

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: P333658-830

Luminaire Tested: **S125RDIW-S375D1560U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333658-830
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-S375D1560U830-4F0-1E-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: 7244.2 lumens
Efficiency: N/A
Efficacy: 135.7 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

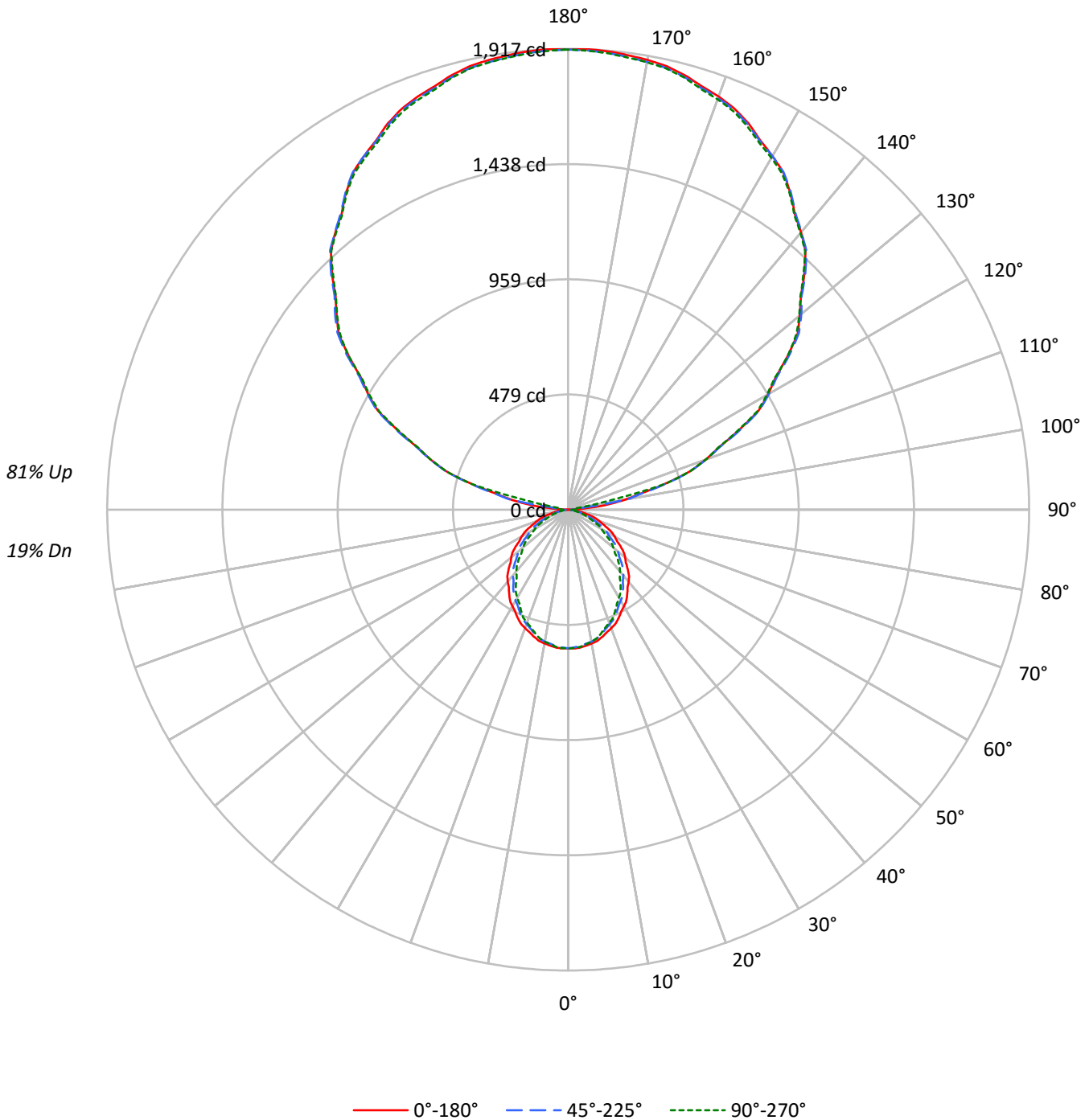
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	0.7
10°-20°	151.6	2.1
20°-30°	219.8	3.0
30°-40°	250.5	3.5
40°-50°	244.1	3.4
50°-60°	205.5	2.8
60°-70°	144.1	2.0
70°-80°	74.1	1.0
80°-90°	22.7	0.3
90°-100°	69.6	1.0
100°-110°	428.7	5.9
110°-120°	777.5	10.7
120°-130°	997.8	13.8
130°-140°	1073.2	14.8
140°-150°	1007.4	13.9
150°-160°	814.9	11.2
160°-170°	527.0	7.3
170°-180°	181.8	2.5
0°-30°	425.6	5.9
0°-40°	676.0	9.3
0°-60°	1125.7	15.5
0°-90°	1366.5	18.9
90°-120°	1275.7	17.6
90°-150°	4354.1	60.1
90°-180°	5878.0	81.1
0°-180°	7244.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	13	23	30	34	5
95°	81	74	23	29	30	103
105°	417	422	423	423	421	442
115°	783	790	792	786	778	776
125°	1114	1123	1124	1118	1114	994
135°	1389	1397	1395	1392	1383	1070
145°	1610	1613	1613	1614	1606	1007
155°	1774	1766	1768	1771	1761	817
165°	1872	1864	1864	1872	1862	528
175°	1914	1906	1907	1917	1906	182
180°	1914	1914	1914	1914	1914	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.3	8.3	8.2	8.2	8.1	8.3	8.7	9.0	9.4	9.8	10.1
90°	1.4	4.0	6.5	9.0	11.5	13.9	16.1	18.3	20.5	22.7	24.3
92.5°	21.9	20.1	18.3	16.6	14.8	14.9	16.9	18.8	20.7	22.7	24.3
95°	80.9	79.9	79.0	78.0	77.1	70.6	58.6	46.7	34.7	22.7	24.3
97.5°	168.8	170.5	172.2	174.0	175.7	164.7	140.9	117.3	93.5	69.8	60.9
100°	237.0	237.9	238.8	239.8	240.7	241.9	243.1	244.4	245.6	246.9	199.9
102.5°	306.2	307.4	308.6	309.8	310.9	312.0	312.7	313.5	314.2	315.0	306.1
105°	417.2	418.4	419.7	420.9	422.2	422.8	422.8	422.8	422.8	422.8	422.8
107.5°	532.3	532.3	532.3	532.3	532.3	532.6	533.3	534.0	534.6	535.2	535.3
110°	607.3	607.3	607.3	607.3	607.3	607.6	608.2	608.9	609.4	610.1	609.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	677.7	678.4	679.2	680.0	680.7	681.3	681.6	682.0	682.4	682.8	681.6
115°	783.3	784.8	786.4	788.0	789.5	790.4	790.8	791.1	791.5	791.7	790.4
117.5°	892.5	892.4	892.3	892.3	892.2	892.8	894.0	895.1	896.4	897.6	895.9
120°	960.5	960.3	960.0	959.6	959.3	959.6	960.5	961.5	962.4	963.4	962.8
