

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: P333658

Luminaire Tested: **S125RDIW-S375D1560U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333658  
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-S375D1560U835-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7685.8 lumens  
Efficiency: N/A  
Efficacy: 143.9 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

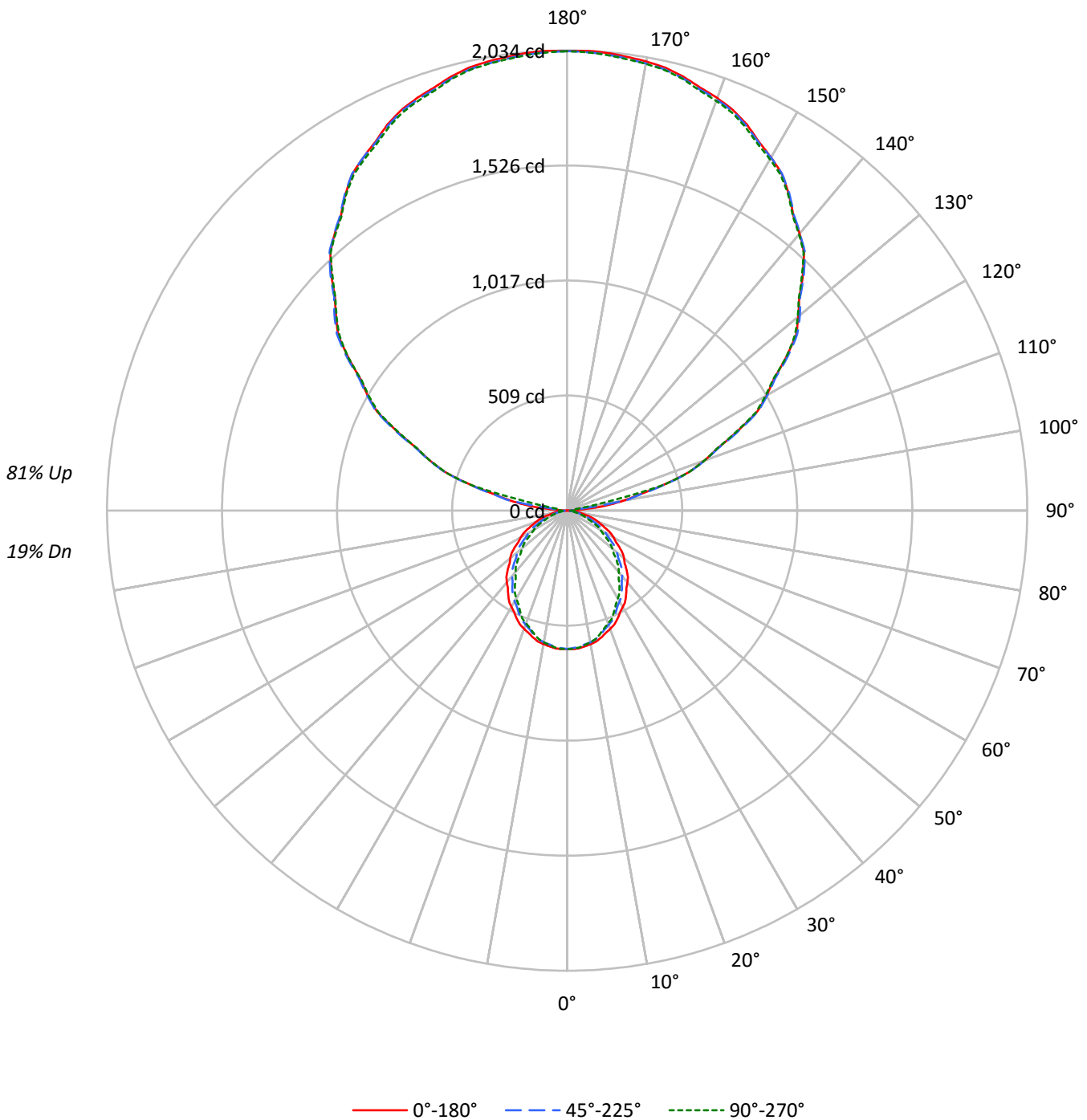
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28	19
1	91	87	83	80	80	77	74	71	58	56	54	40	39	38	24	24	23	16
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	75	67	60	54	66	59	53	49	45	41	38	31	29	27	19	18	17	12
4	69	59	51	46	61	52	46	41	40	35	32	28	25	23	17	16	15	10
5	63	52	45	39	55	46	40	35	35	31	27	25	22	20	15	14	13	9
6	58	47	39	34	51	41	35	30	32	27	24	23	20	17	14	12	11	8
7	54	42	34	29	47	37	31	26	29	24	21	20	17	15	13	11	10	7
8	49	38	31	26	44	34	27	23	26	21	18	19	16	14	12	10	9	6
9	46	34	27	23	40	31	25	20	24	19	16	17	14	12	11	9	8	6
10	43	31	25	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3952	3952	3952
5°	3961	3916	3940
10°	3931	3880	3880
15°	3884	3801	3770
20°	3824	3691	3647
25°	3755	3583	3504
30°	3667	3457	3347
35°	3578	3327	3170
40°	3495	3191	2996
45°	3394	3040	2807
50°	3293	2875	2609
55°	3174	2716	2399
60°	3056	2525	2173
65°	2917	2303	1913
70°	2757	2024	1648
75°	2538	1707	1372
80°	2235	1339	1153
85°	1882	1097	1030



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	0.7
10°-20°	160.8	2.1
20°-30°	233.2	3.0
30°-40°	265.7	3.5
40°-50°	259.0	3.4
50°-60°	218.0	2.8
60°-70°	152.8	2.0
70°-80°	78.6	1.0
80°-90°	24.1	0.3
90°-100°	73.8	1.0
100°-110°	454.8	5.9
110°-120°	824.9	10.7
120°-130°	1058.6	13.8
130°-140°	1138.6	14.8
140°-150°	1068.8	13.9
150°-160°	864.5	11.2
160°-170°	559.1	7.3
170°-180°	192.9	2.5
0°-30°	451.5	5.9
0°-40°	717.3	9.3
0°-60°	1194.3	15.5
0°-90°	1449.8	18.9
90°-120°	1353.5	17.6
90°-150°	4619.5	60.1
90°-180°	6236.0	81.1
0°-180°	7685.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	611	609	604	608	608	58
