

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: P333517-840

Luminaire Tested: **S125RDIP-S375D1205U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333517-840
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: S125RDIP-S375D1205U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6325.0 lumens
Efficiency: N/A
Efficacy: 149.9 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

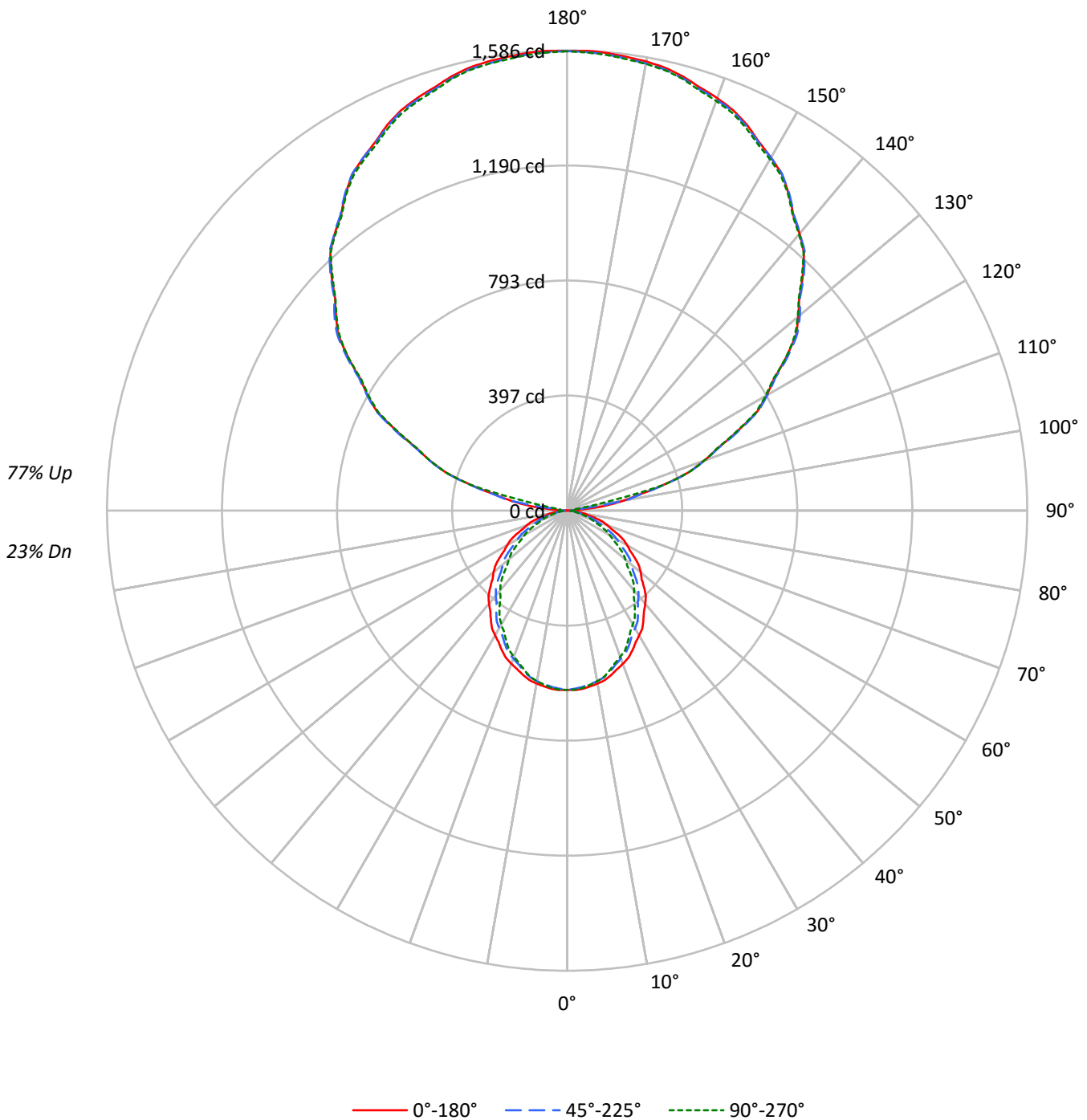
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	88	84	81	81	78	75	72	60	58	56	43	42	41	28	27	27	20
2	84	77	71	66	74	68	63	59	53	49	47	38	36	34	25	24	23	17
3	76	67	60	55	68	60	54	50	46	42	39	34	31	29	22	20	19	14
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12
5	64	53	45	40	57	47	41	36	37	32	29	27	24	21	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	9
7	54	43	35	30	48	38	32	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	35	28	24	27	22	19	20	17	15	13	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	11	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3991	3991	3991
5°	4000	3955	3979
10°	3970	3918	3918
15°	3922	3839	3807
20°	3862	3727	3682
25°	3792	3619	3539
30°	3703	3491	3380
35°	3613	3360	3202
40°	3530	3222	3026
45°	3428	3070	2834
50°	3325	2903	2635
55°	3206	2743	2423
60°	3086	2550	2195
65°	2946	2326	1932
70°	2783	2045	1665
75°	2563	1724	1385
80°	2258	1354	1164
85°	1904	1104	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	0.9
10°-20°	162.4	2.6
20°-30°	235.5	3.7
30°-40°	268.4	4.2
40°-50°	261.6	4.1
50°-60°	220.2	3.5
60°-70°	154.3	2.4
70°-80°	79.3	1.3
80°-90°	23.3	0.4
90°-100°	57.5	0.9
100°-110°	354.6	5.6
110°-120°	643.1	10.2
120°-130°	825.3	13.0
130°-140°	887.7	14.0
140°-150°	833.2	13.2
150°-160°	674.0	10.7
160°-170°	435.9	6.9
170°-180°	150.4	2.4
0°-30°	456.0	7.2
0°-40°	724.3	11.5
0°-60°	1206.1	19.1
0°-90°	1463.1	23.1
90°-120°	1055.2	16.7
90°-150°	3601.6	56.9
90°-180°	4862.0	76.9
0°-180°	6325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	617	615	610	614	614	58
15°	587	584	574	573	569	165
25°	532	524	508	502	497	245
35°	458	447	426	413	406	287
45°	375	361	336	318	310	289
55°	285	269	244	223	215	255
65°	193	176	152	134	126	191
75°	103	88	69	59	56	109
85°	26	18	15	14	14	29
90°	1	10	19	24	28	4
95°	67	61	19	24	25	85
105°	345	349	350	350	349	366
115°	648	654	655	650	643	642
125°	921	929	930	925	921	823
135°	1149	1156	1154	1151	1144	885
145°	1332	1334	1334	1335	1329	833