122.5°	1020.8	1021.9	1023.1	1024.4	1025.5	1026.3	1026.8	1027.2	1027.7	1028.1	1027.5
125°	1113.8	1116.0	1118.2	1120.4	1122.7	1123.7	1123.7	1123.7	1123.7	1123.7	1122.5
127.5°	1202.6	1204.2	1205.8	1207.4	1208.9	1209.7	1209.5	1209.3	1209.1	1208.9	1208.2
130°	1257.1	1258.7	1260.3	1261.9	1263.4	1264.3	1264.7	1265.0	1265.3	1265.6	1264.7
132.5°	1311.5	1313.4	1315.2	1317.1	1318.9	1319.5	1318.8	1318.1	1317.4	1316.7	1316.5
135°	1389.0	1390.9	1392.9	1394.8	1396.7	1397.2	1396.7	1396.0	1395.3	1394.8	1394.1
137.5°	1460.3	1461.9	1463.6	1465.2	1466.9	1467.4	1466.8	1466.2	1465.7	1465.1	1465.3
140°	1506.8	1507.5	1508.1	1508.7	1509.4	1509.5	1509.2	1508.9	1508.5	1508.3	1508.9
142.5°	1548.8	1549.2	1549.5	1549.9	1550.3	1550.8	1551.2	1551.6	1552.1	1552.6	1552.7
145°	1610.4	1611.0	1611.7	1612.3	1613.0	1613.3	1613.3	1613.3	1613.3	1613.3	1613.5
147.5°	1664.3	1664.2	1664.1	1664.0	1663.8	1664.0	1664.3	1664.7	1665.1	1665.5	1665.8
150°	1698.4	1697.7	1697.1	1696.5	1695.8	1695.8	1696.5	1697.1	1697.7	1698.4	1699.0
152.5°	1731.3	1729.9	1728.5	1727.1	1725.7	1725.3	1726.0	1726.6	1727.3	1727.9	1728.5
155°	1773.6	1771.7	1769.8	1767.9	1766.0	1765.4	1766.0	1766.6	1767.3	1767.9	1768.9
157.5°	1806.2	1805.1	1803.9	1802.8	1801.7	1801.1	1801.2	1801.3	1801.3	1801.4	1802.4
160°	1828.9	1827.0	1825.1	1823.3	1821.4	1820.5	1820.9	1821.2	1821.5	1821.8	1823.1
162.5°	1847.1	1845.2	1843.3	1841.4	1839.5	1838.7	1839.0	1839.4	1839.7	1839.9	1841.7
165°	1871.5	1869.6	1867.6	1865.8	1863.9	1863.1	1863.4	1863.8	1864.1	1864.3	1866.2
167.5°	1889.6	1887.7	1885.7	1883.8	1881.8	1881.0	1881.3	1881.6	1882.0	1882.3	1884.5
170°	1899.9	1897.6	1895.5	1893.2	1891.0	1890.1	1890.4	1890.7	1891.0	1891.3	1893.9
172.5°	1906.7	1904.5	1902.2	1900.1	1897.8	1897.1	1897.6	1898.2	1898.8	1899.3	1901.6
175°	1914.0	1912.1	1910.3	1908.4	1906.5	1905.7	1906.0	1906.3	1906.7	1907.0	1909.5
177.5°	1917.4	1915.9	1914.4	1912.9	1911.4	1910.7	1911.0	1911.3	1911.5	1911.8	1913.5
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	10.4	10.7	11.0	11.2	11.3	11.5	11.6	11.7
90°	25.8	27.4	29.0	30.3	31.2	32.1	33.1	34.0
92.5°	25.8	27.4	29.0	30.0	30.4	30.9	31.4	31.8
95°	25.8	27.4	29.0	29.8	29.8	29.8	29.8	29.8
97.5°	52.0	43.2	34.2	29.8	29.8	29.8	29.8	29.8
100°	152.9	105.9	59.0	34.9	33.6	32.3	31.1	29.8
102.5°	297.2	288.3	279.5	264.3	242.8	221.4	199.9	178.5
105°	422.8	422.8	422.8	422.6	422.4	422.1	421.7	421.4
107.5°	535.4	535.4	535.5	535.0	534.0	533.1	532.2	531.2
110°	608.2	607.3	606.3	606.1	606.3	606.6	607.0	607.3