15°	581	578	568	568	564	164
25°	527	519	503	497	492	242
35°	454	442	422	409	402	284
45°	372	358	333	315	307	287
55°	282	267	241	221	213	252
65°	191	175	151	133	125	189
75°	102	88	68	59	55	108
85°	25	17	15	14	14	29
90°	2	13	24	31	36	5
95°	86	78	24	31	32	109
105°	443	448	449	448	447	469
115°	831	838	840	834	825	823
125°	1182	1192	1192	1186	1182	1055
135°	1474	1482	1480	1476	1468	1136
145°	1709	1711	1712	1712	1704	1068
155°	1882	1873	1876	1879	1868	867
165°	1986	1977	1978	1986	1975	561
175°	2031	2022	2023	2034	2022	193
180°	2031	2031	2031	2031	2031	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	613.0	612.8	612.5	612.3	612.0	611.5	610.7	609.8	609.0	608.2	609.0
5°	611.0	610.6	610.2	609.7	609.3	608.6	607.4	606.3	605.2	604.0	605.1
7.5°	605.0	604.6	604.2	603.8	603.4	602.5	601.2	599.8	598.5	597.1	597.8
10°	599.4	599.1	598.8	598.5	598.2	597.3	595.9	594.4	593.0	591.6	591.9
12.5°	593.1	592.7	592.4	592.0	591.6	590.4	588.5	586.6	584.6	582.7	582.9
15°	580.9	580.3	579.7	579.1	578.5	577.1	574.9	572.8	570.6	568.5	568.4
17.5°	567.2	566.2	565.3	564.3	563.4	561.6	558.8	556.1	553.4	550.7	550.2
20°	556.4	555.4	554.4	553.4	552.3	550.2	546.9	543.6	540.3	537.0	536.5
22.5°	544.6	543.6	542.6	541.5	540.5	538.3	534.8	531.4	527.9	524.5	523.5
25°	526.9	525.3	523.8	522.2	520.7	518.0	514.2	510.4	506.6	502.8	501.5
27.5°	506.5	504.7	502.8	500.9	499.0	496.1	492.0	487.9	483.9	479.8	477.9
30°	491.7	489.8	487.8	485.9	483.9	480.8	476.5	472.2	467.9	463.5	461.2
32.5°	477.3	475.0	472.8	470.5	468.2	464.9	460.5	456.1	451.7	447.3	444.7
35°	453.8	451.4	448.9	446.4	444.0	440.4	435.8	431.2	426.6	422.0	419.0
37.5°	430.8	427.8	424.8	421.8	418.8	414.9	410.2	405.4	400.7	395.9	392.3
40°	414.6	411.5	408.4	405.3	402.2	398.2	393.3	388.4	383.4	378.5	374.6
42.5°	397.5	394.4	391.2	388.1	384.9	380.8	375.7	370.6	365.5	360.4	356.7
45°	371.6	368.6	365.6	362.6	359.7	355.3	349.7	344.1	338.4	332.8	328.6
47.5°	344.7	341.5	338.4	335.2	332.1	327.7	322.0	316.3	310.6	304.9	300.7
50°	327.7	324.3	320.9	317.5	314.1	309.5	303.6	297.8	291.9	286.1	281.8
