

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: P333156-840

Luminaire Tested: **S125DIP-S375D1205U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333156-840
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: S125DIP-S375D1205U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5842.3 lumens
Efficiency: N/A
Efficacy: 138.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

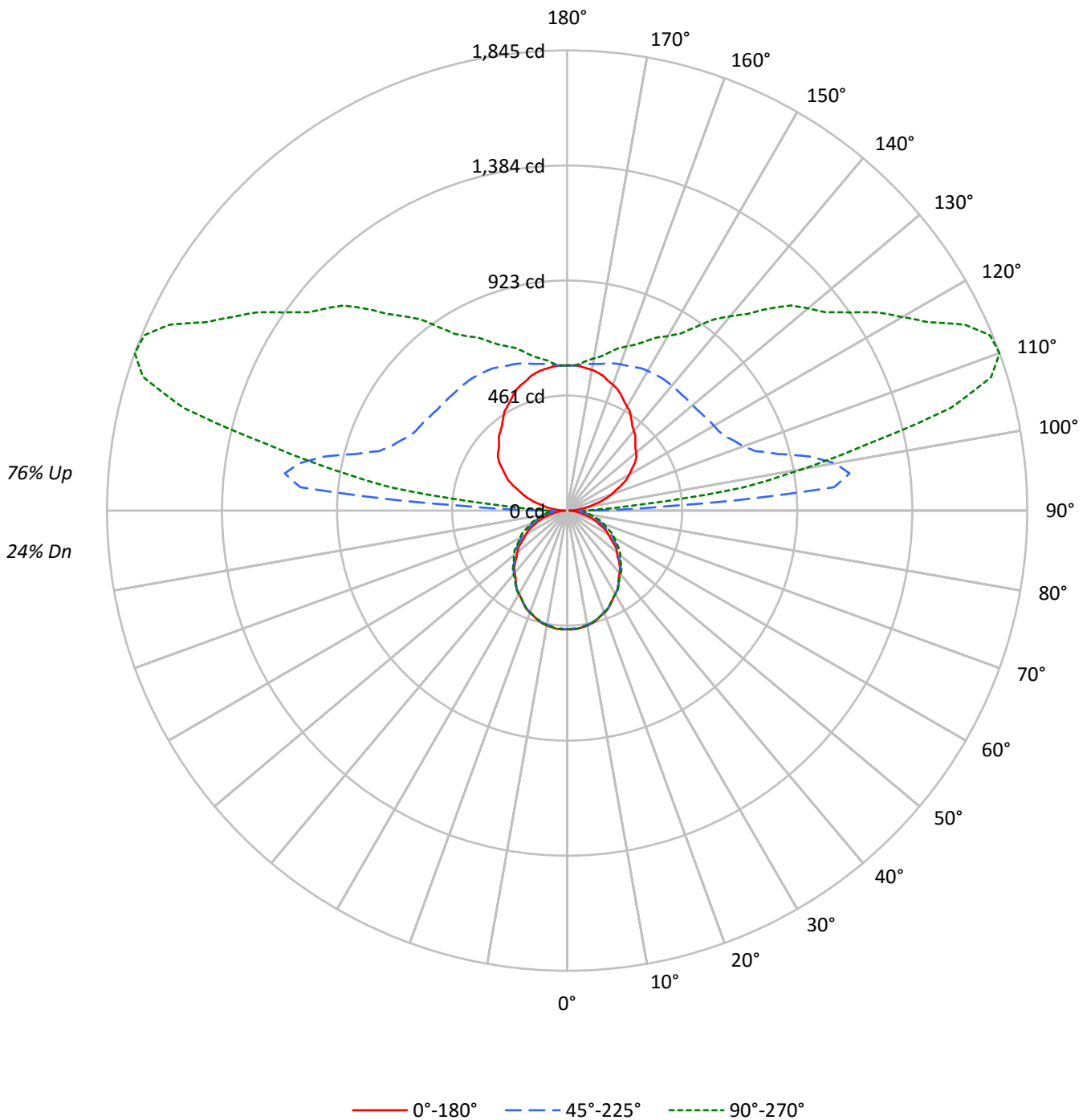
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333156-840

CATALOG NUMBER: S125DIP-S375D1205U840-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333156-840

CATALOG NUMBER: S125DIP-S375D1205U840-4F0-1E-UDD-D4

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	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	87	83	80	81	78	74	71	60	57	55	43	42	40	28	27	26	19
2	83	76	70	65	74	68	63	58	52	48	46	37	35	33	24	23	22	16
3	76	67	59	54	67	59	53	48	46	41	38	33	30	28	21	20	18	13
4	69	59	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	40	35	36	31	28	26	23	20	17	15	14	10
6	58	46	39	33	51	42	35	30	32	27	24	23	20	18	15	13	12	9
7	54	42	34	29	47	37	31	26	29	24	21	21	18	16	14	12	10	8
8	50	38	30	25	44	34	27	23	26	22	18	19	16	14	13	11	9	7
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	8	6
10	43	31	24	20	38	28	22	18	22	18	14	16	13	11	11	9	8	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



