

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: P333361-840

Luminaire Tested: **S125DIW-S375D1340U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333361-840
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-S375D1340U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6175.3 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

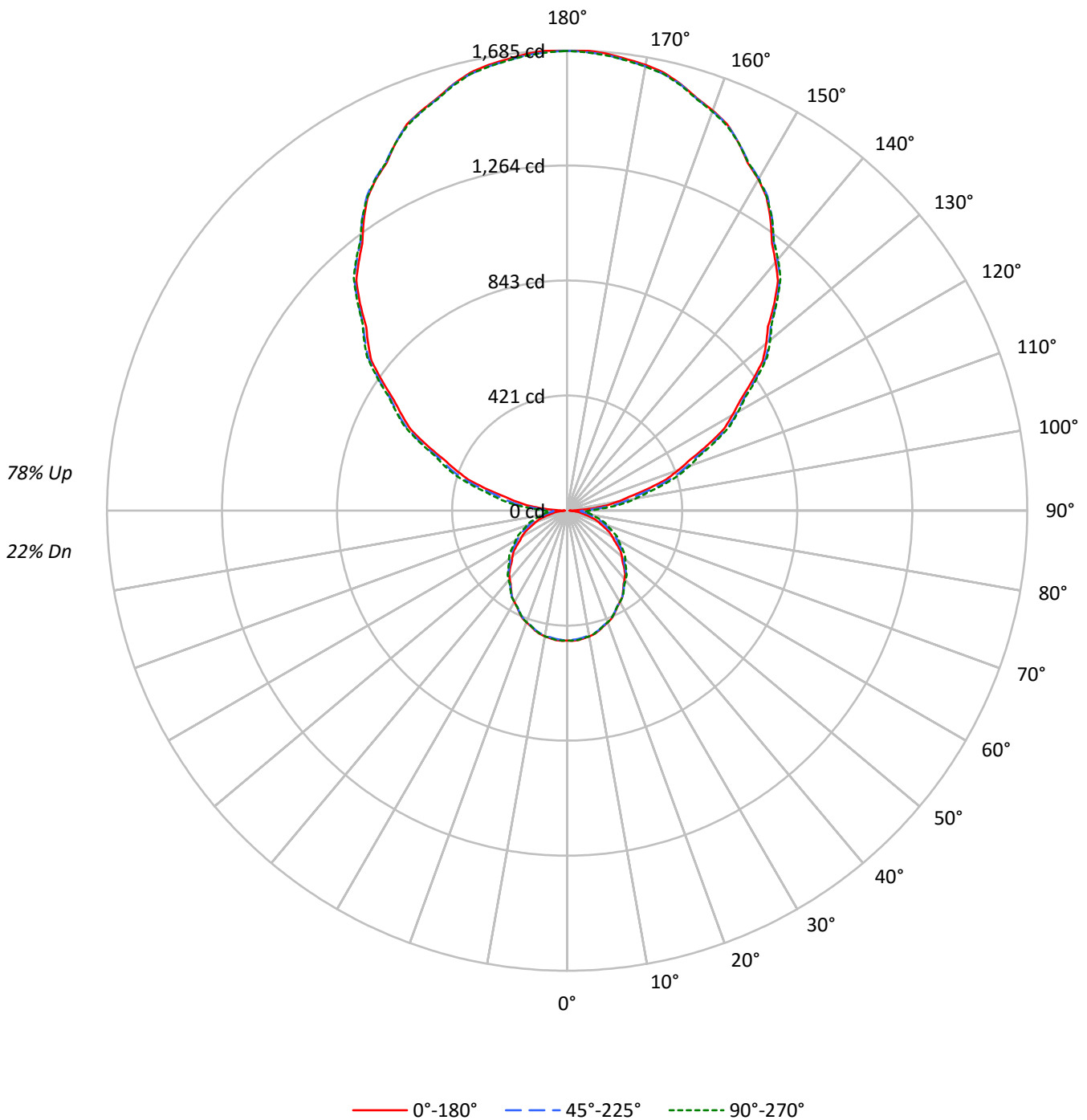
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	22
1	91	87	83	80	81	77	74	71	59	57	55	42	41	40	27	26	25	18
2	83	76	70	65	73	67	62	58	51	48	45	37	35	33	23	22	21	15
3	75	66	59	54	67	59	53	48	45	41	38	32	30	28	20	19	18	13
4	69	58	51	45	61	52	46	41	40	35	32	29	26	23	18	17	15	11
5	63	52	44	38	56	46	40	35	36	31	27	26	23	20	16	15	13	9
6	58	46	39	33	51	41	35	30	32	27	24	23	20	17	15	13	11	8
7	53	42	34	29	47	37	31	26	29	24	21	21	18	15	13	12	10	7
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	41	31	24	20	24	19	16	17	14	12	11	9	8	6
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	9	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.7
10°-20°	127.8	2.1
20°-30°	190.0	3.1
30°-40°	225.1	3.6
40°-50°	232.7	3.8
50°-60°	214.4	3.5
60°-70°	173.3	2.8
70°-80°	116.1	1.9
80°-90°	63.9	1.0
90°-100°	146.5	2.4
100°-110°	357.8	5.8
110°-120°	580.6	9.4
120°-130°	751.6	12.2
130°-140°	835.7	13.5
140°-150°	815.9	13.2
150°-160°	684.5	11.1
160°-170°	455.0	7.4
170°-180°	159.2	2.6
0°-30°	362.8	5.9
0°-40°	587.9	9.5
0°-60°	1035.1	16.8
0°-90°	1388.3	22.5
90°-120°	1085.0	17.6
90°-150°	3488.1	56.5
90°-180°	4787.0	77.5
0°-180°	6175.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	9	34	59	76	84	10
95°	91	107	135	154	160	96
105°	303	317	339	355	363	323
115°	567	576	591	597	599	561
125°	826	833	844	848	850	739
135°	1072	1080	1084	1090	1088	826
145°	1299	1303	1307	1309	1308	811
155°	1486	1486	1487	1491	1486	684
165°	1615	1613	1614	1618	1611	455
175°	1679	1674	1674	1681	1673	160
180°	1683	1683	1683	1683	1683	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.8	18.6	22.4	26.2	30.0	33.8	37.8	41.7	45.6	49.6	52.2
90°	8.8	14.4	20.1	25.8	31.4	37.0	42.5	48.1	53.6	59.3	63.1
92.5°	38.4	43.1	47.9	52.5	57.3	62.6	68.8	74.8	81.0	87.1	91.3
95°	91.2	94.5	97.8	101.1	104.3	109.2	115.6	122.1	128.5	134.9	139.3
97.5°	146.9	149.7	152.3	154.9	157.6	162.7	170.1	177.5	184.9	192.4	196.4
100°	188.5	190.7	192.9	195.1	197.2	201.9	208.9	216.1	223.2	230.2	235.1
102.5°	233.2	236.4	239.5	242.8	245.9	250.0	255.3	260.4	265.6	270.7	275.7
105°	302.9	306.0	309.1	312.3	315.4	319.3	324.2	329.0	333.9	338.7	342.5
107.5°	379.9	382.7	385.6	388.5	391.3	395.0	399.2	403.5	407.9	412.2	415.2
110°	432.9	435.7	438.4	441.0	443.7	447.0	450.7	454.5	458.3	462.1	464.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	487.5	489.2	490.9	492.7	494.4	497.3	501.2	505.1	509.1	513.0	515.2