52.5°	309.2	305.7	302.2	298.8	295.3	290.8	285.3	279.7	274.2	268.7	264.1
55°	281.9	278.6	275.3	272.1	268.8	264.3	258.5	252.7	247.0	241.2	236.6
57.5°	254.4	250.9	247.3	243.8	240.3	235.8	230.2	224.7	219.2	213.6	209.1
60°	236.6	233.0	229.4	225.8	222.2	217.7	212.1	206.6	201.0	195.5	191.0
62.5°	217.8	214.3	210.9	207.5	204.0	199.5	193.9	188.3	182.6	177.0	172.8
65°	190.9	187.4	183.9	180.4	176.9	172.4	167.0	161.6	156.1	150.7	146.6
67.5°	164.2	160.7	157.2	153.7	150.2	145.8	140.6	135.4	130.2	125.0	121.2
70°	146.0	142.6	139.1	135.6	132.1	127.8	122.6	117.5	112.4	107.2	104.0
72.5°	128.3	124.9	121.5	118.1	114.7	110.5	105.7	100.9	96.1	91.3	88.4
75°	101.7	98.6	95.5	92.4	89.4	85.7	81.3	77.0	72.7	68.4	66.1
77.5°	75.2	72.8	70.3	67.8	65.4	62.4	59.0	55.5	52.1	48.6	47.0
80°	60.1	57.6	55.2	52.7	50.2	47.6	44.7	41.8	38.9	36.0	35.1
82.5°	45.3	43.1	40.9	38.6	36.4	34.3	32.4	30.4	28.4	26.4	26.0
85°	25.4	23.6	21.7	19.9	18.0	16.8	16.3	15.8	15.3	14.8	14.7
87.5°	8.8	8.8	8.7	8.7	8.6	8.8	9.2	9.6	10.0	10.4	10.7
90°	1.5	4.2	6.9	9.5	12.2	14.7	17.1	19.4	21.7	24.1	25.8
92.5°	23.2	21.3	19.4	17.6	15.7	15.8	17.9	19.9	22.0	24.1	25.8
95°	85.8	84.8	83.8	82.8	81.8	74.9	62.2	49.5	36.8	24.1	25.8
97.5°	179.1	180.9	182.7	184.6	186.4	174.7	149.5	124.4	99.2	74.1	64.6
100°	251.4	252.4	253.4	254.4	255.4	256.6	257.9	259.3	260.6	261.9	212.1
102.5°	324.9	326.1	327.4	328.7	329.9	331.0	331.8	332.6	333.4	334.2	324.8
105°	442.6	443.9	445.3	446.6	447.9	448.6	448.6	448.6	448.6	448.6	448.6
107.5°	564.8	564.8	564.8	564.8	564.8	565.1	565.8	566.5	567.2	567.8	567.9
110°	644.3	644.3	644.3	644.3	644.3	644.6	645.3	646.0	646.6	647.3	646.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	719.0	719.8	720.6	721.4	722.2	722.8	723.2	723.6	724.0	724.4	723.1
115°	831.0	832.6	834.3	836.0	837.6	838.6	839.0	839.3	839.7	840.0	838.6
117.5°	946.9	946.8	946.7	946.7	946.6	947.2	948.5	949.7	951.0	952.3	950.5
120°	1019.1	1018.8	1018.5	1018.1	1017.8	1018.1	1019.1	1020.1	1021.1	1022.1	1021.5
122.5°	1083.0	1084.2	1085.5	1086.8	1088.0	1088.9	1089.4	1089.8	1090.3	1090.8	1090.1
