

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: P333367-830

Luminaire Tested: **S125DIW-S375D1560U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333367-830
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: S125DIW-S375D1560U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6477.3 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

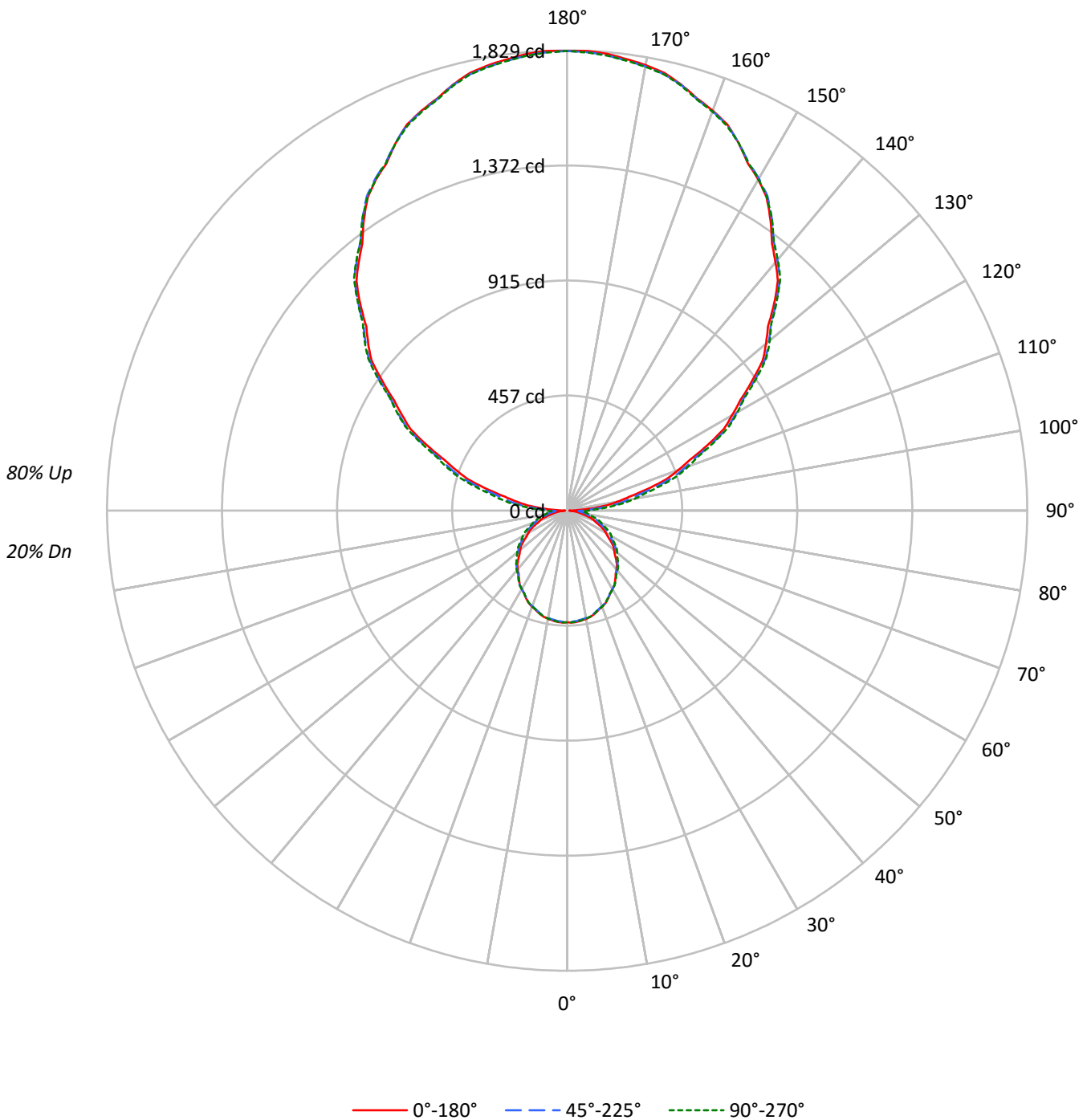
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	67	67	67	47	47	47	29	29	29	20
1	91	86	83	79	80	76	73	70	58	56	54	41	39	38	25	24	23	16
2	82	75	69	64	73	67	62	57	50	47	44	35	33	32	22	20	19	13
3	75	66	59	53	66	58	53	48	44	40	37	31	29	27	19	18	16	11
4	69	58	51	45	60	52	45	40	39	35	31	28	25	23	17	15	14	9
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	15	13	12	8
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11	7
7	53	41	34	28	47	37	30	26	28	23	20	20	17	15	12	11	9	6
8	49	37	30	25	43	33	27	22	25	21	18	18	15	13	11	10	8	6
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7	5
10	42	31	24	19	37	28	22	18	21	17	14	15	12	10	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	0.6
10°-20°	119.3	1.8
20°-30°	177.4	2.7
30°-40°	210.1	3.2
40°-50°	217.2	3.4
50°-60°	200.1	3.1
60°-70°	161.8	2.5
70°-80°	108.3	1.7
80°-90°	60.2	0.9
90°-100°	153.9	2.4
100°-110°	384.5	5.9
110°-120°	627.5	9.7
120°-130°	814.2	12.6
130°-140°	906.3	14.0
140°-150°	885.2	13.7
150°-160°	742.8	11.5
160°-170°	493.8	7.6
170°-180°	172.8	2.7
0°-30°	338.7	5.2
0°-40°	548.8	8.5
0°-60°	966.1	14.9
0°-90°	1296.3	20.0
90°-120°	1165.9	18.0
90°-150°	3771.5	58.2
90°-180°	5181.0	80.0
0°-180°	6477.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	34	58	75	83	10
95°	98	113	141	160	167	103
105°	328	342	364	380	388	350
115°	615	624	638	644	646	608
125°	896	904	914	918	919	802
135°	1164	1172	1176	1181	1178	897
145°	1409	1414	1419	1421	1418	880
155°	1612	1612	1613	1618	1612	742
165°	1753	1750	1751	1756	1748	494
175°	1822	1817	1817	1824	1815	173
180°	1827	1827	1827	1827	1827	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.9	17.4	21.1	24.7	28.3	32.0	35.7	39.4	43.2	46.8	49.4
90°	8.4	14.0	19.6	25.3	30.9	36.5	41.9	47.5	53.0	58.4	62.3
92.5°	40.7	45.3	50.0	54.6	59.2	64.6	70.7	76.7	82.8	88.9	93.1
95°	98.0	101.2	104.3	107.5	110.7	115.5	121.9	128.4	134.8	141.3	145.6
97.5°	158.6	161.2	163.7	166.2	168.7	173.8	181.3	188.8	196.3	203.9	208.0
100°	203.8	205.9	207.8	209.9	212.0	216.6	223.8	230.9	238.2	245.3	250.2
102.5°	252.3	255.5	258.6	261.7	264.9	269.0	274.2	279.3	284.4	289.5	294.5
105°	328.0	331.1	334.3	337.4	340.5	344.5	349.3	354.1	358.9	363.7	367.5
107.5°	411.6	414.5	417.5	420.4	423.2	426.8	431.0	435.3	439.5	443.7	446.7
110°	469.3	472.0	474.8	477.5	480.2	483.4	487.1	490.8	494.5	498.1	500.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	528.5	530.2	532.0	533.7	535.5	538.2	542.1	545.9	549.7	553.6	555.8
