

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: P333157-830

Luminaire Tested: **S125DIP-S375D1205U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333157-830
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-S375D1205U830-4F0-1E-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: 5973.6 lumens
Efficiency: N/A
Efficacy: 141.6 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

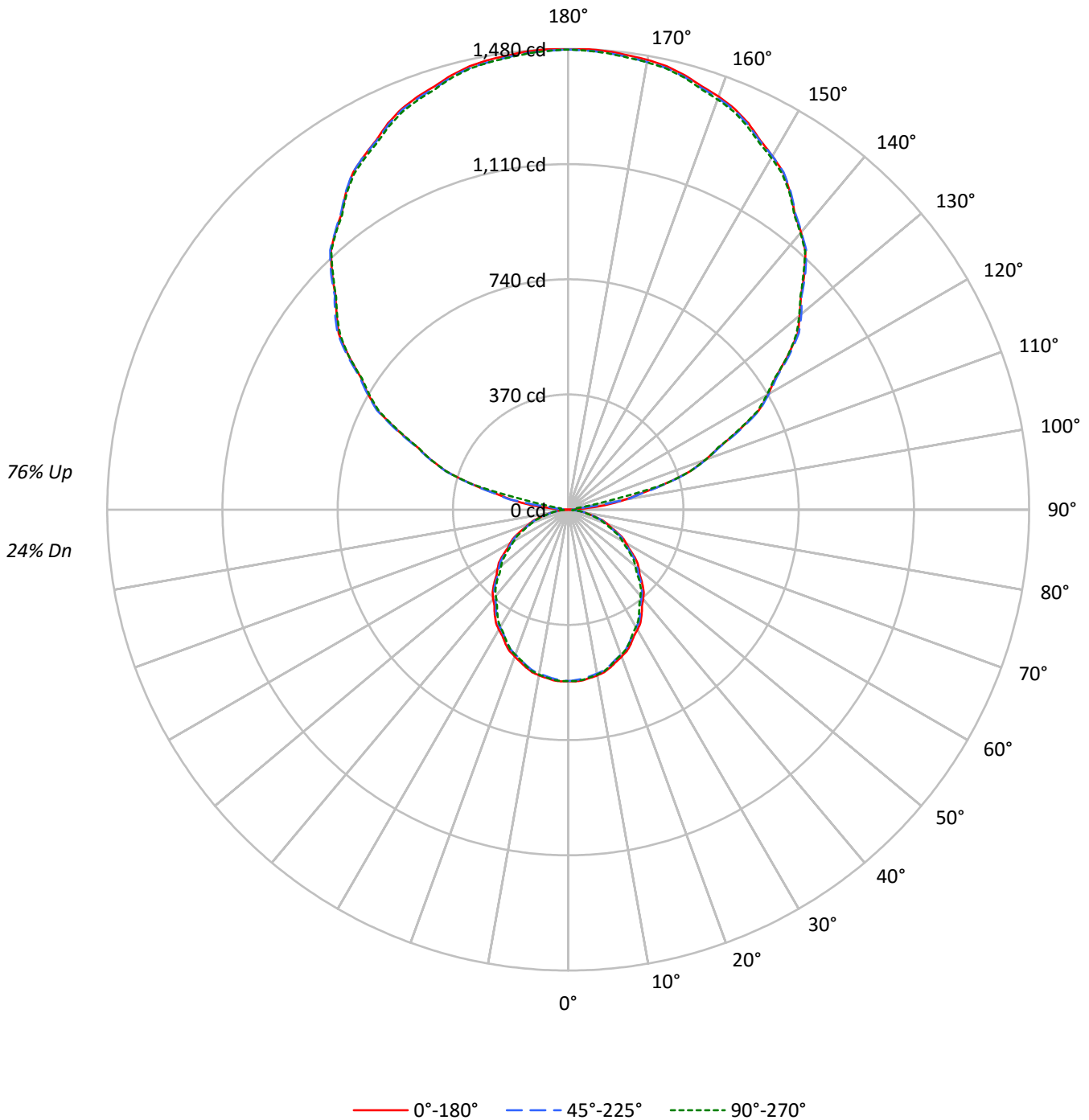
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3556	3556	3556
5°	3564	3530	3553
10°	3543	3505	3525
15°	3504	3463	3477
20°	3449	3404	3410
25°	3390	3334	3331
30°	3317	3258	3242
35°	3239	3177	3132
40°	3159	3089	3044
45°	3072	3008	2948
50°	2976	2910	2823
55°	2884	2800	2723
60°	2773	2689	2595
65°	2644	2557	2470
70°	2517	2402	2319
75°	2293	2218	2141
80°	2042	2008	1960
85°	1771	1808	1712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	0.9
10°-20°	146.6	2.5
20°-30°	216.5	3.6
30°-40°	252.7	4.2
40°-50°	253.8	4.2
50°-60°	222.8	3.7
60°-70°	166.0	2.8
70°-80°	94.9	1.6
80°-90°	30.7	0.5
90°-100°	53.7	0.9
100°-110°	330.9	5.5
110°-120°	600.2	10.0
120°-130°	770.3	12.9
130°-140°	828.6	13.9
140°-150°	777.7	13.0
150°-160°	629.1	10.5
160°-170°	406.9	6.8
170°-180°	140.3	2.3
0°-30°	415.1	6.9
0°-40°	667.8	11.2
0°-60°	1144.3	19.2
0°-90°	1435.8	24.0
90°-120°	984.9	16.5
90°-150°	3361.5	56.3
90°-180°	4538.0	76.0
0°-180°	5973.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	550	549	544	548	548	52
15°	524	522	518	520	520	148
25°	476	473	468	469	467	219
35°	411	409	403	401	397	257
45°	336	334	329	324	323	259
55°	256	255	249	245	242	229
65°	173	172	167	164	162	172
75°	92	91	89	88	86	98
85°	24	24	24	24	23	27
90°	1	10	18	23	26	4
95°	62	57	18	23	23	80
105°	322	326	326	326	325	341
115°	605	610	611	607	600	599
125°	860	867	868	863	860	768
135°	1072	1078	1077	1074	1068	826
145°	1243	1245	1246	1246	1240	777
155°	1369	1363	1365	1368	1359	631
165°	1445	1439	1439	1445	1437	408
175°	1478	1472	1472	1480	1471	141
180°	1478	1478	1478	1478	1478	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	552.0	551.8	551.6	551.3	551.1	550.5	549.8	549.0	548.3	547.4	548.3
5°	549.7	549.5	549.3	549.1	548.9	548.4	547.4	546.5	545.4	544.5	545.4
7.5°	544.7	544.5	544.3	544.1	543.9	543.3	542.2	541.1	540.1	539.0	539.9
10°	540.2	540.0	539.8	539.6	539.4	538.8	537.7	536.6	535.6	534.5	535.3
