

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: P333659-940

Luminaire Tested: **S125RDIW-S375D1560U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333659-940
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-S375D1560U940-4F0-1E-UDD-F1
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, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6115.0 lumens
Efficiency: N/A
Efficacy: 114.5 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

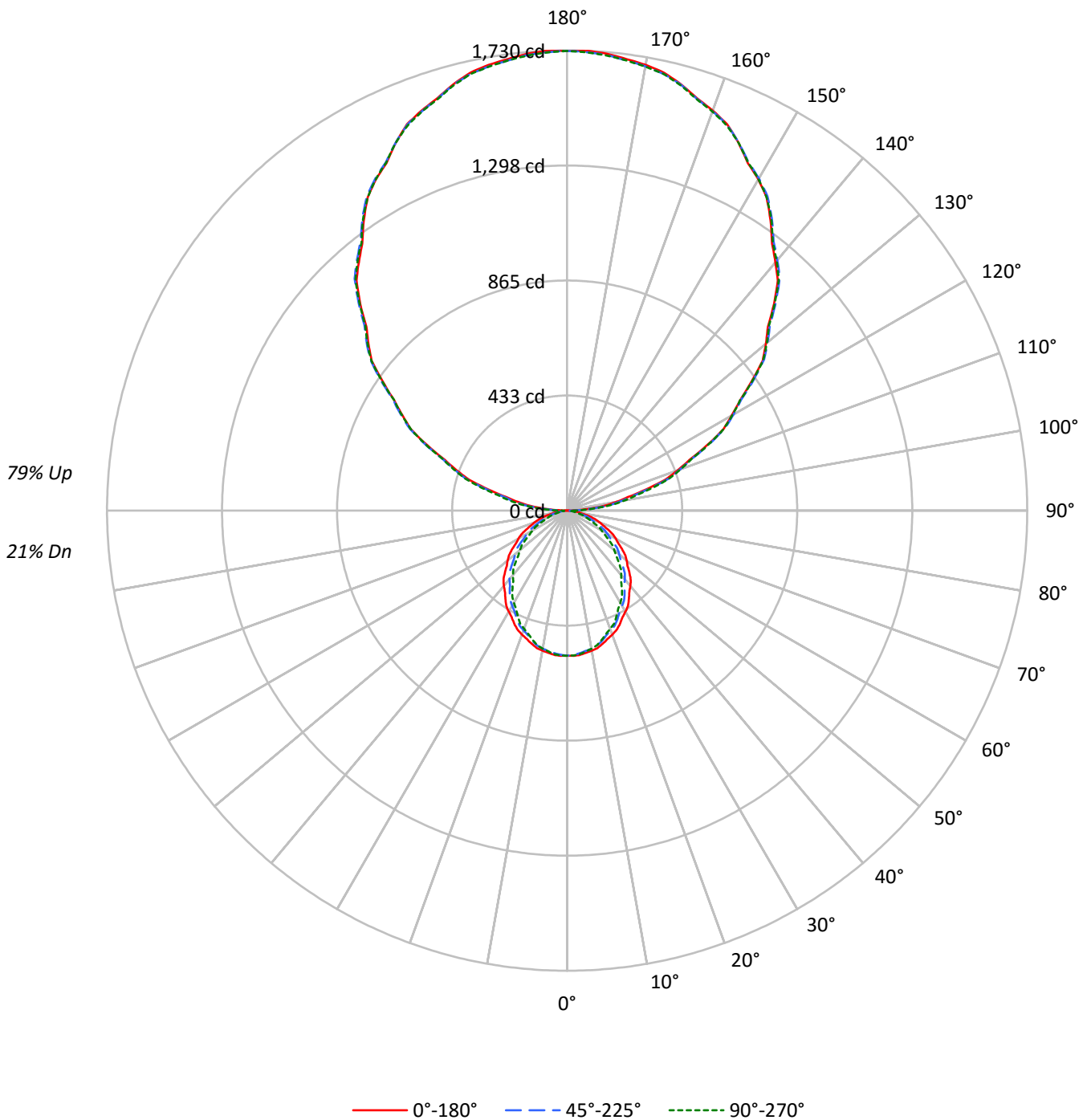
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25	18
2	83	76	70	66	73	68	63	59	52	48	46	37	35	33	23	22	21	15
3	76	67	60	55	67	60	54	49	46	42	38	33	30	28	21	19	18	13
4	69	59	52	46	61	53	46	42	40	36	33	29	26	24	18	17	16	11
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14	10
6	58	47	39	34	52	42	35	31	32	28	24	23	20	18	15	13	12	9
7	54	42	35	29	48	38	31	27	29	25	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	19	16	14	13	11	10	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3524	3524	3524
5°	3532	3492	3513
10°	3505	3459	3459
15°	3463	3389	3361
20°	3410	3291	3252
25°	3348	3195	3125
30°	3270	3082	2984
35°	3191	2967	2827
40°	3117	2845	2672
45°	3027	2711	2503
50°	2936	2563	2327
55°	2831	2422	2139
60°	2725	2251	1938
65°	2601	2054	1705
70°	2459	1805	1469
75°	2263	1522	1223
80°	1993	1194	1027
85°	1675	978	919



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	0.8
10°-20°	143.4	2.3
20°-30°	207.9	3.4
30°-40°	237.0	3.9
40°-50°	231.0	3.8
50°-60°	194.4	3.2
60°-70°	136.3	2.2
70°-80°	70.1	1.1
80°-90°	21.5	0.4
90°-100°	115.7	1.9
100°-110°	341.8	5.6
110°-120°	578.9	9.5
120°-130°	761.9	12.5
130°-140°	853.7	14.0
140°-150°	836.7	13.7
150°-160°	702.8	11.5
160°-170°	467.2	7.6
170°-180°	163.5	2.7
0°-30°	402.6	6.6
0°-40°	639.6	10.5
0°-60°	1065.0	17.4
0°-90°	1292.8	21.1
90°-120°	1036.5	16.9
90°-150°	3488.8	57.1
90°-180°	4822.0	78.9
0°-180°	6115.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	545	543	539	542	542	52
15°	518	515	507	506	503	146
25°	470	463	448	443	438	216
35°	405	394	376	365	359	253
45°	331	319	297	281	274	256
55°	251	238	215	197	190	225
65°	170	156	134	118	112	169
75°	91	78	61	52	49	96
85°	23	16	13	13	12	25
90°	1	12	22	28	32	6
95°	87	91	104	113	116	93
105°	307	313	322	329	334	327
115°	580	585	588	586	585	573
125°	846	854	855	853	851	757
135°	1100	1108	1110	1109	1104	848
145°	1333	1338	1342	1342	1338	833