155°	1467	1461	1462	1465	1456	676
165°	1548	1542	1542	1548	1540	437
175°	1583	1577	1577	1586	1576	151
180°	1583	1583	1583	1583	1583	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	619.0	618.8	618.5	618.3	618.0	617.5	616.7	615.8	615.0	614.2	615.0
5°	617.0	616.6	616.2	615.7	615.3	614.6	613.4	612.3	611.2	610.0	611.1
7.5°	611.0	610.6	610.2	609.8	609.4	608.4	607.1	605.7	604.4	603.0	603.7
10°	605.3	605.0	604.7	604.4	604.1	603.2	601.8	600.3	598.8	597.4	597.7
12.5°	599.0	598.5	598.2	597.8	597.4	596.2	594.3	592.4	590.4	588.4	588.7
15°	586.6	586.0	585.4	584.8	584.2	582.8	580.6	578.5	576.2	574.1	574.0
17.5°	572.8	571.8	570.9	569.9	569.0	567.1	564.3	561.6	558.9	556.1	555.6
20°	561.9	560.9	559.9	558.9	557.7	555.6	552.3	549.0	545.6	542.3	541.8
22.5°	550.0	549.0	548.0	546.8	545.8	543.6	540.1	536.6	533.1	529.7	528.7
25°	532.1	530.5	529.0	527.4	525.8	523.1	519.3	515.4	511.6	507.8	506.4
27.5°	511.5	509.7	507.8	505.8	503.9	501.0	496.9	492.7	488.7	484.5	482.6
30°	496.6	494.6	492.6	490.7	488.7	485.5	481.2	476.9	472.5	468.1	465.7
32.5°	482.0	479.7	477.5	475.1	472.8	469.5	465.0	460.6	456.2	451.7	449.1
35°	458.3	455.9	453.3	450.8	448.4	444.7	440.1	435.5	430.8	426.2	423.1
37.5°	435.0	432.0	429.0	426.0	422.9	419.0	414.2	409.4	404.7	399.8	396.2
40°	418.7	415.6	412.4	409.3	406.2	402.1	397.2	392.2	387.2	382.2	378.3
42.5°	401.4	398.3	395.1	391.9	388.7	384.6	379.4	374.3	369.1	364.0	360.2
45°	375.3	372.2	369.2	366.2	363.2	358.8	353.1	347.5	341.7	336.1	331.8
47.5°	348.1	344.9	341.7	338.5	335.4	330.9	325.2	319.4	313.7	307.9	303.7
50°	330.9	327.5	324.1	320.6	317.2	312.6	306.6	300.7	294.8	288.9	284.6
52.5°	312.3	308.7	305.2	301.7	298.2	293.7	288.1	282.5	276.9	271.4	266.7
55°	284.7	281.3	278.0	274.8	271.5	266.9	261.1	255.2	249.4	243.6	238.9
57.5°	256.9	253.4	249.7	246.2	242.7	238.1	232.5	226.9	221.4	215.7	211.2
60°	238.9	235.3	231.7	228.0	224.4	219.8	214.2	208.6	203.0	197.4	192.9
62.5°	219.9	216.4	213.0	209.5	206.0	201.5	195.8	190.2	184.4	178.7	174.5
65°	192.8	189.2	185.7	182.2	178.6	174.1	168.6	163.2	157.6	152.2	148.0
67.5°	165.8	162.3	158.8	155.2	151.7	147.2	142.0	136.7	131.5	126.2	122.4
70°	147.4	144.0	140.5	136.9	133.4	129.1	123.8	118.7	113.5	108.3	105.0
72.5°	129.6	126.1	122.7	119.3	115.8	111.6	106.7	101.9	97.0	92.2	89.3
75°	102.7	99.6	96.4	93.3	90.3	86.5	82.1	77.8	73.4	69.1	66.8
77.5°	75.9	73.5	71.0	68.5	66.0	63.0	59.6	56.0	52.6	49.1	47.5
80°	60.7	58.2	55.7	53.2	50.7	48.1	45.1	42.2	39.3	36.4	35.4
