

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: P333308-830

Luminaire Tested: **S125DIP-S1270D590U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333308-830
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-S1270D590U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6572.2 lumens
Efficiency: N/A
Efficacy: 119.3 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-Direct

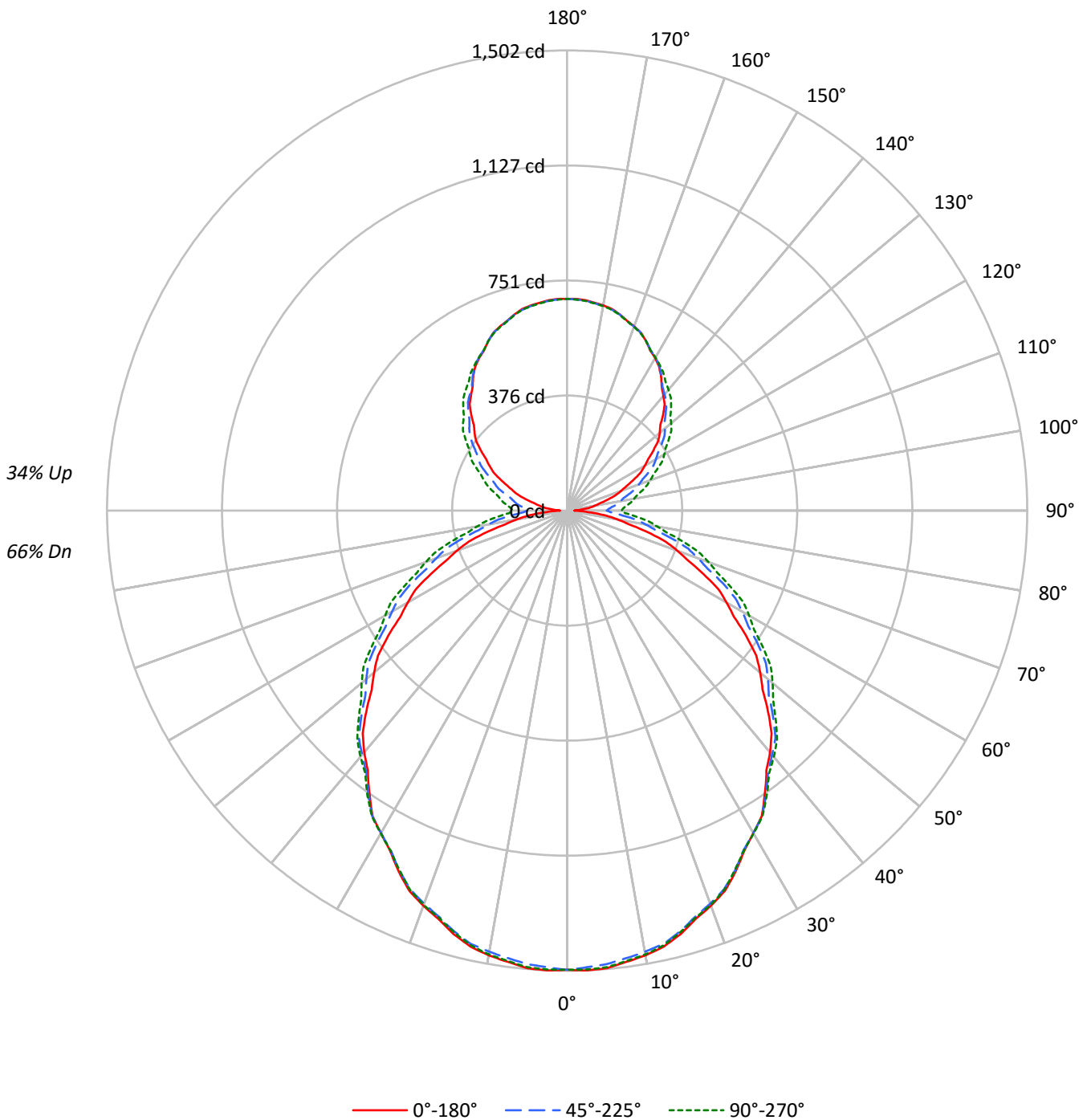
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	100	96	91	87	94	90	86	83	80	77	74	70	68	66	61	60	58	54
2	91	83	76	71	85	78	72	67	69	65	61	61	57	54	53	51	48	44
3	83	73	65	58	78	69	61	56	61	55	50	54	49	45	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	48	42	65	54	46	40	48	42	37	43	38	33	38	33	30	27
6	64	51	43	37	60	49	41	35	43	37	32	39	33	29	34	30	26	24
7	59	46	38	32	56	44	36	31	39	33	28	35	30	26	31	27	23	21
8	55	42	34	28	52	40	32	27	36	30	25	32	27	23	29	24	21	19
9	51	38	31	25	48	37	29	24	33	27	23	30	24	21	26	22	19	17
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9680	9680	9680
5°	9700	9502	9532
10°	9630	9332	9318
15°	9517	9129	9046
20°	9362	8878	8774
25°	9178	8609	8439
30°	8955	8314	8134
35°	8748	8042	7856
40°	8535	7756	7574
45°	8297	7510	7326
50°	8068	7245	7106
55°	7794	6995	6847
60°	7494	6708	6584
65°	7180	6410	6286
70°	6825	6000	5981
75°	6261	5606	5607
80°	5525	5130	5198
85°	4842	4811	5069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	2.2
10°-20°	402.4	6.1
20°-30°	598.4	9.1
30°-40°	708.8	10.8
40°-50°	732.8	11.2
50°-60°	675.1	10.3
60°-70°	545.7	8.3
70°-80°	365.5	5.6
80°-90°	191.0	2.9
90°-100°	152.6	2.3
100°-110°	215.1	3.3
110°-120°	284.0	4.3
120°-130°	334.5	5.1
130°-140°	354.4	5.4
140°-150°	337.2	5.1
150°-160°	281.0	4.3
160°-170°	186.8	2.8
170°-180°	65.4	1.0
0°-30°	1142.5	17.4
0°-40°	1851.2	28.2
0°-60°	3259.1	49.6
0°-90°	4361.3	66.4
90°-120°	651.7	9.9
90°-150°	1677.7	25.5
90°-180°	2211.0	33.6
0°-180°	6572.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1499	1496	1486	1497	1496	142
15°	1431	1432	1422	1430	1425	403
25°	1300	1304	1296	1301	1295	598
35°	1126	1135	1132	1136	1136	704
45°	927	943	951	961	962	715
55°	713	736	760	775	782	637
65°	491	525	560	581	588	487
75°	270	309	356	384	392	287
85°	81	130	181	212	225	86
90°	24	76	129	164	178	18
95°	54	94	149	183	196	52
105°	136	163	209	241	254	145
115°	240	255	292	317	326	238
125°	344	347	376	397	405	308
135°	443	445	455	474	480	341
145°	534	535	537	544	548	334
