

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: P333654-830

Luminaire Tested: **S125RDIW-S375D1340U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333654-830
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-S375D1340U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6421.3 lumens
Efficiency: N/A
Efficacy: 137.8 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

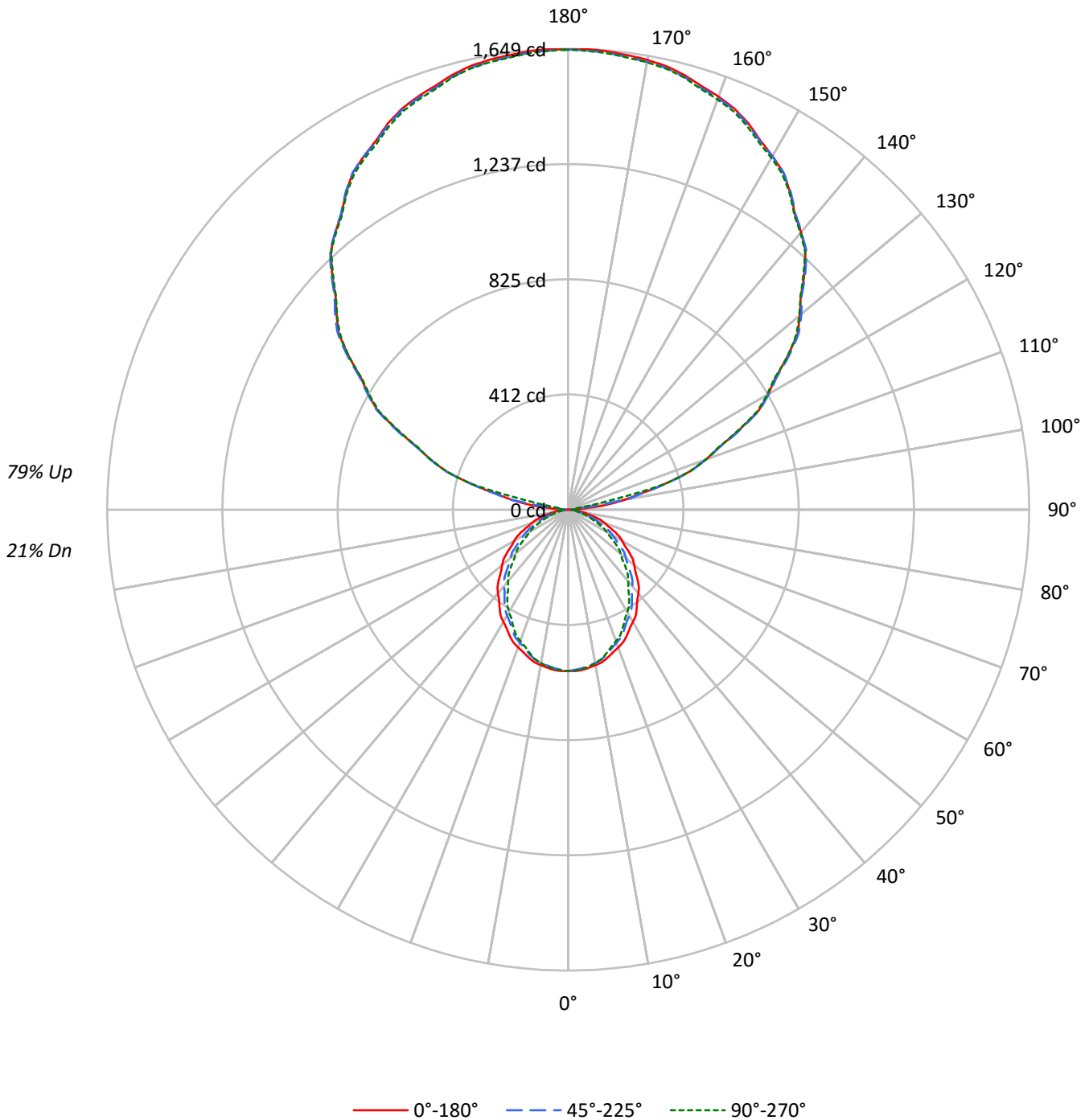
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	71	66	74	68	63	59	52	49	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	19	17	16	11
5	64	53	45	39	56	47	40	36	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°	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	0.8
10°-20°	151.6	2.4
20°-30°	219.8	3.4
30°-40°	250.5	3.9
40°-50°	244.1	3.8
50°-60°	205.5	3.2
60°-70°	144.1	2.2
70°-80°	74.1	1.2
80°-90°	22.1	0.3
90°-100°	59.8	0.9
100°-110°	368.7	5.7
110°-120°	668.7	10.4
120°-130°	858.2	13.4
130°-140°	923.1	14.4
140°-150°	866.4	13.5
150°-160°	700.9	10.9
160°-170°	453.3	7.1
170°-180°	156.3	2.4
0°-30°	425.6	6.6
0°-40°	676.0	10.5
0°-60°	1125.7	17.5
0°-90°	1366.0	21.3
90°-120°	1097.2	17.1
90°-150°	3744.9	58.3
90°-180°	5055.0	78.7
0°-180°	6421.3	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	11	20	26	29	4
95°	70	64	20	25	26	89
105°	359	363	364	364	362	380
115°	674	680	681	676	669	668
125°	958	966	966	962	958	855
135°	1195	1202	1200	1197	1190	921
145°	1385	1387	1388	1388	1382	866
155°	1525	1519	1521	1523	1514	703
165°	1610	1603	1604	1610	1601	455
175°	1646	1639	1640	1649	1639	157
180°	1646	1646	1646	1646	1646	



