

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: P333507-940

Luminaire Tested: **S125RDIP-S375D810U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333507-940  
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-S375D810U940-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3884.3 lumens  
Efficiency: N/A  
Efficacy: 124.5 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

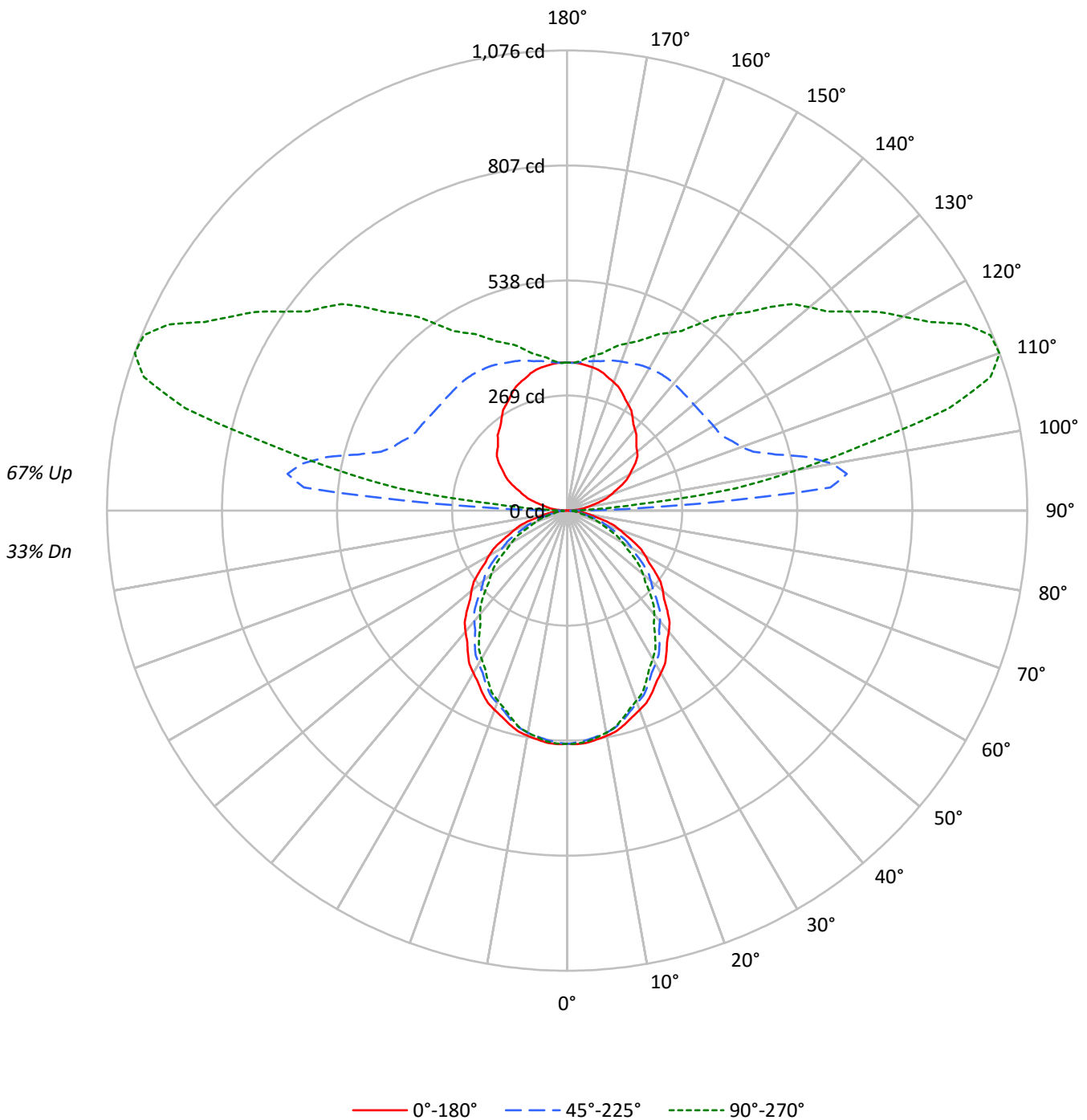
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333507-940

CATALOG NUMBER: S125RDIP-S375D810U940-4F0-1E-UDD-F4

### Luminous Intensity Polar Plot





TEST NUMBER: P333507-940

CATALOG NUMBER: S125RDIP-S375D810U940-4F0-1E-UDD-F4

**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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35	28
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	27	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	32	29	25	23	22	18
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	29	33	28	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	22	41	30	24	20	25	20	17	20	16	14	15	13	11	9