125°	1181.7	1184.0	1186.4	1188.7	1191.1	1192.2	1192.2	1192.2	1192.2	1192.2	1190.9
127.5°	1275.9	1277.6	1279.3	1281.0	1282.6	1283.4	1283.2	1283.0	1282.8	1282.6	1281.8
130°	1333.7	1335.4	1337.1	1338.8	1340.4	1341.4	1341.8	1342.1	1342.4	1342.8	1341.8
132.5°	1391.5	1393.5	1395.4	1397.4	1399.3	1399.9	1399.2	1398.4	1397.7	1397.0	1396.8
135°	1473.7	1475.7	1477.8	1479.8	1481.8	1482.4	1481.8	1481.1	1480.4	1479.8	1479.1
137.5°	1549.3	1551.0	1552.8	1554.5	1556.3	1556.8	1556.2	1555.6	1555.0	1554.4	1554.6
140°	1598.7	1599.4	1600.0	1600.7	1601.4	1601.5	1601.2	1600.9	1600.5	1600.2	1600.9
142.5°	1643.2	1643.6	1644.0	1644.4	1644.8	1645.3	1645.8	1646.2	1646.7	1647.2	1647.3
145°	1708.6	1709.2	1709.9	1710.6	1711.3	1711.6	1711.6	1711.6	1711.6	1711.6	1711.9
147.5°	1765.8	1765.6	1765.5	1765.4	1765.2	1765.4	1765.8	1766.2	1766.6	1767.0	1767.4
150°	1801.9	1801.2	1800.6	1799.9	1799.2	1799.2	1799.9	1800.6	1801.2	1801.9	1802.6
152.5°	1836.8	1835.4	1833.9	1832.4	1830.9	1830.5	1831.2	1831.9	1832.6	1833.2	1833.9
155°	1881.7	1879.7	1877.7	1875.7	1873.7	1873.0	1873.7	1874.3	1875.0	1875.7	1876.7
157.5°	1916.3	1915.1	1913.9	1912.7	1911.5	1910.9	1911.0	1911.1	1911.1	1911.2	1912.3
160°	1940.4	1938.4	1936.4	1934.4	1932.4	1931.5	1931.9	1932.2	1932.5	1932.9	1934.2
162.5°	1959.7	1957.7	1955.7	1953.6	1951.6	1950.8	1951.1	1951.5	1951.8	1952.1	1954.0
165°	1985.6	1983.6	1981.5	1979.5	1977.5	1976.7	1977.0	1977.4	1977.7	1978.0	1980.0
167.5°	2004.8	2002.8	2000.7	1998.6	1996.5	1995.7	1996.0	1996.3	1996.7	1997.0	1999.4
170°	2015.7	2013.3	2011.0	2008.6	2006.3	2005.3	2005.6	2006.0	2006.3	2006.6	2009.3
172.5°	2022.9	2020.6	2018.2	2015.9	2013.5	2012.7	2013.3	2013.9	2014.5	2015.1	2017.5
175°	2030.7	2028.7	2026.7	2024.7	2022.7	2021.9	2022.2	2022.5	2022.9	2023.2	2025.9
177.5°	2034.3	2032.7	2031.1	2029.5	2027.9	2027.2	2027.5	2027.8	2028.0	2028.3	2030.2
180°	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	611.9	611.9	611.9	611.9	611.9	611.9	611.9	611.9
2.5°	609.8	610.7	611.5	611.9	611.8	611.7	611.6	611.5