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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	8.1	8.0	7.9	7.8	7.9	8.2	8.5	8.9	9.1	9.4
90°	1.2	3.4	5.6	7.7	9.9	12.0	13.9	15.7	17.6	19.5	20.9
92.5°	18.8	17.2	15.7	14.2	12.7	12.8	14.5	16.1	17.8	19.5	20.9
95°	69.6	68.7	68.0	67.1	66.3	60.7	50.4	40.2	29.8	19.5	20.9
97.5°	145.2	146.7	148.2	149.6	151.1	141.6	121.2	100.9	80.4	60.0	52.4
100°	203.8	204.6	205.4	206.2	207.1	208.0	209.1	210.2	211.2	212.4	171.9
102.5°	263.3	264.4	265.4	266.5	267.5	268.3	269.0	269.7	270.2	270.9	263.3
105°	358.8	359.9	361.0	362.0	363.2	363.6	363.6	363.6	363.6	363.6	363.6
107.5°	457.9	457.9	457.9	457.9	457.9	458.2	458.7	459.2	459.8	460.3	460.3
110°	522.4	522.4	522.4	522.4	522.4	522.5	523.1	523.7	524.2	524.7	524.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	582.9	583.5	584.2	584.8	585.4	586.0	586.3	586.5	586.9	587.2	586.2
115°	673.6	675.0	676.4	677.7	679.1	679.9	680.1	680.4	680.7	681.0	679.9
117.5°	767.6	767.5	767.5	767.4	767.4	767.9	768.9	770.0	771.0	772.0	770.6
120°	826.1	826.0	825.7	825.4	825.1	825.4	826.1	827.0	827.8	828.6	828.1
122.5°	877.9	878.9	880.0	881.0	882.0	882.8	883.2	883.5	883.9	884.3	883.7
125°	958.0	959.9	961.8	963.7	965.5	966.5	966.5	966.5	966.5	966.5	965.4
127.5°	1034.3	1035.8	1037.1	1038.4	1039.8	1040.4	1040.2	1040.1	1039.9	1039.7	1039.2
130°	1081.2	1082.6	1083.9	1085.3	1086.7	1087.5	1087.8	1088.0	1088.3	1088.5	1087.8
132.5°	1128.1	1129.6	1131.2	1132.8	1134.3	1134.9	1134.3	1133.7	1133.1	1132.5	1132.4
135°	1194.8	1196.4	1198.0	1199.6	1201.3	1201.7	1201.3	1200.7	1200.1	1199.6	1199.1
137.5°	1256.0	1257.4	1258.8	1260.2	1261.6	1262.1	1261.6	1261.1	1260.7	1260.2	1260.3
140°	1296.0	1296.6	1297.1	1297.6	1298.2	1298.4	1298.1	1297.8	1297.5	1297.2	1297.8
142.5°	1332.1	1332.5	1332.8	1333.1	1333.4	1333.8	1334.2	1334.5	1334.9	1335.3	1335.4
145°	1385.1	1385.6	1386.2	1386.8	1387.2	1387.5	1387.5	1387.5	1387.5	1387.5	1387.8
147.5°	1431.4	1431.3	1431.3	1431.2	1431.1	1431.2	1431.4	1431.8	1432.1	1432.5	1432.8
150°	1460.8	1460.2	1459.7	1459.2	1458.6	1458.6	1459.2	1459.7	1460.2	1460.8	1461.3
152.5°	1489.0	1487.9	1486.7	1485.5	1484.3	1483.9	1484.5	1485.1	1485.6	1486.1	1486.7
155°	1525.4	1523.8	1522.2	1520.6	1518.9	1518.4	1518.9	1519.5	1520.0	1520.6	1521.4
157.5°	1553.5	1552.6	1551.5	1550.6	1549.6	1549.2	1549.2	1549.3	1549.4	1549.4	1550.2
160°	1573.0	1571.4	1569.8	1568.1	1566.5	1565.8	1566.1	1566.4	1566.7	1567.0	1568.0
162.5°	1588.7	1587.1	1585.4	1583.8	1582.2	1581.5	1581.8	1582.1	1582.2	1582.5	1584.0
165°	1609.7	1608.0	1606.4	1604.8	1603.2	1602.4	1602.7	1603.0	1603.3	1603.5	1605.1
167.5°	1625.2	1623.6	1621.9	1620.2	1618.5	1617.9	1618.1	1618.3	1618.6	1618.9	1620.9
170°	1634.1	1632.2	1630.2	1628.3	1626.5	1625.6	1625.9	1626.2	1626.5	1626.7	1628.9
172.5°	1639.9	1638.0	1636.2	1634.2	1632.3	1631.6	1632.1	1632.6	1633.0	1633.5	1635.5
175°	1646.2	1644.6	1643.0	1641.3	1639.7	1639.1	1639.4	1639.6	1639.9	1640.1	1642.3
177.5°	1649.2	1647.8	1646.6	1645.3	1644.0	1643.4	1643.7	1643.9	1644.1	1644.3	1645.9
180°	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2