12.5°	534.6	534.2	533.9	533.6	533.2	532.5	531.5	530.6	529.5	528.6	529.1
15°	524.1	523.8	523.5	523.2	522.8	522.2	521.1	520.1	519.0	517.9	518.4
17.5°	511.9	511.5	511.0	510.7	510.2	509.4	508.3	507.3	506.1	505.0	505.7
20°	501.8	501.6	501.4	501.2	501.1	500.3	499.1	497.8	496.5	495.3	496.0
22.5°	491.7	491.3	491.0	490.7	490.3	489.6	488.3	487.2	486.0	484.8	485.3
25°	475.7	475.2	474.7	474.2	473.7	472.9	471.6	470.3	469.1	467.9	468.1
27.5°	456.9	456.7	456.4	456.1	455.8	455.0	453.7	452.4	451.1	449.8	449.9
30°	444.8	444.5	444.1	443.8	443.6	442.7	441.3	439.8	438.4	436.9	436.7
32.5°	431.5	431.0	430.6	430.2	429.7	428.9	427.5	426.2	425.0	423.7	423.3
35°	410.8	410.4	410.0	409.6	409.3	408.3	407.0	405.7	404.3	402.9	402.5
37.5°	389.3	388.8	388.3	387.8	387.3	386.4	385.1	383.9	382.6	381.4	380.6
40°	374.7	374.1	373.6	373.2	372.7	371.7	370.4	369.1	367.7	366.4	365.5
42.5°	358.9	358.5	358.2	357.7	357.3	356.5	355.1	353.7	352.3	351.0	350.2
45°	336.3	335.9	335.5	335.2	334.7	333.9	332.8	331.7	330.5	329.3	328.2
47.5°	311.9	311.9	311.9	312.0	312.0	311.3	309.9	308.5	307.1	305.7	304.5
50°	296.2	296.0	295.7	295.3	295.0	294.4	293.1	292.0	290.9	289.6	288.4
52.5°	280.2	279.9	279.7	279.6	279.4	278.6	277.4	276.2	274.8	273.6	272.6
55°	256.1	255.8	255.5	255.2	255.0	254.1	252.8	251.5	250.1	248.7	247.9
57.5°	230.8	230.6	230.5	230.4	230.2	229.5	228.4	227.2	226.1	225.0	223.9
60°	214.7	214.3	214.0	213.6	213.2	212.4	211.4	210.4	209.2	208.2	207.3
62.5°	198.0	197.7	197.4	197.1	196.8	196.1	195.3	194.4	193.4	192.6	191.5
65°	173.0	172.8	172.6	172.4	172.2	171.5	170.5	169.4	168.3	167.3	166.4
67.5°	148.6	148.3	147.8	147.4	147.0	146.4	145.6	144.8	144.0	143.3	142.5
70°	133.3	132.8	132.3	131.9	131.4	130.6	129.8	128.9	128.1	127.2	126.6
72.5°	116.6	116.2	115.9	115.6	115.3	114.8	114.2	113.7	113.1	112.5	111.9
75°	91.9	91.7	91.5	91.3	91.1	90.8	90.3	89.8	89.4	88.9	88.6
77.5°	69.2	69.1	69.0	68.9	68.9	68.7	68.4	68.1	67.9	67.6	67.4
80°	54.9	54.9	54.9	54.9	54.9	54.8	54.6	54.4	54.2	54.0	53.9
82.5°	42.3	42.2	42.0	41.8	41.8	41.7	41.6	41.6	41.5	41.5	41.3
85°	23.9	24.0	24.1	24.2	24.3	24.4	24.4	24.4	24.4	24.4	24.3
87.5°	9.6	10.0	10.4	10.8	11.2	11.5	11.8	12.1	12.3	12.5	12.8
90°	1.1	3.0	5.0	7.0	8.9	10.7	12.4	14.1	15.8	17.5	18.8
92.5°	16.9	15.6	14.1	12.8	11.4	11.5	13.0	14.5	16.0	17.5	18.8