82.5°	45.7	43.5	41.3	39.0	36.8	34.6	32.7	30.7	28.7	26.7	26.3
85°	25.7	23.8	21.9	20.1	18.2	17.0	16.5	16.0	15.5	14.9	14.8
87.5°	8.8	8.7	8.5	8.4	8.2	8.2	8.5	8.8	9.1	9.4	9.6
90°	1.2	3.2	5.4	7.5	9.5	11.5	13.3	15.1	17.0	18.8	20.1
92.5°	18.1	16.7	15.1	13.7	12.2	12.3	13.9	15.6	17.2	18.8	20.1
95°	66.9	66.1	65.3	64.5	63.7	58.5	48.5	38.6	28.7	18.8	20.1
97.5°	139.7	141.1	142.5	143.9	145.3	136.2	116.5	96.9	77.4	57.8	50.4
100°	196.0	196.8	197.5	198.3	199.1	200.1	201.1	202.2	203.2	204.2	165.3
102.5°	253.3	254.3	255.3	256.2	257.2	258.0	258.6	259.3	259.9	260.5	253.2
105°	345.1	346.1	347.1	348.2	349.2	349.7	349.7	349.7	349.7	349.7	349.7
107.5°	440.4	440.4	440.4	440.4	440.4	440.6	441.1	441.6	442.2	442.7	442.7
110°	502.3	502.3	502.3	502.3	502.3	502.6	503.1	503.6	504.1	504.6	503.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	560.6	561.2	561.8	562.4	563.0	563.5	563.8	564.1	564.4	564.7	563.8
115°	647.8	649.1	650.5	651.8	653.1	653.9	654.1	654.4	654.6	654.9	653.9
117.5°	738.2	738.2	738.1	738.1	738.0	738.5	739.5	740.4	741.4	742.5	741.1
120°	794.6	794.3	794.1	793.8	793.6	793.8	794.6	795.4	796.1	796.9	796.4
122.5°	844.3	845.4	846.3	847.3	848.3	849.0	849.3	849.7	850.1	850.4	849.9
125°	921.3	923.1	924.9	926.8	928.6	929.5	929.5	929.5	929.5	929.5	928.5
127.5°	994.8	996.1	997.3	998.7	1000.0	1000.6	1000.4	1000.3	1000.1	1000.0	999.4
130°	1039.9	1041.2	1042.5	1043.8	1045.1	1045.8	1046.1	1046.4	1046.6	1046.9	1046.1
132.5°	1084.9	1086.4	1087.9	1089.4	1091.0	1091.5	1090.9	1090.3	1089.7	1089.1	1089.0
135°	1149.0	1150.5	1152.2	1153.7	1155.3	1155.8	1155.3	1154.8	1154.2	1153.7	1153.2
137.5°	1207.9	1209.3	1210.6	1211.9	1213.4	1213.8	1213.4	1212.8	1212.3	1211.9	1212.0
140°	1246.4	1247.0	1247.5	1248.0	1248.5	1248.6	1248.4	1248.1	1247.9	1247.6	1248.1
142.5°	1281.1	1281.4	1281.8	1282.1	1282.4	1282.7	1283.1	1283.4	1283.8	1284.2	1284.3
145°	1332.1	1332.6	1333.1	1333.6	1334.1	1334.4	1334.4	1334.4	1334.4	1334.4	1334.7
147.5°	1376.6	1376.5	1376.4	1376.3	1376.2	1376.3	1376.6	1377.0	1377.4	1377.7	1378.0
150°	1404.8	1404.3	1403.8	1403.3	1402.8	1402.8	1403.3	1403.8	1404.3	1404.8	1405.3
152.5°	1432.1	1431.0	1429.8	1428.7	1427.4	1427.1	1427.7	1428.3	1428.8	1429.3	1429.8
155°	1467.0	1465.5	1463.9	1462.4	1460.8	1460.3	1460.8	1461.3	1461.9	1462.4	1463.2
157.5°	1494.1	1493.1	1492.2	1491.3	1490.3	1489.9	1490.0	1490.0	1490.1	1490.1	1490.9