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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°	9.7	10.0	10.2	10.4	10.5	10.6	10.7	10.7
90°	22.2	23.6	25.0	26.0	26.9	27.6	28.5	29.3
92.5°	22.2	23.6	25.0	25.8	26.2	26.6	27.0	27.3
95°	22.2	23.6	25.0	25.6	25.6	25.6	25.6	25.6
97.5°	44.8	37.1	29.4	25.6	25.6	25.6	25.6	25.6
100°	131.5	91.1	50.7	30.0	28.8	27.8	26.7	25.6
102.5°	255.6	248.0	240.3	227.2	208.9	190.4	171.9	153.5
105°	363.6	363.6	363.6	363.5	363.3	363.0	362.7	362.4
107.5°	460.4	460.5	460.5	460.1	459.3	458.5	457.7	456.9
110°	523.1	522.4	521.5	521.2	521.5	521.8	522.1	522.4



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CATALOG NUMBER: S125RDIW-S375D1340U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	585.1	584.2	583.2	582.4	582.0	581.6	581.3	580.9
115°	678.8	677.7	676.7	675.2	673.6	672.0	670.3	668.7
117.5°	769.2	767.8	766.4	765.3	764.6	763.9	763.2	762.5
120°	827.6	827.0	826.4	825.5	824.2	822.7	821.4	820.1
122.5°	883.2	882.6	882.1	881.0	879.5	877.9	876.3	874.8
125°	964.3	963.3	962.1	961.2	960.5	959.6	958.8	958.0
127.5°	1038.6	1037.9	1037.4	1036.0	1034.1	1032.1	1030.0	1028.0
130°	1086.9	1086.1	1085.3	1084.2	1082.9	1081.5	1080.2	1078.8
132.5°	1132.2	1132.0	1131.8	1131.1	1129.7	1128.4	1127.0	1125.7
135°	1198.5	1198.0	1197.4	1196.4	1194.8	1193.1	1191.5	1189.9
137.5°	1260.4	1260.5	1260.6	1259.9	1258.5	1257.1	1255.7	1254.2
140°	1298.4	1298.8	1299.4	1298.8	1297.2	1295.6	1294.0	1292.3
142.5°	1335.5	1335.7	1335.8	1335.0	1333.3	1331.7	1330.1	1328.5
145°	1388.1	1388.4	1388.6	1388.0	1386.3	1384.7	1383.1	1381.5
147.5°	1433.1	1433.4	1433.8	1432.9	1431.0	1429.0	1427.1	1425.1
150°	1461.9	1462.4	1462.9	1462.1	1459.9	1457.7	1455.6	1453.4
152.5°	1487.2	1487.8	1488.3	1487.6	1485.6	1483.8	1481.8	1479.8
155°	1522.2	1523.0	1523.8	1523.1	1521.0	1518.8	1516.6	1514.5
157.5°	1551.1	1552.0	1552.8	1552.2	1550.0	1547.8	1545.7	1543.5
160°	1569.1	1570.2	1571.3	1570.7	1568.6	1566.4	1564.2	1562.1
162.5°	1585.5	1587.1	1588.7	1588.2	1585.8	1583.4	1581.0	1578.7
165°	1606.8	1608.4	1610.1	1609.8	1607.6	1605.4	1603.3	1601.1
167.5°	1622.9	1624.8	1626.7	1626.5	1624.0	1621.6	1619.2	1616.7
170°	1631.1	1633.2	1635.4	1635.3	1632.9	1630.4	1628.0	1625.5
172.5°	1637.5	1639.5	1641.3	1641.2	1638.7	1636.3	1633.8	1631.4
175°	1644.5	1646.6	1648.8	1648.7	1646.2	1643.8	1641.3	1638.9
177.5°	1647.4	1648.9	1650.4	1650.3	1648.5	1646.8	1645.0	1643.3
180°	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2	1646.2

(END OF REPORT)