95°	62.4	61.7	61.0	60.2	59.5	54.6	45.2	36.0	26.8	17.5	18.8
97.5°	130.4	131.7	133.0	134.3	135.6	127.1	108.8	90.5	72.2	53.9	47.0
100°	182.9	183.7	184.4	185.1	185.9	186.7	187.7	188.7	189.6	190.6	154.3
102.5°	236.4	237.3	238.3	239.1	240.1	240.8	241.4	242.0	242.6	243.2	236.3
105°	322.1	323.0	324.0	325.0	325.9	326.4	326.4	326.4	326.4	326.4	326.4
107.5°	411.0	411.0	411.0	411.0	411.0	411.2	411.7	412.2	412.7	413.2	413.2
110°	468.8	468.8	468.8	468.8	468.8	469.1	469.6	470.0	470.5	471.0	470.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	523.2	523.8	524.3	524.9	525.5	525.9	526.2	526.5	526.8	527.1	526.2
115°	604.6	605.9	607.1	608.3	609.5	610.3	610.5	610.8	611.0	611.2	610.3
117.5°	689.0	689.0	688.9	688.9	688.8	689.3	690.2	691.1	692.0	693.0	691.7
120°	741.6	741.3	741.1	740.8	740.6	740.8	741.6	742.3	743.0	743.8	743.3
122.5°	788.1	789.0	789.9	790.8	791.7	792.4	792.7	793.1	793.4	793.7	793.2
125°	859.9	861.6	863.3	865.0	866.7	867.5	867.5	867.5	867.5	867.5	866.6
127.5°	928.5	929.7	930.9	932.1	933.3	933.9	933.7	933.6	933.4	933.3	932.7
130°	970.5	971.8	973.0	974.2	975.4	976.1	976.4	976.7	976.9	977.1	976.4
132.5°	1012.6	1014.0	1015.4	1016.8	1018.2	1018.7	1018.1	1017.6	1017.1	1016.5	1016.4
135°	1072.4	1073.8	1075.3	1076.8	1078.3	1078.7	1078.3	1077.8	1077.2	1076.8	1076.3
137.5°	1127.4	1128.7	1129.9	1131.1	1132.5	1132.8	1132.5	1132.0	1131.5	1131.1	1131.2
140°	1163.3	1163.9	1164.3	1164.8	1165.3	1165.4	1165.2	1164.9	1164.7	1164.4	1164.9
142.5°	1195.7	1196.0	1196.4	1196.7	1196.9	1197.2	1197.6	1197.9	1198.3	1198.6	1198.7
145°	1243.3	1243.8	1244.3	1244.7	1245.2	1245.5	1245.5	1245.5	1245.5	1245.5	1245.8
147.5°	1284.9	1284.8	1284.7	1284.6	1284.5	1284.6	1284.9	1285.2	1285.5	1285.8	1286.1
150°	1311.2	1310.7	1310.2	1309.8	1309.3	1309.3	1309.8	1310.2	1310.7	1311.2	1311.6
152.5°	1336.6	1335.6	1334.5	1333.4	1332.3	1332.0	1332.6	1333.0	1333.5	1334.0	1334.5
155°	1369.2	1367.8	1366.3	1364.9	1363.4	1362.9	1363.4	1363.9	1364.4	1364.9	1365.6
157.5°	1394.5	1393.5	1392.7	1391.9	1390.9	1390.5	1390.6	1390.6	1390.7	1390.7	1391.5
160°	1412.0	1410.5	1409.1	1407.6	1406.2	1405.5	1405.8	1406.0	1406.3	1406.5	1407.5
162.5°	1426.0	1424.6	1423.1	1421.6	1420.1	1419.6	1419.8	1420.0	1420.3	1420.5	1421.9
165°	1444.8	1443.4	1441.9	1440.5	1439.0	1438.4	1438.6	1438.9	1439.1	1439.4	1440.9