155°	1525	1525	1526	1531	1525	702
165°	1658	1656	1657	1661	1654	468
175°	1724	1719	1719	1726	1717	164
180°	1728	1728	1728	1728	1728	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	546.6	546.4	546.2	546.0	545.7	545.3	544.6	543.8	543.1	542.3	543.1
5°	544.8	544.5	544.1	543.7	543.3	542.7	541.6	540.6	539.7	538.6	539.6
7.5°	539.5	539.1	538.8	538.4	538.1	537.3	536.1	534.8	533.7	532.4	533.1
10°	534.5	534.2	534.0	533.7	533.4	532.6	531.4	530.0	528.8	527.5	527.8
12.5°	528.9	528.5	528.2	527.9	527.5	526.5	524.8	523.1	521.3	519.6	519.8
15°	518.0	517.5	516.9	516.4	515.9	514.6	512.6	510.8	508.8	506.9	506.8
17.5°	505.8	504.9	504.1	503.2	502.4	500.8	498.3	495.9	493.5	491.1	490.6
20°	496.1	495.3	494.4	493.5	492.5	490.6	487.7	484.7	481.8	478.8	478.4
22.5°	485.6	484.7	483.8	482.9	482.0	480.0	476.9	473.9	470.7	467.7	466.8
25°	469.8	468.4	467.1	465.7	464.3	461.9	458.5	455.1	451.7	448.4	447.2
27.5°	451.7	450.0	448.4	446.7	445.0	442.4	438.7	435.1	431.5	427.8	426.1
30°	438.5	436.8	435.0	433.3	431.5	428.7	424.9	421.1	417.2	413.3	411.3
32.5°	425.6	423.6	421.6	419.5	417.5	414.6	410.6	406.7	402.8	398.9	396.5
35°	404.7	402.5	400.3	398.1	395.9	392.7	388.6	384.5	380.4	376.3	373.6
37.5°	384.1	381.5	378.8	376.1	373.4	370.0	365.8	361.5	357.3	353.0	349.8
40°	369.7	366.9	364.2	361.4	358.6	355.1	350.7	346.3	341.9	337.5	334.0
42.5°	354.5	351.7	348.8	346.1	343.2	339.6	335.0	330.5	325.9	321.4	318.1
45°	331.4	328.7	326.0	323.3	320.7	316.8	311.8	306.8	301.8	296.8	293.0
47.5°	307.4	304.5	301.8	298.9	296.1	292.2	287.1	282.0	277.0	271.9	268.1
50°	292.2	289.2	286.1	283.1	280.1	276.0	270.7	265.6	260.3	255.1	251.3
52.5°	275.7	272.6	269.5	266.4	263.3	259.3	254.4	249.4	244.5	239.6	235.5
55°	251.4	248.4	245.5	242.6	239.7	235.7	230.5	225.3	220.3	215.1	211.0
57.5°	226.9	223.7	220.5	217.4	214.3	210.3	205.3	200.4	195.5	190.5	186.5
60°	211.0	207.8	204.6	201.3	198.1	194.1	189.1	184.2	179.2	174.3	170.3
62.5°	194.2	191.1	188.1	185.0	181.9	177.9	172.9	167.9	162.8	157.8	154.1
65°	170.2	167.1	164.0	160.9	157.7	153.7	148.9	144.1	139.2	134.4	130.7
67.5°	146.4	143.3	140.2	137.1	133.9	130.0	125.4	120.7	116.1	111.5	108.1
70°	130.2	127.2	124.0	120.9	117.8	114.0	109.3	104.8	100.2	95.6	92.7
72.5°	114.4	111.4	108.3	105.3	102.3	98.5	94.3	90.0	85.7	81.4	78.8
75°	90.7	87.9	85.2	82.4	79.7	76.4	72.5	68.7	64.8	61.0	58.9
77.5°	67.1	64.9	62.7	60.5	58.3	55.6	52.6	49.5	46.5	43.3	41.9
80°	53.6	51.4	49.2	47.0	44.8	42.4	39.9	37.3	34.7	32.1	31.3
