

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: P333157-840

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333157-840  
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: S125DIP-S375D1205U840-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6400.3 lumens  
Efficiency: N/A  
Efficacy: 151.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

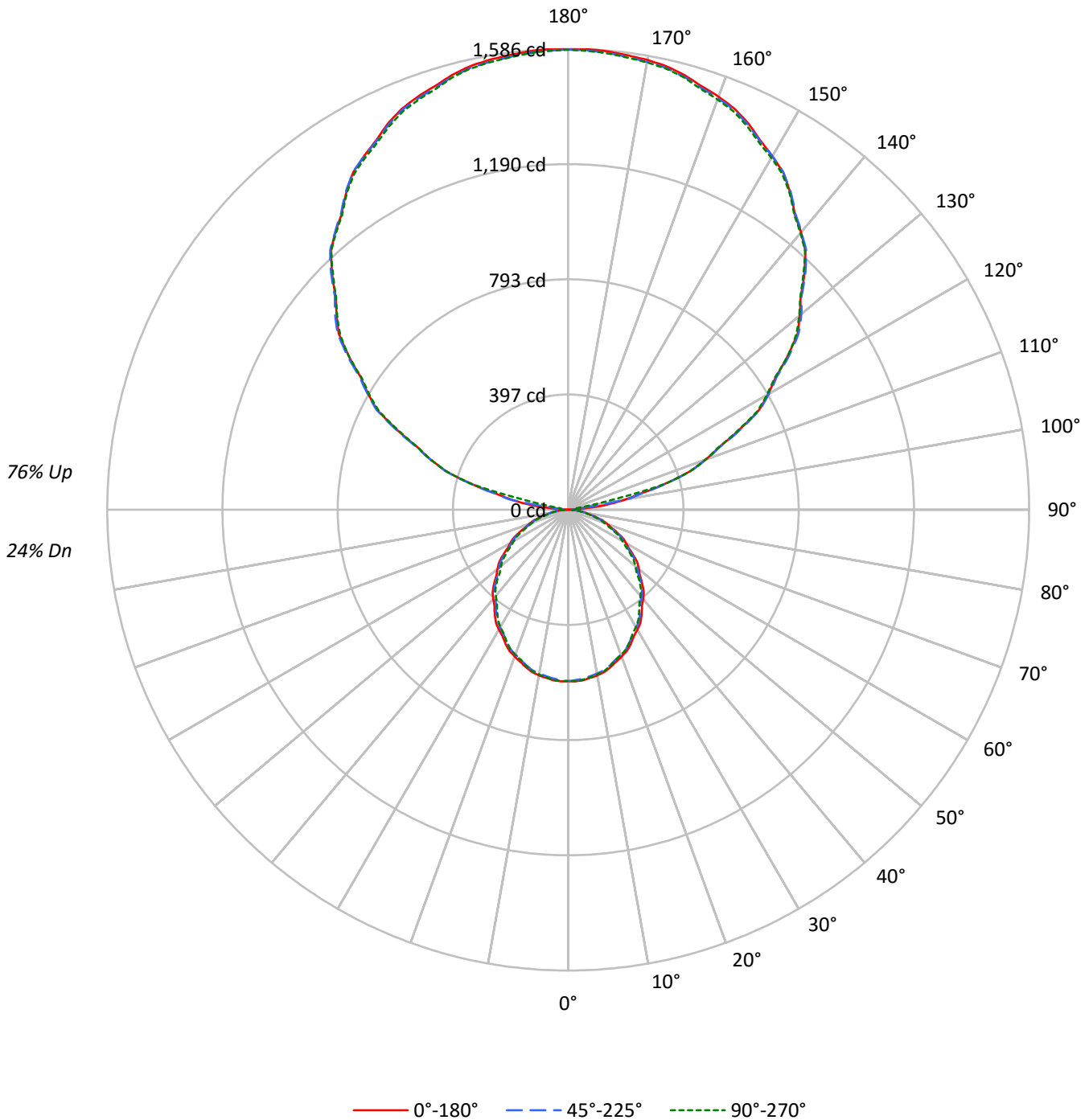
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	77	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	21	19	14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12
5	64	53	45	39	56	47	40	36	37	32	28	27	24	21	18	16	14	11
6	59	47	39	34	52	42	35	31	33	28	25	24	21	19	16	14	13	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7
10	43	32	25	20	38	29	23	18	23	18	15	17	14	12	11	10	8	6