167.5°	1458.9	1457.4	1455.9	1454.3	1452.8	1452.2	1452.5	1452.6	1452.9	1453.2	1454.9
170°	1466.8	1465.1	1463.3	1461.6	1459.9	1459.2	1459.4	1459.7	1459.9	1460.2	1462.2
172.5°	1472.0	1470.3	1468.6	1466.9	1465.2	1464.5	1465.0	1465.5	1465.8	1466.3	1468.1
175°	1477.7	1476.2	1474.8	1473.3	1471.9	1471.2	1471.5	1471.8	1472.0	1472.3	1474.1
177.5°	1480.4	1479.1	1478.0	1476.9	1475.6	1475.2	1475.4	1475.6	1475.7	1475.9	1477.3
180°	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	550.6	550.6	550.6	550.6	550.6	550.6	550.6	550.6
2.5°	549.0	549.8	550.5	550.9	550.8	550.7	550.7	550.6
5°	546.2	547.1	548.0	548.4	548.3	548.2	548.1	548.0
7.5°	540.7	541.6	542.4	542.8	542.7	542.6	542.5	542.4
10°	536.0	536.8	537.6	537.9	537.8	537.7	537.6	537.5
12.5°	529.8	530.5	531.0	531.3	531.3	531.3	531.3	531.2
15°	518.9	519.3	519.9	520.1	520.1	520.1	520.1	520.1
17.5°	506.2	506.8	507.5	507.5	507.0	506.5	506.1	505.6
20°	496.6	497.3	497.9	498.1	497.6	497.1	496.6	496.2
22.5°	485.7	486.2	486.6	486.6	486.4	486.0	485.7	485.3
25°	468.3	468.4	468.6	468.5	468.3	468.0	467.7	467.4
27.5°	449.9	449.9	450.0	449.9	449.5	449.2	448.9	448.7
30°	436.5	436.3	436.1	435.9	435.6	435.4	435.0	434.7
32.5°	423.0	422.6	422.3	421.9	421.3	420.8	420.3	419.7
35°	402.0	401.5	401.0	400.4	399.6	398.8	398.0	397.3
37.5°	379.9	379.2	378.4	377.9	377.4	377.0	376.5	376.1
40°	364.6	363.7	362.9	362.3	362.0	361.7	361.4	361.1
42.5°	349.4	348.6	347.8	347.2	346.8	346.3	345.9	345.4
45°	327.0	325.8	324.7	324.0	323.7	323.4	323.1	322.8
47.5°	303.3	302.2	301.0	300.0	299.4	298.7	298.0	297.4
50°	287.2	285.9	284.6	283.7	283.0	282.3	281.6	281.0
52.5°	271.5	270.3	269.2	268.3	267.6	266.8	266.1	265.3
55°	246.9	246.1	245.2	244.5	243.8	243.1	242.4	241.8
57.5°	222.7	221.6	220.5	219.7	219.3	219.0	218.6	218.2
60°	206.3	205.3	204.3	203.5	202.8	202.2	201.5	200.9
62.5°	190.5	189.4	188.3	187.6	187.1	186.5	186.0	185.5
65°	165.5	164.7	163.8	163.2	162.8	162.4	162.0	161.6
67.5°	141.8	141.0	140.3	139.8	139.6	139.3	139.1	138.8
70°	126.0	125.5	124.9	124.4	124.0	123.7	123.2	122.8
72.5°	111.2	110.6	109.9	109.4	109.1	108.7	108.2	107.8
75°	88.3	88.0	87.7	87.4	87.0	86.6	86.2	85.8
77.5°	67.3	67.1	66.9	66.7	66.4	66.2	65.9	65.6
80°	53.8	53.7	53.6	53.4	53.3	53.1	52.9	52.7
82.5°	41.1	40.9	40.8	40.6	40.6	40.6	40.5	40.5
85°	24.2	24.1	24.0	23.8	23.7	23.5	23.3	23.1