82.5°	40.4	38.4	36.5	34.4	32.5	30.6	28.9	27.1	25.3	23.5	23.2
85°	22.6	21.0	19.4	17.7	16.1	15.0	14.5	14.1	13.6	13.2	13.1
87.5°	7.8	7.8	7.8	7.8	7.7	7.8	8.2	8.6	8.9	9.3	9.5
90°	1.3	3.7	6.2	8.6	10.9	13.1	15.2	17.3	19.4	21.5	23.0
92.5°	32.5	34.2	35.9	37.5	39.2	41.4	44.0	46.5	49.0	51.6	53.6
95°	87.4	88.0	88.6	89.2	89.8	91.6	94.6	97.6	100.6	103.5	105.7
97.5°	145.3	145.4	145.7	146.0	146.2	148.4	152.5	156.7	160.8	164.9	166.8
100°	188.2	188.2	188.2	188.2	188.2	190.2	194.1	198.0	201.9	205.7	208.5
102.5°	234.5	235.8	236.9	238.1	239.3	240.9	242.9	244.9	246.8	248.8	251.7
105°	306.7	308.1	309.6	311.1	312.6	314.2	316.0	317.8	319.6	321.5	323.2
107.5°	386.2	387.7	389.2	390.7	392.2	393.7	395.0	396.4	397.8	399.1	400.0
110°	441.1	442.6	444.1	445.6	447.1	448.3	449.2	450.0	450.9	451.8	452.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	497.0	497.8	498.6	499.4	500.2	501.1	502.2	503.4	504.5	505.7	506.0
115°	579.6	580.9	582.0	583.2	584.4	585.3	585.9	586.5	587.1	587.7	587.4
117.5°	662.5	663.0	663.5	664.1	664.6	665.1	665.7	666.2	666.7	667.4	667.5
120°	714.1	715.6	717.1	718.6	720.1	720.9	721.3	721.6	721.8	722.2	722.2
122.5°	770.1	770.6	771.2	771.7	772.2	772.8	773.6	774.5	775.2	776.0	775.7
125°	845.9	847.7	849.5	851.3	853.1	854.2	854.4	854.7	855.1	855.3	854.7
127.5°	926.6	927.6	928.6	929.6	930.7	931.4	931.7	932.1	932.5	932.8	932.5
130°	975.0	976.5	978.0	979.5	981.0	982.0	982.7	983.2	983.8	984.4	984.1
132.5°	1023.4	1025.9	1028.3	1030.8	1033.2	1034.4	1034.3	1034.1	1034.0	1033.9	1033.6
135°	1100.1	1101.9	1103.7	1105.5	1107.2	1108.3	1108.6	1108.9	1109.2	1109.5	1109.5
137.5°	1172.2	1173.9	1175.6	1177.3	1179.1	1180.3	1181.0	1181.6	1182.2	1182.9	1183.3
140°	1218.4	1219.9	1221.4	1222.9	1224.4	1225.6	1226.5	1227.4	1228.3	1229.2	1229.8
142.5°	1264.7	1266.0	1267.2	1268.5	1269.7	1270.9	1272.0	1273.2	1274.3	1275.4	1275.8
145°	1332.8	1333.9	1335.2	1336.3	1337.6	1338.5	1339.4	1340.3	1341.2	1342.1	1342.1
147.5°	1395.7	1396.3	1397.0	1397.7	1398.3	1399.0	1399.7	1400.4	1401.1	1401.9	1402.6
150°	1437.6	1437.3	1437.1	1436.7	1436.5	1436.9	1438.1	1439.3	1440.5	1441.7	1441.7
152.5°	1472.0	1472.5	1472.9	1473.3	1473.7	1474.2	1474.7	1475.2	1475.6	1476.1	1476.9
155°	1525.1	1525.1	1525.1	1525.1	1525.1	1525.2	1525.5	1525.8	1526.1	1526.4	1527.6
157.5°	1572.4	1571.7	1571.1	1570.4	1569.8	1569.6	1569.9	1570.2	1570.5	1570.7	1572.0
160°	1600.4	1599.5	1598.6	1597.7	1596.8	1596.5	1596.8	1597.1	1597.4	1597.7	1598.8