TEST NUMBER: P333658-830

CATALOG NUMBER: S125RDIW-S375D1560U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	680.3	679.2	678.0	677.1	676.7	676.3	675.8	675.3
115°	789.2	788.0	786.6	785.1	783.3	781.3	779.4	777.5
117.5°	894.3	892.7	891.0	889.8	889.0	888.2	887.3	886.5
120°	962.1	961.5	960.9	959.8	958.2	956.6	955.1	953.5
122.5°	1026.8	1026.2	1025.6	1024.4	1022.6	1020.7	1018.9	1017.0
125°	1121.2	1119.9	1118.7	1117.6	1116.6	1115.7	1114.7	1113.8
127.5°	1207.5	1206.8	1206.1	1204.6	1202.2	1200.0	1197.6	1195.2
130°	1263.8	1262.8	1261.9	1260.6	1259.0	1257.4	1255.8	1254.2
132.5°	1316.4	1316.2	1316.0	1315.0	1313.5	1311.9	1310.3	1308.7
135°	1393.5	1392.9	1392.2	1390.9	1389.0	1387.1	1385.3	1383.4
137.5°	1465.4	1465.5	1465.7	1464.9	1463.2	1461.6	1459.9	1458.3
140°	1509.5	1510.1	1510.8	1510.1	1508.3	1506.4	1504.5	1502.6
142.5°	1552.7	1552.9	1553.0	1552.2	1550.2	1548.3	1546.4	1544.5
145°	1613.9	1614.2	1614.5	1613.7	1611.8	1610.0	1608.1	1606.2
147.5°	1666.2	1666.6	1667.0	1666.0	1663.8	1661.5	1659.3	1657.0
150°	1699.6	1700.3	1700.9	1700.0	1697.4	1694.9	1692.4	1689.9
152.5°	1729.2	1729.8	1730.4	1729.6	1727.3	1725.0	1722.8	1720.5
155°	1769.8	1770.8	1771.7	1770.8	1768.4	1765.9	1763.3	1760.8
157.5°	1803.4	1804.4	1805.4	1804.7	1802.1	1799.6	1797.1	1794.6
160°	1824.3	1825.6	1826.8	1826.3	1823.7	1821.2	1818.6	1816.2
162.5°	1843.5	1845.3	1847.0	1846.5	1843.8	1841.0	1838.2	1835.4
165°	1868.1	1870.1	1872.0	1871.6	1869.2	1866.6	1864.1	1861.5
167.5°	1886.8	1889.0	1891.3	1891.0	1888.2	1885.4	1882.5	1879.7
170°	1896.4	1898.9	1901.4	1901.3	1898.5	1895.6	1892.7	1889.9
172.5°	1903.8	1906.1	1908.4	1908.1	1905.3	1902.4	1899.6	1896.8
175°	1911.9	1914.5	1917.0	1916.8	1914.0	1911.2	1908.4	1905.5
177.5°	1915.3	1917.0	1918.8	1918.7	1916.7	1914.7	1912.6	1910.6
180°	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0	1914.0

(END OF REPORT)