

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: P333513-840

Luminaire Tested: **S125RDIP-S375D1035U840-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333513-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-S375D1035U840-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5212.4 lumens  
Efficiency: N/A  
Efficacy: 139.7 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

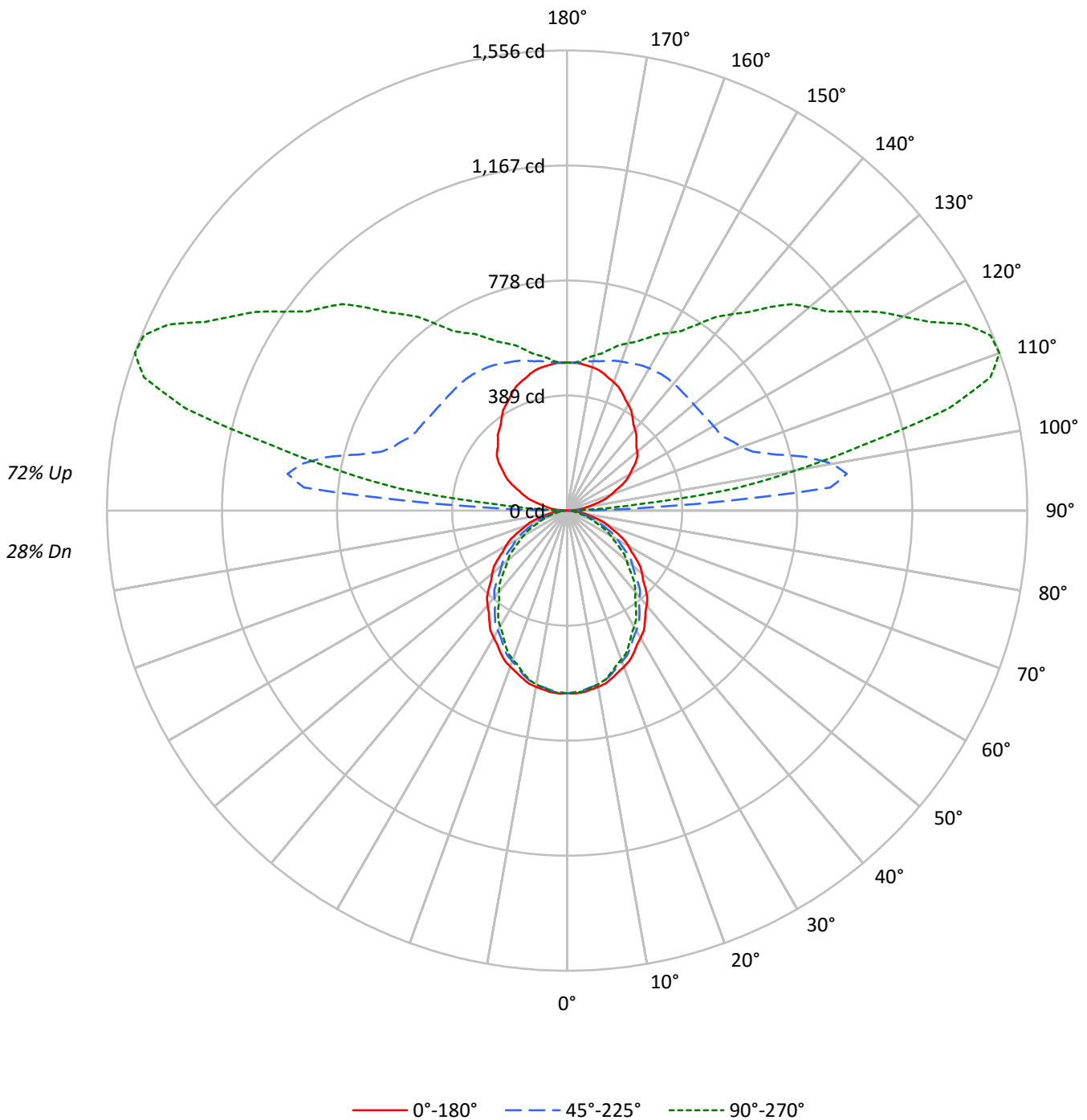
Input Watts (W): 37.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333513-840

CATALOG NUMBER: S125RDIP-S375D1035U840-4F0-1E-UDD-F4

### 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	82	83	80	77	74	62	60	58	47	45	44	32	31	31	24
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	28	27	26	20
3	77	68	61	56	69	61	55	51	48	44	41	36	34	31	25	23	22	17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	22	21	19	15
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13
6	60	48	40	35	53	43	37	32	34	30	26	26	23	20	18	16	15	11
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	27	46	35	29	24	28	24	20	22	18	16	15	13	12	9
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	21	40	30	23	19	24	19	16	18	15	13	13	11	10	8