115°	567.4	569.3	571.2	573.1	574.9	577.5	580.8	584.1	587.3	590.7	592.2
117.5°	647.6	648.6	649.6	650.7	651.7	653.7	656.7	659.8	662.9	666.0	667.9
120°	697.9	699.7	701.5	703.3	705.0	707.2	709.9	712.6	715.3	717.9	719.6
122.5°	752.0	752.8	753.4	754.1	754.7	756.6	759.6	762.8	765.8	768.8	770.2
125°	825.9	827.5	829.1	830.7	832.4	834.5	836.8	839.1	841.5	843.8	845.0
127.5°	903.9	904.8	905.7	906.7	907.5	909.0	911.0	913.1	915.1	917.2	918.4
130°	951.1	952.5	953.8	955.1	956.5	958.3	960.3	962.3	964.3	966.3	967.6
132.5°	997.9	1000.3	1002.6	1005.0	1007.3	1009.1	1010.1	1011.1	1012.1	1013.1	1014.2
135°	1072.5	1074.1	1075.8	1077.4	1079.0	1080.4	1081.4	1082.4	1083.4	1084.5	1085.8
137.5°	1142.6	1144.2	1145.8	1147.4	1149.0	1150.3	1151.3	1152.4	1153.3	1154.3	1155.9
140°	1187.3	1188.7	1190.2	1191.6	1193.2	1194.4	1195.3	1196.3	1197.3	1198.2	1199.9
142.5°	1232.3	1233.4	1234.7	1235.8	1236.9	1238.1	1239.2	1240.3	1241.4	1242.5	1243.9
145°	1298.7	1299.7	1300.8	1301.8	1302.9	1303.8	1304.7	1305.6	1306.5	1307.4	1307.9
147.5°	1359.5	1360.1	1360.8	1361.4	1362.0	1362.7	1363.4	1364.1	1364.8	1365.5	1366.3
150°	1400.4	1400.1	1399.8	1399.5	1399.2	1399.6	1400.8	1402.0	1403.1	1404.3	1404.3
152.5°	1433.9	1434.3	1434.7	1435.1	1435.5	1435.9	1436.4	1436.8	1437.3	1437.8	1438.6
155°	1485.5	1485.5	1485.5	1485.5	1485.5	1485.6	1485.9	1486.2	1486.5	1486.8	1487.9
157.5°	1531.6	1531.0	1530.3	1529.6	1529.0	1528.8	1529.1	1529.4	1529.7	1530.0	1531.2
160°	1558.8	1558.0	1557.1	1556.2	1555.4	1555.1	1555.4	1555.7	1555.9	1556.2	1557.4
162.5°	1583.0	1582.4	1581.7	1581.0	1580.4	1580.1	1580.1	1580.2	1580.2	1580.3	1581.8
165°	1615.2	1614.6	1614.0	1613.5	1612.9	1612.8	1613.0	1613.3	1613.6	1613.9	1615.1
167.5°	1642.4	1641.2	1640.1	1638.9	1637.8	1637.2	1637.2	1637.2	1637.2	1637.2	1638.9
170°	1657.1	1656.0	1654.8	1653.7	1652.4	1651.8	1651.8	1651.8	1651.8	1651.8	1653.7
172.5°	1667.6	1666.4	1665.3	1664.1	1662.9	1662.3	1662.3	1662.3	1662.3	1662.3	1664.1
175°	1679.4	1678.2	1677.1	1675.9	1674.8	1674.2	1674.2	1674.2	1674.2	1674.2	1675.9
177.5°	1685.4	1684.5	1683.5	1682.6	1681.6	1681.1	1680.8	1680.6	1680.4	1680.1	1681.5
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	54.9	57.6	60.3	62.0	62.9	63.8	64.7	65.6
90°	67.0	70.8	74.6	77.4	78.9	80.5	82.1	83.7
92.5°	95.5	99.8	104.0	106.7	108.2	109.5	110.9	112.2
95°	143.6	147.9	152.2	155.0	156.3	157.6	159.0	160.3
97.5°	200.6	204.6	208.7	211.3	212.4	213.4	214.5	215.5
100°	239.8	244.7	249.4	252.5	253.7	254.9	256.1	257.3
102.5°	280.6	285.6	290.5	293.7	295.2	296.6	298.0	299.4
105°	346.4	350.2	354.1	356.8	358.3	359.9	361.5	363.1
107.5°	418.1	421.0	423.9	425.7	426.3	426.9	427.5	428.0
110°	467.8	470.6	473.4	475.1	475.5	475.9	476.4	476.9