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

	0°	45°	90°
0°	3810	3810	3810
5°	3818	3782	3806
10°	3796	3756	3777
15°	3754	3710	3726
20°	3696	3647	3654
25°	3632	3572	3569
30°	3554	3491	3473
35°	3470	3404	3356
40°	3384	3309	3262
45°	3291	3222	3159
50°	3189	3118	3024
55°	3090	3001	2916
60°	2971	2882	2780
65°	2832	2740	2647
70°	2696	2574	2485
75°	2458	2376	2293
80°	2187	2153	2101
85°	1904	1941	1830



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.6	0.9
10°-20°	157.1	2.5
20°-30°	232.0	3.6
30°-40°	270.7	4.2
40°-50°	271.9	4.2
50°-60°	238.7	3.7
60°-70°	177.8	2.8
70°-80°	101.7	1.6
80°-90°	32.9	0.5
90°-100°	57.5	0.9
100°-110°	354.6	5.5
110°-120°	643.1	10.0
120°-130°	825.3	12.9
130°-140°	887.7	13.9
140°-150°	833.2	13.0
150°-160°	674.0	10.5
160°-170°	435.9	6.8
170°-180°	150.4	2.3
0°-30°	444.7	6.9
0°-40°	715.5	11.2
0°-60°	1226.0	19.2
0°-90°	1538.4	24.0
90°-120°	1055.2	16.5
90°-150°	3601.6	56.3
90°-180°	4862.0	76.0
0°-180°	6400.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	588	583	587	587	56
15°	562	560	555	557	557	158
25°	510	507	501	502	501	234
35°	440	438	432	429	426	275
45°	360	358	353	348	346	278
55°	274	273	266	262	259	245
65°	185	184	179	175	173	184
75°	98	98	95	94	92	105
85°	26	26	26	26	25	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°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	591.4	591.2	591.0	590.7	590.5	589.9	589.1	588.2	587.4	586.5	587.4
5°	589.0	588.8	588.5	588.3	588.1	587.5	586.5	585.5	584.4	583.4	584.3
7.5°	583.6	583.4	583.2	583.0	582.8	582.1	581.0	579.8	578.7	577.5	578.5
10°	578.8	578.6	578.3	578.1	577.9	577.2	576.1	574.9	573.8	572.7	573.5
12.5°	572.8	572.4	572.0	571.7	571.3	570.6	569.5	568.5	567.3	566.3	566.9
15°	561.5	561.2	560.9	560.6	560.2	559.5	558.4	557.2	556.0	554.9	555.4
17.5°	548.5	548.1	547.5	547.1	546.6	545.8	544.6	543.5	542.3	541.1	541.8
20°	537.7	537.5	537.2	537.0	536.8	536.0	534.7	533.3	532.0	530.7	531.4
22.5°	526.8	526.4	526.0	525.7	525.3	524.5	523.2	522.0	520.7	519.5	520.0
25°	509.7	509.2	508.6	508.1	507.6	506.6	505.3	503.9	502.6	501.3	501.5
27.5°	489.6	489.3	489.0	488.7	488.4	487.5	486.1	484.7	483.3	481.9	482.0
30°	476.6	476.3	475.8	475.5	475.2	474.3	472.8	471.2	469.7	468.1	467.9
32.5°	462.3	461.8	461.4	460.9	460.4	459.5	458.1	456.7	455.3	453.9	453.5
35°	440.1	439.7	439.3	438.9	438.5	437.5	436.1	434.6	433.1	431.7	431.2
37.5°	417.1	416.6	416.1	415.5	415.0	414.0	412.6	411.3	409.9	408.6	407.8
40°	401.4	400.8	400.3	399.8	399.3	398.3	396.9	395.5	393.9	392.5	391.6
42.5°	384.6	384.2	383.7	383.2	382.8	381.9	380.4	379.0	377.5	376.1	375.3
45°	360.3	359.9	359.5	359.1	358.6	357.8	356.6	355.4	354.1	352.8	351.6
47.5°	334.2	334.2	334.2	334.3	334.3	333.6	332.0	330.5	329.0	327.5	326.3
50°	317.4	317.1	316.8	316.4	316.1	315.4	314.1	312.9	311.6	310.3	309.0
52.5°	300.2	299.9	299.7	299.5	299.3	298.5	297.2	295.9	294.5	293.2	292.1
55°	274.4	274.1	273.8	273.5	273.2	272.3	270.8	269.4	267.9	266.5	265.6