155°	610	610	610	612	610	281
165°	663	662	662	664	661	187
175°	689	687	687	690	687	65
180°	691	691	691	691	691	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1502.4	1501.9	1501.4	1500.9	1500.3	1499.2	1497.3	1495.5	1493.7	1491.9	1493.7
5°	1498.9	1498.3	1497.6	1496.9	1496.3	1494.9	1492.5	1490.3	1488.0	1485.7	1488.3
7.5°	1485.7	1485.4	1485.2	1484.9	1484.7	1483.4	1481.0	1478.7	1476.3	1473.9	1476.2
10°	1473.9	1473.9	1473.9	1473.9	1473.9	1472.6	1470.0	1467.4	1464.8	1462.2	1464.4
12.5°	1457.5	1457.7	1458.0	1458.3	1458.5	1457.6	1455.6	1453.4	1451.3	1449.3	1451.0
15°	1431.3	1431.6	1432.0	1432.3	1432.7	1431.6	1429.4	1427.1	1424.8	1422.5	1424.5
17.5°	1397.2	1397.9	1398.5	1399.2	1399.9	1399.0	1396.8	1394.5	1392.1	1389.9	1391.4
20°	1372.5	1373.2	1373.9	1374.5	1375.2	1374.3	1372.1	1369.8	1367.4	1365.2	1366.2
22.5°	1344.3	1345.5	1346.7	1347.8	1349.1	1348.3	1345.8	1343.2	1340.7	1338.1	1339.4
25°	1300.5	1301.6	1302.5	1303.4	1304.5	1304.0	1302.0	1300.0	1298.1	1296.1	1297.4
27.5°	1251.8	1253.2	1254.6	1256.0	1257.5	1257.1	1254.9	1252.6	1250.5	1248.2	1249.2
30°	1215.3	1217.3	1219.2	1221.2	1223.1	1223.1	1221.2	1219.2	1217.3	1215.3	1216.0
32.5°	1182.4	1184.1	1185.8	1187.5	1189.2	1189.3	1187.9	1186.5	1185.0	1183.6	1184.2
35°	1125.7	1127.9	1130.2	1132.6	1134.8	1135.5	1134.4	1133.5	1132.6	1131.5	1132.6
37.5°	1068.9	1071.0	1073.1	1075.3	1077.3	1078.2	1077.9	1077.5	1077.2	1076.9	1078.2
40°	1030.1	1032.7	1035.4	1038.0	1040.6	1041.7	1041.4	1041.0	1040.8	1040.5	1041.7
42.5°	987.8	991.2	994.6	998.0	1001.5	1003.4	1004.2	1004.9	1005.6	1006.4	1007.9
45°	927.3	930.9	934.4	938.0	941.6	944.2	945.9	947.5	949.1	950.7	953.1
47.5°	865.3	868.6	871.9	875.2	878.5	881.7	884.5	887.3	890.0	892.9	896.3
50°	822.9	826.5	830.1	833.7	837.4	840.9	844.5	848.1	851.7	855.3	858.8
52.5°	778.3	782.7	787.0	791.4	795.8	800.1	804.6	808.9	813.2	817.7	821.5
55°	712.8	717.9	723.2	728.4	733.6	738.9	744.0	749.3	754.5	759.8	763.4
57.5°	645.7	652.0	658.3	664.5	670.8	676.9	683.0	688.9	694.9	701.0	705.1
60°	601.1	607.6	614.1	620.7	627.2	633.7	640.3	646.8	653.3	659.8	664.7
62.5°	557.5	564.1	570.6	577.1	583.6	590.5	597.5	604.5	611.6	618.7	624.1
65°	490.8	498.3	505.9	513.4	520.8	528.6	536.4	544.2	552.0	559.9	564.8
67.5°	427.9	435.2	442.4	449.7	456.9	464.6	472.5	480.5	488.4	496.4	502.4
70°	382.1	389.6	397.1	404.6	412.1	420.1	428.6	437.2	445.6	454.1	460.3
72.5°	337.4	345.2	353.0	360.7	368.5	377.0	386.3	395.6	404.8	414.2	420.8
