3	898.7	899.0	899.4	899.7	899.4
130°	940.4	941.9	943.3	944.8	946.2	947.2	947.8	948.4	948.9	949.5	949.2
132.5°	987.1	989.5	991.9	994.2	996.6	997.7	997.6	997.5	997.4	997.3	997.0
135°	1061.1	1062.8	1064.5	1066.3	1068.0	1069.0	1069.3	1069.6	1069.9	1070.2	1070.2
137.5°	1130.6	1132.3	1134.0	1135.6	1137.3	1138.4	1139.1	1139.7	1140.4	1141.0	1141.3
140°	1175.2	1176.7	1178.1	1179.6	1181.0	1182.1	1183.0	1183.9	1184.7	1185.6	1186.2
142.5°	1219.9	1221.1	1222.3	1223.5	1224.7	1225.8	1226.9	1228.0	1229.1	1230.2	1230.6
145°	1285.5	1286.6	1287.8	1288.9	1290.1	1291.1	1292.0	1292.8	1293.7	1294.6	1294.6
147.5°	1346.2	1346.8	1347.5	1348.1	1348.7	1349.4	1350.1	1350.8	1351.5	1352.2	1352.9
150°	1386.7	1386.4	1386.1	1385.8	1385.5	1385.9	1387.1	1388.3	1389.4	1390.6	1390.6
152.5°	1419.9	1420.3	1420.7	1421.1	1421.5	1421.9	1422.4	1422.8	1423.3	1423.8	1424.5
155°	1471.0	1471.0	1471.0	1471.0	1471.0	1471.1	1471.4	1471.7	1472.0	1472.3	1473.4
157.5°	1516.6	1516.0	1515.4	1514.7	1514.1	1513.9	1514.2	1514.5	1514.8	1515.1	1516.2
160°	1543.6	1542.8	1541.9	1541.0	1540.2	1539.9	1540.2	1540.5	1540.7	1541.0	1542.2
162.5°	1567.5	1566.9	1566.2	1565.6	1565.0	1564.7	1564.7	1564.8	1564.8	1564.9	1566.3
165°	1599.4	1598.8	1598.2	1597.7	1597.1	1597.0	1597.2	1597.5	1597.8	1598.1	1599.3
167.5°	1626.4	1625.2	1624.1	1622.9	1621.8	1621.2	1621.2	1621.2	1621.2	1621.2	1622.9
170°	1640.9	1639.8	1638.6	1637.5	1636.3	1635.7	1635.7	1635.7	1635.7	1635.7	1637.5
172.5°	1651.3	1650.1	1649.0	1647.8	1646.7	1646.1	1646.1	1646.1	1646.1	1646.1	1647.8
175°	1663.0	1661.8	1660.7	1659.5	1658.4	1657.8	1657.8	1657.8	1657.8	1657.8	1659.5
177.5°	1668.9	1668.0	1667.1	1666.2	1665.2	1664.7	1664.4	1664.2	1664.0	1663.7	1665.1
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0	1006.0
2.5°	1002.6	1003.9	1005.3	1005.9	1005.8	1005.6	1005.5	1005.4
5°	996.4	998.1	999.8	1000.5	1000.1	999.8	999.5	999.1
7.5°	984.0	985.2	986.4	986.8	986.4	986.0	985.7	985.3
10°	973.5	974.0	974.6	974.6	974.0	973.5	973.0	972.5
12.5°	958.7	959.1	959.4	959.2	958.4	957.7	956.9	956.1
15°	934.2	934.0	933.9	933.0	931.5	930.0	928.5	926.9
17.5°	903.7	902.8	902.0	900.9	899.7	898.4	897.2	895.9
20°	881.2	880.3	879.5	878.3	876.8	875.3	873.8	872.2
22.5°	858.9	857.2	855.6	854.1	852.9	851.6	850.4	849.1
25°	822.3	820.1	817.9	815.8	814.0	812.1	810.3	808.4
27.5°	782.7	779.6	776.5	774.1	772.3	770.5	768.7	766.9
30°	754.3	750.4	746.5	743.8	742.3	740.8	739.3	737.8
32.5°	726.7	722.5	718.2	715.1	713.1	711.2	709.3	707.4
35°	683.9	679.0	674.1	670.5	668.1	665.7	663.4	661.0
37.5°	639.1	633.2	627.3	623.2	620.9	618.7	616.4	614.1
40°	609.4	603.0	596.6	592.4	590.4	588.3	586.3	584.3
42.5°	580.2	574.0	567.9	563.3	560.4	557.4	554.4	551.5
45°	533.5	526.8	520.0	515.4	512.9	510.3	507.8	505.3
47.5°	487.4	480.4	473.5	468.6	465.8	463.0	460.2	457.4
50°	456.1	449.0	441.9	437.1	434.6	432.1	429.5	427.0
52.5°	426.5	418.8	411.2	406.1	403.6	401.1	398.5	396.0
55°	381.4	373.8	366.2	361.1	358.4	355.7	353.0	350.3
57.5°	336.3	328.9	321.5	316.5	314.1	311.7	309.4	307.0
60°	306.5	299.1	291.7	286.7	284.2	281.6	279.1	276.6
62.5°	277.2	270.3	263.4	258.7	256.2	253.7	251.1	248.6
65°	234.2	227.4	220.7	216.0	213.5	211.0	208.4	205.9
67.5°	193.1	186.9	180.7	176.6	174.6	172.6	170.5	168.5
70°	165.8	160.6	155.3	151.7	149.7	147.7	145.6	143.6
72.5°	140.5	135.6	130.8	127.7	126.4	125.0	123.7	122.3
75°	105.0	101.3	97.6	95.1	94.0	92.8	91.6	90.4
77.5°	74.7	72.1	69.5	67.8	66.9	66.0	65.2	64.3
80°	56.2	54.7	53.2	52.3	51.9	51.6	51.2	50.9
82.5°	42.0	41.3	40.6	40.2	40.0	39.8	39.6	39.4
85°	24.0	23.8	23.6	23.5	23.3	23.1	23.0	22.8
87.5°	13.8	14.1	14.4	14.6	14.6	14.7	14.7	14.7
90°	23.6	25.1	26.5	27.7	28.5	29.4	30.3	31.1
92.5°	53.6	55.5	57.4	58.7	59.3	60.0	60.6	61.2
95°	103.9	105.9	108.0	109.2	109.8	110.4	111.0	111.6
97.5°	162.8	164.7	166.6	167.8	168.1	168.5	168.8	169.2
100°	203.7	206.2	208.8	210.4	211.0	211.6	212.2	212.7
102.5°	245.6	248.4	251.3	253.1	253.9	254.7	255.5	256.3
105°	313.5	315.2	316.9	318.2	319.1	320.0	320.8	321.7
107.5°	386.7	387.6	388.5	388.9	388.8	388.7	388.7	388.6
110°	437.6	438.4	439.3	439.6	439.3	439.0	438.7	438.4