5°	606.1	607.1	608.1	608.6	608.4	608.1	607.9	607.7
7.5°	598.5	599.3	600.0	600.2	600.0	599.8	599.6	599.3
10°	592.2	592.5	592.8	592.8	592.5	592.2	591.9	591.6
12.5°	583.1	583.4	583.6	583.5	583.0	582.5	582.1	581.6
15°	568.2	568.1	568.0	567.5	566.6	565.7	564.8	563.8
17.5°	549.7	549.2	548.7	548.0	547.3	546.5	545.7	545.0
20°	536.0	535.5	535.0	534.3	533.3	532.4	531.5	530.6
22.5°	522.4	521.4	520.4	519.5	518.8	518.0	517.3	516.5
25°	500.2	498.8	497.5	496.3	495.1	494.0	492.9	491.7
27.5°	476.1	474.2	472.3	470.9	469.8	468.7	467.6	466.5
30°	458.8	456.5	454.1	452.5	451.5	450.6	449.7	448.8
32.5°	442.1	439.5	436.8	435.0	433.8	432.6	431.4	430.3
35°	416.0	413.0	410.0	407.8	406.4	405.0	403.5	402.1
37.5°	388.7	385.2	381.6	379.1	377.7	376.3	374.9	373.5
40°	370.7	366.8	362.9	360.3	359.1	357.9	356.6	355.4
42.5°	352.9	349.2	345.4	342.7	340.9	339.0	337.2	335.4
45°	324.5	320.4	316.3	313.5	312.0	310.4	308.9	307.3
47.5°	296.5	292.2	288.0	285.0	283.3	281.6	279.9	278.2
50°	277.4	273.1	268.8	265.9	264.4	262.8	261.3	259.7
52.5°	259.4	254.8	250.1	247.0	245.5	244.0	242.4	240.9
55°	232.0	227.4	222.8	219.6	218.0	216.3	214.7	213.1
57.5°	204.6	200.1	195.5	192.5	191.1	189.6	188.2	186.7
60°	186.5	181.9	177.4	174.4	172.8	171.3	169.8	168.2
62.5°	168.6	164.4	160.2	157.4	155.8	154.3	152.8	151.2
65°	142.4	138.3	134.2	131.4	129.9	128.3	126.8	125.2
67.5°	117.4	113.7	109.9	107.4	106.2	105.0	103.7	102.5
70°	100.9	97.7	94.5	92.3	91.0	89.8	88.6	87.3
72.5°	85.4	82.5	79.6	77.7	76.9	76.1	75.2	74.4
75°	63.9	61.6	59.4	57.9	57.2	56.4	55.7	55.0
77.5°	45.5	43.9	42.3	41.2	40.7	40.2	39.6	39.1
80°	34.2	33.3	32.4	31.8	31.6	31.4	31.2	31.0
82.5°	25.6	25.1	24.7	24.4	24.3	24.2	24.1	23.9
85°	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9
87.5°	11.0	11.4	11.7	11.9	12.0	12.2	12.3	12.4
90°	27.4	29.1	30.8	32.1	33.1	34.1	35.1	36.1
92.5°	27.4	29.1	30.8	31.8	32.3	32.8	33.3	33.7
95°	27.4	29.1	30.8	31.6	31.6	31.6	31.6	31.6
97.5°	55.2	45.8	36.3	31.6	31.6	31.6	31.6	31.6
100°	162.2	112.4	62.6	37.0	35.6	34.3	33.0	31.6
102.5°	315.3	305.9	296.5	280.4	257.6	234.9	212.1	189.4
