

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: P333137-830

Luminaire Tested: **S125DIP-S375D810U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333137-830  
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: S125DIP-S375D810U830-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4021.0 lumens  
Efficiency: N/A  
Efficacy: 128.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

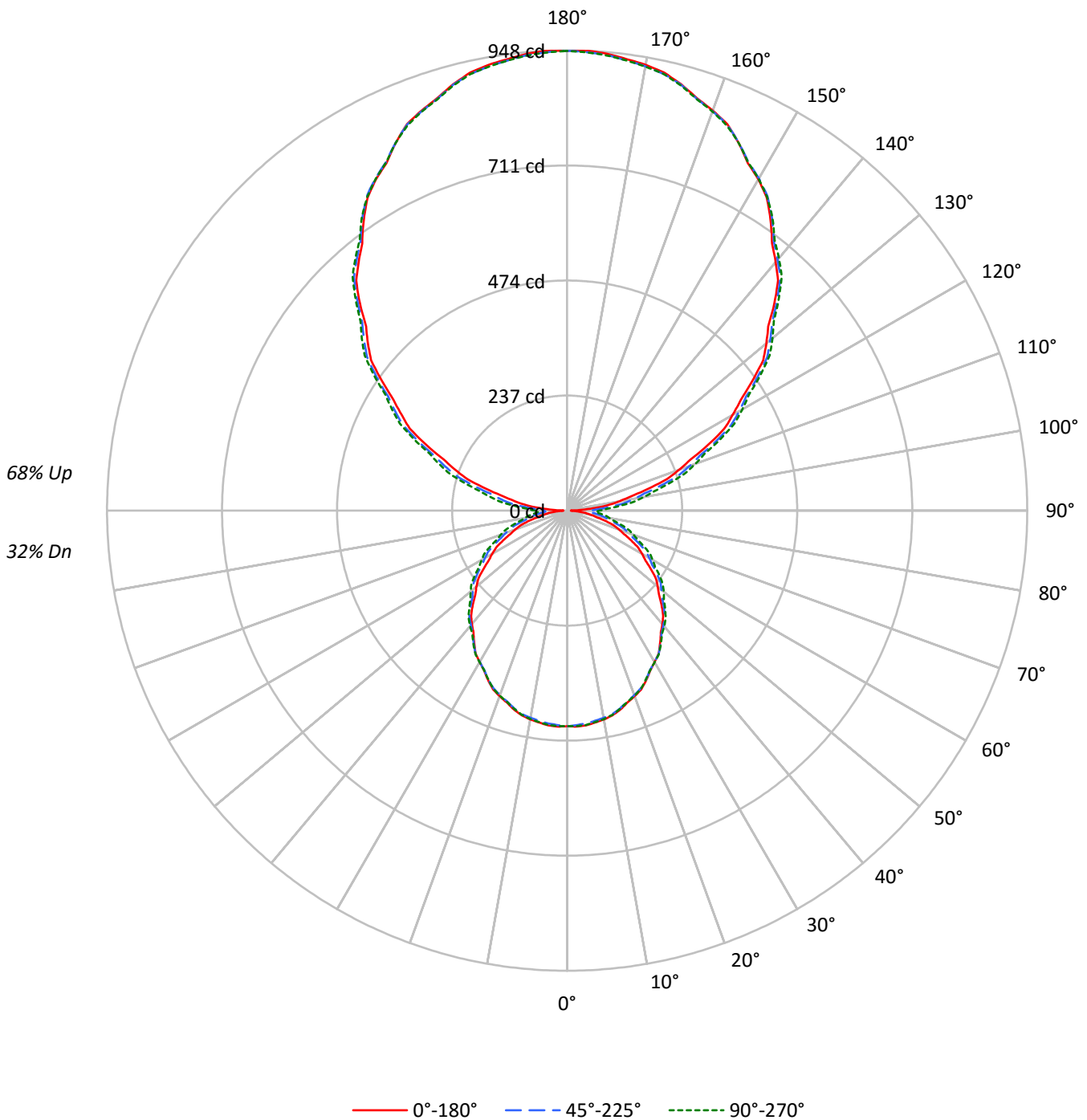
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	93	89	85	81	84	80	77	74	64	61	59	48	47	45	34	33	33	26
2	85	77	71	66	76	70	64	60	55	52	49	42	40	38	30	28	27	21
3	77	68	60	55	69	61	55	50	49	44	41	37	34	31	26	24	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	19	24	19	16	18	15	13	14	11	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.0	1.0
10°-20°	119.3	3.0
20°-30°	177.4	4.4
30°-40°	210.1	5.2
40°-50°	217.2	5.4
50°-60°	200.1	5.0
60°-70°	161.8	4.0
70°-80°	108.3	2.7
80°-90°	58.2	1.4
90°-100°	95.0	2.4
100°-110°	210.6	5.2
110°-120°	332.8	8.3
120°-130°	426.4	10.6
130°-140°	471.7	11.7
140°-150°	459.3	11.4
150°-160°	385.1	9.6
160°-170°	256.0	6.4
170°-180°	89.6	2.2
0°-30°	338.7	8.4
0°-40°	548.8	13.6
0°-60°	966.1	24.0
0°-90°	1294.4	32.2
90°-120°	638.4	15.9
90°-150°	1995.8	49.6
90°-180°	2727.0	67.8
0°-180°	4021.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	28	48	61	66	7
95°	54	67	88	103	108	56
105°	172	183	200	213	218	184
115°	320	327	339	346	348	317
125°	465	470	479	484	486	417
135°	604	608	612	617	616	465
145°	731	733	736	738	737	457
155°	836	836	836	839	836	385
165°	909	907	908	911	906	256
175°	945	942	942	946	941	90
180°	947	947	947	947	947	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.8	17.1	20.5	23.8	27.1	30.6	34.1	37.7	41.2	44.7	47.1
90°	7.7	12.2	16.5	20.9	25.4	29.8	34.2	38.6	43.1	47.5	50.5
92.5°	24.1	27.9	31.7	35.4	39.2	43.5	48.3	53.1	57.9	62.6	65.9
95°	53.5	56.5	59.3	62.1	64.9	68.8	73.8	78.7	83.6	88.5	91.8
97.5°	84.7	87.1	89.5	91.9	94.3	98.2	103.7	109.1	114.5	120.0	123.1
100°	108.0	110.0	112.1	114.0	116.1	119.7	125.0	130.2	135.4	140.6	144.1
102.5°	133.0	135.5	138.1	140.5	143.1	146.5	150.5	154.7	158.7	162.9	166.4
105°	171.9	174.4	176.7	179.1	181.4	184.5	188.4	192.4	196.2	200.1	203.0
107.5°	215.1	217.2	219.3	221.5	223.6	226.5	230.0	233.6	237.0	240.6	243.0
110°	244.8	246.8	248.7	250.7	252.7	255.3	258.5	261.7	264.9	268.2	270.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	275.4	276.8	278.1	279.6	280.9	283.1	286.4	289.6	292.9	296.2	298.2