75°	270.4	278.9	287.4	295.9	304.3	313.9	324.2	334.7	345.2	355.6	362.1
77.5°	206.0	215.8	225.6	235.4	245.2	255.1	265.2	275.2	285.3	295.4	302.6
80°	166.1	175.9	185.7	195.5	205.3	215.7	226.8	237.9	249.0	260.1	267.3
82.5°	129.6	140.0	150.2	160.6	170.9	181.7	193.1	204.4	215.8	227.2	234.1
85°	80.9	91.6	102.4	113.2	123.9	135.1	146.5	157.9	169.3	180.8	187.9
87.5°	46.0	56.6	67.2	77.9	88.5	99.4	110.7	122.1	133.3	144.6	152.2
90°	24.0	35.4	46.8	58.2	69.7	81.3	93.3	105.2	117.2	129.1	137.2
92.5°	34.2	44.5	54.9	65.2	75.5	86.9	99.2	111.7	124.0	136.5	144.5
95°	54.0	62.8	71.5	80.2	89.0	99.5	111.8	124.0	136.4	148.6	156.7
97.5°	75.4	83.1	90.9	98.6	106.3	116.4	128.8	141.1	153.4	165.9	173.5
100°	91.4	98.3	105.2	112.0	118.9	128.3	140.3	152.3	164.3	176.3	184.3
102.5°	108.8	115.6	122.4	129.2	136.0	144.9	155.9	166.8	177.9	188.8	196.6
105°	135.8	141.7	147.5	153.3	159.1	167.3	177.8	188.3	198.8	209.3	216.6
107.5°	165.9	170.9	176.0	181.0	186.1	193.5	203.5	213.5	223.4	233.4	240.2
110°	186.6	191.1	195.7	200.2	204.7	211.7	221.2	230.7	240.3	249.8	256.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	209.1	212.4	215.9	219.3	222.8	229.2	238.6	247.9	257.2	266.6	272.7
115°	240.5	243.4	246.1	248.8	251.7	257.4	266.1	274.8	283.5	292.3	298.0
117.5°	272.2	273.9	275.7	277.4	279.1	284.1	292.3	300.6	308.8	317.1	322.7
120°	292.8	294.5	296.1	297.6	299.2	303.8	311.4	319.1	326.7	334.3	339.9
122.5°	314.1	314.7	315.4	316.0	316.8	320.8	328.4	336.0	343.6	351.1	356.3
125°	344.1	344.5	344.9	345.3	345.6	349.2	355.8	362.5	369.1	375.8	380.8
127.5°	374.8	374.9	375.0	375.1	375.2	378.0	383.5	389.0	394.5	400.0	404.7
130°	394.3	394.5	394.7	395.0	395.3	397.8	402.7	407.5	412.3	417.1	421.6
132.5°	412.5	413.3	414.2	415.2	416.0	418.3	421.8	425.3	428.7	432.2	436.7
135°	442.8	443.2	443.6	443.9	444.3	445.7	448.2	450.5	453.0	455.3	459.6
137.5°	471.3	471.7	472.1	472.6	473.1	473.9	475.3	476.6	478.1	479.4	483.4
140°	488.6	489.2	489.8	490.4	491.0	491.6	492.3	493.0	493.7	494.4	498.2
142.5°	507.1	507.4	507.6	507.8	508.1	508.5	509.0	509.5	510.0	510.6	513.8
145°	534.3	534.5	534.6	534.8	534.9	535.2	535.6	535.9	536.3	536.6	538.3
147.5°	558.0	558.3	558.6	558.8	559.1	559.3	559.6	560.0	560.2	560.5	561.3
150°	574.8	574.7	574.6	574.5	574.3	574.5	575.0	575.4	575.9	576.4	576.4
152.5°	588.5	588.7	588.9	589.1	589.2	589.4	589.6	589.7	589.9	590.2	590.5
155°	609.7	609.7	609.7	609.7	609.7	609.8	609.9	610.0	610.2	610.3	610.8