115°	615.3	617.3	619.2	621.1	623.0	625.6	628.8	631.9	635.1	638.2	639.6
117.5°	702.4	703.4	704.5	705.5	706.4	708.4	711.4	714.4	717.3	720.3	722.2
120°	757.0	758.8	760.7	762.6	764.5	766.7	769.2	771.8	774.3	776.8	778.5
122.5°	815.8	816.5	817.2	817.9	818.6	820.5	823.4	826.4	829.3	832.4	833.7
125°	895.9	897.7	899.5	901.3	903.1	905.1	907.4	909.6	911.8	914.1	915.0
127.5°	980.7	981.7	982.7	983.6	984.7	986.1	988.1	990.0	992.0	994.0	995.1
130°	1031.9	1033.4	1034.9	1036.3	1037.8	1039.5	1041.5	1043.6	1045.6	1047.5	1048.6
132.5°	1082.7	1085.3	1087.9	1090.4	1093.0	1094.8	1095.7	1096.6	1097.5	1098.4	1099.5
135°	1163.7	1165.5	1167.2	1169.0	1170.8	1172.2	1173.3	1174.2	1175.3	1176.2	1177.5
137.5°	1239.7	1241.5	1243.3	1245.0	1246.8	1248.2	1249.2	1250.2	1251.2	1252.3	1253.8
140°	1288.4	1289.9	1291.5	1293.1	1294.7	1296.0	1297.0	1298.1	1299.1	1300.1	1301.8
142.5°	1337.2	1338.5	1339.7	1341.0	1342.2	1343.5	1344.6	1345.9	1347.1	1348.3	1349.6
145°	1409.2	1410.3	1411.5	1412.7	1413.8	1414.9	1415.8	1416.7	1417.7	1418.6	1419.2
147.5°	1475.3	1475.9	1476.6	1477.3	1478.0	1478.8	1479.5	1480.3	1481.0	1481.8	1482.7
150°	1519.6	1519.3	1519.0	1518.6	1518.3	1518.8	1520.0	1521.4	1522.6	1523.9	1523.9
152.5°	1555.9	1556.4	1556.9	1557.3	1557.7	1558.2	1558.8	1559.2	1559.7	1560.3	1561.0
155°	1612.0	1612.0	1612.0	1612.0	1612.0	1612.1	1612.5	1612.8	1613.1	1613.4	1614.7
157.5°	1662.0	1661.3	1660.7	1659.9	1659.3	1659.1	1659.3	1659.7	1660.0	1660.3	1661.6
160°	1691.6	1690.6	1689.7	1688.8	1687.8	1687.5	1687.8	1688.1	1688.5	1688.8	1690.0
162.5°	1717.8	1717.0	1716.4	1715.7	1715.0	1714.7	1714.7	1714.8	1714.9	1714.9	1716.5
165°	1752.8	1752.1	1751.4	1750.9	1750.2	1750.0	1750.4	1750.7	1751.0	1751.3	1752.6
167.5°	1782.3	1781.0	1779.8	1778.5	1777.3	1776.6	1776.6	1776.6	1776.6	1776.6	1778.5
170°	1798.2	1797.0	1795.6	1794.4	1793.2	1792.5	1792.5	1792.5	1792.5	1792.5	1794.4
172.5°	1809.6	1808.4	1807.0	1805.8	1804.5	1803.9	1803.9	1803.9	1803.9	1803.9	1805.8
175°	1822.4	1821.1	1819.9	1818.5	1817.3	1816.7	1816.7	1816.7	1816.7	1816.7	1818.5
177.5°	1828.9	1827.9	1826.9	1825.9	1824.9	1824.2	1824.0	1823.7	1823.4	1823.3	1824.8
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	51.9	54.5	57.0	58.7	59.7	60.5	61.4	62.2
90°	66.1	69.8	73.7	76.4	78.0	79.6	81.2	82.9
92.5°	97.4	101.6	105.8	108.7	110.0	111.4	112.7	114.1
95°	150.0	154.3	158.6	161.5	162.8	164.1	165.4	166.6
97.5°	212.2	216.2	220.4	222.9	223.9	225.0	226.0	227.1
100°	255.1	260.0	264.9	267.9	269.1	270.3	271.5	272.8
102.5°	299.5	304.6	309.6	312.9	314.4	315.8	317.4	318.8
105°	371.4	375.2	379.0	381.7	383.3	385.0	386.6	388.2
107.5°	449.5	452.3	455.2	456.9	457.5	458.0	458.5	459.1
110°	503.7	506.4	509.3	510.9	511.1	511.5	511.9	512.3