105°	448.6	448.6	448.6	448.4	448.1	447.8	447.4	447.1
107.5°	568.0	568.0	568.1	567.6	566.6	565.6	564.6	563.6
110°	645.3	644.3	643.3	643.0	643.3	643.6	644.0	644.3





TEST NUMBER: P333658

CATALOG NUMBER: S125RDIW-S375D1560U835-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	721.8	720.6	719.3	718.4	718.0	717.5	717.0	716.5
115°	837.3	836.0	834.6	833.0	831.0	828.9	826.9	824.9
117.5°	948.8	947.1	945.3	944.0	943.2	942.3	941.4	940.5
120°	1020.8	1020.1	1019.5	1018.3	1016.6	1014.9	1013.3	1011.6
122.5°	1089.4	1088.8	1088.1	1086.8	1084.9	1082.9	1081.0	1079.0
125°	1189.6	1188.2	1186.9	1185.7	1184.7	1183.7	1182.7	1181.7
127.5°	1281.1	1280.4	1279.6	1278.0	1275.5	1273.1	1270.6	1268.1
130°	1340.8	1339.8	1338.8	1337.4	1335.8	1334.1	1332.4	1330.7
132.5°	1396.6	1396.4	1396.2	1395.2	1393.6	1391.9	1390.2	1388.5
135°	1478.4	1477.8	1477.1	1475.7	1473.7	1471.7	1469.7	1467.7
137.5°	1554.7	1554.8	1555.0	1554.2	1552.4	1550.7	1548.9	1547.2
140°	1601.5	1602.2	1602.9	1602.2	1600.2	1598.2	1596.2	1594.2
142.5°	1647.4	1647.6	1647.7	1646.8	1644.7	1642.7	1640.7	1638.7
145°	1712.3	1712.6	1712.9	1712.1	1710.1	1708.1	1706.1	1704.1
147.5°	1767.8	1768.2	1768.6	1767.6	1765.2	1762.8	1760.4	1758.0
150°	1803.2	1803.9	1804.6	1803.6	1800.9	1798.2	1795.6	1792.9
152.5°	1834.6	1835.2	1835.9	1835.0	1832.6	1830.2	1827.8	1825.4
155°	1877.7	1878.7	1879.7	1878.8	1876.2	1873.5	1870.8	1868.1
157.5°	1913.3	1914.4	1915.5	1914.7	1912.0	1909.3	1906.6	1904.0
160°	1935.5	1936.9	1938.2	1937.6	1934.9	1932.2	1929.5	1926.9
162.5°	1955.9	1957.8	1959.6	1959.1	1956.2	1953.2	1950.3	1947.3
165°	1982.0	1984.1	1986.1	1985.7	1983.1	1980.4	1977.7	1975.0
167.5°	2001.8	2004.2	2006.6	2006.3	2003.3	2000.3	1997.3	1994.3
170°	2012.0	2014.7	2017.3	2017.2	2014.2	2011.2	2008.1	2005.1
172.5°	2019.9	2022.3	2024.7	2024.4	2021.4	2018.4	2015.4	2012.4
175°	2028.5	2031.2	2033.9	2033.7	2030.7	2027.7	2024.7	2021.7
177.5°	2032.1	2033.9	2035.8	2035.7	2033.5	2031.4	2029.2	2027.1
180°	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7	2030.7

(END OF REPORT)