162.5°	1625.1	1624.4	1623.8	1623.2	1622.5	1622.2	1622.2	1622.3	1622.4	1622.4	1623.9
165°	1658.2	1657.6	1657.0	1656.4	1655.8	1655.6	1656.0	1656.3	1656.5	1656.9	1658.0
167.5°	1686.1	1685.0	1683.8	1682.6	1681.4	1680.8	1680.8	1680.8	1680.8	1680.8	1682.6
170°	1701.2	1700.0	1698.8	1697.6	1696.5	1695.9	1695.9	1695.9	1695.9	1695.9	1697.6
172.5°	1712.0	1710.8	1709.6	1708.4	1707.2	1706.6	1706.6	1706.6	1706.6	1706.6	1708.4
175°	1724.1	1722.9	1721.7	1720.5	1719.3	1718.7	1718.7	1718.7	1718.7	1718.7	1720.5
177.5°	1730.3	1729.3	1728.4	1727.4	1726.4	1725.8	1725.6	1725.4	1725.1	1724.9	1726.4
180°	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	543.8	544.6	545.3	545.6	545.5	545.5	545.4	545.3
5°	540.5	541.4	542.2	542.7	542.5	542.2	542.1	541.9
7.5°	533.7	534.4	535.0	535.2	535.0	534.8	534.7	534.4
10°	528.1	528.3	528.6	528.6	528.3	528.1	527.8	527.5
12.5°	520.0	520.2	520.4	520.3	519.9	519.4	519.1	518.6
15°	506.7	506.6	506.5	506.0	505.2	504.4	503.6	502.7
17.5°	490.2	489.7	489.3	488.7	488.0	487.3	486.6	486.0
20°	478.0	477.5	477.1	476.4	475.5	474.7	473.9	473.1
22.5°	465.8	464.9	464.0	463.2	462.6	461.9	461.3	460.6
25°	446.0	444.8	443.6	442.6	441.5	440.5	439.5	438.5
27.5°	424.5	422.8	421.2	419.9	418.9	417.9	417.0	416.0
30°	409.1	407.1	404.9	403.5	402.6	401.8	401.0	400.2
32.5°	394.2	391.9	389.5	387.9	386.8	385.8	384.7	383.7
35°	371.0	368.3	365.6	363.6	362.4	361.1	359.8	358.6
37.5°	346.6	343.5	340.3	338.0	336.8	335.6	334.3	333.1
40°	330.6	327.1	323.6	321.3	320.2	319.1	318.0	316.9
42.5°	314.7	311.4	308.0	305.6	304.0	302.3	300.7	299.1
45°	289.4	285.7	282.0	279.6	278.2	276.8	275.4	274.0
47.5°	264.4	260.6	256.8	254.1	252.6	251.1	249.6	248.1
50°	247.4	243.5	239.7	237.1	235.8	234.3	233.0	231.6
52.5°	231.3	227.2	223.0	220.3	218.9	217.6	216.2	214.8
55°	206.9	202.8	198.7	195.8	194.4	192.9	191.5	190.0
57.5°	182.4	178.4	174.3	171.7	170.4	169.1	167.8	166.5
60°	166.3	162.2	158.2	155.5	154.1	152.8	151.4	150.0
62.5°	150.3	146.6	142.9	140.4	138.9	137.6	136.3	134.8
65°	127.0	123.3	119.7	117.2	115.8	114.4	113.1	111.6
67.5°	104.7	101.4	98.0	95.8	94.7	93.6	92.5	91.4
70°	90.0	87.1	84.3	82.3	81.1	80.1	79.0	77.8
72.5°	76.2	73.6	71.0	69.3	68.6	67.9	67.1	66.3
75°	57.0	54.9	53.0	51.6	51.0	50.3	49.7	49.0
77.5°	40.6	39.1	37.7	36.7	36.3	35.8	35.3	34.9
80°	30.5	29.7	28.9	28.4	28.2	28.0	27.8	27.6
82.5°	22.8	22.4	22.0	21.8	21.7	21.6	21.5	21.3