157.5°	628.7	628.4	628.1	627.9	627.6	627.5	627.6	627.8	627.9	628.0	628.5
160°	639.9	639.5	639.1	638.8	638.4	638.3	638.4	638.6	638.7	638.8	639.2
162.5°	649.8	649.5	649.2	648.9	648.7	648.6	648.6	648.7	648.7	648.7	649.2
165°	663.0	662.7	662.5	662.2	662.0	661.9	662.0	662.2	662.3	662.4	662.9
167.5°	674.2	673.7	673.2	672.7	672.2	672.0	672.0	672.0	672.0	672.0	672.7
170°	680.1	679.7	679.2	678.7	678.3	678.1	678.1	678.1	678.1	678.1	678.7
172.5°	684.5	684.0	683.5	683.1	682.6	682.3	682.3	682.3	682.3	682.3	683.1
175°	689.3	688.8	688.3	687.9	687.4	687.2	687.2	687.2	687.2	687.2	687.9
177.5°	691.8	691.4	691.1	690.7	690.2	690.0	689.9	689.8	689.8	689.7	690.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1495.5	1497.3	1499.2	1500.0	1499.7	1499.5	1499.2	1498.9
5°	1490.9	1493.6	1496.2	1497.3	1496.9	1496.7	1496.3	1496.0
7.5°	1478.5	1480.8	1483.1	1484.0	1483.8	1483.4	1483.1	1482.7
10°	1466.8	1469.0	1471.3	1472.3	1472.0	1471.7	1471.3	1471.0
12.5°	1452.7	1454.5	1456.3	1456.8	1455.9	1455.1	1454.2	1453.4
15°	1426.4	1428.4	1430.3	1430.7	1429.4	1428.0	1426.7	1425.4
17.5°	1392.9	1394.4	1395.9	1396.3	1395.4	1394.7	1393.9	1393.1
20°	1367.2	1368.1	1369.1	1369.6	1369.6	1369.6	1369.6	1369.6
22.5°	1340.7	1341.9	1343.1	1343.3	1342.6	1341.8	1341.0	1340.2
25°	1298.7	1300.0	1301.4	1301.2	1299.6	1297.9	1296.3	1294.7
27.5°	1250.1	1250.9	1251.9	1252.1	1251.4	1250.8	1250.3	1249.7
30°	1216.6	1217.3	1218.0	1218.0	1217.8	1217.4	1217.1	1216.7
32.5°	1184.9	1185.5	1186.2	1186.4	1186.0	1185.7	1185.3	1185.1
35°	1133.5	1134.4	1135.5	1136.0	1136.0	1136.0	1136.0	1136.0
37.5°	1079.5	1080.8	1082.1	1082.7	1082.5	1082.4	1082.3	1082.1
40°	1043.0	1044.3	1045.7	1046.6	1047.3	1047.9	1048.6	1049.2
42.5°	1009.5	1011.1	1012.6	1013.4	1013.6	1013.7	1013.9	1014.0
45°	955.4	957.6	959.9	961.2	961.6	961.9	962.2	962.5
47.5°	899.6	902.9	906.3	908.2	909.0	909.6	910.4	911.2
50°	862.4	866.0	869.7	871.9	872.9	873.9	874.9	875.8
52.5°	825.4	829.2	833.0	835.4	836.0	836.8	837.5	838.2
55°	766.9	770.5	774.1	776.6	777.9	779.2	780.5	781.8
57.5°	709.2	713.3	717.5	720.0	721.0	721.9	722.9	723.9
60°	669.6	674.5	679.4	682.3	683.3	684.3	685.3	686.3
62.5°	629.5	634.9	640.4	643.7	644.9	646.2	647.4	648.7
65°	569.7	574.6	579.5	582.6	583.9	585.2	586.5	587.8
67.5°	508.3	514.3	520.2	524.0	525.7	527.4	529.1	530.8
70°	466.5	472.7	478.9	483.0	484.9	486.9	488.9	490.8
72.5°	427.5	434.3	441.0	445.1	446.6	448.0	449.4	450.8
75°	368.7	375.2	381.7	385.9	387.5	389.1	390.8	392.4