160°	1512.9	1511.3	1509.7	1508.1	1506.6	1505.9	1506.2	1506.4	1506.7	1506.9	1508.0
162.5°	1527.8	1526.3	1524.7	1523.2	1521.6	1521.0	1521.2	1521.5	1521.8	1522.0	1523.5
165°	1548.0	1546.5	1544.9	1543.4	1541.8	1541.2	1541.4	1541.7	1541.9	1542.2	1543.8
167.5°	1563.1	1561.5	1559.8	1558.2	1556.6	1555.9	1556.2	1556.4	1556.7	1557.0	1558.8
170°	1571.6	1569.7	1567.8	1566.0	1564.2	1563.5	1563.7	1564.0	1564.2	1564.5	1566.6
172.5°	1577.1	1575.3	1573.5	1571.7	1569.8	1569.1	1569.6	1570.1	1570.5	1571.0	1573.0
175°	1583.3	1581.7	1580.1	1578.5	1577.0	1576.3	1576.6	1576.9	1577.1	1577.4	1579.4
177.5°	1586.1	1584.8	1583.6	1582.4	1581.0	1580.5	1580.7	1580.9	1581.1	1581.3	1582.9
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	617.9	617.9	617.9	617.9	617.9	617.9	617.9	617.9
2.5°	615.8	616.7	617.5	617.9	617.8	617.7	617.6	617.5
5°	612.1	613.1	614.1	614.6	614.4	614.1	613.9	613.7
7.5°	604.4	605.2	605.9	606.1	605.9	605.7	605.5	605.2
10°	598.0	598.3	598.6	598.6	598.3	598.0	597.7	597.4
12.5°	588.9	589.2	589.4	589.3	588.8	588.2	587.8	587.3
15°	573.8	573.7	573.6	573.1	572.2	571.3	570.4	569.4
17.5°	555.1	554.6	554.1	553.4	552.7	551.9	551.1	550.4
20°	541.3	540.8	540.3	539.6	538.6	537.7	536.7	535.8
22.5°	527.6	526.5	525.5	524.6	523.9	523.1	522.4	521.6
25°	505.1	503.7	502.4	501.2	500.0	498.9	497.8	496.6
27.5°	480.8	478.9	477.0	475.5	474.4	473.3	472.2	471.1
30°	463.3	461.0	458.6	457.0	456.0	455.0	454.1	453.2
32.5°	446.5	443.8	441.1	439.3	438.1	436.9	435.7	434.5
35°	420.1	417.1	414.0	411.8	410.4	409.0	407.5	406.1
37.5°	392.5	389.0	385.4	382.8	381.4	380.0	378.6	377.2
40°	374.4	370.4	366.5	363.9	362.6	361.4	360.1	358.9
42.5°	356.4	352.6	348.8	346.1	344.3	342.3	340.5	338.7
45°	327.7	323.6	319.4	316.6	315.1	313.5	311.9	310.3
47.5°	299.4	295.1	290.8	287.8	286.1	284.4	282.7	280.9
50°	280.1	275.8	271.5	268.5	267.0	265.4	263.9	262.3
52.5°	262.0	257.3	252.6	249.4	247.9	246.4	244.8	243.3
55°	234.3	229.6	225.0	221.8	220.2	218.4	216.8	215.2
57.5°	206.6	202.1	197.4	194.4	193.0	191.5	190.1	188.5
60°	188.3	183.7	179.2	176.1	174.5	173.0	171.5	169.9
62.5°	170.3	166.0	161.8	159.0	157.3	155.8	154.3	152.7
65°	143.8	139.7	135.5	132.7	131.2	129.6	128.1	126.4
67.5°	118.6	114.8	111.0	108.5	107.2	106.0	104.7	103.5
70°	101.9	98.7	95.4	93.2	91.9	90.7	89.5	88.2
72.5°	86.2	83.3	80.4	78.5	77.7	76.9	75.9	75.1
75°	64.5	62.2	60.0	58.5	57.8	57.0	56.2	55.5
77.5°	45.9	44.3	42.7	41.6	41.1	40.6	40.0	39.5
80°	34.5	33.6	32.7	32.1	31.9	31.7	31.5	31.3