115°	320.3	321.6	322.9	324.2	325.6	327.7	330.5	333.4	336.2	339.0	340.6
117.5°	365.2	366.0	366.7	367.5	368.2	369.9	372.6	375.2	378.0	380.6	382.4
120°	393.5	394.6	395.8	396.9	397.9	399.7	402.1	404.5	406.9	409.3	410.9
122.5°	423.9	424.2	424.7	425.2	425.6	427.1	429.6	432.3	434.8	437.3	438.8
125°	465.3	466.2	467.1	468.0	468.9	470.3	472.5	474.6	476.6	478.8	479.9
127.5°	509.2	509.5	510.0	510.5	511.0	512.1	513.9	515.7	517.5	519.2	520.5
130°	535.6	536.4	537.1	537.8	538.6	539.7	541.4	543.1	544.8	546.5	547.6
132.5°	561.8	563.2	564.5	565.8	567.1	568.3	569.3	570.2	571.2	572.2	573.3
135°	603.8	604.6	605.5	606.4	607.3	608.1	609.0	609.8	610.7	611.5	612.7
137.5°	643.2	644.0	644.9	645.8	646.7	647.4	648.1	648.8	649.5	650.2	651.6
140°	668.2	669.0	669.9	670.6	671.5	672.1	672.8	673.4	673.9	674.5	675.9
142.5°	693.5	694.2	694.7	695.4	696.0	696.6	697.2	697.9	698.5	699.2	700.3
145°	730.8	731.4	732.0	732.5	733.0	733.6	734.1	734.5	735.1	735.6	736.0
147.5°	764.9	765.3	765.6	766.0	766.3	766.7	767.1	767.5	767.9	768.3	768.8
150°	787.9	787.7	787.6	787.4	787.2	787.5	788.2	788.8	789.5	790.1	790.1
152.5°	806.7	807.0	807.2	807.5	807.7	807.9	808.1	808.4	808.7	809.0	809.4
155°	835.8	835.8	835.8	835.8	835.8	835.8	836.0	836.2	836.3	836.5	837.2
157.5°	861.8	861.4	861.0	860.6	860.3	860.2	860.4	860.5	860.6	860.8	861.5
160°	877.0	876.6	876.1	875.6	875.1	875.0	875.1	875.2	875.4	875.6	876.3
162.5°	890.6	890.2	889.9	889.6	889.2	889.0	889.0	889.1	889.1	889.2	889.9
165°	908.8	908.4	908.1	907.8	907.5	907.4	907.5	907.7	907.9	908.0	908.7
167.5°	924.1	923.4	922.7	922.1	921.4	921.1	921.1	921.1	921.1	921.1	922.1
170°	932.4	931.7	931.0	930.4	929.7	929.3	929.3	929.3	929.3	929.3	930.4
172.5°	938.2	937.5	936.9	936.2	935.6	935.3	935.3	935.3	935.3	935.3	936.2
175°	944.9	944.2	943.6	942.9	942.3	941.9	941.9	941.9	941.9	941.9	942.9
177.5°	948.3	947.7	947.3	946.7	946.1	945.8	945.7	945.6	945.5	945.3	946.1
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	49.5	51.8	54.3	55.8	56.6	57.4	58.2	58.9
90°	53.6	56.6	59.7	61.8	63.0	64.1	65.3	66.4
92.5°	69.1	72.3	75.6	77.7	78.7	79.7	80.8	81.8
95°	95.1	98.4	101.7	103.8	104.8	105.8	106.8	107.8
97.5°	126.2	129.3	132.4	134.4	135.3	136.1	137.0	137.8
100°	147.7	151.2	154.7	156.8	157.8	158.7	159.6	160.5
102.5°	169.9	173.5	177.1	179.4	180.4	181.4	182.5	183.5
105°	205.9	208.9	211.8	213.9	215.0	216.1	217.4	218.5
107.5°	245.4	247.8	250.2	251.8	252.3	252.9	253.4	254.0
110°	272.8	275.1	277.4	278.9	279.4	279.8	280.4	280.9