87.5°	13.0	13.3	13.6	13.7	13.7	13.7	13.7	13.7
90°	20.0	21.2	22.4	23.4	24.1	24.8	25.5	26.3
92.5°	20.0	21.2	22.4	23.2	23.5	23.8	24.2	24.5
95°	20.0	21.2	22.4	23.0	23.0	23.0	23.0	23.0
97.5°	40.2	33.3	26.4	23.0	23.0	23.0	23.0	23.0
100°	118.1	81.8	45.5	26.9	25.9	25.0	23.9	23.0
102.5°	229.4	222.6	215.7	204.1	187.5	170.9	154.4	137.8
105°	326.4	326.4	326.4	326.3	326.0	325.8	325.6	325.4
107.5°	413.3	413.3	413.4	413.0	412.3	411.6	410.9	410.1
110°	469.6	468.8	468.1	467.9	468.1	468.3	468.6	468.8



TEST NUMBER: P333157-830

CATALOG NUMBER: S125DIP-S375D1205U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	525.3	524.3	523.4	522.7	522.5	522.1	521.8	521.4
115°	609.3	608.3	607.4	606.1	604.6	603.2	601.7	600.3
117.5°	690.4	689.2	687.9	686.9	686.3	685.7	685.0	684.4
120°	742.8	742.3	741.9	741.0	739.8	738.6	737.4	736.1
122.5°	792.8	792.3	791.8	790.8	789.4	788.0	786.6	785.2
125°	865.6	864.6	863.7	862.8	862.0	861.4	860.6	859.9
127.5°	932.2	931.7	931.1	930.0	928.2	926.3	924.5	922.7
130°	975.6	974.9	974.2	973.2	971.9	970.8	969.6	968.4
132.5°	1016.2	1016.1	1016.0	1015.3	1014.1	1012.9	1011.6	1010.4
135°	1075.8	1075.3	1074.9	1073.8	1072.4	1070.9	1069.5	1068.0
137.5°	1131.3	1131.4	1131.5	1131.0	1129.6	1128.4	1127.1	1125.9
140°	1165.4	1165.8	1166.4	1165.8	1164.4	1163.0	1161.5	1160.1
142.5°	1198.8	1198.9	1199.0	1198.3	1196.8	1195.4	1193.9	1192.5
145°	1245.9	1246.2	1246.4	1245.9	1244.3	1242.9	1241.4	1240.0
147.5°	1286.4	1286.7	1286.9	1286.2	1284.5	1282.7	1281.0	1279.2
150°	1312.2	1312.7	1313.2	1312.4	1310.5	1308.5	1306.6	1304.7
152.5°	1334.9	1335.5	1336.0	1335.3	1333.5	1331.8	1330.0	1328.3
155°	1366.3	1367.1	1367.8	1367.2	1365.3	1363.3	1361.3	1359.4
157.5°	1392.3	1393.1	1393.8	1393.3	1391.3	1389.4	1387.4	1385.4
160°	1408.4	1409.4	1410.4	1409.9	1408.0	1406.0	1404.1	1402.1
162.5°	1423.2	1424.7	1426.0	1425.6	1423.4	1421.3	1419.2	1417.0
165°	1442.3	1443.8	1445.2	1444.9	1443.0	1441.1	1439.1	1437.2
167.5°	1456.7	1458.4	1460.2	1460.0	1457.7	1455.6	1453.4	1451.2
170°	1464.1	1466.0	1468.0	1467.8	1465.7	1463.5	1461.3	1459.1
172.5°	1469.8	1471.6	1473.3	1473.1	1470.9	1468.8	1466.5	1464.3
175°	1476.1	1478.1	1480.0	1479.9	1477.7	1475.6	1473.3	1471.1
177.5°	1478.7	1480.1	1481.4	1481.3	1479.8	1478.2	1476.6	1475.1
180°	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7

(END OF REPORT)