**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



TEST NUMBER: P333507-940

CATALOG NUMBER: S125RDIP-S375D810U940-4F0-1E-UDD-F4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.3	1.3
10°-20°	143.4	3.7
20°-30°	207.9	5.4
30°-40°	237.0	6.1
40°-50°	231.0	5.9
50°-60°	194.4	5.0
60°-70°	136.3	3.5
70°-80°	70.1	1.8
80°-90°	19.6	0.5
90°-100°	250.7	6.5
100°-110°	538.9	13.9
110°-120°	505.7	13.0
120°-130°	409.8	10.6
130°-140°	328.9	8.5
140°-150°	248.2	6.4
150°-160°	174.7	4.5
160°-170°	103.0	2.7
170°-180°	33.5	0.9
0°-30°	402.6	10.4
0°-40°	639.6	16.5
0°-60°	1065.0	27.4
0°-90°	1291.0	33.2
90°-120°	1295.2	33.3
90°-150°	2282.2	58.8
90°-180°	2593.0	66.8
0°-180°	3884.3	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	6	11	15	16	2
95°	23	68	618	280	164	24
105°	79	110	506	995	924	83
115°	141	170	406	875	1029	139
125°	195	229	389	696	811	173
135°	229	275	386	583	674	178
145°	266	305	388	483	531	167
155°	304	327	378	427	446	140
165°	332	341	363	385	390	93
175°	345	345	348	352	351	33
180°	346	346	346	346	346	



TEST NUMBER: P333507-940

CATALOG NUMBER: S125RDIP-S375D810U940-4F0-1E-UDD-F4

**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	7.3	7.1	6.9	6.7	6.6	6.7	6.9	7.0	7.1	7.3
90°	0.7	1.4	2.8	4.2	5.6	7.0	7.7	9.1	9.7	11.1	11.9
92.5°	8.5	10.3	16.1	24.8	36.8	57.2	95.2	159.1	228.4	224.8	182.0
95°	23.0	23.7	29.2	36.9	52.3	83.6	158.3	311.7	504.1	617.8	604.5
97.5°	38.2	39.1	43.0	50.6	64.4	87.0	136.3	248.8	450.1	659.7	764.8
100°	48.8	50.2	53.0	60.6	73.9	94.8	135.3	225.9	401.6	629.6	803.9
102.5°	60.5	61.3	63.6	71.8	83.9	104.3	140.3	216.4	364.8	576.6	780.5
105°	78.8	78.8	82.3	89.3	100.4	119.9	150.6	212.7	329.1	505.5	705.6
107.5°	96.7	98.0	101.4	107.1	118.7	136.3	165.9	219.1	314.1	456.6	629.2
110°	109.5	110.8	113.6	119.9	130.4	148.5	177.1	225.2	309.6	433.6	585.7



TEST NUMBER: P333507-940

CATALOG NUMBER: S125RDIP-S375D810U940-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	122.3	123.7	125.9	132.2	142.7	160.2	187.7	233.0	309.6	420.3	553.3
115°	140.8	142.2	144.4	150.6	161.0	178.5	204.3	244.7	311.7	405.8	518.0
117.5°	157.6	159.7	161.9	168.2	180.0	196.9	221.3	258.2	316.3	398.7	497.0
120°	168.7	170.9	173.6	179.9	191.7	209.2	233.5	267.1	320.7	395.3	485.3
122.5°	180.5	182.0	184.2	190.5	203.5	220.9	245.3	277.1	324.6	392.5	475.2
125°	195.2	196.6	200.1	206.3	219.6	237.7	260.7	290.7	331.2	389.1	461.5
127.5°	206.8	208.9	213.4	221.3	235.4	253.5	275.7	303.3	338.6	387.4	449.0
130°	214.0	216.2	221.7	230.8	245.4	263.6	285.2	311.7	343.0	386.3	440.7
132.5°	219.6	222.3	229.0	239.2	254.3	272.5	294.1	318.9	348.0	386.3	434.0
135°	228.7	231.5	239.9	251.0	265.6	284.5	306.1	329.1	354.9	386.3	426.0
137.5°	240.1	242.2	250.0	261.2	275.5	294.9	314.6	336.6	361.1	387.1	418.9
140°	246.8	248.9	257.3	268.4	281.7	300.5	320.7	341.6	363.9	387.6	415.5
142.5°	254.6	256.2	263.9	275.1	287.8	305.5	324.6	344.5	365.6	388.3	412.8
145°	266.4	267.7	274.7	284.5	297.0	313.1	331.2	348.6	367.5	387.6	408.6
147.5°	278.6	279.5	285.4	294.5	305.4	319.5	335.4	351.2	368.1	385.8	404.2
150°	285.9	287.2	292.1	301.2	310.9	322.8	338.1	352.8	368.1	384.1	400.9
152.5°	293.6	294.5	298.8	306.7	316.0	326.7	340.9	353.9	367.6	381.9	397.0
155°	304.0	304.0	308.2	315.1	322.1	331.9	343.8	354.9	366.0	377.9	390.5
157.5°	313.2	313.1	316.4	322.4	328.5	335.9	346.1	355.6	364.3	373.7	384.3
160°	319.3	318.6	321.5	326.3	331.9	338.1	347.2	355.6	362.6	371.0	379.3
162.5°	324.3	323.7	326.5	330.7	335.2	340.4	348.3	355.0	360.9	367.6	374.8
165°	331.9	330.5	332.6	336.1	338.9	343.0	348.6	354.2	358.4	362.6	368.1
167.5°	336.9	336.2	337.4	339.4	341.3	344.0	348.6	352.5	354.5	357.7	361.6
170°	340.3	339.6	340.3	341.6	343.0	345.1	348.6	351.4	352.8	354.9	357.7
172.5°	342.5	341.3	341.9	343.3	344.1	345.1	348.0	350.3	350.5	351.5	353.7
175°	345.1	343.8	344.5	345.1	345.1	345.1	347.2	348.6	347.9	347.9	348.6
177.5°	346.3	345.3	345.3	345.8	345.3	345.3	346.3	347.0	345.8	345.8	346.3
180°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8