TEST NUMBER: P333137-830

CATALOG NUMBER: S125DIP-S375D810U830-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	300.2	302.2	304.2	305.4	305.8	306.1	306.5	306.9
115°	342.2	343.8	345.3	346.4	346.8	347.2	347.6	348.1
117.5°	384.2	386.0	387.8	388.6	388.6	388.6	388.6	388.6
120°	412.6	414.2	415.8	416.7	416.6	416.5	416.4	416.3
122.5°	440.3	441.7	443.1	443.8	443.9	443.9	444.0	444.1
125°	481.2	482.4	483.6	484.5	484.7	485.0	485.4	485.7
127.5°	521.8	523.0	524.3	525.0	525.3	525.5	525.8	525.9
130°	548.8	550.1	551.2	552.0	552.0	552.2	552.4	552.5
132.5°	574.6	575.8	576.9	577.5	577.5	577.4	577.4	577.3
135°	614.1	615.3	616.6	617.1	616.9	616.8	616.6	616.4
137.5°	652.9	654.2	655.5	656.0	655.5	655.2	654.7	654.3
140°	677.3	678.7	680.0	680.5	680.1	679.7	679.3	678.8
142.5°	701.3	702.5	703.6	703.9	703.5	703.0	702.7	702.2
145°	736.5	737.0	737.4	737.6	737.5	737.4	737.4	737.3
147.5°	769.4	770.0	770.4	770.2	769.3	768.4	767.4	766.5
150°	790.1	790.1	790.1	789.9	789.8	789.5	789.3	789.1
152.5°	809.7	810.1	810.5	810.4	809.8	809.3	808.7	808.1
155°	837.8	838.5	839.1	839.1	838.2	837.4	836.6	835.8
157.5°	862.1	862.8	863.5	863.3	862.1	861.1	860.0	858.9
160°	876.9	877.5	878.2	878.2	877.3	876.5	875.6	874.9
162.5°	890.7	891.6	892.3	892.2	891.3	890.3	889.4	888.4
165°	909.4	910.0	910.6	910.5	909.5	908.5	907.5	906.5
167.5°	923.1	924.1	925.1	925.0	924.1	923.0	922.0	921.0
170°	931.3	932.4	933.3	933.2	932.1	930.9	929.8	928.7
172.5°	937.3	938.2	939.2	939.2	938.2	937.2	936.1	935.1
175°	943.9	944.9	945.8	945.7	944.6	943.5	942.4	941.2
177.5°	946.9	947.6	948.5	948.4	947.4	946.6	945.7	944.7
180°	947.1	947.1	947.1	947.1	947.1	947.1	947.1	947.1

(END OF REPORT)