TEST NUMBER: P333367-830

CATALOG NUMBER: S125DIW-S375D1560U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	558.0	560.2	562.4	563.5	563.6	563.7	563.8	564.0
115°	641.0	642.4	643.9	644.7	645.0	645.3	645.5	645.8
117.5°	724.1	725.9	727.8	728.5	727.9	727.3	726.7	726.0
120°	780.1	781.7	783.4	783.9	783.3	782.6	781.8	781.2
122.5°	834.9	836.2	837.5	838.0	837.6	837.2	836.7	836.3
125°	916.0	916.8	917.8	918.3	918.5	918.6	918.8	919.0
127.5°	996.2	997.3	998.4	999.0	998.9	998.8	998.7	998.7
130°	1049.6	1050.7	1051.7	1052.2	1052.0	1051.8	1051.7	1051.5
132.5°	1100.5	1101.5	1102.6	1102.9	1102.4	1101.9	1101.5	1101.0
135°	1178.7	1180.0	1181.3	1181.5	1180.7	1180.0	1179.1	1178.4
137.5°	1255.3	1256.9	1258.4	1258.5	1257.4	1256.1	1254.9	1253.8
140°	1303.5	1305.2	1306.9	1307.2	1306.0	1304.8	1303.6	1302.4
142.5°	1350.9	1352.2	1353.5	1353.5	1352.4	1351.1	1350.0	1348.8
145°	1419.7	1420.1	1420.6	1420.6	1420.0	1419.5	1418.9	1418.3
147.5°	1483.6	1484.5	1485.4	1484.9	1482.9	1480.9	1478.9	1477.0
150°	1523.9	1523.9	1523.9	1523.6	1523.1	1522.5	1522.0	1521.5
152.5°	1561.8	1562.5	1563.3	1563.1	1562.0	1560.9	1559.7	1558.6
155°	1615.9	1617.2	1618.4	1618.3	1616.7	1615.1	1613.5	1612.0
157.5°	1662.8	1664.2	1665.4	1665.0	1662.8	1660.8	1658.7	1656.6
160°	1691.3	1692.5	1693.8	1693.7	1692.1	1690.5	1688.9	1687.3
162.5°	1718.0	1719.5	1721.0	1720.8	1719.0	1717.1	1715.3	1713.4
165°	1753.8	1755.1	1756.3	1756.1	1754.2	1752.3	1750.4	1748.4
167.5°	1780.4	1782.3	1784.1	1784.1	1782.2	1780.3	1778.3	1776.3
170°	1796.3	1798.2	1800.1	1800.0	1797.7	1795.5	1793.3	1791.1
172.5°	1807.7	1809.6	1811.5	1811.5	1809.5	1807.5	1805.5	1803.6
175°	1820.5	1822.4	1824.3	1824.1	1821.9	1819.7	1817.5	1815.2
177.5°	1826.3	1827.8	1829.3	1829.2	1827.4	1825.6	1823.8	1822.1
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6

(END OF REPORT)