57.5°	247.3	247.1	246.9	246.8	246.6	245.9	244.7	243.5	242.3	241.1	239.8
60°	230.0	229.6	229.2	228.8	228.4	227.6	226.5	225.4	224.2	223.1	222.1
62.5°	212.2	211.9	211.5	211.2	210.9	210.2	209.2	208.2	207.2	206.3	205.2
65°	185.3	185.1	184.9	184.7	184.5	183.8	182.7	181.5	180.4	179.3	178.2
67.5°	159.3	158.9	158.3	157.9	157.5	156.8	156.0	155.1	154.3	153.5	152.7
70°	142.8	142.3	141.8	141.3	140.8	140.0	139.1	138.1	137.2	136.3	135.6
72.5°	124.9	124.5	124.2	123.8	123.5	123.0	122.4	121.8	121.2	120.6	119.9
75°	98.5	98.3	98.1	97.9	97.7	97.3	96.7	96.2	95.7	95.2	94.9
77.5°	74.1	74.0	73.9	73.8	73.8	73.6	73.3	73.0	72.7	72.4	72.2
80°	58.8	58.8	58.8	58.8	58.8	58.7	58.5	58.3	58.1	57.9	57.8
82.5°	45.3	45.2	45.0	44.8	44.7	44.6	44.5	44.5	44.4	44.4	44.2
85°	25.7	25.8	25.9	26.0	26.1	26.2	26.2	26.2	26.2	26.2	26.1
87.5°	10.3	10.7	11.1	11.6	12.0	12.3	12.6	12.9	13.2	13.4	13.7
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°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	588.2	589.1	589.9	590.3	590.2	590.1	590.1	590.0
5°	585.2	586.2	587.1	587.5	587.4	587.3	587.2	587.1
7.5°	579.4	580.3	581.2	581.6	581.5	581.4	581.3	581.2
10°	574.3	575.1	576.0	576.3	576.2	576.1	576.0	575.9
12.5°	567.6	568.4	569.0	569.3	569.3	569.3	569.3	569.2
15°	555.9	556.4	557.0	557.2	557.2	557.2	557.2	557.2
17.5°	542.4	543.0	543.7	543.7	543.2	542.7	542.2	541.7
20°	532.1	532.8	533.5	533.7	533.1	532.6	532.1	531.6
22.5°	520.4	520.9	521.4	521.4	521.1	520.7	520.4	520.0
25°	501.7	501.9	502.1	502.0	501.7	501.4	501.1	500.8
27.5°	482.0	482.0	482.1	482.0	481.6	481.3	481.0	480.7
30°	467.7	467.5	467.3	467.1	466.8	466.5	466.1	465.7
32.5°	453.2	452.8	452.4	452.0	451.4	450.8	450.3	449.7
35°	430.7	430.2	429.6	429.0	428.2	427.3	426.5	425.7
37.5°	407.1	406.3	405.5	404.9	404.3	403.9	403.4	402.9
40°	390.6	389.7	388.8	388.2	387.9	387.5	387.2	386.9
42.5°	374.4	373.5	372.6	372.0	371.5	371.0	370.6	370.1
45°	350.3	349.1	347.9	347.1	346.8	346.5	346.2	345.9
47.5°	325.0	323.8	322.4	321.4	320.7	320.0	319.3	318.6
50°	307.7	306.3	305.0	304.0	303.2	302.5	301.7	301.0
52.5°	290.8	289.6	288.4	287.5	286.7	285.9	285.1	284.3
55°	264.6	263.7	262.8	262.0	261.3	260.4	259.7	259.0
57.5°	238.6	237.4	236.2	235.4	235.0	234.6	234.2	233.8
60°	221.1	219.9	218.9	218.0	217.3	216.6	215.9	215.2
62.5°	204.1	202.9	201.8	201.0	200.5	199.9	199.2	198.7
65°	177.3	176.4	175.5	174.8	174.4	174.0	173.6	173.2
67.5°	151.9	151.1	150.3	149.8	149.6	149.3	149.1	148.8
70°	135.0	134.4	133.8	133.3	132.9	132.5	132.0	131.6
72.5°	119.2	118.5	117.8	117.2	116.8	116.4	115.9	115.5
75°	94.6	94.3	93.9	93.6	93.2	92.8	92.4	91.9
77.5°	72.1	71.9	71.7	71.5	71.2	70.9	70.6	70.3
80°	57.7	57.6	57.5	57.3	57.1	56.9	56.7	56.5
82.5°	44.0	43.8	43.7	43.5	43.5	43.5	43.4	43.4
85°	26.0	25.9	25.8	25.5	25.3	25.1	24.9	24.7
87.5°	13.9	14.2	14.5	14.6	14.6	14.6	14.6	14.6
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: P333157-840

CATALOG NUMBER: S125DIP-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)