TEST NUMBER: P333507-940

CATALOG NUMBER: S125RDIP-S375D810U940-4F0-1E-UDD-F4

**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°	7.5	7.6	7.8	7.9	7.9	7.8	7.9	7.8
90°	12.6	13.3	13.9	15.3	15.3	15.3	16.1	16.1
92.5°	123.6	89.7	67.5	57.2	48.2	46.5	45.6	44.5
95°	501.3	395.3	309.6	251.0	201.5	180.6	175.0	163.8
97.5°	746.6	672.3	588.7	507.3	464.2	425.2	404.9	396.0
100°	857.6	823.4	751.6	679.1	631.0	580.8	555.0	543.9
102.5°	894.9	916.1	881.5	832.5	781.0	745.3	717.3	708.9
105°	872.9	968.5	999.2	991.5	969.1	946.1	932.2	923.8
107.5°	794.2	921.8	1000.5	1036.9	1048.2	1048.0	1043.5	1037.9
110°	736.3	868.7	967.1	1026.3	1057.7	1070.9	1075.8	1075.8





TEST NUMBER: P333507-940

CATALOG NUMBER: S125RDIP-S375D810U940-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	690.5	816.3	915.7	985.6	1031.4	1054.2	1066.3	1071.4
115°	633.1	741.2	836.7	912.7	967.1	1000.5	1020.0	1029.1
117.5°	596.0	689.1	771.4	841.2	895.5	930.1	949.5	955.0
120°	575.9	659.6	736.3	797.6	849.2	882.7	901.5	907.0
122.5°	560.9	638.4	706.7	764.2	810.2	840.9	859.7	864.7
125°	539.0	610.1	670.7	720.9	760.0	788.5	803.9	810.8
127.5°	516.7	583.0	639.6	686.6	722.0	747.3	761.8	764.8
130°	502.7	564.1	618.4	663.8	698.7	721.7	735.6	739.8
132.5°	488.7	546.2	595.6	639.2	674.0	697.1	709.9	714.6
135°	470.6	518.7	563.4	603.1	633.7	656.7	669.3	673.5
137.5°	455.3	494.2	531.3	565.0	592.5	613.4	625.0	629.6
140°	446.9	479.7	511.8	541.0	566.9	585.0	595.4	598.9
142.5°	439.7	467.4	495.0	520.4	542.3	557.7	567.6	570.4
145°	430.2	451.8	473.4	492.2	509.0	520.8	528.5	531.3
147.5°	421.2	438.8	455.4	469.7	482.9	492.4	496.9	498.1
150°	416.3	431.6	444.8	457.4	467.9	476.2	479.0	479.7
152.5°	410.6	424.4	436.5	446.2	455.0	461.7	464.5	465.2
155°	402.3	413.5	423.2	430.9	437.8	442.7	444.8	445.5
157.5°	394.0	403.1	410.6	416.7	422.1	426.1	428.1	427.9
160°	388.3	395.3	402.3	407.2	412.1	415.5	417.0	416.3
162.5°	382.2	388.6	394.5	398.8	402.6	405.5	405.8	405.6
165°	373.7	378.6	382.8	386.3	389.1	390.5	390.5	390.5
167.5°	365.6	368.8	372.0	374.5	375.9	377.2	376.7	376.5
170°	361.1	363.3	365.3	366.8	368.1	368.8	368.8	368.1
172.5°	356.1	358.2	359.8	360.6	360.9	362.1	361.1	360.3
175°	350.7	350.7	352.1	352.1	352.1	352.8	351.4	350.7
177.5°	347.0	347.5	347.5	347.5	347.0	347.5	345.8	345.8
180°	345.8	345.8	345.8	345.8	345.8	345.8	345.8	345.8

(END OF REPORT)