TEST NUMBER: P333156-840

CATALOG NUMBER: S125DIP-S375D1205U840-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	0.8
10°-20°	127.8	2.2
20°-30°	190.0	3.3
30°-40°	225.1	3.9
40°-50°	232.7	4.0
50°-60°	214.4	3.7
60°-70°	173.3	3.0
70°-80°	116.1	2.0
80°-90°	63.4	1.1
90°-100°	455.6	7.8
100°-110°	931.8	15.9
110°-120°	867.8	14.9
120°-130°	699.2	12.0
130°-140°	557.7	9.5
140°-150°	418.6	7.2
150°-160°	294.0	5.0
160°-170°	173.3	3.0
170°-180°	56.4	1.0
0°-30°	362.8	6.2
0°-40°	587.9	10.1
0°-60°	1035.1	17.7
0°-90°	1387.9	23.8
90°-120°	2255.3	38.6
90°-150°	3930.7	67.3
90°-180°	4454.0	76.2
0°-180°	5842.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	9	33	57	73	79	7
95°	45	133	1074	516	323	46
105°	137	198	876	1710	1593	144
115°	240	292	701	1498	1761	236
125°	330	387	666	1189	1385	293
135°	386	464	654	991	1146	299
145°	449	513	652	815	898	281
155°	512	550	636	719	750	236
165°	559	574	610	647	657	157
175°	581	581	586	593	590	55
180°	582	582	582	582	582	



TEST NUMBER: P333156-840

CATALOG NUMBER: S125DIP-S375D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.8	18.4	22.1	26.0	29.7	33.6	37.4	41.4	45.1	49.1	51.7
90°	8.7	13.1	18.8	24.4	30.1	35.9	40.6	46.5	51.2	57.1	60.6
92.5°	21.0	27.2	40.1	57.7	81.0	118.6	186.2	297.3	417.6	415.1	345.4
95°	44.8	48.7	60.8	76.3	104.8	160.8	289.8	551.5	878.9	1073.7	1053.7
97.5°	69.8	73.6	82.6	98.0	123.6	164.6	251.1	443.6	785.9	1142.1	1321.2
100°	87.3	91.8	98.7	113.7	138.3	176.2	247.5	403.4	702.5	1089.4	1385.0
102.5°	106.6	110.1	115.8	131.7	154.1	191.0	254.8	386.2	639.0	998.8	1344.0
105°	136.8	138.5	146.0	159.4	179.9	215.1	269.8	377.4	576.4	876.4	1215.3
107.5°	166.3	170.1	177.0	188.1	209.0	240.8	293.8	386.2	549.0	791.8	1084.4
110°	187.5	191.1	197.0	208.8	227.7	260.2	311.2	395.2	540.1	751.8	1009.6



TEST NUMBER: P333156-840

CATALOG NUMBER: S125DIP-S375D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	209.0	212.5	217.2	228.7	247.3	278.8	327.9	407.0	538.7	727.8	953.5
115°	239.8	242.9	247.1	258.4	276.8	307.8	354.0	424.6	540.0	701.1	891.9
117.5°	267.5	271.6	275.8	286.8	307.2	337.1	380.7	445.2	545.6	686.9	854.1
120°	286.3	290.1	295.2	306.0	326.3	357.0	400.4	459.1	551.9	679.8	832.9
122.5°	305.7	308.4	312.3	323.0	345.0	375.5	418.9	474.6	557.0	673.6	814.5
125°	330.4	332.6	338.4	348.9	371.1	402.5	443.3	495.9	566.0	665.5	789.2
127.5°	349.4	352.8	360.2	373.5	397.2	428.5	467.5	515.6	576.7	660.6	765.8
130°	361.6	365.1	374.4	389.5	414.0	445.2	483.0	529.1	583.3	657.5	750.5
132.5°	370.6	375.1	386.4	403.4	429.0	460.1	497.6	540.5	590.7	656.0	737.8
135°	385.8	390.4	404.3	423.0	447.6	479.6	516.6	556.1	600.3	653.8	722.1
137.5°	405.0	408.4	421.4	440.2	464.2	497.0	530.5	567.8	609.6	653.6	708.2
140°	415.9	419.4	433.4	452.2	474.5	506.2	540.4	575.7	613.4	653.4	701.5
142.5°	429.0	431.5	444.5	463.2	484.5	514.3	546.4	579.9	615.5	653.6	695.8
145°	448.7	451.0	462.6	478.9	499.9	526.8	557.3	586.7	618.4	652.4	688.1
147.5°	468.9	470.3	480.4	495.6	513.9	537.7	564.4	591.0	619.6	649.3	680.5
150°	481.1	483.4	491.7	507.0	523.3	543.3	569.1	593.8	619.6	646.5	674.7
152.5°	494.2	495.6	502.9	516.3	531.8	549.9	573.8	595.6	618.6	642.8	668.1
155°	511.6	511.6	518.7	530.4	542.1	558.6	578.5	597.2	616.0	636.0	657.1
157.5°	527.1	526.8	532.5	542.6	552.9	565.3	582.5	598.4	613.0	628.9	646.8
160°	537.5	536.2	541.0	549.2	558.6	569.1	584.4	598.4	610.2	624.3	638.3
162.5°	545.8	544.7	549.4	556.6	564.2	572.9	586.2	597.5	607.3	618.6	630.9
165°	558.6	556.2	559.8	565.6	570.3	577.3	586.7	596.1	603.1	610.2	619.6
167.5°	567.0	565.8	567.9	571.2	574.5	579.0	586.7	593.3	596.5	602.0	608.5
170°	572.6	571.5	572.6	575.0	577.3	580.9	586.7	591.4	593.8	597.2	602.0
172.5°	576.4	574.3	575.4	577.7	579.2	580.9	585.7	589.6	590.0	591.7	595.4
175°	580.9	578.5	579.7	580.9	580.9	580.9	584.4	586.7	585.5	585.5	586.7
177.5°	583.0	581.1	581.1	582.0	581.1	581.1	583.0	583.9	582.0	582.0	583.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0