85°	13.0	12.9	12.8	12.8	12.7	12.6	12.5	12.4
87.5°	9.8	10.2	10.4	10.6	10.8	10.9	11.0	11.1
90°	24.5	26.0	27.5	28.7	29.6	30.5	31.4	32.3
92.5°	55.6	57.5	59.6	60.8	61.5	62.2	62.8	63.5
95°	107.7	109.9	111.9	113.2	113.9	114.5	115.0	115.7
97.5°	168.8	170.8	172.7	174.0	174.3	174.7	175.0	175.4
100°	211.2	213.8	216.5	218.2	218.7	219.4	220.0	220.5
102.5°	254.7	257.6	260.5	262.4	263.2	264.0	264.9	265.7
105°	325.0	326.8	328.6	329.9	330.8	331.7	332.6	333.5
107.5°	400.9	401.8	402.7	403.1	403.1	403.1	403.0	402.9
110°	453.7	454.6	455.5	455.8	455.5	455.1	454.9	454.6



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CATALOG NUMBER: S125RDIW-S375D1560U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	506.5	506.9	507.3	507.3	506.8	506.2	505.7	505.2
115°	587.1	586.8	586.5	586.2	585.9	585.6	585.3	585.1
117.5°	667.8	668.1	668.2	667.8	666.6	665.4	664.2	663.0
120°	722.2	722.2	722.2	721.6	720.4	719.2	718.0	716.8
122.5°	775.5	775.3	775.0	774.5	773.5	772.5	771.5	770.6
125°	854.2	853.5	852.9	852.5	852.2	851.9	851.6	851.3
127.5°	932.2	931.9	931.6	931.1	930.5	930.0	929.3	928.7
130°	983.8	983.6	983.2	982.8	982.2	981.6	981.0	980.4
132.5°	1033.3	1033.0	1032.7	1032.2	1031.4	1030.5	1029.7	1028.8
135°	1109.5	1109.5	1109.5	1108.9	1107.7	1106.5	1105.3	1104.1
137.5°	1183.7	1184.0	1184.4	1183.8	1182.3	1180.8	1179.3	1177.8
140°	1230.4	1231.0	1231.5	1231.1	1229.7	1228.2	1226.6	1225.1
142.5°	1276.1	1276.5	1276.9	1276.3	1274.8	1273.4	1271.8	1270.3
145°	1342.1	1342.1	1342.1	1341.7	1340.8	1339.9	1339.0	1338.1
147.5°	1403.3	1404.0	1404.7	1404.1	1402.0	1400.0	1398.0	1396.0
150°	1441.7	1441.7	1441.7	1441.4	1440.7	1440.2	1439.6	1439.0
152.5°	1477.6	1478.3	1479.0	1478.8	1477.7	1476.7	1475.6	1474.5
155°	1528.7	1530.0	1531.2	1531.1	1529.6	1528.0	1526.5	1525.1
157.5°	1573.2	1574.4	1575.6	1575.2	1573.2	1571.2	1569.2	1567.3
160°	1600.1	1601.2	1602.5	1602.3	1600.8	1599.3	1597.9	1596.3
162.5°	1625.3	1626.7	1628.2	1628.0	1626.3	1624.5	1622.8	1621.0
165°	1659.2	1660.5	1661.6	1661.3	1659.6	1657.8	1656.0	1654.1
167.5°	1684.4	1686.1	1687.9	1687.9	1686.0	1684.3	1682.4	1680.5
170°	1699.4	1701.2	1703.0	1702.9	1700.8	1698.7	1696.6	1694.5
172.5°	1710.2	1712.0	1713.8	1713.8	1711.9	1710.0	1708.2	1706.4
175°	1722.3	1724.1	1725.9	1725.7	1723.7	1721.5	1719.5	1717.3
177.5°	1727.8	1729.2	1730.6	1730.5	1728.8	1727.2	1725.5	1723.9
180°	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1	1728.1

(END OF REPORT)