TEST NUMBER: P333675

CATALOG NUMBER: S125RDIW-S610D1340U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	488.5	488.9	489.3	489.3	488.8	488.3	487.7	487.2
115°	566.3	566.0	565.7	565.4	565.1	564.8	564.6	564.3
117.5°	644.1	644.3	644.6	644.1	643.0	641.8	640.7	639.5
120°	696.6	696.6	696.6	696.0	694.8	693.7	692.5	691.4
122.5°	748.0	747.8	747.5	747.0	746.0	745.1	744.2	743.3
125°	823.8	823.3	822.7	822.3	822.0	821.7	821.4	821.1
127.5°	899.1	898.8	898.6	898.1	897.6	897.0	896.4	895.8
130°	948.9	948.7	948.4	947.9	947.4	946.8	946.2	945.6
132.5°	996.7	996.4	996.1	995.6	994.8	993.9	993.1	992.3
135°	1070.2	1070.2	1070.2	1069.6	1068.4	1067.3	1066.1	1065.0
137.5°	1141.7	1142.0	1142.4	1141.8	1140.4	1138.9	1137.5	1136.1
140°	1186.8	1187.3	1187.9	1187.5	1186.0	1184.6	1183.2	1181.7
142.5°	1230.9	1231.3	1231.6	1231.1	1229.6	1228.2	1226.7	1225.3
145°	1294.6	1294.6	1294.6	1294.1	1293.3	1292.4	1291.5	1290.7
147.5°	1353.5	1354.2	1354.9	1354.3	1352.3	1350.4	1348.4	1346.5
150°	1390.6	1390.6	1390.6	1390.3	1389.7	1389.1	1388.5	1388.0
152.5°	1425.1	1425.8	1426.5	1426.4	1425.3	1424.3	1423.2	1422.2
155°	1474.6	1475.7	1476.9	1476.7	1475.3	1473.9	1472.4	1471.0
157.5°	1517.4	1518.5	1519.7	1519.3	1517.4	1515.5	1513.6	1511.7
160°	1543.3	1544.5	1545.6	1545.5	1544.1	1542.6	1541.2	1539.7
162.5°	1567.7	1569.0	1570.4	1570.3	1568.6	1566.9	1565.3	1563.6
165°	1600.4	1601.6	1602.7	1602.4	1600.7	1599.0	1597.2	1595.5
167.5°	1624.7	1626.4	1628.1	1628.1	1626.3	1624.5	1622.7	1620.9
170°	1639.2	1640.9	1642.6	1642.5	1640.5	1638.5	1636.4	1634.4
172.5°	1649.6	1651.3	1653.0	1653.0	1651.2	1649.4	1647.6	1645.8
175°	1661.2	1663.0	1664.7	1664.5	1662.5	1660.5	1658.5	1656.5
177.5°	1666.5	1667.9	1669.3	1669.2	1667.5	1665.9	1664.3	1662.7
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9

(END OF REPORT)