77.5°	309.7	316.9	324.1	328.4	329.7	330.9	332.2	333.6
80°	274.5	281.6	288.9	293.1	294.4	295.7	297.0	298.3
82.5°	241.0	248.0	254.9	259.5	261.8	264.2	266.6	268.9
85°	195.1	202.3	209.5	214.4	217.0	219.6	222.3	224.8
87.5°	159.9	167.5	175.1	180.1	182.5	184.8	187.2	189.5
90°	145.3	153.4	161.6	166.9	169.6	172.2	174.8	177.5
92.5°	152.5	160.5	168.6	173.9	176.4	179.0	181.5	184.1
95°	164.8	172.8	180.8	186.1	188.6	191.1	193.6	196.1
97.5°	181.2	188.8	196.4	201.4	203.8	206.1	208.5	210.9
100°	192.2	200.1	208.0	213.1	215.3	217.5	219.7	221.9
102.5°	204.3	212.2	219.9	224.9	227.2	229.5	231.8	234.1
105°	223.9	231.1	238.4	243.3	245.9	248.5	251.2	253.8
107.5°	247.0	253.8	260.6	265.0	267.1	269.1	271.1	273.1
110°	262.9	269.4	276.0	280.3	282.5	284.6	286.8	289.0



TEST NUMBER: P333308-830

CATALOG NUMBER: S125DIP-S1270D590U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	278.8	284.8	291.0	295.1	297.2	299.3	301.3	303.3
115°	303.8	309.5	315.3	319.1	320.9	322.8	324.6	326.5
117.5°	328.4	334.0	339.7	343.4	345.1	346.9	348.6	350.3
120°	345.4	350.9	356.5	360.1	361.5	363.0	364.5	366.0
122.5°	361.5	366.6	371.9	375.2	376.8	378.4	380.0	381.5
125°	385.8	390.8	395.7	399.0	400.5	402.0	403.5	405.0
127.5°	409.4	414.2	418.9	422.0	423.7	425.4	427.0	428.7
130°	426.0	430.5	434.9	437.8	439.2	440.6	442.1	443.4
132.5°	441.1	445.5	450.0	452.7	453.7	454.8	455.8	456.9
135°	463.8	468.1	472.3	475.0	476.2	477.3	478.5	479.7
137.5°	487.4	491.4	495.4	497.8	498.5	499.2	499.9	500.6
140°	502.1	505.9	509.7	512.0	512.6	513.4	514.2	514.8
142.5°	517.0	520.2	523.4	525.4	526.0	526.8	527.4	528.2
145°	539.9	541.5	543.2	544.4	545.4	546.3	547.2	548.3
147.5°	562.1	562.9	563.7	564.0	563.8	563.5	563.4	563.2
150°	576.4	576.4	576.4	576.5	576.6	576.6	576.7	576.8
152.5°	590.8	591.1	591.4	591.3	590.9	590.6	590.2	589.8
155°	611.2	611.7	612.2	612.2	611.5	611.0	610.3	609.7
157.5°	629.0	629.4	629.9	629.8	629.0	628.2	627.5	626.6
160°	639.7	640.2	640.6	640.6	640.1	639.4	638.9	638.3
162.5°	649.8	650.4	651.0	650.9	650.3	649.5	648.8	648.1
165°	663.4	663.8	664.4	664.2	663.5	662.8	662.0	661.4
167.5°	673.4	674.2	674.9	674.9	674.1	673.4	672.6	671.9
170°	679.5	680.1	680.9	680.8	680.0	679.2	678.3	677.5
172.5°	683.8	684.5	685.2	685.2	684.5	683.7	683.0	682.2
175°	688.6	689.3	690.0	689.9	689.2	688.3	687.5	686.6
177.5°	690.8	691.4	691.9	691.9	691.3	690.6	689.8	689.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0

(END OF REPORT)