**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



TEST NUMBER: P333513-840

CATALOG NUMBER: S125RDIP-S375D1035U840-4F0-1E-UDD-F4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	1.1
10°-20°	162.4	3.1
20°-30°	235.5	4.5
30°-40°	268.4	5.1
40°-50°	261.6	5.0
50°-60°	220.2	4.2
60°-70°	154.3	3.0
70°-80°	79.3	1.5
80°-90°	22.8	0.4
90°-100°	362.4	7.0
100°-110°	779.1	14.9
110°-120°	731.2	14.0
120°-130°	592.6	11.4
130°-140°	475.6	9.1
140°-150°	358.9	6.9
150°-160°	252.6	4.8
160°-170°	148.9	2.9
170°-180°	48.4	0.9
0°-30°	456.0	8.7
0°-40°	724.3	13.9
0°-60°	1206.1	23.1
0°-90°	1462.6	28.1
90°-120°	1872.8	35.9
90°-150°	3299.8	63.3
90°-180°	3750.0	71.9
0°-180°	5212.4	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	9	16	21	23	3
95°	33	98	893	405	237	35
105°	114	159	731	1439	1336	120
115°	204	246	587	1265	1488	200
125°	282	331	562	1006	1172	250
135°	331	398	558	843	974	257
145°	385	441	560	698	768	241
155°	440	473	546	618	644	202
165°	480	493	524	556	564	135
175°	499	499	503	509	507	47
180°	500	500	500	500	500	



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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	8.4	8.3	8.1	7.9	8.0	8.1	8.4	8.5	8.8	9.0
90°	1.0	2.0	4.0	6.1	8.1	10.1	11.1	13.1	14.1	16.2	17.2
92.5°	12.3	14.9	23.4	35.9	53.2	82.7	137.7	230.0	330.2	325.0	263.1
95°	33.2	34.2	42.3	53.4	75.6	121.0	228.8	450.6	728.9	893.2	874.0
97.5°	55.2	56.5	62.1	73.2	93.1	125.8	197.2	359.7	650.9	953.9	1105.9
100°	70.6	72.6	76.6	87.7	106.8	137.1	195.6	326.6	580.7	910.3	1162.4
102.5°	87.6	88.7	91.9	103.8	121.4	150.8	202.9	313.0	527.5	833.7	1128.5
105°	113.9	113.9	119.0	129.1	145.2	173.4	217.7	307.5	475.8	730.8	1020.3
107.5°	139.8	141.8	146.5	154.8	171.6	197.0	239.9	316.8	454.0	660.1	909.7
110°	158.2	160.3	164.3	173.4	188.5	214.7	256.1	325.6	447.6	627.0	846.8



TEST NUMBER: P333513-840

CATALOG NUMBER: S125RDIP-S375D1035U840-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	176.8	178.8	182.1	191.2	206.2	231.7	271.4	336.9	447.6	607.7	800.0
115°	203.7	205.6	208.6	217.7	232.9	258.1	295.4	353.9	450.6	586.7	749.0
117.5°	227.8	230.9	234.1	243.2	260.3	284.7	320.0	373.2	457.3	576.4	718.6
120°	244.0	247.0	251.1	260.1	277.2	302.5	337.7	386.1	463.7	571.6	701.7
122.5°	260.9	263.1	266.3	275.4	294.2	319.4	354.7	400.6	469.4	567.5	687.1
125°	282.3	284.3	289.3	298.4	317.6	343.8	377.1	420.4	478.9	562.5	667.4
127.5°	299.0	302.1	308.5	320.0	340.3	366.6	398.6	438.5	489.6	560.1	649.2
130°	309.5	312.6	320.6	333.7	354.9	381.0	412.3	450.6	496.0	558.5	637.1
132.5°	317.6	321.3	331.0	345.8	367.8	393.9	425.3	461.1	503.2	558.5	627.4
135°	330.6	334.7	346.8	362.9	384.1	411.3	442.5	475.8	513.1	558.5	615.9
137.5°	347.2	350.2	361.5	377.7	398.4	426.5	454.8	486.8	522.2	559.7	605.7
140°	356.9	359.9	372.0	388.1	407.3	434.5	463.7	494.0	526.2	560.5	600.9
142.5°	368.2	370.4	381.6	397.8	416.2	441.7	469.4	498.0	528.7	561.3	596.8
145°	385.1	387.1	397.2	411.3	429.5	452.6	478.9	504.0	531.3	560.5	590.8
147.5°	402.8	404.0	412.7	425.9	441.5	461.9	484.9	507.7	532.3	557.8	584.5
150°	413.3	415.4	422.4	435.6	449.6	466.8	489.0	510.1	532.3	555.4	579.7
152.5°	424.6	425.9	432.1	443.5	456.9	472.4	493.0	511.7	531.5	552.3	574.0
155°	439.5	439.5	445.6	455.7	465.7	479.9	497.0	513.1	529.3	546.4	564.5
157.5°	452.8	452.6	457.5	466.2	475.0	485.7	500.4	514.1	526.6	540.4	555.6
160°	461.7	460.7	464.7	471.8	479.9	489.0	502.0	514.1	524.2	536.3	548.5
162.5°	469.0	468.0	472.0	478.3	484.7	492.2	503.6	513.3	521.8	531.5	542.0
165°	479.9	477.9	480.9	485.9	490.0	496.0	504.0	512.1	518.2	524.2	532.3
167.5°	487.2	486.1	488.0	490.8	493.6	497.4	504.0	509.7	512.5	517.2	522.8
170°	492.0	491.0	492.0	494.0	496.0	499.0	504.0	508.1	510.1	513.1	517.2
172.5°	495.2	493.4	494.4	496.3	497.6	499.0	503.2	506.4	506.9	508.3	511.5
175°	499.0	497.0	498.0	499.0	499.0	499.0	502.0	504.0	503.0	503.0	504.0
177.5°	500.8	499.2	499.2	500.0	499.2	499.2	500.8	501.6	500.0	500.0	500.8
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0