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CATALOG NUMBER: S125DIW-S375D1340U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	517.6	519.9	522.2	523.4	523.6	523.8	524.0	524.2
115°	593.8	595.4	596.9	597.9	598.2	598.5	599.0	599.3
117.5°	669.9	672.0	674.0	674.7	674.3	673.8	673.4	672.9
120°	721.4	723.2	725.0	725.6	725.1	724.5	724.0	723.4
122.5°	771.7	773.2	774.6	775.2	774.9	774.6	774.3	774.0
125°	846.1	847.1	848.2	848.8	849.1	849.3	849.5	849.7
127.5°	919.7	920.9	922.1	922.8	922.8	922.8	922.8	922.8
130°	968.7	969.9	971.0	971.6	971.5	971.4	971.4	971.3
132.5°	1015.4	1016.5	1017.7	1018.1	1017.7	1017.3	1016.9	1016.6
135°	1087.1	1088.5	1089.8	1090.1	1089.5	1088.9	1088.2	1087.6
137.5°	1157.4	1159.0	1160.5	1160.8	1159.8	1158.8	1157.7	1156.7
140°	1201.6	1203.5	1205.2	1205.5	1204.5	1203.4	1202.3	1201.3
142.5°	1245.2	1246.5	1247.9	1248.0	1247.0	1245.9	1244.9	1243.9
145°	1308.4	1308.9	1309.4	1309.5	1309.0	1308.5	1308.1	1307.6
147.5°	1367.3	1368.1	1369.0	1368.5	1366.8	1364.9	1363.1	1361.3
150°	1404.3	1404.3	1404.3	1404.0	1403.5	1403.1	1402.6	1402.1
152.5°	1439.2	1439.9	1440.6	1440.5	1439.5	1438.4	1437.3	1436.3
155°	1489.1	1490.3	1491.5	1491.3	1489.9	1488.4	1486.9	1485.5
157.5°	1532.4	1533.5	1534.7	1534.3	1532.4	1530.5	1528.5	1526.6
160°	1558.5	1559.7	1560.8	1560.7	1559.3	1557.8	1556.4	1554.9
162.5°	1583.2	1584.5	1585.9	1585.8	1584.1	1582.4	1580.7	1579.0
165°	1616.2	1617.4	1618.5	1618.2	1616.5	1614.8	1613.0	1611.2
167.5°	1640.7	1642.4	1644.2	1644.2	1642.3	1640.5	1638.7	1636.9
170°	1655.4	1657.1	1658.8	1658.7	1656.7	1654.7	1652.5	1650.5
172.5°	1665.9	1667.6	1669.3	1669.3	1667.5	1665.7	1663.9	1662.0
175°	1677.6	1679.4	1681.1	1680.9	1678.9	1676.9	1674.9	1672.8
177.5°	1682.9	1684.4	1685.8	1685.7	1683.9	1682.3	1680.7	1679.1
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3

(END OF REPORT)