82.5°	25.9	25.3	24.9	24.6	24.5	24.4	24.3	24.1
85°	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0
87.5°	9.9	10.1	10.4	10.6	10.6	10.7	10.8	10.9
90°	21.4	22.7	24.0	25.0	25.9	26.6	27.4	28.2
92.5°	21.4	22.7	24.0	24.8	25.1	25.5	26.0	26.3
95°	21.4	22.7	24.0	24.6	24.6	24.6	24.6	24.6
97.5°	43.0	35.6	28.3	24.6	24.6	24.6	24.6	24.6
100°	126.5	87.7	48.8	28.8	27.8	26.8	25.7	24.6
102.5°	245.8	238.5	231.2	218.6	200.9	183.1	165.4	147.6
105°	349.7	349.7	349.7	349.6	349.3	349.1	348.8	348.6
107.5°	442.8	442.8	442.9	442.5	441.7	441.0	440.2	439.4
110°	503.1	502.3	501.5	501.3	501.5	501.8	502.1	502.3



TEST NUMBER: P333517-840

CATALOG NUMBER: S125RDIP-S375D1205U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	562.8	561.8	560.8	560.1	559.8	559.4	559.1	558.7
115°	652.8	651.8	650.8	649.4	647.8	646.3	644.7	643.2
117.5°	739.7	738.4	737.0	736.0	735.3	734.7	734.0	733.3
120°	795.9	795.4	794.9	794.0	792.6	791.3	790.0	788.7
122.5°	849.4	848.9	848.4	847.3	845.8	844.2	842.8	841.3
125°	927.5	926.3	925.3	924.4	923.6	922.9	922.1	921.3
127.5°	998.8	998.3	997.6	996.4	994.5	992.5	990.6	988.7
130°	1045.3	1044.5	1043.8	1042.7	1041.4	1040.2	1038.8	1037.5
132.5°	1088.8	1088.6	1088.5	1087.8	1086.5	1085.2	1083.9	1082.6
135°	1152.7	1152.2	1151.7	1150.5	1149.0	1147.4	1145.9	1144.3
137.5°	1212.1	1212.2	1212.3	1211.7	1210.3	1209.0	1207.6	1206.3
140°	1248.6	1249.1	1249.7	1249.1	1247.6	1246.1	1244.5	1242.9
142.5°	1284.4	1284.5	1284.6	1283.9	1282.3	1280.8	1279.2	1277.7
145°	1334.9	1335.2	1335.4	1334.8	1333.2	1331.7	1330.1	1328.6
147.5°	1378.3	1378.6	1378.9	1378.1	1376.2	1374.3	1372.5	1370.6
150°	1405.9	1406.4	1406.9	1406.1	1404.1	1402.0	1399.9	1397.9
152.5°	1430.3	1430.9	1431.4	1430.7	1428.8	1426.9	1425.0	1423.2
155°	1463.9	1464.7	1465.5	1464.8	1462.8	1460.7	1458.5	1456.5
157.5°	1491.8	1492.6	1493.4	1492.8	1490.7	1488.6	1486.5	1484.4
160°	1509.0	1510.1	1511.2	1510.7	1508.5	1506.4	1504.4	1502.3
162.5°	1524.9	1526.4	1527.8	1527.4	1525.1	1522.8	1520.6	1518.2
165°	1545.3	1546.9	1548.4	1548.1	1546.1	1544.0	1541.9	1539.8
167.5°	1560.7	1562.6	1564.5	1564.3	1561.9	1559.5	1557.2	1554.9
170°	1568.6	1570.7	1572.9	1572.7	1570.3	1568.0	1565.7	1563.3
172.5°	1574.8	1576.7	1578.5	1578.3	1576.0	1573.7	1571.2	1568.9
175°	1581.5	1583.7	1585.7	1585.6	1583.3	1580.9	1578.5	1576.2
177.5°	1584.3	1585.8	1587.2	1587.1	1585.5	1583.8	1582.1	1580.4
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3

(END OF REPORT)