TEST NUMBER: P333513-840

CATALOG NUMBER: S125RDIP-S375D1035U840-4F0-1E-UDD-F4

**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°	9.2	9.4	9.6	10.0	9.9	9.8	10.0	9.9
90°	18.2	19.2	20.2	22.2	22.2	22.2	23.2	23.2
92.5°	178.6	129.7	97.6	82.7	69.8	67.4	65.9	64.3
95°	724.9	571.6	447.6	362.9	291.3	261.2	253.1	236.9
97.5°	1079.5	972.0	851.2	733.5	671.3	614.7	585.5	572.6
100°	1240.0	1190.6	1086.7	981.9	912.3	839.8	802.4	786.4
102.5°	1294.0	1324.4	1274.7	1203.7	1129.3	1077.7	1037.1	1025.0
105°	1262.1	1400.3	1444.6	1433.5	1401.3	1368.1	1347.9	1335.7
107.5°	1148.4	1332.7	1446.6	1499.2	1515.6	1515.4	1508.7	1500.7
110°	1064.6	1256.1	1398.3	1484.0	1529.3	1548.4	1555.5	1555.5





TEST NUMBER: P333513-840

CATALOG NUMBER: S125RDIP-S375D1035U840-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	998.5	1180.3	1324.0	1425.1	1491.4	1524.3	1541.9	1549.0
115°	915.3	1071.7	1209.7	1319.6	1398.3	1446.6	1474.9	1488.0
117.5°	861.7	996.4	1115.4	1216.2	1294.8	1344.8	1372.8	1380.9
120°	832.7	953.7	1064.6	1153.3	1227.9	1276.3	1303.5	1311.6
122.5°	810.9	923.0	1021.8	1104.9	1171.4	1215.8	1243.0	1250.3
125°	779.3	882.1	969.8	1042.4	1098.8	1140.1	1162.4	1172.5
127.5°	747.0	843.0	924.8	992.8	1044.0	1080.5	1101.5	1105.9
130°	726.9	815.6	894.2	959.8	1010.2	1043.4	1063.6	1069.6
132.5°	706.7	789.7	861.1	924.2	974.6	1007.9	1026.4	1033.3
135°	680.4	750.0	814.6	872.0	916.4	949.7	967.8	973.8
137.5°	658.3	714.6	768.2	817.0	856.7	887.0	903.7	910.3
140°	646.2	693.6	739.9	782.3	819.6	845.9	860.9	866.0
142.5°	635.7	675.8	715.8	752.5	784.2	806.3	820.6	824.9
145°	622.0	653.3	684.5	711.8	735.9	753.1	764.2	768.2
147.5°	609.2	634.5	658.5	679.0	698.2	712.0	718.4	720.2
150°	601.9	624.0	643.2	661.4	676.4	688.5	692.6	693.6
152.5°	593.8	613.5	631.1	645.2	657.9	667.6	671.6	672.6
155°	581.7	597.8	612.0	623.0	633.1	640.2	643.2	644.2
157.5°	569.6	582.9	593.8	602.5	610.4	616.1	618.9	618.7
160°	561.5	571.6	581.7	588.8	595.8	600.9	602.9	601.9
162.5°	552.7	561.9	570.4	576.6	582.1	586.3	586.7	586.5
165°	540.4	547.4	553.5	558.5	562.5	564.5	564.5	564.5
167.5°	528.7	533.3	538.0	541.6	543.6	545.4	544.6	544.4
170°	522.2	525.2	528.3	530.3	532.3	533.3	533.3	532.3
172.5°	514.9	518.0	520.2	521.4	521.8	523.6	522.0	521.0
175°	507.1	507.1	509.1	509.1	509.1	510.1	508.1	507.1
177.5°	501.6	502.4	502.4	502.4	501.6	502.4	500.0	500.0
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0

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