TEST NUMBER: P333156-840

CATALOG NUMBER: S125DIP-S375D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	54.3	57.0	59.6	61.6	62.3	63.1	64.0	64.7
90°	64.1	67.8	71.3	75.1	75.9	76.6	78.6	79.3
92.5°	249.3	194.6	159.6	143.7	129.5	127.3	126.4	125.2
95°	882.3	706.2	564.2	467.2	384.6	350.0	341.4	323.4
97.5°	1292.6	1169.7	1031.3	895.6	823.8	758.8	725.5	711.2
100°	1477.5	1422.2	1303.5	1182.9	1102.6	1018.7	975.9	957.8
102.5°	1538.7	1576.3	1520.5	1439.2	1353.2	1293.7	1247.2	1233.8
105°	1498.9	1661.7	1715.5	1703.9	1667.2	1629.1	1606.4	1593.1
107.5°	1364.3	1580.8	1715.5	1778.1	1797.8	1798.2	1791.1	1782.3
110°	1265.1	1490.0	1657.4	1758.5	1812.0	1835.0	1843.9	1844.6



TEST NUMBER: P333156-840

CATALOG NUMBER: S125DIP-S375D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1186.4	1400.0	1569.1	1688.1	1766.0	1804.9	1826.1	1835.3
115°	1087.4	1271.1	1433.8	1563.0	1655.1	1712.0	1745.5	1761.4
117.5°	1022.5	1181.0	1321.3	1439.9	1532.1	1591.0	1624.4	1634.5
120°	987.2	1129.8	1260.6	1365.1	1452.6	1509.5	1541.9	1551.9
122.5°	960.3	1092.4	1209.1	1306.9	1385.0	1437.2	1469.6	1478.6
125°	921.1	1042.5	1146.2	1231.7	1298.0	1346.7	1373.0	1385.2
127.5°	881.2	994.4	1091.3	1171.3	1231.6	1274.7	1299.7	1305.5
130°	856.4	961.1	1054.1	1131.4	1190.5	1229.8	1253.7	1261.3
132.5°	831.4	929.6	1014.1	1088.5	1147.6	1186.8	1208.8	1217.2
135°	798.5	880.8	957.3	1025.1	1077.2	1116.5	1138.1	1145.7
137.5°	770.7	837.5	901.1	958.7	1005.3	1041.0	1060.9	1069.0
140°	755.4	811.6	866.8	916.9	960.7	991.6	1009.7	1015.9
142.5°	742.0	789.8	837.2	880.6	917.9	944.1	961.2	966.5
145°	725.1	761.9	798.8	831.0	859.6	879.9	893.2	898.4
147.5°	709.3	739.0	767.1	791.2	813.7	829.9	837.6	839.9
150°	700.5	726.4	748.6	769.8	787.5	801.7	806.5	807.8
152.5°	691.2	714.2	734.6	751.0	765.8	777.1	781.8	783.0
155°	677.0	695.8	712.3	725.2	736.9	745.1	748.6	749.8
157.5°	663.0	678.4	691.2	701.3	710.3	717.2	720.4	720.2
160°	653.6	665.3	677.0	685.3	693.5	699.3	701.8	700.5
162.5°	643.3	654.1	663.9	671.2	677.5	682.5	683.0	682.7
165°	628.9	637.1	644.2	650.1	654.8	657.1	657.1	657.1
167.5°	615.3	620.8	626.1	630.4	632.7	634.8	633.9	633.7
170°	607.8	611.4	614.9	617.2	619.6	620.8	620.8	619.6
172.5°	599.4	602.9	605.5	606.9	607.3	609.5	607.6	606.4
175°	590.3	590.3	592.6	592.6	592.6	593.8	591.4	590.3
177.5°	583.9	584.8	584.8	584.8	583.9	584.8	582.0	582.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0

(END OF REPORT)